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[Decisions of the United States Court of Customs and Patent Appeals are indicated by a star and of the Supreme Court of the United States by the letter (ª).]

ERRATA

Page 319, O. G., of May 12, published Trade-Mark 312,658, McIlhenny Company, in the disclaimer, line 3, for the misspelled word "Tobasco" read *Tabasco*.

Page 706, 1,805,883, strike out the claim as printed and insert instead:

The method of producing building board which includes heating pine wood to effect the removal of turpentine and pine oil therefrom, treating the wood with gasoline for the extraction of rosin therefrom, mechanically defibering the wood, forming the wood in admixture with water into a sheet and eliminating the water from the sheet.

Alphabetical List of Inventions, page xxxviii, Plaster, Wall, G. R. Walper, in O. G., May 5, 1931, for "1,804,445", read *1,803,445*.

Alphabetical List of Patentees, O. G., May 5, 1931, page xxxi, Walper, Gordon R., for "1,804,445", read *1,803,445*.

327375

Acidophilus Ice Cream Corporation, Yonkers, N. Y. Frozen confections. 282,807; May 5; Serial No. 308,873; published Feb. 17, 1931. Class 46.

Adams, Fred, Philadelphia, Pa. Picture projectors. 282,939; May 5; Serial No. 308,319; published Feb. 24, 1931. Class 26.

Advance-Rumely Company, La Porte, Ind. Threshers, combine threshers, shredders, etc. 282,950; May 5; Serial No. 308,767; published Feb. 24, 1931. Class 23.

Agfa Ansco Corporation, Binghamton, N. Y. Photographic cameras. 282,900; May 5; Serial No. 309,052; published Feb. 24, 1931. Class 26.

Akro Agate Company, The, assignor, by mesne assignments, to The Akro Agate Company, Akron, Ohio. Playing marbles. 83,121; renewed Aug. 22, 1931.

Albers Packing Company, Riverside, Calif. Canned olives. 282,793; May 5; Serial No. 308,237; published Feb. 17, 1931. Class 46.

Alexander Bros. Co., Savannah, Ga. Overalls. 83,537; renewed Sept. 26, 1931.

American Agricultural Chemical Company, The. (See Bowker Fertilizer Company, assignor.)

American Crayon Company, The, Sandusky, Ohio. Crayons. 282,838; May 5; Serial No. 288,892; published Oct. 29, 1929. Class 37.

American Papeterie Company, Albany, N. Y. Writing paper and envelopes. 282,789; May 5; Serial No. 307,650; published Feb. 17, 1931. Class 37.

American Tobacco Company, The, New York, N. Y. Cards. 282,832; May 5; Serial No. 297,651; published Feb. 17, 1931. Class 38.

Arion Steel Company, The, Boston, Mass. Files. 282,875; May 5; Serial No. 309,496; published Mar. 10, 1931. Class 23.

Arlington Rubber Co., Dorchester, Mass. Golf balls. 282,894; May 5; Serial No. 310,006; published Feb. 24, 1931. Class 22.

Aspirin Gum Sales Company. (See de Vautibault, Jean.)

Atkins, E. C., and Company, Indianapolis, Ind. Hacksaw blades. 282,865; May 5; Serial No. 293,815; published Mar. 4, 1930. Class 23.

Avio Corporation, New York, N. Y. Toy and model airplanes and parts thereof. 282,883; May 5; Serial No. 309,549; published Feb. 24, 1931. Class 22.

Bache, Semon, & Company, New York, N. Y. Glass. 82,722; renewed July 18, 1931.

Badger Paper Mills, Inc., Peshtigo, Wis. Writing and printing paper. 282,813; May 5; Serial No. 309,497; published Feb. 17, 1931. Class 37.

Baldwin Paper Co. Inc., New York, N. Y. Safety paper. 282,812; May 5; Serial No. 309,722; published Feb. 17, 1931. Class 37.

Ballard & Ballard Co., Louisville, Ky. Flour. 282,821; May 5; Serial No. 309,057; published Feb. 17, 1931. Class 46.

Balmex Co., Inc., New York, N. Y. Salve. 282,806; May 5; Serial No. 308,876; published Feb. 10, 1931. Class 6.

Baltimore Butterine Company, The, Baltimore, Md. Mayonnaise, salad dressing, condiment table sauces, etc. 282,790; May 5; Serial No. 308,003; published Feb. 17, 1931. Class 46.

Barrett Company, The, New York, N. Y. Paint and stain thinners and oils. 282,866; May 5; Serial No. 295,418; published Feb. 24, 1931. Class 16.

Batson, Woode J., doing business as Spencer Popcorn Company, Spencer, Iowa. Ice cream and sherbet. 282,835; May 5; Serial No. 298,971; published Jan. 6, 1931. Class 46.

Beacon Oyster Company, Wickford, R. I. Oysters or clams. 282,943; May 5; Serial No. 308,571; published Feb. 24, 1931. Class 46.

Bellas Hess & Co., to National Bellas Hess Co., Inc., New York, N. Y., successor. Hosiery. 82,560; renewed July 11, 1931.

Benson, Lloyd R., to Axelander R. Benson Company, Hudson, N. Y., successor. Soldering fluxes. 83,469; renewed Sept. 19, 1931.

Bergeret, Charles, doing business as Faivre Laboratories, New York, N. Y. Cachet, wafers, capsules, etc. 282,884; May 5; Serial No. 309,550; published Feb. 24, 1931. Class 6.

Bersimo, Inc., New York, N. Y. Hair dye. 282,891; May 5; Serial No. 309,768; published Feb. 24, 1931. Class 6.

Better Products Machine Company, Lynchburg, Va. Machine for cutting bread, cake, etc. 282,878; May 5; Serial No. 309,498; published Feb. 24, 1931. Class 23.

Blumenthal Lewin Co., Los Angeles, Calif. Lounging robes, beach robes, smoking jackets, etc. 282,961; May 5. Class 39.

Benjois, Inc., New York, N. Y. Perfume. 282,816; May 5; Serial No. 309,260; published Feb. 17, 1931. Class 6.

Bowker Fertilizer Company, assignor to The American Agricultural Chemical Company, New York, N. Y. Fertilizers. 82,297; renewed June 20, 1931.

Bowker Fertilizer Company, assignor to The American Agricultural Chemical Company, New York, N. Y. Fertilizers and manures. 83,555; renewed Sept. 26, 1931.

Brown, Desmond, doing business as Commodore Brush Company, New York, N. Y. Tooth paste and dental cream. 282,786; May 5; Serial No. 307,339; published Feb. 17, 1931. Class 6.

Brunswick-Balke-Collender Company, The, Chicago, Ill. Bowling pins. 282,896–9; May 5; Serial Nos. 309,410–13; published Feb. 24, 1931. Class 22.

Bryn & Halden Tændstikfabrikker Aktieselskab. (See Haldens Tændstikfabrik, assignor.)

Calculator Equipment Corporation, Orange, N. J. Calculating machines. 282,880; May 5; Serial No. 309,511; published Feb. 24, 1931. Class 26.

Call Publishing Company, The, San Francisco, Calif. Vignette or masthead for a daily newspaper. 282,867; May 5; Serial No. 299,826; published Feb. 17, 1931. Class 38.

Cameron, Virgil K., Columbus, Ohio. Bulletins published from time to time. 282,901–2; May 5; Serial Nos. 309,186–7; published Feb. 17, 1931. Class 38.

Campbell, Andrew C., Incorporated, Waterbury, Conn. Metal-swaging machinery. 282,879; May 5; Serial No. 309,510; published Feb. 24, 1931. Class 23.

Campbell, Fred R., doing business as Campbell X-Ray Company, Boston, Mass. X-ray apparatus. 282,886; May 5; Serial No. 309,663; published Feb. 24, 1931. Class 44.

Campe Corporation, The, New York, N. Y. Underwear. 282,963; May 5. Class 39.

Candyland, The, Rome, N. Y. Candy. 282,946; May 5; Serial No. 308,679; published Feb. 24, 1931. Class 46.

Capital City Products Company, The, Columbus, Ohio. Vegetable-oil stearine. 282,855; May 5; Serial No. 306,030; published Feb. 17, 1931. Class 46.

Case, J. I., Company, Racine, Wis. Agricultural machinery, implements, farm-operating equipment, and parts thereof. 282,906; May 5; Serial No. 309,230; published Feb. 24, 1931. Class 23.

Century Electric Co., St. Louis, Mo. Electric motors. 83,046; renewed Aug. 15, 1931.

Champion Coated Paper Company, The, Hamilton, Ohio. Mineral coated paper. 282,841; May 5; Serial No. 281,262; published Feb. 17, 1931. Class 37.

Chemische Fabriken Dr. Joachim Wiernik & Co., Aktiengesellschaft, Berlin-Waidmannslust, Germany. Medicine. 282,938; May 5; Serial No. 308,288; published Feb. 24, 1931. Class 6.

Chipmans, Chas., Sons, Easten and Selinsgrove, Pa., to Rufus W. Scott Company, New York, N. Y., successor. Hosiery. 76,740; renewed Feb. 15, 1930.

Chirelstein, Nathan, doing business as Rapidaire, Inc., Newark, N. J. Tire-inflating machine. 282,933; May 5; Serial No. 307,803; published Feb. 24, 1931. Class 23.

Clinton Laboratories, Inc., Los Angeles, Calif. Vaginal germicidal powder. 282,817; May 5; Serial No. 309,189; published Feb. 17, 1931. Class 6.

Clinton Laboratories, Inc., Los Angeles, Calif., Vaginal germicidal powder. 282,903; May 5; Serial No. 309,190; published Feb. 17, 1931. Class 6.

Coastal Coffee Co., Savannah, Ga. Coffee. 282,895; May 5; Serial No. 310,010; published Feb. 24, 1931. Class 46.

Commodore Brush Company. (See Brown, Desmond.)

Contour Hosiery Mills, Rockford, Ill. Hosiery. 282,797; May 5; Serial No. 308,577; published Feb. 17, 1931. Class 39.

Cooper & Roe, to Cooper & Roe, Limited, Nottingham, England, successor. Knitted undershirts, drawers, union suits, and hosiery. 81,857; renewed May 16, 1931.

Cooperative Merchandising Bureau. (See Kirby, Block & Fischer, Inc.)

Corn Products Refining Company, Jersey City, N. J., and New York, N. Y., to Corn Products Refining Company, New York, N. Y. Edible corn oil. 83,639; renewed Oct. 3, 1931.

Corry-Jamestown Manufacturing Corporation, Corry, Pa. Office furniture. 282,869; May 5; Serial No. 301,160; published Feb. 24, 1931. Class 32.

Crockett, J. E., doing business as The Fo-Mo-Na Company, Atlanta, Ga. Foot lotions and deodorants. 282,888; May 5; Serial No. 309,725; published Feb. 24, 1931. Class 6.

Cronol Co. Inc., New York, N. Y. Medicine. 282,881; May 5; Serial No. 309,514; published Feb. 24, 1931. Class 6.

Crook, James W., assignor to The J. W. Crook Stores Company, Baltimore, Md. Foods. 81,508; renewed Apr. 18, 1931.

Crystal Chemical Company, Inc., The, New York, N. Y. Cream soaps. 282,862; May 5; Serial No. 286,926; published Feb. 24, 1931. Class 4.

Curtiss Candy Company, The, Chicago, Ill. Chewing gum. 282,882; May 5; Serial No. 309,515; published Feb. 24, 1931. Class 46.

Cutino Company, The, Kansas City, Mo. Prophylactic articles. 282,850; May 5; Serial No. 304,608; published Sept. 30, 1930. Class 44.

Danove, Aurthur G., Westwego, La. Extract of pepper, creole mustard, catsup, etc. 282,833; May 5; Serial No. 298,053; published Feb. 17, 1931. Class 46.

Dealers Sales Corporation. (See Koken Barbers' Supply Company, The, assignor.)
De Luxe Products, Inc., Watertown, Conn. Rouge. 282,822; May 5; Serial No. 309,026; published Feb. 17, 1931. Class 6.
Denney, William F., doing business as Frances Denney of Philadelphia, Philadelphia, Pa. Toilet preparations. 282,931; May 5; Serial No. 307,134; published Feb. 17, 1931. Class 6.
Dent, Allcroft & Co. to Dent, Allcroft & Co., Ltd., London, England, successor. Gloves. 80,990; renewed Feb. 21, 1931.
Detmer Woolen Company, New York, N. Y.; Chicago, Ill.; Kansas City, Mo.; Los Angeles, Calif.; and Seattle, Wash., to Detmer, Bruner & Mason, Inc., New York, N. Y., successor. Woolen piece goods. 81,967; renewed May 23, 1931.
De Vautibault, Jean, doing business as Aspirin Gum Sales Company, New York, N. Y. Flavored chicle or chewing gum containing acetyle-salicylic acid for the relief of simple headaches, neuralgias, etc. 282,839; May 5; Serial No. 283,263; published Feb. 10, 1931. Class 6.
Diamond Alkali Company, Pittsburgh, Pa. Sodium bicarbonate. 282,927; May 5; Serial No. 306,309; published Feb. 17, 1931. Class 6.
Dodd, Samuel H., doing business as Zerox Products, Springfield, Mo. Aluminum compound. 282,870; May 5; Serial No. 309,419; published Feb. 17, 1931. Class 6.
Duff Manfg. Co., The, by change of name to The Duff-Norton Manufacturing Company, Pittsburgh, Pa. Lifting jacks. 82,310; renewed June 20, 1931.
Duff, P., & Sons., Inc., doing business as Redfield Company, Pittsburgh, Pa. Peanut butter. 282,954; May 5. Class 46.
E. M. E. Corporation, doing business as Kemiko Mfg. Co., Newark, N. J. Deodorants. 282,829; May 5; Serial No. 294,149; published Mar. 4, 1930. Class 6.
Eastern Oil Industries, Ltd. (See Hasbemesh, Inc., assignor.)
S in 1 Pet Products. (See Schliesser, Harold.)
Eico Distributing Company, doing business as Many, Blanc & Co., Chicago, Ill. Maltless carbonated beverages. 282,826; May 5; Serial No. 306,773; published Feb. 24, 1931. Class 45.
Electric Cable Company, The, Bridgeport, Conn., assignor to Habirshaw Cable & Wire Corporation, New York, N. Y. Rubber covered wires and cables for electrical purposes. 81,688; renewed May 2, 1931.
Elgin Butter Company, The, assignor, by mesne assignments, to The Fox River Butter Co. Inc., New York, N. Y. Butter. 36,163; renewed Apr. 2, 1931.
Eno Rubber Corporation, Los Angeles, Calif. Rubber play balls. 282,966; May 5. Class 22.
Enterprise Specialty Co., The, Detroit, Mich. Combined multiplication device and pencil case. 282,872; May 5; Serial No. 309,466; published Feb. 24, 1931. Class 26.
Ermold, Edward, Company, New York, N. Y. Glue. 282,787; May 5; Serial No. 307,392; published Feb. 17, 1931. Class 5.
Evans Sons Lescher & Webb Limited, Liverpool and London, England. Medicated throat pastils. 81,446; renewed Apr. 11, 1931.
Evenol Perfumer Inc., New York, N. Y. Astringents, astringent cerates, etc. 282,788; May 5; Serial No. 307,621; published Feb. 17, 1931. Class 6.
Faber, Eberhard, New York, assignor to Eberhard Faber Pencil Company, Brooklyn, N. Y. Lead pencils and rubber erasers. 83,564; renewed Sept. 26, 1931.
Faber, Eberhard, New York, assignor to Eberhard Faber Pencil Company, Brooklyn, N. Y. Rubber erasers. 83,565; renewed Sept. 26, 1931.
Faivre Laboratories. (See Bergeret, Charles.)
Fo-Mo-Na Company, The. (See Crockett, J. E.)
Fox River Butter Co. Inc., The. (See Elgin Butter Company, The, assignor.)
Franklin, H. H., Manufacturing Company, Syracuse, N. Y. Aircraft engines and parts thereof. 282,799; May 5; Serial No. 308,622; published Feb. 17, 1931. Class 23.
Friedland, I. J., Atlanta, Ga. Prophylactic rubber articles for the prevention of contagious diseases. 282,921; May 5; Serial No. 305,181; published Feb. 24, 1931. Class 44.
Gaybird, Limited, Great Missenden, England. Medicines. 282,824; May 5; Serial No. 306,178; published Feb. 10, 1931. Class 6.
Geiger, J. W., Inc., New York, N. Y. Capes, aprons, and hoods. 282,920; May 5; Serial No. 304,657; published Feb. 24, 1931. Class 44.
Gellocide Corporation, Tulsa, Okla. Anhydrous oily solution. 282,904; May 5; Serial No. 309,200; published Feb. 24, 1931. Class 6.
Genschow, Gustav., & Co., Aktiengesellschaft, Berlin, Germany. Ammunition, firearms, and parts thereof. 282,805; May 5; Serial No. 308,824; published Feb. 24, 1931. Class 9.
Goodrich, B. F. Company, The, New York, N. Y. Rubber vehicle tires and inner tubes therefor. 282,905; May 5; Serial No. 309,204; published Feb. 24, 1931. Class 35.
Gosman Company, The, Baltimore, Md. Sweetened and flavored medicinal beverage. 282,825; May 5; Serial No. 306,350; published Feb. 10, 1931. Class 6.
Gower, Marie, Los Angeles, Calif. Preparations for growing hair. 282,846; May 5; Serial No. 303,179; published Feb. 17, 1931. Class 6.
Green, William, New Bedford, Mass. Cough drops. 282,851; May 5; Serial No. 305,483; published Feb. 17, 1931. Class 6.
Griffith-Durney Co., San Francisco, Calif. Canned fruits. 83,830; renewed Oct. 17, 1931.
Gros, Million & Cie., assignor, by mesne assignments, to Societe Anonyme Etablissements Vautheret, Gros & Laforge, Lyon, France. Tulles of all kinds. 81,073; renewed Feb. 28, 1931.
Gurban, Betty, New York, N. Y. Salve. 282,942; May 5; Serial No. 308,545; published Feb. 24, 1931. Class 6.
Gutman, Julian, & Company, Inc., Baltimore, Md. Hosiery. 282,804; May 5; Serial No. 308,729; published Feb. 17, 1931. Class 39.
H & W Company, The, Newark, N. J. Corsets. 81,698; renewed May 2, 1931.
Habirshaw Cable & Wire Corporation. (See Electric Cable Company, The, assignor.)
Haldens Tændstikfabrik, Fredrikshald, Norway, assignor to Bryn & Halden Tændstikfabrikker Aktieselskab Bryn near Oslo, Norway. Matches. 81,700–1; renewed May 2, 1931.
Harris, Harry A., Chicago, Ill. Ladies' textile-fabric bloomers. 282,844; May 5; Serial No. 301,914; published Feb. 17, 1931. Class 39.
Hashemesh, Inc., New York, N. Y., assignor to Eastern Oil Industries, Ltd., London, England. Olive oil and sesame oil. 282,834; May 5; Serial No. 298,447; published June 17, 1930. Class 46.
Hawaiian Pineapple Company, Ltd., San Francisco, Calif., and Iwilei, Hawaii. Canned pineapples. 282,861; May 5; Serial No. 275,314; published Sept. 16, 1930. Class 46.
Heller & Perrin, Pittsburgh, Pa. Soap, soap chips, and soap powder. 282,951; May 5; Serial No. 308,781; published Feb. 24; 1931. Class 4;
Hood Rubber Co., East Watertown and Boston, Mass., assignor to Hood Rubber Company, Inc., Wilmington, Del. Rubber boots and shoes and overshoes. 81,079; renewed Feb. 28, 1931.
Hosier, Elmer E., Delaware Water Gap, Pa. Outdoor game. 282,859; May 5; Serial No. 301,642; published Feb. 24, 1931. Class 22.
Hough, Azel C., South Butler, N. Y., assignor to Hough Shade Corporation, Janesville, Wis. Woven fabric for shades, screens and curtains. 36,909; renewed Aug. 20, 1931.
Hoyt, F. M., Shoe Company, Manchester, N. H. Leather boots and shoes. 82,086; renewed May 30, 1931.
Hunt, Albert P. (See Liquid Dehydration Corporation, assignor.)
Hunt, B. R., Manufacturing Company, Union City, Ind. Golf bags, racket covers, etc. 282,792; May 5; Serial No. 308,112; published Jan. 13, 1931. Class 22.
Hurley and Sanders, Los Angeles, Calif. Printed publications. 282,940; May 5; Serial No. 308,441; published Feb. 17, 1931. Class 38.
Imperial Rubber Co., assignor to Frederick A. Lachance, doing business as Imperial Rubber Co., New York, N. Y. Rubber goods. 83,583; renewed Sept. 26, 1931.
Inderrieden, J. B., Co., The, Chicago, Ill. Dried raisins and dried fruits. 282,863; May 5; Serial No. 290,575; published Jan. 7, 1930. Class 46.
Industrial Chemical Sales Company, Inc., New York, N. Y. Finely-divided solid material having selective absorptive properties to be used in connection with the purification of medicines, etc. 282,847; May 5; Serial No. 303,569; published Feb. 10, 1931. Class 6.
Industrial Chemical Sales Company, Inc., New York, N. Y. Precipitated chalk. 282,919; May 5; Serial No. 303,718; published Sept. 9, 1930. Class 6.
International Feature Service, Inc., New York, N. Y. Cartoons. 282,910; May 5; Serial No. 309,382; published Feb. 17, 1931. Class 38.
Interwoven Stocking Company, New Brunswick, N. J. Hosiery. 83,070; renewed Aug. 15, 1931.
Italian Maraconi Mfg. Co. Inc., Los Angeles, Calif. Macaroni. 282,843; May 5; Serial No. 306,096; published Feb. 17, 1931. Class 46.
Jamestown Lounge Company, Jamestown, N. Y. Furniture. 282,926; May 5; Serial No. 306,135; published Feb. 24, 1931. Class 32.
Jaynes Drug Company, assignor, by mesne assignments, to United Drug Company, Boston, Mass. Candies. 82,519; renewed July 4, 1931.
Jensol Laboratories, Inc., Salt Lake City, Utah. Medicinal oil. 282,917; May 5; Serial No. 307,406; published Feb. 24, 1931. Class 6.
Johnson, B. D., Midville, Ga. Medicinal preparation for acid stomach and heart relief. 282,873; May 5; Serial No. 309,478; published Feb. 24, 1931. Class 6.
Johnson, J. S., Chemical Co., Inc., Hagerstown, Md. Prophylactic suppositories. 282,911; May 5; Serial No. 309,383; published Feb. 17, 1931. Class 6.
K. B. Beverage Company, Bay City, Mich. Ginger ale. 282,810; May 5; Serial No. 309,781; published Feb. 24, 1931. Class 45.
Keim Medicine Co., Corry, Pa. Pile ointment and an eczema, skin ointment. 282,858; May 5; Serial No. 307,678; published Feb. 17, 1931. Class 6.
Kemiko Mfg. Co. (See E. M. E. Corporation.)

Kiefer-Stewart Company. (See Stewart, Daniel, Co.)
Kirby, Block & Fischer, Inc., doing business as Cooperative Merchandising Bureau, New York, N. Y. Shirts, pajamas, and underwear. 282,953; May 5. Class 39.
Koken-Barbers' Supply Company, The, assignor, by mesne assignments, to Dealers Sales Corporation, St. Louis, Mo. Shampoo preparation. 82,094; renewed May 30, 1931.
Krause, John M., doing business as Whippet Top Manufacturing Company, Los Angeles, Calif. Toy top. 282,868; May 5; Serial No. 300,205; published Feb. 24, 1931. Class 22.
Kress, S. H., & Co., New York, N. Y. Teaspoons, soup spoons, butter knives, etc. 282,957; May 5. Class 23.
Lachance, Frederick A. (See Imperial Rubber Co., assignor.)
Larkin Co. Inc., Buffalo, N. Y. Candies. 282,876; May 5; Serial No. 309,929; published Feb. 24, 1931. Class 46.
Larré Laboratories. (See Lawrence, F. E.)
Lawrence, F. E., doing business as Larré Laboratories, Denver, Colo. Vaginal antiseptic tablets. 282,827; May 5; Serial No. 306,988; published Feb. 10, 1931. Class 6.
Lax & Strauss, assignor, by mesne assignments, to Lax & Burgheimer Corporation, New York, N. Y. Knit underwear. 82,995; renewed Aug. 8, 1931.
Leavitt, C. Franklin, doing business as New Life Crystals, Gary, Ind. Mineral water. 282,934; May 5; Serial No. 308,942; published Feb. 17, 1931. Class 6.
Le Roi Hosiery Co. Inc., New York, N. Y. Hosiery. 282,795; May 5; Serial No. 308,548; published Feb. 17, 1931. Class 39.
Lewis & Tylor, Limited, Cardiff, England. Woven machine belting and machine belting of leather. 82,525; renewed July 4, 1931.
Lilly, Eli, and Company, Indianapolis, Ind. Medicine or pharmaceutical preparation. 282,892; May 5; Serial No. 309,823; published Feb. 24, 1931. Class 6.
Llondale Shirt Co. Inc., New York, N. Y. Shirts, pajamas, and underwear. 282,965; May 5. Class 39.
Liquid Dehydration Corporation, Chicago, Ill., assignor to Albert P. Hunt. Powdered food products, viscid but stable products, cereals, etc. 282,840; May 5; Serial No. 282,559; published Feb. 17, 1931. Class 46.
Lisner, Leonard E., New York, N. Y. Bleach and beauty creams, rouges, face packs, eyelash grower, etc. 282,935; May 5; Serial No. 307,851; published Feb. 24, 1931. Class 6.
Louangel Laboratories, Inc., New York, N. Y. Alcoholic preparation of iodine and medicinal oils. 282,947; May 5; Serial No. 308,696; published Feb. 17, 1931. Class 6.
Lowrie, James W., doing business as The Wholesale Grocer & The Retailers' Journal Publishing Company, Chicago, Ill. Section of a magazine. 282,945; May 5; Serial No. 308,631; published Feb. 17, 1931. Class 38.
Lurch, Carl, Chicago, Ill. Malt extract. 282,962; May 5. Class 46.
M. & N. Cigar Manufacturers, Inc. (See Newman, Julius C., assignor.)
Macbeth-Evans Glass Co., Pittsburgh, Pa., to Macbeth-Evans Glass Company, Charleroi, Pa. Arc and incandescent electric lamps. 83,164; renewed Aug. 22, 1931.
Macfadden Publications, Inc., New York, N. Y. Monthly magazine. 282,923; May 5; Serial No. 305,868; published Feb. 17, 1931. Class 38.
Mackie Pine Oil Specialty Company, Inc., Covington, La. Hair shampoo. 282,918; May 5; Serial No. 301,965; published Feb. 17, 1931. Class 6.
Mainzer, Adolf J., Inc., New York, N. Y. Cake icing. 282,820; May 5; Serial No. 309,089; published Feb. 17, 1931. Class 46.
Maison Pierre Bardou Job, Perpignan, France, assignor to Societe Job Anciens Etablissements Bardou-Job et Pauilhac, Perpignan and Toulouse, France. Cigarette papers. 36,970–1; renewed Aug. 27, 1931.
Many, Blanc & Co. (See Eico Distributing Company.)
Martaba Distributing Company, Brooklyn, N. Y. Cosmetics. 282,852; May 5; Serial No. 305,933; published Feb. 10, 1931. Class 6.
Mary & Dean Company, The, Kansas City, Kans. Oil mixture prepared to be used as an application to bunions. 282,929; May 5; Serial No. 307,024; published Feb. 17, 1931. Class 6.
McCabe, John, doing business as John McCabe & Co., New York, N. Y. Correspondence and mailing envelopes, etc. 282,819; May 5; Serial No. 309,090; published Feb. 17, 1931. Class 37.
McKesson & Robbins, Incorporated, Bridgeport and Fairfield, Conn. Hand and skin lotion. 282,808; May 5; Serial No. 308,945; published Feb. 10, 1931. Class 6.
Mexican Wholesale Grocery Co., Los Angeles, Calif. Canned vegetables, malt syrup, canned fruit, etc. 282,849; May 5; Serial No. 304,156; published Feb. 17, 1931. Class 46.
Millar Brothers & Company, Philadelphia, Pa. Ham. 282,925; May 5; Serial No. 306,102; published Feb. 24, 1931. Class 46.
Miller, James S., Trenton, N. J. Paper headrest covers. 282,815; May 5; Serial No. 309,391; published Feb. 17, 1931. Class 37.
Mora, E., doing business as E. Mora's Specialty Food Co., A. & E. Mora's Specialty Food Co., and E. & A. Mora's Specialty Food Co., Los Angeles, Calif. Alimentary pastes, canned prepared foods. 282,964; May 5. Class 46.
Morning Telegraph, Inc., New York, N. Y. Newspaper section, column, or department. 282,912–13; May 5; Serial Nos. 309,392–3; published Feb. 17, 1931. Class 38.
Morris Manufacturing Co. (See Warshawsky, Morris.)
Muehlmatt, Adolph, Cincinnati, Ohio. Engravers', watchmakers', and jewelers' machines, tools and dies. 82,528; renewed July 4, 1931.
National Bellas Hess Co., Inc. (See Bellas Hess & Co.)
National Candy Company, The, Jersey City, N. J., and St. Louis, Mo., to National Candy Company, St. Louis, Mo. Candies. 81,619; renewed Apr. 25, 1931.
New Life Crystals. (See Leavitt, C. Franklin.)
Newman, Julius C., assignor to M. & N. Cigar Manufacturers, Inc., Cleveland, Ohio. Cigars. 80,937; renewed Feb. 14, 1931.
Nawrath, John P., to J. P. Nawrath & Co., Inc., New York, N. Y., successor. Cotton mops. 83,347–9; renewed Sept. 5, 1931.
Noiseless Typewriter Company, The, Middletown, Conn., assignor, by mesne assignments, to Remington Typewriter Company, Ilion and New York, N. Y. Typewriting machines. 81,543; renewed Apr. 18, 1931.
Nova Manufacturing Company, Brooklyn, N. Y. Table pads. 282,960; May 5. Class 32.
Nutravite Limited, London, England. Cocoa for use as a table beverage. 282,854; May 5; Serial No. 306,012; published Feb. 17, 1931. Class 46.
Oakes, Thomas, & Co., Bloomfield, N. J. Woolen and worsted cloths. 282,853; May 5; Serial No. 305,978; published Jan. 20, 1931. Class 42.
O'Neil Lumber Company Inc., St. Louis, Mo., and East St. Louis, Ill. Paints, varnishes, stains, etc. 282,937; May 5; Serial No. 308,177; published Feb. 24, 1931. Class 16.
Palmer, Daniel D., Davenport, Iowa. Coffee. 282,877; May 5; Serial So. 310,040; published Feb. 24, 1931. Class 46.
Palmetto Canning Co., Palmetto, Fla. Jellies and marmalades, fruit preserves, canned vegetables, etc. 282,784; May 5; Serial No. 307,171; published Feb. 17, 1931. Class 46.
Park-Brooke Clothes, New York, N. Y. Suits and coats. 282,837; May 5; Serial No. 293,686; published Feb. 13,1930. Class 39.
Park Laboratory Co., Inc., San Antonio, Tex. Medicinal preparation for the relief of head colds, etc. 282,856; May 5; Serial No. 307,535; published Feb. 17, 1931. Class 6.
Parker Wire Goods Company, Worcester, Mass. Hand cutting tools and parts. 282,871; May 5; Serial No. 309,441; published Feb. 24, 1931. Class 23.
Pearl Waist Company, Inc. (See Quinn, John F.)
Peckham-Foreman, Inc., New York, N. Y. Trousers. 282,836; May 5; Serial No. 299,859; published Feb. 17, 1931. Class 39.
Peerless Rubber Manufacturing Company, New Durham, N. J., and New York, N. Y., assignor to United States Rubber Company, New York, N. Y. Hose. 82,356; renewed June 20, 1931.
Peerless Rubber Manufacturing Company, New Durham, N. J., and New York, N. Y., assignor to United States Rubber Company, New York, N. Y. Packing. 82,357–8; renewed June 20, 1931.
Pijanowski, Stanley, doing business as Rain Proof Finish Co., Chicago, Ill. Polish. 282,932; May 5; Serial No. 307,176; published Feb. 24, 1931. Class 16.
Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Navigation compasses. 282,914; May 5; Serial No. 309,394; published Feb. 24, 1931. Class 26.
Powell Pressed Steel Company, The, Hubbard, Ohio. Toy vehicle similar to a sled. 282,893; May 5; Serial No. 309,904; published Feb. 24, 1931. Class 22.
Quinn, John F., to Pearl Waist Company, Inc., Cohoes, N. Y., successor. Knitted underwear. 83,598; renewed Sept. 26, 1931.
Rain Proof Finish Co. (See Pijanowski, Stanley.)
Rapidaire, Inc. (See Chirelstein, Nathan.)
Reckitt & Sons, Limited, Hull, England, assignor to Reckitts (U. S. A.), Ltd., Hull, England, and Rochester, N. Y. Laundry blue. 81,910; renewed May 16, 1931.
Redfield Company. (See Duff, P., & Sons, Inc.)
Red Hand Tea Company. (See Ruckrich, Katie.)
Remington Typewriter Company. (See Noiseless Typewriter Company, The, assignor.)
Rheumo-Chase Company, Pittsburgh, Pa. Ointment and salve. 282,952; May 5; Serial No. 308,906; published Feb. 17, 1931. Class 6.
Ritchie & Enson, assignor to The Winterbottom Book Cloth Company Limited, Manchester, England. Tracing cloth. 81,029; renewed Feb. 21, 1931.
Roddenbery, Walter B., Cairo, Ga. Cane syrup. 282,796; May 5; Serial No. 308,554; published Feb. 17, 1931. Class 46.
Roebling's, John A., Sons Company, Trenton, N. J. Wire rope. 81,746; renewed May 2, 1931.
Rosalia Laboratories. (See Volpi, Rosalia.)

Ross, Frank W. C., New York, N. Y., assignor to Myma A. M. Ross, Toronto, Canada. Cold cream. 82,642; renewed July 11, 1931.
Rothbard, Samuel, New York, N. Y. Ice-cream confections. 282,803; May 5; Serial No. 308,704; published Feb. 17, 1931. Class 46.
Roycrofters, The, East Aurora, N. Y. Pocket-books, portfolios, leather cases, satchels, etc. 82,643; renewed July 11, 1931.
Rubel Baking Co., The, Cincinnati, Ohio. Bread. 282,959; May 5. Class 46.
Rubinger Sportswear Corp., New York, N. Y. Knitted sportswear. 282,798; May 5; Serial No. 308,597; published Feb. 17, 1931. Class 39.
Ruckrich, Katie, doing business as Red Hand Tea Company, Brooklyn, N. Y. Herb tea for costiveness, etc. 282,848; May 5; Serial No. 304,066; published Feb. 17, 1931. Class 6.
Russell Chemical Co. (See Sorber, Catherine A.)
Sakata, Kyugoro, Kure, Japan. Fountain pens. 282,800; May 5; Serial No. 308,643; published Feb. 17, 1931. Class 37.
San Diego Fruit & Produce Co., San Diego, Calif. Fresh vegetables. 282,956; May 5. Class 46.
Saquoit Paper Co., Inc., Utica, N. Y. Toilet paper. 282,860; May 5; Serial No. 261,686; published Apr. 3, 1928. Class 37.
Schliesser, Harold, doing business as S in 1 Pet Products, New York, N. Y. Health, song and vigor restorer, etc., for birds. 282,948; May 5; Serial No. 308,705; published Feb. 17, 1931. Class 6.
Schneiderman Bros., New York, N. Y. Leatherette coats and woolen overcoats. 282,809; May 5; Serial No. 308,908; published Feb. 17, 1931. Class 39.
Scott, Rufus W., Company. (See Chipmans, Chas., Sons.)
Scoville Canning Company, Inc., New York, N. Y. Canned grapefruit and grapefruit juice. 282,885; May 5; Serial No. 309,623; published Feb. 24, 1931. Class 46.
Sears, Roebuck and Co., Chicago, Ill. Wagon and tractor umbrellas. 282,823; May 5; Serial No. 308,961; published Feb. 17, 1931. Class 41.
Serrecchia, Joseph, Chicago, Ill. Preparation for the treatment of sore eyes, etc. 282,831; May 5; Serial No. 295,540; published Feb. 17, 1931. Class 6.
Seven Arts Publishing Co., New York, N. Y. Syndicated topical columns or articles published. 282,864; May 5; Serial No. 293,793; published Apr. 1, 1930. Class 38.
Siering, Eugene R., New York, N. Y. Certain toilet articles. 81,751; renewed May 2, 1931.
Smith, Samuel W., Fullerton, Calif. Chemical compound to control scaly bark and gumnosis in trees. 282,874; May 5; Serial No. 309,484; published Feb. 24, 1931. Class 6.
Societe Anonyme Etablissements Vautheret, Gros & Laforge. (See Gros, Million & Cie., assignor.)
Societe Anonyme Premet, Paris, France. Perfume, toilet water, face powder, etc. 282,915; May 5; Serial No. 309,402; published Feb. 24, 1931. Class 6.
Societe des Parfums Weil (Societe Anonyme), Paris, France. Face and talcum powders, rouges, perfumes, etc. 282,944; May 5; Serial No. 308,602; published Feb. 24, 1931. Class 6.
Societe Job Anciens Etablissements Bardou-Job et Paulhac. (See Maison Pierre Bardou Job, assignor.)
Sorber, Catherine A., doing business as Russell Chemical Co., Brookline, Pa. External liniment. 282,930; May 5; Serial No. 307,065; published Feb. 17, 1931. Class 6.
Specialty Products Company, New Orleans, La. Rubbing alcohol. 282,936; May 5; Serial No. 308,091; published Feb. 17, 1931. Class 6.
Spencer Popcorn Company. (See Batson, Woode J.)
Standard Brands Incorporated, New York, N. Y. Tea. 282,907–8; May 5; Serial Nos. 309,289–90; published Feb. 24, 1931. Class 46.
Standard Brands Incorporated, New York, N. Y. Coffee and tea. 282,909; May 5; Serial No. 309,362; published Feb. 24, 1931. Class 46.
Starr Piano Company, The, Richmond, Ind. Pianos. 83,371; renewed Sept. 5, 1931.
Steiner, Carl, New York, N. Y. Paper and paperboards. 282,818; May 5; Serial No. 309,098; published Feb. 17, 1931. Class 37.
Stewart, Daniel, Co., to Kiefer-Stewart Company, Indianapolis, Ind., successor. Toilet preparations, medicines and insecticides. 82,652; renewed July 11, 1931.
Stivers, Theo., Milling Company, Rome, Ga. Self-rising flour. 282,785; May 5; Serial No. 307,229; published Jan. 27, 1931. Class 46.
Sure-Strike, Inc., Milwaukee, Wis. Bowling pins. 282,922; May 5; Serial No. 305,375; published Feb. 24, 1931. Class 22.
Testrite Instrument Company, New York, N. Y. Optical instruments. 282,928; May 5; Serial No. 306,713; published Feb. 24, 1931. Class 26.
Thomas Mills, Inc., High Point, N. C. Hosiery. 282,801; May 5; Serial No. 308,652; published Feb. 17, 1931. Class 39.
Tissue Company, The, Saugerties, N. Y. Paper napkins and towels. 282,958; May 5. Class 37.
Tonawanda Paper Company, Inc., Wilmington, Del. Newsprint paper. 282,802; May 5; Serial No. 308,654; published Feb. 17, 1931. Class 37.
Turner & Harrison Pen Manufacturing Company, Inc., The, Philadelphia, Pa. Pens. 81,758; renewed May 2, 1931.
USL Battery Corporation, Niagara Falls, N. Y. Insecticide, insectifuge. 282,916; May 5; Serial No. 309,404; published Feb. 17, 1931. Class 6.
Union Carbide Company, Chicago, Ill., to Union Carbide Company, New York, N. Y. Calcium carbid. 83,615; renewed Sept. 26, 1931.
United Drug Company. (See Jaynes Drug Company, assignor.)
United Drug Company, Boston, Mass. Rubber bands. 282,814; May 5; Serial No. 309,488; published Feb. 17, 1931. Class 37.
United States Envelope Company, Springfield, Mass. Correspondence paper and envelopes. 282,845; May 5; Serial No. 303,135; published Feb. 17, 1931. Class 37.
United States Rubber Company. (See Peerless Rubber Manufacturing Company, assignor.)
Upjohn Company, The, Kalamazoo, Mich. Cough syrup. 282,889; May 5; Serial No. 309,755; published Feb. 24, 1931. Class 6.
Valley City Milling Co., Grand Rapids, Mich. Granulated meal. 82,659; renewed July 11, 1931.
Van Camp Hardware & Iron Company, Indianapolis, Ind. Hardware and plumbing and steam-fitters' supplies. 81,836; renewed May 9, 1931.
Vanderbilt, R. T., Company, Inc., New York, N. Y. Chemically-prepared compound of tellurium. 282,890; May 5; Serial No. 309,764; published Feb. 24, 1931. Class 6.
Vaughan Knitting Company, The, Pottstown, Pa. Hosiery. 83,374; renewed Sept. 5, 1931.
Vegetable Oil Products Company, Los Angeles, Calif. Hard-fat shortening. 282,842; May 5; Serial No. 229,310; published May 8, 1928. Class 46.
Virden Packing Co., San Francisco, Calif. Sausage. 282,830; May 5; Serial No. 295,196; published Feb. 17, 1931. Class 46.
Voigt Milling Company, Grand Rapids, Mich. Flour. 83,375; renewed Sept. 5, 1931.
Volpi, Rosalia, doing business as Rosalia Laboratories, Birmingham, Ala. Face creams, face lotions, etc. 282,949; May 5; Serial No. 308,766; published Feb. 17, 1931. Class 6.
Vulcan Corporation, Portsmouth, Ohio. Golf clubs. 282,828; May 5; Serial No. 307,016; published Jan. 20, 1931. Class 22.
Wallace, Ira O., Louisville, Ky. Extract from plant or grain substances. 282,791; May 5; Serial No. 308,048; published Feb. 17, 1931. Class 46.
Walt Disney Productions, Ltd., Los Angeles, Calif. Figure toys. 282,857; May 5; Serial No. 307,658; published Feb. 24, 1931. Class 22.
Warshawsky, Morris, doing business as Morris Manufacturing Co., New York, N. Y. Automobile hub bolts. 282,955; May 5. Class 13.
Waterman, L. E., Company, New York, N. Y. Fountain pens and parts thereof. 83,621; renewed Sept. 26, 1931.
Western Fruit Corporation Inc., New York, N. Y. Laxative. 282,811; May 5; Serial No. 309,765; published Feb. 17, 1931. Class 6.
Western Printing & Lithographing Company, Racine, Wis. Playing cards. 282,887; May 5; Serial No. 309,720; published Feb. 24, 1931. Class 22.
Wheeler Paper Corporation, Albany, N. Y. Toilet paper. 282,941; May 5; Serial No. 308,524; published Feb. 17, 1931. Class 37.
Whippet Top Manufacturing Company. (See Krause, John M.)
Wholesale Grocer & The Retailers' Journal Publishing Company, The. (See Lowrie, James W.)
Winterbottom Book Cloth Company Limited, The. (See Ritchie & Eason, assignors.)
Yawman and Erbe Mfg. Co., Rochester, N. Y. Stationery and supplies, file guides, etc. 282,794; May 5; Serial No. 308,523; published Feb. 17, 1931. Class 37.
Zerox Products. (See Dodd, Samuel H.)
Zinsser, William H., assignor to William Zinsser & Co., Inc., New York, N. Y. Shellac and other varnishes. 82,739; renewed July 18, 1931.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Bennett, Earle C., doing business as Kandyeast Company, West Springfield, Mass. Improved Chocolate Kandyeast. For Candy. 39,067; May 5.
Blue Grass Creamery, Inc., The, Blue Grass, Iowa. Amy Lee. For Butter. 39,068; May 5.
Chewaukla Mineral Springs Company, Chicago, Ill. Sleepy Water. For Mineral Water. 39,069; May 5.
Dunn & McCarthy, Inc., Auburn, N. Y. Almost any Foot is a Normal Foot for Heel Hugger Shoes. For Shoes. 39,070; May 5.
El-o-Pathic Laboratories. (See Henkin, Henry.)
Gysin, Sebastian, doing business as Modern Health Products, Milwaukee, Wis. Nu-Vege-Sal. For Table Salt. 39,071; May 5.

Henkin, Henry, doing business as the El-O-Pathic Laboratories, Los Angeles, Calif. El-O-Pathic Evacuant. For a Preparation for the Relief of Constipation. 39,072; May 5.
Henking, Earle, Niland, Calif. Hen-King. For Tomatoes. 39,073; May 5.
Hill Brothers Company, The, New York, N. Y. Camel Dates—Good as They Look. For Dates. 39,074; May 5.
Hoague-Sprague Corporation, Lynn, Mass. H. Heicklen Shoe Co. For Boxes. 39,075; May 5.
Hoague-Sprague Corporation, Lynn, Mass. M. O'Neil. For Boxes. 39,076; May 5.
Kandyeast Company. (See Bennett, Earle C.)
Kemet Laboratories Company, Inc., New York, N. Y. Kemet Barium Magnesium 'Getter' Tablets. For Tablets of 'Getter' Composition. 39,077; May 5.
Los Angeles Soap Co., Los Angeles, Calif. White King Cocoa Almond. For Soap. 39,078; May 5.
Midway Chemical Co., Chicago, Ill. Genuine Turpentine. For Turpentine. 39,079; May 5.
Modern Health Products. (See Gysin, Sebastian.)
Muller Electric Company, Cleveland, Ohio. 21—A. For Battery Clips. 39,080; May 5.
New England Confectionery Company, Cambridge, Mass. Necco Bolsters. For Candy. 39,081; May 5.
Paraffine Companies, Inc., The, San Francisco, Calif. Pub-Cote. For Industrial Coatings. 39,082; May 5.
Reefer's No-Moth, Inc., New York, N. Y. Reefer's No-Moth Cedaraire. For Preparations for Protection Against Moths. 39,083; May 5.
Ward Baking Company, New York, N. Y. Ward's Vitabred. For Bread. 39,084; May 5.
Washington Fruit & Produce Co., Inc., Yakima, Wash. Independent (Red Label). For Pears. 39,085; May 5.
Washington Fruit & Produce Co., Inc., Yakima, Wash. Independent (White Label). For Apples. 39,086; May 5.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Bishop Products Company, The, Cleveland, Ohio. Double-Gammon. For Game. 13,168; May 5.
Cayne, James L., doing business as The Rejuvené Mfg. Co., Oakland, Calif. Reju-Velour. For a Toilet Preparation. 13,169; May 5.
Phillips, Chas. H., Chemical Co., The, New York, N. Y. Phillips' Milk of Magnesia. For Milk of Magnesia. 13,173; May 5.
Rejuvene Mfg. Co., The. (See Cayne, James L.)
Scott, James G., Washington, D. C. Bufarator. For Domestic Refrigerator. 13,174; May 5.
Smith, J. Hungerford, Co., Rochester, N. Y. Rochester Root Beer. For Root Beer. 13,170; May 5.
Smith, J. Hungerford, Co., Rochester, N. Y. Fruits and Flavors. For Soda Fountain Fruits and Flavors. 13,171; May 5.
Smith, J. Hungerford, Co., Rochester, N. Y. Juicy Orange. For Orange Juice. 13,172; May 5.
Sprague, E. A., Caldwell, Idaho. Golden Bee Brand Comb Honey. For Comb Honey. 13,175; May 5.
Standard Oil Company, The, Cleveland, Ohio. Heat Tempered. For Gasoline. 13,176; May 5.
Williamson Candy Company, Chicago, Ill. It Fits the Hand. For Jar for Peanut Butter. 13,177; May 5.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & J. Manufacturing Co., Binghamton, N. Y. Kitchen tools and utensils. 309,160; May 5. Class 23.
A. & L. Fruit Co., Los Angeles, Calif. Fresh citrus fruits. 280,867; May 5. Class 46.
Air-O-Swing Co. Inc., Seattle, Wash. Toy swings. 306,589; May 5. Class 22.
Albert Lea Packing Company, Incorporated, Albert Lea, Minn. Smoked meats, boiled hams, and sausage. 303,412; May 5. Class 46.
Alexander, John A., New York, N. Y. Radio and wireless television instruments, loud speakers, radio-tubes, etc. 307,245; May 5 Class 21.
Allegheny Sales Company, Pittsburgh, Pa. Beverages and syrups for making the same. 312,408; May 5. Class 45.
Allied Printing and Binding Machinery, Inc., Cleveland, Ohio. Paper folding machines and sealing machines. 312,404; May 5. Class 23.
Aluminum Company of America, Pittsburgh, Pa. Aluminum castings, billets and ingots, etc. 307,867–8; May 5. Class 14.
Aluminum Company of America, Pittsburgh, Pa. Blank lithographic plates. 307,871–2; May 5. Class 14.
Aluminum Company of America, Pittsburgh, Pa. Aluminum cable, steel reinforced aluminum cable, and condenser blades. 307,873–4; May 5. Class 21.
American Girl Products Co., The. (See Statter, Humphrey, jr.)
American Safety Razor Corporation, Brooklyn, N. Y. Razors and blades therefor. 312,082; May 5. Class 23.
American Tobacco Company, The, New York, N. Y. Plug tobacco. 310,439; May 5. Class 17.
Amherst-Logan County Coal Corporation, doing business as the Amherst Coal Company, Charleston, W. Va. Coal. 311,769; May 5. Class 1.
Babcock, A. P., Co., New York, N. Y. Astringents, bleach creams, dry rouges, hand lotions, etc. 310,850; May 5. Class 6.
Barteldes, Armin, Denver, Colo. Dandelion killer. 311,593; May 5. Class 6.
Barton & Guestier, Bordeaux, France. Claret and white wines. 306,230; May 5. Class 47.
Benureau, H., New York, N. Y. Building stone. 311,318; May 5. Class 12.
Bethlehem Textiles Company, Bethlehem, Pa. Bloomers. 311,994; May 5. Class 39.
Biltwell Chair and Furniture Company, doing business as Ko-Rect Posture Chair Company, Denton, N. C. Chairs. 311,319; May 5. Class 32.
Blue Ridge Ginger Ale Co. (See Marion Orange Crush Bottling Company, Inc.)
Bohn Aluminum & Brass Corporation, Detroit, Mich. Sink fixtures. 296,388; May 5. Class 13.
Bohn Aluminum & Brass Corporation, Detroit, Mich. Castings and forgings. 296,389–91; May 5. Class 14.

Bonide Chemical Co. Inc., Utica, N. Y. Ointment and repellent. 312,408; May 5. Class 6.
Borgfeldt, Geo., & Co., New York, N. Y. Dolls. 312,288; May 5. Class 22.
British Enka Artificial Silk Company Limited, London, England. Piece goods made of cellulose. 303,946; May 5. Class 42.
British Enka Artificial Silk Company Limited, London, England. Imitation straw and horsehair. 310,750; May 5. Class 1.
Brunning, Charles, Company, Inc., New York, N. Y. Photo prints, photostats, and photographic reproductions. 311,719; May 5. Class 38.
Butler-Kohaus, Inc., St. Louis, Mo. Incandescent electric lamp bulbs. 311,227; May 5. Class 21.
Cambridge Pliable Brick Company, Cambridge, Ohio. Plastic refractory material. 308,425; May 5. Class 12.
Canadian Club Corporation, Philadelphia, Pa. Maltless beverages and sirups, extracts, and emulsions for making the same. 312,476–7; May 5. Class 45.
Carlisle Ribbon Mills, Inc., Paterson, N. J. Silk warp belting ribbon. 309,459; May 5. Class 42.
Chatfield Paper Corporation, The, Cincinnati, Ohio. Butchers' wrapping paper. 312,411; May 5. Class 37.
Cincinnati Wholesale Grocery Company, The, Cincinnati, Ohio. Canned fruits, canned vegetables, canned berries, etc. 310,250; May 5. Class 46.
Cohen, Goldman & Co. Inc., New York, N. Y. Outer garments, underwear, sbirts, etc. 312,415; May 5. Class 39.
Cohn & Rosenberger, Inc., New York, N. Y. Pearls, necklaces, bracelets, etc. 311,469; May 5. Class 28.
Colgate-Palmolive-Peet Company, Chicago, Ill. Antiseptic and germicide. 310,556; May 5. Class 6.
Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 311,513; May 5. Class 4.
Collins Company, The, Collinsville, Conn. Axes and machetes. 312,511; May 5. Class 23.
Colorado Fuel and Iron Company, The, Denver, Colo. Nails, tacks, brads, and staples. 303,240; May 5. Class 13.
Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Rifles and machine guns. 312,548; May 5. Class 9.
Commercial Importing Co. Inc., Seattle, Wash. Tea. 301,852; May 5. Class 46.
Compagnie Centrale Fromagère Société Anonyme, La Roche S/Foron, France. Cheese. 301,406; May 5. Class 46.
Connell, Albert E., doing business as The Daker Chemical Company. Therapeutic solutions. 311,826; May 5. Class 6.
Continental Oil Company, Ponca City, Okla. Lubricating oil. 310,104; May 5. Class 15.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Continental Oil Company, Ponca City, Okla. Lubricating oil. 310,107; May 5. Class 15.
Cornish Wire Company, Incorporated, New York, N. Y. Insulated wire, insulated copper wire, etc. 311,254; May 5. Class 21.
Covert, Martin B., doing business as Covite Manufacturing Company, Holland, Mich. Liquid for use in conditioning valves, etc. 311,765; May 5. Class 6.
Covite Manufacturing Company. (See Covert, Martin B.)
Crowell Publishing Company, The, New York, N. Y. Magazine. 312,418; May 5. Class 38.
Curtis Publishing Company, The, Philadelphia, Pa. House organs. 312,480–1; May 5. Class 38.
Daker Chemical Company, The. (See Connell, Albert E.)
David, Herman, doing business as The R. Stern Company, New York, N. Y. Shoes, sandals, and slippers. 307,928; May 5. Class 39.
Deane Plaster Co., The, Yonkers, N. Y. Surgical adhesive plaster. 310,718; May 5. Class 44.
Decker, Alfred, & Cohn, Inc., Chicago, Ill. Overcoats and suits. 311,325; May 5. Class 39.
Delco Radio Corporation, Dayton, Ohio. Radio receiving sets and parts thereof. 311,233; May 5. Class 21.
Denver Mud Company, Inc., The, Denver, Colo. Cosmetic toilet clay preparation. 311,266; May 5. Class 6.
Dermay Perfumers, Inc., New York, N. Y. Cleansing tissue papers. 312,096; May 5. Class 37.
Deutsche Gasgluehlicht-Auer-Gesellschaft mit beschraenkter Haftung, Berlin, Germany. Oxygen inhalation. 308,482; May 5. Class 44.
Diamond Power Specialty Corporation, Detroit, Mich. Gauge glasses, water columns and gauges. 310,818; May 5. Class 26.
Dietz, Anna C., doing business as Rex Modeling Clay Co., New York, N. Y. Modeling clay. 312,601; May 5. Class 1.
Doré, Antoinette. (See Modern Tissues Corporation.)
Eagle, C. K., & Co., Inc., New York, N. Y. Silk piece goods. 310,599; May 5. Class 42.
Eastman Kodak Company, Rochester, N. Y. Photographic film. 312,555; May 5. Class 26.
Electric Equipment Corporation, The, Davenport, Iowa. Electric appliances. 311,372; May 5. Class 21.
El Estado Products Company, Seattle, Wash. Face and vanishing creme. 298,092; May 5. Class 6.
Ely & Walker Dry Goods Company, St. Louis, Mo. Underwear. 312,045; May 5. Class 39.
Essanay Dress Company. (See Scharf, Joseph H.)
Farley, E. O., Limited, Camperdown, near Sydney, Australia. Digestive beverage material containing chocolate and yeast. 303,049; May 5. Class 46.
Fingles, W. A., Inc., Baltimore, Md. Flashing and skylights. 311,832; May 5. Class 12.
Firth-Sterling Steel Company, McKeesport, Pa. Metals. 312,370; May 5. Class 14.
Fleer, Frank H., Corporation, Philadelphia, Pa. Chewing gum. 305,967; May 5. Class 46.
Foster Chemical Co. (See Gregg, James D.)
Fret Chemical Co., Greensboro, N. C. Preparation for the treatment of disordered conditions of the stomach or bowels, etc. 312,423; May 5. Class 6.
Frosted Foods Company, Inc., New York, N. Y. Frozen food products. 301,024; May 5. Class 46.
Gardiner Manufacturing Company, Inc., Buffalo, N. Y. Washing solution for fabrics, etc. 305,751; May 5. Class 4.
Gilbert & Barker Manufacturing Company, West Springfield, Mass. Oil burners. 311,475; May 5. Class 34.
Gitman Brothers, Cincinnati, Ohio. Fresh vegetables. 311,329; May 5. Class 46.
Glassberg, Jack, doing business as Universal Distributing Co., Newark, N. J. Photographic flash lamps. 312,183; May 5. Class 21.
Glidden Company, The, doing business as Wisconsin Food Products Co., Cleveland, Ohio. Pure uncolored oleomargarine. 304,813; May 5. Class 46.
Goldman, Meyer, Philadelphia, Pa. Apparel for dolls. 312,518; May 5. Class 22.
Goodman, H., & Sons, Inc., New York, N. Y. Nonelectrical hair wavers, hair curlers, and hair pins. 311,096; May 5. Class 40.
Gordon Corporation, Ltd., Berkeley, Calif. Soap, washing powder, and other cleaning preparations. 310,993; May 5. Class 4.
Goudey Gum Co., The, Allston, Mass. Chewing gum. 311,330; May 5. Class 46.
Green Caddie Corporation, Detroit, Mich. Golf tees. 309,611; May 5. Class 22.
Gregg, James D., doing business as Foster Chemical Co., Liberty, N. C. Powder for use in the treatment of headache, etc. 312,428; May 5. Class 6.
"Griesogen" Griesheimer Autogen Verkaufs-Gesellschaft m. b. H., Frankfort-on-the-Main-Gresheim, Germany. Metal gas bottles, flasks, drums, and tanks. 309,682; May 5. Class 2.
Hahn, Wm., & Company, Washington, D. C. Shoes. 310,940; May 5. Class 39.
Hanna, M. A., Company, The, Cleveland, Ohio. Hard coal, bituminous coal, and coke. 312,645–6; May 5. Class 1.
Harbin, Gladys G., Atlanta, Ga. Dropsy medicine. 312,560; May 5. Class 6.
Hart Drug Corporation, Miami, Fla. Inhalants. 311,727; May 5. Class 6.
Hillyard Chemical Company, St. Joseph, Mo. Porcelain and enamel cleaning compound. 310,990; May 5. Class 4.
Hillyard Chemical Company, St. Joseph, Mo. Deodorizing cakes. 310,998; May 5. Class 6.
Hollywood Candy Co. (See Martoccio, F. A., Company.)
Homeyard, Maria L. K., doing business as The Mother Job Cure Laboratory and Liquifruta Laboratories, London, England. Proprietory cough medicine for human use. 309,618; May 5. Class 6.
Huston, Tom, Corporation, Columbus, Ga. Grapefruit juice. 312,151; May 5. Class 45.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Stimulant. 312,186; May 5. Class 6.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. General antiseptic. 312,187; May 5. Class 6.
Ideal Supply Company, Chicago, Ill. Material for toughening the fibers of silk. 311,610; May 5. Class 6.
Independent Lock Company, Fitchburg, Mass. Padlocks. 311,782; May 5. Class 25.
International Safety Razor Corp., Bloomfield, N. J. Razor blades. 312,563; May 5. Class 23.
International Safety Razor Corp., Bloomfield, N. J. Razors and razor blades. 312,564; May 5. Class 23.
Isolantite Company of America, Inc., Belleville, N. J. Ceramic insulators. 312,230; May 5. Class 21.
Jameson-Boyce Company, Binghamton, N. Y. Flour, canned fruit and vegetables, etc. 292,731; May 5. Class 46.
Jamieson, C. E., Detroit, Mich. Cod liver oil preparation. 310,381; May 5. Class 6.
Jomol Petroleum Products, Philadelphia, Pa. Petroleum jelly. 312,232; May 5. Class 6.
Junkers, Hugo, Dessau, Germany. Automobiles, motor boats, airships, etc. 279,926; May 5. Class 19.
Junkers, Hugo, Dessau, Germany. Altimeters, instruments for taking bearings, inclinometers, etc. 279,929; May 5. Class 26.
Kappa Delta Pi, Tiffin, Ohio. Keys and badges. 312,052; May 5. Class 28.
Kellogg, M. W., Company, The, New York, N. Y. Plastic monolithic refractories. 311,963; May 5. Class 12.
Kennedy, W. J., Dairy Co., Detroit, Mich. Dairy products. 306,532; May 5. Class 46.
Kennel Gardens, Inc. (See Simpson, W. Earl.)
Keystone Portland Cement Company, Philadelphia, Pa. Portland cement. 311,063; May 5. Class 12.
Ko-Rect Posture Chair Company. (See Biltwell Chair and Furniture Company.)
Kotzin, Theodore, Los Angeles, Calif. Knickers. 306,651; May 5. Class 39.
Kraemer, A. L., Co., Chicago, Ill. School papers of all kinds. 311,839; May 5. Class 37.
Kresge, S. S., Company, Detroit, Mich. Mouth harmonicas. 310,591; May 5. Class 36.
Kress, S. H., & Co., New York, N. Y. Garters. 312,344; May 5. Class 39.
Lady Peggy, Inc. (See Scott & Gilbert Co.)
Lash's Products Company, San Francisco, Calif. Beverages and syrups, compounds, flavors, and concentrates for making the same. 312,302; May 5. Class 45.
Lefferman, Rebecca, doing business as The Silver Bottling Works, Port Chester, N. Y. Maltless beverages and syrups and extracts used in making the same. 312,565; May 5. Class 45.
Leggett, Francis H., & Company, New York, N. Y. Food for dogs. 312,505; May 5. Class 46.
Lentheric, Incorporated, New York, N. Y. Perfumes, toilet waters, face powders, sachets, etc. 310,058; May 5. Class 6.
Levin, Nathan, doing business as Star Bottling Works, Philadelphia, Pa. Orange flavor soft drinks. 300,423; May 5. Class 45.
Lewy Chemical Company, The, New York, N. Y. Insecticides. 312,189; May 5. Class 6.
Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass. 307,209; May 5. Class 33.
Lima Cord Sole and Heel Company, The, Lima, Ohio. Soles. 310,648; May 5. Class 39.
Lima Cord Sole and Heel Company, The, Lima, Ohio. Soles for shoes. 310,649; May 5. Class 39.
Lowell Mills Company, Lowell, Mass. Hosiery. 312,155; May 5. Class 39.
Lyndonville Canning Company, Inc., The, Lyndonville, N. Y. Canned applesauce. 312,656; May 5. Class 46.
Marion Orange Crush Bottling Company, Inc., doing business as Orange Crush Bottling Co. Inc. and also as Blue Ridge Ginger Ale Co., Marion, Va. Maltless beverages. 304,056; May 5. Class 45.
Marshall Field & Company, Chicago, Ill. Rubber tires and tubes. 312,144; May 5. Class 35.
Marshall Field & Company, Chicago, Ill. Rubber tires and tubes. 312,146; May 5. Class 35.
Martoccio, F. A., Company, doing business as Hollywood Candy Co., Minneapolis, Minn. Candy bars. 312,611; May 5. Class 46.
Maskey, Anna, doing business as Maskey's, San Francisco, Calif. Candies. 310,132–4; May 5. Class 46.

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Maul Company, The, Detroit, Mich. Concrete units. 312,057; May 5. Class 12.
Maybaum Brothers, Inc., New York, N. Y. Pearls and precious stones and articles of jewelry. 311,744; May 5. Class 28.
McAteer, R. C., Company, Pittsburgh, Pa. Food tints. 311,745; May 5. Class 6.
McCreery Manufacturing Company, Portland, Oreg. Union suit under garments. 310,434; May 5. Class 39.
McGuire, P. J., Wenatchee, Wash. Fresh apples. 305,048; May 5. Class 46.
Mellcan & Company, Chicago, Ill. Soap flakes. 310,022; May 5. Class 4.
Melville Shoe Corporation, New York, N. Y. Hosiery. 311,968; May 5. Class 39.
Miller, Campbell E., Butler, Pa. Shoes. 312,304; May 5. Class 39.
Minnesota Consolidated Canneries, Inc., Minneapolis, Minn. Canned corn. 301,490; May 5. Class 46.
Modern Tissues Corporation, doing business as Antoinette Doré, New York, N. Y. Toilet paper. 312,111; May 5. Class 37.
Morehouse, Chas. D., El Monte, Calif. Fresh rhubarb. 305,720; May 5. Class 46.
Mother Job Cure Laboratory and Liquifruta Laboratories, The. (See Homeyard, Maria L. K.)
Munsingwear Corporation, The, Minneapolis, Minn. Underwear. 312,113; May 5. Class 39.
Murray and Nickell Manufacturing Company, Chicago, Ill. Henna, quick wave set, and wave set powder compound. 312,195; May 5. Class 6.
National Fireproofing Corporation, Pittsburgh, Pa. Ceramic structural units. 311,843; May 5. Class 12.
National Labeling Machine Co., Inc., Long Island City, N. Y. Machines for applying labels. 276,896; May 5. Class 23.
National Petroleum Publishing Company, Cleveland, Ohio. Periodical. 311,924; May 5. Class 38.
Naugatuck Chemical Company, The, New York, N. Y. Condensation product of formaldehyde and ethylamine. 309,276; May 5. Class 1.
New England Fish Company, Seattle, Wash. Canned salmon. 305,365; May 5. Class 46.
Norge Corporation, Detroit, Mich. Water coolers. 311,883; May 5. Class 31.
North American Refractories Company, Cleveland, Ohio. Dry fire brick material. 309,650; May 5. Class 12.
Ohio Brass Company, The, Mansfield, Ohio. Metals and alloys, rods, etc. 311,412; May 5. Class 14.
Orange Crush Bottling Co. Inc. (See Marion Orange Crush Bottling Company, Inc.)
Orbit Listerated Gum Company, Chicago, Ill. Chewing gum. 312,308; May 5. Class 46.
Parade, Incorporated, Cleveland, Ohio. Magazine. 312,663; May 5. Class 38.
Paragon Novelty Bag Co., Inc., New York, and Newburgh, N. Y. Hand bags, billfolds, wallets, and purses. 311,970; May 5. Class 3.
Paris Hair Tonic Company, The, Sociedad Anonima, Mexico City, Mexico. Hair-curling tonic. 304,342; May 5. Class 6.
Parker Brothers Inc., Salem, Mass. Board game. 312,248; May 5. Class 22.
Parker Brothers, Inc., Portland, Me., and Salem, Mass. Card game. 312,622; May 5. Class 22.
Paxton & Gallagher Company, Omaha, Nebr. Canned fruits, canned vegetables, canned fish, etc. 311,281; May 5. Class 46.
Phillips Ribbon & Carbon Co., Inc., Rochester, N. Y. Carbon and copy sheet holder. 312,237; May 5. Class 37.
Pioneer Suspender Company, Philadelphia, Pa. Apparel belts, suspenders, braces, etc. 311,971–5; May 5. Class 39.
Precision Electrotype Company, San Francisco, Calif. Rubber and brass stamps and brands. 292,009; May 5. Class 37.
Press Publishing Company, New York, N. Y. Comic strip or section for newspaper publication. 312,386; May 5. Class 38.
Propper-McCallum Hosiery Co., Inc., New York, N. Y. Hosiery. 311,927; May 5. Class 39.
Pyott Foundry & Machine Co., Chicago, Ill. Power transmission machinery. 307,953; May 5. Class 23.
R R R Chemical Company, Rader, Tenn. Preparation for the destruction of rats and mice. 311,535; May 5. Class 6.
Rankin, Wm. H., Company, Chicago, Ill. Beverages and compounds, concentrates, and syrups for making the same. 275,296; May 5. Class 45.
Rasmussen, Geo., Co., Chicago, Ill. Butter, cocoa, coffee, etc. 297,329; May 5. Class 46.
Ream, Charles A., Lancaster, Pa. Golf game boards. 310,026; May 5. Class 22.
Red Star Yeast & Products Company, Milwaukee, Wis. Dried grains. 312,627; May 5. Class 46.
Refrigeration Corporation of Maryland, Baltimore, Md. Refrigerating cabinets. 312,774; May 5. Class 31.
Research Foundation, Inc., New York, N. Y. Tooth powder, dentifrices, and mouth wash. 310,027; May 5. Class 6.
Research Products Corporation, New York, N. Y. Mercury. 312,531; May 5. Class 6.
Rex Modeling Clay Co. (See Dietz, Anna C.)
Reynolds & Co., New York, N. Y. Cheese. 312,532; May 5. Class 46.
Röhm & Haas Company, Philadelphia, Pa. Unsplinterable glass. 310,661; May 5. Class 33.
Ronuk, Limited, Portslade, near Brighton, England. Detergent preparations. 311,202; May 5. Class 4.
Russell Manufacturing Company, The, Middletown, Conn. Brake lining. 312,572; May 5. Class 35.
Samaco Chemical Company. (See Sammons, Walter H.)
Sammons, Walter H., doing business as Samaco Chemical Company. Ointments. 311,849; May 5. Class 6.
Sano Typewriter Pad Company, Wilkes-Barre, Pa. Cushioning pads. 312,455; May 5. Class 50.
Schachtelkäsefabrik Franz Zwick, Kellmunz (Schwaben), Germany. Cheese. 297,782; May 5. Class 46.
Scharf, Joseph H., doing business as Essanay Dress Company, New York, N. Y. Misses' dresses. 309,236; May 5. Class 39.
Scott & Gilbert Co., doing business as Lady Peggy, Inc., San Francisco, Calif. Lip sticks, rouge compacts, cold creams, etc. 290,478; May 5. Class 6.
Scott, O. M., & Sons Company, Marysville, Ohio. House organ. 312,270; May 5. Class 38.
Scruggs-Vandervoort-Barney, St. Louis, Mo. Complexion powder, cleansing creme, tissue creme, astringent lotion, etc. 311,933; May 5. Class 6.
Shoe Form Co., Inc., Auburn, N. Y. Toy boats. 311,344; May 5. Class 22.
Shoudy, Chester P., Spokane, Wash. Dentifrices and mouth washes. 312,202; May 5. Class 6.
Silver Bottling Works, The. (See Lefferman, Rebecca.)
Simpson, W. Earl, doing business as Kennel Gardens, Inc., Elkridge, Md. Dog feed. 310,949; May 5. Class 46.
Smith, W. L., Orchards, Inc., Cheswold, Del. Sweet cider. 312,163; May 5. Class 45.
Societe Anonyme Jean Patou, Paris, France. Perfume, face and skin lotions, etc. 312,317; May 5. Class 6.
Societe des Etablissements Eugene Koenig (Eugene Koenig et Cie., Societe en Commandite par Actions), Marseille, France. Powder for washing and renewing wash leather gloves, etc. 304,931; May 5. Class 4.
Southern Rice Sales Company, Inc., New York, N. Y. Rice, barley, dried peas, etc. 310,780; May 5. Class 46.
Southland Coffee Company, Macon, Ga. Coffee. 311,982; May 5. Class 46.
Southland Coffee Company, Macon, Ga. Coffee. 312,576; May 5. Class 46.
Spratt's Patent (America) Limited, London, England. Dog food. 312,537; May 5. Class 46.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Insecticides, deodorants, and disinfectants. 311,796; May 5. Class 6.
Standard Oil Company of New Jersey, Wilmington, Del. Oils and lubricating greases. 312,274; May 5. Class 15.
Standard Oil Company of New Jersey, Wilmington, Del. Oils. 312,671; May 5. Class 15.
Star Bottling Works. (See Levin, Nathan.)
Statter, Humphrey, jr., doing business as The American Girl Products Co., Sioux City, Iowa. Sanitary napkin belts. 311,414; May 5. Class 44.
Stern, R., Company, The. (See David, Herman.)
Stevens, Chas. A., & Bros., Chicago, Ill. Playing cards. 276,105; May 5. Class 22.
Stratford, Charles W., doing business as Stratford Engineering Company, Kansas City, Mo. Petroleum refining equipment. 306,073; May 5. Class 23.
Summit Thread Company, East Hampton, Conn., and Boston, Mass. Threads. 311,984; May 5. Class 43.
Sutliff & Case Co., Inc., Peoria, Ill. Anesthetic. 312,285; May 5. Class 6.
Tar Products Corporation, Providence, R. I. Cleansing preparations for cement, etc. 306,750; May 5. Class 4.
Tar Products Corporation, Providence, R. I. Insecticides. 306,751; May 5. Class 6.
Tarkio Molasses Feed Company, Kansas City, Mo. Feeds. 310,742; May 5. Class 46.
Thermographic Corporation, New York, N. Y. Inks. 312,580; May 5. Class 11.
Tire Savers Corporation, Ltd., San Jose, Calif. Pressure gauges. 311,940; May 5. Class 26.
Tisch, Charles, Inc., Brooklyn, N. Y. Cabinet gas ranges, gas cookers, warm air furnaces, etc. 312,351; May 5. Class 34.
Tissue Company, The, Saugerties, N. Y. Paper napkins and handkerchiefs. 312,352; May 5. Class 37.
Truscon Steel Company, doing business as The Truscon Laboratories, Hamtramck, Mich. Paint. 310 667–8; May 5. Class 16.
United States Radium Corporation, New York, N. Y. Luminous or plain number plates, name plates, sign plates, etc. 311,497; May 5. Class 50.
Universal Distributing Co. (See Glassberg, Jack.)
Vandermyn, Armand J. P., doing business as Vandermyn Paint Company, Pittsburgh, Pa. Paints, varnishes, paste paints, and lacquers. 311,219; May 5. Class 16.
Vercillen Limited, Antwerp, Belgium. Cigars, cigarillos, cigarettes, etc. 309,912; May 5. Class 17.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Vollan, Joseph, doing business as Vollan's, Chicago, Ill. Wooden trays. 312,072; May 5. Class 2.
Warde, Mattie D., Philadelphia, Pa. Hair tonic, face lotion, face cream, foot lotion, etc. 307,025; May 5. Class 6.
Waterhouse Woolen Company, Chicago, Ill. Unfinished worsted woolen cloth. 308,149; May 5. Class 42.
Weil Clothing Co., St. Louis, Mo. Wearing apparel. 305,257; May 5. Class 39.
Whitacre, W. E., Inc., El Centro, Calif. Fresh melons. 311,351; May 5. Class 46.
White, Jack, Golf Company Limited, London, England. Golf balls, clubs, irons, tees, and bags. 306,114; May 5. Class 22.
Wiggans, Alva, Brookings, Oreg. Medicinal tea. 310,033; May 5. Class 6.
Wisconsin Food Products Co. (See Glidden Company, The.)

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 3

Pocket-Books, portfolios, satchels, etc. The Roycroftera. 82,643; renewed July 11, 1931.

CLASS 4

Soap, soap chips, and soap powder. Heller & Perrin. 282,951; May 5; Serial No. 308,781; published Feb. 24, 1931.
Soaps, cream. Crystal Chemical Company. 282,862; May 5; Serial No. 286,926; published Feb. 24, 1931.

CLASS 5

Glue. Edward Ermold Company. 282,787; May 5; Serial 307,392; published Feb. 17, 1931.

CLASS 6

Alcohol, Rubbing. Specialty Products Company. 282,936; May 5; Serial No. 308,091; published Feb. 17, 1931.
Aluminum compound. Samuel H. Dodd. 282,870; May 5; Serial No. 309,419; published Feb. 17, 1931.
Anhydrous oily solution. Gellocide Corporation. 282,904; May 5; Serial No. 309,200; published Feb. 24, 1931.
Antiseptic tablets, Vaginal. F. E. Lawrence. 282,827; May 5; Serial No. 306,988; published Feb. 10, 1931.
Astringents, astringent cerates, etc. Evenod Perfumer Inc. 282,788; May 5; Serial No. 307,621; published Feb. 17, 1931.
Cachet, wafers, capsules, etc. C. Bergeret. 282,884; May 5; Serial No. 309,550; published Feb. 24, 1931.
Calcium carbid. Union Carbide Company. 83,615; renewed Sept. 26, 1931.
Chalk, Precipitated. Industrial Chemical Sales Company. 282,919; May 5; Serial No. 303,718; published Sept. 9, 1930.
Chemical compound to control scaly bark and gumnosis in trees, S. W. Smith. 282,874; May 5; Serial No. 309,484; published Feb. 24, 1931.
Chicle or chewing gum containing acetylene-salicylic acid, Flavored. J. De Vautibault. 282,839; May 5; Serial No. 283,263; published Feb. 10, 1931.
Compound of tellurium, Chemically-prepared. R. T. Vanderbilt Company. 282,890; May 5; Serial No. 309,764; published Feb. 24, 1931.
Cosmetics. Martaba Distributing Company. 288,852; May 5; Serial No. 305,933; published Feb. 10, 1931.
Cough drops. W. Green. 282,851; May 5; Serial No. 305,483; published Feb. 17, 1931.
Cough syrup. Upjohn Company. 282,889; May 5; Serial No. 309,755; published Feb. 24, 1931.
Cream, Cold. F. W. Ross. 82,642; renewed July 11, 1931.
Creams, face lotions, etc., face. R. Volpi. 282,949; May 5; Serial No. 308,766; published Feb. 17, 1931.
Creams, rouges, face packs, eyelash grower, etc., Bleach and beauty. L. E. Lisner. 282,935; May 5; Serial No. 307,851; published Feb. 24, 1931.
Deodorants. E. M. E. Corporation. 282,829; May 5; Serial No. 294,149; published Mar. 4, 1930.
Dye, hair. Bersimo, Inc. 282,891; May 5; Serial No. 309,768; published Feb. 24, 1931.
Fluxes, Soldering. L. R. Benson. 83,469; renewed Sept. 19, 1931.
Insecticide, Insectifuge. USL Battery Corporation. 282,916; May 5; Serial No. 309,404; published Feb. 17, 1931.
Iodine, Nonirritating, nondrying, etc. Louangel Laboratories, Inc. 282,947; May 5; Serial No. 308,696; published Feb. 17, 1931.
Laundry blue. Reckett & Sons, Limited. 81,910; renewed May 16, 1931.
Laxative. Western Fruit Corporation, Inc. 282,811; May 5; Serial No. 309,765; published Feb. 17, 1931.
Liniment, External. C. A. Sorber. 282,930; May 5; Serial No. 307,063; published Feb. 17, 1931.
Lotion, hand and skin. McKesson & Robbins, Incorporated. 282,808; May 5; Serial No. 308,945; published Feb. 10, 1931.
Lotions and deodorants, Foot. J. E. Crockett. 282,888; May 5; Serial No. 309,725; published Feb. 24, 1931.
Medicated throat pastils. Evans Sons Leacher & Webb Limited. 81,446; renewed Apr. 11, 1931.
Medicinal beverage. Gosman Company. 282,825; May 5; Serial No. 306,350; published Feb. 10, 1931.
Medicinal oil. Jensol Laboratories, Inc. 282,917; May 5; Serial No. 307,406; published Feb. 24, 1931.
Medicinal preparation for acid stomach and heart relief. B. D. Johnson. 282,873; May 5; Serial No. 309,478; published Feb. 24, 1931.
Medicinal preparation for the relief of head colds, etc. Park Laboratory Co., Inc. 282,856; May 5; Serial No. 307,535; published Feb. 17, 1931.
Medicine. Chemische Fabriken Dr. Joachim Wiernik & Co., Aktiengesellschaft. 282,938; May 5; Serial No. 308,288; published Feb. 24, 1931.
Medicine. Cronol Co. Inc. 282,881; May 5; Serial No. 309,514; published Feb. 24, 1931.
Medicine or pharmaceutical preparation. Eli Lilly and Company. 282,892; May 5; Serial No. 309,823; published Feb. 24, 1931.
Medicines for the treatment of diseases in game and poultry. Gayhird, Limited. 282,824; May 5; Serial No. 306,178; published Feb. 10, 1931.
Mineral water. C. F. Leavitt. 282,934; May 5; Serial No. 308,942; published Feb. 17, 1931.
Oil mixture, etc. Mary & Dean Company. 282,929; May 5; Serial No. 307,024; published Feb. 17, 1931.
Ointment and an eczema and skin ointment, Pile. Keim Medicine Co. 282,858; May 5; Serial No. 307,678; published Feb. 17, 1931.
Ointment and salve used in the treatment of rheumatism. Rheumo-Chase Company. 282,952; May 5; Serial No. 308,906; published Feb. 17, 1931.
Perfume. Bourjois, Inc. 282,816; May 5; Serial No. 309,260; published Feb. 17, 1931.
Perfume, toilet water, face powder, etc. Societe Anonyme Premet. 282,915; May 5; Serial No. 309,402; published Feb. 24, 1931.
Powder, Vaginal germicidal. Clinton Laboratories, Inc. 282,817; May 5; Serial No. 309,189; published Feb. 17, 1931.
Powder, Vaginal germicidal. Clinton Laboratories, Inc. 282,903; May 5; Serial No. 309,190; published Feb. 17, 1931.
Powders, rouges, perfumes, etc., Face and talcum. Societe des Parfums Weil (Societe Anonyme). 282,944; May 5; Serial No. 308,602; published Feb. 24, 1931.
Preparation for the treatment of sore eyes, etc. J. Serrecchia. 282,831; May 5; Serial No. 295,540; published Feb. 17, 1931.
Preparations for growing hair. M. Gower. 282,846; May 5; Serial No. 303,179; published Feb. 17, 1931.
Restorer for birds, Health, song and vigor. H. Schliesser. 282,948; May 5; Serial No. 308,705; published Feb. 17, 1931.
Rouge. De Luxe Products, Inc. 282,822; May 5; Serial No. 309,026; published Feb. 17, 1931.
Salve. B. Gurhan. 282,942; May 5; Serial No. 308,545; published Feb. 24, 1931.
Salve for treating acne, pimples, blackheads, etc. Balmex Co. 282,806; May 5; Serial No. 308,876; published Feb. 10, 1931.
Shampoo, Hair. Mackie Pine Oil Specialty Company. 282,918; May 5; Serial No. 301,985; published Feb. 17, 1931.
Shampoo preparation. Koken Barbers' Supply Company. 82,094; renewed May 30, 1931.
Sodium bicarbonate. Diamond Alkali Company. 282,927; May 5; Serial No. 306,309; published Feb. 17, 1931.
Solid material having selective adsorptive properties, Finely divided. Industrial Chemical Sales Company. 282,847; May 5; Serial No. 303,569; published Feb. 10, 1931.
Suppositories, Prophylactic. J. S. Johnson Chemical Co. 282,911; May 5; Serial No. 309,383; published Feb. 17, 1931.
Tea for costiveness; headache, dizziness, etc., Herb. K. Ruckrich. 282,848; May 5; Serial No. 304,066; published Feb. 17, 1931.
Toilet articles. E. R. Siering. 81,751; renewed May 2, 1931.
Toilet preparations. W. F. Denney. 282,931; May 5; Serial No. 307,134; published Feb. 17, 1931.
Toilet preparations, medicines, and insecticides. Daniel Stewart Co. 82,652; renewed July 11, 1931.
Tooth paste and dental cream. D. Brown. 282,786; May 5; Serial No. 307,339; published Feb. 17, 1931.

CLASS 7

Rope, Wire. John A. Roebling's Sons Company. 81,746; renewed May 2, 1931.

CLASS 8

Cigarette papers. Maison Pierre Bardou Job. 36,970–1; renewed Aug. 27, 1931.

CLASS 9

Ammunition, firearms, and parts thereof. G. Genschow & Co., Aktiengesellschaft. 282,805; May 5; Serial No. 308,824; published Feb. 24, 1931.
Matches. Haldens Tændstikfabrik. 81,700–1; renewed May 2, 1931.

CLASS 10

Fertilizers. Bowker Fertilizer Company. 82,297; renewed June 20, 1931.
Fertilizers and manures. Bowker Fertilizer Company. 83,555; renewed Sept. 26, 1931.

CLASS 13

Belts, Automobile hub. M. Warshawsky. 282,955; May 5.
Hardware and plumbing and steamfitters' supplies. Van Camp Hardware & Iron Company. 81,886; renewed May 9, 1931.

CLASS 16

Paint and stain thinners and oils. Barrett Company. 282,866; May 5; Serial No. 295,418; published Feb. 24, 1931.
Paints, varnishes, stains, etc. O'Neil Lumber Company. 282,937; May 5; Serial No. 308,177; published Feb. 24, 1931.
Polish. S. Pijanowski. 282,932; May 5; Serial No. 307,176; published Feb. 24, 1931.
Shellac and other varnishes. W. H. Zinsser. 82,739; renewed July 18, 1931.

CLASS 17

Cigars. J. C. Newman. 80,937; renewed Feb. 14, 1931.

CLASS 21

Electric lamps. Macbeth-Evans Glass Co. 83,164; renewed Aug. 22, 1931.
Electric motors. Century Electric Co. 83,046; renewed Aug. 15, 1931.
Wires and cables. Rubber covered. Electric Cable Company. 81,688; renewed May 2, 1931.

CLASS 22

Balls, Rubber play. Eno Rubber Corporation. 282,966; May 5.
Bowling pins. Brunswick-Balke-Collender Company. 282,896–9; May 5; Serial Nos. 309,410–13; published Feb. 24, 1931.
Bowling pins. Sure-Strike, Inc. 282,922; May 5; Serial No. 305,375; published Feb. 24, 1931.
Cards, Playing. Western Printing & Lithographing Company. 282,887; May 5; Serial No. 309,720; published Feb. 24, 1931.
Game, Outdoor. E. E. Hosler. 282,859; May 5; Serial No. 301,642; published Feb. 24, 1931.
Golf bags, racket covers, etc. B. R. Hunt Manufacturing Company. 282,792; May 5; Serial No. 308,112; published Jan. 13, 1931.
Golf balls. Arlington Rubber Co. 282,894; May 5; Serial No. 310,006; published Feb. 24, 1931.
Golf clubs. Vulcan Corporation. 282,828; May 5; Serial No. 307,016; published Jan. 20, 1931.
Marbles, Playing. Akro Agate Company. 83,121; renewed Aug. 22, 1931.
Toy and model airplanes and parts thereof. Avio Corporation. 282,883; May 5; Serial No. 309,549; published Feb. 24, 1931.
Toy top. J. M. Krause. 282,868; May 5; Serial No. 300,205; published Feb. 24, 1931.
Toy vehicle similar to a sled. Powell Pressed Steel Company. 282,983; May 5; Serial No. 309,904; published Feb. 24, 1931.
Toys, Figure. Walt Disney Productions, Ltd. 282,857; May 5; Serial No. 307,658; published Feb. 24, 1931.

CLASS 23

Engines and parts thereof, Aircraft. H. H. Franklin Manufacturing Company. 282,799; May 5; Serial No. 308,622; published Feb. 17, 1931.
Files. Arion Steel Company. 282,875; May 5; Serial No. 304,496; published Mar. 10, 1931.
Jacks, Lifting. Duff Manfg. Co. 82,310; renewed June 20, 1931.
Machine for cutting bread, cake, pies, etc. Better Products Machine Company. 282,878; May 5; Serial No. 309,498; published Feb. 24, 1931.
Machinery, implements, farm operating equipment, and parts thereof, Agricultural. J. I. Case Company. 282,906; May 5; Serial No. 309,230; published Feb. 24, 1931.
Machines, tools, and dies, Engravers', watchmakers' and jewelers'. A. Muehlmatt. 82,528; renewed July 4, 1931.
Metal swaging machinery. Andrew C. Campbell, Incorporated. 282,879; May 5; Serial No. 309,510; published Feb. 24, 1931.
Saw blades, Hack. E. C. Atkins and Company. 282,865; May 5; Serial No. 293,815; published Mar. 4, 1930.
Teaspoons, soup spoons, butter knives, etc. S. H. Kress & Co. 282,957; May 5.
Threshers, combine threshers, shredders, etc. Advance-Rumely Company. 282,950; May 5; Serial No. 308,767; published Feb. 24, 1931.
Tire-inflating machine. N. Chirelstein. 282,933; May 5; Serial No. 307,803; published Feb. 24, 1931.
Tools and parts, hand cutting. Parker Wire Goods Company. 282,871; May 5; Serial No. 309,441; published Feb. 24, 1931.
Type-writing machines. Noiseless Typewriter Company. 81,543; renewed Apr. 18, 1931.

CLASS 26

Calculating machines. Calculator Equipment Corporation. 282,880; May 5; Serial No. 309,511; published Feb. 24, 1931.
Cameras, Photographic. Agfa Ansco Corporation. 282,900; May 5; Serial No. 309,052; published Feb. 24, 1931.
Compasses, Navigation. Pioneer Instrument Company. 282,914; May 5; Serial No. 309,394; published Feb. 24, 1931.
Multiplication device and pencil case, Combined. Enterprise Specialty Co. 282,872; May 5; Serial No. 309,466; published Feb. 24, 1931.
Optical instruments. Testrite Instrument Company. 282,928; May 5; Serial No. 306,713; published Feb. 24, 1931.
Picture projectors. F. Adams. 282,939; May 5; Serial No. 308,319; published Feb. 24, 1931.

CLASS 29

Mops, Cotton. J. P. Nawrath. 83,347–9; renewed Sept. 5, 1931.

CLASS 32

Furniture, Living room, dining room, etc. Jamestown Lounge Company. 282,926; May 5; Serial No. 306,135; published Feb. 24, 1931.
Furniture, Office. Corry-Jamestown Manufacturing Corporation. 282,869; May 5; Serial No. 301,160; published Feb. 24, 1931.
Table pads. Nova Manufacturing Company. 282,960; May 5.

CLASS 33

Glass. Semon Bache & Company. 82,722; renewed July 18, 1931.

CLASS 35

Belting and machine belting of leather, Woven machine. Lewis & Tylor, Limited. 82,525; renewed July 4, 1931.
Hose. Peerless Rubber Manufacturing Company. 82,356; renewed June 20, 1931.
Packing. Peerless Rubber Manufacturing Company. 82,357–8; renewed June 20, 1931.
Rubber goods. Imperial Rubber Co. 83,583; renewed Sept. 26, 1931.
Tires and inner tubes, Rubber vehicle. B. F. Goodrich Company. 282,905; May 5; Serial No. 309,204; published Feb. 24, 1931.

CLASS 36

Pianos. Starr Piano Company. 83,371; renewed Sept. 5, 1931.

CLASS 37

Bands, Rubber. United Drug Company. 282,814; May 5; Serial No. 309,488; published Feb. 17, 1931.
Crayons. American Crayon Company. 282,838; May 5; Serial No. 288,892; published Oct. 29, 1929.
Envelopes, Correspondence and mailing. J. McCabe. 282,819; May 5; Serial No. 309,090; published Feb. 17, 1931.
Erasers, Rubber. E. Faber. 83,565; renewed Sept. 26, 1931.
Paper and envelopes, Correspondence. United States Envelope Company. 282,845; May 5; Serial No. 303,135; published Feb. 17, 1931.
Paper and envelopes, Writing. American Papeterie Co. 282,789; May 5; Serial No. 307,650; published Feb. 17, 1931.
Paper and paper boards. Carl Steiner. 282,818; May 5; Serial No. 309,098; published Feb. 17, 1931.
Paper headrest covers. J. S. Miller. 282,815; May 5; Serial No. 309,391; published Feb. 17, 1931.
Paper, Mineral Coated. Champion Coated Paper Company. 282,841; May 5; Serial No. 281,262; published Feb. 17, 1931.
Paper napkins and towels. Tissue Company. 282,958; May 5.
Paper, Newsprint. Tonawanda Paper Company. 282,802; May 5; Serial No. 308,654; published Feb. 17, 1931.
Paper, Safety. Baldwin Paper Co. Inc. 282,812; May 5; Serial No. 309,722; published Feb. 17, 1931.
Paper, Toilet. Sauquoit Paper Co. 282,860; May 5; Serial No. 261,686; published Apr. 3, 1928.
Paper, Toilet. Wheeler Paper Corp. 282,941; May 5; Serial No. 308,524; published Feb. 17, 1931.

Paper, Writing and printing. Badger Paper Mills, Inc. 282,813; May 5; Serial No. 309,497; published Feb. 17, 1931.
Pencils and rubber erasers, Lead. E. Faber. 83,564; renewed Sept. 26, 1931.
Pens. Turner & Harrison Pen Manufacturing Company. 81,758; renewed May 2, 1931.
Pens and parts thereof, Fountain. L. E. Waterman Company. 83,621; renewed Sept. 26, 1931.
Pens, Fountain. K. Sakata. 282,800; May 5; Serial No. 308,643; published Feb. 17, 1931.
Stationery and supplies, file guides, etc. Yawman and Erbe Mfg. Co. 282,794; May 5; Serial No. 308,523; published Feb. 17, 1931.
Tracing cloth. Ritchie & Eason. 81,029; renewed Feb. 21, 1931.

CLASS 38

Bulletins. V. K. Cameron. 282,901-2; May 5; Serial Nos. 309,186-7; published Feb. 17, 1931.
Cards. American Tobacco Company. 282,832; May 5; Serial No. 297,651; published Feb. 17, 1931.
Cartoons. International Feature Service, Inc. 282,910; May 5; Serial No. 309,382; published Feb. 17, 1931.
Columns or articles published, Syndicated. Seven Arts Publishing Co. 282,864; May 5; Serial No. 293,793; published Apr. 1, 1930.
Magazine, Monthly. Macfadden Publications, Inc. 282,923; May 5; Serial No. 305,868; published Feb. 17, 1931.
Magazine, Section of a. J. W. Lowrie. 282,945; May 5; Serial No. 308,631; published Feb. 17, 1931.
Newspaper section, column, or department. Morning Telegraph, Inc. 282,912-13; May 5; Serial Nos. 309,392-3; published Feb. 17, 1931.
Publications, Printed. Hurley and Sanders. 282,940; May 5; Serial No. 308,441; published Feb. 17, 1931.
Vignette or masthead for a daily newspaper. The Call Publishing Company. 282,867; May 5; Serial No. 299,826; published Feb. 17, 1931.

CLASS 39

Bloomers, Ladies' textile fabric. H. A. Harris. 282,844; May 5; Serial No. 301,914; published Feb. 17, 1931.
Boots and shoes and rubber oversboes, Rubber. Hood Rubber Co. 81,079; renewed Feb. 28, 1931.
Boots and shoes, Leather. F. M. Hoyt Shoe Company. 82,086; renewed May 30, 1931.
Coats, Boys', infants', etc. Schneiderman Bros. 282,809; May 5; Serial No. 308,908; published Feb. 17, 1931.
Corsets. H & W Company. 81,698; renewed May 2, 1931.
Gloves. Dent, Allcroft & Co. 80,990; renewed Feb. 21, 1931.
Hosiery. Bellas Hess & Co. 825,60; renewed July 11, 1931.
Hosiery. Chas. Chipmans Sons. 76,740; renewed Feb. 15, 1930.
Hosiery. Contour Hosiery Mills. 282,797; May 5; Serial No. 308,577; published Feb. 17, 1931.
Hosiery. Julian Gutman & Company. 282,804; May 5; Serial No. 308,729; published Feb. 17, 1931.
Hosiery. Interwoven Stocking Company. 83,070; renewed Aug. 15, 1931.
Hosiery. Le Roi Hosiery Co. Inc. 282,795; May 5; Serial No. 308,548; published Feb. 17, 1931.
Hosiery. Thomas Mills, Inc. 282,801; May 5; Serial No. 308,652; published Feb. 17, 1931.
Hosiery. Vaughan Knitting Company. 83,374; renewed Sept. 5, 1931.
Overalls. Alexander Bros. Co. 83,537; renewed Sept. 26, 1931.
Robes, beach robes, smoking jackets, etc., Lounging. Blumenthal Lewin Co. 282,961; May 5.
Shirts, pajamas, and underwear. Kirby, Block & Fischer, Inc. 282,953; May 5.
Shirts, pajamas, and underwear. Llondale Shirt Co. Inc. 282,965; May 5.
Sportswear, etc., Knitted. Rubinger Sportswear Corp. 282,798; May 5; Serial No. 308,597; published Feb. 17, 1931.
Suits and coats, Men's and youths'. Park-Brooke Clothes. 282,837; May 5; Serial No. 293,686; published Feb. 18, 1930.
Trousers. Peckham-Foreman, Inc. 282,836; May 5; Serial No. 299,859; published Feb. 17, 1931.
Undershirts, drawers, union suits, and hosiery, Knitted. Cooper & Roe. 81,857; renewed May 16, 1931.
Underwear. Campe Corporation. 282,963; May 5.
Underwear, Knit. Lax & Strauss. 82,995; renewed Aug. 8, 1931.
Underwear, Knitted. J. F. Quinn. 83,593; renewed Sept. 26, 1931.

CLASS 41

Umbrellas, Wagon and tractor. Sears, Roebuck and Co. 282,823; May 5; Serial No. 308,961; published Feb. 17, 1931.

CLASS 42

Fabric for shades, screens, and curtains, Woven. A. C. Hough. 36,909; renewed Aug. 20, 1931.
Tulles of all kinds. Gros, Million & Cie. 81,073; renewed Feb. 28, 1931.
Wooden and worsted cloths. Thomas Oakes & Co. 282,853; May 5; Serial No. 305,978; published Jan. 20, 1931.
Woolen piece goods. Detmer Woolen Company. 81,967; renewed May 23, 1931.

CLASS 44

Capes, agrons, and hoods. J. W. Geiger, Inc. 282,920; May 5; Serial No. 304,637; published Feb. 24, 1931.
Prophylactic articles. Cutino Company. 282,850; May 5; Serial No. 304,608; published Sept. 30, 1930.
Rubber articles for the prevention of contagious diseases, Prophylactic. I. J. Friedland. 282,921; May 5; Serial No. 305,181; published Feb. 24, 1931.
X-ray apparatus. F. R. Campbell. 282,886; May 5; Serial No. 309,663; published Feb. 24, 1931.

CLASS 45

Beverages. Elco Distributing Company. 282,826; May 5; Serial No. 306,773; published Feb. 24, 1931.
Ginger ale. K. B. Beverage Company. 282,810; May 5; Serial No. 309,781; published Feb. 24, 1931.

CLASS 46

Alimentary pastes, canned prepared foods. E. Mora. 282,964; May 5.
Bread. Rubel Baking Co. 282,959; May 5.
Butter. Elgin Butter Company, The. 36,163; renewed Apr. 2, 1931.
Cake icing. Adolf J. Mainzer, Inc. 282,820; May 5; Serial No. 309,089; published Feb. 17, 1931.
Candies. Jaynes Drug Company. 82,519; renewed July 4, 1931.
Candies. Larkin Co. Inc. 282,876; May 5; Serial No. 309,929; published Feb. 24, 1931.
Candies, National Candy Company. 81,619; renewed Apr. 25, 1931.
Candy. The Candyland. 242,946; May 5; Serial No. 308,679; published Feb. 24, 1931.
Canned fruits. Griffith-Durney Co. 83,830; renewed Oct. 17, 1931.
Canned grapefruit and grapefruit juice. Scoville Canning Company. 282,885; May 5; Serial No. 309,623; published Feb. 24, 1931.
Canned olives. Albers Packing Company. 282,793; May 5; Serial No. 308,237; published Feb. 17, 1931.
Canned pineapples. Hawaiian Pineapple Company 282,861; May 5; Serial No. 275,314; published Sept. 16, 1930.
Canned vegetables, malt syrup, canned fruits, etc. Mexican Wholesale Grocery Co. 282,849; May 5; Serial No. 304,156; published Feb. 17, 1931.
Cocoa for use as a table beverage. Nutravite Limited. 282,854; May 5; Serial No. 306,012; published Feb. 17, 1931.
Coffee. Coastal Coffee Co. 282,895; May 5; Serial No. 310,010; published Feb. 24, 1931.
Coffee. D. D. Palmer. 282,877; May 5; Serial No. 310,040; published Feb. 24, 1931.
Coffee and tea. Standard Brands Incorporated. 282,909; May 5; Serial No. 309,362; published Feb. 24, 1931.
Confections, Frozen. Acidophilus Ice Cream Corporation. 282,807; May 5; Serial No. 308,873; published Feb. 17, 1931.
Corn oil, Edible. Corn Products Refining Company. 83,639; renewed Oct. 3, 1931.
Extract from plant or grain substances. I. O. Wallace. 282,791; May 5; Serial No. 308,048; published Feb. 17, 1931.
Extract, Malt. C. Lurch. 282,962; May 5.
Extract of pepper, creole mustard, sweet pepper catsup, etc. A. G. Danove. 282,833; May 5; Serial No. 298,083; published Feb. 17, 1931.
Fat shortening, Hard. Vegetable Oil Products Company. 282,842; May 5; Serial No. 229,310; published May 8, 1928.
Flour. Ballard & Ballard Co. 282,821; May 5; Serial No. 309,057; published Feb. 17, 1931.
Flour. Voigt Milling Company. 83,375; renewed Sept. 5, 1931.
Flour, Self rising. Theo. Stivers Milling Company. 282,785; May 5; Serial No. 307,229; published Jan. 27, 1931.
Foods. J. W. Crook. 81,508; renewed Apr. 18, 1931.
Gum, Chewing. Curtiss Candy Company. 282,882; May 5; Serial No. 309,515; published Feb. 24, 1931.
Ham. Millar Brothers & Company. 282,925; May 5; Serial No. 306,102; published Feb. 24, 1931.
Ice cream and sherbet. W. J. Batson. 282,835; May 5; Serial No. 298,971; published Jan. 6, 1931.
Ice cream confections. S. Rothbard. 282,803; May 5; Serial No. 308,704; published Feb. 17, 1931.
Jellies and marmalades, fruit preserves, canned vegetables, etc. Palmetto Canning Co. 282,784; May 5; Serial No. 307,171; published Feb. 17, 1931.
Macaroni. Italian Macaroni Mfg. Co. Inc. 282,843; May 5; Serial No. 306,096; published Feb. 17, 1931.
Mayonnaise, salad dressing, condiment sauces, etc. Baltimore Butterine Company. 282,790; May 5; Serial No. 308,003; published Feb. 17, 1931.
Meal, Granulated. Valley City Milling Co. 82,659; renewed July 11, 1931.
Olive oil and sesame oil. Hashemesh, Inc. 282,834; May 5; Serial No. 298,447; published June 17, 1930.

Oysters or clams. Beacon Oyster Company. 282,943; May 5; Serial No. 308,571; published Feb. 24, 1931.
Peanut butter. P. Duff & Sons, Inc. 282,954; May 5.
Raisins and fruits, Dried. J. B. Inderrieden Co. 282,863; May 5; Serial No. 290,575; published Jan. 7, 1930.
Sausage. Virden Packing Co. 282,830; May 5; Serial No. 295,196; published Feb. 17, 1931.
Syrup, Cane. W. B. Roddenbery. 282,796; May 5; Serial No. 308,554; published Feb. 17, 1931.
Tea. Standard Brands Incorporated. 282,907-8; May 5; Serial Nos. 309,289-90; published Feb. 24, 1931.
Vegetable, Fresh. San Diego Fruit & Produce Co. 282,956; May 5.
Vegetable oil stearine. Capital City Products Company. 282,855; May 5; Serial No. 306,030; published Feb. 17, 1931.

CLASS 48

Powdered food products, viscid but stable products, cereals, etc. Liquid Dehydration Corporation. 282,840; May 5; Serial No. 282,559; published Feb. 17, 1931.

ALPHABETICAL LIST OF LABELS

Almost any Foot is a Normal Foot for Heel Hugger Shoes. For Shoes. Dunn & McCarthy, Inc. 39,070; May 5.
Amy Lee. For Butter. Blue Grass Creamery, Inc. 39,068; May 5.
Camel Dates—Good as They Look. For dates. Hills Brothers Company. 39,074; May 5.
El-O-Pathic Evacuant. For a Preparation for the Relief of Constipation. H. Henkin. 39,072; May 5.
Genuine Turpentine. For Turpentine. Midway Chemical Co. 39,079; May 5.
H. Heicklen Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,075; May 5.
Hen-King. For Tomatoes. E. S. Henking. 39,073; May 5.
Improved Chocolate Kandyeast. For Candy. E. C. Bennett. 39,067; May 5.
Independent (Red Label). For Pears. Washington Fruit & Produce Co. 39,085; May 5.
Independent (White Label). For Apples. Washington Fruit & Produce Co., Inc. 39,086; May 5.
Kemet Barium Magnesium 'Getter' Tablets. For Tablets of 'Getter' Composition. Kemet Laboratories Company. 39,077; May 5.
M. O'Neil. For Boxes. Hoague-Sprague Corporation. 39,076; May 5.
Necco Bolsters. For Candy. New England Confectionery Company. 39,081; May 5.
Nu-Vege-Sal. For Table Salt. S. Gysin. 39,071; May 5.
Pab-cote. For Industrial Coatings. Paraffine Companies. 39,082; May 5.
Reefer's No-Moth Cedaraire. For Preparations for Protection Against Moths. Reefer's No-Moth, Inc. 39,083; May 5.
Sleepy Water. For Mineral Water. Chewaukla Mineral Springs Company. 39,069; May 5.
21—A. For Battery Clips. Mueller Electric Company. 39,080; May 5.
Ward's Vitabred. For Bread. Ward Baking Company. 39,084; May 5.
White King Cocoa Almond. For Soap. Los Angeles Soap Co. 39,078; May 5.

ALPHABETICAL LIST OF PRINTS

Bufarator. For Domestic Refrigerator. J. G. Scott. 13,174; May 5.
Double-Gammon. For Game. Bishop Products Company. 13,168; May 5.
Fruit and Flavors. For Soda Fountain Fruits and Flavors. J. Hungerford Smith Co. 13,171; May 5.
Golden Bee Brand Comb Honey. For Comb Honey. E. A. Sprague. 13,175; May 5.
Heat Tempered. For Gasoline. Standard Oil Company. 13,176; May 5.
It Fits the Hand. For Jar Peanut Butter. Williamson Candy Company. 13,177; May 5.
Juicy Orange. For Orange Juice. J. Hungerford Smith Co. 13,172; May 5.
Phillips' Milk of Magnesia. For Milk of Magnesia. Chas. H. Phillips Chemical Co. 13,173; May 5.
Reju-Velour. For a Toilet Preparation. J. L. Cayne. 13,169; May 5.
Rochester Root Beer. For Root Beer. J. Hungerford Smith Co. 13,170; May 5.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 5TH DAY OF MAY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Aba, Eugene, Oakland, assignor to Neon Appliances Ltd. of America, Emeryville, Calif. Attaching external electrodes. 1,803,541; May 5.

Abbe, Edward J., assignor to The Elwell Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,804,046; May 5.

Abbe, Edward J., assignor to The Elwell-Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,804,047; May 5.

Abbona, Giacomo, Mondovi Breo, Italy. Transmission. 1,803,744; May 5.

Aberfoyle Manufacturing Company. (See Ruff, Samuel P., jr., assignor.)

Abernathy, Rollin M., Seattle, Wash. Milk can cover. 1,803,825; May 5.

Abler, John E., Hollywood, Calif. Core position indicator for well drilling apparatus. 1,803,785; May 5.

Adams, Charles A., Humble, Tex. Rod elevator. 1,804,074; May 5.

Adams, George R., Los Angeles, Calif. Doorknob. 1,803,375; May 5.

Adams, Harold E., assignor to Nash Engineering Company, South Norwalk, Conn. Priming mechanism for centrifugal pumps. 1,803,885; May 5.

Adams, Herbert, Liverpool, England, assignor, by mesne assignments, to Associated Telephone & Telegraph Company, Kansas City, Mo. Rotary line switch circuit. 1,803,452; May 5.

Adams, Walter S., assignor to The J. G. Brill Company, Philadelphia, Pa. Graduated semielliptic spring. 1,804,300; May 5.

Addier, Joseph H., Brooklyn, N. Y., assignor to Pulilcan Manufacturing Corporation, Bridgeport, Conn. Bundling towels preparatory for washing. 1,803,826; May 5.

Adsit, Frank W., and T. W. Hicks, Minneapolis, Minn. Printing blanket for offset work. 1,804,139; May 5.

Aeromarine Plane & Motor Company. (See Boland, Joseph J., assignor.)

Aeromarine Plane & Motor Company. (See Chilton, Roland, assignor.)

Aero Model Company, The. (See Schutte, Junius M., assignor.)

Affel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. System for communicating with moving vehicles. 1,803,453; May 5.

Affel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Ssystem for communicating with moving vehicles. 1,803,454; May 5.

Agfa Ansco Corporation. (See Bornmann, Carl, assignor.)

Agfa Ansco Corporation. (See Lowkrantz, Gunne, assignor.)

Agrimson, John J., County of Rushford, Minn. Cream cooler. 1,804,194; May 5.

Aitken, William J., Chicago, Ill., assignor, by mesne assignments, to National Parking Garages, Incorporated. Automobile handling and storing apparatus. 1,803,583; May 5.

Albritton, Dez, Spokane, Wash. Memorandum paper holder or similar article. Des. 84,067; May 5.

Alden, Herbert W., and N. R. Brownyer, assignors to The Timken-Detroit Axle Company, Detroit, Mich. Car truck. 1,803,584; May 5.

Alemite Corporation. (See Davis, Ernest W., assignor.)

Alemite Corporation. (See Hanson, Christian A., assignor.)

Alemite Corporation. (See Zerk, Oscar U., assignor.)

Alfreds, Torris H., Park Ridge, assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,803,685; May 5.

Alland, Maurice, Atlantic City, N. J. Soap dispenser. 1,803,827; May 5.

Alland, Maurice, Atlantic City, N. J. Soap dispenser. 1,803,828; May 5.

Allbright-Nell Company, The. (See Ozouf, Arthur E., assignor.)

Allen, Lavont C. (See Cowley, J. T., and Allen.)

Allen, Lavont C. (See Jennings, C. S., and Allen.)

Allis-Chalmers Manufacturing Company. (See Nye, Henry V., assignor.)

Allis-Chalmers Mannfacturing Company. (See Powell, William H., assignor.)

Alm, Joseph E., San Francisco, Calif. Expansible cuff link. 1,803,988; May 5.

Almquist, Leopold, Jersey City, N. J., assignor to American Car and Foundry Company, New York, N. Y. Mine car. 1,803,376; May 5.

Altenkirch, Edmund, Neuenhagen, near Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Absorption machine. 1,803,318; May 5.

Altorfer Bros. Company. (See Deilhaugh, Mark A., assignor.)

Aluminum Company of America. (See Doerschuk, Victor C., assignor.)

American Can Company. (See Fitzgerald, Fred F., assignor.)

American Can Company. (See Hothersall, John M., assignor.)

American Can Company. (See Jones, Lyman L., assignor.)

American Car and Foundry Company. (See Almquist, Leopold, assignor.)

American Car and Foundry Company. (See Beyer, John, assignor.)

American Car and Foundry Company. (See Dietrichson, William F., assignor.)

American Car and Foundry Company. (See Johnson, Warren V., assignor.)

American Car and Foundry Company. (See Joy, Robert W., assignor.)

American Car and Foundry Company. (See Rohifing, John M., assignor.)

American Car and Foundry Company. (See van Hoorn, Albert W. W., assignor.)

American Car and Foundry Company. (See Walp, Charles F., assignor.)

American Ice Company. (See Lange, George, assignor.)

American Lace Mfg. Co., The. (See Hucknall, Hage.W., assignor.)

American Laundry Machinery Company, The. (See Carroll, E. J., and Cutter, assignors.)

American Optical Company. (See Cunning, William A., assignor.)

American Optical Company. (See Johnston, George S., assignor.)

American Optical Company. (See O'Meara, Denis H., assignor.)

American Ozone Company. (See Daily, James M., assignor.)

American Protein Corporation. (See Wescott, William B., assignor.)

American Sales Book Company. (See Bottle, Edward K., assignor.)

American Seal-Kap Corporation. (See Goodwin, Carl W., assignor.)

American Signs Corporation. (See Schaefer, Frank, assignor.)

American Smelting and Refining Company. (See Rutherford, Ronald C., assignor.)

American Switch Point Protector and Railroad Equipment Company, The. (See Kilburn, Isaac J., assignor.)

American Telephone and Telegraph Company. (See Affel, Herman A., assignor.)

American Telephone and Telegraph Company. (See Drew, George A., assignor.)

American Valve & Meter Company, The. (See Tanner, Robert A., assignor.)

Ames, Butler, Lowell, Mass. Electric signaling apparatus. 1,804,195; May 5.

Amoit, Félix, assignor to Société d'Emboutissage et de Constructions Mécaniques, Colombes, France. Hollow frame assembly. 1,803,494; May 5.

Anderson, Alexander G., Whiteland, Ind. Wireless receiving static eliminator. 1,803,419; May 5.

Anderson, Charles L., Ravenswood, W. Va. Brooder. 1,804,242; May 5.

Anderson, Gust A., Rockford, Ill. Match box container and holder. 1,803,989; May 5.

Anderson, Robert G. (See Jupp, W. B., and Anderson.)

Andre, Frank V., Sewickley, and H. A. Davis, New Brighton, Pa. Aquatic amusement apparatus. 1,804,075; May 5.

Andrew, Thurman, Jamaica Plain, Mass. Garter. 1,803,786; May 5.

Andrews, Charles W., Duluth, Minn., assignor of one-half to H. A. Brassert, Chicago, Ill. Gas production. 1,803,686; May 5.

Andrews, John, jr., Kerrobert, Saskatchewan, Canada. Combined rail lifter and spike puller. 1,804,301; May 5.

Andrews, John L., Elmwood Park, assignor to Stewart-Warner Corporation, Chicago, Ill. Vacuum tank. 1,803,687; May 5.

Andrus, George P., Rainier, Oreg. Golf table. Des. 84,068; May 5.

Angel, Herbert, and J. W. Robinson, Brooklyn, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y. High speed fork regenerating repeater for telegraph systems. 1,804,302; May 5.

Apple, Vincent G., Dayton, Ohio. Electric starting device. 1,803,829; May 5.

Archea, Walter D. (See Binns, G. W., Archea, and Nenninger, assignors.)
Arey, Fred R., Oakland, and W. E. Jones, jr., Alameda, Calif. Card table. 1,803,830; May 5.
Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Power plant. 1,803,455; May 5.
Arndt, Franklin E., assignor to The Galion Iron Works & Mfg. Co., Galion, Ohio. Leaning wheel grader. Re18,064; May 5.
Arthur, George M., Glassboro, N. J. Fire fighting implement. 1,803,831; May 5.
Arutunoff, Armais, Bartlesville, Okla. Wire for winding motors, etc. 1,804,076; May 5.
Arvey Corporation. (See Horwath, Julius, assignor.)
Associated Telephone & Telegraph Company. (See Adams, Herbert, assignor.)
Atmospheric Nitrogen Corporation. (See Kniskern, Walter H., assignor.)
Atwood, Hart W., Portland, Oreg. Automatic means for lubricating the bearings of a machine. 1,803,456; May 5.
Atwood & Morrill Co. (See Morrill, Herbert B., assignor.)
Ausman, Paul W., Birmingham, Ala. Slag cooling apparatus. 1,803,886; May 5.
Automatic Electric Inc. (See Hershey, Harry E., assignor.)
Automatic Musical Instrument Company. (See Yelder, Harry A., assignor.)
Automatic Registering Machine Company. (See Staring, William H., assignor.)
Averell, Sylvester G., assignor to John Chatillon & Sons, New York, N. Y. Spring scale. 1,803,832; May 5.
Babcock & Wilcox Company, The. (See Davy, Christopher H., assignor.)
Babcock & Wilcox Company, The. (See Whittam, Benjamin B., assignor.)
Backus, Clarence E., and D. G. Williamson, Parkersburg, W. Va. Well pump apparatus. 1,804,077; May 5.
Badeker, John, Chicago, Ill. Metallic rod packing. 1,803,990; May 5.
Baden, Martin W., Winfield, Kans. Preventing corrosion in pipes. 1,804,078; May 5.
Baehr, Albert, Chicago, Ill. Truss for the reduction or alleviation of hernia. 1,803,457; May 5.
Bahnson Company, The. (See Bahnson, Frederic F., assignor.)
Bahnson, Frederic F., assignor to The Bahnson Company, Winston-Salem, N. C. Air conditioning apparatus. 1,804,079; May 5.
Bailey Meter Company. (See Hardgrove, Ralph M., assignor.)
Bailey, Walter T. (See Federwitz, T. A., and Bailey.)
Bainbridge, George K., Ripon, Calif. Plastic molding machine. 1,803,991; May 5.
Baker, Orson F., et al. (See Sherburne, Claude L., assignor.)
Baker, Thomas W. (See Magee, Frederick W., assignor.)
Baldus, Paul C. (See Irgens, F. T., and Baldus.)
Balkwill, Stephen W., Cleveland Heights, Ohio. Railway crossing. 1,803,420; May 5.
Ball, George S. (See Teeple, G. L., and Ball.)
Barnes, Carl B. H., Detroit, Mich. Electrically operated cradle. 1,803,887; May 5.
Barnes, William A., assignor to Dominion Electrical Mfg. Company, Minneapolis, Minn. Electrical cooking appliance. 1,804,190; May 5.
Barr, George A., et al. (See Goetz, George, assignor.)
Barr, S. M., et al. (See Goetz, George, assignor.)
Barratt, William T., assignor to Charles Cooper Company, Inc., Bennington, Vt. Circular knitting machine. 1,803,833; May 5.
Barrett, Arthur M., Winnetka, assignor to Barrett-Cravens Company, Chicago, Ill. Lift truck. 1,803,688; May 5.
Barrett-Cravens Company. (See Barrett, Arthur M., assignor.)
Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Striking casting. 1,804,080; May 5.
Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Striking casting. 1,804,081; May 5.
Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Striking casting. 1,804,082; May 5.
Barry, Joseph F., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Clamping device. 1,804,140; May 5.
Barstow Stove Company. (See Starr, Clarence D., assignor.)
Bartsch, Herbert E. (See Nash, C. J., and Bartsch.)
Basola, Anthony, and F. Nemarnick, Long Island City, N. Y. Die nut. 1,803,888; May 5.
Bassecches, Jacob T., New York, N. Y. Radiopanel. 1,803,310; May 5.
Batcheller, Birney C., Wallingford, Vt., assignor to The Lamson Company, Syracuse, N. Y. Pneumatic despatch system. 1,803,377; May 5.
Bates, Mortimer F., Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc. Power transmission. 1,803,834; May 5.
Battey, William A., Haverford, Pa., assignor to Pennsylvania Crusher Company, New York, N. Y. Hammer crusher. 1,803,585; May 5.
Banck, Theodore H., assignor to The E. J. Manville Machine Company, Waterbury, Conn. Safety means for blank feeding mechanism. 1,803,992; May 5.
Bayer, Leo J., St. Louis, Mo. Boiler cleaner. 1,803,495; May 5.
Bayton, Edward A., Detroit, Mich., assignor to The Lees-Bradney Company, Cleveland, Ohio. Feeding mechanism for hobbing machines. 1,804,303; May 5.
Beane, Bella, Alpena, Mich. Combined bumper and mud guard. 1,804,304; May 5.
Beaton & Cadwell Manufacturing Company, The. (See Cadwell, W. H., and Ott, assignors.)
Becker, Bernard C., York, Pa., assignor, to The Yoder Pencil Company, Cleveland, Ohio. Pencil. 1,803,586; May 5.
Becker, Rudolph, North Plainfield, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Presser-device for sewing machines. 1,803,930; May 5.
Beckman, Herman C., Chicago, Ill., assignor to The De Laval Separator Company, New York, N. Y. Device for suspending and supplying cleaning fluid to teat cups. 1,803,319; May 5.
Beebe, Lloyd S., Scotia, N. Y., assignor to General Electric Company. Folding loop antenna. 1,804,305; May 5.
Beidler, Elliott W., Elyria, and A. C. Roessler, Lakewood, assignors to Romec Corporation, Elyria, Ohio. Hydraulic shock absorber. 1,804,141; May 5.
Bell, Alfred B., assignor to Hale & Kilburn Co., Philadelphia, Pa. Reclining seat. 1,803,835; May 5.
Bell & Howell Company, The. (See Steckbart, Bruno, assignor.)
Bell Telephone Laboratories, Incorporated. (See Barry, Joseph F., assignor.)
Bell Telephone Laboratories, Incorporated. (See Bruce, E., and Friis, assignors.)
Bell Telephone Laboratories, Incorporated. (See Collis, Raymond E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gray, Frank, assignor.)
Bell Telephone Laboratories, Incorporated. (See Keller, Arthur C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Knowlton, A. D., and Everett, assignors.)
Bell Telephone Laboratories, Incorporated. (See Morton, Edmund R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Stoller, Hugh M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Stryker, Norman R., assignor.)
Bender, Raymond C., West Palm Beach, Fla. Acoustic device. 1,804,306; May 5.
Bendix Brake Company. (See La Brie, Ludger E., assignor.)
Benson, Stewart F., and W. I. Peterson, Brainerd, Minn. Drier. 1,803,421; May 5.
Berbeck, Trian, Baltimore, Md. Method and apparatus for increasing the lift of airplanes. 1,804,307; May 5.
Berger, Emil J., Hatfield, and A. W. Swartz, Norristown, assignors to The Dexdale Hosiery Mills, Lansdale, Pa. Yarn moistening device. 1,804,366; May 5.
Bergerioux, René, Reuilly, France. Distributing device for distributor drills. 1,803,521; May 5.
Bergman, Donald J., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for vapor fractionation. 1,803,956; May 5.
Berlin, David W., Rasunda, Sweden. Heat exchange device. 1,804,083; May 5.
Bernadt, Walter H., Buffalo, N. Y. Conveyer control. 1,803,689; May 5.
Berry, Robert C., Indianapolis, Ind. Clutch. 1,803,458; May 5.
Bertelsmann, Hans. (See Mueller, H., and Bertelsmann.)
Bertram, Hugo A., Malden, Mass. Heel shaping machine. 1,803,587; May 5.
Bettenga, Creno P., Marshalltown, Iowa. Heating apparatus. 1,803,690; May 5.
Beyer, John, Bayonne, N. J., assignor to American Car and Foundry Company, New York, N. Y. Valve. 1,803,378; May 5.
Bigelow-Sanford Carpet Co. (See Stone, Edwin W., assignor.)
Bihr, Alphonse, New York, N. Y. Decalcomania and making the same. 1,803,836; May 5.
Billington, Samuel, assignor to The Southington Hardware Company, Southington, Conn. Try- and miter-square. 1,804,142; May 5.
Binns, George W., W. D. Archea, and L. F. Nenninger, assignors, by mesne assignments, to The Cincinnati Grinders Incorporated, Cincinnati, Ohio. Centerless grinding. 1,804,197; May 5.
Birdsall, Wilfred T., Montclair, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Feeding device. 1,804,143; May 5.
Bishop, John R., Waterloo, Iowa. Piston gauge. 1,803,311; May 5.
Bissell, Richard E., Cleveland Heights, assignor to Thompson Products, Inc., Cleveland, Ohio. Apparatus for heating and ventilating cars. 1,804,144; May 5.
Blackburn, Floyd. (See Runkles, E. M., and Blackburn.)
Blackmore, Lloyd, assignor to General Motors Corporation, Detroit, Mich. Spare tire lock. 1,803,931; May 5.
Blaisdell, Harrison O., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,803,496; May 5.

Blake, John T. (See Boggs, Charles R., and Blake, assignors.)
Blake, Louis H., Altus, Okla. Fishing line float. 1,804,084; May 5.
Blank, Arthur D., San Francisco, Calif., H. A. Kohman, Pittsburgh, Pa., and A. Schultz, New York, N. Y., assignors, by mesne assignments, to Standard Brands, Incorporated, Dover, Del. Leavened product and composition of matter. 1,803,588; May 5.
Blanton, William B. (See Drake, H. W., and Blanton.)
Blessington, Stephen G., Claremont, N. H. Tape attaching machine. 1,804,198; May 5.
Blood, George H. (See Palge, P. F., and Blood.)
Blumenthal, Julius J., assignor to Lighting Appliance Company, Inc., New York, N. Y. Lighting fixture or article of similar nature. Des. 84,069; May 5.
Blyth, Lennox M., Chirnside, Scotland. Variable transmission gear. 1,803,422; May 5.
Boggs, Charles R., Waban, and J. T. Blake, assignors to Simplex Wire & Cable Company, Boston, Mass. Rubber compound and articles. 1,804,199; May 5.
Bohl, Hugo, Westfield, N. J., assignor to Radiant Lighting Fixture Co., Inc., New York, N. Y. Glass shade for a lighting fixture or article of similar nature. Des. 84,070; May 5.
Bohnhardt, Bruno F. (See Bohnhardt, Charles F. H. and B. F.)
Bohnhardt, Charles F. H., and B. F., Lynwood, Calif. Noncorroding valve. 1,803,889; May 5.
Bohnsack, John A., Cleveland Heights, assignor to The E. F. Hauerman Company, Cleveland, Ohio. Adjustable abutment mold. 1,803,589; May 5.
Boker, Vitus A., assignor to Min-A-Max Co., Minneapolis, Minn. High pressure grease gun. 1,803,312; May 5.
Boland, Joseph J., assignor, by mesne assignments, to Aero-Marine Plane & Motor Company, Inc., Keyport, N. J. Valve gear. 1,803,459; May 5.
Bolender, Augustus B., assignor to Warner Gear Company, Muncie, Ind. Jig bushing. 1,804,381; May 5.
Bollinger, John C., Olympia, Wash. Sleeve holder. 1,804,308; May 5.
Bond, William L., Schenectady, N. Y., assignor to General Electric Company. Current regulating device. 1,804,243; May 5.
Borden, Arthur H., North Dartmouth, Mass. Container. 1,804,085; May 5.
Borden Company, The. (See Pealer, Robert B., assignor.)
Bornmann, Carl, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Picture projector. 1,803,313; May 5.
Borovitz, Joseph, assignor to Joseph Borovitz, Inc., New York, N. Y. Combined receptacle for smokers' article or similar devices. Des. 84,071; May 5.
Borovitz, Joseph, Inc. (See Borovitz, Joseph, assignor.)
Bosch, Fritz, Pforzheim, Germany. Timepiece serving as a watch or traveling clock. 1,804,048; May 5.
Bossard, Gisbert L., assignor to General Kontrolar Company, Inc., Dayton, Ohio. Flasher. 1,803,590; May 5.
Boston Rubber Mat Company. (See O'Toole, Martin H., assignor.)
Bott, George R., assignor to Norma-Hoffman Bearings Corp., Stamford, Conn. Bearing assembly unit and mounting therefor. 1,803,591; May 5.
Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada. Manifolding book. 1,804,145; May 5.
Bour, John W., Los Angeles, Calif. Clear vision device. 1,803,787; May 5.
Bourbeau, Olivier, Paris, France. Automatic brake adjusting mechanism. 1,804,309; May 5.
Bowser, Percy L. (See Flammang, J., and Bowser.)
Boyle Manufacturing Company, The. (See Boyle, Willis J., jr., assignor.)
Boyle, Willis J., jr., assignor to The Boyle Manufacturing Company, Inc., Los Angeles, Calif. Forming and cutting machine. 1,803,542; May 5.
Bradley, Charles E., and C. D. Mason, assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Lining for rubber articles. Re18,058; May 5.
Brady, Vincent, New York, N. Y. Aerial toy. 1,804,244; May 5.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,803,314; May 5.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,803,592; May 5.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Power actuator. 1,803,957; May 5.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Branche, Nelson T., assignor to Surface Combustion Corporation, Toledo, Ohio. Thermostat. 1,804,367; May 5.
Brand, Harry R., New York, N. Y. Mechanism and method for controlling business. 1,803,522; May 5.
Brass Goods M'f'g. Co. (See Hyatt, Frank S., assignor.)
Brassert, Herman A. (See Andrews, Charles W., assignor.)
Breer, Carl, Detroit, assignor to Chrysler Corporation, Highland Park, Mich. Carburetor. 1,803,315; May 5.
Brennan, Charles T., Waterbury, Conn. Hopper feed. 1,803,993; May 5.
Brenneman, B. W. (See Palich, Martin B., assignor.)
Bricard, Roger, assignor to Société Anonyme Francaise Dite: Bricard, Ancienne Maison Sterlin, Paris, France. Irreversible rotary power transmission system. 1,804,310. May 5.
Briede & Rogovsky. (See Kent, Owen, assignor.)
Brill, J. G., Company, The. (See Adams, Walter S., assignor.)
Brill, J. G., Company, The. (See Latshaw, Elmer, assignor.)
Brockelsby, Ralph A., Cleveland, Ohio. Toothbrush. 1,803,497; May 5.
Brockway, Carl P., Ridgewood, assignor to World Bestos Corporation, Paterson, N. J. Process and apparatus for plating wire. 1,803,691; May 5.
Brodt, Hektor, Zuchwil, near Solothurn, assignor to Scintilla Aktiengesellschaft, Solothurn, Switzerland. Reversing switch. 1,804,086; May 5.
Brooks Engineering Corporation. (See Brooks, Stephen H., assignor.)
Brooks, Stephen H., assignor to Brooks Engineering Corporation, Los Angeles, Calif. Fire prevention system for tanks. 1,803,460; May 5.
Brouse, William, H. D., Toronto, Ontario, Canada. Automatic document vending machine. 1,804,200; May 5.
Brown, Carl D., assignor to Draper Corporation, Hopedale, Mass. Loom dobby. 1,804,368; May 5.
Brown, Carl D., assignor to Draper Corporation, Hopedale, Mass. Shifting shuttle box loom. 1,804,369; May 5.
Brown, Charles F., Beaver, Pa. Tank valve. 1,803,423; May 5.
Brown, Charley L., Rushville, Mo. Aircraft motor and mounting. 1,804,311; May 5.
Brown, Charley L., Rushville, Mo. Aircraft motor and mounting. 1,804,312; May 5.
Brown Company. (See Elder, Robert F., and Hill, assignors.)
Brown Company. (See Schur, Milton O., assignor.)
Brown, Henry K., assignor to Cook Laboratories, Inc., Chicago, Ill. Hypodermic syringe. 1,803,316; May 5.
Brown, John W., Manufacturing Company, The. (See Johnson, Roy W., assignor.)
Brown, Marshall, Heltonville, Ind. Shingle bracket. 1,803,788; May 5.
Brown, Phelps, Springfield, Mass. Magneto. 1,803,543; May 5.
Brown, Robert N., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,803,317; May 5.
Brown and Sharpe Manufacturing Company. (See Townsend, Herbert E., assignor.)
Brown, Tom R., assignor to The Glacifer Corporation, Kennett Square, Pa. Shipping container. 1,803,544; May 5.
Brownlee, Mason, Oakland, Calif. Combined curtain and shade bracket. 1,803,593; May 5.
Brownyer, Nelson R. (See Alden, H. W., and Brownyer.)
Brownyer, Nelson R., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Car truck. 1,803,594; May 5.
Bruce, Daniel C., Nashville, Tenn. Composition of matter. 1,804,245; May 5.
Bruce, Edmond, and H. T. Friis, Red Bank, N. J., assignors to Bell Telephone Laboratories, New York, N. Y. Wave amplifying system. 1,804,087; May 5.
Brubaker, Jacob E., assignor to The Hubley Manufacturing Co., Lancaster, Pa. Toy. 1,804,313; May 5.
Brun, Charles, Roosevelt, N. Y. Tronser hanger. 1,804,314; May 5.
Brune, Rudolf. (See Wagner, H., and Brune.)
Bryant Electric Company, The. (See McKinley, Benjamin P., assignor.)
Bub, Leopold. (See Kramer, O., and Bub.)
Buckeye Steel Castings Company, The. (See Bush, Samuel P., assignor.)
Buckeye Steel Castings Company, The. (See Johnson, George T., assignor.)
Budd, Walter P., Durham, N. C. Roof flashing. 1,804,246; May 5.
Budd, Walter P., Durham, N. C. Roof flashing. 1,804,315; May 5.
Budde, Wilhelm, Berlin-Dahlem, Germany. Telegraphic system. 1,803,379; May 5.
Bunce, Earl H., and G. T. Mahler, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y. Reducing zinciferous material. 1,804,201; May 5.
Burgess, Joseph E., New York, assignor to The United States Printing & Lithograph Company, Brooklyn, N. Y. Display toy aeroplane. 1,803,789; May 5.
Burke, Jeremiah, Terre Haute, Ind. Steam boiler. 1,803,790; May 5.
Burke, Mark P., Long Beach, Calif. Gas lift means. 1,803,837; May 5.
Burke, Ulysses J., Des Moines, Iowa. Phonograph attachment. 1,803,692; May 5.
Bush, Samuel P., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car truck construction. 1,803,791; May 5.

Buase, Edwin G., Chicago, Ill., assignor, by mesne assignments, to F. Schaefer, Pittsburgh, Pa. Brake beam hanger bracket. 1,804,146; May 5.
Butler, Frank O., Chicago, Ill. Hand positioner for golf clubs. 1,804,316; May 5.
Byron Jackson Co. (See Smith, Nelson K., assignor.)
C. E. Manufacturing Co. (See Quarrie, Eugene A., assignor.)
C-S Engineering Company. (See Coffin, Joel S., jr., assignor.)
C-S Engineering Company. (See Schellens, Eugene L. and C. A., assignors.)
Cadwell, William H., and J. Ott, assignors to The Beaton & Cadwell Manufacturing Company, New Britain, Conn. Sent operated flush valve. 1,803,958; May 5.
Caller, Raymond E., New York, N. Y. Conduit for dust collecting systems. 1,804,147; May 5.
Cameron, James A., Brooklyn, N. Y., and G. B. Rickard, Glen Rock, N. J., assignors to Cameron Machine Company, Brooklyn, N. Y. Winding machine. Re18,060; May 5.
Cameron Machine Company. (See Cameron, J. A., and Richard, assignors.)
Campbell, A. S., Company. (See Kubler, Frederick J., assignor.)
Campbell, Gordon G., Upper Montclair, and J. Klepac, Fort Lee, N. J., assignors to Kohler-Brambach Piano Company, New York, N. Y. Grand piano action. 1,803,890; May 5.
Campbell, Robert C., Millburn, N. J., assignor, by mesne assignments, to Oliver United Filters, Inc., San Francisco, Calif. Filtering material and method of filtering sugar juices. 1,803,380; May 5.
Canadian Electro Products Company. (See Nieuwland, Julius A., assignor.)
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carpenter, Charles E., Chicago, Ill. Eradication of quack grass and the like. 1,803,938; May 5.
Carpenter, Samuel R., Sweetwater, Tex. Cake knocker for oil presses. 1,803,745; May 5.
Carroll, Emil J., and E. I. Cutter, assignors to The American Laundry Machinery Company, Norwood, Ohio. Unloading or discharging means. 1,803,662; May 5.
Carroll, Fred M., Yonkers, assignor to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine. 1,803,959; May 5.
Carson, George C., San Francisco, Calif., assignor to Carson Investment Company. Producing blister copper from copper bearing materials. 1,803,663; May 5.
Carson Investment Company. (See Carson, George C., assignor.)
Casper, Frank L., Howes Cave, N. Y. Table leaf support. 1,803,545; May 5.
Catoldo, Giovanni R., Boston, Mass. Fruit press. 1,803,595; May 5.
Cavins, Omar A., Glendale, Calif. Well casing and removing the same from a well. 1,803,839; May 5.
Cemroc, Inc. (See Ormesher, Frank L., assignor.)
Champlin, Franklin J., Dalton, Mass., assignor to General Electric Company. System of electric motor control. 1,804,317; May 5.
Chance, Albert B., Centralia, Mo. Pole guy fixture. 1,804,202; May 5.
Chaplin, Merle P., Waterville, assignor, by mesne assignments, to Fidelity Trust Company, trustee, Portland, Me. Pulp molding machine. 1,804,203; May 5.
Chapman, Frank D., Berlin, Wis. Automatic cooker. 1,803,994; May 5.
Charlier, Maurice, Brussels, Belgium. Apparatus for swaging dental plates. 1,804,318; May 5.
Charman, Walter M., Youngstown, Ohio. Lining for hot top. 1,804,205; May 5.
Charman, Walter M., Youngstown, Ohio. Hot top. 1,804,208; May 5.
Charman, Walter M., and H. J. Darlington, Youngstown, Ohio; said Darlington assignor to said Charman. Hot top for ingot molds. 1,804,204; May 5.
Charman, Walter M., and H. J. Darlington, Youngstown, Ohio; said Darlington assignor to said Charman. Hot top. 1,804,206; May 5.
Charman, Walter M., and H. J. Darlington, Youngstown, Ohio; said Darlington assignor to said Charman. Mold wiper for hot tops. 1,804,207; May 5.
Chase, Elroy A., Northfield, assignor to Rock of Ages Corporation, Burlington, Vt. Producing a contoured surface on stone. 1,803,891; May 5.
Chatillon, John, & Sons. (See Averell, Sylvester G., assignor.)
Chéron, Pierre J., Stratford, Conn., assignor to Moto Meter Gauge & Equipment Corporation, Toledo, Ohio. Cover plate for traffic warning device. Des. 84,072; May 5.
Cherry-Burnrell Corporation. (See McCain, Wes W., assignor.)
Chicago-Cleveland Car Roofing Company. (See Swanson, Earl R., assignor.)
Chicago Forging & Manufacturing Company. (See Hynes, Dibrell P., assignor.)
Chicago Surgical & Electrical Co. (See Lidberg, Tiodolf, assignor.)
Chilton, Roland, assignor, by mesne assignments, to Aeromarine Plane & Motor Company, Inc., Keyport, N. J. Airplane control. 1,803,498; May 5.
Chilton, Roland, Ridgewood, N. J., assignor to Wright Aeronautical Corporation. Splined connection. 1,803,995; May 5.
Christensen, Niels C., Salt Lake City, Utah. Method and apparatus for spraying fluid pulps. 1,803,792; May 5.
Christianson, Neales P., Los Angeles, Calif. Apparatus for launching planes. 1,803,320; May 5.
Christman, Matthias, Springfield, Mo. Lubricating device. 1,803,746; May 5.
Chrysler Corporation. (See Breer, Carl, assignor.)
Church, James S., Brookline, Mass. Cable tractor. 1,804,148; May 5.
Cilley, Osborn H., Manheim, assignor to United States Asbestos Co., Manheim, Pa. Asbestos insulating tape. 1,803,840; May 5.
Cinch Manufacturing Corporation. (See Peters, Arthur C., assignor.)
Cincinnati Grinders Incorporated. (See Binns, George W., Arches, and Nenninger, assignors.)
Clark, Noah D., assignor of one-half to G. Struble, Cincinnati, Ohio. Packing structure. 1,804,088; May 5.
Clark, Ralph C. (See Goetz, H. W., Clairk, and Ferlin.)
Clandel, Charles H., Veuxhaulles, France. Internal combustion engine. 1,803,461; May 5.
Claus, Bruno, Sangerhausen, Germany. Electric lamp. 1,804,049; May 5.
Clawson, Albert E., Bryn Mawr, Pa., assignor to Taylor Instrument Companies, Rochester, N. Y. Pressure responsive instrument. 1,803,996; May 5.
Cleary, Edward T. (See Rutledge, A. E., and Cleary.)
Clemens, Fred J., East Haven, assignor to The William Schollhorn Company, New Haven, Conn. Hand tool. 1,804,149; May 5.
Clerc, Leonard F., Detroit, Mich. Street car. 1,803,747; May 5.
Cleveland Folding Machine Company, The. (See Tufts, Lesley R., assignor.)
Cleveland Graphite Bronze Company, The. (See Klocke, William H., assignor.)
Cobe Engineering Company. (See Cobe, Harry H., assignor.)
Cobe, Harry H., Chelsea, assignor to Cobe Engineering Company, Boston, Mass. Electric pump. 1,804,375; May 5.
Cobe, Harry H., Chelsea, assignor to Cobe Engineering Company, Boston, Mass. Electromagnetic reciprocating mechanism. 1,804,376; May 5.
Cochran, Ben L., Duncan, Okla., assignor to Magnolia Petroleum Company, Dallas, Tex. Trailer. 1,804,089; May 5.
Coffin, Joel S., jr., Englewood, assignor to C-S Engineering Company, Jersey City, N. J. Locomotive front end construction. 1,803,793; May 5.
Cohoe Processes, Inc. (See Cohoe, Wallace P., assignor.)
Cohoe, Wallace P., Riverdale-on-Hudson, assignor to Cohoe Processes, Inc., New York, N. Y. Machine for and method of dyeing cloth and otherwise treating textiles. 1,803,664; May 5.
Cole, Norman W. (See Stoody, Winston F., and S. M., and Cole.)
Collins, Patrick B., Dorchester, Mass. Shirt. 1,804,319; May 5.
Collis, Raymond E., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,804,150; May 5.
Colt's Patent Fire Arms Manufacturing Co. (See Moore, F. T., and Pfeiffer, assignors.)
Colt's Patent Fire Arms Manufacturing Co. (See Pfeiffer, Christian, assignor.)
Colt's Patent Firm Arms Manufacturing Co. (See Tansley, George H., assignor.)
Conlin, Joseph, et al. (See Estep, William G., assignor.)
Conlon, Thomas A., Silver Spring, Md. Recoil and counter-recoil mechanism for guns. 1,803,523; May 5.
Conner, Julian B., Humble, Tex. Flow tester. 1,804,247; May 5.
Connersville Blower Company, The. (See Townsend, William, assignor.)
Continental Can Company. (See Smith, William B., assignor.)
Conway, Joseph T., Cleveland, Ohio. Filing device. 1,803,997; May 5.
Cook Laboratories, Inc. (See Brown, Henry K., assignor.)
Cooper, Charles, Company. (See Barratt, William T., assignor.)
Cope, Raymond M., Chicago, Ill., assignor of one-tenth to C. Veneman and forty-five one-hundredths to W. A. Jackson. Vending machine. Re18,059; May 5.
Copeland, Jacob, Chicago, Ill., assignor to Riggs Optical Company, Consolidated. Retinoscope. 1,804,151; May 5.
Corrigan, James T., Washington, D. C. Loud speaker. 1,803,892; May 5.
Cosco, Frederick C., Columbus, Ohio, assignor to The Jeffrey Manufacturing Company. Battery box. 1,803,424; May 5.
Cowan, James L., assignor to Italo-French Produce Company, Pittsburgh, Pa. Display package. 1,804,152; May 5.
Cowley, James T., assignor to The Lamson Company, Syracuse, N. Y. Pneumatic dispatch system. 1,803,893; May 5.

Cowley, James T., and L. C. Allen, assignors to The Lamson Company, Syracuse, N. Y. Conveying apparatus. 1,804,153; May 5.
Cowley, James T. and L. C. Allen, assignors to The Lamson Company, Syracuse, N. Y. Conveyer system. 1,804,154; May 5.
Cowperthwait, Norman R., Silver Lake, Kans. Electric annunciator for automobile tires. 1,804,209; May 5.
Crago, Claude H., Strathfield, near Sidney, and A. E. Hamilton, Carlington, near Sidney, New South Wales, Australia. Centrifugal type dust separator. 1,803,462; May 5.
Craig, Richard M., San Antonio, Tex. Sign. 1,803,596; May 5.
Craig, Richard M., San Antonio, Tex. Revolving sign. 1,803,597; May 5.
Craig, Richard M., San Antonio, Tex. Changeable sign. 1,803,598; May 5.
Craig, Richard M., San Antonio, Tex. Display apparatus. 1,803,599; May 5.
Cramer, Raymond H., Newark, N. J., assignor to General Motors Corporation, Detroit, Mich. Coiling machine. 1,803,960; May 5.
Cramer, William N., Chicago, Ill. Roofing. 1,803,998; May 5.
Crandall, Weller R., assignor to Noveltoy Corporation, Chicago, Ill. Wheeled toy. Des. 84,073; May 5.
Cronenweth, Earl E., and C. G. Hamer, San Fernando, Calif. Spring oiler. 1,803,748; May 5.
Crosby Steam Gage & Valve Co. (See Davidson, Kenneth S. M., assignor.)
Cross, Henry H., and G. F. Fox, Chicago, Ill. Lubricant demonstrating can. 1,804,210; May 5.
Cross, John W., New York, N. Y. Column construction. 1,804,320; May 5.
Cross, Raleigh B., Oregon City, Oreg. Stovepipe anchor and lock. 1,803,894; May 5.
Crossley, William O., Toledo, Ohio. Mitering gauge. 1,804,248; May 5.
Crowe, Lloyd L. E., Milwaukee, Wis. Pulsation control. 1,804,321; May 5.
Crowell, Erd V., Los Angeles, Calif. Packer. 1,803,841; May 5.
Crumrine, Chester W., assignor to Electromatic Typewriters, Rochester, N. Y. Power mechanism for sheet punching machines. 1,804,090; May 5.
Cuff, James S., New London, Conn. Carburetor. 1,804,322; May 5.
Cunningham, John A., Bethlehem, assignor of one-half to M. Cunningham, Philadelphia, Pa. Nozzle. 1,803,425; May 5.
Cunningham, Mary. (See Cunningham, John A., assignor.)
Curtis, Thomas S., Huntington Park, assignor to The Vitrefrax Company, Los Angeles, Calif. Clay product, ceramic composition and associated process. 1,803,999; May 5.
Curtiss, Charles B., Bay City, Mich. Torque equalizing mechanism. 1,803,895; May 5.
Cutler-Hammer, Inc. (See Tregoning, William C., assignor.)
Cutler, Joseph W., assignor to Cutler Mail Chute Co., Rochester, N. Y. Closure for mail chutes. 1,804,050; May 5.
Cutler Mail Chute Co. (See Cutler, Joseph W., assignor.)
Cutter, Edmund I. (See Carroll, E. J., and Cutter.)
Cutting, Herbert A., Detroit, Mich. Cleaning means. 1,803,693; May 5.
Daily, James M., assignor to American Ozone Company, Chicago, Ill. Apparatus for making ozone. 1,803,600; May 5.
Damerell, Mark H., assignor to Wyman-Gordon Company, Worcester, Mass. Air turbine. 1,803,896; May 5.
Daniels, Nathan, Malden, and J. M. Pero, Randolph, Mass. Shoe lacing. 1,804,211; May 5.
Danielson, Carl T., Chicago, Ill. Saw. 1,803,463; May 5.
Danzer, Georg, assignor to the Firm Vogtlandische Maschinenfabrik (vorm. J. C. und H. Dietrich) A.G., Plauen, Germany. Cutting and transferring mechanism for printing presses. 1,803,499; May 5.
Darlington, Harry J. (See Charman, W. M., and Darlington.)
Davidson, Harry G., Ortega, Fla. Propulsion means for boats. 1,804,323; May 5.
Davidson, Kenneth S. M., Newton Highlands, assignor to Crosby Steam Gage & Valve Co., Boston, Mass. Gauge glass mounting. 1,803,842; May 5.
Davis, Cortland W., Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Blue flame mantle lamps. Re18,061; May 5.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricant compressor. 1,803,524; May 5.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,803,601; May 5.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Washing apparatus. 1,803,897; May 5.
Davis, Harry A. (See Andre, F. V., and Davis.)
Davis, John W. (See Decker, S. K., Johnson, Davis, and Junor.)
Davis, Roy P. M., Mount Union, Pa. Brickmaking machine. 1,803,546; May 5.
Davy, Christopher H., Beckenham, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Dry pipe. 1,803,381; May 5.
Day, Roland B., New York, N. Y. Producing carbon black and apparatus therefor. 1,804,249; May 5.
Decker, Sherwin K., G. A. Johnson, J. W. Davis, and J. B. Junor, Los Angeles, Calif., assignors to International Business Machines Corporation, New York, N. Y. Accounting means. 1,803,961; May 5.
Deere & Company. (See Paul, William L., assignor.)
Defibaugh, Mark A., assignor to Altorfer Bros. Company, Peoria, Ill. Washing machine. 1,803,382; May 5.
Defibaugh, Mark A., assignor to Altorfer Bros. Company, Peoria, Ill. Washing machine. 1,803,383; May 5.
De Florez, Luis, Pomfret, Conn., assignor to The Texas Company. Furnace. 1,804,155; May 5.
Degener, Gustave O. (See Hochman, J. C., and Degener.)
De Giers, Clarence A., Forest Hills, assignor to The Liquidometer Corporation, Long Island City, N. Y. Movement transmitting system. 1,804,212; May 5.
De Laval Separator Company, The. (See Beckman, Herman C., assignor.)
Delco-Remy Corporation. (See Haas, Nelson R., assignor.)
Demarest, Thomas W., Pittsburgh, Pa. Crosshead shoe. 1,803,749; May 5.
Dennis, Adolphus S., Oakland, Calif., assignor to Monroe Calculating Machine Company, Orange, N. J. Attachment for calculating machines. 1,803,464; May 5.
Dennis, Basil W. Columbus, Ohio. Expansion joint or coupling. 1,803,665; May 5.
Derry, Charles H., Alliance, Ohio. Radiocabinet. 1,804,000; May 5.
De Tar, Donald R., Schenectady, N. Y., assignor to General Electric Company. Current regulating device. 1,804,250; May 5.
Detroit Body Die Company. (See Purdy, Emmett G., assignor.)
Deutsch, Hermann, Gross-Lichterfelde, near Berlin, Germany, assignor, by mesne assignments, to Pencil Mechanism Corporation, New York, N. Y. Mechanical pencil. 1,803,794; May 5.
De Weal, André G., Chicago, Ill. Ice cube pan for refrigerators. 1,804,324; May 5.
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,803,843; May 5.
Dexdale Hosiery Mills, The. (See Berger, E. J., and Swartz, assignors.)
Dey, William H., Montclair, N. J., assignor to United States Radium Corporation, New York, N. Y. Display device. 1,803,602; May 5.
Diamond, Emanuel, New York, N. Y. Nonsinkable bathing suit. 1,803,898; May 5.
Dietrichson, William F., St. Louis, Mo., assignor to American Car and Foundry Company, New York, N. Y. Door tripping device for cars. 1,803,384; May 5.
Dietzgen, Eugene, Company. (See Langener, Adolph, assignor.)
Dijksterhuis, Popko R., assignor to N. V. Philips Gloeilampenfabrieken, Eindhoven, Netherlands. Constant magnitude control system. 1,804,325; May 5.
Dillon, James E., Masontown, Pa. Mining machine. 1,803,547; May 5.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Adjustable Geneva intermittent. 1,803,465; May 5.
Dires, Joseph D., Tempe, Ariz. Bearing. 1,804,251; May 5.
Disk-O-Knowledge, Inc. (See Smith, Samuel, assignor.)
Ditchfield, Frank, assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Metal car roof. 1,803,321; May 5.
Dodson, Roy E., San Diego, Calif. Toilet flush valve-guide. 1,803,603; May 5.
Doehler Die-Casting Co. (See Morin, Louis H., assignor.)
Doerschuk, Victor C., Massena, N. Y., assignor to Aluminum Company of America, Pittsburgh, Pa. Carbon electrodes and molding the same. Re18,062; May 5.
Doherty, Helen Lee E., New York, N. Y. Automobile body. Des. 84,074; May 5.
Doherty, Helen Lee E., New York, N. Y. Automobile body. Des. 84,075; May 5.
Doherty Research Company. (See Fisher, James P., assignor.)
Doherty Research Company. (See Goldsborough, Winder E., Morgan, and Wyckoff, assignors.)
Dokken, Anton, Brookings, S. Dak. Fly chaser. 1,804,326; May 5.
Doman, John F., Los Angeles, Calif. Ironing board. 1,803,844; May 5.
Dominion Electric Mfg. Company. (See Barnes, William A., assignor.)
Dooley, George W., Ducor, Calif. Hydraulic mechanism for driving motor vehicles. 1,803,932; May 5.
Dooley, George W., Ducor, Calif. Hydraulic driving mechanism. 1,803,933; May 5.
Douglas, John, Pensacola, Fla., assignor to The John Douglas Company, Cincinnati, Ohio. Waste receptacle. 1,804,213; May 5.
Douglas, John, Company, The. (See Douglas, John, assignor.)

Drake, Herbert W., East Orange, N. J., and W. B. Blanton, Brooklyn, assignors to The Western Union Telegraph Company, New York, N. Y. Conception circuit for simplex printers. 1,804,327; May 5.
Drake, Ronald I., assignor of one-half to P. J. Massey, Chicago, Ill. Printing press plate and making the same. 1,803,548; May 5.
Draper Corporation. (See Brown, Carl D., assignor.)
Drbul, Mikulas, Chicago, Ill. Safety device for aeroplanes. 1,804,156; May 5.
Drew, George A., Des Moines, Iowa, assignor to American Telephone and Telegraph Company. Ticket distributing system. 1,803,466; May 5.
Driver, Wilbur B., East Orange, and S. R. Keith, Montclair, assignors to Gilby Wire Company, Newark, N. J. Electrical resistance alloy. 1,803,467; May 5.
Driver, Wilbur B., East Orange, and S. R. Keith, Montclair, assignors to Gilby Wire Company, Newark, N. J. Electrical resistance alloy. 1,803,468; May 5.
Droddy, Harrison, assignor of one-half to J. Roach, El Dorado, Ark. Device for removing and installing springs. 1,803,750; May 5.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Converting hydrocarbon oils. 1,803,962; May 5.
Duckworth, Theophilus O., Salt Lake City, Utah. Power pump rod lift. 1,803,426; May 5.
Dudycha, Harold E., South St. Paul, Minn., assignor to Swift & Company, Chicago, Ill. Rendering tank. 1,803,604; May 5.
Du Frane, Alexander G., and J. L. Du Frane, Oakland, Calif. Hydraulic press. 1,803,845; May 5.
Du Frane, John L. (See Du Frane, Alexander G. and J. L.)
Dunham, Roy O., Schenectady, N. Y., assignor to General Electric Company. Ship propulsion. 1,804,328; May 5.
Du Pont Rayon Company. (See Lardy, Guillaume, assignor.)
Dura Company, The. (See Graff, George, assignor.)
Durand, Marcel P., St. Germain-Em-Laye, France. Spindle drive. 1,804,091; May 5.
Durman, Toby, Signal Hill, Calif. Automatic film winding device. 1,803,322; May 5.
East, Charles V., Molson, Wash. Saw sharpener. 1,803,934; May 5.
Eck, Guy E., Manitowoc, Wis. Sprinkler. 1,804,001; May 5.
Eck, Jacques, Los Angeles, Calif. Airplane. 1,804,092; May 5.
Eclipse Machine Company. (See Lansing, Raymond P., assignor.)
Economy Pump and Oil Tool Company. (See Taylor, James W., assignor.)
Edgar, Frank M. (See Schnell, W., and Edgar.)
Edwards, James H., Seattle, Wash., assignor to Remington Typewriter Company, Ilion, N. Y. Combined typewriting and computing machine. 1,803,525; May 5.
Edwards Manufacturing Company, The. (See Myers, G. D., Edwards, and Hobing, assignors.)
Edwards, Walter A. (See Myers, G. D., Edwards, and Hobing.)
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking petroleum. 1,803,963; May 5.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Desulphurizing cracked hydrocarbons. 1,803,964; May 5.
Einfeldt, Ernest E., Davenport, Iowa, assignor to French & Hecht, Incorporated. Traction wheel construction. 1,803,427; May 5.
Elder, Robert F., Portland, Me., and R. B. Hill, Berlin, N. H., assignors to Brown Company, Berlin, N. H. Processing of a latex. 1,804,157; May 5.
Electromatic typewriters. (See Crumrine, Chester W., assignor.)
Elec-Tru-Tone Corporation. (See Leishman, Le Roy J., assignor.)
Elektrizitatswerk Lonza. (See Lüscher, E., and Steiger, assignors.)
Elliott-Fisher Company. (See Resch, Henry, assignor.)
Elliott, Harold F., assignor to Victor Talking Machine Company, Camden, N. J. Tuner control mechanism. 1,803,846; May 5.
Ellis, Elizabeth M. (See Ellis, Hartley, assignor.)
Ellis, Hartley, Cleveland, Ohio, assignor of twenty-one fortieths to E. M. Ellis, Erie, Pa. Closure for metallic drums and the like and making same. 1,803,847; May 5.
Ellis, Ruby K., et al., administrators. (See Koenig, Joseph.)
Elmore Samuel T. (See Retherford H. G., and Elmore.)
Elwell, George H., assignor to The Greist Manufacturing Company, New Haven, Conn. Electric switch. 1,803,848; May 5.
Elwell, George H., assignor to The Greist Manufacturing Company, New Haven, Conn. Electric switch. 1,803,849; May 5.
Elwell Parker Electric Company, The. (See Abbe, Edward J., assignor.)
Ely, Cornelius G., assignor to Grigsby-Grunow Company, Chicago, Ill. Escutcheon plate for radio receivers. Des. 84,076; May 5.
Emmons, Arthur N., Syracuse, N. Y. Surface finishing machine. 1,803,549; May 5.
Equipment Specialties Co. (See Hull, George A., assignor.)
Erba Aktiengesellschaft. (See Seck, Willy, assignor.)
Erickson, C. E., Company. (See Erickson, Ernest R., assignor.)
Erickson, Ernest R., Des Moines, Iowa, assignor to C. E. Erickson Company, Inc. Oilmeter. 1,803,694; May 5.
Essig, Gottlieb F., Philadelphia, Pa. Holder of straps of suspenders and similar articles. 1,804,158; May 5.
Essmann, Carl J. (See Nelson, A. J., and Essmann.)
Estep, William G., assignor of one-third to R. Hawk and one-third to J. Conlin, Duquesne, Pa. Float controlled valve. 1,804,093; May 5.
Evans, Ernest E., Riverside, Calif. Automatic stamping device. 1,803,323; May 5.
Evans, Harry N., sr., Philadelphia, Pa. Adjustable bucking-up tool with interchangeable dies. 1,803,965; May 5.
Everett, Samuel H. (See Knowlton, A. D., and Everett.)
Ewart, Laura V. (See Ewart, Thomas S.)
Ewart, Thomas S., Raymond, Wash., by judicial decree transferred to Laura V. Ewart. Reverse gearing. 1,804,252; May 5.
Fagan, James M., Maplewood, N. J., assignor to Westinghouse Lamp Company. High frequency induction heating. 1,803,500; May 5.
Falk, Morris, Leominster, Mass. Key cutting machine. 1,803,428; May 5.
Fantz, Fred C., Webster Groves, assignor to Midwest Piping & Supply Co. Inc., St. Louis, Mo. Machine for flanging pipes. 1,804,002; May 5.
Fantz, Fred C., Webster Groves, assignor to Midwest Piping & Supply Co. Inc., St. Louis, Mo. Tailstock for machines for flanging pipes. 1,804,003; May 5.
Farr, Alfred C., assignor to C. Horner, Upland, Ind. Door. 1,804,329; May 5.
Faus, Harold T., Lynn, Mass., assignor to General Electric Company. Electric measuring instrument. 1,804,330; May 5.
Federal Bill Counter Company, The. (See Lard, Allan E., assignor.)
Federal Products Corporation. (See Litterio, Caesar B., assignor.)
Federwitz, Theodore A., and W. T. Bailey, Philadelphia, assignors to Stokes and Smith Company, Summerdale, Philadelphia, Pa. Conveying system. 1,803,935; May 5.
Federwitz, Theodore A., and W. T. Bailey, Philadelphia, assignors to Stokes and Smith Company, Summerdale, Philadelphia, Pa. System for applying wrappers. 1,804,094; May 5.
Feils, Ruth, Brooklyn, assignor to United States Mail Chute Corporation, New York, N. Y. Mail chute. 1,804,159; May 5.
Ferlin, John J. (See Goetz, H. W., Clark, and Ferlin.)
Fernandez, Segundo D. (See Pardo, O. G., and Fernandez.)
Ferrell, Dent, and A. W. Helmholtz, Harrisburg, assignors to Safety Mining Company, Chicago, Ill. Blasting mechanism. 1,803,501; May 5.
Ferrin, Arthur M., Red Rock, Mont. Door or gate closer. 1,804,385; May 5.
Fidelity Trust Company, trustee. (See Chaplin, Merle P., assignor.)
Fiedler, Sebastien O. A., assignor to L'Auxiliaire Des Chemins de Fer et de l'Industrie, Paris, France. Feed water heater. 1,804,214; May 5.
Finley, Thomas M., St. Louis, Mo. Slide transmission for internal combustion engines. 1,803,795; May 5.
Finn, Anna M., administratrix. (See Finn, Hugh J.)
Finn, Hugh J., deceased, Brooklyn, N. Y.; A. M. Finn, administratrix. Submergible apparatus. 1,803,526; May 5.
Finnegan, Wilfred A., Bangor, Me. Knockdown box. 1,803,385; May 5.
Fireproof Wall Company. (See Makowski, John F., assignor.)
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Expansion joint installing device. 1,804,215; May 5.
Fischer, Erik W., Stockholm, and E. W. J. Virgin, Djursholm, Sweden. Producing amalgams to be used in dentistry. 1,803,386; May 5.
Fisher, James P., Bartlesville, Okla., assignor to Doherty Research Company, New York, N. Y. Boiler governor. 1,803,324; May 5.
Fitzgerald, Fred F., Oak Park, Ill., assignor to American Can Company, New York, N. Y. Method of canning. 1,803,605; May 5.
Flammang, John, University City, and P. L. Bowser, St. Louis, Mo., assignors, by mesne assignments, to The Sterling Corporation, Wilmington, Del. Trunk piston. 1,803,387; May 5.
Flexible Steel Lacing Company. (See Purple, George E., assignor.)
Flintermann, Gerhard, West Orange, N. J. Flexible joint. 1,803,606; May 5.
Floyd, Darby G., and M. H. McLendon, Winnsboro, S. C. Combined shipper and gear casing lock. 1,803,796; May 5.
Flynn, John B., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Fabricating strikers. 1,804,004; May 5.
Flynn, John B., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Doorlock. 1,804,253; May 5.

Folmer Graflex Corporation, The. (See Roth, Charles H., assignor.)
Forbes Lithograph Manufacturing Company. (See Paige, P. F., and Blood, assignors.)
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Air cleaner. 1,803,751; May 5.
Ford, Henry, assignor to Ford Motor Company, Dearborn, Mich. Glass grinding machine. 1,803,752; May 5.
Ford Motor Company. (See Ford, Henry, assignor.)
Ford Motor Company. (See Ludwig, Frederick W., assignor.)
Forsberg, Gustav A., assignor to Gulbransen Company, Chicago, Ill. Pedal construction and mounting. 1,803,502; May 5.
Fortune, Robert O., Los Angeles, Calif. Intermittent control mechanism. 1,804,051; May 5.
Foster Machine Company. (See McKean, John O., assignor.)
Fothergill, Thomas R. (See Nicolas, H. B., and Fothergill.)
Fox Company. (See Russell, Frederick T., assignor.)
Fox, George F. (See Cross, H. H., and Fox.)
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frederics, E., Inc. (See Frederics, Ernest O., assignor.)
Frederics, Ernest O., assignor to E. Frederics, Inc., New York, N. Y. Hair-drying hood. 1,804,005; May 5.
Freedman, William, Brooklyn, and J. Guiney, New York, N. Y. Car card. 1,803,325; May 5.
French & Hecht, Incorporated. (See Einfeldt, Ernest E., assignor.)
French, Louis O., Milwaukee, Wis. Fuel feeding system. 1,803,666; May 5.
Freund, Herman R., Brooklyn, assignor to Intertype Corporation, New York, N. Y. Cleaning magazines and matrices. 1,804,331; May 5.
Freysinger, John B., assignor to North & Judd Manufacturing Company, New Britain, Conn. Snap hook with swivel. 1,804,377; May 5.
Frick Company, The. (See Small, Norman M., assignor.)
Friedberger, Simon. (See Kappler, Carl F., assignor.)
Friedemann, Matthew M., New York, N. Y. Show card holder for display stands. 1,803,667; May 5.
Friedlander, Hans, Berlin, Germany. Treatment of fibrous material. 1,803,936; May 5.
Friedrich, Paul O. E., Millville, N. J., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y. Making glass wool sheets. 1,804,254; May 5.
Friesen, Klaus N., Geneseo, Kans. Agricultural implement. 1,803,753; May 5.
Frigidaire Corporation. (See Schmieding, W. H. F., and King, assignors.)
Friis, Harald T. (See Bruce, Edmond, and Friis, assignors.)
Frink, C. H., Clayton, N. Y. Sidewalk snowplow. 1,803,754; May 5.
Froehlich, Arthur B., Chicago, Ill. Printing mechanism. 1,804,160; May 5.
Fuller, James E., assignor to New York Knife Company, New York, N. Y. Pocketknife. 1,803,899; May 5.
Fusaline, Incorporated. (See Lang, C. A., and Gamble, assignors.)
G. and W. Electric Specialty Company. (See Rah, Joseph, assignor.)
Gale, Marian, Los Angeles, Calif. Vehicle body construction. 1,803,668; May 5.
Galion Iron Works & Mfg. Co., The. (See Arndt, Franklin E., assignor.)
Galion Metallic Vault Company, The. (See Smith, Ralph E., assignor.)
Galloway Engineering Company. (See Greening, H. B., and Galloway, assignors.)
Galloway, James W. (See Greening, H. B., and Galloway.)
Gamble, Charles B. (See Lang, C. A., and Gamble.)
Garankin, Theodore P., New York, N. Y. Pencil. 1,803,695; May 5.
Gardner-Denver Company. (See Gustafson, Hjalmer C., assignor.)
Gardner-Denver Company. (See Pearson, Gustav C., assignor.)
Gardner-Denver Company, The. (See Terry, Edward F., jr., assignor.)
Gardner, Norman E., Allentown, Pa. Toy airplane. 1,803,469; May 5.
Garrigus, Robert O. (See Garrigus, Walter A. and R. O.)
Garrigus, Walter A. and R. O., Toledo, Ohio. Brake rod. 1,803,550; May 5.
Gates, Clarence J., jr., C. S. Nathan, and A. A. McDonough, Chicago, Ill. Liner. 1,803,696; May 5.
Gay, Frazer W., Newark, N. J. Automatic airplane control mechanism. 1,804,006; May 5.
Gee, William J. (See Orester, J., and Gee.)
General Aniline Works, Inc. (See Herz, Richard, assignor.)
General Aniline Works, Inc. (See Herz, R., and Zeweck, assignors.)
General Aniline Works, Inc. (See Krzikalla, H., and Schnitzspahn, assignors.)
General Aniline Works, Inc. (See Kunz, Max A., assignor.)
General Aniline Works, Inc. (See Lüttringhaus, A., Wolff, and Neresheimer, assignors.)
General Aniline Works, Inc. (See Wagner, H., and Brune, assignors.)
General Electric Company. (See Beebe, Lloyd S., assignor.)
General Electric Company. (See Bond, William L., assignor.)
General Electric Company. (See Champlin, Franklin J., assignor.)
General Electric Company. (See de Tar, Donald R., assignor.)
General Electric Company. (See Dunham, Roy O., assignor.)
General Electric Company. (See Faus, Harold T., assignor.)
General Electric Company. (See Hutt, Joseph, assignor.)
General Electric Company. (See Jones, Howard A., assignor.)
General Electric Company. (See Langmuir, Irving, assignor.)
General Electric Company. (See Lennox, Thomas C., assignor.)
General Electric Company. (See O'Connell, Edward J., assignor.)
General Electric Company. (See Steenstrup, Christian, assignor.)
General Electric Company. (See Taylor, Laurens A., assignor.)
General Electric Company. (See Whelan, Dow O., assignor.)
General Electric Vapor Lamp Company. (See Malley, Roy D., assignor.)
General Electric Vapor Lamp Company. (See Walker, Warren R., assignor.)
General Kontrola Company. (See Bossard, Gisbert L., assignor.)
General Motors Corporation. (See Blackmore, Lloyd, assignor.)
General Motors Corporation. (See Cramer, Raymond H., assignor.)
General Motors Corporation. (See Gibbons, Harold R., assignor.)
General Motors Corporation. (See Jansson, Axel J., assignor.)
General Motors Corporation. (See Schwarze, Herman, assignor.)
General Motors Corporation. (See Sterling, Claude H., assignor.)
General Motors Corporation. (See Strickland, William R., assignor.)
General Motors Research Corporation. (See Upton, G. B., and Hutchinson, assignors.)
Gentiluomo, Alexander, Grantwood, N. J. Fireproof film reel. 1,804,332; May 5.
Georgas, Christos. (See Nenna, Gennaro, assignor.)
Gerhardt, John M., Charleston, Ill. Barrel rack. 1,803,797; May 5.
Germann, Wilhelm, Dortmund, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Double slip point with tongues disposed outside the diamond. 1,804,095; May 5.
Germer, August H., Hamburg, Germany. Type carrier for stamping presses. 1,804,255; May 5.
Gernandt Motor Corporation. (See Gernandt, Waldo G., assignor.)
Gernandt, Waldo G., South Bend, Ind., assignor to Gernandt Motor Corporation, Chicago, Ill. Feeding fuel to high compression internal combustion engines. 1,803,326; May 5.
Gibbons, Harold R., Chatham, N. J., assignor to General Motors Corporation, Detroit, Mich. Antifriction bearing. 1,803,966; May 5.
Gibbs, Lloyd T. (See Riney, A. H., and Gibbs.)
Gibson, John G., Ventnor, N. J. Grate structure. 1,803,327; May 5.
Gietmann, Anton. (See Schuler, H., and Gietmann.)
Gilbert, Levi L., Mesquite, Nev. Obstetrical bed. 1,804,256; May 5.
Gilby Wire Company. (See Driver, W. B., and Keith, assignors.)
Gill, Thomas J. (See King, James L., Minkler, and Gill.)
Glacifer Corporation, The. (See Brown, Tom R., assignor.)
Godin, Henry J., Augusta, Ga. Headlight. 1,803,900; May 5.
Goeddertz, Henry, Denver, Colo. Combined trunk and camping outfit. 1,803,901; May 5.
Goetz, George, assignor to S. M. Barr and G. A. Barr, Los Angeles, Calif. Marine paint. 1,803,607; May 5.
Goetz, Herbert W., Alhambra, R. C. Clark, Los Angeles, and J. J. Ferlin, Huntington Park, Calif. Spider. 1,803,608; May 5.
Goez, William F., assignor to Iowa Fiber Box Company, Keokuk, Iowa. Article carrier. 1,803,755; May 5.
Golden Nuggett Sweets. (See Olsen, Andrew, jr., and J. A., assignors.)
Goldman, Oscar G., San Francisco, Calif. Pressure regulating valve. 1,803,697; May 5.
Goldsborough, Winder E., South Norwalk, Conn., J. D. Morgan, South Orange, and G. H. Wyckoff, Mountain Lakes, N. J., assignors to Doherty Research Company, New York, N. Y. Producing molten and refined metal from crude ores. 1,804,161; May 5.
Golnick, John, Detroit, Mich. Clamp. 1,804,007; May 5.
Good Inventions Co. (See Good, John, assignor.)
Good, John, Garden City, assignor to Good Inventions Co., New York, N. Y. Fuel spraying. 1,803,967; May 5.

Goodwin, Carl W., Wayland, Mass., assignor, by mesne assignments, to American Seal-Kap Corporation, Long Island City, N. Y. Milk bottle capper. 1,803,328; May 5.

Gosmann, Walter, Dortmund, Germany. Incandescent gas light miner's lamp. 1,803,756; May 5.

Goss, Harold J., assignor to The International Paper Box Machine Company, Nashua, N. H. Blank preparing mechanism for box making machines. 1,803,698; May 5.

Goss, Harold J., assignor to The International Paper Box Machine Company, Nashua, N. H. Machine for applying strips to blanks. 1,803,699; May 5.

Gould Storage Battery Corporation. (See Friedrich, Paul O. E., assignor.)

Grabill, John D., Woodstock, Va. Sorting apparatus. 1,804,096; May 5.

Graf, Raymond I., East Grand Rapids, Mich. Automobile door lock handle. 1,803,609; May 5.

Graff, George, assignor to The Dura Company, Toledo, Ohio. Light. Des. 84,077; May 5.

Graton & Knight Company. (See Streeter, Claude O., assignor.)

Grammes, L. F., & Sons. (See Price, Charles S., assignor.)

Grant, John, Los Angeles, Calif. Compound expanding underreamer. 1,803,669; May 5.

Grasselli Chemical Company, The. (See Grine, Harry A., assignor.)

Grasselli Chemical Company, The. (See Siegel, Alfred, assignor.)

Gray, Frank, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrooptical system. 1,803,700; May 5.

Greaves, William B. and W. M. Stevenson, Springfield, Mass. Rug or carpet weaving loom. 1,804,008; May 5.

Greene, Curtis, San Diego, Calif. Door or gate stop. 1,803,610; May 5.

Greening, Herald B., Hamilton, Ontario, Canada, and J. W. Galloway, Detroit, Mich., assignors to Galloway Engineering Company, Limited, Hamilton, Ontario, Canada. Two cycle internal combustion engine swash plate construction. 1,804,010; May 5.

Greenlee, Elbert R., Kansas City, Kans. Air brake. 1,803,798; May 5.

Greenley, Jay H., Strongsville, Ohio. Automatic control system for vehicles. 1,804,257; May 5.

Gregarek, Otto, Philadelphia, Pa. Combined insole and arch support. 1,804,009; May 5.

Gregoire, Victor, Lake Andes, S. Dak. Steering wheel brake for tractors. 1,804,333; May 5.

Greist Manufacturing Company, The. (See Elwell, George H., assignor.)

Greist Manufacturing Company, The. (See Hinman, George L., assignor.)

Grigsby-Grunow Company. (See Ely, Cornelius G., assignor.)

Grine, Harry A., Clarksburg, W. Va., assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Zinc condenser. 1,803,611; May 5.

Gross, Miriam, assignor to Miriam Gross Company, Milwaukee, Wis. Knitted ensemble dress. Des. 84,078; May 5.

Grover, Percy C., Birmingham, Ala. Cylinder hone. 1,803,701; May 5.

Grupe, Friedrich W., Berlin, Germany. Device for splitting stumps in the ground. 1,803,902; May 5.

Gubbei, Hans, Philadelphia, Pa. Collapsible bed. 1,804,011; May 5.

Guhelmann, Ivan, and J. M. Tinker, South Milwaukee, Wis., assignor, by mesne assignments, to Newport Chemical Corporation, 1, 2- and 2, 3- diamino anthraquinone sulphates and method of preparing and isolating the same. 1,803,503; May 5.

Guerltey, Charles, Passaic, N. J. Sifting top can. 1,803,799; May 5.

Guernsey, Charles O., Philadelphia, Pa. Ventilating system. 1,804,334; May 5.

Guiney, Joseph. (See Freedman, W., and Guiney.)

Gulbransen Company. (See Forsberg, Gustav A., assignor.)

Gulotta, Charles. (See Herlbauer, J. J., and Gulotta.)

Gunning, William A., assignor to American Optical Company, Southbridge, Mass. Lens tool surfacing machine. 1,803,429; May 5.

Gustafson, Hjalmer C., assignor to Gardner-Denver Company, Denver, Colo. Variable stroke tool. 1,804,216; May 5.

Gustafson, Hjulmer C., assignor to Gardner-Denver Company, Denver, Colo. Tool retainer. 1,804,217; May 5.

Guyer, Reynolds, St. Paul, Minn., assignor to Waldorf Paper Products Company. Closure for pouring carton. 1,803,612; May 5.

Haas, Nelson R., assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio. Dynamo brush. 1,804,052; May 5.

Hahn, Mathias, assignor to H. Krantz, Aachen, Germany. Decatizing of textile fabrics. 1,804,097; May 5.

Hale & Kilburn Co. (See Bell, Alfred B., assignor.)

Hale, Willis W., Cleveland, Ohio. Sandwich baker. 1,804,335; May 5.

Hall, C. M., Lamp Company. (See Martinek, Alois L., assignor.)

Hall, Harvey C., Port Nelson, Ontario, assignor to Milne Neckwear Limited, Toronto, Canada. Necktie. 1,803,388; May 5.

Hallwood, Nathan A., Columbus, Ohio. Scale. 1,804,053; May 5.

Hamer, Charles G. (See Cronenweth, E. E., and Hamer.)

Hamilton, Albert E. (See Crago, C. H., and Hamilton.)

Hamilton-Wade Company. (See Howard, Albert L., assignor.)

Hammond Clock Company, The. (See Stephens, George H., assignor.)

Hand, Jesse H., Detroit, Mich. Clutch mechanism. 1,803,420; May 5.

Hanig, William J., Ackley, Iowa. Traction wheel. 1,803,702; May 5.

Hankins, Cyrus, Baltimore, Md., assignor to The Symington Company, New York, N. Y. Casting and pattern therefor. 1,803,551; May 5.

Hankins, Oscar R., assignor to The Larimer Company, Aurora, Ill. Window sash and screen. 1,803,527; May 5.

Hanna, Richard W., Piedmont, assignor to Standard Oil Company of California, San Francisco, Calif. Treating hydrocarbon with metallic halides. 1,803,670; May 5.

Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Signaling. 1,803,504; May 5.

Hansen, Hans C., Frederiksberg, assignor to Soren Wistoft & Co.'s Fabrikker, Akts., Copenhagen, Denmark. Releasing mechanism for automatic vending machines. 1,804,098; May 5.

Hanson, Carlstian A., assignor to Alemite Corporation, Chicago, Ill. Lubricating system. 1,803,703; May 5.

Hardgrove, Ralph M., Bethlehem, Pa., assignor to Bailey Meter Company. Automatic control system. 1,804,336; May 5.

Hardie, Francis R., Salt Lake County, Utah. Communicating form. 1,803,704; May 5.

Harms, Albert G., Chicago, Ill. Burial casket. 1,803,470; May 5.

Harner, David A., Cedar Falls, Iowa. Pumping device. 1,803,705; May 5.

Harris, Carl C. (See Simonds, W. J., and Harris.)

Hartline, William A., Tampa, Fla. Blotting medium. 1,803,800; May 5.

Hartmann Trunk Company. (See Ritter, Julius, jr., assignor.)

Haselhorst, Ewald. (See Schmidt, A., and Haselhorst.)

Hauck Manufacturing Company. (See Schumann, Alfred F., assignor.)

Hauserman, E. F., Company, The. (See Bolinsack, John A., assignor.)

Hawk, Robert, et al. (See Estep, William G., assignor.)

Hayward, Carle R., Quincy, Mass. Treating materials containing lead. 1,804,054; May 5.

Hazard, Theodore C., Rochester, N. Y. Apparatus for the control of industrial heat treatment processes. 1,804,378; May 5.

Hazy, Lillie, New York, N. Y. Kitchen utensil. 1,804,099; May 5.

Heberlein, Georges, Wattwil, Switzerland, assignor to Heberlein Patent Corporation, New York, N. Y. Machine for processing fabric. 1,803,968; May 5.

Heberlein Patent Corporation. (See Heberlein, Georges, assignor.)

Heggem, Alfred G., Tulsa, Okla. Stuffing box. 1,803,471; May 5.

Heginbottom, Walter G., assignor to Marvel Carburetor Company, Flint, Mich. Carburetor. 1,803,613; May 5.

Hehemann, Frederick H., assignor to The Lunkenheimer Company, Cincinnati, Ohio. Strainer. 1,804,162; May 5.

Heil, Norman E., Paterson, N. J. Antiskid device. 1,803,552; May 5.

Hellman, Harry A. (See Mussey, W. H., and Hellman.)

Helmholtz, Arthur W. (See Ferrell, D., and Helmholtz.)

Heltzel, Joseph W., Warren, Ohio. Road building apparatus. 1,804,337; May 5.

Henderson, James W., Niagara Falls, N. Y. Storage garage. 1,804,338; May 5.

Henschel, Hans, Dresden-Loschwitz, Germany. Card-carrier for card-files. 1,804,339; May 5.

Henshall, George R., Vancouver, British Columbia, Canada. Continuous cooker for fish reduction. 1,803,801; May 5.

Herlbauer, Joseph J., Hollis, and C. Gulotta, New York, N. Y. Vehicle towing device. 1,803,389; May 5.

Herold, Walter F., Upper Montclair, N. J. Receptacle for cigarette ashes and the like. 1,804,163; May 5.

Herrmann, Emil, assignor to P. Piepenstock, Mulheim-Ruhr, Germany. Epicylic gear. 1,804,055; May 5.

Hershey, Harry E., Oak Park, assignor to Automatic Electric Inc., Chicago, Ill. Remote control system. 1,803,614; May 5.

Herz, Richard, Frankfort-on-the-Main, W. Zerweck, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the anthanthrone series and making same. 1,803,757; May 5.

Herz, Richard, Frankfort-on-the-Main, and W. Zerweck, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Halogenated vat dyestuffs and making same. 1,803,758; May 5.

Hessel, Joseph, Winnipeg, Manitoba, Canada. Shoe expander. 1,803,759; May 5.

Hicks, Thomas W. (See Adsit, F. W., and Hicks.)

Hill, Roger B. (See Elder, Robert F., and Hill, assignors.)

Hill, Thomas, Detroit, Mich. Plate holder. 1,803,431; May 5.

Hinman, George L., New Haven, Conn., assignor to The Greist Manufacturing Company. Rotary index. 1,803,553; May 5.

Hirschmann, Pauline H., et al. (See Stephens, Thomas J., assignor.)

Hobing, John W. (See Myers, G. D., Edwards, and Hobing.)

Hochman, Julius C., and G. O. Degener, said Degener assignor of one-half of his right to said Hochman, and one-half of his right to M. Samburg, New York, N. Y. Computing machine. 1,803,329; May 5.

Hochstetter, Frederick W., Pittsburgh, Pa. Electron discharge device. 1,803,850; May 5.

Hocker Corporation, The. (See Hocker, Ivan S., assignor.)

Hocker, Ivan S., assignor to The Hocker Corporation, Philadelphia, Pa. Extracting fat from cacao bean or a product thereof. 1,803,615; May 5.

Hoffman, Harry, Philadelphia, and P. F. Karst, Highland Park, assignors of one-third to L. Hoffman, Philadelphia, Pa. Motion picture apparatus. 1,804,340; May 5.

Hoffman, Louis. (See Hoffman, H., and Karst, assignors.)

Hollamann, Hans E., Darmstadt, Germany. Production of electric waves. 1,803,528; May 5.

Hollenbeck, Dennis L., assignor to Litho-Paint Poster Company, Chicago, Ill. Frame for supporting display cards and the like. 1,804,164; May 5.

Holmgren, Per F., Brooklyn, N. Y. Crank shaft. 1,803,432; May 5.

Holub, Charles J., assignor to The W. E. Lamneck Company, Columbus, Ohio. Furnace register. 1,804,165; May 5.

Hoops, Howard C. (See Wilson, Archibald E., assignor.)

Hoover Company, The. (See Smellie, Donald G., assignor.)

Horner, Carrie. (See Farr, Alfred C., assignor.)

Horowit, Benn B. (See Sernaker, Harry, assignor.)

Horwath, Julius, assignor to Arvey Corporation, Chicago, Ill. Display stand and the like. 1,803,851; May 5.

Hotchner, Fred, Los Angeles, Calif. Discharge tube display. 1,803,706; May 5.

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Making sheet metal containers. 1,803,616; May 5.

Howard, Albert L., assignor to Hamilton-Wade Company, Brockton, Mass. Bumper boot. 1,804,218; May 5.

Howard, Thomas C., Brookline, Mass. Acoustic wall or ceiling structure. 1,803,390; May 5.

Hubley Manufacturing Company, The. (See Brubaker, Jacob E., assignor.)

Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,079; May 5.

Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,080; May 5.

Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,081; May 5.

Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Cleaning dephlegmators. 1,803,969; May 5.

Hughes Tool Company. (See Scott, Floyd L., assignor.)

Hull, George A., assignor to Equipment Specialties Co., Chicago, Ill. Refrigerator car. 1,804,219; May 5.

Hummel, Frederick E., Hopewell, Va. Car liner. 1,803,617; May 5.

Hungarian Rubber Goods Factory Limited. (See Turchanyi, Ladislas, assignor.)

Hunyady, Frank, Chicago, Ill. Self adjusting brake. 1,804,012; May 5.

Hurst, William J., Maquoketa, Iowa. Drag harrow cleaner. 1,804,100; May 5.

Hutchinson, Roland V. (See Upton, G. B., and Hutchinson.)

Hutt, Joseph, Coventry, England, assignor to General Electric Company. Acoustical device. 1,804,341; May 5.

Hyatt, Frank S., assignor to Brass Goods M'f'g. Co., Brooklyn, N. Y. Hose holder. 1,803,529; May 5.

Hyde, Catherine E., executrix. (See Hyde, Edward W., jr.)

Hyde, Edward W., jr., deceased, Philadelphia, Pa.; C. E. Hyde, executrix. Structural head for reinforced concrete construction. 1,804,342; May 5.

Hydraulic Pressed Bearing Company. (See Stockfleth, Berger, assignor.)

Hynes, Dibrell P., assignor to Chicago Forging & Manufacturing Company, Chicago, Ill. Window curtain support. 1,803,707; May 5.

Hytken, Max, Ruleville, Miss. Sealable container. 1,804,343; May 5.

I. G. Farbenindustrie Aktiengesellschaft. (See Kämpf, Adolf, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Kramer, O., and Bub, assignors.)

Ice Cream Cone Machinery, Inc. (See Tatosian, Harry G., assignor.)

Inman, Harry A., Newark, N. Y. Egg carton. 1,804,166; May 5.

International Business Machines Corporation. (See Decker, S. K., Johnson, Davis, and Junor, assignors.)

International Couplers Co. (See White, Walter C., assignor.)

International Motor Company. (See Jupp, W. B., and Anderson, assignors.)

International Nickel Company, The. (See Merica, P. D., Vanick, and Wickenden, assignors.)

International Paper Box Machine Company, The. (See Goss, Harold J., assignor.)

International Paper Company. (See Read, Robert E., assignor.)

International Precipitation Company. (See Witte, Gustav A., assignor.)

International Projector Corporation. (See Dina, Augusto, assignor.)

Intertype Corporation. (See Freund, Herman R., assignor.)

Iowa Fiber Box Company. (See Goez, William F., assignor.)

Iowa State College of Agricultural and Mechanical Arts. (See Sweeney, Orland R., assignor.)

Irgens, Finn T., and P. C. Baldus, assignors to Outboard Motors Corporation, Milwaukee, Wis. Timer mounting and drive. 1,803,618; May 5.

Italo-French Produce Company. (See Cowan, James L., assignor.)

Jackson, John C., assignor to The Modern Oil Well Supply Company, Fort Collins, Colo. Signal system and apparatus for boilers. 1,803,852; May 5.

Jackson, Warren A. (See Cope, Raymond M., assignor.)

Jaeger, Frederick W., Milwaukee, Wis. Temperature control device. 1,803,708; May 5.

Jahns, Chauncey F., Schuyler, Nebr. Pipe coupling. 1,803,472; May 5.

Jansson, Axel J., Flint, assignor to General Motors Corporation, Detroit, Mich. Cushion connection. 1,803,937; May 5.

Jantsch, Victor, assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich. Underslung tire carrier. 1,803,938; May 5.

Jeffrey Manufacturing Company, The. (See Cosco, Frederick C., assignor.)

Jenezon, Albert C., Baltimore, Md. Parachute. 1,803,903; May 5.

Jennings, Chester S., and L. C. Allen, Syracuse, assignors to The Lamson Company, Syracuse, N. Y. Deflector control mechanism. 1,803,391; May 5.

Jensen, Charles E., assignor of one-half to A. H. Wethey, jr., Portland, Oreg. Cable clamp. 1,803,619; May 5.

Jensen, Joseph Marcus, Los Angeles, Calif. Front-wrap-closure-garment. Des. 84,082; May 5.

Jester, Smith M., Park Rapids, Minn. Antenna. 1,803,620; May 5.

Johns-Manville Sales Corporation. (See Murphy, Everett N., assignor.)

Johnson, George T., Columbus, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Coupler yoke. 1,803,802; May 5.

Johnson, Gustav, West Roxbury, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Separable fastener. 1,804,370; May 5.

Johnson, Gustav A. (See Decker, S. K., Johnson, Davis, and Junor.)

Johnson, John H., Chula Vista, Calif. Food preserving table. 1,803,330; May 5.

Johnson, Roy W., assignor to The John W. Brown Manufacturing Company, Columbus, Ohio. Bulb mounting for headlamps. 1,803,709; May 5.

Johnson, Warren V., Bloomsburg, Pa., assignor to American Car and Foundry Company, New York, N. Y. Mine car. 1,803,392; May 5.

Johnston, George S., San Francisco, Calif., assignor to American Optical Company, Southbridge, Mass. Lens testing device. 1,803,473; May 5.

Jones, Alice M., assignor to Pinaud, Inc., New York, N. Y. Vanity case. Des. 84,083; May 5.

Jones, Eunice, Meion, Tex. Water cooler. 1,803,393; May 5.

Jones, George F., Dallas, Tex. Overhead bulkhead drop gate for box and refrigerator cars. 1,803,760; May 5.

Jones, Howard A., Schenectady, N. Y., assignor to General Electric Company. Ballast resistor. 1,804,344; May 5.

Jones, Jacob R., Indianapolis, Ind. Attachment for license plates. 1,804,013; May 5.

Jones, Lawrence, Beards Fork, W. Va. Manuscript holder for typewriters. 1,804,258; May 5.

Jones, Lyman L., Seattle, Wash., assignor to American Can Company, New York, N. Y. Can end counting and stacking machine. 1,803,621; May 5.

Jones, William E., jr. (See Arey, Fred R., and Jones, assignors.)

Joseph, Felix A., Hampstead, London, England. Freewheel clutch. 1,804,014; May 5.

Joy, Robert W., Brooklyn, assignor to American Car and Foundry Company, New York, N. Y. Slack adjuster for railway brakes. 1,803,394; May 5.

Joyce, Harold L., assignor to Jas. P. Marsh & Company, Chicago, Ill. Radiator air vent. Des. 84,084; May 5.

Joyce, Lyndon W., assignor to Joyce-Venning Manufacturing Co., Inc., Greensboro, N. C. Resilient metallic suspender loop. 1,804,259; May 5.

Joyce-Venning Manufacturing Co. (See Joyce, Lyndon W., assignor.)

Junor, John B. (See Decker, S. K., Johnson, Davis, and Junor.)

Jupp, William B., and R. G. Anderson, Plainfield, N. J., assignors to International Motor Company, New York, N. Y. Mounting and cooling construction for driving units of locomotives. 1,803,853; May 5.

Kadel, Byers W., Baltimore, Md. Car door mechanism. 1,803,474; May 5.

Kaiser, Richard C., New Rochelle, N. Y. Building. Des. 84,085; May 5.

Kalle & Co., Aktiengesellschaft. (See Krieger, W., and Zahn, assignors.)

Kamin, Samuel, assignor to Neon Products, Inc., Lima, Ohio. Neon optical sign. Des. 84,086; May 5.

Kämpf, Adolf, Premnitz/Westhavelland, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Apparatus for making bands of artificial fibres. 1,803,475; May 5.

Kappler, Carl F., assignor to S. Friedberger, Philadelphia, Pa. Machine for making fabric. 1,803,476; May 5.

Karnes, James C., Buffalo, N. Y. Antiaircraft sight. 1,803,939; May 5.

Karst, Paul F. (See Hoffman, H., and Karst.)

Kashian, Minas H., Boston, assignor of one-fourth to W. H. Sellars, East Milton, Mass. Latch. 1,804,382; May 5.

Kaufman, Charles, Garfield Heights, Ohio. Making screws and bolts. 1,803,803; May 5.

Keune, Arthur F., Syracuse, assignor to Semet-Solvay Engineering Corporation, New York, N. Y. Distillation system. 1,803,671; May 5.

Keeney Manufacturing Company, The. (See Keeney, William A., assignor.)

Keeney, William A., Wethersfield, Conn., assignor to The Keeney Manufacturing Company. Valve. 1,804,167; May 5.

Keith, Stanley R. (See Driver, W. B., and Keith.)

Keller, Arthur C., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Determining cyclic variations in a rotating member. 1,804,168; May 5.

Kelsen, Ernst, Vienna, Austria. Apparatus for electrolytically producing metal alloys. 1,804,101; May 5.

Kelsey, William H., Cleveland, Ohio. Ironing device. 1,803,622; May 5.

Kemikal, Inc. (See Mellanoff, Isadore S., assignor.)

Kennedy-McCandless Corporation. (See McCandless, Harry E., assignor.)

Kent, Owen, Downers Grove, Ill., assignor to Briede & Rogovsky. Apparatus for applying trouser hooks. 1,803,970; May 5.

Keown, George C., Rapid City, S. Dak., assignor to Western Wheeled Scraper Company, Aurora, Ill. Wheeled scraper. 1,803,971; May 5.

Kerr, William J., Smethport, Pa. Spinning toy. 1,804,260; May 5.

Kershaw, Henry, Jersey City, N. J. Cigarette extinguisher. 1,804,102; May 5.

Kichart, Joseph A. (See Rozdilski, John, assignor.)

Kiesel, William F., jr., Altoona, Pa. Railway draft gear. 1,804,345; May 5.

Kilburn, Isaac J., assignor to The American Switch Point Protector and Railroad Equipment Company, Denver, Colo. Switch point protector. 1,803,904; May 5.

King, C. G., & Co. (See Smith, Walter E., assignor.)

King, James L., U. S. Navy, C. T. Minkler, and T. J. Gill, Newport, R. I. Air blowing exercise head for torpedoes. 1,803,530; May 5.

King, Jesse G. (See Schmieding, W. H. F., and King.)

Kinzbach, Alfred, Sour Lake, Tex. Valve mechanism. 1,803,905; May 5.

Kirschenbaum, Isaac, Middletown, Pa. Coat. 1,804,346; May 5.

Kiwad, Michael, New York, N. Y., assignor to La Belle Specialty Co., Inc. Lamp base or article of analogous nature. Des. 84,087; May 5.

Kiwad, Michael, New York, N. Y., assignor to La Belle Specialty Co., Inc. Base for clocks, lamps, or articles of analogous nature. Des. 84,088; May 5.

Kladivko, Hugo, jr., Buffalo, assignor to National Aniline & Chemical Company, New York, N. Y. Process of making 4,4'-tetraethyldiaminodiphenylmethane. 1,803,331; May 5.

Klepac, Joseph. (See Campbell, G. G., and Klepac.)

Kllesrath, Victor W. (See Bragg, C. S., and Kllesrath.)

Kliver, William B., Columbus, Ohio. Necktie re-former. 1,803,710; May 5.

Klocke, William H., Woodhaven, N. Y., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making bearings. 1,804,015; May 5.

Klug, William, assignor to Novelty Corporation, Chicago, Ill. Combined pony and rider toy. Des. 84,089; May 5.

Knilans, Harold M., Shreveport, La. Athletic shoe. 1,803,554; May 5.

Kniskern, Walter H., Syracuse, assignor to Atmospheric Nitrogen Corporation, Solvay, N. Y. Separating finely divided liquids from gases and apparatus therefor. 1,803,854; May 5.

Knoll, Hans, Munich, assignor to Mercedes Buromaschinen-Werke Aktiengesellschaft, Benshausen, Germany. Calculating machine. 1,804,103; May 5.

Knowlton, Alfred D., and S. H. Everett, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,804,169; May 5.

Kodak, Limited. (See Newman, Arthur S., assignor.)

Koenig, Joseph, deceased, Manitowoc, Wis.; R. Koenig and R. K. Ellis, administrators. Propeller. 1,804,016; May 5.

Koenig, Remus, et al., administrators. (See Koenig, Joseph.)

Kohler-Brambach Piano Company. (See Campbell, G. G., and Klepac, assignors.)

Kohman, Henry A. (See Blank, A. D., Kohman, and Schultz.)

Kolodny, Charles, Brookline, Mass. Card table. 1,803,804; May 5.

Koppers Company, The. (See Van Ackeren, Joseph, assignor.)

Koropp, Leopold, Chicago, Ill. Floral spray. 1,804,104; May 5.

Kötteritzsch, Friedrich, Breddin, near Wittenberge, Germany. Rail joint connection. 1,804,056; May 5.

Kovar, John R., and Louis W. Kovar, Owatonna, Minn. Cultivator with sled frame. 1,803,332; May 5.

Kovar, Louis W. (See Kovar, John R., and L. W.)

Kramer, Oskar, and L. Bub, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of carbon. 1,803,855; May 5.

Krantz, Hubert. (See Hahn, Mathias, assignor.)

Krell, Joseph, Berlin-Pankow, Germany. Printing machine. 1,803,940; May 5.

Krieger, Wilhelm, and R. Zahn, assignors to Kalle & Co., Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Diazo-types stabilized with a derivative of thiocarbonic acid and preparing them. 1,803,906; May 5.

Kromer, Theodor, Freiburg, assignor to T. Kromer Gesellschaft mit beschränkter Haftung, Freiburg, in Breisgau, Germany. Lock. 1,803,531; May 5.

Kromer, Theodor, Gesellschaft mit beschränkter Haftung. (See Kromer, Theodor, assignor.)

Krug, Philip, Hoisington, Kans. Automatic disk sharpener. 1,804,347; May 5.

Kruse, Maurice M., Long Island City, N. Y. Adjustable golf tee and anchor therefor. 1,803,907; May 5.

Krzikalla, Hans, Mannheim, and K. Schnitzspahn, Offenbach-on-the-Main, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Preparation suitable for developing dyeings. 1,803,532; May 5.

Kubacki, John S., Chicago, Ill. Nut lock. 1,804,348; May 5.

Kubler, Frederick J., New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass. Windlace construction for vehicles. 1,804,371; May 5.

Kullander, Martin J., Calumet City, Ill. Strainer valve. 1,803,477; May 5.

Kunz, Max A., Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacture of vat dyestuffs of the anthraquinone series. 1,803,395; May 5.

La Belle Specialty Co. (See Kiwad, Michael, assignor.)

La Bombard, Leon E., Waltham, and M. H. Sidebotham, West Newton, Mass. Garment protector. 1,803,712; May 5.

La Bombard, Leon E., Waltham, and M. H. Sidebotham, Newtonville, assignors to Specialty Automatic Machine Company, Chelsea, Mass. Partially sliced wrapped bread. 1,803,711; May 5.

La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,803,396; May 5.

Lalanne, Louis, Marseille, France. Device for adjusting the openings of scuttle ports and the position of the pane holders thereof. 1,803,533; May 5.

Lamneck, W. E., Company, The. (See Holub, Charles J., assignor.)

Lamson Company, The. (See Batcheller, Birney C., assignor.)

Lamson Company, The. (See Cowley, James T., assignor.)

Lamson Company, The. (See Cowley, J. T., and Allen, assignors.)

Lamson Company, The. (See Jennings, C., and Allen, assignors.)

Lang, Charles A., and C. B. Gamble, assignors to Fusaline, Incorporated, Minneapolis, Minn. Transfer switch. 1,803,623; May 5.

Lange, George, New York, N. Y., assignor to American Ice Company, Jersey City, N. J. Ice manufacturing apparatus. 1,804,220; May 5.

Langmuir, Irving, Schenectady, N. Y., assignor to General Electric Company. Incandescent lamp. 1,804,349; May 5.

Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Steeple closure for ink bottles. 1,803,713; May 5.

Lanier, Edward H., Covington, Ky. Aeroplane. 1,803,805; May 5.

Lanning, Howard H., Topeka, Kans. Fire door. 1,803,333; May 5.

Lannon, Thomas F., Van Nuys, Calif. Feed cutter. 1,804,350; May 5.

Lansing, Raymond P., Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Switch mechanism. 1,803,908; May 5.

Lard, Allan E., assignor to The Federal Bill Counter Company, Washington, D. C. Machine for sorting and counting paper money. 1,803,624; May 5.

Lardy, Guillaume, Peage-De-Roussillon, France, assignor, by mesne assignments, to Du Pont Rayon Company, New York, N. Y. Restoring the luster to rayon. 1,803,672; May 5.

Larimer Company, The. (See Hankins, Oscar R., assignor.)

La Rizza, Louis, Revere, Mass. Amusement device. 1,803,397; May 5.

Larson, Albert L., Beloit, Wis. Roller bearing. 1,803,625; May 5.

Larson, Bert E., Park Ridge, assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,803,714; May 5.

Larson, Peter E., Chicago, Ill. Combination table and ironing board. 1,804,372; May 5.

Lasley, Jack C., Los Angeles, Calif. Collapsible portable dressing room. 1,803,626; May 5.

Lassen, Waldemar H. C., St. Paul, Minn. Making motion picture screens. 1,804,170; May 5.

Lathrop, Harry D., Chicago, Ill. Can washing machine. 1,803,627; May 5.

Lathrop, Harry D., Chicago, Ill. Liquid heater. 1,803,628; May 5.

Latshaw, Elmer, assignor to The J. G. Brill Company, Philadelphia, Pa. Motor mounting for car trucks. 1,804,351; May 5.

Lankel, Arthur K., Detroit, Mich. Jigging and doweling patterns. 1,803,478; May 5.

Laustrup Kirstine. (See Woodjard, Guy L., assignor.)

L'Auxiliaire des Chemins de Fer et de l'Industrie. (See Fiedler, Sebastien O. A., assignor.)

Lavin, James A., New York, N. Y. Bulk measuring device. Des. 84,090; May 5.

Leban, Louis, Pittsburgh, Pa. Electric radiant heater. 1,803,972; May 5.

Lederer, Erwin R., assignor to Texas Pacific Coal & Oil Co., Fort Worth, Tex. Producing lubricating oils. 1,803,941; May 5.

Lee, Albert P., assignor to Lee Trailer & Body Co., Chicago, Ill. Semi automatic dumping body. 1,804,261; May 5.

Lee Trailer & Body Co. (See Lee, Albert P., assignor.)

Leedy Manufacturing Company. (See Strupe, Cecil H., assignor.)

Lees-Bradner Company, The. (See Bayton, Edward A., assignor.)

Leevo, Voldemar, New York, N. Y. Tripod for cameras. 1,803,534; May 5.

Lehmann, Gotthilf, Bronx, N. Y. Combination electric light and perfume dispenser. 1,803,334; May 5.

Leishman, Le Roy J., assignor to Elec-Tru-Tone Corporation, Los Angeles, Calif. Telegraphophone system. 1,803,555; May 5.

Leka, Thomas M., Englewood, N. J. Safety lifting and descending accessory for aircraft. 1,804,352; May 5.

Lennox, Thomas C., Pittsfield, Mass., assignor to General Electric Company. System of electric distribution. 1,804,353; May 5.

Levin, Isaac, Brooklyn, N. Y. Garment hanger. 1,803,856; May 5.

Levinson, David, assignor to Wilson-Weston Sporting Goods Company, Chicago, Ill. Protective apparatus for athletes. 1,803,335; May 5.

Lewis, George A., Cleveland, Ohio. Fold-type table. 1,804,171; May 5.

Lewis, Walter C., and H. T. Powers, Corpus Christi, Tex. Automobile boat. 1,804,262; May 5.

Lidberg, Tiodolf, Chicago, Ill., assignor to Chicago Surgical & Electrical Co. Thermostatic temperature control. 1,803,629; May 5.

Lighting Appliance Company. (See Blumenthal, Julius J., assignor.)

Lighty, David A., Edgewood, Iowa. Coin holder for mail boxes. 1,803,715; May 5.

Lilienfeld, Leon, Vienna, Austria. Cellulose conversion products and process of making. 1,804,354; May 5.

Lipthrott, Henry C., New Orleans, La. Fish hook and trap. 1,804,355; May 5.

Liquidometer Corporation, The. (See De Giers, Clarence A., assignor.)

Litho-Paint Poster Company. (See Hollenbeck, Dennis L., assignor.)

Litterio, Caesar B., assignor to Federal Products Corporation, Providence, R. I. Cylinder gauge. 1,804,383; May 5.

Lloyd, W. J. (See Whipp, John W., assignor.)

Locomotive Firebox Company. (See Alfreds, Torris H., assignor.)

Locomotive Firebox Company. (See Larson, Bert E., assignor.)

Lodding, Frederick W. (See Vedder, J. W., and Lodding.)

Lodding, Frederick W., and J. W. Vedder, assignors to Rice, Barton & Fales, Incorporated, Worcester, Mass. Doctor. 1,803,909; May 5.

Logan, Charles W., Kenmore, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Electric heater. Des. 84,091; May 5.

Lombardi, Vincent, Brooklyn, N. Y. Knitting machine. 1,803,336; May 5.

Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble suit. Des. 84,092; May 5.

Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble suit. Des. 84,093; May 5.

Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble suit. Des. 84,094; May 5.

Lookingland, Isaac D., Chicago, Ill. System and means for feeding water to steam boilers. 1,804,172; May 5.

Lossie, Alberta L., Louisville, Ky. Educational chart. 1,803,630; May 5.

Lotter, Adolph G., assignor to Stationers Loose Leaf Co., Milwaukee, Wis. Loose leaf binder. 1,804,173; May 5.

Lowenthal, Arthur M., Rochester, N. Y., assignor to Max Lowenthal & Sons. Headwear. 1,804,356; May 5.

Lowenthal, Max, & Sons. (See Lowenthal, Arthur M., assignor.)

Lowkrantz, Gunne, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Light control for printers. 1,803,398; May 5.

Ludwig, Frederick W., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Bracing for freight. 1,803,761; May 5.

Lumb, Henry T., Poughkeepsie, N. Y. Lumber return attachment for saw tables. 1,803,857; May 5.

Lunati, Peter J., Memphis, Tenn. Chock. 1,803,942; May 5.

Lundquist, Frank A., Galva, Ill. Handle for safe doors. 1,803,337; May 5.

Lunkenheimer Company, The. (See Hehemann, Frederick H., assignor.)

Lüscher, Emil, and H. Steiger, Basel, assignors to the Firm: Elektrizitatswerk Lonz, Gampel and Basel, Switzerland. Production of metaldehyde. 1,804,357; May 5.

Lüttringhaus, Arthur, and H. Wolff, Mannheim, and H. Neresheimer, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, New York, N. Y. Manufacture of dibenzanthronyls. 1,803,399; May 5.

Lüttringhaus, Arthur, and H. Wolff, Mannheim, and H. Neresheimer, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of dibenzanthronyls. 1,803,910; May 5.

Lutu & Rosene Elektriska Aktiebolag. (See Uggla, Wilhelm R., assignor.)

Lykken, Henry G., Minneapolis, Minn. Firing kilns. 1,803,806; May 5.

Lyness, Horatio S., Lynn, Mass. Shoe and making the same. 1,803,716; May 5.

Lyons, John F., and M. S. Perkins, Keene, N. H. Adjustable hose clamp. 1,804,358; May 5.

Lysne, Ole A., Northfield, Minn. Shovel. 1,803,717; May 5.

Mabee, Elliott B., Brooklyn, N. Y. Illuminating device for the display and examination of negatives. 1,803,631; May 5.

MacClatchie, John W., Compton, Calif. Adjustable propeller. 1,803,858; May 5.

Macdonald, William, Dennison, Ohio. Combined printing and color applying element and manufacturing the same. 1,804,359; May 5.

MacGregor, Peter G., Pequannock, assignor to Pyrene Manufacturing Company, Newark, N. J. Fire extinguishing apparatus. 1,803,859; May 5.

MacKenzie, Duncan. (See Marcin, Michael J., assignor.)

MacLeod, Daniel T., assignor to Perfex Corporation, Milwaukee, Wis. Transformer cooler. 1,803,505; May 5.

Madison, Martin J. Tulsa, Okla. Vending machine. 1,804,221; May 5.

Magee, Frederick W., assignor of one-half to T. W. Baker, London, Ontario, Canada. Motorist's eyeshield. 1,803,338; May 5.

Magee, John J., Woodbury, N. J. Road breaking apparatus. 1,804,360; May 5.

Magill-Weinsheimer Company. (See Rasmussen, Frank H., assignor.)

Magnolia Petroleum Company. (See Cochran, Ben L., assignor.)

Mahler, George T. (See Bunce, E. H., and Mahler.)

Maignen, Prosper J. A., Philadelphia, Pa. Fractional combustion apparatus. 1,804,174; May 5.

Mailey, Roy D., East Orange, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Mercury switch. 1,804,017; May 5.

Makowski, John F., Oakland, Calif., assignor of one-half to Fireproof Wall Company. Fastening clip. 1,803,632; May 5.

Mancusi, Pasquale, assignor to Pursmoke Pipe Company, New York, N. Y. Tobacco pipe. 1,804,018; May 5.

Mantle Lamp Company of America, The. (See Davis, Cortland W., assignor.)

Manville, E. J., Machine Company, The. (See Bauck, Theodore H., assignor.)

Manville, E. J., Machine Company, The. (See Praeny, John E., assignor.)

Marcin, Michael J., assignor of one-half to D. MacKenzie, Trenton, N. J. Treating carbonaceous articles. 1,804,361; May 5.

Markel Electric Products, Inc. (See Logan, Charles W., assignor.)

Markel Electric Products Inc. (See McFadden, Glenn E., assignor.)

Marks, Alexander, Chicago, Ill., assignor to Otis Elevator Company, New York, N. Y. Elevator safety apparatus. 1,803,762; May 5.

Marks, Dan G., Los Angeles, Calif. Toilet tank water softening device. 1,803,860; May 5.

Marlin-Rockwell Corporation. (See Parsons, Harry N., assignor.)

Marsh, Jas. P., & Company. (See Joyce, Harold L., assignor.)
Mirtens, Wilhelm, Bremen, Germany. Magnifying glass. 1,804,105; May 5.
Martin, Geoffrey, Wembley, England. Kiln for manufacturing lime or the like. 1,804,362; May 5.
Martin, Julius W., administrator. (See Perry, Napoleon J.)
Martin, Mark H., Baltimore, Md., assignor to The Symington Company, New York, N. Y. Draft device. 1,803,911; May 5.
Martin, Victor E. (See Walthers, H. S., and Martin.)
Martinek, Alois L., assignor to C. M. Hall Lamp Company, Detroit, Mich. Focusing adjustment for lamps. 1,803,433; May 5.
Marvel Carburetor Company. (See Heginbottom, Walter G., assignor.)
Marvel Carburetor Company. (See Wright, Rea P., assignor.)
Marvin, Burdette K., Riverside, Calif. Display box. 1,803,861; May 5.
Masench, Joseph J., Newark, N. J. Tire replacing machine. 1,804,222; May 5.
Mason, Claude D. (See Bradley, C. E., and Mason.)
Massey, George H., Chicago, Ill. Tower excavator. 1,804,175; May 5.
Massey, Peter J. (See Drake, Ronald L., assignor.)
Mattison Machine Works. (See Medholdt, Louis T., assignor.)
Maxson, Charles B., assignor of one-half to J. W. Maxson, Westerly, R. I. Sheet cutting and feeding machine. 1,804,223; May 5.
Maxson, Julian W. (See Maxson, Charles B., assignor.)
May Hosiery Mills. (See Perry, Napoleon J., assignor.)
Mayden, John W., Weleetka, Okla. Auto table for safeway garages. 1,804,363; May 5.
Mayflower, Collis S., Flagstaff, Ariz. Glass edging machine. 1,804,263; May 5.
Mayer Manufacturing Corporation. (See Smith, Jacob A., assignor.)
Maytag Company, The. (See Mikulasek, John, assignor.)
Maytag Company, The. (See Snyder, Howard F., assignor.)
McAleer, James, Chicago, Ill. Water regulator for boilers. 1,803,479; May 5.
McCain, Wes W., Oak Park, Ill., assignor, by mesne assignments, to Cherry-Burrell Corporation, Wilmington, Del. Cartoning machine. 1,803,633; May 5.
McCandless, Harry E., assignor to Kennedy-McCandless Corporation, Rochester, N. Y. Tray for nursery chairs. 1,804,057; May 5.
McClellan, Joseph G., St. Louis, Mo. Binding post. 1,803,718; May 5.
McConnell, Cora H., New York, N. Y. Mop cleaning receptacle. 1,803,339; May 5.
McDevitt, James B., Chicago, Ill. Automobile ventilator. 1,804,264; May 5.
McDonough, Ambrose A. (See Gates, C. J., jr., Nathan, and McDonough.)
McDonough, James B., jr., New York, N. Y. Toy. 1,803,506; May 5.
McFadden, Glenn E., assignor to Markel Electric Products Inc., Buffalo, N. Y. Electric light fixture. Des. 84,095; May 5.
McFadden, Glenn E., assignor to Markel Electric Products Inc., Buffalo, N. Y. Electric light fixture. Des. 84,096; May 5.
McFadden, Glenn E., assignor to Markel Electric Products Inc., Buffalo, N. Y. Electric light fixture. Des. 84,097; May 5.
McKean, John O., assignor to Foster Machine Company, Westfield, Mass. Slub catcher. 1,804,019; May 5.
McKee Glass Company. (See Smith, Maurice A., assignor.)
McKinley, Benjamin P., Bridgeport, Conn., assignor to The Bryant Electric Company. Electric attachment plug. 1,804,020; May 5.
McLendon, Millen H. (See Floyd, D. G., and McLendon.)
McMillan Book Company. (See Unger, Paul O., assignor.)
McQuaid, Harry W., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Surface hardening steel. 1,804,176; May 5.
Mears, Henry S., Portland, Oreg. Rope structure. 1,803,912; May 5.
Medholdt, Louis T., assignor to Mattison Machine Works, Rockford, Ill. Feed mechanism. 1,803,973; May 5.
Meibers, Harry B., Springfield, Ohio. Puzzle. 1,803,763; May 5.
Mellanoff, Isadore S., Philadelphia, Pa., assignor to Kemikal, Inc. Plastic from natural resin, phenol, aldehyde, and alkali. 1,804,379; May 5.
Menough, Paul S., Pittsburgh, Pa. Process of annealing and heat treating cast iron. 1,803,340; May 5.
Mercedes Buromaschinen-Werke Aktiengesellschaft. (See Knoll, Hans, assignor.)
Merian, Frederic, Pittsburgh, Pa., assignor, by mesne assignments, to Pilkington Brothers Limited, Lancashire, England. Apparatus for use in surfacing sheet material. 1,803,434; May 5.
Merica, Paul D., Westfield, J. S. Venick, Elizabeth, and T. H. Wickenden, Roselle, N. J., assignors, by mesne assignments, to The International Nickel Company, New York, N. Y. Gray cast iron. 1,803,480; May 5.
Merklinger, Frank E. (See Vauclain, C. P., and Merklinger.)
Merrick, Charles E., Baltimore, Md. Cutter head for meat skinning machines. 1,803,341; May 5.
Messler, Eugene L., Pittsburgh, and J. Thomas, Sharpsville, Pa. Hot top for ingot molds. 1,803,342; May 5.
Metal Forms Corporation. (See Miller, George H., assignor.)
Metallurgica Bresciana Gia Tempini. (See Revelli, Bethel A., assignor.)
Metcalf, Jay H., Grand Rapids, Mich. Plastic modeling machine. 1,804,224; May 5.
Metlox Corporation, Ltd. (See Wilson, William B., assignor.)
Meyer, Otto, Wettelswalde, near Crimmitschau, Germany. Automatic weighing machine. 1,803,913; May 5.
Micha, Léon, Antwerp, Belgium. Screw nut. 1,804,058; May 5.
Michigan State Board of Agriculture. (See Miller, Elroy J., assignor.)
Midwest Piping & Supply Co., Inc. (See Fantz, Fred C., assignor.)
Mikalasek, John, assignor to The Maytag Company, Newton, Iowa. Driving means for washing machines. 1,803,974; May 5.
Mildren, Lory J. (See Taylor, James S., assignor.)
Miller, Arthur E. (See Salisbury, H. M., and Miller.)
Miller, Elroy J., assignor to Michigan State Board of Agriculture, East Lansing, Mich. Production of ash free adsorbent carbon. 1,803,943; May 5.
Miller, Ernest B. (See Phillips, James I., assignor.)
Miller, Ernest E., David City, Nebr. Vehicle radiator. 1,803,764; May 5.
Miller, Frederick W., Hockley Heath, England. Reproducing designs in metal. 1,804,021; May 5.
Miller, George H., assignor to Metal Forms Corporation, Milwaukee, Wis. Step form. 1,803,719; May 5.
Miller, H. H. Industries Company, The. (See Pfouts, Leroy S., assignor.)
Miller, Harry L., Chester, Pa. Heat exchange apparatus. 1,803,435; May 5.
Miller, Henry, assignor to A. O. Smith Corporation, Milwaukee, Wis. Tool for bending tubular articles. 1,804,384; May 5.
Miller Rubber Company Inc. (See Riley, Ralph E., assignor.)
Miller, William J., assignor of one-half to W. E. Ranney, Columbus, Ohio. Apparatus for electric welding. 1,804,059; May 5.
Mills, William H., Attleboro, Mass. Life saving and salvage apparatus for use with submarines. 1,803,944; May 5.
Milne Neckwear Limited. (See Hall, Harvey C., assignor.)
Min-A-Max Co. (See Boker, Vitus A., assignor.)
Miner, Claude G., Berkeley, Calif. Producing nitrides of aluminum or magnesium from their minerals. 1,803,720; May 5.
Minick, William L., jr., Waynesboro, Pa. Electrical toy. 1,804,265; May 5.
Minkler, Chester T. (See King, James L., Minkler, and Gill.)
Minor, Burt S., San Pedro, Calif. Hoisting clevis. 1,803,721; May 5.
Minty, John E., assignor to Shaw-Crane-Putman Machine Company, Muskegon, Mich. Spring actuated reel. 1,803,481; May 5.
Miriam Gross Company. (See Gross, Miriam, assignor.)
Mishawaka Rubber and Woolen Manufacturing Company. (See Bradley, C. E., and Mason, assignors.)
Mississippi Valley Trust Company, et al., Executors. (See Noxon, Elwin I.)
Modern Oil Well Supply Company, The. (See Jackson, John C., assignor.)
Monroe Calculating Machine Company. (See Dennis, Adolphus S., assignor.)
Moody, Lewis F., Philadelphia, Pa. Hydraulic turbine. 1,803,673; May 5.
Moon, Morris R., Portland, Oreg. Automatic window cleaner. 1,803,722; May 5.
Moore, Bruce A., Blawnox, Pa. Loading and unloading device. 1,804,266; May 5.
Moore, Frederick T., East Hartford, and C. Pfeiffer, Hartford, Conn., assignors to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Reversible feed mechanism for machine guns. 1,803,351; May 5.
Moore, Ralph R., Portland, Oreg. Tractor hoist. 1,803,400; May 5.
Morgan, Harry J., Walnut Park, assignor to P. L. & M. Company, Los Angeles, Calif. Welding composition. 1,803,634; May 5.
Morgan Hurrycane Company, The. (See Morgan, William H., assignor.)
Morgan, John D. (See Goldsborough, W. E. Morgan, and Wyckoff, assignors.)
Morgan, William H., Alliance, Ohio, assignor, by mesne assignments, to The Morgan Hurrycane Company, New York, N. Y. Shearing or disintegrating sugar cane. 1,804,267; May 5.
Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Metal bed. 1,803,862; May 5.
Morrill, Herbert B., assignor to Atwood & Morrill Co., Salem, Mass. Safety relief valve. 1,804,060; May 5.
Morton, Edmund R., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulator system. 1,804,178; May 5.

Morton, James, West Lothian, Scotland. Manufacture of chenille and other fabrics. 1,804,106; May 5.
Moto Meter Gauge & Equipment Corporation. (See Chéron, Pierre J., assignor.)
Mueller, Hugo, Mannheim, and H. Bertelsmann, Bielefeld, Germany. Stand-up double collars. 1,803,765; May 5.
Mueller, Moritz L., Seattle, Wash. Lumber drying apparatus for yard use. 1,804,107; May 5.
Muldner, Carl C., jr., Maplewood, Mo. Portfolio for neckties and soft collars. 1,803,343; May 5.
Müller, Imanuel. (See Pinkert, M. A. and Müller.)
Müller, John P., New Rochelle, N. Y. Poise and manipulating device for same on balance beams. 1,804,177; May 5.
Murphy, Everett N., Chicago, Ill., assignor, by mesne assignments, to Johns-Manville Sales Corporation. Floor construction. 1,803,723; May 5.
Murray, Howard J., New York, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa. Automatic release for gear synchronizers. 1,803,535; May 5.
Mussey, William H., and H. A. Hellman, assignors to The Pullman Car & Manufacturing Corporation, Chicago, Ill. Conduit structure for railway cars. 1,803,482; May 5.
Myers, George D., W. A. Edwards and J. W. Hobing, assignors to The Edwards Manufacturing Company, Cincinnati, Ohio. Traffic marker. 1,803,635; May 5.
N. V. Philips Gloeilampenfabrieken. (See Dijksterhuis, Popko R., assignor.)
Nadeau, Joseph, Portland, Oreg. Rigging hook. 1,803,401; May 5.
Nanfeldt, William, assignor to World Bestos Corporation, Paterson, N. J. Detector. 1,803,724; May 5.
Napier, George R., Cleveland, Ohio. Woodworking machine. 1,803,402; May 5.
Nash, Charles J., and H. E. Bartsch, Chicago, Ill., assignors to Universal Draft Gear Attachment Co. Brake operating mechanism. 1,804,179; May 5.
Nash Engineering Company. (See Adams, Harold E., assignor.)
Nathan, Charles S. (See Gates, C. J., jr., Nathan, and McDonough.)
Nathan Manufacturing Company. (See Sharp, John C., assignor.)
National Aniline & Chemical Company. (See Kladivko, Hugo, jr., assignor.)
National Cash Register Company, The. (See Shipley, Bernis M., assignor.)
National Parking Garages, Incorporated. (See Aitken, William J., assignor.)
Neidich, Samuel A., Edgewater Park, N. J. Making tubes of celluloid and the like. 1,804,022; May 5.
Neidich, Samuel A., Edgewater Park, N. J. Making tubes of celluloid and the like. 1,804,023; May 5.
Nejelski, Leo, assignor of one-half to F. X. Trimbach, University City, Mo. Jar or similar receptacle. Des. 84,098; May 5.
Nelson, Albin J., and C. J. Essmann, Brooklyn, N. Y. Tire inflating air pressure controller. 1,803,863; May 5.
Nelson, Harry T., Dallas, Tex. Helicopter flying toy. 1,803,636; May 5.
Nemarnick, Frank. (See Basola, Anthony, and Nemarnick.)
Nenna, Gennaro, Owen Sound, Ontario, assignor to C. Georgas, Owen Sound, Ontario, Canada. Cigarette and match dispenser. 1,803,536; May 5.
Nenninger, Lester F. (See Binns, George W., Archea, and Nenninger, assignors.)
Neon Appliances Ltd. of America. (See Aha, Eugene, assignor.)
Neon Products, Inc. (See Kamin, Samuel, assignor.)
Neresheimer, Heinrich. (See Lüttringhaus, A., Wolff, and Neresheimer.)
Nestle-Lemur Company, The. (See Trafton, Howard A., assignor.)
New Jersey Zinc Company, The. (See Bunce, E. H., and Mahler, assignors.)
Newman, Arthur S., Highgate, assignor to Kodak, Limited, Holborn, London, England, Cinematograph apparatus. 1,803,864; May 5.
Newport Chemical Corporation. (See Gubelmann, I., and Tinker, assignors.)
Newspaper Mechanical Sales Company. (See Schofield, John G., assignor.)
New York Knife Company. (See Fuller, James E., assignor.)
Nicholson, Charles E., Detroit, Mich. Roller screen. 1,803,674; May 5.
Nicolas, Herbert B., Charltonville, Manchester, and T. R. Fothergill, Rossendale, England. Metal printing rollers and printing plates. 1,804,024; May 5.
Nieuwland, Julius A., Notre Dame, Ind., assignor to Canadian Electro Products Company, Limited, Montreal, Canada. Vulcanization accelerator and manufacture thereof. 1,804,226; May 5.
Nissen, Arvid E., Upper Darby, Pa. Shell construction. 1,803,537; May 5.
Nock, Harold E., assignor to Towle Manufacturing Company, Newburyport, Mass. Spoon or analogous article. Des. 84,099; May 5.
Norma-Hoffman Bearings Corp. (See Bott, George R., assignor.)
North American Chemical Company. (See Thoma, Andrew, assignor.)
North, Charles H., San Francisco, Calif. Remote mechanical brake control for trailers. 1,804,025; May 5.
North & Judd Manufacturing Company. (See Freysinger, John B., assignor.)
Northington, Norfleet J., St. Albans, N. Y. Manipulating attachment for the lens focusing mechanism of moving picture projecting machines. 1,804,268; May 5.
Norton, Charles H., assignor to Norton Company, Worcester, Mass. Grinding machine. 1,803,807; May 5.
Norton Company. (See Norton, Charles H., assignor.)
Novak, Izador J., assignor to The Raybestos Company, Bridgeport, Conn. Soluble gilsonite and making same. 1,803,637; May 5.
Noveltoy Corporation. (See Crandall, Weller R., assignor.)
Noveltoy Corporation. (See Klug, William, assignor.)
Noxon, Dorothy V., et al., executors. (See Noxon, Elwin I.)
Noxon, Elwin I., deceased, by D. V. Noxon, Webster Groves, G. A. Noxon, and Mississippi Valley Trust Company, executors, assignors to Ralston Purina Company, St. Louis, Mo. Molding machine. 1,803,344; May 5.
Noxon, George A., et al., executors. (See Noxon, Elwin I.)
Nudelman, Morris, St. Louis County, Mo. Whirling toy. 1,803,638; May 5.
Nugent, John J., Ogden, Utah. Spinal extensor. 1,803,556; May 5.
Nye, Henry V., West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Motor control system. 1,804,180; May 5.
Oberg, John A., Worcester, Mass. Tip-up. 1,803,914; May 5.
Obstbaum, Stanley, Brooklyn, N. Y. Set of playing cards. Des. 84,100; May 5.
O'Connell, Edward J., Schenectady, N. Y., assignor to General Electric Company. Welding apparatus. 1,804,269; May 5.
O'Connor, Arthur F., assignor to Union Railway Equipment Company, Chicago, Ill. Hand brake. 1,804,225; May 5.
O'Daniell, George R. (See Stout, F. and O'Daniell.)
Oildraulic Lift Company. (See Stukenborg, Louis C., assignor.)
O'Keeffe, George W., New Rochelle, N. Y. Apparatus for drying. 1,803,766; May 5.
O'Keeffe, George W., New Rochelle, N. Y. Drying. 1,803,767; May 5.
Oliver United Filters, Inc. (See Campbell, Robert C., assignor.)
Olsen, Andrew, jr., and J. A., assignors to Golden Nuggett Sweets, San Francisco, Calif. Candy handling system. 1,804,026; May 5.
Olsen, James A. (See Olsen, Andrew, jr., and J. A.)
O'Meara Denis H., Detroit, Mich., assignor to American Optical Company, Southbridge, Mass. Magnifying measuring instrument. 1,803,483; May 5.
O'Neill, Michael J., Chicago, Ill. Take off and landing platform for aeroplanes. 1,803,507; May 5.
Orester, Jacob, and W. J. Gee, Syracuse, N. Y. License plate holder. Des. 84,125; May 5.
Ormesher, Frank L., assignor to Cemroc, Inc., Cincinnati, Ohio. Building material. 1,803,557; May 5.
Osborn Manufacturing Company, The. (See Oyster, Earl F., assignor.)
Oster, John, assignor to John Oster Mfg. Company, Racine, Wis. Hand clipper. 1,803,345; May 5.
Oster, John, Mfg. Company. (See Oster, John, assignor.)
Otis Elevator Company. (See Marks, Alexander, assignor.)
O'Toole, Martin H., Everett, assignor to Boston Rubber Mat Company, Boston, Mass. Link mat and border. 1,804,027; May 5.
Ott, John. (See Cadwell, W. H., and Ott.)
Ottinger, Leon, New York, N. Y. Operating means for automobile door latches and window regulators. 1,803,675; May 5.
Ottinger, Leon, New York, N. Y. Operating means for automobile door latches and window regulators. 1,803,725; May 5.
Otwell, Ralph B., Detroit, Mich. Combined heater and exhaust manifold. 1,803,436; May 5.
Outboard Motors Corporation. (See Irgens, F. T., and Baldus, assignors.)
Owens, Freeman H., New York, N. Y. Recording photographic sound records. 1,803,346; May 5.
Owens, Freeman H., New York, N. Y. Combined picture machine and elevating support therefor. 1,803,347; May 5.
Owens, Freeman H., New York, N. Y. Sound reproducing or recording apparatus. 1,803,403; May 5.
Owens, Freeman H., New York, N. Y. Motion picture film printing apparatus. 1,803,404; May 5.
Oyster, Earl F., Shaker Heights, assignor to The Osborn Manufacturing Company, Cleveland, Ohio. Mold machine. 1,804,181; May 5.
Ozouf, Arthur E., assignor to The Allbright-Nell Company, Chicago, Ill. Apparatus for pressing and cooking meats. 1,804,227; May 5.
P. L. & M. Company. (See Morgan, Harry J., assignor.)
Pacent Electric Company. (See Parker, Oliver B., assignor.)

Packard Motor Car Company. (See Brown, Robert N., assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Page, Albert E., Brooklyn, assignor to Scott & Williams, Incorporated, New York, N. Y. Machine for knitting spliced fabrics and knitting the same. 1,803,865; May 5.
Paige, Paul F., Detroit, Mich., and G. H. Blood, Lynn, assignors to Forbes Lithograph Manufacturing Company, Boston, Mass. Display frame. 1,804,373; May 5.
Palich, Martin B., Houston, assignor of one-fourth to B. W. Brenneman, Dallas County, Tex. Siphon. 1,804,270; May 5.
Palmer, Wayne F., Holyoke, Mass. Torch cutting device. 1,804,271; May 5.
Palmer, Wayne F., Holyoke, Mass. Trackway. 1,804,272; May 5.
Paquette, Eugene, Willimansett, Mass. Fire extinguisher. 1,804,228; May 5.
Pardo, Oscar G., and S. D. Fernandez, Habana, Cuba. Centrifugal separator. 1,804,108; May 5.
Parker, Frederick W., Gerlach, Nev. Safety gear shift. 1,804,109; May 5.
Parker, Oliver B., Brooklyn, assignor to Pacent Electric Company, Inc., New York, N. Y. Pickup. 1,804,364; May 5.
Parmele, William R., Portland, Oreg. Wing construction for aeroplanes. 1,803,915; May 5.
Parsons, Harry N., Chicago, Ill., assignor to Martin-Rockwell Corporation. Ball bearing. 1,804,110; May 5.
Pasurka, Charles, Chicago, Ill. Envelope. 1,803,348; May 5.
Paterson, Alexander, Buffalo, N. Y. Breakdown mill. 1,804,111; May 5.
Patterson, Louis L., Los Angeles, Calif. Vehicle. 1,803,866; May 5.
Paul, William L., Berkeley, Calif., assignor to Deere & Company, Moline, Ill. Flow. 1,804,112; May 5.
Paulding, John I., Inc. (See Wack, Henry K., assignor.)
Payson, Aurin E., and M. R. Wetmore, Norwich, Conn. Refrigerating apparatus. 1,803,639; May 5.
Penler, Robert B., assignor to The Borden Company, Warren, Ohio. Die stock. 1,803,484; May 5.
Pearmain, William J., assignor to Twin Disc Clutch Company, Racine, Wis. Clutch. 1,804,113; May 5.
Pearson, Gustav C., assignor to Gardner-Denver Company, Denver, Ohio. Lubricator. 1,804,182; May 5.
Pelkey, Frank T., Marine City, Mich. Anchor. 1,804,273; May 5.
Pencil Mechanism Corporation. (See Deutsch, Hermann, assignor.)
Pennsylvania Crusher Company. (See Battey, William A., assignor.)
Perfex Corporation. (See MacLeod, Daniel T., assignor.)
Perkins, Melvin S. (See Lyons, J. F., and Perkins.)
Pero, John M. (See Daniels, N., and Pero.)
Perry, Napoleon J., deceased, by J. W. Martin, administrator, assignor to May Hosiery Mills, Nashville, Tenn. Stop mechanism for knitting machines. 1,803,558; May 5.
Peters, Arthur C., assignor to Cinch Manufacturing Corporation, Chicago, Ill. Stud and grommet fastener. 1,803,485; May 5.
Petersime, Ira M., Gettysburg, Ohio. Baking oven. 1,803,975; May 5.
Peterson, Werner I. (See Benson, S. F., and Peterson.)
Pfeiffer, Christian. (See Moore, F. T., and Pfeiffer.)
Pfeiffer, Christian, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Automatic firearm. 1,803,349; May 5.
Pfouts, Joan S., administratrix. (See Pfouts, Leroy S., assignor.)
Pfouts, Leroy S., deceased, by J. S. Pfouts, administratrix, assignor to The H. H. Miller Industries Company, Canton, Ohio. Freezing apparatus. 1,803,640; May 5.
Pfuderer, Carl A., Brooklyn, N. Y. Bookmark. 1,803,726; May 5.
Philip Carey Manufacturing Company, The. (See Ross, Edgar S., assignor.)
Phillips, James L., Mannington, W. Va., assignor of one-half to E. B. Miller, Tulsa, Okla. Chain tongs. 1,803,867; May 5.
Phillips Petroleum Company. (See Riney, A. H., and Gibbs, assignors.)
Piepenstock, Paul. (See Herrmann, Emil, assignor.)
Pignanelli, Luigi, Tacoma, Wash. Fastener for rubber heels. 1,803,641; May 5.
Pilkington Brothers Limited. (See Merian, Frederic, assignor.)
Pinaud, Inc. (See Jones, Alice M., assignor.)
Pinkert, Max, Pforzheim, and I. Müller, Neuenburg, Germany, said Pinkert assignor to said Müller. Seal. 1,803,916; May 5.
Pistole, Henry T., Dallas, Tex. Head covering. 1,803,538; May 5.
Platt, Harry E., Ottumwa, Iowa. Signaling device. 1,803,808; May 5.
Poberejsky, Jacques, Bois-Colombes, France. Protective lining for tanks. 1,804,274; May 5.
Pollock, Robert T., New York, N. Y., assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for cracking oils. 1,804,028; May 5.
Porter, Harry F., Trenton, N. J. Magnetic alloy. 1,803,353; May 5.
Porter, Harry F., Trenton, N. J. Producing and refining alloys. 1,803,809; May 5.
Porter, Harry F., Trenton, N. J. Magnetic device. 1,803,868; May 5.
Powell, Alfred S., Floral Park, assignor to Stransky Products Corporation, New York, N. Y. Mop cleaning device. 1,804,229; May 5.
Powell, Joseph C., Minden, La. Agricultural implement. 1,803,917; May 5.
Powell, William H., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. System of distribution. 1,803,676; May 5.
Powers, Howard T. (See Lewis, W. C., and Powers.)
Praeny, John E., assignor to The E. J. Manville Machine Company, Waterbury, Conn. Die controlling mechanism for open die metal heading machines. 1,804,029; May 5.
Price, Charles S., Bethlehem, assignor to L. F. Grammes & Sons, Inc., Allentown, Pa. Gluing machine. 1,804,365; May 5.
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Pudleiner, John, Allentown, Pa. Hinge for toilet seats and covers. 1,804,114; May 5.
Pullelean Manufacturing Corporation. (See Addler, Joseph H., assignor.)
Pullman Car & Manufacturing Corporation, The. (See Mussey, W. H., and Hellman, assignors.)
Pullman Car & Manufacturing Corporation. (See Winther, Martin P., assignor.)
Purdy, Emmett G., Detroit, Mich., assignor to Detroit Body Die Company. Motor vehicle hood. Des. 84,105; May 5.
Purple, George E., La Grange, assignor to Flexible Steel Lacing Company, Chicago, Ill. Belt fastener. 1,803,354; May 5.
Pursmoke Pipe Company. (See Mancusi, Pasquale, assignor.)
Pyrene Manufacturing Company. (See MacGregor, Peter G., assignor.)
Quadrow, Albert, et al. (See Swearingen, Alfred R., assignor.)
Quarrie, Eugene A., New York, N. Y., assignor to C. E. Manufacturing Co., Providence, R. I. Rectifier. 1,803,976; May 5.
R. M. Company. (See Murray, Howard J., assignor.)
Radiant Lighting Fixture Co. (See Bohl, Hugo, assignor.)
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Corporation of America. (See Wright, G. M., and Smith, assignors.)
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Paper product and making the same. 1,803,642; May 5.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Paper product and making the same. 1,803,643; May 5.
Rafton, Harold R., Lawrence, Mass., assignor to Rafton Laboratories, Inc. Sizing paper. 1,803,644; May 5.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Paper product and making the same. 1,803,645; May 5.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Eliminating foam in paper manufacture. 1,803,646; May 5.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Manufacture of carbonate filled sized paper. 1,803,647; May 5.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Sizing carbonate filled paper. 1,803,648; May 5.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Eliminating foam in paper manufacture. 1,803,649; May 5.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Sizing carbonate filled paper. 1,803,650; May 5.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Sizing carbonate filled paper. 1,803,651; May 5.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Sizing carbonate filled paper. 1,803,652; May 5.
Rafton Laboratories, Inc. (See Rafton, Harold R., assignor.)
Rah, Joseph, assignor, by mesne assignments, to G. and W. Electric Specialty Company, Chicago, Ill. System of electrical distribution. 1,803,653; May 5.
Raife, Harry E., Wilkes-Barre, Pa. Road marker. 1,804,230; May 5.
Ralston Purina Company. (See Noxon, Elwin I., assignor.)
Ranney, William E. (See Miller, William J., assignor.)
Rantz, Frank A., St. Petersburg, Fla. Garage door. 1,804,231; May 5.
Rasmussen, Frank H., assignor to Magill-Weinsheimer Company, Chicago, Ill. Display device. 1,803,727; May 5.
Ran, Henry, jr., New York, N. Y., assignor to Westinghouse Lamp Company. Cut-out for incandescent lamps. 1,803,486; May 5.
Raybestos Company, The. (See Novak, Izador J., assignor.)

Read, Robert E., White Plains, N. Y., assignor to International Paper Company. Sharpening mechanism for grinding machines. 1,803,487; May 5.
Reardon, Helen M., et al. (See Swearingen, Alfred R., assignor.)
Redmann, Robert G., Bristol, Conn. Ingot mold construction. 1,804,275; May 5.
Refrigerator Grid Company. (See Sherer, Frank G., assignor.)
Reichmann, Reinhold, Berlin, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Manufacture of insulating bodies and more particularly of insulators for spark plugs. 1,803,355; May 5.
Remington Typewriter Company. (See Edwards, James H., assignor.)
Remington Typewriter Company. (See Walsoe, Sigurd L., assignor.)
Renshler, John D., Findlay, Ohio. Burial casket. 1,804,276; May 5.
Re Qua, Frederick L., San Francisco, Calif. Railway rail joint. 1,803,768; May 5.
Resch, Henry, Bayonne, N. J., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,804,232; May 5.
Retherford, Horace G., Vilas, and S. T. Elmore, Campo, Colo. Well capper. 1,803,945; May 5.
Revelli, Bethel A., Turin, assignor, by mesne assignments, to Metallurgica Bresciana Gia Tempini, Finrnegrande, Brescia, Italy. Automatic firearm actuated by compressed air. 1,803,946; May 5.
Reynolds, Morley P., Cleveland Heights, assignor to The W. S. Tyler Company, Cleveland, Ohio. Screening apparatus. 1,804,115; May 5.
Rheinische Metallwaaren und Maschinenfabrik. (See Schuler, H., and Gietmann, assignors.)
Rice, Barton & Fales, Incorporated. (See Lodding, F. W., and Vedder, assignors.)
Rice, Barton & Fales, Incorporated. (See Vedder, John W., assignor.)
Rice, Barton & Fales, Incorporated. (See Vedder, J. W., and Lodding, assignors.)
Richheimer, Isaac D., New York, N. Y. Percolator. 1,803,356; May 5.
Richter, August F., Watertown, N. Y., assignor to Stebbins Engineering & Manufacturing Company. Digesting system. 1,804,116; May 5.
Richter, Erich F. W., Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y. Automatic card ejector. 1,803,977; May 5.
Rickard, George B. (See Cameron, J. A., and Rickard.)
Ricker, Norman H., assignor to J. P. Scranton, Houston, Tex., trustee. Electromagnetic method of underground exploration. 1,803,405; May 5.
Riggs Optical Company-Consolidated. (See Copeland, Jacob, assignor.)
Riker Company, The. (See Riker, Samuel M., assignor.)
Riker, Samuel M., Chester, N. J. Shoe ornament. Des. 84,102; May 5.
Riker, Samuel M., Chester, N. J. Shoe buckle. Des. 84,103; May 5.
Riker, Samuel M., Chester, N. J., assignor to The Riker Company. Shoe ornament. Des. 84,101; May 5.
Riley, Ralph E., Akron, Ohio, assignor, by mesne assignments, to Miller Rubber Company, Inc., Wilmington, Del. Overshoe and making the same. 1,803,559; May 5.
Riney, Arthur H., and L. T. Gibbs, assignors to Phillips Petroleum Company, Bartlesville, Okla. Pipe line controlling means. 1,803,437; May 5.
Ringle, Robert F., Zelienople, Pa. Molding machine. 1,803,406; May 5.
Rithner, Henry, Wellsburg, W. Va. Lamp shade or similar article. Des. 84,104; May 5.
Ritter, Julius, jr., assignor to Hartmann Trunk Company, Racine, Wis. Trunk curtain and laundry bag. 1,804,030; May 5.
Ritter, Julius, jr., assignor to Hartmann Trunk Company, Racine, Wis. Wardrobe trunk. 1,804,031; May 5.
Roach, Jack. (See Droddy, Harrison, assignor.)
Robertson, H. H., Company. (See Thomas, George W., assignor.)
Robeson-Rochester Corporation. (See Schott, Howard H., assignor.)
Robins Conveying Belt Company. (See Robins, Thomas, assignor.)
Robins, Thomas, New York, N. Y., assignor to Robins Conveying Belt Company, Passaic, N. J. Pulley. 1,803,357; May 5.
Robinson, James W. (See Angel, H., and Robinson.)
Rocheron, Henri F. L. J., Levallois-Perret, France. Hinge. 1,803,438; May 5.
Rock of Ages Corporation. (See Chase, Elroy A., assignor.)
Rodin, Mate M., San Pedro, Calif. Fishhook or catching device. 1,803,560; May 5.
Rodin, Mate M., San Pedro, Calif. Fishhook. 1,803,561; May 5.
Rodney Hunt Machine Company. (See Simonds, Warren J., and Harris, assignors.)
Roessler, Amandus C. (See Beidler, E. W., and Roessler.)
Roet, Isaac, Amsterdam, Netherlands. Cigarette making machine. 1,803,562; May 5.
Rohland, Charles B., Barberton, Ohio. Rotary vegetable cutting machine. 1,803,769; May 5.
Rohlfing, John M., Plainfield, N. J., assignor to American Car and Foundry Company, New York, N. Y. Lined tank and making the same. 1,803,407; May 5.
Rolaff, Walter G. E., St. Louis, Mo. Valve controlling mechanism for refrigerating systems. 1,803,677; May 5.
Romec Corporation. (See Beidler, E., and Roessler, assignors.)
Ronk, George T., assignor to Speeder Machinery Corporation, Cedar Rapids, Iowa. Excavator bucket. 1,803,654; May 5.
Root, Charles S., Springfield, Mass. Tweezer tool. 1,803,728; May 5.
Roseman, Leo, Newark, N. J. Automatic stop for sewing machines. 1,803,978; May 5.
Rosenfeld, Simon A. (See Strom, Olaf S., assignor.)
Rosenstein, Aaron, assignor to Rosenstein Bros. & Hook, New York, N. Y. Advertising sign. 1,803,439; May 5.
Rosenstein Bros. & Hook. (See Rosenstein, Aaron, assignor.)
Ross, Edgar S., Pittsburgh, Pa., assignor to The Philip Carey Manufacturing Company. Bituminous composition. 1,803,488; May 5.
Rossman, Allen M., assignor, by mesne assignments, to Rossman Patent, Incorporated, Chicago, Ill. Clamp. 1,803,508; May 5.
Rossman Patents, Incorporated. (See Rossman, Allen M., assignor.)
Roth, Charles H., assignor to The Folmer Graflex Corporation, Rochester, N. Y. Camera. 1,804,061; May 5.
Rottman, George, Brooklyn, N. Y. Safety apparatus for motor vehicles. 1,804,032; May 5.
Rouse, Frank, Houston, Tex. Molding machine. 1,803,408; May 5.
Royal Worcester Corset Company, The. (See Wittenberg, Margaret H., assignor.)
Rozdilski, John, assignor of one-half to J. A. Keihart, Mayfield, Pa. Needle threader. 1,803,918; May 5.
Ruff, Samuel P., jr., Bowling Green, Nether Providence Township, assignor to Aberfoyle Manufacturing Company, Chester, Pa. Treating yarn. 1,803,869; May 5.
Ruiz, Mario F., Guanabacoa, Cuba. Safety lock for doors. 1,804,277; May 5.
Runkles, Elsie M., and F. Blackburn, Detroit, Mich. Combination chair and writing desk. 1,803,947; May 5.
Runne, Henry G., Rochester, N. Y. Signal. 1,804,233; May 5.
Rush, John W., La Grande, Oreg. Tractor hitch for farm machinery. 1,803,770; May 5.
Russell, Frederick T., Utica, N. Y., assignor, by mesne assignments, to Fox Company, Philadelphia, Pa. 1,804,117; May 5.
Russell, Thomas B. (See Sommers, A. L., and Russell.)
Rutherford, Ronald C., El Paso, Tex., assignor to American Smelting and Refining Company, New York, N. Y. Removal of arsenic from lead bullion. 1,803,771; May 5.
Rutledge, Arthur E., and E. T. Cleary, Rockford, Ill. Trip device for power shovels. 1,803,678; May 5.
S. E. Company. (See Wallace, George W., assignor.)
Safety Mining Company. (See Ferrell, D., and Helmholtz, assignors.)
Sagar, Albert, Slater, S. C. Motion transmitting device for looms. 1,803,509; May 5.
Sage, Edwin R., Jersey City, N. J. Jack stanchion. 1,803,810; May 5.
Sagen, Peter, Skaneateles, N. Y. Tire chain cross member. 1,803,563; May 5.
St. Pierre, Octave J., Chicago, Ill. Clutch mechanism. 1,804,037; May 5.
Salisbury, Everett M., Providence, R. I. Display carton or similar article. Des. 84,106; May 5.
Salisbury, Hervey M., Walnut Grove, and A. E. Miller, Sacramento, Calif. Directional stabilizer for aircraft. 1,803,655; May 5.
Salkeld, Howard B. (See von Hildebrandt, Paul G., assignor.)
Salmon, Philip A. (See Shaw, K. R. and Salmon.)
Samburg, Maurice. (See Hochman and Degener, assignors.)
Sampson, Richard H., Westfield, N. J. Automobile. Des. 84,107; May 5.
Sanders, George E., New York, N. Y. Forming colloidal suspensions containing copper and product thereof. 1,803,870; May 5.
Saunders, David M., Hicksville, Ohio. Street and station indicator. 1,803,811; May 5.
Schaaff, John T., Washington, D. C., assignor to The Tabulating Machine Company, New York, N. Y. Key punch. 1,803,979; May 5.
Schaefer, Frank, assignor of one-half to American Signs Corporation, Kalamazoo, Mich. Gaseous tube lamp sign. 1,804,062; May 5.
Schaefer, Frederic. (See Busse, Edwin G., assignor.)
Schaefer, Frederic, Pittsburgh, Pa. Brake hanger support. 1,804,118; May 5.
Schaefer, Frederic, Pittsburgh, Pa. Brake hanger support. 1,804,119; May 5.
Schellens, Christopher A. (See Schellens, Eugene L. and C. A.)

Schellens, Eugene L., Milburn, N. J., and C. A. Schellens, Marblehead, Mass., assignors to C S Engineering Company, Jersey City, N. J. Feed water heater. 1,803,772; May 5.
Scherck, Lewis A., New Orleans, La. Multiple drip coffee urn. 1,804,278; May 5.
Schering-Kahlbaum Aktiengesellschaft. (See Zöllner, Clemens, assignor.)
Schlaepfer, Hans A., Geneva, Switzerland. Bookkeeping appliance. 1,803,564; May 5.
Schmidt, Alfred, Dusseldorf, and E. Haselhorst, Halle-on-the-Saale, Germany. Rotary valve. 1,803,773; May 5.
Schmidt, Thomas B., Harrisburg, Pa. Dispensing cabinet. 1,803,774; May 5.
Schmieding, Warren H. F., and J. G. King, assignors to Frigidaire Corporation, Dayton, Ohio. Seal for refrigerating apparatus. 1,803,510; May 5.
Schneider, George A. (See Steinhauer, Fritz P., assignor.)
Schnell, William, and F. M. Edgar, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Radiator cap. 1,804,279; May 5.
Schnitzspahn, Karl. (See Krzikalla, H., and Schnitzspahn.)
Schofield, John G., assignor, by mesne assignments, to Newspaper Mechanical Sales Company, Washington, D. C. Coin control for vending machines. 1,803,440; May 5.
Schoolhorn, William, Company, The. (See Clemens, Fred J., assignor.)
Schönfeld, Paul L., Chemnitz, Germany. Sock. 1,803,980; May 5.
Schott, Howard H., assignor to Robeson-Rochester Corporation, Rochester, N. Y. Handle construction for vessels. 1,803,729; May 5.
Schrader's, A., Son, Incorporated. (See Wahl, John, assignor.)
Schueren, Arnold C., Chicago, Ill., assignor, by mesne assignments, to Vaughan Company. Meat cutting device. 1,803,489; May 5.
Schulenburg, George F., St. Louis, Mo. Flanging machine. 1,803,730; May 5.
Schuler, Frank M., Winona, Minn. Automatic feeder for candy machines. 1,803,656; May 5.
Schuler, Hermann, and A. Gletmann, Dusseldorf, assignors to Rheinische Metallwaaren und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Fuse setting machine. 1,803,775; May 5.
Schultz, Alfred. (See Blank, A. D., Kohman, and Schultz.)
Schumann, Alfred F., Baltimore, Md., assignor to Hauck Manufacturing Company, Brooklyn, N. Y. Railway switch heating system. 1,803,358; May 5.
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Manufacture of impregnated fiber articles. 1,803,409; May 5.
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Manufacture of pulp articles. 1,803,410; May 5.
Schutte, Junius M., assignor to The Aero Model Company, Chicago, Ill. Aerial toy. Des. 84,108; May 5.
Schwarber, Henry, Weehawken, N. J. Embroidered lace edging. Des. 84,109; May 5.
Schwarber, Henry, Weehawken, N. J. Embroidered lace edging. Des. 84,110; May 5.
Schwarber, Henry, Weehawken, N. J. Embroidered lace edging. Des. 84,111; May 5.
Schwartz Bros. Dental Laboratory Company. (See Schwartz, Eli P., assignor.)
Schwartz, Eli P., assignor to Schwartz Bros. Dental Laboratory Company, St. Louis, Mo. Tooth crown and forming and applying the same. 1,803,680; May 5.
Schwarze, Herman, Birmingham, assignor to General Motors Corporation, Detroit, Mich. Distributor mounting. 1,803,948; May 5.
Schwedler, Gustave H., Kansas City, Mo. Thermostatic device. 1,803,565; May 5.
Schweitzer, Wilhelm, Duisburg, Germany. Electric switching apparatus. 1,804,063; May 5.
Scintilla Aktiengesellschaft. (See Brodt, Hektor, assignor.)
Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Drill cutter retaining means. 1,803,679; May 5.
Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Core bit plug. 1,803,731; May 5.
Scott & Williams, Incorporated. (See Page, Albert E., assignor.)
Scranton, J. P. (See Ricker, Norman H., assignor.)
Seay, Thomas H., Washington, D. C. File cabinet and shipping case. 1,803,919; May 5.
Seck, Willy, Augsburg, Germany, assignor to Erba Aktiengesellschaft, Zurich, Switzerland. Manufacture of highly sulphonated oils. 1,804,183; May 5.
Segal, Hyman, Kansas City, Mo. Automatic safety stop. 1,804,184; May 5.
Seitz, William C., Amsterdam, N. Y. Clutch. 1,803,776; May 5.
Sellars, William H. (See Kashian, Minas H., assignor.)
Semet-Solvay Engineering Corporation. (See Keane, Arthur F., assignor.)
Sengbusch, Gustav J., Milwaukee, Wis. Penholder socket. 1,804,120; May 5.
Sernaker, Harry, assignor of one-half to B. B. Horowit, New York, N. Y. Pocketbook. 1,803,441; May 5.
Serra, Luigi M., Rome, Italy. Rail joint. 1,804,280; May 5.
Sexton, George A., Winchester, Mass. Compartment can. 1,803,566; May 5.
Sgritta, Alfonso, Brooklyn, N. Y. Automatic wick threading machine. 1,803,871; May 5.
Shaffer, William D., Brea, Calif. Jar mechanism for well drilling. 1,803,732; May 5.
Shaud, Reginald C., Berkeley, Calif. Oil dispensing device. 1,803,359; May 5.
Shanholtzer, Earl L., Hollywood, Calif. Easel. 1,803,511; May 5.
Shapiro, Henry, Philadelphia, Pa. Garment hanger. 1,803,512; May 5.
Sharp, John C., Chattanooga, Tenn., assignor to Nathan Manufacturing Company, New York, N. Y. Wood oil feeder and producing the same. 1,804,234; May 5.
Shaw-Crane-Putnam Machine Company. (See Minty, John E., assignor.)
Shaw, Kenneth R., and P. A. Salmon, Newark, N. J. Sleeve attachment for electric cables and conduits. 1,803,872; May 5.
Sheras, Morris, Manistee, Mich. Designating device. 1,803,733; May 5.
Sherburne, Claude L., Topeka, assignor of one-third to O. F. Baker, Independence, and one-third to P. Updike, Fort Scott, Kans. Dump body for trucks. 1,803,360; May 5.
Sherer, Frank G., Los Angeles, Calif., assignor to Refrigerator Grid Co., Chicago, Ill. Ice-freezing receptacle wall. 1,803,734; May 5.
Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,803,812; May 5.
Shoe Form Co. (See De Witt, William J., assignor.)
Shrnuger, Darius E., Atlantic, Iowa. Screen construction. 1,803,920; May 5.
Shunk, John G., Bucyrus, Ohio. Street marker. 1,804,281; May 5.
Sickler, Gilbert, Assaria, Kans. Snowplow. 1,804,282; May 5.
Sidebotham, Melvin H. (See La Bombard, L. E., and Sidebotham.)
Siegel, Alfred, Newark, N. J., assignor, by mesne assignments, to The Grasselli Chemical Company, Wilmington, Del. Azo dyestuffs and their preparation. 1,803,657; May 5.
Siemens & Halske, Aktiengesellschaft. (See Reichmann, Reinhold, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Altenkich Edmund, assignor.)
Siggins, Clarence L. (See Siggins, Frederick A. and C. L.)
Siggins, Frederick A. and C. L., Detroit, Mich. Partition for automobiles. 1,804,033; May 5.
Simonds, Warren J., and C. C. Harris, assignors to Rodney Hunt Machine Company, Orange, Mass. Bearing for wood rolls. 1,803,735; May 5.
Simons, George D., Newark, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y. Motor vehicle. 1,804,121; May 5.
Simplex Wire & Cable Company. (See Boggs, C. R., and Blake, assignors.)
Simpson, Robert E., Taft, Calif. Cable tool underreamer. 1,803,873; May 5.
Sinclair, Homer, M., Holyoke, Mass. Package. 1,803,636; May 5.
Singer Bros. Company. (See Singer, Oscar I., assignor.)
Singer Manufacturing Company, The. (See Becker, Rudolph, assignor.)
Singer, Oscar I., assignor to Singer Bros. Company, Chicago, Ill. Traveling bag. 1,804,122; May 5.
Sison, Honoria A., Manila, P. I. Sagittal pelvimeter. 1,804,064; May 5.
Sizer, Albert W., Hessle, England. Molding machine. 1,804,283; May 5.
Skopik, Oskar L., Berlin, Germany. Brake. 1,804,185; May 5.
Slater, Eric, Heaton, Bolton, assignor to George Taylor (Brass Foundries) Limited, Bolton, England. Automatically removing water from boats. 1,803,567; May 5.
Small, Norman M., assignor to Frick Company, Waynesboro, Pa. Valve. 1,804,065; May 5.
Smellie, Donald G., Canton, Ohio, assignor to The Hoover Company. Dusting tool. 1,803,921; May 5.
Smith, A. O., Corporation. (See Miller, Henry, assignor.)
Smith, Arthur W., Bemidji, Minn. Gravity feed powdered soap dispenser. 1,804,235; May 5.
Smith, Jacob A., River Forest, assignor to Mayer Manufacturing Corporation, Chicago, Ill. Indicating device. 1,803,658; May 5.
Smith, Maurice A., assignor to McKee Glass Company, Jeanette, Pa. Automobile headlight lens. Des. 84,112; May 5.
Smith, Michael, Modesto, Calif. Pneumatic rock drill. 1,804,066; May 5.
Smith, Nelson K., Los Angeles, assignor to Byron Jackson Co., West Berkeley, Calif. Circle brace. 1,803,681; May 5.
Smith, Owen, Monroe, Va. Starter and pound section. 1,803,813; May 5.

CARNEGIE LIBRARY OF ATLANTA

Smith, Ralph E., assignor to The Galion Metallic Vault Company, Galion, Ohio. Burial vault. Des. 84,113; May 5.
Smith, Samuel, Brooklyn, assignor to Disk-O-Knowledge, Inc., New York, N. Y. Dial for charts or the like. Des. 84,114; May 5.
Smith, Sidney B. (See Wright, G. M., and Smith.)
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,115; May 5.
Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe ornament. Des. 84,116; May 5.
Smith, William B., Baltimore, Md., assignor to Continental Can Company, Inc., New York, N. Y. Forming a display packer's container. 1,804,284; May 5.
Snyder, Howard F., assignor to The Maytag Company, Newton, Iowa. Driving mechanism for washing machines and the like. 1,803,981; May 5.
Snyder, Orlow C., Long Island City, N. Y. Nut lock. 1,803,874; May 5.
Snyder, Verne C., Portland, Oreg. Sawdust burner. 1,804,285; May 5.
Société Anonyme Francaise Dite: Bricard Ancienne Maison Sterlin. (See Bricard, Roger, assignor.)
Société d'Embontissage et de Constructions Mécaniques. (See Amiot, Félix, assignor.)
Socony Burner Corporation. (See Tapp, Harry F., assignor.)
Sommers, Albert L., and T. B. Russell, Chicago, Ill. Trolley pole head structure. 1,804,067; May 5.
Sorenson, Melvin, Reynolds, N. Dak. Automatic crank pin oiler. 1,804,236; May 5.
Southard, George L., Franklin, Pa. Lubricating compound. 1,804,124; May 5.
Southington Hardware Company, The. (See Billington, Samuel, assignor.)
Spadone, Charles C. (See Spadone, Walter W. and C. C.)
Spadone, Walter W., New York, and C. C. Spadone, Rockville Center, N. Y. Cutting and stripping machine. 1,804,034; May 5.
Spann, Floyd M., et al. (See Stephens, Thomas J., assignor.)
Specialty Automatic Machine Company. (See La Bombard, L. E., and Sidebotham, assignors.)
Speeder Machinery Corporation. (See Ronk, George T., assignor.)
Speich, Julius E., Nedrow, N. Y. Fish lure. 1,803,777; May 5.
Spengler, J. P. (See Spengler, Peter J. and J. P.)
Spengler, Peter J. and J. P., Ostwine, near Swinemunde, Germany. Process of and apparatus for producing pressed bodies of powderous material. 1,803,814; May 5.
Speno, Frank, Ithaca, N. Y. Conveyer. 1,804,286; May 5.
Sperry Development Company. (See Sperry, Elmer A., assignor.)
Sperry, Elmer A., Brooklyn, N. Y., assignor to Sperry Development Company, Dover Green, Del. Combustion engine locomotive. 1,803,876; May 5.
Sperry, Elmer A., assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y. Fissure detector for steel rails. 1,804,380; May 5.
Sperry Gyroscope Company. (See Bates, Mortimer F., assignor.)
Sperry Products, Inc. (See Sperry, Elmer A., assignor.)
Spiers, Beatrice, Philadelphia, Pa. Combined outer and under shirt. 1,804,068; May 5.
Sponar, Aloysius T., assignor to John Wood Manufacturing Company, Conshohocken, Pa. Gas water heater. 1,804,123; May 5.
Sprigg, Melvin B., Weston, W. Va. Reflector. 1,803,815; May 5.
Spry, John W., Dallas, Tex. Material handling apparatus. 1,804,287; May 5.
Standard Brands, Incorporated. (See Blank, A. D., Kohman, and Schultz, assignors.)
Standard Oil Company of California. (See Hanna, Richard W., assignor.)
Stanley, Arthur E., Elkhart, and R. Zones, Mishawaka, Ind. Pressure regulating device. 1,803,653; May 5.
Staring, William H., Willoughby, Ohio, assignor to Automatic Registering Machine Company, Inc. Voting machine. 1,804,035; May 5.
Starke, August F. B., Shelby, Mont. Nutcracker. Des. 84,117; May 5.
Starr, Clarence D., Barrington, assignor to Barstow Stove Company, Providence, R. I. Cooking apparatus. 1,804,129; May 5.
Starr, Clarence D., Barrington, assignor to Barstow Stove Company, Providence, R. I. Electric range. 1,804,130; May 5.
Starr, Howard. (See Starr, John H., and H.)
Starr, John H., and H., Shickley, Nebr. Cultivator shovel mounting. 1,803,778; May 5.
Stationers Loose Leaf Co. (See Lotter, Adolph G., assignor.)
Stearns, Jason C., Worcester, Mass. Cigar lighter. 1,803,361; May 5.
Stebbins Engineering & Manufacturing Company. (See Richter, August F., assignor.)
Stechbart, Bruno, assignor to The Bell & Howell Company, Chicago, Ill. Photographic film viewing and editing apparatus. 1,803,411; May 5.
Steele, Ray N., Cedar Rapids, Iowa. Engine piston. 1,803,362; May 5.
Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Composite metal and brazing process therefor. 1,804,237; May 5.
Stehl, Conrad, Oakland, Calif. Cooker. 1,803,877; May 5.
Steiger, Heinrich. (See Lüscher, E., and Steiger.)
Steiner, Frank M., Minneapolis, Minn., assignor to Steiner Sales Company, Salt Lake City, Utah. Stop mechanism for towel cabinets. 1,803,363; May 5.
Steiner Sales Company. (See Steiner, Frank M., assignor.)
Steinhauer, Fritz P., assignor of one-fifth to G. A. Schneider, Chicago, Ill. Portable oil and gas service stations. Re18,063; May 5.
Steinhauser, Joseph, Chicago, Ill. Clock controlled switch. 1,804,125; May 5.
Stephens, George H., Northbrook, assignor to The Hammond Clock Company, Chicago, Ill. Clock case or similar article. Des. 84,118; May 5.
Stephens, Thomas J., Chicago, Ill., assignor of one-fourth, to F. M. Spann, and one-eighth to P. H. Hirschmann, New York, N. Y. Apparatus for sharpening razor blades. 1,803,364; May 5.
Sterling, Claude H., assignor to General Motors Corporation, Detroit, Mich. Overgear transmission. 1,803,949; May 5.
Sterling Corporation, The. (See Flammang, J., and Bowser, assignors.)
Stetson, Charles C., St. Paul, Minn. Toy. 1,803,365; May 5.
Stetson, Charles C., St. Paul, Minn. Signal rocket. 1,803,366; May 5.
Stetson, Charles C., St. Paul, Minn. Toy. 1,803,490; May 5.
Stevens, John A., Lowell, Mass., assignor to The Upson Company, Lockport, N. Y. Platen support for heat processing machines. 1,803,779; May 5.
Stevenson, George E., Indianapolis, Ind. Elevator element. 1,803,367; May 5.
Stevenson, Wilbur W., Pittsburgh, Pa. Fluid flow meter. 1,804,036; May 5.
Stevenson, William M. (See Greaves, W. B., and Stevenson.)
Stewart-Warner Corporation. (See Andrews, John L., assignor.)
Stockfleth, Berger, Niles, Mich., assignor to Hydraulic Pressed Bearing Company, Wilmington, Del. Means for making bearing linings or sleeves. 1,803,513; May 5.
Stokes and Smith Company. (See Federwitz, T. A., and Bailey, assignors.)
Stoller, Hugh M., Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulator system. 1,804,126; May 5.
Stone, Edwin W., Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Harness mechanism for looms. 1,803,539; May 5.
Stoody Company. (See Stoody, Winston F. and S. M., and Cole, assignors.)
Stoody, Shelley M. (See Stoody, Winston F. and S. M., and Cole.)
Stoody, Winston F. and S. M., and N. W. Cole, assignors to Stoody Company, Whittier, Calif. Facing tools and resulting products. 1,803,875; May 5.
Stout, Ella K. (See Stout, F. and O'Daniell, assignors.)
Stout, Fred, and G. R. O'Daniell, Grand Rapids, Mich., assignors of two-fifths to said Stout, one-fifth to said O'Daniell, and two-fifths to E. K. Stout. Measuring and cutting device. 1,803,878; May 5.
Stover, John W., Pittsburgh, Pa. Clothes stand. 1,804,069; May 5.
Stransky Products Corporation. (See Powell, Alfred S., assignor.)
Streeter, Claude O., Shrewsbury, assignor to Grafton & Knight Company, Worcester, Mass. Driving belt having wedge-shaped links. 1,803,922; May 5.
Strickland, William R., assignor to General Motors Corporation, Detroit, Mich., Intake manifold heater. 1,803,950; May 5.
Strobel, Clarence J., Marysville, Mich., and A. P. Tallman, Toledo, Ohio. Waterproof paper. 1,803,816; May 5.
Strom, Olaf S., Alhambra, assignor of one-half to S. A. Rosenfeld, Los Angeles, Calif. Lighting fixture. 1,803,568; May 5.
Struble, George. (See Clark, Noah D., assignor.)
Strupe, Cecil H., Indianapolis, Ind., assignor to Leedy Manufacturing Company. Drum pedal. 1,804,128; May 5.
Stryker, Norman R., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Speech transmission system. 1,804,127; May 5.
Stukenborg, Louis C., assignor to Oildraulic Lift Company, Memphis, Tenn. Vehicle lifting jack. 1,803,682; May 5.
Superheater Company. (See Armacost, Wilbur H., assignor.)
Surface Combustion Corporation. (See Branche, Nelson T., assignor.)
Svibla, Henry, Chicago, Ill. Automobile cover. 1,804,131; May 5.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Car roof. 1,803,442; May 5.
Swartwout, Everett W., White Plains, N. Y. Compressor and pump. 1,803,660; May 5.

Swartz, Abraham W. (See Berger, E. J., and Swartz.)
Swearingen, Alfred R., assignor of one-eighth to H. M. Reardon, and one-fourth to Albert Quadow, Miami, Fla. Tailpiece retaining means. 1,803,661; May 5.
Sweeney, Clifton E., Indianapolis, Ind. Riveting iron. 1,803,368; May 5.
Sweeney, Orland R., assignor to Iowa State College of Agricultural and Mechanical Arts, Ames, Iowa. Process relating to the production of synthetic lumber from cornstalks. 1,803,737; May 5.
Swift & Company. (See Dudycha, Harold E., assignor.)
Sykes, John E., Harehills, Leeds, England. Exhaust silencer. 1,804,070; May 5.
Symington Company, The. (See Barrows, Donald S., assignor.)
Symington Company, The. (See Hankins, Cyrus, assignor.)
Symington Company, The. (See Martin, Mark H., assignor.)
Tabulating Machine Company, The. (See Carroll, Fred M., assignor.)
Tabulating Machine Company, The. (See Richter, Erich F. W., assignor.)
Tabulating Machine Company, The. (See Schaaf, John T., assignor.)
Tabulating Machine Company, The. (See Weinlich, Hermann A., assignor.)
Tallman, Allen P. (See Strobel, C. J., and Tallman.)
Tandy, Lewis G., New York, N. Y. Locomotive driving connection. 1,804,038; May 5.
Tannehill, Vernon L., Fort Wayne, Ind. Golf game. 1,804,040; May 5.
Tanner, Robert A., Barboursville, W. Va., assignor to The American Valve & Meter Company, Cincinnati, Ohio. Wheel and rail lubricator. 1,803,923; May 5.
Tansley, George H., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Firing mechanism for automatic firearms. 1,803,350; May 5.
Tansley, George H., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Extractor for automatic firearms. 1,803,352; May 5.
Tapp, Harry F., Brooklyn, assignor to Socony Burner Corporation, New York, N. Y. Control for oil burners. 1,803,879; May 5.
Tashjian, Edward H., New York, N. Y. Construction unit. 1,804,132; May 5.
Tatham, William, Sydney, New South Wales, Australia. Bean stringing and slicing implement. 1,803,880; May 5.
Tatoslan, Harry G., assignor to Ice Cream Cone Machinery, Inc., Bridgeport, Conn. Machine for forming and stacking ice cream cones. 1,804,039; May 5.
Taylor, George, (Brass Foundries) Limited. (See Slater, Eric, assignor.)
Taylor Instrument Companies. (See Clawson, Albert E., assignor.)
Taylor, James S., Tulsa, assignor of one-half to L. J. Mildren, Ponca City, Okla. Cable clamp. 1,804,288; May 5.
Taylor, James W., San Antonio, Tex., assignor to Economy Pump and Oil Tool Company. Automatic valve for fluid lift devices. 1,803,683; May 5.
Taylor, Joseph B., Allendale, N. J. Dust separator. 1,803,540; May 5.
Taylor, Kelley H., Birmingham, Ala. Broom and mop holder. 1,803,569; May 5.
Taylor, Laurens A., Schenectady, N. Y., assignor to General Electric Company. Sound recording. 1,804,289; May 5.
Tchayeff, Serge, Paris, France. Device for applying hooked clasps. 1,804,071; May 5.
Teeple, George L., New York, and G. S. Ball, Brooklyn, N. Y. Salvage chamber for submarines. 1,803,369; May 5.
Tennessee Products Corporation. (See Walton, John W., assignor.)
Tensfeldt, Ernst, Berlin-Charlottenburg, Germany. Safety wardrobe ticket-set. 1,804,238; May 5.
Ternstedt Manufacturing Company. (See Flynn, John B., assignor.)
Ternstedt Manufacturing Company. (See Schnell, W., and Edgar, assignors.)
Terry, Edward F., jr., Denver, Colo., assignor, by mesne assignments, to The Gardner-Denver Company, Quincy, Ill. Lubricator. 1,804,186; May 5.
Terry, Edward F., jr., assignor to Gardner-Denver Company, Denver, Colo. Drill mounting shell. 1,804,187; May 5.
Texas Company, The. (See De Flore, Luis, assignor.)
Texas Pacific Coal & Oil Co. (See Lederer, Erwin R., assignor.)
Thiry, Léon, Huy, Belgium. Manufacture of elastic joints and supports. 1,803,491; May 5.
Thoma, Andrew, Cambridge, assignor to North American Chemical Company, Boston, Mass. Shoe filler coating apparatus. 1,803,951; May 5.
Thomas, Adolph A., New York, N. Y. Thermostat. 1,803,982; May 5.
Thomas, George W., assignor to H. H. Robertson Company, Pittsburgh, Pa. Building construction. 1,803,514; May 5.
Thomas, James. (See Messler, E. L., and Thomas.)
Thompson, Elmer B., Des Moines, Iowa. Apparatus for extracting water from clothes and the like. 1,803,412; May 5.
Thompson Products, Inc. (See Bissell, Richard E., assignor.)
Thomsen, Alfred M., San Francisco, Calif. Making sulphite pulp. 1,803,738; May 5.
Thorne, Carl B., Hawkesbury, Ontario, Canada. Separating particles from free water. 1,804,188; May 5.
Thurell, John P., Fort Myers, Fla. Sprinkler fire protection apparatus. 1,804,374; May 5.
Thurman, John S., St. Louis, Mo. Gin. 1,803,739; May 5.
Tilden, Sydney G., Stewart Manor, N. Y. Vehicle brake adjusting stand. 1,804,041; May 5.
Timken-Detroit Axle Company, The. (See Alden, H. W., and Brownyer, assignors.)
Timken-Detroit Axle Company, The. (See Brownyer, Nelson R., assignor.)
Timken-Detroit Axle Company, The. (See McQuaid, Harry W., assignor.)
Tinker, John M. (See Gubelmann, I., and Tinker.)
Towle Manufacturing Company. (See Nock, Harold E., assignor.)
Townsend, Herbert E., East Providence, R. I., assignor to Brown and Sharpe Manufacturing Company. Grinding machine. 1,803,492; May 5.
Townsend, William, Chicago, Ill., assignor to The Connersville Blower Company, Inc., Connersville, Ind. Unloading valve. 1,804,133; May 5.
Trafton, Howard A., Brooklyn, assignor to The Nestle-Lemur Company, New York, N. Y. Casing for a hair-waving machine. Des. 84,119; May 5.
Trans-Lux Daylight Picture Screen Corporation. (See Birdsall, Wilfred T., assignor.)
Tregoning, William C., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Plug cap for separable attachment plugs. 1,803,983; May 5.
Treiber Diesel Engine Corporation. (See Treiber, Otis D., assignor.)
Treiber, Otis D., Collingswood, assignor to Treiber Diesel Engine Corporation, Camden, N. J. Fuel feed control means for internal combustion engines. 1,803,515; May 5.
Treiber, Otis D., Collingswood, assignor to Treiber Diesel Engine Corporation, Camden, N. J. Internal combustion engine structure. 1,803,516; May 5.
Tremellen, William E., Los Angeles, Calif. Holder for receptacles. 1,803,817; May 5.
Trimbach, Frank X. (See Nejelski, Leo, assignor.)
Trites, Howard E., Bridgewater, Mass. Poultry drinking stand. 1,803,413; May 5.
Tschappat, Sheridan P., Tulsa, Okla. Coupling or T for use in connection with oil well tubing. 1,804,290; May 5.
Tudorov, Marko, San Pedro, Calif. Oil burner. 1,803,414; May 5.
Tufts, Lesley R., assignor to The Cleveland Folding Machine Company, Cleveland, Ohio. Fold plate shifter. 1,803,370; May 5.
Turchanyi, Ladislas, Sashalom, near Budapest, assignor to Hungarian Rubber Goods Factory Limited, Budapest, Hungary. Toy. Des. 84,120; May 5.
Turchanyi, Ladislas, Sashalom, near Budapest, assignor to Hungarian Rubber Goods Factory Limited, Budapest, Hungary. Toy. Des. 84,121; May 5.
Turrettini, Horace F. A., Geneva, Switzerland. Apparatus for electric cooling. 1,804,072; May 5.
Twin Disc Clutch Company. (See Pearmain, William J., assignor.)
Tyler, W. S., Company, The. (See Reynolds, Morley P., assignor.)
Uggla, Wilhelm R., Morby, Stocksund, assignor to Luth & Rosén Elektriska Aktiebolag, Stockholm, Sweden. Cooling means for electric machines. 1,803,570; May 5.
Ulman, John J., Cleveland, Ohio. Heating and illuminating device for fish aquariums. 1,803,571; May 5.
Underwood Elliott Fisher Company. (See Blaisdell, Harrison O., assignor.)
Underwood Elliott Fisher Company. (See von Reppert, Richard, assignor.)
Unger, Paul O., assignor to McMillan Book Company, Syracuse, N. Y. Manufacturing flexible posts. 1,804,134; May 5.
Union Asbestos & Rubber Company. (See Wild, Rudolf L. R., assignor.)
Union Railway Equipment Company. (See O'Connor, Arthur F., assignor.)
United-Carr Fastener Corporation. (See Johnson, Gustav, assignor.)
United Metal Hose Co. (See White, Jonathan N., assignor.)
United States Asbestos Co. (See Cilley, Osborn H., assignor.)
United States Mail Chute Corporation. (See Fells, Ruth, assignor.)
United States Printing & Lithograph Company. (See Burgess, Joseph E., assignor.)
United States Radium Corporation. (See Dey, William H., assignor.)
Universal Draft Gear Attachment Co. (See Nash, C. J., and Bartsch, assignors.)
Universal Oil Products Company. (See Bergman, Donald J., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)

Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Oil Products Company. (See Huff, Lyman C., assignor.)
Universal Oil Products Company. (See Pollock, Robert T., assignor.)
Updike, Preston, et al. (See Sherburne, Claude L., assignor.)
Upson, Charles A., assignor to The Upson Company, Lockport, N. Y. Platen mechanism for heat processing machines. 1,803,780; May 5.
Upson Company, The. (See Stevens, John A., assignor.)
Upton, George B., Ithaca, N. Y., and R. V. Hutchinson, Lansing, Mich., assignors to General Motors Research Corporation, Detroit, Mich. Shutter control for air-cooled engines. 1,803,952; May 5.
V. D. Ltd. (See Vigneron, Jean B. J. A., assignor.)
Vail, Virgie, Kansas City, Kans. Playing cards. 1,803,818; May 5.
Valentine, Frank R., Belle Center, Ohio. Preparation containing medicinal oil. 1,804,135; May 5.
Van Ackeren, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Double offtake for coking retorts. 1,803,881; May 5.
Vanderbeek, Gerrit, assignor to Yates-American Machine Company, Beloit, Wis. Boring machine. 1,803,740; May 5.
Van Hoorn, Albert W. W., Wilmington, Del, assignor to American Car and Foundry Company, New York, N. Y. Muffler. 1,803,415; May 5.
Vanick, James S. (See Merica, P. D., Vanick, and Wickenden.)
Van Norman, Charles E., Springfield, Mass. Bench tool. 1,803,984; May 5.
Vauclain, Charles P., Drexel Hill, and F. E. Merklinger, Philadelphia, Pa. Making axle boxes. 1,804,291; May 5.
Vaughan Company. (See Schueren, Arnold C., assignor.)
Vedder, John W. (See Lodding, F. W., and Vedder.)
Vedder, John W., Worcester, Mass. Press roll. 1,803,926; May 5.
Vedder, John W., assignor to Rice, Barton & Fales, Incorporated, Worcester, Mass. Laminated doctor. 1,803,924; May 5.
Vedder, John W., assignor to Rice, Barton & Fales, Incorporated, Worcester, Mass. Flexible doctor or scraper blade. 1,803,927; May 5.
Vedder, John W., and F. W. Lodding, assignors to Rice, Barton & Fales, Incorporated, Worcester, Mass. Flexible doctor. 1,803,925; May 5.
Veneman, Charles. (See Cope, Raymond M., assignor.)
Venzie, Frederick M., Philadelphia, Pa. Building structure. 1,803,371; May 5.
Vereinigte Stahlwerke Aktiengesellschaft. (See Germann, Wilhelm, assignor.)
Victor Talking Machine Company. (See Elliott, Harold F., assignor.)
Vigneron, Jean B. J. A., La Rochelle, France, assignor to V. D. Ltd., London, England. Trawling gear. 1,803,928; May 5.
Virden, John C., Company. (See Wing, Clarence G., assignor.)
Virgin, Erik W. J. (See Fischer, E. W., and Virgin.)
Visionola Mfg. Corporation. (See von Madaler, Ferdinand, assignor.)
Vitrefrax Company, The. (See Curtis, Thomas S., assignor.)
Vivier, Max, New York, N. Y. Shade. 1,803,372; May 5.
Vogtlandische Maschinenfabrik (vorm. J. C. und H. Dietrich) A.-G. (See Danzer, Georg, assignor.)
Volet, René A. L., La Varenne St. Hilaire, France. Rotor. 1,803,493; May 5.
Von Hildebrandt, Paul G., assignor to H. B. Salkeld, Pittsburgh, Pa. Preparing fiber from wood and wood waste. 1,803,443; May 5.
Von Hildebrandt, Paul G., assignor to H. B. Salkeld, Pittsburgh, Pa. Digester. 1,803,444; May 5.
Von Krenski, Roman, Berlin-Charlottenburg, Germany. Power transmitting friction wheel. 1,803,953; May 5.
Von Madaler, Ferdinand, Hampton Bays, assignor, by mesne assignments, to Visionola Mfg. Corporation, New York, N. Y. Synchronously operated motion picture and sound reproduction apparatus. 1,803,572; May 5.
Von Reppert, Richard, Hartford, Conn., assignor to Underwood, Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,803,573; May 5.
Von Reppert, Richard, Hartford, Conn., assignor to Underwood, Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,804,189; May 5.
Wack, Henry K., New Bedford, assignor to John I. Paulding, Inc., Bedford, Mass. Shade holder. 1,803,574; May 5.
Wagner, Hermann, Bad Soden-on-the-Taunus, and R. Brune, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Preparing the 2-nitrile of aryl-1-thioglycol-2-carboxylic acids containing bromine and new product obtainable thereby. 1,803,781; May 5.
Wahl, John, Rosedale, assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Tire valve cap or the like. 1,803,373; May 5.
Waldorf Paper Products Company. (See Guyer, Reynolds, assignor.)
Walker, Warren R., Great Kills, N. Y., assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Electrode. 1,803,985; May 5.
Walker, Warren R., Short Hills, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Electric liquid flow switch. 1,803,986; May 5.
Wallace, George W., San Francisco, Calif., assignor to The S. E. Company. Carbonizing apparatus. 1,804,073; May 5.
Walp, Charles F., Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y. Skid. 1,803,416; May 5.
Walper, Gordon R., Royal Oak, Mich. Wall plaster. 1,804,445; May 5.
Walsoe, Sigurd L., Springdale, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,803,517; May 5.
Walter, Richard R., Nuremberg, Germany. Metal composition. 1,803,882; May 5.
Walthers, Harry S., and V. E. Martin, assignors to Yates-American Machine Company, Beloit, Wis. Cutter head. 1,803,741; May 5.
Walton, John W., Rockdale, assignor to Tennessee Products Corporation, Nashville, Tenn. Manufacturing commercial products from phosphatic material. 1,803,417; May 5.
Wangelin, Walter H., St. Louis, Mo. Sand slinging apparatus. 1,803,575; May 5.
Warek, Michael J., Plains, Pa. Automatic poultry feeding device. 1,804,239; May 5.
Warner Gear Company. (See Bolender, Augustus B., assignor.)
Warren, John W., Knoxville, Tenn. Building unit. 1,804,292; May 5.
Warrick, Charles F., Detroit, Mich. Electric mixer. 1,803,446; May 5.
Warzoha, Stephen, Port Chester, N. Y. Flag display device. 1,804,293; May 5.
Watson, Frank H., Jonesboro, Ark. Pneumatic inner tube and valve stem. 1,804,294; May 5.
Weatherhead, Albert J., jr., Cleveland, Ohio. Pipe coupling. 1,803,576; May 5.
Weatherhead, Albert J., jr., Cleveland, Ohio. Sectional pipe coupling. 1,803,577; May 5.
Weatherhead, Albert J., jr., Cleveland, Ohio. Sectional pipe coupling. 1,803,578; May 5.
Weaver, Cora P., Alhambra, Calif. Side door curtain for automobiles. 1,803,883; May 5.
Weber, Joseph L., Green Bay, Wis., assignor to Weber-McDonald Wall Tie Company. Form tie for concrete structures. 1,803,819; May 5.
Weber-McDonald Wall Tie Company. (See Weber, Joseph L., assignor.)
Weinlich, Hermann A., Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y. Typewriter controlled perforating machine. 1,803,954; May 5.
Weldon, Charles F., Lake Geneva, Wis. Printer's quoin chase. 1,803,782; May 5.
Wells, Amos S., Minneapolis, Minn. Tip plate for a tooth. 1,803,579; May 5.
Welsh, Ulysses S. G., New York, N. Y. Pot and pan cleaner. 1,804,240; May 5.
Wendel, Oswald, Bayonne, N. J. Portable dressing shield. 1,804,190; May 5.
Wenzel, Albert W., St. Cloud, N. J. Packing ring. 1,803,955; May 5.
Werme, Melcher G., Worcester, Mass., assignor to Wickmire Spencer Steel Company, New York, N. Y. Folding display stand. 1,803,742; May 5.
Wescott, William B., Wellesley, assignor to American Protein Corporation, Boston, Mass. Production of protein products. 1,804,042; May 5.
Western Electric Company. (See Simonds, George D., assignor.)
Western Union Telegraph Company, The. (See Angel, H., and Robinson, assignors.)
Western Union Telegraph Company, The. (See Drake, H. W., and Blanton, assignors.)
Western Wheeled Scraper Company. (See Keown, George C., assignor.)
Westinghouse Lamp Company. (See Fagan, James M., assignor.)
Westinghouse Lamp Company. (See Rau, Henry, jr., assignor.)
Wethey, A. H., jr. (See Jensen, Charles E., assignor.)
Wetmore, Miner P. (See Payson, A. E., and Wetmore.)
Whelan, Dow O., Scotia, N. Y., assignor to General Electric Company. Sound reproducing apparatus. 1,804,295; May 5.
Wherry, Isaac M., Zearing, Iowa. Internal combustion engine. 1,803,783; May 5.
Whipp, John W., assignor of one-half to W. J. Lloyd, Eureka Springs, Ark. Wind motor. 1,804,241; May 5.
White, Jonathan N., assignor to United Metal Hose Co. Inc., New York, N. Y. Spring expanding apparatus. 1,803,518; May 5.
White, Rollin H., Cleveland Heights, Ohio. Extension support and driving means for tructors. 1,803,447; May 5.
White, Walter C., assignor to International Couplers Co., Pittsburgh, Pa. Flexible pipe joint. 1,803,820; May 5.
White, William S., Denver, Colo. Flush valve. 1,803,418; May 5.

Whittam, Benjamin B., Elizabeth, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Air heater. 1,804,191; May 5.
Whittlesey, John E., Newton, Mass. Laminated insulating structure. 1,804,043; May 5.
Wickenden, Thomas H. (See Merica, P. D., Vanick, and Wickenden.)
Wickmire Spencer Steel Company. (See Werme, Melcher G., assignor.)
Wiedemann, Harold, Seattle, Wash. Display tablet. 1,803,743; May 5.
Wild, Rudolf L. R., assignor to Union Asbestos & Rubber Company, Chicago, Ill. Friction material. 1,803,448; May 5.
Williams, Lester, Marshalltown, Iowa. Scrap cutter. 1,803,580; May 5.
Williamson, Douglas G. (See Backus, Clarence E., and Williamson.)
Wilson, Archibald E., assignor of one-half to H. C. Hoops, Toronto, Ontario, Canada. Automatic pump. 1,804,192; May 5.
Wilson-Weston Sporting Goods Company. (See Levinson, David, assignor.)
Wilson, William B., Los Angeles, Calif., assignor, by mesne assignments, to Metlox Corporation, Ltd. Display sign. 1,803,884; May 5.
Wine, William E., Toledo, Ohio. Cross bearer. 1,803,449; May 5.
Wing, Clarence G., assignor to John C. Virden Company, Cleveland, Ohio. Lighting fixture. Des. 84,122; May 5.
Wing, Clarence G., assignor to John C. Virden Company, Cleveland, Ohio. Lighting fixture. Des. 84,123; May 5.
Winkler, Fridolin, Villingen, Germany. Process and apparatus for the shaping of lumps of dough. 1,804,296; May 5.
Winther, Martin P., Waukegan, assignor to Pullman Car & Manufacturing Corporation, Chicago, Ill. Generator axle-drive. 1,804,193; May 5.
Wintz, George E., New York, N. Y. Talking billboard. 1,804,297; May 5.
Wistoft, Soren, & Co.'s Fabrikker, Akts. (See Hansen, Hans C., assignor.)
Witte, Gustav A., Riverside, assignor to International Precipitation Company, Los Angeles, Calif. Grinding material. 1,803,821; May 5.
Wittenberg, Margaret H., Worcester, Mass., assignor to The Royal Worcester Corset Company, Corset. 1,803,822; May 5.
Wittenmyer, Carlos, Mount Clemens, Mich. Visible index filing device. 1,803,823; May 5.
Woldich, Francis S., Sapulpa, Okla. Apparatus for the stabilization, rectification, and fractional distillation of natural gasoline. 1,803,581; May 5.
Wolf, Benzion, Chicago, Ill. Garter. 1,804,044; May 5.
Wolf, Jacques, Basel, Switzerland. Sealing device. 1,804,298; May 5.
Wolf, Walter M., Chicago, Ill. Ash receptacle for smokers' use. Des. 84,124; May 5.
Wolff, Hugo. (See Lüttringhaus, A., Wolff, and Neresheimer.)
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Stereotype plate casting and finishing machine. 1,803,374; May 5.
Wood, John, Manufacturing Company. (See Sponar, Aloysius T., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woodard, William E., Forest Hills, N. Y. Locomotive driving connection. 1,803,987; May 5.
Woodjard, Guy L., San Diego, Calif., assignor to K. Lanstrup. Paper and plaster foundation supporting device. 1,803,824; May 5.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Carburetor. 1,803,684; May 5.
World Bestos Corporation. (See Brockway, Carl P., assignor.)
World Bestos Corporation. (See Nanfeldt, William, assignor.)
Wright Aeronautical Corporation. (See Chilton, Roland, assignor.)
Wright, Arthur, Upper Montclair, N. J. Drying apparatus. 1,803,450; May 5.
Wright, George M., Chesterfield, and S. B. Smith, Chelmsford, England, assignors to Radio Corporation of America. Signal transmitting system. 1,804,136; May 5.
Wright, Rea P., Washington, D. C., assignor to Marvel Carburetor Company, Flint, Mich. Heat controlling change forming devices. 1,803,784; May 5.
Wyckoff, George H. (See Goldsborough, W. E., Morgan, and Wyckoff.)
Wyman-Gordon Company. (See Damerell, Mark H., assignor.)
Yates-American Machine Company. (See Vanderbeek, Gerrit, assignor.)
Yates-American Machine Company. (See Walthers, Harry S., and Martin, assignors.)
Yates Machine Company. (See Yates, Thomas J., assignor.)
Yates, Thomas J., assignor to Yates Machine Company, Salem, Mass. Automatic valve. 1,804,137; May 5.
Yelder, Harry A., assignor to Automatic Musical Instrument Company, Grand Rapids, Mich. Reversing gear mechanism. 1,804,138; May 5.
Yellow Truck & Coach Manufacturing Company. (See Jantsch, Victor, assignor.)
Yentsch, William C., Peoria, Ill. Combined lifting and transporting device. 1,804,290; May 5.
Yoder Pencil Company, The. (See Becker, Bernard C., assignor.)
Youngstown Steel Door Company, The. (See Ditchfield, Frank, assignor.)
Zahn, Rudolf. (See Krieger, W., and Zahn.)
Zaidan, Joseph P., Scranton, Pa. Overwinding preventer for spring motors. 1,803,929; May 5.
Zeh, Edward A., Passaic, assignor to Zeh Incorporated, Clifton, N. J. Lithographer's glass. 1,803,519; May 5.
Zeh Incorporated. (See Zeh, Edward A., assignor.)
Zerk, Oscar U., Cleveland, Ohio, assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,803,520; May 5.
Zerweck, Werner. (See Herz, R., and Zerweck.)
Ziembinski, Stanislas J., Bellevue, France. Spark advancing apparatus. 1,803,451; May 5.
Zöllner, Clemens, Berlin-Charlottenburg, assignor to Schering-Kahlbaum Aktiengesellschaft, Berlin, Germany. Production of quinoline derivatives. 1,804,045; May 5.
Zones, Robert. (See Stanley, A. E., and Zones.)
Zucco, Pierre, San Francisco, Calif. Cement composition. 1,803,582; May 5.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 5TH DAY OF MAY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Absorption machine. E. Altenkirch. 1,803,318; May 5.
Abutment mold, Adjustable. J. A. Bohnsack. 1,803,589; May 5.
Accelerator and manufacture thereof, Vulcanization. J. A. Nieuwland. 1,804,226; May 5.
Accounting means. S. K. Decker, G. A. Johnson, J. W. Davis, and J. B. Junor. 1,803,961; May 5.
Acoustic device. R. C. Bender. 1,804,306; May 5.
Acoustical device. J. Hutt. 1,804,341; May 5.
Aeroplane. E. H. Lanier. 1,803,805; May 5.
Agricultural implement. K. N. Friesen. 1,803,753; May 5.
Agricultural implement. J. C. Powell. 1,803,917; May 5.
Air brake. E. R. Greenlee. 1,803,798; May 5.
Air cleaner. H. Ford. 1,803,751; May 5.
Air conditioning apparatus. F. F. Bahnson. 1,804,079; May 5.
Aircraft, Safety lifting and descending accessory for. T. M. Leka. 1,804,352; May 5.
Air heater. B. B. Whittam. 1,804,191; May 5.
Airplane. J. Eck. 1,804,092; May 5.
Airplane control. R. Chilton. 1,803,498; May 5.
Airplane control mechanism, Automatic. F. W. Gay. 1,804,006; May 5.
Airplanes, Method and apparatus for increasing the lift of. T. Berbeck. 1,804,307; May 5.
Air pressure controller, Tire inflating. A. J. Nelson and C. J. Essman. 1,803,863; May 5.
Alloy, Electrical resistance. W. B. Driver and S. R. Keith. 1,803,467–8; May 5.
Alloy, Magnetic. H. F. Porter. 1,803,353; May 5.
Alloys, Apparatus for electrolytically producing, metal. E. Kelsen. 1,804,101; May 5.
Alloys, Producing and refining. H. F. Porter. 1,803,809; May 5.
Amalgams to be used in dentistry, Producing. E. W. Fischer and E. W. J. Virgin. 1,803,386; May 5.
Amusement apparatus, Aquatic. F. V. Andre and H. A. Davis. 1,804,075; May 5.
Amusement device. L. La Rizza. 1,803,397; May 5.
Anchor. F. T. Pelkey. 1,804,273; May 5.
Anchor and lock, Stovepipe. R. B. Cross. 1,803,894; May 5.
Antenna. S. M. Jester. 1,803,620; May 5.
Antenna, Folding loop. L. S. Beebe. 1,804,305; May 5.
Antiaircraft sight. J. C. Karnes. 1,803,939; May 5.
Antiskid device. N. E. Hell. 1,803,552; May 5.
Arsenic from lead bullion, Removal of. R. C. Rutherford. 1,803,771; May 5.
Article carrier. W. F. Goez. 1,803,755; May 5.
Asbestos insulating tape. O. H. Cilley. 1,803,840; May 5.
Automobile. R. H. Sampson. Des. 84,107; May 5.
Automobile body. H. L. E. Doherty. Des. 84,074–5; May 5.
Automobile handling and storing apparatus. W. J. Aitken. 1,803,583; May 5.
Automobile ventilator. J. B. McDevitt. 1,804,264; May 5.
Axle boxes, Making. C. P. Vauciain and F. E. Merklinger. 1,804,291; May 5.
Bag: *See*—
  Traveling bag.
Balanching beams, Poise and manipulating device for same on. J. P. Müller. 1,804,177; May 5.
Ballast resistor. H. A. Jones. 1,804,344; May 5.
Bands of artificial fibers, Apparatus for making. A. Kämpf. 1,803,475; May 5.
Barrel rack. J. M. Gerhardt. 1,803,797; May 5.
Base for clocks, lamps, or articles of analogous nature. M. Kiwad. Des. 84,088; May 5.
Battery box. F. C. Cosco. 1,803,424; May 5.
Bean stringing and slicing implement. W. Tatham. 1,803,880; May 5.
Bearing. J. D. Dines. 1,804,251; May 5.
Bearing, Antifriction. H. R. Gibbons. 1,803,966; May 5.
Bearing assembly unit and mounting therefor. G. R. Bott. 1,803,591; May 5.
Bearing, Ball. H. N. Parsons. 1,804,110; May 5.
Bearing for wood rolls. W. J. Simonds and C. C. Harris. 1,803,735; May 5.
Bearing, Roller. A. L. Larson. 1,803,625; May 5.
Bearings, Making. W. H. Klocke. 1,804,015; May 5.
Bearings of a machine, Automatic means for lubricating the. H. W. Atwood. 1,803,456; May 5.
Bed, Collapsible. H. Gubbel. 1,804,011; May 5.
Bed, Metal. L. H. Morin. 1,803,862; May 5.
Bed, Obstetrical. L. L. Gilbert. 1,804,256; May 5.
Belt having wedge shaped links, Driving. C. O. Streeter. 1,803,922; May 5.
Billboard, Talking. G. E. Wintz. 1,804,297; May 5.
Binder, Loose leaf. A. G. Lotter. 1,804,173; May 5.
Binding post. J. G. McClellan. 1,803,718; May 5.
Bituminous composition. E. S. Ross. 1,803,488; May 5.
Blank feeding mechanism, Safety means for. T. H. Bauck. 1,803,992; May 5.
Blasting mechanism. D. Ferrell and A. W. Helmholtz. 1,803,501; May 5.
Blotting medium. W. A. Hartline. 1,803,800; May 5.
Board: *See*—
  Ironing board.
Boat, Automobile. W. C. Lewis and H. T. Powers. 1,804,262; May 5.
Boats, Propulsion means for. H. G. Davidson. 1,804,323; May 5.
Bodies of powderous material, Process of and apparatus for producing pressed. P. J. and J. P. Spengler. 1,803,814; May 5.
Boiler: *See*—
  Locomotive boiler. Steam boiler.
Boiler cleaner. L. J. Bayer. 1,803,495; May 5.
Book, Manifolding. E. K. Bottle. 1,804,145; May 5.
Bookkeeping appliance. H. A. Schlaepfer. 1,803,564; May 5.
Bookmark. C. A. Pfuderer. 1,803,726; May 5.
Boring machine. G. Vanderbeek. 1,803,740; May 5.
Bottle capper, Milk. C. W. Goodwin. 1,803,328; May 5.
Bottles, Steeple closure for ink. A. Langaner. 1,803,713; May 5.
Box: *See*—
  Battery box. Knockdown box.
  Display box. Stuffing box.
Box making machines, Blank preparing mechanism for. H. J. Goss. 1,803,698; May 5.
Brace: *See*—
  Circle brace.
Bracing for freight. F. W. Ludwig. 1,803,761; May 5.
Bracket: *See*—
  Brake beam hanger bracket. Shingle bracket.
  Curtain and shade bracket.
Brake: *See*—
  Air brake. Self adjusting brake.
  Hand brake.
Brake. L. E. Brie. 1,803,396; May 5.
Brake. O. L. Skopik. 1,804,185; May 5.
Brake adjusting mechanism, Automatic. O. Bourbeau. 1,804,309; May 5.
Brake adjusting stand, Vehicle. S. G. Tilden. 1,804,041; May 5.
Brake beam hanger bracket. E. G. Busse. 1,804,146; May 5.
Brake control for trailers, Remote mechanical. C. H. North. 1,804,025; May 5.
Brake for tractors, Steering wheel. V. Gregoire. 1,804,333; May 5.
Brake operating mechanism. C. J. Nash and H. E. Bartsch. 1,804,179; May 5.
Brake rod. W. A. and R. O. Garrigus. 1,803,550; May 5.
Brakes, Slack adjuster for railway. R. W. Joy. 1,803,394; May 5.
Bread, Partially sliced wrapped. L. E. La Bombard and M. H. Sidebotham. 1,803,711; May 5.
Breakdown mill. A. Paterson. 1,804,111; May 5.
Brickmaking machine. R. P. M. Davis. 1,803,546; May 5.
Brooder. C. L. Anderson. 1,804,242; May 5.
Brush, Dynamo. N. R. Haas. 1,804,052; May 5.
Bucket, Excavator. G. T. Ronk. 1,803,654; May 5.
Buckle, Shoe. S. M. Riker. Des. 84,103; May 5.
Buckle, Shoe. W. E. Smith. Des. 84,115; May 5.
Building. R. C. Kaiser. Des. 84,085; May 5.
Building construction. G. W. Thomas. 1,803,514; May 5.
Building material. F. L. Ormesher. 1,803,557; May 5.
Building structure. F. M. Venzie. 1,803,371; May 5.
Building unit. J. W. Warren. 1,804,292; May 5.
Bumper and mud guard, Combined. B. Beane. 1,804,304; May 5.
Bumper boot. A. L. Howard. 1,804,218; May 5.
Burner: *See*—
  Oil burner. Sawdust burner.
Burners, Control for oil. H. F. Tapp. 1,803,879; May 5.
Bushing, Jig. A. B. Bolender. 1,804,381; May 5.
Cabinet and shipping case, Film. T. H. Seay. 1,803,919; May 5.
Cabinet, Dispensing. T. B. Schmidt. 1,803,774; May 5.
Cabinets, Stop mechanism for towel. F. M. Steiner. 1,803,363; May 5.
Cable clamp. C. E. Jensen. 1,803,619; May 5.
Cable clamp. J. S. Taylor. 1,804,288; May 5.
Cables and conduits, Sleeve attachment for electric. K. R. Shaw and P. A. Salmon. 1,803,872; May 5.

Cacao bean or product thereof, Extracting fat from. I. S. Hocker. 1,803,615; May 5.
Calculating machine. H. Knoll. 1,804,103; May 5.
Calculating machines, Attachment for. A. S. Dennis. 1,803,464; May 5.
Camera. C. H. Roth. 1,804,061; May 5.
Can: *See*—
Compartment can. Sifting top can.
Lubricant demonstrating can.
Candy handling system. A. Olsen, jr., and J. A. Olsen. 1,804,026; May 5.
Candy machines, Automatic feeder for. F. M. Schuler. 1,803,656; May 5.
Canning. F. F. Fitzgerald. 1,803,605; May 5.
Car liner. F. E. Hummel. 1,803,617; May 5.
Car, Mine. L. Almquist. 1,803,376; May 5.
Car, Mine. W. Y. Johnson. 1,803,392; May 5.
Car, Refrigerator. G. A. Hull. 1,804,219; May 5.
Car, Street. L. F. Clerc. 1,803,747; May 5.
Carbon black and apparatus therefor; Producing. R. B. Day. 1,804,249; May 5.
Carbon, Manufacture of. O. Kramer and L. Bub. 1,803,855; May 5.
Carbon, Production of ash free adsorbent. E. J. Miller. 1,803,943; May 5.
Carbonaceous articles, Treating. M. J. Marcin. 1,804,361; May 5.
Carbonizing apparatus. G. W. Wallace. 1,804,073; May 5.
Carburetor. C. Breer. 1,803,315; May 5.
Carburetor. J. S. Cuff. 1,804,322; May 5.
Carburetor. W. G. Heginbottom. 1,803,613; May 5.
Carburetor. L. M. Woolson. 1,803,684; May 5.
Card, Car. W. Freedman and J. Guiney. 1,803,325; May 5.
Card carrier for card files. H. Henschel. 1,804,339; May 5.
Card ejector, Automatic. E. F. W. Richter. 1,803,977; May 5.
Card table. F. R. Arey and W. E. Jones, jr. 1,803,830; May 5.
Card table. C. Kolodny. 1,803,804; May 5.
Cards, Playing. V. Vail. 1,803,818; May 5.
Cards, Set of playing. S. Obstbaum. Des. 84,100; May 5.
Carrier: *See*—
Article carrier. Tire carrier.
Carton, Egg. H. A. Inman. 1,804,166; May 5.
Carton or similar article, Display. E. M. Salisbury. Des. 84,106; May 5.
Cartoning machine. W. W. McCain. 1,803,633; May 5.
Cartons, Closure for pouring. R. Guyer. 1,803,612; May 5.
Cash register. B. M. Shipley. 1,803,812; May 5.
Casket. Burial. A. G. Harms. 1,803,470; May 5.
Casket. Burial. J. D. Renshler. 1,804,276; May 5.
Casting and pattern therefor. C. Hankins. 1,803,551; May 5.
Casting, Striking. D. S. Barrows. 1,804,080–82; May 5.
Catcher, Slub. J. O. McKean. 1,804,019; May 5.
Cellulose conversion products and making. L. Lilienfeld. 1,804,354; May 5.
Cement composition. P. Zucco. 1,803,582; May 5.
Centrifugal separator. O. G. Pardo and S. D. Fernandez. 1,804,108; May 5.
Chain cross member, Tire. P. Sagen. 1,803,563; May 5.
Chair and writing desk, Combination. E. M. Runkles and F. Blackburn. 1,803,947; May 5.
Chart, Educational. A. L. Lossie. 1,803,630; May 5.
Chenille and other fabrics, Manufacture of. J. Morton. 1,804,106; May 5.
Chock. P. J. Lunati. 1,803,942; May 5.
Chute, Mail. R. Fells. 1,804,159; May 5.
Cigarette extinguisher. H. Kershaw. 1,804,102; May 5.
Cigarette making machine. I. Roet. 1,803,562; May 5.
Cinematograph apparatus. A. S. Newman. 1,803,864; May 5.
Circle brace. N. K. Smith. 1,803,681; May 5.
Circuit for simplex printers, Concentration. H. W. Drake and W. B. Blanton. 1,804,327; May 5.
Clamp: *See*—
Cable clamp. Hose clamp.
Clamp. J. Golnick. 1,804,007; May 5.
Clamp. A. M. Rossman. 1,803,508; May 5.
Clamping device. J. F. Barry. 1,804,140; May 5.
Clasps, Device for applying hooked. S. Tchayeff. 1,804,071; May 5.
Clay product, ceramic composition and associated process. T. S. Curtis. 1,803,999; May 5.
Cleaner: *See*—
Air cleaner. Pot and pan cleaner.
Boiler cleaner. Window cleaner.
Harrow cleaner.
Cleaning means. H. A. Cutting. 1,803,693; May 5.
Clevis, Hoisting. B. S. Minor. 1,803,721; May 5.
Clip: *See*—
Fastening clip.
Clipper, Hand. J. Oster. 1,803,345; May 5.
Clock case or similar article. G. H. Stephens. Des. 84,118; May 5.
Clock controlled switch. J. Steinhauser. 1,804,125; May 5.
Closure for mail chutes. J. W. Cutler. 1,804,050; May 5.
Closure for metallic drums and the like, and making same. H. Ellis. 1,803,847; May 5.
Clothes stand. J. W. Stover. 1,804,069; May 5.
Clutch. R. C. Berry. 1,803,458; May 5.
Clutch. W. J. Pearmain. 1,804,113; May 5.
Clutch. W. C. Seitz. 1,803,776; May 5.
Clutch, Free wheel. F. A. Joseph. 1,804,014; May 5.
Clutch mechanism. J. H. Hand. 1,803,430; May 5.
Clutch mechanism. O. St. Pierre. 1,804,037; May 5.
Coat. I. Kirschenbaum. 1,804,346; May 5.
Coiling machine. R. H. Cramer. 1,803,960; May 5.
Collar, Stand up double. H. Mueller and H. Bertelemann. 1,803,765; May 5.
Colloidial suspensions containing copper and product thereof, Forming. G. E. Sanders. 1,803,870; May 5.
Column construction. J. W. Cross. 1,804,320; May 5.
Combustion apparatus, Fractional. P. J. A. Malgnen. 1,804,174; May 5.
Commercial products from phosphatic material, Manufacturing. J. W. Walton. 1,803,417; May 5.
Compartment can. G. A. Sexton. 1,803,566; May 5.
Composition of matter. D. C. Bruce. 1,804,245; May 5.
Compound, Lubricating. G. L. Southard. 1,804,124; May 5.
Compressor and pump. E. W. Swartwout. 1,803,660; May 5.
Compressor, Lubricant. E. W. Davis. 1,803,524; May 5.
Computing machine. J. C. Hochman and G. O. Degener. 1,803,329; May 5.
Concrete construction, Structural head for reenforced. E. W. Hyde, jr. 1,804,342; May 5.
Condenser, Zinc. H. A. Grine. 1,803,611; May 5.
Conduit for dust collecting systems. R. E. Caller. 1,804,147; May 5.
Conduit structure for railway cars. W. H. Mussey and H. A. Hellman. 1,803,482; May 5.
Connection, Splined. R. Chilton. 1,803,995; May 5.
Construction unit. E. H. Tashjian. 1,804,132; May 5.
Container. A. H. Borden. 1,804,085; May 5.
Container and holder, Match box. G. A. Anderson. 1,803,989; May 5.
Container, Forming a display packer's. W. B. Smith. 1,804,284; May 5.
Container, Sealable. M. Hytken. 1,804,343; May 5.
Container, Shipping. T. R. Brown. 1,803,544; May 5.
Containers, Making sheet metal. J. M. Hothersall. 1,803,616; May 5.
Control mechanism, Intermittent. R. O. Fortune. 1,804,051; May 5.
Control system, Automatic. R. M. Hardgrove. 1,804,336; May 5.
Control system, Constant magnitude. P. R. Dijksterhuis. 1,804,325; May 5.
Control system for vehicles, Automatic. J. H. Greenley. 1,804,257; May 5.
Conveyer. F. Speno. 1,804,286; May 5.
Conveyer control. W. H. Bernadt. 1,803,689; May 5.
Conveyer system. J. T. Cowley and L. C. Allen. 1,804,154; May 5.
Conveying apparatus. J. T. Cowley and L. C. Allen. 1,804,153; May 5.
Conveying system. T. A. Federwitz and W. T. Bailey. 1,803,935; May 5.
Cooker. C. Stehl. 1,803,877; May 5.
Cooker, Automatic. F. D. Chapman. 1,803,994; May 5.
Cooker for fish reduction, Continuous. G. R. Henshall. 1,803,801; May 5.
Cooking apparatus. C. D. Starr. 1,804,129; May 5.
Cooler: *See*—
Cream cooler. Water cooler.
Transformer cooler.
Cooling apparatus, Slag. P. W. Ausman. 1,803,886; May 5.
Cooling means for electric machines. W. R. Uggla. 1,803,570; May 5.
Copper from copper bearing materials, Producing blister. G. C. Carson. 1,803,663; May 5.
Corrosion in pipes, Preventing. M. W. Baden. 1,804,078; May 5.
Corset. M. H. Wittenberg. 1,803,822; May 5.
Counting and stacking machine, Can end. L. L. Jones. 1,803,621; May 5.
Coupler yoke. G. T. Johnson. 1,803,802; May 5.
Coupling: *See*—
Pipe coupling.
Coupling or T for use in connection with oil well tubing. S. P. Tschappat. 1,804,290; May 5.
Cover, Automobile. H. Svihla. 1,804,131; May 5.
Cover, Milk can. R. M. Abernathy. 1,803,825; May 5.
Cover plate for traffic warning device. P. J. Chéron. Des. 84,072; May 5.
Covering, Head. H. T. Pistole. 1,803,538; May 5.
Cradle, Electrically operated. C. B. H. Barnes. 1,803,887; May 5.
Crank shaft. P. F. Holmgren. 1,803,432; May 5.
Cream cooler. J. J. Agrinson. 1,804,194; May 5.
Cross-bearer. W. E. Wine. 1,803,449; May 5.
Crosshead shoe. T. W. Demarest. 1,803,749; May 5.
Crusher: *See*—
Hammer crusher.
Cuff link, Expansible. J. E. Alm. 1,803,988; May 5.
Cultivator with sled frame. J. R. and L. W. Kovar. 1,803,332; May 5.
Current regulating device. W. L. Bond. 1,804,243; May 5.
Current regulating device. D. R. De Tar. 1,804,250; May 5.

Curtain and laundry bag, Trunk. J. Ritter, jr. 1,804,030; May 5.
Curtain and shade bracket, Combined. M. Brownlee. 1,803,593; May 5.
Curtain for automobiles, Side door. C. P. Weaver. 1,803,883; May 5.
Curtain support, Window. D. P. Hynes. 1,803,707; May 5.
Cushion connection. A. J. Jansson. 1,803,937; May 5.
Cutter: *See*—
Feed cutter. Scrap cutter.
Cutter head. H. S. Walthers and V. E. Martin. 1,803,741; May 5.
Cutter head for meat skinning machines. C. E. Merrick. 1,803,341; May 5.
Cutting and feeding machine, Sheet. C. B. Maxson. 1,804,223; May 5.
Cutting and stripping machine. W. W. and C. C. Spadone. 1,804,034; May 5.
Cutting device, Meat. A. C. Schueren. 1,803,489; May 5.
Cutting machine, Key. M. Falk. 1,803,428; May 5.
Cutting machine, Rotary vegetable. C. B. Rohland. 1,803,769; May 5.
Cyclic variations in a rotating member, Determining. A. C. Keller. 1,804,168; May 5.
Cylinder gauge. C. B. Litterio. 1,804,383; May 5.
Cylinder hone. P. C. Grover. 1,803,701; May 5.
Decalcomania, and making the same. A. Bihr. 1,803,836; May 5.
Deflector control mechanism. C. S. Jennings and L. C. Allen. 1,803,391; May 5.
Dental plates, Apparatus for swaging. M. Charlier. 1,804,318; May 5.
Dephlegmators, Cleaning. L. C. Huff. 1,803,969; May 5.
Designating device. M. Sheras. 1,803,733; May 5.
Designs in metal, Reproducing. F. W. Miller. 1,804,021; May 5.
Despatch system, Pneumatic. B. C. Batcheller. 1,803,377; May 5.
Detector. W. Nanfeldt. 1,803,724; May 5.
Dial for charts or the like. S. Smith. Des. 84,114; May 5.
Diazo-types stabilized with a derivative of thiocarbonic acid and preparing them. W. Kreiger and R. Zahn. 1,803,906; May 5.
Dibenzanthronyls, Manufacture of. A. Lüttringhaus, H. Wolff, and H. Neresheimer. 1,803,399; May 5.
Dibenzanthronyls, Manufacture of. A. Lüttringhaus, H. Wolff, and H. Neresheimer. 1,803,910; May 5.
Die controlling mechanism for open die metal heading machines. J. E. Pracny. 1,804,029; May 5.
Die stock. R. B. Pealer. 1,803,484; May 5.
Digester. P. G. von Hildebrandt. 1,803,444; May 5.
Digesting system. A. F. Richter. 1,804,116; May 5.
Dispenser, Cigarette and match. G. Nenna. 1,803,536; May 5.
Dispenser combination, Electric light and perfume. G. Lehmann. 1,803,334; May 5.
Dispenser, Gravity feed powdered soap. A. W. Smith. 1,804,235; May 5.
Dispenser, Soap. M. Alland. 1,803,827–28; May 5.
Display apparatus. R. M. Craig. 1,803,599; May 5.
Display box. B. K. Marvin. 1,803,861; May 5.
Display device. W. H. Dey. 1,803,602; May 5.
Display device. F. H. Rasmussen. 1,803,727; May 5.
Display frame. P. F. Paige and G. H. Blood. 1,804,373; May 5.
Display package. J. L. Cowan. 1,804,152; May 5.
Display stand, Folding. M. G. Werme. 1,803,742; May 5.
Distillation system. A. F. Keane. 1,803,671; May 5.
Distributing device for distributor drills. R. Bergerioux. 1,803,521; May 5.
Doctor. F. W. Lodding, and J. W. Vedder. 1,803,909; May 5.
Doctor, Flexible. J. W. Vedder and F. W. Lodding. 1,803,825; May 5.
Doctor, Laminated. J. W. Vedder. 1,803,924; May 5.
Doctor or scraper blade, Flexible. J. W. Vedder. 1,803,927; May 5.
Door. A. C. Farr. 1,804,329; May 5.
Door, Fire. H. H. Lanning. 1,803,333; May 5.
Door, Garage. F. A. Rantz. 1,804,231; May 5.
Doorknob. G. R. Adams. 1,803,375; May 5.
Door latches and window regulators, Operating means for automobile. L. Ottinger. 1,803,725; May 5.
Doorlock. J. B. Flynn. 1,804,253; May 5.
Door lock handle, Automobile. R. I. Graf. 1,803,609; May 5.
Door mechanism, Car. B. W. Kadel. 1,803,474; May 5.
Door or gate closer. A. M. Ferrin. 1,804,385; May 5.
Door or gate stop. C. Greene. 1,803,610; May 5.
Door tripping device for cars. W. F. Dietrichson. 1,803,384; May 5.
Double slip point with tongues disposed outside the diamond. W. Germann. 1,804,095; May 5.
Dough, Process and apparatus for the shaping of lumps of. F. Winkler. 1,804,296; May 5.
Draft device. M. H. Martin. 1,803,911; May 5.
Dress, Knitted ensemble. M. Gross. Des. 84,078; May 5.
Drier. S. F. Benson and W. I. Peterson. 1,803,421; May 5.
Drill: *See*—
Rock drill.
Drill cutter retaining means. F. L. Scott. 1,803,679; May 5.
Drinking stand, Poultry. H. E. Trites. 1,803,413; May 5.
Drive, Spindle. M. P. Durand. 1,804,091; May 5.
Driving connection, Locomotive. L. G. Tandy. 1,804,038; May 5.
Driving connection, Locomotive. W. E. Woodard. 1,803,987; May 5.
Driving means for washing machines. J. Mikulasek. 1,803,974; May 5.
Driving mechanism for washing machines and the like. H. F. Snyder. 1,803,981; May 5.
Driving mechanism, Hydraulic. G. W. Dooley. 1,803,933; May 5.
Drum pedal. C. H. Strupe. 1,804,128; May 5.
Dry pipe. C. H. Davy. 1,803,381; May 5.
Drying. G. W. O'Keeffe. 1,803,767; May 5.
Drying apparatus. A. Wright. 1,803,450; May 5.
Drying, Apparatus for. G. W. O'Keeffe. 1,803,766; May 5.
Dump body for trucks. C. L. Sherburne. 1,803,360; May 5.
Dumping body, Semiautomatic. A. P. Lee. 1,804,261; May 5.
Dust separator. J. B. Taylor. 1,803,540; May 5.
Dust separator, Centrifugal type. C. H. Crago and A. E. Hamilton. 1,803,462; May 5.
Dyeings, Preparation suitable for developing. H. Krzikalla and K. Schnitzspahn. 1,803,532; May 5.
Dyestuff and their preparation, Azo. A. Siegel. 1,803,657; May 5.
Dyestuffs and making same, Halogenated vat. R. Herz and W. Zerweck. 1,803,758; May 5.
Dyestuffs of the anthraquinone series and making same, Vat. R. Herz and W. Zerweck. 1,803,757; May 5.
Dyestuffs of the anthraquinone series, Manufacture of vat. M. A. Kunz. 1,803,395; May 5.
Easel. E. L. Shanholtzer. 1,803,511; May 5.
Electric annunciator for automobile tires. N. R. Cowperthwait. 1,804,209; May 5.
Electric cooling, Apparatus for. H. F. A. Turrettini. 1,804,072; May 5.
Electric distribution, System of. T. C. Lennox. 1,804,353; May 5.
Electric heater. C. W. Logan. Des. 84,091; May 5.
Electric light fixture. G. E. McFadden. Des. 84,095–7; May 5.
Electric liquid flow switch. W. R. Walker. 1,803,986; May 5.
Electric mixer. C. F. Warrick. 1,803,446; May 5.
Electric motor control, System of. F. J. Champlin. 1,804,317; May 5.
Electric signaling apparatus. B. Ames. 1,804,195; May 5.
Electric switch. G. H. Elwell. 1,803,848–49; May 5.
Electric Switching apparatus. W. Echweitzer. 1,804,063; May 5.
Electric waves, Production of. H. E. Hollmann. 1,803,528; May 5.
Electrical cooking appliance. W. A. Barnes. 1,804,196; May 5.
Electrical distribution. J. Rah. 1,803,653; May 5.
Electrode. W. R. Walker. 1,803,985; May 5.
Electrode and molding the same, Carbon. V. C. Doerschuk. Re18,062; May 5.
Electrodes, Attaching external. E. Aba. 1,803,541; May 5.
Electromagnetic reciprocating mechanism. H. H. Cobe. 1,804,376; May 5.
Electron Discharge device. F. W. Hochsetter. 1,803,850; May 5.
Electrooptical system. F. Gray. 1,803,700; May 5.
Elevator: *See*—
Rod elevator.
Elevator element. G. E. Stevenson. 1,803,367; May 5.
Elevator safety apparatus. A. Marks. 1,803,762; May 5.
Engine: *See*—
Internal-combustion engine.
Engine structure, Internal combustion. O. D. Treiber. 1,803,516; May 5.
Engine swash plate, construction, Two-cycle internal combustion. H. B. Greening and J. W. Galloway. 1,804,010; May 5.
Engines, Feeding fuel to high compression Internal combustion. W. G. Gernandt. 1,803,326; May 5.
Engines, Fuel feed control means for internal combustion. O. D. Treiber. 1,803,515; May 5.
Envelope. C. Pasurka. 1,803,348; May 5.
Excavator, Tower. G. B. Massey. 1,804,175; May 5.
Exhaust Silencer. J. E. Sykes. 1,804,070; May 5.
Extractor for automatic firearms. G. H. Tansley. 1,803,352; May 5.
Eyeshield, Motorist's. F. W. Magee. 1,803,338; May 5.
Fastener, Belt. G. E. Purple. 1,803,354; May 5.
Fastener for rubber heels. L. Pignanelli. 1,803,641; May 5.
Fastener, Separable. G. Johnson. 1,804,370; May 5.
Fastener, Stud and grommet. A. C. Peters. 1,803,485; May 5.
Fastening clip. J. F. Makowski. 1,803,632; May 5.
Feed cutter. T. F. Lannon. 1,804,350; May 5.
Feed mechanism. L. T. Medholdt. 1,803,973; May 5.
Feeding device. W. T. Birdsall. 1,804,143; May 5.
Feeding device, Automatic poultry. M. J. Warek. 1,804,239; May 5.

Fiber articles, Manufacture of impregnated. M. O. Schur. 1,803,409; May 5.
Fiber from wood and wood waste, Preparing. P. G. Hildebrandt. 1,803,443; May 5.
Fibrous material, Treatment of. H. Friedlander. 1,803,936; May 5.
Filing device. J. T. Conway. 1,803,997; May 5.
Filing device, Visible index. C. Wittenmyer. 1,803,823; May 5.
Film reel, Fireproof. A. Gentiluomo. 1,804,332; May 5.
Film winding device, Automatic. T. Durman. 1,803,322; May 5.
Film printing apparatus, Motion picture. F. H. Owens. 1,803,404; May 5.
Filtering material and method of filtering sugar juices. R. C. Campbell. 1,803,380; May 5.
Film viewing and editing apparatus, Photographic. B. Steckbart. 1,803,411; May 5.
Firearm actuated by compressed air, Automatic. B. A. Revelli. 1,803,946; May 5.
Firearm, Automatic. C. Pfeiffer. 1,803,349; May 5.
Firearms, Firing mechanism for automatic. G. H. Tansley. 1,803,350; May 5.
Fire extinguisher. E. Paquette. 1,804,228; May 5.
Fire extinguishing apparatus. P. G. MacGregor. 1,803,859; May 5.
Fire fighting implement. G. M. Arthur. 1,803,831; May 5.
Fire prevention system for tanks. S. H. Brooks. 1,803,460; May 5.
Fishhook. M. M. Rodin. 1,803,561; May 5.
Fish hook and trap. H. C. Lipthrott. 1,804,355; May 5.
Fishhook or catching device. M. M. Rodin. 1,803,560; May 5.
Fish lure. J. E. Speich. 1,803,777; May 5.
Fishing line float. L. H. Blake. 1,804,084; May 5.
Flag display device. S. Warzoha. 1,804,293; May 5.
Flanging machine. G. F. Schulenburg. 1,803,730; May 5.
Flasher. G. L. Bogard. 1,803,590; May 5.
Flexible joint. G. Flintermann. 1,803,606; May 5.
Floor construction. E. N. Murphy. 1,803,723; May 5.
Floral spray. L. Koropp. 1,804,104; May 5.
Flow tester. J. B. Conner. 1,804,247; May 5.
Fluid flow meter. W. W. Stevenson. 1,804,036; May 5.
Fluid to teat cups, Device for suspending and supplying cleaning. H. C. Beckman. 1,803,319; May 5.
Fly chaser. A. Dokken. 1,804,326; May 5.
Fold type table. G. A. Lewis. 1,804,171; May 5.
Food preserving table. J. H. Johnson. 1,803,330; May 5.
Form, Communicating. F. R. Hardie. 1,803,704; May 5.
Forming and cutting machine. W. J. Boyle, jr. 1,803,542; May 5.
Foundation supporting device, Paper and plaster. G. L. Woodjard. 1,803,824; May 5.
4.4'-tetrathyldiamindiphenylmethane, Making. H. Kladivko, jr. 1,803,331; May 5.
Frame: *See*—
Display frame.
Frame assembly, Hollow. F. Amiot. 1,803,494; May 5.
Frame for supporting display cards and the like. D. L. Hollenbeck. 1,804,164; May 5.
Freezing apparatus. L. S. Pfouts. 1,803,640; May 5.
Friction material. R. L. R. Wild. 1,803,448; May 5.
Friction wheel, Power transmitting. R. von Krenski. 1,803,953; May 5.
Fruit press. G. R. Catoldo. 1,803,595; May 5.
Fuel feeding system. L. O. French. 1,803,666; May 5.
Fuel spraying. J. Good. 1,803,967; May 5.
Furnace. L. de Florez. 1,804,155; May 5.
Furnace register. C. J. Holub. 1,804,165; May 5.
Fuse setting machine. H. Schuler and A. Gietmann. 1,803,775; May 5.
Garage, Storage. J. W. Henderson. 1,804,338; May 5.
Garment, Front-wrap closure. J. M. Jensen. Des. 84,082; May 5.
Garment hanger. I. Levin. 1,803,856; May 5.
Garment hanger. H. Shapiro. 1,803,512; May 5.
Garter. T. Andrew. 1,803,786; May 5.
Garter. B. Wolf. 1,804,044; May 5.
Gas lift means. M. P. Burke. 1,803,837; May 5.
Gas production. C. W. Andrews. 1,803,686; May 5.
Gasoline, Apparatus for the stabilization, rectification, and fractional distillation of natural. F. S. Woldich. 1,803,581; May 5.
Gate for box and refrigerator cars, Overhead bulkhead drop. G. F. Jones. 1,803,760; May 5.
Gauge: *See*—
Cylinder gauge. Piston gauge.
Mitering gauge.
Gear, Epicyclic. E. Herrmann. 1,804,055; May 5.
Gear mechanism, Reversing. H. A. Yelder. 1,804,138; May 5.
Gear, Railway draft. W. F. Kiesel, jr. 1,804,345; May 5.
Gear shift, Safety. F. W. Parker. 1,804,109; May 5.
Gear, Trawling. J. B. J. A. Vigneron. 1,803,928; May 5.
Gear, Valve. J. J. Boland. 1,803,459; May 5.
Gear, Variable transmission. L. M. Blyth. 1,803,422; May 5.
Gearing, Reverse. T. S. Ewart. 1,804,252; May 5.
Generator axle drive. M. P. Winther. 1,804,193; May 5.
Geneva intermittent, Adjustable. A. Dina. 1,803,465; May 5.
Gilsonite and making same, Soluble. I. J. Novak. 1,803,637; May 5.
Gin. J. S. Thurman. 1,803,739; May 5.
Glass: *See*—
Lithographer's glass. Magnifying glass.
Glass edging machine. C. S. Mayflower. 1,804,263; May 5.
Glass wool sheets, Making. P. O. E. Friedrich. 1,804,254; May 5.
Gluing machine. C. S. Price. 1,804,365; May 5.
Golf clubs, Hand positioner for. F. O. Butler. 1,804,316; May 5.
Golf game. V. L. Tannehill. 1,804,040; May 5.
Golf table. G. P. Andrus. Des. 84,068; May 5.
Golf tee and anchor therefor, Adjustable. M. M. Kruse. 1,803,907; May 5.
Governor, Boiler. J. P. Fisher. 1,803,324; May 5.
Grader, Leaning wheel. F. E. Arndt. Re18,064; May 5.
Grass and the like, Eradication of quack. C. E. Carpenter. 1,803,838; May 5.
Grate structure. J. G. Gibson. 1,803,327; May 5.
Gray cast iron. P. D. Merica, J. S. Vanick, and T. H. Wickenden. 1,803,480; May 5.
Grease gun, High pressure. V. A. Boker. 1,803,312; May 5.
Grinding, Centerless. G. W. Sinns, W. D. Archea, and L. F. Nenninger. 1,804,197; May 5.
Grinding machine. C. H. Norton. 1,803,807; May 5.
Grinding machine. H. E. Townsend. 1,803,492; May 5.
Grinding machine, Glass. H. Ford. 1,803,752; May 5.
Grinding machines, Sharpening mechanism for. R. E. Read. 1,803,487; May 5.
Grinding material. G. A. Witte. 1,803,821; May 5.
Guns, Recoil and counter recoil mechanism for. T. A. Conlon. 1,803,523; May 5.
Guns, Reversible feed mechanism for machine. F. T. Moore. 1,803,351; May 5.
Hair waving machine, Casing for. H. A. Trafton. Des. 84,119; May 5.
Hammer crusher. W. A. Battey. 1,803,585; May 5.
Hand brake. A. F. O'Connor. 1,804,225; May 5.
Handle: *See*—
Door lock handle.
Handle construction for vessels. H. H. Schott. 1,803,729; May 5.
Handle for safe doors. F. A. Lundquist. 1,803,337; May 5.
Hanger: *See*—
Garment hanger. Trouser hanger.
Harrow cleaner, Drag. W. J. Hurst. 1,804,100; May 5.
Headlight. H. J. Godin. 1,803,900; May 5.
Headwear. A. M. Lowenthal. 1,804,356; May 5.
Heat controlling means for charge forming devices. R. P. Wright. 1,803,784; May 5.
Heat exchange apparatus. D. W. Berlin. 1,804,083; May 5.
Heat exchange apparatus. H. L. Miller. 1,803,435; May 5.
Heat exchange device. D. W. Berlin. 1,804,083; May 5.
Heat processing machines, Platen mechanism for. C. A. Upson. 1,803,780; May 5.
Heat processing machines, Platen support for. J. A. Stevens. 1,803,779; May 5.
Heat treatment, Apparatus for the control of industrial. T. C. Hazard. 1,804,378; May 5.
Heater: *See*—
Air heater. Radiant heater.
Intake manifold heater. Water heater.
Liquid heater.
Heater and exhaust manifold, Combined. R. B. Otwell. 1,803,436; May 5.
Heater, Feed water. S. O. A. Fiedler. 1,804,214; May 5.
Heating and illuminating device for fish aquariums. J. J. Ulman. 1,803,571; May 5.
Heating and ventilating cars, Apparatus for. R. E. Bissell. 1,804,144; May 5.
Heating apparatus. C. P. Bettenga. 1,803,690; May 5.
Heel shaping machine. H. A. Bertram. 1,803,587; May 5.
Hinge. H. F. L. J. Rocheron. 1,803,438; May 5.
Hinge for toilet seats and covers. J. Pudleiner. 1,804,114; May 5.
Hitch for farm machinery, Tractor. J. W. Rush. 1,803,770; May 5.
Hobbing machines, Feeding mechanism for. E. A. Bayton. 1,804,303; May 5.
Holder, Broom and mop. K. H. Taylor. 1,803,569; May 5.
Holder for display stands, Show card. M. M. Friedemann. 1,803,667; May 5.
Holder for receptacles. W. E. Tremellen. 1,803,817; May 5.
Holder for typewriters, Manuscript. L. Jones. 1,804,258; May 5.
Holder, Hose. F. S. Hyatt. 1,803,529; May 5.
Holder, License plate. J. Orester and W. J. Gee. Des. 84,125; May 5.
Holder of straps of suspenders and similar articles. G. F. Essig. 1,804,158; May 5.
Holder or similar article, Memorandum paper. D. Albritton. Des. 84,067; May 5.
Holder, Plate. T. Hill. 1,803,431; May 5.
Holder, Shade. H. K. Wack. 1,803,574; May 5.
Holder, Sleeve. J. C. Bollinger. 1,804,308; May 5.
Hood, Hair drying. E. O. Frederics. 1,804,005; May 5.

Hood, Motor vehicle. E. G. Purdy. Des. 84,105; May 5.
Hook: *See*—
Rigging hook.
Hooks, Apparatus for applying trouser. O. Kent. 1,803,970; May 5.
Hopper, Feed. C. T. Brennan. 1,803,993; May 5.
Hose clamp, Adjustable. J. F. Lyons and M. S. Perkins. 1,804,358; May 5.
Hydraulic mechanism for driving motor vehicles. G. W. Dooley. 1,803,932; May 5.
Hydraulic press. A. G. and J. L. Du Frane. 1,803,845; May 5.
Hydrocarbon with metallic halides, Treating. R. W. Hanna. 1,803,670; May 5.
Hydrocarbons, Desulphurizing cracked. G. Egloff. 1,803,964; May 5.
Ice manufacturing apparatus. G. Lange. 1,804,220; May 5.
Index, Rotary. G. L. Hinman. 1,803,553; May 5.
Indicating device. J. A. Smith. 1,803,658; May 5.
Indicator: *See*—
Street and station indicator.
Induction heating, High frequency. J. M. Fagan. 1,803,500; May 5.
Ingot mold construction. R. G. Redmann. 1,804,275; May 5.
Inner tube and valve stem, Pneumatic. F. H. Watson. 1,804,294; May 5.
Insulating bodies and more particularly of insulators for spark plugs, Manufacture of. R. Reichmann. 1,803,355; May 5.
Insulating structure, Laminated. J. E. Whittlesey. 1,804,043; May 5.
Intake manifold heater. W. R. Strickland. 1,803,950; May 5.
Internal combustion engine. R. N. Brown. 1,803,317; May 5.
Internal combustion engine. C. H. Claudel. 1,803,461; May 5.
Internal combustion engine. I. M. Wherry. 1,803,783; May 5.
Iron: *See*—
Gray cast iron.
Iron, Annealing and heat treating cast. P. S. Menough. 1,803,340; May 5.
Iron, Riveting. C. E. Sweeney. 1,803,368; May 5.
Ironing board. J. P. Doman. 1,803,844; May 5.
Ironing device. W. H. Kelsey. 1,803,622; May 5.
Jack: *See*—
Vehicle lifting jack.
Jack, Stanchion. E. R. Sage. 1,803,810; May 5.
Jar or similar receptacle. L. Nejelski. Des. 84,098; May 5.
Joint: *See*—
Flexible joint. Rail joint.
Pipe joint.
Joint connection, Rail. F. Kötteritzsch. 1,804,056; May 5.
Joint installing device, Expansion. A. C. Fischer. 1,804,215; May 5.
Joint or coupling, Expansion. B. W. Dennis. 1,803,665; May 5.
Joints and supports, Manufacture of elastic. L. Thiry. 1,803,491; May 5.
Kiln for manufacturing lime or the like. G. Martin. 1,804,362; May 5.
Kilns, Firing. H. G. Lykken. 1,803,806; May 5.
Knitting machine. V. Lombardi. 1,803,836; May 5.
Knitting machine, Circular. W. T. Barratt. 1,803,833; May 5.
Knitting machines, Stop mechanism for. N. J. Perry. 1,803,558; May 5.
Knockdown box. W. A. Finnegan. 1,803,385; May 5.
Lace. H. W. Hucknall. Des. 84,079–81; May 5.
Lace edging, Embroidered. H. Schwarber. Des. 84,109–11; May 5.
Lamp base or article of analogous nature. M. Kiwad. 84,087; May 5.
Lamp, Electric. B. Claus. 1,804,049; May 5.
Lamp, Incandescent. I. Langmuir. 1,804,349; May 5.
Lamp, Incandescent gas tight miner's. W. Gosmann. 1,803,756; May 5.
Lamps, Blue flame mantle. C. W. Davis. Re18,061; May 5.
Lamps, Cut-out for incandescent electric. H. Rau, jr. 1,803,486; May 5.
Lamps, Focusing adjustment for. A. L. Martinek. 1,803,433; May 5.
Latch. M. H. Kashian. 1,804,382; May 5.
Latches and window regulators, Operating means for automobile door. L. Ottinger. 1,803,675; May 5.
Latex, Processing of. R. F. Elder and R. B. Hill. 1,804,157; May 5.
Leavened product and composition of matter. A. D. Blank, H. A. Kohman, and A. Schultz. 1,803,588; May 5.
Lens, Automobile headlight. M. A. Smith. Des. 84,112; May 5.
Lens focusing mechanism of moving picture projecting machines, Manipulating attachment for the. N. J. Northington. 1,804,268; May 5.
Lens testing device. G. S. Johnston. 1,803,473; May 5.
License plates, Attachment for. J. R. Jones. 1,804,013; May 5.
Life saving and salvage apparatus for use with submarines. W. H. Mills. 1,803,944; May 5.
Lifting and transporting device, Combined. W. C. Yentsch. 1,804,299; May 5.
Light. G. Graff. Des. 84,077; May 5.
Light control for printers. G. Lowkrantz. 1,803,398; May 5.
Lighter, Cigar. J. C. Stearns. 1,803,361; May 5.
Lighting fixture. O. S. Strom. 1,803,568; May 5.
Lighting fixture. C. G. Wing. Des. 84,122–3; May 5.
Lighting fixture or article of similar nature. J. J. Blumenthal. Des. 84,069; May 5.
Liner. C. J. Gates, jr., C. S. Nathan, and A. A. McDonough. 1,803,696; May 5.
Lining for hot tops. W. M. Charman. 1,804,205; May 5.
Lining for rubber articles. C. E. Bradley and C. D. Mason. Re18,058; May 5.
Lining for tanks, Protective. J. Poberejsky. 1,804,274; May 5.
Linings or sleeves, Making bearing. B. Stockfleth. 1,803,513; May 5.
Liquid heater. H. D. Lathrop. 1,803,628; May 5.
Liquids from gases and apparatus therefor, Separating finely divided. W. H. Kniskern. 1,803,854; May 5.
Lithographer's glass. E. A. Zeh. 1,803,519; May 5.
Loading and unloading device. R. A. Moore. 1,804,266; May 5.
Lock: *See*—
Nut lock. Tire lock.
Shipper and gear casing lock.
Lock. T. Kromer. 1,803,531; May 5.
Lock for doors, Safety. M. F. Ruis. 1,804,277; May 5.
Locomotive boiler. T. H. Alfreds. 1,803,685; May 5.
Locomotive boiler. B. E. Larson. 1,803,714; May 5.
Locomotive, Combustion engine. E. A. Sperry. 1,803,876; May 5.
Locomotive front, End construction. J. S. Coffin, jr. 1,803,793; May 5.
Loom dobby. C. D. Brown. 1,804,368; May 5.
Loom, Rug or carpet weaving. W. B. Greaves and W. M. Stevenson. 1,804,008; May 5.
Loom, Shifting shuttle box. C. D. Brown. 1,804,369; May 5.
Looms, Harness mechanism for. E. W. Stone. 1,803,539; May 5.
Looms, Motion transmitting device for. A. Sagar. 1,803,509; May 5.
Loud speaker. J. T. Corrigan. 1,803,892; May 5.
Lubricant demonstration can. H. H. Cross and G. F. Fox. 1,804,210; May 5.
Lubricating apparatus. O. U. Zerk. 1,803,520; May 5.
Lubricating device. M. Christman. 1,803,746; May 5.
Lubricating system. E. W. Davis. 1,803,601; May 5.
Lubricating system. C. A. Hanson. 1,803,703; May 5.
Lubricator: *See*—
Wheel and rail lubricator.
Lubricator. G. C. Pearson. 1,804,182; May 5.
Lubricator. E. F. Terry, jr. 1,804,186; May 15.
Lumber drying apparatus for yard use. M. L. Mueller. 1,804,107; May 5.
Lumber from cornstalks, Relating to the production of synthetic. O. R. Sweeney. 1,803,737; May 5.
Machine for and method of dyeing cloth and otherwise treating textiles. W. P. Cohoe. 1,803,664; May 5.
Machine for applying stripe to blanks. H. J. Goss. 1,803,699; May 5.
Machine for flanging pipes. F. C. Fanta. 1,804,002; May 5.
Machine for forming and stacking ice cream cones. H. G. Tatosian. 1,804,039; May 5.
Machine for knitting spliced fabrices and knitting the same. A. E. Page. 1,803,863; May 5.
Machine for making fabric. C. F. Kappler. 1,803,476; May 5.
Machine for processing fabric. G. Heberlein. 1,803,668; May 5.
Machine for sorting and counting paper money. A. E. Lard. 1,803,624; May 5.
Magazines and matrices, Cleaning. H. R. Freund. 1,804,331; May 5.
Magnetic device. H. F. Porter. 1,803,868; May 5.
Magneto. P. Brown. 1,803,543; May 5.
Magnifying glass. W. Märtens. 1,804,105; May 5.
Magnifying measuring instrument. D. H. O'Meara. 1,803,488; May 5.
Mail boxes, Coin holder for. D. A. Lighty. 1,803,715; May 5.
Marker, Road. H. E. Raife. 1,804,230; May 5.
Marker, Street. J. Q. Shunt. 1,804,281; May 5.
Marker, Traffic. C. D. Myers, W. A. Edwards, and J. W. Hobing. 1,803,638; May 5.
Mat and border, Link. M. H. O'Toole. 1,804,027; May 5.
Material handling apparatus. J. W. Sprout. 1,804,287; May 5.
Materials containing lead, Treating. C. R. Hayward. 1,804,054; May 5.
Measuring and cutting device. P. Stout and G. B. O'Donnell. 1,803,878; May 5.
Measuring device. Ralph J. A. Lavin. Des. 84,096; May 5.
Measuring instrument, Electric. H. T. Paar. 1,804,320; May 5.
Meats, Apparatus for pressing and cooking. A. F. Oswald. 1,804,227; May 5.

Mechanism and method for controlling business. H. R. Brand. 1,803,522; May 5.
Mercury switch. R. D. Malley. 1,804,017; May 5.
Metal and brazing process therefor, Composite. C. Steenstrup. 1,804,237; May 5.
Metal composition. R. R. Walter. 1,803,882; May 5.
Metal from crude ores, Producing molten and refined. W. E. Goldsborough, J. D. Morgan, and G. H. Wyckoff. 1,804,161; May 5.
Metaldehyde, Production of. E. Lüscher and H. Stelger. 1,804,357; May 5.
Meter; *See*—
Fluid flow meter.
Mill; *See*—
Breakdown mill.
Mining machine. J. E. Dillon. 1,803,547; May 5.
Mitering gauge. W. O. Crossley. 1,804,248; May 5.
Mixer; *See*—
Electric mixer.
Mold; *See*—
Abutment mold.
Mold machine. E. F. Oyster. 1,804,181; May 5.
Molding machine. E. I. Noxon. 1,803,344; May 5.
Molding machine. R. F. Ringle. 1,803,406; May 5.
Molding machine. F. Rouse. 1,803,408; May 5.
Molding machine. A. W. Sizer. 1,804,283; May 5.
Molding machine, Plastic. G. K. Bainbridge. 1,803,991; May 5.
Mop cleaning device. A. S. Powell. 1,804,229; May 5.
Motor; *See*—
Wind motor.
Motor and mounting, Aircraft. C. L. Brown. 1,804,311–12; May 5.
Motor control system. H. V. Nye. 1,804,180; May 5.
Motors, Overwinding preventer for spring. J. P. Zaldan. 1,803,929; May 5.
Mounting and cooling construction for driving units of locomotives. W. B. Jupp and R. G. Anderson. 1,803,853; May 5.
Mounting and drive, Timer. F. T. Irgens and P. C. Baldus. 1,803,618; May 5.
Mounting, Cultivator shovel. J. H. and H. Starr. 1,803,778; May 5.
Mounting, Distributor. H. Schwarze. 1,803,948; May 5.
Mounting for car trucks, Motor. E. Latshaw. 1,804,351; May 5.
Mounting for headlamps, Bulb. R. W. Johnson. 1,803,709; May 5.
Mounting, Gauge glass. K. S. M. Davidson. 1,803,842; May 5.
Movement transmitting system. C. A. de Giers. 1,804,212; May 5.
Muffler. A. W. W. van Hoorn. 1,803,415; May 5.
Necktie. H. C. Hall. 1,803,388; May 5.
Necktie reformer. W. B. Kliver. 1,803,710; May 5.
Needle threader. J. Rozdilski. 1,803,918; May 5.
Negatives, Illuminating device for the display and examination of. E. B. Mabee. 1,803,631; May 5.
Nitrides of aluminum or magnesium from their minerals, Producing. C. G. Miner. 1,803,720; May 5.
Nozzle. J. A. Cunningham. 1,803,425; May 5.
Nutcracker. A. F. B. Starke. Des. 84,117; May 5.
Nut, Die. A. Basola, and F. Nemarnick. 1,803,888; May 5.
Nut lock. J. S. Kubacki. 1,804,348; May 5.
Nut lock. O. C. Snyder. 1,803,874; May 5.
Nut, Screw. L. Micha. 1,804,058; May 5.
Oil and gas service stations, Portable. F. P. Steinhauer. Re18,063; May 5.
Oil burner. M. Tudorov. 1,803,414; May 5.
Oil dispensing device. R. C. Shand. 1,803,359; May 5.
Oil feeder and producing the same, Wood. J. C. Sharp. 1,804,235; May 5.
Oilmeter. E. R. Erickson. 1,803,694; May 5.
Oiler, Automatic crank pin. M. Sorenson. 1,804,236; May 5.
Oiler, Spring. E. E. Cronenweth and C. G. Hamer. 1,803,748; May 5.
Oils, Apparatus for cracking. R. T. Pollock. 1,804,028; May 5.
Oils, Converting hydrocarbon. C. P. Dubbs. 1,803,962; May 5.
Oils, Manufacture of highly sulphonated. W. Seck. 1,804,183; May 5.
Oils, Producing lubricating. E. R. Lederer. 1,803,941; May 5.
1:2' and 2:3-diamino anthraquinone sulphates and preparing and isolating the same. I. Gubelmann and J. M. Tinker. 1,803,503; May 5.
Ornament, Shoe. S. M. Riker. Des. 84,101–2; May 5.
Ornament, Shoe. W. E. Smith. Des. 84,116; May 5.
Oven, Baking. I. M. Petersime. 1,803,975; May 5.
Oversboe and making the same. R. E. Riley. 1,803,559; May 5.
Ozone, Apparatus for making. J. M. Daily. 1,803,600; May 5.
Package. H. M. Sinclair. 1,803,736; May 5.
Packer. F. V. Crowell. 1,803,841; May 5.
Packing, Metallic rod. J. Badeker. 1,803,990; May 5.
Packing ring. A. W. Wenzel. 1,803,955; May 5.
Packing structure. N. D. Clark. 1,804,088; May 5.
Paint, Marine. G. Goetz. 1,803,607; May 5.
Pan for refrigerators, Ice cube. A. G. de Weal. 1,804,324; May 5.
Paper manufacture, Eliminating foam in. H. R. Rafton. 1,803,646; May 5.
Paper manufacture, Eliminating foam in. H. R. Rafton. 1,803,649; May 5.
Paper, Manufacture of carbonate filled sized. H. R. Rafton. 1,803,647; May 5.
Paper product and making the same. H. R. Rafton. 1,803,642–3; May 5.
Paper product and making the same. H. R. Rafton. 1,803,645; May 5.
Paper, Sizing. H. R. Rafton. 1,803,644; May 5.
Paper, Sizing carbonate filled. H. R. Rafton. 1,803,648; May 5.
Paper, Sizing carbonate filled. H. R. Rafton. 1,803,650–2. May 5.
Paper, Waterproof. C. J. Strobel and A. P. Tallman. 1,803,816; May 5.
Parachute. A. C. Jenezon. 1,803,903; May 5.
Particles from free water, Separating. C. B. Thorne. 1,804,188; May 5.
Partition for automobiles. F. A. and C. L. Siggers. 1,804,033; May 5.
Patterns, Jigging and doweling. A. K. Laukel. 1,803,478 May 5.
Pedal construction and mounting. G. A. Forsberg. 1,803,502; May 5.
Pelvimeter, Sagittal. H. A. Sison. 1,804,061 May 5.
Pencil. B. C. Becker. 1,803,586; May 5.
Pencil. T. P. Garaukin. 1,803,695; May 5.
Pencil, Mechanical. H. Deutsch. 1,803,794; May 5.
Percolator. I. D. Richheimer. 1,803,356; May 5.
Perforating machine, Typewriter controlled. H. A. Welch. 1,803,954; May 5.
Petroleum, Cracking. G. Egloff. 1,803,963; May 5.
Phonograph attachment. C. J. Burke. 1,803,692; May 5.
Piano action, Grand. G. G. Campbell and J. Klepa. 1,803,890; May 5.
Pickup. O. B. Parker. 1,804,364; May 5.
Picture and sound reproduction apparatus, Synchronous operated motion. F. von Madaler. 1,803,572; May 5.
Picture apparatus, Motion. H. Hoffman and F. F. Kerr. 1,804,340; May 5.
Picture machine and elevating support therefor, Combined. F. H. Owens. 1,803,347; May 5.
Picture projector. C. Bornmann. 1,803,313 May 5.
Picture screen, Making motion. W. H. C. Lauste. 1,804,170; May 5.
Pipe; *See*—
Dry pipe. Tobacco pipe.
Pipe coupling. C. F. Jahns. 1,803,472; May 5.
Pipe coupling. A. J. Weatherhead, jr. 1,803,576 May 5.
Pipe coupling, Sectional. A. J. Weatherhead, jr. 1,803,577–8; May 5.
Pipe joint, Flexible. W. C. White. 1,803,820 May 5.
Pipe line controlling means. A. H. Riney and L. T. Gilbert. 1,803,437; May 5.
Piston, Engine. R. N. Steele. 1,803,362; May 5.
Piston gauge. J. R. Bishop. 1,803,311; May 5.
Piston, Trunk. J. Flammang and P. L. Bowser. 1,803,687 May 5.
Planes, Apparatus for launching. N. P. Christensen. 1,803,329; May 5.
Plaster, Wall. G. R. Walper. 1,804,445; May 5.
Plastic from natural resin, phenol, aldehyde, and alkali. L. S. Mellahoff. 1,804,379; May 5.
Plastic modeling machine. J. H. Metcalf. 1,804,224. May 5.
Plate for radio receivers, Escutcheon. C. G. Fry. Des. 84,076; May 5.
Plate shifter, Fold. L. R. Tufts. 1,803,370 May 5.
Platform for aeroplanes, Take-off and landing. M. J. O'Neill. 1,803,507; May 5.
Plow. W. L. Paul. 1,804,112; May 5.
Plug cap for separable attachment plugs. W. C. Ferguson. 1,803,983; May 5.
Plug, Core bit. F. L. Scott. 1,803,731; May 5.
Plug, Electric attachment. B. P. McKinley. 1,804,020 May 5.
Pneumatic dispatch system. J. T. Cowley. 1,807,895 May 5.
Pocketbook. H. Sernaker. 1,803,441; May 5.
Pocketknife. J. E. Fuller. 1,803,899; May 5.
Pole guy fixture. A. B. Cmauce. 1,804,202; May 5.
Portfolio for neckties and soft collars. C. C. Mosher, Jr. 1,803,393; May 5.
Post; *See*—
Binding post.
Posts, Manufacturing flexible. P. O. Unger. 1,804,134. May 5.
Pot and pan cleaner. U. S. G. Welsh. 1,804,240. May 5.
Power actuator. C. S. Bragg and V. W. Kilgrath. 1,803,314; May 5.
Power actuator. C. S. Bragg and V. W. Kilgrath. 1,803,592; May 5.
Power actuator. C. S. Bragg and V. W. Kilgrath. 1,803,957; May 5.
Power plant. W. H. Armacost. 1,803,455; May 5.
Power transmission. M. F. Bates. 1,803,834; May 5.
Power transmission system, Irreversible rotary. E. Briéard. 1,804,310; May 5.

Preparation containing medicinal oil. F. R. Valentine. 1,804,135 May 5.
Press; *See*—
Hydraulic press.
Fruit press. A. Vedder. 1,803,926; May 5.
Press roll. Leveler for oil. S. R. Carpenter. 1,803,745. May 5.
Pressure. Responsive instrument. A. B. Clawson. 1,803,900 May 5.
Printing. Transfer applying element and manufacturing the same. W. Macdonald. 1,804,350; May 5.
Printing. Blanket for offset work. F. W. Adalt and T. W. Blake. 1,804,139; May 5.
Printing. J. Krell. 1,803,940; May 5.
Printing. A. R. Froehlich. 1,804,160; May 5.
Printing. Cutting and transferring mechanism for. 1,803,499; May 5.
Printing. Offset and printing plate, Metal. H. R. Nicolas and T. R. Cartwright. 1,804,024; May 5.
Propeller. J. Kreidig. 1,804,010; May 5.
Propeller. J. W. Marchbanks. 1,803,858. May 5.
Protective appliance for athletes. D. Levinson. 1,803,335 May 5.
Pulverizer. L. E. La Rembard and M. H. Sides. 1,803,712; May 5.
Pump. Production of. W. R. Westcott. 1,804,017 May 5.
Pump. 1,803,357 May 5.
Pump. Manufacture of. M. O. Selzer. 1,803,410 May 5.
Pump molding machine. M. P. Chaplin. 1,804,203; May 5.
Pump. Method and apparatus for spraying fluid. N. C. Christensen. 1,803,502 May 5.
Pumping system. I. L. Crowe. 1,804,321 May 5.
Pump apparatus. Well. C. E. Barkus and D. G. Williamson. 1,804,077 May 5.
Pump. A. F. Wilson. 1,804,195; May 5.
Pump. H. H. Cole. 1,804,275; May 5.
Push rod for lifter. P. O. Dewhurst. 1,803,420. May 5.
Pumping device. D. A. Harner. 1,803,705; May 5.
Pumping mechanism for centrifugal. H. E. Adams. 1,803,881 May 5.
Push. K. T. Schmidt. 1,803,079; May 5.
Pumping mechanism. Power mechanism for sheet. C. W. Crawford. 1,804,096; May 6.
Quirk. H. P. Mulling. 1,803,763 May 5.
Quotation. Automatic. Production of. C. Zöllner. 1,803,640 May 5.
Race chair. Folding. C. F. Weldon. 1,803,782; May 5.
Rack; *See*—
Barrel rack.
Radiant heater. Electric. L. Lelgu. 1,803,973; May 5.
Radiator air vent. H. L. Joyce. Des. 84,084; May 5.
Radiator cap. W. Schnell and F. M. Ebner. 1,804,179; May 5.
Radiator. F. E. Miller. 1,803,764 May 5.
Radio Cabinet. H. Derry. 1,804,060 May 5.
Rail joint. J. F. Rasschen. 1,803,310 May 5.
Rail joint. I. M. Serra. 1,804,280. May 6.
Railway. F. L. Re Quo. 1,803,768. May 5.
Rail and cable pulley. Combined. J. Andrews, jr. 1,803,301 May 5.
Rail. S. W. Balkwill. 1,807,420; May 5.
Razor. C. D. Starr. 1,804,130 May 5.
Razor, Removing the luster in. G. Lard. 1,803,672 May 5.
Razor sharpening Apparatus for sharpening. T. J. Stephens. 1,803,304 May 5.
Receptacle for cigarette ashes and the like. W. F. Herold. 1,804,162 May 5.
Receptacle for smokers' articles or similar devices. Combined. J. Horovitz. Des. 84,071; May 5.
Receptacle for smokers' use, Ash. W. M. Wolf. Des. 82,124; May 5.
Receptacle, Mop cleaning. C. H. McConnell. 1,803,339 May 5.
Receptacle wall, for freezing. F. G. Sherer. 1,803,734; May 5.
Receptacle, Waste. J. Douglas. 1,804,213; May 5.
Reclining seat. A. B. Bell. 1,803,835 May 5.
Recorder. E. A. Quarrie. 1,803,976; May 5.
Reel; *See*—
Film reel. Spring actuated reel.
Reflector. M. B. Sprigg. 1,803,815; May 5.
Refrigerating apparatus. A. E. Payson and M. P. Wetmore. 1,803,639; May 5.
Register; *See*—
Cash register. Furnace register.
Regulating device, Pressure. A. R. Stanley and R. Zones. 1,803,659; May 5.
Regulator for boilers, Water. J. McAlear. 1,803,479; May 5.
Regulator system. E. R. Morton. 1,804,178; May 5.
Regulator system. H. M. Stoller. 1,804,126; May 5.
Remote control system. H. E. Hersey. 1,803,614; May 5.
Rendering tank. H. E. Dudycha. 1,803,604; May 5.
Retinoscope. J. Copeland. 1,804,151; May 5.
Retorts, Double offtake for coking. J. Van Ackeren. 1,803,881; May 5.
Reversing switch. H. Brodt. 1,804,066; May 5.
Rigging hook. J. Nadeau. 1,803,401; May 5.
Ring; *See*—
Packing ring.
Road breaking apparatus. J. J. Magee. 1,804,300; May 5.
Road building apparatus. J. W. Bidwell. 1,804,357; May 5.
Rock drill, Pneumatic. M. Smith. 1,804,026; May 5.
Rocket, Signal. C. C. Stetson. 1,803,360; May 5.
Rod; *See*—
Brake rod.
Rod elevator. C. A. Adams. 1,804,074; May 5.
Roller screen. C. E. Nicholson. 1,803,674; May 5.
Roof, Car. E. R. Swanson. 1,803,442; May 5.
Roof flashing. W. P. Budd. 1,804,240; May 5.
Roof flashing. W. P. Budd. 1,804,315; May 5.
Roof, Metal car. P. Litchfield. 1,803,321; May 5.
Roofing. W. N. Cramer. 1,803,998; May 5.
Room, Collapsible portable dressing. J. C. Lesley. 1,803,626; May 5.
Rope structure. H. S. Means. 1,803,912; May 5.
Rotor. R. A. L. Volet. 1,803,493; May 5.
Rubber compounds and articles. C. B. Boggs and J. T. Blake. 1,804,199; May 5.
Safety device for aeroplanes. N. Dibrill. 1,804,156; May 5.
Sand slinging apparatus. W. H. Wangelin. 1,803,526; May 5.
Sandwich baker. W. W. Hale. 1,804,355; May 5.
Sash and screen Window. O. R. Hamblin. 1,803,527; May 5.
Saw. C. T. Danielson. 1,803,463; May 5.
Sawdust burner. V. C. Snyder. 1,804,285; May 5.
Scale. S. A. Hallwood. 1,804,052; May 5.
Scale, Spring. S. C. Averell. 1,803,832; May 5.
Scrap cutter. I. Williams. 1,803,580. May 5.
Scraper, Wheeled. G. C. Krown. 1,803,071; May 5.
Screen; *See*—
Roller screen.
Screen construction. D. E. Stranger. 1,803,920; May 5.
Screening apparatus. M. P. Reynolds. 1,804,115; May 5.
Screws and bolts, Making. C. Kaufmann. 1,803,803. May 5.
Scuttle parts and the position of the same holders thereof, Adjusting the openings of. L. Lalante. 1,803,586; May 5.
Seal. M. Pinkert and I. Miller. 1,803,616; May 5.
Seal for refrigerating apparatus. W. H. T. Schlechter and J. G. King. 1,803,100. May 5.
Sealing device. J. Wulf. 1,804,298; May 6.
Seat; *See*—
Reclining seat.
Seat, Lapboard bridge. F. Hennessy. 1,804,312; May 5.
Seat, Spring bridge. W. S. Adams. 1,804,300 May 5.
Separator; *See*—
Centrifugal separator. Dust separator.
Sewing machine, Automatic. Apparatus for. L. Bessman. 1,803,978; May 5.
Sewing machine, Presser device for. R. Becker. 1,803,930; May 5.
Shade. M. Vicker. 1,803,372; May 5.
Shade for a lighting fixture or article of similar nature. Glass. H. Reid. Des. 84,070; May 5.
Shade or similar article, Lamp. R. Richter. Des. 84,100 May 5.
Sharpener, Automatic disk. P. King. 1,804,247; May 5.
Sharpener, Saw. C. V. Hall. 1,803,934; May 5.
Sheet material, Apparatus for use in surfacing. F. Mellon. 1,803,434 May 5.
Shell construction. A. F. Nissen. 1,803,537; May 5.
Shell Deaf mounting. F. P. Terry, jr. 1,804,187; May 5.
Shield, Portable dressing. O. Wenzel. 1,804,190; May 5.
Shingle bracket. M. Brown. 1,803,766; May 5.
Ship propulsion. R. O. Dunham. 1,804,378; May 5.
Shipper and gear casing lock, Combined. D. G. Floyd and M. H. McLendon. 1,803,796; May 5.
Shirt. P. R. Collins. 1,804,219; May 5.
Shirt, Combined outer and under. R. Spiers. 1,804,068 May 5.
Shock absorber, Hydraulic. F. W. Bender and A. C. Roessler. 1,804,141; May 5.
Shoe and making the same. H. S. Lyons. 1,803,716; May 5.
Shoe, Athletic. H. M. Kellam. 1,803,654; May 5.
Shoe expander. J. Hessel. 1,803,750; May 5.
Shoe fiber coating apparatus. A. Thoma. 1,803,934 May 5.
Shoe form. W. J. De Witt. 1,803,843; May 5.
Shoe lacing. N. Daniels and J. M. Pero. 1,804,211. May 5.
Shovel. O. A. Lyons. 1,803,717; May 5.
Shovels, Trip device for power. A. E. Rutledge and E. T. Cleary. 1,803,678; May 5.
Shutter control for air cooled engines. G. H. Upton and R. V. Hutchinson. 1,803,932; May 5.
Sifting top can. C. Guerlitz. 1,803,799; May 5.
Sign. R. M. Craig. 1,803,596; May 5.
Sign, Advertising. A. Rosenstein. 1,803,439; May 5.
Sign, Changeable. R. M. Craig. 1,803,595; May 5.
Sign, Display. W. R. Wilson. 1,803,884; May 5.
Sign, Gaseous tube lamp. F. Schaefer. 1,804,086. May 5.
Sign, Neon optical. S. Kamin. Des. 84,088; May 5.
Sign, Revolving. R. M. Craig. 1,803,597; May 5.

signal. H. G. Petine. 1,804,233; May 5.
Signal system and apparatus for boilers. J. C. Jackson. 1,803,852; May 5.
Signal transmitting system. G. M. Wright and S. B. Smith. 1,804,136; May 5.
Signaling. C. W. Hansell. 1,803,504; May 5.
Signaling device. H. E. Platt. 1,803,808; May 5.
Siphon. M. H. Falch. 1,804,270; May 5.
Sled. C. F. Walp. 1,803,416; May 5.
Snap hook with swivel. J. B. Freysinger. 1,804,377; May 5.
Snowplow. G. Sickler. 1,804,282; May 5.
Snowplow, Sidewalk. C. H. Frink. 1,803,754; May 5.
Sock. P. L. Schonfeld. 1,803,980; May 5.
Socket, Penholder. G. J. Sengbusch. 1,804,120; May 5.
Sorting apparatus. J. D. Grabill. 1,804,096; May 5.
Sound recording. L. A. Taylor. 1,804,289; May 5.
Sound records, Recording photographic. F. H. Owens. 1,803,346; May 5.
Sound reproducing apparatus. D. O. Whelan. 1,804,295; May 5.
Sound reproducing or recording apparatus. F. H. Owens. 1,803,403; May 5.
Spark advancing apparatus. S. J. Ziembinski. 1,803,451; May 5.
Speech transmission system. N. R. Stryker. 1,804,127; May 5.
Spider. H. W. Goetz, R. C. Clark, and J. J. Ferlin. 1,803,608; May 5.
Spinal extensor. J. J. Nugent. 1,803,556; May 5.
Spoon or analogous article. H. E. Nock. Des. 84,099; May 5.
Spring: *See*—
Semielliptic spring.
Spring actuated reel. J. E. Minty. 1,803,181; May 5.
Spring expanding apparatus. J. N. White. 1,803,518; May 5.
Springs, Device for removing and installing. H. Droddy. 1,803,750; May 5.
Sprinkler. G. E. Eck. 1,804,001; May 5.
Sprinkler fire protection apparatus. J. P. Thurell. 1,804,374; May 5.
Stabilizer for aircraft, Directional. H. M. Salisbury and A. E. Miller. 1,803,655; May 5.
Stamping device, Automatic. E. E. Evans. 1,803,325; May 5.
Stand: *See*—
Brake adjusting stand.
Clothes stand.
Display stand.
Drinking stand.
Vehicle brake adjusting stand.
Stand and the like, Display. J. Horwath. 1,803,851; May 5.
Starter and pound section. O. Smith. 1,803,813; May 5.
Starting device, Electric. V. G. Apple. 1,803,829; May 5.
Static eliminator, Wireless receiving. A. G. Anderson. 1,803,419; May 5.
Steam boiler. J. Burke. 1,803,790; May 5.
Steel rails, Fissure detector for. E. A. Sperry. 1,804,380; May 5.
Steel, Surface hardening. H. W. McQuaid. 1,804,176; May 5.
Step form. G. H. Miller. 1,803,719; May 5.
Stereotype plate casting and finishing machine. H. A. W. Wood. 1,803,374; May 5.
Stop, Automatic safety. H. Segal. 1,804,181; May 5.
Strainer. F. H. Hehemann. 1,804,162; May 5.
Street and station indicator. D. M. Saunders. 1,803,811; May 5.
Strikers, Fabricating. J. B. Flynn. 1,804,004; May 5.
Stuffing box. A. G. Heggem. 1,803,471; May 5.
Stumps in the ground, Device for splitting. T. W. Grupe. 1,803,902; May 5.
Submarines, Salvage chamber for. G. L. Teeple and G. S. Ball. 1,803,369; May 5.
Submergible apparatus. H. J. Finn. 1,803,526; May 5.
Sugar cane, Shearing of disintegrating. W. H. Morgan. 1,804,267; May 5.
Suit, Ensemble. D. Long. Des. 84,092–4; May 5.
Suit, Nonsinkable bathing. E. Diamond. 1,803,898; May 5.
Sulphite pulp, Making. A. M. Thomsen. 1,803,738; May 5.
Support, Brake hanger. F. Schaefer. 1,804,118–9; May 5.
Support, Combined insole and arch. O. Gregarek. 1,804,009; May 5.
Surface finishing machine. A. N. Emmons. 1,803,549; May 5.
Surface on stone, Producing a contoured. E. A. Chase. 1,803,891; May 5.
Suspender loop, Resilient metallic. L. W. Joyce. 1,804,259; May 5.
Switch: *See*—
Clock controlled switch.
Electric liquid flow switch.
Electric switch.
Mercury switch.
Reversing switch.
Transfer switch.
Switch circuit, Rotary line. H. Adams. 1,803,452; May 5.
Switch heating system, Railway. A. F. Schumann. 1,803,358; May 5.
Switch mechanism. R. P. Lansing. 1,803,908; May 5.
Switch point protector. I. J. Kilburn. 1,803,904; May 5.
Synchronizers, Automatic release for gear. H. J. Murray. 1,803,535; May 5.
Syringe, Hypodermic. H. K. Brown. 1,803,316; May 5.
System of distribution. W. H. Powell. 1,803,676; May 5.
Table: *See*—
Card table.
Fold type table.
Food preserving table.
Table and ironing board, Combination. P. F. Larson. 1,804,372; May 5.
Table and safeway garages, Auto. J. Mayden. 1,804,363; May 5.
Table, Leaf support. F. L. Casper. 1,803,54, May 5.
Tables, Lumber return attachment for saw. H. T. umb. 1,803,857; May 5.
Tablet, Display. H. Wiedemann. 1,803,743; May 5.
Tabulating machine. F. M. Carrell. 1,803,959; May 5.
Tailpiece retaining means. A. R. Swearingen. 661; May 5.
Tailstock for machines for flanging pipes. F. antz. 1,804,003; May 5.
Tank: *See*—
Rendering tank.
Vacuum tank.
Tank and making the same, Lined. J. M. Rohling. 1,803,407; May 5.
Tape attaching machine. S. G. Blessington. 1,801 May 5.
Target. F. T. Russell. 1,804,117; May 5.
Telegraph systems, High speed fork regenerating for. H. Angel and J. W. Robinson. 1,804,302; May 5.
Telegraphic system. W. Budde. 1,803,379; May 5.
Telegraphophone system. Left. J. Leishman. 1,803, May 5.
Telephone exchange system. R. E. Collis. 1,804 May 5.
Telephone exchange system. A. D. Knowlton and S. Everett. 1,804,169; May 5.
Temperature control device. F. W. Jaeger. 1,80 98 May 5.
Temperature control, Thermostatic. T. Lidberg. 1,803,629 May 5.
Textile fabrics, Decatizing of. M. Hahn. 1,801,9 May 5.
Thermostat. N. T. Branche. 1,804,367; May 5.
Thermostat. A. A. Thomas. 1,803,982; May 5.
Thermostatic device. G. H. Schwedler. 1,803,565; May 5.
Threading machine, Automatic wick. A. Sgritta. 1,803,871; May 5.
Ticket distributing system. G. A. Drew. 1,803,466; May 5.
Tie for concrete structures, Form. J. I. Weber. 1,803,819 May 5.
Timepiece serving as a watch or traveling clock. F. Bosch. 1,804,048; May 5.
Tip plate for a tooth. A. S. Wells. 1,803,579; May 5.
Tip up. J. A. Oberg. 1,803,914; May 5.
Tire carrier, Underslung. V. Jantsch. 1,803,938; May 5.
Tire lock, Spare. L. Blackmore. 1,803,931; May 5.
Tire replacing machine. J. J. Masceuch. 1,804,222; May 5.
Tobacco pipe. P. Mancusi. 1,804,018; May 5.
Tongs, Chain. J. I. Phillips. 1,803,867; May 5.
Tool, Bench. C. E. Van Norman. 1,803,984; May 5.
Tool, Dusting. D. G. Smellie. 1,803,921; May 5.
Tool for bending tubular articles. H. Miller. 1,804,384; May 5.
Tool, Hand. F. J. Clemens. 1,804,149; May 5.
Tool retainer. H. J. Gustafson. 1,804,217; May 5.
Tool surfacing machine, Lens. W. A. Gunning. 1,803,429; May 5.
Tool, Tweezer. C. S. Root. 1,803,728; May 5.
Tool, Variable stroke. H. C. Gustafson. 1,804,216; May 5.
Tool with interchangeable dies, Adjustable bucking up. H. N. Evans, sr. 1,803,965; May 5.
Tools and resulting products, Facing. W. F. and S. M. Stoody and N. W. Cole. 1,803,875; May 5.
Toothbrush. R. A. Brockelsby. 1,803,497; May 5.
Tooth crown and forming and applying the same. E. P. Schwartz. 1,803,680; May 5.
Top for ingot molds, Hot. W. M. Charman and H. J. Darlington. 1,804,204; May 5.
Top for ingot molds, Hot. E. L. Messler and J. Thomas. 1,803,342; May 5.
Top, Hot. W. M. Charman and H. J. Darlington. 1,804,206; May 5.
Top, Hot. W. M. Charman. 1,804,208; May 5.
Torch cutting device. W. F. Palmer. 1,804,271; May 5.
Torpedoes, Air blowing exercise head for. J. L. King, C. T. Minkler, and T. J. Gill. 1,803,530; May 5.
Torque equalizing mechanism. C. B. Curtiss. 1,803,895; May 5.
Towels preparatory for washing, Bundling. J. H. Addler. 1,803,826; May 5.
Towing device, Vehicle. J. J. Herlbauer, H. and C. Gulotta. 1,803,389; May 5.
Toy. J. E. Brubaker. 1,804,313; May 5.
Toy. J. B. McDonough, jr. 1,803,506; May 5.
Toy. C. C. Stetson. 1,803,365; May 5.
Toy. C. C. Stetson. 1,803,490; May 5.
Toy. L. Turchanyi. Des. 84,120–1; May 5.
Toy, Aerial. V. Brady. 1,804,244; May 5.
Toy, Aerial. J. M. Schutte. Des. 84,108; May 5.
Toy aeroplane, Display. J. E. Burgess. 1,803,789; May 5.
Toy airplane. N. E. Gardner. 1,803,469; May 5.
Toy, Combined pony and rider. W. Klug. Des. 84,089; May 5.
Toy, Electrical. W. L. Minnick, jr. 1,804,265; May 5.
Toy, Helicopter flying. H. T. Nelson. 1,803,636; May 5.

Toy, Spinning. W. J. Kerr. 1,804,260; May 5.
Toy, Wheeled. W. R. Crandall. Des. 84,073; May 5.
Toy, Whirling. M. Nudelman. 1,803,638; May 5.
Trackway. W. F. Palmer. 1,804,272; May 5.
Traction wheel. W. J. Hanlg. 1,803,702; May 5.
Tractor, Cable. J. S. Church. 1,804,148; May 5.
Tractor hoist. R. B. Moore. 1,803,400; May 5.
Tractors, Extension support and driving means for. R. H. White. 1,803,447; May 5.
Trailer. B. L. Cochran. 1,804,089; May 5.
Transfer switch. C. A. Lang and C. B. Gamble. 1,803,623; May 5.
Transformer cooler. T. T. MacLeod. 1,803,505; May 5.
Transmission. G. Abbona. 1,803,744; May 5.
Transmission for internal combustion engines, Slide. T. M. Finley. 1,803,795; May 5.
Transmission, Overgear. C. H. Sterling. 1,803,949; May 5.
Traveling bag. O. I. Singer. 1,804,122; May 5.
Tray for nursery chairs. H. E. McCandless. 1,804,057; May 5.
Tripod for cameras. V. Leevo. 1,803,534; May 5.
Trolley pole head structure. A. L. Sommers and T. B. Russell. 1,804,067; May 5.
Trouser hanger. C. Brun. 1,804,314; May 5.
Truck, Car. H. W. Alden and N. R. Brownyer. 1,803,584; May 5.
Truck, Car. N. R. Brownyer. 1,803,594; May 5.
Truck construction, Car. S. P. Bush. 1,803,791; May 5.
Truck, Industrial. E. J. Abbe. 1,804,046–7; May 5.
Truck, Lift. A. M. Barrett. 1,803,688; May 5.
Trunk and camping outfit, Combined. H. Goeddertz. 1,803,901; May 5.
Trunk, Wardrobe. J. Ritter, jr. 1,804,031; May 5.
Truss for the reduction or alleviation of hernia. A. Baehr. 1,803,457; May 5.
Try and miter square. S. Billington. 1,804,142; May 5.
Tube display, Dr large. F. Hotchner. 1,803,706; May 5.
Tubes of cellul d and the like, Making. S. A. Neidich. 1,804,022–3; May 5.
Tuner control mechanism. H. F. Elliott. 1,803,846; May 5.
Turbine, Air. M. H. Damerell. 1,803,896; May 5.
Turbine, Hydraulic. L. F. Moody. 1,803,673; May 5.
2 ultrile of aryl-1-thioglycol-2-carboxylic acids containing bromine and new product obtainable thereby, Preparing the. H. Wagner and R. Brune. 1,803,781; May 5.
Type carrier for stamping presses. A. H. Germer. 1,804,253; May 5.
Typewriting and computing machine, Combined. J. H. Edwards. 1,803,525; May 5.
Typewriting and computing machine, Combined. H. Resch. 1,804,232; May 5.
Typewriting machine. H. O. Blaisdell. 1,803,496; May 5.
Typewriting machine. R. von Reppert. 1,803,573; May 5.
Typewriting machine. R. von Reppert. 1,804,189; May 5.
Typewriting machine. S. L. Walsoe. 1,803,517; May 5.
Underground exploration, Electromagnetic method of. N. H. Ricker. 1,803,405; May 5.
Underreamer, Cable tool. R. E. Simpson. 1,803,873; May 5.
Underreamer, Compound expanding. J. Grant. 1,803,669; May 5.
Unloading and discharging means. E. J. Carroll and E. I. Cutter. 1,803,662; May 5.
Urn, Multiple drip coffee. L. A. Scherck. 1,804,278; May 5.
Utensil, Kitchen. L. Hazy. 1,804,099; May 5.
Vacuum tank. J. L. Andrews. 1,803,687; May 5.
Valve. J. Beyer. 1,803,378; May 5.
Valve. W. A. Keeney. 1,804,167; May 5.
Valve. N. M. Small. 1,804,065; May 5.
Valve, Automatic. T. J. Yates. 1,804,137; May 5.
Valve cap or the like, Tire. J. Wahl. 1,803,373; May 5.
Valve controlling mechanism for refrigerating systems. W. G. E. Rolaff. 1,803,677; May 5.
Valve, Float controlled. W. G. Estep. 1,804,093; May 5.
Valve, Flush. W. S. White. 1,803,418; May 5.
Valve for fluid lift devices, Automatic. J. W. Taylor. 1,803,683; May 5.
Valve guide, Toilet flush. R. E. Dodson. 1,803,603; May 5.
Valve mechanism. A. Kinzbach. 1,803,905; May 5.
Valve, Noncorroding. C. F. H. Bohnhardt and B. F. Bohnhardt. 1,803,889; May 5.
Valve, Pressure regulating. O. G. Goldman. 1,803,697; May 5.
Valve, Rotary. A. Schmidt and E. Haselhorst. 1,803,773; May 5.
Valve, Safety relief. H. B. Morrill. 1,804,060; May 5.
Valve, Seat operated flush. W. H. Cadwell and J. Ott. 1,803,958; May 5.
Valve, Strainer. M. J. Kullander. 1,803,477; May 5.
Valve, Tank. C. F. Brown. 1,803,423; May 5.
Valve Unloading. W. Townsend. 1,804,133; May 5.
Vanity case. A. McL. Jones. Des. 84,083; May 5.
Vapor fractionation, Process and apparatus for. D. J. Bergman. 1,803,956; May 5.
Vault, Burial. R. E. Smith. Des. 84,113; May 5.
Vehicle. L. L. Patterson. 1,803,866; May 5.
Vehicle body construction. M. Gale. 1,803,668; May 5.
Vehicle lifting jack. L. C. Stukenborg. 1,803,082; May 5.
Vehicle, Motor. G. D. Simonds. 1,804,121; May 5.
Vehicles, Safety apparatus for motor. G. Rottman. 1,804,032; May 5.
Vehicles, System for communicating with moving. H. A. Affell. 1,803,453; May 5.
Vehicles, Windlace construction for. F. J. Kubler. 1,804,371; May 5.
Vending machine. R. M. Cope. Re18,059; May 5.
Vending machine. M. J. Madison. 1,804,221; May 5.
Vending machine, Automatic document. W. H. D. Brouse. 1,804,200; May 5.
Vending machines, Coin control for. J. G. Schofield. 1,803,440; May 5.
Vending machines, Releasing mechanism for automatic. H. C. Hansen. 1,804,098; May 5.
Ventilating system. C. O. Guernsey. 1,804,334; May 5.
Ventilator: *See*—
Automobile ventilator.
Vision device, Clear. J. W. Bour. 1,803,787; May 5.
Voting machine. W. H. Staring. 1,804,035; May 5.
Wall or ceiling structure, Acoustic. T. C. Howard. 1,803,390; May 5.
Wardrobe ticket set, Safety. E. Tensfeldt. 1,804,238; May 5.
Washing apparatus. E. Davis. 1,803,897; May 5.
Washing machine. M. A. Defibaugh. 1,803,382–3; May 5.
Washing machine, Can. H. D. Lathrop. 1,803,627; May 5.
Water cooler. E. Jones. 1,803,393; May 5.
Water from boats, Automatically removing. E. Slater. 1,803,567; May 5.
Water fro clothes and the like, Apparatus for extracting. E. B. Thompson. 1,803,412; May 5.
Water heater, Feed. E. L. and C. A. Schellens. 1,803,772; May 5.
Water heater, Gas. A. T. Sponar. 1,804,123; May 5.
Water softening device, Toilet tank. D. G. Marks. 1,803,860; May 5.
Water to steam boilers, Feeding. I. D. Lookingland. 1,804,172; May 5.
Wave amplifying system. E. Bruce and H. T. Friis. 1,804,087; May 5.
Weighing machine, Automatic. O. Meyer. 1,803,913; May 5.
Welding apparatus. E. J. O'Connell. 1,804,269; May 5.
Welding, Apparatus for electric. W. J. Miller. 1,804,059; May 5.
Welding composition. H. J. Morgan. 1,803,634; May 5.
Well capper. H. G. Retherford and S. T. Elmore. 1,803,945; May 5.
Well casing and removing the same from a well. O. A. Cavins. 1,803,839; May 5.
Well drilling apparatus, Core position indicator for. J. E. Abler. 1,803,785; May 5.
Well drilling, Jar mechanism for. W. D. Shaffer. 1,803,732; May 5.
Wheel and rail lubricator. R. A. Tanner. 1,803,923; May 5.
Wheel construction, Traction. E. E. Elnfeldt. 1,803,427; May 5.
Wind motor. J. W. Whipp. 1,804,241; May 5.
Winding machine. J. A. Cameron and G. B. Rickard. Re18,060; May 5.
Window cleaner, Automatic. M. R. Moon. 1,803,722; May 5.
Wing construction for aeroplanes. W. R. Parmele. 1,803,915; May 5.
Wiper for hot tops, Mold. W. M. Charman and H. J. Darlington. 1,804,207; May 5.
Wire for winding motors, etc. A. Arutunoff. 1,804,076; May 5.
Wire, Process and apparatus for plating. C. P. Brockway. 1,803,691; May 5.
Woodworking machine. G. R. Napier. 1,803,402; May 5.
Wrappers, System for applying. T. A. Federwitz and W. T. Bailey. 1,804,094; May 5.
Wheel: *See*—
Friction wheel.
Traction wheel.
Yarn moistening device. E. J. Berger and A. W. Swartz. 1,804,360; May 5.
Yarn, Treating. S. P. Ruff, jr. 1,803,869; May 5.
Zinciferous material, Reducing. E. H. Bunce and G. T. Mahler. 1,804,201; May 5.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Acme-Evans Company, Indianapolis, Ind. Wheat flour, buckwheat flour, rye flour, etc. 282,971; May 12; Serial No. 307,913; published Feb. 24, 1931. Class 46.

American Metal Company (Limited), The, New York, N. Y. Metal products. 283,049; May 12; Serial No. 309,629; published Feb. 24, 1931. Class 14.

Arles Company, Inc., The, New York, N. Y. Metallic lame or lahn in the form of thread. 283,015; May 12; Serial No. 301,086; published Feb. 24, 1931. Class 48.

Armstrong Cork Company, Lancaster, Pa. Felt-base floor coverings. 282,991; May 12; Serial No. 310,239; published Mar. 3, 1931. Class 20.

Armstrong Cork Company, Lancaster, Pa. Linoleum. 282,992; May 12; Serial No. 310,240; published Mar. 3, 1931. Class 20.

Armstrong Cork Company, Lancaster, Pa. Hard-surfaced floor covering. 282,993; May 12; Serial No. 310,241; published Mar. 3, 1931. Class 20.

Armstrong Cork Company, Lancaster, Pa. Molded bottle and jar closures or caps. 283,037; May 12; Serial No. 309,455; published Feb. 24, 1931. Class 50.

Ayers, John R., doing business as Onion Rub Company, Boston, Mass. Medicinal preparation. 283,067; May 12. Class 6.

Bain, Mrs., Washington, D. C. Mixture containing flour and other ingredients. 283,025; May 12; Serial No. 305,775; published Feb. 24, 1931. Class 46.

Baker, A. J., Co., Inc., Johnstown, N. Y. Manufactured and dressed leather. 282,983; May 12; Serial No. 308,920; published Feb. 24, 1931. Class 1.

Báňská-A Hutní Společnost, Brunn, Czechoslovakia. Coal and coke. 283,052; May 12; Serial No. 309,707; published Feb. 24, 1931. Class 1.

Báňská-A Hutní Společnost, Brunn, Czechoslovakia. Coal and coke. 283,053; May 12; Serial No. 309,713; published Feb. 24, 1931. Class 1.

Baron, H., & Co., Incorporated, Brooklyn, N. Y. Flavoring syrups. 283,034; May 12; Serial No. 309,369; published Feb. 24, 1931. Class 46.

Barringer, Edward E., Salisbury, N. C. Granite. 283,068; May 12. Class 1.

Belber Trunk & Bag Company, The, Philadelphia, Pa. Trunks and hand luggage. 283,023; May 12; Serial No. 305,690; published Feb. 24, 1931. Class 3.

Best Foods, Inc., The, New York, N. Y. Pickle, relishes, peanut butter, salad dressings, etc. 283,081; May 12. Class 46.

Betty's Fudge Shop. (See Samter, Morris.)

Black, James H., Portland, Oreg. Snuffers. 283,029; May 12; Serial No. 309,117; published Feb. 24, 1931. Class 8.

Bradley, Milton, Company, Springfield, Mass. Games. 283,007; May 12; Serial No. 310,205; published Mar. 3, 1931. Class 22.

Brinkstool Paint Co., Los Angeles, Calif. Paint enamels. 283,013; May 12; Serial No. 291,318; published Mar. 3, 1931. Class 16.

Buettner, T., & Co. Inc., Chicago, Ill. Yarns. 282,996; May 12; Serial No. 309,185; published Mar. 3, 1931. Class 43.

Burson Knitting Company, Rockford, Ill. Hosiery. 283,082; May 12. Class 39.

Chavin & Berman, Chicago, Ill. Sole leather. 282,972; May 12; Serial No. 307,920; published Feb. 24, 1931. Class 1.

Child-Health Sand Co., Philadelphia, Pa. Sand. 283,011; May 12; Serial No. 300,469; published Feb. 24, 1931. Class 1.

Conti Products Corp., Brooklyn, N. Y. Olive oil. 282,973; May 12; Serial No. 307,924; published Feb. 24, 1931. Class 46.

Continental Baking Company, New York, N. Y. Rolls. 283,038; May 12; Serial No. 306,053; published Feb. 24, 1931. Class 46.

Cooney, Ralph S., doing business as School Service Co., New York, N. Y. Punch card. 282,998; May 12; Serial No. 309,463; published Mar. 3, 1931. Class 22.

Davidson Baking Co., Inc., Portland, Oreg. Bread, rolls, cake, etc. 283,035; May 12; Serial No. 309,418; published Feb. 24, 1931. Class 46.

Dentists' Supply Company of New York, The, New York, N. Y. Artificial teeth. 282,988; May 12; Serial No. 309,581; published Mar. 3, 1931. Class 44.

Du Pont, E. I., de Nemours and Company, Wilmington, Del. Resins. 283,059; May 12; Serial No. 309,923; published Feb. 24, 1931. Class 1.

Eichenlaub, George F., doing business as G. F. Eichenlaub Coal Co., Gallitzin, Pa. Coal. 283,075; May 12. Class 1.

Elgin American Manufacturing Co., Elgin, Ill. Receptacles for cigars, cigarettes, and tobacco other than pouches. 283,018; May 12; Serial No. 302,461; published Feb. 24, 1931. Class 8.

Ellison & Spring, Inc., New York, N. Y. Decorative and embroidered linens. 282,980; May 12; Serial No. 308,725; published Feb. 24, 1931. Class 42.

Engelmeyer, Morris, New York, N. Y. Bread. 283,021; May 12; Serial No. 304,130; published Feb. 24, 1931. Class 46.

Feinberg, Michael, doing business as Feinberg Kosher Sausage Company, Minneapolis, Minn. Cleaning preparation. 283,064; May 12; Serial No. 309,338; published Mar. 3, 1931. Class 4.

Flanagan, Joseph C., assignor to F. M. Flanagan, Pittsburgh, Pa. Rubber matting. 283,020; May 12; Serial No. 303,637; published Feb. 24, 1931. Class 50.

Fla-Vo-Krisp Company, The, Chicago, Ill. Candies, nuts, and confectionery. 283,062; May 12; Serial No. 309,310; published Mar. 3, 1931. Class 46.

Florida Canners, Inc., Eustis, Fla. Canned citrus fruit. 283,044; May 12; Serial No. 306,946; published Mar. 3, 1931. Class 46.

Franke, George, Sons Company, The, Baltimore, Md. Tinsel for Christmas trees and other decorative purposes. 283,065; May 12; Serial No. 310,218; published Mar. 3, 1931. Class 22.

Gallatin Valley Milling Co., Seattle, Wash. Wheat flour. 282,970; May 12; Serial No. 307,812; published Feb. 24, 1931. Class 46.

Gaybird, Limited, Great Missenden, England. Game and poultry foods. 283,039; May 12; Serial No. 306,179; published Feb. 24, 1931. Class 46.

General Mills, Inc., Minneapolis, Minn. Stock and poultry feed. 283,043; May 12; Serial No. 306,847; published Feb. 24, 1931. Class 46.

General Steel Castings Corporation, Eddystone, Pa. Rough and semifinished metal castings and forgings. 282,968; May 12; Serial No. 307,486; published Feb. 24, 1931. Class 14.

Gragnano Products, Inc., San Francisco, Calif. Alimentary pastes. 283,072; May 12. Class 46.

Grape Products, Incorporated, North East, Pa. Grape juice. 282,994; May 12; Serial No. 310,376; published Mar. 3, 1931. Class 45.

Grape Products, Incorporated, North East, Pa. Grape juice. 282,995; May 12; Serial No. 310,445; published Mar. 3, 1931. Class 45.

Gray, Dorothy, Bloomfield, N. J., and New York, N. Y. Powder puffs and absorbent powder puffs. 283,046; May 12; Serial No. 309,469; published Feb. 24, 1931. Class 29.

Great Atlantic & Pacific Tea Company, The, doing business as The Quaker Maid Company, Inc., New York, N. Y. Peas, beans, and lentils. 283,006; May 12; Serial No. 310,201; published Mar. 3, 1931. Class 46.

Great Lakes Varnish Works, Inc., Chicago, Ill. Flat wall paint. 283,040; May 12; Serial No. 306,351; published Nov. 18, 1930. Class 16.

"Griesogen" Griesheimer Autogen Verkaufs-Gesellschaft m. b. H. Wires and rods for soldering and welding purposes. 283,050; May 12; Serial No. 309,683; published Feb. 24, 1931. Class 14.

Griswoldville Manufacturing Company, Griswoldville, Mass. Felt. 283,058; May 12; Serial No. 309,812; published Feb. 24, 1931. Class 50.

Harden, E. E., Packing Company, Salinas, Calif. Fresh vegetables. 283,069–70; May 12. Class 46.

Hawley & Hoops, New York, N. Y. Candies. 282,979; May 12; Serial No. 308,626; published Mar. 3, 1931. Class 46.

Hills Brothers Company, The, New York, N. Y. Canned grapefruit. 283,060; May 12; Serial No. 309,077; published Feb. 3, 1931. Class 46.

Holman Soap Company, Chicago, Ill. Soap. 282,990; May 12; Serial No. 309,779; published Mar. 3, 1931. Class 4.

Hunter, Frank M., Lititz, Pa. Bloomers and panties and men's underwear. 283,047; May 12; Serial No. 309,524; published Feb. 24, 1931. Class 39.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Artificial silk threads and yarns. 283,001; May 12; Serial No. 309,728; published Mar. 3, 1931. Class 43.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Chemical product. 283,022; May 12; Serial No. 305,433; published Mar. 3, 1931. Class 16.

Industrial Chemical Sales Company, Inc., New York, N. Y. Finely-divided solid material having selective adsorptive properties. 283,019; May 12; Serial No. 303,570; published Mar. 3, 1931. Class 31.

Industrial Rayon Corporation, Cleveland, Ohio. Rayon yarn. 283,005; May 12; Serial No. 310,129; published Mar. 3, 1931. Class 43.

Intercity Development Corporation, New York, N. Y. Claylike and other minerals. 283,009; May 12; Serial No. 296,870; published Feb. 24, 1931. Class 1.

Kelvinator Corporation, Detroit, Mich. Refrigerator cabinets and mechanical refrigerating apparatus. 282,989; May 12; Serial No. 309,736; published Mar. 3, 1931. Class 31.

Klenit Corporation, Winner, S. Dak. Pumice soap. 283,054; May 12; Serial No. 309,737; published Feb. 24, 1931. Class 4.

La Plant-Choate Manufacturing Co., Cedar Rapids, Iowa. Road building machinery. 283,074; May 12. Class 23.

Laschinger & Meinhardt, Inc., New York, N. Y. Fish products. 283,002; May 12; Serial No. 309,897; published Mar. 3, 1931. Class 46.
Lenell, Hans S., doing business as H. S. Lenell, Chicago, Ill. Cookies. 282,987; May 12; Serial No. 308,992; published Feb. 24, 1931. Class 46.
Lockwood, Edward S., doing business as Lockwood & Company, Annapolis, Md. Chocolate caramels. 282,981; May 12; Serial No. 308,797; published Mar. 3, 1931. Class 46.
Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Candies. 283,028; May 12; Serial No. 295,034; published Mar. 3, 1931. Class 46.
Mayer, Oscar, & Co. Inc., doing business as Oscar Mayer's, Chicago, Ill. Frankfurters. 282,967; May 12; Serial No. 295,950; published June 3, 1930. Class 46.
Mexican Gulf Packing Co., Inc., Pascagoula, Miss. Canned shrimp. 283,024; May 12; Serial No. 305,717; published Mar. 3, 1931. Class 46.
Milburn, Alexander, Company, The, Baltimore, Md. Portable acetylene lights, welding and cutting torches, acetylene generators, and tips. 283,079; May 12. Class 34.
Morris Candy Co., Minneapolis, Minn. Candy. 283,042; May 12; Serial No. 306,824; published Mar. 3, 1931. Class 46.
Musselman, C. H., Company, The, Biglerville, Pa. Canned fruits and vegetables, cider vinegar, etc. 282,977; May 12; Serial No. 308,513; published Feb. 24, 1931. Class 46.
National Labeling Machine Co., Inc., Long Island City, N. Y. Machines for applying labels to the body of bottles and the like. 283,012; May 12; Serial No. 276,897; published Aug. 6, 1929. Class 23.
Niehaus, Jos., Company, The, Cincinnati, Ohio. Chamois skin. 283,051; May 12; Serial No. 309,697; published Feb. 24, 1931. Class 1.
No Drip Company. (See Pipkin, James A.)
Oaks, Harry C., doing business as Oaks Candy Shop, Appleton, Wis. Candy. 283,073; May 12. Class 46.
Ohio Truss Company, The, Cincinnati, Ohio. Surgical and abdominal belts and hip reducers. 283,041; May 12; Serial No. 306,658; published Mar. 3, 1931. Class 44.
Onion Rub Company. (See Ayers, John R.)
Oxford Corporation, The, West Paris, Me. Golf game. 282,974; May 12; Serial No. 308,124; published Mar. 3, 1931. Class 22.
Palmer Corporation, The, Chicago, Ill. Fresh celery. 283,003–4; May 12; Serial Nos. 309,933–4; published Mar. 3, 1931. Class 46.
Parker-Regan Corporation, San Francisco, Calif. Mops. 283,048; May 12; Serial No. 309,592; published Feb. 24, 1931. Class 29.
Penn Fruit Company, Philadelphia and Darby, Pa. Fresh deciduous fruits and fresh vegetables, and nuts. 283,014; May 12; Serial No. 292,417; published Feb. 24, 1931. Class 46.
Pioneer Hatchery, Inc., The, Petaluma, Calif. Live baby chickens. 283,000; May 12; Serial No. 309,593; published Mar. 3, 1931. Class 46.
Pipkin, James A., doing business as No Drip Company, Dallas, Tex. Bottle wrappers and protectors. 283,078; May 12. Class 2.
Polak & Schwarz, Zaandam, Netherlands. Natural and imitation flavors suitable for flavoring foods and ingredients of foods. 283,016; May 12; Serial No. 301,502; published Feb. 24, 1931. Class 46.
Pressed Prism Plate Glass Company, Chicago, Ill. Glass. 282,997; May 12; Serial No. 309,211; published Feb. 24, 1931. Class 33.
Proctor & Gamble Company, The, Cincinnati, Ohio. Soap. 282,975; May 12; Serial No. 308,126; published Mar. 3, 1931. Class 4.
Providence Thread Co. Inc., New York, N. Y. Sewing thread. 283,066; May 12; Serial No. 310,412; published Mar. 3, 1931. Class 43.
Quaker Maid Company, Inc., The. (See Great Atlantic & Pacific Tea Company, The.)
Quinlan Pretzel Company, Reading, Pa. Pretzels. 283,031–2; May 12; Serial Nos. 309,353–4; published Feb. 24, 1931. Class 46.
Rainier Brewing Company, San Francisco, Calif. Malt syrup. 283,030; May 12; Serial No. 309,212; published Feb. 24, 1931. Class 46.
Ramsey, Eleanor D., Detroit, Mich. Cleaner. 283,010; May 12; Serial No. 298,714; published Aug. 12, 1930. Class 4.
Red River Valley Produce Co., Inc., Grand Forks, N. Dak. Dressed poultry and eggs. 282,984; May 12; Serial No. 308,954; published Feb. 24, 1931. Class 46.
Reeves, B. M., Co., Inc., Brooklyn, N. Y. Olives, bottled cherries, stuffed figs, and stuffed dates. 282,969; May 12; Serial No. 307,735; published Feb. 24, 1931. Class 46.
Reiner & Berkow, Inc., New York, N. Y. Clocks and watches. 283,026; May 12; Serial No. 305,791; published Feb. 24, 1931. Class 27.
Samter, Morris, doing business as Betty's Fudge Shop, Atlantic City, N. J. Candies. 282,978; May 12; Serial No. 308,518; published Mar. 3, 1931. Class 46.
Schalk, Jacob R., Poughkeepsie, N. Y. Boats. 283,071; May 12. Class 19.
Scherer, J. J., Sons Co., Inc., Irvington, N. J. Canned sauerkraut, dill pickles, sauerkraut juice, etc. 283,027; May 12; Serial No. 305,942; published Feb. 24, 1931. Class 46.
School Service Co. (See Cooney, Ralph S.)
Sivyer Steel Castings Co., Milwaukee, Wis. Iron and steel alloys, castings, forgings, etc. 283,017; May 12; Serial No. 301,765; published Feb. 24, 1931. Class 14.
Spardel, Franz W. E., doing business as F. W. Emil Spardel, Hamburg, Germany. Vaginal syringes, irrigators, and pessaries. 283,061; May 12; Serial No. 309,097; published Mar. 3, 1931. Class 44.
Stametco Broom & Mfg. Co. Inc., St. Paul, Minn. Brooms and mops. 282,976; May 12; Serial No. 308,495; published Feb. 24, 1931. Class 29.
Standard Brands Incorporated, New York, N. Y. Tea and coffee. 282,999; May 12; Serial No. 309,535; published Mar. 3, 1931. Class 46.
Stanowitz, Rose, Brooklyn, N. Y. Jams. 283,076; May 12. Class 46.
Stearns Coal & Lumber Company, Inc., Stearns, Ky. Coal. 283,055–7; May 12; Serial Nos. 309,748–50; published Feb. 24, 1931. Class 1.
Steinemann, Violet D., Los Angeles, Calif. Dolls. 283,008; May 12; Serial No. 296,152; published Mar. 3, 1931. Class 22.
Stivers, Theo, Milling Company, Rome, Ga. Wheat flour. 282,986; May 12; Serial No. 307,146; published Feb. 24, 1931. Class 46.
Stowall and Co., San Francisco, Calif. Prophylactic membranous articles for the prevention of contagious diseases. 283,063; May 12; Serial No. 309,320; published Mar. 3, 1931. Class 44.
Styron-Beggs Company, The, Newark, Ohio. Gauze bandages and absorbent cotton. 282,985; May 12; Serial No. 307,068; published Mar. 3, 1931. Class 44.
United States Rubber Company, New York, N. Y. Rubberized fabric. 283,036; May 12; Serial No. 309,446; published Feb. 24, 1931. Class 50.
Van Camp Hardware & Iron Co., Indianapolis, Ind. Lawn grass seed. 283,080; May 12. Class 1.
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Refrigerators. 283,077; May 12. Class 31.
Winthrop Chemical Company, Inc., New York, N. Y. Organic iodine compound. 283,045; May 12; Serial No. 309,493; published Mar. 10, 1931. Class 6.
Wolverine-Empire Refining Company, Inc., Oil City, Pa. Cleaning fluid. 282,982; May 12; Serial No. 308,843; published Mar. 3, 1931. Class 4.
Woolson Spice Company, The, Toledo, Ohio. Blended coffee. 82,828; renewed July 25, 1931.
World's Star Knitting Company, Bay City, Mich. Hosiery and underwear. 283,033; May 12; Serial No. 309,365; published Feb. 24, 1931. Class 39.
Young, Charles W., and Company, assignor to Chas. W. Young & Co., Philadelphia, Pa. Soaps. 82,128; renewed May 30, 1931.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Brinkley, J. R., M. D., Milford, Kans. Sunshine Coffee. For Coffee. 39,087; May 12.
Burgess Battery Company, Madison, Wis. Burgess Straight-Thru Air Compressor Silencer. For Air Compressor Silencers. 39,088; May 12.
Corn & Ware, Calipatria, Calif. Desert Edge. For Fresh Tomatoes. 39,089; May 12.
Doane, William, St. Louis, Mo. Ice Cream No. 041. For Ice Cream. 39,090; May 12.
Doane, William, St. Louis, Mo. Ice Cream No. 042. For Ice Cream. 39,091; May 12.
Doane, William, St. Louis, Mo. Ice Cream No. 043. For Ice Cream. 39,092; May 12.
Doane, William, St. Louis, Mo. Ice Cream No. 044. For Ice Cream. 39,093; May 12.
Douglas Manufacturing Company, Inc., Louisville, Ky. Christmas Tree Tinsel. For Christmas Tree Tinsel. 39,094–5; May 12.
Duncan Coffee Co., Houston, Tex. Early Bird. For Coffee. 39,096; May 12.
Dunn & McCarthy, Inc., Auburn, Ohio. "They Walk softly and go Far." For Shoes. 39,097; May 12.
Frank, L., & Co., Inc., New Orleans, La. American Beauty. For Eggs. 39,098; May 12.
General Health Corporation, Philadelphia, Pa. General Health Nipples. For Nursing Bottle Nipples. 39,099; May 12.
Grissmann, Gus, Company, Inc., New York, N. Y. Carla. For Hosiery. 39,100; May 12.

Gysin, Sebastian, doing business as Modern Health Products, Milwaukee, Wis. Swiss Kriss. For Laxative. 39,101; May 12.
Gysin, Sebastian, doing business as Modern Health Products, Milwaukee, Wis. Slim. For Reducing Tea. 39,102; May 12.
Happiness G. J. Co., Brooklyn, N. Y. Palo-Alo. For Malt Sugar Products. 39,103; May 12.
Hazzard, R. P., Company, Gardiner, Me. "The Hazzard Shoe". For Boxes. 39,104; May 12.
Hoague-Sprague Corporation, Lynn, Mass. La France. For Boxes. 39,105; May 12.
Hoague-Sprague Corporation, Lynn, Mass. Honey. For Boxes. 39,106; May 12.
Hoague-Sprague Corporation, Lynn, Mass. Priscilla. For Boxes. 39,107; May 12.
Hoague-Sprague Corporation, Lynn, Mass. The Helfand Shoe. For Boxes. 39,108; May 12.
Hoague-Sprague Corporation, Lynn, Mass. St. Louis Novelty Shoe Co. For Boxes. 39,109; May 12.
Hoague-Sprague Corporation, Lynn, Mass. Ethel Ettic. For Boxes. 39,110; May 12.
Hoague-Sprague Corporation, Lynn, Mass. Marcelle. For Boxes. 39,111; May 12.
Hoague-Sprague Corporation, Lynn, Mass. Tom Thumb Sport Shoes. For Boxes. 39,112; May 12.
Hoague-Sprague Corporation, Lynn, Mass. The Kay Shoe Co. For Boxes. 39,113; May 12.
Hoague-Sprague Corporation, Lynn, Mass. Simon Weiner. For Boxes. 39,114; May 12.
Hoague-Sprague Corporation, Lynn, Mass. Mary Anne. For Boxes. 39,115; May 12.
Hoague-Sprague Corporation, Lynn, Mass. Mandel Shoe Co. For Boxes. 39,116; May 12.
Huyler's Wholesale Division, Inc., assignor to Huyler's, New York, N. Y. Jewels of Huyler's. For Candy. 39,117; May 12.
Ingersoll, Charles J., Seattle, Wash. Vulcanizing Hot Patch Cement for Torn Auto Tops. For Cement. 39,118; May 12.
Lawrence Baking Company, Lansing, Mich. Booster. For Bread. 39,119; May 12.
Love Nest Products Co., Inc., New York, N. Y. Love Nest. For Coffee. 39,120; May 12.
M & R Dietetic Laboratories, Inc., Columbus, Ohio. "Vita". For Butter. 39,121; May 12.
Modern Health Products. (See Gysin, Sebastian.)
Mora, E., Los Angeles, Calif. Mora's. For Chicken and Egg Noodles. 39,122; May 12.
Plymouth Packing Company, Inc., Plymouth, Wis. Lakeland. For Canned Corn. 39,124; May 12.
Powdered Malt Corporation, The, Lima, Ohio. Cream of Barley Malt. For Barley Malt Powder. 39,123; May 12.
S. M. A. Corporation, Cleveland, Ohio. Protein S. M. A. For Food Product for Infants. 39,125; May 12.
S. M. A. Corporation, Cleveland, Ohio. S. M. A. Concentrated Liquid. For Food Product for Infants. 39,126; May 12.
S. M. A. Corporation, Cleveland, Ohio. S. M. A. For Food Product for Infants. 39,127; May 12.
Schoenhut, A., Company, The, Philadelphia, Pa. Schoenhut's Blox-De-Luxe. For Sets of A. B. C. Blocks. 39,128; May 12.
Selig, Samuel A., doing business as Selig Remedy Company, Detroit, Mich. No-Cid-Ol. For Stomach Medicine. 39,129; May 12.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Handy Andy No. 8. For Plumbing Supplies. 39,130; May 12.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Handy Andy No. 5. For Plumbing Supplies. 39,131; May 12.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Handy Andy No. 1. For Plumbing Supplies. 39,132; May 12.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Handy Andy No. 2. For Plumbing Supplies. 39,133; May 12.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Handy Andy No. 3. For Plumbing Supplies. 39,134; May 12.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Handy Andy No. 4. For Plumbing Supplies. 39,135; May 12.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Handy Andy No. 6. For Plumbing Articles. 39,136; May 12.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Handy Andy No. 7. For Plumbing Supplies. 39,137; May 12.
Spaulding Bakeries, Inc., Binghamton, N. Y. Golden Twist. For Bread. 39,138; May 12.
Sullivan, H. C., doing business as H. C. Sullivan Cannery, Frostproof, Fla. Eversweet. For Grapefruit. 39,139; May 12.
Weyerhaeuser Forest Products, St. Paul, Minn. 4-Square Guide Line Framing. For Lumber. 39,140; May 12.
Whitmore, Christian A., Mercersburg, Pa. Tast-E. For Bread. 39,141; May 12.
Williams, J. B., Company, The, Glastonbury, Conn. William Rayex. For Tonic for the Scalp and Hair. 39,142; May 12.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Central Rock Company, Lexington, Ky. Cenroc. For Agricultural Lime. 13,178; May 12.
Colgate-Palmolive-Peet Company, Chicago, Ill. Palmolive beads. For Palmolive Beads Soap. 13,179; May 12.
Columbia Steel Equipment Co., Philadelphia, Pa. Columbia Steel Equipment Co. For Steel Filing Cabinets. 13,180; May 12.
Cream of Wheat Corporation, The, Minneapolis, Minn. The Farm for us . . . Every time. For Wheat Breakfast Food. 13,181; May 12.
Cream of Wheat Corporation, The, Minneapolis, Minn. "Who'd Trade this for the City?" For Wheat Breakfast Food. 13,182; May 12.
Cream of Wheat Corporation, The, Minneapolis, Minn. "There Stood Billy". For Wheat Breakfast Food. 13,183; May 12.
Cream of Wheat Corporation, The, Minneapolis, Minn. "They'll be fine, Strongmen". For Wheat Breakfast Food. 13,184; May 12.
Cream of Wheat Corporation, The, Minneapolis, Minn. "City Life? Not me!". For Wheat Breakfast Food. 13,185; May 12.
Daggett & Ramsdell, New York, N. Y. Here it is! Ha-kol relieves Headaches Externally. For an External Preparation for Relieving Headaches. 13,186; May 12.
Fox, I. J., Inc., New York, N. Y. It makes a Difference when you buy from the maker. For Fur Coats. 13,187; May 12.
Heinz, H. J., Company, Pittsburgh, Pa. A whole meal in itself delightfully good . . . So inexpensive. For Cooked Spaghetti in Tomato Sauce with Cheese. 13,188; May 12.
Hubinger Company, The, Keokuk, Iowa. The Bath of Beauty. For Starch Powder. 13,189; May 12.
International Paper Company, New York, N. Y. "Paper is the Base of the Job". For Paper. 13,190; May 12.
International Paper Company, New York, N. Y. Paper is the Base of the Job. For Paper. 13,191; May 12.
International Paper Company, New York, N. Y. "Paper is the Base of the Job". For Paper. 13,192; May 12.
National Cigar Stands Company, New York, N. Y. Black and White. For Cigars. 13,193; May 12.
Parva Products Company, Wilmington, Del. Parva Buckle. For Buckles for Overalls and the Like. 13,194; May 12.
Stemar Displays Company, Chicago, Ill. Libby's Pineapple. For Canned Pineapple. 13,195; May 12.
Taylor & Sledd, Inc., Richmond, Va. Taylor & Sledd, Inc. Service. For Canned Herring, Canned Herring Roe, Canned Tomato Juice, Canned Fruit for Salad, Etc. 13,196; May 12.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2. 1907]

Abboloid Novelty Company, Chicago, Ill. Ornamental belt buckles. 310,364; May 12. Class 28.
Abelson, Meyer H., Wilkes-Barre, Pa. Candies. 312,227; May 12. Class 46.
Abramson, Elmer, St. Louis, Mo. Bags. 308,150; May 12. Class 2.
Acco Products, Inc., Long Island City, N. Y. Filing device and filing cabinets. 310,629; May 12. Class 32.
Acme Backing Corporation, Brooklyn, N. Y. Processed fabric, backing material used in the manufacture of laminated fabrics. 310,200; May 12. Class 50.
Afro-Werk Adolf Frost & Co., Taucha, near Leipzig, Germany. Tablets of any kind with peppermint and fruit taste, sugar wares, toffee, etc. 308,001; May 12. Class 46.
Alaska Pacific Salmon Corporation, Seattle, Wash. Canned salmon. 312,356; May 12. Class 46.
Allen, A. E., & Co., Ltd., Nottingham, England. Stockings and socks. 298,560; May 12. Class 39.
Alliance Manufacturing Company, The, Alliance, Ohio. Shears and pruners. 298,263; May 12. Class 28.
Alpha Tank & Sheet Metal Mfg. Co., St. Louis, Mo. Chemical stills, spray water cooling towers, etc. 290,819; May 12. Class 23.
Aluminum Company of America, Pittsburgh, Pa. Collapsible tubes. 312,829; May 12. Class 2.
Ambler Asbestos Shingle & Sheathing Company, Ambler, Pa. Asbestos composition board. 312,469; May 12. Class 12.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

American Electric Company, Inc., Chicago, Ill. Telephone supplies. 311,553; May 12. Class 21.
Araban Coffee Co., Inc., Boston, Mass. Coffee. 312,745; May 12. Class 46.
Aronson-Caplin Company, Inc., New York, N. Y. Slips, bloomers, petticoats, etc. 307,760; May 12. Class 39.
Artzt, Bernard S., doing business as B. S. Laboratories, Philadelphia, Pa. Medicinal treatment for the hair, scalp and tissues of the face and body. 310,704; May 12. Class 6.
B. S. Laboratories. (See Artzt, Bernard S.)
Bailey, Stacy P., New York, N. Y. Dresses, coats, hats, etc. 306,124; May 12. Class 39.
Barksdale, Irving S., doing business as Table Rock Laboratories, Inc., Greenville, S. C. Capsules of copper and iron used in the dietary treatment of anæmia. 312,083; May 12. Class 6.
Beach & Arthur, Inc., Indianapolis, Ind. Paper plates. 312,541; May 12. Class 2.
Beatrice Creamery Company, Chicago, Ill. Butter, eggs, raw cream, and dressed poultry. 307,576; May 12. Class 46.
Beecher-Peck & Lewis, Detroit, Mich. Paper for wrapping meats. 312,941; May 12. Class 37.
Beer & Davies, New York, N. Y. Eggs. 312,972; May 12. Class 46.
Belknap Hardware & Manufacturing Company, Louisville, Ky. Shot guns and rifles. 309,767; May 12. Class 9.
Binney & Smith Company, New York, N. Y. Preparations and compounds for use as accelerators, antioxidants, etc. 312,508; May 12. Class 6.
Birk, Marjorie A., New York, N. Y. Set of natural or artificial hairs, adhesives and adhesive removers adapted for the attachment and removal of said hairs from eyelasbes sold as a unit. 312,834; May 12. Class 40.
Blackstone, Leo, Newark, N. J. Laxative. 311,594; May 12. Class 6.
Bleichrode-Hammerstein Corporation, New York, N. Y. Bathroom fixtures. 312,361; May 12. Class 13.
Bloomer Bros. Company, Newark, N. J. Containers. 312,472; May 12. Class 2.
Blumenthal, Sidney, & Co., Inc., New York, N. Y. Pile fabrics in the piece. 312,509; May 12. Class 42.
Bona Allen, Incorporated, Buford, Ga. Boots and shoes. 311,816; May 12. Class 39.
Bonney Forge & Tool Works, Allentown, Pa. Unions of welded and threaded connections. 312,473; May 12. Class 14.
Botany Worsted Mills, Passaic, N. J. Woolen piece goods. 311,173; May 12. Class 42.
Botany Worsted Mills, Passaic, N. J. Woolen piece goods. 311,175–6; May 12. Class 42.
British Enka Artificial Silk Company Limited, London, England. Imitation straw and horsehair made of cellulose. 311,418; May 12. Class 1.
Brophy, Arthur, Santa Cruz, Calif. Hook for doors. 312,254; May 12. Class 13.
Brown, Sidney W., doing business as Old Gold Ginger Ale Co., Long Beach, Calif. Non-alcoholic beverage. 306,166; May 12. Class 45.
Brown & Williamson Tobacco Corporation, Louisville, Ky. Cigarette paper and cigarette booklets. 312,597; May 12. Class 17.
Bruce, E. L., Company, Memphis, Tenn. Oak flooring. 312,474; May 12. Class 12.
Bruce Products Corporation, Detroit, Mich. Metal cleaning compounds, buffs, polishing wheels, etc. 307,839; May 12. Class 4.
Buffalo Dental Manufacturing Company, Buffalo, N. Y. Dental appliances. 309,458; May 12. Class 44.
Butler Paper Corporations, Chicago, Ill. Paper. 312,510; May 12. Class 37.
California Art Supply Co., Palo Alto, Calif. Art and modeling clay. 300,464; May 12. Class 1.
Cammann Manufacturing Company, Inc., Waltham, Mass. Kitchen appliances for heating, mixing, stirring, and the like. 312,475; May 12. Class 23.
Cape Ann Isinglass Company, Marblehead, Mass. Clarifier for beer. 311,953; May 12. Class 48.
Cappel Furniture Company, The, Dayton, Ohio. Radio receiving sets and loud speakers. 312,330; May 12. Class 21.
Chad Valley Co. Ltd., The, Harborne, England. Paper box files, rubber stamps, hand blotters, etc. 280,693; May 12. Class 37.
Chambers, B. F., doing business as Chambers Laboratories, Blountsville, Ala. Medicinal preparation. 310,637; May 12. Class 6.
Charlotte Chemical Laboratories, Inc., Charlotte, N. C. Cleaning powder. 296,480; May 12. Class 4.
Chemische Fabrik Elsendrath Gesellschaft mit beschränkter Haftung, Mettmann/Rhld, Germany. Pastes, liquids, and powders for polishing shoes, polishing and cleaning preparations for leather, etc. 296,481; May 12. Class 4.
Chum Razor Blade Corp., Detroit, Mich. Razors and razor blades. 312,331; May 12. Class 23.
Cincinnati Wholesale Grocery Company, The, Cincinnati, Ohio. Canned fruits, canned vegetables, rice, etc. 310,251; May 12. Class 46.
Clarkson, Inc., Suffern, N. Y. Cleaning fluid. 303,276; May 12. Class 4.
Cohen, I. & B., Bomzon & Co. Inc., New York, N. Y. Men's outer clothing. 311,823; May 12. Class 39.
Colgate-Palmolive-Peet Company, Chicago, Ill. Dental cream. 310,367; May 12. Class 6.
Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Revolvers. 312,549; May 12. Class 9.
Combustioneer, Inc., Goshen, Ind. Fuel-handling equipment. 306,050–1; May 12. Class 34.
Consolidated Companies, Inc., Plaquemine, La. Canned fruits and vegetables, jellies, pickles, etc. 294,959; May 12. Class 46.
Corbett & North, Inc., New York, N. Y. Wearing apparel. 311,561; May 12. Class 39.
Cortland Line Company, Cortland, N. Y. Fish lines. 312,698; May 12. Class 22.
Crouse-Hinds Company, Syracuse, N. Y. Electrical conduit fittings. 312,699; May 12. Class 21.
Cunningham, Edward P., Incorporated, New York, N. Y. Hats. 311,827; May 12. Class 39.
Daimler-Benz Aktiengesellschaft, Berlin, Germany. Automotive vehicles, parts and accessories, trimming, etc. 288,586; May 12. Class 19.
Dannemiller Grocery Company, The, Canton, Ohio. Canned goods. 308,359–60; May 12. Class 46.
Deutsch Amphibolin-Werke von Robert Murjahn. (See Murjahn, Robert.)
Di Bartolomeo, Antonio, Camden, N. J. Maltless beverage. 307,657; May 12. Class 45.
Dobbs & Co., New York, N. Y. Hats. 310,935; May 12. Class 39.
Dobbs & Co., New York, N. Y. Hats. 312,333; May 12. Class 39.
Dorr Company, The, New York, N. Y. Apparatus for the treatment of solids suspended in liquids, clarifiers for sewage, pumps, etc. 312,334; May 12. Class 23.
Drink-Apep Company. (See Pettit & Whitacre, Inc.)
Dubois Products & Cold Storage Company, Dubois, Pa. Malt syrup. 312,419; May 12. Class 46.
Dun, M. K., Inc., New York, N. Y. Shoes. 311,829; May 12. Class 39.
Durex Abrasives Corporation, Jersey City, N. J. Abrasives. 311,866; May 12. Class 4.
Eddystone Cement Corp., New York, N. Y. Cement. 310,977; May 12. Class 12.
Elish, Harry, Paper Company, New York, N. Y. Gummed paper. 309,680; May 12. Class 37.
Elite Perfume Shop, doing business as Niktarf Cie., Brooklyn, N. Y. Powders, rouges, cold cream, etc. 311,057; May 12. Class 6.
Eskimo Pie Corporation, doing business through its subsidiary, New York Eskimo Pie Corporation, Louisville, Ky. Ice cream and candy confection. 303,600; May 12. Class 46.
Esterbrook Steel Pen Manufacturing Company, The, Camden, N. J. Pens. 312,984; May 12. Class 37.
Eton Products, Inc., Newark, N. J. Pharmaceutical mouth wash. 312,126; May 12. Class 6.
Eureka Metal Products Corporation, Buffalo, N. Y. Cable clamps. 311,914; May 12. Class 13.
Eyetex Company, Chicago, Ill. Medicated fabric pad suitable to cover the eyes as a compress. 309,583; May 12. Class 44.
Faehndrich, William, Inc., New York, N. Y. Cheese. 312,843–4; May 12. Class 46.
Feitus, A. M., jr., Vicksburg, Miss. Golf balls for miniature golf courses. 312,127; May 12. Class 22.
Fiege Company, The, Green Bay, Wis. Cable and wire rope end clamps and turnbuckle assemblies. 311,868; May 12. Class 13.
Fintex Corporation, The, Cleveland, Ohio. Men's clothing. 311,869; May 12. Class 39.
Firestone Battery Company, Akron, Ohio. Spark plugs. 311,133; May 12. Class 21.
Fischer's Surfa-Saver, Inc., Cincinnati, Ohio. Soap. 311,603; May 12. Class 4.
Flagler Co., The, Atlanta, Ga. Chemical for treating timber. 311,654; May 12. Class 6.
France Manufacturing Company, The, Cleveland, Ohio. Ozone generators. 308,499; May 12. Class 21.
Gaede Silk Dyeing Company, Paterson, N. J. Piece dyed goods. 311,271; May 12. Class 42.
General Dry Batteries, Inc., Cleveland, Ohio. Electric batteries. 311,570; May 12. Class 21.
General Dry Batteries, Inc., Cleveland, Ohio. Electric batteries. 312,558; May 12. Class 21.
General Dyestuff Corporation, New York, N. Y. Dyes and dyestuffs. 312,559; May 12. Class 6.
George, Benjamin B., Cincinnati, Ohio. Cooked icing. 312,246; May 12. Class 46.
Germania Tea Company, Minneapolis, Minn. Medicines. 311,095; May 12. Class 6.
Globe American Corporation, Kokomo, Ind. Brooders. 312,642; May 12. Class 50.
Gordon, Harry R., doing business as The Harry R. Gordon Co., Inc., New York, N. Y. Sugar and prepared flour. 308,887; May 12. Class 46.
Grand Rapids Cabinet Company, Grand Rapids, Mich. Refrigerator cabinets. 313,082; May 12. Class 31.
Gray, Dorothy, Bloomfield, N. J., and New York, N. Y. Filled compacts. 309,468; May 12. Class 6.
Gray, Dorothy, Bloomfield, N. J., and New York, N. Y. Filled compacts. 309,471; May 12. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Great Lakes Aircraft Corporation, Cleveland Ohio. Airplanes. 312,213; May 12. Class 19.
Greenfield Tap and Die Corporation, Greenfield, Mass. Bit trace tools, bolt cutters, horseshoers' buttresses, etc. 312,427; May 12. Class 23.
Gummed Products Company, The, Troy, Ohio. Gummed paper and fabric tapes. 309,587; May 12. Class 37.
Gwaltney, P. D., Jr., & Co., Inc., Smithfield, Va. Cured meats. 308,202; May 12. Class 46.
Hachmeister-Lind Company, McKees Rocks, Pa. Incandescent electric-lamp bulbs. 311,726; May 12. Class 21.
Hagan Corporation, Pittsburgh, Pa. Chemical for treating steam boiler water. 307,716; May 12. Class 6.
Hair Net Packers, Inc., New York, N. Y. Hair nets. 306,720; May 12. Class 42.
Hale and Shook, Long Beach, Calif. Pile ointment and salve. 312,050; May 12. Class 6.
Handy Andy Specialty Co., Inc., Long Island City, N. Y. Fruit juice extractors. 307,162; May 12. Class 23.
Hardsoog Manufacturing Co., Ottumwa, Iowa. Electric drills and mining bits and bit teeth. 312,003; May 12. Class 21.
Harshaw Chemical Company, The, Cleveland, Ohio. Chocolate flavored food preparations. 311,334; May 12. Class 46.
Hemmerdinger, J. H., & Son, Inc., Brooklyn, N. Y. Shoe soles. 311,684; May 12. Class 39.
Herff-Jones Co., Indianapolis, Ind. Golf tee holder. 311,407; May 12. Class 22.
Hill, Hattie van Esther, doing business as Van Esther Beauty Shoppe, Cleveland, Ohio. Face creams, hair oils and growers, etc. 300,197; May 12. Class 6.
Hilson, Myrtle M., doing business as Pino Mfg. Co., Seattle, Wash. Sirup. 307,000; May 12. Class 45.
Holloway, M. J., & Company, Chicago, Ill. Candy bars. 310,865; May 12. Class 46.
Hollywood Products Company, Ltd., Glendale, Hollywood, and Los Angeles, Calif. Beverages and syrups, extracts, and concentrates for preparing the same. 312,914; May 12. Class 45.
Homan & Biehl, Chicago, Ill. Paper covers for closet seats. 304,200; May 12. Class 37.
Hopper Paper Company, Taylorville, Ill. Writing paper. 312,881; May 12. Class 37.
Hydropel Process Company, Boston, Mass. Waterproofed fabrics. 312,884; May 12. Class 50.
Johnson, Ross H., doing business as Johnson Products, Inc., Indianapolis, Ind. Golf tees. 312,919; May 12. Class 22.
Jordan, Carrie E., Muncie, Ind. Medicines. 311,380; May 12. Class 6.
Keller, Chas. F., doing business as The Keller Company, Mechanicsburg, Ohio. Diuretic in tablet form. 312,153; May 12. Class 6.
Kemet Laboratories Company, Inc., New York, N. Y. Metals and/or alloys. 304,919; May 12. Class 14.
King Features Syndicate, Inc., New York, N. Y. Cartoon strip. 311,686; May 12. Class 38.
Kirkman Engineering Corporation, New York, N. Y. Electrical fuses. 310,941; May 12. Class 21.
Koeppen, Ernst, Carlstadt, N. J. Kitchen utensils. 312,711; May 12. Class 13.
Kold Kub Company, Dallas, Tex. Frozen confections. 302,903; May 12. Class 46.
Kraft-Phenix Cheese Corporation, Chicago, Ill. French dressing, mayonnaise, etc. 298,402; May 12. Class 46.
Kresge Department Store Corporation, Newark, N. J. Men's clothing. 311,481; May 12. Class 39.
Krim, Max, doing business as Krim Beverage Company, Lebanon, Pa. Maltless beverages and syrups and extracts for making the same. 307,499; May 12. Class 45.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Canned soups, relishes, spices, etc. 279,480; May 12. Class 46.
Kurtain Krisp Co. (See McDonald, O. G.)
Kurz, H. C., A. G., Nuremberg, Germany. Lead pencils, crayons, slate pencils, etc. 312,808; May 12. Class 37.
Lake Publishing Company, Gary, Ind. Booklets of word puzzles. 307,780; May 12. Class 38.
Lambert Marketing Company, Sacramento, Calif. Fresh vegetables. 312,920; May 12. Class 46.
Langlois, New York. (See United Drug Company.)
Larkin Specialty Manufacturing Co., San Francisco, Calif. Smokers' articles. 297,809; May 12. Class 8.
Larkin Specialty Manufacturing Co., San Francisco, Calif. Smokers' articles. 297,810; May 12. Class 8.
Lawrence Products Company, Inc., Kelso and Seattle, Wash., and Los Angeles, Calif. Antiseptic germicide. 311,615; May 12. Class 6.
Legg, A. C., Packing Co. Inc., Birmingham, Ala. Seasoning for sausages, meats, or other foods. 311,840; May 12. Class 46.
Lockstrip Manufacturing Corporation, Long Island City, N. Y. Dividing strips. 312,346; May 12. Class 12.
Lundholm, Carl H., Stockholm, Sweden. Parachutes, parachute casings, and harnesses for parachutes. 310,771; May 12. Class 19.
Luroks Chemical Co., Philadelphia, Pa. Washing preparation. 312,012; May 12. Class 4.
Magazine Antiques, Inc., The, New York, N. Y. Magazine. 312,442; May 12. Class 38.
Marshall Field & Company, Chicago, Ill. Handkerchiefs. 312,258; May 12. Class 42.
Martin Bros., Inc., Yardville, N. J. Concrete building blocks. 311,639; May 12. Class 12.
Mayam Limited, London, England. Chewing gum. 310,344; May 12. Class 46.
Mayer, William C., Jefferson, Wis. Golf game. 312,056; May 12. Class 22.
McDonald, O. G., doing business as Kurtain Krisp Co., Detroit, Mich. Canned fluids, composed of oxidized bituminous materials, to make fibers of curtains firmer and stronger. 309,544; May 12. Class 6.
McIlhenny Company, New Iberia, La. Pepper sauce. 312,658; May 12. Class 46.
Menasha Products Company, The, Chicago, Ill. Paper napkins. 305,232; May 12. Class 37.
Milton-Byron Company, Dayton, Ohio. Salve for the treatment of colds. 312,444; May 12. Class 6.
Ming, Inc., New York, N. Y. Tea. 312,764; May 12. Class 46.
Murjahn, Robert, doing business as Deutsch Amphibolin-Werke von Robert Murjahn, Ober Ramstedt, Germany. Paints and painter's size. 309,619; May 12. Class 16.
National Carbon Coated Paper Company, The, Sturgis, Mich. Writing paper. 312,998; May 12. Class 37.
National Malleable and Steel Castings Company, Cleveland, Ohio. Radio loud speakers, choke coils and electromagnets. 296,491; May 12. Class 21.
National Union Radio Corporation, Newark, N. J. Radio electron tubes. 310,943; May 12. Class 21.
Natox Hygienic Laboratories, Brooklyn, N. Y. Preparation for oral hygiene. 309,049; May 12. Class 6.
New York Eskimo Pie Corporation. (See Eskimo Pie Corporation.)
Niktarf Cie. (See Elite Perfume Shop.)
Norfolk Paint & Varnish Company, Quincy and Atlantic, Mass. Paints. 302,871; May 12. Class 16.
Norris, Perry E., doing business as Norris Products, Chicago, Ill. Finish and color restorer. 311,620; May 12. Class 6.
Old Gold Ginger Ale Co. (See Brown, Sidney W.)
Ozark Smelting & Mining Company, The, Cleveland, Ohio. Paint pigments. 312,490; May 12. Class 16.
Package Paper Company, Holyoke, Mass. Lace reproductions on transparent paper or paper substitutes. 304,628; May 12. Class 37.
Paraffine Companies, Inc., The, San Francisco, Calif. Paint. 297,764; May 12. Class 16.
Paramount Pen Co., Inc., Weehawken, N. J. Fountain pens and pencils. 312,236; May 12. Class 37.
Penney, J. C., Company, Wilmington, Del., and New York, N. Y. Hats. 310,528; May 12. Class 39.
Pettit & Whitacre, Inc., doing business as Drink-Apep Company, North Merchantville, N. J. Herb drink or tonic. 311,485; May 12. Class 45.
Phi Lambda Upsilon, Tucson, Ariz. Keys and badges of precious metal. 312,492; May 12. Class 28.
Pillsbury Flour Mills Company, Minneapolis, Minn. Wheat flour. 310,068–9; May 12. Class 46.
Pino Mfg. C. (See Hilson, Myrtle M.)
Plant Rubber & Asbestos Works, San Francisco, Calif. Thermal insulating materials and pipe coverings. 312,239; May 12. Class 12.
Pollak, Henry, Inc., New York, N. Y. Felt hats, untrimmed. 307,108; May 12. Class 39.
Pollak, Henry, Inc., New York, N. Y. Felt hats, untrimmed. 307,110; May 12. Class 39.
Powell, Richard C., Princeton, N. J. Processed material. 312,220; May 12. Class 12.
Prince Lanten Corp., New York, N. Y. Cotton fabrics. 311,157; May 12. Class 42.
Pulitzer Publishing Company, St. Louis, Mo. Column or section of a newspaper. 300,298; May 12. Class 38.
Republic Carbon Company, Niagara Falls, N. Y. Electrodes. 310,883; May 12. Class 21.
Rhinehardt, Frank M., Badin, N. C. Soaps. 311,932; May 12. Class 4.
Riverside Heights Orange Growers Association, Riverside, Calif. Fresh citrus fruits. 279,238; May 12. Class 46.
Roesing, John, Chicago, Ill. Whiskey. 313,005; May 12. Class 49.
Roset Phar. Co., not inc., Chicago, Ill. Pharmaceutical preparation. 312,454; May 12. Class 6.
Ross, Sydney, Co., The, Newark, N. J. Toilet soap. 306,066; May 12. Class 4.
Rotoprint Gravure Co., Inc., Jamaica, N. Y. Periodical publication. 310,189; May 12. Class 38.
Royal Manufacturing Company, Toledo, Ohio. Golf clubs and balls. 312,666; published May 12. Class 22.
Sanford, William W., doing business as Sanford Company, Binghamton, N. Y. Inhalant. 310,260; May 12. Class 6.
Sauer, Friedrich, G. m. b. H., Gotha, Germany. Yeast preparations. 308,392; May 12. Class 46.
Savignon, Henri, Boussard Freres et Dieux, Societe en nom Collectif, Paris, France. Unfermented grape juice. 312,374; May 12. Class 45.

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PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Savignon, Henri, Boussard Freres et Dieux Societe en nom Collectif, Paris, France. Wines. 312,375; May 12. Class 47.
Schroeder, Arthur F., doing business as A. F. Schroeder Oil Co., Milwaukee, Wis. Lubricating oils and greases. 312,458; May 12. Class 15.
Simon Millinery Supply Company, San Francisco, Calif. Hats. 305,055–6; May 12. Class 39.
Societe Cadolle Freres, Paris, France. Perfumery and toilet preparations. 307,744; May 12. Class 6.
Southern Oak Flooring Industries, Little Rock, Ark. Flooring. 312,205; May 12. Class 12.
Standard Overall Company, The, Baltimore, Md. Shirts, overalls, and pants. 311,983; May 12. Class 39.
Steam and Combustion Company, Chicago, Ill. Burners, such as gas burners, oil conversion burners, etc. 303,220; May 12. Class 34.
Steinway & Sons, New York, N. Y. Pianos. 311,347; May 12. Class 36.
Stoddard, G. S., & Co., Inc., New York, N. Y. Analgesic and hypnotic. 312,777; May 12. Class 6.
Stramberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radio receiving sets and parts, supplies, etc., for talking machines, etc. 308,911; May 12. Class 21.
Sullivan Machinery Company, Boston, Mass., and Chicago, Ill. Portable electric plants. 312,506; May 12. Class 21.
Sullivan Machinery Company, Boston, Mass., and Chicago, Ill. Moisture proof cables or conductors. 312,569; May 12. Class 21.
Table Rock Laboratories, Inc. (See Barksdale, Irving S.)
Thomas, Jenny S., Philadelphia, Pa. Tissue and cleansing cream, rouge, muscle oil, etc. 312,501; May 12. Class 6.
Thread Mills Company, The, Monticello, Ind. Thread and yarn. 312,165; May 12. Class 43.
United Drug Company, doing business as Langlois, New York, Boston, Mass. Toilet soap. 312,674; May 12. Class 4.
United Plywood Corporation, New Albany, Ind. Pre-finished flooring and plywood. 311,544; May 12. Class 12.
Universal Full Fashioned Hosiery Co., Inc., Paterson, N. J. Hosiery. 311,453; May 12. Class 39.
Van Esther Beauty Shoppe. (See Hill, Hattie V. E.)
Verellen Limited, Antwerp, Belgium. Cigars, cigarillos, cigarettes, and tobacco. 309,910; May 12. Class 17.
Visco-Ment Corporation, Chicago, Ill. Asphalt. 312,395; May 12. Class 12.
Vitelli & Company, New York, N. Y. Canned peeled tomatoes and canned tomato sauce. 311,807; May 12. Class 46.
West Coast Grocery Company, Tacoma, Wash. Canned fruits, canned vegetables, food flavoring extracts, etc. 311,809; May 12. Class 46.
White Star Refining Company, Detroit, Mich. Storage Batteries. 303,931; May 12. Class 21.
Wile, Julius, Sons & Co., New York, N. Y. Canned and bottled anchovies, artichokes, asparagus, etc. 305,152; May 12. Class 46.
Wittel, William F., Irvington, N. J. Fences and parts thereof. 312,278; May 12. Class 13.
Wright, Wm. E., & Sons Company, Orange, N. J. Bias fold tapes and trimmings. 295,591; May 12. Class 40.
Yordonoff, Nicholas D., doing business as Yordonoff Medicine Company, Waterloo, Iowa. Preparation for the treatment of asthma, bronchitis, etc. 311,858; May 12. Class 6.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Chamois skin. Jos. Niebaus Company. 283,051; May 12; Serial No. 309,697; published Feb. 24, 1931.
Clay-like and other minerals. Intercity Development Corporation. 283,009; May 12; Serial No. 296,870; published Feb. 24, 1931.
Coal. G. F. Eichenlaub. 283,075; May 12.
Coal. Stearns Coal & Lumber Company. 283,055–7; May 12; Serial Nos. 309,748–50; published Feb. 24, 1931.
Coal and coke. Banská-A Hutní Spolecnost. 283,052; May 12; Serial No. 309,707; published Feb. 24, 1931.
Coal and coke. Banská-A Hutní Spolecnost. 283,053; May 12; Serial No. 309,713; published Feb. 24, 1931.
Granite. E. E. Barringer. 283,068; May 12.
Leather, manufactured and dressed. A. J. Baker Co. 282,983; May 12; Serial No. 308,920; published Feb. 24, 1931.
Leather, Sole. Chavin & Berman. 282,972; May 12; Serial No. 307,930; published Feb. 24, 1931.
Resins. E. I. Dupont de Nemours and Company. 283,059; May 12; Serial No. 309,923; published Feb. 24, 1931.
Sand. Child-Health Sand Co. 283,011; May 12; Serial No. 300,469; published Feb. 24, 1931.
Seed, Lawn grass. Van Camp Hardware & Iron Co. 283,080; May 12.

CLASS 2

Wrappers and protectors, Bottle. J. A. Pipkin. 288,078; May 12.

CLASS 3

Trunks and hand luggage. Belber Trunk & Bag Company. 283,023; May 12; Serial No. 305,690; published Feb. 24, 1931.

CLASS 4

Cleaner. E. D. Ramsey. 283,010; May 12; Serial No. 298,714; published Aug. 12, 1930.
Cleaning fluid. Wolverine-Empire Refining Company. 282,982; May 12; Serial No. 308,843; published Mar. 3, 1931.
Cleaning preparation. M. Feinberg. 283,064; May 12; Serial No. 309,338; published Mar. 3, 1931.
Soap. Holman Soap Company. 282,990; May 12; Serial No. 309,779; published Mar. 3, 1931.
Soap. Procter & Gamble Company. 282,975; May 12; Serial No. 308,126; published Mar. 3, 1931.
Soap, Pumice. Klenit Corporation. 283,054; May 12; Serial No. 309,737; published Feb. 24, 1931.
Soaps. Charles W. Young and Company. 82,128; renewed May 30, 1931.

CLASS 6

Iodine compound, Organic. Winthrop Chemical Company. 283,045; May 12; Serial No. 309,493; published Mar. 10, 1931.
Medicinal preparation. J. R. Ayers. 283,067; May 12.

CLASS 8

Receptacles for cigars, cigarettes, and tobacco other than pouches. Elgin American Manufacturing Co. 283,018; May 12; Serial No. 302,461; published Feb. 24, 1931.
Snuffers. J. H. Black. 283,029; May 12; Serial No. 309,117; published Feb. 24, 1931.

CLASS 14

Iron and steel alloys, castings, forgings, etc. Sivyer Steel Castings Co. 283,017; May 12; Serial No. 301,765; published Feb. 24, 1931.
Metal castings and forgings, Rough and semifinished. General Steel Castings Corporation. 282,968; May 12; Serial No. 307,486; published Feb. 24, 1931.
Metal products. American Metal Company (Limited). 283,049; May 12; Serial No. 309,629; published Feb. 24, 1931.
Wires and rods for soldering and welding purposes. "Griesogen" Griesheimer Autogen Verkaufs-Gesellschaft m. b. H. 283,050; May 12; Serial No. 309,683; published Feb. 24, 1931.

CLASS 16

Chemical Product. I. G. Farbenindustrie Aktiengesellschaft. 283,022; May 12; Serial No. 305,433; published Mar. 3, 1931.
Enamels, paint. Brininstool Paint Co. 283,013; May 12; Serial No. 291,318; published Mar. 3, 1931.
Paint, Flat wall. Great Lakes Varnish Works Inc. 283,040; May 12; Serial No. 306,351; published Nov. 18, 1930.

CLASS 19

Boats. J. R. Schalk. 283,071; May 12.

CLASS 20

Floor covering, hard-surfaced. Armstrong Cork Company. 282,993; May 12; Serial No. 310,241; published Mar. 3, 1931.
Floor coverings, felt-base. Armstrong Cork Company. 282,991; May 12; Serial No. 310,239; published Mar. 3, 1931.
Linoleum. Armstrong Cork Company. 282,992; May 12; Serial No. 310,240; published Mar. 3, 1931.

CLASS 22

Dolls. V. D. Steinemann. 283,008; May 12; Serial No. 296,152; published Mar. 3, 1931.
Games. Milton Bradley Company. 283,007; May 12; Serial No. 310,205; published Mar. 3, 1931.
Golf game. Oxford Corporation. 282,974; May 12; Serial No. 308,124; published Mar. 3, 1931.
Punch card. R. S. Cooney. 282,998; May 12; Serial No. 309,463; published Mar. 3, 1931.
Tinsel. George Franke Sons Company. 283,065; May 12; Serial No. 310,218; published Mar. 3, 1931.

CLASS 23

Machines for applying labels to the body of bottles and the like. National Labeling Machine Co. 283,012; May 12; Serial No. 276,897; published Aug. 6, 1929.
Road building machinery. La Plant-Choate Manufacturing Co. 288,074; May 12.

CLASS 27

Clocks and watches. Reiner & Berkow, Inc. 283,026; May 12; Serial No. 305,791; published Feb. 24, 1931.

CLASS 29

Brooms and mops. Stametco Broom & Mfg. Co. Inc. 282,976; May 12; Serial No. 308,495; published Feb. 24, 1931.
Mops. Parker-Regan Corporation. 283,048; May 12; Serial No. 309,592; published Feb. 24, 1931.
Powder puffs and absorbent powder puffs. D. Gray. 283,046; May 12; Serial No. 309,469; published Feb. 24, 1931.

CLASS 31

Refrigerator cabinets and mechanical refrigerating apparatus. Kelvinator Corporation. 282,989; May 12; Serial No. 309,736; published Mar. 3, 1931.
Refrigerators. Westinghouse Electric & Manufacturing Company. 283,077; May 12.
Solid material having selective adsorptive properties, Finely-divided. Industrial Chemical Sales Company. 283,019; May 12; Serial No. 303,570; published Mar. 3, 1931.

CLASS 33

Glass. Pressed Prism Plate Glass Company. 282,997; May 12; Serial No. 309,211; published Feb. 24, 1931.

CLASS 34

Acetylene lights, welding and cutting torches, acetylene generators, and tips, Portable. Alexander Milburn Company. 283,079; May 12.

CLASS 39

Bloomers and panties and men's underwear. F. M. Hunter. 283,047; May 12; Serial No. 309,524; published Feb. 24, 1931.
Hosiery. Burson Knitting Company. 283,082; May 12.
Hosiery and underwear. World's Star Knitting Company. 283,033; May 12; Serial No. 309,365; published Feb. 24, 1931.

CLASS 42

Linens, Decorative and embroidered. Ellison & Spring, Inc. 282,980; May 12; Serial No. 308,725; published Feb. 24, 1931.

CLASS 43

Metallic lame or lahn in the form of thread. Arles Company. 283,015; May 12; Serial No. 301,086; published Feb. 24, 1931.
Thread, Sewing. Providence Thread Co. Inc. 283,066; May 12; Serial No. 310,412; published Mar. 3, 1931.
Threads and yarns, Artificial silk. I. G. Farbenindustrie Aktiengesellschaft. 283,001; May 12; Serial No. 309,728; published Mar. 3, 1931.
Yarn, Rayon. Industrial Rayon Corporation. 283,005; May 12; Serial No. 310,129; published Mar. 3, 1931.
Yarns. T. Buettner & Co. Inc. 282,996; May 12; Serial No. 309,185; published Mar. 3, 1931.

CLASS 44

Bandages and absorbent cotton, Gauze. Styron-Beggs Company. 282,985; May 12; Serial No. 307,068; published Mar. 3, 1931.
Prophylactic membranous articles. Stowall and Co. 283,063; May 12; Serial No. 309,320; published Mar. 3, 1931.
Surgical and abdominal belts and hip reducers. Ohio Truss Company. 283,041; May 12; Serial No. 306,658; published Mar. 3, 1931.
Syringes, Irrigators, and pessaries, Vaginal. F. W. E. Spardel. 283,061; May 12; Serial No. 309,097; published Mar. 3, 1931.
Teeth, Artificial. Dentists' Supply Company of New York. 282,988; May 12; Serial No. 309,581; published Mar. 3, 1931.

CLASS 45

Grape juice. Grape Products, Incorporated. 282,994; May 12; Serial No. 310,376; published Mar. 3, 1931.
Grape juice. Grape Products, Incorporated. 282,995; May 12; Serial No. 310,445; published Mar. 3, 1931.

CLASS 46

Alimentary pastes. Gragnano Products, Inc. 283,072; May 12.
Bread. M. Engelmeyer. 283,021; May 12; Serial No. 304,130; published Feb. 24, 1931.
Bread, rolls, cake, etc. Davidson Baking Co. 283,035; May 12; Serial No. 309,418; published Feb. 24, 1931.
Candies. Hawley & Hoops. 282,979; May 12; Serial No. 308,626; published Mar. 3, 1931.
Candies. Mason, Au & Magenheimer Manufacturing Company. 283,028; May 12; Serial No. 295,034; published Mar. 3, 1931.
Candies. M. Samter. 282,978; May 12; Serial No. 308,518; published Mar. 3, 1931.
Candies, nuts, and confectionery. Fla-Vo-Krisp Company. 283,062; May 12; Serial No. 309,310; published Mar. 3, 1931.
Candy. Morris Candy Co. 283,042; May 12; Serial No. 306,824; published Mar. 3, 1931.
Candy. H. C. Oaks. 283,073; May 12.
Canned citrus fruit. Florida Canners, Inc. 283,044; May 12; Serial No. 306,946; published Mar. 3, 1931.
Canned fruits, canned vegetables, cider vinegar, etc. C. H. Musselman Company. 282,977; May 12; Serial No. 308,513; published Feb. 24, 1931.
Canned grapefruit. Hills Brothers Company. 283,060; May 12; Serial No. 309,077; published Feb. 3, 1931.
Canned sauerkraut, dill pickles, sauerkraut juice, etc. J. J. Scherer Sons Co. 283,027; May 12; Serial No. 305,942; published Feb. 24, 1931.
Canned shrimp. Mexican Gulf Packing Co. 283,024; May 12; Serial No. 305,717; published Mar. 3, 1931.
Celery, Fresh. Palmer Corporation. 283,003–4; May 12; Serial Nos. 309,933–4; published Mar. 3, 1931.
Chickens, Live baby. Pioneer Hatchery, Inc. 283,000; May 12; Serial No. 309,593; published Mar. 3, 1931.
Chocolate caramels. E. S. Lockwood. 282,981; May 12; Serial No. 308,797; published Mar. 3, 1931.
Coffee, Blended. Woolson Spice Company. 82,823; renewed July 25, 1931.
Cookies. H. S. Lenell. 282,987; May 12; Serial No. 308,992; published Feb. 24, 1931.
Fish products. Laschinger & Meinhardt, Inc. 283,002; May 12; Serial No. 309,897; published Mar. 3, 1931.
Flavors. Polak & Schwarz. 283,016; May 12; Serial No. 301,502; published Feb. 24, 1931.
Flour. Acme-Evans Company. 282,971; May 12; Serial No. 307,913; published Feb. 24, 1931.
Flour, Wheat. Gallatin Valley Milling Co. 282,970; May 12; Serial No. 307,146; published Feb. 24, 1931.
Flour, Wheat. Theo Stiyers Milling Company. 282,986; May 12; Serial No. 301,146; published Feb. 24, 1931.
Frankfurters. Oscar Mayer & Co. Inc. 282,967; May 12; Serial No. 295,950; published June 3, 1930.
Fruits, vegetables, and nuts, Fresh deciduous. Penn Fruit Company. 283,014; May 12; Serial No. 292,417; published Feb. 24, 1931.
Game and poultry foods. Gaybird, Limited. 283,089; May 12; Serial No. 306,179; published Feb. 24, 1931.
Jams. R. Stanowitz. 283,076; May 12.
Mixture containing flour and other ingredients. Mrs. Bain. 283,025; May 12; Serial No. 305,775; published Feb. 24, 1931.
Olive oil. Conti Products Corp. 282,973; May 12; Serial No. 307,924; published Feb. 24, 1931.
Olives, bottled cherries, stuffed figs, and stuffed dates. B. M. Reeves Co. 282,969; May 12; Serial No. 307,735; published Feb. 24, 1931.
Peas, beans, and lentils. Great Atlantic & Pacific Tea Company. 283,006; May 12; Serial No. 310,201; published Mar. 3, 1931.
Pickle relishes, peanut butter, salad dressings, etc. Best Foods, Inc. 283,081; May 12.
Poultry and eggs, Dressed. Red River Valley Produce Co. 282,984; May 12; Serial No. 308,954; published Feb. 24, 1931.
Pretzels. Quinlan Pretzel Company. 283,031–2; May 12; Serial Nos. 309,853–4; published Feb. 24, 1931.
Rolls. Continental Baking Company. 283,088; May 12; Serial No. 306,053; published Feb. 24, 1931.
Stock and poultry feed. General Mills, Inc. 283,043; May 12; Serial No. 306,847; published Feb. 24, 1931.
Syrups, Malt. Rainier Brewing Company. 283,030; May 12; Serial No. 309,212; published Feb. 24, 1931.
Syrups, Flavoring. H. Baron & Co. 283,034; May 12; Serial No. 309,869; published Feb. 24, 1931.
Tea and coffee. Standard Brands Incorporated. 282,999; May 12; Serial No. 309,535; published Mar. 3, 1931.
Vegetables, Fresh. E. E. Harden Packing Company. 283,069–70; May 12.

CLASS 50

Closures or caps, Bottle and jar. Armstrong Cork Company. 283,037; May 12; Serial No. 309,455; published Feb. 24, 1931.
Fabric, Rubberized. United States Rubber Company. 283,036; May 12; Serial No. 309,446; published Feb. 24, 1931.
Felt. Griswoldville Manufacturing Company. 288,038; May 12; Serial No. 309,812; published Feb. 24, 1931.
Matting, Rubber. J. C. Flanagan. 283,020; May 12; Serial No. 303,687; published Feb. 24, 1931.

ALPHABETICAL LIST OF LABELS

American Beauty. For Eggs. L. Frank & Co. 39,098; May 12.
Booster. For Bread. Lawrence Baking Company. 39,119; May 12.
Burgess Straight-Thru Air Compressor Silencer. For Air Compressor Silencers. Burgess Battery Company. 39,088; May 12.
Carla. For Hosiery. Gus Grissmann Company. 39,100; May 12.
Christmas Tree Tinsel. For Christmas Tree Tinsel. Douglas Manufacturing Company. 39,094–5; May 12.
Cream of Barley Malt. For Barley Malt Powder. Powdered Malt Corporation. 39,123; May 12.
Desert Edge. For Fresh Tomatoes. Corn & Ware. 39,089; May 12.
Early Bird. For Coffee. Duncan Coffee Co. 39,096; May 12.
Ethel Ettic. For Boxes. Hoague-Sprague Corporation. 39,110; May 12.
Eversweet. For Grapefruit. H. C. Sullivan. 39,139; May 12.
4-Square Guide Line Framing. For Lumber. Weyerhaeuser Forest Products. 39,140; May 12.
General Health Nipples. For Nursing Bottle Nipples. General Health Corporation. 39,099; May 12.
Golden Twist. For Bread. Spaulding Bakeries, Inc. 39,138; May 12.
Handy Andy No. 1. For Plumbing Supplies. J. A. Sexauer Mfg. Co. 39,132; May 12.
Handy Andy No. 2. For Plumbing Supplies. J. A. Sexauer Mfg. Co. 39,133; May 12.
Handy Andy No. 3. For Plumbing Supplies. J. A. Sexauer Mfg. Co. 37,134; May 12.
Handy Andy No. 4. For Plumbing Supplies. J. A. Sexauer Mfg. Co. 39,135; May 12.
Handy Andy No. 5. For Plumbing Supplies. J. A. Sexauer Mfg. Co. 39,131; May 12.
Handy Andy No. 6. For Plumbing Articles. J. A. Sexauer Mfg. Co. 39,136; May 12.
Handy Andy No. 7. For Plumbing Supplies. J. A. Sexauer Mfg. Co. 39,137; May 12.
Handy Andy No. 8. For Plumbing Supplies. J. A. Sexauer Mfg. Co. 39,130; May 12.
Honey. For Boxes. Hoague-Sprague Corporation. 39,106; May 12.
Ice Cream No. 041. For Ice Cream. W. Doane. 39,090; May 12.
Ice Cream No. 042. For Ice Cream. W. Doane. 39,091; May 12.
Ice Cream No. 043. For Ice Cream. W. Doane. 39,092; May 12.
Ice Cream No. 044. For Ice Cream. W. Doane. 39,093; May 12.
Jewels of Huyler's. For Candy. Huyler's Wholesale Division, Inc. 39,117; May 12.
La France. For Boxes. Hoague-Sprague Corporation. 39,105; May 12.
Lakeland. For Canned Corn. Plymouth Packing Company. 39,124; May 12.
Love Nest. For Coffee. Love Nest Products Co. 39,120; May 12.
Mandel Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,116; May 12.
Marcelle. For Boxes. Hoague-Sprague Corporation. 39,111; May 12.
Mary Anne. For Boxes. Hoague-Sprague Corporation. 39,115; May 12.
Mora's. For Chicken and Egg Noodles. E. Mora. 39,122; May 12.
No-Cld-Ol. For Stomach Medicine. S. A. Selig. 39,129; May 12.
Palo-Alo. For Malt Sugar Products. Happiness G. J. Co. 39,103; May 12.
Priscilla. For Boxes. Hoague-Sprague Corporation. 39,107; May 12.
Protein S. M. A. For Food Product for Infants. S. M. A. Corporation. 39,125; May 12.
S. M. A. For Food Product for Infants. S. M. A. Corporation. 39,127; May 12.
S. M. A. Concentrated Liquid. For Food Product for Infants. S. M. A. Corporation. 39,126; May 12.
St. Louis Novelty Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,109; May 12.
Schoenhut's Blox-De-Lux. For Sets of A. B. C. Blocks. A. Schoenhut Company. 39,128; May 12.
Simon Weiner. For Boxes. Hoague-Sprague Corporation. 39,114; May 12.
Slim. For Reducing Tea. S. Gysin. 39,102; May 12.
Sunshine Coffee. For Coffee. J. R. Brinkley, M. D. 39,087; May 12.
Swiss Kriss. For Laxative. S. Gysin. 39,101; May 12.
Tast-E. For Bread. C. A. Whitmore. 39,141; May 12.
"The Hazzard Shoe". For Boxes. R. P. Hazzard Company. 39,104; May 12.
The Helfand Shoe. For Boxes. Hoague-Sprague Corporation. 39,108; May 12.
The Kay Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,113; May 12.
"They Walk Softly and Go Far". For Shoes. Dunn & McCarthy, Inc. 39,097; May 12.
Tom Thumb Sport Shoes. For Boxes. Hoague-Sprague Corporation. 39,112; May 12.
"Vita". For Butter. M. & R. Dietetic Laboratories, Inc. 39,121; May 12.
Vulcanizing Hot Patch Cement for Torn Auto Tops. For Cement. C. J. Ingersoll. 39,118; May 12.
Williams Rayex. For Tonic for the Scalp and Hair. J. B. Williams Company. 39,142; May 12.

ALPHABETICAL LIST OF PRINTS

A whole meal in itself delightfully good . . . So Inexpensive. For Cooked Spaghetti in Tomato Sauce with Cheese. H. J. Heinz Company. 13,188; May 12.
Black and White. For Cigars. National Cigar Stands Company. 13,193; May 12.
Cenroc. For Agricultural Lime. Central Rock Company. 13,178; May 12.
"City Life? Not me!". For Wheat Breakfast Food. The Cream of Wheat Corporation. 131,185; May 12.
Columbia Steel Equipment Co. For Steel Filing Cabinets. Columbia Steel Equipment Co. 13,180; May 12.
Here it is! Ha-kol relieves Headaches Externally. For an External Preparation for Relieving Headaches. Daggett & Ramsdell. 13,186; May 12.
It makes a Difference when you buy from the maker. For Fur Coats. I. J. Fox, Inc. 13,187; May 12.
Libby's Pineapple. For Canned Pineapple. Stemar Displays Company. 13,195; May 12.
Palmolive beads. For Palmolive Beads Soap. Colgate-Palmolive-Peet Company. 13,179; May 12.
"Paper is the Base of the Job". For Paper. International Paper Company. 13,190; May 12.
"Paper is the Base of the Job". For Paper. International Paper Company. 13,191; May 12.
"Paper is the Base of the Job". For Paper. International Paper Company. 13,192; May 12.
Parva Buckle. For Buckles for Overalls and the Like. Parva Products Company. 13,194; May 12.
Taylor & Sledd, Inc. Service. For Canned Herring, Canned Herring Roe, Canned Tomato Juice, Canned Fruit for Salad, Etc. Taylor & Sledd, Inc. 13,196; May 12.
The Bath of Beauty. For Starch Powder. The Hubinger Company. 13,189; May 12.
The Farm for us . . . Every time. For Wheat Breakfast Food. The Cream of Wheat Corporation. 13,181; May 12.
"There Stood Billy". For Wheat Breakfast Food. The Cream of Wheat Corporation. 13,183; May 12.
"They'll be fine, strong men". For Wheat Breakfast Food. The Cream of Wheat Corporation. 13,184; May 12.
"Who'd Trade this for the City?". For Wheat Breakfast Food. The Cream of Wheat Corporation. 13,182; May 12.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 12TH DAY OF MAY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Eshbaugh, Jesse E., assignor.)
A C Spark Plug Company. (See Sterling, Leroy P., assignor.)
Abbott, James H., Philadelphia, Pa. Cigarette holder. 1,805,228; May 12.
Abrahams, Albin, Spokane, Wash. Fish lure. 1,804,391; May 12.
Aceta G. m. b. H. (See Friederich, Alfred, assignor.)
Ackley, Raymond E., assignor to R. R. Donnelley & Sons Company, Chicago, Ill. Bookbinding machine. 1,805,157; May 12.
Acme Card System Company. (See Powell, Frank D., assignor.)
Adamson, Lee H., Beverly Hills, Calif. Mechanical movement. 1,804,488; May 12.
Adell, John A., Orange, Mass. Bar hanger. 1,805,027; May 12.
Agee, George M., Des Moines, Iowa. Feed mixer. 1,804,386; May 12.
Aglow, Harry, Philadelphia, Pa., assignor to Gill Glass & Fixture Company. Chandelier frame. Des. 84,126; May 12.
Air Development Company. (See Shadle, Clinton F., assignor.)
Air-Way Electric Appliance Corporation. (See Gudka, Elmer E., assignor.)
Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)
Aktiebolaget Svenska Kullagerfabriken. (See Wistrand, Gunnar, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Wichert, Alfred, assignor.)
Albertine, Herman, Rutherford, N. J. High power pedal-operated grease gun. 1,804,731; May 12.
Alco Products Incorporated. (See Jacocks, George T., assignor.)
Alden, John L., Wyncote, Pa., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y. Flexible conductor. 1,804,732; May 12.
Alden, John L., La Grange, Ill., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y. Core covering apparatus. 1,804,911; May 12.
Alger, Harley C., and P. A. Frazier, assignors to R. R. Donnelley & Sons Company, Chicago, Ill. Binding books. 1,804,392; May 12.
Allbestos Corporation. (See Grainger, Chester A., assignor.)
Alleman, Gellert, Wallingford, assignor to Sun Oil Company, Philadelphia, Pa. Preparation of colloidal metal. 1,805,199; May 12.
Allen, Albert. (See Webb, S. W., Callan, and Allen.)
Allen & Allen. (See Phillips, Frederick E., assignor.)
Allen, Harold V., East Bethel, Vt. Protective device. 1,805,386; May 12.
Allen and Hills, Incorporated. (See Hills, Paul W., assignor.)
Allen, Samuel C., Montgomery County, near Dayton, assignor, by mesne assignments, to Dayton Racquet Company, Inc., Dayton, Ohio. Arrow testing device. 1,804,450; May 12.
Allen, W. D., Manufacturing Company. (See Symonds, William H., assignor.)
Altenbach, Otto, Los Angeles, Calif. Pocket implement. 1,805,065; May 12.
Aluminum Company of America. (See Frary, Francis C., assignor.)
Amalgamated Carburetters Limited. (See Brown, Clement, assignor.)
Ambler Asbestos Shingle & Sheathing Company. (See Buczkowski, Edward J., assignor.)
American and Dominions Unbreakable Records Limited. (See Pemberton-Billing, Noel, assignor.)
American Floor Surfacing Machine Company, The. (See Wolfe, H. H., and Myers, assignors.)
American Flyer Mfg. Co. (See Becker, Harry S., assignor.)
American Freight Service, Inc. (See Perin, Donald W., assignor.)
American Gasaccumulator Company. (See Oestnaes, Victor L., assignor.)
American Optical Company. (See Desmond, Daniel, assignor.)
American Radiator Company. (See Eggleston, Lewis W., assignor.)
American Rolling Mill Company, The. (See Barnes, H. C., and Driest, assignors.)
American Rolling Mill Company, The. (See Good, R. C., and Holiday, assignors.)
American Rolling Mill Company, The. (See Hudson, Edwin B., assignor.)
American Rolling Mill Company, The. (See Palmer, C. B., and Kronborg, assignors.)
American Sales Book Company, Limited. (See Hagemann, Louis F., assignor.)
American Seating Company. (See Hamilton, George H., assignor.)
American Steel Pipe Co. Inc. (See Johnson, Gustave A., assignor.)
American Telephone and Telegraph Company. (See Corbead, Harry B., assignor.)
American Telephone & Telegraph Company. (See Shanck, Roy B., assignor.)
American Telephone & Telegraph Company. (See Vernam, Gilbert S., assignor.)
American Thermos Bottle Company, The. (See Wetmore, Miner P., assignor.)
Ammann, Albert H., assignor to Jostam Manufacturing Co., Chicago, Ill. Recoil pad for guns. 1,805,273; May 12.
Amsden & Barnard Inc. (See Amsden, Eugene C., assignor.)
Amsden, Eugene C., assignor to Amsden & Barnard, Inc., Boston, Mass. Tunnel lining unit. 1,805,435; May 12.
Anderson, Bernard H., assignor to General Motors Corporation, Detroit, Mich. Brake. 1,805,274; May 12.
Andrews, Troy M., and C. E. Lauer, Port Arthur, Tex., assignors, by mesne assignments, to The Texas Company, New York, N. Y. Treating petroleum. 1,804,451; May 12.
Andrieux, Pierre J. J., Montebourg, France. Gas burner or nozzle. 1,805,066; May 12.
Anthony Company. (See Anthony, W. C., Benedict, and Wachter, assignors.)
Anthony, William C., C. H. Benedict, and L. Wachter, Streator, assignors to Anthony Company, Streater, Ill. Shovel head. 1,805,028; May 12.
Anton, Mark, West Orange, assignor to Pie Bakeries of America, Inc., Newark, N. J. Rack. 1,804,912; May 12.
Arbuckle, Samuel F., Detroit, Mich., assignor to Monogram Lens Corporation, Paterson, N. J. Lamp focusing mechanism. 1,804,665; May 12.
Arkell, Bartlett, New York, N. Y. Multiply bag and producing the same. 1,805,067; May 12.
Arlt, John L., assignor to F. W. Stork and J. L. Arlt, doing business as Ideal Manufacturing Company, Saginaw, Mich. Washtub. 1,805,068; May 12.
Armstrong Cork Company. (See Jones, Alfred, assignor.)
Ashenhurst, Harold S., assignor, by mesne assignments, to Insulex Corporation Chicago, Ill. Making insulating blocks in the field. 1,805,069; May 12.
Ask, George M., Kirkwood, Calif. Water wheel. 1,804,583; May 12.
Associated Telephone and Telegraph Company. (See Smith, Sidney R., assignor.)
Ateliers de Construction & Fonderies de Jeumont. (See Escole, Paul, assignor.)
Atherton, Albert, Bloomfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Repeating apparatus for concentration units. 1,805,351; May 12.
Atkins, Edgar H., Richmond, Va., assignor to Mergenthaler Linotype Company. Typographical composing and casting machine. 1,804,489; May 12.
Atwood, George F., Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Variable electrical apparatus. 1,805,229; May 12.
Aubel, Verne W., Buffalo, N. Y., and J. B. Fitz Gibbon, Bridgeburg, Ontario, Canada. Heat recuperator or regenerator structure. 1,804,393; May 12.
Autodrink Corporation, The. (See Smith, H. C., and Vanneman, assignors.)
Automatic Freezer Corporation. (See Loranger, Hubert R. and U. R., assignors.)
Aven, Thomas W. (See Beble, J., Aven, and Linnartz.)
Averill, William H., Dorchester, Mass., assignor to Pike Manufacturing Company, Pike, N. H. Display stand. 1,805,352; May 12.
Ayres, Arthur U., assignor to The Sharples Specialty Company, Philadelphia, Pa. Lubricating system. 1,805,280; May 12.
B. O. T. Mfg. Co. (See Tilden, Bert O., assignor.)
Babcock & Wilcox Company, The. (See Jones, William A., assignor.)

Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)

Babcock & Wilcox Company, The. (See Whittam, Benjamin B., assignor.)

Bacon, Arthur J., Philadelphia, Pa., assignor of one-half to M. H. Clyman, Camden, N. J. Reseating leak proof faucet and valve. 1,805,158; May 12.

Badische, Maschinenfabrik & Eisengiesserei vormals G. Sebold und Sebold & Neff. (See Henninger, Ludwig, assignor.)

Bagge, Ernest, et al. (See Bagge, Walter, assignor.)

Bagge, Walter, assignor of one-third to E. Bagge, and one-third to A. B. Imhoff, Los Angeles, Calif. Wheel gauge. 1,804,490; May 12.

Bailey, Walter T. (See Federwitz, T. A., and Bailey.)

Baker, Wedworth V., Detroit, Mich. Core oven. 1,805,029; May 12.

Ball, Percy B., assignor to The Watson Company, Attleboro, Mass. Spoon or similar article. Des. 84,127; May 12.

Balson, Adrian C., Philadelphia, Pa. Toy bank. 1,804,733; May 12.

Balton, James L., assignor to Joseph Shapiro, Baltimore, Md. Ice cream scoop. 1,805,387; May 12.

Balzer, Werner H., New York, assignor, by mesne assignments, to A. K. Kempton, Jackson Heights, Long Island, N. Y. Hinged bezel for clocks. 1,804,734; May 12.

Bancel, Paul A., Montclair, assignor to Ingersoll-Rand Company, Jersey City, N. J. Condenser. 1,804,584; May 12.

Barefoot, Josie C., Charlotte, N. C. Safety device for use on a dough rolling machine commonly known to the baking industry as a dough brake. 1,804,853; May 12.

Barker, Edwin H., Moylan, Pa., assignor to A. H. Wirz, Inc. Threading method and mechanism. 1,805,126; May 12.

Barks, Farnk S., St. Louis, Mo. Lubricating system. 1,805,303; May 12.

Barnard, Edmund J., assignor to Boston Book Binding Company, Inc., Cambridge, Mass. Picture frame and making same. 1,805,436; May 12.

Barner, Lawrence D., and G. O. Shelander, Beaumont, Tex. Line changing reel. 1,804,585; May 12.

Barnes, Hugh C., and G. A. Driest, assignors to The American Rolling Mill Company, Middletown, Ohio. Hydraulic scaler. 1,804,735; May 12.

Barrett, Glenn J., assignor to Portable Adding Machine Company, Chicago, Ill. Manual paper feeding mechanism for adding machines. 1,804,736; May 12.

Barrow, Hepburn & Gale. (See Radburne, John W., assignor.)

Barton, Francis M., assignor, by mesne assignments, to Scott-Weiss Steel Company, Chicago, Ill. Metallic structural member. 1,804,452; May 12.

Basseches, Jacob T., New York, N. Y. Record reading device. 1,804,453; May 12.

Bassick Company, The. (See Herold, Walter F., assignor.)

Bastian-Morley Company. (See Morley, James P., assignor.)

Batcher, Ralph R., Hollis, N. Y. Magnetic device. 1,805,459; May 12.

Bateman, Arthur T., and A. Irvine, assignors to Bohn Aluminum & Brass Corporation, Detroit, Mich. Mold. 1,805,200; May 12.

Bates, Adelmer M., deceased, by C. H. Bates, administratrix, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Method of and apparatus for applying coating. 1,805,070; May 12.

Bates, Clara H., administratrix. (See Bates, Adelmer M.)

Bauer, Robert, and G. J. Ludwig, Grand Rapids, Mich. Percolating apparatus. 1,805,159; May 12.

Baum, Isaac A., Chicago, Ill. Metal buck and wood jamb. 1,805,030; May 12.

Baum, Isaac A., Chicago, Ill. Reenforced metal jamb construction. 1,805,031; May 12.

Baumgartner, Otto, Wollinsen, Switzerland. Vaporizer for internal combustion engines. 1,805,304; May 12.

Bay State Fishing Company. (See Gallison, E. A., and MacDonald, assignors.)

Bay State Fishing Company. (See MacDonald, Albert S., assignor.)

Beach Manufacturing Company. (See Horton, John O., assignor.)

Bear Manufacturing Company. (See Wochner, Henry, assignor.)

Beardsley, Elmer O., assignor to The Beardsley & Piper Company, Chicago, Ill. Machine for handling molding sand. 1,804,394; May 12.

Beardsley & Piper Company, The. (See Beardsley, Elmer O., assignor.)

Beck, Walter, assignor to Deutsche Gold & Silber Scheideanstalt, vormals Roessler, Frankfort-on-the-Main, Germany. Hardening articles made of iron or steel. 1,804,454; May 12.

Becker, Harry S., River Forest, assignor to American Flyer Mfg. Co., Chicago, Ill. Equipment controlling unit. 1,804,491; May 12.

Behle, Joseph, T. W. Aven, and H. Linnartz, assignors to The Murray Company, Dallas, Tex. Press box latch. 1,804,854; May 12.

Belile, John A. (See Somersgale, C. W., and Belile.)

Belknap, George J., Bridgeport, Conn. Quick opening valve. 1,804,586; May 12.

Bell Telephone Laboratories, Incorporated. (See Atwood, George F., assignor.)

Bell Telephone Laboratories, Incorporated. (See Clausen, Henry P., assignor.)

Bell Telephone Laboratories, Incorporated. (See Curtis, Austen M., assignor.)

Bell Telephone Laboratories, Incorporated. (See Flanders, Paul B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Fowler, Clarence B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Hague, Alfred B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Harrison, Henry C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Johnson, L. H., and Stokely, assignors.)

Bell Telephone Laboratories, Incorporated. (See Kuhn, Walter, assignor.)

Bell Telephone Laboratories, Incorporated. (See Pritchard, William T., assignor.)

Bell Telephone Laboratories, Incorporated. (See Rettenmeyer, Francis X., assignor.)

Bellamy, John I., Brookfield, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Telephone system. 1,804,822; May 12.

Bendix Brake Company. (See Girling, Albert H. G., assignor.)

Bendix Brake Company. (See Norton, Raymond J., assignor.)

Bendix Brake Company. (See Semmens, Harry H., assignor.)

Benedict, Charles H. (See Anthony, W. C., Benedict, and Wachter.)

Benjamin, Harry S., Detroit, Mich. Vending machine. 1,804,492; May 12.

Benjamins, Israel, assignor to R. Benjamins, Brooklyn, N. Y. Fluid motor. 1,804,493; May 12.

Benjamins, Rose. (See Benjamins, Israel, assignor.)

Berger, Samuel I., Newark, N. J. Airplane toy. 1,804,737; May 12.

Bergstein, Samuel, Middletown, Ohio. Paper box or the like. 1,804,738; May 12.

Berkowitz, Max, Richmond Hill, N. Y. Lady's hand bag. Des. 84,128; May 12.

Berl, Ernst, Darmstadt, Germany. Dechlorinating water. 1,805,353; May 12.

Berthold, Erich. (See Kunz, M. A., Koeberle, and Berthold.)

Berwick, Jo D., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Drum for manufacturing endless rubber articles. 1,805,032; May 12.

Bettison, David C., Omaha, Nebr., assignor of one-half to F. W. Pfieging. Railway track circuit apparatus. 1,804,666; May 12.

Bigelow Sanford Carpet Co. (See La Couture, Henry C., assignor.)

Billing, Joseph, Spondon, near Derby, England, assignor to Celanese Corporation of America. Concentrating aqueous solutions of lower aliphatic acids. 1,805,127; May 12.

Bird, Harry R., Taft, Calif. Hinge. 1,805,324; May 12.

Bird Machine Company. (See Bunker, W. S., and G. L. Hanscom, assignors.)

Birdseye, Clarence, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del. Bin for storage of fish. 1,805,354; May 12.

Birmann, Rudolph, assignor to De Laval Steam Turbine Company, Trenton, N. J. Sleeve for high speed wheels. 1,805,201; May 12.

Bishop, Joseph W., Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Forming press. 1,805,275; May 12.

Bitte, Fred, Portland, Oreg. Floating marine way. 1,804,667; May 12.

Bivens, Maurice E., Scotia, N. Y., assignor to General Electric Company. Directional control of dynamo-electric devices. 1,805,160; May 12.

Black & Decker Manufacturing Company, The. (See Decker, Alonzo G., assignor.)

Blacksand Mining and Manufacturing Company. (See McCracken, James N., assignor.)

Blake, Edmund E., Saco, Me., assignor to Saco-Lowell Shops, Newton, Mass. Manufacture of yarn. 1,804,968; May 12.

Blaustein, Abe, New York, N. Y. Doll. 1,805,231; May 12.

Blenko, Walter J., Pittsburgh, assignor to C. P. Byrnes, trustee, Sewickley, Pa. Manufacture of reenforced glass. 1,804,395; May 12.

Bliss, E. W., Company. (See Kruse, Peter, assignor.)

Blomstrom, Lowell C., assignor to Federal Mogul Corporation, Detroit, Mich. Holding half bearings about an arbor preparatory to machining. 1,805,232; May 12.

Blondin, Joseph, Los Angeles, Calif. Unilayer rigid airplane wing. 1,804,823; May 12.

Blood, Laurence E., Boston, and J. B. Wiard, Brookline, assignors to S. A. Woods Machine Company, Boston, Mass. Wood planing machine. 1,805,437; May 12.

Bockmuhl, Max, Frankfort-on-the-Main-Hochst, and R. Knoll, Hornau-on-the-Taunus, assignors to I. G. Farbenindustrie Aktiengesellschaft Frankfort-on-the-Main, Germany. Basic compounds and preparing them. 1,805,355; May 12.

Bodine, Alfred V., assignor to Dictaphone Corporation, Bridgeport, Conn. Acoustic device. 1,804,456; May 12.

Bodine, Alfred V., and J. M. Lucarelle, assignors to Dictaphone Corporation, Bridgeport, Conn. Document holder. 1,804,455; May 12.

Boedicker, Herman C., New York, N. Y. Photo composing screen and plate holder. 1,805,202; May 12.

Bohm, Adolph. (See Danielson, Gustav E., assignor.)

Bohn Aluminum & Brass Corporation. (See Bateman, A. T., and Irvine, assignors.)

Bolen, Jesse T., Beaverton, assignor of one-fourth to K. D. Christy, and one-fourth to F. Christy, Klamath Falls, Oreg. Power drag saw. 1,804,969; May 12.

Bolgiano, John F. Dayton, Ohio. Power transmission. 1,804,668; May 12.

Boll, Lester P. (See Matthews, C. L., Boll, and Crump.)

Bollwine, Mary A., Tampico, Mex. Brassière. 1,804,855; May 12.

Borresen, Helge A., Chicago, Ill., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Adjustable latch lock fastener. 1,805,356; May 12.

Boston Book Binding Company. (See Barnard, Edmund J., assignor.)

Boutry, Charles G., Meudon, France. Pipe joint. 1,804,856; May 12.

Bowers, Frank. (See Snow, N. L., Bowers, and Howse.)

Bowker, Clinton D., Phoenix, Ariz. Airship. 1,804,588; May 12.

Bowman, Bruce L. (See Bowman, Rudolph M. and B. L.)

Bowman, Rudolph M. and B. L., Hollywood, Calif. Excavator. 1,804,587; May 12.

Boyd, John R., assignor to R. L. Wickline, Pittsburgh, Pa. Fire extinguisher. 1,805,033; May 12.

Boye, James H., assignor to J. H. Boye Manufacturing Company, Chicago, Ill. Curtain fixture and supporting brackets therefor. 1,804,669; May 12.

Boye, James H., assignor to J. H. Boye Manufacturing Company, Chicago, Ill. Curtain support. 1,805,233; May 12.

Boye, James H., Manufacturing Company. (See Boye, James H., assignor.)

Brackett, Edward M., et al. (See Brackett, E. M., and Danecke, assignors.)

Brackett, Edward M., and D. Danecke, assignors to E. M. and F. M. Brackett, copartners doing business under the firm name and style of The Brackett Stripping Machine Company, Topeka, Kans. Paper cutting and trimming machine and gauge and gauge-stop, carrier, holddown and safety mechanism therefor. 1,805,128; May 12.

Brackett, Fred M., et al. (See Brackett, E. M., and Danecke, assignors.)

Brackett Stripping Machine Company, The. (See Brackett, E. M., and Danecke, assignors.)

Brady, Thomas, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Lubricating device for elevator guide rails. 1,805,305; May 12.

Braine, Bancroft G., assignor to The Rail Joint Company, New York, N. Y. Rail joint construction. 1,805,034; May 12.

Braithwaite and Company Engineers Limited. (See Radice, William A., assignor.)

Branch, Harry, Terre Haute, Ind. Adjusting device for awning arms. 1,804,550; May 12.

Brandle & Smith Company. (See Putt, Frank B., assignor.)

Branley, Harry, Honesdale, Pa. Hosiery. 1,805,035; May 12.

Brasty, Joseph, Maple Heights, assignor of one-third to J. B. Lewis and one-third to Lewis Colton, Cleveland, Ohio. Vacuum sweeper. 1,805,203; May 12.

Breed, Charles W. (See Burkhardt, G. R., and Breed.)

Breer, Carl, Detroit, assignor to Chrysler Corporation, Highland Park, Mich. Vibration dampener. 1,805,357; May 12.

Brenn, Carl W., Montclair, N. J. Folding machine. 1,805,161; May 12.

Brennan, Edward J., Harrisburg, Pa., assignor to Nasalets Inc., New York, N. Y. Nasal pellet. 1,804,670; May 12.

Brennan, Henry C., Wickford, R. I. Flush tank control valve. 1,804,857; May 12.

Breuer, Adam A., Chicago, Ill. Spraying unit. 1,804,589; May 12.

Briggs, Stephen F., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Clutch mechanism. 1,804,467; May 12.

Briggs & Stratton Corporation. (See Briggs, Stephen F., assignor.)

Briggs and Stratton Corporation. (See Fitzgerald, John W., assignor.)

Bring, Einar J., Franklin, Pa., assignor to Franklin Railway Supply Company. Railway booster. 1,805,071; May 12.

Britton, Edgar C., assignor to The Dow Chemical Company, Midland, Mich. Purification of halogenated hydrocarbons. 1,804,458; May 12.

Britton, Edgar C., assignor to The Dow Chemical Company, Midland, Mich. Preparation of aliphatic acid chlorides. 1,805,162; May 12.

Brogan, Michael F., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Inserting fastenings. 1,804,396; May 12.

Brogan, Michael F., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening inserting machine. 1,804,397; May 12.

Brooks, Desmond B., Haxtun, Colo. Freight car pusher. 1,805,388; May 12.

Brown, Charles W., San Diego, Calif. Closet flushing device. 1,805,204; May 12.

Brown, Clement, assignor to Amalgamated Carburetters Limited, Perry Barr, Birmingham, England. Liquid pump. 1,804,524; May 12.

Brown Company. (See Parker, Howard, assignor.)

Brown, Daniel C., West Pittston, Pa. Bearing box. 1,805,325; May 12.

Brown, James M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Switch mechanism. 1,804,590; May 12.

Brown, Roy W., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Pressure measuring instrument. 1,804,970; May 12.

Brown, Walter O., Detroit, Mich. Reenforced wood box or crate. 1,804,494; May 12.

Brownyer, Nelson R., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Electric car truck. 1,805,438; May 12.

Bruce, Alfred W., New York, N. Y. Locomotive boiler. 1,805,072; May 12.

Brunhoff, Edward, Wyoming, Ohio. Display and vending apparatus. 1,804,913; May 12.

Brunk, Harold J. (See Lord, T., and Brunk.)

Brunk, Harold J., assignor to C. F. Pease Company, Chicago, Ill. Machine for making blue prints and other photoprints. 1,804,739; May 12.

Brunswick-Balke-Collender Company, The. (See Bishop, Joseph W., assignor.)

Brunswick-Balke-Collender Company, The. (See Treiber, Theodore R., assignor.)

Buchanan, Truman B., Denver, Colo. Store front or the like. Des. 84,129; May 12.

Buckner, Thomas E., Burkburnett, Tex. Belt cutter. 1,805,163; May 12.

Buczkowski, Edward J., assignor to Ambler Asbestos Shingle & Sheathing Company, Ambler, Pa. Waterproof and dielectric asbestos lumber. 1,804,740; May 12.

Budd, Edward G., Manufacturing Co. (See Ledwinka, Joseph, assignor.)

Budd, Edward G., Manufacturing Company. (See Tarbox, John P., assignor.)

Budd Wheel Company. (See Vix, George A., assignor.)

Builders Iron Foundry. (See Connet, Frederick N., assignor.)

Bull, William C., Brooklyn, N. Y., assignor to William C. Bull, Inc. Fabricating machine for laminated glass products. 1,805,389; May 12.

Bull, William C., Inc. (See Bull, William C., assignor.)

Bullard Company, The. (See Bullard, Edward P., jr., assignor.)

Bullard, Edward P., jr., Stratford, assignor, by mesne assignments, to The Bullard Company, Bridgeport, Conn. Multiple spindle center turning machine. 1,804,971; May 12.

Bunker, William S., Foxboro, and G. L. Hanscom, South Walpole, assignors to Bird Machine Company, South Walpole, Mass. Belt drive. 1,805,326; May 12.

Burdette, Richard S., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Extension felly. 1,805,036; May 12.

Burke, Hiram P. (See Harvey, Lee, assignor.)

Burkhardt, George R., Chicago, and C. W. Breed, Western Springs, Ill. Railway grade crossing construction. 1,805,234; May 12.

Burn, Walter S., Hartlepool, England. Fuel valve of internal combustion engines. 1,805,358; May 12.

Burney, Charles F. (See Harris, J. H., and Burney.)

Burrell Engineering & Construction Company. (See Burrell, G. T., and Jackson, assignors.)

Burrell, George R., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Tractive device for tires. 1,805,037; May 12.

Burrell, George T., and A. V. Jackson, assignors to Burrell Engineering and Construction Company, Chicago, Ill. Climbing or lifting jack. 1,804,858; May 12.

Burroughs Adding Machine Company. (See Pasinski, W. J., and Magnus, assignors.)

Burroughs Adding Machine Company. (See Smith, Aurlie T., assignor.)

Burry, Vincent J., Berwyn, assignor to Woodman Railway Supply Company, Chicago, Ill. Journal box. 1,805,073; May 12.

Burt, James P., assignor to Glenwood Range Company, Taunton, Mass. Latch for doors. 1,805,129; May 12.

Burtch, Joel A., Cleveland, Ohio, assignor, by mesne assignments, to Jewell Electrical Instrument Company. Radio testing device. 1,805,074; May 12.

Butcher, Charles A., Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Synchronous machine starting system. 1,804,591; May 12.

Butler, Benjamin J., Somerville, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Electrical condenser. 1,805,075; May 12.

Buttfield, Gibson, Beckview Heights, North Plainfield, assignor to The Vulcan Detinning Company, Sewaren, N. J. Recovery of tin compounds. 1,804,551; May 12.

Butsbach, Fred, Clinton, Iowa. Window construction. 1,804,741; May 12.

Byrnes, Clarence P., trustee. (See Blenko, Walter J., assignor.)

Bysshe, Ernest T., and R. B. Finn, assignors to Jones & Lamson Machine Company, Springfield, Vt. Screw-cutting die. 1,804,459; May 12.

Cadieux, Joseph O., Meriden, Conn. Gas lamp socket and transformer. 1,804,525; May 12.

Cadwell, Sidney M., Leonia, N. J., and A. T. Maximoff, New York, N. Y., assignors to The Nangatuck Chemical Company, Naugatuck, Conn. Aldehyde-amine condensation products and preparing same. 1,804,398; May 12.

Calkins, Claude C., Spokane, Wash. Shoe bearing. 1,804,672; May 12.

Callan, John G. (See Webb, S. W., Callan, and Allen.)

Calumet Steel Company. (See Hook, L. H., Evans, and Wallrab, assignors.)

Campbell, A. S., Company. (See Kubler, Frederick J., assignor.)

Campbell, Robert B., assignor to Desmond Manufacturing Company, Muskegon Heights, Mich. Sprinkling apparatus. 1,804,742; May 12.

Campbell, William H., et al, executors. (See Triplett, James B.)

Cannon, Hugh H., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif. Apparatus for desludging liquids. 1,804,743; May 12.

Cannon-Prutzman Treating Processes, Ltd. (See Cannon, Hugh H., assignor.)

Carlson, Axel F., Cambridge, assignor to The Reece Button Hole Machine Company, Boston, Mass. Buttonhole sewing machine. 1,805,205; May 12.

Carlson, Charles G., Chicago, Ill. Folding table. 1,805,235; May 12.

Carlston, Joel B., Galesburg, Ill. Form for dresses. 1,805,076; May 12.

Carr, Ernest R., assignor to The Collis Company, Clinton, Iowa. Poultry coop gate. 1,804,671; May 12.

Carr, Fred S., Newton, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Nut and screw fastening. 1,805,460; May 12.

Carr, John T., Trenton, N. J. Sign. 1,805,327; May 12.

Carter, Ray L., Phoenix, N. Y., assignor to The Stanley Works, New Britain, Conn. Shaft holder for applying chucks. 1,805,164; May 12.

Carter, William S., New York, N. Y. Folding tilt display container. 1,805,077; May 12.

Cazautet, Suzanne (widow, Vives), administratrix. (See Vives, Emile G. E.)

Celanese Corporation of America. (See Billing, Joseph, assignor.)

Central Scientific Company. (See Klopsteg, Paul E., assignor.)

Cépède, Casimir. (See D'Ayrenx, A., Cépède, and Ratore.)

Chace, Norman B., Cincinnati, Ohio. Radial drill. 1,804,673; May 12.

Chadeloid Chemical Company. (See Ellis, Carleton, assignor.)

Challans, Eric W. (See Peter, L. H., Challans, and MacGregor.)

Chalmers, George W. (See Johnson, J. A., and Chalmers.)

Charles, Ulysses G., assignor of one-fourth to D. E. Dunne, jr., Wichita, Kans. Hydraulic clutch. 1,804,744; May 12.

Charlton & Co. (See Merz, Eduard, assignor.)

Chase, Curtis D., Allston, Mass., assignor to Chase Holding Corporation. Distributing tank. 1,804,592; May 12.

Chase Holding Corporation. (See Chase, Curtis D., assignor.)

Christopher, Philip H., Fairmont, W. Va. Combination refrigerator and show case. 1,804,914; May 12.

Christy, Fred, et al. (See Bolen, Jesse T., assignor.)

Christy, Katie D., et al. (See Bolen, Jesse T., assignor.)

Chrysler Corporation. (See Breer, Carl, assignor.)

Chrysler Corporation. (See De Vlieg, Ray A., assignor.)

Chrysler Corporation. (See Henderson, Herbert V., assignor.)

Chrysler Corporation. (See Maynard, Howard E., assignor.)

Chucto, Theodore, Rockaway Beach, N. Y. Plier for cutting and scraping insulations from wires. 1,805,276; May 12.

Clark, Albert B., Dorchester, assignor of forty per cent to Alfred H. Howard, Boston, Mass. Message transmission. 1,805,390; May 12.

Clark, Charles W. (See Fitzpatrick, E., Clark, and Tiernan.)

Clark, Harry, Middleport, and R. E. Metcalf, Gasport, N. Y. Method and apparatus for wrapping articles. 1,805,306; May 12.

Clarke, Hans T., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic sensitizer and making it. 1,804,674; May 12.

Clarke, Hans T., and D. F. Othmer, assignors to Eastman Kodak Company, Rochester, N. Y. Removing water from aqueous acetic acid. 1,804,745; May 12.

Clausen, Harold C., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway car retarder. 1,805,307; May 12.

Clausen, Henry P., Mamaroneck, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,804,675; May 12.

Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Radio broadcasting system. 1,805,446; May 12.

Cline, Thaddeus E., and R. E. Tipton, Denver, Colo. Foot guiding mechanism. 1,804,552; May 12.

Clyman, Maurice H. (See Bacon, Arthur J., assignor.)

Cole, Perry C., Clay Center, Kans. Elevating grader. 1,804,399; May 12.

Colgate-Palmolive-Peet Company et al. (See Holliday, Robert L., assignor.)

Colladay, Edward F. (See Clement, Edward E., assignor.)

Collins, John A., Oakland, Calif. Artificial limb. 1,804,915; May 12.

Collis Company, The. (See Carr, Ernest R., assignor.)

Colton, Lewis, et al. (See Brasty, Joseph, assignor.)

Columbia Phonograph Company. (See Dalton, William J., assignor.)

Community Construction Co. (See Doty, John W., assignor.)

Condit Electrical Manufacturing Corporation. (See Edsall, William S., assignor.)

Conlon, Thomas A., Silver Spring, Md. Variable recoil mechanism for guns. 1,804,388; May 12.

Conn, C. G., Ltd. (See Gulick, Edward J., assignor.)

Conner Crouse Corporation. (See Crouse, George B., assignor.)

Connet, Frederick N., assignor to Builders Iron Foundry, Providence, R. I. Venturi meter. 1,805,236; May 12.

Conrath, George A., assignor of one-half to C. S. Denman, Des Moines, Iowa. Apparatus and method for handling pulverized fuel. 1,804,593; May 12.

Consolidated Aircraft Corporation. (See Fairbanks, Andrew J., assignor.)

Consolidated Aircraft Corporation. (See Gwinn, Joseph M., jr., assignor.)

Consolidated Aircraft Corporation. (See Laddon, Isaac M., assignor.)

Consolidated Car-Heating Company. (See Hynes, Lee P., assignor.)

Consolidated Machine Corporation of America. (See Roberts, R. R., and Forward, assignors.)

Continuous Rail Crossing Corporation. (See Uschmann, Curt, assignor.)

Conveyor Sales Company. (See Walter, Raymond A., assignor.)

Cook, Herbert R. (See McDonald, C. T., and Cook.)

Cooper, Douglas W. (See Pursley, Cornelious C., assignor.)

Corcoran, John J. (See Hull, S. P., Corcoran, and Lavarack.)

Cordier, Raymond, Canton, Ohio. Chord finder. 1,804,460; May 12.

Cornell, Mead, assignor, by mesne assignments, to The Merrill Company, San Francisco, Calif. Meter. Re18,067; May 12.

Cotte, Marie, Leipzin, Germany. Machine for producing tape loops. 1,804,916; May 12.

Courtenay, Frederic D., Short Hills, N. J., assignor to Embosograf Corporation of America, New York, N. Y. Sign display stand. Des. 84,130; May 12.

Coxhead, Harry B., Hollis, N. Y., assignor to American Telephone and Telegraph Company. Radio receiving circuit. 1,804,526; May 12.

Cramblet, Paul K., Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Casing structure for electrical appliances. 1,805,277; May 12.

Crane, Frank G., and J. M. Ward, Detroit, Mich. Apparatus and method of ornamenting paper. 1,804,495; May 12.

Crawford, William E., Wauwatosa, and R. C. F. Kurtze, Milwaukee, assignors to A. O. Smith Corporation, Milwaukee, Wis. Welding without electrical leakage. 1,804,461; May 12.

Creamery Package Mfg. Company, The. (See Hippenmeyer, Irving R., assignor.)

Creed & Company Limited. (See Creed, F. G., and Salmon, assignor.)

Creed, Frederick G., and R. D. Salmon, assignors, by mesne assignments, to Creed & Company Limited, Croydon, England. Telegraphic transmitting and tape perforating apparatus. 1,804,496; May 12.

Crocker, Thomas F. (See Voss, John H., and Crocker.)

Crocker, Thomas F., Chicago, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Telephone system. 1,804,594; May 12.

Croft, Herbert L. (See Mason, E. J., and Croft.)

Cross, Walter M., Kansas City, Mo. Aeroplane wing. 1,804,824; May 12.

Crouse, George B., Stamford, Conn., assignor, by mesne assignments, to Conner Crouse Corporation, New York, N. Y. Filtering electric currents. 1,804,859; May 12.

Crowley, Joseph P., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,805,206; May 12.

Crump, Lindell L. (See Matthews, C. L., Boll, and Crump.)

Cunningham, Thomas F., and A. H. Gifford, Boonton, N. J. Pipe wrench. 1,805,078; May 12.

Curtis, Austen M., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. High speed relay. 1,804,746; May 12.

Curtiss, Merritt E., Pittsburgh, Pa. Electric display device. 1,804,595; May 12.

Dachlauer, Karl, and E. Thiel, Hochst-on-the-Main, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Aromatic sulfonic acids and preparing the same. 1,804,527; May 12.

Dahlberg, Lars E. M. C., Kristianstad, Sweden. Means on firearms for measuring angles in the field. 1,804,825; May 12.

Dallett Company, The. (See Van Sickel, Wilber H., assignor.)

Dalton, William J., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Radio apparatus. 1,804,676; May 12.

Daneke, Dietrich. (See Brackett, E. M., and Daneke.)

Danielson, Gustav E., assignor of one-fourth to A. Bohm, Seattle, Wash. Gear shift. 1,804,747; May 12.

Danthine, Karl, Bern, assignor to Heinrick Surber, Zurich, Switzerland. Rifle attachment for firing miniature ammunition. 1,805,278; May 12.

Dap, Jean, Puteaux, France, assignor to Dap-Motor-Patent-Gesellschaft m. b. H., Cologne-Holweide, Germany. Rotary engine and pump. 1,804,497; May 12.

Dap-Motor-Patent-Gesellschaft m. b. H. (See Dap, Jean, assignor.)

Daprato Statuary Company. (See Rigali, John E., assignor.)

Davis, Frank, Brooklyn, N. Y. Protective structure for cashier and teller windows. 1,804,677; May 12.

Davis, Vernon J., Buffalo, N. Y. Molding. 1,804,400; May 12.

Davis, Vernon J., Buffalo, N. Y. Molding apparatus and equipment for forming the same. 1,804,401; May 12.

D'Ayrenx, Albert, C. Cépède, and L. Ratore, Paris, France. Aseptic toothbrush. Des. 84,131; May 12.

Dayton Racquet Company. (See Allen, Samuel C., assignor.)

Dayton Scale Company. (See Fuller, Frederick L., assignor.)

Decker, Alonzo G., Towson Heights, assignor to The Van Dorn Electric Tool Company, Towson, Md. Casing for a portable electric polisher. Des. 84,132; May 12.

Decker, Alonzo G., Towson Heights, assignor to The Black & Decker Manufacturing Company, Towson, Md. Casing for a portable electric polisher. Des. 84,133; May 12.

De Laval Steam Turbine Company. (See Birmann, Rudolph, assignor.)

De Long, James E. (See Fisher, J. B., and De Long.)

De Marchi, Carlos, Los Angeles, Calif. Water vehicle. 1,804,972; May 12.

Denman, Charles S. (See Conrath, George A., assignor.)

Denney, Louis S., Mount Vernon, Ohio. Hot water heater. 1,805,165; May 12.

Dennison Manufacturing Company. (See Sayler, Galen H., assignor.)

De Polo, Alfred, Connellsville, Pa. Propeller. 1,805,359; May 12.

Deppé, William P., Brightwaters, and L. L. Summers, deceased, New York, N. Y.; L. L. B. Summers, and A. Young, administrators. Cracking process. 1,804,917; May 12.

Derr, Earle W., assignor to Rubber Craft Products Company, Akron, Ohio. Mat. 1,805,038; May 12.

Derrick, George H., deceased, by V. A. Derrick, executrix, Oakland, Calif., assignor, by mesne assignments, to Instograph, Ltd. Electric switch. 1,804,748; May 12.

Derrick, Victory A., executrix. (See Derrick, George H.)

Desmond, Daniel, assignor to American Optical Company, Southbridge, Mass. Measuring device. 1,804,749; May 12.

Desmond Manufacturing Company. (See Campbell, Robert B., assignor.)

Deutsche Gold & Silber Scheideanstalt, vormals Roessler. (See Beck, Walter, assignor.)

Devine, J. P., Manufacturing Co. (See Koops, Carl, assignor.)

De Vito, Nicholas, St. Louis, Mo. Valve. 1,805,130; May 12.

De Vlieg, Ray A., assignor to Chrysler Corporation, Detroit, Mich. Heat treating furnace. 1,805,360; May 12.

Dewend, William D., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Disk harrow. 1,804,750; May 12.

Diagonal Corrugated Patent Corporation. (See Wagner, Joshua, assignor.)

Diamond Power Specialty Corporation. (See Snow, N. L., Bowers, and Howse, assignors.)

Dickerman, Leslie L., East Grantville, Vt. Croquet table. Des. 84,134; May 12.

Dickinson, James C., assignor of twenty-six one-hundredths to Chester Grey and twenty-six one-hundredths to R. W. Wiederwax, Atlantic City, N. J. Gas meter. 1,804,596; May 12.

Dictaphone Corporation. (See Bodine, Alfred V., assignor.)

Dictaphone Corporation. (See Bodine, A. V., and Lucarelle, assignors.)

Dictaphone Corporation. (See Woodbridge, Charles K., assignor.)

Dieterle, Edward A., Glenellyn, Ill. Enriching gas. 1,804,402; May 12.

Dietzgin, Eugene, Company. (See Langsner, Adolph, assignor.)

Dinklage, Raymond, Glen Ridge, N. J. Anchoring device. 1,804,918; May 12.

Dixon, Lyman W., Maywood, Ill. Labeling. 1,805,308; May 12.

Doble Steam Motors Corporation. (See Doble, Warren, assignor.)

Doble, Warren, Berkeley, Calif., assignor to Doble Steam Motors Corporation, Wilmington, Del. Boiler feed water control device. 1,804,751; May 12.

Dockett, James, jr., Roxbury, Mass. Garment hanger. 1,804,919; May 12.

Doehler Vending Machines, Inc. (See Morin, Louis H., assignor.)

Doi, Rinkichi. (See Yoshioka, Shojiro, assignor.)

Don Chemical Company, The. (See Britton, Edgar C., assignor.)

Donaldson, John W., Irvington, N. Y., and B. L. Polkosnik, Greenwich, Conn. Card index file cabinet. 1,804,597; May 12.

Donaldson, Theodore L., Poughkeepsie assignor to J. R. Schalk, Rhinebeck, N. Y. Boat. 1,805,131; May 12.

Donlin, John, Brooklyn, N. Y. Game. 1,804,860; May 12.

Donnell, Harold W., New York, N. Y. Index or filing card. 1,804,528; May 12.

Donnellan, Edward P., assignor to Standard-Johnson Company, Inc., Brooklyn, N. Y. Coin counting machine. 1,805,079; May 12.

Donnellan, Edward P., assignor to Standard-Johnson Company, Inc., Brooklyn, N. Y. Coin counting mechanism. 1,805,132; May 12.

Donnelley, R. R., & Sons Company. (See Ackley, Raymond E., assignor.)

Donnelley, R. R., & Sons Company. (See Alger, H. C., and Frazier, assignors.)

Dooley, Edward G., assignor of forty-nine per cent to F. M. Hiyake, Los Angeles, Calif. Apparatus for heating and sterilizing towels. 1,804,752; May 12.

Dorn, Hans, Berlin, Germany. Adjustable wrench. 1,804,861 May 12.

Dorsey, Benjamin L., and T. S. Ingersoll, assignors to Ingersoll Magnetic Lock Company, Los Angeles, Calif. Automobile hood lock. 1,804,387; May 12.

Dosick, Samuel, Providence, R. I. Pistol charm. 1,805,080; May 12.

Doty, John W., assignor to Community Construction Co., Olney, Ill. Mop handle fastener. 1,804,498; May 12.

Douds, Ralph A., assignor to W. Peacock and R. Peacock, Lakeland, Fla. Valve. 1,805,391; May 12.

Douds, Ralph A., assignor to W. Peacock and R. Peacock, Lakeland, Fla. Valve. 1,805,392; May 12.

Douglas, Gordon C., Covina, assignor of one-half to D. G. Small, Los Angeles, Calif. Construction material. 1,804,753; May 12.

Dow Chemical Company, The. (See Britton, Edgar C., assignor.)

Dow Chemical Company, The. (See Hale, William J., assignor.)

Dowling, Francis J., New York, N. Y. Loading wheelbarrow. 1,804,403; May 12.

Dowling, Francis J., New York, N. Y. Wheeled carrier. 1,804,404; May 12.

Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet molding apparatus. 1,805,237; May 12.

Dreyfus, Camille, New York, N. Y. Ornamental fabric containing derivatives of cellulose and producing the same. 1,804,529; May 12.

Driest, George A. (See Barnes, H. C., and Driest.)

Drkal, Bohumil, Buenos Aires, Argentina. Clutch for motor cars. 1,805,081; May 12.

Dron, Douglas W., Belfast, Ireland. Preparation of vegetable fibers. 1,805,166; May 12.

Drury, Thomas W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system for farm lighting plants. 1,805,207; May 12.

Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for fractionation of hydrocarbons. 1,804,553; May 12.

Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Method and apparatus for fractionation of hydrocarbons. 1,804,554; May 12.

Dufay, Louis, Versailles, France, assignor to Harold Wade, London, England. Color photography. 1,805,361; May 12.

Duff, Ewen C., assignor to Kops Bros. Inc., New York, N. Y. Apparel garment. 1,805,133; May 12.

Duffy, Charles H., Miami, Fla. Auto wheel and tire lock. 1,804,678; May 12.

Duncan, Cecil A., and T. W. Morefield, Pulaski, Va. Combined seeder, packer and pulverizer. 1,804,862; May 12.

Duncanson, Walter E., assignor to J. G. Wilson Corp., New York, N. Y. Venetian blind. 1,805,238; May 12.

Dunlap, William A., Pittsburgh, Pa. Lamp support. 1,804,863; May 12.

Dunn, William C., Chicago, Ill. Spring suspension for vehicles. 1,804,405; May 12.

Dunne, Darcey E., jr. (See Charles, Ulysses G., assignor.)
Dunning, William E., assignor to The McCaskey Register Company, Alliance, Ohio. Autographic register. 1,805,239; May 12.
Du Pont, E. I., de Nemours & Company. (See Powers, Donald H., assignor.)
Dura Company. (See Lawrence, J. D., and Nicholson, assignors.)
Durrant, William, Plainfield, N. J. Plate locking mechanism for printing presses. 1,805,134; May 12.
Duty, Spencer C., Cleveland Heights, Ohio. Coupler. 1,804,973; May 12.
Eames, William F., Wilkinsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Elevator control system. 1,805,208; May 12.
Earl Aircraft Corporation. (See Earl, Harry W., assignor.)
Earl, Harry W., assignor to Earl Aircraft Corporation, Portland, Oreg. Internal combustion engine. 1,804,598; May 12.
Eastern Manufacturing Company. (See Webb, S. W., Callan, and Allen, assignors.)
Eastman Kodak Company. (See Clarke Hans T., assignor.)
Eastman Kodak Company. (See Clarke, H. T., and Othmer, assignors.)
Eastman Kodak Company. (See Hopkins, Roy S., assignor.)
Eastman Kodak Company. (See Wittel, Otto, assignor.)
Eberle, John A., assignor to The Perfection Manufacturing Company, St. Louis, Mo. Baby carriage. 1,805,135; May 12.
Eberle, John A., assignor to The Perfection Manufacturing Company, St. Louis, Mo. Child's vehicle. 1,805,136; May 12.
Economy Electric Devices Co. (See Gould, L. E., and Lake, assignors.)
Edel, Walter L., New Haven, Conn., assignor, by mesne assignments, to Frigidaire Corporation. Pressure operated control mechanism. 1,804,599; May 12.
Edmunds, Lewis J. (See Sundberg, G. W., and Edmunds.)
Edsall, William S., Brookline, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Counting relay. 1,805,082; May 12.
Edson, Elmer R., Portland, Oreg. Guard wheel for safety railway trucks. 1,804,600; May 12.
Edwards, Junius D., Oakmont, Pa. Producing printing plates. 1,804,920; May 12.
Edwards, William A., Chicago, Ill. Duplex fuel supplying apparatus for internal combustion engines. 1,804,754; May 12.
Efcolite Corporation. (See Von Nessen, Walter, assignor.)
Egerer, August, Great Neck, N. Y. Sweater or article of similar nature. Des. 84,135; May 12.
Egerer, August, Great Neck, N. Y. Sweater or article of similar nature. Des. 84,136; May 12.
Egerer, August, Great Neck, N. Y. Sweater or article of similar nature. Des. 84,137; May 12.
Eggler, Frederic B., Goppingen, Germany. Dental apparatus. 1,805,309; May 12.
Eggleston, Lewis W., Detroit, Mich., assignor to American Radiator Company, New York, N. Y. Valve. 1,804,462; May 12.
Ehrenfeld, Arthur, New York, N. Y., assignor to Francis H. Leggett and Company, Inc. Carton. Des. 84,138; May 12.
Eldemiller, Earling W., Medina, Wash. Dust cap for pneumatic tire valves. 1,804,755; May 12.
Elnson-Freeman Co., Inc. (See Elnson, Morris M., assignor.)
Elnson, Morris M., Yonkers, N. Y., assignor to Elnson-Freeman Co., Inc. Shipping and display container. 1,804,526; May 12.
Elsenstein, Maxwell, New York, N. Y. Automatic unwinding rule. 1,804,975; May 12.
Electric Boat Company. (See Weeks, Ralph M., assignor.)
Electric Service Supplies Company. (See Smith, Walter H., assignor.)
Electrolux Servel Corporation. (See Munters, Carl G., assignor.)
Ellern, Albert J., assigor to Travelad Corporation, Chicago, Ill. Display device. 1,805,209; May 12.
Elliot, William S., Northampton, Mass., assignor by mesne assignments, to Pro-Phy-Lac-Tic Brush Company, Wilmington, Del. Brush cleaning machine. 1,804,601; May 12.
Elliott, Edward O., Jenkintown, Pa. Locomotive truck. 1,805,328; May 12.
Ellis, Carleton, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Delineated area. 1,804,389; May 12.
Ellis, Hugh J., Berwyn, Ill. Microphone and microphone mounting. 1,805,362; May 12.
Ellis, Ray E., Los Angeles, Calif. Shade. 1,804,864; May 12.
Ellyson, Frederick W., Munich, Germany. Rotary valve gear. 1,804,921; May 12.
Elwood, Frank, assignor of one-half to F. A. Thompson, Carbondale, Ill. Shovel tooth. 1,804,756; May 12.
Embosograf Corporation of America. (See Courtnay, Frederic D., assignor.)
Engelmann, Max, Lausa, Germany. Cinematographic projection apparatus. 1,804,499; May 12.
Erf, Oscar, Columbus, Ohio. Treating hay. 1,804,602; May 12.
Erickson, Albert N., Elmhurst, N. Y. Freezing point lowering composition. 1,804,463; May 12.
Erickson, Ervil H., et al. (See Swanjord, Knute, assignor.)
Erickson, John, assignor of fifty-one one-hundredths to Sweet & Doyle Foundry & Machine Co., Troy, N. Y. Hydraulic faucet. 1,804,865; May 12.
Erickson, Ole A., et al. (See Swanjord, Knute, assignor.)
Escola, Paul, assignor to Ateliers de Construction & Fonderes de Jeumont, Jeumont, France. Glass sheet drawing apparatus. 1,805,329; May 12.
Eshbaugh, Jesse E., assignor to A C Spark Plug Company, Flint, Mich. Ammeter. 1,805,447; May 12.
Estoppey, Georges, Dayton, Ohio. Bomb sight. 1,804,679; May 12.
Evans, Kelley D., assignor of one-half to C. E. Rooven, Hamilton, Ohio. Perforating machine. 1,804,974; May 12.
Evans, Percy. (See Hook, L. H., Evans, and Wallrab.)
Eveready Pen Company. (See Weingart, Richard, assignor.)
Everts, Walter W., assignor to Sid Post, Fort Worth, Tex. Sadiron. 1,804,827; May 12.
Fairbanks, Andrew J., Dayton, Ohio, assignor, by mesne assignments, to Consolidated Aircraft Corporation, Buffalo, N. Y. Aircraft fitting. 1,805,439; May 12.
Fairchild, Sherman M., New York, N. Y. Film changing and positioning device for cameras. 1,804,680; May 12.
Fairfield Specialties Corporation. (See Hoban, Fairfield W., assignor.)
Fanchier, Zada L., Wichita Falls, Tex. Mail receiver. 1,805,393; May 12.
Faultless Caster Company. (See Noelting, Clarence B., and W. H., assignor.)
Fauth, Elizabeth D. (See Grieves, H. H., and Fauth.)
Fedders Manufacturing Company. (See Siagel, Franklin G., assignor.)
Federal Mogul Corporation. (See Blomstrom, Lowell C., assignor.)
Federwitz, Theodore A., and W. T. Bailey, assignors to Stokes and Smith Company, Philadelphia, Pa. Conveying system. 1,804,406; May 12.
Fegley, Thomas J., and G. O. Leopold, assignors to North Bro's M'f'g Co., Philadelphia, Pa. Extension bit. 1,805,330; May 12.
Fehrle, Alfred. (See Streitwolf, K., and Fehrle.)
Feltman, Edward A., and E. C. A. Wickemeyer, Richmond, Ind. Glare eliminator. 1,804,922; May 12.
Fernekes, Valentine W., and W. H. Ray, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Conveying system. 1,804,923; May 12.
Ferro, Casimiro, Bayonne, N. J. Lock for automobile tires, wheels, and other devices. 1,805,083; May 12.
Fetterly, Charles L., New Brunswick, and W. E. Smith, Milltown, assignors to Gulbenkian Seamless Rug Company, New Brunswick, N. J. Loom. 1,805,331; May 12.
Fibreboard Products Inc. (See Rosener, Leland S., assignor.)
Fingado, Rudolf. (See Seidel, W., and Fingado.)
Finn, Robert R. (See Bysshe, E. T., and Finn.)
Finn, Sidney J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for and method of heel-seat fitting. 1,805,039; May 12.
Firestone Tire and Rubber Company, The. (See Brown, Roy W., assignor.)
Firth, Fred C., Upper Batley, S. Jessop, sr., Batley, and C. T. Tattersfield, Dewsbury, England. Shaper mechanism for winding yarn on weft bobbins in spinning mules. 1,804,866; May 12.
Fischer, Otto. (See Goldberg, E., and Fischer.)
Fisher, Charles F., Veterans' Home, Calif. Window cleaner. 1,804,867; May 12.
Fisher, James B., and J. E. De Long, assignors to Waukesha Motor Company, Waukesha, Wis. Transmission and reverse gear. 1,805,137; May 12.
Fitch, George N., Ventura, Calif. Expansible bit. 1,804,681; May 12.
Fitzgerald, Alanx S., Schenectady, N. Y., assignor to General Electric Company. Electric control system. 1,805,167; May 12.
Fitzgerald, John W., assignor to Briggs and Stratton Corporation, Milwaukee, Wis. Engine starter. 1,804,757; May 12.
Fitz-Gibbon, John B. (See Aubel, Verne W., and Fitz-Gibbon.)
Fitz-Gibbon, John B., Bridgeburg, Ontario, Canada, assignor of one-half to D. M. Thorpe, Buffalo, N. Y. Base for furnaces, tanks and the like. 1,804,407; May 12.
Fitzpatrick, Eugene, Woodhaven, and C. W. Clark, Bellerose, and P. A. Tiernan, Laurel Hill, assignors to Nichols Copper Company, New York, N. Y. Producing metallic powders. 1,804,924; May 12.
Fitzpatrick, Joseph G., and R. W. Flint, Anaheim, assignors to J. F. Flint, Long Beach, Calif. Elevator. 1,804,758; May 12.
Flanders, Paul B., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,804,759; May 12.
Flint, Joseph F. (See Fitzpatrick, J. G., and Flint, assignors.)
Flint, Robert W. (See Fitzpatrick, J. G., and Flint.)
Flintkote Company, The. (See Kirschbraun, L., and Overbury, assignors.)

Floyd, William M., Cincinnati, Ohio. Fountain pen eraser and burnisher. 1,805,279; May 12.
Ford, Earl P. (See Valley, J. S., and Ford.)
Fortier, James G., assignor to Ribbon-Ink Co., Inc., Chicago, Ill. Ribbon inking device. 1,804,976; May 12.
Forward, Worthy J. (See Roberts, R. R., and Forward.)
Fosnaugh, George S., Compton, and H. H. Thrasher, Southgate, Calif. Core drilling attachment. 1,804,682; May 12.
Foster, William E., Cleveland Heights, Ohio. Sound-absorbing structure. 1,805,210; May 12.
Fowler, Clarence B., Queens Village, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,804,408; May 12.
Fowler, Clarence B., Queens Village, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,804,409; May 12.
Fox, Susan E., Paris, Tenn. Dispensing closure for containers. 1,804,760; May 12.
Frame, William J., London, England. Vacuum cleaner. 1,804,410; May 12.
Frankel, Berthold W., Brookline, Mass. Hair dressing booth. 1,805,240; May 12.
Franklin Railway Supply Company. (See Bring, Einar J., assignor.)
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frary, Francis C., Oakmont, assignor to Aluminum Company of America, Pittsburgh, Pa. Corrosion resistant aluminum alloy article. 1,805,448; May 12.
Frazier, Philip A. (See Alger, H. C., and Frazier.)
Fredendall, Field, Kaukauna, Wis. Coupling pin. 1,805,138; May 12.
Friederich, Alfred, Berlin, assignor to Aceta G. m. b. H., Berlin-Lichtenberg, Germany. Heating device for the dry spinning producing artificial threads. 1,804,530; May 12.
Frigidaire Corporation. (See Edel, Walter L., assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Frist, Robert P., jr., Long Beach, Calif. Centrifugal casting machine. 1,805,168; May 12.
Fritts, Charles B., Kansas City, Kans. Bumperette trunk rack. 1,804,761; May 12.
Frosted Foods Company. (See Birdseye, Clarence, assignor.)
Fuller Brush Company, The. (See Matteson, George F., assignor.)
Fuller Company. (See Morrow, Joseph H., assignor.)
Fuller, Frederick L., Trenton, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Magnifying device. 1,804,464; May 12.
Fuller, George L., Orangeburg, S. C. Door holder. 1,805,169; May 12.
Fuller Lehigh Company. (See Shellenberger, Rolfe, assignor.)
G & G Atlas Systems, Inc. (See Stoetzel, Joseph J., assignor.)
G & W Electric Specialty Co. (See Williams, Paul F., assignor.)
Gabriel, Alphonse, Oakland, Calif. Coin controlled lock. 1,804,411; May 12.
Gage, Nellie M., Dayton, Ohio. Luggage carrier. 1,804,868; May 12.
Gallagher, John, Philadelphia, Pa. Toy or advertising device. 1,804,925; May 12.
Gallison, Ernest A., Watertown, and A. S. MacDonald, Quincy, assignors, by mesne assignments, to Bay State Fishing Company, Boston, Mass. Cutting implement. 1,804,977; May 12.
Gambarini, Benjamin, Alameda, Calif. Flying machine. 1,804,869; May 12.
Gamble, Jack H. L., Headland, Ala. Straddle row cultivator. 1,805,394; May 12.
Garden, Henry E., Augusta, Kans. Wire line clamp. 1,804,762; May 12.
Gardiner, John, Los Angeles, Calif. Rivet rolling device. 1,804,683; May 12.
Gardiner, John F. (See Jamieson, A. C., Gardiner, and McDonald.)
Gardiner, John H., College Park, Md. Nitrocellulose composition. 1,804,503; May 12.
Garrigue, Paul, New York, N. Y. Collapsible globe. 1,804,828; May 12.
Garrigue, Paul, New York, N. Y. Collapsible globe and mounting for same. 1,804,829; May 12.
Gedeon, Andrew, Chicago, Ill. Radiator. 1,804,603; May 12.
Geier, P. A., Company, The. (See Lawrence, C. B., and Martinet, assignors.)
Geiger, Ernst, Irvington, N. J. Automobile guiding apparatus. 1,805,211; May 12.
Gem Manufacturing Company. (See Hedrick, Gale H., assignor.)
General Aircraft Corporation. (See Stewart, Bayard S., assignor.)
General Aniline Works, Inc. (See Heidenreich, Rudolf M., assignor.)
General Aniline Works, Inc. (See Heil, Rudolf, assignor.)
General Aniline Works, Inc. (See Hoffa, E., and Müller, assignors.)
General Aniline Works, Inc. (See Holl, Alfred, assignor.)
General Aniline Works, Inc. (See Kunz, Max A., and Koeberle, assignors.)
General Aniline Works, Inc. (See Kunz, M. A., Koeberle, and Berthold, assignors.)
General Aniline Works, Inc. (See Mieg, Walter, assignor.)
General Aniline Works, Inc. (See Nawiasky, Paul, assignor.)
General Electric Company. (See Bivens, Maurice E., assignor.)
General Electric Company. (See Fitzgerald, Alan S., assignor.)
General Ice Scoring Machine Company, The. (See Roark, Robert H., assignor.)
General Motors Corporation. (See Anderson, Bernard H., assignor.)
General Motors Corporation. (See Walters, V. E., and Grant, assignors.)
General Motors Corporation. (See Wilson, John F., assignor.)
General Motors Research Corporation. (See Perrine, Lester E., assignor.)
Genoese, John, San Francisco, Calif. Safety paper. 1,804,978; May 12.
Gentile, Marino, assignor of one-half to S. W. Weis, Chicago, Ill. Paper pulp container. 1,804,555; May 12.
Gentile, Marino, assignor of one-half to S. W. Weis and one-fourth to George Pick, Chicago, Ill. Composite covering material. 1,804,556; May 12.
Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches. (See Meissner, Alexander, assignor.)
Glanini, Peter C., Portland, Oreg. Tent stake. 1,805,084; May 12.
Gibbons, Willis A. (See Hopkinson, E., and Gibbons.)
Gifford, Arthur H. (See Cunningham, T. F., and Gifford.)
Gilbert, A. C., Company, The. (See Gilbert, Alfred C., assignor.)
Gilbert, Alfred C., Hamden, assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Construction toy. 1,804,926; May 12.
Gilbert, Alfred C., Hamden, assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn. Container for construction toys and like sets. 1,804,927; May 12.
Gilbert, Alfred J., Windsor, assignor to The Silent Glow Oil Burner Corporation, Hartford, Conn. Pump. 1,804,604; May 12.
Gill Glass & Fixture Company. (See Aglow, Harry, assignor.)
Gill, J. Ray, Portland, Mo. Pipe puller for removing or pulling pipes or casings from wells and the like. 1,805,280; May 12.
Gill, Thomas, Jersey, Calif. Asparagus trimming machine. 1,804,928; May 12.
Gillette Safety Razor Company. (See Thompson, Ralph E., assignor.)
Girling, Albert H. G., Harlow, England, assignor to Bendix Brake Company, South Bend, Ind. Expanding brake. 1,804,929; May 12.
Glasier, Harold H., Los Angeles, Calif. Traction frame. 1,804,312; May 12.
Glass, James F., Conroe, Tex. Work table and clamp. 1,805,395; May 12.
Glenwood Range Company. (See Burt, James P., assignor.)
Globe-Wernicke Company, The. (See Smiley, Samuel, jr., assignor.)
Gold, Monroe, Brooklyn, N. Y. Clip for a fountain pen or similar article. Des. 84,139; May 12.
Goldberg, Emanuel, and O. Fischer, Dresden, Germany. Film box. 1,804,500; May 12.
Goldman, Samuel, Brooklyn, N. Y. Sash lock. 1,805,170; May 12.
Good, Bruce Z., assignor to The Loomis Machine Company, Tiffin, Ohio. Drilling machine. 1,805,139; May 12.
Good, Robert C., Edgewood, and H. Holiday, Glenshaw, Pa., assignors, by mesne assignments, to The American Rolling Mill Company, Middletown, Ohio. Making car wheels. 1,804,763; May 12.
Goodlet, James C., Indianapolis, Ind. Collapsible minnow trap. 1,804,684; May 12.
Goodyear Tire & Rubber Company, The. (See Berwick, Jo D., assignor.)
Goodyear Tire & Rubber Company, The. (See Burdette, Richard S., assignor.)
Goodyear Tire & Rubber Company, The. (See Burrell, George R., assignor.)
Goodyear Tire & Rubber Company, The. (See Meyer, Frank H., assignor.)
Goodyear Tire & Rubber Company, The. (See Sebrell, Lorin B., assignor.)
Goodyear Tire & Rubber Company, The. (See State, Will C., assignor.)
Goodyear Tire & Rubber Company, The. (See Teppema, Jan, assignor.)
Goodyear Tire & Rubber Company, The. (See Woodward, Alva W., assignor.)
Goodyear's Inc. (See Van Horn, Earl, assignor.)
Gordon, James C., Los Angeles, Calif. Air control for internal combustion engines. 1,804,605; May 12.
Goss, Byron C., Cleveland, Ohio. Bank vault ventilator system. 1,805,332; May 12.

Goss and Deleeuw Machine Company, The. (See Spring, Joseph J., assignor.)
Gould, Lawrence E., Chicago, and J. T. Lake, Wilmette, assignors to Economy Electric Devices Co., Chicago, Ill. Fuel metering apparatus. 1,804,537; May 12.
Governor and Company of Adventurers of England Trading Into Hudson's Bay. (See Sharpe, George G., assignor.)
Govers, Francis X., assignor to Indian Refining Company, Lawrenceville, Ill. Heat transfer tube. 1,804,465; May 12.
Grabler Manufacturing Company, The. (See McCabe, Frank E., assignor.)
Graffenberger, Friedrich, assignor to Milwaukee Lace Paper Company, Milwaukee, Wis. Plant cover. 1,805,212; May 12.
Grainger, Chester A., Cynwyd, Pa., assignor to Allbestos Corporation, Philadelphia, Pa. Display cabinet. Des. 84,140; May 12.
Grant, Edwin J., Los Angeles, Calif. Apparatus for and method of cutting material. 1,804,764; May 12.
Grant, Irving. (See Walters, V. E., and Grant.)
Grant, James H. (See Johnson, H. L., and Grant.)
Grant, John. (See Santiago, James J., assignor.)
Grant, John. (See Triplett, James B., assignor.)
Grau, Ernst, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,804,606; May 12.
Graybill, Kenneth W., Villa Park, assignor to Reserve Holding Company, Chicago, Ill. Voltage regulating system. 1,805,140; May 12.
Great Northern Paper Company. (See Harkness, Orris A., assignor.)
Green, Aaron S., et al. (See Hunsicker, Clyde L., assignor.)
Green, Louis D., et al. (See Hunsicker, Clyde L., assignor.)
Greenwood Associates. (See Greenwood, Marcus J., assignor.)
Greenwood, Marcus J., assignor to Greenwood Associates, Gardner, Mass. Extension table. 1,805,213; May 12.
Gregg, Bessie L. (See Haselton, Page S., assignor.)
Greist Manufacturing Co., The. (See Hinman, George L., assignor.)
Gresham, Floyd M. (See Robertson, Ivy B., assignor.)
Grey, Chester, et al. (See Dickinson, James C., assignor.)
Grieves, Harry H., and E. D. Fauth, assignor to Standard Oil Company, Whiting, Ind. Ornamented candle. 1,805,171; May 12.
Griffith, William A., and W. L. Myers, Holly, Colo. Sound post for stringed musical instruments. 1,805,172; May 12.
Griffith, William B., Audubon, N. J., assignor to Star Sprinkler Corporation. Dry pipe valve. 1,805,241; May 12.
Griffoul, Henry M., San Jose, Calif. Dehydrator. 1,805,173; May 12.
Grimm, William K., Elkhart, Ind. Motion picture apparatus. 1,804,685; May 12.
Groehn, Otto J., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Method of and apparatus for making automobile doors. 1,804,607; May 12.
Groff, Joseph C., New York, N. Y. Converting the heat energy of fuel into useful working energy. 1,804,413; May 12.
Groves, Cecil R. D., Thornton Heath, England. Electrical warming means or device for use with internal combustion engines to facilitate starting thereof. 1,805,040; May 12.
Grubman, Leo J., Belle Harbor, N. Y. Eye mounting for dolls. 1,805,085; May 12.
Grus, William, jr., Los Angeles, Calif. Leaf spring oiler. 1,805,242; May 12.
Gudka, Elmer E., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,805,174; May 12.
Guild, Waldo J., assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,804,414; May 12.
Gulbenkian Seamless Rug Company. (See Fetterly, C. L., and Smith, assignors.)
Gulick, Edward J., assignor to C. G. Conn, Ltd., Elkhart, Ind. Clarinet. 1,805,449; May 12.
Guyer, George A., Chicago, Ill. Piling spacer. 1,805,086; May 12.
Gwinn, Joseph M., jr., assignor to Consolidated Aircraft Corporation, Buffalo, N. Y. Aircraft. 1,804,765; May 12.
Haas, Alphonse, San Bernardino, Calif. Cigar or cigarette ash protector. 1,804,979; May 12.
Haas, Herman, Leunep, Germany. Air circulating device for drying flat fabrics. 1,804,558; May 12.
Hagemann, Louis F., Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada. Strip aligning apparatus for manifold record machines. 1,804,608; May 12.
Hague, Alfred E., West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,804,766; May 12.
Hague, Alfred E., West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,804,767; May 12.
Halbig, Paul, and F. Kaufler, assignors to Dr. Alexander Wacker Gesellschaft fur Elektrochemische Industrie, Munich, Germany. Effecting ester condensations. 1,805,281; May 12.
Hale, George C., Dover, N. J. Delay powder. 1,805,214; May 12.
Hale, William J., assignor to The Dow Chemical Company, Midland, Mich. Making diarylamines. 1,804,466; May 12.
Hales, Leonard L., Winnipeg, Manitoba, Canada. Brush. 1,804,415; May 12.
Hall, Alfred, East Jaffrey, N. H. Envelope sealer. 1,804,609; May 12.
Hall, George E. (See Witten, Arthur P., assignor.)
Hall, Peter P-G., Philadelphia, Pa. Thread milling machine. 1,804,686; May 12.
Hallam, Stanley M., Milwaukee, Wis. Clock lamp. Des. 84,141; May 12.
Hallam, Stanley M., Milwaukee, Wis. Clock lamp. Des. 84,142; May 12.
Halvorsen, Severin, Chicago, Ill., assignor to The Newspaper Stuffing Machine Company, Seattle, Wash. Feeding mechanism. 1,804,610; May 12.
Halvorsen, Severin, Chicago, Ill., assignor to The Newspaper Stuffing Machine Company, Seattle, Wash. Pneumatic feed mechanism. 1,804,611; May 12.
Halvorsen, Severin, Chicago, Ill., assignor to The Newspaper Stuffing Machine Company, Seattle, Wash. Pneumatic feed mechanism. 1,804,612; May 12.
Hamer, Leland S., Long Beach, assignor of one-half to K. A. Wright, Los Angeles, and one-half to E. Koppl, Long Beach, Calif. Well tool. 1,805,087; May 12.
Hamilton, Alexander C., Detroit, Mich., assignor, by mesne assignments, to Relay Motor Products Corporation, Bridgeport, Conn. Motor vehicle construction. 1,804,687; May 12.
Hamilton, George H., East Grand Rapids, assignor to American Seating Company, Grand Rapids, Mich. Chair. Des. 84,143; May 12.
Hamilton Standard Propeller Corporation, The. (See Nelson, Arvid, assignor.)
Hammerstrom, Karl R., Butler, Pa. Manufacturing hollow articles. 1,805,283; May 12.
Hammerstrom, Karl R., Hammond, Ind., and L. H. Vold, Butler, Pa. Pinch riveter. 1,805,282; May 12.
Hammond, Frederick W., Chepstow, England. Coating metallic articles, particularly the interiors of water mains (in situ). 1,805,215; May 12.
Hanak, Edward, Houston, Tex. Motor conveyor trackway. 1,805,175; May 12.
Hanscom, Geoffrey L. (See Bunker, W. S., and Hanscom.)
Hansell, Clarence W., Port Jefferson, N. Y., assignor to Radio Corporation of America. Prevention of parasitics in electron emission tube circuits. 1,804,836; May 12.
Hansen Canning Machinery Corporation. (See Hausen, Oswald H., assignor.)
Hansen, Oswald H., Milwaukee, assignor to Hansen Canning Machinery Corporation, Port Washington, Wis. Can feeding mechanism. 1,805,243; May 12.
Harbecke, Herman H., Chicago, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Voltage control system. 1,804,768; May 12.
Hardesty, Benjamin D., assignor to Mayer China Company, Beaver Falls, Pa. Supporting device for pottery. 1,804,980; May 12.
Hardesty, Francis D., Pleasant Ridge, assignor to Herron-Zimmers Molding Company, Detroit, Mich. Two part finishing molding. 1,804,831; May 12.
Hardesty, Francis D., Dayton, Ohio. Motor vehicle lock. 1,805,088; May 12.
Harkness, Orris A., Yeazie, assignor to Great Northern Paper Company, Millinocket, Me. Steering mechanism for twin engine tractors. 1,805,141; May 12.
Harris, Ewing T., Seminole, Okla. Oil pressure gauge. 1,804,981; May 12.
Harris, Julius H., and C. F. Burney, Dallas, Tex. Sample display. 1,805,041; May 12.
Harris, William A., Greenville, S. C. Pneumatic tire inflating and deflating apparatus. 1,805,397; May 12.
Harrison, Henry C., Port Washington, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,804,688; May 12.
Hart, Harry S., and D. Hindahl, Chicago, Ill. Car construction. 1,804,769; May 12.
Hart, John, Union City, N. J. Garment holder, folder, supporter and box strengthener. 1,805,363; May 12.
Hartford-Empire Company. (See Rowe, George E., assignor.)
Harvard Company, The. (See Monnot, Edward L., assignor.)
Harvey, Lee, San Francisco, Calif., assignor to H. P. Burke, Alpine, Ariz. Oil filtering and refining means. 1,805,450; May 12.
Haselton, Page S., Upper Montclair, N. J., assignor to B. L. Gregg, Forest Hill Gardens, N. Y. Cutting glass. 1,805,457; May 12.
Hastings, Herbert, Rochester, N. Y. Pressure gauge. 1,805,176; May 12.
Hatch, Raymond S. (See Wolf, R. B., Hill, and Hatch.)
Hathaway, William R., asignor to United Advertising Corporation, New Haven, Conn. Pipe hanger for electrical conduits and the like. 1,804,416; May 12.
Havens, Allen H., St. Petersburg, Fla. Eyeshield for spectacles. 1,805,396; May 12.

Hawkins, Harold E. (See Hawkins, Ross, assignor.)
Hawkins, Ross, assignor to H. E. Hawkins, Chicago, Ill. Indicating means. 1,805,244; May 12.
Hawley, Douglass, Minneapolis, Minn., assignor to Jewell Electrical Instrument Company, Chicago, Ill. Radio testing device. 1,805,089; May 12.
Hays, Howard R., Philadelphia County, assignor to H. S. Levy and L. F. Levy, Philadelphia, Pa. Silver nitrate holder for process cameras. 1,804,982; May 12.
Head, Francis. (See Head, Miriam C. and F.)
Head, Miriam C. and F., Newton Mass. Sport garment. 1,804,930; May 12.
Heald Machine Company, The. (See Guild, Waldo J., assignor.)
Heald Machine Company, The. (See Taylor, Edward M., assignor.)
Hecht, Carl E. (See Mincemoyer, Charles E., assignor.)
Hedrick, Gale H., Glensbaw, assignor to Gem Manufacturing Company, Pittsburgh, Pa. Automobile bumper. 1,805,284; May 12.
Heidenreich, Rudolf M., Elberfeld, Germany, assignor to to General Aniline Works, Inc., New York, N. Y. New compounds of the benzanthraquinone series. 1,804,870; May 12.
Heil, Rudolf, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New vat dyestuff of the dipyrazolanthrone series and making same. 1,804,531; May 12.
Heine, Walter G. R., Detroit, Mich. Hood lock. 1,805,042; May 12.
Helfant, Henry, Arverne, N. Y. Shoe buckle connecting means. 1,805,398; May 12.
Helland, Herman H., Fargo, N. D. Door register. 1,804,871; May 12.
Henderson, Fred A., Creston, Iowa. Mop attachment for brooms. 1,804,504; May 12.
Henderson, Herbert V., assignor to Chrysler Corporation, Detroit, Mich. Supporting bracket. 1,805,364; May 12.
Hendrick, Joseph H., Oakland, Ky. Cutting device. 1,805,399; May 12.
Hendry, William F., Ossining, N. Y., assignor, by mesne assignments, to Manhattan Electrical Supply Company, Inc., Jersey City, N. J. Electric discharge device. 1,804,467; May 12.
Henninger, Ludwig, assignor to Badische Maschinenfabrik & Eisengiesserei vormals G. Sebold und Sebold & Neff, Durlach, Germany. Folding tool for match-box making machines. 1,804,613; May 12.
Hensted, Ira, et al. (See Swanjord, Knute, assignor.)
Hentschel, Ernest R., deceased, Washington, D. C.; J. Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. Controlling the amplitude of alternating current. 1,805,463; May 12.
Herold, Walter F., Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn. Furniture rest or shoe. 1,804,390; May 12.
Herron-Zimmers Molding Company. (See Hardesty, Francis D., assignor.)
Hershfield, Abe, Goshen, Ind., assignor to Standard Oil Company, Chicago, Ill. Structure for signs. 1,804,770; May 12.
Herting, Otto, assignor to Sani Paper Products Co. Inc., Philadelphia, Pa. Composition for and method of heat and fire proofing paper, crafthoard and the like. 1,804,417; May 12.
Hevi Duty Electric Company. (See Koenig, Leon C., assignor.)
Hicken, Elmer E., Collingswood, N. J. Tender. Re18,066; May 12.
Hickok Manufacturing Company. (See Mix, Edwin S., assignor.)
Higby, Roy C., et al. (See Vieau, Harold F., assignor.)
Higgins, Joseph E., Grand Island, Nebr. Reversing mechanism. 1,804,983; May 12.
Higgins, Nicholas F., Chicago, Ill. Cotton picker. 1,805,310; May 12.
Hl-Heat Gas Co. Inc. (See Lindbloom, Charles V., assignor.)
Hill, Harold O., Aspinwall, Pa. Footing for towers or the like. 1,805,311; May 12.
Hill, Leland H., Collingswood, N. J., assignor to Westinghouse Electric & Manufacturing Company. Tap changing system. 1,804,614; May 12.
Hill, Raymond P. (See Wolf, R. B., Hill, and Hatch.)
Hills, Paul W., assignor to Allen and Hills, Incorporated, Auburn, N. Y. Shuttle and manufacture. 1,805,090; May 12.
Hindahl, David. (See Hart, H. S., and Hindahl.)
Hinds, Orville Q., Chicago, Ill. Foot controlled accelerator and brake mechanism. 1,804,615; May 12.
Hinman, George L., assignor to The Greist Manufacturing Co., New Haven, Conn. Doorlatch. 1,805,091; May 12.
Hippenmeyer, Irving R., Waukesha, Wis., assignor to The Creamery Package Mfg. Company, Chicago, Ill. Unloading mechanism for can washing machines. 1,805,142; May 12.
Hirsch, Mortiz, Frankfort-on-the-Main, Germany. Refrigeration apparatus. 1,805,400; May 12.
Hiyake, Frank M. (See Dooley, Edward G., assignor.)
Hoban, Fairfield W., assignor to Fairfield Specialties Corporation, New York, N. Y. Support for hats and the like. 1,804,931; May 12.
Hodgkinson, Francis, Swarthmore, Pa., assignor to Westinghouse Electric and Manufacturing Company. Multistage feed water heating. 1,804,616; May 12.
Hodnett, William, Fillmore, N. Y. Lowering apparatus. 1,805,177; May 12.
Hoeh, Albert C., Royal Oak, Mich. Driver for reamers and the like. 1,804,505; May 12.
Hoffa, Erwin, Hochst-on-the-Main, J. Müller, Hanau-on-the-Main, and F. Müller, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Converting arylcarboxyamino-o-thiogly-collic acids into dydroxythionaphthene compounds. 1,804,872; May 12.
Hoffman, Albert F., Newark, N. J. Bottling machine. 1,804,985; May 12.
Hoffman-La Roche Inc. (See Preiswerk, Ernest, assignor.)
Hoffman, William E., Los Angeles, Calif. Compressor and means for converting Ford motors into same. 1,804,873; May 12.
Hoffmann, Kurt, Dresden, Germany. Adjusting knob for framing devices. 1,804,501; May 12.
Hoffstetter, Carl H., assignor to Odin Stove Manufacturing Company, Erie, Pa. Door structure. 1,804,984; May 12.
Hojnowski, Jakob, Nekoosa, Wis. Child's vehicle. 1,804,832; May 12.
Hoke, Frank, Indianapolis, Ind., assignor to Holcomb & Hoke Manufacturing Company. Signal receiving and distributing system. 1,804,559; May 12.
Holcomb & Hoke Manufacturing Company. (See Hoke, Frank, assignor.)
Holden, Charles L., Kings Mills, and P. P. Quayle, Lebanon, assignors to The Peters Cartridge Company, Cincinnati, Ohio. Blank cartridge. 1,804,986; May 12.
Holiday, Harry. (See Good, R. C., and Holiday.)
Holl, Alfred, Offenbach-on-the-Main, Germany, assignor to General Aniline Works Inc., New York, N. Y. Manufacturing vat dyestuffs of the anthraquinone series. 1,804,532; May 12.
Holland, Newman H., Montclair, N. J., assignor to Western Electric Company, New York, N. Y. Acoustic device. 1,804,689; May 12.
Holliday, Robert L., New York, N. Y., assignor, by mesne assignments, to Colgate-Palmolive-Peet Company, Chicago, Ill. and The Procter & Gamble Company, Cincinnati, Ohio. Manufacture of soap powder. 1,804,932; May 12.
Holmes, John R. (See Roberts, T. H., and Holmes.)
Holmes, Will K., Tulsa, Okla., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Treating hydrocarbon oils. 1,804,933; May 12.
Holte, Halvor, administrator. (See Holte, Harold O.)
Holte, Harold O., deceased, Pittsburgh, Pa., by H. Holte, administrator, Crookston, Minn., assignor to The Union Switch & Signal Company, Swissvale, Pa. Signaling apparatus. 1,805,092; May 12.
Holzwarth Gas Turbine Co. (See Holzwarth, Hans, assignor.)
Holzwarth, Hans, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Cooling device for combustion gas turbines. 1,805,093; May 12.
Hommel, Oscar, Pittsburgh, Pa. Enamel ware. 1,805,143; May 12.
Hook, Lee H., P. Evans, and C. S. Wallrab, Chicago Heights, assignors to Calumet Steel Company, Chicago, Ill. Repeater. 1,805,312; May 12.
Hooven, C. E. (See Evans, Kelley D., assignor.)
Hoover, Joseph C., Detroit, Mich., assignor, by mesne assignments, to Jewell Electrical Instrument Company, Chicago, Ill. Set checker. 1,805,094; May 12.
Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Adjustable light source for photographic printing machines. 1,804,771; May 12.
Hopkinson, Ernest, New York, and W. A. Gibbons, Little Neck, assignors to New York Belting & Packing Company, New York, N. Y. Making articles of rubber and fibrous material and product. 1,805,245; May 12.
Hopson, Morton, Eustis, Fla. Suction pump. 1,804,987; May 12.
Horni, Joseph T., Newark, N. J. Traffic sign stand. 1,805,095; May 12.
Horton, John O., assignor to Beach Manufacturing Company, Montrose, Pa. Sawing machine. 1,805,043; May 12.
Howarth, Julius, assignor to Newman-Rudolph Lithographing Co., Chicago, Ill. Advertising novelty stand. 1,804,617; May 12.
Howard, Alfred H. (See Clark, Albert B., assignor.)
Howard Development Company. (See Howard, Merton W., assignor.)
Howard, Merton W., assignor to Howard Delevopment Company, Lynn, Mass. Needle loader for sewing machines. 1,804,618; May 12.
Howe, Frank D., Cuyahogo Falls, Ohio. Furnace. 1,804,988; May 12.
Howse, Curtis L. (See Snow, N. L., Bowers, and Howse.)
Hoyt, John T. Hazleton, Pa., assignor, by mesne assignments, to Oliver United Filters Inc., San Francisco, Calif. Fluid pressure discharge for continuous filters. 1,804,934; May 12.
Hribar, Martin, Forest Hills, N. Y. Drain cleaner. 1,804,874; May 12.

Hubbard, James W., assignor to The Mechanical Manufacturing Company, Chicago, Ill. Lard filling machine. 1,804,772; May 12.
Hubbell, Harvey, jr., Bridgeport, Conn. Auxiliary brake operating mechanism. 1,804,773; May 12.
Huber, Eugen, Leverkusen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Etherifying cellulose. 1,805,365; May 12.
Hudson, Edwin B., Butler, Pa., assignor to The American Rolling Mill Company, Middletown, Ohio. Pickling tank construction. 1,804,774; May 12.
Hudson Motor Car Company. (See Groehn, Otto J., assignor.)
Hughes, Virgil R., Belvedere Gardens, Calif. Road subgrading machine. 1,804,418; May 12.
Hull, Samuel P., Yonkers, J. J. Corcoran, Albany, N. Y., and F. C. Lavarack, Montclair, N. J. Cabling clip. 1,804,775; May 12.
Humason, Granville A., Houston, Tex. Packer. 1,804,619; May 12.
Hunsicker, Clyde L., San Francisco, Calif. Ophthalmological instrument. 1,804,691; May 12.
Hunsicker, Clyde L., San Francisco, Calif., assignor, by mesne assignments, of one-half to A. S. Green and L. D. Green. Optometrist instrument. 1,804,690; May 12.
Hunt, C. Howard, Pen Company. (See Thompson, Frank, assignor.)
Hunter, Edgar K., assignor, by mesne assignments, to Kodak Limited and Intertype Limited, London, England. Photographic printing process and apparatus therefor. 1,805,333; May 12.
Hussey, Erwin H., Springfield, Ohio. Manufacture of fiber board. 1,804,560; May 12.
Husted, H. A., Company, The. (See Kraft, Herman T., assignor.)
Hutchens, Edward, Cudahy, Wis., assignor, by mesne assignments, to H. Muehlstein & Co. Inc., New York, N. Y. Machine and method for removing valve stems from inner tubes. 1,804,419; May 12.
Hux, Frank, Bruni, assignor to Standard Drilling and Sand Testing Company, Webb County, Tex. Sand testing tool. 1,804,620; May 12.
Hydraulic Deep Well Pump Company. (See Squires, Wilbur N., assignor.)
Hynes, Lee P., Albany, assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y. Bus heating system. 1,804,875; May 12.
I. G. Farbenindustrie Aktiengesellschaft. (See Bockmuhl, M., and Knoll, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Dachlauer, K., and Thiel, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Huber, Eugen, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Seidel, W., and Fingado, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Voss, Arthur, assignor.)
Ideal Manufacturing Company. (See Arlt, John L., assignor.)
Illinois Cosmetics Co. (See Roberts, Benjamin T., assignor.)
Illinois Watch Case Company. (See Pretot, Harry V., assignor.)
Imhoff, Arthur B., et al. (See Bagge, E., and Imhoff, assignors.)
Indian Refining Company. (See Govers, Francis X., assignor.)
Industrial Silica Corporation. (See Smith, Harry H., assignor.)
Ingersoll Magnetic Lock Company. (See Dorsey, B. L., and Ingersoll, assignors.)
Ingersoll-Rand Company. (See Bancel, Paul A., assignor.)
Ingersoll-Rand Company. (See Parsons, Frederick W., assignor.)
Ingersoll, Thomas S. (See Dorsey, B. L., and Ingersoll.)
Instograph, Ltd. (See Derrick, George H., assignor.)
Insulex Corporation. (See Ashenhurst, Harold S., assignor.)
International Coal Carbonization Company. (See Runge, W., and Packard, assignors.)
International Fire Equipment Corporation. (See Old, Clayton W., assignor.)
International Nickel Company, The. (See Pilling, Norman B., assignor.)
International Patents Development Company. (See Johnson, J. A., and Chalmers, assignors.)
Intertype Limited, et al. (See Hunter, Edgar K., assignor.)
Irvine, Andrew. (See Bateman, A. T., and Irvine.)
Irwin, Paul L., Pittsburgh, Pa. Torsion testing machine. 1,804,621; May 12.
Jackson, Andrew V. (See Burrell, George T., and Jackson.)
Jackson, Charles F., Minneapolis, Minn., assignor to Standard Oil Development Company. Method and apparatus for working oil sands. 1,804,692; May 12.
Jacobs, Joseph H., Rochester, N. Y. Center tester. 1,805,285; May 12.
Jacobus, Edward, East Orange, N. J. Machine element. 1,804,935; May 12.
Jacocks, George T., Brooklyn, assignor, by mesne assignments, to Alco Products Incorporated, New York, N. Y. System of heat interchange. 1,804,936; May 12.
James, Charles T., Los Angeles, Calif. Safety cage window. 1,804,776; May 12.
Jamieson, Aubrey C., Kew, J. F. Gardiner, Gardenvale, and W. J. McDonald, Preston, Australia. Hydraulically operated air compressor and the like. 1,804,876; May 12.
Jandoc, Antonio, and B. A. Lagmay, Wilmette, Ill. Ventilated shoe. 1,804,533; May 12.
Janney, Edward K., Buena Vista, Va. Safety hasp. 1,805,401; May 12.
Jarvis, Perry G., Minnora, W. Va. Wire stitcher. 1,804,502; May 12.
Jefferson Electric Company. (See McDonald, C. T., and Cook, assignors.)
Jeffrey, Melvin R., Missoula, Mont. Fish control apparatus. 1,804,989; May 12.
Jensen, John, assignor to Whitney Metal Tool Company, Rockford, Ill. Angle bar bending machine. 1,804,468; May 12.
Jerome, Horace M., assignor, by mesne assignments, to G. A. Wood, Detroit, Mich. Boiler construction. 1,804,777; May 12.
Jessop, Stanley, sr. (See Firth, F. C., Jessop, and Tattersfield.)
Jewell Electrical Instrument Company. (See Burtch, Joel A., assignor.)
Jewell Electrical Instrument Company. (See Hawley, Douglass, assignor.)
Jewell Electrical Instrument Company. (See Hoover, Joseph C., assignor.)
Jimopulos, Sam C., assignor of four-tenths to R. Nolen, St. Louis, Mo. Belt. 1,804,990; May 12.
Johnson, Chester W., Boston, assignor to The A. L. Smith Iron Works, Chelsea, Mass. Circuit closer. 1,804,622; May 12.
Johnson, George B., Evanston, Ill. Hydrocarbon burner. 1,804,469; May 12.
Johnson, Gustave A., assignor to American Steel Pipe Co. Inc., Irvington, N. J. Process and apparatus for coating. 1,804,991; May 12.
Johnson, Herbert L., and J. H. Grant, Dexter, Me. Cam lock for screens and storm windows. 1,804,877; May 12.
Johnson, Joseph A., Chicago, and G. W. Chalmers, Summit, Ill., assignors to International Patents Development Company, Wilmington, Del. Feeding device for presses. 1,805,246; May 12.
Johnson, Lewis H., Madison, N. J., and R. L. Stokely, Floral Park, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,804,778; May 12.
Johnson Metal Products Co. (See Johnson, Theodore, assignor.)
Johnson, Olof, Northville, N. Y. Automobile transmission hoist. 1,805,402; May 12.
Johnson Service Company. (See Otto, Carl A., assignor.)
Johnson, Theodore, Erie, assignor to Johnson Metal Products Co., Erie, Pa. Casement window structure. 1,805,403; May 12.
Johnson, William O., Denver, Colo. Shoe. Des. 84,144; May 12.
Johnston, Ernest, Loveland, Colo. Building. Des. 84,145; May 12.
Johnston, Howard M., and O. H. Shenstone, Toronto, Ontario, assignors to Massey Harris Company, Toronto, Canada. Fertilizer distributor. 1,805,096; May 12.
Johnston, Walter C., Polk City, Fla. Ornamental article and making the same. 1,804,833; May 12.
Jones, Alfred, assignor to Armstrong Cork Company, Lancaster, Pa. Manufacture of printed floor coverings. 1,805,144; May 12.
Jones, Ed L. (See Vroman, John C., assignor.)
Jones, Elmer M., Atlanta, Ga. Package dispensing apparatus. 1,804,534; May 12.
Jones, Frank H., Upper Sandusky, Ohio. Friction clutch disk. 1,804,878; May 12.
Jones, John D., Portland, Oreg. Water cooled bearing. 1,804,693; May 12.
Jones & Lamson Machine Company. (See Bysshe, E. T., and Finn, assignors.)
Jones & Laughlin Steel Corporation. (See Rendleman, Norman C., assignor.)
Jones, Lloyd T., Berkeley, Calif. Mercury vapor turbine. 1,804,694; May 12.
Jones, Philip, and P. W. Prutzman, Los Angeles, Calif. Mechanical rotary drilling control. 1,804,779; May 12.
Jones, Walter L., Arlington, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Fastener assembly. 1,805,462; May 12.
Jones, William A., Westerleigh, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Header and support therefor. 1,804,780; May 12.
Joslyn, Paul L., San Francisco, Calif. Piston ring. 1,805,404; May 12.
Jostam Manufacuring Co. (See Ammann, Albert H., assignor.)
Kaden, Max, New Britain, Conn. Toothbrush and tumbler rack. 1,805,366; May 12.
Kahn, David, Woodcliff, N. J. Fountain pen. Des. 84,146; May 12.
Kaplan, Louis J., assignor, by mesne assignments, to The Kitchen Katch-All Corporation, Greenwich, Ohio. Kitchen utensil. 1,804,623; May 12.
Kaplan, Max. (See Kline, M., and Kaplan.)
Karitzky, John. (See Pleister, H. W., and Karitzky.)

Karius, Karl, Achern-in-Baden, Germany. Rolling metals and apparatus therefor. 1,804,879; May 12.
Karnes, James C., Buffalo, N. Y. Registering indices of fire control systems. 1,804,992; May 12.
Kaufler, Felix. (See Halbig, P., and Kaufler.)
Keeler Brass Company. (See Keeler, Isaac S., assignor.)
Keeler, Isaac S., assignor to Keeler Brass Company, Grand Rapids, Mich. Knob or handle lock. 1,804,781; May 12.
Keil, Francis, & Son, Inc. (See Keil, Henry F., assignor.)
Keil, Henry F., Scarsdale, N. Y., assignor to Francis Keil & Son, Inc. Locking mechanism. 1,805,451; May 12.
Kelch, James W. (See Roberts, T. H., and Holmes, assignors.)
Keller, Charles G., Poughkeepsie, N. Y. Vehicle wheel. 1,804,937; May 12.
Keller, Charles G., Poughkeepsie, N. Y. Vehicle wheel. 1,804,938; May 12.
Kelley, Raymond E., Buffalo, N. Y. Ceiling supporting strap. 1,804,420; May 12.
Kelly, James F., Clifton, N. J. Wall construction. 1,805,334; May 12.
Kempton, Arthur K. (See Balzer, Werner H., assignor.)
Kermode, William M., and C. S. Plummer, Bradford, England. Expansion pipe joint and the like. 1,805,335; May 12.
Kerner Incinerator Company. (See Kummer, Frederick C., assignor.)
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Economizer. 1,804,939; May 12.
Kimball, Franklin E., Long Beach, Calif. Purifying sulphuric acid. 1,805,247; May 12.
King, Alexander H. (See Ryder, Earle A., and King.)
King, George E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor control system. 1,805,248; May 12.
King, Jesse G., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,804,624; May 12.
King, Ronald T., Burlington, N. J. Automatically operated press. 1,805,367; May 12.
Kirschbraun, Lester, Chicago, Ill. Apparatus and process of generating power. 1,804,561; May 12.
Kirschbraun, Lester, Leonia, N. J., and F. C. Overbury, Pasadena, Calif., assignors to The Flintkote Company, Boston, Mass. Apparatus for making aqueous bituminous emulsions. 1,804,562; May 12.
Kitchen Katch-All Corporation, The. (See Kaplan, Louis J., assignor.)
Klachlo, Abraham W. (See Kuplan, Abraham, assignor.)
Klemm, Edwin O., Saginaw, Mich. Settee with reading and writing attachments. Des. 84,147; May 12.
Klemm, Edwin O., and K. R. Otto, Saginaw, Mich. Reading chair. Des. 84,152; May 12.
Kline, Max, Bronx, and Max Kaplan, New York, N. Y., assignors to Superior Products Corporation, Elizabeth, N. J. Vanity case. 1,804,563; May 12.
Klopsteg, Paul E., assignor to Central Scientific Company, Chicago, Ill. Comparator. 1,804,421; May 12.
Knobloch, Carl, Middletown, Conn. Liquid level gauge. 1,804,695; May 12.
Knoll, Robert. (See Bockmuhl, M., and Knoll.)
Knosher, Adolph, assignor to Kroehler Manufacturing Company, Naperville, Ill. Davenport bed. 1,805,097; May 12.
Knott, Gottfred, Davis Junction, Ill. Hay fork. 1,804,625; May 12.
Knowland, Richard G., Wollaston, and N. Kosak, Everett, Mass., assignors to Nashua Manufacturing Company, Nashua, N. H. Dye bath and process of dyeing. 1,805,098; May 12.
Knox, Harry A., Davenport, Iowa. Endless band track for vehicles. 1,804,470; May 12.
Koch, John M., Reading, Pa. Automatic feeder for centerless grinders. 1,804,422; May 12.
Koch & Te Kock. (See Menscheer, Johannes, assignor.)
Kodak Limited, et al. (See Hunter, Edgar K., assignor.)
Koeberle, Karl. (See Kunz, M. A., Koeberle, and Berthold.)
Koeberle, Karl. (See Kunz, Max A., and Koeberle, assignors.)
Koehring Company. (See Robb, John F., assignor.)
Koenig, Leon C., Chicago, Ill., assignor to Hevi Duty Electric Company, Milwaukee, Wis. Pressure control in furnaces. 1,804,782; May 12.
Koerber, John C., South Orange, N. J. Clip for toy electric railway tracks. 1,804,783; May 12.
Koerber, John C., South Orange, N. J. Toy railway track clip. 1,804,784; May 12.
Kondolf, Mathias R., Lower Merion Township, Montgomery County, Pa., assignor to The Lox-Seal Corporation, Brooklyn, N. Y. Art of tagging. 1,804,940; May 12.
Koops, Carl, New York, assignor to J. P. Devine Manufacturing Co., Buffalo, N. Y. Impregnating apparatus. 1,805,145; May 12.
Koppl, Ernest, et al. (See Hamer, Leland S., assignor.)
Kops Bros. Inc. (See Duff, Ewen C., assignor.)
Kosak, Nathaniel. (See Knowland, R. G., and Kosak.)
Kovar, John R., and L. W. Kovar, assignors to Joseph J. Kovar Company, Owatonna, Minn. Harrow having spring teeth. 1,805,286; May 12.
Kovar, Joseph J., Company. (See Kovar, John R. and L. W., assignors.)
Kovar, Louis W. (See Kovar, John R. and L. W.)
Kowal, Walter, New York, N. Y., assignor to Phoenix-Hermetic Company, Chicago, Ill. Blank feeding mechanism for punch presses. 1,805,336; May 12.
Kračmer, Joseph, Brno, Czechoslovakia. Dam construction. 1,804,696; May 12.
Kraft, Herman T., Akron, Ohio, assignor to The H. A. Husted Company, Detroit, Mich. Steering wheel. 1,804,993; May 12.
Krantz, Arthur J., assignor to The Reeves Manufacturing Company, Dover, Ohio. Fruit picking pail. 1,805,287; May 12.
Krenzke, Paul F., Chicago, Ill. Apron conveyer. 1,804,423; May 12.
Kroehler Manufacturing Company. (See Knosher, Adolph, assignor.)
Kronborg, Kristian. (See Palmer, C. B., and Kronborg.)
Krueger, William C. F., Detroit, Mich. Liquid vending machine. 1,804,785; May 12.
Kruse, Peter, assignor to E. W. Bliss Company, Brooklyn, N. Y. Machine for seaming can heads. 1,805,288; May 12.
Kubler, Frederick J., New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass. Roof and pillar construction for automobile bodies. 1,805,461; May 12.
Kuhn, Walter, Staten Island, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone testing system. 1,804,786; May 12.
Kuhns, William L., Clayton, N. M. Branding and dehorning chute. 1,805,405; May 12.
Kullmer, Frank, assignor, by mesne assignments, to Soulé Steel Company, San Francisco, Calif. Metal window. 1,804,787; May 12.
Kumber, Frederick, Pittsburgh, Pa. Door fastener. 1,805,099; May 12.
Kummer, Frederick C., Milwaukee, Wis., assignor to Kerner Incinerator Company. Hopper and check. 1,804,788; May 12.
Kuno, Shichigoro, Ogden, Utah. Hoe. 1,805,289; May 12.
Kunz, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs. 1,804,535; May 12.
Kunz, Max A., Mannheim, and K. Koeberle and E. Berthold, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Halogen derivatives of dibenzopyrenequinones. 1,804,880; May 12.
Kuplan, Abraham, assignor of one-half to A. W. Klachko, Los Angeles, Calif. Automobile radiator cap. Des. 84,153; May 12.
Kurtze, Reimar C. F. (See Crawford, W. E., and Kurtze.)
Kwartz, Emil, Seattle, Wash. Foldable rule. 1,804,789; May 12.
Lackner Products Corporation. (See Lackner, Rolph J., assignor.)
Lackner, Rolph J., Ozone Park, assignor to Lackner Products Corporation, Brooklyn, N. Y. Traffic signaling system and signal. 1,805,406; May 12.
La Couture, Henry C., Hudson County, N. J., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 84,154; May 12.
Ladd, James B., Ardmore, Pa., assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J. Ladle actuating mechanism. 1,804,471; May 12.
Laddon, Isaac M., assignor to Consolidated Aircraft Corporation, Buffalo, N. Y. Aircraft. 1,804,790; May 12.
Laemmien, Rudolf. Grossgartach, near Heilbronn, Germany. Beet topper. 1,805,044; May 12.
Legarde, Leoncio, Mexico, assignor of one-half to C. Martinez, Mexico, D. F., Mexico. Combined trapping and electrocuting apparatus. 1,805,407; May 12.
Lagmay, Ben A. (See Jandoc, Antonio, assignor.)
Lake, Jarrett T. (See Gould, L. E., and Lake.)
La Measure, Joses T. and L. J., Detroit, Mich. Machine for cleaning trouser cuffs. 1,804,791; May 12.
La Measure, Laurence J. (See La Measure, J. T. and L. J.)
Landvoigt, Thomas E., Westmont, assignor to National Radiator Corporation, Johnstown, Pa. Radiator. 1,804,424; May 12.
Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Die. 1,804,792; May 12.
Langsner, Adolph, assignor to Eugene Dietzgin Company, Chicago, Ill. Developing apparatus with blanket adjustment and spray application of liquid ammonia. 1,804,793; May 12.
Lapham, Edwin B. (See Tevis, Robert, assignor.)
Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Card punch. 1,804,994; May 12.
Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Statistical card printing and cutting machine. 1,804,995; May 12.
Lauer, Carl E. (See Andrews, T. M., and Lauer.)
Laurent, Thomas, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Lock for folding doors. 1,805,240; May 12.

Laursen, Laurits A., assignor of one-fourth to P. L. Laursen, Akron, Ohio. Rubber tire and process of making. 1,805,146; May 12.
Laursen, Pearl L. (See Laursen, Laurits A., assignor.)
Lauterbur, Edward J. (See Lauterbur, Frank X. and E. J., and Mintchell.)
Lauterbur, Frank X. and E. J., and H. L. Mintchell, assignors to The Peerless Bread Machine Company, Sidney, Ohio. Water softening apparatus and automatically controlling the cycles in a water softening system. 1,804,834; May 12.
Lavarack, Frederick C. (See Hull, S. P., Corcoran, and Lavarack.)
Lawrence, Charles B., and E. F. Martinet, assignors to The P. A. Geier Company, Cleveland, Ohio. Spraying attachment. 1,805,216; May 12.
Lawrence Engine Company. (See Lawrence, George R., assignor.)
Lawrence, George R., assignor to Lawrence Engine Company, Chicago, Ill. Starter for internal combustion engines. 1,805,313; May 12.
Lawrence, John D., and S. W. Nicholson, assignors, by mesne assignments, to Dura Company, Toledo, Ohio. Window regulator. 1,805,217; May 12.
Lay, Emil. (See von Forster, H., and Lay).
Leboeuf Fountain Pen Co. (See Walsh, Frank T., assignor.)
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa. Door for closed vehicle bodies. 1,804,794; May 12.
Lee, James W., Kansas City, Mo. Beverage making machine. 1,804,795; May 12.
Lefkowitz, Charles M., New York, N. Y. Link switch. 1,804,425; May 12.
Leggett, Francis H., and Company. (See Ehrenfeld, Arthur, assignor.)
Lemmon, Norman E., assignor to Standard Oil Company, Whiting, Ind. Revivifying spent fuller's earth. 1,805,178; May 12.
Leopold, George O. (See Fegley, T. J., and Leopold.)
Leslie, John W., Evanston, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company. Pipe hanger. 1,804,472; May 12.
Levy, Howard S., et al. (See Hays, Howard R., assignor.)
Levy, Lionel F., et al. (See Hays, Howard R., assignor.)
Levy, Stanley I., London, England. Treatment of copper rich material. 1,805,100; May 12.
Lewis, Julius B., et al. (See Brasty, Joseph, assignor.)
Lewis, Lyle D., Corwin Center, Pa. Gain making device. 1,804,835; May 12.
Libbey-Owens-Ford Glass Company. (See Crowley, Joseph P., assignor.)
Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)
Libbey-Owens-Ford Glass Company. (See Mambourg, Leopold, assignor.)
Libbey-Owens-Ford Glass Company. (See Randall, James W. H., assignor.)
Libbey-Owens-Ford Glass Company. (See Reece, Joseph A., assignor.)
Lightning Appliance Company. (See Roettges, Frederick W., assignor.)
Ligno-Cellulose Corporation. (See Wolf, R. B., Hill, and Hatch, assignors.)
Lindblad, Hardy, Frederic, Wis. Drill chuck. 1,804,506; May 12.
Lindbloom, Charles V., Cranford, N. J., assignor, by mesne assignments, to Hi-Heat Gas Co. Inc., New York, N. Y. Valve for gas burners. 1,804,473; May 12.
Linder, Willis W., Salisbury, assignor to The Terrell Machine Company, Charlotte, N. C. Bobbin stripping machine. 1,805,452; May 12.
Ling, Francis E. (See Reif, Joseph, assignor.)
Linn, Le Roy R., and C. N. Remfry, Proctor, Minn. Safety device for locomotive boosters. 1,804,881; May 12.
Linnartz, Hugh. (See Behle, J., Aven, and Linnartz.)
Loetscher, Emil C., Dubuque, Iowa. Veneer article and manufacture. 1,805,179; May 12.
Logan-Long Company. (See Mosher, Fred A., assignor.)
Logan, William B., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Vacuum distillation. 1,804,941; May 12.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 84,148; May 12.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 84,149; May 12.
Longstreet, Lawrence C., assignor of one-third to G. Voehl, Dunellen, N. J. Boat propulsion mechanism. 1,804,882; May 12.
Loock, Frederick F. (See Wilms, G. O., and Loock.)
Look, Carrol A., Los Angeles, Calif. Beverage faucet. Des. 84,150; May 12.
Loomis Machine Company, The. (See Good, Bruce Z., assignor.)
Loranger, Hubert R., Highland Park, and U. R. Loranger, deceased, Detroit, Mich., M. F. Loranger, executrix, assignors to Automatic Freezer Corporation, Detroit, Mich. Scrubber for refrigerating apparatus. 1,804,836; May 12.
Loranger, Marie F., executrix. (See Loranger, Hubert R. and U. R.)
Loranger, Ubaid R. (See Loranger, Hubert R. and U. R.)
Lord, Hugh C., Erie, Pa. Brake and actuating the same. 1,804,697; May 12.
Lord, Thomas, and H. J. Brunk, assignors to C. F. Pease Company, Chicago, Ill. Machine for making blue prints and other photoprints. 1,804,796; May 12.
Losack, John M., Orchard, Tex. Well strainer. 1,805,408; May 12.
Lotter, Adolph G., assignor, by mesne assignments to Stationers Loose Leaf Co., Milwaukee, Wis. Loose leaf binder. 1,804,626; May 12.
Lower, Melvin S., assignor to The Sun Rubber Company, Barberton, Ohio. Pin and clip tray. 1,805,045; May 12.
Lox Seal Corporation, The. (See Kondolf, Mathias R., assignor.)
Lucarelle, Joseph M. (See Bodine, A. V., and Lucarelle.)
Luckey, George P., Lancaster, Pa. Pressure gauge. 1,804,698; May 12.
Ludwig, George J. (See Bauer, R., and Ludwig.)
Ludwig, John J., Carpenter, S. Dak. Engine cooling system cleaner. 1,804,536; May 12.
Lukenbill, Emery D., Indianapolis, Ind. Sanitary pouring cap. 1,804,627; May 12.
Lunn, Ernest, assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill. Electric welding of cast iron. 1,804,837; May 12.
Lynch, Alline M., Bloomfield, N. J. Book end. Des. 84,155; May 12.
Macabee, Edward L. (See Macabee, Fabian and E. L.)
Macabee, Fabian E. and E. L., Hayward, assignors of one-half to H. C. Schroeder, Oakland, Calif. Brake testing device. 1,804,942; May 12.
MacDonald, Albert S. (See Gallison, E. A., and MacDonald.)
MacDonald, Albert S., Quincy, assignor, by mesne assignments, to Bay State Fishing Company, Boston, Mass. Wire support and guide. 1,804,996; May 12.
MacGregor, Roderick M. (See Peter, L. H., Challans, and MacGregor.)
MacIndoe, John F., Philadelphia, Pa. Automatic control for lubricators. 1,805,290; May 12.
MacNeill, John B., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,804,628; May 12.
Magnus, John. (See Pasinski, W. J., and Magnus.)
Mahoney, William J., New York, N. Y. Amusement apparatus. 1,805,337; May 12.
Maier, Dwight C., Bryan, Ohio. Shaft keying device. 1,804,699; May 12.
Maillard, Cecile M. L., Nogent-le-Roy, France. Dispenser for pulverulent substances and the like. 1,804,943; May 12.
Malleable Iron Fittings Company. (See Pickop, George B., assignor.)
Malleable Iron Fittings Company. (See Smith, Woodruff R., assignor.)
Mambourg, Leopold, Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Temperature control means for molten glass. 1,805,218; May 12.
Mambourg, Leonold, Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet width maintaining device. 1,805,250; May 12.
Manhattan Electrical Supply Company. (See Hendry, William F., assignor.)
Manley Manufacturing Company. (See Manley, Robert E., assignor.)
Manley, Robert E., assignor to Manley Manufacturing Company, York, Pa. Dolly. 1,804,997; May 12.
Manning, John, Baine Harbor, Newfoundland. Woodworking bench plane. 1,804,507; May 12.
Marion Steam Shovel Company, The. (See Shelton, Dwight J., assignor.)
Marlowe, Albert L. (See Sadusky, T. A., Marlowe, and Miller.)
Marsh, George H. (See Milanovich, John, assignor.)
Martin, Hildeburn, Circleville, Ohio. Game board. Des. 84,151; May 12.
Martin, Lucille, Long Beach, Calif. Plug for electric circuits. 1,804,474; May 12.
Martinet, Eugene F. (See Lawrence, C. B., and Martinet.)
Martinez Celso. (See Legarde, Leoncio, assignor.)
Mason, Eli J., and H. L. Croft, Calamus, Iowa; E. L. Miller, administrator of said H. L. Croft, deceased, assignor to said Mason. Harrow drawbar and hinge therefor. 1,805,409; May 12.
Massey Harris Company. (See Johnston, H. M., and Shenstone, assignors.)
Mathesius, Walther, and M. W. Neufeld, Berlin-Charlottenburg, Germany. Alloy metal for bearings. 1,804,883; May 12.
Mattes, Leo A., Berkeley, Calif. Ant poison feeder. 1,804,426; May 12.
Matteson, George F., Rocky Hill, assignor to The Fuller Brush Company, Hartford, Conn. Feeding mechanism for punch presses. 1,805,219; May 12.
Matthews, Claude L., St. Louis, L. P. Boll, University City, and L. L. Crump, Kirkwood, Mo., assignors to W. N. Matthews Corporation, St. Louis, Mo. Guy guard. 1,805,251; May 12.
Matthews, W. N., Corporation. (See Matthews, C. L., Boll, and Crump, assignors.)
Maximoff, Alexander T. (See Cadwell, S. M., and Maximoff.)
Maxwell, William H., Los Angeles, Calif. Jarring tool. 1,804,700; May 12.

Maxwell, William H., et al., executors. (See Triplet, James B.)
Mayer China Company. (See Hardesty, Benjamin D., assignor.)
Maynard, Howard E., assignor to Chrysler Corporation, Detroit, Mich. Wrench. 1,805,368; May 12.
Mazer, Marcus, Philadelphia, Pa. Acoustic slab. 1,804,884; May 12.
McAdams, Frank J., Chicago, Ill. Heating apparatus. 1,805,338; May 12.
McAdams, Harry, Philadelphia, Pa. Knitting machine. 1,805,339; May 12.
McAdams, Harry, Margate City, N. J. Stop motion mechanism. 1,805,340; May 12.
McBee Binder Company, The. (See Morton, William J., assignor.)
McBee Binder Co., The. (See Welk, Nelson S., assignor.)
McCabe, Frank E., assignor to The Grabler Manufacturing Company, Cleveland, Ohio. Treating molding sand. 1,804,629; May 12.
McCall, Furman H., Anderson, assignor of one-half to C. C. McCall, Greenville, S. C. Fishing line. 1,805,410; May 12.
McCarl, Carl C. (See McCall, Furman H., assignor.)
McCarthy, John, Hollywood, Calif. Oven. Des. 84,156; May 12.
McCartney, Robert F., Wellington, New Zealand. Electrical immersion heater. 1,804,885; May 12.
McCaskey Register Company, The. (See Dunning, William E., assignor.)
McChesney, David, Kirkland Lake, Ontario, Canada. Exterior corner connection for wallboards. 1,804,564; May 12.
McChesney, David, Kirkland Lake, Ontario, Canada. Interior wall board connection. 1,804,630; May 12.
McCracken, James N., Los Angeles, Calif., assignor to Blacksand Mining and Manufacturing Company, Ltd. Collecting magnetic materials and separating them from other materials. 1,804,998; May 12.
McDonald, Clarence T., and H. R. Cook, assignors to Jefferson Electric Company, Chicago, Ill. Cartridge fuse. 1,804,886; May 12.
McDonald, William J. (See Jamieson, A. C., Gardiner, and McDonald.)
McGill, William B., Dormont, assignor to Neon Signal Devices, Inc., Pittsburgh, Pa. Traffic signal. 1,805,429; May 12.
McHugh, Irene, Seattle, Wash. Statuette. Des. 84,157; May 12.
McKee, Ralph H., New York, N. Y., assignor to Tennessee Corporation. Manufacture of sulphates. 1,804,631; May 12.
McKee, Ralph H., Leonia, N. J. Denatured spirits and making the same. 1,804,632; May 12.
McKee, Ralph H., Jersey City, N. J. Making fire proofed wood and like cellular products. 1,804,633; May 12.
McKenna Process Company of Illinois. (See Langford, George, assignor.)
McWain, Eugene E., Los Angeles, Calif. Tile making attachment to vibrating machines. 1,805,180; May 12.
Meacher, Wyatt, London, England. Machine for removing the surface scale from metal plates. 1,804,537; May 12.
Mechanical Manufacturing Company, The. (See Hubbard, James W., assignor.)
Meissner, Alexander, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Hallesches, Berlin, Germany. Converting electrical oscillations into mechanical movement. 1,804,838; May 12.
Menschner, Johannes, Rossweni, assignor to the Firm Kock & Te Kock, Voigtland, Germany. Picking the weft threads in looms for wearing preparatory chenilles. 1,805,046; May 12.
Merck, Wilhelm, Darmstadt, Germany. Device for opening vials. 1,805,369; May 12.
Mergenthaler Linotype Company. (See Atkins, Edgar H., assignor.)
Mergenthaler Linotype Company. (See Rogers, J. R., and Sytz, assignors.)
Merrill Company, The. (See Cornell, Mead, assignor.)
Merz, Eduard, South Orange, N. J., assignor to Charlton & Co., New York, N. Y. Cuff button. 1,804,944; May 12.
Metalfilters Limited. (See Pickard, Joseph A., assignor.)
Metallgesellschaft Aktiengesellschaft. (See Von Forster, H., and Lay, assignors.)
Metcalf, Robert E. (See Clark, H., and Metcalf.)
Meunier, Ross M., Glendale, Calif. Adjustable shade. 1,804,634; May 12.
Meyer, Emil A., Springfield, Ohio. Illuminated clock. 1,804,999; May 12.
Meyer, Frank H., Warren, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, Akron, Ohio. Vehicle wheel structure. 1,804,635; May 12.
Meyer, Hermann, Berlin, Germany. Method of and apparatus for inflating inflatable bodies, such for example as inflatable boats. 1,805,370; May 12.
Michell-Crankless Engines Corporation. (See Sherman, Thomas L., assignor.)
Mieg, Walter, Vohwinkel, near Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs. 1,804,538; May 12.
Milanovich, John, assignor of one-third to George H. Marsh, Hollidays Cove, W. Va. Scrubbing machine. 1,804,636; May 12.
Miller, Arthur E., Sacramento, Calif. Auxiliary propelling means for motor vehicles. 1,804,887; May 12.
Miller, E. L., administrator. (See Mason, E. J., assignor, and Croft.)
Miller, Frank D. (See Sadusky, T. A., Marlowe, and Miller.)
Miller, H. H., Industries Company, The. (See Morrow, Clifford, assignor.)
Miller, Maurice, Pottstown, Pa. Method of and apparatus for blocking hats. 1,805,220; May 12.
Miller, Max C., Cumberland, R. I. Knitting machine. 1,805,000; May 12.
Miller, Robert E., Bronxville, N. Y. Furniture leg shoe. 1,805,252; May 12.
Miller, Samuel W., Hollis, N. Y., assignor to Oxweld Acetylene Company. Heat retaining hood for gas or electric fusion welding. 1,805,181; May 12.
Miller, Thomas S., South Orange, N. J. Device for hoisting a floating object subject to wave action. 1,804,945; May 12.
Milwaukee Lace Paper Company. (See Graffenberger, Friedrich, assignor.)
Mincemoyer, Charles E., assignor of one-half to C. E. Hecht, Milton, Pa. Knitting machine. 1,805,440; May 12.
Mineck, Walter, Cedar Rapids, Iowa. Container. 1,804,539; May 12.
Minneapolis-Honeywell Regulator Company. (See Cramblet, Paul K., assignor.)
Mintchell, Howard L. (See Lauterbur, Frank X. and E. J., and Mintchell.)
Mitchell, John E., Dallas, Tex. Combination feeder-cleaner and extracting machine. 1,805,221; May 12.
Mix, Edwin S., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Strap connection. 1,805,047; May 12.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange device. 1,805,101; May 12.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Mojonnier Bros. Co. (See Mojonnier, Julius J., assignor.)
Mojonnier, Julius J., Oak Park, Ill., assignor to Mojonnier Bros. Co. Chain conveyer. 1,804,701; May 12.
Molins, Walter E., Deptford, London, England. Carton or like container for cigarettes and the like. 1,805,371; May 12.
Monnot, Edward L., assignor to The Harvard Company, Canton, Ohio. Combined heater and illuminator. 1,805,291; May 12.
Monogram Lens Corporation. (See Arbuckle, Samuel F., assignor.)
Monroe Calculating Machine Company. (See Walter, Edward C., assignor.)
Monsch, Simon P., Pontezer, near Guingamp, France. Pipe coiled with steel wire for pressure conduits and vessels under pressure. 1,804,888; May 12.
Monterio, José N., New Bedford, Mass. Meat cutter. 1,805,411; May 12.
Mooney, Fred L., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Method of and apparatus for locating elements upon shoe-bottoms. 1,804,427; May 12.
Morasky, Joseph, Brodhead, Colo. Price chart for gasoline pump bowls. 1,804,540; May 12.
Morefield, Thomas W. (See Duncan, Cecil A., and Morefield.)
Morgan Hurrycane Company, The. (See Morgan, William H., assignor.)
Morgan, William H., Alliance, Ohio, assignor, by mesne assignments, to The Morgan Hurrycane Company, New York, N. Y. Apparatus for disintegrating cane stalks preparator to the extraction of the juice from same. 1,804,797; May 12.
Morin, Louis H., New York, N. Y., assignor, by mesne assignments, to Doehler Vending Machines, Inc. Liquid vender. 1,804,889; May 12.
Morley, James P., Michigan City, assignor to Bastian-Morley Company, La Porte, Ind. Water heater. 1,805,222; May 12.
Morrow, Clifford, C., assignor to The H. H. Miller Industries Company, Canton, Ohio. Capping mechanism. 1,804,637; May 12.
Morrow, Joseph H., Catasauqua, Pa., assignor to Fuller Company. Portable pump. 1,804,565; May 12.
Morton, William J. San Francisco, Calif., assignor to The McBee Binder Company, Athens, Ohio. Binder for loose leaf books. 1,805,314; May 12.
Mosher, Fred A., Grand Rapids, assignor to Logan-Long Company, Chicago, Ill. Shingle and making same. 1,805,292; May 12.
Mosshart, Donald J., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Actuating means for fuel agitators. 1,804,638; May 12.
Mott, Lyndon F., Houston, Tex. Fastener lock. 1,804,839; May 12.
Moya, Ramon G., Cornella de Llobregat, Spain. Shutterless loom. 1,804,890; May 12.
Mnehlstein, H., & Co. Inc. (See Hutchens, Edward, assignor.)
Mullaney, Ralph A., Chicago, Ill. Lamp construction. 1,804,566; May 12.
Müller, Fritz. (See Hoffa, E., and Müller.)
Müller, Jens. (See Hoffa, E., and Müller.)
Müller, Johann G., Kiel-Ellerbek, Germany. Power drive for flat knitting machines. 1,805,315; May 12.

Munters, Carl G., Stockholm, Sweden, assignor to Electrolux Serval Corporation, New York, N. Y. Absorption refrigerating apparatus. 1,805,293; May 12.
Murphy, George F., Philadelphia, Pa. Expansion joint and anchorage therefor. 1,805,102; May 12.
Murphy, James J., Washington, D. C. Fraternal lapel button. Des. 84,158; May 12.
Murray Company, The. (See Behle, J. T., Aven, and Linnartz, assignors.)
Murray, Howard J., New York, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa. Pendulum controlled circuit closer. 1,805,147; May 12.
Mussey, William H., assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill. Car underframe construction. 1,804,428; May 12.

Myers, Harry L. (See Wolfe, H. H., and Myers.)
Myers, Walter L. (See Griffith, W. A., and Myers.)
Nadel, Louis, assignor to Pierce Steel Pile Corporation, New York, N. Y. Composite pile. 1,805,253; May 12.
Naismith, Donald M. (See Naismith, George and D. M.)
Naismith, George and D. M., Pittsburgh, Pa., assignors to D. M. Naismith. Furnace. 1,805,001; May 12.
Napolitano, Ernesto B., Detroit, Mich. Shoe press. 1,805,182; May 12.
Nasalets Inc. (See Brennan, Edward J., assignor.)
Nash, Charles J., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Railway brake. 1,804,475; May 12.
Nashua Manufacturing Company. (See Knowland, R. G., and Kosak, assignors.)
National Cash Register Company. (See Shipley, Bernis M., assignor.)
National Hydrodriv Company. (See Springsteen, Luther W., assignor.)
National India Rubber Company. (See Polleys, Herbert R., assignor.)
National Pneumatic Company. (See Laurent, Thomas, assignor.)
National Pneumatic Company. (See Rowntree, Harold, assignor.)
National Radiator Corporation. (See Landvoigt, Thomas E., assignor.)
Naugatuck Chemical Company, The. (See Cadwell, S. M., and Maximoff, assignors.)
Naugatuck Chemical Company, The. (See Strickhouser, Sherman I., assignor.)
Nawlasky, Paul, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Manufacture of grey to black vat dyestuffs. 1,804,840; May 12.
Neafie, Andrew J., Mountain Lakes, N. J. Apparatus for marking or scoring surfaces. 1,805,148; May 12.
Neikirk, John O., assignor to Rodger Ballast Car Company, Chicago, Ill. Car construction. 1,804,702; May 12.
Neilon, Patrick J., East Cleveland, Ohio. Pipe hanger. 1,805,006; May 12.
Nelson, Arvid, Milwaukee, Wis., assignor to The Hamilton Standard Propeller Corporation, West Homestead, Pa. Balancing propeller blades. 1,805,149; May 12.
Nelson, Jabez C., and W. A. Papworth, assignors to Syracuse Washing Machine Corporation, Syracuse, N. Y. Casing for a combined clothes washer and drier. Des. 84,159; May 12.
Nelson, Nels H., Des Moines, Iowa. Rolling awning. 1,804,798; May 12.
Nelson, Nels H., Des Moines, Iowa. Awning. 1,805,223; May 12.
Neon Signal Devices, Inc. (See McGill, William B., assignor.)
Neufeld, Martin W. (See Mathiesius, W., and Neufeld.)
Neumeyer, Fritz, Berlin-Charlottenberg, Germany. Letters, figures, and signs for exhibition from aircraft. 1,805,002; May 12.
Newhall, Henry B., Corporation. (See Pleister, H. W., and Karitzky, assignors.)
Newman, Isidor, Bronx, N. Y. Frangible seal for receptacles. 1,805,003; May 12.
Newman, Milton T., Jacksonville, Fla. Container for insecticides, etc. 1,804,891; May 12.
Newman-Rudolph Lithographing Co. (See Horwarth, Julius, assignor.)
Newsome, Ralph G., Newport News, Va. Grading level. 1,805,004; May 12.
Newspaper Stuffing Machine Company, The. (See Halvorsen, Severin, assignor.)
New York Belting & Packing Company. (See Hopkinson, E., and Gibbons, assignors.)
Nichols Copper Company. (See Fitzpatrick, E., Clark, and Tiernan, assignors.)
Nichols, Winfield S., Rockford, Ill. Lawn mower. 1,804,703; May 12.
Nicholson, John T., Laramie, Wyo. Transparent tile and making same. 1,804,508; May 12.
Nicholson, Stanley W. (See Lawrence, J. D., and Nichols.)
Nisbet, Theodore B., Irvington, N. Y. Wind shield support. 1,805,341; May 12.
Noddack, Ida. (See Noddack, Walter and I.)
Noddack, Walter and I., Berlin-Grunewald, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Production of concentrates of rhenium. 1,804,429; May 12.

Noelting, Clarence B. and W. H., assignors to Faultless Caster Company, Evansville, Ind. Ball bearing caster. 1,804,639; May 12.
Noelting, William H. (See Noelting, Clarence B. and W. H.)
Noffsinger, John, Jewell, Ohio. Automatic coupler for air line hose of railway cars. 1,804,509; May 12.
Nolen, Ralph. (See Jimopoulos, Sam C., assignor.)
North Bro's. M'f'g. Co. (See Fegley, T. J., and Leopold, assignors.)
Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Trenton, N. J. Inductor type furnace. 1,805,150; May 12.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake closure. 1,805,183; May 12.
Norwood, Harry G., Washington, D. C., assignor to T. F. von Dorn, New York, N. Y. Railway rail anchor. 1,804,510; May 12.
Norwood, Harry G., assignor to T. F. Von Dorn, New York, N. Y. Spring nut locking device for rail joints. 1,805,412; May 12.
Norwood, Harry G., assignor to T. F. Von Dorn, New York, N. Y. Spring nut locking device for rail joints. 1,805,413; May 12.
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Envelope feed mechanism. 1,804,476; May 12.
Nowakowski, John, Detroit, Mich. Ornamental ship. Des. 84,160; May 12.
Nutt, William H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Covering heels. 1,804,430; May 12.
Nuway Electric Company. (See Zamboni, Frank J., assignor.)
Odin Stove Manufacturing Company. (See Hoffstetter, Carl H., assignor.)
Oestnaes, Victor L., Westfield, assignor to American Gasaccumulator Company, Elizabeth, N. J. Reflector and providing the reflecting surface thereof with means for coloring the light reflected therefrom. 1,805,224; May 12.
Ogden, J. Edward, Company. (See Tomkinson, Charles C., assignor.)
Ohlendorf, Emil F., Moline, Ill. Bumper mechanism. 1,805,414; May 12.
Old, Clayton W., Montclair, N. J., assignor to International Fire Equipment Corporation, New York, N. Y. Fire extinguisher. 1,804,477; May 12.
Oliver Farm Equipment Company. (See Dewend, William D., assignor.)
Oliver, Fay. (See Spencer, E. A., jr., and Oliver.)
Oliver United Filters Inc. (See Hoyt, John T., assignor.)
Olson, John, administrator. (See Hentschel, Ernest R.)
O'Neill, Edward J., et al. (See Vieu, Harold F., assignor.)
Oppe, Charles. See Wheeler, G. E., and Oppe.)
Osborn, Jacob R., Du Bois, Pa. Runner block and mounting means therefor. 1,805,254; May 12.
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,804,946; May 12.
Osgood, George H., Tacoma, Wash. Vegetable protein-base glue. 1,804,640; May 12.
Osgood, George H., Tacoma, Wash. Pressure bar for veneer machines. 1,804,704; May 12.
Osterholm, William C., Oak Park, Ill., assignor to Wilcox Products Corporation, Detroit, Mich. Valve tappet and forming the same. 1,805,255; May 12.
Othmer, Donald F. (See Clarke, H. T., and Othmer.)
Otis Elevator Company. (See Brady, Thomas, assignor.)
Otto, Carl A., assignor to Johnson Service Company, Milwaukee, Wis. Valve motor. 1,805,342; May 12.
Otto, Karl R. (See Klemm, E. O., and Otto.)
Overbury, Frederick C. (See Kirschbraun, L., and Overbury.)
Oxweld Acetylene Company. (See Miller, Samuel W., assignor.)

Packard, Edwin A. (See Runge, W., and Packard.)
Palenske, Frederick C., St. Joseph, and W. A. Robbins, Benton Harbor, Mich. Rubber stripping for doors or windows. 1,804,799; May 12.
Palmer, Charles B., Van Nuys, Calif., and K. Kronborg, Middletown, assignors to The American Rolling Mill Company, Middletown, Ohio. Continuous pickling machine. 1,804 800; May 12.
Palmgren, Per G., Gottenborg, Sweden. Rolling mill guide. 1,804,947; May 12.
Panabaker, Neal, Coeur D'Alene, Idaho. Lumber marker. 1,804,801; May 12.
Papworth, Walter A. (See Nelson, J. C., and Papworth.)
Parker, Howard, assignor to Brown Company, Berlin, N. H. Multiple conduit and spacing supports therefor. 1,804,478; May 12.
Parsons, Frederick W., Elmira, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Clearance valve assembly. 1,804,892; May 12.
Pasinski, Walter J., and J. Magnus, assignors to Burroughs Adding Machine Company, Detroit, Mich. Calculating machine. 1,805,225; May 12.
Pastor, Juan, Buenos Aires, Argentina. Construction of guitars. 1,804,802; May 12.
Pattison, Ervin M., Detroit, Mich. Electric plug connection. 1,804,803; May 12.
Pattison, William S., Kansas City, Kans. Reenforced surface floor. 1,804,804; May 12.

Paulus, Charles L., Dayton, Ohio, and H. O. Russell, Detroit, Mich. Making coiled springs and spring casings. 1,804,705; May 12.
Peacock, Robert, et al. (See Douds, Ralph A., assignor.)
Peacock, William, et al. (See Douds, Ralph A., assignor.)
Pease, C. F., Company. (See Brunk, Harold J., assignor.)
Pease, C. F. Company. (See Lord, T., and Brunk, assignors.)
Pedersen, John D., Jackson, Wyo. Combination of cartridge clip and follower. 1,804,511; May 12.
Pedersen, Paul, New York, N. Y. Vehicle top operating mechanism. 1,805,184; May 12.
Pedley, Elmer C., Chino, Calif. Pipe coupling apparatus. 1,805,007; May 12.
Pedroli, Julia B., Los Angeles, Calif. Fabric pad. 1,804,841; May 12.
Peerless Bread Machine Company, The. (See Lauterbur, Frank X. and E. J., and Mintchell, assignors.)
Pemberton-Billing, Noel, Twickenham, assignor, by mesne assignments, to American and Dominions Unbreakable Records Limited, London, England. Manufacture of gramophone records. 1,804,641; May 12.
Pendarvis, Elizabeth L. (See Pendarvis, G. R. and E. L.)
Pendarvis, George R. and E. L., Hampton Roads, Va. Insect protector. 1,805,415; May 12.
Pentz, Albert D., assignor to Pentz Motor Brake Corporation, New York, N. Y. Hydraulic brake. 1,805,256; May 12.
Pentz Motor Brake Corporation. (See Pentz, Albert D., assignor.)
Perfection Manufacturing Company, The. (See Eberle, John A., assignor.)
Perin, Donald W., Brookline, assignor to Perin-Walsh Company, Boston, Mass. Container having swivel casters. 1,804,541; May 12.
Perin, Donald W., Brookline, Mass., assignor to American Freight Service, Inc., New York, N. Y. Locking means. 1,804,542; May 12.
Perin-Walsh Company. (See Perin, Donald W., assignor.)
Perkins, Kenneth, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Electric lamp socket. 1,805,048; May 12.
Perrine, Lester E., assignor to General Motors Research Corporation, Detroit, Mich. Air valve carburetor. 1,805,453; May 12.
Pete, Leslie H., E. W. Challans, and R. M. MacGregor, London, England, assignors, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa. Electric relay. 1,804,431; May 12.
Peters Cartridge Company, The. (See Holden, C. L., and Quayle, assignors.)
Petigor, Isidor F., New York, N. Y. Advertising device. 1,804,948; May 12.
Pfleging, Frank W. (See Bettison, David C., assignor.)
Phillips, Frederick E., Newport, Ky., assignor of one-fourth to Allen & Allen, Cincinnati, Ohio. Pneumatic feeding mechanism for machine tools. 1,804,805; May 12.
Phillips, Leland A., assignor to The Phillips Ribbon & Carbon Company, Rochester, N. Y. Tablet. 1,804,806; May 12.
Phillips Ribbon & Carbon Company, The. (See Phillips, Leland A., assignor.)
Phillips, William E., La Crescenta, Calif. Combination tool. 1,805,005; May 12.
Phoenix-Hermetic Company. (See Kowal, Walter, assignor.)
Pick, George, et al. (See Gentile, Marino, assignor.)
Pickard, Joseph A., Acton, London, assignor to Metafilters Limited, London, England. Filter. 1,804,512; May 12.
Pickop, George B., New Haven, assignor to Malleable Iron Fittings Company, Branford, Conn. Vibrator. 1,804,949; May 12.
Pie Bakeries of America, Inc. (See Anton, Mark, assignor.)
Pierce Steel Pile Corporation. (See Nadel, Louis, assignor.)
Pike Manufacturing Company. (See Averill, William H., assignor.)
Pilling, Norman B., Elizabeth, N. J., assignor to The International Iron-nickel-copper alloy. 1,805,049; May 12.
Pitt, Frederick D., Kansas City, Mo. Dispensing bottle stopper. 1,805,257; May 12.
Pleister, Henry W., Westfield, and J. Karitzky, assignors to H. B. Newhall Corporation, Garwood, N. J. Drive ring. 1,804,807; May 12.
Plummer, Charles St. C. (See Kermode, W. M., and Plummer.)
Polkosnik, Bernard L. (See Donaldson, J. W., and Polkosnik.)
Polleys, Herbert R., New Haven, Conn., assignor to National India Rubber Company, Bristol, R. I. Coating and marking machine. 1,804,479; May 12.
Polleys, Herbert R., New Haven, Conn., assignor to National India Rubber Company, Bristol, R. I. Cement applying machine. 1,804,480; May 12.
Polleys, Herbert R., New Haven, Conn., assignor to National India Rubber Company, Bristol, R. I. Latex applying machine. 1,804,481; May 12.
Pollitzer, Franz, Solln, by Munich, Germany. Fractionating, cooling, and condensing gas mixtures. 1,804,432; May 12.
Pomeranz, Jacob J. (See Tanasso, V., and Pomeranz.)

Portable Adding Machine Company. (See Barrett, Glenn J., assignor.)
Porter, Arthur S. (See Skripkin, Frank, assignor.)
Post, Sid. (See Everts, Walter W., assignor.)
Potter, Harry W., Birmingham, Mich. Carburetor. 1,804,842; May 12.
Powell, Frank D., assignor to Acme Card System Company, Chicago, Ill. Apparatus for cutting index elements. 1,804,642; May 12.
Powers, Donald H., Pennsgrove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Rubber accelerator. 1,805,103; May 12.
Pratt & Whitney Aircraft Co., The. (See Ryder, E. A., and King, assignors.)
Pray, Lucian A., Racine, Wis. Dental gauge. 1,804,567; May 12.
Preiswerk, Ernest, Basel, Switzerland, assignor to Hoffman-La Roche Inc., Newark, N. J. Compound of dialkyl barbituric acids and making the same. 1,805,294; May 12.
Pretot, Harry V., assignor to Illinois Watch Case Company, Elgin, Ill. Vanity case. 1,804,808; May 12.
Pritchard William T., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Vacuum cleaner apparatus. 1,804,809; May 12.
Procter & Gamble Company, The, et al. (See Holliday, Robert L., assignor.)
Pro-Phy-Lac-Tic Brush Company. (See Elliott, William S., assignor.)
Prutzman, Paul W. (See Jones, P., and Prutzman.)
Pugh, John D., Baltimore, Md. Car dumping apparatus. 1,804,543; May 12.
Pugh, John D., Baltimore, Md. Car dumping apparatus. 1,804,544; May 12.
Pullman Car and Manufacturing Corporation. (See Lunn, Ernest, assignor.)
Pullman Car and Manufacturing Corporation. (See Mussey, William H., assignor.)
Pursley, Cornelious C., assignor of one-half to Douglas W. Cooper, Hillboro, Tex. Air mail exchange device. 1,805,258; May 12.
Putt, Frank B., Meadowbrook, Pa., assignor to Brandle & Smith Company, Philadelphia, Pa. Bottle or similar container. Des. 84,161; May 12.
Quayle, Philip P. (See Holden, C. L., and Quayle.)
R. M. Company. (See Murray, Howard J., assignor.)
Radburne, John W., Rushden, assignor to Barrow, Hepburn & Gale, London, England. Boot, shoe, and similar footwear. 1,804,545; May 12.
Radice, William A., Westminster, assignor to Braithwaite and Company Engineers Limited, London, England. Pile screwing apparatus. 1,804,706; May 12.
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Rail Joint Company, The. (See Braine, Bancroft G., assignor.)
Rainsford, Patrick, Dorchester, Mass. Window shade. 1,805,372; May 12.
Ramsey, Joseph M., Lakewood, Ohio. Combined support and shutter actuating means for cameras. 1,805,185; May 12.
Randall, James W. H., New York, N. Y., assignor to Libbey-Owens-Ford, Toledo, Ohio. Producing laminated glass. 1,805,259; May 12.
Ray, Charles T., Louisville, Ky. Tillage implement. 1,804,513; May 12.
Ray, William H. (See Fernekes, V. W., and Ray.)
Raymond, Carl S., Flint, Mich. Artificial bait. 1,805,416; May 12.
Raymond Concrete Pile Company. (See Taussig, John W., assignor.)
Ready, William A., Brookline, Mass. Split D-handle. 1,804,950; May 12.
Reece Button Hole Machine Company, The. (See Carlson, Axel F., assignor.)
Reece, Joseph A., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,805,260; May 12.
Reed, Embra T., Elmore, Ohio. Lime kiln. 1,805,151; May 12.
Reed-Lewis, Ellis W., Detroit, Mich., assignor to The Super Cement Co. Portland cement and producing the same. 1,805,104; May 12.
Reed Propeller Co. Inc., The. (See Reed, Sylvanus A., assignor.)
Reed, Sylvanus A., assignor to The Reed Propeller Co. Inc., New York, N. Y. Aeronautical propeller. 1,804,433; May 12.
Reed, Sylvanus A., assignor to The Reed Propeller Co. Inc., New York, N. Y. Aeronautical propeller and making the same. 1,804,434; May 12.
Reedy, John H., assignor of one-half to A. O. Rolfe, Hamilton, Ohio. Packing box. 1,804,810; May 12.
Reeves Manufacturing Company, The. (See Krantz Arthur J., assignor.)
Reichard, Herman G., Brooklyn, N. Y. Treatment of fibers. 1,805,316; May 12.
Reichelt, Bruno, Nutley, N. J. Sweatband for hats. 1,804,546; May 12.
Reif, Joseph H., assignor of one-half to F. E. Ling, Hebron, Ind. 1,804,482; May 12.
Reisley, Ryah, Sunnyside, N. Y. Machine for decorating fabrics. 1,804,435; May 12.

Reiter, Daniel L., New York, N. Y. Snap fastener. 1,804,951; May 12.
Relay Motor Products Corporation. (See Hamilton, Alexander C., assignor.)
Reliance Company, The. (See Wilms, G. O., and Loock, assignors.)
Remfry, Charles N. (See Linn, L. R., and Remfry.)
Remington Rand Inc. (See Lasker, William W., assignor.)
Rendleman, Norman C., assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa. Interlocking sheet piling. 1,804,436; May 12.
Reserve Holding Company. (See Bellamy, John I., assignor.)
Reserve Holding Company. (See Crocker, Thomas F., assignor.)
Reserve Holding Company. (See Graybill, Kenneth W., assignor.)
Reserve Holding Company. (See Harbecke, Herman H., assignor.)
Reserve Holding Company. (See Voss, John H., and T. F. Crocker, assignors.)
Rettenmeyer, Francis X., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Wave signaling system. 1,804,952; May 12.
Reznik, Benjamin M. (See Walker, Ernest A., assignor.)
Ribbon-Ink Co. (See Fortier, James G., assignor.)
Ricardo, Harry R., London, England. Crankshaft. 1,804,643; May 12.
Rice, Branche C., Cleveland, Ohio. Combination shoe and glide for furniture. 1,804,437; May 12.
Rice, Harold G., Chicago, Ill. Bottle capper. 1,805,295; May 12.
Richardson, Edgar J., Sheridan, Wyo. Reverse motion check. 1,805,226; May 12.
Richmond, Leon H., Fort H. G. Wright, N. Y. Sound screening device for hydrophones. 1,805,186; May 12.
Riddiford, Charles E., Washington, D. C. Binder. 1,804,514; May 12.
Rigali John E., assignor to Daprato Statuary Company, Chicago, Ill. Device for designating a place of worship. Des. 84,162; May 12.
Rightway Corporation, The. (See Webb, Arthur B., assignor.)
Ringwald, Clarence, North Hampton, assignor to Robbins & Myers, Inc., Springfield, Ohio. Electric fan. 1,805,105; May 12.
Ritzel, Willis J., Pasadena, Calif. Elongated tablet package and wrapping. 1,805,417; May 12.
Ritzel, Willis J., Pasadena, Calif. Elongated tablet package and wrapping. 1,805,419; May 12.
Rives, Tom C., New Haven, Conn. Apparatus for and method of exciting electrical oscillations. 1,805,187; May 12.
Roark, Robert H., Waco, assignor, by mesne assignments, to The General Ice Scoring Machine Company, Dallas, Tex. Scoring ice by fluid pressure. 1,805,296; May 12.
Robb, John F., Cleveland Heights, Ohio, assignor to Koehring Company, Milwaukee, Wis. Truck mix meter. 1,805,373; May 12.
Robbins & Meyers. (See Ringwald, Clarence, assignor.)
Robbins, John A., Lawrenceville, Ill. Instrument for detecting irregularities in the bores of pipes and the like. 1,805,343; May 12.
Robbins, William A. (See Palenske, F. C., and Robbins.)
Roberts, Benjamin T., assignor to Illinois Cosmetics Co., Chicago, Ill. Bottle. Des. 84,163; May 12.
Roberts, Roland R. and W. J. Forward, assignors to Consolidated Machine Tool Corporation of America, Rochester, N. Y. Machine tool. 1,805,188; May 12.
Roberts, Thomas H., and J. R. Holmes, assignors to J. W. Kelch, Detroit, Mich. Machine for making shells for automobile heaters and the like. 1,805,261; May 12.
Robertshaw, George A., Greensburg, Pa. Valve. 1,804,438; May 12.
Robertson, Ivy B., assignor of one-third to F. M. Gresham, Charlotte, N. C. Door operating mechanism. 1,804,515; May 12.
Robertson, Luther C., Cordova, Ala. Knickeralls. 1,804,516; May 12.
Robinson, Henry H., Los Angeles, Calif. Variable flow resistance. 1,805,106; May 12.
Rocke, John, Bloomington, Ill. Agitator mechanism for washing machines. 1,805,107; May 12.
Rodger Ballast Car Company. (See Nelkirk, John O., assignor.)
Roettges, Frederick W., assignor to Lighting Appliance Company, Inc., New York, N. Y. Lighting fixture bracket or article of similar nature. Des. 84,164; May 12.
Rogers, John R., and E. A. Sytz, Brooklyn, N. Y., assignors to Mergenthaler Linotype Company. Slug casting machine and type bars cast thereby. 1,804,317; May 12.
Rogers, Thomas H., assignor to E. I. du Pont de Nemours & Co., Wilmington, Del. Oil composition and inhibiting oxidation thereof. 1,805,458; May 12.
Rolfe, Albert O. (See Reedy, John H., assignor.)
Roller, Frank W., East Orange, N. J., assignors to Roller-Smith Company. Measuring instrument. 1,804,953; May 12.
Roller-Smith Company. (See Roller, Frank W., assignor.)
Rose, Edward E., Edgewood, Pa., and J. T. Welsh, Westfield, N. J.; said Rose assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,805,262; May 12.
Rosel, William E., assignor to The Yardley Screen & Weatherstrip Company, Columbus, Ohio. Cable lock for window blinds. 1,804,811; May 12.
Roselle, Joseph F., Cincinnati, Ohio. Hat shaping machine. 1,805,050; May 12.
Rosener, Leland S., assignor to Fibreboard Products Inc., San Francisco, Calif. Box blank slotting machine. 1,804,644; May 12.
Rothe, Frederick E., Wentzville, Mo. Barber chair. 1,805,189; May 12.
Rothermel, Samuel W., Lynbrook, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y. Distributor transmitter for simplex telegraph circuits. 1,805,374; May 12.
Rouse, Thomas C., Wilmington, Del. Holder for milk bottles and the like. 1,804,645; May 12.
Rowe, George E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Chain conveyer. 1,805,430; May 12.
Rowntree, Harold, Scarsdale, assignor to National Pneumatic Company, New York, N. Y. Heel and toe control of vehicles. 1,805,263; May 12.
Rubber Craft Products Company. (See Derr, Earle W., assignor.)
Ruben Patents Company. (See Ruben, Samuel, assignor.)
Ruben, Samuel, assignor to Ruben Patents Company, New York, N. Y. Electric discharge display device. 1,805,108; May 12.
Rude, Oscar T., Nona, N. Dak. Windmill. 1,805,008; May 12.
Rudin, Philip G., Pittsburgh, Pa. Mixing machine. 1,804,707; May 12.
Rugg, Walter S., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Multiple car elevator. 1,805,227; May 12.
Runge, Walter, East Orange, N. J., and E. A. Packard, Yonkers, N. Y., assignors, by mesne assignments, to International Coal Carbonization Company. Processing of coal. 1,805,109; May 12.
Russell, Burdsall, & Ward Bolt and Nut Company. (See Ward, William L., assignor.)
Russell, Herbert O. (See Paulus, Charles L., and Russell.)
Ruth, Rudolph, Schwedt, Germany. Color screen film and manufacturing the same. 1,805,009; May 12.
Rutherford, Charles E., West Hartford, assignor to The Wiremold Company, Hartford, Conn. Adjustable electrical conduit elbow. 1,804,954; May 12.
Rutherford, Romilly T., Alameda, Calif., assignor to Wood-Barrett Corporation, Ltd. Time switch. 1,805,010; May 12.
Ryan Mnfg. Corporation. (See Schlacks, William J., assignor.)
Ryder, Carroll D., Danbury, Conn. Composition for the manufacture of conduits and the like. 1,805,431; May 12.
Ryder, Earle A., and A. H. King, West Hartford, assignor to The Pratt & Whitney Aircraft Co., Hartford, Conn. Engine testing apparatus. 1,804,646; May 12.
Sabath, Albert, assignor to Scene-In-Action Corporation, Chicago, Ill. Lamp. Des. 84,165; May 12.
Sabath, Albert, assignor to Scene-In-Action Corporation, Chicago, Ill. Lamp. Des. 84,166; May 12.
Sabath, Albert, assignor to Scene-In-Action Corporation, Chicago, Ill. Lamp. Des. 84,167; May 12.
Saco-Lowell Shops. (See Blake, Edmund E., assignor.)
Sadusky, Thomas A., A. L. Marlowe, and F. D. Miller, Denver, Colo. Bathtub chair. 1,805,297; May 12.
St. Regis Paper Company. (See Bates, Adelmer M., assignor.)
Salmon, Reginald D. (See Creed, F. G., and Salmon.)
Salomone, Joseph, Brooklyn, N. Y. Combination household implement. 1,805,011; May 12.
Sampson, Charles H., assignor to Sampson Permagraph Company Inc. Rochester, N. Y. Mechanical movement. 1,805,375; May 12.
Sampson Permagraph Company Inc. (See Sampson, Charles H., assignor.)
Samson, Thomas, Grafton, N. Dak. Seed potato cutter. 1,805,376; May 12.
Sandison, Alexander G. S., Kelda, Baltasound, Shetland Islands. Regulating combustion in boiler furnaces. 1,805,012; May 12.
Sani Paper Products Co. Inc. (See Herting, Otto, assignor.)
Santiago, James J., assignor to J. Grant, Los Angeles, Calif. Liner puller. 1,804,843; May 12.
Sargent & Company. (See Shaw, John H., assignor.)
Sattler, Edward A., assignor to G. J. Sattler, Buffalo, N. Y. Artificial denture. 1,804,812; May 12.
Sattler, George J. (See Sattler, Edward A., assignor.)
Sayler, Galen H., Chicago, Ill., assignor to Dennison Manufacturing Company, Framingham, Mass. Making fast colored crepe paper. 1,805,013; May 12.
Scene-In-Action Corporation. (See Sabath, Albert, assignor.)
Schalk, Jacob R. (See Donaldson, Theodore L., assignor.)
Schalk, Jacob R., Rhinebeck, N. Y. Rail locking means. 1,805,014; May 12.

Schaller, John L., Wellesley, Mass. Roof joint. 1,805,110; May 12.
Scharf, Reinhardt, Thiensville, Wis. Educational device. 1,804,813; May 12.
Scheu, Carl H., Lakewood, Ohio. Attaching means for removable dentures. 1,805,264; May 12.
Schlacks, William J., assignor to Ryan Mfg. Corporation, Chicago, Ill. Road grader. 1,805,051; May 12.
Schlais, Antoney F., Ironwood, Mich. Glare shade for automobiles. 1,805,419; May 12.
Schlumpf, Walter, Flushing, N. Y. Lock. 1,804,955; May 12.
Schmude, Robert J., Chicago, Ill. Piano. 1,804,568; May 12.
Schober, Johann, Kleinholzhausen Post Grossholzhausen, near Rosenheim, Germany. Trap for beasts of prey. 1,805,317; May 12.
Schroeder, Harry C. (See Macabee, Fabian E. and E. L., assignors.)
Schultis, Charles F., assignor to The Simplex Copper Joint Company, Cleveland, Ohio. Pipe coupling and forming the same. 1,804,814; May 12.
Schultis, Charles F., assignor to The Simplex Copper Joint Company, Cleveland, Ohio. Machine for deforming pipes. 1,804,815; May 12.
Schultz, Edward F., Chicago, Ill. Canopy for funerals. Des. 84,168; May 12.
Schulze, Alfred L., Houston, Tex. Sad iron holder. 1,805,015; May 12.
Schumacker, Antone, Chicago, Ill. Thread cutting machine. 1,804,708; May 12.
Schuster, Otto P., Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company. Controller drum. 1,804,647; May 12.
Schwartz, Mike, Cleveland, Ohio. Ash tray. 1,805,016; May 12.
Schweer, John H., Long Beach, Calif. Tube holder. 1,805,420; May 12.
Schwelger, Bruno, Lipinki K/Bieca Zach Malopolska, Poland. Device for raising fluids from boreholes. 1,805,377; May 12.
Schweigert, Frederick, New York, N. Y. Wrench. 1,805,298; May 12.
Scott, Malcolm G., Los Angeles, Calif. Door operating mechanism for delivery trucks. 1,805,017; May 12.
Scott-Weiss Steel Company. (See Barton, Francis M., assignor.)
Scribner, Harold F., New York, N. Y. Locating device for plier punches. 1,804,648; May 12.
Scruggs, Frank A., Los Angeles, Calif. Molding machine. 1,805,018; May 12.
Sebrell, Lorin B., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Preventing the dissolution of metals in pickling baths. 1,805,052; May 12.
Seidel, Walter, and R. Fingado, Dormagen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Decomposing lignified fibers. 1,804,893; May 12.
Semmes, Harry H., Chevy Chase, Md., assignor to Bendix Brake Company, South Bend, Ind. Brake operator. 1,805,190; May 12.
Send, Maurice, Detroit, Mich. Interchangeable sign. 1,805,378; May 12.
Shadle, Clinton F., Indianapolis, Ind., assignor to Air Development Company, Inc. Apparatus for conditioning air. 1,804,649; May 12.
Shahan, Orville B., Tunnelton, W. V. Fishplate with lugs. 1,805,421; May 12.
Shanck, Roy B., Flushing, N. Y., assignor to American Telephone & Telegraph Company. Telegraph repeater arrangement. 1,804,547; May 12.
Shanton, Ira A., St. Petersburg, Fla. Lawn mower sharpener attachment. 1,804,439; May 12.
Shapiro, Joseph. (See Balton, James L., assignor.)
Sharpe, George G., Ulcombe, assignor to The Governor and Company of Adventurers of England Trading Into Hudson's Bay, London, England. Stretching rabbit and other skins. 1,805,379; May 12.
Sharples Specialty Company, The. (See Ayres, Arthur U., assignor.)
Shatto, Carl W., Sebastopol, Calif. Fruit dipper. 1,805,380; May 12.
Shaw, John H., New Haven, assignor to Sargent & Company, New Haven, Conn. Lock. 1,804,956; May 12.
Shelander, Gus O. (See Barner, L. D., and Shelander.)
Shellenberger, Rolfe, Bethlehem, assignor to Fuller Lehigh Company, Fullerton, Pa. Furnace block. 1,804,957; May 12.
Shelton, Dwight J., assignor to The Marion Steam Shovel Company, Marion, Ohio. Crawling traction mechanism. 1,804,816; May 12.
Shenstone, Osborne H. (See Johnston, H. M., and Shenstone.)
Sherman, Thomas L., assignor to Michell-Crankless Engines Corporation, New York, N. Y. Crankless engine. 1,804,440; May 12.
Shimko, John, Uniontown, Pa. Post twister. 1,805,381; May 12.
Shinn, George D., Russellville, Ark. Automatic window lock. 1,804,518; May 12.
Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,804,650; May 12.
Shipman, Frederic, San Francisco, Calif. Reflector. 1,804,651; May 12.
Shoenberg, Milton H., San Francisco, Calif. Thermomotive device. 1,804,709; May 12.
Siefken, Fred, Torrance, Calif. Oil saving device. 1,805,344; May 12.
Siemens & Halske, Aktiengesellschaft. (See Noddack, Walter and I., assignors.)
Signode Steel Strapping Company. (See Leslie, John W., assignor.)
Silent Glow Oil Burner Corporation, The. (See Gilbert, Alfred J., assignor.)
Silva, Antone J., Milton, Calif. Vertebræ stretcher. 1,804,441; May 12.
Silverman, Joseph, Chicago, Ill. Landing gear for aeroplanes. 1,804,817; May 12.
Simplex Copper Joint Company, The. (See Schultis, Charles F., assignor.)
Sinclair Refining Company. (See Taber, George H., jr., assignor.)
Singer Manufacturing Company, The. (See Perkins, Kenneth, assignor.)
Skenandon Rayon Corporation. (See Volk, Walter C., assignor.)
Skinner, Ralph L., et al. (See Skinner, Ralph L., assignor.)
Skinner, Ralph L., Detroit, Mich., assignor of one-hundredth to said R. L. Skinner, and ninety-nine one-hundredths to T. H. West, Wilmette, Ill. Oil-rectifying system for internal combustion engines. 1,804,844; May 12.
Skripkin, Frank, Toronto, Ontario, assignor to A. S. Porter, Islington, Ontario, Canada. Bookholder. 1,805,191; May 12.
Slagel, Franklin G., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Vaporizor for refrigerator systems. 1,805,152; May 12.
Small, David G. (See Douglas, Gordon C., assignor.)
Smiley, Samuel, jr., assignor to The Globe-Wernicke Company, Cincinnati, Ohio. Metal cabinet. 1,805,019; May 12.
Smith, A. L., Iron Works, The. (See Johnson, Chester W., assignor.)
Smith, A. O., Corporation. (See Crawford, W. E., and Kurtze, assignors.)
Smith, Aurile T., assignor to Burroughs Adding Machine Company, Detroit, Mich. Testing device for centrifugal switches. 1,805,192; May 12.
Smith, Edward J., assignor to M. E. Smith, Cleveland, Ohio. Lamp shade and support therefor. 1,805,193; May 12.
Smith, George L., Rock Island, Ill. Coin box. 1,805,422; May 12.
Smith, Harry C., and D. R. Vanneman, New York, assignors to The Autodrink Corporation, New York, N. Y. Dispensing and display device. 1,804,519; May 12.
Smith, Harry H., Massillon, assignor to Industrial Silica Corporation, Youngstown, Ohio. Apparatus for producing light aggregates. 1,805,020; May 12.
Smith, Mary E. (See Smith, Edward J., assignor.)
Smith, Onkley, Chicago, Ill. Attachment for beds. 1,804,710; May 12.
Smith, Sidney R., London, England, assignor to Associated Telephone and Telegraph Company, Chicago, Ill. Telephone system. 1,805,153; May 12.
Smith, Thomas R., Youngstown, Ohio. Valve. 1,804,711; May 12.
Smith, Walter H., assignor, by mesne assignments, to Electric Service Supplies Company, Philadelphia, Pa. Door holding means and release. 1,804,443; May 12.
Smith, William E. (See Fetterly, C. L., and Smith.)
Smith, Woodruff R., West Haven, assignor to Malleable Iron Fittings Company, Branford, Conn. Control handle for motor boat engines. 1,804,442; May 12.
Smithe, F. L., Machine Co. (See Novick, Abraham, assignor.)
Snell, Lyle K., Detroit, Mich. Brake mechanism. 1,805,053; May 12.
Snow, Norman L., F. Bowers, and C. L. Howse, assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,805,454; May 12.
Soans, Cyril A., Wheaton, Ill. Air heater. 1,804,444; May 12.
Sodergren, Eric, Sierra Madre, Calif. Work holding device for miter boxes. 1,805,022; May 12.
Somersgale, Charles W., and J. A. Belile, Montevideo, Uruguay. Electromagnetic selector device. 1,805,021; May 12.
Soule Steel Company. (See Kullmer, Frank, assignor.)
Spang and Company. (See Spang, George A., assignor.)
Spang, George A., assignor to Spang and Company, Butler, Pa. Well packer. 1,804,818; May 12.
Sparks, Charles F., St. Louis, Mo. Bag turning apparatus. 1,805,111; May 12.
Sparks, Charles F., St. Louis, Mo. Apparatus for manufacturing bags. 1,805,112; May 12.
Sparks, Charles F., St. Louis, Mo. Bag turning apparatus. 1,805,432; May 12.
Spencer, Edward A., Jr., Los Angeles, and F. Oliver, Whittier, Calif. Side wall drilling organization. 1,804,819; May 12.
Spreen, Maxwell H., Detroit, Mich. Refrigerating mechanism support and cabinet therefor. 1,804,845; May 12.
Spring, Joseph J., assignor to The Goss and Delesenw Machine Company, New Britain, Conn. Work rotating type of chucking machine. 1,805,054; May 12.

Springsteen, Luther W., Afton, assignor to National Hydrodriv Company, Binghamton, N. Y. Fluid operated driving means. 1,805,023; May 12.

Squires, Wilbur N., assignors to Hydraulic Deep Well Pump Company, Joplin, Mo. Deep well pump. 1,805,024; May 12.

Squires, Wilbur N., assignor to Hydraulic Deep Well Pump Company, Joplin, Mo. Deep well pumping system. 1,805,025; May 12.

Squires, Wilbur N., Joplin, Mo. Deep well pump. 1,805,441; May 12.

Stackhouse, George A., Oakland, Calif., assignor to L. A. Young Spring and Wire Corporation, Detroit, Mich. Sofa bed. 1,804,820; May 12.

Stackhouse, George A., Oakland, Calif., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Spring structure. 1,804,821; May 12.

Staley, Carl O., Congress Park, Ill. Draft regulator. 1,805,423; May 12.

Standard Drilling and Sand Testing Company. (See Hux, Frank, assignor.)

Standard-Johnson Company. (See Donnellan, Edward P., assignor.)

Standard Oil Company. (See Grieves, H. H., and Fauth, assignors.)

Standard Oil Company. (See Hershfield, Abe, assignor.)

Standard Oil Company. (See Lemmon, Norman E., assignor.)

Standard Oil Development Company. See Jackson, Charles F., assignor.)

Standard Oil Development Company. (See Wilson, Henry H., assignor.)

Standard Sanitary Manufacturing Co. (See Tafel, Theodore, jr., assignor.)

Stankewitz, Louis, New York, N. Y. Exposure indicating attachment for cameras. 1,805,424; May 12.

Stanley Works, The. (See Carter, Ray L., assignor.)

Star Sprinkler Corporation. (See Griffith, William B., assignor.)

Starr, Charles E., Los Angeles, Calif. Brake mechanism. 1,804,894; May 12.

Starr Piano Company, The. (See Topp, William H., assignor.)

State, Will C., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Securing a tread to a tire carcass. 1,805,026; May 12.

Stationers Loose Leaf Co. (See Lotter, Adolph G., assignor.)

Stebbins, Albert H., Los Angeles, Calif. Crank arm bearing. 1,804,958; May 12.

Steffer, William J., Anderson, Ind. Log and tree saw. 1,805,318; May 12.

Steiger, Howard W., Lakewood, Ohio. Vise. 1,804,652; May 12.

Stephenson Protectahood Corporation. (See Stephenson, Robert J., assignor.)

Stephenson, Robert J., assignor to Stephenson Protectahood Corporation, Auburn, N. Y. Automobile hood lining. 1,804,895; May 12.

Sterling, Leroy P., Williamsport, Pa., assignor to A C Spark Plug Company, Flint, Mich. Detachable filter cover. 1,805,455; Mar. 12.

Stevens, Arthur, assignor to The Vol-U-Meter Co., Inc., Buffalo, N. Y. Filling device. 1,804,445; May 12.

Stevens, Herman A., Kalamazoo, Mich. Pneumatic hammer. 1,804,712; May 12.

Stewart, Bayard S., assignor of four-fifths to General Aircraft Corporation, Hazleton, Pa. Concentric hinge connection for airplane control surfaces. 1,804,520; May 12.

Stewart, John H., Cincinnati, Ohio. Centrifugal pump. 1,804,846; May 12.

Stewart-Warner Corporation. (See Tice, Percival S., assignor.)

Stocks, Charles E., El Paso, Tex. Clamp. 1,805,425; May 12.

Stockton, William S., assignor to The Willys-Overland Company, Toledo, Ohio. Steering control. 1,804,713; May 12.

Stoetzel, Joseph J., Queens Village, assignor to G & G Atlas Systems, Inc., New York, N. Y. Blower. 1,805,055; May 12.

Stokely, Ray L. (See Johnson, L. H., and Stokely.)

Stokes, Charles L., Los Angeles, Calif. Applying engine explosion pressure. 1,804,446; May 12.

Stokes and Smith Company. (See Federwitz, T. A., and Bailey, assignors.)

Stone & Webster, Incorporated. (See Vittinghoff, Hans, assignor.)

Stork, Fred W., et al. (See Arlt, John L., assignor.)

Straubel, Louis A., Green Bay, Wis. Paper interfolding machine. 1,804,847; May 12.

Streitwolf, Karl, Frankfort-on-the-Main, and A. Fehrle, Bad-Soden, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Arsenobenzimidazolons. 1,805,382; May 12.

Strickhouser, Sherman I., Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treatment of aldehyde-amines. 1,805,194; May 12.

Stuart, Alexander A. S., Ridgefield Park, N. J. Surgical knife. 1,804,959; May 12.

Sullivan, Joseph F., Archbald, Pa. Gas distribution apparatus. 1,804,896; May 12.

Sullivan Machinery Company. (See Osgood, Charles F., assignor.)

Summers, Leland L. (See Deppé, W. P., and Summers.)

Summers, Llewellyn L. B., et al., administrators. (See Deppé, W. P., and Summers.)

Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,804,653; May 12.

Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,804,654; May 12.

Sun Oil Company. (See Alleman, Gellert, assignor.)

Sun Rubber Company, The. (See Lower, Melvin S., assignor.)

Sundberg, Gustaf W., and L. J. Edmunds, Los Angeles, Calif. Piston oil saving ring. 1,804,848; May 12.

Super Cement Co., The. (See Reed-Lewis, Ellis W., assignor.)

Superior Products Corporation. (See Kline, M., and Kaplan, assignors.)

Surber, Heinrick. (See Danthine, Karl, assignor.)

Sutton Engineering Company. (See Wise, George A., assignor.)

Swanjord, Knute, assignor of one-fourth to E. H. Erickson, one-fourth to O. A. Erickson, and one-fourth to I. Hensted, all of Balaton, Minn. Halter. 1,804,655; May 12.

Swanson, Hugo R. (See Van Rensselaer, K. M., and Swanson.)

Sweet & Doyle Foundry & Machine Co. (See Erickson, John, assignor.)

Swift, James R., Highland, N. Y. Wave operated pump. 1,804,656; May 12.

Swindell-Dressler Corporation. (See Talbot, Thomas, assignor.)

Swingle, Archibald, Roundup, Mont. Internal combustion engine. 1,804,521; May 12.

Symonds, William H., Chicago, assignor to W. D. Allen Manufacturing Company, Chicago, Ill. Stand pipe connection for buildings. 1,804,714; May 12.

Syracuse Washing Machine Corporation. (See Nelson, J. C., and Papworth, assignors.)

Sytz, Edward A. (See Rogers, J. R., and Sytz.)

Taber, George H., jr., Rye, assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,805,113; May 12.

Taddiken, Ulrich A., Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Air ejector. 1,804,569; May 12.

Tafel, Theodore, jr., Ben Avon, Pa., assignor to Standard Sanitary Manufacturing Co. Combination sink and convertible dishwasher. 1,804,715; May 12.

Talbot, Thomas, Sedgley, near Dudley, Worcester, England, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa. Tunnel kiln. 1,804,657; May 12.

Tanasso, Vincent, New York, and J. J. Pomeranz, Brooklyn, N. Y. Box stud for nose bridges. 1,805,345; May 12.

Tanberg, Ragnar, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric surge recorder. 1,805,195; May 12.

Tanner, George, Sandpoint, Idaho. Sawmill setwork. 1,804,716; May 12.

Tarbox, John P., assignor to Eduard G. Budd Manufacturing Company, Philadelphia, Pa. Automobile body and mounting therefor. 1,804,658; May 12.

Tardiff, Philip D., Detroit, Mich. Automatic brake relay. 1,805,196; May 12.

Tattersfield, Clifford T. (See Firth, F. C., Jessop, and Tattersfield.)

Taussig, John W., Englewood, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y. Screw conveyer pile. 1,805,265; May 12.

Taylor, Edward M., assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,805,056; May 12.

Technicolor Motion Picture Corporation. (See Weaver, Eastman A., assignor.)

Temler, Friedrich, Cologne-Nippes, Germany. Arch support for shoes. 1,804,549; May 12.

Tennessee Corporation. (See McKee, Ralph H., assignor.)

Teppema, Jan, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Accelerator of vulcanization. 1,805,057; May 12.

Terrell Machine Company, The. (See Linder, Willis W., assignor.)

Tevis, Robert, Jamaica, L. I., N. Y., assignor of six-tenths to E. B. Lapham, Hoboken, N. J. Printing telegraph receiver. 1,805,114; May 12.

Texas Company, The. (See Andrews, T. M., and Lauer, assignors.)

Texas Company, The. (See Holmes, Will K., assignor.)

Texas Company, The. (See Logan, William B., assignor.)

Thibeault, Joseph H., Ware, Mass. Oil valve drain. 1,804,960; May 12.

Thiel, Emil. (See Dachlauer, K., and Thiel.)

Thiry, Leon, Brussels, Belgium. Automatic pistol. 1,805,383; May 12.

Thomas, Adolph A., New York, N. Y. Electromagnetic instrument. 1,804,961; May 12.

Thomas, Stanley P., Merced, Calif. High pressure relief valve. 1,804,897; May 12.

Thompson, Alfred H., Los Angeles, Calif. Fuel regulator. 1,804,849; May 12.

Thompson, Frank, assignor to C. Howard Hunt Pen Company, Camden, N. J. Pencil sharpener. 1,804,717; May 12.

Thompson, Frank A. (See Elwood, Frank, assignor.)

Thompson, Ralph E., Brookline, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,804,718; May 12.

Thorpe, Drew M. (See Fitz-Gibbon, John B., assignor.)

Thorpe, Lester R., East Bakersfield, Calif. Finger board. 1,804,962; May 12.

Thrasher, Henry H. (See Fosnaugh, G. S., and Thrasher.)

Tice, Percival S., assignor to Stewart-Warner Corporation, Chicago, Ill. Carburetor. 1,804,659; May 12.

Tiernan, Peter A. (See Fitzpatrick, Eu, Clark, and Tiernan.)

Tilden, Bert O., assignor to B. O. T. Mfg. Co., Trenton, N. J. Water closet bowl. Re18,065; May 12.

Timken-Detroit Axle Company, The. (See Brownyer, Nelson R., assignor.)

Timmons, Edwin S., Chicago, Ill. Vehicle light director. 1,804,719; May 12.

Tipton, Ray E. (See Cline, T. E., and Tipton.)

Toft, George W., Mountain View, Calif. False tooth. 1,804,898; May 12.

Todd, Charles W., Schenectady, N. Y. Locomotive structure. 1,805,115; May 12.

Tomkinson, Charles C., assignor, by mesne assignments, to J. Edward Ogden Company, New York, N. Y. Toggle bolt. 1,805,319; May 12.

Topp, William H., assignor, by mesne assignments, to The Starr Piano Company, Richmond, Ind. Brake actuating mechanism. 1,804,570; May 12.

Trane, Reuben N., La Crosse, Wis. Radiator. 1,805,116; May 12.

Travelad Corporation. (See Ellern, Albert J., assignor.)

Traver, Harry G., Beaver Falls, Pa. Amusement coaster railway. 1,805,266; May 12.

Treiber Diesel Engine Corporation. (See Treiber, Otis D., assignor.)

Treiber, Otis D., Narberth, assignor to Treiber Diesel Engine Corporation, Camden, N. J. Liquid fuel feeding means for internal combustion engines. 1,804,660; May 12.

Treiber, Theodore R., Chicago, Ill., assignor, by mesne assignments, to The Brunswick-Balke-Collender Company, Bowling alley pit cushion structure. 1,805,267; May 12.

Tresback, Louis F., Teaneck Township, Bergen County, N. J. Check book. 1,805,268; May 12.

Triangle Kapok Machine Corporation. (See Van Rensselaer, K. M., and Swanson, assignors.)

Trimble, William L. R., Granbury, Tex. Cylinder head stand. 1,805,320; May 12.

Triplett, James B., deceased, Whittier, W. H. Campbell, Los Angeles, and W. H. Maxwell, Beverly Hills, executors, assignors to J. Grant, Los Angeles, Calif. Underreamer with an hydraulic trigger. 1,804,850; May 12.

Troy, Thomas H., Boise, Idaho. Animal shears. 1,804,963; May 12.

Trumbull Electric Manufacturing Company, The. (See Young, Frank A., assignor.)

Tschirner, Frederick M., Medford, N. J., assignor to Zeolite Chemical Company, New York, N. Y. Base exchange zeolite and preparing same. 1,804,964; May 12.

Tunick, David. (See Walker, Ernest A., assignor.)

Turbo-Mixer Corporation, The. (See Valentine, Kenneth S., assignor.)

Turcott, David, Beloit, assignor to Yates-American Machine Company, Beloit, Wis. Signaling device for an automatic lathe. 1,804,720; May 12.

Ullman, Herbert G., Tuckahoe, N. Y. Pipe coupling or connection. 1,805,321; May 12.

Underwood Elliott Fisher Company. (See von Reppert, Richard, assignor.)

Ungerer, Fritz, Pforzheim, Germany. Lubricating arrangement for plate straightening or rolling machines. 1,804,571; May 12.

Union Switch & Signal Company, The. (See Clausen, Harold C., assignor.)

Union Switch & Signal Company, The. (See Holte, Harold O., assignor.)

Union Switch & Signal Company, The. (See Peter, L. H., Challans, and MacGregor, assignors.)

Union Switch & Signal Company, The. (See Zierdt, Conrad H., assignor.)

United Advertising Corporation. (See Hathaway, William R., assignor.)

United-Carr Fastener Corporation. (See Borresen, Helge A., assignor.)

United-Carr Fastener Corporation. (See Carr, Fred S., assignor.)

United-Carr Fastener Corporation. (See Jones, Walter I., assignor.)

United Shoe Machinery Corporation. (See Brogan, Michael F., assignor.)

United Shoe Machinery Corporation. (See Finn, Sidney J., assignor.)

United Shoe Machinery Corporation. (See Mooney, Fred L., assignor.)

United Shoe Machinery Corporation. (See Nutt, William H., assignor.)

United States Cast Iron Pipe & Foundry Company. (See Ladd, James B., assignor.)

Universal Draft Gear Attachment Co. (See Nash, Charles J., assignor.)

Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)

"Universelle" Cigarettenmaschinen-Fabrik, J. C. Müller & Co. (See Voigt, Robert W., assignor.)

Uschmann, Curt, Glendale, Calif., assignor to Continuous Rail Crossing Corporation, Reno, Nev. Rail crossing. 1,804,901; May 12.

Valentine, Kenneth S., Hollis, assignor to The Turbo-Mixer Corporation, New York, N. Y. Mixing, dissolving or dispersing apparatus. 1,804,966; May 12.

Valley, Jerry S., and E. P. Ford, Matlock, Wash. Undercutter for sawing logs. 1,805,058; May 12.

Valmore, William S., Mansfield, Ohio. Valve mechanism. 1,804,721; May 12.

Vanatta, Fred L., Orland, Ind. Chalk line spool. 1,805,426; May 12.

Van Dorn Electric Tool Company, The. (See Decker, Alonzo G., assignor.)

Van Horn, Earl, assignor to Goodyear's Inc., Los Angeles, Calif. Aeroplane landing light. 1,804,572; May 12.

Van Hove, Desire H., Royal Oak, assignor to L. A. Young Spring and Wire Corporation, Detroit, Mich. Spring seat structure. 1,804,722; May 12.

Vanneman, Daniel R. (See Smith, H. C., and Vanneman.)

Van Rensselaer, Killaen M., Woodmere, and H. R. Swanson, Brooklyn, assignors to Triangle Kapok Machine Corporation, Brooklyn, N. Y. Apparatus for treating fibers and the like. 1,805,117; May 12.

Van Sant, Robert H., Chicago, Ill. Toilet package. 1,805,299; May 12.

Van Sickel, Wilber H., Langhorne, assignor to The Dallett Company, Philadelphia, Pa. Stone dressing machine. 1,805,269; May 12.

Vaughan, Berkeley S., assignor to Wheeler Screen Company, Geneva, Ill. Ironing table. 1,804,573; May 12.

Venable, William W., Charleston, W. Va. Unloading apparatus. 1,805,427; May 12.

Vernam, Gilbert S., River Edge, N. J., assignor to American Telephone & Telegraph Company. Telegraph exchange system. 1,804,548; May 12.

Victor, John H., Chicago, Ill., assignor to Victor Manufacturing & Gasket Co. Gasket. 1,804,574; May 12.

Victor Manufacturing & Gasket Co. (See Victor, John H., assignor.)

Victor, Paul F., River Forest, Ill. Automobile heater. 1,805,300; May 12.

Vleau, Harold F., Liverpool, assignor of one-third to R. C. Higby, Big Moose, and one-third to E. J. O'Neill, Syracuse, N. Y. Centrifugal clothes drier. 1,805,428; May 12.

Virden, John C., Company. (See Wing, Clarence G., assignor.)

Vis, George A., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Making cap nuts. 1,805,384; May 12.

Vittinghoff, Hans, Winchester, Mass., assignor, by mesne assignments, to Stone & Webster, Incorporated. Maximum demand gas meter. 1,805,118; May 12.

Vives, Emile G. E., deceased, by S. J. Cazautet (widow Vives), administratrix, St. Pe, France. Head lamp for motor vehicles. 1,804,965; May 12.

Voehl, George. (See Longstreet, Lawrence C., assignor.)

Voigt, Robert W., assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Apparatus for combining horizontal layers of articles. 1,805,119; May 12.

Vold, Lars H. (See Hammerstrom, K. R., and Vold.)

Volk, Walter C., Rome, assignor to Skenandoa Rayon Corporation, Utica, N. Y. Mechanism for use in treating yarn. 1,805,456; May 12.

Vol-U-Meter Co., The. (See Stevens, Arthur, assignor.)

Von Dorn, Theodore F. (See Norwood, Harry G., assignor.)

Von Erbardt, South Hadley, Mass. Control apparatus for power-transmitting mechanism. 1,805,120; May 12.

Von Forster, Hermann, Niederursel, near Frankfort-on-the-Main, and E. Lay, Eschersheim, near Frankfort-on-the-Main, assignors to Metallgesellschaft Aktiengesellschaft, Frankfort-on-the-Main, Germany. Composite metal. 1,804,899; May 12.

Von Nessen, Walter, New York, N. Y., assignor to Efcolite Corporation, Trenton, N. J. Lighting fixture or article of similar nature. Des. 84,169; May 12.

Von Reppert, Richard, Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,804,723; May 12.

Voss, Arthur, Frankfort-on-the-Main-Hochst, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Hardened artificial mass and preparing it. 1,805,385; May 12.

Voss, John H., Berwyn, and T. F. Crocker, Chicago, assignors to Reserve Holding Company, Chicago, Ill. Telephone system. 1,804,575; May 12.

Vroman, John C., Chelsea, assignor of one-half to E. L. Jones, Tulsa, Okla. Oil well pump. 1,804,900; May 12.

Vulcan Detinning Company. (See Buttfield Gibson, assignor.)

Wachter, Lester. (See Anthony, W. C., Benedict, and Wachter.)

Wacker, Dr. Alexander, Gesellschaft fur Elektrochemische Industrie. (See Halbig, P., and Kaufler, assignors.)
Wade, Harold. (See Dufay, Louis, assignor.)
Wadsworth, George B., Company, The. (See Wadsworth, George E., assignor.)
Wadsworth, George E., Erlanger, Ky., assignor, by mesne assignments, to The George B. Wadsworth Company, Cincinnati, Ohio. Fusible switch mechanism. 1,804,724; May 12.
Wagenhals, William G., Detroit, Mich. Humidifier. 1,805,059; May 12.
Wagner, Dwight H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Flower vase. 1,804,447; May 12.
Wagner, Joshua, Brooklyn, assignor, by mesne assignments, to Diagonal Corrugated Patent Corporation, New York, N. Y. Corrugating machine. 1,804,661; May 12.
Waite, Griffin G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Remote metering system. 1804,576; May 12.
Walker, Ernest A., Newark, assignor to D. Tunick, Newark, and B. M. Reznik, Caldwell, N. J. Chandelier. Des. 84,170; May 12.
Walker, Ernest A., Newark, assignor to D. Tunick, Newark, and B. M. Reznik, Caldwell, N. J. Lighting fixture body or article of analogous nature. Des. 84,171; May 12.
Walker, Ernest A., Newark, assignor to D. Tunick, Newark, and B. M. Reznik, Caldwell, N. J. Wall bracket or article of analogous nature. Des. 84,172; May 12.
Walker, Ernest A., Newark, assignor to D. Tunick, Newark, and B. M. Reznik, Caldwell, N. J. Back-plate for wall brackets or articles of analogous nature. Des. 84,173; May 12.
Walker, Ward C., Battle Creek, Mich. Hose clamp. 1,804,725; May 12.
Wallfisch, Ludwig, Hirschberg, Germany. Wedge shaped driving belt. 1,805,442; May 12.
Wallrab, Charles S. (See Hook, L. H., Evans and Wallrab.)
Walsh, Frank T., assignor to Leboeuf Fountain Pen Co., Inc., Springfield, Mass. Fountain pen. 1,804,522; May 12.
Walter, Edward C., assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,805,060; May 12.
Walter, Edward C., assignor to Monroe Calculating Machine Company, Orange, N. J. Register. 1,805,061; May 12.
Walter, Raymond A., assignor to Conveyor Sales Company, New York, N. Y. Driving mechanism. 1,804,577; May 12.
Walter, Raymond A., assignor to Conveyor Sales Company, New York, N. Y. Driving mechanism for reciprocating conveyers. 1,804,578; May 12.
Walters, Vernon E., Detroit, and I. Grant, Grosse Pointe Park, assignors to General Motors Corporation, Detroit, Mich. Clamping device. 1,805,443; May 12.
Walton, Kenneth B., Atlantic City, N. J. Annunciator system. 1,804,902; May 12.
Waraksa, Peter J., El Paso, Tex. Windshield visor. 1,805,346; May 12.
Ward, Joseph M. (See Crane, F. G., and Ward.)
Ward, William L., assignor to Russell, Burdsall, & Ward Bolt and Nut Company, Port Chester, N. Y. Manufacture of nut blanks. 1,804,579; May 12.
Warren, Jesse J., jr., Philadelphia, Pa. Coin bank. 1,804,726; May 12.
Waterbury Farrel Foundry and Machine Company, The. (See Wilcox, Richard L., assignor.)
Watson Company, The. (See Ball, Percy B., assignor.)
Waukesha Motor Company. (See Fisher, J. B., and De Long, assignors.)
Weaver, Eastman A., Brookline, assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass. Photography. 1,804,727; May 12.
Webb, Arthur B., Milwaukee, Wis., assignor to The Rightway Corporation. Snow remover. 1,805,121; May 12.
Webb, Stuart W., Brookline, J. G. Callan, Cambridge, and A. Allen, Winchester, assignors, by mesne assignments, to Eastern Manufacturing Company, Boston, Mass. Apparatus for use in finishing paper. 1,804,483; May 12.
Webster, William S., Roslindale, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Vernier. 1,805,154; May 12.
Weeks, Ralph M., New London, assignor to Electric Boat Company, Groton, Conn. Stuffing box. 1,805,155; May 12.
Wehner, Peter P., Cincinnati, Ohio. Animated toy. 1,805,156; May 12.
Weingart, Richard, assignor to Eversady Pen Company, Inc., New York, N. Y. Closure device for fountain pens. 1,805,347; May 12.
Weingart, Richard, assignor to Eversady Pen Company, Inc., New York, N. Y. Fountain pen. 1,805,348; May 12.
Weinheim, Emil, New York, N. Y. Synchronously positive feed. 1,805,122; May 12.
Weis, Samuel W. (See Gentile, Marino, assignor.)
Welk, Nelson S., assignor to The McBee Binder Co., Athens, Ohio. Movable pressure device. 1,805,322; May 12.
Wells, Frank O., Greenfield, Mass. Die blanks and making dies. 1,804,662; May 12.
Welsh, John T. (See Rose, E. E., and Welsh.)
Wemp, Ernest E., Detroit, Mich. Lever booster. 1,804,903; May 12.
Wemp, Ernest E., Detroit, Mich. Clutch disk. 1,804,904; May 12.
Wemp, Ernest E., Detroit, Mich. Clutch facing. 1,804,905; May 12.
Wemp, Ernest E., Detroit, Mich. Gear silencer construction. 1,804,906; May 12.
Wendling, Charles C., Dover, Ohio. Sheet opener. 1,805,301; May 12.
West, Thomas H., et al. (See Skinner, Ralph L., assignor.)
Western Electric Company. (See Alden, John L., assignor.)
Western Electric Company. (See Fernekes, V. W., and Ray, assignors.)
Western Electric Company. (See Holland, Newman H., assignor.)
Western Union Telegraph Company, The. (See Atherton, Albert, assignor.)
Western Union Telegraph Company. (See Rothermel, Samuel W., assignor.)
Western Union Telegraph Company, The. (See Wise, Raleigh J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Brown, James M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Butcher, Charles A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Drury, Thomas W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Grau, Ernst, assignor.)
Westinghouse Electric & Manufacturing Company. (See Hill, Leland H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hodgkinson, Francis, assignor.)
Westinghouse Electric & Manufacturing Company. (See King, George E., assignor.)
Westinghouse Electric & Manufacturing Company. (See MacNeill, John B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mosshart, Donald J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Rose, E. E., assignor, and Welsh.)
Westinghouse Electric & Manufacturing Company. (See Rugg, Walter S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schuster, Otto P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Taddiken, Ulrich A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Tanberg, Ragnar, assignor.)
Westinghouse Electric & Manufacturing Company. (See Waite, Griffin G., assignor.)
Wetmore, Miner P., assignor to The American Thermos Bottle Company, Norwich, Conn. Bottle-silvering machine. 1,804,484; May 12.
Wheeler, Gardner E., and C. Oppe, New Haven, Conn. Vehicle arm or prop. 1,804,728; May 12.
Wheeler Screen Company. (See Vaughan, Berkeley S., assignor.)
Wheeling Steel Corporation. (See Wagner, Dwight H., assignor.)
Whitesides, Walter L., Long Beach, Calif. Cigarette dispenser. 1,804,580; May 12.
Whitney Metal Tool Company. (See Jensen, John, assignor.)
Whittam, Benjamin B., Elizabeth, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler. 1,804,907; May 12.
Wiard, John B. (See Blood, L. E., and Wiard.)
Wichert, Alfred, Mannheim-Neuostheir, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Socket connection for electrical conductors. 1,804,908; May 12.
Wickemeyer, Ezra C. A. (See Feltman, E. A., and Wickemeyer.)
Wickline, Robert L. (See Boyd, John R., assignor.)
Wiederwax, Robert W., et al. (See Dickinson, James C., assignor.)
Wigle, Wilson B., Compton, Calif. Stuffing box. 1,804,581; May 12.
Wilcox Products Corporation. (See Osterholm, William C., assignor.)
Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Clearance mechanism for improperly aligned articles. 1,805,123; May 12.
Wilcox, Richard L., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Upsetting mechanism. 1,805,124; May 12.
Williams, Paul F., assignor to G & W Electric Specialty Co., Chicago, Ill. Electrical connecter. 1,805,270; May 12.
Willys-Overland Company, The. (See Stockton, William S., assignor.)
Wilms, Gustav O., and F. F. Loock, Milwaukee, Wis., assignors, by mesne asignments, to The Reliance Company, Wilmington, Del. Electrical switch. 1,804,729; May 12.
Wilson, Henry H., Regina, Saskatchewan, Canada, assignor to Stand Oil Development Company. Desulphurizing liquid hydrocarbon. 1,805,444; May 12.

Wilson, J. G., Corp. (See Duncanson, Walter E., assignor.)
Wilson, John F., assignor to General Motors Corporation, Detroit, Mich. Deck doorlock. 1,805,445; May 12.
Wing, Clarence G., assignor to John C. Virden Company, Cleveland, Ohio. Lighting fixture. Des. 84,174; May 12.
Winthrop Chemical Company. (See Streitwolf, K., and Fehrle, assignors.)
Wired Radio, Inc. (See Hentschel, Ernest R., assignor.)
Wireless Specialty Apparatus Company. (See Butler, Benjamin J., assignor.)
Wireless Specialty Apparatus Company. (See Webster, William S., assignor.)
Wiremold Company, The. (See Rutherford, Charles E., assignor.)
Wirz, A. H., Inc. (See Barker, Edwin H., assignor.)
Wise, George A., Pittsburgh, Pa. assignor to Sutton Engineering Company. Round straightener. 1,805,302; May 12.
Wise, Raleigh J., Bloomfield, N. J., to The Western Union Telegraph Company, New York, N. Y. Signal distortion indicator. 1,805,349; May 12.
Wistrand, Gunnar, Berlin, Germany, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Mounting for non-driven rolls. 1,804,909; May 12.
Witte, James E., Newport, Ky. Hot air furnace. 1,804,851; May 12.
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Film editing machine. 1,804,730; May 12.
Witten, Arthur P., assignor to G. E. Hall and himself, Akron, Ohio. Ornamenting toy balloons. Re18,068; May 12.
Wochner, Henry, assignor to Bear Manufacturing Company, Rock Island, Ill. Tracking gauge for automobiles. 1,804,448; May 12.
Wolf, Robert B., New York, N. Y., R. P. Hill, Glen Rock, and R. S. Hatch, East Orange, N. J., assignors to Lignocellulose Corporation, New York, N. Y. Producing cellulose from lignified material. 1,804,967; May 12.
Wolfe, Harry H., and H. L. Myers, assignors to The American Floor Surfacing Machine Company, Toledo, Ohio. Edging machine. 1,804,523; May 12.
Wood, Garfield A. (See Jerome, Horace M., assignor.)
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Web guide roller. 1,805,197; May 12.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Double matrix operating device. 1,805,271; May 12.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Electrically operated metal pump. 1,805,272; May 12.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Woodard, William E., Forest Hills, N. Y. Locomotive construction. 1,805,125; May 12.
Wood-Barrett Corporation, Ltd. (See Rutherford, Romilly T., assignor.)
Woodbridge, Charles K., New York, N. Y., assignor to Dictaphone Corporation, Bridgeport, Conn. Sound collecting and transmitting means. 1,804,485; May 12.
Woodman Railway Supply Company. (See Burry, Vincent J., assignor.)
Woodruff, Joseph W., Elizabeth, N. J. High pressure lubricating apparatus. 1,804,449; May 12.
Woodruff, Joseph W., Elizabeth, N. J. Pressure greasing apparatus. 1,804,582; May 12.
Woods, S. A., Machine Company. (See Blood, L. E., and Wiard, assignors.)
Woodward, Alva W., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Latching device for split rims. 1,805,062; May 12.
Worlein, Valentin C., Chicago, Ill. Vehicle spring snubber. 1,805,350; May 12.
Woycheshin, Sill, Marlin, Tex. Plow. 1,804,910; May 12.
Wright, Kenneth A., et al. (See Hamer, Leland S., assignor.)
Wright, Parvin, Seattle, Wash. Apparatus for treating wires. 1,804,486; May 12.
Wrona, Casimir, Ugine, France. Rotary pump. 1,805,063; May 12.
Yardley Screen & Weatherstrip Company, The. (See Rosel, William E., assignor.)
Yarnall, David R., assignor to Yarnall-Waring Company, Philadelphia, Pa. Steam trap. 1,805,064; May 12.
Yarnall-Waring Company. (See Yarnall, David R., assignor.)
Yates-American Machine Company. (See Turcott, David, assignor.)
Yoshioka, Shojiro, New York, N. Y., assignor to Rinkichi Doi, Sendai, Japan. Book mirror. 1,804,487; May 12.
Young, Arthur, et al., administrators. (See Deppé, W. P., and Summers.)
Young, Earl L., San Fernando, Calif. Hedge trimmer. 1,805,323; May 12.
Young, Frank A., Meriden, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Reversing switch. 1,805,434; May 12.
Young, L. A., Spring and Wire Corporation. (See Stackhouse, George A., assignor.)
Young, L. A., Spring and Wire Corporation. (See Van Hove, Desire H., assignor.)
Zallio, John B., Chicago, Ill. Food service device. 1,805,198; May 12.
Zamboni, Frank J., Hynes, assignor, by mesne assignments, to Nuway Electric Company, Los Angeles, Calif. Circuit controlling reactance coil. 1,804,852; May 12.
Zeolite Chemical Company. (See Tschirner, Frederick M., assignor.)
Zierdt, Conrad H., Rosedale, Penn Township, Allegheny County, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical apparatus. 1,804,663; May 12.
Zierdt, Conrad H., Rosedale, Penn Township, Allegheny County, assignor to the Union Switch & Signal Company, Swissvale, Pa. Power supply system. 1,804,664; May 12.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 12TH DAY OF MAY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Accelerator and brake mechanism, Foot controlled. O. Q. Hinds. 1,804,615; May 12.
Accelerator of vulcanization. J. Teppema. 1,805,057; May 12.
Accelerator, Rubber. D. H. Powers. 1,805,103; May 12.
Acid and preparing same, Aromatic sulfonic. K. Dachlauer and E. Thiel. 1,804,527; May 12.
Acid chlorides, Preparation of aliphatic. E. C. Britton. 1,805,162; May 12.
Acid, Purifying sulphuric. F. E. Kimball. 1,805,247; May 12.
Acoustic device. A. V. Bodine. 1,804,456; May 12.
Acoustic device. P. B. Flanders. 1,804,759; May 12.
Acoustic device. H. C. Harrison. 1,804,688; May 12.
Acoustic device. N. H. Holland. 1,804,689; May 12.
Acoustic slab. M. Mazer. 1,804,884; May 12.
Adding machines, Manual paper feeding mechanism for. G. J. Barrett. 1,804,730; May 12.
Adjustable wrench. H. Dorn. 1,804,861; May 12.
Advertising device. I. F. Petigor. 1,804,948; May 12.
Aeroplane wing. W. M. Cross. 1,804,824; May 12.
Air, Apparatus for conditioning. C. F. Shadle. 1,804,649; May 12.
Air circulating device for drying flat fabrics. H. Haas. 1,804,558; May 12.
Aircraft. J. M. Gwinn, jr. 1,804,765; May 12.
Aircraft. I. M. Laddon. 1,804,790; May 12.
Aircraft fitting. A. J. Fairbanks. 1,805,439; May 12.
Air ejector. U. A. Taddiken. 1,804,569; May 12.
Air heater. C. A. Soans. 1,804,444; May 12.
Air mail exchange device. C. C. Pursley. 1,805,258; May 12.
Airplane wing, Unilayer rigid. J. Biondin. 1,804,823; May 12.
Airship. C. D. Bowker. 1,804,588; May 12.
Aldehyde-amine condensation products and preparing same. S. M. Cadwell and A. T. Maximoff. 1,804,398; May 12.
Aldehyde-amines, Treatment of. S. I. Strickhouser. 1,805,194; May 12.
Alloy metal for bearings. W. Mathesius and M. W. Neufeld. 1,804,883; May 12.
Aluminum alloy article, Corrosion resistant. F. C. Frary. 1,805,448; May 12.
Ammeter. J. E. Eshbaugh. 1,805,447; May 12.
Amusement apparatus. W. J. Mahoney. 1,805,337; May 12.
Amusement coaster railway. H. G. Traver. 1,805,266; May 12.
Anchoring device. R. Dinklage. 1,804,918; May 12.
Angle bar bending machine. J. Jensen. 1,804,468; May 12.
Animal shears. T. H. Troy. 1,804,963; May 12.
Annunciator system. K. B. Walton. 1,804,902; May 12.
Apparel garment. E. C. Duff. 1,805,133; May 12.
Aqueous solutions of lower aliphatic acids, Concentrating. J. Billing. 1,805,127; May 12.
Arch support for shoes. F. Temler. 1,804,549; May 12.
Arrow testing device. S. C. Allen. 1,804,450; May 12.
Arsenobenzimidazolons. K. Streitwolf and A. Fehrle. 1,805,382; May 12.
Articles made of iron or steel, Hardening. W. Beck. 1,804,454; May 12.
Articles, Method and apparatus for wrapping. H. Clark and R. E. Metcalf. 1,805,306; May 12.
Articles of rubber and fibrous material and product, Making. E. Hopkinson and W. A. Gibbons. 1,805,245; May 12.
Artificial bait. C. S. Raymond. 1,805,416; May 12.
Artificial mass and preparing it, Hardened. A. Voss. 1,805,385; May 12.
Arylcarboxyamino-o-thioglycollic acids into hydroxythionaphthene compounds, Converting. E. Hoffa, J. and F. Müller. 1,804,872; May 12.
Ash protector, Cigar or cigarette. A. Haas. 1,804,979; May 12.
Autographic register. W. E. Dunning. 1,805,239; May 12.
Automatically operated press. R. T. King. 1,805,367; May 12.
Auto wheel and tire lock. C. H. Duffy. 1,804,678; May 12.
Automobile body and mounting therefor. J. P. Tarbox. 1,804,658; May 12.
Automobile guiding apparatus. E. Geiger. 1,805,211; May 12.
Automobile heater. P. F. Victor. 1,805,300; May 12.
Automobile hood lock. B. L. Dorsey and T. S. Ingersoll. 1,804,387; May 12.

Awning. N. H. Nelson. 1,805,223; May 12.
Awning arms, Adjusting device for. H. Branch. 1,804,550; May 12.
Awning, Rolling. N. H. Nelson. 1,804,798; May 12.
Backplate for wall brackets or article of analogous nature. E. A. Walker. Des. 84,173; May 12.
Bag and producing the same, Multiply. B. Arkell. 1,805,067; May 12.
Bag turning apparatus. C. F. Sparks. 1,805,111; May 12.
Bag turning apparatus. C. F. Sparks. 1,805,432; May 12.
Bags, Apparatus for manufacturing. C. F. Sparks. 1,805,112; May 12.
Bank, Coin. J. J. Warren, jr. 1,804,726; May 12.
Barber chair. F. E. Rohe. 1,805,189; May 12.
Bar hanger. J. A. Adell. 1,805,027; May 12.
Base for furnaces, tanks and the like. J. B. Fitz-Gibbon. 1,804,407; May 12.
Bathtub chair. T. A. Sadusky, A. L. Marlowe, and F. D. Miller. 1,805,297; May 12.
Bearing box. D. C. Brown. 1,805,325; May 12.
Bearing, Crank arm. A. H. Stebbins. 1,804,958; May 12.
Bearing, Shoe. C. C. Calkins. 1,804,672; May 12.
Bearing, Water cooled. J. D. Jones. 1,804,693; May 12.
Bearings about an arbor preparatory to machining, Holding half. L. C. Blomstrom. 1,805,232; May 12.
Bed, Davenport. A. Knosher. 1,805,097; May 12.
Bed, Sofa. G. A. Stackhouse. 1,804,820; May 12.
Beds, Attachment for. O. Smith. 1,804,710; May 12.
Beet topper. R. Laemmlen. 1,805,044; May 12.
Belt. S. C. Jimopoulos. 1,804,930; May 12.
Belt cutter. T. E. Buckner. 1,805,163; May 12.
Belt, Wedge shaped driving. L. Wallfisch. 1,805,442; May 12.
Beverage making machine. J. W. Lee. 1,804,795; May 12.
Bin for storage of fish. C. Birdseye. 1,805,354; May 12.
Binder. C. E. Riddiford. 1,804,514; May 12.
Binder for loose leaf books. W. J. Morton. 1,805,314; May 12.
Binder, Loose leaf. A. G. Lotter. 1,804,626; May 12.
Bit: *See*—
Extensible bit. Extension bit.
Blind, Venetian. W. E. Duncanson. 1,805,238; May 12.
Block: *See*—
Furnace block.
Blower. J. J. Stoetzel. 1,805,055; May 12.
Board: *See*—
Finger board.
Boat. T. L. Donaldson. 1,805,131; May 12.
Boat propulsion mechanism. L. C. Longstreet. 1,804,882; May 12.
Bobbin stripping machine. W. W. Linder. 1,805,452; May 12.
Boiler: *See*—
Locomotive boiler.
Boiler. B. B. Whittam. 1,804,907; May 12.
Boiler cleaner. N. L. Snow, F. Bowers, and C. L. Howse. 1,805,454; May 12.
Boiler construction. H. M. Jerome. 1,804,777; May 12.
Boiler feed water control device. W. Doble. 1,804,751; May 12.
Bolt: *See*—
Toggle bolt.
Bomb sight. G. Estoppey. 1,804,679; May 12.
Book binding machine. R. E. Ackley. 1,805,157; May 12.
Book end. A. M. Lynch. Des. 84,155; May 12.
Books, Method of binding. H. C. Alger and P. A. Frazier. 1,804,392; May 12.
Boot, shoe and similar footwear. J. W. Radburne. 1,804,545; May 12.
Booth, Hair dressing. B. W. Frankel. 1,805,240; May 12.
Bottle. B. T. Roberts. Des. 84,163; May 12.
Bottle capper. H. G. Rice. 1,805,295; May 12.
Bottle or similar container. F. B. Putt. Des. 84,161; May 12.
Bottle silvering machine. M. P. Wetmore. 1,804,484; May 12.
Bottle stopper, Dispensing. F. D. Pitt. 1,805,257; May 12.
Bottling machine. A. F. Hoffman. 1,804,985; May 12.
Bowl, Water closet. B. O. Tilden. Re18,065; May 12.
Bowling alley pit cushion structure. T. R. Treiber. 1,805,267; May 12.
Box: *See*—
Bearing box. Journal box.
Coin box. Packing box.
Film box. Stuffing box.
Box blank slotting machine. L. S. Rosener. 1,804,644; May 12.
Box or crate, Reenforced wood. W. O. Brown. 1,804,494; May 12.
Box or the like, Paper. S. Bergstein. 1,804,738; May 12.

Box stud for nose bridges. V. Tanasso and J. J. Pomeranz. 1,805,345; May 12.
Bracket: *See*—
Supporting bracket.
Brake: *See*—
Expanding brake. Railway brake.
Hydraulic brake.
Brake. B. H. Anderson. 1,805,274; May 12.
Brake actuating mechanism. W. H. Topp. 1,804,570; May 12.
Brake and actuating the same. H. C. Lord. 1,804,697; May 12.
Brake closure. R. J. Norton. 1,805,183; May 12.
Brake mechanism. L. K. Snell. 1,805,053; May 12.
Brake mechanism. C. E. Starr. 1,804,894; May 12.
Brake operating mechanism, Auxiliary. H. Hubbell, jr. 1,804,773; May 12.
Brake operator. H. H. Semmes. 1,805,190; May 12.
Brake testing device. F. E. and E. L. Macabee. 1,804,942; May 12.
Brassière. M. A. Bollwine. 1,804,855; May 12.
Brush. L. L. Hales. 1,804,415; May 12.
Brush cleaning machine. W. S. Elliot. 1,804,601; May 12.
Buck and wood jamb, Metal. I. A. Baum. 1,805,030; May 12.
Buckle connecting means, Shoe. H. Helfant. 1,805,398; May 12.
Building. E. Johnston. Des. 83,145; May 12.
Bumper, Automobile. G. H. Hedrick. 1,805,284; May 12.
Bumper mechanism. E. F. Ohlendorf. 1,805,414; May 12.
Burner: *See*—
Hydrocarbon burner.
Burner or nozzle, Gas. P. J. J. Andrieux. 1,805,066; May 12.
Button, Cuff. E. Merz. 1,804,944; May 12.
Button, Fraternal lapel. J. J. Murphy. Des. 84,158; May 12.
Cabinet, Card index file. J. W. Donaldson and B. L. Polkosnik. 1,804,597; May 12.
Cabinet, Display. C. A. Grainger. Des. 84,140; May 12.
Cabinet, Metal. S. Smiley, jr. 1,805,019; May 12.
Cabling clip. S. P. Hull and F. C. Lavarack. 1,804,775; May 12.
Calculating machine. W. J. Paśinski and J. Magnus. 1,805,225; May 12.
Calculating machine. E. C. Walter. 1,805,060; May 12.
Cameras, Combined support and shutter actuating means for. J. M. Ramsey. 1,805,185; May 12.
Cameras, Exposure indicating attachment for. L. Stankewitz. 1,805,424; May 12.
Cameras, Film changing and positioning device for. S. M. Fairchild. 1,804,680; May 12.
Can feeding mechanism. O. H. Hansen. 1,805,243; May 12.
Candle, Ornamented. H. H. Grieves and E. D. Fauth. 1,805,171; May 12.
Cane stalks preparatory to the extraction of the juice from same, Apparatus for disintegrating. W. H. Morgan. 1,804,797; May 12.
Canopy for funerals. E. F. Schultz. Des. 84,168; May 12.
Cap, Sanitary pouring. E. D. Lukenbill. 1,804,627; May 12.
Capping mechanism. C. Morrow. 1,804,637; May 12.
Car construction. H. S. Hart and D. Hindahl. 1,804,769; May 12.
Car construction. J. O. Neikirk. 1,804,702; May 12.
Car pusher, Freight. D. B. Brooks. 1,805,388; May 12.
Car retarder, Railway. H. C. Clausen. 1,805,307; May 12.
Car underframe construction. W. H. Mussey. 1,804,428; May 12.
Carburetor. H. W. Potter. 1,804,842; May 12.
Carburetor. P. S. Tice. 1,804,659; May 12.
Carburetor, Air valve. L. E. Perrine. 1,805,453; May 12.
Card, Index or filing. H. W. Donnell. 1,804,528; May 12.
Carpet. H. C. La Couture. Des. 84,154; May 12.
Carriage, Baby. J. A. Eberle. 1,805,135; May 12.
Carrier: *See*—
Luggage carrier. Wheeled carrier.
Carton. A. Ehrenfeld. Des. 84,138; May 12.
Carton or like container for cigarettes and the like. W. E. Molins. 1,805,371; May 12.
Cartridge, Blank. C. L. Holden and P. P. Quayle. 1,804,986; May 12.
Cartridge clip and follower, Combination of. J. D. Pedersen. 1,804,511; May 12.
Cartridge fuse. C. T. McDonald and H. R. Cook. 1,804,886; May 12.
Case: *See*—
Vanity case.
Casement window structure. T. Johnson. 1,805,403; May 12.
Cash register. B. M. Shipley. 1,804,650; May 12.
Casing for a combined clothes washer and drier. J. C. Nelson and W. A. Papworth. Des. 84,159; May 12.
Casing for a portable electric polisher. A. G. Decker. Des. 84,132-3; May 12.
Casing structure for electrical appliances. P. K. Cramblet. 1,805,277; May 12.

Cast iron, Electric welding of. E. Lunn. 1,804,837; May 12.
Caster, Ball bearing. C. B. and W. H. Noelting. 1,804,639; May 12.
Casting machine, Centrifugal. R. P. Frist, jr. 1,805,168; May 12.
Ceiling supporting strap. R. E. Kelley. 1,804,420; May 12.
Cellulose, Etherifying. E. Huber. 1,805,365; May 12.
Cellulose from lignified material, Producing. R. B. Wolf, R. P. Hill, and R. S. Hatch. 1,804,967; May 12.
Cement and producing the same, Portland. E. W. Reed-Lewis. 1,805,104; May 12.
Cement applying machine. H. R. Polleys. 1,804,480; May 12.
Center tester. J. H. Jacobs. 1,805,285; May 12.
Chain conveyer. G. E. Rowe. 1,805,430; May 12.
Chair: *See*—
Barber chair. Bathtub chair.
Chair. G. H. Hamilton. Des. 84,143; May 12.
Chandelier. E. A. Walker. Des. 84,170; May 12.
Chandelier frame. H. Aglow. Des. 84,126; May 26.
Chart for gasoline pump bowls, Price. J. Morasky. 1,804,540; May 12.
Check book. L. F. Tresback. 1,805,268; May 12.
Chord finder. R. Cordier. 1,804,460; May 12.
Chucking machine, Work rotating type of. J. J. Spring. 1,805,054; May 12.
Chute, Branding and dehorning. W. L. Kuhns. 1,805,405; May 12.
Circuit breaker. J. B. MacNeill. 1,804,628; May 12.
Circuit closer. C. W. Johnson. 1,804,622; May 12.
Circuit closer, Pendulum controlled. H. J. Murray. 1,805,147; May 12.
Circuit, Radio receiving. H. B. Coxhead. 1,804,526; May 12.
Clamp: *See*—
Hose clamp. Wire line clamp
Clamp. C. E. Stocks. 1,805,425; May 12.
Clamping device. V. E. Walters and I. Grant. 1,805,443; May 12.
Clarinet. E. J. Gulick. 1,805,449; May 12.
Cleaner: *See*—
Boiler cleaner. Vacuum cleaner.
Cooling system cleaner. Window cleaner.
Drain cleaner.
Cleaner apparatus, Vacuum. W. T. Pritchard. 1,804,809; May 12.
Clearance mechanism for improperly aligned articles. R. L. Wilcox. 1,805,123; May 12.
Climbing or lifting jack. G. T. Burrell and A. V. Jackson. 1,804,858; May 12.
Clip: *See*—
Cabling clip. Toy railway track clip.
Clip for a fountain pen or similar article. M. Gold. Des. 84,139; May 12.
Clock, Illuminated. E. A. Meyer. 1,804,999; May 12.
Clocks, Hinged bezel for. W. H. Balzer. 1,804,734; May 12.
Closet flushing device. C. W. Brown. 1,805,204; May 12.
Closure device for fountain pens. R. Weingart. 1,805,347; May 12.
Closure for containers, Dispensing. S. E. Fox. 1,804,760; May 12.
Clothes drier, Centrifugal. H. F. Vieau. 1,805,428; May 12.
Clutch disk. E. E. Wemp. 1,804,904; May 12.
Clutch disk, Friction. F. H. Jones. 1,804,878; May 12.
Clutch facing. E. E. Wemp. 1,804,905; May 12.
Clutch for motor cars. B. Drkal. 1,805,081; May 12.
Clutch, Hydraulic. U. G. Charles. 1,804,744; May 12.
Clutch mechanism. S. F. Briggs. 1,804,457; May 12.
Coal, Processing of. W. Runge and E. A. Packard. 1,805,109; May 12.
Coating and marking machine. H. R. Polleys. 1,804,479; May 12.
Coating metallic articles, particularly the interiors of water mains (in situ). F. W. Hammond. 1,805,215; May 12.
Coating, Method of and apparatus for applying. A. M. Bates. 1,805,070; May 12.
Coating, Process and apparatus for. G. A. Johnson. 1,804,991; May 12.
Coil, Circuit controlling reactance. F. J. Zamboni. 1,804,852; May 12.
Coin box. G. L. Smith. 1,805,422; May 12.
Coin controlled lock. A. Gabriel. 1,804,411; May 12.
Coin counting machine. E. P. Donnellan. 1,805,079; May 12.
Coin counting mechanism. E. P. Donnellan. 1,805,132; May 12.
Combustion in boiler furnaces, Regulating. A. G. S. Sandison. 1,805,012; May 12.
Comparator. P. E. Klopsteg. 1,804,421; May 12.
Composition for and method of heat and fireproofing paper, craftboard, and the like. O. Herting. 1,804,417; May 12.
Composition for the manufacture of conduits and the like. C. D. Ryder. 1,805,431; May 12.
Compound of dialkyl barbituric acids and making the same. E. Preiswerk. 1,805,294; May 12.
Compounds and preparing them, Basic. M. Bockmuhl and R. Knoll. 1,805,535; May 12.
Compounds of the benzathraquinone series, New. R. M. Heidenreich. 1,804,870; May 12.

Compresser and converting Ford motor into same. W. E. Hoffman. 1,804,873; May 12.
Compressor and the like, Hydraulically operated air. A. C. Jamieson, J. F. Gardiner, and W. J. McDonald. 1,804,876; May 12.
Concentrates of rhenium, Production of. W. and I. Noddack. 1,804,429; May 12.
Concentration units, Repeating apparatus for. A. Atherton. 1,805,351; May 12.
Condenser. P. A. Bancel. 1,804,584; May 12.
Condenser, Electrical. B. J. Butler. 1,805,075; May 12.
Conductor, Flexible. J. L. Alden. 1,804,732; May 12.
Conduit and spacing supports therefor, Multiple. H. Parker. 1,804,478; May 12.
Conduit elbow, Adjustable electrical. C. E. Rutherford. 1,804,954; May 12.
Construction material. G. C. Douglas. 1,804,753; May 12.
Container. W. Mineck. 1,804,539; May 12.
Container, Folding tilt display. W. S. Carter. 1,805,077; May 12.
Container for construction toys and like sets. A. C. Gilbert. 1,804,927; May 12.
Container for insecticides, etc. M. T. Newman. 1,804,891; May 12.
Container having swivel casters. D. W. Perin. 1,804,541; May 12.
Container, Paper pulp. M. Gentile. 1,804,555; May 12.
Container, Shipping and display. M. M. Elnson. 1,804,826; May 12.
Control apparatus. E. E. Rose and J. T. Welsh. 1,805,262; May 12.
Control for lubricators, Automatic. J. F. MacIndoe. 1,805,290; May 12.
Control mechanism, Pressure operated. W. L. Edel. 1,804,599; May 12.
Control of vehicles, Heel and toe. H. Rowntree. 1,805,263; May 12.
Controller drum. O. P. Schuster. 1,804,647; May 12.
Conveyer, Apron. P. F. Krenzke. 1,804,423; May 12.
Conveyer, Chain. J. J. Mojonnier. 1,804,701; May 12.
Conveying system. T. A. Federwitz and W. T. Bailey. 1,804,406; May 12.
Conveying system. V. W. Fernekes and W. H. Ray. 1,804,923; May 12.
Cooling device for combustion gas turbines. H. Holzwarth. 1,805,093; May 12.
Cooling system cleaner, Engine. J. J. Ludwig. 1,804,536; May 12.
Copper rich material, Treatment of. S. I. Levy. 1,805,100; May 12.
Core covering apparatus. J. L. Alden. 1,804,911; May 12.
Core drilling attachment. G. S. Fosnaugh and H. H. Thrasher. 1,804,682; May 12.
Corner connection for wall boards, Exterior. D. McChesney. 1,804,564; May 12.
Corrugating machine. J. Wagner. 1,804,661; May 12.
Cotton picker. N. F. Higgins. 1,805,310; May 12.
Coupler. S. C. Duty. 1,804,973; May 12.
Coupler for air line hose of railway cars, Automatic. J. Hoffsinger. 1,804,509; May 12.
Coupling pin. F. Fredendall. 1,805,138; May 12.
Cover, Detachable filter. L. P. Sterling. 1,805,455; May 12.
Cover, Plant. F. Graffenberger. 1,805,212; May 12.
Covering material, Composite. M. Gentile. 1,804,556; May 12.
Coverings, Manufacture of printed floor. A. Jones. 1,805,144; May 12.
Cracking process. W. P. Deppé and L. L. Summers. 1,804,917; May 12.
Crankless engine. T. L. Sherman. 1,804,440; May 12.
Crankshaft. H. R. Ricardo. 1,804,643; May 12.
Croquet table. L. L. Dickerman. Des. 84,134; May 12.
Cultivator, Straddle row. J. H. L. Gamble. 1,805,394; May 12.
Current, Controlling the amplitude of alternating. E. R. Hentschel. 1,805,463; May 12.
Curtain fixture and supporting brackets therefor. J. H. Boye. 1,804,669; May 12.
Curtain support. J. H. Boye. 1,805,233; May 12.
Cutter: *See*—
Belt cutter.
Meat cutter.
Seed potato cutter.
Cutting device. J. H. Hendrick. 1,805,399; May 12.
Cutting implement. E. A. Gallison, and A. S. MacDonald. 1,804,977; May 12.
Cutting material. Apparatus for and method of. E. J. Grant. 1,804,764; May 12.
Cylinder head stand. W. L. R. Trimble. 1,805,320; May 12.
Dam construction. Joseph Kračmer. 1,804,696; May 12.
Dehydrator. H. M. Griffoul. 1,805,173; May 12.
Delineated area. C. Ellis. 1,804,389; May 12.
Dental apparatus. F. B. Eggler. 1,805,309; May 12.
Dental gauge. L. A. Pray. 1,804,567; May 12.
Denture, Artificial. E. A. Sattler. 1,804,812; May 12.
Dentures, Attaching means for removable. C. H. Scheu. 1,805,264; May 12.
Developing apparatus with blanket adjustment and spray application of liquid ammonia. A. Langsner. 1,804,793; May 12.
Device for designating a place of worship. J. E. Rigall. Des. 84,162; May 12.
Diarylamines, Making. W. J. Hale. 1,804,466; May 12.
Die: *See*—
Screw cutting die.
Die. G. Langford. 1,804,792; May 12.
Die blanks and making dies. F. O. Wells. 1,804,662; May 12.
Dipper, Fruit. C. W. Shatto. 1,805,380; May 12.
Dispenser, Cigarette. W. L. Whitesides. 1,804,580; May 12.
Dispenser for pulverulent substances and the like. C. M. L. Maillard. 1,804,943; May 12.
Dispensing and display device. H. C. Smith and D. R. Vanneman. 1,804,519; May 12.
Dispensing apparatus, Package. E. M. Jones. 1,804,534; May 12.
Display and vending apparatus. E. Brunhoff. 1,804,913; May 12.
Display device. A. J. Ellern. 1,805,209; May 12.
Display stand. W. H. Averill. 1,805,352; May 12.
Distributing tank. C. D. Chase. 1,804,592; May 12.
Doll. A. Blaustein. 1,805,231; May 12.
Dolly. R. E. Manley. 1,804,997; May 12.
Door for closed vehicle bodies. J. Ledwinka. 1,804,794; May 12.
Door holding means and release. W. H. Smith. 1,804,443; May 12.
Doorlatch. G. L. Hinman. 1,805,091; May 12.
Doorlock. J. Reif. 1,804,482; May 12.
Doorlock, Deck. J. F. Wilson. 1,805,445; May 12.
Door operating mechanism. I. B. Robertson. 1,804,515; May 12.
Door operating mechanism for delivery trucks. M. G. Scott. 1,805,017; May 12.
Door register. H. H. Helland. 1,804,871; May 12.
Door structure. C. H. Hoffstetter. 1,804,984; May 12.
Doors, Method of and apparatus for Making automobile. O. J. Groehn. 1,804,607; May 12.
Draft regulator. C. O. Staley. 1,805,423; May 12.
Drain cleaner. M. Hribar. 1,804,874; May 12.
Drain, Oil valve. J. H. Thibeault. 1,804,960; May 12.
Dress. D. Long. Des. 84,148–9; May 12.
Drier: *See*—
Clothes drier.
Drill: *See*—
Radial drill.
Drill chuck. H. Lindblad. 1,804,506; May 12.
Drilling control, Mechanical rotary. P. Jones and P. W. Prutzman. 1,804,779; May 12.
Drilling machine. B. Z. Good. 1,805,139; May 12.
Drilling organization, Side wall. E. A. Spencer, jr., and F. Oliver. 1,804,819; May 12.
Drive, Belt. W. S. Bunker and G. L. Hanscom. 1,805,326; May 12.
Drive ring. H. W. Pleister and J. Karitzky. 1,804,807; May 12.
Driver for reamers and the like. A. C. Hoeh. 1,804,505; May 12.
Driving means Fluid operated. L. W. Springsteen. 1,805,023; May 12.
Driving mechanism. R. A. Walter. 1,804,577; May 12.
Driving mechanism for reciprocating conveyers. R. A. Walter. 1,804,578; May 12.
Drum for manufacturing endless rubber articles. J. D. Berwick. 1,805,032; May 12.
Dumping apparatus, Car. J. D. Pugh. 1,804,543–4; May 12.
Dust cap for pneumatic tire valves. E. W. Eidemiller. 1,804,755; May 12.
Dye bath and process of dyeing. R. G. Knowland and N. Kosak. 1,805,098; May 12.
Dyestuff of the dipyrazolanthrone series and making same, New vat. R. Heil. 1,804,431; May 12.
Dyestuffs, Manufacture of grey to black vat. P. Nawiasky. 1,804,840; May 12.
Dyestuffs of the anthraquinone series, Manufacturing vat. A. Holl. 1,804,532; May 12.
Dyestuffs, Vat. M. A. Kunz and K. Koeberle. 1,804,535; May 12.
Dyestuffs, Vat. W. Mieg. 1,804,538; May 12.
Earth, Revivifying spent fuller's. N. E. Lemmon. 1,805,178; May 12.
Economizer. H. J. Kerr. 1,804,939; May 12.
Edging machine. H. H. Wolfe and H. L. Myers. 1,804,523; May 12.
Educational device. R. Scharf. 1,804,813; May 12.
Electric control system. A. S. Fitzgerald. 1,805,167; May 12.
Electric current, Filtering. G. B. Crouse. 1,804,859; May 12.
Electric devices, Directional control of dynamic. M. E. Bivens. 1,805,160; May 12.
Electric discharge device. W. F. Hendry. 1,804,467; May 12.
Electric discharge display device. S. Ruben. 1,805,108; May 12.
Electric display device. M. E. Curtiss. 1,804,595; May 12.
Electric surge recorder. R. Tanberg. 1,805,195; May 12.
Electric switch. G. H. Derrick. 1,804,748; May 12.
Electrical apparatus. C. H. Zierdt. 1,804,663; May 12.
Electrical apparatus, Variable. G. F. Atwood. 1,805,229; May 12.
Electrical connecter. P. F. Williams. 1,805,270; May 12.
Electrical immersion heater. R. F. McCartney. 1,804,885; May 12.

Electrical oscillations, Apparatus for and method of exciting. T. C. Rives. 1,805,187; May 12.
Electrical oscillations into mechanical movement, Converting. A. Meissner. 1,804,838; May 12.
Electrical switch. G. O. Wilms and F. F. Loock. 1,804,729; May 12.
Electrical warming means or device for use with internal combustion engines to facilitate starting thereof. C. R. D. Groves. 1,805,040; May 12.
Electromagnetic instrument. A. A. Thomas. 1,804,961; May 12.
Electromagnetic selector device. C. W. Somersgale and J. A. Belile. 1,805,021; May 12.
Elevator: *See*—
Multiple car elevator.
Elevator. J. G. Fitzpatrick and R. W. Flint. 1,804,758; May 12.
Elevator control system. W. F. Eames. 1,805,208; May 12.
Emulsions. Apparatus for making aqueous bituminous. L. Kirschbraun and F. C. Overbury. 1,804,562; May 12.
Enamel ware. O. Hommel. 1,805,143; May 12.
Engine: *See*—
Crankless engine. Internal-combustion engine.
Engine and pump, Rotary. J. Dap. 1,804,497; May 12.
Engine explosion pressure, Applying. C. L. Stokes. 1,804,446; May 12.
Engine testing apparatus. E. A. Ryder and A. H. King. 1,804,646; May 12.
Engines, Air control for internal combustion. J. C. Gordon. 1,804,605; May 12.
Engines, Duplex fuel supplying apparatus for internal combustion. W. A. Edwards. 1,804,754; May 12.
Engines, Liquid fuel feeding means for internal combustion. O. D. Treiber. 1,804,660; May 12.
Engines, Oil rectifying system for internal combustion. R. L. Skinner. 1,804,844; May 12.
Envelope feed mechanism. A. Novick. 1,804,476; May 12.
Envelope sealer. A. Hall. 1,804,609; May 12.
Equipment controlling unit. H. S. Becker. 1,804,491; May 12.
Eraser and burnisher, Fountain pen. W. M. Floyd. 1,805,279; May 12.
Ester condensations, Effecting. P. Halbig and F. Kaufler. 1,805,281; May 12.
Excavator. R. M. and B. L. Bowman. 1,804,587; May 12.
Expanding brake. A. H. G. Girling. 1,804,920; May 12.
Expansible bit. G. N. Fitch. 1,804,681; May 12.
Extension bit. T. J. Fegley and G. O. Leopold. 1,805,330; May 12.
Extension table. M. J. Greenwood. 1,805,213; May 12.
Eye mounting for dolls. L. J. Grubman. 1,805,085; May 12.
Eyeshield for spectacles. A. H. Havens. 1,805,396; May 12.
Fabric containing derivatives of cellulose and producing the same, Ornamental. C. Dreyfus. 1,804,529; May 12.
Fabric pad. J. B. Pedroli. 1,804,841; May 12.
Fabricating machine for laminated glass products. W. C. Bull. 1,805,389; May 12.
Fan, Electric. C. Ringwald. 1,805,105; May 12.
Fastener assembly. W. I. Jones. 1,805,462; May 12.
Fastener, Door. F. Kumber. 1,805,099; May 12.
Fastener lock. L. F. Mott. 1,804,839; May 12.
Fastener, Mop handle. J. W. Doty. 1,804,498; May 12.
Fastener, Snap. D. I. Reiter. 1,804,951; May 12.
Fastening inserting machine. M. F. Brogan. 1,804,397; May 12.
Fastening, Nut and screw. F. S. Carr. 1,805,460; May 12.
Fastenings, Inserting. M. F. Brogan. 1,804,396; May 12.
Faucet and valve, Reseating leakproof. A. J. Bacon. 1,805,158; May 12.
Faucet, Beverage. C. A. Look. Des. 84,150; May 12.
Faucet, Hydraulic. J. Erickson. 1,804,865; May 12.
Feed mixer. G. M. Agee. 1,804,386; May 12.
Feeder, Ant poison. L. A. Mattes. 1,804,426; May 12.
Feeder-cleaner and extracting machine, Combination. J. E. Mitchell. 1,805,221; May 12.
Feeding mechanism. S. Halvorsen. 1,804,610; May 12.
Felly, Extension. R. S. Burdette. 1,805,036; May 12.
Fertilizer distributor. H. M. Johnston and O. H. Shenstone. 1,805,096; May 12.
Fiber board, Manufacture of. E. H. Hussey. 1,804,560; May 12.
Fibers and the like, Apparatus for treating. K. M. Van Rensselaer and H. R. Swanson. 1,805,117; May 12.
Fibers, Decomposing lignified. W. Seidel and R. Fingado. 1,804,893; May 12.
Fibers, Treatment of. H. G. Reichard. 1,805,316; May 12.
Filling device. A. Stevens. 1,804,445; May 12.
Film and manufacturing the same, Color screen. R. Ruth. 1,805,009; May 12.
Film box. E. Goldberg and O. Fischer. 1,804,500; May 12.
Film editing machine. O. Wittel. 1,804,730; May 12.
Filter. J. A. Pickard. 1,804,512; May 12.
Filters, Fluid pressure discharge for continuous. J. T. Hoyt. 1,804,934; May 12.
Finger board. L. R. Thorpe. 1,804,962; May 12.
Firearms for measuring angles in the field, Means on. L. E. M. C. Dahlberg. 1,804,825; May 12.
Fire extinguisher. J. R. Boyd. 1,805,033; May 12.
Fire extinguisher. C. W. Old. 1,804,477; May 12.
Fish control apparatus. M. R. Jeffrey. 1,804,989; May 12.
Fish lure. A. Abrahams. 1,804,891; May 12.
Fishing line. F. H. McCall. 1,805,410; May 12.
Fishplate with lugs. O. B. Shahan. 1,805,421; May 12.
Floor, Reenforced surface. W. S. Pattison. 1,804,804; May 12.
Fluid motor. I. Benjamins. 1,804,493; May 12.
Fluids from boreholes, Device for raising. B. Schweiger. 1,805,377; May 12.
Flying machine. B. Gambarini. 1,804,869; May 12.
Folding machine. C. W. Brenn. 1,805,161; May 12.
Folding table. C. G. Carlson. 1,805,235; May 12.
Food service device. J. B. Zallio. 1,805,198; May 12.
Foot guiding mechanism. T. E. Cline and R. E. Tipton. 1,804,552; May 12.
Footing for towers or the like. H. O. Hill. 1,805,311; May 12.
Fork: *See*—
Hay fork.
Form for dresses. J. B. Carlston. 1,805,076; May 12.
Forming press. J. W. Bishop. 1,805,275; May 12.
Frame: *See*—
Traction frame.
Frame and making same, Picture. E. J. Barnard. 1,805,436; May 12.
Freezing point lowering composition. A. N. Erickson. 1,804,463; May 12.
Fuel agitators, Actuating means for. D. J. Mosshart. 1,804,638; May 12.
Fuel, Apparatus and method for handling pulverized. G. A. Conrath. 1,804,593; May 12.
Fuel metering apparatus. L. E. Gould. 1,804,557; May 12.
Fuel regulator. A. H. Thompson. 1,804,849; May 12.
Furnace: *See*—
Heat treating furnace. Inductor type furnace.
Hot air furnace.
Furnace. F. D. Howe. 1,804,988; May 12.
Furnace. G. Naismith and D. M. Naismith. 1,805,001; May 12.
Furnace block. R. Shellenberger. 1,804,957; May 12.
Furnaces, Pressure control in. L. C. Koenig. 1,804,782; May 12.
Furniture, Combination shoe and glide for. B. C. Rice. 1,804,437; May 12.
Furniture leg shoe. R. E. Miller. 1,805,252; May 12.
Furniture rest or shoe. W. F. Herold. 1,804,390; May 12.
Gain making device. L. D. Lewis. 1,804,835; May 12.
Game. J. Donlin. 1,804,860; May 12.
Game board. H. Martin. Des. 84,151; May 12.
Garment hanger. J. Dockett, jr. 1,804,919; May 12.
Garment, Sport. M. C. Head and F. Head. 1,804,930; May 12.
Gas distribution apparatus. J. F. Sullivan. 1,804,896; May 12.
Gas, Enriching. E. A. Dieterle. 1,804,402; May 12.
Gas meter. J. C. Dickinson. 1,804,596; May 12.
Gas meter, Maximum demand. H. Vittinghoff. 1,805,118; May 12.
Gas mixtures, Fractionating, cooling, and condensing. F. Pollitzer. 1,804,432; May 12.
Gasket. J. H. Victor. 1,804,574; May 12.
Gate: *See*—
Poultry coop gate.
Gauge: *See*—
Dental gauge. Oil pressure gauge.
Liquid level gauge. Wheel gauge.
Gauge for automobiles, Tracking. H. Wochner. 1,804,448; May 12.
Gear for aeroplanes, Landing. J. Silverman. 1,804,817; May 12.
Gear, Rotary valve. F. W. Ellyson. 1,804,921; May 12.
Gear shift. G. E. Danielson. 1,804,747; May 12.
Gear silencer construction. E. E. Wemp. 1,804,906; May 12.
Gear, Transmission and reverse. J. B. Fisher and J. E. De Long. 1,805,137; May 12.
Glare eliminator. E. A. Feltman and E. C. A. Wickemeyer. 1,804,922; May 12.
Glass apparatus, Sheet. J. P. Crowley. 1,805,206; May 12.
Glass apparatus, Sheet. J. A. Reece. 1,805,260; May 12.
Glass, Cutting. P. S. Haselton. 1,805,457; May 12.
Glass, Manufacture of reenforced. W. J. Blenko. 1,804,395; May 12.
Glass, Producing laminated. J. W. H. Randall. 1,805,259; May 12.
Glass sheet drawing apparatus. P. Escole. 1,805,329; May 12.
Globe and mounting for same, Collapsible. P. Garrigue. 1,804,829; May 12.
Globe, Collapsible. P. Garrigue. 1,804,828; May 12.
Glue, Vegetable protein-base. G. H. Osgood. 1,804,640; May 12.

Grade crossing construction, Railway. G. R. Burkhardt and C. W. Breed. 1,805,234; May 12.
Grader, Elevating. P. C. Cole. 1,804,399; May 12.
Grader, Road. W. J. Schlacks. 1,805,051; May 12.
Grading level. R. C. Newsome. 1,805,004; May 12.
Grease, gun, High power pedal operated. H. Albertine. 1,804,731; May 12.
Greasing apparatus, Pressure. J. W. Woodruff. 1,804,582; May 12.
Grinders, Automatic feeder for centerless. J. M. Koch. 1,804,422; May 12.
Grinding machine. W. J. Guild. 1,804,414; May 12.
Grinding machine. E. M. Taylor. 1,805,056; May 12.
Guitars, Construction of. J. Pastor. 1,804,802; May 12.
Guns, Recoil pad for. A. H. Ammann. 1,805,273; May 12.
Guns, Variable recoil mechanism for. T. A. Conlon. 1,804,388; May 12.
Guy guard. C. L. Matthews, L. P. Boll and L. L. Crump. 1,805,251; May 12.
Halogen derivative of dibenzopyrenequinones. M. A. Kunz, K. Koeberle and E. Berthold. 1,804,880; May 12.
Halter. K. Swanford. 1,804,655; May 12.
Hammer, Pneumatic. H. A. Stevens. 1,804,712; May 12.
Hand bag, Lady's. M. Berkowitz. Des. 84,128; May 12.
Handle: *See*—
Split D-handle.
Handle for motor boat engines, Control. W. R. Smith. 1,804,442; May 12.
Hanger: *See*—
Bar hanger. Pipe hanger.
Garment hanger.
Harrow, Disk. W. D. Dewend. 1 804,750; May 12.
Harrow drawbar and hinge therefor. E. J. Mason and H. L. Croft. 1,805,409; May 12.
Harrow having spring teeth. J. R. and L. W. Kovar. 1,805,286; May 12.
Hasp, Safety. E. K. Janney. 1,805,401; May 12.
Hat shaping machine. J. F. Roselle. 1,805,050; May 12.
Hats, Method of and apparatus for blocking. M. Miller. 1,805,220; May 12.
Hay fork. G. Knott. 1,804,625; May 12.
Hay, Treating. O. Erf. 1,804,602; May 12.
Header and support therefor. W. A. Jones. 1,804,780; May 12.
Heat energy of fuel into useful working energy, Converting the. J. C. Groff. 1,804,413; May 12.
Heat exchange device. A. B. Modine. 1,805,101; May 12.
Heat interchange, System of. G. T. Jacocks. 1,804,936; May 12.
Heat recuperator or regenerator structure. V. W. Aubel and J. B. Fitz-Gibbon. 1,804,393; May 12.
Heat transfer tube. F. X. Govers. 1,804,465; May 12.
Heat treating furnace. R. A. Vileg. 1,805,360; May 12.
Heater: *See*—
Air heater. Hot water heater.
Automobile heater. Water heater.
Electrical immersion heater.
Heater and illuminator, Combined. E. L. Monnot. 1,805,291; May 12.
Heating apparatus. F. J. McAdams. 1,805,338; May 12.
Heating device for the dry spinning method of producing artificial threads. A. Friederich. 1,804,530; May 12.
Heating system, Bus. L. P. Hynes. 1,804,875; May 12.
Hedge trimmer. E. L. Young. 1,805,323; May 12.
Heels, Covering. W. H. Nutt. 1,804,480; May 12.
Hinge. H. R. Bird. 1,805,324; May 12.
Hinge connection for airplane control surfaces, Concentric. B. S. Stewart. 1,804,520; May 12.
Hoe. S. Kuno. 1,805,289; May 12.
Hoisting a floating object subject to wave action, Device for. T. S. Miller. 1,804,945; May 12.
Holder, Book. F. Skripkin. 1,805,191; May 12.
Holder, Cigarette. J. H. Abbott. 1,805,228; May 12.
Holder, Document. A. V. Bodine and J. M. Lucarelle. 1,804,455; May 12.
Holder, Door. G. L. Fuller. 1,805,169; May 12.
Holder, folder, supporter, and box strengthener, Garment. J. Hart. 1,805,363; May 12.
Holder for applying chucks, Shaft. R. L. Carter. 1,805,164; May 12.
Holder for milk bottles and the like. T. C. Rouse. 1,804,645; May 12.
Holder for process cameras, Silver nitrate. H. R. Hays. 1,804,982; May 12.
Holder, Sadiron. A. L. Schulze. 1,805,015; May 12.
Holder, Tube. J. H. Schweer. 1,805,420; May 12.
Hollow articles, Manufacturing. K. R. Hammerstrom. 1,805,283; May 12.
Hood for gas or electric fusion welding, Heat retaining S. W. Miller. 1,805,181; May 12.
Hood lock. W. G. R. Heine. 1,805,042; May 12.
Hopper and check. F. C. Kummer. 1,804,788; May 12.
Horizontal layers of articles, Apparatus for combining. R. W. Voigt. 1,805,119; May 12.
Hose clamp. W. C. Walker. 1,804,725; May 12.
Hosiery. H. Branley. 1,805,035; May 12.
Hot air furnace. J. E. Witte. 1,804,851; May 12.
Hot water heater. L. S. Denney. 1,805,165; May 12.
Household implement, Combination. J. Salomone. 1,805,011; May 12.
Humidifier. W. G. Wagenbals. 1,805,059; May 12.
Hydraulic brake. A. D. Pentz. 1,805,256; May 12.
Hydrocarbon burner. G. B. Johnson. 1,804,469; May 12.
Hydrocarbon, Desulphurizing liquid. H. H. Wilson. 1,805,444; May 12.
Hydrocarbons, Apparatus for fractionation of. C. P. Dubbs. 1,804,553; May 12.
Hydrocarbons, Cracking. G. H. Taber, jr. 1,805,113; May 12.
Hydrocarbons, Method and apparatus for fractionation of. C. P. Dubbs. 1,804,554; May 12.
Hydrocarbons, Purification of halogenated. E. C. Britton. 1,804,458; May 12.
Ice by fluid pressure, Scoring. R. H. Roark. 1,805,296; May 12.
Impregnating apparatus. C. Koops. 1,805,145; May 12.
Index elements, Apparatus for cutting. F. D. Powell. 1,804,642; May 12.
Indicating means. R. Hawkins. 1,805,244; May 12.
Indicator: *See*—
Signal distortion indicator.
Indices of fire control systems, Registering. J. C. Karnes. 1,804,992; May 12.
Inductor type furnace. E. F. Northrup. 1,805,150; May 12.
Inflating inflatable bodies, such for example as inflatable boats, Method of and apparatus for. H. Meyer. 1,805,370; May 12.
Inking device, Ribbon. J. G. Fortier. 1,804,976; May 12.
Insect protector. G. R. and E. L. Pendarvis. 1,805,415; May 12.
Instrument for detecting irregularities in the bores of pipes and the like. J. A. Robbins. 1,805,343; May 12.
Insulating blocks in the field, Making. H. S. Ashenhurst. 1,805,069; May 12.
Internal combustion engine. H. W. Earl. 1,804,598; May 12.
Internal combustion engine. A. Swingle. 1,804,521; May 12.
Iron-nickel-copper alloy. N. B. Pilling. 1,805,049; May 12.
Ironing table. B. S. Vaughan. 1,804,573; May 12.
Jack: *See*—
Climbing or lifting jack.
Jamb construction, Reenforced metal. I. A. Baum. 1,805,031; May 12.
Joint: *See*—
Pipe joint. Roof joint.
Joint and anchorage therefor, Expansion. G. F. Murphy. 1,805,102; May 12.
Journal box. V. J. Burry. 1,805,073; May 12.
Kiln, Lime. E. T. Reed. 1,805,151; May 12.
Kiln, Tunnel. T. Talbot. 1,804,657; May 12.
Knickeralls. L. C. Robertson. 1,804,516; May 12.
Knife, Surgical. A. A. S. Stuart. 1,804,959; May 12.
Knitting machine. H. McAdams. 1,805,338; May 12.
Knitting machine. M. C. Miller. 1,805,000; May 12.
Knitting machine. C. E. Mincemoyer. 1,805,440; May 12.
Knitting machines, Power drive for flat. J. G. Müller. 1,805,315; May 12.
Knob for framing devices, Adjusting. K. Hoffmann. 1,804,501; May 12.
Knob or handle lock. I. S. Keeler. 1,804,781; May 12.
Labeling. L. W. Dixon. 1,805,308; May 12.
Ladle actuating mechanism. J. B. Ladd. 1,804,471; May 12.
Lamp. A. Sabath. Des. 84,165–7; May 12.
Lamp, Clock. S. M. Hallam. Des. 84,141–2; May 12.
Lamp construction. R. A. Mullaney. 1,804,566; May 12.
Lamp focusing mechanism, S. F. Arbuckle. 1,804,665; May 12.
Lamp for motor vehicles, Head. E. G. E. Vives. 1,804,965; May 12.
Landing light, Aeroplane. E. Van Horn. 1,804,572; May 12.
Lard filling machine. J. W. Hubbard. 1,804,772; May 12.
Latch for doors. J. P. Burt. 1,805,129; May 12.
Latch lock fastener, Adjustable. H. A. Borresen. 1,805,356; May 12.
Latch, Press box. J. Behle, T. W. Aven, and H. Linnartz. 1,804,854; May 12.
Latching device for split rims. A. W. Woodward. 1,805,062; May 12.
Latex applying machine. H. R. Polleys. 1,804,481; May 12.
Letters, figures, and signs for exhibition from aircraft. F. Neumeyer. 1,805,002; May 12.
Lever booster. E. E. Wemp. 1,804,903; May 12.
Light: *See*—
Landing light.
Light aggregates, Apparatus for producing. H. H. Smith. 1,805,020; May 12.
Light director, Vehicle. E. S. Timmons. 1,804,719; May 12.
Light source for photographic printing machines, Adjustable. R. S. Hopkins. 1,804,771; May 12.
Lighting fixture. C. G. Wing. Des. 84,174; May 12.
Lighting fixture body or article of analogous nature. E. A. Walker. Des. 84,171; May 12.
Lighting fixture bracket or article of similar nature. F. W. Roettges. Des. 84,164; May 12.
Lighting fixture or article of similar nature. W. Van Nessen. Des. 84,169; May 12.

Lighting plants, Control system for farm. T. W. Drury. 1,805,207; May 12.
Limb, Artificial. J. A. Collins. 1,804,915; May 12.
Line changing reel. L. D. Barner and G. O. Shelander. 1,804,585; May 12.
Liner puller. J. J. Santiago. 1,804,843; May 12.
Lining, Automobile hood. R. J. Stephenson. 1,804,895; May 12.
Link switch. C. M. Lefkowitz. 1,804,425; May 12.
Liquid level gauge. C. Knobloch. 1,804,695; May 12.
Liquids, Apparatus for desludging. H. H. Cannon. 1,804,743; May 12.
Lock: *See*—
Automobile hood lock. Knob or handle lock.
Coin controlled lock. Sash lock.
Fastener lock. Vehicle lock.
Hood lock. Window lock.
Lock. W. Schlumpf. 1,804,955; May 12.
Lock. J. H. Shaw. 1,804,956; May 12.
Lock for automobile tires, wheels, and other devices. C. Ferro. 1,805,083; May 12.
Lock for folding doors. T. Laurent. 1,805,249; May 12.
Lock for screens and storm windows, Cam. H. L. Johnson and J. H. Grant. 1,804,877; May 12.
Lock for window blinds, Cable. W. E. Rosel. 1,804,811; May 12.
Locking device for rail joints, Spring nut. H. G. Norwood. 1,805,412–13; May 12.
Locking means. D. W. Perin. 1,804,542; May 12.
Locking means, Rail. J. R. Schalk. 1,805,014; May 12.
Locking mechanism. H. F. Keil. 1,805,451; May 12.
Locking mechanism for printing presses, Plate. W. Durrant. 1,805,134; May 12.
Locomotive boiler. A. W. Bruce. 1,805,072; May 12.
Locomotive construction. W. E. Wooward. 1,805,125; May 12.
Locomotive structure. C. W. Tood. 1,805,115; May 12.
Loom. C. L. Fetterly and W. E. Smith. 1,805,331; May 12.
Loom, Shutterless. R. G. Moya. 1,804,890; May 12.
Looms for weaving preparatory chenilles, Picking the weft threads in. J. Menschner. 1,805,046; May 12.
Lowering apparatus. W. Hodnett. 1,805,177; May 12.
Lubricating apparatus, High pressure. J. W. Woodruff. 1,804,449; May 12.
Lubricating arrangement for plate straightening or rolling machines. F. Ungerer. 1,804,571; May 12.
Lubricating device for elevator guide rail. T. Brady. 1,805,305; May 12.
Lubricating system. A. U. Ayres. 1,805,230; May 12.
Lubricating system. F. S. Barks. 1,805,303; May 12.
Luggage carrier. N. M. Gage. 1,804,868; May 12.
Lumber, Waterproof and dielectric asbestos. E. J. Buczkowski. 1,804,740; May 12.
Machine and method for removing valve stems from inner tubes. E. Hutchens. 1,804,419; May 12.
Machine element. E. Jacobus. 1,804,935; May 12.
Machine for and method of beel seat fitting. S. J. Finn. 1,805,039; May 12.
Machine for cleaning trouser cuffs. J. T. and L. J. La Measure. 1,804,791; May 12.
Machine for decorating fabrics. R. Reisley. 1,804,435; May 12.
Machine for deforming pipes. C. F. Schultis. 1,804,815; May 12.
Machine for handling molding sand. E. O. Beardsley. 1,804,394; May 12.
Machine for making blue prints and other photoprints. H. J. Brunk. 1,804,739; May 12.
Machine for making blue prints and other photoprints. T. Lord and H. J. Brunk. 1,804,796; May 12.
Machine for making shells for automobile heaters and the like. T. H. Roberts and J. R. Holmes. 1,805,261; May 12.
Machine for producing tape loops. M. Cotte. 1,804,916; May 12.
Machine for removing the surface scale from metal plates. W. Meacher. 1,804,537; May 12.
Machine for seaming can heads. P. Kruse. 1,805,288; May 12.
Magnetic device. R. R. Batcher. 1,805,459; May 12.
Magnetic materials and separating them from other materials, Collecting. J. N. McCracken. 1,804,998; May 12.
Magnifying device. F. L. Fuller. 1,804,464; May 12.
Mail receiver. Z. L. Fanchier. 1,805,393; May 12.
Marine way, Floating. F. Bitte. 1,804,667; May 12.
Marker, Lumber. N. Panabaker. 1,804,801; May 12.
Mat. E. W. Derr. 1,805,038; May 12.
Matrix operating device, Double. H. A. W. Wood. 1,805,272; May 12.
Measuring device. D. Desmond. 1,804,749; May 12.
Measuring instrument. F. W. Roller. 1,804,953; May 12.
Measuring instrument, Pressure. R. W. Brown. 1,804,970; May 12.
Meat cutter. J. N. Monterio. 1,805,411; May 12.
Mechanical movement. L. H. Adamson. 1,804,488; May 12.
Mechanical movement. C. H. Sampson. 1,805,375; May 12.
Message transmission. A. B. Clark. 1,805,390; May 12.
Metal, Composite. H. von Forster and E. Lay. 1,804,899; May 12.
Metal, Preparation of colloidal. G. Alleman. 1,805,199; May 12.
Metals and apparatus therefor, Rolling. K. Karius. 1,804,879; May 12.
Metals in pickling baths, Preventing the dissolution of. L. B. Sebrell. 1,805,052; May 12.
Metallic powders, Producing. E. Fitzpatrick, C. W. Clark, and P. A. Tiernan. 1,804,924; May 12.
Meter: *See*—
Gas meter. Venturi meter.
Truck mix meter.
Meter. M. Cornell. Re18,067; May 12.
Metering system, Remote. G. G. Waite. 1,804,576; May 12.
Microphone and microphone mounting. H. J. Ellis. 1,805,362; May 12.
Mill guide, Rolling. P. G. Palmgren. 1,804,947; May 12.
Mining machine. C. F. Osgood. 1,804,946; May 12.
Minnow trap, Collapsible. J. C. Goodlet. 1,804,684; May 12.
Mirror, Book. S. Yoshioka. 1,804,487; May 12.
Mixer: *See*—
Feed mixer.
Mixing, dissolving, or dispersing apparatus. K. S. Valentine. 1,804,966; May 12.
Mixing machine. P. G. Rudin. 1,804,707; May 12.
Mold. A. T. Bateman and A. Irvine. 1,805,200; May 12.
Molding. V. J. Davis. 1,804,400; May 12.
Molding apparatus and equipment for forming the same. V. J. Davis. 1,804,401; May 12.
Molding apparatus, Sheet. J. L. Drake. 1,805,237; May 12.
Molding machine. F. A. Scruggs. 1,805,018; May 12.
Molding, Two part finishing. F. D. Hardesty. 1,804,831; May 12.
Mop attachment for brooms. F. A. Henderson. 1,804,504; May 12.
Motor: *See*—
Fluid motor. Valve motor.
Motor control system. G. E. King. 1,805,248; May 12.
Mounting for non-driven rolls. G. Wistrand. 1,804,909; May 12.
Mower, Lawn. W. S. Nichols. 1,804,703; May 12.
Multiple car elevator. W. S. Rugg. 1,805,227; May 12.
Musical instruments, Sound post for stringed. W. A. Griffith and W. L. Myers. 1,805,172; May 12.
Nasal pellet. E. J. Brennan. 1,804,670; May 12.
Nitrocellulose composition. J. H. Gardner. 1,804,503; May 12.
Novelty stand, Advertising. J. Horwarth. 1,804,617; May 12.
Nut blanks, Manufacture of. W. L. Ward. 1,804,579; May 12.
Nuts, Making cap. G. A. Vis. 1,805,384; May 12.
Oil composition and inhibiting oxidation thereof. T. H. Rogers. 1,805,458; May 12.
Oil filtering and refining means. L. Harvey. 1,805,450; May 12.
Oil, Pressure gauge. E. T. Harris. 1,804,981; May 12.
Oil sands, Method and apparatus for working. C. F. Jackson. 1,804,692; May 12.
Oil saving device. F. Siefken. 1,805,344; May 12.
Oiler, Leaf spring. W. Grus, jr. 1,805,242; May 12.
Oils, Treating hydrocarbon. W. K. Holmes. 1,804,933; May 12.
Opener, Sheet. C. C. Wendling. 1,805,301; May 12.
Ophthalmological instrument. C. L. Hunsicker. 1,804,691; May 12.
Optometrist instrument. C. L. Hunsicker. 1,804,690; May 12.
Ornamental article and making the same. W. C. Johnston. 1,804,833; May 12.
Oven. J. McCarthy. Des. 84,156; May 12.
Oven, Core. W. V. Baker. 1,805,029; May 12.
Package and wrapping, Elongated tablet. W. J. Ritzel. 1,805,417–18; May 12.
Packer. G. A. Humason. 1,804,619; May 12.
Packer, Well. G. A. Spang. 1,804,818; May 12.
Packing box. J. H. Reedy. 1,804,810; May 12.
Pad: *See*—
Fabric pad.
Pail, Fruit picking. A. J. Krantz. 1,805,287; May 12.
Paper, Apparatus and method of ornamenting. F. G. Crane and J. M. Ward. 1,804,495; May 12.
Paper, Apparatus for use in finishing. S. W. Webb, J. G. Calian, and A. Allen. 1,804,483; May 12.
Paper cutting and trimming machine and gauge and gauge-stop, carrier, hold-down and safety mechanism. E. M. Brackett and D. Daneke. 1,805,128; May 12.
Paper interfolding machine. L. A. Straubel. 1,804,847; May 12.
Paper, Making fast colored crepe. G. H. Sayler. 1,805,013; May 12.
Paper, Safety. J. Genoese. 1,804,978; May 12.
Parasitics in electron emission tubes, circuits, Prevention of. C. W. Hansell. 1,804,830; May 12.
Pen, Fountain. D. Kahn. Des. 84,146; May 12.
Pen, Fountain. F. T. Walsh. 1,804,522; May 12.
Pen, Fountain. R. Weingart. 1,805,348; May 12.
Percolating apparatus. R. Bauer and G. J. Ludwig. 1,805,159; May 12.
Perforating machine. K. D. Evans. 1,804,974; May 12.
Petroleum, Treating. T. M. Andrews and C. E. Lauer. 1,804,451; May 12.

Photo composing screen and plate holder. H. C. Boedicker. 1,805,202; May 12.
Photographic printing process and apparatus therefor. E. K. Hunter. 1,805,333; May 12.
Photographic sensitizer and making it. H. T. Clarke. 1,804,674; May 12.
Photography, Color. L. Dufay. 1,805,361; May 12.
Photoplay. E. A. Weaver. 1,804,727; May 12.
Piano. R. J. Schmude. 1,804,568; May 12.
Picker: *See*—
Cotton picker.
Pickling machine, Continuous. C. B. Palmer and K. Kronborg. 1,801,806; May 12.
Picture apparatus, Motion. W. K. Grimm. 1,804,685; May 12.
Pile, Composite. L. Nadel. 1,805,253; May 12.
Pile screwing apparatus. W. A. Radice. 1,804,706; May 12.
Piling, Interlocking sheet. N. C. Rendleman. 1,804,436; May 12.
Piling spacer. G. A. Guyer. 1,805,086; May 12.
Pin: *See*—
Coupling pin.
Pipe coiled with steel wire for pressure conduits and vessels under pressure. S. P. Monsch. 1,804,888; May 12.
Pipe coupling and forming the same. C. F. Schultis. 1,804,814; May 12.
Pipe coupling apparatus. E. C. Pedley. 1,805,007; May 12.
Pipe coupling or connection. H. G. Ullman. 1,805,321; May 12.
Pipe hanger. J. W. Leslie. 1,804,472; May 12.
Pipe hanger. P. J. Neilon. 1,805,006; May 12.
Pipe hanger for electrical conduits and the like. W. R. Hathaway. 1,804,416; May 12.
Pipe joint. C. G. Boutry. 1,804,856; May 12.
Pipe joint and the like, Expansion. W. M. Kermode and C. S. Plummer. 1,805,335; May 12.
Pipe puller for removing or pulling pipes or casings from wells and the like. J. R. Gill. 1,805,280; May 12.
Pipe wrench. T. F. Cunningham and A. H. Gifford. 1,805,078; May 12.
Pistol, Automatic. L. Thiry. 1,805,383; May 12.
Pistol charm. S. Dorick. 1,805,080; May 12.
Piston oil saving ring. G. W. Sundberg and L. J. Edmunds. 1,804,848; May 12.
Piston ring. P. L. Joslyn. 1,805,404; May 12.
Plane, Woodworking bench. J. Manning. 1,804,507; May 12.
Plier punches, Locating device for. H. F. Scribner. 1,804,648; May 12.
Pliers for cutting and scraping insulations from wires. T. Chucto. 1,805,276; May 12.
Plow. S. Woycheshin. 1,804,910; May 12.
Plug connection, Electric. E. M. Pattison. 1,804,803; May 12.
Plug for electric circuits. L. Martin. 1,804,474; May 12.
Pneumatic feed mechanism. S. Halvorsen. 1,804,611–12; May 12.
Pocket implement. G. Altenbach. 1,805,065; May 12.
Positive feed, Synchronously. E. Weinheim. 1,805,122; May 12.
Post twister. J. Shimko. 1,805,381; May 12.
Poultry coop gate. E. R. Carr. 1,804,671; May 12.
Powder, Delay. G. C. Hale. 1,805,214; May 12.
Power, Apparatus and process of generating. L. Kirschbraun. 1,804,561; May 12.
Power supply system. C. H. Zierdt. 1,804,664; May 12.
Power transmission. J. F. Bolgiano. 1,804,668; May 12.
Power transmitting mechanism, Control device for. R. von Erhardt. 1,805,120; May 12.
Press: *See*—
Automatically operated press.
Forming press.
Shoe press.
Presses, Feeding device for. J. A. Johnson and G. W. Chalmers. 1,805,246; May 12.
Pressure device, Movable. N. S. Welk. 1,805,322; May 12.
Pressure gauge. H. Hastings. 1,805,176; May 12.
Pressure gauge. G. P. Luckey. 1,804,658; May 12.
Printing and cutting machine, Statistical card. W. W. Lasker. 1,804,905; May 12.
Printing plates, Producing. J. D. Edwards. 1,804,920; May 12.
Projection apparatus, Cinematographic. M. Engelmann. 1,804,499; May 12.
Propeller. A. De Polo. 1,805,359; May 12.
Propeller, Aeronautical. S. A. Reed. 1,804,433; May 12.
Propeller and making the same, Aeronautical. S. A. Reed. 1,804,434; May 12.
Propeller blades, Balancing. A. Nelson. 1,805,149; May 12.
Protective device. H. V. Allen. 1,805,386; May 12.
Protective structure for cashier and teller windows. F. Davis. 1,804,677; May 12.
Puller: *See*—
Liner puller.
Pump. A. J. Gilbert. 1,804,604; May 12.
Pump, Centrifugal. J. H. Stewart. 1,804,846; May 12.
Pump, Deep well. W. N. Squires. 1,805,024; May 12.
Pump, Deep well. W. N. Squires. 1,805,441; May 12.
Pump, Electrically operated metal. H. A. W. Wood. 1,805,272; May 12.
Pump, Liquid. C. Brown. 1,804,524; May 12.
Pump, Oil well. J. C. Vroman. 1,804,900; May 12.
Pump, Portable. J. H. Morrow. 1,804,565; May 12.
Pump, Rotary. C. Wrona. 1,805,063; May 12.
Pump, Suction. M. Hopson. 1,804,987; May 12.
Pump, Wave operated. J. R. Swift. 1,804,656; May 12.
Pumping system, Deep well. W. N. Squires. 1,805,025; May 12.
Punch, Card. W. W. Lasker. 1,804,994; May 12.
Punch presses, Blank feeding mechanism for. W. Kowal. 1,805,336; May 12.
Punch presses, Feeding mechanism for. G. F. Matteson. 1,805,219; May 12.
Rabbit and other skins, Stretching. G. G. Sharpe. 1,805,379; May 12.
Rack: *See*—
Toothbrush and tumbler rack.
Trunk rack.
Rack. M. Anton. 1,804,912; May 12.
Radial drill. N. B. Chace. 1,804,673; May 12.
Radiator. A. Gedeon. 1,804,603; May 12.
Radiator. T. E. Landvoigt. 1,804,424; May 12.
Radiator. R. N. Trane. 1,805,116; May 12.
Radiator cap, Automobile. A. Kuplan. Des. 84,153; May 12.
Radio apparatus. W. J. Dalton. 1,804,676; May 12.
Radio broadcasting system. E. E. Clement. 1,805,446; May 12.
Radio testing device. J. A. Burtch. 1,805,074; May 12.
Radio testing device. D. Hawley. 1,805,080; May 12.
Rail anchor, Railway. H. G. Norwood. 1,804,510; May 12.
Rail crossing. C. Uschmann. 1,804,901; May 12.
Rail joint construction. B. G. Braine. 1,805,034; May 12.
Railway booster. E. J. Bring. 1,805,071; May 12.
Railway brake. C. J. Nash. 1,804,475; May 12.
Razor, Safety. R. E. Thompson. 1,804,718; May 12.
Reading chair. E. O. Klemm and K. R. Otto. Des. 84,152; May 12.
Record reading device. J. T. Basseches. 1,804,453; May 12.
Records, Manufacture of gramophone. N. Pemberton-Billing. 1,804,641; May 12.
Recorder: *See*—
Electric surge recorder.
Reel: *See*—
Line changing reel.
Reflector. F. Shipman. 1,804,631; May 12.
Reflector and providing the reflecting surface thereof with means for coloring the light reflected therefrom. V. L. Oestnaes. 1,805,224; May 12.
Refrigerating apparatus. J. G. King. 1,804,624; May 12.
Refrigerating apparatus. O. M. Summers. 1,804,653–4; May 12.
Refrigerating apparatus, Absorption. C. G. Munters. 1,805,293; May 12.
Refrigerating mechanism support and cabinet therefor. M. H. Spreen. 1,804,845; May 12.
Refrigeration apparatus. M. Hirsch. 1,805,400; May 12.
Refrigerator and show case, Combination. P. H. Christopher. 1,804,914; May 12.
Register: *See*—
Autographic register.
Cash register.
Door register.
Register. E. C. Walter. 1,805,061; May 12.
Regulator: *See*—
Draft regulator.
Fuel regulator.
Window regulator.
Regulator system. E. Grau. 1,804,606; May 12.
Relay, Automatic brake. P. D. Tardiff. 1,805,196; May 12.
Relay, Counting. W. S. Edsall. 1,805,082; May 12.
Relay, Electric. L. H. Peter, E. W. Challana, and R. M. Mac Gregor. 1,804,431; May 12.
Relay, High speed. A. M. Curtis. 1,804,746; May 12.
Repeater. L. H. Hook, P. Evans, and C. S. Wallrab. 1,805,312; May 12.
Reverse motion check. E. J. Richardson. 1,805,226; May 12.
Reversing mechanism. J. E. Higgins. 1,804,983; May 12.
Reversing switch. F. A. Young. 1,805,434; May 12.
Rifle attachment for firing miniature ammunition. K. Danthine. 1,805,278; May 12.
Ring: *See*—
Drive ring.
Piston oil saving ring.
Piston ring.
Rivet rolling device. J. Gardiner. 1,804,683; May 12.
Riveter, Pinch. K. R. Hammerstrom and L. H. Vold. 1,805,282; May 12.
Road subgrading machine. V. R. Hughes. 1,804,418; May 12.
Roller: *See*—
Web guide roller.
Roof and pillar construction for automobile bodies. F. J. Kubler. 1,805,461; May 12.
Roof joint. J. L. Schaller. 1,805,110; May 12.
Round straightener. G. A. Wise. 1,805,302; May 12.
Rubber stripping for doors or windows. F. C. Palenske and W. A. Robbins. 1,804,799; May 12.
Rule, Automatic unwinding. M. Eisenstein. 1,804,975; May 12.
Rule, Foldable. E. Kwartz. 1,804,789; May 12.

Runner block and mounting means therefor. J. R. Osborn 1,805,254; May 12.
Sadiron. W. W. Everts. 1,804,827; May 12.
Safety device for locomotive boosters. LeR. R. Linn and C. N. Remfry. 1,804,881; May 12.
Safety device for use on a dough rolling machine commonly known to the baking industry as a dough brake. J. C. Barefoot. 1,804,853; May 12.
Sample display. J. H. Harris and C. F. Burney. 1,805,041; May 12.
Sand, Treating molding. F. E. McCabe. 1,804,629; May 12.
Sash lock. S. Goldman. 1,805,170; May 12.
Saw, Log and tree. W. J. Steffler. 1,805,318; May 12.
Saw mill set work. G. Tanner. 1,804,716; May 12.
Saw, Power drag. J. T. Bolen. 1,804,969; May 12.
Sawing machine. J. O. Horton. 1,805,043; May 12.
Scaler, Hydraulic. H. C. Barnes and G. A. Driest. 1,804,735; May 12.
Scoop, Ice cream. J. L. Balton. 1,805,387; May 12.
Screw conveyer pile. J. W. Taussig. 1,805,265; May 12.
Screw cutting die. E. T. Bysshe and R. R. Finn. 1,804,459; May 12.
Scrubber for refrigerating apparatus. H. R. Loranger and U. R. Loranger. 1,804,836; May 12.
Scrubbing machine. J. Milanovich. 1,804,636; May 12.
Seal for receptacles, Frangible. I. Newman. 1,805,003; May 12.
Seat structure, Spring. D. H. Van Hove. 1,804,722; May 12.
Seed potato cutter. T. Samson. 1,805,376; May 12.
Seeder, packer and pulverizer, Combined. C. A. Duncan and T. W. Morefield. 1,804,862; May 12.
Set checker. J. C. Hoover. 1,805,094; May 12.
Settee with reading and writing attachments. E. O. Klemm. Des. 84,147; May 12.
Sewing machine, Buttonhole. A. F. Carlson. 1,805,205; May 12.
Sewing machines, Needle loader for. M. W. Howard. 1,804,618; May 12.
Shade. R. E. Ellis. 1,804,864; May 12.
Shade, Adjustable. R. M. Meunier. 1,804,634; May 12.
Shade and support therefor, Lamp. E. J. Smith. 1,805,103; May 12.
Shade for automobiles, Glare. A. F. Schiais. 1,805,419; May 12.
Shade, Window. P. Rainsford. 1,805,372; May 12.
Shaft keying device. D. C. Maier. 1,804,699; May 12.
Shaper mechanism for winding yarn on weft bobbins in spinning mules. F. C. Firth, S. Jessop, and C. T. Tattersfield. 1,804,866; May 12.
Sharpener attachment, Lawn mower. I. A. Shanton. 1,804,439; May 12.
Sharpener, Pencil. F. Thompson. 1,804,717; May 12.
Shears: *See*—
Animal shears.
Sheet width maintaining device. L. Mambourg. 1,805,250; May 12.
Shingle and making same. F. A. Mosher. 1,805,292; May 12.
Ship, Ornamental. J. Nowakowski. Des. 84,160; May 12.
Shoe. W. O. Johnson. Des. 84,144; May 12.
Shoe bottoms, Method of and apparatus for locating elements upon. F. L. Mooney. 1,804,427; May 12.
Shoe press. E. B. Napolitano. 1,805,182; May 12.
Shoe, Ventilated. A. Jandoc and B. A. Lagmay. 1,804,533; May 12.
Shovel head. W. C. Anthony, C. H. Benedict, and L. Wachter. 1,805,028; May 12.
Shovel tooth. F. Elwood. 1,804,756; May 12.
Shuttle and method of manufacture. P. W. Hills. 1,805,090; May 12.
Sign. J. T. Carr. 1,805,327; May 12.
Sign display stand. F. D. Courtenay. Des. 84,130; May 12.
Sign, Interchangeable. M. Send. 1,805,378; May 12.
Signs, Structure for. A. Hershfield. 1,804,770; May 12.
Signal: *See*—
Traffic signal.
Signal distortion indicator. R. J. Wise. 1,805,349; May 12.
Signal receiving and distributing system. F. Hoke, 1,804,559; May 12.
Signaling apparatus. H. O. Holte. 1,805,092; May 12.
Signaling device for an automatic lathe. D. Turcott. 1,804,720; May 12.
Signaling system. H. P. Clausen. 1,804,675; May 12.
Sink and convertible dishwasher, Combination. T. Tafel, Jr. 1,804,715; May 12.
Slug casting machine and type bars cast thereby. J. R. Rogers and E. A. Sytz. 1,804,517; May 12.
Snow remover. A. B. Webb. 1,805,121; May 12.
Soap powder, Manufacture of. R. L. Holliday. 1,804,932; May 12.
Socket and transformer, Gas lamp. J. O. Cadieux. 1,804,525; May 12.
Socket connection for electrical conductors. A. Wichert. 1,804,908; May 12.
Socket, Electric lamp. K. Perkins. 1,805,048; May 12.
Sound absorbing structure. W. E. Foster. 1,805,210; May 12.
Sound collecting and transmitting means. C. K. Woodbridge. 1,804,485; May 12.
Sound screening device for hydrophones. L. H. Richmond. 1,805,186; May 12.
Spindle center turning machine, Multiple. E. P. Bullard, jr. 1,804,971; May 12.
Spirits and making the same, Denatured. R. H. McKee. 1,804,632; May 12.
Split D-handle. W. A. Ready. 1,804,950; May 12.
Spool, Chalk line. F. L. Vanatta. 1,805,426; May 12.
Spoon or similar article. P. B. Ball. Des. 84,127; May 12.
Spraying attachment. C. B. Lawrence and E. F. Martinet. 1,805,216; May 12.
Spraying unit. A. A. Breuer. 1,804,589; May 12.
Spring snubber, Vehicle. V. C. Worlein. 1,805,350; May 12.
Spring structure. G. A. Stackhouse. 1,804,821; May 12.
Spring suspension for vehicles. W. C. Dunn. 1,804,405; May 12.
Springs and spring casings, Making coiled. C. L. Paulus and H. O. Russell. 1,804,705; May 12.
Sprinkling apparatus. R. B. Campbell. 1,804,742; May 12.
Stake, Tent. P. C. Gianini. 1,805,084; May 12.
Stand: *See*—
Cylinder head stand.
Display stand.
Novelty stand.
Traffic sign stand.
Stand pipe connection for buildings. W. H. Symonds. 1,804,714; May 12.
Starter, Engine. J. W. Fitzgerald. 1,804,575; May 12.
Starter for internal combustion engines. G. R. Lawrence. 1,805,313; May 12.
Starting system, Synchronous machine. C. A. Butcher. 1,804,591; May 12.
Statuette. I. McHugh. Des. 84,157; May 12.
Steam trap. D. R. Yarnall. 1,805,064; May 12.
Steering control. W. S. Stockton. 1,804,713; May 12.
Steering mechanism for twin engine tractors. O. A. Harkness. 1,805,141; May 12.
Steering wheel. H. T. Kraft. 1,804,993; May 12.
Stone dressing machine. W. H. Van Sickel. 1,805,269; May 12.
Stop motion mechanism. H. McAdams. 1 805,340; May 12.
Stopper: *See*—
Bottle stopper.
Store front or the like. T. B. Buchanan. Des. 84,129; May 12.
Strainer, Well. J. M. Losack. 1,805,408; May 12.
Strap: *See*—
Ceiling supporting strap.
Strap connection. E. S. Mix. 1,805,047; May 12.
Stretcher, Vertebræ. A. J. Silva. 1,804,441; May 12.
Stretcher, Wire. P. G. Jarvis. 1,804,502; May 12.
Strip aligning apparatus for manifold record machines. L. F. Hagemann. 1,804,608; May 12.
Structural member, Metallic. F. M. Barton. 1,804,452; May 12.
Stuffing box. R. M. Weeks. 1,805,155; May 12.
Stuffing box. W. B. Wigle. 1,804,581; May 12.
Sulphates, Manufacture of. R. H. McKee. 1,804,631; May 12.
Support for hats and the like. F. W. Hoban. 1,804,931; May 12.
Support, Lamp. W. A. Dunlap. 1,804,863; May 12.
Support, Wing shield. T. B. Nisbet. 1,805,341; May 12.
Supporting bracket. H. V. Henderson. 1,805,364; May 12.
Supporting device for pottery. B. D. Hardesty. 1,804,980; May 12.
Surfaces, Apparatus for marking or scoring. A. J. Neafie. 1,805,148; May 12.
Sweatband for hats. B. Reichelt. 1,804,546; May 12.
Sweater or article of similar nature. A. Egerer. Des. 84,135–7; May 12.
Sweeper, Vacuum. J. Brasty. 1;805,203; May 12.
Switch: *See*—
Electric switch.
Electrical switch.
Link switch.
Reversing switch.
Time switch.
Switch mechanism. J. M. Brown. 1,804,590; May 12.
Switch mechanism, Fusible. G. E. Wadsworth. 1,804,724; May 12.
Table: *See*—
Extension table.
Folding table.
Ironing table.
Table and clamp, Work. J. F. Glass. 1,805,395; May 12.
Tablet. L. A. Phillips. 1,804,806; May 12.
Tagging. M. R. Kondolf. 1,804,940; May 12.
Tank: *See*—
Distributing tank.
Tank construction, Pickling. E. B. Hudson. 1,804,774; May 12.
Tap changing system. L. H. Hill. 1,804,614; May 12.
Telegraph exchange system. G. S. Vernam. 1,804,548; May 12.
Telegraph receiver, Printing. R. Tevis. 1,805,114; May 12.
Telegraph repeater arrangement. R. B. Shanck. 1,804,547; May 12.
Telegraphic transmitting and tape perforating apparatus. F. G. Creed and R. D. Salmon. 1,804,496; May 12.
Telephone exchange system. C. B. Fowler. 1,804,408–9; May 12.
Telephone system. J. I. Bellamy. 1,804,822; May 12.
Telephone system. T. F. Crocker. 1,804,594; May 12.
Telephone system. A. E. Hague. 1,804,766; May 12.
Telephone system. A. E. Hague. 1,804,767; May 12.

Telephone system. L. H. Johnson and R. L. Stokely. 1,804,778; May 12.
Telephone system. S. R. Smith. 1,805,153; May 12.
Telephone system. J. H. Voss and T. F. Crocker. 1,804,575; May 12.
Telephone testing system. W. Kuhn. 1,804,786; May 12.
Temperature control means for molten glass. L. Mambourg. 1,805,218; May 12.
Tender. E. E. Hicken. Re18,066; May 12.
Testing device for centrifugal switches. A. T. Smith. 1,805,192; May 12.
Thermomotive device. M. H. Shoenberg. 1,804,709; May 12.
Thread cutting machine. A. Schumacker. 1,804,708; May 12.
Thread milling machine. P. P. G. Hall. 1,804,686; May 12.
Threading method and mechanism. E. H. Barker. 1,805,126; May 12.
Tile and making same, Transparent. J. T. Nicholson. 1,804,508; May 12.
Tile making attachment to vibrating machines. E. E. McWain. 1,805,180; May 12.
Tillage implement. C. T. Ray. 1,804,513; May 12.
Time switch. R. T. Rutherford. 1,805,010; May 12.
Tin compounds, Recovery of. G. Buttfield. 1,804,551; May 12.
Tire and process of making, Rubber. L. A. Laursen. 1,805,146; May 12.
Tire carcass, Securing a thread to a. W. C. State. 1,805,026; May 12.
Tire inflating and deflating apparatus, Pneumatic. W. A. Harris. 1,805,397; May 12.
Tires, Tractive device for. G. R. Burrell. 1,805,037; May 12.
Toggle bolt. C. C. Tomkinson. 1,805,319; May 12.
Toilet package. R. H. Van Sant. 1,805,299; May 12.
Tool, Combination. W. E. Phillips. 1,805,005; May 12.
Tool for match box making machines, Folding. L. Heninger. 1,804,613; May 12.
Tool, Jarring. W. H. Maxwell. 1,804,700; May 12.
Tool, Machine. R. R. Roberts and W. J. Forward. 1,805,188; May 12.
Tool, Sand testing. F. Hux. 1,804,620; May 12.
Tool, Well. L. S. Hamer. 1,805,087; May 12.
Tools, Pneumatic feeding mechanism for, machine. F. E. Phillips. 1,804,805; May 12.
Tooth, False. G. W. Toft. 1,804,898; May 12.
Toothbrush and tumbler rack. M. Kaden. 1,805,366; May 12.
Toothbrush, Antiseptic. A. D'Ayrenx. Des. 84,131; May 12.
Torsion testing machine. P. L. Irwin. 1,804,621; May 12.
Towels, Apparatus for heating and sterilizing. E. G. Dooley. 1,804,752; May 12.
Toy, Airplane. S. I. Berger. 1,804,737; May 12.
Toy, Animated. P. P. Wehner. 1,805,156; May 12.
Toy balloons, Ornamenting. A. P. Witten. Re18,068; May 12.
Toy bank. A. C. Balson. 1,804,733; May 12.
Toy, Construction. A. C. Gilbert. 1,804,926; May 12.
Toy electric railway tracks, Clip for. J. C. Koerber. 1,804,783; May 12.
Toy or advertising device. J. Gallagher. 1,804,925; May 12.
Toy railway track clip. J. C. Koerber. 1,804,784; May 12.
Track circuit apparatus, Railway. D. C. Bettison. 1,804,666; May 12.
Track for vehicles, Endless bank. H. A. Knox. 1,804,470; May 12.
Trackway, Motor conveyer. E. Hanak. 1,805,175; May 12.
Traction frame. H. H. Glasier. 1,804,412; May 12.
Traction mechanism, Crawling. D. J. Shelton. 1,804,816; May 12.
Traffic sign stand. J. T. Horni. 1,805,095; May 12.
Traffic signal. W. B. McGill. 1,805,429; May 12.
Traffic signaling system and signal. R. J. Lackner. 1,805,406; May 12.
Transmission hoist, Automobile. O. Johnson. 1,805,402; May 12.
Transmitter for simplex telegraph circuits, Distributor-. S. W. Rothermel. 1,805,374; May 12.
Trap: *See*—
  Minnow trap.
  Steam trap.
Trap for beasts of prey. J. Schober. 1,805,317; May 12.
Trapping and electrocuting apparatus, Combined. L. Lagarde. 1,805,407; May 12.
Tray, Ash. M. Schwartz. 1,805,016; May 12.
Tray, Pin and clip. M. S. Lower. 1,805,045; May 12.
Trimmer: *See*—
  Hedge trimmer.
Trimming machine, Asparagus. T. Gill. 1,804,028; May 12.
Truck, Electric car. N. R. Brownyer. 1,805,438; May 12.
Truck, Locomotive. E. O. Elliott. 1,805,328; May 12.
Truck mix meter. J. F. Robb. 1,805,373; May 12.
Trunk rack, Bumperette. C. B. Fritts. 1,804,761; May 12.
Tube: *See*—
  Heat transfer tube.
Tunnel lining unit. E. C. Amsden. 1,805,435; May 12.
Turbine, Mercury vapor. L. T. Jones. 1,804,694; May 12.
Typewriting machine. R. von Reppert. 1,804,723; May 12.
Typographical composing and casting machine. E. H. Atkins. 1,804,489; May 12.
Undercutter for sawing logs. J. S. Valley and E. P. Ford. 1,805,058; May 12.
Underreamer with an hydraulic trigger. J. B. Triplett, W. H. Campbell and W. H. Maxwell. 1,804,850; May 12.
Unloading apparatus. W. W. Vanable. 1,805,427; May 12.
Unloading mechanism for can washing machines. I. R. Hippenmeyer. 1,805,142; May 12.
Upsetting mechanism. R. L. Wilcox. 1,805,124; May 12.
Utensil, Kitchen. L. J. Kaplan. 1,804,623; May 12.
Vacuum cleaner. W. J. Frame. 1,804,410; May 12.
Vacuum cleaner. E. E. Gudka. 1,805,174; May 12.
Vacuum distillation. W. B. Logan. 1,804,941; May 12.
Valve. N. De Vito. 1,805,130; May 12.
Valve. R. A. Douds. 1,805,391–2; May 12.
Valve. L. W. Eggleston. 1,804,462; May 12.
Valve. G. A. Robertshaw. 1,804,438; May 12.
Valve. T. R. Smith. 1,804,711; May 12.
Valve assembly, Clearance. F. W. Parsons. 1,804,892; May 12.
Valve, Dry pipe. W. B. Griffith. 1,805,241; May 12.
Valve, Flush tank control. H. C. Brennan. 1,804,857; May 12.
Valve for gas burners. C. V. Lindbloom. 1,804,473; May 12.
Valve, High pressure relief. S. P. Thomas. 1,804,897; May 12.
Valve mechanism. W. S. Valmore. 1,804,721; May 12.
Valve motor. C. A. Otto. 1,805,342; May 12.
Valve of internal combustion engines, Feed. W. S. Burn. 1,805,358; May 12.
Valve, Quick opening. G. J. Belknap. 1,804,586; May 12.
Valve tappet and forming the same. W. C. Osterholm. 1,805,255; May 12.
Vanity case. M. Kline and M. Kaplan. 1,804,563; May 12.
Vanity case. H. V. Pretot. 1,804,808; May 12.
Vaporizer for internal combustion engines. O. Baumgartner. 1,805,304; May 12.
Vaporizer for refrigerator systems. F. G. Siagel. 1,805,152; May 12.
Variable flow resistance. H. H. Robinson. 1,805,106; May 12.
Vase, Flower. D. H. Wagner. 1,804,447; May 12.
Vegetable fibers, Preparation of. D. W. Dron. 1,805,166; May 12.
Vehicle arm or prop. G. E. Wheeler and C. Oppe. 1,804,728; May 12.
Vehicle, Child's. J. A. Eberle. 1,805,136; May 12.
Vehicle, Child's. J. Hojnowski. 1,804,832; May 12.
Vehicle construction, Motor. A. C. Hamilton. 1,804,687; May 12.
Vehicle lock, Motor. F. D. Hardesty. 1,805,088; May 12.
Vehicle top operating mechanism. P. Pedersen. 1,805,184; May 12.
Vehicle, Water. C. De Marchi. 1,804,972; May 12.
Vehicle wheel. C. G. Keller. 1,804,937–8; May 12.
Vehicles, Auxiliary propelling means for motor. A. E. Miller. 1,804,887; May 12.
Vehicles, Head lamp for motor. E. G. E. Vives. 1,804,965; May 12.
Vender, Liquid. L. H. Morin. 1,804,889; May 12.
Vending machine. H. S. Benjamin. 1,804,492; May 12.
Vending machine, Liquid. W. C. F. Krueger. 1,804,785; May 12.
Veneer article and manufacture. E. C. Loetscher. 1,805,179; May 12.
Veneer machines, Pressure bar for. G. H. Osgood. 1,804,704; May 12.
Vernier. W. S. Webster. 1,805,154; May 12.
Ventilator system, Bank vault. B. C. Goss. 1,805,332; May 12.
Venturi meter. F. N. Connet. 1,805,236; May 12.
Vials, Device for opening. W. Merck. 1,805,369; May 12.
Vibration dampener. C. Breer. 1,805,357; May 12.
Vibrator. G. B. Pickop. 1,804,949; May 12.
Vise. H. W. Steiger. 1,804,652; May 12.
Visor, Windshield. P. J. Waraksa. 1,805,346; May 12.
Voltage control system. H. H. Harbecke. 1,804,768; May 12.
Voltage regulating system. K. W. Graybill. 1,805,140; May 12.
Wall board connection, Interior. D. McChesney. 1,804,630; May 12.
Wall bracket or article of analogous nature. E. A. Walker. Des. 84,172; May 12.
Wall construction. J. F. Kelly. 1,805,334; May 12.
Washing machines, Agitator mechanism for. J. Rocke. 1,805,107; May 12.
Washtub. J. L. Arlt. 1,805,068; May 12.
Water, Dechlorinating. E. Berl. 1,805,353; May 12.
Water from aqueous acetic acid, Removing. H. T. Clarke and D. F. Othmer. 1,804,745; May 12.
Water heater. J. P. Morley. 1,805,222; May 12.
Water heating, Multistage feed. F. Hodgkinson. 1,804,616; May 12.
Water softening apparatus and automatically controlling the cycles in a water softening system. F. X. and E. J. Lauterber and H. L. Mintchell. 1,804,834; May 12.

Water wheel. G. M. Ask. 1,804,583; May 12.
Wave signaling systems. F. X. Rettenmeyer. 1,804,952; May 12.
Web guide roller. H. A. W. Wood. 1,805,197; May 12.
Welding without electrical leakage. W. E. Crawford and C. F. Kurtze. 1,804,461; May 12.
Wheelbarrow, Loading. F. J. Dowling 1,804,403; May 12.
Wheel: *See*—
  Steering wheel.
  Water wheel.
  Vehicle wheel.
Wheel for safety railway trucks, Guard. E. R. Edson. 1,804,560; May 12.
Wheel gauge. W. Bagge. 1,804,490; May 12.
Wheel structure, Vehicle. F. H. Meyer. 1,804,635; May 12.
Wheeled carrier. F. J. Dowling. 1,804,404; May 12.
Wheels, Making car. R. C. Good and H. Holiday. 1,804,763; May 12.
Wheels, Sleeve for high speed. R. Birmann. 1,805,201; May 12.
Windmill. O. T. Rude. 1,805,008; May 12.
Window cleaner. C. F. Fisher. 1,804,867; May 12.
Window construction. F. Butzbach. 1,804,741; May 12.
Window lock, Automatic. G. D. Shinn. 1,804,518; May 12.
Window, Metal. F. Kullmer. 1,804,787; May 12.
Window regulator. J. D. Lawrence and S. W. Nichols. 1,805,217; May 12.
Window, Safety cage. C. T. James. 1,804,776; May 12.
Wire line clamp. H. E. Garden. 1,804,762; May 12.
Wire support and guide. A. S. MacDonald. 1,804,996; May 12.
Wires, Apparatus for treating. P. Wright. 1,804,486; May 12.
Wood and like cellular products, Making fire proofed. R. H. McKee. 1,804,633; May 12.
Wood planing machine. L. E. Blood and J. B. Wiard. 1,805,437; May 12.
Work holding device for miter boxes. E. Sodergren. 1,805,022; May 12.
Wrench: *See*—
  Adjustable wrench.
  Pipe wrench.
Wrench. H. E. Maynard. 1,805,368; May 12.
Wrench. F. Schweigert. 1,805,298; May 12.
Yarn, Manufacture of. E. E. Blake. 1,804,968; May 12.
Yarn, Mechanism for use in treating. W. C. Volk. 1,805,456; May 12.
Zeolite and preparing same, Base exchange. F. M. Tschirner. 1,804,964; May 12.

CLASSIFICATION OF PATENTS

ISSUED MAY 12, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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U. S. GOVERNMENT PRINTING OFFICE: 1931

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

A. I. O. Company, Chicago, Ill. Ointment to be used for the treatment of ringworm of the feet and genitocrural region. 283,219; May 19; Serial No. 304,711; published Mar. 3, 1931. Class 6.

Addressograph Company, Chicago, Ill. Printing plates. 283,104; May 19; Serial No. 309,547; published Mar. 3, 1931. Class 50.

Agfa Ansco Corporation, Binghamton, N. Y. Photographic film. 283,157–9; May 19; Serial Nos. 309,324–6; published Mar. 3, 1931. Class 26.

Allis-Chalmers Manufacturing Company. (See La Crosse Plow Company, assignor.)

Alpha Tank & Sheet Metal Mfg. Co., St. Louis, Mo. Boiler breechings, unit air heaters, smokestacks, etc. 283,209; May 19; Serial No. 290,733; published Mar. 10, 1931. Class 34.

American Bitumuls Company, Wilmington, Del. Asphalt, pavement materials, etc. 283,217; May 19; Serial No. 305,688; published Mar. 3, 1931. Class 12.

American Crayon Company, The, Sandusky, Ohio. Birthday-candle holders. 283,096; May 19; Serial No. 309,184; published Mar. 3, 1931. Class 34.

American Lace Paper Co., Milwaukee, Wis. Jardinières, vases, pails, etc. 283,198; May 19; Serial No. 302,800; published Mar. 10, 1931. Class 2.

American News Company, Inc., The, New York, N. Y. Wrist watches. 283,193; May 19; Serial No. 307,793; published Mar. 3, 1931. Class 27.

American Steel and Wire Company of New Jersey. (See Union Fence Co., assignor.)

American Woolen Company, Boston, Mass. Woolen piece goods. 283,146; May 19; Serial No. 310,326; published Mar. 3, 1931. Class 42.

Andre Co., The, Gulfport, Miss. Cough compound. 283,245; May 19; Serial No. 307,757; published Mar. 3, 1931. Class 6.

Andrea, F. A. D., Inc., New York, N. Y. Radio receiving instruments and station-wave-length indicators. 283,228; May 19; Serial No. 308,180; published Mar. 3, 1931. Class 21.

Armstrong Cork Company, Lancaster, Pa. Felt base and similar floor coverings, both piece goods and rugs. 283,291; May 19. Class 20.

Arnold, John B., doing business as Arnold's Men's Shops, Brooklyn, N. Y. Men's and boys' outer garments, etc. 283,132; May 19; Serial No. 301,780; published Aug. 19, 1930. Class 39.

Asia Company, The, Los Angeles, Calif. Rice. 283,273; May 19; Serial No. 300,703; published Mar. 3, 1931. Class 46.

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Atkins, E. C., and Company, Indianapolis, Ind. Cutter blades. 283,211; May 19; Serial No. 288,832; published Nov. 26, 1929. Class 23.

Atlas Leather Company, Caseyville, Ill. Pulleys. 283,177–8; May 19; Serial Nos. 310,278–9; published Mar. 3, 1931. Class 23.

Aurora Cotton Mills, Aurora, Ill. Sheetings, pillow tubings, sheets, etc. 283,274; May 19; Serial No. 300,913; published Feb. 24, 1931. Class 42.

Automatic Merchandizer, Inc., The, East Cambridge, Mass. Vending machines. 283,123; May 19; Serial No. 301,006; published Mar. 3, 1931. Class 23.

Badische Anilin-& Soda-Fabrik, Ludwigshafen-on-the-Rhine, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Chemicals. 83,541–2; renewed Sept. 26, 1931.

Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic mountings. 283,173; May 19; Serial No. 310,008; published Mar. 3, 1931. Class 26.

Beatrice Creamery Company, Chicago, Ill. Butter. 283,185; May 19; Serial No. 307,575; published Dec. 30, 1930. Class 46.

Benrus Watch Co., New York, N. Y. Watches. 283,156; May 19; Serial No. 309,500; published Mar. 3, 1931. Class 27.

Black Hawk Coffee and Spice Company, Waterloo, Iowa. Coffee and tea. 36,934; renewed Aug. 20, 1931.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 283,141; May 19; Serial No. 309,880; published Mar. 3, 1931. Class 42.

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Boncilla Laboratories, Inc., Indianapolis, Ind. Facial pack for bleaching and softening the skin, etc. 283,250; May 19; Serial No. 308,352; published Mar. 3, 1931. Class 6.

Bond Electric Corporation, Jersey City, N. J. Flashlights. 283,098; May 19; Serial No. 309,259; published Mar. 3, 1931. Class 21.

Bonney Forge & Tool Works, Allentown, Pa. Welding unions. 283,140; May 19; Serial No. 309,842; published Feb. 24, 1931. Class 14.

Borowikow, Boris, doing business as Borowikow Laboratories Co., Brooklyn, N. Y. Creams for disorders of the skin. 283,247; May 19; Serial No. 308,006; published Mar. 3, 1931. Class 6.

Bradley Lumber Company of Arkansas, Warren, Ark. Hardwood flooring and trim. 383,252; May 19; Serial No. 308,475; published Mar. 3, 1931. Class 12.

British Radiostat Corporation Limited, Montreal, Canada, and London, England. Radio and picture receiving and transmitting sets. 283,179; May 19; Serial No. 310,281; published Mar. 10, 1931. Class 21.

British Taroleum Company, Limited, The, London, England. Bituminous compounds for road-making or road-dressing purposes. 283,090; May 19; Serial No. 309,409; published Feb. 24, 1931. Class 12.

Brooklyn Standard Bag Co. Inc., Brooklyn, N. Y. Paper bags. 283,170–1; May 19; Serial Nos. 310,244–5; published Mar. 10, 1931. Class 2.

Browning Arms Company, Ogden, Utah. Shotguns, rifles, pistols, and gun cases. 283,189; May 19; Serial No. 304,648; published Oct. 14, 1930. Class 9.

Bruhn, Linda C., doing business as Rock Cheese & Butter Co., Auburndale, Wis. Cheese. 283,199; May 19; Serial No. 304,909; published Mar. 3, 1931. Class 46.

Brybro Fabrics, Inc., New York, N. Y. Woven fabrics. 283,134; May 19; Serial No. 309,261; published Mar. 3, 1931. Class 42.

Burghardt, Anthony R., doing business as Burghardt's Rye Bread Bakery, Detroit, Mich. Bread. 383,186; May 19; Serial No. 308,476; published Mar. 3, 1931. Class 46.

Burton Explosives, Inc., Cleveland, Ohio. Nitroglycerin, ammonium-nitrate dynamites, black powder, etc. 283,145; May 19; Serial No. 310,004; published Mar. 10, 1931. Class 9.

Byron Hat Corporation, New York, N. Y. Hats for men. 283,097; May 19. Serial No. 309,229; published Feb. 24, 1931. Class 39.

California Orchard Co., Los Angeles, Calif. Dried beans. 283,288–9; May 19. Class 46.

Carmo Shoe Mfg. Co., Carthage, Mo. Ladies' and misses' shoes, slippers, pumps, etc. 283,095; May 19; Serial No. 309,188; published Mar. 3, 1931. Class 39.

Castle Kid Co., Inc., assignor, by mesne assignments, to Castle Kid Co., Inc., Camden, N. J. Kid leather made from hair sheepskin. 83,221; renewed Aug. 29, 1931. Class 1.

Celanese Corporation of America, New York, N. Y. Fabrics made wholly or partially of cellulose derivatives. 283,163; May 19; Serial No. 309,025; published Mar. 3, 1931. Class 42.

Chamberlain, F. B., Company, East St. Louis, Ill., and St. Louis, Mo. Coffee extract and concentrated coffee. 283,261; May 19; Serial No. 297,003; published Apr. 29, 1930. Class 46.

Champion Radio Works, Inc., doing business as Legion Laboratories, Danvers, Mass. Electron tubes. 283,277; May 19; Serial No. 294,502; published Feb. 3, 1931. Class 21.

Chemical Foundation, Incorporated, The. (See Badische Anilin-& Soda-Fabrik, assignor.)

Chemical Foundation, Incorporated, The. (See Knöll & Co., assignor.)

Chemical Foundation, Incorporated, The. (See Lingner, Karl A., assignor.)

Chemical Foundation, Incorporated. (See Meyer, Arnold O., assignor.)

Chemical Foundation, Incorporated, The. (See Sociedad Vinicola, S. & L. Durlacher, assignor.)

Chicago Mail Order Company, Chicago, Ill. Women's coats. 283,124; May 19; Serial No. 308,927; published Mar. 3, 1931. Class 39.

Clarkson, Inc., Suffern, N. Y. Lotion to be applied to the body to prevent sunburn or exposure. 283,283; May 19. Class 6.

Clay Products Company, Inc. of Indiana, Brazil, Ind. Glazed and unglazed clay building tile. 283,094; May 19; Serial No. 309,770; published Mar. 3, 1931. Class 12.

Cleveland Fruit Juice Company, The, Cleveland, Ohio. Prepared chocolate sirup. 283,292; May 19. Class 46.

Climax Engineering Company, Clinton, Iowa. Internal-combustion engines. 283,120; May 19; Serial No. 306,089; published Mar. 3, 1931. Class 23.

Climax Engineering Company, Clinton, Iowa. Internal-combustion engines. 283,205; May 19; Serial No. 291,760; published Mar. 3, 1931. Class 23.

Clover Leaf Products Company, Los Angeles, Calif. Ginger ale. 283,149; May 19; Serial No. 310,554; published Mar. 10, 1931. Class 45.

Consolidated Ashcroft Hancock Company, New York, N. Y. Pressure gauges, thermometers, engine indicators, etc. 283,275; May 19; Serial No. 293,871; published Mar. 3, 1931. Class 26.

Continental Pure Products Co. (See Polefsky, Jacob S.)

Copley Hat Company, Inc., New York, N. Y. Men's hats and caps and women's and misses' hats. 283,233; May 19; Serial No. 306,770; published Mar. 3, 1931. Class 39.

Cowan Woolen Company, Lewiston, Me. Woolen piece goods. 282,272; May 19; Serial No. 300,477; published Feb. 24, 1931. Class 42.

Coward, M., successor to C. Sylvester. (See Johnson, Christina S.)

Cowdin Company, Portland, Oreg. Tables. 283,290; May 19. Class 32.

Cox, J. & G., Limited, Edinburgh, Scotland. Glues. 82,423; renewed June 27, 1931.

Crawshaw Carpet Company, Newburgh, N. Y. Woven rugs. 283,191; May 19; Serial No. 306,730; published Mar. 3, 1931. Class 42.

Cream City Bedding Company, Milwaukee, Wis. Mattresses. 283,161; May 19; Serial No. 309,233; published Mar. 3, 1931. Class 32.

Crusellas Rhum Quinquina Co., Inc., New York, N. Y. Toilet water. 283,255; May 19; Serial No. 308,858; published Mar. 3, 1931. Class 6.

Daniels, Claude H., Boston, Mass. Boots, shoes, and slippers. 283,223; May 19; Serial No. 308,882; published Feb. 24, 1931. Class 39.

Darow Manufacturing Company. (See Dash, Ira F.)

Dash, Ira F., doing business as Darow Manufacturing Company, New York, N. Y. Portable electric-lighting outfits and fittings. 283,099; May 19; Serial No. 309,375; published Mar. 3, 1931. Class 21.

Derby Oil Company, The, Wichita, Kans. Motor-fuel oils and gasoline. 283,222; May 19; Serial No. 308,980; published Mar. 3, 1931. Class 15.

Deutsche Hydrierwerke, A.-G., Berlin, Charlottenburg, Germany. Disinfectants, chemical products, chemicals, etc. 283,265; May 19; Serial No. 298,430; published Mar. 3, 1931. Class 6.

Di Santo, Joseph, doing business as Di Santo & Co., Duluth, Minn. Malt syrup. 283,151; May 19; Serial No. 309,464; published Mar. 3, 1931. Class 46.

Eagle, C. K., & Company, Inc., New York, N. Y. Silk piece goods. 283,136; May 19; Serial No. 309,634; published Mar. 3, 1931. Class 42.

Eagle Clothes, New York, N. Y. Men's clothing. 283,130; May 19; Serial No. 303,422; published Mar. 3, 1931. Class 39.

Eagle Electric Mfg. Co., Inc., Brooklyn, N. Y. Electric heating elements for radiant heaters. 283,298; May 19. Class 21.

Eckley, Amory P., San Francisco, Calif. Playing cards. 283,258; May 19; Serial No. 294,628; published Mar. 10, 1931. Class 22.

Edwards & Walker Company, Portland, Me. Golf balls. 283,172; May 19; Serial No. 310,639; published Mar. 10, 1931. Class 22.

Eisenstadt Manufacturing Company, St. Louis, Mo. Pyrophoric cigarette and cigar lighters. 283,260; May 19; Serial No. 296,909; published Mar. 10, 1931. Class 34.

Elevator Supplies Company, Inc., Hoboken, N. J. Elevator signaling apparatus. 283,296; May 19. Class 21.

Eureka Fire Hose Manufacturing Company, New York, N. Y. Hose of fabric and rubber. 283,160; May 19; Serial No. 309,308; published Mar. 3, 1931. Class 35.

Excelsior Varsity Underwear Corporation. (See Maryland Oiled Clothing Company, assignor.)

Fabrik Chem. Pharm. Präparate Dallmann & Co. Wiesbaden-Schierstein, Germany. Pharmaceutical preparations. 283,284; May 19. Class 6.

Faith Mills, Inc., Averill Park, N. Y. Knit wool, wool-mixed cloth, and wool and rayon cloth. 283,190; May 19; Serial No. 305,808; published Feb. 24, 1931. Class 42.

Federal Steel Sash Company, Waukesha, Wis. Steel sash. 283,256; May 19; Serial No. 308,885; published Feb. 24, 1931. Class 12.

Figaro Chemical Co., The Figaro Company, Dallas, Tex., successor. Meat-preservative. 78,783; renewed July 12, 1930.

Fire-O-Matic, Inc., Portland, Oreg. Automatic stokers. 283,114; May 19; Serial No. 306,435; published Mar. 3, 1931. Class 34.

Firestone Tire & Rubber Company, The, Akron, Ohio. Automobile tires. 283,266; May 19; Serial No. 299,310; published Mar. 3, 1931. Class 35.

Forest City Mfg. Co., St. Louis, Mo. Outer wearing apparel for women and girls. 283,150; May 19; Serial No. 309,199; published Mar. 3, 1931. Class 39.

Fort Orange Paper Company, Castleton, to Fort Orange Paper Company, Castleton-on-Hudson, N. Y. Paper. 36,703; renewed July 9, 1931.

Fox-Coffey-Edge Co., Dallas, Tex. Hats and lingerie. 283,083; May 19; Serial No. 309,638; published Mar. 3, 1931. Class 39.

Fraser, William H., St. Paul, Minn. Medicinal compound. 283,257; May 19; Serial No. 308,985; published Feb. 24, 1931. Class 6.

French Battery Company, Madison, Wis., assignor to Transitone Automobile Radio Corporation, Philadelphia, Pa. Dry-cell batteries. 283,276; May 19; Serial No. 294,297; published Mar. 3, 1931. Class 21.

Freshie, Austin, Tex. Advertising publication. 283,278; May 19. Class 38.

Gallun, A. F., & Sons, assignor, by mesne assignments, to A. F. Gallun & Sons Corporation, Milwaukee, Wis. Vegetable-tanned leather made of calf, kip, and cattle hides. 83,571; renewed Sept. 26, 1931.

Gallun, A. F., & Sons, assignor, by mesne assignments, to A. F. Gallun & Sons Corporation, Milwaukee, Wis. Chrome-tanned leather made of calf, kip, and cattle hides. 83,572; renewed Sept. 26, 1931.

Gallun, A. F., & Sons, assignor, by mesne assignments, to Gallun & Sons Corporation, Milwaukee, Wis. Vegetable-tanned leather made of calf, kip, and cattle hides. 83,573; renewed Sept. 26, 1931.

General Mills, Inc., Minneapolis, Minn. Wheat flour. 283,184; May 19; Serial No. 307,447; published Mar. 3, 1931. Class 46.

General Motors Corporation, Detroit, Mich. Automobiles and motor-driven trucks and structural parts thereof. 283,086; May 19; Serial No. 310,014; published Mar. 3, 1931. Class 19.

General Motors Radio Corporation, Dayton, Ohio. Radio receiving sets and parts thereof. 283,227; May 19; Serial No. 308,472; published Mar. 3, 1931. Class 21.

Gibbons, J. P., jr., doing business as Peanut Products Company, Hamlet, N. C. Salted peanuts and roasted peanuts. 283,267; May 19; Serial No. 299,700; published Dec. 16, 1930. Class 46.

"Gloy" Manufacturing Company, Limited, The, assignor to Gloy & Empire Adhesives, Limited, London, England. Adhesive paste. 82,596; renewed July 11, 1931.

Goessling Inc., New York, N. Y. Fabric gloves. 283,101; May 19; Serial No. 309,560; published Mar. 3, 1931. Class 39.

Goldberg Brothers, Denver, Colo. Radio antenna. 283,113; May 19; Serial No. 306,438; published Mar. 3, 1931. Class 21.

Goodrich Drug Co., assignor to Velvetina Company, Inc., Omaha, Nebr. Massage-cream, toilet cream, talcum powder, etc. 82,597; renewed July 11, 1931.

Granat, Joseph, San Francisco, Calif. Electric store signs. 283,230; May 19; Serial No. 307,715; published Mar. 3, 1931. Class 21.

Granger & Co., Buffalo, N. Y. Coffee. 81,456; renewed Apr. 11, 1931.

"Griesogen" Griesheimer Autogen Verkaufs-Gesellschaft m. b. H., Frankfort-on-the-Main-Griesheim, Germany. Machines and apparatus for electric and electro-autogenous cutting, etc. 283,084; May 19; Serial No. 309,686; published Mar. 3, 1931. Class 21.

Grisard Laboratories, Incorporated, The, Winchester, Tenn. Preparation for use in the treatment of cardiac conditions. 283,091; May 19; Serial No. 309,472; published Mar. 3, 1931. Class 6.

Griswoldville Manufacturing Company, Griswoldville, Mass. Adhesive tape. 283,165; May 19; Serial No. 309,814; published Mar. 3, 1931. Class 5.

Gross, Benjamin & Edward J., Co. Inc., New York, N. Y. Finger rings and mountings therefor. 283,085; May 19; Serial No. 309,690; published Mar. 3, 1931. Class 28.

Ground Gripper Shoe Company, Inc., New York, N. Y. Children's shoes. 283,264; May 19; Serial No. 298,326; published Mar. 3, 1931. Class 39.

Hanson Scale Company, Chicago, Ill. Kitchen scales. 283,107; May 19; Serial No. 309,615; published Mar. 3, 1931. Class 26.

Hardwick, Hindle, Inc., Newark, N. J. Resistance units, rheostats, switches, etc. 283,212; May 19; Serial No. 288,335; published Mar. 3, 1931. Class 21.

Harris, Carl C., Orange, Mass. Bathing floats and water boards. 283,180; May 19; Serial No. 309,241; published Mar. 10, 1931. Class 22.

Hilex Company, The, St. Paul, Minn. Liquid preparation for cleansing, etc. 283,239; May 19; Serial No. 307,095; published Mar. 3, 1931. Class 6.

Hood Rubber Company, Inc., Watertown, Mass. Rubber boots and shoes, overshoes, and rubber-soled canvas shoes. 283,210; May 19; Serial No. 289,628; published May 13, 1930. Class 39.

Horder's Inc., Chicago, Ill. Carbon paper. 283,103; May 19; Serial No. 309,523; published Mar. 3, 1931. Class 11.

Hubbard Milling Company, Mankato, Minn. Wheat flour. 283,166; May 19; Serial No. 309,895; published Mar. 3, 1931. Class 46.

Indiana Band Instrument Company, Elkhart, Ind. Trumpets, cornets, French horns, etc. 283,279; May 19. Class 36.

Ingraham, E., Company, The, Bristol, Conn. Clocks. 283,110–12; May 19; Serial Nos. 309,858–60; published Mar. 3, 1931. Class 27.

Instograph, Ltd., Oakland, Calif. Time daters and time-dating machines. 283,175; May 19; Serial No. 310,220; published Mar. 3, 1931. Class 26.

Iowa Fiber Box Company, Keokuk, Iowa. Paper or cardboard cans. 283,115; May 19; Serial No. 305,863; published Mar. 3, 1931. Class 2.

Iowa Fiber Box Company, Keokuk, Iowa. Dispensing boxes. 283,164; May 19; Serial No. 309,861; published Mar. 10, 1931. Class 2.

Irvin, Daniel L., New York, N. Y. Chair, seat, or automobile cushions. 283,174; May 19; Serial No. 310,170; published Mar. 3, 1931. Class 32.

Jackson Lumber Company, Lockhart, Ala. Lumber, beams, scantling, etc. 283,254; May 19; Serial No. 308,547; published Mar. 3, 1931. Class 12.

Johnson, Christina S., doing business as M. Coward, successor to C. Sylvester, Brooklyn, N. Y. Medicinal oil. 283,259; May 19; Serial No. 294,734; published Mar. 3, 1931. Class 6.

Juilliard, A. D., & Co., Inc., New York, N. Y. Corduroys in the piece. 283,195; May 19; Serial No. 307,945; published Mar. 3, 1931. Class 42.

Kalite Company, Limited, Pasadena, Calif. Acoustical plaster. 283,243; May 19; Serial No. 307,529; published Dec. 30, 1930. Class 12.

Karreth, August, doing business as Luitpold-Werk, Chemisch-Pharmazeutische Fabrik, Munich, Germany. Venereal disease preparation. 283,221; May 19; Serial No. 302,221; published Feb. 24, 1931. Class 6.

Kawneer Company, The, Niles, Mich. Show cases and metal constructional parts of show cases. 283,287; May 19. Class 32.

Kelsey Heating Company, Syracuse, N. Y. Steam and hot water boilers, and hot air furnaces. 283,293; May 19. Class 34.

Kiger, C. A., Company, The, Kansas City, Mo. Finger ring. 282,282; May 19. Class 28.

Knoll & Co., Ludwigshafen, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Tonic. 36,747; renewed July 16, 1931.

Kohler Company, Kohler, Wis. Toilet seats. 283,271; May 19; Serial No. 300,285; published Mar. 3, 1931. Class 13.

La Crosse Plow Company, La Crosse, assignor to Allis-Chalmers Manufacturing Company, West Allis, Wis. Plows. 82,338; renewed June 20, 1931.

La Mode Garment Co., Inc., Chicago, Ill. Ladies' and children's wearing apparel. 283,127; May 19; Serial No. 308,865; published Mar. 3, 1931. Class 39.

Lane Bryant, Inc., New York, N. Y. Garter and corset belts and corsets. 283,206; May 19; Serial No. 291,727; published May 6, 1930. Class 39.

Lanvin Parfums, Inc., Wilmington, Del., and New York, N. Y. Perfume, extract, and toilet water. 283,251; May 19; Serial No. 308,449; published Feb. 24, 1931. Class 6.

Legion Laboratories. (See Champion Radio Works, Inc.)

Leominster Oil Burner Corporation, Leominster, Mass. Oil burners. 283,231; May 19; Serial No. 307,240; published Mar. 3, 1931. Class 34.

Lewis, Mary F., Cleveland, Ohio. Scalp tonic, brilliantine, and cleansing cream. 283,236; May 19; Serial No. 263,272; published Feb. 24, 1931. Class 6.

Lingner, Karl A., Dresden, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Soaps and soap powders. 83,417; renewed Sept. 12, 1931.

Lord & Taylor, New York, N. Y. Boots, shoes, and slippers. 283,232; May 19; Serial No. 306,821; published Mar. 3, 1931. Class 39.

Luitpold-Werk, Chemische-Pharmazeutische Fabrik. (See Karreth, August.)

Mackay, Nellie, Jackson Heights, Long Island, N. Y. Knee pads. 283,118; May 19; Serial No. 308,741; published Mar. 3, 1931. Class 50.

Mallory Hat Company, The, Danbury, Conn. Hats and caps. 283,116; May 19; Serial No. 304,874; published Mar. 3, 1931. Class 39.

Marathon Razor Blade Co., Inc., Irvington, N. J. Razor blades, metal holders for razor blades, knives, scissors. 283,269; May 19; Serial No. 299,979; published Mar. 3, 1931. Class 23.

Marathon Razor Blade Co. Inc., Irvington, N. J. Razor blades, razor-blade holders, razors, penknives, scissors. 283,270; May 19; Serial No. 300,213; published Mar. 3, 1931. Class 23.

Maryland Company, The, Baltimore, Md. Overalls and work trousers. 283,201; May 19; Serial No. 309,590; published Mar. 3, 1931. Class 39.

Maryland Oiled Clothing Company, assignor, by mesne assignments, to Excelsior Varsity Underwear Corporation, Baltimore, Md. Pajamas, drawers, and union suits. 81,813; renewed May 9, 1931.

McClellan Manufacturing Co., The, Los Angeles, Calif. Furniture. 283,109; May 19; Serial No. 309,739; published Mar. 3, 1931. Class 32.

McKean, B. S., & Co., assignor, by mesne assignments, to B. S. McKean, Inc., New York, N. Y. Medicinal remedies. 36,638; renewed June 25, 1931.

McLean, Andrew, Company, New York, N. Y., and Passaic, N. J. Oilcloth. 283,192; May 19; Serial No. 306,866; published Mar. 10, 1931. Class 20.

Menasha Products Company The, Chicago, Ill. Paper napkins. 283,286; May 19. Class 37.

Menasha Products Company, The, Chicago, Ill. Paper food pails and cartons. 283,295; May 19. Class 2.

Meyer, Arnold O., Hamburg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del. Fertilizers. 82,621; renewed July 11, 1931.

Model Brassiere Co. Inc., Brooklyn, N. Y. Brassières. 283,229; May 19; Serial No. 307,983; published Feb. 24, 1931. Class 39.

Monicke Herb Company, Monicke Herb Company, Sheboygan, Wis., a firm, successor. Herb medicines. 83,084; renewed Oct. 3, 1931.

Mosinee Paper Mills Company, Mosinee, Wis. Thermal insulating paper. 283,238; May 19; Serial No. 306,278; published Feb. 24, 1931. Class 12.

Motometer Company, Inc., The, assignor to Moto Meter Gauge and Equipment Corporation, Long Island City, N. Y. Electrically-operated audible warning devices. 283,214; May 19; Serial No. 286,997; published Mar. 3, 1931. Class 21.

Moto Meter Gauge and Equipment Corporation. (See Motometer Company, Inc., The, assignor.)

Mueller Brass Co., Port Huron, Mich. Rods, sand castings, and forgings. 283,119; May 19; Serial No. 308,382; published Mar. 3, 1931. Class 14.

Munroe, Charles F., doing business as Oneida Laboratories, Oneida, N. Y. Compound for relieving stomach distress. 283,216; May 19; Serial No. 305,203; published Mar. 3, 1931. Class 6.

National Biscuit Company, New York, N. Y. Biscuit, crackers, cookies, etc. 283,183; May 19; Serial No. 307,005; published Mar. 3, 1931. Class 46.

National Blank Book Co., Holyoke, Mass. Cellulose products. 283,194; May 19; Serial No. 307,822; published Mar. 3, 1931. Class 50.

National Electric Appliance Corporation, Bridgeport, Conn. Staples. 283,187; May 19; Serial No. 308,834; published Mar. 10, 1931. Class 13.

National Moth-Proofing Service, Chicago, Ill. Mothproofing and repellant chemical. 283,213; May 19; Serial No. 287,714; published Mar. 3, 1931. Class 6.

National Selected Morticians, Chicago, Ill. Supplies principally used by morticians. 283,253; May 19; Serial No. 308,514; published Feb. 24, 1931. Class 6.

New York & New Jersey Lubricant Co., assignor to New York & New Jersey Lubricant Company, New York, N. Y. Lubricants. 37,175; renewed Oct. 8, 1931.

New York Wire Cloth Company, Wilmington, Del., and New York, N. Y. Wire fabric. 283,169; May 19; Serial No. 310,225; published Mar. 10, 1931. Class 13.

Nomend Hosiery Mills M. B. Laubach Co. Inc., Philadelphia, Pa. Hosiery. 283,125; May 19; Serial No. 308,901; published Mar. 3, 1931. Class 39.

Ohio Injector Company, The, Wadsworth, Ohio. Valves and parts thereof. 183,154–5; May 19; Serial Nos. 309,698–9; published Mar. 10, 1931. Class 13.

Oneida Laboratories. (See Munroe, Charles F.)

Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics. 283,138; May 19; Serial No. 309,785; published Mar. 3, 1931. Class 42.

Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabric in the piece. 283,139; May 19; Serial No. 309,786; published Mar. 3, 1931. Class 42.

Onodaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics. 283,143–4; May 19; Serial Nos. 309,987–8; published Mar. 3, 1931. Class 42.

Pabst Corporation, Milwaukee, Wis. Malt syrup. 283,285; May 19. Class 46.

Pat Chemical Co., Milwaukee, Wis. Liniment. 283,248; May 19; Serial No. 308,216; published Feb. 24, 1931. Class 6.

Paton, Cleo, Paris, France. Empty base-metal vanity cases and similar pocket outfits. 283,207; May 19; Serial No. 291,021; published Mar. 3, 1931. Class 2.

Peanut Products Company. (See Gibbons, J. P., jr.)

Peckham-Foreman, Inc., New York, N. Y. Sweaters, knitted jackets, and slipovers. 283,268; May 19; Serial No. 299,858; published Mar. 3, 1931. Class 39.

Pender, David, Grocery Company, Norfolk, Ca. Teas, coffees, sugar, etc. 283,237; May 19; Serial No. 265,893; published Mar. 3 1931. Class 46.

Penichet, Dr. C. J., Habana, Cuba. Pharmaceutical preparation for the treatment of coughs, colds, etc. 283,242; May 19; Serial No. 307,367; published Feb. 24. 1931. Class 6.

Penney, J. C., Company, Wilmington, Del., and New York, N. Y. Men's, boys', and youths' clothing. 283,200; May 19; Serial No. 309,568; published Mar. 3, 1931. Class 39.

Penney, J. C., Company, Wilmington, Del., and New York, N. Y. 283,226; May 19; Serial No. 308,792; published Mar. 3, 1931. Class 39.

Pepsodent Co., The, Chicago, Ill. Antiseptics. 283,088; May 19; Serial No. 309,284; published Feb. 24, 1931. Class 6.

Pichel, Ralph, Hartsdale, N. Y. Preparation for flavoring cakes, puddings, and sauces. 283,128; May 19; Serial No. 308,219; published Mar. 3, 1931. Class 46.

Pioneer Paper Company, Los Angeles, Calif. Bituminous emulsions. 283,093; May 19; Serial No. 309,602; published Mar. 3, 1931. Class 12.

Polefsky, Jacob S., doing business as Continental Pure Products Co., New York, N. Y. Grape juice. 283,147; May 19; Serial No. 310,531; published Mar. 10, 1931. Class 45.

Polin Bros. & Berkowitz, Inc., New York, N. Y. Package and bulk ground or bean coffee, whole and ground spices, tea, and rice. 283,152; May 19; Serial No. 309,482; published Mar. 3, 1931. Class 46.

Porcelain Tile Company, Chicago, Ill. Tiles and foundation sheets for tiles. 283,220; May 19; Serial No. 302,598; published Mar. 3, 1931. Class 12.

Protecto Manufacturing Company, Chicago, Ill. Metal-bound felt weather strips. 283,263; May 19; Serial No. 297,777; published Feb. 24, 1931. Class 12.

Pure-Test Food Products Company, Chicago, Ill. Malt syrup. 283,126; May 19; Serial No. 308,999; published Mar. 3, 1931. Class 46.

Puritan Soap Company, Rochester, N. Y. Antifreeze solution, liquid preparations for stopping leaks in automobile radiators, etc. 283,240–1; May 19; Serial Nos. 307,289–90; published Feb. 24, 1931. Class 6.
Rea-Patterson Milling Company, Coffeyville, Kans. Wheat-flour. 83,690; renewed Oct. 3, 1931.
Red Top Products Co. (See Schoendorf, Samuel.)
Restful Slipper Co., Inc., New York, N. Y. Boots, shoes, slippers. 283,100; May 19; Serial No. 309,396; published Mar. 3, 1931. Class 39.
Reynolds, R. J., Tobacco Company, Winston Salem, N. C. Tobacco-pipes. 82,470; renewed June 27, 1931.
Reynolds, R. J., Tobacco Company, Winston Salem, N. C. Smoking and chewing tobacco, cigars, cigarettes, etc. 83,471; renewed June 27, 1931.
Rider, Daniel H., New York, N. Y. Safety-razor blades. 283,108; May 19; Serial No. 309,621; published Mar. 3, 1931. Class 23.
Ritchie Manufacturing Company, Marshalltown, Iowa. Stock waterers. 283,162; May 19; Serial No. 309,175; published Mar. 3, 1931. Class 50.
Rock Cheese & Butter Co. (See Bruhn, Linda C.)
Sage, Caterina, in Bourbon del Monte Principessa di San Faustino, Genoa, Italy. Holder for loose leaf paper leaves, paper pads, score cards, etc. 283,294; May 19. Class 37.
Schoendorf, Samuel, doing business as Red Top Products Co., Asbury Park, N. J. Salad dressings, tomato ketchup, chili sauce, etc. 283,129; May 19; Serial No. 305,881; published Mar. 3, 1931. Class 46.
Schwarzenbach Huber Co., The, New York, N. Y. Broad silks and silk mixtures. 283,137; May 19; Serial No. 309,655; published Mar. 3, 1931. Class 42.
Schwarzenbach Huber Co., The, New York, N. Y. Broad silks and silk mixtures. 283,142; May 19; Serial No. 309,908; published Mar. 3, 1931. Class 42.
Scull, William S., Company, Camden, N. J. Blended coffee. 83,693; renewed Oct. 3, 1931.
Seabury & Johnson, New York, N. Y. Oxid-of-zinc adhesive plaster. 83,694; renewed Oct. 3, 1931.
Sears, Roebuck and Co., Chicago, Ill. Wire rope. 283,148; May 19; Serial No. 310,536; published Mar. 10, 1931. Class 7.
Sears, Roebuck and Co., Chicago, Ill. Storage "A" and "B" Batteries. 283,215; May 19; Serial No. 286,279; published Sept. 24, 1929. Class 21.
Selby, Battersby & Co., Philadelphia, Pa. Emulsified asphalt and magnesite materials. 283,153; May 19; Serial No. 309,178; published Feb. 24, 1931. Class 12.
Servidor Company, The, New York, N. Y. Wall cabinets. 283,176; May 19; Serial No. 310,261; published Mar. 3, 1931. Class 32.
Sigmund, Fred L., doing business as Sigmund Chemical Company, Moorestown, N. J. Compound tablet for prolonging bloom of life of cut flowers. 283,244; May 19; Serial No. 307,690; published Feb. 24, 1931. Class 6.
Simson & Frey, Inc., New York, N. Y. Clarinets. 283,203; May 19; Serial No. 292,639; published Mar. 3, 1931. Class 36.
Sociedad Vinicola, S. & L. Durlacher, Hamburg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Perfumery. 82,837; renewed July 25, 1931.
Societe Anonyme des Usines Renault, Billancourt, France. Automobiles and constructive parts thereof. 283,181; May 19; Serial No. 309,398; published Mar. 10, 1931. Class 19.
Societe Anonyme des Usines Renault, Billancourt, France. Automobiles and constructive parts thereof. 283,182; May 19; Serial No. 309,400; published Mar. 10, 1931. Class 19.
Societe à Responsibilite, Limitee Rodier, Paris, France. Piece goods. 283,196; May 19; Serial No. 308,560; published Feb. 24, 1931. Class 42.
Southland Cotton Oil Company, Paris, Tex. Cottonseed cake and cottonseed meal. 283,167; May 19; Serial No. 309,949; published Mar. 3, 1931. Class 46.
Spinner, Philip V., & Co., Chicago, Ill. Ornamental gift boxes and containers. 283,117; May 19; Serial No. 302,699; published Mar. 3, 1931. Class 2.
Spinner, Philip V., & Co., Chicago, Ill. Gift boxes and containers. 283,197; May 19; Serial No. 302,701; published Mar. 10, 1931. Class 2.
Standard Chemical Manufacturing Company, Omaha, Nebr. Inhalent for treatment of respiratory infections of poultry and hogs. 283,202; May 19; Serial No. 309,008; published Feb. 24, 1931. Class 6.
Staytite Company, The, Houston, Tex. Flame arrester and breathing valve. 283,087; May 19; Serial No. 310,075; published Mar. 3, 1931. Class 13.
Stelwagon Manufacturing Company, Philadelphia, Pa. Cementitious coatings in semiliquid form. 283,246; May 19; Serial No. 307,904; published Feb. 24, 1931. Class 12.
Stirn, L. & E., New York, N. Y. Silk piece goods, artificial-silk piece goods, etc. 283,133; May 19; Serial No. 309,038; published Feb. 24, 1931. Class 42.
Streator Brick Company, Streator, Ill. Face brick. 283,092; May 19; Serial No. 309,574; published Mar. 3, 1931. Class 12.
Streit, C. F. Mfg. Co., The, Cincinnati, Ohio. Household and office chairs and rockers. 283,122; May 19; Serial No. 303,129; published Mar. 3, 1931. Class 32.
Structural Waterproofing Co., Inc., New York, N. Y. Waterproofing preparations. 283,089; May 19; Serial No. 309,360; published Feb. 24, 1931. Class 12.
Sunbeam Motor Car Co., Ltd., The, Wolverhampton, England. Internal-combustion engines. 283,204; May 19; Serial No. 292,605; published Apr. 15, 1930. Class 23.
Swift and Company, Chicago, Ill. Glue. 283,188; May 19; Serial No. 308,913; published Mar. 3, 1931. Class 5.
Telefilm Company, The. (See Bohan, Joseph H.)
Transitone Automobile Radio Corporation. (See French Battery Company, assignor.)
Tropical Paint and Oil Company, The, Cleveland, Ohio. Roofing cement for roofs of all types. 283,131; May 19; Serial No. 302,753; published Aug. 12, 1930. Class 12.
Union Fence Co., Dekalb, Ill., assignor to The American Steel and Wire Company of New Jersey, Cleveland, Ohio. Wire fencing. 36,727; renewed July 9, 1931.
U. S. Manufacturing Corporation. (See United States Wire Mat Co.)
United States Wire Mat Co., by change of name to U. S. Manufacturing Corporation, Decatur, Ill. Implements for disabling or killing insects. 83,617; renewed Sept. 26, 1931.
Universal Draft Gear Attachment Co., Chicago, Ill. Hand wheels for car brakes. 283,208; May 19; Serial No. 290,987; published Mar. 10, 1931. Class 19.
Velvetina Company, Inc. (See Goodrich Drug Co., assignor.)
Voightländer & Sohn, Aktiengesellschaft, Brunswick, Germany. Photographic apparatus and accessories. 283,281; May 19. Class 26.
Warner Engineering Corporation, Ltd., Pomona, Calif. Electric welding torch. 283,102; May 19; Serial No. 309,578; published Mar. 3, 1931. Class 21.
Washington Building Lime Company, The, Engle, W. Va., and Baltimore, Md. Agricultural lime. 283,121; May 19; Serial No. 303,309; published Mar. 3, 1931. Class 10.
Webster Electric Company, Racine, Wis. Audio-frequency amplifiers, choke coils, electric pick-up tone arms, etc. 283,297; May 19. Class 21.
Welder, Helen, San Antonio, Tex. Napkin holders, napkin rings, napkin markers. 283,225; May 19; Serial No. 308,842; published Mar. 3, 1931. Class 28.
White, James F., & Co. Inc., New York, N. Y. Open-mesh linen cloth in the piece. 283,135; May 19; Serial No. 309,542; published Feb. 24, 1931. Class 42.
Whiting-Mead Co., Los Angeles, Calif. Composition tile. 283,249; May 19; Serial No. 308,270; published Feb. 24, 1931. Class 12.
Whitney Blake Company, The, Hamden, Conn. Electric wires and cables. 283,280; May 19. Class 21.
Williams, J. H., & Co., Buffalo, N. Y. Wrenches, wrench sets, wrench sockets, etc. 283,105; May 19; Serial No. 309,579; published Mar. 3, 1931. Class 23.
Willis, Charles L., Brooklyn, N. Y. Asbestos packing. 283,106; May 19; Serial No. 309,597; published Mar. 3, 1931. Class 35.
Wright, De Coster, Inc., St. Paul, Minn. Radio receiving sets, radio loud-speakers, electrical amplifying units, etc. 283,234; May 19; Serial No. 306,480; published Mar. 3, 1931. Class 21.
Württembergische Metallwarenfabrik, Geislinger-Steige, Germany. Stoves and lamps, lamp brackets, candlesticks, etc. 283,262; May 19; Serial No. 297,464; published Mar. 10, 1931. Class 34.
Wyckoff Macaroni Mfg. Co., Brooklyn, N. Y. Macaroni. 283,218; May 19; Serial No. 309,494; published Mar. 3, 1931. Class 46.
Zinsser, William H., assignor to William Zinsser & Co., Inc., New York, N. Y. Wood-polishing oil. 83,799; renewed Oct. 10, 1931.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Bradford County Egg Club, Athens, Pa. Bradco. For Eggs. 39,143; May 19.
Borgess Battery Company, Madison, Wis. Burgess Straight-Thru Exhaust Muffler. For Exhaust Mufflers. 39,144; May 19.
Central Waxed Paper Company, Chicago, Ill. Whole Wheat. For Bread. 39,145; May 19.
Central Waxed Paper Company, Chicago, Ill. Sliced. For Bread. 39,146; May 19.
Chenango Knitting Company, Inc., Sherburne, N. Y. Mercedes Hosiery Deluxe. For Women's Hosiery. 39,147; May 19.
Chocco-Yeast, Inc., Springfield, Mass. Chocco-Yeast. For Yeast Cakes. 39,148; May 19.
Davis, Chas. T., Pensacola, Fla. Davis' Union Remedy. For Medicinal Preparation. 39,149; May 19.
Delegator, Benjamin, Cincinnati, Ohio. Hebrew Movable Alphabet. For a Box for an Alphabet of Hebrew Letters Made in Wood and in Various Sizes. 39,150; May 19.
Drew, Jack J., Pittsburg, Okla. Boxkol. For Coal. 39,151; May 19.
Endo, Sute M., Honolulu, Hawaii. Plasco. For Preparation for Use in the Treatment of Local Inflammation and Congestion of All Kinds. 39,152; May 19.

Fla-Vo Krisp Company, The, Chicago, Ill. Fla-Vo-Krisp. For Roasted Salted Nuts. 39,153; May 19.
Hoague-Sprague Corporation, Lynn, Mass. I. S. Co. For Boxes. 39,154; May 19.
Hoague-Sprague Corporation, Lynn, Mass. The May Co. For Boxes. 39,155; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Joseph, Inc. For Boxes. 39,156; May 19.
Hoague-Sprague Corporation, Lynn, Mass. National Maid. For Boxes. 39,157; May 19.
Hoague-Sprague Corporation, Lynn, Mass. The Boardman Shoe Co. For Boxes. 39,158; May 19.
Hoague-Sprague Corporation, Lynn, Mass. The Cavalier Shoe. For Boxes. 39,159; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Smart Shoes. For Boxes. 39,160; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Arch Craft. For Boxes. 39,161; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Fashion Queen. For Boxes. 39,162; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Beverly Hills Vanities. For Boxes. 39,163; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Felser Bros. For Boxes. 39,164; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Modern Sport Girl. For Boxes. 39,165; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Nadell Bros. For Boxes. 39,166; May 19.
Hoague-Sprague Corporation, Lynn, Mass. La Parisienne. For Boxes. 39,167; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Irving Levy & Co. Inc. For Boxes. 39,168; May 19.
Hoague-Sprague Corporation, Lynn, Mass. The Hollywood Girl. For Boxes. 39,169; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Hudson Shoes. For Boxes. 39,170; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Betty Gale. For Boxes. 39,171; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Hurd Shoe Co. Inc. For Boxes. 39,172; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Susan Strong. For Boxes. 39,173; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Juvenile Footwear. For Boxes. 39,174; May 19.
Hoague-Sprague Corporation, Lynn, Mass. Monroe Bros. & Co. For Boxes. 39,175; May 19.
Hubinger Co., The, Keokuk, Iowa. Quick Elastic Hot Starch in 30 Seconds. For Starch. 39,176; May 19.
Kadane-Brown, Inc., Dallas, Tex. Mistletoe. For Salad Dressing. 39,177; May 19.
Kadane-Brown, Inc., Dallas, Tex. Mistletoe. For Sandwich Spread. 39,178; May 19.
Kadane-Brown, Inc., Dallas, Tex. Mistletoe. For Mayonnaise. 39,179; May 19.
Midway Chemical Co., Chicago, Ill. Jeweler's Polish. For Silver Polish. 39,180; May 19.
Midway Chemical Co., Chicago, Ill. Radiant De Lux Cleaning Fluid. For Cleaning Fluid. 39,181; May 19.
Moffat Coal Company, The, Denver, Colo. Moffat Coal. For Coal. 39,182; May 19.
Moffat Coal Company, The, Denver, Colo. Oak Creek Coal. For Coal. 39,183; May 19.
Northern Paper Mills, Green Bay, Wis. Arrowhead Crepe Tissue. For Toilet Paper. 39,184; May 19.
Pagano, Dominic, Fresno, Calif. Promised Land Grapes. For Grapes. 39,185; May 19.
Reefer's No-Moth, Inc., New York, N. Y. Reefer's No-Moth Cedaraire. For Preparations for Protection Against Moths. 39,186; May 19.
Regal Products Co., New York, N. Y. Mothine. For Preparation Which Kills Moths, Moth Eggs, and Larvæ. 39,187; May 19.
Saqui, David S., New York, N. Y. Seam-A-Dex. For Women's Hosiery or Stockings. 39,188; May 19.
Schulze Baking Company, Kansas City, Mo. 2 in 1 Butter-Nut. For Bread. 39,189; May 19.
Standard Brands Incorporated, New York, N. Y. Bonita. For Coffee. 39,190; May 19.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Andrews, O. B., Company, Chattanooga, Tenn. Cream of the Crop. For Fruits. 13,197; May 19.
Fisk Tire Co., Inc., The, Chicopee Falls, Mass. Win Nation-Wide Approval. For Tires. 13,198; May 19.
Fisk Tire Co., Inc., Chicopee Falls, Mass. Air-Flight Principle. For Tires. 13,199; May 19.
Hawaiian Pineapple Company, Ltd., San Francisco, and Honolulu, T. H. What Becomes of a Dole Pineapple. For Pineapple. 13,200; May 19.
Jones, Howard, doing business as Staybestos Brake Lining Co., Sellersville, Pa. Staybestos. For Asbestos Brake Lining. 13,201; May 19.
Squibb, E. R., & Sons, New York, N. Y. In return for '30-Seconds-Each-Night' (#34–BA–1931). For Liquid Petrolatum. 13,202; May 19.
Squibb, E. R., & Sons, New York, N. Y. In Return for '30-Seconds-Each-Night' (No. 34–AZ–1931). For Liquid Petrolatum. 13,203; May 19.
Staybestos Brake Lining Co. (See Jones, Howard.)

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aceta G. m. b. H., Berlin-Lichtenberg, Germany. Threads and yarns. 311,352; May 19. Class 43.
Alfe, Salvatore, doing business as S. Alfe Cigar Company, Philadelphia, Pa. Cigars. 310,966; May 19. Class 17.
Aluminum Company of America, Pittsburgh, Pa. Collapsible tubes. 312,830; May 19. Class 2.
Aluminum Company of America, Pittsburgh, Pa. Welding flux. 312,831–2; May 19. Class 6.
American Bleached Goods Company, Inc., New York, N. Y. Cotton piece goods. 312,033; May 19. Class 42.
American Institute of Banking, New York, N. Y. Booklets. 312,733; May 19. Class 38.
American Maize-Products Company, New York, N. Y. Syrups, corn oils, and cornstarch. 312,034; May 19. Class 46.
American Maize-Products Company, New York, N. Y. Gloss starch. 312,035; May 19. Class 6.
American Maize-Products Company, New York, N. Y. Corn salad oil. 312,036; May 19. Class 46.
Apex Oil Co., St. Louis, Mo. Gasoline. 312,170; May 19. Class 15.
Aquabar Waterproofing Products. (See Conrey, R. E.)
Armand Company, The, Des Moines, Iowa. Toilet powder. 312,280; May 19. Class 6.
Associated Apparel Industries, Inc., Chicago, Ill. Elastic webbing. 312,686; May 19. Class 42.
Bailey Company, Cleveland, Ohio. Men's and boys' clothing. 311,911; May 19. Class 39.
Baker, Edith K., Fort Myers, Fla. Conserves, marmalades, jellies, etc. 311,814; May 19. Class 46.
Bamber, Will'am, Banstead, Surrey, England. Constructional toys. 311,465; May 19. Class 22.
Barr & Creelman Co., Rochester, N. Y. Bathtubs, lavatory basins, toilet tanks, etc. 310,907; May 19. Class 13.
Barrett Company, The, New York, N. Y. Creosote oil. 295,417; May 19. Class 6.
Bauermeister, Chas. W., Co., Terre Haute, Ind. Canned fruits and vegetables, canned fish, peanut butter, etc. 311,643; May 19. Class 46.
Bennett Pumps Corporation, Muskegon Heights, Mich. Portable liquid dispensing apparatus. 312,038; May 19. Class 26.
Berry's, James B., Sons Company, Chicago, Ill. Gasoline and motor lubricating oil. 311,948; May 19. Class 15.
Beyer, Erich, Chicago, Ill. Animal watering troughs. 312,885; May 19. Class 50.
Bishop Company, The, North Attleboro, Mass. Ophthalmic mountings and parts thereof. 313,119; May 19. Class 26.
Blake Manufacturing Company, Springfield, Mass. Dry batteries. 312,638; May 19. Class 21.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 311,360; May 19. Class 42.
Bond Chemical Company. (See Harford, Earl R.)
Bowen, Walter W., doing business as Wafelteen Syrup Co., Miami, Fla. Table syrup. 309,224; May 19. Class 46.
Brach, E. J., & Sons, Chicago, Ill. Candy. 311,949; May 19. Class 46.
Bradley, Milton, Company, Springfield, Mass. Games. 298,426; May 19. Class 22.
Brand & Oppenheimer, Incorporated, New York, N. Y. Cotton piece goods. 307,147; May 19. Class 42.
British Enka Artificial Silk Company Limited, London, England. Piece goods made of cellulose. 303,947; May 19. Class 42.
British Enka Artificial Silk Company Limited, London, England. Braid made of cellulose. 310,751; May 19. Class 40.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

British Enka Artificial Silk Company Limited, London, England. Braid made of cellulose. 311,419; May 19. Class 40.
Burndy Engineering Company, Inc., New York, N. Y. Electrical connectors. 312,545; May 19. Class 21.
Cardinal Radio Mfg. Co. (See Long, Miles A.)
Carlin Comforts, Inc., New York, N. Y. Comfortables. 308,355; May 19. Class 42.
Carson Pirie Scott & Co., Chicago, Ill. Cotton piece goods. 297,848; May 19. Class 42.
Casteen Co., Inc., Union City, N. J. Foot cream. 312,793; May 19. Class 6.
Celanese Corporation of America, New York, N. Y. Fabrics made of cellulose derivatives. 312,599–600; May 19. Class 42.
Clark & Glendon Inc., New York, N. Y. Damask fabrics. 293,616; May 19. Class 42.
Conrey, R. E., doing business as Aquabar Waterproofing Products, Philadelphia, Pa. Moisture resistant compounds. 312,512; May 19. Class 12.
Cromwell Silver Mfg. Corp., New York, N. Y. Fruit bowls, bread trays, candy dishes, nut bowls, etc. 312,095; May 19. Class 13.
Current, James A., doing business as Current Medicine Co., Lorain, Ohio. Medicine. 312,551; May 19. Class 6.
Curtis Companies, Incorporated, Clinton, Iowa. Fabricated doors. 312,700; May 19. Class 12.
Czechoslovak Musical Instruments Company, New York, N. Y. Violins, violas, cellos, etc. 308,534; May 19. Class 36.
Dassonville, Michel, Paris, France. Knitted, netted, and textile fabrics. 306,001; May 19. Class 42.
Dassonville, Michel, Paris, France. Thread and yarn. 315,998; May 19. Class 43.
Deland, C. M., New York, N. Y. Woolen piece goods. 311,215; May 19. Class 42.
Dextone Company, The, New Haven, Conn. Base course blocks, plinths, pilaster and bases and shafts, etc. 312,554; May 19. Class 12.
Disk-O-Knowledge, Inc., New York, N. Y. Maps and charts. 312,292; May 19. Class 38.
Dow Chemical Company, The, Midland, Mich. Cleaning compositions. 270,310; May 19. Class 4.
Du Pont Rayon Company, Buffalo, N. Y. Yarns, threads, and filaments. 312,336; May 19. Class 43.
Durex Products Inc., New York, N. Y. Pessaries. 311,997; May 19. Class 6.
Duro Metal Products Company, Chicago, Ill. Automotive tools. 310,330; May 19. Class 23.
Echols Bros. Radiator Works, Fort Worth, Tex. Acetylene gas generators. 312,367; May 19. Class 34.
Edwards & Deutsch Lithographing Company, Chicago, Ill. Correspondence forms and partially printed forms sold as such. 309,771; May 19. Class 37.
Edwards, Omer H., doing business as Royal Digesto Co., Stamford, N. Y. Liquid medical preparation. 312,294; May 19. Class 6.
Elco Paint Products Inc., doing business as Elco Paint Sales Co., New York, N. Y. Paints, primers, woodfillers, etc. 306,673; May 19. Class 16.
Enterprise Manufacturing Company, The, Akron, Ohio. Fishing floats. 313,236; May 19. Class 22.
Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reels. 313,237; May 19. Class 22.
Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reel cases. 306,734; May 19. Class 22.
Essex Rubber Company Inc., Trenton, N. J. Rubber play balls and swimming tubes. 312,513; May 19. Class 22.
Europa Malt Syrup Co. (See Pabst Corporation.)
Fay, Edward J., New York, N. Y. Hair and toilet brushes. 312,368; May 19. Class 29.
Fay, Edward J., New York, N. Y. Perfumes, face, talcum and bath powders, toilet water, etc. 312,369; May 19. Class 6.
Fey, Aruthur W., Hazleton, Pa. Marshmallow whip. 312,143; May 19. Class 46.
Fifth Avenue Platinum Shops, Inc., New York, N. Y. Finger rings and other articles of jewelry. 312,514; May 19; Class 28.
Fish, Albert A., doing business as Richards Manufacturing Company, Philadelphia, Pa. Mixture control valves for carbureters. 312,179; May 19. Class 23.
Fitler, Edwin H., Co., The, Philadelphia, Pa. Bundling twine. 313,339; May 19. Class 7.
Fitler, Edwin H., Co., The, Philadelphia, Pa. Manila rope. 313,340; May 19. Class 7.
Fournet, Sudney C., New Orleans, La. Wall board and tile. 312,755; May 19. Class 12.
France, J. H., Refractories Co., Snow Shoe, Pa. Refractory cement. 312,515; May 19. Class 12.
France, J. H., Refractories Co., Snow Shoe, Pa. Refractory concrete. 312,516; May 19. Class 12.
Fratelli Branca, Milan, Italy. Stomach bitters. 272,395–7; May 19. Class 6.
Fulflo Specialties Company, Blanchester, Ohio. Metal valves. 312,339; May 19. Class 13.
General Insulating & Mfg. Co., Alexandria, Ind. Heat and cold insulation material. 309,427–8; May 19. Class 12.
Gento Laboratories. (See Steigrod, Samuel.)
Gianikos, Emanuel, Cleveland, Ohio. Medicine. 307,647; May 19. Class 6.
Glatzer, Gustave, New York, N. Y. Rose disinfectant, insecticides, perfumes, rouge, etc. 303,281; May 19. Class 6.
Golden Eagle Soap Company, San Francisco, Calif. Soap. 307,943; May 19. Class 4.
Good Story Magazine Company, Inc., New York, N. Y. Magazine. 301,900; May 19. Class 38.
Griffith Laboratories, Inc., The, Chicago, Ill. Curing salt. 312,219; May 19. Class 6.
Guidetti, Ferruccio, New York, N. Y. Water closets, bidets, lavatories, etc. 306,297; May 19. Class 13.
Hahn Department Stores, Inc., Wilmington, Del. Hosiery. 311,915; May 19. Class 39.
Hallis-Karlebach, Helan, New York, N. Y. Clothes costumers. 311,333; May 19. Class 32.
Halsted Oil Company, Inc., New York, N. Y. Preparation for use as a rust solvent and lubricant, and lubricating oils and greases. 288,378; May 19. Class 15.
Hansen, Thorkild N., Chicago, Ill. Powder used in preparation of food drinks. 307,774; May 19. Class 46.
Hanson-Van Winkle-Munning Company, Matawan, N. J. Buffing compound. 312,647; May 19. Class 4.
Harford, Earl R., doing business as Bond Chemical Company, Middletown, N. Y. Cleaning and bleaching disinfectant. 312,951; May 19. Class 6.
Hartford Products Corporation, Hartford, Conn. Razor stroppers. 313,037; May 19. Class 4.
Harvey, Leo M., doing business as Harvey Machine Company, Los Angeles, Calif. Fruit and nut clippers and shears. 312,709; May 19. Class 23.
Haywood Company, The. (See Wood, Karl.)
Heller, R. C., Co., Inc., Baltimore, Md. Mattresses. 306,238; May 19. Class 32.
Higgins, John, & Company, Ltd., Waterford, N. Y. Medicinal sprays and inhalants. 312,782; May 19. Class 6.
Highfill, Ernest E., doing business as The Safe Way Auto Light Co., Los Angeles, Calif. Electric lamps. 309,588; May 19. Class 21.
Hilborn, J., & W. E. Reed, Inc., New York, N. Y. Hosiery and sweaters. 309,600; May 19. Class 39.
Hill, Sam M., doing business as Hill's Mfg. Co., Galveston, Tex. Insecticide. 287,703; May 19. Class 6.
Home Billiardette Table Company, Inc., The, Chicago, Ill. Pool tables. 311,781; May 19. Class 22.
Hooper, Claude E., New York, N. Y. Games employing boards or charts, and boards or charts for playing games. 312,758–9; May 19. Class 22.
Hooster Manufacturing Company, The, Newcastle, Ind. Furniture. 311,477; May 19. Class 32.
Houston Salt Co., Houston, Tex. Salt. 311,901; May 19. Class 6.
Hudson Valley Fuel Corporation, Troy, N. Y. Sulphate of ammonia for fertilizer. 312,918; May 19. Class 10.
Hume-Sinclair Coal Mining Company, Kansas City, Mo. Coal. 312,482; May 19. Class 1.
Hurlbut Paper Company, South Lee, Mass. Writing and printing paper. 311,733; May 19. Class 37.
Hydropel Process Company, Boston, Mass. Woolen, silk, rayon, etc., piece goods and piece goods containing a mixture of same. 312,586; May 19. Class 42.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Calcium compound. 312,188; May 19. Class 6.
International Merchandising Syndicate, Inc., New York, N. Y. Mattress ticking. 300,281; May 19. Class 42.
Ivins', J. S., Son, Inc., Philadelphia, Pa. Cookies, cakes and crackers. 297,916; May 19. Class 46.
Jordeau, Jean, Inc., South Orange, N. J. Depilatories. 312,433; May 19. Class 6.
Junkers, Hugo, Dessau, Germany. Electrically heated boilers, electrical stoves and radiators, etc. 279,925; May 19. Class 21.
Junkers, Hugo, Dessau, Germany. Gas heaters and stoves, ventilating fans and coolers, oil and gas burners, etc. 279,932; May 19. Class 34.
Juvenile Shoe Corporation of America, The, Aurora, Mo. Boots and shoes. 312,102; May 19. Class 39.
Kahn, Maxwell M., doing business as Maxwell Rubber Products, Belleville, N. J. Toy animals and other toy figures. 312,653; May 19. Class 22.
Keith Corporation, Chicago, Ill. Magazines. 298,574; May 19. Class 38.
Keney, Victor, Woodside, Long Island, N. Y. Doll eyes and lashes, dolls, face masks, and animal toys. 313,245; May 19. Class 22.
Klee & Coleman, Indianapolis, Ind. Maltless beverages and sirups and extracts for making the same. 313,193; May 19. Class 45.
Klin, Edwin J., Chicago, Ill. Golf clubs. 313,194; May 19. Class 22.
Lavietes, David P., doing business as Pequot Soap Works, Inc., Brooklyn, N. Y. Laundry soap. 312,483; May 19. Class 4.
Lesher, Whitman & Co., Inc., New York, N. Y. Bedspreads, made-up window draperies, and a fabric. 311,529; May 19. Class 42.
Long, Miles A., doing business as Cardinal Radio Mfg. Co., Los Angeles, Calif. Radio receiving sets. 309,738; May 19. Class 21.

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Lotito, Frank, doing business as West Coast Wine Jelly Co., Los Angeles, Calif. General medicinal tonic. 312,923; May 19. Class 6.
Lovett, Howard E., Pittsburgh, Pa. Metal boxes. 311,842; May 19. Class 2.
Lowe, Joe, Corporation, Brooklyn, N. Y. Edible fats. 312,054; May 19. Class 46.
Luther Grinder & Tool Company, Milwaukee, Wis. Sharpening grinders. 311,389; May 19. Class 23.
Mantas, George K., Brooklyn, N. Y. Apparatus for table golf. 311,787; May 19. Class 22.
Marathon Razor Blade Co., Inc., Irvington, N. J. Razors, pen knives, scissors, etc. 312,263; May 19. Class 23.
Mar-Vel Products Co. (See Vinje, Hulda A.)
Marvex Inc., Canton, Ohio. Composition material. 306,822; May 19. Class 12.
Maxwell Rubber Products. (See Kahn, Maxwell M.)
May Company, J. L., The, New York, N. Y. Pintickets, labels and tags. 311,584; May 19. Class 37.
Mayflower Beverage Co., Inc., Jamaica Plain, Mass. Nonalcoholic maltless beverages, syrups and extracts for making same, and ginger ale. 300,214; May 19. Class 45.
Meyer, George M., doing business as Meyer Food Products Co., Cincinati, Ohio. Horse radish, horse radish and mustard, Mexican style horse radish. 311,439; May 19. Class 46.
Munsch Laboratories, Inc., New York, N. Y. Compound of plantago psyllium. 312,619; May 19. Class 6.
New Balance Arch Company, Inc., North Cambridge, Mass. Boots and shoes. 312,115; May 19. Class 39.
New England Fish Company, Seattle, Wash. Fish and seafoods. 284,413; May 19. Class 46.
New England Fish Company, Seattle, Wash. Fish and seafoods. 284,415; May 19. Class 46.
Newman, I., & Sons, Inc., New York, N. Y. Device or apparatus for determining basic types of the human figure to assist in the designing of foundation garments. 313,090; May 19. Class 26.
Ninety-nine Chemical Corporation, Memphis, Tenn. Insecticides. 312,621; May 19. Class 6.
Norwich Pharmacal Company, The, Norwich, N. Y. Liquid demulcent preparation. 312,059; May 19. Class 6.
Nyal company, Detroit, Mich. Candy. 306,960; May 19. Class 46.
Ohio State Automobile Association, Columbus, Ohio. Publications. 312,526; May 19. Class 38.
Omaha Cap Manufacturing Company, Omaha, Nebr. Caps. 277,637; May 19. Class 39.
Omaha Steel Works, Omaha, Nebr. Steel castings. 319,986; May 19. Class 14.
Orent, Jacob L., Brooklyn, N. Y. Fur coats. 311,484; May 19. Class 39.
Pabst Corporation, doing business as Europa Malt Syrup Co., Milwaukee, Wis. Malt syrup. 312,812; May 19. Class 46.
Pacific Products, Inc., San Francisco, Calif. Mineral water. 292,951; May 19. Class 45.
Pacific Remedy Corporation, New York and Brooklyn, N. Y. Medicinal preparation. 312,570; May 19. Class 6.
Paraffine Companies, Inc., The, San Francisco, Calif. Paint brushes. 297,760; May 19. Class 29.
Pelletier, Michael D., New York, N. Y. Cartons, advertising circulating letters, and a periodical publication. 310,586; May 19. Class 38.
Pequot Soap Works, Inc. (See Lavietes, David P.)
Peteb Corporation, The, Lowell, Mass. Cleansing cream, face cream, and cold cream. 312,323; May 19. Class 6.
Pioneer Sales Co., Philadelphia, Pa. Malt extract. 309,867; May 19. Class 46.
Polar Ware Company, Sheboygan, Wis. Vitreous enamel pots, pans and kettles. 310,836; May 19. Class 13.
Premier Jewelry Company, New York, N. Y. Unbreakable necklace cables. 312,493–4; May 19. Class 28.
Princess Pat Products Limited, Toronto, Ontario, Canada. Hair nets. 312,161; May 19. Class 42.
Propper-McCallum Hosiery Co., Inc., New York, N. Y. Hosiery. 312,814; May 19. Class 39.
Pulitzer Publishing Company, St. Louis, Mo. Section department or column of newspapers. 312,625; May 19. Class 38.
Pulver Company, Inc., Rochester, N. Y. Chewing gum. 310,072; May 19. Class 46.
Puresweet Confections, Inc., Tulsa, Okla. Candy. 305,827; May 19. Class 46.
Purity Oats Company, Keokuk, Iowa. Printed mailing card. 311,928; May 19. Class 38.
Rand Shoe Company, New Orleans, La. Leather shoes and boots. 296,198; May 19. Class 39.
Renotrat Corporation of America, New York, N. Y. Preparation for kidney diseases. 312,571; May 19. Class 6.
Research Products Corporation, New York, N. Y. Dental alloy. 312,816; May 19. Class 44.
Richards Laboratories, Duluth and Grand Rapids, Minn. Preparation for the treatment of cold in the head, throat, and chest. 311,931; May 19. Class 6.
Richards Manufacturing Company. (See Fish, Albert A.)
Rockola, David Co., Chicago, Ill. Weighing scales. 312,390; May 19. Class 26.
Roethlisberger & Co. Inc., New York, N. Y. Cheese. 311,789; May 19. Class 46.
Ronuk, Limited, doing business as Ronuk Sanitary Polish Works, Portslade, near Brighton, England. Floor polish, furniture cream, floor dressing, and motor car polish. 311,203; May 19. Class 16.
Royal Digesto Co. (See Edwards, Omer H.)
Royal Lace Paper Works, Inc., The, Brooklyn, N. Y. Paper products. 312,497; May 19. Class 37.
Rurup, Ernest G., doing business as Scientific Laboratories of America, San Francisco, Calif. Dental creams. 312,065; May 19. Class 6.
Russell Manufacturing Company, The, Middletown, Conn. Belting made of rubber for power transmission, etc. 312,573; May 19. Class 35.
Rutecki, Valeria, Philadelphia, Pa. Food preparation in liquid form. 308,493; May 19. Class 46.
Safe Way Auto Light Co., The. (See Highfill, Ernest E.)
Sanimetal Tile Corporation, New York, N. Y. Enamel tiles. 311,551; May 19. Class 12.
Schellenberg, Hermann, Berlin, Germany. Compound and liquid for the hair, hair restorer, etc. 302,647; May 19. Class 6.
Scientific Laboratories of America. (See Rurup, Ernest G.)
Scott, Mrs. F. Andrew, Los Angeles, Calif. Cream for the finger-nails. 308,223; May 19. Class 6.
Sheetpaint Products Corporation, New York, N. Y. Wall coverings of coated paper. 311,004; May 19. Class 37.
Silva, John R., doing business as John R. Silva & Co., Brooklyn, N. Y. Coffee, olive oil, cocoa, tea, etc. 307,743; May 19. Class 46.
Singer Manufacturing Company, The, Elizabeth, N. J., and New York, N. Y. Electric vacuum cleaners and dust bags therefor. 132,535; May 19. Class 21.
Slater, S., & Sons, Inc., New York, N. Y. Pile fabrics and/or combinations thereof. 310,957; May 19. Class 42.
Soapless Foam, Limited, London, England. Aerating equipment. 310,493; May 19. Class 21.
Societe Anonyme Jean Patou, Paris, France. Perfumes, face lotions, face powder, talcum powder, etc. 312,316; May 19. Class 6.
Spence, Dellas J., doing business as Taneycomo Fish Bait Company, Branson, Mo. Prepared fish bait. 312,393; May 19. Class 22.
Spencer Thermostat Company, Cambridge, Mass. Electric switches. 310,888; May 19. Class 21.
Stameteo Broom & Mfg. Co. Inc., St. Paul, Minn. Brooms and mop attachments for brooms. 306,291; May 19. Class 29.
Stanley Works, The, New Britain, Conn. Electric tools. 311,936; May 19. Class 21.
Steigrod, Samuel, doing business as Gento Laboratories, Paulsboro, N. J., assignor to L. Weinberk Company, Philadelphia, Pa. Medicine. 310,076; May 19. Class 6.
Sterling Products Co., Evansville, Ind. Malt extract. 312,964; May 19. Class 46.
Stewart, Mary E., doing business as Stewart & Cobb Chemical Co., Covington, Ky. Compound for deodorizing the breath. 311,630; May 19. Class 6.
Stoddard, G. S., & Co., Inc., New York, N. Y. Medicinal tablets. 312,779; May 19. Class 6.
Straus, Royer & Straus, Inc., Baltimore, Md. Dresses, shirts, shorts, blouses, etc. 312,500; May 19. Class 39.
Stuart Bros. Corporation, Bartow, Fla. Fresh citrus fruits. 310,496; May 19. Class 46.
Taneycomo Fish Bait Company. (See Spence, Dellas J.)
Thum, O. & W., Company, The, Grand Rapids, Mich. Sticky fly paper. 310,959; May 19. Class 50.
Timme, E. F., & Son, New York, N. Y. Pile fabrics. 312,581; May 19. Class 42.
Train, John, Pipestone, Minn. Card games. 311,803; May 19. Class 22.
Twin Cities Distributing Company, The, Covington, Ky. Oils and greases. 312,208; May 19. Class 15.
Union Oil Company of California, Los Angeles, Calif. Lubricating oils. 299,531; May 19. Class 15.
United States Coast Artillery Association, Washington, D. C. Periodical. 311,211; May 19. Class 38.
United States Rubber Company, New York, N. Y. Boots and shoes. 311,631; May 19. Class 39.
Universal Bottled Gas Corporation, Rochester, N. Y. Liquid gas. 308,870; May 19. Class 6.
Van Beuren Corporation, The, New York, N. Y. Motion picture films. 208,046; May 19. Class 26.
Veldown Company, Inc., New York, N. Y. Cleansing tissues. 310,000; May 19. Class 37.
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Refractory stones and bricks, silica stones and bricks, etc. 296,157; May 19. Class 12.
Vinje, Mulda A., doing business as Mar-Vel Products Co., Chicago, Ill. Soothing lotions, salve or ointment for mouth gum irritations. 312,324; May 19. Class 6.
Visco-Ment Corporation, Chicago, Ill. Emulsified asphalt. 312,394; May 19. Class 12.
Viviano, G., Inc., Detroit, Mich. Fish paste, fish products, jellies. 303,356; May 19. Class 46.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Voorhies, William H., Decatur, Ill. Antiseptic medicinal preparation. 311,988; May 19. Class 6.
Wafelteen Syrup Co. (See Bowen, Walter W.)
Waite, Thresher Corporation, Providence, R. I. Jewelry. 312,073; May 19. Class 28.
Wall, Ruben E., doing business as Whoopee Pipes, Buffalo, N. Y. Smoking pipes. 313,064; May 19. Class 8.
Wasson, Augusta, Whitestone, Long Island, N. Y. Dolls. 311,012; May 19. Class 23.
Watson, Thomas A., doing business as Watson Chemical Laboratories, Chicago, Ill. Medical compound. 309,837; May 19. Class 6.
Wedler-Shuford Co., The, St. Louis, Mo. Infant's textile napkins. 312,022; May 19. Class 42.
Wehrle Company, The, Newark, Ohio. Stoves and ranges. 310,815; May 19. Class 34.
Weidlich Bros. Mfg. Co., Bridgeport, Conn. Trophies. 311,857; May 19. Class 28.
Weinberg, L., Company. (See Steigrod, Samuel, assignor.)
West Coast Knitting Mills, Los Angeles, Calif. Swimming suits. 311,294; May 19. Class 39.
West Coast Wine Jelly Co. (See Lotito, Frank.)
Western Precipitation Company, Los Angeles, Calif. Apparatus for subjecting gases to centrifugal action. 310,499; May 19. Class 23.
Wholesale Radio Service Co., Inc., Wilmington, Del., and New York, N. Y. Sporting and athletic goods. 311,455; May 19. Class 22.
Whoopee Pipes. (See Wall, Ruben E.)
Wilson-Jones Company, Chicago, Ill. Visible card index cabinet. 312,077; May 19. Class 32.
Wolverine Supply & Manufacturing Company, Pittsburgh, Pa. Toy sets. 318,263; May 19. Class 22.
Wood, Karl, doing business as The Haywood Company, Memphis, Tenn. Nasal oils. 311,897; May 19. Class 6.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Kid leather made from hair sheepskin. Castle Kid Co. 83,221; renewed Aug. 29, 1931.
Leather made of calf, kip, and cattle hides, Chrome-tanned. A. F. Gallun & Sons. 83,572; renewed Sept. 26, 1931.
Leather made of calf, kip, and cattle hides, Vegetable-tanned. A. F. Gallun & Sons. 83,571; renewed Sept. 26, 1931.
Leather made of calf, kip, and cattle hides, Vegetable-tanned. A. G. Gallun & Sons. 83,573; renewed Sept. 26, 1931.

CLASS 2

Bags, Paper. Brooklyn Standard Bag Co. Inc. 283,170–1; May 19; Serial Nos. 310,244–5; published Mar. 10, 1931.
Boxes and containers, Gift. Philip V. Spinner & Co. 283,197; May 19; Serial No. 302,701; published Mar. 10, 1931.
Boxes and containers, Ornamental gift. Philip V. Spinner & Co. 283,117; May 19; Serial No. 302,699; published Mar. 3, 1931.
Boxes, Dispensing. Iowa Fiber Box Company. 283,164; May 19; Serial No. 309,861; published Mar. 10, 1931.
Cans, Paper or cardboard. Iowa Fiber Box Company. 283,115; May 19; Serial No. 305,863; published Mar. 3, 1931.
Jardinières, vases, pails, etc. American Lace Paper Co. 283,198; May 19; Serial No. 302,800; published Mar. 10, 1931.
Pails and cartons, Paper food. Menasha Products Company. 283,295; May 19.
Vanity cases and similar pocket outfits, Empty base metal. C. Paton. 283,207; May 19; Serial No. 291,021; published Mar. 3, 1931.

CLASS 4

Soaps and soap powders. K. A. Lingner. 83,417; renewed Sept. 12, 1931.

CLASS 5

Adhesive paste. "Glov" Manufacturing Company. 82,596; renewed July 11, 1931.
Adhesive tape. Griswoldville Manufacturing Company. 283,165; May 19; Serial No. 309,814; published Mar. 3, 1931.
Glue. Swift and Company. 283,188; May 19; Serial No. 308,913; published Mar. 3, 1931.
Glues. J. & G. Cox, Limited. 82,423; renewed June 27, 1931.

CLASS 6

Adhesive plaster, Oxid-of-zinc. Seabury & Johnson. 83,694; renewed Oct. 3, 1931.
Antifreeze solution, liquid preparations for stopping leaks in automobile radiators, etc. Puritan Soap Company. 283,240–1; May 19; Serial No. 307,289–90; published Feb. 24, 1931.
Antiseptics. Pepsodent Co. 283,088; May 19; Serial No. 309,284; published Feb. 24, 1931.
Chemical, Mothproofing and repellant. National Moth-Proofing Service. 283,213; May 19; Serial No. 287,714; published Mar. 3, 1931.
Chemicals. Badische Anilin- & Soda-Fabrik. 83,541–2; renewed Sept. 26, 1931.
Compound for relieving stomach distress. C. F. Munroe. 283,216; May 19; Serial No. 305,203; published Mar. 3, 1931.
Compound tablet for prolonging bloom of life of cut flowers. F. L. Sigmund. 283,244; May 19; Serial No. 307,690; published Feb. 24, 1931.
Cough compound. Andre Co. 283,245; May 19; Serial No. 307,757; published Mar. 3, 1931.
Cream, toilet cream, talcum powder, etc., Massage-. Goodrich Drug Co. 82,597; renewed July 11, 1931.
Creams for disorders of the skin. B. Borowikow. 283,247; May 19; Serial No. 308,006; published Mar. 3, 1931.
Disinfectants, chemical products, chemicals, etc. Deutsche Hydrierwerke, A.-G. 283,265; May 19; Serial No. 298,430; published Mar. 3, 1931.
Facial pack for bleaching and softening the skin, etc. Bonolila Laboratories, Inc. 283,250; May 19; Serial No. 308,352; published Mar. 3, 1931.
Inhalant for treatment of respiratory infections of poultry and hogs. Standard Chemical Manufacturing Company. 283,202; May 19; Serial No. 309,008; published Feb. 24, 1931.
Liniment. Pat Chemical Co. 283,248; May 19; Serial No. 308,216; published Feb. 24, 1931.
Liquid preparation for cleansing, etc. Hilex Company. 283,239; May 19; Serial No. 307,095; published Mar. 3, 1931.
Lotion to be applied to the body to prevent sunburn or exposure. Clarkson, Inc. 283,283; May 19.
Medicinal compound. W. H. Fraser. 283,257; May 19; Serial No. 308,985; published Feb. 24, 1931.
Medicinal oil. C. S. Johnson. 283,259; May 19; Serial No. 294,734; published Mar. 3, 1931.
Medicinal remedies. B. S. McKean & Co. 36,638; renewed June 25, 1931.
Medicines, Herb. Monicke Herb Company. 83,684; renewed Oct. 3, 1931.
Ointment to be used for the treatment of ringworm of the feet and genitocrural region. A. I. O. Company. 283,219; May 19; Serial No. 304,711; published Mar. 3, 1931.
Perfume, extract, and toilet water. Lanvin Parfums, Inc. 283,251; May 19; Serial No. 308,449; published Feb. 24, 1931.
Perfumery. Sociedad Vinicola, S. & L. Durlacher. 82,837; renewed July 25, 1931.
Pharmaceutical preparation for the treatment of coughs, colds, etc. Dr. C. J. Penichet. 283,242; May 19; Serial No. 307,367; published Feb. 24, 1931.
Pharmaceutical preparations. Fabrik Chem. Pharm. Präparate Dallmann & Co. 283,284; May 19.
Preparation for use in the treatment of cardiac conditions. Grisard Laboratories, Incorporated. 283,091; May 19; Serial No. 309,472; published Mar. 3, 1931.
Preparation in tablet and gelatine form, Venereal disease. A. Karreth. 283,221; May 19; Serial No. 302,221; published Feb. 24, 1931.
Preservative, Meat. Figaro Chemical Co. 78,783; renewed July 12, 1930.
Supplies principally used by morticians. National Selected Morticians. 283,253; May 19; Serial No. 308,514; published Feb. 24, 1931.
Toilet water. Crusellas Rhum Quinquina Co. 283,255; May 19; Serial No. 308,858; published Mar. 3, 1931.
Tonic. Knoll & Co. 36,747; renewed July 16, 1931.
Tonic, brilliantine, and cleansing cream, Scalp. M. F. Lewis. 283,236; May 19; Serial No. 263,272; published Feb. 24, 1931.

CLASS 7

Rope, Wire. Sears, Roebuck and Co. 283,148; May 19; Serial No. 310,536; published Mar. 10, 1931.

CLASS 8

Pipes, Tobacco. R. J. Reynolds Tobacco Company. 82,470; renewed June 27, 1931.

CLASS 9

Nitroglycerin, ammonium-nitrate dynamites, black powder, etc. Burton Explosives, Inc. 283,145; May 19; Serial No. 310,004; published Mar. 10, 1931.
Shotguns, rifles, pistols, and gun cases. Browning Arms Company. 283,189; May 19; Serial No. 304,648; published Oct. 14, 1930.

CLASS 10

Fertilizers. A. O. Meyer. 82,621; renewed July 11, 1931.

Lime, Agricultural. Washington Building Lime Company. 283,121; May 19; Serial No. 303,309; published Mar. 3, 1931.

CLASS 11

Carbon paper. Horder's Inc. 283,103; May 19; Serial No. 309,523; published Mar. 3, 1931.

CLASS 12

Asphalt and magnesite materials, Emulsified. Selby, Battersby & Co. 283,153; May 19; Serial No. 309,178; published Feb. 24, 1931.
Asphalt, pavement materials, etc. American bitumuls Company. 283,217; May 19; Serial No. 305,688; published Mar. 3, 1931.
Brick. Streator Brick Company. 283,092; May 19; Serial No. 309,574; published Mar. 3, 1931.
Cement, Roofing. Tropical Paint and Oil Company. 283,131; May 19; Serial No. 302,753; published Aug. 12, 1930.
Cementitious coatings in semiliquid form. Stelwagon Manufacturing Company. 283,246; May 19; Serial No. 307,904; published Feb. 24, 1931.
Composition tile. Whiting-Mead Co. 283,249; May 19; Serial No. 308,276; published Feb. 24, 1931.
Compounds for roadmaking, Bituminous. British Taroleum Company. 283,090; May 19; Serial No. 309,409; published Feb. 24, 1931.
Emulsions, Bituminous. Pioneer Paper Company. 283,093; May 19; Serial No. 309,602; published Mar. 3, 1931.
Flooring and trim, Hardwood. Bradley Lumber Company of Arkansas. 283,252; May 19; Serial No. 308,475; published Mar. 3, 1931.
Lumber, beams, scantling, etc. Jackson Lumber Company. 283,254; May 19; Serial No. 308,547; published Mar. 3, 1931.
Plaster, Acoustical. Kalite Company. 283,243; May 19; Serial No. 307,529; published Dec. 30, 1930.
Preparations, Waterproofing. Structural Waterproofing Co. 283,089; May 19; Serial No. 309,360; published Feb. 24, 1931.
Sash, Steel. Federal Steel Sash Company. 283,256; May 19; Serial No. 308,885; published Feb. 24, 1931.
Thermal insulating paper. Mosinee Paper Mills Company. 283,238; May 19; Serial No. 3066,278; published Feb. 24, 1931.
Tile, glazed and unglazed clay building. Clay Products Company, Inc. of Indiana. 283,094; May 19; Serial No. 309,770; published Mar. 3, 1931.
Tiles and foundation sheets for tiles, Wall and floor. Porcelain Tile Company. 283,220; May 19; Serial No. 302,598; published Mar. 3, 1931.
Weather strips, Metal bound felt. Protecto Manufacturing Company. 283,263; May 19; Serial No. 297,777; published Feb. 24, 1931.

CLASS 13

Fencing, Wire. Union Fence Co. 36,727; renewed July 9, 1931.
Frames, Metal sign or display. J. H. Bohan. 283,224; May 19; Serial No. 308,851; published Mar. 3, 1931.
Staples. National Electric Appliance Corporation. 283,187; May 19; Serial No. 308,834; published Mar. 10, 1931.
Toilet seats. Kohler Company. 283,271; May 19; Serial No. 300,285; published Mar. 3, 1931.
Valve, Flame arrestor and breathing. Staytite Company. 283,087; May 19; Serial No. 310,075; published Mar. 3, 1931.
Valves. Ohio Injector Company. 283,154–5; May 19; Serial Nos. 309,698–9; published Mar. 10, 1931.
Wire fabric. New York Wire Cloth Company. 283,169; May 19; Serial No. 310,225; published Mar. 10, 1931.

CLASS 14

Rods, sand castings, and forgings. Mueller Brass Co. 283,119; May 19; Serial No. 308,382; published Mar. 3, 1931.
Welding unions. Bonney Forge & Works. 283,140; May 19; Serial No. 309,842; published Feb. 24, 1931.

CLASS 15

Lubricants. New York & New Jersey Lubricant Co. 37,175; renewed Oct. 8, 1931.
Oils and gasoline, Motor fuel. Derby Oil Company. 283,222; May 19; Serial No. 308,980; published Mar. 3, 1931.

CLASS 16

Oil, Wood-polishing. W. H. Zinsser. 83,799; renewed Oct. 10, 1931.

CLASS 17

Tobacco, cigars, cigarettes, and snuff, Smoking and chewing. R. J. Reynolds Tobacco Company. 82,471; renewed June 27, 1931.

CLASS 19

Automobiles and constructive parts thereof. Societe Anonyme des Usines Renault. 283,182; May 19; Serial No. 309,398; published Mar. 10, 1931.
Automobiles and constructive parts thereof. Societe Anonyme des Usines Renault. 283,183; May 19; Serial No. 309,400; published Mar. 10, 1931.
Automobiles and motor-driven trucks and structural parts thereof. General Motors Corporation. 283,086; May 19; Serial No. 310,014; published Mar. 3, 1931.
Wheels for car brakes, Hand. Universal Draft Gear Attachment Co. 283,208; May 19; Serial No. 290,987; published Mar. 10, 1931.

CLASS 20

Coverings, both piece goods and rugs, Felt base and similar floor. Armstrong Cork Company. 283,291; May 19.
Oilcloth. Andrew McLean Company. 283,192; May 19; Serial No. 306,866; published Mar. 10, 1931.

CLASS 21

Amplifiers, choke coils, electric pick-up tone arms, etc., Audio-frequency. Webster Electric Company. 283,297; May 19.
Batteries, Dry-cell. French Battery Company. 283,276; May 19; Serial No. 294,297; published Mar. 3, 1931.
Batteries, Storage "A" and "B". Sears, Roebuck and Co. 283,215; May 19; Serial No. 286,279; published Sept. 24, 1929.
Electric heating elements for radiant heaters. Eagle Electric Mfg. Co. 283,298; May 19.
Electric lighting outfits and fittings, Portable. I. F. Dash. 283,099; May 19; Serial No. 309,375; published Mar. 3, 1931.
Electric store signs. J. Granat. 283,230; May 19; Serial No. 307,715; published Mar. 3, 1931.
Electric welding torch. Warner Engineering Corporation. 283,102; May 19; Serial No. 309,578; published Mar. 3, 1931.
Electric wires and cables. Whitney Blake Company. 283,280; May 19.
Electrically-operated audible warning devices. Motometer Company. 283,214; May 19; Serial No. 286,997; published Mar. 3, 1931.
Electron Tubes. Champion Radio Works, Inc. 283,277; May 19; Serial No. 294,502; published Feb. 3, 1931.
Flashlights. Bond Electric Corporation. 283,098; May 19; Serial No. 309,259; published Mar. 3, 1931.
Machines and apparatus for electric and electro-autogenous cutting, etc. "Griesogen" Griesheimer Autogen Verkaufs-Gesellschaft m. b. H. 283,084; May 19; Serial No. 309,656; published Mar 3, 1931.
Radio and picture receiving and transmitting sets. British Radiostat Corporation Limited. 283,179; May 19; Serial No. 310,281; published Mar. 10, 1931.
Radio antenna. Goldberg Brothers. 283,113; May 19; Serial No. 306,438; published Mar. 3, 1931.
Radio receiving instruments and station wave length indicators. F. A. D. Andrea, Inc. 283,228; May 19; Serial No. 308,180; published Mar. 3, 1931.
Radio receiving sets and parts thereof. General Motors Radio Corporation. 283,227; May 19; Serial No. 308,472; published Mar. 3, 1931.
Radio receiving sets, radio loudspeakers, electrical amplifying units, etc. Wright, De Coster, Inc. 283,234; May 19; Serial No. 306,480; published Mar. 3, 1931.
Resistance units, rheostats, switches, etc. Hardwick, Hindle, Inc. 283,212; May 19; Serial No. 288,335; published Mar. 3, 1931.
Signaling apparatus, Elevator. Elevator Supplies Company. 283,296; May 19.

CLASS 22

Cards, Paying. A. P. Eckley. 283,258; May 19; Serial No. 294,628; published Mar. 10, 1931.
Floats and water boards, Bathing. C. C. Harris. 283,180; May 19; Serial No. 309,241; published Mar. 10, 1931.
Golf balls. Edwards & Walker Company. 283,172; May 19; Serial No. 310,639; published Mar. 10, 1931.

CLASS 23

Blades, Cutter. E. C. Atkins and Company. 283,211; May 19; Serial No. 288,832; published Nov. 26, 1929.
Blades, metal holders for razor blades, knives, scissors, Razor. Marathon Razor Blade Co. 283,269; May 19; Serial No. 299,979; published Mar. 3, 1931.
Blades, razor blade holders, razors, penknives, scissors, Razor. Marathon Razor Blade Co. 283,270; May 19; Serial No. 300,213; published Mar. 3, 1931.
Engines, Internal combustion. Climax Engineering Company. 283,120; May 19; Serial No. 306,089; published Mar. 3, 1931.
Engines, Internal combustion. Climax Engineering Company. 283,205; May 19; Serial No. 291,760; published Mar. 3, 1931.
Engines, Internal combustion. Sunbeam Motor Car Co. 283,204; May 19; Serial No. 292,605; published Apr. 15, 1930.
Plows. La Crosse Plow Company. 82,338; renewed June 20, 1931.
Pulleys. Atlas Leather Company. 283,177–8; May 19; Serial Nos. 310,278–9; published Mar. 3, 1931.
Razor blades, Safety. D. H. Rider. 283,108; May 19; Serial No. 309,621; published Mar. 3, 1931.
Vending machines. Automatic Merchandizer, Inc. 283,123; May 19; Serial No. 301,006; published Mar. 3, 1931.

Wrenches, wrench sets, wrench sockets, etc. J. H. Williams & Co. 283,105; May 19; Serial No. 309,579; published Mar. 3, 1931.

CLASS 24

Washing machines, Laundry. Associated Merchandising Corporation. 283,168; May 19; Serial No. 310,154; published Mar. 10, 1931.

CLASS 26

Film, Photographic. Agfa Ansco Corporation. 283,157–9; May 19; Serial Nos. 309,324–6; published Mar. 3, 1931.
Gauges, thermometers, engine indicators, etc. Pressure. Consolidated Ashcroft Hancock Company. 283,275; May 19; Serial No. 293,871; published Mar. 3, 1931.
Ophthalmic mounting. Bausch & Lomb Optical Company. 283,173; May 19; Serial No. 310,008; published Mar. 3, 1931.
Photographic apparatus and photographic accessories. Voightländer & Sohn, Aktiengesellschaft. 283,281; May 19.
Scales, Kitchen. Hanson Scale Company. 283,107; May 19; Serial No. 309,615; published Mar. 3, 1931.
Time daters and time-dating machines. Instograph, Ltd. 283,175; May 19; Serial No. 310,220; published Mar. 3, 1931.

CLASS 27

Clocks. E. Ingraham Company. 283,110–12; May 19; Serial Nos. 309,858–60; published Mar. 3, 1931.
Watches. Benrus Watch Co. 283,156; May 19; Serial No. 309,500; published Mar. 3, 1931.
Watches, Wrist. American News Company. 283,193; May 19; Serial No. 307,793; published Mar. 3, 1931.

CLASS 28

Holders, rings, markers, Napkin. H. Welder. 283,225; May 19; Serial No. 308,842; published Mar. 3, 1931.
Rings and mountings therefor, Finger. Benjamin & Edward J. Gross Co. Inc. 283,085; May 19; Serial No. 309,690; published Mar. 3, 1931.
Rings, Finger. C. A. Kiger Company. 283,282; May 19.

CLASS 32

Cabinets, Wall. Servidor Company. 283,176; May 19; Serial No. 310,261; published Mar. 3, 1931.
Chairs and rockers, Household and office. C. F. Streit Mfg. Co. 283,122; May 19; Serial No. 303,129; published Mar. 3, 1931.
Cushions, Chair, seat, or automobile. D. L. Irvin. 283,174; May 19; Serial No. 310,170; published Mar. 3, 1931.
Furniture. McClellan Manufacturing Co. 283,109; May 19; Serial No. 309,739; published Mar. 3, 1931.
Mattresses. Cream City Bedding Company. 283,161; May 19; Serial No. 309,233; published Mar. 3, 1931.
Show cases and metal constructional parts of show cases. Kawneer Company. 283,287; May 19.
Tables. Cowdin Company. 283,290; May 19.

CLASS 34

Boiler breechings, air heaters, smoke stacks, etc. Alpha Tank & Sheet Metal Mfg. Co. 283,209; May 19; Serial No. 290,733; published Mar. 10, 1931.
Boilers and hot air furnaces, Steam and hot water. Kelsey Heating Company. 283,293; May 19.
Burners, oil. Leominster Oil Burner Corporation. 283,231; May 19; Serial No. 307,240; published Mar. 3, 1931.
Candle holders, Birthday. American Crayon Company. 283,096; May 19; Serial No. 309,184; published Mar. 3, 1931.
Lighters, Cigarette and cigar. Eisenstadt Manufacturing Company. 283,260; May 19; Serial No. 296,909; published Mar. 10, 1931.
Stokers, Automatic. Fire-O-Matic, Inc. 283,114; May 19; Serial No. 306,435; published Mar. 3, 1931.
Stoves and lamps, lamp brackets, candlesticks, etc. Württembergische Metallwarenfabrik. 283,262; May 19; Serial No. 297,464; published Mar. 10, 1931.

CLASS 35

Hose. Eureka Fire Hose Manufacturing Company. 283,160; May 19; Serial No. 309,308; published Mar. 3, 1931.
Packing, Asbestos. C. L. Willis. 283,106; May 19; Serial No. 309,597; published Mar. 3, 1931.
Tires, Automobile. Firestone Tire & Rubber Company. 283,266; May 19; Serial No. 299,310; published Mar. 3, 1931.

CLASS 36

Clarinets. Simson & Frey, Inc. 283,203; May 19; Serial No. 292,639; published Mar. 3, 1931.
Trumpets, cornets, French horns, etc. Indiana Band Instrument Company. 283,279; May 19.

CLASS 37

Holder for loose leaf paper leaves, paper pads, score cards, etc. Caterina Sage in Bourbon del Monte Principessa di Son Faustino. 283,294; May 19.
Paper. Fort Orange Paper Company. 36,703; renewed July 9, 1931.
Paper napkins. Menasha Products Company. 283,286; May 19.

CLASS 38

Publication, Advertising. Freshie. 283,278; May 19.

CLASS 39

Apparel for women and girls, Wearing. Forest City Mfg. Co. 283,150; May 19; Serial No. 309,199; published Mar. 3, 1931.
Apparel, Wearing. La Mode Garment Co. 283,127; May 19; Serial No. 308,865; published Mar. 3, 1931.
Boots, shoes, and overshoes, and rubber soled canvas shoes, Rubber. Hood Rubber Company. 283,210; May 19; Serial No. 289,628; published May 13, 1930.
Boots, shoes, and slippers. C. H. Daniels. 282,223; May 19; Serial No. 308,882; published Feb. 24, 1931.
Boots, shoes, and slippers. Lord & Taylor. 283,232; May 19; Serial No. 306,821; published Mar. 3, 1931.
Boots, shoes, slippers, etc. Restful Slipper Co. 283,100; May 19; Serial No. 309,396; published Mar. 3, 1931.
Brassières. Model Brassiere Co. Inc. 283,229; May 19; Serial No. 307,983; published Feb. 24, 1931.
Clothing, Men's. Eagle Clothes. 283,130; May 19; Serial No. 303,422; published Mar. 3, 1931.
Clothing, Men's, boys' and youths'. J. C. Penney Company. 283,200; May 19; Serial No. 309,568; published Mar. 3, 1931.
Coats, Women's. Chicago Mail Order Company. 283,124; May 19; Serial No. 308,927; published Mar. 3, 1931.
Garments, etc., Men's and boys' outer. J. B. Arnold. 283,132; May 19; Serial No. 301,780; published Aug. 19, 1930.
Garter and corset belts and corsets. Lane Bryant, Inc. 283,206; May 19; Serial No. 291,727; published May 6, 1930.
Gloves, Fabric. Goessling Inc. 283,101; May 19; Serial No. 309,560; published Mar. 3, 1931.
Hats. J. C. Penney Company. 283,226; May 19; Serial No. 308,792; published Mar. 3, 1931.
Hats and caps. Mallory Hat Company. 283,110; May 19; Serial No. 304,874; published Mar. 3, 1931.
Hats and caps, and women's and misses' hats, Men's. Copley Hat Company. 283,233; May 19; Serial No. 306,770; published Mar. 3, 1931.
Hats and lingerie. Fox-Coffey-Edge Co. 283,083; May 19; Serial No. 309,638; published Mar. 3, 1931.
Hats for men. Byron Hat Corporation. 283,097; May 19; Serial No. 309,229; published Feb. 24, 1931.
Hosiery. Nomend Hosiery Mills M. B. Laubach Co. Inc. 283,125; May 19; Serial No. 308,901; published Mar. 3, 1931.
Overalls and work trousers. Maryland Company. 283,201; May 19; Serial No. 309,500; published Mar. 3, 1931.
Pajamas, drawers, and union suits. Maryland Oiled Clothing Company. 81,813; renewed May 9, 1931.
Shoes, Children's. Ground Gripper Shoe Company. 283,264; May 19; Serial No. 298,326; published Mar. 3, 1931.
Shoes, slippers, pumps, etc. Carmo Shoe Mfg. Co. 283,095; May 19; Serial No. 309,188; published Mar. 3, 1931.
Sweaters, knitted jackets, and slipovers. Peckham-Foreman, Inc. 283,268; May 19; Serial No. 299,858; published Mar. 3, 1931.

CLASS 42

Corduroys in the piece. A. D. Juilliard & Co. 283,195; May 19; Serial No. 307,945; published Mar. 3, 1931.
Fabrics made wholly or partially of cellulose derivatives. Celanese Corporation of America. 283,163; May 19; Serial No. 309,025; published Mar. 3, 1931.
Fabrics, Woven. Brybro Fabrics, Inc. 283,134; May 19; Serial No. 309,261; published Mar. 3, 1931.
Linen cloth in the piece. Open-mesh. J. F. White & Co. Inc. 283,135; May 19; Serial No. 309,542; published Feb. 24, 1931.
Piece goods. Societe A Responsabilite Limitee Rodier. 283,196; May 19; Serial No. 308,560; published Feb. 24, 1931.
Pile fabrics. Sidney Blumenthal & Co. Inc. 283,141; May 19; Serial No. 309,880; published Mar. 3, 1931.
Rugs, Woven. Crawshaw Carpet Company. 283,191; May 19; Serial No. 306,730; published Mar. 3, 1931.
Sheetings, pillow tubings, sheets, etc. Aurora Cotton Mills. 283,274; May 19; Serial No. 300,913; published Feb. 24, 1931.
Silk fabric in the piece. Onondaga Silk Company. 283,139; May 19; Serial No. 309,786; published Mar. 3, 1931.
Silk fabrics. Onondaga Silk Compnay. 283,138; May 19; Serial No. 309,785; published Mar. 3, 1931.
Silk fabrics. Onondaga Silk Company. 283,143–4; May 19; Serial Nos. 309,987–8; published Mar. 3, 1931.
Silk piece goods. C. K. Eagle & Company. 283,136; May 19; Serial No. 309,634; published Mar. 3, 1931.
Silk piece goods, artificial-silk piece goods, etc. L. & E. Stirn. 283,133; May 19; Serial No. 309,038; published Feb. 24, 1931.
Silks and silk mixtures, Broad. Schwarzenbach Huber Co. 283,137; May 19; Serial No. 309,655; published Mar. 3, 1931.
Silks and silk mixtures, Broad. Schwarzenbach Huber Co. 283,142; May 19; Serial No. 309,908; published Mar. 3, 1931.

Wool, wool-mixed cloth, and wool and rayon cloth, Knit. Faith Mills, Inc. 283,190; May 19; Serial No. 305,808; published Feb. 24, 1931.
Woolen piece goods. American Woolen Company. 283,146; May 19; Serial No. 310,326; published Mar. 3, 1931.
Woolen piece goods. Cowan Woolen Company. 283,272; May 19; Serial No. 300,477; published Feb. 24, 1931.

CLASS 45

Ginger ale. Clover Leaf Products Company. 283,149; May 19; Serial No. 310,554; published Mar. 10, 1931.
Grape-juice. J. S. Polefsky. 283,147; May 19; Serial No. 310,531; published Mar. 10, 1931.

CLASS 46

Beans, Dried. California Orchard Co. 283,288–9; May 19.
Biscuit, crackers, cookies, etc. National Biscuit Company. 283,183; May 19; Serial No. 307,005; published Mar. 3, 1931.
Bread. A. R. Burghardt. 283,186; May 19; Serial No. 308,476; published Mar. 3, 1931.
Butter. Beatrice Creamery Company. 283,185; May 19; Serial No. 307,575; published Dec. 30, 1930.
Cheese. L. C. Bruhn. 283,199; May 19; Serial No. 304,909; published Mar. 3, 1931.
Coffee. Granger & Co. 81,456; renewed Apr. 11, 1931.
Coffee and tea. Black Hawk Coffee and Spice Company. 36,934; renewed Aug. 20, 1931.
Coffee, Blended. William S. Scull Company. 83,093; renewed Oct. 3, 1931.
Coffee, spices, tea, and rice. Polin Bros. & Berkowitz, Inc. 283,152; May 19; Serial No. 309,482; published Mar. 3, 1931.
Cottonseed cake and cottonseed meal. Southland Cotton Oil Company. 283,167; May 19; Serial No. 309,949; published Mar. 3, 1931.
Extract, Coffee. F. B. Chamberlain Company. 283,261; May 19; Serial No. 297,003; published Apr. 29, 1930.
Flour, Wheat. General Mills, Inc. 283,184; May 19; Serial No. 307,447; published Mar. 3, 1931.
Flour, Wheat. Hubbard Milling Company. 283,166; May 19; Serial No. 309,895; published Mar. 3, 1931.
Flour, Wheat. Rea-Patterson Milling Company. 83,690; renewed Oct. 3, 1931.
Macaroni. Wyckoff Macaroni Mfg. Co. 283,218; May 19; Serial No. 309,494; published Mar. 3, 1931.
Peanuts, Salted and roasted. J. P. Gibbons, jr. 283,267; May 19; Serial No. 299,700; published Dec. 16, 1930.
Preparation for flavoring cakes, puddings, and sauces. R. Pichel. 283,128; May 19; Serial No. 308,219; published Mar. 3, 1931.
Rice. Asia Company. 283,273; May 19; Serial No. 300,703; published Mar. 3, 1931.
Salad dressings, tomato ketchup, chili sauce, etc. S. Schoendorf. 283,129; May 19; Serial No. 305,881; published Mar. 3, 1931.
Sirup, Prepared chocolate. Cleveland Fruit Juice Company. 283,292; May 19.
Syrup, Malt. J. Di Santo. 283,151; May 19; Serial No. 309,464; published Mar. 3, 1931.
Syrup, Malt. Pabst Corporation. 283,285; May 19.
Syrup, Malt. Pure-Test Food Products Company. 283,126; May 19; Serial No. 308,999; published Mar. 3, 1931.
Teas, coffees, sugar, etc. David Pender Grocery Company. 283,287; May 19; Serial No. 265,893; published Mar. 3, 1931.

CLASS 50

Cellulose products. National Blank Book Co. 283,194; May 19; Serial No. 307,822; published Mar. 3, 1931.
Implements for disabling or killing insects. United States Wire Mat Co. 83,617; renewed Sept. 26, 1931.
Pads, Knee. N. Mackay. 283,118; May 19; Serial No. 308,741; published Mar. 3, 1931.
Printing plates. Addressograph Company. 283,104; May 19; Serial No. 309,547; published Mar. 3, 1931.
Stock waterers. Ritchie Manufacturing Company. 283,162; May 19; Serial No. 309,175; published Mar. 3, 1931.

ALPHABETICAL LIST OF LABELS

Arch Craft. For Boxes. Hoague-Sprague Corporation. 39,161; May 19.
Arrowhead Crepe Tissue. For Toilet Paper. Northern Paper Mills. 39,184; May 19.
Betty Gale. For Boxes. Hoague-Sprague Corporation. 39,171; May 19.
Beverly Hills Vanities. For Boxes. Hoague-Sprague Corporation. 39,163; May 19.
Bonita. For Coffee. Standard Brands Incorporated. 39,190; May 19.
Boxkol. For Coal. J. J. Drew. 39,151; May 19.
Bradco. For Eggs. Bradford County Egg Club. 39,143; May 19.
Burgess Straight-Thru Exhaust Muffler. For Exhaust Mufflers. Burgess Battery Company. 39,144; May 19.
Chocco-Yeast. For Yeast Cakes. Chocco-Yeast, Inc. 39,148; May 19.
Davis' Union Remedy. For Medicinal Preparation. C. T. Davis. 39,149; May 19.
Fashion Queen. For Boxes. Hoague-Sprague Corporation. 39,162; May 19.
Felser Bros. For Boxes. Hoague-Sprague Corporation. 39,164; May 19.
Fla-Vo-Krisp. For Roasted Salted Nuts. Fla-Va-Krisp Company. 39,153; May 19.
Hebrew Movable Alphabet. For a Box for an Alphabet of Hebrew Letters Made in Wood and in Various Sizes. B. Delegator. 39,150; May 19.
Hudson Shoes. For Boxes. Hoague-Sprague Corporation. 39,170; May 19.
Hurd Shoe Co. Inc. For Boxes. Hoague-Sprague Corporation. 39,172; May 19.
I. S. Co. For Boxes. Hoague-Sprague Corporation. 39,154; May 19.
Irving Levy & Co. Inc. For Boxes. Hoague-Sprague Corporation. 39,168; May 19.
Jeweler's Polish. For Silver Polish. Midway Chemical Co. 39,180; May 19.
Joseph, Inc. For Boxes. Hoague-Sprague Corporation. 39,156; May 19.
Juvenile Footwear. For Boxes. Hoague-Sprague Corporation. 39,174; May 19.
La Parisienne. For Boxes. Hoague-Sprague Corporation. 39,167; May 19.
Mercedes Hosiery Deluxe. For Women's Hosiery. Chenango Knitting Company. 39,147; May 19.
Mistletoe. For Mayonnaise. Kadane-Brown, Inc. 39,179; May 19.
Mistletoe. For Salad Dressing. Kadane-Brown, Inc. 39,177; May 19.
Mistletoe. For Sandwich Spread. Kadane-Brown, Inc. 39,178; May 19.
Modern Sport Girl. For Boxes. Hoague-Sprague Corporation. 39,165; May 19.
Moffat Coal. For Coal. Moffat Coal Company. 39,182; May 19.
Monroe Bros. & Co. For Boxes. Hoague-Sprague Corporation. 39,175; May 19.
Mothine. For Preparation Which Kills Moths, Moth Eggs, and Larvæ. Regal Products Co. 39,187; May 19.
Nadell Bros. For Boxes. Hoague-Sprague Corporation. 39,166; May 19.
National Maid. For Boxes. Hoague-Sprague Corporation. 39,157; May 19.
Oak Creek Coal. For Coal. Moffat Coal Company. 39,183; May 19.
Plasco. For Preparation for Use in the Treatment of Local Inflammation and Congestion of All Kinds. S. M. Endo. 39,152; May 19.
Promised Land Grapes. For Grapes. D. Pagano. 39,185; May 19.
Quick Elastic Hot Starch in 30 Seconds. For Starch. Hubinger Co. 39,176; May 19.
Radiant De Lux Cleaning Fluid. For Cleaning Fluid. Midway Chemical Co. 39,181; May 19.
Reefer's No-Moth Cedaraire. For Preparations for Protection Against Moths. Reefer's No-Moth, Inc. 39,186; May 19.
Seam-A-Dex. For Women's Hosiery or Stockings. D. S. Saqui. 39,188; May 19.
Sliced. For Bread. Central Waxed Paper Company. 39,146; May 19.
Smart Shoes. For Boxes. Hoague-Sprague Corporation. 39,160; May 19.
Susan Strong. For Boxes. Hoague-Sprague Corporation. 39,173; May 19.
The Boardman Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,158; May 19.
The Cavalier Shoe. For Boxes. Hoague-Sprague Corporation. 39,159; May 19.
The Hollywood Girl. For Boxes. Hoague-Sprague Corporation. 39,169; May 19.
The May Co. For Boxes. Hoague-Sprague Corporation. 39,155; May 19.
2 in 1 Butter-Nut. For Bread. Schulze Baking Company. 39,189; May 19.
Whole Wheat. For Bread. Central Waxed Paper Company. 39,145; May 19.

ALPHABETICAL LIST OF PRINTS

Air-Fight Principle. For Tires. Fisk Tire Co. 13,199; May 19.
Cream of the Crop. For Fruits. O. B. Andrews Company. 13,197; May 19.
In Return for '30-Seconds-Each-Night' (No. 34–AZ–1931). For Liquid Petrolatum. E. R. Squibb & Sons. 13,203; May 19.
In Return for '30-Seconds-Each-Night' (#34–BA–1931). For Liquid Petrolatum. E. R. Squibb & Sons. 13,202; May 19.
Staybestos. For Asbestos Brake Lining. H. Jones. 13,201; May 19.
What Becomes of a Dole Pineapple. For Pineapple. Hawaiian Pineapple Company. 13,200; May 19.
Win Nation-Wide Approval. For Tires. Fisk Tire Co. 13,198; May 19.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 19TH DAY OF MAY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A-B Stove Company. (See Reedy, Alfred J., assignor.)
A C Spark Plug Company. (See Babitch, Abraham M., assignor.)
A C Spark Plug Company. (See Gustafson, Edwin A., assignor.)
A C Spark Plug Company. (See Kamrath, Herbert G., assignor.)
A C Spark Plug Company. (See McKinley, Charles W., assignor.)
A C Spark Plug Company. (See Rabezzana, Hector, assignor.)
Abe, Shotaro, Hongoku, Japan. Photograph developing device. 1,806,232; May 19.
Ackerman, Catherine L., Minneapolis, Minn. Mixing machine for pastry. 1,806,139; May 19.
Adaire, William R., Philadelphia, Pa., assignor to New England Lace Mills, Inc., New York, N. Y. Lace. Des. 84,175; May 19.
Adams, Arthur H., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Manufacturing electrical switching apparatus. 1,806,188; May 19.
Adams, Ella M., New York, N. Y. Hair waver. 1,805,507; May 19.
Adams, Harry Lee, Elvins, Mo. Gasoline motor. 1,806,233; May 19.
Adams, J. D., Manufacturing Company. (See Adams, Roy E., assignor.)
Adams, Lester V., Schenectady, N. Y., assignor to General Electric Company. Synthetic resin and making the same. 1,805,473; May 19.
Adams, Roy E., assignor, by mesne assignments, to J. D. Adams Manufacturing Company, Indianapolis, Ind. Road grader. 1,806,568; May 19.
Adamson, Robert M., Los Angeles, Calif. Automatically controlled airplane. 1,805,750; May 19.
Addison, Edward C., Camden, N. J., and W. H. Hill, assignors to R. H. Beaumont Company, Philadelphia, Pa. Reversible double digging edge scraper. 1,806,551; May 19.
Adlake Company, The. (See Levan, John F., assignor.)
Adler, Robert, St. Paul, Minn. Insert for concrete roads and the like. 1,806,275; May 19.
Agfa Ansco Corporation. (See Goldhammer, L., assignor.)
Agfa Ansco Corporation. (See Prill, A., and Walter, assignors.)
Air-Way Pump Company. (See Andreasen, Alfred C., assignor.)
Aktiebolaget Ljungströms Angturbin. (See Lysholm, A., and Cederstrand, assignors.)
Aktiengesellschaft Brown Boveri & Cie. (See Tanner, Heinrich, assignor.)
Alba Corporation, The. (See Mayer, Waldemar F., assignor.)
Albertson & Company, Inc. (See Albertson, Frans O., assignor.)
Albertson, Frans O., assignor to Albertson & Company, Inc., Sioux City, Iowa. Valve seat reconstruction tool. 1,806,189; May 19.
Alexovits, Thomas M., Bayonne, N. J., assignor to John E. Greenawalt, New York, N. Y. Charge car for sintering apparatus. 1,806,438; May 19.
Allan, Ronald S., Los Angeles, Calif. Noncorrodible faucet. 1,805,537; May 19.
Allen, Albert, Winchester, and J. G. Callan, Cambridge, assignors to Atlantic Precision Instrument Company, Boston, Mass. Apparatus for controlling moisture content of paper or the like. 1,805,474; May 19.
Allied Metal Industries. (See Carlton, Jack C.)
Allmänna Svenska Elektriska Aktiebolaget. (See Petersén, Wilhelm H., assignor.)
Aluminum Goods Mfg. Co. (See Drumm, Elmer E., assignor.)
Ambronn, Richard, Gottingen, Germany. Exploring the subsoil. 1,805,900; May 19.
Ambros, Otto. (See Griessbach, R., and Ambros.)
American Bank Stationery Company. (See Kernan, John J., assignor.)
American Bosch Magneto Corporation. (See Lang, G. J., Drennan, and Schlesinger, assignors.)
American Can Company. (See Taylor, William E., assignor.)
American Chemical Paint Company. (See Gravell, James H., assignor.)
American Cyanamid Company. (See Collins, Charles D., assignor.)
American Engineering Company. (See Koons, Charles V., assignor.)
American Engineering Company. (See Mellon, James A., assignor.)
American Fabrics Company, The. (See Page, Samuel H., assignor.)
American Gypsum Co., The. (See New, Gustave A., assignor.)
American Lace Mfg. Co., The. (See Hucknall, Hage W., assignor.)
American Lace Paper Company. (See Conrad, Fred A., assignor.)
American Machine & Foundry Company. (See Ferenci, Lester, assignor.)
American Machine & Foundry Company. (See Schmitt, Frank R., assignor.)
American Optical Company. (See Baker, Nelson M., assignor.)
American Optical Company. (See Tillyer, Edgar D., assignor.)
American Refractories Institute. (See Phelps, Stuart M., assignor.)
American Safety Razor Corporation. (See Behrman, Marcus B., assignor.)
American Seating Company. (See Hamilton, George H., assignor.)
American Tar Products Company. (See Clarke, E. W., and Eigenbrot, assignors.)
American Telephone & Telegraph Company. (See Ohl, Russell S., assignor.)
American Telephone & Telegraph Company. (See Parker, Ralzemond D., assignor.)
American Telephone & Telegraph Company. (See Potter, Ralph K., assignor.)
American Textile Co. (See Ball, Ben A., assignor.)
American Tubular Elevator Company. (See Schiller, Morgan B., assignor.)
American Type Founders Company. (See Kelly, William M., assignor.)
Ames Pump Company, Inc. (See Frederick, Rheuel H., assignor.)
Anchor Cap & Closure Corporation. (See Hammer, Charles, assignor.)
Anciens Etablissements Barbier, Benard & Turenne, Société Anonyme. (See Bénard, Henri L. M. J., assignor.)
Anderberg, Oscar T., Mason City, Iowa. Building construction. 1,805,538; May 19.
Anderson, Russell T., Denver, Colo. Connecting rod aligning gauge. 1,805,475; May 19.
Andreasen, Alfred C., Oak Park, assignor to Air-Way Pump Company, Chicago, Ill. Combination hose end indicator and valve. 1,805,476; May 19.
Andrews, Charles W. (See Knowles, A. S., and Andrews.)
Andrews, Charles W., Chicago, Ill., and R. D. Rogers, Bayonne, N. J., assignors to C. P. T. Development Corporation, Chicago, Ill. Treatment of heavy hydrocarbon material. 1,805,711; May 19.
Andros, Charles H. (See Swartz, George, assignor.)
Angelillo, Fedele, New York, N. Y. Vehicle jack. 1,805,508; May 19.
Anibal, Benjamin H., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Rubber motor mounting. 1,806,569; May 19.
Ansul Chemical Company of California. (See Collins, Lester W., assignor.)
Arbelt, Pierre, Paris, France, assignor to Hartford-Empire Company, Hartford, Conn. Machine for making glassware. 1,805,796; May 19.
Arbuckle, S. F., Corp. (See Whitacre, Clarence J., assignor.)
Arcless Contact Company, The. (See Armstrong, R. W., and McCabe, assignors.)
Arfsten, Newton, New York, N. Y. Obtaining stereoscopic impressions of moving picture images. 1,806,190; May 19.
Arlette, Inc. (See Watts, Warren S., assignor.)
Armstrong, Raymond W., and I. E. McCabe, Chicago, Ill.; said Armstrong, assignor to The Arcless Contact Company. Glass container for light operated electric switches. 1,805,966; May 19.
Arnold, Frank G., New York, N. Y. Pressure gauging tire valve. 1,806,380; May 19.
Art Metal Construction Company. (See Larson, Algot J. E., assignor.)
Arthur, John S. (See Gogarten, R., and Arthur.)
Ashworth, George B., Amsterdam, N. Y. Grate support. 1,805,477; May 19.
Associated Telephone & Telegraph Company. (See Gunning, Percy F., assignor.)
Associated Telephone & Telegraph Company. (See Mercer, Richard, assignor.)

Atlantic Precision Instrument Company. (See Allen, A., and Callan, assignors.)
Atlas Metal Works. (See Reetz, Conrad A., assignor.)
Atomic Power Corporation. (See Lynn, R. M., and Malouf, assignors.)
Atomic Power Corporation. (See Malouf, William M., assignor.)
Atwood, James C., Syracuse, N. Y., assignor to General Motors Corporation, Detroit, Mich. Broach. 1,806,552; May 19.
Audiffren Refrigerating Machine Company. (See Perkins, Karl D., assignor.)
Audio-Cinema, Incorporated. (See Carpenter, Arthur W., assignor.)
Audio-Cinema, Incorporated. (See Lane, George, assignor.)
Auerbach, Ernst B., Berlin, Germany. Treating, separating, and purifying oils. 1,805,751; May 19.
Austral Window Company. (See Hull, Franklyn H., assignor.)
Autographic Register Company. (See Carroll, Hezekiah W., jr., assignor.)
Automatic Electric Inc. (See Lomax, Clarence E., assignor.)
Babcock & Wilcox Company, The. (See Spyer, Arthur, assignor.)
Babitch, Abraham M., assignor to A C Spark Plug Company, Flint, Mich. Oil purifier and dilution remover. 1,806,553; May 19.
Baensch, Walter, assignor to Schering-Kahlbaum A.-G., Berlin, Germany. Agitating device. 1,806,381; May 19.
Bailey, Alfred B., Verdun, Quebec, Canada. Direction indicator. 1,806,276; May 19.
Baird, Dudley. (See Fowler, E. J., and Baird.)
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Spectacle frame. Des. 84,176; May 19.
Ball, Ben A., assignor to American Textile Co. Inc., Pawtucket, R. I. Lace. Des. 84,177; May 19.
Ball, Harry V., Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y. Associating mechanism. 1,805,681; May 19.
Balsam, Maurice M., Brooklyn, N. Y. Metal binding machine. 1,806,277; May 19.
Balsley, Eugene A., Wheeling, W. Va., and L. I. Yeomans, assignors to L. I. Yeomans, Inc., Chicago, Ill. Protecting sand molds and cores. 1,805,650; May 19.
Barber, Frank, College Point, N. Y. Making plaited leather. 1,805,478; May 19.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Tension controlling means for traveling offset webs. 1,806,140; May 19.
Barber, Howard M., Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Tension controlling means for traveling offset webs. 1,806,141; May 19.
Barbet, Emile A., Paris, France. Continuous rectification of crude methyl alcohol. 1,805,559; May 19.
Bard, George M. (See Potter, Oscar, assignor.)
Bardsley, William A., Oaklyn, N. J. Drum support for locomotives. 1,806,516; May 19.
Barlow, Lester P., assignor to McCord Radiator & Mfg. Co., Detroit, Mich. Vapor cooling system for internal combustion engines. 1,806,382; May 19.
Barrett Company, The. (See Moses, F. G., Hess, and Perkins, assignors.)
Barrett, Joseph E., Co., The. (See McKenny, Charles A., assignor.)
Barta, Joseph, Martins Ferry, Ohio. Tub. 1,805,560; May 19.
Barton, Robert B., River Forest, assignor to Elgin National Watch Company, Chicago, Ill. Wrist watch spring strap. 1,806,439; May 19.
Basher, John S. (See Ciraolo, F. A., and Basher.)
Bass, James H., Waukee, Iowa. Fence row mower. 1,805,861; May 19.
Bassick Company, The. (See Moore, Raymond G., assignor.)
Batchelder, James W., Brookline, Mass. Speed transmission mechanism. 1,806,440; May 19.
Bates, Albert J., Chicago, Ill., assignor, by mesne assignments, to Bates Expanded Steel Corporation, East Chicago, Ind. Lath fastener. 1,805,797; May 19.
Bates Expanded Steel Corporation. (See Bates, Albert J., assignor.)
Batina, Charles C., Chicago, Ill. Washing machine. 1,805,862; May 19.
Bauer, Gustav, Hamburg, Germany. Superheater for water tube boilers. 1,805,967; May 19.
Bauer, Karl, and Eugen Kade, Bronx, N. Y. Universal kitchen tong. 1,806,441; May 19.
Beacon Manufacturing Company. (See Lemieux, W. J., and Hood, assignors.)
Beal, Francis R., Port William, Ohio. Automobile transmission lifting device. 1,806,033; May 19.
Beaumont, R. H., Company. (See Addison, E. C., and Hill, assignors.)
Beaver Machine & Tool Co. (See Slade, Harold E., assignor.)
Beck, Karl, and H. Kracker, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Water-insoluble azo dyestuffs and material dyed therewith. 1,806,034; May 19.
Beck, Lue O., Buffalo, N. Y. Device and method of classifying patrons. 1,806,142; May 19.
Becker, Joseph, Montclair, N. J. Folding clothes hanger. 1,805,561; May 19.
Beckwith, Louis I., Dorchester, Mass. Upright construction. 1,805,731; May 19.
Bedrossyan, Mark D., Springfield, Mass. Combined electric sign and mirror. 1,805,798; May 19.
Begue, Frederick F., and J. A. McIntosh, assignors to Standard Tube and Manufacturing Company, Detroit, Mich. Closure for a filler opening for receptacles. 1,805,562; May 19.
Behrman, Marcus B., assignor to American Safety Razor Corporation, Brooklyn, N. Y. Safety razor. 1,805,509; May 19.
Belcher, Walter E., Winnipeg, Manitoba, Canada. Electric iron. 1,806,383; May 19.
Belden Manufacturing Company. (See Wermine, Hugo H., assignor.)
Bell, Alonzo C. and Thaddeus R., Westfield, N. J. Preliminarily heating internal combustion engines. 1,806,442; May 19.
Bell & Howell Company, The. (See Howell, Albert S., assignor.)
Bell, Thaddeus R. (See Bell, Alonzo C. and T. R.)
Bellows, Emma L., New York, N. Y. Fountain applicator. 1,806,517; May 19.
Belshaw, Walter, Seattle, Wash. Doughnut machine. 1,806,326; May 19.
Bénard, Henri L. M. J., Paris, assignor to Anciens Etablissements Barbier, Benard & Turenne, Société Anonyme, Paris, France. Shadowless lighting apparatus. 1,806,384; May 19.
Benedict, Charles. (See Eckstine, Fred G., assignor.)
Benner, Harry P. (See Egloff, G., and Benner.)
Bennett, Alice V., London, England. Keyboard operated musical instrument. 1,805,863; May 19.
Benson, Henry K., Seattle, Wash. Making sulphite pulp from Douglas fir and other resinous conifers. 1,805,799; May 19.
Bent, Frank A. (See Parker, C. K., and Bent.)
Benzel, Carl R., Greeley, Colo. Hand mower. 1,805,864; May 19.
Benzel, Carl R., Greeley, Colo. Cultivator attachment. 1,805,865; May 19.
Bergara, Carlos. (See Rinderspacher, E., and Bergara.)
Bergara, Raul. (See Rinderspacher, E., and Bergara.)
Bergdoll, John G., assignor to York Ice Machinery Corporation, York, Pa. Refrigeration. 1,805,901; May 19.
Berge, Joseph, Montclair, N. J. Lock cap for fasteners. 1,805,937; May 19.
Berger, Knute, Seattle, Wash. Fairleader. 1,805,800; May 19.
Berns, John H., jr., Tampa, Fla. Rocking horse. 1,806,035; May 19.
Bertrand, Frederic E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Device for attaching heels. 1,805,539; May 19.
Beryllium Development Corporation. (See Cooper, Hugh S., assignor.)
Besag, Ernst, assignor to Schiele & Bruchsaler Industriewerkde A. G., Baden-Baden, Germany. Thermal release device. 1,806,443; May 19.
Bianco, Vincent A., Culver City, Calif. Necktie. 1,805,968. May 19.
Bieber, Clarence G. (See Mudge, W. A., and Bieber.)
Biel, Louis, Ridgeway, Iowa. Hog feeder. 1,805,902; May 19.
Bigelow, Mary E., et al. (See Stuart, T. F., assignor, and Moore.)
Birch, Albert, Belmont, Mass. Cloth opening machine. 1,805,866; May 19.
Birdsall, Bert A., assignor of one-half to H. C. King, Decatur, Nebr. Spark plug. 1,805,752; May 19.
Bishop & Babcock Mfg. Company, The. (See Levy, Edward J., assignor.)
Black, John C., Los Angeles, Calif. Distilling and cracking petroleum oils. 1,806,036; May 19.
Black, John C., Los Angeles, Calif. Cracking oils. 1,806,037; May 19.
Blackburn, Myrtis, et al. (See Titus, Thomas L., assignor.)
Blanchard, Adna F., assignor to G. C. Seaton, New York, N. Y. Shock absorber. 1,806,038; May 19.
Blazek, Joseph, Chicago, Ill. Refrigerated display counter. 1,805,563; May 19.
Blomgren, Henry E., Brooklyn, N. Y., assignor to The Simplex Piston Ring Company of America, Inc., Cleveland, Ohio. Piston ring. 1,806,143; May 19.
Bodnar, John, Atlasburg, Pa. Wire reel carrier. 1,805,564; May 19.
Boehringer, C. H., Sohn, Chemische Fabrik. (See Rahn, Franz, assignor.)
Boggild & Jacobsen, Messrs. (See Jensen, Jens J., assignor.)
Bohn, Gebhard C., St. Paul, Minn. Hinge. Des. 84,178; May 19.
Boileau, Arthur H., assignor to Cherry-Burrell Corporation, Cedar Rapids, Iowa. Power churn. 1,805,464; May 19.
Boileau, Arthur H., Cedar Rapids, Iowa, assignor, by mesne assignments, to Cherry-Burrell Corporation, Wilmington, Del. Power churn. 1,805,753; May 19.

Boker, Vitus A., assignor to Min-A-Max Co., Minneapolis, Minn. Lubricator coupling means. 1,806,278; May 19.
Bolton, John A., Timperley, England. Apparatus for regulating the concentration of solutions. 1,806,536; May 19.
Bond Electric Corporation. (See Brown, James T., assignor.)
Bonney, Lynn F. (See Wright, J. C., and Bonney.)
Bonnot Company, The. (See Lentz, George W., assignor.)
Booker, Homer N. (See Wessel, L. H., and Booker.)
Boorum & Pease Company. (See Finley, Charles A., assignor.)
Booth, Augustus D., Columbus, Ohio. Roller bearing. 1,806,279; May 19.
Booth, Earl C., Indianapolis, Ind. Electric heater. Des. 84,179; May 19.
Borden, Stephen W., Summit, N. J., assignor, by mesne assignments, to Crouse-Hinds Company, Syracuse, N. Y. Electrical connecting device for electrical conductors. 1,805,754; May 19.
Borst, Warren R., West New Brighton, N. Y. Sewage treatment. 1,805,682; May 19.
Bossart, Paul N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus responsive to the passage of railway vehicles. 1,806,039; May 19.
Boström, Carl G., Stockholm, Sweden. Protective glass with color wedge for spectacles, together with methods for manufacturing same. 1,805,969; May 19.
Boulade, Antonin, assignor to Société du Carburateur Zenith, Lyons, France. Altimetric automatic controlling device for carburetors for aeroplane motors. 1,806,280; May 19.
Bounds, Orville T. (See Wilkins, Harry T., assignor.)
Boutin, John Z., Troy, N. Y. Brake for sleds. 1,806,444; May 19.
Bower, Ferdinand A., Flint, assignor to General Motors Corporation, Detroit, Mich. Oil filter installation. 1,806,537; May 19.
Boyd, Loren C., Warren, Ohio. Shears sharpening device. 1,806,234; May 19.
Boylan, Howard S., and G. F. Bretz, Council Bluffs, Iowa. Golf ball paint kit. 1,805,801; May 19.
Bradley, Charles E., and C. Ferrettie, assignors to Mishawaka Rubber and Woolen Manufacturing Company. Mishawaka, Ind. Rubber treating process and product. 1,805,712; May 19.
Bradley, Charles E., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Rubber treating method and product. 1,805,713; May 19.
Bradner, Donald B., Hamilton, Ohio. Composition for producing irritating smoke clouds. 1,805,755; May 19.
Bradshaw, William, and W. G. Mylius, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Meter terminal. 1,806,327; May 19.
Bramson, Mogens L., Hendon, London, England. Variable pitch propeller. 1,806,385; May 19.
Brandenburger, Leo. (See Schleicher, M., and Brandenburger.)
Brennan, Rose M. (See Ferris, W. C., and Brennan.)
Bretz, Geordis F. (See Boylan, H. S., and Bretz.)
Brevetti S. A. Italiani Esteri S. A. B. I. E. (See Compare, Manrico, assignor.)
Briggs, Edward, San Francisco, assignor to W. J. Moran, Fairfax, Calif. Vibrator for molds and dental flasks. 1,805,970; May 19.
Brightman, Rainald, Blackley, Manchester, assignor to Imperial Chemical Industries Limited, Westminster, England. Manufacture of azo dyes. 1,805,714; May 19.
Brightman, Rainald, Blackley, Manchester, assignor to Imperial Chemical Industries Limited, Westminster, England. Manufacture of azo dyestuffs. 1,805,715; May 19.
Bristol, Edgar H., assignor to The Foxboro Company, Foxboro, Mass. Controlling mechanism. 1,805,971; May 19.
Britton, Edgar C., assignor to The Dow Chemical Company, Midland, Mich. Making metal alkyl compounds. 1,805,756; May 19.
Broche, Léon J., Verrieres-Le-Buisson, France, assignor to Tropenas Company, New York, N. Y. Method and apparatus for use in the manufacture of glassware. 1,806,445; May 19.
Brooks, Harry C., Washington, D. C. Cabinet for storing and preserving fruits and vegetables. 1,805,565; May 19.
Broom & Wade Limited. (See Prestage, Edwin, assignor.)
Brown, A. G., Boveri & Cie. (See Frey, Karl, assignor.)
Brown Company. (See Richter, G. A., and Schur, assignors.)
Brown Company. (See Schur, Milton O., assignor.)
Brown Company. (See Schur, M. O., and Webber, assignors.)
Brown, Eric, Baden, Switzerland. Gear power transmission. 1,806,328; May 19.
Brown, James T., Jamaica, assignor to Bond Electric Corporation, New York, N. Y. Flashlight. 1,805,683; May 19.
Brown, Samuel B., Los Angeles, Calif. Internal combustion engine. 1,805,540; May 19.
Browne, Lyle W., assignor to The Fisher Governor Company, Inc., Marshalltown, Iowa. Sensitive fuel governor. 1,805,802; May 19.
Brucker, Henry, Maplewood, N. J. Coffeepot. 1,806,144; May 19.
Brump, Herbert L., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Motor mounting. 1,806,329; May 19.
Brunner, Albert H., et al. (See Stuart, T. F., and Moore, assignors.)
Brunswick-Balke-Collender Company, The. (See Johnson, George, assignor.)
Bryant, Ozro N., Moores and A. F. Schwendner, Essington, Pa., assignors to Westinghouse Electric and Manufacturing Company. Fluid pressure governing mechanism. 1,805,972; May 19.
Brylka, Joseph S., Du Bois, Pa. Box lock. 1,806,518; May 19.
Budd Wheel Company. (See Wentworth, Robert S., assignor.)
Bulgarini, Luis, Buenos Aires, assignor of one-third to L. Salvo, Buenos Aires, Argentina, and one-third to Santiago Imas, New York, N. Y. Life saving device. 1,805,803; May 19.
Bull, Arthur A., assignor, by mesne assignments, to Handy Cleaner Corporation, Detroit, Mich. Oil filter. 1,805,903; May 19.
Bumstead, Charles W. (See Langley, C. J., and O'Gorman, assignors.)
Bunet, Paul E., Versailles, assignor of one-half to Société Acieries de Gennevilliers, Gennevilliers, France. Rotary frequency transformer. 1,806,386; May 19.
Burke, Paul, Green Bay, Wis., assignor to Northwest Engineering Corporation. Pull shovel. 1,805,479; May 19.
Burns, Fred J., assignor to Columbia Mills, Inc., Saginaw, Mich. Self-locking combination venetian blind bracket. 1,805,611; May 19.
Busby, Henry H., Evanston, Ill. Ladder. 1,806,145; May 19.
Busch-Sulzer Bros.-Diesel Engine Company. (See Kägi, Emil, assignor.)
Butkey, Andrew T., Youngstown, Ohio, assignor to The Safety Processing Company. Grooving machine. 1,806,235; May 19.
Butler, Benjamin J., Somerville, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Condenser manufacture. 1,805,651; May 19.
Byers, Horace G., New York, N. Y., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Age resisting vulcanized rubber composition. 1,806,040; May 19.
Byles, Frank A., Scotia, N. Y., assignor to General Electric Company. Electrical regulating system. 1,806,330; May 19.
C. P. T. Development Corporation. (See Andrews, C. W., and Rogers, assignors.)
Cadman, Addi B., Beloit, Wis., assignor to Warner Mfg. Co., South Beloit, Ill. Trailer vehicle. 1,806,191; May 19.
Caldwell, Hendrix K., San Diego, Calif. Grounding clamp. 1,805,804; May 19.
Callan, John G. (See Allen, A., and Callan.)
Callsen, Albert, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Induction meter. 1,806,331; May 19.
Cambridge Laboratories. (See Smith, Charles G., assignor.)
Cameron, Charles E., jr., East Orange, N. J., assignor to Lauter-Humana Co. Piano lighting device. 1,805,973; May 19.
Camp, Percy B., Maywood, Ill., assignor to Universal Draft Gear Attachment Co. Clevis for brakes. 1,805,805; May 19.
Campbell, Alexander M., Winnipeg, Manitoba, Canada. Disk plow. 1,805,974; May 19.
Campbell, Harry V., Freehold, N. J. Pile structure. 1,805,975; May 19.
Campbell, Samuel J., assignor to Hudson-Sharp Machine Company, Green Bay, Wis. Machine for folding and scalloping paper sheets. 1,805,510; May 19.
Campbell, Stewart L., Berkeley, and J. Grant, Los Angeles, Calif.; said Campbell assignor to said Grant. Expanding reaming or cutting tool. 1,805,806; May 19.
Canadian Silk Products Limited. (See Thompson, E. J., and Hubler, assignors.)
Candee, Zenas P., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Transfer mechanism. 1,805,976; May 19.
Caracristi, Virginius Z., Bronxville, N. Y. Air heater. 1,805,652; May 19.
Card, Zina L., Milwaukee, Wis. Grease cup. 1,806,446; May 19.
Carlton, Jack C., Southgate, assignor to A. Lipton, doing business as Allied Metal Industries, Inglewood, Calif. Combination curtain pole and curtain suspending means. Des. 84,180; May 19.
Carlton, Jack C., Southgate, assignor to A. Lipton, doing business as Allied Metal Industries, Inglewood, Calif. Combination curtain pole and curtain suspending means. Des 84,181; May 19.
Carlton, Jack C., Southgate, assignor to A. Lipton, doing business as Allied Metal Industries, Inglewood, Calif. Combination curtain pole and curtain suspending means. Des. 84,182; May 19.
Carmody, William S., Salem, N. J. Lifting and transferring device. 1,805,653; May 19.

Carney, James J., Bethel, Vt. Chimney cleaner. 1,806,387; May 19.
Carpenter, Arthur W., New York, assignor, by mesne assignments, to Audio-Cinema, Incorporated, Long Island City, N. Y. Apparatus for making animated pictures. 1,805,511; May 19.
Carpenter, Charles W., Rockville Center, assignor to Collins Development Corporation, New York, N. Y. Electrotherapeutical device. 1,805,904; May 19.
Carroll, Hezekiah W., jr., assignor to Autographic Register Company, Hoboken, N. J. Manifolding machine. 1,806,041; May 19.
Carsley, David R. (See Ramakers, C., and Carsley.)
Carson, William. (See McDowell, J. S., and Carson.)
Carson, William W., jr. (See Giesler, J. V., and Carson.)
Carson, William W., jr., assignor, by mesne assignments, to The Fulton Syphon Company, Knoxville, Tenn. Steam valve. 1,806,447; May 19.
Carter, Lionel A., Webster Groves, Mo. Machine for filling molding flasks. 1,806,042; May 19.
Catalina Hats Ltd. (See Edwards, George H., assignor.)
Cavanagh, John, assignor to The Crofut & Knapp Company, South Norwalk, Conn. Hat. 1,805,977; May 19.
Cave, Henry, assignor to The Fuller Brush Company, Hartford, Conn. Dental plate brush. 1,806,519; May 19.
Cave, Henry, assignor to The Fuller Brush Company, Hartford, Conn. Brush. 1,806,520; May 19.
Cederstrand, Gunnar. (See Lysholm, A., and Cederstrand.)
Celanese Corporation of America. (See Dreyfus, C., and Platt, assignors.)
Central Mine Equipment Company. (See Ormsby, Erle, assignor.)
Central Trust Company of Illinois et al., executors. (See Friendly, Herbert M.)
Chadwick, Lee S., Shaker Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Air pump for pressure fuel tanks. 1,805,757; May 19.
Chadwick, Lee S., Shaker Heights, Ohio. Vibrating apparatus. 1,805,758; May 19.
Chain Belt Company. (See Shafer, Samuel, jr., assignor.)
Chamberlain, Harry B., Kalamazoo, Mich. Safe. 1,805,759; May 19.
Chamberlain Metal Weatherstrip Company. (See Julien, Louis F., assignor.)
Chandler, Edgar J., assignor of one-half to H. M. Steves, Oakland, Calif. Automatically actuated weather strip. 1,805,512; May 19.
Chapman, Paul, Rayside, N. Y. Power transmission construction. 1,805,612; May 19.
Charles, Maurice, Courbevoie, France. Safety switch. 1,806,236; May 19.
Charleston Dry Dock and Machine Company et al. (See Smith, Richard F., assignor.)
Chase Machine Company. (See Chase, S., 4th, Palm, and Pfeiffer, assignors.)
Chase, Stephen, 4th, G. H. Palm, R. S. Pfeiffer, Chicago, and B. S. Pfeiffer, Winnetka, assignors to Chase Machine Company, Chicago, Ill. Carpet cleaning machine. 1,806,237; May 19.
Cherry-Burrell Corporation. (See Boileau, Arthur H., assignor.)
Chicago Lock Company. (See Shinn, Lyle B., assignors.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chilton, Ralph H., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,805,684; May 19.
Cholerton, Alfred F., et al. (See Lee, John E., assignor.)
Chryst, William A., assignor to Delco-Remy Corporation, Dayton, Ohio. Centrifugal clutch. 1,806,332; May 19.
Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,806,333; May 19.
Cinadr, Frank A., Moulton, Tex. Garment bag support. 1,806,521; May 19.
Cipra, William J., Cleveland, Ohio. Noise producing toy. 1,805,566; May 19.
Ciraolo, Antonio, Oakland, Calif. Ignition device. 1,806,574; May 19.
Ciraolo, Ferdinand A., and J. S. Basher, Oakland, Calif. Adjustable insulator support. 1,806,575; May 19.
Clark, Howard I., Los Angeles, Calif. Rotary foot pad. 1,805,978; May 19.
Clark, James H., assignor to Swift and Company, Chicago, Ill. Display and shipping container. 1,806,334; May 19.
Clark, J. L., Manufacturing Co. (See Truesburg, Fred C., assignor.)
Clark, J. R., Co., The. (See Kalgren, John E., assignor.)
Clark, John N. (See Trimble, W. H., and Clark.)
Clarke, Edgar W., and J. L. Eigenbrot, Evanston, assignors to American Tar Products Company, Chicago, Ill. Apparatus and coking liquefiable carbonaceous materials. 1,806,146; May 19.
Clavel, René, Basel-Augst, near Basel, Switzerland. Treatment of cellulose derivatives of products made therewith. 1,806,043; May 19.
Clawson, Monroe S., Montclair, N. J. Individual cup heater. 1,805,716; May 19.
Clearfield Machine Company. (See McMurray, Walter E., assignor.)
Clearwater Lumber Company. (See Laursen, Bruno L., assignor.)
Clerc, Reinhard. (See Schoeller, W., Jordan, and Clerc.)
Clifford, John M., Providence, R. I. Speaking tube apparatus. 1,805,465; May 19.
Clouse, William L., assignor to The National Machinery Company, Tiffin, Ohio. Press. Des. 84,218; May 19.
Clouse, William L., Tiffin, Ohio. Heating apparatus. 1,805,938; May 19.
Cogan, Leslie L., assignor of one-half to R. R. Rhodes, Peru, Ind. Journal box. 1,806,044; May 19.
Cohen, Julian S., New York, N. Y. Food product. 1,806,576; May 19.
Collins, Charles D., New York, assignor to American Cyanamid Company, New York, N. Y. Apparatus for spraying. 1,806,192; May 19.
Collins Development Corporation. (See Carpenter, Charles W., assignor.)
Collins, Gordon V., Hamilton, assignor to J. K. Richardson, St. Mary's, Ontario, Canada. Check valve for volatile liquids. 1,805,480; May 19.
Collins, Lester W., assignor to Ansul Chemical Company of California, Modesto, Calif. Sterilizing fruit in refrigerator cars. 1,806,012; May 19.
Collins, Tappan, Dormont, Pa. Measuring the amount of water contained in moist sand or gravel. 1,806,538; May 19.
Colson Company, The. (See Roe, De Forest, assignor.)
Colt's Patent Fire Arms Manufacturing Co. (See Ironside, George, assignor.)
Colt's Patent Fire Arms Manufacturing Co. (See Webb, George, assignor.)
Columbia Mills, Inc. (See Burns, Fred J., assignor.)
Columbus Auto Brass Company, The. (See Donley, Harold B., assignor.)
Columbus Auto Parts Company, The. (See Flumerfelt, William A., assignor.)
Commercial Alcohol Company Ltd. (See Gogarten, R., and Arthur, assignors.)
Compare, Manrico, Milan, assignor to S. A. Brovetti Italiani Esteri S. A. B. I. E., Turin, Italy. Telegraph system. 1,805,867; May 19.
Conard, Frederick U., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,805,685; May 19.
Condit Electrical Manufacturing Corporation. (See Jansson, Gustav E., assignor.)
Conrad, Fred A., assignor to American Lace Paper Company, Milwaukee, Wis. Paper doily. Des. 84,183; May 19.
Consolidated Car Heating Company. (See Parsons, Robert J., assignor.)
Continental Motors Corporation. (See Niven, Archie M., assignor.)
Cooke, George J., Chicago, Ill. Refrigerating apparatus. 1,805,613; May 19.
Coon, Chester C. (See Jordan, C. A., and Coon.)
Cooper, David A. (See Stone, O. H., and Cooper.)
Copeland Products, Inc. (See Muffly, Glenn, assignor.)
Corcoran, Thos. J. Lamp Co., The. (See Schmidt, J. F., Erbart, and Wright, assignors.)
Costello, Henry O., Providence, R. I. Display toy. 1,806,448; May 19.
Cotter, Thomas, Evansville, Ind. Releasing threading die. 1,805,905; May 19.
Cottrell, C. B., & Sons Company. (See Barber, Howard M., assignor.)
Craigo, John M., Hartford, Conn. Method of and apparatus for mounting die teeth. 1,806,147; May 19.
Cram, Leroy V., Flint, assignor to General Motors Corporation, Detroit, Mich. Fan. 1,806,539; May 19.
Crawford, Harry W. (See Ennis, C. E., and Crawford.)
Crawford, Richard A., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Aqueous rubber dispersion and making same. 1,806,388; May 19.
Critchfield, Robert M., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Windshield wiper. 1,806,335; May 19.
Critchfield, Robert M., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Windshield cleaner. 1,806,336; May 19.
Crofut & Knapp Company, The. (See Cavanagh, John, assignor.)
Cross Development Corporation. (See Cross, Roy, assignor.)
Cross, Roy, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del. Treating petroleum hydrocarbons in the vapor phase. 1,805,686; May 19.
Crouse-Hinds, Company. (See Borden, Stephen W., assignor.)
Crum, Roland R., Whittier, Calif. Booster brake device. 1,805,808; May 19.
Cunard, Russell S., Everett, Pa. Direction signal for motor vehicles. 1,805,717; May 19.
Cooper, Hugh S., Cleveland, Ohio, assignor to Beryllium Development Corporation. Production of beryllium and other metals. 1,805,567; May 19.
Crandall, Eugene L., Schenectady, N. Y., assignor to General Electric Company. Shielding means for high tension cable. 1,805,513; May 19.
Crolley, Sumter L., and D. L. Jones, Camden, S. C. Splitting attachment for looms. 1,805,568; May 19.
Cunningham, Frederick W. (See Hardy, A. C., and Cunningham.)
Cutler-Hammer, Inc. (See Kuhn, Clarence W., assignor.)
Cutler-Hammer, Inc. (See Meuer, George J., assignor.)

Cutler-Hammer, Inc. (See Stansbury, C., and Mortensen, assignors.)
Coughlin, George, New York, N. Y. Deposit receptacle. 1,805,760; May 19.
Coulombe, Charles, Detroit, Mich. Valve mechanism oil jacket. 1,805,807; May 19.
Cummings, Benjamin L., and A. W. Harris, Toledo, Ohio, assignors to General Motors Corporation, Detroit, Mich. Coupling device. 1,806,540; May 19.
Dahl, Berent O., Viroqua, Wis. Safety wing for aircraft. 1,806,148; May 19.
Daugherty, Charles S., Philadelpia, Pa. Container. 1,806,149; May 19.
Davidson, Glenn. (See Laucks, I. F., and Davidson.)
Davis, Charles C., assignor, by mesne assignments, to St. Joseph Iron Works, St. Joseph, Mich. Reenforced basket bottom. 1,805,687; May 19.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Actuating mechanism for pressing machines. 1,805,569; May 19.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Pressing element for laundry and garment pressing machines. 1,805,570; May 19.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Counterbalancing mechanism for heads of pressing machines. 1,806,193; May 19.
Davis, Maurice E., Grand Rapids, Mich., assignor, by mesne assignments, to Leo Meyer Company, Akron, Ohio. Method and machine for reclaiming rubber and fabric from tire beads. 1,805,688; May 19.
Davis, Robert L., Pittsburgh, Pa., and D. G. Little, Long Meadow, Mass., assignors to Westinghouse Electric and Manufacturing Company. Amplifier. 1,806,281; May 19.
Davis, Stuart. (See Fenn, L. C., and Davis.)
Davis, Thomas A. (See Watson, Alec V., assignor.)
Davis, Walter T., Parkersburg, W. Va. Plant protector. 1,805,571; May 19.
Dawson, Herbert. (See Hallstead, L. A., and Dawson.)
Day, Fred J., Los Angeles, Calif. Cooling apparatus. 1,805,809; May 19.
Deckebach, Henry E., Cincinnati, Ohio. Advertising device. 1,806,150; May 19.
Decker, Ward, assignor to The Willys-Overland Company, Toledo, Ohio. Carburetor. 1,806,045; May 19.
Deere & Company. (See White, Charles H., assignor.)
Deeter, Amos O., Minot, N. Dak. Light globe holder. 1,806,046; May 19.
De Florez, Luis, Pomfret, Conn. Float controlled pumping system for oil refineries. 1,806,449; May 19.
De Gruyter, Paul J., The Hague, Netherlands. Metal dowel for wooden beams. 1,806,522; May 19.
Dehn, Paul M., Alice, N. Dak. Fastener for storm and screen sashes. 1,805,654; May 19.
De Kater, Jacobus G., The Hague, Netherlands. Machine for sawing under water. 1,806,013; May 19.
Delamothe, Louis A., Oakland, Calif. Ear ring. Des. 84,184; May 19.
Delco Products Corporation. (See Brump, Herbert L., assignor.)
Delco Products Corporation. (See Chryst, William A., assignor.)
Delco Products Corporation. (See Elsey, George W., assignor.)
Delco-Remy Corporation. (See Critchfield, Robert M., assignor.)
Delco-Remy Corporation. (See Goad, Louis C., assignor.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
De Mask, Martin J., Pittsfield, Mass. Multiple base plug receptacle. 1,805,572; May 19.
De Mattia, Constant, assignor to Vincent Steel Process Company, Detroit, Mich. Emery wheel dressing tool. 1,805,514; May 19.
De Mers, Clayton D., assignor to Taylor Instrument Companies, Rochester, N. Y. Controlling the operation in pulp grinding. 1,806,238; May 19.
Denney, Harvey J., Westlake, La. Inside pipe cutter. 1,805,515; May 19.
Dennis, Alfred A., assignor to Veneer Machinery Company, Grand Rapids, Mich. Jointer. 1,805,906; May 19.
Dennis, Alfred A., assignor to Veneer Machinery Company, Grand Rapids, Mich. Veneer taping machine. 1,805,907; May 19.
De Pamphilis, Gennaro, New York, N. Y. Pad. 1,805,761; May 19.
De Ram, Georges H. E., Boulogne-sur-Seine, France. Frictional shock absorber with hydraulic control. 1,805,466; May 19.
Derceser, Richard, and K. Moldaenke, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Water-insoluble azo dyestuffs and material dyed therewith. 1,806,047; May 19.
Detroit Lubricator Company. (See Russel, Philip S., assignor.)
Deubener, Walter H., St. Paul, Minn. Paper shopping bag. 1,805,810; May 19.
De Vega, Axel P., Boston, Mass. Cigarette pack opener. 1,805,811; May 19.
De Vilbiss Company, The. (See Mutschel, Oscar J., assignor.)
De Vizcaya, Jean A. A., Paris, France. Vehicle body. 1,806,523; May 19.
De Witt, Arthur R., assignor of one-half to C. L. Wright, Harbor Springs, Mich. Boat seam sealing method. 1,805,812; May 19.
Diamond Match Company, The. (See Light, Clare K., assignor.)
Dick, Burns, St. Louis, assignor to Wagner Electric Corporation, St. Louis, Mo. Braking apparatus. 1,806,151; May 19.
Dickerson, Ralph W., Roscoe, Ohio. Planter. 1,806,389; May 19.
Dickinson, Harry S., Moline, Ill., assignor to The Dunham Company, Berea, Ohio. Double roller pulverizer. 1,805,718; May 19.
Didinger, George H., et al., trustees. (See Farr, F. G., and Didinger, assignors.)
Diescher, S., & Sons. (See Diescher, Samuel E., assignor.)
Diescher, Samuel E., assignor to S. Diescher & Sons, Pittsburgh, Pa. Tin plate conveyer and cleaner. 1,805,980; May 19.
Dietz, Frank L., assignor of one-half to E. H. Luke and one-half to North Pacific Cedar Products Corporation, Seattle, Wash. Hand split tapered shake. 1,805,689; May 19.
Dietzel, Albert, Pittsburgh, Pa. Pickling apparatus. 1,806,239; May 19.
Dinsmore, Carrie M., Walnut Park, Calif. Coat hanger. 1,805,573; May 19.
Ditchfield, Frank. (See McWilliams, J. P., and Ditchfield.)
Dittmann, Emil, Plon, Germany. Bookmarker. 1,805,732; May 19.
Dixon, John F., Wylde Green, England. File for letters or other papers. 1,805,939; May 19.
Dobyns, Daniel T., administrator. (See Wooding, Benjamin F., assignor.)
Dodge, Adiel Y., South Bend, Ind. Lighting unit. 1,805,690; May 19.
Doehler Die-Casting Co. (See Morin, Louis H., assignor.)
Doherty Research Company. (See O'Connor, John F., assignor.)
Dolan, Frederick J., assignor to Riley Stoker Corporation, Worcester, Mass. Distributing device. 1,805,940; May 19.
Donald, James R., Montreal, Quebec, Canada. Production of carbon dioxide ice. 1,806,240; May 19.
Donley, Harold B., assignor to The Columbus Auto Brass Company, Columbus, Ohio. Oil measure. 1,805,813; May 19.
Donnelly, Charles A., Chicago, Ill. Goggles. 1,806,524; May 19.
Dow Chemical Company, The. (See Britton, Edgar C., assignor.)
Down, Sidney G., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Cooling device for automotive brakes. 1,805,655; May 19.
Drake, Herbert W., East Orange, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Call distributing system. 1,806,525; May 19.
Drennan, Joseph F. (See Lang, G. J., Drennan, and Schlesinger.)
Drew, John E., Jersey City, N. J., assignor to Wade & Butcher Corporation. Razor stropper. 1,805,691; May 19.
Dreyfus, Camille, New York, N. Y., and H. Platt, Alleghany County, Md., assignors to Celanese Corporation of America. Cellulose fibers, fabrics, and articles. 1,806,048; May 19.
Dreyfus, Henry, London, England. Treatment of cellulose derivatives or products made therewith. 1,805,467; May 19.
Dreyfus, Henry, London, England. Treatment of cellulose derivatives or products made therewith. 1,805,468; May 19.
Drumm, Elmer E., assignor to Aluminum Goods Mfg. Co., Manitowoc, Wis. Detachable cooking utensil handle. Re18069; May 19.
Dryice Equipment Corporation. (See Martin, James W., jr., assignor.)
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for treating petroleum. 1,806,282; May 19.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Converting petroleum oil. 1,806,283; May 19.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Process of and apparatus for converting heavy into lighter hydro-carbons. 1,806,284; May 19.
Dufour, René, Paris, France. Electric furnace. 1,805,469; May 19.
Dulany, G. W., Trust, The. (See Page, Charles B., assignor.)
Dunham, Albert E., Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Channeling machine. 1,805,719; May 19.
Dunham Company, The. (See Dickinson, Harry S., assignor.)
Dunlap, James E., assignor to Walker Vehicle Co., Chicago, Ill. Vehicle. 1,806,337; May 19.
Dunwody, Kenneth W., Macon, Ga. Building unit. 1,805,470; May 19.

Du Pont, E. I. de Nemours & Company. (See Dykstra, H. B., and Lawson, assignors.)
Dupuis, Fernand, Charleroi, Belgium. Centrifugal separator. 1,806,241; May 19.
Duquesne, Ferdinand A., St. Maur Des Fosses, France. Safety apparatus for protection and defense against burglary and violation of habitations. 1,806,242; May 19.
Durant, Herbert U., Los Angeles, Calif. Fluid pressure control. 1,805,814; May 19.
Duval, Adam I., et al. (See Staude, John M., assignor.)
Dykstra, Harry B., and W. E. Lawson, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Composition of matter. 1,806,152; May 19.
Dyrr, Jacob V., Bell, Calif. Spring harrow tooth. 1,805,481; May 19.
Dyrr, Jacob V., Bell, Calif. Remote control hoist. 1,805,482; May 19.
Eames, William J. (See Law, S. W., and Eames.)
Easterly, David H., Detroit, Mich. Hay stacker. 1,806,243; May 19.
Eaton Axle & Spring Company, The. (See Reid, James S., assignor.)
Echikson, Elchanan, Newark, N. J. Knife tang. 1,806,244; May 19.
Eckersley, James E., Aberdeen, assignor of one-half to A. Polson, Hoquiam, Wash. Set works for wood cutting machines. 1,806,526; May 19.
Eckstine, Fred G., assignor of one-half to C. Benedict, Los Angeles, Calif. Metering valve. 1,805,733; May 19.
Edson, Bert, Pawtucket, R. I., assignor to New England Lace Mills, Inc., New York, N. Y. Lace. Des. 84,185; May 19.
Edson, Bert, Pawtucket, R. I., assignor to New England Lace Mills, Inc., New York, N. Y. Lace. Des. 84,186; May 19.
Edson, Bert, Pawtucket, R. I., assignor to New England Lace Mills, Inc., New York, N. Y. Lace. Des. 84,187; May 19.
Edwards, George H., Mill Valley, assignor to Catalina Hats Ltd., San Francisco, Calif. Hat shaping and pressing mold. 1,805,979; May 19.
Edwards, William A., Chicago, Ill. Radiator shutter control for conserving heat. 1,806,153; May 19.
Eggleston Drilling Corporation. (See Smith, Eggleston, assignor.)
Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Apparatus for cracking oil. 1,805,614; May 19.
Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Cracking hydrocarbon products. 1,805,615; May 19.
Egloff, Gustav, and J. C. Morrell, assignors to Universal Oil Products Company, Chicago, Ill. Treating petroleum oil. 1,805,616; May 19.
Ehnbom, Bo K. G., Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,805,656; May 19.
Elfiaender, Ludwig. (See Lüttringhaus, A., Elfiaender, and Kaćer.)
Elgenbrot, John L. (See Clarke, E. W., and Elgenbrot.)
Eisemann, Peter, Richmond Hill, N. Y. Clamping vise. 1,806,527; May 19.
Electric Service Supplies Company. (See Williams, Charles S., assignor.)
Electrolux Servel Corporation. (See Ehnbom, Bo K. G., assignor.)
Electrolux Servel Corporation. (See Randel, Bo F., assignor.)
Elevator Supplies Company. (See Shonnard, Harold W., assignor.)
Elgin National Watch Company. (See Barton, Robert B., assignor.)
Elliott Company. (See Thompson, Neil, assignor.)
Ellis, Don G., assignor to Kelvinator Corporation, Detroit, Mich. Evaporator. 1,805,762; May 19.
Elsey, George W., assignor to Delco Products Corporation, Dayton, Ohio. Piston. 1,806,338; May 19.
Emsco Derrick & Equipment Company. (See Goeser, Edwin W., assignor.)
England, Lee R., Carter, Okla. Ear suction cup. 1,805,471; May 19.
Ennis, Charles E., El Paso, Tex. and H. W. Crawford, Albuquerque, N. Mex. Charge humidifier for explosive engines. 1,806,049; May 19.
Ensign Carburetor Co. (See Ensign, Roy F., assignor.)
Ensign, Roy F., South Pasadena, assignor to Ensign Carburetor Co., Ltd., Huntington Park, Calif. Carburetor. 1,805,763; May 19.
Ensslin, Adolf, North Attleboro, Mass. Tumbling machine. 1,806,194; May 19.
Erenbrack, John E., Chicago, Ill. Casing and coil assembly for heat transfer devices. 1,806,450; May 19.
Erhart, Louis F. (See Schmidt, J. F., Erhart, and Wright.)
Ericson, Charles E., Los Angeles, Calif. Diamond floor polisher. 1,805,516; May 19.
Ernst, Otto, and H. Lange, Frankfort-on-the-Main-Hochst, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing chloracetaldehyde. 1,806,285; May 19.
Esau, Abraham, Jena, Germany. Short wave oscillator. 1,806,245; May 19.
Eveleth, Clarence M., River Forest, Ill. Shade. 1,805,941; May 19.
Everett, Edward A., Long Island City, N. Y., and M. H. Loughridge, Bogota, N. J.; said Loughridge assignor to said Everett. Electric circuits. 1,805,764; May 19.
Excel Magneto Company. (See Reis, Curt F., assignor.)
Fairbank, Charles O. (See Ranney, L., and Fairbank.)
Fairchild, Charles N., New Haven, Conn., assignor to Fairchild Lock Corporation, New York, N. Y. Cam snap lock. 1,806,253; May 19.
Fairchild Lock Corporation. (See Fairchild, Charles N., assignor.)
Fairey, Charles R. (See Williams, David, L. H., assignor.)
Fancher, Charles J., Windsor, Vt., and R. A. Johnson, Longmeadow, Mass., assignors, by mesne assignments, to Woodward, Hubbard Company, Hill, N. H. Strip feeding mechanism. 1,806,154; May 19.
Fancher, Charles J., Windsor, Vt., and R. A. Johnson, Longmeadow, Mass., assignors, by mesne assignments, to Woodard, Hubbard Company, Hill, N. H. Glazier's point machine. 1,806,195; May 19.
Farkas, John. (See Polnk, Gabriel, assignor.)
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake release device. 1,805,617; May 19.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Air purifier. 1,805,657; May 19.
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Triple valve cylinder cap. 1,805,658; May 19.
Farr, Frederick G., et al., trustees. (See Farr, F. G., and Didinger, assignors.)
Farr, Frederick G., New York, N. Y., and G. H. Didinger, Philadelphia, Pa., assignors to F. G. Farr, D. Slingluff, and G. H. Didinger, trustees. Steam generator. 1,806,390; May 19.
Farrelly, Adaline, Chicago, Ill. Shampoo cap. 1,806,155; May 19.
Fawkes, Charles G., Denver, Colo. Vehicle wheel. 1,805,574; May 19.
Fayolle, Paul. (See Plummer, Edgar P., assignor.)
Federal Laboratories, Inc. (See Young, John W., assignor.)
Federal Telegraph Company. (See Hough, Clinton W., assignor.)
Federal Telegraph Company. (See Kolster, Frederick, A., assignor.)
Fegley, Thomas J., and G. O. Leopold, assignors to North Bros's. M'f'g. Co., Philadelphia, Pa. Portable power-driven saw. 1,806,528; May 19.
Feldenheimer, William, London, England. Manufacture of rubber compositions. 1,805,517; May 19.
Feldman, Joseph, and J. Lessem, New York, N. Y.; said Lessem assignor to said Feldman. Hand baggage. 1,806,246; May 19.
Felger, Hermann, Nuremberg, Germany. Propelling pencil. 1,805,575; May 19.
Felix, Benjamin B., Chicago, Ill. Cushioning strip. 1,805,576; May 19.
Fendt, Emil, and K. Schörg, Frankfort-on-the-Main-Hochst, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Electrical inductive and resistance heating device. 1,805,908; May 19.
Fenn, Loren C., and S. Davis, Chinook, Wash. Pipe fitting apparatus. 1,805,909; May 19.
Fenton, Frank S., assignor to Fenton's Sandwich, Inc., Cincinnati, Ohio. Restaurant building. Des. 84,188; May 19.
Fenton's Sandwich, Inc. (See Fenton, Frank S., assignor.)
Ferenci, Lester, Brooklyn, N. Y., assignor to American Machine & Foundry Company. Automatic slip coupling. 1,805,692; May 19.
Ferrell, Dent, and A. W. Helmholtz, assignor to Safety Mining Company, Harrisburg, Ill. Blasting cartridge. 1,805,541; May 19.
Ferrettie, Conrad. (See Bradley, C. E., and Ferrettie.)
Ferris, Malcolm, Washington, D. C. Radio loop antenna system. 1,805,942; May 19.
Ferris, Wheaton C., University City, and R. M. Brennan, St. Louis, Mo. Expanding device. 1,806,339; May 19.
Finley, Charles A., Rutherford, N. J., assignor to Boorum & Pease Company, Brooklyn, N. Y. Visible loose leaf device. 1,806,529; May 19.
Fireproof Wall Company. (See Makowski, John F., assignor.)
Fischer, Bernard, St. Charles, Mo. Foot control for seed planters. 1,806,050; May 19.
Fisher, Arthur W., Forest Hills Borough, and W. B. Wells, Wilkinsburg, assignors to The Union Switch & Signal Company, Swissvale, Pa. Light signal. 1,806,051; May 19.
Fisher Governor Company, The. (See Browne, Lyle W., assignor.)
Fisk, Athelbert A. (See Hills, Wallie and F. W., assignors.)
Fitchett, Thomas S., assignor to F. X. Hooper Company, Inc., Glenarm, Md. Skip-feed attachment for slotting and creasing machines. 1,806,391; May 19.
Fitzpatrick, Joseph G., Anaheim, Calif. Fishing tool. 1,805,815; May 19.

Flack, Theodore J., Brooksville, Fla. Molding articles. 1,806,451; May 19.
Fleming, Wells S., Portland, Oreg. Floor drain fixture. 1,805,816; May 19.
Fletcher, Ernest E., Chicago, Ill. Floor construction. 1,805,483; May 19.
Flintermann, Gerhard, Orange, N. J. Adjustable seat for vehicles. 1,806,014; May 19.
Florence Pipe Foundry & Machine Company. (See Green, Charles B., assignor.)
Flumerfelt, William A., Columbus, Ohio, assignor to The Columbus Auto Parts Company. Joint. 1,806,286; May 19.
Foale, William E., Wilkinsburg, Pa. Roll for flattening metal sheets. 1,806,015; May 19.
Foley Saw Tool Company. (See Mathieu, Vincent J., assignor.)
Foresman, Robert A., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Stoker. 1,805,618; May 19.
Foresman, Robert A., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Stoker. 1,806,554; May 19.
Forrest, John H., assignor to The Universal Lifting Appliance Co., Seattle, Wash. Ejector. 1,806,287; May 19.
Foster Brothers Manufacturing Company. (See Foster, William B., assignor.)
Foster Machine Company. (See McKean, John O., assignor.)
Foster Wheeler Corporation. (See Primrose, John, assignor.)
Foster, William B., assignor to Foster Brothers Manufacturing Company, Utica, N. Y. Spring cushion construction. 1,805,817; May 19.
Fowler, Edith M., executrix. (See Fowler, Edward J.)
Fowler, Edward J., deceased, by E. M. Fowler, Redwood City, executrix, and D. Baird, Berkeley, Calif., assignors to Nicholas Copper Company, New York, N. Y. Roasting furnace. 1,805,659; May 19.
Fox, Guy Denver, Colo. Chart. 1,806,156; May 19.
Foxboro Company, The. (See Bristol, Edgar H., assignor.)
Francis, Daniel R., assignor to The Waterbury Tool Company, Waterbury, Conn. Adjusting hydraulic gear drives. 1,806,340; May 19.
Franklin Equipment Company. (See Langer, Rudolph J., assignor.)
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frantz, Virgil L., Roanoke, Va. Locomotive sanding device. 1,806,052; May 19.
Franz, Charles H., jr., Milwaukee, Wis. Ring binder attachment. 1,806,157; May 19.
Fraunberger, Fritz, and G. Knöffler, Premnitz, Germany. Manufacture of oxidation products of siccative oils. 1,806,247; May 19.
Frederick, Rheuel H., Irvington, N. J., assignor to Ames Pump Company, Inc., New York, N. Y. Centrifugal pump. 1,805,765; May 19.
Freeman, Henry, Tottenham, London, and H. D. Thurgar, London, England. Device for use in dressing the hair. 1,806,248; May 19.
Freeman, Louis W., Gary, W. Va. Cuff for trousers. 1,805,577; May 19.
Frey, Karl, Ennetbaden, assignor to A. G. Brown Boveri & Cie. Baden, Switzerland. Steam turbine apparatus. 1,806,065; May 19.
Fried Krupp Grusonwerk Aktiengesschaft. (See Voegel, August, assignor.)
Friedman, John H., assignor to The National Machinery Co., Tiffin, Ohio. Method of and mechanism for trimming forgings. 1,805,943; May 19.
Friendly, Herbert M., deceased, Chicago, Ill.; M. S. Friendly and Central Trust Company of Illinois executors. Automatic telephone system. 1,806,288; May 19.
Friendly, Milton S., et al., executors. (See Friendly, Herbert M.)
Frigidaire Corporation. (See Chilton, Ralph H., assignor.)
Frigidaire Corporation. (See King, Jesse G., assignor.)
Frisbie, Raymond H., Kewaunee, Wis. Manure loader. 1,805,818; May 19.
Fromknecht, Bernard M., assignor to The Griswold Manufacturing Company, Erie, Pa. Waffle iron. 1,806,196; May 19.
Fromm, Edward, Iowa Falls, Iowa. Starter mechanism. 1,805,944; May 19.
Fulgora, Fred, Pittsburgh, Pa. Producing a background for moving pictures. 1,806,452; May 19.
Fuller Brush Company, The. (See Cave, Henry, assignor.)
Fuller, Richard B., Lawrence, N. Y., assignor, by mesne assignments to The Soundex Corporation. Manufacturing fibrous blocks. 1,805,981; May 19.
Fuller, Theodore S., Montclair, N. J. Device for dispensing pipe cleaners. 1,805,619; May 19.
Fulton Sylphon Company, The. (See Carson, William W., jr., assignor.)
Fulton Sylphon Company, The. (See Giesler, Jean V., assignor.)
Fulton Sylphon Company, The. (See Giesler, J. V., and Carson, assignors.)
Fulton Sylphon Company, The. (See Reeder, Frank C., assignor.)
G. C. A. Manufacturing Company, The. (See Grinnell, Harold D., assignor.)
Gallagher, Walter J., Cincinnati, Ohio. Toy. 1,806,053; May 19.
Gardner-Denver Company. (See Gardner, John W., assignor.)
Gardner, George, Redlands, Calif. Sweeping attachment for road graders. 1,806,054; May 19.
Gardner, John W., Quincy, Ill. assignor, by mesne assignments, to Gardner-Denver Company. Pump. 1,805,542; May 19.
Gardner, Joseph and J. H. S., assignors to L. Gardner & Sons Limited, Patricroft, near Manchester, England. Valve operating mechanism of internal combustion engines. 1,805,578; May 19.
Gardner, Joseph H. S. (See Gardner, Joseph and J. H. S.)
Gardner, L., & Sons Limited. (See Gardner, Joseph and J. H. S., assignors.)
Garrison Fire Detecting System Incorporated. (See Lindsey, William D., assignor.)
Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Rock drill feeding device. 1,805,518; May 19.
Gavaza, George V., Quincy, Mass. Cushion. 1,806,341; May 19.
Gebhard Louis A., Washington, D. C. assignor to Wired Radio Inc., New York, N. Y. Inductance system. Re18,070; May 19.
Gehrig, William F. Berkeley Heights, N. J. Detonating firework composition. 1,805,945; May 19.
Gehring, John. (See Slade, H. E., and Gehring.)
Gemberling, Cameron H., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Harrow hitch. 1,805,484; May 12.
Gemex Company. (See Roy, Wilfrid J., assignor.)
Gemmer Manufacturing Company. (See Marles, Henry, assignor.)
General Aniline Works, Inc. (See Beck, K., and Kracker, assignors.)
General Aniline Works, Inc. (See Dereser, R., and Moldaenke, assignors.)
General Aniline Works, Inc. (See Hentrich, W., Knoche, and Virck, assignors.)
General Aniline Works, Inc. (See Herz, R., and Zerweck, assignors.)
General Aniline Works, Inc. (See Laska, L., Reyher, and Zitscher, assignors.)
General Aniline Works, Inc. (See Lüttringhaus, A., Elfiaender, and Kaćer, assignors.)
General Aniline Works, Inc. (See Meyer, K. H., and Schuster, assignors.)
General Aniline Works, Inc. (See Schmidt, Karl, assignor.)
General Electric Company. (See Adams, Lester V., assignor.)
General Electric Company. (See Byles, Frank A., assignor.)
General Electric Company. (See Crandall, Eugene L., assignor.)
General Electric Company. (See Halvorson, Cromwell A. B., assignor.)
General Electric Company. (See Hardy, Arthur C., assignor.)
General Electric Company. (See Hardy, A. C., and Cunningham, assignors.)
General Electric Company. (See Heymann, Hugo, assignor.)
General Electric Company. (See Horstkotte, Edward H., assignor.)
General Electric Company. (See Kinnard, Isaac F., assignor.)
General Electric Company. (See MacMillan, Campbell, assignor.)
General Electric Company. (See Paul, William E., assignor.)
General Electric Company. (See Rogers, I. E., and Scott, assignors.)
General Electric Company. (See Thompson, Louis W., assignor.)
General Electric Company. (See Thompson, L. W., and Horstkotte, assignors.)
General Electric Company. (See Tiedeman, John A., assignor.)
General Electric Company. (See Troy, Matthew O., assignor.)
General Electric Company. (See Walle, Ludvig S., assignor.)
General Electric X-Ray Corporation. (See Wantz, Julius B., assignor.)
General Frigheatone Co. Inc. (See Sherman, William S., assignor.)
General Motors Corporation. (See Anibal, Benjamin H., assignor.)
General Motors Corporation. (See Atwood, James C., assignor.)
General Motors Corporation. (See Bower, Ferdinand A., assignor.)
General Motors Corporation. (See Cram, Leroy V., assignor.)
General Motors Corporation. (See Cummings, B. L., and Harris, assignors.)
General Motors Corporation. See Midgley, T., jr., Thomas, and Hochwalt, assignors.)

General Steel Castings Corporation. (See Nystrom, Karl F., assignor.)

General Steel Castings Corporation. (See Pfiager, Harry M., assignor.)

Genkin, Vladimir, Marseille, France. Polyphase electrical instrument. 1,806,392; May 19.

Gercich, Frederick A. (See Hammer, G., Gercich, and Smith.)

Gercich, Frederick A., assignor to Hammer-Bray Company, Oakland, Calif. Gas stove. 1,806,055; May 19.

Gessner, David, Worcester, Mass. Fulling and washing machine. 1,806,342; May 19.

Getz, Benjamin E., Morton, Ill. Washing machine. 1,806,289; May 19.

Geyer, Harvey D., assignor to Inland Manufacturing Company, Dayton, Ohio. Steering wheel with swivel spoke. 1,806,743; May 19.

Gibson, Joseph D., Logan, W. Va. Vaporizing device for treating asthma. 1,806,453; May 19.

Giesler, Jean V., assignor, by mesne assignments, to The Fulton Syphon Company, Knoxville, Tenn. Radiator controlling mechanism. 1,806,393; May 19.

Giesler, Jean V., assignor to The Fulton Syphon Company, Knoxville, Tenn. Temperature regulator. 1,806,530; May 19.

Giesler, Jean V., and W. W. Carson, jr., assignors to The Fulton Syphon Company, Knoxville, Tenn. Fluid mixer. 1,806,394; May 19.

Giger, Walter, Camden, N. J. Clutch operating mechanism. 1,806,158; May 19.

Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Cast metal hopper door. 1,805,660; May 19.

Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Cast metal drop door. 1,805,661; May 19.

Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Hopper door of cast metal. 1,805,662; May 19.

Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Drop door of cast metal. 1,805,663; May 19.

Gilpin, Garth G., Riverside, assignor to Union Metal Products Company, Chicago, Ill. Cast hopper door. 1,805,664; May 19.

Gladeck, Frederick C., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Lock-joint folding attachment for cigar enveloping machines. 1,805,693; May 19.

Glantz, Ludwig B., Minden, Nebr. Piston ring compressor. 1,805,743; May 19.

Globe Machine & Stamping Company, The. (See Green, Lee B., assignor.)

Goad, Louis C., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Shaft centering support. 1,806,344; May 19.

Goeser, Edwin W., assignor to Emsco Derrick Equipment Company, Los Angeles, Calif. Two speed rotary drive. 1,805,819; May 19.

Gogarten, Rudolf, Aachen, Germany, and J. S. Arthur, assignors to The Commercial Alcohol Company Ltd., London, England. Production of degradation products from celiniose, celliuose-like substances, and cellulose containing materials. 1,806,531; May 19.

Goldberg, Meyer D., Philadelphia, Pa. Dental equipment. 1,806,159; May 19.

Goldhammer, Leo, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Film transporting device in a motion picture apparatus. 1,805,579; May 19.

Goldman, Barney, New York, N. Y. Ventilating system for projecting rooms. 1,805,620; May 19.

Goldstein, Samuel, Chicago, Ill. Combined vest and trousers. Des. 84,190; May 19.

Goldwyn Brothers. (See Manly, Fred G., assignor.)

Goldwyn, George L., et al. (See Manly, Fred G., assignor.)

Goldwyn, Herman, et al. (See Manly, Fred G., assignor.)

Gonsett, Robert R., Los Angeles, Calif. Motor operated shears. 1,806,555; May 19.

Good, John N., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Train control device. 1,805,621; May 19.

Goodrich, B. F., Company, The. (See Crawford, Richard A., assignor.)

Goodwin, Harley E., Hartford, Conn. Bathtub seat and hand rest. 1,805,622; May 19.

Goodwin, James E., Cedar Bluff, Va. Automatic fire alarm. 1,805,946; May 19.

Gordon, Aaron. (See Lipman, C. B., and Gordon.)

Gorham Mfg. Co. (See Staf, Axel H., assignor.)

Goudeau, Eric O., Detroit, Mich. Holding support for baby swings. 1,806,454; May 19.

Graham, Thomas C., Long Beach, Calif. Advertising machine. 1,806,160; May 19.

Graham, Warren C. S., New Orleans, La. Pulverizing or disintegrating equipment. 1,806,249; May 19.

Grand Central Wicker Shop, Inc. (See Oliva, Vincent, assignor.)

Grant, John. (See Campbell, S. L., and Grant.)

Gravell, James H., Elkins Park, assignor to American Chemical Paint Company, Ambler, Pa. Method of and material for preventing metal from corroding. 1,805,982; May 19.

Graziani, Andrea, Camden, N. J. Heat conduit and protector therefor. 1,806,455; May 19.

Graziani, Frank A., Fairmont, W. Va. Combination chair plate and rail brace. 1,806,254; May 19.

Green, Charles B., assignor to Florence Pipe Foundry & Machine Company, Florence, N. J. Hydrant tool. 1,806,556; May 19.

Green, Lee B., Lakewood, assignor to The Glome Machine & Stamping Company, Cleveland, Ohio. Combined washing machine casing and support therefor. Des. 84,219; May 19.

Greenawalt, John E. (See Alexovits, Thomas M., assignor.)

Greer, Tony S., Sacramento, Calif. Combination gas tank cap and feed supply lock. 1,805,868; May 19.

Gregson, Oswald G., West Perth, Western Australia, Australia. Sectional auxiliary rim and bracket for vehicle wheels. 1,806,532; May 19.

Greve, Edgar E., Bellevue, assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa. Casing elevator. 1,805,519; May 19.

Griessbach, Robert, and Otto Ambros, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Cattle fodder. 1,806,290; May 19.

Griffith, Earl W., Dalhart, Tex. Rotary valve. 1,806,016; May 19.

Grigsby Grunow Company. (See Jordan, James D., assignor.)

Grinnell, Harold D., assignor to The G. C. A. Manufacturing Company, Pittsfield, Mass. Lamp bulb removing mechanism. 1,806,557; May 19.

Griswold Manufacturing Company, The. (See Fromknecht, Bernard M., assignor.)

Grivin, Johann, Riga, Latvia. Process and device for treating fuel-air-mixtures for internal combustion engines. 1,805,472; May 19.

Grõner, Christian F., Oslo, and S. Kloumann, Snaroen, near Oslo, Norway. Arch dam. 1,806,255; May 19.

Groove Lock Co. Inc. (See Zeindlhofer, Anton, assignor.)

Groves, Elmer H., Minneapolis, Minn. Infant's garment. 1,805,766; May 19.

Grumbacher, M. (See Grumbacher, Walter, assignor.)

Grumbacher, Walter, assignor to M. Grumbacher, New York, N. Y. Color arrangement. 1,805,520; May 19.

Guenard, José L. M., Ponce, Porto Rico. Closure receptacle for bottles and jars. 1,806,256; May 19.

Guggenheim Brothers. (See Robinson, Preston, assignor.)

Guiraud, Henri J., assignor to Societe Anonyme La Cooperation Agricole & Industrielle, Veuxhaulles, France. Carburetor. 1,805,947; May 19.

Gullett Gin Company. (See Wallace, Jeffrey J., assignor.)

Gunning, Percy F., Liverpool, England, assignor to Associated Telephone & Telegraph Company, Chicago, Ill. Telephone system. 1,805,820; May 19.

Gustafson, Edwin A., Flint, assignor to A C Spark Plug Company, Flint, Mich. Speedometer drive. 1,806,541; May 19.

Gilth, Paul F. G. (See Witzler, W., and Gilth.)

Guy, Harry L., Chicago, Ill. Shingle manufacture. 1,806,161; May 19.

Gyro Process Company. (See Wagner, Cary R., assignor.)

Haas, Otto R., North Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Winding machine. 1,805,544; May 19.

Hack, Ernest B., East Melbourne, assignor of one-half to A. V. Leggo, Melbourne, Victoria, Australia. Production of material to be used in the formation of roadways and the like. 1,806,250; May 19.

Hahn, Paul, Berlin, Germany. Lace and like fastening. 1,806,162; May 19.

Haig, Virgil B., Los Angeles, Calif. Automatic faucet opening attachment. 1,805,821; May 19.

Haigler, Claude C., San Jose, Calif. Decoy. 1,806,456; May 19.

Hakim, John B., Danbury, Conn. Carroting composition. 1,806,533; May 19.

Haley, Reuben, Beaver, Pa. Lighting fixture. 1,806,251; May 19.

Hall, Walter E. (See Lowrey, G. A., and Hall.)

Hallstead, Leon A., and H. Dawson, assignors, by mesne assignments, to H. D. Taylor Co., Buffalo, N. Y. Air pressure gauge. 1,805,869; May 19.

Halstead, John F., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Cutting filler tobacco for cigar bunches. 1,805,694; May 19.

Halvorsen, Ole G., Chicago, Ill. Screw propeller. 1,806,345; May 19.

Halvorson, Cromwell A. B., Lynn, Mass., assignor to General Electric Company. Lighting unit. 1,805,485; May 19.

Hamilton, George H., assignor to American Seating Company, Grand Rapids, Mich. Bracket. 1,806,534; May 19.

Hammer-Bray Company. (See Gercich, Frederick A., assignor.)

Hammer-Bray Company. (See Hammer, G., Gercich, and Smith, assignors.)

Hammer, Charles, Hollis Court Boulevard, assignor, by mesne assignments, to Anchor Cap & Closure Corporation, Long Island City, N. Y. Rotary cap having sealing material flowed thereinto. 1,805,623; May 19.

Hammer, George, F. A. Gercich, and W. S. Smith, assignors to Hammer-Bray Company, Oakland, Calif. Air feed and vent device for closed top gas stoves. 1,806,056; May 19.

Hammond, John H., jr., Gloucester, Mass. Paravane torpedo. 1,806,346; May 19.

Hammond, Joseph D. (See Scofield, T. J., White, and Hammond.)

Handley Page Limited. (See Wood, Ronald M., assignor.)

Handy Cleaner Corporation. (See Bull, Arthur A., assignor.)

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Feeding device for rock drills. 1,805,521; May 19.

Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,805,695; May 19.

Hanses, Frank, Glenn View, Ill. Vehicle towing device. 1,805,822; May 19.

Hardy, Arthur C., Wellesley, Mass., assignor to General Electric Company. Method of and apparatus for comparing and recording radiant energy. 1,806,198; May 19.

Hardy, Arthur C., Wellesley, Mass., and F. W. Cunningham, Stamford, Conn., assignors to General Electric Company. Method of and apparatus for comprising and recording relative intensity of radiant energy. 1,806,197; May 19.

Hardy, Arthur C., Wellesley, Mass., and F. W. Cunningham, Stamford, Conn., assignors to General Electric Company. Method and apparatus for comparing radiant energy. 1,806,199; May 19.

Harriman, Joseph B., North Reading, Mass. Poultry light control. 1,806,395; May 19.

Harris, Arthur W. (See Cummings, B. L., and Harris.)

Harrison, George D. (See Myers, W. L., and Harrison.)

Hart, Francis K., et al. (See Titus, Thomas L., assignor.)

Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,806,200; May 19.

Hartbauer, August W. L., Chicago, Ill. Car construction. 1,805,696; May 19.

Hartbauer, August W. L., Chicago, Ill. Railway car construction. 1,805,767; May 19.

Hartford-Empire Company. (See Arbelt, Pierre, assignor.)

Hartford-Empire Company. (See Keller, John R., assignor.)

Hartman, Charles, Waddington Channell, British Columbia, Canada. Pipe wrench. 1,806,457; May 19.

Hartwell, Hubert, Evanston, Ill. Miter square. 1,806,396; May 19.

Hastert, Edouard. (See Lepersonné, M., and Hastert.)

Haverstick, Earl J., Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company. Resistance material and making same. 1,806,347; May 19.

Hawkins, Edward M., Glezen, Ind., assignor of one-half to W. E. Ponder, Pike County, Ind. Transfer means for mine cars. 1,805,910; May 19.

Hayden, Robert P., assignor to Johnson & Johnson, New Brunswick, N. J. Mechanism for slitting fabric. 1,806,458; May 19.

Hazlett, Clarence W. (See Hazlett, Kenneth C. and C. W.)

Hazlett, Kenneth C. and C. W., Santa Monica, Calif. Coupling. 1,805,580; May 19.

Hebert, Helen B., San Diego, Calif. Doll. Des. 84,191; May 19.

Hedly, Arthur H., assignor to Ludlow Typograph Company, Chicago, Ill. Machine for making printer's leads, slugs, and rules. 1,806,257; May 19.

Heer, Walter F., Bexley, Ohio. Temporary bookbinder. 1,806,057; May 19.

Heftler, Victor R., and H. B. Norris, assignors to Zenith-Detroit Corporation, Detroit, Mich. Carburetor. 1,806,348; May 19.

Heilweil, Samuel, New York, assignor of one-half to A. Messer, and one-half to R. B. Messer, Brooklyn, N. Y. Doll-eye bulb. 1,805,823; May 19.

Helmholtz, Arthur W. (See Ferrell, D., and Helmholtz.)

Hemphill Company. (See Lawson, John and R. H., assignors.)

Hendrickson, Leo B., assignor to Union Steam Pump Company, Battle Creek, Mich. Air filter. 1,805,824; May 19.

Henry, Lucien N., Soissons, France. Apparatus for fleshing hides, skins and the like. 1,806,258; May 19.

Hentrich, Winfrid, Wiesdorf-on-the-Rhine, R. Knoche, Leverkusen-on-the-Rhine, and P. Virck, Dessau-Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Mono-azo dye. 1,805,911; May 19.

Hentschel, Elmer J., and S. E. Miller, Springfield, Ohio. Compression valve and faucet. 1,806,397; May 19.

Hercules Powder Company. (See Nordenswan, Carl-Johan H., assignor.)

Hermann Manufacturing Company, The. (See Wessel, L. H., and Booker, assignors.)

Herz, Richard, Frankfort-on-the-Main, and W. Zerweck, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New derivatives of anthanthrone and making same. 1,805,912; May 19.

Herz, Richard, Frankfort-on-the-Main, and W. Zerweck, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New alkoxy derivatives of anthanthrone and making same. 1,805,913; May 19.

Hess, Raymond W. (See Moses, F. G., Hess, and Perkins.)

Hess, William W., Robinson, Ill. Insect destroyer. 1,805,581; May 19.

Hettrick Manufacturing Company. (See Mack, Clarence G., assignor.)

Hevi Duty Electric Company. (See Smalley, Edwin L., assignor.)

Heymann, Hugo, Friedenau, Berlin, Germany, assignor to General Electric Company. Electric rolling mill drive with Leonard control. 1,806,349; May 19.

Hill Clutch Machine and Foundry Company, The. (See Peck, Cecil C., assignor.)

Hill, Harold O., Aspinwall, assignor to Riter-Conley Manufacturing Company, Pittsburgh, Pa. Tower construction. 1,806,459; May 19.

Hill, Warren H. (See Addison, E. C., and Hill.)

Hills, Fred W. (See Hills, Wallie and F. W.)

Hills, Wallie and F. W., Ashton, assignors of one-third to A. A. Fisk, Hutchinson, Kans. Adjustable connecting rod. 1,805,825; May 19.

Himmel Brothers Company, The. (See Himmel, Fred and I., assignors.)

Himmel, Fred and I., assignors to The Himmel Brothers Company, New Haven, Conn. Corner clamp for store front construction. Des. 84,192; May 19.

Himmel, Isidore. (See Himmel, Fred and I.)

Hire, Charles, Murray, Ky. Force table. 1,806,350; May 19.

Hitner, Harry F., Oakmont, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for melting glass and similar substances. Re18,071; May 19.

Hochwalt, Carroll A. (See Midgley, T., jr., Thomas, and Hochwalt.)

Hockley, Horace R., assignor to G. D. Peters & Company, Limited, Slough, England. System of and apparatus for operating and controlling the doors of rail or road vehicles. 1,805,983; May 19.

Hoe, R. & Co. (See Ball, Harry V., assignor.)

Hofbauer, Caspar E., assignor to Paramount Carburetor Corporation, New York, N. Y. Carbureting system. 1,806,201; May 19.

Hoffman, Jay C., Akron, Ohio. Railway signaling system. 1,806,291; May 19.

Hofstetter, Robert, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for assembling members. 1,806,202; May 19.

Hoglund, Theodore J., Gardner, Mass. Toy handcuff. 1,806,163; May 19.

Hohein, George C., Clarendon, Va. Sewing machine attachment. 1,806,252; May 19.

Holden, Richard R., Highland guide. 1,806,164; May 19.

Holmes, Harry W., assignor to The Regina Corporation, Rahway, N. J. Equipment for electric vacuum cleaners and the like. 1,806,461; May 19.

Holmgren, Elof, Red Deer, Alberta, Canada. Berry gatherer. 1,806,058; May 19.

Hood, James. (See Lemeiux, W. J., and Hood.)

Hooper, F. X., Company, Inc. Fitchett, Thomas S., assignor.)

Hoople, Charles I., Honolulu, Hawaii. Adjustable anti-glare shield. 1,806,059; May 19.

Hopkins, Robert C., Alliance, Ohio. Mobile blower unit. 1,806,460; May 19.

Hopkins, Robert C., Alliance, Ohio. Gas valve. 1,806,462; May 19.

Hopkins, Robert C., Alliance, Ohio. Oil and gas furnace. 1,806,463; May 19.

Horos, Alexander and S., Philadelphia, Pa. Cap. 1,805,522; May 19.

Horos, Stephen. (See Horos, A. and S.)

Horstkotte, Edward H. (See Thompson, L. W., and Horstkotte.)

Horstkotte, Edward H., Schenectady, N. Y., assignor to General Electric Company. System of speed control. 1,805,486; May 19.

Hough, Clinton W., New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Wired radio program apparatus. 1,805,665; May 19.

Houseman, Harold E., Edge Moor, assignor to Standard-Trump Bros. Machine Company, Wilmington, Del. Pattern mechanism for circular knitting machines. 1,805,697; May 19.

Houseman, Wilbur L., Somerton, Pa., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del. Knitted fabric and making the same. 1,805,624; May 19.

Houseman, Wilbur L., Somerton, Pa., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del. Knitting mechanism. 1,805,625; May 19.

Housley, John, Elizabeth, N. J. Spectacle protector. 1,806,464; May 19.

Hovermale, James E., San Quentin, Calif. Beet harvester. 1,805,582; May 19.

Howard, Frank A., Elizabeth, and N. E. Loomis, Westfield, N. J., assignors to Standard Oil Development Company. Recovering gasoline from gas. 1,806,571; May 19.

Howard, William R., Washington, D. C., assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for converting petroleum oil. 1,806,060; May 19.

Howarth, Harry A. S., Frankford, assignor to Kingsbury Machine Works, Inc., Frankford, Philadelphia, Pa. Bearing. 1,806,061; May 19.
Howarth, Harry A. S., Frankford, assignor to Kingsbury Machine Works, Inc., Frankford, Philadelphia, Pa. Bearing. 1,806,062; May 19.
Howell, Albert S., assignor to The Bell & Howell, Company, Chicago, Ill. Photographic printing machine. 1,805,768; May 19.
Howlett, Frank H., Oakland, assignor to F. Wolfsohn, San Francisco, Calif. Planer. 1,805,545; May 19.
Howlett, Frank H., Oakland, assignor to F. Wolfsohn, San Francisco, Calif. Planer. 1,805,546; May 19.
Hubler, Raymond H. (See Thompson, E. J., and Hubler.)
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,193; May 19.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,194; May 19.
Hudson-Sharp Machine Company. (See Campbell, Samuel J., assignor.)
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for hydrocarbon oil conversion. 1,806,063; May 19.
Hughes, William R. (See Skeels, Henry E., assignor.)
Hukill, Henry D., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Tube coupling. 1,805,666; May 19.
Hull, Franklyn H., Hawthorne, N. J., assignor to Austral Window Company, New York, N. Y. Combined door bumper and coat hanger. 1,805,984; May 19.
Hultgren, Charles, assignor to S. Karpen & Bros., Chicago, Ill. Sofa bed. 1,806,259; May 19.
Hunt, Franklin B., assignor to The Liquid Carbonic Corporation, Chicago, Ill. Refrigerating system. 1,806,559; May 19.
Hunt, George, assignor to The Studebaker Corporation, South Bend, Ind. Air vent for fuel tank. 1,806,292; May 19.
Hurka, Frank, Schenectady, N. Y. Garden implement. 1,806,165; May 19.
Huschke, Casper B. (See Jensen, K. M., and Huschke.)
Huston, Jack, San Francisco, Calif. Door operating mechanism. 1,806,203; May 19.
Hydraulic Deep Well Pump Company. (See Squires, Wilbur N., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Ernst, O., and Lange, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Fendt, E., and Schörge, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Griessbach, R., and Ambros., assignors.)
Imas, Sanitago, et al. (See Bulgarini, Luis, assignor.)
Imperial Chemical Industries Limited. (See Brightman, Rainald, assignor.)
Indge, Herbert S. (See Player, S., and Indge.)
Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)
Ingersoll-Rand Company. (See Le Valley, John, assignor.)
Ingersoll-Rand Company. (See Miller, Ralph, assignor.)
Ingersoll-Rand Company. (See Smith, William A., sr., assignor.)
Inland Manufacturing Company, The. (See Geyer, Harvey D., assignor.)
Inman: Harry A., Newark, N. Y. Container. 1,805,870; May 19.
International Cigar Machinery Company. (See Gladeck, Frederick C., assignor.)
International Cigar Machinery Company. (See Halstead, John F., assignor.)
Intertype Corporation. (See Willis, Le Roy W., assignor.)
Ironside, George, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Machine gun mount. 1,805,547; May 19.
Issar, Kornel, Detroit, Mich. Humidifier for gas engines. 1,806,293; May 19.
Jacob, Bruno E., Ripon, Wis. Shaving machine for cylindrical sound records. 1,805,583; May 19.
Jacob, Francis M., Columbus, Miss. Circuit closer. 1,806,398; May 19.
Jacobs, Franklin D., Bellevue, assignor to Pittsburgh Brush Company, Pittsburgh, Pa. Brush. 1,806,542; May 19.
Jacobs, William J. (See Mumaugh, Arthur H., assignor.)
Jansson, Gustav E., Wellaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. High tension direct current transmission. 1,806,351; May 19.
Jeffrey, Harold M., Methuen, assignor to Patent Protection Corporation, Lowell, Mass. Bobbin transfer feeler. 1,805,548; May 19.
Jeffrey Manufacturing Company. (See Levin, Nils D., assignor.)
Jenks, Harry N., Sacramento, Calif. Water treatment device. 1,805,667; May 19.
Jensen, Jens J., assignor to Messrs. Boggild & Jacobsen, Copenhagen, Denmark. Mold for plastic substances for instance chocolate. 1,806,017; May 19.
Jensen, Kristoffer M., and C. B. Huschke, Morgan, Minn. Poultry roost. 1,806,352; May 19.
Jippson, Adolph B., Cleveland, Ohio. Combined cigarette dispenser, match box holder, and ash receiver. 1,806,399; May 19.
Johnson & Johnson. (See Hayden, Robert P., assignor.)
Johnson, Charles S., Champaign, Ill. Portable batcher. 1,805,769; May 19.
Johnson, Clarence E., and F. C. Koestner, Chicago, Ill. Registering mechanism. 1,806,353; May 19.
Johnson, Ernest G., Boston, assignor, by mesne assignments to The Palmer Electric & Manufacturing Company, Waltham, Mass. Electrical contact jaw. 1,805,487; May 19.
Johnson, George, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Mold for toilet seats. 1,805,871; May 19.
Johnson, Robert A. (See Fancher, C. J., and Johnson.)
Johnson, William C. (See McCahey, George F., assignor.)
Johnston, James W., assignor to Lacene Manufacturing Company, Manchester, N. H. Grading machine. 1,806,166; May 19.
Jolls, John M., Philadelphia, Pa. Apparatus for teaching music. 1,805,488; May 19.
Jolly, Charles L., Wilmar, Calif. Hydraulic brake. 1,805,985; May 19.
Jones, Dewey L. (See Crolley, S. L., and Jones.)
Jones, Howard H., North Hollywood, Calif. Pad for football players. 1,805,734; May 19.
Jones, Leo D., assignor to The Sharples Specialty Company, Philadelphia, Pa. Dewaxing oil. 1,806,570; May 19.
Jordan, Clarence A., and C. C. Coon, Oakland, Calif. Pole unloader. 1,805,872; May 19.
Jordan, Hans. (See Schoeller, W., Jordan, and Clerc.)
Jordan, James D., Elmhurst, assignor to Grigsby Grunow Company, Chicago, Ill. Radio apparatus. 1,805,626; May 19.
Jorgensen, Lars R., Berkeley, Calif. Arch dam. 1,805,986; May 19.
Jorgensen, Svend M., Elizabeth, N. J., assignor to The Superheater Company, New York, N. Y. Direct contact desuperheater. 1,806,204; May 19.
Joseph, Edward L., Westminster, England. Filter for air and other gases. 1,806,400; May 19.
Joy, Bertram C. (See Simms, F. R., and Joy.)
Julien, Louis F., assignor to Chamberlin Metal Weatherstrip Company, Detroit, Mich. Weather stripping. 1,806,018; May 19.
Julstedt, Clas J. (See Youngdahl, F. E., and Julstedt.)
Jungmann, Karl, Aussig, and O. Kolbert, Nestomitz, Czechoslovakia. Production of solid alcoholic iodine solutions in pencil form as a substitute for tincture of iodine. 1,806,260; May 19.
Kačer, Filip. (See Lüttringhaus, A., Eiflaender, and Kačer.)
Kade, Eugen. (See Bauer, K., and Kade.)
Kägi, Emil, Winterthur, Switzerland, assignor to Busch-Sulzer Bros.-Diesel Engine Company, St. Louis, Mo. Internal combustion engine. 1,805,698; May 19.
Kalgren, John E., assignor to The J. R. Clark Co., Minneapolis, Minn. Machine for making paper covered ironing boards. 1,806,205; May 19.
Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Crankcase ventilation. 1,806,543; May 19.
Kane Manufacturing Company. (See Ward, Lawrence T., assignor.)
Karpen, S., & Bros. (See Hultgren, Charles, assignor.)
Kaselitz, Oscar, Berlin, Germany. Producing potassium phosphate. 1,805,873; May 19.
Keller, John R., Carnegie, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Method and apparatus for feeding molten glass. 1,805,987; May 19.
Kelley, Cecil S., East McKeesport, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Signal horn. 1,805,627; May 19.
Kelley, Cecil S., East McKeesport, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Packing ring. 1,805,668; May 19.
Kelley, Earl R., Kansas City, Kans. Aeroplane. 1,805,770; May 19.
Kelley, Leonard O., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,806,167; May 19.
Kellogg Switchboard and Supply Company. (See Olsen, Halvor M., assignor.)
Kellogg Switchboard and Supply Company. (See Potter, Earl F., assignor.)
Kellogg Switchboard and Supply Company. (See Yanochowski, George A., assignor.)
Kelly, William M., Westfield, assignor to American Type Foundries Company, Jersey City, N. J. Side register device. 1,806,465; May 19.
Kelvinator Corporation. (See Ellis, Don G., assignor.)
Kelvinator Corporation. (See Replogle, John R., assignor.)
Kelvinator Corporation. (See Spreen, Charles C., assignor.)
Kemp, Jesse B., Pomona, Calif. Glass protector. 1,805,584; May 19.
Kempton, Willard H., Wilkinsburg, assignor to Westinghouse Electric & Manufacturing Company. Strain insulator. 1,806,294; May 19.
Kennedy, George M., Detroit, Mich. Automobile radiator screen. 1,806,104; May 19.
Kenney Manufacturing Company. (See Smith, Walter E., assignor.)

Kerkman, Freidreck W., St. John, Wash. Tire chain. 1,806,064; May 19.
Kernan, John J., Baltimore, assignor to American Bank Stationery Company, Baltimore, Md. Bookbinder. 1,806,466; May 19.
Kerotest Manufacturing Company. (See Mueller, Richard W., assignor.)
Kerr, Arthur G., Seattle, Wash., and D. Merchant, San Francisco, Calif., assignors to Wood Hydraulic Hoist & Body Company, Detroit, Mich. Vehicle body. 1,805,489; May 19.
Keystone Lubricating Company. (See Ludwick, Harlan M., assignor.)
Khetah Corporation. (See Sartakoff, Jack D., assignor.)
Kieckhefer, A., Elevator Co. (See Kieckhefer, Edwin F., assignor.)
Kieckhefer, Edwin F., assignor to A. Kieckhefer Elevator Co., Milwaukee, Wis. Motor controller. 1,805,699; May 19.
King, Henry C. (See Bridsall, Bert A., assignor.)
King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,805,700; May 19.
King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,805,701; May 19.
Kingsbury Machine Works, Inc. (See Howarth, Harry A. S., assignor.)
Kinnard, Isaac F., Lynnfield, Mass., assignor to General Electric Company. Interchangeable instrument case. 1,806,295; May 19.
Kirby, James B., West Richfield, Ohio. Suction cleaner. 1,806,168; May 19.
Kirschbraun, Lester, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for cracking oil. 1,805,628; May 19.
Kleinknecht, George M., Fort Lee, N. J. Reversible casement frame. 1,806,467; May 19.
Kloumann, Sigurd. (See Gröner, F., and Kloumann.)
Knight, Ashley G., jr., Kansas City, Mo. Shock absorber. 1,806,468; May 19.
Knight, Ronald F., Ramsey, N. J. Steam engine operation efficiency device. 1,805,585; May 19.
Knoche, Rudolf. (See Hentrich, W., Knoche, and Virck.)
Knöffler, Georg. (See Fraunberger, F., and Knöffler.)
Knott, Carl A., et al. (See Staude, John M., assignor.)
Knowles, Alexander S., and C. W. Andrews, assignors to Tar & Petroleum Process Company, Chicago, Ill. Apparatus for distilling and coking heavy hydrocarbon liquids. 1,805,720; May 19.
Knox, Harry A., Davenport, Iowa. Vehicle. 1,805,771; May 19.
Koept, Henry F., Fort Wayne, Ind. Slicing machine. 1,806,105; May 19.
Koestner, Fred C. (See Johnson, C. E., and Koestner.)
Kogl, Frank, St. Paul, Minn., assignor of one-half to Hans Steingassinger, Zell-on-the-Ziller, Austria. Life preserving device. 1,805,721; May 19.
Kohler Company. (See Kohler, Walter J., jr., assignor.)
Kohler, Walter J., jr., assignor to Kohler Company, Kohler, Wis. Adjustable leg for sinks and the like. 1,805,169; May 19.
Kohr, Robert F., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,806,296; May 19.
Kohr, Robert F., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,806,297; May 19.
Kohut, Jacob, St. Louis, Mo. Combined lamp and clock or similar article. Des. 84,195; May 19.
Kolbert, Oswald. (See Jungmann, K., and Kolbert.)
Kollsman Instrument Company. (See Kollsman, Paul, assignor.)
Kollsman, Paul, Woodhaven, N. Y., assignor to Kollsman Instrument Company, Inc., Brooklyn, N. Y. Indicator. Re18,072; May 19.
Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Directional radio system. 1,806,577; May 19.
Koons, Charles V., assignor to American Engineering Company, Philadelphia, Pa. Swivel hook. 1,806,469; May 19.
Kootz, Arthur C., Milwaukee, Wis. Mop construction. 1,805,490; May 19.
Kopikowski, Victor, Philadelphia, Pa. Gas container for aircraft. 1,806,470; May 19.
Koppers Company, The. (See Sperr, Frederick W., jr., assignor.)
Koppers Company, The. (See Van Ackeren, Joseph, assignor.)
Kotzen, Earl L. (See Nestler, Paul R., assignor.)
Kovacs, Gabor. (See Makno, Jozsef, assignor.)
Kracker, Herbert. (See Beck, K., and Kracker.)
Kraft, Charles, Jersey City, N. J. Support for electrically actuated fixtures. 1,805,988; May 19.
Kramer, Simon P., Cincinnati, Ohio. Filtering and apparatus therefor. 1,806,471; May 19.
Krauth & Benninghofen. (See Krauth, Marie W., assignor.)
Krauth, Marie W., assignor to Krauth & Benninghofen, Hamilton, Ohio. Autographic register. 1,806,544; May 19.
Kreielsheimer, William, New York, N. Y. Textile fabric. Des. 84,196; May 19.
Kremmling, Otto, Hamersleben, near Oschersleben, Germany. Applying filling materials to pastry. 1,806,066; May 19.
Kuehnle, George J. (See Streit, C. F., and Kuehnle.)
Kuhn, Clarence W., North Milwaukee, assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Motor controller. 1,805,491; May 19.
Kunin, Paul, and I. E. McElroy, Minneapolis, Minn.; said McElroy assignor to said Kunin. Hair curling apparatus. 1,806,472; May 19.
Kurtz, Daniel W. B., jr., Baltimore, Md. Beveling machine. 1,805,735; May 19.
Lacene Manufacturing Company. (See Johnston, James W., assignor.)
Lafayette, O. J., Manufacturing Company. (See Lory, George O., assignor.)
Lakewest Corporation, The. (See Youngdahl, F. E., and Julstedt, assignors.)
Lamarre, Fabyan, J., Springfield Mass. Desk stand and ink fountain. 1,805,772; May 19.
Lane, George, Poughkeepsie, assignor, by mesne assignments to Audio-Cinema Incorporated, Long Island City, N. Y. Motion picture printing machine. 1,805,948; May 19.
Lang, Gustave J., Longmeadow J. F. Drennan Springfield, and B. E. Schlesinger, Boston, assignors to American Bosch Magneto Corporation, Springfield, Mass. Terminal construction for ignition coils. 1,805,874; May 19.
Lange, Harry G., St. Elmo, Ill. Portable building. 1,806,354; May 19.
Lange, Heinrich. (See Ernst, O., and Lange.)
Langer, Rudolph J., assignor to Franklin Equipment Company, Monticello, Iowa. Watering bowl. 1,806,473; May 19.
Langley, Cortlandt J., and W. F. O'Gorman, New York, N. Y. assignors to C. W. Bunstead, Trustee, Highland Park, N. J. Variable transmission. 1,805,523; May 19.
Langmack, Roy E., Minneapolis, Minn. Motor lubricating device. 1,805,826; May 19.
Lapointe, Francis J., Ann Arbor, Mich. Vertical pull broaching machine. 1,806,106; May 19.
Larsen, Alf N., Ogden, Utah. Landing skid for aeroplanes. 1,805,914; May 19.
Larsen, Louis H., Union City, N. J., and C. W. Nixon, New York, N. Y. Change maker. 1,806,107; May 19.
Larson, Algot J. E., assignor to Art Metal Construction Company, Jamestown, N. Y. Binding means for the surface coverings of furniture. Re18,077; May 19.
Larsson, Thure, assignor to Norton Company, Worcester, Mass. Abrasive wheel. 1,805,949; May 19.
Laska, Leopold, Rudolph Reyher, and A. Zitscher, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azodyestuffs insoluble in water and process of making same. 1,805,915; May 19.
Laster, Harry W., Oak Park, assignor of one-half to J. W. Schindler, Elmhurst, Ill. Scarifying attachment for paving rollers. 1,805,524; May 19.
Laucks, I. F., Incorporated. (See Laucks, I. F., and Davidson, assignors.)
Laucke Irving F., and G. Davidson, assignors to I. F. Laucks, Incorporated, Seattle, Wash. Vegetable glue and making same. 1,805,773; May 19.
Laursen, Bruno L., Dunedin, assignor, by mesne assignments, of forty-eight per cent to Clearwater Lumber Company, Incorporated, Clearwater, Fla. Folding furniture. 1,805,736; May 19.
Laursen, Bruno L., Dunedin, assignor, by mesne assignments, of forty-eight per cent to Clearwater Lumber Company, Incorporated, Clearwater, Fla. Folding furniture. 1,805,737; May 19.
Lauter-Humana Co. (See Cameron, Charles E., jr., assignor.)
Lavergne, Jean, Paris, France. Carburetor. 1,805,586; May 19.
Law, Stanley W., Mahtomedi, and W. J. Eames, St. Paul, Minn. Bracket and dead end insulator. 1,806,170; May 19.
Lawler, S. C., Company. (See Lawler, Simeon C., assignor.)
Lawlor, Simeon C., Chicago, Ill. Window pole. 1,806,261; May 19.
Lawlor, Simeon C., assignor to S. C. Lawlor Company, Chicago, Ill. Wringing machine. 1,805,774; May 19.
Lawson, John and R. H., Pawtucket, assignors to Hemphill Company, Central Falls, R. I. Mechanism for effecting reverse plating. 1,806,199; May 19.
Lawson, John F., Brooklyn, N. Y. Electric welding. 1,805,549; May 19.
Lawson, Robert H. (See Lawson, J., and R. H.)
Lawson, Walter E. (See Dykstra, H. B., and Lawson.)
Lecocq, Ernest, Brussels, Belgium. Sizing paper. 1,806,474; May 19.
Lee, Alvin J. (See Moran, J. L., and Lee.)
Lee, John E., assignor of two-thirds to A. F. Cholerton and H. C. S. Tyler, Leicester, England. Machine for trimming the capsules or sealing covers of bottles, jars, and like containers. 1,806,475; May 19.
Lee, Ping, Windsor, Ontario, Canada. Detachable rubber heel. 1,805,738; May 19.
Lees, John W., Chicago, Ill. Rotary piston machine. 1,806,206; May 19.
Leggo, Arthur V. (See Hack, Ernest B., assignor.)

Lejeune, George J., Philadelphia, Pa. Vortex ring toy gun. 1,806,067; May 19.
Lemieux, Wilfred J., and J. Hood, assignors to Beacon Manufacturing Company, New Bedford, Mass. Automatic loom. 1,805,525; May 19.
Lemming, John C., assignor to Moraine Products Company, Dayton, Ohio. Briquetting machine. 1,806,300; May 19.
Lentz, George W., assignor to The Bonnot Company, Canton, Ohio. Chipping machine. 1,806,572; May 19.
Leo Meyer Company. (See Davis, Maurice E., assignor.)
Leopold, George O. (See Fegley, T. J., and Leopold.)
Lepersonne, Max, Liege, Belgium, and E. Hastert, Eschesur-Alzette, Luxemburg, assignors to Société Anonyme des Ciments Luxembourgeois, Luxemburg, Grand Duchy of Luxemburg. Rendering homogeneous finely pulverized materials in large masses. 1,806,068; May 19.
Lessem, Jacob. (See Feldman, J., and Lessem.)
Le Valley, John, Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Pressure controlled valve. 1,806,301; May 19.
Levan, John F., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Sash ventilator. 1,806,298; May 19.
Levene, Albert H., Newark, N. J. Shelving. 1,805,989; May 19.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Rotary engine. 1,805,875; May 19.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Mining machine. 1,805,876; May 19.
Levy, Edward J., now by judicial change of name E. L. Mayo, assignor to The Bishop & Babcock Mfg. Company, Cleveland, Ohio. Thermostatic valve. 1,806,072; May 19.
Lewis Differential Company. (See Tatter, John W., assignor.)
Liamin, Dimitri, Los Angeles, Calif. Metal boat construction. 1,805,669; May 19.
Lichtenthaeler, Frank E., Newton Highlands, Mass. Making esters of the fatty acids. 1,805,775; May 19.
Lichtig, Abraham J., Oakland, Calif. Clothes bag. 1,805,877; May 19.
Light, Clare K., Oswego, N. Y., assignor, by mesne assignments, to The Diamond Match Company. Making matches. 1,805,827; May 19.
Lindahl, Anders. (See Luttropp, Conrad, assignor.)
Lindeman, James E., assignor to W. H. Miner, Inc., Chicago, Ill. Door construction for railway cars. 1,806,401; May 19.
Linderman, Zilpha, Sebastopol, Calif. Pencil holder. 1,806,476; May 19.
Lindsey, William D., South Orange, N. J., assignor to Garrison Fire Detecting System Incorporated, New York, N. Y. Splicing and terminal device for fire detecting cables. 1,806,207; May 19.
Link-Belt Company. (See Sjolander, Axel K., assignor.)
Lipman, Carl E. L., assignor to Lipman Patents Corporation, Chicago, Ill. Evaporator. 1,805,526; May 19.
Lipman, Charles B., and A. Gordon, assignors to the Regents of the University of California, Berkeley, Calif. Wood product and producing the same. 1,805,550; May 19.
Lipman Patents Corporation. (See Lipman, Carl E. L., assignor.)
Lipton, A. (See Carlton, Jack C., assignor.)
Liquid Carbonic Corporation, The. (See Hunt, Franklin B., assignor.)
Little, Donald G. (See Davis, R. L., and Little.)
Lloyd, Richard L., New York, N. Y. Apparatus for melting snow. 1,806,069; May 19.
Lloyd, Thomas and T. W., assignors of one-third to W. W. Lloyd, Ashley, Pa. Attaching device for bait boxes. 1,806,477; May 19.
Lloyd, Thomas W. (See Lloyd, Thomas and T. W.)
Lloyd, Willard W. (See Lloyd, Thomas and T. W., assignors.)
Lomax, Clarence E., Oak Park, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Telephone system. Re18,076; May 19.
Long, Carrie O., Chicago, Ill. Hair waving appliance. 1,806,355; May 19.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 84,197; May 19.
Long, Frank G., Rockcastle, Ala. Pipe cleaner. 1,806,478; May 19.
Long, Thomas, assignor to Mills Novelty Company, Chicago, Ill. Scale. Des. 84,198; May 19.
Loomis, Nathaniel E. (See Howard, F. A., and Loomis.)
Lorang, Henry J., St. Louis, Mo. Mop head. 1,806,402; May 19.
Lory, George O., Los Angeles, Calif., assignor to O. J. Lafayette Manufacturing Company. Heat insulating hand grip. 1,806,479; May 19.
Louthridge, Matthew H. (See Everett, E. A., and Louthridge.)
Louthridge, Matthew H., Bogota, N. J. Braking system. 1,805,551; May 19.
Lovell Manufacturing Company. (See Schnda, Ernest J., assignor.)
Lowrey, George A., Pelly, and W. F. Hall, Goose Creek, Tex. Spear. 1,805,828; May 19.
Ludlow Typograph Company. (See Hedly, Arthur H., assignor.)
Ludwick, Harlan M., Parkesburg, assignor to Keystone Lubricating Company, Philadelphia, Pa. Lubricator. 1,806,545; May 19.
Luke, Edwin H., et al. (See Dietz, Frank L., assignor.)
Lustig, Ruben B., Kansas City, Mo. Display stand. Des. 84,220; May 19.
Lüttringhaus, Arthur, Mannheim, L. Eiffaender, Ludwigshafen-on-the-Rhine, and F. Kacer, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of thioethers of the anthraquinone series. 1,805,916; May 19.
Luttropp, Conrad, assignor of one-half to A. Lindahl, Stockholm, Sweden. Calculating machine. 1,806,070; May 19.
Lykes, Coke S. (See Sundstrom, C., and Lykes.)
Lyles, Thomas B., Terre Haute, Ind. Safety appliance for airplanes. 1,806,403; May 19.
Lynn, Ross M., and W. M. Malouf, assignors to Atomic Power Corporation, Salt Lake City, Utah. Method and apparatus for treating motor fuel. 1,806,356; May 19.
Lynn, Ross M., and W. M. Malouf, Salt Lake City, Utah, assignors to Atomic Power Corporation. Motor fuel treating device. 1,806,404; May 19.
Lysholm, Alf, and G. Cederstrand, assignors to Aktiebolaget Ljungströms Angturbin, Stockholm, Sweden. Cooler contacting with circulating air. 1,805,917; May 19.
Maas, Louis, Hartford, Conn. Game of skill. 1,806,071; May 19.
MacDonald, Joel W., assignor to The Tactiphone Company, Houston, Tex. Apparatus for and method of cultivating and improving the hearing. 1,806,357; May 19.
MacGregor, Laurence B., Long Beach, and A. E. Spear, Olinda, Calif. Well cleaning device. 1,806,073; May 19.
MacGregor, Wallace, Berkeley, Calif. Safety fire hose holder. 1,806,074; May 19.
Mack, Clarence G., assignor to Hettrick Manufacturing Company, Toledo, Ohio. Awning. 1,805,950; May 19.
MacKnight, Harry A., Providence, R. I., assignor to Winsor & Jerauld Mfg. Co. Tentering machines. 1,806,208; May 19.
MacMillan, Campbell, Schenectady, N. Y., assignor to General Electric Company. Protective device for induction motors. 1,805,492; May 19.
Magazine Repeating Razor Company. (See Schick, Jacob, assignor.)
Magidson, Frank, assignor to Pittsburgh Tag Company, Pittsburgh, Pa. Tag fastener. 1,806,171; May 19.
Magrill, Alexander L., Dallas, Tex. Food product. 1,806,302; May 19.
Mailloux, Harvey A., Haverhill, Mass. Webbing fastener retainer. 1,806,405; May 19.
Major Equipment Co. (See Major Roscoe E., assignor.)
Major, Roscoe E., assignor to Major Equipment Co., Inc., Chicago, Ill. Roundel holder. 1,806,209; May 19.
Makowski, John F., Oakland, Calif., assignor to Fireproof Wall Company, Reno, Nev. Conduit assembly. 1,805,990; May 19.
Malcom, Robert, et al. (See Moran, J. L., and Lee, assignors.)
Malouf, William M. (See Lynn, R. M., and Malouf.)
Malouf, William M., assignor, by direct and mesne assignments, to Atomic Power Corporation, Salt Lake City, Utah. Attachment for internal combustion engines. 1,806,406; May 19.
Mankó, Jozsef, Ozd, Hungary, assignor of one-half to G. Kovacs, Warrensville, Ohio. Mowing machine. 1,806,480; May 19.
Manley, Joseph F., Scranton, Pa. Brush for cleaning artificial dentures. 1,805,587; May 19.
Manley Manufacturing Company. (See Manley, Robert E., assignor.)
Manley, Robert E., assignor to Manley Manufacturing Company, York, Pa. Hydraulic jack. 1,805,588; May 19.
Manly, Fred G., assignor, by mesne assignments, to G. I. Goldwyn and H. Goldyn, Chicago, Ill., copartners doing business as Goldwyn Brothers. Folding cot. 1,806,358; May 19.
Manufacturers Machinery Company. (See Mudd, Garrett W., assignor.)
Marchant's Foundry Co. (See Scott, William B., assignor.)
Markel Electric Products, Inc. (See McFadden, Glenn E., assignor.)
Marles, Henry, assignor to Gemmer Manufacturing Company, Detroit, Mich. Steering column construction. 1,806,172; May 19.
Marquette Manufacturing Company. (See Nilson, Leonard D., assignor.)
Marschke, Reinhold B., St. Paul, Minn. Collapsible concealing ladder. 1,805,829; May 19.
Marsh, Esli A. (See Menke, E. W., and Marsh.)
Martin, James W., jr., Yonkers, assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y. Refrigerating apparatus and method. 1,805,493; May 19.
Martin, Mark H., assignor to T. H. Symington & Son, Inc., Baltimore, Md. Body bolster center plate and mounting. 1,806,075; May 19.
Martois, Arthur E., Compton, Calif. Tong operating mechanism. 1,806,481; May 19.
Mason, Charles D., Des Moines, Iowa. Foam destroyer. 1,805,830; May 19.

Mastenbrook, Henry J., Cleveland Heights, assignor to The Swartwout Company, Cleveland, Ohio. Reducing valve. 1,805,702; May 19.
Mathieu, Vincent J., New Bedford, Mass., assignor to Foley Saw Tool Company, Incorporated, Minneapolis, Minn. Retoothing machine. 1,805,831; May 19.
Maurer, Russell L., assignor of one-fourth to G. E. Mueller, Chicago, Ill. Telephone system. 1,806,546; May 19.
Mayer, Waldemar F., Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt. Coordinated ironing and folding machine. 1,805,776; May 19.
Mayo, Edward L. (See Levy, Edward J.)
McAtree, John L., Brooklyn, N. Y., assignor to Scovill Manufacturing Company, Waterbury, Conn. Vanity case. 1,806,303; May 19.
McCabe, Ira E. (See Armstrong, R. W., and McCabe.)
McCahey, George F., assignor of one-half to W. C. Johnson, Providence, R. I. Core covering machine. 1,805,494; May 19.
McConnell, Wythe, El Paso, Colo. Shocking attachment for grain binders. 1,806,407; May 19.
McCord Radiator & Mfg. Co. (See Barlow, Lester P., assignor.)
McCullough, Frederick S., Edgewood, Pa. Hot cathode device. 1,806,108; May 19.
McCullough, Frederick S., Edgewood, Pa. Amplification of electrical currents. 1,806,109; May 19.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Compressor control device. 1,805,629; May 19.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Dynamic and fluid pressure brake control. 1,805,630; May 19.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake device. 1,805,631; May 19.
McDowell, John S., and W. Carson, Midland, Ontario, Canada. Shoe shining machine. 1,805,832; May 19.
McElroy, Isaac E. (See Kunin, P., and McElroy.)
McFadden, Glenn E., assignor to Markel Electric Products, Inc., Buffalo, N. Y. Shade for an electric lamp. Des. 84,199; May 19.
McIntosh, James A. (See Begue, F. F., and McIntosh.)
McIntyre, Arthur C. and W. H., Kalamazoo, Mich. Valve structure. 1,805,777; May 19.
McIntyre, John J., Hartford, Conn. Metal ball grinding machine. 1,805,878; May 19.
McIntyre, William H. (See McIntyre, Arthur C. and W. H.)
McKay, Archie B., New London, Conn. Dirigible headlight. 1,805,589; May 19.
McKean, John O., assignor to Foster Machine Company, Westfield, Mass. Cop cone holder for creels. 1,805,495; May 19.
McKee, Harry H., assignor to Swift & Company, Chicago, Ill. Meat marker. 1,806,076; May 19.
McKenny, Charles A., assignor to The Joseph E. Barrett Co., Detroit, Mich. Mechanical overload release. 1,805,879; May 19.
McKinley, Charles W., assignor to A C Spark Plug Company, Flint, Mich. Bracket. 1,806,560; May 19.
McKinley, Charles W., assignor to A C Spark Plug Company, Flint, Mich. Oil pressure booster. 1,806,561; May 19.
McLeod, Daniel, jr., Dallas, Tex. Clip. 1,805,833; May 19.
McLeod, Robert J., West Drayton, England. Thread milling machine. 1,806,359; May 19.
McMurray, Walter E., assignor to Clearfield Machine Company, Clearfield, Pa. Grinding and mixing pan. 1,806,077; May 19.
McWilliams, John P., and F. Ditchfield, assignors to The Youngstown Steel Door Company, Cleveland, Ohio. Car. 1,806,173; May 19.
Meissner, Alexander, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany. Oscillation generation. 1,805,918; May 19.
Mekeel, Van Cortright, Oak Park, Ill. Reversible dipper tooth. 1,805,527; May 19.
Mellon, James A., assignor to American Engineering Company, Philadelphia, Pa. Davit winch. 1,806,482; May 19.
Menke, Edward W., and E. A. Marsh, Chicago, Ill., assignors, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Automatic charge forming and feeding device. 1,806,110; May 19.
Mercer, Richard, Harrow, England, assignor to Associated Telephone & Telegraph Company, Kansas City, Mo. Telephone system. 1,805,778; May 19.
Merchant, Donald. (See Kerr, A. G., and Merchant.)
Mericko, Stephen A., Hinckley, Minn. Mouthpiece for pipes. 1,805,880; May 19.
Messer, Abraham, et al. (See Hellwell, Samuel, assignor.)
Messer, Robert B., et al. (See Hellwell, Samuel, assignor.)
Metals Protection Corporation. (See Patten, James C., assignor.)
Metalweld Service Corporation. (See Oechsle, Joseph S., assignor.)
Metropolitan Engineering Company. (See Holmes, Henry S., assignor.)
Metz, Raymond, and W. J. Quirk, Evanston, Ill. Lock. 1,805,779; May 19.
Metzger, Claude W., Houston, Tex. Drilling tool. 1,805,991; May 19.
Meuer, George J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric appliance plug. Des. 84,200; May 19.
Meyer, Kurt H., Mannheim, and C. Schuster, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Manufacture of azo dyestuffs. 1,805,919; May 19.
Meyer, Victor, Brooklyn, N. Y. Horse bit. 1,806,483; May 19.
Michaud, Oscar, Salem, Mass. Knife for cutting shoes. 1,806,484; May 19.
Michell, Anthony G. M., Melbourne, Australia. Bearing. 1,805,992; May 19.
Middleton, Harry N., Westville, N. J., assignor to B. F. Sturtevant Company, Hyde Park, Mass. Eliminator. 1,806,535; May 19.
Midgley, Thomas, jr., C. A. Thomas, and C. A. Hochwalt, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich. Manufacture of rubber. 1,806,547; May 19.
Miersbe, Adolf, Raderthal, near Cologne-on-the-Rhine, Germany. Steam heating plant. 1,806,304; May 19.
Miguet, Paul L. J., St-Julien-de-Maurienne (Savoie), France. Electric furnace. 1,806,210; May 19.
Milar, Karl A., Chicago, Ill. Atomizing and spraying semifluid material containing asbestos fiber. 1,805,632; May 19.
Miller, Anthony P., Pleasantville, N. J. Method of and apparatus for water filtration. 1,805,993; May 19.
Miller, Cuyler C., jr., Gillespie, Ill. Coal loading machine. 1,805,951; May 19.
Miller, Erwin E., Fullerton, Calif. Expansible packer for hydraulic plungers. 1,806,078; May 19.
Miller, Gustav A., Seattle, Wash. Glider propulsion device. 1,805,834; May 19.
Miller, Herbert A. (See Poole, Roscoe D., assignor.)
Miller, Ralph, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Internal combustion engine. 1,805,670; May 19.
Miller, Samuel E. (See Hentschel, E. J., and Miller.)
Miller Train Control Corporation, The. (See Rice, Philip X., assignor.)
Milligan, Albert J., San Francisco, Calif. Gas appliance. 1,805,835; May 19.
Mills, Fred L., Oak Park, assignor to Mills Novelty Company, Chicago, Ill. Coin-controlled vending machine. 1,805,837; May 19.
Mills, Fred L., Oak Park, assignor to Mills Novelty Company, Chicago, Ill. Target practice vending machine. 1,805,838; May 19.
Mills Novelty Company. (See Long, Thomas, assignor.)
Mills Novelty Company. (See Mills, Fred L., assignor.)
Millspaugh, William H., assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Gearless suction roll. 1,805,671; May 19.
Millspaugh, William H., assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Countersunk suction roll shell. 1,805,780; May 19.
Min-A-Max Co. (See Boker, Vitus A., assignor.)
Miner, W. H., Inc. (See Lindeman, James E., assignor.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Mineral Felt Insulating Company, The. (See Russell, F. C., and Savidge, assignors.)
Mirafuentes, Alfonso F., Gaudalupe, Mexico. Musical toy. 1,806,485; May 19.
Mirafuentes, Alfonso F., Gaudalupe, Mexico. Hair cutting scissors. 1,806,486; May 19.
Mishawaka Rubber and Woolen Manufacturing Company. (See Bradley, Charles E., assignor.)
Mishawaka Rubber and Woolen Manufacturing Company. (See Bradley, C. E., and Ferrettie, assignors.)
Mitchell, Courtney N., Cleveland Heights, Ohio. Shock absorber. 1,805,836; May 19.
Mitchell, Joseph S., Chicago, Ill., assignor to Sullivan Machinery Company. Core drill. 1,806,079; May 19.
Mitchell, Kearney, Sulphur Mines, La. Drill pipe cutter. 1,805,703; May 19.
Moad, Buren, Toledo, Ohio. Candy cotton forming machine. 1,806,111; May 19.
Moeller, William J., Mt. Healthy, and A. H. Zimmerman, Lockland, Ohio, assignors to The Philip Carey Manufacturing Company. Built-up roofing and application. 1,805,739; May 19.
Moldaenke, Karl. (See Dereser, R., and Moldaenke.)
Möller, Ernst, Karlshorst, Berlin, Germany. Diaphragm piston, in particular for control valves for air brakes. 1,806,360; May 19.
Moore, Henry A. (See Stuart, T. F., and Moore.)
Moore, Joseph J., Karnack, Tex. Saw filing machine. 1,806,361; May 19.
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Hood catch. 1,805,496; May 19.
Moraine Products Company. (See Lemming, John C., assignor.)
Moran, John L., and A. J. Lee, Spokane, Wash., assignors, by mesne assignments of one-fourth to F. E. P. Wilder, Spokane, Wash., and one-fourth to R. Malcom, Chicago, Ill. Goggles. 1,805,633; May 19.
Moran, William J. (See Briggs, Edward, assignor.)
Morawski, Adolf, Springfield, Mass. Cord adjuster for electric irons. 1,806,487; May 19.

Moreau, Albert L., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Supervisory control system. 1,806,262; May 19.
Moreton, Henry H., Santa Monica, Calif. Gas heater. 1,805,781; May 19.
Morgan, Milton I., and B. C. Tate, Bristol, Tenn. Churn attachment for washing machines. 1,805,952; May 19.
Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Drawer and supporting means. 1,806,174; May 19.
Morrell, Jacque C. (See Egloff, G., and Morrell.)
Morris, Austin, Greenwood, Ind. Plant-setting machine. 1,805,839; May 19.
Mortensen, Niels L. (See Stansbury, C., and Mortensen.)
Morton, Harold A., Akron, Ohio. Mineral oil and antioxidant agent and process. 1,805,953; May 19.
Morton, Harold A., Akron, Ohio. Soap and soap product and stabilizing agent and process. 1,805,954; May 19.
Moses, Frederick G., New York, R. W. Hess, Buffalo, and R. L. Perkins, East Aurora, assighors to The Barrett Company, New York, N. Y. Concentration of ores by flotation. 1,806,302; May 19.
Moxley, Berry C., Hoquiam, Wash. Automatic oil burner regulator. 1,806,080; May 19.
Mudd, Garrett W., assignor to Manufacturers Machinery Company, Chicago, Ill. Feeding mechanism for interlacing machines. 1,805,528 8 May 19.
Mudge, William A., and C. G. Bieber, Huntington, W. Va. Transformer. 1,806,408; May 19.
Mueller Co. (See Wilkins, James M., assignor.)
Mueller, George E. (See Maurer, Russell L., assignor.)
Mueller, Richard W., assignor to Kerotest Manufacturing Company, Pittsburgh, Pa. Operating mechanism for valves. 1,806,305; May 19.
Muffly, Glenn, Detroit, Mich., assignor to Copeland Products, Inc. Refrigerating mechanism. 1,806,019; May 19.
Mumaugh, Arthur H., assignor of one-half to W. J. Jacobs, Toledo, Ohio. Gear shift control mechanism. 1,806,211; May 19.
Munson, Otto A., St. Paul, Minn. Metal window sash and frame. 1,806,263; May 19.
Munz, Elmer G., Detroit, Mich. Spray nozzle. 1,805,782; May 19.
Muschler, Fred, Denville, N. J. Making copper plated shingles. 1,805,920; May 19.
Musselman, Bert A., Des Moines, Iowa. Overhead automobile decking for railway cars. 1,805,881; May 19.
Mutschel, Oscar J., assignor to The De Vilbiss Company, Toledo, Ohio. Spraying device. 1,806,112; May 19.
Myers, L. A., jr. Inc. (See Myers, W. L., and Harrison, assignors.)
Myers, William L., Newark, and G. D. Harrison, Belleville, assignors to L. A. Myers, jr., Inc., Newark, N. J. Buckle. 1,805,882; May 19.
Mylius, Walter G. (See Bradshaw, W., and Mylius.)
Mylius, Walter G., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Mounting construction for meters. 1,806,306; May 19.
Naamlooze Venootschap De Bataafsche Petroleum Maatschappij. (See Straatman, Alphons G. H., assignor.)
Nagoa, Kikuro, Kamisonocho, Nishiku, Nagoya, Japan. Door opening and shutting device for automobiles. 1,806,488; May 19.
Nagy, Steve, Woodbridge, N. J. Joint chair and rail lock. 1,805,590; May 19.
Nahon, James M., Madrid, Spain. Nonskid device for boots and shoes. 1,806,212; May 19.
Narbo, Lauritz Martin, Brooklyn, N. Y. Dispensing device. 1,806,363; May 19.
National Aniline and Chemical Company. (See West, Byron L., assignor.)
National Automatic Tool Company, The. (See Peters, Frebert J., assignor.)
National Cash Register Company, The. (See Warner, Edgar, assignor.)
National Enameling and Stamping Company. (See Sladky, Alexander C., assignor.)
National Machinery Company, The. (See Clouse, William L., assignor.)
National Machinery Co., The. (See Friedman, John H., assignor.)
Naul, James M., Plainfield, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Electric sewing machine. 1,806,489; May 19.
Naumann, Hermann G. R., Nijmegen, Netherlands. Rotary cooling drum. 1,806,490; May 19.
Nebel, Ernst O., Philadelphia, Pa. Forming open work designs in stockings. 1,806,491; May 19.
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Valve mechanism for fluid pressure tools. 1,805,921; May 19.
Nelson, C., Manufacturing Company. (See Nelson, James L., assignor.)
Nelson, James L., assignor to C. Nelson Manufacturing Company, St. Louis, Mo. Making liquid containers and container so produced. 1,805,552; May 19.
Nelson, John N., assignor to Universal Optical Corporation, Providence, R. I. Ophthalmic mounting. 1,805,529; May 19.
Nelson, Nels T., Attleboro, assignor to J. F. Sturdy & Son Co., Attleboro Falls, Mass. Buckle for wrist watch straps. 1,806,213; May 19.
Neon, Claude, Lights, Inc. (See Smalley, Robert C., assignor.)
Nestler, Paul R., Green Lane, Pa., assignor of one-half to E. L. Kotzen, Reading, Pa. Knitting garter extensions for hosiery. 1,806,492; May 19.
New England Lace Mills, Inc. (See Adaire, William R., assignor.)
New England Lace Mills, Inc. (See Edson, Bert, assignor.)
New, Gustave A., assignor to The American Gypsum Co., Port Clinton, Ohio. Reenforced and protected wall board edge. 1,805,840; May 19.
Newman, Thomas S., Okmulgee, Okla. Closure cap for collapsible and other containers. 1,806,364; May 19.
Nichols Copper Company. (See Fowler, Edward J., assignor.)
Nickerson, William H., Newton, Mass. Orthopedic footwear. 1,806,409; May 19.
Niemeyer, William, Sheridan, Tex. Aeroplane. 1,805,994; May 19.
Nilson, Leonard D., Wayzata, assignor to Marquette Manufacturing Company, St. Paul, Minn. Planetary gear operated lifting jack. 1,805,841; May 19.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Internal combustion engine. 1,806,175; May 19.
Nixon, Clifton W. (See Larsen, L. H., and Nixon.)
Noddack, Ida. (See Noddack Walter and I.)
Noddack, Walter and I., Berlin-Grunewald, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany. Electric incandescent body. 1,806,410; May 19.
Nordwenswan, Carl-Johan H., assignor to Hercules Powder Company, Wilmington, Del. Producing building board. 1,805,883; May 19.
Norris, Harry B. (See Heftler, V. R., and Norris.)
North Bro's M'f'g. Co. (See Fegley, T. J., and Leopold, assignors.)
North Pacific Cedar Products Corporation. (See Dietz, Frank L., assignor.)
Northwest Engineering Corporation. (See Burke, Paul, assignor.)
Norton, Bertram, Claverley, assignor to Nortons (Tividale) Limited, Tipton, England. Coal washer box. 1,806,493; May 19.
Norton Company. (See Larsson, Thure, assignor.)
Norton Company. (See Player, S., and Indge, assignors.)
Nortons (Tividale) Limited. (See Norton, Bertram, assignor.)
Norviel, Harry E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Lock switch. 1,806,307; May 19.
Nygaard, Oscar, Saugus, Mass. Furnace wall. 1,806,113; May 19.
Nystrom, Karl F., Milwaukee, Wis., assignor to General Steel Castings Corporation, Granite City, Ill. Pedestal filler unit. 1,806,411; May 19.
O'Brien, James D., Brooklyn, N. Y. Protective lining. 1,806,494; May 19.
O'Connor, John F., Toledo, Ohio, assignor to Doherty Research Company, New York, N. Y. Furnace. 1,805,634; May 19.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Draft gear. 1,806,264; May 19.
Oechsle, Joseph S., assignor to Metalweed Service Corporation, Philadelphia, Pa. Tractor supporting unit. 1,805,704; May 19.
O'Gorman, William F. (See Langley, C. J., and O'Gorman.)
Ohl, Russell S., New York, N. Y., assignor to American Telephone & Telegraph Company. Signaling system. 1,805,591; May 19.
Oil Well Supply Company. (See Greeve, Edgar E., assignor.)
Oliva, Vincent, assignor to Grand Central Wicker Shop, Inc., New York, N. Y. Chair or the like. Des. 84,201; May 19.
Oliver Farm Equipment Company. (See Gemberling, Cameron H., assignor.)
Olsen, Halvor M., Oak Park, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Socket. 1,805,783; May 19.
Olsen, Joseph, Portland, Oreg. Paper tape machine. 1,806,412; May 19.
Olson, John O., St. Paul, Minn. Manufacturing heat exchangers. Re18,078; May 19.
Omoto, Ryo, Tokyo-Fu, assignor of one-half to M. Tada, Toyko, Japan. Black line photographic sensitized paper and making the same. 1,805,592; May 19.
Ormsby, Erle, assignor to Central Mine Equipment Company, St. Louis, Mo. Blasting cartridge. 1,805,672; May 19.
Orr, Calvin P., Laona, Wis. Tie handle. 1,805,845; May 19.
Otto, Carl, Essen-Ruhr, Germany. Horizontal coke oven. 1,805,922; May 19.
Owe, Aage W., Oslo, Norway. Producing vitamine preparations. 1,805,593; May 19.
Owens, John H., Racine, Wis. Pipe rest. 1,806,176; May 19.
Paasche, Jens A., Wilmette, Ill. System and apparatus for spraying. 1,806,365; May 19.
Paéz, Enrique D., jr., San Diego, Calif. Lifting jack. 1,806,413; May 19.

Page, Charles B., Evanston, assignor, by mesne assignments, to The G. W. Dulany Trust, Chicago, Ill. Furnace. 1,806,114; May 19.
Page, Samuel H., Stratford, assignor to The American Fabrics Company, Bridgeport, Conn. Lace. Des. 84,202; May 19.
Palladino, Joseph T., Waterbury, Conn. Adjustable shade roller bracket. 1,805,995; May 19.
Palm, George H. (See Chase, S., 4th, Palm, and Pfeiffer.)
Palmer Electric & Manufacturing Company. (See Johnson, Ernest G., assignor.)
Paper & Textile Machinery Company, The. (See Millspaugh, William H., assignor.)
Paramount Carburetor Corporation. (See Hofbauer, Caspar E., assignor.)
Pardee, Lloyd W., Lakewood, assignor to The Scott and Fetzer Company, Cleveland, Ohio. Suction cleaner. 1,806,177; May 19.
Parker, Charles K., Richmond, and F. A. Bent, Berkeley, assignors to Standard Oil Company of California, San Francisco, Calif. Revivifying used decolorizing materials. 1,806,020; May 19.
Parker, Raizemond D., Brooklyn, N. Y., assignor to American Telephone & Telegraph Company. Communicating system. 1,805,594; May 19.
Parker, Wilbur E., Everett, Mass. Rolling window screen for automobiles. 1,806,495; May 19.
Parks, Claude C. (See Wilcox, Vincey A., assignor.)
Parsons Company, The. (See Vaughn, George A., assignor.)
Parsons, Robert J., Schenectady, assignor to Consolidated Car Heating Company, Inc., Albany, N. Y. Heater porcelain. 1,806,115; May 19.
Patent Protection Corporation. (See Jeffrey, Harold M., assignor.)
Patten, James C., assignor to Metals Protection Corporation, Indianapolis, Ind. Polishing chromium. 1,806,414; May 19.
Paul, John B., Pittsburgh, Pa. Camera. 1,806,308; May 19.
Paul, William E., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,805,497; May 19.
Pawsat, Ewald F., assignor to The Wald Manufacturing Company, Maysville, Ky. Wrench. 1,805,884; May 19.
Peck, Cecil C., Lakewood, assignor to The Hill Clutch Machine and Foundry Company, Cleveland, Ohio. Agitating mechanism. 1,805,842; May 19.
Penberthy Injector Company. (See Yoder, Howard D., assignor.)
Perera, Alvaro, New York, N. Y. Weighing scale. 1,806,496; May 19.
Perfection Stove Company. (See Chadwick, Lee S., assignor.)
Perkins, Karl D., assignor to Audiffren Refrigerating Machine Company, New York, N. Y. Humidifier. 1,806,021; May 19.
Perkins, Robert L. (See Moses, F. G., Hess, and Perkins.)
Perla, Samuel, Brooklyn, N. Y. Lighting fixture part. 1,805,996; May 19.
Perry, Ollie P., Jackson, Ky. Railway car brake. 1,806,214; May 19.
Peters, G. D., & Company. (See Hockley, Horace R., assignor.)
Peters, Frebert J., assignor to The National Automatic Tool Company, Richmond, Ind. Drafting machine. 1,805,740; May 19.
Peters, Orville B., Winnipeg, Manitoba, Canada. Controlling device for locomotive or engine bells. 1,806,215; May 19.
Petersén, Wilhelm H., assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasteras, Sweden. Contact device for electric circuit breakers. 1,806,117; May 19.
Peterson, Logan S., McKeesport, Pa. Hedge trimmer. 1,806,116; May 19.
Peterson, Ralph Elbe, Wash. Supporting bracket. 1,805,784; May 19.
Pfeiffer, Benjamin S. (See Chase, S., 4th, Palm, and Pfeiffer.)
Pfeiffer, Rudolf S. (See Chase, S., 4th, Palm, and Pfeiffer.)
Pflager, Harry M., St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Railway booster motor. 1,806,415; May 19.
Phelan, Louis F., Stonington, Conn. Winding machine attachment. 1,805,595; May 19.
Phelps, Stuart M., Pittsburgh, Pa., assignor to American Refractories Institute. Brick meter. 1,806,118; May 19.
Philip Carey Manufacturing Company, The. (See Moeller, W. J., and Zimmerman, assignors.)
Phillips, Harold F., Belmont, Mass. Piston and skirt-expanding ring therefor. 1,806,416; May 19.
Phoenix-Hermetic Company. (See Taliaferro, Thomas L., assignor.)
Pichler, John, Cleveland, Ohio. Automatic tool cutting machine. 1,806,562; May 19.
Pickard, Rosa M., Wilmette, Ill. Wall plate for lighting fixtures. Des. 84,203; May 19.
Pickard, Rosa M., Wilmette, Ill. Tie back for curtain draperies. Des. 84,204; May 19.
Pierce, James H., Bay City, Mich. Internal combustion engine. 1,805,843; May 19.
Pittsburgh Brush Company. (See Jacobs, Franklin D., assignor.)
Pittsburgh Plate Glass Company. (See Hitner, Harry F., assignor.)
Pittsburgh Tag Company. (See Magidson, Frank, assignor.)
Plvak, Joel L., New York, N. Y. Adjustable cover for cockpits. 1,806,366. May 19.
Platt, Herbert. (See Dreyfus, C., and Platt.)
Player, Sydney, and H. S. Indge, Westboro, assignors to Norton Company, Worcester, Mass. Method of and apparatus for dressing abrasive laps. 1,805,955; May 19.
Plummer, Edgar P., assignor of one-half to Paul Fayolle, Regina, Saskatchewan, Canada. Heater. 1,806,216; May 19.
Polak, Gabriel, deceased, Forest City, Pa.; H. Polak, administratrix, assignor of thirty-five one-hundredths to J. Farkas. Automatic crossing gate. 1,806,407; May 19.
Polak, Helen, administratrix. (See Polak, Gabriel.)
Polson, Alexander. (See Eckersley, James E., assignor.)
Poole, Arthur F., Westport, Conn., assignor to The Wahl Company, Chicago, Ill. Lead pencil. 1,805,673; May 19.
Poole, Roscoe D., assignor of one-half to H. A. Miller, Danvers, Mass. Last. 1,806,417; May 19.
Pope, Joseph H., Hamilton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe nail. 1,805,553; May 19.
Poppensieker, Fritz. (See Schaerer, O., and Poppensieker.)
Poth, Richard, Dortmund, Germany. Ignition roof for traveling grate boiler plants. 1,806,022; May 19.
Potter, Earl F., Glencoe, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Loop antenna. 1,805,846; May 19.
Potter, Oscar, Downers Grove, Ill., assignor of one-half to G. M. Bard. Smelter. 1,805,554; May 19.
Potter, Ralph K., New York, N. Y., assignor to American Telephone and Telegraph Company. Signaling system. 1,805,596; May 19.
Pouder, Warren E. (See Hawkins, Edward M., assignor.)
Pratt, Alexander M., Newcastle, New South Wales, Australia. Propelling water craft. 1,805,597; May 19.
Pratt, Louis L., assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa. Lubricated expansion joint. 1,806,081; May 19.
Prestage, Edwin, London, assignor of one-half to Broom & Wade Limited, High Wycombe, Buckinghamshire, England. High pressure gas compressor. 1,805,741; May 19.
Prill, Alphons, Wiesdorf, and R. Walter, Dessau, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Producing 4-substitution products of the quinoline series. 1806,563; May 19.
Prill, Alphons, Wiesdorf, and R. Walter, Dessau, Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Producing 4-substitution products of the quinoline series. 1,806,564; May 19.
Primrose, John, Richmond, assignor to Fosser Wheeler Corporation, New York, N. Y. Reflux tower. 1,805,635; May 19.
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Putterman, Benjamin, Brooklyn, N. Y., assignor, by mesne assignments, to Yankee Metal Products Corp. Smoker's receptacle. 1,806,418; May 19.
Quirk, Wellington J. (See Metz, R., and Quirk.)
Rabezzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Shielding means for ignition apparatus. 1,806,548; May 19.
Raconite Chemical Company. (See Stevens, James L., assignor.)
Ragatz, Edward G., assignor to Union Oil Company of California, Los Angeles, Calif. Distillation of petroleum. 1,806,023; May 19.
Rahn, Franz, assignor to the Firm C. H. Boehringer Sohn, Chemische Fabrik, Nieder-Ingelheim-on-the-Rhine, Germany. Purification of acetylene. 1,806,419; May 19.
Ramakers, Cornelius, and D. R. Carsley, Los Angeles, Calif., assignors to Soaring Plane Corporation. Airplane. 1,805,722; May 19.
Ramsperger, Albert B., Richmond Hill, N. Y. Stand. 1,805,674; May 19.
Randel, Bo F., San Diego, Calif., assignor to Electrolux Servel Corporation, New York, N. Y. Refrigerating means and method. 1,806,498; May 19.
Ranney, Leo, New York, N. Y., and C. O. Fairbank, Petrolia, Ontario, Canada, assignor of one-half to Standard Oil Development Company. Facilitating flow from wells. 1,806,499; May 19.
Rathgeb, Joseph J., jr., New York, N. Y. Boiler. 1,806,178; May 19.
Rausch, Gottfried, Ammendorf, near Halle-on-the-Saale, Germany. Dough-dividing and working machine. 1,805,705; May 19.
Rausch, Gottfried, Ammendorf, near Halle-on-the-Saale, Germany. Loaf-forming machine. 1,805,706; May 19.
Reeder, Frank C., assignor to The Fulton Syphon Company, Knoxville, Tenn. Automatic regulator. 1,806,367; May 19.
Reedy, Alfred J., assignor to A-B Stove Company, Battle Creek, Mich. Gas stove. Des. 84,205; May 19.
Rees, William E., Gananoque, Ontario, Canada. Rivet setting and punching press. 1,806,217; May 19.

Reetz, Conrad A., assignor to Atlas Metal Works, Dallas, Tex. Telephone cabinet. 1,805,847; May 19.
Reeves, Orwell C., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Jewel bearing mounting. 1,806,179; May 19.
Regents of the University of California, The. (See Lipman, C. B., and Gordon, assignors.)
Regina Corporation, The. (See Holmes, Harry W., assignor.)
Reid, James S., assignor to The Eaton Axle & Spring Company, Cleveland, Ohio. Closure. 1,806,218; May 19.
Reinhardt, Willard L., East Cleveland, assignor to Willard Storage Battery Company, Cleveland, Ohio. Drying storage battery plates. 1,806,180; May 19.
Reis, Curt F., assignor to Excel Magneto Company, Chicago, Ill. Impulse coupling. 1,805,598; May 19.
Remington Typewriter Company. (See Hart, Frederick A., assignor.)
Replogle, John R., assignor to Kelvinator Corporation, Detroit, Mich. Refrigerated food cabinet. 1,805,785; May 19.
Republic Steel Corporation. (See Vignos, Paul, assignor.)
Resch, Henry, Bayonne, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,806,082; May 19.
Reserve Holding Company. (See Saunders, Norman H., assignor.)
Reyher, Rudolf. (See Laska, L., Reyher, and Zitscher.)
Reynolds, Edwin, Vineland, N. J. Rod supporting bracket. 1,805,742; May 19.
Reynolds Metals Company. (See Tomlinson, Frank B., assignor.)
Rhiner, Sherrie L., Pine Bluffs, Wyo. Doorlatch mechanism. 1,805,997; May 19.
Rhodes, Russell R. (See Cogan, Leslie L., assignor.)
Rice, Philip X., Danville, Ill., assignor to The Miller Train-Control Corporation, Staunton, Va. Train control system. 1,806,500; May 19.
Richardson, John K. (See Collins, Gordon V., assignor.)
Richter, George A., and M. O. Schur, assignors to Brown Company, Berlin, N. H. Treatment of pulp and product of same. 1,806,309; May 19.
Ricks, Hyrum, Los Angeles, Calif. Scraper. 1,806,219; May 19.
Rider, Ernest G., assignor to Stokes and Smith Company, Philadelphia, Pa. Wrapper tabbing mechanism. 1,806,181; May 19.
Riley Stoker Corporation. (See Dolan, Frederick J., assignor.)
Riley Stoker Corporation. (See Snow, Alexander I., assignor.)
Rinderspacher, Emilio, R. Bergara, and C. Bergara, Buenos Aires, Argentina. Electric heater for liquids. 1,805,885; May 19.
Riter-Conley Manufacturing Company. (See Hill, Harold O., assignor.)
Rizer, Conrad K., New York, N. Y. Headlight. 1,805,886; May 19.
Roberts, Edward W., Chicago, Ill. Mouthpiece for telephones or speaking tubes and like instruments. 1,806,368; May 19.
Roberts, John H., Hatfield, Ark. Cotton chopping attachment for cultivators. 1,805,599; May 19.
Roberts, Thomas J., Atlanta, Ga. Fluid pressure starting mechanism. 1,806,083; May 19.
Robinson, Guy A., Cincinnati, Ohio. Gas range. 1,805,923; May 19.
Robinson, Preston, assignor to Guggenheim Brothers, New York, N. Y. Recovery of metals. 1,806,310; May 19.
Rock, George L., Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for producing tubular articles. 1,806,119; May 19.
Rockwell, Edward A., New York, N. Y. Valve operating mechanism. 1,806,220; May 19.
Rockwell, George G., and C. L. Walters, Danbury, Conn. Sound reproducing diaphragm. 1,806,420; May 19.
Roe, De Forest, Cleveland, assignor to The Colson Company, Elyria, Ohio. Tread. 1,806,084; May 19.
Rogers, Ira E., Marblehead, and W. C. Scott, Quincy, Mass., assignors to General Electric Company. Clutch mechanism for looms and the like. 1,805,498; May 19.
Rogers, Reginald D. (See Andrews, C. W., and Rogers.)
Rolls Royce Limited. (See Royce, Frederick H., assignor.)
Romine, Robert T., Mount Clemens, Mich. Portable platform and making the same. 1,806,085; May 19.
Romine, Robert T., Mount Clemens, Mich. Portable loading platform. 1,806,086; May 19.
Rose, Alfred G., assignor of one-half to Rose Brothers (Gainsborough) Limited, Gainsborough, England. Conveyer for packaging machines. 1,806,501; May 19.
Rose Brothers (Gainsborough) Limited. (See Rose, Alfred G., assignor.)
Rosen, Louis W., Brooklyn, N. Y. Shutter-locking device for cameras. 1,805,707; May 19.
Rosenberg, Heyman, New York, N. Y. Ladder. 1,806,502; May 19.
Rosenberg, Heyman, New York, N. Y. Apparatus for treating metal work. 1,806,503; May 19.
Ross, Alfred G., Cincinnati, Ohio. Clothing retainer. 1,806,221; May 19.
Ross, Charles L., Washington, D. C. Spring device. 1,805,600; May 19.
Ross, Charles L., Washington, D. C. Firearm. 1,805,601; May 19.
Ross, Edward A., Gernt, Tenn. Saw filer. 1,806,222; May 19.
Ross, Walter S. (See Strachan, Hugh B., assignor.)
Roy, Wilfrid J., East Orange, assignor to Gemex Company, Newark, N. J. Bracelet clasp. 1,806,265; May 19.
Royce, Frederick H., West Wittering, near Chicester, England, assignor to Rolls Royce Limited, Derby, England. Hydraulic shock absorber. 1,805,924; May 19.
Rubber Service Laboratories Company, The. (See Byers, Horace G., assignor.)
Rubsam, Charles F., Jackson, Mich. Vaporizer. 1,805,844; May 19.
Rudolph, Alfred P., Denver, Colo. Massage device. 1,805,675; May 19.
Rummel, George W., Swissvale, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Automatic train pipe coupling. 1,805,676; May 19.
Russel, Philip S., assignor to Detroit Lubricator Company, Detroit, Mich. Valve. 1,806,505; May 19.
Russell, Frank C., and C. L. Savide, assignors to The Mineral Felt Insulating Company, Toledo, Ohio. Mineral fiber felting. 1,806,024; May 19.
Russell, Robert C., assignor to W. S. Shaw Company, Dallas, Tex. Radiator bar and reenforcing means. 1,805,887; May 19.
Rybak, Karol P., Taylor, Pa. Curtain bracket. 1,806,504; May 19.
Saari, August M., Watton, Mich. Transmission. 1,806,505; May 19.
Sachs, Joseph, Hartford, Conn. Electric meter protecting cabinet. 1,805,723; May 19.
Sachs, Joseph, Hartford, Conn. Electric meter protecting cabinet. 1,805,724; May 19.
Sachs, Joseph, Hartford, Conn. Fuse block attachment. 1,805,725; May 19.
Sadinoff, Max, Brooklyn, N. Y. Lace trimming or the like. Des. 84,221; May 19.
Sadinoff, Max, Brooklyn, N. Y. Lace trimming or the like. Des. 84,222; May 19.
Safety Grinding Wheel & Mch. Company, The. (See Weinland, Hermon G., assignor.)
Safety Mining Company. (See Ferrell, D., and Helmholtz, assignors.)
Safety Processing Company, The. (See Butkey, Andrew T., assignor.)
St. Joseph Iron Works. (See Davis, Charles C., assignor.)
St. Joseph Iron Works. (See Schmidtke, Albert H., assignor.)
St. Regis Paper Company. (See Menke, E. W., and Marsh, assignors.)
Salvo, Luis, et al. (See Bulgarini, Luis, assignor.)
Samala, Dino, Milan, Italy. Bomb for use with a special bomb-thrower or with firearms already existing and having a smaller caliber than the bomb. 1,806,223; May 19.
Samuel G. Thomson, Flushing, N. Y. Railway rail and rail-joint. 1,806,427; May 19.
Sanabria, Ulises A., Louisville, Ky., assignor, by mesne assignments, to Western Television Corporation, Chicago, Ill. Method and means for scanning. 1,805,848; May 19.
Sandin, Maurits J., Wilkins Township, Allegheny County, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fuse mechanism. Re18,073; May 19.
Sartakoff, Jack D., assignor, by mesne assignments, to Khetah Corporation, New York, N. Y. Liquid level indicating system. 1,805,849; May 19.
Saunders, Arthur B., Nashua, N. H. Sheet cutting machine. 1,805,743; May 19.
Saunders, Norman H., Homewood, assignor to Reserve Holding Company, Chicago, Ill. Automatic telephone system. 1,805,726; May 19.
Saunders, William C., Hinton, Iowa. Wire reeling attachment. 1,805,636; May 19.
Savidge, Clinton L. (See Russell, F. C., and Savidge.)
Savidge, William G., Sunbury, Pa. Nutlock. 1,806,506; May 19.
Sawle, William S., Chicago, Ill. Punching tool. 1,806,266; May 19.
Schacher, Adolf, assignor of one-half to D. Simon, Philadelphia, Pa. Clutch. 1,805,530; May 19.
Schaer, Charles, Langenthal, assignor to the Firm: Sulzer Frères Société Anonyme, Winterthur, Switzerland. High pressure reciprocating compressor. 1,806,311; May 19.
Schaerer, Otto, and F. Poppensieker, Cologne, assignors to the Firm Alfred H. Schutte, Cologne-Deutz, Germany. Screw cutting device for automatic lathes. 1,805,998; May 19.
Schering-Kahlbaum A.-G. (See Baensch, Walter, assignor.)
Schering-Kahlbaum A.-G. (See Schoeller, W. H. Jordan, and Clerc, assignors.)
Schermuly, Joseph, Wichita, Kans. Agricultural implement. 1,805,850; May 19.
Schick, Jacob, East Orange, N. J., assignor to Magazine Repeating Razor Company. Shaving equipment. 1,806,087; May 19.
Schiele & Bruchsaler Industriewerke A. G. (See Besag, Ernst, assignor.)
Schiff, Arthur, New York, N. Y. Display device. 1,806,120; May 19.

Schiller, Morgan B., Pittsburgh, assignor to American Tubular Elevator Company, Pittsburgh, Pa. Sectional tubular tower. 1,806,312; May 19.
Schindler, Joseph W. (See Laster, Harry W., assignor.)
Schleicher, Manfred, Berlin-Charlottenburg, and L. Brandenburger, Berlin-Halensee, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Means for indicating the position of a connecter switch. 1,805,999; May 19.
Schlesinger, Barthold E. (See Lang, G. J., Drennan, and Schlesinger.)
Schmidt, John F., L. F. Erhart, and O. E. Wright, assignors to The Thos. J. Corcoran Lamp Co., Cincinnati, Ohio. Connecter. 1,806,267; May 19.
Schmidt, Karl, Leverkusen, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Oxidation of leuco compounds of the triaryl methane series. 1,805,925; May 19.
Schmidtke, Albert H., assignor to St. Joseph Iron Works, St. Joseph, Mich. Box making machine. 1,805,888; May 19.
Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung. (See Uhde, Robert, assignor.)
Schmitt, Frank R., Queens Village, N. Y., assignor to American Machine & Foundry Company. Paper feed for wrapping machines. 1,805,677; May 19.
Schnell, August F., Kankakee, Ill. Fish lure. 1,806,088; May 19.
Schoeller, Walter, Berlin-Charlottenburg, H. Jordan, Berlin-Steglitz, and R. Clerc, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Production of alkylphenols. 1,805,555; May 19.
Schoeller, Walter, and H. Schotte, assignor to the Firm Schering-Kahlbaum Aktiengeselischaft, Berlin, Germany. Substituted guanidine alcohols. 1,805,889; May 19.
Schörg, Karl. (See Fendt, E., and Schörg.)
Schotte, Herbert. (See Schoeller, W., and Schotte.)
Schrankel, Howard L., Buffalo, N. Y. Heating apparatus. 1,805,556; May 19.
Schuda, Ernest J., assignor to Lovell Manufacturing Company, Erie, Pa. Wringer frame. 1,805,557; May 19.
Schulz, George W., Cleveland, Ohio, assignor to Yawman & Erbe Manufacturing Co., Rochester, N. Y. Extensible desk top. 1,805,890; May 19.
Schulze, William H., assignor to Stewart-Warner Corporation, Chicago, Ill. Fuel pump. 1,806,268; May 19.
Schur, Milton O. (See Richter, G. A., and Schur.)
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Mask for cylinder molds. 1,805,499; May 19.
Schur, Milton O., and R. A. Webber, assignors to Brown Company, Berlin, N. H. Cellulose derivative manufacture. 1,806,421; May 19.
Schuster, Curt. (See Meyer, K. H., and Schuster.)
Schutte, Firm Alfred H. (See Schaerer O., and Poppensieker, assignors.)
Schwendner Anthony F. (See Bryant, O. N., and Schwendner.)
Schwentler, Francis E., St. Louis, Mo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,805,637; May 19.
Scofield, Theodore J., Jackson, Mich., assignor to The Sparks-Withington Company. Electrical transformer and inductance coil. 1,805,639; May 19.
Scofield, Theodore J., G. A. White, and J. D. Hammond, Jackson, Mich., assignors to The Sparks-Withington Company. Radio coupling coil. 1,805,638; May 19.
Scott and Fetzer Company, The. (See Pardee, Lloyd W., assignor.)
Scott, Walter R., Washington, Pa. Curtain and shade fixture. 1,805,926; May 19.
Scott, William B., assignor to Marchant's Foundry Co., Oakland, Calif. Molding apparatus. 1,806,000; May 19.
Scott, William C. (See Rogers, I. E., and Scott.)
Scovill Manufacturing Company. (See McAtee, John L., assignor.)
Seaman, Harry T., Rochester, N. Y. Device for distributing fertilizer and the like. 1,806,025; May 19.
Seaton, Guy C. (See Blanchard, Adna F., assignor.)
Seedig, Adolph G., Wheeler, Tex. Seat attachment. 1,806,026; May 19.
Seguy, Jean D., assignor to Universal Oil Products Company, Chicago, Ill. Dephlegmator. 1,806,089; May 19.
Seguy, Jean D., assignor to Universal Oil Products Company, Chicago, Ill. Dephlegmator. 1,806,090; May 19.
Seitz, Bertram, Philadelphia, Pa. Gate for delivery vehicles. 1,805,851; May 19.
Seligmann, William, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Workholder for material working apparatus. 1,806,182; May 19.
Shadberg Company. (See Vawter, John M., assignor.)
Shaen, Robert H., Ambler, Pa. Scale reader for draftsmen. 1,806,422; May 19.
Shafer, Samuel, jr., assignor to Chain Belt Company, Milwaukee, Wis. Concrete delivery apparatus. 1,805,602; May 19.
Shand, Errol B., and L. Smede, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company. Seal for metal-tank rectifiers and the like. 1,806,313; May 19.
Shapiro, Joseph. (See Woodward, William B., assignor.)
Shapiro, Philip, Los Angeles, Calif. Lubricator indicator. 1,806,423; May 19.
Sharp, Lewis, Huntington Park, Calif. Mowing machine. 1,805,927; May 19.
Sharples Specialty Company, The. (See Jones, Leo. D., assignor.)
Shaw, Leon I., Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Suspension. 1,806,183; May 19.
Shaw, Lewis A., Washington County, Oreg. Harvester. 1,805,744; May 19.
Shaw, W. S., Company. (See Russell, Robert C., assignor.)
Shell Petroleum Corporation. (See Thornburgh, Hubert R., assignor.)
Shering-Kahlbaum Aktiengesellschaft. (See Schoeller, W., and H. Schotte, assignors.)
Sherman, William S., Brooklyn, N. Y., assignor, by mesne assignments, to General Frigheatone Co. Inc. Liquid to be used as heat transferring medium. 1,805,500; May 19.
Shindel, Harry F., assignor to Willson Products, Inc., Reading, Pa. Adjusting means for goggles. 1,805,640; May 19.
Shinn, Lyle B., assignor to Chicago Lock Company, Chicago, Ill. Lock. 1,805,891; May 19.
Shlesinger, William H., Brooklyn, N. Y. Lamp. Des. 84,206; May 19.
Shonnard, Harold W., Upper Montclair, N. J., assignor to Elevator Supplies Company, Inc. Swivel coupling. 1,805,956; May 19.
Siebs, Claude T., Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for welding. 1,806,121; May 19.
Siemens & Halske, Aktiengesellschaft. (See Noddack, W. and I., assignors.)
Siemens & Halske Aktiengesellschaft. (See Schleicher, M., and Brandenburger, assignors.)
Signode Steel Strapping Company. (See Treat, Sidney W., assignor.)
Simms, Frederick R., London, and B. C. Joy, West Hampstead, London, England. Cleansing or filtering lubricating oils. 1,806,001; May 19.
Simms, Frederick R., London, and B. C. Joy, West Hampstead, London, England. Cleansing or filtering lubricating oils. 1,806,002; May 19.
Simon, Daniel. (See Schacher, Adolf, assignor.)
Simplex Piston Ring Company of America, Inc., The. (See Blomgren, Henry E., assignor.)
Simpson, Robert D., Columbus, Ohio. Liquid distributor. 1,805,852; May 19.
Simpson, Robert W., Salem, Ohio. Folding table. 1,806,091; May 19.
Singer Manufacturing Company, The. (See Naul, James M., assignor.)
Siry, Herbert, Newport, Ky. Automobile headlight. 1,806,424; May 19.
Sjolander, Axel K., assignor to Link-Belt Company, Chicago, Ill. Adjustable bearing. Re18,075; May 19.
Skeels, Henry E., Rochester, N. Y., assignor of one-half to W. R. Hughes. Extension ladder. 1,806,185; May 19.
Slade, Harold E., Glen Ridge, and J. Gehring, Jersey City, assignors to Beaver Machine & Tool Co., Inc., Newark, N. J. Electric lamp holder or socket. 1,806,314; May 19.
Sladky, Alexander C., assignor to National Enameling and Stamping Company, Inc., Milwaukee, Wis. Receptacle attachment. 1,806,184; May 19.
Slingluff, Donald, et al., trustees. (See Farr, F. G., and Didinger, assignors.)
Smalley, Edwin L., Whitefish Bay, assignor to Hevi Duty Electric Company, Milwaukee, Wis. Rotary hearth furnace. 1,806,027; May 19.
Smalley, Robert C., Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y. Duplex vacuum tube lights. 1,806,507; May 19.
Smede, Lloyd. (See Shand, E. B., and Smede.)
Smith, Albert H., Edgbaston, England. Cinematograph film. 1,806,122; May 19.
Smith, Charles G., Medford, assignor, by mesne assignments, to Cambridge Laboratories, Inc., Cambridge, Mass. Gas pump. 1,806,369; May 19.
Smith, Earl S., assignor to The Toledo Porcelain Enamel Products Company, Toledo, Ohio. Bird bath. 1,806,123; May 19.
Smith, Eggleston, Mamaroneck, N. Y., assignor to Eggleston Drilling Corporation, Dover, Del. Self seating device for drilling bits. 1,805,678; May 19.
Smith, Eggleston, Newark, N. J., assignor to Eggleston Drilling Corporation, Dover, Del. Earth drilling apparatus. 1,805,727; May 19.
Smith, Ira D., Eastland, Tex. Automatic check valve. 1,805,603; May 19.
Smith, Richard F., Charleston, S. C., assignor of one-fourth to R. D. Sullivan, Savannah, Ga., and one-half to Charleston Dry Dock and Machine Company, Charleston, S. C. Ship construction. 1,806,508; May 19.
Smith, Russell T., Greenville, Mich. Refrigerator cabinet. Des. 84,208; May 19.
Smith, Wallace D., Kalamazoo, Mich. Applicator for vibrating machines. 1,805,853; May 19.
Smith, Walter E., Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I. Drapery rod. Des. 84,207; May 19.

Smith, Walter E., Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I. Drapery rod. Des. 84,209; May 19.
Smith, William A., sr., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Chuck for rock drills. 1,806,315; May 19.
Smith, William H., Copeland, Idaho. Locking system for containers. 1,806,124; May 19.
Smith, William S. (See Hammer, G., Gercich, and Smith.)
Snavely, Clarence S., Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. Re18,079; May 19.
Snow, Alexander I., assignor to Riley Stoker Corporation, Worcester, Mass. Automatic stoker. 1,805,641; May 19.
Soaring Plane Corporation. (See Ramakers, C., and Carsley, assignors.)
Société Acieries de Gennevilliers. (See Bunet, Paul E., assignor.)
Société Anonyme des Ciments Luxembourgeois. (See Lepersonne, M., and Hastert, assignors.)
Société Anonyme La Cooperation Agricole & Industrielle. (See Guiraud, Henri J., assignor.)
Société Du Carburateur Zenith. (See Boulade, Antonin, assignors.)
Sohn, John, Deadwood, S. Dak. Sandal. 1,805,728; May 19.
Solvay Process Company. (See Sundstrom, C., and Lykes, assignors.)
Sorensen, Andrew J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,806,092; May 19.
Sorensen, Andrew J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus responsive to the passage of railway vehicles. 1,806,093; May 19.
Soundex Corporation, The. (See Fuller, Richard B., assignor.)
Sparks-Withington Company, The. (See Scofield, Theodore J., assignor.)
Sparks-Withington Company, The. (See Scofield, T. J., White, and Hammond, assignors.)
Spear, Albert E. (See MacGregor, L. B., and Spear.)
Speidel, Albert E. R., Edgewood, R. I. Bracelet chain. Des. 84,210; May 19.
Speidel, Albert E. R., Edgewood, R. I. Bracelet chain. Des. 84,211; May 19.
Speidel, Albert E. R., Edgewood, R. I. Bracelet chain. Des. 84,212; May 19.
Speidel, Albert E. R., Edgewood, R. I. Bracelet chain. Des. 84,213; May 19.
Speidel, Albert E. R., Edgewood, R. I. Bracelet chain. Des. 84,214; May 19.
Sperr, Frederick W., jr., Pittsburgh, Pa., assignor to The Koppers Company. Gas purification process. 1,806,370; May 19.
Sperry, Elmer A., jr., Brooklyn, assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Nonpendulous gyrocompass. 1,805,854; May 19.
Sperry Gyroscope Company. (See Sperry, Elmer A., jr., assignor.)
Spohn, Gottlob, Pforzheim, Germany. Folding device for letter sheets. 1,806,125; May 19.
Spousta, John, River Rouge, Mich. Furnace. 1,805,786; May 19.
Spreen, Charles C., assignor to Kelvinator Corporation, Detroit, Mich. Mechanical refrigeration. 1,805,787; May 19.
Springfels, Charles F., West Palm Beach, Fla. Safety traffic light. 1,806,126; May 19.
Spyer, Arthur, London, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Boiler feed water system. 1,806,371; May 19.
Squires, Wilbur N., assignor to Hydraulic Deep Well Pump Company, Joplin, Mo. Pump. 1,805,788; May 19.
Squyer, Albert R. (See Weaver, G. E., and Squyer.)
Staat, Aaron, Cincinnati, Ohio. Combination chip rack and smoking stand. Des. 84,215; May 19.
Staf, Axel H., assignor to Gorham Mfg. Co., Providence, R. I. Spoon or similar article. Des. 84,223; May 19.
Staley, Harrison L., Martinsville, Ind. Boiler tube cleaner. 1,806,127; May 19.
Standard Oil Company of California. (See Parker, C. K., and Bent, assignors.)
Standard Oil Development Company. (See Howard, F. A., and Loomis, assignors.)
Standard Oil Development Company. (See Ranney, L., and Fairbank, assignors.)
Standard-Trump Bros. Machine Company. (See Houseman, Harold E., assignor.)
Standard-Trump Bros. Machine Company. (See Houseman, Wilbur L., assignor.)
Standard Tube and Manufacturing Company. (See Begue, F. F., and McIntosh, assignors.)
Stansbury, Carroll, Wauwatosa, and N. L. Mortensen, assignors, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Controller for electric motors. 1,806,269; May 19.
Stant, Kyle E., assignor to The Stant Machine Company, Connersville, Ind. Radiator cap. 1,806,224; May 19.
Stant Machine Company, The. (See Stant, Kyle E., assignor.)
Staude, John M., assignor of one-third to A. I. Duval and one-third to C. A. Knott, Pittsburgh, Pa. Tube welding furnace. 1,806,028; May 19.
Stedefeld, Curt, Heidelberg, Germany. Running gear for high speed suspension cars. 1,805,928; May 19.
Stein, Friedrich, Saarbrucken, Germany. Clarinet. 1,805,929; May 19.
Steinfeld, Samuel. (See Wasserberg, Max, assignor.)
Steingassinger, Hans. (See Kogl, Frank, assignor.)
Stephens, Arnold A., Davenport, Iowa. Automotive piston. 1,805,957; May 19.
Stephens, Arnold A., Davenport, Iowa. Hollow piston. 1,805,958; May 19.
Stephens, Arnold A., Davenport, Iowa. Motor piston. 1,805,959; May 19.
Stephens, Arnold A., assignor of one-half to G. E. Weeks, Davenport, Iowa. Piston construction. 1,805,960; May 19.
Stevens, James L., Hayden, Ariz., assignor to Raconite Chemical Company. Concentration of ores, minerals and the like. 1,805,855; May 19.
Stephenson, Leonard D., Ashland, Oreg. Amalgamator. 1,805,930; May 19.
Steves, Harold M. (See Chandler, Edgar J., assignor.)
Stewart, Sigmund S., Passaic, assignor to Wilson Welder & Metals Company, Inc., Hoboken, N. J. Coating arc welding electrodes. 1,806,128; May 19.
Stewart-Warner Corporation. (See Schulze, William H., assignor.)
Stille, Corsville E., Tuckahoe, N. J. Adjustable pressure indicator for tires. 1,806,372; May 19.
Stitch, Jack C., New York, N. Y. Window shade stop. 1,806,373; May 19.
Stokes and Smith Company. (See Rider, Ernest G., assignor.)
Stoltz, Carl F., Delhi, Ohio, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,805,531; May 19.
Stone, Oscar H., near Dayton, and D. A. Cooper, Dayton, Ohio. Adjustable air blast heater for locomotives. 1,805,892; May 19.
Stowell, Frank C., Medford, Mass. Rail and tie plate. 1,806,094; May 19.
Straatman, Alphons G. H., assignor to Naamlooze Venootschap De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Adjusting well holes. 1,806,509; May 19.
Strachan, Hugh B., assignor of one-third to W. S. Ross, Bedford, Ohio. Tractor and trailer coupling. 1,805,642; May 19.
Straka, Atnon, Chicago, Ill. Grappling hook. 1,805,604; May 19.
Street, William A., Belington, W. Va. Automobile or traffic signal. 1,805,643; May 19.
Streit, Carl F., and G. J. Kuehnle, Cincinnati, Ohio, said Kuehnle assignor to said Streit. Scrap removing device for woodworking machinery. 1,805,856; May 19.
Strunk, Gustav, Essen-Ruhr, Germany. Device for changing over the points in mine tracks from the traveling vehicle. 1,806,129; May 19.
Stuart, Thomas F., and H. A. Moore, said Stuart assignor to M. E. Bigelow, and said Moore assignor to A. H. Brunner, Los Angeles, Calif. Push catch for doors. 1,805,789; May 19.
Stucki, Arnold, Pittsburgh, Pa. Roller side bearing. 1,806,003; May 19.
Studebaker Corporation, The. (See Hunt, George, assignor.)
Studebaker Corporation, The. (See Kohr, Robert F., assignor.)
Studebaker, Marion M., Topeka, Kans. Hatrack. 1,806,578; May 19.
Stull, John S., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Stock feeding device. 1,806,130; May 19.
Stull, John S., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for handling articles. 1,806,131; May 19.
Sturdy's J. F. Son Co. (See Nelson, Nels T., assignor.)
Sturgis, William B., Chicago, Ill. Oil burner. 1,806,566; May 19.
Sturtevant, B. F., Company. (See Middleton, Harry N., assignor.)
Suderov, Abraham, New York, N. Y. Finger ring or similar article. Des. 84,189; May 19.
Suderov, Abraham, New York, N. Y. Finger ring or similar article. Des. 84,216; May 19.
Suderov, Abraham, New York, N. Y. Finger ring or similar article. Des. 84,217; May 19.
Sullivan, John T., Lewiston, Idaho. Motor vehicle. 1,806,095; May 19.
Sullivan Machinery Company. (See Gartin, Elmer G., assignor.)
Sullivan Machinery Company. (See Mitchell, Joseph S., assignor.)
Sullivan, Raymond D., et al. (See Smith, Richard F., assignor.)
Sulzer Frères Société Anonyme, The firm. (See Schaer, Charles, assignor.)
Sulzer Frères Société Anonyme, The firm. (See Trechsel, Max, assignor.)
Sundstrom, Carl, and C. S. Lykes, Syracuse, assignors to Solvay Process Company, Solvay, N. Y. Production of a concentrated caustic soda product. 1,806,096; May 19.

Superheater Company, The. (See Jorgensen, Svend M., assignor.)
Swartwout Company, The. (See Mastenbrook, Henry J., assignor.)
Swartz, George, Albany, assignor of one-half to C. H. Andros, Nassau, N. Y. Process and apparatus for preparing charges for power devices. 1,805,644; May 19.
Swift and Company. (See Clark, James H., assignor.)
Swift & Company. (See McKee, Harry H., assignor.)
Symington, T. H., & Son, Inc. (See Martin, Mark H., assignor.)
Symington, T. H., & Son, Inc. (See Symington, Thomas H., assignor.)
Symington, Thomas H., assignor to T. H. Symington & Son, Inc., Baltimore, Md. Lateral motion mechanism. 1,806,097; May 19.
Tactiphone Company, The. (See MacDonald, Joel W., assignor.)
Tada, Manabu. (See Omoto, Ryo, assignor.)
Taliaferro, Thomas L., assignor to Phoenix-Hermetic Company, Chicago, Ill. Metal jar closure. 1,806,425; May 19.
Tallon, George, Malone, N. Y. Oil pan for internal combustion engines. 1,805,729; May 19.
Tanner, Heinrich, Baden, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Speed control apparatus for spinning machines. 1,806,098; May 19.
Tar & Petroleum Process Company. (See Knowles, A. S., and Andrews, assignors.)
Tate, Ballard C. (See Morgan, M. I., and Tate.)
Tatter, John W., assignor to Lewis Differential Company, Chicago, Ill. Brake band. 1,805,501; May 19.
Tavender, Walter K., Haworth, N. J. Electric heater. 1,806,004; May 19.
Taylor, Frank F., Santa Ana, Calif. Internal combustion engine. 1,805,931; May 19.
Taylor, H. D., Co. (See Hallstead, L. A., and Dawson, assignors.)
Taylor Instrument Companies. (See De Mers, Clayton D., assignor.)
Taylor, William E., East Orange, N. J., assignor to American Can Company, New York, N. Y. Scoring machine. 1,805,708; May 19.
Teel, Raymond A., Glenolden, Pa. Umbrella. 1,805,745; May 19.
Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assignor.)
Thayer, Russell, Philadelphia, Pa. Aircraft. 1,806,316; May 19.
Thoma, Corallie D., New York, N. Y. Form for washing and drying gloves. 1,805,709; May 19.
Thomas, Adolph A., New York, N. Y. Electric phonograph. 1,806,374; May 19.
Thomas, André, assignor to L. Thomas, Paris, France. Fastening device. 1,806,005; May 19.
Thomas, Charles A. (See Midgley, T., jr., Thomas, and Hochwalt.)
Thomas, Edward G., assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Counting scale. 1,806,132; May 19.
Thomas, Frank B., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car equipment. 1,805,645; May 19.
Thomas, Frank M., Easton, Pa. Magnetic drive for centrifugal casting machines. 1,805,961; May 19.
Thomas, Frank M., Easton, Pa. Pipe joint. 1,805,962; May 19.
Thomas, Horace T., Lansing, Mich. Self adjusting valve gearing. 1,806,099; May 19.
Thomas, Louise. (See Thomas, André, assignor.)
Thomas, Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake pipe cut off valve. 1,805,646; May 19.
Thomas, Thomas H., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Train pipe coupling. 1,805,647; May 19.
Thomas, William M., Indianapolis, Ind. Power mechanism. 1,806,133; May 19.
Thompson, Edgar J., Montreal, Quebec, and R. H. Hubler, Sherbrooke, Quebec, assignors to Canadian Silk Products Limited, Sherbrooke, Canada. Apparatus for knitting full fashioned hosiery. 1,805,893; May 19.
Thompson, George F., assignor to G. H. Williams Company, Erie, Pa. Clamshell bucket. 1,805,532; May 19.
Thompson, Louis W., Schenectady, N. Y., assignor to General Electric Company. Regulating system. 1,806,317; May 19.
Thompson, Louis W., and E. H. Horstkotte, Schenectady, N. Y., assignors to General Electric Company. Control system for dynamo-electric machines. 1,805,502; May 19.
Thompson Manufacturing Company. (See Thompson, Walter V. E., assignor.)
Thompson, Neil, Jeannette, assignor to Elliott Company, Pittsburgh, Pa. Apparatus for cleaning tubes. 1,806,270; May 19.
Thompson, Walter V., assignor to Thompson Manufacturing Company, Los Angeles, Calif. Intermittent motion sprinkler. 1,806,100; May 19.
Thompson, Walter V., assignor to Thompson Manufacturing Company, Los Angeles, Calif. Turbulence arrester. 1,806,101; May 19.
Thomson, Samuel G., Flushing, N. Y. Railway rail and rail-joint. 1,806,426; May 19.
Thornburgh, Hubert R., Leonia, N. J., assignor to Shell Petroleum Corporation. Stadia rod. 1,805,605; May 19.
Thorssell, Carl T., Kassel, Germany. Working up crude phosphate and potassium salts to mixed fertilizer. 1,806,029; May 19.
Thurgar, Harry D. (See Freeman, H., and Thurgar.)
Tiedeman, John A., Schenectady, N. Y., assignor to General Electric Company. Recording method and apparatus. 1,806,375; May 19.
Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Diagnostic instrument. 1,806,318; May 19.
Titus, Thomas L., Omaha, assignor of one-fourth to M. Blackburn, Omaha, Nebr., and one-fourth to F. K. Hart, Council Bluffs, Iowa. Liquid dispensing valve. 1,805,790; May 19.
Toledo Porcelain Enamel Products Company, The. (See Smith, Earle S., assignor.)
Toledo Scale Manufacturing Company. (See Kelley, Leonard O., assignor.)
Toledo Scale Manufacturing Company. (See Reeves, Orwell C., assignor.)
Toledo Scale Manufacturing Company. (See Thomas, Edward G., assignor.)
Tomlinson, Frank B., assignor to Reynolds Metals Company, Louisville, Ky. Sealing carton. 1,805,533; May 19.
Toncray, William S., Phoenix, Ariz. Air cooling and conditioning apparatus. 1,805,963; May 19.
Trane, Reuben N., La Crosse, Wis. Radiator. 1,806,186; May 19.
Traver, Harry G., Beaver Falls, Pa. Amusement ride. 1,806,102; May 19.
Travis, Simeon E., jr., Hattiesburg, Miss., assignor to The Weldmech Steel Products Co. Metallic truck body. 1,806,428; May 19.
Travis, Simeon E., jr., Hattiesburg, Miss., assignor to The Weldmech Steel Products Co. Underframe for truck bodies. 1,806,429; May 19.
Traynor, William M., Cornwall-on-Hudson, N. Y. Combination garments. 1,806,430; May 19.
Treat, Sidney W., Chicago, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company. Box strapping machine. 1,805,791; May 19.
Trechsel, Max., assignor to the Firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Double acting internal combustion engine. 1,806,319; May 19.
Trimble, William H., and J. N. Clark, Dallas, Tex. Battery terminal clamp. 1,805,857; May 19.
Tropenas Company. (See Broche, Leon J., assignor.)
Troy, Matthew O., Schenectady, N. Y., assignor to General Electric Company. Magnetic core for electrical apparatus. 1,805,534; May 19.
Truesbury, Fred C., assignor to J. L. Clark Manufacturing Co., Rockford, Ill. Container. 1,806,320; May 19.
Tuttle, Henry A., deceased, Upton, Mass., by Jennie L. Tuttle, executrix, Upton, Mass. Reversing mechanism. 1,806,431; May 19.
Tuttle, Jennie L., executrix. (See Tuttle, Henry A.)
Tyden, Emil, Hastings, Mich. Accelerator for dry pipe valve sprinkler systems. 1,805,858; May 19.
Tyler, Carl E., Los Angeles, Calif. Vacuum headrest for bathtubs. 1,806,103; May 19.
Tyler, Horace C. S., et al. (See Lee, John E., assignor.)
Uhde, Robert, assignor to Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung, Kassel-Wilhelmshohe, Germany. Boiler generating steam according to the indirect method. 1,806,030; May 19.
Underwood Elliott Fisher Company. (See Conard, Frederick U., assignor.)
Underwood Elliott Fisher Company. (See Resch, Henry, assignor.)
Union Metal Products Company. (See Gilpin, Garth G., assignor.)
Union Oil Company of California. (See Ragatz, Edward G., assignor.)
Union Steam Pump Company. (See Hendrickson, Leo B., assignor.)
Union Switch & Signal Company, The. (See Bossart, Paul N., assignor.)
Union Switch & Signal Company, The. (See Fisher, A. W., and Wells, assignors.)
Union Switch & Signal Company, The. (See Snavely, Clarence S., assignor.)
Union Switch & Signal Company, The. (See Sorensen, Andrew J., assignor.)
Union Switch & Signal Company, The. (See Stoltz, Carl F., assignor.)
Union Switch & Signal Company, The. (See Whitehorn, Arthur R., assignor.)
United Shoe Machinery Corporation. (See Bertrand, Frederic E., assignor.)
United Shoe Machinery Corporation. (See Dunham, Albert E., assignor.)
United Shoe Machinery Corporation. (See Haas, Otto R., assignor.)
United Shoe Machinery Corporation. (See Pope, Joseph H., assignor.)
Universal Draft Gear Attachment Co. (See Camp, Percy B., assignor.)
Universal Lifting Appliance Co., The. (See Forrest, John H., assignor.)

Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Egloff, G., and Benner, assignors.)
Universal Oil Products Company. (See Egloff, G., and Morrell, assignors.)
Universal Oil Products Company. (See Howard, William R., assignor.)
Universal Oil Products Company. (See Huff, Lyman C., assignor.)
Universal Oil Products Company. (See Kirschbraun, Lester, assignor.)
Universal Oil Products Company. (See Seguy, Jean D., assignor.)
Universal Optical Corporation. (See Nelson, John N., assignor.)
Upson, Charles A., and O. R. Winter, assignors to The Upson Company, Lockport, N. Y. Board making machine. 1,806,006; May 19.
Upson Company. (See Upson, C. A., and Winter, assignors.)
Upson, Ralph H., Red Bank, N. J. Airplane control mechanism. 1,806,432; May 19.
Vail, George L., Denver, Colo. System of ice-manufacture and refrigeration. 1,805,932; May 19.
Valvano, Domenic A., Linden, N. J. Toy golf course. Des. 84,224; May 19.
Van Ackeren, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Coke oven. 1,806,134; May 19.
Vaughn, George A., assignor to The Parsons Company, Newton, Iowa. Convertible excavating attachment. 1,806,511; May 19.
Vawter, John M., assignor to Shadberg Company, Indianapolis, Ind. Brake. 1,806,510; May 19.
Veneer Machinery Company. (See Dennis, Alfred A., assignor.)
Venzie, Frederick M., Philadelphia, Pa. Plaster board clip. 1,805,648; May 19.
Verdich, Hans P., Aberdeen, S. Dak. Antiglare attachment for headlights. 1,805,606; May 19.
Vernon, Frederick L., Newton, Iowa. Cap. 1,806,225; May 19.
Veselka, Frank A., Mart, Tex. Cotton chopper. 1,806,376; May 19.
Vettel, Albert J. (See Weaver, G. E., and Vettel.)
Victor, Harold, Roselle, N. J. Tire guard for automobiles. 1,805,933; May 19.
Vignos, Paul, Canton, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Locking mechanism. 1,806,031; May 19.
Vincent Steel Process Company. (See De Mattia, Constant, assignor.)
Virck, Paul. (See Hentrich, W., Knoche, and Virck.)
Voegel, August, Magdeburg, assignor to the firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Apparatus for grinding the rolls of ore crushing or like mills. 1,806,226; May 19.
Volkmann, Joseph, Glenside, Pa. Protective device for alternating polyphase systems of distribution. 1,805,934; May 19.
Von Waldenburg-Straus-Scharina, Edouard W., Lubeck, Germany. Filter for separating dust from air or gas. 1,806,513; May 19.
Voorhees, Daniel W., jr., Peru, Ill. Steel truck. 1,806,271; May 19.
Vreeland, William H., Augusta, Kans. Hollow casing spear. 1,805,535; May 19.
Wade & Butcher Corporation. (See Drew, John E., assignor.)
Wagenhorst, James H., Detroit, Mich. Making wire spoked wheels. 1,806,227; May 19.
Wagner, Cary R., Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich. Oil heater. 1,805,607; May 19.
Wagner Electric Corporation. (See Dick, Burns, assignor.)
Wahl Company, The. (See Poole, Arthur F., assignor.)
Wahlberg, Nils A., Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmission line device. 1,806,321; May 19.
Wald Manufacturing Company, The. (See Pawsat, Ewald, assignor.)
Walker Vehicle Co. (See Dunlap, James E., assignor.)
Wallace, Jacob H., deceased, San Diego, Calif.; J. M. Wallace, administratrix. Retrieving device for aeroplanes. 1,806,549; May 19.
Wallace, Jeffrey J., assignor to Gullett Gin Company, Amite, La. Cleaner and hull extractor. 1,806,632; May 19.
Wallace, Julia M., administratrix (See Wallace, Jacob H.)
Walle, Ludvig S., Lansdowne, Pa., assignor to General Electric Company. Electric circuit breaker. 1,806,322; May 19.
Wallis, Barnes N., Weybridge, England. Apparatus for turning inclined surfaces. 1,805,964; May 19.
Walter, Robert. (See Prill, A., and Walter.)
Walters, Charles L. (See Rockwell, G. G., and Walters.)
Wampach, Frank J. (See Wampach, Joseph J., assignor.)
Wampach, Joseph J., St. Paul, assignor of one-half to F. J. Wampach, Jordan, Minn. Parachute. 1,805,894; May 19.
Wantz, Julius B., Oak Park, assignor to General Electric X-Ray Corporation, Chicago, Ill. X-ray tube. 1,805,503; May 19.
Ward, Willis C., Orchard Lake, Mich. Airship. 1,806,135; May 19.
Ward, Lawrence T., assignor to Kane Manufacturing Company, Kane, Pa. Venetial blind. 1,806,228; May 19.
Warner, Edgar, assignor to The National Cash Register Company, Dayton, Ohio. Screw machine. 1,805,746; May 19.
Warner Mfg. Co. (See Cadman, Addi B., assignor.)
Wasserberg, Max, Flushing, assignor of one-half to S. Steinfeld, New York, N. Y. Sign and display device. 1,805,504; May 19.
Waterbury Farrel Foundry and Machine Company, The. (See Candee, Zenas P., assignor.)
Waterbury Tool Company, The. (See Francis, Daniel R., assignor.)
Watson, Alec V., St. Albans, assignor of one-half to T. A. Davis, London, England. Safety razor. 1,805,895; May 19.
Watts, Warren S., assignor to Arlette, Inc., Louisville, Ky. Hair waving wrapper. 1,806,007; May 19.
Watts, Warren S., assignor to Arlette, Inc., Louisville, Ky. Hair waving wrapper. 1,806,008; May 19.
Weathers, Bathelbert W., San Diego, Calif. Electric motor generator. 1,805,935; May 19.
Weaver, Gallard E., and A. R. Squyer, assignors to Weaver Manufacturing Company, Springfield, Ill. Lifting appliance. 1,806,323; May 19.
Weaver, Gallard E., and A. J. Vettel, assignors to Weaver Manufacturing Company, Springfield, Ill. Wreck crane. 1,806,433; May 19.
Weaver Manufacturing Company. (See Weaver, G. E., and Squyer, assignors.)
Weaver Manufacturing Company. (See Weaver, G. E., and Vettel, assignors.)
Webb, George, West Hartford, assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn. Washing machine. 1,805,558; May 19.
Webber, Robert A. (See Schur, M. O., and Webber.)
Weeks, George E. (See Stephens, Arnold A., assignor.)
Weinheim, Emil, New York, N. Y. Impregnating and coating flexible materials. 1,805,730; May 19.
Weinland, Hermon G., assignor to The Safety Grinding Wheel & Mch. Company, Springfield, Ohio. Grinding wheel testing apparatus. 1,805,896; May 19.
Weinrub, Harry, New York, N. Y. Control for knitting machines. Re18,074; May 19.
Weiss, Abraham, New York, N. Y. Steering device. 1,806,136; May 19.
Welczek, Ludwic A., New York, N. Y. Puncturing apparatus. 1,806,434; May 19.
Weldon, Samuel, Portland, Oreg. Necktie. 1,805,965; May 19.
Weldmech Steel Products Co., The. (See Travis, Simeon E., jr., assignor.)
Wells, Wesley B. (See Fisher, A. W., and Wells.)
Wentworth, Robert S., Germantown, assignor to Budd Wheel Company, Philadelphia, Pa. Cooling means for vehicle wheels. 1,805,792; May 19.
Wermine, Hugo H., Villa Park, assignor to Belden Manufacturing Company, Chicago, Ill. Christmas tree stand. 1,805,649; May 19.
Werner, Oscar, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Lighting unit. 1,806,435; May 19.
Wessel, Ludwig H., and H. N. Booker, assignors to The Hermann Manufacturing Company, Lancaster, Ohio. Machine for refining paper and pulp. 1,806,272; May 19.
West, Byron L., Hamburg, assignor to National Aniline and Chemical Company, Inc., New York, N. Y. Disazo dye. 1,806,137; May 19.
Western Electric Company. (See Adams, Arthur H., assignor.)
Western Electric Company. (See Hofstetter, Robert, assignor.)
Western Electric Company. (See Rock, George L., assignor.)
Western Electric Company. (See Seligmann, William, assignor.)
Western Electric Company. (See Shaw, Leon I., assignor.)
Western Electric Company. (See Siebs, Claude T., assignor.)
Western Electric Company. (See Stull, John S., assignor.)
Western Television Corporation. (See Sanabria, Ulises A., assignor.)
Western Union Telegraph Company, The. (See Drake, Herbert W., assignor.)
Westinghouse Air Brake Company, The. (See Down, Sidney G., assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company, The. (See Good, John N., assignor.)
Westinghouse Air Brake Company, The. (See Hukill, Henry D., assignor.)
Westinghouse Air Brake Company, The. (See Kelley, Cecil S., assignor.)
Westinghouse Air Brake Company, The. See McCune, Joseph C., assignor.)

Westinghouse Air Brake Company, The. (See Rummel, George W., assignor.)
Westinghouse Air Brake Company, The. (See Schwentler, Francis E., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Frank B., assignor.)
Westinghouse Air Brake Company, The. (See Whitaker, Uncas A., assignor.)
Westinghouse Electric and Manufacturing Company. (See Bradshaw, W., and Mylius, assignors.)
Westinghouse Electric and Manufacturing Company. (See Bryant, O., and Schwendner, assignors.)
Westinghouse Electric and Manufacturing Company. (See Callsen, Albert, assignor.)
Westinghouse Electric and Manufacturing Company. (See Davis, R. L., and Little, assignors.)
Westinghouse Electric & Manufacturing Company. (See Foresman, Robert A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Haverstick, Earl J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Kempton, Willard H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Moreau, Albert L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mylius, Walter G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sandin, Maurits J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Shand, E. B., and Smede, assignors.)
Westinghouse Electric & Manufacturing Company. (See Wahlberg, Nils A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Werner, Oscar, assignor.)
Weston, Edward F., assignor to Weston Electrical Instrument Corporation, Newark, N. J. Magneto. 1,805,608; May 19.
Weston Electrical Instrument Corporation. (See Weston, Edward F., assignor.)
Wheeler, C. H., Manufacturing Company. (See Pratt, Louis L., assignor.)
Whitacre, Clarence J., Detroit, Mich., assignor, by mesne assignments, to S. F. Arbuckle Corp. Bellows and making the same. 1,806,009; May 19.
Whitaker, Uncas A., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Coupler unlatching device. 1,806,567; May 19.
White, Charles H., assignor to Deere & Company, Moline, Ill. Planter-marker. 1,805,505; May 19.
White, Charles H., assignor to Deere & Company, Moline, Ill. Wire dofling mechanism for planters. 1,805,506; May 19.
White, George A. (See Scofield, T. J., White, and Hammond.)
White, Oliver C., Gardena, Calif. Poultry feeding device. 1,805,859; May 19.
White, Rollin H., Cleveland Heights, Ohio. Steering mechanism. 1,805,536; May 19.
Whitehorn, Arthur R., Chicago, Ill., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,805,747; May 19.
Whittingham, George H., Baltimore, Md. Friction switch mechanism. 1,806 377; May 19.
Wiegand, Edwin L., assignor to Edwin L. Wiegand Company, Pittsburgh, Pa. Electric heating apparatus. 1,806,512; May 19.
Wiegand, Edwin L., Company. (See Wiegand, Edwin L., assignor.)
Wieman, Kammerer, Wright Co. (See Wright, J. C., and Bonney, assignors.)
Wiingaard, Aage G. P., Copenhagen, Denmark. Savings box clock. 1,806,324; May 19.
Wilcox, Vincey A., Los Gatos, assignor of one-half to C. C. Parks San Jose, Calif. Saw. 1,805,936; May 19.
Wilder, Francis E. P., et al. (See Moran, J. L., and Lee, assignors.)
Wilkins, Harry T., Philadelphia, Pa., assignor of one-half to O. T. Bounds, Centralia, Ill. Recording and prompting device. 1,805,897; May 19.
Wilkins, James M., assignor to Mueller Co., Decatur, Ill. Packing for pipe cutters and valve inserting machines. 1,805,710; May 19.
Willard Storage Battery Company. (See Reinhardt, Willard L., assignor.)
Williams, Calvin C., Philadelphia, Pa. Valve actuating mechanism. 1,806,229; May 19.
Williams, Calvin C., Philadelphia, Pa. Valve actuating mechanism. 1,806,230; May 19.
Williams, Calvin C., Philadelphia, Pa. Valve actuating mechanism. 1,806,231; May 19.
Williams, Charles S., Kingston, assignor to Electric Service Supplies Company, Philadelphia, Pa. Apparatus for and method of developing high voltage direct current supply. 1,805,679; May 19.
Williams, David L. H., Ickenham, assignor to C. R. Fairey, Hayes, England. Bracing a cantilever beam against torsional deflection. 1,806,010; May 19.
Williams, G. H., Company. (See Thompson, George F., assignor.)
Williams, Harrison R., New York, N. Y. Paper manufacture. 1,806,273; May 19.
Williams Oil-O-Matic Heating Corporation. (See Williams, Walter W., assignor.)
Williams, Raymond A., Arlington, Mass. Bowling alley. 1,806,274; May 19.
Williams, Walter W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Liquid fuel burning mechanism. 1,806,550; May 19.
Willis, Le Roy W., assignor to Intertype Corporation, Brooklyn, N. Y. Typographical machine. 1,806,514; May 19.
Willson Products, Inc. (See Shindel, Harry F., assignor.)
Willys-Overland Company, The. (See Decker, Ward, assignor.)
Wilson, George W., Canfield, Ohio. Dirigible headlight. 1,805,748; May 19.
Wilson, Tom, Homestead, Pa. Lubricating system. 1,805,609; May 19.
Wilson Welder & Metals Company. (See Stewart, Sigmund S., assignor.)
Winsor & Jerauld Mfg. Co. (See MacKnight, Harry A., assignor.)
Winter, Otto R. (See Upson, C. A., and Winter.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wireless Specialty Apparatus Company. (See Butler, Benjamin J., assignor.)
Withycombe, Robert M., Sydney, New South Wales, Australia. Manufacture of brushes. 1,806,436; May 19.
Witteman, John, Milwaukee, Wis. Window curtain hanger. 1,805,793; May 19.
Witzler, Willi, and P. F. G. Güth, Hamburg, Germany. Water heater. 1,806,378; May 19.
Wolfsohn, Fred W. (See Howlett, Frank H., assignor.)
Wood Hydraulic Hoist & Body Company. (See Kerr, A. G., and Merchant, assignors.)
Wood, Ronald M., South Farnborough, assignor to Handley Page Limited, Cricklewood, Middlesex, England. Wings and other aerofoils of aircraft. 1,806,379; May 19.
Woodard, Hubbard Company. (See Fancher, C. J., and Johnson, assignors.)
Wooden, Roy F., Mount Vernon, Ill. Adjustable and reversible propeller for aeroplanes or other aircraft. 1,806,325; May 19.
Wooding, Benjamin F., deceased, Montclair, N. J.; D. T. Dobyns, administrator. Automatic controlling system for motor vehicles. 1,806,011; May 19.
Woodward, Hubbard Company. (See Fancher, C. J., and Johnson, assignors.)
Woodward, William B., Washington, D. C., assignor to Joseph Shapiro, Baltimore, Md. Blade sharpener. 1,806,437; May 19.
Wright, Carl L. (See De Witt, Arthur R., assignor.)
Wright, Jesse C., Huntington Park, and L. F. Bonney, Los Angeles, Calif., assignors to Wieman, Kammerer, Wright Co., Inc. Well bit. 1,805,898; May 19.
Wright, Jesse C., Los Angeles, Calif. Well drilling bit. 1,805,899; May 19.
Wright, Oscar E. (See Schmidt, J. F., Erhart, and Wright.)
Wyckoff, Edgar C., Clinton, N. J. Two cycle internal combustion motor. 1,806,138; May 19.
Yankee Metal Products Corp. (See Putterman, Benjamin, assignor.)
Yanochowski, George A., La Grange, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Audion tube. 1,805,794; May 19.
Yawman & Erbe Manufacturing Co. (See Schulz, George W., assignor.)
Yeomans, Lucien I., Inc. (See Baisley, E. A., and Yeomans, assignors.)
Yoder, Howard D., assignor to Penberthy Injector Company, Detroit, Mich. Jet device. 1,806,187; May 19.
York Ice Machinery Coropration. (See Bergdoll, John G., assignor.)
Young, Charles O., Clackamas, Oreg. Dispensing machine for toilet seat covers. 1,806,573; May 19.
Young, Jonhn W., Ben Avon, assignor to Federal Laboratories, Inc., Pittsburgh, Pa. Vault and safe construction. 1,805,610; May 19.
Youngdahl, Francis E., and C. J. Julstedt, Brooklyn, N. Y., assignors to The Lakewest Corporation. Safety device for bottle cap crimping machines. 1,805,680; May 19.
Younghusband, James L., Chicago, Ill. Cosmetic powder container. 1,805,860; May 19.
Youngstown Steel Door Company, The. (See McWilliams, J. P., and Ditchfield, assignors.)
Zeindlhofer, Anton, Vienna, Austria, assignor to Groove Lock Co. Inc., New York, N. Y. Fastening device. 1,805,795; May 19.
Zenith-Detroit Corporation. (See Heftler, V. R., and Norris, assignors.)
Zerweck, Werner. (See Herz, R., and Zerweck.)
Zimmerman, Arthur H. (See Moeller, W. J., and Zimmerman.)
Zitscher, Arthur. (See Laska, L., Reyher, and Zitscher.)
Zoelly, Heinrich, Zurich, Switzerland. Stuffing box for rotating shafts. 1,806,515; May 19.
Zoglauer, Ferdinand, Peterswalds, near Orlau, Czechoslovakia. Rowing device. 1,805,749; May 19.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 19TH DAY OF MAY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abrasive laps, Method of and apparatus for dressing. S. Player and H. S. Indge. 1,805,955; May 19.
Abrasive wheel. T. Larsson. 1,805,949; May 19.
Accelerator for dry pipe valve sprinkler systems. E. Tyden. 1,805,858; May 19.
Acetylene, Purification of. F. Rahn. 1,806,419; May 19.
Adjustable connecting rod. W. Hills and F. W. Hills. 1,805,825; May 19.
Advertising device. H. E. Deckebach. 1,806,150; May 19.
Advertising machine. T. C. Graham. 1,806,160; May 19.
Aeroplane. E. R. Kelley. 1,805,770; May 19.
Aeroplane. W. Niemeyer. 1,805,994; May 19.
Aeroplanes, Landing skid for. A. N. Larsen. 1,805,914; May 19.
Aeroplanes, Retrieving device for. J. H. Wallace. 1,806,549; May 19.
Agitating device. W. Baensch. 1,806,381; May 19.
Agitating mechanism. C. C. Peck. 1,805,842; May 19.
Agricultural implement. J. Schermuly. 1,805,850; May 19.
Air cooling and conditioning apparatus. W. S. Toncray. 1,805,963; May 19.
Aircraft. R. Thayer. 1,806,316; May 19.
Aircraft, Safety wing for. B. O. Dahl. 1,806,148; May 19.
Aircraft, Wings and other aerofoils of. R. M. Wood. 1,806,379; May 19.
Air heater. V. Z. Caracristi. 1,805,652; May 19.
Airplane. C. Ramakers and D. R. Carsley. 1,805,722; May 19.
Airplane, Automatically controlled. R. M. Adamson. 1,805,750; May 19.
Airplane control mechanism. R. H. Upson. 1,806,432; May 19.
Air pressure gauge. L. A. Hallstead and H. Dawson. 1,805,869; May 19.
Air purifier. C. C. Farmer. 1,805,657; May 19.
Airship. W. C. Ward. 1,806,135; May 19.
Air vent for fuel tanks. G. Hunt. 1,806,292; May 19.
Alarm: *See*—
  Automatic fire alarm.
Alcohols, Substituted guanidine. W. Schoeller and H. Schotte. 1,805,889; May 19.
Alkylphenols, Production of. W. Schoeller, H. Jordan, and R. Clerc. 1,805,555; May 19.
Amalgamator. L. D. Stephenson. 1,805,930; May 19.
Amplifier. R. L. Davis and D. G. Little. 1,806,281; May 19.
Amusement ride. H. G. Traver. 1,806,102; May 19.
Antenna, Loop. E. F. Potter. 1,805,846; May 19.
Anthanthrone and making same, New alkoxy derivatives of. R. Herz and W. Zerweck. 1,805,913; May 19.
Anthanthrone and making same, New derivatives of. R. Herz and W. Zerweck. 1,805,912; May 19.
Applicator for vibrating machines. W. D. Smith. 1,805,853; May 19.
Applicator, Fountain. E. L. Bellows. 1,806,517; May 19.
Arch dam. C. F. Groner. 1,806,255; May 19.
Assembling members, Apparatus for. R. Hofstetter. 1,806,202; May 19.
Associating mechanism. H. V. Ball. 1,805,681; May 19.
Attachment for looms, Splitting. S. L. Crolley and D. L. Jones. 1,805,568; May 19.
Audion tube. G. A. Yanochowski. 1,805,794; May 19.
Autographic register. M. W. Krauth. 1,806,544; May 19.
Automatic regulator. F. C. Reeder. 1,806,367; May 19.
Automobile decking for railway cars, Overhead. B. A. Musselman. 1,805,881; May 19.
Automobile or traffic signal. W. A. Street. 1,805,643; May 19.
Awning. C. G. Mack. 1,805,950; May 19.
Axle housing and the like and producing it, Rear. H. S. Holmes. 1,806,558; May 19.
Azodyestuffs insoluble in water and making same. L. Laska, R. Reyher, and A. Zitscher. 1,805,915; May 19.
Bag: *See*—
  Clothes bag. Paper shopping bag.
Bag support, Garment. F. A. Cinadr. 1,806,521; May 19.
Baggage, Hand. J. Feldman and J. Lessem. 1,806,246; May 19.
Basket bottom, Reenforced. C. C. Davis. 1,805,687; May 19.
Batcher, Portable. C. S. Johnson. 1,805,769; May 19.
Battery plates, Drying storage. W. L. Reinhardt. 1,806,180; May 19.
Battery terminal clamp. W. H. Trimble and J. N. Clark. 1,805,857; May 19.

Bearing. H. A. S. Howarth. 1,806,061–2; May 19.
Bearing. A. G. M. Michell. 1,805,992; May 19.
Bearing, Adjustable. A. K. Sjolander. Re18,075; May 19.
Bearing, Roller. A. D. Booth. 1,806,279; May 19.
Bearing, Roller side. A. Stucki. 1,806,003; May 19.
Bed, Sofa. C. Haltgren. 1,806,259; May 19.
Beet harvester. J. E. Hovermale. 1,805,582; May 19.
Bellows and making the same. C. J. Whitacre. 1,806,009; May 19.
Bells, Controlling device for locomotive or engine. O. B. Peters. 1,806,215; May 19.
Berry gatherer. E. Holmgren. 1,806,058; May 19.
Beryllium and other metals, Production of. H. S. Cooper. 1,805,567; May 19.
Beveling machine. D. W. B. Kurtz, jr. 1,805,735; May 19.
Binder, Book. J. J. Kernan. 1,806,466; May 19.
Binder, Temporary book. W. F. Heer. 1,806,057; May 19.
Binding means for the surface coverings of furniture. A. J. E. Larson. Re18,077; May 19.
Bird bath. E. S. Smith. 1,806,123; May 19.
Bit: *See*—
  Horse bit. Well drilling bit.
  Well bit.
Bits, Self seating device for drilling. E. Smith. 1,805,678; May 19.
Blind bracket, Self locking combination venetian. F. J. Burns. 1,805,611; May 19.
Blind, Venetian. T. T. Ward. 1,806,228; May 19.
Blower unit, Mobile. R. C. Hopkins. 1,806,460; May 19.
Board making machine. C. A. Upson and O. R. Winter. 1,806,006; May 19.
Board, Producing building. C. J. H. Nordenswan. 1,805,883; May 19.
Boat construction, Metal. D. Liamin. 1,805,669; May 19.
Boat seam sealing method. A. R. De Witt. 1,805,812; May 19.
Bobbin transfer feeler. H. M. Jeffrey. 1,805,548; May 19.
Body bolster center plate and mounting. M. H. Martin. 1,806,075; May 19.
Boiler. J. J. Rathgeb, jr. 1,806,178; May 19.
Boiler feed water system. A. Spyer. 1,806,371; May 19.
Boiler generating steam according to the indirect method. R. Uhde. 1,806,030; May 19.
Boiler tube cleaner. H. L. Staley. 1,806,127; May 19.
Bomb for use with a special bomb-thrower or with firearms already existing and having a smaller caliber than the bomb. D. Samaia. 1,806,223; May 19.
Booster, Oil pressure. C. W. McKinley. 1,806,561; May 19.
Boots and shoes, Nonskid device for. J. M. Nahon. 1,806,212; May 19.
Bowl, Watering. R. J. Langer. 1,806,473; May 19.
Bowling alley. R. A. Williams. 1,806,274; May 19.
Box: *See*—
  Coal washer box. Journal box.
Box for rotating shafts, Stuffing. H. Zoelly. 1,806,515; May 19.
Box lock. J. S. Brylka. 1,806,518; May 19.
Box making machine. A. H. Schmidtke. 1,805,888; May 19.
Box strapping machine. S. W. Treat. 1,805,791; May 19.
Boxes, Attaching device for bait. T. and T. W. Lloyd. 1,806,477; May 19.
Bracelet chain. A. E. R. Speidel. Des. 84,210–14; May 19.
Bracelet clasp. W. J. Roy. 1,806,265; May 19.
Bracket: *See*—
  Curtain bracket. Supporting bracket.
  Rod supporting bracket. Shade roller bracket.
Bracket. G. H. Hamilton. 1,806,534; May 19.
Bracket. C. W. McKinley. 1,806,560; May 19.
Bracket and dead end insulator. S. W. Law and W. J. Eames. 1,806,170; May 19.
Brake: *See*—
  Fluid pressure brake. Railway car brake.
  Hydraulic brake.
Brake. R. F. Kohr. 1,806,296–7; May 19.
Brake. J. M. Vawter. 1,806,510; May 19.
Brake band. J. W. Tatter. 1,805,501; May 19.
Brake control, Dynamic and fluid pressure. J. C. McCune. 1,805,630; May 19.
Brake device, Booster. R. R. Crum. 1,805,808; May 19.
Brake device, Fluid pressure. C. W. McCune. 1,805,631; May 19.
Brake for sleds. J. Z. Boutin. 1,806,444; May 19.
Brake release device. C. C. Farmer. 1,805,617; May 19.
Braking apparatus. B. Dick. 1,806,151; May 19.

Braking system. M. H. Loughridge. 1,805,551; May 19.
Brick meter. S. M. Phelps. 1,806,118; May 19.
Briquetting machine. J. C. Lemming. 1,806,300; May 19.
Broach. J. C. Atwood. 1,806,552; May 19.
Broaching machine, Vertical pull. F. J. Lapointe. 1,806,106; May 19.
Brush. H. Cave. 1,806,520; May 19.
Brush. F. D. Jacobs. 1,806,542; May 19.
Brush, Dental plate. H. Cave. 1,806,519; May 19.
Brushes, Manufacture of. R. M. Withycombe. 1,806,436; May 19.
Bucket, Clam shell. G. F. Thompson. 1,805,532; May 19.
Buckle. W. L. Myers and G. D. Harrison. 1,805,882; May 19.
Buckle for wrist watch straps. N. T. Nelson. 1,806,213; May 19.
Building construction. O. T. Anderberg. 1,805,538; May 19.
Building, Portable. H. G. Lange. 1,806,354; May 19.
Building unit. K. W. Dunwody. 1,805,470; May 19.
Bumper and coat hanger, Combined door. F. H. Hull. 1,805,984; May 19.
Burner: *See*—
  Oil burner.
Cabinet, Electric meter protecting. J. Sachs. 1,805,723–4; May 19.
Cabinet for storing and preserving fruits and vegetables. H. C. Brooks. 1,805,565; May 19.
Cabinet, Refrigerated food. J. R. Replogle. 1,805,785; May 19.
Cabinet, Telephone. C. A. Reetz. 1,805,847; May 19.
Cables, Shielding means for high tension. E. L. Crandall. 1,805,513; May 19.
Cables, Splicing and terminal device for fire detecting. W. D. Lindsey. 1,806,207; May 19.
Calculating machine. C. Luttropp. 1,806,070; May 19.
Call distributing system. H. W. Drake. 1,806,525; May 19.
Cam snap lock. C. N. Fairchild. 1,806,253; May 19.
Camera. J. B. Paul. 1,806,308; May 19.
Cameras, Shutter locking device for. L. W. Rosen. 1,805,707; May 19.
Candy cotton forming machine. B. Moad. 1,806,111; May 19.
Cantilever beam against torsional deflection, Bracing a. D. L. H. Williams. 1,806,010; May 19.
Cap. A. and S. Horos. 1,805,522; May 19.
Cap. F. L. Vernon. 1,806,225; May 19.
Cap, Shampoo. A. Farrelly. 1,806,155; May 19.
Car. J. P. McWilliams and F. Ditchfield. 1,806,173; May 19.
Car brake, Railway. O. P. Perry. 1,806,214; May 19.
Car construction. A. W. L. Harthauer. 1,805,696; May 19.
Car construction, Railway. A. W. L. Harthauer. 1,805,767; May 19.
Car equipment, Safety. F. B. Thomas. 1,805,645; May 19.
Car for sintering apparatus, Charge. T. M. Alexovits. 1,806,438; May 19.
Carbonaceous materials, Apparatus and process for coking liquefiable. E. W. Clarke and J. L. Eigenbrot. 1,806,146; May 19.
Carbureting system. C. E. Hofbauer. 1,806,201; May 19.
Carburetor. W. Decker. 1,806,045; May 19.
Carburetor. R. F. Ensign. 1,805,763; May 19.
Carburetor. H. J. Guiraud. 1,805,947; May 19.
Carburetor. V. R. Heftler and H. B. Norris. 1,806,348; May 19.
Carburetor. J. Lavergne. 1,805,586; May 19.
Carburetors for aeroplane motors, Alimetric automatic controlling device for. A. Boulade. 1,806,280; May 19.
Carrier: *See*—
  Wire reel carrier.
Carroting composition. J. B. Hakim. 1,806,533; May 19.
Cartons, Sealing. F. B. Thomlinson. 1,805,533; May 19.
Cartridge, Blasting. D. Ferrell and A. W. Helmholtz. 1,805,541; May 19.
Cartridge, Blasting. E. Ormsby. 1,805,672; May 19.
Case: *See*—
  Interchangeable instrument case. Vanity case.
Casement frame, Reversible. G. M. Kleinknecht. 1,806,467; May 19.
Casing and coil assembly for heat transfer devices. J. E. Ercanbrack. 1,806,450; May 19.
Casing elevator. E. E. Greve. 1,805,519; May 19.
Casing spear, Hollow. W. H. Vreeland. 1,805,535; May 19.
Catch for doors, Push. T. F. Stuart and H. A. Moore. 1,805,789; May 19.
Catch, Hood. R. G. Moore. 1,805,496; May 19.
Catches, Making. C. K. Light. 1,807,827; May 19.
Cathode device, Hot. F. S. McCullough. 1,806,108; May 19.
Cellulose derivative manufacture. M. O. Schur and R. A. Webber. 1,806,421; May 19.
Cellulose derivatives of products made therewith, Treatment of. R. Clavel. 1,806,043; May 19.
Cellulose derivatives or products made therewith, Treatment of. H. Dreyfus. 1,805,467–8; May 19.
Cellulose fibres, fabrics and articles. C. Dreyfus and H. Platt. 1,806,048; May 19.
Centrifugal separator. F. Dupuis. 1,806,241; May 19.
Chain, Tire. F. W. Kerkman. 1,806,064; May 19.
Chair or the like. V. Oliva. Des. 84,201; May 19.
Chair plate and rail brace, Combination. F. A. Graziani. 1,806,254; May 19.
Change maker. L. H. Larsen and C. W. Nixon. 1,806,107; May 19.
Channeling machine. A. E. Dunham. 1,805,719; May 19.
Charge forming and feeding device, Automatic. E. W. Menke and E. A. Marsh. 1,806,110; May 19.
Charges for power devices, Process and apparatus for preparing. G. Swartz. 1,805,644; May 19.
Chart. G. Fox. 1,806,156; May 19.
Chimney cleaner. J. J. Carney. 1,806,387; May 19.
Chipping machine. G. W. Lentz. 1,806,572; May 19.
Chloracetaldehyde, Preparing. O. Ernst and H. Lange. 1,806,285; May 19.
Chopping attachment for cultivators, Cotton. J. H. Roberts. 1,805,599; May 19.
Christmas tree stand. H. H. Wermine. 1,805,649; May 19.
Chromium, Polishing. J. C. Patten. 1,806,414; May 19.
Chuck for rock drills. W. A. Smith, sr. 1,806,315; May 19.
Churn attachment for washing machines. M. I. Morgan and B. C. Tate. 1,805,952; May 19.
Churn, Power. A. H. Bolleau. 1,805,464; May 19.
Churn, Power. A. H. Bolleau. 1,805,753; May 19.
Cigarette dispenser, match box holder, and ash receiver, Combined. A. B. Jippson. 1,806,399; May 19.
Circuit breaker, Electric. L. S. Walle. 1,806,322; May 19.
Circuit closer. F. M. Jacob. 1,806,398; May 19.
Circuit, Electric. E. A. Everett and M. H. Loughridge. 1,805,764; May 19.
Clamp: *See*—
  Battery terminal clamp. Grounding clamp.
Clamp for store front construction, Corner. F. and I. Himmel. Des. 84,192; May 19.
Clarinet. F. Stein. 1,805,929; May 19.
Clasp: *See*—
  Bracelet clasp.
Classifying patrons, Device and method of. L. O. Beck. 1,806,142; May 19.
Cleaner: *See*—
  Boiler tube cleaner. Suction cleaner.
  Chimney cleaner. Windshield cleaner.
  Pipe cleaner.
Cleaner and hull extractor. J. J. Wallace. 1,806,032; May 19.
Cleaners, Device for dispensing pipe. T. S. Fuller. 1,805,619; May 19.
Cleaning device, Well. L. B. MacGregor and A. E. Spear. 1,806,073; May 19.
Cleaning machine, Carpet. S. Chase, 4th, G. H. Palm, and R. S. and B. S. Pfeiffer. 1,806,237; May 19.
Clevis for brakes. P. B. Camp. 1,805,805; May 19.
Clip. D. McLeod, jr. 1,805,833; May 19.
Clock, Savings box. A. G. P. Wiingaard. 1,806,324; May 19.
Closure. J. S. Reid. 1,806,218; May 19.
Closure cap for collapsible and other containers. T. S. Newman. 1,806,364; May 19.
Cloth opening machine. A. Birch. 1,805,866; May 19.
Clothes bag. A. J. Lichtig. 1,805,877; May 19.
Clothes hanger, Folding. J. Becker. 1,805,561; May 19.
Clothing retainer. A. G. Ross. 1,806,221; May 19.
Clutch. A. Schacher. 1,805,530; May 19.
Clutch, Centrifugal. W. A. Chryst. 1,806,332; May 19.
Clutch mechanism for looms and the like. I. E. Rogers and W. C. Scott. 1,805,498; May 19.
Clutch operating mechanism. W. Giger. 1,806,158; May 19.
Coal loading machine. C. C. Miller, jr. 1,805,951; May 19.
Coal washer box. B. Norton. 1,806,493; May 19.
Coat hanger. C. M. Dinsmore. 1,805,573; May 19.
Coffeepot. H. Brucker. 1,806,144; May 19.
Color arrangement. W. Grumbacher. 1,805,520; May 19.
Communicating systems. R. D. Parker. 1,805,594; May 19.
Composition for producing irritating smoke clouds. D. B. Bradner. 1,805,755; May 19.
Composition of matter. H. B. Dykstra and W. E. Lawson. 1,806,152; May 19.
Compressor control device. J. C. McCune. 1,805,629; May 19.
Compressor, High pressure gas. E. Prestage. 1,805,741; May 19.
Compressor, High pressure reciprocating. C. Schaer. 1,806,311; May 19.
Concrete delivery apparatus. S. Shafer, jr. 1,805,602; May 19.
Concrete roads and the like, Insert for. R. Adler. 1,806,275; May 19.
Condenser manufacture. B. J. Butler. 1,805,651; May 19.
Conduit assembly. J. F. Makowski. 1,805,990; May 19.
Connecter. J. F. Schmidt, L. F. Erbart, and O. E. Wright. 1,806,267; May 19.
Contact device for electric circuit breakers. W. H. Petersen. 1,806,117; May 19.
Container. C. S. Dougherty. 1,806,149; May 19.
Container. H. A. Inman. 1,805,870; May 19.
Container. F. C. Truesbury. 1,806,320; May 19.
Container, Cosmetic powder. J. L. Younghusband. 1,805,860; May 19.

Container, Display and shipping. J. H. Clark. 1,806,334; May 19.
Container for aircraft, Gas. V. Kopikowski. 1,806,470; May 19.
Container for light operated switches, Glass. R. W. Armstrong and I. E. McCabe. 1,805,966; May 19.
Containers and container so produced, Making liquid. J. L. Nelson. 1,805,552; May 19.
Control system for dynamo electric machines. L. W. Thompson and E. H. Horstkotte. 1,805,502; May 19.
Control system, Supervisory. A. L. Moreau. 1,806,262; May 19.
Controller for electric motors. C. Stansbury and N. L. Mortensen. 1,806,269; May 19.
Controlling mechanism. E. H. Bristol. 1,805,971; May 19.
Conveyer for packaging machines. A. G. Rose. 1,806,501; May 19.
Cooler contacting with circulating air. A. Lysholm and G. Lederstrand. 1,805,917; May 19.
Cooling apparatus. F. J. Day. 1,805,809; May 19.
Cooling device for automotive brakes. S. G. Down. 1,805,655; May 19.
Cooling drum, Rotary. H. G. R. Naumann. 1,806,490; May 19.
Cooling means for vehicle wheels. R. S. Wentworth. 1,805,792; May 19.
Cooling system for internal combustion engines, Vapor. L. F. Barlow. 1,806,382; May 19.
Core covering machine. G. F. McCahey. 1,805,494; May 19.
Core dri'l. J. S. Mitchell. 1,806,079; May 19.
Cot, Folding. F. G. Manly. 1,806,358; May 19.
Cotton chopper. F. A. Veselka. 1,806,376; May 19.
Coupler unlatching device. U. A. Whitaker. 1,806,567; May 19.
Coupling: *See*—
Automatic train pipe coupling.
Automatic slip coupling.
Impulse coupling.
Swivel coupling.
Tractor and trailer coupling.
Train pipe coupling.
Tube coupling.
Coupling. K. C. and C. W. Hazlett. 1,805,580; May 19.
Coupling, Automatic slip. L. Ferenci. 1,805,692; May 19.
Coupling, Automatic train pipe. G. W. Rummel. 1,805,676; May 19.
Coupling device. B. L. Cummings and A. W. Harris. 1,806,540; May 19.
Coupling means, Lubricator. V. A. Boker. 1,806,278; May 19.
Cover for cockpits, Adjustable. J. L. Pivak. 1,806,366; May 19.
Crane, Wreck. G. E. Weaver and A. J. Vettel. 1,806,433; May 19.
Creels, Cop cone holder for. J. O. McKean. 1,805,495; May 19.
Crossing gate, Automatic. G. Polak. 1,806,497; May 19.
Cuff for trousers. L. W. Freeman. 1,805,577; May 19.
Cultivator attachment. C. R. Benzel. 1,805,865; May 19.
Cup: *See*—
Ear suction cup.
Grease cup.
Cup heater, Individual. M. S. Clawson. 1,805,716; May 19.
Current supply, Apparatus for and method of developing high voltage direct. C. S. Williams. 1,805,679; May 19.
Current transmission, High tension direct. G. E. Jansson. 1,806,351; May 19.
Currents, Amplification of electrical. F. S. McCullough. 1,806,109; May 19.
Curtain and shade fixture. W. R. Scott. 1,805,926; May 19.
Curtain bracket. K. P. Rybak. 1,806,504; May 19.
Cushion. G. V. Gavaza. 1,806,341; May 19.
Cushioning strip. B. B. Felix. 1,805,576; May 19.
Cutter: *See*—
Drill pipe cutter.
Cutter, Drill pipe. K. Mitchell. 1,805,703; May 19.
Cutting device for automatic lathes, Screw. O. Schaerer and F. Poppensieker. 1,805,998; May 19.
Cutting machine, Sheet. A. B. Saunders. 1,805,743; May 19.
Cutting machines, Set works for wood. J. E. Eckersley. 1,806,526; May 19.
Dam, Arch. L. R. Jorgensen. 1,805,986; May 19.
Davit winch. J. A. Mellon. 1,806,482; May 19.
Decolorizing materials, Revivifying used. C. K. Parker and F. A. Bent. 1,806,020; May 19.
Decoy. C. C. Haizler. 1,806,456; May 19.
Degradation products from cellulose like substances and cellulose containing materials, Production of. R. Gorgarten and J. S. Arthur. 1,806,531; May 19.
Dental equipment. M. D. Goldberg. 1,806,159; May 19.
Dentures, Brush for cleaning artificial. J. F. Manley. 1,805,587; May 19.
Dephlegmator. J. D. Seguy. 1,806,089–90; May 19.
Designs in stockings, Forming open-work. E. O. Nebel. 1,806,491; May 19.
Desk stand and ink fountain. F. J. Lamarre. 1,805,772; May 19.
Destroyer, Insect. W. W. Hess. 1,805,581; May 19.
Desuperheater, Direct contact. S. M. Jorgensen. 1,806,204; May 19.
Device for changing over the points in mine tracks from the traveling vehicle. G. Strunk. 1,806,129; May 19.
Diagnostic instrument. E. D. Tillyer. 1,806,129; May 19.
Diamond floor polisher. C. E. Ericson. 1,805,516; May 19.
Die, Releasing threading. T. Cotter. 1,805,905; May 19.
Die teeth, Method of and apparatus for mounting. J. M. Craigo. 1,806,147; May 19.
Dipper tooth, Reversible. V. C. Mekeel. 1,805,527; May 19.
Direction indicator. A. B. Bailey. 1,806,276; May 19.
Dispensing device. L. M. Narbo. 1,806,363; May 19.
Dispensing machine for toilet seat covers. C. O. Young. 1,806,573; May 19.
Display device. A. Schiff. 1,806,120; May 19.
Display stand. R. B. Lustig. Des. 84,220; May 19.
Distributing device. F. J. Dolan. 1,805,940; May 19.
Doily, Paper. F. A. Conrad. Des. 84,183; May 19.
Doll. H. B. Hebert. Des. 84,191; May 19.
Doll eye-bulb. S. Hellweli. 1,805,823; May 19.
Door, Cast hopper. G. G. Gilpin. 1,805,664; May 19.
Door, Cast metal drop. G. G. Gilpin. 1,805,661; May 19.
Door, Cast metal hopper. G. G. Gilpin. 1,805,660; May 19.
Door construction for railway cars. J. E. Lindeman. 1,806,401; May 19.
Door of cast metal, Drop. G. G. Gilpin. 1,805,663; May 19.
Door of cast metal, Hopper. G. G. Gilpin. 1,805,662; May 19.
Door operating mechanism. J. Huston. 1,806,203; May 19.
Doors of rail or road vehicles, System of and apparatus for operating and controlling the. H. R. Hockley. 1,805,983; May 19.
Dough dividing and working machine. G. Rausch. 1,805,705; May 19.
Doughnut machine. W. Belshaw. 1,806,326; May 19.
Dowel for wooden beams, Metal. P. J. De Gruyter. 1,806,522; May 19.
Drafting machine. F. J. Peters. 1,805,740; May 19.
Drain fixture, Floor. W. S. Fleming. 1,805,816; May 19.
Drapery rod. W. E. Smith. Des. 84,207; May 19.
Drapery rod. W. E. Smith. Des. 84,209; May 19.
Drawer and supporting means. L. H. Morin. 1,806,174; May 19.
Dress. D. Long. Des. 84,197; May 19.
Drill: *See*—
Core drill.
Drill feeding device, Rock. E. G. Gartin. 1,805,518; May 19.
Drilling apparatus, Earth. E. Smith. 1,805,727; May 19.
Drills, Feeding device for rock. C. C. Hansen. 1,805,521; May 19.
Drive for centrifugal casting machines, Magnetic. F. McS. Thomas. 1,805,961; May 19.
Drive, Speedometer. E. A. Gustafson. 1,806,541; May 19.
Drive, Two speed rotary. E. W. Goeser. 1,805,819; May 19.
Dye, Disazo. B. L. West. 1,806,137; May 19.
Dye, Mono-azo. W. Hentrich, R. Knoche and P. Virck. 1,805,911; May 19.
Dyes, Manufacture of azo. R. Brightman. 1,805,714; May 19.
Dyestuff and material dyed therewith, Water insoluble azo. K. Beck and H. Kracker. 1,806,034; May 19.
Dyestuffs and material dyed therewith, Water-insoluble azo. R. Dereser and K. Moldaenke. 1,806,047; May 19.
Dyestuffs, Manufacture of azo. R. Brightman. 1,805,715; May 19.
Dyestuffs, Manufacture of azo. K. H. Meyer and C. Schuster. 1,805,919; May 19.
Ear ring. L. A. Delamothe. Des. 84,184; May 19.
Ear suction cup. L. R. England. 1,805,471; May 19.
Efficiency device, Steam engine operation. R. F. Knight. 1,805,585; May 19.
Ejector. J. H. Forrest. 1,806,287; May 19.
Electric furnace. R. Dufour. 1,805,469; May 19.
Electric furnace. P. L. J. Miguet. 1,806,210; May 19.
Electric heater. E. C. Booth. Des. 84,179; May 19.
Electric heater. W. K. Tavender. 1,806,004; May 19.
Electric incandescent body. W. and I. Noddack. 1,806,410; May 19.
Electric iron. W. E. Belcher. 1,806,383; May 19.
Electric switch. W. E. Paul. 1,805,497; May 19.
Electrical connecting device for electrical conductors. S. W. Borden. 1,805,754; May 19.
Electrical contact jaw. E. G. Johnson. 1,805,487; May 19.
Electrical instrument, Polyphase. V. Genkin. 1,806,392; May 19.
Electrical regulating system. F. A. Byles. 1,806,330; May 19.
Electrical switching apparatus, Manufacturing. A. H. Adams. 1,806,188; May 19.
Electrical transformer and inductance coil. T. J. Scofield. 1,805,639; May 19.
Electrodes, Coating arc welding. S. S. Stewart. 1,806,128; May 19.

Electrotherapeutical device. C. W. Carpenter. 1,805,904; May 19.
Elevator: *See*—
Casing elevator.
Eliminator. H. N. Middleton. 1,806,535; May 19.
Engine: *See*—
Internal-combustion engine.
Rotary engine.
Engines, Attachment for internal combustion. W. M. Malouf. 1,806,406; May 19.
Engines, Preliminarily heating internal combustion. A. C. Bell and T. R. Bell. 1,806,442; May 19.
Esters of the fatty acids, Making. F. E. Lichtenthaeler. 1,805,775; May 19.
Evaporator. D. G. Ellis. 1,805,762; May 19.
Evaporator. C. E. L. Lipman. 1,805,526; May 19.
Excavating attachment, Convertible. G. A. Vaughn. 1,806,511; May 19.
Expanding device. W. C. Ferris. 1,806,339; May 19.
Expansion joint, Lubricated. L. L. Pratt. 1,806,081; May 19.
Extractor: *See*—
Cleaner and bull extractor.
Fabric and making the same, Knitted. W. L. Houseman. 1,805,624; May 19.
Fabric, Mechanism for slitting. R. P. Hayden. 1,806,458; May 19.
Fairleader. K. Berger. 1,805,800; May 19.
Fan. L. V. Cram. 1,806,539; May 19.
Fastener for storm and screen sashes. P. M. Dehn. 1,805,654; May 19.
Fastener, Lath. A. J. Bates. 1,805,797; May 19.
Fastener retainer, Webbing. H. A. Mailloux. 1,806,405; May 19.
Fastener, Tag. F. Magidson. 1,806,171; May 19.
Fasteners, Lock cap for. J. Berge. 1,805,737; May 19.
Fastening device. A. Thomas. 1,806,005; May 19.
Fastening device. A. Zeindlhofer. 1,805,795; May 19.
Fastening, Lace and like. P. Hahn. 1,806,162; May 19.
Faucet, Non-corrodible. R. S. Allan. 1,805,537; May 19.
Faucet opening attachment, Automatic. V. B. Haig. 1,805,821; May 19.
Feeder, Hog. L. Bici. 1,805,902; May 19.
Feeding device, Poultry. O. C. White. 1,805,859; May 19.
Feeding device, Stock. J. S. Stull. 1,806,130; May 19.
Felting, Mineral fiber. F. C. Russell and C. L. Savidge. 1,806,024; May 19.
Fertilizer and the like, Device for distributing. H. T. Seaman. 1,806,025; May 19.
Fibrous blocks, Manufacturing. R. B. Fuller. 1,805,981; May 19.
File for letters or other papers. J. F. Dixon. 1,805,939; May 19.
Filler opening for receptacles, Closure for. F. F. Begue and J. A. McIntosh. 1,805,562; May 19.
Film, Cinematograph. A. H. Smith. 1,806,122; May 19.
Film transporting device in a motion picture apparatus. L. Goldhammer. 1,805,579; May 19.
Filter, Air. L. B. Hendrickson. 1,805,824; May 19.
Filter for air and other gases. E. L. Joseph. 1,806,400; May 19.
Filter for separating dust from air or gas. E. W. von Waldenburg-Straus-Scharina. 1,806,513; May 19.
Filter installation, Oil. F. A. Bower. 1,806,537; May 19.
Filter, Oil. A. A. Bull. 1,805,903; May 19.
Filtering and apparatus therefor. S. P. Kramer. 1,806,471; May 19.
Fire alarm, Automatic. J. E. Goodwin. 1,805,946; May 19.
Firearm. C. L. Ross. 1,805,601; May 19.
Firework composition, Detonating. W. F. Gehrig. 1,805,945; May 19.
Fish lure. A. F. Schnell. 1,806,088; May 19.
Flashlight. J. T. Brown. 1,805,683; May 19.
Flexible materials, Impregnating and coating. E. Weinheim. 1,805,730; May 19.
Floor construction. E. E. Fletcher. 1,805,483; May 19.
Fluid mixer. J. V. Giesler and W. W. Carson, jr. 1,806,394; May 19.
Fluid pressure brake. F. E. Schwentler. 1,805,637; May 19.
Fluid pressure control. H. U. Durant. 1,805,814; May 19.
Fluid pressure governing mechanism. O. N. Bryant and A. F. Schwendner. 1,805,972; May 19.
Foam destroyer. C. D. Mason. 1,805,830; May 19.
Fodder, Cattle. R. Griessbach and O. Ambros. 1,806,290; May 19.
Folding and ironing machine, Coordinated. W. F. Mayer. 1,805,776; May 19.
Folding device for letter sheets. G. Spohn. 1,806,125; May 19.
Folding table. R. W. Simpson. 1,806,091; May 19.
Food product. J. S. Cohen. 1,806,576; May 19.
Food product. A. L. Magril. 1,806,302; May 19.
Foot pad, Rotary. H. I. Clark. 1,805,978; May 19.
Foot wear, Orthopedic. W. H. Nickerson. 1,806,409; May 19.
Force table. C. Hire. 1,806,350; May 19.
Forgings, Method of and mechanism for trimming. J. H. Friedman. 1,805,943; May 19.
Form for washing and drying gloves. C. D. Thom. 1,805,709; May 19.
Fountain: *See*—
Desk stand and ink fountain.
4-substitution products of the quinoline series, Producing. A. Prill and R. Walter. 1,806,563–4; May 19.
Frame: *See*—
Wringer frame.
Fruit in refrigerator cars, Sterilizing. L. W. Collins. 1,806,012; May 19.
Fuel-air-mixtures for internal combustion engines, Process and device for treating. J. Grivin. 1,805,472; May 19.
Fuel burning mechanism, Liquid. W. W. Williams. 1,806,550; May 19.
Fulling and washing machine. D. Gessner. 1,806,342; May 19.
Furnace: *See*—
Electric furnace.
Oil and gas furnace.
Roasting furnace.
Rotary hearth furnace.
Tube welding furnace.
Furnace. J. F. O'Connor. 1,805,634; May 19.
Furnace. C. B. Page. 1,806,114; May 19.
Furnace. J. Spousta. 1,805,786; May 19.
Furnace wall. O. Nygaard. 1,806,113; May 19.
Furniture, Folding. B. L. Laursen. 1,805,736–7; May 19.
Fuse block attachment. J. Sachs. 1,805,725; May 19.
Fuse mechanism. M. J. Sandin. Re18,073; May 19.
Game of skill. L. Maas. 1,806,071; May 19.
Garden implement. F. Hurka. 1,806,165; May 19.
Garment, Combination. W. M. Traynor. 1,806,430; May 19.
Garment, Infant's. E. H. Groves. 1,805,766; May 19.
Garter extensions for hosiery, Knitting. P. R. Nestler. 1,806,492; May 19.
Gas appliance. A. J. Milligan. 1,805,835; May 19.
Gas heater. H. H. Moreton. 1,805,781; May 19.
Gas purification process. F. W. Sperr, jr. 1,806,370; May 19.
Gasoline from gas, Recovering. F. A. Howard and N. E. Loomis. 1,806,571; May 19.
Gasoline motor. H. L. Adams. 1,806,233; May 19.
Gate for delivery vehicles. B. Seitz. 1,805,851; May 19.
Gauge: *See*—
Air pressure gauge.
Gear, Draft. J. F. O'Connor. 1,806,264; May 19.
Gear drives, Adjusting means for hydraulic. D. R. Francis. 1,806,340; May 19.
Gear for high speed suspension cars, Running. C. Stedefeld. 1,805,928; May 19.
Gear power transmission. E. Brown. 1,806,328; May 19.
Gear shift control mechanism. A. H. Humaugh. 1,806,211; May 19.
Gearing, Self adjusting valve. H. T. Thomas. 1,806,099; May 19.
Generator: *See*—
Electric motor generator.
Steam generator.
Glass and similar substances, Apparatus for melting. H. F. Hitner. Re18,071; May 19.
Glass, Method and apparatus for feeding molten. J. R. Keller. 1,805,987; May 19.
Glass protector. J. B. Kemp. 1,805,584; May 19.
Glass with color wedge for spectacles together with method for manufacturing same, Protective. C. G. Bostrom. 1,805,969; May 19.
Glassware, Method and apparatus for use in the manufacture of. L. J. Broche. 1,806,445; May 19.
Glazier's point machine. C. J. Fancher and R. A. Johnson. 1,806,195; May 19.
Glider propulsion device. G. A. Miller. 1,805,834; May 19.
Glue and making same, Vegetable. I. F. Laucks and G. Davidson. 1,805,773; May 19.
Goggles. C. A. Donnelly. 1,806,524; May 19.
Goggles. J. L. Moran and A. J. Lee. 1,805,633; May 19.
Goggles, Adjusting means for. H. F. Shindel. 1,805,640; May 19.
Governor, Sensitive fuel. L. W. Browne. 1,805,802; May 19.
Grader, Road. R. E. Adams. 1,806,568; May 19.
Graders, Sweeping attachment for road. G. Gardner. 1,806,054; May 19.
Grading machine. J. W. Johnston. 1,806,166; May 19.
Grappling hook. A. Straka. 1,805,604; May 19.
Grate support. G. B. Ashworth. 1,805,477; May 19.
Grease cup. Z. L. Card. 1,806,446; May 19.
Grip, Heat insulating hand. G. O. Locy. 1,806,479; May 19.
Grinding and mixing pan. W. E. McMurray. 1,806,077; May 19.
Grinding machine, Metal ball. J. J. McIntyre. 1,805,878; May 19.
Grooving machine. A. T. Butkey. 1,806,235; May 19.
Grounding clamp. H. K. Caldwell. 1,805,804; May 19.
Gun mount, Machine. G. Ironside. 1,805,547; May 19.
Gyro-compass, Non-pendulous. E. A. Sperry, jr. 1,805,854; May 19.
Hair curling apparatus. P. Kunin and I. E. McElroy. 1,806,472; May 19.
Hair, Device for use in dressing the. H. Freeman and H. D. Thurgar. 1,806,248; May 19.
Hair waver. E. M. Adams. 1,805,507; May 19.
Hair waving appliance. C. O. Long. 1,806,355; May 19.
Hair waving wrapper. W. S. Watts. 1,806,007–8; May 19.
Hand split tapered shake. F. L. Dietz. 1,805,689; May 19.

Handling articles, Apparatus for. J. S. Stull. 1,806,131; May 19.
Hanger: *See*—
Coat hanger. Window curtain hanger.
Combined door bumper and coat hanger.
Harrow hitch. C. H. Gemberling. 1,805,484; May 19.
Harrow tooth, Spring. J. V. Dyrr. 1,805,481; May 19.
Harvester. L. A. Shaw. 1,805,744; May 19.
Hat. J. Cavanagh. 1,805,977; May 19.
Hatrack. M. M. Studebaker. 1,806,578; May 19.
Hat shaping and pressing mold. G. H. Edwards. 1,805,979; May 19.
Headlight. C. K. Rizer. 1,805,886; May 19.
Headlight, Automobile. H. Siry. 1,806,424; May 19.
Headlight, Dirigible. A. B. McKay. 1,805,589; May 19.
Headlight, Dirigible. G. W. Wilson. 1,805,748; May 19.
Headlights, Antiglare attachment for. H. P. Verdich. 1,805,606; May 19.
Headrest for bath tubs, Vacuum. C. E. Tyler. 1,806,103; May 19.
Heating, Apparatus for and method of cultivating and improving the. J. W. MacDonald. 1,806,357; May 19.
Hearth furnace, Rotary. E. L. Smalley. 1,806,027; May 19.
Heat conduit and protector therefor. A. Graziani. 1,806,455; May 19.
Heat exchangers, Manufacturing. J. O. Olson. Re18,078; May 19.
Heater: *See*—
Adjustable air blast heater. Gas heater.
Air heater. Individual cup heater.
Electric heater. Oil heater.
Electric liquid heater. Water heater.
Heater. E. P. Plummer. 1,806,216; May 19.
Heater for liquids, Electric. E. Rinderspacher and R. and C. Bergara. 1,805,885; May 19.
Heater for locomotives, Adjustable air blast. O. H. Stone and D. A. Cooper. 1,805,892; May 19.
Heating apparatus. W. L. Clouse. 1,805,938; May 19.
Heating apparatus. H. L. Schrankel. 1,805,556; May 19.
Heating apparatus, Electric. E. L. Wiegand. 1,806,512; May 19.
Heating device, Electrical inductive and resistance. E. Fendt and K. Schörg. 1,805,908; May 19.
Hedge trimmer. L. S. Peterson. 1,806,116; May 19.
Heel, Detachable rubber. P. Lee. 1,805,738; May 19.
Heels, Device for attaching heels. F. E. Bertrand. 1,805,539; May 19.
Hides, skins and the like, Apparatus for fleshing. L. N. Henry. 1,806,258; May 19.
Hinge. G. C. Bohn. Des. 84,178; May 19.
Hoist, Remote control. J. V. Dyrr. 1,805,482; May 19.
Holder for material working apparatus, Work. W. Seligmann. 1,806,182; May 19.
Holder, Light globe. A. O. Deeter. 1,806,046; May 19.
Holder or socket, Electric lamp. H. E. Slade and J. Gehring. 1,806,314; May 19.
Holder, Pencil. Z. Linderman. 1,806,476; May 19.
Holder, Roundel. R. E. Major. 1,806,209; May 19.
Holder, Safety fire hose. W. MacGregor. 1,806,074; May 19.
Hook: *See*—
Grappling hook.
Horse bit. V. Meyer. 1,806,483; May 19.
Hose end indicator and valve, Combination. A. C. Andreasen. 1,805,476; May 19.
Hosiery, Apparatus for knitting full fashioned. E. J. Thompson and R. H. Hubler. 1,805,893; May 19.
Humidifier. K. D. Perkins. 1,806,021; May 19.
Humidifier for explosive engines, Charge. C. E. Ennis and H. W. Crawford. 1,806,049; May 19.
Humidifier for gas engines. K. Issar. 1,806,293; May 19.
Hydraulic brake. C. L. Jolly. 1,805,985; May 19.
Hydraulic jack. R. E. Manley. 1,805,588; May 19.
Hydrocarbon material, Treatment of heavy. C. W. Andrews and R. D. Rogers. 1,805,711; May 19.
Hydrocarbon products, Apparatus for cracking. G. Egloff and H. P. Benner. 1,805,615; May 19.
Hydrocarbons, Process of and apparatus for converting heavy into lighter. C. P. Dubbs. 1,806,284; May 19.
Ice manufacture and refrigeration, System of. G. L. Vail. 1,805,932; May 19.
Ice, Production of carbon dioxide. J. R. Donald. 1,806,240; May 19.
Ignition apparatus, Shielding means for. H. Rabezzana. 1,806,548; May 19.
Ignition device. A. Ciraolo. 1,806,574; May 19.
Ignition roof for traveling grate boiler plants. R. Poth. 1,806,022; May 19.
Impulse coupling. C. F. Reis. 1,805,598; May 19.
Indicator: *See*—
Direction indicator. Lubricator indicator.
Indicator. P. Kollsman. Re18,072; May 19.
Indicator for tires, Adjustable pressure. C. E. Stille. 1,806,372; May 19.
Inductance system. L. A. Gebhard. Re18,070; May 19.
Induction meter. A. Callsen. 1,806,331; May 19.
Instrument case, Interchangeable. I. F. Kinnard. 1,806,195; May 19.
Insulator, Strain. W. H. Kempton. 1,806,294; May 19.
Interlacing machines, Feeding mechanism for. G. W. Mudd. 1,805,528; May 19.
Intermittent motion sprinkler. W. Van E. Thompson. 1,806,100; May 19.
Internal combustion engine. S. B. Brown. 1,805,540; May 19.
Internal combustion engine. E. Kägi. 1,805,698; May 19.
Internal combustion engine. R. Miller. 1,805,670; May 19.
Internal combustion engine. A. M. Niven. 1,806,175; May 19.
Internal combustion engine. J. H. Pierce. 1,805,843; May 19.
Internal combustion engine. F. F. Taylor. 1,805,931; May 19.
Internal combustion engine, Double acting. M. Trechsel. 1,806,319; May 19.
Internal combustion motor, Two cycle. E. C. Wyckoff. 1,806,138; May 19.
Iodine solutions in pencil form as a substitute for tincture of iodine, Production of solid alcoholic. K. Jungmann and O. Kolbert. 1,806,260; May 19.
Iron: *See*—
Electric iron. Waffle iron.
Irons, Cord adjuster for electric. A. Mornawski. 1,806,487; May 19.
Jack: *See*—
Hydraulic jack. Planetary gear operated lifting jack.
Lifting jack. Vehicle jack.
Jar closure, Metal. T. L. Talinferro. 1,806,425; May 19.
Jet device. H. D. Yoder. 1,806,187; May 19.
Joint: *See*—
Lubricated expansion joint. Pipe joint.
Joint. W. A. Flumerfelt. 1,806,286; May 19.
Joint chair and rail lock. S. Nagy. 1,805,590; May 19.
Jointer. A. A. Dennis. 1,805,906; May 19.
Journal box. L. L. Cogan. 1,806,044; May 19.
Kit, Golf ball paint. H. S. Boylan and G. F. Bretz. 1,805,801; May 19.
Knife for cutting shoes. O. Michaud. 1,806,484; May 19.
Knife tang. E. Echlkson. 1,806,244; May 19.
Knitting machines, Control for. H. Weinrub. Re18,074; May 19.
Knitting mechanism. W. L. Houseman. 1,805,625; May 19.
Lace. W. R. Adair. Des. 84,175; May 19.
Lace. B. A. Ball. Des. 84,177; May 19.
Lace. B. Edson. Des. 84,185–7; May 19.
Lace. H. W. Hucknall. Des. 84,193–4; May 19.
Lace. S. H. Page. Des. 84,202; May 19.
Lace trimming or the like. M. Sadinoff. Des. 84,221–2; May 19.
Ladder. H. H. Busby. 1,806,145; May 19.
Ladder. H. Rosenberg. 1,806,502; May 19.
Ladder, Collapsible concealing. R. B. Marschke. 1,805,829; May 19.
Ladder, Extension. H. E. Skeels. 1,806,185; May 19.
Lamp. W. H. Schlesinger. Des. 84,206; May 19.
Lamp and clock or similar article, Combined. J. Kohut. Des. 84,195; May 19.
Lamp bulb removing mechanism. H. D. Grinnell. 1,806,557; May 19.
Last. R. D. Poole. 1,806,417; May 19.
Latch mechanism, Door. S. L. Rhiner. 1,805,997; May 19.
Lateral motion mechanism. T. H. Symington. 1,806,097; May 19.
Laundry and garment pressing, Pressing element for. E. Davis. 1,805,570; May 19.
Leather, Making plaited. F. Barber. 1,805,478; May 19.
Leg for sinks and the like, Adjustable. W. J. Kohler, jr. 1,806,169; May 19.
Leuco compounds of the triaryl methane series, Oxidation of. K. Schmidt. 1,805,925; May 19.
Life preserving device. F. Kogl. 1,805,721; May 19.
Life saving device. L. Bulgarini. 1,805,803; May 19.
Lifting and transferring device. W. S. Carmody. 1,805,653; May 19.
Lifting appliance. G. E. Weaver and A. R. Squyer. 1,806,323; May 19.
Lifting jack. E. D. Paéz, jr. 1,806,413; May 19.
Lifting jack, Planetary gear operated. L. D. Nilson. 1,805,841; May 19.
Light: *See*—
Safety traffic light. Vacuum tube light.
Light control, Poultry. J. B. Harriman. 1,806,395; May 19.
Light signal. A. W. Fisher and W. B. Wells. 1,806,051; May 19.
Lighting apparatus, Shadowless. H. L. M. J. Bénard. 1,806,384; May 19.
Lighting device, Piano. C. E. Cameron, jr. 1,805,973; May 19.
Lighting fixture. R. Haley. 1,806,251; May 19.
Lighting fixture part. S. Perla. 1,805,996; May 19.
Lighting unit. A. Y. Dodge. 1,805,690; May 19.
Lighting unit. C. A. B. Halvorson. 1,805,485; May 19.
Lighting unit. O. Werner. 1,806,435; May 19.
Lining, Protective. J. D. O'Brien. 1,806,494; May 19.
Liquid distributor. R. D. Simpson. 1,805,852; May 19.

Liquid level indicating system. J. D. Santakoff. 1,805,849; May 19.
Liquid to be used as heat transferring medium. W. S. Sherman. 1,805,500; May 19.
Liquids, Apparatus for distilling and coking heavy hydrocarbon. A. S. Knowles and C. W. Andrews. 1,805,720; May 19.
Loader, Manure. R. H. Frisbie. 1,805,818; May 19
Loaf forming machine. G. Rausch. 1,805,706; May 19.
Lock: *See*—
Box lock. Joint chair and rail lock.
Cam snap lock. Nut lock.
Lock. R. Metz and W. J. Quirk. 1,805,779; May 19.
Lock. L. B. Shinn. 1,805,891; May 19.
Lock joint folding attachment for cigar enveloping machines. F. C. Gladeck. 1,805,693; May 19.
Lock switch. H. E. Norviel. 1,806,307; May 19.
Locking mechanism. P. Vignos. 1,805,031; May 19.
Locking system for containers. W. H. Smith. 1,806,124; May 19.
Locomotive sanding device. V. L. Frantz. 1,806,052; May 19.
Locomotives, Drum support for. W. A. Bardsley. 1,806,516; May 19.
Loom, Automatic. W. J. Lemieux and J. Hood. 1,805,525; May 19.
Loose leaf device, Visible. C. A. Finley. 1,806,529; May 19.
Lubricating device, Motor. R. E. Langmack. 1,805,826; May 19.
Lubricating system. T. Wilson. 1,805,609; May 19.
Lubricator. H. M. Ludwick. 1,806,545; May 19.
Lubricator indicator. P. Shapiro. 1,806,423; May 19.
Machine for filling molding flasks. L. A. Carter. 1,806,042; May 19.
Machine for folding and scalloping paper sheets. S. J. Campbell. 1,805,510; May 19.
Machine for making glassware. P. Arbelt. 1,805,796; May 19.
Machine for making paper covered ironing boards. J. E. Kaigren. 1,806 205; May 19.
Machine for making printer's leads, slugs, and rules. A. H. Hedly. 1,806,257; May 19.
Machine for refining paper and pulp. L. H. Wessel and H. N. Booker. 1,806,272; May 19.
Machine for sawing under water. J. G. De Kater. 1,806,013; May 19.
Machine for trimming the capsules or sealing covers of bottles, jars, or like containers. J. E. Lee. 1,806,475; May 19.
Magnetic core for electrical apparatus. M. O. Troy. 1,805,534; May 19.
Magneto. E. F. Weston. 1,805,608; May 19.
Manifolding machine. H. W. Carroll, jr. 1,806,041; May 19.
Marker, Book. E. Dittmann. 1,805,732; May 19.
Marker, Meat. H. H. McKee. 1,806,076; May 19.
Marker, Planter. C. H. White. 1,805,505; May 19.
Mask for cylinder molds. M. O. Schur. 1,805,499; May 19.
Massage device. A. P. Rudolph. 1,805 675; May 19.
Matches, Making. C. K. Light. 1,805,827; May 19.
Material containing asbestos fiber, Atomizing and spraying semifluid. K. A. Milar. 1,805,632; May 19.
Material to be used in the formation of roadways and the like, Production of. E. B. Hack. 1,806,250; May 19.
Measure, Oil. H. B. Donley. 1,805,813; May 19.
Measuring the amount of water contained in moist sand or gravel. T. Collins. 1,806,538; May 19.
Metal alkyl compounds, Making. E. C. Britton. 1,805,756; May 19.
Metal binding machine. M. M. Balsam. 1,806,277; May 19.
Metal from corroding, Method of and material for preventing. J. H. Gravell. 1,805,982; May 19.
Metal work, Apparatus for treating. H. Rosenberg. 1,806,503; May 19.
Metals, Recovery of. P. Robinson. 1,806,310; May 19.
Meter: *See*—
Brick meter. Induction meter.
Meter terminal. W. Bradshaw and W. G. Mylius. 1,806,327; May 19.
Mill drive with Leonard control, Electric rolling. H. Heymann. 1,806,349; May 19.
Mills, Apparatus for grinding the rolls of ore crushing or like. A. Voegel. 1,806,226; May 19.
Mineral oil and anti-oxidant agent and process. H. A. Morton. 1,805,953; May 19.
Mining machine. N. D. Levin. 1,805,876; May 19.
Miter square. H. Hartwell. 1,806,396; May 19.
Mixer: *See*—
Fluid mixer.
Mixing machine for pastry. C. L. Ackerman. 1,806,139; May 19.
Moisture content of paper or the like, Apparatus for controlling. A. Allen and J. G. Callan. 1,805,474; May 19.
Mold: *See*—
Hat shaping and pressing mold.
Mold for plastic substances, for instance, chocolate. J. J. Jensen. 1,806,017; May 19.
Mold for toilet seats. G. Johnson. 1,805,871; May 19.
Molding apparatus. W. B. Scott. 1,896,000; May 19.
Molding articles. T. J. Flack. 1,806,451; May 19.
Molds and cores, Protecting sand. E. A. Balsley and L. I. Yeomans. 1,805,650; May 19.
Mop construction. A. C. Kootz. 1,805,490; May 19.
Mop head. H. J. Lorang. 1,806,402; May 19.
Motor: *See*—
Railway booster motor.
Motor controller. E. F. Kieckhefer. 1,805,699; May 19.
Motor controller. C. W. Kuhn. 1,805,491; May 19.
Motor Fuel, Method and apparatus for treating. R. M. Lynn and W. M. Malouf. 1,806,256; May 19.
Motor fuel treating device. R. M. Lynn and W. M. Malouf. 1,806,404; May 19.
Motor generator, Electric. E. W. Weathers. 1,805,935; May 19.
Motor operated shears. R. R. Gonsett. 1,806,555; May 19.
Mounting construction for meters. W. G. Mylius. 1,806,306; May 19.
Mounting, Jewel bearing. O. C. Reeves. 1,806,179; May 19.
Mounting, Motor. H. L. Brump. 1,806,329; May 19.
Mounting, Rubber motor. B. H. Anibal. 1,806,569; May 19.
Mouthpiece for pipes. S. A. Mericko. 1,805,880; May 19.
Mouthpiece for telephones or speaking tubes and like instruments. E. W. Roberts. 1,806,368; May 19.
Mower, Fence row. J. H. Bass. 1,805,861; May 19.
Mower, Hand. C. R. Benzel. 1,805,864; May 19.
Mowing machine. J. Mankó. 1,806,480; May 19.
Mowing machine. L. Sharp. 1,805,927; May 19.
Music, Apparatus for teaching. J. M. Jolls. 1,805,488; May 19.
Musical instrument, Keyboard operated. A. V. Bennett. 1,805,863; May 19.
Nail, Shoe. J. H. Pope. 1,805,553; May 19.
Necktie. V. A. Bianco. 1,805,968; May 19.
Necktie. S. Weldon. 1,805,965; May 19.
Nozzle, Spray. E. G. Munz. 1,805,782; May 19.
Nut lock. W. G. Savidge. 1,806,506; May 19.
Oil and gas furnace. R. C. Hopkins. 1,806,463; May 19.
Oil, Apparatus for cracking. G. Egloff and H. P. Benner. 1,805,614; May 19.
Oil burner. W. B. Sturgis. 1,806,566; May 19.
Oil burner regulator, Automatic. B. C. Moxley. 1,806,080; May 19.
Oil conversion, Process and apparatus for hydrocarbon. L. C. Huff. 1,806,063; May 19.
Oil, Dewaxing. L. D. Jones. 1,806,570; May 19.
Oil heater. C. R. Wagner. 1,805,607; May 19.
Oil, Process and apparatus for cracking. L. Kirschbraun. 1,805,628; May 19.
Oil purifier and dilution remover. A. M. Babitch. 1,806,553; May 19.
Oil, Treating petroleum. G. Egloff and J. C. Morrell. 1,805,616; May 19.
Oils, Cleansing or filtering lubricating. F. R. Simms and B. C. Joy. 1,806,001 2; May 19.
Oils, Cracking. J. C. Black. 1,806,037; May 19.
Oils, Treating, separating, and purifying. E. B. Auerbach. 1,805,751; May 19.
Opener, Cigarette pack. A. P. De Vega. 1,805,811; May 19.
Opening and shutting device for automobiles, Door. K. Nagao. 1,806,488; May 19.
Ophthalmic mounting. J. N. Nelson. 1,805,529; May 19.
Ores by flotation, Concentration of. F. G. Moses, R. W. Hess, and R. L. Perkins. 1,806,362; May 19.
Ores, minerals, and the like, Concentration of. J. L. Stevens. 1,805,855; May 19.
Oscillation generation. A. Meissner. 1,805,918; May 19.
Oven, Coke. J. van Ackeren. 1,806,134; May 19.
Oven, Horizontal coke. C. Otto. 1,805,922; May 19.
Overload release, Mechanical. C. A. McKenny. 1,805,879; May 19.
Oxidation products of siccative oils, Manufacture of. F. Fraunberger and G. Knöffler. 1,806,247; May 19.
Packer for hydraulic plungers, Expansible. E. E. Miller. 1,806,078; May 19.
Packing for pipe cutter and valve inserting machine. J. M. Wilkins. 1,805,710; May 19.
Packing ring. C. S. Kelley. 1,805,668; May 19.
Pad: *See*—
Rotary foot pad.
Pad. G. de Pamphilis. 1,805,761; May 19.
Pad for football players. H. H. Jones. 1,805,734; May 19.
Pan for internal combustion engines, Oil. G. Tallon. 1,805,729; May 19.
Paper and making the same, Black line photographic sensitized. R. Omoto. 1,805,592; May 19.
Paper manufacture. H. R. Williams. 1,806,273; May 19.
Paper shopping bag. W. H. Deubener. 1,805,810; May 19.
Paper, Sizing. E. Lecocq. 1,806,474; May 19.
Paper tape machine. J. Olsen. 1,806,412; May 19.
Parachute. J. J. Wampach. 1,805,894; May 19.
Pastry, Applying filling materials to. O. Kremmling. 1,806,066; May 19.
Pattern mechanism for circular knitting machines. H. E. Houseman. 1,805,697; May 19.
Pedestal filler unit. K. F. Nystrom. 1,806,411; May 19.
Pencil, Lead. A. F. Poole. 1,805,673; May 19.
Pencil, Propelling. H. Felger. 1,805,575; May 19.
Petroleum, Apparatus for treating. C. P. Dubbs. 1,806,282; May 19.
Petroleum, Distillation of. E. G. Ragatz. 1,806,023; May 19.

Petroleum hydrocarbons in the vapor phase, Treating. R. Cross. 1,805,686; May 19.
Petroleum oil, Apparatus for converting. W. R. Howard. 1,806,060; May 19.
Petroleum oil, Converting. C. P. Dubbs. 1,806,283; May 19.
Petroleum oils, Distilling and cracking. J. C. Black. 1,806,036; May 19.
Phonograph, Electric. A. A. Thomas. 1,806,374; May 19.
Phosphate and potassium salts to mixed fertilizer, Working up crude. C. T. Thorssell. 1,806,029; May 19.
Photographic developing device. S. Abe. 1,806,232; May 19.
Photographic printing machine. A. S. Howell. 1,805,768; May 19.
Pickling apparatus. A. Dietzel. 1,806,239; May 19.
Picture printing machine, Motion. G. Lane. 1,805,948; May 19.
Pictures, Apparatus for making animated. A. W. Carpenter. 1,805,511; May 19.
Pictures, Producing a background for moving. F. Fulgora. 1,806,452; May 19.
Pile structure. H. V. Campbell. 1,805,975; May 19.
Pipe cleaner. F. G. Long. 1,806,478; May 19.
Pipe cutter, Inside. H. J. Denney. 1,805,515; May 19.
Pipe fitting apparatus. L. C. Fenn and S. Davis. 1,805,909; May 19.
Pipe joint. F. McS. Thomas. 1,805,962; May 19.
Pipe rest. J. H. Owens. 1,806,176; May 19.
Pipe wrench. C. Hartman. 1,806,457; May 19.
Piston. G. W. Elsey. 1,806,338; May 19.
Piston and skirt expanding ring therefor. H. F. Phillips. 1,806,416; May 19.
Piston, Automotive. A. A. Stephens. 1,805,957; May 19.
Piston construction. A. A. Stephens. 1,805,960; May 19.
Piston, Hollow. A. A. Stephens. 1,805,958; May 19.
Piston, in particular for control valves for air brakes, Diaphragm. E. Möller. 1,806,360; May 19.
Piston machine, Rotary. J. W. Lees. 1,806,206; May 19.
Piston, Motor. A. A. Stephens. 1,805,959; May 19.
Piston ring. H. E. Blomgren. 1,806,143; May 19.
Piston ring compressor. L. B. Glantz. 1,805,543; May 19.
Pitch propeller, Variable. M. L. Bramson. 1,806,385; May 19.
Planer. F. H. Howlett. 1,805,545–6; May 19.
Plant protector. W. T. Davis. 1,805,571; May 19.
Plant setting machine. A. Morris. 1,805,839; May 19.
Planter. R. W. Dickerson. 1,806,389; May 19.
Planters, Foot control for seed. B. Fischer. 1,806,050; May 19.
Planters, Wire dofling mechanism for. C. H. White. 1,805,506; May 19.
Plaster board clip. F. M. Venzie. 1,805,648; May 19.
Plate conveyer and cleaner, Tin. S. E. Diescher. 1,805,980; May 19.
Platform and making the same, Portable. R. T. Romine. 1,806,085; May 19.
Platform, Portable loading. R. T. Romine. 1,806,086; May 19.
Plating, Mechanism for effecting reverse. J. Lawson and R. H. Lawson. 1,806,399; May 19.
Plow, Disk. A. M. Campbell. 1,805,974; May 19.
Plug, Electric appliance. G. J. Meuer. Des. 84,200; May 19.
Plug receptacle, Multiple base. M. J. De Mask. 1,805,572; May 19.
Pole and curtain suspending means, Combination curtain. J. C. Carlton. Des. 84,180–2; May 19.
Pole, Window. S. C. Lawlor. 1,806,261; May 19.
Porcelain, Heater. R. J. Parsons. 1,806,115; May 19.
Potassium phosphate, Producing. O. Kaselitz. 1,805,873; May 19.
Power mechanism. W. M. Thomas. 1,806,133; May 19.
Power transmission construction. P. Chapman. 1,805,612; May 19.
Press. W. L. Clouse. Des. 84,218; May 19.
Pressing machines, Actuating means for. E. Davis. 1,805,569; May 19.
Pressing machines, Counterbalancing mechanism for heads of. E. Davis. 1,806,193; May 19.
Propeller for aeroplanes or other aircraft, Adjustable and reversible. R. F. Wooden. 1,806,325; May 19.
Protective device for alternating polyphase systems of distribution. J. Volkmann. 1,805,934; May 19.
Protective device for induction motors. C. MacMillan. 1,805,492; May 19.
Protector, Spectacle. J. Housley. 1,806,464; May 19.
Pull shovel. P. Burke. 1,805,479; May 19.
Pulp and product of same, Treatment of. G. A. Richter and M. O. Schur. 1,806,309; May 19.
Pulp from Douglas fir and other resinous conifers, Making sulphite. H. K. Benson. 1,805,799; May 19.
Pulp grinding, Controlling the operation in. C. D. De Mers. 1,806,238; May 19.
Pulverized materials in large masses, Rendering homogeneous finely. M. Lepersonne and E. Hastert. 1,806,068; May 19.
Pulverizer, Double roller. H. S. Dickinson. 1,805,718; May 19.
Pulverizing or disintegrating equipment. W. C. S. Graham. 1,806,249; May 19.
Pump. J. W. Gardner. 1,805,542; May 19.
Pump. W. N. Squires. 1,805,788; May 19.
Pump, Centrifugal. R. H. Frederick. 1,805,765; May 19.
Pump for pressure fuel tanks, Air. L. S. Chadwick. 1,805,757; May 19.
Pump, Fuel. W. H. Schulze. 1,806,268; May 19.
Pump, Gas. C. G. Smith. 1,806,369; May 19.
Pumping system for oil refineries, Float controlled. L. De Florez. 1,806,440; May 19.
Puncturing apparatus. L. A. Welczek. 1,806,434; May 19.
Rack and smoking stand, Combination chip. A. Staat. Des. 84,215; May 19.
Radiant energy, Method of and apparatus for comparing and recording relative intensity of. A. C. Hardy and F. W. Cunningham. 1,806,197; May 19.
Radiant energy, Method and apparatus for comparing. A. C. Hardy and F. W. Cunningham. 1,806,199; May 19.
Radiant energy, Method of and apparatus for comparing and recording. A. C. Hardy. 1,806,198; May 19.
Radiator. R. N. Trane. 1,806,186; May 19.
Radiator bar and reenforcing means. R. C. Russell. 1,805,887; May 19.
Radiator cap. K. E. Stant. 1,806,224; May 19.
Radiator controlling mechanism. J. V. Giesler. 1,806,393; May 19.
Radiator screen, Automobile. G. M. Kennedy. 1,806,104; May 19.
Radiator shutter control for conserving heat. W. A. Edwards. 1,806,153; May 19.
Radio apparatus. J. D. Jordan. 1,805,626; May 19.
Radio coupling coil. T. J. Scofield, G. A. White, and J. D. Hammond. 1,805,638; May 19.
Radio loop antenna system. M. Ferris. 1,805,942; May 19.
Radio program apparatus, Wired. C. W. Hough. 1,805,665; May 19.
Radio system, Directional. F. A. Kolster. 1,806,577; May 19.
Rail and rail joint, Railway. S. G. Thomson. 1,806,426–7; May 19.
Rail and tie plate. F. C. Stowell. 1,806,094; May 19.
Railway booster motor. H. M. Pflager. 1,806,415; May 19.
Range, Gas. G. A. Robinson. 1,805,923; May 19.
Razor, Safety. M. B. Behrman. 1,805,509; May 19.
Razor, Safety. A. V. Watson. 1,805,895. May 19.
Receptacle attachment. A. C. Sladky. 1,806,184; May 19.
Receptacle, Deposit. G. Coughlin. 1,805,760; May 19.
Receptacle for bottles and jars, Closure. J. L. M. Guenard. 1,806,256; May 19.
Receptacle, Smoker's. B. Putterman. 1,806,418; May 19.
Recording and prompting device. H. T. Wilkins. 1,805,897; May 19.
Recording method and apparatus. J. A. Tiedeman. 1,806,375; May 19.
Records, Shaving machine for cylindrical sound. B. E. Jacob. 1,805,583; May 19.
Rectification of crude methyl alcohol, Process for continuous. E. A. Barbet. 1,805,559; May 19.
Reflex tower. J. Primrose. 1,805,635; May 19.
Refrigerated display counter. J. Blazek. 1,805,563; May 19.
Refrigerating apparatus. R. H. Chilton. 1,805,684; May 19.
Refrigerating apparatus. G. J. Cooke. 1,805,613; May 19.
Refrigerating apparatus. J. G. King. 1,805,700–1; May 19.
Refrigerating apparatus and method. J. W. Martin, jr. 1,805,493; May 19.
Refrigerating means and method. B. F. Randel. 1,806,498; May 19.
Refrigerating mechanism. G. Muffly. 1,806,019; May 19.
Refrigerating system. F. B. Hunt. 1,806,559; May 19.
Refrigeration. J. G. Bergdoll. 1,805,901; May 19.
Refrigeration. B. K. G. Ehnbom. 1,805,656; May 19.
Refrigeration, Mechanical. C. C. Spreen. 1,805,787; May 19.
Refrigerator cabinet. R. T. Smith. Des 84,208; May 19.
Register: *See*—
Autographic register.
Register device, Side. W. M. Kelly. 1,806,465; May 19.
Registering mechanism. C. E. Johnson and F. C. Koestner. 1,806,353; May 19.
Regulating system. L. W. Thompson. 1,806,317; May 19.
Regulator: *See*—
Automatic regulator. Temperature regulator.
Resin and making the same, Synthetic. L. V. Adams. 1,805,473; May 19.
Resistance material and making same. E. J. Haverstick. 1,806,347; May 19.
Restaurant building. F. S. Fenton. Des. 84,188; May 19.
Re-toothing machine. V. J. Mathieu. 1,805,831; May 19.
Reversing mechanism. H. A. Tuttle. 1,806,431; May 19.
Rim and bracket for vehicle wheels, Sectional auxiliary. O. G. Gregson. 1,806,532; May 19.
Ring: *See*—
Packing ring. Piston ring.
Ring binder attachment. C. H. Franz, jr. 1,806,157; May 19.
Ring or similar article, Finger. A. Suderov. Des. 84,189; May 19.

Ring or similar article, Finger. A. Suderov. Des. 84,216–17; May 19.
Rivet setting and punching press. W. E. Rees. 1,806,217; May 19.
Roasting furnace. E. J. Fowler. 1,805,659; May 19.
Rocking horse. J. H. Berns, jr. 1,806,035; May 19.
Rod: *See*—
Adjustable connecting rod. Stadia rod.
Rod aligning gauge, Connecting. R. T. Anderson. 1,805,475; May 19.
Rod supporting bracket. E. Reynolds. 1,805,742; May 19.
Roll for flattening metal sheets. W. E. Foale. 1,806,015; May 19.
Rollers, Scarifying attachment for paving. H. W. Laster. 1,805,524; May 19.
Roofing and method of application, Built-up. W. J. Moeller and A. H. Zimmerman. 1,805,739; May 19.
Roost, Poultry. K. M. Jensen and C. B. Huschke. 1,806,352; May 19.
Rotary cap having sealing material flowed thereinto. C. Hammer. 1,805,623; May 19.
Rotary engine. N. D. Levin. 1,805,875; May 19.
Rowing device. F. Zoglauer. 1,805,749; May 19.
Rubber and fabric from tire beads, Method and machine for reclaiming. M. E. Davis. 1,805,688; May 19.
Rubber composition, Age resisting vulcanized. H. G. Byers. 1,806,040; May 19.
Rubber compositions, Manufacture of. W. Feldenheimer. 1,805,517; May 19.
Rubber dispersion and making, Aqueous. R. A. Crawford. 1,806,388; May 19.
Rubber, Manufacture of. T. Midgley, jr., C. A. Thomas, and C. A. Hochwalt. 1,806,547; May 19.
Rubber treating method and product. C. E. Bradley. 1,805,713; May 19.
Rubber treating process and product. C. E. Bradley and C. Ferrettie. 1,805,712; May 19.
Safe. H. B. Chamberlain. 1,805,759; May 19.
Safety apparatus for protection and defense against burglary and violation of habitations. F. A. Duquesne. 1,806,242; May 19.
Safety appliance for airplanes. T. B. Lyles. 1,806,403; May 19.
Safety device for bottle cap crimping machines. F. E. Youngdahl. 1,805,680; May 19.
Safety switch. M. Charles. 1,806,236; May 19.
Sandal. J. Sohn. 1,805,728; May 19.
Sash and frame, Metal window. O. A. Munson. 1,806,263; May 19.
Sash ventilator. J. F. Levan. 1,806,298; May 19.
Saw. V. A. Wilcox. 1,805,036; May 19.
Saw filer. E. A. Ross. 1,806,222; May 19.
Saw filing machine. J. J. Moore. 1,806,361; May 19.
Saw, Portable power driven. T. J. Fegley and G. O. Leopold. 1,806,528; May 19.
Scale. T. Long. Des. 84,198; May 19.
Scale, Counting. E. G. Thomas. 1,806,132; May 19.
Scale reader for draftsmen. R. H. Shaen. 1,806,422; May 19.
Scale, Weighing. L. O. Kelley. 1,806,167; May 19.
Scale, Weighing. A. Perera. 1,806,496; May 19.
Scanning, Method and means for. U. A. Sanabria. 1,805,848; May 19.
Scissors, Hair cutting. A. F. Mirafuentes. 1,806,486; May 19.
Scoring machine. W. E. Taylor. 1,805,708; May 19.
Scraper. H. Ricks. 1,806,219; May 19.
Scraper, Reversible double digging edge. E. C. Addison and W. H. Hill. 1,806,551; May 19.
Screen: *See*—
Automobile radiator screen.
Screen for automobiles, Rolling window. W. E. Parker. 1,806,495; May 19.
Screw machine. E. Warner. 1,805,746; May 19.
Screw propeller. O. G. Malvorsen. 1,806,345; May 19.
Seal for metal tank rectifiers and the like. E. B. Shand and L. Smede. 1,806,313; May 19.
Seat and hand rest, Bath tub. H. E. Goodwin. 1,805,622; May 19.
Seat attachment. A. G. Seedig. 1,806,026; May 19.
Seat for vehicles, Adjustable. G. Flintermann. 1,806,014; May 19.
Sectional tubular tower. M. B. Schiller. 1,806,312; May 19.
Separator: *See*—
Centrifugal separator.
Sewage treatment. W. R. Borst. 1,805,682; May 19.
Sewing machine attachment. G. C. Hohein. 1,806,252; May 19.
Sewing machine, Electric. J. M. Naul. 1,806,489; May 19.
Shade. C. M. Eveleth. 1,805,941; May 19.
Shade for an electric lamp. G. E. McFadden. Des. 84,199; May 19.
Shade roller bracket, Adjustable. J. T. Palladino. 1,805,995; May 19.
Sharpener, Blade. W. B. Woodward. 1,806,487; May 19.
Shaving equipment. J. Schick. 1,806,087; May 19.
Shears sharpening device. L. C. Boyd. 1,806,234; May 19.
Shelving. A. H. Levene. 1,805,989; May 19.
Shield, Adjustable antiglare. C. I. Hoople. 1,806,059; May 19.
Shingle manufacture. H. L. Guy. 1,806,161; May 19.
Shingles, Making copper plated. F. Muschler. 1,805,920; May 19.
Ship construction. R. F. Smith. 1,806,508; May 19.
Shock absorber. A. F. Blanchard. 1,806,038; May 19.
Shock absorber. W. A. Chryst. 1,806,388; May 19.
Shock absorber. A. G. Knight, jr. 1,806,468; May 19.
Shock absorber. C. N. Mitchell. 1,805,836; May 19.
Shock absorber, Hydraulic. F. H. Royce. 1,805,924; May 19.
Shock absorber with hydraulic control, Friction. G. H. E. De Ram. 1,805,466; May 19.
Shocking attachment for grain binders. W. McConnell. 1,806,407; May 19.
Shoe shining machine. J. S. McDowell and W. Carson. 1,805,832; May 19.
Shovel: *See*—
Pull shovel.
Sign and display device. M. Wasserberg. 1,805,504; May 19.
Sign and mirror, Combined electric. M. D. Bedrossyan. 1,805,798; May 19.
Signal: *See*—
Automobile or traffic signal. Light signal.
Signal for motor vehicles, Direction. R. S. Cunard. 1,805,717; May 19.
Signal horn. C. S. Kelley. 1,805,627; May 19.
Signaling device, Railway. J. C. Hoffman. 1,806,291; May 19.
Signaling system. R. S. Ohl. 1,805,591; May 19.
Signaling system. R. K. Potter. 1,805,596; May 19.
Slicing machine. H. F. Koepf. 1,806,105; May 19.
Slotting and creasing machines, Slip-feed attachment for. T. S. Fitchett. 1,806 391; May 19.
Smelter. O. Potter. 1,805,554; May 19.
Snow, Apparatus for melting. R. L. Lloyd. 1,806,069; May 19.
Soap and soap products and stabilizing agent and process. H. A. Morton. 1,805,954; May 19.
Socket. H. M. Olsen. 1,805,783; May 19.
Soda product, Production of a concentrated caustic. C. Sundstrom and C. S. Lykes. 1,806,096; May 19.
Solutions, Apparatus for regulating the concentration of. J. A. Bolton. 1,806,536; May 19.
Sound reproducing diaphragm. G. G. Rockwell and C. L. Walters. 1,806,420; May 19.
Spark plug. B. A. Birdsall. 1,805,752; May 19.
Spear. G. A. Lowrey and W. F. Hall. 1,805,828; May 19.
Spectacle frame. N. M. Baker. Des. 84,176; May 19.
Speed control, System of. E. H. Horstkotte. 1,805,486; May 19.
Speed transmission mechanism. J. W. Batchelder. 1,806,440; May 19.
Spinning machines, Speed control apparatus for. H. Tanner. 1,806,098; May 19.
Spoon or similar article. A. H. Staf. Des. 84,223; May 19.
Spraying, Apparatus for. C. D. Collins. 1,806,192; May 19.
Spraying device. O. J. Mutschel. 1,806,112; May 19.
Spraying, System and apparatus for. J. A. Paasche. 1,806,265; May 19.
Spring cushion construction. W. B. Foster. 1,805,817; May 19.
Spring device. C. L. Ross. 1,805,600; May 19.
Stacker, Hay. D. H. Easterly. 1,806,243; May 19.
Stadia rod. H. R. Thornburgh. 1,805,605; May 19.
Stand: *See*—
Christmas tree stand.
Stand. A. B. Ramsperger. 1,805,674; May 19.
Starter mechanism. E. Fromm. 1,805,944; May 19.
Starting mechanism, Fluid pressure. T. J. Roberts. 1,806,083; May 19.
Steam generator. F. G. Farr and G. H. Didinger. 1,806,390; May 19.
Steam heating plant. A. Miersbe. 1,806,304; May 19.
Steering column construction. H. Marles. 1,806,172; May 19.
Steering device. A. Weiss. 1,806,136; May 19.
Steering mechanism. R. H. White. 1,805,536; May 19.
Stereoscopic impressions of moving picture images, Obtaining. N. Arfsten. 1,806,190; May 19.
Stoker. R. A. Foresman. 1,805,618; May 19.
Stoker. R. A. Foresman. 1,805,554; May 19.
Stoker, Automatic. A. I. Snow. 1,805,641; May 19.
Stop, Window shade. J. C. Stich. 1,806,378; May 19.
Stove, Gas. F. A. Gercich. 1,806,055; May 19.
Stove, Gas. A. J. Reedy. Des. 84,205; May 19.
Stoves, Air feed and vent device for closed top gas. G. Hammer, F. A. Gercinch, and W. S. Smith. 1,806,056; May 19.
Strip feeding mechanism. C. J. Fancher and R. A. Johnson. 1,806,154; May 19.
Stropper, Razor. J. E. Drew. 1,805,691; May 19.
Subsoil, Exploring the. R. Ambronn. 1,805,900; May 19.
Suction cleaner. J. B. Kirby. 1,806,168; May 19.
Suction cleaner. L. W. Pardee. 1,806,177; May 19.
Suction roll, Gearless. W. H. Millspaugh. 1,805,671; May 19.
Suction roll shell, Countersunk. W. H. Millspaugh. 1,805,780; May 19.
Superheater for water tube boilers. G. Bauer. 1,805,967; May 19.
Support, Adjustable insulator. F. A. Ciraolo and J. S. Basher. 1,806,575; May 19.
Support for electrically actuated fixtures. C. Kraft. 1,805,988; May 19.
Support, Shaft centering. L. C. Goad. 1,806,344; May 19.

Supporting bracket. R. Peterson. 1,805,784; May 19.
Surfaces, Apparatus for turning inclined. B. N. Wallis. 1,805,964; May 19.
Suspension. L. I. Shaw. 1,806,183; May 19.
Swings, Holding support for baby. E. O. Goudeau. 1,806,454; May 19.
Switch: *See*—
Electric switch. Safety switch.
Lock switch.
Switch, Means for indicating the position of a connecter. M. Schleicher and L. Brandenburger. 1,805,999; May 19.
Switch mechanism, Friction. G. H. Whittingham. 1,806,377; May 19.
Swivel coupling. H. W. Shonnard. 1,805,956; May 19.
Swivel hook. C. V. Koons. 1,806,469; May 19.
Table: *See*—
Folding table. Force table.
Tank cap and feed supply lock, Combination gas. T. S. Greer. 1,805,868; May 19.
Telegraph system. M. Compare. 1,805,867; May 19.
Telephone system. P. E. Gunning. 1,805,820; May 19.
Telephone system. C. E. Lomax. Re18,076; May 19.
Telephone system. R. L. Maurer. 1,806,546; May 19.
Telephone system. R. Mercer. 1,805,778; May 19.
Telephone system, Automatic. H. M. Friendly. 1,806,288; May 19.
Telephone system, Automatic. N. H. Saunders. 1,805,726; May 19.
Temperature regulator. J. V. Giesler. 1,806,530; May 19.
Tension controlling means for traveling offset webs. H. M. Barber. 1,806,140–1; May 19.
Tentering machine. H. A. MacKnight. 1,806,208; May 19.
Terminal construction for ignition coils. G. J. Lang, J. F. Drennan, and B. E. Schlesinger. 1,805,874; May 19.
Textile fabric. W. Kreielsheimer. Des. 84,196; May 19.
Thermal release device. E. Besag. 1,806,443; May 19.
Thioethers of the anthraquinone series, Production of. A. Luttringhaus. 1,805,916; May 19.
Thread milling machine. R. J. McLeod. 1,806,359; May 19.
Tie back for curtain draperies. R. M. Pickard. Des. 84,204; May 19.
Tie handle. C. P. Orr. 1,805,845; May 19.
Tire guard for automobiles. H. Victor. 1,805,933; May 19.
Tobacco for cigar bunches, Cutting filler. J. F. Halstead. 1,805,694; May 19.
Tong operating mechanism. A. E. Martois. 1,806,481; May 19.
Tong, Universal kitchen. K. Bauer and E. Kade. 1,806,441; May 19.
Tool cutting machine, Automatic. J. Pichler. 1,806,562; May 19.
Tool, Drilling. C. W. Metzger. 1,805,991; May 19.
Tool, Emery wheel dressing. C. De Mattia. 1,805,514; May 19.
Tool, Expanding reaming or cutter. S. L. Campbell and J. Grant. 1,805,806; May 19.
Tool, Fishing. J. G. Fitzpatrick. 1,805,815; May 19.
Tool, Hydrant. C. B. Green. 1,806,556; May 19.
Tool, Punching. W. S. Sawle. 1,806,266; May 19.
Tool, Valve seat reconstruction. F. O. Albertson. 1,806,189; May 19.
Top, Extensible desk. G. W. Schulz. 1,805,890; May 19.
Torpedo, Paravane. J. H. Hammond, jr. 1,806,346; May 19.
Tower construction. H. O. Hill. 1,806,459; May 19.
Toy. W. J. Gallagher. 1,806,053; May 19.
Toy, Display. H. O. Costello. 1,806,448; May 19.
Toy golf course. D. A. Valvano. Des. 84,224; May 19.
Toy gun, Vortex ring. G. J. Lejeune. 1,806,067; May 19.
Toy handcuff. T. J. Hoglund. 1,806,163; May 19.
Toy, Musical. A. F. Mirafuentes. 1,806,485; May 19.
Toy, Noise producing. W. J. Cipra. 1,805,566; May 19.
Tractor and trailer coupling. H. B. Strachan. 1,805,642; May 19.
Tractor supporting unit. J. S. Oechsle. 1,805,704; May 19.
Traffic controlling apparatus, Railway. C. S. Snavely. Re18,079; May 19.
Traffic controlling apparatus, Railway. A. J. Sorensen. 1,806,092; May 19.
Traffic controlling apparatus, Railway. C. F. Stoltz. 1,805,531; May 19.
Traffic controlling apparatus, Railway. A. R. Whitehorn. 1,805,747; May 19.
Traffic light, Safety. C. F. Springfels. 1,806,126; May 19.
Train control device. J. N. Good. 1,805,621; May 19.
Train control system. P. X. Rice. 1,806,500; May 19.
Train pipe coupling. T. H. Thomas. 1,805,647; May 19.
Transfer means for mine cars. E. M. Hawkins. 1,805,910; May 19.
Transfer mechanism. Z. P. Candee. 1,805,976; May 19.
Transformer. W. A. Mudge and C. G. Bieber. 1,806,408; May 19.
Transformer, Rotary frequency. P. E. Bunet. 1,806,386; May 19.
Transmission. A. M. Saari. 1,806,505; May 19.
Transmission lifting device, Automobile. F. R. Beal. 1,806,033; May 19.
Transmission line device. N. A. Wahlberg. 1,806,321; May 19.
Transmission, Variable. C. J. Langley and W. F. O'Gorman. 1,805,523; May 19.
Tread. D. Roe. 1,806,084; May 19.
Trimmer: *See*—
Hedge trimmer.
Trolley guide. R. R. Holden. 1,806,164; May 19.
Truck body, Metallic. S. E. Travis, jr. 1,806,428; May 19.
Truck, Steel. D. W. Voorhees, jr. 1,806,271; May 19.
Tub. J. Barta. 1,805,560; May 19.
Tube: *See*—
Audion tube. X-ray tube.
Tube apparatus, Speaking. J. M. Clifford. 1,805,465; May 19.
Tube coupling. H. D. Hukill. 1,805,666; May 19.
Tube welding furnace. J. M. Staude. 1,806,028; May 19.
Tubes, Apparatus for cleaning. N. Thompson. 1,806,270; May 19.
Tubular articles, Method of and apparatus for producing. G. L. Rock. 1,806,119; May 19.
Tumbling machine. A. Ensslin. 1,806,194; May 19.
Turbine apparatus, Steam. K. Frey. 1,806,065; May 19.
Turbulence arrester. W. V. Thompson. 1,806,101; May 19.
Typewriting machine. F. U. Conard. 1,805,685; May 19.
Typewriting machine. F. A. Hart. 1,806,200; May 19.
Typewriting machine. H. Resch. 1,806,082; May 19.
Typographical machine. L. W. Willis. 1,806,514; May 19.
Umbrella. R. A. Teel. 1,805,745; May 19.
Underframe for truck bodies. S. E. Travis, jr. 1,806,429; May 19.
Unloader, Pole. C. A. Jordan and C. C. Coon. 1,805,872; May 19.
Upright construction. L. I Beckwith 1,805,731; May 19.
Utensil handle, Detachable cooking. E. E. Drumm. Re18,069; May 19.
Vacuum cleaners and the like, Equipment for electric. H. W. Holmes. 1,806,461; May 19.
Vacuum tube light, Duplex. R. C. Smalley. 1,806,507; May 19.
Valve. P. S. Russel. 1,806,565; May 19.
Valve actuating mechanism. C. C. Williams. 1,806,229–31; May 19.
Valve and faucet, Compression. E. J. Hentschel and S. E. Miller. 1,806,397; May 19.
Valve, Automatic check. I. D. Smith. 1,805,603; May 19.
Valve, Brake pipe cut off. T. H. Thomas. 1,805,646; May 19.
Valve cylinder cap, Triple. C. C. Farmer. 1,805,658; May 19.
Valve for rock drills. C. C. Hansen. 1,805,695; May 19.
Valve for volatile liquids, Check. G. W. Collins. 1,805,480; May 19
Valve, Gas. R. C. Hopkins. 1,806,462; May 19.
Valve, Liquid dispensing. T. L. Titus. 1,805,790; May 19
Valve mechanism for fluid pressure tools. G. M. Nell. 1,805,921; May 19.
Valve mechanism oil jacket. C. Coulombe. 1,805,807; May 19.
Valve, Metering. F. G. Eckstine. 1,805,733; May 19.
Valve operating mechanism. E. A. Rockwell. 1,806,220; May 19.
Valve operating mechanism of internal combustion engines. J. and J. H. S. Gardiner. 1,805,578; May 19.
Valve, Pressure controlled. J. Le Valley. 1,806,301; May 19.
Valve, Pressure gauging Tire. F. G. Arnold. 1,806,380; May 19.
Valve, Reducing. H. J. Mastenbrook. 1,805,702; May 19.
Valve, Rotary. E. W. Griffith. 1,806,016; May 19.
Valve, Steam. W. W. Carson, jr. 1,806,447; May 19.
Valve structure. A. C. and W. H. McIntyre. 1,805,777; May 19.
Valve, Thermostatic. E. J. Levy. 1,806,072; May 19.
Valves, Operating mechanism for. R. W. Mueller. 1,806,305; May 19.
Vanity case. J. L. McAtree. 1,806,303; May 19.
Vaporizer. C. F. Rubsam. 1,805,844; May 19.
Vaporizing device for treating asthma. J. D. Gibson. 1,806,453; May 19.
Vault and safe construction. J. W. Young. 1,805,610; May 19.
Vehicle. J. E. Dunlap. 1,806,337; May 19.
Vehicle. H. A. Knox. 1,805,771; May 19.
Vehicle body. A. G. Kerr and D. Merchant. 1,805,489; May 19.
Vehicle body. J. A. A. de Viscaya. 1,806,523; May 19.
Vehicle jack. F. Angelillo. 1,805,508; May 19.
Vehicle, Motor. J. T. Sullivan. 1,806,095; May 19.
Vehicle towing device. F. Hanses. 1,805,822; May 19.
Vehicle, Trailer. A. B. Cadman. 1,806,191; May 19.
Vehicle wheel. C. G. Fawkes. 1,805,574; May 19.
Vehicles, Apparatus responsive to the passage of railway. P. N. Bossart. 1,806,039; May 19.
Vehicles, Apparatus responsive to the passage of railway. A. J. Sorensen. 1,806,093; May 19.
Vehicles, Automatic controlling system for motor. B. F. Wooding. 1,806,011; May 19.
Vending machine, Coin controlled. F. L. Mills. 1,805,837; May 19.
Vending machine, Target practice. F. L. Mills. 1,805,838; May 19.

Veneer taping machine. A. A. Dennis. 1,805,907; May 19.
Ventilating system for projecting rooms. B. Goldman. 1,805,620; May 19.
Ventilation, Crankcase. H. G. Kamrath. 1,806,543; May 19.
Ventilator: *See*—
Sash ventilator.
Vest and trousers, Combined. S. Goldstein. Des. 84,190; May 19.
Vibrating apparatus. L. S. Chadwick. 1,805,758; May 19.
Vibrator for molds and dental flasks. E. Briggs. 1,805,970; May 19.
Vise, Clamping. P. Eisemann. 1,806,527; May 19.
Vitamine preparations, Producing. A. W. Owe. 1,805,593; May 19.
Waffle iron. B. M. Fromknecht. 1,806,196; May 19.
Wall board edge, Reenforced and protected. G. A. New. 1,805,840; May 19.
Wall plate for lighting fixtures. R. M. Pickard. Des. 84,203; May 19.
Washing machine. C. C. Batina. 1,805,862; May 19.
Washing machine. B. E. Getz. 1,806,289; May 19.
Washing machine. G. Webb. 1,805,558; May 19.
Washing machine casing and support therefor, Combined. L. B. Green. Des. 84,219; May 19.
Watch spring strap, Wrist. R. B. Barton. 1,806,439; May 19.
Water craft, Propelling. A. M. Pratt. 1,805,597; May 19.
Water filtration, Method of and apparatus for. A. P. Miller. 1,805,993; May 19.
Water heater. W. Witzler and P. F. G. Güth. 1,806,378; May 19.
Water treatment device. H. N. Jenks. 1,805,667; May 19.
Wave oscillator, Short. A. Esau. 1,806,245; May 19.
Weatherstrip, Automatically actuated. E. J. Chandler. 1,805,512; May 19.
Weather stripping. L. F. Julien. 1,806,018; May 19.
Welding, Electric. J. F. Lawson. 1,805,549; May 19.
Welding, Method of and apparatus for. C. T. Siebs. 1,806,121; May 19.
Well bit. J. C. Wright and L. F. Bonney. 1,805,898; May 19.
Well drilling bit. J. C. Wright. 1,805,899; May 19.
Well holes, Adjusting. A. G. H. Straatman. 1,806,509; May 19.
Wells, Facilitating flow from. L. Ranney and C. O. Fairbank. 1,806,499; May 19.
Wheel: *See*—
Abrasive wheel. Vehicle wheel.
Wheel testing apparatus, Grinding. H. G. Weinland. 1,805,896; May 19.
Wheel with swivel spoke, Steering. H. D. Geyer. 1,806,343; May 19.
Wheels, Making wire spoked. J. H. Wagenhorst. 1,806,227; May 19.
Winding machine. O. R. Haas. 1,805,544; May 19.
Winding machine attachment. L. F. Phelan. 1,805,595; May 19.
Window curtain hanger. J. Witteman. 1,805,793; May 19.
Windshield cleaner. R. M. Critchfield. 1,806,336; May 19.
Wiper, Windshield. R. M. Critchfield. 1,806,335; May 19.
Wire reel carrier. J. Bodnar. 1,805,564; May 19.
Wire reeling attachment. W. C. Saunders. 1,805,636; May 19.
Wrapper tabbing mechanism. E. G. Rider. 1,806,181; May 19.
Wrapping machines, Paper feed for. F. R. Schmitt. 1,805,677; May 19.
Wrench: *See*—
Pipe wrench.
Wringer frame. E. J. Schuda. 1,805,557; May 19.
Wringing machine. S. C. Lawlor. 1,805,774; May 19.
Wood product and producing the same. C. B. Lipman and A. Gordon. 1,805,550; May 19.
Woodworking machinery, Scrap removing device for. C. F. Streit and G. J. Kuehnle. 1,805,856; May 19.
Wrench. E. F. Pawsat. 1,805,884; May 19.
X-ray tube. J. B. Wantz. 1,805,503; May 19.

CLASSIFICATION OF PATENTS

ISSUED MAY 19, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

A/S Arendal Smelteverk, Eydehaven, near Arendal, Norway. Silicium carbide, and abrasive and polishing articles manufactured therefrom. 283,417; May 26; Serial No. 309,841; published Mar. 10, 1931. Class 4.

Action Color Poster Co. (See Comfort, Hosmer H.)

Adams, Charles, New Kensington, Pa. Maltless beverages, sirups and extracts for making the same. 283,379; May 26; Serial No. 310,906; published Mar. 17, 1931. Class 45.

Amend, Fred W., Co., Chicago, Ill. Candy. 283,466; May 26; Serial No. 298,367; published Mar. 10, 1931. Class 46.

American Automobile Association, Inc., Washington, D. C. Illustrated monthly. 283,367; May 26; Serial No. 310,198; published Mar. 10, 1931. Class 38.

American Federation of Labor, Washington, D. C. Books, magazines, pamphlets, and circulars. 283,400; May 26; Serial No. 309,580; published Mar. 10, 1931. Class 38.

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American Sales Book Company, Limited, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y. Paper and stationery. 283,343; May 26; Serial No. 309,954; published Mar. 3, 1931. Class 37.

Anderson, Neva C., Jamestown, N. Y. Girdles, corsets, and brassières. 283,475; May 26; Serial No. 294,839; published Mar. 10, 1931. Class 39.

Andrews, Marshall C., doing business as Andrews Remedy Co., Lakewood, Ohio. Cough medicine. 283,334; May 26; Serial No. 309,495; published Mar. 3, 1931. Class 6.

Angle, Don D., doing business as Don D. Angle Welders Supply Company, Los Angeles, Calif. Alloy metals. 283,314; May 26; Serial No. 306,164; published Mar. 10, 1931. Class 14.

Arundel Trucking Co., Inc., Baltimore, Md. Fertilizers. 283,331; May 26; Serial No. 309,456; published Mar. 10, 1931. Class 10.

Athens Flooring Company, The, Athens, Ohio. Wood flooring. 283,483; May 26. Class 12.

Atkins, E. C., & Company, Indianapolis, Ind.; Memphis, Tenn.; Minneapolis, Minn.; Atlanta, Ga.; and Portland, Oreg., to E. C. Atkins & Company, Indianapolis, Ind. Saws. 36,347; renewed Apr. 30, 1931.

Atkinson, Fenlon Co. Inc., New York, N. Y. Cotton, linen, chintz, and cretonne fabrics. 283,508; May 26. Class 42.

Atlantic Mills, The, Olneyville and Providence, R. I., and Stottville, N. Y. All-wool coating fabric. 283,464; May 26; Serial No. 299,038; published Dec. 23, 1930. Class 42.

Ault & Wiborg Co., The, assignor, by mesne assignments, to The Ault & Wiborg Varnish Works, Inc., Cincinnati, Ohio. Varnish paint. 81,773; renewed May 9, 1931.

Babigian, Bagdasar, New York, N. Y. Medicinal compound. 283,376; May 26; Serial No. 310,043; published Mar. 3, 1931. Class 6.

Bader-Vaden-Parks Company, Tulsa, Okla. Sausage seasoning. 283,412; May 26; Serial No. 309,795; published Mar. 10, 1931. Class 46.

Baltic-American Feed Corporation, New York, N. Y. Feed for cattle. 283,342; May 26; Serial No. 309,955; published Mar. 10, 1931. Class 46.

Baltimore Butterine Company, The, Baltimore, Md. Pickle relish, salad oils, butter, etc. 283,458; May 26; Serial No. 307,408; published Mar. 10, 1931. Class 46.

Baltimore Concrete Products Co., The, Baltimore, Md. Concrete building blocks. 283,307; May 26; Serial No. 306,522; published Mar. 3, 1931. Class 12.

Beckman-Dawson Roofing Company, Chicago, Ill. Shingles and roofing. 283,480; May 26. Class 12.

Bendiner & Schlesinger, Inc., New York, N. Y. Preparation for the relief of menstrual pain and discomfort. 283,341; May 26; Serial No. 309,962; published Mar. 3, 1931. Class 6.

Berg, Joseph, New York, N. Y. Check books, account books, and ledgers. 283,363; May 26; Serial No. 310,280; published Mar. 3, 1931. Class 37.

Berkshire Knitting Mills, Wyomissing, Pa. Hosiery. 283,442; May 26; Serial No. 308,849; published Mar. 3, 1931. Class 39.

Bernhard, Robert A., Rochester, N. Y. Medicines and tinctures. 283,514; May 26. Class 6.

Bernstein, Sam, & Co., Inc., Camden, N. J. Chamois. 283,405; May 26; Serial No. 309,657; published Mar. 10, 1931. Class 1.

Birner, Philip, doing business as Del Vino Grape Products Co., Brooklyn, N. Y. Grape juice. 283,381; May 26; Serial No. 310,793; published Mar. 17, 1931. Class 45.

Bloomfield, J., & Co., Inc., New York, N. Y. Ladies' hats. 283,504; May 26. Class 39.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 283,335; May 26; Serial No. 309,502; published Mar. 3, 1931. Class 42.

Boettiger, Louis A., Co., New York, N. Y. Baby teething rings. 283,352; May 26; Serial No. 309,881; published Mar. 10, 1931. Class 44.

Bohan, Joseph H., doing business as The Teleframe Company, Chicago, Ill. Signs or display cards and colored cards. 283,441; May 26; Serial No. 308,852; published Mar. 10, 1931. Class 38.

Brainard Steel Corporation, Warren, Ohio. Tools. 283,510; May 26. Class 23.

Brandler, Joseph B., New York, N. Y. Pile fabrics. 283,494; May 26. Class 42.

Bright Biscuit Co., Kansas City, Mo. Crackers and cakes. 283,328; May 26; Serial No. 309,373; published Mar. 10, 1931. Class 46.

Brillat Bros., Jersey City, N. J. Maltless beverage. 283,452; May 26; Serial No. 308,239; published Mar. 17, 1931. Class 45.

Brown & Bigelow, St. Paul, Minn. Etchings, printed etchings, greeting cards, etc. 283,431; May 26; Serial No. 302,669; published Mar. 10, 1931. Class 38.

Bruno, Philip, doing business as Westchester Pharmacal Co., Tuckahoe, N. Y. Antiseptic dentifrice, mouth wash, and gargle. 283,304; May 26; Serial No. 307,090; published Dec. 9, 1930. Class 6.

Buchwald, Martin, New York, N. Y. Shampoo. 283,347; May 26; Serial No. 309,919; published Mar. 3, 1931. Class 6.

Butler Paper Corporations, Chicago, Ill. Paper. 283,488; May 26. Class 37.

Byer-Rolnick Company, Dallas, Tex. Hats. 283,454; May 26; Serial No. 307,797; published Mar. 10, 1931. Class 39.

Caromount Mills, Inc., Rocky Mount, N. C., and New York, N. Y. Pile fabrics. 283,369; May 26; Serial No. 310,161; published Mar. 3, 1931. Class 42.

Carter, Garnet, doing business as Fairyland Manufacturing Co., Chattanooga, Tenn. Materials for constructing miniature golf courses and apparatus for use in connection therewith. 283,428; May 26; Serial No. 303,143; published Aug. 19, 1930. Class 22.

Carter, J. W., Company, Nashville, Tenn. Boots, shoes, and slippers. 283,489; May 26. Class 39.

Chase & Company, Jacksonville, to Chase & Company, Sanford, Fla., successor. Oranges, lemons, grape-fruit, tangerines, and limes. 83,223; renewed Aug. 29, 1931.

Cheney Lime & Cement Company, Birmingham, Ala. Masonry cement. 283,506; May 26. Class 12.

Clarkson, Inc., Suffern, N. Y. Astringent, bandoline, bay rum, camphor ice, etc. 283,484; May 26. Class 6.

Clay Products Company, Inc. of Indiana, Brazil, Ind. House organ. 283,336; May 26; Serial No. 309,512; published Mar. 10, 1931. Class 38.

Cohen, Goldman & Co. Inc., New York, N. Y. Outer garments, shirts, and uppers for shoes. 283,320; May 26; Serial No. 309,165; published Mar. 10, 1931. Class 39.

Colorado Fuel and Iron Company, The, Denver, Colo. Coal. 283,393; May 26; Serial No. 310,442; published Mar. 10, 1931. Class 1.

Columbian Rope Company, Auburn, N. Y. Manila and sisal rope. 83,717; renewed Oct. 10, 1931.

Comfort, Hosmer H., doing business as Action Color Poster Co., Stockton, Calif. Posters, windshield stickers, and admission tickets. 283,378; May 26; Serial No. 310,011; published Mar. 10, 1931. Class 38.

Connecticut Macaroni Factory. (See Muro, Generoso.)

Continental Baking Company, Wilmington, Del., and New York, N. Y. Cake. 283,406; May 26; Serial No. 309,677; published Mar. 10, 1931. Class 46.

Continental Grocery Corporation, Limited, Denver, Colo. Weekly publication. 283,392; May 26; Serial No. 310,444; published Mar. 10, 1931. Class 38.

Continental Paper & Bag Corporation, New York, N. Y. Food wrappers. 283,351; May 26; Serial No. 309,885; published Mar. 3, 1931. Class 37.

Cotton Trade Journal, Inc., New Orleans, La. Periodical. 283,413; May 26; Serial No. 309,806; published Feb. 24, 1931. Class 38.

Cottonsticks Company. (See Thompson, George E.)

Cranberry Canners, Inc. (See Ocean Spray Preserving Company, assignor.)

Crescent Fire Arms Co., The, Norwich, Conn. Guns. 283,512; May 26. Class 9.

Crowell Publishing Company, The, New York, N. Y. Column or heading. 283,319; May 26; Serial No. 309,066; published Mar. 3, 1931. Class 38.

Cuyahoga Newspapers Inc., Cleveland, Ohio. Newspapers. 283,414; May 26; Serial No. 309,807; published Feb. 24, 1931. Class 38.

Dade City Packing Company, Dade City, Fla. Fresh citrus fruits. 283,467; May 26; Serial No. 298,082; published Mar. 10, 1931. Class 46.

Darco Sales Corporation, New York, N. Y. Adsorptive carbons and carbonaceous materials. 283,332; May 26; Serial No. 309,462; published Mar. 17, 1931. Class 31.

Davies, Thomas, Conway, Wales. Ointment for burns, cuts, etc. 283,299; May 26; Serial No. 307,311; published Feb. 17, 1931. Class 6.

Dayton Dry Goods Co., by change of name to The Dayton Company, Minneapolis, Minn. Cotton long cloth. 75,359; renewed Sept. 28, 1929.

De Land, C. M., New York, N. Y. Woolen piece goods (tweeds). 283,499; May 26. Class 42.
Del Vino Grape Products Co. (See Birner, Philip.)
Dickinson, Albert, Company, The, Chicago, Ill. Pop corn. 283,322; May 26; Serial No. 309,265; published Mar. 10, 1931. Class 46.
Drug Products Co., Inc., The, Long Island City, N. Y. Skin lotion. 283,474; May 26; Serial No. 295,935; published Apr. 8, 1930. Class 6.
Easley Cotton Mills, Easley and Greenville, S. C. Sheetings and drills. 36,511; renewed June 4, 1931.
Eastern Aniline Co. (See Speare's, Alden, Sons Co., The.)
Eaton Paper Company, The, Adams, Mass. Writing paper. 283,375; May 26; Serial No. 310,048; published Mar. 3, 1931. Class 37.
Elgin American Manufacturing Co., Elgin, Ill. Toilet sets and traveling-bag fittings. 283,397; May 26; Serial No. 310,369; published Mar. 3, 1931. Class 40.
Elliott Works, Inc., Des Moines, Iowa. Storage-battery-electrolyte compound. 283,456; May 26; Serial No. 307,712; published Mar. 3, 1931. Class 6.
Enid Manufacturing Co. Inc., New York, N. Y. Brassières, garter belts, and girdles. 283,503; May 26. Class 39.
Estes, J. Edmund, Fall River, Mass. Mops and mop heads and mop yarn. 283,446; May 26; Serial No. 308,686; published Mar. 10, 1931. Class 29.
Etna Watch Company, New York, N. Y. Time recorders, clocks, watches. 283,511; May 26. Class 27.
Ettl Studios, Incorporated, New York, N. Y. Modeling clay. 283,350; May 26; Serial No. 309,890; published Mar. 10, 1931. Class 1.
Fairmont Aluminum Company, Fairmont, W. Va. Aluminum. 283,419; May 26; Serial No. 304,858; published Mar. 10, 1931. Class 14.
Fairyland Manufacturing Co. (See Carter, Garnet.)
Fawcett Publications, Inc., Minneapolis, Minn. Magazines published every month. 283,416; May 26; Serial No. 309,835; published Feb. 24, 1931. Class 38.
Federated Business Publications, Inc., New York, N. Y. Monthly printed periodical or trade paper. 283,382; May 26; Serial No. 310,640; published Mar. 10, 1931. Class 38.
Fender Mayonnaise Company, Jacksonville, Fla. Mayonnaise, sandwich spread, olive relish, etc. 283,445; May 26; Serial No. 308,728; published Mar. 10, 1931. Class 46.
Fidalgo Island Packing Company, Anacortes, Wash. Canned salmon. 283,361–2; May 26; Serial Nos. 310,334–5; published Mar. 10, 1931. Class 46.
Fields Food Products Co. (See Schoenfield, Milton H.)
Fort Atkinson News, Inc., Fort Atkinson, Wis. Periodical publication. 283,312; May 26; Serial No. 306,298; published Mar. 3, 1931. Class 38.
Fru't Dealer Publishing Company, The, Philadelphia, Pa. Periodicals. 283,411; May 26; Serial No. 309,773; published Feb. 24, 1931. Class 38.
Füllemann, Adolf, Goldau, Canton of Schwyz, Switzerland. Dry fire extinguisher. 283,323; May 26; Serial No. 309,267; published Mar. 3, 1931. Class 6.
Gantt, Incorporated, Chicago, Ill. Candies, ice cream, and salad dressings. 283,418; May 26; Serial No. 309,853; published Mar. 10, 1931. Class 46.
General Cigar Co., Inc., New York, N. Y. Cigars. 283,308; May 26; Serial No. 306,477; published Jan. 27, 1931. Class 17.
General Register Corporation, Brooklyn, N. Y. Ticket-issuing machines, ticket printing and issuing machines, and ticket-punching machines and parts thereof. 283,339–40; May 26; Serial Nos. 309,971–2; published Mar. 10, 1931. Class 23.
General Tanning Corporation, The, Irvington, N. J. Belting butts, lace leather, mill strapping, and apron leather. 283,460; May 26; Serial No. 299,775; published Oct. 28, 1930. Class 1.
George, Thomas, Johnson City, Tenn. Ice-cream confection. 283,409; May 26; Serial No. 309,732; published Mar. 10, 1931. Class 46.
Georgia-Kincaid Mills, The, Griffin, Ga. Cotton goods. 283,349; May 26; Serial No. 309,892; published Mar. 3, 1931. Class 42.
Gerli, F., & Company, Inc., New York, N. Y. Raw silk. 283,329; May 26; Serial No. 309,378; published Mar. 10, 1931. Class 1.
Gernsback, Hugo, New York, N. Y. Publication. 283,403; May 26; Serial No. 309,639; published Feb. 24, 1931. Class 38.
Godissart's Parfum Classique Francais, Inc., Hollywood, Calif. Face cream, brilliantine, dentifrice, etc. 283,500; May 26. Class 6.
Golf Shaft & Block Company, Memphis, Tenn. Dimension stock and turnings of hickory, persimmon, dogwood, and other woods. 283,366; May 26; Serial No. 310,253; published Mar. 10, 1931. Class 1.
Good Story Magazine Company, Inc., New York, N. Y. Magazine. 283,432–4; May 26; Serial Nos. 301,901–3; published Mar. 10, 1931. Class 38.
Gordon Hollow Blast Grate Company, The, to R. J. Tower Iron Works, Inc., doing business as The Gordon Hollow Blast Grate Company, Greenville, Mich., successor. Grates. 83,405; renewed Sept. 12, 1931.
Graffin, Samuel W., White Plains, N. Y. Monthly publications. 283,337; May 26; Serial No. 309,519; published Mar. 3, 1931. Class 38.
Grafo Pencil Company, Ltd., Ceske Budejovice, Czechoslovakia. Lead and copying pencils. 283,471; May 26; Serial No. 297,073; published Apr. 29, 1930. Class 37.
Grand Rapids Plaster Company Grand Rapids, Mich. Plaster. 283,410; May 26; Serial No. 309,734; published Mar. 3, 1931. Class 12.
Gulf Fertilizer Company, The, Tampa, Fla. Fertilizer. 283,391; May 26; Serial No. 309,474; published Mar. 10, 1931. Class 10.
Guth, Stern & Co., Inc., New York, N. Y. Mechanical razor-blade sharpeners. 283,374; May 26; Serial No. 310,051; published Mar. 10, 1931. Class 23.
Hall & McChesney, Inc., Syracuse, N. Y. Indexes for books. 283,402; May 26; Serial No. 309,614; published Mar. 3, 1931. Class 37.
Harbor Plywood Corporation, Hoquiam, Wash. Plywood. 283,513; May 26. Class 12.
Heinn Company, The, Milwaukee, Wis. Loose leaf book binders. 283,486; May 26. Class 37.
Heister, Louis, Company, The, Cincinnati, Ohio. Sterile medicinal solutions for hypodermatic uses. 283,311; May 26; Serial No. 306,398; published Mar. 3, 1931. Class 6.
Helwith, Alfred L., & Co., Inc., New York, N. Y. Broadcloth. 283,505; May 26. Class 42.
Hendrix & Company, Hollywood, Fla. Frozen sherbets and frozen fruit juices. 283,333; May 26; Serial No. 309,475; published Mar. 10, 1931. Class 46.
Hitt Fireworks Co., Seattle, Wash. Exploding and chromatic daylight fireworks. 283,380; May 26; Serial No. 310,827; published Mar. 17, 1931. Class 9.
Home Products Co., Springfield, Mass. Malt syrup. 283,427; May 26; Serial No. 303,183; published Sept. 2, 1930. Class 46.
Horlick's Malted Milk Corporation, Racine, Wis. Malted milk. 283,451; May 26; Serial No. 308,369; published Mar. 10, 1931. Class 46.
Horowitz, A., & Sons, Inc., New York, N. Y. Fur trimmings for wearing apparel. 283,440; May 26; Serial No. 308,939; published Mar. 10, 1931. Class 40.
Houbigant, Inc., New York, N. Y. Perfumes, toilet water, face powder, etc. 283,357–8; May 26; Serial Nos. 309,855–6; published Mar. 3, 1931. Class 6.
Hoyt's Brothers, Inc., Newark, N. J. Rose disinfectant, insecticides, disinfectants, etc. 283,477; May 26; Serial No. 290,837; published Dec. 3, 1929. Class 6.
Huntington Shoe and Leather Co., Huntington, Ind. Shoes. 283,305; May 26; Serial No. 307,052; published Feb. 24, 1931. Class 39.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Artificial textile fibres. 283,309; May 26; Serial No. 306,445; published Mar. 10, 1931. Class 1.
Illustrated News Service, Inc., New York, N. Y. Photographs and photographic prints. 283,482; May 26. Class 38.
Industrial Chemical Sales Company, Inc., New York, N. Y. Chemical preparations. 283,368; May 26; Serial No. 310,169; published Mar. 3, 1931. Class 6.
International Chemical Company, Chicago, Ill. Preservative and finish. 283,318; May 26; Serial No. 305,006; published Nov. 4, 1930. Class 16.
International Paper Company, New York, N. Y. Paper. 283,364; May 26; Serial No. 310,256; published Mar. 3, 1931. Class 37.
International Paper Company, New York, N. Y. Paper used in the printing art. 283,365; May 26; Serial No. 310,255; published Mar. 3, 1931. Class 37.
James-United, Inc., Los Angeles, Calif. Photographic prints. 283,436; May 26; Serial No. 301,267; published Feb. 24, 1931. Class 38.
Junior Achievement Incorporated, Springfield, Mass. Book ends, stationery racks, door stops, etc. 283,453; May 26; Serial No. 307,849; published Mar. 10, 1931. Class 32.
Keller, Oscar D., Elizabeth, La. Ice. 283,390; May 26; Serial No. 310,479; published Mar. 10, 1931. Class 1.
Kimberly-Clark Corporation, Neenah, Wis. Cover papers. 283,327; May 26; Serial No. 309,312; published Mar. 3, 1931. Class 37.
Korfund Company, Inc., The, New York, N. Y. Machinery vibration absorber. 283,300; May 26; Serial No. 307,165; published Mar. 10, 1931. Class 23.
Korfund Company, Inc., New York, N. Y. Publications. 283,301; May 26; Serial No. 307,164; published Mar. 10, 1931. Class 38.
Lambert Pharmacal Company, Wilmington, Del. Toothbrushes. 283,373; May 26; Serial No. 310,054; published Mar. 3, 1931. Class 29.
Lanman & Kemp, assignor to Lanman & Kemp, Inc., New York, N. Y. Salve or ointment of witch-hazel. 83,748; renewed Oct. 10, 1931.
La Resista Corset Company, The, Bridgeport, Conn. Ladies' corsets, girdles, bandeaux, etc. 283,465; May 26; Serial No. 298,707; published Oct. 28, 1930. Class 39.
Leeds & Northrup Company, Philadelphia, Pa. Enclosing envelopes for heat-responsive elements of electrical pyrometers. 283,423; May 26; Serial No. 304,147; published Mar. 10, 1931. Class 26.
Lever Brothers Company. (See Zog, Ltd., assignor.)
Life Publishing Company, New York, N. Y. Publication. 283,356; May 26; Serial No. 309,863; published Mar. 10, 1931. Class 38.

Limoges China Company, The, Sebring, Ohio. Porcelain and semiporcelain dishes and tableware. 283,497; May 26. Class 30.
Locktite Co., Inc., The, Gloversville, N. Y. Ladies' hand bags and purses. 283,355; May 26; Serial No. 309,864; published Mar. 10, 1931. Class 3.
Longview Lime Works, Longview, Ala. Agricultural lime. 283,430; May 26; Serial No. 302,784; published Mar. 10, 1931. Class 10.
May Oil Burner Corporation, Baltimore, Md. Advertising device. 283,450; May 26; Serial No. 308,552; published Mar. 10, 1931. Class 50.
Mayer, Oscar, & Co. Inc., doing business as Oscar Mayer's, Chicago, Ill. Bacon. 283,472; May 26; Serial No. 296,228; published Mar. 10, 1931. Class 46.
McFadden Publications, Inc., New York, N. Y. Monthly magazine. 283,338; May 26; Serial No. 309,527; published Mar. 3, 1931. Class 38.
McFadden Publications, Inc., New York, N. Y. Monthly magazine. 283,395–6; May 26; Serial Nos. 310,393–4; published Mar. 10, 1931. Class 38.
McGarrahan, John F., assignor to National Protex Company, Inc., Brookfield, Ill. Polish for automobiles, furniture, etc. 283,330; May 26; Serial No. 309,438; published Mar. 3, 1931. Class 16.
McKee Glass Company, Jeannette, Pa. Automobile lamp lenses. 283,509; May 26. Class 33.
Mente & Co., Inc., New Orleans, La. Jute bagging. 283,415; May 26; Serial No. 309,826; published Feb. 24, 1931. Class 42.
Merchants Refrigerating Co. (See Publishers Printing Company, assignor.)
Milcor Steel Company. (See Milwaukee Corrugating Company, assignor.)
Milwaukee Corrugating Company, assignor to Milcor Steel Company, Milwaukee, Wis. Metal lathing. 283,481; May 26. Class 12.
Mindlin, Morris, doing business as Vigorin Manufacturing Co., New York, N. Y. Hairdressing. 283,404; May 26; Serial No. 309,649; published Mar. 3, 1931. Class 6.
Motion Picture Daily, Inc., New York, N. Y. Daily periodical. 283,389; May 26; Serial No. 310,484; published Mar. 10, 1931. Class 38.
Muro, Generoso, doing business as Connecticut Macaroni Factory, New Haven, Conn. Macaroni, spaghetti, and other alimentary paste products. 283,473; May 26; Serial No. 295,951; published Mar. 10, 1931. Class 46.
National Protex Company, Inc. (See McGarrahan, John F., assignor.)
Nature's Laboratory Products Company. (See Stone, Irving.)
Naugatuck Chemical Company, The, New York, N. Y. Condensation product of acetone and diphenylamine. 283,324; May 26; Serial No. 309,277; published Mar. 10, 1931. Class 1.
Naugatuck Chemical Company, The, New York, N. Y. Condensation product of acetaldehyde and aniline in an acid medium. 283,325; May 26; Serial No. 309,280; published Mar. 10, 1931. Class 1.
Naugatuck Chemical Company, The, New York, N. Y. Chlorinated rubber varnish. 283,326; May 26; Serial No. 309,283; published Mar. 10, 1931. Class 16.
Neustadter Brothers, San Francisco, Calif. Men's and boys' coats, jerkins, vests, blouses, etc. 283,316; May 26; Serial No. 305,238; published Mar. 3, 1931. Class 39.
Northrup Glove M'fg. Co., to Albert Rosenthal, doing business as Northrup Glove Mfg. Co., Johnstown, N. Y., successor. Gloves and mittens. 81,288; renewed Mar. 21, 1931.
No-Snore Company, The, Cincinnati, Ohio. Preparation for eliminating snoring. 283,502; May 26. Class 6.
Nu-Trine Co., Hollywood, Calif. Bird foods. 283,421; May 26; Serial No. 304,734; published Mar. 10, 1931. Class 46.
Ocean Spray Preserving Company, South Hanson, Mass., assignor to Cranberry Canners, Inc. Fresh apples, apple sauce, and canned cranberries. 283,437; May 26; Serial No. 301,198; published Mar. 10, 1931. Class 46.
Ocean Spray Preserving Company, South Hanson, Mass., assignor to Cranberry Canners, Inc. Canned cranberries. 283,438; May 26; Serial No. 301,195; published Mar. 10, 1931. Class 46.
Ouerbacker Coffee Company, The, Louisville, Ky. Spices and rice. 83,179; renewed Aug. 22, 1931.
Peters Manufacturing Co., Boston, Mass., to Peters Manufacturing Co., Wollaston, Mass. Cotton and woolen cloth in the piece. 81,624; renewed Apr. 25, 1931.
Pinaud Incorporated, New York, N. Y. Perfume, toilet water, rouge, etc. 283,479; May 26; Serial No. 287,201; published Oct. 1, 1929. Class 6.
Planters Cotton Oil & Fertilizer Co., Rocky Mount, N. C. Fertilizer. 283,498; May 26. Class 10.
Plomo Specialty Mfg. Co., The, Cleveland, Ohio. Liquid power belt dressing compound. 83,354; renewed Sept. 5, 1931.
Pocono Rubber Cloth Co., The, Trenton, N. J. Coated textile fabric. 283,372; May 26; Serial No. 310,070; published Mar. 10, 1931. Class 50.
Pollak, Henry, Inc., New York, N. Y. Straw braids or plaits designed for the manufacture of hats. 283,302–3; May 26; Serial Nos. 307,105–6; published Mar. 10, 1931. Class 40.
Polyphase Corporation, New York, N. Y. Crackers. 283,408; May 26; Serial No. 309,714; published Mar. 10, 1931. Class 46.
Publishers Printing Company, assignor to Merchants Refrigerating Co., New York, N. Y. Periodical publication. 283,371; May 26; Serial No. 310,071; published Mar. 10, 1931. Class 38.
Quigley Publishing Company, Inc., New York, N. Y. Weekly periodical. 283,388; May 26; Serial No. 310,486; published Mar. 10, 1931. Class 38.
RCA Photophone, Inc., New York, N. Y. Combined sound and motion picture films, sound-recording apparatus, and sound-reproducing apparatus. 283,429; May 26; Serial No. 302,968; published Mar. 10, 1931. Class 26.
Realty Exchange Service Company, Oakland, Calif. Real-estate-listing service magazines published weekly. 283,448; May 26; Serial No. 308,567; published Mar. 3, 1931. Class 38.
Reiner & Berkow, Inc., New York, N. Y. Clocks, wrist watches, and watches. 283,360; May 26; Serial No. 310,350; published Mar. 10, 1931. Class 27.
Rock River Cotton Company, Janesville, Wis. Cotton batting. 283,424–5; May 26; Serial Nos. 303,491–2; published Mar. 10, 1931. Class 1.
Rockwell-Barnes Company, Chicago, Ill. Writing paper. 283,447; May 26; Serial No. 308,595; published Mar. 3, 1931. Class 37.
Rose, William T., doing business as Rose's Pine Moss Laboratories, Waterloo, Iowa. Scalp packs and creams, hair tonics, and shampoo preparations. 283,501; May 26. Class 6.
Rosenthal, Albert. (See Northrup Glove M'fg. Co.)
Rotary Shirt Co. Inc., New York, N. Y. Shirts and collars. 283,478; May 26. Serial No. 290,932; published Mar. 3, 1931. Class 39.
Rothert, Evelyn, Cincinnati, Ohio. Series of essays published periodically. 283,459; May 26; Serial No. 309,003; published Mar. 3, 1931. Class 38.
Runci, Joseph, & Sons Co., Boston, Mass. Scalp tonic. 283,507; May 26. Class 6.
Ryvita Company, Ltd., The, London, England. Bread and biscuits. 283,455; May 26; Serial No. 307,740; published Mar. 10, 1931. Class 46.
Samuels, Edmond, Darlinghurst, Sydney, Australia. Medicinal preparations, particularly throat pastiles or jellies. 283,463; May 26; Serial No. 299,625; published Mar. 3, 1931. Class 6.
Sandoz Chemical Works, Inc., New York, N. Y. Medicinal preparations adapted for the treatment of piropiasmosis. 283,344–5; May 26; Serial Nos. 309,942–3; published Mar. 3, 1931. Class 6.
Sandoz Chemical Works, Inc., New York, N. Y. Medicinal preparations having anodyne properties. 283,346; May 26; Serial No. 309,940; published Mar. 3, 1931. Class 6.
Sandvikens Jernverks Aktiebolag, Sandviken, Sweden. Iron and steel. 283,348; May 26; Serial No. 309,905; published Mar. 10, 1931. Class 14.
Santarub Chemical Company. (See Santee, Joe. F.)
Santee, Joe. F., doing business as Santarub Chemical Company, Okmulgee, Okla. Prophylactic gargle and a prophylactic wash. 283,310; May 26; Serial No. 306,419; published Mar. 3, 1931. Class 6.
Schachtelkäsefabrik Franz Zwick, Kellmunz, Germany. Cheese. 283,359; May 26; Serial No. 310,361; published Mar. 10, 1931. Class 46.
Schachtelkäsefabrik Franz Zwick, Kellmunz, Germany. Cheese. 283,398; May 26; Serial No. 310,362; published Mar. 10, 1931. Class 46.
Schoenfield, Milton H., doing business as Fields Food Products Co., Pasadena, Calif. Canned soups. 283,420; May 26; Serial No. 304,739; published Mar. 10, 1931. Class 46.
School Musician Publishing Co., Chicago, Ill. Printed publications. 283,321; May 26; Serial No. 309,177; published Feb. 24, 1931. Class 38.
Schrafft, W. F., & Sons Corporation, Boston, Mass. Chocolate candies. 83,360; renewed Sept. 5, 1931.
Schwickert, Richard, Aktiengesellschaft, Freiburg in the Brisgow, Germany. Tracing linen. 283,407; May 26; Serial No. 309,702; published Mar. 3, 1931. Class 37.
Scovill Manufacturing Company, Waterbury, Conn. Snap fasteners. 283,469–70; May 26; Serial Nos. 297,151–2; published July 22, 1930. Class 40.
Scranton Show Case Co. (See Sher, Lena.)
Sears, Roebuck and Co., Chicago, Ill. Transparent elastic material. 283,387; May 26; Serial No. 310,490; published Mar. 10, 1931. Class 50.
Sengbusch Self-Closing Inkstand Company, Milwaukee, Wis. Inkwells. 283,354; May 26; Serial No. 309,870; published Mar. 10, 1931. Class 37.
Seymour & Peck Co., Chicago, Ill. Wooden drums. 283,490; May 26. Class 2.
Sher, Lena, doing business as Scranton Show Case Co., Philadelphia, Pa. Soda booths. 283,493; May 26. Class 32.
Shur-Hold Header Co., San Jose, Calif. Header for door frames and the like. 283,491; May 26. Class 12.
Smith Drug Company, Portsmouth, Ohio. Preparation for the treatment of colds. 283,401; May 26; Serial No. 309,596; published Mar. 3, 1931. Class 6.
Solene, V., Co. (See Solimine, Vicenzina.)

Sollmine, Vicenzina, doing business as V. Solene Co., New York, N. Y. Preparations for the care of the skin. 283,439; May 26; Serial No. 308,962; published Mar. 3, 1931. Class 6.
Speare's, Alden, Sons Co., The, doing business as Eastern Aniline Co., Cambridge, Mass., and New York, N. Y. Washing blue. 283,487; May 26. Class 6.
Stametco Broom & Mfg. Co. Inc., St. Paul, Minn. Brooms. 283,492; May 26. Class 29.
Standard Oil Company of New York, New York, N. Y. Lubricating oils. 81,556; renewed Apr. 18, 1931.
Standard Overall Co., to The Standard Overall Company, Baltimore, Md., successor. Overalls. 83,101; renewed Aug. 15, 1931.
Stefert, A., & Son, Philadelphia, Pa. Push street brooms. 283,422; May 26; Serial No. 304,258; published Mar. 10, 1931. Class 29.
Stern Brothers, New York, N. Y. Gloves. 283,405; May 26. Class 39.
Stivers, Theo., Milling Company, Cleveland, Tenn. Wheat flour, stock feed, and shorts. 283,443; May 26; Serial No. 308,841; published Mar. 10, 1931. Class 46.
Stone, Irving, doing business as Nature's Laboratory Products Company, Chicago, Ill. Intestinal lubricant. 283,468; May 26; Serial No. 297,459; published Aug. 5, 1930. Class 6.
Strauss, Hugo, Packing Co. Inc., Brooklyn, N. Y. Canned cat food. 283,444; May 26; Serial No. 308,800; published Mar. 10, 1931. Class 46.
Tapley, J. F., Company, New York, to J. F. Tapley Company, Long Island City, N. Y. Books. 82,378; renewed June 20, 1931.
Teleframe Company, The. (See Bohan, Joseph H.)
Thompson, George E., doing business as Cottonsticks Company, Inman, S. C. Applicators. 283,485; May 26. Class 44.
Tonawanda Paper Company, Inc., North Tonawanda, N. Y., and Wilmington, Del. Newsprint paper. 283,353; May 26; Serial No. 309,875; published Mar. 3, 1931. Class 37.
Tower, R. J., Iron Works, Inc. (See Gordon Hollow Blast Grate Company, The.)
Treasure Cake Company, Ltd., Los Angeles, Calif. Buns, assorted, mixed, and fancy cakes; pies, rolls, French pastry products, etc. 283,435; May 26; Serial No. 301,736; published Mar. 10, 1931. Class 46.
Tropical Sweets Incorporated, Davenport, Fla. Candy, candied citrus, jellies, etc. 283,394; May 26; Serial No. 310,424; published Mar. 10, 1931. Class 46.
Tubize Chatillon Corporation, New York, N. Y. Monthly magazine. 283,370; May 26; Serial No. 310,145; published Mar. 10, 1931. Class 38.
Turco Products, Inc., doing business as Turco, Los Angeles, Calif. Cleaning-solvent preparation having incidental disinfectant properties. 283,313; May 26; Serial No. 306,204; published Mar. 10, 1931. Class 4.
Turco Products Inc., Los Angeles, Calif. Cleaning-solvent preparation having incidental disinfectant properties. 283,315; May 26; Serial No. 305,793; published Mar. 10, 1931. Class 4.
Unit Heater & Cooler Company, The, Wausaw, Wis. Heating and cooling radiators. 283,496; May 26. Class 34.
United States Cartridge Company, Lowell, Mass. Cartridges. 83,450–1; renewed Sept. 12, 1931.
United States Envelope Company, Springfield, Mass. Papers, envelopes, cardboards, and Bristol boards and tissue paper. 283,426; May 26; Serial No. 303,228; published Mar. 3, 1931. Class 37.
United States Trade Mark Association, The, New York, N. Y. Publication. 83,792; renewed Oct. 10, 1931.
Universal Form Clamp Co., Chicago, Ill. Shores, post caps, T-heads, L-heads, etc. 283,449; May 26; Serial No. 308,563; published Feb. 24, 1931. Class 12.
Vander Ley Bros., Inc., Grand Rapids, Mich. Household chairs. 283,377; May 26; Serial No. 310,032; published Mar. 10, 1931. Class 32.
Vigorin Manufacturing Co. (See Mindlin, Morris.)
Von Damm, Henry W., doing business as F. H. von Damm, Brooklyn, N. Y. Aquarium cement. 283,461; May 26; Serial No. 299,742; published Mar. 10, 1931. Class 12.
Von Damm, Henry W., doing business as F. H. von Damm, Brooklyn, N. Y. Grass seeds and bird nesting. 283,462; May 26; Serial No. 299,741; published Mar. 10, 1931. Class 1.
Von Damm, Henry W., doing business as F. H. von Damm, Brooklyn, N. Y. Birdseeds, turtle food, etc. 283,476; May 26; Serial No. 294,195; published Apr. 8, 1930. Class 46.
Watson, E. C., doing business as E. C. Watson Publishing Co., Harlingen, Tex. Monthly magazine. 283,385; May 26; Serial No. 310,541; published Mar. 10, 1931. Class 38.
Wells Drorbaugh, Bronxville, N. Y. Periodical. 283,306; May 26; Serial No. 306,772; published Mar. 10, 1931. Class 38.
Welters, Edward A., doing business as Welters Mfg. Co., Jacksonville, Fla. Face powder, talcum powder, cold cream, etc. 283,399; May 26; Serial No. 309,541; published Mar. 3, 1931. Class 6.
Westchester Pharmacal Co. (See Bruno, Philip.)
West-Crescent Fuel Company, The, Toledo, Ohio. Coal. 283,383; May 26; Serial No. 310,621; published Mar. 10, 1931. Class 1.
West India Oil Company, Bayonne, N. J. Candles. 82,034–37; renewed May 23, 1931.
West India Oil Company, Bayonne, N. J. Candles. 82,736; renewed July 18, 1931.
West India Oil Company, Bayonne, N. J. Candles. 82,848; renewed July 25, 1931.
Whyte Feed Mills, Pine Bluff, Ark. Dairy feed. 283,386; May 26; Serial No. 310,500; published Mar. 10, 1931. Class 46.
Wilbur-Ellis Company, San Francisco, Calif. Stock food. 283,384; May 26; Serial No. 310,585; published Mar. 10, 1931. Class 46.
Williams, Edgar J., New York, N. Y. Mailing lists. 36,283; renewed Apr. 23, 1931.
Williams, Thos J., Buenos Aires, Argentina. Carbonate of soda (Na_2Co_3). 283,317; May 26; Serial No. 305,063; published Mar. 3, 1931. Class 6.
Young & Metzner, to Young & Metzner, Inc., Long Island City, N. Y., successor. Bag patches made of jute cloth. 83,797–8; renewed Oct. 10, 1931.
Zog, Ltd., London, England, assignor to Lever Brothers Company, Cambridge, Mass. Cleansing preparation for paints. 83,465; renewed Sept. 12, 1931.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

American Cone & Pretzel Company, Philadelphia, Pa. Rold Gold. For Spaghetti. 39,191; May 26.
American Novelty Works, Herndon, Pa. Jump, a game of solitaire with marbles. For a Game. 39,192; May 26.
Aviation Smoked Fish Co. (See Dissen, Harry Y.)
Bodger Seeds, Ltd., Los Angeles, Calif. Gold Medal Dahlia Flowered Zinnias. For Zinnia Seeds. 39,193; May 26.
Cer-Lac Company, The, Los Angeles, Calif. Cera-Lac-Wonder Flour. For Flour. 39,194; May 26.
Clearwater Chemical Co., Clearwater, Fla. Ze-Ma-Lene. For Ointment. 39,195; May 26.
Dissen, Harry Y., doing business as Aviation Smoked Fish Co., Chicago, Ill. Aviation Brand Smoked Fish. For Smoked Fish. 39,196; May 26.
Drug Products Co., The, Inc., Long Island City, N. Y. Pamol Plain. For Medicinal Preparation. 39,197; May 26.
Drug Products Co., The, Inc., Long Island City, N. Y. Pulvoids No. 467 Pitovaco. For Medicinal Preparation. 39,198; May 26.
Drug Products Co., The, Inc., Long Island City, N. Y. Pamol Compound. For Medicinal Preparation. 39,199; May 26.
Drug Products Co., The, Inc., Long Island City, N. Y. Po. No. 3 Calmox. For Medicinal Preparation. 39,200; May 26.
Export Fibreboard Case Association, San Francisco, Calif. E. F. C. A. Cases Approved for Export. For Fibreboard Shipping Cases. 39,201; May 26.
Faber, A. W., Inc., Newark, N. J. A. W. Faber Eraser Kit. For a Container for Holding and Displaying Rubber Erasers. 39,202; May 26.
Federal Research Corporation, Woodland, Ill. Homax. For Waxes. 39,203; May 26.
Folger, J. A. & Co., San Francisco, Calif. Folger's Golden Gate. For Coffee. 39,204; May 26.
Getchell, F. W. & Son, Burbank, Calif. Dundee Egg Farms. For Eggs. 39,205; May 26.
Glaser, Crandell Co., Chicago, Ill. Piklsnaps. For Pickles. 39,206; May 26.
Hoague-Sprague Corporation, Lynn, Mass. Reed's. For Boxes. 39,207; May 26.
Long, W. E. Company, The, Chicago, Ill. Norrland Swedish Rye. For Rye Bread. 39,208; May 26.
McCosh, Marshall K., doing business as The Rampjack Company, Reistertown, Md. The Rampjack. For Vehicle Jacks. 39,209; May 26.
Mid-American Food Products, Inc., St. Joseph, Mo. Hot Shot. For Barbecue Horseradish. 39,210; May 26.
Midway Chemical Company, Chicago, Ill. Woodbrite. For Mops. 39,211; May 26.
Midway Chemical Co., Chicago, Ill. Exit. For Liquid Insecticide. 39,212; May 26.
Miller High Life Company, Milwaukee, Wis. Barl-E-Malt. For Malt Syrup. 39,213; May 26.
Miller High Life Company, Milwaukee, Wis. Wisconsin Malt. For Malt Syrup. 39,214; May 26.
Milwaukee Malt Syrup Company, Milwaukee, Wis. Windsor Arms. For Malt Syrup. 39,215; May 26.
Newcomb, Harry W., Arlington, Mass. Datenut a 5¢ Square-Meal Confection. For Confection. 39,216; May 26.
Rampjack Company, The. (See McCosh, Marshall K.)
S. M. A. Corporation, Cleveland, Ohio. Concentrated Liquid Whole Milk, Smaco Product No. 203. For Food Product for Infants. 39,217; May 26.
S. M. A. Corporation, Cleveland, Ohio. Liquid Fat-Free Milk Double Protein, Smaco Product No. 202. For Food Product for Infants. 39,218; May 26.

S. M. A. Corporation, Cleveland, Ohio. Non-Allergic Whole Milk, Smaco Product No. 300. For Food Product for Infants. 39,219; May 26.
S. M. A. Corporation, Cleveland, Ohio. Liquid Protein Milk, Smaco Product No. 201. For Food Product for Infants. 39,220; May 26.
S. M. A. Corporation, Cleveland, Ohio. Maltose & Dextrins, Smaco Product No. 400. For Food Product for Infants. 39,221; May 26.
S. M. A. Corporation, Cleveland, Ohio. Concentrated Liquid Fat Free Milk, Smaco Product No. 205. For Food Product for Infants. 39,222; May 26.
Schippleck, Otto E., Fairfax, Minn. Polar Cake. For Chocolate Covered Ice Cream. 39,223; May 26.
Standard Brands Incorporated, New York, N. Y. Royal Strawberry Flavor Gelatin Dessert. For Gelatin Dessert. 39,224; May 26.
Standard Brands Incorporated, New York, N. Y. Royal Raspberry Flavor Gelatin Dessert. For Gelatin Dessert. 39,225; May 26.
Standard Brands Incorporated, New York, N. Y. Royal Lime Flavor Gelatin Dessert. For Gelatin Dessert. 39,226; May 26.
Standard Brands Incorporated, New York, N. Y. Royal Lemon Flavor Gelatin Dessert. For Gelatin Dessert. 39,227; May 26.
Standard Brands Incorporated, New York, N. Y. Royal Cherry Flavor Gelatin Dessert. For Gelatin Dessert. 39,228; May 26.
Standard Brands Incorporated, New York, N. Y. Royal Orange Flavor Gelatin Dessert. For Gelatin Dessert. 39,229; May 26.
Sun-Ra Products Company, St. Joseph, Mo. Sun-Ra. For Barbecue Horseradish. 39,230; May 26.
Sun-Ra Products Company, St. Joseph, Mo. Sun-Ra. For Flavored Beverage Preparation. 39,231; May 26.
Tautges, J. G., doing business as Tautges Chile Con Carne Co., Minneapolis, Minn. Tautges Chile Con Carne. For Chile Con Carne. 39,232; May 26.
Uncle Sam Breakfast Food Company, Omaha, Nebr. Vanilla Sweeties. For Breakfast Foods. 39,233; May 26.
Wheeling Coffee & Spice Company, Wheeling, W. Va. Paramount. For Coffee. 39,234; May 26.
Zo-Ro-Lo, Inc., Ada, Okla. Zo-Ro-Lo. For Medicine for the Treatment of Rheumatism, High Blood Pressure, Indigestion, Nervousness. 39,235; May 26.

COLLEGE LIBRARY OF ATLANTA

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Continental Steel Corporation, Kokomo, Ind. Continental Pioneer Poultry Fence. For Wire Fencing. 13,204; May 26.
Continental Steel Corporation, Kokomo, Ind. Continental Pioneer Farm Fence. For Wire Fencing. 13,205; May 26.
Continental Steel Corporation, Kokomo, Ind. Continental Pioneer Chick-proof Poultry Fence. For Wire Fencing. 13,206; May 26.
Drug Products Co., The, Inc., Long Island City, N. Y. Pamol. For Medicinal Emulsion. 13,207; May 26.
Mathews Company, The, Detroit, Mich. Jumbo. For Frozen Chocolate Covered Bars. 13,208; May 26.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. & J. Manufacturing Co., The, Binghamton, N. Y. Spoons, cake turners, forks, can openers, etc. 803,083; May 26. Class 23.
A/S. Apothekernes Laboratorium for Specialpræparater, Skoyen, near Oslo, Norway. Bath perfumery. 305,801; May 26. Class 6.
Abrasive Products, Inc., Boston, Mass. Natural abrasive of flint, emery, and garnet, artificial abrasive and abrasive papers and cloths. 312,250; May 26. Class 4.
Abrasive Products, Inc., Boston, Mass. Natural abrasives of flint, abrasive papers and cloths. 312,252; May 26. Class 4.
Albarosa Packing Co. (See Schroeder Brothers, Inc.)
Alkalaris Mineral Water Company, doing business as Crystal Rock Water Company, Columbus, Ohio. Mineral waters and maltless beverages. 312,894; May 26. Class 45.
Alpha Game Company, The. (See Stellmacher, Herbert.)
Alpine Käse A., Burgdorf, Switzerland. Cheese. 313,171; May 26. Class 46.
Alrite Mfg. C. (See Fidelity Manufacturing Co., Inc.)
American Multigraph Co., Wilmington, Del., and Cleveland, Ohio. Chemicals. 312,937; May 26. Class 6.
American Multigraph Co., Wilmington, Del., and Cleveland, Ohio. Planographic prints. 313,068; May 26. Class 38.
Anstice, Josiah, & Co. Inc., Rochester, N. Y. Vegetable peeling machines and slicing machines. 303,312; May 26. Class 23.
Ante-Fermen Co., The, Columbia, S. C. Medicinal preparation. 309,665; May 26. Class 6.
Associated Tourist Bureau of America, Baltimore, Md. Maps. 312,122; May 26. Class 38.
Augusta Knitting Corporation, Utica, N. Y. Women's underwear. 312,880; May 26. Class 39.
Automatic Canteen Company, Chicago, Ill. Candy bars. 313,531; May 26. Class 46.
B. V. D. Company, Inc., The, Baltimore, Md. Underwear. 301,400; May 26. Class 39.
Bailey, Broadus, doing business as Broadus Bailey and Company, Greenville, S. C. Cleaning composition for bath tubs, etc. 312,470; May 26. Class 4.
Beacon Oil Company, by change of name, Colonial Beacon Oil Company. Oils and greases. 298,684; May 26. Class 15.
Beatrice Creamery Company, Chicago, Ill. Milk and cream. 313,417; May 26. Class 46.
Beecher Peck & Lewis, Detroit, Mich. Papers. 312,942; May 26. Class 37.
Behrens & Kashins, Inc., New York, N. Y. Bath robes and lounge robes. 312,973; May 26. Class 39.
Bell Punch and Printing Company Limited, The. Rotary printing presses. 311,993; May 26. Class 23.
Black Flag Company, The, Baltimore, Md. Insecticides. 313,418; May 26. Class 6.
Blair & Curtis, Inc., New York, N. Y. Medicinal Preparations. 312,676; May 26. Class 6.
Blair & Curtis, Inc., New York, N. Y. Medicinal preparations. 312,677; May 26. Class 6.
Bowman, Erick, doing business as Bowman Laboratory, Owatonna, Minn. Preparation for treating live stock. 312,899; May 26. Class 6.
Brechet & Richter Company, Minneapolis, Minn. Flavored powdered preparations. 311,556; May 26. Class 46.
Brignall, Guy E., doing business as Lite Soap Company, Aurora, Ill. Mineral soap. 300,323; May 26. Class 4.
Brignall, Guy E., doing business as Crysto Soap Company, Aurora, Ill. Mineral soap. 300,324; May 26. Class 4.
Builders Iron Foundry, Providence, R. I. Fluid meters. 313,280; May 26. Class 26.
Byk-Guldenwerke Chemische Fabrik Aktiengesellschaft, Berlin, Germany. Medicinal preparations. 312,838; May 26. Class 6.
C and A Sales Co. (See Cluff, William R.)
Campbell Holton & Co., Bloomington, Ill. Coffee. 281,765; May 26. Class 46.
Carbon Products Company, The, Lancaster, Ohio. Dry cells and batteries. 312,752; May 26. Class 21.
Caro-Maid Ice Cream Co. (See Wood Grocery Co., The.)
Carr, James T., Orange, N. J. Incandescent electric lamps. 311,954; May 26. Class 21.
Carson Pirie Scott & Co., Chicago, Ill. Ladies' underwear. 313,073; May 26. Class 39.
Carter's Ink Company, The, Cambridge, Mass. Writing inks, typewriter ribbons, and carbon paper. 313,419; May 26. Class 11.
Caruthers, Henry T., doing business as Zenith Cleaner Products Company, Memphis, Tenn. Preservative preparation. 311,637; May 26. Class 16.
Celanese Corporation of America, New York, N. Y. Underwear. 313,178; May 26. Class 39.
Chambers, J. B., doing business as Chambers Candy Co., Griffin, Ga. Candy. 313,074; May 26. Class 46.
Chappel Bros., Inc., Rockford, Ill. Canned meat and cereals for dogs, etc. 312,698; May 26. Class 46.
Chermendy, Carl V., doing business as Everglaze Products Co., Denver, Colo. Polish. 311,026; May 26. Class 16.
Chesebrough Manufacturing Company, Consolidated, New York, N. Y. Petroleum jelly. 310,211; May 26. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Chicago Pneumatic Tool Company, New York, N. Y. Pumping and compressing apparatus and parts thereof. 309,262; May 26. Class 23.
Cir-Cul-Air Refr'g. Corp., St. Louis, Mo. Display refrigerators, air conditioning and cooling devices, and storage coolers. 282,772; May 26. Class 31.
Clarke, A. G., Drug Company, The, Denver, Colo. Skin lotion. 313,283; May 26. Class 6.
Clicquot Club Company, Millis, Mass. Syrups and extracts. 312,414; May 26. Class 45.
Cluff, William R., doing business as C and A Sales Co., New York, N. Y. Table games. 310,546; May 26. Class 22.
Cohan, Roth & Stiffson, New York, N. Y. Neckties, cravats, and scarfs. 313,122; May 26. Class 39.
Colonial Beacon Oil Company. (See Beacon Oil Company.)
Colonial Mills Inc., New York, N. Y. Rayon piece goods. 312,416; May 26. Class 42.
Colonial Products Company. (See Silberman, L. E.)
Conklin Pen Company, The, Toledo, Ohio. Fountain pens. 311,367–8; May 26. Class 37.
Consolidated Electric Lamp Company, Danvers, Mass. Incandescent electric lamps and electron radio tubes. 311,230; May 26. Class 21.
Consolidated Patentees, Inc., New York, N. Y. Antiseptics. 313,180; May 26. Class 6.
Continental Traffic Marker, Inc., Chicago, Ill. Traffic guides and road markers. 301,753; May 26. Class 50.
Cooper Stamp Works. (See Zimmer, Charles.)
Cooper, William, & Nephews, Incorporated, Chicago, Ill. Insecticide. 310,473; May 26. Class 6.
Co-Operative Central Exchange, Superior, Wis. Men's pants, boys' breeches, etc. 312,174; May 26. Class 39.
Crystal Rock Water Company. (See Alkalaris Mineral Water Company.)
Crysto Soap Company. (See Brignall, Guy E.)
Cyclofile Corporation, Rochester, N. Y. Filing cabinets. 313,363; May 26. Class 32.
Cyco Manufacturing Co. (See Fisher, Cecil C.)
Dairy Corporation of America, Chicago, Ill. Powdered skim milk and powdered cream. 313,234; May 26. Class 46.
Deering, Charles M., doing business as Salta Products, Worcester, Mass. Powdered cleanser. 309,809; May 26. Class 4.
Déjà, Inc., New York, N. Y. Articles of clothing for women. 311,129; May 26. Class 39.
Derfler, Nathan, New York, N. Y. Photographic prints. 312,945; May 26. Class 38.
Dieker, Louis G., doing business as The Duryana Company, Los Angeles, Calif. Health foods. 313,460; May 26. Class 46.
Disney, Walt, Productions, Ltd., Hollywood, Calif. Dolls. 313,591; May 26. Class 22.
Dorsell Hosiery Co. (See Sabath, Emil.)
Drei-S-Werk Schwabacher Spinnereinadel-U Stahlspitzen-Werk Fr. Reingruber, Schwabach, Bavaria, Germany. Talking machine needles. 309,266; May 26. Class 36.
Dresner, S., & Son, Inc., Chicago, Ill. Luggage. 313,285; May 26. Class 3.
Drug Products Co., The, Inc., Long Island City, N. Y. Antacid and neutralizer of hyperacidity. 313,126; May 26. Class 6.
Du Pont Viscoloid Company, New York, N. Y. Hair ornament. 312,335; May 26. Class 40.
Duryana Company, The. (See Dieker, Louis G.)
Egan Cotton Mills, Atlanta, Ga. Textile padding. 310,217; May 26. Class 42.
Electro Refractories Corporation, The, Buffalo, N. Y. Bricks, plates, slabs, and blocks of refractory composition. 311,088; May 26. Class 12.
El-O-Pathic Laboratories. (See Henkin, Henry.)
Emkins. (See Satnick, Max.)
Ettelbrick Shoe Co. Inc., Greenup, Ill. Infants' shoes. 312,295; May 26. Class 39.
Everglaze Products Co. (See Chermendy, Carl V.)
Fashion Park Associates, Inc., Rochester, N. Y. Sweaters, hats, caps, stockings, underwear, etc. 312,046; May 26. Class 39.
Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. 313,035; May 26. Class 39.
Fem-Pac Company, The. (See Snyder, John B.)
Fidelity Manufacturing Co., Inc., doing business as Alrite Mfg. Co., Zionsville, Pa. Auto top dressing. 313,365; May 26. Class 4.
Field, Alfred, Seattle, Wash. Pyrophoric cigarette lighters. 295,610; May 26. Class 34.
Firemaster Company, New York, N. Y. Portable hand fire extinguishing apparatus. 313,080; May 26. Class 23.
Fisher, Cecil C., doing business as Cyco Manufacturing Co., Des Moines, Iowa. Tables, bookcases, shelving, racks, etc. 311,870; published May 26. Class 32.
Flaherty, Lena, doing business as Rhealinzo Co., Portland, Oreg. Medicine for pyorrhea. 306,437; May 26. Class 6.
Florence Stove Company, Gardner, Mass. Electric cooker. 298,694; May 26. Class 21.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 310,979; May 26. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 312,909; May 26. Class 42.
Four in One Products Company. (See Stephens, Charles Z.)
Fox, Geo. A., Products Co., Inc., Kansas City, Mo. Chocolate flavored syrups and concentrates. 311,871; May 26. Class 45.
Franklin Simon & Co. Inc., New York, N. Y. Perfumes and hygienic products. 310,939; May 26. Class 6.
Frohlich, Samuel D., New York, N. Y. Hair nets. 313,081; May 26. Class 42.
Fuller, James S., Inc., Kingston, N. Y. Shirts. 312,297; May 26. Class 39.
Gabilla, Incorporated, New York, N. Y. Toilet-soap. 311,437; May 26. Class 4.
General Paint Corporation, San Francisco, Calif. Paint comprising aluminum powder and a suitable binder or the component parts thereof. 312,798; May 26. Class 16.
Gerber, Charles A., New York, N. Y. Ladies' hats. 305,902; May 26. Class 39.
Gibotone Co., Savannah, Ga. Alternative tonic and system builder. 313,366; May 26. Class 6.
Golt, Kenneth E., Minneapolis, Minn. Preparation for the treatment of nasal and sinus infections. 313,540; May 26. Class 6.
Gold Coast Paint Company, San Francisco, Calif. Ready mixed paint, floor enamel, varnishes. 313,291; May 26. Class 16.
Goldman-Kolber Co. Inc., New York, N. Y. Finger rings. 312,799; May 26. Class 28.
Goldwyn, William, St. Louis, Mo. Cosmetics. 312,643; May 26. Class 6.
Griswoldville Manufacturing Company, Griswoldville, Mass. Sand-paper. 309,815; May 26. Class 4.
Gross Millinery Co., Inc., Trenton, N. J. Women's, misses', and children's hats. 304,554; May 26. Class 39.
Hammel, Riglander-Pennant Corporation, New York, N. Y. Wrist bands for watches. 312,259; May 26. Class 40.
Hemingray Glass Company, Muncie, Ind. Glass bottles. 312,912; May 26. Class 33.
Henkin, Henry, doing business as El-O-Pathic Laboratories, Los Angeles, Calif. Absorbent liniment, etc. 311,609; May 26. Class 6.
Henly, Ralph L., St. Paul, Minn. Candy. 313,133; May 26. Class 46.
Herzog, Henry J., New York, N. Y. Tonic in the form of tablets, salts, or powder. 313,038–9; May 26. Class 6.
Highland Orange Association, Highland, Calif. Fresh citrus fruits. 310,563; May 26. Class 46.
Hill-Shaw Company, Chicago, Ill. Glass coffee brewer. 312,214; May 26. Class 13.
Hills Brothers Company, The, New York, N. Y. Dried dates. 312,342; May 26. Class 46.
Hoberg Paper & Fibre Company, Green Bay, Wis. Toilet paper, paper towels, and napkins. 313,341; May 26. Class 37.
Holtum, C. N., Freeport, Ill. Cast aluminum cooking hollow ware. 305,953; May 26. Class 13.
Horn Surgical Company, Philadelphia, Pa. Elastic hosiery. 312,917; May 26. Class 44.
International Shoe Co., St. Louis, Mo. Boots and shoes. 309,084; May 26. Class 39.
Interstate Chemical Mfg. Co., Jersey City, N. J. Insecticides. 311,838; May 26. Class 6.
Ischerland, Frederick E., Flint, Mich. Hair tonic. 313,342; May 26. Class 6.
Ischerland, Frederick E., Flint, Mich. Hair tonic. 313,343; May 26. Class 6.
Jewelers Publishing Corporation, New York, N. Y. Weekly magazine. 313,290; May 26. Class 38.
Joffe Brothers, New York and Brooklyn, N. Y. Candied popcorn. 312,783; May 26. Class 46.
Junkers, Hugo, Dessau, Germany. Metallic walls, wall plates, wall brackets, roofs, etc. 279,924; May 26. Class 12.
Kellom, Chas. F., & Co., Inc., Philadelphia, Pa. Lubricating oils and greases. 297,918; May 26. Class 15.
Kellom, Chas. F., & Co., Inc., Philadelphia, Pa. Auxiliary lubricating and anticarbonizing material. 298,031; May 26. Class 15.
Kelly Brothers Nurseries, Dansville, N. Y. Catalogs relating to horticultural or nursery products. 310,175; May 26. Class 38.
Kendall Company, The, Boston, Mass. Absorbent cotton. 313,551; May 26. Class 44.
Kerr, Louis M., Buffalo, N. Y. Waterproofing dressing for shoes, etc. 313,136; May 26. Class 4.
Keystone Mfg. Co., The, Buffalo, N. Y. Apparatus for grinding cylindrical surfaces, such as the cylinders of engines, etc. 311,241; May 26. Class 23.
King, Charles M., doing business as Wisconsin Malt Products Co., Racine, Wis. Pure malt extract. 298,245; May 26. Class 46.
Kingdon, A. M., doing business as Nu-Age Laboratories, Omaha, Nebr. Preparation for the treatment of sour stomach, etc. 311,613; May 26. Class 6.
Kissana Chem.-Pharm. Laboratorium G. m. b. H., Bad Kissingen, Germany. Adhesive plasters, dressings of iodoform gauze, perfumery, etc. 309,086; May 26. Class 6.
Kittl, Lola, Menahga, Minn. Candy. 298,634; May 26. Class 46.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Klingstedt Brothers Company, The, Canton, Ohio. Checks, such as bank checks. 306,517; May 26. Class 37.
Klingstedt Brothers Company, The, Canton, Ohio. Writing paper, letter heads, invoices, and statements. 306,518; May 26. Class 37.
Knights of Peter Claver, Mobile, Ala. Writing paper. 311,612; May 26. Class 37.
Krause, Chas. A., Milling Co., Milwaukee, Wis. Flaked corn product. 312,436; May 26. Class 48.
Kroger Grocery & Baking Co., Cincinnati, Ohio. Canned fruits and fruit preserves, canned vegetables, canned sea food, etc. 279,795; May 26. Class 46.
Leggett, Francis H., & Company, New York, N. Y. Canned peas. 299,189; May 26. Class 46.
Lehigh Packing Co. Inc., Allentown, Pa. Rabbits for breeding purposes: 308,738; May 26. Class 1.
Lentheric, Incorporated, New York, N. Y. Perfumes, toilet waters, face and dusting powders, etc. 310,059; May 26. Class 6.
Les Heritiers de Marie Brizard & Roger, M. B. Glotin, Achard & Glotin, Bordeaux, France. Maltless beverages. 310,383; May 26. Class 45.
Liquid Cement Co., San Diego, Calif. Adhesive liquid cement. 312,850; May 26. Class 5.
Lister & Company, Limited, Bradford, England. Piece goods. 307,721; May 26. Class 42.
Lite Soap Company. (See Brignall, Guy E.)
Lomax Company, The, Chicago, Ill. Ginger ale. 313,248; May 26. Class 45.
Loughran, H. C., Newark, N. J. Rug cushions, paddings, and carpet-cushions. 312,992; May 26. Class 50.
Lyons & Company, New York, N. Y. Sandals, moccasins, and play oxfords of leather. 312,156; May 26. Class 39.
MacKay, Donald, Twin Falls, Idaho. Liniment. 310,325; May 26. Class 6.
Marathon Company, Attleboro, Mass. Finger rings, bracelets, hand bags, etc. 312,261–2; May 26. Class 28.
Marshall, John G., Brooklyn, N. Y. Preparation for removing oil colors from photographs. 312,108; May 26. Class 16.
Martini, L. M., Grape Products Co., Kingsburg, Calif. Grape syrup. 299,273; May 26. Class 45.
Matthias, Maximilian P., Forest Hills, N. Y. Astringents. 313,302; May 26. Class 6.
McCloskey Varnish Co., Philadelphia, Pa. Oil varnish. 313,045; May 26. Class 16.
McNaught Syndicate, Inc., The, New York, N. Y. Comic strips. 312,784; May 26. Class 38.
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Montross & Clarke Company, Inc., New York, N. Y. Sheet paper for printing and writing. 306,300; May 26. Class 37.
Moore and Bradford, Washington, D. C. Glass and metal cleaning paste. 297,450; May 26. Class 4.
Moores Lime Company, The, Durbin, Ohio. Material made principally from dolomite or lime. 312,716; May 26. Class 1.
Mount Vernon-Woodberry Mills, Inc., Baltimore, Md. Cotton fabrics. 309,440; May 26. Class 42.
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Pentaten, Pharmazeutische Fabrik Dr. Max Riese & Co., Rhondorf-on-the-Rhine, Germany. Skin cream. 312,529; May 26. Class 6.
Pettinos, George F., Incorporated, Philadelphia, Pa. Sands. 313,387; May 26. Class 1.
Phoenix Manufacturing Company. (See Strauss, Leon.)
Pomeranz, C., & Son, New York, N. Y. Fur trimmings. 299,928; May 26. Class 40.
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Santee, Joe. F., doing business as Santarub Chemical Company, Okmulgee, Okla. Ointment. 306,418; May 26. Class 6.
Satnick, Max, doing business as Emkins, Brooklyn, N. Y. Astringents, etc. 311,850; May 26. Class 6.
Scaramelli, Henry, Inc., New York, N. Y. Cheese. 299,282; May 26. Class 46.
Scheidt, H. E., Lyle, Wash. Candy bar. 309,534; May 26. Class 46.
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Schmid, Julius, New York, N. Y. Rubber nursing nipples. 311,217; May 26. Class 44.
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Scovill Manufacturing Company, Waterbury, Conn. Vehicle radiator caps, crank hole covers, etc. 305,496; May 26. Class 19.
Seneca Food Products Corporation, Utica, N. Y. Malt syrup. 310,839; May 26. Class 46.
Sewall Paint & Varnish Company, Kansas City, Mo. Color mixing apparatus comprising pedestal, measuring graduates, test plates, etc. 311,573; May 26. Class 20.
Sharples Specialty Company, The, Philadelphia, Pa. Centrifugal machines. 313,513; May 26. Class 23.
Shell Oil Company, San Francisco, Calif. Gasoline, kerosene, gas oil, etc. 312,389; May 26. Class 15.
Shunk, L. E., Latex Products, Inc., Akron, Ohio. Prophylactic rubber articles. 310,192; May 26. Class 44.
Silberman, L. E., doing business as Colonial Products Company, Des Moines, Iowa. Malt extracts. 312,739; May 26. Class 46.
Silberman, Louis J., doing business as Star Gasoline Co., St. Louis, Mo. Gasoline. 313,009; May 26. Class 15.
Slavick Jewelry Company, The, Los Angeles, Calif. Finger rings. 307,223; May 26. Class 28.
Smiley-Heide, Inc., New York, N. Y. Creepers, rompers, and baby suits and dresses. 311,641; May 26. Class 39.
Smith, Carroll, Boston, Mass. Books, pamphlets, posters, etc. 298,416; May 26. Class 38.

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Chicago Pneumatic Tool Company, New York, N. Y. Pumping and compressing apparatus and parts thereof. 309,262; May 26. Class 23.
Cir-Cul-Air Refr'g. Corp., St. Louis, Mo. Display refrigerators, air conditioning and cooling devices, and storage coolers. 282,772; May 26. Class 31.
Clarke, A. G., Drug Company, The, Denver, Colo. Skin lotion. 313,283; May 26. Class 6.
Clicquot Club Company, Millis, Mass. Syrups and extracts. 312,414; May 26. Class 45.
Cluff, William R., doing business as C and A Sales Co., New York, N. Y. Table games. 310,546; May 26. Class 22.
Cohan, Roth & Stiffson, New York, N. Y. Neckties, cravats, and scarfs. 313,122; May 26. Class 39.
Colonial Beacon Oil Company. (See Beacon Oil Company.)
Colonial Mills Inc., New York, N. Y. Rayon piece goods. 312,416; May 26. Class 42.
Colonial Products Company. (See Silberman, L. E.)
Conklin Pen Company, The, Toledo, Ohio. Fountain pens. 311,367–8; May 26. Class 37.
Consolidated Electric Lamp Company, Danvers, Mass. Incandescent electric lamps and electron radio tubes. 311,230; May 26. Class 21.
Consolidated Patentees, Inc., New York, N. Y. Antiseptics. 313,180; May 26. Class 6.
Continental Traffic Marker, Inc., Chicago, Ill. Traffic guides and road markers. 301,753; May 26. Class 50.
Cooper Stamp Works. (See Zimmer, Charles.)
Cooper, William, & Nephews, Incorporated, Chicago, Ill. Insecticide. 310,473; May 26. Class 6.
Co-Operative Central Exchange, Superior, Wis. Men's pants, boys' breeches, etc. 312,174; May 26. Class 39.
Crystal Rock Water Company. (See Alkalaris Mineral Water Company.)
Crysto Soap Company. (See Brignall, Guy E.)
Cyclofile Corporation, Rochester, N. Y. Filing cabinets. 313,363; May 26. Class 32.
Cyco Manufacturing Co. (See Fisher, Cecil C.)
Dairy Corporation of America, Chicago, Ill. Powdered skim milk and powdered cream. 313,234; May 26. Class 46.
Deering, Charles M., doing business as Salta Products, Worcester, Mass. Powdered cleanser. 309,809; May 26. Class 4.
Déjà, Inc., New York, N. Y. Articles of clothing for women. 311,129; May 26. Class 39.
Derfler, Nathan, New York, N. Y. Photographic prints. 312,945; May 26. Class 38.
Dieker, Louis G., doing business as The Duryana Company, Los Angeles, Calif. Health foods. 313,460; May 26. Class 46.
Disney, Walt, Productions, Ltd., Hollywood, Calif. Dolls. 313,591; May 26. Class 22.
Dorsell Hosiery Co. (See Sabath, Emil.)
Drei-S-Werk Schwabacher Spinnereinadel-U Stahlspitzen-Werk Fr. Reingruber, Schwabach, Bavaria, Germany. Talking machine needles. 309,266; May 26. Class 36.
Dresner, S., & Son, Inc., Chicago, Ill. Luggage. 313,285; May 26. Class 3.
Drug Products Co., The, Inc., Long Island City, N. Y. Antacid and neutralizer of hyperacidity. 313,126; May 26. Class 6.
Du Pont Viscoloid Company, New York, N. Y. Hair ornament. 312,335; May 26. Class 40.
Duryana Company, The. (See Dieker, Louis G.)
Egan Cotton Mills, Atlanta, Ga. Textile padding. 310,217; May 26. Class 42.
Electro Refractories Corporation, The, Buffalo, N. Y. Bricks, plates, slabs, and blocks of refractory composition. 311,088; May 26. Class 12.
El-O-Pathic Laboratories. (See Henkin, Henry.)
Emkins. (See Satnick, Max.)
Ettelbrick Shoe Co. Inc., Greenup, Ill. Infants' shoes. 312,295; May 26. Class 39.
Everglaze Products Co. (See Chermendy, Carl V.)
Fashion Park Associates, Inc., Rochester, N. Y. Sweaters, hats, caps, stockings, underwear, etc. 312,046; May 26. Class 39.
Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. 313,035; May 26. Class 39.
Fem-Pac Company, The. (See Snyder, John B.)
Fidelity Manufacturing Co., Inc., doing business as Alrite Mfg. Co., Zionsville, Pa. Auto top dressing. 313,365; May 26. Class 4.
Field, Alfred, Seattle, Wash. Pyrophoric cigarette lighters. 295,610; May 26. Class 34.
Firemaster Company, New York, N. Y. Portable hand fire extinguishing apparatus. 313,080; May 26. Class 23.
Fisher, Cecil C., doing business as Cyco Manufacturing Co., Des Moines, Iowa. Tables, bookcases, shelving, racks, etc. 311,870; published May 26. Class 32.
Flaherty, Lena, doing business as Rhealinzo Co., Portland, Oreg. Medicine for pyorrhea. 306,437; May 26. Class 6.
Florence Stove Company, Gardner, Mass. Electric cooker. 298,694; May 26. Class 21.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 310,979; May 26. Class 42.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 312,909; May 26. Class 42.
Four in One Products Company. (See Stephens, Charles Z.)
Fox, Geo. A., Products Co., Inc., Kansas City, Mo. Chocolate flavored syrups and concentrates. 311,871; May 26. Class 45.
Franklin Simon & Co. Inc., New York, N. Y. Perfumes and hygienic products. 310,939; May 26. Class 6.
Frohlich, Samuel D., New York, N. Y. Hair nets. 313,081; May 26. Class 42.
Fuller, James S., Inc., Kingston, N. Y. Shirts. 312,297; May 26. Class 39.
Gabilla, Incorporated, New York, N. Y. Toilet-soap. 311,437; May 26. Class 4.
General Paint Corporation, San Francisco, Calif. Paint comprising aluminum powder and a suitable binder or the component parts thereof. 312,798; May 26. Class 16.
Gerber, Charles A., New York, N. Y. Ladies' hats. 305,902; May 26. Class 39.
Gibotone Co., Savannah, Ga. Alternative tonic and system builder. 313,366; May 26. Class 6.
Goit, Kenneth E., Minneapolis, Minn. Preparation for the treatment of nasal and sinus infections. 313,540; May 26. Class 6.
Gold Coast Paint Company, San Francisco, Calif. Ready mixed paint, floor enamel, varnishes. 313,291; May 26. Class 16.
Goldman-Kolber Co. Inc., New York, N. Y. Finger rings. 312,799; May 26. Class 28.
Goldwyn, William, St. Louis, Mo. Cosmetics. 312,643; May 26. Class 6.
Griswoldville Manufacturing Company, Griswoldville, Mass. Sand-paper. 309,815; May 26. Class 4.
Gross Millinery Co., Inc., Trenton, N. J. Women's, misses', and children's hats. 304,554; May 26. Class 39.
Hammel, Riglander-Pennant Corporation, New York, N. Y. Wrist bands for watches. 312,259; May 26. Class 40.
Hemingray Glass Company, Muncie, Ind. Glass bottles. 312,912; May 26. Class 33.
Henkin, Henry, doing business as El-O-Pathic Laboratories, Los Angeles, Calif. Absorbent liniment, etc. 311,609; May 26. Class 6.
Henly, Ralph L., St. Paul, Minn. Candy. 313,133; May 26. Class 46.
Herzog, Henry J., New York, N. Y. Tonic in the form of tablets, salts, or powder. 313,038–9; May 26. Class 6.
Highland Orange Association, Highland, Calif. Fresh citrus fruits. 310,563; May 26. Class 46.
Hill-Shaw Company, Chicago, Ill. Glass coffee brewer. 312,214; May 26. Class 13.
Hills Brothers Company, The, New York, N. Y. Dried dates. 312,342; May 26. Class 46.
Hoberg Paper & Fibre Company, Green Bay, Wis. Toilet paper, paper towels, and napkins. 313,341; May 26. Class 37.
Holtum, C. N., Freeport, Ill. Cast aluminum cooking hollow ware. 305,953; May 26. Class 13.
Horn Surgical Company, Philadelphia, Pa. Elastic hosiery. 312,917; May 26. Class 44.
International Shoe Co., St. Louis, Mo. Boots and shoes. 309,084; May 26. Class 39.
Interstate Chemical Mfg. Co., Jersey City, N. J. Insecticides. 311,838; May 26. Class 6.
Ischerland, Frederick E., Flint, Mich. Hair tonic. 313,342; May 26. Class 6.
Ischerland, Frederick E., Flint, Mich. Hair tonic. 313,343; May 26. Class 6.
Jewelers Publishing Corporation, New York, N. Y. Weekly magazine. 313,296; May 26. Class 38.
Joffe Brothers, New York and Brooklyn, N. Y. Candied popcorn. 312,783; May 26. Class 46.
Junkers, Hugo, Dessau, Germany. Metallic walls, wall plates, wall brackets, roofs, etc. 279,924; May 26. Class 12.
Kellom, Chas. F., & Co., Inc., Philadelphia, Pa. Lubricating oils and greases. 297,918; May 26. Class 15.
Kellom, Chas. F., & Co., Inc., Philadelphia, Pa. Auxiliary lubricating and anticarbonizing material. 298,031; May 26. Class 15.
Kelly Brothers Nurseries, Dansville, N. Y. Catalogs relating to horticultural or nursery products. 310,175; May 26. Class 38.
Kendall Company, The, Boston, Mass. Absorbent cotton. 313,551; May 26. Class 44.
Kerr, Louis M., Buffalo, N. Y. Waterproofing dressing for shoes, etc. 313,136; May 26. Class 4.
Keystone Mfg. Co., The, Buffalo, N. Y. Apparatus for grinding cylindrical surfaces, such as the cylinders of engines, etc. 311,241; May 26. Class 23.
King, Charles M., doing business as Wisconsin Malt Products Co., Racine, Wis. Pure malt extract. 298,245; May 26. Class 46.
Kingdon, A. M., doing business as Nu-Age Laboratories, Omaha, Nebr. Preparation for the treatment of sour stomach, etc. 311,613; May 26. Class 6.
Kissana Chem.-Pharm. Laboratorium G. m. b. H., Bad Kissingen, Germany. Adhesive plasters, dressings of iodoform gauze, perfumery, etc. 309,086; May 26. Class 6.
Kitti, Lola, Menahga, Minn. Candy. 298,634; May 26. Class 46.

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Klingstedt Brothers Company, The, Canton, Ohio. Checks, such as bank checks. 306,517; May 26. Class 37.
Klingstedt Brothers Company, The, Canton, Ohio. Writing paper, letter heads, invoices, and statements. 306,518; May 26. Class 37.
Knights of Peter Claver, Mobile, Ala. Writing paper. 311,612; May 26. Class 37.
Krause, Chas. A., Milling Co., Milwaukee, Wis. Flaked corn product. 312,436; May 26. Class 48.
Kroger Grocery & Baking Co., Cincinnati, Ohio. Canned fruits and fruit preserves, canned vegetables, canned sea food, etc. 279,795; May 26. Class 46.
Leggett, Francis H., & Company, New York, N. Y. Canned peas. 299,139; May 26. Class 46.
Lehigh Packing Co. Inc., Allentown, Pa. Rabbits for breeding purposes. 308,738; May 26. Class 1.
Lentheric, Incorporated, New York, N. Y. Perfumes, toilet waters, face and dusting powders, etc. 310,059; May 26. Class 6.
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Schwabacher Bros. & Co., Incorporated, Seattle, Wash. Bathroom tissue. 313,097; May 26. Class 37.
Scovill Manufacturing Company, Waterbury, Conn. Vehicle radiator caps, crank hole covers, etc. 305,496; May 26. Class 19.
Seneca Food Products Corporation, Utica, N. Y. Malt syrup. 310,839; May 26. Class 46.
Sewall Paint & Varnish Company, Kansas City, Mo. Color mixing apparatus comprising pedestal, measuring graduates, test plates, etc. 311,573; May 26. Class 26.
Sharples Specialty Company, The, Philadelphia, Pa. Centrifugal machines. 313,513; May 26. Class 23.
Shell Oil Company, San Francisco, Calif. Gasoline, kerosene, gas oil, etc. 312,389; May 26. Class 15.
Shunk, L. E., Latex Products, Inc., Akron, Ohio. Prophylactic rubber articles. 310,192; May 26. Class 44.
Silberman, L. E., doing business as Colonial Products Company, Des Moines, Iowa. Malt extracts. 312,739; May 26. Class 46.
Silberman, Louis J., doing business as Star Gasoline Co., St. Louis, Mo. Gasoline. 313,009; May 26. Class 15.
Slavick Jewelry Company, The, Los Angeles, Calif. Finger rings. 307,223; May 26. Class 28.
Smiley-Heide, Inc., New York, N. Y. Creepers, rompers, and baby suits and dresses. 311,641; May 26. Class 39.
Smith, Carroll, Boston, Mass. Books, pamphlets, posters, etc. 298,416; May 26. Class 38.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Smith, L. C., & Corona Typewriters Inc., New York, N. Y. Typewriting machines and parts thereof. 312,391; May 26. Class 23.
Snell, Norma R., doing business as N. R. Snell Lumber Company, Cleveland, Ohio. Playground and game apparatus. 310,840; May 26. Class 22.
Snoko Inc., San Francisco, Calif. Ice shaving machines. 299,867; May 26. Class 23.
Snyder, John B., doing business as The Fem-Pac Company, New York, N. Y. Catamenial appliances. 312,867; May 26. Class 44.
Southern Rice Sales Company, Inc., New York, N. Y. Rice, barley, dried peas, etc. 312,776; May 26. Class 46.
Spalding, A. G., & Bros., New York, N. Y. Golf clubs. 312,818; May 26. Class 22.
Sperl, Anna, doing business as The Anna Sperl Mfg. Co., New York, N. Y. Hair rejuvenating ointment. 310,267; May 26. Class 6.
Standard Brands Incorporated, New York, N. Y. Tea. 312,273; May 26. Class 46.
Standard Oil Company, Whiting, Ind., and Chicago, Ill. Mothproofing compound and insecticides. 313,313; May 26. Class 6.
Standard Oil Company, Whiting, Ind., and Chicago, Ill. Rust preventing oils and greases. 313,314; May 26. Class 15.
Star Gasoline Co. (See Silberman, Louis J.)
Steffen, Ernest, doing business as Swiss Diamond Palace, San Francisco, Calif. Diamond and other kinds of finger rings. 313,011; May 26. Class 28.
Stellmacher, Herbert, doing business as The Alpha Game Company, Dallas, Tex. Games played with cards. 313,567; May 26. Class 22.
Stephens, Charles Z., doing business as Four in One Products Company, Richmond, Va. Polishes for automobiles, furniture, etc. 312,206; May 26. Class 16.
Stoddard, G. S., & Co., Inc., New York, N. Y. Concentrated lipoidal extract. 312,778; May 26. Class 6.
Strauss, Leon, doing business as Phoenix Manufacturing Company, Baltimore, Md. Combination work suits, overalls, dungarees, etc. 305,984; May 26. Class 39.
Strobmeyer & Arpe Company, New York, N. Y. Dried beans. 313,063; May 26. Class 46.
Swiss Diamond Palace. (See Steffen, Ernest.)
Tripoli Barber Supply Co., Inc., Philadelphia, Pa. Hair tonics and toilet waters. 313,353; May 26. Class 6.
Truscon Steel Company, Youngstown, Ohio. Plaster base. 311,350; May 26. Class 12.
U. S. Golf Ball Corporation, Chicago, Ill. Golf balls. 313,514–15; May 26. Class 22.
Victor Oolitic Stone Company, Bloomington, Ind. Building stone. 312,396; May 26. Class 1.
Villar, Jose P., Brooklyn, N. Y. Bathing suits. 313,015; May 26. Class 39.
Volcano Burner Co., Inc., Tulsa, Okla. Gas burner. 308,229; May 26. Class 34.
Wells, S. C., & Co., Le Roy, N. Y. Soothing and healing preparation for burns, etc. 312,245; May 26. Class 6.
Western Clock Company, Peru, Ill. Clocks and watches. 313,401; May 26. Class 27.
Wilshire Oil Company, Inc., Vernon, Calif. Gasoline, kerosene, etc. 312,024; May 26. Class 15.
Wilson Products Company, Inc., The, Tyrone, Pa. Candy and popcorn confections. 312,582; May 26. Class 46.
Wisconsin Malt Products Co. (See King, Charles M.)
Wise, Julia, New York, N. Y. Condimental sauces. 312,583; May 26. Class 46.
Wood Grocery Co., The, doing business as Caro-Maid Ice Cream Co., Dillon, S. C. Ice cream, sherberts, ices, and frozen confections. 312,969; May 26. Class 46.
Worcester Salt Company, New York, N. Y. Salt. 311,991; May 26. Class 6.
Worcester Salt Company, New York, N. Y. Salt. 311,992; May 26. Class 6.
Young's Candy Products Co., Inc., Philadelphia, Pa. Filled taffy candy. 298,609; May 26. Class 46.
Zeiss, Carl, Jena, Germany. Objectives. 307,019; May 26. Class 26.
Zenith Cleaner Products Company. (See Caruthers, Henry T.)
Zimmer, Charles, doing business as Cooper Stamp Works, New York, N. Y. Printing, stamping, and stenciling inks. 264,564; May 26. Class 11.
Zonta International, Chicago, Ill. Publication. 312,320; May 26. Class 38.
Zo-Ro-Lo, Inc., Ada, Ohio. Medicine. 313,066; May 26. Class 6.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Belting butts, lace leather, mill strapping, and apron leather. General Tanning Corporation. 283,460; May 26; Serial No. 299,775; published Oct. 28, 1930.
Chamois. Sam Bernstein & Co. 283,405; May 26; Serial No. 309,657; published Mar. 10, 1931.
Clay, Modeling. Ettl Studios, Incorporated. 283,350; May 26; Serial No. 309,890; published Mar. 10, 1931.
Coal. Colorado Fuel and Iron Company. 283,393; May 26; Serial No. 310,442; published Mar. 10, 1931.
Coal. West-Crescent Fuel Company. 283,383; May 26; Serial No. 310,621; published Mar. 10, 1931.
Condensation product of acetaldehyde and aniline in an acid medium. Naugatuck Chemical Company. 283,325; May 26; Serial No. 309,280; published Mar. 10, 1931.
Condensation product of acetone and diphenylamine. Naugatuck Chemical Company. 283,324; May 26; Serial No. 309,277; published Mar. 10, 1931.
Cotton batting. Rock River Cotton Company. 283,424–5; May 26; Serial Nos. 303,491–2; published Mar. 10, 1931.
Hickory, persimmon, dogwood, and other woods, Dimension stock and turnings of. Golf Shaft & Block Company. 283,366; May 26; Serial No. 310,253; published Mar. 10, 1931.
Ice. O. D. Keller. 283,390; May 26; Serial No. 310,479; published Mar. 10, 1931.
Seeds and bird nesting, Grass. H. W. von Damm. 283,462; May 26; Serial No. 299,741; published Mar. 10, 1931.
Silk, Raw. E. Gerli & Company. 283,329; May 26; Serial No. 309,378; published Mar. 10, 1931.
Textile fibres, Artificial. I. G. Farbenindustrie Aktiengesellschaft. 283,309; May 26; Serial No. 306,445; published Mar. 10, 1931.

CLASS 2

Drums, Wooden. Seymour & Peck Co. 283,490; May 26.

CLASS 3

Bags and purses, Ladies' hand. Locktite Co. 283,355; May 26; Serial No. 309,864; published Mar. 10, 1931.

CLASS 4

Cleaning solvent preparation having incidental disinfectant properties. Turco Products Inc. 283,313; May 26; Serial No. 306,204; published Mar. 10, 1931.
Cleaning solvent preparation having incidental disinfectant properties. Turco Products Inc. 283,315; May 26; Serial No. 305,793; published Mar. 10, 1931.
Cleansing preparation for paints. Zog, Ltd. 83,465; renewed Sept. 12, 1931.
Dressing compound, Liquid power belt. Plomo Specialty Mfg. Co. 83,354; renewed Sept. 5, 1931.
Silicium carbide and abrasive and polishing articles manufactured therefrom. A/S Arendahl Smelteverk. 284,417; May 26; Serial No. 309,841; published Mar. 10, 1931.

CLASS 6

Antiseptic dentifrice, mouth wash, and gargle. P. Bruno. 283,304; May 26; Serial No. 307,090; published Dec. 9, 1930.
Astringent, bandoline, bay rum, camphor ice, etc. Clarkson, Inc. 283,484; May 26.
Carbonate of soda (Na_2Co_3). T. J. Williams. 283,317; May 26; Serial No. 305,063; published Mar. 3, 1931.
Chemical preparations. Industrial Chemical Sales Company. 283,368; May 26; Serial No. 310,169; published Mar. 3, 1931.
Compound, Storage-battery electrolyte. Elliott Works. 283,456; May 26; Serial No. 307,712; published Mar. 3, 1931.
Cough medicine. M. C. Andrews. 283,334; May 26; Serial No. 309,495; published Mar. 3, 1931.
Cream, brilliantine, dentifrice, etc., Face. Godissart's Parfum Classique Francais, Inc. 283,500; May 26.
Disinfectant, insecticides, disinfectants, etc., Rose. Hoyt's Brothers, Inc. 283,477; May 26; Serial No. 290,837; published Dec. 3, 1929.
Fire extinguisher, Dry. A Füllemann. 283,323; May 26; Serial No. 309,267; published Mar. 3, 1931.
Hairdressing. M. Mindlin. 283,404; May 26; Serial No. 309,649; published Mar. 3, 1931.
Intestinal lubricant. I. Stone. 283,468; May 26; Serial No. 297,459; published Aug. 5, 1930.
Lotion, Skin. Drug Products Co. 283,474; May 26; Serial No. 295,935; published Apr. 8, 1930.
Medicinal compound. B. Bahigian. 283,376; May 26; Serial No. 310,043; published Mar. 3, 1931.
Medicinal preparations. Sandoz Chemical Works, Inc. 283,344–5; May 26; Serial Nos. 309,942–3; published Mar. 3, 1931.
Medicinal preparations having anodyne properties. Sandoz Chemical Works, Inc. 283,346; May 26; Serial No. 309,940; published Mar. 3, 1931.
Medicinal preparations, particularly throat pastilles or jellies, E. Samuels. 283,463; May 26; Serial No. 299,625; published Mar. 3, 1931.
Medicines and tinctures. R. A. Bernhard. 283,514; May 26.

Ointment for burns, etc. Thomas Davies. 283,299; May 26; Serial No. 307,311; published Feb. 17, 1931.
Packs and creams, hair tonics, and shampoo preparations, Scalp. W. T. Rose. 283,501; May 26.
Perfume, toilet water, face powder, etc. Pinaud Incorporated. 283,479; May 26; Serial No. 287,201; published Oct. 1, 1929.
Perfumes, toilet water, face powder, etc. Houbigant, Inc. 283,357–8; May 26; Serial Nos. 309,855–6; published Mar. 3, 1931.
Powder, talcum powder, cold cream, etc., Face. E. A. Welters. 283,399; May 26; Serial No. 309,541; published Mar. 3, 1931.
Preparation for eliminating snoring. No-Snore Company. 283,502; May 26.
Preparation for the relief of menstrual pain and discomfort. Bendiner & Schlesinger, Inc. 283,341; May 26; Serial No. 309,962; published Mar. 3, 1931.
Preparation for the treatment of colds. Smith Drug Company. 283,401; May 26; Serial No. 309,596; published Mar. 3, 1931.
Preparations for the care of the skin. Solimine. 283,439; May 26; Serial No. 308,962; published Mar. 3, 1931.
Prophylactic gargle and a phophylactic wash. J. F. Santee. 283,310; May 26; Serial No. 306,419; published Mar. 3, 1931.
Salve or ointment of witch-hazel. Lanman & Kemp. 83,748; renewed Oct. 10, 1931.
Shampoo. M. Buchwald. 283,347; May 26; Serial No. 309,919; published Mar. 3, 1931.
Sterile medicinal solutions for hypodermatic uses. L. Heister Company. 283,311; May 26; Serial No. 306,398; published Mar. 3, 1931.
Tonic, Scalp. Joseph Bunci & Sons Co. 283,507; May 26.
Washing blue. Alden Speare's Sons Co. 283,487; May 26.

CLASS 7

Rope, Manila and sisal. Columbian Rope Company. 83,717; renewed Oct. 10, 1931.

CLASS 9

Cartridges. United States Cartridge Company. 83,450–1; renewed Sept. 12, 1931.
Fireworks, Daylight. Hitt Fireworks Co. 283,380; May 26; Serial No. 310,827; published Mar. 17, 1931.
Guns. Crescent Fire Arms Co. 283,512; May 26.

CLASS 10

Fertilizer. Gulf Fertilizer Company. 283,391; May 26; Serial No. 309,474; published Mar. 10, 1931.
Fertilizer. Planters Cotton Oil & Fertilizer Co., 283,498; May 26.
Fertilizers. Arundel Trucking Co. 283,331; May 26; Serial No. 309,456; published Mar. 10, 1931.
Lime, Agricultural. Longview Lime Works. 283,430; May 26; Serial No. 302,784; published Mar. 10, 1931.

CLASS 12

Cement, Aquarium. H. W. von Damm. 283,461; May 26; Serial No. 299,742; published Mar. 10, 1931.
Cement, Masonry. Cheney Lime & Cement Company. 283,506; May 26.
Concrete building blocks. Baltimore Concrete Products Co. 283,307; May 26; Serial No. 306,522; published Mar. 3, 1931.
Header for door frames and the like. Shur-Hold Header Co. 283,491; May 26.
Lathing, Metal. Milwaukee Corrugating Company. 283,481; May 26.
Plaster. Grand Rapids Plaster Company. 283,410; May 26; Serial No. 309,734; published Mar. 3, 1931.
Plywood. Harbor Plywood Corporation. 283,513; May 26.
Shingles and roofing. Beckman-Dawson Roofing Company. 283,480; May 26.
Shores, post caps, T-heads, L-heads, etc. Universal Form Clamp Co. 283,449; May 26; Serial No. 308,563; published Feb. 24, 1931.
Wood flooring. Athens Flooring Company. 283,493; May 26.

CLASS 14

Aluminum. Fairmont Aluminum Company. 283,419; May 26; Serial No. 304,858; published Mar. 10, 1931.
Iron and steel. Sandvikens Jernverks Aktiebolag. 283,348; May 26; Serial No. 309,905; published Mar. 10, 1931.
Metals, Alloy. D. D. Angle. 283,314; May 26; Serial No. 306,164; published Mar. 10, 1931.

CLASS 15

Candles. West India Oil Company. 82,034–7; renewed May 23, 1931.
Candles. West India Oil Company. 82,736; renewed July 18, 1931.
Candles. West India Oil Company. 82,848; renewed July 25, 1931.
Oils, Lubricating. Standard Oil Company of New York. 81,556; renewed Apr. 18, 1931.

CLASS 16

Polish for automobiles, furniture, etc. J. F. McGarrahan. 283,330; May 26; Serial No. 309,438; published Mar. 3, 1931.
Preservative and finish. International Chemical Company. 283,318; May 26; Serial No. 305,006; published Nov. 4, 1930.
Varnish, Chlorinated rubber. Naugatuck Chemical Company. 283,320; May 26; Serial No. 309,283; published Mar. 10, 1931.
Varnish paint. Ault & Wiborg Co. 81,773; renewed May 9, 1931.

CLASS 17

Cigars. General Cigar Co., Inc. 283,308; May 26; Serial No. 306,477; published Jan. 27, 1931.

CLASS 22

Materials for constructing miniature golf courses and apparatus for use in connection therewith. G. Carter. 283,428; May 26; Serial No. 303,143; published Aug. 19, 1930.

CLASS 23

Blade sharpeners, Mechanical razor. Guth, Stern & Co. 283,374; May 26; Serial No. 310,051; published Mar. 10, 1931.
Issuing machines, printing and issuing machines, and punching machines and parts thereof. General Register Corporation. 283,339–40; May 26; Serial Nos. 309,971–2; published Mar. 10, 1931.
Machinery vibration absorber. Korfund Company. 283,300; May 26; Serial No. 307,165; published Mar. 10, 1931.
Saws. E. C. Atkins & Company. 36,347; renewed Apr. 30, 1931.
Tools. Brainard Steel Corporation. 283,510; May 26.

CLASS 26

Envelopes for heat responsive elements of electrical pyrometers, Enclosing. Leeds & Northrup Company. 283,423; May 26; Serial No. 304,147; published Mar. 10, 1931.
Films, sound recording apparatus, and sound reproducing apparatus, Combined sound and motion picture. RCA Photophone, Inc. 283,429; May 26; Serial No. 302,968; published Mar. 10, 1931.

CLASS 27

Clocks and watches. Reiner & Berkow, Inc. 283,360; May 26; Serial No. 310,350; published Mar. 10, 1931.
Time recorders, clocks, and watches. Etna Watch Company. 283,511; May 26.

CLASS 29

Brooms. Stametco Broom & Mfg. Co. Inc. 283,492; May 26.
Brooms. A. Steiert & Son. 283,422; May 26; Serial No. 304,258; published Mar. 10, 1931.
Brushes, Tooth. Lambert Pharmacal Company. 283,373; May 26; Serial No. 310,054; published Mar. 3, 1931.
Mops and mop heads and mop yarn. J. E. Estes. 283,446; May 26; Serial No. 308,686; published Mar. 10, 1931.

CLASS 30

Dishes and tableware. Limoges China Company. 283,497; May 26.

CLASS 31

Carbons and carbonaceous materials, Adsorptive. Darco Sales Corporation. 283,332; May 26; Serial No. 309,462; published Mar. 17, 1931.

CLASS 32

Book ends, stationery racks, door stops, etc. Junior Achievement Incorporated. 283,453; May 26; Serial No. 307,849; published Mar. 10, 1931.
Booths, Soda. L. Sher. 283,498; May 26.
Chairs. Vander Ley Bros., Inc. 283,377; May 26; Serial No. 310,032; published Mar. 10, 1931.

CLASS 33

Lenses, Automobile lamp. McKee Glass Company. 283,509; May 26.

CLASS 34

Grates. Gordon Hollow Blast Grate Company. 83,405; renewed Sept. 12, 1931.
Radiators, Heating and cooling. Unit Heater & Cooler Company. 283,496; May 26.

CLASS 37

Binders, Loose leaf book. Heinn Company. 283,486; May 26.
Check books, account books, and ledgers. J. Berg. 283,363; May 26; Serial No. 310,280; published Mar. 3, 1931.
Indexes for books. Hall & McChesney, Inc. 283,402; May 26; Serial No. 309,614; published Mar. 3, 1931.

Inkwells. Sengbusch Self-Closing Inkstand Company. 283,354; May 26; Serial No. 309,870; published Mar. 10, 1931.
Paper. Butler Paper Corporations. 283,488; May 26.
Paper. International Paper Company. 283,364; May 26; Serial No. 310,256; published Mar. 3, 1931.
Paper and stationery. American Sales Book Company. 283,343; May 26; Serial No. 309,954; published Mar. 3, 1931.
Paper, Newsprint. Tonawanda Paper Company. 283,353; May 26; Serial No. 309,875; published Mar. 3, 1931.
Paper use in the printing art. International Paper Company. 283,365; May 26; Serial No. 310,255; published Mar. 3, 1931.
Paper, Writing. Eaton Paper Company. 283,375; May 26; Serial No. 310,048; published Mar. 3, 1931.
Paper, Writing. Rockwell-Barnes Company. 283,447; May 26; Serial No. 308,595; published Mar. 3, 1931.
Papers, envelopes, cardboards and Bristol boards and tissue paper. United States Envelope Company. 283,426; May 26; Serial No. 303,228; published Mar. 3, 1931.
Pencils, Lead and copying. Grafo Pencil Company. 283,471; May 26; Serial No. 297,071; published Apr. 29, 1930.
Tracing linen. Richard Schwickert Aktiengesellschaft. 283,407; May 26; Serial No. 309,702; published Mar. 3, 1931.
Wrappers, Food. Continental Paper & Bag Corporation. 283,351; May 26; Serial No. 309,885; published Mar. 3, 1931.

CLASS 38

Books. J. F. Tapley Company. 82,378; renewed June 20, 1931.
Books, magazines, pamphlets, and circulars. American Federation of Labor. 283,400; May 26; Serial No. 309,580; published Mar. 10, 1931.
Column or heading. Crowell Publishing Company. 283,319; May 26; Serial No. 309,066; published Mar. 3, 1931.
Essays, Series of. E. Rothert. 283,459; May 26; Serial No. 309,003; published Mar. 3, 1931.
Etchings, printed etchings, greeting cards, etc. Brown & Bigelow. 283,431; May 26; Serial No. 302,669; published Mar. 10, 1931.
House organ. Clay Products Company. 283,336; May 26; Serial No. 309,512; published Mar. 10, 1931.
Magazine. Good Story Magazine Company. 283,432–4; May 26; Serial Nos. 301,901–3; published Mar. 10, 1931.
Magazine. MacFadden Publications, Inc. 283,395–6; May 26; Serial Nos. 310,393–4; published Mar. 10, 1931.
Magazine. Tubize Chatillon Corporation. 283,370; May 26; Serial No. 310,145; published Mar. 10, 1931.
Magazine, Monthly. MacFadden Publications, Inc. 283,338; May 26; Serial No. 309,527; published Mar. 3, 1931.
Magazine, Monthly. E. C. Watson. 283,385; May 26; Serial No. 310,541; published Mar. 10, 1931.
Magazines published every month. Fawcett Publications, Inc. 283,416; May 26; Serial No. 309,835; published Feb. 24, 1931.
Magazines, Real-estate-listing service. Realty Exchange Service Company. 283,448; May 26; Serial No. 308,567; published Mar. 3, 1931.
Mailing lists. E. J. Williams. 36,283; renewed Apr. 23, 1931.
Monthly, Illustrated. American Automobile Association, Inc. 283,367; May 26; Serial No. 310,198; published Mar. 10, 1931.
Newspapers. Cuyahoga Newspapers Inc. 283,414; May 26; Serial No. 309,807; published Feb. 24, 1931.
Periodical. Cotton Trade Journal, Inc. 283,413; May 26; Serial No. 309,806; published Feb. 24, 1931.
Periodical. Wells Drorbaugh. 283,306; May 26; Serial No. 306,772; published Mar. 10, 1931.
Periodical, Daily. Motion Picture Daily, Inc. 283,389; May 26; Serial No. 310,484; published Mar. 10, 1931.
Periodical or trade paper. Federated Business Publications, Inc. 283,382; May 26; Serial No. 310,640; published Mar. 10, 1931.
Periodical, Weekly. Quigley Publishing Company, Inc. 283,388; May 26; Serial No. 310,486; published Mar. 10, 1931.
Periodicals. Fruit Dealer Publishing Company. 283,411; May 26; Serial No. 309,773; published Feb. 24, 1931.
Photographs and photographic prints. Illustrated News Service, Inc. 283,482; May 26.
Posters, windshield stickers and admission tickets. H. H. Comfort. 283,378; May 26; Serial No. 310,011; published Mar. 10, 1931.
Prints, Photographic. James-United, Inc. 283,436; May 26; Serial No. 301,267; published Feb. 24, 1931.
Publication. American Orthopædic Association. 283,457; May 26; Serial No. 307,522; published Feb. 24, 1931.
Publication. Life Publishing Company. 283,356; May 26; Serial No. 309,863; published Mar. 10, 1931.
Publication. United States Trade Mark Association. 83,792; renewed Oct. 10, 1931.
Publication, Bimonthly. H. Gernsback. 283,403; May 26; Serial No. 309,639; published Feb. 24, 1931.
Publication, Periodical. Fort Atkinson News, Inc. 283,312; May 26; Serial No. 306,298; published Mar. 3, 1931.
Publication, Periodical. Publishers Printing Company. 283,371; May 26; Serial No. 310,071; published Mar. 10, 1931.
Publication, Weekly. Continental Grocery Corporation. 283,392; May 26; Serial No. 310,444; published Mar. 10, 1931.
Publications. Korfund Company. 283,301; May 26; Serial No. 307,164; published Mar. 10, 1931.
Publications, Monthly. S. W. Graffiin. 283,337; May 26; Serial No. 309,519; published Mar. 3, 1931.
Publications, Printed. School Musician Publishing Co. 283,321; May 26; Serial No. 309,177; published Feb. 24, 1931.
Signs or display cards, and colored cards. J. H. Bohan. 283,441; May 26; Serial No. 308,852; published Mar. 10, 1931.

CLASS 39

Boots, shoes, and slippers. J. W. Carter Company. 283,489; May 26.
Brassières, garter belts, and girdles. Enid Manufacturing Co. 283,503; May 26.
Coats, jerkins, vests, blouses, etc. Neustadter Brothers. 283,316; May 26; Serial No. 305,238; published Mar. 3, 1931.
Corsets, girdles, bandeaus, etc., Ladies'. La Resista Corset Company. 283,465; May 26; Serial No. 298,707; published Oct. 28, 1930.
Garments, shirts, and uppers for shoes, Outer. Cohen, Goldman & Co. Inc. 283,320; May 26; Serial No. 309,165; published Mar. 10, 1931.
Girdles, corsets, and brassières. N. C. Anderson. 283,475; May 26; Serial No. 294,839; published Mar. 10, 1931.
Gloves. Stern Brothers. 283,495; May 26.
Gloves and mittens. Northrup Glove M'fg. Co. 81,288; renewed Mar. 21, 1931.
Hats. Byer-Rolnick Company. 283,454; May 26; Serial No. 307,797; published Mar. 10, 1931.
Hats, Ladies'. J. Bloomfield & Co. 283,504; May 26.
Hosiery. Berkshire Knitting Mills. 283,442; May 26; Serial No. 308,849; published Mar. 3, 1931.
Overalls. Standard Overall Co. 83,101; renewed Aug. 15, 1931.
Shirts and collars. Rotary Shirt Co. Inc. 283,478; May 26; Serial No. 290,032; published Mar. 3, 1931.
Shoes. Huntington Shoe and Leather Co. 283,305; May 26; Serial No. 307,052; published Feb. 24, 1931.

CLASS 40

Braids or plaits, Straw. Henry Pollak, Inc. 283,302–3; May 26; Serial Nos. 307,105–6; published Mar. 10, 1931.
Snap fasteners. Scovill Manufacturing Company. 283,469–70; May 26; Serial Nos. 279,151–2; published July 22, 1930.
Toilet sets and traveling-bag fittings. Elgin American Manufacturing Co. 283,397; May 26; Serial No. 310,369; published Mar. 3, 1931.
Trimmings, Fur. A. Horowitz & Sons, Inc. 283,440; May 26; Serial No. 308,939; published Mar. 10, 1931.

CLASS 42

Bag patches made of jute cloth. Young & Metzner. 83,797–8; renewed Oct. 10, 1931.
Broadcloth. Alfred L. Helwith & Co. 283,505; May 26.
Cotton and woolen cloth in the piece. Peters Manufacturing Co. 81,624; renewed Apr. 25, 1931.
Cotton goods. Georgia-Kincaid Mills. 283,349; May 26; Serial No. 309,982; published Mar. 3, 1931.
Cotton, linen, chintz, and cretonne fabrics. Atkinson, Fenlon Co. Inc. 283,508; May 26.
Cotton long cloth. Dayton Dry Goods Co. 75,359; renewed Sept. 28, 1929.
Fabrics in the piece, Pile. S. Blumenthal & Co., Inc. 283,335; May 26; Serial No. 309,502; published Mar. 3, 1931.
Jute bagging. Mente & Co. 283,415; May 26; Serial No. 309,826; published Feb. 24, 1931.
Pile fabrics. J. B. Brandler. 283,494; May 26.
Pile fabrics. Caromount Mills, Inc. 283,369; May 26; Serial No. 310,161; published Mar. 3, 1931.
Sheetings and drills. Easley Cotton Mills. 36,511; renewed June 4, 1931.
Wool coating fabric, All. Atlantic Mills. 283,464; May 26; Serial No. 299,038; published Dec. 23, 1930.
Woolen piece goods (tweeds). C. M. De Land. 283,499; May 26.

CLASS 44

Applicators. G. E. Thompson. 283,485; May 26.
Teething rings, Baby. Louis A. Boettiger Co. 283,352; May 26; Serial No. 309,881; published Mar. 10, 1931.

CLASS 45

Beverage, Maltless. Brillat Bros. 283,452; May 26; Serial No. 308,239; published Mar. 17, 1931.
Beverages, sirups and extracts for making the same, Maltless. C. Adams. 283,379; May 26; Serial No. 310,906; published Mar. 17, 1931.
Grape juice. P. Birner. 283,381; May 26; Serial No. 310,793; published Mar. 17, 1931.

CLASS 46

Apples, apple sauce and canned cranberries. Ocean Spray Preserving Company. 283,437; May 26; Serial No. 801,198; published Mar. 10, 1931.
Bacon. Oscar Mayer & Co. Inc. 283,472; May 26; Serial No. 296,228; published Mar. 10, 1931.
Birdseeds, turtle food, etc. H. W. Von Damm. 283,476; May 26; Serial No. 294,195; published Apr. 8, 1930.
Bread and biscuits. Ryvita Company. 283,455; May 26; Serial No. 307,740; published Mar. 10, 1931.
Buns, pies, rolls, French pastry products, etc. Treasure Cake Company, Ltd. 283,435; May 26; Serial No. 301,736; published Mar. 10, 1931.
Cake. Continental Baking Company. 283,406; May 26; Serial No. 309,677; published Mar. 10, 1931.
Candies, Chocolate. W. F. Schrafft & Sons Corporation. 83,360; renewed Sept. 5, 1931.
Candies, ice cream, and salad dressings. Gantt. Incorporated. 283,418; May 26; Serial No. 309,853; published Mar. 10, 1931.
Candy. Fred W. Amend Co. 283,466; May 26; Serial No. 298,367; published Mar. 10, 1931.
Candy, candied citrus, jellies, etc. Tropical Sweets Incorporated. 283,394; May 26; Serial No. 310,424; published Mar. 10, 1931.
Canned cat food. Hugo Strauss Packing Co. Inc. 283,444; May 26; Serial No. 308,800; published Mar. 10, 1931.
Canned salmon. Fidalgo Island Packing Company. 283,361–2; May 26; Serial Nos. 310,334–5; published Mar. 10, 1931.
Canned soups. M. H. Schoenfield. 283,420; May 26; Serial No. 304,739; published Mar. 10, 1931.
Cheese. Schachtelkäsefabrik Franz Zwick. 283,359; May 26; Serial No. 310,361; published Mar. 10, 1931.
Cheese. Schachtelkäsefabrik Franz Zwick. 283,398; May 26; Serial No. 310,362; published Mar. 10, 1931.
Crackers. Polyphase Corporation. 283,408; May 26; Serial No. 309,714; published Mar. 10, 1931.
Crackers and cakes. Bright Biscuit Co. 283,328; May 26; Serial No. 309,373; published Mar. 10, 1931.
Cranberries, Fresh and canned. Ocean Spray Preserving Company. 283,438; May 26; Serial No. 301,195; published Mar. 10, 1931.
Feed, Dairy. Whyte Feed Mills. 283,386; May 26; Serial No. 310,500; published Mar. 10, 1931.
Feed for cattle. Baltic-American Feed Corporation. 283,342; May 26; Serial No. 309,955; published Mar. 10, 1931.
Flour, stock feed, and shorts, Wheat. Theo. Stivers Milling Company. 283,443; May 26; Serial No. 308,841; published Mar. 10, 1931.
Food, Stock. Wilbur-Ellis Company. 283,384; May 26; Serial No. 310,585; published Mar. 10, 1931.
Foods, Bird. Nu-Trine Co. 283,421; May 26; Serial No. 304,734; published Mar. 10, 1931.
Fruits, Fresh citrus. Dade City Packing Company. 283,467; May 26; Serial No. 298,082; published Mar. 10, 1931.
Ice cream confection. T. George. 283,409; May 26; Serial No. 309,732; published Mar. 10, 1931.
Macaroni, spaghetti, and other alimentary paste products. G. Muro. 283,473; May 26; Serial No. 295,951; published Mar. 10, 1931.
Mayonnaise, sandwich spread, olive relish, etc. Fender Mayonnaise Company. 283,445; May 26; Serial No. 308,728; published Mar. 10, 1931.
Milk, Malted. Horlick's Malted Milk Corporation. 283,451; May 26; Serial No. 308,369; published Mar. 10, 1931.
Oranges, lemons, grape-fruit, tangerines, and limes. Chase & Company. 83,223; renewed Aug. 29, 1931.
Pickle relish, salad oils, butter, etc. Baltimore Butterine Company. 283,458; May 26; Serial No. 307,468; published Mar. 10, 1931.
Pop corn. Albert Dickinson Company. 283,322; May 26; Serial No. 309,265; published Mar. 10, 1931.
Sausage seasoning. Bader-Vaden-Parks Company. 283,412; May 26; Serial No. 309,795; published Mar. 10, 1931.
Sherbets and fruit juices, Frozen. Hendrix & Company. 283,333; May 26; Serial No. 309,475; published Mar. 10, 1931.
Spices and rice. Ouerbacker Coffee Company. 83,179; renewed Aug. 22, 1931.
Syrup, Malt. Home Products Co. 283,427; May 26; Serial No. 303,183; published Sept. 2, 1930.

CLASS 50

Advertising device. May Oil Burner Corporation. 283,450; May 26; Serial No. 308,552; published Mar. 10, 1931.
Elastic material, Transparent. Sears, Roebuck and Co. 283,387; May 26; Serial No. 310,490; published Mar. 10, 1931.
Textile fabric, Coated. Pocono Rubber Cloth Co. 283,372; May 26; Serial No. 310,070; published Mar. 10, 1931.

ALPHABETICAL LIST OF LABELS

A. W. Faber Eraser Kit. For a Container for Holding and Displaying Rubber Erasers. A. W. Faber. 39,202; May 26.
Aviation Brand Smoked Fish. For Smoked Fish. H. Y. Dissen. 39,196; May 26.
Barl-E-Malt. For Malt Syrup. Miller High Life Company. 39,213; May 26.
Cera-Lac-Wonder Flour. For Flour. Cera-Lac Company. 39,194; May 26.
Concentrated Liquid Fat Free Milk, Smaco Product No. 205. For Food Product for Infants. S. M. A. Corporation. 39,222; May 26.
Concentrated Liquid Whole Milk, Smaco Product No. 203. For Food Product for Infants. S. M. A. Corporation. 39,217; May 26.
Datenut a 5¢ Square-meal Confection. For Confection. Harry W. Newcomb. 39,216; May 26.
Dundee Egg Farms. For Eggs. F. W. Getchel & Son. 39,205; May 26.
E. F. C. A. Cases Approved for Export. For Fibreboard Shipping Cases. Export Fibreboard Case Association. 39,201; May 26.
Exit. For Liquid Insecticide. Midway Chemical Co. 39,212; May 26.
Folger's Golden Gate. For Coffee. J. A. Folger & Co. 39,204; May 26.
Gold Medal Dahlia Flowered Zinnias. For Zinnia Seeds. Bodger Seeds. 39,193; May 26.
Homax. For Waxes. Federal Research Corporation. 39,203; May 26.
Hot Shot. For Barbecue Horseradish. Mid-America Food Products, Inc. 39,210; May 26.
Jump, A Game of Solitaire with Marbles. For a Game. American Novelty Works. 39,192; May 26.
Liquid Fat-Free Milk Double Protein, Smaco Product No. 202. For Food Product for Infants. S. M. A. Corporation. 39,218; May 26.
Liquid Protein Milk, Smaco Product No. 201. For Food Product for Infants. S. M. A. Corporation. 39,220; May 26.
Maltose & Dextrins, Smaco Product No. 400. For Food Product for Infants. S. M. A. Corporation. 39,221; May 26.
Non-Allergic Whole Milk, Smaco Product No. 300. For Food Product for Infants. S. M. A. Corporation. 39,219; May 26.
Norrland Swedish Rye. For Rye Bread. W. E. Long Company. 39,208; May 26.
Pamol Compound. For Medicinal Preparation. Drug Products Co. 39,199; May 26.
Pamol Plain. For Medicinal Preparation. Drug Products Co. 39,197; May 26.
Paramount. For Coffee. Wheeling Coffee & Spice Company, Wheeling, W. Va. 39,234; May 24.
Piklsnaps. For Pickles. Glaser, Crandell Co. 39,206; May 26.
Po. No. 3 Calmox. For Medicinal Preparation. Drug Products Co. 39,200; May 26.
Polar Cake. For Chocolate Covered Ice Cream. Otto E. Schippleck. 39,223; May 26.
Pulvoids No. 467 Pitovaco. For Medicinal Preparation. Drug Products Co. 39,198; May 26.
Reed's. For Boxes. Hoague-Sprague Corporation. 39,207; May 26.
Rold Gold. For Spaghetti. American Cone & Pretzel Company. 39,191; May 26.
Royal Cherry Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,228; May 26.
Royal Lemon Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,227; May 26.
Royal Lime Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,226; May 26.
Royal Orange Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,229; May 26.
Royal Raspberry Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands. Incorporated. 39,225; May 26.
Royal Strawberry Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 39,224; May 26.
Sun-Ra. For Barbecue Horseradish. Sun-Ra Products Company. 39,230; May 26.
Sun-Ra. For Flavored Beverage Preparation. Sun-Ra Products Company. 39,231; May 26.
Tautges Chile Con Carne. For Chile Con Carne. J. G. Tautges. 39,232; May 26.
The Rampjack. For Vehicle Jacks. M. K. McCosh. 39,209; May 26.
Vanilla Sweeties. For Breakfast Foods. Uncle Sam Breakfast Food Company. 39,233; May 26.
Windsor Arms. For Malt Syrup. Milwaukee Malt Syrup Company. 39,215; May 26.
Wisconsin Malt. For Malt Syrup. Miller High Life Company. 39,214; May 26.
Woodbrite. For Mops. Midway Chemical Company. 39,211; May 26.
Ze-Ma-Lene. For Ointment. Clearwater Chemical Co. 39,195; May 26.
Zo-Ro-Lo. For Medicine for the Treatment of Rheumatism, High Blood Pressure, Indigestion, Nervousness, etc. Zo-Ro-Lo, Inc. 39,235; May 26.

ALPHABETICAL LIST OF PRINTS

Continental Pioneer Chick-proof Poultry Fence. For Wire Fencing. Continental Steel Corporation. 13,206; May 26.
Continental Pioneer Farm Fence. For Wire Fencing. Continental Steel Corporation. 13,205; May 26.
Continental Pioneer Poultry Fence. For Wire Fencing. Continental Steel Corporation. 13,204; May 26.
Jumbo. For Frozen Chocolate Covered Bars. The Mathews Company. 13,208; May 26.
Pamol. For Medicinal Emulsion. Drug Products Co. 13,207; May 26.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 26TH DAY OF MAY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbe, Edward J., assignor to The Elwell-Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,807,269; May 26.
Abrahamson, William, Chicago, Ill. Artificially cooled display case. 1,807,332; May 26.
Achenbach, Charles, Manitowoc, Wis. Combination jack and post puller. 1,807,142; May 26.
Acme Fishing Tool Co. (See Bell, T. W., and Rogers, assignors.)
Advance Pattern & Foundry Company. (See Burlin, Leslie H., assignor.)
Advance-Rumely Company. (See Paulsen, Thomas R., assignor.)
Agfa Ansco Corporation. (See Risdon, John J., assignor.)
Aitken, Allan A., Montreal, Quebec, Canada. Humidifier. 1,806,729; May 26.
Aitken, John M. (See Ruggles, Hiram C., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Angerstein, Ferdinand, assignor.)
Alberti, Charles E., Chicago, Ill. Visionograph record and making the same. 1,807,270; May 26.
Aldrich, Benjamin F., assignor of one-half to E. M. Carey, Milwaukee, Wis. Wing control for aircraft. 1,806,927; May 26.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alexander, John R., Paris, Tex. Flashlight holder. 1,807,501; May 26.
Alexander, Robert E., Springfield, Pa. Skirt holder. 1,806,601; May 26.
Alland, Maurice, Atlantic City, N. J. Thimble. 1,806,730; May 26.
Allen, Edward B., Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Buttonhole sewing machine. 1,807,577; May 26.
Allen, Paul W., Knoxville, Tenn. Printing press. 1,806,591; May 26.
Allen, Russell G., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Distributing head for glassware forming machines. 1,806,731; May 26.
All-Steel-Equip Company. (See Christensen, Carl T., assignor.)
American Air Filter Company. (See Goodloe, Alfred, assignor.)
American Arch Company. (See Doble, Bradley, assignor.)
American Bicheroux Company, The. (See Fincke, Michael, assignor.)
American Bosch Magneto Corporation. (See Martin, J. F., and Watts, assignors.)
American Buckle Company, The. (See Salisbury, Jessup, assignor.)
American Can Company. (See Hoffman, Edmund, assignor.)
American Can Company. (See Lindgren, Henry W., assignor.)
American Cyanamid Company. (See Buchanan, Guy H., assignor.)
American Cyanamid Company. (See Christmann, Ludwig J., assignor.)
American Electric Company. (See Ide, Harry H., assignor.)
American Iron and Machine Works Co. (See Owen, Frank M., assignor.)
American Lace Mfg. Co., The. (See Hucknall, Hage W., assignor.)
American Multigraph Co. (See Morse, Lawrence H., assignor.)
American New Fashion Silverware Corporation. (See Caiazzo, Ralph, assignor.)
American Optical Company. (See Forshey, Elmore A., assignor.)
American Pulley Company, The. (See Munoz, G. C., and Bowen, assignors.)
American Sales Book Company. (See Bottle, Edward K., assignor.)
American Steel Foundries. (See Kayler, Frank H., assignor.)
American Stove Company. (See Brumbaugh, Isaac V., assignor.)
American Swiss Company, The. (See Grund, Fletcher D., assignor.)
American Telephone and Telegraph Company. (See Bown, Ralph, assignor.)
American Telephone and Telegraph Company. (See Merts, Pierre, assignor.)
American Telephone and Telegraph Company. (See Wintringham, William T., assignor.)
Anderson, Ernest H. B. (See Parsons, C. A., and Anderson.)
Anderson, Roland G., New Haven, Conn., assignor, by mesne assignments, to Wellman Company, Medford, Mass. Embossing rubber. 1,807,024; May 26.
Anderson, Will, Minneapolis, Minn. Trap. 1,807,463; May 26.
Andrews, Willard E., Sycamore, Ill. Vending machine. 1,806,835; May 26.
Angel, Herbert, and J. W. Robinson, Brooklyn, assignors to The Western Union Telegraph Company, New York, N. Y. Method of and apparatus for operating cable telegraph systems. 1,807,368; May 26.
Angerstein, Ferdinand, Mannheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Induction-motor control system. 1,807,143; May 26.
Anschicks, Rudolph J., assignor to Protectoseal Company of America, Chicago, Ill. Flame baffle partition. 1,806,602; May 26.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Brake mechanism. 1,806,579; May 26.
Archibald, John O., Lancaster, N. Y. Power unit device. 1,806,639; May 26.
Armistead, Herbert, Farnley, Leeds, assignor to Armistie Limited, Hunslet, Leeds, England. Case-tie or like fastening. 1,806,836; May 26.
Armistie Limited. (See Armistead, Herbert, assignor.)
Armitage, Joseph B., Milwaukee, assignor to Kearney & Trecker Corporation, West Allis, Wis. Machine tool lubrication. 1,806,603; May 26.
Arms, Ray W., assignor to Roberts and Schaefer Company, Chicago, Ill. Cleaning coal. 1,806,779; May 26.
Arms, Ray W., assignor to Roberts and Schaefer Company, Chicago, Ill. Dust collecting system for coal cleaners. 1,806,780; May 26.
Armstrong Cork Company. (See Busch, Herman F., assignor.)
Armstrong, Frank H., assignor to Safety Mining Company, Chicago, Ill. Blasting cartridge. 1,807,144; May 26.
Arnal, Leon E. (See Magney, G. R., Tusler, and Arnal.)
Art Metal Construction Company. (See Skar, J. G. L., and Syren, assignors.)
Asadoorian, Mariam E., Pasadena, Calif. Attachment for frying pans. 1,807,271; May 26.
Ashe, Marsellus T., Garden City, N. Y. Container. 1,807,233; May 26.
Ault & Wiborg Co., The. (See Miller, Amos L., assignor.)
Axe, Roy T., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y. Sash holder and starter. 1,807,272; May 26.
B. V. D. Company, The. (See Heyn, Robert E., assignor.)
Backus, John C., Smethport, Pa. Umbrella lock. 1,806,660; May 26.
Bagshaw, Charles M., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Producing soles of or for boots and shoes. 1,806,661; May 26.
Bailey, Chas. M., Co. (See Thing, Frederick A., assignor.)
Baird, John L., assignor to Television Limited, London, England. Television and like apparatus. 1,807,464; May 26.
Baird, John L., assignor to Television Limited, London, England. Television and like apparatus. 1,807,465; May 26.
Baker & Company. (See Maulen, Frederick, assignor.)
Baker & Co. Inc. (See Raymond, Louis, assignor.)
Baker, James M., Parkersburg, W. Va. Collapsible rumble seat inclosure. 1,806,604; May 26.
Baker-Raulang Company, The. (See Remde, Edward H., assignor.)
Barbour, John E., Paterson, N. J., assignor to National Net & Twine Co. Inc., Boston, Mass. Shuttle operating mechanism. 1,807,333; May 26.
Barker, Eugene. (See Speck, W. C., and Barker.)
Barnes, Gladeon M., U. S. Army, Hastings, Mich. Cylinder and piston. 1,806,884; May 26.
Barone, Anthony, Boston, Mass. Dental elevator. 1,806,592; May 26.
Barrett Company, The. (See Miller, Stuart P., assignor.)
Bart, Blasius, East Orange, N. J. Electrolytically formed articles. 1,807,145; May 26.
Bartels, Elmer L., assignor to The Gleaner Combine Harvester Corporation, Independence, Mo. Grain cutting unit. 1,806,928; May 26.
Barth, Oscar R., Detroit, Mich. Magazine pencil. 1,806,580; May 26.

Bartholomew, Bert E., assignor to Consolidated Factories Limited, Santa Ana, Calif. Window pulley. 1,806,605; May 26.
Barton, Francis M., assignor, by mesne assignments, to Scott-Weiss Steel Company, Chicago, Ill. Metallic insert for concrete structures. 1,806,662; May 26.
Bassick Company, The. (See Sargent, Frank P., assignor.)
Bath, Wilmer H., West Conshohocken, assignor to The Sharples Specialty Company, Philadelphia, Pa. Liquid seal. 1,806,929; May 26.
Bausch & Lomb Optical Company. (See Forrest, John W., assignor.)
Banwens, Seraphine F., Chicago, assignor to L. G. Blessing, Evanston, Ill. Fluting machine. 1,806,885; May 26.
Beard, Bert, assignor to G. M. Holley, Detroit, Mich. Carburetor. 1,806,930; May 26.
Beck, Charles W., assignor, by mesne assignments, to N. M. Beck, Toledo, Ohio. Gear shift lever grip for motor vehicles. 1,807,369; May 26.
Beck, Nellie E. (See Beck, Charles W., assignor.)
Beckley, Howard B. (See Bennett, H. T., Story, and Beckley.)
Behimer, Otto, Chicago, Ill., assignor to The Texas Company, New York, N. Y. Distillation. 1,806,732; May 26.
Behrman, Abraham S., Chicago, Ill., assignor, by mesne assignments, to The Permutit Company, New York, N. Y. Base exchange material and making same. 1,806,663; May 26.
Beidler, George C., Rochester, N. Y. Camera bellows support. 1,807,273; May 26.
Beidler, George C., Rochester, N. Y. Film straightening device. 1,807,274; May 26.
Beller, Edward A., Dubuque, Iowa. Body support for coffins. 1,806,990; May 26.
Belden, Albert G., and C. G. Trefethen, assignors to Norton Company, Worcester, Mass. Grinding machine. 1,806,664; May 26.
Bell Telephone Laboratories, Incorporated. (See Gilbert, John J., assignor.)
Bell, Thomas W., and T. C. Rogers, assignors to Acme Fishing Tool Co., Parkersburg, W. Va. Link. 1,806,733; May 26.
Bemis, Ken E., Los Angeles, Calif., assignor to Fountain Products Corporation. Food product and making the same. 1,807,189; May 26.
Bendix Brake Company. (See Apple, Vincent G., assignor.)
Benjamin Electric Mfg. Company. (See Benjamin, Reuben B., assignor.)
Benjamin, Reuben B., assignor to Benjamin Electric Mfg. Company, Chicago, Ill. Radio frequency amplifying system. 1,807,300; May 26.
Benner, Harry P. (See Egloff, G., and Benner.)
Bennett, Harry, Brooklyn, N. Y. Emulsifying water insoluble substances. 1,807,563; May 26.
Bennett, Harry T., and L. G. Story, Tulsa, Okla., said Story assignor to Josiah Chatfield, Cleveland, Ohio. Lubricating oil and making the same. 1,806,735; May 26.
Bennett, Harry T., L. G. Story, and H. B. Beckley, Tulsa, Okla.; said Story assignor to Josiah Chatfield, Cleveland, Ohio. Lubricating oil. 1,806,734; May 26.
Bennis, Alfred W., Bolton, England. Chain grate. 1,807,502; May 26.
Benz, George R. (See Harlow, F. J., and Benz.)
Berg-Winship, Inc. (See Winship, Albert W., assignor.)
Berlin Chapman Company. (See Chapman, Frank D., assignor.)
Berlin Chapman Company. (See Stocking, George E., assignor.)
Bernard, Jacques M., Paris, France. Preparation of viscose. 1,807,370; May 26.
Berwick, Frederick W. (See Quick, W., Thomas, and Berwick.)
Besser, Albert, et al. (See Stubner, John F., assignor.)
Best Die Casting and Stamping Company, Incorporated. (See Mariani, Frank, assignor.)
Beth, Hugo W. H., assignor to Norton Company, Worcester, Mass. Segmental grinding wheel and making the same. 1,806,665; May 26.
Bethenod, Joseph, assignor to Societe des Moteurs Dugelay, Paris, France. Fuel supply system for internal combustion engines of variable load for using heavy fuels. 1,806,581; May 26.
Bethlehem Steel Company. (See Dougherty, R. S. A., and McIntosh, assignors.)
Bethlehem Steel Company. (See Keller, Albert T., assignor.)
Bethlehem Steel Company. (See McCarty, Richard J., jr., assignor.)
Beutner, Fred G., White Lake, S. Dak. Portable electric saw. 1,806,582; May 26.
Bigler, Clinton L., and J. Kloos, assignors to The Morgan Engineering Company, Alliance, Ohio. Ingot stripper. 1,807,275; May 26.
Billington, James H., Company. (See Cundey, Clarence E., assignor.)
Binns, Gerald L., Ypsilanti, Mich. Luggage carrier for vehicles. 1,807,371; May 26.
Birdsboro Steel Foundry and Machine Company. (See Peterson, Edward T., assignor.)
Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Slack puller. 1,807,466; May 26.
Bjornwald, Holger, New York, N. Y. Carriage reversing mechanism for windshield cleaners and the like. 1,807,372; May 26.
Blackhawk Manufacturing Company, The. (See Pfauser, Edward M., assignor.)
Blair, J. M. (See Livingston, Harry W., assignor.)
Blessing, Lewis G. (See Banwens, Seraphine F., assignor.)
Blesso, Rocco, Hartford, Conn. Traffic signal. Des. 84,225. May 26.
Bletcher, Ralph E., and E. H. Bucknell, Los Angeles, Calif. Valve mechanism. 1,807,081; May 26.
Blinn, Harry M., Baltimore, Md., assignor to Doughnut Machine Corporation, New York, N. Y. Pressure regulating valve. 1,807,564; May 26.
Blunt, James G., Schenectady, N. Y. Locomotive structure. 1,807,334; May 26.
Blunt, James G., Schenectady, N. Y. Connecting rod for locomotives. 1,807,373; May 26.
Bock, Walther, Berlin-Steglitz, Germany, and K. Rath, New York, N. Y., assignors to C. Lorens, A. G., Berlin-Tempelhof, Germany. Electric regulation system. 1,807,190; May 26.
Bodde, Theodore, Niagara Falls, assignor to The Regan Safety Devices Company, Inc., New York, N. Y. Magnetron circuit controlling apparatus. 1,807,097; May 26.
Bodde, Theodore, Niagara Falls, assignor to The Regan Safety Devices Company, Inc., New York, N. Y. Magnetron circuit controlling apparatus. 1,807,098; May 26.
Boicourt, Allan H. (See Boicourt, Edward H. and A. H.)
Boicourt, Edward H. and A. H., Rockwell City, Iowa. Automatic fuse setting apparatus. 1,806,593; May 26.
Bonander, John Erik, Calumet, Ill. Card holder. 1,807,467; May 26.
Boorman, Edward T., Milltown, assignor to King Press, Inc., borough of Carlstadt, N. J. Finishing playing cards. 1,806,583; May 26.
Booth, Clement, Danbury, Conn., assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,806,886; May 26.
Booth, Garry M., Dearborn, Mich. Auto towing device. 1,806,606; May 26.
Borer, William J., Genoa, Nebr. Lawn mowing machine. 1,806,584; May 26.
Bossert Corporation, The. (See Clement, Walter J., assignor.)
Bott, Wister P., Homer, La. Aeroplane. 1,806,870; May 26.
Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada. Carbon controller for typewriting machines. 1,807,301; May 26.
Bowen, Russell H. (See Munoz, G. C., and Bowen.)
Bower, Ward E., Washington, D. C. Sound intensity measuring system. 1,806,871; May 26.
Bowerman, Fred W., Chicago, Ill. Reflector sign. 1,807,374; May 26.
Bowers, Frank, assignor, by mesne assignments, to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,807,276; May 26.
Bowers, Harry A., Hollywood, Calif. Bar mounting for xylophone or the like. 1,807,057; May 26.
Bown, Ralph, Maplewood, N. J., assignor to American Telephone and Telegraph Company. Radio broadcasting system. 1,806,666; May 26.
Boyd, Robert H. (See Faries, R., and Boyd.)
Boyd, Samuel J., Los Angeles, Calif. Rotary drive trip hammer. 1,807,025; May 26.
Boye Needle Company, The. (See Byrnes, Edward P., assignor.)
Bover, Sylvester, Lynn, Mass., assignor to General Electric Company. Electric condenser and removing impurities from the elements of or for such condensers. 1,807,375; May 26.
Boyle, Eldridge R., Boston, Mass. Furring clip. 1,806,837; May 26.
Boyle, John R., Chicago, Ill. Electrically operated valve. 1,807,191; May 26.
Boynton, Alexander, San Antonio, Tex. Automatic well flowing device. 1,806,872; May 26.
Boynton, Alexander, San Antonio, Tex. Drilling wells. 1,807,082; May 26.
Bracey, William E., and L. W. Bramblett, Dallas, Tex. Combination tube and brush holder. 1,807,083; May 26.
Brach, Leon S., East Orange, N. J. Cigarette snuffer and receiver. 1,806,781; May 26.
Brach, Leon S., East Orange, N. J. Article for receiving cigar or cigarette stubs. 1,806,782; May 26.
Brackelsberg, Carl, Milspe, Germany. Process and device for the production of iron-alloys free from gases, especially oxygen. 1,807,468; May 26.
Braden, Marshall H., assignor to The Nu-Way Corporation, Rock Island, Ill. Control system for burners. 1,807,302; May 26.
Braden, Marshall H., assignor to The Nu-Way Corporation, Rock Island, Ill. Liquid fuel burning system. 1,807,376; May 26.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Vacuum brake system. 1,807,277; May 26.

Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Bramblett, Lyfus W. (See Bracey, W. E., and Bramblett.)
Brand, James C., assignor to Chase Plow Company, Lincoln, Neb. Lever. 1,806,783; May 26.
Brassert, H. A., & Co. (See Wille, Fred; assignor.)
Brehmer, William, San Antonio, Tex. Spraying machine. 1,807,469; May 26.
Breslin, John F., jr., Summit Hill, Pa. Combined illuminated sign and wreath support. 1,806,667; May 26.
Breuer, Adam A., Chicago, Ill. Sprayer. 1,806,784; May 26.
Brewer-Titchener Corporation. (See Wenn, Floyd D., assignor.)
Brewer-Titchener Corporation, The. (See Winans, Daniel M., assignor.)
Briele, August K. and R. H., Baltimore, Md. Loose leaf binder clamp. 1,807,504; May 26.
Briele, Robert H. (See Briele, A. K. and R. H.)
Briggs Manufacturing Company. (See Marshall, William, assignor.)
Brill, Abraham, assignor to The Republic Rubber Company, Youngstown, Ohio. Rubber tire and analogous article of manufacture. 1,806,838; May 26.
Brittain, Richard J., jr., Newark, N. J., assignor to General Motors Corporation, Detroit, Mich. Journal box. 1,807,026; May 26.
Britten, Edwin F., jr., Maplewood, assignor to Monroe Calculating Machine Company, Orange, N. J. Attachment for calculating machines. 1,807,192; May 26.
Britton, Edgar C. (See Hale, W. J., and Britton.)
Broad, William, Beaver Falls, assignor of three-fourth to H. E. McLain, Pittsburgh, Pa. Indicator for pastries and the like. 1,807,146; May 26.
Brockway, William A., Marietta, Whatcom County, Wash. Horn for radio speakers. 1,807,027; May 26.
Broido, Benjamin, deceased, by The Superheater Company, New York, N. Y., assignee. Radiant superheater. Re18,082; May 26.
Brokaw, De Witt P., North Plainfield, N. J. Golf tee. 1,807,377; May 26.
Brooke, Frank W., assignor to William Swindell & Brothers, Pittsburgh, Pa. Furnace. 1,807,147; May 26.
Brooks, Charles A. (See Penrod, M. A., Young, and Brooks.)
Brooks, William H., assignor to Carnation Company, Oconomowoc, Wis. Valve. 1,807,193; May 26.
Brown, Basil E., Pontiac, Mich. Adjustable support for angle bars. 1,806,607; May 26.
Brown, H. Brainard, assignor to Taylor Instrument Companies, Rochester, N. Y. Thermometer. Des. 84,226; May 26.
Brown, Herbert C. (See Capell, Carl F., assignor.)
Brown, Hugh S., Roselle Park, N. J., assignor to The Hubron Company, Inc. Earth auger. 1,807,148; May 26.
Brown-Hutchinson Iron Works. (See Hoefen, Walter V., assignor.)
Brown, Reinhardt H., La Porte, Ind. Baby hammock for automobiles. 1,807,234; May 26.
Brown, Reinhardt H., La Porte, Ind. Collapsible carriage for children. 1,807,235; May 26.
Brown, Virgil S., Cromwell, Iowa. Grain soaking attachment for watering troughs. 1,806,585; May 26.
Brown, Wilbur F., Toledo, Ohio. Headlight indicating device. 1,806,931; May 26.
Browning, J. M. & M. S., Company. (See Browning, John M., assignor.)
Browning, John, administrator. (See Browning, John M.)
Browning, John M., deceased, by J. Browning, administrator, assignor to J. M. & M. S. Browning Company, Ogden, Utah. Firearm. 1,806,736; May 26.
Bruer, Genevieve, San Francisco, Calif. Garment box. 1,806,737; May 26.
Brumbaugh, Isaac V., assignor to American Stove Company, St. Louis, Mo. Special construction for lining for range ovens. 1,807,470; May 26.
Bruner, George C. (See Frawley, R. W., and Bruner.)
Bruno, Ernest, New York, N. Y. Adjustable holding device. 1,806,887; May 26.
Bruson, Herman A., Germantown, assignor to Rohm & Haas, Co., Inc., Philadelphia, Pa. Condensation product of ketonic acids. 1,807,503; May 26.
Bryant, John, Cardiff, Wales. Internal combustion engine. 1,806,608; May 26.
Buchanan, Guy H., Westfield, N. J., assignor to American Cyanamid Company, New York, N. Y. Separating adhering particles. 1,806,888; May 26.
Buchina, Joseph. (See Koch, L. B., and Buchina.)
Buckeye Steel Castings Company, The. (See Speck, W. C., and Barker, assignors.)
Bucknell, Ernest H. (See Bletcher, R. E., and Bucknell.)
Budd, Edward G., Manufacturing Co. (See Ledwinka, Joseph, assignor.)
Budd Wheel Company. (See Hughes, James W., assignor.)
Budd Wheel Company. (See Nelson, Emil A., assignor.)
Budil, Eleonore, born Meixner, Berlin-Tempelhof, Germany. Filter for air and gases. 1,807,378; May 26.
Buell, Wales S., Brooklyn, assignor to Foster Wheeler Corporation, New York, N. Y. Method of and apparatus for generating and superheating steam. 1,807,505; May 26.
Buerer, Wayne, Reno, Nev. Safety braking mechanism for aeroplanes. 1,807,194; May 26.
Buffington, Calvin A., Berkshire, N. Y. Folding chair. 1,807,506; May 26.
Bulthuis, William, Chicago, Ill. Shower bath cabinet. 1,806,668; May 26.
Bundy, Clara M. L., Tacoma, Wash. Apparatus for teaching music. 1,806,964; May 26.
Burgamy, J. R. (See Lockhard, Frank S., assignor.)
Burke, Elmer H., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Pattern grading machine. 1,807,195; May 26.
Burkett, George C., Indiahoma, Okla. Trailer hitch. 1,807,303; May 26.
Burkhardt, Conrad C. C., Philadelphia, Pa. Simultaneously controlling the throttle and electric motors of locomotives. 1,807,471; May 26.
Burkley, Charles. (See Cox, John H., assignor.)
Burks, Arthur W., Decatur, Ill. Strainer. 1,806,839; May 26.
Burlin, Leslie H., Oak Park, assignor to Advance Pattern & Foundry Company, Chicago, Ill. Combination tray and table. Des. 84,227; May 26.
Burlin, Leslie H., Oak Park, assignor to Advance Pattern & Foundry Company, Chicago, Ill. Table. Des. 84,228; May 26.
Burnish, Howard J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Pipe coupling thread protector. 1,806,932; May 26.
Burnish, Howard J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Pipe thread protector. 1,807,565; May 26.
Burns, Bruce, and H. B. Lewis, Los Angeles, and R. M. Otis, Alhambra, assignors to Hughes Development Company, Ltd., Los Angeles, Calif. Chemico-thermal welding process. 1,806,738; May 26.
Burrow, Robert J., Buchanan, assignor to Clark Tructractor Company, Buchanan, Mich. Draft coupling for tractors and trailers. 1,807,379; May 26.
Busch, Herman F., Millvale, assignor to Armstrong Cork Company, Pittsburgh, Pa. Bottle closure and its manufacture. 1,806,739; May 26.
Bush, A. G. (See Criner, Harry J., assignor.)
Businga, Cornelius S., Rockford, Ill. Trailer vehicle. 1,806,889; May 26.
Butler, Charles R. (See Rasmussen, C. A., Butler, and Trout.)
Butler, Edward A., Buffalo, and T. R. Olive, New York, assignors, by mesne assignments, to Robert Donner, Buffalo, N. Y. Stroboscopic apparatus. 1,807,149. May 26.
Butler, Glenn C., Rochester, Mich. Oar. 1,807,380; May 26.
Butler, Henry E., Schenectady, N. Y., assignor to General Electric Company. Cut-out for series incandescent street-lighting circuits and the like. 1,807,381; May 26.
Butler, John R., assignor of one-half to J. C. McLean, Durango, Colo. Universal connection for piston rods. 1,807,382; May 26.
Butterworth, Arthur B., Port Arthur, Tex., assignor, by mesne assignments, to Butterworth System, Inc., Wilmington, Del. Cleaning, scaling, and gas freeing bulk cargo tanks of tank vessels. 1,806,740; May 26.
Butterworth System, Inc. (See Butterworth, Arthur B., assignor.)
Byrne, William W., Mobile, Ala. Automobile advertising apparatus. 1,807,278; May 26.
Byrnes, Edward P., assignor to The Boye Needle Company, Chicago, Ill. Spatula. 1,807,279; May 26.
Caiazzo, Ralph, assignor to American New Fashion Silverware Corporation, Brooklyn, N. Y. Window sash. 1,807,507; May 26.
Caldwell, John H., Milwaukee, Wis. Land clearing machine. 1,807,150; May 26.
Calvert, Robert, Wilmette, assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill. Ester of diethylene glycol. 1,807,304; May 26.
Camel Company. (See Fehr, E. J., and Tobin, assignors.)
Camel Company. (See Wasberg, A., and Tobin, assignors.)
Cameron Can Machinery Co. (See Cameron, William, assignor.)
Cameron, Charles E., jr., East Orange, N. J., assignor to Lauter-Humana Co. Piano action. 1,806,595; May 26.
Cameron, Hugh M., Woodhaven, assignor to J. Chatillon & Sons, New York, N. Y. Spring scale. 1,806,741; May 26.
Cameron, Hugh M., Woodhaven, assignor to J. Chatillon & Sons, New York, N. Y. Projecting scale. 1,806,742; May 26.
Cameron, William, assignor to Cameron Can Machinery Co., Chicago, Ill. Automatic stop mechanism. 1,806,890; May 26.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Remote control mechanism. 1,806,669; May 26.
Campbell, John S., Pittsburgh, Pa. Antiskid chain holder. 1,806,840; May 26.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Manufacture of blown glassware. 1,807,566; May 26.
Capell, Carl F., Santa Monica, assignor of one-fourth to H. C. Brown, Los Angeles, Calif. Signaling apparatus for motor vehicles. 1,806,670; May 26.
Carey, Edward M. (See Aldrich, Benjamin F., assignor.)

Carey, Philip, Manufacturing Company, The. (See Rogers, Homer L., assignor.)
Carfrey, James J., assignor to Gotham Silk Hosiery Company, Inc., Philadelphia, Pa. Runner stop for stockings. 1,807,508; May 26.
Carman, Glenn B. (See Westman, L. A., and Carman.)
Carnahan, George H., New York, N. Y., assignor, by mesne assignments, to Rubber Surfacers, Inc., Wilmington, Del. Grinding method and apparatus. 1,807,383; May 26.
Carnation Company. (See Brooks, William H., assignor.)
Carpenter, Charles E., Hopewell Junction, N. Y. Electric motor speed controller. 1,807,280; May 26.
Carpenter, Robert F., assignor to The Sanymetal Products Company, Cleveland, Ohio. Boiler cover. 1,807,058; May 26.
Carpenter, Youel V., Essington, assignor to Ideal Lubricator Company, Philadelphia, Pa. Lubricating system. 1,807,059; May 26.
Castelyns, George, L. Stans, and A. Vinck, New York, N. Y. Building wall. 1,807,335; May 26.
Caterpillar Tractor Co. (See Rucker, George H., assignor.)
Cave, Sydney R., New York, N. Y. Duplex indicating device. 1,806,785; May 26.
Central Railway Signal Company. (See Wedger, W. L., and Edmands, assignors.)
Century Lighting Equipment, Inc. (See Levy, Joseph, assignor.)
Chadwick, George B., Portsmouth, N. H. Bushing. 1,806,891; May 26.
Chalmers, Charles E., New York, N. Y. Multiple fare collecting and change making machine. 1,807,196; May 26.
Chambersburg Engineering Company. (See Terhune, Howard, assignor.)
Chandler & Price Company, The. (See Root, Charles F., assignor.)
Chapman, Frank D., assignor to Berlin Chapman Company, Berlin, Wis. Continuous cooker. 1,806,609; May 26.
Chapman-Stein Company, The. (See Culbertson, Albert L., assignor.)
Chase Plow Company. (See Brand, James C., assignor.)
Chatfield, Josiah. (See Bennett, H. T., and Story, assignor.)
Chatfield, Josiah. (See Story, L. G., assignor Beckley and Bennett.)
Chatillon, John, & Sons. (See Cameron, Hugh M., assignor.)
Chevrier, Zotique, Masenod, Saskatchewan, Canada. Wagon end gate mounting. 1,807,084; May 26.
Chicago Rawhide Manufacturing Company. (See Clark, Harold A., assignor.)
Chorlton, Alan E. L., London, England. Internal combustion engine control mechanism. 1,807,384; May 26.
Christensen, Carl T., Aurora, Ill., assignor to All-Steel-Equip Company. Furniture. 1,806,610; May 26.
Christensen, Niels A., Milwaukee, Wis. Brake apparatus. 1,807,151; May 26.
Christmann, Ludwig J., Jersey City, N. J., assignor to American Cyanamid Company, New York, N. Y. Substituted aryl antitoxidant. 1,806,671; May 26.
Christmas, William W., New York, N. Y., assignor, by mesne assignments, to The General Development Company, Hartford, Conn. Aeroplane. 1,806,586; May 26.
Church, Albert E., New Britain, Conn. Chuck. 1,807,385; May 26.
Cincinnati Grinders Incorporated. (See Booth, Clement, assignor.)
Clark, Ezra E., deceased, Newtonville, Mass.; F. Clark, executrix. Valve for sprinkler systems. 1,807,305; May 26.
Clark, Frances, executrix. (See Clark, Ezra E.)
Clark, Harold A., Northbrook, assignor to Chicago Rawhide Manufacturing Company, Chicago, Ill. Oil seal. 1,807,567; May 26.
Clark, Harold A., Northbrook, assignor to Chicago Rawhide Manufacturing Co., Chicago, Ill. Oil seal. 1,807,568; May 26.
Clark, Harold A., Northbrook, assignor to Chicago Rawhide Manufacturing Company. Oil retainer. 1,807,569; May 26.
Clark, Ira J., Fort Morgan, Colo. Valve stem split lock catcher. 1,807,509; May 26.
Clark, Jeddiah B., Dunkirk, Ind. Glass-gob disposing means. 1,807,336; May 26.
Clark Loose Leaf Manufacturing Company. (See Kemp, John B., assignor.)
Clark, Ralph C. (See Goetz, H. W., Clark, and Ferlin.)
Clark, Tructractor Company. (See Burrows, Robert J., assignor.)
Clark, Wycliffe L., Jamestown, N. Y. Fastening device. 1,807,236; May 26.
Clarke, Carole A., Moorestown, N. J., assignor to Victor Talking Machine Company. Cabinet for radio receiving apparatus. 1,807,386; May 26.
Claus, Rolf R., West New York, N. J. Device for lifting bodies submerged in water. 1,806,786; May 26.
Claypoole, Walter, Forest Hills, assignor to The Texas Company, New York, N. Y. Cable oil. 1,807,060; May 26.
Clement, Edward E., assignor to E. F. Colladay, Washington, D. C. Silent wave radio transmission system. 1,807,510; May 26.
Clement, Walter J., assignor to The Bossert Corporation, Utica, N. Y. Hammer mill. 1,807,107; May 26.
Cleveland Crane & Engineering Company, The. (See Wehr, William G., assignor.)
Cleveland Graphite Bronze Company, The. (See Myers, James L., assignor.)
Cleveland Planer Company, The. (See Mesker, Louis H., assignor.)
Clewell, John H., Arlington, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del. Ink for cellulose esters. 1,806,965; May 26.
Coddington, Harry W., Roanoke, Va. Oil cellar for driving boxes. 1,806,594; May 26.
Colangelo, Antony, Revere, Mass. Mop holder and wringer. 1,807,387; May 26.
Coleman Lamp and Stove Co. (See McCutchen, John E., assignor.)
Coley, Henry E., London, England. Manufacture of zinc. 1,806,596; May 26.
Colladay, Edward F. (See Clement, Edward E., assignor.)
Collins, Hubert D. (See Wright, R. L., and Collins.)
Colman, Howard D., Rockford, Ill. Thermostat. 1,807,306; May 26.
Columbian Rope Company. (See Palmer, John A., assignor.)
Comer, John, Windsor, Colo. Beet blocker. 1,807,511; May 26.
Compagnie Internationale Pour La Fabrication Des Essences et Petroles. (See Joseph, Alfred, assignor.)
Condon, Carr D., Des Moines, Iowa. Refrigerating unit. 1,807,152; May 26.
Connell, Stanley L., assignor to The Girard Model Works, Inc., Girard, Pa. Registering bank. 1,806,892; May 26.
Conradty, Ottmar, Nuremberg, Germany. Incandescent lamp. 1,806,787; May 26.
Consolidated Factories Limited. (See Bartholomew, Bert E., assignor.)
Continental Can Company. (See Sedwick, Mathew M., assignor.)
Continental Diamond Fibre Company. (See Frederick, Louis T., assignor.)
Conveyor Sales Company. (See Moulton, Albion, assignor.)
Conveyor Sales Company. (See Walter, Raymond A., assignor.)
Cook Electric Company. (See Persons, Lawrence M., assignor.)
Cookson, Thomas. (See Morrill, B. F., Cookson, and Sloane.)
Cooper, Elisha H., assignor to The Tafnir Bearing Company, New Britain, Conn. Spring end connection. 1,807,099; May 26.
Copeland Products, Inc. (See Thomas, Charles C., assignor.)
Copelin, Le Roy, Jacksonville, Fla. Self leveling clock escapement verge rod. 1,806,966; May 26.
Copper Plate Sheet & Tube Company. (See Knapp, Edwin R., assignor.)
Cordes, Silas, Boise, Idaho. Headlight for motor vehicles. 1,806,611; May 26.
Corliss, Cyrus, Boston, Mass. Apparatus for feeding coal and like material. 1,807,388; May 26.
Corning Glass Works. (See Said, William H., assignor.)
Corning Glass Works. (See Smith, Rowland D., assignor.)
Cowper-Coles, Sherard O., Sunbury-on-Thames, England. Manufacture of metallic sheet strip or wire. 1,806,587; May 26.
Cox, John H., Lowell, assignor of one-half to C. Burkley, Gastonia, N. C. Stopping mechanism for spoolers and the like. 1,806,612; May 26.
Crabtree, R. W., & Sons, Limited. (See Webster, Clarence H., assignor.)
Crago, Harry R., Schenectady, N. Y., assignor to General Electric Company. Cutout for series incandescent street lighting circuits and the like. 1,807,389; May 26.
Craig, Charles F., et al. (See Moreton, Henry H., assignor.)
Craighead, Walter B., St. Paul, Minn. Ball game. 1,806,613; May 26.
Cramer, Albert N., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Shear mechanism for glass feeders. 1,806,743; May 26.
Crickmer, Charles S., assignor to Tridex Corporation, Dallas, Tex. Two-way valve. 1,807,085; May 26.
Criner, Harry J., assignor of one-half to A. G. Busch, Davenport, Iowa. Multiple bladed slicing machine. 1,806,672; May 26.
Crosby, George L., East Orange, N. J. Loose leaf binder. 1,807,390; May 26.
Cross, Frank H., Cleveland, and G. J. Ruf, Cleveland Heights, Ohio. Coupling device. 1,806,788; May 26.
Cross, Paul A., Takoma Park, Md. Brush. 1,807,281; May 26.
Cross, Samuel C., West Springfield, assignor to Moore Crop Forging Company, Springfield, Mass. Die for swaging machines. 1,806,789; May 26.

Crowley, Jesse C., Paris, Tex. Seed distributing attachment for planters. 1,807,282; May 26.
Crown Cork & Seal Company. (See McManus, Charles E., assignor.)
Culbertson, Albert L., assignor, by mesne assignments, to The Chapman-Stein Company, Mount Vernon, Ohio. Water-cooled agitator. 1,806,614; May 26.
Culp, Arthur J., Clatnon, Ala. Exhaust trap construction. 1,807,512; May 26.
Culver, Lagar R., Los Angeles, assignor of one-half to J. W. Prillaman and Ella F. Prillaman, Vista, Calif. Power dipper door latch trip. 1,807,028; May 26.
Cundey, Clarence E., assignor to J. H. Billington Company, Philadelphia, Pa. Combined inner metal shield and outer metal grip for bobbins and making same. 1,807,198; May 26.
Cunningham, Harry G., Los Angeles, Calif. Inside micrometer caliper. 1,806,893; May 26.
Cushman, Orville E., and T. W. Doell, Berkeley, assignors to Standard Oil Company of California, San Francisco, Calif. Cutting oil. 1,806,933; May 26.
Cutler-Hammer, Inc. (See Hubbard, Frank H., assignor.)
Czapek, Emil, and R. Weingand, Bomlitz, Germany. Manufacturing artificial leather, leather board, waxed cloth and the like. 1,806,841; May 26.
Daniels, Claude H., Newton Center, Mass. Boot or shoe and making same. 1,806,673; May 26.
Danko, John M., and J. Kasarda, Freeland, Pa. Walking toy animal. 1,807,391; May 26.
Dasey, Percy J., Chicago, Ill. A gaseous fuel mixing device. 1,806,790; May 26.
Daughaday, Frank P., Providence, R. I. Collar button. 1,806,894; May 26.
Davis, Carl H., assignor to Tubize Chatillon Corporation, New York, N. Y. Textile fabric. Des. 84,229; May 26.
Davis, Carl H., assignor to Tubize Chatillon Corporation, New York, N. Y. Textile fabric. Des. 84,230; May 26.
Davis, Carl H., assignor to Tubize Chatillon Corporation, New York, N. Y. Textile fabric. Des. 84,231; May 26.
Davis, Carl H., assignor to Tubize Chatillon Corporation, New York, N. Y. Textile fabric. Des. 84,232; May 26.
Davis, Claud F., Shadyside, Ohio. Continuous circulating pumps. 1,807,392; May 26.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricant compressor. 1,806,615; May 26.
Davis, G. M., Regulator Company. (See Davis, George C., assignor.)
Davis, George C., assignor to G. M. Davis Regulator Company, Chicago, Ill. Valve housing. 1,806,791; May 26.
Davis, Kenneth, Pittsburgh, Pa. Combined trolley frog and line section switch. 1,806,842; May 26.
Dawans, Adrien, Brussels, Belgium. Apparatus for melting finely divided materials. 1,807,307; May 26.
Dawson, Wilfred, London, England. Electric lamp. 1,806,843; May 26.
Day, Fred A., Columbus, Ohio. Heel breasting machine. 1,807,153; May 26.
Day, J. H., Company, The. (See Kirchhoff, William G., assignor.)
Dear, Russell, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Winding device. 1,807,199; May 26.
De Florez, Luis, Boston, Mass., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Treatment of hydrocarbons. 1,806,597; May 26.
De Forest, Lee, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation. Silent drive mechanism for talking motion picture machines. 1,806,744; May 26.
De Forest, Lee, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation. Sound producing device. 1,806,745; May 26.
De Forest, Lee, assignor to Deforest Phonofilm Corporation, New York, N. Y. Luminous discharge device. 1,806,746; May 26.
Deforest Phonofilm Corporation. (See de Forest, Lee, assignor.)
De Fraine, Allan F. (See Degenhardt, W. R., and de Fraine.)
Degenhardt, William R., London, and A. F. de Fraine, Wembley, assignors to The Francois Cementation Company, Limited, Doncaster, England. Rock abrading machine. 1,806,792; May 26.
Deister, Emil, Fort Wayne, Ind. Screen. 1,806,934; May 26.
Delaney, Thomas W., St. Paul, Minn. Furnace control. 1,807,513; May 26.
Delco Products Corporation. (See Dear, Russell, assignor.)
De Leece, Frank, et al. (See Pisani, Guilio, assignor.)
Delmanhorst, Herman F. (See Dodge, Clinton C., assignor.)
Delmanhorst, Herman F., assignor, by mesne assignments, to Louisville Frog, Switch & Signal Company, Louisville, Ky. Reflecting device. 1,807,393; May 26.
Delta Electric Company. (See Wiley, Lee M., assignor.)
Dennis, Samuel D., Chillicothe, Mo. Electrician's tape gripper. 1,806,844; May 26.
Dennison, French E., and W. S. Ireland, assignors to National Refrigeration Corporation, Beloit, Wis. Expansion valve. 1,807,200; May 26.
Denoux, René, Paris, France. Acoustic receiver. 1,806,598; May 26.
De Postels, Theodore A., New York, N. Y. Drafting appliance. 1,807,237; May 26.
Deremer, J. G., Research Corporation. (See De Remer, Jay G., assignor.)
De Remer, Jay G., Greenwich, Conn., assignor, by mesne assignments, to J. G. Deremer Research Corporation, Jersey City, N. J. Massage belt. 1,807,308; May 26.
Desfosse, Paul. (See Poncel, Alexis, assignor.)
Detrick, M. H., Company. (See Hosbein, L. H., assignor.)
Detrick, M. H., Company. (See Lanyon, Samuel H., assignor.)
Deubel, Hermann. (See Muehlfeld, P., and Deubel.)
Dewey and Almy Chemical Company. (See Dewey, Bradley, assignor.)
Dewey, Bradley, Cambridge, assignor to Dewey and Almy Chemical Company, North Cambridge, Mass. Self deodorizing sealing composition. 1,807,570; May 26.
Dewoitine, Julien E. E., Chatillon-sous-Bagneux, France. Radiator actuating mechanism. 1,807,514; May 26.
Dexter Folder Company. (See Rader, Earl D., assignor.)
Diamond Power Specialty Corporation. (See Bowers, Frank, assignor.)
Diamond Power Specialty Corporation. (See Rawson, Grant I., assignor.)
Dick, Howard J., Benton Harbor, Mich. Multiple body artificial fish lure. 1,807,283; May 26.
Dieterich, Albert E. (See Smith, G. W., and Dieterich.)
Disney, Walter E., Hollywood, Calif. Toy figure. Des. 84,233; May 26.
Dixie Culvert & Metal Company, The. (See See, Howard, assignor.)
Dobie, Bradley, Ridgewood, N. J., assignor, by mesne assignments, to American Arch Company, Inc., New York, N. Y. Furnace structure. 1,806,747; May 26.
Dobie, Bradley, Chicago, Ill., assignor to American Arch Company. Combustion chamber. 1,806,798; May 26.
Dodge, Clinton C., assignor of one-half to H. F. Delmanhorst, Louisville, Ky. Reflecting lens unit. 1,807,472; May 26.
Doelfel, John G. (See Sauer, Conrad, assignor.)
Doell, Theodore W. (See Cushman, O. E., and Doell.)
Doherty Research Company. (See Goldsborough, W. E., and Schilling, assignors.)
Doherty Research Company. (See Morgan, John D., assignor.)
Dolan, William A., assignor to The Wilbert Products Co. Inc., New York, N. Y. Bottle or similar article. Des. 84,234; May 26.
Donaldson, Charles H. (See Mabee, Charles R., assignor.)
Donnelly, Nell Q., Kansas City, Mo. Garment. 1,806,794; May 26.
Donner, Robert. (See Butler, E. A., and Olive, assignors.)
Donohue, James A., Philadelphia, Pa. Medical cabinet for light ray treatment. 1,806,674; May 26.
Doran, Elmer E., Merced, Calif. Wheeled scraper. 1,807,201; May 26.
Dougherty, Robert S. A., and R. J. McIntosh, Bethlehem, Pa., assignors to Bethlehem Steel Company. Sheet piling. 1,806,967; May 26.
Doughnut Machine Corporation. (See Blinn, Harry M., assignor.)
Dow Chemical Company, The. (See Hale, W. J., and Britton, assignors.)
Drysdale & Company. (See Drysdale, John W. W., assignor.)
Drysdale, John W. W., Yoker, Glasgow, assignor to Drysdale & Company, Limited, Glasgow, Scotland. Lubricating system. 1,807,515; May 26.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Producing low boiling point hydrocarbons. 1,806,616; May 26.
Dube, Joseph E. (See Luce, William D., assignor.)
Dunham, Arthur L., New York, N. Y. Interiorly enamelled boiler. 1,807,394; May 26.
Dunn, John W., Los Angeles, Calif. Venetian blind operating mechanism. 1,807,061; May 26.
Dunn, William D., assignor to August W. Spilner, Elizabeth, N. J. Portable window seat. 1,806,675; May 26.
Dunning, Elmer D., Stonehurst, Upper Darby, assignor to Kulair Corporation, Philadelphia, Pa. Valve mechanism for compressors. 1,807,029; May 26.
Dupont, Andrew T., Washington, D. C., assignor to Elevator Supplies Co., Inc., Hoboken, N. J. Checking means for door operating mechanism. 1,807,284; May 26.
Du Pont Vissoloid Company. (See Clewell, John H., assignor.)
Durkee, Henry E., Manchester, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Thread grinding machine. 1,807,516; May 26.
Dur-O-Lite Pencil Company. (See Lynn, John P., assignor.)
Dusel, Frank J., St. Paul, Minn. Tire rim. 1,806,676; May 26.
Dvilnsky, Louis, Brookline, Mass. Baseboard radiator. 1,807,202; May 26.
Dwyer, Will, Dallas, Tex. Injector and aspirator. 1,806,845; May 26.
Ebeling, Charles W., New York, N. Y., assignor to Harrison W. Rogers, Incorporated. Synchronized photographic and sound recording and reproducing mechanism. 1,806,617; May 26.
Eckland, Emil O. (See Young, W. H., and Eckland.)
Edmands, John W. (See Wedger, W. L., and Edmands.)

Edmonds, George P., assignor to G. and W. Electric Specialty Company, Chicago, Ill. Distribution switch. 1,807,030; May 26.
Edwards, Charles F. (See Ross, S. D., and Edwards.)
Edwards, James M., Waterloo, Iowa, assignor to Iowa Dairy Separator Company. Bearing protector. 1,806,748; May 26.
Edwards, O. M., Company Inc., The. (See Axe, Roy T., assignor.)
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Cracking petroleum oil. 1,806,618; May 26.
Egloff, Gustav, and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Apparatus for treating hydrocarbon oil. 1,806,619; May 26.
Ehmig, Victor, La Garenne Colombes, France. Construction of aeroplanes. 1,807,203; May 26.
Ekstedt, Ernest D., East St. Louis, Ill., assignor, by mesne assignments, to National Malleable and Steel Castings Company, Cleveland, Ohio. Sintering machine car and grate bar therefor, and the like. 1,807,154; May 26.
Elderkin, Paul N., Los Angeles, Calif. Dispensing means. 1,806,599; May 26.
Elderkin, Paul N., Los Angeles, Calif. Support. 1,806,600; May 26.
"Electa" Apparatenbau-Gesellschaft M. B. H. (See Matzka, Otto, assignor.)
Electric Steel Foundry Company. (See Richmond, Harry H., assignor.)
Electrical Engineers Equipment Company. (See Starr, James H., assignor.)
Electrons, Inc. (See von Wedel, Carl J. R. H., assignor.)
Elevator Supplies Co. (See Dupont, Andrew T., assignor.)
Elevator Supplies Company. (See Weeks, William W., assignor.)
Elliott-Fisher Company. (See Stevenson, Ernest, assignor.)
Elliott, Harmon P., Watertown, Mass. Addressing machine. 1,807,309; May 26.
Ellis, George H., St. Paul, assignor to The Insulite Company, Minneapolis, Minn. Building wall structure. 1,807,395; May 26.
Ellis, Laurence D., Toledo, Ohio. Toy wagon. 1,806,749; May 26.
Ellman, Wofgang, Sheboygan, Wis. Safety device for stoves. 1,807,310; May 26.
Ellsworth, F. J., et al. (See Furr, Harry L., assignor.)
Ellsworth, Percy G., Burlington, Vt. Stringing beads. 1,807,396; May 26.
Elwell-Barker Electric Company, The. (See Abbe, Edward J., assignor.)
Emerson, George H., and W. B. Whitsitt, Baltimore, Md. Siphon generator and circulator for locomotive boilers. 1,807,473; May 26.
England, Benjamin C., Pedricktown, N. J. Transplanter. 1,807,474; May 26.
Englisch, O. B., et al. (See Moreton, Henry H., assignor.)
Enterprise Manufacturing Company, The. (See Pflueger, Charles T., assignor.)
Erickson, Willard E. (See Kidder, E. H., and Erickson.)
Eriendson, John, and V. G. Faulhafer, Vancouver, British Columbia, Canada. Attachable bracket shelf. 1,807,517; May 26.
Espig, Hermann, and W. Teubner, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Surface treatment of synthetic precious stones. 1,806,588; May 26.
Espig, Hermann, and W. Teubner, Bitterfeld, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Surface treatment of articles made of synthetic corundum. 1,806,589; May 26.
Evans, Walter W., Longmeadow, assignor to Ludlow Manufacturing Associates, Ludlow, Mass. Linen shoe thread. 1,807,571; May 26.
Evans, Walter W., Longmeadow, assignor to Ludlow Manufacturing Associates, Ludlow, Mass. Shoe. 1,807,572; May 26.
Fahrney, Emery H., Chicago, Ill. Pump priming device. 1,806,968; May 26.
Fairbairn, George C., Port Arthur, Tex., assignor to The Texas Company, New York, N.Y. Indicator. 1,806,750; May 26.
Faries Manufacturing Company. (See Peters, Henry M., assignor.)
Faries, Robert, St. Davids, and R. H. Boyd, Philadelphia, Pa. Rail retaining member. 1,807,204; May 26.
Farkas, Eugene, New York, N. Y. Changeable exhibitor. 1,806,678; May 26.
Farnsworth, Philo T., Berkeley, assignor, by mesne assignments, to Television Laboratories, Inc., San Francisco, Calif. Light valve. 1,806,935; May 26.
Fassnacht, Karl. (See Schraysshuen, C., and Fassnacht.)
Faulhafer, Valentine G. (See Eriendson, J., and Faulhafer.)
Fechheimer, Carl J., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Propeller type pump or fan. 1,807,397; May 26.
Fehr, Eugene J., and K. J. Tobin, assignors to Camel Company, Chicago, Ill. Car door structure. 1,807,311; May 26.
Fereday, Frederick T., Anchorage, Ky., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,806,795; May 26.
Ferguson Brothers Manufacturing Company. (See Wagner, Andrew, assignor.)
Ferlin, John J. (See Goetz, H. W., Clark, and Ferlin.)
Ferris, Ervie A., Westwood, Calif. Offset for log carriers. 1,807,086; May 26.
Fetyk, Joseph F., New York, N. Y., assignor to Francis Keil & Son, Inc. Locking mechanism. 1,806,991; May 26.
Feyl, John L. (See Lunz, G. A., and Feyl.)
Fibreboard Products Inc. (See Ford, G. F., and Pittman, assignors.)
Fieux, Jean, assignor of one-half to Schneider & Cie., Paris, France. Device for bringing a moving body to rest. 1,806,992; May 26.
Fincke, Michael, Aix-la-Chapelle, Germany, assignor, by mesne assignments, to The American Bicheroux Company. Feeding sheet glass to leer conveyers. 1,806,590; May 26.
Finke, Herman A., St. Louis, Mo. Internal combustion engine. 1,807,087; May 26.
Finnell System, Inc. (See Finnell, Walter S., assignor.)
Finnell, Walter S., assignor to Finnell System, Inc., Hannibal, Mo. Powder distributor. 1,806,936; May 26.
Fischer, William B. (See Warlavek, Carl, assignor.)
Fisher, David W. (See London, J. S., and McCarty, assignors.)
Fisher, Emmett E., Indianapolis, Ind. Apparatus for controlling velocity of wheeled vehicles. 1,806,993; May 26.
Fisher, Emmett E., Indianapolis, Ind. Track brake. 1,806,994; May 26.
Fisk, Sylvanus W., Los Angeles, Calif. Dishwashing machine. 1,806,751; May 26.
Fitzky, Wilhelm, and E. Thoma, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo-dyestuffs insoluble in water. 1,806,995; May 26.
Flam, Stephen, Walnut Park, assignor to Supertile Machinery Corporation, Los Angeles, Calif. Vibrator mechanism. 1,806,620; May 26.
Flamma, Lucio, New York, N. Y. Combination beverage dispenser. 1,807,518; May 26.
Flather, Frederick A., Lowell, Mass. Curtain package. 1,807,519; May 26.
Fleck, Roy E., Oil City, Pa. Switch. 1,807,398; May 26.
Floring, William M., Newton Center, Mass., assignor, by mesne assignments, to The Ruberoid Co., Bound Brook, N. J. Mulch for promoting growth of plants. 1,807,205; May 26.
Floyd, Ray H., Chicago, Ill., assignor of forty-nine per cent to I. W. Powell and I. E. Powell. Automatic spark retarder. 1,806,752; May 26.
Fogarty, Orville A., Montreal, Quebec, assignor to Vilas Oil Burners Limited, Cowansville, Canada. Electrical switch in oil burning equipments. 1,806,937; May 26.
Ford, George F., Los Angeles, and W. F. Pittman, Huntington Park, assignors to Fibreboard Products Inc., San Francisco, Calif. Forming mechanism. 1,806,893; May 26.
Forrest, John W., Brighton, assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Optical system for colorimeters and the like. 1,806,621; May 26.
Forshey, Elmore A., New York, N. Y., assignor to American Optical Company, Southbridge, Mass. Diagnostic instrument. 1,807,520; May 26.
Foshay, W. B., Company. (See Magney, G. R., Tusler, and Arnal.)
Foster Wheeler Corporation. (See Buell, Wales S., assignor.)
Foulk, Theodore M., assignor to Public Service Company of Colorado, Denver, Colo. Apparatus for cleaning gas. 1,807,521; May 26.
Fountain Products Corporation. (See Bemis, Ken E., assignor.)
Fowler, Arno W., Highland, Ill. Clock winding mechanism. 1,806,969; May 26.
Fox, John H., Pittsburgh, and H. F. Hitner, Oakmont, Pa., assignors to Pittsburgh Plate Glass Company. Process and apparatus for making composite glass. 1,806,846; May 26.
Francis Kell & Son, Inc. (See Fetyk, Joseph F., assignor.)
Francois Cementation Company, The. (See Degenhardt, W. R., and de Fraine, assignors.)
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frawley, Raymond W., and G. C. Bruner, Birmingham, Ala. Tie plate. 1,807,062; May 26.
Frederick, Louis T., Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del. Means for and method of molding materials. 1,807,155; May 26.
Frederick, Louis T., Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del. Mica laying apparatus. 1,807,206; May 26.
Frederick, Victor W. I., Brooklyn, N. Y. Window ventilator. 1,806,847; May 26.
French, Charles A., Riverside, Ill. Semiflash boiler. 1,806,677; May 26.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric. Des. 84,235; May 26.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered lace. Des. 84,236; May 26.

Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric. Des. 84,237; May 26.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric. Des. 84,238; May 26.
Freund, Edmund J., Valparaiso, Ind. Type form projector. 1,806,896; May 26.
Friedrich, Wilhelm, Berlin-Lichterfelde, Germany. Dry fire extinguisher. 1,807,399; May 26.
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Frisch, Arthur, Brooklyn, N. Y. Doll-head and the like. 1,807,207; May 26.
Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Bottle cap. Des. 84,239; May 26.
Fuller Brush Company, The. (See Smith, Curtiss F., assignor.)
Fullilove, John A., Market Harborough, England. Casting large accumulator plates. 1,806,848; May 26.
Furr, Harry L., Washington, D. C., assignor of two per cent to F. J. Ellsworth and five per cent to H. W. Steigel, Staunton, Va. Signal switch for motor vehicles. 1,807,285; May 26.
G. & W. Electric Specialty Company. (See Edmonds, George P., assignor.)
Galbraith, Joseph B., Kaysville, Utah. Chuck. 1,807,156; May 26.
Gallagher, Arthur J., Warren, Ohio. Cup container. 1,807,400; May 26.
Galvin, William H. (See Runge, Paul I. A., assignor.)
Garrison, Forrest C., Evanston, Ill., assignor to The Oscar C. Rixson Company. Pivot hinge. 1,807,063; May 26.
Gas Machinery Company, The. (See Gleason, James H., assignor.)
Gates, Howard A., assignor to Zenith Radio Corporation, Chicago, Ill. Power-circuit control for radio receiving systems. 1,806,796; May 26.
Gathmann, Emil, Baltimore, Md. Ingot mold. 1,806,753; May 26.
Gedge, Frederick C., Plainfield, Ill. Equalizing feed means for water tube boilers. 1,807,088; May 26.
Gelardi, August J., Bronx, N. Y. Combination pencil, rule, and compass. 1,806,849; May 26.
General Aniline Works, Inc. (See Fitzky, W., and Thoma, assignors.)
General Aniline Works Inc. (See Schweitzer, Hugo, assignor.)
General Development Company, The. (See Christmas, William W., assignor.)
General Electric Company. (See Boyer, Sylvester, assignor.)
General Electric Company. (See Butler, Henry E., assignor.)
General Electric Company. (See Crago, Harry R., assignor.)
General Electric Company. (See Hoxie, Charles A., assignor.)
General Electric Company. (See Lee, Charles F., assignor.)
General Electric Company. (See Mittag, Albert H., assignor.)
General Electric Company. (See Owens, Joseph W., assignor.)
General Electric Company. (See Schurig, Otto R., assignor.)
General Electric Company. (See Woodcock, Virgil E., assignor.)
General Industries Company, The. (See Van Der Woude, Fritz, assignor.)
General Motors Corporation. (See Brittain, Richard J., jr., assignor.)
General Steel Castings Corporation. (See Tawresey, John S., assignor.)
General Talking Pictures Corporation. (See de Forest, Lee, assignor.)
Gerry, Edith S., Warwick, R. I. Headlight for automobiles. 1,806,897; May 26.
Ghia, Eugene, Bristol, Conn. Tread member for tire chains. 1,807,522; May 26.
Gibbens, Gabriel J., Hutchinson, Kans. Plant setting machine. 1,806,622; May 26.
Gibbons, Arthur J., near Indianapolis, assignor to L. D. Gibbons, Camby, Ind. Snath. 1,807,573; May 26.
Gibbons, Louisa D. (See Gibbons, Arthur J., assignor.)
Gibbons, Willis A., Great Neck, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Modifying vulcanizable material and product. 1,807,031; May 26.
Gibson, George H., Upper Montclair, N. J. Combustion regulation. 1,806,970; May 26.
Gibson, Mary K., Baltimore, Md. Eyeshield. 1,807,475; May 26.
Giese, Paul, Leipzig, Germany. Dimming device for searchlights. 1,806,850; May 26.
Gieseler, George A., assignor, by direct and mesne assignments, to The Pollen Filter Incorporated, Cleveland, Ohio. Apparatus for removing pollen from air. 1,807,032; May 26.
Gilbert, John J., Douglaston, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Cable signaling system. 1,806,754; May 26.
Gilkerson, James F., Milwaukee, Wis. Shoe. 1,807,401; May 26.
Gillian, Herman, Columbus, Ohio. Glove. 1,807,402; May 26.
Gilman, George H., Belmont, Mass., assignor, by mesne assignments, to Worthington Pump and Machinery Corporation, New York, N. Y. Drilling machine. 1,806,873; May 26.
Gilman, George H., Belmont, Mass., assignor, by mesne assignments, to Worthington Pump and Machinery Corporation, New York, N. Y. Drilling machine. 1,806,874; May 26.
Gilmore, Carl, Oakland, Calif. Beach chair. 1,806,679; May 26.
Ginnel, Henry, Scarsdale, N. Y., assignor to Hiler Engineering & Construction Company, Inc. Incinerator grate. 1,807,064; May 26.
Ginsberg, Abraham J., New York, N. Y. Receptacle. 1,807,476; May 26.
Girard Model Works, Inc., The. (See Connell, Stanley L., assignor.)
Gleaner Combine Harvester Corporation, The. (See Bartels, Elmer I., assignor.)
Gleason, James H., Willoughby, assignor to The Gas Machinery Company, Cleveland, Ohio. Fuel-charging mechanism. 1,806,623; May 26.
Glenwood Range Company. (See Wilde, Samuel A., assignor.)
Glover, Earl, L., and R., Comstock, Nebr. Two row corn picker. 1,806,624; May 26.
Glover, Loyd. (See Glover, Earl, L., and R.)
Glover, Rex. (See Glover, Earl, L., and R.)
Goetz, Herbert W., Alhambra, R. C. Clark, Los angeles, and J. J. Ferlin, Huntington Park, Calif. Rotary table. 1,807,286; May 26.
Gold, Harriett, et al. (See Hopp, Leo, assignor.)
Goldblatt, David, New York, N. Y., assignor to Mergenthaler Linotype Company. Typographical composing machine. 1,807,523; May 26.
Goldsborough, Winder E., South Norwalk, Conn., and B. Schilling, New York, assignors to Doherty Research Company, New York, N. Y. Fuel injection system. 1,807,524; May 26.
Goodloe, Alfred, Roanoke, Va., assignor, by mesne assignments, to American Air Filter Company, Inc. Automatic self cleaning automobile filter. 1,806,898; May 26.
Goodman, Samuel, Chicago, Ill., and W. N. Sechler, Fort Scott, Kans. Footwear. 1,806,938; May 26.
Gordon, Charles W., Pleasantville, assignor to The Superheater Company, New York, N. Y. Boiler. 1,807,238; May 26.
Gordon, Douglas B., Hamilton, Ontario, Canada. Display device. 1,807,403; May 26.
Goss, Harry T., Rutherford, N. J., assignor to Pack Shops, Inc., New York, N. Y. Circular vending machine. 1,807,404; May 26.
Gotham Silk Hosiery Company. (See Carfrey, James J., assignor.)
Götz, Richard, Berlin-Gross-Lichterfelde, Germany. Needle bearing. Re18,080; May 26.
Gould, Sidney B., New York, N. Y. Vehicle construction. 1,807,525; May 26.
Grabber Manufacturing Company, The. (See McAvoy, Dan J., assignor.)
Graff, Gorge B., Newton Center, and R. A. Stewart, Watertown, assignors to George B. Graff Company, Cambridge, Mass. Signal device. 1,807,100; May 26.
Graff, George B., Company. (See Graff, G. B., and Stewart, assignors.)
Grafmiller, James, Forest, Ohio. Hay loader. 1,806,875; May 26.
Graham, Fred, assignor to Lufkin Foundry & Machine Company, Lufkin, Texas. Counterbalance for pumping rigs. 1,807,337; May 26.
Grampp, Albert, Corona, N. Y. Starting and landing device for airships of the lighter than air type. 1,806,939; May 26.
Grant, Denison W., Franklin, Pa. Filtering and decolorizing oils. 1,806,876; May 26.
Grant, John, Los Angeles, Calif. Hold down sleeve for expansive reamers. 1,806,625; May 26.
Gray, Edwin. (See Meehan, A., and Gray.)
Greenawalt, John E., New York, N. Y. Dust collector mechanism for sintering machines. 1,806,899; May 26.
Greenberg, Irving, Brooklyn, N. Y. Telephone dial lock 1,807,065; May 26.
Greenhouse, Samuel, Brooklyn, N. Y. Bottling machine. 1,806,971; May 26.
Greer, Frederick W., Cambridge, Mass. Confection conveying machine. 1,807,338; May 26.
Greiner, Adolph, and C. J. Long, Milford, Mich. Valve construction. 1,806,972; May 26.
Grieve, Thomas S., Leicester, England. Circular knitting machine. 1,806,996; May 26.
Groove Lock Co. (See Leberman, Harry, assignor.)
Grund, Fletcher D., Weston, assignor to The American Swiss Company, Toledo, Ohio. Door latch device. 1,806,940; May 26.
Guentzler, Herman F., Cleveland, Ohio. Sponge cup. 1,807,239; May 26.
Guiterman, Leo A., New York, N. Y. Tee holders. 1,806,797; May 26.
Gundersen, George. (See Soderberg, Erik A., assignor.)
Gypsy Oil Company. (See Wright, R. L., and Collins, assignors.)
Haines Corporation, The. (See Lane, Ralph W., assignor.)
Hale, Frank B., Edgewood Arsenal, Md. Point detonating fuse. 1,806,877; May 26.
Hale Pneumatic, Ltd. (See Hale, William B., assignor.)

Hale, William B., Huntington Park, Calif., assignor to Hale Pneumatic, Ltd., Lovelock, Nev. Air concentrator or compressor. 1,806,941; May 26.
Hale, William J., and E. C. Britton, assignor to The Dow Chemical Company, Midland, Mich. Making phenolic compounds. 1,806,798; May 26.
Hall & Brown Wood Working Machine Company. (See Lewis, Harold L., assignor.)
Haller, Frank J., assignor to Stover Manufacturing & Engine Co., Freeport, Ill. Windmill. 1,806,900; May 26.
Hamel, Hermann, Dresden-Blasewitz, Germany. Spinning machine for artificial silk. 1,806,851; May 26.
Hamilton, Delbert L. (See Schulzke, R. F., and Hamilton.)
Hamilton Standard Propeller Corporation, The. (See Hamilton, Thomas F., assignor.)
Hamilton, Thomas F., Milwaukee, Wis., assignor to The Hamilton Standard Propeller Corporation, West Homestead, Pa. Adjustable engine for aircraft. 1,806,680; May 26.
Hamlyn, Sidney W., London, England. Electric lamp shade and/or fitting. 1,806,852; May 26.
Hammerly, Herman J., Wallingford, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Electric switch. 1,807,526; May 26.
Hammond Clock Company, The. (See Stephens, George H., assignor.)
Hammond, Frank, Park Royal, England. Cleaning liquid storage tanks and the like. 1,806,681; May 26.
Hankey, John L., Sale, Manchester, England. Treating textile material with chromium. 1,807,208; May 26.
Hanny, Charles E., Unionville, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Panel board cabinet clamp. 1,807,527; May 26.
Hansell, Clarence W., Rocky Point, L. I., N. Y., assignor to Radio Corporation of America. Antenna. 1,806,755; May 26.
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Steel retainer. 1,806,799; May 26.
Hansen, Harry J., La Junta, Colo. Closure clock. 1,807,033; May 26.
Hard, Malcolm, Flushing, assignor to The Superheater Company, New York, N. Y. Manufacturing superheater headers. 1,807,240; May 26.
Harding, Dana E., Arlington, assignor, by mesne assignments, to Harding-Walcott Company, Boston, Mass. Leather grading machine. 1,806,756; May 26.
Harding-Walcott Company. (See Harding, Dana E., assignor.)
Hardinge Company. (See Hardinge, Harlowe, assignor.)
Hardinge, Harlowe, assignor to Hardinge Company, Incorporated, York, Pa. Universal rod mill. 1,807,034; May 26.
Hardsocg Wonder Drill Co. (See Smith, G. W., and Dieterich, assignors.)
Harlow, Frederick J., and G. R. Benz, assignors to Phillips Petroleum Company, Bartlesville, Okla. Unilization of paraffin hydrocarbons to create a non-oxidizing and non-sulphurous atmosphere in the temperature treatment of solids. 1,806,853; May 26.
Harper, Harry, Minneapolis, Minn. Coffee urn. Des. 84,270; May 26.
Hartford-Empire Company. (See Canfield, Robert W., assignor.)
Hartford-Empire Company. (See Peiler, Karl E., assignor.)
Hartford-Empire Company. (See Wadman, Harold A., assignor.)
Hartford Rubber Works Co., The. (See Lough, Hector V., assignor.)
Hawley, Frank M., Detroit, Mich., assignor to Morse Chain Company, Ithaca, N. Y. Tightener for flexible drive connections. 1,806,901; May 26.
Hawley, Frank M., Detroit, Mich., assignor to Morse Chain Company, Ithaca, N. Y. Automatic chain tightener device. 1,806,902; May 26.
Hebb, John A., Hopwood, Pa. Coin control mechanism for vending machines or the like. 1,806,757; May 26.
Heer, Samuel. (See Straw, Edward F., assignor.)
Heinmuller, John P. V., assignor to A. Wittnauer Co., New York, N. Y. Watch dial or similar article. Des. 84,240; May 26.
Heiny, Matthew M., and I. R. Smith, Haxtun, Colo. Chain repairing tool. 1,806,682; May 26.
Heitmann, Arthur C., Oakwood, Ohio. Attaching lintels to concrete spandrels. 1,807,405; May 26.
Hendricks, Benjamin A., Seattle, Wash. Fuel oil heater. 1,806,942; May 26.
Henkel, Frank N., Hammond, La. Compression air valve tester. 1,807,287; May 26.
Henley, William J., Jr., Rushville, Ind. Continuous reversible toaster. 1,807,312; May 26.
Henrard, Fernand, Brussels, Belgium. Mixer. 1,806,684; May 26.
Herbert, Sigmund, New York, N. Y. Picture support. 1,807,288; May 26.
Hercules Powder Company. (See Humphrey, Irvin W., assignor.)
Hering, Edward, Beverly, assignor to United States Pipe & Foundry Company, Burlington, N. J. Cap tile and tile roof. 1,806,685; May 26.
Herman, Wallace C., Oakwood, Ohio. Reversible variable speed transmission mechanism. 1,807,035; May 26.
Herrenbruck, Herman, assignor to Orbon Stove Co., Belleville, Ill. Oven door construction. 1,806,758; May 26.
Herrenbruck, Herman, assignor to Orbon Stove Co., Belleville, Ill. Gas burner and support therefor. 1,806,800; May 26.
Herring, Horace B., Memphis, Tenn. Canoe paddle. 1,807,289; May 26.
Herzog, Robert, Berlin, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Speed regulating system. 1,807,209; May 26.
Hesson, Robert B., Middlesex Borough, N. J., assignor to Research Corporation, New York, N. Y. Insulator. 1,806,854; May 26.
Hetzel, Charles E., Glenbrook, Conn., assignor to Zeloid Products Corporation, Holyoke, Mass. Treatment of cellulose solutions. 1,807,036; May 26.
Heyn, Robert E., South Orange, N. J., assignor to The B. V. D. Company, Inc., New York, N. Y. Garment. 1,806,686; May 26.
Hiatt, William G., assignor to Phillips Petroleum Company, Bartlesville, Okla. Treating sulphur bearing gases. 1,807,528; May 26.
Hice, Sherman, Detroit, Mich. Loading deck for automobiles. 1,807,529; May 26.
Hickey Fuse & Manufacturing Company. (See Hickey, John H., assignor.)
Hickey, John H., assignor to Hickey Fuse & Manufacturing Company, San Francisco, Calif. Refillable electric fuse. 1,807,406; May 26.
Higgins, Eric B., assignor to United Water Softeners Limited, London, England. Electrolytic production of sterilizing agents, germicides, and the like. 1,806,801; May 26.
Highfield, Frank W., Coventry, England. Power meter. 1,807,530; May 26.
Hiler Engineering & Construction Company. (See Ginnel, Henry, assignor.)
Hines, Frank S., Northfield, Minn. Weighing attachment for meat slicers. 1,807,313; May 26.
Hinnekens, Florent, assignor to Van Vlaanderen Machine Company, Paterson, N. J. Friction coupling. 1,807,210; May 26.
Hipple, Percy A., Atlanta, Ga. Compacting, finishing and curing concrete pavements. 1,807,116; May 26.
Hitner, Harry F. (See Fox, J. H., and Hitner.)
Hobart Manufacturing Company, The. (See Johnston, Herbert L., assignor.)
Hodgkins, Edward F., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for finishing the shanks of shoes. 1,806,626; May 26.
Hoefen, Walter V., assignor to Brown-Hutchinson Iron Works, Detroit, Mich. Conveyer mechanism. 1,807,211; May 26.
Hofbauer, Caspar E., assignor to Paramount Carburetor Corporation, New York, N. Y. Carburetor. 1,807,037; May 26.
Hoffman, Edmund, Brooklyn, assignor to American Can Company, New York, N. Y. Gasket for talcum powder cans. 1,806,802; May 26.
Hoffman High Pressure Equipment Company. (See Mahoney, Burton J., assignor.)
Hoffstetter, Carl H., assignor to Odin Stove Manufacturing Company, Erie, Pa. Door. Des. 84,241; May 26.
Hohnhorst, William J., Anchorville, Mich. Paper flowerpot. 1,807,407; May 26.
Holden, James E., Oswego, Oreg. Logging block. 1,807,038; May 26.
Holland, Walter E., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Binding post. 1,806,627; May 26.
Holley, George M. (See Beard, Bert, assignor.)
Holmes, Glenn E., and M. Treiman, assignors to Mexican American Hat Company, St. Louis, Mo. Buckle. 1,807,212; May 26.
Hooper, Ansel C., Miami Beach, Fla. Shoulder strap retainer. 1,807,290; May 26.
Hoover, Charles W., Burbank, assignor to Phillips Petroleum Company, Bartlesville, Okla. Coupling. 1,806,687; May 26.
Hopkins, Robert K., assignor to The M. W. Kellogg Company, New York, N. Y. Pipe flanging and upsetting machine. 1,807,531; May 26.
Hopkins Spray Equipment Company. (See Tittamore, Frank A., assignor.)
Hopp, George, et al. (See Hopp, Leo., assignor.)
Hopp, Leo, assignor of one-half to H. Gold and one-half to G. Hopp, New York, N. Y. Price ticket holder. 1,807,213; May 26.
Hosbein, Louis H., assignor to M. H. Detrick Company, Chicago, Ill. Furnace construction. 1,807,408; May 26.
Hotchkiss, E. H., Company, The. (See Peterson, Roy E., assignor.)
Howes, Leonard R., Akron, Ohio, assignor, by mesne assignments, to Miller Rubber Company, Inc., Wilmington, Del. Making ornamental rubber balls. 1,806,688; May 26.
Hoxie, Charles A., Alplaus, N. Y., assignor to General Electric Company. Sound recording apparatus. 1,807,409; May 26.

Hubbard, Frank H., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Supporting elements for electrical devices. 1,807,410; May 26.
Hubron Company, The. (See Brown, Hugh S., assignor.)
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,242; May 26.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,243; May 26.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,244; May 26.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,245; May 26.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,246; May 26.
Hughes Development Company. (See Burns, B., Lewis, and Otis, assignors.)
Hughes, James W., assignor to Budd Wheel Company, Philadelphia, Pa. Method and machine for electroplating. 1,807,157; May 26.
Hull, Robert W., Hingham, and W. J. MacDonald, Watertown, Mass.; said MacDonald assignor to said Hull. Vending machine. 1,807,532; May 26.
Hume Steel Limited. (See Hume, Walter R., assignor.)
Hume, Walter R., Melbourne, Victoria, assignor to Hume Steel Limited, Melbourne, Australia. Metal working apparatus. 1,806,855; May 26.
Hume, Walter R., Melbourne, Victoria, Australia. Welded article. 1,807,477; May 26.
Humphrey, Irvin W., Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del. Producing high grade rosin. 1,806,973; May 26.
Humphreys, Omar R. (See Humphreys, Walter G. and O. R.)
Humphreys, Walter G. and O. R., Omaha, Nebr. Cable connecter. 1,807,314; May 26.
Hunt, Fred L., Mishawaka, assignor to Perkins Corporation, South Bend, Ind. Air motor electric generating and storage system. 1,806,628; May 26.
I. G. Farbenindustrie Aktiengesellschaft. (See Espig, H., and Teubner, assignors).
I. G. Farbenindustrie Aktiengesellschaft. (See Kröner, G., and Stauf, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Ott, K., and Schuessler, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pistor, Gustav, assignor.)
Ide, Harry H., assignor to American Electric Company, Inc., Chicago, Ill. Transmitter suspension arm. 1,806,903; May 26.
Ideal Lubricator Company. (See Carpenter, Youel V., assignor.)
Imes, Elmer S., Jersey City, N. J., assignor, by mesne assignments, to Magnetic Analysis Corporation, Long Island City, N. Y. Method of and apparatus for testing magnetizable objects. 1,807,411; May 26.
Imperial Chemical Industries Limited. (See Warren, Thomas R., assignor.)
Indera Mills Company. (See Martin, Charles L., assignor.)
Industrial Research Company. (See Joffé, Abraham, assignor.)
Ingalls, Henry A., Bakersfield, Calif. Road treating apparatus. 1,807,412; May 26.
Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)
Insulite Company, The. (See Ellis, George H., assignor.)
International Combustion Engineering Corporation. (See Lundgren, Edwin, assignor.)
International Fibreboard Limited. (See Wiser, Henry J., assignor.)
International Motor Company. (See Masury, Alfred F., assignor.)
International Motor Company. (See Post, Edwin M., jr., assignor.)
Iowa Dairy Separator Company. (See Edwards, James M., assignor.)
Ireland, Ward S. (See Dennison, F. E., and Ireland.)
Irvine, Benjamin P., Denver, Colo. Two-row pulling and six-row piling apparatus for harvesting sugar beets. 1,806,974; May 26.
Irving Engineering Co. (See Mueller, Adolf, assignor.)
Isaacson, Max J., Brooklyn, N. Y. Disengageable fastener. 1,807,478; May 26.
Isom, Edward W., Scarsdale, assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbon oils. 1,807,241; May 26.
Isom, Edward W., Scarsdale, assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbon oils. 1,807,242; May 26.
Jackson, Ralph G., Woodbury, N. J. Manufacturing smooth surface floor. 1,807,291; May 26.
Jakobson, Thomas P., assignor of one-half to E. M. Kling, Los Angeles, Calif. Music leaf turner. 1,806,803; May 26.
Jamaica Sea Airport. (See Traver, Philip C., assignor.)
James, Edwin T., Tasman, Nelson, New Zealand. Wire tightening device. 1,807,479; May 26.
Jaxheimer, William H., assignor to Smith Drum & Company, Philadelphia, Pa. Washing machine. 1,807,214; May 26.
Jeffrey Manufacturing Company, The. (See Montgomery, William J., assignor.)
Jewett, Harold A., Fredonia, N. Y. Liquid level indicator and stop. 1,806,804; May 26.
Joffé, Abraham, Leningrad, Union of Socialist Soviet Republics, assignor to Industrial Research Company, Cambridge, Mass. Translating device. 1,807,292; May 26.
Johansen, Harry C., Michigan City, Ind., assignor to Sullivan Machinery Company. Drilling apparatus. 1,806,759; May 26.
Johnson, Charles I., Chicago, Ill., assignor to Nestor Johnson Manufacturing Company. Toe guard for ice skates. 1,806,975; May 26.
Johnson, Earl, Kansas City, Mo. Mixing liquids. 1,806,904; May 26.
Johnson, John E. (See Oslund, C. H., and Johnson.)
Johnson, Lewis D., assignor to Lincoln Meter Company, Springfield, Ill. Meter. 1,807,215; May 26.
Johnson, Roy E., Minneapolis, Minn. Machine for sawing material at various angles. 1,807,216; May 26.
Johnson, Samuel J., assignor to The Seinsheimer Paper Company, Cincinnati, Ohio. Window shade. 1,807,533; May 26.
Johnston, Herbert L., assignor to the Hobart Manufacturing Company, Troy, Ohio. Meat grinder. 1,807,574; May 26.
Jontof, Rudolf, Hamburg, Germany. Curved mouthpiece for mouth organs. 1,806,689; May 26.
Joseph, Alfred, Enghien, assignor to Compagnie Internationale pour la Fabrication des Essences et Petroles, Paris, France. Vaporization of heavy hydrocarbons. 1,806,997; May 26.
Joseph, Alfred, assignor to Societe Internationale Des Procedes Prudhomme Houdry, Paris, France. Process for the treatment of a metallic, organic or other compound, or a gas, by a gaseous agent serving to enter into reaction therewith. 1,807,534; May 26.
Kahlisch, Gustav. (See Reiners, W., and Kahlisch.)
Kalman Steel Company. (See White, William E., assignor.)
Kampas, William, Des Moines, Iowa. Shade roller. 1,807,535; May 26.
Kampfman, Charles, East Hartford, Conn. Cigarette package. 1,806,905; May 26.
Kasarda, John. (See Danko, J. M., and Kasarda.)
Kaufman, Morris J., Juneau, Alaska. Treating and protecting corns. 1,806,998; May 26.
Kaufman, Tobias J., Chicago, Ill. Waste and overflow fitting. 1,807,117; May 26.
Kayler, Frank H., Alliance, Ohio, assignor to American Steel Foundries, Chicago, Ill. Coupler. 1,807,243; May 26.
Kearney & Trecker Corporation. (See Armitage, Joseph B., assignor.)
Kelrnan, Fred M., Edgewater, N. J. Shoe clasp. 1,806,629; May 26.
Kelzer, Harold, Concord, Mass. Splash guard. 1,807,039; May 26.
Keller, Albert T., Bethlehem, Pa., assignor to Bethlehem Steel Company. Universal rolling mill. 1,806,976; May 26.
Keller, Charles B., Willow Grove, Pa. Jewelry fastener. 1,807,293; May 26.
Kelley, Berta L., and L. Winniford, Santa Barbara, Calif. Doll. Des. 84,247; May 26.
Kellogg, M. W., Company, The. (See Hopkins, Robert K., assignor.)
Keltonik, Stephen, Conemaugh, Pa. Combined inkstand and penrack. 1,806,630; May 26.
Kemp, John B., Ridgewood, N. J., assignor to Clark Loose Leaf Manufacturing Company. Pad holder. 1,807,158; May 26.
Kendall, William G., Newark, N. J. Compact plate holding ring. 1,807,480; May 26.
Kenna Ernest M., New York, N. Y. Leaf holder for books. 1,807,118; May 26.
Kenney, Francis L. M., Los Angeles, Calif., assignor, by mesne assignments, to Frank L. Manion. Filter device. 1,806,977; May 26.
Kessler, Louis, Chicago, Ill. Mine ventilating apparatus. 1,806,760; May 26.
Keup, Albert, Gelsenkirchen, Germany. Centrifugal casting. 1,807,536; May 26.
Kidder, Elwin H., and W. E. Erickson, assignors to Link-Belt Company, Chicago, Ill. Car dumper. 1,807,294; May 26.
Kilberg, Frank, Detroit, Mich. Window latch. 1,806,978; May 26.
Kimbrell, Hollie B., Fayette, Ala. Rat trap. 1,807,537; May 26.
King, C. G., & Co. (See Recchia, Orlando R., assignor.)
King Company. (See King, George G., assignor.)
King, George G., assignor to King Company, Sheffield, Ala. Lamp post. 1,807,418; May 26.
King, Joseph J. (See Parsons, J. B., and King.)
King Press, Inc. (See Boorman, Edward T., assignor.)
Kirchhoff, William G., assignor to The J. H. Day Company, Cincinnati, Ohio. Conveyer and bailer. 1,807,295; May 26.
Kiwad, Michael, New York, N. Y., assignor to LaBelle Specialty Co., Inc. Lamp base or article of analogous nature. Des. 84,248; May 26.
Kleebauer, Charles P., Coboes, and R. M. Lackey, Waterford, N. Y. Carry bag. 1,806,761; May 26.
Klein, Albert E., New York, N. Y. Hot water heating system. 1,807,481; May 26.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Kling, Emelia M. (See Jakobson, Thomas P., assignor.)

Kloos, John. (See Birler, C. L., and Kloos.)
Knapp, Edwin R., Summit, N. J., assignor to Copper Plate Sheet & Tube Company. Apparatus for treating metal sheets. 1,806,805; May 26.
Knight, William G., Derby, Me. Locomotive driving rod connection. 1,807,217; May 26.
Knutson, Thor, Minneapolis, Minn. Concrete form for floors. 1,807,315; May 26.
Koch, Lydia B., and J. Buchina, New York, assignors to The Reinforced Paper Bottle Corporation, New York, N. Y. Manufacture of paper containers. 1,806,943; May 26.
Kochs, Theo. A., Company. (See Schwarzkopf, Arthur R., assignor.)
Kocour, Cyril, Chicago, Ill. Apparatus and process of determining the strength of solutions. 1,806,806; May 26.
Koford, Carl C., assignor to The Nubone Company, Inc., Erie, Pa. Corset. 1,807,159; May 26.
Kolker, Albert H. (See Parchen, Vincent P., assignor.)
Kolmer, Wilhelm, and E. Wirschinger, Augsburg, assignors to Maschinenfabrik Augsburg-Nurnberg, A. G., Augsburg, Germany. Fore gripper mechanism. 1,806,856; May 26.
Koppers Company, The. (See van Ackeren, Joseph, assignor.)
Koski, Matt W., Hoquiam, Wash. Shingle machine attachment. 1,806,979; May 26.
Kraft, Gustav F., Kansas City, Mo. Condiment holder. 1,807,160; May 26.
Krakeler, Frederick, Woodside, N. Y. Tobacco pipe reamer. 1,807,576; May 26.
Krell, George, Sapulpa, Okla. Pipe clamp. 1,806,944; May 26.
Kreutzberg, Otto A., Bethlehem, Pa. Pulverizer. 1,806,980; May 26.
Kroder Reubel Co., The. (See Reubel, Henry, assignor.)
Kröner, Gerhard, Cologne-on-the-Rhine, and F. W. Stauf, Cologne-Deutz, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Regeneration of active silica gel. 1,806,690; May 26.
Kruttschnitt, John, San Mateo, Calif. Dough cooking machine. 1,806,878; May 26.
Kuhajda, Joseph, Maspeth, N. Y. Rotary engine. 1,807,414; May 26.
Kulair Corporation. (See Dunning, Elmer D., assignor.)
Kunderd, Freiderika, Elkhart County, Ind. Shock absorbing landing strut for aeroplanes. 1,806,807; May 26.
Kuntz, Rueben. (See Schultz, F., and Kuntz.)
Kurth & Knapp Mfg. Co. (See Paquette, Cyril D., assignor.)
Kurtz, Daniel W. B., jr., Columbia, Mo. Bill fold or purse. 1,807,482; May 26.
Kusterle, Frank, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Furniture post end fitting. 1,806,945; May 26.
L. C. L. Corporation, The. (See Woodruff, Graham C., assignor.)
LaBelle Specialty Co. (See Kiwad, Michael, assignor.)
Lackey, Robert M. (See Kleebauer, C. P., and Lackey.)
La France, David J., Cambridge, Mass. Fountain pen. 1,807,415; May 26.
Lahey, Frank H., assignor to New England Deaconess Association, Boston, Mass. Forceps. 1,806,808; May 26.
Lamson Company, The. (See Zimmer, Arnold A., assignor.)
Lancaster Asphalt, Inc. (See Robinson, Thomas, assignor.)
Lane, Ralph W., Canton, assignor to The Haines Corporation, Boston, Mass. Adhesive composition. 1,807,244; May 26.
Langewiesche, Wilhelm, assignor to C. Lorenz-Aktiengesellschaft, Berlin-Tempelhof, Germany. Electric machine. 1,807,218; May 26.
Langford, George, assignor to McKenna Process Co. of Illinois, Joliet, Ill. Rail. 1,807,219; May 26.
Lanyon, Samuel H., San Francisco, Calif., assignor to M. H. Detrick Company, Chicago, Ill. Furnace construction. 1,806,809; May 26.
Larsen, Gabriel, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Fountain pen or similar article. Des. 84,249; May 26.
Larson, Bert E., Park Ridge, assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,807,416; May 26.
Larson, John A., Seattle, Wash. Pencil sharpener and holder. 1,807,245; May 26.
Lasher, Martha, Miami, Fla. Fruit holder. 1,806,631; May 26.
Laubheimer, John G., Nashville, Tenn. Septic tank. 1,807,296; May 26.
Lauter-Humana Co. (See Cameron, Charles E., jr., assignor.)
Lazzari, Peter, Pittsburgh, Pa. Toy performer. 1,807,119; May 26.
Leberman, Harry, New York, assignor to Groove Lock Co. Inc., Brooklyn, N. Y. Fastening device for bag frames. 1,807,220; May 26.
Lechner, Leopold, Mahr-Ostrau, Czechoslovakia. Container. 1,807,417; May 26.
Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Co., Philadelphia, Pa. Pressed metal vehicle body. 1,807,316; May 26.
Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Co., Philadelphia, Pa. Windshield mounting. 1,807,317; May 26.
Lee, Charles F., Cincinnati, Ohio, assignor to General Electric Company. System of motor control. 1,807,418; May 26.
Lee, Frederick W., Baltimore, Md., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,806,691; May 26.
Leek, Albert E., Wigan, England. Steam generating plant. 1,807,538; May 26.
Lees, Ernest J., Shaker Heights, Ohio. Automatic temperature control. 1,807,101; May 26.
Lehning, Charles, Astoria, N. Y. Air space expansion joint. 1,807,339; May 26.
Leighton, John W., Port Huron, Mich. Billet casting machine. 1,807,419; May 26.
Leitelt Iron Works. (See Meyer, Frederick H., assignor.)
Lemon, Guy A., Chapman, Kans. Rumble seat construction. 1,806,692; May 26.
Leonard, Frederick C., assignor to Leonard-Rooke Co., Providence, R. I. Mixing valve. 1,807,040; May 26.
Leonard, W. A., Machine Co. Inc. (See Leonard, William A., assignor.)
Leonard, William A., assignor to W. A. Leonard Machine Co. Inc., Danbury, Conn. Hat brim flanging machine. 1,806,810; May 26.
Leonard-Rooke Co. (See Leonard, Frederick C., assignor.)
Leslie, Frank R., White Bear Lake, Minn. Insulation. 1,806,946; May 26.
Levy, Joseph, Brooklyn, assignor to Century Lighting Equipment, Inc., New York. Spot and flood light projector. 1,806,906; May 26.
Lewis, Harold L., assignor to Hall & Brown Wood Working Machine Company, St. Louis, Mo. Saw. 1,807,120; May 26.
Lewis, Howard B. (See Burns, B., Lewis, and Otis.)
Liberty Electric Company. (See Wilmanns, Christopher, assignor.)
Liebau, Richard, Pittsburgh, Pa., assignor to The Republic Rubber Company, Youngstown, Ohio. Making solid tires. 1,806,857; May 26.
Lighting Appliance Company. (See Villaret, Gustave E., assignor.)
Lincoln Meter Company. (See Johnson, Lewis D., assignor.)
Lindgren, Henry W., Waukegan, Ill., assignor to American Can Company, New York, N. Y. Runway switch and control therefor. 1,806,879; May 26.
Lindsey, Walter, Toronto, Ontario, Canada. Combined card support and display stand. 1,806,907; May 26.
Ling, Stephen G., Los Angeles, Calif. Automatic valve lubricator. 1,806,999; May 26.
Lingal, Harry J., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Toggle latch. 1,807,041; May 26.
Link-Belt Company. (See Kidder, E. H., and Erickson, assignors.)
Lipper, Harry M., Atlantic City, N. J., assignor to Lipper Manufacturing Company. Headgear and making the same. Re18,081; May 26.
Lipper Manufacturing Company. (See Lipper, Harry M., assignor.)
Livingston, Harry W., assignor of one-half to J. M. Blair, Lyons, Kans. Gas burner. 1,806,858; May 26.
Lockhart, Frank S., deceased; F. E. Moskovics, administrator, assignor of one-half to J. R. Burgamy, Cincinnati, Ohio. Cooling intake for internal combustion engines. 1,807,042; May 26.
Locomotive Firebox Company. (See Larson, Bert E., assignor.)
Loeffler, Joseph M., Philadelphia, Pa. Door opening apparatus. 1,807,121; May 26.
Logan, William B., De Quincy, La., assignor to The Newport Company, Carrollville, Wis. Treatment of rosin and product thereof. 1,807,483; May 26.
London, John S., Philadelphia, and C. B. McCarty, Matamoras, Pa., assignors of one-third to D. W. Fisher, Hornell, N. Y. Oiling device. 1,807,484; May 26.
Long, Cornelius J. (See Greiner, A., and Long.)
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Coat. Des. 84,250; May 26.
Long, Spencer W., Redondo Beach, Calif., assignor by mesne assignments, to The National Supply Company, Toledo, Ohio. Locking device for spring hooks. 1,806,908; May 26.
Lorenz-Aktiengesellschaft, C. (See Langewiesche, Wilhelm, assignor.)
Lorenz, C., A. G. (See Bock, W., and Rath, assignors.)
Lorenz, C., Aktiengesellschaft. (See Herzog, Robert, assignor.)
Lorenz, C., Aktiengesellschaft. (See Schmidt, Karl, assignor.)
Lough, Hector V., assignor to The Hartford Rubber Works Co., Hartford, Conn. Tread shrinking machine. 1,806,811; May 26.
Louisville Frog, Switch & Signal Company. (See Delmanhorst, Herman F., assignor.)
Louisville Frog, Switch & Signal Company. (See Zehnder, Louis R., assignor.)

Loven, Otto E., Forest Park, Ill. Spring roller curtain. 1,807,161; May 26.
Lowry, Julius C., Detroit, Mich. Lighting fixture. Des. 84,251; May 26.
Luce, William D., assignor of one-half to J. E. Dube, Haverhill, Mass. Automatic damper. 1,807,066; May 26.
Luckenbach, Royer, Brooklyn, N. Y. Amalgamator. 1,807,162; May 26.
Ludlow Manufacturing Associates. (See Evans, Walter W., assignor.)
Lufkin Foundry & Machine Company. (See Graham, Fred, assignor.)
Lundgren, Edwin, Frederick, Md., assignor to International Combustion Engineering Corporation, New York, N. Y. Stoker fired boiler installation. 1,807,318; May 26.
Lunz, George A., and John L. Feyl, Buffalo, N. Y. Window. 1,807,420; May 26.
Lutz, Friedrich, assignor to Union Special Machinenfabrik, G. m. b. H., Stuttgart, Germany. Chain cutter for sewing machines. 1,807,539; May 26.
Lynn, John P., assignor to Dur-O-Lite Pencil Company, Chicago, Ill. Pencil. 1,806,632; May 26.
Lyon Metal Products, Incorporated. (See Vance, Walter N., assignor.)
Mabee, Charles R., Vittoria, Ontario, Canada, assignor, by mesne assignments, to C. H. Donaldson, Buffalo, N. Y. Preparation of livestock feeds. 1,807,043; May 26.
Mabee, Charles R., assignor, by mesne assignments, to C. H. Donaldson, Buffalo, N. Y. Manufacture of live stock feed. 1,807,067. May 26.
MacDonald, John W., Wilkinsburg, Pa. Toy gas cannon. 1,806,633; May 26.
MacDonald, John W., Wilkinsburg, Pa. Toy cannon. 1,806,693; May 26.
MacDonald, William J. (See Hull, R. W., and MacDonald.)
MacLeod, James, Glasgow, Scotland. Turbine driven locomotive. 1,807,485; May 26.
Magnetic Analysis Corporation. (See Imes, Elmer S., assignor.)
Magney, Gottlieb R., W. H. Tusler, and L. E. Arnal, assignors to W. B. Fosbay Co., Minneapolis, Minn. Display device for buildings. 1,806,634; May 26.
Mahoney, Burton J., Chicago, Ill., assignor to Hoffmann High Pressure Equipment Company. Grease gun or the like. 1,807,421; May 26.
Makranczy, Theodore A., Los Angeles, Calif. Separable key. 1,807,540; May 26.
Maletz, Guido, Baltimore, Md. Twine holding and dispensing device. 1,806,812; May 26.
Manion, Frank L. (See Kenney, Francis L. M., assignor.)
Manley Manufacturing Company. (See Manley, Robert E., assignor.)
Manley, Robert E., assignor to Manley Manufacturing Company, York, Pa. Press frame. 1,807,297; May 26.
Manzel, Adolph W. F., assignor to Manzel Bros. Co., Buffalo, N. Y. Shock absorber. 1,807,422; May 26.
Manzel Bros Co. (See Manzel, Adolph W. F., assignor.)
Mariani, Frank, assignor to Best Die Casting and Stamping Company, Incorporated, New York, N. Y. Hinged mirror for automobile doors. Des. 84,252; May 26.
Markel Electric Products, Inc. (See McFadden, Glenn E., assignor.)
Markson, Clemens J., Philadelphia, Pa. Locking mechanism. 1,806,694; May 26.
Marshall, William, assignor to Briggs Manufacturing Company, Detroit, Mich. Deck construction for vehicle bodies. 1,807,298; May 26.
Martin, Charles L., assignor to Indera Mills Company, Winston-Salem, N. C. Bathing suit. 1,807,486; May 26.
Martin, John F., and F. E. Watts, assignors to American Bosch Magneto Corporation, Springfield, Mass. Oiler. 1,807,340; May 26.
Maruhn, Johannes, Berlin-Friedenau, and L. Tübben, Berlin-Nicolassee, Germany. Producing liquid hydrocarbons and apparatus therefor. 1,807,122; May 26.
Maschinenfabrik Augsburg-Nurnberg A. G. (See Kolmer, W., and Wirschinger, assignors.)
Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Individual wheel mounting. 1,806,695; May 26.
Matson, Julius J., Glenwood, Ill. Carburetor. 1,807,423; May 26.
Mattei, Diego, Genba, Italy. Self acting closure for water tight compartments. 1,806,859; May 26.
Matthews, W. N., Corporation. (See Birkenmaier, Theodore, assignor.)
Mattinson, Henry. (See Tilly, E. C., and Mattinson.)
Matzka, Otto, assignor to the firm "Electa" Apparatenbau-Gesellschaft m. b. H., Vienna, Austria. Apparatus for affixing stamps, labels, and the like. 1,807,424; May 26.
Maulen, Frederick, East Orange, N. J., assignor to Baker & Company, Inc. Dental alloy for swaged dentures. 1,807,068; May 26.
Mauro, Frank J., Brooklyn, N. Y. Weatherproof license plate holder for motor vehicles. 1,807,246; May 26.
McAvoy, Dan J., assignor to The Grabler Manufacturing Company, Cleveland, Ohio. Sand displacer. 1,807,578; May 26.
McCalmon, Charles, Manitowoc, Wis. Window screen construction. 1,807,425; May 26.
McCarter, Roley C., Rising Star, Tex. Paraffin gopher. 1,807,123; May 26.
McCarthy, George L., Rye, N. Y. Photographing apparatus. 1,806,763; May 26.
McCarthy, George L., Rye, and A. Novick, Flushing, N. Y.; said Novick assignor to said McCarthy. Photographing apparatus. 1,806,762; May 26.
McCarty, Charles B. (See London, J. S., and McCarty.)
McCarty, Richard J., jr., Bethelehem, Pa., assignor to Bethlehem Steel Company. Gearing. 1,807,000; May 26.
McCauley, George T., Butte, Mont. Automobile spring. 1,807,541; May 26.
McCaw, Frederick, Belfast, Northern Ireland. Fiber-preparing treatment of bast or vegetable fiber plants. 1,807,221; May 26.
McClary, G. H. (See Wages, Lawrence L., assignor.)
McCombs, Edward S. (See McCullough, J. B., and McCombs.)
McCormick, Lewis M., Palo Alto, Calif. Dispenser. 1,806,981; May 26.
McCullough, Joseph B., and E. S. McCombs. Baster Springs, Kans. Fluid saving device. 1,807,222; May 26.
McCullough, Paul J., assignor to Scullin Steel Co., St. Louis, Mo. Brake beam safety device. 1,806,635; May 26.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake valve device. 1,807,319; May 26.
McCutchen, John E., assignor to Coleman Lamp and Stove Co., Wichita, Kans. Thermostatic cut off. 1,806,636; May 26.
McDaniel, Levi B., Concrete, Wash. Pan rotary kiln. 1,807,069; May 26.
McFadden, Glenn E., assignor to Markel Electric Products, Inc., Buffalo, N. Y. Lamp chimney. Des. 84,253; May 26.
McGavic, Arthur, Kansas City, Mo., assignor to Nathan Paine, Miami Beach, Fla. Louver door. 1,806,637; May 26.
McGhee, Henry, Rushcutters Bay, near Sydney, New South Wales, Australia. Manufacture of rubber soled footwear. 1,807,487; May 26.
McGill Manufacturing Company. (See Popp, Rudolf, assignor.)
McIntosh, Roderick J. (See Dougherty, R. S. A., and McIntosh.)
McKenna Process Co. of Illinois. (See Langford, George, assignor.)
McKerchner, James E. (See McKerchner, Leroy R., assignor.)
McKercher, Leroy R., California, Iowa, assignor of one-half to James E. McKerchner, Valparaiso, Nebr. Washing machine. 1,806,982; May 26.
McLain, Harry E. (See Broad, William, assignor.)
McLean, Jennie C. (See Butler, John R., assignor.)
McManus, Charles E., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Making bottle closures. 1,806,880; May 26.
McQuaid, Howard S. (See Walker, H. W., and McQuaid.)
Meehan, Albert, and E. Gray, New York, N. Y. Glove stretching device. 1,807,070; May 26.
Meissner Manufacturing Company, The. (See Meissner, William O., assignor.)
Meissner, William O., assignor to The Meisaner Manufacturing Company, Chicago, Ill. Coil winding machine. 1,806,697; May 26.
Mergenthaler Linotype Company. (See Goldblatt, David, assignor.)
Meridith, Russell L., East Cleveland, Ohio. Hydrocarbon burner. 1,807,247; May 26.
Merrilles, Floy C., Oak Park, Ill. Fender and guard. 1,807,044; May 26.
Merrill, Albert D., Watertown, N. Y. Digesting and cooking liquor preparation system. 1,807,320; May 26.
Mertz, Pierre, Bellerose Manor, N. Y., assignor to American Telephone and Telegraph Company. Television. 1,806,638; May 26.
Mesker, Louis H., Shaker Heights, assignor to The Cleveland Planer Company, Cleveland, Ohio. Tool lifter. 1,806,696; May 26.
Messler, Madge. (See Messler, Matie C., assignor.)
Messler, Matie C., assignor to Madge Messler, Providence, R. I. Cushioning insole for boots and shoes. 1,807,341; May 26.
Methlin, Nicolas E., assignor to Schneider & Cie, Paris, France. Synchronous motor. 1,807,001; May 26.
Metje, Adolf, New York, N. Y. Combination cigarette container and match guard. 1,807,299; May 26.
Mexican American Hat Company. (See Holmes, G. E., and Treiman, assignors.)
Meyer, Clifford L., Bellevue, Pa. Suspenders. 1,806,909; May 26.
Meyer, Frederick H., assignor to Leitelt Iron Works, Grand Rapids, Mich. Lifting grapple. 1,807,124; May 26.
Michalicek, Fred, Estacada, Oreg. Anchoring device. 1,807,488; May 26.
Middleton, William V., and J. W. Thropp, Trenton, N. J. Ditch filling machine. 1,807,489; May 26.
Mieres, José, Buenos Aires, Argentina. Garter. 1,807,224; May 26.

Miessner, Benjamin F., Short Hills, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Electron tube energizing method and apparatus. 1,806,813; May 26.

Miller, Amos L., Philadelphia, Pa., assignor to The Ault & Wiborg Co., Cincinnati, Ohio. Process and apparatus for the production from hydrocarbon oil of black pigment consisting of carbon. 1,807,321; May 26.

Miller, Arthur E. (See Salisbury, H. M., and Miller.)

Miller, Charles, Long Island, N. Y. Shoe. Des. 84,254; May 26.

Miller Rubber Company. (See Howes, Leonard R., assignor.)

Miller, Samuel F., Bay Head, N. J., assignor to Pacific Flush Tank Company, New York, N. Y. Sludge digestion apparatus. 1,806,698; May 26.

Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Flaking pitch. 1,807,223; May 26.

Mills, John B., assignor to Ohmer Fare Register Company, Dayton, Ohio. Registering device. 1,807,163; May 26.

Milner, William B., Dunkirk, N. Y. Valve. 1,807,490; May 26.

Mine & Smelter Supply Company, The. (See Wells, Sidney D., assignor.)

Miner, Hiram P., Mission Ridge, S. Dak. Airship. 1,807,542; May 26.

Mitchell, Charles G., Montreal, Quebec, Canada. Storage building. 1,806,699; May 26.

Mitchell, James M., Flushing, N. Y. Apparatus for settling and classifying sand. 1,807,125; May 26.

Mittag, Albert H., Schenectady, N. Y., assignor to General Electric Company. System of distribution. 1,807,426; May 26.

Mjelva, Ingvald, Seattle, Wash. Tire removing tool. 1,806,947; May 26.

Moblard, Albert V., New York, N. Y. Attachment plug. 1,807,427; May 26.

Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heat exchange unit. 1,807,164; May 26.

Modine Manufacturing Company. (See Modine, Arthur B., assignor.)

Moltzan, Louis B., Buffalo, N. Y. Truss. 1,806,639; May 26.

Monroe Calculating Machine Company. (See Britten, Edwin F., jr., assignor.)

Monteith, Robert H., Lockland, Ohio. Bail for hand lanterns. 1,807,491; May 26.

Montgomery, William J., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Centrifugal fan. 1,806,860; May 26.

Moody, William O., La Grange, Ill., assignor to Frederic Schaefer, Pittsburgh, Pa. Brake hanger support. 1,806,700; May 26.

Moor, Herbert H., Rock Island, Ill. Toy. Des. 84,255; May 26.

Moore, Benjamin S., Detroit, assignor to Oakes Products Corporation, North Chicago, Ill. Spare wheel locking device. 1,806,764; May 26.

Moore Drop Forging Company. (See Cross, Samuel C., assignor.)

Moreton, Henry H., Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to C. F. Craig, Los Angeles, Calif. Oil filter. 1,806,701; May 26.

Morgan Engineering Company, The. (See Bigler, C. L., and Kloos, assignors.)

Morgan, John D., Maplewood, N. J., assignor to Doherty Research Company, New York, N. Y. Silicate refractory and forming same. 1,807,543; May 26.

Mork, Sverre A., Washington, D. C. Roadbed equipment and using the same. 1,807,002; May 26.

Morrill, Byron F., T. Cookson, and S. Sloane, Lebanon, N. H. Bit. 1,807,126; May 26.

Morrison, George, Poughkeepsie, N. Y. Vending machine. 1,806,814; May 26.

Morse Chain Company. (See Hawley, Frank M., assignor.)

Morse, Lawrence H., Cleveland, Ohio, assignor, by mesne assignments, to American Multigraph Co., Wilmington, Del. Ribbon holding and feeding device for printing machines. 1,807,322; May 26.

Morterud, Einar, Torderod, near Moss, Norway. Directly heated pulp digester. 1,807,544; May 26.

Moskovics, Frederick E., administrator. (See Lockhart, Frank S.)

Moulton, Albion, Philadelphia, Pa., assignor, by mesne assignments, to Conveyor Sales Company, New York, N. Y. Connecter bolt. 1,807,127; May 26.

Muehlfeld, Peter, and H. Deubel, New York, N. Y. Rocking-moving vehicle toy. 1,807,428; May 26.

Mueller, Adolf, Cheektowaga, N. Y., assignor to Irving Engineering Co., Inc., Sioux City, Iowa. Shutter for automobile radiators. 1,807,165; May 26.

Munoz, Gonzalo C., and R. H. Bowen, assignors to The American Pulley Company, Philadelphia, Pa. Rack for hand trucks. 1,807,128; May 26.

Mussey, William H., assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill. Clasp brake rigging. 1,807,575; May 26.

Muther, Lorenz F., Newton Center, Mass. Contact for electric circuits. 1,806,815; May 26.

Myers, James L., Cleveland Heights, assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Grooved bearing. 1,807,166; May 26.

Nastukoff, Alexander M., Moscow, Union of Socialist Soviet Republics. Production of synthetic dressing or tanning materials. 1,806,910; May 26.

National Carbon Company. (See Wright, Charles A., assignor.)

National Malleable and Steel Castings Company. (See Ekstedt, Ernest D., assignor.)

National Malleable and Steel Castings Company. (See Schmidt, Ernest H., assignor.)

National Net & Twine Co. (See Barbour, John E., assignor.)

National Refrigeration Corporation. (See Dennison, F. E., and Ireland, assignors.)

National Supply Company, The. (See Long, Spencer W., assignor.)

Naugatuck Chemical Company, The. (See Gibbons, Willis A., assignor.)

Naugatuck Chemical Company, The. (See ter Horst, William P., assignor.)

Nebel, Ernst O., Philadelphia, Pa. Yarn moistening device. 1,807,492; May 26.

Nelson, Emil A., Abington, assignor to Budd Wheel Company, Philadelphia, Pa. Vehicle wheel. 1,807,167; May 26.

Nelson, Ollie T., Bristol, Pa., assignor to Pacific Steel Boiler Corporation, Detroit, Mich. Metal to metal joint. 1,807,003; May 26.

Nelson, Roy, Minot, N. Dak. Soldering pliers. 1,807,004; May 26.

Nestor Johnson Manufacturing Company. (See Johnson, Charles I., assignor.)

New England Deaconess Association. (See Lahey, Frank H., assignor.)

Newport Company, The. (See Logan, William B., asignor.)

New York Air Brake Company, The. (See Campbell, Charles A., assignor.)

Nielsen, Niels P., Custer, Wash. Hen house dropping board cleaner. 1,806,816; May 26.

Nilsen, Carl D., Los Angeles, Calif. Tile panel strip construction. 1,806,948; May 26.

Norgren, Carl A., Denver, Colo. Air chuck. 1,806,983; May 26.

Norton Company. (See Belden, A. G., and Trefethen, assignors.)

Norton Company. (See Beth, Hugo W. H., assignor.)

Novick, Abraham. (See McCarthy, G. L., and Novick.)

Nubone Company, The. (See Koford, Carl C., assignor.)

Nuckolls, Samuel H., Stone Mountain, assignor to G. F. Willis, Atlanta, Ga. Portable electric lamp. 1,807,129; May 26.

Nu-Shine Company, The. (See Richardson, Robert P., assignor.)

Nu-Way Corporation, The. (See Braden, Marshall H., assignor.)

O & J Machine Company, The. (See Oslund, C. H., and Johnson, assignors.)

Oakes Products Corporation. (See Moore, Benjamin S., assignor.)

Oatley, Henry B., Great Neck, assignor to The Superheater Company, New York, N. Y. Superheater header. 1,807,248; May 26.

Odin Stove Manufacturing Company. (See Hoffstetter, Carl H., assignor.)

Ogden, J. Edward, Company. (See Ogden, Ralph E., assignor.)

Ogden, Ralph E., Lawrence, assignor, by mesne assignments, to J. Edward Ogden Company, New York, N. Y. Expansion shield. 1,806,640; May 26.

O'Gorman, Gaynor, Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Loaded rubber heel. 1,806,641; May 26.

O'Hagan, Bernard E., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,806,817; May 26.

Ohmer Fare Register Company. (See Mills, John B., assignor.)

Ohnstrand, Enoch, Kenmore, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Bookstack. 1,806,642; May 26.

Ohnstrand, Enoch, Kenmore, N. Y., assignor to Remington Rand Inc., New York, N. Y. Desk drawer lock. 1,806,643; May 26.

Olaszy, Joseph, Linden, N. J., assignor of one-third to B. Wiseman, New York, N. Y., and one-third to B. Siman, Elizabeth, N. J. Aeroplane air station. 1,807,429; May 26.

Olive, Theodore R. (See Butler, E. A., and Olive.)

Olmstead, Orimell B., Pulaski, N. Y. Steam and hot water boiler. 1,807,249; May 26.

Olshansky, Max J., et al. (See Stubner, John F., assignor.)

Olson, Joseph, Houston, Tex. Steam engine valve gear. 1,807,005; May 26.

O'Neill, John E., Corning, N. Y. Saw. 1,806,702; May 26.

Orbon Stove Co. (See Herrenbruck, Herman, assignor.)

O'Reilly, John J., New York, N. Y. Concrete, masonry and steel construction. 1,807,323; May 26.

Orser, Otto J., Denver, Colo. Street cleaner. 1,807,259; May 26.

Ossko, Cleotus, Worland, Wyo. Cattle guard. 1,807,130; May 26.

Osinga, Thomas J., Chicago, Ill. Elevator door control. 1,807,006; May 26.

Oslund, Charles H., and J. E. Johnson, assignor to The O & J Machine Company, Worcester, Mass. Label wiping device. 1,806,911; May 26.

Ostersetzer, Alfons, Klosterneuburg, and F. Riesenfeld, Vienna Austria, assignors to Pollopas Limited, Nottingham, England. Making phenol aldehyde condensation products. 1,807,545; May 26.

Otis, Russell M. (See Burns, B., Lewis, and Otis.)

Otsuka, Kanichi, Uchisaiwai-Cho Kojimachi-Ku Tokyo, Japan. Steam finishing apparatus. 1,807,007; May 26.

Ott, Karl, Leverkusen-on-the-Rhine, and H. Schuessler, Cologne-Deutz, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of cellulose. 1,806,703; May 26.

Ovenhausen, Franz, Steinheim, Germany. Producing veneers. 1,807,251; May 26.

Owen, Frank M., assignor of one-half to American Iron and Machine Works Co., Oklahoma City, Okla. Bit or like vise. 1,806,912; May 26.

Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making composite glass. 1,806,861; May 26.

Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Severing composite glass. 1,806,862; May 26.

Owens-Illinois Glass Company. (See Allen, Russell G., assignor.)

Owens-Illinois Glass Company. (See Cramer, Albert N., assignor.)

Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)

Owens-Illinois Glass Company. (See Treece, Jesse H., assignor.)

Owens, Joseph W., Schenectady, N. Y., assignor to General Electric Company. Cutout for series incandescent street lighting circuits and the like. 1,807,430; May 26.

Pace, Canio, Coney Island, N. Y. Ice cream cutter. 1,806,704; May 26.

Pacific Flush Tank Company. (See Miller, Samuel F., assignor.)

Pacific Steel Boiler Corporation. (See Nelson, Ollie T., assignor.)

Pack Shops, Inc. (See Goss, Harry T., assignor.)

Pack, Wehrli D., Salt Lake City, Utah, assignor to Utah Radio Products Company, Incorporated. Loud speaker. 1,807,168; May 26.

Pack, Wehrli D., Salt Lake City, Utah, assignor to Utah Radio Products Company, Incorporated. Sound propagating diaphragm. 1,807,225; May 26.

Page, Albert E., Brooklyn, assignor to Scott and Williams, Incorporated, New York, N. Y. Transfer mechanism for circular knitting machines. 1,807,008; May 26.

Page, Albert E., Brooklyn, assignor to Scott & Williams, Incorporated, New York, N. Y. Transfer ring for circular knitting machines. 1,807,431; May 26.

Page, Clarence C., Portland, Oreg. Candy wrapping machine. 1,807,045; May 26.

Paine, Nathan. (See McGavic, Arthur, assignor.)

Paisseau, Jean, Paris, France. Production of substance having a nacreous and chatoyant aspect. 1,806,863; May 26.

Pallemaerts, Jules E., Stratford, London, England. Stereoscopic cinema projection screen. 1,806,864; May 26.

Palm, Frederick, Shorewood, assignor to A. O. Smith Corporation, Milwaukee, Wis. Arc welding chill. 1,806,949; May 26.

Palmer, John A., assignor to Columbian Rope Company, Auburn, N. Y. Indentifying means for ropes. 1,807,131; May 26.

Paoletti, Santo, et al. (See Pisani, Guilio, assignor.)

Pappas, Peter, and T. P., Webster City, Iowa. Bumper system for trucks and automobiles. 1,807,132; May 26.

Paquette, Cyril D., assignor to Kurth & Knapp Mfg. Co., Detroit, Mich. Conveyor safety device. 1,806,913; May 26.

Paramount Carburetor Corporation. (See Hofbauer, Caspar E., assignor.)

Parchen, Vincent P., assignor of one-half to A. H. Kolker, Chicago, Ill. Combined money band and article holder. 1,806,818; May 26.

Paris, Hugh P., Oakland, Calif. Portable material receiving means. 1,806,644; May 26.

Parsons, Charles A., Newcastle-on-Tyne, England, and E. H. B. Anderson, New York, N. Y.; said Anderson, assignor to said Parsons. Elastic fluid turbine. 1,806,645; May 26.

Parsons, James B., and J. J. King, Indiana, Pa. Golf course marker. 1,807,089; May 26.

Patrou, Theodore. (See Pappas, P., and Patrou.)

Paulsen, Thomas R., Los Angeles, Calif., assignor to Advance-Rumely Company, La Porte, Ind. Tractor. 1,806,819; May 26.

Pearson, Harry F., Santa Rita, N. Mex. Valve gear. 1,807,432; May 26.

Peller, Karl E., West Hartford, assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn. Electrically heated container for molten glass. 1,807,071; May 26.

Pelosi, Frank, Haverhill, Mass. Safety razor. 1,807,342; May 26.

Pen Desk Set Company. (See Sheaffer, Craig R., assignor.)

Pennington, Gordon R., Cleveland Heights, Ohio. Belt drive mechanism. 1,807,133; May 26.

Penrod, Melvin A., Swissvale, H. S. Young, Wilkinsburg, and C. A. Brooks, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,806,820; May 26.

Perkins Corporation. (See Hunt, Fred L., assignor.)

Permutit Company, The. (See Behrman, Abraham S., assignor.)

Persico, Remigio, Pittsburgh, Pa. Partial self winding mechanism. 1,807,169; May 26.

Persons, Lawrence M., assignor to Cook Electric Company, Chicago, Ill. Draft controller. 1,807,226; May 26.

Peters, Henry M., Chicago, assignor to Faries Manufacturing Company, Decatur, Ill. Display stand. 1,807,493; May 26.

Peterson, Charles W., Cincinnati, Ohio. Loud speaker motor. 1,806,914; May 26.

Peterson, Edward T., Reading, assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa. Straightening machine. 1,807,324; May 26.

Peterson, Nels V., Knox, Ind. Nest. 1,807,253; May 26.

Peterson, Roy E., East Norwalk, assignor to The E. H. Hotchkiss Company, Norwalk, Conn. Stapling machine. 1,807,170; May 26.

Pfauser, Edward M., assignor to The Blackhawk Manufacturing Company, Milwaukee, Wis. Socket wrench. 1,807,134; May 26.

Pfueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Fishing reel. 1,807,433; May 26.

Philadelphia Storage Battery Company. (See Holland, Walter E., assignor.)

Phillips, Hyman, Cincinnati, Ohio. Oil dispenser. Des. 84,256; May 26.

Phillips Petroleum Company. (See Harlow, F. J., and Benz, assignors.)

Phillips Petroleum Company. (See Hiatt, William G., assignor.)

Phillips Petroleum Company. (See Hoover, Charles W., assignor.)

Piano, Joe, Chicago, Ill. Propelling mechanism. 1,807,254; May 26.

Pidcock, Kevin J. (See West, F. B., and Pidcock.)

Pinkus, Eugene, Toledo, Ohio. Illuminated sign. 1,806,915; May 26.

Pinnelli, Donato, Orange, N. J. Convertible implement. 1,807,009; May 26.

Pisani, Guilio, Farwell, assignor of one-half to S. Paoletti, Renovo, and one-half to Frank De Leece, Philadelphia, Pa. Animal trap. 1,807,171; May 26.

Pistor, Gustav, Leipzig, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Charging means for electric furnaces. 1,807,090; May 26.

Pittman, Walter F. (See Ford, G. F., and Pittman.)

Pittsburgh Plate Glass Company. (See Fox, J. H., and Hitner, assignors.)

Pittsburgh Plate Glass Company. (See Owen, William, assignor.)

Plante, Frank X., Sloatsburg, N. Y. Fastening device for shirts. 1,807,546; May 26.

Pokora, Charles, Milwaukee, Wis. Indicating device. 1,807,172; May 26.

Pollack, Lazarus W., Brooklyn, N. Y. Doll's eyes and mounting therefor. 1,807,091; May 26.

Pollen Filter Incorporated, The. (See Gieseler, George A., assignor.)

Pollopas Limited. (See Ostersetzer, A., and Risenfeld, assignors.)

Poncel, Alexis, Long Island, assignor of forty-nine percent to P. Desfosse, New York, N. Y. Radio receiving apparatus. 1,807,343; May 26.

Pond, Rudolf, Valparaiso, Ind., assignor to McGill Manufacturing Company. Switch operating device. 1,806,821; May 26.

Post, Edwin M., jr., assignor to International Motor Company, New York, N. Y. Engine speed control by manifold depression. 1,806,705; May 26.

Powell, Irene E., et al. (See Floyd, Ray H., assignor.)

Powell, Irvin W., et al. (See Floyd, Ray H., assignor.)

Pratt & Whitney Company. (See Durkee, Henry E., assignor.)

Pratt, Irwin E., Los Angeles, Calif. Pad and holder therefor. 1,806,950; May 26.

Prentka, Joseph, New York, N. Y. Aeroplane. 1,806,822; May 26.

Price, Robert, Putney, London, England. Machine tool for metal working purposes. 1,806,951; May 26.

Prillaman, Ella F., et al. (See Culver, Lagar R., assignor.)

Prillaman, John W., et al. (See Culver, Lagar R., assignor.)

Prion, Pierre A. M., Chinon, France. Machine for automatically printing photographic proofs. 1,807,547; May 26.

Proctor, George P., Wichita Falls, Tex. Locking thread connection. 1,807,494; May 26.

Proctor, John A., Lexington, assignor to Wireless Specialty Apparatus Company, Boston, Mass. Coupling transformer. 1,807,135; May 26.

Protectoseal Company of America. (See Anschicks, Rudolph J., assignor.)

Prout, Herbert L., Villa Park, Ill. Variable speed transmission. 1,806,984; May 26.

Przekop, Andrew. (See Szczesny, F., and Przekop.)

Public Service Company of Colorado. (See Foulk, Theodore M., assignor.)
Pullman Car and Manufacturing Corporation. (See Mussey, William H., assignor.)
Quackenbush, Cleveland H., South Euclid, Ohio. Armature winding. 1,807,252; May 26.
Quick, William, London, S. E. Thomas, Hounslow, and F. W. Berwick, London, England. Device for controlling windows of the sliding type. 1,807,548; May 26.
Rader, Earl D., Bedford, assignor to Dexter Folder Company, New York, N. Y. Folding machine. 1,806,706; May 26.
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Corporation of America. (See Miessner, Benjamin F., assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Radio Patents Corporation. (See Schmierer, Johannes M., assignor.)
Ranger, Arthur W., London, England. Platen printing press. 1,806,865; May 26.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Quartz tuning fork drive. 1,807,010; May 26.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Analyzing system for multiplex facsimile transmission. 1,807,011; May 26.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Multiplex reproducing. 1,807,012; May 26.
Rasmussen, Chester A., C. R. Butler, Long Beach, and W. A. Trout, Los Angeles, Calif. Casing support. 1,807,046; May 26.
Rath, Karl. (See Bock, W., and Rath.)
Rawson, Grant L., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Soot blower. 1,807,255; May 26.
Ray, James L., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fluid pressure relay mechanism. 1,807,173; May 26.
Rayburn, Elwyn M., San Francisco, Calif. Variable speed power transmission. 1,807,013; May 26.
Raymond, Louis, New York, N. Y., assignor to Baker & Co. Inc. Ready-made cusp. 1,807,072; May 26.
Raymond, Paul C., Buffalo, N. Y. Machine tool for tapping nut-blanks. 1,806,707; May 26.
Reber, Amel, San Bernardino, Calif. Revolving waste pipe opening machine. 1,807,549; May 26.
Recchia, Orlando R., Cranston, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,257; May 26.
Rector, Louis J. L., Amissville, Va. Insect trap. 1,807,550; May 26.
Redlinger, Matthias, Freeport, Ill. Mop and brush holder. 1,807,434; May 26.
Regan Safety Devices Company, The. (See Bodde, Theodore, assignor.)
Reid, James J., San Francisco, Calif. Gas generator. 1,806,823; May 26.
Reiners, Wilhelm, and G. Kahlisch, assignors to W. Schlafhorst & Co., Munich-Gladbach, Germany. Exchanging the bobbins in preparatory weaving machines. 1,807,495; May 26.
Reinforced Paper Bottle Corporation, The. (See Koch, L. B., and Buchina, assignors.)
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,806,881; May 26.
Remington Rand Inc. (See Ohnstrand, Enoch, assignor.)
Republic Rubber Company, The. (See Brill, Abraham, assignor.)
Republic Rubber Company, The. (See Liebau, Richard, assignor.)
Requa, Mark M., Seattle, Wash. Furnace. 1,806,916; May 26.
Research Corporation. (See Hesson, Robert B., assignor.)
Reubel, Henry, assignor to The Kroder Reubel Co., Incorporated, New York, N. Y. Curtain ring and eye. 1,807,551; May 26.
Rex, William J., Holland, Manitoba, Canada. Hand operated bundle trip for binders. 1,806,708; May 26.
Richardson, Joseph L., Nashville, Ark. Clothing compartment. 1,806,882; May 26.
Richardson, Robert P., assignor to The Nu-Shine Company, Reidsville, N. C. Bottle. Des. 84,258; May 26.
Richmond, Harry H., assignor to Electric Steel Foundry Company, Portland, Oreg. Logging vehicle. 1,807,325; May 26.
Richter, Walther, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electrode for electric welding. 1,806,952; May 26.
Riddell, John T., Evanston, Ill. Cleat and stud holder. 1,806,917; May 26.
Riddle, Aubrey. (See Thomas, L. J., and Riddle.)
Riesenfeld, Franz. (See Ostersetzer, A., and Riesenfeld.)
Riggs, Arthur E., Sapulpa, Okla. Valve seat lapping machine. 1,806,918; May 26.
Rip Van Winkle Wall Bed Company. (See Sinclair, Neil, assignor.)
Risdon, John J., assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Method and apparatus for making photographic prints. 1,807,047; May 26.
Ritter, John G., Norwood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Earth boring system. 1,807,048; May 26.
Riviere, Albert S., assignor to Union Special Machine Company, Chicago, Ill. Machine for trimming and hemming fabric sections. 1,807,552; May 26.
Rixson, Oscar C., Company, The. (See Garrison, Forrest C., assignor.)
Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Steel wool pad. 1,807,136; May 26.
Robbins, William H., Springfield, assignor to The Williams Company, London, Ohio. Steel wool pad and holder. 1,807,137; May 26.
Roben, Semen D., Moscow, Union of Socialist Soviet Republics. Method and device for voice culture. 1,806,919; May 26.
Roberts and Schaefer Company. (See Arms, Ray W., assignor.)
Roberts and Schaefer Company. (See Stump, Earl, assignor.)
Roberts, Charles, New York, N. Y. Display mechanism. 1,806,985; May 26.
Roberts, Eugene, New York, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah. Brake mechanism for centrifugal machines. 1,806,683; May 26.
Roberts, William T. B., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Mechanism for supplying fastenings. 1,806,883; May 26.
Robinson, Henry, New York, N. Y. Combination chute and closure. 1,807,496; May 26.
Robinson, James W. (See Angel, H., and Robinson.)
Robinson, Joseph, assignor of one-fourth to R. M. Wolvin, New York, N. Y. Electrical vaporizer. 1,806,646; May 26.
Robinson, Thomas, assignor to Lancaster Asphalt, Inc., New York, N. Y. Roofing element. 1,807,435; May 26.
Rochestie, Barnett B., Trenton, N. J. Weighing machine casing. Des. 84,259; May 26.
Rochestie, Barnett B., Trenton, N. J. Weighing machine casing. Des. 84,260; May 26.
Rodanet, Charles H. H., Versailles, assignor to Société Anonyme Etablissements Ed. Jaeger, Levallois-Perret, France. Steering wheel. 1,807,553; May 26.
Rogers, Harrison W., Incorporated. (See Ebeling, Charles W., assignor.)
Rogers, Homer L., Dayton, Ohio, assignor to The Philip Carey Manufacturing Company. Rail filler. 1,807,174; May 26.
Rogers, Thomas C. (See Bell, T. W., and Rogers.)
Rohm & Haas Co. (See Bruson, Herman A., assignor.)
Rohn, Wilhelm, Hanau, Germany. Alloy for turbine blades and machine parts exposed to similar conditions. 1,807,554; May 26.
Root, Charles F., assignor to The Chandler & Price Company, Cleveland, Ohio. Sheet registering device. 1,807,436; May 26.
Rose, Edward E., Cicero, Ill. Metallic doorframe. 1,806,647; May 26.
Rosinsky, Joseph, New York, N. Y. Combined walking stick and cigar and cigarette carrier and lighter. 1,806,709; May 26.
Ross, Charles W., jr., New Orleans, La. Pipe joint. 1,806,710; May 26.
Ross, Stanley D., and C. F. Edwards, Vancouver, British Columbia, Canada. Lubricator for internal combustion engines. 1,807,437; May 26.
Ross, William, Anaconda, Mont. T-square with sliding pivoted blade. 1,807,438; May 26.
Roth, Benjamin, St. Louis, Mo. Warning device for electric push-buttons, etc. 1,807,344; May 26.
Rubberoid Co., The. (See Floring, William M., assignor.)
Rubber Surfacers, Inc. (See Carnahan, George H., assignor.)
Ruben, Samuel, assignor, by mesne assignments, to Ruben Tube Company, New York, N. Y. Photo-electric cell. 1,807,326; May 26.
Ruben Tube Company. (See Ruben, Samuel, assignor.)
Rucker, George H., Stockton, assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif. Sheet metal brake. 1,806,986; May 26.
Ruf, George J. (See Cross, F. H., and Ruf.)
Ruggles, Hiram C., assignor of one-half to J. M. Aitken, Phoenix, Ariz. Packing. 1,807,555; May 26.
Rundqvist, Thore R. E., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling mechanism. 1,806,765; May 26.
Runge, Paul I. A., assignor to W. H. Galvin, San Francisco, Calif. Automobile headlight. 1,807,102; May 26.
Russell, William H., New Haven, Conn. Coin actuated change mechanism. 1,807,175; May 26.
Ryan, Joseph P., Chicago, Ill. Sign. Des. 84,261; May 26.
Ryan, William D., San Diego, Calif. Prod type battery cell tester. 1,807,439; May 26.
Ryder Anti-Glare Shield Co. (See Ryder, Forest C., assignor.)
Ryder, Forest C., assignor to Ryder Anti-Glare Shield Co., Elgin, Oreg. Glare shield. 1,807,256; May 26.

Sachs, Walter, Lancaster, Pa. Burglary protection system. 1,806,953; May 26.
Safety Mining Company. (See Armstrong, Frank H., assignor.)
Said, William H., assignor to Corning Glass Works, Corning, N. Y. Making glass articles. 1,807,103; May 26.
Salisbury, Hervey M., Walnut Grove, and A. E. Miller, Sacramento, Calif. Airplane. 1,806,648; May 26.
Salisbury, Jessup, Hamden, assignor to The American Buckle Company, West Haven, Conn. Button loop. 1,806,824; May 26.
Salisbury, Jessup, Hamden, assignor to The American Buckle Company, West Haven, Conn. Button loop. 1,806,825; May 26.
Salisbury, Jessup, Hamden, assignor to The American Buckle Company, West Haven, Conn. Button loop. 1,806,826; May 26.
Salzman, Morris, Brooklyn, assignor to Universal Permanent Wave Machine Corporation, New York, N. Y. Curling rod. 1,806,711; May 26.
Sanders, Edward, Blackwell, Tex. Pumping device. 1,807,556; May 26.
Sanford, Henry H., Mansfield, Ohio. Cabinet gas heater. 1,807,014; May 26.
Sanymetal Products Company, The. (See Carpenter, Robert F., assignor.)
Sargent, Frank P., Stratford, assignor to The Bassick Company, Bridgeport, Conn. Hood catch. 1,806,649; May 26.
Sauer, Conrad, assignor of fifty per cent to J. G. Doelfel, Pittsburgh, Pa. Clothes prop. 1,806,827; May 26.
Schaefer, Frederic. (See Moody, William O., assignor.)
Schaefer, Herbert, Luxemburg, Luxemburg. Heating in a gaseous atmosphere particularly in a reducing or oxidizing atmosphere. 1,807,257; May 26.
Schat, Ane P., Utrecht, Netherlands. Boat chock. 1,807,104; May 26.
Schierer, Jacob, New York, N. Y. Locking clasp. 1,807,557; May 26.
Schilling, Bernhard. (See Goldsborough, W. E., and Schilling.)
Schlafhorst W., & Co. (See Reiners, W., and Kahlisch, assignors.)
Schliephake, Erwin, Jena, Germany. Appliance for diathermic treatment by means of high frequency. 1,807,105; May 26.
Schmelz, Charles F., assignor to Stay-Put Shade Roller Corporation, Bridgeport, Conn. Shade roller. 1,806,650; May 26.
Schmidt, Ernest H., Cleveland Heights, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Draft key for car couplers. 1,807,345; May 26.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Marine pumping system. 1,806,651; May 26.
Schmidt, Karl, Berlin-Sudende, assignor to C. Lorenz Aktiengeselischaft, Berlin-Tempelhof, Germany. Insulating high frequency transformers. 1,807,176; May 26.
Schmierer, Johannes M., Lichterfelde, near Berlin, Germany, assignor to Radio Patents Corporation, New York, N. Y. Gas discharge tube. 1,807,177; May 26.
Schmitz, Henry A., jr., assignor to A. O. Smith Corporation, Milwaukee, Wis. Arc welding chill. 1,806,954; May 26.
Schneggenburger, Walter A., Buffalo, N. Y. Fishhook holder. 1,807,346; May 26.
Schneider & Cie. (See Fieux, Jean, assignor.)
Schneider & Cie. (See Methlin, Nicolas E., assignor.)
Schofield, Stanley T. (See Van Sickle, R. C., and Schofield.)
Schon, Lester. (See Shoenberg, M. H., and Schon.)
Schraysshuen, Carl, Providence, and K. Fassnacht, Edgewood, assignors to Speidel Chain Co., Providence, R. I. Elastic mesh bracelet. 1,807,440; May 26.
Schuessler, Heribert. (See Ott, K., and Schuessler.)
Schuler, Abram J., Chicago, Ill. Clock. Des. 84,262; May 26.
Schulman, Joseph, Brooklyn, N. Y. Cooling system for engines. 1,806,712; May 26.
Schultz, Ferd, and R. Kuntz, Juneau, Wis. Highway marker. 1,807,015; May 26.
Schulz, Paul H., Moline, Ill. Record changing mechanism. 1,807,073; May 26.
Schulzke, Richard F., and D. L. Hamilton, Portland, Oreg. Necktie press. 1,807,259; May 26.
Schurig, Otto R., Schenectady, N. Y., assignor to General Electric Company. Resistor. 1,807,441; May 26.
Schwan, Werner, Dallas, Tex. Gas burner. 1,807,092; May 26.
Schwartz, Frank Q., Detroit, Mich. Making lock washers. 1,807,258; May 26.
Schwartz, Samuel, Cleveland, Ohio. Advertising sign. 1,807,442; May 26.
Schwarzkopf, Arthur R., assignor to Theo. A. Kochs Company, Chicago, Ill. Hydraulic raising and lowering mechanism for chair seats. 1,806,713; May 26.
Schweigert, Frederick, New York, N. Y. Interchangeable hammer. 1,807,347; May 26.
Schweitzer, Hugo, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works Inc., New York, N. Y. The manufacture of 2-aminonaphthalene-3-carboxylic acid. 1,806,714; May 26.
Schwindt, Christian J., assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa. Crystalline organic compounds. 1,806,715; May 26.
Scott and Williams, Incorporated. (See Page, Albert E., assignor.)
Scott & Williams, Incorporated. (See Page, Albert E., assignor.)
Scott-Weiss Steel Company. (See Barton, Francis M., assignor.)
Scovill Manufacturing Company. (See Westfall, William R., assignor.)
Scullin Steel Co. (See McCullough, Paul J., assignor.)
Searles, Raymond R., assignor to The Tafnir Bearing Company, New Britain, Conn. Antifriction spring connection. 1,807,093; May 26.
Seaton, Charles F., Elyria, Ohio. Detachable joy stick for aeroplanes. 1,806,716; May 26.
Sechler, Will N. (See Goodman, S., and Sechler.)
Sedwick, Mathew M., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Marker for marking container covers. 1,807,558; May 26.
See, Howard, assignor to The Dixie Culvert & Metal Company, Atlanta, Ga. Corrugated conduit. 1,806,920; May 26.
Seil, Gilbert E., Conshohocken, Pa. Making synthetic amphibolic products. 1,807,178; May 26.
Seinsheimer Paper Company, The. (See Johnson, Samuel J., assignor.)
Selden Research & Engineering Corporation, The. (See Schwindt, Christian J., assignor.)
Senn, Vesta M., administratrix. (See Senn, William E.)
Senn, William E., deceased, by V. M. Senn, administratrix, assignor to The Universal Clay Products Co., Sandusky, Ohio. Pressure equalizing mechanism for multiple dies. 1,807,443; May 26.
Servaas, Jan, Brooklyn, N. Y. Kitchen utensil. 1,806,828; May 26.
Sharples Specialty Company, The. (See Bath, Wilmer H., assignor.)
Shatkin, Aaron, Brooklyn, N. Y. Collapsible housing for writing instruments. 1,807,444; May 26.
Shaw, James W., Chicago, Ill. Safety bank check. 1,807,445; May 26.
Sheaffer, Craig R., Fort Madison, Iowa, assignor, by mesne assignments, to Pen Desk Set Company. Fountain pen desk set. 1,807,227; May 26.
Shears, James H., Oklahoma City, Okla. Game. 1,807,074; May 26.
Sheldon, Henry A., Buffalo, N. Y., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Device for trimming corn. 1,807,348; May 26.
Sheller, Samuel H., Marion, Pa. Fruit basket top applying tool. 1,806,717; May 26.
Sherwood, Lester L., Los Angeles, Calif. Sweat band. 1,807,049; May 26.
Shoenberg, Milton H., and L. Schon, San Francisco, Calif.; said Schon assignor to said Shoenberg. Circuit interrupter. 1,806,766; May 26.
Shore, Albert F., New York, N. Y. Apparatus for measuring the hardness of materials. 1,806,767; May 26.
Shuron Optical Company. (See Sundstrom, Ivar, assignor.)
Siebenmann, Daniel, Bern, Switzerland. Automatic fire-extinguishing device. 1,806,829; May 26.
Siman, Burnett, et al. (See Olaszy, Joseph, assignor.)
Simmen Automatic Railway Signal Company. (See Simmen, Paul J., assignor.)
Simmen, Paul J., Eden, N. Y. Circuit control of train control systems. 1,806,831; May 26.
Simmen, Paul J., assignor to Simmen Automatic Railway Signal Company, Eden, N. Y. Automatic train control. 1,806,830; May 26.
Simmons Company. (See Kusterle, Frank, assignor.)
Sinclair, Neil, assignor to Rip Van Winkel Wall Bed Company, Inc., Oakland, Calif. Shifting narrow door wall bed. 1,806,955; May 26.
Sinclair Refining Company. (See Isom, Edward W., assignor.)
Singer Manufacturing Company, The. (See Allen, Edward B., assignor.)
Skar, John G. L., Jamestown, and H. J. Syren, Buffalo, assignors to Art Metal Construction Company, Jamestown, N. Y. Storage system. 1,807,075; May 26.
Sloane, Scott. (See Morrill, B. F., Cookson, and Sloane.)
Smeby, Justin G., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Valve. 1,807,446; May 26.
Smenner, Harry F., Fort Wayne, Ind., assignor to The Wayne Home Equipment Company, Baltimore, Md. Combustion tube for oil burners. 1,806,921; May 26.
Smith, A. O., Corporation. (See Burnish, Howard J., assignor.)
Smith, A. O., Corporation. (See Palm, Frederick, assignor.)
Smith, A. O., Corporation. (See Richter, Walther, assignor.)
Smith, A. O., Corporation. (See Schmitz, Henry A., jr., assignor.)
Smith, A. O., Corporation. (See Strobel, Karl, assignor.)
Smith, Albert M. (See Wurster, O. H., and Smith.)
Smith, Curtiss F., West Hartford, assignor to The Fuller Brush Company, Hartford, Conn. Handle coupling and constructing the same. 1,807,559; May 26.

Smith Drum & Company. (See Jaxheimer, William H., assignor.)
Smith, George W., Ottumwa, Iowa, and A. E. Dieterich, Washington, D. C., assignors to Hardsocg Wonder Drill Co., Ottumwa, Iowa. Rock drill. 1,807,016; May 26.
Smith, Irvin R. (See Heiny, M. M., and Smith.)
Smith, John W., Philadelphia, Pa. Propeller hub. 1,807,179; May 26.
Smith, John W., assignor to the Fafnir Bearing Company, New Britain, Conn. Spring end connection. 1,807,094; May 26.
Smith, Rowland D., assignor to Corning Glass Works, Corning, N. Y. Treating glass articles. 1,807,017; May 26.
Smith, Walter, Malaga, Calif. Box handling tongs. 1,806,956; May 26.
Smith, William G., Rossburn, Manitoba, Canada. Gravel spreader. 1,807,447; May 26.
Société Anonyme Etablissements Ed. Jaeger. (See Rodanet, Charles H. H., assignor.)
Societe des Moteurs Dugelay. (See Bethenod, Joseph, assignor.)
Societe Internationale des Procedes Prudhhomme Houdry. (See Joseph, Alfred, assignor.)
Soderberg, Erik A., assignor of one-half to G. Gundersen, Alameda, Calif. Fish cutting machine. 1,807,448; May 26.
Solomon, Maurice, Yonkers, N. Y. Cap. 1,807,180; May 26.
Sosinski, Paul P., assignor to The Union Switch & Signal Company, Swissvale, Pa. Alternating current relay employing a motor element. 1,807,349; May 26.
Spanier, Fritz, Karlsruhe, Germany. Sectional wedge. 1,806,718; May 26.
Speciale, Michael, New York, N. Y. Clock. 1,807,497; May 26.
Speck, William C., and E. Barker, assignors to The Buckeye Steel Castings Company, Columbus, Ohio. Apparatus for freeing castings from sand and gates. 1,807,181; May 26.
Speicher, Daniel E., Urbana, Ind. Bag. 1,807,449; May 26.
Speidel Chain Co. (See Schraysshuen, C., and Fassnacht, assignor.)
Spelshouse, Louis L., Baltimore, Md. Building block. 1,807,138; May 26.
Sperry Development Company. (See Sperry, Elmer A., assignor.)
Sperry, Elmer A., Brooklyn, N. Y., assignor to Sperry Development Company, Dover, Del. Automatic accelerator. 1,808,652; May 26.
Spiess, Georg, Leipzig, Germany. Device for adjustment of the pile feed in sheet feeding machines. 1,806,866; May 26.
Spilner, August W. (See Dunn, William D., assignor.)
Sprague-Sells Corporation. (See Sheldon, Henry A., assignor.)
Standard Oil Company of California. (See Cushman, O. E., and Doell, assignors.)
Stanley, Robert L., Richmond, Me. Last. 1,806,720; May 26.
Stans, Leonard. (See Castelyns, G., Stans, and Vinck.)
Stark, John W., Bowling Green, Ky. Rim end connecter. 1,807,106; May 26.
Starkey, Frederick W., Logan, Pa. Tank float stopper. 1,807,450; May 26.
Starr, James H., Oak Park, Ill., assignor to Electrical Engineers Equipment Company. Electric fuse. 1,807,228; May 26.
Stauf, Friedrich W. (See Kröner, G., and Stauf.)
Stay-Put Roller Shade Corporation. (See Schmelz, Charles F., assignor.)
Stebbins, Albert H., Los Angeles, Calif. Anti-friction bearing. 1,807,451; May 26.
Steigel, Herbert W., et al. (See Furr, Harry L., assignor.)
Steinhilber, Ceasar, North Bergen, N. J. Removable saw handle. 1,806,922; May 26.
Stephens, George H., Northbrook, Ill., assignor to The Hammond Clock Company, Chicago, Ill. Clock case. Des. 84,263; May 26.
Sternbergh, Layman M., Ocean Grove, N. J. Splash guard and tile for forming the same. 1,807,107; May 26.
Stevenson, Ernest, West Haven, Conn., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,806,768; May 26.
Stewart, Robert A. (See Graff, G. B., and Stewart.)
Stimson, Jonathan C., St. Louis, Mo. Reflecting device. 1,807,350; May 26.
Stocking, George E., Rochelle, assignor of one-fourth to Berlin Chapman Company, Berlin, Wis. Apparatus for washing vegetables and fruits. 1,806,957; May 26.
Stoll, Henry C., Bronx, N. Y. Cigarette box or the like. Des. 84,264; May 26.
Stolz, Harry P., Glendale, Calif. Cementing wells. 1,807,050; May 26.
Stoner, Frank H., Monroe, Mich. Disk cultivator. 1,807,182; May 26.
Story, Le Roy G. (See Bennett, H. T., and Story.)
Story, Le Roy G. (See Bennett, H. T., Story, and Beckley.)
Stover Manufacturing & Engine Co. (See Haller, Frank J., assignor.)
Strahan, Charles F., Linwood, Nebr. Honeycomb and comb foundation. 1,806,987; May 26.
Stratford, William M., Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Treating oil. 1,807,183; May 26.
Straw, Edward F., assignor to S. Heer, Pittsburgh, Pa. Illuminated display globe. 1,806,769; May 26.
Strobel, Karl, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electric arc welding. 1,806,958; May 26.
Stubner, John F., Chicago, Ill., assignor of one-third to A. Besser and one-third to M. J. Olshansky. Stereopticon. 1,807,327; May 26.
Stump, Earl, assignor to Roberts and Schaefer Company, Chicago, Ill. Hydraulic cleaner control. 1,806,923; May 26.
Sullivan, Edward D., Klamath Falls, Oreg. Combination tongue and brake. 1,806,719; May 26.
Sullivan Machinery Company. (See Johansen, Harry C., assignor.)
Sullivan Machinery Company. (See Rundqvist, Thore R. E., assignor.)
Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Power transmitting device. 1,806,653; May 26.
Sundstrom, Ivar, Rochester, N. Y., assignor to Shuron Optical Company, Inc. Eyeglass mounting. 1,807,560; May 26.
Supan, Milton C., Mineral, Calif. Jack. 1,807,351; May 26.
Superheater Company, The. (See Broido, Benjamin, assignor.)
Superheater Company, The. (See Gordon, Charles W., assignor.)
Superheater Company, The. (See Hard, Malcolm, assignor.)
Superheater Company, The. (See Oatley, Henry B., assignor.)
Superfile Machinery Corporation. (See Flam, Stephen, assignor.)
Swartz, Elizabeth M., Norfolk, Va. Child's clothes supporter. 1,807,452; May 26.
Sweet, Henry N., Boston, Mass. Insect exterminator. 1,807,076; May 26.
Swindell, William & Brothers. (See Brooke, Frank W., assignor.)
Syren, Harold J. (See Skar, J. G. L., and Syren.)
Szczesny, Frank, and A. Przekop, Norwich, Conn. Picker check for looms. 1,807,018; May 26.
Tafnir Bearing Company, The. (See Cooper, Elisha H., assignor.)
Tafnir Bearing Company, The. (See Searles, Raymond R., assignor.)
Tafnir Bearing Company, The. (See Smith, John W., assignor.)
Tanger, Samuel, Lynbrook, N. Y. Radiator inclosure. 1,807,352; May 26.
Tarshis, Ralph, Brooklyn, N. Y. Helicopter. 1,807,353; May 26.
Tauben, Maxwell, Brooklyn, N. Y. Invisible tie collar. 1,806,721; May 26.
Tawresey, John S., East Orange, N. J., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Railway truck. 1,806,832; May 26.
Taylor Instrument Companies. (See Brown, H. Brainard, assignor.)
Teed, Lue A., Fullerton, Calif. Well capping device. 1,807,498; May 26.
Television Laboratories, Inc. (See Farnsworth, Philo T., assignor.)
Television Limited. (See Baird, John L., assignor.)
Ter Horst, William P., Packanack Lake, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treatment of rubber. 1,807,355; May 26.
Terhune, Howard, assignor to Chambersburg Engineering Company, Chambersburg, Pa. Forging hammer. 807,455; May 26.
Test, William H., Redondo Beach, Calif. Purifying pigment materials. 1,806,988; May 26.
Tetrault, Eusebe, Ludlow, Mass. Universal joint. 1,806,723; May 26.
Teubner, Wolfgang. (See Espig, H., and Teubner.)
Texas Company, The. (See Rehimer, Otto, assignor.)
Texas Company, The. (See Claypoole, Walter, assignor.)
Texas Company, The. (See De Florez, Luis, assignor.)
Texas Company, The. (See Fairbairn, George C., assignor.)
Texas Company, The. (See Stratford, William M., assignor.)
Thing, Frederick A., Oakland, assignor to Chas. M. Bailey Co., San Francisco, Calif. Radiator hanger. 1,806,924; May 26.
Thoma, Erwin. (See Fritzky, W., and Thoma.)
Thomas, Charles C., Detroit, Mich., assignor to Copeland Products, Inc. Refrigerating mechanism. 1,807,354; May 26.
Thomas, Lewis J., and A. Riddle, Ekron, Ky. Smoking pipe. 1,807,260; May 26.
Thomas, Sydney E. (See Quick, W., Thomas, and Berwick.)
Thompson, Lee O., Vancouver, Wash. Seat positioning device. 1,807,579; May 26.
Thorness, Louis S., Renton, Wash. Cableway. 1,807,229; May 26.
Throop, Damon R., Stockton, Calif. Automatic revolving scraper. 1,806,959; May 26.

Throop, Joseph W. (See Middleton, W. V., and Throop.)
Tielke, Homer F., Cleveland, Ohio. Rolling mill piercing point, plug and guide, and making same. 1,807,453; May 26.
Tielke, Homer F., Cleveland, Ohio. Using rolling mill piercing points. 1,807,454; May 26.
Tilly, Ernest C., Montpelier, Bristol, and H. Mattinson, Disley, England. Ticket issuing machine. 1,806,654; May 26.
Titan Tool Company. (See Walker, John V., assignor.)
Tittemore, Frank A., Richmond, assignor to Hopkins Spray Equipment Company, San Francisco, Calif. Combined pressure control and water separator device for paint spraying machines. 1,807,230; May 26.
Tobin, Kenneth J. (See Fehr, E. J., and Tobin.)
Tobin, Kenneth J. (See Wasberg, A., and Tobin.)
Tontet, George V., Buenos Aires, Argentina. Tank for the transportation of volatile liquids. 1,807,108; May 26.
Trapper, William, Sacramento, Calif. Compressor unloading device. 1,806,925; May 26.
Traver, Philip C., Lynbrook, assignor to Jamaica Sea Airport, Jamaica, N. Y. Mooring mast. 1,806,655; May 26.
Treece, Jesse H., Toledo, Ohio, assignor to Owens-Illinois Glass Company. Glassware forming machine. 1,807,095; May 26.
Trefethen, Charles G. (See Belden, A. G., and Trefethen.)
Treiman, Morris. (See Holmes, G. E., and Treiman.)
Tridex Corporation. (See Crickmer, Charles S., assignor.)
Trout, William A. (See Rasmussen, C. A., Butler, and Trout.)
Trumbull Electric Manufacturing Company, The. (See Hammerly, Herman J., assignor.)
Trumbull Electric Manufacturing Company, The. (See Hanny, Charles E., assignor.)
Trumbull, Frank S., Providence, R. I. Spoon or similar article. Des. 84,265; May 26.
Trump, Elno H., Akron, Ohio. Stamping machine. 1,807,490; May 26.
Tübben, Ludwig. (See Maruhn, J., and Tübben.)
Tubize Chatillon Corporation. (See Davis, Carl H., assignor.)
Tuck, George A., San Francisco, Calif. Gas furnace. 1,807,051; May 26.
Tusler, Wilbur H. (See Magney, G. R., Tusler, and Arnal.)
Ullendorff, Jennie, Portland, Oreg. Mechanism for supplying fluids from one airship to another while in flight. 1,806,833; May 26.
Ullendorff, Jennie, Portland, Oreg. Mechanism for supplying fluids from one airship to another while in flight. 1,806,834; May 26.
Union Special Machine Company. (See Riviere, Albert S., assignor.)
Union Special Maschinenfabrik G. m. b. H. (See Lutz, Friedrich, assignor.)
Union Switch & Signal Company, The. (See Fereday, Frederick T., assignor.)
Union Switch & Signal Company, The. (See Lee, Frederick W., assignor.)
Union Switch & Signal Company, The. (See O'Hagan, Bernard E., assignor.)
Union Switch & Signal Company, The. (See Penrod, M. A., Young, and Brooks, assignors.)
Union Switch & Signal Company, The. (See Sosinski, Paul P., assignor.)
Union Switch & Signal Company, The. (See Williamson, Arba G., assignor.)
United Shoe Machinery Corporation. (See Bagshaw, Charles M., assignor.)
United Shoe Machinery Corporation. (See Burke, Elmer H., assignor.)
United Shoe Machinery Corporation. (See Hodgkins, Edward F., assignor.)
United Shoe Machinery Corporation. (See O'Gorman, Gaynor, assignor.)
United Shoe Machinery Corporation. (See Roberts, William T. B., assignor.)
United States Pipe & Foundry Company. (See Hering, Edward, assignor.)
United Water Softeners Limited. (See Higgins, Eric B., assignor.)
Universal Clay Products Co., The. (See Senn, William E., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Oil Products Company. (See Egloff, G., and Benner, assignors.)
Universal Permanent Wave Machine Corporation. (See Salzman, Morris, assignor.)
Utah Radio Products Company. (See Pack, Wehrli D., assignor.)
Van Ackeren, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Cooling of coking retorts and apparatus. 1,807,019; May 26.
Van Berkel, Cornelia F. M. (See van Weenen, Franciscus L., assignor.)
Vance, Walter N., Chicago Heights, assignor to Lyon Metal Products, Incorporated, Aurora, Ill. Checkbook. 1,807,356; May 26.
Van der Woude, Fritz, assignor to The General Industries Company, Elyria, Ohio. Governor. 1,807,052; May 26.
Van Pappelendam, Carl A., Keokuk, Iowa. Tandem seat construction. 1,807,077; May 26.
Van Schaack Bros. Chemical Works, Inc. (See Calvert, Robert, assignor.)
Van Sickle, Roswell C., and S. T. Schofield, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Operating mechanism for oil circuit interrupters. 1,807,020; May 26.
Van Vlaanderen Machine Company. (See Hinnekens, Florent, assignor.)
Van Vranken, Frank, Los Angeles, Calif. Safety throttle control. 1,806,960; May 26.
Van Weenen, Franciscus L., Rotterdam, Netherlands, assignor of one-half to C. F. M. van Berkel, Waesenaar, Netherlands. Device for injecting liquid under pressure. 1,806,770; May 26.
Vaughn, William B., Baker, Oreg. Hay rake, gatherer, loader and buncher. 1,807,357; May 26.
Versare Corporation. (See Warhus, Oliver F., assignor.)
Victor Talking Machine Company. (See Clarke, Carole A., assignor.)
Vilas Oil Burners Limited. (See Fogarty, Orville A., assignor.)
Villaret, Gustave E., Leonia, N. J., assignor to Lighting Appliance Company, Inc., New York, N. Y. Lighting fixture strap or article of similar nature. Des. 84,266; May 26.
Villaret, Gustave E., Leonia, N. J., assignor to Lighting Appliance Company, Inc., New York, N. Y. Lighting fixture member or article of similar nature. Des. 84,267; May 26.
Villaret, Gustave E., Leonia, N. J., assignor to Lighting Appliance Company, Inc., New York, N. Y. Lighting fixture member or article of similar nature. Des. 84,268; May 26.
Vincenzi, John J., Boston, Mass. Molding apparatus. 1,807,053; May 26.
Vinck, Armand. (See Castelyns, G., Stans, and Vinck.)
Volodimirov, Nicholas N., Richmond Hill, N. Y. Flexible packing. 1,807,139; May 26.
Von der Lippe-Lipski, Elaine, Washington, D. C. Advertising device. 1,806,722; May 26.
Von Wedel, Carl J. R. H., Berlin, Germany, assignor, by mesne assignments, to Electrons, Inc. Discharge tube. 1,807,140; May 26.
Vought, Chance M. (See Wait, William, jr., assignor.)
Waas, Charles W., St. Paul, Minn. Child's wagon. 1,806,961; May 26.
Wadman, Harold A., assignor to Hartford-Empire Company, Hartford, Conn. Methods of and apparatus for making glass. 1,807,054; May 26.
Wadsworth, David T., Cold Springs, assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky. Latching and seal receiving structure. 1,807,261; May 26.
Wadsworth Electric Manufacturing Company, The. (See Wadsworth, David T., assignor.)
Wagar, Fred L., Wagar, Ala. Exhaust ventilator. 1,807,109; May 26.
Wages, Lawrence L., assignor of one-half to G. H. McClary, Bessemer, Ala. Convertible barber chair. 1,807,262; May 26.
Wagner, Andrew, West Hoboken, assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J. Folding table. 1,807,184; May 26.
Wait, William, jr., Garden City, assignor to Chance M. Vought, Great Neck, N. Y. Gun mount for airchaft. 1,806,724; May 26.
Walker, Harold W., Edgewood, Md., and H. S. McQuaid, Lakewood, Ohio. Insecticide. 1,807,078; May 26.
Walker, John V., Fairview, assignor to Titan Tool Company, Erie, Pa. Self-opening tool. 1,807,264; May 26.
Walker, John V., Fairview, assignor to Titan Tool Company, Erie, Pa. Screw driving device. 1,807,265; May 26.
Walter, George A., Ithaca, N. Y. Apparatus for dissolving solids. 1,807,263; May 26.
Walter, Raymond A., assignor to Conveyor Sales Company, New York, N. Y. Carrier support for reciprocating conveyers. 1,807,110; May 26.
Walthers, Harry S., assignor to Yates-American Machine Company, Beloit, Wis. Cutter head. 1,807,185; May 26.
Walton, John Q., Washington, D. C., assignor to Westinghouse Electric and Manufacturing Company. Marine pumping system. 1,806,725; May 26.
Ward, Nicholas A., Auburn, Wash. Stake sharpener. 1,806,656; May 26.
Warhus, Oliver F., Albany, N. Y., assignor to Versare Corporation. Road vehicle. 1,806,771; May 26.
Warner, John F., Muncie, Ind., assignor to C. R. Wayman, Dayton, Ohio. Frame construction. 1,807,186; May 26.
Warren, Thomas R., Norton-on-Tees, assignor to Imperial Chemical Industries Limited, London, England. Regulation of pumps, compressors, blowers and like machines. 1,807,328; May 26.
Wartemann, Oscar, College Point, New York, N. Y. Dam construction. 1,807,358; May 26.
Wasberg, Axel, and K. J. Tobin, assignors to Camel Company, Chicago, Ill. Opening, closing, and latching mechanism. 1,806,772; May 26.

Washburn, Ernest A., Los Angeles, Calif. Guard finger and ledger plate construction for mowers and reapers. 1,806,926; May 26.
Watermau, L. E., Company. (See Larsen, Gabriel, assignor.)
Waters, William, Boston, Mass. Heater for propellers. 1,807,359; May 26.
Waters, William S., Lakewood, Ohio. Lighting fixture. 1,806,773; May 26.
Watrous, Earl G., Chicago, Ill. Plumbing fitting. 1,806,962; May 26.
Watts, Frank E. (See Martin, J. F., and Watts.)
Wayman, Charles R. (See Warner, John F., assignor.)
Wayne Home Equipment Company, The. (See Smenner, Harry F., assignor.)
Wazlavek, Carl, assignor of one-fourth to W. B. Fischer, Massillon, Ohio. Grab. 1,807,266; May 26.
Webster, Clarence H., London, assignor to R. W. Crabtree & Sons, Limited, Leeds, England. Machine for rewinding webs of papers, applicable for similar purposes. 1,806,774; May 26.
Wedger, Walter L., Belmont, and J. W. Edmands, Newton Highlands, Mass., assignors, by mesne assignments, to Central Railway Signal Company, Inc. Fire extinguishing composition. 1,807,456; May 26.
Weeks, William W., Brooklyn, N. Y., assignor to Elevator Supplies Company, Inc. Elevator door operating mechanism. 1,807,231; May 26.
Wehr, William G., East Cleveland, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Paper roll handling mechanism. 1,807,360; May 26.
Weingand, Richard. (See Czapek, E., and Weingand.)
Weinreich, Christ G., St. Louis, Mo. Lifting device. 1,807,361; May 26.
Weis, Henry T., Fairmont, W. Va. Cleaning condensers and the like. 1,807,457; May 26.
Weland, Martin E., Chicago, Ill. Handling and wrapping margarine. 1,807,458; May 26.
Wellman Company. (See Anderson, Roland G., assignor.)
Wells, Sidney D., Quincy, Ill., assignor, by mesne assignments, to The Mine & Smelter Supply Company, Denver, Colo. Producing fibrous materials. 1,807,111; May 26.
Welsh, Frank, Granville, Ohio. Leak stopping device for pipes. 1,806,867; May 26.
Welton, Park E., Cuyahoga Falls, Ohio. Molding press. 1,807,055; May 26.
Wenn, Floyd D., Binghamton, assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Making an insulator cap. 1,806,726; May 26.
Werner, Frank J., Portage Township, Porter County, Ind. Furnace. 1,807,112; May 26.
West, Frederick B., and K. J. Pidcock, Kyogle, New South Wales, Australia. Wheel drawer for use on motor vehicles. 1,807,329; May 26.
West, Hazael E., Washington, D. C. Reading stand. 1,807,500; May 26.
Western States Machine Company, The. (See Roberts, Eugene, assignor.)
Western Union Telegraph Company, The. (See Angel, H., and Robinson, assignors.)
Westfall, William R., Kew Garden, N. Y., assignor to Scovill Manufacturing Company, Waterbury, Conn. Ash receiver or similar article. Des. 84,269; May 26.
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Fechheimer, Carl J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Lingal, Harry J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Ray, James L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Ritter, John G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schmidt, Henry F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Smeby, Justin G., assignor.)
Westinghouse Electric and Manufacturing Company. (See Van Sickle, R. C., and Schofield, assignors.)
Westinghouse Electric and Manufacturing Company. (See Walton, John Q., assignor.)
Westinghouse Electric & Manufacturing Company. (See Yensen, Trygve D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Zworykin, Vladimir K., assignor.)
Westman, Le Roy A., and G. B. Carman, Cleveland, Ohio. Hydraulic shock absorber. 1,807,362; May 26.
Wheatcroft, Violette E., West New Brighton, N. Y. Collapsible rack for radiators. 1,807,363; May 26.
Wheeler, William I., Scottville, Ill. Repair nose for plow shares. 1,807,459; May 26.
White, Alphonzo, assignor to Baxter D. Whitney & Son, Inc., Winchendon, Mass. Cutter guard. 1,807,561; May 26.
White Cap Company. (See White, William P., assignor.)
White, Lillie G., assignor of one-half to F. W. Ziniti, Boston, Mass. Electric drier. 1,806,727; May 26.
White, William E., assignor to Kalman Steel Company, Chicago, Ill. Dowel bar support. 1,807,364; May 26.
White, William P., assignor to White Cap Company, Chicago, Ill. Making closure caps. 1,807,187; May 26.
Whitney, Baxter D., & Son, Inc. (See White, Alphonzo, assignor.)
Whitsitt, William B. (See Emerson, G. H., and Whitsitt.)
Wibert, Oscar A., Finspong, Sweden. Packing for use between rotary and stationary machine parts. 1,807,460; May 26.
Wilbert Products Co., The. (See Dolan, William A., assignor.)
Wilcox, Charles E., Long Beach, Calif. Elevator. 1,806,776; May 26.
Wilde, Samuel A., assignor to Glenwood Range Company, Tauton, Mass. Safety lock for gas valves. 1,806,775; May 26.
Wiley, Lee M., assignor to Delta Electric Company, Marion, Ind. Electric switch. 1,806,777; May 26.
Wille, Fred, Chicago, assignor to H. A. Brassert & Co., Chicago, Ill. Gas drier. 1,806,989; May 26.
Williams Company, The. (See Robbins, William H., assignor.)
Williamson, Arba G., Carnegie, assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa. Track circuit system. 1,807,230; May 26.
Willis, George F. (See Nuckolls, Samuel H., assignor.)
Willits, Guy L., Minneapolis, Minn. Drawbar attachment. 1,806,728; May 26.
Wilmanns, Christopher, Indianapolis, Ind., assignor to Liberty Electric Company. Smoker's stand. 1,807,079; May 26.
Wilson, Frederick R., Canonsburg, Pa. Road construction. 1,806,778; May 26.
Winans, Daniel M., Binghamton, assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Door buffer and retainer. 1,807,113; May 26.
Winniford, Louise. (See Kelley, B. L., and Winniford.)
Winship, Albert W., assignor to Berg-Winship, Inc., Utica, N. Y. Dress suspending and carrying device. 1,807,267; May 26.
Wintringham, William T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Power limiting apparatus. 1,806,657; May 26.
Wireless Specialty Apparatus Company. (See Proctor, John A., assignor.)
Wirschinger, Erhard. (See Kolmer, W., and Wirsinger.)
Wiseman, Barnett, et al. (See Olaszy, Joseph, assignor.)
Wiser, Henry J., Ottawa, Ontario, assignor to International Fibreboard Limited, Gatineau, Quebec, Canada. Extractor in presses. 1,807,461; May 26.
Witten, William S., Pasadena, Calif. Stock pen. 1,807,188; May 26.
Wittnauer, A., Co. (See Heinmuller, John P. V., assignor.)
Wolf, Paul, Zwickau, Germany. Miner's lamp. 1,806,868; May 26.
Wolf, Paul, Zwickau, Germany. Electric lamp charged from accumulators. 1,806,869; May 26.
Wolvin, Roy M. (See Robinson, Joseph, assignor.)
Wood, Alan D., Lower Merion Township, Montgomery County, Pa. Embossing metallic plates. 1,807,141; May 26.
Wood, Leonard, St. Louis, Mo. Self-supporting hose. 1,806,963; May 26.
Wood, William C., Davenport, Iowa. Flying toy. 1,807,365; May 26.
Woodcock, Virgil E., Washington, D. C., assignor to General Electric Company. Compressible pile rheostat. 1,807,366; May 26.
Woodruff, Graham C., Bronxville, assignor to The L. C. L. Corporation. Container freight car. 1,807,268; May 26.
Woolery, Horace E., St. Paul, assignor to Woolery Machine Company, Minneapolis, Minn. Railway bolt tightener. 1,807,367; May 26.
Woolery Machine Company. (See Woolery, Horace E., assignor.)
Woolever, Herbert A., Orange, Pa. Nut wrench. 1,807,080; May 26.
Worthington Pump and Machinery Corporation. (See Gilman, George H., assignor.)
Wright, Charles A., Lakewood, Ohio, assignor to National Carbon Company. Battery charging unit. 1,807,331; May 26.
Wright, Robert L., and H. D. Collins, assignors to Gypsy Oil Company, Tulsa, Okla. Sucker rod box cleaner. 1,807,114; May 26.
Wurster, Oscar H., and A. M. Smith, assignors to Wurster & Sanger, Inc., Chicago, Ill. Rotary extractor. 1,807,232; May 26.
Wurster & Sanger, Inc. (See Wurster, O. H., and Smith, assignors.)
Yates-American Machine Company. (See Walthers, Harry S., assignor.)
Yensen, Trygve D., East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Magnetic product and making the same. 1,807,021; May 26.
Yensen, Trygve D., Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company. Radio transformer. 1,807,022; May 26.
Young, Andrew P., Pleasantville, N. Y. Golf ball cleaner. 1,807,023; May 26.
Young, Henry S. (See Penrod, M. A., Young, and Brooks.)
Young, Walter H., and E. O. Eckland, Chicago, Ill.; said Eckland, assignor to said Young. Inking device. 1,807,562; May 26.

Young, William C., Atlantic, Iowa. Four row corn planter. 1,807,115; May 26.
Zehnder, Louis R., assignor, by mesne assignments, to Louisville Frog, Switch & Signal Company, Louisville, Ky. Wire connecter. 1,807,462; May 26.
Zeloid Products Corporation. (See Hetzel, Charles E., assignor.)
Zenith Radio Corporation. (See Gates, Howard A., assignor.)
Zimmer, Arnold A., Chicago, Ill., assignor to The Lamson Company, Syracuse, N. Y. Pressure relief means for pneumatic tube systems. 1,807,096; May 26.
Ziniti, Frank W. (See White, Lillie G., assignor.)
Zorn, William H., Harrisburg, Nebr. Pump. 1,806,658; May 26.
Zworykin, Vladimir K., Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company. Light sensitive element. 1,807,056; May 26.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 26TH DAY OF MAY, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accelerator, Automatic. E. A. Sperry. 1,806,652; May 26.
Accumulator plates, Casting large. J. A. Fullilove. 1,806,848; May 26.
Acoustic receiver. R. Denoux. 1,806,598; May 26.
Addressing machine. H. P. Elliott. 1,807,309; May 26.
Adhesive composition. R. W. Lane. 1,807,244; May 26.
Advertising apparatus, Automobile. W. W. Byrne. 1,807,278; May 26.
Advertising device. E. von der Lippe-Lipski. 1,806,722; May 26.
Aeroplane. W. P. Bott. 1,806,870; May 26.
Aeroplane. W. W. Christmas. 1,806,586; May 26.
Aeroplane. J. Preatka. 1,806,822; May 26.
Aeroplane air station. J. Olaszy. 1,807,429; May 26.
Aeroplanes, Construction of. V. Ehmig. 1,807,203; May 26.
Aeroplanes, Detachable joy stick for. C. F. Seaton. 1,806,716; May 26.
Agitator, Water cooled. A. L. Culbertson. 1,806,614; May 26.
Air concentrator or compressor. W. B. Hale. 1,806,941; May 26.
Aircraft, Wing control for. B. F. Aldrich. 1,806,927; May 26.
Airplane. H. M. Salisbury and A. E. Miller. 1,806,648; May 26.
Airship. H. P. Miner. 1,807,542; May 26.
Alloy for swaged dentures, Dental. F. Maulen. 1,807,068; May 26.
Alloy for turbine blades and machine parts exposed to similar conditions. W. Rohn. 1,807,554; May 26.
Amalgamator. R. Luckenbach. 1,807,162; May 26.
Amphibolic products, Making synthetic. G. E. Sell. 1,807,178; May 26.
Anchoring device. F. Michalicek. 1,807,488; May 26.
Animal trap. G. F. Pisani. 1,807,171; May 26.
Antenna. C. W. Hansell. 1,806,755; May 26.
Antioxidant. Substituted aryl. L. J. Christmann. 1,806,671; May 26.
Armature winding. C. H. Quackenbush. 1,807,252; May 26.
Ash receiver or similar article. W. R. Westfall. Des. 84,269; May 26.
Auger, Earth. H. S. Brown. 1,807,148; May 26.
Auto towing device. G. M. Booth. 1,806,606; May 26.
Automobile spring. G. T. McCauley. 1,807,541; May 26.
Bag: *See*—
Carry bag.
Bag. D. E. Speicher. 1,807,449; May 26.
Bail for hand lanterns. R. H. Monteith. 1,807,491; May 26.
Ball game. W. B. Craighead. 1,806,613; May 26.
Balls, Making ornamental rubber. L. R. Howes. 1,806,688; May 26.
Band, Sweat. L. L. Sherwood. 1,807,049; May 26.
Bank and article holder, Combined money. V. P. Parchen. 1,806,818; May 26.
Bank check, Safety. J. W. Shaw. 1,807,445; May 26.
Bank, Registering. S. L. Connell. 1,806,892; May 26.
Barber chair, Convertible. L. L. Wages. 1,807,262; May 26.
Base exchange material and making same. A. S. Behrman. 1,806,663; May 26.
Battery cell tester, Prod type. W. D. Ryan. 1,807,439; May 26.
Battery charging unit. C. A. Wright. 1,807,331; May 26.
Beach chair. C. Gilmore. 1,806,679; May 26.
Beads, Stringing. P. G. Ellsworth. 1,807,396; May 26.
Bearing, Antifriction. A. H. Stebbins. 1,807,451; May 26.
Bearing, Grooved. J. L. Myers. 1,807,166; May 26.
Bearing, Needle. R. Götz. Re18,080; May 26.
Bearing protector. J. M. Edwards. 1,806,748; May 26.
Bed, Shifting narrow door wall. N. Sinclair. 1,806,955; May 26.
Beet blocker. J. Comer. 1,807,511; May 26.
Belt, Massage. J. G. De Remer. 1,807,308; May 26.
Bill fold or purse. D. W. B. Kurtz, jr. 1,807,482; May 26.
Billet casting machine. J. W. Leighton. 1,807,419; May 26.
Binder clamp, Loose leaf. A. K. and R. H. Briele. 1,807,504; May 26.
Binder, Loose leaf. G. L. Crosby. 1,807,390; May 26.
Binders, Hand operated bundle trip for. W. J. Rex. 1,806,708; May 26.
Binding post. W. E. Holland. 1,806,627; May 26.
Bit. B. F. Morrill, T. Cookson, and S. Sloane. 1,807,126; May 26.
Bit or like vise. F. M. Owen. 1,806,912; May 26.
Blind operating mechanism, Venetian. J. W. Dunn. 1,807,061; May 26.
Block: *See*—
Building block. Logging block.
Boat chock. A. P. Schat. 1,807,104; May 26.
Bobbins and making them, Combined inner metal shield and outer metal grip for. C. E. Cundey. 1,807,198; May 26.
Bobbins in preparatory weaving machines, Exchanging the. W. Reiners and G. Kahlisch. 1,807,495; May 26.
Bodies submerged in water, Device for lifting. R. R. Claus. 1,806,786; May 26.
Body to rest, Device for bringing a moving. J. Fleux. 1,806,992; May 26.
Boiler: *See*—
Enameled boiler. Semi-flash boiler.
Locomotive boiler. Steam and hot water boiler.
Boiler. C. W. Gordon. 1,807,238; May 26.
Boiler cleaner. F. Bowers. 1,807,276; May 26.
Boiler installation, Stoker fired. E. Lundgren. 1,807,318; May 26.
Boilers, Equalizing feed means for water tube. F. C. Gedge. 1,807,088; May 26.
Bolt: *See*—
Connecter bolt.
Bolt tightener, Railway. H. E. Woolery. 1,807,367; May 26.
Bookstack. E. Ohnstrand. 1,806,642; May 26.
Boot or shoe and making same. C. H. Daniels. 1,806,673; May 26.
Bottle. R. P. Richardson. Des. 84,258; May 26.
Bottle cap. E. W. Fuerst. Des. 84,239; May 26.
Bottle closure and its manufacture. H. F. Busch. 1,806,739; May 26.
Bottle closures, Making. C. E. McManus. 1,806,880; May 26.
Bottle or similar article. W. A. Dolan. Des. 84,234; May 26.
Bottling machine. S. Greenhouse. 1,806,971; May 26.
Box: *See*—
Garment box. Journal box.
Box cleaner, Sucker rod. R. L. Wright and H. D. Collins. 1,807,114; May 26.
Box or the like, Cigarette. H. C. Stoll. Des. 84,264; May 26.
Bracelet, Elastic mesh. C. Schraysshuen and K. Fassnacht. 1,807,440; May 26.
Brake: *See*—
Sheet metal brake. Track brake.
Brake apparatus. N. A. Christensen. 1,807,151; May 26.
Brake hanger support. W. O. Moody. 1,806,700; May 26.
Brake mechanism. V. G. Apple. 1,806,579; May 26.
Brake mechanism for centrifugal machines. E. Roberts. 1,806,683; May 26.
Brake rigging, Clasp. W. H. Mussey. 1,807,575; May 26.
Brake system, Vacuum. C. S. Bragg and V. W. Kliesrath. 1,807,277; May 26.
Braking mechanism for aeroplanes, Safety. W. Buerer. 1,807,194; May 26.
Brush. P. A. Cross. 1,807,281; May 26.
Buckle. G. E. Holmes and M. Treiman. 1,807,212; May 26.
Buckle, Shoe. O. R. Recchia. Des. 84,257; May 26.
Buffer and retainer, Door. D. M. Winans. 1,807,113; May 26.
Building block. L. L. Spelshouse. 1,807,138; May 26.
Building, Storage. C. G. Mitchell. 1,806,699; May 26.
Building wall. G. Castelyns, L. Stans and A. Vinck. 1,807,335; May 26.
Bumper system for trucks and automobiles. P. Pappas and T. Patrou. 1,807,132; May 26.
Burglary protection system. W. Sachs. 1,806,953; May 26.
Burner: *See*—
Gas burner. Hydrocarbon burner.
Burner and support therefor, Gas. H. Herrenbruck. 1,806,800; May 26.
Burners, Control system for. M. H. Braden. 1,807,302; May 26.
Bushing. G. B. Chadwick. 1,806,891; May 26.
Button, Collar. F. P. Daughaday. 1,806,894; May 26.
Button loop. J. Sallsbury. 1,806,824–6; May 26.
Cabinet clamp, Panel board. C. E. Hanny. 1,807,527; May 26.
Cabinet for light ray treatment, Medical. J. A. Donohue. 1,806,674; May 26.
Cabinet for radio receiving apparatus. C. A. Clarke. 1,807,386; May 26.

Cabinet, Shower bath. W. Bulthuis. 1,806,668; May 26.
Cable connecter. W. G. and O. R. Humphreys. 1,807,314; May 26.
Cableway. L. S. Thorness. 1,807,229; May 26.
Calculating machines, Attachment for. E. F. Britten, jr. 1,807,192; May 26.
Camera bellows support. G. C. Beidler. 1,807,273; May 26.
Can displacer. D. J. McAvoy. 1,807,578; May 26.
Candy wrapping machine. C. C. Page. 1,807,045; May 26.
Cap. M. Solomon. 1,807,180; May 26.
Car, Container freight. G. C. Woodruff. 1,807,268; May 26.
Car dumper. E. H. Kidder and W. E. Erickson. 1,807,294; May 26.
Carbon controller for typewriting machines. E. K. Bottle. 1,807,301; May 26.
Carburetor. B. Beard. 1,8089,30; May 26.
Carburetor. C. E. Hofbauer. 1,807,037; May 26.
Carburetor. J. J. Matson. 1,807,423; May 26.
Cards, Finishing playing. E. T. Boorman. 1,806,583; May 26.
Carriage for children. Collapsible. R. H. Brown. 1,807,235; May 26.
Carrier for vehicles, Luggage. G. L. Binns. 1,807,371; May 26.
Carry bag. C. P. Kleebauer and R. M. Lackey. 1,806,761; May 26.
Carton package. F. A. Flather. 1,807,519; May 26.
Cartridge, Blasting. F. H. Armistead. 1,807,836; May 26.
Case: *See*—
Display case.
Case-tie or like fastening. H. Armistead. 1,806,836; May 26.
Casing, Weighing machine. B. B. Rochestie. Des. 84,259–60; May 26.
Casting, Centrifugal. A. Keup. 1,807,536; May 26.
Castings from sand and gates, Apparatus for freeing. W. C. Speck and E. Barker. 1,807,181; May 26.
Catch, Hood. F. P. Sargent. 1,806,649; May 26.
Cellulose, Manufacture of. K. Ott and H. Schussler. 1,806,703; May 26.
Cellulose solutions, Treatment of. C. E. Hetzel. 1,807,036; May 26.
Chain cutter for sewing machines. F. Lutz. 1,807,539; May 26.
Chain tightener device, Automatic. F. M. Hawley. 1,806,902; May 26.
Chair: *See*—
Barber chair. Folding chair.
Beach chair.
Checkhook. W. N. Vance. 1,807,356; May 26.
Chimney, Lamp. G. E. McFadden. Des 84,253; May 26.
Chuck. A. E. Church. 1,807,385; May 26.
Chuck. J. B. Galbraith. 1,807,156; May 26.
Chuck, Air. C. A. Norgren. 1,806,983; May 26.
Chute and closure, Combination. H. Robinson. 1,807,496; May 26.
Cigar or cigarette stubs, Article for receiving. L. S. Brach. 1,806,782; May 26.
Cigarette package. C. Kampfman. 1,806,905; May 26.
Cigarette snuffer and receiver. L. S. Brach. 1,806,781; May 26.
Cinema projection screen, Stereoscopic. J. E. Pallemaerts. 1,806,864; May 26.
Circuit control of train control systems. P. J. Simmen. 1,806,831; May 26.
Circuit controlling apparatus, Magnetron. T. Bodde. 1,807,097–8; May 26.
Circuit interrupter. M. H. Shoenberg and L. Schon. 1,806,766; May 26.
Circuit interrupter, Operating mechanism for oil. R. C. Van Sickle and S. T. Schofield. 1,807,020; May 26.
Clamp: *See*—
Binder clamp. Pipe clamp.
Cabinet clamp.
Clasp: *See*—
Locking clasp. Shoe clasp.
Cleaner: *See*—
Boiler cleaner. Golf ball cleaner.
Box cleaner. Street cleaner.
Dropping board cleaner.
Cleaner control, Hydraulic. E. Stump. 1,806,923; May 26.
Clip: *See*—
Furring clip.
Clock. A. J. Schuler. Des. 84,262; May 26.
Clock. M. Specials. 1,807,497; May 26.
Clock case. G. H. Stephens. Des. 84,263; May 26.
Clock escapement verge rod, Self leveling. L. Copelin. 1,806,906; May 26.
Clock winding mechanism. A. W. Fowler. 1,806,969; May 26.
Closure caps, Making. W. P. White. 1,807,187; May 26.
Closure for water tight compartments, Self acting. D. Mattei. 1,806,859; May 26.
Coal and like material, Apparatus for feeding. C. Corliss. 1,807,388; May 26.
Coal, Cleaning. R. W. Arms. 1,806,779; May 26.
Coat. D. Long. Des. 84,250; May 26.
Coffins, Body support for. E. A. Beller. 1,806,990; May 26.
Coil winding machine. W. O. Meissner. 1,806,697; May 26.
Coin actuated change mechanism. W. H. Russell. 1,807,175; May 26.
Collar, Invisible tie. M. Tauben. 1,806,721; May 26.
Combustion chamber. B. Dobie. 1,806,793; May 26.
Combustion regulation. G. H. Gibson. 1,806,970; May 26.
Compartment, Clothing. J. L. Richardson. 1,806,882; May 26.
Compound, Crystalline organic. C. J. Schwindt. 1,806,715; May 26.
Compound, or a gas, by a gaseous agent serving to enter into reaction therewith, Treatment of a metallic, organic or other. A. Joseph. 1,807,534; May 26.
Compressor, Lubricant. E. W. Davis. 1,806,615; May 26.
Compressor unloading device. W. Trapper. 1,806,925; May 26.
Concrete form for floors. T. Knutson. 1,807,315; May 26.
Concrete, masonry and steel construction. J. J. O'Reilly. 1,807,323; May 26.
Concrete structures, Metallic insert for. F. M. Barton. 1,806,662; May 26.
Condensation product of ketonic acids. H. A. Bruson. 1,807,503; May 26.
Condensation products, Making phenol aldehyde. A. Ostersetzer and F. Riesenfeld. 1,807,545; May 26.
Condenser and removing impurities from the elements of or for such condensers, Electric. S. Boyer. 1,807,375; May 26.
Condensers and the like, Cleaning. H. T. Wels. 1,807,457; May 26.
Conduit, Corrugated. H. See. 1,806,920; May 26.
Confection conveying machine. F. W. Greer. 1,807,338; May 26.
Connecting rod for locomotives. J. G. Blunt. 1,807,373; May 26.
Connection for piston rods, Universal. J. R. Butler. 1,807,382; May 26.
Connection, Locking thread. G. P. Proctor. 1,807,494; May 26.
Connector bolt. A. Moulton. 1,807,127; May 26.
Contact for electric circuit. L. F. Muther. 1,806,815; May 26.
Container. M. T. Ashe. 1,807,233; May 26.
Container. L. Lechner. 1,807,417; May 26.
Container and match guard, Combination cigarette. A. Metje. 1,807,299; May 26.
Container, Cup. A. J. Gallagher. 1,807,400; May 26.
Container for molten glass, Electrically heated. K. E. Peller. 1,807,071; May 26.
Containers, Manufacture of paper. L. B. Koch and J. Buchina. 1,806,943; May 26.
Convertible implement. D. Pinnelli. 1,807,009; May 26.
Conveyer and baller. W. G. Kirchhoff. 1,807,295; May 26.
Conveyer mechanism. W. V. Hoefen. 1,807,211; May 26.
Conveyor, safety device. C. D. Paquette. 1,806,913; May 26.
Cooker, Continuous. F. D. Chapman. 1,806,609; May 26.
Cooling of coking retorts and apparatus therefor. J. van Ackeren. 1,807,019; May 26.
Cooling system for engines. J. Schulman. 1,806,712; May 26.
Corn, Device for trimming. H. A. Sheldon. 1,807,348; May 26.
Corn picker, Two row. E. L., and R. Glover. 1,806,624; May 26.
Corns, Treating and protecting. M. P. Kaufman. 1,806,998; May 26.
Corset. C. C. Koford. 1,807,159; May 26.
Counterbalance for pumping rigs. F. Graham. 1,807,337; May 26.
Coupler. F. H. Kayler. 1,807,243; May 26.
Coupling: *See*—
Friction coupling.
Coupling. C. W. Hoover. 1,806,687; May 26.
Coupling device. F. H. Cross and G. J. Ruf. 1,806,788; May 26.
Coupling for tractors and trailers, Draft. R. J. Burrow. 1,807,379; May 26.
Cover, Boiler. R. F. Carpenter. 1,807,058; May 26.
Coverings, Manufacturing smooth floor. R. G. Jackson. 1,807,291; May 26.
Cultivator, Disk. F. H. Stoner. 1,807,182; May 26.
Cup: *See*—
Sponge cup.
Curling rod. M. Salzman. 1,806,711; May 26.
Current relay employing a motor, Alternating. P. P. Sosinski. 1,807,349; May 26.
Curtain ring and eye. H. Reubel. 1,807,551; May 26.
Curtain, Spring roller. O. E. Loven. 1,807,161; May 26.
Cusp, Ready made. L. Raymond. 1,807,072; May 26.
Cut-off, Thermostatic. J. E. McCutchen. 1,806,636; May 26.
Cut-out for series incandescent street-lighting circuits and the like. H. E. Butler. 1,807,381; May 26.
Cutout for series incandescent street lighting circuits and the like. H. R. Crago. 1,807,389; May 26.
Cutout for series incandescent street lighting circuits and the like. J. W. Owens. 1,807,430; May 26.
Cutter: *See*—
Ice cream cutter.
Cutter guard. A. White. 1,807,561; May 26.
Cutter head. H. S. Walthers. 1,807,185; May 26.

Cutting machine, Fish. E. A. Soderberg. 1,807,448; May 26.
Cylinder and piston. G. M. Barnes. 1,806,884; May 26.
Dam construction. O. Wartemann. 1,807,358; May 26.
Damper, Automatic. W. D. Luce. 1,807,066; May 26.
Deck construction for vehicle bodies. W. Marshall. 1,807,298; May 26.
Dental elevator. A. Barone. 1,806,592; May 26.
Desk drawer lock. E. Ohnstrand. 1,806,643; May 26.
Diagnostic instrument. E. A. Forshey. 1,807,520; May 26.
Diathermic treatment by means of high frequency, Appliance for. E. Schliephake. 1,807,105; May 26.
Die for swaging machines. S. C. Cross. 1,807,789; May 26.
Dies, Pressure equalizing mechanism for multiple. W. E. Senn. 1,807,443; May 26.
Dimming device for searchlights. P. Giese. 1,806,850; May 26.
Discharge tube. C. J. R. H. von Wedel. 1,807,140; May 26.
Dishwashing machine. S. W. Fisk. 1,806,751; May 26.
Dispenser. L. M. McCormick. 1,806,981; May 26.
Dispenser, Combination beverage. L. Flamma. 1,807,518; May 26.
Dispenser, Oil. H. Phillips. Des. 84,256; May 26.
Dispensing means. P. N. Elderkin. 1,806,599; May 26.
Display case. Artificially cooled. W. Abrahamson. 1,807,332; May 26.
Display device. D. B. Gordon. 1,807,403; May 26.
Display device for buildings. G. R. Magney, W. H. Tusler, and L. E. Arnal. 1,806,634; May 26.
Display globe, Illuminated. E. F. Straw. 1,806,769; May 26.
Display mechanism. C. Roberts. 1,806,985; May 26.
Display stand. H. M. Peters. 1,807,493; May 26.
Distillation. O. Behimer. 1,806,732; May 26.
Distribution switch. G. P. Edmonds. 1,807,030; May 26.
Distribution, System of. A. H. Mittag. 1,807,426; May 26.
Ditch filling machine. W. V. Middleton and J. W. Thropp. 1,804,789; May 26.
Doll. B. L. Kelley and L. Winniford. Des. 84,247; May 26.
Doll's eyes and mounting therefor. L. W. Pollack. 1,807,091; May 26.
Door. C. H. Hoffstetter. Des. 84,241; May 26.
Door construction, Oven. H. Herrenbruck. 1,806,758; May 26.
Door control, Elevator. T. J. Osinga. 1,807,006; May 26.
Door, Louver. A. McGavic. 1,806,637; May 26.
Door opening apparatus. J. M. Loeffler. 1,807,121; May 26.
Doorframe, Metallic. E. E. Rose. 1,806,647; May 26.
Door operating mechanism, Checking means for. A. T. Dupont. 1,807,284; May 26.
Door operating mechanism, Elevator. W. W. Weeks. 1,807,231; May 26.
Door structure, Car. E. J. Fehr and K. J. Tobin. 1,807,311; May 26.
Dough cooking machine. J. Kruttschnitt. 1,806,878; May 26.
Dowel bar support. W. E. White. 1,807,364; May 26.
Draft controller. L. M. Persons. 1,807,226; May 26.
Drafting appliance. T. A. De Postels. 1,807,237; May 26.
Drawbar attachment. G. L. Willits. 1,806,728; May 26.
Dress suspending and carrying device. A. W. Winship. 1,807,267; May 26.
Dressing or tanning materials, Production of synthetic. A. M. Nastukoff. 1,806,910; May 26.
Drier: *See*—
Electric drier.
Gas drier.
Drill: *See*—
Rock drill.
Drilling apparatus. H. C. Johansen. 1,806,759; May 26.
Drilling machine. G. H. Gilman. 1,806,873–4; May 26.
Drilling mechanism. T. R. E Rundqvist. 1,806,765; May 26.
Drive connections, Tightener for flexible. F. M. Hawley. 1,806,901; May 26.
Drive mechanism, Belt. G. R. Pennington. 1,807,133; May 26.
Drive mechanism for talking motion picture machines, Silent. L. de Forest. 1,806,744; May 26.
Drive, Quartz tuning fork. R. H. Ranger. 1,807,010; May 26.
Driving rod connection, Locomotive. W. G. Knight. 1,807,217; May 26.
Dropping board cleaner, Hen house. N. P. Nielsen. 1,806,816; May 26.
Dust collecting system for coal cleaners. R W. Arms. 1,806,780; May 26.
Dust collector mechanism for sintering machines. J. E. Greenawalt. 1,806,899; May 26.
Dyestuffs insoluble in water, Azo. W. Fitzky and E. Thoma. 1,806,995; May 26.
Earth boring system. J. G. Ritter. 1,807,048; May 26.
Electric drier. L. G. White. 1,806,727; May 26.
Electric fuse. J. H. Starr. 1,807,228; May 26.
Electric machine. W. Langewiesche. 1,807,218; May 26.
Electric regulation system. W. Bock and K. Rath. 1,807,190; May 26.
Electric switch. H. J. Hammerly. 1,807,526; May 26.
Electric switch. L. M. Wiley. 1,806,777; May 26.
Electrician's tape gripper. S. D. Dennis. 1,806,844; May 26.
Electrode for electric welding. W. Richter. 1,806,952; May 26.
Electrolytic production of sterilizing agents, germicides, and the like. E. B. Higgins. 1,806,801; May 26.
Electrolytically formed article. B. Bart. 1,807,145; May 26.
Electron tube energizing method and apparatus. B. F. Miessner. 1,806,813; May 26.
Electroplating, Method and machine for. J. W. Hughes. 1,807,157; May 26.
Elevator: *See*—
Dental elevator.
Elevator. C. E. Wilcox. 1,806,776; May 26.
Enameled boiler, Interiorly. A. L. Dunham. 1,807,394; May 26.
Engine: *See*—
Internal combustion engine.
Engine control mechanism, Internal combustion. A. E. L. Chorlton. 1,807,384; May 26.
Engine for aircraft, Adjustable. T. F. Hamilton. 1,806,680; May 26.
Engine speed control by manifold depression. E. M. Post, jr. 1,806,705; May 26.
Engines, Lubricator for internal combustion. S. D. Ross and C. F. Edwards. 1,807,437; May 26.
Ester of diethylene glycol. R. Calvert. 1,807,304; May 26.
Exhaust ventilator. F. L. Wagar. 1,807,109; May 26.
Exhibitor, Changeable. E. Farkas. 1,806,678; May 26.
Expansion joint, Air space. 1,807,339; May 26.
Extractor: *See*—
Rotary extractor.
Extractor in presses. H. J. Wiser. 1,807,461; May 26.
Eyeglass mounting. I. Sundstrom. 1,807,560; May 26.
Eyeshield. M. K. Gibson. 1,807,475; May 26.
Fan, Centrifugal. W. J. Montgomery. 1,806,860; May 26.
Fare collecting and change making machine, Multiple. C. E. Chalmers. 1,807,196; May 26.
Fastener. Disengageable. M. J. Isaacson. 1,807,478; May 26.
Fastener, Jewelry. C. B. Keller. 1,807,293; May 26.
Fastening device. W. L. Clark. 1,807,236; May 26.
Fastening device for bag frames. H. Leberman. 1,807,220; May 26.
Fastening device for shirts. F. X. Plante. 1,807,546; May 26.
Fastenings, Mechanism for supplying. W. T. B. Roberts. 1,806,883; May 26.
Feed, Manufacture of live stock. C. R. Mabee. 1,807,067; May 26.
Fender and guard. F. C. Merrilies. 1,807,044; May 26.
Fiber preparing treatment of bast or vegetable fiber plants. F. McCaw. 1,807,221; May 26.
Fibrous material, Producing. S. D. Wells. 1,807,111; May 26.
Film straightening device. G. C. Beidler. 1,807,274; May 26.
Filter, Automatic self cleaning automobile. A. Goodloe. 1,806,898; May 26.
Filter for air and gases. E. Budil. 1,807,378; May 26.
Filter, Oil. H. H. Moreton. 1,806,701; May 26.
Firearm. J. M. Browning. 1,806,736; May 26.
Fire extinguisher, Dry. W. Friedrich. 1,807,399; May 26.
Fire extinguishing composition. W. L. Wedger and J. W. Edmands. 1,807,456; May 26.
Fire extinguishing device, Automatic. D. Siebenmann. 1,806,829; May 26.
Fishing reel. C. T. Pflueger. 1,807,433; May 26.
Fish lure, Multiple body artificial. H. J. Dick. 1,807,283; May 26.
Fitting, Waste and overflow. T. J. Kaufman. 1,807,117; May 26.
Flower pot, Paper. W. J. Hohnhorst. 1,807,407; May 26.
Fluid saving device. J. B. McCullough and E. S. McCombs. 1,807,222; May 26.
Fluids from one airship to another while in flight, Mechanism for supplying. J. Ullendorff. 1,806,833–4; May 26.
Fluting machine. S. F. Bauwens. 1,806,885; May 26.
Folding chair. C. A. Buffington. 1,807,506; May 26.
Folding machine. E. D. Rader. 1,806,706; May 26.
Folding table. A. Wagner. 1,807,184; May 26.
Food product and making the same. K. E. Bemis. 1,807,189; May 26.
Foot wear. S. Goodman and W. N. Sechler. 1,806,938; May 26.
Footwear, Manufacture of rubber soled. H. McGhee. 1,807,487; May 26.
Forceps. F. H. Lahey. 1,806,808; May 26.
Forming mechanism. G. F. Ford and W. F. Pittman. 1,806,895; May 26.
Frame: *See*—
Door frame.
Press frame.
Frame construction. J. F. Warner. 1,807,186; May 26.
Friction coupling. F. Hinnekens. 1,807,210; May 26.
Fuel burning system, Liquid. M. H. Braden. 1,807,376; May 26.
Fuel charging mechanism. J. H. Gleason. 1,806,623; May 26.
Fuel injection system. W. E. Goldsborough and B. Schilling. 1,807,524; May 26.
Fuel mixing device, Gaseous. P. J. Dasey. 1,806,790; May 26.

Fuel oil heater. B. A. Hendricks. 1,806,942; May 26.
Fuel supply systems for internal combustion engines of variable load for using heavy fuels. J. Bethenod. 1,806,581; May 26.
Furnace: *See*—
Gas furnace.
Furnace. F. W. Brooke. 1,807,147; May 26.
Furnace. M. M. Requa. 1,806,916; May 26.
Furnace. F. J. Werner. 1,807,112; May 26.
Furnace construction. S. H. Lanyon. 1,806,809; May 26.
Furnace construction. L. H. Hosbein. 1,807,408; May 26.
Furnace control. T. W. Delaney. 1,807,513; May 26.
Furnace structure. B. Doble. 1,806,747; May 26.
Furnaces, Charging means for electric. G. Pistor. 1,807,090; May 26.
Furniture. C. T. Christensen. 1,806,610; May 26.
Furniture post end fitting. F. Kusterle. 1,806,945; May 26.
Furring clip. E. R. Boyle. 1,806,837; May 26.
Fuse, Point detonating. F. B. Hale. 1,806,877; May 26.
Fuse, Readjustable electric. J. H. Hickey. 1,807,406; May 26.
Fuse setting apparatus, Automatic. E. H. and A. H. Boicourt. 1,806,593; May 26.
Game. J. H. Shears. 1,807,074; May 26.
Garment. N. Q. Donnelly. 1,806,794; May 26.
Garment. R. E. Heyn. 1,806,686; May 26.
Garment box. G. Bruer. 1,806,737; May 26.
Garter. J. Mieres. 1,807,224; May 26.
Gas, Apparatus for cleaning. T. M. Foulk. 1,807,521; May 26.
Gas burner. H. W. Livingston. 1,806,858; May 26.
Gas burner. W. Schwan. 1,807,092; May 26.
Gas discharge tube. J. M. Schmierer. 1,807,177; May 26.
Gas drier. F. Wille. 1,806,989; May 26.
Gas furnace. G. A. Tuck. 1,807,051; May 26.
Gas generator. J. J. Reid. 1,806,823; May 26.
Gas heater, Cabinet. H. H. Sanford. 1,807,014; May 26.
Gases, Treating sulphur bearing. W. G. Hiatt. 1,807,528; May 26.
Gasket for talcum powder cans. E. Hoffman. 1,806,802; May 26.
Gear shift lever grip for motor vehicles. C. W. Beck. 1,807,369; May 26.
Gear, Steam engine valve. J. Olson. 1,807 005; May 26.
Gear, Valve. H. F. Pearson. 1,807,432; May 26.
Gearing. R. J. McCarty, jr. 1,807,000; May 26.
Generator: *See*—
Gas generator.
Generator and circulator for locomotive boilers, Syphon. G. H. Emerson and W. B. Whitsitt. 1,807,473; May 26.
Glare shield. F. C. Ryder. 1,807,256; May 26.
Glass, Apparatus for making composite. W. Owen. 1,806,861; May 26.
Glass articles, Making. W. H. Said. 1,807,103; May 26.
Glass articles, Treating. R. D. Smith. 1,807,017; May 26.
Glass feeders, Shear mechanism for. A. N. Cramer. 1,806,743; May 26.
Glass gob disposing means. J. B. Clark. 1,807,336; May 26.
Glass, Methods of and apparatus for making. H. A. Wadman. 1,807,054; May 26.
Glass, Process and apparatus for making composite. J. H. Fox and H. F. Hitner. 1,806,846; May 26.
Glass, Severing composite. W. Owen. 1,806,862; May 26.
Glass to leer conveyors, Feeding sheet. M. Fincke. 1,806,590; May 26.
Glassware forming machine. J. H. Treece. 1,807,095; May 26.
Glassware forming machines, Distributing head for. R. G. Allen. 1,806,731; May 26.
Glassware, Manufacture of blown. R. W. Canfield. 1,807,566; May 26.
Glove. H. Gillaan. 1,807,402; May 26.
Glove stretching device. A. Meehan and E. Gray. 1,807,070; May 26.
Golf ball cleaner. A. P. Young. 1,807,023; May 26.
Golf tee. D. P. Brokaw. 1,807,377; May 26.
Governor. F. van der Woude. 1,807,052; May 26.
Grab. C. Wazlavek. 1,807,266; May 26.
Grain cutting unit. E. L. Bartels. 1,806,920; May 26.
Grain soaking attachment for watering troughs. V. S. Brown. 1,806,585; May 26.
Grapple, Lifting. F. H. Meyer. 1,807,124; May 26.
Grate, Chain. A. W. Bennis. 1,807,502; May 26.
Grate, Incinerator. H. Ginnel. 1,807,064; May 26.
Gravel spreader. W. G. Smith. 1,807,447; May 26.
Grease gun or the like. B. J. Mahoney. 1,807,421; May 26.
Grinder, Meat. H. L. Johnston. 1,807,574; May 26.
Grinding machine. A. G. Belden and C. G. Trefethen. 1,806,664; May 26.
Grinding machine. C. Booth. 1,806,886; May 26.
Grinding method and apparatus. G. H. Carnahan. 1,807,383; May 26.
Grinding wheel and making the same, Segmental. H. W. H. Beth. 1,806,665; May 26.
Gripper mechanism, Fore. W. Kolmer and E. Wirschinger. 1,806,856; May 26.
Guard and tile for forming the same, Splash. L. M. Sternbergh. 1,807,107; May 26.
Guard, Cattle. C. Osako. 1,807,130; May 26.
Guard, Splash. H. Kelzer. 1,807,039; May 26.
Gun mount for aircraft. W. Walt, jr. 1,806,724; May 26.
Hammer, Forging. H. Terhune. 1,807,435; May 26.
Hammer, Interchangeable. F. Schweigert. 1,807,347; May 26.
Hammer mill. W. J. Clement. 1,807,197; May 26.
Hammer, Rotary drive trip. S. J. Boyd. 1,807,025; May 26.
Hammock for automobiles, Baby. R. H. Brown. 1,807,234; May 26.
Handle: *See*—
Saw handle.
Handle coupling and constructing the same. C. F. Smith. 1,807,559; May 26.
Hanger: *See*—
Radiator hanger.
Harvesting sugar beets, Two-row pulling and six-row piling apparatus for. B. P. Irvine. 1,806,974; May 26.
Hat brim flanging machine. W. A. Leonard. 1,806,810; May 26.
Headgear and making the same. H. M. Lipper. Re18,081; May 26.
Headlight, Automobile. P. I. A. Runge. 1,807,102; May 26.
Headlight for automobiles. E. S. Gerry. 1,806,897; May 26.
Headlight for motor vehicles. S. Cordes. 1,806,611; May 26.
Headlight indicating device. W. F. Brown. 1,806,931; May 26.
Heads and the like, Doll. A. Frisch. 1,807,207; May 26.
Heat exchange unit. A. B. Modine. 1,807,164; May 26.
Heater: *See*—
Fuel oil heater.
Gas heater.
Heating in a gaseous atmosphere, particularly in a reducing or oxidizing atmosphere. H. Schaefer. 1,807,257; May 26.
Heating system, Hot water. A. E. Klein. 1,807,481; May 26.
Heel breasting machine. F. A. Day. 1,807,153; May 26.
Heel, Loaded rubber. G. O'Gorman. 1,806,641; May 26.
Helicopter. R. Tarshis. 1,807,353; May 26.
Hinge, Pivot. F. C. Garrison. 1,807,063; May 26.
Holder and starter, Sash. R. T. Axe. 1,807,272; May 26.
Holder and wringer, Mop. A. Colangelo. 1,807,387; May 26.
Holder, Antiskid chain. J. S. Campbell. 1,806,840; May 26.
Holder, Card. J. E. Bonander. 1,807,467; May 26.
Holder, Cleat stud. J. T. Riddell. 1,806,917; May 26.
Holder, Combination tube and brush. W. E. Bracey and L. W. Bramblett. 1,807,083; May 26.
Holder, Condiment. G. F. Kraft. 1,807,160; May 26.
Holder, Fish hook. W. A. Schneggenburger. 1,807,346; May 26.
Holder, Flashlight. J. R. Alexander. 1,807,501; May 26.
Holder for books, Leaf. E. M. Kenna. 1,807,118; May 26.
Holder for motor vehicles, Waterproof license plate. F. J. Mauro. 1,807,246; May 26.
Holder, Fruit. M. Lasher. 1,806,631; May 26.
Holder, Mop and brush. M. Redlinger. 1,807,434; May 26.
Holder, Pad. J. B. Kemp. 1,807,158; May 26.
Holder, Price ticket. L. Hopp. 1,807,213; May 26.
Holder, Skirt. R. E. Alexander. 1,806,601; May 26.
Holder, Tee. L. A. Guiterman. 1,806,797; May 26.
Holding device, Adjustable. E. Bruno. 1,806,887; May 26.
Honey comb and comb foundation. C. F. Strahan. 1,806,987; May 26.
Horn for radio speakers. W. A. Brockway. 1,807,027; May 26.
Hose, Self supporting. L. Woods. 1,806,963; May 26.
Housing for writing instruments, Collapsible. A. Shatkin. 1,807,444; May 26.
Hub, Propeller. J. W. Smith. 1,807,179; May 26.
Humidifier. A. A. Aitken. 1,806,729; May 26.
Hydrocarbon burner. R. L. Meridith. 1,807,247; May 26.
Hydrocarbons and apparatus therefor, Producing liquid. J. Maruhn and L. Tubben. 1,807,122; May 26.
Hydrocarbons, Producing low boiling point. C. P. Dubbs. 1,806,616; May 26.
Hydrocarbons, Treatment of. L. de Florez. 1,806,597; May 26.
Hydrocarbons, Vaporization of heavy. A. Joseph. 1,806,997; May 26.
Ice cream cutter. C. Pace. 1,806,704; May 26.
Indicating device. C. Pokora. 1,807,172; May 26.
Indicating device, Duplex. S. R. Cave. 1,806,785; May 26.
Indicator. G. C. Fairbairn. 1,806,750; May 26.
Indicator and stop, Liquid level. H. A. Jewett. 1,806,804; May 26.
Indicator for pastries and the like. W. Broad. 1,807,146; May 26.
Ingot mold. E. Gathmann. 1,806,753; May 26.
Ingot stripper. C. L. Bigler and J. Kloos. 1,807,275; May 26.
Injector and aspirator. W. Dwyer. 1,806,845; May 26.
Ink for cellulose esters. J. H. Clewell. 1,806,965; May 26.
Inking device. W. H. Young and E. O. Eckland. 1,807,562; May 26.
Insect exterminator. H. N. Sweet. 1,807,076; May 26.

Insecticide. H. W. Walker. 1,807,078; May 26.
Insect trap. L. J. L. Rector. 1,807,550; May 26.
Insole for boots and shoes, Cushioning. M. C. Messler. 1,807,341; May 26.
Insulation. F. R. Leslie. 1,806,946; May 26.
Insulator. R. B. Hesson. 1,806,854; May 26.
Insulator caps, Making. F. D. Wenn. 1,806,726; May 26.
Intake for internal combustion engines, Cooling. F. S. Lockhart. 1,807,042; May 26.
Internal combustion engine. J. Bryant. 1,806,608; May 26.
Internal combustion engine. H. A. Finke. 1,807,087; May 26.
Iron alloys free from gases, especially oxygen, Process and device for the production of. C. Brackelsberg. 1,807,468; May 26.
Jack. M. C. Supan. 1,807,351; May 26.
Jack and post puller, Combination. C. Achenbach 1,807,142; May 26.
Joint: *See*—
Expansion joint. Universal joint.
Pipe joint.
Journal box. R. J. Brittain, jr. 1,807,026; May 26.
Key: *See*—
Separable key.
Key for car couplers, Draft. E. H. Schmidt. 1,807,345; May 26.
Kiln, Pan rotary. L. B. McDaniel. 1,807,069; May 26.
Knitting machine, Circular. T. S. Grieve. 1,806,996; May 26.
Knitting machines, Transfer mechanism for circular. A. E. Page. 1,807,008; May 26.
Knitting machines, Transfer ring for circular. A. E. Page. 1,807,431; May 26.
Label wiping device. C. H. Oslund and J. E. Johnson. 1,806,911; May 26.
Lace. H. W. Hucknall. Des. 84,242–6; May 26.
Lace, Embroidered. E. W. Freudenberg. Des. 84,236; May 26.
Lamp base or article of analogous nature. M. Kiwad. Des. 84,248; May 26.
Lamp charged from accumulators, Electric. P. Wolf. 1,806,869; May 26.
Lamp, Electric. W. Dawson. 1,806,843; May 26.
Lamp, Incandescent. O. Conradty. 1,806,787; May 26.
Lamp, Miner's. P. Wolf. 1,806,868; May 26.
Lamp, Portable electric. S. H. Nuckolls. 1,807,129; May 26.
Lamp post. G. G. King. 1,807,413; May 26.
Land clearing machine. J. H. Caldwell. 1,807,150; May 26.
Last. R. L. Stanley. 1,806,720; May 26.
Latch device, Door. F. D. Grund. 1,806,940; May 26.
Latch, Toggle. H. J. Lingal. 1,807,041; May 26.
Latch trip, Power dipper door. L. R. Culver. 1,807,028; May 26.
Latch, Window. F. Kilberg. 1,806,978; May 26.
Latching and seal receiving structure. D. T. Wadsworth. 1,807,261; May 26.
Leak stopping device for pipes. F. Welsh. 1,806,867; May 26.
Leather grading machine. D. E. Harding. 1,806,756; May 26.
Leather, leather board, waxed cloth and the like, Manufacturing artificial. H. Czapek and R. Weingand. 1,806,841; May 26.
Lens unit, Reflecting. C. C. Dodge. 1,807,472; May 26.
Lever. J. C. Brand. 1,806,783; May 26.
Lifter: *See*—
Tool lifter.
Lifting device. C. G. Weinreich. 1,807,361; May 26.
Light projector, Spot and flood. J. Levy. 1,806,906; May 26.
Light sensitive element. V. K. Zworykin. 1,807,056; May 26.
Lighting fixture. J. C. Lowry. Des. 84,251; May 26.
Lighting fixture. W. S. Waters. 1,806,773; May 26.
Lighting fixture member or article of similar nature. G. E. Villaret. Des. 84,267–8; May 26.
Lighting fixture strap or article of similar nature. G. E. Villaret. Des. 84,266; May 26.
Lining for range oven, Special construction for. I. V. Brumbaugh. 1,807,470; May 26.
Link. T. W. Bell and T. C. Rogers. 1,806,733; May 26.
Lintels to concrete spandrels, Attaching. A. C. Heitmann. 1,807,405; May 26.
Liquid under pressure, Device for injecting. F. L. van Weenen. 1,806,770; May 26.
Liquids, Mixing. E. Johnson. 1,806,904; May 26.
Liquor preparation system, Digesting and cooking. A. D. Merrill. 1,807,320; May 26.
Loader, Hay. J. Grafmiller. 1,806,875; May 26.
Loading deck for automobiles. S. Hice. 1,807,529; May 26.
Lock: *See*—
Closure lock. Telephone dial lock.
Desk drawer lock. Umbrella lock.
Lock, Closure. H. J. Hansen. 1,807,033; May 26.
Lock for gas valve, Safety. S. A. Wilde. 1,806,775; May 26.
Locking clasp. J. Schierer. 1,807,557; May 26.
Locking device for spring hooks. S. W. Long. 1,806,908; May 26.
Locking device, Spare wheel. B. S. Moore. 1,806,764; May 26.
Locking mechanism. J. F. Fetyk. 1,806,991; May 26.
Locking mechanism. C. J. Markson. 1,806,694; May 26.
Locomotive boiler. B. E. Larson. 1,807,416; May 26.
Locomotive structure. J. G. Blunt. 1,807,334; May 26.
Locomotive, Turbine driven. J. MacLeod. 1,807,485; May 26.
Logging block. J. E. Holden. 1,807,038; May 26.
Looms, Picker check for. F. Szczesny and A. Przekop. 1,807,018; May 26.
Loud speaker. W. D. Pack. 1,807,168; May 26.
Loud speaker motor. C. W. Peterson. 1,806,914; May 26.
Lubricating system. Y. V. Carpenter. 1,807,059; May 26.
Lubricating system. J. W. W. Drysdale. 1,807,515; May 26.
Lubricator: *See*—
Valve lubricator.
Luminous discharge device. L. de Forest. 1,806,746; May 26.
Machine for automatically printing photographic proofs. P. A. M. Priou. 1,807,547; May 26.
Machine for finishing the shanks of shoes. E. F. Hodgkins. 1,806,626; May 26.
Machine for rewinding webs of papers applicable for similar purposes. C. H. Webster. 1,806,774; May 26.
Machine for sawing materials at various angles. R. E. Johnson. 1,807,216; May 26.
Machine for trimming and hemming fabric sections. A. S. Riviere. 1,807,552; May 26.
Magnetic product and making the same. T. D. Yensen. 1,807,021; May 26.
Magnetizable objects, Method of and apparatus for testing. E. S. Imes. 1,807,411; May 26.
Margarine, Handling and wrapping. M. E. Weland. 1,807,458; May 26.
Marker for marking container covers. M. M. Sedwick. 1,807,558; May 26.
Marker, Golf course. J. B. Parsons and J. J. King. 1,807,089; May 26.
Marker, Highway. F. Schultz and R. Kuntz. 1,807,015; May 26.
Mast, Mooring. P. Traver. 1,806,655; May 26.
Material receiving means, Portable. H. P. Paris. 1,806,644; May 26.
Measuring the hardness of material, Apparatus for. A. F. Shore. 1,806,767; May 26.
Melting finely divided materials, Apparatus for. A. Dawans. 1,807,307; May 26.
Metal sheets, Apparatus for treating. E. R. Knapp. 1,806,805; May 26.
Metal to metal joints. O. T. Nelson. 1,807,003; May 26.
Metal working apparatus. W. R. Hume. 1,806,855; May 26.
Metallic plates, Embossing. A. D. Wood. 1,807,141; May 26.
Meter: *See*—
Power meter.
Meter. L. D. Johnson. 1,807,215; May 26.
Mica laying apparatus. L. T. Frederick. 1,807,206; May 26.
Micrometer caliper, Inside. H. G. Cunningham. 1,806,893; May 26.
Mill: *See*—
Hammer mill. Rolling mill.
Rod mill.
Mill piercing point, plug, and guide and making same, Rolling. H. F. Tielke. 1,807,453; May 26.
Mill piercing points, Using rolling. H. F. Tielke. 1,807,454; May 26.
Mirror for automobile doors, Hinged. F. Mariani. Des. 84,252; May 26.
Mixer. F. Henrard. 1,806,684; May 26.
Mold: *See*—
Ingot mold.
Molding apparatus. J. J. Vincenzi. 1,807,053; May 26.
Molding materials. L. T. Frederick. 1,807,155; May 26.
Molding press. P. E. Welton. 1,807,055; May 26.
Motor: *See*—
Loud speaker motor. Synchronous motor.
Motor control system, Induction. F. Angerstein. 1,807,143; May 26.
Motor control, System of. C. F. Lee. 1,807,418; May 26.
Motor electric generating and storage system, Air. F. L. Hunt. 1,806,628; May 26.
Motor speed controller, Electric. C. E. Carpenter. 1,807,280; May 26.
Mounting, Individual wheel. A. F. Masury. 1,806,695; May 26.
Mounting, Wagon end gate. Z. Chevrier. 1,807,084; May 26.
Mouthpiece for mouth organs, Curved. R. Jontof. 1,806,689; May 26.
Mowers and reapers, Guard finger and ledger plate construction for. E. A. Washburn. 1,806,926; May 26.
Mowing machine, Lawn. W. J. Borer. 1,806,584; May 26.
Mulch for retaining growth of plants. W. M. Floring. 1,807,205; May 26.
Multiplex reproducing. R. H. Banger. 1,807,012; May 26.
Music, Apparatus for teaching. C. M. L. Bundy. 1,806,964; May 26.
Music leaf turner. T. P. Jakobson. 1,806,803; May 26.

Necktie press. R. F. Schulzke and D. L. Hamilton. 1,807,259; May 26.
Nest. N. V. Peterson. 1,807,253; May 26.
Nut wrench. H. A. Woolever. 1,807,080; May 26.
Oar. G. C. Butler. 1,807,380; May 26.
Offset for log carriers. E. A. Ferris. 1,807,086; May 26.
Oil and making the same, Lubricating. H. T. Bennett and L. G. Story. 1,806,735; May 26.
Oil, Cable. W. Claypoole. 1,807,060; May 26.
Oil cellar for driving boxes. H. W. Coddington. 1,806,594; May 26.
Oil, Cutting. O. E. Cushman and T. W. Doell. 1,806,933; May 26.
Oil, Lubricating. H. T. Bennett, L. G. Story, and H. B. Beckley. 1,806,734; May 26.
Oil of black pigment consisting of carbon, Process and apparatus for the production from hydrocarbon. A. L. Miller. 1,807,321; May 26.
Oil retainer. H. A. Clark. 1,807,569; May 26.
Oil seal. H. A. Clark. 1,807,567–8; May 26.
Oil, treating hydrocarbon, Apparatus for. G. Egloff and H. P. Benner. 1,806,619; May 26.
Oiler. J. F. Martin and F. E. Watts. 1,807,340; May 26.
Oiling device. J. S. London and C. B. McCarty. 1,807,484; May 26.
Oils, Cracking hydrocarbon. E. W. Isom. 1,807,241–2; May 26.
Oils, Filtering and decolorizing. D. W. Grant. 1,806,876; May 26.
Oils, Treating. W. M. Stratford. 1,807,183; May 26.
Opening, closing, and latching mechanism. A. Wasberg and K. J. Tobin. 1,806,772; May 26.
Optical system for colorimeters and the like. J. W. Forrest. 1,806,621; May 26.
Packing. H. C. Ruggles. 1,807,555; May 26.
Packing, Flexible. N. N. Volodimirov. 1,807,139; May 26.
Packings for use between rotary and stationary machine parts. O. A. Wibert. 1,807,460; May 26.
Pad: *See*—
Steel wool pad.
Pad and holder, Steel wool. W. H. Robbins. 1,807,137; May 26.
Pad and holder therefor. I. E. Pratt. 1,806,950; May 26.
Paddle, Canoe. H. B. Herring. 1,807,289; May 26.
Paint spraying machines, Combined pressure control and water separation device for. F. A. Tittemore. 1,807,230; May 26.
Pans, Attachment for frying. M. E. Asadoorian. 1,807,271; May 26.
Paper roll handling mechanism. W. G. Wehr. 1,807,360; May 26.
Paraffin gopher. R. C. McCarter. 1,807,123; May 26.
Paraffin hydrocarbons to create a nonoxidizing and nonsulphurous atmosphere in the temperature treatment of solids, Utilization of. F. J. Harlow and G. R. Benz. 1,806,853; May 26.
Partition, Flame baffle. R. J. Anschicka. 1,806,602; May 26.
Pattern grading machine. E. H. Burke. 1,807,195; May 26.
Pavements, Compacting, finishing, and curing concrete. P. A. Hipple. 1,807,116; May 26.
Pen desk set, Fountain. C. R. Sheaffer. 1,807,227; May 26.
Pen, Fountain. D. J. La France. 1,807,415; May 26.
Pen or similar article, Fountain. G. Larsen. Des. 84,249; May 26.
Pen, Stock. W. S. Witten. 1,807,188; May 26.
Pencil. J. P. Lynn. 1,806,632; May 26.
Pencil, Magazine. O. R. Barth. 1,806,580; May 26.
Pencil, rule, and compass, Combination. A. J. Gelardi. 1,806,849; May 26.
Petroleum oil, Cracking. G. Egloff. 1,806,618; May 26.
Phenolic compounds, Making. W. J. Hale and E. C. Britton. 1,806,798; May 26.
Photo-electric cell. S. Ruben. 1,807,326; May 26.
Photographic and sound recording and reproducing mechanism, Synchronized. C. W. Ebeling. 1,806,617; May 26.
Photographic prints, Method and apparatus for making. J. J. Risdon. 1,807,047; May 26.
Photographing apparatus. G. L. McCarthy. 1,806,763; May 26.
Photographing apparatus. G. L. McCarthy and A. Novick. 1,806,762; May 26.
Piano action. C. E. Cameron, jr. 1,806,595; May 26.
Picker: *See*—
Corn picker.
Picture support. S. Herbert. 1,807,288; May 26.
Pigment materials, Purifying. W. H. Test. 1,806,988; May 26.
Piling, Sheet. R. S. A. Dougherty and R. J. McIntosh. 1,806,967; May 26.
Pipe: *See*—
Smoking pipe.
Pipe clamp. G. Krell. 1,806,944; May 26.
Pipe flanging and upsetting machine. R. K. Hopkins. 1,807,531; May 26.
Pipe joint. C. W. Ross, jr. 1,806,710; May 26.
Pipe opening machine, Revolving waste. A. Reber. 1,807,549; May 26.
Pipe reamer, Tobacco. F. Krekeler. 1,807,576; May 26.
Pipe thread protector. H. J. Burnish. 1,807,565; May 26.
Pitch, Flaking. S. P. Miller. 1,807,223; May 26.
Plant setting machine. G. J. Gibbens. 1,806,622; May 26.
Planter, Four row corn. W. C. Young. 1,807,115; May 26.
Planters, Seed distributing attachment for. J. C. Crowley. 1,807,282; May 26.
Plate holding ring, Compact. W. G. Kendall. 1,807,480; May 26.
Pliers, Soldering. R. Nelson. 1,807,004; May 26.
Plow shares, Repair nose for. W. I. Wheeler. 1,807,459; May 26.
Plug, Attachment. A. V. Moblard. 1,807,427; May 26.
Plumbing fitting. E. G. Watrous. 1,806,982; May 26.
Pneumatic tube systems, Pressure relief means for. A. A. Zimmer. 1,807,096; May 26.
Pollen from air, Apparatus for removing. G. A. Gieseler. 1,807,032; May 26.
Post: *See*—
Binding post. Lamp post.
Pot: *See*—
Flower pot.
Powder distributor. W. S. Finnell. 1,806,936; May 26.
Power circuit control for radio receiving systems. H. A. Gates. 1,806,796; May 26.
Power limiting. W. T. Wintringham. 1,806,657; May 26.
Power meter. F. W. Highfield. 1,807,530; May 26.
Power transmission, Variable speed. E. M. Rayburn. 1,807,013; May 26.
Power transmitting device. O. M. Summers. 1,806,653; May 26.
Power unit device. J. O. Archibald. 1,806,659; May 26.
Press: *See*—
Molding press. Printing press.
Necktie press.
Press frame. R. E. Manley. 1,807,297; May 26.
Printing machines, Ribbon holding and feeding device for. L. H. Morse. 1,807,322; May 26.
Printing press. P. W. Allen. 1,806,591; May 26.
Printing press, Platen. A. W. Ranger. 1,806,865; May 26.
Prop, Clothes. C. Sauer. 1,806,827; May 26.
Propellers, Heater for. W. Waters. 1,807,359; May 26.
Propelling mechanism. J. Piano. 1,807,254; May 26.
Protector, Pipe coupling thread. H. J. Burnish. 1,806,932; May 26.
Puller: *See*—
Slack puller.
Pulley, Window. B. E. Bartholomew. 1,806,605; May 26.
Pulp digester, Directly heated. E. Morterud. 1,807,544; May 26.
Pulverizer. O. A. Kreutzberg. 1,806,980; May 26.
Pump. W. H. Zorn. 1,806,658; May 26.
Pump, Continuous circulating. C. F. Davis. 1,807,392; May 26.
Pump or fan, Propeller type. C. J. Fechheimer. 1,807,397; May 26.
Pump priming device. E. H. Fahrney. 1,806,968; May 26.
Pumping device. E. Sanders. 1,807,556; May 26.
Pumping system, Marine. H. F. Schmidt. 1,806,651; May 26.
Pumping system, Marine. J. Q. Walton. 1,806,725; May 26.
Pumps, compressors, blowers and like machines, Regulation of. T. R. Warren. 1,807,828; May 26.
Rack for hand trucks. G. C. Munoz and R. H. Bowen. 1,807,128; May 26.
Rack for radiators, Collapsible. V. E. Wheatcroft. 1,807,363; May 26.
Radiant superheater. B. Broido. Re18,082; May 26.
Radiator actuating mechanism. J. E. E. Dewoltine. 1,807,514; May 26.
Radiator, Baseboard. L. Dvilnsky. 1,807,202; May 26.
Radiator hanger. F. A. Thing. 1,806,924; May 26.
Radiator inclosure. S. Tanger. 1,807,352; May 26.
Radio broadcasting system. R. Bown. 1,806,666; May 26.
Radio frequency amplifying system. R. B. Benjamin. 1,807,300; May 26.
Radio receiving apparatus. A. Poncel. 1,807,343; May 26.
Radio transformer. T. D. Yensen. 1,807,022; May 26.
Radio transmission system, Silent wave. E. E. Clement. 1,807,510; May 26.
Rail. G. Langford. 1,807,219; May 26.
Rail filler. H. L. Rogers. 1,807,174; May 26.
Rail retaining member. R. Faries and R. H. Boyd. 1,807,204; May 26.
Raising and lowering mechanism for chair seats, Hydraulic. A. R. Schwarzkopf. 1,806,718; May 26.
Rake, gatherer, loader and buncher, Hay. W. B. Vaughn. 1,807,357; May 26.
Rat trap. H. B. Kimbrell. 1,807,537; May 26.
Razor, Safety. F. Pelosi. 1,807,342; May 26.
Reading stand. H. E. West. 1,807,500; May 26.
Reamers, Hold down sleeve for expansive. J. Grant. 1,806,625; May 26.
Receptacle. A. J. Ginsberg. 1,807,476; May 26.
Record and making the same, Visionograph. C. E. Alberti. 1,807,270; May 26.

Record changing mechanism. P. H. Schulz. 1,807,073; May 26.
Reel: *See*—
Fishing reel.
Reflecting device. H. F. Delmanhorst. 1,807,393; May 26.
Reflecting device. J. C. Stimson. 1,807,350; May 26.
Refrigerating mechanism. C. C. Thomas. 1,807,354; May 26.
Refrigerating unit. C. D. Condon. 1,807,152; May 26.
Registering device. J. B. Mills. 1,807,163; May 26.
Relay mechanism, Fluid pressure. J. L. Ray. 1,807,173; May 26.
Remote control mechanism. C. A. Campbell. 1,806,669; May 26.
Resistor. O. Schurig. 1,807,441; May 26.
Rheostat, Compressible pile. V. E. Woodcock. 1,807,306; May 26.
Rim end connecter. J. W. Stark. 1,807,106; May 26.
Ring: *See*—
Plate holding ring.
Road construction. F. R. Wilson. 1,806,778; May 26.
Road treating apparatus. H. A. Ingalls. 1,807,412; May 26.
Roadbed equipment and using the same. S. A. Mork. 1,807,002; May 26.
Rock abrading machine. W. R. Degenhardt and A. F. de Fraine. 1,806,792; May 26.
Rock drill. G. W. Smith and A. E. Dieterich. 1,807,016; May 26.
Rod: *See*—
Clock escapement verge rod. Curling rod.
Rod mill, Universal. H. Hardinge. 1,807,034; May 26.
Roller: *See*—
Shade roller.
Rolling mill, Universal. A. T. Keller. 1,806,976; May 26.
Roofing element. T. Robinson. 1,807,435; May 26.
Ropes, Identifying means for. J. A. Palmer. 1,807,131; May 26.
Rosin and product thereof, Treatment of. W. B. Logan. 1,807,483; May 26.
Rosin, Producing high grade. I. W. Humphrey. 1,806,973; May 26.
Rotary engine. J. Kuhajda. 1,807,414; May 26.
Rotary extractor. O. H. Wurster and A. M. Smith. 1,807,232; May 26.
Rotary table. H. W. Goetz, R. C. Clark, and J. J. Ferlin. 1,807,286; May 26.
Rubber, Embossing. R. G. Anderson. 1,807,024; May 26.
Rubber, Treatment of. W. P. ter Horse. 1,807,355; May 26.
Safety device, Brake beam. P. J. McCullough. 1,806,635; May 26.
Safety device for stoves. W. Ellman. 1,807,310; May 26.
Sand, Apparatus for settling and classifying. J. M. Mitchell. 1,807,125; May 26.
Sash, Window. R. Calazzo. 1,807,507; May 26.
Saw. H. L. Lewis. 1,807,120; May 26.
Saw. J. E. O'Neill. 1,806,702; May 26.
Saw handle, Removable. C. Steinhilber. 1,806,922; May 26.
Saw, Portable electric. F. G. Beutner. 1,806,582; May 26.
Scale, Projecting. H. M. Cameron. 1,806,742; May 26.
Scale, Spring. H. M. Cameron. 1,806,741; May 26.
Scraper, Automatic revolving. D. R. Throop. 1,806,959; May 26.
Scraper, Wheeled. R. E. Doran. 1,807,201; May 26.
Screen: *See*—
Cinema projection screen.
Screen. E. Deister. 1,806,934; May 26.
Screen construction, Window. C. McCalmon. 1,807,425; May 26.
Screw driving device. J. V. Walker. 1,807,265; May 26.
Seal, Liquid. W. H. Bath. 1,806,929; May 26.
Sealing composition, Self deodorizing. B. Dewey. 1,807,570; May 26.
Seat: *See*—
Window seat.
Seat construction, Rumble. G. A. Lemon. 1,806,692; May 26.
Seat construction, Tandem. C. A. van Pappelendam. 1,807,077; May 26.
Seat enclosure, Collapsible rumble. J. M. Baker. 1,806,604; May 26.
Seat positioning device. L. O. Thompson. 1,807,579; May 26.
Semi-flash boiler. C. A. French. 1,806,677; May 26.
Separable key. T. A. Makranczy. 1,807,540; May 26.
Separating adhering particles. G. H. Buchanan. 1,806,888; May 26.
Septic tank. J. G. Laubheimer. 1,807,296; May 26.
Sewing machine, Buttonhole. E. B. Allen. 1,807,377; May 26.
Shade and/or fittings, Electric lamp. S. W. Hamlyn. 1,806,852; May 26.
Shade roller. W. Kampas. 1,807,535; May 26.
Shade roller. C. F. Schmelz. 1,806,650; May 26.
Shade, Window. S. J. Johnson. 1,807,533; May 26.
Sharpener and holder, Pencil. J. A. Larson. 1,807,245; May 26.
Sharpener, Stake. N. A. Ward. 1,806,656; May 26.
Sheet feeding machines, Device for adjustment of the pile feed in. G. Spiess. 1,806,866; May 26.
Sheet metal brake. G. H. Rucker. 1,806,986; May 26.
Sheet registering device. C. F. Root. 1,807,436; May 26.
Shelf, Attachable bracket. J. Erlendson and V. G. Faulhafer. 1,807,517; May 26.
Shield, Expansion. R. E. Ogden. 1,806,640; May 26.
Shingle machine attachment. M. W. Koski. 1,806,979; May 26.
Shock absorber. A. W. F. Manzel. 1,807,422; May 26.
Shock absorber, Hydraulic. L. A. Westman and G. B. Carman. 1,807,362; May 26.
Shoe. W. W. Evans. 1,807,572; May 26.
Shoe. J. F. Gilkerson. 1,807,401; May 26.
Shoe. C. Miller. Des. 84,254; May 26.
Shoe clasp. F. M. Keirnan. 1,806,629; May 26.
Shutter for automobile radiators. A. Mueller. 1,807,165; May 26.
Shuttle operating mechanism. J. E. Barbour. 1,807,333; May 26.
Sign. J. P. Ryan. Des. 84,261; May 26.
Sign, Advertising. S. Schwartz. 1,807,442; May 26.
Sign and wreath support, Combined illuminated. J. F. Breslin, jr. 1,806,667; May 26.
Sign, Illuminated. E. Pinkus. 1,806,915; May 26.
Sign, Reflector. F. W. Bowerman. 1,807,374; May 26.
Signal device. G. B. Graff and R. A. Stewart. 1,807,100; May 26.
Signaling apparatus for motor vehicles. C. F. Capell. 1,806,670; May 26.
Signaling, Railway. M. A. Penrod, H. S. Young, and C. A. Brooks. 1,806,820; May 26.
Signaling system, Cable. J. J. Gilbert. 1,806,754; May 26.
Silica gel, Regeneration of active. G. Kröner and F. W. Stauf. 1,806,690; May 26.
Silicate refractory and forming same. J. D. Morgan. 1,807,543; May 26.
Sintering machine car and grate bar therefor and the like. E. D. Ekstedt. 1,807,154; May 26.
Skates, Toe guard for ice. C. I. Johnson. 1,806,075; May 26.
Slack puller. T. Birkenmaier. 1,807,466; May 26.
Slicing machine, Multiple bladed. H. J. Criner. 1,806,672; May 26.
Sludge digestion apparatus. S. F. Miller. 1,806,698; May 26.
Smoker's stand. C. Wilmanns. 1,807,079; May 26.
Smoking pipe. L. J. Thomas and A. Riddle. 1,807,260; May 26.
Snath. A. J. Gibbons. 1,807,573; May 26.
Socket wrench. E. M. Pfauser. 1,807,134; May 26.
Soles of or for boots and shoes, Producing. C. M. Bagshaw. 1,806,661; May 26.
Solids, Apparatus for dissolving. G. A. Walter. 1,807,263; May 26.
Solutions, Apparatus and process of determining the strength of. C. Kocour. 1,806,806; May 26.
Soot blower. G. I. Rawson. 1,807,255; May 26.
Sound intensity measuring system. W. E. Bower. 1,806,871; May 26.
Sound producing device. L. de Forest. 1,806,745; May 26.
Sound propagating diaphragm. W. D. Pack. 1,807,225; May 26.
Sound recording apparatus. C. A. Hoxie. 1,807,409; May 26.
Spark retarder, Automatic. R. H. Floyd. 1,806,752; May 26.
Spatula. E. P. Byrnes. 1,807,279; May 26.
Speed regulating system. R. Herzog. 1,807,209; May 26.
Speed transmission mechanism, Reversible variable. W. C. Herman. 1,807,035; May 26.
Speed transmission, Variable. H. L. Prout. 1,806,984; May 26.
Spinning machine for artificial silk. H. Hamel. 1,806,851; May 26.
Sponge cup. H. F. Guentzler. 1,807,239; May 26.
Spoon or similar article. F. S. Trumbull. Des. 84,265; May 26.
Sprayer. A. A. Breuer. 1,806,784; May 26.
Spraying machine. W. Brehmer. 1,807,469; May 26.
Spring: *See*—
Automobile spring.
Spring connection, Antifriction. R. R. Searles. 1,807,093; May 26.
Spring end connection. E. H. Cooper 1,807,099; May 26.
Spring end connection. J. W. Smith. 1,807,094; May 26.
Stamping machine. E. H. Trump. 1,807,499; May 26.
Stamps, labels, and the like, Apparatus for affixing. O. Matzka. 1,807,424; May 26.
Stand: *See*—
Display stand. Smoker's stand.
Reading stand.
Stand and pen rack, Combined ink. S. Keltonik. 1,806,630; May 26.
Stapling machine. R. E. Peterson. 1,807,170; May 26.
Starting and landing device for airships of the lighter than air type. A. Grampp. 1,806,939; May 26.
Steam and hot water boiler. O. B. Olmstead. 1,807,249; May 26.
Steam finishing apparatus. K. Otsuka. 1,807,007; May 26.
Steam generating plant. A. E. Leek. 1,807,538; May 26.
Steam, Method of and apparatus for generating and superheating. W. S. Buell. 1,807,505; May 26.
Steel retainer. C. C. Hansen. 1,806,799; May 26.
Steel wool pad. W. H. Robbins. 1,807,136; May 26.
Steering wheel. C. H. H. Rodanet. 1,807,553; May 26.

Stereopticon. J. F. Stubner. 1,807,327; May 26.
Stock feeds, Preparation of live. C. R. Mabee. 1,807,043; May 26.
Stockings, Runner stop for. J. J. Carfrey. 1,807,508; May 26.
Stones, Surface treatment of synthetic precious. H. Espig and W. Teubner. 1,806,588; May 26.
Stop mechanism, Automatic. W. Cameron. 1,806,890; May 26.
Stopper: *See*—
Tank float stopper.
Stopping mechanism for spoolers and the like. J. H. Cox. 1,806,612; May 26.
Storage system. J. G. L. Skar and H. J. Syren. 1,807,075; May 26.
Straightening machine. E. T. Peterson. 1,807,324; May 26.
Strainer. A. W. Burks. 1,806,839; May 26.
Strap retainer, Shoulder. A. C. Hooper. 1,807,290; May 26.
Street cleaner. O. J. Orser. 1,807,250; May 26.
Strip or wire, Manufacture of metallic sheet. S. O. Cowper-Coles. 1,806,587; May 26.
Stroboscopic apparatus. E. A. Butler and T. R. Olive. 1,807,149; May 26.
Strut for aeroplanes, Shock absorbing landing. F. Kunderd. 1,806,807; May 26.
Substance having a nacreous and chatoyant aspect, Production of. J. Paisseau. 1,806,863; May 26.
Suit, Bathing. C. L. Martin. 1,807,486; May 26.
Superheater header. H. B. Oatley. 1,807,248; May 26.
Superheater headers, Manufacturing. M. F. Hard. 1,807,240; May 26.
Support. P. N. Elderkin. 1,806,600; May 26.
Support and display stand, Combined card. W. Lindsey. 1,806,907; May 26.
Support, Casing. C. A. Rasmussen, C. R. Butler, and W. A. Trout. 1,807,046; May 26.
Support for angle bars, Adjustable. B. A. Brown. 1,806,607; May 26.
Support for reciprocating conveyers, Carrier. R. A. Walter. 1,807,110; May 26.
Supporter, Child's clothes. E. M. Swartz. 1,807,452; May 26.
Supporting element for electrical devices. F. H. Hubbard. 1,807,410; May 26.
Surface treatment of articles made of synthetic corundum. H. Espig and W. Teubner. 1,806,589; May 26.
Suspenders. C. L. Meyer. 1,806,909; May 26.
Switch: *See*—
Distribution switch. Electric switch.
Switch. R. E. Fleek. 1,807,398; May 26.
Switch and control therefor, Runway. H. W. Lindgren. 1,806,879; May 26.
Switch for motor vehicles, Signal. H. L. Furr. 1,807,285; May 26.
Switch in oil burning equipments, Electrical. O. A. Fogarty. 1,806,937; May 26.
Switch operating device. R. Popp. 1,806,821; May 26.
Synchronous motor. N. E. Methlin. 1,807,001; May 26.
Table: *See*—
Folding table. Rotary table.
Table. L. H. Burlin. Des. 84,228; May 26.
Tank: *See*—
Septic tank.
Tank float stopper. F. W. Starkey. 1,807,450; May 26.
Tank for the transportation of volatile liquids. G. V. Tontet. 1,807,108; May 26.
Tanks and the like, Cleaning liquid storage. F. Hammond. 1,806,681; May 26.
Tanks of tank vessels, Cleaning, scaling, and gas freeing bulk cargo. A. B. Butterworth. 1,806,740; May 26.
Telegraph systems, Method of and apparatus for operating cable. H. Angel and J. W. Robinson. 1,807,368; May 26.
Telephone dial lock. I. Greenberg. 1,807,065; May 26.
Television. P. Mertz. 1,806,638; May 26.
Television and like apparatus. J. L. Baird. 1,807,464–5; May 26.
Temperature control, Automatic. E. J. Lees. 1,807,101; May 26.
Textile fabric. C. H. Davis. Des. 84,229–32; May 26.
Textile fabric, Embroidered. E. W. Freudenberg. Des. 84,235; May 26.
Textile fabric, Embroidered. E. W. Freudenberg. Des. 84,237–8; May 26.
Textile material with chromium, Treating. J. L. Hankey. 1,807,208; May 26.
Thermometer. H. B. Brown. Des. 84,226; May 26.
Thermostat. H. D. Colman. 1,807,306; May 26.
Thimble. M. Aliand. 1,806,730; May 26.
Thread grinding machine. H. E. Dunkee. 1,807,516; May 26.
Thread, Linen shoe. W. W. Evans. 1,807,571; May 26.
Throttle and electric motors of a locomotive, Simultaneously controlling the. C. C. C. Burkhardt. 1,807,471; May 26.
Throttle control, Saftey. F. Van Vranken. 1,806,960; May 26.
Ticket issuing machine. E. C. Tilly. 1,806,654; May 26.
Tie plate. R. W. Frawley and G. C. Bruner. 1,807,062; May 26.
Tile and tile roof, Cap. E. Hering. 1,806,685; May 26.
Tile panel strip construction. C. D. Nilsen. 1,806,948; May 26.
Tilter device. F. L. M. Kenney. 1,806,977; May 26.
Tire and analogous article of manufacture, Rubber. A. Brill. 1,806,838; May 26.
Tire rim. F. J. Dusel. 1,806,676; May 26.
Tires, Making solid. R. Liebau. 1,806,857; May 26.
Toaster, Continuous reversible. W. J. Henley, jr. 1,807,312; May 26.
Tongs, Box handling. W. Smith. 1,806,956; May 26.
Tongue and brake, Combination. E. D. Sullivan. 1,806,719; May 26.
Tool, Chain repairing. M. M. Heiny and I. R. Smith. 1,806,682; May 26.
Tool for metal working purposes, Machine. R. Price. 1,806,951; May 26.
Tool for tapping nut blanks, Machine. P. C. Raymond. 1,806,707; May 26.
Tool, Fruit basket top applying. S. H. Sheller. 1,806,717; May 26.
Tool lifter. L. H. Mesker. 1,806,606; May 26.
Tool lubrication, Machine. J. B. Armitage. 1,806,603; May 26.
Tool, Self opening. J. V. Walker. 1,807,264; May 26.
Tool, Tire removing. I. Mjelva. 1,806,947; May 26.
Toy. H. H. Moo. Des. 84,255; May 26.
Toy animal, Walking. J. M. Danko and J. Kasarda. 1,807,391; May 26.
Toy cannon. J. W. MacDonald. 1,806,693; May 26.
Toy figure. W. E. Disney. Des. 84,233; May 26.
Toy, Flying. W. C. Wood. 1,807,365; May 26.
Toy gas cannon. J. W. MacDonald. 1,806,633; May 26.
Toy performer. P. Lazzari. 1,807,119; May 26.
Toy, Rocking-moving vehicle. P. Muehlfeld and H. Deubel. 1,807,428; May 26.
Toy wagon. L. D. Ellis. 1,806,749; May 26.
Track brake. E. E. Fisher. 1,806,994; May 26.
Track circuit system. A. G. Williamson. 1,807,330; May 26.
Tractor. T. R. Paulsen. 1,806,819; May 26.
Traffic controlling apparatus, Railway. F. W. Lee. 1,806,691; May 26.
Traffic controlling apparatus, Railway. F. T. Fereday. 1,806,795; May 26.
Traffic controlling apparatus, Railway. B. E. O'Hagan. 1,806,817; May 26.
Traffic signal. R. Biesso. Des. 84,225; May 26.
Trailer hitch. G. C. Burkett. 1,807,303; May 26.
Train control, Automatic. P. J. Simmen. 1,806,830; May 26.
Transformer, Coupling. J. A. Proctor. 1,807,135; May 26.
Transformers, Insulating high frequency. K. Schmidt. 1,807,176; May 26.
Translating device. A. Joffé. 1,807,292; May 26.
Transmission, Analyzing system for multiplex facsimile. R. H. Ranger. 1,807,011; May 26.
Transmitter suspension arm. H. H. Ide. 1,806,903; May 26.
Transplanter. B. C. England. 1,807,474; May 26.
Trap: *See*—
Animal trap. Rat trap.
Insect trap.
Trap. W. Anderson. 1,807,463; May 26.
Trap construction, Exhaust. A. J. Culp. 1,807,512; May 26.
Tray and table, Combination. L. H. Burlin. Des. 84,227; May 26.
Tread member for tire chains. E. Ghia. 1,807,522; May 26.
Tread shrinking machine. H. V. Lough. 1,806,811; May 26.
Trolley frog and line section switch, Combined. K. Davis. 1,806,842; May 26.
Truck, Industrial. E. J. Abbe. 1,807,269; May 26.
Truck, Industrial. E. H. Remde. 1,806,881; May 26.
Truck, Railway. J. S. Tawresey. 1,806,832; May 26.
Truss. L. B. Moitzan. 1,806,639; May 26.
T-square with sliding pivoted blades. W. Ross. 1,807,438; May 26.
Tube: *See*—
Discharge tube. Gas discharge tube.
Tube for oil burners, Combustion. H. F. Smenner. 1,806,921; May 26.
Turbine, Elastic fluid. C. A. Parsons and E. H. B. Anderson. 1,806,645; May 26.
Twine holding and dispensing device. G. Maletz. 1,806,812; May 26.
2-aminonaphthalene-3-carboxylic acid, Manufacture of. H. Schweitzer. 1,806,714; May 26.
Type form projector. E. J. Freund. 1,806,896; May 26.
Typewriting and computing machine, Combined. E. Stevenson. 1,806,768; May 26.
Typographical composing machine. D. Goldblatt. 1,807,523; May 26.
Umbrella lock. J. C. Backus. 1,806,660; May 26.
Universal joint. E. Tetrault. 1,806,723; May 26.
Urn, Coffee. H. Harper. Des. 84,270; May 26.
Utensil, Kitchen. J. Servaas. 1,806,828; May 26.
Valve. W. H. Brooks. 1,807,193; May 26.
Valve. W. B. Milner. 1,807,490; May 26.
Valve. J. G. Smeby. 1,807,446; May 26.
Valve construction. A. Greiner and C. J. Long. 1,806,972; May 26.
Valve device, Brake. J. C. McCune. 1,807,319; May 26.
Valve, Electrically operated. J. R. Boyle. 1,807,191; May 26.

Valve, Expansion. F. E. Dennison and W. S. Ireland. 1,807,200; May 26.
Valve for sprinkler systems. E. E. Clark. 1,807,305; May 26.
Valve housing. G. C. Davis. 1,806,791; May 26.
Valve, Light. P. T. Farnsworth. 1,806,935; May 26.
Valve lubricator, Automatic. S. G. Ling. 1,806,999; May 26.
Valve mechanism. R. E. Bletcher and E. H. Bucknell. 1,807,081; May 26.
Valve mechanism for compressors. E. D. Dunning. 1,807,029; May 26.
Valve, Mixing. F. C. Leonard. 1,807,040; May 26.
Valve, Pressure regulating. H. M. Blinn. 1,807,564; May 26.
Valve seat lapping machine. A. E. Riggs. 1,806,918; May 26.
Valve stem split lock catcher. I. J. Clark. 1,807,509; May 26.
Valve tester, Compression air. F. N. Henkel. 1,807,287; May 26.
Valve, Two way. C. S. Crickmer. 1,807,085; May 26.
Vaporizer, Electrical. J. Robinson. 1,806,646; May 26.
Vegetables and fruits, Apparatus for washing. G. E. Stocking. 1,806,957; May 26.
Vehicle body, Pressed metal. J. Ledwinka. 1,807,316; May 26.
Vehicle construction. S. B. Gould. 1,807,525; May 26.
Vehicle, Logging. H. H. Richmond. 1,807,325; May 26.
Vehicle, Road. O. F. Warhus. 1,806,771; May 26.
Vehicle, Trailer. C. S. Businga. 1,806,859; May 26.
Vehicle wheel. E. A. Nelson. 1,807,167; May 26.
Vehicles, Apparatus for controlling velocity of wheeled. E. E. Fisher. 1,806,993; May 26.
Vending machine. W. E. Andrews. 1,806,835; May 26.
Vending machine. R. W. Hall and W. J. MacDonald. 1,807,532; May 26.
Vending machine. G. Morrison. 1,806,814; May 26.
Vending machine, Circular. H. T. Goss. 1,807,404; May 26.
Vending machines or the like, Coin control mechanism for. J. A. Hebb. 1,806,757; May 26.
Veneers, Producing. F. Ovenhausen. 1,807,251; May 26.
Ventilating apparatus, Mine. L. Kessler. 1,806,760; May 26.
Ventilator: *See*—
Exhaust ventilator. Window ventilator.
Vibrator mechanism. S. Flam. 1,806,620; May 26.
Viscose, Preparation of. J. M. Bernard. 1,807,370; May 26.
Voice culture, Method and device for. S. D. Roben. 1,806,919; May 26.
Vulcanizable material and product, Modifying. W. A. Gibbons. 1,807,031; May 26.
Wagon, Child's. C. W. Waas. 1,806,961; May 26.
Walking stick and cigar and cigarette carrier, Combined. J. Rosinsky. 1,806,709; May 26.
Wall structure, Building. G. H. Ellis. 1,807,395; May 26.
Warning device for electric push-buttons, etc. B. Roth. 1,807,344; May 26.
Washers, Making lock. F. Q. Schwartz. 1,807,258; May 26.
Washing machine. W. H. Jaxheimer. 1,807,214; May 26.
Washing machine. L. R. McKercher. 1,806,982; May 26.
Watch dial or similar article. J. P. V. Heinmuller. Des. 84,240; May 26.
Water insoluble substances, Emulsifying. H. Bennett. 1,807,563; May 26.
Wedge, Sectional. F. Spanier. 1,806,718; May 26.
Weighing attachment for meat slicers. F. S. Hines. 1,807,313; May 26.
Welded article. W. R. Hume. 1,807,477; May 26.
Welding chill, Arc. F. Palm. 1,806,949; May 26.
Welding chill, Arc. H. A. Schmitz, jr. 1,806,954; May 26.
Welding, Electric arc. K. Strobel. 1,806,958; May 26.
Welding process, Chemico-thermal. B. Burns, H. B. Lewis, and R. M. Otis. 1,806,788; May 26.
Well capping device. L. A. Teed. 1,807,498; May 26.
Well, Cementing a. H. P. Stolz. 1,807,050; May 26.
Well flowing device, Automatic. A. Boynton. 1,806,872; May 26.
Wells, Drilling. A. Boynton. 1,807,082; May 26.
Wheel: *See*—
Steering wheel. Vehicle wheel.
Wheel drawer for use on motor vehicles. F. B. West and K. J. Pidcock. 1,807,329; May 26.
Winding device. R. Dear. 1,807,199; May 26.
Winding mechanism, Partial self. R. Persico. 1,807,169; May 26.
Windmill. F. J. Haller. 1,806,900; May 26.
Window. G. A. Lunz and J. L. Feyl. 1,807,420; May 26.
Window seat, Portable. W. D. Dunn. 1,806,675; May 26.
Window ventilator. V. W. I. Frederick. 1,806,847; May 26.
Windows of the sliding type, Device for controlling. W. Quick, S. E. Thomas, and F. W. Berwick. 1,807,548; May 26.
Windshield cleaners and the like, Carriage reversing mechanism for. H. Bjornwald. 1,807,372; May 26.
Windshield mounting. J. Ledwinka. 1,807,317; May 26.
Wire connecter. L. R. Zehnder. 1,807,462; May 26.
Wire tightening device. E. T. James. 1,807,479; May 26.
Wrench: *See*—
Nut wrench. Socket wrench.
Yarn moistening device. E. O. Nebel. 1,807,492; May 26.
Zinc, Manufacture of. H. E. Coley. 1,806,596; May 26.
Zylophones or the like, Bar mounting for. H. A. Bowers. 1,807,057; May 26.

CLASSIFICATION OF PATENTS

ISSUED MAY 26, 1931

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20: 1,807,155
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87.5:
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281— 15: 1,806,960
283— 9: 1,807,445
284— 17: 1,806,982
285— 139: 1,806,710
137: 1,807,003
143: 1,806,788
286— 9:
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287— 116: 1,807,559
111: 1,806,687
288— 1: 1,807,567
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237: 1,807,166
312— 42: 1,807,400
67: 1,807,404
116: 1,807,332
143: 1,806,610

U. S. GOVERNMENT PRINTING OFFICE: 1931

Patents Nos. 1,803,310 to 1,804,385

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Designs	59—No.	84,067 to No. 84,125, inclusive.
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Total	1,419	

Adjudicated Patents

(C. C. A. Mo.) Eckart patent, No. 1,377,566, for method of enhancing the growth of plants, *Held* valid and infringed. *Graham Paper Co.* v. *International Paper Co.*, 46 F.(2d) 881.

(C. C. A. Mo.) Rogers patent, No. 1,438,664, for truck frame, *Held* invalid. *Hermon Body Co.* v. *St. Louis Body and Equipment Co.*, 46 F.(2d) 879.

(C. C. A. Ohio) Russ patent, No. 1,528,345, for heel and method of making the same, *Held* valid and infringed. *United Shoe Machinery Corporation* v. *Day Wood Heel Co.*, 46 F.(2d) 897.

(C. C. A. Ohio) Russ patent, No. 1,536,691, for heel-blank breast-shaping machine, claims 1, 3, 5, and 6 *Held* valid and infringed. *Id.*

(C. C. A. Mo.) Eckart reissue patent, No. 15,231, for method and means for enhancing the growth of plants, *Held* valid and infringed. *Graham Paper Co.* v. *International Paper Co.*, 46 F.(2d) 881.

Disclaimers

1,652,262.—*Maurice Walter*, New York, N. Y. DUMPING MECHANISM FOR SEMITRAILERS. Patent dated December 18, 1927. Disclaimer filed April 18, 1931, by the *patentee*.

Hereby enters this disclaimer to claim 2 of the said patent which is in the following words, to wit:

"In combination with a tractor and semi-trailer, dumping mechanism mounted wholly on the tractor, a fifth wheel connection between the tractor and semi-trailer, one element of which is carried on the tractor and connected with the dumping mechanism and the co-operating element of which is carried on the trailer, and means between the fifth wheel connection and the dumping mechanism affording capacity for universal movement of the fifth wheel during dumping."

1,691,507.—*John C. Anderson*, Kearny, N. J. WOVEN-WIRE FABRIC AND METHOD OF MAKING IT. Patent dated November 13, 1928. Disclaimer filed April 14, 1931, by the *patentee*.

Hereby enters this disclaimer to that part of the claims in said specification which is in the following words, to wit:

"1. A sectional woven wire fabric having unconfined outer edges and composed of sections woven from right-hand coils and other sections woven from left-hand coils, and connecting members each having means for engaging and holding the end coils of the adjacent sections in substantially the same space relation as the corresponding coils within each section, thereby connecting said sections so that their unconfined outer edges are in substantial alinement with one another."

"3. The method of making a woven wire fabric that comprises weaving a plurality of sections of wire fabric composed of coils having right-hand curvature, weaving a plurality of other sections having left-hand curvature, and joining said sections together, with the right and left sections alternating and with the side edges of all of said sections in alinement, by placing adjacent to the end of each successive section a connecting member having openings which are alternately adapted to interengage with the right and left wires respectively, weaving a wire similar to the wires of one of said sections through the loops of the end wire of said section and through the proper set of the openings of said connecting member, and then weaving a wire of opposite curvature through the loops of the end wire of the next section and through the remaining openings of said connecting member."

1,789,946.—*Thomas M. Rector*, Rutherford, N. J. METHOD OF PACKING NUTS. Patent dated January 20, 1931. Disclaimer filed April 16, 1931, by the assignee, *Franklin Baker Company*, patentee, said Rector consenting.

Hereby enters this disclaimer to the subject matter of each of the claims of said Letters Patent, except when the nuts are humidified so that their moisture content is approximately five per cent before they are sealed in the containers.

Condition of Applications Under Examination at Close of Business April 18, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 97,200; Trade-Mark Division, 1,254. Oldest new case, July 21, 1930; oldest amended, July 21, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Oct. 25	Nov. 10	792
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Sept. 26	Sept. 26	1,427
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Oct. 27	†Jan. 12	1,012
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Sept. 18	Oct. 1	930
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Sept. 27	Oct. 4	919
318	6. LEWERS, A. M., Carbon Chemistry	Aug. 28	Aug. 29	2,188
106	7. JARBOE, C. G., Optics; Photography	Aug. 27	Aug. 27	2,134
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Aug. 18	Oct. 1	1,588
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 20	Oct. 22	1,491
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 3	Nov. 15	1,113
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Oct. 29	Nov. 12	841
380	12. HENRY, C. C., Machine Elements	Sept. 1	Sept. 20	1,363
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Oct. 23	Oct. 30	1,129
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Sept 25	Sept. 25	1,311
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Sept. 2	Sept. 2	2,633
242*	16. SPENCER, C. J., Telegraphy; Telephony	Dec. 11	Dec. 17	912
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Aug. 20	Aug. 23	1,570
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Oct. 1	Oct. 1	1,266
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Aug. 20	Aug. 19	2,211
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Oct. 3	Oct. 6	1,039
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Oct. 9	Dec. 10	962
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 8	Nov. 11	1,039
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Aug. 27	Aug. 22	1,084
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Sept. 4	Sept. 15	988
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Cumminutors.	Sept. 23	Sept. 25	1,520
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Oct. 1	Oct. 21	1,022
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Sept. 29	Sept. 29	1,157
225	28. BENSON, A. R., Internal-Combustion Engines	Sept. 8	Sept. 8	1,877
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Oct. 8	Sept. 25	592
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Oct. 25	†Jan. 2	945
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	July 21	July 21	2,614
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Nov. 20	Nov. 19	1,398
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavement; Roofs; Wooden Buildings.	Sept. 26	Oct. 2	2,681
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Dec. 15	Dec. 19	823
116*	35. REYNOLDS, E. G., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Jan. 29	†Jan. 30	952
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Aug. 19	Aug. 30	2,317
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 19	Sept. 19	1,719
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Nov. 6	Nov. 4	610
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Sept. 27	Sept. 27	1,725
362*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Aug. 27	Sept. 25	3,071
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Oct. 18	Oct. 18	888
223*	42. CUTTING, H. O., Electric Signaling	Sept. 19	Sept. 19	1,477
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Oct. 18	Oct. 18	1,660
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Aug. 18	Aug. 25	2,238
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Aug. 20	Aug. 19	2,310
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Oct. 10	Oct. 15	1,200
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Oct. 1	Oct. 7	2,185
212*	48. ROEPKE, O. B., Electricity, General Applications	Sept. 19	Sept. 25	1,209
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Nov. 21	Nov. 19	1,156
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 23	Aug. 25	2,495
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Aug. 4	Aug. 4	2,363
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Oct. 28	Nov. 1	1,615
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Dec. 19	Dec. 22	943
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Aug. 16	Aug. 16	2,621
102	55. BOWEN, S. T. { Bread, Pastry, and Confection Making; Cutlery	†Mar. 7	†Mar. 7	236
	{ Designs	†Mar. 23	†Apr. 6	291
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Aug. 25	Aug. 25	2,008
257*	57. NICHOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Sept. 24	Sept. 19	832
270*	58. DOWELL, E. F., Abrading; Typewriting	Aug. 18	Aug. 20	1,510
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Oct. 22	Oct. 22	1,746
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Aug. 18	Aug. 18	2,060
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Aug. 19	Aug. 21	2,174
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Aug. 20	Aug. 21	2,530
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Aug. 4	Aug. 5	2,488
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND. { Trade-Marks	†Mar. 23	†Apr. 6	1,057
	{ Labels and Prints	†Mar. 20	†Apr. 6	197

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

Supreme Court of the United States

CARBICE CORPORATION OF AMERICA *v.* AMERICAN PATENTS DEVELOPMENT CORPORATION AND DRY ICE CORPORATION OF AMERICA

No. 43. Decided March 9, 1931

1. PATENTS—INFRINGEMENT—USE OF UNPATENTED MATERIALS.

The owner of a patent for a particular kind of package employing solid carbon dioxide in a new combination can, if the patent is valid, prohibit entirely the manufacture, sale, or use of such packages or can grant licenses upon terms consistent with the limited scope of the patent monopoly, or it may charge a royalty or license fee, but such owner may not exact as the condition of a license that unpatented materials used in connection with the invention shall be purchased only from the licensor, and, if it does so, relief against one who supplies such unpatented materials will be denied.

2. SAME—SAME—SAME.

Infringement, whether direct or contributory, is essentially a tort and implies invasion of some right of the patentee. The exclusive licensee under a patent for a refrigerating transportation package which includes solid carbon dioxide has no right to be free from competition in the sale of solid carbon dioxide. Control over the supply of such unpatented material is beyond the scope of the patentee's monopoly, and this limitation, inherent in the patent grant, is not dependent upon the peculiar function or character of the unpatented material or on the way in which it is used.

ON WRIT of certiorari to the United States Circuit Court of Appeals for the Second Circuit.

Reversed.

Mr. Samuel E. Darby, jr., for Carbice Corporation of America.

Mr. Charles Neave and *Mr. George C. Dean* for American Patents Development Corporation et al.

Mr. Justice BRANDEIS delivered the opinion of the Court.

The American Patents Development Corporation, as owner of United States Patent No. 1,595,426, and the Dry Ice Corporation, as exclusive licensee, brought this suit in the Federal court for eastern New York to enjoin contributory infringement by the Carbice Company, for an accounting of profits, and for damages. The defendant denied both the validity of the patent and the alleged infringement. The district court, without passing upon validity, dismissed the bill on the ground that infringement had not been shown, 25 F.(2d) 730. The circuit court of appeals held the patent valid and infringed, 38 F.(2d) 62. A writ of certiorari was granted, 281 U. S. 711.

Solid carbon dioxide has a temperature of about 110° below zero. When it "melts", it passes directly into a dry, gaseous state—the gas having a like temperature and being in volume about 500 times that of the solid. These properties make the solid dioxide an excellent dry refrigerant for foodstuffs, particularly for the shipment of ice cream. The refrigerating transportation package, which is the subject of the patent in suit, is made up in this way: Near the middle of the outer box or carton in which the ice cream or other foodstuff is to be shipped, there is placed, in a small container, a quantity of solid carbon dioxide. So placed, this refrigerant is relatively enduring because it is doubly protected from the exterior heat by the ice cream which surrounds it and by the evaporating gas which excludes air and moisture from the shipping case. The ice cream is kept frozen by both the solid and the gaseous dioxide. Although the cost of solid dioxide is about ten times that of water ice, such use is said to have revolutionized the transportation of ice cream, as in this way shipping and handling charges are greatly reduced and the messiness incident to the employment of water ice is eliminated.

The patent in suit is not for solid carbon dioxide. That article and its properties as a refrigerant have been long known to the public. The patent is not for a machine for making solid carbon dioxide. Nor is it for a process for making or using that substance. The Patent Office rejected an application for a process patent. The patent is said to be for a manufacture. The specifications outline the method of construction and use; and a typical claim [6] is for a—

> transportation package consisting of a protective casing of insulating material having packed therein a quantity of frozen carbon dioxide in an insulating container and a quantity of freezable product in freezing proximity to said frozen carbon dioxide and the gas evaporated therefrom, arranged so that said frozen carbon dioxide is less accessible for exterior heat than said freezable products.

The sole business of the Dry Ice Corporation is the manufacture of solid carbon dioxide which it sells under the name of "DryIce". It does not make or sell transportation packages in which solid carbon dioxide is used as a refrigerant. It does not issue to other concerns licenses to make such packages upon payment of a stipulated royalty. It does not formally license buyers of its dry ice to use the invention in suit. But each invoice for solid dioxide sold by it bears this notice.

> The merchandise herein described is shipped upon the following condition: That DryIce shall not be used except in DryIce Cabinets or other containers or apparatus provided or approved by the DryIce Corporation of America; and that DryIce Cabinets or other containers or apparatus provided or approved by the DryIce Corporation of America shall be refrigerated or used only with DryIce. These uses of DryIce are fully covered by our Basic Method and Apparatus Patent No. 1,511,306. Granted October 14th, 1924, and other Patents Pending.

The patent in suit, No. 1,595,426, issued August 10, 1926, is not named in the invoice; but it has been assumed that thereby the Dry Ice Corporation extends to each of its customers, buyers of solid carbon dioxide, a license to use the invention without the payment of royalty. The restrictions as to the purchase of cartons set forth in the invoices of the corporation appear not to have been insisted upon by it.

The Carbice Corporation also manufactures solid carbon dioxide. It is charged with contributory

infringement because it sells its product to customers of the Dry Ice Corporation with knowledge that the dioxide is to be used by the purchaser in transportation packages like those described in the patent. The Carbice Corporation challenges the validity of the patent and denies infringement. Whether the transportation package described is a patentable invention we need not determine. For even if it is, no relief can be granted.

[1] The invention claimed is for a particular kind of package employing solid carbon dioxide in a new combination. If the patent is valid the owner can, of course, prohibit entirely the manufacture, sale, or use of such packages, *Continental Paper Bag Co.* v. *Eastern Paper Bag Co.*, 210 U. S. 405, 136 O. G. 1297. Or it can grant licenses upon terms consistent with the limited scope of the patent monopoly, *United States* v. *General Electric Co.*, 272 U. S. 476, 489. It may charge a royalty or license fee. But it may not exact as the condition of a license that unpatented materials used in connection with the invention shall be purchased only from the licensor; and if it does so, relief against one who supplies such unpatented materials will be denied.[1] The limited monopoly to make, use, and vend an article may not be "expanded by limitations as to materials and supplies necessary to the operation of it." *Motion Picture Patents Co.* v. *Universal Film Manufacturing Co.*, 243 U. S. 502, 515, 238 O. G. 311. Compare *United Shoe Machinery Co.* v. *United States*, 258 U. S. 451, 462; *United States* v. *General Electric Co.*, 272 U. S. 476, 492.

The relief here sought is indistinguishable from that denied in the Motion Picture case. There, it was held that to permit the patent owner "to derive its profit, not from the invention on which the law gives it a monopoly but from the unpatented supplies with which it is used" is "wholly without the scope of the patent monopoly." P. 517. If a monopoly could be so expanded, the owner of a patent for a product might conceivably monopolize the commerce in a large part of unpatented materials used in its manufacture. The owner of a patent for a machine might thereby secure a partial monopoly on the unpatented supplies consumed in its operation. The owner of a patent for a process might secure a partial monopoly on the unpatented material employed in it. The owner of the patent in suit might conceivably secure a limited monopoly for the supplying not only of solid carbon dioxide, but also of the ice cream and other foods, as well as of the cartons in which they are shipped.[2] The attempt to limit the licensee to the use of unpatented materials purchased from the licensor is comparable to the attempt of a patentee to fix the price at which the patented article may be resold. *Bauer & Cie.* v. *O'Donnell*, 229 U. S. 1, 191 O. G. 1068; *Straus* v. *Victor Talking Machine Co.*, 243 U. S. 490, 238 O. G. 316; *Boston Store* v. *American Graphophone Co.*, 246 U. S. 8, 249 O. G. 985. Compare *Bobbs-Merrill Co.* v. *Straus*, 210 U. S. 339. In both classes of cases, courts deny relief against those who disregard the limitations sought to be imposed by the patentee beyond the legitimate scope of its monopoly.[3]

[2] Plaintiffs seek to distinguish the Motion Picture case from that at bar, by pointing out that there, as in *Henry* v. *A. B. Dick Co.*, 224 U. S. 1, 176 O. G. 751, the unpatented supplies, over which the licensor sought to extend its monopoly, were merely used in the patented machines, whereas here the unpatented refrigerant is one of the necessary elements of the patented product. And to distinguish the case at bar from *Morgan Envelope Co.* v. *Albany Perforated Wrapping Paper Co.*, 152 U. S. 425, 433, 67 O. G. 271, it is pointed out that the Carbice Corporation is furnishing not a passive element in the combination, like the paper in the Morgan Envelope fixture, but the dynamic element which produces refrigeration. These distinctions are without legal significance. Infringement, whether direct or contributory, is essentially a tort, and implies invasion of some right of the patentee. Compare *Moore* v. *Marsh*, 7 Wall. 515, 520; *Root* v. *Railway Co.*, 105 U. S. 189, 214, 21 O. G. 1112. The Dry Ice Corporation has no right to be free from competition in the sale of solid carbon dioxide. Control over the supply of such unpatented material is beyond the scope of the patentee's monopoly; and this limitation, inherent in the patent grant, is not dependent upon the peculiar function or character of the unpatented material or on the way in which it is used. Relief is denied because the Dry Ice Corporation is attempting, without sanction of law, to employ the patent to secure a limited monopoly of unpatented material used in applying the invention. The present attempt is analogous to the use of a patent as an instrument for restraining

[1] In England the insertion of such a requirement in any license agreement is a complete defense to any defendant charged with infringement. See Patents and Designs Act (1907), 7 Edw. VII, c. 29, sec. 38, as amended by (1919) 9 and 10 Geo. V, c. 80, sec. 20, sched. 38; *Sarason* v. *Frémay* [1914], 2 Ch. 474; *Huntoon Co.* v. *Kolynos, (Inc.)* [1930], 1 Ch. Div. 528, 535, 547, 553, 562. The need for such legislative measures to prevent abuse of the patent monopoly has now been recognized by the International Convention for the Protection of Industrial Property. See Actes de la Conférence de La Haye de 1925 (Bern, 1926), pp. 433–4, 606; Ladas, International Protection of Industrial Property, pp. 337–40, 817. In this country the patent statutes similarly provide that an unreasonable delay in formally disavowing patent claims held invalid, and the consequent maintenance of a broader monopoly than warranted, is a complete defense to all infringers, even as to remaining valid claims. Rev. Stats. secs. 4917, 4922, 35 U. S. C. secs. 65, 71. See *Ensten* v. *Simon Ascher & Co., Inc.*, No. 46, October Term 1930, decided February 2, 1931.

[2] See, also, the examples given by Chief Justice White, dissenting in *Henry* v. *A. B. Dick Co.*, 224 U. S. 1, 55. "The very existence of such restrictions suggests that in its absence a competing article of equal or better quality would be offered at the same or at a lower price. . . ." Vaughan, Economics of Our Patent System, pp. 125–7.

[3] The patent grant is inherently limited in other respects. A patent covering an essential instrumentality does not enable a patentee or its licensee thereby to abridge its obligations as a public utility; the exclusive right to license use of the invention cannot be so exercised. *Missouri ex rel. Baltimore C. O. Tel. Co.* v. *Bell Tel. Co.*, 23 F. 539, appeal dismissed, 127 U. S. 780; *State ex rel. Postal Tel. Cable Co.* v. *Delaware & A. Tel. & Tel. Co.*, 47 F. 633, affirmed, 50 F. 677. Nor does the grant of a United States patent exempt the patented product from limitations imposed by State police statutes. *Patterson* v. *Kentucky*, 97 U. S. 501; *Allen* v. *Riley*, 203 U. S. 347; *John Woods & Sons* v. *Carl*, 203 U. S. 358; *Ozan Lumber Co.* v. *Union County National Bank*, 207 U. S. 251. Compare *Webber* v. *Virginia*, 103 U. S. 344, 347. See note 1, supra. Nor can a patent be made the basis of an unconscionable contract. *Pope Mfg. Co.* v. *Gormully*, 144 U. S. 224.

commerce which was condemned, under the Sherman antitrust law, in *Standard Sanitary Mfg. Co.* v. *United States*, 226 U. S. 20, 184 O. G. 1074.[4]

The case at bar is wholly unlike *Leeds & Catlin* v. *Victor Talking Machine Co.*, 213 U. S. 325, 333, 144 O. G. 1095, on which plaintiffs rely. That was an ordinary case of contributory infringement. The Victor Company sold machines embodying a patent for a combination. Leeds & Catlin were held to be infringers because the intended incorporation in the Victor machines of the article which they sold, did not constitute a repair of the machine and hence was not within the license implied on sale. *Heyer* v. *Duplicator Mfg. Co.*, 263 U. S. 100, 325 O. G. 701. There was no suggestion that the Victor Company, which itself manufactured and sold the patented product, sought "to derive its profits, not from the invention on which the law gives it a monopoly, but from the unpatented supplies with which it is used." In the case at bar the plaintiffs neither sell nor license others to sell complete transportation packages. They supply merely one of the several materials entering into the combination; and on that commodity they have not been granted a monopoly. Their attempt to secure one cannot be sanctioned.[5]

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE WILSON

No. 2,580. Decided February 3, 1931

PATENTABILITY—VEHICLE WHEEL.

Claims for a vehicle wheel adapted to be operable in both vertical and inclined positions *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Wallace R. Lane, Mr. F. F. Mason, and *Mr. Wm. S. Hodges* for Wilson.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

The subject matter of this ex parte appeal from the decision of the Board of Appeals of the United States Patent Office, affirming the decision of the Examiner, is for improved vehicle wheels, claimed to be operable in both vertical and inclined positions, as on a road grader.

In the use of a road grader it is often necessary for one wheel to run in the ditch at the side of the road while the other is on more level ground and nearer the center of the road. In order that the wheels may not slip and that the vehicle may have traction, applicant's device is so constructed that projecting flanges on each side of the tire of the wheel come in contact with the road when the wheels stand at an angle. The rim, bolts, nuts and tire are so arranged as to provide a means which the applicant claims will prevent skidding.

The claims were rejected upon the following references: Reid, 623,034, April 11, 1899; Neill et al., 683,220, September 24, 1901; Bosworth, 1,043,061, November 5, 1912; Gray, 1,240,337, September 18, 1917; Dawson, 1,487,920, March 25, 1924; Hutchinson (French Addition), 8,014 of 1907; Cann (French), 389,296, of 1908.

We have carefully examined the references and the opinions of the tribunals below and have considered the argument of counsel on both sides and agree with the Board of Appeals that applicant has disclosed nothing patentable over the prior art cited, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

JANTZEN KNITTING MILLS *v.* WEST COAST KNITTING MILLS

No. 2,503. Decided January 12, 1931. Rehearing denied March 31, 1931

1. TRADE-MARKS—REPRESENTATION OF THE GOODS.
"It is a well settled principle of trade-mark law that a mere representation of the merchandise on which the mark is used cannot be adopted as a trade-mark. The reason for this rule is that such a mark indicates nothing in the nature of origin or ownership of the articles to which it is affixed."
2. SAME—SAME.
"A representation of the goods themselves may, however, if incorporated with other features of a mark which are sufficiently arbitrary and distinctive as in themselves to indicate origin or ownership of the goods to which they are affixed, be adopted as a trade-mark."
3. SAME—SAME—DIVING GIRL IN A SWIMMING SUIT.
The representation of a diving girl wearing a swimming suit is generic in character and the registration of such a representation as a trade-mark can not exclude another from using any such representation but only from using such a representation when the diving girl is in substantially the same position and posture.
4. SAME—SAME—SAME—LIKELIHOOD OF CONFUSION.
A trade-mark for bathing suits comprising the representation of a girl attired in a bathing suit, cap and shoes, about to dive from a spring board into water *Held* not confusingly similar to a trade-mark for the same goods comprising a girl with arms and limbs extended, similarly attired, appearing to be in the air as in the act of diving.

BLAND, *J.*, and HATFIELD, *J.*, dissenting.

APPEAL from the Patent Office. Affirmed.

Mr. Eugene E. Stevens, Mr. Edward D. Jones, and *Mr. Albert L. Jacobs* for Jantzen Knitting Mills.

Mr. Albert J. Fihe for West Coast Knitting Mills.

LENROOT, *J.:*

This is an appeal from a decision of the Commissioner of Patents affirming a decision of the

[4] In such cases, the attempt to use the patent unreasonably to restrain commerce is not only beyond the scope of the grant, but also a direct violation of the antitrust acts. Compare section 3 of the Clayton Act, October 15, 1914, c. 323, 38 stat. 730, 731, which prohibits any lease, sale, contract, or agreement tending to create a monopoly in any line of commerce, and is applicable to all "goods, wares, merchandise, machinery, supplies or other commodities, whether patented or unpatented. . . ." See *United Shoe Mach. Co.* v. *United States*, 258 U. S. 451, 460; *Lord* v. *Radio Corp. of America*, 24 F.(2d) 565, 566–7, affirmed, 28 F.(2d) 257, certiorari denied, 278 U. S. 648, decree entered, 35 F.(2d) 962, affirmed, February 13, 1931, — F.(2d) —. Compare, as to trade secrets, *Dr. Miles Medical Co.* v. *Park & Sons Co.*, 220 U. S. 373, 401.

[5] Restrictions on the manner of use, essential to prevent unwarranted extension, are inherent in other limited monopolies. Thus, a trade-mark may not be used as a means of misrepresentation. *Worden* v. *California Fig Syrup Co.*, 187 U. S. 516; *Mulhens & Kropff, Inc.*, v. *Ford-Mulhens, Inc.*, 43 F.(2d) 937; *Leather Cloth Co., Ltd.*, v. *American Leather Cloth Co., Ltd.*, 4 De G. J. & S. 137, affirmed, 11 H. L. C. 523. Nor a tradename as a means of deception. *Memphis Keeley Institute* v. *Keeley Co.*, 155 F. 964; *Royal Baking Powder Co.* v. *Federal Trade Commission*, 281 F. 744; *Federal Trade Commission* v. *Bradley*, 31 F.(2d) 569.

Examiner of Interferences, dismissing an opposition filed by appellant against the application of appellee for registration of a trade-mark for bathing suits, comprising a representation of a girl attired in a bathing suit, cap and shoes, about to dive from a springboard into water. The notation "Hollywood" appears over this representation, which notation, however, is disclaimed apart from the mark shown. The mark is used by appellee as a trade-mark for swimming suits.

Appellant claims prior use upon the same kind of goods of a trade-mark comprising a girl with arms and limbs extended, attired in a bathing suit, cap and stockings, appearing to be in the air as in the act of diving. Appellant further pleads ownership of three registrations, No. 193,298, dated December 23, 1924, No. 194,451, dated January 27, 1925, and No. 213,637, dated June 1, 1926. In each of the marks here under consideration approximately one-half of the figure of the girl is covered by a swimming suit.

Both parties took testimony and the Patent Office tribunals found that appellant adopted and had continuously used its mark from a date over a year and a half prior to the earliest date that appellee alleged adoption and use of its mark. This was conceded upon the argument of the case before us. The goods upon which the marks are used are identical and the only issue before us is whether or not the marks of the respective parties are confusingly similar within the meaning of section 5 of the Trade-mark Act of 1905. The Patent Office tribunals concurred in finding that they are not, and it was upon that ground that the opposition was dismissed.

The Commissioner in his decision affirming the decision of the Examiner said:

> The opposer has shown large expenditures in advertising, the creation of a large business in connection with which its mark has been used and, presumably, is in possession of a valuable good will as an asset to its business. It being the first in the field, doubts, if any exist, in accordance with the usual rule, must be resolved against the late comer.
>
> The specimens showing the actual use of the applicant's mark indicate the bathing suit to be of a different color from that adopted by the opposer. It is in evidence, however, that the applicant in some instances uses red or orange as the color of the bathing suit exhibited in its mark. The opposer usually employs red as the color of the swimming suit as well as the cap and stockings shown upon the figure. To this extent, there is some similarity in the two marks here under consideration. It must be noted that the respective representations of the figures in the two marks are quite dissimilar. There is nothing in the position of the figure of the applicant's mark which suggests the very unusual attitude or position of the figure of the opposer's mark. It may be truly said that both represent a diving girl but beyond this, except as to the color above noted, the similarity ends. Unless it can be held the opposer is entitled to the broadest possible interpretation of its trade-mark rights in connection with the representation of a female figure wearing a bathing suit and in the act of diving, or even in the position preliminary to making a dive, opposer can not succeed in the instant case. It is in evidence, applicant's record page 19 and Exhibits 7 to 13, that the pictorial representation of a girl clad in a swimming suit has been used by others before either of the instant parties entered the field. It may be said that such a representation could not be appropriated in any event as a trade mark for such goods since such a representation would be merely that of the goods themselves in the position in which they are ordinarily used and others engaged in this same business would have a right to so illustrate their goods. These facts, therefore, lead to the conclusion that the differences between the particular representations of the girls and their positions are such that confusion in trade would not be likely. Only in a broad sense can both marks be said to represent a diving girl since in one instance, that of the opposer, the girl is in the air, and in the other instance, that of the applicant, the girl is standing up upon the end of a plank or board.

Appellant contends that the Commissioner erred in refusing to give a broad interpretation of its trade-mark rights in connection with the representation of a female figure wearing a bathing suit and in the act of diving, and insists that, as it was first in the field to use a diving girl as a trade-mark for swimming suits, it is entitled to the exclusive use of such representation as a trade-mark for such merchandise. If appellant is correct in this contention, the decision of the Patent Office should be reversed.

The first question, therefore, is whether appellant is, as a matter of law, entitled to the broad interpretation which it claims for its trade-mark. It will be observed that its trade-mark consists of the figure of a girl in the posture heretofore stated, clad only in a swimming suit, with cap and stockings. Appellant concedes that appellee has the right to adopt as a trade-mark the figure of a girl upon which to illustrate its swimming suits, but contends that no figure of a diving girl can be lawfully so used because of its prior rights to the exclusive use of such figure.

We do not think that appellant has a right to monopolize the figure of a diving girl clad in a swimming suit. It is a well settled principle of trade-mark law that a mere representation of the merchandise on which the mark is used cannot be adopted as a trade-mark. *Bristol Co.* v. *Graham*, 199 F. 412; *Ex parte American Paint & Color Co.*, 4 T. M. Rep. 40.

The reason for this rule is that such a mark indicates nothing in the nature of origin or ownership of the articles to which it is affixed. In *Elgin National Watch Co.* v. *Illinois Watch Case Co.*, 179 U. S. 665, 94 O. G. 755, the court, discussing the nature of a trade-mark, said:

> The term has been in use from a very early date, and, generally speaking, means a distinctive mark of authenticity, through which the products of particular manufacturers or the vendible commodities of particular merchants may be distinguished from those of others. It may consist in any symbol or in any form of words, but as its office is to point out distinctively the origin or ownership of the articles to which it is affixed, it follows that no sign or form of words can be appropriated as a valid trade mark, which from the nature of the fact conveyed by its primary meaning, others may employ with equal truth, and with equal right, for the same purpose.

A representation of the goods themselves may, however, if incorporated with other features of a mark which are sufficiently arbitrary and distinctive as in themselves to indicate origin or ownership of the goods to which they are affixed, be adopted as a trade-mark.

An illustration of such a mark being allowed registration is found in *Ex parte Cooper Underwear Co.*, 130 Ms. Dec. 325, 9 T. M. Rep. 523, where the mark consisted of the representation of a woman sitting upon a couch, having a wrapper draped in such manner as to reveal in part the knitted underwear which she wears; a child, also dressed in knitted underwear, sitting beside her, while another, similarly clad, stands upon one foot on the opposite side. The woman is represented as reading from a book. The registration was allowed for use on woven and knitted underwear for men, women, and children, and for socks. The Commissioner of Patents in his decision said:

> If applicant's picture were merely a picture of its underwear, it would be clearly unregistrable. But it is an arbitrary, artistic arrangement of details in which the illustration of the goods is only one of many features. The couch, the woman reading from a book to the two children, convey an idea distinct from the underwear, and while any manufacturer is entitled to illustrate his underwear garments per se, he is not entitled to monopolize the arbitrary matter in applicant's picture, and there is enough of this matter to take this mark away from a mere representation of applicant's goods.

In *Ex parte Thompson Piano Mfg. Co.*, 130 Ms. Dec. 311, 9 T. M. Rep. 522, a representation of a grand piano and a woman standing by the piano polishing the same was granted registration as a trade-mark for furniture polish, the Commissioner of Patents holding that there was sufficient arbitrary matter to warrant allowance of the mark.

In *Ex parte Scholl Mfg. Co.* 130 Ms. Dec. 113, 9 T. M. Rep. 321, a mark for instep arch supports consisting of a perspective view of the underside of a foot supported on a mechanical arch, held in turn by a hand, was refused registration upon the ground that it was descriptive.

As heretofore observed, the swimming suits appearing upon appellant's and appellee's marks both cover approximately one-half of the respective figures of the girls. We think it is clear that the only ground upon which either is registrable is that it has such distinctive elements that its registration does not in fact preclude others manufacturing similar goods from illustrating the same upon girls in a diving, swimming, or any other general position in which a girl clad in a swimming suit would ordinarily be seen; the only limitation upon such manufacturer would be that he would have no right to illustrate swimming suits made by him upon the figure of a girl, employing in such representation arbitrary features which had theretofore been adopted by another as a trade-mark or so closely resembling the same as to cause confusion in the mind of the public.

We hold, therefore, that appellant's trade-mark rights are limited to the figure of a girl in substantially the position shown in its registered mark, and not to the figure of a diving girl generally.

We think that the representation of a diving girl wearing a swimming suit is generic in character, and the registration of such a representation as a trade-mark cannot exclude others from using any representation of a diving girl wearing a swimming suit, but only from using the representation of a diving girl in substantially the same position and posture as that shown by its mark. The test of similarity producing confusion is, therefore, not whether the two marks represent diving girls, but whether the appearance or position which gives to appellant's mark its exclusive right has been so nearly simulated by appellee in its mark as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers.

Applying this test to the two marks in issue, we are clear that the resemblance is not such as to prevent registration of appellee's mark. We think no purchaser would confuse the posture of a girl with arms and limbs extended, as in the act of diving through the air, with the posture of a girl standing on a diving board with her arms held back as if about to spring or dive into water. We may add that the diving board adds further distinctiveness to appellee's mark.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

BLAND, *J.* (dissenting):

I cannot agree either in the conclusion reached or the reasoning employed in the decision of the majority, for the reason, chiefly, that it permits the registration of appellee's trade-mark, when, to me, it is obvious that confusion, within the meaning of the trade-mark statute, will result. The opinion of the majority seems to rest chiefly upon the rights existing between the parties and takes no consideration of the public's rights with reference to confusion.

If the diving girl trade-mark of appellant is a valid one and entitled to registration, it would seem that appellee's trade-mark should not be registered for use on goods of the same descriptive properties, since the trade-marks so nearly resemble each other as to be likely to cause confusion or mistake in the mind of the public and will deceive purchasers. If the trade-mark of appellant is invalid, it ought not to have been registered, and of course the same applies to appellee's trade-mark which so nearly resembles it.

Furthermore, if the reasoning employed by the majority as to the scope of protection afforded to appellant for his trade-mark is conceded and if its validity is conceded, I would have to differ with the majority in the conclusion that "no purchaser would confuse the posture of a girl with arms and limbs extended, as in the act of diving through the air, with the posture of a girl standing on a diving board with her arms held back as if about to spring or dive into water." The ordinary purchaser of bathing suits, seeing a diving girl, clad in a bathing suit, in the act of diving, would hardly study the exact posture of the diving girl and compare it with the posture of another similar diving girl.

The effect of the majority holding will probably be that trade-marks of many different kinds, representing diving girls, in bathing suits, in slightly different postures, will be registered, resulting in conditions which Congress sought to prevent.

HATFIELD, *J.*, concurs in the dissenting opinion.

ON PETITION FOR REHEARING

LENROOT, *J.*:

On January 29, 1931, appellant filed a petition for rehearing in this case, which case was decided by

this court on January 12, 1931. The petition is based upon the alleged registration by appellant of the trade-marks "Diving Girl" and "Red Diving Girl", which trade-marks were not considered by us in our decision.

It is true that we did not consider said marks. The mark "Diving Girl" was not pleaded in the notice of opposition, although the mark "Red Diving Girl" was pleaded. Neither of said marks seems to have been considered by the Patent Office tribunals, although referred to as having been included in the notice of opposition. This is erroneous as to the mark "Diving Girl" because, as above stated, said mark was not pleaded in said notice. Representations of both of said marks are, however, found in the record.

In appellant's appeal to the Commissioner, no error was assigned with reference to the mark "Diving Girl", but error was assigned as to the mark "Red Diving Girl".

In the appeal to this court, the grounds for appeal are stated as follows:

1. That the First Assistant Commissioner erred in not sustaining the opposition;
2. That the First Assistant Commissioner erred in affirming the decision of the Examiner of Trade-Marks;
3. That the First Assistant Commissioner erred in holding that "the respective representations of the figures in the two marks are quite dissimilar."
4. That the First Assistant Commissioner erred in not finding that the opposer is entitled to the broadest possible interpretation of its trade-mark rights in connection with the representation of a female figure wearing a bathing suit and in the act of diving, or in the position preliminary to making a dive;
5. That the First Assistant Commissioner erred in finding "that confusion in trade would not be likely."

The first two grounds are general and cannot be considered by us. Section 4912 of the Revised Statutes requires a party appealing to this court to file with the Commissioner of the Patent Office his reasons for appeal. Certainly a general assignment that the Commissioner erred in his decision, without further specification, is not a compliance with the provisions of this section.

Therefore, the only reasons for appeal were those numbered 3, 4 and 5.

The third ground of appeal relates to the holding of the Commissioner that "the respective representations of the figures in the two marks are quite dissimilar." The fourth ground of appeal relates to the holding of the Commissioner with respect to appellant's trade-mark rights in connection with "the representation of a female figure wearing a bathing suit and in the act of diving, or in the position preliminary to making a dive." The fifth ground of appeal relates only to confusion in trade.

In appellant's brief, and upon oral argument, no reliance was placed by appellant's counsel upon the mark "Diving Girl" or "Red Diving Girl", but the argument was directed solely to marks representing a female figure wearing a bathing suit and in the act of diving.

Section 4914 of the Revised Statutes provides that the decision of this court shall be confined to the points set forth in the reasons of appeal.

As appellant's motion for rehearing is based upon points not set forth in its reasons of appeal, the motion is denied.

Denied.

BLAND, *J.* (dissenting):

I cannot agree to the additional opinion written by Judge Lenroot in this case. In the first place, I do not think the reasons sufficient for our failure to consider the question of confusion between appellee's mark and the mark "Diving Girl" and "Red Diving Girl" and especially should we consider the question with reference to the confusion which would result in view of the registered mark "Red Diving Girl." I believe, under the circumstances of this case, that the holding of the majority that the question is not raised by assignments 1 and 2 is unwarranted. In view of the fact that the mark "Red Diving Girl" was pleaded in the notice of opposition, is set out in the record, and was before the Commissioner, the same being referred to, by number, in the Commissioner's decision, we should have considered it. Since we failed to consider it and since it is probable that a different result would have been reached if we had considered it, a rehearing should be granted.

The fact that the majority feels it necessary to render an additional opinion will be taken as an indication that the court would not have arrived at the same conclusion if it had considered the two trade-marks "Diving Girl" and "Red Diving Girl." It seems to me that there is just as much likelihood of confusion between appellee's mark and the pictorial representation of a red diving girl as there would be between appellee's trade-mark and the trade-mark involving the words "Red Diving Girl." It is well-settled in *Sherwin-Williams Co. v. Naamlooze, etc.* 146 M. D. 460, 15 T. M. Rep. 270, that the word "Capitol" is to be given the same effect as the picture of the Capitol. To the same effect is *Ex parte Woolwine*, 97 O. G. 1373, in which the picture of a donkey and the word "Donkey" were involved. Certainly if an applicant is not permitted to register the word "Bear," he would not be entitled to register the picture of a bear. *Great Bear Spring Co. v. Bear Lithia Springs Co.*, 45 App. D. C. 305, 229 O. G. 613, 6 T. M. Rep. 430.

As above indicated, the additional opinion points to the weakness of the original opinion, that is to say, it seems obvious that confusion will result from the two red diving girl trade-marks, whether in pictures or words.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

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1,087,662, 1,612,510, L. R. Jorgensen, Dam construction, filed Feb. 14, 1931, D. C. Oreg. (Portland), Doc. E 9183, *Constant Angle Arch Dam Co. v. The Inland Power & Light Co. et al.*

1,089,405, W. S. Ferguson, Reenforced-concrete dock or pier, filed Feb. 27, 1931, D. C., W. D. N. Y., Doc. 480, *The Dock & Terminal Engineering Co. et al. v. Washburn Crosby Corp.* Doc. 481, *The Dock & Terminal Engineering Co. et al. v. Eastern Grain Elevator Corp. et al.* Doc. 482, *The Dock & Terminal Engineering Co. et al. v. Lake & Rail Warehouse & Elevator Corp. et al.* Doc. 483, *The Dock & Terminal Engineering Co. et al. v. Archer-Daniels-Midland Co. et al.* Doc. 484, *The Dock & Terminal Engineering Co. et al. v. American Elevator & Warehouse Co. et al.* Same, filed Feb. 28, 1931, D. C., W. D. N. Y., Doc. 485, *The Dock & Terminal Engineering Co. et al. v. Superior Elevator & Forwarding Corp.* Doc. 486, *The Dock & Terminal Engineering Co. et al. v. Spencer Kellogg & Sons, Inc.* Doc. 487, *The Dock & Terminal Engineering Co. et al. v. Marine Elevator Co.* Same, D. C., S. D. Ala. (Mobile), Doc. E 146, *The Dock & Terminal Engineering Co. et al. v. Alabama State Docks Commission et al.* Same filed Feb. 27, 1931, D. C., E. D. La. (Baton Rouge), Doc. 234, *The Dock & Terminal Engineering Co. et al. v. The City of Baton Rouge, La.* Same, D. C., E. D. La. (New Orleans), Doc. 20638, *The Dock & Terminal Engineering Co. et al. v. Board of Commissioners of Port of New Orleans, La.* Same, filed Mar. 2, 1931, D. C. Md., Doc. E 1842, *The Dock & Terminal Engineering Co. et al. v. B. & O. R. R. Co.* Same, D. C., E. D. Wis. (Milwaukee), Doc. 3129, *The Dock & Terminal Engineering Co. et al. v. Green Bay & Western R. R. Co. et al.* Same, filed Mar. 5, 1931, D. C., E. D. Mich., S. Div., Doc. 4889, *The Dock & Terminal Engineering Co. et al. v. Nicholson Universal Steamship Co.* Same, filed Mar. 2, 1931, D. C., S. D. Tex. (Houston), Doc. E 450. *The Dock & Terminal Engineering Co. et al. v. Houston Compress Co.* Doc. E 451, *The Dock & Terminal Engineering Co. et al. v. Manchester Terminal Co.* Doc. E 452, *The Dock & Terminal Engineering Co. et al. v. Texas & New Orleans Rwy. Co.* Same, filed Mar. 5, 1931, D. C., E. D. Wis. (Milwaukee), Doc. 3134, *The Dock & Terminal Engineering Co. et al. v. The C. Reiss Coal Co.* Doc. 3135, *The Dock & Terminal Engineering Co. et al. v. Chicago, Milwaukee, St. Paul & Pacific R. R. Co. et al.* Doc. 3136, *The Dock & Terminal Engineering Co. et al. v. Milwaukee Terminal Co.* Same, D. C., S. D. N. Y., Doc. E 58/239, *The Dock & Terminal Engineering Co. et al. v. Atmospheric Nitrogen Corp.* Same, D. C., E. D. Mich., S. Div., Doc. 4690, *The Dock & Terminal Engineering Co. et al. v. Ford Motor Co.* Same, filed Mar. 6, 1931, D. C., N. D. Ohio, E. Div., Doc. 3699, *The Dock & Terminal Engineering Co. et al. v. Universal Terminal Co.* Same, D. C., N. D. Ohio (Toledo), Doc. E 1143, *The Dock & Terminal Engineering Co. et al. v. The Toledo & Ohio Central Rwy. Co.* Same, filed Feb. 18, 1931, D. C., S. D. Calif., S. Div., Doc. 113–M, *The Dock & Terminal Engineering Co. et al. v. City of San Diego et al.* Same, filed Mar. 3, 1931, D. C., W. D. Wash., N. Div., Doc. 806, *The Dock & Terminal Engineering Co. et al. v. American Can Co. et al.* Same, filed Mar. 5, 1931, D. C., S. D. Tex. (Corpus Christi), Doc. E 47, *The Dock & Terminal Engineering Co. et al. v. Nueces Co. Navigation District.* Same, filed Mar. 6, 1931, D. C., W. D. N. Y., Doc. 506, *The Dock & Terminal Engineering Co. et al. v. Saskatchewan Pool Elevators, Ltd., et al.* Doc. 507, *The Dock & Terminal Engineering Co. et al. v. Terminals & Transportation Corp. of America et al.* Same, D. C., N. D. N. Y., Doc. 2152, *The Dock & Terminal Engineering Co. et al. v. Standard Oil Co. of New York.* Same, D. C., E. D. Mich., N. Div., Doc. 410, *The Dock & Terminal Engineering Co. et al. v. Chevrolet Motor Co,* Same, filed Mar. 2, 1931, D. C., N. D. Ind. (Hammond), Doc. E 317, *The Dock & Terminal Engineering Co. et al. v. The Youngstown Sheet & Tube Co.*

1,092,078, M. C. Overman, Vehicle tire; 1,723,435, same, Cushion tires, filed Feb. 27, 1931, D. C., S. D. N. Y., Doc. E 58/151, *Overman Cushion Tire Co., Inc., v. Firestone Tire & Rubber Co. et al.*

1,101,482, Bacon and Clark, Treatment of mineral oil; 1,131,309, same, Manufacture of gasoline; 1,334,731, R. F. Bacon et al., Apparatus for the manufacture of gasoline; 1,439,683, Bacon and Brooks, Manufacture of gasoline, D. C., E. D. Okla. (Muskogee), Doc. E 3456, *Gulf Refining Co. v. Pure Oil Co.* Dismissed Feb. 18, 1931. Same, D. C. Del., Doc. E 606, *Gulf Refining Co. v. American Refining Co., Inc.* Dismissed upon stipulation Feb. 19, 1931.

1,131,309. (See 1,101,482.)

1,156,122, J. C. Woodley, Fibrous composition and process of manufacture, C. C. A., 8th Cir. (St. Louis), Doc. 8907, *J. C. Woodley et al. v. The American Container Corp.* Decree affirmed Feb. 24, 1931.

1,177,774, F. H. Houghland, Folding box, D. C., S. D. N. Y., Doc. E 46/310, *C. A. Fox Box Co., Inc., v. Quick Service Box Co., Inc.* Dismissed for lack of prosecution Feb 28, 1931.

1,180,159. (See 1,018,502.)

1,184,189, G. Lockhart, Lock; 1,192,215, same, Door closing and locking device, filed Feb. 25, 1931. D. C., S. D. N. Y., Doc. E 58/135, *G. Lockhart v. The Interborough Rapid Transit Co.*

1,191,306, T. A. Hoover, Bumper for vehicles; 1,221,800, same, Automobile bumper; 1,576,043, 1,427,275, R. B. Fageol, same; 1,364,878, L. P. Halladay, Attachment for bumper support; 1,362,620, same, Truss spring bumper bar; 1,397,741, F. R. Procunier, Automobile Bumper; 1,198,246, G. A. Lyon, Buffer for motor vehicles, filed Feb. 14, 1931, D. C., S. Div. Ohio, (Dayton), Doc. E 286, *American Chain Co., Inc., v. J. Turner et al.*

1,192,215. (See 1,184,189.)

1,193,093, B. Weinberger, Garment-pressing machine; 1,326,982, J. B. Spencer, same, D. C. Del., Doc. E 664, *U. S. Hoffman Machinery Corp. v. Pantex Pressing Machine, Inc.* Dismissed upon mandate of circuit court of appeals, Feb. 26, 1931.

1,195,923, R. Gans, Softening of water, D. C., S. D. Ohio (Dayton), Doc. E-241, *The Permutit Co. v. The Monarch Engineering Co.* Consent decree Feb. 13, 1931.

1,198,246. (See 1,191,306.) 1,221,800. (See 1,191,306.)

1,230,715, R. M. Johnson, Motor-vehicle body, filed Mar. 2, 1931, D. C., S. D. N. Y., Doc. E 58/173, *R. M. Johnson v. Paramount Public Corp.*

1,271,529, M. C. Hopkins, Acoustic device, D. C. Minn. (St. Paul), Doc. E 1811, *Lektophone Corp. v. Wright-De Coster, Inc.* Dismissed without prejudice Feb. 24, 1931. Same, C. C. A., 2d Cir., Doc. —, *Lektophone Corp. v. Colonial Radio Corp.* Decree reversed on consent (Mar. 3, 1931).

1,294,672, O. E. Kellum, Method of producing assembled synchronous kinetograph and phonograph records, filed Feb. 24, 1931, D. C., S. D. Calif. (Los Angeles), Doc. 4415–J, *O. E. Kellum et al. v. Warner Bros. et al.*

1,320,384, Godbold and Fletcher, Drill cutter, filed Feb. 26, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E T–53–J, *Hughes Tool Co. v. Globe Oil Tools Co.*

1,326,982. (See 1,193,093.) 1,334,731. (See 1,101,482.)

1,343,927, C. Massatsch, Manufacture of purifying material, D. C., S. D. Ohio (Dayton), Doc. E 242, *The Permutit Co. v. The Monarch Engineering Co.* Patent held valid Feb. 13, 1931.

1,362,620. (See 1,191,306.) 1,364,878. (See 1,191,306.)

1,397,741. (See 1,191,306.) 1,427,275. (See 1,191,306.)

1,436,459, J. Reece, Seat cover, D. C., S. D. N. Y., Doc. E 58/104, *Evr-Klean Seat Pad Co. v. Cyclone Stores, Inc.* Consent decree for plaintiff Feb. 27, 1931. Doc. E 58/106, *Evr-Klean Seat Pad Co. v. A. Levene (Dorjan Auto Supply Co.).* Decree as above.

1,439,683. (See 1,101,482.)

1,497,293, J. Denaro, Automatic ice-cream-cone machine; 1,615,799, same, Automatic machine for making cup pastry, appeal filed Mar. 2, 1931, C. C. A., 4th Cir., Doc. 3151, *J. Denaro v. The Maryland Baking Co.*

1,554,898, A. F. Teigen, Tobacco pipe, D. C. Minn. (St. Paul), Doc. E 1263, *A. F. Teigen et al.* v. *United Cigar Stores Co. of America.* Dismissed Feb. 24, 1931.

1,558,644, T. L. Smith, Scale; 1,598,620, Rhodes and Hochriem, Coin-controlled gravity-operated ticket printing and delivering scale; 1,622,571, A. A. Caille, Weighing scale, D. C., S. D. N. Y., Doc. E 49/386, *Rhodes-Hochriem Mfg. Co.* v. *F. W. Woolworth & Co.* Consent order of discontinuance Feb. 27, 1931.

1,576,043. (See 1,191,306.)

1,594,047, E. F. Clark, Pocket cigar lighter, D. C., S. D. N. Y., Doc. E 48/381, *Clark Lighter Co., Inc.*, v. *United Cigar Stores Co.* Consent order of discontinuance Feb. 21, 1931.

1,598,620. (See 1,558,644.)

1,609,428, H. Ringel, Clothing receptacle, D. C., S. D. N. Y., Doc. E 46/305, *Connecters Paper Co.* v. *J. Goldman et al.* Dismissed for lack of prosecution Feb. 28, 1931.

1,611,444, D. M. Hepburn, Stone-asphalt road and method of preparing and laying same, filed Dec. 23, 1930, D. C., E. D. Mo. (St. Louis), Doc. 9319, *Amiesite Asphalt Co. of America* v. *Flinn Paving Co. et al.*

1,612,510. (See 1,087,662.) 1,615,799. (See 1,497,293.)

1,622,571. (See 1,558,644.)

1,626,474, S. Morrison, Double swinging mirror compact case, D. C., S. D. N. Y., Doc. E 46/204, *S. Morrison* v. *Pallas Mfg. Co., Inc.* Dismissed for lack of prosecution Feb. 28, 1931.

1,667,680, A. Sammartino, Ring, filed Mar. 3, 1931, D. C. R. I., Doc. 364, *A. Sammartino et al.* (*Sammartino Bros. Co.*) v. *P. Sammartino et al.* (*Sammartino & Sanchirico*).

1,692,372, H. A. Gardner, Treating artificial silk, filed Feb. 25, 1931, D. C. Del., Doc. E 863, *Tubize Chatillon Corp.* v. *Industrial Rayon Corp.*

1,723,435. (See 1,092,078.)

1,725,742, J. A. Singmaster, Artificial-silk filament and making same, filed Feb. 25, 1931, D. C. Del. Doc. E 864, *Tubize Chatillon Corp.* v. *Industrial Rayon Corp.*

1,733,451, A. E. Dixon, Lamp shade and process of making, filed Feb. 25, 1931, D. C., S. D. N. Y., Doc. E 58/136, *Rembrandt Lamp Corp.* v. *Illuminating Novelties Corp.*

1,749,734, T. J. Kelly, Netted cord fabric bag, D. C., N. D. Ga. (Atlanta), Doc. E 372, *Southern Brighton Mills* v. *American Mills Co.* Decree for plaintiff Feb. 24, 1931.

Re. 16,497, J. E. Caps, Water-softening apparatus, D. C., S. D. Ohio (Dayton), Doc. E 243, *The Permutit Co.* v. *The Monarch Engineering Co.* Patent held valid Feb. 13, 1931.

Re. 17,131, O. S. Caesar, Heating apparatus for automotive vehicle, D. C. Minn., 4th Div., Doc. E 1679, *Tropic-Aire, Inc.*, v. *United Motors Service, Inc.* Dismissed without prejudice Feb. 25, 1931.

Re. 17,955, F. A. Arbogast, Fish bait or lure, filed Mar. 2, 1931, D. C., N. D. Ohio (Cleveland), Doc. 3691, *F. A. Arbogast* v. *The Enterprise Mfg. Co.*

Des. 74,384, E. E. Nahon, Chair, D. C., S. D. N. Y., Doc. E 47/33, *E. E. Nahon et al.* v. *The Imperial Upholstering Corp.* Dismissed for lack of prosecution Feb. 28, 1931.

Des. 76,612, A. Von Frankenberg, Lamp, D. C., S. D. N. Y., Doc. E 48/341, *Frankart, Inc.*, v. *Berman Novelty Co., Inc., et al.* Patent held valid Feb. 24, 1931.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,433,102, L. B. Sperry, Turn indicator, decided April 17, 1931, claims 1, 5, 6, 7, 8, 11, 13, 16, and 17.

Pat. 1,632,562, W. G. E. Rolaff, Compressor, decided March 16, 1931, claims 7, 8, and 14.

Pat. 1,675,123, Metzger and Bauer, Method of and apparatus for fumigating, decided March 2, 1931, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, and 18.

Pat. 1,720,877, A. C. Baker, Rotary core barrel, decided March 11, 1931, claims 1 and 2.

Pat. 1,727,308, Denison and Cunningham, Heat regulating device, decided April 14, 1931, claims 20, 21, 22, 23, and 24.

Pat. 1,762,376, H. A. Anderson, Drink mixer, decided March 26, 1931, claims 2, 3, 4, and 10.

Interference Notices

U. S. PATENT OFFICE, *Washington, Apr. 14, 1931.*

George F. Colley, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications for patent of George F. Colley, 1284 Union Avenue, Los Angeles, Calif., and of Stephen Seth, 882 Park Avenue, Baltimore, Md., and counsel for Colley having stated that they do not know the present whereabouts of said Colley, notice is hereby given that unless said George F. Colley, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

THOMAS E. ROBERTSON,
Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 18, 1931.*

Loughlin & Company, their assigns or legal representatives, take notice:

An interference having been declared by this office between the application of M. M. Fleron & Son, Inc., 113 North Broad Street, Trenton, N. J., for registration of a trade-mark and trade-mark registered May 13, 1930, No. 270,829, to Loughlin & Company, 703 Mount Vernon Place, Washington, D. C., and a notice of such declaration sent by registered mail to said Loughlin & Company at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Loughlin & Company, their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, April 22, 1931.*

H. H. Palmer & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of John F. Jelke Company, Hillsboro and Northeastern R. R. Track, Hillsboro, Wisconsin, for registration of a trade-mark and trade-mark registered April 24, 1917, No. 776,354, to H. H. Palmer & Co., 45 Harrison Street, New York, N. Y., and the Office having failed to secure satisfactory service upon said H. H. Palmer & Co. at the said address, notice is hereby given that unless said H. H. Palmer & Co., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, MAY 5, 1931

[VOL. 406. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 309,276. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed Dec. 23, 1930.

TRIMENE BASE

No claim is made to the exclusive right to the use of the word "Base" except in the combination shown.

For Condensation Product of Formaldehyde and Ethylamine.

Claims use since Sept. 9, 1924.

Ser. No. 310,750. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England. Filed Feb. 5, 1931.

FIDENKA

For Imitation Straw and Imitation Horsehair Made of Cellulose.

Claims use since Aug. 17, 1929.

Ser. No. 311,769. AMHERST-LOGAN COUNTY COAL CORPORATION, doing business as The Amherst Coal Company, Charleston, W. Va. Filed Mar. 5, 1931.

CARBON HILL

For Coal.

Claims use since Oct. 1, 1925.

Ser. No. 312,601. ANNA C. DIETZ, doing business as Rex Modeling Clay Co., New York, N. Y. Filed Mar. 27, 1931.

MONOLITH

For Modeling Clay.

Claims use since 1915.

Ser. No. 312,645. THE M. A. HANNA COMPANY, Cleveland, Ohio. Filed Mar. 28, 1931.



For Hard Coal, Bituminous Coal and Coke.

Claims use since Jan. 13, 1931.

Ser. No. 312,646. THE M. A. HANNA COMPANY, Cleveland, Ohio. Filed Mar. 28, 1931.

MECHANO

For Hard Coal, Bituminous Coal and Coke.

Claims use since Jan. 13, 1931.

CLASS 2

Receptacles

Ser. No. 309,682. "GRIESOGEN" GRIESHEIMER AUTOGEN VERKAUFS-GESELLSCHAFT M. B. H., Frankfort-on-the-Main-Griesheim, Germany. Filed Jan. 7, 1931.



For Metal Gas Bottles, Flasks, Drums, and Tanks for Storing and Shipping Gases Under Pressure.
Claims use since June, 1927.

Ser. No. 312,072. JOSEPH VOLLAN, doing business as Vollan's, Chicago, Ill. Filed Mar. 12, 1931.



The word "Weight" is disclaimed apart from the other features of the mark shown in the drawing.
For Wooden Trays for General Home and Domestic Usage.
Claims use since December, 1930.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 311,970. PARAGON NOVELTY BAG CO., INC., New York and Newburgh, N. Y. Filed Mar. 10, 1931.



For Hand Bags, Billfolds, Wallets, and Purses.
Claims use since May, 1928.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 304,931. SOCIETE DES ETABLISSEMENTS EUGENE KOENIG (EUGENE KOENIG ET CIE., SOCIETE EN COMMANDITE PAR ACTIONS), Marseille, France. Filed Aug. 22, 1930.

CHEVRETTE

For Powder for Washing and Renewing Wash-Leather Gloves, Silk-Stockings, Blouses, Jumpers, Laces, Fine Woolens, and Other Articles of Washable Materials.
Claims use since June 12, 1924.

Ser. No. 305,751. GARDINER MANUFACTURING COMPANY, INC., Buffalo, N. Y. Filed Sept. 16, 1930.



For Washing Solution for Fabrics and for General Household Use.
Claims use since Apr. 1, 1920.

Ser. No. 306,750. TAR PRODUCTS CORPORATION, Providence, R. I. Filed Oct. 14, 1930.

HEXKLEEN

For Cleansing Preparations for Cement, Wood, Glass, Marble, or the Like.
Claims use since Sept. 17, 1930.

Ser. No. 310,022. MELICAN & COMPANY, Chicago, Ill. Filed Jan. 16, 1931.



The drawing is lined to indicate blue. The words "Vogue White Soap Flakes" are disclaimed apart from the mark as shown.
For Soap Flakes.
Claims use since Dec. 15, 1930.

Ser. No. 310,993. GORDON CORPORATION, LTD., Berkeley, Calif. Filed Feb. 12, 1931.

HALL MARK

For Soap, Washing Powder, and Other Cleaning Preparations Having a Soap Base.
Claims use since Feb. 15, 1930.

Ser. No. 310,996. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo. Filed Feb. 12, 1931.

LUST-O-WHITE

For Porcelain and Enamel Cleaning Compound.
Claims use since Mar. 15, 1930.

Ser. No. 311,202. RONUK, LIMITED, Portslade, near Brighton, England. Filed Feb. 18, 1931.

DIRSOF

For Detergent Preparations for General Cleaning Purposes.
Claims use since September, 1929.

Ser. No. 311,513. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Feb. 27, 1931. Under 10-year proviso.



Applicant makes no claim herein to the words "Family Soap" appearing on the drawing. The trade-mark is usually printed in blue on a white background.
For Soap.
Claims use since 1894.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 290,478. SCOTT & GILBERT CO., doing business as Lady Peggy, Inc., San Francisco, Calif. Filed Oct. 1, 1929.

Lady Peggy

For Lip Sticks, Rouge Compacts, Powder Compacts, Cold Creams, Vanishing Creams, Lemon Skin Creams, Lemon Skin Lotions, Brilliantines, Cleansing Creams, Liquid Shampoos, Face Powders, Talcum Powders, and Perfumes.
Claims use since May 1, 1928.

Ser. No. 298,092. EL ESTADO PRODUCTS COMPANY, Seattle, Wash. Filed Mar. 29, 1930.



The portrait appearing on the drawing is fanciful.
For Face Creme and Vanishing Creme.
Claims use since Mar. 20, 1930.

Ser. No. 304,842. THE PARIS HAIR TONIC COMPANY, SOCIEDAD ANONIMA, Mexico City, Mexico. Filed Aug. 7, 1930.

Bella Vista

For Hair-Curling Tonic.
Claims use since July 5, 1930.

Ser. No. 306,751. TAR PRODUCTS CORPORATION, Providence, R. I. Filed Oct. 14, 1930.

HEXIT

Applicant is the owner of registered Trade-Mark No. 215,895.
For Insecticides.
Claims use since Aug. 21, 1930.

Ser. No. 307,025. MATTIE D. WARDE, Philadelphia, Pa. Filed Oct. 21, 1930.

MATTIE D. WARDE'S
EXCELSIOR
PREPARATIONS

The word "Preparations" is disclaimed apart from the mark as shown on the drawing.
For Hair Tonic, a Salve for Straightening the Hair, Face Lotion, Foot Lotion, Face Cream.
Claims use since 1920.

Ser. No. 309,618. MARIA LAETITIA KEMPE HOMEYARD, doing business as The Mother Job Cure Laboratory and Liqufruta Laboratories, London, England. Filed Jan. 5, 1931.

LIQUFRUTA

For Proprietary Cough Medicine for Human Use.
Claims use since Oct. 17, 1902.

Ser. No. 310,027. RESEARCH FOUNDATION, INC., New York, N. Y. Filed Jan. 16, 1931.

ORA-GLO

For Tooth Powder, Dentifrices, and Mouth Wash.
Claims use since July 31, 1928.

Ser. No. 310,033. ALVA WIGGINS, Brookings, Oreg. Filed Jan. 16, 1931.

SWAMP TEA



The portrait appearing in the drawing is that of the applicant, and no claim being made to the words "Swamp Tea" apart from the mark shown on the drawing.
For Medicinal Tea for the Treatment of Kidney Disorders and Rheumatism.
Claims use since Nov. 26, 1930.

Ser. No. 310,058. LENTHERIC, INCORPORATED, New York, N. Y. Filed Jan. 17, 1931.

AU FIL DE L'EAU

For Perfumes, Toilet Waters, Eau de Cologne, Face and Scalp Lotions, Face Powders, Talcum Powders, Dusting Powders, Powder Compacts, Sachets, and Brilliantines.
Claims use since Nov. 21, 1924.

Ser. No. 310,381. C. E. JAMIESON, Detroit, Mich. Filed Jan. 26, 1931.

VIT-O-JAY

For Cod Liver Oil Preparation.
Claims use since Jan. 3, 1930.

Ser. No. 310,556. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Jan. 30, 1931.

Gardol

For Antiseptic and Germicide for Use as a Mouth Wash, Gargle, Deodorant, Nasal Spray, or Douche.
Claims use since Nov. 15, 1930.

Ser. No. 310,850. A. P. BABCOCK CO., New York, N. Y. Filed Feb. 9, 1931.

NUMEROLOGY

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Powders, Nail Creams, Nail Polishes, Nail Bleaches, Witch-Hazel, Peroxide, Petroleum Jellies, Witch-Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Jan. 8, 1931.

Ser. No. 310,998. HILLYARD CHEMICAL COMPANY, St. Joseph, Mo. Filed Feb. 12, 1931.

ODO-KAKES

The word "Kakes" is disclaimed apart from the mark as shown.
For Deodorizing Cakes.
Claims use since June 1, 1930.

Ser. No. 311,266. THE DENVER MUD COMPANY, INC., Denver, Colo. Filed Feb. 20, 1931.

Lady Mode



The Spirit of Beauty

The portrait appearing on the drawing is fanciful.
For Cosmetic Toilet Clay Preparation for the Aid of Beauty.
Claims use since Apr. 1, 1930.

Ser. No. 311,535. R R R CHEMICAL COMPANY, Rader, Tenn. Filed Feb. 27, 1931.

R·R·R

For Preparation for the Destruction of Rats and Mice.
Claims use since Jan. 5, 1931.

Ser. No. 311,593. ARMIN BARTELDES, Denver, Colo. Filed Mar. 2, 1931.

Journey's End

For Dandelion Killer Comprising a Chemical in Powdered Form.
Claims use since Jan. 13, 1931.

Ser. No. 311,610. IDEAL SUPPLY COMPANY, Chicago, Ill. Filed Mar. 2, 1931.

SAV-A-HOSE



No claim is made to the exclusive right to use the word "Hose" per se.
For Material for Toughening the Fibers of Natural and Artificial Silk.
Claims use since Feb. 23, 1931.

Ser. No. 311,727. HART DRUG CORPORATION, Miami, Fla. Filed Mar. 4, 1931.

EFEMIST

For Inhalants for the Relief of Infections of the Nasal Cavity.
Claims use since Nov. 17, 1930.

Ser. No. 311,745. R. C. McATEER COMPANY, Pittsburgh, Pa. Filed Mar. 4, 1931.



The drawing is lined for the colors yellow, green, and red. No claim is made for the words "Pure Food Tints" except in the relation shown.

For Food Tints.

Claims use since Jan. 26, 1931.

Ser. No. 311,765. MARTIN B. COVERT, doing business as Covite Manufacturing Company, Holland, Mich. Filed Mar. 2, 1931.

COVITE

For Liquid for Use in Conditioning Valves and Controlling Carbon in Internal Combustion Engines.

Claims use since Oct. 1, 1930.

Ser. No. 311,796. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y. Filed Mar. 5, 1931.



No claim is made to the printed language appearing on the drawing with the exception of the words "Flit" and "Stanco Incorporated." No claim is made to the representation of a label. The drawing is lined and shaded to indicate the colors red, yellow, and black. Applicant is the owner of registered Trade-Mark #215,833.

For Insecticides, Deodorants, and Disinfectants.

Claims use since May 25, 1928.

Ser. No. 311,826. ALBERT E. CONNELL, doing business as The Daker Chemical Company, Cleveland, Ohio. Filed Mar. 6, 1931.

CHOLECYSTDRAIN

For Therapeutic Solutions Used in the Treatment of the Biliary Tract.

Claims use since Feb. 21, 1931.

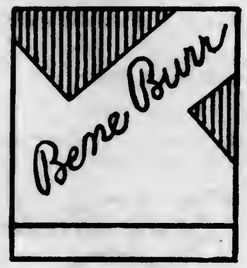
Ser. No. 311,849. WALTER H. SAMMONS, doing business as Samaco Chemical Company, Philadelphia, Pa. Filed Mar. 6, 1931.

GLYCAN

For Ointments for Relieving Muscular and Nerve Pain and Soreness and for Use as a Deodorant.

Claims use since July 15, 1930.

Ser. No. 311,938. SCRUGGS-VANDERVOORT-BARNEY, St. Louis, Mo. Filed Mar. 9, 1931.



For Complexion Powder, Cleansing Creme, Tissue Creme, Astringent Lotion, Skin Tonic, Foundation Creme for a Powder Base, Pore Paste to Reduce the Pores, Rouge, Lipstick, Depilatory, Bleaching Creme, Acne Creme, Acne Lotion, Muscle Oil, Liquefying Cream for the Face, Eye Wrinkle Lotion, Brilliantine, Liquid Base Powder, Face and Complexion Cream, Perfume Extract, Toilet Water, Talcum Powder, Sachet Powder, Bath Salt, Face and Complexion Lotion, Permanent Wave Oil, Compact Refills, Bath Dusting for the Skin After Bathing, Liquid Nail-Polish Remover, Shampoo, Hand Lotion, After Shaving Lotion, Lilac Vegetal, Bandoline, Deodorant, Hair Tonic, White Lip Pomade, Eye Brow Pencil, Dental Cream, Nail Polish, Preparation for Removing the Cuticle Around the Finger Nails.

Claims use since July, 1930.

Ser. No. 312,186. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Mar. 16, 1931.

Cicoral

For Stimulant in Cardiac and Respiratory Failure and for the Blood Circulation.

Claims use since Feb. 1, 1931.

Ser. No. 312,187. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Mar. 16, 1931.

Selarom

For General Antiseptic.

Claims use since Feb. 1, 1931.

Ser. No. 312,189. THE LEWY CHEMICAL COMPANY, New York, N. Y. Filed Mar. 16, 1931.

LIQUID FROST

For Insecticides.

Claims use since Jan. 15, 1931.

Ser. No. 312,195. MURRAY AND NICKELL MANUFACTURING COMPANY, Chicago, Ill. Filed Mar. 16, 1931.

MURNICK

For Henna, Quick Wave Set, and Wave Set Powder Compound.

Claims use since Mar. 10, 1931.

Ser. No. 312,202. CHESTER PAUL SHOUDY, Spokane, Wash. Filed Mar. 16, 1931.

SOLU DENT

For Dentifrices and Mouth Washes.

Claims use since Jan. 1, 1931.

Ser. No. 312,232. JOMOL PETROLEUM PRODUCTS, Philadelphia, Pa. Filed Mar. 17, 1931.

Jomolene

For Petroleum Jelly.

Claims use since Mar. 9, 1931.

Ser. No. 312,285. SUTLIFF & CASE CO., INC., Peoria, Ill. Filed Mar. 18, 1931.

A.-L.-A.

For Anesthetic.

Claims use since Feb. 2, 1931.

406 O. G.—2

Ser. No. 312,317. SOCIETE ANONYME JEAN PATOU, Paris, France. Filed Mar. 19, 1931.

Sex Appeal

For Perfume, Face and Skin Lotions, Sachets, Brilliantine, Bath Salts, Toilet Water, Face Powder, Rouge, Face Cream.

Claims use since Oct. 22, 1930.

Ser. No. 312,408. BONIDE CHEMICAL CO. INC., Utica, N. Y. Filed Mar. 23, 1931.

PIK-NIX

For Healing and Protective Ointment for External Use upon Poultry and a Repellent Against Poultry Cannibalism.

Claims use since Feb. 2, 1931.

Ser. No. 312,423. FRET CHEMICAL CO., Greensboro, N. C. Filed Mar. 23, 1931.

BABY'S FRET

No claim being made to the word "Baby's" except in the precise relation and association in which the same appears herein.

For Preparation for the Treatment of Disordered Conditions of the Stomach or Bowels, Teething Disorders, Indigestion, Nonassimilation, Diarrhea, and Ordinary Children's Ailments.

Claims use since Dec. 1, 1930.

Ser. No. 312,428. JAMES D. GREGG, doing business as Foster Chemical Co., Liberty, N. C. Filed Mar. 23, 1931.



For Powder for Use in the Treatment of Headache, Colds, and Neuralgia.

Claims use since May 1, 1930.

Ser. No. 312,531. RESEARCH PRODUCTS CORPORATION, New York, N. Y. Filed Mar. 25, 1931.

ABSOPUR

For Mercury.

Claims use since Mar. 24, 1931.

Ser. No. 312,560. GLADYS G. HARBIN, Atlanta, Ga. Filed Mar. 26, 1931.

HAPPY JOHN

For Dropsy Medicine.
Claims use since Mar. 9, 1931.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 312,548. COLT'S PATENT FIRE ARMS MANUFACTURING CO., Hartford, Conn. Filed Mar. 26, 1931.

MONITOR

For Rifles and Machine Guns.
Claims use since Mar. 23, 1931.

CLASS 11

Inks and Inking Materials

Ser. No. 312,580. THERMOGRAPHIC CORPORATION, New York, N. Y. Filed Mar. 26, 1931.

THERMO

For Printing Inks, Inks for Raised-Letter Printing, and Thermographic Compounds Used in the Production of Raised-Letter Printing.
Claims use since Jan. 17, 1931.

CLASS 12

Construction Materials

Ser. No. 308,425. CAMBRIDGE PLIABLE BRICK COMPANY, Cambridge, Ohio. Filed Nov. 29, 1930.

OX PLIABLE



The word "Pliable" is disclaimed apart from the mark shown in the drawing.
For Plastic Refractory Material for Boiler and Furnace Linings.
Claims use since Jan. 1, 1926.

Ser. No. 309,650. NORTH AMERICAN REFRACTORIES COMPANY, Cleveland, Ohio. Filed Jan. 6, 1931.

NARCOGRAIN

For Dry Fire Brick Material Used for Patching Furnace Walls.
Claims use since Oct. 23, 1930.

Ser. No. 311,063. KEYSTONE PORTLAND CEMENT COMPANY, Philadelphia, Pa. Filed Feb. 14, 1931.

VELROCA
(QUICK ROCK)

The words "Quick Rock" not being claimed apart from the mark as shown.
For Portland Cement.
Claims use since Feb. 2, 1931.

Ser. No. 311,318. H. BENUREAU, New York, N. Y. Filed Feb. 21, 1931.

H.B.
VAURION

For Building Stone Dressed and Ready for Use.
Claims use since Oct. 19, 1925.

Ser. No. 311,832. W. A. FINGLES, INC., Baltimore, Md. Filed Mar. 6, 1931.

MAJESTIC

For Certain Articles Used in Building Construction—to wit, Flashing and Skylights.
Claims use since Mar. 15, 1930.

Ser. No. 311,843. NATIONAL FIREPROOFING CORPORATION, Pittsburgh, Pa. Filed Mar. 6, 1931.

Segmentile

For Ceramic Structural Units.
Claims use since Mar. 1, 1930.

Ser. No. 311,963. THE M. W. KELLOGG COMPANY, New York, N. Y. Filed Mar. 10, 1931.

CASTIC

For Plastic Monolithic Refractories.
Claims use since Jan. 3, 1931.

Ser. No. 312,057. THE MAUL COMPANY, Detroit, Mich. Filed Mar. 12, 1931.

MACOTTA

For Concrete Units for Use in Buildings and Making Ornamental Walls.
Claims use since Jan. 23, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 296,388. BOHN ALUMINUM & BRASS CORPORATION, Detroit, Mich. Filed Feb. 24, 1930.

BOHN-ART

For Sink Fixtures.
Claims use since Aug. 1, 1929.

Ser. No. 303,240. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo. Filed July 7, 1930.



COLORADO NAIL-KIT

The drawing has been ruled to denote the colors yellow and red. No claim is made to the wording apart from the mark as shown.
For Nails, Tacks, Brads, and Staples.
Claims use since May 20, 1930.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 296,389. BOHN ALUMINUM & BRASS CORPORATION, Detroit, Mich. Filed Feb. 24, 1930.

BOHNALITE

For Nonferrous Castings and Forgings.
Claims use since Apr. 1, 1929.

Ser. No. 296,390. BOHN ALUMINUM & BRASS CORPORATION, Detroit, Mich. Filed Feb. 24, 1930.

B

For Nonferrous Castings and Forgings.
Claims use since Oct. 15, 1929.

Ser. No. 296,391. BOHN ALUMINUM & BRASS CORPORATION, Detroit, Mich. Filed Feb. 24, 1930.

BOHNOLLOY

For Nonferrous Castings and Forgings.
Claims use since Dec. 27, 1929.

Ser. No. 307,867. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Nov. 14, 1930.

ALCOA

For Aluminum Sand Mold and Permanent Mold Castings, Aluminum Billets and Ingots, Aluminum Forgings and Extruded Shapes, Aluminum Foil and Sheet, Aluminum Solder, and Granulated Aluminum.
Claims use since May 10, 1930.

Ser. No. 307,868. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Nov. 14, 1930.

ALCOA



For Aluminum Sand Mold and Permanent Mold Castings, Aluminum Billets and Ingots, Aluminum Forgings and Extruded Shapes, Aluminum Foil and Sheet, Aluminum Solder, and Granulated Aluminum.
Claims use since May 10, 1930.

Ser. No. 307,871. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Nov. 14, 1930.

ALCOA

For Blank Lithograph Plates.
Claims use since June 10, 1930.

Ser. No. 307,872. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Nov. 14, 1930.



For Blank Lithograph Plates.
Claims use since June 10, 1930.

Ser. No. 311,412. THE OHIO BRASS COMPANY, Mansfield, Ohio. Filed Feb. 24, 1931.

DURON

For Nonferrous Metals and Alloys Containing Copper and Silicon and for Rolled and Drawn Rods, Bars, and Wires.
Claims use since June 25, 1928.

Ser. No. 312,370. FIRTH-STERLING STEEL COMPANY, McKeesport, Pa. Filed Mar. 21, 1931.

NITRARD

For Metals Which Have Been or Are to Be Nitrided.
Claims use since Jan. 27, 1931.

CLASS 15

Oils and Greases

Ser. No. 310,104. CONTINENTAL OIL COMPANY, Ponca City, Okla. Filed Jan. 19, 1931.

GERMO

For Lubricating Oil.
Claims use since Aug. 27, 1930.

Ser. No. 310,107. CONTINENTAL OIL COMPANY, Ponca City, Okla. Filed Jan. 19, 1931.

GERMOLIND

For Lubricating Oil.
Claims use since Aug. 27, 1930.

Ser. No. 312,274. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Mar. 18, 1931.

ESSOLENE

For Refined, Semirefined, and Unrefined Oils Made From Petroleum Both with and without Admixture of Animal, Vegetable, or Mineral Substances for Illuminating, Burning, Power, Fuel, and Lubricating Purposes, and Lubricating Greases.
Claims use since Mar. 7, 1931.

Ser. No. 312,671. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Mar. 28, 1931.

ESSOLUBE

For Refined, Semirefined, and Unrefined Oils Made from Petroleum, Both with and without Admixture of Animal, Vegetable, or Mineral Substances, for Illuminating, Burning, Power, Fuel, and Lubricating Purposes, and Lubricating Greases.
Claims use since Mar. 9, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 310,667. TRUSCON STEEL COMPANY, doing business as The Truscon Laboratories, Hamtramck, Mich. Filed Feb. 2, 1931.

TITAN HIDE

For Double Strength White Paste Paint.
Claims use since June 30, 1930.

Ser. No. 310,668. TRUSCON STEEL COMPANY, doing business as The Truscon Laboratories, Hamtramck, Mich. Filed Feb. 2, 1931.

Tru-flo

For Ready Mixed Self-Leveling Flat Paint.
Claims use since June 30, 1930.

Ser. No. 311,219. ARMAND J. P. VANDERMYN, doing business as Vandermyn Paint Company, Pittsburgh, Pa. Filed Feb. 18, 1931.



No claim is made to the words "Basic," "Lead," "Chromate," "Magnetic," "Iron-Oxide," or "The Ideal Anti-Corrosive Paint" except in association with the word "Chromag" and accompanying Structural Representation.
For Ready-Mixed Paints, Varnishes, Paste Paints, and Lacquers.
Claims use since Nov. 15, 1930.

CLASS 17

Tobacco Products

Ser. No. 309,912. VERELLEN LIMITED, Antwerp, Belgium. Filed Jan. 13, 1931.

MELIOR

For Cigars, Cigarillos, Cigarettes, and Smoking Tobacco, Chewing Tobacco, and Snuff Tobacco.
Claims use since February, 1896.

Ser. No. 310,439. THE AMERICAN TOBACCO COMPANY, New York, N. Y. Filed Jan. 27, 1931.

PENN 5 No 1

Applicant is the owner of registration No. 36,841, dated July 30, 1901.
For Plug Tobacco.
Claims use since August, 1899.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 279,926. HUGO JUNKERS, Dessau, Germany. Filed Feb. 26, 1929.



For Automobiles, Motor Boats, Airships, Flying Machines, Gliders, Propellers; Radiators for Automobiles, Tractors, Motor Boats, and Flying Machines; Vehicle Fuel and Oil Tanks, Bearing Planes, Steering Devices, Landing Gear, Wheels, Floats, Runners, Tail Skid Spikes for Flying Machines, Trucks, Parachutes.
Claims use since May 28, 1924.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 307,245. JOHN A. ALEXANDER, New York, N. Y. Filed Oct. 28, 1930.



No claim is made to the words "Service on Sound" apart from the mark shown on the drawing.

For Short and Long Wave Receiving and Transmitting Radio and Wireless Television Instruments, Loud Speakers, Loud Speaker Units, Power Amplifying Units, Radio Tubes—Namely, Rectifying, Receiving, Amplifying, and Transmitting Tubes—Audio and Radio Transformers, Power and Line Transformers, Inductance Coils, Audio and Radio Frequency Choke Coils, Photo Electric Cells, Mercury Switches, Relays, High Intensity Lamps, Incandescent Lamps, Glow Tubes, Condensers, Microphones, Electrical Pick-Ups for Reproducing Sound from Phonograph Record Discs and from Photographic Motion Picture Films, Storage Batteries, "B" Batteries, Dynamotors, Generators, Motors, Current Converters, Variable Resistances.

Claims use since November, 1929.

Ser. No. 307,873. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Nov. 14, 1930.

ALCOA

For Aluminum Cable, Steel-Reinforced Aluminum Cable and Condenser Blades, All for Electrical Use.

Claims use since Apr. 20, 1930.

Ser. No. 307,874. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Nov. 14, 1930.

ALCOA



For Aluminum Cable, Steel-Reinforced Aluminum Cable and Condenser Blades, All for Electrical Use.

Claims use since Apr. 20, 1930.

Ser. No. 311,227. BUTLER-KOHAUS, INC., St. Louis, Mo. Filed Feb. 19, 1931.

CANDYLBEME

For Incandescent Electric Lamp Bulbs.

Claims use since Jan. 1, 1931.

Ser. No. 311,233. DELCO RADIO CORPORATION, Dayton, Ohio. Filed Feb. 19, 1931.

DELCO

For Radio Receiving Sets and Parts Thereof.

Claims use since Sept. 1, 1930.

Ser. No. 311,254. CORNISH WIRE COMPANY, INCORPORATED, New York, N. Y. Filed Feb. 19, 1931.

PARALAC

For Insulated Wire, Insulated Copper Wire, and Other Types of Wire for Electrical Use.

Claims use since Mar. 1, 1930.

Ser. No. 311,372. THE ELECTRIC EQUIPMENT CORPORATION, Davenport, Iowa. Filed Feb. 24, 1931.

HELP

Home Electric Light Power

TRADE MARK

APPLIANCES

In this application no claim is made to exclusive rights to the words "Home," "Electric," "Light," "Power," "Trade Mark" and "Appliances" apart from their use in the mark disclosed.

For Electric Appliances—Namely, Electric Light Plants for Homes and Farms, Batteries, Pumps, and Vacuum Cleaners.

Claims use since Jan. 16, 1931.

Ser. No. 312,183. JACK GLASSBERG, doing business as Universal Distributing Co., Newark, N. J. Filed Mar. 16, 1931.



For Photographic Flash Lamps.

Claims use since Jan. 2, 1931.

Ser. No. 312,230. ISOLANTITE COMPANY OF AMERICA, INC., Belleville, N. J. Filed Mar. 17, 1931.

CERRISO

For Ceramic Insulators.

Claims use since Feb. 4, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 276,105. CHAS. A. STEVENS & BROS., Chicago, Ill. Filed Nov. 30, 1928.

PERSONAL

PERIOD

For Playing Cards.

Claims use since November, 1925.

Ser. No. 306,114. JACK WHITE GOLF COMPANY LIMITED, London, England. Filed Sept. 26, 1930.

Jack White

The trade-mark is the signature of Jack White.

For Golf Balls, Golf Clubs, Golf Irons, Golf Tees, and Golf Bags.

Claims use since Mar. 17, 1925.

Ser. No. 306,589. AIR-O-SWING CO. INC., Seattle, Wash. Filed Oct. 10, 1930.

AIR-O-SWING

Applicant disclaims the right to the exclusive use of the word "Swing" apart from the trade-mark as shown in the drawing. The drawing is lined for red.

For Toy Swings.

Claims use since December, 1929.

Ser. No. 309,611. GREEN CADDIE CORPORATION, Detroit, Mich. Filed Jan. 5, 1931.

GREEN CADDIE

For Golf Tees.

Claims use since Sept. 15, 1930.

Ser. No. 310,026. CHARLES A. REAM, Lancaster, Pa. Filed Jan. 16, 1931.

Scot---Tee

Gof

The term "Tee" is hereby disclaimed apart from the mark shown.

For Golf Game Boards.

Claims use since Nov. 28, 1930.

Ser. No. 311,344. SHOE FORM CO., INC., Auburn, N. Y. Filed Feb. 21, 1931.

Skipper Craft

No registration rights are claimed for the word "Craft" apart from the mark shown in the drawing.

For Toy Boats.

Claims use since Jan. 30, 1931.

Ser. No. 312,248. PARKER BROTHERS INC., Salem, Mass. Filed Mar. 17, 1931.

SUNK

For Board Game Played on Charts with Movable Pieces.

Claims use since Feb. 28, 1931.

Ser. No. 312,288. GEO. BORGFELDT & CO., New York, N. Y. Filed Mar. 19, 1931.

BABYKINS

For Dolls.

Claims use since Jan. 23, 1931.

Ser. No. 312,518. MEYER GOLDMAN, Philadelphia, Pa. Filed Mar. 25, 1931.



For Apparel for Dolls.

Claims use since August, 1925.

Ser. No. 312,622. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass. Filed Mar. 27, 1931.

RUMBA

For Card Game.
Claims use since Mar. 23, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 276,896. NATIONAL LABELING MACHINE CO., INC., Long Island City, N. Y. Filed Dec. 18, 1928.

NATIONAL MIDGET LABELER

No claim is made to the exclusive use of the words "Midget" and "Labeler" apart from the trade-mark shown on the drawing.
For Machines for Applying Labels to the Body of Bottles and the Like.
Claims use since Feb. 16, 1921.

Ser. No. 306,073. CHARLES W. STRATFORD, doing business as Stratford Engineering Company, Kansas City, Mo. Filed Sept. 25, 1930.

STRATCO

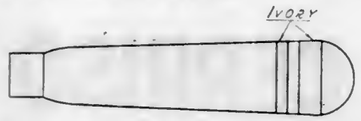
For Petroleum Refining Equipment—Namely, Contactors, Level Controls, Mechanical Valves, and Complete Acid Treating Plants for Petroleum Products.
Claims use since Oct. 26, 1928.

Ser. No. 307,953. PYOTT FOUNDRY & MACHINE CO., Chicago, Ill. Filed Nov. 15, 1930.

PYOTT VEE TEX DRIVE CHICAGO, ILL. U.S.A.

Applicant disclaims the words "Drive," "Chicago, Ill. U. S. A." and the representation of the goods apart from the mark shown in the drawing.
For Power Transmission Machinery Comprising Driven and Driver Grooved Sheaves and Endless V-shaped Belts.
Claims use since Sept. 29, 1930.

Ser. No. 309,160. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed Dec. 19, 1930.



The trade-mark consists in a relatively wide and a relatively narrow ivory colored band in spaced relation around the handle of the goods and near the free end thereof as indicated in the drawing. The representation of the handle and the legend word "Ivory" together with the lead lines shown in the drawing are disclaimed.
For Kitchen Tools and Utensils—Namely, Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Greasers for Pans, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grapefruit Knives, Egg Beaters, Egg Beaters and Covers, Egg Beaters, Covers and Bowls (Sets), Egg Beaters and Pitcher Sets, Rolling Pins, Dough Cutters, and Mechanical Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 312,082. AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y. Filed Mar. 13, 1931.

MIKE

For Razors and Blades Therefor.
Claims use since November, 1930.

Ser. No. 312,404. ALLIED PRINTING AND BINDING MACHINERY, INC., Cleveland, Ohio. Filed Mar. 23, 1931.

ALLIED

The lining is used in the drawing to indicate the color red.
For Paper Folding Machines and Sealing Machines for Placing Seals on Mailing Pieces.
Claims use since Feb. 17, 1931.

Ser. No. 312,511. THE COLLINS COMPANY, Collinsville, Conn. Filed Mar. 25, 1931.



Exclusive use of all the wording shown in the drawing with the exception of the words "El Luchador" is disclaimed apart from the mark shown in the drawing. No claim is made to the representation of the label per se.
For Axes and Machetes.
Claims use since Jan. 1, 1928.

Ser. No. 312,563. INTERNATIONAL SAFETY RAZOR CORP., Bloomfield, N. J. Filed Mar. 26, 1931.

CORONA

For Razor Blades.
Claims use since Mar. 4, 1931.

Ser. No. 312,564. INTERNATIONAL SAFETY RAZOR CORP., Bloomfield, N. J. Filed Mar. 26, 1931.

SPEEDOX

For Razors and Razor Blades.
Claims use since Mar. 13, 1931.

CLASS 25

Locks and Safes

Ser. No. 311,782. INDEPENDENT LOCK COMPANY, Fitchburg, Mass. Filed Mar. 5, 1931.

Black Knight

For Padlocks.
Claims use since Apr. 15, 1930.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 279,929. HUGO JUNKERS, Dessau, Germany. Filed Feb. 26, 1929.



For Altimeters, Instruments for Determining the Travel and Relative Position of Aircraft in the Air, Electrical and Optical Drift Meters, Instruments for Taking Bearings, Induction and Gyroscopic Compasses, Inclinometers, Optical and Acoustic Signalling Apparatus, Speedometers, Testing Instruments for Spark Plugs and Wiring, Static Pressure Meters, Gauges, Revolution and Torque Meters, Accelerometers, Elongation Meters, Dynamometers, Manometers, Power Meters, Universal Inclinometers, Flow Meters, Thermometers, Calorimeters, Gasmeters, Thermostats.
Claims use since May 28, 1924.

Ser. No. 310,818. DIAMOND POWER SPECIALTY CORPORATION, Detroit, Mich. Filed Feb. 6, 1931.



For Gauge Glasses, Water Columns, and Water Gauges.
Claims use since July 2, 1930.

Ser. No. 311,940. TIRE SAVERS CORPORATION, LTD., San Jose, Calif. Filed Mar. 9, 1931.

TIRE SAVERS

For Pressure Gauges for Pneumatic Tires.
Claims use since Dec. 1, 1930.

Ser. No. 312,555. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Mar. 26, 1931.

VERICHROME

For Photographic Film.
Claims use since Feb. 19, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 311,469. COHN & ROSENBERGER, INC., New York, N. Y. Filed Feb. 26, 1931.

"FASHION SQUARE"

For Pearls, Necklaces, Bracelets, Earrings, Finger Rings, Brooches, Barpins, and Ornamental Hatpins; and Pins for Dress Ornaments, Ornamental Pins and Buckles for Decorating Hats, Ornamental Shoe Buckles, and Hair Ornaments, Made Wholly or in Part of or Plated with Precious Metal.
Claims use since Feb. 10, 1931.

Ser. No. 311,744. MAYBAUM BROTHERS, INC., New York, N. Y. Filed Mar. 4, 1931.

AT-A-TIME

For Pearls and Precious Stones (Real or Imitation), Set and/or Unset; Articles of Jewelry Consisting of Necklaces, Bracelets, Earrings, Pins, and Finger Rings.
Claims use since Apr. 17, 1925.

Ser. No. 312,052. KAPPA DELTA PI, Tiffin, Ohio. Filed Mar. 12, 1931.

K
A
Π

For Keys and Badges All Made or Plated with Precious Metal.
Claims use since Mar. 20, 1920.

CLASS 31

Filters and Refrigerators

Ser. No. 311,883. NORGE CORPORATION, Detroit, Mich. Filed Mar. 7, 1931.

WATERVOIR

For Water Coolers.
Claims use since Feb. 1, 1931.

Ser. No. 312,774. REFRIGERATION CORPORATION OF MARYLAND, Baltimore, Md. Filed Mar. 31, 1931.

RECO

For Refrigerating Cabinets of the Indirect Refrigeration Type.
Claims use since September, 1929.

CLASS 32

Furniture and Upholstery

Ser. No. 311,319. BILTWELL CHAIR AND FURNITURE COMPANY, doing business as Ko-Rect Posture Chair Company, Denton, N. C. Filed Feb. 21, 1931.

Ko-Rect



Applicant disclaims the right to the exclusive use of the representation of a chair shown in the drawing.
For Chairs for Household and Office Use.
Claims use since Feb. 3, 1931.

CLASS 33

Glassware

Ser. No. 307,209. LIBBEY-OWENS-FORD GLASS COMPANY, Toledo, Ohio. Filed Oct. 27, 1930.



For Sheet Glass—Namely, Window Glass, Plate Glass, Laminated Glass, Ground Glass, Wire Glass, Ribbed Glass, Transparent Glass, Translucent Glass, and Opaque Glass.
Claims use since Aug. 7, 1930.

Ser. No. 310,661. RÖHM & HAAS COMPANY, Philadelphia, Pa. Filed Feb. 2, 1931.

LUGLAS

For Unsplinterable Glass.
Claims use since Jan. 10, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 311,475. GILBERT & BARKER MANUFACTURING COMPANY, West Springfield, Mass. Filed Feb. 26, 1931.

FLEXIBLE FLAME

For Oil Burners.
Claims use since July 22, 1930.

Ser. No. 312,351. CHARLES TISCH, INC., Brooklyn, N. Y. Filed Mar. 20, 1931.

LAFAYETTE

For Cabinet Gas Ranges, Gas Cookers, Combination Coal and Gas Ranges, Warm Air Furnaces, Coal Fire Water Heaters, and Coal Ranges.
Claims use since March, 1925.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 312,144. MARSHALL FIELD & COMPANY, Chicago, Ill. Filed Mar. 14, 1931.

Community

For Rubber Tires and Tubes for Automobiles, Automobile Trucks, and Trailers.
Claims use since Jan. 20, 1931.

Ser. No. 312,146. MARSHALL FIELD & COMPANY, Chicago, Ill. Filed Mar. 14, 1931.

VALIANT

For Rubber Tires and Tubes for Automobiles, Automobile Trucks, and Trailers.
Claims use since Jan. 20, 1931.

Ser. No. 312,572. THE RUSSELL MANUFACTURING COMPANY, Middletown, Conn. Filed Mar. 26, 1931.

KONTAK

For Brake Lining.
Claims use since Dec. 27, 1930.

CLASS 36

Musical Instruments and Supplies

Ser. No. 310,591. S. S. KRESGE COMPANY, Detroit, Mich. Filed Jan. 30, 1931.

"Contest"

For Mouth Harmonicas.
Claims use since Jan. 16, 1931.

CLASS 37

Paper and Stationery

Ser. No. 292,009. PRECISION ELECTROTYPE COMPANY, San Francisco, Calif. Filed Nov. 4, 1929.



For Rubber and Brass Stamps and Brands.
Claims use since Oct. 4, 1929.

Ser. No. 311,839. A. L. KRAEMER CO., Chicago, Ill. Filed Mar. 6, 1931.

KRACO SCHOOLRITE

For School Papers of All Kinds—Namely, Writing Paper, School Tablets, Writing Pads, and Ledger, Bond, Millboard, Bristol, Blotting, Printing, Cover, Typewriter, Wrapping, Mimeograph, and Tissue Paper, and Correspondence and Mailing Envelopes, Record Books, Cards, and Binders.
Claims use since Feb. 1, 1929.

Ser. No. 312,096. DERMAY PERFUMERS, INC., New York, N. Y. Filed Mar. 13, 1931.

Dermex

For Cleansing Tissue Papers.
Claims use since Feb. 1, 1931.

Ser. No. 312,111. MODERN TISSUES CORPORATION, doing business as Antoinette Doré, New York, N. Y. Filed Mar. 13, 1931.



For Toilet Paper.
Claims use since May 1, 1929.

Ser. No. 312,237. PHILLIPS RIBBON & CARBON CO., INC., Rochester, N. Y. Filed Mar. 17, 1931.

LINE - O - GRAPH

For Carbon and Copy Sheet Holder.
Claims use since Oct. 17, 1930.

Ser. No. 312,352. THE TISSUE COMPANY, Saugerties, N. Y. Filed Mar. 20, 1931.

TISLYN

For Paper Napkins and Handkerchiefs.
Claims use since Aug. 1, 1930.

Ser. No. 312,411. THE CHATFIELD PAPER CORPORATION, Cincinnati, Ohio. Filed Mar. 23, 1931.

TORORAP

For Butchers' Wrapping Paper.
Claims use since Mar. 14, 1931.

CLASS 38

Prints and Publications

Ser. No. 311,719. CHARLES BRUNINO COMPANY, INC., New York, N. Y. Filed Mar. 4, 1931.

GIANT PHOTO PRINTS

The words "Photo-Prints" are disclaimed apart from the mark shown in the drawing.
For Photo Prints, Photostats, and Photographic Reproductions.
Claims use since Jan. 15, 1931.

Ser. No. 311,924. NATIONAL PETROLEUM PUBLISHING COMPANY, Cleveland, Ohio. Filed Mar. 9, 1931.

INTERNATIONAL
PETROLEUM
TECHNOLOGY

The lining displayed in the drawing is merely for purposes of shading.
For Monthly Periodical.
Claims use since Feb. 18, 1931.

Ser. No. 312,270. O. M. SCOTT & SONS COMPANY, Marysville, Ohio. Filed Mar. 18, 1913.

Lawn Care

For House Organs.
Claims use since August, 1928.

Ser. No. 312,386. PRESS PUBLISHING COMPANY, New York, N. Y. Filed Mar. 21, 1931.

DIVOT DIGGERS

For Comic Strip or Section for Newspaper Publication.
Claims use since Apr. 23, 1928.

Ser. No. 312,418. THE CROWELL PUBLISHING COMPANY, New York, N. Y. Filed Mar. 23, 1931.



"DOLLAR BILL"

For Monthly Magazine.
Claims use since Mar. 3, 1931.

Ser. No. 312,480. THE CURTIS PUBLISHING COMPANY, Philadelphia, Pa. Filed Mar. 24, 1931.

CURTIS NEWS

For House Organs Published Monthly.
Claims use since Dec. 14, 1930.

Ser. No. 312,481. THE CURTIS PUBLISHING COMPANY, Philadelphia, Pa. Filed Mar. 24, 1931.

GIRLS' CLUB CHAT

For House Organs Published Monthly.
Claims use since Dec. 14, 1930.

Ser. No. 312,663. PARADE, INCORPORATED, Cleveland, Ohio. Filed Mar. 28, 1931.

PARADE

For Weekly Magazine.
Claims use since Mar. 26, 1931.

CLASS 39

Clothing

Ser. No. 305,257. WEIL CLOTHING CO., St. Louis, Mo. Filed Sept. 2, 1930.

Ramsworth

For Wearing Apparel—Namely, Men's and Boys' Suits, Overcoats, Topcoats, Pants, and Trousers.
Claims use since Aug. 15, 1930.

Ser. No. 306,651. THEODORE KOTZIN, Los Angeles, Calif. Filed Oct. 11, 1930.

Stay-put
Knickers

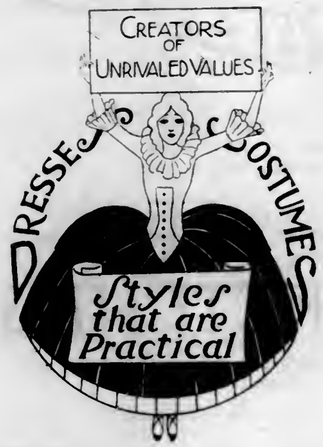
The word "Knickers" being disclaimed apart from the mark shown.
For Knickers for Men, Women, and Children.
Claims use since June 1, 1929.

Ser. No. 307,928. HERMAN DAVID, doing business as The R. Stern Company, New York, N. Y. Filed Nov. 15, 1930.

Da Vido

For Men's, Women's, and Children's Shoes, Sandals, and Slippers Made in Whole or in Part of Leather or of Leather and Fabric.
Claims use since Sept. 16, 1930.

Ser. No. 309,236. JOSEPH H. SCHARF, doing business as Essanay Dress Company, New York, N. Y. Filed Dec. 22, 1930.



The descriptive terms "Creators of Unrivaled Values," "Dresses," "Costumes," and "Styles That are Practical" are hereby disclaimed by the applicant apart from the mark shown on the drawing.
For Misses' Dresses.
Claims use since Jan. 2, 1917.

Ser. No. 310,434. MCCREERY MANUFACTURING COMPANY, Portland, Oreg. Filed Jan. 27, 1931.



For Union Suit Under Garments for Use of Men and Made of Rayon Fabric.
Claims use since Mar. 1, 1930.

Ser. No. 310,648. THE LIMA CORD SOLE AND HEEL COMPANY, Lima, Ohio. Filed Feb. 2, 1931.

RAW-CORD
BY
GRO CORD

No claim being made to the exclusive right to the use of the words "Raw-Cord" and/or the word "Cord" apart from the mark shown in the drawing.
For Soles Made or Formed of a Combination of Rubber and Fabric for Shoes.
Claims use since October, 1930.

Ser. No. 310,649. THE LIMA CORD SOLE AND HEEL COMPANY, Lima, Ohio. Filed Feb. 2, 1931.

CORDED-CREPE
BY
GRO CORD

No claim being made to the exclusive right to the use of the words "Corded-Crepe" and/or the word "Cord" apart from the mark shown in the drawing.
For Soles Made or Formed of a Combination of Rubber and Fabric for Shoes.
Claims use since October, 1930.

Ser. No. 310,940. WM. HAHN & COMPANY, Washington, D. C. Filed Feb. 11, 1931.

"Fit and keep you Fit"

Applicant disclaims the word "Fit" independently of the mark shown.
For Leather Shoes.
Claims use since Sept. 30, 1930.

Ser. No. 311,325. ALFRED DECKER & COHN, INC., Chicago, Ill. Filed Feb. 21, 1931.

STAUNCHLEY YEAROUND

For Overcoats for Men and Men's Suits, Including Coats, Vests, and Knickerbockers.
Claims use since Feb. 1, 1931.

Ser. No. 311,927. PROPPER-MCCALLUM HOSIERY CO., INC., New York, N. Y. Filed Mar. 9, 1931.

"Tango-Foot"

For Hosiery.
Claims use since January, 1931.

Ser. No. 311,968. MELVILLE SHOE CORPORATION, New York, N. Y. Filed Mar. 10, 1931.

BONDTWIST

For Hosiery.
Claims use since Feb. 6, 1931.

Ser. No. 311,971. PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Filed Mar. 10, 1931.

The Basque

The lining on the drawing is to indicate the color red. No claim is made to the name "Basque" appearing on the drawing apart from the mark as shown.
For Apparel Belts, Suspenders, Braces, and Garters.
Claims use since Jan. 2, 1931.

Ser. No. 311,972. PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Filed Mar. 10, 1931.

The Chami-Suede

The lining on the drawing is to indicate the color red. No claim is made to the wording appearing on the drawing apart from the mark as shown.
For Apparel Belts, Suspenders, Braces, and Garters.
Claims use since Jan. 2, 1931.

Ser. No. 311,973. PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Filed Mar. 10, 1931.

The Leonardo

The lining on the drawing is to indicate the color red.
For Apparel Belts, Suspenders, Braces, and Garters.
Claims use since Jan. 2, 1931.

Ser. No. 311,974. PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Filed Mar. 10, 1931.

The Checquers

The lining on the drawing is to indicate the color red.
For Apparel Belts, Suspenders, Braces, and Garters.
Claims use since Jan. 2, 1931.

Ser. No. 311,975. PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Filed Mar. 10, 1931.

The Londoner

The lining on the drawing is to indicate the color red.
For Apparel Belts, Suspenders, Braces, and Garters.
Claims use since Jan. 2, 1931.

Ser. No. 311,994. BETHLEHEM TEXTILES COMPANY, Bethlehem, Pa. Filed Mar. 11, 1931.

Amplette

For Women's Bloomers Made of Silk, Rayon, Cotton, Wool, and Mixed Silk and Rayon, and Either Silk or Rayon Mixed with Either Cotton or Wool.
Claims use since Jan. 15, 1931.

Ser. No. 312,045. ELY & WALKER DRY GOODS COMPANY, St. Louis, Mo. Filed Mar. 12, 1931.

RITZY MAID

For Ladies', Misses', and Children's Woven and Knitted Underwear of Silk, Rayon, Cotton, Wool, or Combinations Thereof.
Claims use since Sept. 1, 1930.

Ser. No. 312,113. THE MUNSINGWEAR CORPORATION, Minneapolis, Minn. Filed Mar. 13, 1931.

"SKETCHIES"

For Women's and Misses' Underwear.
Claims use since Jan. 25, 1931.

Ser. No. 312,155. LOWELL MILLS COMPANY, Lowell, Mass. Filed Mar. 14, 1931.

LASTIGART

For Hosiery.
Claims use since Feb. 27, 1931.

Ser. No. 312,304. CAMPBELL E. MILLER, Butler, Pa. Filed Mar. 19, 1931.



For Shoes, Made of Leather, Canvas, Rubber, Cloth, or Combinations Thereof.
Claims use since Dec. 15, 1930.

Ser. No. 312,344. S. H. KRESS & CO., New York, N. Y. Filed Mar. 20, 1931.



For Men's Garters.
Claims use since January, 1925.

Ser. No. 312,415. COHEN, GOLDMAN & CO. INC., New York, N. Y. Filed Mar. 23, 1931.



No claim is made to the exclusive use of the words, "The Fabric of Style & Comfort," "Trade Mark" separate and apart from the mark as shown on the drawing.
For Men's, Boys', and Children's Outer Garments, Consisting of Coats, Vests, Pants, Overcoats, Raincoats, Dusters, Mackinaws, Ulsters, Smoking Jackets, Automobile Coats, Bathwraps; Men's Dress, Negligee, and Work Shirts; Men's, Women's, and Children's Underwear Made of Knitted, Netted, and Textile Fabrics; and Uppers for Shoes.
Claims use since Oct. 1, 1914.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 311,036. H. GOODMAN & SONS, INC., New York, N. Y. Filed Feb. 16, 1931.

TRIDENT

For Non-Electrical Hair Wavers, Non-Electrical Hair Curlers and Hair Pins, Made of Non-Precious Metal.
Claims use since June 24, 1930.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 303,946. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England. Filed July 29, 1930.

FIDENKA

For Piece Goods Made of Cellulose.
Claims use since Aug. 17, 1929.

Ser. No. 308,149. WATERHOUSE WOOLEN COMPANY, Chicago, Ill. Filed Nov. 20, 1930.

GLENMOOR

For Unfinished Worsted Woolen Cloth in the Piece for Men's Suitings.
Claims use since Jan. 1, 1928.

Ser. No. 309,459. CARLISLE RIBBON MILLS, INC., Paterson, N. J. Filed Dec. 30, 1930.

666 COLSILKS PRODUCTS

Registration of the word "Products" is not claimed apart from the mark shown.
For Silk Warp Belting Ribbon in the Piece or Bolt.
Claims use since Dec. 17, 1930.

Ser. No. 310,599. C. K. EAGLE & CO., INC., New York N. Y. Filed Jan. 31, 1931.

CEDARCLIFF

For Silk Piece Goods.
Claims use since 1888.

CLASS 43

Thread and Yarn

Ser. No. 311,984. SUMMIT THREAD COMPANY, East Hampton, Conn., and Boston, Mass. Filed Mar. 10, 1931.

TYSO

For Threads.
Claims use since Sept. 1, 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 308,482. DEUTSCHE GASGLUEHLICHT-AUER-GESELLSCHAFT, MIT BESCHRAENKTER HAFTUNG, Berlin, Germany. Filed Dec. 1, 1930.

-Degea-
Proxylen

For Oxygen Inhalation.
Claims use since May 26, 1930.

Ser. No. 310,718. THE DIANE PLASTER CO., Yonkers, N. Y. Filed Feb. 4, 1931. Under 10-year proviso.

FIRST-AID
BRAND

No claim being made to the exclusive use of the word "Brand" apart from the mark as shown.
For Surgical Adhesive Plaster.
Claims use since 1886.

Ser. No. 311,414. HUMPHREY STATTER, Jr., doing business as The American Girl Products Co., Sioux City, Iowa. Filed Feb. 25, 1931.



The representation of a girl appearing on the drawing is entirely fanciful. The use of the words "Sanitary Belt" is disclaimed apart from use in connection with the mark as shown.
For Sanitary Napkin Belts.
Claims use since Jan. 1, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 275,296. WM. H. RANKIN COMPANY, Chicago, Ill. Filed Nov. 14, 1928.

'NANA

ALE

The word "Ale" does not form a part of the registration sought apart from the trade-mark shown in the drawing.
For Nonalcoholic, Maltless, Noncereal Beverages and Compounds, Concentrates and Syrups for Making the Same.
Claims use since Oct. 1, 1928.

Ser. No. 300,423. NATHAN LEVIN, doing business as Star Bottling Works, Philadelphia, Pa. Filed May 13, 1930.

Sweetie

For Orange Flavor Soft Drinks.
Claims use since June 1, 1916.

Ser. No. 304,056. MARION ORANGE CRUSH BOTTLING COMPANY, INC., doing business as Orange Crush Bottling Co. Inc. and also as Blue Ridge Ginger Ale Co., Marion, Va. Filed July 31, 1930.

BLUE RIDGE

For Carbonated Non-Alcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since May 1, 1926.

Ser. No. 312,151. TOM HUSTON CORPORATION, Columbus, Ga. Filed Mar. 14, 1931.

RAYO
"LIQUID SUN-RAYS"

For Grapefruit Juice Sold as a Soft Drink.
Claims use since Jan. 30, 1931.

Ser. No. 312,163. W. L. SMITH ORCHARDS, INC., Cheswold, Del. Filed Mar. 14, 1931.



For Sweet Cider.
Claims use since June, 1929.

Ser. No. 312,302. LASH'S PRODUCTS COMPANY, San Francisco, Calif. Filed Mar. 19, 1931.

SNOW
KING

For Nonalcoholic, Maltless Beverages, Carbonated or Uncarbonated, Sold as Soft Drinks, and Syrups, Compounds, Flavors, and Concentrates for Making the Same.
Claims use since Mar. 7, 1931.

Ser. No. 312,403. ALLEGHENY SALES COMPANY, Pittsburgh, Pa. Filed Mar. 23, 1931.

TALLY-HO

For Nonalcoholic, Maltless Beverages Sold as Soft Drinks and Syrups for Making the Same.
Claims use since Mar. 16, 1931.

Ser. No. 312,476. CANADIAN CLUB CORPORATION, Philadelphia, Pa. Filed Mar. 24, 1931.

MAPLE LEAF

For Nonalcoholic, Maltless Beverages and Sirups, Extracts, and Emulsions for Making the Same.
Claims use since 1910.

Ser. No. 312,477. CANADIAN CLUB CORPORATION, Philadelphia, Pa. Filed Mar. 24, 1931.



For Nonalcoholic, Maltless Beverages and Sirups, Extracts, and Emulsions for Making the Same.
Claims use since 1910.

Ser. No. 312,565. REBECCA LEFFERMAN, doing business as The Silver Bottling Works, Port Chester, N. Y. Filed Mar. 26, 1931.



For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts Used in Making the Same.
Claims use since Dec. 15, 1929.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 280,867. A. & L. FRUIT CO., Los Angeles, Calif. Filed Mar. 18, 1929.

VERY SWEET



The descriptive words "Very Sweet" are disclaimed apart from the mark shown on the drawing. The picture forming a part of the drawing is fanciful.
For Fresh Citrus Fruits.
Claims use since Mar. 1, 1929.

Ser. No. 292,731. JAMESON-BOYCE COMPANY, Binghamton, N. Y. Filed Nov. 22, 1929.

Jam-Boy

For Wheat Flour, Pastry Flour, Pancake Flour; Canned Fruit—Namely, Peaches, Pears, Pineapple, Cherries, Apricots, Raspberries, Strawberries, Mixed Fruit for Salads, Prunes, Blackberries, Applesauce, Grapefruit, and Preserves; Canned Vegetables—Namely, Corn, Peas, Tomatoes, Wax Beans, Beets, Refugee Beans, Carrots, Kidney Beans, Pork and Beans, Lima Beans, Succotash, Pumpkin, Sauerkraut, Spinach, and Asparagus; Canned Meat—Namely, Dried Sliced Beef and Vienna Sausage; Catsup, Chili-Sauce, Mince Meat, Peanut Butter, Cocoanut, and Canned Evaporated Milk; Coffee, Tea, and Cocoa; Rice, Canned Fish—Namely, Tuna Fish, Shrimp, and Salmon.
Claims use since September, 1915.

Ser. No. 297,329. GEO. RASMUSSEN CO., Chicago, Ill. Filed Mar. 14, 1930.



For Butter, Cocoa, Coffee, Dry Legumes; Breakfast and Household Cereals Such as Barley, Rice, Corn Meal, and Pearl Barley; Jellies; Table Relishes—Namely, Catsup and Olives; Fresh Fruit Preserves, Tapioca, Tea, and Whole or Ground Spices.
Claims use since Apr. 28, 1909.

Ser. No. 297,782. SCHACHTELKÄSEFABRIK FRANZ ZWICK, Kellmunz (Schwaben), Germany. Filed Mar. 22, 1930.



For Cheese.
Claims use since Nov. 3, 1927.

Ser. No. 301,024. FROSTED FOODS COMPANY, INC., New York, N. Y. Filed May 22, 1930.



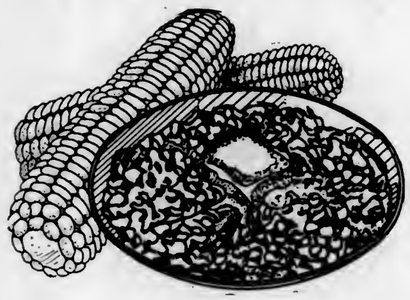
Applicant disclaims the exclusive right to the outline of the label and to the word "Foods" where such word does not form a part of the applicant's name.
For Frozen Food Products—Namely, Lamb, Pork, Beef, Veal, and Sausage, Fish, Shellfish, Vegetables, and Fruits.
Claims use since Feb. 15, 1930.

Ser. No. 301,406. COMPAGNIE CENTRALE FROMAGÈRE SOCIÉTÉ ANONYME, La Roche S/Foron, France. Filed May 28, 1930.



No claim is made to the use of the words "The Summit of Excellence," "Pure as the Eternal Snows," "The," "Dominating in Its Crowning Glory the High Pastures and Valleys Where," "Is Produced," "Genuine Petit Gruyere Cheese," apart from the mark as shown in the drawing.
For Cheese.
Claims use since May 13, 1930.

Ser. No. 301,490. MINNESOTA CONSOLIDATED CANNERIES, INC., Minneapolis, Minn. Filed May 28, 1930.



No claim is made to the pictorial representation of the goods apart from the mark as shown.
For Canned Corn.
Claims use since Feb. 3, 1930.

Ser. No. 301,852. COMMERCIAL IMPORTING CO. INC., Seattle, Wash. Filed May 31, 1930.

CORONA

For Tea.
Claims use since 1909.

Ser. No. 303,049. E. O. FARLEY LIMITED, Camperdown, near Sydney, Australia. Filed July 2, 1930.

CHOCYEAST

The word "Yeast" is disclaimed apart from the mark shown on the drawing.
For Digestive Beverage Material Containing Chocolate and Yeast.
Claims use since 1927.

Ser. No. 303,412. ALBERT LEA PACKING COMPANY, INCORPORATED, Albert Lea, Minn. Filed June 20, 1930.



For Smoked Meats, Boiled Hams, and Sausage.
Claims use since Feb. 14, 1930.

Ser. No. 304,813. THE GLIDDEN COMPANY, doing business as Wisconsin Food Products Co., Cleveland, Ohio. Filed Aug. 20, 1930.

TASTI-NUT

Applicant hereby disclaims the descriptive word "Nut" apart from the mark as shown on the drawing.
For Pure Uncolored Oleomargarine for Table Use.
Claims use since Sept. 10, 1926.

Ser. No. 305,048. P. J. MCGUIRE, Wenatchee, Wash. Filed Aug. 26, 1930.

WENATCHEE

ACES

For Fresh Apples.
Claims use since July 1, 1930.

Ser. No. 305,365. NEW ENGLAND FISH COMPANY, Seattle, Wash. Filed Sept. 5, 1930.

VALUE

For Canned Salmon.
Claims use since Dec. 30, 1929.

Ser. No. 305,720. CHAS. D. MOREHOUSE, El Monte, Calif. Filed Sept. 15, 1930.

Cherrybarb

For Fresh Rhubarb.
Claims use since Nov. 1, 1924.

Ser. No. 305,967. FRANK H. FLEER CORPORATION, Philadelphia, Pa. Filed Sept. 23, 1930.

DUBBLE BALL

The trade-mark consists of the words "Dubble Ball" but no claim is made to exclusive right to the use of the word "Ball" apart from the mark shown in the drawing.
For Chewing Gum Comprising a Core of Chewing Gum and a Thick Coating or Covering of Hard Candy.
Claims use since Sept. 19, 1930.

Ser. No. 306,532. W. J. KENNEDY DAIRY CO., Detroit, Mich. Filed Oct. 8, 1930.

W. J. Kennedy Dairy Co.



No claim being made to the corporate name "W. J. Kennedy Dairy Co." apart from the mark as shown on the drawing. The picture shown on the drawing is fanciful.
For Dairy Products—Namely, Milk, Cream, Butter, Buttermilk, and Cottage Cheese.
Claims use since May 1, 1929.

Ser. No. 310,132. ANNA MASKEY, doing business as Maskey's, San Francisco, Calif. Filed Jan. 19, 1931.



Maskey's

Applicant is the owner of registration No. 100,579, dated Oct. 20, 1914.
For Candies.
Claims use since June 18, 1901.

Ser. No. 310,133. ANNA MASKEY, doing business as Maskey's, San Francisco, Calif. Filed Jan. 19, 1931.



For Candies.
Claims use since December, 1886.

Ser. No. 310,134. ANNA MASKEY, doing business as Maskey's, San Francisco, Calif. Filed Jan. 19, 1931. Under 10-year proviso.

Maskey's

For Candies.
Claims use since December, 1886.

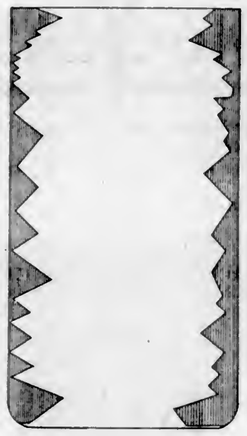
Ser. No. 310,250. THE CINCINNATI WHOLESALE GROCERY COMPANY, Cincinnati, Ohio. Filed Jan. 22, 1931.

WHITE VILLA

For Canned Fruits, Canned Vegetables, Canned Berries, Raisins, Dried Currants, Mince Meat, Spices, Canned Sliced Beef, Cheese, Rolled Oats, Canned Fish, Canned Shrimp, Cove Oysters in Tins, Olives, Rice; Condiments—Namely, Catsup; Canned Red Kidney Beans, Mayonnaise, Coffee, Butter, Canned Prunes, Dried Prunes, Canned Figs, Dates; Jellies and Preserves Comprising Preserved Fruit—Namely, Peach, Apricot, Raspberry, Pineapple, Cherry, Etc.; Apple Sauce, Cranberry Sauce, Tea, Canned Pimientos, and Sardines.

Claims use on canned peas, corn, tomatoes, and pineapple in applicant's business since April, 1922, and to the other products enumerated herein, as follows: canned fruits other than pineapple since on or about Jan. 1, 1924; canned vegetables other than peas, corn, and tomatoes since on or about Jan. 1, 1923; canned berries, raisins, currants, mince meat, spices, canned sliced beef since on or about Jan. 1, 1924; cheese, rolled oats, canned fish, shrimp, cove oysters since on or about Jan. 1, 1925; olives and rice since on or about Jan. 1, 1926; condiments and red kidney beans since on or about Jan. 1, 1928; coffee and mayonnaise since on or about Jan. 1, 1929; butter, prunes, figs, dates, jellies and preserves, apple sauce, cranberry sauce, tea, and pimientos since on or about Jan. 1, 1930; and sardines since on or about Jan. 1, 1931.

Ser. No. 310,742. TARKIO MOLASSES FEED COMPANY, Kansas City, Mo. Filed Feb. 4, 1931.



The drawing is lined for red. No claim is made to the outline of the bag.
For Feeds for Cattle, Hogs, Sheep, and Poultry.
Claims use since Jan. 14, 1930.

Ser. No. 310,780. SOUTHERN RICE SALES COMPANY, INC., New York, N. Y. Filed Feb. 5, 1931.

TWINKLE

For Rice, Barley, Dried Peas, Dried Beans, Dried Lentils, Coffee and Spices, Rice Flakes, and Rice Flour.
Claims use since Jan. 14, 1931.

Ser. No. 310,949. W. EARL SIMPSON, doing business as Kennel Gardens, Inc., Elkridge, Md. Filed Feb. 11, 1931.

DOG TREAT



For Dog Feed.
Claims use since Jan. 1, 1929.

Ser. No. 311,281. PAXTON & GALLAGHER COMPANY, Omaha, Nebr. Filed Feb. 20, 1931.

P AND G

For Canned Fruits—Namely, Sliced Yellow Cling Peaches, Peaches, Apricots, and Raspberries; Canned Vegetables—Namely, Beans, Peas, and Corn; Canned Fish—Namely, Salmon; Food Flavoring Extract, Catsup, Chili Sauce, Olives, Tea, and Coffee.
Claims use since 1912.

Ser. No. 311,329. GITMAN BROTHERS, Cincinnati, Ohio. Filed Feb. 21, 1931.

FOUR BROTHERS

The drawing is lined for green.
For Fresh Vegetables.
Claims use since Dec. 1, 1930.

Ser. No. 311,330. THE GOUDEY GUM CO., Allston, Mass. Filed Feb. 21, 1931.

OH BOY

For Chewing Gum.
Claims use since Oct. 25, 1918.

Ser. No. 311,351. W. E. WHITACRE, INC., El Centro, Calif. Filed Feb. 21, 1931.

FORE

For Fresh Melons—Namely, Cantaloupes.
Claims use since Dec. 22, 1930.

Ser. No. 311,982. SOUTHLAND COFFEE COMPANY, Macon, Ga. Filed Mar. 10, 1931.

PRIDE OF THE SOUTHLAND

For Coffee.
Claims use since April, 1930.

Ser. No. 312,308. ORBIT LISTERATED GUM COMPANY, Chicago, Ill. Filed Mar. 19, 1931.

HONEY MOONS

The word "Honey" is disclaimed apart from the mark as shown.
For Chewing Gum.
Claims use since Mar. 13, 1931.

Ser. No. 312,505. FRANCIS H. LEGGETT & COMPANY, New York, N. Y. Filed Mar. 24, 1931.

BOWWOW

For Specially Prepared Food for Dogs.
Claims use since Feb. 17, 1931.

Ser. No. 312,532. REYNOLDS & CO., New York, N. Y. Filed Mar. 25, 1931.



For Cheese.
Claims use since August, 1930.

Ser. No. 312,537. SPRATT'S PATENT (AMERICA) LIMITED, London, England. Filed Mar. 25, 1931.

SPIX

For Dog Food.
Claims use since Mar. 17, 1931.

Ser. No. 312,576. SOUTHLAND COFFEE COMPANY, Macon, Ga. Filed Mar. 26, 1931.

SECOND CUP

For Coffee.
Claims use since Mar. 3, 1931.

Ser. No. 312,611. F. A. MARTOCCIO COMPANY, doing business as Hollywood Candy Co., Minneapolis, Minn. Filed Mar. 27, 1931.

ZERO

For Candy Bars.
Claims use since Mar. 20, 1931.

Ser. No. 312,627. RED STAR YEAST & PRODUCTS COMPANY, Milwaukee, Wis. Filed Mar. 27, 1931.

NADISCO

For Dried Grains Used for Cattle Feed.
Claims use since Mar. 3, 1931.

Ser. No. 312,656. THE LYNDONVILLE CANNING COMPANY, INC., Lyndonville, N. Y. Filed Mar. 28, 1931.

NEW YORKER

For Canned Applesauce.
Claims use since Mar. 23, 1931.

CLASS 47
Wines

Ser. No. 306,230. BARTON & GUESTIER, Bordeaux, France. Filed Sept. 30, 1930. Under 10-year proviso.

BARTON & GUESTIER
BORDEAUX
FRANCE

For Claret and White Wines.
Claims use since Jan. 1, 1875.

CLASS 50
Merchandise Not Otherwise Classified

Ser. No. 311,497. UNITED STATES RADIUM CORPORATION, New York, N. Y. Filed Feb. 26, 1931.

U.S.R.

For Luminous or Plain Number Plates, Name Plates, Sign Plates, and Indicators.
Claims use since Feb. 16, 1931.

Ser. No. 312,455. SANO TYPEWRITER PAD COMPANY, Wilkes-Barre, Pa. Filed Mar. 23, 1931.

SANO

For Cushioning Pads for Supporting Typewriters and the Like.
Claims use since Feb. 1, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 5, 1931

282,784. JELLIES AND MARMALADES, FRUIT PRESERVES, CANNED FRUITS, CANNED FRUIT JUICES FOR FOOD PURPOSES, CANNED VEGETABLES, PICKLES, CANNED FISH, CRYSTALLIZED FRUITS AND FRUIT PEEL, HONEY. PALMETTO CANNING CO., Palmetto, Fla.
Filed October 25, 1930. Serial No. 307,171. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,785. SELF-RISING FLOUR. THEO. STIVERS MILLING COMPANY, Rome, Ga.
Filed October 27, 1930. Serial No. 307,229. PUBLISHED JANUARY 27, 1931. Class 46.

282,786. TOOTH PASTE AND DENTAL CREAM. DESMOND BROWN, doing business as Commodore Brush Company, New York, N. Y.
Filed October 29, 1930. Serial No. 307,339. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,787. GLUE. EDWARD ERMOLD COMPANY, New York, N. Y.
Filed October 31, 1930. Serial No. 307,392. PUBLISHED FEBRUARY 17, 1931. Class 5.

282,788. ASTRINGENTS, ASTRINGENT CERATES, ETC. EVENOD PERFUMER INC., New York, N. Y.
Filed November 7, 1930. Serial No. 307,621. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,789. WRITING PAPER AND ENVELOPES. AMERICAN PAPETERIE COMPANY, Albany, N. Y.
Filed November 8, 1930. Serial No. 307,650. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,790. MAYONNAISE, SALAD DRESSING, SANDWICH SPREAD, MUSTARD DRESSING, CONDIMENT TABLE SAUCES, AND PICKLE RELISHES. THE BALTIMORE BUTTERINE COMPANY, Baltimore, Md.
Filed November 18, 1930. Serial No. 308,003. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,791. EXTRACT FROM PLANT OR GRAIN SUBSTANCES CONTAINING NO DRUGS, BUT CONTAINING VITAMINES, NATURAL SALTS, AND FLAVORINGS THAT MAY BE USED EITHER AS AN INGREDIENT OF FOODS, PARTICULARLY AS A SEASONING, OR EATEN ALONE. IRA O. WALLACE, Louisville, Ky.
Filed November 18, 1930. Serial No. 308,048. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,792. GOLF BAGS, GOLFERS' TRAVELING BAGS, COMMONLY CALLED, KARRYALS, RACKET COVERS, AND BOWLING-BALL BAGS. B. R. HUNT MANUFACTURING COMPANY, Union City, Ind.
Filed November 20, 1930. Serial No. 308,112. PUBLISHED JANUARY 13, 1931. Class 22.

282,793. CANNED OLIVES. ALBERS PACKING COMPANY, Riverside, Calif.
Filed November 24, 1930. Serial No. 308,237. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,794. STATIONERY AND SUPPLIES, FILE GUIDES, ETC. YAWMAN AND ERBE MFG. CO., Rochester, N. Y.
Filed December 2, 1930. Serial No. 308,523. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,795. HOSIERY. LE ROI HOSIERY CO. INC., New York, N. Y.
Filed December 3, 1930. Serial No. 308,548. PUBLISHED FEBRUARY 17, 1931. Class 39.

282,796. CANE SYRUP. WALTER BLAIR RODDENBERY, Cairo, Ga.
Filed December 3, 1930. Serial No. 308,554. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,797. HOSIERY. CONTOUR HOSIERY MILLS, Rockford, Ill.
Filed December 4, 1930. Serial No. 308,577. PUBLISHED FEBRUARY 17, 1931. Class 39.

282,798. KNITTED SPORTS WEAR — NAMELY, WOMEN'S, MISSES', AND CHILDREN'S ONE-PIECE DRESSES, TWO-PIECE DRESSES, THREE-PIECE SUITS, AND SWEATERS. RUBINGER SPORTSWEAR CORP., New York, N. Y.
Filed December 4, 1930. Serial No. 308,597. PUBLISHED FEBRUARY 17, 1931. Class 39.

282,799. AIRCRAFT ENGINES AND PARTS THEREOF. H. H. FRANKLIN MANUFACTURING COMPANY, Syracuse, N. Y.
Filed December 5, 1930. Serial No. 308,622. PUBLISHED FEBRUARY 17, 1931. Class 23.

282,800. FOUNTAIN PENS. KYUGORO SAKATA, Kure, Japan.
Filed December 5, 1930. Serial No. 308,643. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,801. HOSIERY. THOMAS MILLS, INC., High Point, N. C.
Filed December 5, 1930. Serial No. 308,652. PUBLISHED FEBRUARY 17, 1931. Class 39.

282,802. NEWSPRINT PAPER. TONAWANDA PAPER COMPANY, INC., Wilmington, Del.
Filed December 5, 1930. Serial No. 308,654. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,803. CHOCOLATE-COATED ICE-CREAM CONFECTIONS. SAMUEL ROTHBARD, New York, N. Y.
Filed December 6, 1930. Serial No. 308,704. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,804. HOSIERY. JULIUS GUTMAN & COMPANY, INC., Baltimore, Md.
Filed December 8, 1930. Serial No. 308,729. PUBLISHED FEBRUARY 17, 1931. Class 39.

282,805. AMMUNITION, FIREARMS, AND PARTS THEREOF. GUSTAV GENSCHOW & CO., AKTIENGESELLSCHAFT, Berlin, Germany.
Filed December 10, 1930. Serial No. 308,824. PUBLISHED FEBRUARY 24, 1931. Class 9.

282,806. SALVE FOR TREATING ACNE, PIMPLES, BLACKHEADS, CHAPPED HANDS, AND SKIN IRRITATIONS. BALMEX CO., INC., New York, N. Y.
Filed December 12, 1930. Serial No. 308,876. PUBLISHED FEBRUARY 10, 1931. Class 6.

282,807. FROZEN CONFECTIONS HAVING THERAPEUTIC PROPERTIES. ACIDOPHILUS ICE CREAM CORPORATION, Yonkers, N. Y.
Filed December 12, 1930. Serial No. 308,878. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,808. HAND AND SKIN LOTION. MCKESSON & ROBBINS, INCORPORATED, Bridgeport and Fairfield, Conn.
Filed December 13, 1930. Serial No. 308,945. PUBLISHED FEBRUARY 10, 1931. Class 6.

282,809. BOYS', INFANTS', YOUNG MEN'S, AND MEN'S LEATHER COATS, LEATHERETTE COATS, AND WOOLEN OVERCOATS. SCHNEIDERMAN BROS., New York, N. Y.
Filed December 12, 1930. Serial No. 308,908. PUBLISHED FEBRUARY 17, 1931. Class 39.

282,810. GINGER ALE. K. B. BEVERAGE COMPANY, Bay City, Mich.
Filed January 9, 1931. Serial No. 309,781. PUBLISHED FEBRUARY 24, 1931. Class 45.

282,811. LAXATIVE. WESTERN FRUIT CORPORATION INC., New York, N. Y.
Filed January 8, 1931. Serial No. 309,765. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,812. SAFETY PAPER, INCLUDING A COATED SAFETY PAPER FOR PRINTING LABELS AND THE LIKE. BALDWIN PAPER CO. INC., New York, N. Y.
Filed January 8, 1931. Serial No. 309,722. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,813. WRITING AND PRINTING PAPER. BADGER PAPER MILLS, INC., Peshtigo, Wis.
Filed December 31, 1930. Serial No. 309,497. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,814. RUBBER BANDS FOR OFFICE AND GENERAL USE. UNITED DRUG COMPANY, Boston, Mass.
Filed December 30, 1930. Serial No. 309,488. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,815. PAPER HEADREST COVERS IN THE FORM OF TOWELS. JAMES S. MILLER, Trenton, N. J.
Filed December 27, 1930. Serial No. 309,391. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,816. PERFUME. BOURJOIS, INC., New York, N. Y.
Filed December 23, 1930. Serial No. 309,260. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,817. VAGINAL GERMICIDAL POWDER. CLINTON LABORATORIES, INC., Los Angeles, Calif.
Filed December 20, 1930. Serial No. 309,189. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,818. PAPER AND PAPERBOARDS, BEING WATERPROOF, INSOLUBLE IN WATER, ALSO GREASEPROOF AND OILPROOF. CARL STEINER, New York, N. Y.
Filed December 17, 1930. Serial No. 309,098. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,819. CORRESPONDENCE AND MAILING ENVELOPES, ETC. JOHN MCCABE, doing business as John McCabe & Co., New York, N. Y.
Filed December 17, 1930. Serial No. 309,090. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,820. CAKE ICING. ADOLF J. MAINZER, INC., New York, N. Y.
Filed December 17, 1930. Serial No. 309,089. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,821. SELF-RISING FLOUR. BALLARD & BALLARD CO., Louisville, Ky.
Filed December 17, 1930. Serial No. 309,057. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,822. ROUGE FOR USE ON THE FACE AND LIPS. DE LUXE PRODUCTS, INC., Watertown, Conn.
Filed December 16, 1930. Serial No. 309,026. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,823. WAGON AND TRACTOR UMBRELLAS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 13, 1930. Serial No. 308,961. PUBLISHED FEBRUARY 17, 1931. Class 41.

282,824. MEDICINES FOR THE TREATMENT OF DISEASES IN GAME AND POULTRY—NAMELY, GAPES, COCCIDIOSIS, AND ROUP; ALSO TONE TONIC IN POWDER AND PILL FORM, TONIC APERIENT SALTS, AND INSECT POWDER. GAYBIRD, LIMITED, Great Missenden, England.
Filed September 29, 1930. Serial No. 306,178. PUBLISHED FEBRUARY 10, 1931. Class 6.

282,825. SWEETENED AND FLAVORED MEDICINAL BEVERAGE FOR USE IN DIABETIC AND SIMILAR CASES WHERE THE USE OF SUGAR IS NOT DESIRABLE. THE GOSMAN COMPANY, Baltimore, Md.
Filed October 3, 1930. Serial No. 306,350. PUBLISHED FEBRUARY 10, 1931. Class 6.

282,826. NONALCOHOLIC, NONCEREAL, MALTLESS, CARBONATED BEVERAGES. ELCO DISTRIBUTING COMPANY, doing business as Many, Blanc & Co., Chicago, Ill.
Filed October 15, 1930. Serial No. 306,773. PUBLISHED FEBRUARY 24, 1931. Class 45.

282,827. VAGINAL ANTISEPTIC TABLETS. F. E. LAWRENCE, doing business as Larré Laboratories, Denver, Colo.
Filed October 20, 1930. Serial No. 306,988. PUBLISHED FEBRUARY 10, 1931. Class 6.

282,828. GOLF CLUBS. VULCAN CORPORATION, Portsmouth, Ohio.
Filed October 21, 1930. Serial No. 307,016. PUBLISHED JANUARY 20, 1931. Class 22.

282,829. DEODORANTS. E. M. E. CORPORATION, doing business as Kemiko Mfg. Co., Newark, N. J.
Filed December 28, 1929. Serial No. 294,149. PUBLISHED MARCH 4, 1930. Class 6.

282,830. SAUSAGE. VIRDEN PACKING CO., San Francisco, Calif.
Filed January 24, 1930. Serial No. 295,196. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,831. PREPARATION FOR THE TREATMENT OF SORE EYES, ULCERS, GANGRENE, VENEREAL DISEASES, AND ALLIED CONDITIONS; FOR ALL SKIN ERUPTIONS, AND CANCER. JOSEPH SERRECCHIA, Chicago, Ill.
Filed February 3, 1930. Serial No. 295,540. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,832. PLACE CARDS, DECORATIVE CARDS, CUT-OUT CARDS, AND PRINTED CARDS OF IRREGULAR SHAPE USABLE AS FAVORS AND AS ADVERTISING NOVELTIES. THE AMERICAN TOBACCO COMPANY, New York, N. Y.
Filed March 21, 1930. Serial No. 297,651. PUBLISHED FEBRUARY 17, 1931. Class 38.

282,833. EXTRACT OF PEPPER, CREOLE MUSTARD, SWEET-PEPPER CATSUP, AND SPANISH FISHERMAN SAUCE. AURTHUR GUSTIN DANOVE, Westwego, La.
Filed March 29, 1930. Serial No. 298,083. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,834. OLIVE OIL AND SESAME OIL. HASHEMESH, INC., New York, N. Y., assignor to Eastern Oil Industries, Ltd., London, England, a Corporation of Great Britain.
Filed April 5, 1930. Serial No. 298,447. PUBLISHED JUNE 17, 1930. Class 46.

282,835. ICE CREAM AND SHERBET. WOODE J. BATSON, doing business as Spencer Popcorn Company, Spencer, Iowa.
Filed April 17, 1930. Serial No. 298,971. PUBLISHED JANUARY 6, 1931. Class 46.

282,836. TROUSERS FOR BEACH WEAR. PECKHAM-FOREMAN, INC., New York, N. Y.
Filed May 2, 1930. Serial No. 299,859. PUBLISHED FEBRUARY 17, 1931. Class 39.

282,837. MEN'S AND YOUTHS' SUITS AND COATS. PARK-BROOKE CLOTHES, New York, N. Y.
Filed December 14, 1929. Serial No. 293,686. PUBLISHED FEBRUARY 18, 1930. Class 39.

282,838. CRAYONS. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio.
Filed August 23, 1929. Serial No. 288,892. PUBLISHED OCTOBER 29, 1929. Class 37.

282,839. FLAVORED CHICLE OR CHEWING GUM CONTAINING ACETYLE-SALICYLIC ACID FOR THE RELIEF OF SIMPLE HEADACHES, NEURALGIAS, COLDS, MUSCULAR PAIN. JEAN DE VAUTIBAULT, doing business as Aspirin Gum Sales Company, New York, N. Y.
Filed April 30, 1929. Serial No. 283,263. PUBLISHED FEBRUARY 10, 1931. Class 6.

282,840. POWDERED FOOD PRODUCTS, VISCID BUT STABLE PRODUCTS, CEREALS, ETC. LIQUID DEHYDRATION CORPORATION, Chicago, Ill., assignor to Albert P. Hunt.
Filed April 17, 1929. Serial No. 282,559. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,841. MINERAL-COATED PAPER SUITABLE FOR PRINTING. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio.
Filed March 25, 1929. Serial No. 281,262. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,842. HARD-FAT SHORTENING. VEGETABLE OIL PRODUCTS COMPANY, Los Angeles, Calif.
Filed March 27, 1926. Serial No. 229,310. PUBLISHED MAY 8, 1928. Class 46.

282,843. MACARONI. ITALIAN MACARONI MFG. CO. INC., Los Angeles, Calif.
Filed September 26, 1930. Serial No. 306,096. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,844. LADIES' TEXTILE-FABRIC BLOOMERS. HARRY A. HARRIS, Chicago, Ill.
Filed May 31, 1930. Serial No. 301,914. PUBLISHED FEBRUARY 17, 1931. Class 39.

282,845. CORRESPONDENCE PAPER AND ENVELOPES. UNITED STATES ENVELOPE COMPANY, Springfield, Mass.
Filed July 3, 1930. Serial No. 303,135. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,846. PREPARATIONS FOR GROWING HAIR. MARIE GOWER, Los Angeles, Calif.
Filed July 7, 1930. Serial No. 303,179. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,847. FINELY-DIVIDED SOLID MATERIAL HAVING SELECTIVE ADSORPTIVE PROPERTIES TO BE USED IN CONNECTION WITH THE PURIFICATION OF MEDICINES, PHARMACEUTICAL PREPARATIONS, ETC., MANUFACTURED FROM DIATOMACEOUS EARTH. INDUSTRIAL CHEMICAL SALES COMPANY, INC., New York, N. Y.
Filed July 17, 1930. Serial No. 303,569. PUBLISHED FEBRUARY 10, 1931. Class 6.

282,848. HERB TEA FOR COSTIVENESS, HEADACHE, DIZZINESS, INDIGESTION, RHEUMATISM, LIVER AND KIDNEY TROUBLES, AND GAS IN THE STOMACH. KATIE RUCKRICH, doing business as Red Hand Tea Company, Brooklyn, N. Y.
Filed July 31, 1930. Serial No. 304,066. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,849. CANNED VEGETABLES, MALT SYRUP, CANNED FRUIT, CANNED FISH. MEXICAN WHOLESALE GROCERY CO., Los Angeles, Calif.
Filed August 2, 1930. Serial No. 304,156. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,850. PROPHYLACTIC ARTICLES OF RUBBER AND GOLDBEATER SKIN FOR THE PREVENTION OF CONTAGIOUS DISEASES. THE CUTINO COMPANY, Kansas City, Mo.
Filed August 14, 1930. Serial No. 304,608. PUBLISHED SEPTEMBER 30, 1930. Class 44.

282,851. COUGH DROPS. WILLIAM GREEN, New Bedford, Mass.
Filed September 9, 1930. Serial No. 305,483. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,852. COSMETICS CONSISTING OF LIP STICK, ROUGE AND TOILET POWDER. MARTABA DISTRIBUTING COMPANY, Brooklyn, N. Y.
Filed September 22, 1930. Serial No. 305,933. PUBLISHED FEBRUARY 10, 1931. Class 6.

282,853. WOOLEN AND WORSTED CLOTHS MADE FOR UNIFORM PURPOSES IN THE PIECE, EXCEPT FABRICS COLORED AN OLIVE-DRAB SHADE. THOMAS OAKES & CO., Bloomfield, N. J.
Filed September 23, 1930. Serial No. 305,978. PUBLISHED JANUARY 20, 1931. Class 42.

282,854. PREPARATION CONTAINING COCOA FOR USE AS A TABLE BEVERAGE. NUTRAVITE LIMITED, London, England.
Filed September 24, 1930. Serial No. 306,012. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,855. VEGETABLE OIL STEARINE. THE CAPITAL CITY PRODUCTS COMPANY, Columbus, Ohio.
Filed September 24, 1930. Serial No. 306,030. PUBLISHED FEBRUARY 17, 1931. Class 46.

282,856. MEDICINAL PREPARATION FOR THE RELIEF OF HEAD COLDS, NERVOUS HEADACHE, AND AS A SKIN OINTMENT. PARK LABORATORY CO., INC., San Antonio, Tex.
Filed November 4, 1930. Serial No. 307,535. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,857. FIGURE TOYS. WALT DISNEY PRODUCTIONS, LTD., Los Angeles, Calif.
Filed November 8, 1930. Serial No. 307,658. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,858. PILE OINTMENT AND AN ECZEMA AND SKIN OINTMENT. KEIM MEDICINE CO., Corry, Pa.
Filed November 8, 1930. Serial No. 307,678. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,859. OUTDOOR GAME CHARACTERIZED BY A PLAYING FIELD INCLUDING NUMERICALLY-DISTINGUISHABLE HOLES, SAID GAME BEING PLAYED WITH CROQUET BALLS AND SPECIAL MALLETS. ELMER E. HOSIER, Delaware Water Gap, Pa.
Filed May 29, 1930. Serial No. 301,642. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,860. TOILET PAPER. SAUQUOIT PAPER CO., INC., Utica, N. Y.
Filed February 14, 1928. Serial No. 261,686. PUBLISHED APRIL 3, 1928. Class 37.

282,861. CANNED PINEAPPLES. HAWAIIAN PINEAPPLE COMPANY, LTD., San Francisco, Calif., and Iwilei, Territory of Hawaii.
Filed November 14, 1928. Serial No. 275,314. PUBLISHED SEPTEMBER 16, 1930. Class 46.

282,862. CREAM SOAPS. THE CRYSTAL CHEMICAL COMPANY, INC., New York, N. Y.
Filed July 11, 1929. Serial No. 286,926. PUBLISHED FEBRUARY 24, 1931. Class 4.

282,863. DRIED RAISINS AND DRIED FRUITS—NAMELY, PEARS, APRICOTS, PRUNES, PEACHES, PLUMS, NECTARINES, APPLES, CURRANTS, AND FIGS. THE J. B. INDERRIEDEN CO., Chicago, Ill.
Filed October 3, 1929. Serial No. 290,575. PUBLISHED JANUARY 7, 1930. Class 40.

282,864. SYNDICATED TOPICAL COLUMNS OR ARTICLES PUBLISHED FROM TIME TO TIME. SEVEN ARTS PUBLISHING CO., New York, N. Y.
Filed December 17, 1929. Serial No. 293,793. PUBLISHED APRIL 1, 1930. Class 38.

282,865. HACK-SAW BLADES. E. C. ATKINS AND COMPANY, Indianapolis, Ind.
Filed December 18, 1929. Serial No. 293,815. PUBLISHED MARCH 4, 1930. Class 23.

282,866. PAINT AND STAIN THINNERS AND OILS USED IN MAKING PAINTS. THE BARRETT COMPANY, New York, N. Y.
Filed January 31, 1930. Serial No. 295,418. PUBLISHED FEBRUARY 24, 1931. Class 16.

282,867. VIGNETTE OR MASTHEAD FOR A DAILY NEWSPAPER. THE CALL PUBLISHING COMPANY, San Francisco, Calif.
Filed May 2, 1930. Serial No. 299,826. PUBLISHED FEBRUARY 17, 1931. Class 38.

282,868. TOY TOP. JOHN M. KRAUSE, doing business as Whippet Top Manufacturing Company, Los Angeles, Calif.
Filed May 9, 1930. Serial No. 300,205. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,869. OFFICE FURNITURE — NAMELY, FILING CASES, CABINETS, TABLES, DESKS, AND STEEL EQUIPMENT BUILT TO ORDER. CORRY-JAMESTOWN MANUFACTURING CORPORATION, Corry, Pa.
Filed May 24, 1930. Serial No. 301,160. PUBLISHED FEBRUARY 24, 1931. Class 32.

282,870. ALUMINUM COMPOUND TO STOP LEAKS IN RADIATORS AND MOTOR BLOCKS. SAMUEL H. DODD, doing business as Zerox Products, Springfield, Mo.
Filed December 29, 1930. Serial No. 309,419. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,871. HAND CUTTING TOOLS AND PARTS, COMPRISING HAND KNIVES, KNIFE BLADES, AND KNIFE HANDLES. PARKER WIRE GOODS COMPANY, Worcester, Mass.
Filed December 29, 1930. Serial No. 309,441. PUBLISHED FEBRUARY 24, 1931. Class 23.

282,872. COMBINED MULTIPLICATION DEVICE AND PENCIL CASE. THE ENTERPRISE SPECIALTY CO., Detroit, Mich.
Filed December 30, 1930. Serial No. 309,466. PUBLISHED FEBRUARY 24, 1931. Class 26.

282,873. MEDICINAL PREPARATION FOR ACID STOMACH AND HEART RELIEF. B. D. JOHNSON, Midville, Ga.
Filed December 30, 1930. Serial No. 309,478. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,874. CHEMICAL COMPOUND TO CONTROL SCALY BARK AND GUMNOSIS IN TREES. SAMUEL W. SMITH, Fullerton, Calif.
Filed December 30, 1930. Serial No. 309,484. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,875. FILES. THE ARION STEEL COMPANY, Boston, Mass.
Filed December 31, 1930. Serial No. 309,496. PUBLISHED MARCH 10, 1931. Class 23.

282,876. CANDIES. LARKIN CO. INC., Buffalo, N. Y.
Filed January 14, 1931. Serial No. 309,929. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,877. COFFEE. DANIEL DAVID PALMER, Davenport, Iowa.
Filed January 16, 1931. Serial No. 310,040. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,878. MACHINE FOR CUTTING BREAD, CAKE, PIES, AND OTHER FOOD PRODUCTS. BETTER PRODUCTS MACHINE COMPANY, Lynchburg, Va.
Filed December 31, 1930. Serial No. 309,498. PUBLISHED FEBRUARY 24, 1931. Class 23.

282,879. METAL-SWAGING MACHINERY. ANDREW C. CAMPBELL, INCORPORATED, Waterbury, Conn.
Filed December 31, 1930. Serial No. 309,510. PUBLISHED FEBRUARY 24, 1931. Class 23.

282,880. CALCULATING MACHINES. CALCULATOR EQUIPMENT CORPORATION, Orange, N. J.
Filed December 31, 1930. Serial No. 309,511. PUBLISHED FEBRUARY 24, 1931. Class 26.

282,881. MEDICINE IN THE FORM OF TABLETS FOR THE RELIEF OF PAIN AND FEVER. CRONOL CO. INC., New York, N. Y.
Filed December 31, 1930. Serial No. 309,514. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,882. CHEWING GUM. THE CURTISS CANDY COMPANY, Chicago, Ill.
Filed December 31, 1930. Serial No. 309,515. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,883. TOY AND MODEL AIRPLANES AND PARTS THEREOF. AVIO CORPORATION, New York, N. Y.
Filed January 2, 1931. Serial No. 309,549. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,884. CACHET, WAFERS, CAPSULES, TABLETS, AND PILLS FOR HEADACHES, ALLEVIATION OF PAIN, NEURALGIA, RHEUMATISM, HEAD COLDS, MALARIA, AND MENSTRUAL PAINS. CHARLES BERGERET, doing business as Faivre Laboratories, New York, N. Y.
Filed January 2, 1931. Serial No. 309,550. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,885. CANNED GRAPEFRUIT AND GRAPEFRUIT JUICE FOR FOOD PURPOSES. SCOVILLE CANNING COMPANY, INC., New York, N. Y.
Filed January 5, 1931. Serial No. 309,623. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,886. X-RAY APPARATUS. FRED R. CAMPBELL, doing business as Campbell X-Ray Company of Boston, Boston, Mass.
Filed January 6, 1931. Serial No. 309,663. PUBLISHED FEBRUARY 24, 1931. Class 44.

282,887. PLAYING CARDS. WESTERN PRINTING & LITHOGRAPHING COMPANY, Racine, Wis.
Filed January 7, 1931. Serial No. 309,720. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,888. FOOT LOTIONS AND DEODORANTS. J. E. CROCKETT, doing business as The Fo-Mo-Na Company, Atlanta, Ga.
Filed January 8, 1931. Serial No. 309,725. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,889. COUGH SYRUP. THE UPJOHN COMPANY, Kalamazoo, Mich.
Filed January 8, 1931. Serial No. 309,755. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,890. CHEMICALLY-PREPARED COMPOUND OF TELLURIUM USED AS A TOUGHENER IN THE MANUFACTURE OF RUBBER PRODUCTS. R. T. VANDERBILT COMPANY, INC., New York, N. Y.
Filed January 8, 1931. Serial No. 309,764. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,891. HAIR DYE. BERSIMO, INC., New York, N. Y.
Filed January 9, 1931. Serial No. 309,768. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,892. MEDICINE OR PHARMACEUTICAL PREPARATION, NAMELY A POWDER IN CAPSULE FORM USEFUL AS A DIURETIC. ELI LILLY AND COMPANY, Indianapolis, Ind.
Filed January 10, 1931. Serial No. 309,823. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,893. TOY VEHICLE SIMILAR TO A SLED. THE POWELL PRESSED STEEL COMPANY, Hubbard, Ohio.
Filed January 13, 1931. Serial No. 309,904. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,894. GOLF BALLS. ARLINGTON RUBBER CO., Dorchester, Mass.
Filed January 16, 1931. Serial No. 310,006. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,895. COFFEE. COASTAL COFFEE CO., Savannah, Ga.
Filed January 16, 1931. Serial No. 310,010. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,896. BOWLING PINS. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Chicago, Ill.
Filed December 29, 1930. Serial No. 309,410. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,897. BOWLING PINS. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Chicago, Ill.
Filed December 29, 1930. Serial No. 309,411. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,898. BOWLING PINS. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Chicago, Ill.
Filed December 29, 1930. Serial No. 309,412. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,899. BOWLING PINS. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Chicago, Ill.
Filed December 29, 1930. Serial No. 309,413. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,900. PHOTOGRAPHIC CAMERAS. AGFA ANSCO CORPORATION, Binghamton, N. Y.
Filed December 17, 1930. Serial No. 309,052. PUBLISHED FEBRUARY 24, 1931. Class 26.

282,901. BULLETINS PUBLISHED FROM TIME TO TIME ON PHYSICAL CULTURE, PHYSICAL TRAINING, AND HEALTH-BUILDING EXERCISES. VIRGIL K. CAMERON, Columbus, Ohio.
Filed December 20, 1930. Serial No. 309,186. PUBLISHED FEBRUARY 17, 1931. Class 38.

282,902. BULLETINS PUBLISHED FROM TIME TO TIME ON PHYSICAL CULTURE, PHYSICAL TRAINING, AND HEALTH-BUILDING EXERCISES. VIRGIL K. CAMERON, Columbus, Ohio.
Filed December 20, 1930. Serial No. 309,187. PUBLISHED FEBRUARY 17, 1931. Class 38.

282,903. VAGINAL GERMICIDAL POWDER. CLINTON LABORATORIES, INC., Los Angeles, Calif.
Filed December 20, 1930. Serial No. 309,190. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,904. ANHYDROUS OILY SOLUTION HAVING GERMICIDAL PROPERTIES USED IN THE NATURE OF AN OINTMENT FOR BRUISES, ABRASIONS, CUTS, BURNS, CHAPPED HANDS, TREATMENT OF MUCOUS MEMBRANE, AND AS AN OINTMENT BASE FOR VARIOUS MEDICAMENTS. GELLOCIDE CORPORATION, Tulsa, Okla.
Filed December 20, 1930. Serial No. 309,200. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,905. RUBBER VEHICLE TIRES AND INNER TUBES THEREFOR. THE B. F. GOODRICH COMPANY, New York, N. Y.
Filed December 20, 1930. Serial No. 309,204. PUBLISHED FEBRUARY 24, 1931. Class 35.

282,906. AGRICULTURAL MACHINERY, IMPLEMENTS, FARM OPERATING EQUIPMENT, AND PARTS THEREOF. J. I. CASE COMPANY, Racine, Wis.
Filed December 22, 1930. Serial No. 309,230. PUBLISHED FEBRUARY 24, 1931. Class 23.

282,907. TEA. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed December 23, 1930. Serial No. 309,289. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,908. TEA. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed December 23, 1930. Serial No. 309,290. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,909. COFFEE AND TEA. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed December 26, 1930. Serial No. 309,362. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,910. CARTOONS. INTERNATIONAL FEATURE SERVICE, INC., New York, N. Y.
Filed December 27, 1930. Serial No. 309,382. PUBLISHED FEBRUARY 17, 1931. Class 38.

282,911. PROPHYLACTIC SUPPOSITORIES FOR PREVENTION OF CONTAGIOUS DISEASES. J. S. JOHNSON CHEMICAL CO., INC., Hagerstown, Md.
Filed December 27, 1930. Serial No. 309,383. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,912. NEWSPAPER SECTION, COLUMN, OR DEPARTMENT. MORNING TELEGRAPH, INC., New York, N. Y.
Filed December 27, 1930. Serial No. 309,392. PUBLISHED FEBRUARY 17, 1931. Class 38.

282,913. NEWSPAPER SECTION, COLUMN, OR DEPARTMENT. MORNING TELEGRAPH, INC., New York, N. Y.
Filed December 27, 1930. Serial No. 309,393. PUBLISHED FEBRUARY 17, 1931. Class 38.

282,914. NAVIGATION COMPASSES. PIONEER INSTRUMENT COMPANY, INCORPORATED, Brooklyn, N. Y.
Filed December 27, 1930. Serial No. 309,394. PUBLISHED FEBRUARY 24, 1931. Class 26.

282,915. PERFUME, TOILET WATER, FACE POWDER, TALCUM POWDER, SACHETS, FACE CREAMS, ROUGE, LIP STICKS, BATH SALTS, BRILLIANTINE. SOCIETE ANONYME PREMET, Paris, France.
Filed December 27, 1930. Serial No. 309,402. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,916. INSECTICIDE, INSECTIFUGE. USL BATTERY CORPORATION, Niagara Falls, N. Y.
Filed December 27, 1930. Serial No. 309,404. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,917. MEDICINAL OIL USED IN THE EXTERNAL TREATMENT OF GOITRE, ECZEMA, HAY FEVER, SINUS AFFECTIONS, AND PILES. JENSOL LABORATORIES, INC., Salt Lake City, Utah.
Filed October 31, 1930. Serial No. 307,406. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,918. HAIR SHAMPOO. MACKIE PINE OIL SPECIALTY COMPANY, INC., Covington, La.
Filed May 31, 1930. Serial No. 301,965. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,919. PRECIPITATED CHALK USED IN OR IN THE MANUFACTURE OF DENTIFRICES, PHARMACEUTICAL PREPARATIONS, AND FOOD PRODUCTS. INDUSTRIAL CHEMICAL SALES COMPANY, INC., New York, N. Y.
Filed July 22, 1930. Serial No. 303,718. PUBLISHED SEPTEMBER 9, 1930. Class 6.

282,920. CAPES AND APRONS FOR USE BY SURGEONS. J. W. GEIGER, INC., New York, N. Y.
Filed August 15, 1930. Serial No. 304,657. PUBLISHED FEBRUARY 24, 1931. Class 44.

282,921. PROPHYLACTIC RUBBER ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. I. J. FRIEDLAND, Atlanta, Ga.
Filed August 30, 1930. Serial No. 305,181. PUBLISHED FEBRUARY 24, 1931. Class 44.

282,922. BOWLING PINS. SURE-STRIKE, INC., Milwaukee, Wis.
Filed September 5, 1930. Serial No. 305,375. PUBLISHED FEBRUARY 24, 1931. Class 22.

282,923. MONTHLY MAGAZINE. MACFADDEN PUBLICATIONS, INC., New York, N. Y.
Filed September 19, 1930. Serial No. 305,868. PUBLISHED FEBRUARY 17, 1931. Class 38.

282,924—[WITHDRAWN.]

282,925. HAM. MILLAR BROTHERS & COMPANY, Philadelphia, Pa.
Filed September 26, 1930. Serial No. 306,102. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,926. LIVING-ROOM, DINING-ROOM, BEDROOM, AND OFFICE FURNITURE. JAMESTOWN LOUNGE COMPANY, Jamestown, N. Y.
Filed September 27, 1930. Serial No. 306,135. PUBLISHED FEBRUARY 24, 1931. Class 32.

282,927. SODIUM BICARBONATE. DIAMOND ALKALI COMPANY, Pittsburgh, Pa.
Filed October 2, 1930. Serial No. 306,309. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,928. OPTICAL INSTRUMENTS—NAMELY, READING GLASSES, MAGNIFYING LENSES, TELESCOPES, MICROSCOPES, GOGGLES, EYEGLASSES, BINOCULARS, OPERA AND FIELD GLASSES, AND GAZING GLOBES. TESTRITE INSTRUMENT COMPANY, New York, N. Y.
Filed October 13, 1930. Serial No. 306,713. PUBLISHED FEBRUARY 24, 1931. Class 26.

282,929. OIL MIXTURE PREPARED TO BE USED AS AN APPLICATION TO BUNIONS. THE MARY & DEAN COMPANY, Kansas City, Kans.
Filed October 21, 1930. Serial No. 307,024. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,930. EXTERNAL LINIMENT USED IN THE TREATMENT OF BACKACHE, NEURALGIA, RHEUMATISM, SPRAINS, TOOTHACHE, LUMBAGO, SCIATICA, PLEURISY, SORE THROAT, AND ANALOGOUS DISEASES. CATHERINE ANN SORBER, doing business as Russell Chemical Co., Brookline, Pa.
Filed October 22, 1930. Serial No. 307,065. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,931. TOILET PREPARATIONS, ETC. WILLIAM F. DENNEY, doing business as Frances Denney of Philadelphia, Philadelphia, Pa.
Filed October 24, 1930. Serial No. 307,134. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,932. POLISH FOR AUTOMOBILES AND FURNITURE. STANLEY PEJANOWSKI, doing business as Rain Proof Finish Co., Chicago, Ill.
Filed October 25, 1930. Serial No. 307,176. PUBLISHED FEBRUARY 24, 1931. Class 16.

282,933. TIRE-INFLATING MACHINE. NATHAN CHIRELSTEIN, doing business as Rapidaire, Inc., Newark, N. J.
Filed November 12, 1930. Serial No. 307,803. PUBLISHED FEBRUARY 24, 1931. Class 23.

282,934. MINERAL WATER. C. FRANKLIN LEAVITT, doing business as New Life Crystals, Gary, Ind.
Filed December 13, 1930. Serial No. 308,942. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,935. BLEACH AND BEAUTY CREAMS, ROUGES, FACE PACKS, EYELASH GROWER, ETC. LEONARD E. LISNER, New York, N. Y.
Filed November 13, 1930. Serial No. 307,851. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,936. RUBBING ALCOHOL. SPECIALTY PRODUCTS COMPANY, New Orleans, La.
Filed November 19, 1930. Serial No. 308,091. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,937. CERTAIN NAMED PAINT PRODUCTS. O'NEIL LUMBER COMPANY INC., St. Louis, Mo., and East St. Louis, Ill.
Filed November 20, 1930. Serial No. 308,177. PUBLISHED FEBRUARY 24, 1931. Class 16.

282,938. MEDICINE FOR CLIMACTERIC DISEASES. CHEMISCHE FABRIKEN DR. JOACHIM WIERNIK & CO., AKTIENGESELLSCHAFT, Berlin-Waidmannslust, Germany.
Filed November 25, 1930. Serial No. 308,288. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,939. PICTURE PROJECTORS ADAPTED TO BE CONTAINED IN OR COMBINED WITH PHONOGRAPH REPRODUCERS. FRED ADAMS, Philadelphia, Pa.
Filed November 26, 1930. Serial No. 308,319. PUBLISHED FEBRUARY 24, 1931. Class 26.

282,940. PRINTED PUBLICATIONS INCLUDING PAMPHLETS OR BOOKS ISSUED FROM TIME TO TIME OF IRREGULAR PERIODS. HURLEY AND SANDERS, Los Angeles, Calif.
Filed November 29, 1930. Serial No. 308,441. PUBLISHED FEBRUARY 17, 1931. Class 38.

282,941. TOILET PAPER. WHEELER PAPER CORPORATION, Albany, N. Y.
Filed December 2, 1930. Serial No. 308,524. PUBLISHED FEBRUARY 17, 1931. Class 37.

282,942. SALVE TO AID IN HEALING OF PIMPLES AND MINOR ERUPTION OF THE SKIN. BETTY GURBAN, New York, N. Y.
Filed December 3, 1930. Serial No. 308,545. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,943. FRESH-OPENED OYSTERS OR CLAMS IN PAPER CONTAINERS AND OYSTERS OR CLAMS PROCESSED AND SEALED IN CANS. BEACON OYSTER COMPANY, Wickford, R. I.
Filed December 4, 1930. Serial No. 308,571. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,944. FACE POWDERS, TALCUM POWDERS, ROUGES, PERFUMES, TOILET WATERS, BRILLIANTINES, FACE LOTIONS, COLD CREAMS, SKIN CREAMS, AND BATH SALTS. SOCIETE DES PARFUMS WEIL (SOCIETE ANONYME), Paris, France.
Filed December 4, 1930. Serial No. 308,602. PUBLISHED FEBRUARY 24, 1931. Class 6.

282,945. SECTION OF A MAGAZINE—NAMELY, A MONTHLY MAGAZINE. JAMES W. LOWRIE, doing business as The Wholesale Grocer & The Retailers' Journal Publishing Company, Chicago, Ill.
Filed December 5, 1930. Serial No. 308,631. PUBLISHED FEBRUARY 17, 1931. Class 38.

282,946. CANDY. THE CANDYLAND, Rome, N. Y.
Filed December 6, 1930. Serial No. 308,679. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,947. NONIRRITATING, NONDRYING, AND NONALCOHOLIC PREPARATION OF IODINE AND MEDICINAL OILS. LOUANGEL LABORATORIES, INC., New York, N. Y.
Filed December 6, 1930. Serial No. 308,696. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,948. HEALTH, SONG, AND VIGOR RESTORER FOR BIRDS (A DRY PRODUCT); COMBINED TONIC AND BITTERS FOR BIRDS (LIQUID), AND ANTISEPTIC BIRD WASH (LIQUID). HAROLD SCHLIESSER, doing business as 8 in 1 Pet Products, New York, N. Y.
Filed December 6, 1930. Serial No. 308,705. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,949. FACE CREAMS, FACE LOTIONS, FACE POWDERS, ROUGE, CLAY PACKS, AND LIP STICKS. ROSALIA VOLPI, doing business as Rosalia Laboratories, Birmingham, Ala.
Filed December 8, 1930. Serial No. 308,766. PUBLISHED FEBRUARY 17, 1931. Class 6.

282,950. THRESHERS, COMBINE THRESHERS, SHREDDERS, SILO FILLERS, PLOWS, TRACTORS, AND HULLERS AND PARTS THEREOF. ADVANCE-RUMELY COMPANY, La Porte, Ind.
Filed December 6, 1930. Serial No. 308,767. PUBLISHED FEBRUARY 24, 1931. Class 23.

282,951. SOAP, SOAP CHIPS, AND SOAP POWDER. HELLER & PERRIN, Pittsburgh, Pa.
Filed December 9, 1930. Serial No. 308,781. PUBLISHED FEBRUARY 24, 1931. Class 4.

282,952. OINTMENT AND SALVE USED IN THE TREATMENT OF RHEUMATISM. RHEUMO-CHASE COMPANY, Pittsburgh, Pa.
Filed December 12, 1930. Serial No. 308,906. PUBLISHED FEBRUARY 17, 1931. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

282,953. (CLASS 39. CLOTHING.) KIRBY, BLOCK & FISCHER, INC., doing business as Cooperative Merchandising Bureau, New York, N. Y. Filed May 31, 1930. Serial No. 301,948.

LONSBURY

For Men's and Boys' Dress and Negligee Shirts, Pajamas, and Underwear.
Claims use since Feb. 1, 1930.

282,954. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. DUFF & SONS, INC., doing business as Redfield Company, Pittsburgh, Pa. Filed June 3, 1930. Serial No. 302,141.

REDFIELD

The drawing is lined for red.
For Peanut Butter.
Claims use since Jan. 13, 1930.

282,955. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) MORRIS WABSHAWSKY, doing business as Morris Manufacturing Co., New York, N. Y. Filed Aug. 2, 1930. Serial No. 304,158.

MADE IN MORRIS U.S.A.

For Automobile Hub Bolts.
Claims use since July 1, 1929.

282,956. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SAN DIEGO FRUIT & PRODUCE CO., San Diego, Calif. Filed Oct. 31, 1930. Serial No. 307,425.

VERIGREEN

For Fresh Vegetables.
Claims use since July 1, 1926.

282,957. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS AND PARTS THEREOF.) S. H. KRESS & CO., New York, N. Y. Filed Dec. 14, 1929. Serial No. 293,671.

GLENDALE

For Teaspoons, Tablespoons, Dessert Spoons, Soup Spoons, Sugar Spoons, Iced-Tea Spoons, Baby Spoons, After-Dinner Coffee Spoons, Berry Spoons, Butter Spreaders, Butter Knives, Dinner Knives, Dinner Knives (Stainless), Children's Knives, Children's Forks, Salad Forks, Oyster Forks, Dinner Forks, Dessert Forks, Cold-Meat Forks, Gravy Ladles, and Pastry Servers, All of Semi-precious Metals.
Claims use since Nov. 1, 1929.

282,958. (CLASS 37. PAPER AND STATIONERY.) THE TISSUE COMPANY, Saugerties, N. Y. Filed Jan. 21, 1930. Serial No. 295,060.

La Mode SERVIETTES

For Paper Napkins and Towels.
Claims use since Dec. 11, 1929.

282,959. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE RUBEL BAKING CO., Cincinnati, Ohio. Filed Jan. 25, 1930. Serial No. 295,238.

DOUBLE RYE

For Bread.
Claims use since Dec. 2, 1929.

282,960. (CLASS 32. FURNITURE AND UPHOLSTERY.) NOVA MANUFACTURING COMPANY, Brooklyn, N. Y. Filed Mar. 8, 1930. Serial No. 297,030.

LOCK-TITE

For Table Pads.
Claims use since Nov. 15, 1929.

282,961. (CLASS 39. CLOTHING.) BLUMENTHAL LEWIN CO., Los Angeles, Calif. Filed Mar. 20, 1930. Serial No. 297,579.

Palm Springs

For Men's, Women's, and Children's Lounging Robes; Beach Robes, Smoking Jackets, Negligees, Beach Outer Suits, Beach Pants, Beach Pajamas, and Lounging Pajamas.
Claims use since Mar. 4, 1930.

282,962. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CARL LURCH, Chicago, Ill. Filed Mar. 21, 1930. Serial No. 297,688.

BODENSTEIN

For Malt Extract.
Claims use since Mar. 1, 1930.

282,963. (CLASS 39. CLOTHING.) THE CAMPE CORPORATION, New York, N. Y. Filed Apr. 11, 1930. Serial No. 298,685.

WYOMING

For Men's and Boys' Underwear—Namely, Shirts, Drawers, and Union Suits.
Claims use since Mar. 5, 1930.

282,964. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) E. MORA, doing business as E. Mora's Specialty Food Co., A. & E. Mora's Specialty Food Co., and E. & A. Mora's Specialty Food Co., Los Angeles, Calif. Filed Dec. 22, 1930. Serial No. 309,249.

MORA'S

For Alimentary Pastes; Canned Prepared Foods—Namely, Spaghetti, Ravioli, Noodles, Chicken with Noodles, Chile Con Carne, Tomato Sauce, Mushroom Sauce, Cheese.
Claims use since Jan. 1, 1923.

282,965. (CLASS 39. CLOTHING.) LIONDALE SHIRT CO. INC., New York, N. Y. Filed Jan. 23, 1931. Serial No. 310,296.

Drummond

For Men's and Boys' Dress and Negligee Shirts, Pajamas, and Underwear.
Claims use since Jan. 3, 1930.

282,966. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ENO RUBBER CORPORATION, Los Angeles, Calif. Filed Sept. 17, 1929. Serial No. 289,882.

"Ball-For-All"

For Rubber Play Balls.
Claims use since Apr. 27, 1929.

TRADE-MARK REGISTRATIONS RENEWED

36,163. BUTTER. Registered April 2, 1901. THE ELGIN BUTTER COMPANY, Elgin, Ill. Renewed April 2, 1931, to The Fox River Butter Co. Inc., New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

36,909. WOVEN FABRIC FOR SHADES, SCREENS, AND CURTAINS. Registered August 20, 1901. AZEL CLARENCE HOUGH, South Butler, N. Y. Renewed August 20, 1931, to Hough Shade Corporation, Janesville, Wis., a Corporation of Connecticut, assignee.

36,970. CIGARETTE PAPERS. Registered August 27, 1901. MAISON PIERRE BARDOU JOB, Perpignan, France. Renewed August 27, 1931, to Societe Job Anciens Etablissements Bardou-Job et Paulhac, Perpignan and Toulouse, France, a Corporation of France, assignee.

36,971. CIGARETTE PAPERS. Registered August 27, 1901. MAISON PIERRE BARDOU JOB, Perpignan, France. Renewed August 27, 1931, to Societe Job Anciens Etablissements Bardou-Job et Paulhac, Perpignan and Toulouse, France, a Corporation of France, assignee.

76,740. HOSIERY. Registered February 15, 1910. CHAS. CHIPMANS SONS, Easton and Selinsgrove, Pa. Renewed February 15, 1930, to Rufus W. Scott Company, New York, N. Y., a Corporation of Delaware, successor.

80,937. CIGARS. Registered February 14, 1911. JULIUS C. NEWMAN. Renewed February 14, 1931, to M. & N. Cigar Manufacturers, Inc., Cleveland, Ohio, a Corporation of Ohio, assignee.

80,990. GLOVES. Registered February 21, 1911. DENT, ALLCROFT & CO. Renewed February 21, 1931, to Dent, Allcroft & Co., Ltd., London, England, a Corporation of Great Britain, successor.

81,029. TRACING-CLOTH. Registered February 21, 1911. RITCHIE & EASON. Renewed February 21, 1931, to The Winterbottom Book Cloth Company Limited, Manchester, England, a Corporation of Great Britain, assignee.

81,073. TULLES OF ALL KINDS. Registered February 28, 1911. GROS, MILLION & CIE. Renewed February 28, 1931, to Societe Anonyme Etablissements Vautheret, Gros & Laforge, Lyon, France, a Corporation of France, assignee by mesne assignments.

81,079. RUBBER BOOTS AND SHOES AND RUBBER OVERSHOES. Registered February 28, 1911. HOOD RUBBER CO., East Watertown and Boston, Mass. Renewed February 28, 1931, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware, assignee.

81,446. MEDICATED THROAT-PASTILES FOR HUMAN USE. Registered April 11, 1911. EVANS SONS LESCHER & WEBB LIMITED, Liverpool and London, England, a Corporation of Great Britain. Renewed April 11, 1931.

81,508. CERTAIN FOODS. Registered April 18, 1911. JAMES W. CROOK. Renewed April 18, 1931, to The J. W. Crook Stores Company, Baltimore, Md., a Corporation of Maryland, assignee.

81,543. TYPE-WRITING MACHINES. Registered April 18, 1911. THE NOISELESS TYPEWRITER COMPANY, Middletown, Conn. Renewed April 18, 1931, to Remington Typewriter Company, Ilion and New York, N. Y., a Corporation of New York, assignee by mesne assignments.

81,619. CANDIES. Registered April 25, 1911. THE NATIONAL CANDY COMPANY, Jersey City, N. J., and St. Louis, Mo. Renewed April 25, 1931, to National Candy Company, St. Louis, Mo., a Corporation of New Jersey.

81,688. RUBBER-COVERED WIRES AND CABLES FOR ELECTRICAL PURPOSES. Registered May 2, 1911. THE ELECTRIC CABLE COMPANY, Bridgeport, Conn. Renewed May 2, 1931, to Habirshaw Cable & Wire Corporation, New York, N. Y., a Corporation of New York, assignee.

81,698. CORSETS, CORSET-WAISTS, BRASSIÈRES, AND UNDERWAISTS. Registered May 2, 1911. THE H & W COMPANY, Newark, N. J., a Corporation of New Jersey. Renewed May 2, 1931.

81,700. MATCHES. Registered May 2, 1911. HALDENS TÆNDSTIKFABRIK, Fredrikshald, Norway. Renewed May 2, 1931, to Bryn & Halden Tændstikfabrikker Aktieselskab, Bryn, near Oslo, Norway, a Corporation of Norway, assignee.

81,701. MATCHES. Registered May 2, 1911. HALDENS TÆNDSTIKFABRIK, Fredrikshald, Norway. Renewed May 2, 1931, to Bryn & Halden Tændstikfabrikker Aktieselskab, Bryn, near Oslo, Norway, a Corporation of Norway, assignee.

81,746. WIRE ROPE. Registered May 2, 1911. JOHN A. ROEBLING'S SONS COMPANY, Trenton, N. J., a Corporation of New Jersey. Renewed May 2, 1931.

81,751. CERTAIN TOILET ARTICLES. Registered May 2, 1911. EUGENE R. SIERING, New York, N. Y. Renewed May 2, 1931.

81,758. PENS. Registered May 2, 1911. THE TURNER & HARRISON PEN MANUFACTURING COMPANY, INC., Philadelphia, Pa., a Corporation of Pennsylvania. Renewed May 2, 1931.

81,836. CERTAIN NAMED HARDWARE, AND PLUMBING AND STEAM-FITTERS' SUPPLIES. Registered May 9, 1911. VAN CAMP HARDWARE & IRON COMPANY, Indianapolis, Ind., a Corporation of Indiana. Renewed May 9, 1931.

81,857. KNITTED UNDERSHIRTS, DRAWERS, UNION SUITS, AND HOSIERY. Registered May 16, 1911. COOPER & ROE. Renewed May 16, 1931, to Cooper & Roe, Limited, Nottingham, England, a Corporation of Great Britain, successor.

81,910. LAUNDRY BLUE. Registered May 16, 1911. RECKITT & SONS, LIMITED, Hull, England. Renewed May 16, 1931, to Reckitts (U. S. A.), Ltd., Hull, England, and Rochester, N. Y., a Corporation of Great Britain, assignee.

81,967. WOOLEN PIECE GOODS. Registered May 23, 1911. DETMER WOOLEN COMPANY, New York, N. Y.; Chicago, Ill.; Kansas City, Mo.; Los Angeles, Calif.; and Seattle, Wash. Renewed May 23, 1931, to Detmer, Bruner & Mason, Inc., New York, N. Y., a Corporation of New York, successor.

82,086. LEATHER BOOTS AND SHOES. Registered May 30, 1911. F. M. HOYT SHOE COMPANY, Manchester, N. H., a Corporation of New Hampshire. Renewed May 30, 1931.

82,094. SHAMPOO PREPARATION. Registered May 30, 1911. THE KOKEN BARBERS' SUPPLY COMPANY. Renewed May 30, 1931, to Dealers Sales Corporation, St. Louis, Mo., a Corporation of Delaware, assignee by mesne assignments.

82,297. FERTILIZERS. Registered June 20, 1911. BOWKER FERTILIZER COMPANY. Renewed June 20, 1931, to The American Agricultural Chemical Company, New York, N. Y., a Corporation of Connecticut, assignee.

82,310. LIFTING-JACKS. Registered June 20, 1911. THE DUFF MANFG. CO. Renewed June 20, 1931, to The Duff-Norton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania, by change of name.

82,356. HOSE COMPOSED OF RUBBER OR FABRIC AND COMBINED RUBBER AND FABRIC. Registered June 20, 1911. PEERLESS RUBBER MANUFACTURING COMPANY, New Durham, N. J., and New York, N. Y. Renewed June 20, 1931, to United States Rubber Company, New York, N. Y., a Corporation of New Jersey, assignee.

82,357. PACKING COMPOSED OF RUBBER OR RUBBER AND FABRIC. Registered June 20, 1911. PEERLESS RUBBER MANUFACTURING COMPANY, New Durham, N. J., and New York, N. Y. Renewed June 20, 1931, to United States Rubber Company, New York, N. Y., a Corporation of New Jersey, assignee.

82,358. PACKING COMPOSED OF RUBBER AND FIBROUS MATERIAL AND RUBBER AND FIBROUS MATERIAL COMBINED WITH METAL. Registered June 20, 1911. PEERLESS RUBBER MANUFACTURING COMPANY, New Durham, N. J., and New York, N. Y. Renewed June 20, 1931, to United States Rubber Company, New York, N. Y., a Corporation of New Jersey, assignee.

82,519. CANDIES. Registered July 4, 1911. JAYNES DRUG COMPANY. Renewed July 4, 1931, to United Drug Company, Boston, Mass., a Corporation of Delaware, assignee by mesne assignments.

82,525. WOVEN MACHINE-BELTING AND MACHINE-BELTING OF LEATHER. Registered July 4, 1911. LEWIS & TYLOR, LIMITED, Cardiff, England, a Corporation of Great Britain. Renewed July 4, 1931.

82,528. ENGRAVERS', WATCHMAKERS', AND JEWELERS' MACHINES, TOOLS, AND DIES. Registered July 4, 1911. ADOLPH MUEHLMATT, Cincinnati, Ohio. Renewed July 4, 1931.

82,560. HOSIERY. Registered July 11, 1911, BELLAS HESS & CO. Renewed July 11, 1931, to National Bellas Hess Co., Inc., New York, N. Y., a Corporation of New York, successor.

82,642. COLD-CREAM. Registered July 11, 1911. FRANK W. C. ROSS, New York, N. Y. Renewed July 11, 1931, to Myma A. M. Ross, Toronto, Canada, assignee.

82,643. POCKET-BOOKS, PORTFOLIOS, LEATHER CASES FOR PAPER CURRENCY, MUSIC-ROLLS, SATCHELS, AND HAND-BAGS. Registered July 11, 1911. THE ROYCROFTERS, East Aurora, N. Y., a Corporation of New York. Renewed July 11, 1931.

82,652. CERTAIN TOILET PREPARATIONS, MEDICINES, AND INSECTICIDES. Registered July 11, 1911. DANIEL STEWART CO. Renewed July 11, 1931, KIEFER-STEWART COMPANY, Indianapolis, Ind., a Corporation of Indiana, successor.

82,659. GRANULATED MEAL. Registered July 11, 1911. VALLEY CITY MILLING CO., Grand Rapids, Mich., a Corporation of Michigan. Renewed July 11, 1931.

82,722. GLASS USED FOR CERTAIN PURPOSES. Registered July 18, 1911. SEMON BACHE & COMPANY, New York, N. Y., a Corporation of New York. Renewed July 18, 1931.

82,739. SHELLAC AND OTHER VARNISHES. Registered July 18, 1911. WILLIAM H. ZINSSER. Renewed July 18, 1931, to William Zinsser & Co., Inc., New York, N. Y., a Corporation of New York, assignee.

82,995. KNIT UNDERWEAR. Registered August 8, 1911. LAX & STRAUSS. Renewed August 8, 1931, to Lax & Burgheimer Corporation, New York, N. Y., a Corporation of New York, assignee by mesne assignments.

83,046. ELECTRIC MOTORS. Registered August 15, 1911. CENTURY ELECTRIC CO., St. Louis, Mo., a Corporation of Missouri. Renewed August 15, 1931.

83,070. HOSIERY. Registered August 15, 1911. INTERWOVEN STOCKING COMPANY, New Brunswick, N. J., a Corporation of New Jersey. Renewed August 15, 1931.

83,121. PLAYING-MARBLES. Registered August 22, 1911. THE AKRO AGATE COMPANY. Renewed August 22, 1931, to The Akro Agate Company, Akron, Ohio, a Corporation of Ohio, assignee by mesne assignments.

83,164. ARC AND INCANDESCENT ELECTRIC LAMPS. Registered August 22, 1911. MACBETH-EVANS GLASS CO., Pittsburg, Pa. Renewed August 22, 1931, to Macbeth-Evans Glass Company, Charleroe, Pa., a Corporation of Pennsylvania.

83,347. COTTON MOPS. Registered September 5, 1911. JOHN P. NAWRATH. Renewed September 5, 1931, to J. P. Nawrath & Co., Inc., New York, N. Y., a Corporation of New York, successor.

83,348. COTTON MOPS. Registered September 5, 1911. JOHN P. NAWRATH. Renewed September 5, 1931, to J. P. Nawrath & Co., Inc., New York, N. Y., a Corporation of New York, successor.

83,349. COTTON MOPS. Registered September 5, 1911. JOHN P. NAWRATH. Renewed September 5, 1931, to J. P. Nawrath & Co., Inc., New York, N. Y., a Corporation of New York, assignee.

83,371. PIANOS, EITHER WITH OR WITHOUT AUTOMATIC PLAYER MECHANISM. Registered September 5, 1911. THE STARR PIANO COMPANY, Richmond, Ind., a Corporation of Indiana. Renewed September 5, 1931.

83,374. HOSIERY. Registered September 5, 1911. THE VAUGHAN KNITTING COMPANY, Pottstown, Pa., a Corporaton of Pennsylvania. Renewed September 5, 1931.

83,375. ALL KINDS OF FLOUR. Registered September 5, 1911. VOIGT MILLING COMPANY, Grand Rapids, Mich., a Corporation of Michigan. Renewed September 5, 1931.

83,469. SOLDERING-FLUXES. Registered September 19, 1911. LLOYD R. BENSON. Renewed September 19, 1931, to Alexander R. Benson Company, Hudson, N. Y., a Corporation of New York, successor.

83,537. OVERALLS. Registered September 26, 1911. ALEXANDER BROS. CO., Savannah, Ga., a Corporation of Georgia. Renewed September 26, 1931.

83,555. FERTILIZERS AND MANURES. Registered September 26, 1911. BOWKER FERTILIZER COMPANY. Renewed September 26, 1931, to The American Agricultural Chemical Company, New York, N. Y., a Corporation of Connecticut, assignee.

83,564. LEAD-PENCILS AND RUBBER ERASERS. Registered September 26, 1911. EBERHARD FABER, New York, N. Y. Renewed September 26, 1931, to Eberhard Faber Pencil Company, Brooklyn, N. Y., a Corporation of New York, assignee.

83,565. RUBBER ERASERS. Registered September 26, 1911. EBERHARD FABER, New York, N. Y. Renewed September 26, 1931, to Eberhard Faber Pencil Company, Brooklyn, N. Y., a Corporation of New York assignee.

83,583. CERTAIN KINDS OF RUBBER GOODS. Registered September 26, 1911. IMPERIAL RUBBER CO. Renewed September 26, 1931, to Frederick A. Lachance, doing business as Imperial Rubber Co., New York, N. Y., assignee.

83,598. KNITTED UNDERWEAR. Registered September 26, 1911. JOHN F. QUINN. Renewed September 26, 1931, to Pearl Waist Company, Inc., Cohoes, N. Y., a Corporation of New York, successor.

83,615. CALCIUM CARBID. Registered September 26, 1911. UNION CARBIDE COMPANY, Chicago, Ill. Renewed September 26, 1931, to Union Carbide Company, New York, N. Y., a Corporation of Virginia.

83,621. FOUNTAIN-PENS AND PARTS THEREOF. Registered September 26, 1911. L. E. WATERMAN COMPANY, New York, N. Y., a Corporation of New York. Renewed September 26, 1931.

83,639. EDIBLE CORN-OIL. Registered October 3, 1911. CORN PRODUCTS REFINING COMPANY, Jersey City, N. J., and New York, N. Y. Renewed October 3, 1931, to Corn Products Refining Company, New York, N. Y., a Corporation of New Jersey.

83,830. CANNED FRUITS. Registered October 17, 1911. GRIFFITH-DURNEY CO., San Francisco, Calif., a Corporation of California. Renewed October 17, 1931.

LABELS

REGISTERED MAY 5, 1931

39,067.—*Title:* IMPROVED CHOCOLATE KANDYEAST. For Candy. EARLE C. BENNETT, doing business as Kandyeast Company, West Springfield, Mass. Published March 19, 1931.

39,068.—*Title:* AMY LEE. For Butter. THE BLUE GRASS CREAMERY, INC., Blue Grass, Iowa. Published April 4, 1930.

39,069.—*Title:* SLEEPY WATER. For Mineral Water. CHEWAUKLA MINERAL SPRINGS COMPANY, Chicago, Ill. Published January 12, 1931.

39,070.—*Title:* ALMOST ANY FOOT IS A NORMAL FOOT FOR HEEL HUGGER SHOES. For Shoes. DUNN & MCCARTHY, INC., Auburn, N. Y. Published March 25, 1931.

39,071.—*Title:* NU-VEGE-SAL. For Table Salt. SEBASTIAN GYSIN, doing business as Modern Health Products, Milwaukee, Wis. Published January 15, 1931.

39,072.—*Title:* EL-O-PATHIC EVACUANT. For a Preparation for the Relief of Constipation. HENRY HENKIN, doing business as the El-O-Pathic Laboratories, Los Angeles, Calif. Published February 3, 1931.

39,073.—*Title:* HEN-KING. For Tomatoes. EARLE HENKING, Niland, Calif. Published March 27, 1931.

39,074.—*Title:* CAMEL DATES—GOOD AS THEY LOOK. For Dates. THE HILLS BROTHERS COMPANY, New York, N. Y. Published March 26, 1931.

39,075.—*Title:* H. HEICKLEN SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 12, 1931.

39,076.—*Title:* M. O'NEIL. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 2, 1931.

39,077.—*Title:* KEMET BARIUM MAGNESIUM 'GETTER' TABLETS. For Tablets of 'Getter' Composition. KEMET LABORATORIES COMPANY, INC., New York, N. Y. Published October 14, 1930.

39,078.—*Title:* WHITE KING COCOA ALMOND. For Soap. LOS ANGELES SOAP CO., Los Angeles, Calif. Published January 15, 1931.

39,079.—*Title:* GENUINE TURPENTINE. For Turpentine. MIDWAY CHEMICAL CO., Chicago, Ill. Published February 19, 1931.

39,080.—*Title:* 21—A. For Battery Clips. MUELLER ELECTRIC COMPANY, Cleveland, Ohio. Published February 23, 1931.

39,081.—*Title:* NECCO BOLSTERS. For Candy. NEW ENGLAND CONFECTIONERY COMPANY, Cambridge, Mass. Published February 7, 1931.

39,082.—*Title:* PAB-COTE. For Industrial Coatings. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Published May 15, 1930.

39,083.—*Title:* REEFER'S NO-MOTH CEDARAIRE. For Preparations for Protection Against Moths. REEFER'S NO-MOTH, INC., New York, N. Y. Published March 28, 1931.

39,084.—*Title:* WARD'S VITABRED. For Bread. WARD BAKING COMPANY, New York, N. Y. Published March 2, 1931.

39,085.—*Title:* INDEPENDENT (RED LABEL). For Pears. WASHINGTON FRUIT & PRODUCE CO., INC., Yakima, Wash. Published March 9, 1931.

39,086.—*Title:* INDEPENDENT (WHITE LABEL). For Apples. WASHINGTON FRUIT & PRODUCE CO., INC., Yakima, Wash. Published March 9, 1931.

PRINTS

REGISTERED MAY 5, 1931

13,168.—*Title:* DOUBLE-GAMMON. For Game. THE BISHOP PRODUCTS COMPANY, Cleveland, Ohio. Published February 13, 1931.

13,169.—*Title:* RE-JU-VELOUR. For a Toilet Preparation. JAMES LLOYD CAYNE, doing business as the Rejuvené Mfg. Co., Oakland, Calif. Published December 3, 1926.

13,170.—*Title:* ROCHESTER ROOT BEER. For Root Beer. J. HUNGERFORD SMITH CO., Rochester, N. Y. Published January 2, 1931.

13,171.—*Title:* FRUITS AND FLAVORS. For Soda Fountain Fruits and Flavors. J. HUNGERFORD SMITH CO., Rochester, N. Y. Published January 2, 1931.

13,172.—*Title:* JUICY ORANGE. For Orange Juice. J. HUNGERFORD SMITH CO., Rochester, N. Y. Published January 2, 1931.

13,173.—*Title:* PHILLIPS' MILK OF MAGNESIA. For Milk of Magnesia. THE CHAS. H. PHILLIPS CHEMICAL CO., New York, N. Y. Published February 3, 1930.

13,174.—*Title:* BUFARATOR. For Domestic Refrigerator. JAMES G. SCOTT, Washington, D. C. Published April 8, 1931.

13,175.—*Title:* GOLDEN BEE BRAND COMB HONEY. For Comb Honey. E. A. SPRAGUE, Caldwell, Idaho. Published December 11, 1930.

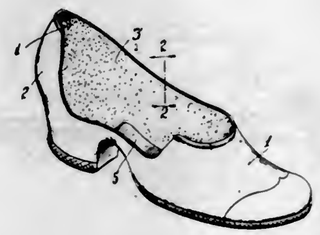
13,176.—*Title:* HEAT TEMPERED. For Gasoline. THE STANDARD OIL COMPANY, Cleveland, Ohio. Published March 14, 1931.

13,177.—*Title:* IT FITS THE HAND. For Jar for Peanut Butter. WILLIAMSON CANDY COMPANY, Chicago, Ill. Published February 15, 1931.

REISSUES

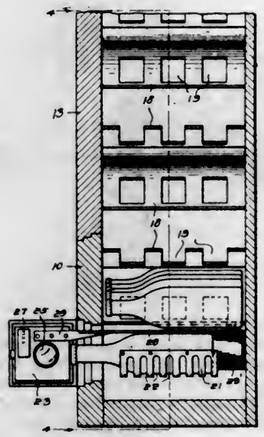
MAY 5, 1931

18,058. LINING FOR RUBBER ARTICLES. CHARLES E. BRADLEY and CLAUDE D. MASON, Mishawaka, Ind., assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Original No. 1,677,428, dated July 17, 1928, Serial No. 192,591, filed May 19, 1927. Application for reissue filed July 16, 1930. Serial No. 468,474. 9 Claims. (Cl. 36—5.)



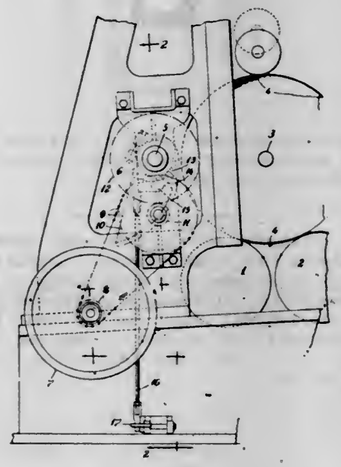
6. In an article of wearing apparel shaped to fit a portion of the human body, the combination of a wall of rubber composition vulcanized in a form corresponding to the shape of said portion of the human body and having a lining of comminuted fibers secured to the inner surface thereof so that the extensibility of the lining is limited solely by the elasticity of the vulcanized rubber composition.

18,059. VENDING MACHINE. RAYMOND M. COPE, Chicago, Ill., assignor, by direct and mesne assignments, of one-tenth to Charles Veneman and forty-five one-hundredths to Warren A. Jackson. Original No. 1,742,581, dated Jan. 7, 1930, Serial No. 299,061, filed Aug. 11, 1928. Application for reissue filed July 9, 1930. Serial No. 466,894. 15 Claims. (Cl. 312—36.)



15. In an article dispensing machine a housing adapted to confine a stack of articles, a stationary receiver for supporting the lowermost article in the stack, and means operable to separate the lowermost article from the others in the stack, a door controlling access to said housing and being operatively connected to said last mentioned means to render said article accessible from the exterior of the housing.

18,060. WINDING MACHINE. JAMES A. CAMERON, Brooklyn, N. Y., and GEORGE B. RICKARD, Glen Rock, N. J., assignors to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Original No. 1,759,538, dated May 20, 1930, Serial No. 245,075, filed Jan. 7, 1928. Renewed Nov. 16, 1929. Application for reissue filed Aug. 27, 1930. Serial No. 478,260. 6 Claims. (Cl. 242—66.)

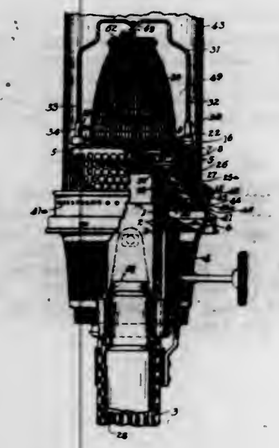


3. In a winding machine, the combination with two surface winding drums spaced apart and rotatable in the same direction, and a winding shaft to be placed in the valley between the drums and to support a roll of flexible material, of ejecting means other than one of the winding drums to move the winding shaft and its roll of flexible material upwardly out of said valley and outwardly over one of said drums at first relatively slowly and then with a gradually accelerated movement.

18,061. BLUE FLAME MANTLE LAMPS. CORTLAND W. DAVIS, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Original No. 1,744,298, dated Jan. 21, 1930, Serial No. 208,286, filed July 25, 1927. Application for reissue filed Jan. 9, 1931. Serial No. 507,703. 41 Claims. (Cl. 67—38.)

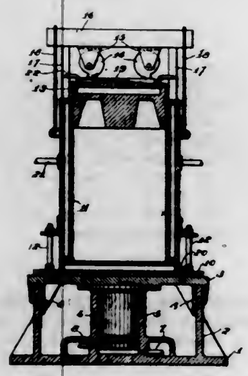
38. A blue-flame oil burner of the wick type having a burner cone and an outer wick tube, and a flame-protecting baffle disposed with its upper end below the upper end of the wick when the wick is raised to its operative position and in such relation to the burner cone and the outer wick tube as to produce between it and the burner

cone a major air passage, and between it and the outer wick tube a minor air passage which leads to the exposed



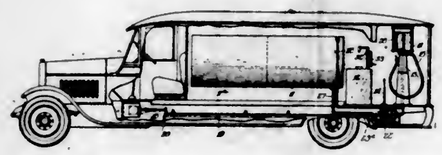
surface of the wick and through which a very small current of heat-insulating air may flow to prevent overheating of the outer wick tube.

18,062. CARBON ELECTRODE AND METHOD OF MOLDING THE SAME. VICTOR C. DOERSCHUK, Massena, N. Y., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Original No. 1,683,587, dated Sept. 4, 1928, Serial No. 206,922, filed July 19, 1927. Application for reissue filed Aug. 27, 1930. Serial No. 478,259. 25 Claims. (Cl. 18—47.5.)



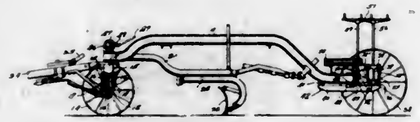
4. The method of molding into a coherent mass a normally unconsolidated mixture of granular carbon and a viscous bituminous binder, comprising heating the mixture to a temperature of not less than about 100° C., placing the heated mixture in a heated mold, jarring the mold to consolidate the mixture, and cooling the mold body before removing the molded mass.

18,063. PORTABLE OIL AND GAS SERVICE STATION. FRITZ P. STEINHAUER, Chicago, Ill., assignor of one-fifth to George A. Schneider, Chicago, Ill. Original No. 1,764,057, dated June 17, 1930, Serial No. 104,862, filed Apr. 26, 1926. Application for reissue filed Mar. 20, 1931. Serial No. 524,027. 7 Claims. (Cl. 221—95.)



1. A motor driven vehicle equipped with storage tanks for oil and gasoline or other liquid fuel, standpipes with visible meters, a supply pipe connecting each meter with a tank, a dispensing hose from each meter, pumps inserted between the tanks and meters, and means for utilizing the vehicle motor to drive any one of the pumps at will, said means comprising a motor driven counter shaft, and clutches interposed between the counter shaft and each of the pumps.

18,064. LEANING WHEEL GRADER. FRANKLIN E. ARNDT, Galion, Ohio, assignor to The Galion Iron Works & Mfg. Co., Galion, Ohio, a Corporation of Ohio. Original No. 1,655,303, dated Jan. 3, 1928, Serial No. 189,043, filed May 5, 1927. Application for reissue filed Sept. 27, 1930. Serial No. 484,910. 17 Claims. (Cl. 37—157.)

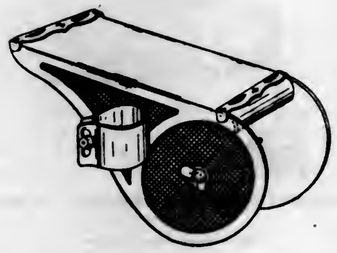


1. In an implement of the class described, wheel supported front and rear axles, a frame connecting said axles and comprising front and rear sections pivoted to each other and to the front and rear axles respectively for angling in substantially horizontal planes, the effective load transmitting portions of said sections lying entirely between the axles, and manually operable means for angling the sections of the main frame.

DESIGNS

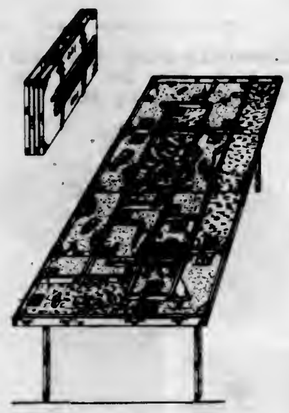
MAY 5, 1931

84,067. MEMORANDUM PAPER HOLDER OR SIMILAR ARTICLE. DEZ ALBRITTON, Spokane, Wash. Filed Feb. 24, 1931. Serial No. 38,812. Term of patent 7 years.



The ornamental design for a memorandum paper holder or similar article, as shown.

84,068. GOLF TABLE. GEORGE P. ANDRUS, Rainier, Oreg. Filed Dec. 1, 1930. Serial No. 37,858. Term of patent 3½ years.



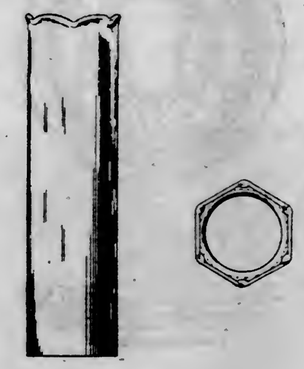
The ornamental design for a golf table, as shown.

84,069. LIGHTING FIXTURE OR ARTICLE OF SIMILAR NATURE. JULIUS J. BLUMENTHAL, New York, N. Y., assignor to Lighting Appliance Company, Inc., New York, N. Y. Filed Aug. 8, 1930. Serial No. 36,602. Term of patent 3½ years.



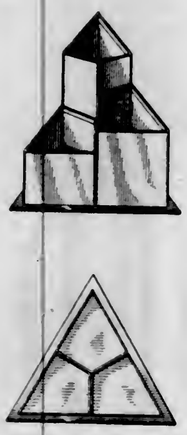
The ornamental design for a lighting fixture, or article of similar nature, as shown and described.

84,070. GLASS SHADE FOR A LIGHTING FIXTURE OR ARTICLE OF SIMILAR NATURE. HUGO BOHL, Westfield, N. J., assignor to Radiant Lighting Fixture Co., Inc., New York, N. Y. Filed Feb. 12, 1930. Serial No. 34,502. Term of patent 3½ years.



The ornamental design for a glass shade for a lighting fixture, or article of similar nature, as shown.

84,071. COMBINED RECEPTACLE FOR SMOKERS' ARTICLES OR SIMILAR DEVICES. JOSEPH BOROVITZ, New York, N. Y., assignor to Joseph Borovitz, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 2, 1929, Serial No. 32,285, and in Germany May 21, 1929. Term of patent 3½ years.



The ornamental design for a combined receptacle for smokers' articles or similar devices as shown.

84,072. COVER PLATE FOR TRAFFIC WARNING DEVICE. PIERRE J. CHERON, Stratford, Conn., assignor to Moto Meter Gauge & Equipment Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Feb. 26, 1931. Serial No. 38,828. Term of patent 7 years.



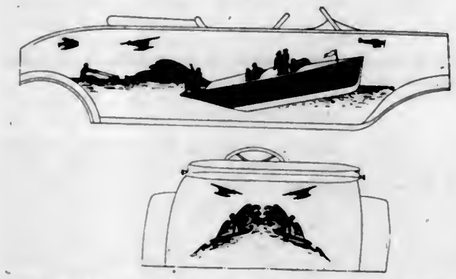
The ornamental design for a cover plate for traffic warning device, as shown.

84,073. WHEELED TOY. WELLER R. CRANDALL, Chicago, Ill., assignor to Noveltoy Corporation, Chicago, Ill., a Corporation of Illinois. Filed July 12, 1930. Serial No. 36,335. Term of patent 3½ years.



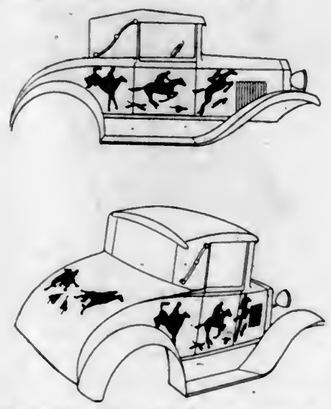
The ornamental design for a wheeled toy, as shown and described.

84,074. AUTOMOBILE BODY. HELEN LEE E. DOHERTY, New York, N. Y. Filed Dec. 15, 1930. Serial No. 38,000. Term of patent 3½ years.



The ornamental design for an automobile body, as shown and described.

84,075. AUTOMOBILE BODY. HELEN LEE E. DOHERTY, New York, N. Y. Filed Dec. 15, 1930. Serial No. 37,999. Term of patent 3½ years.



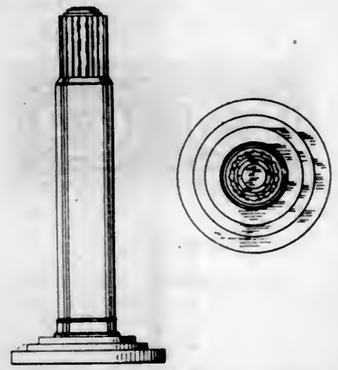
The ornamental design for an automobile body, as shown and described.

84,076. ESCUTCHEON PLATE FOR RADIO RECEIVERS. CORNELIUS G. ELY, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 28, 1931. Serial No. 38,860. Term of patent 7 years.



The ornamental design for an escutcheon plate for radio receivers as shown and described.

84,077. LIGHT. GEORGE GRAFF, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 6, 1930. Serial No. 37,155. Term of patent 14 years.



The ornamental design for a light, substantially as shown.

84,078. KNITTED ENSEMBLE DRESS. MIRIAM GROSS, Milwaukee, Wis., assignor to Miriam Gross Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 28, 1931. Serial No. 38,880. Term of patent 7 years.



The ornamental design for a knitted ensemble dress as shown and described.

84,079. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Feb. 6, 1931. Serial No. 38,571. Term of patent 3½ years.



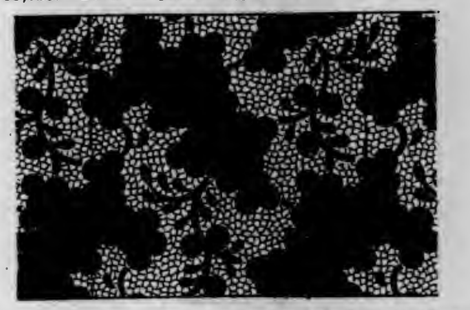
The ornamental design for lace substantially as shown and described.

84,080. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Feb. 9, 1931. Serial No. 38,595. Term of patent 3½ years.



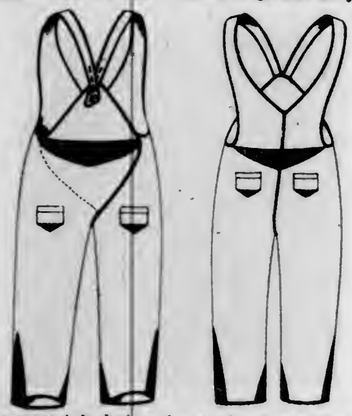
The ornamental design for lace substantially as shown and described.

84,081. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Feb. 11, 1931. Serial No. 38,623. Term of patent 3½ years.



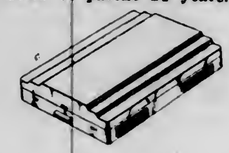
The ornamental design for lace substantially as shown and described.

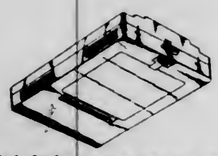
84,082. FRONT-WRAP-CLOSURE GARMENT. JOSEPH MARCUS JENSEN, Los Angeles, Calif. Filed Feb. 24, 1931. Serial No. 38,791. Term of patent 14 years.



The ornamental design for a front-wrap-closure-garment, as shown.

84,083. VANITY CASE. ALICE McL. JONES, New York, N. Y., assignor to Pinaud, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 5, 1931. Serial No. 38,948. Term of patent 14 years.





The ornamental design for a vanity case substantially as shown.

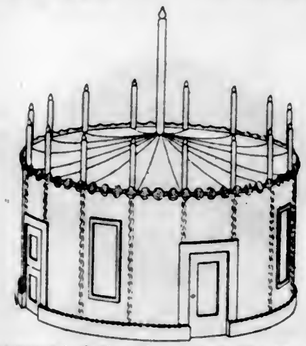
84,084. RADIATOR AIR VENT. HAROLD L. JOYCE, Chicago, Ill., assignor to Jas. P. Marsh & Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 15, 1930. Serial No. 37,265. Term of patent 14 years.





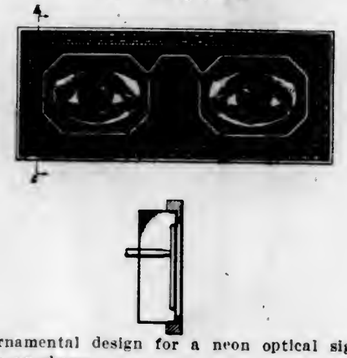
The ornamental design for a radiator air vent, substantially as shown.

84,085. BUILDING. RICHARD C. KAISER, New Rochelle, N. Y. Filed Feb. 14, 1931. Serial No. 38,658. Term of patent 14 years.



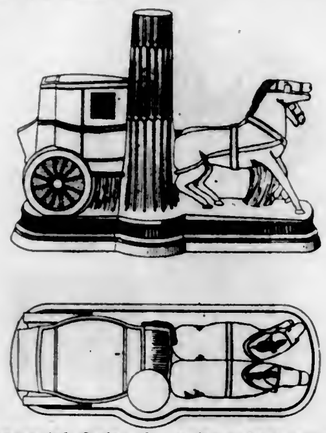
The ornamental design for a building as shown and described.

84,086. NEON OPTICAL SIGN. SAMUEL KAMIN, Lima, Ohio, assignor to Neon Products, Inc., Lima, Ohio, a Corporation of Ohio. Filed Mar. 5, 1931. Serial No. 38,949. Term of patent 3½ years.



The ornamental design for a neon optical sign, substantially as shown.

84,087. LAMP BASE OR ARTICLE OF ANALOGOUS NATURE. MICHAEL KIWAD, New York, N. Y., assignor to La Belle Specialty Co., Inc., a Corporation of New York. Filed Mar. 26, 1931. Serial No. 39,255. Term of patent 3½ years.



The ornamental design for a lamp base or article of analogous nature substantially as shown and described.

84,088. BASE FOR CLOCKS, LAMPS, OR ARTICLES OF ANALOGOUS NATURE. MICHAEL KIWAD, New York, N. Y., assignor to La Belle Specialty Co., Inc., a Corporation of New York. Filed Mar. 26, 1931. Serial No. 39,256. Term of patent 3½ years.





The ornamental design for a base for clocks, lamps, or articles of analogous nature substantially as shown and described.

84,089. COMBINED PONY AND RIDER TOY. WILLIAM KLUG, Chicago, Ill., assignor to Noveltoy Corporation, Chicago, Ill., a Corporation of Illinois. Filed July 12, 1930. Serial No. 36,334. Term of patent 3½ years.



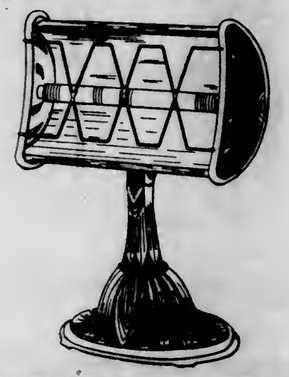
The ornamental design for a combined pony and rider toy, as shown and described.

84,090. BULK MEASURING DEVICE. JAMES A. LAVIN, New York, N. Y. Filed Mar. 2, 1931. Serial No. 38,891. Term of patent 7 years.



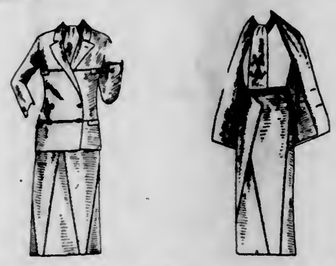
The ornamental design for a bulk measuring device, substantially as shown.

84,091. ELECTRIC HEATER. CHARLES W. LOGAN, Kenmore, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Aug. 23, 1930. Serial No. 36,745. Term of patent 3½ years.



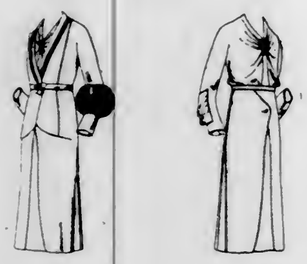
The ornamental design for an electric heater substantially as shown and described.

84,092. ENSEMBLE SUIT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 20, 1931. Serial No. 38,736. Term of patent 3½ years.



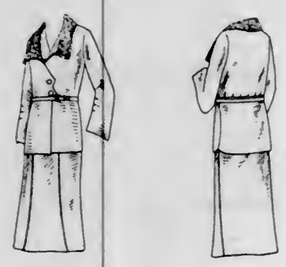
The ornamental design for an ensemble suit substantially as shown.

84,093. ENSEMBLE SUIT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 20, 1931. Serial No. 38,737. Term of patent 3½ years.



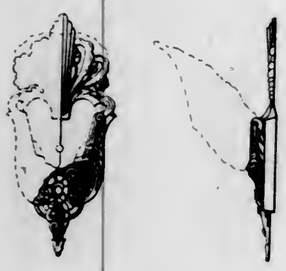
The ornamental design for an ensemble suit substantially as shown.

84,094. ENSEMBLE SUIT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 20, 1931. Serial No. 38,738. Term of patent 3½ years.



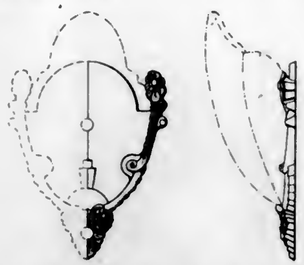
The ornamental design for an ensemble suit substantially as shown.

84,095. ELECTRIC LIGHT FIXTURE. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products Inc., Buffalo, N. Y., a Corporation of New York. Filed Feb. 21, 1931. Serial No. 38,775. Term of patent 3½ years.



The ornamental design for an electric light fixture, substantially as shown and described.

84,096. ELECTRIC LIGHT FIXTURE. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products Inc., Buffalo, N. Y., a Corporation of New York. Filed Feb. 21, 1931. Serial No. 38,776. Term of patent 3½ years.



The ornamental design for an electric light fixture, substantially as shown and described.

84,097. ELECTRIC LIGHT FIXTURE. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products Inc., Buffalo, N. Y., a Corporation of New York. Filed Feb. 21, 1931. Serial No. 38,777. Term of patent 3½ years.



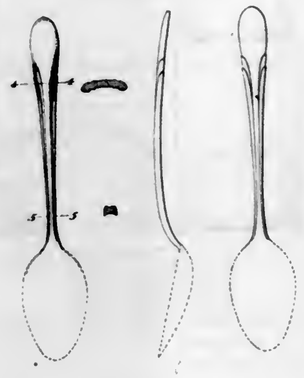
The ornamental design for an electric light fixture, substantially as shown.

84,098. JAR OR SIMILAR RECEPTACLE. LEO NEJELSKI, University City, Mo., assignor of one-half to Frank X. Trimbach, University City, Mo. Filed Aug. 13, 1930. Serial No. 36,662. Term of patent 14 years.



The ornamental design for a jar or similar receptacle substantially as shown and described.

84,099. SPOON OR ANALOGOUS ARTICLE. HAROLD E. NOCK, Newburyport, Mass., assignor to Towle Manufacturing Company, Newburyport, Mass., a Corporation of Massachusetts. Filed Mar. 5, 1931. Serial No. 38,937. Term of patent 14 years.



The ornamental design for a spoon or analogous article, substantially as shown.

84,100. SET OF PLAYING CARDS. STANLEY OBSTBAUM, Brooklyn, N. Y. Filed June 20, 1930. Serial No. 36,114. Term of patent 14 years.

84,100—Continued.



The ornamental design for a set of playing cards substantially as shown and described.

84,101. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J., assignor to The Riker Company, a Corporation of New Jersey. Filed Feb. 20, 1931. Serial No. 38,739. Term of patent 7 years.



The ornamental design for a shoe ornament, as shown.

84,102. SHOE ORNAMENT. SAMUEL M. RIKER, Chester, N. J. Filed Aug. 26, 1930. Serial No. 36,780. Term of patent 7 years.



The ornamental design for a shoe ornament, as shown.

84,103. SHOE BUCKLE. SAMUEL M. RIKER, Chester, N. J. Filed Aug. 26, 1930. Serial No. 36,783. Term of patent 7 years.



The ornamental design for a shoe buckle, as shown.

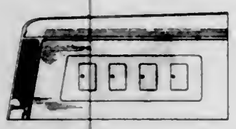
84,104. LAMP SHADE OR SIMILAR ARTICLE. HENRY RITHNER, Wellsburg, W. Va. Filed Mar. 18, 1929. Serial No. 30,516. Term of patent 7 years.

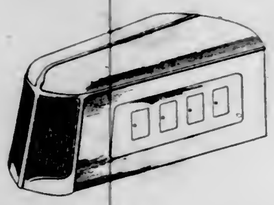




The ornamental design for a lamp shade or similar article, as shown.

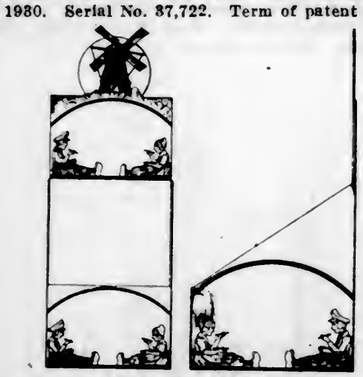
84,105. MOTOR VEHICLE HOOD. EMMETT G. PURDY, Detroit, Mich., assignor to Detroit Body Die Company, a Corporation of Michigan. Filed Mar. 5, 1931. Serial No. 38,957. Term of patent 14 years.





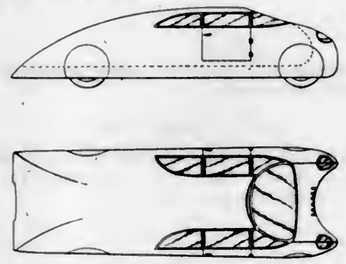
The ornamental design for a motor vehicle hood as shown.

84,106. DISPLAY CARTON OR SIMILAR ARTICLE. EVERETT M. SALISBURY, Providence, R. I. Filed Nov. 19, 1930. Serial No. 37,722. Term of patent 14 years.



The ornamental design for a display carton or similar article substantially as shown and described.

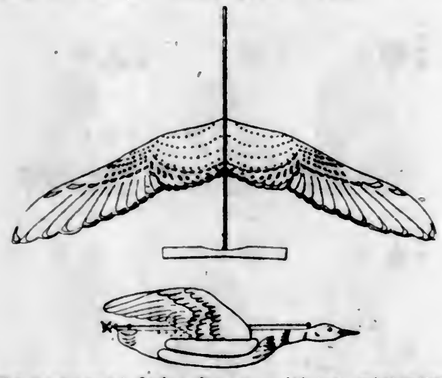
84,107. AUTOMOBILE. RICHARD H. SAMPSON, Westfield, N. J. Filed Feb. 12, 1931. Serial No. 38,630. Term of patent 14 years.





The ornamental design for an automobile, as shown.

84,108. AERIAL TOY. JUNIUS M. SCHUTTE, Chicago, Ill., assignor to The Aero Model Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1931. Serial No. 38,674. Term of patent 7 years.



The ornamental design for an aerial toy, substantially as shown.

84,109. EMBROIDERED LACE EDGING. HENRY SCHWARBER, Weehawken, N. J. Filed Mar. 6, 1931. Serial No. 38,972. Term of patent 3½ years.



The ornamental design for embroidered lace edging, as shown.

84,110. EMBROIDERED LACE EDGING. HENRY SCHWARBER, Weehawken, N. J. Filed Mar. 6, 1931. Serial No. 38,973. Term of patent 3½ years.

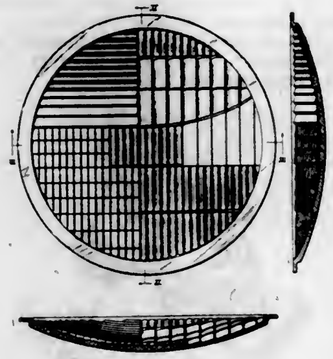


The ornamental design for embroidered lace edging, as shown.

84,111. EMBROIDERED LACE EDGING. HENRY SCHWARBER, Weehawken, N. J. Filed Mar. 6, 1931. Serial No. 38,974. Term of patent 3½ years.

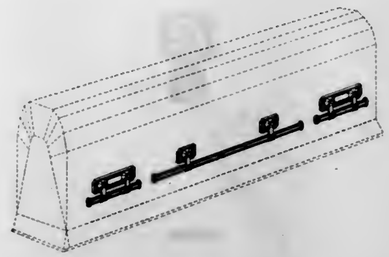
The ornamental design for embroidered lace edging, as shown.

84,112. AUTOMOBILE HEADLIGHT LENS. MAURICE A. SMITH, Jeannette, Pa., assignor to McKee Glass Company, Jeannette, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1930. Serial No. 34,734. Term of patent 14 years.



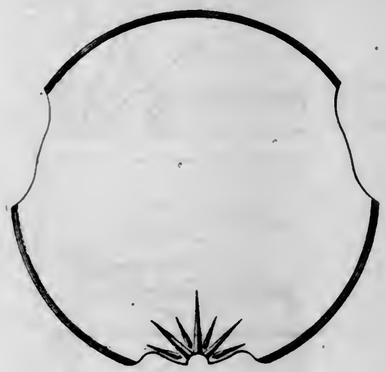
The ornamental design for an automobile headlight lens as shown.

84,113. BURIAL VAULT. RALPH E. SMITH, Galion, Ohio, assignor to The Galion Metallic Vault Company, Galion, Ohio, a Corporation of Ohio. Filed Nov. 10, 1930. Serial No. 37,620. Term of patent 7 years.



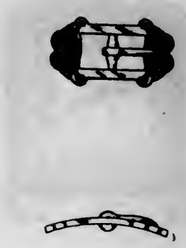
The ornamental design for a burial vault, as shown.

84,114. DIAL FOR CHARTS OR THE LIKE. SAMUEL SMITH, Brooklyn, N. Y., assignor to Disk-O-Knowledge, Inc., New York, N. Y. Filed Mar. 19, 1931. Serial No. 39,143. Term of patent 14 years.



The ornamental design for a dial for charts, or the like substantially as shown.

84,115. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Mar. 11, 1931. Serial No. 39,036. Term of patent 3½ years.



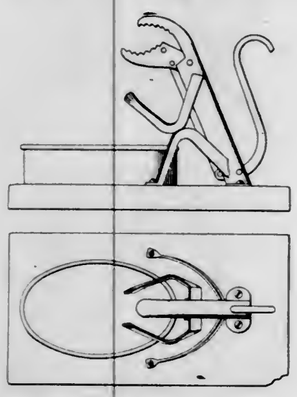
The ornamental design for a shoe buckle as shown.

84,116. SHOE ORNAMENT. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Mar. 11, 1931. Serial No. 39,037. Term of patent 3½ years.



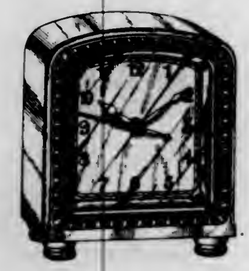
The ornamental design for a shoe ornament as shown.

84,117. NUTCRACKER. AUGUST F. B. STARKE, Shelby, Mont. Filed Feb. 17, 1931. Serial No. 38,694. Term of patent 14 years.



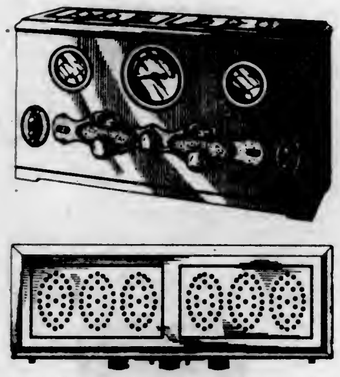
The ornamental design for a nut cracker as shown.

84,118. CLOCK CASE OR SIMILAR ARTICLE. GEORGE H. STEPHENS, Northbrook, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 14, 1931. Serial No. 39,092. Term of patent 14 years.



The ornamental design for a clock case or similar article, as shown.

84,119. CASING FOR A HAIR-WAVING MACHINE. HOWARD A. TRAFTON, Brooklyn, N. Y., assignor to The Nestle-Lemur Company, New York, N. Y., a Corporation of Ohio. Filed Mar. 14, 1931. Serial No. 39,094. Term of patent 7 years.



The ornamental design for a casing for a hair-waving machine, as shown.

84,120. TOY. LADISLAS TURCHANYI, Sashalom, near Budapest, Hungary, assignor to Hungarian Rubber Goods Factory Limited, Budapest, Hungary, a Corporation of Hungary. Filed Feb. 28, 1931. Serial No. 38,878. Term of patent 7 years.



The ornamental design for a toy substantially as shown and described.

84,121. TOY. LADISLAS TURCHANYI, Sashalom, near Budapest, Hungary, assignor to Hungarian Rubber Goods Factory Limited, Budapest, Hungary, a Corporation of Hungary. Filed Feb. 28, 1931. Serial No. 38,879. Term of patent 7 years.



The ornamental design for a toy substantially as shown and described.

84,122. LIGHTING FIXTURE. CLARENCE G. WING, Cleveland, Ohio, assignor to John C. Virden Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 19, 1931. Serial No. 38,729. Term of patent 3½ years.



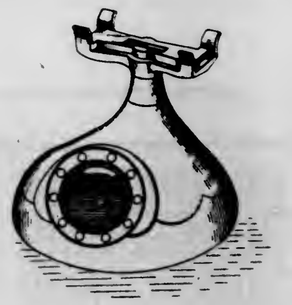
The ornamental design for a lighting fixture, as shown.

84,123. LIGHTING FIXTURE. CLARENCE G. WING, Cleveland, Ohio, assignor to John C. Virden Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 19, 1931. Serial No. 38,730. Term of patent 3½ years.



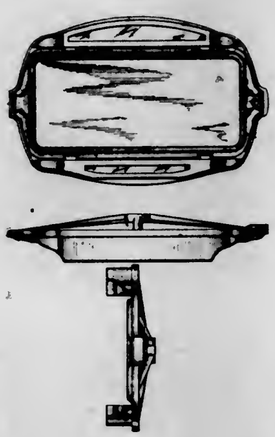
The ornamental design for a lighting fixture, as shown.

84,124. ASH RECEPTACLE FOR SMOKERS' USE. WALTER M. WOLF, Chicago, Ill. Filed Feb. 20, 1931. Serial No. 38,748. Term of patent 14 years.



The ornamental design for an ash receptacle for smokers' use, as shown.

84,125. LICENSE PLATE HOLDER. JACOB ORESTER and WILLIAM JOHN GEE, Syracuse, N. Y. Filed Feb. 13, 1931. Serial No. 38,651. Term of patent 7 years.

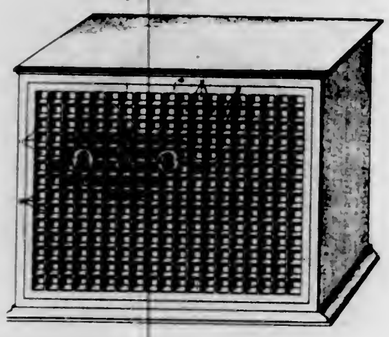


The ornamental design for a license plate holder, as shown.

PATENTS

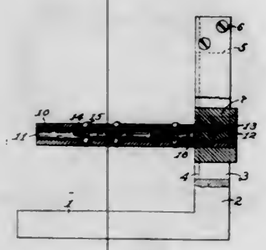
GRANTED MAY 5, 1931

1,803,310. RADIOPANEL. JACOB T. BASSECHES, New York, N. Y. Filed Feb. 19, 1925. Serial No. 10,159. 2 Claims. (Cl. 175—298.)



2. An instrument panel having predetermined regularly arranged apertures and forming the major portion of the panel and formed oversized as to form universal reception and alignment of the spaced attaching members of radio instruments.

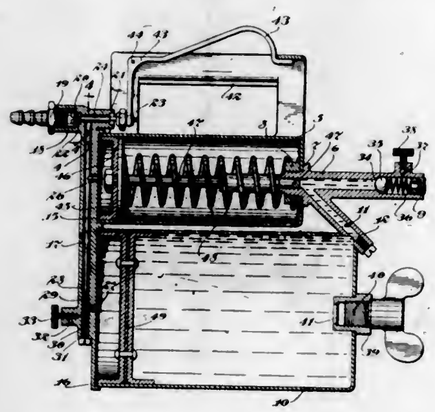
1,803,311. PISTON GAUGE. JOHN R. BISHOP, Waterloo, Iowa. Filed May 14, 1928. Serial No. 277,450. 3 Claims. (Cl. 33—180.)



1. In a gauge, a base member, a longitudinally slotted standard fixed perpendicularly upon said base member, a tubular member having a rectangular head mounted slidably in the slot of said standard, said tubular member having oppposite laterally opening apertures, and clutch-devices mounted in the apertures in said member for movements to project without said tubular member.

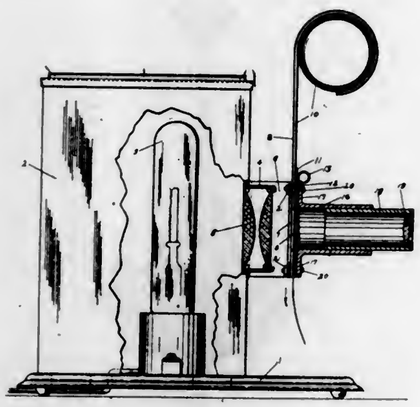
1,803,312. HIGH-PRESSURE GREASE GUN. VITUS A. BOKER, Minneapolis, Minn., assignor to Min-A-Max Co., Minneapolis, Minn., a Corporation of Minnesota. Filed June 18, 1928. Serial No. 286,300. 4 Claims. (Cl. 221—47.3.)

3. In a device of the character described, a barrel having a chamber for fluids, a power device comprising a piston and a plunger, a spring to retract the piston and plunger, means co-operating with the plunger to receive fluids from said chamber when the plunger is retracted and discharge



them on a power stroke of the piston and plunger, and means for simultaneously admitting air under pressure behind the piston and into said chamber.

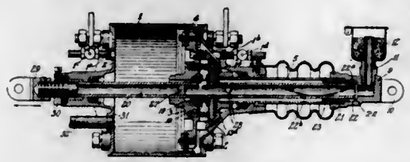
1,803,313. PICTURE PROJECTOR. CARL BOARMANN, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y. Filed Mar. 26, 1928. Serial No. 264,944. 1 Claim. (Cl. 88—17.)



A film guide for projectors comprising a strip of material provided with means for holding a coil of film and with an opening past which said film is adapted to be moved, and guiding means for said film comprising a frame having a rolled upper edge and resilient fingers adapted to engage the film adjacent its edges, and spacer members between said strip of material and said guiding means, said members providing guiding means for the extreme edges of said film strip.

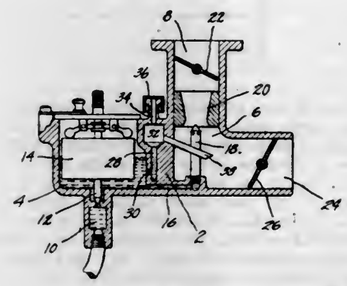
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1,803,314. POWER ACTUATOR. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed June 17, 1927, Serial No. 199,477. Renewed Oct. 14, 1929. 25 Claims. (Cl. 121—41.)



1. Valve mechanism for controlling the operation of power actuators, comprising among its members a normally closed valve controlling passages for effecting the operation of the actuator when in open position, said valve having oppositely disposed faces of substantially the same area, one of which is exposed at all times to the higher fluid pressure in a direction to open the valve, means for exposing the other face of said valve to the lower fluid pressure when the valve is closed, an operator operated part connected with said valve for opening it, yielding resistance means normally closing said valve against the pressure of the higher fluid pressure, and being of sufficient power to offer material resistance to the movement of the valve when the fluid pressures on the opposite faces of the valve are equalized, and means for shutting off said lower fluid pressure from said valve when the valve is opened, whereby when said valve is opened, the pressure of said resistance means will be transferred to the said operator operated part in proportion to the decrease of the differential of pressures on opposite faces of the valve.

1,803,315. CARBURETOR. CARL BREER, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Filed May 26, 1926. Serial No. 111,892. 4 Claims. (Cl. 261—41.)



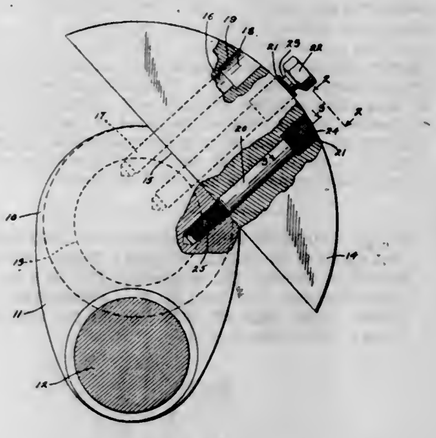
1. In a carburetor comprising a float chamber, a mixing chamber provided with an inlet for the admission of air, means for supplying fuel from said float chamber to said mixing chamber, a well open to atmospheric pressure for receiving a supply of fuel from said float chamber, an enlarged portion in said well and above the fuel level, a passage having an opening larger than the opening to atmospheric pressure and connecting said enlarged portion and said mixing chamber, and a choke, the outlet of said passage being in the path of the air admitted through said inlet when said choke is open for opposing the flow of fuel through said passage.

1,803,316. HYPODERMIC SYRINGE. HENRY K. BROWN, Chicago, Ill., assignor to Cook Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 16, 1927. Serial No. 240,386. 3 Claims. (Cl. 128—218.)



2. A syringe cartridge comprising a straight glass tube beaded near its fore end, having a sealing stopper of resilient material fitted in the said beaded fore end and adapted to be pierced by a needle, and having a piston plug in its opposite end adapted to be pushed into or through the tube to eject the liquid contents through the needle, said pierceable stopper shaped to fit the bead of the tube, being otherwise cylindrical and of substantially uniform diameter and having cylindrical portions fitted in the tube both behind and in front of the bead of the tube, and the cylindrical portion of said stopper in front of the bead projecting substantially beyond the fore end of the tube to provide a cushioning means.

1,803,317. INTERNAL-COMBUSTION ENGINE. ROBERT N. BROWN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 21, 1925. Serial No. 17,266. 6 Claims. (Cl. 74—38.)

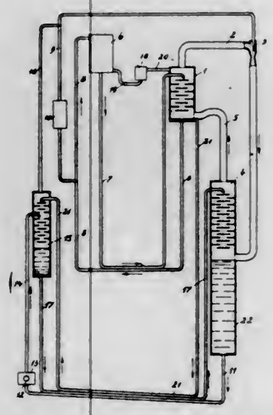


1. The method of attaching one metal piece to another metal piece, comprising passing a bolt through one piece and threading it into the other piece until the head of the bolt rests in a depression formed by the sides of the first piece, and then pressing the sides of the first piece together with the bolt head between the pressed portion until the material of the first piece enters longitudinal serrations in the bolt head and thereby prevents turning of the bolt.

1,803,318. ABSORPTION MACHINE. EDMUND ALTENKIRCH, Neuenhagen, near Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Apr. 6, 1929, Serial No. 353,073, and in Germany Apr. 10, 1928. 7 Claims. (Cl. 62—119.5.)

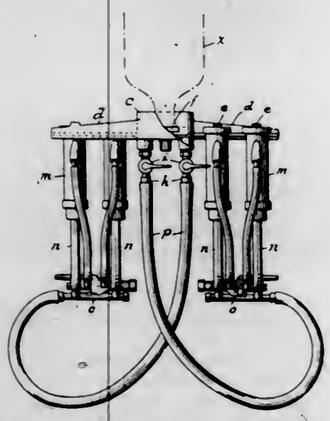
1. An absorption machine, having two bodies of absorption solution each consisting of a binary mixture of a

liquid solvent and a gaseous working medium, a generator for expelling working medium from the absorption solution, a reabsorber for the absorption of working medium into the absorption solution, an evaporator for evaporating the working medium out of the absorption solution, an absorber for absorbing working medium into the absorption solution, a pipe for leading gaseous working medium from said generator to said reabsorber, a pipe for leading gaseous working medium from said evaporator to said absorber, a pipe for leading weak absorption solution from said generator to said absorber, a pipe for returning strong



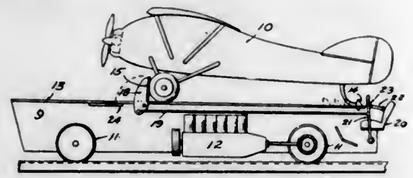
absorption solution from said absorber into said generator, a pipe for leading strong absorption solution from said reabsorber into said evaporator, a pipe for returning weak absorption solution from said evaporator into said reabsorber, means for effecting a circulation of one body of absorption solution through said generator and said absorber, means for effecting a circulation of the other body of absorption solution through said evaporator and said reabsorber, the quantity of the liquid of the body circulating through said generator and said absorber being larger than the quantity of the liquid of the body circulating through said evaporator and said reabsorber.

1,803,319. DEVICE FOR SUSPENDING AND SUPPLYING CLEANING FLUID TO TEAT CUPS. HERMAN C. BECKMAN, Chicago, Ill., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 27, 1928. Serial No. 265,127. 10 Claims. (Cl. 167—3.)



5. A device for cleaning teat cups and holding the milk tubes leading therefrom in position to allow a cleaning fluid to be supplied thereto, which comprises means to which said milk tubes are connectible and through which a cleaning fluid may be supplied, and a rack comprising a pair of ledges over which the top flanges of teat cups are adapted to slide and retainers adapted to overlie said flanges when the teat cups are in position on the ledges.

1,803,320. APPARATUS FOR LAUNCHING PLANES. NEALES P. CHRISTIANSON, Los Angeles, Calif. Filed Oct. 15, 1927. Serial No. 226,337. 3 Claims. (Cl. 244—2.)



1. In combination, a flying field, a self propelled plane launching carriage adapted to travel on said field, means to support a plane in taking off position on said carriage, and means to control the propulsion and movement of said carriage, by an operator carried in a control station below said plane and in rear thereof.

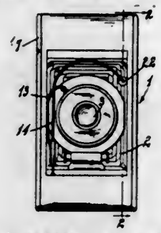
1,803,321. METAL CAR ROOF. FRANK DITCHFIELD, Cleveland, Ohio, assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 9, 1929. Serial No. 331,373. 15 Claims. (Cl. 108—5.4.)

6. As an article of manufacture, a securing pin for metal car roofs, said pin having a drip-forming annular groove intermediate the ends of its shank whereby to prevent flow of moisture to the ends of the pin.

13. In a metal car roof, the combination with an end plate; of an end roof sheet having a flange extending down over and in spaced relation to the end plate; means interposed between the end plate and said sheet flange and forming therewith a weather seal; and means for keying said overhanging flange of the roof sheet to the end plate to prevent lifting of the sheet.

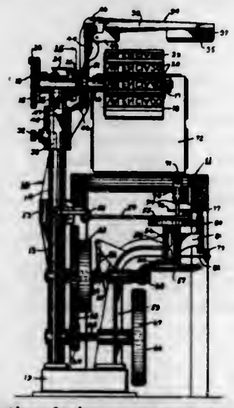
1,803,322. AUTOMATIC FILM-WINDING DEVICE. TOBY DURMAN, Signal Hill, Calif. Filed Dec. 5, 1927. Serial No. 237,744. 6 Claims. (Cl. 95—31.)

1. In combination with a camera including a shutter mechanism, a used film spool, and an unused film spool having notches therein, a spring means engaging said used film spool, trigger means, said trigger means including a rod mounted for rotary movement, a catch on the rod engaging the notches in the unused spool, a film extending between both of said spools, said film having perforations therein, means co-operating with said perforations and controlling said trigger means whereby the trigger is actuated by the perforations; a manual shutter control comprising a sleeve, a rod slidable in the sleeve, a flexible cable extending from the rod to the shutter mechanism, a second cable, slidably mounted on the rod, a



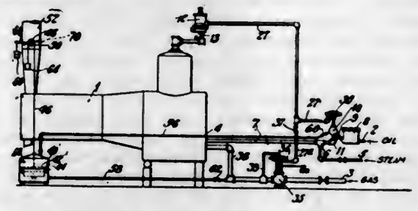
shoulder on said rod, said second cable being adapted to be engaged by the shoulder on the rod, an actuating lever to which the said last named cable extends, said lever being adapted to be swung when the rod is depressed and means connecting said lever and trigger means, whereby the trigger means is released when the lever is swung.

1,803,323. AUTOMATIC STAMPING DEVICE. ERNEST E. EVANS, Riverside, Calif. Filed May 23, 1927. Serial No. 193,702. 4 Claims. (Cl. 101—35.)



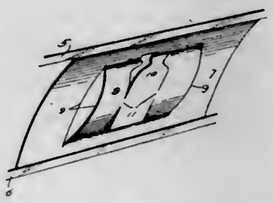
1. In a printing device, a support, a printing member mounted for movement on said support, means for moving said printing member to operative position, an inking member associated with said printing member and means for moving said inking member against and from said printing member while said printing member is moving from normal position to operative position and means operated by an object being printed to cause operation of said last mentioned means.

1,803,324. BOILER GOVERNOR. JAMES P. FISHER, Bartlesville, Okla., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 15, 1923. Serial No. 657,505. 8 Claims. (Cl. 236—26.)



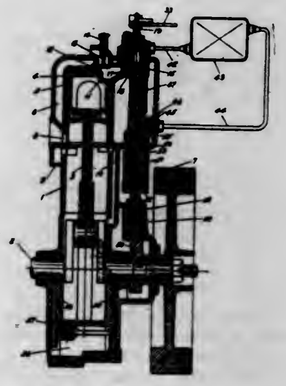
1. In an apparatus for controlling the steam pressure of a boiler, the combination of means for controlling the fire under the boiler, means for governing said controlling means comprising an air chamber so connected to said controlling means that the air pressure in said chamber governs said controlling means, a diaphragm exposed on one side to the air pressure in said chamber and on the other to the steam pressure of the boiler, and an air valve mounted with said diaphragm, said valve being so arranged that a change in the steam pressure will disproportionately affect the air pressure in said chamber.

1,803,325. CAR CARD. WILLIAM FREEDMAN, Brooklyn, and JOSEPH GUINEY, New York, N. Y. Filed May 20, 1929. Serial No. 364,365. 3 Claims. (Cl. 40—125.)



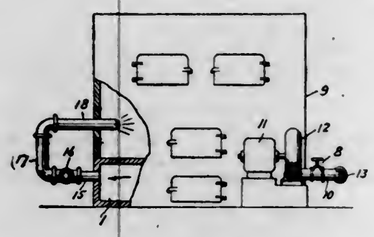
1. A car card display comprising, a frame having opposed card engaging members, a card having a main body adapted when bowed to be engaged at its opposite straight edges by said members and to be held thereby in bowed condition, a portion of said card having a free edge detached from said main body, said portion being adapted to be offset from the bowed part of said card.

1,803,326. MEANS FOR FEEDING FUEL TO HIGH-COMPRESSION INTERNAL-COMBUSTION ENGINES. WALDO G. GERNANDT, South Bend, Ind., assignor to Gernandt Motor Corporation, Chicago, Ill. Filed Apr. 20, 1928, Serial No. 683,544. Renewed Aug. 25, 1928. 12 Claims. (Cl. 123—33.)



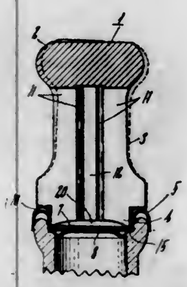
1. Means for feeding fuel to an engine cylinder having a working piston therein comprising an injector plug, said plug provided with a fuel passage having a valve controlling one end of said passage, a valve for controlling the other end of said passage comprising a member having a tapered end fitting in a tapered seat, said tapered end having a V-slot across that part of its face adjacent the passage end, a fuel chamber intermediate the ends of said member and a groove leading from said chamber to the V slot.

1,803,327. GRATE STRUCTURE. JOHN G. GIBSON, Ventnor, N. J. Filed May 17, 1929. Serial No. 363,971. 1 Claim. (Cl. 110—75.)



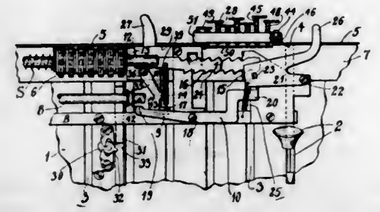
In combination, a furnace, a head pipe for cool air arranged at one side of said furnace, a plurality of spaced hollow grate bars extended through said furnace at right angles to said head pipe, a plurality of units having open bottoms and perforated tops fitted between said grate bars, a second head pipe arranged upon the side of said furnace opposite said first mentioned head pipe and in substantially the same plane with said first mentioned head pipe, the opposite ends of said grate bars being directly connected to said head pipes for uninterrupted circulation of air, a blower connected to said first mention head pipe for passing cool air to said grate bars, a profusely perforated nozzle extended through a side wall of said furnace in a plane above and parallel with said grate bars, and a pipe connection from said second mentioned head pipe to said nozzle for feeding heated air under pressure to said nozzle in a plane above and substantially parallel to the perforated tops of said units.

1,803,328. MILK-BOTTLE CAPPER. CARL W. GOODWIN, Wayland, Mass., assignor, by mesne assignments, to American Seal-Kap Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Apr. 3, 1929. Serial No. 352,220. 1 Claim. (Cl. 226—80.)



A device of the class described comprising a one piece plunger having a central portion at one end of reduced diameter to be entered within the annular pouring lip housing of a milk bottle cap and engage on the marginal portion of the bore covering portion of said cap, said portion of reduced diameter extending to an annular substantially flat shoulder spaced above the end of said housing, said plunger having a head at its upper end and being divided from its lower end substantially to said head by a plurality of substantially diametrical slots and having a central perforation extending from the lower end substantially to said head to provide a plurality of resilient cap-engaging fingers, the ends of said fingers being free to yield from each other when pressed against said cap, the lower ends of said fingers being upwardly domed.

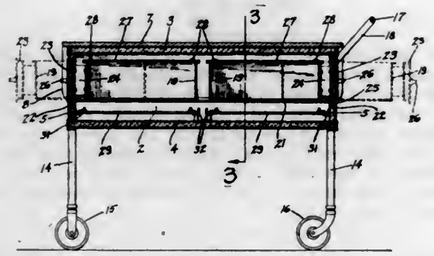
1,803,329. COMPUTING MACHINE. JULIUS C. HOCHMAN and GUSTAVE O. DEGENER, New York, N. Y.; said Degener assignor of one-half of his right to said Hochman and one-half of his right to Maurice Samburg, New York, N. Y. Filed Nov. 18, 1921. Serial No. 516,015. 28 Claims. (Cl. 235—59.)



1. In a computing machine, in combination, a bank of tabulating keys for assisting in placing a carriage in tabulated position, said keys being in proximity to each other closer than the width of the operator's finger, each key head extending beyond the head of that key adjacent thereto, the actuation of which concurrently with the selected key would effect incorrect tabulation and a totalizer shifting finger piece arranged to be actuated by the thumb as a tabulator key is actuated by the index finger.

24. In a combined typewriting and computing machine in combination, a bank of computing keys, a totalizer, means to prevent a repeated operative stroke from between the ends of the return stroke of the computing keys in any tabulated position of the totalizer, said means also being operable to prevent the effective initiation of a computing key stroke after a single computing actuation subsequent to the return of the totalizer to units position, regardless of the position of the typewriter platen.

1,803,330. FOOD-PRESERVING TABLE. JOHN H. JOHNSON, Chula Vista, Calif. Filed Mar. 9, 1928. Serial No. 260,529. 2 Claims. (Cl. 45—17.)

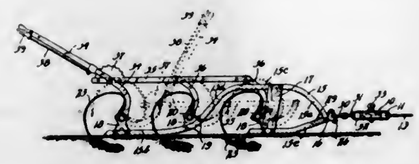


1. A portable service table including an elongated body portion having a chamber therein defined by insulated walls and the end walls of said chamber each having a door opening provided with a door, spaced rails in said chamber extending lengthwise thereof, a pair of drawers slidably supported on said rails and movable through said door openings, each drawer being secured to one of said doors and spaced therefrom to provide air-circulation passages between the drawers and their respective doors, plates fixed in said chamber and arranged to provide closures for said drawers when the drawers are positioned in said chamber, and said plates and the walls of said drawers being spaced from the walls of said chamber to provide air-circulation passages around the sides, ends, tops, and bottoms of said drawers, and means for heating said chamber.

1,803,331. PROCESS OF MAKING 4.4'-TETRAETHYLDIAMINODIPHENYLMETHANE. HUGO KLADIVKO, Jr., Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 3, 1923. Serial No. 629,709. 11 Claims. (Cl. 260—64.)

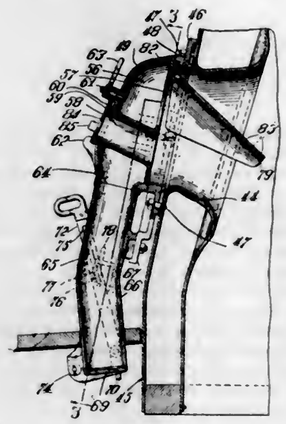
1. In the production of 4.4'-tetraethyldiaminodiphenylmethane, a process which comprises treating about two molecular proportions of diethylaniline with about one molecular proportion of formaldehyde in the presence of an aromatic sulfonic acid containing an unsubstituted amino group attached to the aromatic nucleus, said acid acting as a carrier or adjuvant.

1,803,332. CULTIVATOR WITH SLED FRAME. JOHN R. KOVAR and LOUIS W. KOVAR, Owatonna, Minn. Filed Dec. 31, 1928. Serial No. 329,636. 6 Claims. (Cl. 55—104.)



1. A cultivator having in combination, a drag bar, having engagement with the ground to support said cultivator, a rock shaft journaled in said bar and extending laterally therefrom, a tooth carried on said rock shaft and disposed in a plane in close proximity to the vertical plane of said drag bar, said drag bar adjacent said tooth being positioned well above the ground and adjacent the top of said tooth in all operative positions of said tooth whereby no space is formed horizontally between said bar and tooth.

1,803,333. FIRE DOOR. HOWARD H. LANNING, Topeka, Kans. Filed July 8, 1929. Serial No. 375,810. 4 Claims. (Cl. 110—175.)



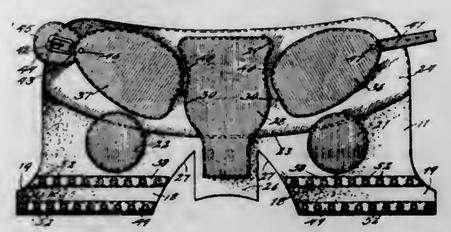
1. A firebox having a fire door opening, a ring secured about said opening and provided with recesses in its upper outer face, a chambered fire door mounted on said ring, the chamber of the door having openings at the bottom and at the rear of the door, the door having a sand introducing channel disposed transversely therethrough and communicating with the fire door opening, a closure for said channel, an air deflecting member disposed about the upper side of the opening in the rear wall of the door and extending into the fire door opening, said deflecting member being flanged at its outer end and said flanges seating in the ring recesses and held in place by the rear wall of the fire door, a hollow open ended member secured to the ring with one end communicating with the opening in the bottom of the door while the other end is disposed beneath the firebox deck and constitutes the air inlet, adjustable means for controlling said air inlet, and means whereby said adjustable means may be controlled and locked in adjusted positions.

1,803,334. COMBINATION ELECTRIC LIGHT AND PERFUME DISPENSER. GOTTHILF LEHMANN, Bronx, N. Y. Filed June 18, 1929. Serial No. 370,690. 3 Claims. (Cl. 219—45.)



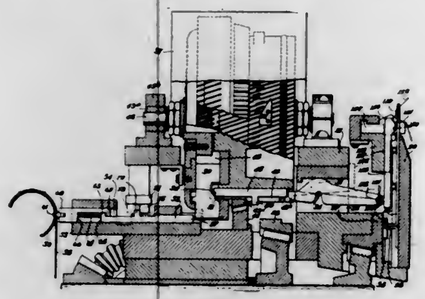
1. A vaporizer for use in rooms comprising a shell for the substance to be vaporized, said shell having an opening and comprising an outer glass mantle having substantially the form of a pine-apple, adapted to be suitably ornamented, a solid substance diffusing a perfume, an electrically operated heating element in said shell to vaporize the substance in said shell, a means for closing the lower end of said shell, and a socket in which the upper end of said shell is seated adapted to be attached to the light circuit of the room.

1,803,335. PROTECTIVE APPARATUS FOR ATHLETES. DAVID LEVINSON, Chicago, Ill., assignor to Wilson-Western Sporting Goods Company, Chicago, Ill., a Corporation of Delaware. Original application filed Feb. 14, 1927, Serial No. 167,976. Divided and this application filed June 22, 1928. Serial No. 287,497. 5 Claims. (Cl. 2—2.)



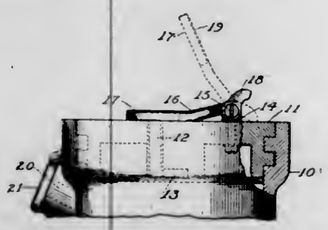
1. A protective harness for football players comprising a girdle formed of an integral piece of thick felt, and adapted to extend about the trunk of a player from points below the hips to points above the lower ribs, a strap for drawing the upper part of said girdle in to conform with the waist of the wearer, a plurality of pieces of thick and flexible leather stitched on said felt to protect the vital parts of the player, and adjustable means for securing the lower part of said girdle together closely about the hips, the intermediate parts of said girdle between the top and bottom being unsecured.

1,803,336. KNITTING MACHINE. VINCENT LOMBARDI, Brooklyn, N. Y. Filed Oct. 30, 1929. Serial No. 403,413. 9 Claims. (Cl. 66—102.)



1. In a circular knitting machine, in combination, a stationary needle carrier, a supporting member rotatably mounted with respect thereto, a row of spring beard needles supported by said needle carrier, means supported by said rotatable member to cause said needles to be advanced and retracted, a plurality of pressers supported by a stationary part of said machine and arranged for movement to a position for pressing upon the beards of said needles to close the same, and pattern-control mechanism for causing such movements of said pressers, said mechanism including a drum mounted on said rotatable cylindrical member and arranged for independent rotation in response to the rotation of said rotatable member, a plurality of independently adjustable elements carried by said drum, means for controlling the adjustment of said adjustable elements, pattern-determining means arranged to present a succession of series of varied configurations to said adjustment controlling means, and means to cause the operation of said adjustment controlling mechanism in response to presentation of each series of said configurations.

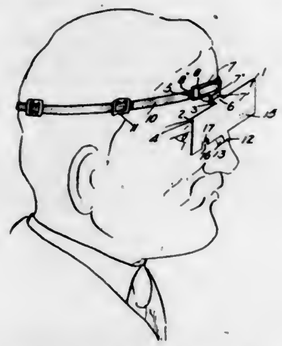
1,803,337. HANDLE FOR SAFE DOORS. FRANK A. LUNDQUIST, Galva, Ill. Filed Aug. 27, 1928. Serial No. 302,200. 2 Claims. (Cl. 109—1.)



1. The combination with a safe door, of a handle in the form of a ball for lifting said door, pivots for the handle, said pivots being located at one side of the center of gravity of the door, and stopping means for limiting the movement of the handle on its pivots, said stopping means serving to retain the central part of the handle nearer to the center of gravity of the door than the pivots by which the handle is connected to the door.

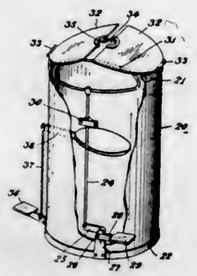
1,803,338. MOTORIST'S EYESHIELD. FREDERICK WILLIAM MAGEE, London, Ontario, Canada, assignor of one-half to Thomas William Baker, London, Ontario, Canada. Filed Sept. 14, 1929. Serial No. 392,576. 2 Claims. (Cl. 2—12.)

1. In a motorist's eyeshield, the combination with a shield body, of a resilient flexible transverse member adapted to bear against the forehead of the wearer, an adjustable head band secured to such transverse member, and a hinged connection between the transverse member and the shield body, such hinged connection comprising an offset loop member extending from the upper edge of the shield body, a spring tongue extending from the upper



edge of the shield body over the loop, a tongue formed integral with the transverse member and forming a split sleeve in which the transverse portion of the loop turnably fits, the split portion of the sleeve forming an extension against which the longitudinal edge of the shield body tongue resiliently bears.

1,803,339. MOP-CLEANING RECEPTACLE. CORA H. MCCONNELL, New York, N. Y. Filed Nov. 16, 1928. Serial No. 319,869. 1 Claim. (Cl. 15—89.)

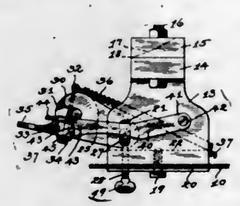


A mop cleaning device consisting of a substantially cylindrical container, a lid on top of the container, the said lid comprising two hinged semi-circular members each provided with a semi-circular center recess cooperating to receive a cylindrical mop handle, the latter being tightly held by means of rubber jaws fixed upon the edges of the aforesaid center recesses, a foraminated member disposed in a horizontal position substantially in the middle of the receptacle for striking the shreds of a mop carried by the handle; the said foraminated member being carried by a lever-arm pivoted to and projecting outside the container and pivotally engaging a rod outside the container, said rod being pivotally connected to a lever at the bottom of and outside the said receptacle, substantially as and for the purpose set forth.

1,803,340. PROCESS OF ANNEALING AND HEAT TREATING CAST IRON. PAUL S. MENOUGH, Pittsburgh, Pa. Filed Nov. 10, 1925, Serial No. 68,172. Renewed Nov. 18, 1929. 7 Claims. (Cl. 148—8.)

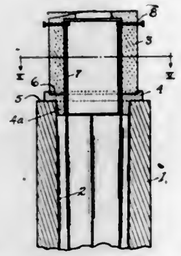
1. A process for treating metal which consists in heating white cast iron to a temperature in excess of the critical temeprature range, holding it at approximately that temperature for a sufficient length of time to produce a structure containing between about .25% and about 1% of combined carbon, removing it from the furnace while at a temperature in excess of the critical range, quenching or rapidly cooling it in a medium which will have such a cooling effect on the metal that the austenite of the solid solution shall be changed and set as any one of the structures called troostito-sorbite sorbite, sorbitic-pearlite, pearlite or any combination of these structures, while retaining the content of combined carbon substantially unchanged.

1,803,341. CUTTER HEAD FOR MEAT-SKINNING MACHINES. CHARLES E. MERRICK, Baltimore, Md. Filed Jan. 30, 1929. Serial No. 336,034. 3 Claims. (Cl. 146—130.)



1. In a cutter head for meat skinning machines the combination with two spaced vertical supports, of a roller-frame pivotally sustained between said supports to swing up and down,—said frame having a projection at one end which extends crosswise past the vertical support at that end, a roller carried by the frame, a cutter-blade sustained by and extending between the two supports, spring means for holding the frame up and a latch-lever having one end pivotally attached to the side of one vertical support and when the roller-frame is up resting upon the projection from the frame,—said latch-lever swinging down as the frame is moved down and making locking engagement with the frame projection to hold the frame down.

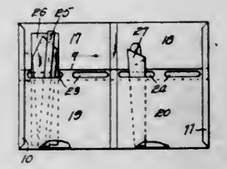
1,803,342. HOT TOP FOR INGOT MOLDS. EUGENE L. MESSLER, Pittsburgh, and JAMES THOMAS, Sharpsville, Pa. Filed Oct. 10, 1929. Serial No. 398,594. 2 Claims. (Cl. 22—147.)



1. A hot-top for ingot molds comprising an outer portion of refractory material, said outer portion being formed of an upper and lower member, the lower member having a depending portion outwardly contoured to fit the inner surface of the ingot mold, and a thin metal lining member arranged within the two refractory members aforesaid.

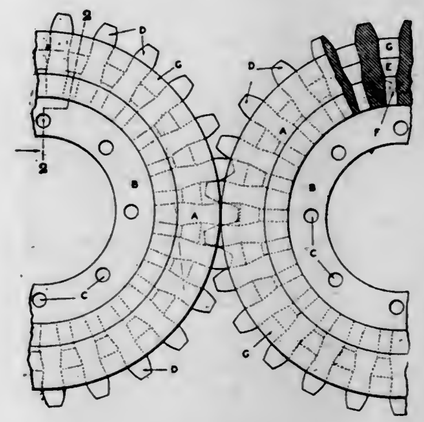
1,803,343. PORTFOLIO FOR NECKTIES AND SOFT COLLARS. CARL C. MULDNER, Jr., Maplewood, Mo. Filed Aug. 5, 1929. Serial No. 383,665. 2 Claims. (Cl. 206—7.)

1. In a portfolio of the class described formed from a single sheet of flexible material and embodying a pair of flexible cover sections each comprising a one piece outer wall and a two piece inner wall embossed at their inner edges and adhesively secured together to provide a relatively stiff back section, the ends of the two piece inner walls being overlapped and adhesively secured together to slightly stiffen the inner walls transversely at this



point, the overlapped ends of the inner cover walls being provided with aligned transverse openings leading to the space between the outer and inner walls of the cover sections and the side edges of the outer walls being folded over and adhesively secured to the side edge portions of the two piece inner walls of the cover sections.

1,803,344. MOLDING MACHINE. ELWIN I. NOXON, deceased, St. Louis, Mo., by Dorothy V. Noxon, Webster Groves, Mo., George A. Noxon, St. Louis, Mo., and Mississippi Valley Trust Company, St. Louis, Mo., executors, assignors to Ralston Purina Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 5, 1928. Serial No. 310,602. 2 Claims. (Cl. 107—8.)

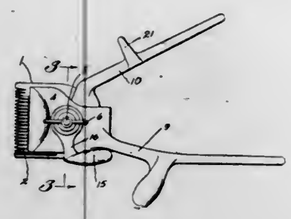


1. In a device of the class described, the combination of a pair of rotary members provided with intermeshing teeth, each of said members having a series of radial molds communicating with the spaces between its teeth, said members each being provided with closure means at each end rotating therewith and terminating at the pitch line of the teeth to form compression chambers between said teeth and to slidingly cooperate with the sides of the teeth of the other member.

1,803,345. HAND CLIPPER. JOHN OSTER, Racine, Wis., assignor to John Oster Mfg. Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 15, 1930. Serial No. 428,557. 3 Claims. (Cl. 30—1.)

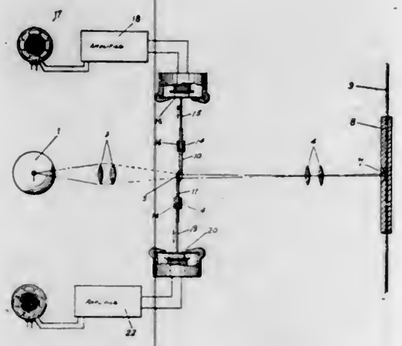
1. In combination with a hand operated hair clipper having a fixed and a movable blade, a fixed handle rigidly connected to the fixed blade, a movable handle connected to the movable blade for operating the same, and housing and tensioning means for the movable blade, a combined

thumb rest and guide grip including a body portion of concavo-convex form positioned adjacent and engaging



the lower end of the fixed handle and having an attaching portion engaged by the tensioning means whereby the combined thumb rest and guide grip is secured in position.

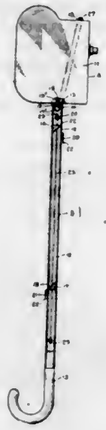
1,803,346. MEANS AND METHOD FOR RECORDING PHOTOGRAPHIC SOUND RECORDS. FREEMAN H. OWENS, New York, N. Y. Filed Sept. 17, 1928. Serial No. 306,494. 5 Claims. (Cl. 179—100.3.)



3. Means for recording photographic sound records comprising a light source of constant intensity, a slit variable as to size thru which the light from said source is adapted to pass, said slit including a pair of overlapping plates movable toward and away from each other to vary the size of said slit, a pair of individual electromagnetically controlled diaphragms connected to said plates respectively, whereby the size of said slit is varied in accordance with the sound to be recorded, and means for photographing the modulated light rays from said variable slit on a sensitized film.

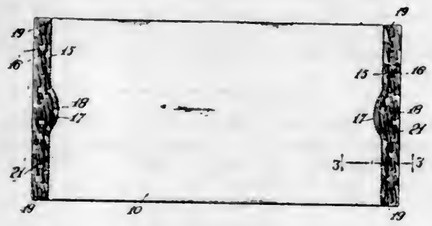
1,803,347. COMBINED PICTURE MACHINE AND ELEVATING SUPPORT THEREFOR. FREEMAN H. OWENS, New York, N. Y. Filed Dec. 3, 1928. Serial No. 323,259. 16 Claims. (Cl. 95—12.)

1. In combination, a camera including camera exposure mechanism, a standard detachably connectible to the camera and effective when attached to the camera for elevating the same to a relatively high point of
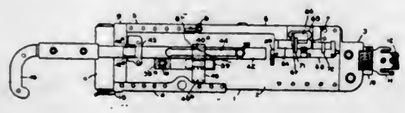


vantage, camera operating means mounted on said standard, and means connecting the camera exposure mechanism with the camera operating means of said standard.

1,803,348. ENVELOPE. CHARLES PASURKA, Chicago, Ill. Filed May 13, 1929. Serial No. 362,734. 4 Claims. (Cl. 229—85.)



1. An envelope adapted to be opened by tearing and having a perforated line extending across the front adjacent one edge of the envelope, a perforated line extending across the back thereof adjacent said edge to provide lines along which said end is severed when opening the envelope, the said perforated lines being arranged out of alignment to resist folding of the envelope along said lines.

1,803,349. AUTOMATIC FIREARM. CHRISTIAN PFEIFFER, Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Nov. 15, 1929, Serial No. 407,522. Renewed Dec. 31, 1930. 22 Claims. (Cl. 89—8.)



1. In an automatic firearm, the combination of a breech casing having two similar means at opposite sides there-

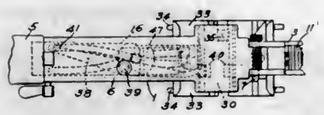
of each adapted for the attachment of a "trigger motor", a breech bolt within the casing and reciprocable upon recoil, reversible firing mechanism adapted when the breech bolt is in its forward firing position to be operated by a "trigger motor" attached at either side of the casing, a bracket attached to the casing by the attachment means thereof opposite to that used by the "trigger motor", and means carried at least in part by the bracket for manually operating the breech bolt.

22. In an automatic firearm, the combination of a breech bolt longitudinally reciprocable upon recoil, a spring actuated firing pin movable longitudinally of the breech bolt, a cocking lever on the breech bolt acting automatically during recoil to move the firing pin relatively rearward to cocked position, a sear carried by the breech bolt and biased for movement in one direction to engage the firing pin to hold it in cocked position, manually operable trigger mechanism for moving the sear in the direction to release the firing pin, the said mechanism including a trigger at the rear of the firearm movable in the forward direction to release the sear, a transversely grooved block immediately in front of the trigger and having a notch for receiving a portion thereof, and a safety bar slidable in the groove in the block and having a notch movable into and out of register with the notch in the block, the said bar thus serving according to its position to permit or prevent operative movement of the trigger.

1,803,350. FIRING MECHANISM FOR AUTOMATIC FIREARMS. GEORGE H. TANSLEY, Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Dec. 12, 1929. Serial No. 413,610. 8 Claims. (Cl. 89—27.)

7. In an automatic firearm, the combination of a breech bolt longitudinally reciprocable upon recoil, a spring actuated firing pin movable longitudinally of the breech bolt, a cocking lever on the breech bolt acting automatically during recoil to move the firing pin relatively rearward to cocked position, a transversely and horizontally movable sear carried by the breech bolt and reversible in position with respect thereto, a spring pressed plunger carried by the sear for biasing it in one direction or the other according to its position so as to engage the firing pin to hold it in cocked position, and an abutment means with which the plunger engages in each position of the sear.

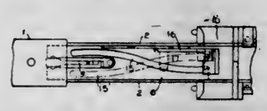
1,803,351. REVERSIBLE FEED MECHANISM FOR MACHINE GUNS. FREDERICK T. MOORE, East Hartford, and CHRISTIAN PFEIFFER, Hartford, Conn., assignors to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed May 23, 1930. Serial No. 455,019. 9 Claims. (Cl. 89—33.)



1. In an automatic firearm, the combination of a breech casing having a transverse cartridge feed channel there-

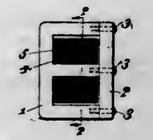
in, a breech bolt in the casing movable rearward upon recoil and provided with means forming parts of two oppositely inclined intersecting cam paths, at least a part of each cam path having a fixed relationship with the breech bolt, and means adapted for feeding cartridges through the feed channel in either direction and including a lever pivoted to the casing and having means thereon adapted to operably engage either of the said cam paths.

1,803,352. EXTRACTOR FOR AUTOMATIC FIREARMS. GEORGE H. TANSLEY, Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Dec. 12, 1929. Serial No. 413,611. 4 Claims. (Cl. 89—33.)



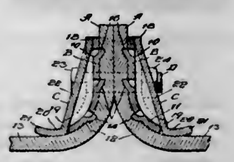
1. In an automatic firearm, the combination of a barrel having a firing chamber adapted to receive a cartridge, a breech bolt longitudinally reciprocable upon recoil, mechanism adapted to feed a cartridge belt from left to right or from right to left, an extractor pivoted to the breech bolt and adapted to engage the foremost cartridge of the belt to withdraw it as the breech bolt and extractor move rearward upon recoil, means operative during recoil for moving the extractor about its pivotal axis to transfer the said cartridge downward to a position in alignment with the firing chamber of the barrel, a downward extending element on the extractor serving to retain the said cartridge and in proper relation to the extractor and also adapted to effect the preceding cartridge, a single longitudinal pivot means near the center of the extractor for pivotally connecting the said retaining and ejecting element with the extractor, the said pivot means permitting the said element to be mounted in either of two relatively reversed positions with the effective portion thereof at the right or at the left of the cartridge as required by the direction of feed.

1,803,353. MAGNETIC ALLOY. HARRY F. PORTER, Trenton, N. J. Filed Jan. 20, 1927. Serial No. 162,245. 10 Claims. (Cl. 175—21.)



1. A magnetic alloy comprising copper 8% to 10%, nickel 35% to 55% and iron 35% to 55%.

1,803,354. BELT FASTENER. GEORGE E. PURPLE, La Grange, Ill., assignor to Flexible Steel Lacing Company, Chicago, Ill., a Corporation of Illinois. Filed June 19, 1929. Serial No. 372,090. 9 Claims. (Cl. 24—37.)



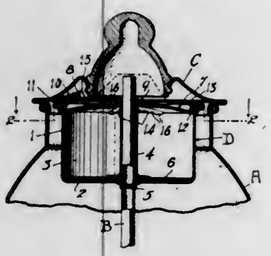
1. In a fastener for the ends of a belt arranged back to back, the combination with two clamping plates proper

disposed on opposite sides of the backed ends; of separate backing plates detachably fitted against the outer sides of the clamping plates, the backing plates being substantially co-extensive with the clamping plates in a direction transverse of the belt; and securing means extending through all of the plates and the belt ends.

1,803,355. MANUFACTURE OF INSULATING BODIES AND MORE PARTICULARLY OF INSULATORS FOR SPARK PLUGS. REINHOLD REICHMANN, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Dec. 2, 1929, Serial No. 411,214, and in Germany Oct. 17, 1928. 4 Claims. (Cl. 25—157.)

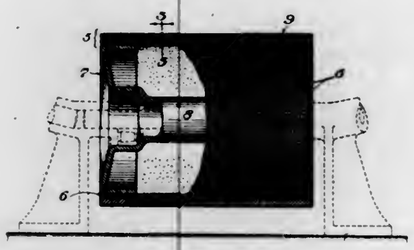
1. The process of producing insulating bodies of aluminum oxide, particularly spark plugs, which consists in sintering the bodies in a chamber free from reducing carbon-containing gases or vapors.

1,803,356. PERCOLATOR. ISAAC D. RICHHEIMER, New York, N. Y. Filed July 20, 1929. Serial No. 379,654. 4 Claims. (Cl. 53—3.)



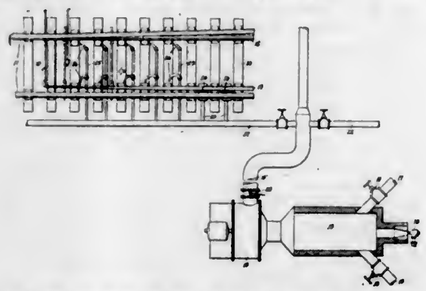
1. The combination of a percolator drip cup having a perforate bottom, a coffee retainer in said cup, and a percolator tube extending centrally through the cup and said retainer for delivering liquid upon the top of said retainer, said coffee retainer having a convex perforated top surface and an annular imperforate upwardly facing groove at its edges.

1,803,357. PULLEY. THOMAS ROBINS, New York, N. Y., assignor to Robins Conveying Belt Company, Passaic, N. J., a Corporation of New Jersey. Filed Jan. 26, 1929. Serial No. 335,272. 3 Claims. (Cl. 64—17.)



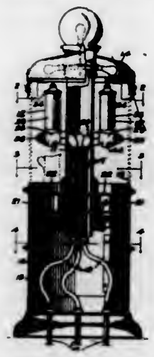
1. A pulley comprising a rim support, a rim formed of foraminated metal having elements which extend back and forth with portions in contact with the support and a tough resilient covering for the foraminated metal filling the spaces between the various elements and between portions of some of said elements and the support.

1,803,358. RAILWAY-SWITCH-HEATING SYSTEM. ALFRED F. SCHUMANN, Baltimore, Md., assignor to Hauck Manufacturing Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 442,026. 4 Claims. (Cl. 246—428.)



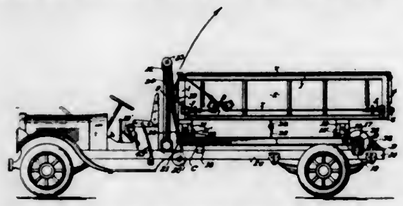
1. A heating system for railway-switches and the like embodying in combination a heating plant for a non-condensible gaseous medium, means to place said heated medium under pressure and to deliver the same to a distributing main, and nozzle elements associated with the portions of the track to be heated and connected with said main for applying directly to said track portions of the heated gaseous medium.

1,803,359. OIL-DISPENSING DEVICE. REGINALD C. SHAND, Berkeley, Calif. Filed Sept. 17, 1928. Serial No. 306,447. 6 Claims. (Cl. 221—67.)



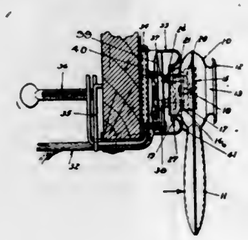
4. An oil dispensing device comprising a base structure, a hollow standard mounted for rotation with respect to said base, a plurality of pipes extending within said standard from sources of fluid, and a plurality of dispensing units positioned on said standard and in communication with said pipes.

1,803,360. DUMP BODY FOR TRUCKS. CLAUDE L. SHEBBURNE, Topeka, Kans., assignor of one-third to Orson F. Baker, Independence, Kans., and one-third to Preston Updike, Fort Scott, Kans. Filed May 3, 1929. Serial No. 360,118. 2 Claims. (Cl. 298—21.)



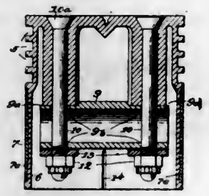
1. In dump bodies for trucks for the discharge of load to the sides or rear of the truck, a dump body and a frame, the dump body pivotally mounted on the frame on an axis longitudinal with the truck and the frame pivotally mounted at the rear of the chassis of the truck and carried by the chassis of the truck, a winch and cable means to raise the said frame to tilt the body to the rear of the truck and another winch mounted at the pivot axis of the said frame and connected by a cable to the said body as a means to tilt the body to either side of the truck.

1,803,361. CIGAR LIGHTER. JASON C. STEARNS, Worcester, Mass. Filed Aug. 31, 1927. Serial No. 216,763. 6 Claims. (Cl. 219—32.)



1. In a cigar lighter, the combination with a socket adapted to be attached to a dash board or wall and having a pair of electric contacts therein, of a detachable igniting element having a handle projecting therefrom, an incandescent element therein, two terminals on the back connected with the opposite ends of the incandescent element, said terminals and contacts being so located that one pair normally remains in contact and the other pair separated, and yielding means for holding them in this position, whereby the detachable element can be mounted on said socket and the circuit completed by the swinging of the detachable element.

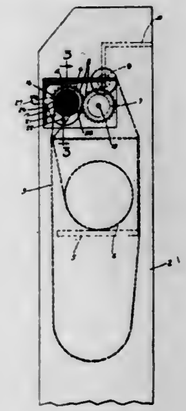
1,803,362. ENGINE PISTON. RAY N. STEELE, Cedar Rapids, Iowa. Filed July 12, 1928, Serial No. 292,196. Renewed May 21, 1930. 4 Claims. (Cl. 74—108.)



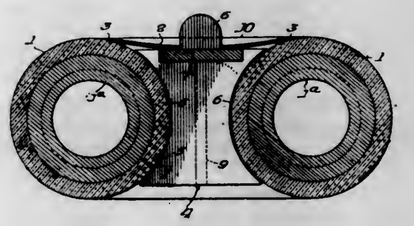
1. In an engine piston, an improved mounting for the wrist-pin, comprising a pair of posts springing from the closed end of the piston, bolts therein, a wrist-pin flattened at the ends on one side to rest on the posts, and bored for said bolts, clamping nuts, and channeled clamp-plates interposed between the nuts and the cylindrical side of the pin.

1,803,363. STOP MECHANISM FOR TOWEL CABINETS. FRANK M. STEINER, Minneapolis, Minn., assignor to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed Mar. 22, 1929. Serial No. 349,117. 5 Claims. (Cl. 312—38.)

1. A towel cabinet comprising a casing, a feed roll for the clean towel therein, a cam operated by the revolution of said roll, said cam having a peripheral off-set forming a stop, a locking lever having a finger piece and a lug in the path of said stop when said lever is in its locking position, said lever also having a cam surface to engage the high part of said cam after its initial movement and impart a slight initial rotary movement thereto when said lever is moved to its release position.

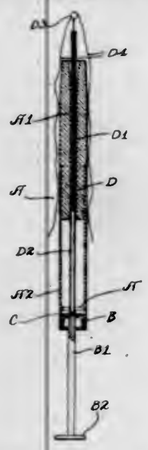


1,803,364. APPARATUS FOR SHARPENING RAZOR BLADES. THOMAS J. STEPHENS, Chicago, Ill., assignor of one-fourth to Floyd M. Spann, New York, N. Y., and one-eighth to Pauline H. Hirschmann, New York, N. Y. Filed Oct. 15, 1928. Serial No. 312,469. 6 Claims. (Cl. 76—89.2.)



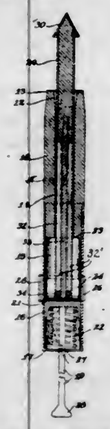
1. Apparatus for sharpening two-edged razor blades, comprising a pair of cylindrical sharpening members spaced apart a distance somewhat greater than the width of a blade to be sharpened, and a carriage located between said members mounted directly upon them and adapted to hold a blade with its edges parallel with the axes of said members and bearing upon convex surfaces of said members, said carriage being movable in the direction of the axes of the sharpening members.

1,803,365. TOY. CHARLES C. STETSON, St. Paul, Minn. Filed July 5, 1929. Serial No. 375,942. 17 Claims. (Cl. 102—23.)



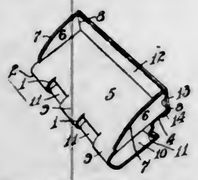
9. A toy comprising, a sparkler, a holder for supporting said sparkler, and percussion cap and driving means in said holder for igniting and driving said sparkler out of said holder rocket-like into the air.

1,803,366. SIGNAL ROCKET. CHARLES C. STETSON, St. Paul, Minn. Filed Aug. 30, 1929. Serial No. 389,427. 15 Claims. (Cl. 102—23.)



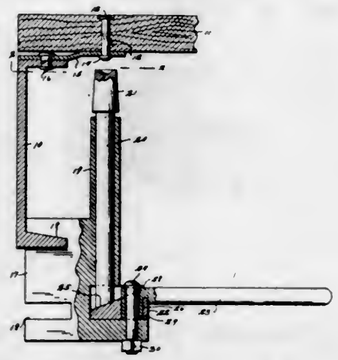
1. A signalling device including a rocket, a holder for said rocket, spring urged rocket ejecting means in said holder, and a percussion cap exploded by said spring urged means to aid the rocket ejection.

1,803,367. ELEVATOR ELEMENT. GEORGE E. STEVENSON, Indianapolis, Ind. Filed Sept. 19, 1929, Serial No. 393,807. Renewed Sept. 22, 1930. 2 Claims. (Cl. 198—152.)



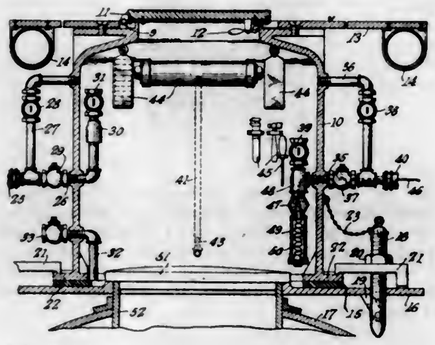
1. A conveyor element formed from a single sheet of metal, comprising a panel section and two edge sections, the edge sections being bent to lie in a plane parallel with the panel section and one adapted to overlie the other, one of said edge sections being bent up on two parallel edges to form sides and bent up on its free edge to form a back, said element having its edges slotted and a portion of its edges doubled inwardly to form hinge loops.

1,803,368. RIVETING IRON. CLIFTON E. SWEENEY, Indianapolis, Ind. Filed Oct. 10, 1929. Serial No. 398,716. 5 Claims. (Cl. 78—53.5.)



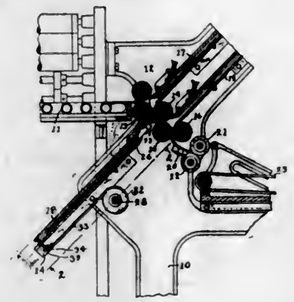
3. A riveting iron comprising a base, said base having a plurality of grooves, a sleeve mounted on the base in offset relation to the grooved portion of the base and extending upwardly therefrom, a shaft slidably mounted in the sleeve, rivet setting means mounted on the outer end of said shaft, cam means pivotally mounted on the base and adapted for horizontal rotation thereon, the lower end of said shaft being angularly inclined so as to bear against the inclined surface of said cam and means for turning the cam on its pivot whereby to move the shaft upwardly.

1,803,369. SALVAGE CHAMBER FOR SUBMARINES. GEORGE L. TEEPLE, New York, and GEORGE S. BALL, Brooklyn, N. Y. Filed Oct. 1, 1928. Serial No. 309,539. 13 Claims. (Cl. 61—69.)



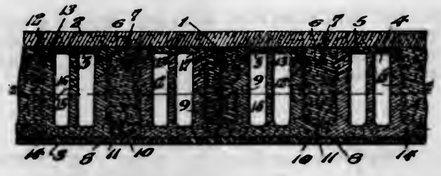
1. A rescue device for a submerged submarine comprising a casing having a chamber therein open at the bottom, means to effect a fluid-tight registration between said chamber and the submerged submarine, means to force air into said chamber to expel water therefrom, and a check valve through which the water is expelled but automatically preventing its return.

1,803,370. FOLD-PLATE SHIFTER. LESLEY R. TUFTS, Cleveland, Ohio, assignor to The Cleveland Folding Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 7, 1930. Serial No. 419,100. 9 Claims. (Cl. 270—68.)



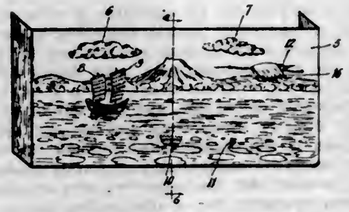
1. In a folding machine, a frame, a pair of guides mounted thereon, a fold plate slidable upon said guides, a flexible connector, means carried by the plate and frame respectively to which the ends of said connector are secured, and means for exerting a pull upon the connector to cause the ends thereof to approach each other.

1,803,371. BUILDING STRUCTURE. FREDERICK M. VENZIE, Philadelphia, Pa. Filed July 23, 1929. Serial No. 380,276. 6 Claims. (Cl. 72—66.)



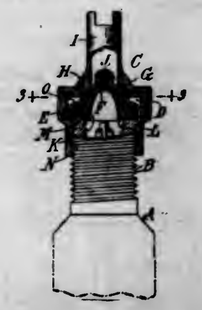
1. A floor structure having completely concealed beams comprising spaced beams, a plurality of hollow tiles arranged between adjacent beams, each tile having a flanged solid base and recessed at its top to receive a cover plate, adjacent bases abutting with the flanged parts of at least some of the tile bases completely covering a beam bottom, the tops of said tiles being substantially flush with the tops of said beams, a cover plate for each hollow tile, and cementitious material arranged between said tiles.

1,803,372. SHADE. MAX VIVIER, New York, N. Y. Filed Mar. 8, 1928. Serial No. 259,960. 4 Claims. (Cl. 41—21.)



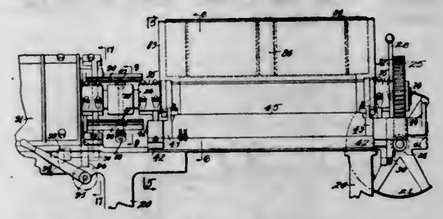
3. A shade of the character described to be viewed by transmitted light comprising a main translucent sheet having a design thereon, and a semi-transparent auxiliary section secured to said main sheet but spaced therefrom in a part of its area overlying a portion of the design and coordinated with said design to form a part thereof, substantially as described.

1,803,378. TIRE VALVE CAP OR THE LIKE. JOHN WAHL, Rosedale, N. Y., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 12, 1926. Serial No. 141,059. 6 Claims. (Cl. 152—12.)



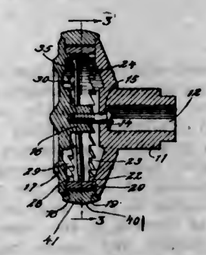
1. A cap comprising a body portion provided with an internal bearing face, a recess in the top of said bearing face, a packing washer in said cap having a face in slidable contact with the bearing face of the cap and tiltable with relation to the axis of the cap, a projection on the washer extending into the recess in the cap and of smaller diameter than the said recess adapted to limit the tilting of the washer by engagement with the wall of the recess.

1,803,374. STEREOTYPE PLATE CASTING AND FINISHING MACHINE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed July 2, 1926, Serial No. 120,096. Renewed Sept. 11, 1930. 28 Claims. (Cl. 22—3.)



1. In a mold for casting semi-cylindrical stereotype printing plates, the combination with a curved back and a core rotatable therein on a horizontal axis, of a pair of center rings for dividing the mold cavity into two parts to cast two printing plates therein, and means for moving said center rings and releasing the inner edges of the matrices thereby.

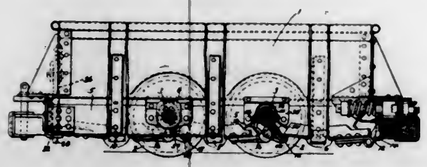
1,803,375. DOORKNOB. GEORGE R. ADAMS, Los Angeles, Calif. Filed July 2, 1928. Serial No. 289,743. 9 Claims. (Cl. 292—347.)



1. In a door-knob, the combination of: a face member; a shank member; a ring between said face and shank mem-

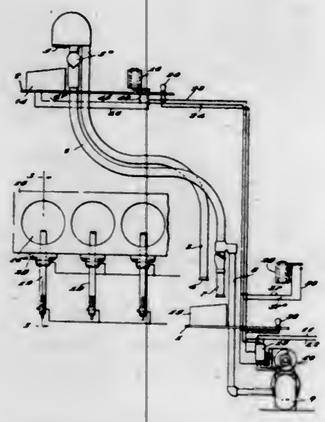
bers; a ratchet on said face member; a ratchet on said shank member; a screw engaging said members to clamp said ring in place; and means extending between said ratchets to prevent any relative rotation of said members which might loosen the clamping engagement on said ring exerted by said screw.

1,803,376. MINE CAR. LEOPOLD ALMQUIST, Jersey City, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 5, 1928. Serial No. 310,655. 18 Claims. (Cl. 105—253.)



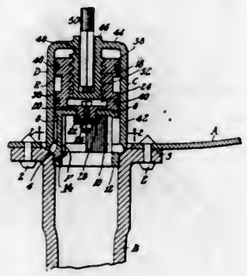
1. In a drop bottom mine car, a dumping door pivotally mounted on the car, a pivotally mounted latch for holding said door in closed position, said latch having laterally projecting ribs forming open-ended slots thereon, a second drop door, hinges for attaching said second door to said car and lugs carried by said hinges and engaging in said slots to operate said latch.

1,803,377. PNEUMATIC DESPATCH SYSTEM. BIRNEY C. BATCHELLER, Wallingford, Vt., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Nov. 1, 1928. Serial No. 316,391. 13 Claims. (Cl. 243—9.)



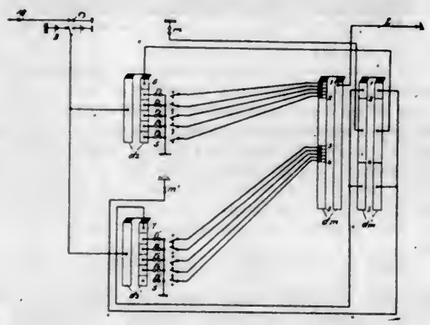
1. Power control apparatus for use with a pneumatic tube line extending between two stations and having power driven means for creating a carrier impelling air flow in said line, said apparatus comprising a receptacle capable of holding a plurality of carriers, a movable part in the receptacle which remains in one position so long as a predetermined number of carriers are within the receptacle, means operative to raise said part upon reduction of the number of carriers in the receptacle below such predetermined number, and means responsive to such upward movement of said part for starting the power driven means into operation.

1,803,378. VALVE. JOHN BEYER, Bayonne, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed July 19, 1928. Serial No. 293,909. 13 Claims. (Cl. 137—21.)



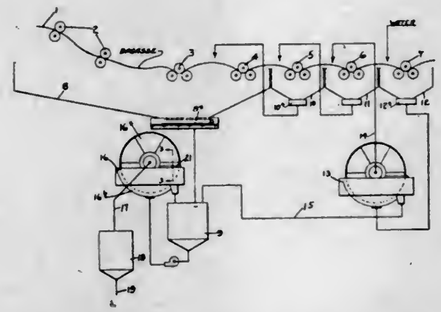
1. A valve assembly comprising a guide element having outlet ports, a valve surrounding said guide element and provided with an exteriorly threaded internal socket, means for actuating said valve comprising a block secured to the guide element and having internal threads with which the socket is engaged whereby upon rotation of the valve the socket is elevated to elevate the valve, and sealing means secured to the block to prevent admission of foreign matter to the interior of the valve.

1,803,379. TELEGRAPHIC SYSTEM. WILHELM BUDDE, Berlin-Dahlem, Germany. Filed Feb. 27, 1928, Serial No. 257,248, and in Germany Nov. 7, 1927. 7 Claims. (Cl. 178—71.)



1. An apparatus for the operation of start-stop mechanism in a telegraphic circuit employing a plurality of simple circuits leading from sub-stations to a central station, the same comprising a main rotary distributor, a multiplex service circuit connected to the central station across said distributor, and two sets of storage devices for directly transferring signals sent out by the sub-stations to the multiple line through the main distributor, the latter comprising successively operating distributor sections for the respective sets of storage devices each operative for a distributing action on less than a half revolution of the distributor, whereby a signal arriving from a sub-station flows only through one storage device, the next signal flows only through the other device, and succeeding signals are then alternately transferred to the one or to the other of said storage devices without overlap, and whereby while the one storage device receives a signal the other will release the previously received signal.

1,803,380. FILTERING MATERIAL AND METHOD OF FILTERING SUGAR JUICES. ROBERT C. CAMPBELL, Millburn, N. J., assignor, by mesne assignments, to Oliver United Filters, Inc., San Francisco, Calif., a Corporation of Nevada. Filed July 21, 1925. Serial No. 44,975. 6 Claims. (Cl. 210—200.)



1. The method of improving the purity of cane sugar by filtering the sugar juices as they come from the screens of the crushing mills and before defecation or heating of the juices, in a continuous filter provided with a perforated plate filtering medium which consists in extracting from said juices a filter aid naturally occurring therein, adding said filter aid to said juices to prevent plugging of the perforations of said plate by the shreds of the cane stalks, then drawing the juices through said filter and collecting the filter aid and solids on the filter medium, and completely removing the collected solids and filter aid from the surface of said filter medium during each cycle of filter operation.

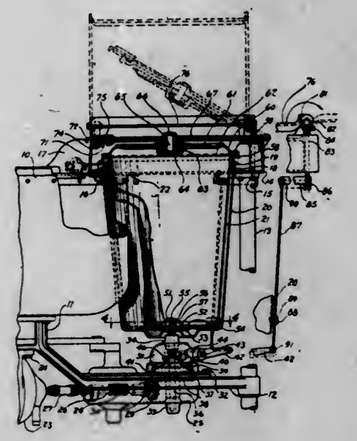
1,803,381. DRY PIPE. CHRISTOPHER HUMPHREY DAVY, Beckenham, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 26, 1926, Serial No. 144,206, and in Great Britain Jan. 1, 1926. 2 Claims. (Cl. 183—75.)



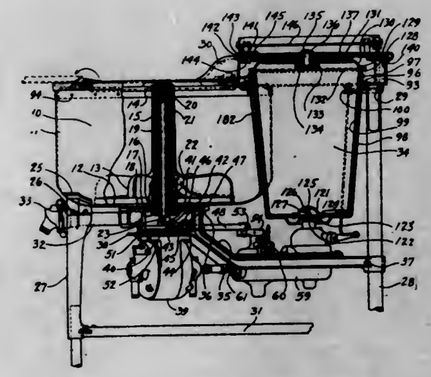
1. In a device of the class described, two adjacent substantially parallel rows of vanes of angular cross section disposed with the angles in one row facing those in the other and with a vane in one row having a leg extending toward a leg of a vane in the other row, the ends of said legs being spaced from each other, and transverse members extending between said spaced ends and spaced therefrom.

1,803,382. WASHING MACHINE. MARK A. DEFIBAUGH, Peoria, Ill., assignor to Altorfer Bros. Company, Peoria, Ill., a Corporation of Illinois. Filed Dec. 22, 1926. Serial No. 156,800. 7 Claims. (Cl. 210—75.)

1. In a device of the character described, in combination, a centrifugal extractor comprising a tapered, imperforate basket, a casing surrounding said basket, a fluid chamber at the upper end of the casing and surrounding the top of the basket, driving means projecting through said casing and engaging the bottom of said basket, a ring secured to the upper edge of the basket and providing openings therebetween, a top for said basket, a locking bar providing a bearing support for the top, said locking bar having a pivotal connection with the fluid chamber at one end in a manner to permit the raising and lowering of the top, and locking mechanism disposed upon the opposite end adapted to secure the locking bar to the fluid chamber.



1,803,383. WASHING MACHINE. MARK A. DEFIBAUGH, Peoria, Ill., assignor to Altorfer Bros. Company, Peoria, Ill., a Corporation of Illinois. Filed Dec. 27, 1926. Serial No. 157,088. 4 Claims. (Cl. 210—71.)

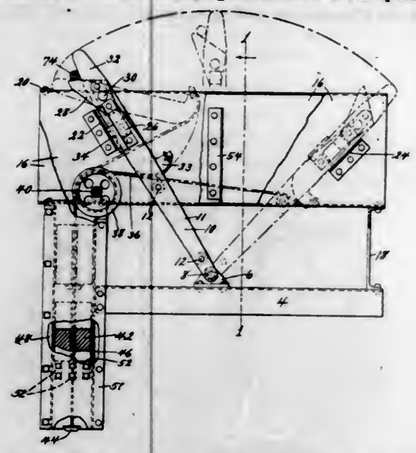


2. In a centrifugal extractor, in combination, an extractor receptacle, a driving shaft adapted for detachable driving connection with the lower end of said receptacle, and means adjustable in relation to the upper end of the shaft for varying the position of engagement between the upper end of said shaft and said receptacle.

1,803,384. DOOR-TRIPPING DEVICE FOR CARS. WILLIAM F. DIETRICHSON, St. Louis, Mo., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 27, 1930. Serial No. 431,869. 13 Claims. (Cl. 214—58.)

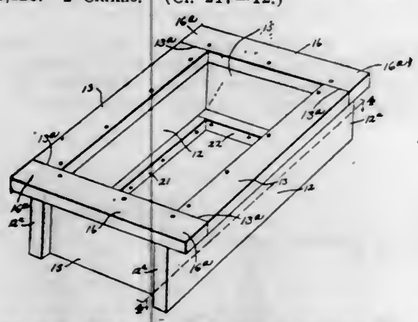
1. In a car door tripping device, a support, a lever pivotally mounted on said support, a second lever pivoted on said first lever, means limiting the rotation of said

second lever with respect to said first lever, means fixed on said first lever for engaging a car door latch operating



arm, means to bias said levers to normal position and a stop to prevent movement of said levers past normal position in one direction.

1,803,385. KNOCKDOWN BOX. WILFRED A. FINNEGAN, Bangor, Me. Filed June 24, 1929. Serial No. 373,125. 2 Claims. (Cl. 217—12.)

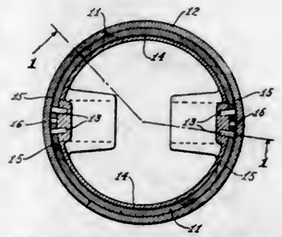


1. An open knock-down sand box, comprising a pair of side members, having end extensions containing vertical dovetail grooves, and outwardly projecting flanges, fixed to the upper edges of said members, the ends of said flanges forming abutment shoulders from which said extensions project, and a pair of end members having vertical dovetail tongues on their ends removably inserted in said grooves, and outwardly projecting flanges fixed to their upper edges, said flanges having extensions overhanging said tongues and bearing on the extensions of the side members to limit the entrance of the tongues into the grooves, and on the abutment shoulders of the side members, to oppose racking of the box, the inner edges of said flanges being flush with the inner sides of the side and end members, so that said flanges form an open mouth portion of the storage space, said portion being of the same area as the portion formed by the side and end members, and permitting unobstructed access to all portions to said storage space.

1,803,386. PROCESS FOR PRODUCING AMALGAMS TO BE USED IN DENTISTRY. ERIK WILHELM FISCHER, Stockholm, and ERIK WILHELM J:SON VIRGIN, Djursholm, Sweden. Filed Dec. 28, 1927, Serial No. 243,203, and in Germany Jan. 10, 1927. 4 Claims. (Cl. 75—1.)

1. An improved process for the production of silver alloy powder subsequently to be completely amalgamated in the production of dental fillings, consisting in treating the silver alloy particles with mercury in a quantity insufficient to produce complete amalgamation.

1,803,387. TRUNK PISTON. JOHN FLAMMANG, University City, and PERCY L. BOWSER, St. Louis, Mo., assignors, by mesne assignments, to The Sterling Corporation, Wilmington, Del., a Corporation of Delaware. Filed Oct. 8, 1927. Serial No. 224,818. 10 Claims. (Cl. 74—108.)



1. A piston comprising, a body, a base ring provided with a bearing face for a packing ring and fixed to said body at a point circumferentially removed from its trust diameter, there being clearance between the piston body and the base ring on a diameter taken through the thrust side of the piston in order to compensate for expansion of the body.

1,803,388. NECKTIE. HARVEY C. HALL, Port Nelson, Ontario, Canada, assignor to Milne Neckwear Limited, Toronto, Canada. Filed Dec. 20, 1926. Serial No. 155,958. 7 Claims. (Cl. 2—146.)



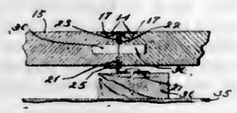
1. A four-in-hand necktie having in combination a tubular outer member and a tubular inner member the latter member consisting of a fabric resilient transversely of the tie, said inner member being located in the knot forming portion of the necktie.

1,803,389. VEHICLE TOWING DEVICE. JOSEPH J. HERLBAUER, Hollis, and CHARLES GULOTTA, New York, N. Y. Filed Feb. 10, 1928. Serial No. 253,380. 5 Claims. (Cl. 280—33.14.)



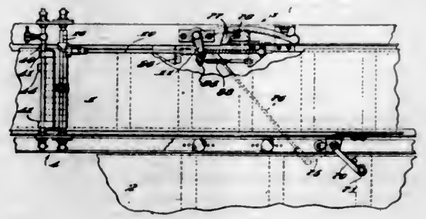
1. A towing device comprising a latch having a base portion provided with a U-shaped end and a pivoted latch plate on the opposite end thereof, and a flexible metallic strap having one portion coiled about said base portion.

1,803,390. ACOUSTIC WALL OR CEILING STRUCTURE. THOMAS CLARK HOWARD, Brookline, Mass. Filed Nov. 20, 1928. Serial No. 320,696. 5 Claims. (Cl. 72—18.)



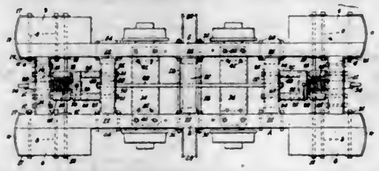
1. An acoustic unit including a frame and a body of acoustic material supported by the walls of said frame, the body being of acoustic casting plaster introduced in plastic form and allowed to set in said frame, the outer face of the plaster being exposed whereby a plurality of such units form a substantially continuous acoustic surface, tongues projecting outwardly from the walls of the frame, said tongues constituting part of the means for interlocking abutting units and fingers projecting inwardly from the walls of the frame to engage the body of acoustic material when plastic and to tie it when set to the walls of the frame.

1,803,391. DEFLECTOR - CONTROL MECHANISM. CHESTER S. JENNINGS and LAVONT C. ALLEN, Syracuse, N. Y., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Apr. 5, 1929. Serial No. 352,671. 20 Claims. (Cl. 186—20.)



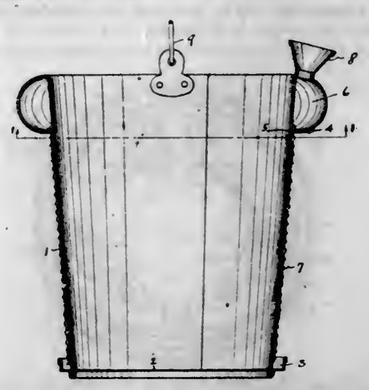
1. Conveyor apparatus comprising means defining a predetermined path along which carriers may move, a carrier movable in said path, said carrier having provision for supporting a plurality of contact elements, a diverter for causing carriers to leave said path, an actuator normally responsve to engagement by one contact element to make said diverter operative, and control means operable by another contact element spaced laterally of the first-named element to make the actuator inoperative.

1,803,392. MINE CAR. WARREN V. JOHNSON, Bloomsburg, Pa., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 17, 1930. Serial No. 429,064. 12 Claims. (Cl. 105—364.)



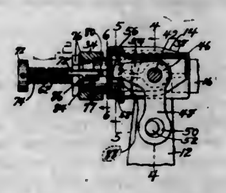
1. A car structure comprising an underframe having side and end sills, said side sills projecting beyond the end sills and forming parts of bumper structures, body supporting blocks secured to the side sills adjacent the ends of the latter to provide the remainder of the bumper structures, ties between the sills, pedestals secured to the ties, body supporting brackets secured to the sills, and a welded body mounted on the underframe and secured to the ties.

1,803,393. WATER COOLER. EUNICE JONES, Melon, Tex. Filed Apr. 17, 1928. Serial No. 270,742. 2 Claims. (Cl. 62—91.)



1. The combination with a sheet metal container, the upper edge of whose walls is outwardly and downwardly turned and spaced from the container proper and the free margin of said downwardly turned portion being inwardly turned and provided with teeth, thus providing a chamber around the outside of the upper end of the container, a fabric envelope around the container whose upper margin is clamped between the walls of the container and said inwardly turned margin and is engaged by said teeth.

1,803,394. SLACK ADJUSTER FOR RAILWAY BRAKES. ROBERT W. JOY, Brooklyn, N. Y., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed May 12, 1928. Serial No. 277,159. 13 Claims. (Cl. 188—202.)



11. In a brake, a brake lever, a tension rod, and a slack adjuster interposed between said tension rod and brake lever and operated by said brake lever for shifting the effective connection of said rod and lever.

1,803,395. MANUFACTURE OF VAT DYESTUFFS OF THE ANTHRAQUINONE SERIES. MAX ALBERT KUNZ, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Feb. 9, 1926, Serial No. 87,173, and in Germany Feb. 16, 1925. Divided and this application filed Feb. 29, 1928. Serial No. 258,143. 1 Claim. (Cl. 260—60.)

The process of producing new compounds of the anthraquinone series which comprises acting with an anthraquinone aldehyde on a condensation product of an aminoanthraquinone with an aldehyde of the benzene series.

1,803,396. BRAKE. LUDGER E. LA BEIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 3, 1927. Serial No. 237,375. 19 Claims. (Cl. 188—78.)

1. A brake comprising, in combination, a drum, a backing plate at the open side of the drum, a friction device

in the drum having adjacent separable ends and formed with slots in said ends, a shaft passing through the backing plate and having an applying device acting on said ends, supporting means adjacent the backing plate and in which the shaft is journaled, and devices on opposite sides of the shaft and securing said means to the backing

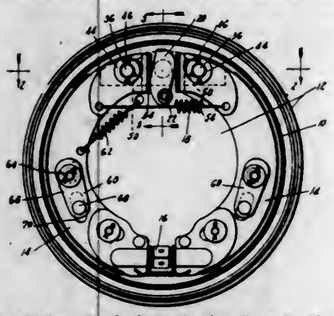
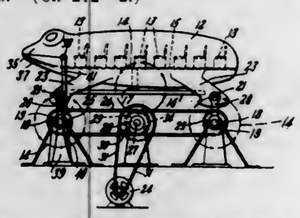


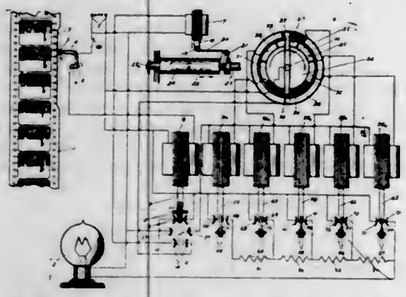
plate and which extend through the slots in the ends of the friction device and one of which serves as an anchor for the friction device when the drum is turning in one direction and the other of which serves as an anchor for the friction device when the drum is turning in the other direction.

1,803,397. AMUSEMENT DEVICE. LOUIS LA RIZZA, Revere, Mass. Filed Apr. 3, 1930. Serial No. 441,410. 3 Claims. (Cl. 272—2.)



1. An amusement device comprising a movable body having a plurality of spaced apart stations for passengers, and operating mechanism organized to raise and lower the body and impart to each station an orbital movement in a vertical plane, said mechanism including forward and rear horizontal crank shafts journaled in fixed bearings and having offset wrist-pins journaled in bearings on end portions of the body, a motor, and torque-transmitting connections between it and the crank shafts, adapted to rotate said shafts and revolve their wrist-pins in unison.

1,803,398. LIGHT CONTROL FOR PRINTERS. GUNNE LOWKRANTZ, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y. Filed Mar. 26, 1928. Serial No. 264,785. 7 Claims. (Cl. 95—75.)

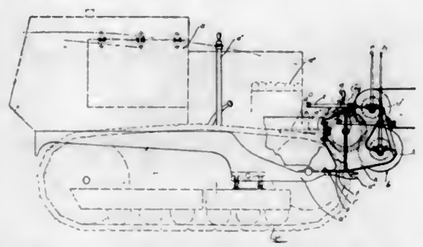


1. A light change control for printers including in combination, a strip of film having notches in its edge of different predetermined lengths, a printing lamp, a series of resistance units adapted to be selectively cut into the circuit of said lamp, means operated by said notches and controlled by the length thereof for selectively cutting one or more of said units into said lamp circuit, said means comprising a master solenoid and a plurality of secondary solenoids, means on said secondary solenoids for establishing circuits through said units and means on said master solenoid for closing said circuits.

1,803,399. MANUFACTURE OF DIBENZANTHRONYLS. ARTHUR LÜTTRINGHAUS and HUGO WOLFF, Mannheim, and HEINRICH NERESHEIMER, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 5, 1926, Serial No. 114,011, and in Germany June 15, 1925. 4 Claims. (Cl. 260—61.)

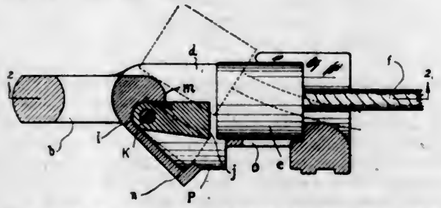
1. The process of producing 2.2'-dibenzanthronyls which comprises acting on a mixture of a 2-halogen-benzanthrone and a benzanthrone having a free 2-position with an alkaline condensing agent at a more moderate temperature than that leading substantially to vat coloring matters.

1,803,400. TRACTOR HOIST. RALPH B. MOORE, Portland, Oreg. Filed July 2, 1927. Serial No. 203,163. 8 Claims. (Cl. 180—53.)



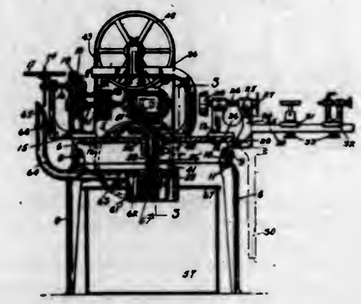
1. In combination with a tractor having two spaced rearwardly extending frame members, a longitudinally-arranged horizontal power take-off shaft terminating at the rearward end of such tractor and arranged above the horizontal plane of such frame ends, such shaft being alined with an aperture in the body of the tractor, cover fastening means arranged adjacent such aperture, a draft connection arranged at the rearward edge of such tractor and below the horizontal plane of such frame ends, an auxiliary hoist of the character described mounted upon the rearward end of such tractor, fastened to the latter by such fastening means adjacent the power take-off shaft aperture and to such frame ends, such hoist being arranged above such frame enda the latter supporting the major portion of such hoist and such hoist being arranged above and clear of such draft connections so as not to interfere with the operation of the latter.

1,803,401. RIGGING HOOK. JOSEPH NADEAU, Portland, Oreg. Filed July 30, 1930. Serial No. 471,724. 11 Claims. (Cl. 24—123.)



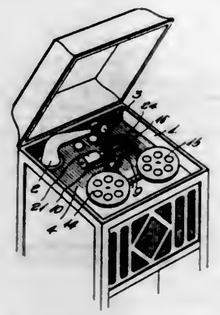
1. A logging hook comprising a hollow body defining an interiorly-arranged chamber adapted to engage and house the knob-like end of a cable, one end of such chamber defining a seat for such cable end and the other end defining a laterally arranged entrance aperture spaced from such seat, such entrance aperture connecting the interior chamber with the exterior of such body, a restricted longitudinal slot leading from such aperture to such seat and proportioned to pass the cable but to retain the knob-like end thereof, an interiorly-arranged keeper arranged movably and centrally in said body and opposing the seat therein and resilient means engaging said keeper and tending to return and to hold the latter centrally in such chamber.

1,803,402. WOODWORKING MACHINE. GEORGE R. NAPIER, Cleveland, Ohio. Filed Sept. 11, 1926. Serial No. 134,864. 14 Claims. (Cl. 144—1.)



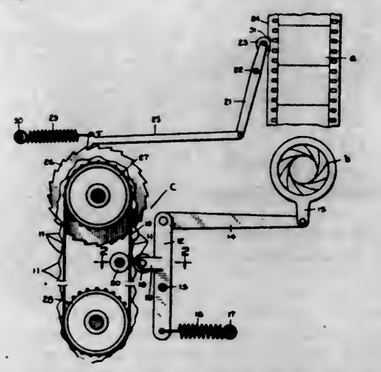
1. In combination, a support, a power plant rotatably mounted thereon, a multiplicity of tools detachably carried by the support, and adapted to be selectively driven by the power plant, said power plant being capable of circumferential and radial movement with respect to the support.

1,803,403. SOUND REPRODUCING OR RECORDING APPARATUS. FREEMAN H. OWENS, New York, N. Y. Filed Sept. 25, 1926, Serial No. 137,713. Renewed Aug. 11, 1930. 8 Claims. (Cl. 179—100.3.)



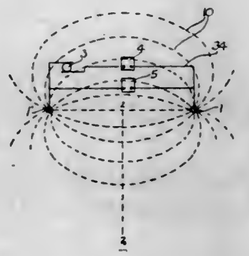
6. In combination, a phonograph having a substantially horizontal support, a drive shaft passing through an aperture in said support, a frame structure arranged to be mounted on top of said support and carrying a film moving mechanism, a source of light and a light sensitive element, said light source and said element being so disposed on said frame structure relative to the film that light from said source may pass through the film to said element; and coupling means between said drive shaft and said film moving mechanism.

1,803,404. MOTION-PICTURE-FILM-PRINTING APPARATUS. FREEMAN H. OWENS, New York, N. Y. Filed Oct. 2, 1926. Serial No. 139,075. 9 Claims. (Cl. 95—75.)



1. In a motion picture film printing apparatus, the combination with a shutter and a negative motion picture film movable past the shutter opening, of means for predeterminedly varying the shutter opening in accordance with varying light intensities selected for the printing of the negative, said means comprising a movable strip independent of the film and provided with a series of operating elements, means connected to the shutter and mechanically operated by said operating elements of the strip, the character of the elements on the strip determining the operation imparted thereby to the connecting means and consequently the amount of shutter opening, and means operated by the motion picture film when a change in printing intensity is to be effected for moving said strip to change the cooperative relation between the operating elements on the strip and the said connecting means.

1,803,405. ELECTROMAGNETIC METHOD OF UNDERGROUND EXPLORATION. NORMAN H. RICKER, Houston, Tex., assignor to J. P. Scranton, Houston, Tex., trustee. Filed Jan. 27, 1928. Serial No. 249,802. 13 Claims. (Cl. 175—182.)

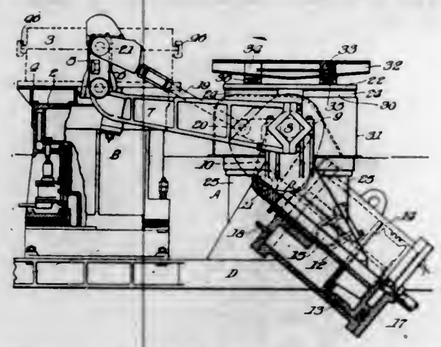


1. A method of exploring for underground mineral deposits comprising, causing alternating electric currents to flow in the earth between two electrodes embedded in the surface thereof, determining at a series of points over the surface of the earth the angular position in space of the plane tangent to the surface containing the magnetic fields due to said currents, and co-ordinating the data so obtained.

1,803,406. MOLDING MACHINE. ROBERT F. RINGLE, Zelienople, Pa. Filed May 29, 1929. Serial No. 366,862. 8 Claims. (Cl. 22—83.)

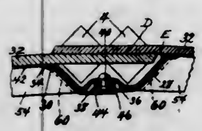
1. Turnover and flask withdrawing mechanism for a molding machine comprising a turnover plate, turnover

arms and an actuating shaft therefor having an operating lever, a pivotally mounted cylinder having a plunger



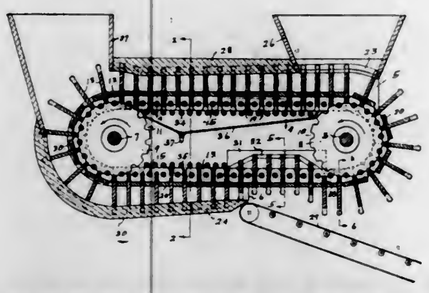
directly connected with the lever, an equalizing table above the cylinder, and plungers and cylinders therefor one on each opposite side of the actuating shaft.

1,803,407. LINED TANK AND METHOD OF MAKING THE SAME. JOHN M. ROHLFING, Plainfield, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 15, 1929. Serial No. 332,590. 24 Claims. (Cl. 29—162.)



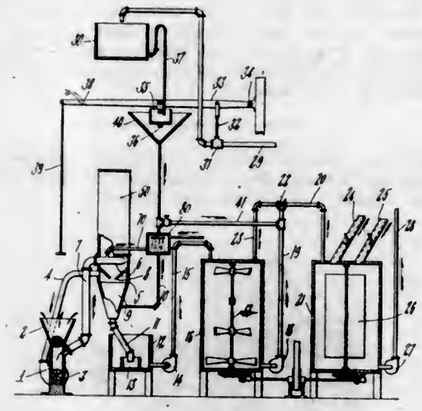
1. In a tank, riveted tank sheets, guards secured to the tank sheets and covering the inner heads of the rivets, and a metallic lining in said tank connected to and covering the guards.

1,803,408. MOLDING MACHINE. FRANK ROUSE, Houston, Tex. Filed Dec. 5, 1927. Serial No. 237,646. 6 Claims. (Cl. 25—99.)



4. A molding machine including a housing, an endless carrier therein, means for revolving said carrier, a plurality of chutes through which the carrier moves, one wall of each chute converging from one end of the chute toward the carrier, partitions on the carrier, which form matrices, with the walls of said chutes, wherein units may be moulded and compressed from plastic material, one of said chutes having an inlet end for plastic material and the other chute having a discharge end for the moulded units, and means for elevating and withdrawing the partitions from the said discharge end to permit the discharge of the moulded units therefrom, said means being effective to thereafter permit the lowering of said elevated partitions by gravity.

1,803,409. MANUFACTURE OF IMPREGNATED FIBER ARTICLES. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed July 30, 1929. Serial No. 382,202. 17 Claims. (Cl. 92—21.)

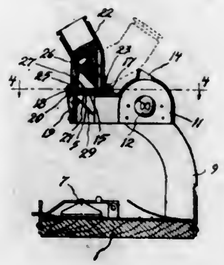


1. An impregnated article comprising cellulose fiber, a solid, infusible pore-forming agent and the impregnating agent.

1,803,410. MANUFACTURE OF PULP ARTICLES. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Feb. 20, 1930. Serial No. 430,145. 8 Claims. (Cl. 92—21.)

1. A furnish for the manufacture of pulp articles, comprising an aqueous suspension of a mixture of waste paper stock, ground charcoal, and beaten, long-fibered stock.

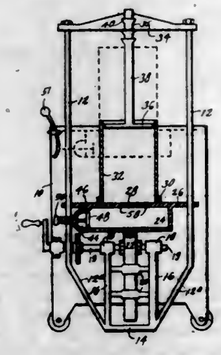
1,803,411. PHOTOGRAPHIC-FILM VIEWING AND EDITING APPARATUS. BRUNO STECHBART, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 3, 1927. Serial No. 237,447. 7 Claims. (Cl. 88—14).



1. In a film viewing device the combination with a film guide provided with a facewise aperture therethrough and including a film face guide member pivoted with respect to the other film face guide member of the guide for facewise movement into and out of film retaining position, an intermediately angled viewing tube carried with said pivoted guide member in associated relation with said aperture and mounted, with the portion thereof adjacent the movable guide member disposed normal to the plane of the guide, for angular movement with respect to the pivoted guide member on the axis

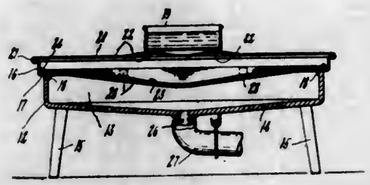
of said adjacent portion of the tube, a triangular glass reflecting prism mounted in said adjacent portion of the tube and having one face thereof disposed upright with respect to the plane of said guide and having another face thereof facing generally in the direction of the other portion of said tube, and a magnifier in said other portion of said tube.

1,803,412. APPARATUS FOR EXTRACTING WATER FROM CLOTHES AND THE LIKE. ELMER B. THOMPSON, Des Moines, Iowa. Filed Feb. 21, 1927. Serial No. 169,840. 9 Claims. (Cl. 100—42.)



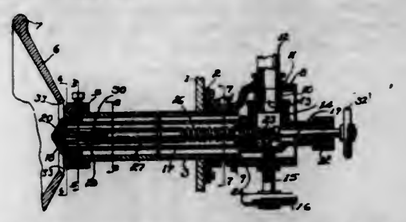
1. In an extractor of the kind described, a container having a foraminous bottom, a plunger mounted to enter the container, one of said elements being mounted for movement relative to the other for squeezing water from the contents of the container, mechanism for moving one of said elements, means for rendering said mechanism inoperative when the pressure reaches a predetermined degree, a compartment below the container for receiving the extracted water, means for discharging water from opposite sides of said compartment, and an adjustable member for cooperating with said last means for causing a discharge at the respective sides of the compartment depending upon the position in which said adjustable member is set.

1,803,413. POULTRY DRINKING STAND. HOWARD E. TRITES, Bridgewater, Mass. Filed Feb. 24, 1930. Serial No. 430,777. 6 Claims. (Cl. 119—72.)



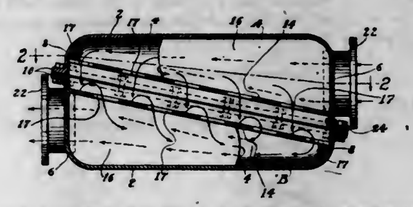
1. A poultry drinking stand, comprising an open base frame horizontally supported, a fowl-supporting grid bearing removably on the frame and covering the space bounded thereby, said grid having openings for the passage of droppings therethrough, a water receptacle supported by the grid and spaced from the margin thereof a distance permitting droppings from fowls, in drinking position on the grid, to pass through grid openings, and a receptacle for droppings removably supported by the frame under the grid, the grid being composed of a layer of wire fabric of relatively coarse mesh, and reinforcing members including a marginal member attached to the margin of said layer, and transverse members fixed at their ends to the marginal member and extending in different directions across the same.

1,803,414. OIL BURNER. MARKO TUDOROV, San Pedro, Calif. Filed Feb. 15, 1929. Serial No. 340,201. 1 Claim. (Cl. 299—59.)



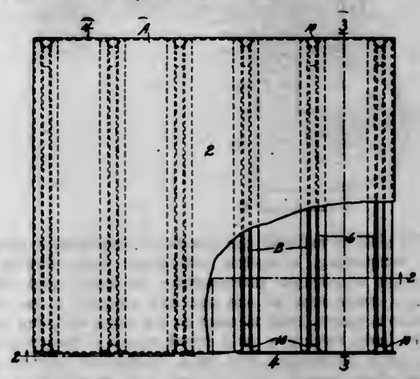
An oil burner comprising a fixed tubular body having a conical nozzle with a central orifice, a tubular member rotatable in said tubular body and having a conical end fitting within said tip and having a central opening registering with said orifice, a rod slidably mounted in said tubular member and splined thereto, a pin mounted in the end of said rod and passing through the opening in the conical end of said tubular member, an operating handle on the end of said rod for manually advancing said pin into said orifice or rotating said tubular member, and means for delivering fuel oil to said orifice.

1,803,415. MUFFLER. ALBERT W. W. VAN HOORN, Wilmington, Del., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 22, 1929. Serial No. 409,034. 17 Claims. (Cl. 137—160.)



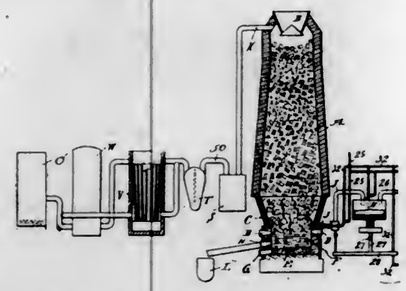
1. In a muffler, a pair of similar members adapted to be connected to form a hollow casing, said members each having an inclined baffle therein extending from end to end of said members.

1,803,416. SKID. CHARLES F. WALP, Berwick, Pa., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 28, 1929. Serial No. 395,863. 7 Claims. (Cl. 248—41.)



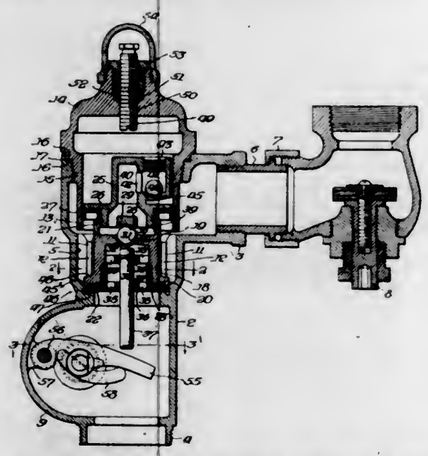
1. A skid formed of a single piece of metal provided with downturned flanges upon opposite sides defining supporting portions, and a plurality of separately formed flanged channels secured to the inner surface of the metal and extending along and secured to the flanges.

1,803,417. METHOD OF MANUFACTURING COMMERCIAL PRODUCTS FROM PHOSPHATIC MATERIAL. JOHN WILLIAM WALTON, Rockdale, Tenn., assignor to Tennessee Products Corporation, Nashville, Tenn., a Corporation of Tennessee. Filed Mar. 23, 1929. Serial No. 349,328. 14 Claims. (Cl. 75—14.)



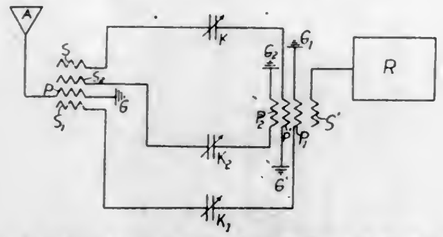
1. In the manufacture of ferro-phosphorus in a blast furnace, the process which consists in charging the furnace with a suitable mixture of phosphatic material, iron bearing material, fluxing material, and carbon, igniting the charge at the base thereof, and supplying air into the combustion zone to raise and maintain a temperature in said zone sufficient, in the presence of incandescent carbon contained therein, to reduce the phosphorus of said phosphatic material to the elemental state and enable it to combine with the iron, in the presence of the fluxing material, and withdrawing a portion of the gases from said zone to increase the temperature and reducing and combining action in said combustion zone.

1,803,418. FLUSH VALVE. WILLIAM S. WHITE, Denver, Colo. Filed Dec. 8, 1927. Serial No. 238,516. 9 Claims. (Cl. 137—93.)



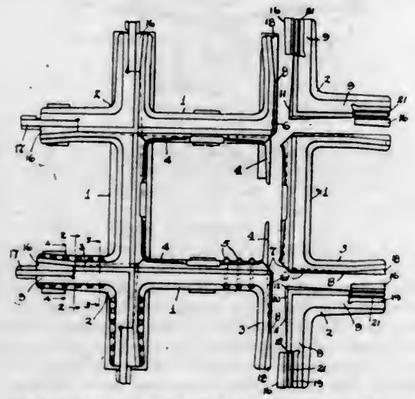
1. In a flush valve of the character described, a piston valve comprising, a hollow cylindrical body having a transverse diaphragm intermediate its ends, said body having a valve seat at one end and adapted to be connected to a piston head member at its other end, the wall of said body having a fluid bleed opening therethrough above said diaphragm and said diaphragm having an opening therethrough and a valve seat surrounding the opening and facing said other end, a piston head secured to said body at said other end and provided with a primary chamber and a secondary chamber, said primary chamber having an opening to the interior of said body above the seat in said diaphragm and an opening to said secondary chamber, and said secondary chamber having an opening adapted to communicate with the interior of a control chamber, a valve seat about the last said opening, gravity closing valves for the last said valve seat and the seat in said diaphragm, and a cylinder wall engaging friction washer secured between said head and body.

1,803,419. WIRELESS RECEIVING STATIC ELIMINATOR. ALEXANDER GRAHAM ANDERSON, Whiteland, Ind. Filed June 26, 1930. Serial No. 463,950. 3 Claims. (Cl. 250—20.)



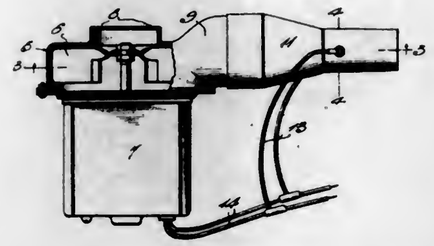
1. A static and interference eliminator, adapted for connection between the antenna and input circuit of a receiver, which consists of two four-circuit inductors coupled by two balancing circuits and a single-circuit; the first four-circuit inductor consisting of a primary, two closely-coupled secondaries and a loosely-coupled secondary, and the second four-circuit inductor consisting of three primaries and a secondary; the two closely-coupled secondaries of the first four-circuit inductor being parts of balancing circuits, one tuned slightly above and the other slightly below the receiver tuning, and the loosely-coupled secondary of the first four-circuit inductor being a part of the signal circuit tuned with the receiver; the two closely-coupled balancing secondaries of the first four-circuit inductor being connected thru tuning condensers to two of the primaries of the second four-circuit inductor which two primaries are in opposite phase to the third primary of the second four-circuit inductor; the loosely-coupled signal receiving secondary of the first four-circuit inductor being connected thru a tuning condenser to the third primary of the second four-circuit inductor; the primary of the first four-circuit inductor being connected with the antenna, and the secondary of the second four-circuit inductor being connected with the receiver; all of the primaries being grounded.

1,803,420. RAILWAY CROSSING. STEPHEN WARD BALKWILL, Cleveland Heights, Ohio. Filed Mar. 24, 1930. Serial No. 438,333. 10 Claims. (Cl. 246—463.)



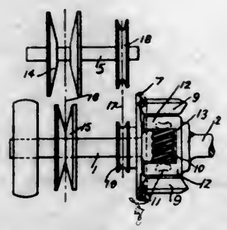
1. In a railway crossing, the combination of a plurality of members which when assembled have intersecting grooves formed in their top surfaces, rail receiving apertures formed in the approaches of the crossing, and complementary interengaging means on the contiguous faces of said members, said last named means tapered longitudinally and terminating in said rail receiving apertures.

1,803,421. DRIER. STEWART F. BENSON and WERNER I. PETERSON, Brainerd, Minn. Filed Feb. 21, 1930. Serial No. 430,421. 2 Claims. (Cl. 34—26.)



1. In a drier of the type embodying an air blower having an outlet nozzle and an electric air heater across said nozzle; a lateral outlet from a portion of said nozzle beyond said heater, an air deflector within said nozzle for deflecting some of the heated air through said lateral outlet, and an air return passage leading from said lateral outlet into the casing of the blower, whereby to return part of the heated air for reheating.

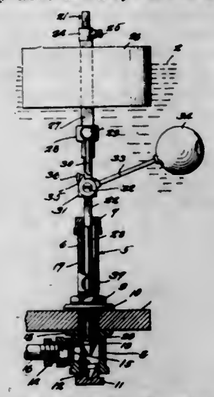
1,803,422. VARIABLE TRANSMISSION GEAR. LENNOX MILLAR BLYTH, Chirnside, Scotland. Filed Jan. 31, 1930, Serial No. 424,837, and in Great Britain Apr. 20, 1929. 1 Claim. (Cl. 74—34.)



A variable speed transmission gear, comprising in combination with a drive shaft and a driven shaft rotatably mounted in coaxial relation, a lay shaft in parallel relation thereto and means for rotating the lay shaft from the drive shaft at variable speeds, of a compensating variable speed drive mounted between said main drive shaft and said driven shaft and comprising a bevel gear rotatably mounted on the end of said drive shaft and adapted to be rotated by the lay shaft, a worm wheel secured on the end of said drive shaft adjacent said bevel gear, a cross head secured on the abutting end of the driven shaft, a pair of shafts rotatably mounted in said cross head at right angles to said drive shaft, worms carried thereby and in mesh with said worm gear, and bevel pinions mounted on the ends of said shafts and in mesh with said bevel gear.

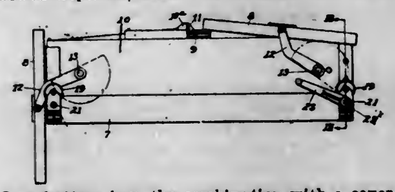
1,803,423. TANK VALVE. CHARLES F. BROWN, Beaver, Pa. Filed Oct. 15, 1930. Serial No. 488,979. 6 Claims. (Cl. 137—104.)

1. In a device of the class described, a tank having an inlet provided with a seat, a stem slidable in the inlet and carrying a valve that closes upwardly against the seat, a main float slidable on the stem, a first stop on the stem and limiting the upward sliding movement of the main float on the stem, a movable stop carried by the main float, the stem having a part with which the movable stop engages to limit the downward sliding movement of the main float, an auxiliary float, mechanism for mounting the auxiliary float movably on the stem, and means



carried by said mechanism for disengaging the movable stop from said part of the stem, as the liquid in the tank recedes from beneath the auxiliary float, thereby transforming the main float into a weight which drops suddenly and strikes said part of the stem a blow that depresses the stem and opens the valve.

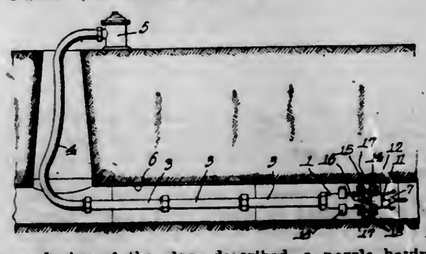
1,803,424. BATTERY BOX. FREDERICK C. COSEO, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company. Filed Oct. 12, 1926, Serial No. 141,230. Renewed Sept. 22, 1930. 28 Claims. (Cl. 105—377.)



1. In a battery box, the combination with a cover plate, an arm pivotally attached to each end of said plate, pivotal supports for said arms at the ends of said box, and actuating means at one end of said box to impart simultaneous movement to said arms.

2. In a battery box, the combination with a cover plate, an arm pivotally attached to each end of said plate, pivotal supports for said arms at the ends of said box, and means to impart rotative movement of said arms about said pivotal supports as and for the purpose set forth.

1,803,425. NOZZLE. JOHN A. CUNNINGHAM, Bethlehem, Pa., assignor of one-half to Mary Cunningham, Philadelphia, Pa. Filed Jan. 16, 1930. Serial No. 421,249. 1 Claim. (Cl. 15—104.30.)



In a device of the class described, a nozzle having a tapered forward end, the nozzle being provided with a

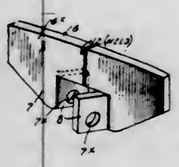
bore which forms an outlet at the extremity of the tapered end, the nozzle having a hollow circumferential bead located to the rear of the tapered end, there being outwardly inclined passages in the tapered end, in front of the bead, outwardly discharging openings in the nozzle in front of the bead and behind said passages, and alternating with said passages, circumferentially of the nozzle, rearwardly-discharging openings in the bead, and outwardly discharging openings in the nozzle, behind the bead, the body having outwardly extended supporting arms, the passages and the openings communicating with the bore.

1,803,426. POWER PUMP-ROD LIFT. THEOPHIUS O. DUCKWORTH, Salt Lake City, Utah. Filed Aug. 6, 1929. Serial No. 383,949. 2 Claims. (Cl. 74—14.)



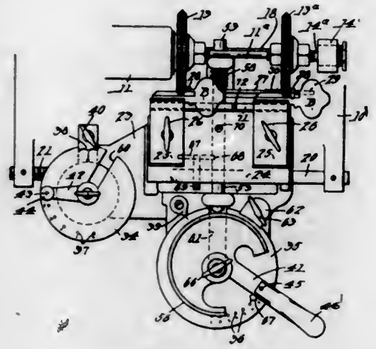
1. In a power pump-rod lift comprising a support having notches therein, horizontally moving rods within said notches, said rods having other rods secured to their ends thereof, said other rods forming guides, a housing having projections thereon, said projections for holding said housing on said guides in such a manner that said housing can be moved upward and downward and means for operating said housing on said guides, all substantially as described.

1,803,427. TRACTION-WHEEL CONSTRUCTION. ERNEST E. EINFELDT, Davenport, Iowa, assignor to French & Hecht, Incorporated, a Corporation of Iowa. Filed Sept. 24, 1929. Serial No. 394,771. 3 Claims. (Cl. 301—44.)



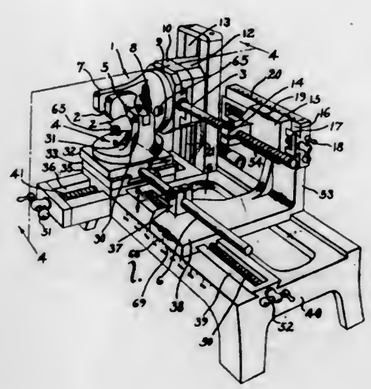
1. An improved cleat for a traction wheel comprising two plates welded together at their inner ends in a common plane, each plate being provided at one edge with a fastening lip extending outwardly from the plate, and said lips being extended in opposite directions from each other and disposed in spaced overlapping relations in planes angularly related to the plane of the plate, and said lips being provided with alined bolt holes to receive a fastening bolt for securing the cleat in position.

1,803,428. KEY-CUTTING MACHINE. MORRIS FALK, Leominster, Mass. Filed Oct. 31, 1927. Serial No. 229,831. 7 Claims. (Cl. 90—13.2.)



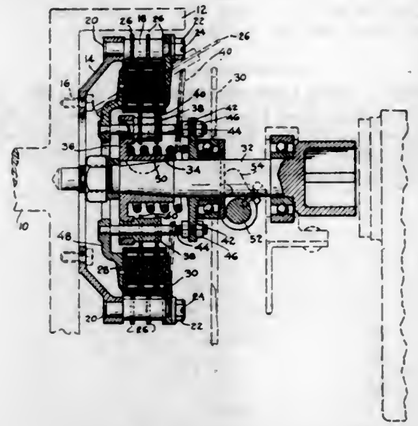
1. In a key cutting machine, the combination with a carriage and a cutter, of a shaft, means for moving the carriage relative to the cutter, a disc on the carriage having an opening adapted to receive the shaft, an arm on said shaft projecting over the disc, and means operated by the shaft for controlling the amount of movement of the carriage.

1,803,429. LENS-TOOL-SURFACING MACHINE. WILLIAM A. GUNNING, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 19, 1927. Serial No. 234,460. 23 Claims. (Cl. 82—12.)



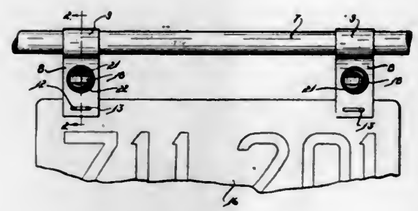
3. In a device of the character described in combination with a surfacing tool, a support for the surfacing tool, a pair of double slides movable at right angles to each other and supporting and carrying the tool support, a radius rod connected to one of the double slides, a work holder having means for holding the work in operable relation with the tool, a pair of double slides movable at right angles to each other and supporting and carrying the work holder, a radius rod connected to one of the double slides for the work holder and a slide having radius rod clamping means adapted to clamp each of the radius rods at desired positions to fix the radii of the arcs in which the tool support and the work holder will move on their double slides, the sets of double slides being in planes at right angles to each other.

1,803,430. CLUTCH MECHANISM. JESSE H. HAND, Detroit, Mich. Filed Feb. 6, 1928. Serial No. 252,139. 6 Claims. (Cl. 192—69.)



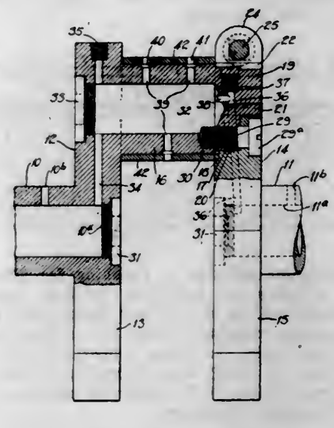
1. Clutch mechanism comprising, in combination with a pair of shafts arranged end to end, a pair of clutch plate carriers one mounted upon each shaft to rotate therewith clutch plates carried by each carrier, thrust plates holding said clutch plates together, one carrier being mounted within the other and provided with tubular parts upon which its clutch plates are supported, operating connections extending through said tubular parts and connected with one thrust plate to be actuated slidably through said parts to release the clutch.

1,803,431. PLATE HOLDER. THOMAS HILL, Detroit, Mich. Filed Feb. 24, 1930. Serial No. 430,657. 2 Claims. (Cl. 40—125.)



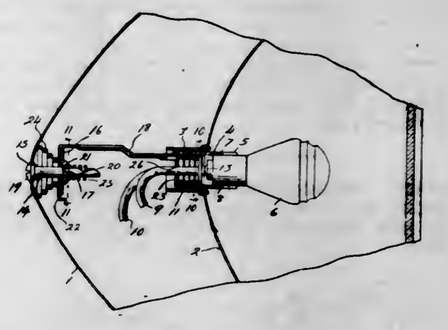
1. A device of the class described, comprising: a pair of plates each having at one end a bulged portion and clamping about a supporting body, each of said plates having a slot formed therein, said slots being in alignment with each other, and one of said plates having an opening formed therein; a projection extending outwardly from the other of said plates and projectable into said opening; a retaining member comprising an elongated stem portion having one end thereof provided with flat faces upon the engagement of which in said slots the rotation of said stem is prevented; a head on said end of said stem projectable through said slots when in alignment therewith; and a spring positioned on said stem adapted to retain said head when projected through said slots and rotated out of alignment therewith in engagement with one of said plates and serving to resist relative movement of said plates.

1,803,432. CRANK SHAFT. PER F. HOLMGREN, Brooklyn, N. Y. Filed Jan. 13, 1930. Serial No. 420,513. 5 Claims. (Cl. 74—38.)



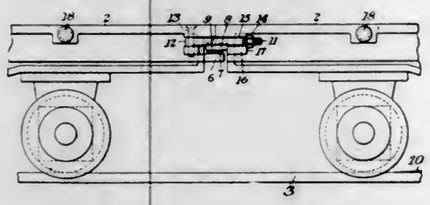
1. A crank shaft of the class described comprising two shaft parts, each of said parts having radially extending integral arms arranged on adjacent ends thereof, one of said arms including an integral crank pin, the free end of which is of reduced size and the other arm having a socket in which the reduced end of said pin is adapted to seat, a key member projecting from the reduced end of said pin and arranged eccentric to the axis thereof for keying the pin against movement with respect to the second named arm, said socket including an eccentric position to receive said key member, and means for securing the pin to said arm.

1,803,433. FOCUSING ADJUSTMENT FOR LAMPS. ALOIS L. MARTINEK, Detroit, Mich., assignor to C. M. Hall Lamp Company, Detroit, Mich., a Corporation of Michigan. Filed June 16, 1930. Serial No. 461,537. 2 Claims. (Cl. 240—44.2.)



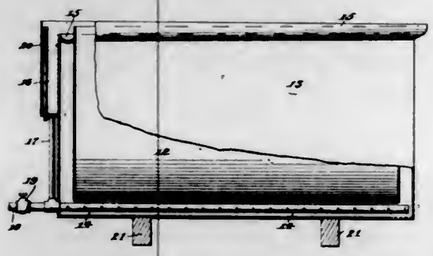
1. In a lamp, a lamp casing, a reflector in the casing, a tiltable bulb retainer carried by the reflector, a rotary operating member accessible through the casing at a point in substantial alignment with the retainer, said member having a square portion and a notch, a cam on the square portion, a spring about the member between the casing and cam, a spring about the member between the cam and notch, and a yoke rigid with the retainer, riding the cam, and having a portion between one of the springs aforesaid and said cam.

1,803,434. APPARATUS FOR USE IN SURFACING SHEET MATERIAL. FREDERIC MERIAN, Pittsburgh, Pa., assignor, by mesne assignments, to Pilkington Brothers Limited, Lancashire, England, a Company of Great Britain. Filed Mar. 10, 1924. Serial No. 698,148. 7 Claims. (Cl. 51—240.)



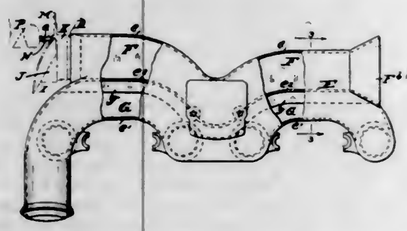
7. Apparatus for grinding or polishing flat glass comprising a plurality of relatively movable associated tables, a projection on one of said tables, and a horizontally disposed engaging surface on an adjacent portion of another table, the riding support for said tables being arranged to bring said projection to rest upon said engaging surface, to maintain the surfaces of said tables in horizontal alignment.

1,803,435. HEAT-EXCHANGE APPARATUS. HARRY L. MILLER, Chester, Pa. Filed Oct. 29, 1930. Serial No. 429,057. 2 Claims. (Cl. 257—208.)



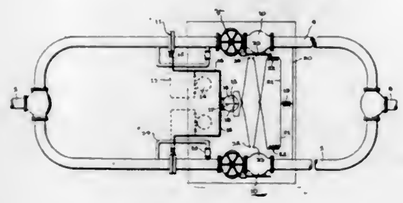
1. A heat exchange apparatus for liquids comprising a vat for holding the liquid to be heated or cooled, a jacket spaced apart from and surrounding said vat, a perforated feed pipe located at the bottom of said vat in the space between the vat and its jacket, a slanting trough at the top of said vat and into which the up-flowing heating or cooling liquid discharges by overflow, a tank at one end of said vat and into which the said trough discharges, and a down-flow pipe connecting said tank with said perforated feed pipe.

1,803,436. COMBINED HEATER AND EXHAUST MANIFOLD. RALPH B. OTWELL, Detroit, Mich. Filed Oct. 29, 1929. Serial No. 403,203. 5 Claims. (Cl. 257—241.)



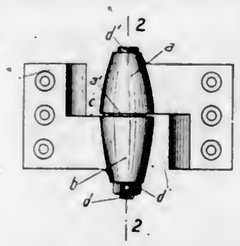
1. In a combined heater and exhaust manifold of the character described, a casing comprising undulating wave-like top, bottom, and a longitudinally extending dividing wall, cast integral with a pair of flat side walls, forming respectively an air heating chamber and an exhaust manifold and whereby the heating surface is relatively increased within a given length by said wave-like walls, said air chamber being divided longitudinally by a plurality of partition walls cast integral with the undulating wave-like top and dividing walls.

1,803,437. PIPE-LINE-CONTROLLING MEANS. ARTHUR H. RINEY and LLOYD T. GIBBS, Bartlesville, Okla., assignors to Phillips Petroleum Company, Bartlesville, Okla. Filed Sept. 6, 1930. Serial No. 480,258. 6 Claims. (Cl. 137—78.)



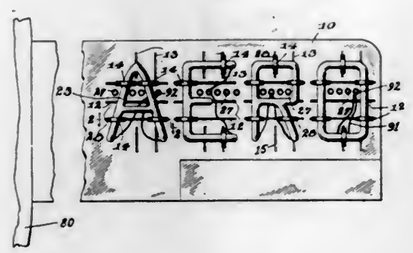
1. A pipe line including a feed pipe and a discharge pipe connected together by branch pipes, each branch pipe having means for obtaining differential pressures therein and a cut-off valve, and automatically operating means actuated by differential pressure in the branches for closing a valve in the branch in which pressure falls below that of the other branch.

1,803,438. HINGE. HENRI FRANCOIS LOUIS JOSEPH ROCHERON, Levallois-Perret, France. Filed July 12, 1929, Serial No. 377,889, and in France Oct. 30, 1928. 1 Claim. (Cl. 16—132.)



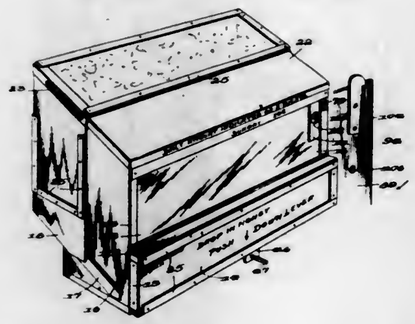
A hinge comprising a male member having a tapered projection thereon, said tapered projection having a rectilinear lateral surface,—a female member having a tapered recess formed therein, said recess having a rectilinear lateral surface adapted to coact with the lateral surface of said projection,—a pintle traversing said male and female elements and operative to maintain said male and female members in assembled relation,—and a spring operative to oppose separation of said male and female members, said spring bearing against part of said pintle at one of the extremities thereof.

1,803,439. ADVERTISING SIGN. AARON ROSENSTEIN, New York, N. Y., assignor to Rosenstein Bros. & Hook, New York, N. Y., a Corporation of New Jersey. Filed Feb. 2, 1929. Serial No. 337,004. 3 Claims. (Cl. 40—130.)



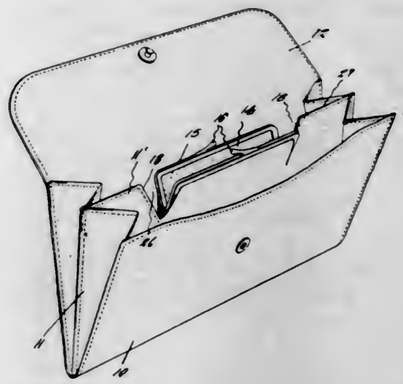
3. The combination with an aeroplane wing, said wing having a plurality of angularly arranged slots therein, of a letter and movable elements adapted to secure said letter to the wing, said elements being selectively positioned in the slots in said wing.

1,803,440. COIN CONTROL FOR VENDING MACHINES. JOHN G. SCHOFIELD, Washington, D. C., assignor, by mesne assignments, to Newspaper Mechanical Sales Company, Washington, D. C., a Corporation of Delaware. Original application filed July 25, 1929, Serial No. 380,870. Divided and this application filed Oct. 4, 1929. Serial No. 397,267. 13 Claims. (Cl. 194—68.)



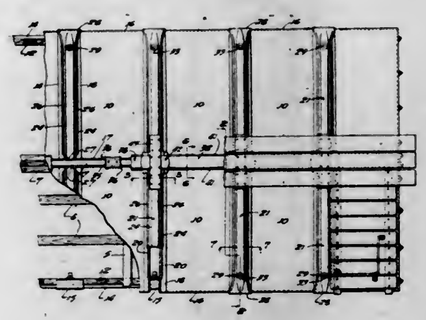
2. In a coin controlled vending machine, a coin chute having a coin holding portion, a movable bar adjacent said chute and carrying a pin projecting into said chute and spaced from the opposite side at a distance less than the diameter of a coin to be held, adjusting means to vary the position of said bar and pin longitudinally of the chute whereby to vary the number of coins held, and camming means for varying the position of said pin toward and from the opposite side as the pin is adjusted longitudinally whereby to vary the size of coins held.

1,803,441. POCKETBOOK. HARRY SERNAKER, New York, N. Y., assignor of one-half to Benn B. Horowit, York, N. Y. Filed Sept. 3, 1930. Serial No. 479,544. 7 Claims. (Cl. 150—30.)



1. In a hand bag, a two part partition having a notched or cut out portion in its upper edge, and a coin purse carried by said partition and mounted between the two parts thereof and between the ends of said notched or cut out portion.

1,803,442. CAR ROOF. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 14, 1929. Serial No. 385,870. 9 Claims. (Cl. 108—5.)

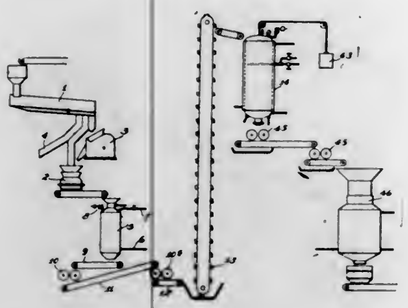


1. In a railway car, the combination with purlins, of roof sheets arranged in spaced relation longitudinally of the car, and seam caps respectively spanning the spaces between adjacent roof sheets, each of said seam caps having a depressed portion interposed between the adjoining edges of adjacent roof sheets for limiting movement of the latter longitudinally of the car, said depressed portions of the seam caps being in supporting engagement with the purlins.

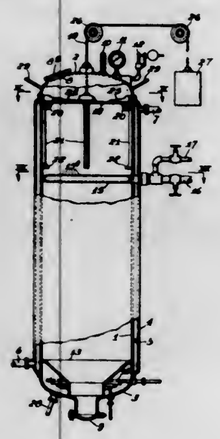
1,803,443. PROCESS OF PREPARING FIBER FROM WOOD AND WOOD WASTE. PAUL G. VON HILDEBRANDT, Pittsburgh, Pa., assignor to Howard B. Salkeld, Pittsburgh, Pa. Filed Nov. 20, 1928. Serial No. 320,601. 11 Claims. (Cl. 92—13.)

1. A process of preparing pulp from wood material, comprising digesting the wood with a reagent adapted

to partially attack the incrustants and open the grain, subsequently confining the preliminarily softened wood under mechanical pressure in an indirectly heated digester, and while thus confined digesting with a second reagent to remove a further amount of the incrustants and free the fiber.



1,803,444. DIGESTER. PAUL G. VON HILDEBRANDT, Pittsburgh, Pa., assignor to Howard B. Salkeld, Pittsburgh, Pa. Filed Nov. 20, 1928. Serial No. 320,602. 5 Claims. (Cl. 92—7.)

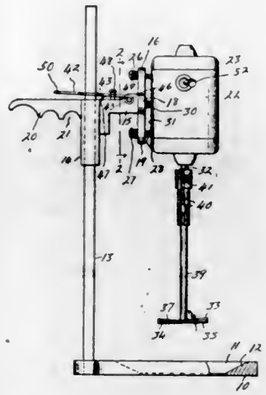


1. An apparatus for digesting wood and the like comprising a shell, means associated with said shell for maintaining a charge of said material compact during digestion, means for withdrawing digested material from the bottom of the shell and means for indirectly heating said charge.

1,803,445. WALL PLASTER. GORDON R. WALPER, Royal Oak, Mich. Filed Dec. 22, 1928. Serial No. 328,063. 1 Claim. (Cl. 106—84.)

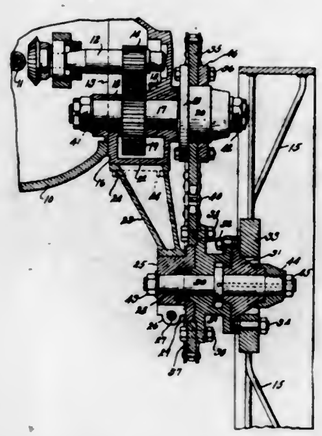
A mixture for plaster comprising powdered calcined gypsum, coarser particles of virgin gypsum shale of such a size as to provide internal support, and particles of gypsum calcined of substantially the same size.

1,803,446. ELECTRIC MIXER. CHARLES F. WARRICK, Detroit, Mich. Filed Dec. 10, 1928. Serial No. 324,999. 9 Claims. (Cl. 259—135.)



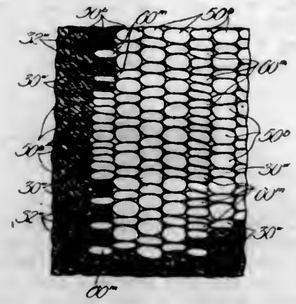
1. A mixing device comprising a standard, a laterally projecting supporting member, a motor having a vertical axis, a plurality of supporting arms on said supporting member arranged to one side of the axis of said motor, and spring connections between the casing of said motor and said supporting arms.

1,803,447. EXTENSION SUPPORT AND DRIVING MEANS FOR TRACTORS. ROLLIN H. WHITE, Cleveland Heights, Ohio. Filed Sept. 27, 1928. Serial No. 308,773. 4 Claims. (Cl. 180—70.)



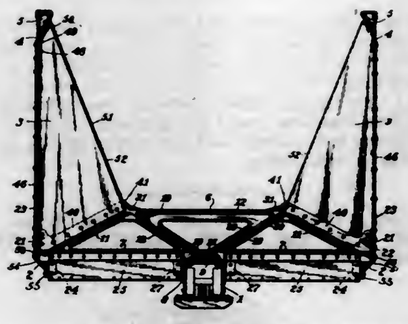
1. In a tractor, the combination with a transmission housing having a driven shaft projecting therefrom, of an auxiliary traction extension comprising a traction wheel hub secured to the projecting end of said shaft, a sprocket detachably secured to said wheel hub, a depending bracket detachably secured to the base of said transmission housing, a fixed axle carried by said bracket, a rotatable hub carried by said fixed axle, a sprocket secured to said rotatable hub, a drive chain encircling said sprockets, and a traction wheel secured to said rotatable hub.

1,803,448. FRICTION MATERIAL. RUDOLF L. R. WILD, Chicago, Ill., assignor to Union Asbestos & Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 29, 1929. Serial No. 410,625. 3 Claims. (Cl. 139—425.)



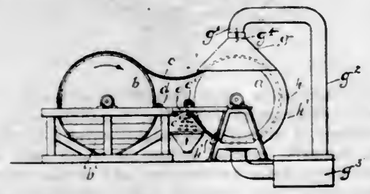
2. A woven brake lining comprising a plurality of transverse filler threads, a plurality of longitudinal warp threads interwoven with the filler threads to form plies of fabric, a plurality of binder threads successively interwoven with the filler threads of different plies and extending longitudinally of the lining, and a plurality of soft metallic wires extending longitudinally of said lining and exposed at regularly spaced points on the surface of said lining, said wires extending diagonally between predetermined points on one side of said lining to predetermined points on the other side of said lining to form exposed metal surfaces of substantially constant area when the lining is worn down.

1,803,449. CROSS-BEARER. WILLIAM E. WINE, Toledo, Ohio. Filed June 4, 1928. Serial No. 282,782. 20 Claims. (Cl. 105—230.)



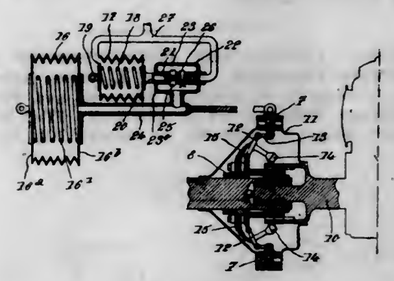
1. A cross bearer for freight cars of substantially trapezoidal form, the nonparallel sides thereof being adapted to receive angular plates for tying the sides of the freight car to said cross bearer.

1,803,450. DRYING APPARATUS. ARTHUR WRIGHT, Upper Montclair, N. J. Filed June 12, 1926. Serial No. 115,517. 1 Claim. (Cl. 34—12.)



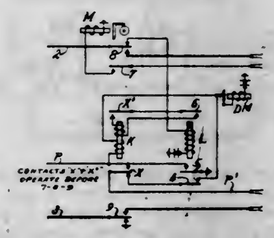
In combination, a rotary drum dryer, a reenforcing medium to conduct a moisture containing mass into contact with the drum, a housing for the drum allowing ingress and exit for the re-enforcing medium, means of ingress and exit for a gaseous medium, means to conduct the gaseous medium from the last named exit, means to the last named means of ingress, and heating means for said gaseous medium between said means of ingress and exit last mentioned.

1,803,451. SPARK-ADVANCING APPARATUS. STANISLAS JANVIER ZIEMBINSKI, Bellevne, France. Filed Nov. 5, 1928, Serial No. 317,356, and in France Nov. 18, 1927. 13 Claims. (Cl. 123—117.)



1. A spark advancing apparatus comprising in combination a fuel intake conduit, a first expansible chamber, a variable pressure chamber, a tube communicating at one extremity with said intake conduit and, at its other extremity, with said first expansible chamber and with said variable pressure chamber, a valve actuable by changes in volume of said first expansible chamber and positioned to control the point at which said tube communicates with the variable pressure chamber, a second expansible chamber communicating with said variable pressure chamber, and means actuable by the expansion and contraction of said second expansible chamber to advance and retard a spark.

1,803,452. ROTARY LINE-SWITCH CIRCUIT. HERBERT ADAMS, Liverpool, England, assignor, by mesne assignments, to Associated Telephone & Telegraph Company, Kansas City, Mo. Filed Dec. 6, 1926, Serial No. 152,795, and in Great Britain Jan. 7, 1926. Renewed May 4, 1929. 19 Claims. (Cl. 179—18.)
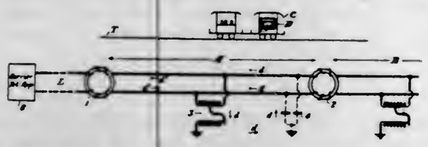


1. In a telephone system, a switch including a line relay, a switching relay, means for operating said relays, and means rendered effective after the switching relay has operated to a certain extent to delay the full operation of the switching relay.

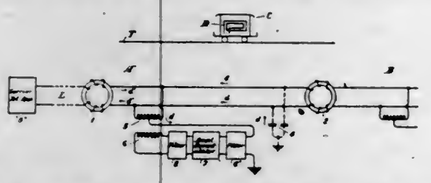
1,803,453. SYSTEM FOR COMMUNICATING WITH MOVING VEHICLES. HERMAN A. AFFEL, Ridgewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 30, 1928. Serial No. 266,091. 3 Claims. (Cl. 179—82.)

1. A system for communicating with moving vehicles comprising a transmission line inductively associated with

a moving vehicle, means for sectionalizing said line with respect to currents applied thereto in a certain manner, said means comprising inductance coils having their windings parallel aiding and series opposed, and means in each of said line sections to apply said currents to said line in a different manner.

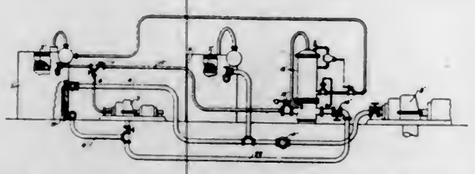


1,803,454. SYSTEM FOR COMMUNICATING WITH MOVING VEHICLES. HERMAN A. AFFEL, Ridgewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 30, 1928. Serial No. 266,092. 5 Claims. (Cl. 179—82.)



2. A system for communicating with moving vehicles comprising a transmission line inductively associated with signaling apparatus in a moving vehicle whereby currents will be induced from said signaling apparatus into said line and will traverse the sides of said line in parallel, means for dividing said line into sections with respect to currents traversing the sides of the line in parallel, means for reducing the frequency of currents thus traversing the line, and means for applying said currents as reduced in frequency to said line whereby they will traverse the sides thereof serially.

1,803,455. POWER PLANT. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed July 22, 1927. Serial No. 207,703. 6 Claims. (Cl. 60—43.)



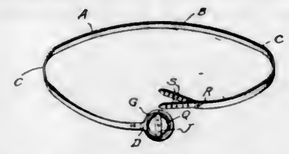
1. In a power plant, a high pressure steam generator and superheater, a high pressure prime mover receiving steam from said superheater, a source of low pressure steam delivering to a low pressure steam supply line, a connection delivering exhaust steam from said prime mover to said low pressure steam supply line, a conduit connecting said high pressure generator with said low pressure steam supply line, a desuperheater located in said connection, and means for isolating either said prime mover or said desuperheater from both said steam generator and said low pressure steam supply line.

1,803,456. AUTOMATIC MEANS FOR LUBRICATING THE BEARINGS OF A MACHINE. HART W. ATWOOD, Portland, Oreg. Filed Mar. 8, 1927. Serial No. 173,724. 4 Claims. (Cl. 184—7.)

1. In lubricating means for machine bearings, a source of lubricant, means for placing said source under pressure, and an individual lubricator at each bearing connected by a conduit with said source, said lubricator comprising a storage chamber provided with inlet and outlet passageways, the former connected with said conduit, a valve-chamber included in said inlet passageway and provided with inlet and outlet ports, the inlet port being located nearest the entrance of said passageway, and having a separate inlet duct extending therefrom into said storage-chamber, said outlet port being connected with said outlet passageway, a piston-valve reciprocal in said valve-chamber, adapted in one position to close said inlet port and in its other position to close said outlet port and open said inlet port, a supplemental valve-chamber included in said separate inlet-duct, and a check valve in such supplemental valve-chamber, whereby the pressure of the lubricant, from said source, and the pressure in said storage-chamber will tend, respectively, to position said piston-valve relative to said ports of said valve chamber.

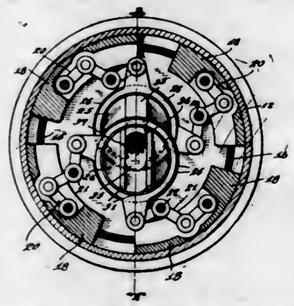


1,803,457. TRUSS FOR THE REDUCTION OR ALLEVIATION OF HERNIA. ALBERT BAEHR, Chicago, Ill. Filed June 29, 1925. Serial No. 40,446. 4 Claims. (Cl. 128—121.)



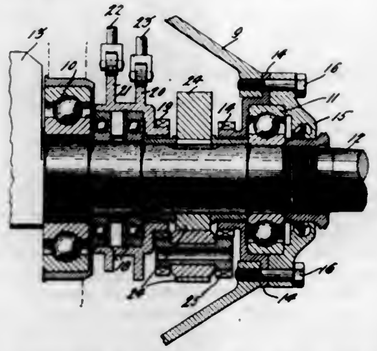
3. In a device of the class described, a resilient member adapted to encircle a human body, a forked member pivoted to said resilient member and rotatable on an axis constituting a continuation of that of said resilient member, a leaf spring pivoted between the extremities of said forked member, and a pad pivotally secured to said leaf spring and rotatable in a plane substantially parallel to that of said spring.

1,803,458. CLUTCH. ROBERT C. BERRY, Indianapolis, Ind. Filed Mar. 8, 1928. Serial No. 259,974. 9 Claims. (Cl. 74—14.)



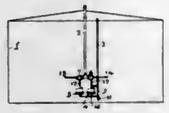
1. In combination, two relatively rotatable co-axial members, one or more eccentrics rotatable with one of said members, a plurality of weights carried by the other of said members, guiding means in which said weights are circumferentially oscillatable, and means operatively interconnecting said weights and eccentrics to cause oscillation of said weights as said two members rotate relatively to each other.

1,803,459. VALVE GEAR. JOSEPH J. BOLAND, Keyport, N. J., assignor, by mesne assignments, to Aeromarine Plane & Motor Company, Inc., Keyport, N. J., a Corporation of New York. Filed June 25, 1928. Serial No. 288,193. 5 Claims. (Cl. 123—90.)



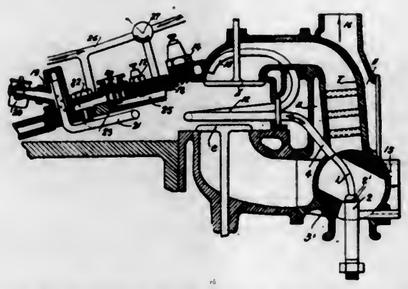
1. In apparatus of the class described, the combination with an engine having a casing and a crank-shaft extending therethrough, of a valve gear driven from the crank-shaft in which one of the gears extends exteriorly of said casing and secured thereto in a manner as to permit rotation of same at the will of an operator.

1,803,460. FIRE PREVENTION SYSTEMS FOR TANKS. STEPHEN H. BROOKS, Los Angeles, Calif., assignor to Brooks Engineering Corporation, Los Angeles, Calif., a Corporation of California. Filed Dec. 15, 1926. Serial No. 154,937. 5 Claims. (Cl. 220—88.)



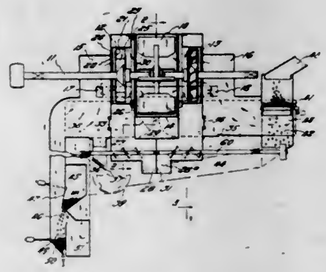
1. In a combined vapor recovery and fire prevention system, a tank for holding inflammable material, a pipe connection from beneath the roof of the tank leading to a pair of differential regulators, a separate vapor flow pipe communicating with the inside of the tank said pipe terminating in oppositely positioned outlets, a valve casing connected to each of said outlets, valves within the casings, means for separately connecting the valves to the controllers, and separate external pipe connections to the valve casings.

1,803,461. INTERNAL-COMBUSTION ENGINE. CHARLES HENRI CLAUDEL, Veuxhaulles, France. Filed Apr. 6, 1927, Serial No. 181,469, and in France Dec. 24, 1926. 4 Claims. (Cl. 123—127.)



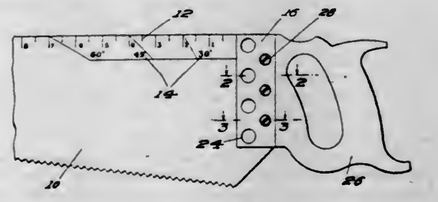
1. In an explosion motor with a main ignition device, a safety sparking device mounted upon the cylinder head and forming sparking anvil and inspection port, a conduit therein, a valve in said conduit, and means supplying a fuel mixture to one end of said conduit, the opposite end thereof opening in proximity of the main ignition device.

1,803,462. CENTRIFUGAL-TYPE DUST SEPARATOR. CLAUDE HAROLD CRAGO, Strathfield, near Sydney, and ALBERT ERNEST HAMILTON, Carlington, near Sydney, New South Wales, Australia. Filed Mar. 23, 1928, Serial No. 264,249, and in Australia June 30, 1927. 4 Claims. (Cl. 209—144.)



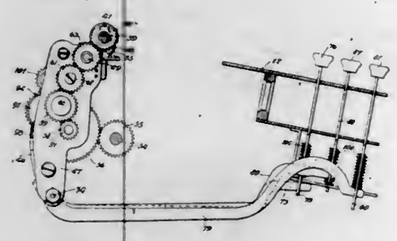
3. Grain cleaning apparatus comprising a pair of cylindrical casings each open centrally at both ends and having an annular peripheral slot at its inner end, a closed dust chamber enclosing said casings, a centrifugal separating fan with helical vanes operating in each of said casings at the end distant from said peripheral slot, both of said fans being mounted on one shaft, a shroud ring on the outer side of said fan shrouding said vanes, a shroud disc on the inner side of said fan, said shroud disc being slightly greater in diameter than the internal diameter of said shroud ring, a circulating centrifugal fan located between said separating fans and arranged to draw air through said casings in an axial direction, said air passing between the vanes of the separating fans and over the periphery of said shroud discs, the dust moving along with said air being trapped by the inner ends of said casings and falling by gravity out through said peripheral slots into said dust chamber, and a closed circuit system of passages connecting the intake and exhaust sides of said circulating fan.

1,803,463. SAW. CARL T. DANIELSON, Chicago, Ill. Filed Dec. 31, 1928. Serial No. 329,355. 1 Claim. (Cl. 145—108.)



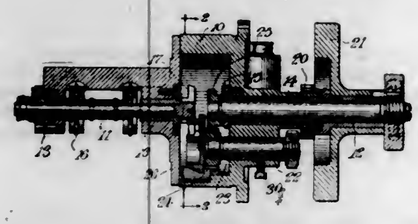
A saw, including a saw blade, a handle thereon, and means for attaching the handle to the blade, said means comprising metallic shoulders for the handle, said metallic shoulders comprising a pair of channel members, the blade and the channel members having aligned openings, and rivets positioned in the openings, the channel members being provided with additional outside openings for the ready insertion of the said rivets, and a handle removably positioned with respect to the blade and shoulders, together with a plurality of double screws for mounting the handle on the shoulders and blade.

1,803,464. ATTACHMENT FOR CALCULATING MACHINES. ADOLPHUS S. DENNIS, Oakland, Calif., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed July 17, 1929. Serial No. 378,942. 5 Claims. (Cl. 235—144.)



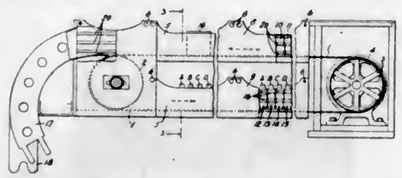
1. In a calculating machine having a set of accumulators, a set of counters, a motor for operating said accumulators and counters, and clearing devices common to said accumulators and counters, the combination of a key for connecting said motor to said clearing devices for effecting clearing of said accumulators, a key for connecting said motor to said clearing devices for effecting clearing of said counters, and a key operable to effect operation of the first and second said keys one after the other.

1,803,465. ADJUSTABLE GENEVA INTERMITTENT. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,696. 2 Claims. (Cl. 74—41.)



1. In a motion picture apparatus, a sprocket adapted to be intermittently rotated through comparatively small angles, a shaft carrying said sprocket and rigidly secured thereto, means for rotatably mounting said shaft, a star wheel secured to said shaft and having a plurality of radially extending slots and cam surfaces therebetween, means for driving said star wheel comprising a pin wheel having a pin adapted to engage said slots and a cam surface adapted to engage said first mentioned cam surfaces, said cam surfaces being tapered in the direction of their axes whereby relative longitudinal adjustment thereof serves to maintain said surfaces in engagement, a driving shaft rigidly secured to said pin wheel and carrying a driving gear, a bushing rotatably mounting said driving shaft and supporting the same against longitudinal movement, a support for said bushing, means for adjusting said bushing longitudinally of said driving shaft and clamping said bushing in said support, a gear substantially coaxial with said star wheel and in driving engagement with said driving gear, a shaft supporting said last mentioned gear wheel and a fly wheel carried by said shaft for maintaining substantially constant rotation thereof while said sprocket is being intermittently rotated.

1,803,466. TICKET-DISTRIBUTING SYSTEM. GEORGE A. DREW, Des Moines, Iowa, assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 2, 1927. Serial No. 217,295. 1 Claim. (Cl. 198—42.)



In a ticket distributing system, an endless belt, means for supporting and driving said belt, a series of longitudinal extending vertical guides mounted above each of the upper surfaces of said belt and forming channels for the reception of tickets which are arranged to travel on the belt in opposite directions, said guides presenting only a small area of contact to the traveling tickets, resilient means adapted to be located in one of said series of guides for stopping said tickets at predetermined points on one run of the belt and ticket receiving receptacles located on the other run of the belt, at the termination of said other series of guides.

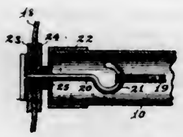
1,803,467. ELECTRICAL-RESISTANCE ALLOY. WILBUR B. DRIVER, East Orange, and STANLEY R. KEITH, Montclair, N. J., assignors to Gilby Wire Company, Newark, N. J., a Corporation of New Jersey. Filed July 3, 1930. Serial No. 465,643. 2 Claims. (Cl. 75—1.)

2. An electrical resistance alloy comprising vanadium between 2% and 5%, manganese between 5% and 40%, nickel between 35% and 50%, chromium between 5% and 20%, and the balance iron.

1,803,468. ELECTRICAL-RESISTANCE ALLOY. WILBUR B. DRIVER, East Orange, and STANLEY R. KEITH, Montclair, N. J., assignors to Gilby Wire Company, Newark, N. J., a Corporation of New Jersey. Filed July 3, 1930. Serial No. 465,644. 1 Claim. (Cl. 75—1.)

An electrical resistance alloy comprising aluminum 5%, vanadium between 2 and 3½%, chromium 15%, nickel between 60 and 75% and the balance iron.

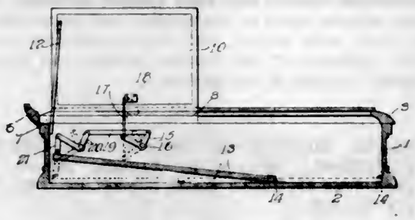
1,803,469. TOY AIRPLANE. NORMAN E. GARDNER, Allentown, Pa. Filed Nov. 23, 1929. Serial No. 409,274. 3 Claims. (Cl. 46—50.)



2. A toy airplane including a tubular body, a propeller, an arbor journaled on one end of said body, said propeller being mounted on said arbor, members on said arbor frictionally engaged with the opposite sides of said propeller to cause the propeller to turn with said arbor, and torsional means within said body and connected with said arbor to turn the arbor.

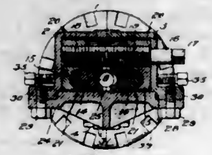
1,803,470. BURIAL CASKET. ALBERT G. HARMS, Chicago, Ill. Filed Apr. 18, 1927. Serial No. 184,463. 11 Claims. (Cl. 27—13.)

1. The combination with a casket having a top closure, a spring bottom fulcrumed upon the bottom of the casket and including a spring structure adapted to support a mattress, and a depressed central portion over the fulcrum and supporting said spring structure, and means at



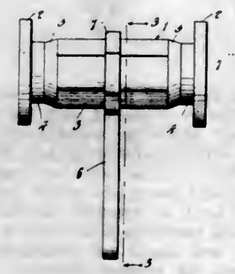
the head end of the casket and co-operating with the adjacent end of the bed bottom to raise or lower the same and hold it in an adjusted position.

1,803,471. STUFFING BOX. ALFRED G. HEGGEM, Tulsa, Okla. Filed Mar. 26, 1927. Serial No. 178,607. 6 Claims. (Cl. 286—16.)



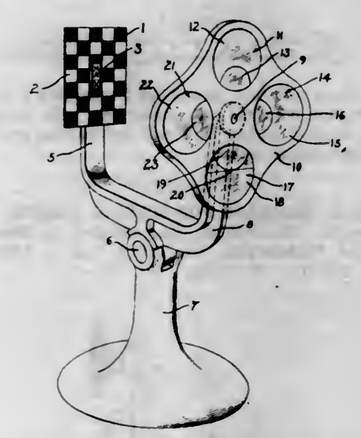
1. In a device of the character indicated, the combination with a stuffing box having alined openings for the passage of a reciprocating element to be packed, of flexible packing means comprising laterally separable sections, packing followers disposed between said stuffing box and said packing means on opposite sides of the axis of the alined openings, and a threaded rod for simultaneously actuating said followers toward the axis of the alined openings, said rod having threaded engagement with said followers.

1,803,472. PIPE COUPLING. CHAUNCEY F. JAHNS, Schuyler, Nebr. Filed Feb. 8, 1927. Serial No. 166,749. 1 Claim. (Cl. 285—203.)



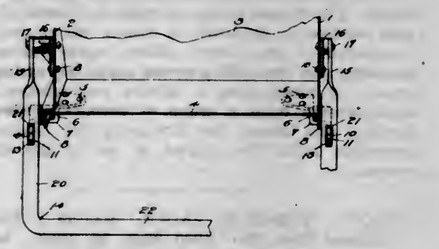
A unitary device of the class described comprising a pipe coupling, a wrench slidable along said coupling, means on said coupling preventing detachment of the wrench therefrom, the coupling having a substantially polygonal portion engageable by the wrench in one position whereby the latter is operable to turn the coupling, said coupling also having a portion engageable by the wrench in another position wherein the coupling and wrench may be moved relatively to each other, particularly to enable adjustment of the wrench relatively to the coupling between turning operation of the coupling.

1,803,473. LENS-TESTING DEVICE. GEORGE S. JOHNSTON, San Francisco, Calif., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 21, 1927. Serial No. 234,713. 3 Claims. (Cl. 88—56.)



1. In a lens testing device, a lens holder having openings therein, multifocal lenses in the openings, and a test chart aligned with the lens holder and having a checkerboard arrangement of test objects of alternate black and white squares and a central panel having a series of vertically arranged letters separated one from the other.

1,803,474. CAR-DOOR MECHANISM. BYERS W. KADEL, Baltimore, Md. Filed May 3, 1928. Serial No. 274,844. 16 Claims. (Cl. 105—308.)

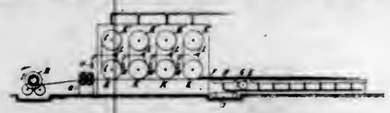


1. In a railway car having hoppers disposed transversely of the car, a hinged door for each of said hoppers, the hinge axis of said doors extending transversely of the car and the doors being adapted to swing to open position under the influence of gravity, and door supporting mechanism for each hopper involving a plurality of members respectively secured to the hopper door adjacent the opposite sides thereof and a member pivotally mounted on the sides of the hopper and respectively engageable with said members on the door for maintaining said door in closed position, said member having a portion extending from one side of the hopper to the other and spaced from the closed door in the direction of opening movement thereof.

1,803,475. APPARATUS FOR MAKING BANDS OF ARTIFICIAL FIBERS. ADOLF KÄMPF, Premnitz/Westhavelland, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 18, 1928, Serial No. 255,473, and in Germany Mar. 5, 1927. 2 Claims. (Cl. 18—8.)

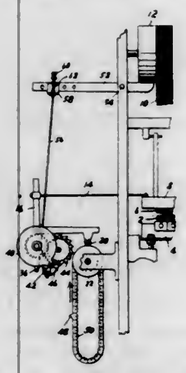
1. A device for guiding and washing a continuously spun moving bundle of artificial fibers on its way from a

plurality of spinning nozzles to the drying device comprising a rail, said rail being provided with projections adapted to subdivide said bundle of filaments when trav-



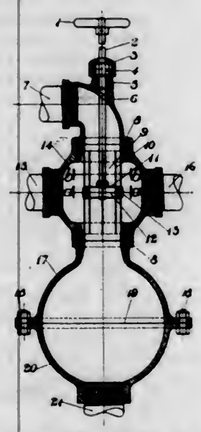
eling across said rail, means for discharging a fluid along the surface of said rail contacting with said bundle, and a conduit within said rail for leading said fluid to said discharging means.

1,803,476. MACHINE FOR MAKING FABRIC. CARL F. KAPPLER, Philadelphia, Pa., assignor to Simon Friedberger, Philadelphia, Pa. Filed Aug. 1, 1928. Serial No. 296,712. 1 Claim. (Cl. 66—85.)



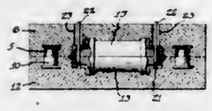
In a fabric making machine including a plurality of needles and thread guides movable to present threads to said needles, a plurality of means for controlling the movements of the thread guides, means for selectively rendering the controlling means operative, spring pressed means for maintaining a definite and substantial minimum tension upon a group of threads passing to the needles, and means for increasing the tension during operation under the control of one of the controlling means.

1,803,477. STRAINER VALVE. MARTIN J. KULLANDER, Calumet City, Ill. Filed Sept. 26, 1927. Serial No. 222,028. 3 Claims. (Cl. 210—167.)



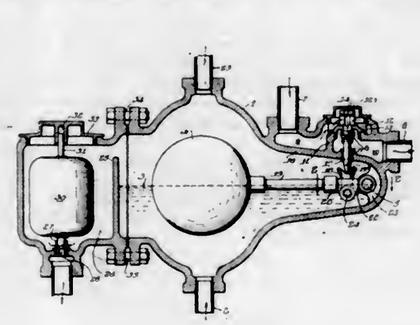
1. A strainer valve, including in combination, a valve body, inlet and outlet pipes attached to the body, a slitted cylindrical strainer in the body, and means for cleaning said strainer while in operation, said cleaner means additionally acting as a valve closure element, said combination cleaner and valve element including an annular member fitted in the strainer and contacting with the inner walls thereof, and blades removably mounted in the periphery of said annular member, and projecting through the slits in the strainer.

1,803,478. METHOD OF JIGGING AND DOWELING PATTERNS. ARTHUR K. LAUKEL, Detroit, Mich. Filed June 21, 1928. Serial No. 287,315. 10 Claims. (Cl. 29—148.)



1. A method of jigging and trimming patterns consisting in forming impressions of split and aligned sections of a working pattern in casts equipped with aligning means, removing said sections from the depressions and placing in said depressions thus formed, metallic pattern sections of similar exterior dimensions to the working pattern sections, and trimming the parting surfaces of said metal sections while in the casts.

1,803,479. WATER REGULATOR FOR BOILERS. JAMES MCALEAR, Chicago, Ill. Filed Aug. 8, 1925. Serial No. 49,149. 10 Claims. (Cl. 137—101.)

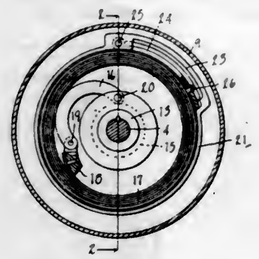


1. A water regulator for boilers comprising a receptacle adapted to be connected with the boiler below the water level and above the water level, a float in said receptacle, a valve controlled by said float which when open admits water to the boiler, an overflow member associated with said receptacle which projects above the normal water level, an overflow chamber into which the water from said receptacle flows when it passes the overflow member, and means for automatically discharging the water from the overflow chamber.

1,803,480. GRAY CAST IRON. PAUL D. MERICA, Westfield, JAMES S. VANICK, Elizabeth, and THOMAS H. WICKENDEN, Roselle, N. J., assignors, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed July 16, 1927. Serial No. 206,378. 5 Claims. (Cl. 75—1.)

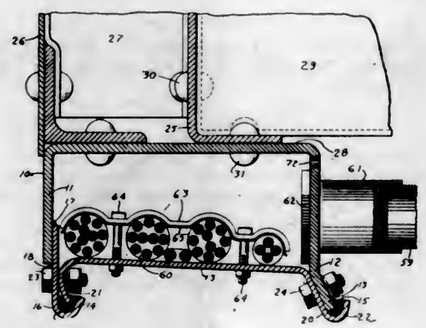
2. A substantially no-growth gray cast iron containing approximately .30% silicon for deoxidizing the iron, and nickel in amount from 0.5 to 5.0% render the casting gray and machinable.

1,803,481. SPRING-ACTUATED REEL. JOHN E. MINTY, Muskegon, Mich., assignor to Shaw-Crane-Putnam Machine Company, Muskegon, Mich. Filed Oct. 12, 1928. Serial No. 312,066. 17 Claims. (Cl. 242—107.)



17. In a spring actuated device, the combination of a shaft, a hub on said shaft, a spring surrounding said hub, means connecting the inner end of said springs to said hub, an annular member rotatable relatively to said shaft and having an inner cylindrical surface against which the spring expands when unwound, and means connecting the outer end of the spring to said member permitting the spring to be wound or unwound without subjecting the end thereof to any kinking strains.

1,803,482. CONDUIT STRUCTURE FOR RAILWAY CARS. WILLIAM H. MUSSEY and HARRY A. HELLMAN, Chicago, Ill., assignors to The Pullman Car & Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed July 26, 1929. Serial No. 381,332. 14 Claims. (Cl. 105—329.)



1. In a railway car, a conduit system comprising a series of car framing members operatively connected and formed to provide cable housings, cables supported within said housings, and closure members supporting certain of said cables.

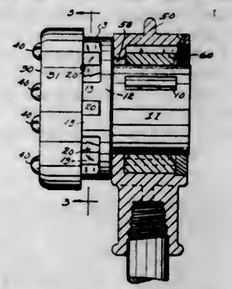
2. In a railway car, a plurality of supporting frame members extending longitudinally and upon opposite sides of the car and formed to provide cable housings, and a transverse housing connecting said members, said transverse housing member constituting a crossbearer in the framing assembly.

1,803,483. MAGNIFYING MEASURING INSTRUMENT. DENIS HENRY O'MEARA, Detroit, Mich., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 27, 1927. Serial No. 229,062. 6 Claims. (Cl. 88—39.)



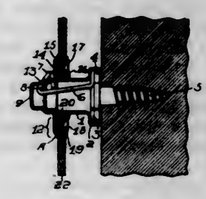
1. In a measuring device, a flexible measuring portion having measuring markings and a lens mounted thereon adapted to be aligned with selected portions of the measuring portion by bending the measuring portion to bring the lens over the desired portion.

1,803,484. DIESTOCK. ROBERT B. PEALER, Warren, Ohio, assignor to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed Sept. 10, 1930. Serial No. 480,929. 5 Claims. (Cl. 10—120.)



2. A driven barrel for a die stock, comprising a sleeve, an outwardly extending head thereon and chaser-lugs arranged in pairs on the longitudinally outer face of the head, there being parallel sided radial passageways to the exterior between the two lugs of each pair, and wider passageways to the exterior between successive pairs, rectangular chasers occupying said parallel sided passageways, and a cup-like ring secured to the housing and having a flange overlapping only the outer longitudinal portions of the chasers and their housings and the space between so as to receive the outward thrust of the chasers and at the same time leave open radial spaces to the exterior along the face of the barrel head and between the chaser housings.

1,803,485. STUD AND GROMMET FASTENER. ARTHUR C. PETERS, Chicago, Ill., assignor to Cinch Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 6, 1928. Serial No. 297,587. 5 Claims. (Cl. 24—211.)



1. A snap fastener stud having a hollow shank and a one-piece spring wire latch presenting member assembled with said shank, said latch presenting member having a latch portion normally extending through an opening in the shank for engagement with a socket, a portion fixed relative to said shank and a movable portion located within the hollow shank and connecting the fixed portion

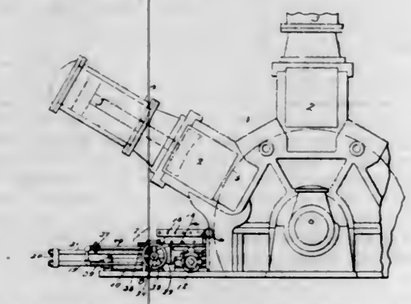
and the latch portion to permit movement of the latch portion with respect to said shank and an axially movable latch operating plunger normally pressed in one direction by the latch presenting member and adapted to be pressed in the opposite direction to move the latch portion into the hollow shank and permit disengagement from the stud of a cooperating fastener socket.

1,803,486. CUT-OUT FOR INCANDESCENT ELECTRIC LAMPS. HENRY RAU, Jr., New York, N. Y., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 22, 1927. Serial No. 200,560. 2 Claims. (Cl. 176—24.)



1. An incandescent electric lamp comprising a bulb, a mount having a filament disposed in said bulb and lead wires projecting from said bulb, a base including a metallic shell and a contact member insulated therefrom, and one of the lead wires connected with said contact-member and the other with the shell, a material disposed in contact with said shell and said first named wire, said material being capable of serving as a resistance during the normal operation of the lamp and as a conductor upon the failure of a flow of current through the lamp bulb.

1,803,487. SHARPENING MECHANISM FOR GRINDING MACHINES. ROBERT E. READ, White Plains, N. Y., assignor to International Paper Company, a Corporation of New York. Filed May 14, 1927. Serial No. 191,307. 7 Claims. (Cl. 125—11.)

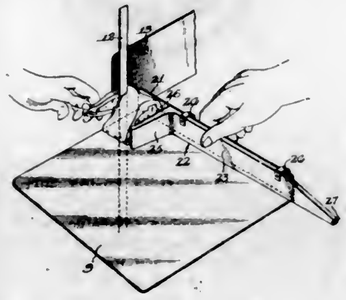


1. In combination with a grinding machine provided with a rotary grinding element, a traversing carriage movable crosswise of the grinding face of said element, a slide mounted on said carriage and movable relatively thereto and from said grinding face, a sharpening tool carried by the slide, mechanism mounted on the carriage and operatively connected with the slide for moving it on the carriage, a rotary shaft extending in the direction of movement of the traversing carriage and having operative engagement with said mechanism in the different positions of the carriage, a power cylinder and a piston therein operatively engaged with the shaft for rotating it, and means for controlling the operation of the piston.

1,803,488. BITUMINOUS COMPOSITION. EDGAR S. ROSS, Pittsburgh, Pa., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed May 20, 1927. Serial No. 193,068. 4 Claims. (Cl. 134—1.)

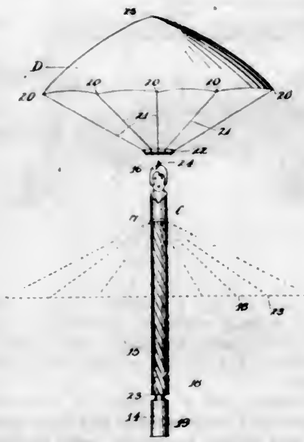
1. The process of producing a bituminous composition comprising dissolving bituminous material in a volatile solvent having a boiling point lower than that of water, driving off the major part of said solvent, gradually adding the solution of bituminous material to a dilute aqueous alkaline solution substantially free from foreign material heated at normal atmospheric pressure to a temperature slightly above the boiling point of the volatile solvent but not substantially above the boiling point of water, simultaneously agitating the mixture and driving off the remainder of the volatile solvent.

1,803,489. MEAT-CUTTING DEVICE. ARNOLD C. SCHUEREN, Chicago, Ill., assignor, by mesne assignments, to Vaughan Company, a Corporation of Illinois. Filed Nov. 12, 1928. Serial No. 318,665. 1 Claim. (Cl. 143—25.)



In a meat cutting machine, a band saw, means for moving said band saw, a work support positioned adjacent said saw and to one side thereof, a work table upon said support and movable past said saw, said table having an upturned flange along its rear edge and extending toward said saw, an L-shaped guide positioned on said table comprising a stock portion slidable along said flange and an integral laterally extending jaw portion for engaging material to be cut, and resilient U-shaped clamps engaging said stock portion and said flange for removably securing said stock portion in sliding contact with said flange.

1,803,490. TOY. CHARLES C. STETSON, St. Paul, Minn. Filed Sept. 20, 1928. Serial No. 307,110. 11 Claims. (Cl. 46—52.)



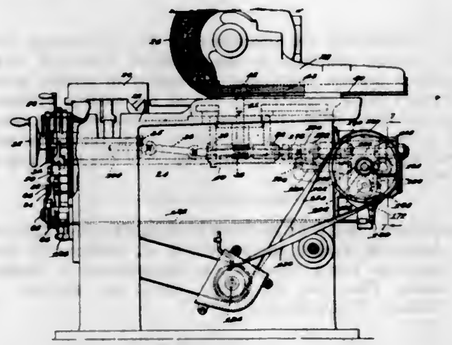
1. A toy including, a miniature figure of a doll, a parachute skirt for said figure, a parachute hood for said figure, and projectile means adapted to shoot said figure into the air when said projectile means is struck a sharp blow, whereby air entering the hood as the projectile descends will cause the hood to leave said figure and the parachute skirt to floatingly descend said figure in the air.

1,803,491. MANUFACTURE OF ELASTIC JOINTS AND SUPPORTS. LEON THIRY, Huy, Belgium. Filed Feb. 15, 1929, Serial No. 340,309, and in France Sept. 19, 1928. 7 Claims. (Cl. 29—88.2.)



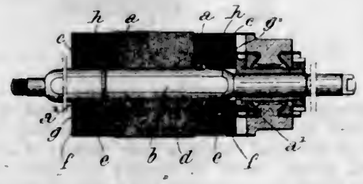
1. A punch for the manufacture of elastic joints and supports of the kind referred to, having outwardly opening ducts adapted to be supplied with lubricant under pressure.

1,803,492. GRINDING MACHINE. HERBERT E. TOWNSEND, East Providence, R. I., assignor to Brown and Sharpe Manufacturing Company, a Corporation of Rhode Island. Filed Oct. 17, 1927. Serial No. 226,615. 14 Claims. (Cl. 51—92.)



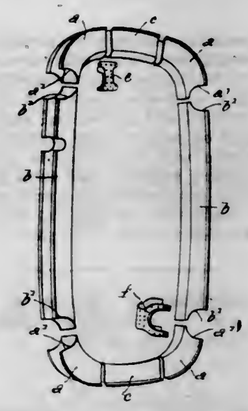
1. A grinding machine having, in combination, a grinding wheel mounted to move towards and away from the work, means for supporting the work, cross feed mechanism for moving the grinding wheel comprising a ratchet wheel, a pawl, a pawl carrier for actuating the pawl to rotate the ratchet wheel, means for throwing the pawl out of operation at a predetermined point in the rotation of the ratchet wheel, and means for adjusting the position of the pawl on the pawl carrier to vary the limit of the pawl feeding stroke a fraction of a tooth.

1,803,493. ROTOR. RENÉ ALFRED LAURENT VOLET, La Vareune St. Hilaire, France. Filed Oct. 2, 1928, Serial No. 309,697, and in Belgium Nov. 12, 1927. 8 Claims. (Cl. 171—206.)



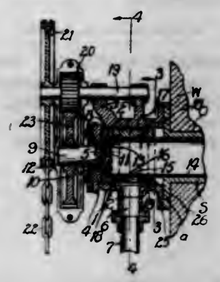
1. A rotor comprising in combination a core having a plurality of longitudinal grooves formed therein adapted to receive a winding, a pair of end-elements having end-grooves formed therein in continuity with the longitudinal grooves in the core, said end-grooves presenting a pair of lateral walls, and a winding laid down in and lying below the level of the surfaces in which the grooves of the end-elements are formed.

1,803,494. HOLLOW-FRAME ASSEMBLY. FÉLIX AMIOT, Colombes, France, assignor to Société D'Emboutissage et de Constructions Mécaniques, Colombes, France, a Society. Filed Aug. 24, 1929, Serial No. 388,161, and in Belgium Dec. 20, 1928. 6 Claims. (Cl. 244—30.)



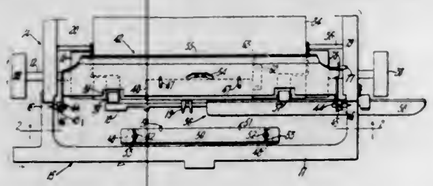
6. A frame unit assembled for aircraft fuselages comprising a plurality of side elements of mutual similarity, a plurality of corner elements of mutual similarity, each corner element abutting endwise against an end of one of the side elements, means for uniting the several constituents of a frame unit into a rigid continuous oval structure and means associated with the thus assembled frame unit adapted for connection with means for rigidly positioning each frame unit with a plurality of similarly assembled frame units in the completed fuselage.

1,803,495. BOILER CLEANER. LEO JOHN BAYER, St. Louis, Mo. Filed Dec. 31, 1928. Serial No. 329,452. 4 Claims. (Cl. 122—392.)



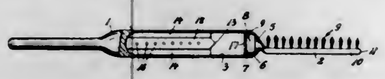
4. A boiler cleaner comprising an operating head and a blower pipe, said head including a housing having a steam chamber therein, a steam supply pipe leading to said chamber, a casing rotatably mounted in the steam chamber of the housing in nested relation with the outer end of the blower pipe, said casing having a steam inlet opening in communication with the steam chamber, said blower pipe having a steam inlet opening adapted for communication with the steam chamber by rotation of the casing, and means for rotating said casing.

1,803,496. TYPEWRITING MACHINE. HARRISON O. BLAISDELL, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 11, 1927. Serial No. 225,450. 20 Claims. (Cl. 197—127.)



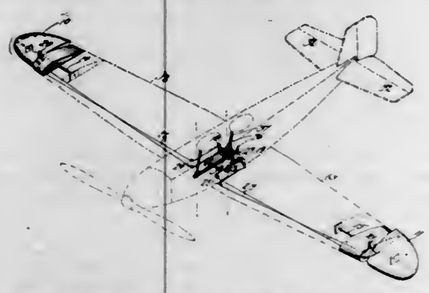
5. In a typewriting machine, a carriage, a platen, a paper-table pivotally mounted on said carriage at the front of said platen to be disposed in a forwardly-inclined position for having a work-sheet positioned thereon and inserted at the front of said platen, and gaging instrumentalities supported on said carriage independently of said table to co-operate with the latter in positioning said work-sheet in typing position, said table being effective, upon being swung rearwardly after said work-sheet has been gaged, to conduct the leading end of the work-sheet rearwardly at the delivery side of the platen.

1,803,497. TOOTHBRUSH. RALPH A. BROCKELSBY, Cleveland, Ohio. Filed Dec. 23, 1929. Serial No. 416,064. 2 Claims. (Cl. 15—184.)



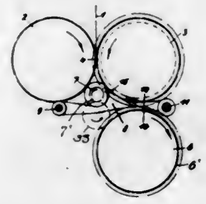
1. In a toothbrush of the class described, a brush member having an enlarged cylindrical head tapered portion, a handle member provided with a hollow portion into which the brush member is adapted to be snugly enclosed when not in use, oppositely disposed portions of the inner walls of the hollow portion of the handle member being thickened to form ribs, the ribs defining between them oppositely disposed duplicate grooves for the reception of the brush member, either of the grooves being adapted to receive and to snugly engage the back of the brush member, the opposing groove forming a clearance space for the bristles of the brush and a longitudinal series of diametrically opposed air holes through the thickened portions of the said hollow handle member.

1,803,498. AIRPLANE CONTROL. ROLAND CHILTON, Keyport, N. J., assignor, by mesne assignments, to Aeromarine Plane & Motor Company, Inc., Keyport, N. J., a Corporation of New York. Filed Apr. 18, 1929. Serial No. 356,128. 9 Claims. (Cl. 244—29.)



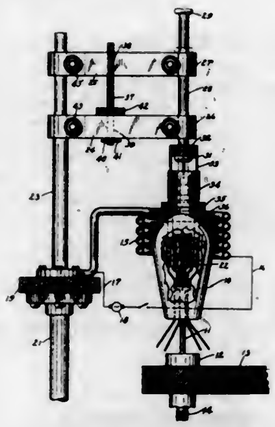
1. The combination with an airplane wing including, a co-operating pair of pivotally mounted ailerons having weather-vane stability tending to enforce alignment of the ailerons with the flight path independently of the attitude of the wing, and control means adapted to define the angle between the two ailerons and floating as to the mean angle of the two ailerons relative to the wing, said control means including a rockable control member, a tube slidable on said member and having a hand grip, and a two-arm cross head rigid with said tube and operatively connected to the respective ailerons.

1,803,499. CUTTING AND TRANSFERRING MECHANISM FOR PRINTING PRESSES. GEORG DANZER, Plauen, Germany, assignor to the Firm Vogtlandische Maschinenfabrik (vorm. J. C. und H. Dietrich) A.-G., Plauen, Germany. Filed May 26, 1928, Serial No. 280,891, and in Germany July 15, 1927. 8 Claims. (Cl. 270—60.)



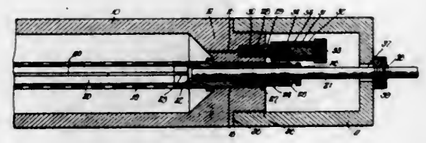
1. Mechanism for transferring the cut sheets from the cutting cylinders to the collecting device of rotary printing presses comprising a plurality of sets of lateral grippers being mounted on one of the cutting cylinders, said grippers being operatively interconnected and adapted to securely hold the cut sheets until the latter have been actually engaged by the grippers of the collecting device.

1,803,500. HIGH-FREQUENCY INDUCTION HEATING. JAMES M. FAGAN, Maplewood, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 23, 1929. Serial No. 401,743. 12 Claims. (Cl. 219—47.)



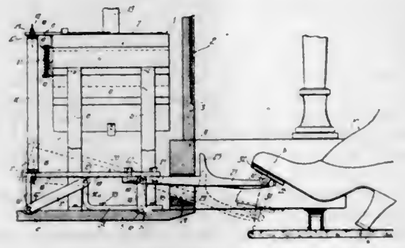
1. A machine for degasifying metallic bodies comprising means for creating a high frequency field to inductively heat an electrode capable of absorbing a given amount of electrical energy, a body capable of absorbing electrical energy, means for moving said body into said field and means for regulating the degree of movement of said body into said field for the absorption of a given amount of electrical energy.

1,803,501. BLASTING MECHANISM. DENT FERRELL and ARTHUR W. HELMHOLTZ, Harrisburg, Ill., assignors to Safety Mining Company, Chicago, Ill., a Corporation of Illinois. Filed June 23, 1928. Serial No. 287,865. 6 Claims. (Cl. 102—6.)



1. A cartridge of the character described, comprising a casing and a movable discharging concussion rod extending into said casing and releasable means on said movable rod for holding said rod against accidental displacement said means being responsive to a predetermined force on said rod to permit actuating movement of the same.

1,803,502. PEDAL CONSTRUCTION AND MOUNTING. GUSTAV A. FORSBERG, Chicago, Ill., assignor to Gulbransen Company, Chicago, Ill,, a Corporation of Illinois. Filed Feb. 20, 1928. Serial No. 255,590. 9 Claims. (Cl. 84—72.)



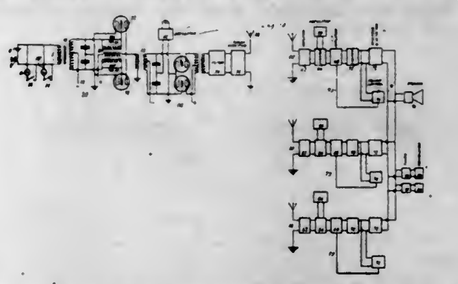
1. In a player piano, an exhaust power unit, a pair of operating pedals pivoted intermediate their ends, operating connections between said unit and the pedals, and foot plates hinged to and disposed above the outer ends of the pedals and having rocking motion with respect thereto in the operation of the pedals.

1,803,503. 1,2- AND 2,3-DIAMINO ANTHRAQUINONE SULPHATES AND METHOD OF PREPARING AND ISOLATING THE SAME. IVAN GUBELMANN and JOHN M. TINKER, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation, a Corporation of Delaware. Filed Jan. 3, 1928. Serial No. 244,371. 9 Claims. (Cl. 260—60.)

3. The process of isolating 1,2- and 2,3-diamino anthraquinone sulphates, which comprises forming a solution of 1,2- and 2,3-diamino anthraquinones in concentrated sulphuric acid, diluting the solution to approximately 88% sulphuric acid concentration to precipitate out 2,3-diamino anthraquinone sulphate, filtering off the precipitated body, further diluting the filtrate to approximately 67% sulphuric acid concentration to precipitate out 1,2-diamino anthraquinone sulphate and recovering the latter body.

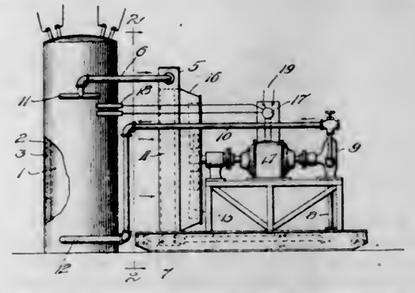
1,803,504. SIGNALING. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 5, 1928. Serial No. 310,482. 16 Claims. (Cl. 250—9.)

9. A diversity communication system for overcoming fading of speech-simulating signals transmitted on a high frequency carrier, in spite of fluctuations in the relative phase of closely adjacent frequencies such as



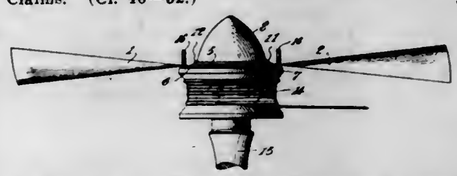
side band and carrier frequencies, comprising the combination of a frequency modulation transmitter with a diversity reception receiver.

1,803,505. TRANSFORMER COOLER. DANIEL T. MACLEOD, Milwaukee, Wis., assignor to Perfex Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 3, 1928. Serial No. 258,854. 2 Claims. (Cl. 257—191.)



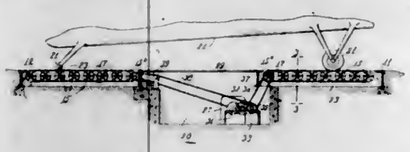
1. A cooling system for transformers comprising a casing surrounding the transformer and containing a dielectric cooling liquid, a heat insulating jacket for said casing operating to prevent direct and uncontrolled heat exchange between the liquid in said casing and the environment of the casing, a liquid circulating system connected to said casing and communicating with the interior thereof, a radiator embodied in said liquid circulating system and disposed exteriorly of said casing, a pump incorporated in said liquid circulating system to positively circulate the liquid through said system, a fan for impelling a current of air through said radiator, motor means for driving said fan and said pump, and means responsive to the temperature of the liquid within the casing for regulating the operation of said motor means whereby to maintain a predetermined temperature condition in said casing.

1,803,506. TOY. JAMES B. MCDONOUGH, Jr., New York, N. Y. Filed Sept. 28, 1929. Serial No. 395,773. 12 Claims. (Cl. 46—52.)



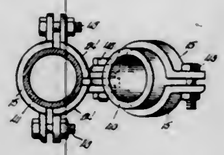
1. A flying toy comprising, in combination, a pair of blades slidably mounted one upon the other, a parachute, a housing for said parachute, and means controlled by relative movement of said blades to detachably secure said parachute and housing to said blades.

1,803,507. **TAKE-OFF AND LANDING PLATFORM FOR AEROPLANES.** MICHAEL J. O'NEILL, Chicago, Ill. Filed Sept. 28, 1928. Serial No. 309,063. 3 Claims. (Cl. 244—2.)



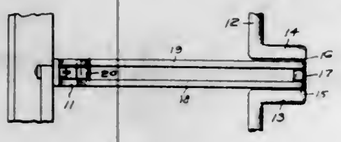
1. In combination with an article of the class described, a frame; a plurality of rotatable shafts mounted in said frame transverse of its length; a plurality of spaced rollers keyed to each of said shafts, the rollers on adjacent shafts being aligned with each other; and means common to all of said shafts whereby they may be rotated in unison.

1,803,508. **CLAMP.** ALLEN M. ROSSMAN, Chicago, Ill., assignor, by mesne assignments, to Rossman Patents, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed June 19, 1925. Serial No. 38,286. 12 Claims. (Cl. 297—54.)



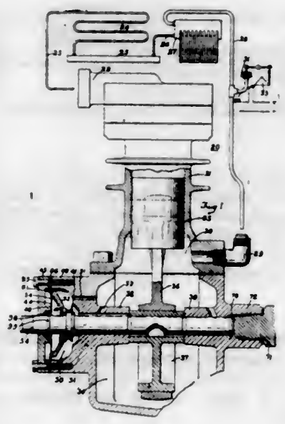
2. A structural clamp of the class described for joining together rod-like members, comprising a plurality of clamp sections each of which embraces and grips a rod-like member, each clamp section including a plurality of clamp units each of which has a body embracing a part of the perimeter of a rod-like member, a lug carried by said body part and having a front face lying approximately in a plane of a radius of the arc corresponding to said part of the perimeter, and a second lug on said body part having a front face parallel to and spaced from a plane of a second radius of said arc by a distance approximately equal to the thickness of a lug, adjacent lugs of adjacent units spaced from each other approximately the thickness of a lug, and bolt-like means for securing said units in gripping relationship to said members and connecting said clamp sections with the lugs of a clamp section intermeshing with the adjacent lugs of a connected clamp section.

1,803,509. **MOTION-TRANSMITTING DEVICE FOR LOOMS.** ALBERT SAGAR, Slater, S. C. Filed Sept. 12, 1930. Serial No. 481,548. 8 Claims. (Cl. 139—190.)



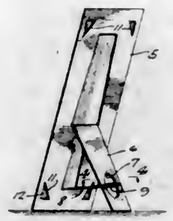
1. The combination with the movable element of a loom, of a link pivoted between its ends to said movable element, a crank shaft having eccentric pins disposed at an oblique angle, and pitman arms pivotally connected with the eccentric pins and with the link upon opposite sides of the pivot of the link.

1,803,510. **SEAL FOR REFRIGERATING APPARATUS.** WARREN H. F. SCHMIEDING and JESSE G. KING, Dayton, Ohio, assignors to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 274,033. 4 Claims. (Cl. 286—11.)



1. In a refrigerating apparatus wherein refrigerant is circulated under varying pressures, a casing, a shaft passing through said casing, a shoulder on said casing surrounding said shaft and forming a cavity subject to pressures within said apparatus, a radial bearing surface on said shaft, an end plate on said shoulder, a diaphragm hermetically connected to said end plate at an effective pressure distance from the axis of said shaft substantially equal to said bearing surface, a rigid ring provided with a bearing surface to cooperate with said first-named bearing surface, said ring and diaphragm being hermetically connected radially beyond said bearing surfaces and a ring with radial, axially resilient fingers for maintaining said bearing surfaces together.

1,803,511. **EASEL.** EARL L. SHANHOLTZER, Hollywood, Calif. Filed Nov. 4, 1929. Serial No. 404,653. 7 Claims. (Cl. 40—150.)



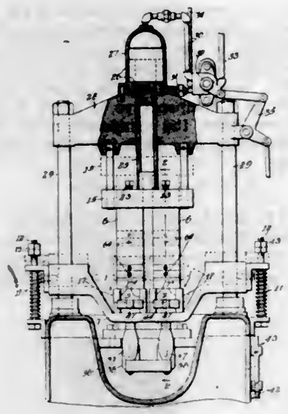
1. An article of manufacture to serve as an easel comprising a single sheet of form retaining material having means on the face to support a card to be displayed, a first tongue cut in said sheet with its root adjacent the mid section of said sheet and adapted to be bent outward and serve as a strut to support said sheet in upright position, an opening adjacent the tip of said tongue, a second tongue cut in said sheet in alinement with said first tongue and adapted to be bent outward to engage said first tongue and serve as a brace, said second tongue having an enlargement at its tip for passage through said opening and to span the latter forming a lock therewith.

1,803,512. **GARMENT HANGER.** HENRY SHAPIRO, Philadelphia, Pa. Filed Oct. 10, 1927. Serial No. 225,088. 10 Claims. (Cl. 223—64.)



10. A garment hanger comprising a rigid supporting member, a resilient gripping member associated at its middle with the middle of the rigid member and a laterally swinging latch at the joint middle of the members and having bent arms extending upon opposite sides of the middle and bearing upon the resilient member intermediate the middle and ends.

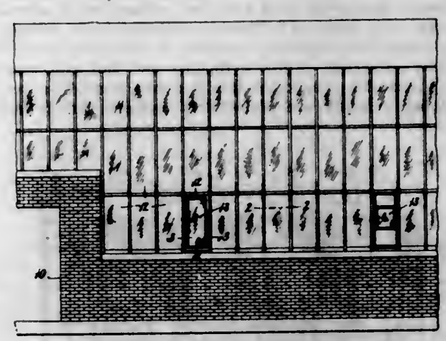
1,803,513. **MEANS FOR MAKING BEARING LININGS OR SLEEVES.** BERGER STOCKFLETH, Niles, Mich., assignor to Hydraulic Pressed Bearing Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 20, 1928. Serial No. 300,757. 6 Claims. (Cl. 22—58.)



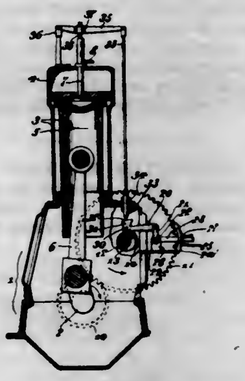
1. In a die casting apparatus, a semi-cylindrical mold part, an opposed thin bearing lining backing, opposed mold parts between which the backing is clamped in opposition to the semi-cylindrical mold part, centering means on said opposed mold parts concentric with the semi-cylindrical mold part for centering the backing in relation to said semi-cylindrical mold part and for sealing the ends of the backing, and means for forcing molten bearing metal into the space and upon the backing.

1,803,514. **BUILDING CONSTRUCTION.** GEORGE W. THOMAS, Pittsburgh, Pa., assignor to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 19, 1928. Serial No. 327,085. 5 Claims. (Cl. 189—69.)

1. In a glazing construction, in combination, an open supporting frame provided with an external flange for attachment to a window sash, and a glass-carrying frame pivoted to said supporting frame and movable with relation to the said supporting frame to open and close the opening therein said flange being of a thickness substantially that of the glass pane of the window.



1,803,515. **FUEL-FEED-CONTROL MEANS FOR INTERNAL-COMBUSTION ENGINES.** OTIS D. TREIBER, Collingswood, N. J., assignor to Treiber Diesel Engine Corporation, Camden, N. J., a Corporation of New Jersey. Filed Sept. 13, 1927. Serial No. 219,254. 9 Claims. (Cl. 123—33.)

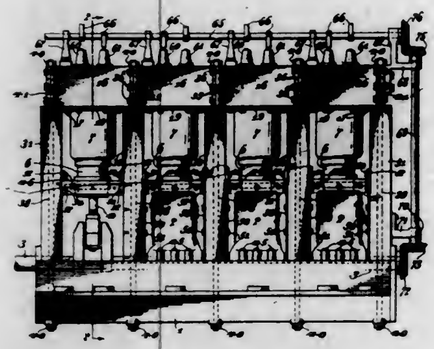


1. In a mechanism for controlling the means for feeding fuel into the cylinder of an internal combustion engine, the combination of a cam shaft having a cam thereon, rotation of the said cam shaft being effected by the crank shaft of the engine, an actuating rod interposed between the fuel feeding means and the said cam shaft, means adapted to be actuated by the cam upon said cam shaft for actuating the said rod, the said last mentioned means being spaced from the said rod, adjustable means interposed between the said means and the said rod whereby the lost motion space between the said means and the said rod may be varied, and means for adjusting the said cam actuated means tangentially of the said cam simultaneously with the adjustment of the said adjustable lost motion controlling means.

1,803,516. **INTERNAL-COMBUSTION-ENGINE STRUCTURE.** OTIS D. TREIBER, Collingswood, N. J., assignor to Treiber Diesel Engine Corporation, Camden, N. J., a Corporation of New Jersey. Filed Sept. 13, 1927. Serial No. 219,256. 8 Claims. (Cl. 121—194.)

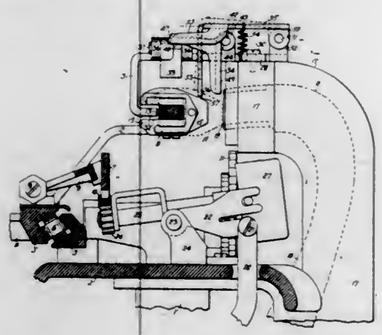
5. In a structure of the character described, the combination of a crank casing comprising a base portion, a

plurality of engine cylinders, a plurality of relatively wide vertical columns located in parallel spaced relation to each other and supported at their lower ends upon the upper side of the said base, one column being located between each pair of adjoining cylinders and columns being located in adjoining relation to the outer sides of the two outermost engine cylinders, and the said crank casing comprising opposite side portions located between adjoining columns and detachably secured thereto and



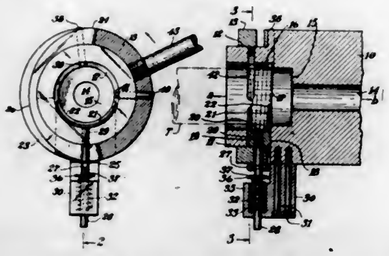
to the said base portion and a cover detachably connected to the upper ends of said side portions and to the opposite sides of adjoining columns, said cover having a central opening therein, cylinder heads mounted upon the upper ends of the said cylinders and the said columns, means for detachably securing said cylinder heads to the said cylinders, and vertical tie rods extending through the said crank casing and the said columns and detachably connected with the said cylinder heads.

1,803,517. TYPEWRITING MACHINE. SIGURD L. WALSOE, Springdale, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Sept. 19, 1929. Serial No. 393,786. 18 Claims. (Cl. 197—176.)



4. The combination of a carriage; tabulator mechanism including column stops and a key controlled counter stop; a normally ineffective anti-rebound device for preventing rebound of the carriage when the latter is arrested by said tabulator mechanism; a spring for moving said anti-rebound device to operative position; and controlling means for enabling said anti-rebound device to be moved to operative position, said controlling means including a cam acted on by a column stop as it approaches the actuated counter stop and effective to release said anti-rebound device and enable its spring to move it to operative position.

1,803,518. SPRING-EXPANDING APPARATUS. JONATHAN NEWTON WHITE, New York, N. Y., assignor to United Metal Hose Co. Inc., New York, N. Y., a Corporation of New York. Filed Nov. 1, 1927. Serial No. 230,375. 15 Claims. (Cl. 29—87.1.)

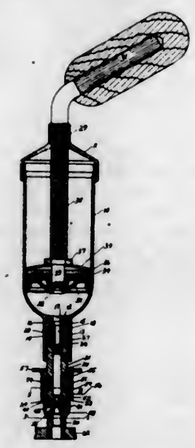


15. In a device of the class described, the combination of a clamp comprising a fixed and a movable jaw, the fixed jaw provided with a spring terminal engaging abutment, and an actuator mounted for rotary movement and provided with a spring terminal engaging abutment movable relative to the fixed abutment, said actuator operatively connected to the movable jaw to control the same in a timed relation to the movement of the rotatable abutment.

1,803,519. LITHOGRAPHER'S GLASS. EDWARD A. ZEH, Passaic, N. J., assignor to Zeh Incorporated, Clifton, N. J., a Corporation of New Jersey. Filed Jan. 5, 1929. Serial No. 330,630. 10 Claims. (Cl. 49—81.)

3. In the art of preparing a grained glass sheet for use in place of a lithographer's stone, the method which consists in applying to one face of a sheet of clear glass a coating comprising a mixture of zinc oxide, stannous oxide and a flux, and subjecting the glass so coated to a firing treatment at a temperature of about forty degrees Fahrenheit, lower than the temperature at which said coating would fuse to a smooth finish when applied to this particular glass.

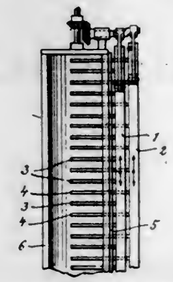
1,803,520. LUBRICATING APPARATUS. OSCAR ULYSSES ZERK, Cleveland, Ohio, assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 3, 1924. Serial No. 684,171. 1 Claim. (Cl. 285—170.)



High pressure lubricating apparatus of the class described comprising, in combination, a lubricant receiving

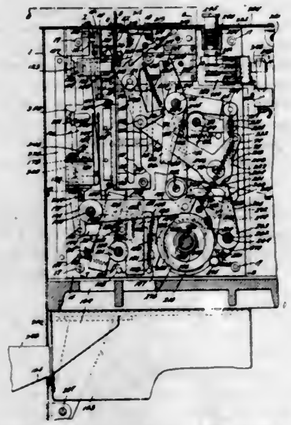
nipple having a flat topped circular inlet end, a concavely spherical lubricant delivering nozzle forming a lubricant tight metal to metal seal with said nipple when pressed thereagainst, said seal permitting universal movement of said nozzle about a fixed center, and quick detachable clamping means including pivoted jaws for maintaining said nipple and nozzle in lubricant tight engagement with each other and permitting universal movement of said nozzle about said center.

1,803,521. DISTRIBUTING DEVICE FOR DISTRIBUTOR DRILLS. RENÉ BERGERIOUX, Reuilly, France. Filed Dec. 18, 1929, Serial No. 415,108, and in France Dec. 21, 1928. 1 Claim. (Cl. 221—120.)



A distributing device for reciprocating distributor drills, comprising two parallel distributing combs having intermeshing teeth arranged in the same plane, and a separate operating crank for each comb, the two cranks being angularly displaced relative to each other.

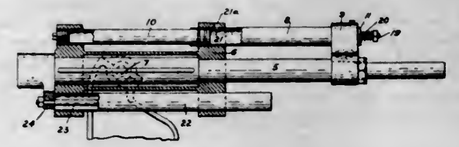
1,803,522. MECHANISM AND METHOD FOR CONTROLLING BUSINESS. HARRY RUSSELL BRAND, New York, N. Y. Filed Mar. 80, 1922. Serial No. 548,250. 22 Claims. (Cl. 235—92.)



1. A commodity purveying controlling mechanism including in combination means for receiving and inaccessibly depositing a commodity identifying token, means for registering the deposition of the token, and means for preventing the registration of any token identifying a different commodity.

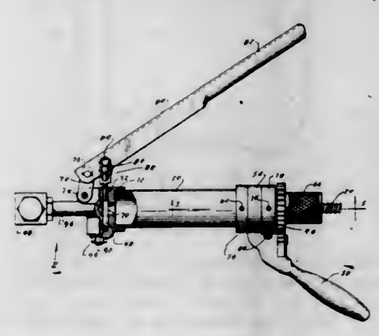
1,803,523. RECOIL AND COUNTER-RECOIL MECHANISM FOR GUNS. THOMAS A. CONLON, Silver Spring, Md. Filed Nov. 7, 1928. Serial No. 317,813. 8 Claims. (Cl. 89—43.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

7. The combination with a gun provided with a recoil and counter-recoil mechanism, of means for admitting propellant gases from the gun barrel to the mechanism to oppose recoil and to counter-recoil the gun and means for locking the gun in any position within the limits of its in-battery position.



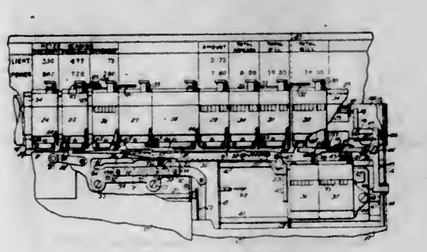
8. The combination with a gun provided with a counter-recoil mechanism wherein the force producing counter-recoil is expended when the gun is returned to in-battery position, of means for locking the gun in any position within the limits of its in-battery position.

1,803,524. LUBRICANT COMPRESSOR. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 8, 1927. Serial No. 197,271. 6 Claims. (Cl. 221—47.4.)



6. A lubricant compressor comprising, in combination, a low pressure cylinder adapted to serve as a lubricant reservoir, a high pressure cylinder supplied therefrom, a piston in said high pressure cylinder, a lever for actuating said piston, a piston mechanism for said low pressure cylinder, and a second lever actuating and feeding forward the piston in the low pressure cylinder when the levers are pulled apart.

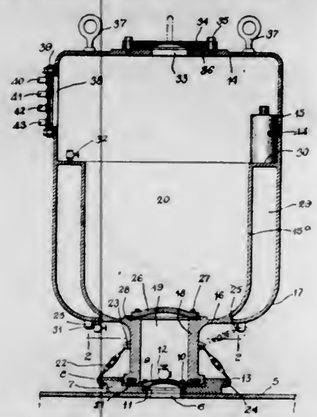
1,803,525. COMBINED TYPEWRITING AND COMPUTING MACHINE. JAMES HENRY EDWARDS, Seattle, Wash., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Mar. 2, 1927. Serial No. 172,059. 7 Claims. (Cl. 285—59.)



1. In a combined typewriting and computing machine, the combination with a carriage traveling through a series

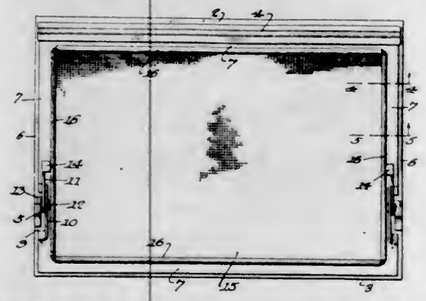
of column positions, a cross-truck for two cross-totalizers, and a pick-up device for said cross-truck, of means for guiding said pick-up device at one level in the field of one of said cross totalizers and at another level in the field of the other cross totalizer, pick-up lugs on said traveling carriage, said lugs being at two heights corresponding to the two said levels, means for moving said pick-up device from one of said levels to the other when the cross-truck moves out of the field of the first specified cross-totalizer, and means for moving said pick-up device to a third or disconnecting level when said cross-truck moves out of the field of the second cross-totalizer.

1,803,526. SUBMERGIBLE APPARATUS. HUGH J. FINN, Brooklyn, N. Y.; Anna May Finn administratrix of said Hugh J. Finn, deceased. Filed May 2, 1928. Serial No. 274,380. 4 Claims. (Cl. 61—69.)



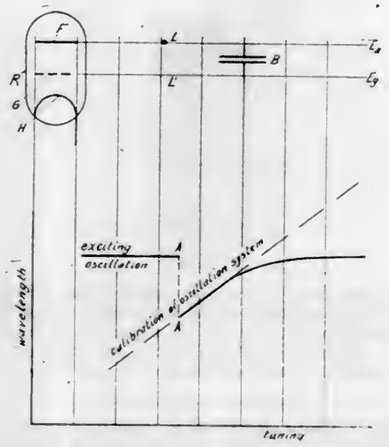
1. A submergible apparatus for use in conjunction with vessels having a hatchway in the hull thereof and a flanged ring encircling the hatchway, comprising a large hollow body, an admission opening at the top thereof and a cover plate closing said opening, a reduced tubular extension projecting beyond the lower end of said body, the chamber in said extension normally opening outwardly through the lower end thereof, a closure plate at the top of said extension controlling the communication between said chamber and the interior of said body, securing devices for said plate in the interior of said body, and means movably supported externally of and adjacent the upper end of said extension for detachably engaging the flanged ring on the hull of the vessel in securely coupling the apparatus to the vessel.

1,803,527. WINDOW SASH AND SCREEN. OSCAR R. HANKINS, Aurora, Ill., assignor to The Larimer Company, Aurora, Ill., a Corporation of Illinois. Filed Dec. 17, 1928. Serial No. 326,649. 3 Claims. (Cl. 156—14.)



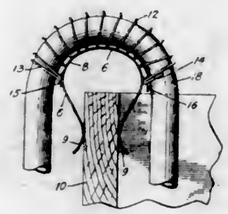
2. In a window screen, a frame made of angular members having two flanges at right angles to each other, a screen mesh covering said frame and extending adjacent the outward extending flanges thereof, U-shaped clips clamped over the said outward extending flanges and over the screen mesh adjacent thereto, each of said outwardly extending flanges having openings over which said U-shaped clips and said screen mesh extend and indentations in said clips and screen mesh entering said openings.

1,803,528. PRODUCTION OF ELECTRIC WAVES. HANS ERICH HOLLMANN, Darmstadt, Germany. Filed June 20, 1929, Serial No. 372,406, and in Germany June 4, 1928. 2 Claims. (Cl. 250—36.)



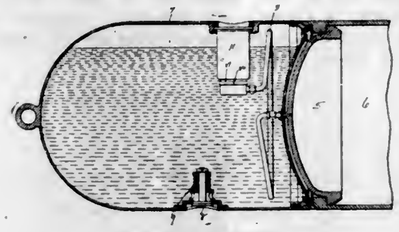
1. In a system for producing ultra high frequency electric oscillations by electron pendulum movements within a vacuum space in a retarding field arrangement including an oscillatory system for utilizing said oscillations, the method of increasing the natural electron oscillating frequency determined by the field strength which consists in tuning said system to a frequency greater than said natural frequency of said electron movements.

1,803,529. HOSE HOLDER. FRANK S. HYATT, Brooklyn, N. Y., assignor to Brass Goods M'f'g. Co., Brooklyn, N. Y., a Corporation of New York. Filed June 10, 1927. Serial No. 197,805. 5 Claims. (Cl. 248—28.)



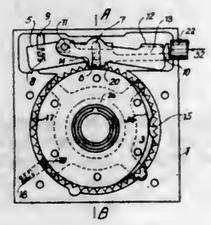
3. A hose holder constructed for attachment to a support and comprising a curved frame and a flexible helical coil, means on said frame for clamping the same to said support and means for attaching said coil to said frame at circumferentially spaced points around said curved frame.

1,803,530. AIR BLOWING EXERCISE HEAD FOR TORPEDOES. JAMES L. KING, U. S. Navy, and CHESTER T. MINKLER and THOMAS J. GILL, Newport R. I. Filed Apr. 27, 1929. Serial No. 358,707. 12 Claims. (Cl. 114—20). (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In an exercise head for a torpedo, in combination, a high pressure air line normally closed, shearing means for opening said line, mechanisms controlling said means, and means permitting the freed air to escape to a surrounding medium.

1,803,531. LOCK. THEODOR KROMER, Freiburg, Germany, assignor to Theodor Kromer Gesellschaft mit beschränkter Haftung, Freiburg, in Breisgau, Germany. Filed Feb. 29, 1928, Serial No. 258,074, and in Germany June 7, 1927. 2 Claims. (Cl. 70—53.)

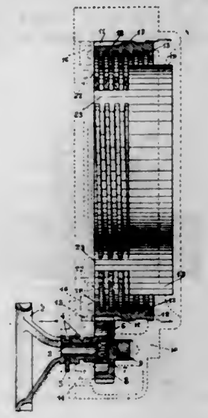


1. A lock comprising a casing, a spindle slidably and rotatably mounted in said casing, a plurality of locking discs mounted on the spindle, means on said spindle for setting said locking discs each disc having a peripheral notch, a principal, spring-controlled tumbler guided vertically in the casing, a rounded lug on said tumbler supporting the latter on the locking discs and adapted to drop into the notches thereof when said notches are in alignment, means on the spindle for turning the different discs so as to bring the notches into alignment under the lug, a lock bolt arranged so as to be normally blocked in shot position by abutment against the end of said tumbler and so as to be released on the tumbler dropping into the disc notches, and an additional tumbler supported on an eccentric portion of one of the discs and adapted to prevent the complete withdrawal of the bolt until said latter disc has been turned from the position in which its notch registers with the lug of the principal tumbler.

1,803,532. PREPARATION SUITABLE FOR DEVELOPING DYEINGS. HANS KRZIKALLA, Mannheim, and KARL SCHNITZSPAHN, Offenbach-on-the-Main, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 12, 1925, Serial No. 49,818, and in Germany Aug. 15, 1924. 5 Claims. (Cl. 8—6.)

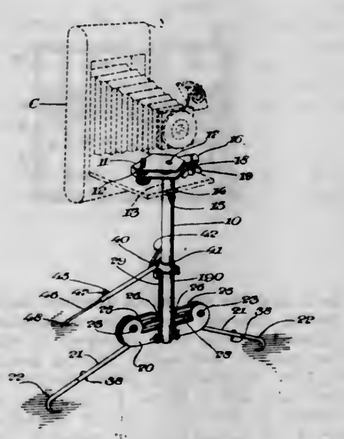
1. As a solid dry composition of matter, a mixture of a diazotizable aromatic amine in a dry solid form with about an equimolecular proportion of a nitrite and a water-soluble neutral salt in a dry condition.

1,803,533. DEVICE FOR ADJUSTING THE OPENINGS OF SCUTTLE PORTS AND THE POSITION OF THE PANE HOLDERS THEREOF. LOUIS LALANNE, Marseille, France. Filed Sept. 17, 1930, Serial No. 482,521, and in France Nov. 15, 1929. 5 Claims. (Cl. 114—178.)



1. A device for adjusting the openings of scuttle ports and the position of the pane holders thereof, comprising in combination: a pane holder; means for moving said pane holder axially; means for rotating said pane holder; a single longitudinally movable member actuating according to its longitudinal position either said means for moving said pane holder axially or said means for rotating said pane holder; and means for locking said member either in the position for actuating said first-named means or in the position for actuating said second-named means, substantially as described.

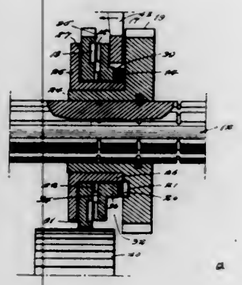
1,803,534. TRIPOD FOR CAMERAS. VOLDEMAR LEEVO, New York, N. Y. Filed Feb. 15, 1930. Serial No. 428,623. 12 Claims. (Cl. 248—46.)



1. A tripod including a standard, means for supporting a camera thereon, a base member on the standard, two oppositely-disposed legs pivotally mounted on said member and movable outwardly beyond the member or fold-

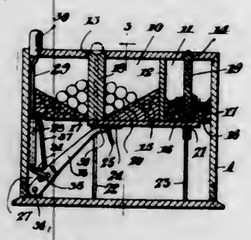
able along the standard, as desired, and means operative to swing the outwardly-projecting legs into gripping relation to a supporting object embraced by the legs.

1,803,535. AUTOMATIC RELEASE FOR GEAR SYNCHRONIZERS. HOWARD J. MURRAY, New York, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa., a Corporation of Delaware. Filed Apr. 21, 1923, Serial No. 633,610. Renewed Sept. 29, 1930. 24 Claims. (Cl. 74—58.)



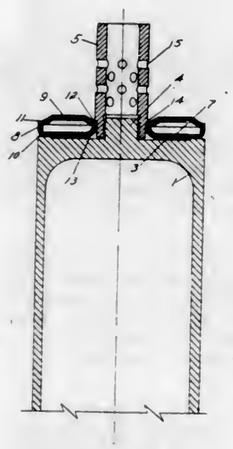
4. In a device of the class described, the combination of a support provided with a relatively fixed element of a friction clutch, an actuator slidable axially on the support, a synchronizer element disposed between the actuator and clutch element and adapted to be clutched therebetween and resilient camming means between the support and the actuator for causing a shifting of the actuator axially and into clutching engagement with the synchronizer element.

1,803,536. CIGARETTE AND MATCH DISPENSER. GENNARO NENNA, Owen Sound, Ontario, Canada, assignor to Christos Georgas, Owen Sound, Ontario, Canada. Filed Jan. 27, 1930. Serial No. 423,775. 3 Claims. (Cl. 312—78.)



1. In a cigarette and match dispenser including a cabinet having cigarette and match compartments formed with opposed sloping bases traversed by simultaneously movable cigarette and match ejecting members, an operating unit comprising a metal bracket formed with upturned lugs, and a sleeve, an actuating member slidably carried by the sleeve adapted to protrude through the top of the cabinet, a main operating lever pivotally carried on one of said lugs, said operating lever being formed with a curved tapered end and with an inclined slot positioned adjacent the pivotal mounting of the lever, a laterally bent impelling portion formed on the actuator adapted to protrude through the slot in said lever and contact with said lugs, spring tension means between said plate and the lever, and a bracket in connection with the cigarette and match ejecting members engageable by said curved end of the lever during operation.

1,803,537. SHELL CONSTRUCTION. ARVID E. NISSEN, Upper Darby, Pa. Filed Feb. 6, 1930. Serial No. 426,390. 8 Claims. (Cl. 102—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



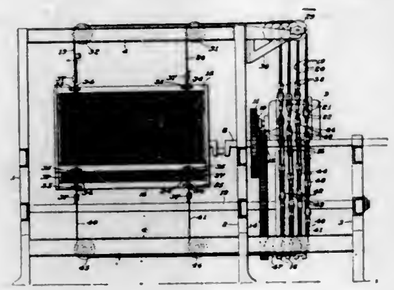
1. A projectile for firing in a rifled barrel comprising a body portion, and a disc loosely carried thereon, and means associated with the disc to attach the same to the body portion so as to prevent its relative rotation with respect thereto on the firing of the projectile.

1,803,538. HEAD COVERING. HENRY T. PISTOLE, Dallas, Tex. Filed Oct. 24, 1929. Serial No. 402,106. 3 Claims. (Cl. 135—12.)



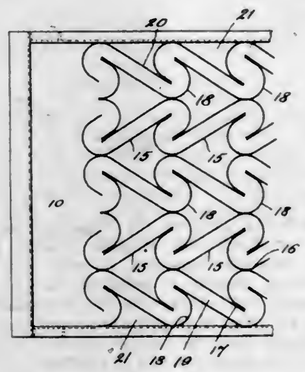
2. In a covering for the human head and shoulders, a fabric cover, a collapsible wire frame, said cover being secured over said frame, said frame having extensions therefrom adapted to be held firmly upon the wearer's shoulders, and a common tensioning means to hold the frame in extended and collapsed position.

1,803,539. HARNESS MECHANISM FOR LOOMS. EDWIN W. STONE, Longmeadow, Mass., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Sept. 12, 1930. Serial No. 481,399. 8 Claims. (Cl. 139—88.)



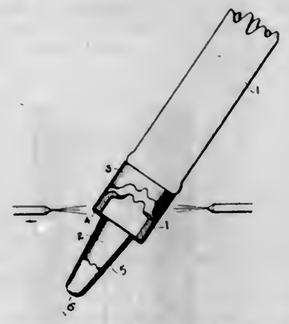
1. In a harness mechanism for looms, a harness frame, power operated means for shifting the frame, including a rocking lever, a sheave connected to the lever to be shifted thereby, a cable looped about said sheave and having its ends extending from the sheave connected to laterally spaced portions of the harness frame, a clamp for securing the looped portions of the cable together and rollers for supporting the two strands of the looped cable between their ends and the sheave and arranged so that upon loosening the clamp the frame can be tilted by shifting the cable about the sheave and then held from tilting by setting up the clamp.

1,803,540. DUST SEPARATOR. JOSEPH B. TAYLOR, Allendale, N. J. Filed Dec. 28, 1927. Serial No. 243,041. 5 Claims. (Cl. 183—79.)



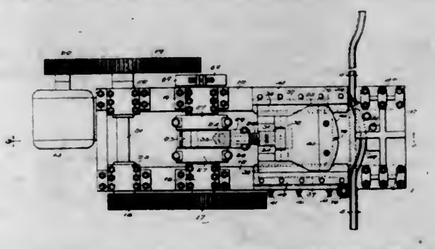
1. Dust separator apparatus comprising a series of passage forming units, each of which is a plate having a flat portion and a curved portion, pairs of units having their flat portions opposite one another and spaced apart to form a passage, and having their curved portions at opposite ends of the two units and the ends of the flat portions of one pair being joined to the ends of curved portions of a succeeding pair and thereby forming a passage through which dust laden fluid passes in reflexing streams.

1,803,541. PROCESS OF ATTACHING EXTERNAL ELECTRODES. EUGENE ABA, Oakland, Calif., assignor to Neon Appliances Ltd. of America, Emeryville, Calif., a Corporation of Nevada. Filed Dec. 3, 1929. Serial No. 411,264. 4 Claims. (Cl. 176—126.)



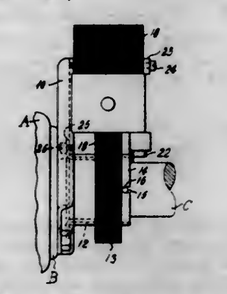
1. The process of attaching electrodes to glass tubes, consisting of heating the electrodes and quenching them in spirit; reheating the electrodes and quenching them in an alkaline solution; telescoping the electrode and glass tube ends welding them together by heat.

1,803,542. FORMING AND CUTTING MACHINE. WILLIS J. BOYLE, Jr., Los Angeles, Calif., assignor to The Boyle Manufacturing Company, Inc., Los Angeles, Calif., a Corporation of California. Filed Sept. 8, 1927. Serial No. 218,288. 13 Claims. (Cl. 153—2.)



1. A combined bending and cutting machine, including cooperating bending dies for bending an arcuate section of predetermined radius in an article operated upon, cooperating shearing dies for severing the arcuate section midway of the length of; and common means for actuating said bending and shearing dies in timed relation to cut said arcuate section after the bending operation is completed.

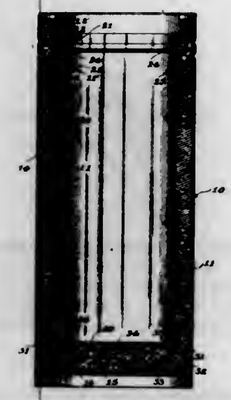
1,803,543. MAGNETO. PHELPS BROWN, Springfield, Mass. Filed Dec. 19, 1929. Serial No. 415,281. 14 Claims. (Cl. 123—149.)



1. In a magneto, a frame adapted to be mounted on an engine and having a hollow bearing through which a

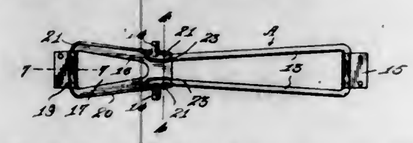
shaft of the engine is adapted to pass, stationary elements for the magneto secured to said frame, and a movable inductor element mounted to turn on said bearing.

1,803,544. SHIPPING CONTAINER. TOM R. BROWN, Kennett Square, Pa., assignor to The Glacifer Corporation, Kennett Square, Pa., a Corporation of Delaware. Filed Mar. 9, 1928. Serial No. 260,470. 6 Claims. (Cl. 220—9.)



1. In a container, a lining therefor forming a receptacle, a rib formed around said lining, and a shoulder formed around the adjacent container wall engaging the outer side of said rib.

1,803,545. TABLE-LEAF SUPPORT. FRANK L. CASPER, Howes Cave, N. Y. Filed Mar. 14, 1929. Serial No. 347,092. 5 Claims. (Cl. 45—47.)



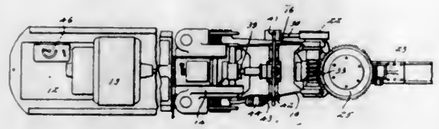
1. The combination with a hingedly mounted member and its support, of a brace comprising companion members pivotally mounted on said hinged member and support, one of said brace members having spaced resilient limbs terminating to provide offset extremities, the other member having openings to both slidably and pivotally receive said offset extremities, and spaced cam-like surfaces located at opposite sides of each opening and cooperating with said limbs, whereby said members are effectively latched when moved in end to end relation, and adapted to be unlatched by force in a direction perpendicularly to said offset extremities.

1,803,546. BRICKMAKING MACHINE. ROY P. M. DAVIS, Mount Union, Pa. Filed June 11, 1929. Serial No. 370,130. 8 Claims. (Cl. 25—1.)



1. A brick making machine, having a mold supporting means and a pallet supporting means adapted to receive and slidably support the mold and pallet thereon, said mold supporting means and said pallet supporting means also adapted to maintain the bottom of the mold and the top of the pallet in the same substantially horizontal plane, a fixed thin smooth liner sheet adapted to rest beneath the mold and upon the pallet, and means for transferring the mold across the face of the liner sheet directly to said pallet without disturbing the substantially horizontal position of the mold.

1,803,547. MINING MACHINE. JAMES E. DILLON, Masontown, Pa. Filed Oct. 12, 1928. Serial No. 312,132. 2 Claims. (Cl. 262—28.)



1. In a mining machine of the character described, a cutter bar mounted for swinging movement, means for swinging, the cutter bar including a worm wheel and worm, means for driving the cutter bar including a transverse shaft having a driving connection to the worm, opposed bevel gear wheels loosely mounted upon the shaft, an intermediate power driven bevel gear engaging both of the first named bevel gear wheels, a clutch for operatively connecting the shaft to either one of the first named gear wheels or disconnecting the shaft from either of the bevel gear wheels, a bevel gear wheel mounted upon said shaft for rotation therewith, an electric motor having its armature shaft operatively engaged with the last named bevel gear wheel, and a reversing controller for said motor whereby the cutter bar may be shifted either by the main power operated shaft or by said motor.

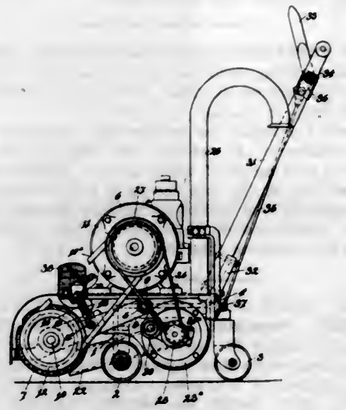
1,803,548. PRINTING-PRESS PLATE AND PROCESS OF MAKING THE SAME. RONALD I. DRAKE, Chicago, Ill., assignor of one-half to Peter J. Massey, Chicago, Ill. Filed Dec. 23, 1929. Serial No. 415,955. 5 Claims. (Cl. 101—395.)



1. A printing plate of the character described, comprising a relatively thin metallic printing shell having printing characters embossed thereon, and a relatively thick backing member of relatively incompressible material having the characteristics of flexibility without elasticity at ordinary temperatures, and distortability in greater degree than the metallic printing shell, to permit localization of distortion due to bending within the backing without appreciably stretching or otherwise distorting the metallic shell.

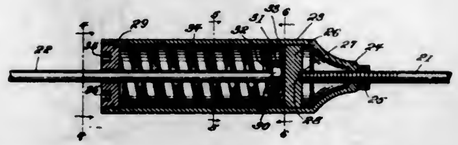
1,803,549. SURFACE-FINISHING MACHINE. ARTHUR N. EMMONS, Syracuse, N. Y. Filed Feb. 26, 1930. Serial No. 431,600. 10 Claims. (Cl. 51—176.)

1. In a floor surfacing machine, the combination of a supporting chassis having means for resting on the floor, a carriage adjustably mounted on the chassis to have an up and down movement, an abrading roller, supporting means therefor adjustably mounted on the chassis to have an up and down movement, a motor mounted on the carriage, motion transmitting means between the motor and the abrading roller, means for adjusting the



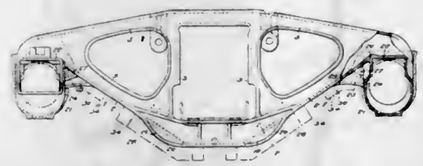
carriage relatively to the chassis, and means for transmitting the adjusting movement of the carriage to the supporting means for the roller.

1,803,550. BRAKE ROD. WALTER A. GARRIGUS and ROBERT O. GARRIGUS, Toledo, Ohio. Filed Dec. 4, 1929. Serial No. 411,570. 3 Claims. (Cl. 74—48.)



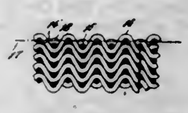
1. An apparatus of the character described comprising a tubular housing, brake rod sections projected within the ends of the housing, means yieldingly engaging end restraining outward movement of one of said brake rod sections, and an adjusting element slidably operable by the remaining brake rod section for cooperation with the yielding means and companion brake rod section.

1,803,551. METHOD OF CASTING AND PATTERN THEREFOR. CYRUS HANKINS, Baltimore, Md., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Original application filed Nov. 20, 1925, Serial No. 70,274. Divided and this application filed Nov. 18, 1926. Serial No. 149,118. 7 Claims. (Cl. 22—193.)



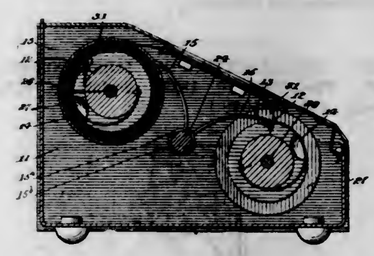
1. The method of casting, where cores are employed to secure external flanges, comprising forming a pattern with core print portions having ends, tapered along the exterior surface of the mold-forming part thereof, inserting correspondingly constructed cores in the core prints formed whereby, when the article is cast, the strength of the casting adjacent the junction between the core and mould is improved.

1,803,552. ANTISKID DEVICE. NORMAN E. HEIL, Paterson, N. J. Filed Feb. 2, 1928. Serial No. 251,381. 2 Claims. (Cl. 139—408.)



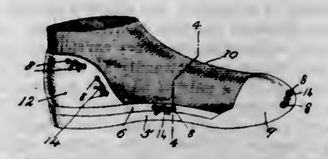
1. An anti-skid device comprising a narrow flat strap of woven fabric, including a plurality of identically constructed plies, the warp threads of each ply passing over and under the adjacent weft threads, the weft threads of each ply being arranged in vertical alignment and staggered horizontally to form each ply with spaced parallel ridges, the ridges of one ply being arranged between the ridges of the adjacent ply to be simultaneously presented to the ground, whereby the ridges of the outermost ply are completely worn while only partly affecting the corresponding ridges of the adjacent ply incident to the wear of the fabric.

1,803,553. ROTARY INDEX. GEORGE L. HINMAN, New Haven, Conn., assignor to The Greist Manufacturing Company, a Corporation of Connecticut. Filed Aug. 12, 1929. Serial No. 385,156. 3 Claims. (Cl. 40—86.)



1. In a rotary index, the combination with an index strip and reels on which said strip may be rolled, and from one to the other of which it may be caused to travel rapidly, of a one-piece yielding stopping member comprising two spring arms partly overlying said reels, said arms being connected by a loop, a shaft on which said loop is loosely mounted, and yielding abutments carried by said reels, said abutments being arranged to come in contact with the ends of said spring arms; whereby, when the said index strip is fully unwound from a reel, a yielding abutment on the empty reel will strike against the end of a spring arm of said stopping member and will turn said loop slightly on said shaft thus causing the other arm of said stopping member to exert a braking pressure on the wound-up index strip on the other reel.

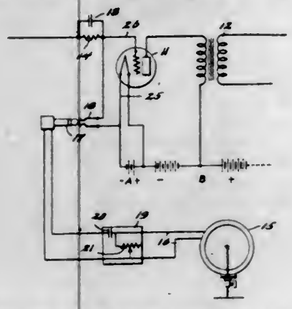
1,803,554. ATHLETIC SHOE. HAROLD M. KNILANS, Shreveport, La. Filed Mar. 26, 1930. Serial No. 439,102. 3 Claims. (Cl. 36—1.)



1. In a shoe of the character described, a sole having side flanges and a toe cap, the said flanges having apertures, a counter secured to the sole at the rear thereof, and an elastic sock-like upper attached to said flanges and counter, the said toe portion of said upper being inserted under the toe cap.

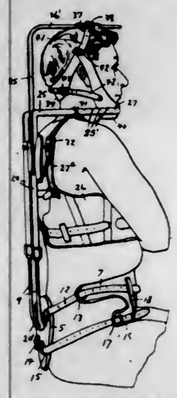
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1,803,555. TELEGRAPHOPHONE SYSTEM. LE ROY J. LEISHMAN, Los Angeles, Calif., assignor to Elec-Tru-Tone Corporation, Los Angeles, Calif., a Corporation of Utah. Original application filed Oct. 6, 1927, Serial No. 224,468. Divided and this application filed Aug. 16, 1928. Serial No. 300,060. 3 Claims. (Cl. 179—100.4.)



1. In combination, a sound reproducer, a connector for making circuit connections with a radio tube consisting of contacts adapted to engage prongs of a radio tube while said tube is in its regular socket of a radio set and making all its normal electrical connections therewith, a supporting member for said contacts, and conductors connecting the reproducer and connector.

1,803,556. SPINAL EXTENSOR. JOHN J. NUGENT, Ogden, Utah. Filed Dec. 10, 1929. Serial No. 413,055. 7 Claims. (Cl. 128—78.)

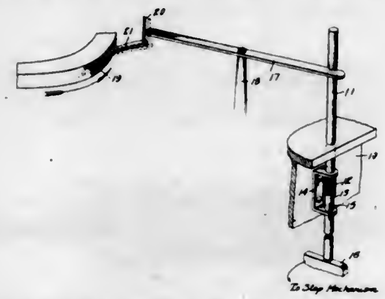


1. A spinal brace comprising a pair of rigid supporting members, each of said members being longitudinally adjustable, a pad hingedly connected to said supporting members at one end of said supporting members, said pad adapted for disposition against the spinal column, at the base of said spinal column, a second pad secured to said rigid supporting members at the opposite ends of said members, for connection with the last-mentioned ends of said members, said last mentioned pad extending across the back between the shoulders of a patient, an abdominal pad, adjustable connections between the first mentioned pad and said abdominal pad, supporting members carried by the said second pad and extending forwardly at opposite sides of the neck of the patient, a pair of pads to be disposed at opposite sides of the patient, an adjustable means for drawing the adjacent ends of said last mentioned pads toward one another and across the back of the patient, similar adjusting means for drawing the adjacent forward ends of said pads across the chest of the patient, shoulder straps for each of said last mentioned side pads, means for adjustably securing the intermediate portions of said shoulder straps to the last-mentioned supporting bars, and a head bar arising from said second pad and terminating above the head of the patient, a head strap operatively associated with said head bar, a chin strap oppositely associated with said head bar, and an adjustable connection between said head straps and said chin straps.

1,803,557. BUILDING MATERIAL. FRANK L. ORMESHER, Cincinnati, Ohio, assignor to Cemroc, Inc., Cincinnati, Ohio, a Corporation of Ohio. Filed July 18, 1928. Serial No. 293,791. 2 Claims. (Cl. 106—27.)

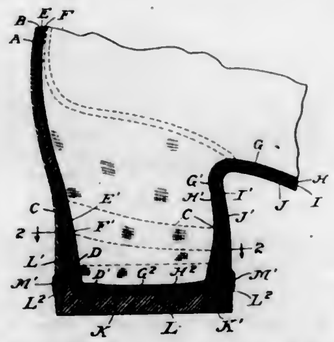
1. A water proofing and accelerating compound for concrete consisting of the product resulting from the combination of a half gallon of water and two pounds of stearic acid, a solution of 3½ to 4 ounces of caustic soda, a solution of from 5 to 6 ounces of calcium chloride and one gallon of water and approximately 10 per cent of powdered form of calcium chloride.

1,803,558. STOP MECHANISM FOR KNITTING MACHINES. NAPOLEON J. PERRY, deceased, Nashville, Tenn., by Julius W. Martin, administrator, Nashville, Tenn., assignor to May Hosiery Mills, Nashville, Tenn., a Corporation of Tennessee. Original application filed Dec. 22, 1919, Serial No. 346,681. Divided and this application filed Aug. 16, 1922, Serial No. 282,287. Renewed Mar. 31, 1927. 6 Claims. (Cl. 66—165.)



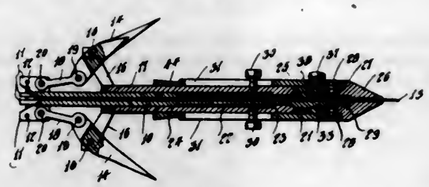
1. In a stop mechanism for knitting machines, a rotary element, a lever pivoted thereon at one end, a pivoted trip on a stationary part of the machine, an abutment at the free end of the lever and a cam surface between the ends of the lever for engagement by an abnormally retracted sinker to move said abutment into position to strike said trip, substantially as set forth.

1,803,559. OVERSHOE AND METHOD OF MAKING THE SAME. RALPH E. RILEY, Akron, Ohio, assignor, by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del., a Corporation of Delaware. Filed Sept. 24, 1929. Serial No. 394,855. 13 Claims. (Cl. 36—5.)



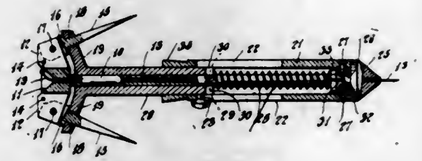
1. In an overshoe of the type described, a heel receiving pocket comprising inner and outer layers and a rubber heel lift having a continuous integral upstanding flange lying between said inner and outer layers and a tread surface adapted to form the outer tread surface of the heel.

1,803,560. FISHHOOK OR CATCHING DEVICE. MATE MIKE RODIN, San Pedro, Calif. Filed Sept. 17, 1929. Serial No. 393,138. 10 Claims. (Cl. 43—36.)



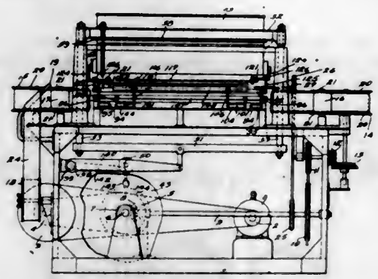
1. A fishing device of the class described having a catching member including pivotally mounted spurs, and means pivotally secured to said spurs to reverse their positions.

1,803,561. FISHHOOK. MATE MIKE RODIN, San Pedro, Calif. Filed Sept. 17, 1929. Serial No. 393,139. 6 Claims. (Cl. 43—36.)



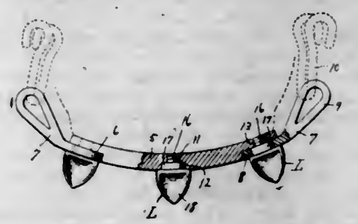
1. A fishing means of the class described comprising a rod, a catching member extending therefrom and including spurs pivotally secured to said rod, a stripping member slidable on said rod, and arms on said stripping member provided with openings to receive said spurs.

1,803,562. CIGARETTE-MAKING MACHINE. ISAAC ROET, Amsterdam, Netherlands. Filed Mar. 18, 1927, Serial No. 176,531, and in the Netherlands Mar. 20, 1926. 8 Claims. (Cl. 131—5.)



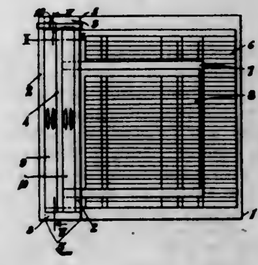
1. A machine for the simultaneous manufacture of a number of cigarettes comprising a main frame upon which is mounted a number of stationary cylindrical cases in a row, each being made in one piece, in combination with means for introducing a piece of paper into each cylindrical case, means for forming each paper into a tube, means for closing the lower end of each tube, means for filling the tubes with tobacco, means for tamping the tobacco, means for closing the upper end of the tubes and for forcing the finished cigarettes out of the cases, all the said means being operably connected with and operated from a main driving shaft.

1,803,563. TIRE-CHAIN CROSS MEMBER. PETER SAGEN, Skaneateles, N. Y. Filed Feb. 21, 1928. Serial No. 255,964. 1 Claim. (Cl. 152—14.)



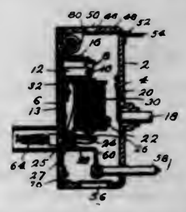
A device of the character described comprising an oblong plate body, the ends of which have recessed end surfaces, holes in said respective recesses, companion link members having complemental openings and calks having shank portions adapted to pivotally connect said link members in the respective recess openings in oblong plate.

1,803,564. BOOKKEEPING APPLIANCE. HANS ARNOLD SCHLAEPFER, Geneva, Switzerland. Filed Mar. 6, 1930, Serial No. 433,712, and in Switzerland Apr. 26, 1929. 2 Claims. (Cl. 282—29.)



1. In a book keeping appliance comprising a supporting member adapted to have detachably secured thereto a journal sheet, a ledger sheet and a carbon sheet interleaved between said journal and ledger sheets, a recessed frame secured to one side of the supporting member and comprising side members and a median member, two bars disposed within said frame between said side members and said median member, the journal sheet being adapted to be passed beneath said median member and to be held by one of said bars, the other bar being adapted to hold the ledger sheet and the carbon sheet, said bars each having a bevelled end engaging with a corresponding bevel edge on the frame, and a clip slidably engaged on the frame and adapted to maintain the other end of said bars in the frame.

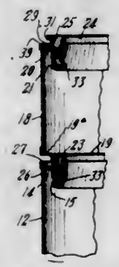
1,803,565. THERMOSTATIC DEVICE. GUSTAVE H. SCHWEDLER, Kansas City, Mo. Filed Sept. 1, 1927. Serial No. 216,882. 1 Claim. (Cl. 200—122.)



In a thermostatic device of the character described, a rectangular case having openings at its upper and lower

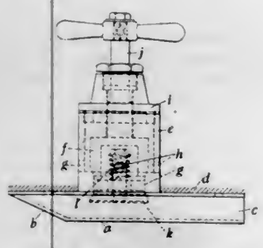
ends for the free circulation of air through said case, an electrically heated circuit closer mounted in the case and arranged longitudinally in the path of the air circulating through said case, a shutter pivotally mounted in the case for controlling the circulation of air through the latter, a handle connected to said shutter and projecting from the case through a slot in the latter, and a bracket secured to the exterior of the case and provided with a horizontally disposed calibrated portion adapted to cooperate with said handle in setting the shutter.

1,803,566. COMPARTMENT CAN. GEORGE A. SEXTON, Winchester, Mass. Filed Dec. 26, 1929. Serial No. 416,412. 4 Claims. (Cl. 220—97.)



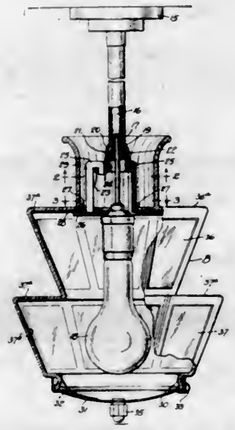
1. A compartment can comprising two independent containers, each composed of a cylindrical body, a bottom joined to and closing one end of the body, and an annular flange joined to and projecting inward from the opposite end of the body and forming the container mouth, the flange of each container being a duplicate of the other, and provided with an annular grooved seat, the bottom of one container having an annular tongue, formed to enter and frictionally engage the annular seat in the flange of the other container, and a cover adapted to close the mouth of either container, and provided with an annular tongue, formed to enter and frictionally engage the grooved seat in the flange of either container, the organization being such that when the containers are charged and the can is ready for the market, one container is closed by the bottom of the other, and the other container is closed by the cover, and when one container is emptied and discarded, the retained container may be closed by the cover.

1,803,567. MEANS FOR AUTOMATICALLY REMOVING WATER FROM BOATS. ERIC SLATER, Heaton, Bolton, England, assignor to George Taylor (Brass Foundries) Limited, Bolton, England. Filed Oct. 16, 1930, Serial No. 489,134, and in Great Britain Dec. 16, 1929. 1 Claim. (Cl. 114—185.)



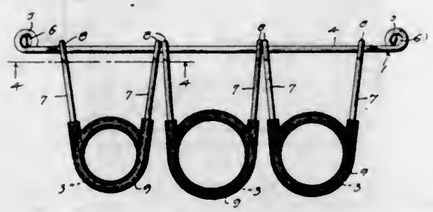
In means for automatically removing water from boats, the combination comprising a hollow channel having an open end and adapted to be attached to the underside of the boat, a cylindrical hollow and perforated extension from the channel adapted to project into the boat, a pair of coaxial valve seatings within the extension, a hand operated valve co-operating with one of said seatings, a screwed stem associated with said valve, a screwed cap on the said extension through which the stem passes and engages, a finger piece on the outer end of the stem, a non-return valve co-operating with the other seating, and a spring whereby the non-return valve is held on its seating, substantially as described.

1,803,568. LIGHTING FIXTURE. OLAF S. STROM, Alhambra, Calif., assignor of one-half to Simon A. Rosenfeld, Los Angeles, Calif. Filed Dec. 26, 1929. Serial No. 416,564. 6 Claims. (Cl. 240—78.)



2. A ceiling lighting fixture, comprising a conduit adapted to be secured to a ceiling so as to be pendant thereto, a ball on the lower end of the conduit, a socket embracing the ball, slotted arms carried by the socket, a ring, hooks carried by the ring and engaging within the slots of said arms for supporting the ring on the socket, spring clips on the ring, a bowl having a shoulder engaged by the ring so that the bowl is supported on the ring, and a bead in the bowl engaged by the clips to detachably secure the ring to the bowl.

1,803,569. BROOM AND MOP HOLDER. KELLY H. TAYLOR, Birmingham, Ala. Filed June 6, 1929. Serial No. 368,907. 2 Claims. (Cl. 24—249.)



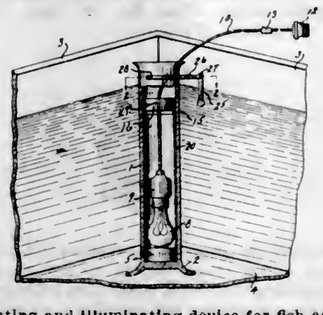
1. A broom or mop holder comprising a bracket, arms pivoted to and extending downwardly from the bracket, and an annular clamp secured to the lower end portions of the arms and adapted to receive the broom or mop handle, the clamp having the upper and lower portions thereof arranged in offset relation with respect to each other in the direction of that axis of the clamp passing through the center of the clamp.

1,803,570. COOLING MEANS FOR ELECTRIC MACHINES. WILHELM ROBERT UGGLA, Morby, Stocksund, Sweden, assignor to Luth & Roséne Elektriska Aktieholag, Stockholm, Sweden, a Corporation of Sweden. Filed Aug. 24, 1927, Serial No. 215,145, and in Sweden Jan. 17, 1927. 3 Claims. (Cl. 171—252.)



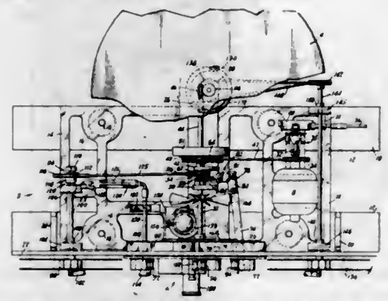
1. In a dynamo-electric machine, a casing, a stator within said casing comprising a plurality of plates, a shell within said casing having longitudinal ribs forming a plurality of longitudinal passages for flow of air, said shell encircling said plates and forming therewith a separate unit adapted to be mounted in and surrounded by said casing, and means for causing flow of air through said passages.

1,803,571. HEATING AND ILLUMINATING DEVICE FOR FISH AQUARIUMS. JOHN J. ULMAN, Cleveland, Ohio. Filed Nov. 14, 1929. Serial No. 407,169. 2 Claims. (Cl. 240—2.)



1. A heating and illuminating device for fish aquariums, comprising a transparent tubular container adapted to be placed in an aquarium, a heating and illuminating means in said container, and reflecting means in said container for the light rays of said heating and illuminating means, said reflecting means being a one-piece member and being arranged at one side only of said heating and illuminating means so that it can be used to direct the light rays toward or away from the central part of the aquarium, thereby enabling the reflector to be used at night as a shield to protect the fish from any glare of the light.

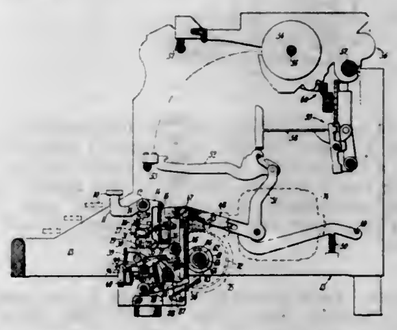
1,803,572. SYNCHRONOUSLY-OPERATED MOTION-PICTURE AND SOUND REPRODUCTION APPARATUS. FERDINAND VON MADALER, Hampton Bays, N. Y., assignor, by mesne assignments, to Visionola Mfg. Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 6, 1928, Serial No. 324,071. Renewed July 22, 1930. 18 Claims. (Cl. 88—16.2.)



4. A machine for reproducing motion pictures and sound in synchronism, in combination, a drive shaft, a phonograph turntable positively driven by said shaft, a film reeling device slippingly connected to said drive shaft, a second film reeling device adapted to be connected to said drive shaft at will, and film feeding devices disconnectibly driven by said drive shaft.

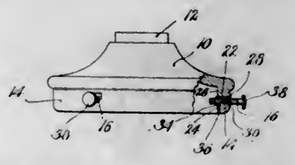
5. In a machine for reproducing motion pictures and sound in synchronism, the combination with a base, a motor, a phonograph turntable mounted on the base and operatively connected to the motor, a panel mounted on said base and extending thereacross, picture projection apparatus secured to said panel and said base, including film feeding mechanism and reels for said film, operating connections between the projection apparatus and said motor, the whole of said apparatus being located within the perimeter of said panel.

1,803,573. TYPEWRITING MACHINE. RICHARD VON REPPERT, Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 11, 1928. Serial No. 305,175. 16 Claims. (Cl. 197—17.)



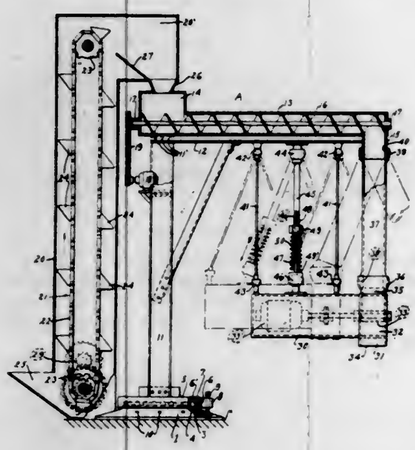
1. A typewriter having the combination of a universal continuously-rotating friction clutch-member, type-bars, individual friction clutch-members connected to the type-bars, normally inoperative pressure-arms effective when released to press the individual clutch-members into engagement with the universal clutch-member, to frictionally transmit typing movements to the type-bars, keys having means to selectively release said pressure-arms, means for restoring said pressure-arms, and means operable by the typing swing of the type-bars and effective to store up energy in the pressure-arm-restoring means, said restoring means being automatically released near the completion of the typing stroke for the purpose of discontinuing the individual clutch-member pressure independently of the actuated key.

1,803,574. SHADE HOLDER. HENRY K. WACK, New Bedford, Mass., assignor to John I. Paulding, Inc., Bedford, Mass., a Corporation of Massachusetts. Filed Dec. 19, 1929. Serial No. 415,328. 7 Claims. (Cl. 240—128.)



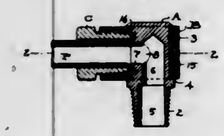
1. A shade holder having a flange provided with a through-and-through opening, a one-piece set-screw holding member mounted in said opening and having portions engaging the inner and outer faces respectively of said flange, one of said portions being provided with a threaded hole, and a set screw extending through said opening and said threaded hole.

1,803,575. SAND-SLINGING APPARATUS. WALTER H. WANGELIN, St. Louis, Mo. Filed Jan. 4, 1930. Serial No. 418,515. 9 Claims. (Cl. 22—36.)



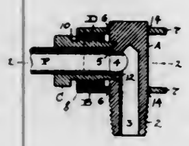
1. An apparatus of the class described including a sand slinger, a support for said sand slinger, a suspension element, a substantially universally movable joint for connecting said suspension element to said support, and a second substantially universally movable joint which serves to connect said suspenion element to said sand slinger.

1,803,576. PIPE COUPLING. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed Apr. 13, 1927. Serial No. 183,372. 9 Claims. (Cl. 285—86.)



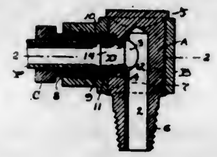
9. A pipe coupling, comprising two sleeved sections having angularly related communicating openings when assembled, including a single nut extending through one of said openings of said sections and adapted to clamp a pipe in sealing union with the other of said sections and to interlock said sections.

1,803,577. SECTIONAL PIPE COUPLING. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed Apr. 13, 1927. Serial No. 183,374. 6 Claims. (Cl. 285—86.)



1. A sectional pipe coupling, comprising a body having a fluid passage, a yoke member sleeved upon said body having a side opening, a screw-threaded collar fitted within said side opening, and a tubular nut extending through said collar adapted to clamp the end of a pipe against said body in open communication with said passage.

1,803,578. SECTIONAL PIPE COUPLING. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed Apr. 13, 1927. Serial No. 183,375. 11 Claims. (Cl. 285—86.)



7. A sectional pipe coupling, comprising a body member having a passage and a counterbored opening in one side open to said passage, a nipple member seated within said counterbored opening, a yoke member sleeved upon said body member having a screw-threaded opening axially coincident with said nipple, and a tubular coupling nut within said screw-threaded opening adapted to clamp a flanged pipe against said nipple.

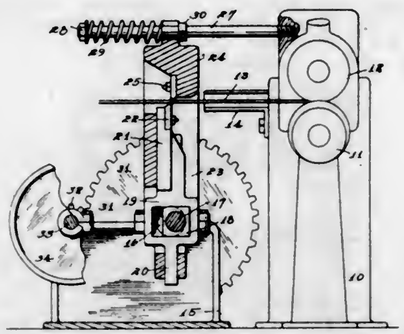
1,803,579. TIP PLATE FOR A TOOTH. AMOS S. WELLS, Minneapolis, Minn. Filed Mar. 31, 1926. Serial No. 98,918. 9 Claims. (Cl. 32—9.)



2. A backing for an artificial tooth which tooth has a flat surface and a recess therein with a passage of reduced size leading therefrom, comprising a member adapted to fit against said surface and carrying a projection adapted to enter said recess, said projection having an enlarged portion at its inner end having a width slightly less than the width of said passage, and a reduced portion adjacent said enlarged portion flaring outwardly from said enlarged portion and substantially fitting said passage at the outer side thereof.

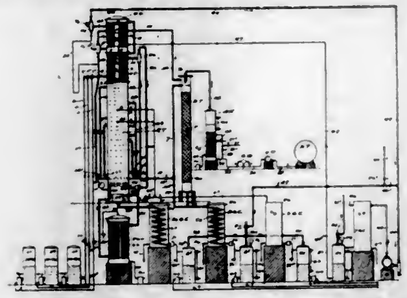
8. A base for a tip of an artificial tooth comprising a member having a surface on which the tip is built of substantially the width of said tip, said member having means formed thereon and rigid therewith embedded in the body of said tip and adapted to interlock with the backing of a tooth.

1,803,580. SCRAP CUTTER. LESTER WILLIAMS, Marshalltown, Iowa. Filed Nov. 30, 1925. Serial No. 72,379. 5 Claims. (Cl. 164—49.)



1. In combination, means for severing a continuously moving strip of stock into short sections, said means comprising a supporting base, a shaft rotatively mounted in said base, an upright yoke pivotally mounted on said shaft, a cutter blade rigidly secured in said yoke, a cutter support slidably mounted in said yoke, a cutter blade carried by said support designed to coact with the first said cutter, said cutter support being provided with guide members, a block slidably mounted in said guide members, a crank member for said block, said crank being a part of said shaft, means for guiding stock transversely between said cutter members, and means for yieldably engaging the upper end of said yoke so as to permit said cutter members to travel longitudinally with said stock while the said cutter members are in action.

1,803,581. APPARATUS FOR THE STABILIZATION, RECTIFICATION, AND FRACTIONAL DISTILLATION OF NATURAL GASOLINE. FRANCIS SALES WOIDICH, Sapulpa, Okla. Filed Nov. 6, 1924. Serial No. 748,161. 6 Claims. (Cl. 196—11.)

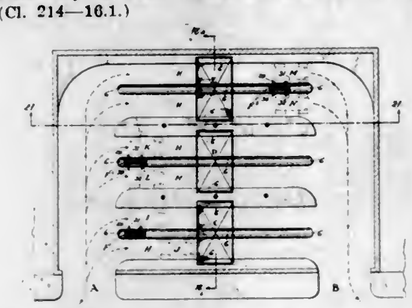


1. Apparatus of the character described, including a pressure storage system for natural gasolines, a thermosiphon heater, a rectifying column above said heater, means for conducting fluids through said heater from and to the bottom of said column, a weathering dephlegmator fixed to the top of said column, means for conducting gasolines from the storage system into said dephlegmator to expand therein, said dephlegmator including a plurality of flues for conducting gases and vapors from said column.

1,803,582. CEMENT COMPOSITION. PIERRE ZUCCO, San Francisco, Calif. Filed Oct. 6, 1925. Serial No. 60,906. 9 Claims. (Cl. 106—25.)

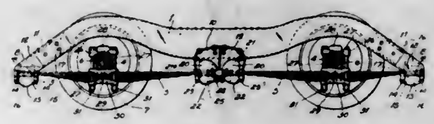
1. A composition consisting of a mixture of aluminous cement and a slag containing bicalcic silicate.

1,803,583. AUTOMOBILE HANDLING AND STORING APPARATUS. WILLIAM J. AITKEN, Chicago, Ill., assignor, by mesne assignments, to National Parking Garages, Incorporated, a Corporation of Delaware. Filed July 19, 1929. Serial No. 379,509. 10 Claims. (Cl. 214—16.1.)



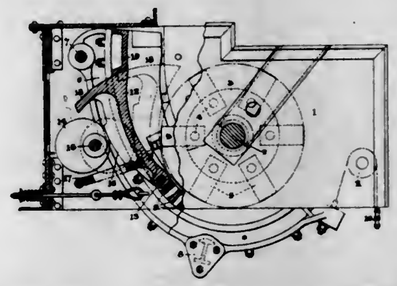
1. In an automobile storing and handling apparatus, a building having an entrance and an exit, an elevator intermediate the entrance and exit, parallel guideways for automobiles arranged on opposite sides of the elevator for guiding automobiles to and from the elevator, said elevator intercepting the guideways and being provided with parallel guideways registering with the automobile guideways, and a parker guideway parallel to and intermediate the automobile guideways.

1,803,584. CAR TRUCK. HERBERT W. ALDEN and NELSON R. BROWNYER, Detroit, Mich., assignors to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Dec. 5, 1927. Serial No. 237,720. 4 Claims. (Cl. 267—30.)



1. A street car truck comprising side frames, straight leaf springs, axle housings against the bottom of which the middle portions of said springs are secured, said side frames having at their middle and ends hollow fittings that extend below the axle housings and contain blocks of rubber or the like that are adapted to receive the ends of said springs, the middle fittings each containing two chambers and the blocks in said chambers forming abutments for the adjacent ends of said springs and the blocks in the end fittings being above and below the springs and having space opposite the ends of said springs to permit endwise play of the adjacent ends of said springs.

1,803,585. HAMMER CRUSHER. WILLIAM A. BATTEY, Haverford, Pa., assignor to Pennsylvania Crusher Company, New York, N. Y., a Corporation of New York. Filed Sept. 21, 1928. Serial No. 307,505. 9 Claims. (Cl. 83—11.)



1. The combination, with crushing or grinding means including a housing having a hopper, a crushing chamber with a screen in the bottom thereof and a hammer-carrying rotor in said chamber, of a pivotally mounted breaker plate disposed in cooperative relation with respect to said rotor, and means for oscillating said breaker plate toward and from the path of the hammers.

1,803,586. PENCIL. BERNARD C. BECKER, York, Pa., assignor to The Yoder Pencil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 3, 1922. Serial No. 533,844. 21 Claims. (Cl. 120—45.)

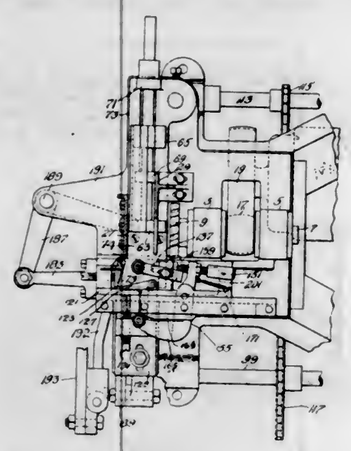
1. In a pencil, the combination with a container for semi-fluid writing material provided with an outlet allowing restricted flow therefrom under pressure, of a

reciprocable tube leading from said outlet to form the writing point and mounted to the pencil body, and a



feeding device capable of forcing said writing material through said tube and operable through inward movement of said tube.

1,803,587. HEEL-SHAPING MACHINE. HUGO A. BERTRAM, Malden, Mass. Filed May 31, 1929. Serial No. 367,341. 16 Claims. (Cl. 12—47.1.)

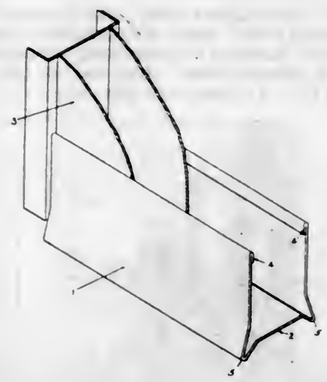


6. A machine for shaping breasts of heels comprising, in combination, a rotary cutter, a heel block holder, means for feeding blocks successively to the holder, means for automatically gripping the block delivered to the holder, and means for moving the holder relatively to the cutter to shape the concave breast of the heel, said gripping means having provision for discharging the block from the holder after it has passed the cutter.

1,803,588. LEAVENED PRODUCT AND COMPOSITION OF MATTER. ARTHUR D. BLANK, San Francisco, Calif., HENRY A. KOHMAN, Pittsburgh, Pa., and ALFRED SCHULTZ, New York, N. Y., assignors, by mesne assignments, to Standard Brands, Incorporated, Dover, Del., a Corporation of Delaware. Filed Oct. 22, 1928. Serial No. 314,315. 18 Claims. (Cl. 99—10.)

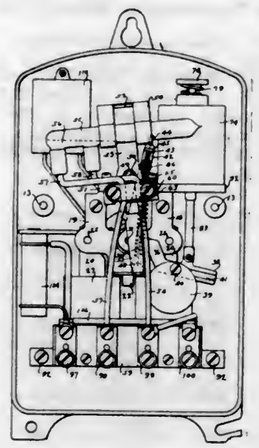
18. A new composition of matter including, in combination, the following ingredients in substantially the proportions given: potassium bromate about 0.02 parts, calcium acid phosphate about 2.0 parts, ammonium chloride about 0.7 parts, and papain about 0.2 parts, to be used with yeast and a neutralizing agent such as soda in the manufacture of "short" leavened products such as soda crackers.

1,803,589. ADJUSTABLE ABUTMENT MOLD. JOHN A. BOHNSACK, Cleveland Heights, Ohio, assignor to The E. F. Hauserman Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 26, 1927. Serial No. 228,786. 4 Claims. (Cl. 189—34.)



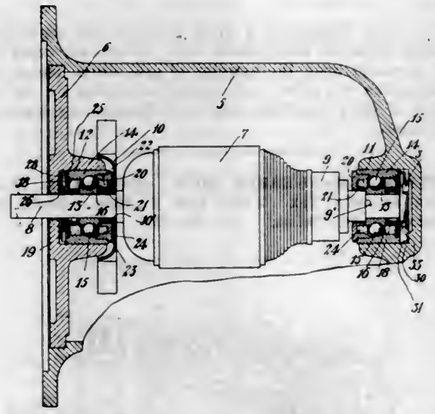
4. The combination with a partition filler element having an edge thereof in spaced parallel relation to a structural surface, of a channel shaped partition finishing mold movably mounted for adjustment between said edge and said surface, the flanges of said channel frictionally engaging said filler element and the web of said channel having spaced ribs for contact with said structural surface.

1,803,590. FLASHER. GISBERT L. BOSSARD, Dayton, Ohio, assignor to General Kontrolar Company, Inc., Dayton, Ohio, a Corporation of Ohio. Filed Nov. 2, 1928, Serial No. 316,840. Renewed Feb. 7, 1930. 16 Claims. (Cl. 200—90.)



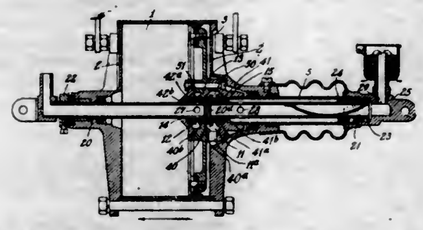
1. A circuit controller of the class described comprising a field magnet provided with pole pieces, a field coil cooperating with said pole pieces, movable armature mounted between said pole pieces and movable therebetween without impact engagement therewith, a rigid operated member pivotally mounted adjacent said armature, operating connections between said operated member and said armature to give a snap movement in opposite directions to the operated member from opposite movements of said armature, a tube carried by said operated member, contacts and fluid means within said tube adapted when the operated member is oscillated to one position to close a circuit and connect the field coil to a current source and when the tube is oscillated to another position to open the circuit, and a single integral supporting member providing opposed bearing mounts for said armature and to which the pole pieces of the field magnet are rigidly connected.

1,803,591. BEARING ASSEMBLY UNIT AND MOUNTING THEREFOR. GEORGE R. BOTT, Stamford, Conn., assignor to Norma-Hoffman Bearings Corp., Stamford, Conn., a Corporation of New York. Filed Dec. 29, 1927. Serial No. 243,301. 4 Claims. (Cl. 308—187.)



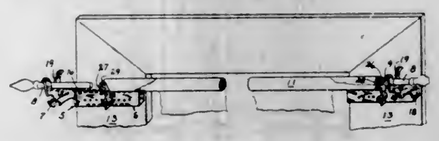
1. In combination with a supporting wall having a bore, an anti-friction bearing unit including inner and outer one-piece rings and a plurality of rotatable bearing elements arranged therebetween, annular closure plates for the opposite sides of the bearing unit connected with said outer bearing ring, and a plate arranged within said bore having a plurality of resiliently yieldable lugs directly bearing against one side edge of the outer ring and adapted to coact with means on said ring to lock the bearing ring against rotative creeping movement.

1,803,592. POWER ACTUATOR. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Sept. 16, 1927. Serial No. 219,872. 15 Claims. (Cl. 121—41.)



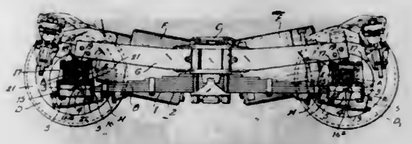
1. The combination with an internal combustion engine provided with a carburetor, a suction passage and a throttle valve controlling the same, of a suction actuated device comprising a cylinder, a piston therein provided with means for connecting it to a part to be operated, and controlling valve mechanism, said cylinder having a portion within the same normally in communication with the suction passage of the engine and constituting a vacuum storage reservoir for the suction actuated device, and means operatively connected with the controlling valve mechanism for cutting off communication between said vacuum storage reservoir and the suction passage when the controlling valve mechanism is actuated, to effect a power stroke of the piston, whereby no air can be admitted from the suction actuated device to the suction passage of the engine during said power stroke.

1,803,593. COMBINED CURTAIN AND SHADE BRACKET. MASON BROWNLEE, Oakland, Calif. Filed Apr. 24, 1928. Serial No. 272,415. 2 Claims. (Cl. 156—24.)



1. In a curtain and shade bracket, an elongated plate atranged for attachment to the wall with its longitudinal edges disposed horizontally and having upwardly opening notches along its upper edge, a U shaped shade support slidable upon and vertically displaceable relative to said plate whereby it may be engaged in said notches, said plate having another set of notches along its lower edge arranged to receive said U shaped member, said plate having a row of openings, therein between said notches, and a screw carried by said U shaped member and arranged to be extended into and out of said openings.

1,803,594. CAR TRUCK. NELSON R. BROWNYER, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Mar. 21, 1930. Serial No. 437,771. 7 Claims. (Cl. 105—182.)

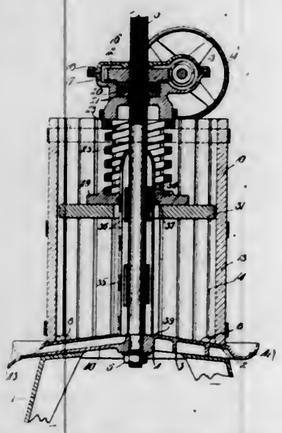


1. A vehicle truck comprising axle housings, members extending from axle housing to axle housing, a support for each end of each member, said support being located below the axle located adjacent thereto and having hanger arms that are rigid therewith and extend upwardly on opposite sides of said housing and are pivotally secured to the upper portion of said axle housing for vertical swinging movement laterally of said truck.

1,803,595. FRUIT PRESS. GIOVANNI R. CATOLDO, Boston, Mass. Filed Dec. 16, 1925. Serial No. 75,771. 5 Claims. (Cl. 100—44.)

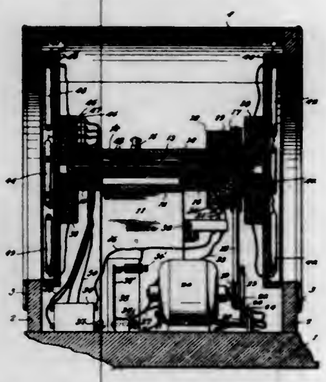
3. Pressure applying mechanism for use in a press having a base plate having an outwardly sloping upper surface provided with a drain channel leading outwardly from adjacent to its center, a fixed screw-threaded rod projecting upwardly from the center of the base plate, outer and inner perforate cylindrical casings resting upon the base plate and an annular presser plate, said pressure applying mechanism comprising a housing movable

longitudinally of the rod, a rotary nut member within the housing, said nut member having screw-threaded engagement with the rod, means mounted on the housing for turning the nut, a coiled compression spring concentric with the rod, means attaching the upper end of the spring to the housing, and a shoe attached to the opposite end of the spring and normally engaging but separable from the presser member, the lower end of the spring being embedded in the shoe.



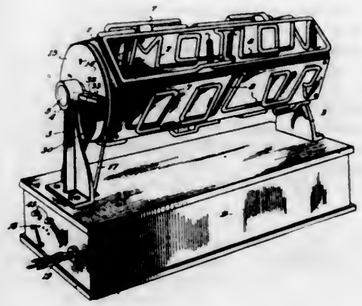
5. A press of the class described comprising a base plate having an outwardly sloping upper surface, means providing a gutter at the marginal part of the plate, a fixed screw threaded rod projecting upwardly from the center of the plate for cooperation with pressure applying means, the plate having an annular groove concentric with the rod, and a perforated casing concentric with the rod and having its lower edge seated in the gutter, the plate having a duct extending through its substance from the annular groove to the gutter.

1,803,596. SIGN. RICHARD M. CRAIG, San Antonio, Tex. Filed Feb. 28, 1930. Serial No. 432,169. 19 Claims. (Cl. 40—130.)



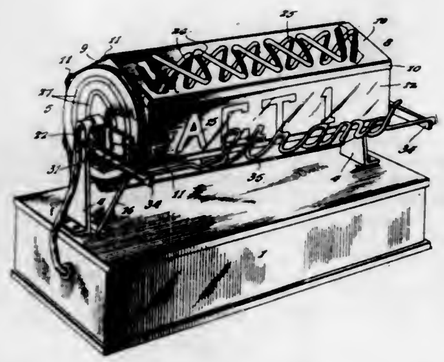
19. A display apparatus comprising oppositely disposed rotatable display members, luminescent tubes mounted on said members and rotatable therewith, an electric circuit controlling the illumination of the tubes of both display members, a circuit closer in said circuit and operable to effect perodic illumination of certain of the tubes and an automatic shunt device arranged in the circuit and operable to periodically cut out said circuit closer and effect constant illumination of all of the tubes.

1,803,597. REVOLVING SIGN. RICHARD M. CRAIG, San Antonio, Tex. Filed Feb. 28, 1930. Serial No. 432,170. 15 Claims. (Cl. 40—77.)



1. A sign comprising a drum mounted for continuous rotation about its longitudinal axis, luminescent tubes fixedly mounted upon the exterior of said drum, means for illuminating the tubes, and means controlled by the rotation of the drum for selectively illuminating the several tubes.

1,803,598. CHANGEABLE SIGN. RICHARD M. CRAIG, San Antonio, Tex. Filed Mar. 1, 1930. Serial No. 432,448. 18 Claims. (Cl. 40—77.)

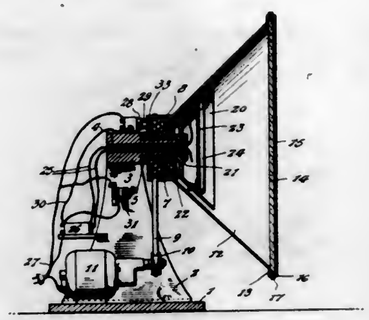


1. A display apparatus comprising a drum mounted for rotation about its major axis, a luminescent tube disposed in front of the drum in a fixed position, display plates mounted upon the drum, a luminescent tube disposed within the drum and fixedly supported, and means controlled by the rotation of the drum for intermittently illuminating the tubes whereby the announcements upon the display plates may be read behind the fixed tube in front of the drum.

1,803,599. DISPLAY APPARATUS. RICHARD M. CRAIG, San Antonio, Tex. Filed Mar. 6, 1930. Serial No. 433,698. 11 Claims. (Cl. 40—133.)

1. A display apparatus comprising a stationary luminescent tube, a display element rotatable in front of said tube and provided with translucent characters, means

for continuously illuminating the tube whereby the characters will appear to form a geometrical design, and means for intermittently illuminating the tube whereby



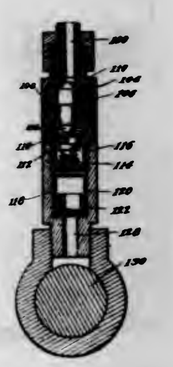
the characters will display an announcement in readable position, said last-mentioned means operating alternately with the means for continuously illuminating the tube.

1,803,600. APPARATUS FOR MAKING OZONE. JAMES MARLOWE DAILY, Chicago,, Ill., assignor, by direct and mesne assignments, to American Ozone Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 7, 1928. Serial No. 245,087. 28 Claims. (Cl. 204—32.)

1. In a generator of the character described, the combination of pairs of plates arranged to form an annular series, the plates of each pair being spaced apart to form therebetween a combined air passage and spart gap, means forming a central conduit in communication with the passages and from which the pairs of plates extend outwardly, electrodes between the pairs of plates, and means for supplying electric current to said electrodes.

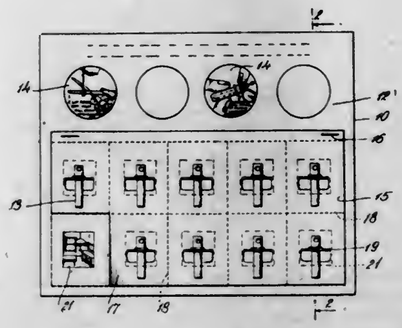
1,803,601. LUBRICATING SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 1, 1925. Serial No. 47,527. 13 Claims. (Cl. 184—70.)

1. A lubricating system comprising a plurality of bearings and apportioning units connected with each of said bearings, said apportioning units each comprising a measuring chamber, an accumulating chamber and a check valve chamber located between said measuring chamber and accumulating chamber, means in said measuring chamber for forcing measured charges of lubricant through said check valve chamber into said accumulating chamber, a check valve in said check valve chamber for preventing return flow of lubricant to said measuring chamber, means in said accumulating chamber for placing the lubricant delivered thereto under yielding pressure comprising a cup-shaped member and a second cup-shaped member freely



slidable in said first named cup-shaped member, said accumulating chamber being connected with a bearing to be lubricated, a pump for supplying lubricant under pressure to all of said apportioning units, and means for conducting lubricant from said pump to said apportioning units.

1,803,602. DISPLAY DEVICE. WILLIAM H. DEY, Montclair, N. J., assignor to United States Radium Corporation, New York, N. Y., a Corporation of Delaware. Filed May 4, 1928. Serial No. 275,016. 3 Claims. (Cl. 206—79.)

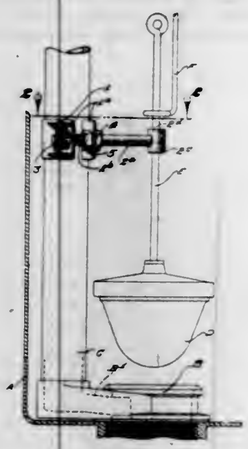


1. A sales and display device comprising the combination of a foundation member, a plurality of article-carrying sections attached thereto, each section being readily detachable from said member with its article remaining in place, and display indicia normally concealed by the sections but exposed upon detachment thereof.

1,803,603. TOILET FLUSH-VALVE GUIDE. ROY E. DODSON, San Diego, Calif. Filed Feb. 18, 1930. Serial No. 429,429. 4 Claims. (Cl. 4—57.)

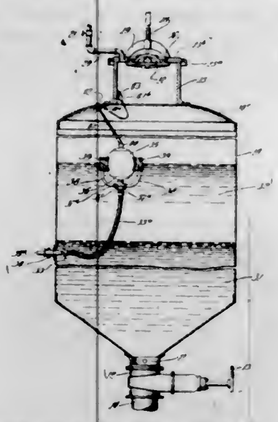
8. The combination with a toilet tank having a flush valve rod and overflow pipe of a clamp means arranged to fit said overflow pipe, a stem longitudinally shiftable

through the adjusting end of said clamp means, nuts on said stem for locking said clamp upon said overflow pipe,



and binding said stem relative to said clamp means, and a guide sleeve at the extended end of said stem, for receiving said valve guide.

1,803,604. RENDERING TANK. HAROLD E. DUDYCHA, South St. Paul, Minn., assignor to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 26, 1927. Serial No. 171,111. 1 Claim. (Cl. 87—13.)

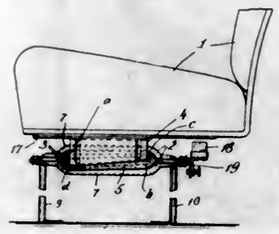


The combination in rendering apparatus of a normally closed vessel adapted to contain the materials to be rendered under pressure, means for permitting the introduction of said materials into said vessel, means for introducing water and steam into said vessel, a flexible discharge conduit for the rendered products having its outlet below the level of the rendered products in said vessel, a float attached to said conduit and adapted to rest on the upper surface of the rendered products in said vessel, U-shaped screens attached to opposite sides of said float at said surface of said products, and inlet pipes opening within said screens and communicating with said discharge conduit.

1,803,605. METHOD OF CANNING. FRED F. FITZGERALD, Oak Park, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 26, 1927. Serial No. 215,757. 3 Claims. (Cl. 99—11.)

1. The method of preserving food and other products, which consists in hermetically sealing the product in its container in a rarefied atmosphere and then processing the same in the presence of substantially only sufficient moisture in the container to create steam in the interstices between the food products and at sufficient heat to sterilize.

1,803,606. FLEXIBLE JOINT. GERHARD FLINTERMANN, West Orange, N. J. Filed Aug. 9, 1927. Serial No. 211,839. 7 Claims. (Cl. 267—63.)

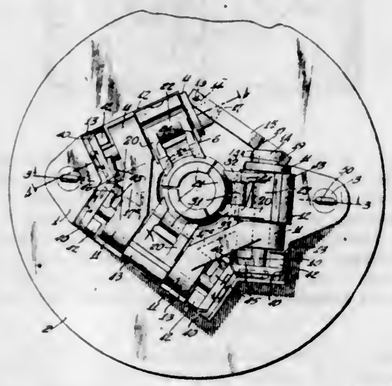


1. A flexible joint comprising an annulus of resilient material, a sheet metal member surrounding said annulus, and an inner member engaging in the opening in said annulus of resilient material, said sheet metal member being longitudinally divided into two sections so that each of the sections engages with the resilient material throughout a portion only of the outer circumference of the annulus, and means for fastening said sections together.

1,803,607. MARINE PAINT. GEORGE GOETZ, Los Angeles, Calif., assignor to S. M. Barr and George A. Barr, Los Angeles, Calif. Filed Apr. 5, 1927. Serial No. 181,265. 2 Claims. (Cl. 134—42.)

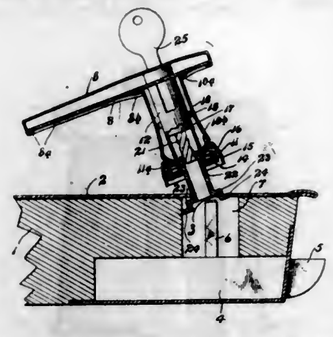
1. A paint including as its principal elements coal tar, sodium cyanide, and cement in substantially the following proportions: Coal tar, one gallon; sodium cyanide, five ounces; cement, one pound.

1,803,608. SPIDER. HERBERT W. GOETZ, Alhambra, RALPH C. CLARK, Los Angeles, and JOHN J. FERLIN, Huntington Park, Calif. Filed Mar. 26, 1928. Serial No. 264,691. 11 Claims. (Cl. 24—249.)



1. The combination of a base having a bore for passage of well piping, a plurality of gripping jaws, and arms pivoted at one end to the base and pivoted at their opposite ends to the respective jaws so that rocking movement of the arms will cause the jaws to engage or release the well piping, the said arms being adapted to rock to jaw releasing position projecting substantially horizontally rearwardly from their axes with the pivoted jaws resting substantially horizontally on the arms.

1,803,609. AUTOMOBILE DOOR LOCK HANDLE. RAYMOND I. GRAF, East Grand Rapids, Mich. Filed May 7, 1928. Serial No. 275,653. 5 Claims. (Cl. 70—91.)



1. In combination with a door or the like having a latch mounted thereon, a handle structure mounted on the door and engaged therewith, means mounted in the handle structure for connecting with or disconnecting it from said latch, means for securing the handle structure to the door, and means for preventing disengagement of the handle from the door upon removal of said securing means except when the handle structure is in latch connecting position.

1,803,610. DOOR OR GATE STOP. CURTIS GREENE, San Diego, Calif. Filed Dec. 31, 1928. Serial No. 329,351. 5 Claims. (Cl. 292—114.)

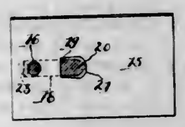


1. In a device of the class described, a vertically disposed casing member, a lug secured in the lower end thereof, a shaft reciprocally mounted therein provided with a hook on its lower end adapted to engage the lug in said casing, a head rigidly secured to said shaft and tiltably supported around the upper end of said casing, and a spring interposed between said lug and said head tending to hold said head and shaft upwardly.

1,803,611. ZINC CONDENSER. HARRY A. GRINE, Clarksburg, W. Va., assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed May 25, 1927. Serial No. 194,238. 3 Claims. (Cl. 263—48.)

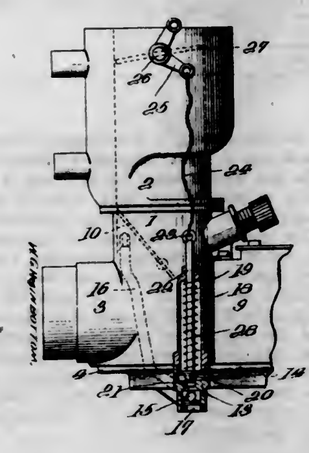
1. A zinc condenser comprising, in combination, a main body portion of a refractory material, and a refractory lining adhesively secured to the condensing surfaces of said main body portion but readily separable therefrom mechanically, said lining comprising a lightly burned mixture of raw clay and grog.

1,803,612. CLOSURE FOR POURING CARTONS. REYNOLDS GUYER, St. Paul, Minn., assignor to Waldorf Paper Products Company, a Corporation of Minnesota. Filed Sept. 20, 1928. Serial No. 307,128. 1 Claim. (Cl. 229—17.)



A carton comprising, a body formed from foldable sheet material, outer, inner and intermediate flaps secured one upon another, said outer and inner flaps having outlet openings registering one with the other and an imperforate closure for said openings formed from said intermediate flap and slidable in the plane thereof to open and close said openings, said opening in said inner flap being formed with an enlargement extending the full width of said closure to permit ready removal of granular substances from the path of said closure.

1,803,613. CARBURETOR. WALTER G. HEGINBOTTOM, Flint, Mich., assignor to Marvel Carburetor Company, Flint, Mich., a Corporation of Indiana. Filed Feb. 26, 1923, Serial No. 621,190. Renewed July 23, 1930. 10 Claims. (Cl. 261—41.)

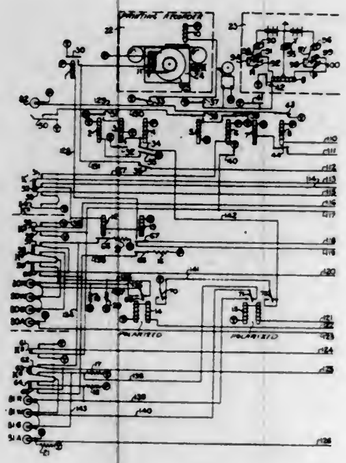


8. A carburetor having high and low speed nozzles and a throttle valve for controlling the outlet thereof, means for supplying fuel to said high and low speed nozzles, a valve for controlling the supply of fuel to said high speed nozzle and having a fuel passage therein for supplying a minimum amount of fuel to said nozzle when seated and a maximum amount of fuel when unseated and means actuated at a predetermined movement of the throttle for unseating said valve for increasing the supply of fuel to said high speed nozzle.

1,803,614. REMOTE CONTROL SYSTEM. HARRY E. HERSHEY, Oak Park, Ill., assignor to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 11, 1926. Serial No. 140,777. 7 Claims. (Cl. 177—353.)

1. In a remote control system, a selector switch, a magnet for said selecting switch, said magnet having means to advance said switch during its deenergization, a

second selective switch containing a magnet having means to advance said switch during its deenergization, a relay and manually controlled circuits therefor over which said relay is energized to close a circuit to the magnet of said first switch, a control relay associated with the second switch, means operated by said first magnet for closing a circuit to said control relay, means responsive to the operation of said control relay for closing the circuit to the magnet of said second switch, and means controlled by the said magnet of said second switch for opening the circuit of said first manually controlled relay, to thereby deenergize said relays and magnets to advance their respective switches.

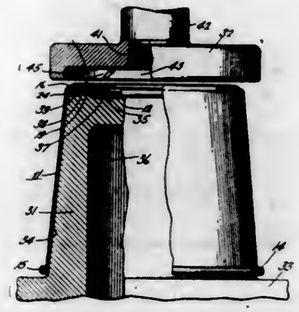


2. In a control system, a step-by-step switch having a switch bank and a wiper therefor, a plurality of keys, a contact in said switch bank for each key, a home position contact in said switch bank, a set of springs in each key having one of such springs connected to said home position contact, another set of springs in each key having one of such springs connected, respectively, to individual ones of said contacts, and means responsive to the operation of any one of said keys for initiating the operation of said switch by way of its home position contact and the first set of springs, for continuing the operation of said switch responsive to the switch wiper engaging the individual contacts connected to the unoperated keys and for stopping the switch responsive to the switch wiper encountering the individual contact connected to the operated key.

1,803,615. PROCESS OF EXTRACTING FAT FROM CACAO BEAN OR A PRODUCT THEREOF. IVAN S. HOCKER, Philadelphia, Pa., assignor to The Hocker Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Aug. 24, 1928. Serial No. 301,946. 4 Claims. (Cl. 87—6.)

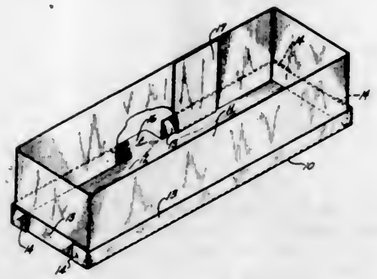
3. The herein described method of extracting fat from cacao beans which consists in heating and agitating an aqueous mixture of a cacao bean product by a rotary motion about a horizontal axis thereby thoroughly to wet the solid non-fatty constituents thereof so as to break down the intimate union between the same and the fatty constituents and so as also to gelatinize the starchy constituents, adding a suitable amount of diastatic material slowly agitating the mass until the gelatinized starchy constituents are saccharified adding a suitable amount of carbonate to the mixture and further agitating the same by a rotary motion about a vertical axis to raise the liberated fatty constituents to the surface, and lastly withdrawing said fatty constituents.

1,803,616. METHOD OF MAKING SHEET METAL CONTAINERS. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed May 2, 1927. Serial No. 188,151. 3 Claims. (Cl. 113—120.)



1. The method of forming a container which comprises forming a continuous side wall and an end portion separately, each said formed portion having formed edges adapted for interfolding, the formed portion of the side wall extending towards the center of said end portion, said end portion having offset portions providing an upwardly presented groove and a shoulder adjacent the edge thereof, spaced from said edge, positioning a sealing compound in said groove, engaging said formed edges into engagement and folding them together with one edge interlocking under the other edge, whereby the formed edges of the side wall scrape into and partially remove the sealing compound in the groove, said folded portions being pressed into said groove and into engagement with said shoulder and confining the removed sealing compound therebetween.

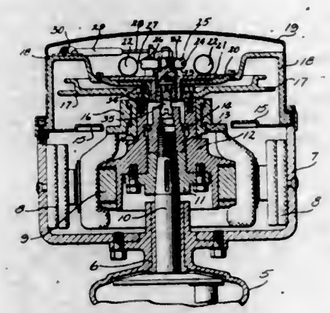
1,803,617. CAR LINER. FREDERICK E. HUMMEL, Hopewell, Va. Filed June 19, 1930. Serial No. 462,264. 5 Claims. (Cl. 105—423.)



1. A car liner, comprising a one-piece bottom member having at its side and end edges upstanding flanges, and a one-piece, continuous siding member positioned on said bottom and against the inner faces of said flanges, said siding extending upwardly from the bottom member and extending around the entire periphery thereof.

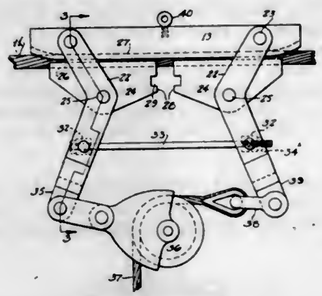
2. A car liner, comprising a one-piece bottom member formed of foldable fibrous material and having at its side and end edges upstanding flanges, and a one-piece, continuous siding member formed of fibrous material and positioned edgewise adjacent said bottom and in overlapping engagement with the inner faces of said flanges and secured thereto, said siding extending upwardly from the bottom member and extending around the entire periphery thereof.

1,803,618. TIMER MOUNTING AND DRIVE. FINN T. IRGENS and PAUL C. BALDUS, Milwaukee, Wis., assignors to Outboard Motors Corporation, Milwaukee, Wis., a Corporation of Michigan. Filed June 19, 1930. Serial No. 462,379. 5 Claims. (Cl. 123—195.)



1. The combination with an engine crank shaft and a crank casing providing a bearing therefor, of a bracket rigidly connected with said casing, a rotatably adjustable timer support mounted on said bracket, and a timer shaft journaled co-axially with said support in a position determined by said bracket and flexibly coupled to said crank shaft to receive motion therefrom at a point spaced from said bearing.

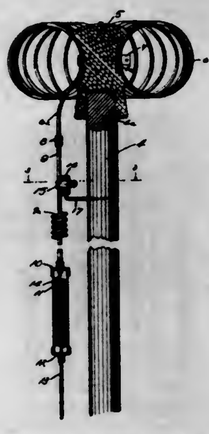
1,803,619. CABLE CLAMP. CHARLES E. JENSEN, Portland, Oreg., assignor of one-half to A. H. Wethey, jr., Portland, Oreg. Filed Apr. 28, 1930. Serial No. 448,003. 4 Claims. (Cl. 24—132.)



4. The combination of an elongated grooved clamp member adapted to ride on one side of a cable, a pair of shoes adapted to bear against the opposite side of said cable, a pair of arms hinged to opposite ends of said clamp and hinged at their mid sections to said shoes, the hinges for said shoes lying closer together than the hinges to said clamp, means for holding said shoes apart for the purpose of freeing the cable, means for drawing said arms to a cable gripping position when a weight is supported thereby, and a bolt across said arms adapted to hold the same in the position to which they are moved by said weight supporting member.

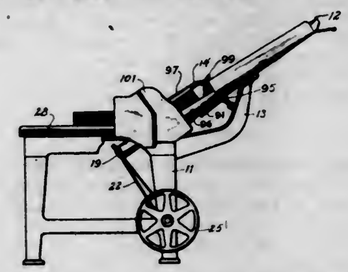
1,803,620. ANTENNA. SMITH M. JESTER, Park Rapids, Minn. Filed Mar. 25, 1927. Serial No. 178,255. 3 Claims. (Cl. 250—33.)

2. A radio antenna comprising, a standard, a toroidal shaped coil wound from a tube and forming a receiving head, an insulator mounted on said standard and having a drum portion thereon against which portions of the



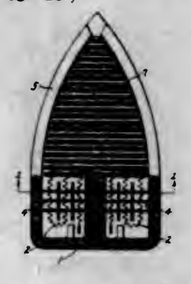
various individual coils of said head fit and are secured, and means for connecting said head to a radio receiving or sending set.

1,803,621. CAN-END COUNTING AND STACKING MACHINE. LYMAN L. JONES, Seattle, Wash., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 18, 1928. Serial No. 633,030. 30 Claims. (Cl. 235—98.)



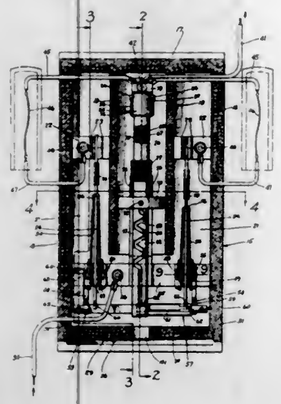
1. In a machine for counting and stacking can ends or the like, the combination of a rotary annular feeding device, and means operable by the feeding of can ends through said device for counting said ends.

1,803,622. IRONING DEVICE. WILLIAM H. KELSEY, Cleveland, Ohio. Filed July 5, 1929. Serial No. 376,064. 2 Claims. (Cl. 68—26.)



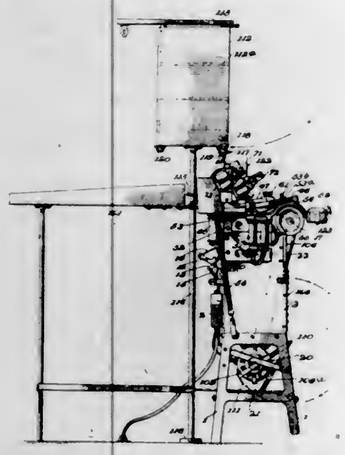
1. In combination, an ironing member having a heated wall, and an ironing unit detachably connected thereto and provided with a plurality of rolling members lying closely adjacent thereto, said heated wall being provided with a smooth iron surface adapted for direct application to the work upon removal of said unit.

1,803,623. TRANSFER SWITCH. CHARLES A. LANG and CHARLES B. GAMBLE, Minneapolis, Minn., assignors to Fusaline, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Nov. 2, 1929. Serial No. 404,456. 20 Claims. (Cl. 200—126.)



1. A device of the class described, comprising a fusible element, movable means having a normal condition and an actuated condition and adapted to be held in normal condition by the fusible element and released for actuation when said fusible element breaks, timing means with which said movable means is operatively associated, trigger means, and circuit-controlling means adapted to be held by said trigger means when said movable means is in normal condition and to be released for actuation by said movable means striking a hammer blow against said trigger means at a time after release of the movable means predetermined by the timing means.

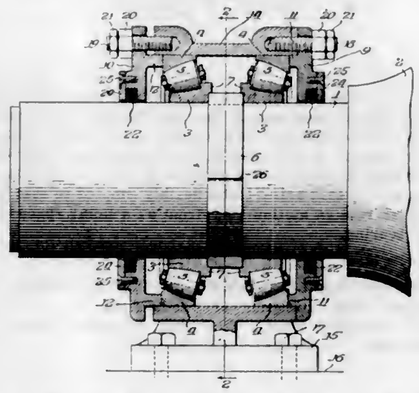
1,803,624. MACHINE FOR SORTING AND COUNTING PAPER MONEY. ALLAN E. LARD, Washington, D. C., assignor to The Federal Bill Counter Company, Washington, D. C., a Corporation of Delaware. Filed June 29, 1926. Serial No. 119,411. 22 Claims. (Cl. 235—92.)



1. In a machine for counting paper money, the combination with a lower feed roll and a cooperating narrower upper feed roll by and between which the bills are gripped and fed; a yieldingly supported finger opposing and normally yieldingly engaging a portion of the surface of the lower roll at one side of the upper roll and over which portion of the surface of the lower roll bills pass in the feeding thereof, and said finger being adapted to be displaced from its said engagement with said surface by bills successively passing between said finger and said surface; and an electric circuit in which said finger and its said cooperating surface of the lower roll are contacts.

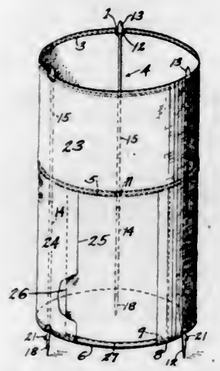
14. In a machine of the class described, the combination of a plurality of pairs of feed rolls for feeding bills or the like; a counter individual to each pair of feed rolls and means actuating each counter to count bills fed by its said feed rolls; and a manually operable device having one position in which the machine is rendered operative excluding its said counters, and another position in which the machine is rendered operative including its counters.

1,803,625. ROLLER BEARING. ALBERT L. LARSON, Beloit, Wis. Filed Apr. 17, 1924. Serial No. 707,050. 5 Claims. (Cl. 308—187.)



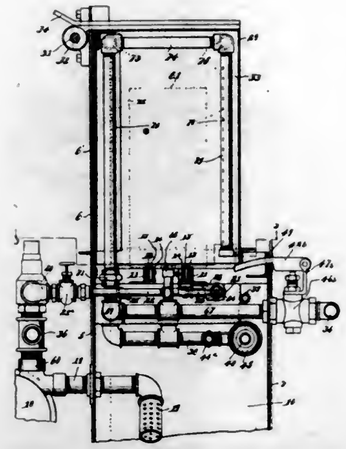
1. A roller bearing provided with a pair of roller bearing arrangements wherein the outer roller races have curved roller surfaces comprising arcs of a circle, the center of which is midway between said races, and means on the shaft for engaging and holding the inner races in position, said means comprising a split ring fitted to the shaft or journal and engaging said inner races.

1,803,626. COLLAPSIBLE PORTABLE DRESSING ROOM. JACK C. LASLEY, Los Angeles, Calif. Filed Sept. 29, 1930. Serial No. 485,091. 9 Claims. (Cl. 135—5.)



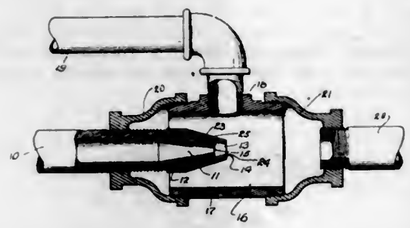
1. A frame; a flexible sleeve fixed at one end to the frame; standards supporting the frame; and other frames spaced apart below the first frame and connected to the sleeve.

1,803,627. CAN WASHING MACHINE. HENRY D. LATHROP, Chicago, Ill. Filed Jan. 26, 1927. Serial No. 163,619. 9 Claims. (Cl. 141—7.)



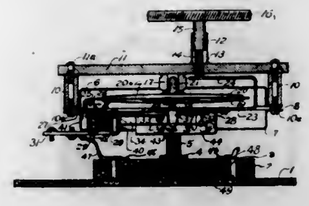
2. A receptacle cleaning apparatus comprising in combination an intermittently movable carriage for shifting receptacles to be washed along a predetermined path; a cylinder having a piston therein for actuating the carriage; means for transmitting a fluid under pressure to said cylinder for actuating said piston, including a pressure-responsive valve; means for discharging fluid from said transmitting means and utilizing it as a cleaning agent against the receptacles, comprising a valve; said pressure-responsive valve being connected with said discharging means for opening said cylinder to said fluid transmitting means for actuating said piston when said discharge valve is closed.

1,803,628. LIQUID HEATER. HARRY D. LATHROP, Chicago, Ill. Filed Aug. 5, 1927. Serial No. 210,772. 6 Claims. (Cl. 261—76.)



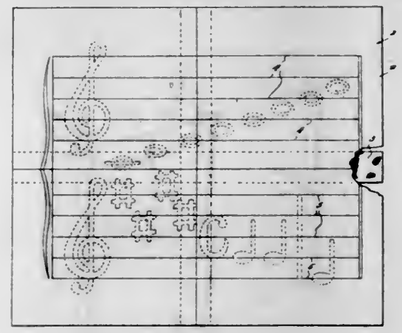
1. A liquid heating device comprising a heating chamber formed of an intermediate cylindrical member with a removable steam inlet reducer and a removable liquid outlet reducer; a steam inlet conduit having a nozzle thereon disposed within said chamber; an outlet in axial alignment with said steam inlet conduit; a liquid inlet at substantially right angles to said steam inlet conduit; a hood engaging and surrounding said nozzle and providing a relatively small annular cooling space between the nozzle and the hood for graduating the initial condensation, the tip of said hood extending beyond the tip of said nozzle, to a point in vertical alignment with the center of said liquid inlet, and means for varying the position of said nozzle relatively to said inlet.

1,803,629. THERMOSTATIC TEMPERATURE CONTROL. TIODOLF LIDBERG, Chicago, Ill., assignor to Chicago Surgical & Electrical Co., a Corporation of Illinois. Filed Mar. 10, 1927. Serial No. 174,134. 8 Claims. (Cl. 200—140.)



7. A thermostatic temperature control comprising a frame, a diaphragm fixed to said frame for thermally responsive regional movement, a bracket movably mounted relative to said diaphragm and normally inaccessible in operative placement of said frame, an electrical switch including complemental contacts fixed to said bracket for control by said diaphragm, exteriorly accessible means for adjusting the position of said bracket to move said switch relative to said diaphragm for temperature control, and meaus associated with said bracket to enclose said switch for the purpose set forth.

1,803,630. EDUCATIONAL CHART. ALBERTA LOUISE LOSSIE, Louisville, Ky. Filed Oct. 25, 1928. Serial No. 315,009. 1 Claim. (Cl. 84—471.)

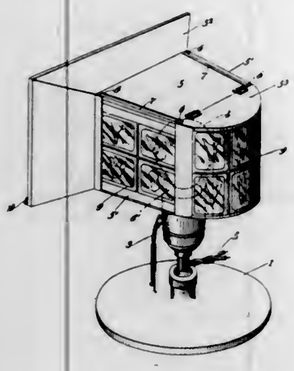


An educational device comprising a board having a representation of a staff and consisting of a plurality of flat sections of rectangular form disposed in edge to edge contact with one another, flexible strips adhering to the rear faces of the sections in bridging relation to the contacting edges thereof whereby to connect the sections and permit the chart to be folded into a compact mass, and a plurality of music symbols disposable upon the front face of the board and freely movable thereon into determined positions thereon relative to the staff.

1,803,631. ILLUMINATING DEVICE FOR THE DISPLAY AND EXAMINATION OF NEGATIVES. ELLIOTT B. MABEE, Brooklyn, N. Y. Filed July 12, 1928. Serial No. 292,163. 4 Claims. (Cl. 40—132.)

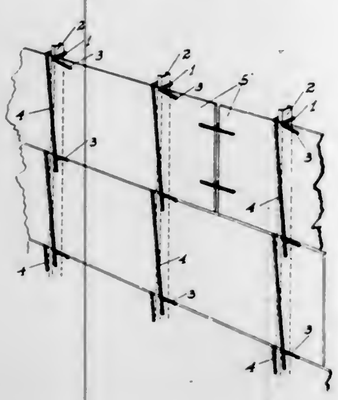
1. In a device of the character described, the combination of a casing whose sides and rear are closed in part

by light diffusing material, illuminating means therein, means at the rear of the casing for supporting a flat holder containing X-ray negatives for examination, means at the sides of the casing for holding flat mounts containing X-ray negatives, and additional means at the



front of the casing for holding mounts containing X-ray negatives in curved position, the means for holding the said mounts maintaining them in position in front of the light diffusing material for examination of the contained negatives by the light from said illuminating means, substantially as and for the purposes set forth.

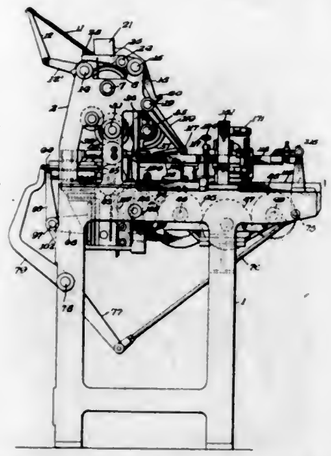
1,803,632. FASTENING CLIP. JOHN F. MAKOWSKI, Oakland, Calif., assignor of one-half to Fireproof Wall Company, a Corporation. Filed Nov. 12, 1929. Serial No. 406,583. 4 Claims. (Cl. 72—120.)



1. A clip for the purpose described comprising a yoke to embrace a stud, a hasp on one branch of the yoke and a prong on the other branch extending at substantially right angles to the longitudinal axis of the hasp.

1,803,633. CARTONING MACHINE. WES W. MCCAIN, Oak Park, Ill., assignor, by mesne assignments, to Cherry-Burrell Corporation, Wilmington, Del., a Corporation of Delaware. Filed Feb. 17, 1928. Serial No. 255,004. 21 Claims. (Cl. 93—2.)

1. A cartoning machine comprising carton feeding means, folding mechanism movable against the carton for partly folding a carton, means moving with said folding mechanism for inserting butter in said partly folded carton, and means operating after the insertion of said but-

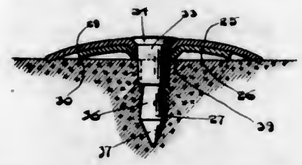


ter into said partly folded carton for folding the carton into a complete self-sustaining snugly fitting package about said butter.

1,803,634. WELDING COMPOSITION. HARRY J. MORGAN, Walnut Park, Calif., assignor to P. L. & M. Company, Los Angeles, Calif., a Corporation of California. Filed Aug. 14, 1928. Serial No. 299,636. 6 Claims. (Cl. 219—10.)

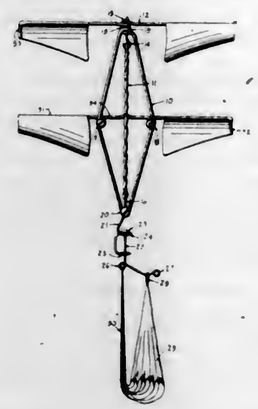
1. A composition for use in applying a hard metal facing to a metallic body by heat welding, said composition comprising a mixture of a material like tungsten in the ability of tungsten to form a hard metal when combined with a hardening element like carbon, the material and the hardening element being finely divided and in suitable proportions to give a hard metal when fused, as exemplified by the proportions of approximately nine pounds of tungsten and one pound of carbon, the material and the hardening element being bound together by a binder to form substantially homogeneous granules.

1,803,635. TRAFFIC MARKER. GEORGE DALTON MYERS, WALTER A. EDWARDS, and JOHN W. HOBING, Cincinnati, Ohio, assignors to The Edwards Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 30, 1929. Serial No. 336,092. 1 Claim. (Cl. 94—1.5.)



In combination with a traffic marker plate having a pin receiving hole therein, a fastening pin occupying the hole and consisting of a shank having at one end an enlarged head engaging the plate surrounding the hole, at the opposite end a pointed pavement penetrating portion, adjacent the penetrating portion a reversely tapered portion, and between the reversely tapered portion and the head a tamping portion of cross sectional area larger than the greatest cross sectional area of either of the first mentioned portions, said tamping portion having a sharp edged shoulder adapted to shear and tamp paving material around the reversely tapered portion when the pin is driven into the pavement through the plate.

1,803,636. HELICOPTER FLYING TOY. HARRY TRACY NELSON, Dallas, Tex. Filed Dec. 26, 1929. Serial No. 416,540. 5 Claims. (Cl. 46—52.)



1. A flying toy with a parachute attached to the lower end of the frame by means including a swivel connection having a vertical axis, one element of the swivel being rigidly attached to the frame of the toy, the other element of the swivel having the cords of the parachute fastened to it and having a portion extending for supporting the top of the parachute.

1,803,637. SOLUBLE GILSONITE AND METHOD OF MAKING SAME. IZADOR J. NOVAK, Bridgeport, Conn., assignor to The Raybestos Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 26, 1929. Serial No. 381,405. 4 Claims. (Cl. 196—22.)

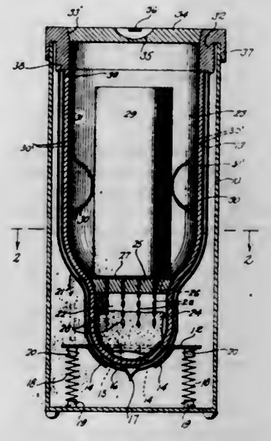
1. A method for rendering gilsonite substantially completely soluble in gasoline and like solvents and for reducing the colloidal characteristics thereof which comprises melting the gilsonite by heating in the absence of the solvent and holding the same at a temperature slightly above its melting point for a time period sufficient to induce substantially complete solubility when mixed with the solvent.

1,803,638. WHIRLING TOY. MORRIS NUDELMAN, St. Louis County, Mo. Filed Feb. 3, 1930. Serial No. 425,532. 2 Claims. (Cl. 46—14.)



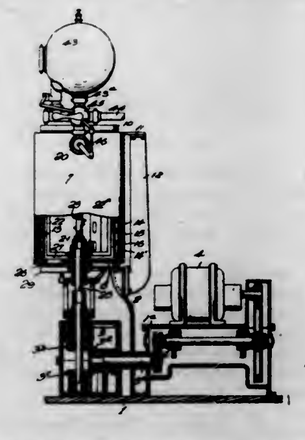
1. A whirling toy comprising a hollow disc consisting of two flat circular sides and overlapped flanges spacing them apart and affording weight to the periphery,—the inner flange being corrugated and the sides having diametrically spaced matching holes, a double cord passing through said holes for manual operation, and a metallic ball loosely disposed in the space between said sides and flanges and adapted to impinge successively the said corrugations under rotation of the disc, substantially as described.

1,803,639. REFRIGERATING APPARATUS. AUBIN E. PAYSON and MINER P. WETMORE, Norwich, Conn. Filed Sept. 21, 1928. Serial No. 307,348. 18 Claims. (Cl. 62—91.5.)



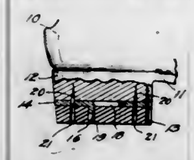
1. In refrigerating apparatus, a heat-insulated jar having an inner transverse partition removably supported by the side walls of the jar below the top and above the bottom thereof, so that the space below said partition constitutes a chamber for holding a refrigerant, the space above said partition constituting a freezing chamber larger than said lower chamber, said partition also serving as a support for a container in said freezing chamber.

1,803,640. FREEZING APPARATUS. LEROY S. PFOUTS, deceased, Canton, Ohio, by Joan S. Pfouts administratrix, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Original application filed Jan. 21, 1928, Serial No. 248,543. Divided and this application filed Aug. 9, 1928. Serial No. 298,452. 8 Claims. (Cl. 62—114.)



1. In apparatus of the class described, the combination of a support, a container for material mounted thereon and comprising a cylinder disposed vertically and having heads closing its upper and lower ends, said lower head being formed with a relatively large opening and a relatively small opening, and a valve element for controlling the discharge of material through the relatively large opening and having a portion to control the discharge of material through said relatively small opening independently of the discharge of material through the large opening.

1,803,641. FASTENER FOR RUBBER HEELS. LUIGI PIONANELLI, Tacoma, Wash. Filed Oct. 4, 1927. Serial No. 223,890. 2 Claims. (Cl. 36—35.)



1. A means for securing an apertured rubber-heel to a shoe structure comprising a leather coupler between the shoe structure and the heel, said coupler being provided with pin elements struck-out from the leather coupler inwardly of the peripheral edges thereof and extending downwardly into some of the apertures of the heel and terminating flush with the lower face of the heel, said struck-out pins providing elongated apertures in the coupler forming cushioning air pockets between the shoe structure and rubber heel, and headed nails inserted in other of the heel apertures and driven through the coupler to engage in the shoe structure, the heads of said nails bearing against the coupler.

1,803,642. PAPER PRODUCT AND METHOD OF MAKING THE SAME. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,167. 20 Claims. (Cl. 92—21.)

1. The method of manufacturing a sized paper filled with carbonate filler comprising adding carbonate filler, in an amount sufficient to impart a substantial degree of filling to the resulting paper, to previously sized fibre in the papermaking process under conditions favoring the minimizing of time of contact between the carbonate filler and the previously sized fibre, and thereafter making paper therefrom.

1,803,643. PAPER PRODUCT AND METHOD OF MAKING THE SAME. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,168. 24 Claims. (Cl. 92—21.)

1. The method of manufacturing a sized paper filled with carbonate filler comprising adding to a previously sized paper mix containing carbonate filler a sizing reatoring material under conditions favoring the minimizing of the time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,803,644. METHOD OF SIZING PAPER. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Rafton Laboratories, Inc., a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,169. 26 Claims. (Cl. 92—21.)

1. The method of sizing paper comprising adding to fibrous material a substantially nonbreakable paraffin emulsion and a substance capable of reacting with a second substance subsequently added to form a precipitate, said precipitation serving to concentrate the disperse phase of said paraffin emulsion, but not to break said emulsion, and thereafter making paper therefrom.

1,803,645. PAPER PRODUCT AND METHOD OF MAKING THE SAME. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,170. 21 Claims. (Cl. 92—21.)

1. The method of manufacturing a sized paper filled with carbonate filler comprising adding to fibrous material a substantially nonbreakable paraffin emulsion and a substance which will react with a second substance subsequently added to form a precipitate, adding said second substance, the reaction caused thereby serving to concentrate the disperse phase of said paraffin emulsion but not to break said emulsion, adding carbonate filler, hereafter adding a sizing restoring agent under conditions favoring the minimizing of the time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,803,646. METHOD OF ELIMINATING FOAM IN PAPER MANUFACTURE. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,171. 35 Claims. (Cl. 92—21.)

1. The method of manufacturing substantially unsized paper filled with carbonate filler comprising adding to a mix containing fibrous material and carbonate filler, acidic material at the wet end of the paper machine, and thereafter making paper therefrom.

1,803,647. MANUFACTURE OF CARBONATE FILLED SIZED PAPER. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,172. 20 Claims. (Cl. 92—21.)

1. The method of manufacturing a sized paper filled with carbonate filler comprising adding to a paper mix containing fibrous material, carbonate filler, and size, a size precipitant under conditions favoring the minimizing of the time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,803,648. METHOD OF SIZING CARBONATE FILLED PAPER. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,173. 28 Claims (Cl. 92—21.)

1. The method of manufacturing a sized paper filled with carbonate filler comprising adding to fibrous material a substantially nonbreakable paraffin emulsion and a substance which will react with a second substance subsequently to be added to form a precipitate, said reaction serving to concentrate the disperse phase of said paraffin emulsion but not to break said emulsion, adding carbonate filler, thereafter adding said second precipitating substance under conditions favoring the minimizing of the time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,803,649. METHOD OF ELIMINATING FOAM IN PAPER MANUFACTURE. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,174. 14 Claims. (Cl. 92—21.)

1. The method of manufacturing substantially unsized paper filled with carbonate filler comprising mixing with fibrous material carbonate filler and saponified material, said saponified material being added in an amount insufficient to produce a substantially sized paper, thereafter adding to the resulting mix a precipitant at the wet end of the paper machine, and thereafter making paper therefrom.

1,803,650. METHOD OF SIZING CARBONATE FILLED PAPER. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,175. 23 Claims. (Cl. 92—21.)

1. The method of sizing paper filled with carbonate filler comprising separately mixing size and size precipitant, and mixing the resulting product with fibrous material and carbonate filler under conditions favoring the minimizing of the time of contact of the constituents of the mix, and thereafter making paper therefrom.

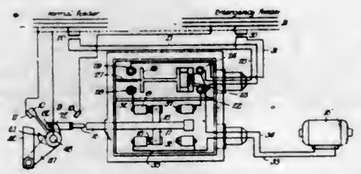
1,803,651. METHOD OF SIZING CARBONATE FILLED PAPER. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,176. 19 Claims. (Cl. 92—21.)

1. The method of sizing paper filled with carbonate filler comprising mixing with fibrous material a paraffin emulsion made with a substantially water soluble type emulsifying agent, fibre associating agent, and carbonate filler, and thereafter adding a restoring agent under conditions favoring the minimizing of the time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,803,652. METHOD OF SIZING CARBONATE FILLED PAPER. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Sept. 5, 1928. Serial No. 304,177. 19 Claims. (Cl. 92—21.)

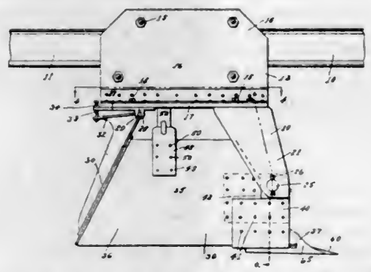
1. The method of sizing paper filled with carbonate filler comprising mixing with fibrous material carbonate filler, a paraffin emulsion made with a substantially water insoluble type emulsifying agent, and a potential fibre associating agent, and thereafter adding to the resulting mix a precipitant for said potential fibre associating agent under conditions favoring the minimizing of the time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,803,653. SYSTEM OF ELECTRICAL DISTRIBUTION. JOSEPH RAH, Chicago, Ill., assignor, by mesne assignments, to G. and W. Electric Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 21, 1927. Serial No. 177,021. 13 Claims. (Cl. 171—97.)



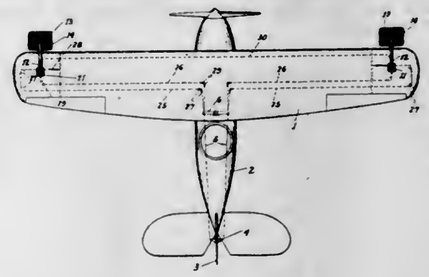
1. In a system of electrical distribution, the combination of a normal feeder, an auxiliary feeder, a service switch for selective connection to either feeder, a mechanical motor for actuating said service switch, an electric motor for storing power in said mechanical motor, and means for controlling the circuit of said motor dependent upon operating conditions on one of said feeders.

1,803,654. EXCAVATOR BUCKET. GEORGE T. RONK, Cedar Rapids, Iowa, assignor to Speeder Machinery Corporation, Cedar Rapids, Iowa, a Corporation of Iowa. Filed Aug. 8, 1927. Serial No. 211,461. 11 Claims. (Cl. 214—145.)



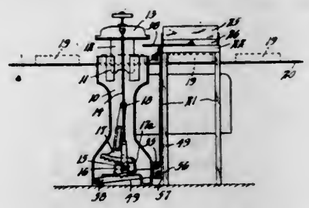
1. In a device of the class described, a bucket support having spaced downwardly extending arms, a bucket member comprising side and bottom portions, the front ends of said side portions being pivoted to and between said downwardly extending arms, a bail adjustably connected to said side portions to change the inclination of said bottom portion, a latch device for connecting said bail with said support, an end plate pivoted to said support, and means for adjusting the angle of said end plate to fit the end of said side members.

1,803,655. DIRECTIONAL STABILIZER FOR AIRCRAFT. HERVEY M. SALISBURY, Walnut Grove, and ARTHUR E. MILLER, Sacramento, Calif. Filed Oct. 19, 1929. Serial No. 400,803. 7 Claims. (Cl. 244—29.)



1. In an airplane having a wing and a horizontal-direction control rudder, horizontal vertically movable air engaging elements mounted in connection with the wing on both sides of the center of span of the same, vertical longitudinally extending and transversely movable air engaging elements disposed adjacent said first named elements, means connecting the adjacent ones of said elements as a unit, and connections between said means and the rudder for causing the rudder to be turned with the vertical or transverse movement of the elements independently.

1,803,656. AUTOMATIC FEEDER FOR CANDY MACHINES. FRANK M. SCHULER, Winona, Minn. Filed Oct. 29, 1928. Serial No. 315,726. 7 Claims. (Cl. 107—7.)

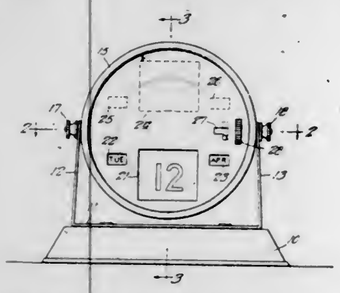


5. An article feeding device for a candy making machine adapted to discharge cherries or other articles into moulds, having in combination, a hopper for containing a multiplicity of said cherries or other articles, said hopper having a bottom with a plurality of rows of holes therein adapted to receive said cherries or articles, plates movable above and below said bottom having rows of apertures therethrough adapted to align with the said holes, stops on said plates limiting the movement thereof, with said apertures respectively in or out of alignment with said holes, a reciprocating actuating member, a yielding connection between said member and said plate above the bottom of said hopper, an arm and lost motion connection between said actuating member and the plate below the bottom of said hopper and a retracting spring connected to said last mentioned plate.

1,803,657. AZO DYESTUFFS AND METHOD FOR THEIR PREPARATION. ALFRED SIEGEL, Newark, N. J., assignor, by mesne assignments, to The Grasselli Chemical Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 2, 1926. Serial No. 91,812. 15 Claims. (Cl. 260—95.)

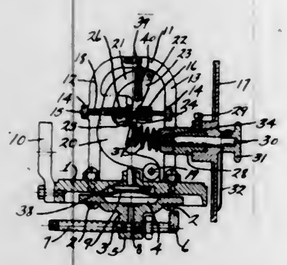
1. The method of preparing an arylamid of 2.3 hydroxynaphthoic acid for coupling, which comprises treating said compound with a hot concentrated solution of caustic soda to produce a homogeneous liquid mass and delivering the resulting mass into a relatively large volume of water.

1,803,658. INDICATING DEVICE. JACOB A. SMITH, River Forest, Ill., assignor to Mayer Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed July 14, 1928. Serial No. 292,723. 11 Claims. (Cl. 40—107.)



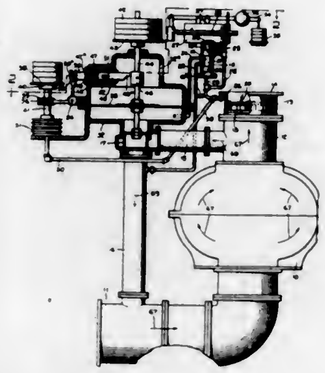
1. A device of the character described comprising a pair of housing sections including annular flange portions telescoping with each other to form a housing, a supporting rod extending substantially centrally through said housing and through said flange portions to thereby lock said housing sections together, means for supporting said rod whereby said housing may rotate about said rod as a center, and indicating means in said housing adapted to change its indication upon each half rotation of said housing.

1,803,659. PRESSURE REGULATING DEVICE. ARTHUR E. STANLEY, Elkhart, and ROBERT ZONES, Mishawaka, Ind. Filed Oct. 31, 1927. Serial No. 230,118. 8 Claims. (Cl. 50—5.)



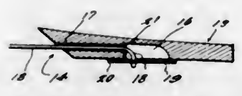
1. The combination with an air pipe line, a plug valve in said pipe line, a diaphragm controlled member, of a pivoted lever adjacent said diaphragm controlled member and moved by said member upon a predetermined pressure, a support adjacent said pivoted lever, means for adjusting said support in relation to the pivoted lever, an expansion spring interposed between the support and the pivoted lever and acting against the diaphragm controlled member, an arm carried by said plug valve, a slidable block, a link connection between the slidable block and the arm of the plug valve, a pivoted arm carried by the pivoted lever and disposed in a recess of the block, a spring, one end of said spring being anchored to the pivoted arm and at a point above said pivoted arm in a position where the pivotal point of the arm will pass therebetween.

1,803,660. COMPRESSOR AND PUMP. EVERETT W. SWARTWOUT, White Plains, N. Y. Filed Dec. 5, 1928. Serial No. 323,980. 20 Claims. (Cl. 230—22.)



1. The combination of a pressure producing device having an inlet passage and a discharge passage, a pressure line communicating with one of said passages, unloading means for said device including passage means for interconnecting said discharge passage with said inlet passage of said device, a valve for said unloading means, and means preset for a definite and substantial range of variation of the pressure of the pressure line for moving said valve to and from its closing and opening positions.

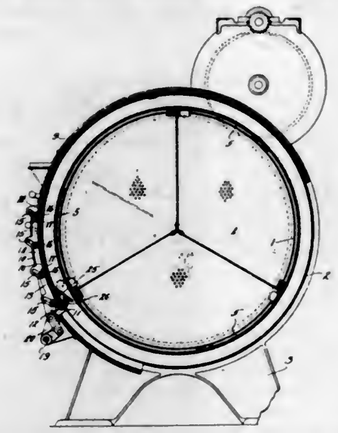
1,803,661. TAILPIECE RETAINING MEANS. ALFRED R. SWEARINGEN, Miami, Fla., assignor of one-eighth to Helen M. Reardon, Miami, Fla., and one-fourth to Albert Quadow, Miami, Fla. Filed Feb. 7, 1930. Serial No. 426,658. 2 Claims. (Cl. 84—302.)



1. In a stringed musical instrument accessory of the class described, a tailpiece provided at one end with a recess and spaced parallel communicating bores, an anchoring loop having its end portions passing forwardly through said bores and arranged in said recess a separate plate covering said recess and contacting with the underside of the adjacent portion of the tailpiece and provided with means for attachment of the terminal ends of said anchoring loop thereto.

1,803,662. UNLOADING OR DISCHARGING MEANS. EMIL J. CARROLL and EDMUND I. CUTTER, Norwood, Ohio, assignors to The American Laundry Machinery Company, Norwood, Ohio, a Corporation of Ohio. Filed Nov. 27, 1925. Serial No. 71,743. 14 Claims. (Cl. 68—18.)

1. In a machine of the character described, a liquid receiving casing provided with a pair of openings, a slidable closure for each of said openings, clamping means effective between said closures for maintaining the same



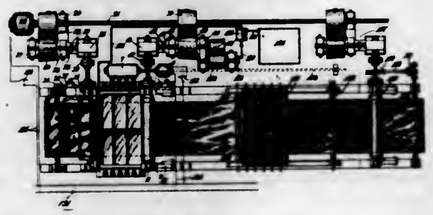
in liquid sealing position, and a single means for actuating said clamping means to unclamp both of said closures.

1,803,663. METHOD AND MEANS FOR PRODUCING BLISTER COPPER FROM COPPER BEARING MATERIALS. GEORGE CAMPBELL CARSON, San Francisco, Calif., assignor to Carson Investment Company, a Corporation of Nevada. Filed Apr. 6, 1926. Serial No. 100,068. 11 Claims. (Cl. 75—62.)



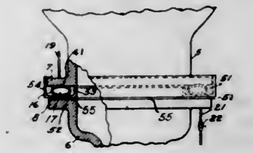
1. The method of smelting sulphide copper ores which comprises forming adjacent embankments of ore and siliceous material and smelting the ore to copper matte for flow along the base of the ore embankment and along the base of the embankment of siliceous material, of bessemerizing the matte adjacent said embankment of siliceous material for fluxing the ferrous oxide therewith, and withdrawing the blister copper from thereunder and the slag from the surface thereof.

1,803,664. MACHINE FOR AND METHOD OF DYEING CLOTH AND OTHERWISE TREATING TEXTILES. WALLACE P. COHOE, Riverdale-on-Hudson, N. Y., assignor to Cohoe Processes, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 28, 1926. Serial No. 157,520. 41 Claims. (Cl. 8—18.)



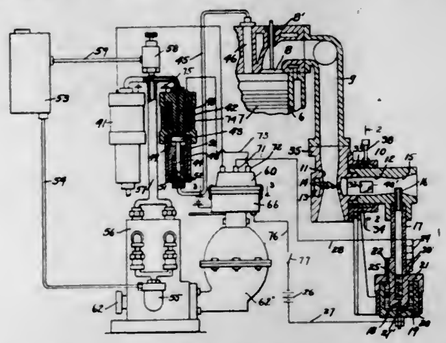
1. A machine for treating a textile with a fluid comprising a container for the fluid, a roll within the container for contact with the fluid and adjacent which the textile passes, means adapted to pass the textile through the container, means adapted to move the roll at such a rate of speed that a film of the fluid is formed on the surface of the roll and moves therewith, and means to adjust the distance of the textile from the surface of said roll.

1,803,665. EXPANSION JOINT OR COUPLING. BASIL W. DENNIS, Columbus, Ohio. Filed Dec. 24, 1925. Serial No. 77,632. 9 Claims. (Cl. 285—130.)



1. In apparatus of the character described, in combination, two conduit sections having portions of their adjacent ends in spaced relation and adapted for relative approach and recession to a substantial extent means for sealing the space between end portions of said conduit sections against leakage of fluid thereacross, said means comprising a flexible hollow gasket in sealing engagement with one of said conduit sections, a carrier for said gasket, said gasket with its carrier being insertible transversely of the axis of said conduit sections to operative position therebetween, and means for automatically maintaining a substantially constant pressure within said gasket in spite of relative movement of the portions of said conduit sections which said gasket engages.

1,803,666. FUEL FEEDING SYSTEM. LOUIS O. FRENCH, Milwaukee, Wis. Filed Jan. 28, 1928. Serial No. 250,216. 9 Claims. (Cl. 123—136.)

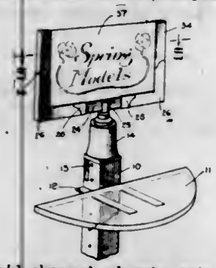


1. In a fuel supply system, the combination with the engine and a fuel-control electromagnet, of a variable resistance controlled by the suction of the engine for controlling the action of said electromagnet.

1,803,667. SHOW CARD HOLDER FOR DISPLAY STANDS. MATTHEW M. FRIEDEMANN, New York, N. Y. Filed June 12, 1928. Serial No. 284,861. 1 Claim. (Cl. 40—146.)

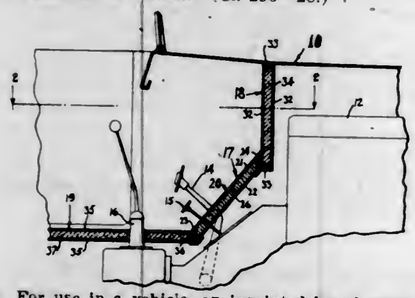
In a display assembly including a tubular standard, a show card holder or frame including a plug member, one end thereof including a portion including a fitting to be disposed in coupling engagement with said standard, the opposite end of said member comprising a bifurcated extension, an open sided channel fitted within said bifurcated section, channel angle members comprising side branches disposed to either side of said open sided channel including inwardly directed lips engaging the upper edges of said member and enveloping the same loosely

for sliding engagement therewith, slots formed in said angle members, fastening members disposed through said



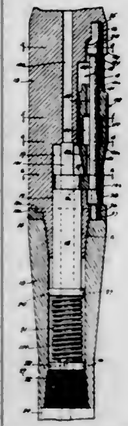
slots engaging said channel whereby said angle members may be disposed at predetermined positions and extend the side branches relatively to each other.

1,803,668. VEHICLE BODY CONSTRUCTION. MARIAN GALE, Los Angeles, Calif. Filed Feb. 20, 1928. Serial No. 255,565. 2 Claims. (Cl. 296—28.)



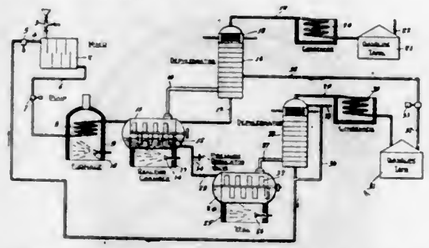
1. For use in a vehicle, an insulated board comprising spaced top and bottom members, end and side members secured to said top and bottom members, said top and bottom members each being formed of a plurality of pieces of wood veneer secured together, said end and side members each being formed of a single piece of wood and being of greater thickness than said top and bottom members, the space between said top, bottom, end and side members being filled with asbestos.

1,803,669. COMPOUND EXPANDING UNDERREAMER. JOHN GRANT, Los Angeles, Calif. Filed Dec. 21, 1927. Serial No. 241,653. 20 Claims. (Cl. 255—75.)



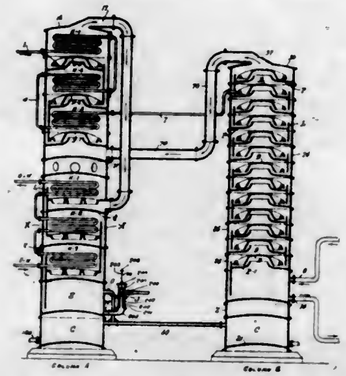
1. In an expansive reamer, a body, a cutter carrying member movable for expansion and contraction with relation to the body, and a cutter mounted exclusively on said carrier and movable with relation thereto for expansion and contraction.

1,803,670. PROCESS OF TREATING HYDROCARBON OIL WITH METALLIC HALIDES. RICHARD W. HANNA, Piedmont, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Jan. 22, 1927. Serial No. 162,725. 10 Claims. (Cl. 196—54.)



2. A process of treating hydrocarbon oils with metallic halide to convert relatively high boiling point oil to relatively low boiling point oil which comprises passing a mixture of hydrocarbon oil and metallic halide under a pressure sufficient to prevent the unconverted relatively high boiling point oil from vaporizing through a heating coil wherein the same is heated to a reaction temperature, passing the admixture into a reaction chamber wherein the admixture is maintained for a period of time at the reaction temperature, removing produced low boiling point oils as vapors from said reaction chamber then passing admixed hydrocarbon oil and metallic halide to a chamber maintained under a substantially reduced pressure, wherein the hydrocarbon oil is vaporized from the metallic halide residue rendered inactive condensing unconverted higher boiling points oils from the vapors vaporized from said metallic halide and returning said oils to the reaction chamber.

1,803,671. DISTILLATION SYSTEM. ARTHUR F. KEANE, Syracuse, N. Y., assignor to Somet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 17, 1926. Serial No. 102,627. 19 Claims. (Cl. 196—100.)



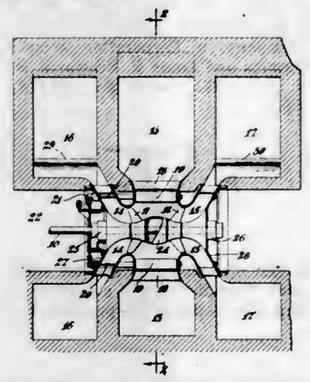
1. In a steam distillation apparatus the combination of a steam distillation column containing a plurality of similar ring sections provided with plates and overflow collars, the alternate ones of which are staggered 180° with respect to each other forming a circuitous path via cooperating overflow collars of adjoining plates, a hood having a multiplicity of inverted crown-like elements therein supported on each of said ring sections, with a unitary structure composed of superposed cooperating ring and plate sections constituting a heat interchanger for liquid feed going to and vapor product coming from the said distillation column, a condenser for condensing the said vapor after it has passed through said heat interchanger, and

a separator in which the condensate from the aforesaid step separates into two layers so as to permit water contained in the upper of said two layers and product to be withdrawn continuously and separately.

1,803,672. PROCESS OF RESTORING THE LUSTER TO RAYON. GUILLAUME LARDY, Peage-de-Roussillon, France, assignor, by meane assignments, to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed July 7, 1928, Serial No. 291,140, and in Great Britain Nov. 4, 1927. 6 Claims. (Cl. 18—48.)

6. A process which comprises wetting and hot-calendering predetermined areas of a fabric containing dulled cellulose acetate threads at a temperature between 125° C. and 170° C. and a pressure of .1 kg./cm² to .5 kg./cm² whereby patterns having a luster are formed on a dull background.

1,803,673. HYDRAULIC TURBINE. LEWIS FERRY MOODY, Philadelphia, Pa. Original application filed June 25, 1920, Serial No. 391,583. Divided and this application filed Mar. 29, 1926. Serial No. 98,081. 27 Claims. (Cl. 253—102.)



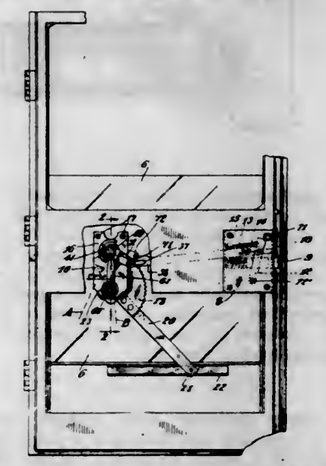
1. In a hydraulic turbine the combination with an intake passage of a plurality of runners supplied thereby, a discharge space for each runner, adjustable guide vanes in said intake passage, and stems for said adjustable guide vanes passing through one of said discharge spaces.

1,803,674. ROLLER SCREEN. CHARLES E. NICHOLSON, Detroit, Mich. Filed Jan. 24, 1928. Serial No. 249,140. 1 Claim. (Cl. 156—39.)



In a window screen device, a vertical angle bar adapted to be secured to a window frame, a screen roller supporting bracket adapted to be secured to a window sash and projecting forwardly therefrom toward the angle bar, and an idler roller, one end of which is carried by the forward terminal of the bracket over which the screen is trained for urging the screen into contact with the angle bar.

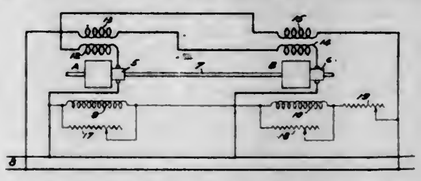
1,803,675. OPERATING MEANS FOR AUTOMOBILE DOOR LATCHES AND WINDOW REGULATORS. LEON OTTINGER, New York, N. Y. Filed June 2, 1928. Serial No. 282,426. 12 Claims. (Cl. 268—126.)



2. In combination with an automobile door latch and window regulator each having an actuating element, a single operating handle therefor, a part mounted in said handle and manually movable independently thereof, and spaced means simultaneously operable upon the actuation of said part to establish an operative connection between said handle and one of said actuating elements while disestablishing such operative connection between the handle and the other actuating element.

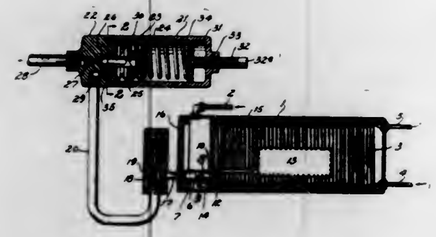
7. In combination with an automobile door latch having an outside handle, and a window regulator, a single inside operating handle therefor, means for establishing an operative connection at will between said handle and the window regulator or the door latch to actuate the latter when said handle is moved in one direction, and means rendered effective by movement of said handle in the opposite direction to lock the door latch against operation by the outside handle.

1,803,676. SYSTEM OF DISTRIBUTION. WILLIAM H. POWELL, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed May 27, 1927. Serial No. 194,578. 11 Claims. (Cl. 171—223.)



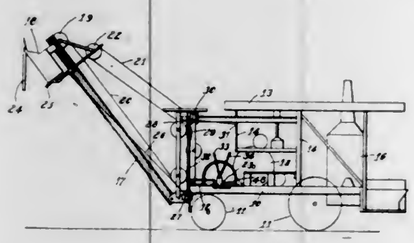
1. In combination, a plurality of direct current dynamo-electric machines having normal operating characteristics of shunt wound machines and connected to supply a common load, each machine having a regulating field winding, said regulating winding on one of said machines including sections connected to carry current proportional to that in the armature circuits of the respective machines and producing energizing effects which neutralize each other during normal operation of said machines.

1,803,677. VALVE CONTROLLING MECHANISM FOR REFRIGERATING SYSTEMS. WALTER G. E. ROLAFF, St. Louis, Mo. Filed Aug. 13, 1926. Serial No. 129,038. 8 Claims. (Cl. 62—8.)



2. In a refrigerating system, in combination with a receiver for liquid refrigerant connected with the low side of the system, a float valve for controlling the flow of refrigerant from the receiver, and a valve interposed in the line between said receiver and the low pressure side of the system and normally held closed by a predetermined pressure exerted on one side and adapted to be opened by a greater pressure by the liquid refrigerant from said receiver exerted on the other side.

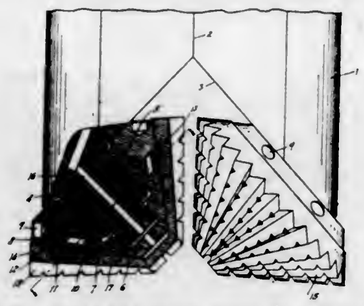
1,803,678. TRIP DEVICE FOR POWER SHOVELS. ARTHUR E. RUTLEDGE and EDWARD T. CLEARY, Rockford, Ill. Filed June 5, 1926. Serial No. 113,913. 3 Claims. (Cl. 214—146.)



1. In a machine of the character described, a frame, a boom extending therefrom, a movable shovel carried thereby having a releasable latch for dumping the same, a dump cable connected with said latch and extending to said frame and connected to a part thereof, there being a certain amount of slack in said cable to afford a predetermined range of movement for said shovel, pulley in a loop of slack cable arranged to have translational movement as the cable slack is used in the movement of said shovel, a slidable bearing member for said pulley, a guide whereon said bearing member is arranged to move, and means cooperating directly with the guide and equally effective in the movement of the bearing in either direction for frictionally braking the movement of said bearing on said guide at any point in the travel thereof.

1,803,679. DRILL CUTTER RETAINING MEANS. FLOYD L. SCOTT, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Dec. 16, 1925. Serial No. 75,709. 13 Claims. (Cl. 255—71.)

1. In a drill cutter, a frusto-conical shaped bushing formed to surround the end of its supporting shaft, a toothed cutter shaped to fit upon said bushing, registered grooves in the bearing surfaces of said bushing and cutter spaced between the forward end and the base and



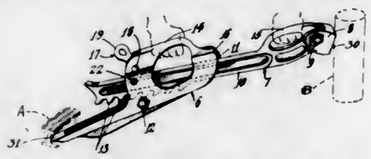
a resilient locking ring fitting within said grooves to prevent longitudinal movement of said cutter on said bushing during operations.

1,803,680. TOOTH-CROWN AND METHOD OF FORMING AND APPLYING THE SAME. ELI P. SCHWARTZ St. Louis, Mo., assignor to Schwartz Bros. Dental Laboratory Company, a Corporation composed of said Eli P. Schwartz and Louis R. Schwartz, St. Louis, Mo. Filed Oct. 14, 1927. Serial No. 229,697. 8 Claims. (Cl. 32—29.)



1. The method of forming crowns for teeth which consists in casting the same around a nuclear crown formed from a casting of a model of the prepared tooth in a suitable mold.

1,803,681. CIRCLE BRACE. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron Jackson Co., West Berkeley, Calif., a Corporation of Delaware. Filed Apr. 25, 1928. Serial No. 272,604. 6 Claims. (Cl. 255—35.)

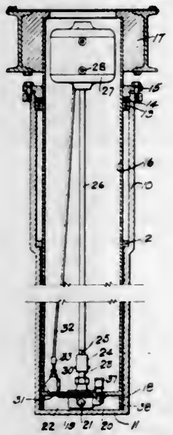


1. A circle brace comprising two slidably connected sections, one of said sections provided beneath the other section with an abutment and the other with teeth on its lower edge to engage said abutment, an abutment on the first mentioned section above the second mentioned section and offset from the first mentioned abutment longitudinally of the first mentioned section, a means to releasably hold the sections toward each other to prevent disengagement of a tooth with the abutment, and a shoe on the outer end of one of the sections for engagement with a drill stem.

1,803,682. VEHICLE LIFTING JACK. LOUIS C. STUKENBORG, Memphis, Tenn., assignor to Oildraulic Lift Company, Memphis, Tenn., a Corporation of Delaware. Filed Jan. 30, 1928. Serial No. 250,468. 7 Claims. (Cl. 138—9.)

1. In a lifting jack, a vertically disposed hollow cylinder, and a self contained lifting unit vertically movable therein, said unit comprising a hollow piston adapted to contain a lifting fluid, and having the lower end

thereof interiorly threaded, a pump having a threaded flange therearound screwed into said threaded portion to form a closure for the lower end of said piston, an



intake for said pump within said piston, an outlet for said pump exterior of said piston, and means carried by said piston for actuating said pump.

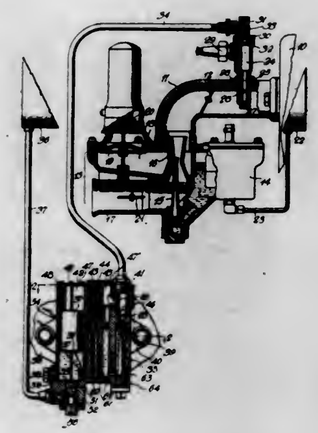
1,803,683. AUTOMATIC VALVE FOR FLUID LIFT DEVICES. JAMES W. TAYLOR, San Antonio, Tex., assignor to Economy Pump and Oil Tool Company, a Corporation of California. Filed Apr. 9, 1927. Serial No. 182,283. 5 Claims. (Cl. 103—232.)



1. In a device of the character described including a well casing, a flow tubing therein, said casing being closed about said tubing at its upper end, the combination of a valve housing in said tubing, a piston in said housing, a valve connected with said piston, means to conduct pressure fluid into said casing, a passage from the outside of said tubing adapted to be closed by said valve, a second passage from without said tubing connecting with the side of said housing away from said valve, and means tending to hold said valve in open position with a predetermined pressure.

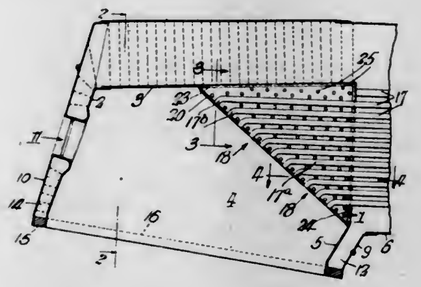
1,803,684. CARBURETOR. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Original application filed Apr. 21, 1923, Serial No. 333,595. Divided and this application filed Jan. 11, 1926. Serial No. 80,687. 9 Claims. (Cl. 261—121.)

1. A carburetor adapted to carburet only unvarying amounts of fuel for any successive units of time under normal conditions, including in combination a mixing chamber, a constant level fuel reservoir having communication with said chamber to supply fuel thereto



by gravity, and means to render ineffective on said reservoir any suction effect in said chamber, whereby fuel is furnished said chamber at an unvarying rate.

1,803,685. LOCOMOTIVE BOILER. TORRIS H. ALFREDS, Park Ridge, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 23, 1929. Serial No. 387,837. 5 Claims. (Cl. 122—69.)

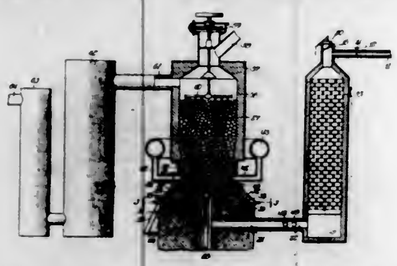


1. A locomotive boiler embodying therein a firebox having a crown sheet and a front sheet and flues leading from said front sheet, a flat hollow element fixed to said crown sheet and front sheet respectively to open therethrough, and including a wall inclined upwardly and rearwardly from said front sheet, certain of said flues extending through said element to be fixed in and to open through said inclined wall thereof.

1,803,686. GAS PRODUCTION. CHARLES W. ANDREWS, Duluth, Minn., assignor of one-half to Herman A. Brassert, Chicago, Ill. Filed Nov. 28, 1923. Serial No. 676,473. 2 Claims. (Cl. 48—202.)

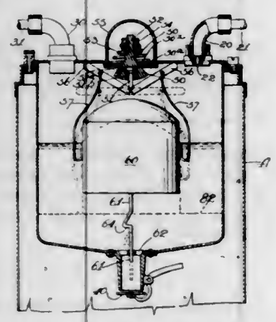
2. The process of raising the calorific value of a gas containing a considerable portion of carbon dioxide, which consists; in passing the gas through a zone of partly consumed coke at a high temperature, next through a zone of coke at a higher temperature, introducing air and steam alternately directly in said latter zone, and then

passing the gas through a zone of substantially raw bituminous coal and thereby distilling and coking the coal



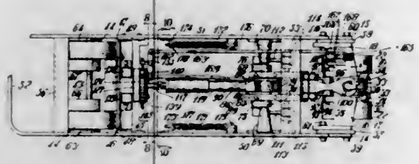
and enriching the mixed gases with the products of distillation, and agitating said coal during the passage of the gas.

1,803,687. VACUUM TANK. JOHN LEWIS ANDREWS, Elmwood Park, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Jan. 18, 1929. Serial No. 333,322. 11 Claims. (Cl. 103—236.)



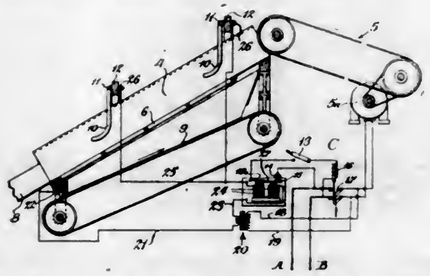
1. In an apparatus for lifting fuel by suction, in combination with a receptacle to which the liquid is to be lifted, having connection for liquid inflow and a liquid outlet at the lower part with an outlet controlling valve; a continuously open suction port and an atmosphere inlet port; an inwardly opening valve controlling the atmosphere inlet port; spring means reacting against a part fixed with respect to the valve seat for holding said valve normally seated against the suction; a float in the chamber and operating connections from the float for moving the atmosphere valve inwardly by the buoyant effort of the float against the resilient reaction of the spring-valve-seating means upon predetermined rise of level of the liquid in the chamber.

1,803,688. LIFT TRUCK. ARTHUR M. BARRETT, Winnetka, Ill., assignor to Barrett-Cravens Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1928. Serial No 294,179. 27 Claims. (Cl. 254—2.)



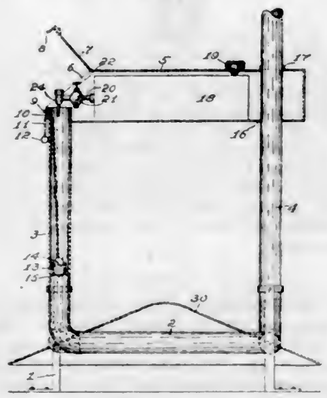
1. In a lift truck, the combination with main and lifting frames and a steering handle, of means operable by said steering handle to lift the lifting frame comprising a rocking member mounted on the main frame, a lifting lever fulcrumed to swing concentrically with the axis of said rocking member and connected with said steering handle to be actuated thereby, pawl and ratchet mechanism operatively connecting said lifting lever and said rocking member for rocking the same to lift the lifting frame, lifting means connecting said rocking member with the forward portion of the lifting frame, holding means interposed between said rocking member and the rear portion of the main frame for normally holding the lifting frame against descent, and means operable to release said holding means.

1,803,689. CONVEYER CONTROL. WALTER H. BERNADT, Buffalo, N. Y. Filed Dec. 27, 1929. Serial No. 416,806. 7 Claims. (Cl. 198—37.)



7. In apparatus for transferring electrically conductive materials from one point to another, a conveyer for delivering the materials to a point of discharge, a motor operatively connected to said conveyer, a normally closed circuit through said motor, a second conveyer for carrying off the materials discharged from said first mentioned conveyer, intermediate means arranged between the two conveyers for facilitating the transfer of the materials from one to the other, automatic means for breaking the circuit through said motor comprising an armature carrying a contact, a magnet for operating said armature, said magnet being included in a normally open circuit and contact means as a part of said circuit carried by said intermediate means and adapted to contact with the materials being conveyed should the materials back up in the intermediate means beyond a predetermined height, said materials being utilized in such case as a conductor to close the normally open circuit through said magnet.

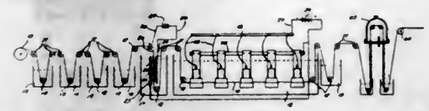
1,803,690 HEATING APPARATUS. CRENO P. BETTENGA, Marshalltown, Iowa. Filed Apr. 22, 1929. Serial No. 357,133. 5 Claims. (Cl. 126—94.)



1. A device of the character described, comprising in combination, a coil of pipe having vertical open end parts

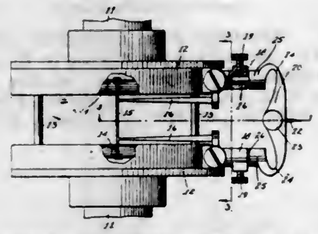
which serve respectively as a combustion chamber and a discharge flue, a burner mounted in spaced relation in said combustion chamber, a hollow housing one end of which is in communication with said combustion chamber, the other end traversed by said flue, and having an air inlet in its bottom adjacent said flue, a closed tank for liquid fuel in said housing, and valve-controlled means for delivering liquid fuel from said tank through said combustion chamber into said burner.

1,803,691. PROCESS AND APPARATUS FOR PLATING WIRE. CARL P. BROCKWAY, Ridgewood, N. J., assignor to World Bestos Corporation, Paterson, N. J., a Corporation of Delaware. Filed Nov. 28, 1928. Serial No. 322,365. 21 Claims. (Cl. 204—1.)



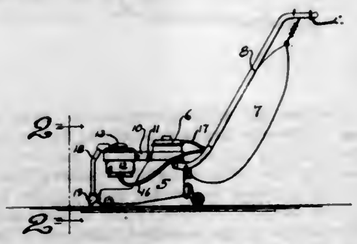
5. The process of chromium plating an iron wire which comprises thoroughly cleansing said wire, passing said wire through a bath of the plating solution, and simultaneously causing a current to flow from said wire through said solution to an electrode, immediately thereafter causing a current to flow from another electrode through said solution to said wire whereby a coating of chromium is applied to said wire, passing said wire in close proximity to a plurality of electrodes in said plating solution and causing a current to flow from said electrodes to said wire, whereby the coating of chromium is increased on said wire, and subjecting successive portions of said wire continuously to electrical bombardment in a vacuum.

1,803,692. PHONOGRAPH ATTACHMENT. ULYSSES J. BURKE, Des Moines, Iowa. Filed Dec. 14, 1928. Serial No. 326,116. 6 Claims. (Cl. 274—37.)



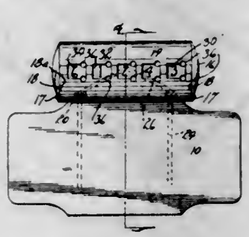
5. A phonograph attachment comprising a stylus yoke having a bar, laterally extending end portions adapted to be secured to the stylus bars of a double phonograph unit, thin portions connecting the bar and the end portions, and a clamping device in the central portion of the yoke for receiving a stylus.

1,803,693. CLEANING MEANS. HERBERT A. CUTTING, Detroit, Mich. Filed Apr. 24, 1929. Serial No. 357,649. 2 Claims. (Cl. 15—14.)



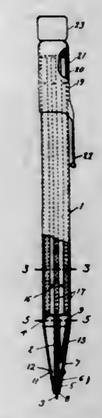
1. A vacuum cleaner including a housing member and a suction inlet, a water container removably secured to said housing and having an outlet leading to a point adjacent said suction inlet and means for heating water in said container to supply steam to an article being cleaned.

1,803,694. OILMETER. ERNEST R. ERICKSON, Des Moines, Iowa, assignor to C. E. Erickson Company, Inc., Des Moines, Iowa. Filed Apr. 29, 1930. Serial No. 448,233. 6 Claims. (Cl. 40—68.)



1. In a device of the class described, a plate, a cylinder at one end thereof formed by rolling a portion of the material of the plate into shape, said plate having slots and said portion having tongues projected through said slots and provided with openings and pin members extended through said openings for holding the cylinder in assembled position.

1,803,695. PENCIL. THEODORE P. GARANKIN, New York, N. Y. Filed Mar. 31, 1930. Serial No. 440,553. 3 Claims. (Cl. 120—14.)

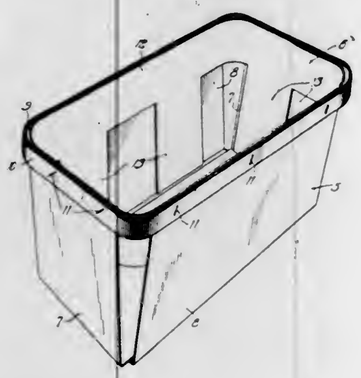


1. In a pencil, the combination with a tubular member, of a bottom tube for leads supported at the operating end of said member, a plurality of tubes for leads of different colors, hooks hingedly supporting said tubes on the walls of said member, said tubes being adapted to drop, one at a time, by gravity into an operating central position registering with said bottom tube, said leads being adapted to slide by gravity from said central tube into said bottom tube into an operating position, means to clamp said lead in its operating position, and a cap resiliently supported on top of said tubular member.

1,803,696. LINER. CLARENCE J. GATES, Jr., CHARLES S. NATHAN, and AMBROSE A. MCDONOUGH, Chicago, Ill. Filed Apr. 29, 1929. Serial No. 358,776. 6 Claims. (Cl. 217—8.)

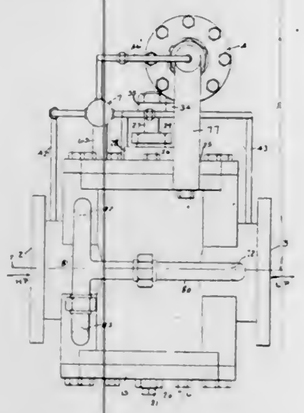
6. The combination with a basket or similar container, of a liner therefor comprising a blank of sheet material

providing a strip disposed around the inside of said basket and adjacent the top edge portion thereof, said blank of sheet material also providing spaced tabs or legs extending from said strip and lying in planes substantially parallel to the plane of the sides of the container



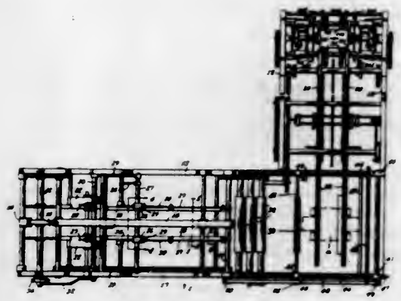
and engaging the bottom portion thereof whereby said strip portion will be maintained in substantially fixed relation to the top edge portion of said container, to thereby protect the contents from any roughness of the inside top edge portion.

1,803,697. PRESSURE REGULATING VALVE. OSCAR G. GOLDMAN, San Francisco, Calif. Filed Aug. 29, 1927. Serial No. 216,079. 12 Claims. (Cl. 50—11.)



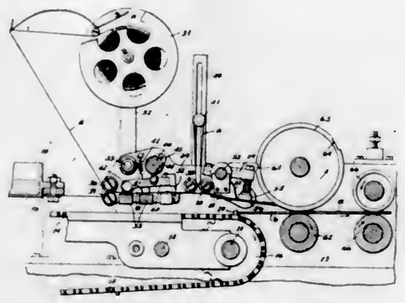
1. A fluid pressure regulating valve comprising a chambered body provided with fluid inlet and outlet ports, a rotatable valve-plug mounted within the body between said ports and provided with a passage adapted to be brought into register therewith, and means for rotating said valve-plug in response to variations in pressure of fluid on the outlet side of said valve, said means comprising a fixed rod, a cylinder slidably mounted on said rod, a connection from said cylinder to said plug whereby a movement of the cylinder will rotate the plug, a fluid pressure connection to the cylinder for forcing the same to slide on said rod, a controlling-valve on said fluid connection operated by fluid pressure from the outlet side of said valve and spring means in said controlling valve adjustably arranged for opposing operation thereof by said pressure.

1,803,698. BLANK PREPARING MECHANISM FOR BOX MAKING MACHINES. HAROLD J. GOSS, Nashua, N. H., assignor to The International Paper Box Machine Company, Nashua, N. H., a Corporation of Maine. Filed Aug. 19, 1929. Serial No. 386,756. 13 Claims. (Cl. 93—49.)



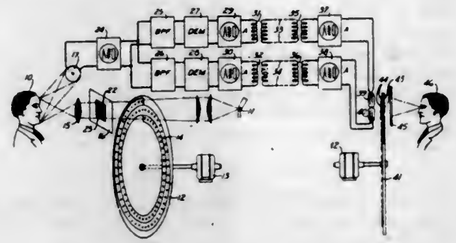
1. The combination with mechanism for making set-up boxes from blanks, of mechanism for preparing flat blanks for the setting-up mechanism, said preparing mechanism including continuously movable blank carriers and means for doubling and securing marginal portions of the blanks while travelling and delivering them to the setting-up mechanism.

1,803,699. MACHINE FOR APPLYING STRIPS TO BLANKS. HAROLD J. GOSS, Nashua, N. H., assignor to The International Paper Box Machine Company, Nashua, N. H., a Corporation of Maine. Filed Nov. 15, 1929. Serial No. 407,470. 14 Claims. (Cl. 93—56.)



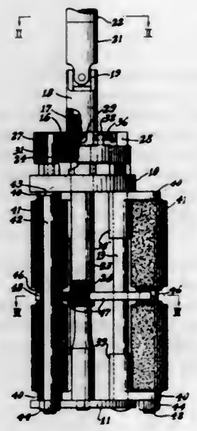
1. A machine for affixing sections of strip material to blanks, comprising means for causing blanks to travel, means for applying adhesive stripes to the blanks, means for weakening the strip material at spaced intervals to provide strip sections, means for applying the strip material to the adhesive stripes of the blanks, and means rendered effective by the combined thickness of the blank and strip for parting the strip material successively at its weakened points.

1,803,700. ELECTROOPTICAL SYSTEM. FRANK GRAY, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 25, 1929. Serial No. 380,786. 7 Claims. (Cl. 178—6.)



1. A device for scanning a field of view comprising a movable element of opaque material, and a light aperture having alternate sections of relatively opaque and transparent material arranged in said movable element.

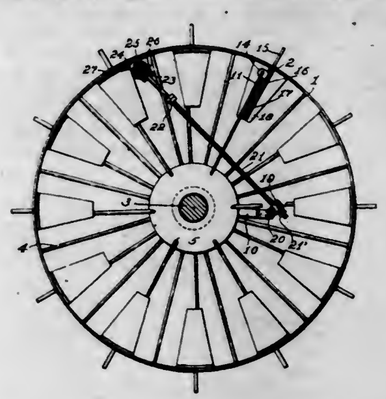
1,803,701. CYLINDER HONE. PERCY C. GROVER, Birmingham, Ala. Filed Nov. 4, 1929. Serial No. 404,612. 7 Claims. (Cl. 51—184.1.)



1. In a tool of the character described, a pair of end plates, a plurality of shafts joining the end plates, a hone pivotally mounted on each shaft and adapted to swing inwardly and outwardly of the end plates, gear means for effecting movement of the hones in unison, a ratchet means for holding the hones in a set position, and means for adjustably positioning the ratchet means to vary the position of the hones.

1,803,702. TRACTION WHEEL. WILLIAM J. HANIG, Ackley, Iowa. Filed Mar. 24, 1930. Serial No. 438,506. 1 Claim. (Cl. 301—46.)

In a traction wheel, a tire therefor having circumferentially spaced apertures, radially directed fixed slideways in line with said apertures on the inner face of the tire, plate-lugs mounted slidably in said slideways to move through said apertures inwardly or outwardly of the tire, said wheel having a hub, a sleeve rotatably mounted thereon and having a radial arm, links between said sleeve and plate-lugs, a bearing-block rockingly mounted on said arm and having an interiorly threaded aperture, a screw-rod threaded and having one end seated in said threaded aperture, lugs fixed on the inner face of the tire, a bearing-block mounted rockingly on said



lugs, the other end of the screw-rod being unthreaded and rotatably secured therein, and means for rotating said screw-rod in either of opposite directions.

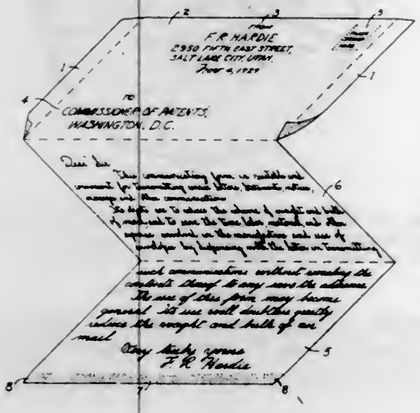
1,803,703. LUBRICATING SYSTEM. CHRISTIAN A. HANSON, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 1, 1925. Serial No. 47,531. 12 Claims. (Cl. 184—7.)

1. A lubricating system comprising means acting periodically to deliver charges of lubricant under pressure, a conduit conveying said charges, a resilient pneumatic capsule in said conduit, a seat for one portion of said capsule, means tending to hold said capsule portion against said seat and thus check return flow from the space around said capsule, a second seat opposite said first seat, said capsule portion having predetermined travel between said two seats, and a check valve in series with said capsule, whereby return of the capsule portion passes a predetermined charge of lubricant around the same.

1,803,704. COMMUNICATING FORM. FRANCIS R. HARDIE, Salt Lake County, Utah. Filed Jan. 20, 1930. Serial No. 422,110. 2 Claims. (Cl. 229—92.7.)

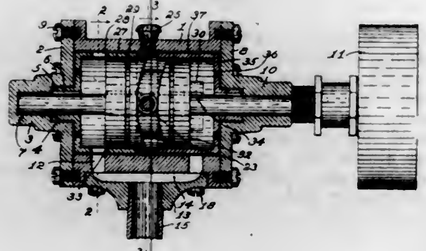
1. A communicatng form of the kind described, consisting of a sheet of paper, or other material, so cut and arranged that flaps extend outwardly from the sides of the upper fold of the sheet, the flaps being so

arranged and prepared, preferably by gumming, that when the sheet is folded, the extending flaps fold backwardly from the front surface of the upper fold of the sheet, and may be fastened or be made to adhere to the back surface of the lower fold of the sheet, thereby partly sealing the communicating form, the method of folding forming a pocket between the backs of the upper and middle folds of the sheet which may be utilized unsealed or otherwise, having the name and address of the transmitter of the communication exposed to view on the front surface of the upper fold of the letter sheet, having



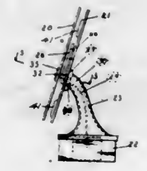
the lower end of the lower fold of the sheet so prepared, preferably by gumming, that when the lower fold of the sheet is folded upwardly against the front surface of the middle fold of the sheet, the lower, prepared end adheres or fastens to the front surface of the letter sheet, substantially along the upper crease of the middle fold of the sheet, on a horizontal line between the salutation and the address of the addressee of the communication, and having a small part of the lower, prepared end of the lower fold of the sheet left unsealed and conspicuously marked, as a convenient place for opening the communication.

1,803,705. PUMPING DEVICE. DAVID A. HARNER, Cedar Falls, Iowa. Filed Jan. 25, 1930. Serial No. 423,482. 2 Claims. (Cl. 103—157.)



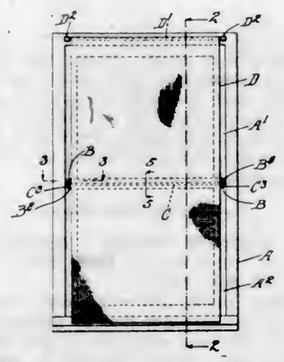
1. A pumping device, comprising in combination, a relatively stationary cylinder having removable heads provided with shaft bearings, a rotatable shaft seated in said bearings, said cylinder having a pair of longitudinally spaced inlet-ports and also a pair of longitudinally spaced outlet-ports circumferentially at an angle to said inlet-ports, a block removably secured on the cylinder across said inlet-ports, and a block removably secured on the cylinder across said outlet-ports, both blocks having longitudinal passages in communication at their ends with said inlet- and outlet-ports respectively, and both blocks having ports communicating medially with said passages, spaced facing cups splined removably on said shaft and having ports alined circumferentially with both said inlet- and outlet-ports, an imperforate piston splined slidably on said shaft within and fitting said cups and spaced from the inner end walls thereof, said piston having a medial circumferential cam groove, and a roller carrying pin mounted in said cylinder wall to traverse the interspace between said cups and enter said cam groove.

1,803,706. DISCHARGE TUBE DISPLAY. FRED HOTCHNER, Los Angeles, Calif. Filed May 25, 1929. Serial No. 366,069. 16 Claims. (Cl. 40—130.)



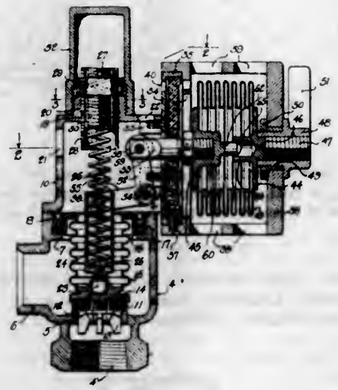
1. In an electric display, a pair of extended spaced sheets of light transmitting material, a tubular light therebetween in the form of a display pattern, and another display pattern disposed between said sheets of light transmitting material and formed of light reflecting material, the second said pattern being so positioned as to be rendered luminous by radiation from said tubular light.

1,803,707. WINDOW CURTAIN SUPPORT. DIBRELL P. HYNES, Chicago, Ill., assignor to Chicago Forging & Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1928. Serial No. 310,982. 18 Claims. (Cl. 156—33.)



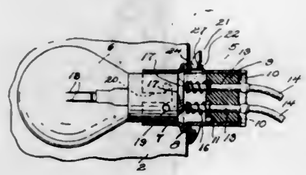
4. The combination with a movable window sash of a curtain raising element adapted to engage said curtain and mounted upon said sash, and supports for said curtain raising element extending outwardly away from said sash and adjustable as to length.

1,803,708. TEMPERATURE CONTROL DEVICE. FREDERICK W. JAEGER, Milwaukee, Wis. Filed May 1, 1929. Serial No. 359,597. 3 Claims. (Cl. 236—42.)



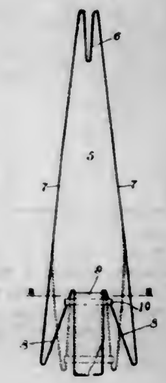
1. In valve mechanism of the type described, the combination of a valve casing, a valve in said casing controlling the supply of heating fluid, a casing secured to said valve casing, said valve having a hollow stem sealed from the fluid controlled by said valve, an adjustable member secured to said last named casing, a tension spring secured within said stem and to said member to open the valve, a thermosensitive device associated with said casings, and means including a lever connecting said device with said stem for causing closing movements of the valve by said device.

1,803,709. BULB MOUNTING FOR HEADLAMPS. ROY W. JOHNSON, Columbus, Ohio, assignor to The John W. Brown Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed May 28, 1929. Serial No. 366,676. 2 Claims. (Cl. 240—41.)



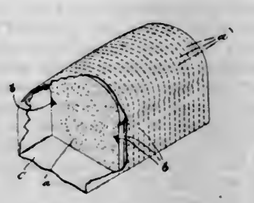
1. The combination with a reflector provided with an opening, of a tubular lamp holder occupying said opening and formed with an annular shoulder engaging one side of the reflector, a plurality of lugs struck out from said holder at a point spaced from said shoulder and the other side of the reflector, a corrugated spring washer on said holder positioned between said lugs and reflector, said washer being formed with notches in the corrugations nearest the reflector and along its inner periphery and through which said lugs pass, there being depressions formed in the corrugations farthest away from said reflector whereby upon the rotation of said washer said lugs will ride up on the corrugations and be seated within the depressions, the washer serving to draw the shoulder of said holder into firm holding engagement with said reflector.

1,803,710. NECKTIE REFORMER. WILLIAM B. KLIVER, Columbus, Ohio. Filed Dec. 8, 1928. Serial No. 324,696. 2 Claims. (Cl. 223—19.)



1. A necktie reforming device including a wire frame in the outline of a spear head with sharp side barbs at the base, a shank portion between said barbs formed of substantially parallel wire portions constituting a handle between said barbs, and a slidable clip engaging the inner wires of the barbs adapted to draw the barbs toward each other and the shank portion.

1,803,711. PARTIALLY SLICED WRAPPED BREAD. LEON E. LA BOMBARD, Waltham, and MELVIN H. SIDEBOTHAM, Newtonville, Mass., assignors to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed Sept. 5, 1929. Serial No. 390,574. 2 Claims. (Cl. 99—10.)



1. A loaf of bread having slicing cuts extending in from opposite sides thereof and partially meeting, said article having separated un-cut portions to lightly maintain the article as a unit, said unit being enclosed in a wrapper, the said un-cut portions being disposed in such positions as to maintain the individual slices in close relationship throughout their areas.

2. The method of preserving bread in a form convenient for users, consisting in transversely cutting a loaf in from opposite sides to an incomplete extent leaving separated un-cut portions in line with said transverse cuts, and then enclosing the cut loaf in a wrapper.

1,803,712. GARMENT PROTECTOR. LEON E. LA BOMBARD, Waltham, and MELVIN H. SIDEBOTHAM, West Newton, Mass. Filed Dec. 2, 1929. Serial No. 411,089. 4 Claims. (Cl. 206—7.)



3. A garment container having a wide opening at the bottom and a small opening at the top with inclined edges at opposite sides of said small opening, said container consisting of two sections of paper having folded and glued marginal portions, and the said inclined edge top portions being glued together flat.

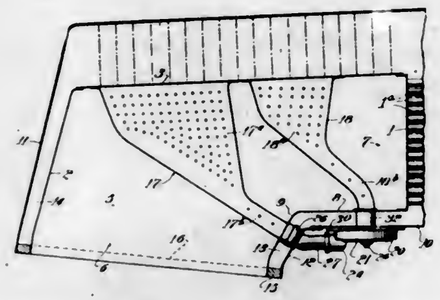
1,803,713. STEEPLE CLOSURE FOR INK BOTTLES. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 20, 1928. Serial No. 255,634. 10 Claims. (Cl. 120—57.)



1. A stopper construction for India ink bottles comprising a sheet metal screw cap provided with a peripheral flange and a top, said flange having locking means for engaging locking projections on the neck of the bottle and said top of the cap, having an opening therethrough, a steeple-like member of moldable material molded about the exterior surface of the cap and having an integral inwardly projecting sleeve passing through the opening in the top of the cap, a quill fitting said sleeve and a sealing washer surrounding and gripping the sleeve and lying within the top surface of the cap whereby when the cap is screwed upon the neck of the bottle, said sealing washer will sealingly engage the open mouth of the bottle.

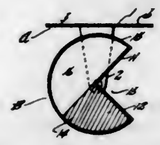
1,803,714. LOCOMOTIVE BOILER. BERT E. LARSON, Park Ridge, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 17, 1929. Serial No. 386,660. 4 Claims. (Cl. 122—68.)

1. A locomotive boiler having a firebox including a fire and a combustion chamber, a water circulating and steaming member in each chamber and each including an inlet end, with one of said inlet ends disposed at substantially a right angle to the other, means providing a well below the boiler and in communication therewith, means providing a slip joint connection for said inlet end of the mem-



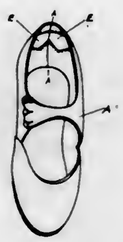
ber in the combustion chamber with said well and means providing a ball and socket joint connection for the inlet end of said member in the firebox with said well.

1,803,715. COIN HOLDER FOR MAIL BOXES. DAVID A. LIGHTY, Edgewood, Iowa. Filed Apr. 11, 1930. Serial No. 443,298. 1 Claim. (Cl. 133—14.)



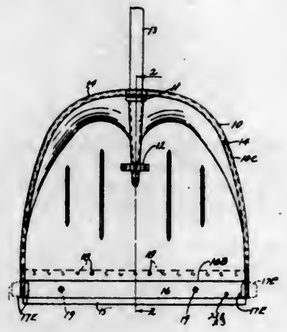
In combination with a mail box, a coin holder journaled at its ends within the box, the said coin holder being approximately three quarters cylindrical, the space at the remaining quarter being closed by radially extended walls forming a finger notch for manipulating the device, and there being a longitudinally extended coin slot opening into the holder flush with one of the radially extended walls, and a weight positioned within the holder oppositely to the said coin slot for normally turning the said slot upwardly.

1,803,716. SHOE AND METHOD OF MAKING THE SAME. HORATIO S. LYNESS, Lynn, Mass. Filed Jan. 7, 1930. Serial No. 419,080. 2 Claims. (Cl. 36—58.6.)



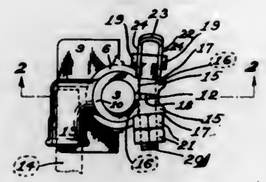
1. In an article of manufacture a shoe with a relatively smooth faced inner quarter lining having cut out slots therein, and means whereby the heel portion of said shoe is prevented from moving relative to the heel of the wearer, said means comprising a non-slip member having a roughened surface arranged to project away from the normal plane of the surface of the lining, the edges of said non-slip member being inserted in said cut out slots and laid flat against the inner surface of said lining, the portion between said slots serving as a backing and being positioned behind said non-slip members.

1,803,717. SHOVEL. OLE A. LYSNE, Northfield, Minn. Filed Mar. 13, 1930. Serial No. 435,575. 4 Claims. (Cl. 294—54.)



1. A shovel ladle comprising a metal blade with plane transverse front edge, the body of said ladle formed with rearwardly rising edge portions, said edge portions comprising a continuous bead, a single wire within said bead and tapered toward its ends, and a front blade device removably fixed to said transverse front edge of the ladle and comprising a double plate, the upper part of said plate offset to provide a forwardly directed opening between the two parts of said plate, a front shovel blade adapted to be slidably inserted in said opening and guide plates fixed to said lower plate to guide and retain said blade in said opening and further means fixed in said lower plate to guide the blade to operative position and said blade normally projecting forward of the front edge of said plate member.

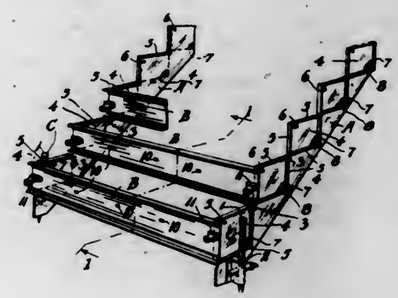
1,803,718. BINDING-POST. JOSEPH G. MCCLELLAN, St. Louis, Mo. Filed Apr. 30, 1928. Serial No. 273,889. 2 Claims. (Cl. 173—259.)



1. In a binding-post, a split ring adapted to engage said post and presenting a pair of apertured clamping jaws, a bolt passing through said jaws and having oppositely disposed lateral arms and a clamping head pivotally borne by said arms, said head presenting a cam surface adapted to vary the intimacy of the post and ring upon the operation of said head.

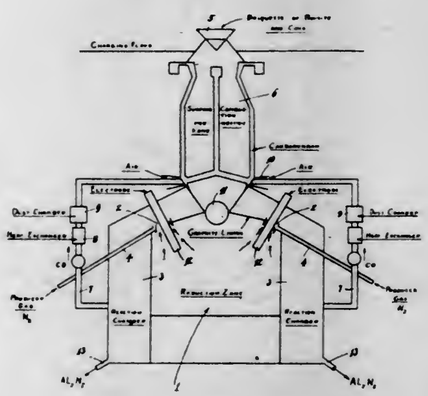
1,803,719. STEP FORM. GEORGE H. MILLER, Milwaukee, Wis., assignor to Metal Forms Corporation, Milwaukee, Wis. Filed Aug. 6, 1928. Serial No. 297,828. 2 Claims. (Cl. 25—118.)

2. A step form of the class described, comprising, in combination, side form members having cut-aways therein defining substantially vertically disposed edges on the side form members, plates carried by the side form members, each plate having one edge substantially adjacent to one of the vertically disposed edges of the side form members, and means for adjusting the relative position of the plates with respect to the side form members so that vertical edges of the plates may be adjusted with respect to



the vertical edges of the side form members and thereby made to assume a true vertical position, regardless of the position of the edges of the side form members.

1,803,720. PROCESS OF PRODUCING NITRIDES OF ALUMINUM OR MAGNESIUM FROM THEIR MINERALS. CLAUDE G. MINER, Berkeley, Calif. Filed July 6, 1926. Serial No. 120,633. 5 Claims. (Cl. 23—192.)

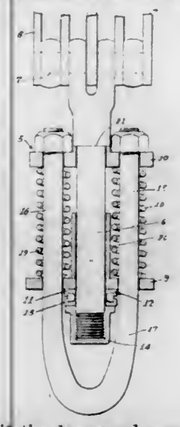


1. A process of producing metallic nitrides which comprises reducing the metallic oxide to the metal in a reducing zone at the volatilization temperature of the metal, conducting the vaporized metal and resultant gases from the reducing zone to a reaction zone apart from the reducing zone, and mixing a nitrogen-bearing gas with the vaporized metal in the reaction zone to produce the metallic nitride.

1,803,721. HOISTING CLEVIS. BURT S. MINOR, San Pedro, Calif. Filed Dec. 1, 1928. Serial No. 328,184. 3 Claims. (Cl. 267—71.)

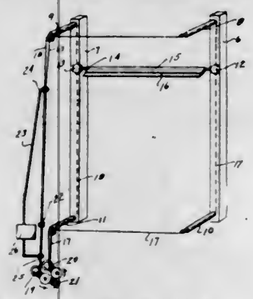
1. A hoisting clevis comprising a support pivotally secured at its upper end, an antifriction bearing on the lower end of said support, a cross bar carried by said bearing having apertures formed therein, a yoke member passing through the apertures in the cross bar, a second cross bar on said support, the end of the yoke arms detachably engaging said second cross bar, a pair of coiled

springs surrounding the yoke arms between the cross bars, and a support to relieve the load on the coiled



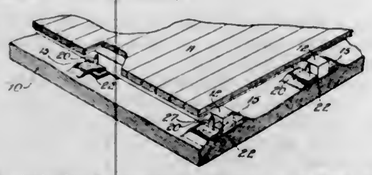
springs and to limit the downward movement of the yoke when a load is imposed thereon, the yoke being free to rotate in any position.

1,803,722. AUTOMATIC WINDOW CLEANER. MORRIS R. MOON, Portland, Oreg. Filed Apr. 22, 1929. Serial No. 357,047. 1 Claim. (Cl. 15—253.)



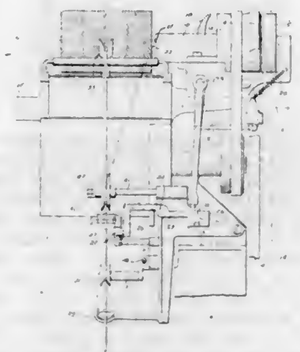
In a device of the class described, in combination, a pair of uprights, grooves longitudinally disposed within the uprights, a hollow post secured to each end of said uprights and communicating with the respective grooves, guide blocks disposed within each groove, a cross bar secured to said guide blocks, a swipe movably secured to said cross bar, winding drums journaled within a vehicle, power means directly associated and in driving engagement with the drums, a plurality of cables having their free ends secured to the guide blocks and to the winding drums respectively and adapted to move the guide blocks, a stop block secured to one of the cables, and means connected therewith for reversing the power means at the completion of each cleaning stroke.

1,803,723. FLOOR CONSTRUCTION. EVERETT N. MURPHY, Chicago, Ill., assignor, by mesne assignments, to Johns-Manville Sales Corporation, a Corporation of Delaware. Filed July 17, 1924. Serial No. 726,471. 4 Claims. (Cl. 72—101.)



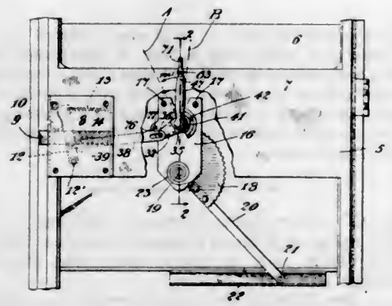
3. A chair for supporting a sleeper or nailing strip for fire-proof floor construction or the like comprising, in combination, a substantially flat horizontal base portion adapted to be laid on a concrete lower floor after the concrete has set, said base portion supporting the nailing strip and a finishing floor fastened thereto, oppositely disposed off-set lugs bent vertically from said base portion for laterally embracing the vertical sides of said nailing strip, and fastening means passing through said lugs and said nailing strip to prevent upward displacement of the latter from said chair.

1,803,724. DETECTOR. WILLIAM NANFELDT, Paterson, N. J., assignor to World Bestos Corporation, Paterson, N. J., a Corporation of Delaware. Filed Oct. 5, 1928. Serial No. 310,461. 8 Claims. (Cl. 242—36.)



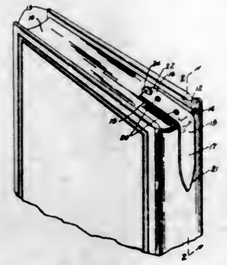
7. In a yarn winding machine, a winding mechanism, an element guided by the path of the yarn through the machine and adapted to be displaced by lateral shifting movement of the yarn, means operable by displacement of the guided element for stopping said winding mechanism, and means for displacing the yarn laterally when the diameter of the same is decreased.

1,803,725. OPERATING MEANS FOR AUTOMOBILE DOOR LATCHES AND WINDOW REGULATORS. LEON OTTINGER, New York, N. Y. Substitute for application Serial No. 294,113, filed July 20, 1928. This application filed Aug. 18, 1928. Serial No. 300,424. 18 Claims. (Cl. 268—126.)



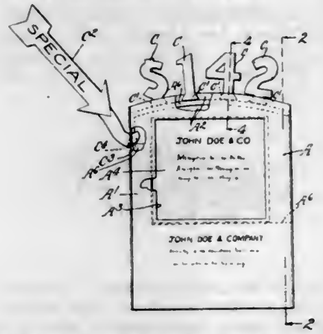
14. The combination with a window regulator and a latch, of an operating handle therefor, a pivotable hand grasp thereon, and means actuated by said hand grasp selectively operatively connecting said handle to said regulator or said latch.

1,803,726. BOOKMARK. CARL A. PFUDERER, Brooklyn, N. Y. Filed Sept. 19, 1928. Serial No. 306,880. 7 Claims. (Cl. 116—119.)



1. A bookmark, comprising a strip formed with a bent end for engaging the outside of the web of a book cover, a clamp tongue disposed laterally of the said bent end for engaging the inside of the same web, a lug integral with the clamp tongue and attached on the said strip, and a marker pivotally mounted on the free end of the strip and arranged for extending downwards or assuming a position of rest upon the strip.

1,803,727. DISPLAY DEVICE. FRANK H. RASMUSSEN, Chicago, Ill., assignor to Magill-Weinsheimer Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 7, 1929. Serial No. 398,049. 4 Claims. (Cl. 40—148.)



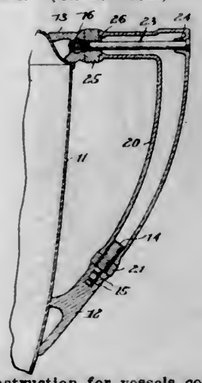
1. In a display device, a body member and means for maintaining it in upright position, said body member including a forward element and a rearward element, said forward and rearward elements being spaced somewhat apart, the forward element being provided with an aperture, a removable display member adapted to be aligned with said aperture, the edges of said elements being separated in lateral alignment with said aperture to permit said removable member to be inserted, a plurality of indicating digits removably mounted upon the upper edge of said body member, said digits being provided with downward extensions adapted to penetrate between the forward and rear elements of said member, and an additional indicating member removably positioned upon one edge of said body member, including a supporting element adapted to penetrate between the forward and rear elements of said body member.

1,803,728. TWEEZER TOOL. CHARLES S. ROOT, Springfield, Mass. Filed Sept. 19, 1929. Serial No. 393,809. 6 Claims. (Cl. 81—3.)



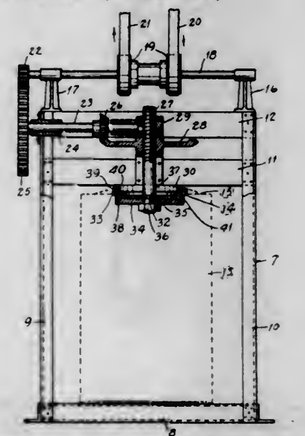
1. A tool of the class described comprising in combination, a support in the form of a tube having its forward end partly closed to provide spaced guideways, a member bent upon itself to provide shanks which extend through said tube and guideways and a ring at the rear end of said tube, the shanks as they extend through said guideways being disposed in a diverging relation and then extended towards one another to form cooperating gripping fingers, shelves carried by said fingers for supporting an article gripped by said fingers, upstanding ledges associated with said fingers for co-operating with said fingers for gripping one side of an object, and spring pressed members for co-operating with said ledges and fingers for gripping another side of an object.

1,803,729. HANDLE CONSTRUCTION FOR VESSELS. HOWARD H. SCHOTT, Rochester, N. Y., assignor to Robeson-Rochester Corporation, Rochester, N. Y., a Corporation of New York. Filed July 18, 1929. Serial No. 379,291. 3 Claims. (Cl. 16—174.)



1. A handle construction for vessels comprising a pair of brackets of relatively soft moulded material fixed to a vessel, a pin of harder material moulded in one of said brackets and projecting therefrom, a threaded bushing of harder material moulded in the other of said brackets, a hollow handle member having an opening at each end thereof, one end of said handle member being slipped over said pin, and a screw passing through the opening at the opposite end of said handle member and threaded into said bushing for securing said opposite end to its bracket.

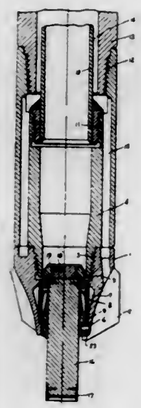
1,803,730. FLANGING MACHINE. GEORGE F. SCHULENBURG, St. Louis, Mo. Filed Nov. 22, 1929. Serial No. 408,946. 2 Claims. (Cl. 153—24.)



1. In a device of the character described, a spindle, means of moving said spindle longitudinally, a die holder secured to said spindle, a die positioned on said die holder, a circular plate, said plate and said die being so

positioned relatively that the vertical movement of said spindle will bring said die and said circular plate in and out of frictional engagement.

1,803,731. CORE BIT PLUG. FLOYD L. SCOTT, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Feb. 16, 1929. Serial No. 340,561. 3 Claims. (Cl. 255—72.)



1. In a core drill, a tubular cutter head, and a plug closing the lower end thereof, adapted when released to float in the liquid in the well.

1,803,732. JAR MECHANISM FOR WELL DRILLING. WILLIAM D. SHAFFER, Brea, Calif. Filed Apr. 8, 1930. Serial No. 442,559. 11 Claims. (Cl. 255—27.)



10. A jar, for well drilling stems, including telescopic shell and mandrel parts having opposed rigid up-jar hammer and anvil shoulders, and down-drive couplers for rigidly connecting the parts under compression force and yieldable under tension of one part when drawing from the other.

1,803,733. DESIGNATING DEVICE. MORRIS SHERAS, Manistee, Mich. Filed Aug. 11, 1928. Serial No. 298,904. 13 Claims. (Cl. 40—145.)



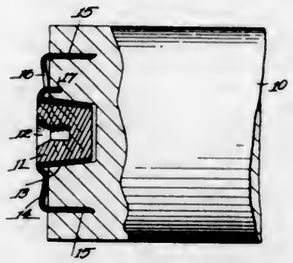
1. In a designating device, a central smooth cylindrical pole, longitudinal double-faced sign boards slidably positioned upon and embracing, said pole and adapted to be placed with their longer dimension in horizontal position, connecting devices slidably positioned on said pole and adapted to postion the double faced sign boards at the desired angle to each other and two projections upon each of the inside faces of said boards adapted to form a pocket for and cooperate with said pole to hold said slidable boards in position upon said pole.

1,803,734. ICE-FREEZING RECEPTACLE WALL. FRANK G. SHERER, Los Angeles, Calif., assignor to Refrigerator Grid Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 11, 1929. Serial No. 345,905. 9 Claims. (Cl. 62—111.)



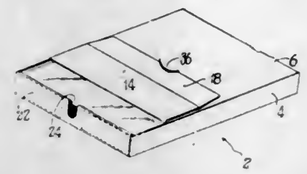
4. A removable ice grid comprising a plurality of vertically disposed crossing members, each having a vertically extending hollow space therein open at one edge of the member.

1,803,735. BEARING FOR WOOD ROLLS. WARREN J. SIMONDS and CARL C. HARRIS, Orange, Mass., assignors to Rodney Hunt Machine Company, Orange, Mass., a Corporation of Massachusetts. Filed Mar. 25, 1929. Serial No. 349,708. 3 Claims. (Cl. 308—238.)



1. A device for anchoring a bearing in the end of a roll comprising a metal cap of annular shape having a flange projecting from its outer edge and adapted to be driven into the end of the roll and a conical collar constituting its center and adapted to be driven into the roll and a wooden bearing block of conical shape driven into the conical collar and permanently held therein.

1,803,736. PACKAGE. HOMER M. SINCLAIR, Holyoke, Mass. Filed July 12, 1929. Serial No. 377,834. 2 Claims. (Cl. 206—57.)



1. A package of the class described comprising in combination, a box formed from a foldable blank having an end wall provided with an opening in the upper side thereof to expose the forward edges of a stack of sheets in said box, the forward portion of the upper wall of said box being severed from the upper edges of the side wall thereof from said forward wall rearwardly to a line of folds extending across said upper wall to form a cover portion, the said cover portion having a hinged forward end portion for inserting between said forward wall and a stack of sheets in said box and the said upper wall at the rear side of said line of folds being provided with a slit to form a tab for receiving the outer edge of the said forward end portion to hold the same in an open position.

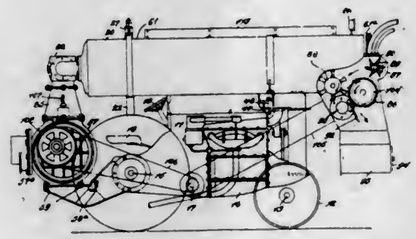
1,803,737. PROCESS RELATING TO THE PRODUCTION OF SYNTHETIC LUMBER FROM CORNSTALKS. ORLAND R. SWEENEY, Ames, Iowa, assignor to Iowa State College of Agricultural and Mechanical Arts, Ames, Iowa, a Corporation of Iowa. Filed June 27, 1929. Serial No. 374,274. 10 Claims. (Cl. 92—6.)

1. The process of manufacturing and producing synthetic lumber from cornstalks consisting in the cooking of the unshredded corn plant in water, discharging the material from the cooker, disintegrating the material by milling, and last forming it into lumber by a suitable machine.

1,803,738. METHOD OF MAKING SULPHITE PULP. ALFRED M. THOMSEN, San Francisco, Calif. Filed Aug. 24, 1929. Serial No. 388,274. 3 Claims. (Cl. 92—11.)

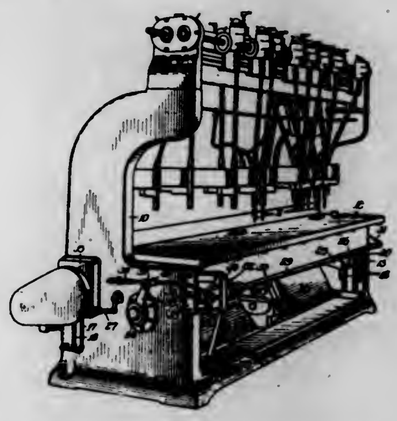
1. In the process of manufacturing sulphite pulp, the method of adding from 5% to 50% of the waste liquor produced to fresh cooking acid in making up the acid for a subsequent charge; adding lime to the remaining waste liquor; separating the precipitate formed by such addition; washing said precipitate; and returning said precipitate to the acid making system.

1,803,739. GIN. JOHN S. THURMAN, St. Louis, Mo. Original application filed Sept. 13, 1923, Serial No. 662,528. Divided and this application filed Dec. 7, 1925. Serial No. 73,958. 5 Claims. (Cl. 19—39.)



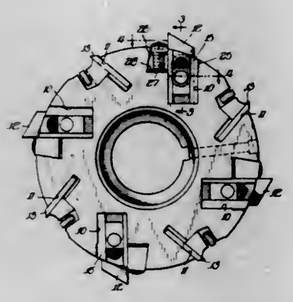
1. In a device of the class described, the combination of a tractor, a plurality of longitudinally disposed suction tanks supported thereby thereabove, a gin supported by said tanks adjacent to one end of said tractor and communicating with one end of each tank, and a vacuum pump carried by the other end of said tractor and connected to said tanks at points remote from the points of connection of the latter with said gin, thereby producing suction in said tanks and said gin and causing the cotton discharged into said gin to be passed therethrough and delivered into said suction tanks.

1,803,740. BORING MACHINE. GERRIT VANDERBEEK, Beloit, Wis., assignor to Yates-American Machine Company, Beloit, Wis., a Corporation of Delaware. Filed Oct. 12, 1929. Serial No. 399,180. 9 Claims. (Cl. 144—112.)



1. In a boring machine, a plurality of bits, a work support, means for moving the support toward and away from the bits, means for automatically reversing the direction of movement of the support at both ends of its travel, manually actuated means for rendering the automatic reversing means inoperative, separately operable manually actuated means for starting and stopping the movement of the support in any position thereof, and a single control member connected with the two last mentioned means for at will independently operating the same.

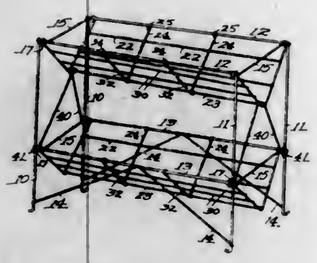
1,803,741. CUTTER HEAD. HARRY S. WALTHERS and VICTOR E. MARTIN, Beloit, Wis., assignors to Yates-American Machine Company, Beloit, Wis., a Corporation of Delaware. Filed Apr. 12, 1930. Serial No. 443,654. 3 Claims. (Cl. 144—230.)



1. In combination, a cutter head having a transversely extending groove, a row of elongated holders arranged

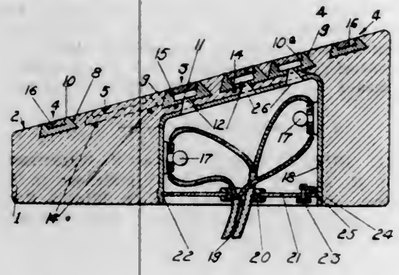
in upright positions in the groove and provided with longitudinally extending slots in the front faces thereof, elongated knives positioned in the slots in the holders with the cutting ends of the knives projecting from the outer ends of the holders, means for clamping the sides of the holders laterally against the contained knives and separate means for clamping the holders in the groove.

1,803,742. FOLDING DISPLAY STAND. MELCHER G. WERME, Worcester, Mass., assignor to Wickmire Spencer Steel Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 31, 1928. Serial No. 316,187. 6 Claims. (Cl. 211—85.)



2. A folding display stand comprising rigid side members, upper and lower shelves each formed in two parts, said parts being hinged together and to said side members, spacing members effective, when operatively connected, to hold said side members at a predetermined distance apart, and sway braces connecting the center hinged portion of said upper shelf to the lower parts of said side members.

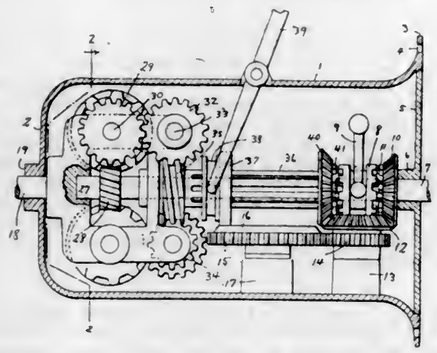
1,803,743. DISPLAY TABLET. HAROLD WIEDEMANN, Seattle, Wash.. Filed Jan. 3, 1929. Serial No. 330,085. 2 Claims. (Cl. 40—133.)



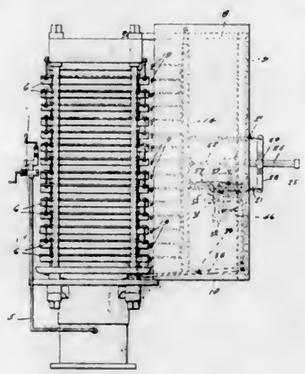
1. The combination with a hardened plastic stone, of spaced channel-shaped letters embedded therein having edges flush with the face of the stone, tie bars connecting said letters and embedded in the stone, grooves in the side walls of the channel-shaped letters, and panels of transparent material in said grooves.

1,803,744. TRANSMISSION. GIACOMO ABBONA, Mondovi Breo, Italy. Filed Oct. 13, 1930. Serial No. 488,512. 1 Claim. (Cl. 74—34.)

A transmission of the class described comprising a housing, a horizontally arranged drive shaft extending into one end of the housing, a horizontally arranged driven shaft extending into the other end of the housing, an intermediate shaft supported for rotary movement in the housing and in alinement with the other shafts, a pair of vertically arranged shafts in the housing, a gear carried by one of said vertical shafts, a friction disk on said gear, a gear carried by the other vertical shaft and meshing with the first gear, a gear loosely arranged on the drive shaft, a gear on the last-mentioned vertical shaft with which the loose gear meshes, a gear fastened to the intermediate shaft and meshing with the last-mentioned gear on the vertical shaft, manually operated clutch means for connecting the drive shaft with either the loose gear or the gear on the intermediate shaft, a sleeve rotatably arranged on the intermediate shaft, a friction disk slidably but non-rotatably mounted on the sleeve, and adapted to engage with the first friction disk, manually operated means for sliding the first disk on the sleeve, U-shaped member having its bight connected with the driven shaft with its limbs of forked construction, a shaft journaled in the extremities of each pair of forks, a gear on the outer end of each shaft, the gears being arranged on opposite ends of the two shafts, a worm gear on each shaft located between the forks, a worm on the sleeve on the intermediate shaft meshing with said worm gears, a shaft journaled in each pair of forks adjacent the light, a gear on one end of the one shaft and a gear on the opposite end of the other shaft, these gears meshing with the gears on the shafts at the ends of the forks, worm gears on the shafts located adjacent the bight part of the member and located between the forks and a worm on the intermediate shaft meshing with the last-mentioned worm gear.

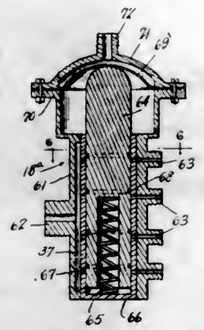


1,803,745. CAKE KNOCKER FOR OIL PRESSES. SAMUEL RUSSELL CARPENTER, Sweetwater, Tex. Filed July 1, 1929. Serial No. 375,095. 8 Claims. (Cl. 100—50.)



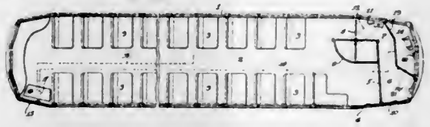
1. A device for pushing cakes from the boxes of an oil press, and comprising a plurality of fingers, one for each box, a vertical beam to which one end of the fingers are attached, said fingers at their opposite ends respectively provided with a depending extension for engagement with a cake in one box, and means for actuating the beam to push the fingers for extracting the cakes from the boxes.

1,803,746. LUBRICATING DEVICE. MATTHIAS CHRISTMAN, Springfield, Mo. Filed July 25, 1927. Serial No. 208,282. 1 Claim. (Cl. 137—139.)



In a lubricating system of the class described a valve comprising a cylindrical casing having an inlet port, a cylindrical bushing located in the casing, one of said parts having a longitudinal groove therein which, with a portion of the other part, forms a chamber for receiving lubricant introduced through the said port, said bushing having ports arranged on diametrically opposite sides thereof, the ports on one side being in communication with said groove, the casing having outlet ports which are in communication with the ports in the other side of the bushing, a plunger slidably mounted within the bushing and having annular grooves therein, a spring for normally holding the plunger in position with the grooves out of alinement with the ports in the bushing, and means for moving the plunger to a position where each of its grooves will aline with a pair of the diametrically spaced ports in the bushing.

1,803,747. STREET CAR. LEONARD F. CLERC, Detroit, Mich. Filed Nov. 19, 1928. Serial No. 320,336. 1 Claim. (Cl. 105—341.)



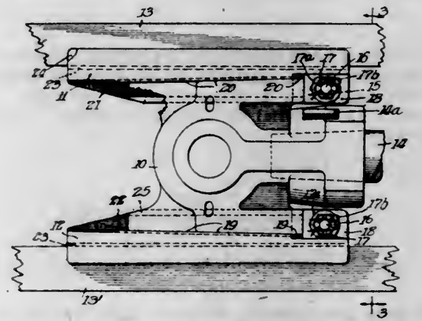
In a one man street car having a rear exit, a seating compartment, a vestibule at one end thereof, a barrier between said compartment and vestibule, entrance doors in the wall of said car at opposite sides of said barrier and leading respectively to said compartment and vestibule, and a gate in said barrier.

1,803,748. SPRING OILER. EARL E. CRONENWETH and CHARLES G. HAMER, San Fernando, Calif. Filed May 13, 1930. Serial No. 451,983. 1 Claim. (Cl. 267—37.)



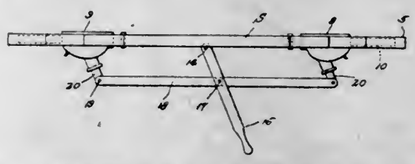
In a spring oiler, a casing open at its opposite ends adapted to receive a leaf spring extending therethrough, said casing comprising a top section, a bottom section, said sections being substantially channel-shaped in cross section, the sides of one of said section being arranged in overlapping relation with respect to the sides of the other of said section, means at the ends of the section to prevent the escape of lubricants, said bottom section formed with a lubricant well having communication with the interior of the bottom section, a lubricant absorbing pad arranged in the bottom section for substantially the full length of said section, wicks extending from the well into said bottom section to merge with said absorbing pad, a clamp overlapping the sections at one end, and co-acting retractile means on the other end of the sections for holding said sections together.

1,803,749. CROSSHEAD SHOE. THOMAS W. DEMAREST, Pittsburgh, Pa. Filed Jan. 5, 1920. Serial No. 349,557. 35 Claims. (Cl. 308—3.)



1. A device of the character described, comprising, in combination, a body and a shoe provided with means for interlocking the body and shoe together, said body and shoe each being further provided with co-operating inclined contacting surfaces which limit relative movement of the shoe and body in one direction, and said interlocking means being adapted for holding said body and shoe in predetermined relative position.

1,803,750. DEVICE FOR REMOVING AND INSTALLING SPRINGS. HARRISON DRODDY, El Dorado, Ark., assignor of one-half to Jack Roach, El Dorado, Ark. Filed Oct. 14, 1929. Serial No. 399,542. 2 Claims. (Cl. 29—87.1.)

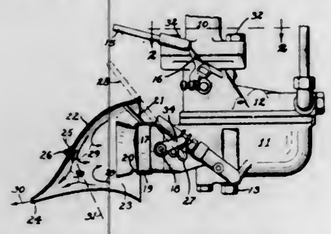


1. An apparatus of the class described comprising a pair of jacks, a connecting bar between the jacks, a lever rockably engaged with the connecting bar, and means operatively connecting the lever with the jacks for simultaneous operation thereof, each jack comprising a stationary part engaged with the bar and a movable part having a beveled terminal, the inner ends of the stationary parts of the jack having formed thereon sockets, and the bar having extensions receivable in said sockets.

1,803,751. AIR CLEANER. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Aug. 28, 1929. Serial No. 388,952. 7 Claims. (Cl. 183—75.)

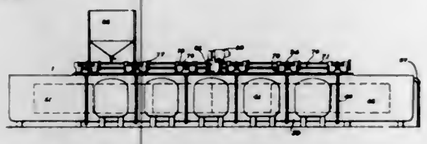
6. In an air cleaner for an internal combustion engine carburetor, an open ended conical shaped casing having

its large end facing the air stream created by the fan of said engine, and having its small end turned rearwardly from said air stream, so that air will be forced into the



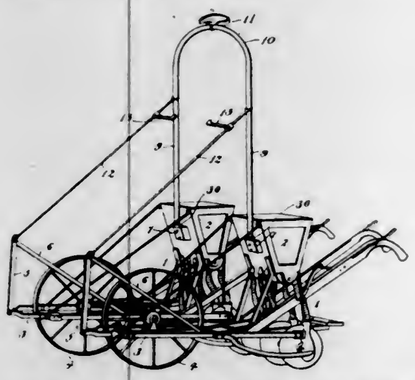
large end and drawn out of the small end of said casing, and a clean air outlet supported within the large end of said casing so that air entering said outlet must reverse its direction from said air stream.

1,803,752. GLASS GRINDING MACHINE. HENRY FORD, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed Feb. 7, 1930. Serial No. 426,535. 7 Claims. (Cl. 51—112.)



1. In a glass grinding machine, means for conveying a sheet of glass on edge between opposed grinding discs to thereby grind both faces of the sheet simultaneously, and means for submerging said sheet in a cooling liquid during the grinding operation.

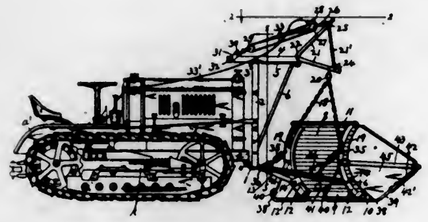
1,803,753. AGRICULTURAL IMPLEMENT. KLAAS N. FRIESEN, Geneseo, Kans. Filed Sept. 30, 1929. Serial No. 396,291. 4 Claims. (Cl. 111—54.)



1. The combination with a pair of grain drills, each having a hopper at its rear end, of a high coupling arch mounted at the lower ends of its legs upon the hoppers of the grain drills.

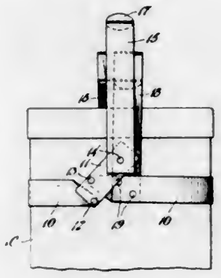
1,803,754. SIDEWALK SNOWPLOW. CARL H. FRINK, Clayton, N. Y. Filed Oct. 18, 1929. Serial No. 400,527. 4 Claims. (Cl. 37—42.)

1. A snow plow attachment for motor tractors comprising a cross bar having means for securement to the front end of the tractor frame, upright posts secured to the cross bar in transversely spaced parallel relation, an additional cross bar secured to the upper ends of the posts, lengthwise bars secured to the upper cross bar to extend forwardly and rearwardly therefrom, braces between the front ends of the lengthwise bars and posts, a mold board extending diagonally across and to opposite sides of the longitudinal center of the tractor frame some distance in



front of the posts, thrust bars pivoted to the lower ends of said posts and diverging forwardly therefrom and having their front ends pivotally connected to the moldboard to permit the latter to swing forwardly and rearwardly, spring connections between the moldboard and thrust bars, and means including a bell crank lever pivotally mounted upon the front end of the upper lengthwise bars for raising and lowering the moldboard.

1,803,755. ARTICLE CARRIER. WILLIAM F. GOEZ, Keokuk, Iowa, assignor to Iowa Fiber Box Company, Keokuk, Iowa, a Corporation of Delaware. Filed Jan. 12, 1931. Serial No. 508,296. 7 Claims. (Cl. 294—27.)

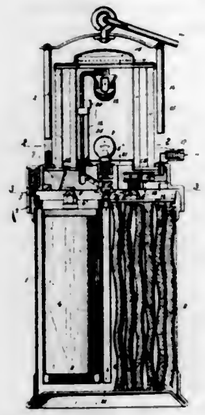


1. An article carrier comprising, in combination, a pair of clamping members; a ball; a pair of links each pivotally connected at one end to one end of one clamping member, and each having its intermediate portion pivotally connected to the adjacent end of the other clamping member, the other end of each link being pivotally connected to one arm of the ball.

1,803,756. INCANDESCENT GAS-LIGHT MINERS' LAMP. WALTER GOSMANN, Dortmund, Germany. Filed Aug. 14, 1929, Serial No. 385,783, and in Germany Sept. 3, 1928. 7 Claims. (Cl. 240—11.3.)

1. In a miner's lamp of the type described, a sectional body, electric current and combustible gas supply means contained within the lowermost section, inner and outer glasses sealed on the uppermost section and forming an outer compressed air chamber and an inner combustible chamber, a gas burner within the combustible chamber having communication with said gas supply means, an electric glow bulb in the last named chamber, and having

circuit connection with the current supply means, an inlet passage adapted to be connected with an external source



of air pressure and a compressed air controlled means controlling said circuit and communication between said inlet passage and said chambers.

1,803,757. VAT DYESTUFFS OF THE ANTHANTHRONE SERIES AND PROCESS OF MAKING SAME. RICHARD HERZ, Frankfort-on-the-Main, and WERNER ZERWECK, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 1, 1926, Serial No. 145,697, and in Germany Nov. 7, 1925. 18 Claims. (Cl. 260—61.)

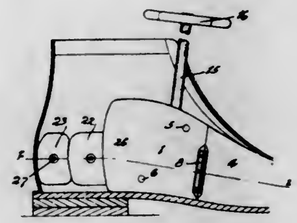
1. A process for producing orange to red vat dyestuffs which process comprises reacting upon anthanthrone with a halogenating agent with addition of a diluent of the group consisting of sulfuric acid, sulfuric acid monohydrate, fuming sulfuric acid, chlorosulfonic acid, sulfuryl chloride, sulfur chlorides, thionylchloride and inert organic diluents of the aromatic series possessing high boiling points.

1,803,758. HALOGENATED VAT DYESTUFFS AND PROCESS OF MAKING SAME. RICHARD HERZ, Frankfort-on-the-Main, and WERNER ZERWECK, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Nov. 1, 1926, Serial No. 145,697, and in Germany Nov. 7, 1925. Divided and this application filed Dec. 11, 1929. Serial No. 413,420. 6 Claims. (Cl. 260—61.)

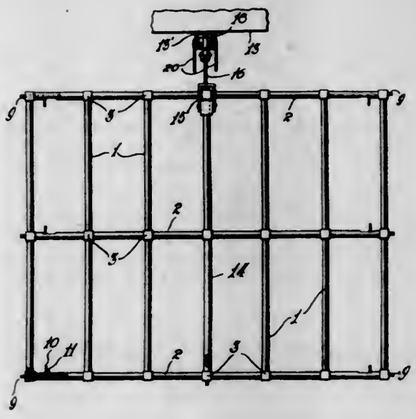
2. The process which comprises reacting upon anthanthrone with a brominating agent, in the presence of an inorganic diluent selected from the group consisting of concentrated sulfuric acid, sulfuric acid monohydrate, fuming sulfuric acid, chlorsulfonic acid, sulfuryl chloride, sulfur chlorides and thionyl chloride, and of a carrier selected from the group consisting of I, $SbCl_5$, $FeCl_3$ and ICl_3, at an elevated temperature below 100° C., and then cooling down and passing chlorine into the mixture.

1,803,759. SHOE EXPANDER. JOSEPH HESSEL, Winnipeg, Manitoba, Canada. Filed May 9, 1930. Serial No. 451,068. 7 Claims. (Cl. 12—128.6.)

1. In a shoe expander, a pair of mating heel sections permanently fastened together and providing an internal cavity, a gear casing housed within the cavity, mating toe sections pivotally connected to the heel sections, a jack screw slidably carried by the gear casing and having the forward end thereof extending between the toe sections, expansion arms pivotally connected to the forward end of the jack screw and received within mating cavities provided in the toe sections and pivotally attached to the toe sections, a bevel pinion mounted on the jack screw and prevented from end shifting by the gear casing, an upwardly extending spindle rotatably carried by the gear casing and provided at its upper end with a hand wheel, and a bevel gear secured to the lower end of the spindle and engaging the former bevel gear.



1,803,760. OVERHEAD BULKHEAD DROP GATE FOR BOX AND REFRIGERATOR CARS. GEORGE F. JONES, Dallas, Tex. Filed Oct. 11, 1929. Serial No. 398,930. 3 Claims. (Cl. 105—376.)

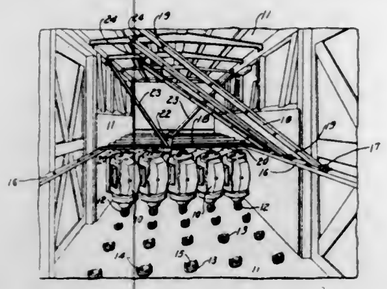


1. A gate for the purpose described in combination with a railway freight car, comprising a trackway support from which the gate is suspended and adapted to ride; swivel means for enabling the gate to be swung from a cross-wise to a length-wise position of the car from said support; means for spacing the gate in the car according to car contents; said means including side wall and floor elements to which the gate is removably attached; and means for suspending the gate on a plane higher than normal loading conditions required in loading certain kinds of freight.

1,803,761. BRACING FOR FREIGHT. FREDERICK W. LUDWIG, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed June 25, 1930. Serial No. 463,594. 14 Claims. (Cl. 105—367.)

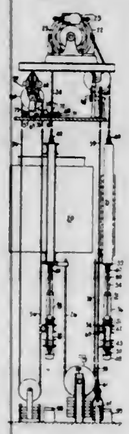
1. In a device of the character described, a freight carrier, an engine unit disposed in said carrier with its crank shaft extending in a vertical direction, a flange secured to the floor of said carrier which pilots the lower end of

said engine, and means extending across the carrier and detachably secured to each side thereof which pilots the upper end of said engine.



2. In a device of the character described, a freight carrier, a plurality of engine units disposed in said carrier with their crank shafts extending in a vertical direction and with their cylinder blocks projecting diagonally to the lines of said carrier so that the crank case of one unit may overlap the cylinder head of the next unit, flanges secured to the floor of said carrier in position to pilot the lower ends of said units, and means extending across the carrier and detachably secured to each side thereof which pilots the upper ends of said units.
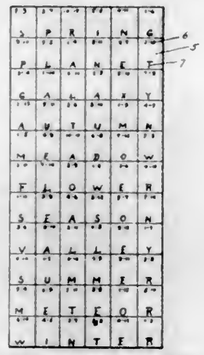
1,803,762. ELEVATOR SAFETY APPARATUS. ALEXANDER MARKS, Chicago, Ill., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed July 5, 1929. Serial No. 375,953. 7 Claims. (Cl. 187—91.)



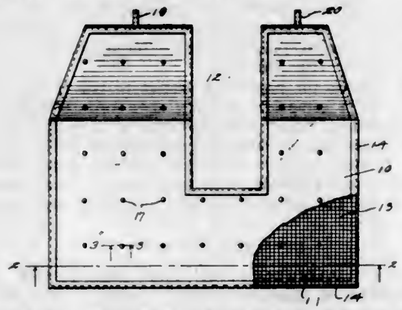
1. In an elevator installation, a hatchway, a body movable in said hatchway, guide rails for said body, a buffer carried by said body, safety brake mechanism carried by said buffer and adapted upon operation to grip said rails to cause the operation of said buffer to retard and stop the descending of said body, means for causing the operation of said safety brake mechanism at any point in the hatchway, and resilient means surrounding a portion of said buffer for retarding the latter upon operation of said safety brake mechanism.

1,803,763. PUZZLE. HARRY B. MEIBERS, Springfield, Ohio. Filed Nov. 18, 1929. Serial No. 408,062. 1 Claim. (Cl. 273—153.)

A set of cards adapted to be assembled in edge abutting engagement in transverse and longitudinal rows, each card bearing a single letter of the alphabet, the letters being so chosen as to spell a word in each transverse row when the cards are arranged in certain sequence, each of the cards being further provided with two different numerals, said numerals being so chosen that all of the numerals within a given range will appear in each transverse row of the cards when said cards are arranged in the aforementioned certain sequence, the numerals further being so chosen that one of said numerals will be common to all of the cards in one of the vertical rows to provide a key card for each transverse row.

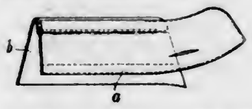


1,803,764. VEHICLE RADIATOR. ERNEST E. MILLER, David City, Nebr. Filed Feb. 16, 1929. Serial No. 340,565. 2 Claims. (Cl. 257—256.)



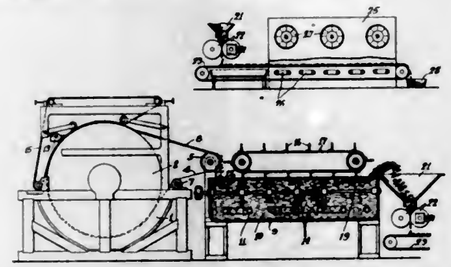
1. A heater for vehicles comprising a flat body adapted to be placed upon the vehicle deck and corresponding in contour and outline to the shaping of the deck, said body comprising upper and lower plates sealed to one another about their edges, a member disposed between said plates and maintaining the plates in spaced relation to one another while subdividing said space into tortuous channels, and means for introducing a heating medium to and withdrawing said heating medium from the space between the plates, one of said plates having pressed portions extending through openings formed in the other of the plates and sealed to the edges of said openings, said pressed portions being positioned at spaced intervals about the plate and between the edge portions thereof.

1,803,765. STAND-UP DOUBLE COLLAR. HUGO MUELLER, Mannheim, and HANS BERTELSMANN, Bielefeld, Germany. Filed Mar. 11, 1929, Serial No. 346,155, and in Germany Feb. 25, 1928. 1 Claim. (Cl. 2—138.)



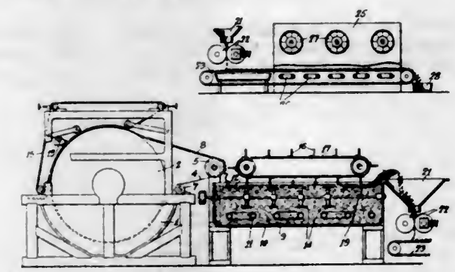
A stiffened turned-over collar, comprising an inner multi-ply neck embracing portion of dense fabric; each ply being substantially indifferent to absorption of starch; an outer multi-ply collar portion of porous fabric with its plies capable of free absorption of a large amount of starch; said neck embracing portion being freely yieldable and the outer collar portion rigid; and reinforcement marginally of the inner neck embracing portion.

1,803,766. APPARATUS FOR DRYING. GEORGE W. O'KEEFFE, New Rochelle, N. Y. Filed Jan. 8, 1927. Serial No. 159,831. 25 Claims. (Cl. 34—2.)



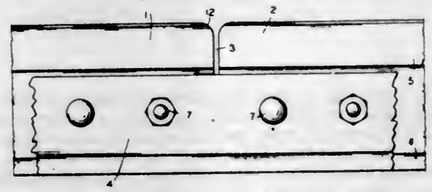
1. Apparatus for drying substances repellant to entrained fluid comprising a tank of liquid, means to raise the liquid to that temperature at which the substance is fluid repellant, means to immerse the substance in the liquid, means to agglomerate the substance while immersed and means to remove the substance from the liquid.

1,803,767. DRYING. GEORGE W. O'KEEFFE, New Rochelle, N. Y. Filed Jan. 8, 1927. Serial No. 159,832. 22 Claims. (Cl. 34—24.)



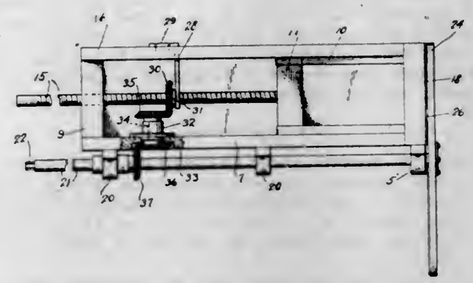
22. The method of drying substances having the characteristics of a precipitate obtained by treating a gum with an alkali and acid, which precipitate has the property of becoming suddenly fluid repellant when raised to a certain critical temperature, consisting in heating the substance to said critical temperature, which temperature is below the boiling point of the entrained fluid.

1,803,768. RAILWAY RAIL JOINT. FREDERICK L. RE QUA, San Francisco, Calif. Filed Oct. 3, 1930. Serial No. 486,133. 2 Claims. (Cl. 238—173.)



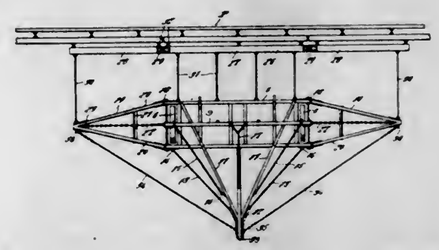
1. A rail joint with the abutting rail ends arcuately chamfered transversely of their tread portions.

1,803,769. ROTARY VEGETABLE CUTTING MACHINE. CHARLES B. ROHLAND, Barberton, Ohio. Filed June 26, 1929. Serial No. 373,887. 1 Claim. (Cl. 146—113.)



In a vegetable cutter of the class described including an elongated casing and a follower slidable in the casing, means for shifting the follower longitudinally in the casing comprising a threaded shaft fixed to the follower and disposed longitudinally in the casing, a gear threaded on the shaft having a collar thereon, a stop bracket mounted on the casing and extending thereinto through which the shaft slidably extends and with which the collar on the gear engages, a shaft extending transversely through an opening in one side of the casing, a bearing for the second named shaft extending through the casing, a gear on the inner end of the second named shaft meshing with the first mentioned gear, said first named gear being retained against longitudinal movement in the casing by the bracket and the second named gear, a third gear fixed on the outer end of the transverse shaft, bearings on one side of the casing, a shaft journaled for rotation in the bearing, a gear fixed on the last mentioned shaft meshing with the third mentioned gear and cutting means fixed on one end of the last mentioned shaft and disposed at one end of the casing.

1,803,770. TRACTOR HITCH FOR FARM MACHINERY. JOHN W. RUSH, La Grande, Oreg. Filed Sept. 10, 1929. Serial No. 391,527. 3 Claims. (Cl. 97—233.)



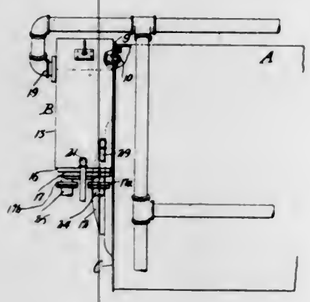
1. In a hitch of the class described, a main frame, wheels supporting said main frame at each end of the frame, wing frames hingedly connected to said main frame at opposite ends of the main frame, and adapted to extend laterally from said main frame, said wing frames adapted to be swung upwardly to assume vertical positions, means for securing said wing frames in said vertical positions, a draft tongue extending forwardly from said main frame intermediate the ends of said main frame, brace bars secured to the main frame and said draft tongue, brace rods secured to said main frame at opposite ends of the main frame and said draft tongue at the forward end of said draft tongue, a pair of flexible members secured at one end to the forward end of said draft tongue, and at their opposite ends to the free

ends of said wing frames, a sectional draft bar, said draft bar comprising an intermediate section and a pair of end sections, means hingedly connecting the end sections of the draft bar to said intermediate section of the draft bar, links extending rearwardly of said main frame, said links adapted to be secured to the intermediate section of said draft bar, links extending rearwardly from the free ends of said wing frames, said last mentioned links adapted to be secured to the outer free ends of said end sections of the draft bar.

1,803,771. REMOVAL OF ARSENIC FROM LEAD BULLION. RONALD CAMPBELL RUTHERFORD, El Paso, Tex., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed July 26, 1929. Serial No. 381,397. 4 Claims. (Cl. 75—15.)

2. The process of treating lead ore containing sulphur, copper and arsenic to produce partially refined lead, which comprises roasting said ore to reduce the sulphur content to less than the chemical equivalent of the copper content whereby an excess of copper is available to unite with the arsenic, and smelting the roasted ore to cause the copper to unite with the remainder of the sulphur and form matte and the excess of copper to unite with the arsenic to form speiss, and removing the matte and speiss from the residue which comprises a base lead bullion containing less than .05% of arsenic.

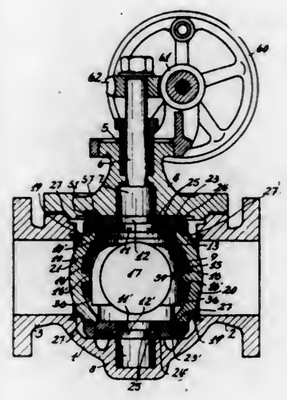
1,803,772. FEED WATER HEATER. EUGENE L. SCHELLENS, Millburn, N. J., and CHRISTOPHER A. SCHELLENS, Marblehead, Mass., assignors to C-S Engineering Company, Jersey City, N. J., a Corporatiorn of Delaware. Filed Mar. 13, 1926. Serial No. 94,370. 24 Claims. (Cl. 122—441.)



22. An arcuate locomotive feed water heater comprising a casing, water tubes therein, extending from end to end thereof, means cooperating with walls of the casing to form an arcuate steam chamber from end to end thereof, means for admitting steam to said chamber, and a plurality of jet openings from said chamber directed toward said tubes.

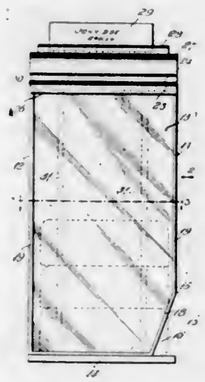
1,803,773. ROTARY VALVE. ALFRED SCHMIDT, Dusseldorf, and EDWALD HASELHORST, Halle-on-the-Saale, Germany. Filed Aug. 9, 1929, Serial No. 384,690, and in Germany Apr. 16, 1928. 7 Claims. (Cl. 251—102.)

1. A rotary valve comprising a valve casing, inlet and outlet branches on the said casing, a bored valve spindle, a bored body surrounding the said spindle, valve plates on the said bored body, means for coupling the bored body with the spindle during a portion of the rotary motion of the spindle and for uncoupling it during another portion of the rotary motion, means for locking the rotary body to the valve-casing during this latter



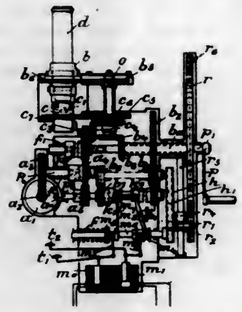
portion of the revolution and eccentric parts on the spindle for causing the relative rotation of the spindle and rotary body to displace the said valve plates, as and for the purpose set forth.

1,803,774. DISPENSING CABINET. THOMAS B. SCHMIDT, Harrisburg, Pa. Filed May 4, 1929. Serial No. 360,587. 1 Claim. (Cl. 312—42.)



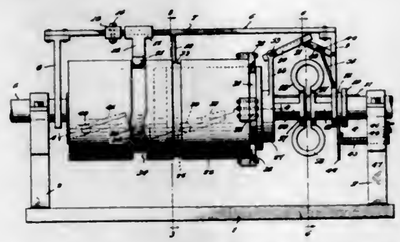
A dispensing cabinet for loaves of bread or the like, comprising a rectangular body including a back, side walls and a transparent front wall, a cover for said body, an inverted U-shaped band arranged at the top of said body, the back and side walls of said body extending into said band, and a strip interposed between the inner walls of said band and extending across the front of the body for protecting the latter against breakage.

1,803,775. FUSE SETTING MACHINE. HERMANN SCHULER and ANTON GIETMANN, Dusseldorf, Germany, assignors to Rheinische Metallwaaren und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed July 15, 1929, Serial No. 378,377, and in Germany Aug. 29, 1927. 11 Claims. (Cl. 86—23.)



1. A fuse setting machine including a projectile receiving head, a fuse ring gripping device revoluble with respect to said head, a constantly revolving motor, means temporarily to connect the motor operatively with the fuse gripping device to revolve the latter, and a remote control for said means.

1,803,776. CLUTCH. WILLIAM C. SEITZ, Amsterdam, N. Y. Filed July 17, 1929. Serial No. 379,005. 9 Claims. (Cl. 192—30.)



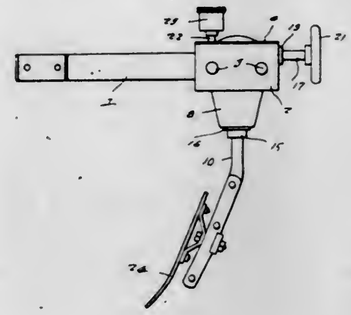
2. A clutch comprising a driving shaft and a driven shaft, an outer cylindrical member, eccentrics mounted in the member and keyed to the respective shafts, means for interlocking the eccentrics with the cylindrical member, a frame slidably keyed to the driving shaft for movement around the cylindrical member, and interlocking means between said member and frame to shift the member and the eccentrics to cause the shafts to rotate simultaneously.

1,803,777. FISH LURE. JULIUS E. SPEICH, Nedrow, N. Y. Filed May 31, 1929. Serial No. 367,600. 2 Claims. (Cl. 43—47.)



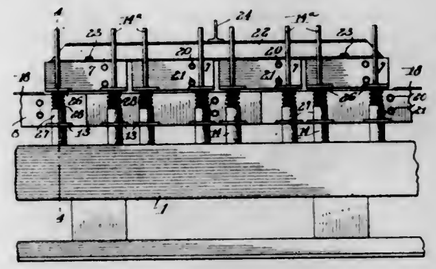
1 An artificial fish-bait comprising a body portion having a forwardly tapered front end and spiral peripheral ribs extending rearwardly from the tapered end to cause the body to rotate when drawn through the water, fish-hooks secured to opposite sides and projecting rearwardly in spaced relation beyond the rear end of said body portion, and a flexible rudder attached to the rear end of the body to extend between the hooks.

1,803,778. CULTIVATOR SHOVEL MOUNTING. JOHN HENRY STARR and HOWARD STARR, Shickley, Nebr. Filed Dec. 7, 1929. Serial No. 412,483. 1 Claim. (Cl. 97—187.)



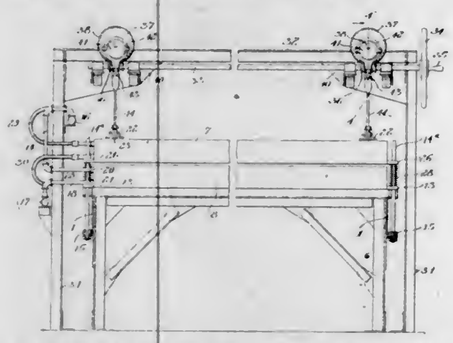
A cultivator shovel of the class described comprising a metallic casing adapted to be mounted on the free end of a cultivator beam and having an open chamber in its upper portion, a removable cover plate mounted on the casing and extending over the chamber, an integral downwardly tapering extension depending from the lower side of the casing, said extension and casing having a vertical bore extending therethrough communicating with the chamber at its lower side, a vertical shovel standard extending through the bore, a reduced threaded extension on the upper end of the standard extending upwardly into the chamber, a gear fixed on the extension, a retaining nut for the gear threaded on the extension, stop means on the standard engaging with the lower end of the extension on the casing for limiting the upward movement of said standard through the bore, a horizontally disposed shaft extending longitudinally and rotatably in the casing and through the chamber, a worm gear fixed on said shaft within the chamber and in mesh with the first named gear, means for manually rotating the shaft, a cultivator shovel on the lower end portion of the standard and means mounted on the casing for lubricating the gears therein.

1,803,779. PLATEN SUPPORT FOR HEAT PROCESSING MACHINES. JOHN A. STEVENS, Lowell, Mass., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Aug. 14, 1928. Serial No. 299,562. 10 Claims. (Cl. 154—1.)



1. In a heat processing machine for sheets and boards, the combination with a lower platen element, an upper platen element, and means independent of said platen elements for drawing sheet material continuously between said elements, of a resilient support for one of said platen elements to maintain it properly spaced from the other element.

1,803,780. PLATEN MECHANISM FOR HEAT PROCESSING MACHINES. CHARLES A. UPSON, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Aug. 14, 1928. Serial No. 299,560. 7 Claims. (Cl. 154—1.)

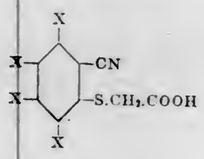


1. A machine for heat processing sheets and boards, comprising in combination, a frame, a lower platen element, an upper platen element, means for supporting the latter in proper spaced relationship to the former, means for heating said platen elements, and lifting mechanism for the upper platen element embodying a hand operated device accessible from one side of the frame.

1,803,781. PROCESS OF PREPARING THE 2-NITRILE OF ARYL-1-THIOGLYCOL-2-CARBOXYLIC ACIDS CONTAINING BROMINE AND NEW PRODUCTS OBTAINABLE THEREBY. HERMANN WAGNER, Bad Sodon-on-the-Taunus, and RUDOLF BRUNS, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 6, 1928, Serial No. 324,311, and in Germany May 5, 1925. 7 Claims. (Cl. 260—108.)

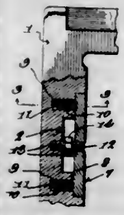
1. The process which comprises subjecting an aryl-1-thioglycollic-2-carboxylic acid nitrile to the action of bromine in the presence of a solvent which is inert to halogen.

6. As new products the compounds of the following formula:



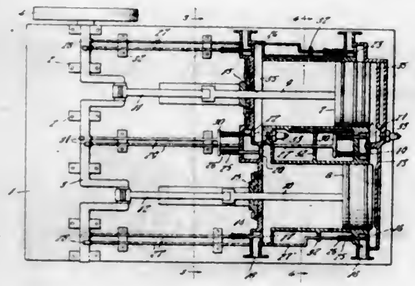
wherein one X stands for bromine, at least one X for alkoxy, halogen or alkyl, and the other X's for hydrogen or univalent substituents.

1,803,782. PRINTER'S QUOIN CHASE. CHARLES F. WELDON, Lake Geneva, Wis. Filed Dec. 22, 1928. Serial No. 327,881. 1 Claim. (Cl. 101—394.)



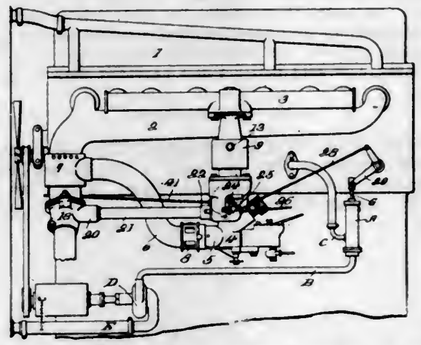
A printing-press chase and quoin assemblage comprising a chase frame, a quoin, the chase frame having spaced sockets therein, spaced stems upon the quoin of greater length than the thickness of said quoin slidably fitting in said sockets and constituting means for slidably supporting the quoin with respect to the said side of the chase frame for adjustment toward and from the same and bracing the quoin when the quoin is moved beyond the chase frame and preventing lateral displacement of the quoin, the said stems and sockets constituting also means for maintaining the said quoin parallel to the said side of the frame, springs within the sockets coacting and extending within said stems and urging the stems outwardly in the sockets and constituting means for normally urging the quoin away from the said side of the frame, the quoin and frame having threaded sockets therein in opposition to each other, the threads in the sockets being oppositely directed, and an adjusting screw having oppositely threaded end portions fitting in said sockets and an intermediate head of polygonal contour for the application of a tool for effecting adjustment of said screw to effect positive adjustment of the quoin in either direction with respect to the said side of the frame.

1,803,783. INTERNAL COMBUSTION ENGINE. ISAAC MITCHELL WHERRY, Zearing, Iowa. Filed Oct. 17, 1929. Serial No. 400,309. 4 Claims. (Cl. 123—61.)



4. An internal combustion engine of the character described comprising a power cylinder having inlet and outlet ports at its opposite ends, a compressor cylinder having inlet and outlet ports at its opposite ends, the outlet ports thereof communicating with the inlet ports of the power cylinder, pistons mounted for reciprocation in the cylinders, a crank shaft coupled to the pistons to cause simultaneous movement thereof in the cylinders, cams mounted on said crank shaft, valves in the inlet ports of the compressor cylinder for admitting a fuel charge thereto throughout the strokes of the piston therein, valves in the outlet ports of the power cylinder for exhausting gases therefrom throughout portions only of the strokes of the piston therein and simultaneously operated pairs of valves in the communicating inlet ports of the power cylinder and the outlet port of the compressor cylinder for the passage of the fuel charge from said compressor cylinder to said power cylinder while the piston in the latter cylinder is traversing the portions of its strokes at which the valves in the outlet ports thereof are closed, and means for actuating the valves comprising independent reciprocating rods engaged at one end with certain of the cams on the crank shaft and at their opposite ends with the inlet and outlet valve of the compressor and power cylinder respectively and reciprocating rods each having one end engaged with one of the remaining cams on the crank shaft and having heads on their opposite ends engaged with the pairs of valves in the communicating outlet and inlet ports of the compressor and power cylinders respectively.

1,803,784. HEAT CONTROLLING MEANS FOR CHARGE FORMING DEVICES. REA P. WRIGHT, Washington, D. C., assignor to Marvel Carburetor Company, Flint, Mich., a Corporation of Illinois. Filed Aug. 15, 1929. Serial No. 386,126. 19 Claims. (Cl. 123—122.)



1. In a heat control for internal combustion engines having a forced feed water cooling system, the combination with valves arranged to throttle the exhaust gases and explosive charge, of means controlled by the pressure of the water cooling system of the internal combustion engine to vary the effect of movement of the charge controlling valve on the exhaust controlling valve.

1,803,785. CORE POSITION INDICATOR FOR WELL DRILLING APPARATUS. JOHN EDWARD ABLER, Hollywood, Calif. Filed July 9, 1928. Serial No. 291,293. 4 Claims. (Cl. 33—205.)



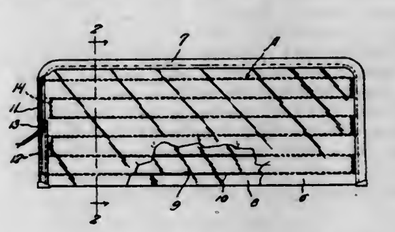
1. An instrument of the character described comprising a casing having a bottom wall provided with a concave upper surface, a vertically yieldable pendulum supporting needle rising centrally from said surface, a normally vertical pendulum having its upper end bearing on the tip of said needle, a pointer projecting centrally from the upper end of the pendulum and adapted in the vertical position of the pendulum to align with the pendulum supporting needle, a magnetic compass needle carried by the pendulum and extending at right angles to said pointer, said compass needle being rotatable about an axis coinciding with the longitudinal axis of the pointer, a lens mounted on the casing and provided with a plurality of concentric lines with which the pointer cooperates and displaceable holding means yieldingly engaging the upper end of the pendulum to force the pendulum downwardly into engagement with the concave bottom wall surface of the casing whereby the pendulum is effectively secured in a vertical position.

1,803,786. GARTER. THURMAN ANDREW, Jamaica Plain, Mass. Filed July 9, 1930. Serial No. 466,812. 1 Claim. (Cl. 241—6.)



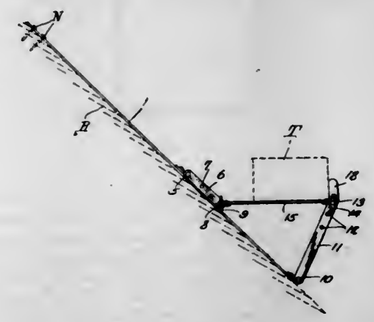
A garter including a band, a shield thereon, a member seated within the shield having an elongated slot, said shield having an aperture through which the slotted portion of the member is exposed, a tape secured at one end to the band and having a clasp at its other end, an intermediate portion of the tape being looped through the slotted member, a buckle carried by said member and movable in the aperture in the shield to engage and release the tape, a fastener at one end of the band, and means on the slotted member for engagement by the fastener.

1,803,787. CLEAR VISION DEVICE. JOHN W. BOUR, Los Angeles, Calif. Filed July 24, 1929. Serial No. 380,611. 2 Claims. (Cl. 20—40.5.)



1. A transparent panel for windshields, windows and other closures comprising a pair of spaced companion transparent panes, transparent strips disposed between and engaging said panes and arranged slightly in spaced relation defining passageways, a continuous resistance wire extending from one passageway to the other, and feed and return wires for said resistance wire secured to the opposite terminals thereof and extending from said panels.

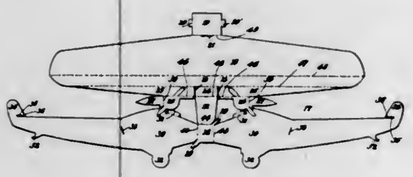
1,803,788. SHINGLE BRACKET. MARSHALL BROWN, Heltonville, Ind. Filed June 25, 1929. Serial No. 373,653. 1 Claim. (Cl. 304—20.)



A shingle bracket including a strap for attachment to a supporting structure, arms pivotally connected thereto,

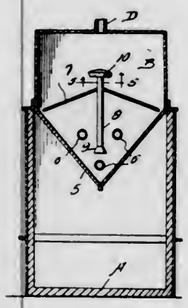
links pivotally connected to the strap, a supporting strip, and pivotal adjustable connections between the ends of said strip and the links and arms, respectively, whereby said links, arms and strip can be folded against the strap or can be moved to position to support the strip at an angle to the strap without disconnecting said strip from the links and arms.

1,803,789. DISPLAY TOY AEROPLANE. JOSEPH EDWIN BURGESS, New York, N. Y., assignor to The United States Printing & Lithograph Company, Brooklyn, N. Y., a Corporation of Ohio. Filed June 20, 1928. Serial No. 286,973. 5 Claims. (Cl. 46—50.)



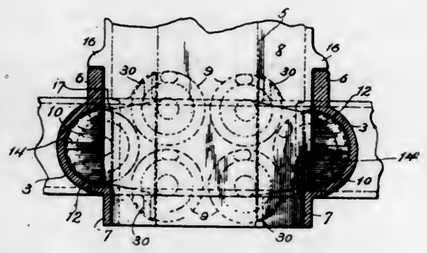
1. A flexible blank for forming a toy display aeroplane comprising a medial head portion, fuselage side portions extending laterally and oppositely from the same, adapted to be folded rearwardly therefrom, and having slits therein, and rear end upright rudder portions having slits, a slit transverse wing portion to rest against the folded fuselage side portions and be secured in the side slits, and a top having a rear slit fuselage portion with a forward tongue to enter the rear slit of the wing, and a rear end horizontal rudder portion to enter the slits in the upright rudder portion, and also receiving the rudder portion in the rear slit.

1,803,790. STEAM BOILER. JEREMIAH BURKE, Terre Haute, Ind. Filed July 13, 1928. Serial No. 292,518. 1 Claim. (Cl. 122—406.)



In a steam boiler for furnaces, a boiler body, the bottom wall of which merges at one end into a water pit having inclined side walls, fire tubes extending longitudinally through the pit and communicating at opposite ends with the interior of the furnace, a plate arranged longitudinally within the boiler above said pit and having its major portion at all times disposed above the normal level of the water within the pin, said plate being provided with downwardly directed surfaces terminating in spaced relation with the inclined walls of the pit, vertical tubes arranged through the plate and having their lower ends below the plate within the pit, the upper ends thereof terminating slightly above the plate, manifolds arranged upon the upper ends of the tubes and having discharge openings whereby the water flowing upwardly through the tubes will drop upon the plate to be directed toward the walls of the boiler, a cold water inlet pipe having discharge openings disposed relative to said tube manifolds whereby cold water may be discharged onto said manifolds, and said boiler being provided with a steam outlet.

1,803,791. CAR TRUCK CONSTRUCTION. SAMUEL P. BUSH, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Jan. 4, 1927. Serial No. 158,950. 19 Claims. (Cl. 105—197.)



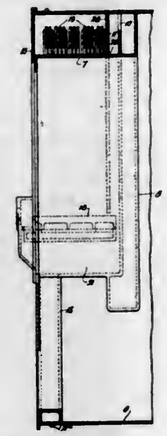
10. In a car truck, a side frame having an upper member, a lower member and columns connecting said members, spring seats near the bases of the columns over the lower member of the side frame, brackets on the side frame adjacent the inner edges of the spring seats, a spring plank resting on the lower member of the side frame between said brackets and the lower portions of the columns, a group of springs supported by the spring plank, the spring seats and said brackets, and a bolster supported by the springs.

1,803,792. METHOD AND APPARATUS FOR SPRAYING FLUID PULPS. NIELS C. CHRISTENSEN, Salt Lake City, Utah. Filed Nov. 24, 1926. Serial No. 150,580. 5 Claims. (Cl. 261—92.)



1. The method of making a spray from fluid mixtures of liquids and finely divided solids which consists in agitating said mixture to keep said solids in suspension and rotating a rapidly revolving horizontal cylinder dipping slightly into said mixture to be sprayed, at such a speed that a portion of said fluid mixture is carried out of the body of said mixture on the surface of said cylinder and is thrown from the surface of said cylinder as a spray.

1,803,793. LOCOMOTIVE FRONT END CONSTRUCTION. JOEL S. COFFIN, Jr., Englewood, N. J., assignor to C-S Engineering Company, Jersey City, N. J., a Corporation of Delaware. Filed July 30, 1927. Serial No. 209,504. 28 Claims. (Cl. 122—423.)



1. A cast steel smoke box having an arcuate feed water heater receiving pocket formed integral therewith and extending within its cylindrical portion.

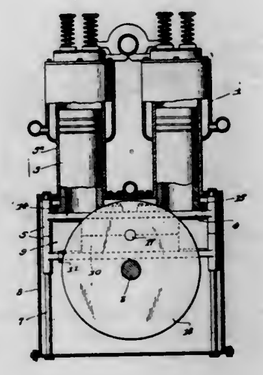
1,803,794. MECHANICAL PENCIL. HERMANN DEUTSCH, Gross-Lichterfelde, near Berlin, Germany, assignor, by mesne assignments, to Pencil Mechanism Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1925, Serial No. 25,546, and in Germany May 8, 1924. 19 Claims. (Cl. 120—17.)



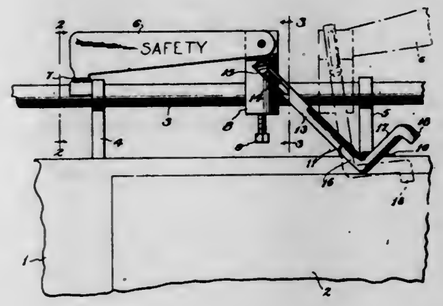
1. In a propelling pencil, in combination, telescoping inner and outer tubes, a slotted-lead-guiding tube secured in said outer tube, a gripper operatively connected with said inner tube and comprising jaws formed on the ends of resilient arms and adapted to pass through the slots in said guiding tube and engage a lead therein, and means operatively connected with said inner tube for controlling said jaws.

1,803,795. SLIDE TRANSMISSION FOR INTERNAL COMBUSTION ENGINES. THOMAS M. FINLEY, St. Louis, Mo. Filed July 9, 1926. Serial No. 121,441. 4 Claims. (Cl. 74—14.)

1. The combination with a plurality of cylinders and pistons, of a slide transmission, comprising spaced guide rods rigid with and extending longitudinally from the cylinders, a cross head rigidly connecting the pistons and slidable on the guide rods and provided with spaced guides extending longitudinally of the cross head, a reciprocating slide mounted between the guides of the cross head and movable longitudinally thereof and having a bearing, a crank shaft composed of sections, fly wheels mounted on the sections and arranged at opposite sides of the cross head and slide, and an eccentric wrist pin connecting the fly wheels and mounted in the bearing of the slide.

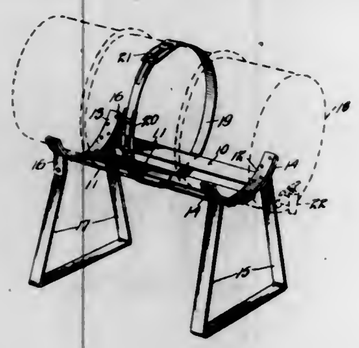


1,803,796. COMBINED SHIPPER AND GEAR CASING LOCK. DARBY G. FLOYD and MILLEN H. MCLENDON, Winnsboro, S. C. Filed Oct. 24, 1928. Serial No. 314,758. 3 Claims. (Cl. 192—135.)



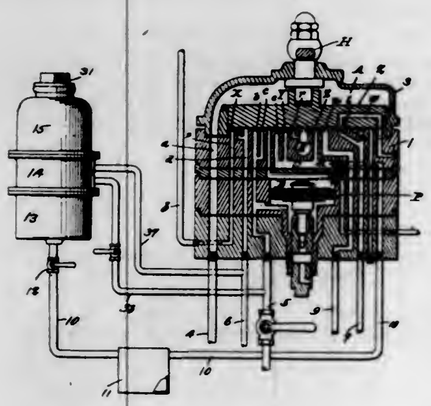
2. The combination with a gear box closure, a shipper rod and a bearing therefor, of a post adjustably secured to the shipper rod, a latch member pivoted to the post and adapted to engage the said bearing of the shipper rod, and fastening means pivotally mounted intermediate its ends, and having one end adapted to secure the said gear box closure, and having the opposite end slidably connected with the said post.

1,803,797. BARREL RACK. JOHN M. GERHARDT, Charleston, Ill. Filed Dec. 7, 1927. Serial No. 238,433. 8 Claims. (Cl. 248—11.)



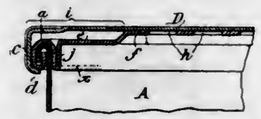
1. A barrel stand comprising an elongated transversely curved cradle formed of a pair of spaced curved end members connected by spaced slats, a support at one end of the cradle fixed relative thereto, and another support at the opposite end of the cradle, substantially as set forth.

1,803,798. AIR BRAKE. ELBERT R. GREENLEE, Kansas City, Kans. Filed June 24, 1929. Serial No. 373,340. 5 Claims. (Cl. 303—60.)



1. In an air brake system the combination with a feed valve pipe, a brake pipe, an automatic brake valve having a piston chamber in the seat portion thereof, of a supplemental chamber in said seat portion, a valved connection between said chambers for holding pressure in said supplemental chamber, an auxiliary feed valve having a control chamber in communication with the supplemental chamber, an equalizing chamber in communication with the brake pipe, a supply chamber in communication with the feed valve pipe, a diaphragm separating the control and equalizing chambers, a spring controlled valve normally closing communication between the equalizing and supply chambers, and means coupled to the valve and actuated by the diaphragm under predetermined pressure in the control chamber, for opening the valve to release pressure from the supply chamber to the equalizing chamber.

1,803,799. SIFTING TOP CAN. CHARLES GUERITEY, Passaic, N. J. Filed Aug. 16, 1927. Serial No. 213,336. 5 Claims. (Cl. 221—62.)



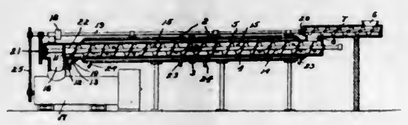
1. A receptacle having its top double-seamed to its body, the top having openings, and the portion of the top formed with such openings raised above the bottom of such seam, and a slide having its middle portion lying close above the said portion of the top to close one or more of said openings according to its position and having resilient lateral portions extended freely above said seam and bent down against and under said seam to resiliently embrace the seam, whereby they may be sprung down to release their cling under said seam.

1,803,800. BLOTTING MEDIUM. WILLIAM A. HARTLINE, Tampa, Fla. Filed July 26, 1928. Serial No. 295,607. 1 Claim. (Cl. 120—26.)



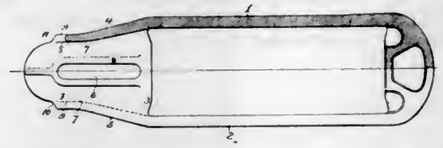
A blotting roller of argillaceous material having a bearing spindle of illium alloy embedded axially therein.

1,803,801. CONTINUOUS COOKER FOR FISH REDUCTION. GEORGE R. HENSHALL, Vancouver, British Columbia, Canada. Filed Apr. 29, 1929, Serial No. 358,935, and in Canada Feb. 28, 1929. 1 Claim. (Cl. 87—13.)



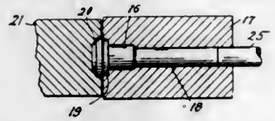
In a continuous cooker for fish reduction processes the combination comprising, a cylindrical casing enclosing a helical conveyor and encircled by an annular steam jacket, the construction of the same in connective sections, whereby said cooker may be conformed to space requirements either in the linear or superposed relation of its parts, the construction of the delivery end of said cooker characterized by a cone-shaped termination of the boss of the conveyor helix whereby the effective cross-sectional area of the delivery end of said casing is gradually decreased thereby subjecting the fish material to an increasing pressure which reaches a maximum at the point of delivery, a drainage receptacle of the nature of a sump at the bottom of the said cooker and adjacent its delivery end, a removable strainer of suitable fabricated metal between said sump and said casing, an apertured baffle plate forming a transverse closure to said casing and through which the expressed fish material is discharged, the construction of said cooker being characterized by the giving to the said casing of an angular inclination whereby the liquid content of the fish material is constantly drained towards the delivery end of the said cooker, the construction characterized by the addition of radial paddles secured at spaced apart intervals along said helical conveyor, and the construction characterized by the application of separate steam control members to each of the said sections whereby one section may be operated at a different temperature to another section.

1,803,802. COUPLER YOKE. GEORGE T. JOHNSON, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed July 28, 1927. Serial No. 208,998. 2 Claims. (Cl. 213—70.)



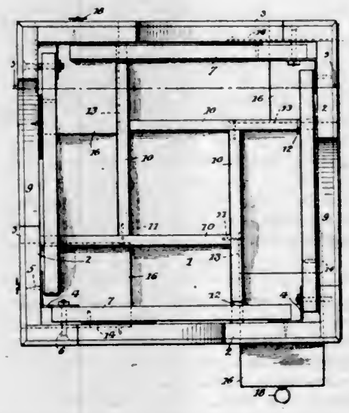
1. A draft yoke provided at its forward end with a hood in which a coupler shank may be inserted and having standard key-receiving slots in its sides, the roof and floor of the hood being extended forward and terminating approximately in the vertical plane of the front ends of the slots, the inner opposed surfaces of the front end portions of the roof and the floor being flat and parallel with the plane of the slots to form a guide for the coupler shank and being set nearer the slots than their rear portions.

1,803,803. PROCESS OF MAKING SCREWS AND BOLTS. CHARLES KAUFMAN, Garfield Heights, Ohio. Filed Feb. 3, 1930. Serial No. 425,408. 4 Claims. (Cl. 10—27.)



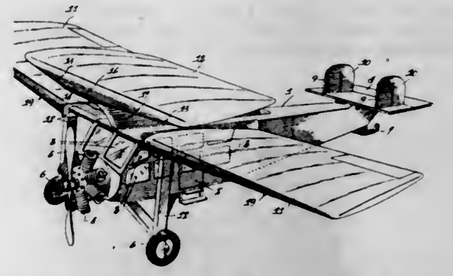
1. The method of making bolt and screw blanks which comprises drawing a portion of a length of stock of cross-sectional area greater than that of the shank of the blank to form a round cross section of a diameter equal to the overall diameter of the threads of the finished article, drawing down a portion of said round cross section to a diameter equal to the pitch diameter of the threads, and upsetting the unreduced portion of the stock to form a head.

1,803,804. CARD TABLE. CHARLES KOLODNY, Brookline, Mass. Filed Mar. 1, 1930. Serial No. 432,427. 1 Claim. (Cl. 45—11.)



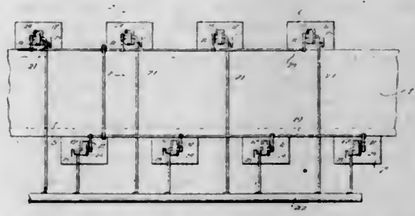
In a table, a top, depending side strips for said top extending along marginal portions thereof, bracing bars against the under face of the top in parallel spaced relation to the side strips and each having its outer end secured against a side strip in spaced relation to an end thereof and its inner end secured against a side face of a companion bracing bar transversely thereof in spaced relation to its ends, a recess being formed in the under face of each bracing bar at its outer end, a bearing bracket carried by each side bar and projecting from the inner side face thereof in spaced relation to an intersecting side strip, supporting legs pivoted between the side strips and brackets and when folded extending longitudinally of the side strips with their free end portions overlapping the bracing bars and engaged in the recesses formed therein, each side strip having an opening formed in one end portion thereof and the side strips and bracing bars having their confronting faces formed with grooves constituting tracks leading inwardly from opposite sides of the openings, and drawers engaged through the openings and slidably supported upon said tracks.

1,803,805. AEROPLANE. EDWARD H. LANIER, Covington, Ky. Filed Sept. 20, 1930. Serial No. 483,299. 14 Claims. (Cl. 244—14.)



1. In an aeroplane, a fuselage, a pair of side wings extending laterally thereof and having their inner edges spaced apart from the fuselage, a central longitudinal partition in the space between the inner edges of said side wings, and a top wing overlying the space between said side wings and itself spaced from the side wings, the under side of said top wing merging with said partition.

1,803,806. METHOD OF AND MEANS FOR FIRING KILNS. HENRY G. LYKKEN, Minneapolis, Minn. Filed Aug. 28, 1926. Serial No. 132,062. 20 Claims. (Cl. 25—151.)

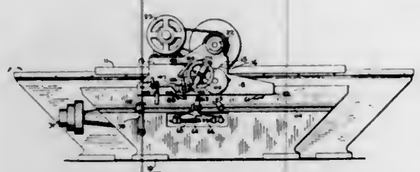


5. A firing device, comprising a common source of mixed pulverized fuel and air, a plurality of firing chambers located at different loci, means for supplying said mixed fuel and air from said source to each of said chambers, and means for regulating the supply at each of said chambers.

1,803,807. GRINDING MACHINE. CHARLES H. NORTON, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 8, 1920. Serial No. 422,412. 3 Claims. (Cl. 51—45.)

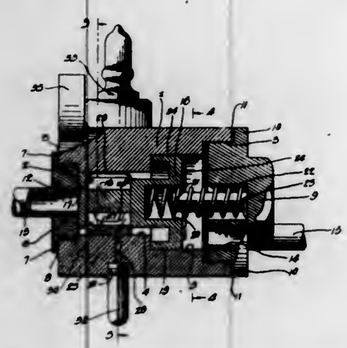
1. A grinding machine comprising a base having parallel ways thereon, two tables mounted on said ways for

reciprocation past each other, one of said tables constituting a work support, a wheel slide on the other table which is reciprocable transversely thereof, a rotatable grinding wheel carried on said slide, a cross feed mechanism to move the slide and feed the grinding wheel relative to the



work, a single driving and reversing mechanism to reciprocate the tables in opposite directions past each other simultaneously and means including adjustable dogs actuated by one of said tables to operate said mechanism and reverse the direction of movement of both tables.

1,803,808. SIGNALING DEVICE. HARRY E. PLATT, Ottumwa, Iowa. Filed May 9, 1930. Serial No. 451,144. 4 Claims. (Cl. 116—55.)

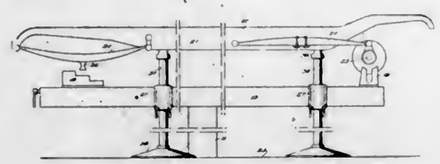


1. A signaling device comprising a body portion having a valve mechanism slidably disposed therein, an auditory signal communicating with said valve mechanism, and means for conveying fluid under pressure to the valve mechanism whereby the fluid may assume a common pressure upon both sides of the valve mechanism, said valve mechanism being operable by releasing the fluid under pressure upon one side of the valve mechanism, whereby said auditory signal will be operated, and comprising a spring-pressed valve body portion and a spring-pressed U-shaped portion, said valve body portion having a cylindrical end portion and a triangular end portion, said end portion being connected by a rectangular portion, said U-shaped portion being mounted on said rectangular portion, said hollow body portion and said U-shaped portion having fluid conduits adapted to become aligned with each other and release said fluid for operating said signal.

1,803,809. METHOD OF PRODUCING AND REFINING ALLOYS. HARRY F. PORTER, Trenton, N. J. Original application filed Jan. 20, 1927, Serial No. 162,245. Divided and this application filed Sept. 28, 1928. Serial No. 309,087. 4 Claims. (Cl. 75—22.5.)

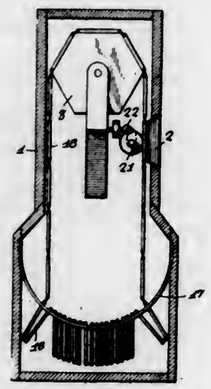
3. The method of simultaneously producing and refining a copper-nickel-iron alloy which comprises melting by induced electric currents a predetermined amount of copper having relatively high oxygen content, melting and dissolving a predetermined amount of nickel and commercial iron in said melt, effecting reduction of carbon in said iron by the oxygen content of the copper, and effecting a stirring motion of said solution to insure uniformity thereof by said induced currents.

1,803,810. JACK STANCHION. EDWIN R. SAGE, Jersey City, N. J. Filed July 31, 1928. Serial No. 296,620. 4 Claims. (Cl. 254—89.)



4. In a device of the class described, the combination of a ground supported stanchion provided with means for engaging part of a vehicle, and a vehicle lifting mechanism having a part thereof slidably mounted for vertical movement on said stanchion and restrained thereby from movement in all other directions.

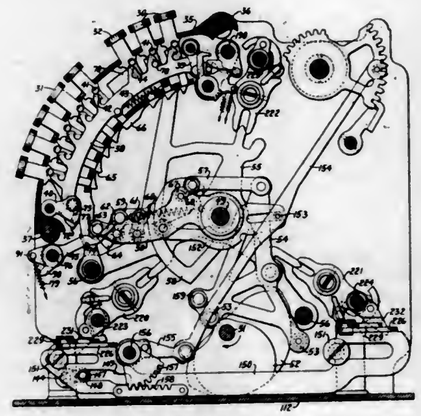
1,803,811. STREET AND STATION INDICATOR. DAVID M. SAUNDERS, Hicksville, Ohio. Filed Sept. 5, 1928. Serial No. 304,048. 2 Claims. (Cl. 40—101.)



1. A device of the class described comprising a casing having a window therein, a drum rotatably arranged in the upper part of the casing, an endless member passing over the drum and passing before the window during the rotary movement of the drum, a disk connected with one of the pintles of the drum, a weighted arm pivotally connected with the pintle, ratchet means for connecting the upper end of the arm with the disk, a segmental part on the lower end of the arm forming the weight therefor, a lever pivotally connected with the pintle, a set screw for connecting the lever with either lower corner of the segmental part, means for reversing the ratchet means and a cable connected with the lever.

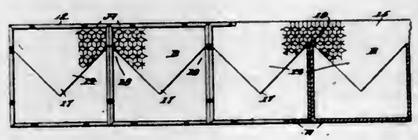
1,803,812. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Jan. 14, 1924, Serial No. 687,305. Divided and this application filed Apr. 9, 1927. Serial No. 182,871. 26 Claims. (Cl. 235—22.)

1. In a machine of the class described, the combination of a plurality of multiple-item transaction keys, a money receptacle having an accessible position, and an inaccessible position, means for retaining said money receptacle in the inaccessible position, means for releasing said re-



taining means, and a differentially slidable means for disabling said releasing means when any one of said multiple-item transaction keys is in operated position.

1,803,813. STARTER AND POUND SECTION. OWEN SMITH, Monroe, Va. Filed June 7, 1928. Serial No. 283,531. 3 Claims. (Cl. 6—11.)

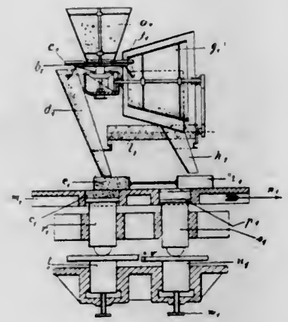


1. The combination of a series of honey comb frames, each having a slot located medially of and extending transversely through the top and a distance into the ends of the same, and a foundation formed from a blank having an unbroken area and an irregular edge constituting alternate planes and recisions, the unbroken area being insertable in the slots when the frames are arranged in a row in end abutting relation to each other with the planes protruded into the respective frames, whereby the latter and the foundation will be joined as a unit.

3. A comb foundation of wax formed from a single piece having an unbroken upper portion to be accommodated within the tops of adjacent comb frames and supported only from the ends of the latter and also provided with a depending plane to extend into said frame.

1,803,814. PROCESS OF AND APPARATUS FOR PRODUCING PRESSED BODIES OF POWDEROUS MATERIAL. PETER JOSEPH SPENGLER and JOHANN PETER SPENGLER, Ostswine, near Swinemunde, Germany. Filed Aug. 23, 1928, Serial No. 301,581, and in Germany Jan. 11, 1926. 17 Claims. (Cl. 25—67.)

10. A rotary table press having upper ram and lower ram comprising in combination a charging hopper, a rotary table plate, moulds in said plate, a charging box above this rotary table plate, scrapers for charging unscreened material for a coarse grained layer directly from said charging hopper to said charging box, a charging box for fine grained material above said rotary plate, a screening drum above said second mentioned charging box for delivering the screened material to said second mentioned



charging box, and a conveyor connected to said screening drum for conveying the coarse material from said drum to said first mentioned charging box.

1,803,815. REFLECTOR. MELVIN B. SPRIGG, Weston, W. Va. Filed Aug. 11, 1928. Serial No. 299,093. 4 Claims. (Cl. 40—135.)



1. In a device of the class described, a glass plate formed with a recess in the rear side thereof, an integral lens formed on the opposite side of said plate and in alignment with the recess, a disc of colored translucent material secured in said recess, and a reflecting element positioned behind said disc.

1,803,816. WATERPROOF PAPER. CLARENCE J. STROBEL, Marysville, Mich., and ALLEN P. TALLMAN, Toledo, Ohio. Filed Mar. 21, 1928. Serial No. 263,583. 1 Claim. (Cl. 92—21.)

As a new article of manufacture, a paper having distributed throughout between its fibers, Pará-cumarone and menhaden oil.

1,803,817. HOLDER FOR RECEPTACLES. WILLIAM ELMER TREMELLEN, Los Angeles, Calif. Filed Dec. 2, 1929. Serial No. 411,149. 2 Claims. (Cl. 248—20.)

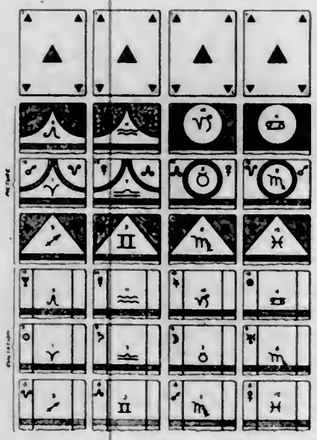
2. A device for holding a plurality of inverted receptacles stacked in nested relationship adjacent to, and

in easily removable contact with a wall portion for holding the stack in an upright and accessible position at all times, comprising a resilient standard having means at



one end for attachment to the wall, said standard extending upwardly and outwardly, and carrying receptacle engaging means at its free end for receiving and holding the receptacles in clamped and removable contact with the wall.

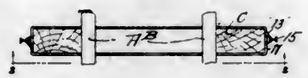
1,803,818. PLAYING CARDS. VIRGIE VAIL, Kansas City, Kans. Filed Nov. 15, 1928. Serial No. 319,635. 2 Claims. (Cl. 273—152.)



1. A set of playing cards embracing four suits each based on an astrological triplicity and each suit including groups of three cards each, each of the cards in each group of the same suit having depicted thereon the symbol of a different one of the signs of the same astrological triplicity, and the corresponding cards of the other suits having depicted thereon in a similar manner the symbols of the signs of other astrological triplicities but of a different triplicity for each suit, cards in the various groups having depicted thereon symbols of various astrological planets in astrological relation to the various signs to indicate the relative values of the cards.

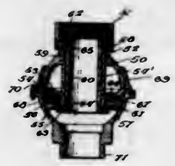
1,803,819. FORM TIE FOR CONCRETE STRUCTURES. JOSEPH L. WEBER, Green Bay, Wis., assignor to Weber-McDonald Wall Tie Company, a Corporation of Wisconsin. Filed Oct. 8, 1928. Serial No. 310,987. 1 Claim. (Cl. 25—131.)

A form tie of the kind described, comprising a pair of relatively stiff wire members, each including a long stretch and relative short bent terminals, the terminals being constructed to embrace a wall form, and eyes formed on the terminals and adapted to receive fasteners to be driven into the wall form to hold said terminals in embracing



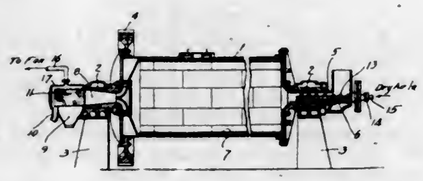
relation thereto, said eyes of the respective terminals being free of each other and non-twisted together, the long stretches of the members being adapted to lie crosswise of the wall form.

1,803,820. FLEXIBLE PIPE JOINT. WALTER C. WHITE, Pittsburgh, Pa., assignor to International Couplers Co., Pittsburgh, Pa., a Common-Law Trust. Filed Sept. 3, 1925. Serial No. 54,296. 5 Claims. (Cl. 285—95.)



2. In a flexible pipe joint, coacting joint members one providing a socket and the other including opposed followers forming a ball fitting in said socket, a packing interposed between said followers to coact between the ball and socket, means slidably supporting said followers to cooperate with the packing, a fluid conducting stem accommodated within said means, and a nut threaded on the stem for engagement with one of the followers.

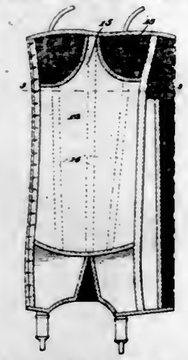
1,803,821. METHOD OF GRINDING MATERIAL. GUSTAV A. WITTE, Riverside, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed June 8, 1927. Serial No. 197,302. 7 Claims. (Cl. 83—9.)



1. The method of grinding Portland cement clinker to a fine state of division while maintaining the normal setting time of the finished cement, which comprises subjecting the same to a grinding operation in the presence of air, and maintaining such air at a relative humidity lower than that of the atmosphere.

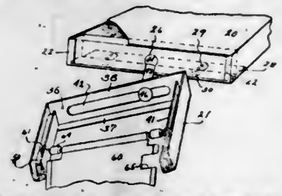
1,803,822. CORSET. MARGARET H. WITTENBERG, Worcester, Mass., assignor to The Royal Worcester Corset Company, a Corporation of Massachusetts. Filed Sept. 11, 1930. Serial No. 481,299. 2 Claims. (Cl. 2—30.)

1. A brassière corset the front of which consists of a brassière part and a body part, said body part comprising two plies or thicknesses of material of a length to extend largely below the waist line and being secured together at their side edges, the inner ply or thickness of material forming an inner belt or pad which extends well down bodily towards the bottom of the outer ply and which inner ply is free at its lower edge and has at its top an upwardly tapering extension reaching up to the middle top of the brassière part, at which point said extension is



attached to said brassière part, said inner belt or pad being loose at its bottom and between its side edges, leaving the two breast sections of the brassière entirely free.

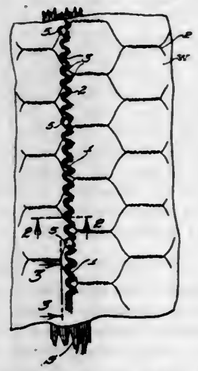
1,803,823. VISIBLE INDEX FILING DEVICE. CARLOS WITTENMYER, Mount Clemens, Mich. Filed Nov. 23, 1927. Serial No. 235,131. 15 Claims. (Cl. 129—16.)



12. In a filing device, a bottomless drawer, means supporting said drawer in a manner such that the drawer may be inverted on said means, record holders suspended from the side members of said drawer, and means adapted to secure said holders against falling out when said drawer is inverted.

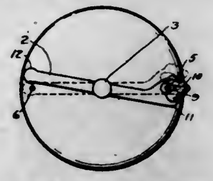
13. In a filing device, a record holder comprising a pocket having a notch in one vertical edge whereby the contents are exposed and having an edge open to facilitate withdrawal of records.

1,803,824. PAPER AND PLASTER FOUNDATION SUPPORTING DEVICE. GUY L. WOODJARD, San Diego, Calif., assignor to Kirstine Laustrup. Filed Jan. 26, 1928. Serial No. 249,526. 4 Claims. (Cl. 72—118.)



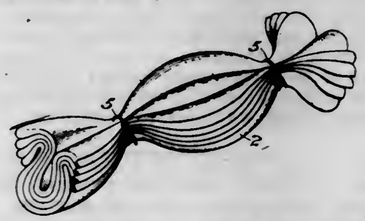
3. In a device of the class described, a metallic strip adapted to rest on one edge and provided with closely positioned short corrugations, the valleys of which are adapted to approximately fit a nail and half encircle the same, and a nail adapted to fit in any of said valleys and provided with a head adapted to engage the edge of said strip with more than half of the circumference of said nail head.

1,803,825. MILK CAN COVER. ROLLIN M. ABERNATHY, Seattle, Wash. Filed Dec. 14, 1929. Serial No. 413,995. 1 Claim. (Cl. 220—30.)



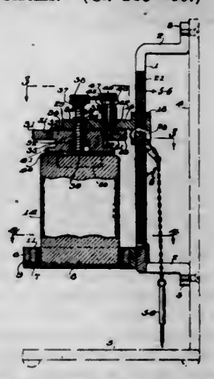
A cover for milk cans or the like embodying a cylindrical shaped casing with one end closed, the other open, slits in the side adjacent the open end, and openings in the closed end, and a bar pivotally attached to the center of the closed end, with means at the ends for closing the openings, and a spout at the side of one end of said bar adapted to be placed over one of the openings.

1,803,826. METHOD OF BUNDLING TOWELS PREPARATORY FOR WASHING. JOSEPH H. ADDLER, Brooklyn, N. Y., assignor to Pullclean Manufacturing Corporation, Bridgeport, Conn., a Corporation of Delaware. Filed Dec. 5, 1929. Serial No. 411,792. 5 Claims. (Cl. 270—30.)



1. Method of bundling towels preparatory for washing, consisting in piling the towel in reversely extending superimposed folds, then locally compressing the towel transversely of the folds to bunch and open up the same, and thereafter securing the same in such bunched condition.

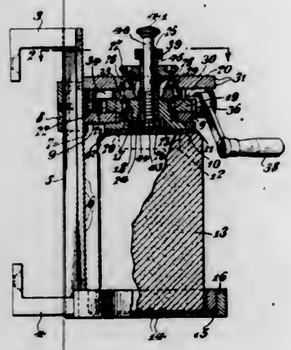
1,803,827. SOAP DISPENSER. MAURICE ALLAND, Atlantic City, N. J. Filed Sept. 24, 1929. Serial No. 394,767. 10 Claims. (Cl. 146—60.)



1. A soap dispenser, comprising a bracket bar having a ratchet surface, a grating element supported by said

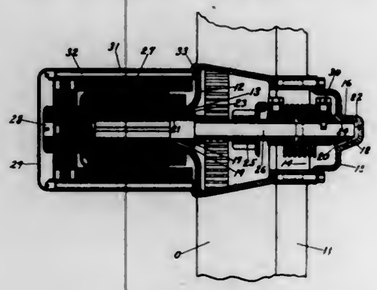
bracket, an arm slidably carried and wholely supported by said bar, ratchet means normally permitting relative movement of said arm upon said bar in one direction and preventing such movement in the opposite direction, and rotatable means carried and wholly supported by said arm to permit rotation of a soap cake with respect to said element.

1,803,828. SOAP DISPENSER. MAURICE ALLAND, Atlantic City, N. J. Filed Jan. 29, 1930. Serial No. 424,181. 8 Claims. (Cl. 146—60.)



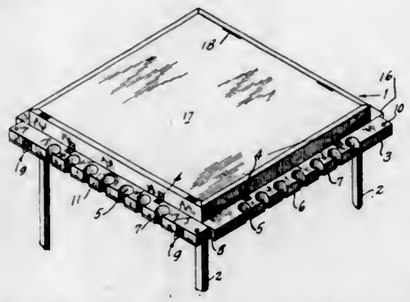
1. A soap dispenser, comprising a bracket having a rack-toothed portion, a member slidable thereon, a soap-engaging element carried by said member, a worm normally engaging said rack, a worm gear normally connected to rotate with said worm, a second worm in engagement with said gear, and a hub for said first worm adapted to be moved longitudinally of its axis, to permit said first worm to move transversely thereof freely from engagement with said rack, to permit rapid movement of said first member with respect to said rack.

1,803,829. ELECTRIC STARTING DEVICE. VINCENT G. APPLE, Dayton, Ohio. Filed Jan. 20, 1928. Serial No. 248,232. 20 Claims. (Cl. 290—48.)



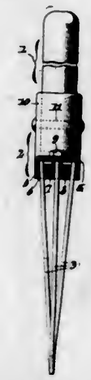
1. The combination of an internal combustion engine having a housing surrounding its rotatable parts, with a gear situated within said housing and adapted to rotate with said engine, a pinion within said housing adapted to mesh with said gear, a shaft secured to said pinion for rotation therewith, said shaft being within said housing but having an end extending through and beyond one wall of said housing, a bearing for said shaft in said wall, a rotatable member of a dynamo electric machine secured in overhung fashion outside of said housing to the extending end of said shaft, and a non-rotatable member of said dynamo electric machine secured to the outside of said wall in operative relation with said rotatable element.

1,803,830. CARD TABLE. FRED RICHARD AREY, Oakland, and WILLIAM EDWARD JONES, Jr., Alameda, Calif. Filed July 5, 1927. Serial No. 203,364. 8 Claims. (Cl. 273—136.)



3. In a card table a first receptacle having pins extending beyond the ends thereof, second receptacle each having a hole in one end thereof to receive one of said pins of said first receptacle, and a locking receptacle having holes in the ends thereof in operative relation to said pins of said second receptacle, said receptacles being foldably secured to the table.

1,803,831. FIRE FIGHTING IMPLEMENT. GEORGE M. ARTHUR, Glassboro, N. J. Filed June 13, 1929. Serial No. 370,533. 1 Claim. (Cl. 15—197.)

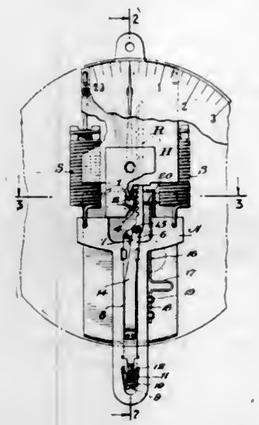


The combination in a fire fighting implement of the type described, of an elongated two-piece head, one section whereof is provided with an inner row of holes in the true vertical and outer longitudinal rows of holes complementarily inclined with respect to the median plane of the implement, and the other section of said head having a handle securing socket, and bristles formed in pairs through doubling of suitable lengths of tape metal with the bristles of each such pair engaged in neighboring holes of the longitudinal rows in the head section aforesaid with their flats placed crosswise, the bristles of the outer rows being in convergent relation, and all of said bristles having their free ends aligned in the median plane of the implement in chisel-like formation transversely thereof and being retained in place by clamping screws securing the head sections together.

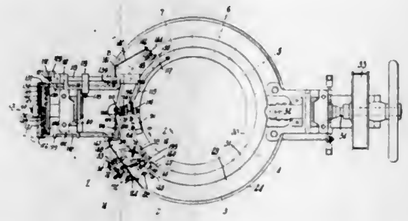
1,803,832. SPRING SCALE. SYLVESTER G. AVERELL, New York, N. Y., assignor to John Chatillon & Sons, New York, N. Y., a Corporation of New York. Filed June 6, 1929. Serial No. 368,857. 6 Claims. (Cl. 265—69.)

1. In a spring scale, the combination of an indicator, an indicator pinion and a rack having its teeth cut at

a progressively increasing angle, and a thermostat adapted to automatically change the position of the rack laterally with reference to the teeth of the pinion under changing temperature conditions so as to correct indicator errors due to temperature changes.



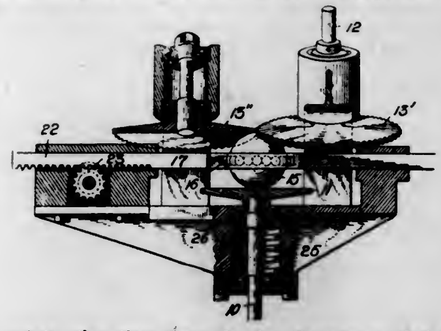
1,803,833. CIRCULAR KNITTING MACHINE. WILLIAM T. BARRATT, Bennington, Vt., assignor to Charles Cooper Company, Inc., Bennington, Vt., a Corporation of Vermont. Filed Apr. 4, 1930. Serial No. 441,493. 18 Claims. (Cl. 66—18.)



18. A circular spring needle knitting machine having, in combination, a primary rotary needle cylinder, a secondary rotary needle cylinder, spring needles on each of said needle cylinders, a presser for the primary needles, a presser for the secondary needles, a rotary driving contact member rotating synchronously with said needle cylinders a driven contact member adapted to be engaged and operated by said rotary driving contact member, mechanism operated by said driven contact member to throw said presser for the primary needles out of operative position, and mechanism operated by said driving contact member to throw said presser for the secondary needles out of operation.

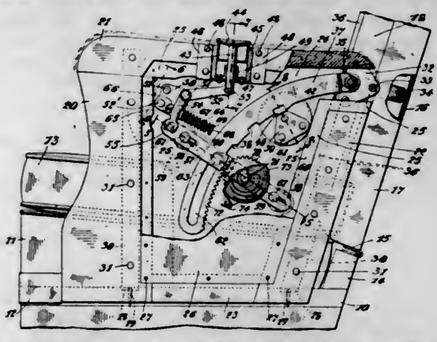
1,803,834. POWER TRANSMISSION. MORTIMER F. BATES, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., a Corporation of New York. Filed Aug. 9, 1927. Serial No. 211,655. 9 Claims. (Cl. 74—26.)

1. In a power transmission, a driving element, a driven element, a disc carried by each of said elements, a single ball interposed between said disc in driving engagement therewith, means for shifting said ball said discs being inclined relative to each other so as to engage said ball



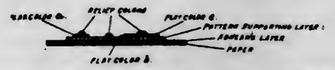
at points other than the ends of a diameter so that said ball is in rolling contact with said discs when shifted with respect thereto.

1,803,835. RECLINING SEAT. ALFRED B. BELL, Philadelphia, Pa., assignor to Hale & Kilburn Co., Philadelphia, Pa., a Corporation of Delaware. Filed June 3, 1929. Serial No. 367,902. 7 Claims. (Cl 155—163.)



1. In combination with a seat having an arm rest portion and a hinged back rest portion, of means for adjusting the inclination of said seat back portion, said means including a member hinged to said back rest portion at one end and having a toothed portion at the other end thereof, a pinion mounted on said arm rest portion and adapted to operatively engage the toothed portion of said member, and driving means associated with said pinion operative to swing said back rest portion forwardly when pressure against said seat back portion is removed.

1,803,836. DECALCOMANIA AND METHOD OF MAKING THE SAME. ALPHONSE BIHR, New York, N. Y. Filed Oct. 21, 1929. Serial No. 401,064. 8 Claims. (Cl. 41—33.)

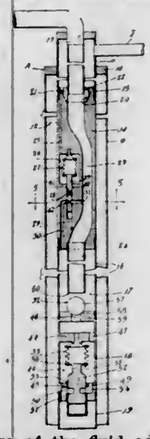


6. A positive decalcomania transfer comprising a layer of paper, a layer of adhesive substance on said paper, a layer of lacquer, on the face of said adhesive layer, and a design or lettering in bold relief constituted of material fused upon the lacquer.

1,803,837. GAS LIFT MEANS. MARK P. BURKE, Long Beach, Calif. Filed Mar. 28, 1927. Serial No. 178,962. 10 Claims. (Cl. 103—234.)

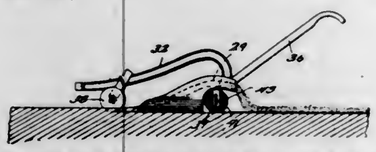
1. In a device of the class described, the combination of a pair of concentrically mounted pipes, a connecting

member secured to the lower ends of said concentrically mounted pipes, one of said pipes providing an inlet gas fluid conduit and the other of said pipes providing an outlet fluid conduit, a fluid pressure operated valve mounted in the said connecting member and adapted to be actu-



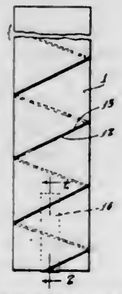
ated by the pressure of the fluid admitted through the fluid inlet conduit, a pipe secured to the lower end of the connecting member and providing a gas lift chamber, and means actuated by the fluid pressure in the gas lift chamber for exhausting the gas under pressure from the gas lift chamber through the fluid outlet conduit.

1,803,838. ERADICATION OF QUACK GRASS AND THE LIKE. CHARLES E. CARPENTER, Chicago, Ill. Filed Oct. 11, 1929. Serial No. 398,967. 3 Claims. (Cl. 97—10.)



2. A method of eradication of quack grass and the like from soil which consists in isolating a relatively thin layer of soil at the top of the ground from the ground beneath it by the use of a substantially impervious layer of fibrous material, to thereby discontinue supply of moisture from the body of the ground upwardly to plants in said layer of soil and at the same time discontinue the supply of oxygen downwardly to the roots in the ground beneath said layer of soil, substantially as described.

1,803,839. WELL CASING AND METHOD OF REMOVING THE SAME FROM A WELL. OMAR A. CAVINS, Glendale, Calif. Filed Jan. 2, 1929. Serial No. 329,721. 15 Claims. (Cl. 166—5.)



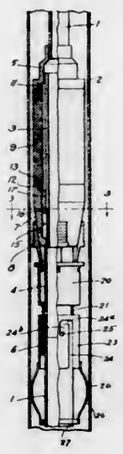
1. A well casing comprising a tubular member of tearable material provided with a slot extending from end to end thereof, and a pull member inside of said tubular member connected with the lower end of the tubular member adjacent to the slot at a point that produces tearing of the tubular member along the line of said slot when the pull member is drawn upwardly.

1,803,840. ASBESTOS INSULATING TAPE. OSBORN H. CILLEY, Manheim, Pa., assignor to United States Asbestos Co., Manheim, Pa., a Corporation of Pennsylvania. Filed Sept. 22, 1928. Serial No. 307,632. 6 Claims. (Cl. 154—44.)



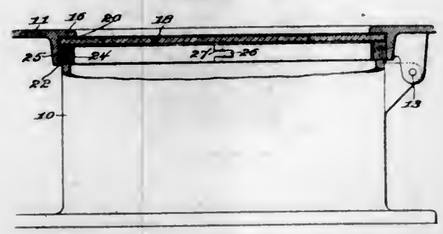
1. Material for covering pipes and the like, consisting of flat tubular tape of woven fabric, each face of the tape presenting a diagonal twill, and a pad for the tape.

1,803,841. PACKER. ERD V. CROWELL, Los Angeles, Calif. Filed May 16, 1928. Serial No. 278,232. 4 Claims. (Cl. 166—12.)



1. In combination, tubing adapted for reception in a well bore and comprising relatively telescopic upper and lower sections, a wedging member fixed to the lower tubing section, packing mounted on the wedging member with the upper tubing section abutting against the upper end of the packing, a slip slidably mounted on the lower tubing section below the wedging member, a spring mounted on the lower tubing section and supporting the slip, the spring being normally compressed by the weight of the slip for spacing the slip below the wedging member but adapted for expansion for positively elevating the slip relative to the tubing and engaging the slip by the wedging member in the event of sudden dropping of the tubing, a sleeve slidable on the lower tubing section below the spring, manually releasable means for locking the sleeve and lower tubing section against relative axial movement, and means tending to frictionally hold the sleeve in the well bore so as to permit lowering of the lower tubing section relative to the frictionally held sleeve upon manual release of said locking means, said lowering of the lower tubing section relative to the sleeve abutting the slip against the sleeve for elevating the slip relative to the tubing and thereby engaging the slip by the wedging member, with said engagement of the slip by the wedging member, either by expansion of the spring or by lowering of the tubing relative to the sleeve, expanding the slip against the wall of the well bore for anchoring the wedging member in the well bore, and abutment by the upper tubing section against the upper end of the packing axially compressing the packing against the anchored wedging member so as to anchor the tubing in the well bore and radially expand the packing to operative engagement with the wall of the well bore.

1,803,842. GAUGE GLASS MOUNTING. KENNETH S. M. DAVIDSON, Newton Highlands, Mass., assignor to Crosby Steam Gage & Valve Co., Boston, Mass., a Corporation of Massachusetts. Filed July 13, 1929. Serial No. 377,967. 1 Claim. (Cl. 20—56.4.)



An instrument glass mounting comprising a removable rim, a glass assembled within the rim, an inwardly extending flange projecting partially across the front portion of the glass, a sealing ring of flexible material assembled within the rim behind the glass and loosely fitting the rim, and a resilient band assembled within the sealing ring and serving through its normally expansive tendency to distort the ring in two directions, thus maintaining the glass in sealing engagement with the flange in addition to sealing the rim directly through the ring.

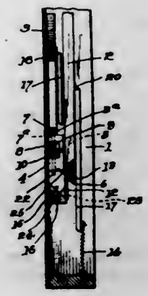
1,803,843. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Dec. 2, 1929. Serial No. 410,942. 4 Claims. (Cl. 12—128.2.)



1. A shoe form comprising a hollow toe form, a cross brace connecting the walls of said toe form, one end of said brace being pivotally secured to one wall of the top form and the other end having a slidable engagement with the other wall of the toe form, a coil intermediate the ends of the cross brace forming a longitudinally extending passage and a back part wire terminating in a portion at an angle to the body thereof which portion is passed through the passage in the coil in the cross brace and by which the cross brace and back part wire are connected.

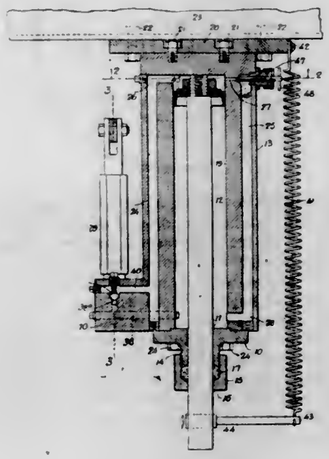
1,803,844. IRONING BOARD. JOHN P. DOMAN, Los Angeles, Calif. Filed Aug. 28, 1929. Serial No. 388,926. 6 Claims. (Cl. 68—10.)

5. In combination, a transverse bearing rod, a board having a rearward extension at its upper surface forming an angular recess beneath said extension with said recess open at its underside and at its rear end for reception of the extension on the bearing rod so as to pivotally mount the board for swinging to horizontal operative position or substantially vertical inoperative position, and an abut-



ment adapted to be engaged by the extension for holding the board against longitudinal movement on its bearing rod when the board has been swung to operative position.

1,803,845. HYDRAULIC PRESS. ALEXANDER G. DU FRANE and JOHN L. DU FRANE, Oakland, Calif. Filed Nov. 13, 1928. Serial No. 319,046. 4 Claims. (Cl. 138—9.)

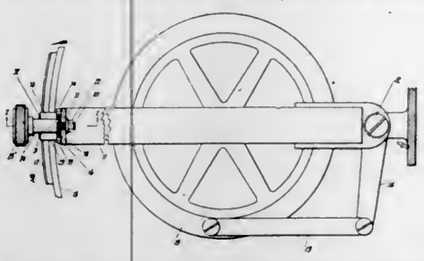


1. A hydraulic press comprising a cylindrical member having a central bore therethrough closed at its ends, spaced apart bores within the wall of the cylindrical member and spaced from the central bore, communicating means between the bores within the walls of the cylinder and the central bore at their respective ends, a piston having a rod for reciprocal movement within the central bore and means for withdrawing a fluid from the bottom of the central bore and delivering it to the top thereof at a point above the piston.

1,803,846. TUNER CONTROL MECHANISM. HAROLD F. ELLIOTT, Camden, N. J., assignor, by direct and mesne assignments, to Victor Talking Machine Company, Camden, N. J., a Corporation of New Jersey. Filed Mar. 13, 1928, Serial No. 261,311. Renewed Sept. 9, 1930. 18 Claims. (Cl. 74—7.)

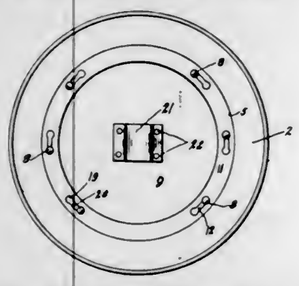
1. In an actuator, a movable arm, means for moving the arm, means providing a slot adjacent said arm moving

means, a main roller engaging one edge of the slot and carried by the arm, and one or more auxiliary rollers engaging



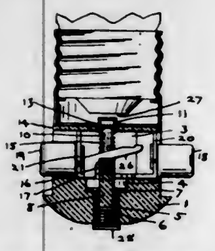
the opposite edge of the slot and also carried by said arm, said auxiliary rollers being actuated by the said main roller.

1,803,847. CLOSURE FOR METALLIC DRUMS AND THE LIKE AND METHOD OF MAKING SAME. HARTLEY ELLIS, Cleveland, Ohio, assignor of twenty-one fortieths to Elizabeth M. Ellis, Erie, Pa. Filed Mar. 3, 1928. Serial No. 258,752. 8 Claims. (Cl. 220—55.)



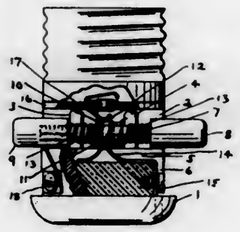
1. The combination with a metallic drum, or the like, having an annular header, of a disk-like closure therefor comprising a central depressed portion adapted to fit within said header and an annular flange adapted to overlie said header, said flange being formed with a plurality of spaced keyhole slots and cam members at the lateral edges of said slots, the surface of each of said cam members rising from a point adjacent the enlarged end of said slot to a point just short of the other end of said slot, and dropping from said last-mentioned point to said other end of said slot said header being provided with a plurality of correspondingly spaced headed lugs for cooperation with said cam members.

1,803,848. ELECTRIC SWITCH. GEORGE HENRY ELWELL, New Haven, Conn., assignor to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 10, 1927. Serial No. 225,196. 7 Claims. (Cl. 173—355.)



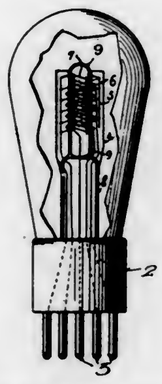
1. An electrical switch comprising a supporting base of insulation providing intersecting runways, two reciprocating members, each member intersecting and movable at right angles to the other within the runways, and connections between the members adapting one member to instantaneously move the other member in alternate directions.

1,803,849. ELECTRIC SWITCH. GEORGE HENRY ELWELL, New Haven, Conn., assignor to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 10, 1927. Serial No. 225,197. 4 Claims. (Cl. 173—355.)



1. An electric switch comprising a supporting base having a transverse passage partially intercepted by spaced abutments therein, and a reciprocating operating member mounted within the passage and carrying a relatively sliding spring-pressed peaked cam movable between the abutments and adapted by means of the operating member to be reciprocally spring-pressed into and out of electrical engagement with a fixed contact mounted upon the base.

1,803,850. ELECTRON DISCHARGE DEVICE. FREDERICK W. HOCHSTETTER, Pittsburgh, Pa. Filed Mar. 27, 1930. Serial No. 439,280. 5 Claims. (Cl. 250—27.5.)

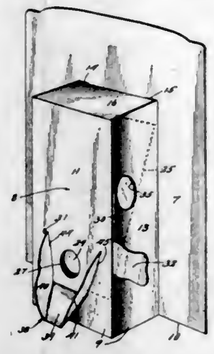


1. An electron discharge device comprising an evacuated envelope, a plate and filament therein, a grid between said plate and filament, a dielectric stem within said filament and a second grid within said stem.

1,803,851. DISPLAY STAND AND THE LIKE. JULIUS HORWATH, Chicago, Ill., assignor to Arvey Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 23, 1929. Serial No. 409,265. 5 Claims. (Cl. 229—7.)

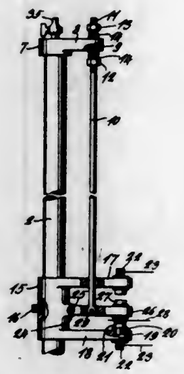
5. As a new article of manufacture, a device of the class described including in combination a main panel, a housing member comprising front and side panels, means for hingedly connecting the rear edges of the side panels aforesaid to the main panel with said side panels parallel to each other, a false bottom panel having its rear portion

hinged adjacent to the lower portion of the front panel of the housing member, and there being windows in the side panels of the housing member and a delivery opening in the lower portion of the front panel of the housing member, said windows and delivery opening being located



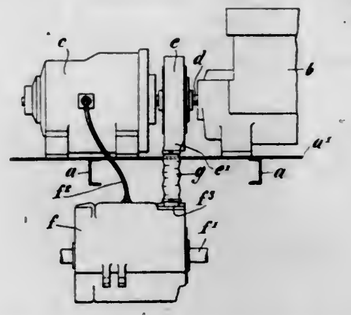
above the position of the false bottom panel when the same is in working position, whereby when the false bottom member is folded up against the front panel of the housing member said housing member may be folded over against the main panel, substantially as described.

1,803,852. SIGNAL SYSTEM AND APPARATUS FOR BOILERS. JOHN C. JACKSON, Fort Collins, Colo., assignor to The Modern Oil Well Supply Company, Fort Collins, Colo., a Corporation of Colorado. Filed Mar. 11, 1929. Serial No. 346,106. 2 Claims. (Cl. 200—137.)



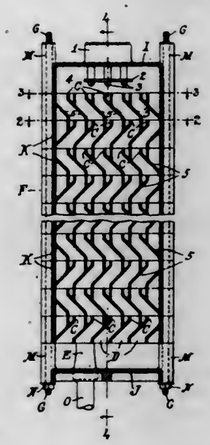
1. In a boiler means for controlling the operation of signals in accordance with the water level comprising, in combination, a tubular member having means at its lower end for connecting it with the interior of the boiler, the upper end of the tubular member being closed, and provided with laterally extending bracket, a switch secured to the lower end of the tubular member, said switch comprising, a body member having an opening through which the tubular member extends, two spaced arms extending laterally from the body member, a switch contact secured to each arm and insulated therefrom, a movable switch arm pivotally connected with the body member at a point between the arms, the outer end of said switch arm having a switch contact secured thereto by insulating material, and a rod connected at its upper end with the bracket and at its lower end with the movable switch contact whereby when the tubular member expands and contracts the movable switch member will be rotated about its pivot.

1,803,853. MOUNTING AND COOLING CONSTRUCTION FOR DRIVING UNITS OF LOCOMOTIVES. WILLIAM B. JUPP and ROBERT G. ANDERSON, Plainfield, N. J., assignors to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 19, 1929. Serial No. 415,267. 2 Claims. (Cl. 105—59.)



2. A power plant for a vehicle comprising an engine and generator unit, a fan driven by the engine and mounted between the engine and generator, a motor electrically connected to the generator, and means to conduct cooling air from the fan to the motor.

1,803,854. METHOD OF SEPARATING FINELY DIVIDED LIQUIDS FROM GASES AND APPARATUS THEREFOR. WALTER H. KNISKERN, Syracuse, N. Y., assignor to Atmospheric Nitrogen Corporation, Solvay, N. Y., a Corporation of New York. Filed Oct. 14, 1926. Serial No. 141,498. 20 Claims. (Cl. 183—79.)

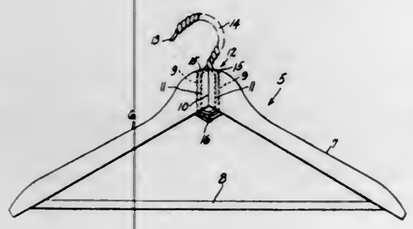


1. The method of separating finely divided liquids suspended in a gas which comprises leading the gas stream into consecutive contact with a multiplicity of surfaces, each adapted to change the direction of flow of the gas whereby liquids suspended in said gas are deposited on said surfaces, leading such so deposited liquids into a plurality of separately maintained pools of said liquid, blocking the passage of the gas stream through said separately maintained pools by means of the accumulated liquid in the respective separately maintained pools and establishing a confluence of successive accumulations from the several separately maintained pools, whereby the gas passes away as a liquid-freed gas, while the minute liquid particles extracted from the gas are passed away as a flowing stream of liquid.

1,803,855. MANUFACTURE OF CARBON. OSKAR KRAMER and LEOPOLD BUB, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 9, 1927, Serial No. 204,659, and in Germany July 13, 1926. 3 Claims. (Cl. 134—60.)

1. In the manufacture of carbon by the thermal decomposition of gases containing carbon monoxid, the step of adding to the gases about 0.1 to 0.2 per cent by volume of a vaporized carbonyl compound of a metal of the iron group.

1,803,856. GARMENT HANGER. ISAAC LEVIN, Brooklyn, N. Y. Filed Nov. 27, 1929. Serial No. 410,012. 1 Claim. (Cl. 223—61.)



A garment hanger comprising a pair of sections abutting each other, each of the sections being provided with an opening near its abutting surface, a suspension hook, and a pair of legs on the said suspension hook passing through the said openings and twisted to tie the said hanger sections together.

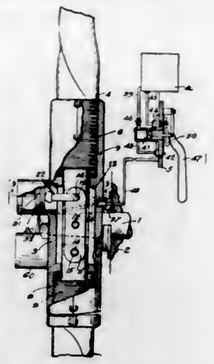
1,803,857. LUMBER RETURN ATTACHMENT FOR SAW TABLES. HENRY T. LUMB, Poughkeepsie, N. Y. Filed May 1, 1930. Serial No. 448,812. 2 Claims. (Cl. 143—33.)



1. In a device of the class described and in combination with a saw and table, of a delivery table mounted on the same plane as said saw table and comprising a stationary member and a movable member, means for carrying the lumber out upon said members, means actuated by the travel of said lumber for allowing the movable member to swing downward, means for returning the lumber to the saw table, means for diverting its line of travel past the saw, and means for bringing the several mechanisms back to their normal positions.

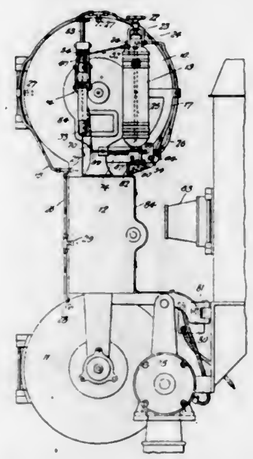
1,803,858. ADJUSTABLE PROPELLER. JOHN W. MACCLATCHIE, Compton, Calif. Filed Mar. 7, 1928. Serial No. 259,708. 6 Claims. (Cl. 170—163.)

1. The combination of a propeller including a hub and diametrically opposite propeller blades rotatable on their longitudinal axes, a rock arm medially pivoted in the hub and connected at its respective ends to the respective propeller blades so that swinging movement of said rock arm will reversely rotatably adjust the propeller blades to vary the pitch of the propeller, a cylinder in the propeller hub, a piston in said cylinder operatively connected



to said rock arm, and a fluid pressure conduit extending through the hub and communicating with the cylinder for actuating the piston.

1,803,859. FIRE EXTINGUISHING APPARATUS. PETER GRAHAM MACGREGOR, Pequannock, N. J., assignor to Pyrene Manufacturing Company, Newark, N. J., a Corporation of Delaware. Filed Nov. 1, 1927. Serial No. 230,239. 1 Claim. (Cl. 169—2.)



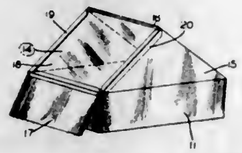
In combination with a motion picture projector having a film housing provided with an opening, a cage movably mounted adjacent said opening and adapted to contain a highly inflammable material, fusible thermal release means for holding said cage in a suspended position and adapted when fused to release said cage, a liquid receptacle adapted to contain a fire extinguishing liquid, a conduit leading from said receptacle into said housing, a valve in said conduit cooperating with said cage and retained closed by the latter when said cage is in its suspended position and permitted to open when said cage is released, a source of fluid pressure, means for releasing said fluid pressure and directing it into said receptacle for expelling the contents of the latter through said conduit, and means cooperating with said thermal release means for rendering said fluid releasing means inoperative until said thermal release means is fused.

1,803,860. TOILET TANK WATER SOFTENING DEVICE. DAN G. MARKS, Los Angeles, Calif. Filed Feb. 6, 1929. Serial No. 337,832. 1 Claim. (Cl. 210—29.)



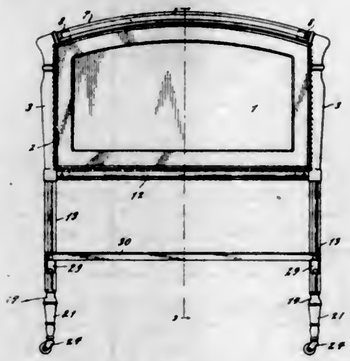
A device for disseminating a water softener in the water in a toilet flush tank comprising a container having perforated walls, a baffle within the container opposite the walls and a water softening composition disposed within the baffle.

1,803,861. DISPLAY BOX. BURDETTE K. MARVIN, Riverside, Calif. Filed Sept. 11, 1929. Serial No. 391,846. 7 Claims. (Cl. 206—44.)



1. A display box having front and back cover flaps and side flaps, the side flaps having inclined forward edges, a transparent member and means for attaching the transparent member to the forward edges of the side flaps.

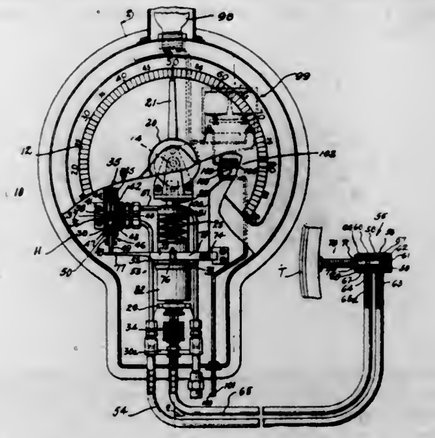
1,803,862. METAL BED. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed Mar. 14, 1928. Serial No. 261,446. 6 Claims. (Cl. 5—280.)



1. A head or foot piece for beds comprising side posts having inwardly opening channels and upper and lower inwardly extending integral projections, tubular cross members the ends of which receive said projections, longitudinal troughs in said cross members, and a panel member with its edges in engagement with said troughs and channels.

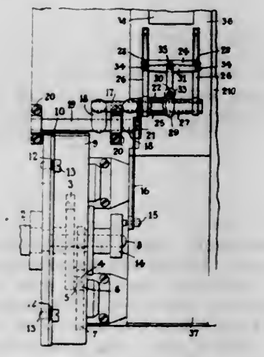
1,803,863. TIRE INFLATING AIR PRESSURE CONTROLLER. ALBIN JOHN NELSON and CARL JOHN ESSMANN, Brooklyn, N. Y. Filed Aug. 20, 1928. Serial No. 300,758. 5 Claims. (Cl. 50—4.)

1. A tire inflating air pressure controller, including a pressure supply conduit, and a pressure control conduit, a valve for the pressure supply conduit, a pneumatic motor for the pressure control conduit, a body with which said conduits communicate, said body having a valve automatically closing the pressure supply conduit, said valve being opened on engaging the body with the tire valve structure, to permit pressure to flow into the tire, said motor closing



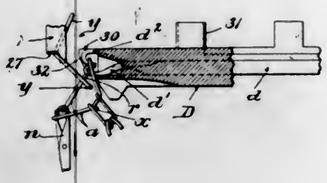
the first mentioned valve when the required pressure in the tire has been attained, and a vent opened by the first mentioned valve as the same closes the pressure supply conduit.

1,803,864. CINEMATOGRAPH APPARATUS. ARTHUR SAMUEL NEWMAN, Highgate, England, assignor to Kodak, Limited, Holborn, London, England. Filed May 28, 1929, Serial No. 366,719, and in Great Britain June 1, 1928. 12 Claims. (Cl. 88—18.4.)



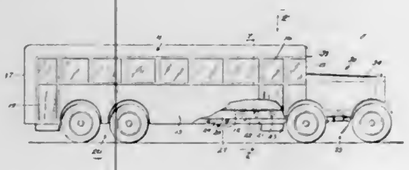
1. In means for driving cinematograph apparatus the combination of a driving shaft, a crank on said main shaft, a driving pin on said crank, a slotted crank driven by the crank pin, a driven shaft on which the slotted crank is mounted, a casing having a closing plate, a bearing on said closing plate in which the driving shaft is mounted, a bearing on the casing in which the driven shaft is mounted, means provided on the closing plate and on the casing to enable these latter to slide and to be fixed with respect to each other, a crank on the driven shaft, a lever one end of which is driven by the said last mentioned crank, a swinging shaft on which the said lever is pivoted intermediate of its ends, and claws moved by the other end of said lever, substantially as set forth.

1,803,865. MACHINE FOR KNITTING SPLICED FABRICS AND METHOD OF KNITTING THE SAME. ALBERT E. PAGE, Brooklyn, N. Y., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Original application filed May 22, 1925, Serial No. 32,046. Divided and this application filed Feb. 20, 1930. Serial No. 429,940. 17 Claims. (Cl. 66—13.)



1. Method of knitting spliced sections on a knitting machine having two sets of needles for ribbed knitting, comprising feeding to one set of said needles a main yarn and operating the needles to knit a plain fabric segment and a contiguous ribbed fabric segment of said yarn, and feeding a splicing yarn to accompany the main yarn during a part of the knitting of the plain fabric segment, and into the space between the face wale and back wale loops of the ribbed fabric.

1,803,866. VEHICLE. LOUIS L. PATTERSON, Los Angeles, Calif. Filed May 2, 1928. Serial No. 274,471. 10 Claims. (Cl. 180—11.)



1. A motor vehicle having a truck unit with a power plant and steering wheels with means to control same from a platform extending rearwardly with inner structure beams adjacent the side edges of the platform, a load carrying unit having a floor with an opening at the front forward end, a pair of outer structural beams on each side of said opening, the inner beams of the platform being adapted to telescopically interfit with the outer beams adjacent the floor, and means to rigidly secure said beams together, the load carrying unit having wheels adjacent the rear end.

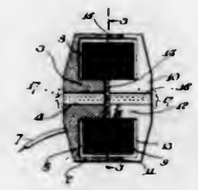
1,803,867. CHAIN TONGS. JAMES I. PHILLIPS, Mannington, W. Va., assignor of one-half to Ernest Barger Miller, Tulsa, Okla. Filed Feb. 19, 1930. Serial No. 429,525. 15 Claims. (Cl. 81—70.)

1. In tongs of the character described, a handle having a head, jaws carried on opposite sides of said head, a pivoted latch disposed intermediate said jaws and having hook-like members at its front end, a chain pivoted at one end to said head, the link-connecting pivot-pins of the free end portion of said chain having projecting ends engageable with said hook members, said latch having a tail-piece, and sleeve-like means mounted for rotary movement



on said handle and having a skirt portion which is engageable with said tail-piece for maintaining said latch in chain-holding position.

1,803,868. MAGNETIC DEVICE. HARRY F. PORTER, Trenton, N. J. Filed Sept. 28, 1928. Serial No. 309,086. 12 Claims. (Cl. 175—356.)



1. Reactor structure comprising a pair of cup-like members of magnetizable material, a coil disposed in each of said members, and a plate of magnetizable material interposed between said members and forming a partition between said coils whereby mutual inductance of said coils is controlled.

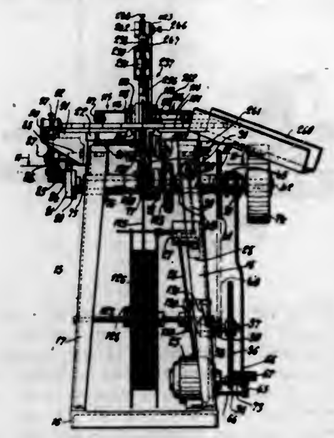
1,803,869. PROCESS OF TREATING YARN. SAMUEL P. RUFF, Jr., Bowling Green, Nether Providence Township, Pa., assignor to Aberfoyle Manufacturing Company, Chester, Pa., a Corporation of Pennsylvania. Filed Jan. 13, 1930. Serial No. 420,598. 1 Claim. (Cl. 28—1.)

A yarn package characterized by an identifying odor provided by an odoriferous compound evenly distributed throughout the yarn strand.

1,803,870. PROCESS OF FORMING COLLOIDAL SUSPENSIONS CONTAINING COPPER AND PRODUCT THEREOF. GEORGE E. SANDERS, New York, N. Y. Filed Oct. 3, 1927. Serial No. 223,850. 10 Claims. (Cl. 167—16.)

7. A dry composition containing a compound of a metal, the salts of which are adapted to kill low forms of life, and a casein compound adapted to react upon the metal compound in the presence of water to form a colloidal suspension of said metal, the proportion of the casein compound being not less than 1 pound of actual casein to 2 pounds of the metallic metal.

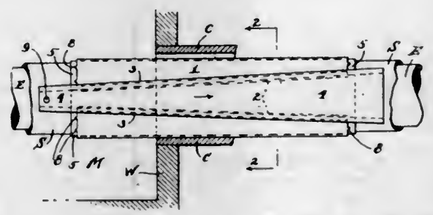
1,803,871. AUTOMATIC WICK THREADING MACHINE. ALFONSO SCAITTA, Brooklyn, N. Y. Filed Oct. 11, 1928. Serial No. 311,766. 4 Claims. (Cl. 18—1.)



2. A machine of the character described, including means to support a candle, means to thread a wick into the candle, means to sever the wick, means to actuate the machine, and other means operated by a knot in the wick to cause the actuating means to stop.

4. A machine of the character described, including a table rotatable about a vertical axis, said table being adapted to support a plurality of candles thereon, means to thread a wick into the candles, means to sever the wick, a hammer to cause a clip on an end of the candle to grip the wick therein, the rotation of the table bringing the candles in succession to the wick threading means, and a chute means coacting with the table, said candles impinging a portion of the chute means and being discharged down the same due to the aforesaid rotation of the table.

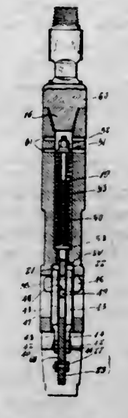
1,803,872. SLEEVE ATTACHMENT FOR ELECTRIC CABLES AND CONDUITS. KENNETH R. SHAW and PHILIP A. SALMON, Newark, N. J. Filed Mar. 10, 1928. Serial No. 260,662. 4 Claims. (Cl. 247—4.)



1. A split, flexible sleeve having tapered and grooved edges and adapted to encircle an electric cable, and a closing member having tapered and grooved edges adapted to co-act with the said tapered and grooved edges upon said flexible sleeve to hold and lock said sleeve upon said cable to protect same against abrasion from contacting parts.

1,803,873. CABLE TOOL UNDERREAMER. ROBERT E. SIMPSON, Taft, Calif. Filed July 30, 1925. Serial No. 47,130. 13 Claims. (Cl. 255—75.)

1. An underreamer comprising a body, reaming cutters mounted by the body and vertically movable from a contracted position to an expanded position, a cutter operating rod within the body, a spring connected to said rod, a cutter gripping rod at one end engaging both of said



cutters and extending into said body, said rod being mounted to move on its axis, and means within the body for attaching said gripping rod to said operating rod.

1,803,874. NUT LOCK. ORLOW C. SNYDER, Long Island City, N. Y. Filed Jan. 28, 1929. Serial No. 335,630. 1 Claim. (Cl. 151—1.)



A nut lock comprising in combination with a bolt and a nut threaded thereon, of a flat seat formed on one side of the bolt, said bolt having a groove around its threaded portion, said groove passing through said flat seat, a comparatively stiff wire ring seated in said groove and having the ends twisted together and extending radially from the axis of the bolt opposite said seat, and a solder cap enveloping said seat, said ring and the twisted together ends of the ring, and entering said groove, said solder cap binding together in a rigid unitary assembly the ring the nut and the bolt.

1,803,875. METHOD OF FACING TOOLS AND RESULTING PRODUCT. WINSTON F. STOODY, SHELLEY M. STOODY, and NORMAN W. COLE, Whittier, Calif., assignors to Stoody Company, Whittier, Calif., a Corporation of California. Filed Jan. 30, 1928. Serial No. 250,698. 25 Claims. (Cl. 76—108.)



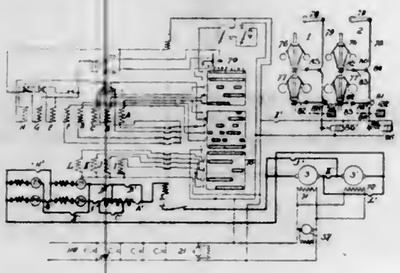
1. A method of facing tools comprising fusing a layer of metal containing pieces of a material having a greater melting point than said metal upon the face of a tool, and fusing a second layer of a metal on top of the first layer, said second layer having a melting point considerably higher than said first layer.

4. A tool having an operating face comprising two fused layers, the first layer consisting of a metal of comparatively low melting point having embedded therein pieces of an alloy of a considerably higher melting point, and the second layer comprising tool steel.

5. The method of facing tools which comprises first associating together a metal of relatively low melting

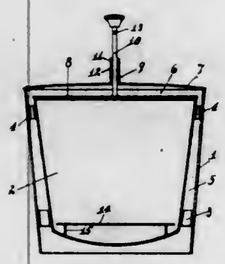
point and pieces of a hard substance of relatively high melting point, supplying heat to the associated mass to cause the metal of low melting point to melt and be deposited on the tool and carry with it the pieces of hard substance depositing them on the tool without materially changing their identity, causing a fusion to take place between the metal of low melting point and the metal of the tool, and allowing the metal of low melting point to cool and harden about the pieces and thus anchor them to the tool.

1,803,876. COMBUSTION ENGINE LOCOMOTIVE. ELMER A. SPERRY, Brooklyn, N. Y., assignor to Sperry Development Company, Dover Green, Del., a Corporation of Delaware. Filed Jan. 20, 1922. Serial No. 530,687. 8 Claims. (Cl. 290—3.)



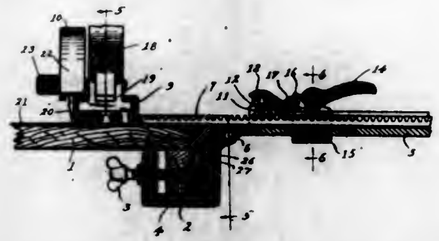
1. In a combustion engine electric locomotive drive for trains, in combination, a locomotive and train cars, a combustion engine and generator on the locomotive, motors on said locomotive and a car of the train, electric circuits between said motors and generator whereby said motors are driven from said generator, and controllers on said locomotive and a car of the train adapted to control both the circuits between said generator and the said motors and the combustion engine.

1,803,877. COOKER. CONRAD STEHL, Oakland, Calif. Filed Aug. 10, 1929. Serial No. 384,994. 4 Claims. (Cl. 53—1.)



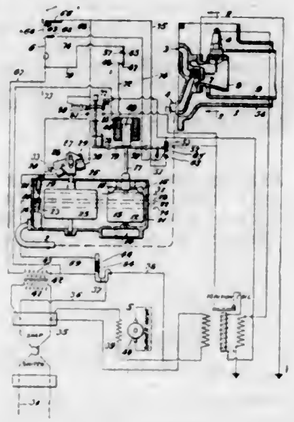
1. A cooker comprising a frustro-conical shell open at both ends, a removable frustro-conical vessel with segmento-spheroidal bottom disposed within and spacedly related to said shell, spacing members interiorly attached to said shell, a cover for said shell provided with a centrally disposed vertical bearing, a cover for said vessel provided with a centrally disposed vertical rod passing through said bearing, and means cooperating between said bearing and said rod whereby said shell cover may be supported in spaced relation relative to the top of the shell and supported by the vessel cover.

1,803,878. MEASURING AND CUTTING DEVICE. FRED STOUT and GEORGE R. O'DANIELL, Grand Rapids, Mich., assignors, by direct and mesne assignments, of two-fifths to said Stout, one-fifth to said O'Daniell, and two-fifths to Ella Kenyon Stout. Filed June 24, 1929. Serial No. 373,367. 3 Claims. (Cl. 164—73.)



1. A device for cutting paper sheets and the like, comprising spaced clamps provided with means for gripping a table, parallel tracks pivoted to the clamps, a tiltable frame composed of parallel arms extending along and guided by the said tracks, a transverse guide member rigidly connecting the inner ends of the said arms and maintaining the same in parallelism and the clamps and tracks in proper spaced relation, a slide mounted on the guide member, and cutting means carried by the slide.

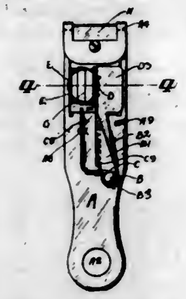
1,803,879. CONTROL FOR OIL BURNERS. HARRY F. TAPP, Brooklyn, N. Y., assignor to Socony Burner Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 11, 1926. Serial No. 80,479. 3 Claims. (Cl. 158—28.)



1. In a liquid-fuel heating system, the combination with a burner, of means for supplying fuel thereto comprising a constant-level supply chamber with a float for controlling the level thereof, a fuel cut off valve, a weighted member associated with said valve and acting when lowered to close the valve irrespective of the level of the fuel in the supply chamber, and means controlled by combustion conditions in the burner for lifting the weight while the burner flame persists but for causing its descent to close the valve when the burner flame fails.

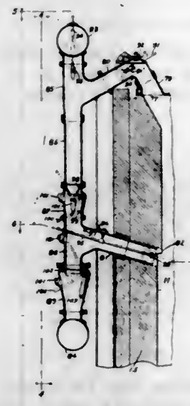
1,803,880. BEAN STRINGING AND SLICING IMPLEMENT. WILLIAM TATHAM, Sydney, New South Wales, Australia. Filed Nov. 14, 1928, Serial No. 319,356, and in Australia Sept. 12, 1928. 7 Claims. (Cl. 146—210.)

1. In a bean stringing and slicing implement, a base having parallel horns formed at one end thereof, a topping blade adapted to lie across the horns formed on the end of the base, a holder having horns similar to the horns formed on the base, the ends of the horns on the



holder being reversely bent to form clips which engage the topping blade and the ends of the horns formed on the base, and means for securing the holder to the base to hold the topping blade in position.

1,803,881. DOUBLE OFFTAKE FOR COKING RETORTS. JOSEPH VAN ACKEREN, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 12, 1925. Serial No. 1,718. 11 Claims. (Cl. 202—257.)

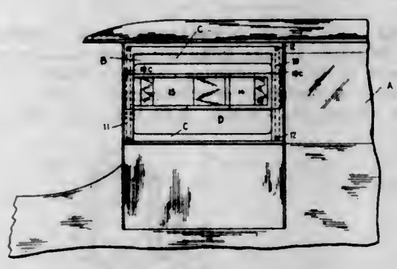


1. In a coking retort oven, in combination: a coking chamber; an upper gas offtake leading therefrom; a gas collecting main; a stand-pipe connected at its upper end with said offtake and said main; a lower gas offtake leading from said chamber at a point below the point of communication of the upper gas offtake with said chamber and also connected with said standpipe at a point intermediate the ends thereof and spaced from the upper end thereof and communicating through said standpipe with said gas main so that gas from the lower offtake may pass upwardly by the upper offtake and thence with gases therefrom to said main; means adapted for discharging liquid gas purifying medium into said standpipe so that said medium will pass therethrough from below the point of communication of the upper offtake therewith past the point of communication of the lower offtake with the standpipe and thereby may treat, in said standpipe, gas that may pass therein from said lower offtake by said upper offtake before said gas reaches said upper offtake; and a seal for said standpipe disposed below the points of communication of both of the offtakes with said standpipe and adjustable to permit either the medium and precipitates alone, or both the medium and precipitates and gas to pass therethrough; and an additional seal for said standpipe disposed between the points of communication of said offtakes with said standpipe, said additional seal also being adjustable to permit either the medium and precipitates alone, or the medium and precipitates and gas to pass therethrough; substantially as specified.

1,803,882. METAL COMPOSITION. RICHARD R. WALTER, Nuremberg, Germany. Filed Nov. 21, 1927, Serial No. 234,897, and in Germany Sept. 1, 1927. 3 Claims. (Cl. 75—1.)

1. In a metal composition capable of resisting wear during use for cutting, the combination of metal particles including tungsten and fritted to each other into a coherent mass having minute cavities between said particles and a filling of an alloy in said structure cavities, said alloy including a metal of the iron group and a metal of the chromium group and constituting about twenty per cent by weight of the tungsten mass.

1,803,883. SIDE DOOR CURTAIN FOR AUTOMOBILES. CORA P. WEAVER, Alhambra, Calif. Filed Mar. 16, 1927. Serial No. 175,661. 1 Claim. (Cl. 296—138.)

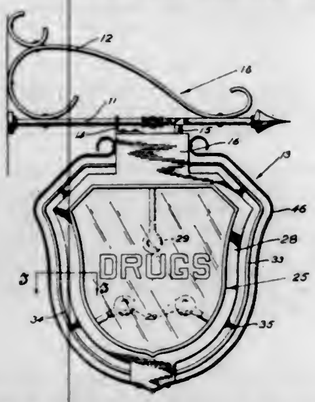


In combination with a frame having a window opening, a fabric curtain stretched so as to bridge said window opening, vertical runners disposed at the opposing ends of the frame window opening and slidably engaged by the opposing ends of said curtain to allow the curtain to be raised or lowered relatively to the window opening, said curtain being composed of overlying alining panel-carrying sections, a pair of parallel fabric tapes having terminals secured to but projecting beyond one end of one curtain section, the major length of which tape is free, said tapes designed to interengage and to skirt the edges of the overlying curtain sections, a pair of parallel tapes similar in mounting and manner of attachment to the foregoing tapes but secured to the other section, flexible loops carried marginally by the respective sections thru which the tapes of the cooperating adjacent section adjustably pass and by means of which the curtain sections are longitudinally adjustable in alinement, the ends of the tapes of one curtain section, and those of the other section being tied together to connect said tapes together and to provide terminals by means of which the completed curtain may be grasped for positioning same upon the runners.

1,803,884. DISPLAY SIGN. WILLIAM B. WILSON, Los Angeles, Calif., assignor, by mesne assignments, to Metlox Corporation, Ltd., a Corporation of California. Filed Oct. 29, 1928. Serial No. 315,650. 7 Claims. (Cl. 40—130.)

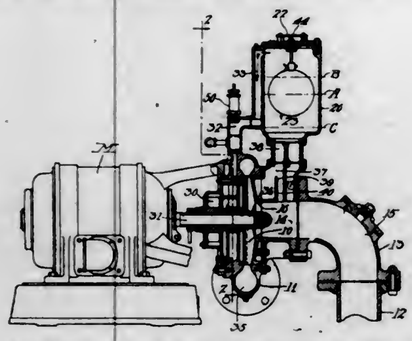
6. An illuminated sign comprising a relatively flat sign body, sets of socket members disposed along the edge of said sign body, luminous gas tubes adapted to be electrically connected with said socket members, said tubes extending along and being uniformly spaced with

relation to the perimeter of the sign and a flat shield strip lying in a plane parallel with the edge of the sign body and being spaced around and conforming to the contour



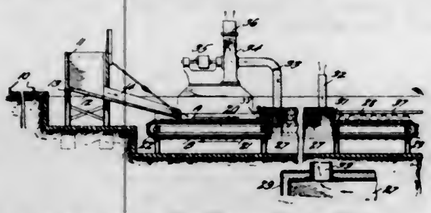
of the lengths of said tubes whereby to shield the same while permitting an unobstructed view of the tubes from opposite sides of the sign.

1,803,885. PRIMING MECHANISM FOR CENTRIFUGAL PUMPS. HAROLD E. ADAMS, South Norwalk, Conn., assignor to Nash Engineering Company, South Norwalk, Conn., a Corporation of Connecticut. Filed Dec. 2, 1929. Serial No. 410,915. 8 Claims. (Cl. 103—113.)



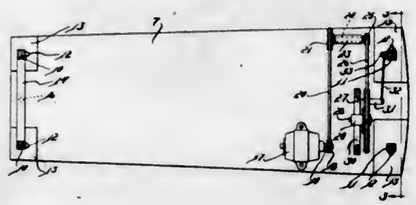
1. Mechanism for priming a centrifugal pump comprising an air pump, a control chamber, connections from said control chamber to said air pump and to said centrifugal pump, a vent valve for said control chamber, a float effective to open said vent valve when the water in said chamber reaches a predetermined level, and a vacuum relief valve for said control chamber.

1,803,886. SLAG COOLING APPARATUS. PAUL W. AUSMAN, Birmingham, Ala. Filed Feb. 20, 1929. Serial No. 341,509. 4 Claims. (Cl. 49—77.5.)



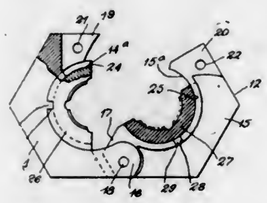
1. In a slag cooling apparatus, a receiver for slag, a chute leading therefrom, a conveyer having a plurality of receptacles located in operative relation to the said chute, a housing constituting a cooling zone through which the conveyer operates, a water jacket in the said cooling zone through which water may circulate for modifying the temperature of the wall of the said cooling zone, means for circulating air therethrough, and means for applying water to the slag in the receptacles as they leave the cooling zone.

1,803,887. ELECTRICALLY OPERATED CRADLE. CARL B. H. BARNES, Detroit, Mich. Filed Feb. 1, 1930. Serial No. 425,135. 1 Claim. (Cl. 5—109.)



A device of the class described, comprising: a portable base; wear plates on the upper surface of said base at opposite ends thereof; a cradle; supporting standards for supporting said cradle and engaging said wear plate; a bolster secured to said standards at one end of said cradle; a pin projecting into said bolster for pivotally connecting one end of said cradle to said base; and power driven means for oscillating said cradle on said pin as a pivot.

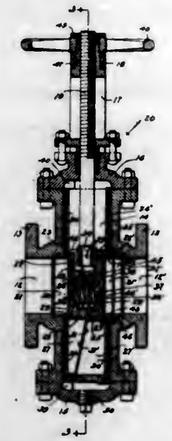
1,803,888. DIE NUT. ANTHONY BASOLA and FRANK NEMARNICK, Long Island City, N. Y. Filed Sept. 5, 1928. Serial No. 304,086. 2 Claims. (Cl. 10—125.)



1. A screw threading tool for cutting screw threads in an intermediate portion of a bolt or the like and for use in restricted places by operation of an ordinary wrench and comprising a nut member made up of hingedly connected parts having the external configuration of a hexagonal nut and having a circular interior, a circular thread cutting die member in cooperating separable segments to fit the circular interior of the nut member, the separable parts of said nut member and the separable parts of said die member having centrally disposed interfitting annular ribs and grooves, and keys and key receiving grooves transversely intersecting the annular ribs and grooves for removably holding the separable die parts in definitely positioned relation within the nut parts.

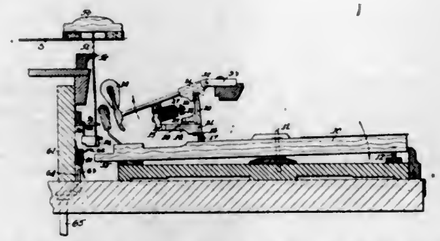
1,803,889. NONCORRODING VALVE. CHARLES F. H. BOHNHARDT and BRUNO F. BOHNHARDT, Lynwood, Calif. Filed Mar. 14, 1927. Serial No. 175,085. 5 Claims. (Cl. 251—68.)

1. In a valve of the general character described: a main body providing a passage for the advance of a fluid; a seat element secured therein; an interior organization shiftable within said body between a flow-obstructing position and a flow-permitting position relatively to said seat; and means for shifting said interior organization relatively to said seat,—said interior organization comprising a plurality of shiftable units each provided with



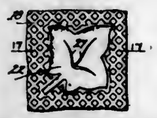
a closure section and with an apertured section and each provided with a wedge face, resilient means being interposed between said units.

1,803,890. GRAND PIANO ACTION. GORDON G. CAMPBELL, Upper Montclair, and JOSEPH KLEPAC, Fort Lee, N. J., assignors to Kohler-Brambach Piano Company, New York, N. Y., a Corporation of New York. Filed Oct. 17, 1930. Serial No. 489,414. 7 Claims. (Cl. 84—239.)



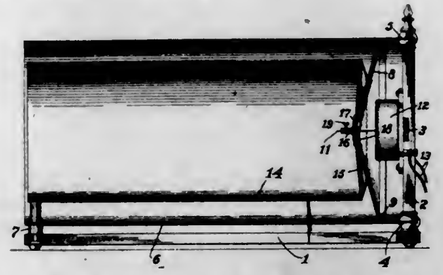
4. In a grand piano action, a key, a whip actuated thereby, a jack pivoted to said whip, a hammer having a butt engaged by said jack, means to release the jack from the hammer as the jack approaches its upper limit of travel, and cam means formed on the hammer butt and through which the weight of the hammer acts on said jack as the hammer swings downward and forces said jack into operative lifting relation with said hammer butt.

1,803,891. METHOD OF PRODUCING A CONTOURED SURFACE ON STONE. ELROY A. CHASE, Northfield, Vt., assignor to Rock of Ages Corporation, Burlington, Vt., a Corporation of Vermont. Filed Oct. 7, 1927. Serial No. 224,745. 3 Claims. (Cl. 41—39.)



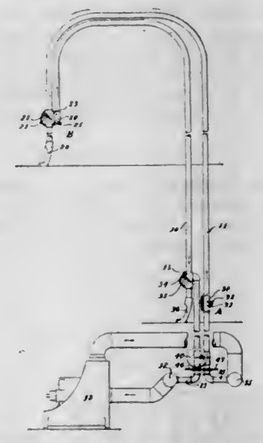
1. The method of producing a contoured surface on a block of stone which consists in coating the surface with glue, removing a narrow outline strip about the figure or design, sand blasting a corresponding outline groove in the stone, removing the glue from the background, sinking the background, recoating the grooved and background portions with additional glue, removing the old glue from the figure, and shaping the contour of said figure by use of a sand blast while the background remains covered.

1,803,892. LOUD SPEAKER. JAMES T. CORRIGAN, Washington, D. C. Filed Apr. 12, 1927. Serial No. 183,083. 11 Claims. (Cl. 181—31.)



7. A loud speaker comprising an actuating means, two cone-shaped diaphragms of different frequencies physically connected to said actuating unit, the magnitude of the angle of one diaphragm being different from the other and the area of the one diaphragm being also different from the other and cylinders secured to the said diaphragms, one cylinder being positioned within the other.

1,803,893. PNEUMATIC DISPATCH SYSTEM. JAMES T. COWLEY, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Aug. 7, 1929. Serial No. 384,095. 6 Claims. (Cl. 243—9.)

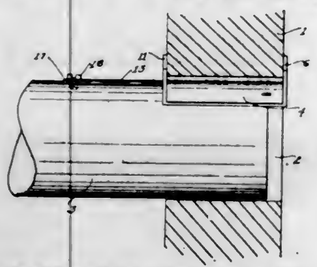


1. In a pneumatic dispatch system of the double transmission tube type, an air compressor, means connecting said compressor with both tubes, whereby the tubes and compressor form a closed circuit, and means for maintaining a minimum flow of air through the circuit and for initiating a carrier impelling flow upon the insertion of a carrier in the line.

1,803,894. STOVEPIPE ANCHOR AND LOCK. RALEIGH B. CROSS, Oregon City, Oreg. Filed Mar. 13, 1929. Serial No. 346,606. 1 Claim. (Cl. 126—318.)

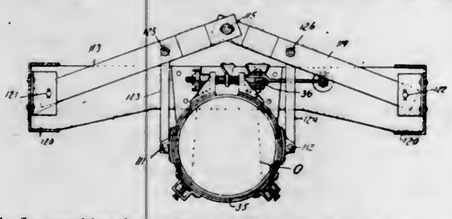
A device of the class described, comprising a metallic strip having a transverse curvature adapted to fit against a stove pipe, and having ears formed at the inner end of the strip adapted to engage the inner wall of a chim-

ney, and projections at the outer end adapted to engage the outer wall of a chimney, stop lugs on the body of the strip adjacent the ears at the inner end, and adapted to engage the end of a stove pipe, a tongue extending from the outer end of the strip and having a screw



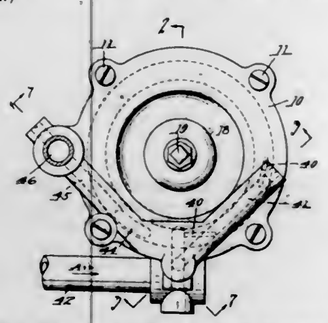
threaded hole adjacent its outer end, a stove pipe section having a screw threaded hole corresponding to the hole in the tongue of the strip and a screw-bolt engaging said threaded holes and securing the tongue to the stove-pipe section.

1,803,895. TORQUE EQUALIZING MECHANISM. CHARLES B. CURTISS, Bay City, Mich. Filed June 20, 1928. Serial No. 286,983. 21 Claims. (Cl. 74—14.)



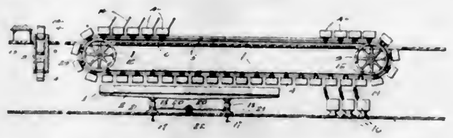
1. In combination with a body subjected to torque, a relatively stationary support, a non-load-supporting means connecting the body to said support at two separated points substantially in the plane of action of the torque forces, whereby the forces causing the torque in the body are re-applied to the body in opposite directions to nullify the same.

1,803,896. AIR TURBINE. MARK H. DAMERELL, Worcester, Mass., assignor to Wyman-Gordon Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 4, 1927. Serial No. 165,971. 6 Claims. (Cl. 253—74.)



1. An air turbine comprising a casing, a rotor mounted therein, said rotor having a central web with an annular groove at each side thereof in its rim portion, a rotor plate mounted in each of said grooves and having a series of forwardly inclined recesses disposed about its periphery, with the inner end of each recess closed by said central web, means to inject air under pressure into said recesses successively, and means to thereafter release the compressed air from each recess.

1,803,897. WASHING APPARATUS. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 7, 1927. Serial No. 181,869. 4 Claims. (Cl. 68—37.)



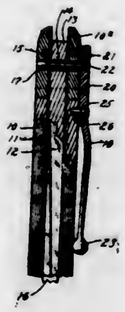
1. A washing apparatus comprising a series of washing vats, a series of clothes receptacles, an endless carrier, arranged so that opposite runs thereof extend horizontally, the receptacles being connected to the carrier to move into and out of alignment with the vats, and means for moving one series toward and from the other when the receptacles are in line with the washing vats and thereby bringing the receptacles into and out of the vats.

1,803,898. NONSINKABLE BATHING SUIT. EMANUEL DIAMOND, New York, N. Y. Filed Oct. 20, 1930. Serial No. 490,013. 1 Claim. (Cl. 9—20.)



In combination, a bathing suit, an inflatable chamber secured to the inner face of the front of said bathing suit, an inflatable chamber secured to the inner face of the back of said bathing suit, and an apron secured to the bathing suit in a position to overlie the inner wall of each of said inflatable chambers.

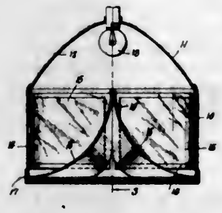
1,803,899. POCKETKNIFE. JAMES E. FULLER, New York, N. Y., assignor to New York Knife Company, New York, N. Y., a Corporation of New York. Filed Apr. 26, 1930. Serial No. 447,578. 3 Claims. (Cl. 24—3.)



3. A pocket knife having a grooved handle, blade swinging into and from such groove, back spring acting upon the tang of the blade, and combined holding rivet and blade pivot stud near the end of the handle; characterized in that the said stud is tubular, and that the knife is provided with a longitudinal resilient holding member

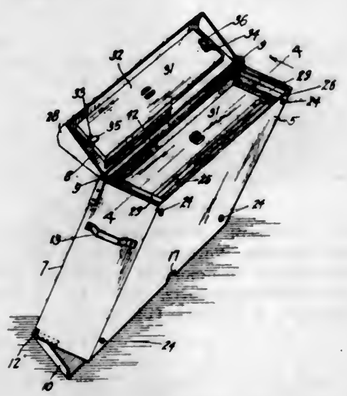
along one end of the handle and having a perforation in line with the passage in said stud, a rivet pin extending clear through said stud and through the perforation in said holding member, and clinched at its ends to secure the end of the holding member, and a projection at the inner side of the holding member slightly removed from said perforation, for preventing swinging of the holding member, and the handle formed with a recess for receiving said projection.

1,803,900. HEADLIGHT. HENRY J. GODIN, Augusta, Ga. Filed Jan. 18, 1930. Serial No. 421,850. 1 Claim. (Cl. 240—41.35.)



A headlight including a casing having a front light opening and light openings in the lower side thereof, a reflector for directing light rays through said front opening, and reflectors disposed in the lower field of reflection of the first reflector extending forwardly from said first reflector in curving divergent relation toward said front opening, said divergent reflectors being inclined upwardly and away from each other into partially covering relation to said lower openings, whereby to direct light rays through said lower openings.

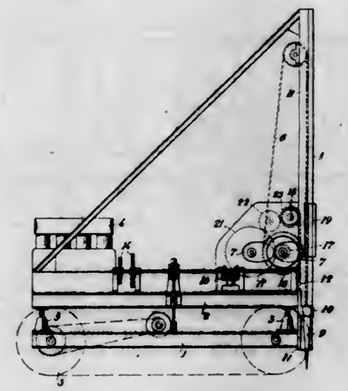
1,803,901. COMBINED TRUNK AND CAMPING OUTFIT. HENRY GOEDDERTZ, Denver, Colo. Filed Apr. 16, 1928. Serial No. 270,448. 9 Claims. (Cl. 190—12.)



1. A combination trunk and camping outfit comprising a box, nested seat-supports fitted within the box, the supports having open frames conforming with the interior contour of the box, and seats for the supports within the box, one of the seats being disposed horizontally of the box to divide the same into upper and lower compartments.

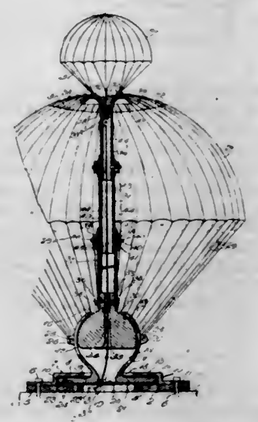
1,803,902. DEVICE FOR SPLITTING STUMPS IN THE GROUND. FRIEDRICH WILHELM GRUPE, Berlin, Germany. Filed May 27, 1929, Serial No. 366,276, and in Germany May 10, 1928. 1 Claim. (Cl. 144—193.)

An automotive piledriver-like device for splitting stumps and the like, comprising a drop weight, a chain for suspending said weight, a splitting tool independent of said weight and located below it, a holder for said tool, a chain for suspending said holder separately, means for guiding said holder separately, said holder being adapted to withdraw said tool from the stump after having



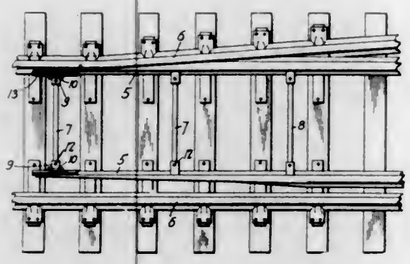
been driven in by said weight, and a pair of elliptical wheels in the driving gear for said chains, so that during the pulling out of the splitting tool the holder and during each lift of the weight the said elements are started slowly and only highly accelerated during the stroke.

1,803,903. PARACHUTE. ALBERT CASPER JENEZON. Baltimore, Md. Filed Dec. 17, 1928. Serial No. 326,330. 6 Claims. (Cl. 244—21.)



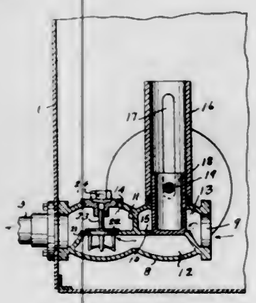
1. In a parachute for use on aircraft, a bag, a mast, having a funnel-shaped top, a central opening in said bag, cords radially disposed on said bag and meeting at a point in said opening, and means for pulling said cords into said funnel shaped top.

1,803,904. SWITCH POINT PROTECTOR. ISAAC J. KILBURN, Denver, Colo., assignor to The American Switch Point Protector and Railroad Equipment Company, Denver, Colo., a Corporation of Colorado. Filed Aug. 20, 1928. Serial No. 300,884. 11 Claims. (Cl. 246—437.)



1. A protector for switch-rails comprising a plate having parallel longitudinal wear-edges to extend along the tread of a switch-rail and having bolt openings transverse to and at equal distances from said edges, for the application of bolts by which the plate is fastened to the rail.

1,803,905. VALVE MECHANISM. ALFRED KINZBACH, Sour Lake, Tex. Filed May 8, 1928. Serial No. 276,000. 3 Claims. (Cl. 137—68.)

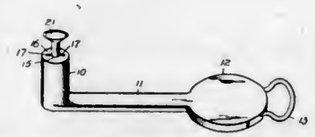


1. A valve mechanism for controlling the flow of fluid from a tank and including a casing anchored to the tank and having an inlet in the tank and an outlet, partitions fixed in said casing separating the same into an inlet chamber into which said inlet leads, an outlet chamber from which said outlet leads and a flow chamber, openings connecting the flow-chamber with the inlet and outlet chambers, and surrounded by valve seats, and valves controlling said seats, and a float connected to one of said valves, a valve guide attached to said casing in which one of said valves works, a float outside of the guide connected, to said last named valve, and means limiting the range of movement of said valve.

1,803,906. DIAZO-TYPES STABILIZED WITH A DERIVATIVE OF THIOCARBONIC ACID AND A PROCESS OF PREPARING THEM. WILHELM KRIEGER and RUDOLF ZAHN, Wiesbaden-Biebrich, Germany, assignors to Kalle & Co., Aktiengesellschaft, Wiesbaden-Biebrich, Germany, a Corporation of Germany. Filed Feb. 6, 1929, Serial No. 338,025, and in Germany Feb. 16, 1928. 9 Claims. (Cl. 95—7.)

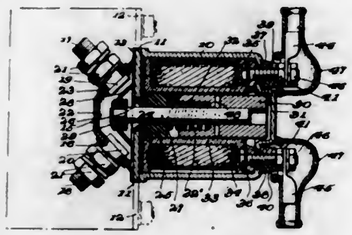
1. The process of stabilizing diazo-types which consists in adding to the light-sensitive layer a derivative of thiocarbonic acid.

1,803,907. ADJUSTABLE GOLF TEE AND ANCHOR THEREFOR. MAURICE M. KRUSE, Long Island City, N. Y. Filed Oct. 22, 1929. Serial No. 401,408. 4 Claims. (Cl. 273—33.)



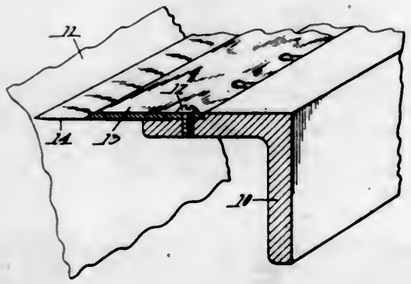
2. An anchoring device for a golf tee, comprising an integral connecting bar, an upright cylindrical member having an axial bore, and a tee adjustably mounted in said bore, the upper end of the cylinder being closed by a flexible piece having a restricted opening and oppositely disposed cuts, said tee having an enlarged portion for the end within the bore of the cylindrical member to frictionally engage the wall of the bore to support the tee at different elevations.

1,803,908. SWITCH MECHANISM. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Oct. 23, 1928. Serial No. 314,462. 9 Claims. (Cl. 200—111.)



1. In a solenoid switch, a shell closed at one end, an insulating spool within said shell and secured thereto at its closed end, a solenoid coil carried by said spool, closure means for the shell embodying a magnetic pole piece, switch operating means embodying a slidable pole piece adjacent said first named pole piece, said spool constituting a guiding member for said slidable pole piece, and means for yieldably separating the pole pieces.

1,803,909. DOCTOR. FREDERICK W. LODDING and JOHN WARREN VEDDER, Worcester, Mass., assignors to Rice, Barton & Fales, Incorporated, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 2, 1928. Serial No. 266,579. 3 Claims. (Cl. 92—74.)

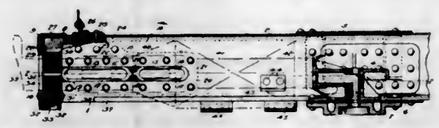


1. A doctor for the purpose described comprising a rigid support, a flexible blade resting on said support and projecting a material distance beyond it and having an edge parallel with it for engaging the surface to be operated upon, and a rigid plate secured to said support and bearing on the upper surface of the flexible blade throughout a space extending from the edge of said support to a line along the blade near the operative edge thereof but spaced therefrom.

1,803,910. MANUFACTURE OF DIBENZANTHRONYLS. ARTHUR LÜTTRINGHAUS and HUGO WOLFF, Mannheim, and HEINRICH NERESHEIMER, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed June 5, 1926, Serial No. 114,011, and in Germany June 15, 1925. Divided and this application filed Jan. 25, 1930. Serial No. 423,538. 2 Claims. (Cl. 260—61.)

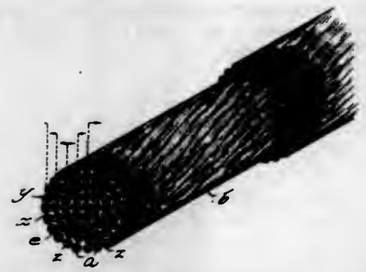
1. As new articles of manufacture, practically pure 2.2'-dibenzanthronyls in which one of the benzanthrone radicles is substituted by a methyl group.

1,803,911. DRAFT DEVICE. MARK H. MARTIN, Baltimore, Md., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Aug. 24, 1925. Serial No. 52,061. 15 Claims. (Cl. 213—50.)



4. An integral draft device comprising an outer portion adapted to embrace a coupler stem and rear portions formed as cheek plates and adapted for application and connection outside of the center sills of a car.

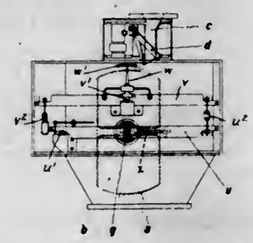
1,803,912. ROPE STRUCTURE. HENRY S. MEARS, Portland, Oreg. Filed Jan. 15, 1929. Serial No. 332,589. 3 Claims. (Cl. 117—52.)



1. A rope having a strand comprising a plurality of yarns twisted together, the yarns lying in the center of the strand having individual turns in the same direction as the turns of the strand, and the individual turns of the yarns being less from the center of the strand outward until the yarns lying on a circle located concentric with and between the center and the circumference of the strand are without turns, lying in parallel relation and the turns of the yarns lying exterior of said circle being in the opposite direction and gradually increasing towards the circumference of the strand from the yarns lying on the said circle in parallel relation.

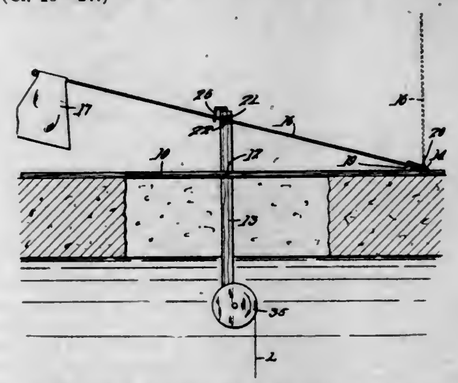
1,803,913. AUTOMATIC WEIGHING MACHINE. OTTO MEYER, Wettelswalde, near Crimmitschau, Germany. Filed Jan. 23, 1928, Serial No. 248,716, and in Germany Jan. 25, 1927. 5 Claims. (Cl. 249—19.)

1. A weighing apparatus comprising a weighing vessel mounted for rotary movement between receiving and discharging positions and for downward and upward movements under the weight of a load and when relieved of such weight, respectively, a feed conduit, a valve controlling the feed of material from said conduit to the vessel, and a pair of successively operating stop members supported for coacting with the valve to control the operation thereof, one of said stop members being engageable with the vessel to effect the opening of the valve and in



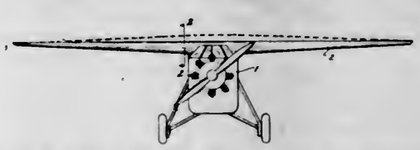
hold it open until the vessel is filled to a predetermined degree and adapted to be released by a certain downward movement of the vessel under the weight of the material therein to permit the valve to partially close, and the other of said stop members being adapted for engagement with the vessel to hold the valve partly closed and adapted to be released upon a further downward movement of the vessel when loaded to the full extent desired to effect a closing of the valve.

1,803,914. TIP-UP. JOHN A. OBERG, Worcester, Mass. Filed Apr. 28, 1930. Serial No. 447,869. 8 Claims. (Cl. 43—17.)



1. In a tip-up, the combination with a plate adapted to rest on the ice and a spring-pressed signal device mounted thereon, of a support having a notch for receiving the signal device, a trigger for releasing the signal device, and a reel carried by said support under water and having means for operating the trigger.

1,803,915. WING CONSTRUCTION FOR AEROPLANES. WILLIAM RAY PARMELE, Portland, Oreg. Filed Dec. 11, 1928. Serial No. 325,205. 5 Claims. (Cl. 244—12.)



1. In a device of the class described, the combination in the wing structure of an aeroplane, of primary ribs.

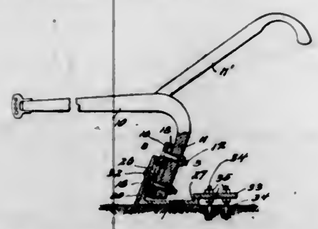
superposed secondary ribs, one end of each secondary rib being hingedly disposed at the leading end of the primary rib and the oppositely disposed end of each secondary rib being slidably disposed relative to the primary rib, said secondary rib being comprised of sectional members hingedly connected, a metallic skin covering for the upper surface of the wing and directly supported by the secondary rib, a strut composed of links hingedly secured together and to the secondary rib elements for raising and lowering the secondary rib and means for manipulating the link strut.

1,803,916. SEAL. MAX PINKERT, Pforzheim, and IMANUEL MÜLLER, Neuenburg, Germany; said Pinkert assignor to said Müller. Filed Apr. 24, 1928, Serial No. 272,428, and in Germany Aug. 10, 1927. 2 Claims. (Cl. 292—320.)



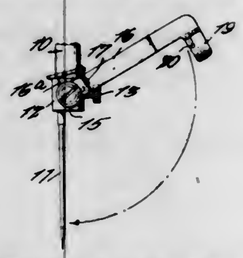
1. A seal comprising a metallic strip having a catch end and a keeper end, adapted for interlocking engagement, the keeper end being provided with a keeper member and a casing substantially enclosing the same, the keeper member comprising two parts, one having an opening and the other a nipple projecting through said opening, and a body of material engaging the member having the opening and extending through the nipple of the other member and interconnecting said members.

1,803,917. AGRICULTURAL IMPLEMENT. JOSEPH C. POWELL, Minden, La. Filed Feb. 24, 1930. Serial No. 430,879. 4 Claims. (Cl. 97—8.)



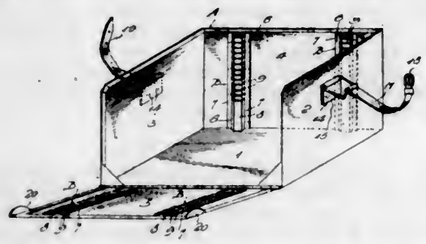
1. An agricultural implement comprising, in combination, a stock, a body member mounted on said stock for angular adjustment in a substantially horizontal plane, a scraper blade vertically adjustably mounted on the front of said body member, said body member being provided with a rearward extension, and harrow teeth mounted for vertical adjustment on said rearward extension.

1,803,918. NEEDLE THREADER. JOHN ROZDILSKI, Mayfield, Pa., assignor of one-half to Joseph A. Kiehart, Mayfield, Pa. Filed Nov. 27, 1926, Serial No. 151,077. Renewed Mar. 20, 1931. 3 Claims. (Cl. 112—225.)



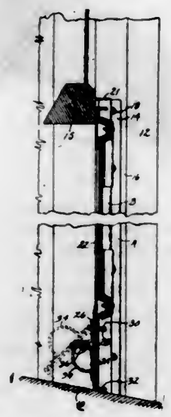
1. A needle threader, a mounting adapted to be mounted for oscillation on a needle bar of a sewing machine, said mounting comprising an arm with an angularly disposed and integral extension, a guide member integral with the lower edge of said extension, a guide integral with the upper edge of said extension, one of said guides lying approximately parallel with said extension on one side and the other of said guides lying approximately parallel with the extension on its opposite side, the said extension having slots to form a seat therethrough, a tongue located between the guides and having a thread hook.

1,803,919. FILE CABINET AND SHIPPING CASE. THOMAS HARDIE SEAY, Washington, D. C. Filed Dec. 10, 1928. Serial No. 325,074. 2 Claims. (Cl. 320—1.)



1. A container constituting a combination file cabinet and shipping case, comprising a movable side, a pair of slotted ridge members secured to said movable side, and a pair to the opposite side, a compression plate selectively engageable with certain slots of one pair and with corresponding slots of the pair on the movable member when the same is in closed position, a closure for said container, an auxiliary tag holding receptacle carried by said closure, and means for securing the closure on the container, whereby the container initially serves as a file cabinet and when the contents have been locked against displacement and the closure secured therein, the same constitutes a complete shipping cabinet with an address tag secured therein.

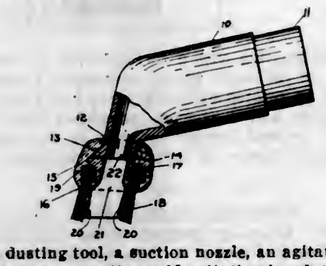
1,803,920. SCREEN CONSTRUCTION. DARIUS E. SHRAUGER, Atlantic, Iowa. Filed Feb. 24, 1930. Serial No. 430,575. 4 Claims. (Cl. 156—14.)



1. In a screen construction for a window having a cross bar, a pair of supporting bars adapted to be secured to the sides of the frame of said window, a screen frame adapted to contact with the inner surfaces of said supporting bars and the outer surface of said cross bar, and thus be confined against both outward and inward movement respectively at its upper end and means to retain it against the supporting bars at its lower end, said screen frame having

a section thereof movable with respect to the remaining portion thereof whereby it may be shortened to lower it from contact with said cross bar whereby it may thereafter be removed inwardly from contact with said supporting bars.

1,803,921. DUSTING TOOL. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Nov. 4, 1927. Serial No. 230,957. 5 Claims. (Cl. 15—158.)



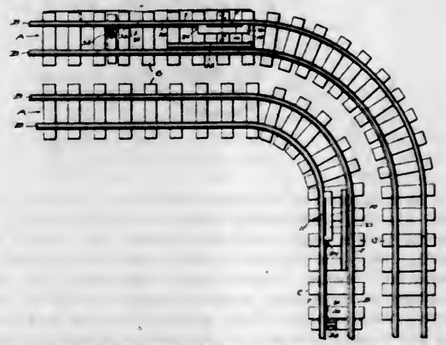
4. In a dusting tool, a suction nozzle, an agitating brush, resilient means connecting said agitating brush to said suction nozzle and means formed integrally with said connecting means to restrict the flow of air into the suction nozzle to the proximity of the point of agitation of the agitating brush.

1,803,922. DRIVING BELT HAVING WEDGE-SHAPED LINKS. CLAUDE O. STREETER, Shrewsbury, Mass., assignor to Graton & Knight Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 18, 1928. Serial No. 278,890. 3 Claims. (Cl. 74—64.)



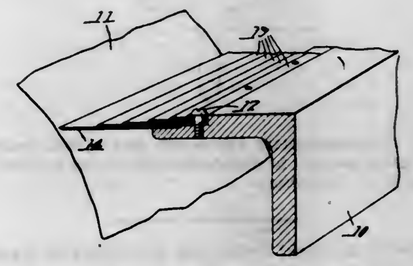
1. A driving belt comprising substantially unyielding inner links, metal connecting links pivoted thereto, spacing links of a thickness substantially equal to said connecting links located between said inner links, and leather outer links assembled with said inner links, said leather outer links having their outer driving faces formed entirely of the grain face of the leather, and being substantially thinner at one longitudinal edge than at the other, whereby the outer grain face is disposed at a substantial angle to the central longitudinal plane of said belt.

1,803,923. WHEEL AND RAIL LUBRICATOR. ROBERT ALLEN TANNER, Barboursville, W. Va., assignor to The American Valve & Meter Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 6, 1928. Serial No. 259,503. 7 Claims. (Cl. 184—3.)



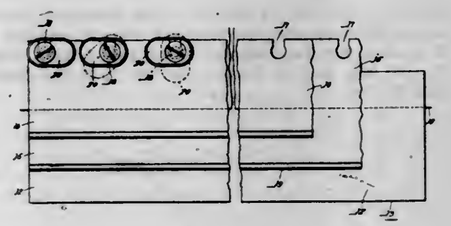
1. In a rail lubricating device, the combination of a flexible rail, of an oil reservoir located adjacent the rail and below the head thereof, an oil distributing bar within the reservoir and normally disposed in a position alongside of the rail head, and means for moving the bar downwardly into the reservoir through the flexing of the rail by the weight of rolling stock passing along said flexible rail.

1,803,924. LAMINATED DOCTOR. JOHN WARREN VEDDER, Worcester, Mass., assignor to Rice, Barton & Fales, Incorporated, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 2, 1928. Serial No. 266,613. 4 Claims. (Cl. 92—74.)



1. A doctor for the purposes described comprising a flexible blade mounted at a distance from its point of contact with the surface which it engages and made up of a series of flexible leaves, each bearing on the one below along a line at a short distance from the edge thereof and parallel therewith to prevent the blade from bending or getting out of position along that line and also prevent enough transverse flexibility to cause the upper edge of the doctor to become spaced from the roll at any point.

1,803,925. FLEXIBLE DOCTOR. JOHN WARREN VEDDER and FREDERICK W. LODDING, Worcester, Mass., assignors to Rice, Barton & Fales, Incorporated, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 28, 1929. Serial No. 335,600. 16 Claims. (Cl. 92—74.)

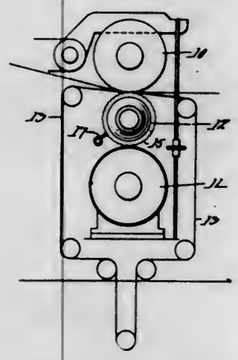


1. A doctor apparatus comprising a support, a flexible blade carried thereby, and means whereby the flexure of the blade can be changed at different places along its length transversely.

1,803,926. PRESS ROLL. JOHN WARREN VEDDER, Worcester, Mass. Filed Oct. 4, 1929. Serial No. 397,342. 1 Claim. (Cl. 92—49.)
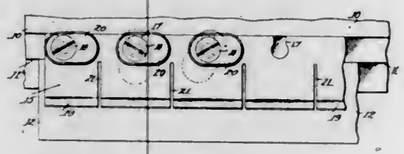
In a press for a paper making machine, the combination of three rolls, a smooth surfaced cylindrical upper roll, a

cylindrical intermediate roll for engagement therewith having surface indentations and a crowned lower roll on



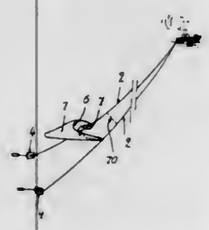
which the intermediate roll bears, said surface indentations being adapted to receive moisture at the top and discharge it at the bottom.

1,803,927. FLEXIBLE DOCTOR OR SCRAPER BLADE. JOHN WARREN VENDER, Worcester, Mass., assignor to Rice, Barton & Fales, Incorporated, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 26, 1930. Serial No. 484,523. 5 Claims. (Cl. 92—74.)



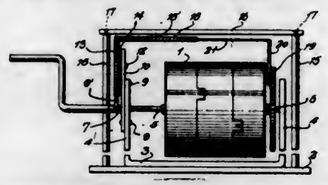
1. The combination of a support, a scraper or doctor blade carried thereby, a spring blade on top of the doctor blade, said spring blade being provided with slots extending backwardly from its front edge to divide the same into sections separately engaging the doctor blade, and an adjusting or tightening device for each section.

1,803,928. TRAWLING GEAR. JEAN BAPTISTE JOSEPH ALPHONSE VIGNERON, La Rochelle, France, assignor to V. D. Ltd., London, England. Filed Feb. 4, 1928, Serial No. 251,954, and in France Apr. 23, 1927. 4 Claims. (Cl. 43—9.)



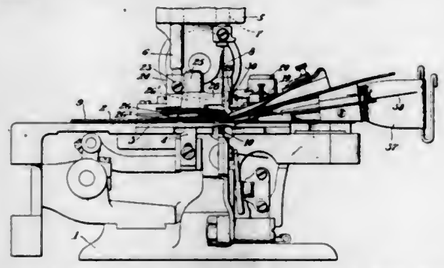
1. A trawling gear comprising two towing hawsers, traction means connected to one end of said hawsers, a net connected to said towing hawsers, and means for spreading the net laterally, so connected with said hawsers as to be situated beyond the attaching point of the net upon said hawsers with respect to said traction means.

1,803,929. OVERWINDING PREVENTER FOR SPRING MOTORS. JOSEPH P. ZAIDAN, Scranton, Pa. Filed Aug. 16, 1930. Serial No. 475,736. 7 Claims. (Cl. 185—43.)



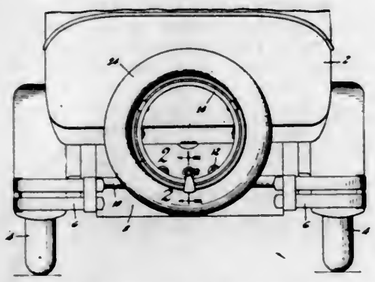
1. In combination with a spring motor, an overwinding preventer for the motor spring comprising, a gear member adapted to be rotated by the winding key, support means for said gear and a member associated with the gear adapted to prevent further rotation of the gear after a predetermined number of turns of the winding key.

1,803,930. PRESSER-DEVICE FOR SEWING MACHINES. RUDOLPH BECKER, North Plainfield, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Apr. 26, 1929. Serial No. 358,187. 8 Claims. (Cl. 112—235.)



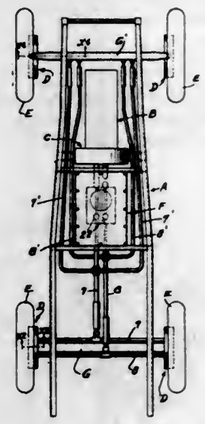
1. In a sewing machine, the combination with stitch-forming mechanism including a reciprocating needle and a feeding device, of a presser-disk having a peripheral edge-portion and an under face and disposed with its under face cooperatively opposed to said feeding device, in rear of said needle.

1,803,931. SPARE TIRE LOCK. LLOYD BLACKMORE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 24, 1928. Serial No. 314,622. 5 Claims. (Cl. 70—90.)



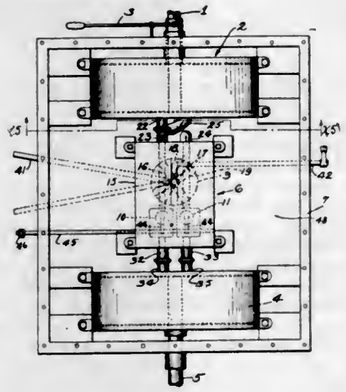
1. In a means for securing a tire and its rim to a vehicle, a frame permanently secured to said vehicle and adapted to removably receive said tire rim, means for securing said rim and said frame together including a headed bolt, means for permanently concealing said head including an operating member placed in end to end relation with said bolt head, means on one of said abutting parts and slidable over the other to cause the turning of the bolt through said operating member, and a lock for throwing the parts to inoperative position.

1,803,932. HYDRAULIC MECHANISM FOR DRIVING MOTOR VEHICLES. GEORGE W. DOOLEY, Ducor, Calif. Filed July 12, 1927. Serial No. 205,236. 1 Claim. (Cl. 180—66.)



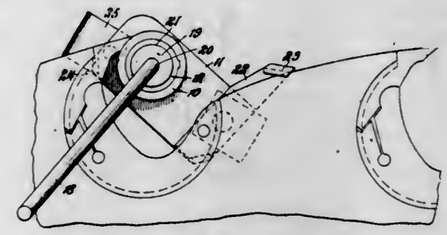
In a driving mechanism for vehicles, a tractor wheel, a stator having a hollow spindle and fixed to a shaft; a rotor in the stator and provided with a drive shaft extending through the spindle; a collar fixed on the end of the drive shaft and non-rotatably connecting such drive shaft with the traction wheel; said stator being fixed to the axle and comprising a shell having a shaft co-axial with the drive shaft and journalled in the axle.

1,803,933. HYDRAULIC DRIVING MECHANISM. GEORGE W. DOOLEY, Ducor, Calif. Filed Apr. 16, 1928. Serial No. 270,512. 3 Claims. (Cl. 60—53.)



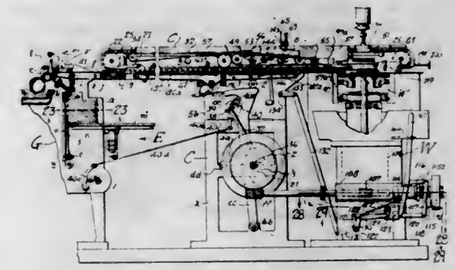
1. The combination with a pump and a motor, of a casing provided with a sump, a reversing valve seat, two poppet valve seats, a passage connecting the pump outlet with the reversing valve seat; a passage connecting the reversing valve seat with the motor through one of the poppet valve seats; a poppet valve to prevent return of fluid from the motor through such poppet valve seat; there being an indirect passage leading from the motor to the sump through the reversing valve seat; a poppet valve in the second poppet valve seat to pass fluid to the sump, means for closing the poppet valves; means to open the poppet valves, respectively, and a reversing valve in the reversing valve seat to pass the fluid alternately at the will of the operator to the motor through one or the other of said poppet valves.

1,803,934. SAW SHARPENER. CHARLES V. EAST, Molson, Wash. Filed Aug. 23, 1927. Serial No. 214,953. 2 Claims. (Cl. 76—37.)



1. A sharpener for circular saws comprising, in combination, an elongated sheet metal plate having a lateral lug adjacent to one end; a band file having a handle journaled in the plate; a hook-shaped member secured to the plate on the end opposite from said lug and adapted to engage the edge of the saw; and a sheet metal, bail-shaped handle secured to the plate on the opposite side from said band file.

1,803,935. CONVEYING SYSTEM. THEODORE A. FEDERWITZ and WALTER T. BAILEY, Philadelphia, Pa., assignors to Stokes and Smith Company, Summerdale, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 1, 1925. Serial No. 40,769. 42 Claims. (Cl. 93—54.)



15. A conveyor unit comprising means for conveying sheets in succession, means for conveying box structures in succession, and means common to said conveying means for effecting simultaneous adjustment thereof, whereby box structures and sheets of different dimensions may be conveyed.

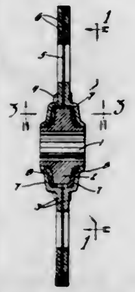
16. A conveyor unit comprising belts for conveying boxes in succession, and means for adjusting a belt transversely of the direction of movement of said belts.

22. In a system for applying wrappers to boxes, the combination with a wrapping machine and a machine spaced therefrom comprising mechanism for removing from a stack and applying adhesive to wrappers in succession, of a conveyer bridging the span between said machines and comprising means for transporting the wrappers from said second named machine to said wrapping machine and means for transporting boxes to said wrapping machine in the same direction as the wrappers.

1,803,936. TREATMENT OF FIBROUS MATERIAL. HANS FRIEDLAENDER, Berlin, Germany. Filed Apr. 9, 1928, Serial No. 268,798, and in Germany May 17, 1927. 16 Claims. (Cl. 92—21.)

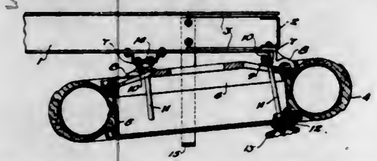
1. The process of producing impregnated artificial fibrous materials, which comprises effecting the precipitation in and on the artificial fibre of hard wax.

1,803,937. CUSHION CONNECTION. AXEL J. JANSSON, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 30, 1929. Serial No. 336,150. 3 Claims. (Cl. 192—68.)



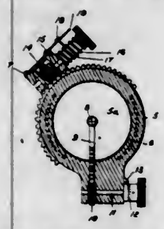
1. In a driven element of a clutch, a disc having frictional driving surfaces at its periphery and a central opening, a pair of plates secured on opposite sides of the disc adjacent said central opening and provided with a series of corelated offset portions providing cups that are closed at outer ends, a hub positioned within said opening in sliding contact with the inner ends of said plates to close the inner ends of the cups and provided with lugs that extend into said cups, and a pair of continuous rings of elastic deformable material interposed between opposite sides of the lugs and said plates and completely incased within said cups.

1,803,938. UNDERSLUNG TIRE CARRIER. VICTOR JANTSCH, Pontiac, Mich., assignor to Yellow Truck & Coach Manufacturing Company, Pontiac, Mich., a Corporation of Maine. Filed Nov. 3, 1927. Serial No. 230,802. 10 Claims. (Cl. 224—29.)



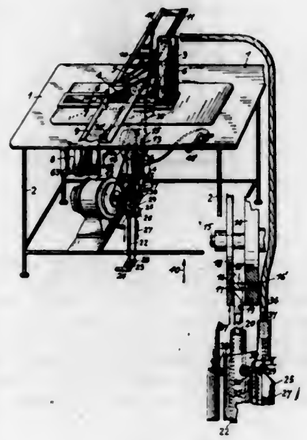
1. The combination with a chassis frame, of tire-carrying means associated therewith, including tire-engaging brackets fixedly secured on the underside of the frame, each being provided with a pair of forked fingers, suspension bolts hung from said brackets, having T-shaped heads engageable with said forked fingers, and tire-engaging lugs adjustably carried by said bolts, upon which the weight of the tire is received and by the adjustment of which the tire is lifted into engagement with said brackets and firmly clamped in carrying position.

1,803,939. ANTIAIRCRAFT SIGHT. JAMES C. KARNES, Buffalo, N. Y. Filed Feb. 26, 1927. Serial No. 171,354. 4 Claims. (Cl. 33—53.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A sight for guns including a body having a sight opening, a member mounted in the body for movement radially of the sight opening, an aiming point on the inner extremity of the member and disposed within the sight opening, means for moving the member and amount corresponding to the vertical lead to be given a gun and means for rotating the body whereby the member is displaced an amount corresponding to horizontal lead to be given the gun.

1,803,940. PRINTING MACHINE. JOSEPH KRELL, Berlin-Pankow, Germany. Filed Nov. 18, 1926, Serial No. 149,192, and in Germany Dec. 4, 1925. 2 Claims. (Cl. 192—125.)



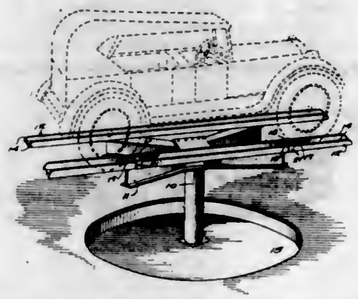
1. In a printing machine, driving mechanism comprising a clutch, automatic means tending to throw in said clutch, manually operated means for throwing out said clutch against the action of said automatic means, a lock for said automatic means, and hand-operated-means comprising a Bowden cable for releasing said lock.

1,803,941. METHOD OF PRODUCING LUBRICATING OILS. ERWIN R. LEDERER, Fort Worth, Tex., assignor to Texas Pacific Coal & Oil Co., Fort Worth, Tex., a Corporation of Texas. Filed Mar. 5, 1929. Serial No. 344,605. 13 Claims. (Cl. 196—19.)

3. The method of producing fully dewaxed 0° F. cold test paraffin base residual lubricating oil from crude oil from which the lighter fractions have been distilled at a temperature approximating the lower range of the boiling temperature of the particular fraction to provide a residuum bright stock of green color and sweet odor, containing amorphous wax and substantially free from crystalline wax, which would interfere with centrifugal separation of the wax and oil, which comprises ageing the residuum oil, treating the same with sulphuric acid at 115 to 125° F., removing the acid sludge, storing the oil to permit settling of the acid sludge, treating the oil with clay at a temperature approximating 420° F., reducing the temperature of the clay and oil to 135° F., diluting the oil with naphtha and filtering to remove the clay further diluting the oil, chilling at a rate approximately 2½° per hr. to about 10° F. and chilling more rapidly to —20 to —40° below zero, centrifuging the wax from the oil, and separating the diluent from the dewaxed oil.

9. The cold dewaxed unblended paraffin base, residual lubricating oil having a viscosity of from 50 seconds at 210° F. to 200 seconds at 210° F. on the Saybolt universal viscosimeter and a cold test of zero to 10° F. and capable of flowing freely at 7 to 10 lbs. absolute pressure at temperatures as low as —30° F., produced from originally residual cylinder stock containing amorphous wax and substantially free from crystalline wax by treatment with sulphuric acid to remove tarry and asphaltic ingredients, treatment with filter clay to remove discoloring material, dilution of the oil with lighter hydrocarbons, chilling to —30° to —40° F., separating the wax from the chilled oil and separating the diluent from the dewaxed oil.

1,803,942. CHOCK. PETER J. LUNATI, Memphis, Tenn. Original application filed June 9, 1925, Serial No. 36,019. Divided and this application filed Feb. 24, 1926. Serial No. 90,399. 5 Claims. (Cl. 188—32.)

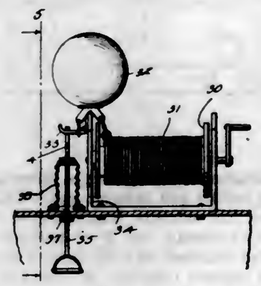


1. A chock for use with a rail having a horizontal base portion and a vertical edge flange, said chock comprising a substantially inverted V-shaped supporting member adapted to slidably receive the edge flange of the rail, and an integral block pivotally connected at one edge to said supporting member, said block having one vertical wall adapted to contact at its lower edge with the base portion of the rail and an inclined wall adapted to contact with a wheel of a vehicle.

1,803,943. PROCESS FOR THE PRODUCTION OF ASH-FREE ADSORBENT CARBON. ELROY J. MILLER, East Lansing, Mich., assignor to Michigan State Board of Agriculture, East Lansing, Mich. Filed Nov. 11, 1927. Serial No. 232,709. 6 Claims. (Cl. 252—3.)

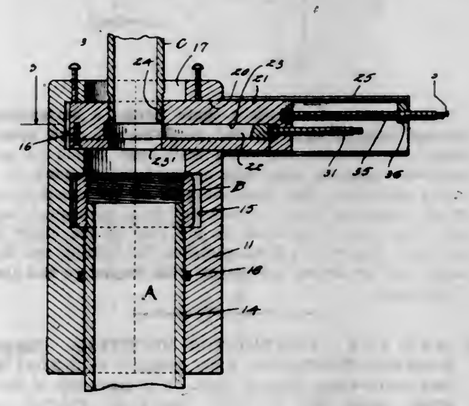
3. The process of purifying commercial grades of activated charcoal comprising admixture with hydrofluoric acid, removing the said acid, boiling with hydrochloric acid, and then removing the last named acid.

1,803,944. LIFE SAVING AND SALVAGE APPARATUS FOR USE WITH SUBMARINES. WILLIAM HUGH MILLS, Attleboro, Mass. Filed Mar. 2, 1929. Serial No. 343,888. 2 Claims. (Cl. 114—16.5.)



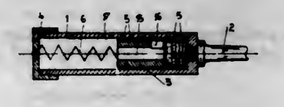
1. Means for indicating the position of a sunken vessel comprising a float, a reel, means for rotatably mounting the reel on the vessel, a flexible member wound about said reel, a V-shaped member secured to said float and removably seating on said mounting means for said reel, means for connecting one side of said V-shaped member to the flexible means, a ring loosely mounted in the opposite side of said V-shaped member, a pivoted arm secured to said mounting means, said arm having an upturned end portion, said arm being adapted to extend through said ring whereby to releasably hold said float on said mounting means, and a vertical movable member engaging the upturned end portion of said arm whereby to normally hold said arm in outstanding position, said movable vertical member extending inwardly of the vessel whereby to permit operation thereof remotely from the float.

1,803,945. WELL CAPPER. HORACE G. RETHERFORD, Vilas, and SAMUEL T. ELMORE, Campo, Colo. Filed Nov. 11, 1930. Serial No. 494,976. 7 Claims. (Cl. 166—15.)



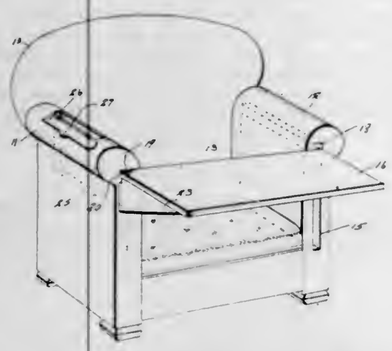
1. An oil well capper comprising a casing formed of two hinged, semi-cylindrical sections, the casing being formed on the interior to receive and clamp upon the coupling on the upper end of a well pipe and have gas-tight engagement therewith, a main valve having a screw-threaded opening therethrough and slidable transversely across the casing to intersect an opening thereof or be withdrawn therefrom, and a second valve mounted on the main valve for movement toward or from a position closing the screw-threaded opening, and means to shift either of said valves independently of the other.

1,803,946. AUTOMATIC FIREARM ACTUATED BY COMPRESSED AIR. BETHEL ABIEL REVELLI, Turin, Italy, assignor, by mesne assignments, to Metallurgica Bresciana Gia Tempini, Fiumegrande, Brescia, Italy, a Company of Italy. Filed Aug. 21, 1929, Serial No. 387,431, and in Italy June 6, 1929. 3 Claims. (Cl. 42—3.)



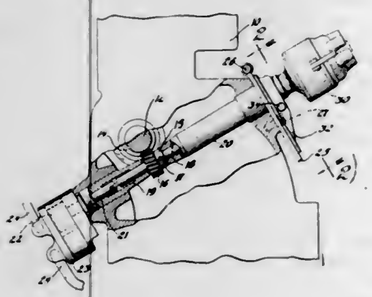
3. In an automatic firearm, in combination with a barrel, a breech, and an air compression chamber in said breech, of a movable member acting as breech bolt for said barrel and as a piston for said compression chamber, and means for placing said compression chamber in connection with the exterior before said movable member has reached the end of its rearward and forward movement respectively.

1,803,947. COMBINATION CHAIR AND WRITING DESK. ELSIE MAE RUNKLES and FLOYD BLACKBURN, Detroit, Mich. Filed Sept. 26, 1929. Serial No. 395,311. 5 Claims. (Cl. 155—127.)



3. In combination with a chair having a horizontally disposed compartment in one arm thereof, desk means, means for slidably mounting said desk means in said horizontal opening, said desk means being adapted to be moved outwardly and longitudinally of the opening and swung upwardly and downwardly into horizontal position, stop means mounted in one arm of the chair for said desk means, and locking means for holding the desk means against lateral movement with respect to the arms of the chair.

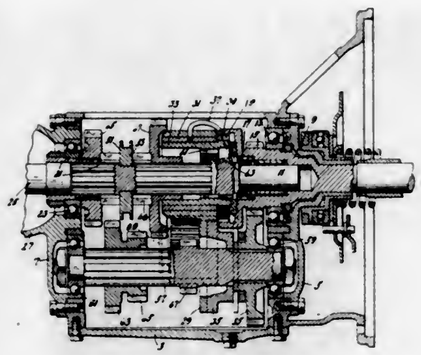
1,803,848. DISTRIBUTOR MOUNTING. HERMAN SCHWARZE, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 7, 1927. Serial No. 231,754. 16 Claims. (Cl. 123—195.)



2. In an internal combustion engine, a distributor housing having an anchoring element fixed thereon in said engine, a distributor shaft within said housing and driven by said engine, a pointer fixed on said housing, means for fixing said anchoring element to said engine, and means for angularly adjusting said housing in said anchoring element.

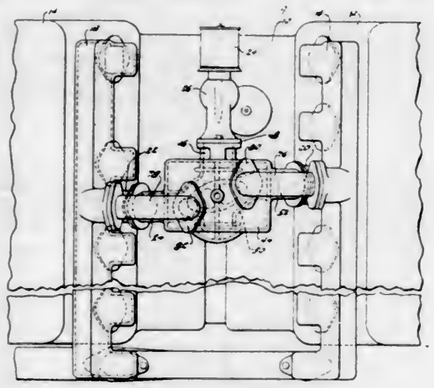
1,803,949. OVERGEAR TRANSMISSION. CLAUDE H. STERLING, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 12, 1927. Serial No. 160,620. 8 Claims. (Cl. 74—58.)

1. In a transmission device, aligned driving and driven shafts, a sleeve within which said driven shaft is slidable and nonrotatably mounted, means to drive said sleeve from said driving shaft, driving means carried by said sleeve whereby the power transmitted to said sleeve from said driving shaft is transmitted from said sleeve, a bearing for said sleeve, a gear ring eccentrically mounted around said shafts, means to drive said gear ring from said driving



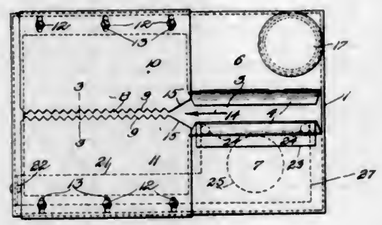
shaft, gearing including an integral driven shaft gear, a gear member on the gear ring for cooperation therewith, and means to reciprocate said driven shaft to move said driven shaft to a position where its external gear is engaged with the cooperating gear on the gear ring.

1,803,950. INTAKE MANIFOLD HEATER. WILLIAM R. STRICKLAND, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 21, 1927. Serial No. 221,078. 5 Claims. (Cl. 123—122.)



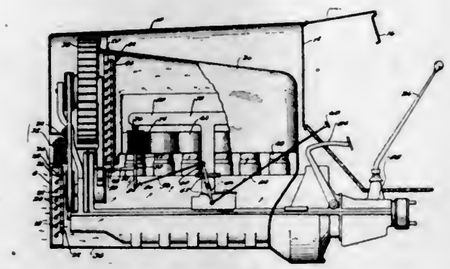
1. In combination with a V-type internal combustion engine having intake and exhaust manifolds, a means for preheating the fuel mixture comprising a heating chamber located well within the V, a horizontal carburetor attached to the chamber and similarly located, a connection from the exhaust manifold of each bank of cylinders attached to said chamber at diagonally opposite points, means for conducting the fuel mixture through the chamber, and means attached to the chamber at diagonally opposite points for leading the fuel mixture to the intake manifold.

1,803,951. SHOE FILLER COATING APPARATUS. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 24, 1927. Serial No. 228,235. 9 Claims. (Cl. 91—32.)



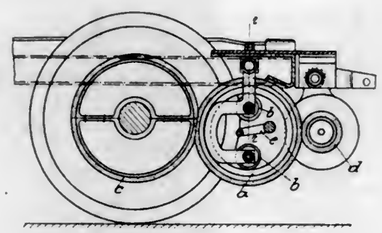
1. The herein described apparatus for treating shoe-bottom filler pieces, comprising a receptacle for holding a sluggishly plastic coating material for application to said pieces, and means for converting the coating into heaped deposits on the piece as the dipped piece is removed from the receptacle.

1,803,952. SHUTTER CONTROL FOR AIR-COOLED ENGINES. GEORGE BURR UPTON, Ithaca, N. Y., and ROLAND V. HUTCHINSON, Lansing, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 12, 1928. Serial No. 277,343. 25 Claims. (Cl. 123—174.)



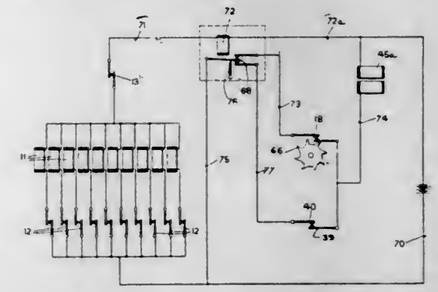
1. In combination with an engine, heat sensitive means for controlling the flow of air to the engine, and means connected with the controlling parts of the engine for controlling the flow of air from the engine.

1,803,953. POWER TRANSMITTING FRICTION WHEEL. ROMAN VON KRENSKI, Berlin-Charlottenburg, Germany. Filed May 9, 1927, Serial No. 190,099, and in Germany May 18, 1926. 1 Claim. (Cl. 74—26.)



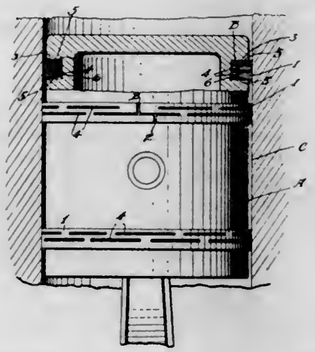
The combination with the frame of a railway vehicle, an axle thereof and a driving friction wheel fixed on said axle, of a dynamo having a driven friction wheel fixed on its shaft, said dynamo being suspended from the frame of the vehicle, an annular coupling member interposed between said friction wheels and having an elastic tyre in engagement with the driving friction wheel and driven friction wheel for transmitting motion from the former to the latter without shocks, supporting means for said annular coupling member suspended from the frame of the vehicle and having rollers engaging the coupling member so as to enable the coupling member to rotate freely between the friction wheels, said supporting means having a gap capable of allowing other devices not belonging to the friction wheels and their supporting means to be passed through the annular coupling member and a brake actuating member passed through said coupling member and said gap, as and for the purposes set forth.

1,803,954. TYPEWRITER CONTROLLED PERFORATING MACHINE. HERMANN ADALBERT WEINLICH, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed June 2, 1927, Serial No. 195,971, and in Germany Jan. 24, 1927. 11 Claims. (Cl. 164—113.)



1. In a machine of the class described, printing elements, means for perforating a record corresponding to data printed by said printing elements and means controlled by the printing elements for causing actuation of the perforating mechanism only when printing is effected.

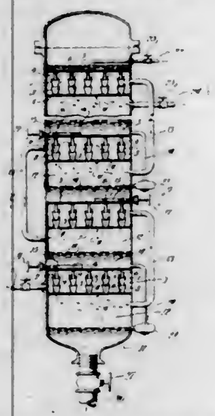
1,803,955. PACKING RING. ALBERT W. WENZEL, St. Cloud, N. J. Filed July 25, 1928. Serial No. 295,197. 9 Claims. (Cl. 74—109.)



1. The combination with a piston having a circumferential groove, of a one-piece metallic split radially and axially resilient packing ring having opposite side surfaces converging toward the inner side of the ring, said ring when axially expanded being of a width intermediate its inner and outer sides greater than the width of said groove, and when radially expanded being of a diameter

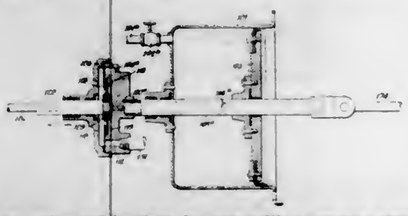
greater than the cylinder, so that when the ring is applied to a piston and inserted in a cylinder axial and radial pressures are developed in the ring sufficient respectively to resist the pressures in the combustion chamber in the cylinder and to overcome the resistance to radial expansion of the ring caused by frictional contact of the side surfaces of the ring with the side walls of said groove, whereby said side surfaces constantly tightly engage both side walls of the groove and the outer surface of the ring is maintained in tight contact with the cylinder walls.

1,803,956. PROCESS AND APPARATUS FOR VAPOR FRACTIONATION. DONALD J. BERGMAN, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 22, 1927. Serial No. 185,689. 5 Claims. (Cl. 261—113.)



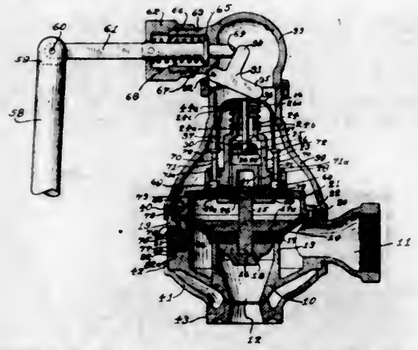
1. A process of vapor dephlegmation, which comprises introducing vapors into a confined zone in a dephlegmating column, jetting cooling liquid downwardly through said zone in a multiplicity of streams with sufficient force that the vapors are entrained therein and passed therewith to a separating zone wherein vapor and liquid separate, withdrawing the vapors from said separating zone and passing same out of contact with the liquid descending through the first mentioned zone and discharging said vapors into a second confined zone above the first mentioned zone where entrainment and subsequent separation again takes place, repeating these operations throughout the height of the dephlegmating column, withdrawing from an upper portion of same those vapors which escape condensation, and withdrawing from a lower portion of same the liquid.

1,803,957. POWER ACTUATOR. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Nov. 7, 1927. Serial No. 231,724. 21 Claims. (Cl. 121—41.)



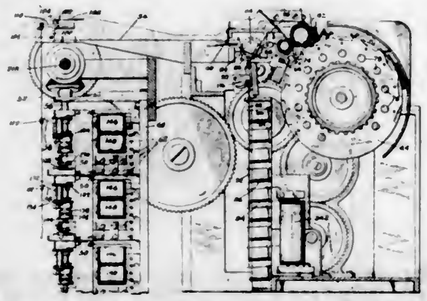
1. In valve mechanism for controlling power actuators, the combination with a hollow valve casing provided with means for connecting it with a portion of an actuator between opposed faces of its actuating members, and for independently connecting it with sources of higher and lower pressures, of a diaphragm valve dividing said casing into two chambers, a diaphragm engaging seat in one of said chambers dividing said chamber when the diaphragm valve is seated into two compartments, one of which is in communication with one of said fluid pressure sources, a disc valve in said chamber with said seat and having sealing portions for seating upon the diaphragm and forming a separate chamber between said disc and diaphragm valves, means for placing said separate chamber in communication with the other of said fluid pressure sources, a valve actuating part operatively connected to said disc and diaphragm valves and having cealing engagement therewith, said valves coacting to connect the said portion of the actuator with one or the other of said fluid pressure sources when either of said valves is in unseated position, and to disconnect said portion of the actuator from both of said sources when both valves are seated.

1,803,958. SEAT OPERATED FLUSH VALVE. WILLIAM H. CADWELL and JOHN OTT, New Britain, Conn., assignors to The Beaton & Cadwell Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Sept. 13, 1926. Serial No. 135,025. 12 Claims. (Cl. 137—93.)



1. In a flush valve, a main chamber having an inlet and an outlet, a control chamber, a by-pass for slowly equalizing the pressure between said chambers after the flush has been operated, a releasing chamber having communication with said control chamber, a normally open release valve located in said releasing chamber and adapted to release fluid therefrom, means for normally shutting off said communication, means for closing said release valve and opening said communication, whereby the flush valve will operate when the release valve is next opened.

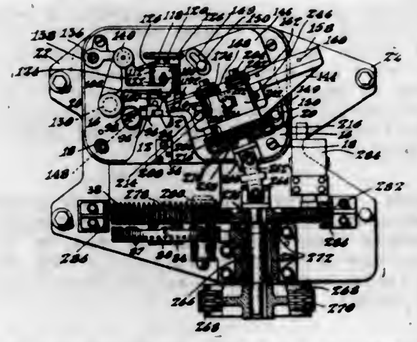
1,803,959. TABULATING MACHINE. FRED M. CARROLL, Yonkers, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Oct. 21, 1925. Serial No. 63,826. 26 Claims. (Cl. 235—58.)



8. In a machine of the class described a supporting frame provided with a plurality of compartments for receiving individual adder units, a common drive shaft located in proximity to said frame, a plurality of driving elements mounted on said shaft each element corresponding in position to the position of one of said compartments, a plurality of removable adder units each comprising an adder element with an individual differential mechanism for operating it and driving means for said differential mechanism adapted to cooperate with a driving element on the common shaft when the unit is placed in one of said compartments.

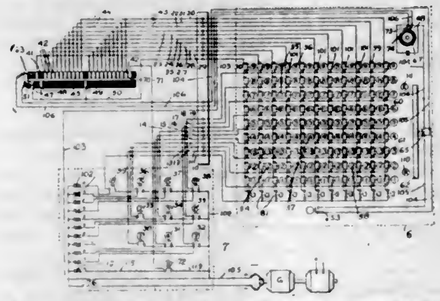
16. An accounting machine comprising a recording device, a plurality of accumulator wheels adapted to be differentially displaced from normal home position to represent data, a plurality of rotating axially shiftable actuators, means for simultaneously shifting said actuators into driving engagement with said wheels to reset the wheels and means actuated according to the differential times at which the wheels reach normal home position on such resetting for controlling the recording device to record the data represented by the differential displacement of the wheels prior to such resetting.

1,803,960. COILING MACHINE. RAYMOND H. CRAMER, Newark, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 26, 1927. Serial No. 215,638. 21 Claims. (Cl. 153—64.)



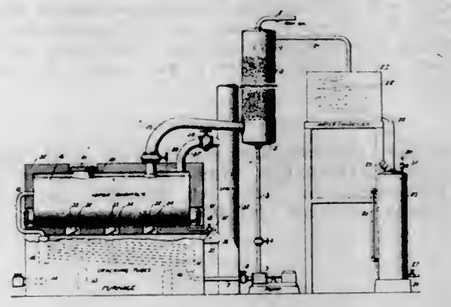
1. In a machine of the character described, a winding head comprising a series of conical rolls having one element of each roll parallel to a common center line to form a coiling recess in which a coil is formed and moved endwise, the smaller ends of the conical rolls projecting in the same direction from the winding head, and means for feeding a strip of material into the space between the rolls; substantially as described.

1,803,961. ACCOUNTING MEANS. SHERWIN K. DECKER, GUSTAV ALFRED JOHNSON, JOHN W. DAVIS, and JOHN BRUCE JUNOR, Los Angeles, Calif., assignors to International Business Machines Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 19, 1927. Serial No. 220,372. 9 Claims. (Cl. 101—93.)



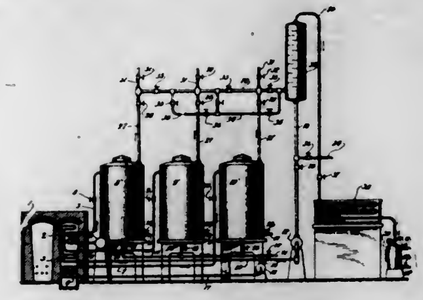
1. In combination a key operated billing machine, a punch including a plurality of series of punches with means for selecting the punches of the several series successively and connections intermediate the billing machine and punch to effect operation of the punch selecting means for the several punch series form the keyboard of the billing machine.

1,803,962. PROCESS FOR CONVERTING HYDROCARBON OILS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 1, 1925. Serial No. 34,132. 1 Claim. (Cl. 196—58.)



A continuous process for cracking hydrocarbon oil, consisting in heating the oil to a cracking temperature in a heating zone, in delivering the highly heated oil to an enlarged vapor chamber, wherein substantial conversion occurs, in maintaining the oil in said vapor chamber at a temperature such that the oil constituents separate into vapors representing at least 80 per cent of the oil charged to the heating zone and a liquid residue by circulating controlled quantities of combustion gases from the heating zone about said vapor chamber, in subjecting such vapors to reflux condensation, in returning the reflux condensate to the heating zone for further treatment, and in maintaining a superatmospheric pressure on the oil undergoing treatment in the process.

1,803,963. PROCESS OF CRACKING PETROLEUM. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 21, 1925. Serial No. 76,640. 3 Claims. (Cl. 196—49.)



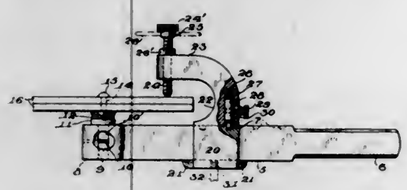
1. A process for cracking hydrocarbon oil, comprising initially subjecting charging oil to given cracking conditions of temperature and pressure, permitting the heated oil to undergo conversion in an enlarged zone, subjecting vapors evolved from the initially treated oil to dephlegmation, whereby a substantial quantity of reflux condensate is formed, separately and independently subjecting oil unvaporized by said initial cracking conditions and the reflux condensate formed as a result of said dephlegmation to further cracking conditions of temperature and pressure,

such as will effect further conversion thereof and commingling the vapors released from said unvaporized oil and said reflux condensate as a result of said separate independent treatments with the vapors evolved from the charging oil as a result of said initial treatment.

1,803,964. PROCESS OF DESULPHURIZING CRACKED HYDROCARBONS. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 26, 1926. Serial No. 118,823. 1 Claim. (Cl. 196—27.)

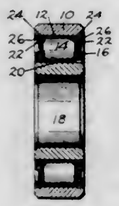
The method of treating dephlegmated cracked hydrocarbon oil vapors as they leave the dephlegmator of an oil cracking apparatus, which consists in subjecting the hot vapors to the action of ozone in the presence of a silent electric discharge.

1,803,965. ADJUSTABLE BUCKING-UP TOOL WITH INTERCHANGEABLE DIES. HARRY N. EVANS, Sr., Philadelphia, Pa. Filed Feb. 28, 1928. Serial No. 257,667. 2 Claims. (Cl. 78—53.5.)



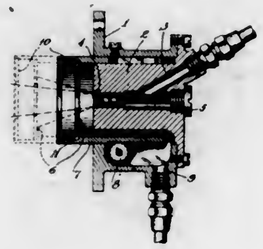
1. A bucking-up tool, comprising a shank, forming a lever and terminating in one direction in a manually engageable portion constituting a lever power arm, a rivet-engageable die supported by the opposite end portion of said shank which constitutes a lever work arm and angularly disposed with respect thereto, a bracket having a gooseneck extension adapted to partially surround and overhang a member being riveted to provide a fulcrum, and spring-pressed means to adjustably secure said bracket longitudinally upon and with respect to said shank, to vary the ratio between the power and work arms of the lever.

1,803,966. ANTIFRICTION BEARING. HAROLD R. GIBBONS, Chatham, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 13, 1927. Serial No. 183,338. 7 Claims. (Cl. 308—212.)
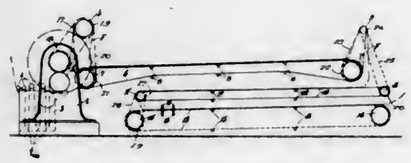


1. In an antifriction bearing, a race ring having a cylindrical raceway and a continuous cylindrical land, the land and the raceway lying in the surface of the same cylinder whose continuity is interrupted by a groove, a series of rollers running on the raceway, and a continuous flat-sided retaining ring having widely spaced projecting tongues in the groove, the ends of the tongues being arcuate and lying in a circle of the same diameter as the bottom of the groove to fit against it, the ring presenting a flat guiding surface to the ends of the rollers and being applicable to the race ring purely by elastic deformation whereby the guiding surface has inherent tendency to retain its flat form; substantially as described.

1,803,967. FUEL SPRAYING. JOHN GOOD, Garden City, N. Y., assignor to Good Inventions Co., New York, N. Y., a Corporation of New York. Filed Jan. 9, 1925. Serial No. 1,452. 15 Claims. (Cl. 158—73.)



1. Liquid spraying apparatus comprising a unitary head structure having a spray source orifice and a liquid chamber therein, a supply passage leading to the spray orifice and a return passage leading from said chamber, an adjustable member extending into the spray cone to intercept a portion only of the spray and adapted to direct variable amounts of the sprayed liquid into said chamber.

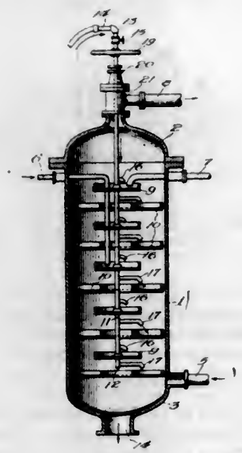
1,803,968. MACHINE FOR PROCESSING FABRIC. GEORGES HEBERLEIN, Wattwil, Switzerland, assignor to Heberlein Patent Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 4, 1926, Serial No. 146,187, and in Germany Aug. 19, 1926. 5 Claims. (Cl. 8—20.)



1. In a machine of the character described the combination of means by which a web of fabric to be processed is subjected to a reagent, wringers for removing the excess reagent, a conveyer belt, means for driving the conveyer belt at a slower speed than the web as received, another conveyer for receiving said web from said first mentioned conveyer and means for driving it at a greater speed than the first conveyer so as to have the web deposited thereon in straightened out or flattened condition.

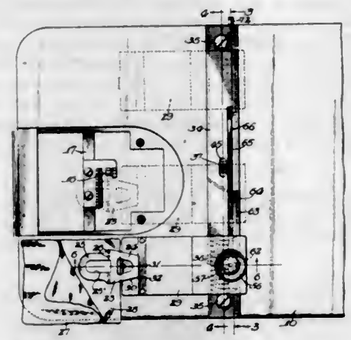
1,803,969. PROCESS FOR CLEANING DEPHLEGMATORS. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed Oct. 18, 1923, Serial No. 669,251. Divided and this application filed Apr. 13, 1925. Serial No. 22,559. 3 Claims. (Cl. 196—69.)

3. A process for removing solid and semisolid residual-like accumulations from the vertically spaced pans of a dephlegmating column employed in the distillation of the hydrocarbon oil, comprising discharging an independent stream of a cleansing fluid into each separate pan under pressure, causing said streams to contact with



each pan in the dephlegmating column, and withdrawing the cleansing fluid and removed residual deposits from the dephlegmating column.

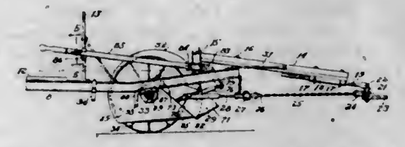
1,803,970. APPARATUS FOR APPLYING TROUSER HOOKS. OWEN KENT, Downers Grove, Ill., assignor to Briede & Rogovsky, a Copartnership consisting of Henry J. Briede and W. P. Rogovsky, Chicago, Ill. Filed Mar. 26, 1928. Serial No. 264,727. 9 Claims. (Cl. 112—104.)



1. In an apparatus of the character set forth, the combination with a sewing machine having the usual feed mechanism, of a carrier having means for receiving and holding a trouser hook provided with holes for receiving stitching, a guide for said carrier, a stop member on the carrier, a stop on the guide for stopping the carrier at a predetermined position, a pawl adapted to engage with teeth on the carrier, and means actuated by the machine for moving the pawl to cause it to engage the teeth and feed the carrier past the needle.
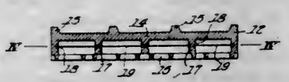
1,803,971. WHEELED SCRAPER. GEORGE C. KEOWN, Rapid City, S. Dak., assignor to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Filed Nov. 4, 1926. Serial No. 146,120. 14 Claims. (Cl. 37—129.)

1. A scraper comprising a frame, a bucket mounted on said frame to rock about a transverse axis, an apron pivotally mounted on the frame to swing into and out of operative relation with the front edge of the bucket, and means directly connected with said apron and actuated by the swinging thereof toward loading position to tip the front edge of the bucket downward.



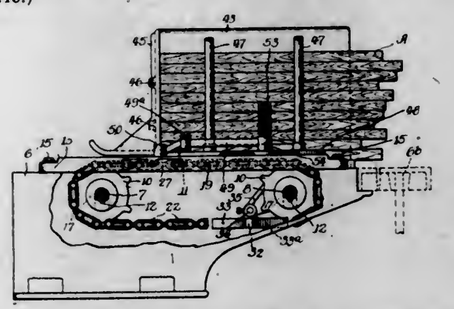
9. In a wheeled scraper, the combination with a frame and a bucket supported thereby to turn about a transverse axis, said bucket having side walls lying within the side members of the frame, and supporting wheels disposed between such side walls and the frame, of pivotal mountings connecting the bucket and wheels with the frame comprising inner and outer spaced coaxial bearing members connected with the side portions of the bucket at opposite sides of each wheel, the outer bearing member being journaled upon the frame, tubular wheel spindles coaxial with and nonrotatably secured to the wheels, the end portions of said spindles being journaled in said bearing members, and shouldered tie-bolts extending through said wheel spindles and connected with said bearing members.

1,803,972. ELECTRIC RADIANT HEATER. LOUIS LEBAU, Pittsburgh, Pa. Filed Jan. 19, 1929. Serial No. 333,684. 2 Claims. (Cl. 219—34.)



1. In an electric radiant heater comprising a casing, a hollow refractory radiant member supported in the casing and having a plurality of resistor-receiving chambers formed by vertically extending partition walls and an open-work front portion, said walls and front portion constituting integral portions of the radiant member, a series of electrically connected resistor units positioned in said chambers to the rear of said front portion, said units each including a relatively thin flexible current-conducting strip having transverse slots to provide a sinuous path for the current.

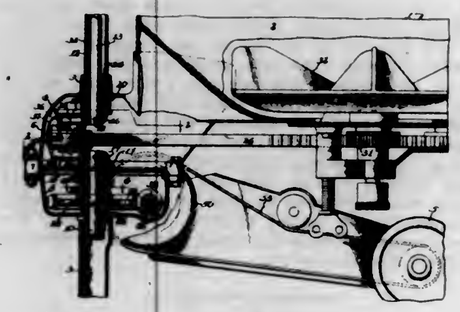
1,803,973. FEED MECHANISM. LOUIS T. MEDHOLDT, Rockford, Ill., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed Sept. 21, 1928. Serial No. 307,544. 29 Claims. (Cl. 144—245.)



1. A feed mechanism comprising, in combination, a magazine to receive a stack of articles, feed means including a plurality of members projectable into the lower portion of said magazine into feeding engagement with the side face of the lowermost of said articles,

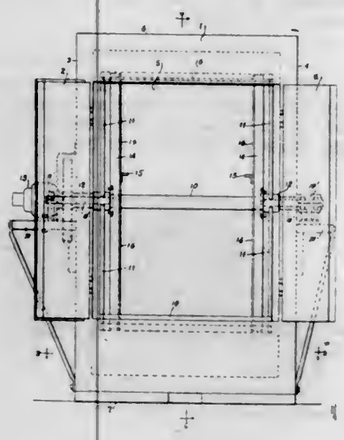
and means engaging said members successively at a predetermined point to project said members into said magazine and into engagement with the side of the article.

1,803,974. DRIVING MEANS FOR WASHING MACHINES. JOHN MIKULASEK, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a Corporation of Delaware. Filed Mar. 20, 1929. Serial No. 348,534. 7 Claims. (Cl. 74—14.)



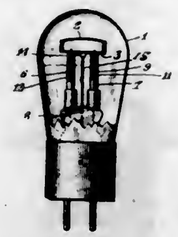
1. In a washing machine, a leg rigid therewith, said leg having chambered parts comprising a multi-piece casting, said pieces being provided with bearings, a one-piece crank having hub portions journalled in the walls of one of said parts, and driving means journalled in the walls of the other of said parts for driving said crank.

1,803,975. BAKING OVEN. IRA M. PETERSIME, Gettysburg, Ohio. Filed Sept. 19, 1927. Serial No. 220,480. 8 Claims. (Cl. 107—55.)



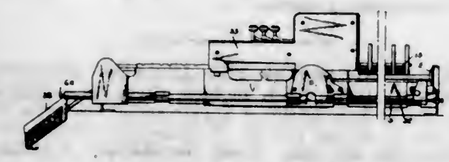
7. In an oven, a supporting track in said oven, a stirrer mounted in said oven for rotation about said track, and a rack adapted to be placed in said oven on said track.

1,803,976. RECTIFIER. EUGENE A. QUARRIE, New York, N. Y., assignor to C. E. Manufacturing Co., Providence, R. I., a Corporation of Rhode Island. Filed June 10, 1927. Serial No. 197,787. 6 Claims. (Cl. 250—27.5.)



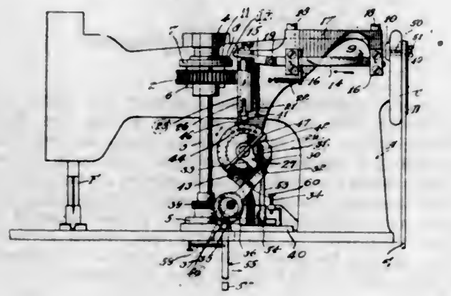
3. In a rectifying tube, a cathode consisting of a cup-shaped element supported by metallic legs and a cap having a frictional fit on said element; and rod-shaped anodes insulated within said metallic legs.

1,803,977. AUTOMATIC CARD EJECTOR. ERICH F. W. RICHTER, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Feb. 8, 1927, Serial No. 166,626, and in Germany Oct. 16, 1926. 31 Claims. Cl. 271—82.)



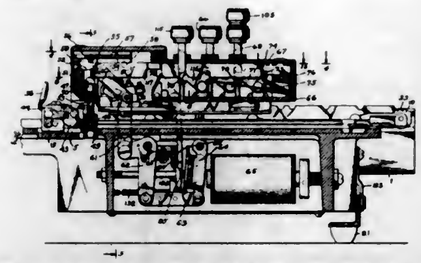
1. In a machine for operating upon records, a record carriage movable in one direction to feed records through the machine and in a reverse direction to receive records for feeding, an ejecting gripping mechanism controlled by said carriage for automatically gripping and ejecting the records from the machine at the completion of a feeding operation and means controlled by said carriage in its reverse movement for settling said ejecting mechanism in readiness for a subsequent ejecting operation.

1,803,978. AUTOMATIC STOP FOR SEWING MACHINES. LEO ROSEMAN, Newark, N. J. Filed Mar. 27, 1928. Serial No. 265,124. 12 Claims. (Cl. 112—219.)



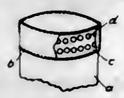
1. The combination with a stitch forming mechanism of means for automatically stopping operation of said mechanism after a predetermined number of stitches have been made, comprising means for counting stitches singly, means for counting stitches by groups each of an equal number of stitches, said means for stopping operation of said stitch-forming mechanism being controlled by co-operation of said two stitch counting means.

1,803,979. KEY PUNCH. JOHN T. SCHAAFF, Washington, D. C., assignor to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 15, 1925. Serial No. 2,552. 19 Claims. (Cl. 164—112.)



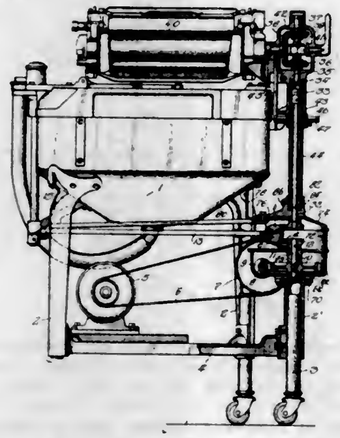
2. In a card perforating machine including perforating elements, a card carriage for carrying the card while it is being operated on by said perforating elements, means for retaining cards in said carriage including a member adapted to project horizontally over the card, and means for automatically withdrawing said member from over the card when the carriage is in a predetermined position.

1,803,980. SOCK. PAUL LINUS SCHÖNFELD, Chemnitz, Germany. Filed Aug. 29, 1925, Serial No. 53,219, and in Great Britain Nov. 6, 1924. 2 Claims. (Cl. 2—240.)



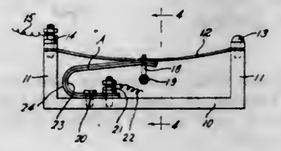
1. A stocking having a hollow hem on the upper end thereof and a rubber ring permanently enclosed within said hem, said ring being provided with unobstructed perforations to prevent alteration of the dimensions of the ring when the stocking is washed and of substantial size sufficient to permit ventilation of that portion of the leg encircled by the ring.

1,803,981. DRIVING MECHANISM FOR WASHING MACHINES AND THE LIKE. HOWARD F. SNYDER, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a Corporation of Delaware. Original application filed June 16, 1921, Serial No. 477,888. Divided and this application filed July 9, 1927. Serial No. 204,496. 17 Claims. (Cl. 74—14.)



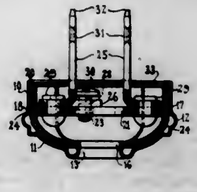
1. In combination with two vertically superimposed shafts disposed with their adjacent ends spaced apart, driving gearing for the lower shaft, a detachable crank connecting the ends of the shafts, a connecting rod pivotally mounted on said crank, an open top casing enclosing the lower shaft and its gearing, an open topped intermediate casing having a horizontally disposed plate closing the top of said first casing and provided with a depending boss acting as a bearing for said lower shaft, said intermediate casing having an upstanding wall enclosing the crank and formed with an opening through which the connecting rod passes, an upper casing closing the open top of the intermediate casing and likewise formed with an opening registering with the opening of the intermediate casing to permit free oscillation of the connecting rod.

1,803,982. THERMOSTAT. ADOLPH A. THOMAS, New York, N. Y. Filed Mar. 26, 1927. Serial No. 178,639. 7 Claims. (Cl. 297—15.)



1. A thermostat comprising a flat U-shaped frame, a buckling spring mounted at its ends on the two limbs of said frame and adapted to change its curvature abruptly by external force, a bimetallic thermostat bar mounted on the base of said frame and arranged to engage said spring substantially at the center thereof so as to exert pressure against the spring in a direction substantially radial to the curvature of the spring, whereby the latter is snapped by said bar at predetermined temperature into a position of reverse curvature, said spring and said bar being mechanically disconnected and mounted to move in the same plane, whereby a flat structure is produced, and connecting means carried by one of said movable parts whereby said bar on cooling becomes automatically coupled to the central portion of said spring and snaps it back to initial position.

1,803,983. PLUG CAP FOR SEPARABLE ATTACHMENT PLUGS. WILLIAM C. TREGONING, Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 13, 1926. Serial No. 135,096. 10 Claims. (Cl. 173—361.)

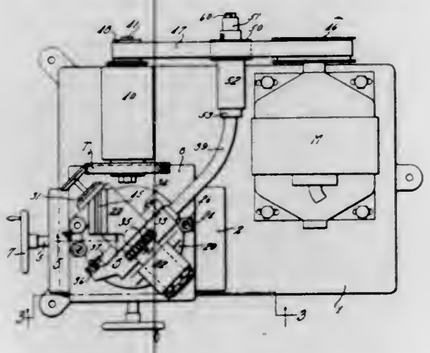


1. In an attachment plug cap, the combination with a cup-shaped cap of sheet insulation, of a separately formed contact carrying disk arranged within said cap, said cap and disk having interengaging parts integral therewith to secure them in assembled relation and to secure them against relative rotation.

1,803,984. BENCH TOOL. CHARLES E. VAN NORMAN, Springfield, Mass. Filed Aug. 15, 1927. Serial No. 213,048. 3 Claims. (Cl. 51—105.)

1. A bench tool comprising a rotatable grinding wheel, a work carrying spindle angularly mounted with respect

to the grinding wheel and adapted to hold and rotate a valve with its seating edge in contact with the periphery of the grinding wheel, and a guideway an-



gularly mounted with relation to the work carrying spindle and adapted to receive the shank of the valve and to position it with its end square against the side of the grinding wheel.

1,803,985. ELECTRODE. WARREN R. WALKER, Great Kills, N. Y., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed July 20, 1925. Serial No. 44,697. 6 Claims. (Cl. 176—126.)



1. In a gaseous discharge device, a nickel plated conductor sealed therein, said conductor being impregnated with hydrogen.

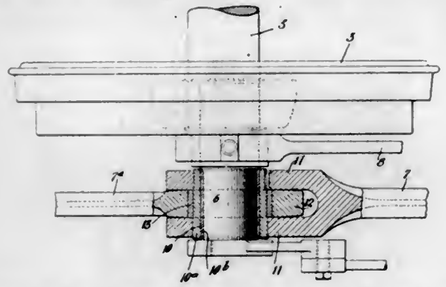
1,803,986. ELECTRIC LIQUID FLOW SWITCH. WARREN R. WALKER, Short Hills, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Oct. 18, 1929. Serial No. 400,688. 13 Claims. (Cl. 200—152.)



1. In a mercury switch, mercury, a substance which tends to promote the maintenance of globules of said mercury, and a substance which promotes coalescence of said globules dissolved in said mercury and counteracting the effect of said first named substance.

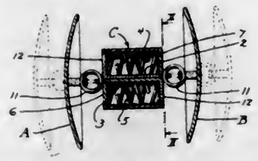
1,803,987. LOCOMOTIVE DRIVING CONNECTION. WILLIAM E. WOODARD, Forest Hills, N. Y. Filed Aug. 27, 1928. Serial No. 302,315. 2 Claims. (Cl. 105—84.)

1. A multi-part main driving rod for locomotive driving wheels, having adjacent parts of solid-headed construction, one head being bifurcated and the other fitting in the bifurcation and each apertured to receive a driving wheel crank pin, a rigid bushing extending through the apertures and pressed into the apertures of the bifurcated head whereby the parts are articulated together as an operative unit for unitary application to and removal from the pin, and an internal anti-friction



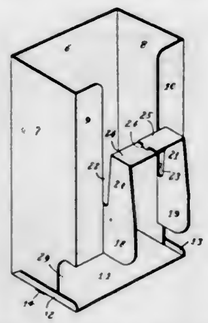
lining in said bushing forming therewith a unified composite sleeve, whereby all the parts may be reduced in diameter and weight for a given rod thrust.

1,803,988. EXPANSIBLE CUFF LINK. JOSEPH E. ALM, San Francisco, Calif. Filed Dec. 16, 1930. Serial No. 502,699. 3 Claims. (Cl. 24—102.)



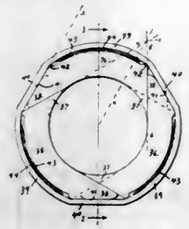
1. In a device of the character described, a pair of cuff buttons, a housing intermediate the buttons, a pair of links insertible in the housing from opposite ends thereof, said links contacting and being guided by each other substantially throughout their length, a head member on each link and at one side, an end plate on each end of the housing, said plates having openings formed thereon to permit entrance of the head members and to form guides for the links, means connecting the links with the buttons and a spring interposed between each link head and the housing end plates, said springs being guided throughout their length by the adjacent links and the housing.

1,803,989. MATCH BOX CONTAINER AND HOLDER. GUST A. ANDERSON, Rockford, Ill. Filed July 28, 1930. Serial No. 471,210. 3 Claims. (Cl. 206—31.)



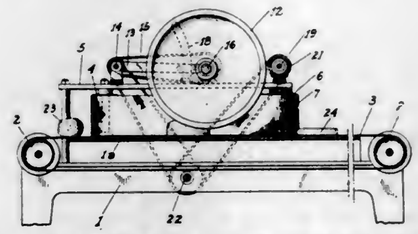
1. The combination in a match box container and holder of side walls, a back wall, and a bottom integral therewith, front panels integral with said side walls, having oppositely spaced inner edges, said walls and panels forming a container to support a vertical row of match boxes upon said bottom, and a holder secured to said panels at right angles thereto to hold a box of matches open for use, the whole constituting a single piece of sheet metal.

1,803,990. METALLIC ROD-PACKING. JOHN BADEKER, Chicago, Ill. Filed Feb. 3, 1930. Serial No. 425,486. 10 Claims. (Cl. 288—3.)



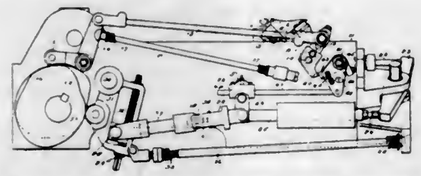
1. In a metallic rod-packing, a pair of adjoining packing-rings each comprising a plurality of segments having parallel side-faces and contacting plane-surface end-faces, the latter extending substantially tangent to the bore of the ring, whereby each segment has a tapered inner end portion and an undercut outer end portion overlapping the tapered inner end of the adjoining segment, and chordal guide-portions on each segment of the rings, said chordal guide-portions of both rings being slidably connected to prevent relative circumferential movement of said rings and to control closing movements of the segments toward the bore of the rings.

1,803,991. PLASTIC MOLDING MACHINE. GEORGE K. BAINBRIDGE, Ripon, Calif. Filed May 12, 1930. Serial No. 451,619. 3 Claims. (Cl. 107—12.)



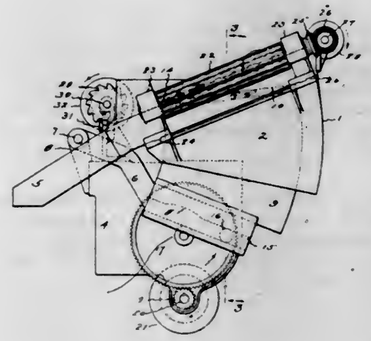
3. In a shaping machine for plastic material having a horizontal movable belt to support and convey lumps of material, and vertical transversely spaced members to engage the lump advancing on the belt and give such lump a predetermined width, a lump flattening disc projecting between said members in spaced relation to the belt, a horizontal arm on one end of which the disc is mounted, a transverse shaft about which the other end of the arm is turnably supported, a fixed bar curved concentric with the shaft and disposed against one side of the arm intermediate its ends, means carried by the arm for clamping engagement with the bar, and drive connections between the shaft and disc.

1,803,992. SAFETY MEANS FOR BLANK FEEDING MECHANISM. THEODORE H. BAUCK, Waterbury, Conn., assignor to The E. J. Manville Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 14, 1930. Serial No. 452,461. 8 Claims. (Cl. 10—23.)



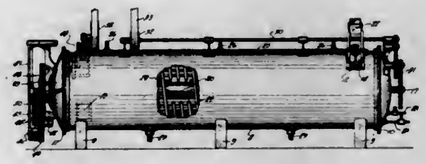
1. Mechanism for operating upon metal blanks comprising a fixed tubular punch adapted to receive the shanks of blanks, a reciprocatory tubular die adapted to operate upon the heads of blanks, means for feeding blanks into line with the punch and die, a pin longitudinally movable within the punch and adapted to eject blanks therefrom, mechanism for reciprocating said pin, said mechanism including fragile means designed to fracture and interrupt the action of the pin should the pin fail to eject a blank from the punch, and mechanism adapted to stop the feed of blanks into line with the punch and die, operated upon the fracture of said fragile means.

1,803,993. HOPPER FEED. CHARLES T. BRENNAN, Waterbury, Conn. Filed Jan. 15, 1930. Serial No. 420,901. 5 Claims. (Cl. 10—167.)



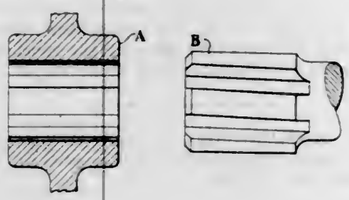
1. A feed for headed blanks comprising a hopper, a fixed inclined track leading from the hopper, mechanism for lifting blanks from the hopper to said track, rotatable means with its axis extending substantially parallel with and at one side of and adjacent to the upper edge of the track for positioning blanks on the track, and mechanism for rotating said means.

1,803,994. AUTOMATIC COOKER. FRANK D. CHAPMAN, Berlin, Wis. Filed May 5, 1928. Serial No. 275,452. 17 Claims. (Cl. 126—272.)



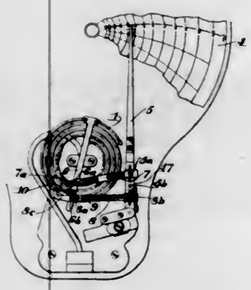
1. An automatic cooker, comprising a drum having an inlet opening and an outlet opening, a carrier within the drum, means for feeding cans of food into the inlet opening to the carrier, means for rotating the carrier in one direction to charge or discharge the cans into or out of the carrier, means for heating the cans carried by the carrier, means for alternately rotating the carrier in opposite directions to agitate the cans carried by the carrier, and means for receiving the cans discharged through the discharge opening of the drum.

1,803,995. SPLINED CONNECTION. ROLAND CHILTON, Ridgewood, N. J., assignor to Wright Aeronautical Corporation, a Corporation of New York. Filed May 15, 1930. Serial No. 452,597. 9 Claims. (Cl. 287—53.)



1. In a splined connection; a driven member; a driving member; one said member having formed therein a groove, the side walls of which are substantially parallel and a spline on the other said member adapted for fitting engagement within said groove, said spline having substantially parallel side walls which are not, however, in parallelism with the side walls of said groove.

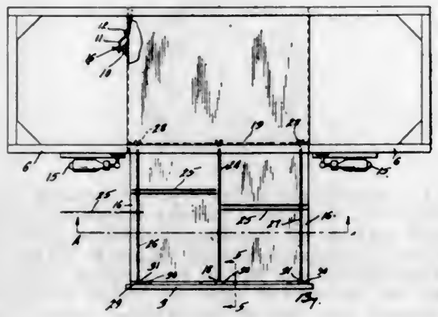
1,803,996. PRESSURE RESPONSIVE INSTRUMENT. ALBERT E. CLAWSON, Bryn Mawr, Pa., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed July 26, 1928. Serial No. 295,365. 3 Claims. (Cl. 74—5.)



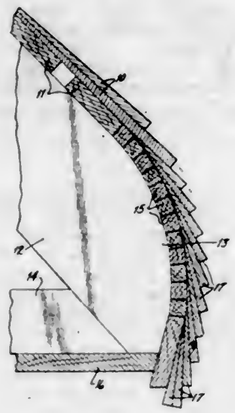
1. In instruments of the character described, the combination with a driving element including an arm having angular motion, a driven element pivotally supported near one end, of two links pivotally connected to said arm and the driven element, said arms being of such relative length and so disposed relatively to the arm and the driven element as to transmit motion at different rates, means on the arm, the links and the driven element for causing one link to transmit motion during one part of the range of motion of the driving element and for causing the other link to transmit motion during another part of the range of motion of the driving element and means for changing the effective length of one link relatively to the other link.

1,803,997. FILING DEVICE. JOSEPH T. CONWAY, Cleveland, Ohio. Filed Mar. 5, 1929. Serial No. 344,448. 7 Claims. (Cl. 40—67.)

1. A device of the character described including a card container having an open top and a card retaining rod extending longitudinally of the container near one of the sides thereof, in combination with a series of filing cards, each comprising a main body portion and having an opening through which the retaining rod extends, said cards being capable of being independently turned approximately 180° about the axis of the rod to offset the same beyond the side of the container in a substantially horizontal position with respect to the other cards of the series.



1,803,998. ROOFING. WILLIAM N. CRAMER, Chicago, Ill. Filed May 31, 1930. Serial No. 458,207. 4 Claims. (Cl. 108—8.)

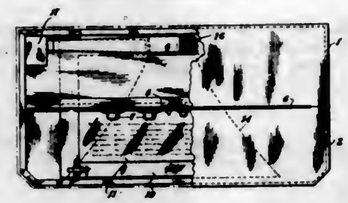


1. In combination, a shingled roof simulating the effect of thatch, a frame work at the edge thereof defining a roll and relatively short stout shingles applied to the roll with a small portion of the butt end exposed to simulate the stubble effect of thatch.

1,803,999. CLAY PRODUCT, CERAMIC COMPOSITION, AND ASSOCIATED PROCESSES. THOMAS S. CURTIS, Huntington Park, Calif., assignor to The Vitrefrax Company, Los Angeles, Calif., a Corporation. Filed June 22, 1926. Serial No. 117,869. 19 Claims. (Cl. 106—11.)

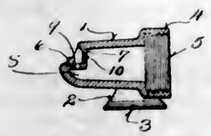
2. A ceramic composition for strengthening clay products which comprises a mineral product of fibrous crystalline structure obtained by heating treating a fibrous aluminum silicate mineral to a temperature of from approximately 1700° F. to approximately 1800° F.

1,804,000. RADIOCABINET. CHARLES H. DERBY, Alliance, Ohio. Filed July 18, 1925. Serial No. 44,546. 1 Claim. (Cl. 250—14.)



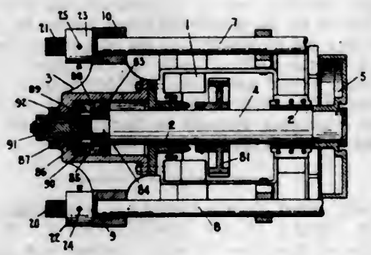
A radio cabinet comprising a box arranged to house a receiving set in its rear portion, and a slidable shelf in the lower portion of the box, having a glass panel and a log chart located beneath said panel.

1,804,001. SPRINKLER. GUY E. W. ECK, Manitowoc, Wis. Filed Aug. 9, 1926. Serial No. 128,054. 1 Claim. (Cl. 299—75.)



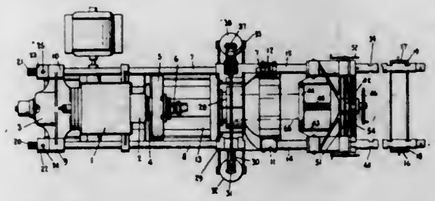
A sprinkler comprising a hollow body portion having a vertical and horizontal front wall adjoining each other, located within the body portion, and closing the front end of the body portion, said body portion having a rear portion adapted for attachment to a hose, and having an aperture through its horizontal wall and an aperture through its vertical wall positioned so that streams of water are projected outwardly from such walls and direct each other to form a diffused spray, an arcuate flange adjacent the aperture in the vertical wall and projecting forwardly therefrom over a portion of the aperture in the horizontal wall to prevent rearward discharge of the spray, and a pair of outwardly and downwardly extending legs integral with the body portion and terminating in bearing feet.

1,804,002. MACHINE FOR FLANGING PIPES. FRED C. FANTZ, Webster Groves, Mo., assignor to Midwest Piping & Supply Co. Inc., St. Louis, Mo., a Corporation of Missouri. Filed Aug. 13, 1930. Serial No. 474,920. 8 Claims. (Cl. 78—14.)



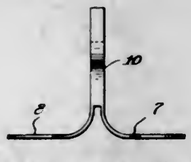
1. In combination with a machine for flanging pipes having a headstock carrying tie rods, a die clamp, a tail stock slidable on said rods, and having quick engaging means thereon to engage slots formed in the tie rods, of a cylinder in said head stock, a spindle, a stem on said spindle a non-rotating, reciprocating block in said cylinder secured to said spindle, a thrust collar on said stem transmitting the thrust from the spindle to said block, antifriction means in said block to hold said stem central in said cylinder for rotation in said block, a non-rotating piston secured to said block, packing means intermediate said piston and the wall of the cylinder, means to introduce hydraulic fluid into said cylinder, there being ports or passages of reduced area to carry the hydraulic fluid intermediate the non-rotating block and the thrust collar.

1,804,003. TAILSTOCK FOR MACHINES FOR FLANGING PIPES. FRED C. FANTZ, Webster Groves, Mo., assignor to Midwest Piping & Supply Co. Inc., St. Louis, Mo., a Corporation of Missouri. Filed Aug. 13, 1930. Serial No. 474,921. 9 Claims. (Cl. 78—14.)



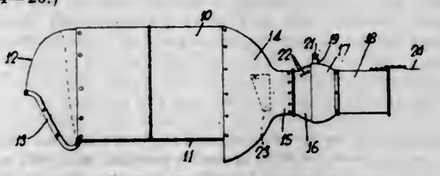
7. In a machine of the type described, a headstock, tension rods, supports on the head of the machine through which said rods pass, a tailstock slidable upon said tension rods, manually operable means to move said tailstock along said rods, quick operating means secured to said tailstock to detachably engage a predetermined pair of slots formed in said tension rods, to positively hold said tailstock against movement after adjustment by said manual means.

1,804,004. METHOD OF FABRICATING STRIKERS. JOHN B. FLYNN, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 20, 1929. Serial No. 379,682. 5 Claims. (Cl. 29—148.)



1. The method of fabricating a striker for a refrigerator latch, or the like, which comprises forming a metallic bar into a predetermined shape, removing a section from such bar, removing a portion of said section to form an opening therein, and then turning the metal adjacent the opening to form a base for the striker.

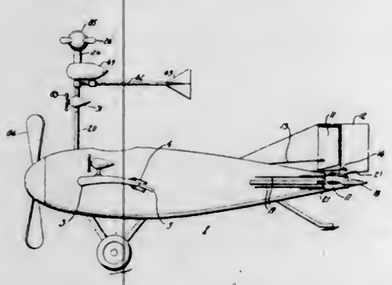
1,804,005. HAIR-DRYING HOOD. ERNEST O. FREDERICS, New York, N. Y., assignor to E. Frederics, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 13, 1929. Serial No. 385,532. 5 Claims. (Cl. 34—26.)



1. A hair-drying hood, comprising a longitudinally extended inverted trough-like member having at its rear

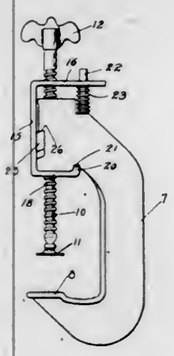
end means to introduce a gaseous drying medium in a generally longitudinal direction, and having at its forward end a rim adapted to fit against the forehead and sides of the head of a subject, said trough-like member providing a space above and at the side of the subject's head to permit gases projected at its rear end to dry the subject's hair, and providing an outlet space at the rear of the subject's neck.

1,804,006. AUTOMATIC AIRPLANE CONTROL MECHANISM. FRAZER W. GAY, Newark, N. J. Filed Mar. 17, 1930. Serial No. 436,334. 5 Claims. (Cl. 244—29.)



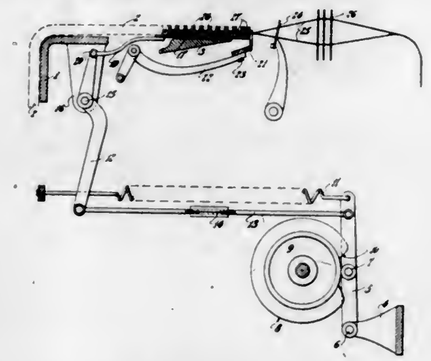
1. In an airplane having a rudder, a motor and connected transmission means for operating said rudder, propeller driven generators mounted on the wings of said airplane, the generator of one wing being connected in opposition to the generator of the opposite wing, said generators being connected to said motor, whereby the differential energy output of said generators serves to operate said motor.

1,804,007. CLAMP. JOHN GOLNICK, Detroit, Mich. Filed Dec. 10, 1930. Serial No. 501,353. 2 Claims. (Cl. 144—305.)



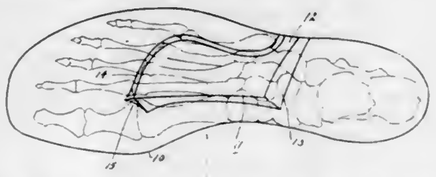
1. A clamp, comprising: a main body portion; a stationary jaw mounted thereon, said main body portion having a bore formed therein at the end opposite said jaw and provided with an opening communicating with said bore, said opening having a beveled edge at one side; a screw threaded into said bore; a substantially U-shaped frame having its bight extended parallel to the longitudinal axis of said screw and each of its legs being provided with an opening for accommodating said screw, one of said legs being angularly turned at its end and adapted for engagement in a groove formed in said main body portion; a half nut mounted on the bight of said U-shaped member adapted for engagement, when in operative position, with said screw, and for disengagement therefrom upon the disengagement of said angularly turned portion of said leg from said groove, said half nut having a beveled surface adapted for engagement with the beveled edge of said opening; and resilient means for normally retaining said half nut in engagement with said screw.

1,804,008. RUG OR CARPET WEAVING LOOM. WILLIAM B. GREAVES and WILLIAM M. STEVENSON, Springfield, Mass. Filed Dec. 2, 1929. Serial No. 410,982. 3 Claims. (Cl. 139—2.)



1. In a machine of the kind described, a press plate, a comb member, a slidable plate mounted on the press plate and extending beyond the outer end of the press plate, when operated, for supporting and engaging the tuft threads of a rug and for effecting a tight draw of tuft threads around the weft threads, when the comb is elevated.

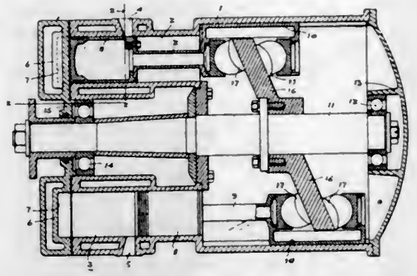
1,804,009. COMBINED INSOLE AND ARCH SUPPORT. OTTO GREGAREK, Philadelphia, Pa. Filed June 14, 1929. Serial No. 370,773. 2 Claims. (Cl. 36—71.)



1. As an article of manufacture, an insole having an arch support formed thereon and projecting from one face thereof and fashioned to provide a major portion extending longitudinally of the insole to support the longitudinal arch extending from the posterior arch to the anterior arch with the forward end projecting between the great and second toes and extending toward the exterior edge of the device as a support for the metatarsal bones, having an extension at the rear end terminating at the edge of the insole as a support for the posterior arch, and the edges of the support being skived outwardly and downwardly from the top face of the support to the top face of the insole to provide a gradual decrease in thickness of the support from its surface to the surface of the insole.

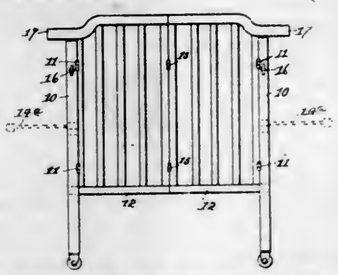
1,804,010. TWO CYCLE INTERNAL COMBUSTION ENGINE SWASH PLATE CONSTRUCTION. HERALD B. GREENING, Hamilton, Ontario, Canada, and JAMES W. GALLOWAY, Detroit, Mich., assignors to Galloway Engineering Company, Limited, Hamilton, Ontario, Canada. Filed Jan. 14, 1929. Serial No. 332,385. 1 Claim. (Cl. 123—53.)

An internal combustion engine, comprising a casing having a plurality of pairs of cylinders extending from the end thereof parallel with the axis of the casing, the cylinders of each of said pairs being connected by a common combustion head, one cylinder of each pair having an intake port and the other cylinder of each having an exhaust port, a shaft axially mounted in said casing, a



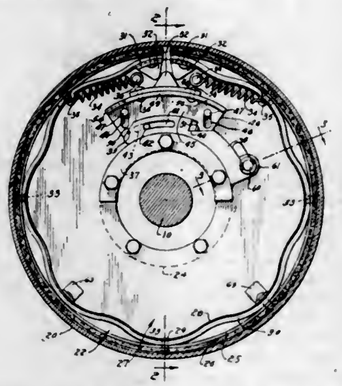
swash plate rigidly secured to said shaft, pistons operating in said cylinders, and cross-heads slidably arranged in said casing and connected with said pistons and operatively engaging the angled surfaces of said swash plate.

1,804,011. COLLAPSIBLE BED. HANS GUBBEL, Philadelphia, Pa. Filed May 23, 1929. Serial No. 365,258. 1 Claim. (Cl. 5—99.)



In a bedstead of the character described, two pairs of posts, two side frames, each of the latter connecting one pair of posts, sectional end frames, each section being hinged to one of the posts, the inner ends of each pair of end frames being hinged together and an extension formed with each section of the end frames, said extension projecting over the upper ends of the posts for contact therewith to increase the rigidity of the bedstead when in its open adjustment.

1,804,012. SELF ADJUSTING BRAKE. FRANK HUNYADY, Chicago, Ill. Filed Feb. 25, 1928. Serial No. 256,892. 20 Claims. (Cl. 188—78.)



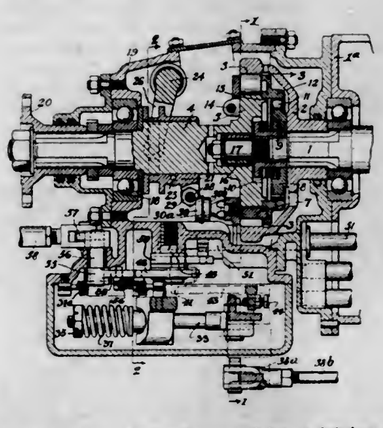
1. A brake comprising a brake-drum, a brake-band internally engaged therewith, an undulated continuous member co-acting throughout its length with said brake-band, and means including rotatably and radially movable elements for operating said member to cause the band to frictionally engage the drum.

1,804,013. ATTACHMENT FOR LICENSE PLATES. JACOB R. JONES, Indianapolis, Ind. Filed Aug. 23, 1930. Serial No. 477,244. 2 Claims. (Cl. 40—125.)



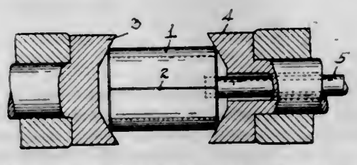
1. The combination with a license plate having numerals thereon, of a hollow frame adapted to be attached to said plate, and an extension at one inner corner of said frame having one or more numerals thereon adapted to cover numerals on said plate.

1,804,014. FREE-WHEEL CLUTCH. FELIX ALEXANDER JOSEPH, Hampstead, London, England. Filed Sept. 1, 1928, Serial No. 303,561, and in Great Britain Oct. 3, 1927. 10 Claims. (Cl. 192—48.)



1. A uni-directional clutch comprising a driving member, a driven member, at least one main wedging member and at least one auxiliary wedging member for assisting the main wedging member to be carried into wedging position, the said auxiliary wedging member being adapted to wedge in one direction of rotation and to be free in the other direction of rotation.

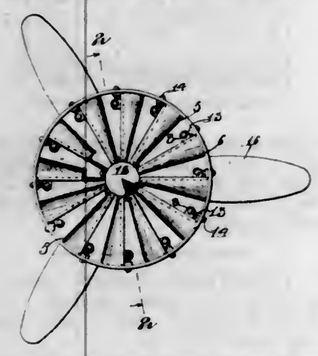
1,804,015. METHOD OF MAKING BEARINGS. WILLIAM H. KLOCKE, Woodhaven, N. Y., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 28, 1928. Serial No. 328,965. 2 Claims. (Cl. 22—65.)



1. In a method of making lined bearings, the steps which consist in forming two semicylindrical shells,

assembling the same into a cylinder with intermediate elements engaged between the adjacent ends of said half shells and snugly clamped therebetween, rotating the assembled cylinder while maintaining a pressure across the adjacent ends of the half cylinders and introducing molten bearing metal into the interior of said shell.

1,804,016. PROPELLER. JOSEPH KOENIG, Manitowoc, Wis.; Remus Koenig and Ruby K. Ellis administrators of said Joseph Koenig, deceased. Filed June 12, 1929. Serial No. 370,273. 3 Claims. (Cl. 170—176.)



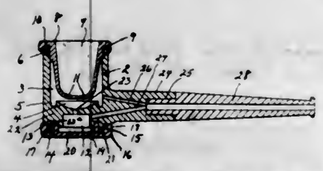
1. A propeller of the class described including a central hollow shaft, a disc at one end of the shaft, radial blades connected to the shaft, means connecting the blades to the disc, a band encircling the blades and connected to their outer edges, said band extending inwardly from the outer ends toward the disc and tapering curved portions formed at the outer ends of said blades.

1,804,017. MERCURY SWITCH. ROY D. MAILEY, East Orange, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed May 1, 1926. Serial No. 105,935. 3 Claims. (Cl. 200—152.)



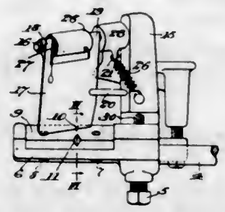
1. A mercury switch comprising a longitudinal tubular envelope, a plurality of cups formed in the envelope wall and arranged transversely of the length thereof, electrodes extending into said cups, mercury in said envelope, and a septum between said cups.

1,804,018. TOBACCO PIPE. PASQUALE MANCUSI, New York, N. Y., assignor to Pursmoke Pipe Company, Inc., New York, N. Y., a Company of Delaware. Filed Sept. 25, 1929. Serial No. 395,039. 3 Claims. (Cl. 131—12.)



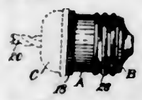
1. A tobacco pipe including a bowl recessed at the upper and lower ends, a partition between said recesses in which is formed a large central cavity, a groove surrounding the cavity and an aperture to provide communications between said cavity and the lower recess, a closure for the lower recess, a tobacco bowl removably mounted in the upper recess and a stem carried by said bowl and provided with two ducts leading from a common point to each of the recesses.

1,804,019. SLUB CATCHER. JOHN O. MCKEAN, Westfield, Mass., assignor to Foster Machine Company, Westfield, Mass., a Corporation of Massachusetts. Filed June 13, 1930. Serial No. 460,910. 26 Claims. (Cl. 28—64.)



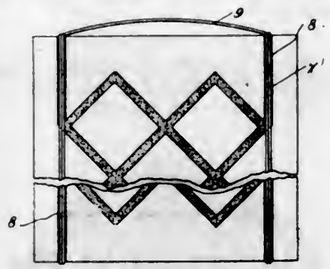
1. In a slub catcher, a yarn plate, and a slub engaging member disposed diagonally across the plate in a plane oblique to the plane of yarn travel.

1,804,020. ELECTRIC ATTACHMENT PLUG. BENJAMIN P. MCKINLEY, Bridgeport, Conn., assignor to The Bryant Electric Company, a Corporation of Connecticut. Filed May 19, 1927. Serial No. 192,507. 10 Claims. (Cl. 173—348.)



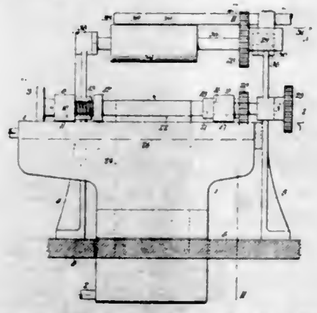
10. An attachment plug part comprising a cup member of molded insulator material having a hub integral therewith fixed centrally within and extending axially from the end wall of said cup member, a contact member molded in and extended axially from said hub, and openings through said end wall at diametrically opposite sides of said hub.

1,804,021. PROCESS OF REPRODUCING DESIGNS IN METAL. FREDERICK WILLIAM MILLER, Hockley Heath, England. Filed Mar. 29, 1930, Serial No. 440,155, and in Great Britain Apr. 9, 1929. 3 Claims. (Cl. 41—25.)



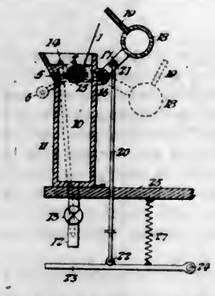
1. A method of reproducing designs in metal consisting in exposing behind a transparency of the design a photographic plate coated with a soluble light-sensitized medium which permits of a powdered electric conducting medium adhering only to the unexposed portion, applying to the undeveloped coating a powdered electric conducting medium so as to adhere only to the nonexposed portions, covering the adhering conducting medium with a film of a substance not readily soluble in water and to which the said conducting medium will adhere, washing away the whole of the original sensitized coating leaving only the conducting medium supported upon the covering film in the form of the design to be reproduced, and depositing metal upon the said conducting medium by electro-deposition.

1,804,022. MEANS FOR MAKING TUBES OF CELLULOID AND THE LIKE. SAMUEL A. NEIDICH, Edgewater Park, N. J. Filed Jan. 3, 1929. Serial No. 330,128. 7 Claims. (Cl. 18—3.)



1. Means for making tubes of celluloid and the like from primarily plane sheets of such material, comprising a rotary head stock having means to rotatably engage one end of a mandrel; a rotary tail stock having means to engage the opposite end of said mandrel; said tail stock being spring pressed toward said head stock to maintain a mandrel between them; but said tail stock being capable of axial movement away from said head stock to release said mandrel; a pressure roller mounted to rotate in parallel relation with the common axis of said head and tail stocks; means arranged to support said head and tail stocks, in such relation, including a pair of arms having bearings and rigidly connected with a rock shaft; whereby the axis of said stocks may be swung toward and away from said roller; means arranged to moisten the surface of said pressure roller with the minimum quantity of a suitable solvent of celluloid or the like, sufficient to prevent adherence of said pressure roller to any such sheet being pressed against it, including a perforated pipe extending parallel with the axis of said roller above the latter.

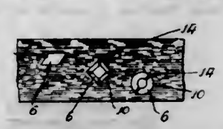
1,804,023. MEANS FOR MAKING TUBES OF CELLULOID AND THE LIKE. SAMUEL A. NEIDICH, Edgewater Park, N. J. Filed Jan. 18, 1929. Serial No. 333,354. 5 Claims. (Cl. 18—3.)



1. Means for forming tubes of celluloid and the like; including a mandrel holder for such material; a bath of solvent of such material, beneath said holder; and means arranged to alternately raise and lower the level of said bath, and thereby alternately submerge and emerge said holder.

1,804,024. METAL PRINTING ROLLER AND PRINTING PLATE. HERBERT BEVAN NICOLAS, Chorltonville, Manchester, and THOMAS ROBINSON FOTHERGILL, Rossendale, England. Filed May 12, 1927, Serial No. 190,961, and in Great Britain May 26, 1926. 1 Claim. (Cl. 41—43.)

The process of producing patterns on metal surfaces for multiple reproduction, which consists in varnishing the surface to be treated, forming lines in the varnish thereby to expose the metal, and subjecting said surface to repeated applications of a stencil of the design in reverse, treating the exposed parts at each application of the



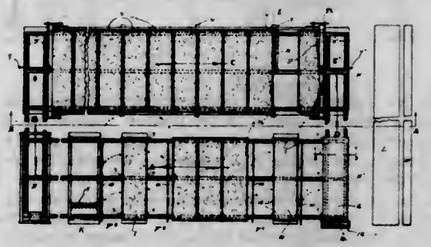
stencil with a medium resistant to etching and on removal of the stencil applying an etching medium to the surfaces previously covered by the stencil, thereby to produce gradations and variations in the depth of etching.

1,804,025. REMOTE MECHANICAL BRAKE CONTROL FOR TRAILERS. CHARLES H. NORTH, San Francisco, Calif. Filed June 27, 1927. Serial No. 201,736. 4 Claims. (Cl. 188—3.)



3. The combination with a tractor and a trailer of brake mechanism for the trailer, said brake mechanism including brake setting means constantly tending to set the trailer brakes, said brake setting means comprising a transverse shaft extending across the trailer and having an operating arm and provided with arms connected with the trailer brakes, a rod slidably mounted on the trailer and connected with said operating arm, and a spring for urging the rod in one direction to apply the trailer brakes, a manually operable lever mounted on the trailer and connected with a slidable rod for manually releasing the trailer brakes, and means mounted on the tractor for operating the trailer brakes.

1,804,026. CANDY HANDLING SYSTEM. ANDREW OLSEN, Jr., and JAMES A. OLSEN, San Francisco, Calif., assignors to Golden Nuggett Sweets, San Francisco, Calif., a Firm. Filed July 11, 1928. Serial No. 291,896. 6 Claims. (Cl. 107—4.)



6. In apparatus for handling candy in the manufacture thereof, a horizontally extending runway, candy slab boards movable along the runway, a paper supply roll at one end of the runway positioned for drawing across the boards in succession, and a candy slab cutter extending across the runway above the boards adapted for cutting candy slabs on the boards.

1,804,027. LINK MAT AND BORDER. MARTIN H. O'TOOLE, Everett, Mass., assignor to Boston Rubber Mat Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 11, 1926. Serial No. 253,707. 1 Claim. (Cl. 15—239.)

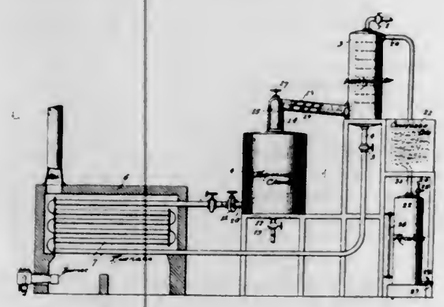
A mat consisting of links and connecting pintles, and a border extending continuously along one edge of the

mat beside the endmost course of links, said pintles extending at one end beyond said endmost course of links and being bent to form hooks on their protruding ends, the border having a longitudinal passage between its top and bottom faces and branch openings in such passage ex-



tending through the face of the border adjacent to the link structure and in alinement with the several pintles, the pintles extending from the outermost course of links through said branch openings and having bent ends located in said passage.

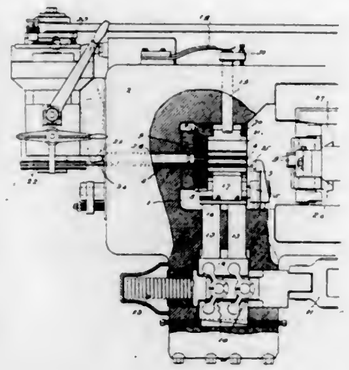
1,804,028. APPARATUS FOR CRACKING OILS. ROBERT T. POLLOCK, New York, N. Y., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 14, 1921, Serial No. 452,096. Renewed Feb. 5, 1927. 2 Claims. (Cl. 196—136.)



1. An apparatus for cracking oil, comprising a conversion chamber and a dephlegmator, connecting means between the conversion chamber and the dephlegmator, said means consisting of a vapor line downwardly inclined from the point of connection to the said conversion chamber to the point of connection to said dephlegmator, and a helical baffling means arranged in said vapor line to form a circuitous path for the vapors passing therethrough.

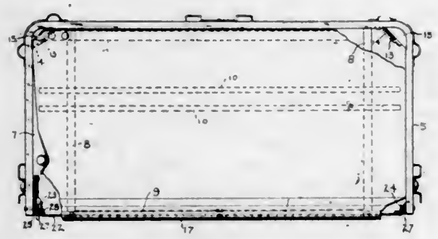
1,804,029. DIE CONTROLLING MECHANISM FOR OPEN DIE METAL HEADING MACHINES. JOHN E. PRAGNY, Waterbury, Conn., assignor to The E. J. Manville Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 16, 1930. Serial No. 468,293. 8 Claims. (Cl. 10—24.)

1. A heading machine having a die pocket, a cutting die and an extruding die fixed in said pocket and dies movable transversely in the pocket, means for feeding stock through the cutting die and movable dies, means for moving both movable dies together across the cutting die and severing a length of the stock and carrying it into line with the extruding die, a reciprocating punch adapted to strike the stock held by the movable dies and drive its inner end into the extruding die, means for ejecting the stock from the extruding die, means for returning one movable die to line with the cutting die while the stock is being ejected



from the extruding die, and means for restraining the return of the other movable die until after the stock has been ejected from the extruding die.

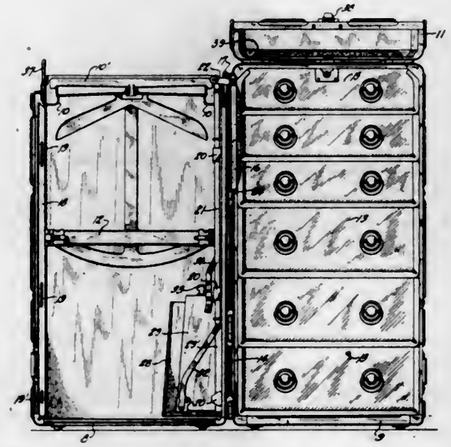
1,804,030. TRUNK CURTAIN AND LAUNDRY BAG. JULIUS RITTER, Jr., Racine, Wis., assignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 11, 1926. Serial No. 80,596. 3 Claims. (Cl. 190—13.)



1. In combination with a wardrobe trunk section having an open front and provided with opposite side slots extending inwardly toward the rear portion of the trunk section, a curtain for covering the front opening of the section, a bar carried by said curtain, said bar being relatively wide in the plane of the curtain and having its opposite ends bent inwardly of said plane and insertable through said slots, and means engageable with said bar for locking said ends within said slots to position said bar flatwise across said front opening when said curtain is in covering position.

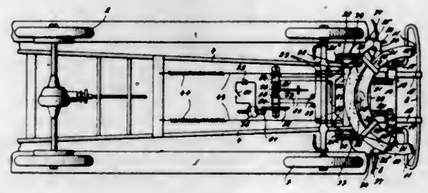
1,804,031. WARDROBE TRUNK. JULIUS RITTER, Jr., Racine, Wis., assignor to Hartmann Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Sept. 2, 1927. Serial No. 217,187. 4 Claims. (Cl. 190—13.)

1. The combination with a wardrobe trunk formed of two hinged together sections swingable horizontally to open position, one of said sections having an open top and an open front closed by the other sections, an outer top cover hinged to one of the sections for closing the upper open end of the other section, an inner front door interposed between the two sections and hingedly connected to one of the sections for closing the open front, an inner top cover hinged to the upper edge portion of the front door for closing the upper open top and swingable to an open position alongside of the front door, garment hangers within the section with the open top guard means within the wardrobe section controlled by the movement of the front door, a cushion mounted on the lower side of the inner top cover for engaging the garment hangers or the garments draped thereon when the cover is in closed position, and a cushion mounted on the lower side



of the outer top cover for yieldingly engaging and holding said inner top cover in its garment engaging position when both covers are in closed position, said inner front door and inner top cover permitting closing the open top section while the two sections remain in open position.

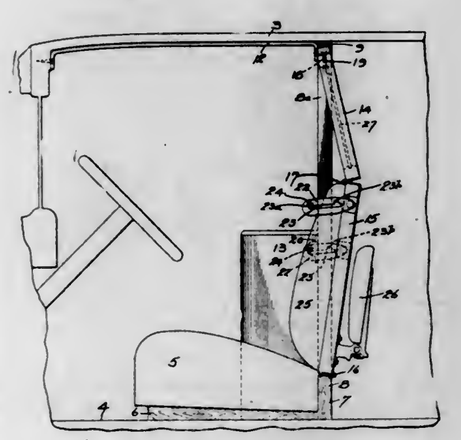
1,804,032. SAFETY APPARATUS FOR MOTOR VEHICLES. GEORGE ROTTMAN, Brooklyn, N. Y. Filed Nov. 14, 1929. Serial No. 407,167. 19 Claims. (Cl. 293—16.)



1. Safety apparatus for motor vehicles comprising parts for holding a pedestrian, parts for supporting the pedestrian and parts controller by the supporting parts for applying the brakes and further obstructing the wheels to bring the vehicle to a standstill when the parts for holding the pedestrian are actuated.

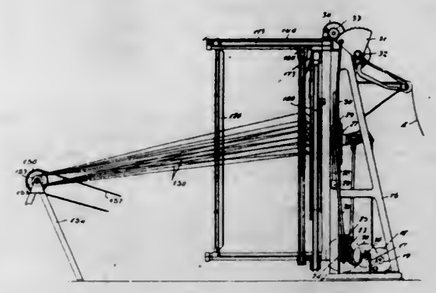
1,804,033. PARTITION FOR AUTOMOBILES. FREDERICK A. SIGGINS and CLARENCE L. SIGGINS, Detroit, Mich. Filed Feb. 4, 1929. Serial No. 337,208. 4 Claims. (Cl. 296—1.)

1. A partition of the character described comprising a frame having an opening therein and adapted to extend upwardly from the floor of a vehicle body, means for supporting said frame in said body, a lower movable portion in said frame having its lower end pivotally mounted on said frame adjacent the lower end of said opening, an upper movable portion having its lower margin pivotally attached to the upper margin of said lower movable portion, pivoting means for holding the upper end of said upper movable portion between the sides of said frame opening so that it is permitted movement therein about a horizontal axis, said movable portions being adapted either to assume



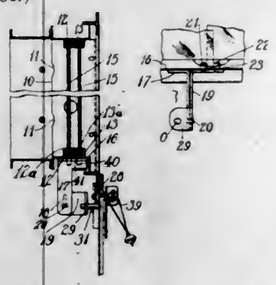
a substantially vertical position or to be moved so that the upper portion is downwardly and rearwardly inclined and the lower portion is upwardly and rearwardly inclined, a seat back on said lower movable portion, and means for holding said movable portions against accidental movement when in either position.

1,804,034. CUTTING AND STRIPPING MACHINE. WALTER W. SPADONE, New York, and CHARLES C. SPADONE, Rockville Centre, N. Y. Filed May 13, 1929. Serial No. 362,468. 12 Claims. (Cl. 164—73.)



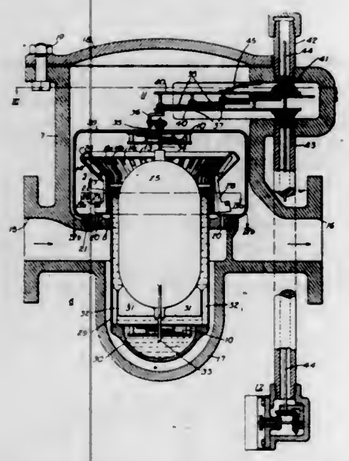
1. In a cutting machine including means for intermittently feeding a web of material in predetermined steps, the combination of a raceway non-yielding in the direction of cutting pressure and provided with a lengthwise extending channel and a cutting slot the ends of which define the opposite limits of the line of cut, endless cutting means arranged to travel lengthwise of said channel in a direction which is constant, and means for adjusting said cutting means into and out of said cutting slot in alternate sequence.

1,804,035. VOTING MACHINE. WILLIAM H. STARING, Willoughby, Ohio, assignor to Automatic Registering Machine Company, Inc., a Corporation of New York. Filed Oct. 28, 1926. Serial No. 144,838. 10 Claims. (Cl. 235—51.)



1. In a voting machine having a compartment, channels fixed in and adjacent one wall of said compartment, plates slidable in said channels, and reciprocable pins in said channels, which pins in one position permit and in another position prevent the movement of said plates, when said plates close said compartment.

1,804,036. FLUID FLOW METER. WILBUR W. STEVENSON, Pittsburgh, Pa. Filed Mar. 20, 1928. Serial No. 263,052. 22 Claims. (Cl. 73—37.)



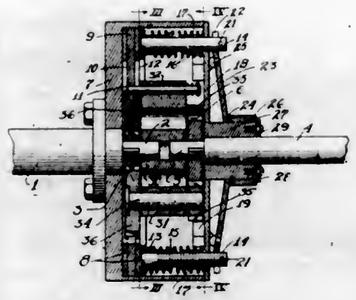
4. A weighted turbine blade having a plurality of angularly related portions and pivotally mounted to automatically transfer under the influence of revolution of said blade one portion or the other into the path of an impinging fluid.

7. A turbine blade member having two distinct elongated side members in substantially parallel planes, each terminating at one end in angularly related fluid-engaging portions.

17. In a fluid flow device, a stationary separable nozzle ring, a tank supported solely thereby and extending on both sides thereof, and having a bearing in the lower end thereof and a turbine rotor associated with said bearing and adapted to be operatively supported by fluid in said tank for co-operating with said nozzle ring.

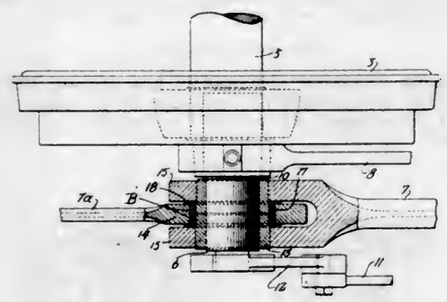
1,804,037. CLUTCH MECHANISM. OCTAVE J. ST. PIERRE, Chicago, Ill. Filed May 8, 1930. Serial No. 450,608. 7 Claims. (Cl. 74—34.)

1. In a clutch mechanism, the combination with a driving shaft and a driven shaft, of gear mechanisms connected with said shafts, a spider rotatably mounted on said shafts between the gear mechanisms and affording support for a plurality of said gears, a friction plate clutch mechanism, apertured arms on one of the clutch friction plates, pins carried by said spider and engaged through said friction plate arms, a spring-controlled governing



means for regulating the frictional pressure between the clutch plates, and a plurality of fulcrumed members connected with said spring-controlled governing means for actuating the same to permit varying relative speeds to be transmitted from the driving shaft to said driven shaft.

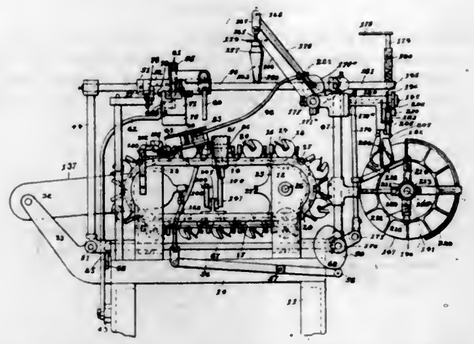
1,804,038. LOCOMOTIVE DRIVING CONNECTION. LEWIS GEORGE TANDY, New York, N. Y. Filed Aug. 14, 1928. Serial No. 299,603. 10 Claims. (Cl. 74—17.)



2. A multi-part main driving rod composed of unitary solid rod members, one member of which has a solid forked end, and an adjacent member of which has an eyed end fitted in said fork, a hard sleeve pressed into the forked end and extending through the eye to articulate said members, and means to prevent galling of the eyed end in the jaws of said fork.

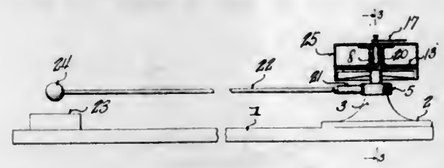
1,804,039. MACHINE FOR FORMING AND STACKING ICE CREAM CONES. HARRY G. TATOSIAN, Bridgeport, Conn., assignor to Ice Cream Cone Machinery, Inc., Bridgeport, Conn., a Corporation of Connecticut. Filed June 22, 1929. Serial No. 372,907. 36 Claims. (Cl. 107—58.)

36. The combination with a baking machine, of means for forming cones from baked cakes while in a pliable condition, means for singly feeding the cakes to said forming means, means for singly delivering the cakes from the baking machine to said feeding means, a rotatably supported drum having spaced compartments adapted to singly receive the cones in nested relation, means for stacking the cones in said compartments and including a pair of relatively movable yieldably connected cone receiving jaws, a yoke-shaped support located above the normal position of said jaws, means for singly removing the cones from said forming means and conveying the same to said jaws, said last mentioned means including a cone-shaped mandril, a pair of toothed jaws movably supported on said mandril, means for spreading said jaws to engage the cone when the mandril is lowered



into the latter to remove the same from said forming means, means for resting the mandril on said support, means for retracting said toothed jaws to release the cone from the mandril when the latter is brought to rest upon said support, and thereby deliver the cone into said relatively movable jaws, and means for intermittently rotating said drum to singly present each compartment for use.

1,804,040. GOLF GAME. VERNON L. TANNEHILL, Fort Wayne, Ind. Filed Mar. 11, 1929. Serial No. 346,076. 2 Claims. (Cl. 265—20.)

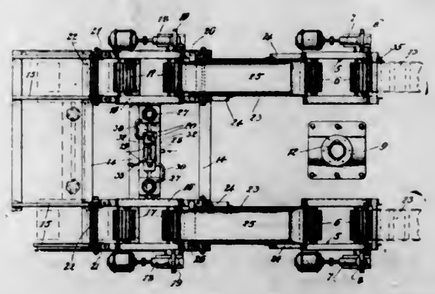


1. An indicating device of the class described including a supporting base having a central raised portion and a reduced part at the upper end thereof, said reduced part and raised portion having a central bore, a sleeve having a cup at one end fitting over the reduced part, a shaft within the sleeve and having its lower end within the bore, a pinion on the upper end of the sleeve and rotatable gears supported upon opposite sides of the sleeve and cooperating with the pinion.

2. An indicating device of the character described including a base having a central raised portion provided with a central bore and a reduced portion at the upper end thereof, an upright shaft having its lower end fitted in the bore, means for retaining said shaft against rotation, a sleeve mounted on the shaft, a cup member on the sleeve and embracing the reduced part of he base, a pinion carried by the sleeve, a bracket on the upper end of the shaft having radial arms, bearing sleeves at the outer ends of the arms, shafts supported within said sleeves and gears on the shafts carried by the bracket and adapted to cooperate with said pinion.

1,804,041. VEHICLE BRAKE ADJUSTING STAND. SYDNEY G. TILDEN, Stewart Manor, N. Y. Filed Mar. 27, 1928. Serial No. 265,098. 8 Claims. (Cl. 265—25.)

1. An adjusting stand for motor vehicle brakes including rear sets of rollers upon which the rear wheels of the vehicle are adapted to be positioned, front sets of rollers upon which the front vehicle wheels are adapted to be positioned, means for mounting said front sets of rollers for horizontal traveling movement as a unit with respect to the rear sets of rollers, a brake testing machine associated with each of said front and rear sets of rollers and

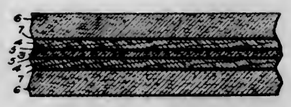


having a driving connection with one of the rollers, a stationary lifting jack for the rear end of the vehicle centrally mounted between the rear sets of rollers, and a lifting jack for the front end of the machine supported upon said mounting for the front sets of rollers for bodily movement as a unit therewith.

1,804,042. METHOD FOR PRODUCTION OF PROTEIN PRODUCTS. WILLIAM BURTON WESCOTT, Wellesley, Mass., assignor to American Protein Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 5, 1922, Serial No. 605,090. Renewed Feb. 6, 1930. 4 Claims. (Cl. 99—11.)

1. The commercial method of producing a protein product comprising gathering the blood from a plurality of food animals during the commercial slaughtering routine in a manner such as to prevent the formation of free hemoglobin therein, retarding coagulation of the gathered blood and thereafter passing a stream of animal blood containing practically no free hemoglobin into the rotating bowl of a centrifuge of a continuous type, in a manner such that the blood stream initially encounters a slowly rotating body of liquid, bringing the blood stream up to the speed of the bowl solely by contact with a liquid surface and preventing passage of air currents through the centrifuge during its operation to thereby centrifugally separate the clear liquid portion of the blood substantially free from the red portion.

1,804,043. LAMINATED INSULATING STRUCTURE. JOHN E. WHITTLESEY, Newton, Mass. Filed Dec. 28, 1929. Serial No. 417,184. 1 Claim. (Cl. 154—44.)



An insulating, laminated structure comprising, in combination, two outer sheets, each comprising a body of asbestos and hydraulic cement; a core between said sheets, said core comprising a central sheet of fibrous material of high dielectric strength and having no definite grain, two sheets of fibrous, grained material on opposite sides, respectively, of said central sheet, and layers of waterproof, adhesive material uniting said two sheets with said central sheet; and layers of waterproof, adhesive material uniting said core with said outer sheets.

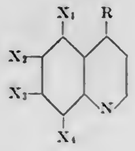
1,804,044. GARTER. BENZION WOLF, Chicago, Ill. Filed Mar. 31, 1930. Serial No. 440,194. 5 Claims. (Cl. 241—6.)



1. A garter comprising a band adapted to encircle the ankle of a wearer, a plurality of upwardly extending members fastened to said band, said members constructed and arranged in the shape of a V, a strip or band connecting said members together near their upper ends, a keeper fixed to said garter, a clasp cooperating with the keeper, and reinforcing stays arranged in said members.

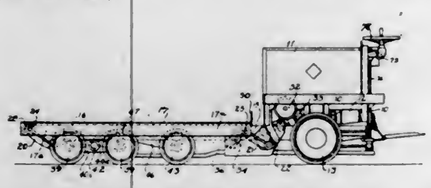
1,804,045. PRODUCTION OF QUINOLINE DERIVATIVES. CLEMENS ZÖLLNER, Berlin-Charlottenburg, Germany, assignor to Schering-Kohlbaum Aktiengesellschaft, Berlin, Germany. Filed Jan. 11, 1928, Serial No. 246,086, and in Germany Jan. 14, 1927. 19 Claims. (Cl. 260—38.)

1. The process of producing 4-alkyl quinolines having the formula



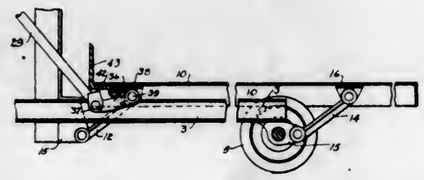
wherein R is an alkyl, while X_1, X_2, X_3, X_4, are hydrogen atoms or any univalent substituents, comprising reacting with an alkyl-β-halogen ethyl ketone in watery solution on an aniline and isolating the resulting alkyl quinoline.

1,804,046. INDUSTRIAL TRUCK. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 10, 1928. Serial No. 253,318. 3 Claims. (Cl. 180—22.)



1. In an industrial power driven truck a main frame having a low portion, a platform surmounting said low portion and connected thereto, a plurality of pairs of relatively small load supporting wheels disposed beneath said platform, the pairs of wheels being spaced longitudinally of said platform to thereby distribute the weight of the load on the platform over the major extent of the traction surface beneath the platform, means for steering some of said wheels beneath the platform about a common turning center, a sub frame structure carrying those of the wheels which are dirigible, mechanism pivotally joined to said low portion of the main frame and the sub frame, and supporting a pair of non dirigible wheels disposed intermediate the small dirigible wheels and the inner end of the platform, the axis line of said last named wheels being the locus of the turning center of the dirigible wheels.

1,804,047. INDUSTRIAL TRUCK. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell-Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 7, 1928. Serial No. 317,846. 7 Claims. (Cl. 254—10.)



1. In an industrial truck, a frame, a movable load carrier, means acting positively in two directions, carried by the frame and connected to the carrier to move it, the connection including a safety device arranged to permit shifting movement of the carrier relative to the frame and said means to prevent damage to said means in the event of the carrier being abnormally forced to move with relation to the frame.

1,804,048. TIMEPIECE SERVING AS A WATCH OR TRAVELING CLOCK. FRITZ BOSCH, Pforzheim, Germany. Filed Aug. 16, 1929, Serial No. 386,297, and in Germany Apr. 13, 1929. 3 Claims. (Cl. 58—88.)



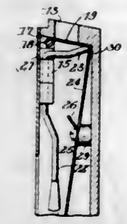
1. A time-piece adapted to serve as watch or traveling clock, comprising in combination a casing, a lid hingedly mounted in said casing, a watch case fixed by a hinge on the inner surface of said lid, a spring controlling said hinge to hold said watch case lying against said lid, means for securing said lid in the shut position, means for releasing said lid, and a spring for automatically bringing said lid with said watch case into the upright position.

1,804,049. ELECTRIC LAMP. BRUNO CLAUS, Sangerhausen, Germany. Filed Feb. 16, 1926, Serial No. 88,610, and in Germany Mar. 9, 1925. 8 Claims. (Cl. 176—1.)



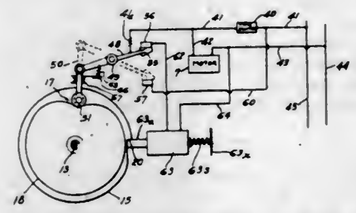
2. Electric lamp comprising a curved, ellipsoidal mirror, an electric source of heat in one focus of said mirror and a selective radiating body in the other focus of said mirror.

1,804,050. CLOSURE FOR MAIL CHUTES. JOSEPH WARREN CUTLER, Rochester, N. Y., assignor to Cutler Mail Chute Co., Rochester, N. Y., a Corporation of New York. Filed Feb. 1, 1930. Serial No. 425,303. 6 Claims. (Cl. 193—8.)



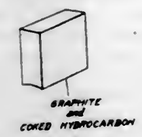
1. In a mail chute, the combination with a chute section and a removable and replaceable panel therefor provided with a mail receiving element provided with an aperture, of a closure for the aperture, and an operating member for the closure pivoted to turn on a vertical axis and accessible only from the inner side of the panel.

1,804,051. INTERMITTENT CONTROL MECHANISM. ROBERT O. FORTUNE, Los Angeles, Calif. Filed May 20, 1930. Serial No. 454,068. 5 Claims. (Cl. 40—53.)



1. A time controlled mechanism for advancing a display strip comprising a motor, a wheel operatively related to said motor to be driven thereby, a shaft whereon said wheel is loosely mounted, a clutch mounted upon and fixed to said shaft, said clutch comprising two gripping elements between which said wheel is situated, a reel operatively related to said shaft to be advanced thereby, a display strip advanceable by the rotation of said wheel, said gripping elements engaging said wheel with sufficient friction to cause the rotation of said wheel to advance said display strip, said clutch comprising a disc having a ratchet shoulder, a solenoid having an armature which normally obstructs the advance of said shoulder to prevent the rotation of said clutch, and a time controlled means to intermittently energize said solenoid to withdraw its said armature from said shoulder thus permitting said clutch and the shaft to which it is attached to perform a complete rotation.

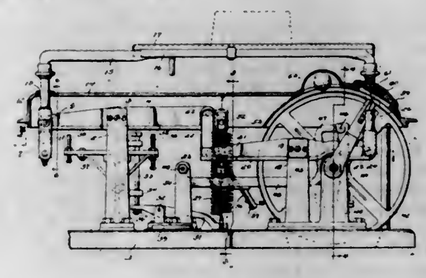
1,804,052. DYNAMO BRUSH. NELSON ROBERT HAAS, Dayton, Ohio, assignor, by mesne assignments, to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 10, 1925. Serial No. 61,842. 19 Claims. (Cl. 171—325.)



1. A dynamo brush in which the different ingredients contained in said brush are uniformly distributed therethrough and comprising a sintered mixture of graphite, particles of previously coked phenolic-condensation product and a hydrocarbon binder.

10. The method of making a dynamo brush comprising graphite and a hydro-carbon binder, which consists in coking a part of the binder, mixing graphite with the uncoked portion of the binder, then mixing the coked portion of said binder with the mixture thus formed, shaping the mixture into the desired form and heating said mixture in a non-oxidizing atmosphere.

1,804,053. SCALE. NATHAN A. HALLWOOD, Columbus, Ohio. Filed June 7, 1928. Serial No. 283,620. 11 Claims. (Cl. 265—69.)

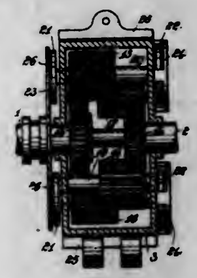


1. In a scale, a base, a reverse compound beam mounted pivotally on said base, a weight receiver carried by said beam, an indicating drum rotatably mounted in connection with said base, a pivoted arm carried by said base, means formed with the outer end of said arm for rotating said indicating drum, a thermostatic element carried by said arm, and a yoke pivotally connecting said thermostatic element with said beam, said thermostatic element upon atmospheric changes serving to shift its pivotal connection with said yoke to points nearer and further away from the pivotal connection of said arm to said base.

1,804,054. METHOD OF TREATING MATERIALS CONTAINING LEAD. CARLE R. HAYWARD, Quincy, Mass. Filed Mar. 29, 1929. Serial No. 351,128. 17 Claims. (Cl. 75—15.)

1. A method of treating lead containing an oxide or oxides of lead, arsenic, tin or antimony, comprising the step of heating the same above the melting point in the presence of a reducing agent and a flux containing stable oxygen salts of an alkali metal and a fluoride.

1,804,055. EPICYCLIC GEAR. EMIL HERRMANN, Mulheim-Ruhr, Germany, assignor to Paul Piepenstock, Muhlheim-Ruhr, Germany. Filed July 28, 1930, Serial No. 471,145, and in Germany Jan. 12, 1929. 1 Claim. (Cl. 74—34.)



An epicyclic gear especially for motor vehicles, comprising in combination a carrier having flat surfaces, spur

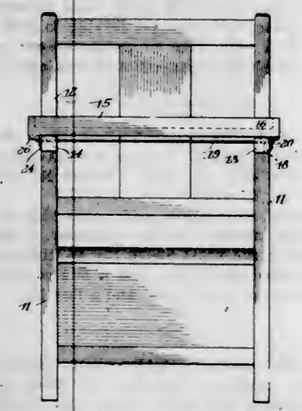
pinions in said carrier, shafts for said spur pinions, shiftable axially limited flat discs on the ends of said shaft on both sides of said carrier, a brake disc rotatably mounted and axially shiftable on one of said shafts the flat discs on one side of said carrier adapted to be brought into contact with said brake and the flat discs on the other side of said carrier adapted to engage with the surfaces on said carrier through the axial displacement caused by said brake disc.

1,804,056. RAIL JOINT CONNECTION. FRIEDRICH KÖTTERITZSCH, Breddin, near Wittenberge, Germany. Filed Nov. 13, 1929, Serial No. 406,902, and in Germany Aug. 21, 1929. 3 Claims. (Cl. 238—219.)



1. A rail joint connection, comprising in combination with the rail web, two junction pieces having play in longitudinal direction of the rail due to the expansion of the rails, straight outer faces and bevelled inner faces adapted to grip around said rail web at the lower and upper portions, a wedge shaped body adapted to engage with the inner bevelled surface of said two junction pieces, and a screw adapted to tighten said wedge.

1,804,057. TRAY FOR NURSERY CHAIRS. HARRY E. MCCANDLESS, Rochester, N. Y., assignor to Kennedy-McCandless Corporation, Rochester, N. Y., a Corporation of New York. Filed Oct. 7, 1927. Serial No. 224,726. 5 Claims. (Cl. 155—127.)



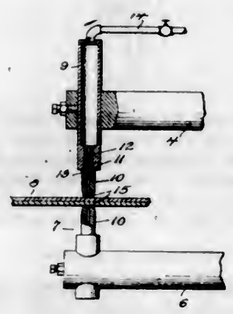
1. In a chair having arms, the combination of a tray, alined slots in said arms, a guiding member fixed to the underside of said tray and extending into said slots, means for permanently securing said guiding member to one of said arms, and releasable means for securing it in the slot of the other of said arms.

1,804,058. SCREW NUT. LÉON MICHA, Antwerp, Belgium. Filed Sept. 16, 1930, Serial No. 482,288, and in Belgium Sept. 25, 1929. 3 Claims. (Cl. 151—21.)



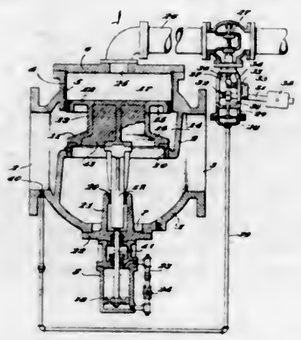
3. A screw-nut having in combination a bearing surface inclined with respect to the axis of the thread and a slot cut in the base opposite the elevated point of same, and a slot cut in the opposite face of the nut, both slots being parallel to each other and substantially tangent to the thread of the nut.

1,804,059. APPARATUS FOR ELECTRIC WELDING. WILLIAM J. MILLER, Columbus, Ohio, assignor of one-half to William E. Ranney, Columbus, Ohio. Filed July 6, 1928. Serial No. 290,765. 4 Claims. (Cl. 219—4.)



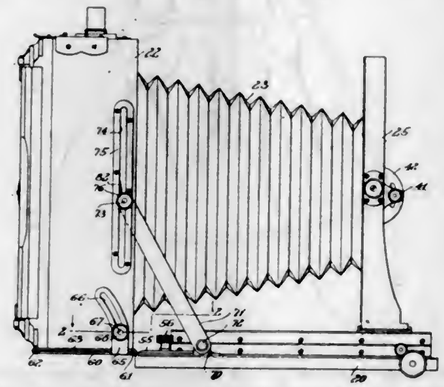
1. In a welding machine, an electrode structure comprising a substantial hollow body having a socket in one end thereof, an electrode point having a reduced portion arranged within said socket, means for circulating fluid into said body, and a passage provided axially in said point and adapted to admit of fluid flow from said body to the work engaging end of said point.

1,804,060. SAFETY RELIEF VALVE. HERBERT B. MORRILL, Salem, Mass., assignor to Atwood & Morrill Co., Salem, Mass., a Corporation of Massachusetts. Filed Dec. 17, 1928. Serial No. 326,695. 2 Claims. (Cl. 137—53.)



1. A relief valve assemblage comprising a casing having an inlet for attachment to a pressure system and an outlet for discharge from the system, a relief valve in the casing between said inlet and outlet, a differential-pressure actuator for said valve, the actuator being adapted to be exposed to pressure on one side to open the valve and on the other side to a chamber having restricted leakage connection with said system, a pilot valve connected on one side to said chamber and on the other side to a discharge outlet, pressure responsive means for opening the pilot valve in response to increase of pressure in the system on the inlet side of the main valve including a connection between said means and said system, leakage from the system to said chamber closing the main valve when the pilot valve is closed and the release of pressure in the chamber when the pilot valve is open permitting pressure on the first side of said actuator to open the relief valve, said means including a diaphragm interconnected with the pilot valve through mechanism comprising a lever carrying an adjustable weight.

1,804,061. CAMERA. CHARLES H. ROTH, Rochester, N. Y., assignor to The Folmer Graflex Corporation, Rochester, N. Y., a Corporation of Delaware. Filed Feb. 9, 1929. Serial No. 338,785. 11 Claims. (Cl. 95—50.)



1. A camera comprising a base element, a body element, a connecting member, a pivotal connection between said base element and one end of said connecting member, a second pivotal connection between said body element and the other end of said connecting member, a lug on said connecting member, and clamping means for holding said lug in predetermined relationship to said body element to clamp said connecting member relative to said body element.

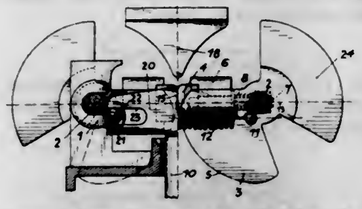
1,804,062. GASEOUS TUBE LAMP SIGN. FRANK SCHAEFER, Kalamazoo, Mich., assignor of one-half to American Signs Corporation, Kalamazoo, Mich. Filed Aug. 17, 1928. Serial No. 300,341. 7 Claims. (Cl. 176—14.)



1. A structure of the class described comprising a tubular body member having reduced electrode chambers at its ends and a central partition providing a pair of gas chambers, tubular arms adjacent the ends of said body communicating with said gas chambers, a tubular indicia element connected at its ends to the upper ends of said arms and opening thereto, electrodes disposed in said electrode chambers and provided with external contacts, tubular housings of a diameter corresponding to that of said body member arranged to embrace said electrode chambers, lugs on said body member and housings, coiled springs engaging said lugs whereby said housings are supported on the ends of said body member, spring circuit connectors arranged in said housings to coact with said circuit contacts when the housings are mounted on said body member, and binding posts on the outer ends of said housings electrically connected to said connectors.

1,804,063. ELECTRIC SWITCHING APPARATUS. WILHELM SCHWEITZER, Duisburg, Germany. Filed Oct. 29, 1928, Serial No. 315,832, and in Germany Oct. 22, 1927. 5 Claims. (Cl. 200—151.)

1. An electric switching apparatus, comprising in combination two rotary axles spaced from each other and movable towards each other, two contact elements rolling on each other, contact surfaces in said contact elements eccentric to said axle, springs adapted to press said contact surfaces against each other for producing the required contact pressure independently of the bearing point said



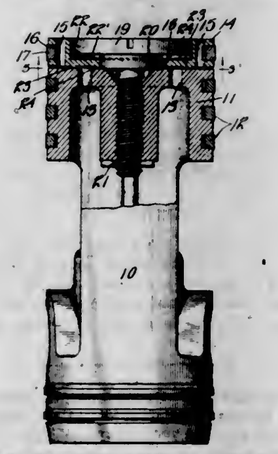
movable contacts breaking energetically after the manner of the action of horns the interrupting spark produced when said axles are horizontal, and a refractory partition arranged between the contact paths to accelerate the cutting out and to subdivide and instantaneously break off the switching spark.

1,804,064. SAGITTAL PELVIMETER. HONORIA ACOSTA SISON, Manila, P. I. Filed July 14, 1928. Serial No. 292,846. 4 Claims. (Cl. 33—148.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A sagittal pelvimeter comprising a calibrated rule member, the calibrations of the rule advancing numerically on either side of a point located midway of its extremities, a pelvimeter comprising a pair of legs pivotally connected at one end for relative adjustment, a calibrated quadrant carried by one of the legs and cooperating with the other for measurement purposes, and means effecting a universal connection between the free end of one of the pelvimeter legs and the rule member at said midpoint of the latter.

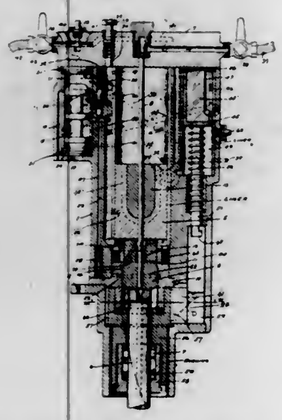
1,804,065. VALVE. NORMAN M. SMALL, Waynesboro, Pa., assignor to Frick Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed June 21, 1928. Serial No. 287,284. 3 Claims. (Cl. 230—221.)



1. A valved piston comprising a piston head having a series of axial perforations therein, a valve having a

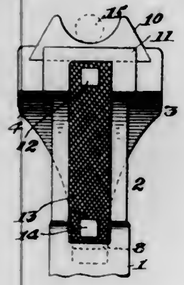
series of axial perforations arranged in a circle of larger diameter than the perforations in the piston head, an annular depending ridge on said valve between the perforations in the valve and those in the piston head, and means for securing the valve upon the piston to allow a slight axial movement of the valve with respect to the piston, substantially as set forth.

1,804,066. PNEUMATIC ROCK DRILL. MICHAEL SMITH, Modesto, Calif. Filed Aug. 14, 1924. Serial No. 732,123. 5 Claims. (Cl. 121—12.)



1. In a pneumatic rock drill, a cylinder, a piston movable therein, means for automatically admitting fluid under pressure into the ends of said cylinder for reciprocating the piston, auxiliary means for reversing the movement of the piston when the latter has covered only a portion of its stroke, and tool controlled means for making operative said auxiliary means upon excessive outward movement of the tool.

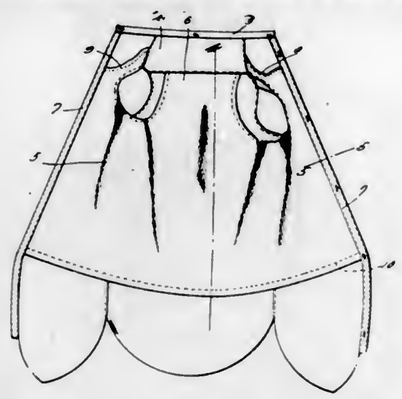
1,804,067. TROLLEY POLE HEAD-STRUCTURE. ALBERT L. SOMMERS and THOMAS B. RUSSELL, Chicago, Ill. Filed Feb. 19, 1930. Serial No. 429,740. 7 Claims. (Cl. 191—59.1.)



1. In a device of the class described, the combination with a harp, of a head mounted on said harp, said head provided with a groove, a contact shoe in said groove, a fastening plate against said head and one end of said contact shoe, and detachable means fastening said plate to said head.

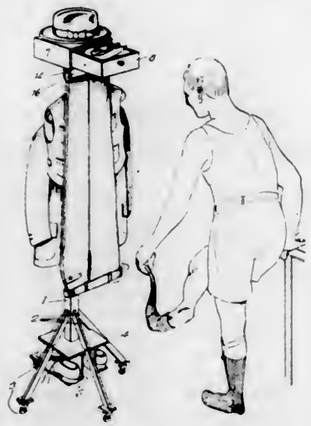
1,804,068. COMBINED OUTER AND UNDER SHIRT. BEATRICE SPIERS, Philadelphia, Pa. Filed May 28, 1930. Serial No. 456,730. 1 Claim. (Cl. 2—115.)

A garment of the character described comprising an outer shirt open at its front and including sleeves, a neck band and a yoke depending from the neck band, the sides of the yoke being spaced inwardly from the sides of the shirt, an undershirt disposed on the inner side of the outer shirt and having its side edges stitched throughout their length to the marginal side portions of the outer shirt, the upper end of the undershirt being spaced below the upper end of the outer shirt, an integral back extension extending upwardly from the undershirt between the sleeve open-



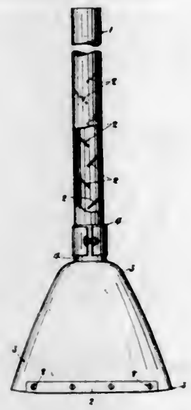
ings of the outer shirt and having its free end portion stitched beneath the lower end portion of the yoke, the remaining portion of the extension being free of the outer shirt, and integral shoulder straps extending upwardly and inwardly from the marginal side portions of the undershirt and having their free end portions stitched beneath the side portions of the yoke, the remaining portions of the shoulder straps being free of the outer shirt and extending over the sleeve openings in the outer shirt.

1,804,069. CLOTHES STAND. JOHN W. STOVER, Pittsburgh, Pa. Filed Dec. 20, 1929. Serial No. 415,446. 3 Claims. (Cl. 211—154.)



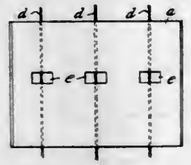
2. A clothes stand of the character described comprising a standard, supporting legs for said standard, a case mounted on the upper end of the standard, a drawer slidable in the case, a trousers' supporting clamp mounted on the bottom of the case forwardly of the standard, a horizontally disposed vest supporting bar mounted on the standard and disposed in a vertical plane intermediate the vertical planes of the trousers' clamp and said standard and a coat supporting bar mounted on the standard beneath the vest supporting bar and disposed in a vertical plane intermediate the vertical plane of the vest supporting bar and the standard.

1,804,070. EXHAUST SILENCER. JOHN EDWARD SYKES, Harehills, Leeds, England. Filed July 7, 1930, Serial No. 466,235, and in Great Britain Apr. 16, 1929. 1 Claim. (Cl. 137—160.)



An exhaust silencer comprising a pipe adapted to be connected at one end to the exhaust manifold of an engine, an enlarged substantially oyster-shaped receptacle connected to the opposite end of the pipe, said pipe having a series of staggered baffle plates disposed alternately on opposite sides thereof and inclined relative to the axis of the pipe, said baffles having their inner or leading edges directed toward the outlet so as to cause the exhaust gases to take a sinuous course through the pipe, said receptacle having a restricted outlet to allow of a sudden expansion of the gases on leaving the pipe and prior to passing out by way of said restricted outlet, said outlet being in substantial alignment with the pipe to provide a through passage for the exhaust gases, the outer edge of said outlet being substantially flat to form a narrow slit for the escape of the exhaust gases, and means connected to said outer edge for preventing outward movement thereof.

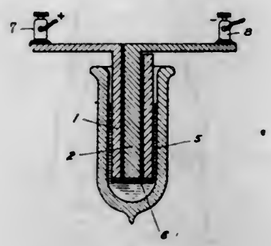
1,804,071. DEVICE FOR APPLYING HOOKED CLASPS. SERGE TCHAYEFF, Paris, France. Filed Dec. 13, 1928, Serial No. 325,889, and in France Oct. 3, 1928. 6 Claims. (Cl. 140—93.)



1. A device for applying hooked clasps upon parallel wires including a movable clasp carrier having a slot at one end to receive the parallel wires during forward movement of the carrier, and means on said carrier to releasably hold the clasp during application of the latter to the parallel wires, said holding means including a yieldable member permitting lateral displacement of the clasp during application to the parallel wires.

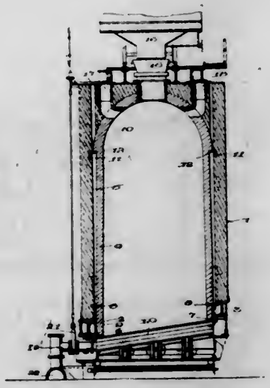
1,804,072. APPARATUS FOR ELECTRIC COOLING. HORACE FRANÇOIS ADOLPHE TURRETTINI, Geneva, Switzerland. Filed Sept. 28, 1926, Serial No. 138,227, and in Germany Oct. 8, 1925. 8 Claims. (Cl. 62—170.)

1. Apparatus for electric cooling by the utilization of the phenomenon known as the Peltier effect which comprises a thermo-couple constituted of two different metallic parts, the cross section of said two metallic parts being substantially in the same ratio as their resistances, an electrical connection for joining the two metallic parts



at their cold joint, and a connector secured to the free end of each of the two metallic parts whereby an external source of electricity can be connected to said thermo-couple for the production of a cooling effect.

1,804,073. CARBONIZING APPARATUS. GEORGE W. WALLACE, San Francisco, Calif., assignor to The S. E. Company, a Corporation of Delaware. Filed Mar. 15, 1927. Serial No. 175,600. 5 Claims. (Cl. 202—214.)

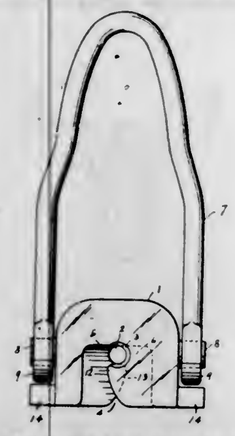


5. In an internally fired down draft carbonizing apparatus of the shaft kiln type for carbonizing coal and the like, a vertical outer shell and a vertical internal shaft formed of refractory material and having an integral closed top, said internal shaft being spaced away from the outer shell and supported thereby, support being afforded at points somewhat below the closed top and also at points somewhat above the bottom of the shaft.

1,804,074. ROD ELEVATOR. CHARLES A. ADAMS, Humble, Tex. Filed Oct. 26, 1929. Serial No. 402,564. 1 Claim. (Cl. 294—91.)

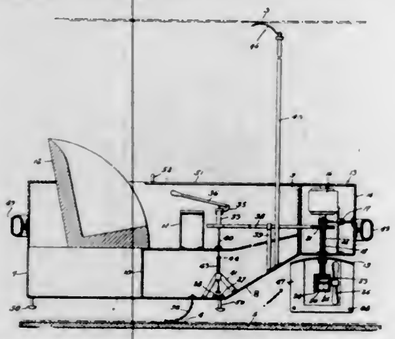
A rod elevator including an elevator body having a vertical bearing adapted to receive a rod, said body having a diagonal side slot extending from said bearing through one side of the body and through which the rod may be inserted into said bearing, an uppper and lower abutment

carried by the body and overlapping and forming retaining means to retain the rod against displacement from said



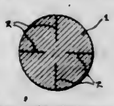
bearing, a bail having side arms pivotally connected to the body and a stop on the slotted side of the body engageable with one of said arms.

1,804,075. AQUATIC AMUSEMENT APPARATUS. FRANK V. ANDRE, Sewickley, and HARRY A. DAVIS, New Brighton, Pa. Filed May 8, 1930. Serial No. 450,791. 3 Claims. (Cl. 104—73.)



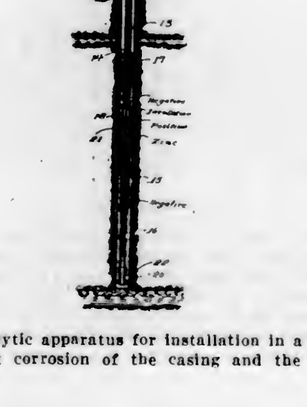
1. An aquatic amusement apparatus of the character described comprising, in combination, a tank adapted to contain water, an electric current conducting supply screen disposed above the tank, an electric current ground screen disposed over the bottom of the tank, a boat disposed for travel in the water in the tank, an electric motor mounted in the boat, a propeller operatively connected to the motor for actuation thereby, means for electrically connecting the motor with the current supply screen, means for electrically connecting said electric motor with the ground screen, the last named means comprising a chain suspended from the boat and engaged with the screen, a conductor wire connecting the chain to the motor and a manually operable control switch interposed in the conductor wire.

1,804,076. WIRE FOR WINDING MOTORS, ETC. ARMAIS ARUTUNOFF, Bartlesville, Okla. Filed Sept. 8, 1928. Serial No. 304,820. 4 Claims. (Cl. 173—264.)



1. Wire for winding electric motors and apparatus, comprising a longitudinal core, a body portion surrounding said core and integral therewith, said body being provided with a series of longitudinally extending, substantially closed slits, radiating from the boundaries of said core, whereby flexibility of the wire is facilitated.

1,804,077. WELL PUMP APPARATUS. CLARENCE E. BACKUS and DOUGLAS G. WILLIAMSON, Parkersburg, W. Va. Filed Mar. 11, 1929. Serial No. 346,218. 2 Claims. (Cl. 255—11.)



1. In well drilling apparatus a base, a mast thereon, a member secured within the mast at a point over the base, a yoke mounted for rotation upon said member about an upwardly extending axis, a walking beam mounted for up and down swinging movement within the yoke, an actuated member pivotally connected to and extending from one end of the walking beam, a pitman connected to the walking beam adjacent to its other end, a member pivotally connected to the walking beam adjacent to the pitman, a link connection between said member and the pitman for holding them constantly parallel, and a counter-balancing weight carried by said member, said walking beam being movable about the axis of the yoke to shift the pitman and the weight-carrying member laterally relative to the base.

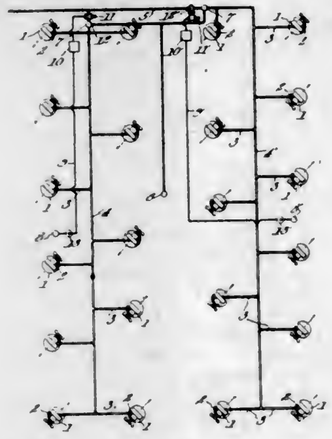
1,804,078. MEANS FOR PREVENTING CORROSION IN PIPES. MARTIN WILLIAM BADEN, Winfield, Kans. Filed Nov. 26, 1928. Serial No. 322,017. 2 Claims. (Cl. 204—1.)



1. Electrolytic apparatus for installation in a well casing to resist corrosion of the casing and the pumping

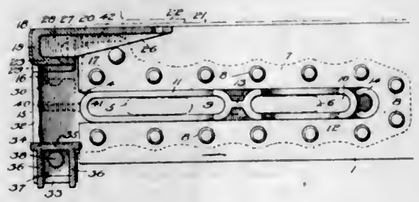
equipment operating therein, said apparatus comprising a tube consisting of tubular sections of metals of different polarity, a connecting unit for the ends of the sections comprising a tubular body of insulating material, metallic sleeves embedded in the said body with their relatively adjacent ends concentrically arranged one within the other and in mutually spaced relation, the said sleeves being provided with thickened relatively remote ends abutting the tubular body of insulating material and threaded to provide for their connection with the tubular sections of the said tube, and radially disposed shoes at the lower end of the lower tubular section for spacing the tube from the casing and establishing electrical connection between the casing and the said tubular section.

1,804,079. AIR CONDITIONING APPARATUS. FREDERIC F. BAHNSON, Winston-Salem, N. C., assignor to The Bahnson Company, Winston-Salem, N. C., a Corporation of North Carolina. Filed Oct. 13, 1928. Serial No. 312,287. 17 Claims. (Cl. 236—44.)



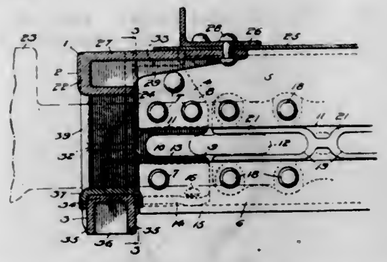
1. In air conditioning apparatus, the combination with a plurality of humidifying units and means for supplying water thereto, each of said units provided with a humidity-responsive member for controlling its individual water supply, and means responsive to temperature changes in the air conditioned by said units for regulating the rate at which water is supplied to said units, of a master control apparatus for controlling the supply of water to all of said units irrespective of the operation of said individual control members and said temperature responsive member.

1,804,080. STRIKING CASTING. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Nov. 14, 1925. Serial No. 69,092. 9 Claims. (Cl. 213—50.)



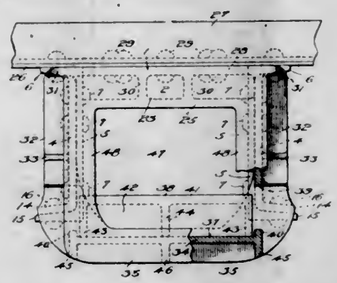
5. In combination with the center sills of a car, said center sills being formed with slots extending to the ends thereof, cheek plates connected on the outside thereof and provided with slots registering with the center sill slots and flanges bordering said slots and engaging the center sill slots, portions of said cheek plates extending beyond the ends of the sills and a striking casting connected to said extensions.

1,804,081. STRIKING CASTING. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Nov. 14, 1925. Serial No. 69,093. 7 Claims. (Cl. 213—50.)



1. In combination with the center sills, cover plate therefor, and end sill of a car, an integral casting comprising portions serving, respectively, as a striking casting and coupler carrier iron, and provided with rearwardly extending ears connected with the webs of said center sills, and a substantially horizontal shelf portion extending rearwardly from over the carrier iron portion beyond said ears, the adjacent ends of the center sills at their upper portions being coped for the reception of portions of said shelf extending transversely beyond said sills, and a portion of said shelf extending rearwardly between the sills and connected with the cover plate and end sill.

1,804,082. STRIKING CASTING. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Jan. 20, 1926. Serial No. 82,499. 20 Claims. (Cl. 213—50.)



2. A combined casting formed with portions serving, respectively, as a striking casting and coupler carrier iron, said carrier iron portion being formed with flanges along its upper surface and said casting being provided with a transverse aperture therein, said aperture being adapted for receiving a carrier block and the flanges serving to provide a pocket for receiving said block on the carrier iron portion.

1,804,083. HEAT EXCHANGE DEVICE. DAVID WERNER BERLIN, Rasunda, Sweden. Filed July 5, 1927, Serial No. 203,592, and in Sweden Aug. 17, 1926. 12 Claims. (Cl. 257—255.)

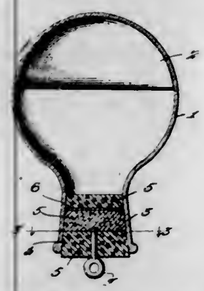
1. In a heat exchange device, a pair of longitudinally corrugated plates arranged with the corrugations of one

plate extending into the corrugations of the other plate, said plates being transversely corrugated along a plu-



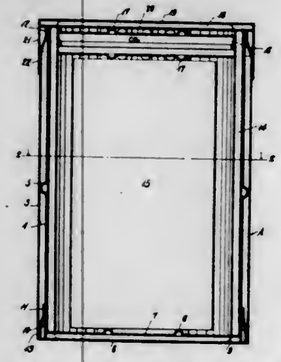
rality of longitudinally disposed lines to bring portions of the plates into interlocking engagement to prevent relative lateral movement of the plates.

1,804,084. FISHING LINE FLOAT. LOUIS H. BLAKE, Altus, Okla. Filed Mar. 14, 1930. Serial No. 435,867. 2 Claims. (Cl. 43—49.)



1. A float for fishing lines, comprising a hollow substantially pear-shaped body whose outer rounded end is luminous and whose mouth portion is formed with an inwardly extending bead, a compressible stopper closing the mouth and an eye having a shank embedded in the stopper.

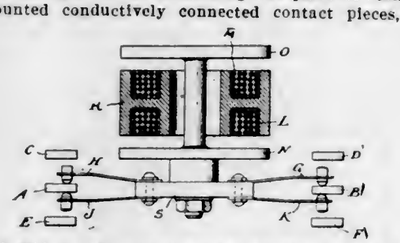
1,804,085. CONTAINER. ARTHUR H. BORDEN, North Dartmouth, Mass. Filed Apr. 16, 1929. Serial No. 355,548. 2 Claims. (Cl. 62—91.5.)



1. In a container of the class described, a bottom wall provided with internal corrugations, a refrigerant container positioned within said container, said refrigerant container being provided with protuberance on its upper and lower surfaces, and a package mounted within said container and resting on said corrugations.

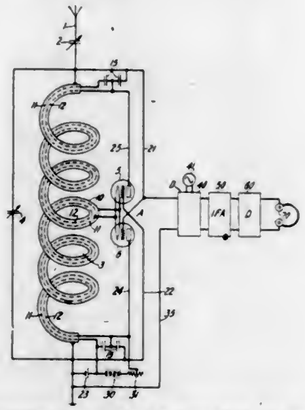
1,804,086. REVERSING SWITCH. HEKTOR BRODT, Zuchwil, near Solothurn, Switzerland, assignor to Scintilla Aktiengesellschaft, Solothurn, Switzerland. Filed Feb. 20, 1929, Serial No. 341,526, and in Germany, Mar. 1, 1928. 2 Claims. (Cl. 200—16.)

1. A switch for reversing the direction of the current in electric installations, including a pair of contacts for the incoming current, two pairs of contacts for the outgoing current, each of said first-named contacts being located between a pair of the said second-named contacts and switching members comprising two pairs of resiliently mounted conductively connected contact pieces, one



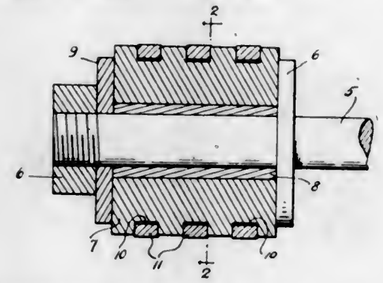
pair of said contact pieces embracing each of said first-named contacts, substantially as and for the purposes described.

1,804,087. WAVE AMPLIFYING SYSTEM. EDMOND BRUCE and HARALD T. FRIIS, Red Bank, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1926. Serial No. 158,170. 8 Claims. (Cl. 250—20.)



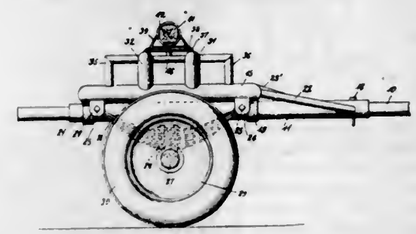
1. An amplifier comprising a plurality of electric space discharge devices connected in balanced relation to operate without frequency translation, each of said devices having a cathode, an anode and a grid, a common input circuit and a common output circuit for said devices, said common input circuit being connected to ground, means for impressing signal variations upon said common input circuit, and means for connecting said cathodes to a point on said input circuit electrically remote from said ground connection.

1,804,088. PACKING STRUCTURE. NOAH D. CLARK, Cincinnati, Ohio, assignor of one-half to George Struble, Cincinnati, Ohio. Filed Sept. 10, 1929. Serial No. 391,551. 1 Claim. (Cl. 74—109.)



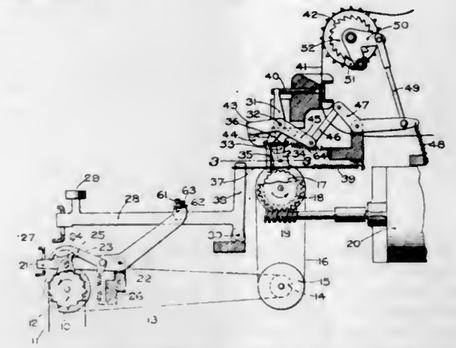
In combination, a piston rod, an annular collar formed on said rod, a bearing sleeve mounted on said rod and having one end thereof abutting said collar, a follower sleeve mounted on said bearing sleeve and having one end abutting said collar, a follower plate on said rod abutting the opposite end of said bearing sleeve and follower sleeve, a nut threaded on the rod and bearing against said follower plate, said follower sleeve being of a greater diameter than the diameters of the collar and follower plate respectively, and having a plurality of circumferentially extending spaced grooves formed on the outer periphery thereof, and piston rings in said grooves, said piston rings being of the split type having their adjacent ends arranged in stepped relation.

1,804,089. TRAILER. BEN L. COCHRAN, Duncan, Okla., assignor to Magnolia Petroleum Company, Dallas, Tex., a Corporation of Texas. Filed Dec. 8, 1928. Serial No. 324,717. 7 Claims. (Cl. 280—33.1.)



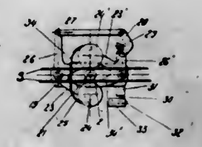
2. A trailer of the character described, comprising in combination, an elongated pipe section adapted to telescopically receive a draft pole, a rectangular frame secured to said pipe section and including side and end members constructed entirely of pipe sections and welded together at their ends by beveled joints, a superstructure mounted above said frame also constructed of pipe sections welded together, a bunker mounted on said superstructure, and a bolster mounted on said bunker.

1,804,090. POWER MECHANISM FOR SHEET PUNCHING MACHINES. CHESTER W. CRUMRINE, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Oct. 7, 1927. Serial No. 224,750. 21 Claims. (Cl. 164—115.)



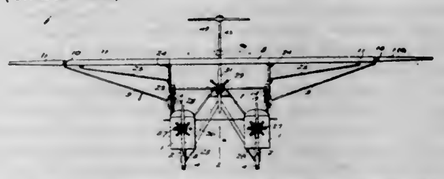
1. In power mechanism for sheet punching machines or the like, the combination with a plurality of perforating devices, of means for selectively actuating said devices comprising a longitudinally grooved roller, power means for rotating said roller, a perforated strip supported on and fed by said roller and having perforations arranged to register with the grooves in the roller, an actuator movably mounted near the roller, a star wheel rotatably mounted thereon, means for resiliently moving the actuator toward the roller so that two arms of the star wheel normally engage the perforated sheet thereon, whereby, upon encountering a perforation in the strip, one arm of the star wheel is engaged with a groove of the roller and moved thereby so as to positively move the actuator by reason of its radial thrust against its bearing on the actuator.

1,804,091. SPINDLE DRIVE. MARCEL PAUL DURAND, St. Germain-en-Laye, France. Filed June 26, 1929, Serial No. 373,826, and in France Aug. 17, 1928. 4 Claims. (Cl. 118—8.)



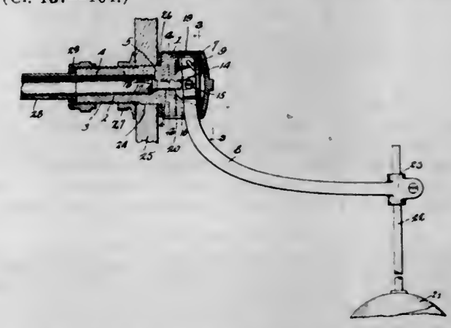
1. A spindle drive constituted by a pulley member on the spindle, a belt engaging said pulley at two diametrically opposite points, a pair of pressure rollers acting radially of the pulley at diametrically opposite points, and means for pressing said rollers on said belt.

1,804,092. AIRPLANE. JACQUES ECK, Los Angeles, Calif. Filed Dec. 2, 1929. Serial No. 411,079. 2 Claims. (Cl. 244—14.)



1. A flying machine having a two-part fuselage, and an inverted V-shaped fuel tank extended parallel to the line of flight between the constituent members of the fuselage and comprising downwardly diverging, liquid-holding parts which communicate at their upper ends.

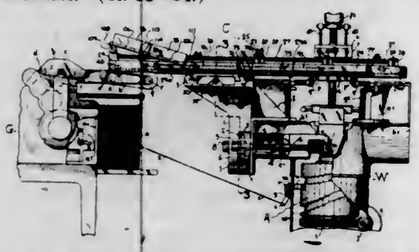
1,804,093. FLOAT CONTROLLED VALVE. WILLIAM G. ESTEP, Duquesne, Pa., assignor of one-third to Robert Hawk and one-third to Joseph Conlin, Duquesne, Pa. Filed Jan. 15, 1930. Serial No. 421,004. 4 Claims. (Cl. 137—104.)



1. A device of the class described including a body portion having a tubular stem opening therethrough; there being a tapered seat in the stem, diametrically opposed pairs of pivot studs and guide ears integral with the body portion, a float-actuated lever pivotally mounted between the lugs and slidable between the ears, a valve adapted to fit snugly upon the seat, a stem projecting therefrom through the body and pivotally connected to the lever at a point between the lugs and ears, and a protecting cap engaging the body portion and housing the lugs and ears

and a portion of the lever, there being a slot in the cap in which the lever is movably mounted, said slot constituting a liquid outlet.

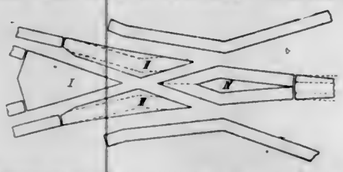
1,804,094. SYSTEM FOR APPLYING WRAPPERS. THEODORE A. FEDERWITZ and WALTER T. BAILEY, Philadelphia, Pa., assignors to Stokes and Smith Company, Summerdale, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 13, 1924. Serial No. 698,841. 23 Claims. (Cl. 93—54.)



1. The combination with a machine for delivering wrapper sheets in succession and comprising a sheet-conveying belt and rollers over which said belt travels, of a support carried by said machine, a roller carried by said support, a second belt passing over said roller and whose delivery end extends beyond the delivery end of said first named belt, and wrapper sheet-guiding means extending longitudinally of and inclined upwardly with respect to said second named belt and in the direction of movement of said wrappers for guiding wrapper sheets therefrom.

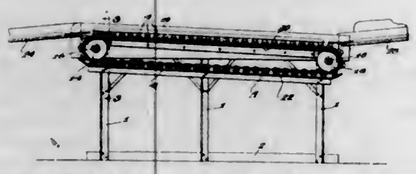
8. Box- and wrapper sheet-conveyer mechanism comprising a box-conveying chain, a wrapper sheet-conveying chain, a support common to said chains, and means for adjusting said support to different positions simultaneously to adjust the position of said conveyor chains.

1,804,095. DOUBLE SLIP POINT WITH TONGUES DISPOSED OUTSIDE THE DIAMOND. WILHELM GERMANN, Dortmund, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Oct. 13, 1930, Serial No. 488,481, and in Germany Sept. 2, 1929. 2 Claims. (Cl. 246—416.)



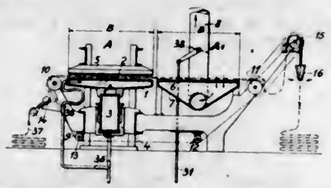
1. A double slip point comprising a center piece of rail-like cross section, the sides of the center piece having concavities therein extending throughout their respective lengths, and a split outwardly bent end at each end of the center piece, said bent ends having concavities in their sides extending longitudinally throughout their length.

1,804,096. SORTING APPARATUS. JOHN D. GRABILL, Woodstock, Va. Filed Feb. 5, 1929. Serial No. 337,689. 5 Claims. (Cl. 209—125.)



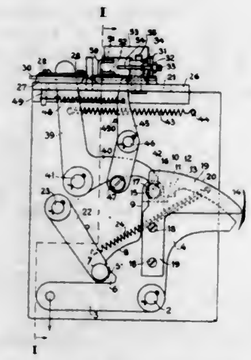
1. A sorting apparatus of the class set forth including an endless conveyor comprising a plurality of rotatable rollers arranged in parallel relation, each of said rollers being cylindrical and provided in its outer face with a plurality of relatively narrow longitudinal grooves spaced substantial distances from each other, the distance between successive grooves, in each instance, being considerably greater than the width of each of said grooves, means for supporting and imparting travel to the endless conveyor, and means for rotating the rollers.

1,804,097. DECATIZING OF TEXTILE FABRICS. MATHIAS HAHN, Aachen, Germany, assignor to Hubert Krantz, Aachen, Germany. Filed Oct. 12, 1929, Serial No. 399,336, and in Germany Oct. 20, 1928. 5 Claims. (Cl. 26—45.)



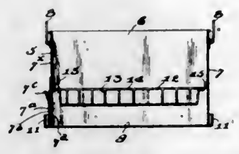
3. An apparatus for decatizing fabrics, comprising a decatizing press having a fixed top plate and a vertically movable hollow bottom plate with a perforated top wall, a power cylinder for reciprocating the hollow press plate, means for simultaneously supplying steam to the power cylinder and to the hollow press plate, a cooling surface behind the press, and conveying means for intermittently moving the fabric through the press and over the cooling surface.

1,804,098. RELEASING MECHANISM FOR AUTOMATIC VENDING MACHINES. HANS CHRISTIAN HANSEN, Frederiksberg, Denmark, assignor to Soren Wistoft & Co.'s Fabriker, Akts., Copenhagen, Denmark. Filed Feb. 14, 1929, Serial No. 339,986, and in Great Britain Feb. 23, 1928. 11 Claims. (Cl. 194—92.)



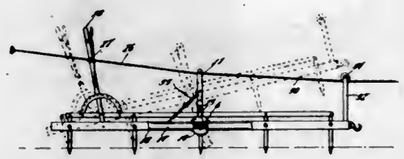
1. Releasing mechanism for automatic vending machines, including a displaceable slide, a pocket in said slide for receiving an inserted coin, a pair of coin feelers for controlling the displacement of said slide, a detent for controlling the operation of the vending machine, mechanism including a plurality of levers, one of said levers being connected to said slide, a lug on said lever for cooperating with said detent, another of said levers forming the bottom of said coin receiving pocket, and means to cause the feelers to engage and arrest a proper coin moving with said slide, the arrest of movement of the slide and coin permitting the lever mechanism to be moved to effect operation of the machine, said feelers permitting free passage of an improper coin, said lever mechanism acting on introduction of an improper coin to prevent operation of the machine.

1,804,099. KITCHEN UTENSIL. LILLIE HAZY, New York, N. Y. Filed Mar. 1, 1929. Serial No. 343,729. 4 Claims. (Cl. 146—200.)



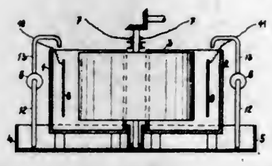
1. A vegetable or fruit washer, including a bottom having an upstanding endless wall, a tubular container having its lower edge resting on the bottom and its wall arranged within and spaced from the upstanding wall, to permit the tubular container to readily detach itself from the bottom when the container is lifted, an open-work tray arranged in the tubular container, and means for supporting the tray above the lower end of the container.

1,804,100. DRAG HARROW CLEANER. WILLIAM J. HURST, Maquoketa, Iowa. Filed Sept. 5, 1929. Serial No. 390,530. 3 Claims. (Cl. 55—34.)



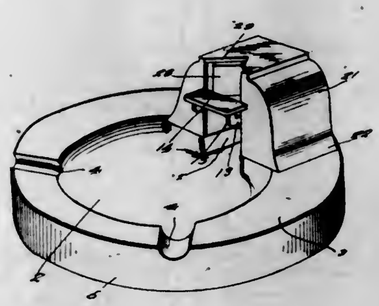
1. In a drag harrow of the class described including a shaft, a hub rockable on the shaft, arms extending from the hub, a ratchet on the hub, a lever, means for rockably mounting the lever, a spring pressed pawl in the lever engageable with the ratchet, said arms terminating in ground engaging teeth, a spring for holding the lever in a normal predetermined position.

1,804,101. APPARATUS FOR ELECTROLYTICALLY PRODUCING METAL ALLOYS. ERNST KELSEN, Vienna, Austria. Filed Aug. 22, 1928, Serial No. 301,339, and in Austria Aug. 24, 1927. 4 Claims. (Cl. 204—2.)



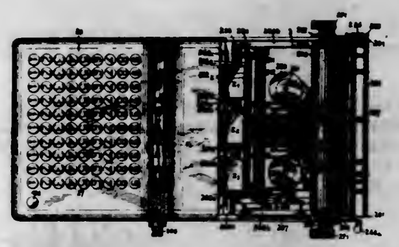
1. An apparatus for electrolytically producing metal alloys, which apparatus comprises a rotary cathode, a plurality of tanks containing different electrolytic baths, which tanks are arranged around the cathode in such manner, that the cathode will be successively put into contact with each of the said different baths and that between the rotary cathode and the edges of the tank walls formed by said arrangement there remain clearances, receptacles placed underneath the tanks for collecting the electrolytes escaping by leakage through said clearances and means for leading back the collected electrolytes into the respective electrolytic tanks.

1,804,102. CIGARETTE EXTINGUISHER. HENRY KERSHAW, Jersey City, N. J. Filed Sept. 17, 1929. Serial No. 393,192. 5 Claims. (Cl. 131—51.)



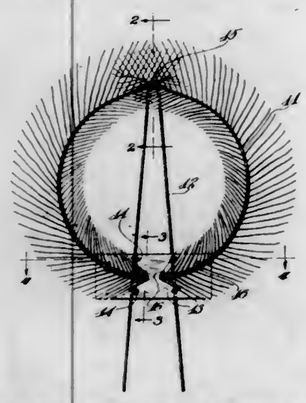
1. A cigarette extinguisher of the character described comprising an ash receiving receptacle, a base bracket mounted on said receptacle, a pair of normally open jaws pivotally mounted on said base bracket, a depressible platform pivotally mounted on the bracket and extending forwardly of the jaws, and means carried by said depressible platform for engagement with the jaws for shifting the same together in a manner to extinguish a cigarette placed therebetween.

1,804,103. CALCULATING MACHINE. HANS KNOLL, Munich, Germany, assignor to Mercedes Buromaschinenwerke Aktiengesellschaft, Benshausen, Germany. Filed May 6, 1930. Serial No. 450,286, and in Germany Jan. 15, 1927. 1 Claim. (Cl. 235—60.)



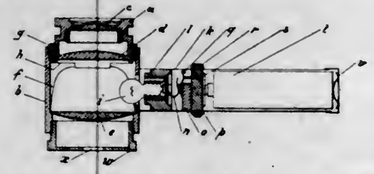
In a machine of the class described, the combination with visible main accumulator dials incapable of endwise travel, and a visible printing mechanism including a traveling paper carriage, a platen thereon and type carriers; of a plurality of sets of subaccumulator dials disposed between the platen and the main accumulator dials and so situated that the numerals on the dials, and the printed numerals, may be simultaneously visible from one point during the normal operation of the machine, said subaccumulator dials being connected to travel with the paper carriage relatively to the main accumulator dials to enable simultaneous accumulation and reading from all the accumulator dials and printing mechanism, and a single set of actuators for the sets of subaccumulator dials, said actuators being located in front of and connected with the type carriers.

1,804,104. FLORAL SPRAY. LEOPOLD KOROPP, Chicago, Ill. Filed Apr. 9, 1929. Serial No. 353,803. 8 Claims. (Cl. 41—12.)



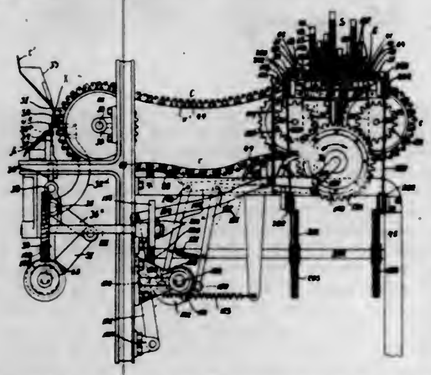
1. A floral wreath comprised of a pair of arcuate sprays with the ends thereof curved toward each other, fasteners securing together one set of spray end portions, a backing element for the other set of spray end portions, and fasteners securing the latter set to the backing element.

1,804,105. MAGNIFYING GLASS. WILHELM MÄRTENS, Bremen, Germany. Filed Apr. 3, 1928, Serial No. 267,020, and in Germany Apr. 5, 1927. 2 Claims. (Cl. 88—39.)



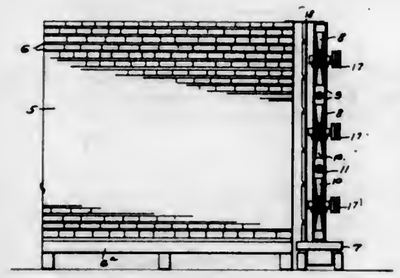
1. A magnifying glass having two lenses spaced apart, a conical annular reflector arranged between the lenses and having an opening in one side, and an electric lamp having a bulb projecting partly into the reflector through said opening so that the rays of light from the lamp are projected through the lenses onto the article to be viewed.

1,804,106. MANUFACTURE OF CHENILLE AND OTHER FABRICS. JAMES MORTON, West Lothian, Scotland. Filed Sept. 9, 1929, Serial No. 391,369, and in Great Britain Sept. 26, 1928. 24 Claims. (Cl. 66—85.)



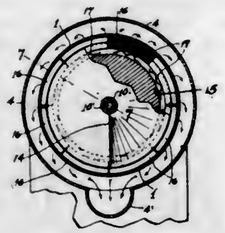
1. Apparatus comprising the combination of independent selectors, guiding means on each selector for leading in a number of threads and holding the end thereof projecting, means controlling said selectors, said controlling means being adapted to move said selectors relatively to one another so as to bring selected guiding means with their projecting thread ends into alignment, a conveyor arranged adjacent said selectors, a gripper adapted to seize the aligned projecting thread ends and pull them across the conveyor, means for forcing the pulled threads into engagement with the conveyor, cutting means for severing said pulled threads, needle means located adjacent said conveyor for binding said threads together, means for operating said conveyor so as to move the severed threads successively into the proximity of said binding means, and movable sinkers for transferring said threads from said conveyor to said binding means.

1,804,107. LUMBER-DRYING APPARATUS FOR YARD USE. MORITZ L. MUELLER, Seattle, Wash. Filed Sept. 16, 1929. Serial No. 392,940. 4 Claims. (Cl. 34—18.)



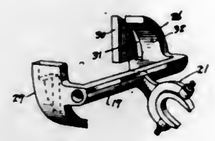
4. The combination with a portable building having blast controlling doors in its walls, of a bodily removable side wall for said building carrying a battery of blast producing fans, as and for the purposes set forth, said battery of fans being of such number and size as to cover substantially the entire side of a pile of lumber to be dried.

1,804,108. CENTRIFUGAL SEPARATOR. OSCAR GARCIA PARDO and SEGUNDO DIAZ FERNANDEZ, Habana, Cuba. Filed Mar. 6, 1929. Serial No. 344,847, and in Cuba May 15, 1928. 1 Claim. (Cl. 210—69.)



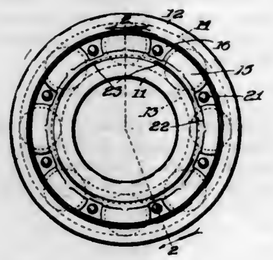
In a separator, a revolving drum, a spiral conveyor rotatable in said drum and having a circumferentially channelled rim portion, scraper sections engaging the interior of the drum arranged end to end extending throughout the length of the edge of the conveyor and having reduced portions slidably mounted in the channel of the conveyor, the side faces of the conveyor and sections presenting substantially continuous surfaces, and a flat bow spring for each scraper section confined between the latter and the base of said channel and normally tending to force the scraper against the interior of the drum.

1,804,109. SAFETY GEAR SHIFT. FREDERICK WILLIAM PARKER, Gerlach, Nev. Filed Sept. 22, 1930. Serial No. 483,644. 3 Claims. (Cl. 74—58.)



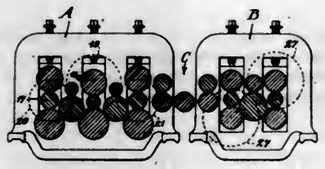
1. A cam-operated shifter of the character described comprising a sleeve adapted for mounting with freedom of endwise motion, two arms extending from the sleeve in spaced and parallel relation, the arms having registering concave faces adapted for engagement by a centrally mounted cam for shifting the sleeve into a central position and each arm having a projecting face allowing the cam to move the sleeve into an end position, each of said projecting faces being opposed by a blank on the other arm.

1,804,110. BALL BEARING. HARRY N. PARSONS, Chicago, Ill., assignor to Marlin-Rockwell Corporation, a Corporation of New York. Filed Mar. 6, 1929. Serial No. 344,799. 5 Claims. (Cl. 308—201.)



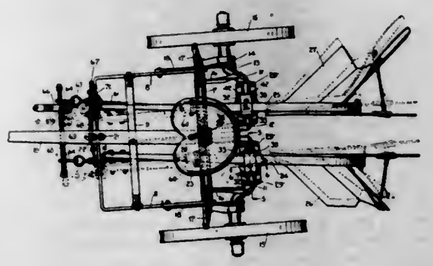
1. In a ball bearing, the combination of inner and outer race-ways, and a ball retainer for said balls piloted on one of said race-ways and containing vents in the surface of said ball retainer which opposes the one of the race-ways on which said ball retainer is piloted and opening laterally of said retainer and also opening into said last-referred-to race-way at all of the spaces between adjacent balls, the radial depth of said vents being appreciably less than the radial thickness of said retainer.

1,804,111. BREAKDOWN MILL. ALEXANDER PATERSON, Buffalo, N. Y. Filed Sept. 7, 1929. Serial No. 391,045. 7 Claims. (Cl. 80—35.)



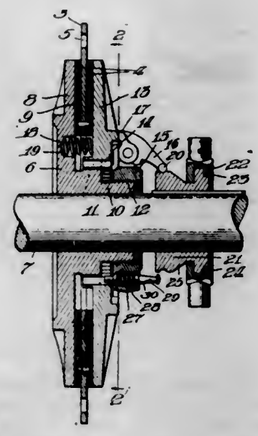
7. A sheet bar breakdown mill including a unit comprising opposed integral housings, each having more than one window, the windows of one housing registering with the windows of the other, a stand of rolls fitted in each pair of registering windows and consisting of upper and lower working rolls and a reinforcing roll below the lower working roll, and work feeding means between the roll stands for transferring the piece from the stand behind to the stand in front, said feeding means including a feed roll engaging with and driven by one of the reinforcing rolls and a weighting roller co-operating with said feed roll whereby the piece is engaged before it leaves the stand behind and for a while after it enters the stand in front.

1,804,112. PLOW. WILLIAM L. PAUL, Berkeley, Calif., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Feb. 13, 1929. Serial No. 339,549. 20 Claims. (Cl. 97—29.)



1. In a plow adapted to be propelled by draft means, the combination with a frame, wheels supporting said frame, lifting means on said frame, and means operable to angle the frame with respect to the line of draft, of a plow comprising a beam having a swivel connection with said frame to rock laterally with respect thereto, and connected with said lifting means to be raised or lowered by the operation thereof, and draft connections on said beam.

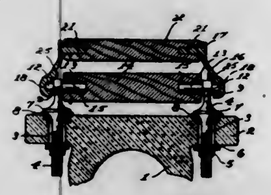
1,804,113. CLUTCH. WILLIAM J. PEARMAIN, Racine, Wis., assignor to Twin Disc Clutch Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 6, 1930. Serial No. 418,697. 1 Claim. (Cl. 192—68.)



In a clutch of the class described a relatively fixed clamping plate comprising a hub having peripheral teeth

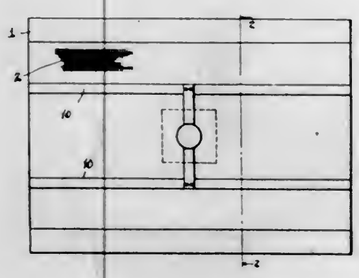
thereon and a threaded end, a floating clamping plate having internal teeth engaging the teeth of the fixed plate, an interiorly threaded ring on the threaded end of the hub, levers on the ring engaging the floating plate, means for actuating the levers and a locking pin on the ring adapted to engage between the teeth on the floating plate.

1,804,114. HINGE FOR TOILET SEATS AND COVERS. JOHN PUDLEINER, Allentown, Pa. Filed Mar. 3, 1930. Serial No. 432,856. 5 Claims. (Cl. 4—236.)



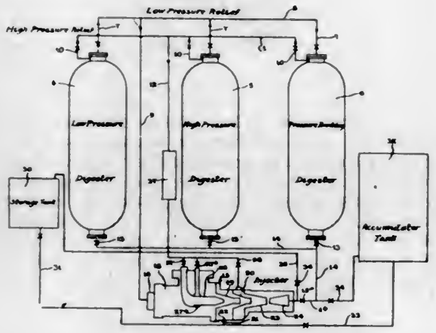
1. In combination with the seat and cover of a toilet bowl, a pair of posts adapted to be secured to the toilet bowl having horizontal pintles extending into recesses on the side edges of said seat and free to rotate in said recesses to pivotally support said seat, said posts having outwardly extending pintles on the same axis as said first pintles, two hinge members shaped to provide a concealed journaled bearing for the outwardly extending pintles, and means rigidly connecting said hinge members to the edges of said cover to pivot said cover on said pintles whereby said posts and hinge members are securely connected to the cover and seat.

1,804,115. SCREENING APPARATUS. MORLEY PUNSHON REYNOLDS, Cleveland Heights, Ohio, assignor to The W. S. Tyler Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 21, 1927. Serial No. 220,960. 9 Claims. (Cl. 209—347.)



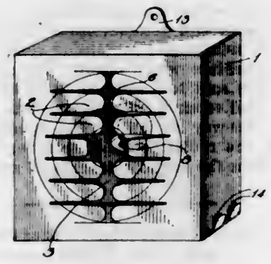
1. In screening apparatus, the combination of a frame, a woven wire screen mounted therein, means engaging two opposite edges of said screen and tensioning the same, two distributing strips secured to said screen in spaced relation, and a single vibrating means secured to said strips, said strips being of sufficient length and distributed resilience as to vibrate in wave-like form.

1,804,116. DIGESTING SYSTEM. AUGUST F. RICHTER, Watertown, N. Y., assignor to Stebbins Engineering & Manufacturing Company, a Corporation of New York. Filed Dec. 12, 1929. Serial No. 413,558. 21 Claims. (Cl. 92—7.)



1. In the digestion of fibrous material, utilizing gases and vapors flowing from a digester to induce the flow of chemical liquor and to force such liquor into another digester against super-atmospheric pressure existing in the latter digester.

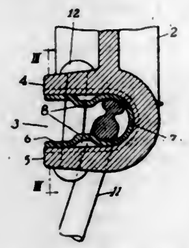
1,804,117. TARGET. FREDERICK T. RUSSELL, Utica, N. Y., assignor, by mesne assignments, to Fox Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 15, 1928. Serial No. 319,473. 7 Claims. (Cl. 124—15.)



7. A target comprising a face of sheet material cut to provide two series of flexible finger members, the fingers of one series pointing toward the fingers of the other series, for the purpose described.

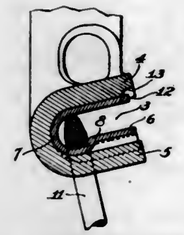
1,804,118. BRAKE HANGER SUPPORT. FREDERIC SCHAEFER, Pittsburgh, Pa. Filed Jan. 5, 1927. Serial No. 159,075. 10 Claims. (Cl. 188—207.)

8. In a brake beam hanger bracket, members forming an open-ended and open-sided recess, a renewable bushing seated in said recess, movable through the open side thereof and having flanged ends engaging the outer faces of said



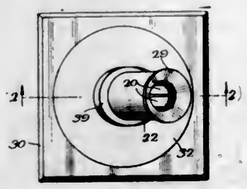
members at the ends of said recess, and means for preventing movement of said bushing through the open side of said recess.

1,804,119. BRAKE HANGER SUPPORT. FREDERIC SCHAEFER, Pittsburgh, Pa. Filed Nov. 12, 1928. Serial No. 318,890. 1 Claim. (Cl. 188—209.)



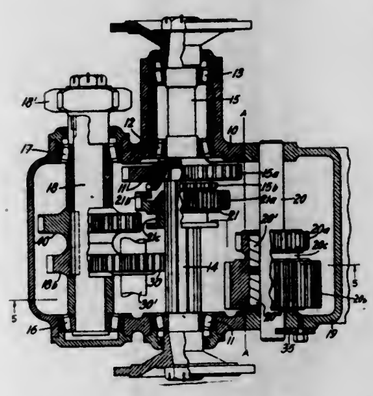
The combination of a truck frame for railway cars provided with a bracket having an open ended slot for receiving a brake hanger, and a substantially U-shaped bushing of resilient wear-resisting metal adapted to be fitted in said slot with its sides pressing yieldingly against the walls of the slot and forming a bearing for a brake hanger, a portion of said bracket extending inwardly into said slot for engaging said bushing to hold it in place, and a recess formed in said bracket adjacent said inwardly extending portion and into which a tool may be inserted for removing the bushing.

1,804,120. PENHOLDER SOCKET. GUSTAV J. SENGBUSCH, Milwaukee, Wis. Filed Jan. 29, 1927. Serial No. 164,411. 10 Claims. (Cl. 120—108.)



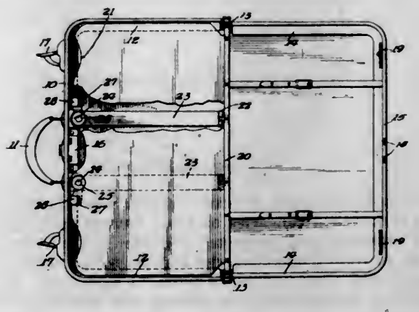
1. In a device of the class described, the combination of a base having an opening therein, a cover mounted on said base over said opening, and a socket for receiving a pen, said socket being mounted on said cover and having a portion extending therethrough into said opening, said socket comprising a tubular member, a cap member removably mounted on the lower end of said tubular member and serving as a closure therefor, and means inside said tubular member for limiting inward movement of the pen, said means being effective to engage a portion of the pen above the writing point thereof so as to provide a substantially sealed chamber enclosing the writing point, whereby evaporation of writing fluid on said point is retarded, and whereby said point is prevented from engaging said closure cap.

1,804,121. MOTOR VEHICLE. GEORGE D. SIMONDS, Newark, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 21, 1927. Serial No. 234,744. 3 Claims. (Cl. 74—58.)



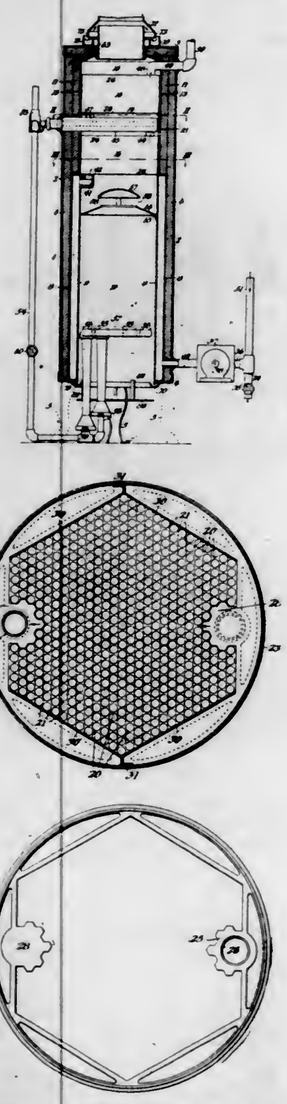
1. In a gearing, a casing, aligned driving and driven shafts supported by said casing, a power take-off shaft, a countershaft mounted in said casing, a duplex gear unit carried by said countershaft and means including said unit for selectively driving said power take-off shaft either independently of or in conjunction with movement of said driven shaft, the movement of the driving and driven shafts being normally ineffective with respect to said power take-off shaft and said countershaft.

1,804,122. TRAVELING BAG. OSCAR I. SINGER, Chicago, Ill., assignor to Singer Bros. Company, Chicago, Ill., a Copartnership. Filed May 23, 1928. Serial No. 280,028. 7 Claims. (Cl. 190—50.)



4. A bag of the character described embodying co-operating frames connected together along one edge for hinged movement one with relation to the other, a member extending along said edge, a brace pivotally connected by one end to said member and extending across said frames, and interengaging means between the said brace and the edges of both of said frames opposite the said member whereby the free edge of both of said frames will be directly braced from said member.

1,804,123. GAS WATER HEATER. ALOYSIUS T. SPONAR, Conshohocken, Pa., assignor to John Wood Manufacturing Company, Conshohocken, Pa., a Corporation of Pennsylvania. Filed June 18, 1928. Serial No. 286,373. 11 Claims. (Cl. 122—210.)



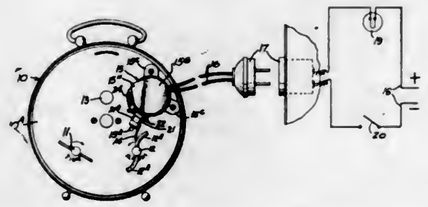
9. The combination with two cellular water heater units each including a congeries of tubes having their opposite ends expanded and connected together and a cylindrical casing encircling said congeries and inclosing a water space around said tubes; of water ports in said units, at diametrically opposite portions thereof, but within the outer circumference thereof; and means connecting the ports in the adjacent faces of said units, including a fitting extending transversely with respect to the common axis of said units and having branches respectively fitted to said ports; wherein the cellular water heater units are held in axially spaced relation by means independent of the fitting connecting their adjacent ports, and including a circumferential band encircling said units and having means whereby it may be constricted thereon.

11. A gas water heater having an annular candensate pan at the bottom thereof, and an axially adjustable closure for the central opening in said pan, comprising a disk having spring fingers engaging said pin; whereby the admission of secondary air to said heater may be controlled, and said closure forms a safety blow-out valve for exploded gases.

1,804,124. LUBRICATING COMPOUND. GEORGE L. SOUTHARD, Franklin, Pa. Filed Nov. 24, 1926. Serial No. 150,621. 6 Claims. (Cl. 87—9.)

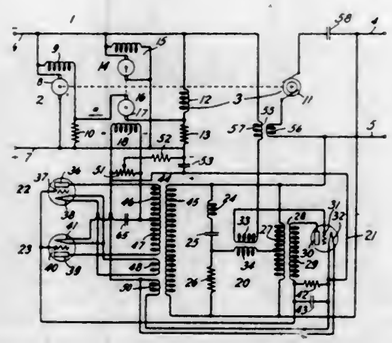
1. A lubricating compound consisting of a petroleum oil having a flash test ranging between 300° F. and 650° F. derived from crude petroleum which latter consists of approximately 33% of aromatic and unsaturated hydrocarbons, and a naphthene-paraffin base with the naphthenes predominating, and an admixture of five per cent to twenty per cent aluminium stearate.

1,804,125. CLOCK CONTROLLED SWITCH. JOSEPH STEINHAUSER, Chicago, Ill. Filed May 18, 1928. Serial No. 278,712. 3 Claims. (Cl. 200—36.)



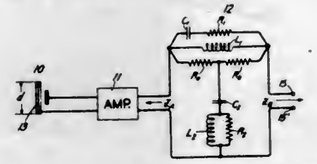
1. A circuit closing or opening mechanism comprising a time controlled rotatable member, a housing having an electric switch therein adapted to close or open an electric circuit, movable means positioned outside of said housing and operatively connected to said switch and adapted upon displacement to operate said switch, a pivotally mounted arm, and a spring for said arm, said spring being adapted to cause a movement of said arm into position against said movable means upon displacement of said movable means by said rotatable member to thereby retain said movable means in displaced position whereby the switch in said housing will be retained in either closed or open circuit pposition.

1,804,126. REGULATOR SYSTEM. HUGH M. STOLLER, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 19, 1929. Serial No. 341,233. 17 Claims. (Cl. 171—119.)



1. In a regulator system for a generator, a Wheatstone bridge circuit connected to the generator circuit, a thermionic tube operated by said bridge circuit in accordance with a characteristic of the generator, means controlled by the tube for governing said generator to maintain the characteristic thereof constant, and a feedback circuit for impressing a potential on the grid of the tube which varies according to the load on the generator.

1,804,127. SPEECH TRANSMISSION SYSTEM. NORMAN R. STRYKER, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 4, 1928. Serial No. 275,069. 6 Claims. (Cl. 179—1.)



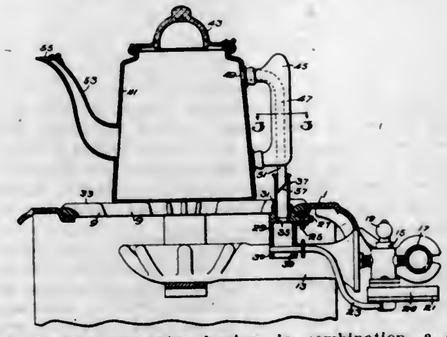
1. In a speech-wave translation system, in combination, an acoustical wave energy translating device, and means for compensating the irregularities of the speech transmission due to non-uniform reflection of acoustical waves by said translating device, said compensating means comprising a combination of wave conducting elements proportioned in accordance with a pre-assigned attenuation characteristic determined by the surface area opposed by said translating device to sound waves incident thereon.

1,804,128. DRUM PEDAL. CECIL H. STRUPE, Indianapolis, Ind., assignor to Leedy Manufacturing Company, a Corporation of Indiana. Filed July 7, 1928. Serial No. 290,918. 7 Claims. (Cl. 84—422.)



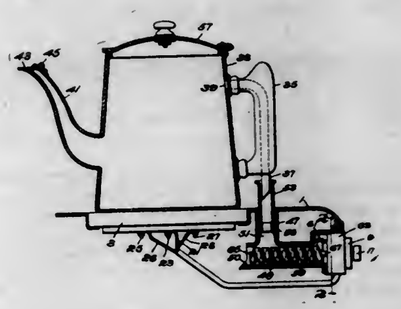
1. A drum pedal comprising a base, a shaft journalled thereon, a beater head carried by said shaft, a foot plate connected to the shaft to rock the same, a spring, and a connection between said spring and shaft to bias the shaft in opposition to the foot plates, said connection being of such character that the effectiveness of the spring upon the shaft may be varied in both force and amplitude.

1,804,129. COOKING APPARATUS. CLARENCE D. STARR, Barrington, R. I., assignor to Barstow Stove Company, Providence, R. I., a Corporation of Rhode Island. Original application filed Oct. 1, 1927, Serial No. 223,361. Divided and this application filed Oct. 27, 1928. Serial No. 315,551. 2 Claims. (Cl. 126—42.)



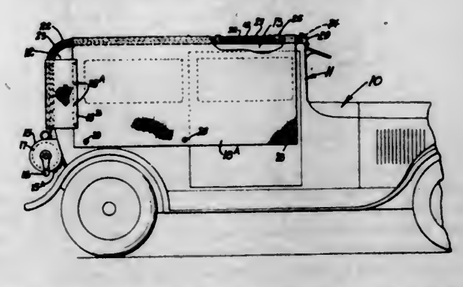
1. Cooking apparatus having, in combination, a support for a cooking vessel, a heater below the plane of said support, said vessel having a conduit for establishing communication between the interior of said vessel adjacent its top and the exterior thereof at a point spaced from its side walls above its bottom, a thermostatically governed controller for said heater having a heat sensitive element, a flue below the plane of said support for directing currents of air and steam against said heat sensitive element, and a readily removable tube for extending said flue to above the plane of said support for connecting said flue to said conduit.

1,804,130. ELECTRIC RANGE. CLARENCE D. STARR, Barrington, R. I., assignor to Barstow Stove Company, Providence, R. I., a Corporation of Rhode Island. Filed Nov. 14, 1928. Serial No. 319,359. 4 Claims. (Cl. 219—20.)



3. An electric range for cooking vessels having, in combination, a frame, an electric heating element at the upper side of said frame, a vertically directed flue for connection to a cooking vessel, said flue having open ends and being carried by said frame, the lower end of said flue being at the under side of said frame below said heating element, a thermostatic switch for controlling current flow through said heating element, said switch having a heat sensitive element in said flue, and connections between said switch and said heating element for causing ascending air currents through said flue to increase the heating effect of said heating element and descending steam currents to decrease the heating effect of said heating element.

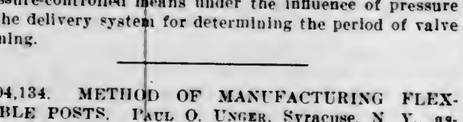
1,804,131. AUTOMOBILE COVER. HENRY SVIHLA, Chicago, Ill. Filed Sept. 21, 1929. Serial No. 394,358. 1 Claim. (Cl. 296—98.)



The combination with an automobile of a housing mounted on said automobile, a roller rotatably mounted in said housing, said roller having a sheave fixed thereto at each end thereof, a crank for rotating said roller and sheaves, a pair of guides extending upwardly from said housing and over the top of said automobile, each pair of said guides comprising a pair of spaced tubular members, a flexible cover normally wound on said roller between said sheaves, said cover having a plurality of

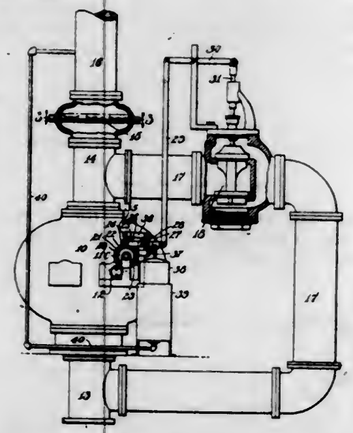
spaced stiffening crossbars, one end of said cover being attached to said roller, a pair of flexible cables attached at one end respectively to said sheaves and being adapted to be wound on said sheaves as the cover is unwound from said roller upon the rotation of said crank, the ends of said stiffening cross-bars being disposed between said spaced tubular members, one of each of said pairs of spaced tubular members being slotted longitudinally thereof, and a clip slidably mounted in each of said slotted tubular members, both of said clips being rigidly connected to the cross-bar at the free end of said cover and one end of each cable being fixed to one of said clips, said flexible cables being movable within said tubular guide members.

1,804,132. CONSTRUCTION UNIT. EDWARD H. TASHJIAN, New York, N. Y. Filed Sept. 17, 1928. Serial No. 306,365. 5 Claims. (Cl. 72—110.)



1. A construction unit comprising an upper member, a tension member, and a web consisting of a pair of rods bent to zig-zag shape each secured to said members and each having anchoring extensions beyond the outer edge of said upper member, the extensions of one rod alternating with successive extensions of the other rod along the length of the unit.

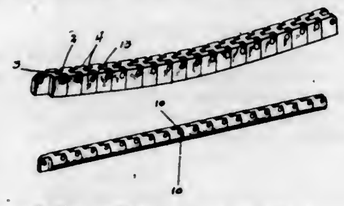
1,804,133. UNLOADING VALVE. WILLIAM TOWNSEND, Chicago, Ill., assignor to The Connersville Blower Company, Inc., Connersville, Ind., a Corporation of Indiana. Filed Oct. 27, 1927. Serial No. 229,089. 6 Claims. (Cl. 230—22.)



1. The combination of a fluid-pressure producer for a delivery system supplied thereby, a valved by-pass for the discharge of said producer, means synchronized with said producer for opening and closing said valve, and pressure-controlled means under the influence of pressure in the delivery system for determining the period of valve opening.

1,804,134. METHOD OF MANUFACTURING FLEXIBLE POSTS. PAUL O. UNGER, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Dec. 27, 1927. Serial No. 242,742. 4 Claims. (Cl. 59—35.)

3. The method of making flexible parts comprising forming a plurality of tongued and grooved links substantially rectangular in cross section, assembling the links with the tongues and grooves of adjacent links in registration, providing a plurality of pintles having a portion of one end less in diameter than the remaining portion of the pintle, fastening the links by means of said pintles

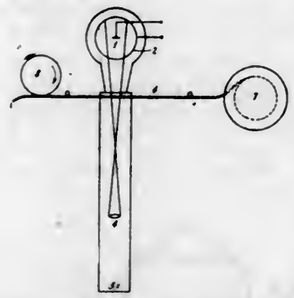


passed through the registering tongues and grooves, and altering the shape of the pivotally connected links transversely of the lengths of the tongues and grooves to form a flexible post approximately cylindrical in cross section and uniform throughout its length.

1,804,135. PREPARATION CONTAINING MEDICINAL OIL. FRANK R. VALENTINE, Belle Center, Ohio. Filed Dec. 16, 1927. Serial No. 240,614. 1 Claim. (Cl. 167—56.)

A solid stable medicinal preparation containing castor oil obtained by dissolving 1½ parts of isinglass in 180 parts of water, adding with agitation 120 parts of castor oil to said isinglass solution while gently boiling same and continuing the boiling until a white creamy emulsion is formed, cooling the emulsion while agitating same, adding 100 parts of sugar to said emulsion and heating same until the sugar has dissolved and the emulsion begins to stiffen, then intermittently heating the mass to increasing and decreasing temperatures not exceeding the boiling point until the mass begins to stiffen and appears as if it were about to sugar, and allowing the mass to cool and harden sufficiently to be formed into pieces.

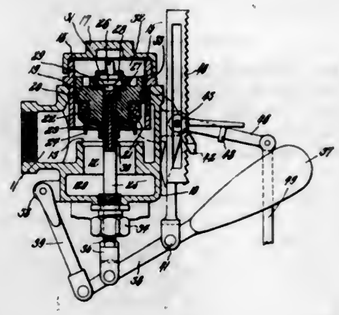
1,804,136. SIGNAL TRANSMITTING SYSTEM. GEORGE MAURICE WRIGHT, Chesterfield, and SIDNEY BERTRAM SMITH, Chelmsford, England, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Mar. 5, 1926, Serial No. 92,382, and in Great Britain Mar. 6, 1925. Renewed May 6, 1929. 20 Claims. (Cl. 178—51.)



1. The method of transmitting signals at high speed which consists in perforating a tape in accordance with the desired signals, causing said tape to interrupt a beam of light, incident upon a light sensitive cell, in accordance with said signals, and causing alternating current pulses from said cell to control a signal transmitter.

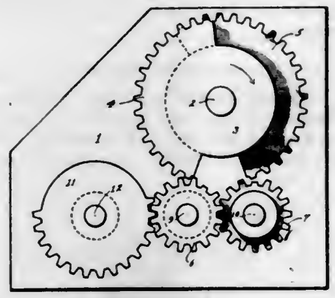
1,804,137. AUTOMATIC VALVE. THOMAS J. YATES, Salem, Mass., assignor to Yates Machine Company, Salem, Mass., a Corporation of Massachusetts. Filed May 4, 1928. Serial No. 275,230. 9 Claims. (Cl. 137—68.)

1. An automatic valve comprising a fluid inlet and outlet, a valve chamber intermediate thereof, a piston fitted to enter said chamber and to seat in said outlet, a valve stem connected to said piston, a weight connected to the valve stem to close the valve, means for retaining the weight in elevated position, means for releasing the weight to close the valve, means for preventing abrupt stoppage of flow through the valve comprising a rim on said piston having a serrated edge and adapted to enter said outlet, means for retarding the closing motion of the



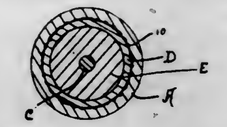
valve, said retarding means comprising a hollow cylinder closed at one end and open at its opposite end into said valve chamber, said cylinder having a longitudinal groove in the wall thereof and being adapted to receive the piston for sliding motion therein, and a ring on said piston and adapted to provide a substantially fluid-tight fit in the cylinder, said groove being terminated short of the closed-valve position of said ring in said cylinder.

1,804,138. REVERSING GEAR MECHANISM. HARRY A. YEIDER, Grand Rapids, Mich., assignor to Automatic Musical Instrument Company, Grand Rapids, Mich., a Corporation of Delaware. Filed Mar. 27, 1929. Serial No. 350,168. 4 Claims. (Cl. 74—14.)



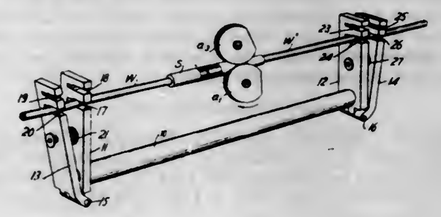
1. A gear train comprising a driving gear wheel continuously rotating in one direction, said driving gear having two segments of teeth thereon spaced apart axially of the gear and each segment located on circumferentially different peripheral portions of the gear wheel with respect to each other, a pair of gears having intermeshing teeth located in the axial space between said segment, one of said pair of gears being arranged to mesh with one of said segments and the other one of said pair of gears being arranged to mesh with the other of said segments.

1,804,139. PRINTING BLANKET FOR OFFSET WORK. FRANK W. ADSIT and THOMAS W. HICKS, Minneapolis, Minn. Filed Jan. 16, 1926. Serial No. 81,685. 4 Claims. (Cl. 101—217.)



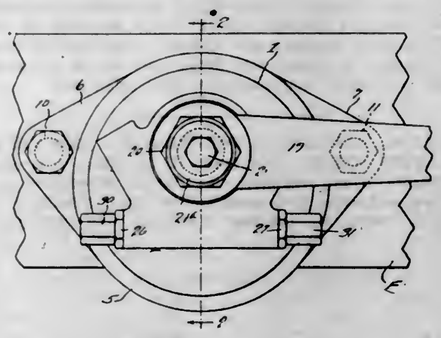
1. A printing cylinder including, a removable cylindrical shell portion and a printing film deposited around the same to provide a covering of ink receiving composition adaptable of transferring the ink in an offset manner.

1,804,140. CLAMPING DEVICE. JOSEPH F. BARRY, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,167. 3 Claims. (Cl. 24—132.)



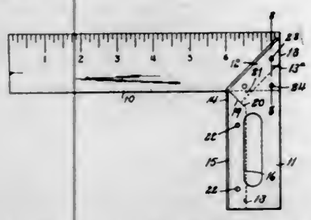
3. In a wire clamping device, a supporting rod, a pair of plates mounted on the ends of said rod, registering means carried by the plates in each pair for receiving the wires, and means for moving the plates out of registry with respect to the other plates for gripping and holding the wires.

1,804,141. HYDRAULIC SHOCK ABSORBER. ELLIOTT W. BEIDLER, Elyria, and AMANDUS C. ROESSLER, Lakewood, Ohio, assignors to Romec Corporation, Elyria, Ohio, a Corporation of Ohio. Filed Mar. 24, 1930. Serial No. 438,310. 7 Claims. (Cl. 188—89.)



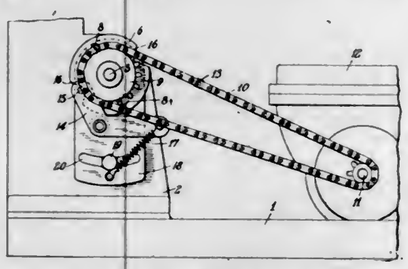
1. In a hydraulic shock absorber, the combination of a pressure chamber having a peripheral wall shaped to conform to a limacon curve, a rotor mounted in said chamber with its axis of rotation passing through the chordal center of the limacon and parallel to the principal axis of the chamber, a piston blade extending through said rotor transversely of its axis, said blade being shorter than the chordal length of the limacon.

1,804,142. TRY- AND MITER-SQUARE. SAMUEL BILLINGTON, Southington, Conn., assignor to The Southington Hardware Company, Southington, Conn., a Corporation. Filed July 23, 1930. Serial No. 470,127. 1 Claim. (Cl. 33—112.)



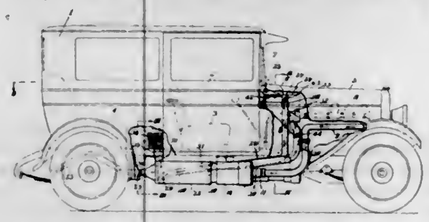
A try- and miter-square comprising a blade and a handle-portion including a beveled end, the inside edge of the handle and the edge of the beveled-portion thereof each being formed with a longitudinally-arranged groove, a plate T-shaped in cross-section having its web notched whereby the plate may be bent at the desired angle, the bent portion of the plate being formed with a slot extending centrally through the web, the web of said strip being entered into the grooves in the handle and bevcled-portion, the blade being entered through the slot in the bent-portion of the plate, and fastening means extending through the handle and through the said web, whereby the plate and blade are secured to the handle.

1,804,143. FEEDING DEVICE. WILFRED T. BIRDSALL, Montclair, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed June 8, 1926. Serial No. 114,407. 9 Claims. (Cl. 74—14.)



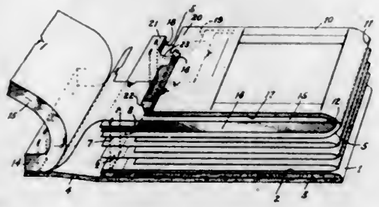
1. In combination, a shaft, a member secured to said shaft and carrying a plurality of projections concentric to the shaft, a sprocket wheel loosely mounted on said shaft, a chain engaging said sprocket wheel and having a dog adapted to engage said projections one at a time to rotate said shaft, and means to drive said chain.

1,804,144. APPARATUS FOR HEATING AND VENTILATING CARS. RICHARD E. BISSELL, Cleveland Heights, Ohio, assignor to Thomas Products, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 11, 1926. Serial No. 154,298. 3 Claims. (Cl. 237—12.3.)



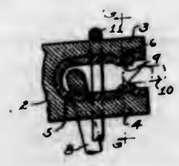
2. Apparatus for heating and ventilating closed-body passenger cars driven by internal combustion engines, comprising a heater connected in the engine exhaust duct and into which said duct discharges, a chamber surrounding said heater but out of communication therewith adapted to be heated by said exhaust gases, a fresh air collector, a conduit connecting said collector with said heating chamber, an air intake in the interior of said car, a conduit extending from said air intake into said first-named conduit with its outer wall spaced from the inner wall of said first conduit to provide a suction tending to draw the air from the interior of the car body, a delivery outlet opening into the car body and a discharge conduit connecting the heating chamber with said delivery outlet.

1,804,145. MANIFOLDING BOOK. EDWARD KIRBY BOTTLE, Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Ontario, Canada. Filed Nov. 15, 1927. Serial No. 233,346. 10 Claims. (Cl. 282—14.)



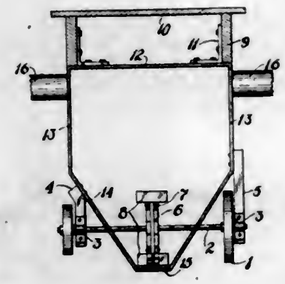
1. A device of the character described comprising a plurality of sets of leaves bound into a pad, each set comprising a bound leaf and a free leaf, said bound leaf being attached to said free leaf at the end opposite the binding, a weakened line between said bound leaf and said binding, a transfer strip bound within said pad in position to extend between the leaves of each set in succession, a blocking strip bound within said pad above said transfer slip, said free leaves terminating at their upper ends below said binding and said blocking strip terminating at its lower end below the upper end of said free leaf, and a cut-out notch through said carbon strip and through said blocking strip in juxtaposition to said weakened line and in position to expose a corner of the free leaf of each of said sets in succession.

1,804,146. BRAKE BEAM HANGER BRACKET. EDWIN G. BUSSE, Chicago, Ill., assignor, by mesne assignments, to Frederic Schaefer, Pittsburgh, Pa. Filed May 4, 1927. Serial No. 188,685. 13 Claims. (Cl. 188—209.)



1. In a brake beam hanger bracket, members forming an open-ended and open-sided recess, and an open-ended bushing in said recess with an open side and formed of spring material, the elasticity of said bushing retaining it in said recess.

1,804,147. CONDUIT FOR DUST COLLECTING SYSTEMS. RAYMOND E. CALLER, New York, N. Y. Filed May 31, 1929. Serial No. 367,274. 2 Claims. (Cl. 302—11.)



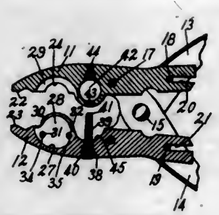
1. In a dust collecting system a main conduit having a top, and having an upper relatively wide portion with spaced parallel straight walls and a lower portion having converging sides, and branch conduits communicating with the said main conduit through the straight walls thereof, and at the upper part of the walls.

1,804,148. CABLE TRACTOR. JAMES S. CHURCH, Brookline, Mass. Filed Mar. 30, 1925. Serial No. 19,546. 5 Claims. (Cl. 175—377.)



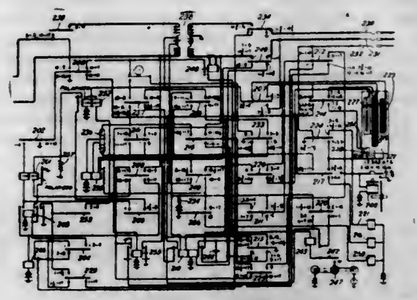
3. A conduit tractor adapted to be operated by electric power comprising a centrally disposed power shaft, a worm gear at each end thereof and ratchet and pawl clutches actuated by each of said worm gears enclosed within a sealed casing adapted to bring said power shaft into operative relation with traction members external to said casing when the power shaft is rotated, said clutches being provided with means for throwing oil over the gears within said casing.

1,804,149. HAND TOOL. FRED J. CLEMENS, East Haven, Conn., assignor to The William Schollhorn Company, New Haven, Conn. Filed Feb. 7, 1930. Serial No. 426,588. 5 Claims. (Cl. 164—81.)



1. In a belt plier, a pair of cooperating jaws, a relatively narrow slot in one of said jaws, said slot having a semi-cylindrical bottom edge portion, a cutter mounted in said slot and having an edge portion shaped to fit the bottom edge of the slot, a convex cutting edge on said cutter extending towards the other jaw, and an opening in the other jaw in which the cutter is received when the jaws are closed.

1,804,150. TELEPHONE EXCHANGE SYSTEM. RAYMOND E. COLLIS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 4, 1929. Serial No. 330,350. 15 Claims. (Cl. 179—18.)



1. In a signaling system, a control device, a responsive device remote therefrom, a control circuit extending between said devices, a control relay in said responsive device in said control circuit and operable thereover, and a second relay in said responsive device in said control circuit and operable from said control device thereover for disassociating said control relay from said circuit.

1,804,151. RETINOSCOPE. JACOB COPELAND, Chicago, Ill., assignor to Riggs Optical Company-Consolidated, a Corporation. Filed June 9. 1927. Serial No. 197,576. 8 Claims. (Cl. 88—20.)



1. In a device of the class described, the combination of a hollow member providing a handle having a housing mounted at one end thereof, said housing having sight openings, a reflector located in the housing, a tubular element connected with and mounted for rotation and reciprocation within said hollow handle, a lamp mounted in one end of the tubular element, connections for said lamp also arranged in the tubular reciprocable element, said connections including a reciprocable element having a flexible conductor connected therewith, a support for said reciprocable element located in said tubular element between the ends thereof, and means located in said reciprocable element for frictionally holding said flexible conductor with relation to said tubular element.

6. In a device of the character described having a tubular handle, a housing secured to the handle, a reflector located in said housing, said housing and reflector having sight openings, in combination with an element having a

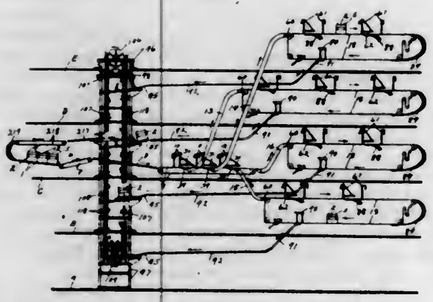
lamp socket, flexible conductors one of which has an end thereof connected with said socket, a yieldable contact, one of said conductors being connected with said yieldable contact, a support for the yieldable contact, said flexible conductors being extended through and beyond one end of said element, means for engaging said flexible conductors between the ends thereof to thereby hold said conductors relatively to the tubular element, said element being insertable into said tubular handle through an end of said handle with a portion of the flexible conductors extending from said handle, and means carried by said handle connected with said element for moving said element with respect to said handle, said handle having an opening whereby said element may be rotated and reciprocated within said handle.

1,804,152. DISPLAY PACKAGE. JAMES L. COWAN, Pittsburgh, Pa., assignor to Italo-French Produce Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 15, 1929. Serial No. 378,349. 2 Claims. (Cl. 206—44.)



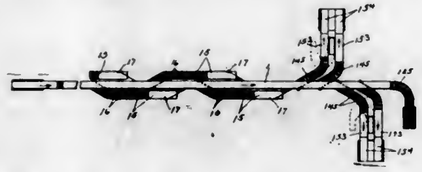
1. A display package comprising a box-like container consisting of a middle body portion formed of a rectangular piece of pasteboard or like material creased and folded to form the bottom and sides of the container but open at one side and at the two ends, and caps fitted over the ends of said body member to complete the box except for the top side, and a transparent moisture-proof cover wrapped around said container and sealed thereon, said wrapper holding said end caps in place on the body portion as well as the contents of the package therein while permitting an unobstructed view of the contents of the package through the open side of the container.

1,804,153. CONVEYING APPARATUS. JAMES T. COWLEY and LAVONT C. ALLEN, Syracuse, N. Y., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Oct. 17, 1927. Serial No. 226,659. 35 Claims. (Cl. 186—20.)



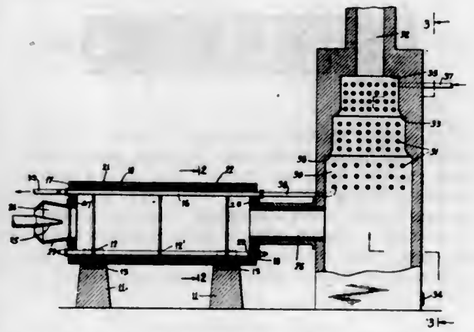
1. In a conveying apparatus, a conveyor, a branch conveyor leading therefrom, a pilot car adapted for convoying one or more containers along said conveyor, a deflector, and means actuated by the pilot car after the pilot car has passed the deflector for closing the deflector.

1,804,154. CONVEYER SYSTEM. JAMES T. COWLEY and LAVONT C. ALLEN, Syracuse, N. Y., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Mar. 5, 1928. Serial No. 259,236. 37 Claims. (Cl. 186—20.)



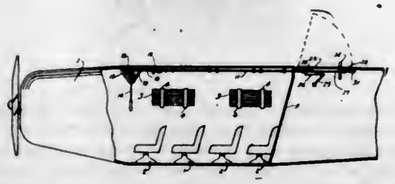
2. In a conveyer system, a conveyer, a branch conveyer comprising a dwell station leading therefrom, a pilot carrier adapted to carry one or more articles, a deflector, means carried by the pilot carrier to actuate the deflector to divert said pilot carrier from the main conveyer into the dwell station having a second conveyer by which the carrier is returned to the main conveyer.

1,804,155. FURNACE. LUIS DE FLOREZ, Pomfret, Conn., assignor to The Texas Company, a Corporation of Delaware. Filed Dec. 28, 1927. Serial No. 242,986. 3 Claims. (Cl. 122—356.)



1. In a furnace, a horizontally arranged cylindrical metal shell having a refractory lining, a plurality of horizontally disposed heating tubes annularly arranged within said shell adjacent said lining, and annular tube plates having their outer edges abutting the inner walls of said shell and constructed and arranged to support said tubes and to define dead air spaces about said tubes.

1,804,156. SAFETY DEVICE FOR AEROPLANES. MIKULAS DABUL, Chicago, Ill. Filed May 1, 1930. Serial No. 448,934. 7 Claims. (Cl. 244—30.)

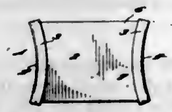


1. In an aeroplane, doors hingedly attached thereto and normally forming the cabin ceiling; said doors having their adjacent edges overlapping each other, springs on said doors imparting an opening stress thereto; eyelets in the lower of said overlapping doors; a slidable rod on the upper door having hooks adapted to engage said eyelets and having an extended forward end terminating in a hook, a lever pivoted in said cabin ceiling; a rod releasably connecting said lever and the door locking rod, and a spring normally pressing said connecting rod against said block, said spring being adapted to push said connecting rod against said block, said spring being adapted to push said connecting rod out of engagement with said door locking rod when said connecting rod reaches a predetermined point in its forward movement.

1,804,157. PROCESSING OF LATEX. ROBERT F. ELDER, Portland, Me., and ROGER B. HILL, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Aug. 5, 1929. Serial No. 383,771. 6 Claims. (Cl. 18—50.)

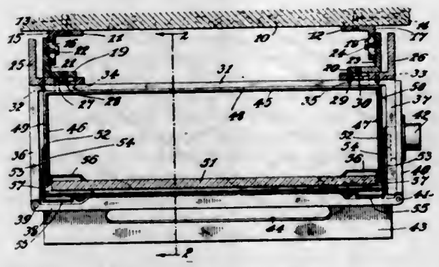
6. A process which comprises adding creaming and vulcanizing agents to latex, heating the latex to effect vulcanization while creaming is taking place, allowing the vulcanized latex to stand until substantially maximum creaming has been effected, and recovering the vulcanized, creamed portion of the latex.

1,804,158. HOLDER OF STRAPS OF SUSPENDERS AND SIMILAR ARTICLES. GOTTLIEB F. ESSIG, Philadelphia, Pa. Filed Oct. 6, 1930. Serial No. 486,672. 2 Claims. (Cl. 24—73.)



2. A holder for retaining in position on the shoulder of the wearer straps of apparel comprising a strip of sheet material having opposite sides inwardly curved and having its marginal edges deflected inwardly to form retaining means for the straps, one of said sides having openings adapted to receive a fastening device.

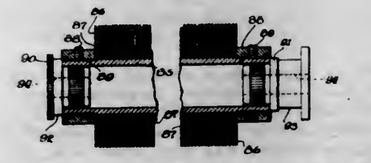
1,804,159. MAIL CHUTE. RUTH FELLS, Brooklyn, N. Y., assignor to United States Mail Chute Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 390,873. 9 Claims. (Cl. 193—8.)



1. In a mail chute, a conduit, sets of angle irons for connecting the conduit to a wall, each set of angle irons comprising a member connected to the wall, a member connected to the chute, and an intermediate member adjustably secured to the member connected to the wall in order to insure the position of the chute being vertical irrespective of irregularities in the surface of the wall.

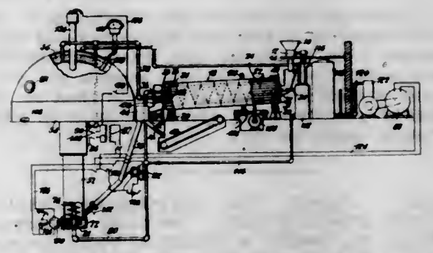
5. In a device of the class described, a channel member having back and side portions, and a panel member comprising a glass plate and resilient frames therefor extending along the sides thereof, the free edges of said resilient frames being adapted to embrace the opposite faces adjacent the edges of the sides of said glass plate, there being formed along the length of the resilient frames intermediate the edges thereof, resilient walled sockets adapted to receive the edges of the respective side portions of said channel member, the walls of said sockets being spaced apart a distance equal to the thickness of the side portions of the channel member, whereby, upon pressing the panel member against the channel member, the edges of the side portions of said channel member may be guided into and become operably retained within the sockets of the resilient frames.

1,804,160. PRINTING MECHANISM. ARTHUR B. FROEHLICH, Chicago, Ill. Filed July 12, 1928. Serial No. 292,267. 13 Claims. (Cl. 197—6.)



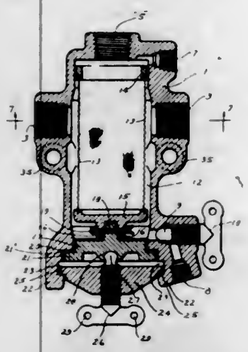
12. In a printing machine, a cylindrical platen having peripherally extending, spaced ribs, means for mounting said platen for rotation about its longitudinal axis, a type bar mounted for movement into contact with the convex periphery of said platen and having concave type fitting the convexity of said platen, the type having projections which interfit with the ribs of said platen during contact.

1,804,161. METHOD OF AND MEANS FOR PRODUCING MOLTEN AND REFINED METAL FROM CRUDE ORES. WINDER B. GOLDSBOROUGH, South Norwalk, Conn., JOHN D. MORGAN, South Orange, and GEORGE HAMPTON WYCKOFF, Mountain Lakes, N. J., assignors to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 17, 1927, Serial No. 213,482. Renewed Sept. 20, 1930. 20 Claims. (Cl. 75—22.5.)



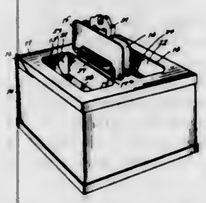
1. A process for producing refined metal from crude iron ore comprising intimately mixing a charge of the finely ground ore with a carbonaceous fuel, heating said mixture in a reducing atmosphere to a temperature at which sponge iron is formed, separating the sponge iron thus formed from the non-ferrous impurities, continuously feeding the purified sponge iron in a charge column upwardly toward the hearth of an electrically heated refining furnace, heating the upwardly moving charge column by resistance to an electric current passed therethrough, exposing the top of the charge column to a refining temperature above its melting point by casting an electric arc between the top of the charge and an electrode of opposite polarity spaced from the top of the charge in the refining furnace, and collecting and further heat treating the molten metal formed at the top of the charge in the hearth of said furnace.

1,804,162. STRAINER. FREDERICK H. HEHEMANN, Cincinnati, Ohio, assignor to The Lunkenheimer Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 1, 1930. Serial No. 448,879. 4 Claims. (Cl. 210—165.)



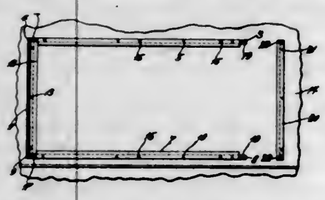
1. In an apparatus, a strainer therefor consisting of a cylindrical gauze member supported at one end by a disc in which one end of said gauze member is embedded and strengthened at its other end by a ring fitting within said gauze member and spun over to engage the end and the outside of said gauze member and a carrier for the strainer pivoted to said disc.

1,804,163. RECEPTACLE FOR CIGARETTE ASHES AND THE LIKE. WALTER F. HEROLD, Upper Montclair, N. J. Filed May 24, 1928. Serial No. 280,182. 14 Claims. (Cl. 131—51.)



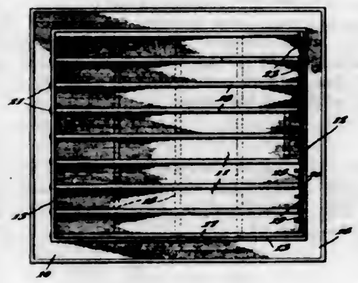
1. A receptacle for ashes or the like, having an ash receiving space, a movable ash support for said space, a movable cover for closing said space, and operating means movable relatively to said support and cover, adapted to effect the closing of either of them and the opening of the other, and adapted to maintain either of them in closed position.

1,804,164. FRAME FOR SUPPORTING DISPLAY CARDS AND THE LIKE. DENNIS L. HOLLENBECK, Chicago, Ill., assignor to Litho-Paint Poster Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 13, 1929. Serial No. 413,765. 2 Claims. (Cl. 40—152.)



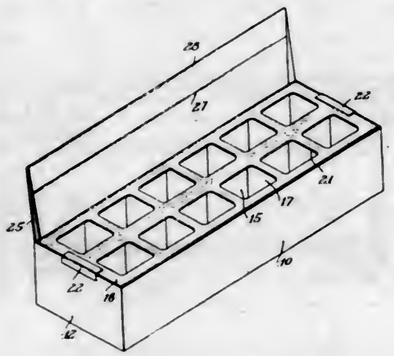
1. A poster display frame, in combination with a support, comprising a pair of longitudinal side members and a transverse end member, each of said members including a portion seated against said support and a portion extending inwardly beyond said first portion, elements attaching the ends of said end member to the ends of said side members and attaching both said end member and said side members rigidly in connection with said support, a detachable end member at the opposite ends of said side members from said first end member and including a portion seating against said support and a portion extending inwardly beyond said first portion, and elements attaching said second end member to said side members and permitting detachment of said second end member from both of said side members.

1,804,165. FURNACE REGISTER. CHARLES J. HOLUB, Columbus, Ohio, assignor to The W. E. Lamneck Company, Columbus, Ohio, a Corporation of Ohio. Filed May 7, 1929. Serial No. 361,168. 2 Claims. (Cl. 98—110.)



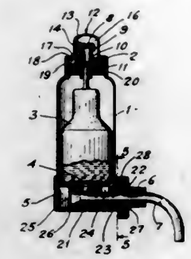
1. A device of the class described, comprising, a grille frame, a series of valve shutters pivoted to said frame, each of said shutters having its axis disposed along its upper edge, a slide bar mounted in said frame for operating the series simultaneously, the operative connection between said slide bar and shutters comprising pins on the bar and the shutters having slots below their pivotal connections traversed by said pins, and the slots formed for permitting the pins to impart a camming action to the shutters.

1,804,166. EGG CARTON. HARRY A. INMAN, Newark, N. Y. Filed Dec. 12, 1929. Serial No. 413,642. 3 Claims. (Cl. 229—28.)



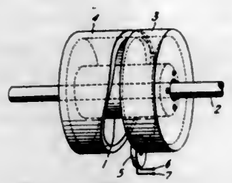
1. An egg carton comprising, in combination, a box body having one open side, partition members extending substantially perpendicular to the plane of said open side for subdividing said body into a plurality of egg receiving compartments, an egg retaining member substantially in the plane of said open side, said retaining member overlying and hiding the edges of said partition members and having a perforation of smaller size than an egg in alinement with each compartment, so that eggs in said compartments may be observed through said perforations but may not be removed therethrough, sealing means for holding said retaining member in place, and a movable closure member overlying said retaining member.

1,804,167. VALVE. WILLIAM A. KEENEY, Wethersfield, Conn., assignor to The Keeney Manufacturing Company, a Corporation of Connecticut. Filed Sept. 10, 1929. Serial No. 391,662. 14 Claims. (Cl. 236—63.)



1. In a radiator valve, a valve casing having an air escape valve therein and an outlet, and liquid absorbing means in said casing having communication with said outlet and receiving through said communication liquid escaping through said outlet.

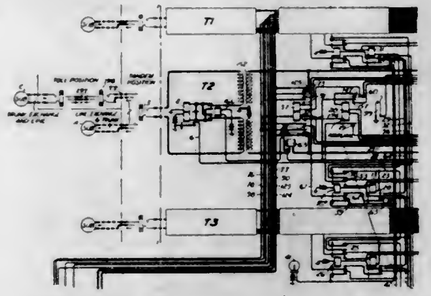
1,804,168. METHOD OF AND MEANS FOR DETERMINING CYCLIC VARIATIONS IN A ROTATING MEMBER. ARTHUR C. KELLER, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 10, 1928. Serial No. 253,251. 5 Claims. (Cl. 175—183.)



1. Apparatus for determining variations in the cyclic rotation of a rotating member comprising a magnet structure to be attached to the rotating member, an electrical pick-up coil and apparatus brought into circuit connection therewith for visibly indicating the voltage waves induced in the electrical pick-up coil, the said magnet structure being so formed that for an unvarying cyclic rotation of the magnet structure a voltage wave of approximately pure sinusoidal form will be generated.

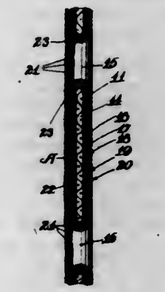
1,804,169. TELEPHONE EXCHANGE SYSTEM. ALFRED D. KNOWLTON and SAMUEL H. EVERETT, New York, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 21, 1928. Serial No. 320,784. 2 Claims. (Cl. 179—6.3.)

1. In a telephone system, an operator's position, a subscriber's line outgoing therefrom, a plurality of link circuits at said position adapted to connect with said line, a toll device associated with said line, said device being arranged to operate in any one of a plurality of manners, operator controlled switching means at said position common to and associated with said link circuits for selectively controlling the operation of said device, and means



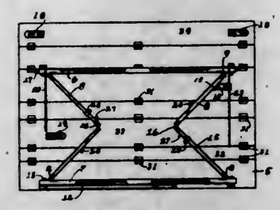
comprising a listening key individual to each of said link circuits for individually associating said common means therewith.

1,804,170. METHOD OF MAKING MOTION PICTURE SCREENS. WALDEMAR H. C. LASSEN, St. Paul, Minn. Filed Jan. 12, 1929. Serial No. 332,001. 6 Claims. (Cl. 88—24.)



1. The method of making a motion picture screen consisting, in impregnating a perforated sheet with highly elastic and pliable material, flowing the openings in said sheet clean of impregnating material, and covering the surface between the openings with a layer of small fluorized glass globules.

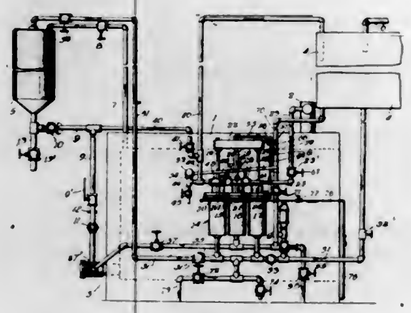
1,804,171. FOLD-TYPE TABLE. GEORGE A. LEWIS, Cleveland, Ohio. Filed Aug. 12, 1927. Serial No. 212,470. 1 Claim. (Cl. 45—116.)



A table comprising a top consisting of a plurality of members laterally movable one upon another, a supporting frame comprising side bars one of which is secured to the under surface of one of said members and sectional end bars hinged to the side bars so that the frame may be collapsed in compact relation with the side bar which is secured to the member, and a hinged latch mounted upon the other side member for detachably securing the outermost member to said side bar, and a pair of legs

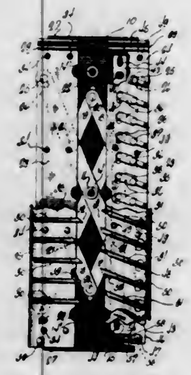
hinged to the outer lateral surface of each of said side bars, so that the legs may be folded down upon the outer surface of said side bars, the frame then folded compactly over one of the outermost members of the top, and the entire top collapsed into a bundle enclosing the said frame therein.

1,804,172. SYSTEM AND MEANS FOR FEEDING WATER TO STEAM BOILERS. ISAAC D. LOOKINGLAND, Chicago, Ill. Filed Oct. 6, 1927. Serial No. 224,351. 5 Claims. (Cl. 122—451.)



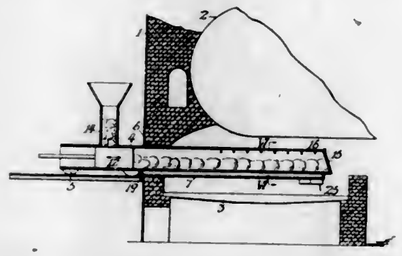
3. In a system of the kind described, a boiler, a multi-cylinder pump, a hot water tank, a receiver connected to the boiler to receive steam therefrom and having a second connection with the boiler for feeding water thereto, connection between the boiler and the similar ends of the several cylinders to supply steam to the cylinders, the opposite end of at least one of the cylinders connected to a source of supply of fluid under a pressure less than the normal steam pressure in the boiler, the remaining opposite ends of the cylinders having an aggregate area greater than the one connected to the source of fluid pressure and connected to the hot water tank to receive hot water therefrom and to the receiver to deliver the hot water thereto.

1,804,173. LOOSE LEAF BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor to Stationers Loose Leaf Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 7, 1929. Serial No. 412,342. 12 Claims. (Cl. 129—9.)



1. In a loose leaf binder adapted to contain record leaves, two series of impaling prongs with their ends normally engaging to form binding rings, means for mounting and guiding the series of impaling prongs for movement away from each other to permit removal or addition of record leaves, means mounting the impaling prongs of one series for angular movement to stagger their ends with respect to the impaling prongs of the other series to effect longitudinal shifting of said leaves with respect to each other, and totally enclosed means for simultaneously moving the prongs of said first series.

1,804,174. FRACTIONAL COMBUSTION APPARATUS. PROSPER JEAN AUGUSTE MAIGNEN, Philadelphia, Pa. Filed Dec. 30, 1925. Serial No. 78,292. 2 Claims. (Cl. 110—24.)



1. In fractional combustion apparatus; the combination with a furnace casing provided with a chimney vent; of a support for a base fire in said casing; a hollow fuel container, including a jacket, movable in and out of said casing to a variable extent, a valve controlling the admission of air between said jacket and container; closure means, carried by said container, normally secluding fuel in said container and movable to permit discharge of the fuel from said container; fuel feeder piston valve means for the introduction of raw fuel to said container, and for the discharge of carbonized matter from said container; and means for the escape of volatile matter from said container.

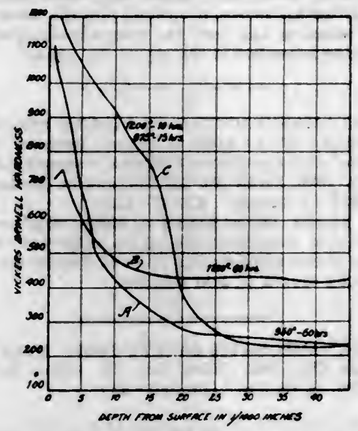
1,804,175. TOWER EXCAVATOR. GEORGE B. MASSEY, Chicago, Ill. Filed Nov. 5, 1930. Serial No. 493,578. 4 Claims. (Cl. 37—117.)



1. In a tower excavator, head and tail towers, a pair of horizontally spaced track cables extending between said towers, supporting means on the head and tail towers for the track cables, said supporting means being more widely spaced on the head tower than on the tail tower, a pair of trolleys arranged to run upon said track cables, a drag bucket suspended from said trolleys, a drag line attached to the drag bucket and extending to winding means on the head tower, and means on one of said towers for simultaneously tensioning the track cables.

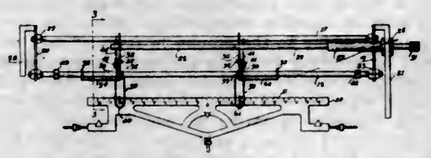
1,804,176. PROCESS OF SURFACE-HARDENING STEEL. HARRY W. MCQUAID, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed June 10, 1929. Serial No. 369,562. 8 Claims. (Cl. 148—16.)

1. The improvement in the process of nitriding steel which consists in heat treating same in two stages in an atmosphere of circulating ammonia, the temperature of the steel in the first stage being approximately 1200° Fahrenheit and the temperature of the second stage be-



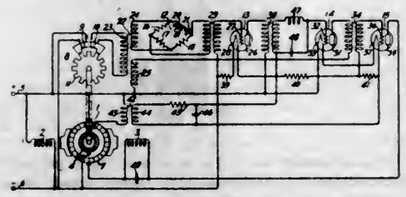
ing approximately 1000° Fahrenheit, said first stage lasting about five to ten hours and the second stage lasting about ten to forty hours.

1,804,177. POISE AND MANIPULATING DEVICE FOR SAME ON BALANCE BEAMS. JOHN P. MÜLLER, New Rochelle, N. Y. Filed Nov. 13, 1929. Serial No. 406,802. 6 Claims. (Cl. 265—54.)



1. A manipulator for the riders or poises of balance beams comprising a plurality of rider manipulators adapted to engage the riders, lift the same from the beam at one point thereof, transferring the riders, and depositing the same at another point of the beam, means for securing the riders against loss, rods for guiding said manipulators, means for limiting their outward movements and means for positively operating said manipulators.

1,804,178. REGULATOR SYSTEM. EDMUND R. MORTON, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 19, 1929. Serial No. 341,229. 12 Claims. (Cl. 171—119.)



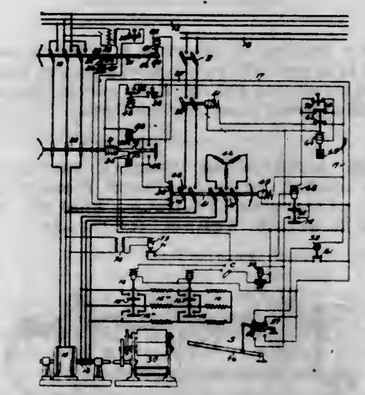
1. In a regulator system, a dynamo-electric machine having an armature and a field winding, control means comprising a space discharge device for varying the excitation of said field winding according to a characteristic of said machine to maintain the machine characteristic constant, and means controlled by the machine armature current for varying the operation of said device to prevent hunting action.

1,804,179. BRAKE OPERATING MECHANISM. CHARLES J. NASH and HERBERT E. BARTSCH, Chicago, Ill., assignors to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed May 11, 1927. Serial No. 190,441. 11 Claims. (Cl. 254—149.)



1. A brake operating mechanism attachment comprising a casing, winding mechanism within said casing, means extending to the exterior of said casing for manually operating said winding mechanism, a conduit extension on said casing, means for attaching said casing to the end wall of a car, a housing provided with a cable guide therein, means for attaching said housing to a railway car, a conduit extension on said housing, a conduit having its ends removably mounted in said extensions, and a cable secured to said drum and extending through said conduit and about said guide.

1,804,180. MOTOR CONTROL SYSTEM. HENRY V. NYE, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 18, 1925, Serial No. 22,616. Renewed Nov. 29, 1929. 11 Claims. (Cl. 172—274.)

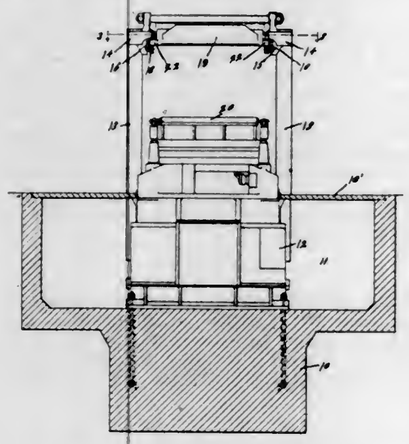


1. In combination, a motor comprising stator and rotor windings and operative to drive a load, circuit-controlling means between said motor and a supply line, means for holding said circuit-controlling means in operative position, an electrical load element, a switching device for connecting one of said motor windings to said electrical load element for braking purposes and capable of operation under certain conditions independently of said circuit-

controlling means, means for maintaining said circuit-controlling means in inoperative position while said motor winding is connected to said electrical load, and means for causing the actuation of said switching device to inoperative position and the release of said maintaining means.

2. In combination, a motor comprising stator and rotor elements and operative to drive a load, circuit-controlling means between one of said elements of the motor and a supply line, an electrical load element, a switching device for connecting one of said elements of the motor to said electrical load element for braking purposes, means for causing actuation of said switching device, means for preventing operation of said circuit-controlling means to closed position while said switching device is in position to connect said latter element of the motor to said electrical load element, and means operable from a point removed from said circuit-controlling means for rendering said preventing means inoperative.

1,804,181. MOLD MACHINE. EARL F. OYSTER, Shaker Heights, Ohio, assignor to The Osborn Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 11, 1928. Serial No. 305,246. 9 Claims. (Cl. 27—42.)



1. In a machine of the class described, a mold bed adapted to be vertically reciprocated, a squeeze head adapted to be moved into and out of the path of said bed, and anti-friction means supporting said head.

1,804,182. LUBRICATOR. GUSTAV C. PEARSON, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Feb. 16, 1929. Serial No. 340,388. 5 Claims. (Cl. 184—55.)

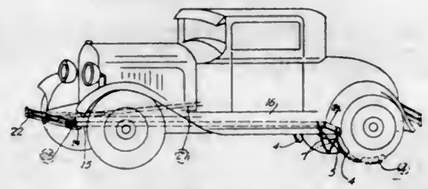


4. In a lubricator, the combination with a casing having an internal chamber forming a lubricant reservoir, of a manifold formed in the upper portion of the casing and including a main supply conduit and oppositely extending branches leading therefrom and opening at opposite sides of the casing, said branches extending over different portions of the reservoir and being transversely pierced, and stems mounted on the transverse perforations and depending below the branches into the lower portion of the reservoir at different points, said stems having passageways for the lubricant opening into the lower portion of the reservoir and into the branch passageways, the stems being accessible at the top of the casing.

1,804,183. MANUFACTURE OF HIGHLY SULPHONATED OILS. WILLY SECK, Augsburg, Germany, assignor to Erba Aktiengesellschaft, Zurich, Switzerland. Filed Feb. 3, 1928, Serial No. 251,738, and in Germany June 23, 1927. 5 Claims. (Cl. 87—12.)

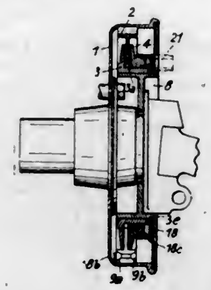
1. A process for preparing a highly sulphonated oil consisting of subjecting the oil to sulphonation in the presence of free sulphonating acid and a substance capable of evolving oxygen in acid solution.

1,804,184. AUTOMATIC SAFETY STOP. HYMAN SEGAL, Kansas City, Mo. Filed Dec. 18, 1929. Serial No. 414,999. 6 Claims. (Cl. 180—83.)



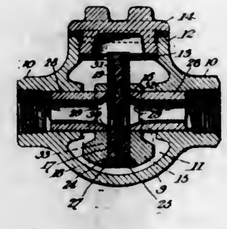
1. A vehicle stop construction comprising, in combination with the traction wheels of the vehicle, shoes releasable for dropping to the ground in front of said wheels, means for normally retaining said shoes suspended off the ground in inoperative position comprising fixed pins releasably engaging said shoes and movable detent and releasing elements operating in one direction to engage and retain said shoes on said pins and also operative by movement in the opposite direction to disengage and release said shoes from the pins, and manually controlled means for actuating said elements for releasing said shoes.

1,804,185. BRAKE. OSKAR LUDWIG SKOPIK, Berlin, Germany. Filed Sept. 26, 1927, Serial No. 221,910, and in Germany Apr. 8, 1927. 5 Claims. (Cl. 188—72.)



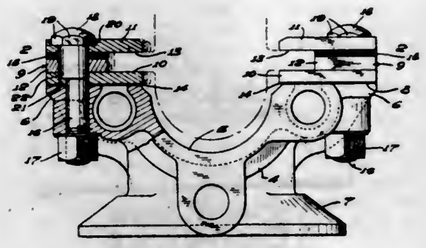
3. In an internal brake for a wheel, the combination of an intermediate ring and two outer rings, all said rings having a common axis, the intermediate ring being connected to the wheel structure to turn therewith, means adapted to prevent the outer rings from turning with the wheel, a cylinder structure connected to one of said outer rings to move in unison therewith, the other of said outer rings having a piston-like extension fiting within said cylinder structure, and means adapted to force fluid under pressure into said cylinder structure to cause said outer rings to be simultaneously actuated towards the intermediate ring.

1,804,186. LUBRICATOR. EDWARD F. TERRY, Jr., Denver, Colo., assignor, by mesne assignments, to The Gardner-Denver Company, Quincy, Ill., a Corporation of Delaware. Filed June 13, 1927. Serial No. 198,577. 9 Claims. (Cl. 184—55.)



7. A lubricator comprising a casing forming a lubricant reservoir and having a side filling opening and a closure for the opening, a pendulum swung within the casing and having a fluid passageway therethrough, a stem rotatably mounted on the pendulum and having one end accessible through the filling opening, said stem having means for directing lubricant from the reservoir into the passageway, a key that detachably engages the stem for rotating the same, said key constituting a pointer, and a scale formed on the casing and with which the pointer coacts to determine the position of the stem.

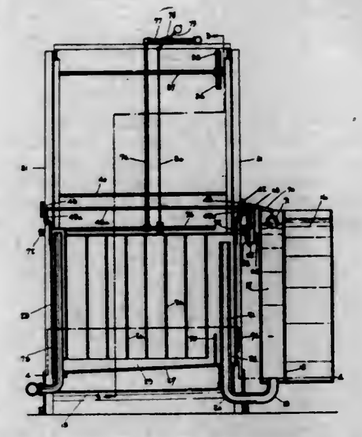
1,804,187. DRILL MOUNTING SHELL. EDWARD F. TERRY, Jr., Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Apr. 16, 1928. Serial No. 270,550. 2 Claims. (Cl. 308—3.)



1. A shell for rock drills comprising a body, a guideway comprising bottom, top and intermediate plates forming a groove in which the flange of the drill body slides, and a bolt holding the guideway and the body together and holding the plates of the guideway together, said bolt having a cam portion engaged with all of said plates to cause them as a unit to be adjusted when the bolt is rotated.

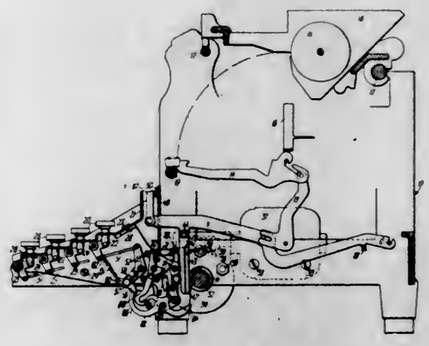
1,804,188. MEANS FOR SEPARATING PARTICLES FROM FREE WATER. CARL BUSCH THORNE, Hawkesbury, Ontario, Canada. Filed Oct. 6, 1928. Serial No. 310,871. 11 Claims. (Cl. 210—152.)

1. In means for separating particles from free water, a receptacle forming the discharge for the free water, a screen in said receptacle for collecting the particles, and an outlet for the waste water and reciprocally operating to



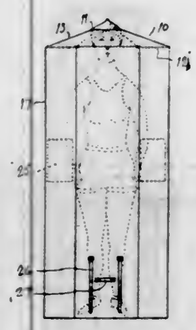
and from said receptacle, recovery troughs forming primary discharge passages and means for feeding liquid containing particles to said screen.

1,804,189. TYPEWRITING MACHINE. RICHARD VON REPPERT, Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 18, 1928. Serial No. 306,698. 22 Claims. (Cl. 197—17.)



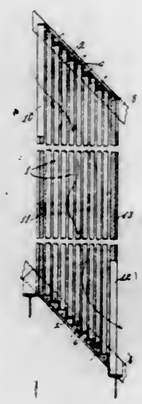
1. In a machine of the character described, the combination of a constantly-rotating power-roller, a typing mechanism comprising a friction pendant adapted to be operatively connected to the power-roller for actuation thereby, a pressure lever, a pressure roller pivoted on the pressure lever and adapted to be pressed against the pendant to establish operative connection between the pendant and the power-roller, a set lever adapted to be set in effective position to induce typing operation, a spring connected to the set lever tending to hold it in normal position, a lock to lock the set lever in effective position, a spring connecting the set lever to the pressure lever to actuate the pressure lever through the medium of the spring whenever the set lever is set in effective position, and a key-operated mechanism to set the set lever in effective position and induce actuation of the typing devices.

1,804,190. PORTABLE DRESSING SHIELD. OSWALD WENDEL, Bayonne, N. J. Filed Oct. 30, 1929. Serial No. 403,400. 8 Claims. (Cl. 135—5.)



2. In a dressing shield, a ring, a foldable frame attached to said ring, and a curtain suspended from and supported by said ring and adapted to enclose the body of the user.

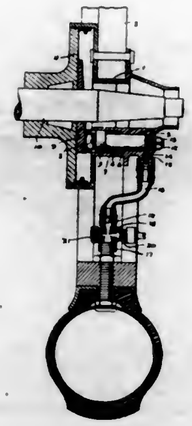
1,804,191. AIR HEATER. BENJAMIN B. WHITTAM, Elizabeth, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 19, 1927. Serial No. 227,080. 11 Claims. (Cl. 257—251.)



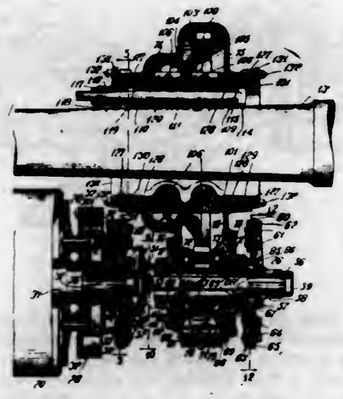
1. In an air heater, straight parallel tubes and a tube plate to which one end of said tubes are connected, said tube plate having flanges thereon at an acute angle to said tubes.

1,804,192. AUTOMATIC PUMP. ARCHIBALD EDGAR WILSON, Toronto, Ontario, Canada, assignor of one-half to Howard C. Hoops, Toronto, Canada. Filed Dec. 5, 1927. Serial No. 237,812. 2 Claims. (Cl. 152—11.)

1. In an automobile, the combination with a wheel thereof having a brake drum and a disc closing the open side of said brake drum, of a pump cylinder carried by said wheel opening into said brake drum, a cam ring encircling the wheel axis within said brake drum and fixed to said disc and presenting its cam face toward said drum, and a piston reciprocably mounted in said cylinder and operatively engaging said cam ring, said drum and disc forming a protective enclosure for said cam ring and the engaging portion of said piston.



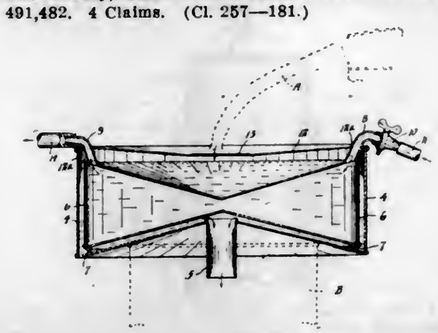
1,804,193. GENERATOR AXLE-DRIVE. MARTIN P. WINTHER, Waukegan, Ill., assignor to Pullman Car & Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 7, 1929. Serial No. 398,080. 9 Claims. (Cl. 105—113.)



1. In a generator drive including a vehicle axle and a driving gear fixed to the axle, a generator having its longitudinal axis parallel therewith, pinion mechanism intermediate said gear and generator having a fixed orbit about said axle, clutch mechanism on said generator, and resilient transmission mechanism axially connecting said pinion and clutch mechanism.

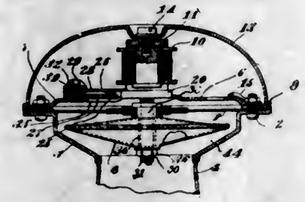
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1,804,194. CREAM COOLER. JOHN J. AGRIMSON, Rushford County, Minn. Filed Oct. 27, 1930. Serial No. 491,482. 4 Claims. (Cl. 257—181.)



1. A cream cooler comprising, a pan, a drum disposed within said pan, inlet and outlet water connections for said drum, said drum having a centrally depressed top surface, and a discharge conduit extending downwardly from the bottom of said pan.

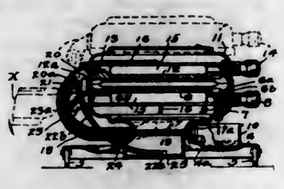
1,804,195. ELECTRIC SIGNALING APPARATUS. BUTLER AMES, Lowell, Mass. Filed Aug. 25, 1926. Serial No. 131,380. 10 Claims. (Cl. 177—7.)



1. Electric signaling apparatus comprising a vibrating member, mechanism for vibrating the member at one side thereof, a horn element at the other side thereof, a sounding box at the end of the horn element adjoining the member, and a hollow metal baffle plate therein rigidly secured to the member and adapted to vibrate therewith, said baffle plate comprising a pair of sheet metal members with marginal portions joined and central portions maintained in rigid spaced relation by a connecting element.

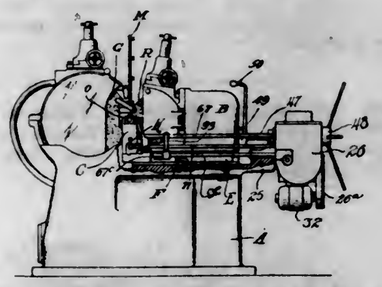
3. Electrical signaling apparatus comprising a casing, a diaphragm mounted in the casing, means for vibrating the diaphragm including a member extending through an opening therein, and a disk clamped against the diaphragm around said opening, the disk being curved toward the diaphragm at its outer margin so that the diaphragm is firmly engaged at the peripheral edge of the disk.

1,804,196. ELECTRICAL COOKING APPLIANCE. WILLIAM A. BARNES, Minneapolis, Minn., assignor to Dominion Electrical Mfg. Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 11, 1929. Serial No. 406,402. 4 Claims. (Cl. 53—5.)



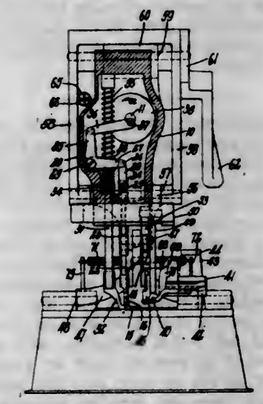
1. In a cooking appliance, a base, a lower grid section secured to said base, an upper grid section, connections between said sections including a U-shaped member having spaced upwardly extending arms, pivotal connections between the upper ends of said arms and said upper section and guide elements in said lower section in which said arms are slidably disposed, said arms being so curved and arranged in said guide elements that said upper grid section will always be disposed vertically above said lower grid section when in horizontal position.

1,804,197. CENTERLESS GRINDING. GEORGE W. BINNS, WALTER D. ARCHEA, and LESTER F. NENNINGER, Cincinnati, Ohio, assignors, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 17, 1926, Serial No. 102,762. Renewed Aug. 15, 1929. 37 Claims. (Cl. 51—103.)



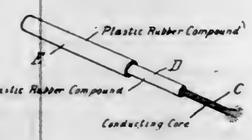
1. The combination with a centerless grinder, including opposed grinding and regulating wheels forming a work-receiving throat, a work-support within the throat, and means for causing a relative movement of one of said wheels to vary the width of the throat, said means including a driven cam, a rock lever, operated by the cam, and means for varying the amplitude of the grinding throat variation for the same arc of movement of the rock lever.

1,804,198. TAPE ATTACHING MACHINE. STEPHEN G. BLESSINGTON, Claremont, N. H. Filed May 1, 1928. Serial No. 274,290. 2 Claims. (Cl. 154—42.)



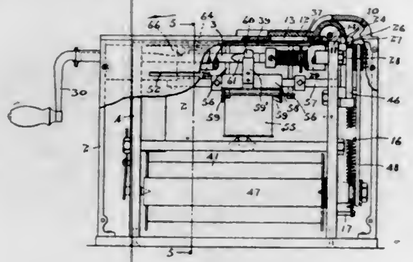
1. A tape attaching and severing machine having, in combination, mechanism for attaching a strip of adhesive tape to a piece of sheet material, mechanism to intermittently feed said sheet material with a tape attached thereto, a tape guide, a rocker arm, a cutter fast thereto and positioned above the tape, a rocker frame, a second cutter fast to said rocker frame and positioned beneath the tape and connected to said rocker arm, said rocker arm and rocker frame being relatively so pivotally mounted that downward movement of the upper cutter will cause the lower cutter to be moved beneath the tape and the tape to be severed by said cutters.

1,804,199. RUBBER COMPOUND AND ARTICLES. CHARLES R. BOGGS, Waban, and JOHN T. BLAKE, Boston, Mass., assignors to Simplex Wire & Cable Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 6, 1926. Serial No. 100,195. 6 Claims. (Cl. 154—2.6.)



1. An improved composite product adapted to resist ozone comprising a body portion containing vulcanized gum and a covering therefor containing unvulcanized gum of rubber character.

1,804,200. AUTOMATIC DOCUMENT VENDING MACHINE. WILLIAM HENRY DAVENPORT BROUSE, Toronto, Ontario, Canada. Filed June 12, 1926. Serial No. 115,605. 21 Claims. (Cl. 101—19.)



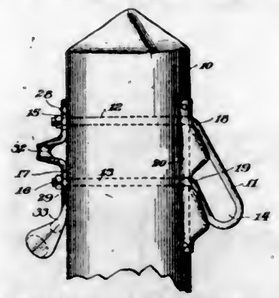
1. In a form vending machine, means for delivering a form sheet from the machine, means for retaining a record portion of said form sheet in the machine and means controlled by the form sheet for controlling the operation of the delivery means.

1,804,201. REDUCING ZINCIFEROUS MATERIAL. EARL H. BUNCE and GEORGE T. MAHLER, Palmerton, Pa., assignors to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed July 13, 1927. Serial No. 205,527. 1 Claim. (Cl. 75—28.)

The method of reducing zinciferous material which comprises heating a porous charge composed of agglomerates of zinciferous material and agglomerates of carbonaceous material in a reducing chamber to a sufficiently high temperature to reduce compounds of zinc, maintaining throughout the porous charge of agglomerates a flow of hot gases containing carbon monoxide, said carbon monoxide being formed in part at least by permitting controlled amounts of air to seep into the heated charge, and withdrawing from the reducing chamber a gaseous product containing metallic zinc vapor.

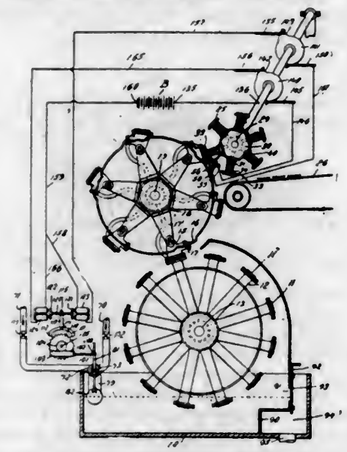
1,804,202. POLE GUY FIXTURE. ALBERT B. CHANCE, Centralia, Mo. Filed Apr. 26, 1928. Serial No. 272,901. 14 Claims. (Cl. 24—115.)

1. A pole guy fixture comprising a saddle member having a curved bearing surface adapted to fit against a pole, said saddle having an aperture and an outwardly inclined rod supporting surface leading to said aperture, and a guy securing fixture comprising a rod adapted to pass through an aperture in said pole and through said aperture in said saddle, said rod having a laterally bent portion formed



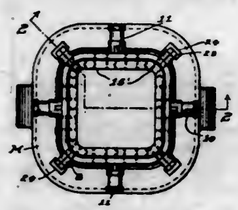
with a cable engaging loop, said laterally bent portion engaging said saddle, and means carried by the end of said rod for securing said saddle and said rod on said pole.

1,804,203. PULP MOLDING MACHINE. MEBLE P. CHAPLIN, Waterville, Me., assignor, by mesne assignments, to Fidelity Trust Company, trustee, Portland, Me., a Corporation of Maine. Filed Mar. 29, 1928. Serial No. 265,550. 35 Claims. (Cl. 92—56.)



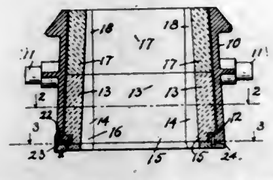
1. In a pulp molding machine, a supply of pulp solution, a pair of coacting dies, one of said dies being adapted to receive a deposit of pulp thereon, and means controlled by the relative positions of said dies when the dies are in coacting relation for regulating the consistency of the pulp solution.

1,804,204. HOT TOP FOR INGOT MOLDS. WALTER M. CHARMAN and HARRY J. DARLINGTON, Youngstown, Ohio; said Darlington assignor to said Charman. Filed Dec. 31, 1928. Serial No. 329,486. 23 Claims. (Cl. 22—147.)



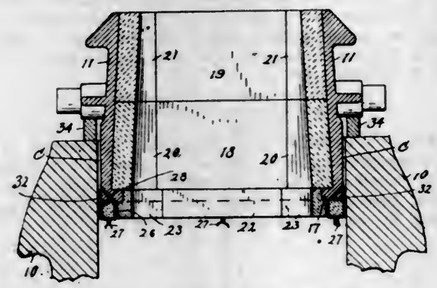
1. A hot top adapted to extend within the end of an ingot mold, and to rest upon the top of the ingot when poured, means for supporting the hot top temporarily during the pouring operation, and parting means protecting the end of the hot top and facilitating stripping of the hot top from the ingot.

1,804,205. LINING FOR HOT TOPS. WALTER M. CHARMAN, Youngstown, Ohio. Filed Dec. 21, 1929. Serial No. 415,646. 11 Claims. (Cl. 22—147.)



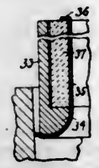
1. In a hot top, a metal casing having a flat lower surface, a lining for said surface, means for detachably securing said lining to said casing, and projection and socket connections between the lining and the casing for holding the lining against lateral movement.

1,804,206. HOT TOP. WALTER M. CHARMAN and HARRY J. DARLINGTON, Youngstown, Ohio; said Darlington assignor to said Charman. Filed Dec. 30, 1929. Serial No. 417,326. 14 Claims. (Cl. 22—147.)



1. In a hot top, a casing, a lining therefor of refractory material, said lining comprising alternate elements having parallel side edges, and intermediate elements tapered toward one end thereof.

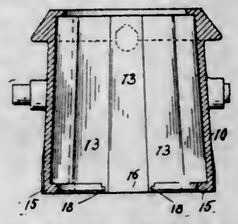
1,804,207. MOLD WIPER FOR HOT TOPS. WALTER M. CHARMAN and HARRY J. DARLINGTON, Youngstown, Ohio; said Darlington assignor to said Charman. Filed Feb. 24, 1930. Serial No. 430,663. 23 Claims. (Cl. 22—147.)



1. In a hot top for ingot molds, sheet material mounted on the hot top protruding outwardly therefrom near the bottom thereof, said material being shaped at its outer edge to conform with and wipe the mold wall as the hot top is lowered into the mold.

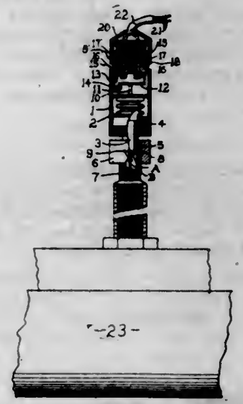
1,804,208. HOT TOP. WALTER M. CHARMAN, Youngstown, Ohio. Filed Mar. 29, 1930. Serial No. 440,127. 9 Claims. (Cl. 22—147.)

1. In a hot top, a metallic casing having an inner surface tapered toward the top thereof, and having an inwardly directed ledge at the bottom thereof, said ledge being provided with a removable section, and a lining com-



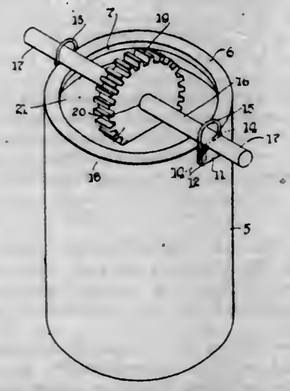
prising tapered blocks, one of said blocks having a maximum width less than the length of the lining removable section.

1,804,209. ELECTRIC ANNUNCIATOR FOR AUTOMOBILE TIRES. NORMAN R. COWPERTHWAIT, Silver Lake, Kans. Filed May 18, 1928. Serial No. 278,868. 2 Claims. (Cl. 200—58.)



1. In a mechanism of the kind described, the combination of a housing containing a bellows, a tube, and a switch, the housing being in threaded engagement with the tube, and the said tube being in threaded engagement with a valve stem, the threaded engagement between the housing and the tube providing a means of adjustment for the switch.

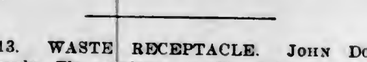
1,804,210. LUBRICANT-DEMONSTRATING CAN. HENRY H. CROSS and GEORGE F. FOX, Chicago, Ill. Filed Sept. 4, 1928. Serial No. 308,763. 1 Claim. (Cl. 35—16.)



In a structure of the character described, the combination with a receptacle having an opening at one end and

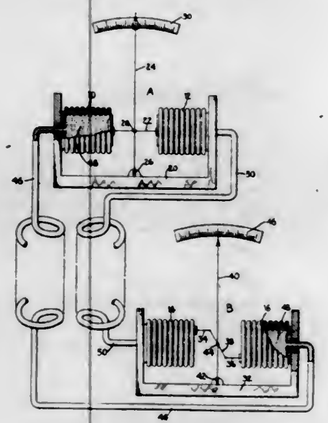
adapted to contain lubricant, a pair of hinged loop members mounted on opposite sides of the receptacle adjacent the end and adapted to be swung to a position above the end of the receptacle to form bearings for a shaft inserted loosely through said loop members and projecting beyond the same, whereby said shaft may be rotated by manipulating the ends thereof with the fingers; and a gear mounted on said shaft between said bearings and detachable when said shaft is removed, said gear being rotatable with said shaft, supported by said shaft in position to project through the opening and into the lubricant in said container.

1,804,211. SHOE LACING. NATHAN DANIELS, Malden, and JOHN M. PERO, Randolph, Mass. Filed Aug. 30, 1930. Serial No. 479,029. 3 Claims. (Cl. 24—143.)



3. As an improved article of manufacture, a ribbonlike fabric of gros-grained weave, of suitable length and width for use as a shoe lacing, provided with lacing tips at each end, and with the gros-grained weave construction of sufficient proportion to produce a non-slipping effect when tied in a shoe lace knot.

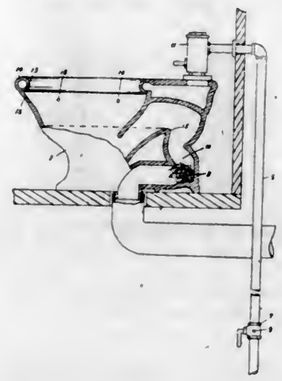
1,804,212. MOVEMENT TRANSMITTING SYSTEM. CLARENCE A. DE GIERS, Forest Hills, N. Y., assignor to The Liquidometer Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Jan. 16, 1930. Serial No. 421,325. 8 Claims. (Cl. 116—21.)



1. A movement transmitting apparatus comprising in combination, a pair of movable members remote from each other, and an hydraulic device effective when one of said members is moved for moving the other of said members a corresponding amount in synchronism with said first member.

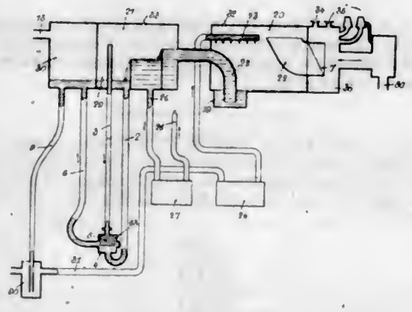
1,804,213. WASTE RECEPTACLE. JOHN DOUGLAS, Pensacola, Fla., assignor to The John Douglas Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 29, 1930. Serial No. 424,263. 7 Claims. (Cl. 4—70.)

5. The combination of a receptacle comprising a perforate wall and an inlet discharging into the receptacle, a discharge duct including means for establishing a normal fluid level in the receptacle for sealing the discharge duct, a water line discharging into the inlet of the receptacle, a shut-off valve in the water line located below the receptacle said valve having a means for draining the water line to the receptacle inlet, and a flush valve in the water line between the inlet and the shut-off valve, the perforate portion of the receptacle wall being disposed at such elevation relative to the normal fluid level and the receptacle



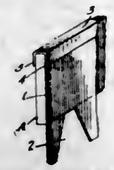
inlet that under normal conditions there will be no overflow through the perforation in the wall of the receptacle, but under abnormal conditions the rise of the water level causes the water to flow through the receptacle perforation to the exterior of the receptacle rather than to the level of the fluid inlet.

1,804,214. FEED WATER HEATER. SÉBASTIEN OTTO ALFRED FIEDLER, Paris, France, assignor to L'Auxiliaire des Chemins de Fer et de l'Industrie, Paris, France. Filed July 27, 1928, Serial No. 295,724, and in France June 12, 1928. 9 Claims. (Cl. 261—1.)



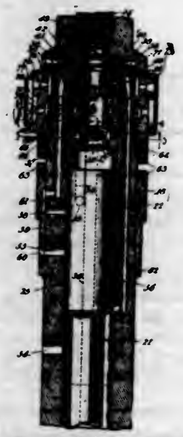
1. A feed water heater for boilers comprising a substantially closed mixing chamber adapted to be supplied with heating steam, means for supplying said mixing chamber with feed water to be heated, a substantially closed distribution chamber, a hydraulic joint between said chambers, the weight of the water column forming said joint being adapted to be overcome by the pressure of the heating steam, whereby water and steam are caused to flow from said mixing chamber into said distribution chamber, said mixing chamber containing substantially no water, means for delivering hot water from said distribution chamber to the boiler feeding means, and steam trap means for discharging any excess of water from said distribution chamber and preventing the escape of steam therefrom.

1,804,215. EXPANSION JOINT INSTALLING DEVICE. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Dec. 23, 1926. Serial No. 156,698. 5 Claims. (Cl. 94—51.)



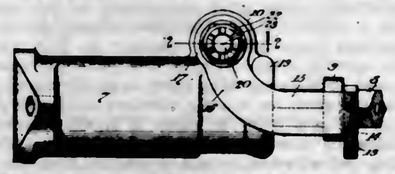
5. Means for installing preformed expansion joint strips in pavements, comprising a backing member, a projection rigidly attached to and extending from one edge of said member to overlie one edge of an expansion joint strip, and impaling means for engaging said strip.

1,804,216. VARIABLE STROKE TOOL. HJALMER C. GUSTAFSON, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,370. 10 Claims. (Cl. 121—12.)



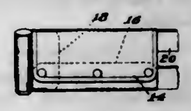
1. In a variable stroke fluid operated tool, the combination with a cylinder having a piston chamber and a piston operating in the chamber, of means for causing the piston to have strokes of different lengths including exhaust ports for the piston chamber opening from the piston chamber at different distances from the valve and covered and uncovered by the piston, an automatic distributing valve, a plurality of trip passageways leading from the piston chamber at different distances from the valve and extending to the valve and covered and uncovered by the piston, and means for closing and opening the exhaust port and the trip passageway that are closer to the valve.

1,804,217. TOOL RETAINER. HJALMER C. GUSTAFSON, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed June 14, 1928. Serial No. 285,342. 8 Claims. (Cl. 121—82.)



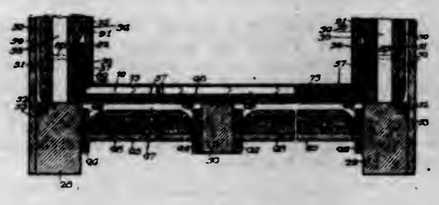
1. The combination with a tool holder, of a tool retainer including a collar engaging yoke portion having an open side, a substantially straight arm carrying said yoke portion and having an offset rear terminal extending laterally on the open side of the yoke portion, and pivoted to one side of the holder, and a stop lug on the tool holder adjacent the pivot mounting and against the rear side of which the offset terminal abuts to limit the swinging movement of the arm and collar engaging yoke portion when embracing a tool and act as an abutment to receive pulling strain on the retainer, said arm being located longitudinally of and in the same plane with the tool when the offset terminal abuts the stop lug.

1,804,218. BUMPER BOOT. ALBERT L. HOWARD, Brockton, Mass., assignor to Hamilton-Wade Company, Brockton, Mass., a Corporation of Massachusetts. Filed Sept. 9, 1930. Serial No. 480,641. 17 Claims. (Cl. 293—55.)



1. A boot for protecting the end portions of automobile bumpers, comprising a non-rigid body portion for enclosing the end portion of a bumper and an attached and flexible flap portion adapted to fold around and protect the end of the bumper.

1,804,219. REFRIGERATOR CAR. GEORGE A. HULL, Chicago, Ill., assignor to Equipment Specialties Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1927. Serial No. 237,638. 15 Claims. (Cl. 105—422.)



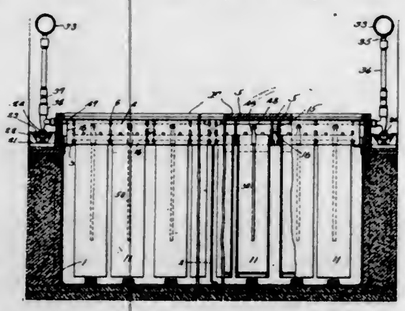
1. In a refrigerator car, the combination of a supporting frame with a layer of heat insulating material carried by said frame, a waterproof layer supported above said insulating material, channeled guides carried by said supporting frame, and a plurality of sections of flooring in said guides, said sections comprising a plurality of strips of lumber secured together at their edges.

2. In a refrigerator car floor, the combination of a plurality of strips of flooring with a pair of channeled guide members for supporting said flooring, a supporting frame for said car, and upwardly extending metal straps on said channeled members for securing the same to said car frame.

1,804,220. ICE MANUFACTURING APPARATUS. GEORGE LANGE, New York, N. Y., assignor to American Ice Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 10, 1928. Serial No. 298,784. 8 Claims. (Cl. 62—159.)

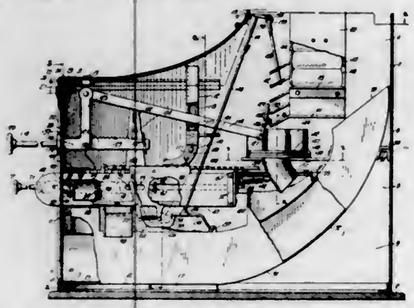
1. In apparatus of the class described the combination with a plurality of cans and means for supporting the cans in a row, of a header mounted for back and forth rotation above the row of cans, drop pipes, flexible

connections between said pipes and the header for yieldingly oscillating the pipes with the header, one of said



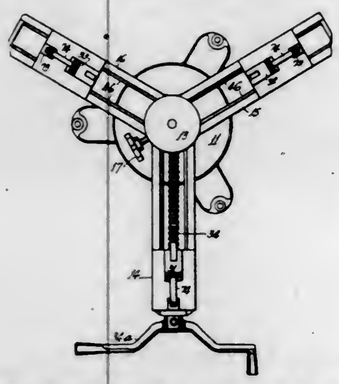
pipes being supported within each can, means for actuating the header, and means for supplying air under low pressure to the header.

1,804,221. VENDING MACHINE. MARTIN J. MADISON, Tulsa, Okla. Filed June 19, 1929. Serial No. 371,974. 15 Claims. (Cl. 194—91.)



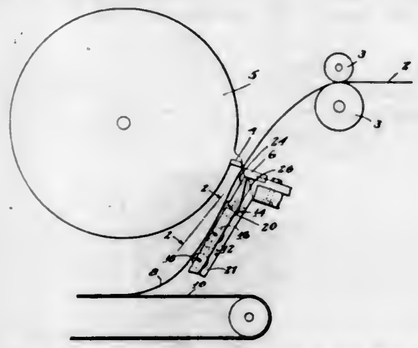
1. In a vending machine, a housing, horizontally spaced article containers within the housing, ejector mechanism operable exteriorly of the housing and including a coin controlled ejector bar normally spaced vertically from the containers and selectively alignable with the containers for ejecting the articles therefrom, and a chute cooperating with the containers for receiving and delivering the ejected articles.

1,804,222. TIRE REPLACING MACHINE. JOSEPH J. MASCUCH, Newark, N. J. Filed May 31, 1929. Serial No. 367,299. 2 Claims. (Cl. 157—6.)



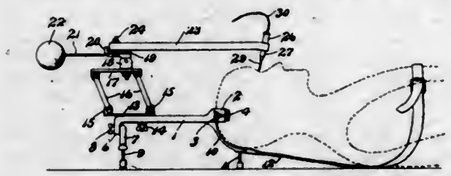
1. A tire changing machine comprising a frame having channel shaped arms with a pair of racks formed on inwardly projecting, parallel ledges in each of said channels, vise heads slidable on each of said arms, a jaw depending from each vise head in said channels between said racks, a rack plate for each jaw having teeth arranged to engage said racks and having apertures for the members of said jaw whereby it may be moved vertically on said jaw to engage said racks and thereby hold the vise head in position and a weighted arm pivoted to each jaw having a cam engaging said plate for raising and lowering said plate.

1,804,223. SHEET CUTTING AND FEEDING MACHINE. CHARLES BENJAMIN MAXSON, Westerly, R. I., assignor of one-half to Julian W. Maxson, Westerly, R. I. Filed Dec. 10, 1929. Serial No. 413,008. 3 Claims. (Cl. 164—68.)



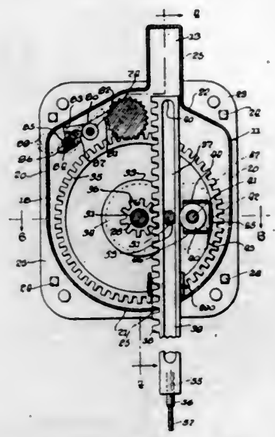
1. A machine for cutting sheets from a web and feeding the cut sheets having, in combination, a cutter, means for feeding the web at a downward incline to the cutter, means for feeding the sheets after they are cut by the cutter from the web in a direction at an angle to the said incline, a member in the path of feeding movement of the sheets from the cutter to the sheet-feeding means, and freely rotatable anti-friction rolls carried by the member and adapted to be engaged by the sheets during their travel from the cutter to the sheet-feeding means.

1,804,224. PLASTIC MODELING MACHINE. JAY H. METCALF, Grand Rapids, Mich. Filed Nov. 19, 1928. Serial No. 320,372. 11 Claims. (Cl. 41—25.)



1. In a machine of the class described, a substantially horizontal bar, a plate mounted for adjustment above and lengthwise of said bar, parallel links pivoted to and extending upwardly from the plate, a second slotted bar pivotally connected to the upper end of the links, means for securing the links, bar and plate in fixed relation to each other after adjustment to any desired position, a member slidably mounted on said second bar, a supporting plate pivotally mounted on said member to turn about a horizontal axis, arms pivotally mounted at one end on the supporting plate, operative connections between the arms for causing simultaneous equal movement of one arm with the other, a stylus attached to and depending from the free end of one of the arms, a modeling tool attached to and depending from the free end of the other arm, and means on the first bar for holding the head of a body in secure relation thereto.

1,804,225. HAND BRAKE. ARTHUR F. O'CONNOR, Chicago, Ill., assignor to Union Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed May 14, 1928. Serial No. 277,606. 6 Claims. (Cl. 74—112.)

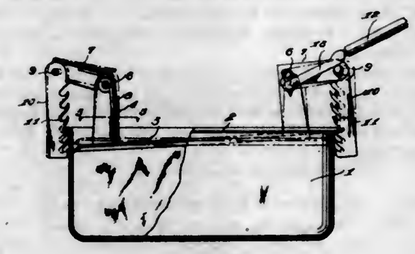


1. In a hand brake mechanism of the character described, the combination with a supporting housing; of a rack bar adapted to reciprocate in said housing; a gear meshing with the teeth of the rack bar at one side of the same, and a roller carried by the suppporting housing at the opposite side of said rack bar and bearing thereon, said gear and roller serving as guide means for said rack bar, and a second gear mounted to rotate about an axis common with the axis of said first gear, said second gear being of larger diameter and provided with an offset portion against which said rack member may bear; and means adapted to bear upon said rack bar at the side opposite to said offset portion.

1,804,226. VULCANIZATION ACCELERATOR AND MANUFACTURE THEREOF. JULIUS A. NIEUWLAND, Notre Dame, Ind., assignor to Canadian Electro Products Company, Limited, Montreal, Canada. Filed Jan. 10, 1927. Serial No. 160,309. 8 Claims. (Cl. 260—1.)

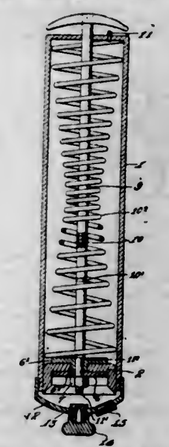
1. A process which comprises reacting together acetylene and an amine in presence of cuprous chloride as catalyst.

1,804,227. APPARATUS FOR PRESSING AND COOKING MEATS. ARTHUR E. OZOUF, Chicago, Ill., assignor to The Allbright-Nell Company, Chicago, Ill., a Corporation of Illinois. Original application filed Sept. 3, 1925, Serial No. 54,293. Divided and this application filed Apr. 21, 1928. Serial No. 271,776. 5 Claims. (Cl. 100—57.)



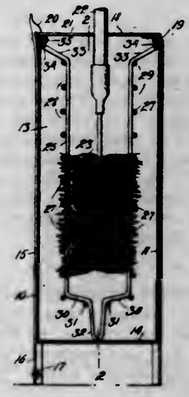
4. In an apparatus of the class described, a receptacle, a cover slidably mounted in said receptacle, standards rising adjacent the ends of said cover, members pivoted to the upper ends of said standards, pawls carried by said members adapted for engaging the ends of said receptacle, coil springs supported by said standards, each coil spring having extended ends reacting against said standard and exercising a yielding leverage action between its respective standard and member.

1,804,228. FIRE EXTINGUISHER. EUGENE PAQUETTE, Willimansett, Mass. Filed Sept. 10, 1927. Serial No. 218,667. 1 Claim. (Cl. 299—92.)



In a fire extinguisher, a cylindrical container, a normally closed discharge port at one end thereof, a normally closed filling opening for the container adjacent said end of the container, a piston operating within the container, a sectional rod having one end secured to the piston and its opposite end extending through the other end of the container and comprising an inner piston carried section and an outer detachable section, said inner section having a notch therein, a spring surrounding the rod and bearing against the piston and the second named end of the cylinder, a handle carried by the outer detachable section of the rod, and a latch pivoted upon the second named end of the container to engage within the notch of the rod and hold the spring under compression.

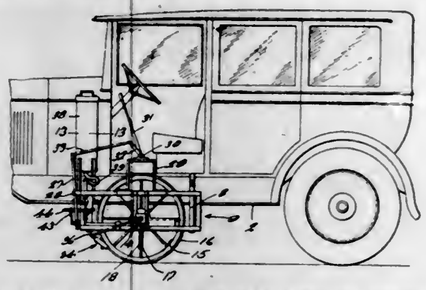
1,804,229. MOP CLEANING DEVICE. ALFRED S. POWELL, Floral Park, N. Y., assignor to Stransky Products Corporation, New York, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,823. 5 Claims. (Cl. 15—142.)



5. A mop cleaner, comprising a casing having an open top for receiving the head of a mop, a shoulder adjacent

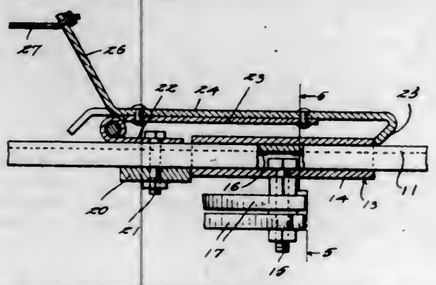
the top opening, and a cleaning device including a spring metal frame sprung into engagement with the bottom of the casing and the shoulder.

1,804,230. ROAD MARKER. HARRY E. RAIFE, Wilkes-Barre, Pa. Filed Apr. 15, 1930. Serial No. 444,504. 3 Claims. (Cl. 91—49.)



3. A road marker of the character described comprising a frame, means for mounting the frame on the running board of a vehicle for vertical and lateral adjustment relative to said running board, a marking wheel rotatably mounted for vertical sliding movement in the frame, a marking fluid supply tank, a distributing pan operatively engaged with the periphery of the marking wheel and mounted for vertical movement therewith, valve controlled means connected with the supply tank for discharging fluid therefrom into the distributing pan, manually operable means for shifting the marking wheel to inoperative position and means operatively connecting the valved means with said wheel shifting means for actuation thereby in a manner to control the passage of fluid from the supply tank to the distributing pan.

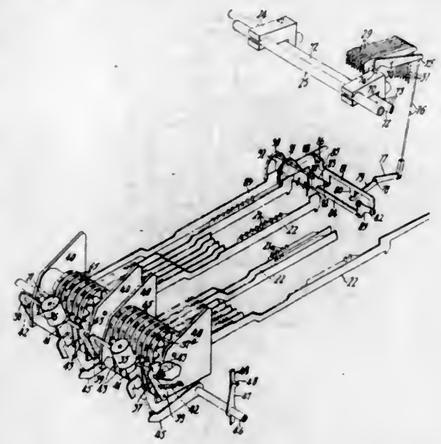
1,804,231. GARAGE DOOR. FRANK A. RANTZ, St. Petersburg, Fla. Filed July 5, 1927. Serial No. 203,576. 1 Claim. (Cl. 292—298.)



The combination with a horizontal support and a yoke slidable thereupon, of latch means adjustably mounted on said support and adapted for engagement with said yoke, said latch comprising a fixed leaf adjustably mounted on said horizontal support, a rockable leaf pivotally mounted on said fixed leaf, and yoke engaging means mounted on said pivoted leaf, said yoke engaging means comprising an elongated plate having a reverted forward end portion adapted for engagement with one end of said yoke, an angularly inclined rear portion adapted for engagement with an operating element.

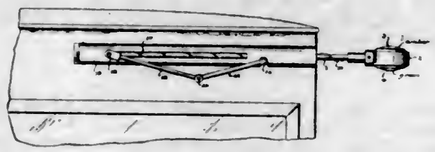
1,804,232. COMBINED TYPEWRITING AND COMPUTING MACHINE. HENRY REICH, Bayonne, N. J., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 27, 1926. Serial No. 91,030. 16 Claims. (Cl. 235—60.)

1. In a computing machine having numeral-keys, a traveling carriage, a plurality of registers, each having a series of computing wheels, a special clearance-sign type-bar, and a plurality of independently-operable special clearance-sign keys, one for each register, all of the clearance-sign keys being effective to operate the clearance-sign



type-bar; means controlled by the carriage at a predetermined position thereof for locking the clearance-sign key of the register adjacent the register in which computations are made.

1,804,233. SIGNAL. HENRY G. RUNNE, Rochester, N. Y. Filed Aug. 10, 1927. Serial No. 212,098. 5 Claims. (Cl. 116—46.)



1. A signal comprising a signalling element having a plurality of separate illuminated portions, a rod by which said signalling element is supported to move axially with the rod, and means for moving said rod axially and also rotating said rod while the signals are illuminated and during such axial movement a number of complete rotations to successively present said illuminated portions to view.

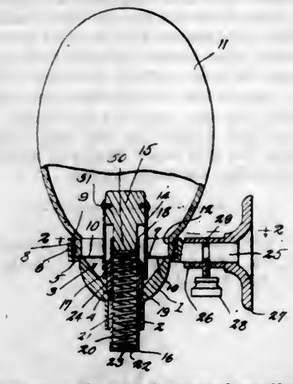
1,804,234. WOOD OIL FEEDER AND METHOD OF PRODUCING THE SAME. JOHN CESSNA SHARP, Chattanooga, Tenn., assignor to Nathan Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Dec. 11, 1922. Serial No. 606,332. 9 Claims. (Cl. 308—243.)

1. The method of treating wood preliminarily to the use thereof in the feeding of lubricating oil comprising the subjection of the wood to a bath of heated oil to expel natural pore filling substances and increase its ability to attract and feed oil.

1,804,235. GRAVITY FEED POWDERED SOAP DISPENSER. ARTHUR W. SMITH, Bemidji, Minn. Filed Apr. 7, 1930. Serial No. 442,305. 5 Claims. (Cl. 221—61.)

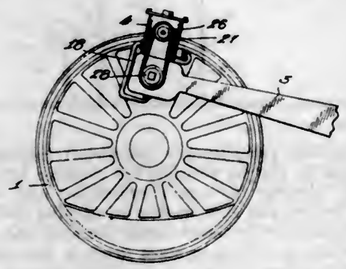
1. A gravity feed soap powder dispenser, comprising a base having a chamber provided with an outlet, a container connected to the base, a partition separating the

container from the chamber and having a hole establishing communication between the container and the cham-



ber, a valve seated on the base to close the outlet, a tubular guide mounted in the partition, and a removable stopper in the guide, the valve being slidable on the stopper.

1,804,236. AUTOMATIC CRANK PIN OILER. MELVIN SORENSON, Reynolds, N. Dak. Filed Jan. 27, 1930. Serial No. 423,849. 1 Claim. (Cl. 184—27.)



A means for lubricating the crank pin of a locomotive or the like, in which said pin is journaled in a connecting rod, said means comprising a lubricant receptacle which is fixed on the connecting rod, an inverted substantially T-shaped pipe member in the receptacle, a spring influenced plunger in the vertical branch of the pipe member, a cam engaging the plunger and having a shaft, a wheel on the outer end of the shaft, a wheel on the outer end of the crank pin, an endless element trained around the wheels, one of the longitudinal branches of the said pipe member extending to one side of the receptacle and being enlarged to provide a seat for a ball valve, a pin for limiting the unseating of the valve, a pipe connection between said branch and the top of the connecting rod and communicating with the crank pin, the second branch of the pipe member having its end affording a seat for a ball valve, a pin for limiting the unseating of the valve and a pipe member connected with the receptacle and with the lower portion of the connecting rod and communicating with the crank pin.

1,804,237. COMPOSITE METAL AND BRAZING PROCESS THEREFOR. CHRISTIAN STEENSTRUP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 16, 1925. Serial No. 62,928. 7 Claims. (Cl. 113—112.)



1. The method of preparing a metal structure for copper brazing, said structure being adapted to modify or prevent the action of brazing copper thereon, which comprisea inserting the structure in a steel casing, welding said casing to the structure, and forming the structuer into a relatively thin ribbon.

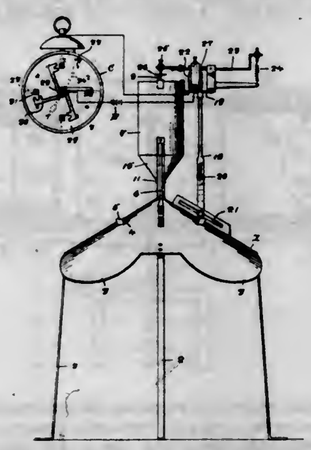
3. A composite metal, comprising an alloy, one of the ingredients of which is readily dissolved out by molten copper, and a ferrous coating on the alloy, said coating substantially surrounding the alloy and being welded thereto.

1,804,238. SAFETY WARDROBE TICKET-SET. ERNST TENSFELDT, Berlin-Charlottenburg, Germany. Filed Dec. 26, 1929, Serial No. 416,598, and in Germany June 26, 1929. 3 Claims. (Cl. 283—9.)



1. A check set comprising a plurality of consecutively numbered checks, the consecutive checks each consisting of two parts having the same number, and a figure characterisation provided on both parts of each check, the figure of each check being distinct from those of each of a plurality of both the preceding and subsequent checks.

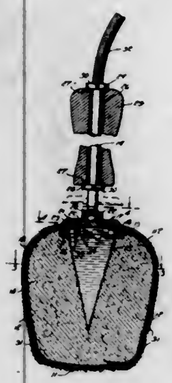
1,804,239. AUTOMATIC POULTRY FEEDING DEVICE. MICHAEL J. WAREK, Plains, Pa. Filed Nov. 2, 1927. Serial No. 230,616. 1 Claim. (Cl. 119—56.)



A poultry feeding device comprising a hopper having a discharge opening therein, a valve for controlling the opening and including a stem extending through the hopper, a bracket arm supported by the upper end of the

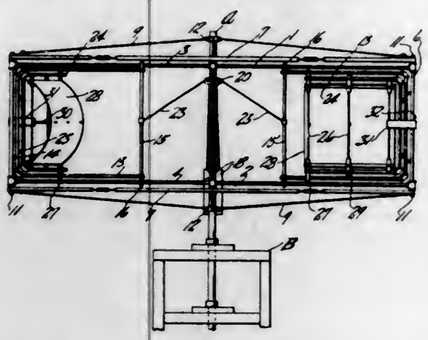
hopper and projecting horizontally therefrom, a support arranged beneath the hopper, a post including relatively adjustable sections connecting the bracket arm with the support, a magnet mounted upon the bracket arm, an armature arm therefor mounted for pivotal movement on said bracket arm, a spring connecting one end of the armature arm with the adjacent end of said bracket arm and normally maintaining one end of the armature spaced above the valve stem, and a circuit for the magnet, whereby movement of the armature arm will cause an opening and closing movement of the valve.

1,804,240. POT AND PAN CLEANER. ULYSSES S. G. WELSH, New York, N. Y. Filed Aug. 16, 1928. Serial No. 300,069. 2 Claims. (Cl. 15—230.)



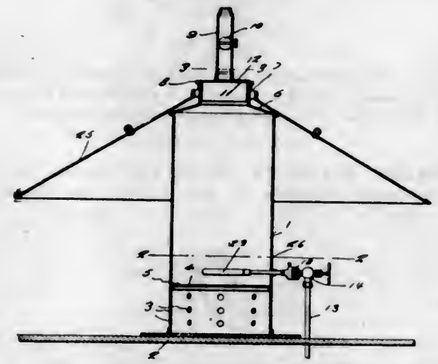
1. A pot and pan cleaner, including a substantially rigid perforated shell, separate abrasive material removably carried upon the surface of said shell, a pervious detergent holder arranged within and spaced from said shell and coaxial therewith, absorbent material between said shell and detergent holder; and means for rotating said shell and detergent holder.

1,804,241. WIND MOTOR. JOHN WILLIAM WHIPP, Eureka Springs, Ark., assignor of one-half to W. J. Lloyd, Eureka Springs, Ark. Filed Sept. 9, 1929. Serial No. 391,179. 1 Claim. (Cl. 170—26.)



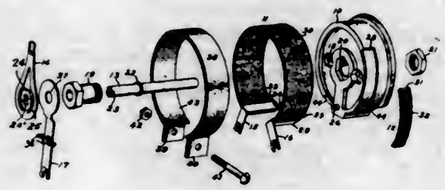
In a wind motor, a rotatable motor frame including radially extended pairs of vertically spaced spokes and vertical end bars connecting the spokes at their outer ends, other frames hinged on the end bars of alternate pairs of spokes, catches upon the said outer frames and adapted to engage the said spokes, slide rods mounted on the pairs of spokes intervening between those carrying the outer frames, weights slidably mounted on the said slide rods, pulleys mounted on the slide rods, cables trained over the pulleys and connected at their ends to the weights and the inner ends of the outer frames, inner sail frames hinged to the outer ends of the said outer frames, sails mounted in the said inner sail frames, the said sails being bowed outward from top to bottom, catches upon the inner ends of the inner sail frames and adapted to engage the outer frames upon the side opposite to which the said outer frame catches are disposed, and leaf springs secured to the said frame end bars and engaging the said inner frames to normally hold the same swung within the outer frames.

1,804,242. BROODER. CHARLES L. ANDERSON, Ravenswood, W. Va. Filed Apr. 23, 1928. Serial No. 272,289. 1 Claim. (Cl. 126—119.)



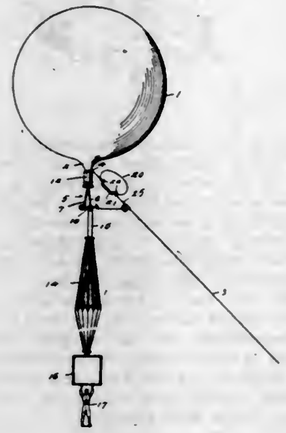
A brooder comprising a cylindrical heating chamber arranged in upright position, the chamber having an upwardly tapering top and a cylindrical neck upstanding from the top and surrounding an opening therein, a cap of cylindrical form seated within the neck, the cap having an opening in its top, a stack fitted in said opening and upstanding from the cap, a manually operable damper in said stack, a partition within the chamber above the bottom thereof and formed with openings, a burner within the chamber and arranged above and in spaced relation to the partition, the wall of the chamber below the partition being formed with openings for the admission of warmed air into the portion of the chamber below the partition and the circulation of the air currents up through the openings in the partition and finally through the stack, the cap having an opening therein at one side of the stack whereby the flame of the burner may be viewed and a closure plate swivelled upon the top of the cap and movable into and out of position to close said last named opening.

1,804,243. CURRENT REGULATING DEVICE. WILLIAM L. BOND, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 20, 1928. Serial No. 294,251. 10 Claims. (Cl. 201—55.)



1. A rheostat comprising a main resistance element, a movable contact member cooperating therewith, and an auxiliary resistance element electrically connected substantially throughout its length in parallel with a portion of said main resistance element so as to vary the ratio of the change of resistance upon corresponding movement of said contact member over the different portions of said main resistance element.

1,804,244. AERIAL TOY. VINCENT BRADY, New York, N. Y. Filed Mar. 8, 1930. Serial No. 434,407. 6 Claims. (Cl. 46—52.)

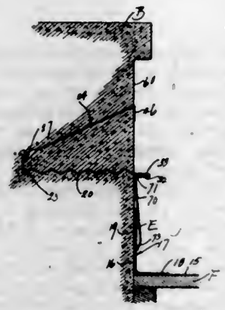


5. A toy, comprising a balloon, a flexible member for holding the balloon captive, an aeronautical device, a catch releasably suspending the aeronautical device from the balloon, and means connecting the catch to said flexible member to permit it to be operated by a pull on said member to effect the release of the aeronautical device.

1,804,245. COMPOSITION OF MATTER. DANIEL C. BRUCE, Nashville, Tenn. Filed Apr. 26, 1927. Serial No. 186,818. 2 Claims. (Cl. 106—39.)

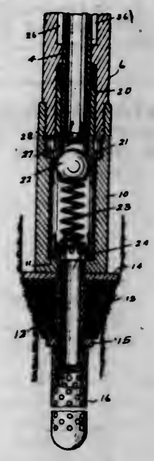
1. A filling composition for fibre board surfaces comprising an admixture of water, flour, whiting, a substance from the group comprising a glucose and dextrin, borax, soap, glycerine, a volatile hydrocarbon, and comminuted fibrous materials, in the proportions specified.

1,804,246. ROOF FLASHING. WALTER P. BUDD, Durham, N. C. Filed May 5, 1928. Serial No. 275,500. 3 Claims. (Cl. 108—26.)



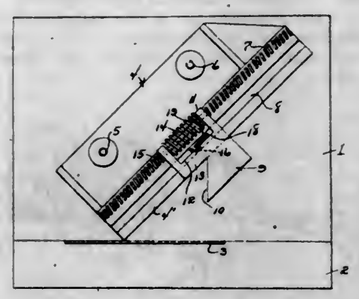
1. As an article of manufacture a sheet metal strip for use in flashing constructions comprising a body provided with corrugated grooves extending longitudinally thereof, an upturned flange at one longitudinal edge thereof, an inverted U-shaped attaching flange at the opposite longitudinal edge thereof, and brace arms struck from the material of the first mentioned flange and of a nature to be twisted at one end thereof from the flange in a transversely extending relation therefrom to provide a brace arm extending transversely across said body.

1,804,247. FLOW TESTER. JULIAN B. CONNER, Humble, Tex. Filed Jan. 3, 1928. Serial No. 244,203. 8 Claims. (Cl. 166—1.)



1. Apparatus for testing a formation in a well bore including a string of pipe to be let down into the bore and having an inlet at its lower end, a packer carried by the pipe above said inlet, a valve for controlling the inlet, means operatively connected with the string and adapted to be actuated, by the rotation of the pipe, against the valve to open the valve, and to be released from said valve by a continued rotation of the string in the same direction, to permit the valve to close.

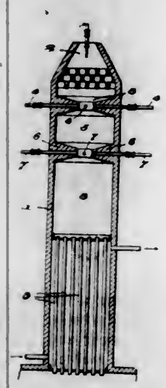
1,804,248. MITERING GAUGE. WILLIAM O. CROSSLEY, Toledo, Ohio. Filed Nov. 27, 1929. Serial No. 410,181. 1 Claim. (Cl. 29—69.)



A mitering gauge comprising an elongated base pivoted adjacent one end to the movable table of a sawing machine with one end arranged adjacent the saw of the machine, means to hold the base in adjusted positions on the table, said base having a thickened portion at one side providing a plane work face against which the material to be mitered may be placed and having a groove extending parallel and in spaced relation to said face, feed

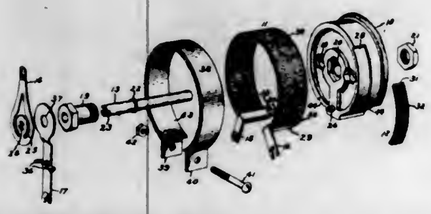
teeth formed on the thickened portion of the base adjacent the groove, a gauge body of trapezoidal shape having one side inclined and disposed at an acute angle to said work face of the thickened portion of the base and providing a narrow side to the body, a bifurcated portion formed on the narrow side of the body and providing spaced arms traversing the groove and feed teeth and resting on the upper face of said thickened portion of the base, a feed nut journalled to the arms and meshing with the teeth to permit adjustment of the body along the work face and toward and from the saw, a boss on the bifurcated portion and extending into the groove, a headed set bolt threaded to said boss and located between the opposing walls of the groove, and a handle secured to the headed set bolt for turning the latter against the wall of the groove lying adjacent the work face of the base to clamp the body in various adjusted positions.

1,804,249. **PROCESS OF PRODUCING CARBON BLACK AND APPARATUS THEREFOR.** ROLAND B. DAY, New York, N. Y. Filed Dec. 21, 1926. Serial No. 156,167. 13 Claims. (Cl. 134—60.)



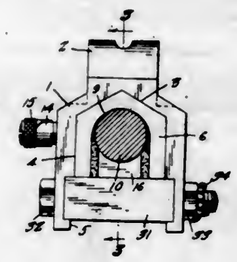
1. The method of producing carbon black which method comprises mixing hot gases of combustion with cooler gases free from oxygen to obtain a cooler mixture substantially free from oxygen, and then causing it to mix with carbonaceous particles at a temperature sufficiently high to yield carbon black but not sufficiently high to cause overheating of the carbon black when formed.

1,804,250. **CURRENT REGULATING DEVICE.** DONALD R. DE TAR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 20, 1928. Serial No. 294,277. 10 Claims. (Cl. 201—55.)



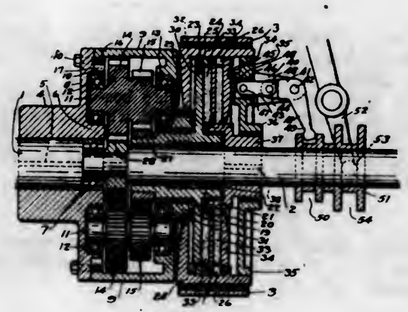
1. In a current regulating device, a base, a resistance element disposed around the periphery thereof, contractable clamping means surrounding said base with said resistance element interposed between the base and the clamping means, and means for contracting said clamping means to secure said resistance element in position on the periphery of said base.

1,804,251. **BEARING.** JOSEPH D. DINES, Tempe, Ariz. Filed Mar. 24, 1930. Serial No. 438,559. 3 Claims. (Cl. 308—68.)



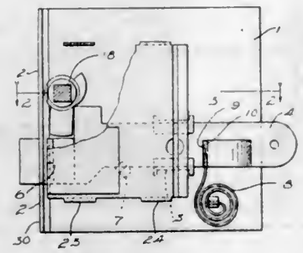
1. A bearing for journals comprising a fixed bearing member having a longitudinal opening entering from its lower end, its top struck at a curvature to afford a rest for a journal and the said curved top being at a greater curvature than the cross sectional contour of the bearing, an outer bearing having a longitudinal opening therethrough whose inner wall is round and arranged at the same curvature as the cross sectional contour of the bearing, said outer bearing having its sides provided with equidistantly spaced fingers and the fixed bearing having openings therethrough for the reception of the fingers, said bearings having a cotton waste therebetween, means for feeding lubricant to the waste and means for adjusting the outer bearing with respect to the journal and with respect to the fixed bearing.

1,804,252. **REVERSE GEARING.** THOMAS S. EWART, Raymond, Wash., by judicial decree transferred to Laura V. Ewart. Filed May 31, 1928, Serial No. 281,658. Renewed Oct. 6, 1930. 1 Claim. (Cl. 74—34.)



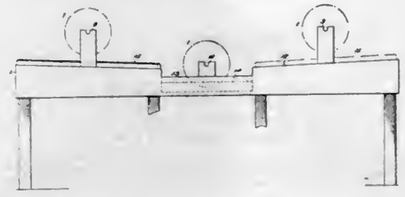
In a reverse gear, a drive shaft, a hub at the end of the said drive shaft, a driven shaft with the end journaled in the hub at the end of the said drive shaft, a gear adjacent the end of the said driven shaft, planetary gears meshing with the said gear on the driven shaft, stub shafts upon which the said planetary gears are mounted, other planetary gears on the said stub shafts, a housing in which the said stub shafts are rotatably mounted, means for rigidly attaching the housing to the hub on the said drive shaft, a sleeve having an outwardly extending flange rotatably mounted on the said driven shaft, a gear on the said sleeve meshing with the planetary gears on the said stub shafts specified as other planetary gears, a clutch housing into which the outwardly extending flange of the sleeve extends, a disc rigidly attached to the gear housing and positioned between the end of the clutch housing and flange, a plurality of fibre and metal discs in the said clutch housing forming the friction members, keys in the said clutch housing engaging slots in the outer edges of the said outwardly extending flange and metal discs, a head in the said clutch housing, suitable locking members in the said head for frictionally holding the members within the said clutch housing, and a suitable brake on the outer surface of the said clutch housing by which the said clutch and gear housing may be held stationary.

1,804,253. **DOORLOCK.** JOHN B. FLYNN, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 12, 1929. Serial No. 399,118. 2 Claims. (Cl. 292—337.)



1. In a lock having a reciprocating bolt, the combination with a lock frame having a pillar face flange with an opening therethrough, of a roll-back for said bolt mounted on the lock frame and having a portion projecting in the said opening a distance substantially equal to the thickness of the metal of the flange and entirely within the face of said flange, and means operatively associated with said rollback for turning the same to retract the bolt.

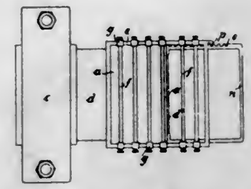
1,804,254. **METHOD OF MAKING GLASS WOOL SHEETS.** PAUL O. E. FRIEDRICH, Millville, N. J., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y., a Corporation of Delaware. Filed Jan. 25, 1927. Serial No. 163,387. 5 Claims. (Cl. 49—79.)



4. The method of making a matted sheet of vitreous material comprising heating the vitreous filaments to reduce the cohesion thereof, feeding the filaments onto a moving surface having a direction of movement transverse with respect to the filaments whereby the filaments will individually adhere to the moving surface and be pulled out from bundled relation to arrange themselves in haphazard interlaced fashion upon the surface, impregnating the mass of interlaced filaments with a binder to effect permanent union, applying pressure to the mass to compress it to the desired thickness and density, and drying the same.

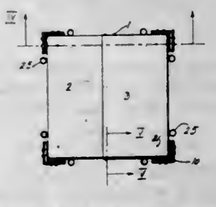
1,804,255. **TYPE CARRIER FOR STAMPING PRESSES.** AUGUST HEINRICH GERMER, Hamburg, Germany. Filed Oct. 15, 1926, Serial No. 141,782, and in Germany Dec. 10, 1925. 14 Claims. (Cl. 101—3.)

1. A type carrier in stamping-presses for punching embossing or impressing letters or the like in cardboard and arrangement of same in the stamping-press comprising a rectangular frame which is adapted to be removably mounted on the stamping-plate which supports the work



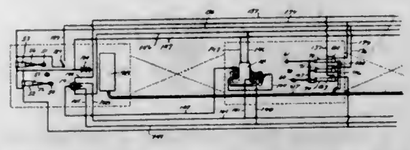
piece and means forming straight edges serving for setting the types adapted to be removably mounted on the setting-frame.

1,804,256. **OBSTETRICAL BED.** LEVI L. GILBERT, Mesquite, Nev. Filed Sept. 9, 1925. Serial No. 55,330. 13 Claims. (Cl. 45—50.)



11. A surgical or obstetrical table including a pair of uprights adapted to support the limbs of a patient on the table, said table having spaced engaging portions adjacent to each edge thereof for interchangeably receiving said uprights in different positions on said table.

1,804,257. **AUTOMATIC CONTROL SYSTEM FOR VEHICLES.** JAY H. GREENLEY, Strongsville, Ohio. Filed Jan. 28, 1925, Serial No. 5,291. Renewed Aug. 20, 1929. 23 Claims. (Cl. 180—14.)

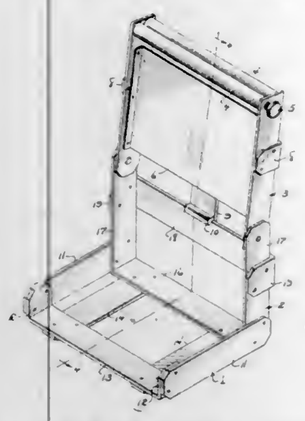


5. The combination with a train of stock vehicles comprising a leading vehicle and one or more trailers, of pneumatically operated, electrically controlled mechanism detachably connected with the change speed levers of each trailer for changing the speed of each trailer, of motor operated means detachably connected with the throttle of each trailer for changing the speed of the engine thereof, control means associated with the change speed lever of the leading vehicle and connected with the change speed lever of each trailer for regulating the speed of each trailer in synchronism with the speed of the leading vehicle and control means associated with the throttle of the leading vehicle and connected with the throttle operating means of each trailer for moving the throttle of each trailer in synchronism with the throttle of the leading vehicle.

1,804,258. **MANUSCRIPT HOLDER FOR TYPEWRITERS.** LAWRENCE JONES, Beards Fork, W. Va. Filed Apr. 23, 1930. Serial No. 446,729. 1 Claim. (Cl. 120—30.)

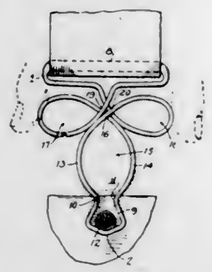
A device of the character set forth comprising a base, cushion feet carried by said base, a vertical support se-

cured to said base, a brace carried by said support, a manuscript holder pivoted to said support, a resilient member secured to said holder and having its free end bent



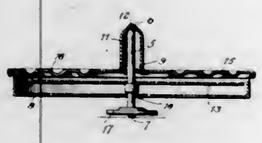
to form a hook-shaped portion adapted to engage the brace for supporting the holder in a vertical position and to permit the holder to be swung into a horizontal position.

1,804,259. RESILIENT METALLIC SUSPENDER LOOP. LYNDON WALKER JOYCE, Greensboro, N. C., assignor to Joyce-Venning Manufacturing Co., Inc., Greensboro, N. C., a Corporation of Delaware. Filed Nov. 6, 1929. Serial No. 405,152. 3 Claims. (Cl. 24—224.)



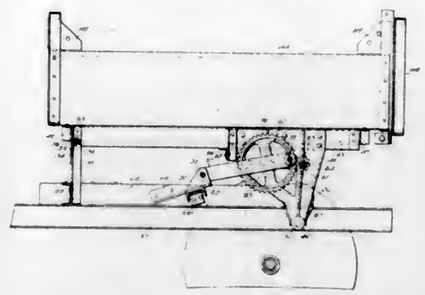
3. A suspender loop comprising a resilient wire bent to form a button retaining loop, a narrow neck at the top of said loop, a larger loop on the opposite side of said neck from said button retaining loop, means for securing said suspender loop to a suspender, beyond said larger loop, and means intermediate said suspender securing means and said larger loop and acting through the latter to expand said neck when said button retaining loop is tensioned at its bottom end and to contract said neck when said tension is relieved.

1,804,260. SPINNING TOY. WILLIAM J. KERR, Smethport, Pa. Filed Oct. 4, 1929. Serial No. 397,323. 4 Claims. (Cl. 46—32.)



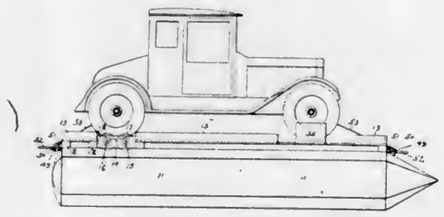
1. In a spinning toy, a lower horizontal disk having items of interest upon its upper face, an upper disk having openings over said items, means for rotatably mounting the two disks coaxially but allowing relative rotation thereof, said means being adapted to effect unitary rotation of the disks upon initial spinning of the toy, whereby said items will not then be individually visible, and means for retarding the rotation of said lower disk to render said items individually visible through the openings of said upper disk while the latter continues to spin.

1,804,261. SEMIAUTOMATIC DUMPING BODY. ALBERT P. LEE, Chicago, Ill., assignor to Lee Trailer & Body Co., Chicago, Ill., a Corporation of Illinois. Filed May 1, 1924. Serial No. 710,291. 12 Claims. (Cl. 298—19.)



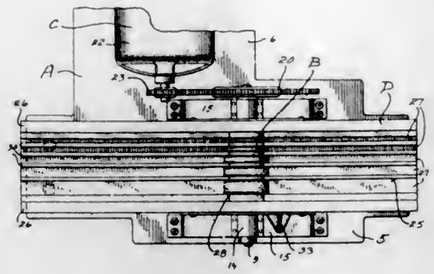
1. A dumping vehicle of the character described comprising a framework, a body swingable on a horizontal axis on said framework and means for swinging said body on its axis in either direction, comprising members mounted to pivot on a fixed axis on said framework and on a shiftable axis relative to said body and rotatable means on said body for shifting said last mentioned axis, said rotatable means being rotatable in the same direction, to move said body in either direction.

1,804,262. AUTOMOBILE BOAT. WALTER C. LEWIS and HOWARD T. POWERS, Corpus Christi, Tex. Filed June 20, 1930. Serial No. 462,574. 1 Claim. (Cl. 115—0.5.)



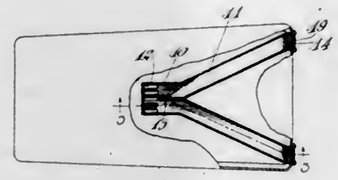
In a boat for automobiles, a pair of spaced pontoons, means connecting the pontoons to hold them in spaced parallel relation, a trackway extending longitudinally of the pontoons upon the connecting means to receive and guide the wheels of an automobile, pairs of parallel rollers rotatably mounted in said trackway for engagement by the wheels of the automobile, a propeller, means operated by one of the rollers of each pair and connected with the propeller to drive the latter, a rudder, a pair of shoes located in the trackway for engagement by the front wheels of the automobile, means to pivotally and slidingly mount said shoes to adjust the latter in accordance with the wheel base of the automobile, means connecting the shoes, and adjustable means connecting the shoe connecting means with the rudder to operate the latter when the steering mechanism of the automobile is operated.

1,804,263. GLASS EDGING MACHINE. COLLIS S. MAYFLOWER, Flagstaff, Ariz. Filed Apr. 26, 1926. Serial No. 104,812. 1 Claim. (Cl. 51—72.)



In a glass edging machine including a bed plate, a grinding element rotatably mounted upon said plate, and an edging table disposed transversely above the grinding element, means for adjustably supporting the table above the grinding element comprising a pair of vertically adjustable uprights supporting one end of the table upon the bed plate and each having a hinged joint the axes of which align transversely of the table, and a vertically adjustable support for the opposite end of the table comprising an adjusting screw rotatably connected at its upper end to the under side of the edging table at the longitudinal center thereof and having a screw threaded lower end, and a block rigidly carried by the bed plate and having a vertically extending threaded bore for receiving the lower threaded end of the adjusting screw.

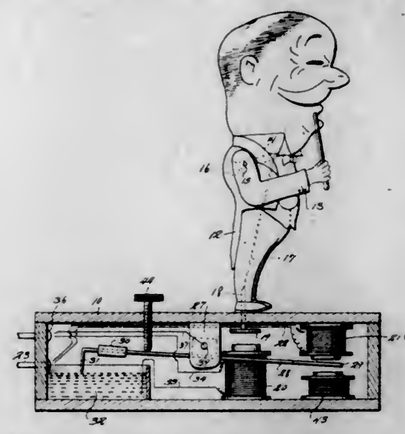
1,804,264. AUTOMOBILE VENTILATOR. JAMES B. MCDEVITT, Chicago, Ill. Filed June 25, 1929. Serial No. 373,604. 4 Claims. (Cl. 98—2.)



1. An automobile ventilator comprising a chamber with the fore part of its floor perforated to communicate with the body interior, a partition in the chamber to the rear of its perforated portion, and conduits diverging rearwardly from the divided sections of the chamber, the outlets of the conduits being through the rear wall of the automobile body.

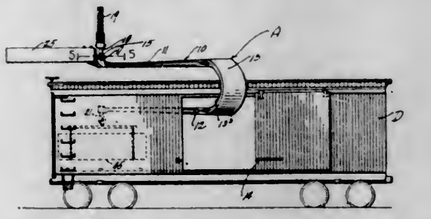
1,804,265. ELECTRICAL TOY. WILLIAM L. MINICK, Jr., Waynesboro, Pa. Filed Aug. 3, 1929. Serial No. 383,198. 3 Claims. (Cl. 46—49.)

1. A toy of the character described, including a figure having a movable part, an armature operatively connected to said movable part to oscillate the latter as the armature is oscillated, an electro-magnet associated with the armature, a pivoted switch adapted when shifted in one direction to close a circuit and when shifted in the other direction to open the circuit, means urging the switch to a position where the circuit is open, a second electro-magnet for which the switch constitutes an armature, the last named magnet having current conducting means adapted to be connected in circuit with a radio receiving set and



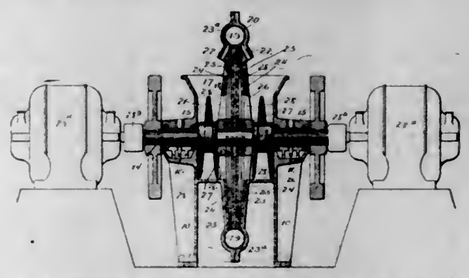
a loud speaker, a shiftable weight mounted upon one end of the switch, and means limiting the movement of that end of the switch adjacent the electro-magnet coacting therewith away from said electro-magnet.

1,804,266. LOADING AND UNLOADING DEVICE. BRUCE A. MOORE, Blawnox, Pa. Filed Feb. 20, 1930. Serial No. 429,991. 5 Claims. (Cl. 294—67.)



1. In a load transfer device the combination of upper and lower spaced beams having a connecting bight portion offset from the plane in which said beams lie transversely to one side of said plane, said connecting means having a recess therein facing the plane in which said beams lie and open to the space between said beams.

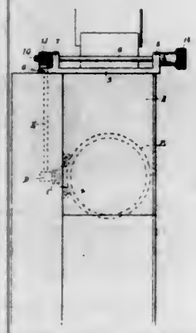
1,804,267. SHEARING OR DISINTEGRATING SUGAR CANE. WILLIAM HENRY MORGAN, Alliance, Ohio, assignor, by mesne assignments, to The Morgan Hurrycane Company, New York, N. Y., a Corporation of Florida. Filed May 5, 1925, Serial No. 28,266. Renewed Feb. 8, 1929. 20 Claims. (Cl. 146—106.)



11. A machine for disintegrating cane stalks having in combination relatively movable cane cutting devices, rela-

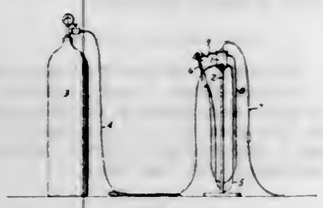
tively movable supports for said devices having surfaces for directing and positioning the cane with relation to said devices to cause said devices to cut or split the cane repeatedly in general directions lengthwise of the stalks, means for relatively moving said supports to actuate relatively said cutting devices, and means for feeding the cane to be disintegrated into position to engage said surfaces.

1,804,268. MANIPULATING ATTACHMENT FOR THE LENS FOCUSING MECHANISM OF MOVING PICTURE PROJECTING MACHINES. NORFLEET J. NORTHINGTON, St. Albans, N. Y. Filed Oct. 2, 1928. Serial No. 309,841. 2 Claims. (Cl. 88—24.)



1. The combination with a moving picture projecting machine having a lens focusing mechanism including a rack, a pinion and an upwardly extending pinion shaft projecting through the lens housing, of a manipulating attachment therefor comprising a bracket arranged transversely upon the housing having a horizontally disposed apertured portion through which the projecting end of the pinion shaft extends, a worm gear secured to the end of said pinion shaft, a manipulator shaft journaled in bearings in the bracket, a worm wheel secured to said manipulator shaft and meshing with the worm gear and a manipulator head at the end of the manipulator shaft.

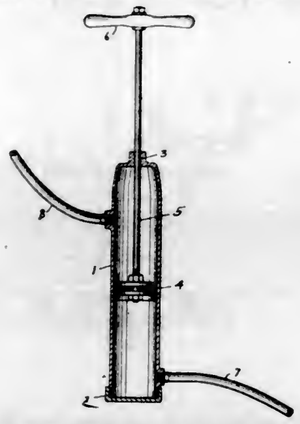
1,804,269. WELDING APPARATUS. EDWARD J. O'CONNELL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 23, 1929. Serial No. 394,464. 5 Claims. (Cl. 219—8.)



1. In combination with a fluid supply line and an electric circuit, means in said fluid supply line for opening and closing the passage through said line, means in said electric circuit for opening and closing said electric circuit and an article supporting means operated by the weight of said article lying thereon for closing said passage through said line and for opening said electric circuit.

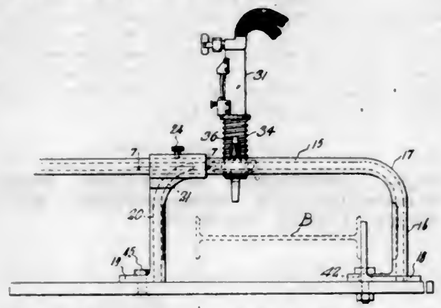
1,804,270. SIPHON. MARTIN B. PALICH, Houston, Tex., assignor of one-fourth to B. W. Brenneman, Dallas County, Tex. Filed Feb. 12, 1929. Serial No. 339,441. 2 Claims. (Cl. 137—20.)

1. A device of the character described including a barrel one end of which has a flat supporting base, a reciprocable plunger therein, means for reciprocating the plunger and a tube leading out from the barrel near each end thereof,



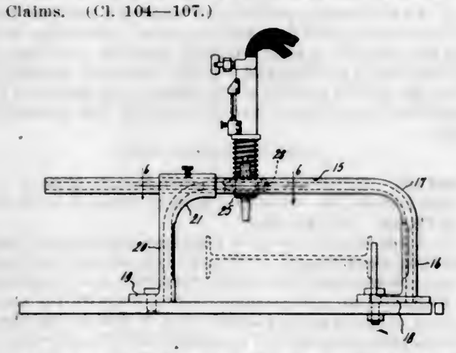
the other end of said barrel beyond the corresponding tube being tapered to fit tightly about the plunger when the plunger is moved into said tapered portion.

1,804,271. TORCH CUTTING DEVICE. WAYNE F. PALMER, Holyoke, Mass. Filed July 8, 1930. Serial No. 466,471. 11 Claims. (Cl. 320—23.)



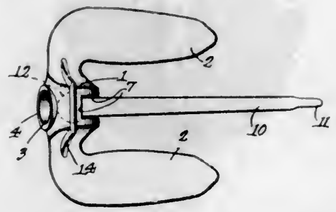
1. A cutting device comprising a trackway passing around three sides of a structural steel member comprising re-entrant parts, a torch carriage movable in the trackway to carry a torch around the external boundaries of the member, and a torch shiftably mounted in the carriage so that it may be moved substantially parallel with and adjacent the re-entrant parts of the member.

1,804,272. TRACKWAY. WAYNE F. PALMER, Holyoke, Mass. Filed July 8, 1930. Serial No. 466,472. 4 Claims. (Cl. 104—107.)



1. A device of the class described, comprising channeled tracks having opposed straight runs and angular portions, a pair of shiftable channeled tracks extending angularly from the straight run of the tracks and having tongues fitting into the channels in said straight runs, said shiftable tracks having the bottoms of their channels merging into the bottoms of the channels of the straight runs, and a carriage slidable in the channels and contractible transversely so as to pass from the straight runs to said shiftable tracks.

1,804,273. ANCHOR. FRANK T. PELKEY, Marine City, Mich. Filed June 26, 1929. Serial No. 373,792. 2 Claims. (Cl. 114—208.)

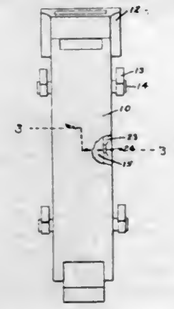


1. An anchor including a head having an opening, the head being provided with forwardly extended flukes and a stock extended between the flukes and having an enlargement mounted to rock in the openings, (he cross-sectional area of the opening) the opening being unemcumbered, to the rear of the enlargement, and being large enough at its rear end to permit the passage of the enlargement, whereby the stock can be slid freely in a backward direction, when the anchor is in use, thereby disposing the rear end of the stock behind, and in spaced relation to, the head, thereby to change the direction of the leverage of the stock on the head, and to give the rear end of the stock a direct fulcrum bearing on the sea floor.

1,804,274. PROTECTIVE LINING FOR TANKS. JACQUES POBEREJSKY, Bois-Colombes, France. Filed Mar. 31, 1927, Serial No. 180,082, and in Belgium Dec. 31, 1926. 4 Claims. (Cl. 154—46.)

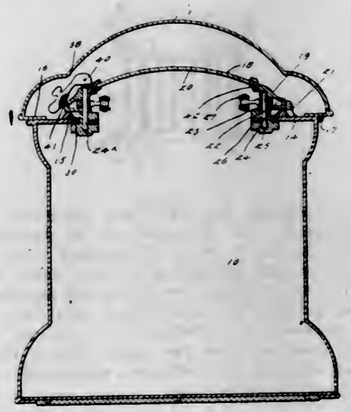
2. A petroleum tank lined with a composition containing guayule.

1,804,275. INGOT MOLD CONSTRUCTION. ROBERT G. REDMANN, Bristol, Conn. Filed Apr. 1, 1930. Serial No. 440,842. 1 Claim. (Cl. 22—146.)



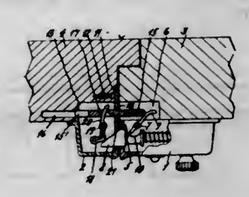
In ingot mold construction two mating parts enclosing mold cavity side walls of said cavity being integral with one of said parts and extending beyond the said cavity, the other of said parts comprising a body part that fits between said side walls and lateral extensions that are opposed to the end faces of said side walls, said end faces and lateral extensions comprising relatively diminutive finished cooperating spot-like lug structures that make face to face contact in the closed position of the mold for limiting such closure, and all other portions of said end faces and lateral extensions that are generally opposed one to the other being gouged out or cut away so as to prevent contact in such closed position of the mold.

1,804,276. BURIAL CASKET. JOHN D. RENSHLER, Findlay, Ohio. Filed June 28, 1930. Serial No. 464,592. 4 Claims. (Cl. 27—6.)



1. A burial casket comprising a body formed with an inwardly extending flange, a main lid operatively hinged to the body, a supplementary lid operatively hinged to the main lid including a rim and a transparent pane, a gasket mounted upon the flange of the body and against which the rim is adapted to bear when the supplementary lid is closed, and means for drawing the supplementary lid against said gasket including a plurality of rotatable locking dogs disposed at intervals around said rim and adapted when turned into one position to engage beneath the flange of the casket body, each locking dog having a straight side face tangential to a circle concentric to the shaft and concentric to the axis of the dog, and a curved flange, the upper face of which is inclined; an oscillatable handle mounted upon the rim at one point and operative connections between said locking dogs and the handle whereby the dogs shall be turned as the handle is oscillated in one direction to shift the dogs beneath the flange and turned to retract said dogs from beneath said flange when the handle is turned in the opposite direction.

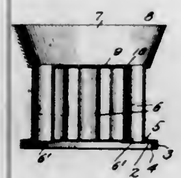
1,804,277. SAFETY LOCK FOR DOORS. MARIO F. RUIZ, Guanabacoa, Cuba. Filed Mar. 20, 1930. Serial No. 437,440. 3 Claims. (Cl. 292—346.)



1. In a lock of the character described, the combination with a locking mechanism including a bolt having a beveled face and in its stem a cam groove, of a lever pivoted in the bolt casing and engaging at one end the cam groove of the bolt, a metal plate or shield slidable in the keeper, and a lever pivoted in the keeper and connected to the

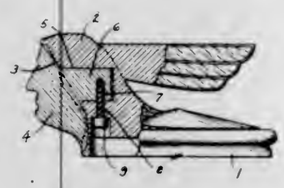
shield, so that the bolt in its forward movement engages the second lever which causes the plate or shield to slide out of the keeper into the bolt casing, thus protecting the bolt from any object placed between the door and door jamb from the outside.

1,804,278. MULTIPLE DRIP COFFEE URN. LEWIS A. SCHERCK, New Orleans, La. Filed May 24, 1930. Serial No. 455,394. 1 Claim. (Cl. 53—3.)



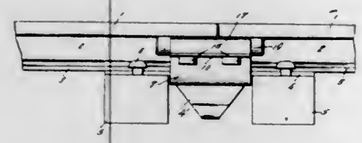
A drip attachment for coffee urns comprising a cap member adapted to fit upon the top of the urn, said cap member having a series of openings with screens disposed across said openings, a series of tubes mounted upon the cap member and surrounding said openings, said tubes being arranged in circular form with their centers at equal distances from the center of the cap member and a pan mounted upon the upper ends of the tubes and having openings at its bottom registering with the upper ends of the tubes.

1,804,279. RADIATOR CAP. WILLIAM SCHNELL and FRANK M. EDGAR, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 1, 1929. Serial No. 336,895. 2 Claims. (Cl. 41—10.)



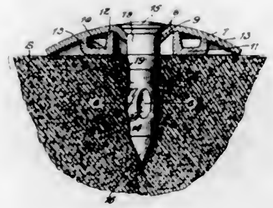
1. An ornamental radiator cap comprising in combination of a head portion and a face portion, the said head portion being recessed to receive the said face portion with the locks of hair of the head portion overlapping the joint between the face and head portions to conceal the same.

1,804,280. RAIL JOINT. LUIGI M. SERRA, Rome, Italy. Filed Oct. 18, 1930. Serial No. 489,638. 4 Claims. (Cl. 238—190.)



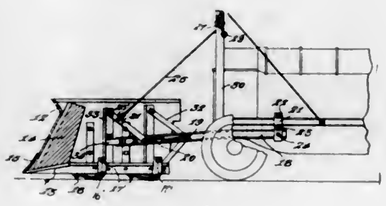
1. A rail joint comprising in combination a joint plate adapted to be disposed parallel to the rail webs and spanning directly across the abutting ends of the rails, bolts passing through the joint plate and the rail webs, an expansible and contractable tubular member interposed between said joint plate and the webs of the rails and spanning directly across the abutting ends of the rails, and said joint plate and bolts provided with cooperating means for retaining the bolts against casual rotation.

1,804,281. STREET MARKER. JOHN Q. SHUNK, Bucyrus, Ohio. Filed Dec. 12, 1929. Serial No. 413,560. 3 Claims. (Cl. 94—1.5.)



1. A street marker comprising a concavo-convex disk having a depressed central portion and a central spike-receiving opening in said portion, and an annular support under said disk of considerably less diameter than the latter, said support comprising a flat base portion for contact with the street, and inner and outer concentric flanges rising from said base portion and contacting with the lower side of the disk, said inner flange surrounding said depressed disk portion to relatively center the disk and support, said disk being sufficiently stiff to prevent depression between its supported portions under the weight of heavy vehicles.

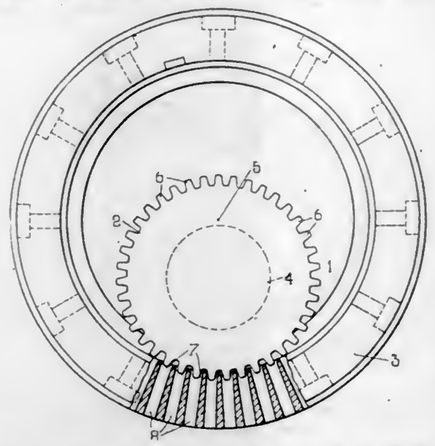
1,804,282. SNOWPLOW. GILBERT SICKLER, Assaria, Kans. Filed July 6, 1929. Serial No. 376,307. 1 Claim. (Cl. 37—44.)



A plow comprising a pair of side elements connected at their forward ends and diverging towards their rear ends and having the upper edges inclined outwardly and upwardly, a block at the connected ends of said side elements, lower flange plates at the lower edges of said elements and extending from beneath the block and upwardly and secured to the side elements to form blades curved runners secured to said plates, vertical braces between said side elements and the plates, and a tractor connecting means secured to said braces.

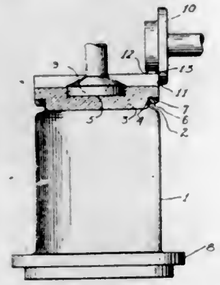
1,804,283. MOLDING MACHINE. ALBERT WILLIAM SIZER, Hessle, England. Filed Sept. 29, 1930. Serial No. 485,237. 2 Claims. (Cl. 107—8.)

2. A machine for molding plastic substances comprising in combination an annular ring having spaced radial passages therein, a solid toothed molding wheel having teeth of equal pitch to the pitch of said passages and engaging with said passages on the inner periphery of said ring, said molding wheel being provided with a



number of peripheral grooves, and a number of peripheral upstanding flanges on the interior of said ring adapted to engage within the grooves of the molding wheel.

1,804,284. METHOD OF FORMING A DISPLAY PACKER'S CONTAINER. WILLIAM B. SMITH, Baltimore, Md., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 5, 1929. Serial No. 344,458. 1 Claim. (Cl. 153—1.)



The method of forming a display packer's container having an inwardly projecting seat and a glass panel end having a depending shoulder portion the diameter of which is substantially the same as the seat, consisting in placing the panel with an elastic packing on the seat and subjecting the edge portion of the wall of the body of the container to a curling pressure in a direction lengthwise of the wall for curling said edge portion inwardly to form a flange, and gradually shifting the said curl and flange into contact with the glass panel and forcing and securing said glass panel in sealing contact with the elastic gasket and said seat, whereby the shoulder on said panel will contact with said inward projecting seat portion and prevent collapsing of the same during rolling of the flange into contact with the panel.

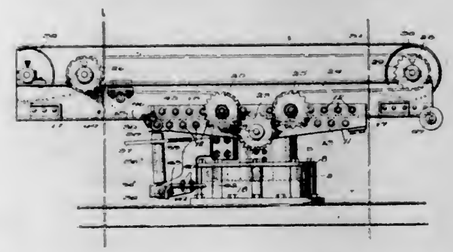
1,804,285. SAWDUST BURNER. VERNE C. SNYDER, Portland, Oreg. Filed Sept. 4, 1928. Serial No. 303,749. 2 Claims. (Cl. 110—29.)

1. A sawdust burner having in combination a pair of side walls having air spaces formed therein and having same partially divided with a horizontal partition extending to the forward end of the walls having an air inlet opening in the top side of said partition communicating with the outer air and having an opening formed on the lowermost side of said partition passing through the wall, a pair of tracks mounted between said walls, a frame mounted on each track, grate bars mounted across said frame, a stop for limiting the rear movement of said frames with relation to said tracks, a latching grate for holding said frames against their stops, a fuel magazine over said



grate bars having a deflector plate therein and a means for adjusting the angular position of said deflector plate for the purpose of projecting fuel against the uppermost portion of said grate bars in a manner that the weight of the fuel in the magazine shall not rest upon the lowermost grate bars.

1,804,286. CONVEYER. FRANK SPENO, Ithaca, N. Y. Filed June 7, 1928. Serial No. 283,670. 10 Claims. (Cl. 198—118.)

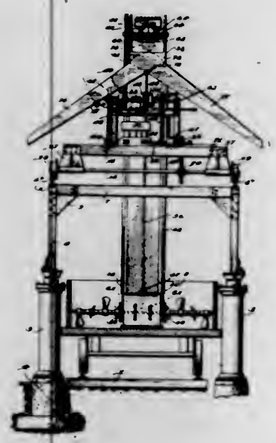


1. In a conveyer, the combination of a supporting structure, plates pivotally supported thereby about a horizontal axis and in spaced relation, a plurality of guiding rollers carried by said plates, said rollers being arranged in a plurality of rows on each of the plates, and conveying structures having portions thereof slidably received between the rows of rollers on each of the plates.

1,804,287. MATERIAL HANDLING APPARATUS. JOHN W. SPRY, Dallas, Tex. Filed July 25, 1929. Serial No. 380,937. 2 Claims. (Cl. 214—44.)

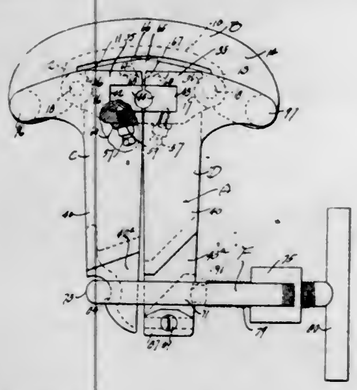
1. In material handling apparatus, an elevated supporting frame, an endless conveyer depending from said frame to contact material to be elevated, with its lower end and mounting a rotating conveyer operating shaft at its lower end, and a plurality of axially alined material gathering and feeding units secured to the opposite ends of said conveyer shaft and extending axially outward from the ends of said shaft, said units comprising hubs having interthreading male and female joints, and having

material engaging wings extending outwardly therefrom and formed to feed the material engaged laterally inward



to said conveyer the threads of said hub joints being inclined to tighten by the thrust of material against said wings.

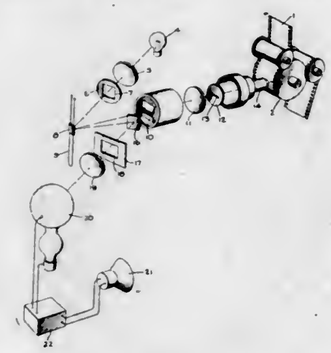
1,804,288. CABLE CLAMP. JAMES S. TAYLOR, Tulsa, Okla., assignor of one-half to Lory J. Mildren, Ponca City, Okla. Filed Jan. 14, 1930. Serial No. 420,757. 9 Claims. (Cl. 24—135.)



4. In a cable clamp a body, a pair of jaws pivoted on the body, the jaws in facing relation having recesses the bottoms of which are relatively convergent in a line transverse to the plane of movement of the jaws, the bottoms of said recesses having a series of sockets therealong, liners having surfaces in abutment with the converging surfaces in the recesses of said jaws, the liners having extensions thereon adapted for selected fitting in the series of sockets of their respective jaw recesses for adjustment of the liners in a predetermined relation along their respective jaw recesses, and set screw means for holding the liners in a predetermined clamped relation in their recesses.

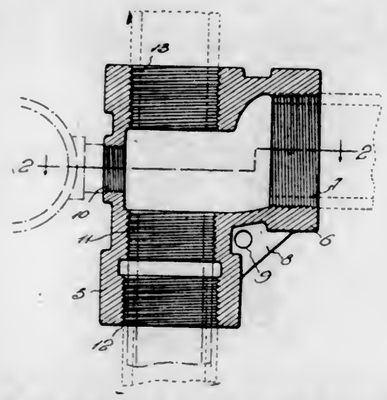
1,804,289. SOUND RECORDING. LAURENS A. TAYLOR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 31, 1930. Serial No. 424,992. 6 Claims. (Cl. 179—100.3.)

1. Apparatus for recording sound on a moving light sensitive member comprising a light source, means for laterally vibrating a beam of light from said source in accordance with sound waves, means whereby the light comprising one portion of said beam may expose said member, monitoring means, and means arranged to direct



the light comprising another portion of said beam toward said monitoring means and to cause a magnification of the movement thereof.

1,804,290. COUPLING OR T FOR USE IN CONNECTION WITH OIL WELL TUBING. SHERIDAN P. TSCHAPPAT, Tulsa, Okla. Filed May 19, 1930. Serial No. 453,562. 1 Claim. (Cl. 285—203.)

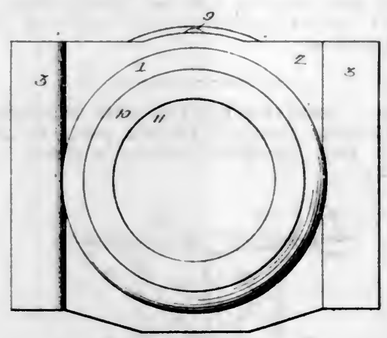


A coupling to be mounted upon a tubing having regular threads or upset threads, said coupling comprising an upstanding tubular body portion having a lateral tubular extension which is threaded for connection with a pipe, said tubular body portion being provided near its upper end with a threaded portion to engage with a tubing, said tubular body portion being provided in its lower portion with means for connection with tubing having regular or upset threaded portions of different diameters, said means comprising upper and lower internal screw threaded portions, the lower screw threaded portion having a larger diameter than the upper screw threaded portion, the arrangement being such that the lower screw threaded portion is adapted to engage upon a tubing having upset threads while the upper screw threaded portion is adapted to engage upon a tubing having regular threads.

1,804,291. PROCESS OF MAKING AXLE BOXES. CHARLES PARRY VAUCLAIN, Drexel Hill, and FRANK E. MERKLINGER, Philadelphia, Pa. Filed Aug. 5, 1929. Serial No. 383,531. 4 Claims. (Cl. 29—166.)

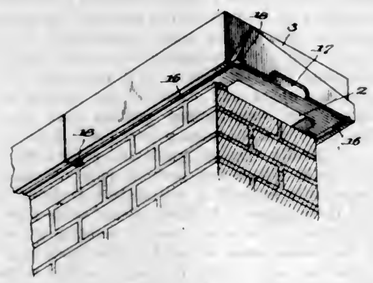
3. The process herein described of making axle boxes, said process consisting first of heating a wrought metal

tube and shaping the ends of the tube to form the front and rear ends of the box; and securing to said tubular



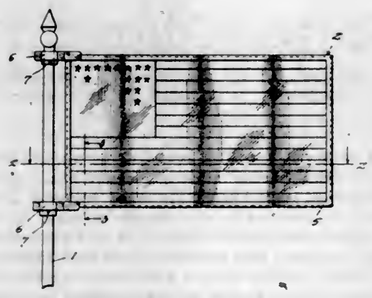
body portion thus formed, two pedestal guides, said guides being spaced apart and secured to the body portion by welding.

1,804,292. BUILDING UNIT. JOHN WRIGHT WARREN, Knoxville, Tenn. Filed May 23, 1930. Serial No. 455,089. 6 Claims. (Cl. 72—86.)



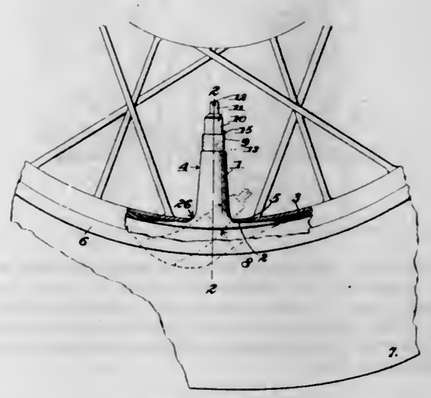
1. A building unit comprising a body portion, an extension at one end thereof of smaller area than the end of the body portion adapted to fit in a complementary recess in another unit, having a pair of downwardly inclined upper surfaces and a channel in each of the upper surfaces of the extension.

1,804,293. FLAG DISPLAY DEVICE. STEPHEN WARZOHA, Port Chester, N. Y. Filed Oct. 16, 1930. Serial No. 489,143. 3 Claims. (Cl. 116—173.)



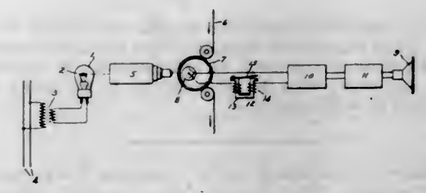
1. A device of the character described, comprising an elongated longitudinally undulated casing designed to conform in contour to a flag and adapted to have a flag compressed between side walls thereof, said side walls being of a transparent material, a supporting staff, and means for attaching the casing to said staff.

1,804,294. PNEUMATIC INNER TUBE AND VALVE STEM. FRANK H. WATSON, Jonesboro, Ark. Filed Oct. 23, 1930. Serial No. 490,805. 6 Claims. (Cl. 152—12.)



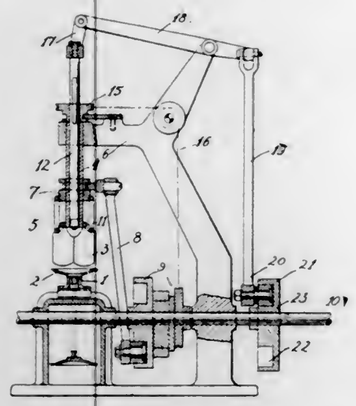
1. A valve stem of yieldable material, a cap, and means on which the cap is fitted, being carried by the stem and having a relatively short extension beyond the end of the stem to enable utilization of said end of the stem as a seat for the rim of the cap.

1,804,295. SOUND REPRODUCING APPARATUS. DOW O. WHELAN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 28, 1929. Serial No. 417,248. 6 Claims. (Cl. 179—100.3.)



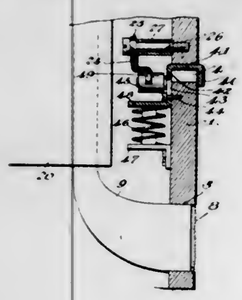
2. Sound reproducing apparatus comprising a light source adapted to be energized by an alternating current, means for passing a sound record through a narrow beam of light from said source, a photo-electric device arranged to receive the light beam modulated by the sound record, a translating device connected with the output circuit of said photo-electric device, and a mechanically resonant filter connected with said output circuit tuned to the alternation frequency of said current.

1,804,296. PROCESS AND APPARATUS FOR THE SHAPING OF LUMPS OF DOUGH. FRIDOLIN WINKLER, Villingen, Germany. Filed Mar. 1, 1929. Serial No. 343,696, and in Germany Mar. 1, 1928. 11 Claims. (Cl. 107—8.)



1. A process for shaping lumps of dough and like articles, comprising the cutting of a lump of dough and forming it into a substantially conical shape, the lines of the cuts extending helically from the apex of the shape, and thereafter compressing the cone of dough in the direction of its axis.

1,804,297. TALKING BILLBOARD. GEORGE E. WINTZ New York, N. Y. Filed Sept. 11, 1929. Serial No. 391,952. 10 Claims. (Cl. 40—139.)



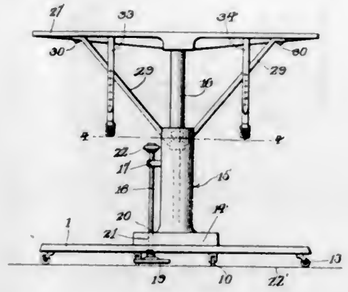
4. An apparatus comprising movable eye and lip members, sound reproducing apparatus, and means to produce irregularities of movement of said members in approximate agreement with the irregularities of the sound reproduced by said apparatus.

1,804,298. SEALING DEVICE. JACQUES WOLF, Basel, Switzerland. Filed July 17, 1929, Serial No. 379,043, and in Germany July 30, 1928. 2 Claims. (Cl. 219—21.)



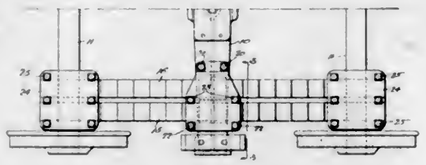
1. A sealing device comprising a heating head and a drip scoop for the sealing wax in combination with tilting means for said drip scoop, said drip scoop being so arranged as to be capable of being applied to the heating head when pressing the wax stick thereon and sliding same down along the scoop and of automatically returning to normal position when the wax stick slides right off the scoop.

1,804,299. COMBINED LIFTING AND TRANSPORTING DEVICE. WILLIAM C. YENTSCH, Peoria, Ill. Filed Aug. 5, 1929. Serial No. 383,589. 6 Claims. (Cl. 254—2.)



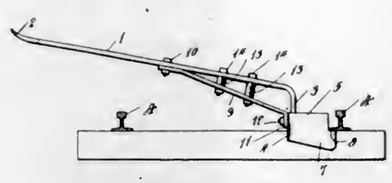
1. In a combined lifting and transporting device, the combination of a carriage, a table arranged in superposed spaced relation with respect to the carriage, an elevating and lowering means for the table including a vertically movable part and an upstanding stationary part, the former extending into the latter, said vertically movable part having its upper end fixed to the bottom of the table between the longitudinal median and the rear edge of the table, said stationary part being fixed to said carriage, a vertically disposed guide rod connected to and spaced from said stationary part, a pair of oppositely disposed, upwardly extending, rearwardly inclined holder rods having their upper ends fixed to said table forwardly of the rear edge of the-latter, and a coupling piece integral with the lower ends of said holder rods and slidably mounted on said guide rod and coating with the said guide and holder rods to maintain the table in parallelism with respect to the carriage.

1,804,300. GRADUATED SEMIELLIPTIC SPRING. WALTER S. ADAMS, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 20, 1930. Serial No. 437,502. 5 Claims. (Cl. 105—182.)



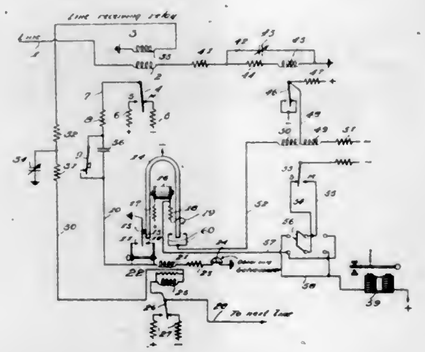
1. In a car truck, spaced axles and an intermediate bolster, the axles having aligned journal boxes providing relatively wide seats upon their upper surfaces, a pair of leaf springs arranged in side to side relation secured at their ends to said journal boxes and at their centers operatively engaging said bolster, one of said springs being rigidly fixed to said bolster and means carried by the bolster and co-acting with the other spring to engage and flex the said other spring when the bolster has been depressed to a predetermined extent against the action of the first-named spring.

1,804,301. COMBINED RAIL LIFTER AND SPIKE PULLER. JOHN ANDREWS, Jr., Kerrobert, Saskatchewan, Canada. Filed Sept. 25, 1929. Serial No. 395,132. 2 Claims. (Cl. 254—121.)



1. A tool of the class described, comprising a handle having a downturned end, a U-shaped member secured to said down-turned end and adapted to rest on a railroad tie, a brace secured to said handle and to said member, spacing means secured between said handle and brace, and the ends of said member provided with shoulders adapted to engage under the base of a railroad rail to lift the rail relatively to the tie.

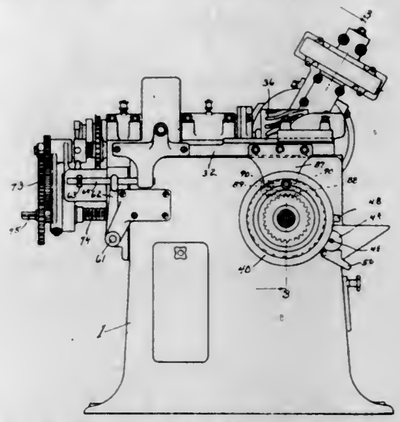
1,804,302. HIGH SPEED FORK REGENERATING REPEATER FOR TELEGRAPH SYSTEMS. HERBERT ANGEL and JAMES W. ROBINSON, Brooklyn, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Aug. 30, 1929. Serial No. 389,568. 17 Claims. (Cl. 178—70.)



1. In a signaling system, a first signaling line, a second signaling line, a tuning fork operating between contacts and means controlled by said tuning fork for repeating that portion of said signaling impulses received while said tuning fork is in non-contacting position between said contacts.

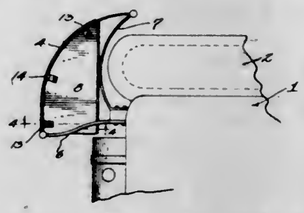
1,804,303. FEEDING MECHANISM FOR HOBBING MACHINES. EDWARD A. BAYTON, Detroit, Mich., assignor to The Lees-Bradner Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 22, 1926. Serial No. 156,488. Renewed Mar. 23, 1931. 29 Claims. (Cl. 90—4.)

1. In a machine of the class described, a stationary main frame, a movable support mounted on the frame and adapted to support a work piece, a tool carriage movable on the frame, a rotatable tool on the carriage, a movable carriage operating element mounted on the main frame, mechanical connections between the operating element and the carriage, means whereby movement of the operating element in one direction is adapted to move the tool carriage to position the tool adjacent to the work piece, and means responsive to movement of the work support whereby movement of the operating element in another direction is effected to feed the tool into the work piece.



29. In a machine of the class described, a stationary main frame, a tool carriage movable on the frame, a work carriage movable on the frame and adapted to support a work piece, a threaded push and pull rod connected to the tool carriage for moving it, a nut element threaded on the rod, and mounted on the frame for rotary and axial movement, means for turning the nut element to propel the rod to move the tool carriage into a predetermined position relative to the work carriage, and means for moving the nut element axially to propel the rod with a tool carriage feed movement, said means including a cam on the main frame, an annular cam follower surrounding the nut element and rotatable thereon on the axis thereof, gear teeth on the cam follower and a rack on the work carriage engaging the gear teeth for rotating the cam follower.

1,804,304. COMBINED BUMPER AND MUD GUARD. HELLA BEANE, Alpena, Mich. Filed Aug. 17, 1928. Serial No. 300,160. Renewed Oct. 2, 1930. 9 Claims. (Cl. 293—55.)

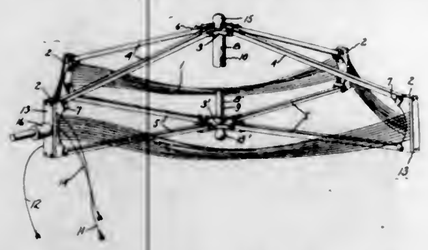


9. The combination with a vehicle having rear quarter bumpers, of a deflector plate positioned substantially within the contour of each bumper and serving to reinforce the same, said deflector plate also extending laterally to the line of projection of the chassis channel frame member and a sufficient distance from the bumper bars toward the rear wheel and being so positioned above the ground as to deflect or stop mud or other foreign material as it is initially thrown from the rear wheels and prevent the same from being thrown onto the rear portion of the vehicle body.

1,804,305. FOLDING LOOP ANTENNA. LLOYD S. BEEBE, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 11, 1929. Serial No. 354,385. 5 Claims. (Cl. 250—33.)

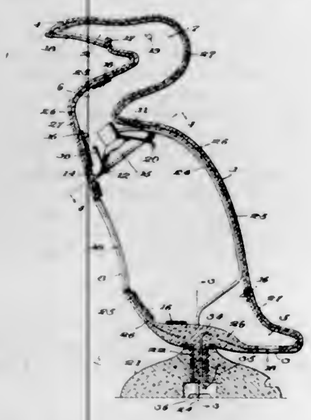
1. A folding antenna structure, comprising a pair of central members arranged side by side, a plurality of con-

ductor carrying members, means attached to the central members for supporting said conductor carrying members about the central members in parallel relation, a loop conductor wound upon said carrying members to form a



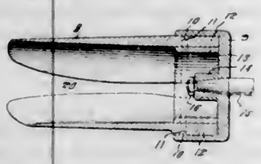
solenoid, and means cooperating with the central members to cause the supporting means to fall into a column extending from the carrying members outward in opposite directions toward the central members when the central members are separated.

1,804,306. ACOUSTIC DEVICE. RAYMOND CECIL BENDER, West Palm Beach, Fla. Filed Mar. 4, 1930. Serial No. 433,077. 12 Claims. (Cl. 181—27.)



1. A loud speaker comprising a sound amplifying chamber of general tapered form having a pair of sound openings one near the larger end and one near the smaller end, and a conical diaphragm sound emitting element mounted within the amplifying chamber between the openings with the concave side of the diaphragm facing in the general direction of the larger end of the chamber and the convex side facing in the general direction of the smaller end.

1,804,307. METHOD AND APPARATUS FOR INCREASING THE LIFT OF AIRPLANES. TRIAN BERBECK, Baltimore, Md. Filed June 25, 1930. Serial No. 463,802. 11 Claims. (Cl. 244—14.)



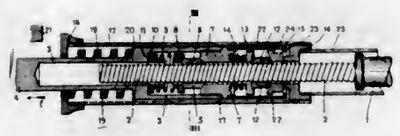
7. An impeller for an airplane adapted to increase the lift thereof, said impeller comprising a cylindrical-like hub having a closed end, a plurality of blade elements having an airfoil section mounted upon said hub in spaced apart relationship with respect to each other, said elements being so positioned that the leading and trailing edges of any two of them are adjacent each other, said hub adapted to be mounted upon a rotatable shaft so that the blade elements may be rotated about a horizontal axis.

1,804,308. SLEEVE HOLDER. JOHN C. HOLLINGER, Olympia, Wash. Filed Dec. 4, 1930. Serial No. 500,070. 5 Claims. (Cl. 24—251.)



1. A grip for a sleeve holder comprising companion jaws, one jaw having its inner end portion thickened to form a shoulder and the other jaw fitting against the inner face of the first jaw with its inner end abutting the shoulder, a flexible strip straddling the thickened inner end portion of the first jaw and having arms secured against opposed faces thereof with one arm overlapping the outer face of the second jaw and secured thereto to hingedly mount the second jaw, and means to move the second jaw towards the first jaw and secure the jaws in a gripping position.

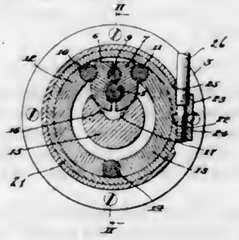
1,804,309. AUTOMATIC BRAKE ADJUSTING MECHANISM. OLIVIER BOURBEAU, Paris, France. Filed May 31, 1930. Serial No. 458,514, and in France Apr. 10, 1930. 14 Claims. (Cl. 188—200.)



1. Mechanism for automatically adjusting the rods of brake mechanism comprising a rod provided at one end with a worm, a plurality of toothed jaws engaging with said worm, a sleeve arranged in alignment with said rod, said sleeve being adapted to hold said jaws in engagement with said worm, and means for limiting the relative movement between said rod and said sleeve

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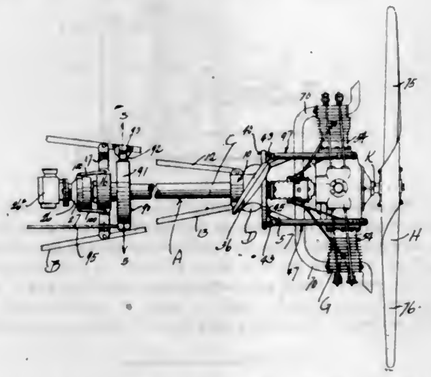
1,804,310. IRREVERSIBLE ROTARY POWER TRANSMISSION SYSTEM. ROGER BRICARD, Paris, France, assignor to Société Anonyme Française Dite: Bricard, Ancienne Maison Sterlin, Paris, France. Filed Jan. 22, 1929, Serial No. 334,309, and in France Oct. 31, 1928. 1 Claim. (Cl. 192—8.)



Irreversible bi-directional transmission mechanism including a fixed clutch element comprising an expansible annulus of variable diameter, free clutch shoes adapted to bind against said annulus in the irreversing function of

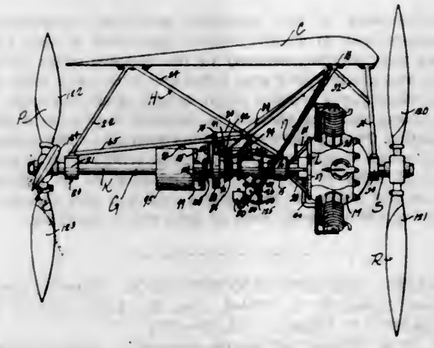
said mechanism, means forming a free toggle joint interposed between said clutch shoes for actuating the same and free levers for operating said toggle joint, a driving and a driven shaft, said free elements being rotatable as a body with said driving and driven shafts when said toggle joint is in loose position, means connected to said driving and driven shafts respectively acting upon opposite sides of said lever, and means for expanding said annulus to a diameter beyond the reach of said clutch shoes for inhibiting the irreversing function of said mechanism.

1,804,311. AIRCRAFT MOTOR AND MOUNTING. CHARLEY L. BROWN, Rushville, Mo. Filed Aug. 9, 1929. Serial No. 384,778. 4 Claims. (Cl. 244—31.)



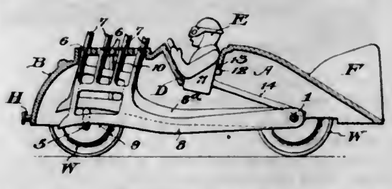
1. In a motor mounting for aircraft the combination of a stationary frame attachable to the aircraft, a motor including a housing, a crank shaft, and main propeller thereon, a motor mounting rotatably carried by said frame and having the motor housing rigidly connected therewith, an auxiliary propeller connected with the motor mounting for rotation therewith, said main and auxiliary propellers being driven in opposite directions, the main propeller being driven incident to normal crank shaft operation and the auxiliary propeller being driven incident to drive of the motor mounting thru back pressure from the motor operation, said propellers having the blades thereof oppositely inclined so that they will produce a propelling effect upon the aircraft in the same direction, the inclination of the auxiliary propeller being greater than the pitch inclination of the oppositely inclined main propeller, and the auxiliary propeller being of appreciably greater effective length than the main propeller.

1,804,312. AIRCRAFT MOTOR AND MOUNTING. CHARLEY L. BROWN, Rushville, Mo. Filed Apr. 29, 1930. Serial No. 448,364. 5 Claims. (Cl. 244—14.)



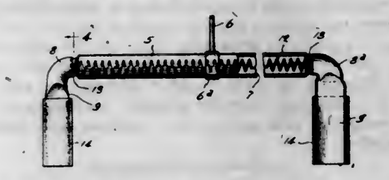
1. In aircraft of the class described the combination of a fuselage having supporting wing surfaces extending laterally therefrom, an out-board motor mounting frame connected with a wing laterally of the fuselage, a shaft rotatably supported by said frame laterally of the fuselage, an internal combustion engine including a casing, a crank shaft and main propeller keyed with the crank shaft and disposed for operation in a plane forwardly of the wing, means fixedly connecting the casing of the internal combustion engine with said first mentioned shaft so that the latter may rotate with the engine casing, an auxiliary propeller keyed with said first mentioned shaft and disposed for operation in a plane rearwardly of the wing, said main and auxiliary propellers having the blades thereof pitched in opposed relation, said auxiliary propeller having number of blades greater than the number of blades of the main propeller.

1,804,313. TOY. JACOB E. BRUBAKER, Lancaster, Pa., assignor to The Hubley Manufacturing Co., Lancaster, Pa., a Corporation of Pennsylvania. Filed May 26, 1930. Serial No. 455,782. 5 Claims. (Cl. 46—45.)



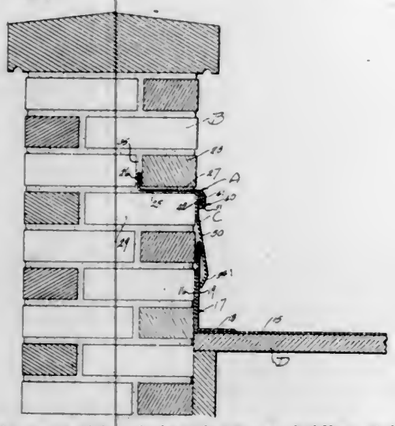
1. A pull toy comprising a body having a plurality of openings, a rear axle, wheels for the rear axle, levers pivotally mounted on said rear axle and having elements thereon adapted to be projected through said openings, a front axle provided with cranks on which the levers rest, and wheels for said front axle whereby the operation thereof will cause the end of said levers opposite their point of pivotal support to cause the reciprocation of said elements through said openings.

1,804,314. TROUSER HANGER. CHARLES BRUN, Roosevelt, N. Y. Filed Feb. 5, 1930. Serial No. 426,109. 2 Claims. (Cl. 223—67.)



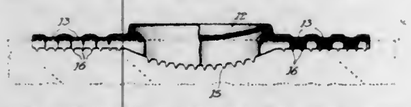
1. A garment hanger including a pair of frames each defining substantially the bar and the lower leg halves of the letter H; and suspending means for said hanger including depending flexible elements the lower ends of which are looped, one of such loops sleeving the bar of one of the frames intermediate the ends of said bar and the other of such loops similarly sleeving the bar of the other frame, thereby to suspend said frames in parallel and laterally separable relation; each of said frames including a tube open at opposite ends, and a pair of elbow elements, each of said elbow elements having a horizontal limb and an integral, depending, vertical limb, each such horizontal limb being tubular and fitted slidably within an end portion of one of said tubes and each such vertical limb being flattened parallel to the plane of its frame; in each frame each such horizontal limb being shaped to present an internal annular bead at a point more removed from the free end of said limb than from the other end thereof, and an expansile coil spring in the tube projecting at opposite ends into the two horizontal limbs fitted into the tube, said spring having terminal convolutions which are enlarged in diameter and which engage the beads in the limbs last-mentioned.

1,804,315. ROOF FLASHING. WALTER P. BUDD, Durham, N. C. Original application filed May 5, 1928, Serial No. 275,500. Divided and this application filed Feb. 7, 1929. Serial No. 338,273. 3 Claims. (Cl. 108—26.)



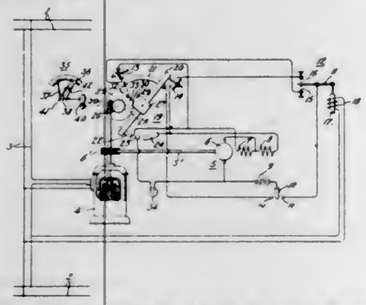
1. As an article of manufacture a holding strip for flashing constructions comprising a body having a transverse attaching flange along one longitudinal margin thereof and being provided with a crimped guide rib in parallelism with said attaching flange and in projecting relation to the same side of the plane of said body portion as said attaching flange.

1,804,316. HAND POSITIONER FOR GOLF CLUBS. FRANK O. BUTLER, Chicago, Ill. Filed Dec. 9, 1929. Serial No. 412,868. 3 Claims. (Cl. 273—81.)



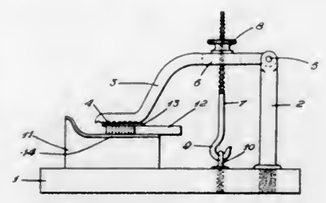
1. In a device of the class described, the combination with a club handle having a non-metallic grip covering, of a relatively rigid member having a depression adapted to receive the end of a digit of a user of the club, said member having portions projecting from opposite ends of said depressed portion and provided with transverse grooves, teeth provided on said member adapted to enter said grip covering, and threads wrapped around said handle and occupying said grooves for securing said member to the handle.

1,804,317. SYSTEM OF ELECTRIC MOTOR CONTROL. FRANKLIN J. CHAMPLIN, Dalton, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 16, 1928. Serial No. 319,907. 10 Claims. (Cl. 171—119.)



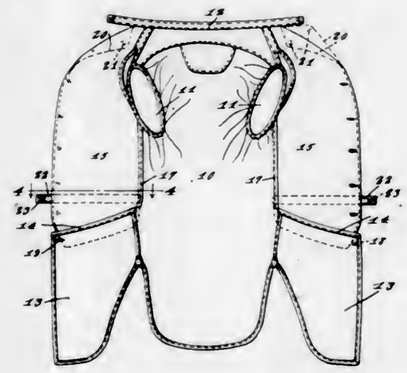
1. In a control system, an electric motor, means for operating said motor to a position of rest at any point within predetermined limits of travel, and selective means for causing operation of said motor only to a position of rest at a predetermined point intermediate said predetermined limits irrespectively of the direction and extent of its movement from said intermediate position.

1,804,318. APPARATUS FOR SWAGING DENTAL PLATES. MAURICE CHARLIER, Brussels, Belgium. Original application filed June 21, 1928, Serial No. 287,219, and in Belgium June 25, 1927. Divided and this application filed July 29, 1929. Serial No. 381,877. 2 Claims. (Cl. 32—5.)



1. An apparatus for swaging dental plates of high resistance metal comprising, in combination, a base, a metal die secured to said base and adapted to receive the plate, a standard on said base, a lever pivoted to said standard, the free end of said lever extending above said die, said lever being adapted to hold the work in position, and adjustable means for locking said lever in operative position.

1,804,319. SHIRT. PATRICK B. COLLINS, Dorchester, Mass. Filed Sept. 4, 1929. Serial No. 390,327. 1 Claim. (Cl. 2—103.)

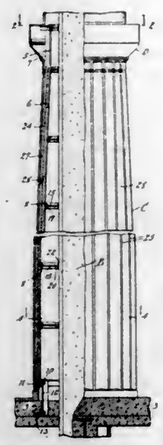


A garment of the character described comprising a one-piece back of a shirt having arm holes, a neck band front vest portions secured to the opposed sides of said back and around said arm holes and connected with said neck band for a portion of its length, and free from the remaining portion thereof to provide lapels, said shirt including front lower end portions secured to the adjacent lower edges of said vest portions, and straps secured to the opposed sides of the back and adapted to be extended across the latter in overlapped relation, and means for securing the adjacent ends of said straps together.

1,804,320. COLUMN CONSTRUCTION. JOHN W. CROSS, New York, N. Y. Filed Apr. 18, 1929. Serial No. 356,149. 11 Claims. (Cl. 72—72.)

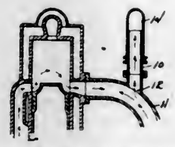
1. In a tubular fabricated decorative column adapted to surround and conceal a structural column, a framework including a plurality of vertical annularly arranged

elements and a plurality of horizontal vertically spaced bands secured thereto, plastic supporting material carried



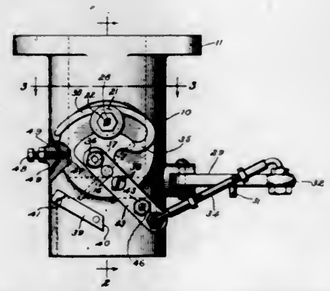
by the framework, a cementitious covering applied to said supporting material and a surface finishing coating applied over said covering.

1,804,321. PULSATION CONTROL. LLOYD L. E. CROWE, Milwaukee, Wis. Filed June 22, 1928. Serial No. 287,473. 1 Claim. (Cl. 123—65.)



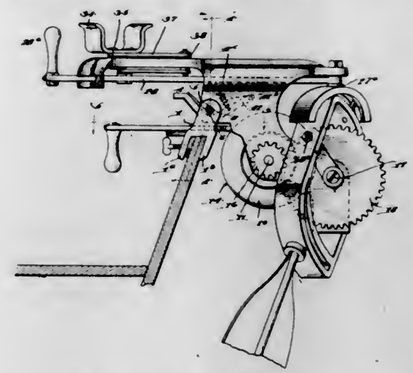
In an internal combustion engine, a cylinder having inlet and exhaust ports, an exhaust pipe leading from the exhaust port, a vacuum chamber within the exhaust pipe and having communication with the exhaust port, and adjustable means providing communication between the exhaust port and pipe and the vacuum chamber and pipe to control the direction of travel of the exhaust gases.

1,804,322. CARBURETOR. JAMES SYLVESTER CUFF, New London, Conn. Filed Jan. 30, 1929. Serial No. 336,075. 2 Claims. (Cl. 261—50.)



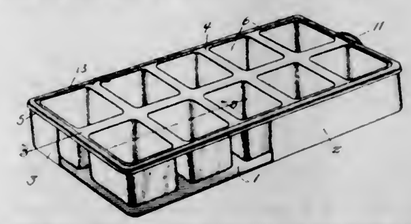
1. In a carburetor, a casing forming an air inlet and a mixing chamber, a choke valve controlling said air inlet, a liquid fuel inlet between the air inlet and the mixing chamber, a valve controlling said liquid fuel inlet, said valve including a valve member, a seat with which said valve member coacts; an adjustable nut on said valve member, a cam supported for movement to coact with said nut, means for effecting the movement of the cam in one direction to move the valve member off of its seat, means constantly acting on said valve member to move it to closed position on its seat and to yieldably hold the valve member on its seat, and means connected directly with said valve member to move it off of its seat.

1,804,323. PROPULSION MEANS FOR BOATS. HARRY G. DAVIDSON, Ortega, Fla. Filed Oct. 4, 1929. Serial No. 397,304. 14 Claims. (Cl. 115—29.)



1. In a boat propulsion means, a propeller member, and means for actuating said propeller member, comprising an oscillating lever adapted for manual operation, an operating lever oscillated by said oscillating lever, a yoke member fixedly related to said propeller member and slidably related to said operating lever, crank means in offset relation, engaging the opposite sides of said yoke member, and a stationary pivot member slidably related to said yoke member, whereby a sculling or figure eight motion is imparted to said propeller member.

1,804,324. ICE CUBE PAN FOR REFRIGERATORS. ANDRÉ G. DE WEAL, Chicago, Ill. Filed May 16, 1929. Serial No. 363,498. 5 Claims. (Cl. 62—108.5.)

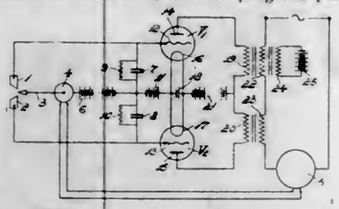


1. A water freezing utensil for use in a refrigerator, comprising a pan member, and a form member including a peripheral flange seated upon and hooked over the said upper edge to support and center the form member on the pan; the form member having a plurality of depending and cup-like formations arranged in rows and freely spaced both from each other and from the pan.

1,804,325. CONSTANT MAGNITUDE CONTROL SYSTEM. POPKO REINDER DIJKSTERHUIS, Eindhoven, Netherlands, assignor to N. V. Philips Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited Liability Company of the Netherlands. Filed Aug. 12, 1929, Serial No. 385,429, and in the Netherlands Oct. 24, 1928. 3 Claims. (Cl. 219—20.)

3. A temperature regulator, comprising a movable conductor, stationary conductors between which the movable conductor is placed, the instantaneous position of the said movable conductor being controlled by the temperature to

be regulated, the stationary conductors being arranged at some distance apart, two thermionic valves having control grids, cathodes and plates, two resistance-shunted condensers, one cooperating with each of the thermionic valves, the said stationary conductors each being connected to the control grid of the corresponding valve and to one of the electrodes of the corresponding condenser, a source of potential to which the said movable conductor is connected, the other electrodes of each of the condensers being connected to the other side of the said potential source and to the cathodes of the said valves, a plate circuit for each of the valves, an inductive winding in the plate circuit of each of the valves, and carrying the plate current



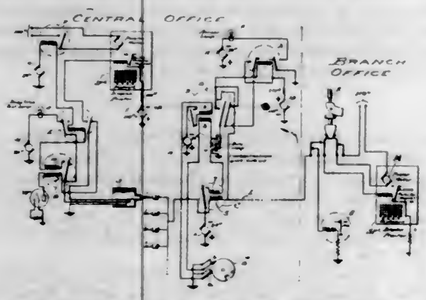
thereof, a separate core for each of the said windings, each winding being connected in the plate circuit of the corresponding valve and carrying the plate current, a supply circuit carrying the heating current, a winding in the said supply circuit on each of the said cores, each of the first-mentioned windings being adapted to vary the magnetization of the corresponding core in senses opposite to each other, an auxiliary winding on one of the said core wound in a direction opposite to that of the corresponding plate-circuit winding, and a direct current magnetization source for the said auxiliary winding, whereby the effects of the two windings on the core neutralize each other and permit increase of the reactance of the corresponding supply circuit winding.

1,804,326. FLY CHASER. ANTON DOKKEN, Brookings, S. Dak. Filed June 17, 1929. Serial No. 371,566. 2 Claims. (Cl. 156—14.)



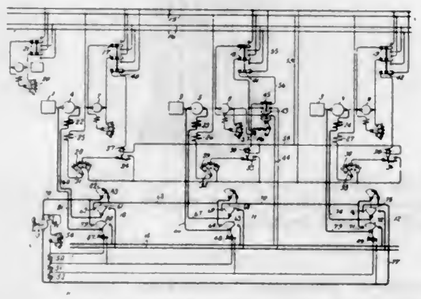
1. In a fly chaser for doors, a rod supported in a position offset with relation to the side of a door but on a plane above the door, means for stationarily attaching the rod in place, and a flexible device supported from the rod and having its free end extending below the path of movement of the upper edge of the door when opening and closing.

1,804,327. CONCENTRATION CIRCUIT FOR SIMPLEX PRINTERS. HERBERT W. DRAKE, East Orange, N. J., and WILLIAM B. BLANTON, Brooklyn, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1929. Serial No. 336,617. 16 Claims. (Cl. 178—2.)
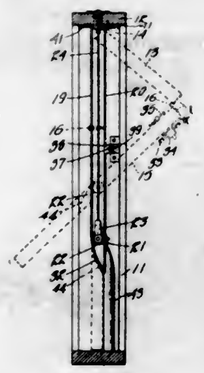


1. In combination, a plurality of transmitting and receiving telegraph apparatus at branch offices with lines terminating in multiple single-contact line plugs at a central station, means for normally applying signal battery to each line, means responsive to interruption of the line at a branch office to display a call signal at the central station, transmitting and recording telegraph apparatus at the central station including a source of operating battery, and a cord circuit for the central station apparatus including means responsive to signal battery for connecting said apparatus and operating battery to the line.

1,804,328. SHIP PROPULSION. ROY O. DUNHAM, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 31, 1927. Serial No. 216,670. 8 Claims. (Cl. 172—8.)



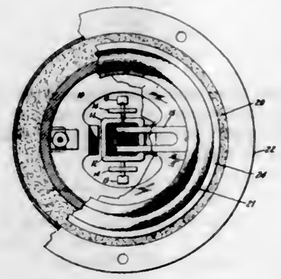
1. An electric power system comprising a motor, electric generating means driven by said motor, a plurality of load circuits, means for connecting said load circuits to said generating means, means responsive to the operation of one of said connecting means for increasing the excitation of said generating means when one of said load circuits is disconnected from said generating means and means responsive to another of said connecting means for rendering said last mentioned means inoperative when another of said load circuits is connected to said generating means.

1,804,329. DOOR. ALFRED C. FARR, Upland, Ind., assignor to Carrie Horner, Upland, Ind. Filed Dec. 31, 1930. Serial No. 505,869. 5 Claims. (Cl. 20—20.)



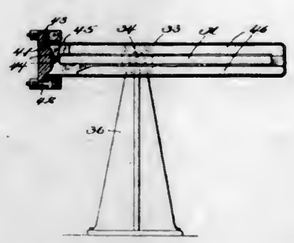
4. The combination with a folding door, of guide rails on each side of the door adapted to receive guide plates on the door, said guide rails having a relatively wide flange at one side to receive the cooperating edge of the door and having a cam portion formed to fit a cooperating notched portion in the edge of the door as the door is closed, said cam portion serving as weather stripping means when the door is closed, substantially as set forth.

1,804,330. ELECTRIC MEASURING INSTRUMENT. HAROLD T. FAUS, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,826. 8 Claims. (Cl. 171—95.)



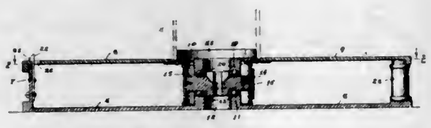
3. An electric measuring instrument of the D'Arsonval type comprising an annular permanent magnet with a pair of inwardly projecting pole pieces on one diameter of the magnet and a moving coil armature pivotally mounted within said magnet with its axis of rotation on a diameter of the magnet at right angles to the first mentioned diameter.

1,804,331. METHOD OF CLEANING MAGAZINES AND MATRICES. HERMAN R. FREUND, Brooklyn, N. Y., assignor to Intertype Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 22, 1928. Serial No. 321,146. 3 Claims. (Cl. 141—1.)



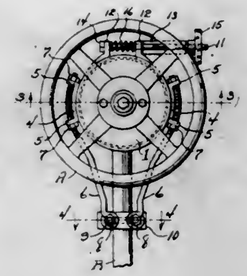
1. The method of cleaning the magazine and matrices of a line casting machine which comprises immersing the magazine while containing the matrices belonging thereto in a cleaning liquid, and causing the matrices to shift their positions relatively to the magazine while in the presence of the cleaning liquid.

1,804,332. FIREPROOF FILM REEL. ALEXANDER GENTILUOMO, Grantwood, N. J. Filed Aug. 18, 1928. Serial No. 300,522. 3 Claims. (Cl. 242—70.)



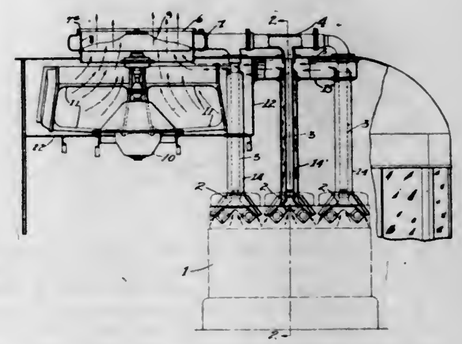
1. A fireproof film reel, including a casing formed with an upstanding wall and a hinged cover, said wall being broken away at one point and provided with a groove, said cover being provided with an extension acting as a continuation of said wall and positioned to fit into said groove when the cover is closed, a rotatable hub provided with a clamp arranged in said casing, and means for guiding the film into and out of the casing.

1,804,333. STEERING WHEEL BRAKE FOR TRACTORS. VICTOR GREGOIRE, Lake Andes, S. Dak. Filed Sept. 13, 1929. Serial No. 392,329. 2 Claims. (Cl. 74—39.)



1. In combination with a vehicle and its steering mechanism, a brake drum connected with the steering wheel, a band for the drum having ears thereon, adjustable means for supporting the band from the steering column, a rod passing through the ears of the band, a spring on the rod and arranged between the ears for holding the band expanded, a member on the rod having one end bearing against one of the ears, the outer end of the rod being threaded and a hand wheel on said threaded end and engaging the opposite end of said member.

1,804,334. VENTILATING SYSTEM. CHARLES O. GUERNSEY, Philadelphia, Pa. Filed Aug. 28, 1928. Serial No. 302,583. 5 Claims. (Cl. 123—171.)

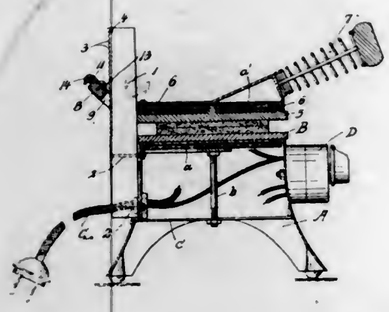


1. In a motor-driven car having a radiator for cooling the engine of the car, an exhaust manifold for the engine, exhaust means leading from said manifold to a connection with a muffler, means spaced from the radiator coils for drawing air through them from the exterior, a closure about said exhaust means and discharging into a passageway between the radiator and the last mentioned means, air being drawn through the closure to cool the exhaust pipes, as an incident to cooling the radiator.

1,804,335. SANDWICH BAKER. WILLIS W. HALE, Cleveland, Ohio. Filed Apr. 1, 1929. Serial No. 351,707. 12 Claims. (Cl. 53—5.)

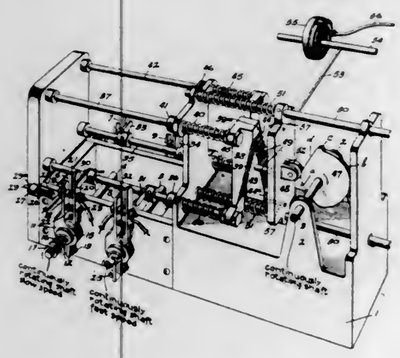
1. In a sandwich baker, in combination, a base comprising a fixed baking plate, an upper baking plate for cooperation with said fixed baking plate, and means intermediate the base and upper baking plate for supporting the latter in adjusted positions vertically spaced

from the lower baking plate to contact with an article of food on the latter, and comprising a standard having



teeth, the upper baking plate having a loop embracing the standard and having a hardened metal plate providing a tooth to engage the teeth of the standard.

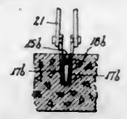
1,804,336. AUTOMATIC CONTROL SYSTEM. RALPH M. HARDGROVE, Bethlehem, Pa., assignor to Bailey Meter Company, a Corporation of Delaware. Filed Dec. 10, 1927. Serial No. 239,201. 18 Claims. (Cl. 236—78.)



1. A control system for use with heating apparatus having a factor appurtenant to the heating apparatus which, during operation of the apparatus, tends to vary from a predetermined value for maintaining said factor at the predetermined value, comprising means positioned in accordance with variations of said factor from the predetermined value, means which when operated tends to restore said factor to its predetermined value, and control means through which said first-named means effects operation of said second-named means, said control means comprising mechanism for effecting movements of said second-named means in each direction, means whereby as said factor approaches its predetermined value after having departed from such value, said mechanism will be operated to effect movement of said second-named means in a direction tending to cause departure of said factor from its predetermined value and in amounts depending upon the rate at which such factor is approaching its predetermined value whereby as the factor approaches its predetermined value its rate of approach will be decreased.

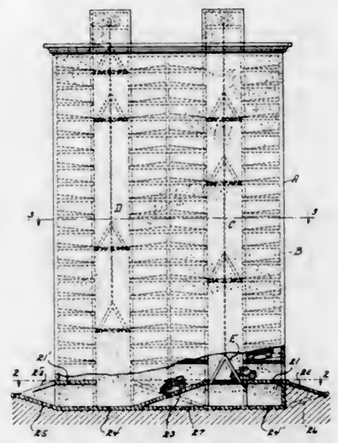
1,804,337. ROAD BUILDING APPARATUS. JOSEPH WILLIAM HELTZEL, Warren, Ohio. Filed Feb. 24, 1928. Serial No. 256,729. 6 Claims. (Cl. 94—51.)

1. A frame movable on the side forms of a concrete road under construction, said frame being open for the depositing and finishing of concrete within the outline of the frame, and a pair of spaced longitudinal plates supported from said frame to receive a joint strip or ma-



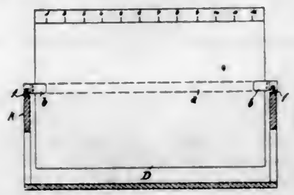
terial between them and their upper edges being arranged to be substantially flush with the finished surface of the concrete, the space between said plates being open at the upper edges of said plates.

1,804,338. STORAGE GARAGE. JAMES W. HENDERSON, Niagara Falls, N. Y. Filed Dec. 21, 1929. Serial No. 415,808. 6 Claims. (Cl. 214—16.1.)



1. A garage of the class described comprising a plurality of stalls arranged in vertical rows, elevators for conveying the cars to and from the stalls, said elevators being arranged in a number of sets, a loading floor for one set of elevators, upwardly sloping ramps for said floor, downwardly sloping ramps for leading the cars from the elevators of said set, an elevator unloading floor for the other set of elevators, downwardly sloping ramps for said unloading floor, passages under the second set of elevators and the unloading floor through which the cars coming from the first set of elevators pass, upwardly sloping ramps for the cars leaving the passages, passages under the first set of elevators and the loading floor, downwardly sloping ramps for said passages, and upwardly sloping ramps for leading the cars from the last mentioned passages to the second set of elevators.

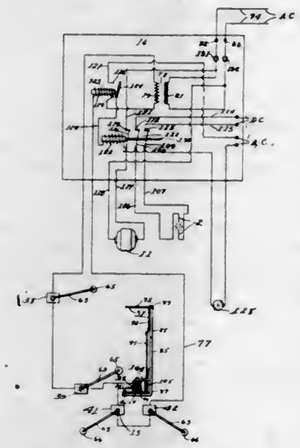
1,804,339. CARD-CARRIER FOR CARD-FILES. HANS HENSCHEL, Dresden-Loschwitz, Germany. Filed Feb. 27, 1928, Serial No. 257,446, and in Germany Mar. 7, 1927. 2 Claims. (Cl. 129—16.)



1. A card-carrier for card-files, comprising in combination with a file-box having a guide-bar with a vertical

flange on the top-edge of each long side-wall, narrow card carrier bars having each near each end a slot upwardly extending from the lower edge designed to be placed on the flange of the corresponding guide-bar, means located within said slots for causing said card-carrier, bars to tilt under the influence of gravity, a clamp fixed on one of the surfaces of each carrier bar, and a second clamp mounted on each carrier bar in spaced relation to and so that it faces said first-mentioned clamp.

1,804,340. MOTION PICTURE APPARATUS. HARRY HOFFMAN, Philadelphia, and PAUL F. KARST, Highland Park, Pa., assignors of one-third to Louis Hoffman, Philadelphia, Pa. Filed Sept. 10, 1928. Serial No. 304,930. 11 Claims. (Cl. 88—17.)



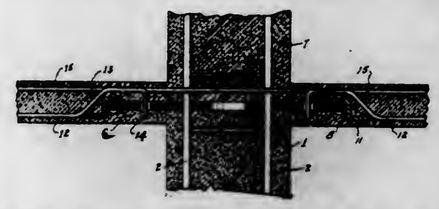
10. In a mechanism for projecting a film upon a screen, a motor for passing a film before an arc, a switch connected in series with said motor and adapted to operatively connect it with a source of current, a relay and a circuit for the electric arc controlled by said relay, and means operatively responsive to the failure of said source of current to effect de-energization of said relay, said arc circuit being broken upon the de-energization of said relay.

1,804,341. ACOUSTICAL DEVICE. JOSEPH HUTT, Coventry, England, assignor to General Electric Company, a Corporation of New York. Filed Aug. 23, 1927, Serial No. 214,970, and in Great Britain Feb. 23, 1927. 2 Claims. (Cl. 181—27.)



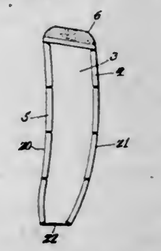
1. An acoustical device comprising a hollow cylindrical casing including closed and open ends, a flaring member extending between said ends and attached to said closed end, and a partition arranged to form between said member and said casing a helical passageway which opens into the smaller end of said member.

1,804,342. STRUCTURAL HEAD FOR REENFORCED CONCRETE CONSTRUCTION. EDWARD W. HYDE, Jr., Philadelphia, Pa.; Catherine E. Hyde executrix of said Edward W. Hyde, jr., deceased. Filed Feb. 13, 1929. Serial No. 339,722. 9 Claims. (Cl. 72—15.)



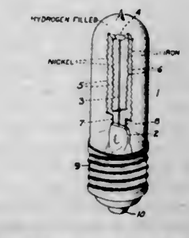
8. The combination with concrete slabs and directly supporting columns, rigid head members consisting each of a single steel plate having lateral flanges embedded in the slabs and columns at the junction thereof and reinforcing rods embedded in columns and slabs having a connection with said heads.

1,804,343. SEALABLE CONTAINER. MAX HYTKEN, Ruleville, Miss. Filed Apr. 5, 1930. Serial No. 441,927. 3 Claims. (Cl. 229—53.)



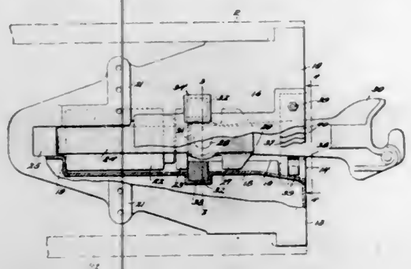
1. A bag blank comprising a front wall forming part, a rear wall forming part extending from the inner end of said front wall forming part, a foldable flap portion projecting from the outer end of the front wall forming part, a set of spaced folds projecting from each side of said front wall forming part, said blank being lengthwise scored at the points of mergence of said sets with said front wall forming part, one of said scores being of arcuate curvature and the other of said scores being of ogee curvature, said rear wall forming part having its lengthwise edges conforming in contour to said scores, said blank being further scored transversely at the point of mergence of said parts and at the point of mergence of said portion with said front wall forming part.

1,804,344. BALLAST RESISTOR. HOWARD A. JONES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 20, 1927. Serial No. 185,316. 4 Claims. (Cl. 201—76.)



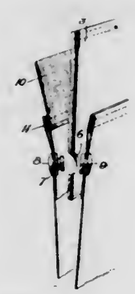
2. In combination, a receptacle filled with an inert gas at a relatively low pressure, and a ballast device mounted therein, said ballast device comprising a pair of series connected nickel and iron resistors.

1,804,345. RAILWAY DRAFT GEAR. WILLIAM F. KIESEL, Jr., Altoona, Pa. Filed Sept. 9, 1926. Serial No. 134,527. 6 Claims. (Cl. 213—6.)



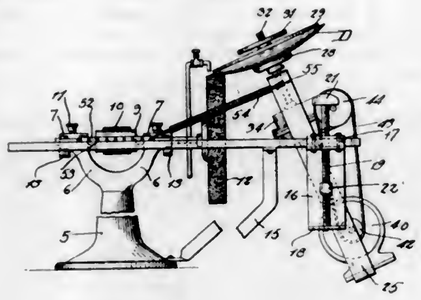
1. In a device of the class described, in combination, a complete draft assembly including a single draft gear, front and rear followers, a draft yoke and a coupler including shank and butt, a pocket casting adapted to be attached to a vehicle and having an open end larger than said coupler shank, said draft assembly being adapted to be placed in said pocket through said open end while completely assembled, means pivotally securing said yoke to said coupler butt near the front end of said yoke and ahead of said draft gear, keys passing through the top and bottom of said pocket casting and positioned to engage the front follower to retain the draft assembly in said pocket and to take the coupler pull, said keys being substantially adjacent the connecting means for said yoke and coupler butt, and an adjustable coupler shank carrier secured to said casting at the mouth of said pocket.

1,804,346. COAT. ISAAC KIRSCHENBAUM, Middletown, Pa. Filed Oct. 5, 1929. Serial No. 397,693. 1 Claim. (Cl. 2—98.)



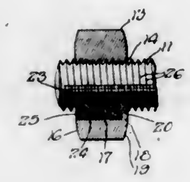
A coat of the character described comprising a body having a lining separate from the outer portions of the body at the collar opening, said lining having a turned over finished edge at said collar opening, a permanent collar secured to the body adjacent the collar opening, a plurality of snap fasteners for securing said lining to said outer portion adjacent the collar opening so as to hold said finished edge of said lining so that it will slightly overlap said permanent collar to give a finished appearance to the garment at the edge of the permanent collar, and a removable collar larger than said permanent collar formed with openings near one edge, said removable collar being adapted to be positioned with the openings therein in line with said snap fasteners, whereby when the snap fasteners are unlocked they will extend through said openings in said removable collar, said removable collar being positioned with one edge extending between said body and said lining and arranged to overlie and hide said permanent collar while said finished edge of the lining will overlie the lower part of the removable collar to give a finished appearance thereto.

1,804,347. AUTOMATIC DISK SHARPENER. PHILIP KRUG, Hoisington, Kans. Filed May 10, 1929. Serial No. 362,033. 1 Claim. (Cl. 51—106.)



A grinding machine of the character described, a pedestal support, a shaft journalled in the support, an abrasive wheel mounted on the shaft, a pulley mounted on the shaft for causing rotation thereof, side bars secured to the pedestal support, brackets mounted on the end of each side bar for horizontal adjustment, a rectangular frame pivoted to said adjustable brackets, means for raising or lowering the rectangular frame relative to the brackets, a rotary work support mounted in the upper portion of rectangular frame, an electric motor carried by the lowermost portion of the rectangular frame, drive means associated with the electric motor and rotary work holder, and resilient means for holding the rectangular frame presented to the abrasive wheel.

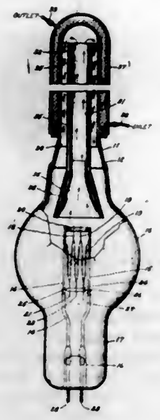
1,804,348. NUT LOCK. JOHN S. KUBACKI, Chicago, Ill. Filed Sept. 20, 1929. Serial No. 393,997. 2 Claims. (Cl. 151—7.)



2. Means for retaining a nut upon a threaded member comprising a nut provided with a bore directed through the routes of the threads of said member whereby to provide lateral openings opening into said bore, a spring member confined in said bore with portions thereof exposed through said lateral openings between the apexes of the threads of said nut for yieldable and resistable bearing against the threads of said threaded member when said nut is assembled upon said threaded member, and a plug for the open end of said bore.

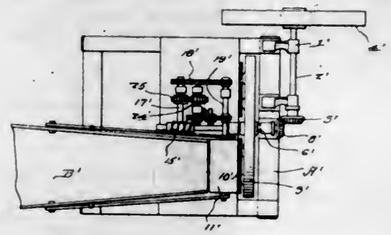
1,804,349. INCANDESCENT LAMP. IRVING LANGMUIR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 10, 1928. Serial No. 291,677. 10 Claims. (Cl. 176—16.)

10. A radiant energy device comprising an envelope, a metal dome joined to said envelope, a radiator operating at incandescence in said envelope, a gas filling for said device, and a duct within said dome communicating with said envelope having an inlet opening in immediate communication with the space adjacent said radiator, and



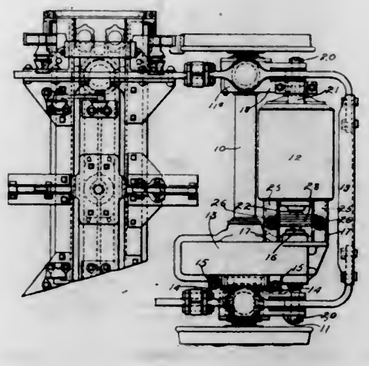
an outlet opening spaced more remote from said radiator for the passage through said dome of heated gas arising from said radiator.

1,804,350. FEED CUTTER. THOMAS F. LANNON, Van Nuys, Calif. Filed Dec. 31, 1928. Serial No. 329,379. 1 Claim. (Cl. 146—112.)



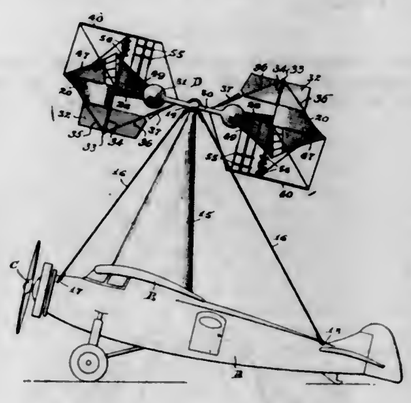
A feed cutter comprising a frame, a feed trough on the frame, a drive shaft carried by the frame at one end of the feed trough and extending transversely of the frame and feed trough, a fly wheel on one end of the shaft, and a beveled gear on the opposite end of the shaft, a stub shaft arranged at right angles to the drive shaft rotatably mounted on the frame at one side of the fed trough, a beveled gear on said stub shaft meshing with the beveled gear on the drive shaft, a feed cutter wheel secured to the stub shaft, a pair of superposed feed roller shafts arranged between the trough and feed cutter wheel, means for driving one of the feed roller shafts from the stub shaft, and means for driving the other feed roller shaft including a sprocket wheel on said last mentioned feed roller shaft, an idle sprocket wheel at one side of the first mentioned sprocket wheel, a lower drive sprocket wheel, a sprocket chain trained about all of said sprocket wheels.

1,804,351. MOTOR MOUNTING FOR CAR TRUCKS. ELMER LATSHAW, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 6, 1930. Serial No. 433,686. 13 Claims. (Cl. 105—133.)



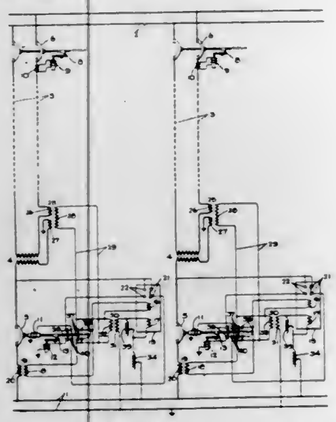
3. In a car truck, the combination with a drive axle of journal boxes therefor, a transmission upon the axle including a housing carried by the axle, a drive motor having its shaft paralleling the axle, and means supporting the drive motor from said transmission and one of said journal boxes.

1,804,352. SAFETY LIFTING AND DESCENDING ACCESSORY FOR AIRCRAFT. THOMAS M. LEKA, Englewood, N. J. Filed May 23, 1930. Serial No. 455,073. 13 Claims. (Cl. 244—19.)



1. An accessory for lifting aircraft vertically and for controlling the vertical descent thereof, including a rotary member mounted on a transverse horizontal axis to turn in a vertical plane, said member including a pair of radially projecting blades having air scoops at the outer end of the forward or leading surface thereof.

1,804,353. SYSTEM OF ELECTRIC DISTRIBUTION. THOMAS C. LENNOX, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,440. 16 Claims. (Cl. 175—294.)

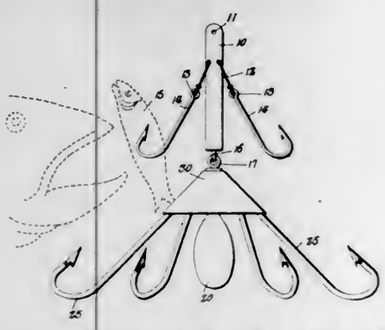


1. In combination, an electric circuit, a power transformer, a circuit breaker for connecting the secondary of said transformer to said circuit, and means energized in accordance with the magnitude of the magnetizing current of said transformer for controlling said circuit breaker.

1,804,354. CELLULOSE CONVERSION PRODUCTS AND PROCESS OF MAKING. LEON LILIENFELD, Vienna, Austria. Filed May 10, 1924, Serial No. 712,477, and in Austria June 6, 1923. 15 Claims. (Cl. 260—10.)

1. Process for making cellulose conversion products, which may be worked up into technical products by dissolution in aqueous alkali solution and precipitation from the solution, which process comprises treating a cellulosic body with strong sulphuric acid of at least about 60° Baumé at a temperature between about minus 5° C. and plus 6° C. and continuing such treatment until a conversion product of cellulose soluble in aqueous caustic alkali solution is obtained.

1,804,355. FISH HOOK AND TRAP. HENRY CLINTON LIPTHROTT, New Orleans, La. Filed Sept. 25, 1929. Serial No. 395,143. 2 Claims. (Cl. 43—36.)



1. A device for mounting a plurality of fish hooks, comprising a central body and radially extending arms, diverging and extending downwardly, the arms being channeled longitudinally, and hooks having their shanks within the channels, with portions passing thru the arms, the ends of the shanks being turned to position approximately parallel with the main portions of said shanks.

1,804,356. HEADWEAR. ARTHUR M. LOWENTHAL, Rochester, N. Y., assignor to Max Lowenthal & Sons, a Copartnership composed of Harry M. Lowenthal, Eugene M. Lowenthal, and Arthur M. Lowenthal. Filed Aug. 9, 1927. Serial No. 211,822. 6 Claims. (Cl. 2—172.)

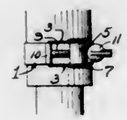


1. Headwear comprising a crown member, and a hinged rear-neck member having a central portion stitched to the rear portion of the crown member along the lower edge of said crown member and having end portions, also stitched to the lower edge of the crown, the inner or stitched edges of the end portions being at slight angles to the seamed edge of the central portion, so as to place the free edge of the rear-neck member under tension when in its upper or lower position.

1,804,357. PRODUCTION OF METALDEHYDE. EMIL LÜSCHER and HEINRICH STEIGER, Basel, Switzerland, assignors to the Firm: Elektrizitatswerk Lonza, Gampel and Basel, Switzerland. Original application filed June 10, 1925, Serial No. 36,278, and in Germany June 23, 1924. Divided and this application filed July 22, 1926. Serial No. 124,287. 1 Claim. (Cl. 260—140.)

A process for the production of metaldehyde which burns practically free from soot and ash, consisting in treating acetaldehyde with oxonium halogenates of aldehydes and ketones as catalysts.

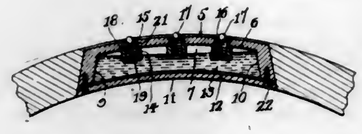
1,804,358. ADJUSTABLE HOSE CLAMP. JOHN F. LYONS and MELVIN S. PERKINS, Keene, N. H. Filed Apr. 26, 1930. Serial No. 447,682. 2 Claims. (Cl. 24—19.)



2. A hose clamp comprising a band member in the form of a strip of resilient sheet metal, the strip being provided in one end portion with a longitudinal series of openings, ears outstanding from the sides of the strip at the other end thereof and each formed with a substantially semi-circular notch, a cylindrical fulcrum element, having circumscribing grooves at its ends, disposed between the ears with its grooved ends seating in the notches in the ears, the said fulcrum element having a diametric opening therein, and a bolt fitting the openings in the strip and fulcrum element and adjustable to clamp the strip about a hose.

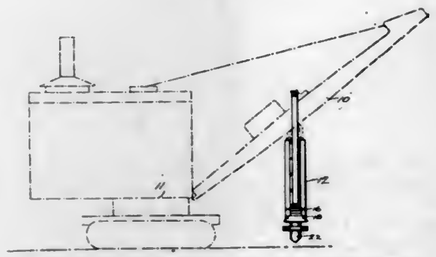
1,804,359. COMBINED PRINTING AND COLOR-APPLYING ELEMENT AND METHOD OF MANUFACTURING THE SAME. WILLIAM MACDONALD, Dennison, Ohio. Filed Apr. 17, 1929. Serial No. 355,821. 7 Claims. (Cl. 101—115.)

1. A method of manufacturing a combined printing form and color applying element consisting in casting a printing form around a removable bevelled end dummy corresponding in contour to that of a color applying device, removing said dummy to provide a color applying



device receiving opening, and then securing in said opening a color liquid reservoir having valve controlled outlet means projecting beyond the outer face of the form.

1,804,360. ROAD-BREAKING APPARATUS. JOHN J. MAGEE, Woodbury, N. J. Filed Jan. 27, 1930. Serial No. 423,874. 10 Claims. (Cl. 262—13.)



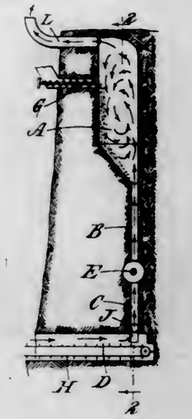
2. In road-breaking apparatus, a road-breaking chisel, a cushion guide for the chisel having means limiting downward movement of the chisel and means supporting the guide and mounting an element for applying successive blows to the head of the chisel, said element engaging the guide and being supported thereby when the chisel is in its lowermost position.

1,804,361. PROCESS OF TREATING CARBONACEOUS ARTICLES. MICHAEL J. MARCIN, Trenton, N. J., assignor of one-half to Duncan MacKenzie, Trenton, N. J. Filed Aug. 29, 1930. Serial No. 478,799. 3 Claims. (Cl. 204—61.)

3. Process of treating carbonaceous articles comprising embedding same in a mixture of 63 parts by weight of flint to 26 parts by weight finely divided coke, placing the the mass in an induction furnace, and passing a current through said furnace to raise the temperature sufficiently above the vaporization point of flint and below the vaporization point of carbon to form an adherent surface layer of uniform, homogeneous and hard silicon carbide.

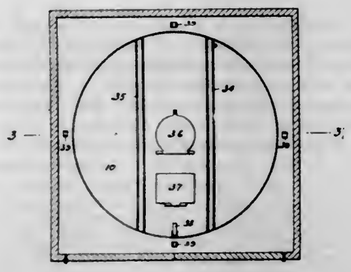
1,804,362. KILN FOR MANUFACTURING LIME OR THE LIKE. GEOFFREY MARTIN, Wembley, England. Filed Apr. 28, 1927, Serial No. 187,332, and in Great Britain May 17, 1926. 6 Claims. (Cl. 222—3.)

1. A shaft kiln for heat treating lime, cement and the like in powdered form comprising a preheating chamber of elongated cross-section having its wider side walls relatively close together, a sintering shaft of relatively smaller cross-section disposed below the preheating chamber and communicating asymmetrically therewith through the bottom, and means for introducing heated fluid into the lower portion of the sintering shaft, said chamber having



an inlet for powdered raw material and a gas outlet both located at the upper end of the preheating chamber at the side remote from the upper end of the sintering shaft.

1,804,363. AUTO TABLE FOR SAFEWAY GARAGES. JOHN W. MAYDEN, Weleetka, Okla. Filed Aug. 11, 1930. Serial No. 474,629. 2 Claims. (Cl. 104—44.)

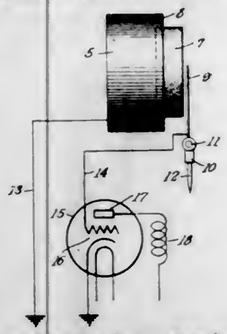


1. A turn table construction comprising a platform supported by beams intersecting in rightangularly disposed relation and defining a square centrally beneath the platform, a hub for the turn table, spokes radially disposed within the square and abutting said hub, a standard journally associated with said hub, disk members arranged upon the ends of the hub and abutting the opposed side edges of the spokes, disks carried by the standard journally associated with the first mentioned disks, and an auxiliary bearing structure cooperatively associated with the first mentioned bearing structures to alleviate tilting of the table.

1,804,364. PICKUP. OLIVER B. PARKER, Brooklyn, N. Y., assignor to Pacent Electric Company, Inc., New York, N. Y., a Corporation of New York. Filed July 12, 1930. Serial No. 467,453. 18 Claims. (Cl. 179—100.41.)

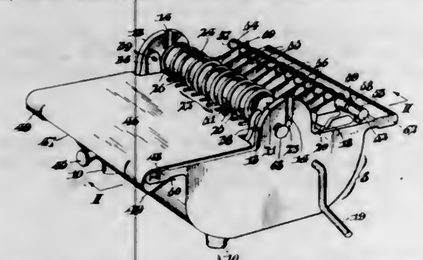
18. An electrical device of the general character disclosed comprising a member of a material capable of permanently retaining an electrostatic charge and having

an electrostatic charge permanently incorporated therein, a companion member associated in electrically coupled



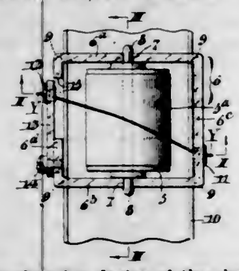
relation with the first member, means for supporting said members in relatively movable relation and circuit establishing connections for said members.

1,804,365. GLUING MACHINE. CHARLES S. PRICE, Bethlehem, Pa., assignor to L. F. Grammes & Sons, Inc., Allentown, Pa., a Corporation of Maryland. Filed Sept. 14, 1928. Serial No. 306,085. 8 Claims. (Cl. 91—51.)



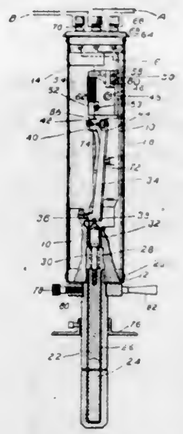
8. The combination in a machine of the type described of a container for adhesive and embodying a partitioned-off pocket; a manually-rotatable drum journaled in the container with a drive gear located in the pocket; adjustable means adapted to regulate the thickness of adhesive applied by said drum; a feeding-in plate having tongues projecting into proximity with said drum, and a non-contacting co-operative circumferentially-ribbed feed roll driven by the applicator gear; slightly vibratory stripper means—removable as a unit—engaging the applicator drum to separate material therefrom as rapidly as it is coated with adhesive; a removable arcuate section cover mounted over the feed device aforesaid; and means whereby the machine may be operated and restrained against back motion.

1,804,366. YARN MOISTENING DEVICE. EMIL J. BERGER, Hatfield, and ABRAHAM W. SWARTZ, Norristown, Pa., assignors to The Dexdale Hosiery Mills, Lansdale, Pa., a Corporation of Pennsylvania. Filed Mar. 21, 1929. Serial No. 348,705. 8 Claims. (Cl. 91—51.)



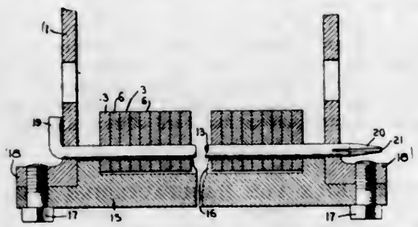
1. A yarn moistening device of the character described comprising a freely revolving horizontally supported hard-surfaced roller having a soft bibulous covering and running with its lower portion immersed in the moistening liquid; and a stationary guide, and a movable guide adapted for adjustment in a plane paralleling the roller, said guide serving to vary the extent of circumferential contact of the yarn angularly over the top of the roller.

1,804,367. THERMOSTAT. NELSON T. BRANCHE, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed May 9, 1928. Serial No. 276,301. 3 Claims. (Cl. 200—137.)



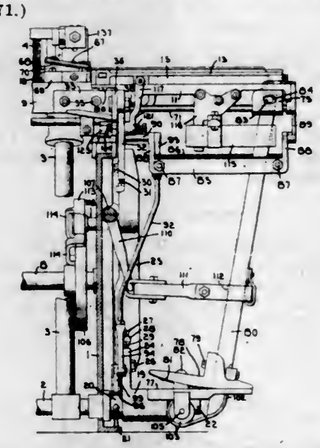
1. In a thermostat, the combination of a tubular casing, an elongated member removably positioned within said casing, a bell crank lever pivoted on said member and having arms of unequal length, the longer arm of said lever extending longitudinally in said casing and the shorter arm of said lever extending transversely in said casing, a pair of contacts, one of said contacts being held by the elongated member, the other of said contacts attached to the longer arm of said lever for movement to and from its fellow contact by said lever, thermally controlled means carried by said elongated member and extending from one end of said casing for actuating said lever, said means being longitudinally adjustable with respect to said member, and means inserted between said lever and said thermally controlled means for absorbing the differential of the movement of said lever and said thermally controlled means.

1,804,368. LOOM DOBBY. CARL D. BROWN, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Dec. 29, 1927. Serial No. 243,348. 2 Claims. (Cl. 139—331.)



1. In a loom dobby the combination of a frame, a fulcrum shaft pointed at one end, mounted in fixed bearings in the frame and endwise removable therefrom, a series of indicating fingers having bearing openings fitting said shaft acting to permit the fingers to rock on the shaft but to prevent the fingers rising bodily on the shaft, a supporting bar extending parallel with the shaft beneath the fingers and spaced therefrom a distance less than half the diameter of the shaft whereby, when the shaft is removed, the fingers will be supported on the bar in position to permit the shaft readily to be reinserted through the bearing openings and into its bearings and whereby, when the fingers are in position on the shaft, the bar will not interfere with their normal rocking movement and cooperating means on the fingers and on the bar acting when the fingers are supported on the bar to retain the fingers longitudinally in position to be threaded by the shaft when it is replaced in its bearings.

1,804,369. SHIFTING SHUTTLE BOX LOOM. CARL D. BROWN, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 6, 1928. Serial No. 297,685. 40 Claims. (Cl. 139—171.)



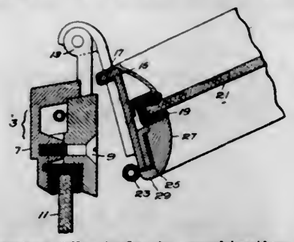
1. A loom comprising a lay having a main section with a raceway and a transversely shiftable box section, a plurality of shuttle boxes on the box lay section, any one of which may be aligned with the raceway by shifting the said section, a picker rod for each box mounted upon the box lay section in parallelism with the raceway, a picker slidable on each picker rod, and means for effecting the picking movement of each picker when its shuttle box is aligned with the raceway, whereby under all conditions the active shuttle is projected in a straight line parallel with the raceway.

1,804,370. SEPARABLE FASTENER. GUSTAV JOHNSON, West Roxbury, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 29, 1929. Serial No. 359,039. 5 Claims. (Cl. 24—75.)



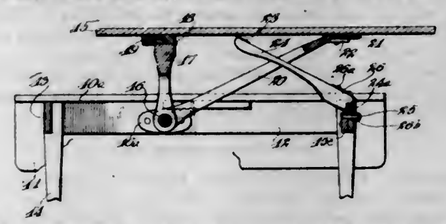
1. A snap fastener device comprising, in combination, a one-piece plate member formed from sheet metal and having a hook portion and yieldable finger means normally pressing toward said hook portion, said hook portion and said yieldable finger means being formed from the material of said plate member and located substantially centrally of said plate member, and a second plate member having an apertured portion at one edge engaged with said hook portion to secure the two plate members together and said yieldable finger means pressing against said apertured portion to hold it in engagement with the hook portion to prevent accidental disengagement while being adapted to be separated by a pull exerted at a predetermined edge of one of the plate members.

1,804,371. WINDLACE CONSTRUCTION FOR VEHICLES. FREDERICK J. KUBLER, New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass., a Corporation of Massachusetts. Filed July 24, 1928. Serial No. 294,988. 2 Claims. (Cl. 296—44.)



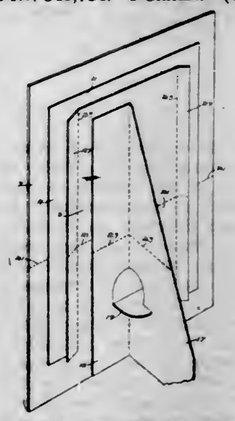
1. In an automobile body in combination with the body hinge pillar, a door of the type having a window therein, the hinge pillar of said door being hung on the body hinge pillar and having at one side thereof a glass channel, a garnish molding carried by said pillar at the inner side of said channel and provided with a flange overlying the inner face of the door pillar, and a windlace having a compressible body lying at the jamb face of said door pillar and a securing flap received between said pillar and molding.

1,804,372. COMBINATION TABLE AND IRONING BOARD. PETER E. LARSON, Chicago, Ill. Filed Jan. 7, 1930. Serial No. 419,144. 12 Claims. (Cl. 68—10.)



1. A combination table and ironing board comprising a shaft journaled in the table sides, an arch erected upon the shaft and having a flat top, an ironing board hinged to said arch at one edge thereof and seating on said flat top, and crossed braces supporting the ironing board on the table.

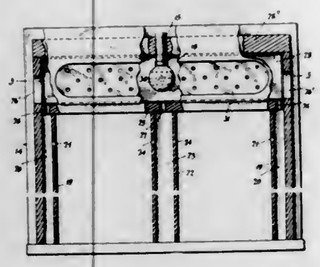
1,804,373. DISPLAY FRAME. PAUL F. PAIGE, Detroit, Mich., and GEORGE H. BLOOD, Lynn, Mass., assignors to Forbes Lithograph Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 1, 1929. Serial No. 343,784. 4 Claims. (Cl. 40—150.)



1. A display device comprising a frame-like member having a tongue carried by an inner edge thereof to lie in

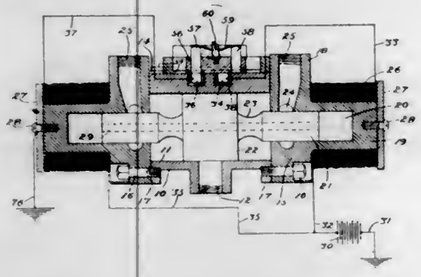
the opening of the frame, said parts adapted to receive between them a sheet to be displayed, said member having a fold line about which it may be folded rearwardly and a collapsible support secured to the back of the tongue and adapted when erected to support the same and through the displayed sheet to maintain erect the frame-like member.

1,804,374. SPRINKLER FIRE-PROTECTION APPARATUS. JOHN P. THURELL, Fort Myers, Fla. Filed Feb. 20, 1929. Serial No. 341,474. 4 Claims. (Cl. 169—16.)



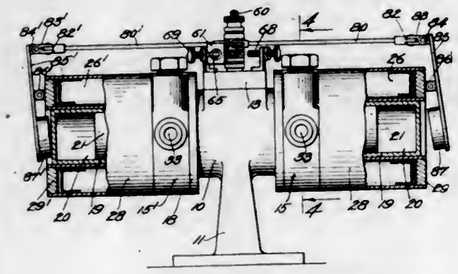
1. In a building having door and window openings in its walls and door openings in its partitions, frames in said door and window openings each having a chamber at its upper portion, a sprinkler head of the heat responsive type in each of said chambers, means for supplying a fire-extinguishing agent to said sprinkler heads, and panels closing the sides of said chambers, one of the panels of each of said chambers being formed of inflammable material and being so positioned relatively to said sprinkler heads that their burning will release said heads.

1,804,375. ELECTRIC PUMP. HARRY H. COBE, Chelsea, Mass., assignor, by direct and mesne assignments, to Cobe Engineering Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 16, 1927. Serial No. 168,630. 9 Claims. (Cl. 230—55.)



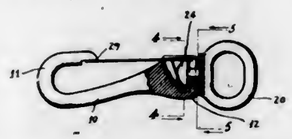
1. In a pump, in combination, a pump cylinder having an inlet and an outlet port, a cylinder head entirely enclosing each end of the cylinder, a piston reciprocable within the cylinder, an electro-magnetic device for moving the piston in each direction, an electrical supply source, a pair of spaced contact posts each electrically connected with one of the electro-magnetic devices, a pair of reciprocable slides actuated in response to the action of the electro-magnetic devices, one of said slides carrying a pair of contacts adapted to engage said posts alternately to complete the circuit from said supply source through the electro magnetic devices, and means for holding said contact carrying slide to complete the circuit through one electromagnetic device until the piston has completed its stroke and then permit it to move to complete the circuit through the other.

1,804,376. ELECTROMAGNETIC RECIPROCATING MECHANISM. HARRY H. COBE, Chelsea, Mass., assignor to Cobe Engineering Company, Boston, Mass., a Corporation of Massachusetts. Filed May 18, 1929. Serial No. 364,050. 13 Claims. (Cl. 230—55.)



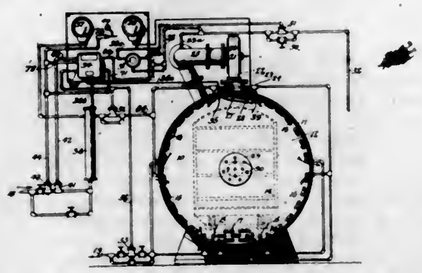
1. In an electro-magnetic reciprocating mechanism, in combination, a magnetic plunger, two solenoid windings for reciprocating said plunger, a switch mechanically separate from said plunger for directing the flow of electric current to said solenoids alternately, and means actuated by the magnetic attraction of said plunger for operating said switch.

1,804,377. SNAP HOOK WITH SWIVEL. JOHN B. FREYSINGER, New Britain, Conn., assignor to North & Judd Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 18, 1930. Serial No. 429,409. 2 Claims. (Cl. 24—236.)



1. In a fastening device of the character described, a hook member formed with a recess at one end having an end wall and side walls, the end wall having a notch therein, flanges at the upper ends of the side walls and shoulders at the bases of said flanges, an eye member having a shank extending through the notch and a head engaging in said recess, and a spring snap operatively assembled with respect to the hook member and having a portion resting on said shoulders and engaging said end wall, said flanges being inturned over the side edges of said spring snap whereby the same is held between the flanges and said shoulders.

1,804,378. APPARATUS FOR THE CONTROL OF INDUSTRIAL HEAT-TREATMENT PROCESSES. THEODORE C. HAZARD, Rochester, N. Y. Filed May 16, 1928. Serial No. 278,218. 13 Claims. (Cl. 236—46.)



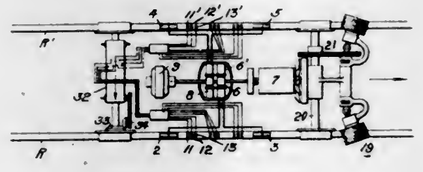
8. In apparatus of the character described, the combination with a heat-treating chamber, steam-heating means for heating the material to be treated and a steam supply, of a steam reservoir between the steam-heating means and the steam supply and means responsive to pressure conditions within the reservoir for controlling the flow of steam from the supply to the reservoir.

1,804,379. PLASTIC FROM NATURAL RESIN, PHENOL, ALDEHYDE, AND ALKALI. ISADORE SIDNEY MELLANOFF, Philadelphia, Pa., assignor to Kemikal, Inc., a Corporation of Delaware. Filed July 3, 1928. Serial No. 290,267. 8 Claims. (Cl. 260—4.)

3. A soluble, fusible plastic substance formed by reacting about two parts of rosin, about twenty parts of aldehyde, about twenty parts of phenol and about two parts of alkali at a temperature of about 70° C. which on further heating becomes insoluble and infusible.

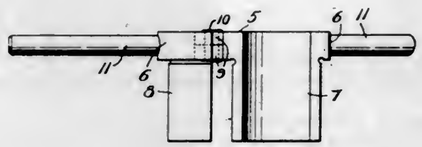
5. The process of producing a plastic substance comprising treating natural resin with ammonium hydroxide and reacting about two parts of the resultant mass with about twenty parts of phenol, twenty parts of aldehyde and two parts of alkali.

1,804,380. FISSURE DECTECTOR FOR STEEL RAILS. ELMER A. SPERRY, Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 27, 1927, Serial No. 215,980, and in Great Britain July 22, 1927. 29 Claims. (Cl. 234—1.5.)



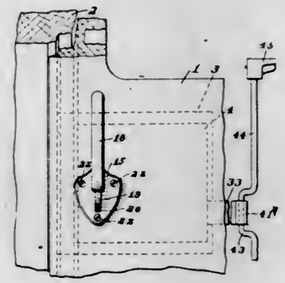
25. In a flaw detector for metallic bars, rails and the like, means for passing a current between spaced points of said bar, means movable relatively to said bar for detecting variations in the current flow from point to point, and flaw-indicating means actuated by said detecting means.

1,804,381. JIG BUSHING. AUGUSTUS B. BOLENDER, Muncie, Ind., assignor to Warner Gear Company, Muncie, Ind., a Corporation of Indiana. Filed Nov. 19, 1927. Serial No. 234,344. 5 Claims. (Cl. 77—62.)



1. The combination with a drill jig having a guide opening, of a guide bushing fitting said opening for free axial movement therein, said bushing being axially split to form a plurality of separable sections, means hingedly connecting said sections, said sections being held in assembled relation by the side walls of the jig opening when the bushing is placed in position.

1,804,382. LATCH. MINAS H. KASHIAN, Boston, Mass., assignor of one-fourth to William H. Sellars, East Milton, Mass. Filed June 7, 1927. Serial No. 197,032. 16 Claims. (Cl. 292—64.)



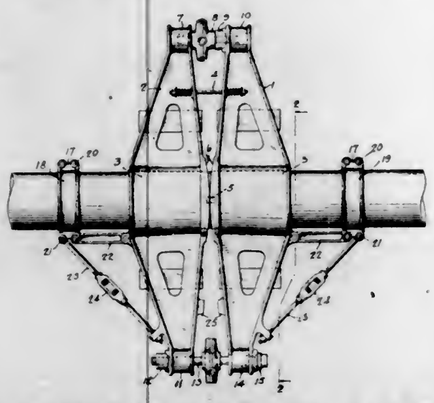
7. Latch mechanism of the kind described, comprising a bolt disposed at one side of a door, a handle disposed on the opposite side of said door, a lever pivoted between its ends, an arm on one end of said lever engaging said bolt, a projection on the opposite end of said lever engaging said handle, and a bar operable from the bolt side of the door to engage the arm of said lever to prevent movement thereof.

1,804,383. CYLINDER GAUGE. CAESAR B. LITTERIO, Providence, R. I., assignor to Federal Products Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Dec. 27, 1928. Serial No. 328,733. 2 Claims. (Cl. 33—178.)



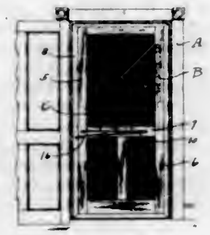
1. In a cylinder gauge, a base, a contact adjustable in said base, means to secure said contact in adjusted position, a movable feeler co-axially arranged with respect to said contact, indicator actuating means, a pivoted rocker in said base interposed between said feeler and said actuating means for transmitting movement from said feeler to said actuating means, said base having an aperture at one side thereof through which said rocker may be inserted, and a plug for said aperture, the pivot for said rocker bearing in said plug and said base.

1,804,384. TOOL FOR BENDING TUBULAR ARTICLES. HENRY MILLER, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed June 3, 1929. Serial No. 368,065. 7 Claims. (Cl. 153—32.)



1. An apparatus for bending articles of substantial length comprising a pair of juxtaposed arms in abutting relation at their centers and diverging outwardly therefrom, said arms having aligned openings therein adapted to receive the article to be bent, and means for relatively moving said diverging arms to apply bending pressures to the article.

1,804,385. DOOR OR GATE CLOSER. ARTHUR M. FERRIN, Red Rock, Mont. Filed Sept. 11, 1929. Serial No. 391,866. 2 Claims. (Cl. 16—78.)



1. The combination with a door and its casing, of a coil spring having one end attached to the door adjacent the free edge of the door, a sheave carried by the free end of the spring, and a flexible pull cord trained over the sheave with one end attached to the door and having its opposite end connected with a jamb piece of said casing.

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Patents Nos. 1,804,386 to 1,805,463

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Prints	19—No.	13,178 to No.	13,196, inclusive.
Reissues	4—No.	18,065 to No.	18,068, inclusive.
Designs	49—No.	84,126 to No.	84,174, inclusive.
Patents	1,078—No.	1,804,386 to No.	1,805,463, inclusive.
Total	1,324		

Adjudicated Patents

(D. C. and C. C. A. N. Y.) Kelley patent, No. 1,132,186, for traffic-signaling system, claim 1, if valid, *Held* not infringed. *Kelley* v. *City of Syracuse*, 47 F.(2d) 347 and 349.

(D. C. and C. C. A. N. Y.) Huether patent, No. 1,235,319, for taping machine, claim 5 *Held* not infringed. *Corrugating Machinery Corporation* v. *Progressive Corrugated Paper Machinery Co.*, 47 F.(2d) 273 and 276.

(C. C. A. Del.) Smith patent, No. 1,340,423, for parachute, claims 1, 2, 3, 4, and 10 *Held* valid and infringed. *Irving Air Chute Co.* v. *Russell Parachute Co.*, 47 F.(2d) 130.

(C. C. A. Del.) Smith patent, No. 1,403,983, for parachute pack, claims 5 and 8 *Held* valid and infringed. *Id.*

(C. C. A. Del.) Smith patent, No. 1,462,456, for parachute pack and harness, claims 1, 11, 12, 15, and 18 *Held* valid and infringed. *Id.*

(D. C. Conn.) Parks patent, No. 1,507,891, for composition of matter for carroting fur and the like, *Held* valid and infringed. *American Hatters & Furriers Co.* v. *Danbury & Bethel Fur Co.*, 47 F.(2d) 268.

(D. C. Conn.) Parks patent, No. 1,507,892, for treated fur and art of treating the same, *Held* valid and infringed. *Id.*

(D. C. Ohio.) Short patent, No. 1,588,303, for transmission belt, *Held* valid and infringed. *Dayton Rubber Mfg. Co.* v. *Dorman Automotive Parts Co.*, 47 F.(2d) 350.

(C. C. A. Del.) Smith patent, No. 1,558,644, for scale, claims 4 and 5, if valid, *Held* not infringed. *International Ticket Scale Corporation* v. *Rhodes-Hoehriem Mfg. Co.*, 47 F.(2d) 134.

(C. C. A. N. Y.) Grubman patent, No. 1,571,916, for method and means for applying eye mountings in doll heads, claims 7–11, 13–20, *Held* not infringed. *Grubman Engineering & Mfg. Co.* v. *Goldberger*, 47 F.(2d) 151.

(C. C. A. N. Y.) Jones patent, No. 1,658,804, for capacitative-coupling control system, claims 1, 2, 4–11 *Held* invalid. *Jones* v. *Freed-Eisemann Radio Corporation*, 47 F.(2d) 174.

(C. C. A. N. Y.) Jones patent, No. 1,658,805, for capacitative-coupling control system, claims 1–16 *Held* invalid. *Id.*

(D. C. N. Y.) Costello patent, No. 1,753,310, for exercising ball and support therefor, claims 1, 5, and 7 *Held* valid and infringed. *Costello* v. *I. Revich & Sons*, 47 F.(2d) 259.

(C. C. A. N. Y.) Grubman reissue patent, No. 16,483, for eye mounting for dolls, claims 10, 26, 30–36 *Held* not infringed. *Grubman Engineering & Mfg. Co.* v. *Goldberger*, 47 F.(2d) 151.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,537,921, R. D. Malley, Mercury switch, decided April 18, 1921, claims 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 19, and 20.

Pat. 1,638,131, W. R. Walker, Electric switch, decided April 18, 1931, claims 1, 2, 3, 4, 5, 6, 10, and 11.

Pat. 1,670,898, S. P. Levenberg, Electrical system, decided March 31, 1931, claim 1.

Pat. 1,680,956, E. H. Simonsen, Wrench, decided April 21, 1931, claim 8.

Pat. 1,721,732, C. A. Hawkins, Vehicle suspension, decided March 20, 1931, claims 7, 8, 9, 10, 11, and 34.

Pat. 1,734,681, M. Lapham, Method of interlocking bolts and nuts, decided March 18, 1931, claim 1.

Pat. 1,743,196, P. J. Dugan, Solenoid construction, decided April 25, 1931, claim 1.

Pat. 1,760,382, C. H. Teesdale, Controlling means for electric switches, decided April 21, 1931, claims 8, 9, 10 and 11.

Condition of Applications Under Examination at Close of Business April 25, 1931

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 96,576; Trade-Mark Division, 1,292. Oldest new case, July 28, 1930: oldest amended, July 28, 1930. The dates given are 1930 except where † indicates 1931.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application awaiting office action: New	Oldest amended application awaiting office action	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Nov. 1	Nov. 15	775
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Oct. 9	Oct. 10	1,422
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Nov. 3	†Jan. 23	991
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 6	Oct. 10	915
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Oct. 2	Oct. 6	910
318	6. LEWERS, A. M., Carbon Chemistry	Sept. 8	Sept. 17	2,185
106	7. JARBOE, C. G., Optics; Photography	Sept. 7	Sept. 8	2,116
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Sept. 7	Sept. 22	1,566
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Oct. 25	Oct. 29	1,491
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 3	Nov. 15	1,081
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Nov. 7	Nov. 18	847
380	12. HENRY, C. C., Machine Elements	Sept. 8	Sept. 28	1,363
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Oct. 31	Nov. 5	1,111
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Oct. 1	Oct. 10	1,286
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Sept. 11	Sept. 8	2,623
242*	16. SPENCER, C. J., Telegraphy; Telephony	Dec. 23	Dec. 27	923
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Aug. 26	Sept. 2	1,567
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Oct. 6	Oct. 8	1,239
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Aug. 27	Aug. 29	2,179
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Oct. 9	Oct. 13	1,031
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Oct. 21	Dec. 10	961
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 27	Nov. 20	998
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Aug. 27	Sept. 5	1,084
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Sept. 17	Sept. 18	971
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Oct. 3	Oct. 4	1,508
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Oct. 17	Nov. 3	1,018
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Oct. 3	Oct. 3	1,147
225	28. BENSON, A. R., Internal-Combustion Engines	Sept. 18	Sept. 23	1,850
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Oct. 30	Oct. 11	590
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Nov. 3	†Jan. 2	944
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	July 28	July 28	2,590
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Nov. 28	Nov. 28	1,383
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Oct. 2	Oct. 6	2,666
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	Dec. 20	Dec. 22	815
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Feb. 5	†Feb. 16	963
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Sept. 2	Sept. 9	2,308
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Sept. 27	Sept. 27	1,692
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Nov. 25	Nov. 28	608
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Oct. 4	Oct. 4	1,724
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Sept. 6	Oct. 6	3,055
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Oct. 27	Oct. 27	875
223*	42. CUTTING, H. O., Electric Signaling	Sept. 25	Sept. 25	1,457
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Oct. 27	Oct. 27	1,671
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Aug. 25	Sept. 2	2,260
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Aug. 26	Aug. 28	2,321
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Oct. 23	Oct. 28	1,194
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Oct. 9	Oct. 13	2,181
212*	48. ROEPKE, O. B., Electricity, General Applications	Sept. 28	Sept. 29	1,198
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Dec. 1	Dec. 1	1,166
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Aug. 30	Aug. 30	2,500
240*	51. BACKUS, C. D., Radiant Energy; Wave Transmission	Aug. 14	Aug. 15	2,333
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Nov. 5	Nov. 8	1,595
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Dec. 19	†Jan. 2	959
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Aug. 21	Aug. 25	2,623
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery	†Mar. 14	†Mar. 14	232
	{Designs	†Apr. 3	†Apr. 14	288
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Sept. 6	Sept. 11	1,977
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Oct. 1	Sept. 26	810
270*	58. DOWELL, E. F., Abrading; Typewriting	Aug. 25	Aug. 25	1,496
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Nov. 1	Nov. 1	1,719
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Aug. 25	Aug. 28	2,059
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Aug. 26	Aug. 27	2,176
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Aug. 27	Aug. 28	2,517
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Aug. 12	Aug. 15	2,473
163	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND, {Trade-Marks	†Mar. 30	†Apr. 15	1,107
	{Labels and Prints	†Mar. 30	†Apr. 3	185

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE EINSTEIN

No. 2,573. Decided February 3, 1931

1. PATENTABILITY—GRINDER-WHEEL OSCILLATOR.
Certain claims for a grinder wheel oscillator *Held* unpatentable over the prior art.

2. SAME—COMPACTNESS.
Compactness or size alone does not constitute invention. There must be some new device or some new and useful purpose accomplished.

3. SAME—SUBSTANTIALLY DUPLICATE CLAIMS.
"Two distinct claims for the same substantial matter, differing only in non-essentials, cannot both be sustained."

APPEAL from the Patent Office. Affirmed.

Mr. Elmer R. Helferich, Messrs. Nathan & Bowman, Mr. Albert F. Nathan, and *Mr. Border Bowman* for Einstein.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

The appellant made application to the Patent Office in Serial No. 673,547, on November 8, 1923, for what he claimed was a new and improved grinder-wheel oscillator. As finally amended, 14 claims were attached to his application, claims 3, 6, 10, 11, and 12 being allowed, and claims 1, 2, 4, 5, 7, 8, 9, 13, and 14 being rejected by both tribunals in the Patent Office. The appellant has assigned error on the refusal of the rejected claims.

Claims 1, 7, and 9 were rejected on the ground that it did not involve invention to substitute gear wheels and a gear unit, such as is shown by the reference Linton, 840,072, January 1, 1907, for the pulleys and belts shown by the reference, Gordon, 1,103,957, July 21, 1914. Claims 2, 4, 13, and 14 were rejected on the said patent to Gordon on the ground that there is no patentable novelty in broadly interchanging the two sleeves of Gordon, as to which one may drive the spindle and which carries the roller and the cam groove. Claims 5 and 8 were rejected as defining nothing patentably different from what is covered by allowed claim No. 3.

Appellant's device is for use in connection with grinding machines for imparting a slight to and fro shifting of the grinding wheel in an axial direction, while the wheel is continuously rotating, and is of particular advantage in truing grinding wheels or in grinding surfaces where it is necessary, or advisable, to shift the grinding wheel forward and backward in doing the work desired. The appellant accomplishes the purposes he has in mind by using a conventional grinding-wheel spindle appropriately housed in bushings, the attachment for oscillating or shifting the shaft forward and backward being located at the end of the spindle opposite to the grinding wheel. Appellant's spindle is operated by a pulley attached thereto, and in an intermediate position thereof, upon which pulley a belt of the ordinary type operates. The spindle is caused to move forward and backward through its bushings by two elements connected with the rear portion of the spindle, which portion has been turned down for the purpose of fitting said elements thereto. One of these elements is a sleeve connected with the spindle and rotating at the same rate as the spindle. The other element is in the form of a ring which surrounds one end of the sleeve element, and which contains a cam follower which fits into a cam groove which surrounds the sleeve element in such a way as to cause, when the ring element is firmly held in one position, the sleeve element and the spindle to move forward and backward as the cam follower passes through the cam groove. The sleeve element and the ring element are caused to move in the same direction but at different rates of speed by a cog wheel having two sets of teeth, the two parts of said cog wheels being of different diameters; thus the spindle and sleeve element will rotate more rapidly than the ring element with its cam follower and, by this means, the spindle will be slowly moved backward and forward as the cam follower goes through the groove. This entire device is mounted in the ordinary housings and with the necessary mountings.

[1] In our opinion the Linton and Gordon references fully anticipate rejected claims 1, 2, 4, 7, 9, 13, and 14. Linton shows a spindle and grinding wheel which is caused to move forward and backward axially by cogwheels, and which is automatically reciprocating. It is true Linton shows a different device for accomplishing the reciprocating movement, his means being a screw shaft which is caused to function by means of gears which operate, in effect, the same as those of the appellant here. Gordon shows a spindle operated by pulleys and belts, and has a cam follower and a cam groove which operate in a like manner to those of the appellant, namely, to move the spindle backward and forward. The elements, however, are arranged opposite to those of the appellant, that is, the outer element bearing the cam follower is attached to the spindle and moves with it, while the inner sleeve bearing the cam groove is stationary. The Patent Office holds that the transposition of these elements is obvious and does not constitute invention. In this we agree. *In re McNeil*, 28 App. D. C. 461, 126 O. G. 3425 is a case in point. There it was held by the court of appeals that a mere reversal of the essential working parts of a previously patented device, did not constitute invention.

[2] Appellant contends his device is compact and occupies much less space than either the Linton or

Gordon devices; that it does away with the cumbersome pulleys of Gordon and the equally cumbersome cogs of Linton. This may be true, but we do not think this element of compactness or size alone, constitutes invention. *Wappler Electric Co.* v. *Bronx Hops, etc.*, 28 F.(2d) 419; *Grinnell Wash, Machine Co.* v. *Johnson*, 247 U. S. 426, 254 O. G. 225. There must be some new device or some new and useful purpose accomplished. There is nothing here, in our judgment, which is not anticipated by Linton and Gordon.

Claims 5 and 8 were rejected, as showing nothing patentable over allowed claim 3. These claims follow:

3. A grinding-machine comprising an axially shiftable spindle; a first member having a circumferential cam-groove mounted on said spindle; means for prohibiting shifting of said member relative to said spindle; a second member loosely journaled coaxial with said spindle and indirectly deriving rotation therefrom, said second member having a part engaging said cam-groove; a removable stop adapted to prevent reciprocation of said second member; and means to adjust said stop from its effective position to permit said second member to shift idly under the action of said cam and thereby to discontinue reciprocation of said spindle.

5. In a grinding machine, a support; a spindle rotatably and translatably journaled therein; a grinding wheel carried by said spindle; means to rotate said spindle; means to translate said spindle in its bearings, said translating means comprising a first member fixed to said spindle; a second member rotatably journaled with its axis coincident with the axis of said first member; means connecting said members to rotate the second member from the first member at an unequal rate; means to cause the relative rotation of said members to translate one of said members and said spindle, said means comprising a cam on one of said members, a follower carried by the other member and co-operating with said cam; abutments engaging one of said members to restrain it against the translatory action of said cam; and means permitting the removal of one of said abutments to permit said restrained member to be translated by the action of said cam.

8. A grinding-machine comprising an axially shiftable spindle; a member keyed on said spindle and having a circumferential cam-groove; a normally shiftable means deriving rotation from said spindle and having a part engaging said cam-groove; means including a stationary abutment and a movable abutment engaging opposite sides of said shiftable means for prohibiting shifting of said shiftable means relative to said spindle to accomplish a reciprocation of said member and spindle, and means to withdraw said movable abutment away from said shiftable means to permit said means to shift idly and not effect a reciprocation of said spindle.

[3] We are not advised from the record why claim 3 was allowed, nor is it particularly material. Two distinct claims for the same substantial matter, differing only in non-essentials, cannot both be sustained. *Decco Co.* v. *Gilchrist Co.*, 125 Fed. 293. *In re Prescott*, 51 App. D. C. 281,301 O. G. 389, 278 Fed. 590; *In re McConnell*, 17 C. C. P. A. (Patents) 1139, 399 O. G. 419, 40 F.(2d) 567. While counsel for appellant contend in their argument that the above quoted claims do differ in essential elements, they do not point out to us what such essential elements are. The only difference apparent, on careful reading, between claims 5 and 3, is that claim 5 refers to "abutments" and claim 3 to a "stop". Certainly, in this device, this would not be a patentable distinction. The same comment may be made on claim 8. The other features of the refused claims, such as "a member keyed on said spindle", as found in claim 8, and members rotating "at an unequal rate", constitute nothing patentable over the prior art, and hence constitute no patentable distinction between these claims and claim 3.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

WHITE *v.* SYVERTSEN

No. 2,514. Decided February 3, 1931

INTERFERENCE—PRIORITY—DILIGENCE.

Evidence reviewed and *Held* to establish that priority was properly awarded to S. on the ground that assuming that W. was the first to reduce to practice S. was the first to conceive the invention and was not lacking in diligence in filing his application for patent.

LENROOT, *J.*, concurring specially.

BLAND, *J.*, dissenting.

APPEAL from the Patent Office. Affirmed.

Mr. G. F. Dewein for White.

Mr. James L. Norris and *Mr. Clarence A. Bateman* for Syvertsen.

HATFIELD, *J.*:

This is an appeal in an interference proceeding from the decision of the Board of Appeals affirming the decision of the Examiner of Interferences awarding priority of invention to appellee, Harald Syvertsen.

The invention relates to an improvement in hydraulic turbines "of the type wherein water is delivered to the runner past an annular series of guide vanes * * * simultaneously adjustable about parallel axes * * * adapted to direct the water tangentially toward the runner blades." It involves the idea of arranging stop pins so that they project into cored-out or open spaces in the guide vanes, in such position as to permit free motion of the guide vanes during normal operation, and, in the event of accidental breakage of the conpection between the guide vanes and the shifting ring—the means connecting the guide vanes to the operating mechanism—prevent them moving beyond a predetermined position and striking the vanes of the runner.

We quote counts 1 and 2 of the five counts involved in the issue:

Count 1. The combination with a turbine and runner, of gate means mounted to have pivotal swinging operation and provided with an open space therein with opposite wall portions, and stop means secured to a part of the turbine and projecting into the open space of the gate means and concealed within the latter and operative with relation to said wall portions to limit the movement of the gate means in the event of breakage of the operating devices therefor.

Count 2. The combination with a turbine installation including a runner and pivoted gates having an end portion with walls of stop pin means extending into the gates between the said walls without interfering with the normal opening and closing movements of the latter but preventing abnormal free movement thereof relatively to the runner.

Appellee, Syvertsen, the senior party, filed his application on February 20, 1925, and a patent, No. 1,570,536, was issued to him on January 19, 1926.

Appellant, White, the junior party, filed his application on May 27, 1926, more than four months after a patent had been issued to appellee. Accordingly, appellant had the burden of establishing priority of invention beyond a reasonable doubt.

Considerable testimony was introduced by the parties.

The tribunals below, in exhaustive opinions, in which the testimony is carefully analyzed and considered, concurred in holding that appellee conceived and disclosed the invention in 1919; that appellant conceived and disclosed the invention in September, 1924; that the evidence submitted by appellant was not sufficient to establish reduction to practice prior to appellee's filing date; and that, as appellee was the first to conceive and reduce the invention to practice, he was entitled to an award of priority.

With reference to appellant's claim that he reduced the invention to practice, prior to appellee's filing date, the Examiner of Interferences said:

During the latter part of 1924 two large units for the Copco Plant of the California-Oregon Power Company were built in the Allis-Chalmers Plant which units were assembled and inspected for shipment as early as the early part of February.

During the process of construction of these gates the turbine units were subjected to the certain shop tests consisting of manually swinging the gates from open to closed position very violently. This swinging was done beyond the normal open and closed position in order that the pins could be brought into action. There were no other tests of the invention within the knowledge of Gross who testified to the above-mentioned tests.

There appears to be considerable diversity of opinion between the parties in interference as to the effectiveness of these shop tests, it being the view of White that such tests constitute a reduction to practice of the invention, while such a contention is opposed by Syvertsen, on the ground that such a test is not an approximation to the action of the forces operating against these gates under normal working conditions.

It will be noted at this point that after the Copco units were installed no difficulties were experienced from the same. Whether this satisfactory operation on the part of the turbine shipped by the Allis-Chalmers Company was due to the fact that the gates had never been moved to a position where the stops came into play or not is not clear.

It is believed by this tribunal that such shop tests do not constitute a reduction to practice of the invention. While the invention on its face may be considered simple in structure, the action of these gates when under the extreme hydraulic pressures and currents to which they are subjected is rather complex, and to violently swing the gates against the pins does not appear sufficient to approximation to the normal working conditions to which these gates would be subjected as to constitute a reduction to practice. Theoretically calculating the water pressures and using a safety factor upon which factor the size of the stop is based cannot be considered a reduction to practice.

However, the Examiner of Interferences did not base his decision entirely upon his holding that appellant had failed to reduce the invention to practice until after appellee's filing date. But, assuming, as he did for the purposes of his decision, that appellant had successfully reduced the invention to practice, he held, after stating and analyzing the testimony pertaining thereto, that appellee was diligent from the time appellant entered the field—September, 1924—until he reduced the invention to practice by filing his application on February 20, 1925.

The Board of Appeals rested its decision squarely upon the proposition that appellant's shop tests were not sufficient to demonstrate that the invention would function properly in actual use, and that he had not reduced the invention to practice prior to appellee's filing date.

Counsel for appellant contends that the invention had been completed by an actual reduction to practice for the following reasons: First, the invention in issue was actually constructed and made a part of a hydraulic turbine, the stop pins being so arranged as to permit free motion of the guide vanes during normal operation; second, the stop pins, it is claimed, were designed by competent hydraulic engineers to withstand the strain of the forces produced by the great pressure and velocity of the water rushing past the guide vanes in actual use, although these forces could not be calculated with assured accuracy; third, the stop pins were tested in the shop by swinging the guide vanes violently against them.

It is conceded that the invention was not tested in actual operation of the turbines. In this connection, appellant testified as follows:

X Q. The stop pins, to be practically operative and useful for their intended purpose, would therefore need sufficient strength in the pins themselves and also in the securing of these pins in their sockets, would they not?

A. Yes.

* * * * * * *

X Q. Your position, as I understand it, is that the ability of the stop pins to withstand the stresses which would be imposed upon them in case of breakage of the controlling connections of the respective vanes during actual running of the turbine could be determined with certainty by calculation. Do I correctly understand your position?

A. *The stresses cannot be determined accurately because the force is not definitely known.* It was a feature of the design of the stop pins that they should stop the vanes under all emergencies, conditions, such as we assume, but undoubtedly a condition could arise under which the guide vanes might be broken just as the condition could arise by which the casing of the turbine would be exploded or the shaft of the turbine twisted in two. The pins were designed and will be found of sufficient size for limiting the motion of the guide vanes under the worst assumed conditions with which we were familiar. [Italics ours.]

Appellant's views regarding the necessity of tests to reduce the invention to practice are concisely stated in his testimony. We quote:

* * * No, the invention is simple and covers a stop or limit device for the motion of the guide vane and when the stop has been installed and the guide vane once adjusted to it, the device is complete and the invention an accomplished fact.

The witness, Emil Gross, was the only one who testified that the stop pins were tested by having the guide vanes swung violently against them.

In view of the fact that the tribunals below have stated the evidence in considerable detail and have analyzed it in their opinions, we deem it unnecessary to extend this opinion by an exhaustive discussion of the testimony. We think it is evident that a mere swinging of the guide vanes against the stop pins by two men, violently or otherwise, would prove nothing more than that the stop pins were in proper position. Such a test would certainly not be of great importance, if its purpose was to determine whether the stop pins were of sufficient strength to withstand the incalculable forces to which they would be subjected in actual operation. Accordingly, one of the questions presented is whether or not the actual construction of the involved invention as a part of a hydraulic turbine is sufficient, as stated by appellant in his testimony, to establish reduction to practice.

Surely, in order to reduce the invention to practice, more would be required than the mere placing of the stop pins in proper position so that they would not interfere with the free motion of the guide vanes during normal operation. The precise purpose of the invention was not merely to permit free motion of the guide vanes during normal operation, but to prevent them, in the event of accidental breakage of their connections with the shifting ring, moving beyond a predetermined position and striking the vanes of the runner. Obviously, the desired results would

not be obtained, unless the stop pins were of sufficient strength to accomplish their intended purposes.

It is conceded by appellant that the stresses or forces to which the pins might be subjected in actual operation could not be accurately calculated. There is some evidence to the effect that such forces could be determined with some reasonable degree of accuracy. However, the evidence submitted by appellant to establish that such forces were so ascertained and that the pins were designed to withstand them is not very satisfactory.

The witness, Gross, testifying for appellant, said that, while he could not be positive, he thought the pins were installed in a turbine in the early part of December, 1924.

Appellant's witness, Henry Walters, stated that he was an inspector in the hydraulic department of the Allis-Chalmers Manufacturing Company, appellant's assignee; that the stop pins were not installed in a hydraulic turbine prior to January, 1925; and that the records of his company indicated that the stop pins were installed in hydraulic turbines some time later than January 3, 1925, and prior to February 10, 1925.

We think that it has been clearly established by appellee that he conceived the invention early in 1919; that he, and some of his associates in the employ of the S. Morgan Smith Company, had discussed the question of the installation of the invention in hydraulic turbines from time to time, especially on July 29, and August 28, 1924, and thereafter; that, due to the fact that the vanes in turbines theretofore constructed by appellee's company were too narrow, or otherwise unsuitable to be used with inside stop pins, it was impossible, on August 28, 1924, for appellee to make practical use of the invention; that, on August 28, 1924, it was understood by appellee and the witness, Jessop, chief engineer of appellee's assignee, that the invention would be utilized as soon as an order was received for the construction of a turbine; that, early in October, 1924, an order for a turbine was received and immediately thereafter and until January, 1925, the use of the invention, as a part of the turbine to be constructed, was many times considered and discussed by appellee and others in the employ of the S. Morgan Smith Company; that drawings for the vanes of this turbine were prepared in October, 1924, pencil drawings of the invention being added thereto shortly thereafter and prior to November 26, 1924; and that the invention was actually installed in this turbine early in the year 1925.

It appears from the record that as early as November, 1924, appellee was making preparation for the filing of an application for a patent; and that, in December, 1924, the matter was in the hands of his patent attorney.

In view of the activities of appellee during July, the latter part of August, October, November, and December, 1924, and January and February, 1925, prior to the filing of his application, it is evident that he was not lacking in diligence. The installation of the invention in hydraulic turbines was a matter of importance and required considerable time for discussion and consideration by those charged with the responsibility. That appellant, White, recognized the truth of this assertion, clearly appears from his testimony, in which he stated that even the preparation of preliminary drawings might be subjected to considerable delay. In this connection, he said:

> The actual work of putting the change on the drawing would, of course, not require very much time, but the discussion leading up to the actual change might take some little time. In other words, I would not go to the draftsman and say "Put this in here at once". I would tell my engineer in charge of design or the chief draftsman to make a preliminary drawing of such change for examination and discussion. A considerable time might well elapse between the request to make the change and the making of the actual change. Again, the conditions of the work in the shop might be such as to not require this change at once and press of other work frequently operates to delay such things. I am not prepared to say how long it would take or did take to make the change from the time it was suggested until the date was placed on the drawing.

Accordingly, we are of opinion that appellee was diligent from the time appellant entered the field—September 10, 1924—until appellee filed his application—February 20, 1925. Assuming, therefore, but not deciding, that appellant reduced the invention to practice shortly before appellee filed his application, nevertheless, appellee was the first to conceive the invention and, as he was not lacking in diligence, the tribunals below were right in holding that he was entitled to an award of priority.

The decision of the Board of Appeals is affirmed.

Affirmed.

LENROOT, *J.* (specially concurring):

I can not agree with the conclusion of the majority of the court that there was no lack of diligence upon the part of appellee in reducing his invention to practice.

The rule is so well settled that it scarcely needs the citation of authority, that the reasonable diligence required of the first inventor, where another has entered the field and has reduced an invention to practice prior to the first inventor's reduction to practice, is diligence in perfecting and adapting his invention. *Automatic Weighing Mach. Co.* v. *Pneumatic Scale Corp.*, 166 F. 288. The rule is also well established that in such cases the first inventof, to be entitled to an award of priority, has the burden of showing that immediately before his rival entered the field, and at that time, he was exercising due diligence in perfecting his invention and attempting to reduce it to actual practice. *Martocello* v. *Kobash*, 17 C. C. P. A. (Patents) 1095, 397 O. G. 169, 39 F.(2d) 677.

Applying these two principles to the case at bar, I think the record shows that appellee did nothing from the date of his conception in 1919 until some time between October 29 and November 26, 1924 to reduce his invention to practice. Appellant entered the field on September 10, 1924, and the majority opinion rests its finding of diligence upon the following statement contained therein:

> We think that it has been clearly established by appellee that he conceived the invention early in 1919; that he, and some of his associates in the employ of the S. Morgan Smith Company, had discussed the question of the installation of the invention in hydraulic turbines from time to time, especially on July 29, and August 28, 1924, and thereafter; that, due to the fact that the vanes in turbines theretofore constructed by appellee's company were too narrow, or otherwise unsuitable to be used with inside stop pins, it was impossible, on August 28, 1924, for appellee to make practical use of the invention; that, on August 28, 1924, it was understood by appellee and the witness, Jessop, chief engineer of appellee's assignee, that the invention would be utilized as soon as an order was received for the construction of a turbine; that, early in October, 1924, an order for a turbine was received and immediately thereafter and until January, 1925, the use of the invention, as a part of the turbine to be constructed, was many times considered and discussed by appellee and others in the employ of the S. Morgan Smith Company; that drawings for the vanes of this turbine were prepared in October, 1924, pencil drawings of the invention being added thereto shortly thereafter and prior to November 26, 1924; and that the invention was actually installed in this turbine early in the year 1925.

I had not supposed that discussion of an invention involving only the question of its use at some time in the future was any evidence of diligence in reducing it to practice. The record does show that appellee discussed with his fellow employees and officers of the company by which he was employed the question of whether his invention should be installed at some time in the future in a turbine. Appellee testified that in August, 1924, in conversation with George A. Jessop, chief engineer of appellee's employers, "it was decided to put in inside gate stops on the first available order received after August, 1924." The record shows that the first "available order" was received in October, 1924, but that it was not decided until January, 1925, that the gate stops embodying the invention in issue should be installed in the turbine covered by that order.

In the case of *Seeberger* v. *Dodge*, 24 App. D. C. 476, 114 O. G. 2382, one of the questions there under consideration was very similar to the question here under discussion. In that case the court said, p. 4895:

> Granting the contention that actual reduction to practice is preferable to that which is constructive, merely, as more to the interest of the public, and that reasonable indulgence ought to be extended to one pursuing that course in good faith, yet, when the construction of an experimental device involves so great cost and risk that an inventor, though possessed of sufficient means, may well hesitate to undertake the same entirely at his own expense, due diligence requires that he should then attempt to secure his right and promote the public interest by filing an application for a patent.

So here, if the invention could not be reduced to practice except by installation of the same in a very large and costly machine, instead of waiting for some indefinite time in the future to embody the invention in such machine, due diligence required that appellee file his application for a patent upon it and thus secure a constructive reduction to practice of the same. This he did not do before appellant's alleged reduction to practice.

It seems to me that the majority opinion modifies the rule as to what constitutes diligence in reducing an invention to practice. If mere discussion of whether a proposed invention should be used commercially in the future, or even a tentative understanding that it shall be so used, is evidence of diligence in reducing an invention to practice, then I think that we have so broadly extended the rule of diligence as to destroy, in many cases, its proper application.

On the other hand, if it be conceded that mere discussion of the future use of an invention is not evidence of diligence, then it seems to me that the conclusion of the majority upon the question of diligence can not be sustained unless it be held that diligence by the first inventor, beginning more than a month after the second inventor had entered the field, is in this case sufficient to entitle him to an award of priority. It seems to me that the reason for the rule that diligence upon the part of the first inventor must exist immediately prior to the time the second inventor enters the field is that any diligence of the first inventor first arising *after* the second inventor enters the field might be the result of his gaining some information concerning the activities of the second inventor. I believe that it is a wise and salutary rule that diligence must be shown immediately before and at the time that the second inventor enters the field, and that any diligence exercised by the first inventor only after the second inventor enters the field can not avail the first inventor as against the claim of the second inventor, who has reduced his invention to practice before the reduction to practice by the first inventor. In the case at bar, there was at the very least a period of more than one month after the second inventor entered the field during which appellee exercised no diligence in reducing his invention to practice, according to the evidence in the record, and there is no evidence that he was exercising such diligence before appellant entered the field. For the reasons stated, assuming that the second inventor was the first to reduce to practice, I can not agree with my brethren that appellee was in the exercise of such diligence in reducing his invention to practice as to entitle him to an award of priority.

Upon the question of reduction to practice, appellee's patent having been issued more than four months prior to the filing of the application of appellant, the burden was upon appellant to establish priority of invention beyond a reasonable doubt. I am frank to say that were this a case where preponderance of evidence only was required, I should be of the opinion that appellant had sufficiently established reduction to practice of his invention prior to appellee's filing date, but I do agree with the statement in the majority opinion that the evidence is somewhat unsatisfactory in this respect. The record clearly shows that it was practical to determine the necessary size of the gate stops by certain mathematical computations, without resorting to an actual test. While it may be found from the testimony that such computations were made and relied upon, there is no direct evidence in the record that the party who made such computations was qualified to do so, and there is no direct evidence that any person qualified to pass upon and determine the strength of the pins actually did so. For this reason, I can not say that appellant has established priority of invention be-

yond a reasonable doubt, and I therefore concur in the conclusion of the majority that the decision of the Board of Appeals should be affirmed.

BLAND, *J.* (dissenting):

I regret that I find myself totally out of harmony with the majority in the conclusion reached, and in that portion of the opinion having reference to reduction to practice. While the conclusion is said to be reached on the issue of the diligence of the appellee, the reduction to practice of appellant is discussed in such a manner as to leave the definite impression that the majority, at least, has very grave doubts as to whether or not appellant reduced his invention to practice.

This court usually follows the commendable practice of not discussing or intimating its views upon questions which it does not care to decide and which are not essential to the decision of the case. The reduction to practice of appellant is not in this case according to the views of the majority, and yet the question is discussed. A conclusion that there was no reduction to practice on the part of appellant adds no strength to nor sheds any light upon the very unsatisfactory testimony as to appellee's diligence. I fail to find any relevancy between the two issues. Appellee either was or was not diligent, without regard to appellant's acts. In my judgement the concurring opinion of my associate, Judge Lenroot, conclusively shows the lack of diligence on the part of appellee.

To my way of thinking, this is one of the peculiar kinds of inventions which does not require such a reduction to practice as that it be installed and operated until the contingency happens which is to call into operation the patented device. Following the logic of the opinion of the majority, it would not have been sufficient to constitute reduction to practice to have put the completed device in actual operation under normal conditions because the invention was not designed to operate under normal conditions, but to operate under abnormal conditions. The chain held the vane in normal conditions, but broke and permitted the stop-pins to stop the vane when a log or some obstruction came against it with greater force than the normal flow of water. Putting the vane in normal operation would not test the strength of the pins until the chain broke. To hold that a reduction to practice of this kind of device requires that it must be tested under abnormal conditions would, under the circumstances, I think, be unreasonable. No such requirement was made of appellee, because of the rule that filing of the application constitutes reduction to practice. The courts should not make a rule in a case of this character which puts the parties, while in the Patent Office, upon such an unequal basis. The practical result, in this kind of case, is that the first one to the Patent Office is declared to be entitled to the invention.

There is ample supporting authority for my views on this question, although none of the cases contains a statement of facts identical with those at bar. The peculiar nature of the device in question would, to me, seem to warrant the application of the rule laid down in *Mason* v. *Hepburn*, 13 App. D. C. 86, 1898 C. D. 510, in which a clip or attachment to a gun was held to have been reduced to practice when it was completely finished and ready for sale and use and was demonstrably capable of producing the result.

The entire record before us unquestionably shows that at the time appellant claims his invention had been reduced to practice, it had been fully ascertained that it was capable of producing the result for which it was invented and that it was completely finished and ready for sale and use. See also *Rolfe* v. *Hoffman*, 26 App. D. C. 336, 121 O. G. 1350.

U. S. Court of Customs and Patent Appeals

IN RE BENNER

No. 2,590. Decided February 3, 1931

PATENTABILITY—STORAGE BATTERIES.

Claims for a storage battery *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. George H. Souther and *Mr. J. E. Hutchinson, jr.*, for Benner.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.*:

This is an appeal from a decision of the Board of Patent Appeals affirming the prior decision of the Examiner rejecting claims 5 and 6 of appellant's application for patent for claimed "improvements in armored storage battery electrodes and processes of making same."

The appealed claims read:

5. A storage battery comprising a container and a component assembly of electrodes and separators, the electrodes comprising a reticulated grid and an active material, of insufficient density to be self-retaining during the action of the battery, on the grid; the separators being pervious to electrolyte but substantially impervious to the active material and of a material which will expand when electrolyte is added whereby the assembly is placed under pressure.

6. A storage battery comprising a container and a component assembly of electrodes and separators, the electrodes comprising a frame and a grid, the grid being of less thickness than the frame, an active material on the grid and flush with the frame, said active material being of insufficient density to be self-retaining during the action of the battery; the separators being pervious to the electrolyte but substantially impervious to the active material and of a material which will expand when electrolyte is added whereby the assembly is placed under pressure.

The claims were rejected upon the following references: Usher, 509,271, November 21, 1893; Hutchinson, 1,159,035. November 2, 1915; Cogan, British 9,048, May 20, 1891; Pumpelly et al., British, 19,883, December 10, 1889.

The Cogan and Hutchinson patents are cited merely to show the specific form of grid in appellant's claim 6 and it is virtually conceded that they do so, but appellant states that "this feature is merely a detail of claim 6." His claim is for the combination of the elements recited in Nos. 5 and 6.

If we disregard the grid feature, claims 5 and 6 are practically identical, and Pumpelly and Usher are relied upon as the primary references against them.

In the brief in behalf of appellant it is said:

Briefly, the combination in its essential details comprises a container 1, which the specification states "should be of sufficient strength to withstand considerable outward force" for reasons hereinafter pointed out; electrodes 2 and 3 having highly porous non-coherent active material of insufficient density to be self-retaining in the grid during the action of the battery; and separators 4 capable of expanding when the electrolyte is added to the battery.

And the brief then points out claimed advantages, and says:

The separators are of selected material having the property of expanding when the electrolyte of the battery is introduced.

The specification says:

The separators used in the present invention are preferably formed of woven or unwoven fibrous material impregnated and aggregated by a suitable bonding agent.

The claims, however, do not claim any specific material, but say "of a material which will expand when electrolyte is added whereby the assembly is placed under pressure."

The Board of Appeals points out that in Pumpelly, while "perhaps the pressure between the assembled parts is not materially increased by the swelling of the separators", still, since the separators hold the active material in place, "there is the necessary pressure for this purpose between the separators and the plates".

Usher states that he may use separators of wood, earthenware or an equivalent substance, and the Board says "expansive action is necessarily inherent" in such wooden separators.

Both Hutchinson and Cogan teach the use of active material on the grid, "flush with the frame."

Careful study of appellant's application has been made by us in the light of the prior art cited, and we fail to see where by his combination of elements disclosed in this prior art, and such substitutions as he suggests, he has produced an article possessing the qualities of novelty essential to entitle him to patent upon the claims made, although he may have made useful improvements. Patentable novelty—invention—is lacking.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,025, 822, 1,163,253, W. H. Millspaugh, Paper making machine; 1,163,251, same, Paper making, D. C., S. D. N. Y., Doc. E 48/267, *The Guardian Trust Co. et al.* v *International Paper Co.* Dismissed Mar. 18, 1931.

1,105,037, T. E. Murray, Seal fastening, D. C., E. D. N. Y., Doc. 4933, *Metropolitan Device Corp.* v. *American Casting & Mfg. Corp.* Dismissed Feb. 25, 1930.

1,145,440, C. Russell, Roof, D. C., E. D. N. Y., Doc. 5371, *The Patent & Licensing Corp. et al.* v. *Tex Tyle Roofing Co., Inc.* Consent decree for plaintiff Feb. 24, 1931.

1,163,251. (See 1,025,822.) 1,163,253. (See 1,025,822.)

1,173,079, E. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,251,377, A. W. Hull, Method of and means for obtaining constant direct current potentials; 1,297,188, I. Langmuir, System for amplifying variable currents; 1,728,879, Rice and Kellogg, Amplifying system, filed Mar. 12, 1931, D. C., E. D. Mo. (St. Louis), Doc. 9412, *Radio Corp. of America et al.* v. *Trav-Ler Mfg. Corp.* Same, filed Mar. 13, 1931, D. C., S. D. Calif (Los Angeles), Doc. T-69-H, *Radio Corp. of America et al.* v. *F. R. Smith (Westerner Radio Mfg. Co.).* Same, filed Mar. 16, 1931, D. C., S. D. Calif. (Los Angeles), Doc. T-75-H, *Radio Corp. of America et al.* v. *May Department Stores Co.*

1,180,159, I. Langmuir, Incandescent electric lamp, D. C., S. D. N. Y., Doc. E 58/139, *General Electric Co.* v. *Cupples Co.* Dismissed Mar. 17, 1931.

1,183,573, 1,183,574, J. Le Page, Cutting rolls; 1,437,429, same, Machine for making steel-cut cereals; 1,682,454. W. M. Williams, Coffee cutting machine, D. C., S. D. N. Y., Doc. E 50/180, *B. F. Gump Co.* v. *J. Burns & Sons, Inc.* Consent order of discontinuance Mar. 13, 1931.

1,183,574. (See 1,183,573.)

1,195,266. O. A. Peterson, Hinged last, C. C. A., 1st Cir., Doc. 2525, *Krentler-Arnold Hinge Last Co.* v. *J. H. Leman et al.* Decree affirmed (notice Mar. 18, 1931).

1,195,632. (See 1,173,079.)

1,215,498, F. Dietz, Spiral spring for the closing of doors, D. C., E. D. N. Y., Doc. 5332, *Door Spring Corp.* v. *Double Duty Theft Protection Corp. et al.* Discontinued as to Double Duty Theft Protection Corp.; consent decree for plaintiff against S. Kalikow Feb. 16, 1931.

1,231,764, F. Lowenstein, Telephone relay; 1,426,754, R. C. Mathes, Circuit for electron discharge device; 1,465,332, H. D. Arnold, Vacuum tube amplifier, filed Mar. 12, 1931, D. C., E. D. Mo. (St. Louis), Doc. 9413-2, *Radio Corp. of America et al.* v. *Trav-Ler Mfg. Corp.* Same, filed Mar. 13, 1931, D. C., S. D. Calif. (Los Angeles), Doc. T-70-H, *Radio Corp. of America et al.* v. *F. R. Smith (Westerner Radio Mfg. Co.).* Doc. T-76-H, *Radio Corp. of America et al.* v. *May Dept. Stores Co.*

1,236,217, G. B. Shaw, Rug and carpet fastener, D. C., S. D. N. Y., Doc. E. 52/110, *W. A. McHorney Co., Inc.*, v. *Gould-Merscreau Co., Inc.* Consent order of discontinuance Mar. 13, 1931.

1,251,377. (See 1,173,079.)

1,271,529, M. C. Hopkins, Acoustic device, D. C. Del., Doc. E 671, *Lektophone Corp.* v. *Robelen Piano Co.* Dismissed upon stipulation Mar. 18, 1931. Doc. E 712, *Lektophone Corp.* v. *Miller Bros. Co.* Dismissed upon mandate of U. S. Supreme Court Mar. 17, 1931.

1,283,404, H. L. Feasel, Mop, D. C., S. D. Calif. (Los Angeles), Doc. E Q-11-M, *O-Cedar Corp.* v. *J. M. Robertson (O-U-Dust Co.).* Patent held valid and infringed Mar. 13, 1931.

1,297,188. (See 1,173,079.)

1,393,040, C. C. Richards et al., Punch and die retainer; 1,785,495, C. C. Richards, same, filed Mar. 16, 1931, D. C., E. D. Mich., S. Div., Doc. 4706, *Allied Products Corp.* v. *Whitman & Barnes, Inc.*

1,426,754. (See 1,231,764.)

1,436,459, J. Reece, Seat cover, D. C., E. D. N. Y., Doc. 5402, *Ever-Klean Seat Pad Co.* v. *J. Ratkin (Gem Auto Parts Co.).* Consent decree for plaintiff Feb. 27, 1931.

1,437,429. (See 1,183,573.)

1,441,928, J. H. Hunt, System of control for electrical devices, D. C., W. D. N. Y., Doc. 39, *Delco-Remy Corp.* v. *Gas Gard Co., Inc.* Dismissed Mar. 10, 1931.

1,452,197, 1,537,076, 1,456,629, 1,700,729, R. B. Gilchrist, Drink mixer; 1,700,730, same, Electric drink mixer, D. C. Wis. (Milwaukee), Doc. 2514, *The Gilchrist Co. et al.* v. *Arnold Electric Co.* Decree for plaintiff (notice Mar. 16, 1931).

1,465,332. (See 1,231,764.) 1,465,629. (See 1,452,197.)

1,489,944, M. Kasser, Machine for processing eggs, filed Mar. 16, 1931, D. C., N. D. Calif. (San Francisco), Doc. 2803-K, *Kasser Egg Process Co.* v. *MacMarr Stores, Ltd.*

1,533,858, L. A. Hazeltine, Method and means for neutralizing capacity coupling in audions, D. C., S. D. N. Y., Doc. E 55/216, *Hazeltine Corp.* v. *United American Bosch Corp.* Consent decree for plaintiff Mar. 16, 1931.

1,537,076. (See 1,452,197.)

1,548,152, L. L. Mack, Postage meter, filed Mar. 18, 1931, D. C. Del., Doc. E 868, *U. S. Postal Meter Corp.* v. *Whitlock Metered Mail Co., Ltd.*

1,610,893, V. F. Siezak, Coin controlled weight printing machine, included by counter claim Mar. 12, 1931, in suit filed Jan. 7, 1931, D. C. Del., Doc. E 853, *Rhodes-Hochriem Mfg. Co.* v. *International Ticket Scale Corp.*

1,629,612, S. Cooper, Tea bag, D. C., E. D. N. Y., Doc. 4917, *Cooper Tea Packer Co., Inc.*, v. *United Grocers Co., Inc.* Dismissed after trial Feb. 18, 1931.

1,646,347, C. C. Collette, Play-ball, D. C., S. D. N. Y., Doc. E 47/114, *C. C. Collette et al.* v. *The Hygrade Cut Fabric Co.* Consent decree for plaintiff Mar. 16, 1931.

1,648,808, L. A. Hazeltine, Wave signaling system; 1,755,114, same, Uni-control signalling system; 1,755,115, same, Variable condenser, filed Mar. 16, 1931, D. C., S. D. N. Y., Doc. E 58/366, *Hazeltine Corp.* v. *Sears, Roebuck & Co., Inc.*

1,660,832, E. Conti, Tube forming machine, D. C., E. D. N. Y., Doc. 4953, *Herz Straw Co., Inc.*, v. *S. Smith et al.* Dismissed after trial Mar. 9, 1931.

1,676,485, D. J. Finucane, Leader pipe strap, D. C., S. D. N. Y., Doc. E 47/5, *D. J. Finucane* v. *D. Levow.* Consent decree for plaintiff Mar. 14, 1931.

1,682,454. (See 1,183,573.) 1,700,729. (See 1,452,197.)

1,700,730. (See 1,452,197.) 1,728,879. (See 1,173,079.)

1,753,310, H. O. Costello, Exercising ball and support therefor, filed Mar. 16, 1931, D. C. R. I., Doc. 365, *H. O. Costello et al.* v. *The Shepard Co.*

1,755,114. (See 1,648,808.) 1,755,115. (See 1,648,808.)

1,785,495. (See 1,393,040.)

1,785,770, Faber & Driggs, Aerial toy, filed Mar. 5, 1931, D. C. Del., Doc. E 866, *The Tipp Fireworks Co. et al* v. *Victory Sparkler & Specialty Co.*

1,790,580, W. Friedman, Powder sifter, filed Mar. 17, 1931, D. C., S. D. N. Y., Doc. E 58/384, *Lupe, Inc.*, v. *Majestic Metal Specialties, Inc., et al.*

Re. 16,251, O. B. Schellberg, Medical apparatus for use in proctotherapy, D. C., S. D. N. Y., Doc. E 49/35, *Schellberg Mfg. Corp.* v. *E. M. De Berri.* Consent decree for plaintiff Mar. 17, 1931.

Des. 78,403, C. Morali, Shoe, D. C., S. D. N. Y., Doc. E 49/230, *Delman, Inc.*, v. *Saks & Co.* Consent order of discontinuance Mar. 18, 1931.

Trade-Marks Canceled

140,613. Men's and boys' hats and caps. Jacobsohn & Schwager, New York, N. Y. Registered March 22, 1921. Canceled April 10, 1931.

150,651. Garters, belts, suspenders, and arm bands. Wilson Brothers, Chicago, Ill. Registered January 3, 1922. Canceled April 27, 1931.

152,141. Sheets, sheetings, and pillowcases. Cooper, Coate & Casey Dry Goods Co., Los Angeles, Calif. Registered February 21, 1922. Canceled April 10, 1931.

157,370. Ginger ale. Peninsula Products Company, Wilmington, Del. Registered August 1, 1922. Canceled April 10, 1931.

189,711. Potato chips. Nicholas J. Shamey, doing business as Eatmor Potato Chip Company, Springfield, Mass. Registered September 23, 1924. Canceled April 10, 1931.

209,043. Signal lights for use on automobiles. Howard B. McLaughlin, doing business as McLaughlin Co., Canton, Ohio. Registered February 16, 1926. Canceled April 27, 1931.

237,891. Prepared flour. T. A. Foulds Company, Boston, Mass. Registered January 17, 1928. Canceled April 10, 1931.

262,528. Monthly magazine. Macfadden Publications, Inc., New York, N. Y. Registered October 15, 1929. Canceled April 27, 1931.

269,008. Leather and fabric gloves. Steinberger Bros. Glove Corp., San Francisco, Calif., and New York, N. Y. Registered March 25, 1930. Canceled April 27, 1931.

270,836. Insecticides, fungicides, deodorants, and other certain named chemicals. Vermitox Laboratories, Inc., Newark, N. J. Registered May 13, 1930. Canceled April 10, 1931.

276,318. Men's clothing. Jacob Marans and Maxwell Marans, New York, N. Y. Registered October 14, 1930. Canceled April 27, 1931.

278,681. Salve. The J. R. Watkins Company, Winona, Minn. Registered December 23, 1930. Canceled April 27, 1931.

Interference Notices

U. S. PATENT OFFICE, *Washington, Apr. 14, 1931.*

George F. Colley, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications for patent of George F. Colley, 1284 Union Avenue, Los Angeles, Calif., and of Stephen Seth, 882 Park Avenue, Baltimore, Md., and counsel for Colley having stated that they do not know the present whereabouts of said Colley, notice is hereby given that unless said George F. Colley, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

THOMAS E. ROBERTSON,
Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 18, 1931.*

Loughlin & Company, their assigns or legal representatives, take notice:

An interference having been declared by this office between the application of M. M. Fleron & Son, Inc., 113 North Broad Street, Trenton, N. J., for registration of a trade-mark and trade-mark registered May 13, 1930, No. 270,829, to Loughlin & Company, 703 Mount Vernon Place, Washington, D. C., and a notice of such declaration sent by registered mail to said Loughlin & Company at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Loughlin & Company, their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 22, 1931.*

H. H. Palmer & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of John F. Jelke Company, Hillsboro and Northeastern R. R. Track, Hillsboro, Wisconsin, for registration of a trade-mark and trade-mark registered April 24, 1917, No. 116,354, to H. H. Palmer & Co., 45 Harrison Street, New York, N. Y., and the Office having failed to secure satisfactory service upon said H. H. Palmer & Co. at the said address, notice is hereby given that unless said H. H. Palmer & Co., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, MAY 12, 1931

[VOL. 406. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 300,464. CALIFORNIA ART SUPPLY CO., Palo Alto, Calif. Filed May 14, 1930.

DU-O

For Art and Modeling Clay.
Claims use since May 1, 1928.

Ser. No. 311,418. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England. Filed Feb. 25, 1931.

FIDUCIA

For Imitation Straw and Imitation Horsehair Made of Cellulose.
Claims use since Aug. 17, 1929.

CLASS 2

Receptacles

Ser. No. 308,150. ELMER ABRAMSON, St. Louis, Mo. Filed Nov. 21, 1930.

PRO_TEK_EGG

The word "Egg" is hereby disclaimed apart from the mark as shown.

For Bags Made of Reinforced, Water-Proof Paper, Consisting of Two Sheets of Kraft Paper Cemented Together with Asphalt, Which Bags Have Been Specially Devised to Fit Inside of Each Half of an Egg Case as a Means of Protecting the Eggs in the Case from Evaporation, Shrinkage, Leakage, Foul Odors, Freezing, Extreme Heat, Water, and Air.
Claims use since Oct. 1, 1930.

Ser. No. 312,472. BLOOMER BROS. COMPANY, Newark, N. Y. Filed Mar. 24, 1931.

TU-CO

For Containers for Food Products—Namely, Ice Cream Pails Made of Cardboard, Oyster Pails Made of Cardboard, and Cardboard Cartons for Packing Ice Cream.
Claims use since Feb. 1, 1931.

Ser. No. 312,541. BEACH & ARTHUR, INC., Indianapolis, Ind. Filed Mar. 26, 1931.

SMART-SET

For Paper Plates.
Claims use since June 11, 1930.

Ser. No. 312,829. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Apr. 2, 1931.

ALCOA

For Collapsible Tubes.
Claims use since May 12, 1930.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 296,480. CHARLOTTE CHEMICAL LABORATORIES, INC., Charlotte, N. C. Filed Feb. 25, 1930.

CHARLITE

For a General Cleaning Powder for Floors, Windows, Cooking Utensils, Dairy Equipment, Hospitals, Bottles; a Detergent for Use as a Soap Assistant in Washing Clothes, a Grease and Oil Remover, a Cleaning Preparation for Removing Heavy Deposits of Carbonized Grease and Oil from Metal and Other Objects.
Claims use since Sept. 29, 1926.

Ser. No. 296,481. CHEMISCHE FABRIK EISENDRATH GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Mettmann/Rhld, Germany. Filed Feb. 25, 1930.

IMMALIN

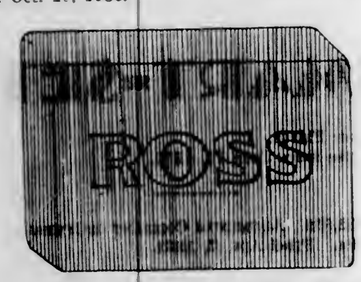
For Pastes, Liquids, and Powders for Polishing Shoes; Pastes, Liquids, and Powders for Cleaning Shoes; Polishing Stone for Shoes; Leather Glaze, Polishing and Cleaning Preparations for Leather, Leather Preserving Preparations, Leather Finishing Preparations, Leather Dressing, Leather Cream, Leather Oil, Grease for Boots, Suede Dressing, Soaps, Washing Powders, and Crystals; Metal Polish, Metal Cleaning Powder; Cleaning Powder for Use on Porcelain, Woodwork, Enamelware, and for General Household Cleaning.
Claims use since Mar. 29, 1901.

Ser. No. 303,276. CLARKSON, INC., Suffern, N. Y. Filed July 9, 1930.

SPOTEX

For Cleaning Fluid for Use on Fabrics and Leather Goods.
Claims use since Apr. 1, 1930.

Ser. No. 306,966. THE SYDNEY ROSS CO., Newark, N. J. Filed Oct. 20, 1930.



Applicant is the owner of Reg. No. 187,391, which was effected under the 10-year proviso of the 1905 act. No claim is made to the representation of the cake of soap per se.
For Toilet Soap.
Claims use since Sept. 1, 1916.

Ser. No. 307,839. BRUCE PRODUCTS CORPORATION, Detroit, Mich. Filed Nov. 13, 1930.



No claim is made to the word "Products" apart from the mark as shown.
For Metal Cleaning Compounds, Metal Polishing Compounds, Buffs, Polishing Wheels, and Emery Wheels.
Claims use since May 1, 1930.

Ser. No. 311,603. FISCHER'S SURFA-SAVER, INC., Cincinnati, Ohio. Filed Mar. 2, 1931.

IMMACULENE

For Soap—Namely, a Detergent for General Cleaning Purposes.
Claims use since Feb. 6, 1931.

Ser. No. 311,866. DUREX ABRASIVES CORPORATION, Jersey City, N. J. Filed Mar. 7, 1931.

DUREXITE

For Abrasives—Namely, Abrasive Coated Cloth or Paper, and Combinations of Abrasive Paper and Cloth.
Claims use since December, 1929.

Ser. No. 311,932. FRANK M. RINEHARDT, Badin, N. C. Filed Mar. 9, 1931.

HANGME



The representation of the goods is hereby disclaimed apart from the mark as shown on the drawing.
For Toilet and Laundry Soaps.
Claims use since Feb. 2, 1931.

Ser. No. 312,012. LUROKS CHEMICAL CO., Philadelphia, Pa. Filed Mar. 11, 1931.



For Liquid Washing Preparation for Clothes and Fabrics and for General Household Cleaning Purposes.
Claims use since Dec. 15, 1930.

Ser. No. 312,674. UNITED DRUG COMPANY, doing business as Langlois, New York, Boston, Mass. Filed Mar. 28, 1931.

Lady Fair

For Toilet Soap.
Claims use since January, 1919.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 300,197. HATTIE VAN ESTHER HILL, doing business as Van Esther Beauty Shoppe, Cleveland, Ohio. Filed May 9, 1930.

Van Esther

For Face Creams, Pressing and Hair Oils, Hair Growers, Medicinal Preparations and Lotions for Treatment of Tetter, Thin Hair, Baldness, Eczema, Corns, and Piles.
Claims use since 1920.

Ser. No. 307,716. HAGAN CORPORATION, Pittsburgh, Pa. Filed Nov. 10, 1930.

BUROMIN

For Chemical for Treating Steam Boiler Water to Prevent the Formation of Boiler Scale.
Claims use since Jan. 20, 1930.

Ser. No. 307,744. SOCIETE CADOLLE FRERES, Paris, France. Filed Nov. 10, 1930.

BIEN-ÊTRE

For Perfumery and Toilet Preparations—Namely, Powders, Rouges, Compacts, Cream, and Lip Sticks.
Claims use since August, 1930.

Ser. No. 309,049. NATOX HYGIENIC LABORATORIES, Brooklyn, N. Y. Filed Dec. 16, 1930.

NaTox

FOR ORAL HYGIENE

The descriptive words "For Oral Hygiene" are disclaimed.
For Preparation for Oral Hygiene.
Claims use since Aug. 1, 1930.

Ser. No. 309,468. DOROTHY GRAY, Bloomfield, N. J., and New York, N. Y. Filed Dec. 30, 1930.

Dorothy Gray

The trade-mark is a facsimile of the signature of applicant's predecessor in business.
For Filled Compacts Containing Face Powder, Rouge, Face Powder and Rouge, Face Powder, Rouge, and Lip Stick.
Claims use since Mar. 20, 1924.

Ser. No. 309,471. DOROTHY GRAY, Bloomfield, N. J., and New York, N. Y. Filed Dec. 30, 1930.



For Filled Compacts Containing Face Powder, Rouge, Face Powder and Rouge, Face Powder, Rouge, and Lip Stick.
Claims use since Aug. 29, 1929.

Ser. No. 309,544. O. G. McDONALD, doing business as Kurtain Krisp Co., Detroit, Mich. Filed Dec. 31, 1930.

KURTAIN KRISP
KEEPS KURTAINS KLEENER

The words "Keeps Kurtains Kleener" are disclaimed apart from the mark as shown on the drawing presented.
For Canned Fluids, Composed of Oxidized Bituminous Materials Dissolved in a Petroleum Spirits Solvent for Impregnating Fibers of Curtains to Make Fibers Firmer and Stronger and to Prevent Soaking Up Water.
Claims use since Dec. 10, 1930.

Ser. No. 310,260. WILLIAM W. SANFORD, doing business as Sanford Company, Binghamton, N. Y. Filed Jan. 22, 1931.

INHALENE

For Inhalant Used for Common Colds and for Affections of the Respiratory Organs.
Claims use since 1910.

Ser. No. 310,367. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Jan. 26, 1931.



Applicant makes no claim to the representation of the tube appearing on the drawing, or to the words "Dental Cream," "Co.," "Successor," and "Made in U. S. A."
For Dental Cream.
Claims use since Nov. 24, 1904.

Ser. No. 310,637. B. F. CHAMBERS, doing business as Chambers Laboratories, Blountsville, Ala. Filed Feb. 2, 1931.

URIM

For Medicinal Preparation in Liquid Form for the Treatment of Rheumatism.
Claims use since Jan. 10, 1931.

Ser. No. 310,704. BERNARD S. ARTZT, doing business as B. S. Laboratories, Philadelphia, Pa. Filed Feb. 2, 1931.



ARTZT MILK-OIL

The words "Artzt Milk Oil" form a part of the mark only in the manner shown. The portrait appearing on the drawing is fanciful.
For Medicinal Treatment for the Hair, Scalp, and Tissues of the Face and Body.
Claims use since Dec. 1, 1929.

Ser. No. 311,095. GERMANIA TEA COMPANY, Minneapolis, Minn. Filed Feb. 16, 1931.



The lining in the drawing represents blue coloring.
For Medicines—Namely, an Herb Tea for Causing the Organs to Eliminate.
Claims use since Mar. 1, 1927.

Ser. No. 311,380. CARRIE E. JORDAN, Muncie, Ind. Filed Feb. 24, 1931.

JORDO

For Medicines for the Treatment of the Hair and Scalp.
Claims use since Feb. 9, 1931.

Ser. No. 311,594. LEO BLACKSTONE, Newark, N. J. Filed Mar. 2, 1931.

TASTY-LAX

LAXATIVE

Applicant disclaims the word "laxative" apart from the mark as shown on the drawing.
For Laxative Prepared with Chocolate.
Claims use since Feb. 26, 1931.

Ser. No. 311,615. THE LAWRENCE PRODUCTS COMPANY, INC., Kelso and Seattle, Wash., and Los Angeles, Calif. Filed Mar. 2, 1931.

SAN-O-KAY

For Antiseptic Germicide in the Form of Tablets and Powder.
Claims use since Nov. 28, 1930.

Ser. No. 311,620. PERRY E. NORRIS, doing business as Norris Products, Chicago, Ill. Filed Mar. 2, 1931.

KEMOFIVE

For Finish and Color Restorer for Leathers, Kids, and Articles Made Therefrom, Such as Gloves.
Claims use since Jan. 1, 1920.

Ser. No. 311,654. THE FLAGLER CO., Atlanta, Ga. Filed Filed Mar. 3, 1931.

TERMICIDE

For Chemical for Treating Timber for the Destruction of Insect and Fungus Life and to Preserve the Wood Against Infestation.
Claims use since Feb. 1, 1931.

Ser. No. 311,858. NICHOLAS D. YORDONOFF, doing business as Yordonoff Medicine Company, Waterloo, Iowa. Filed Mar. 4, 1931.

Morning Life

For Preparation for the Treatment of Asthma, Bronchitis, Hay-Fever, Colds, and Other Affections of the Respiratory Passages.
Claims use since Jan. 16, 1931.

Ser. No. 311,957. ELITE PERFUME SHOP, doing business as Niktarf Cie., Brooklyn, N. Y. Filed Mar. 10, 1931.

SOUL OF ROSES

For Face Powders, Rouges (Lip and Face), Cold Creams, Brilliantine, Nail Polish, and a Liquid Preparation Used for the Removal of Nail Polish.
Claims use since April, 1924.

Ser. No. 312,050. HALE AND SHOOK, Long Beach, Calif. Filed Mar. 12, 1931.

Piles Suppositories

HALE (AND) SHOOK

The words "Piles Suppositories," being descriptive of the goods, are disclaimed apart from the other features of the mark disclosed in the drawing.
For Pile Ointment and Salve.
Claims use since Jan. 3, 1931.

Ser. No. 312,083. IRVING SYDNOR BARKSDALE, doing business as Table Rock Laboratories, Inc., Greenville, S. C. Filed Mar. 13, 1931.

CHALOSID

For Capsules of Copper and Iron Used in the Dietary Treatment of Anæmia.
Claims use since Feb. 1, 1931.

Ser. No. 312,126. ETON PRODUCTS, INC., Newark, N. J. Filed Mar. 12, 1931.

Klort

For Pharmaceutical Mouth Wash.
Claims use since Feb. 18, 1931.

Ser. No. 312,153. CHAS. F. KELLER, doing business as The Keller Company, Mechanicsburg, Ohio. Filed Mar. 14, 1931.

BUKETS

For Diuretic in Tablet Form.
Claims use since Feb. 3, 1931.

Ser. No. 312,444. MILTON-BYRON COMPANY, Dayton, Ohio. Filed Mar. 23, 1931.

ONIONOLA

For Salve for the Treatment of Colds.
Claims use since Mar. 10, 1931.

Ser. No. 312,454. ROSET PHAR. CO., NOT INC., Chicago, Ill. Filed Mar. 23, 1931.

ALBA SYLLA

For Pharmaceutical Preparation Composed of Emulsion of Heavy Mineral Oil and Psyllium Jelly and is Used for the Treatment of Constipation, Bowel Sluggishness, and All Conditions Requiring Intestinal Lubrication.
Claims use since Sept. 1, 1930.

Ser. No. 312,501. JENNY SELTZER THOMAS, Philadelphia, Pa. Filed Mar. 24, 1931.



The lining in the drawing is for the purpose of shading and to illustrate the contrast of colors.

For Tissue Cream, Cleansing Cream, Astringent Cream, Rouge, Lip Rouge, Muscle Oil, Eye Shadow, Face Powder, Mascara, Astringent Lotion, Hand Cream, Foot Cream, Perfume, Nail Polish, Hair Tonic, Face Bleach Pack, and Hair Dye.

Claims use since Mar. 7, 1931.

Ser. No. 312,508. BINNEY & SMITH COMPANY, New York, N. Y. Filed Mar. 25, 1931.

VULCAID

For Preparations and Compounds for Use as Accelerators, Antioxidants, Antiflexers, and Aids to Vulcanization of Rubber and Rubber Compounds.

Claims use since Dec. 1, 1928.

Ser. No. 312,559. GENERAL DYESTUFF CORPORATION, New York, N. Y. Filed Mar. 26, 1931.

FUGITINT

For Dyes and Dyestuffs.

Claims use since Jan. 20, 1931.

Ser. No. 312,777. G. S. STODDARD & CO., INC., New York, N. Y. Filed Mar. 31, 1931.

AM-PHEN-AL

For Analgesic and Hypnotic Recommended as a Substitute for Opiates in the Relief of Pains.

Claims use since Dec. 1, 1929.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 297,809. LARKIN SPECIALTY MANUFACTURING CO., San Francisco, Calif. Filed Mar. 24, 1930.

AUTOTRA

For Smokers' Articles Such as Cigar and Cigaret Containers, Ash Trays, and Snuffers.

Claims use since Oct. 1, 1929.

Ser. No. 297,810. LARKIN SPECIALTY MANUFACTURING CO., San Francisco, Calif. Filed Mar. 24, 1930.

AEROTRA

For Smokers' Articles Such as Cigar and Cigaret Containers, Ash Trays, and Snuffers.

Claims use since Oct. 1, 1929.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 309,767. BELKNAP HARDWARE & MANUFACTURING COMPANY, Louisville, Ky. Filed Jan. 9, 1931.



The geographical name "Essex" is hereby disclaimed apart from the mark as shown.

For Shot Guns and Rifles.

Claims use since Jan. 15, 1901.

Ser. No. 312,549. COLT'S PATENT FIRE ARMS MANUFACTURING CO., Hartford, Conn. Filed Mar. 26, 1931.

POLICE POSITIVE SPECIAL

No claim is made to the word "Special" apart from the trade-mark shown.

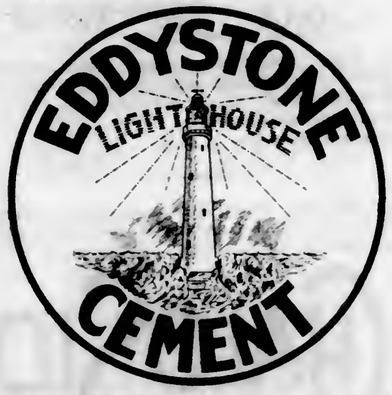
For Revolvers.

Claims use since Aug. 4, 1908.

CLASS 12

Construction Materials

Ser. No. 310,977. EDDYSTONE CEMENT CORP., New York, N. Y. Filed Feb. 12, 1931.



No claim is made to the word "Cement" except in the association shown.

For Cement, Particularly Building or Hydraulic Cements.

Claims use since July 1, 1929.

Ser. No. 311,544. UNITED PLYWOOD CORPORATION, New Albany, Ind. Filed Feb. 27, 1931.



For Pre-Finished Flooring and Plywood.

Claims use since Feb. 17, 1931.

Ser. No. 311,639. MARTIN BROS., INC., Yardville, N. J. Filed Feb. 27, 1931.

DIS-CRETE

For Concrete Building Blocks.

Claims use since Jan. 30, 1931.

Ser. No. 312,205. SOUTHERN OAK FLOORING INDUSTRIES, Little Rock, Ark. Filed Mar. 16, 1931.



For Flooring—Namely, Tongued and Grooved, End-Matched, Square Edge Strips, Parquetry, and Fabricated Blocks.

Claims use since Mar. 5, 1931.

Ser. No. 312,220. RICHARD C. POWELL, Princeton, N. J. Filed Mar. 16, 1931.



For Processed Material Which in Its Finished State Imitates the Appearance of Expensive Woods or Stones.

Claims use since Feb. 23, 1931.

Ser. No. 312,239. PLANT RUBBER & ASBESTOS WORKS, San Francisco, Calif. Filed Mar. 17, 1931.



For Thermal Insulating Materials and Pipe Coverings.

Claims use since Nov. 1, 1930.

Ser. No. 312,346. LOCKSTRIP MANUFACTURING CORPORATION, Long Island City, N. Y. Filed Mar. 20, 1931.

T. M. C.

For Dividing Strips Used in Forming Surfaces of Terrazzo, Cement, and Similar Composition.

Claims use since Mar. 1, 1920.

Ser. No. 312,395. VISCO-MENT CORPORATION, Chicago, Ill. Filed Mar. 21, 1931.

Visco-ment

For Asphalt.

Claims use since Sept. 1, 1930.

Ser. No. 312,469. AMBLER ASBESTOS SHINGLE & SHEATHING COMPANY, Ambler, Pa. Filed Mar. 24, 1931.

RESISTAL

For Asbestos Composition Board.
Claims use since Dec. 1, 1930.

Ser. No. 312,474. E. L. BRUCE COMPANY, Memphis, Tenn. Filed Mar. 24, 1931.

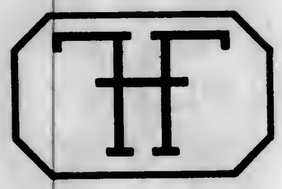
MANSION

For Oak Flooring.
Claims use since Feb. 8, 1928.

CLASS 13

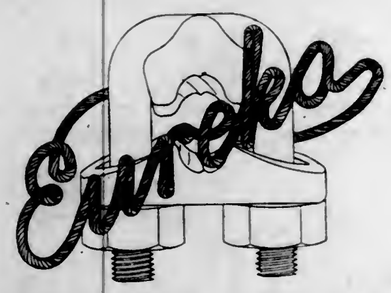
Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 311,868. THE FIEGE COMPANY, Green Bay, Wis. Filed Mar. 7, 1931.



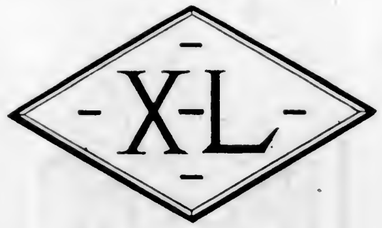
For Cable and Wire Rope End Clamps and Turnbuckle Assemblies.
Claims use since Jan. 30, 1931.

Ser. No. 311,914. EUREKA METAL PRODUCTS CORPORATION, Buffalo, N. Y. Filed Mar. 9, 1931.



The representation of the goods is disclaimed apart from the mark as shown.
For Cable Clamps.
Claims use since Feb. 10, 1931.

Ser. No. 312,254. ARTHUR BROPHY, Santa Cruz, Calif. Filed Mar. 18, 1931.



For Hook for Doors Such as Screen Doors.
Claims use since Jan. 8, 1931.

Ser. No. 312,278. WILLIAM F. WITTEL, Irvington, N. J. Filed Mar. 18, 1931.



No claim is made to the words "Propertyguard Fence" apart from the mark shown in the drawing.
For Fences of Iron, Steel, and Like Metal Substance and Parts Thereof.
Claims use since Apr. 1, 1930.

Ser. No. 312,361. BLEICHRODE-HAMMERSTEIN CORPORATION, New York, N. Y. Filed Mar. 21, 1931.

WALDORF

For Bath Room Fixtures—Namely Soap Dishes, Towel Racks.
Claims use since Dec. 1, 1930.

Ser. No. 312,711. ERNST KOEPPEN, Carlstadt, N. J. Filed Mar. 30, 1931.

SUPER - FRY

For Kitchen Utensils—Namely, Pots and Pans of Sheet Metal or Steel.
Claims use since Nov. 15, 1930.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 304,919. KEMET LABORATORIES COMPANY, INC., New York, N. Y. Filed Aug. 22, 1930.

KEMET

For Metals and/or Alloys Commonly Known as "Getters" for Eliminating or Minimizing Residual Gases in Evacuated Electric Light Bulbs, Radio Tubes, and the Like.
Claims use since Sept. 5, 1929.

Ser. No. 312,473. BONNEY FORGE & TOOL WORKS, Allentown, Pa. Filed Mar. 24, 1931.

THREDOLET

For Unions for Welded and Threaded Connections.
Claims use since Mar, 14, 1931.

CLASS 15

Oils and Greases

Ser. No. 312,458. ARTHUR F. SCHROEDER, doing business as A. F. Schroeder Oil Co., Milwaukee, Wis. Filed Mar. 23, 1931.

DUROPENN

For Lubricating Oils and Lubricating Greases Made from Pennsylvania Crude.
Claims use since Mar. 22, 1928.

CLASS 16

Paints and Painters' Materials

Ser. No. 297,764. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Mar. 22, 1930.



For Ready-Mixed Paint—Namely, Roof Coating.
Claims use since May, 1908.

Ser. No. 302,871. NORFOLK PAINT & VARNISH COMPANY, Quincy and Atlantic, Mass. Filed June 26, 1930.



Applicant disclaims the exclusive use of the word "Norfolk" apart from the mark as shown on the drawing.
For Dry Paste, Ready-Mixed, and Enamel Paints.
Claims use since Jan. 20, 1930.

Ser. No. 309,619. ROBERT MURJAHN, doing business as Deutsch Amphibolin-Werke von Robert Murjahn, Ober Ramstedt, Germany. Filed Jan. 5, 1931.

Caparol

For Paints Dry and in Ready Mixed Form and Painter's Size.
Claims use since February, 1928.

Ser. No. 312,490. THE OZARK SMELTING & MINING COMPANY, Cleveland, Ohio. Filed Mar. 24, 1931.

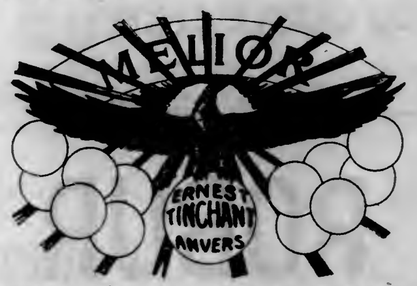
TI-OZLO

For Paint Pigments—Namely, Combination of Titanium and Leaded Zinc Oxide.
Claims use since Feb. 27, 1931.

CLASS 17

Tobacco Products

Ser. No. 309,910. VERELLEN LIMITED, Antwerp, Belgium. Filed Jan. 13, 1931.



No claim is made to the name of the city "Anvers" appearing on the drawing.
For Cigars, Cigarillos, Cigarettes, and Smoking Tobacco, Chewing Tobacco, and Snuff Tobacco.
Claims use since February, 1896.

Ser. No. 312,597. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky. Filed Mar. 27, 1931.

REPEATER

For Cigarette Paper and Cigarette Paper Booklets.
Claims use since Mar. 20, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 288,586. DAIMLER-BENZ AKTIENGESELLSCHAFT, Berlin, Germany. Filed Aug. 16, 1929.

MERCEDES BENZ

For Automotive Vehicles, as Follows: Passenger Cars and Freight Trucks; Parts of and Accessories to Said Vehicles, as Follows: Bodies and Parts Thereof, Frames, Springs, Shock Absorbers, Rubber Bumpers, Spring Shackles, Front Axles, Steering Knuckles, Steering Wheels, Steering Posts, Steering Arms, Tie Rods, Rear Axle Housings, Rear Axle Shafts, Brakes and Parts Thereof, Wheels and Parts Thereof, Hand Levers and Foot Levers, Oil Tanks and Fuel Tanks, Mufflers and Radiators, Instrument Boards, Covers and Hoods and Parts Thereof, Doors, Running Boards, Spare Wheel Carriers, Mud Guards, Trunk Carriers, Tops, Windshields, Windshield Wipers; Trimming, as Follows: Hinges, Made-Up Upholsteries, Seats, Made-Up Seat Covers; Body Heaters Using Heated Gases and Fluids from the Engine, Funnels Made of Metal for the Filling-In of Fuel, Lubricating Oil, or Water, Mirrors, Bumpers.
Claims use since October, 1926.

Ser. No. 310,771. CARL HERMAN LUNDHOLM, Stockholm, Sweden. Filed Feb. 5, 1931.

ROBUR

For Parachutes, Parachute Casings, and Harnesses for Parachutes.
Claims use since November, 1928.

Ser. No. 312,213. GREAT LAKES AIRCRAFT CORPORATION, Cleveland, Ohio. Filed Mar. 14, 1931.

GREAT LAKES AIRCRAFT CORPORATION CLEVELAND, OHIO

No claim being made to the words "Cleveland" and "Ohio" apart from the mark shown in the drawing.
For Airplanes.
Claims use since June, 1929.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 296,491. NATIONAL MALLEABLE AND STEEL CASTINGS COMPANY, Cleveland, Ohio. Filed Feb. 25, 1930.

MAGNEL

For Radio Loud Speakers, Choke Coils, and Electromagnets.
Claims use since Apr. 8, 1929.

Ser. No. 303,931. WHITE STAR REFINING COMPANY, Detroit, Mich. Filed July 28, 1930.



The mark consists of a white star, and the background is included merely to show the application of the mark and forms no part of the mark.
For Storage Batteries.
Claims use since Apr. 10, 1930.

Ser. No. 308,499. THE FRANCE MANUFACTURING COMPANY, Cleveland, Ohio. Filed Dec. 1, 1930.

OZO

For Ozone Generators.
Claims use since June 17, 1929.

Ser. No. 308,911. STROMBERG-CARLSON TELEPHONE MANUFACTURING COMPANY, Rochester, N. Y. Filed Dec. 12, 1930.

Stromberg-Carlson

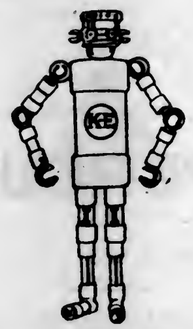
For Radio Receiving Sets Mounted or Contained in Cabinets with Talking Machines, Radio Receiving Sets Adapted for Combination with Talking Machines, Radio Receiving Sets Wherein Parts of the Radio Receiving Sets are Used as Parts of Talking Machines, and Parts, Supplies, Accessories, and Appurtenances for Electrically-Operated Talking Machines—Namely, Electrical Pick-Ups, Electric Motors, Transformers, Rheostats, Electric Switches, and Electric Stop Mechanisms.
Claims use on radio receiving sets mounted or contained in cabinets with talking machines, radio receiving sets adapted for combination with talking machines, radio receiving sets wherein parts of the radio receiving sets are used as parts of talking machines, and electrical pick-ups for electrically operated talking machines since Sept. 1, 1927; on the parts, supplies, accessories, and appurtenances for electrically operated talking machines—namely, electric motors, transformers, rheostats, electrical switches, electrical stop mechanisms—since Oct. 31, 1930. Applicant is owner of registration No. 66,210, effected under the 10-year proviso.

Ser. No. 310,883. REPUBLIC CARBON COMPANY, Niagara Falls, N. Y. Filed Feb. 9, 1931.

ALPHITE

For Carbonaceous Electrodes.
Claims use since Aug. 23, 1930.

Ser. No. 310,941. KIRKMAN ENGINEERING CORPORATION, New York, N. Y. Filed Feb. 11, 1931.



Kay E. Kirkman

For Electrical Fuses.
Claims use since Jan. 29, 1931.

Ser. No. 310,943. NATIONAL UNION RADIO CORPORATION, Newark, N. J. Filed Feb. 11, 1931.

NATIONAL UNION

For Radio Electron Tubes.
Claims use since Jan. 24, 1931.

Ser. No. 311,123. FIRESTONE BATTERY COMPANY, Akron, Ohio. Filed Feb. 17, 1931.

Firestone

For Spark Plugs.
Claims use since Jan. 21, 1931.

Ser. No. 311,553. AMERICAN ELECTRIC COMPANY, INC., Chicago, Ill. Filed Feb. 28, 1931.

Monotype

For Telephone Supplies Consisting of Dry Cell Batteries.
Claims use since Dec. 2, 1930.

Ser. No. 311,570. GENERAL DRY BATTERIES, INC., Cleveland, Ohio. Filed Feb. 28, 1931.

DURO-POWR

The word "Powr" is disclaimed apart from the mark as shown.
For Electric Batteries.
Claims use since Sept. 29, 1930.

Ser. No. 311,726. HACHMEISTER-LIND COMPANY, McKees Rocks, Pa. Filed Mar. 4, 1931.

PERFECT-O-LITE

No claim is made for the words "Perfect" and "Lite" apart from the mark shown in the drawing.
For Incandescent Electric Lamp Bulbs for Electric Lamps.
Claims use since Dec. 15, 1930.

Ser. No. 312,003. HARDSOCG MANUFACTURING CO., Ottumwa, Iowa. Filed Mar. 11, 1931.

Humdinger

For Electric Drills and Mining Bits and Bit Teeth Adapted for Use in Same.
Claims use since August, 1928.

Ser. No. 312,330. THE CAPPEL FURNITURE COMPANY, Dayton, Ohio. Filed Mar. 20, 1931.

CENTURY

For Radio Receiving Sets and Loud Speakers.
Claims use since Mar. 7, 1931.

Ser. No. 312,506. SULLIVAN MACHINERY COMPANY, Boston, Mass., and Chicago, Ill. Filed Mar. 24, 1931.

SULLITE

For Portable Electric Plants.
Claims use since July 9, 1930.

Ser. No. 312,558. GENERAL DRY BATTERIES, INC., Cleveland, Ohio. Filed Mar. 26, 1931.

FLYING SQUAD

For Electric Batteries.
Claims use since Mar. 11, 1931.

Ser. No. 312,569. SULLIVAN MACHINERY COMPANY, Boston, Mass., and Chicago, Ill. Filed Mar. 24, 1931.

STRING-A-LITE

For Moisture Proof Cables or Conductors Provided with Moisture Proof Socketed Outlets at Desired Intervals and With Suitable End Connectors.
Claims use since June 26, 1930.

Ser. No. 312,699. CROUSE-HINDS COMPANY, Syracuse, N. Y. Filed Mar. 30, 1931.

FERALOY

For Electrical Conduit Fittings.
Claims use since Mar. 7, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 311,407. HERFF-JONES CO., Indianapolis, Ind. Filed Feb. 24, 1931.

TeeCaddie

The word "Tee" is hereby disclaimed apart from the mark as shown.
For Golf Tee Holder.
Claims use since Feb. 3, 1931.

Ser. No. 312,056. WILLIAM C. MAYER, Jefferson, Wis. Filed Mar. 12, 1931.

SKILLYNKS

For Indoor Miniature Golf Game.
Claims use since Dec. 19, 1930.

Ser. No. 312,127. A. M. FELTUS, Jr., Vicksburg, Miss. Filed Mar. 13, 1931.



For Golf Balls for Miniature Golf Courses.
Claims use since Oct. 2, 1930.

Ser. No. 312,666. ROYAL MANUFACTURING COMPANY, Toledo, Ohio. Filed Mar. 28, 1931.

ALL AMERICAN

For Golf Clubs and Golf Balls.
Claims use since Jan. 22, 1925.

Ser. No. 312,698. CORTLAND LINE COMPANY, Cortland, N. Y. Filed Mar. 30, 1931.

SUPERCUTY

The drawing is lined for red.
For Fish Lines.
Claims use since Mar. 6, 1931.

Ser. No. 312,919. ROSS H. JOHNSON, doing business as Johnson Products, Inc., Indianapolis, Ind. Filed Apr. 3, 1931.

E-Z-T

For Golf Tees.
Claims use since Aug. 22, 1930.

CLASS 23

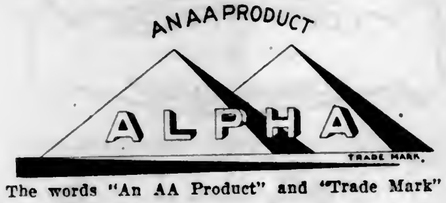
Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 298,263. THE ALLIANCE MANUFACTURING COMPANY, Alliance, Ohio. Filed Apr. 2, 1930.

Doo-Klip

Applicant disclaims any exclusive right to the use of the word "Klip" separate and apart from the mark shown.
For Shears and Pruners.
Claims use since Mar. 20, 1926.

Ser. No. 299,819. ALPHA TANK & SHEET METAL MFG. CO., St. Louis, Mo. Filed May 1, 1930.



The words "An AA Product" and "Trade Mark" are disclaimed.
For Chemical Stills, Spray Water Cooling Towers, Pneumatic Dust Conveyors, Pneumatic Dust Conveyor Systems, and Air-Ducts Therefor.
Claims use since Apr. 1, 1929.

Ser. No. 307,162. HANDY ANDY SPECIALTY CO., INC., Long Island City, New York, N. Y. Filed Oct. 25, 1930.

HANDY-ANDY

For Fruit Juice Extractors of the Mechanical Type.
Claims use since Apr. 23, 1930.

Ser. No. 312,331. CHUM RAZOR BLADE CORP., Detroit, Mich. Filed Mar. 20, 1931.



For the purposes of registration exclusive right to the use of the word "Blade" apart from the mark shown is waived. The drawing is lined for color, the vertical lines indicating the color red and the diagonal lines indicating the color green.
For Razors and Razor Blades.
Claims use since Mar. 5, 1931.

Ser. No. 312,334. THE DORR COMPANY, New York, N. Y. Filed Mar. 20, 1931.

DORRCO

For Apparatus for the Treatment of Solids Suspended in Liquids, Which Comprise Agitators, Thickeners, Tray Thickeners, Washers, Rotary Conveyers, Savealls, Slurry Mixers, Cord Diaphragms for Pumps; Clarifiers for Sewage, Water, and Cane Juice; Classifiers, Bowl Classifiers, Pumps, Rotating Screens, Sand Washers, Digesters, Sizers, Traction Clarifiers, Ejectors, Detritors, Repulpers, Bar Screens, and Closed Circuit Grinding Devices, Incinerators, Sewage Grit Chamber Scrapers, and Sewage Aerators.
Claims use since Nov. 13, 1922.

Ser. No. 312,427. GREENFIELD TAP AND DIE CORPORATION, Greenfield, Mass. Filed Mar. 23, 1931.

Greenfield

Applicant is owner of trade-mark registration No. 102,093, issued Jan. 26, 1915.
For Bit Brace Tools, Bolt Cutters, Horseshoers' Buttresses, Bolt Threaders, Collets, Countershafts, Countersinks, Cold Saw Cutting-Off Machines, Drilling Machines, Drills, Die Stocks, Dies, Grinding Machines; Holders for Dies, Drills, and Taps; Lathes, Mandrels, Metal Working Drills, Pulleys, Pipe Wrenches, Pipe Cutters, Pipe Vises, Pipe Plates, Reamers, Receders (Receding Pipe Threaders), Screw Plates (Sets of Dies, Taps, and Accessories, Wrenches, Stocks, and Collets), Shoeing Vises, Swage-Blocks, Taps, Tapping Attachments (Devices for Attachment to Machines for Receiving and Operating Taps), Threading Machines, Tire-Shrinkers, Tire-Wheels, Tool Grinders, and Wrenches (Tap and Nut).
Claims use since Feb. 1, 1913.

Ser. No. 312,475. CAMMANN MANUFACTURING COMPANY, INC., Waltham, Mass. Filed Mar. 24, 1931.

CULINATOR

For Kitchen Appliances for Beating, Mixing, Stirring, and the Like.
Claims use since Mar. 13, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 310,364. ARBOLOID NOVELTY COMPANY, Chicago, Ill. Filed Jan. 26, 1931.

-TRADEMARK-
RIV-O-PERL

The words "Trade Mark" are disclaimed apart from the mark as shown upon the drawing.
For Ornamental Belt Buckles Made Wholly or in Part of Precious Metal or Plated Therewith.
Claims use since June 1, 1930.

Ser. No. 312,492. PHI LAMBDA UPSILON, Tucson, Ariz. Filed Mar. 24, 1931.

ΦΛΥ

For Keys and Badges All Made or Plated with Precious Metal.
Claims use since 1899.

CLASS 31

Filters and Refrigerators

Ser. No. 313,082. GRAND RAPIDS CABINET COMPANY, Grand Rapids, Mich. Filed Apr. 3, 1931.

ZEROVIZ
(ZERO TEMPERATURE *PLUS* PERFECT VISIBILITY)

Applicant hereby disclaims right to the exclusive use of the words "(Zero Temperature Plus Perfect Visibility)" apart from the mark shown.
For Refrigerator Cabinets.
Claims use since Mar. 14, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 310,629. ACCO PRODUCTS, INC., Long Island City, N. Y. Filed Feb. 2, 1931.

ACCOWAY

For Filing Device Consisting of a Horizontal Supporting Arm with Fastening Means for Holding Drawings and the Like Suspended Therefrom, and Filing Cabinets Therefor.
Claims use since December, 1929.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 303,220. STEAM AND COMBUSTION COMPANY, Chicago, Ill. Filed July 7, 1930.



For Burners—Namely, Gas Burners, Oil Conversion Burners, and Parts Thereof.
Claims use since May 20, 1930.

Ser. No. 306,050. COMBUSTIONEER, INC., Goshen, Ind. Filed Sept. 25, 1930.



No claim is made to the exclusive use of the word "Furnastoker" apart from the mark shown in the drawing.
For Fuel-Handling Equipment—Namely, Fuel Stokers.
Claims use since Aug. 8, 1930.

Ser. No. 306,051. COMBUSTIONEER, INC., Goshen, Ind. Filed Sept. 25, 1930.



For Fuel-Handling Equipment—Namely, Fuel Stokers
Claims use since Aug. 11, 1930.

CLASS 36

Musical Instruments and Supplies

Ser. No. 311,347. STEINWAY & SONS, New York, N. Y. Filed Feb. 21, 1931.

STEINWAY
THE INSTRUMENT OF THE IMMORTALS

Applicant is the owner of Reg. No. 141,687.
For Pianos.
Claims use since 1920.

CLASS 37

Paper and Stationery

Ser. No. 280,693. THE CHAD VALLEY CO. LTD., Harborne, England. Filed Mar. 14, 1929.

CHAD VALLEY

For Paper Box Files of Lever Action and Spring Back Type, Rubber Stamps, Hand Blotters, Date Stamps, Date Indicators and Calendar Pads, Spike and Hook Files, Stamp and Pen Racks, Letter Clips, Rubber Bands, Pencil Protectors, Pen Holders, Pen Points, Pencils, Thumb Tacks, Rubber Erasers, Fountain Pen Caps, Fountain Pen Clips and Ink Fillers; Copying, Rule, Crayon, and Combination Pencils; Pen and Pencil Combinations, Pencil Hand Sharpeners, Pencil Cases, Pencil Holders, Various Types of Self-Sharpening and Turn-In Point Pencils, Pencil Boxes, Paper Fasteners, Paper Clips, Ticket Suspenders, Crayons, Hand Perforators; Forms, Tickets and Labels of All Kinds, Blank and Partially Printed; Paper Covers of Various Kinds, Confetti, Artificial Frost, Paper Backing Sheets, Paper Weights, Letter Dampers, Paper Knives, Steel Letter Openers, Letter Dockets, Drawing Pens.
Claims use since 1898.

Ser. No. 304,200. HOMAN & BIEHL, Chicago, Ill. Filed Aug. 4, 1930.

SANITOI

For Paper Covers for Closet Seats.
Claims use since June 5, 1930.

Ser. No. 304,628. PACKAGE PAPER COMPANY, Holyoke, Mass. Filed Aug. 14, 1930.

Dain-Tea

For Lace Reproductions on Transparent Paper or Paper Substitutes and Used as Table Coverings.
Claims use since July 24, 1930.

Ser. No. 305,232. THE MENASHA PRODUCTS COMPANY, Chicago, Ill. Filed Sept. 2, 1930.



The word "Clothweave" is disclaimed apart from the mark as shown.
For Paper Napkins.
Claims use since Feb. 22, 1930.

Ser. No. 309,587. THE GUMMED PRODUCTS COMPANY, Troy, Ohio. Filed Jan. 3, 1931.

TROJAN
BLU-KORE

For Gummed Paper and Fabric Tapes.
Claims use since Oct. 27, 1930.

Ser. No. 309,680. HARRY ELISH PAPER COMPANY, New York, N. Y. Filed Jan. 7, 1931.

PRIMO

For Gummed Paper.
Claims use since Dec. 29, 1930.

Ser. No. 312,286. PARAMOUNT PEN CO., INC., Weehawken, N. J. Filed Mar. 17, 1931.

PARAMOUNT

For Fountain Pens and Pencils.
Claims use since March, 1918.

Ser. No. 312,510. BUTLER PAPER CORPORATIONS, Chicago, Ill. Filed Mar. 25, 1931.

OAK BROOK

For Paper—Namely, Book Paper, Cover Paper, Document Paper, Bristol Cardboard, Bond Paper, Writing Paper, Ledger Paper, and Paper for the Making of Envelopes.
Claims use since June 1, 1930.

Ser. No. 312,808. H. C. KURZ, A. G., Nuremberg, Germany. Filed Apr. 1, 1931.

GENIUS

For Lead Pencils, Copying Pencils, Colored Pencils, Crayons, Slate Pencils, Pen Holders, and Chalk.
Claims use since Oct. 2, 1928.

Ser. No. 312,881. HOPPER PAPER COMPANY, Taylorville, Ill. Filed Apr. 1, 1931.

SCHOOLTEX

For Writing Paper.
Claims use since Feb. 4, 1924.

Ser. No. 312,941. BEECHER-PECK & LEWIS, Detroit, Mich. Filed Apr. 4, 1931.

KRALO

For Paper for Wrapping Meats.
Claims use since January, 1931.

Ser. No. 312,984. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J. Filed Apr. 6, 1931. Under 10-year proviso.

Columbia

For Writing Pens of All Kinds.
Claims use since 1879.

Ser. No. 312,998. THE NATIONAL CARBON COATED PAPER COMPANY, Sturgis, Mich. Filed Apr. 6, 1931.

N C BOND

No claim is made to the word "Bond" apart from the mark shown.
For Writing Paper.
Claims use since Jan. 15, 1931.

CLASS 38

Prints and Publications

Ser. No. 300,298. PULITZER PUBLISHING COMPANY, St. Louis, Mo. Filed May 10, 1930.

WEATHERBIRD

For Column or Section of a Newspaper.
Claims use since Nov. 13, 1929.

Ser. No. 307,780. LAKE PUBLISHING COMPANY, Gary, Ind. Filed Nov. 11, 1930.

Skriblets

For Booklets of Word Puzzles.
Claims use since Oct. 8, 1930.

Ser. No. 310,189. ROTOPRINT GRAVURE CO., INC., Jamaica, N. Y. Filed Jan. 20, 1931.

Timely Topics

For Periodical Publication.
Claims use since Dec. 6, 1930.

Ser. No. 311,686. KING FEATURES SYNDICATE, INC., New York, N. Y. Filed Mar. 3, 1931.

POPEYE

For Cartoon Strip.
Claims use since Jan. 30, 1931.

Ser. No. 312,442. THE MAGAZINE ANTIQUES, INC., New York, N. Y. Filed Mar. 23, 1931.

The Magazine
ANTIQUES

For Monthly Magazine.
Claims use since January, 1922.

CLASS 39

Clothing

Ser. No. 298,560. A. E. ALLEN & CO., LTD., Nottingham, England. Filed Apr. 9, 1930.

Aristoc

For Stockings and Socks.
Claims use since Oct. 15, 1923.

Ser. No. 305,055. SIMON MILLINERY SUPPLY COMPANY, San Francisco, Calif. Filed Aug. 26, 1930.

DECATELLE

For Ladies' and Misses' Hats.
Claims use since May, 1930.

Ser. No. 305,056. SIMON MILLINERY SUPPLY COMPANY, San Francisco, Calif. Filed Aug. 26, 1930.



Applicant disclaims exclusive use of the word "Berkeley" apart from the trade-mark as shown.
For Ladies' and Misses' Hats.
Claims use since September, 1929.

Ser. No. 306,124. STACY P. BAILEY, New York, N. Y. Filed Sept. 27, 1930.

FRANCELLE

For Ladies' and Children's Ready to Wear Apparel—Namely, Dresses, Coats, Hats, Hose, and Bathrobes.
Claims use since Sept. 4, 1930.

Ser. No. 307,108. HENRY POLLAK, INC., New York, N. Y. Filed Oct. 23, 1930.

foulard

For Women's Felt Hats, Untrimmed.
Claims use since Aug. 11, 1930.

Ser. No. 307,110. HENRY POLLAK, INC., New York, N. Y. Filed Oct. 23, 1930.

MOUCHOIR

For Women's Felt Hats, Untrimmed.
Claims use since Oct. 15, 1929.

Ser. No. 307,760. ARONSON-CAPLIN COMPANY, INC., New York, N. Y. Filed Nov. 11, 1930.

LA RUE

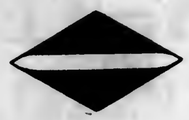
For Slips, Bloomers, Petticoats, Nightgowns, Pajamas, Chemises, Step-Ins, Panties for Women and Children.
Claims use since Mar. 1, 1929.

Ser. No. 310,528. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y. Filed Jan. 29, 1931.

Jean Nédra

For Ladies', Misses', and Children's Ready-to-Wear Hats.
Claims use since Jan. 2, 1931.

Ser. No. 310,935. DOBBS & Co., New York, N. Y. Filed Feb. 11, 1931.



For Hats for Men and Women.
Claims use since Feb. 4, 1931.

Ser. No. 311,453. UNIVERSAL FULL FASHION HOSIERY CO., INC., Paterson, N. J. Filed Feb. 25, 1931.

SECRET

For Hosiery.
Claims use since Feb. 20, 1931.

Ser. No. 311,481. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J. Filed Feb. 26, 1931.

KRESTON

For Men's Clothing—Namely, Dress, Negligee, and Work Shirts, Neckties, Pajamas, Shoes of Leather, Rubber, and/or Fabric and/or Combinations of These Materials, Suits, Jackets, Overcoats, Hats, Caps, Underwear, Hosiery, and Sweaters.
Claims use since Feb. 1, 1931.

Ser. No. 311,561. CORBETT & NORTH, INC., New York, N. Y. Filed Feb. 28, 1931.

KENYA

For Women's and Children's Wearing Apparel—Namely, Sweaters and Blouses.
Claims use since Feb. 5, 1931.

Ser. No. 311,684. J. H. HEMMERDINGER & SON, INC., Brooklyn, N. Y. Filed Mar. 3, 1931.

WHALE BONE

For Leather and Composition Shoe Soles.
Claims use since December, 1930.

Ser. No. 311,816. BONA ALLEN, INCORPORATED, Buford, Ga. Filed Mar. 6, 1931.

BONA ALLEN

No claim being made to the word "Allen" except in association with the word "Bona".
For Boots and Shoes Made Wholly or in Part of Leather, Fabric, or Combinations Thereof.
Claims use since Sept. 1, 1929.

Ser. No. 311,823. I. & B. COHEN, BOMZON & CO. INC., New York, N. Y. Filed Mar. 6, 1931.

Biltmore

For Men's Outer Clothing—Namely, Suits and Overcoats.
Claims use since Aug. 1, 1916.

Ser. No. 311,827. EDWARD P. CUNNINGHAM, INCORPORATED, New York, N. Y. Filed Mar. 6, 1931.

Pers-Pre-Vent

For Hats for Men, Women, and Children.
Claims use since Feb. 17, 1931.

Ser. No. 311,829. M. K. DUN INC., New York, N. Y. Filed Mar. 6, 1931.

DUN
TRI-ARCH
SHOES

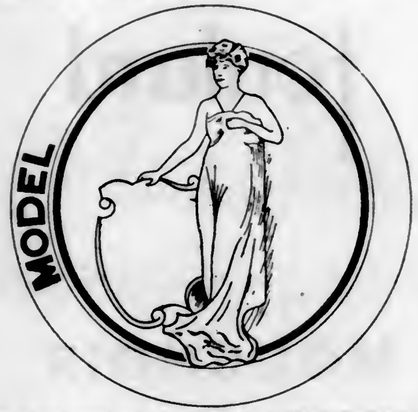
No rights are asserted to the exclusive use of the word "Shoes" apart from the mark shown in the drawing.
For Shoes of Leather, Reptilian Leather, and Fabric and Combinations Thereof.
Claims use since Feb. 26, 1931.

Ser. No. 311,869. THE FINTEX CORPORATION, Cleveland, Ohio. Filed Mar. 7, 1931.

The Forraine Process

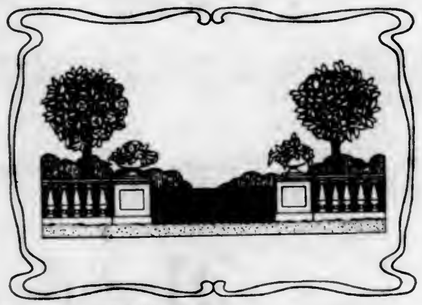
The word "Process" is disclaimed apart from the mark as shown on the drawing.
For Men's Clothing—Viz, Suits, Overcoats, Topcoats, and Jackets.
Claims use since Feb. 4, 1931.

Ser. No. 311,983. THE STANDARD OVERALL COMPANY, Baltimore, Md. Filed Mar. 10, 1931.



No claim being made to the word "Model" apart from the mark as shown.
For Negligee and Work Shirts, Overalls, and Pants.
Claims use since May 1, 1910.

Ser. No. 312,333. DOBBS & CO., New York, N. Y. Filed Mar. 20, 1931



For Hats for Men and Women.
Claims use since Sept. 19, 1930.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 295,591. WM. E. WRIGHT & SONS COMPANY, Orange, N. J. Filed Feb. 4, 1930.

LUSTERAY

For Bias Fold Tapes and Trimmings of Fabric, Consisting of Rayon, Silk, Cotton, and Combinations Thereof.
Claims use since Jan. 8, 1930.

Ser. No. 312,834. MARJORIE A. BIRK, New York, N. Y. Filed Apr. 2, 1931.

EYE-TEB

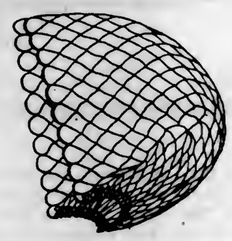
For Set of Natural or Artificial Hairs, Adhesives and Adhesive Removers Adapted for the Attachment and Removal of Said Hairs from Eyelashes, Sold as a Unit.
Claims use since Mar. 11, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 306,720. HAIR NET PACKERS, INC., New York, N. Y. Filed Oct. 13, 1930.

NEW Solo ONE SIZE
FORM HAIR NET ONE SHAPE



The representation of a hair net and all the wording, except the word "Solo" are hereby disclaimed apart from the mark shown.
For Hair Nets.
Claims use since Feb. 14, 1930.

Ser. No. 311,157. PRINCE LAUTEN CORP., New York, N. Y. Filed Feb. 17, 1931.

EVERYBODYS

For Cotton Fabrics in the Piece.
Claims use since Jan. 1, 1931.

Ser. No. 311,173. BOTANY WORSTED MILLS, Passaic, N. J. Filed Feb. 18, 1931.

Framosa

For Woolen Piece Goods.
Claims use since Oct. 4, 1921.

Ser. No. 311,175. BOTANY WORSTED MILLS, Passaic, N. J. Filed Feb. 18, 1931.

Raponge

For Woolen Piece Goods.
Claims use since Oct. 29, 1930.

Ser. No. 311,176. BOTANY WORSTED MILLS, Passaic, N. J. Filed Feb. 18, 1931.

Triador

For Woolen Piece Goods.
Claims use since May 6, 1930.

Ser. No. 311,271. GAEDE SILK DYEING COMPANY, Paterson, N. J. Filed Feb. 20, 1931.

AEDE
EST. 1881

For Piece Dyed Goods Composed of All Silk, Rayon and Silk, Celanese and Silk, All Rayon, and All Celanese.
Claims use since September, 1926.

Ser. No. 312,258. MARSHALL FIELD & COMPANY, Chicago, Ill. Filed Mar. 18, 1931.

POCKETWEAR

For Handkerchiefs.
Claims use since Oct. 1, 1930.

Ser. No. 312,509. SIDNEY BLUMENTHAL & CO., INC., New York, N. Y. Filed Mar. 25, 1931.

Vel-Couture

For Pile Fabrics in the Piece.
Claims use since Mar. 17, 1931.

CLASS 43

Thread and Yarn

Ser. No. 312,165. THE THREAD MILLS COMPANY, Monticello, Ind. Filed Mar. 14, 1931.

OLD COLONY

For Thread and Yarn.
Claims use since June 24, 1924.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 309,458. BUFFALO DENTAL MANUFACTURING COMPANY, Buffalo, N. Y. Filed Dec. 30, 1930.

BUFFALO

No claim is made to the word "Buffalo" apart from the mark as shown in the drawing.
For Dental Appliances—Namely, Vulcanizers, Celluloid Apparatus, Gas and Time Regulators for Vulcanizers,

Stem Gauges, Siphons, Thermometers, Orthodontia Burners, Blowpipes, Blowpipe Stands, Gasoline Gas Generators, Glass Cement Slabs, Felt Cones and Wheels, Flask Bolts, Reversible Flask Bolts, Safety Valves and Disks for Vulvanizers, Automatic Pluggers, Vulcanite and Celluloid Flasks, Spring Clamps.
Claims use since Mar. 15, 1930.

Ser. No. 309,583. EYETEX COMPANY, Chicago, Ill. Filed Jan. 3, 1931.

EYETEX

For Medicated Fabric Pad Suitable to Cover the Eyes as a Compress.
Claims use since Aug. 1, 1930.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 306,166. SIDNEY W. BROWN, doing business as Old Gold Ginger Ale Co., Long Beach, Calif. Filed Sept. 29, 1930.

MOONSHINE

For Non-Alcoholic Maltless Beverage Sold as a Soft Drink.
Claims use since March, 1921.

Ser. No. 307,000. MYRTLE M. HILSON, doing business as Pino Mfg. Co., Seattle, Wash. Filed Oct. 21, 1930.

PINO

For Sirup Used in the Preparation of Non-Alcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Sept. 5, 1930.

Ser. No. 307,499. MAX KRIM, doing business as Krim Beverage Company, Lebanon, Pa. Filed Nov. 3, 1930.

Krim's

The trade-mark is lined to indicate red and gold. The lines shown on the border are for shading purposes only.
For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts for Making the Same.
Claims use since September, 1915.

Ser. No. 307,657. ANTONIO DI BARTOLOMEO, Camden, N. J. Filed Nov. 8, 1930.

YAM YAM

For Non-Alcoholic, Non-Cereal, Maltless Beverage Sold as a Soft Drink.
Claims use since May 1, 1927.

Ser. No. 311,485. PETTIT & WHITACRE, INC., doing business as Drink-Apep Company, North Merchantville, N. J. Filed Feb. 26, 1931.

Drink=Apep

No claim is made to the word "Drink" apart from the mark shown.
For Non-Alcoholic, Maltless Concentrated Herb Drink or Tonic for Fountain and Home Use.
Claims use since Aug. 25, 1930.

Ser. No. 312,374. HENRI SAVIGNON, BOUSSARD FRERES ET DIEUX, SOCIETE EN NOM COLLECTIF, Paris, France. Filed Mar. 21, 1931.

"Mon Vin"

No claim being made to the word "Vin" apart from the mark shown.
For Unfermented Grape Juice.
Claims use since Nov. 7, 1930.

Ser. No. 312,914. HOLLYWOOD PRODUCTS COMPANY, LTD., Glendale, Hollywood, and Los Angeles, Calif. Filed Apr. 3, 1931.

Sun'o

For Nonalcoholic, Maltless, Noncereal Beverages Sold as Soft Drinks and Syrups, Extracts, and Concentrates for Preparing the Same.
Claims use since Dec. 1, 1930.

CLASS 46

Foods and Ingredients of Foods

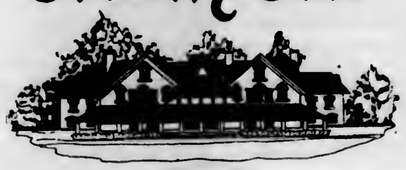
Ser. No. 279,238. RIVERSIDE HEIGHTS ORANGE GROWERS ASSOCIATION, Riverside, Calif. Filed Feb. 12, 1929.

YELLOW GLOBE

For Fresh Citrus Fruits.
Claims use since Jan. 23, 1929.

Ser. No. 279,480. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Filed Feb. 16, 1929.

Country Club



For Canned Fruits and Fruit Preserves—Namely, Apples, Apple Butter, Apple Sauce, Apricots, Apricot Butter, Blackberries, Blackberry Preserves, Blueberries, Royal Anne and Pitted Cherries, Egg Plums, Figs, Grapes, Grapefruit, Grape Marmalade, Gooseberries, Loganberries, Loganberry Preserves, Peaches, Pears, Pineapple, Red Raspberries, Red-Raspberry Preserves, Strawberries, Strawberry Preserves; Canned Vegetables—Namely, Asparagus, Baked Beans, Beets, Celery, Kidney Beans, Lima Beans, Okra, Peas, Pumpkin, String Beans, Succotash, Sweet Corn, Sweet Potatoes, Tomatoes, and Spinach; Canned Sea Food—Namely, Clams, Codfish, Lobster, Oysters, and Shrimp; Canned Soups—Namely, Bean, Clam Chowder, and Tomato; Canned Mincemeat and Plum Pudding; Relishes—Namely, Chili Sauce, Green and Ripe Olives, Red Peppers, Sweet Relish Pickles, Tomato Catchup, and Cocktail Catchup; Spices—Namely, African Ginger, Allspice, Black Pepper, Capers, Celery Salt, Cinnamon, Cloves, Curry Powder, Mace, Mustard, Nutmeg, Poultry Seasoning, Prepared Mustard, Paprika, White Pepper, and Sage; Mexican Chilis, Salad Dressing and Vinegar, Coffee and Tea, Coconut, Walnut Meats, and Peanut Butter, Marshmallow Crême, Maple Sirup and Sugar, and Flour and Cereals—Namely, Barley, Cake Flour, Corn Meal, Dessert Tapioca, Farina, Wheat, Breakfast Cereal, Lye Hominy, Granulated Hominy, Pearl Hominy, Pancake Flour, Pearl Tapioca, Pop Corn in its Natural State, Rice, Rice Flour, Self-Rising Buckwheat, Corn, and Wheat Flour, Wheat Bran, Graham Flour, Entire-Wheat Flour, and Gluten Flour.
Claims use since July 1, 1883.

Ser. No. 294,959. CONSOLIDATED COMPANIES, INC., Plaquemine, La. Filed Jan. 20, 1930.

CONCO

For Canned Fruits and Vegetables; Canned Shell Fish, Fruit Preserves, Jellies, Jams, Canned Pork and Beans, Tomato Catsup, Tomato Paste, Corn and Cane Syrup, Pickles, Cattle and Poultry Feeds, Butter, Wheat Flour, Coffee, Vinegar.
Claims use since 1918.

Ser. No. 298,402. KRAFT-PHENIX CHEESE CORPORATION, Chicago, Ill. Filed Apr. 4, 1930.

KRAFT
Kitchen Fresh

The word "Fresh" is disclaimed apart from the mark as shown in the drawing.
For French Dressing, Thousand Island Dressing, Mayonnaise, and Sandwich Relish or Spread.
Claims use since Mar. 7, 1930.

Ser. No. 302,903. KOLD KUB COMPANY, Dallas, Tex. Filed June 27, 1930.

KOLD KUB

No claim is made to the word "Kold" apart from the mark as shown in the drawing.
For Frozen Confections.
Claims use since June 21, 1930.

Ser. No. 303,600. ESKIMO PIE CORPORATION, doing business through its subsidiary, New York Eskimo Pie Corporation, Louisville, Ky. Filed July 18, 1930.

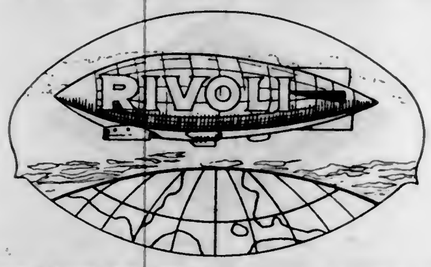
ESKIMO FRUIT PIE

Applicant disclaims the word "Fruit" apart from the mark as shown on the drawing.

For Ice Cream and Candy Confection.

Claims use since May 1, 1928.

Ser. No. 305,152. JULIUS WILE, SONS & CO., New York, N. Y. Filed Aug. 29, 1930.



For Canned and Bottled Anchovies, Antipasto, Artichokes, Asparagus, Bar le duc Conserve, Brussels Sprouts, Capers, Carciofini (Artichoke Hearts), Carrots, Caviar, Cepes (Wild Mushrooms), Maraschino Cherries, Corn in Vinegar, Foie Gras au Naturel (Whole Goose Livers), Fruits in Syrup, Glacé Fruits, Grapes, Herrings, Hors d'Oeuvres Consisting of Anchovies, Sardines, Tuna Fish, Pickles, Artichokes, Mushrooms, String Beans, and Carrots, Jardiniere (Whole Mixed Vegetables), Macedoines (Sliced Mixed Vegetables), Mackerel, Marrons, Mushrooms, Mustard, Noodles, Olives, Olives Farcies (Stuffed), Pate de Foie Gras, Peas, Pearl Onions, Pimientos, Prunes, Purées, Sardines, Meat and Fish Sauces, Spinach, Sprats, String Beans, Truffles, Tunny Fish, Vegetable Relish, and Wine Sauces.

Claims use since July 1, 1929.

Ser. No. 307,576. BEATRICE CREAMERY COMPANY, Chicago, Ill. Filed Nov. 6, 1930.

CORN BELT

For Butter, Eggs, Raw Cream, and Dressed Poultry.

Claims use since Oct. 15, 1908, on butter and cream; since January, 1915, on eggs; and since Jan. 15, 1926, on dressed poultry.

Ser. No. 308,001. AFRO-WERK ADOLF FROST & CO., Taucha, near Leipzig, Germany. Filed Nov. 18, 1930.

Afro

For Tablets of Any Kind Compressed (Cold Pressed) with Peppermint and Fruit Taste, Sugar Wares of Any Kind, Boiled, Hard Sugar Wares Shaped and Unshaped, Filled and Unfilled, Soft Sugar Wares, Toffee, Sugar-Tablets Single, Packed and Unpacked.

Claims use since February, 1916.

Ser. No. 308,202. P. D. GWALTNEY JR. & CO., INC., Smithfield, Va. Filed Nov. 22, 1930. Under 10-year proviso.

GWALTNEY'S SMITHFIELD HAM

For Cured Meats—Namely, Hams.

Claims use since 1882.

Ser. No. 308,359. THE DANNEMILLER GROCERY COMPANY, Canton, Ohio. Filed Nov. 28, 1930.

BLACK AND WHITE



For Canned Goods—Namely, Tomatoes, Hominy, Pumpkin, Cut Red Beets, Spinach, Sliced Pineapple, Halves Yellow Cling Peaches, Sliced Yellow Cling Peaches, Yellow Free Peaches, Bartlett Pears, Peeled Apricots, Crushed Pineapple, Shoe Peg Corn, Bantam Evergreen Corn, Sweet Corn, Strained Tomatoes, Sweet Peas, Succotash, Succotash with Green Limas, Succotash with White Limas, Cut Refugee Beans, Whole Refugee Beans, Whole Wax Beans, Potted Meat, Vienna Sausage, Corned Beef, Cut Wax Beans, Pork and Beans in Tomato Sauce.

Claims use since July, 1917.

Ser. No. 308,360. THE DANNEMILLER GROCERY COMPANY, Canton, Ohio. Filed Nov. 28, 1930.



For Canned Goods—Namely, Pork and Beans, Oven Beans, Cut Wax Beans, Whole Refugee Beans, Cut Refugee Beans, Red Kidney Beans, Succotash, Green Lima Beans, Green Giant Peas, Tiny Tot Peas, Sweet Peas, Telephone Peas, Strained Tomatoes, Sweet Corn, Country Gentlemen Corn, Golden Bantam Corn, Whole Kernel Corn, Grape Fruit, Crushed Pineapple, Strawberries, Loganberries, Red Raspberries, Black Raspberries, Blackberries, Black Sweet Pitted Cherries, Red Sour Pitted Cherries, Red Sweet Cherries, White Cherries, Fruit Salad, Bartlett Pears, Yellow Cling Peaches, Fancy Yellow Cling Peaches, Sliced Yellow Cling Peaches, Sliced Pineapple, Royal Ann Cherries, Sauer Kraut, Spinach, Hominy, Pumpkin, Cut Red Beets, Fancy Tomatoes.

Claims use since October, 1913.

Ser. No. 308,392. FRIEDRICH SAUER G. M. B. H., Gotha, Germany. Filed Nov. 28, 1930.

„Vierka"

For Yeast Preparations.

Claims use since 1926.

Ser. No. 308,887. HARRY RICE GORDON, doing business as The Harry R. Gordon Co., Inc., New York, N. Y.



The drawing is lined to indicate shading only. Applicant disclaims the mere representation of a carton.

For Sugar and Prepared Flour.

Claims use since Apr. 3, 1930.

Ser. No. 310,068. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn. Filed Jan. 17, 1931.

El Campeon

In the drawing, the vertical straight lines spaced apart from each other represent the color red, and the broken horizontal and vertical crossed lines represent the color yellow.

For Wheat Flour.

Claims use since October, 1922.

Ser. No. 310,069. PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn. Filed Jan. 17, 1931.

El Campeon



In the drawing, the vertical straight lines spaced apart from each other represent the color red. The horizontal straight lines spaced apart from each other represent the color blue. The diagonal straight lines spaced apart from each other represent the color brown, and the broken horizontal and vertical cross lines represent the color yellow.

For Wheat Flour.

Claims use since Jan. 3. 1931.

Ser. No. 310,251. THE CINCINNATI WHOLESALE GROCERY COMPANY, Cincinnati, Ohio. Filed Jan. 22, 1931.

HONEY GROVE

For Canned Fruits, Canned Vegetables, Rice, Coffee, Apple Butter, Red Kidney Beans, Canned Fish, Fruit Preserves, Jelly Condiments—viz., Catsup, Sausage, Table Syrup, Nut Margarine, Butter, Pickles, and Olives.

Claims use on canned peas and canned tomatoes since April, 1922, and to all other products enumerated herein as follows: canned fruits, since on or about Jan. 1, 1924; canned vegetables other than canned peas and canned tomatoes, since on or about Jan. 1, 1923; rice, since on or about Jan. 1, 1926; coffee, apple butter, red kidney beans, since on or about Jan. 1, 1929; canned fish, fruit preserves, jelly, condiments, sausage, syrup, nut margarine, butter, and pickles, since or or about Jan. 1, 1930; and on olives, since on or about Jan. 1, 1931.

Ser. No. 310,344. MAYAM LIMITED, London, England. Filed Jan. 24, 1931.

MAYAM

For Chewing Gum.

Claims use since July, 1929.

Ser. No. 310,865. M. J. HOLLOWAY & COMPANY, Chicago, Ill. Filed Feb. 9, 1931.

GOOD NEWS

For Candy Bars.
Claims use since Apr. 15, 1923.

Ser. No. 311,334. THE HARSHAW CHEMICAL COMPANY, Cleveland, Ohio. Filed Feb. 21, 1931.

VI-ZOY

For Chocolate Flavored Food Preparations Designed for Making Milk Beverages or Other Food Beverages.
Claims use since Feb. 19, 1931.

Ser. No. 311,807. VITELLI & COMPANY, New York, N. Y. Filed Mar. 5, 1931.



In the drawing the vertical shade lines indicate areas of the trade-mark that are colored red, and the horizontal shade lines indicate an area of the trade-mark that is colored blue.
For Canned Peeled Tomatoes and Canned Tomato Sauce.
Claims use since 1905.

Ser. No. 311,809. WEST COAST GROCERY COMPANY, Tacoma, Wash. Filed Mar. 5, 1931.

WESCO

For Canned Fruits—Namely, Bartlett Pears, Grapefruit, Yellow Cling Peaches, and Apricots; Canned Vegetables—Namely, Tomatoes, Corn, Golden Sweet Corn, Golden Bantam Corn, and Sweet Peas; Food Flavoring Extracts, Coffee.
Claims use since June 10, 1913.

Ser. No. 311,840. A. C. LEGG PACKING CO. INC., Birmingham, Ala. Filed Mar. 6, 1931.



The drawing is lined to indicate the colors red, blue, yellow, and purple.
For Seasoning for Sausages, Meats, or Other Foods.
Claims use since Nov. 9, 1929.

Ser. No. 312,227. MEYER H. ABELSON, Wilkes-Barre, Pa. Filed Mar. 17, 1931.



For Candles.
Claims use since 1915.

Ser. No. 312,246. BENJAMIN B. GEORGE, Cincinnati, Ohio. Filed Mar. 17, 1931.

Confex

For Cooked Icing.
Claims use since Jan. 22, 1931.

Ser. No. 312,356. ALASKA PACIFIC SALMON CORPORATION, Seattle, Wash. Filed Mar. 21, 1931.

SURF

For Canned Salmon.
Claim use since July 1, 1906.

Ser. No. 312,419. DUBOIS PRODUCTS & COLD STORAGE COMPANY, Du Bois, Pa. Filed Mar. 23, 1931.

HOME LEADER

For Malt Syrup.
Claims use since Mar. 20, 1931.

Ser. No. 312,658. MCILHENNY COMPANY, New Iberia, La. Filed Mar. 28, 1931.



The drawing is lined to indicate the colors red and green. No claim is made to the wording appearing on the drawing with the exception of the word "Tobasco" and the applicant's name, which are specifically claimed.
For Pepper Sauce.
Claims use since Aug. 1, 1930.

Ser. No. 312,745. ARABAN COFFEE CO., INC., Boston, Mass. Filed Mar. 31, 1931.

FELISMERE

For Coffee.
Claims use since Feb. 19, 1931.

Ser. No. 312,764. MINO, INC., New York, N. Y. Filed Mar. 31, 1931.

TELL YOUR FORTUNE

For Tea.
Claims use since Mar. 16, 1931.

Ser. No. 312,843. WILLIAM FAEHNDRICH, INC., New York, N. Y. Filed Apr. 2, 1931.

BERG FREUND

For Cheese.
Claims use since October, 1926.

Ser. No. 312,844. WILLIAM FAEHNDRICH, INC., New York, N. Y. Filed Apr. 2, 1931.

ALPIN-ETTE

For Cheese.
Claims use since June, 1928.

Ser. No. 312,920. LAMBERT MARKETING COMPANY, Sacramento, Calif. Filed Apr. 3, 1931.

BIG CITY

For Fresh Vegetables.
Claims use since Feb. 10, 1931.

Ser. No. 312,972. BEER & DAVIES, New York, N. Y. Filed Apr. 6, 1931.

BEEDEE

For Eggs.
Claims use since Feb. 1, 1931.

CLASS 47

Wines

Ser. No. 312,375. HENRI SAVIGNON, BOUSSARD FRERES ET DIEUX SOCIETE EN NOM COLLECTIF, Paris, France. Filed Mar. 21, 1931.

"Mon Vin"

No claim being made to the word "Vin" apart from the mark shown.
For Wines.
Claims use since Nov. 7, 1930.

CLASS 48

Malt Beverages and Liquors

Ser. No. 311,953. CAPE ANN ISINGLASS COMPANY, Marblehead, Mass. Filed Mar. 10, 1931.

CAPE ANN

For Clarifier for Beer Consisting of Fish Isinglass.
Claims use since 1872.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 313,005. JOHN ROESING, Chicago, Ill. Filed Apr. 6, 1931.

OLD RELIC

For Whiskey.
Claims use since Feb. 10, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 310,200. ACME BACKING CORPORATION, Brooklyn, N. Y. Filed Jan. 21, 1931.

IMPERVO

For Processed Fabric, Backing Material Used in the Manufacture of Laminated Fabrics.
Claims use since Dec. 1, 1930.

Ser. No. 312,642. GLOBE AMERICAN CORPORATION, Kokomo, Ind. Filed Mar. 28, 1931.

GRO MOR

For Brooders.
Claims use since Aug. 15, 1930.

Ser. No. 312,884. HYDROPEL PROCESS COMPANY, Boston, Mass. Filed Apr. 1, 1931.

HYDROPEL

For Waterproofed Fabrics.
Claims use since Oct. 16, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 12, 1931

282,967. FRANKFURTERS. OSCAR MAYER & CO. INC., doing business as Oscar Mayer's, Chicago, Ill.
Filed February 12, 1930. Serial No. 295,950. PUBLISHED JUNE 3, 1930. Class 46.

282,968. ROUGH AND SEMIFINISHED METAL CASTINGS AND FORGINGS OF FERROUS METALS, BRASS, ALUMINUM, AND LEAD. GENERAL STEEL CASTINGS CORPORATION, Eddystone, Pa.
Filed November 3, 1930. Serial No. 307,486. PUBLISHED FEBRUARY 24, 1931. Class 14.

282,969. OLIVES, BOTTLED CHERRIES, STUFFED FIGS, AND STUFFED DATES. B. M. REEVES CO., INC., Brooklyn, N. Y.
Filed November 10, 1930. Serial No. 307,735. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,970. WHEAT FLOUR. GALLATIN VALLEY MILLING Co., Seattle, Wash.
Filed November 12, 1930. Serial No. 307,812. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,971. WHEAT FLOUR, BUCKWHEAT FLOUR, RYE FLOUR, ETC. ACME-EVANS COMPANY, Indianapolis, Ind.
Filed November 15, 1930. Serial No. 307,913. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,972. SOLE LEATHER. CHAVIN & BERMAN, Chicago, Ill.
Filed November 15, 1930. Serial No. 307,920. PUBLISHED FEBRUARY 24, 1931. Class 1.

282,973. OLIVE OIL. CONTI PRODUCTS CORP., Brooklyn, N. Y.
Filed November 15, 1930. Serial No. 307,924. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,974. MINIATURE INDOOR OR OUTDOOR GOLF GAME. THE OXFORD CORPORATION, West Paris, Me.
Filed November 20, 1930. Serial No. 308,124. PUBLISHED MARCH 3, 1931. Class 22.

282,975. TOILET AND BATH SOAP. THE PROCTER & GAMBLE COMPANY, Cincinnati, Ohio.
Filed November 20, 1930. Serial No. 308,126. PUBLISHED MARCH 3, 1931. Class 4.

282,976. BROOMS AND MOPS. STAMETCO BROOM & MFG. CO. INC., St. Paul, Minn.
Filed December 1, 1930. Serial No. 308,495. PUBLISHED FEBRUARY 24, 1931. Class 29.

282,977. CANNED FRUITS, CANNED VEGETABLES, CIDER VINEGAR, JELLIES, AND APPLE BUTTER. THE C. H. MUSSELMAN COMPANY, Biglerville, Pa.
Filed December 2, 1930. Serial No. 308,513. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,978. CANDIES. MORRIS SAMTER, doing business as Betty's Fudge Shop, Atlantic City, N. J.
Filed December 2, 1930. Serial No. 308,518. PUBLISHED MARCH 3, 1931. Class 46.

282,979. CANDIES. HAWLEY & HOOPS, New York, N. Y.
Filed December 5, 1930. Serial No. 308,626. PUBLISHED MARCH 3, 1931. Class 46.

282,980. DECORATIVE AND EMBROIDERED LINENS —NAMELY, NAPKINS, TABLECLOTHS, DINNER SETS, TOWELS, SCARFS, HANDKERCHIEFS. ELLISON & SPRING, INC., New York, N. Y.
Filed December 8, 1930. Serial No. 308,725. PUBLISHED FEBRUARY 24, 1931. Class 42.

282,981. CHOCOLATE CARAMELS. EDWARD S. LOCKWOOD, doing business as Lockwood & Company, Annapolis, Md.
Filed December 8, 1930. Serial No. 308,797. PUBLISHED MARCH 3, 1931. Class 46.

282,982. DRY-CLEANING SOLVENT. WOLVERINE-EMPIRE REFINING COMPANY, INC., Oil City, Pa.
Filed December 10, 1930. Serial No. 308,843. PUBLISHED MARCH 3, 1931. Class 4.

282,983. MANUFACTURED AND DRESSED LEATHER. A. J. BAKER CO., INC., Johnstown, N. Y.
Filed December 13, 1930. Serial No. 308,920. PUBLISHED FEBRUARY 24, 1931. Class 1.

282,984. DRESSED POULTRY, AND EGGS. RED RIVER VALLEY PRODUCE CO., INC., Grand Forks, N. Dak.
Filed December 13, 1930. Serial No. 308,954. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,985. GAUZE BANDAGES, AND ABSORBENT COTTON. THE STYRON-BEGGS COMPANY, Newark, Ohio.
Filed October 22, 1930. Serial No. 307,068. PUBLISHED MARCH 3, 1931. Class 44.

282,986. WHEAT FLOUR. THEO STIVERS MILLING COMPANY, Rome, Ga.
Filed October 24, 1930. Serial No. 307,146. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,987. COOKIES. HANS S. LENELL, doing business as H. S. Lenell, Chicago, Ill.
Filed December 15, 1930. Serial No. 308,992. PUBLISHED FEBRUARY 24, 1931. Class 46.

282,988. ARTIFICIAL TEETH. THE DENTISTS' SUPPLY COMPANY OF NEW YORK, New York, N. Y.
Filed January 3, 1931. Serial No. 309,581. PUBLISHED MARCH 3, 1931. Class 44.

282,989. REFRIGERATOR CABINETS AND MECHANICAL REFRIGERATING APPARATUS. KELVINATOR CORPORATION, Detroit, Mich.
Filed January 8, 1931. Serial No. 309,736. PUBLISHED MARCH 3, 1931. Class 31.

282,990. SOAP. HOLMAN SOAP COMPANY, Chicago, Ill.
Filed January 9, 1931. Serial No. 309,779. PUBLISHED MARCH 3, 1931. Class 4.

282,991. FELT-BASE FLOOR COVERINGS. ARMSTRONG CORK COMPANY, Lancaster, Pa.
Filed January 22, 1931. Serial No. 310,239 PUBLISHED MARCH 3, 1931. Class 20.

282,992. LINOLEUM. ARMSTRONG CORK COMPANY, Lancaster, Pa.
Filed January 22, 1931. Serial No. 310,240. PUBLISHED MARCH 3, 1931. Class 20.

282,993. HARD-SURFACED FLOOR COVERING HAVING A FACING OF LINOLEUM AND A BACKING OF FELT-BASE MATERIAL. ARMSTRONG CORK COMPANY, Lancaster, Pa.
Filed January 22, 1931. Serial No. 310,241. PUBLISHED MARCH 3, 1931. Class 20.

282,994. GRAPE JUICE. GRAPE PRODUCTS, INCORPORATED, North East, Pa.
Filed January 26, 1931. Serial No. 310,376. PUBLISHED MARCH 3, 1931. Class 45.

282,995. GRAPE JUICE. GRAPE PRODUCTS, INCORPORATED, North East, Pa.
Filed January 27, 1931. Serial No. 310,445. PUBLISHED MARCH 3, 1931. Class 45.

282,996. YARNS FOR EMBROIDERING AND RUG MAKING. T. BUTTNER & Co. INC., Chicago, Ill.
Filed December 20, 1930. Serial No. 309,185. PUBLISHED MARCH 3, 1931. Class 43.

282,997. GLASS. PRESSED PRISM PLATE GLASS COMPANY, Chicago, Ill.
Filed December 20, 1930. Serial No. 309,211. PUBLISHED FEBRUARY 24, 1931. Class 33.

282,998. PUNCH CARD. RALPH SADLIER COONEY, doing business as School Service Co., New York, N. Y.
Filed December 30, 1930. Serial No. 309,463. PUBLISHED MARCH 3, 1931. Class 22.

282,999. TEA AND COFFEE. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed December 31, 1930. Serial No. 309,535. PUBLISHED MARCH 3, 1931. Class 46.

283,000. LIVE BABY CHICKENS. THE PIONEER HATCHERY, INC., Petaluma, Calif.
Filed January 3, 1931. Serial No. 309,593. PUBLISHED MARCH 3, 1931. Class 46.

283,001. ARTIFICIAL-SILK THREADS AND YARNS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed January 4, 1931. Serial No. 309,728. PUBLISHED MARCH 3, 1931. Class 43.

283,002. FISH PRODUCTS—NAMELY, SARDINES, HERRING, AND ANCHOVIES. LASCHINGER & MEINHARDT, INC., New York, N. Y.
Filed January 13, 1931. Serial No. 309,897. PUBLISHED MARCH 3, 1931. Class 46.

283,003. FRESH CELERY. THE PALMER CORPORATION, Chicago, Ill.
Filed January 14, 1931. Serial No. 309,933. PUBLISHED MARCH 3, 1931. Class 46.

283,004. FRESH CELERY. THE PALMER CORPORATION, Chicago, Ill.
Filed January 14, 1931. Serial No. 309,934. PUBLISHED MARCH 3, 1931. Class 46.

283,005. RAYON YARN. INDUSTRIAL RAYON CORPORATION, Cleveland, Ohio.
Filed January 19, 1931. Serial No. 310,120. PUBLISHED MARCH 3, 1931. Class 43.

283,006. SCOTCH PEAS, BEANS, AND LENTILS. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, doing business as The Quaker Maid Company, Inc., New York, N. Y.
Filed January 21, 1931. Serial No. 310,201. PUBLISHED MARCH 3, 1931. Class 46.

283,007. GAMES PLAYED WITH MOVABLE PIECES ON A MARKED BOARD. MILTON BRADLEY COMPANY, Springfield, Mass.
Filed January 21, 1931. Serial No. 310,205. PUBLISHED MARCH 3, 1931. Class 22.

283,008. DOLLS. VIOLET D. STEINEMANN, Los Angeles, Calif.
Filed February 17, 1930. Serial No. 296,152. PUBLISHED MARCH 3, 1931. Class 22.

283,009. CLAYLIKE AND OTHER MINERALS WHICH ARE GENERALLY CLASSIFIED AS NONMETALLIC MINERALS—NAMELY, THE SO-CALLED "BENTONITES" AND VOLCANIC ASH AND SUCH SPECIAL FORMS AS HALLOYSITES. INTERCITY DEVELOPMENT CORPORATION, New York, N. Y.
Filed March 5, 1930. Serial No. 296,870. PUBLISHED FEBRUARY 24, 1931. Class 1.

283,010. CLEANER FOR DISHES, FLOORS, WOODWORK, AUTOMOBILES, AND THE LIKE. ELEANOR DOUGLAS RAMSEY, Detroit, Mich.
Filed April 11, 1930. Serial No. 298,714. PUBLISHED AUGUST 12, 1930. Class 4.

283,011. SAND. CHILD-HEALTH SAND CO., Philadelphia, Pa.
Filed May 14, 1930. Serial No. 300,469. PUBLISHED FEBRUARY 24, 1931. Class 1.

283,012. MACHINES FOR APPLYING LABELS TO THE BODY OF BOTTLES AND THE LIKE. NATIONAL LABELING MACHINE CO., INC., Long Island City, N. Y.
Filed December 18, 1928. Serial No. 276,897. PUBLISHED AUGUST 6, 1929. Class 23.

283,013. PAINT ENAMELS. BRININSTOOL PAINT CO., Los Angeles, Calif.
Filed October 21, 1929. Serial No. 291,318. PUBLISHED MARCH 3, 1931. Class 16.

283,014. FRESH DECIDUOUS FRUITS AND FRESH VEGETABLES. PENN FRUIT COMPANY, Philadelphia and Darby, Pa.
Filed November 14, 1929. Serial No. 292,417. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,015. METALLIC LAME OR LAHN IN THE FORM OF THREAD. THE ARLES COMPANY, INC., New York, N. Y.
Filed May 23, 1930. Serial No. 301,086. PUBLISHED FEBRUARY 24, 1931. Class 43.

283,016. NATURAL AND IMITATION FLAVORS SUITABLE FOR FLAVORING FOODS AND INGREDIENTS OF FOODS. POLAK & SCHWARZ, Zaandam, Netherlands.
Filed May 28, 1930. Serial No. 301,502. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,017. IRON AND STEEL ALLOYS, CASTINGS, FORGINGS, PRESSINGS, AND STAMPINGS. SIVYER STEEL CASTINGS CO., Milwaukee, Wis.
Filed May 30, 1930. Serial No. 301,765. PUBLISHED FEBRUARY 24, 1931. Class 14.

283,018. RECEPTACLES FOR CIGARS, CIGARETTES, AND TOBACCO OTHER THAN POUCHES. ELGIN AMERICAN MANUFACTURING CO., Elgin, Ill.
Filed June 16, 1930. Serial No. 302,461. PUBLISHED FEBRUARY 24, 1931. Class 8.

283,019. FINELY-DIVIDED SOLID MATERIAL HAVING SELECTIVE ADSORPTIVE PROPERTIES TO BE USED IN AIDING FILTRATION AND IN DEEMULSIFYING OR DEHYDRATING LIQUIDS. MANUFACTURED FROM DIATOMACEOUS EARTH. INDUSTRIAL CHEMICAL SALES COMPANY, INC., New York, N. Y.
Filed July 17, 1930. Serial No. 303,570. PUBLISHED MARCH 3, 1931. Class 31.

283,020. RUBBER MATTING. JOSEPH C. FLANAGAN, Pittsburgh, Pa., assignor to Florence Mae Flanagan, Pittsburgh, Pa.
Filed July 19, 1930. Serial No. 303,637. PUBLISHED FEBRUARY 24, 1931. Class 50.

283,021. BREAD. MORRIS ENGELMEYER, New York, N. Y.
Filed August 2, 1930. Serial No. 304,130. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,022. SOLID ORGANIC CHEMICAL PRODUCT FOR PRODUCING CRYSTAL PATTERNS IN LACQUERS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed September 8, 1930. Serial No. 305,433. PUBLISHED MARCH 3, 1931. Class 16.

283,023. TRUNKS AND HAND LUGGAGE. THE BELBER TRUNK & BAG COMPANY, Philadelphia, Pa.
Filed September 15, 1930. Serial No. 305,690. PUBLISHED FEBRUARY 24, 1931. Class 3.

283,024. CANNED SHRIMP. MEXICAN GULF PACKING CO., INC., Pascagoula, Miss.
Filed September 15, 1930. Serial No. 305,717. PUBLISHED MARCH 3, 1931. Class 46.

283,025. MIXTURE CONTAINING FLOUR AND OTHER INGREDIENTS FOR MUFFINS, SHORTCAKE, AND THE LIKE. MRS. BAIN, Washington, D. C.
Filed September 17, 1930. Serial No. 305,775. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,026. CLOCKS, WRIST WATCHES, AND PLATINUM, GOLD, AND SILVER WATCHES. REINER & BERKOW, INC., New York, N. Y.
Filed September 17, 1930. Serial No. 305,791. PUBLISHED FEBRUARY 24, 1931. Class 27.

283,027. CANNED SAUERKRAUT, DILL PICKLES, SAUERKRAUT JUICE, SOUR PICKLES. J. J. SCHERER SONS CO., INC., Irvington, N. J.
Filed September 22, 1930. Serial No. 305,942. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,028. CANDIES. MASON, AU & MAGENHEIMER CONFECTIONERY MANUFACTURING COMPANY, Brooklyn, N. Y.
Filed January 21, 1930. Serial No. 295,034. PUBLISHED MARCH 3, 1931. Class 46.

283,029. SNUFFERS FOR SNUFFING OUT BUTTS OF CIGARS AND CIGARETTES THEREIN AND FOR ASH CONTAINERS. JAMES H. BLACK, Portland, Oreg.
Filed December 18, 1930. Serial No. 309,117. PUBLISHED FEBRUARY 24, 1931. Class 8.

283,030. MALT SYRUPS. RAINIER BREWING COMPANY, San Francisco, Calif.
Filed December 20, 1930. Serial No. 309,212. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,031. PRETZELS. QUINLAN PRETZEL COMPANY, Reading, Pa.
Filed December 26, 1930. Serial No. 309,353. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,032. PRETZELS. QUINLAN PRETZEL COMPANY, Reading, Pa.
Filed December 26, 1930. Serial No. 309,354. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,033. HOSIERY AND UNDERWEAR FOR MEN, WOMEN, AND CHILDREN. WORLD'S STAR KNITTING COMPANY, Bay City, Mich.
Filed December 26, 1930. Serial No. 309,365. PUBLISHED FEBRUARY 24, 1931. Class 39.

283,034. FLAVORING SYRUPS FOR USE AS SAUCES, TOPPINGS, AND GENERAL CULINARY PURPOSES. H. BARON & CO., INCORPORATED, Brooklyn, N. Y.
Filed December 27, 1930. Serial No. 309,369. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,035. BREAD, ROLLS, CAKE, PIES, CRACKERS, COOKIES, DOUGHNUTS. DAVIDSON BAKING CO., INC., Portland, Oreg.
Filed December 29, 1930. Serial No. 309,418. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,036. RUBBERIZED FABRIC. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed December 29, 1930. Serial No. 309,446. PUBLISHED FEBRUARY 24, 1931. Class 50.

283,037. MOLDED BOTTLE AND JAR CLOSURES OR CAPS. ARMSTRONG CORK COMPANY, Lancaster, Pa.
Filed December 30, 1930. Serial No. 309,455. PUBLISHED FEBRUARY 24, 1931. Class 50.

283,038. ROLLS. CONTINENTAL BAKING COMPANY, New York, N. Y.
Filed September 25, 1930. Serial No. 306,053. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,039. GAME AND POULTRY FOODS. GAYBIRD, LIMITED, Great Missenden, England.
Filed September 29, 1930. Serial No. 306,179. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,040. FLAT WALL PAINT. GREAT LAKES VARNISH WORKS, INC., Chicago, Ill.
Filed October 3, 1930. Serial No. 306,351. PUBLISHED NOVEMBER 18, 1930. Class 16.

283,041. SURGICAL AND ABDOMINAL BELTS AND HIP REDUCERS. THE OHIO TRUSS COMPANY, Cincinnati, Ohio.
Filed October 11, 1930. Serial No. 306,658. PUBLISHED MARCH 3, 1931. Class 44.

283,042. CANDY. MORRIS CANDY CO., Minneapolis, Minn.
Filed October 16, 1930. Serial No. 306,824. PUBLISHED MARCH 3, 1931. Class 46.

283,043. STOCK AND POULTRY FEED. GENERAL MILLS, INC., Minneapolis, Minn.
Filed October 16, 1930. Serial No. 306,847. PUBLISHED FEBRUARY 24, 1931. Class 46.

283,044. CANNED CITRUS FRUIT. FLORIDA CANNERS, INC., Eustis, Fla.
Filed October 20, 1930. Serial No. 306,946. PUBLISHED MARCH 3, 1931. Class 46.

283,045. WATER-SOLUBLE ORGANIC IODINE COMPOUND USED AS A RADIOPAQUE MEDIUM FOR X-RAY EXAMINATION. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y.
Filed December 30, 1930. Serial No. 309,493. PUBLISHED MARCH 10, 1931. Class 6.

283,046. POWDER PUFFS AND ABSORBENT POWDER PUFFS. DOROTHY GRAY, Bloomfield, N. J., and New York, N. Y.
Filed December 30, 1930. Serial No. 309,469. PUBLISHED FEBRUARY 24, 1931. Class 29.

283,047. MISSES' AND LADIES' BLOOMERS AND PANTIES AND MEN'S TEXTILE UNDERWEAR. FRANK MARION HUNTER, Lititz, Pa.
Filed December 31, 1930. Serial No. 309,524. PUBLISHED FEBRUARY 24, 1931. Class 39.

283,048. MOPS. PARKER-REGAN CORPORATION, San Francisco, Calif.
Filed January 3, 1931. Serial No. 309,592. PUBLISHED FEBRUARY 24, 1931. Class 29.

283,049. METAL PRODUCTS—NAMELY, COPPER IN CAKES, BARS, OR INGOTS. THE AMERICAN METAL COMPANY (LIMITED), New York, N. Y.
Filed January 6, 1931. Serial No. 309,629. PUBLISHED FEBRUARY 24, 1931. Class 14.

283,050. WIRES AND RODS FOR SOLDERING AND WELDING PURPOSES. "GRIESOGEN" GRIESHEIMER AUTOGEN VERKAUFS-GESELLSCHAFT M. B. H., Frankfort-on-the-Main-Griesheim, Germany.
Filed January 7, 1931. Serial No. 309,683. PUBLISHED FEBRUARY 24, 1931. Class 14.

283,051. CHAMOIS SKIN. THE JOS. NIEHAUS COMPANY, Cincinnati, Ohio.
Filed January 7, 1931. Serial No. 309,697. PUBLISHED FEBRUARY 24, 1931. Class 1.

283,052. COAL AND COKE. BÁNSKÁ- A HUTNÍ SPOLEČNOST, Brunn, Czechoslovakia.
Filed January 7, 1931. Serial No. 309,707. PUBLISHED FEBRUARY 24, 1931. Class 1.

283,053. COAL AND COKE. BÁNSKÁ- A HUTNÍ SPOLEČNOST, Brunn, Czechoslovakia.
Filed January 7, 1931. Serial No. 309,713. PUBLISHED FEBRUARY 24, 1931. Class 1.

283,054. PUMICE SOAP. KLENIT CORPORATION, Winner, S. Dak.
Filed January 8, 1931. Serial No. 309,737. PUBLISHED FEBRUARY 24, 1931. Class 4.

283,055. COAL. STEARNS COAL & LUMBER COMPANY, INC., Stearns, Ky.
Filed January 8, 1931. Serial No. 309,748. PUBLISHED FEBRUARY 24, 1931. Class 1.

283,056. COAL. STEARNS COAL & LUMBER COMPANY, INC., Stearns, Ky.
Filed January 8, 1931. Serial No. 309,749. PUBLISHED FEBRUARY 24, 1931. Class 1.

283,057. COAL. STEARNS COAL & LUMBER COMPANY, INC., Stearns, Ky.
Filed January 8, 1931. Serial No. 309,750. PUBLISHED FEBRUARY 24, 1931. Class 1.

283,058. FELT. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass.
Filed January 10, 1931. Serial No. 309,812. PUBLISHED FEBRUARY 24, 1931. Class 50.

283,059. RESINS. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed January 14, 1931. Serial No. 309,923. PUBLISHED FEBRUARY 24, 1931. Class 1.

283,060. CANNED GRAPEFRUIT. THE HILLS BROTHERS COMPANY, New York, N. Y.
Filed December 17, 1930. Serial No. 309,077. PUBLISHED FEBRUARY 3, 1931. Class 46.

283,061. VAGINAL SYRINGES, IRRIGATORS, AND PESSARIES. FRANZ WILHELM EMIL SPARDEL, doing business as F. W. Emil Spardel, Hamburg, Germany.
Filed December 17, 1930. Serial No. 309,097. PUBLISHED MARCH 3, 1931. Class 44.

283,062. CANDIES, NUTS, AND CONFECTIONERY—NAMELY, PLAIN UNSALTED NUTS, NUTS IN THE SHELL, SALTED ROASTED NUTS, PANNED NUTS, CHOCOLATE-COVERED NUTS, SUGAR-COATED NUTS, NUT BLOCKS, AND SUGAR-ROASTED NUTS. THE FLA-VO-KRISP COMPANY, Chicago, Ill.
Filed December 24, 1930. Serial No. 309,310. PUBLISHED MARCH 3, 1931. Class 46.

283,063. PROPHYLACTIC MEMBRANOUS ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. STOWALL AND CO., San Francisco, Calif.
Filed December 24, 1930. Serial No. 309,320. PUBLISHED MARCH 3, 1931. Class 44.

283,064. CLEANING PREPARATION FOR GENERAL USE. MICHAEL FEINBERG, doing business as Feinberg Kosher Sausage Company, Minneapolis, Minn.
Filed December 26, 1930. Serial No. 309,338. PUBLISHED MARCH 3, 1931. Class 4.

283,065. TINSEL FOR CHRISTMAS TREES AND OTHER DECORATIVE PURPOSES. THE GEORGE FRANKE SONS COMPANY, Baltimore, Md.
Filed January 21, 1931. Serial No. 310,218. PUBLISHED MARCH 3, 1931. Class 22.

283,066. SEWING THREAD. PROVIDENCE THREAD CO. INC., New York, N. Y.
Filed January 26, 1931. Serial No. 310,412. PUBLISHED MARCH 3, 1931. Class 43.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

283,067. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN R. AYERS, doing business as Onion Rub Company, Boston, Mass. Filed Oct. 13, 1930. Serial No. 306,719.



For Medicinal Preparation Including an Ointment Base for External Treatment of Colds.
Claims use since Oct. 1, 1929.

283,068. (CLASS 1. RAW OR PARTLY PREPARED MATERIALS.) EDWARD EUGENE BARRINGER, Salisbury, N. C. Filed Oct. 6, 1930. Serial No. 306,878.

Crystal Pink Granite

For Granite in Its Raw or Uncut State.
Claims use since Oct. 1, 1928.

283,069. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) E. E. HARDEN PACKING COMPANY, Salinas, Calif. Filed Oct. 31, 1930. Serial No. 307,397.

Hard-en Krisp

For Fresh Vegetables.
Claims use since Apr. 15, 1929.

283,070. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) E. E. HARDEN PACKING COMPANY, Salinas, Calif. Filed Oct. 31, 1930. Serial No. 307,398.

Hard-en Pak

For Fresh Vegetables.
Claims use since May 15, 1929.

283,071. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) JACOB RUPPERT SCHALK, Poughkeepsie, N. Y. Filed Nov. 13, 1930.

LINWOOD

For Boats—Namely, Pleasure Yachts.
Claims use since September, 1927.

283,072. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GRAGNAMO PRODUCTS, INC., San Francisco, Calif. Filed Nov. 24, 1930. Serial No. 308,251.

GRAGNANO

For Alimentary Pastes.
Claims use since April, 1914.

283,073. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HARRY C. OAKS, doing business as Oaks Candy Shop, Appleton, Wis. Filed Dec. 22, 1930. Serial No. 309,243.

ORIGINAL OAKS CHOCOLATES

For Candy.
Claims use since Aug. 15, 1928.

283,074. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) LA PLANT-CHOATE MANUFACTURING CO., Cedar Rapids, Iowa. Filed Feb. 18, 1931. Serial No. 311,192.



For Road-Building Machinery Comprising Dumping Trailers, Couplings Therefor, Levelers, Ditchers, Surface-Forming Implement, Mixers, Drawbars, Material-Handling Apparatus.
Claims use since June 1, 1929.

283,075. (CLASS 1. RAW OR PARTLY PREPARED MATERIALS.) GEORGE F. EICHENLAUB, doing business as G. F. Eichenlaub Coal Co., Gallitzin, Pa. Filed Feb. 28, 1931. Serial No. 311,568.

PAGE COAL

For Coal.
Claims use since 1924.

283,076. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROSE STANOWITZ, Brooklyn, N. Y. Filed Mar. 25, 1931. Serial No. 312,585.

STANOWITZ

For Jams.
Claims use since Jan. 1, 1930.

283,077. (CLASS 31. FILTERS & REFRIGERATORS.) WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed Mar. 27, 1931. Serial No. 312,633.

Westinghouse

For Refrigerators.
Claims use since Feb. 25, 1930.

283,078. (CLASS 2. RECEPTACLES.) JAMES A. PIPKIN, doing business as No Drip Company, Dallas, Tex. Filed Sept. 20, 1929. Serial No. 290,030.

NO DRIP BOTTLE PROTECTOR

For Bottle Wrappers and Protectors of Paper, Cloth, or Other Absorbent Material.
Claims use since May 13, 1929.

283,079. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE ALEXANDER MILBURN COMPANY, Baltimore, Md. Filed Feb. 7, 1930. Serial No. 295,742.

MILBURN

For Portable Acetylene Lights, Welding and Cutting Torches, Acetylene Generators, and Tips.
Claims use since Oct. 1, 1907.

283,080. (CLASS 1. RAW OR PARTLY PREPARED MATERIALS.) VAN CAMP HARDWARE & IRON CO., Indianapolis, Ind. Filed Feb. 21, 1930. Serial No. 296,376.

SHADO

For Lawn-Grass Seed.
Claims use since Jan. 1, 1930.

283,081. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE BEST FOODS, INC., New York, N. Y. Filed May 13, 1930. Serial No. 300,398.

Best Foods

For Pickle Relishes, Peanut Butter, Sandwich Filling, Salad Dressings, Mayonnaise Dressing, Pickles, Vegetable Oils, Lard Substitute, Icings, and Edible Oils.
Claims use since September, 1923.

283,082. (CLASS 39. CLOTHING.) BURSON KNITTING COMPANY, Rockford, Ill. Filed June 27, 1929. Serial No. 286,221.

Tru-Fashioned

For Hosiery.
Claims use since Mar. 20, 1929.

TRADE-MARK REGISTRATIONS RENEWED

82,128. SOAPS. Registered May 30, 1911. CHARLES W. YOUNG AND COMPANY. Renewed May 30, 1931, to Chas. W. Young & Co., Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

82,823. BLENDED COFFEE. Registered July 25, 1911. THE WOOLSON SPICE COMPANY, Toledo, Ohio, a Corporation of Ohio. Renewed July 25, 1931.

LABELS

REGISTERED MAY 12, 1931

39,087.—*Title:* SUNSHINE COFFEE. For Coffee. J. R. BRINKLEY, M. D., Milford, Kans. Published December 6, 1930.

39,088.—*Title:* BURGESS STRAIGHT-THRU AIR COMPRESSOR SILENCER. For Air Compressor Silencers. BURGESS BATTERY COMPANY, Madison, Wis. Published April 6, 1931.

39,089.—*Title:* DESERT EDGE. For Fresh Tomatoes. CORN & WARE, Callpatria, Calif. Published March 23, 1931.

39,090.—*Title:* ICE CREAM NO. 041. For Ice Cream. WILLIAM DOANE, St. Louis, Mo. Published February 15, 1931.

39,091.—*Title:* ICE CREAM NO. 042. For Ice Cream. WILLIAM DOANE, St. Louis, Mo. Published February 15, 1931.

39,092.—*Title:* ICE CREAM NO. 043. For Ice Cream. WILLIAM DOANE, St. Louis, Mo. Published February 15, 1931.

39,093.—*Title:* ICE CREAM NO. 044. For Ice Cream. WILLIAM DOANE, St. Louis, Mo. Published February 15, 1931.

39,094.—*Title:* CHRISTMAS TREE TINSEL. For Christmas Tree Tinsel. DOUGLAS MANUFACTURING COMPANY, INC., Louisville, Ky. Published January 10, 1930.

39,095.—*Title:* CHRISTMAS TREE TINSEL. For Christmas Tree Tinsel. DOUGLAS MANUFACTURING COMPANY, INC., Louisville, Ky. Published January 10, 1930.

39,096.—*Title:* EARLY BIRD. For Coffee. DUNCAN COFFEE CO., Houston, Tex. Published January 2, 1930.

39,097.—*Title:* "THEY WALK SOFTLY AND GO FAR". For Shoes. DUNN & MCCARTHY, INC., Auburn, N. Y. Published March 25, 1921.

39,098.—*Title:* AMERICAN BEAUTY. For Eggs. L. FRANK & CO., INC., New Orleans, La. Published August 23, 1930.

39,099.—*Title:* GENERAL HEALTH NIPPLES. For Nursing Bottle Nipples. GENERAL HEALTH CORPORATION, Philadelphia, Pa. Published February 1, 1931.

39,100.—*Title:* CARLA. For Hosiery. GUS GRISSMANN COMPANY, INC., New York, N. Y. Published April 8, 1931.

39,101.—*Title:* SWISS KRISS. For Laxative. SEBASTIAN GYSIN, doing business as Modern Health Products, Milwaukee, Wis. Published January 15, 1931.

39,102.—*Title:* SLIM. For Reducing Tea. SEBASTIAN GYSIN, doing business as Modern Health Products, Milwaukee, Wis. Published January 15, 1931.

39,103.—*Title:* PALO-ALO. For Malt Sugar Products. HAPPINESS G. J. CO., Brooklyn, N. Y. Published March 16, 1931.

39,104.—*Title:* "THE HAZZARD SHOE." For Boxes. R. P. HAZZARD COMPANY, Gardiner, Me. Published February 10, 1931.

39,105.—*Title:* LA FRANCE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 16, 1931.

39,106.—*Title:* HONEY. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 4, 1931.

39,107.—*Title:* PRISCILLA. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published November 12, 1930.

39,108.—*Title:* THE HELFAND SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 23, 1931.

39,109.—*Title:* ST. LOUIS NOVELTY SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 2, 1931.

39,110.—*Title:* ETHEL ETTIC. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 4, 1931.

39,111.—*Title:* MARCELLE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 4, 1931.

39,112.—*Title:* TOM THUMB SPORT SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 24, 1930.

39,113.—*Title:* THE KAY SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 12, 1931.

39,114.—*Title:* SIMON WEINER. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 19, 1931.

39,115.—*Title:* MARY ANNE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 23, 1931.

39,116.—*Title:* MANDEL SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 14, 1931.

39,117.—*Title:* JEWELS OF HUYLER'S. For Candy. HUYLER'S WHOLESALE DIVISION, INC., assignor to Huyler's, New York, N. Y. Published May 10, 1930.

39,118.—*Title:* VULCANIZING HOT PATCH CEMENT FOR TORN AUTO TOPS. For Cement. CHARLES JAMES INGERSOLL, Seattle, Wash. Published June 1, 1930.

39,119.—*Title:* BOOSTER. For Bread. LAWRENCE BAKING COMPANY, Lansing, Mich. Published April 9, 1931.

39,120.—*Title:* LOVE NEST. For Coffee. LOVE NEST PRODUCTS CO., INC., New York, N. Y. Published March 25, 1931.

39,121.—*Title:* "VITA". For Butter. M & R DIETETIC LABORATORIES, INC., Columbus, Ohio. Published February 25, 1931.

39,122.—*Title:* MORA'S. For Chicken and Egg Noodles. E. MORA, Los Angeles, Calif. Published November 1, 1930.

39,123.—*Title:* CREAM OF BARLEY MALT. For Barley Malt Powder. THE POWDERED MALT CORPORATION. Published May 23, 1930.

39,124.—*Title:* LAKELAND. For Canned Corn. PLYMOUTH PACKING COMPANY, INC., Plymouth, Wis. Published December 24, 1931.

39,125.—*Title:* PROTEIN S. M. A. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published January 2, 1931.

39,126.—*Title:* S. M. A. CONCENTRATED LIQUID. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published January 2, 1931.

39,127.—*Title:* S. M. A. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published January 2, 1931.

39,128.—*Title:* SCHOENHUT'S BLOX-DE-LUXE. For Sets of A. B. C. Blocks. THE A. SCHOENHUT COMPANY, Philadelphia, Pa. Published February 7, 1931.

39,129.—*Title:* NO-CID-OL. For Stomach Medicine. SAMUEL A. SELIG, doing business as Selig Remedy Company, Detroit, Mich. Published April 1, 1930.

39,130.—*Title:* HANDY ANDY NO. 8. For Plumbing Supplies. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Published March 24, 1931.

39,131.—*Title:* HANDY ANDY NO. 5. For Plumbing Supplies. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Published March 24, 1931.

39,132.—*Title:* HANDY ANDY NO. 1. For Plumbing Supplies. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Published March 24, 1931.

39,133.—*Title:* HANDY ANDY NO. 2. For Plumbing Supplies. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Published March 24, 1931.

39,134.—*Title:* HANDY ANDY NO. 3. For Plumbing Supplies. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Published March 24, 1931.

39,135.—*Title:* HANDY ANDY NO. 4. For Plumbing Supplies. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Published March 24, 1931.

39,136.—*Title:* HANDY ANDY NO. 6. For Plumbing Articles. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Published March 24, 1931.

39,137.—*Title:* HANDY ANDY NO. 7. For Plumbing Supplies. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Published March 24, 1931.

39,138.—*Title:* GOLDEN TWIST. For Bread. SPAULDING BAKERIES, INC., Binghamton, N. Y. Published January 15, 1931.

39,139.—*Title:* EVERSWEET. For Grapefruit. H. C. SULLIVAN, doing business as H. C. Sullivan Cannery, Frostproof, Fla. Published April 3, 1931.

39,140.—*Title:* 4-SQUARE GUIDE LINE FRAMING. For Lumber. WEYERHAEUSER FOREST PRODUCTS, St. Paul, Minn. Published December 4, 1930.

39,141.—*Title:* TAST-E. For Bread. CHRISTIAN A. WHITMORE, Mercersburg, Pa. Published December 29, 1930.

39,142.—*Title:* WILLIAMS RAYEX. For Tonic for the Scalp and Hair. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn. Published February 19, 1931.

PRINTS

REGISTERED MAY 12, 1931

13,178.—*Title:* CENROC. For Agricultural Lime. CENTRAL ROCK COMPANY, Lexington, Ky. Published March 24, 1931.

13,179.—*Title:* PALMOLIVE BEADS. For Palmolive Beads Soap. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Published January 15, 1931.

13,180.—*Title:* COLUMBIA STEEL EQUIPMENT CO. For Steel Filing Cabinets. COLUMBIA STEEL EQUIPMENT CO., Philadelphia, Pa. Published December 1, 1930.

13,181.—*Title:* THE FARM FOR US . . . EVERY TIME. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published March 5, 1931.

13,182.—*Title:* "WHO'D TRADE THIS FOR THE CITY?" For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published April 5, 1931.

13,183.—*Title:* "THERE STOOD BILLY." For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published April 5, 1931.

13,184.—*Title:* "THEY'LL BE FINE, STRONG MEN." For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published April 10, 1931.

13,185.—*Title:* "CITY LIFE? NOT ME!" For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published February 5, 1931.

13,186.—*Title:* HERE IT IS! HA-KOL RELIEVES HEADACHES EXTERNALLY. For an External Preparation for Relieving Headaches. DAGGETT & RAMSDELL, New York, N. Y. Published March 15, 1930.

13,187.—*Title:* IT MAKES A DIFFERENCE WHEN YOU BUY FROM THE MAKER. For Fur Coats. I. J. FOX, INC., New York, N. Y. Published July 18, 1930.

13,188.—*Title:* A WHOLE MEAL IN ITSELF DELIGHTFULLY GOOD . . . SO INEXPENSIVE. For Cooked Spaghetti in Tomato Sauce With Cheese. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published April 4, 1931.

13,189.—*Title:* THE BATH OF BEAUTY. For Starch Powder. THE HUBINGER COMPANY, Keokuk, Iowa. Published March 2, 1931.

13,190.—*Title:* "PAPER IS THE BASE OF THE JOB". For Paper. INTERNATIONAL PAPER COMPANY, New York, N. Y. Published January 15, 1931.

13,191.—*Title:* PAPER IS THE BASE OF THE JOB. For Paper. INTERNATIONAL PAPER COMPANY, New York, N. Y. Published January 15, 1931.

13,192.—*Title:* "PAPER IS THE BASE OF THE JOB". For Paper. INTERNATIONAL PAPER COMPANY, New York, N. Y. Published January 15, 1931.

13,193.—*Title:* BLACK AND WHITE. For Cigars. NATIONAL CIGAR STANDS COMPANY, New York, N. Y. Published February 20, 1931.

13,194.—*Title:* PARVA BUCKLE. For Buckles for Overalls and the Like. PARVA PRODUCTS COMPANY, Wilmington, Del. Published January 9, 1931.

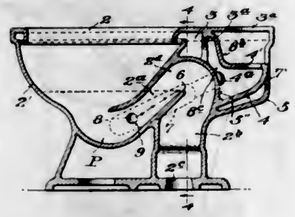
13,195.—*Title:* LIBBY'S PINEAPPLE. For Canned Pineapple. STEMAR DISPLAYS COMPANY, Chicago, Ill. Published February 1, 1931.

13,196.—*Title:* TAYLOR & SLEDD, INC., SERVICE. For Canned Herring, Canned Herring Roe, Canned Tomato Juice, Canned Fruit for Salad, Etc. TAYLOR & SLEDD, INC., Richmond, Va. Published October 25, 1930.

REISSUES

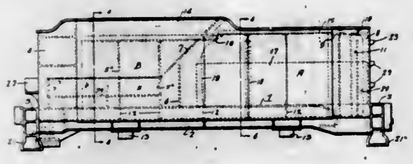
MAY 12, 1931

18,065. WATER CLOSET BOWL. BERT O. TILDEN, Trenton, N. J., assignor to B. O. T. Mfg. Co., Trenton, N. J., a Corporation of New Jersey. Original No. 1,748,197, dated Feb. 25, 1930, Serial No. 399,836, filed Oct. 15, 1929. Application for reissue filed Sept. 30, 1930. Serial No. 485,541. 12 Claims. (Cl. 4—73.)



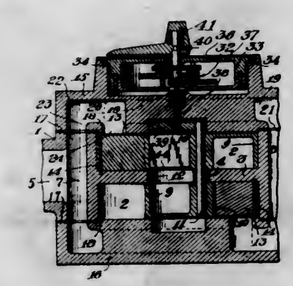
1. A siphon jet water closet bowl having a flushing rim and up and down legs to discharge the contents of the bowl, a hollow rib molded to a lateral wall common to said legs, said wall having a jet opening within the up-leg above the plane of the well of the bowl, and a rib of smaller caliber disposed within the larger rib adapted to discharge the water received from the larger rib through said opening and towards the top of the up-leg to initiate the siphon action of the bowl.

18,066. TENDER. ELMER E. HICKEN, Collingswood, N. J. Original No. 1,734,808, dated Nov. 5, 1929, Serial No. 336,167, filed Jan. 30, 1929. Application for reissue filed Mar. 25, 1931. Serial No. 525,284. 17 Claims. (Cl. 105—231.)



14. A locomotive tender underframe, including a stoker conveyor trough integral therewith.

18,067. METER. MEAD CORNELL, San Francisco, Calif., assignor, by mesne assignments, to The Merrill Company, San Francisco, Calif., a Corporation of California. Original No. 1,753,552, dated Apr. 8, 1930, Serial No. 363,016, filed May 14, 1929. Application for reissue filed June 10, 1930. Serial No. 460,241. 11 Claims. (Cl. 73—37.)



1. A meter for measuring fluids passing therethrough under pressure comprising a meter casing provided with a circular piston chamber, a piston within the chamber and of a diameter less than that of the chamber to permit a gyrating of the piston within said chamber, a ring bearing mounted for rotation centrally of said chamber, a connection between said ring and said piston, said connection being eccentric of the ring and axially of the piston, said piston being radially slotted, a bridge plate disposed vertically within the chamber and extending into said slot, said plate at its outer end fulcrumed to swing on a vertical axis, indicator mechanism operated by the movement of said piston, said casing provided with fluid inlet and outlet ports communicating with said chamber, one at each side of said bridge, said piston affording a valve for controlling the opening and closing of said ports.

18,068. METHOD OF ORNAMENTING TOY BALLOONS. ARTHUR P. WITTEN, Akron, Ohio, assignor to George E. Hall and himself, Akron, Ohio. Original No. 1,762,603, dated June 10, 1930, Serial No. 346,835, filed Mar. 14, 1929. Application for reissue filed Dec. 31, 1930. Serial No. 505,918. 8 Claims. (Cl. 8—5.)

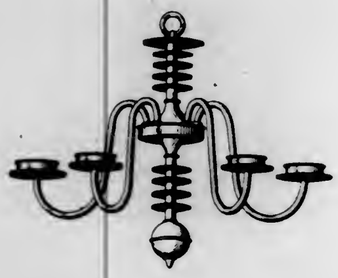


1. That method of ornamenting thin rubber articles which comprises haphazardly gathering a plurality of the articles, packing the same in an enclosed space, and subjecting the same while so confined to a bath of colored solution.

DESIGNS

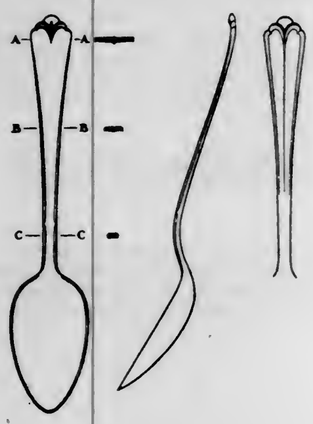
MAY 12, 1931

84,126. CHANDELIER FRAME. HARRY AGLOW, Philadelphia, Pa., assignor to Gill Glass & Fixture Company, a Corporation of Delaware. Filed Jan. 19, 1931. Serial No. 38,383. Term of patent 3½ years.



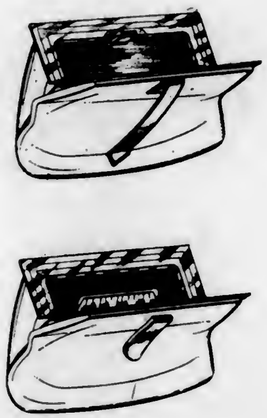
The ornamental design for a chandelier frame substantially as shown.

84,127. SPOON OR SIMILAR ARTICLE. PERCY B. BALL, Attleboro, Mass., assignor to The Watson Company, Attleboro, Mass. Filed Jan. 24, 1931. Serial No. 38,437. Term of patent 7 years.



The ornamental design for a spoon or similar article, substantially as shown.

84,128. LADY'S HAND BAG. MAX BERKOWITZ, Richmond Hill, N. Y. Filed Feb. 2, 1931. Serial No. 38,524. Term of patent 7 years.



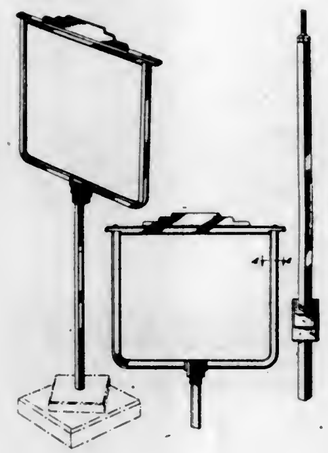
The ornamental design for a lady's handbag substantially as shown.

84,129. STORE FRONT OR THE LIKE. TRUMAN B. BUCHANAN, Denver, Colo. Filed Nov. 20, 1930. Serial No. 37,735. Term of patent 14 years.



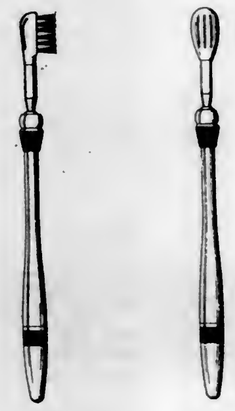
The ornamental design for a store front or the like, as shown.

84,130. SIGN DISPLAY STAND. FREDERIC D. COURTENAY, Short Hills, N. J., assignor to Embosograf Corporation of America, New York, N. Y., a Corporation of New York. Filed Nov. 22, 1930. Serial No. 37,759. Term of patent 7 years.



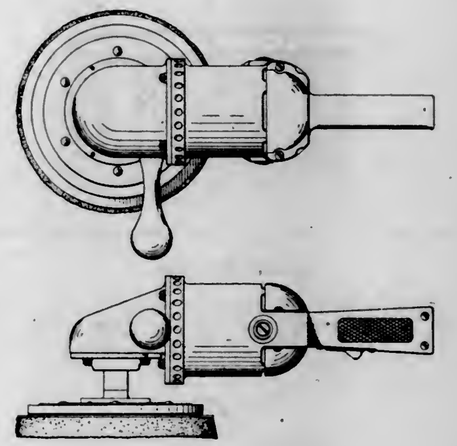
The ornamental design for a sign display stand substantially as shown.

84,131. ASEPTIC TOOTHBRUSH. ALBERT D'AYRENX, CASIMIR CÈPÈDE, and LOUIS RATORÉ, Paris, France. Filed July 12, 1930. Serial No. 36,340. Term of patent 3½ years.



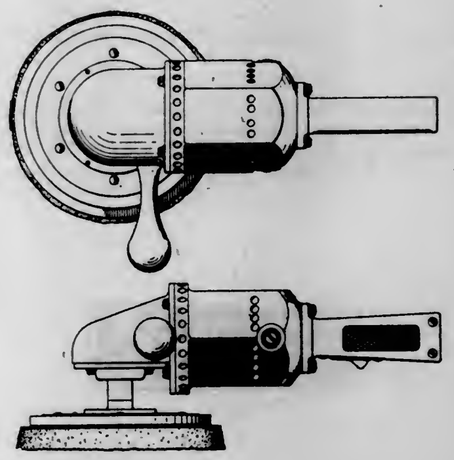
The ornamental design for an aseptic tooth brush, as shown.

84,132. CASING FOR A PORTABLE ELECTRIC POLISHER. ALONZO G. DECKER, Towson Heights, Md., assignor to The Van Dorn Electric Tool Company, Towson, Md., a Corporation of Ohio. Filed June 26, 1930. Serial No. 36,182. Term of patent 7 years.



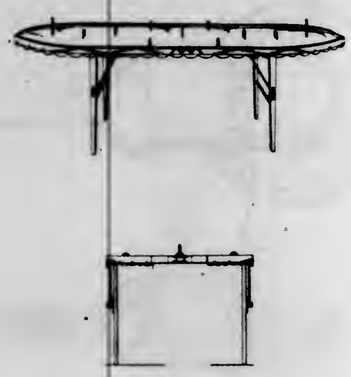
The ornamental design for a casing for a portable electric polisher as shown.

84,133. CASING FOR A PORTABLE ELECTRIC POLISHER. ALONZO GALLOWAY DECKER, Towson Heights, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed June 26, 1930. Serial No. 36,183. Term of patent 7 years.



The ornamental design for a casing for a portable electric polisher, as shown.

84,134. CROQUET TABLE. LESLIE L. DICKERMAN, East Granville, Vt. Filed Feb. 7, 1931. Serial No. 38,585. Term of patent 7 years.



The ornamental design for a croquet table, as shown.

84,135. SWEATER OR ARTICLE OF SIMILAR NATURE. AUGUST EGERER, Great Neck, N. Y. Filed May 13, 1930. Serial No. 35,633. Term of patent 3½ years.



The ornamental design for a sweater or article of similar nature, substantially as shown.

84,136. SWEATER OR ARTICLE OF SIMILAR NATURE. AUGUST EGERER, Great Neck, N. Y. Filed May 13, 1930. Serial No. 35,634. Term of patent 3½ years.



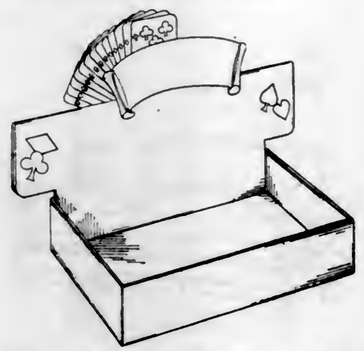
The ornamental design for a sweater or article of similar nature, substantially as shown.

84,137. SWEATER OR ARTICLE OF SIMILAR NATURE. AUGUST EGERER, Great Neck, N. Y. Filed May 13, 1930. Serial No. 35,635. Term of patent 3½ years.



The ornamental design for a sweater or article of similar nature, substantially as shown.

84,138. CARTON. ARTHUR EHRENFELD, New York, N. Y., assignor to Francis H. Leggett and Company, Inc., a Corporation of New York. Filed Feb. 11, 1931. Serial No. 38,619. Term of patent 14 years.



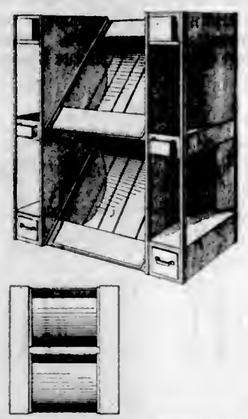
The ornamental design for a carton, as shown and described.

84,139. CLIP FOR A FOUNTAIN PEN OR SIMILAR ARTICLE. MONROE GOLD, Brooklyn, N. Y. Filed Dec. 12, 1930. Serial No. 37,951. Term of patent 7 years.



The ornamental design for a clip for a fountain pen or similar article substantially as shown.

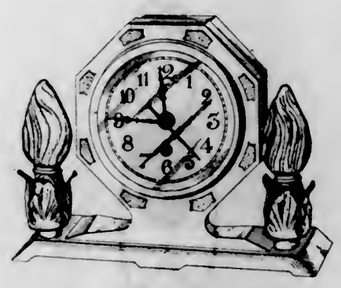
84,140. DISPLAY CABINET. CHESTER A. GRAINGER, Cynwyd, Pa., assignor to Allbestos Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 19, 1931. Serial No. 39,141. Term of patent 7 years.



The ornamental design for a display cabinet, substantially as shown.

406 O. G.—22

84,141. CLOCK LAMP. STANLEY M. HALLAM, Milwaukee, Wis. Filed Oct. 4, 1930. Serial No. 37,135. Term of patent 3½ years.



The ornamental design for a clock lamp, as shown and described.

84,142. CLOCK LAMP. STANLEY M. HALLAM, Milwaukee, Wis. Filed Oct. 4, 1930. Serial No. 37,136. Term of patent 3½ years.



The ornamental design for a clock lamp, as shown and described.

84,143. CHAIR. GEORGE H. HAMILTON, East Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Mar. 19, 1931. Serial No. 39,145. Term of patent 3½ years.



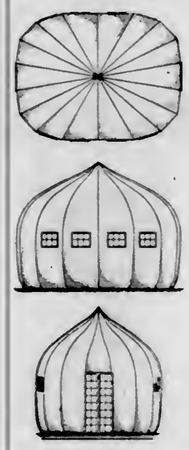
The ornamental design for a chair, substantially as shown.

84,144. SHOE. WILLIAM OSCAR JOHNSON, Denver, Colo. Filed Oct. 7, 1929. Serial No. 32,962. Term of patent 7 years.



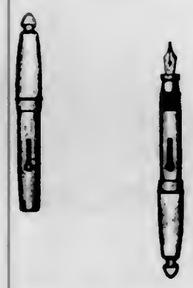
The ornamental design for a shoe, as shown and described.

84,145. BUILDING. ERNEST JOHNSTON, Loveland, Colo. Filed Mar. 16, 1931. Serial No. 39,101. Term of patent 14 years.



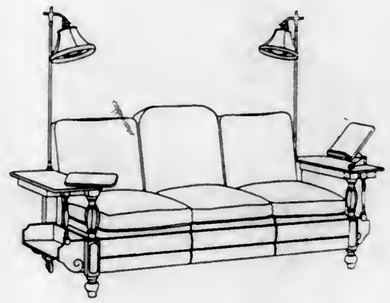
The ornamental design for a building substantially as shown.

84,146. FOUNTAIN PEN. DAVID KAHN, Woodcliff, N. J. Filed Aug. 20, 1930. Serial No. 36,707. Term of patent 14 years.



The ornamental design for a fountain pen, substantially as shown.

84,147. SETTEE WITH READING AND WRITING ATTACHMENTS. EDWIN O. KLEMM, Saginaw, Mich. Filed Jan. 20, 1931. Serial No. 38,397. Term of patent 14 years.



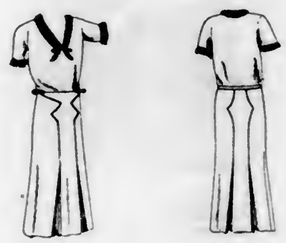
The ornamental design for a settee with reading and writing attachments, substantially as shown.

84,148. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 24, 1931. Serial No. 38,806. Term of patent 3½ years.



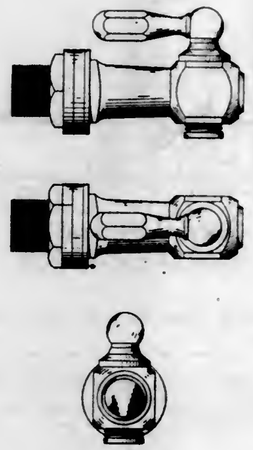
The ornamental design for a dress substantially as shown.

84,149. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 24, 1931. Serial No. 38,807. Term of patent 3½ years.



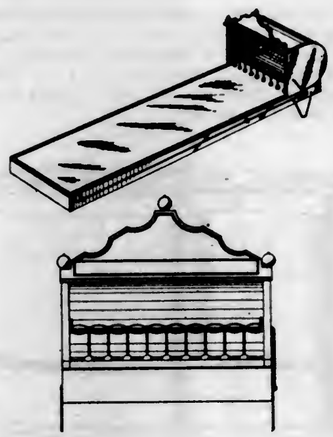
The ornamental design for a dress substantially as shown.

84,150. BEVERAGE FAUCET. CARROL A. LOOK, Los Angeles, Calif. Filed Feb. 13, 1931. Serial No. 38,647. Term of patent 3½ years.



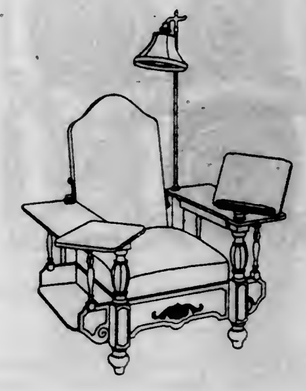
The ornamental design for a beverage faucet, as shown.

84,151. GAME BOARD. HILDEBURN MARTIN, Circleville, Ohio. Filed Feb. 11, 1931. Serial No. 38,612. Term of patent 3½ years.



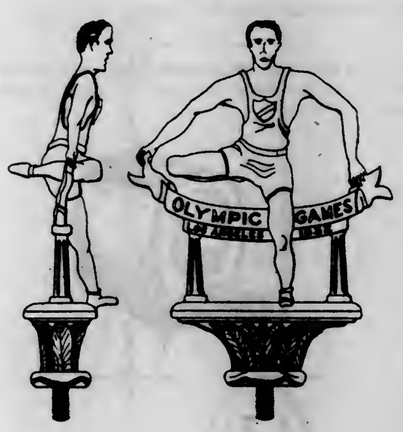
The ornamental design for a game board, as shown.

84,152. READING CHAIR. EDWIN O. KLEMM and KARL R. OTTO, Saginaw, Mich. Filed Jan. 19, 1931. Serial No. 38,351. Term of patent 14 years.



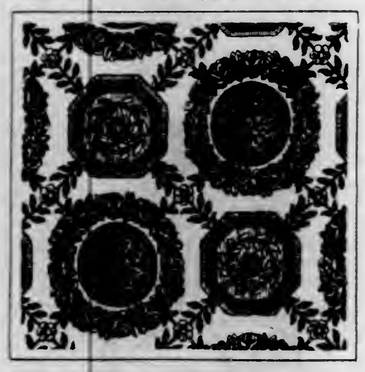
The ornamental design for a reading chair, substantially as shown.

84,153. AUTOMOBILE RADIATOR CAP. ABRAHAM KUPLAN, Los Angeles, Calif., assignor of one-half to Abraham W. Klachko, Los Angeles, Calif. Filed Mar. 14, 1931. Serial No. 39,082. Term of patent 3½ years.



The ornamental design for an automobile radiator cap, as shown.

84,154. CARPET. HENRY C. LA COUTURE, Hudson County, N. J., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Feb. 18, 1931. Serial No. 38,718. Term of patent 7 years.



The ornamental design for a carpet substantially as shown.

84,155. BOOK END. ALLINE M. LYNCH, Bloomfield, N. J. Filed Mar. 10, 1931. Serial No. 39,013. Term of patent 7 years.



The ornamental design for a book end as shown.

84,156. OVEN. JOHN MCCARTHY, Hollywood, Calif. Filed Mar. 24, 1930. Serial No. 35,013. Term of patent 14 years.



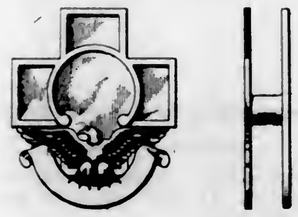
The ornamental design for an oven as shown.

84,157. STATUETTE. IRENE MCHUGH, Seattle, Wash. Filed Mar. 14, 1931. Serial No. 39,084. Term of patent 3½ years.



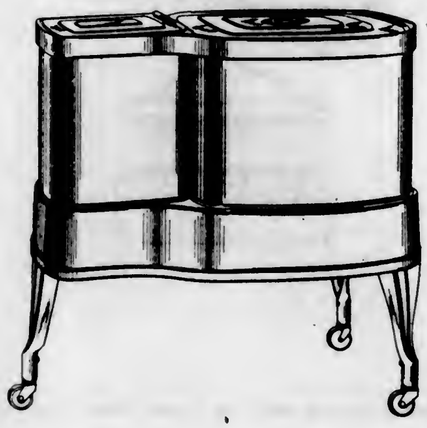
The ornamental design for a statuette, as shown.

84,158. FRATERNAL LAPEL BUTTON. JAMES J. MURPHY, Washington, D. C. Filed Oct. 11, 1930. Serial No. 37,227. Term of patent 14 years.

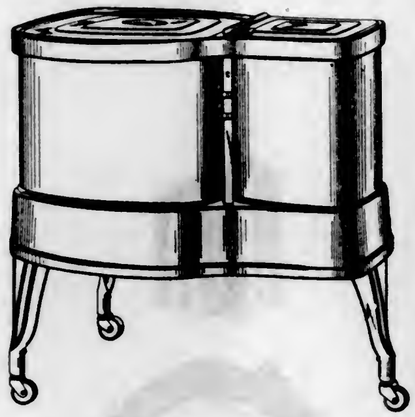


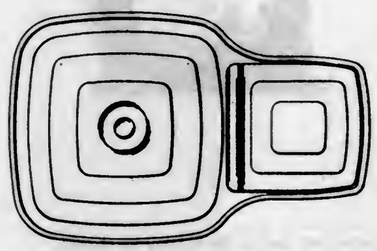
The ornamental design for a fraternal lapel button, as shown and described.

84,159. CASING FOR A COMBINED CLOTHES WASHER AND DRIER. JABEZ C. NELSON and WALTER A. PAPWORTH, Syracuse, N. Y., assignors to Syracuse Washing Machine Corporation, Syracuse, N. Y., a Corporation of Delaware. Filed Feb. 6, 1931. Serial No. 38,576. Term of patent 14 years.



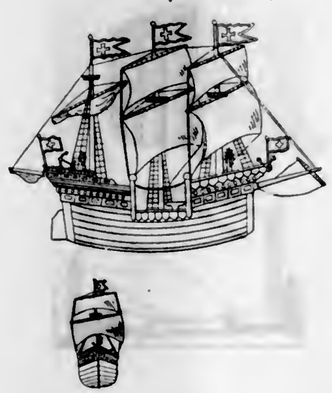
84,159—Continued.





The ornamental design for a casing for a combined clothes washer and drier substantially as shown.

84,160. ORNAMENTAL SHIP. JOHN NOWAKOWSKI, Detroit, Mich. Filed Feb. 10, 1931. Serial No. 38,604. Term of patent 3½ years.



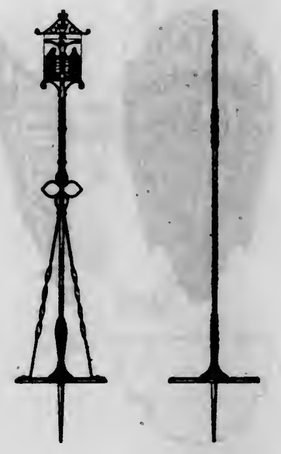
The ornamental design for an ornamental ship as shown.

84,161. BOTTLE OR SIMILAR CONTAINER. FRANK B. PUTT, Meadowbrook, Pa., assignor to Brandle & Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar 12, 1931. Serial No. 39,049. Term of patent 14 years.



The ornamental design for a bottle or similar container, as shown.

84,162. DEVICE FOR DESIGNATING A PLACE OF WORSHIP. JOHN E. RIGALI, Chicago, Ill., assignor to Daprato Statuary Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 13, 1931. Serial No. 38,643. Term of patent 14 years.



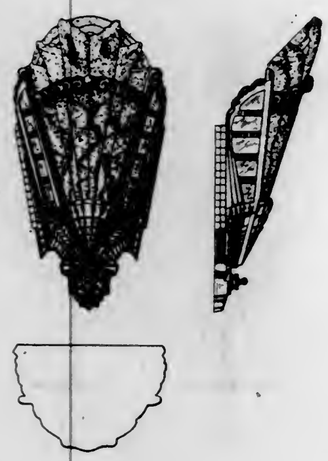
The ornamental design for a device for designating a place of worship substantially as shown.

84,163. BOTTLE. BENJAMIN T. ROBERTS, Chicago, Ill., assignor to Illinois Cosmetics Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 30, 1930. Serial No. 36,829. Term of patent 3½ years.



The ornamental design for a bottle, as shown.

84,164. LIGHTING FIXTURE BRACKET OR ARTICLE OF SIMILAR NATURE. FREDERICK W. ROETTGES, New York, N. Y., assignor to Lighting Appliance Company, Inc., New York, N. Y. Filed Aug. 8, 1930. Serial No. 36,610. Term of patent 3½ years.



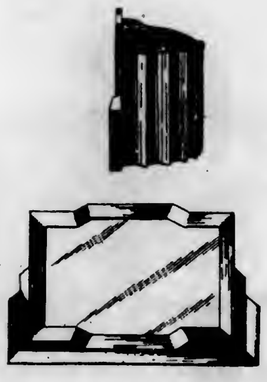
The ornamental design for a lighting fixture bracket, or article of similar nature, as shown.

84,165. LAMP. ALBERT SABATH, Chicago, Ill., assignor to Scene-in-Action Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 2, 1931. Serial No. 38,897. Term of patent 7 years.



The ornamental design for a lamp as shown.

84,166. LAMP. ALBERT SABATH, Chicago, Ill., assignor to Scene-in-Action Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 2, 1931. Serial No. 38,898. Term of patent 7 years.



The ornamental design for a lamp as shown.

84,167. LAMP. ALBERT SABATH, Chicago, Ill., assignor to Scene-in-Action Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 2, 1931. Serial No. 38,899. Term of patent 7 years.



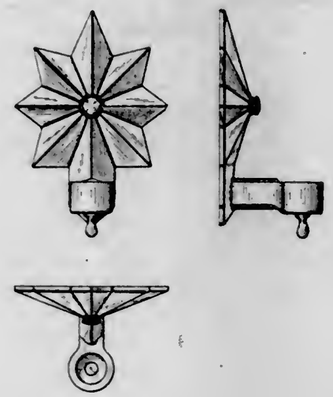
The ornamental design for a lamp, as shown.

84,168. CANOPY FOR FUNERALS. EDWARD F. SCHULTZ, Chicago, Ill. Filed Dec. 15, 1930. Serial No. 38,003. Term of patent 14 years.



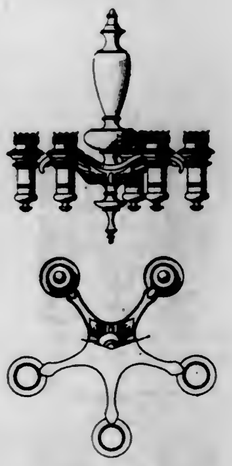
The ornamental design for a canopy for funerals as shown.

84,169. LIGHTING FIXTURE OR ARTICLE OF SIMILAR NATURE. WALTER VON NESSEN, New York, N. Y., assignor to Efcolite Corporation, Trenton, N. J. Filed Mar. 21, 1931. Serial No. 39,190. Term of patent 7 years.



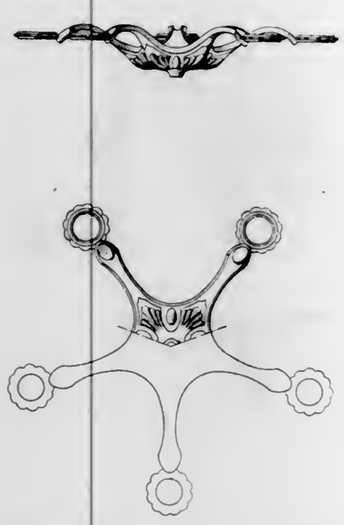
The ornamental design for a lighting fixture, or article of similar nature, as shown.

84,170. CHANDELIER. ERNEST A. WALKER, Newark, N. J., assignor to David Tunick, Newark, N. J., and Benjamin M. Reznik, Caldwell, N. J. Filed Mar. 23, 1931. Serial No. 39,212. Term of patent 7 years.



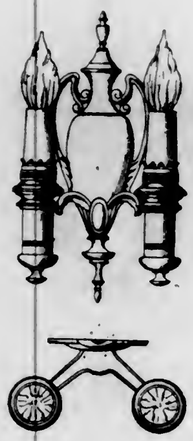
The ornamental design for a chandelier substantially as shown and described.

84,171. LIGHTING FIXTURE BODY OR ARTICLE OF ANALOGOUS NATURE. ERNEST A. WALKER, Newark, N. J., assignor to David Tunick, Newark, N. J., and Benjamin M. Reznik, Caldwell, N. J. Filed Mar. 23, 1931. Serial No. 39,213. Term of patent 7 years.



The ornamental design for a lighting fixture body or article of analogous nature substantially as shown and described.

84,172. WALL BRACKET OR ARTICLE OF ANALOGOUS NATURE. ERNEST A. WALKER, Newark, N. J., assignor to David Tunick, Newark, N. J., and Benjamin M. Reznik, Caldwell, N. J. Filed Mar. 23, 1931. Serial No. 39,214. Term of patent 7 years.



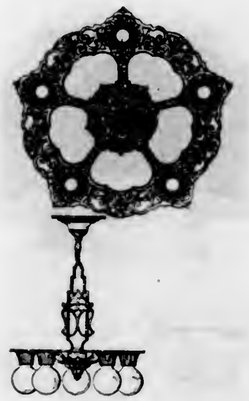
The ornamental design for a wall bracket or article of analogous nature substantially as shown.

84,173. BACK PLATE FOR WALL BRACKETS OR ARTICLES OF ANALOGOUS NATURE. ERNEST A. WALKER, Newark, N. J., assignor to David Tunick, Newark, N. J., and Benjamin M. Reznik, Caldwell, N. J. Filed Mar. 23, 1931. Serial No. 39,215. Term of patent 7 years.



The ornamental design for a back plate for wall brackets or articles of analogous nature substantially as shown.

84,174. LIGHTING FIXTURE. CLARENCE G. WING, Cleveland, Ohio, assignor to John C. Virden Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 19, 1931. Serial No. 38,731. Term of patent 3½ years.

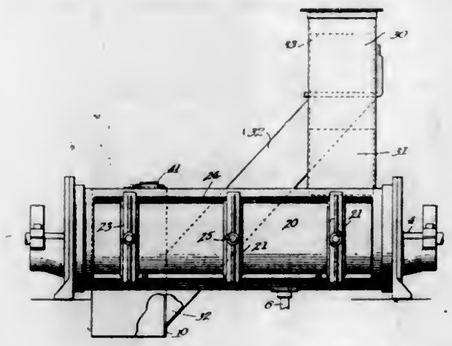


The ornamental design for a lighting fixture, as shown.

PATENTS

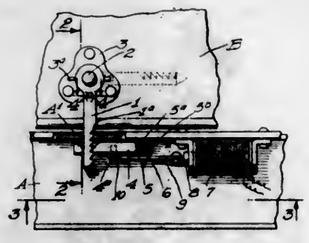
GRANTED MAY 12, 1931

1,804,386. FEED MIXER. GEORGE M. AGEE, Des Moines, Iowa. Filed July 11, 1929. Serial No. 377,466. 5 Claims. (Cl. 259—9.)



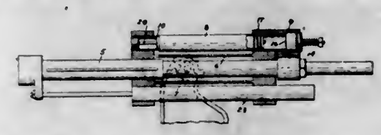
1. An apparatus for preparing feed for live stock comprising an elongated receptacle, of substantially cylindrical form in cross section and having a grain inlet and a mixture outlet, located respectively adjacent opposite ends, an aperture being provided in the side of the receptacle and extending throughout the major portion of the length thereof, a detachable closure plate positioned over said aperture, and adjustable means engaging the receptacle at opposite sides of the aperture and the plate between the edges of the aperture for holding said plate in position.

1,804,387. AUTOMOBILE HOOD LOCK. BENJAMIN L. DORSEY and THOMAS S. INGERSOLL, Los Angeles, Calif., assignors, by direct and mesne assignments, to Ingersoll Magnetic Lock Company, Los Angeles, Calif., a Corporation of California. Filed Aug. 11, 1928. Serial No. 298,936. 7 Claims. (Cl. 70—50.)



1. In a means of the class described, the combination with the main frame of an automobile, having a vertical hole therein, and an engine hood of the automobile, of a locking member mounted on said hood immediately at the inner side thereof and substantially parallel thereto and extending through the hole in said frame and provided with a plurality of longitudinally spaced notches, and a latch member shiftably mounted against the under side of said frame at one side of the opening, adapted to engage said locking member in one of said notches.

1,804,388. VARIABLE RECOIL MECHANISM FOR GUNS. THOMAS A. CONLON, Silver Spring, Md. Filed Oct. 28, 1929. Serial No. 403,077. 4 Claims. (Cl. 89—43.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

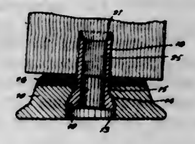


4. A cradle, a gun reciprocally mounted thereon, a recoil mechanism embodying relatively movable parts, means for admitting gases of discharge to said mechanism to check recoil and restore the gun to battery, and means for regulating the volume of the utilized gases.

1,804,389. DELINEATED AREA. CARLETON ELLIS, Montclair, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Oct. 15, 1924, Serial No. 743,782. Renewed July 24, 1929. 3 Claims. (Cl. 94—1.5.)

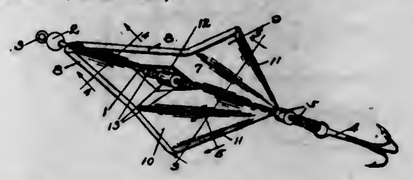
3. A delineated area of the highway having cavities filled with an oxychloride cement.

1,804,390. FURNITURE REST OR SHOE. WALTER F. HEROLD, Upper Montclair, N. J., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 19, 1929. Serial No. 333,581. 3 Claims. (Cl. 16—42.)



1. A furniture rest, comprising a floor engaging base having an opening extending therethrough from top to bottom, resilient means disposed at the upper side of said base having a central aperture in line with the opening of said base adapted to be interposed between the furniture leg and the base to permit relative tilting movement between them, and attaching means comprising a lower portion loosely engaged in said opening of the base, an intermediate portion having means interlockingly secured in said aperture of the resilient means, and an upper portion adapted to be driven into the furniture leg by blows directly applied to said lower portion.

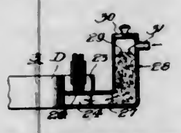
1,804,391. FISH LURE. ALBIN ABRAHAMS, Spokane, Wash. Filed Aug. 26, 1929. Serial No. 388,298. 2 Claims. (Cl. 43—45.)



2. In a fish lure the combination with a stem, of a substantially diamond shaped spinner fashioned from two flat

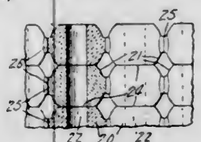
plates of material having contrasting colors, one of the plates having edge flanges to overlap the other plate, a pair of opposed, perpendicular screw-blades fashioned at the rear portion of the spinner, the edges of the blades being disposed at angles to the axis of the spinner, and the front edges of the blades forming substantial continuations of the front edges of the spinner.

1,804,392. METHOD OF BINDING BOOKS. HARLEY C. ALGER and PHILIP A. FRAZIER, Chicago, Ill., assignors to R. R. Donnelley & Sons Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 26, 1928. Serial No. 321,818. 12 Claims. (Cl. 11—1.)



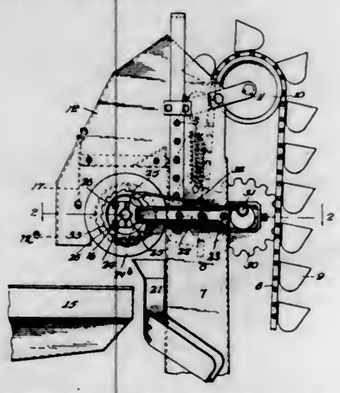
1. The method of binding books comprising applying a relatively thin glue to the back of the book, chilling said back and glue, and applying a coating of heavier glue to the back after the first glue is chilled.

1,804,393. HEAT RECUPERATOR OR REGENERATOR STRUCTURE. VERNE W. AUBEL, Buffalo, N. Y., and JOHN B. FITZ-GIBBON, Bridgeburg, Ontario, Canada. Filed Mar. 23, 1927. Serial No. 177,586. 11 Claims. (Cl. 72—15.5.)



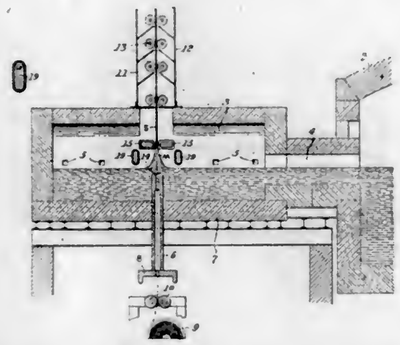
1. A unit for use in the construction of heat interchange structures for recuperative and regenerative ovens, said unit having a series of faces formed to engage with corresponding faces of adjacent units to form a column of units, said faces being joined by outwardly extending portions adapted to contact with corresponding portions of units in adjacent columns at portions only of their lengths to permit gases to flow both lengthwise and crosswise of said columns.

1,804,394. MACHINE FOR HANDLING MOLDING SAND. ELMER O. BEARDSLEY, Chicago, Ill., assignor to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1928. Serial No. 311,115. 6 Claims. (Cl. 209—215.)



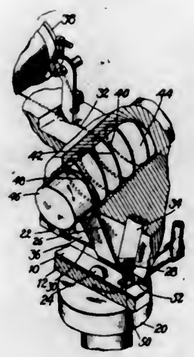
1. In a machine for handling molding sand, the combination of a conveyor comprising an endless chain and buckets, a magnetic separator comprising a rotatable drum to which the sand is delivered by the buckets, and a stationary magnet in the drum, and mechanism for intermittently operating the drum to discharge separately scrap or metal mixed with the sand, comprising a sprocket-wheel engaging and driven by the chain.

1,804,395. MANUFACTURE OF REENFORCED GLASS. WALTER J. BLENKO, Pittsburgh, Pa., assignor to Clarence P. Byrnes, Sewickley, Pa., as trustee. Filed July 3, 1929. Serial No. 375,803. 5 Claims. (Cl. 49—17.)



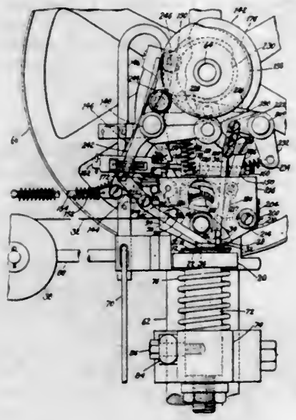
5. Apparatus for making reenforced glass comprising a bath of molten glass, a guide extending upwardly through the bath and adapted for the feeding of a reinforcing material therethrough, the guide terminating below the surface of the glass whereby as the reinforcement rises upwardly glass adheres thereto and forms a meniscus, means for drawing the formed glass upwardly, shaping dies having initial sliding contact with the meniscus, and means for cooling the dies.

1,804,396. METHOD OF INSERTING FASTENINGS. MICHAEL F. BROGAN, Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 3, 1929. Serial No. 368,059. 17 Claims. (Cl. 1—1.)



1. That improvement in methods of inserting fastenings which comprises forcing a piece of wire into a piece of stock without previously forming a fastening-receiving hole and deflecting the wire as it enters the stock thereby causing it to emerge from the stock upon the side from which it entered.

1,804,397. FASTENING INSERTING MACHINE. MICHAEL F. BROGAN, Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 3, 1929. Serial No. 368,060. 36 Claims. (Cl. 1—1.)

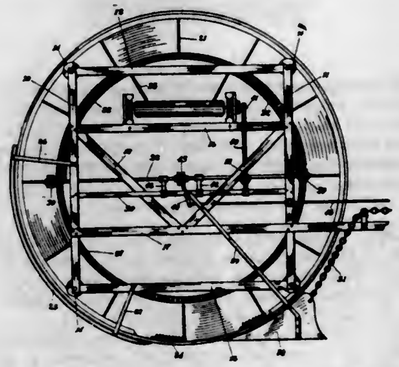


1. A fastening inserting machine having, in combination, means for driving a single piece of wire into a piece of stock, and means for deflecting the wire as it enters the stock formed and arranged to cause the wire to emerge from the stock upon the side from which it entered.

1,804,398. ALDEHYDE-AMINE CONDENSATION PRODUCTS AND PROCESS OF PREPARING SAME. SIDNEY M. CADWELL, Leonia, N. J., and ALEXANDER THEODOROVICH MAXIMOFF, New York, N. Y., assignors to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Oct. 15, 1925. Serial No. 62,655. 42 Claims. (Cl. 260—130.)
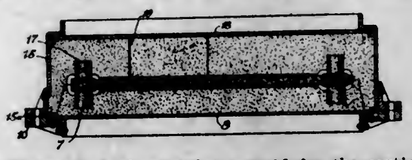
2. A method of making condensation products for the acceleration of vulcanization in rubber, which comprises causing an aldehyde and a basic nitrogenous material to substantially initially and continuously react with each other at temperatures between 100° C. and 200° C., one of said ingredients being gradually added to the other.

1,804,399. ELEVATING GRADER. PERRY C. COLE, Clay Center, Kans. Filed Oct. 7, 1929. Serial No. 398,079½. 2 Claims. (Cl. 37—112.)



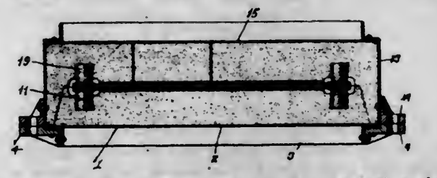
1. An elevating grader comprising a drum, a ring gear carried by said drum, a shaft having two spaced-apart pinions adapted to mesh with said ring gear at different times, a transverse conveyor slidably mounted in the upper portion of the drum, means operably connecting said shaft and said conveyor for driving the latter, and means carried by said shaft for moving said pinions selectively into and out of mesh with said ring gear.

1,804,400. METHOD OF MOLDING. VERNON J. DAVIS, Buffalo, N. Y. Filed Aug. 19, 1927, Serial No. 214,057. Renewed May 17, 1930. 11 Claims. (Cl. 22—193.)



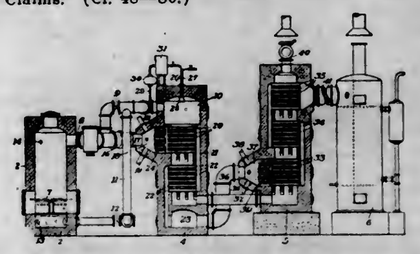
1. The method of preparing a mold for the casting of hollow bodies in which patterns are used for the formation of the mold sections and which consists in suitably positioning structurally independent baked end cores composed of core sand upon said patterns, forming the cope and drag sections of the mold by packing the mold sand upon the respective patterns and about the end cores whereby when the mold sections are removed from the patterns they will carry said end cores in projecting relation to the mold surfaces, removing the mold sections from the patterns, placing a baked body core composed of core sand upon the end cores of the drag section, and fitting the cope section upon the drag section with the end cores of the cope section engaging the body core.

1,804,401. MOLDING APPARATUS AND EQUIPMENT FOR FORMING THE SAME. VERNON J. DAVIS, Buffalo, N. Y. Filed Jan. 11, 1928. Serial No. 245,977. 15 Claims. (Cl. 22—131.)



10. A mold including a cope section, a cope flask enclosing said section, the parting face being formed to provide a chamber the horizontal face of which is formed to provide a molding surface, a drag section having a cooperating molding surface and adapted to fit closely within the scope section when the two sections are assembled thereby to provide a casting space outlined entirely within the cope section and substantially displaced from the plane of the joint line of the cope and drag sections, and a drag plate supporting the drag section and upon which the cope flask rests.

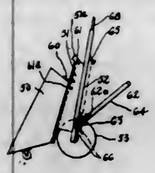
1,804,402. ENRICHING GAS. EDWARD A. DIETERLE, Glenellyn, Ill. Filed Jan. 19, 1924. Serial No. 687,221. 3 Claims. (Cl. 48—80.)



2. Apparatus for enriching a gas, comprising a carbureting chamber, a metallic heater in the carbureting

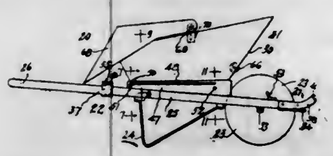
chamber, a combustion chamber for the heater, and a flame shielding means between the combustion chamber and heater, substantially as described.

1,804,403. LOADING WHEELBARROW. FRANCIS J. DOWLING, New York, N. Y. Filed Mar. 5, 1928. Serial No. 259,178. 23 Claims. (Cl. 37—130.)



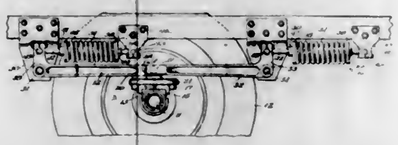
1. A wheelbarrow including a body normally disposed in substantially horizontal position, supporting means for the body having a wheel at the forward end thereof, and guide means co-acting with the body and the supporting means for forward movement of the body at an angle to the supporting means and away therefrom to cause the body to pass in the same general direction over the said wheel, for a digging position of the body when the wheelbarrow is upturned on its forward end, said body moving backward with the aid of gravity on bringing the wheelbarrow back to substantially horizontal position.

1,804,404. WHEELED CARRIER. FRANCIS J. DOWLING, New York, N. Y. Filed Apr. 13, 1929. Serial No. 354,783. 31 Claims. (Cl. 37—130.)



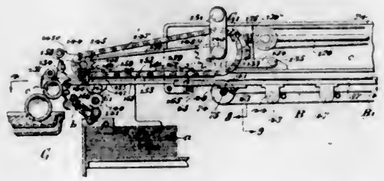
16. A carrier including a frame having a wheel adjacent to the front end thereof and manually manipulated at the rear end thereof, said frame being approximately horizontal, and means on the frame supporting the trough for forward movement therealong, said trough having an oblique front digging wall, said means having pivotal engagement with the frame to swing frontward and bring the front end of the trough in front of the wheel, whereby, in the pivotally upturned position of the trough, the said front digging wall approaches a position of approximate parallelism to the ground and in relatively close proximity thereto, means to releasably lock the trough in digging position with the frame, and the frame including means extending rearward of the trough to cause the said digging wall to be driven into a pile.

1,804,405. SPRING SUSPENSION FOR VEHICLES. WILLIAM C. DUNN, Chicago, Ill. Filed Nov. 16, 1928. Serial No. 319,772. 13 Claims. (Cl. 267—20.)



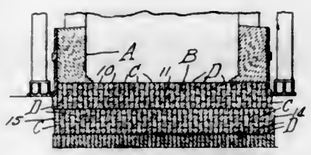
1. In a suspension for vehicles, the combination of a bracket supported by the vehicle, a bell crank lever fulcrumed at its elbow on said bracket and having an upwardly extending arm and a horizontally extending arm, resiliently yielding means disposed between the first recited arm and the vehicle frame for yieldingly resisting the movement of said lever, the forward end of said horizontal arm being disposed adjacent an axle of the vehicle, a member connected with said axle for movement on a vertical axis, and means connecting the end of said horizontal arm with the said member at a point laterally spaced with respect to the axis of said member for movement on an axis intersecting the last said axis.

1,804,406. CONVEYING SYSTEM. THEODORE A. FEDERWITZ and WALTER T. BAILEY, Philadelphia, Pa., assignors to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 21, 1925. Serial No. 70,462. 39 Claims. (Cl. 271—12.)



1. Sheet conveying mechanism comprising sheet gripping mechanism for transporting sheets in succession to one region, and other sheet conveying mechanism timed therewith for effecting sheet delivery from said region to another region comprising structure for pneumatically retaining individual sheets in engagement therewith, one of said conveying mechanisms effecting sheet transportation at a higher velocity than does said other conveying mechanism.

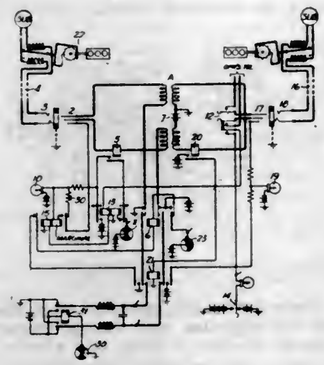
1,804,407. BASE FOR FURNACES, TANKS AND THE LIKE. JOHN B. FITZ-GIBBON, Bridgeburg, Ontario, Canada, assignor of one-half to Drew M. Thorpe, Buffalo, N. Y. Filed Dec. 22, 1927. Serial No. 241,934. 4 Claims. (Cl. 263—46.)



1. A bottom for containers of molten materials, including blocks arranged in series of superposed horizontal courses and said blocks having their sides formed to cooperate with the sides of blocks of an adjacent course for interlocking the blocks of one course with those of another course.

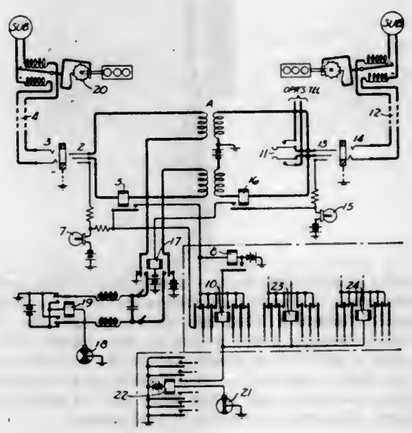
1,804,408. TELEPHONE EXCHANGE SYSTEM. CLARENCE B. FOWLER, Queens Village, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 12, 1930. Serial No. 427,676. 8 Claims. (Cl. 179—12.)

5. In a telephone system, calling lines, called lines, a plurality of connecting circuits for connecting calling lines with called lines, a key in each connecting circuit, meters for said calling lines, means for operating calling line meters while a connection is established, a marginal relay in each connecting circuit, a key common to a plurality of connecting circuits, and means responsive to the



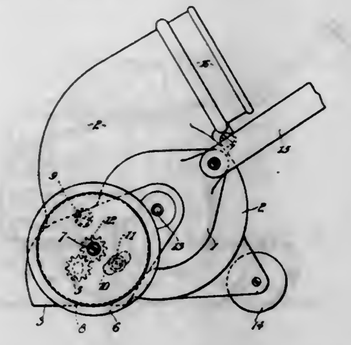
operation of the individual key and the common key for actuating said marginal relay to disable said meter operating means.

1,804,409. TELEPHONE EXCHANGE SYSTEM. CLARENCE B. FOWLER, Queens Village, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 12, 1930. Serial No. 427,677. 7 Claims. (Cl. 179—11.)



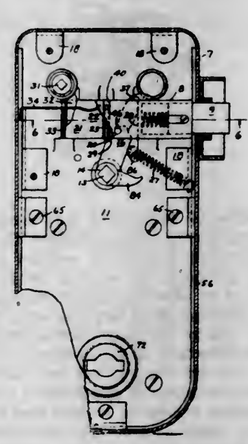
6. In a telephone system, calling lines, called lines, meters for said lines, connecting circuits for connecting a calling line with a called line, a supervisory relay and a signal for each connecting circuit, an interrupter, a battery supply, means controlled by said interrupter for alternately reversing connections from said battery supply to said calling line to operate the meter thereof, means for maintaining said supervisory relay operated in response to the connection from said battery supply when applied to the calling line in one direction or the other, means for maintaining said signal in a non-operated condition in response to the operation of the supervisory relay, another interrupter common to a plurality of connecting circuits for maintaining said signal in non-operated condition, and means for synchronizing said interrupters so that the period of maintaining said signal in non-operated condition by said second interrupter overlaps the period of reversal of current from said battery to the line.

1,804,410. VACUUM CLEANER. WILLIAM JOHNSTON FRAME, London, England. Filed Jan. 14, 1929, Serial No. 332,432, and in Great Britain Feb. 11, 1928. 2 Claims. (Cl. 15—8.)



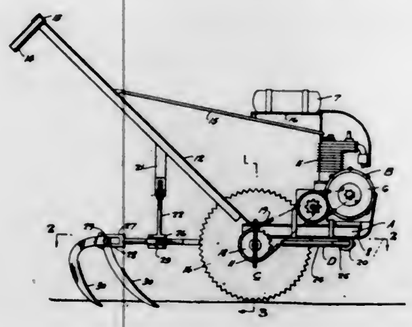
1. A hand operated suction sweeper comprising a fan, a fan casing, a fan spindle whose ends project through the sides of said casing, a pair of floor wheels adapted to drive said spindle by frictional engagement, a pair of plates mounted on the sides of said fan casing and capable of limited pivotal movement, spindles for said floor wheels carried by said plates, a suction floor nozzle, a brush rotatably mounted in said nozzle, said plates constituting bearing supports for the ends of the brush spindle, and gears carried by said floor wheels and meshing continuously with gears mounted at the ends of said brush.

1,804,411. COIN CONTROLLED LOCK. ALPHONSE GABRIEL, Oakland, Calif. Filed May 3, 1927. Serial No. 188,472. 2 Claims. (Cl. 194—74.)



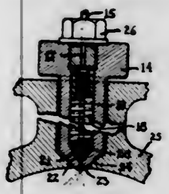
2. In a door lock mechanism, a movable latchplate having a slot therein arranged to receive a coin, means operative to support the coin in its slot and to act through the coin in said slot to retract the bolt, a casing providing an opening for the insertion of said coin into said slot, a normally inoperative closure for said opening arranged to move in the direction of movement of and alongside the latch plate, means on said latchplate for operating said closure for completely closing said opening upon a displacement of said latch plate, detent means for holding the closure in operative position and means operative independently of said first means for effecting a return of said closure means to its inoperative position.

1,804,412. TRACTION FRAME. HAROLD H. GLASIER, Los Angeles, Calif. Filed Mar. 1, 1930. Serial No. 432,410. 10 Claims. (Cl. 97—48.)



1. An agricultural implement having a tractor frame adapted to support the power plant and including guide handles, a tractor wheel carrying said tractor frame; a trailer frame having trace bars connected by a yoke at the front, said yoke having a swinging connection to the front of said tractor frame, and ground working tools at the rear of said trailer frame.

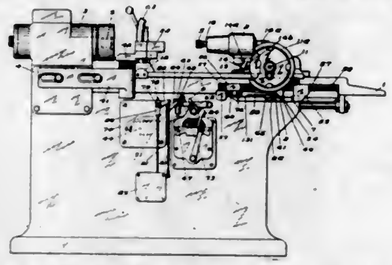
1,804,413. METHOD FOR CONVERTING THE HEAT ENERGY OF FUEL INTO USEFUL WORKING ENERGY. JOSEPH C. GROFF, New York, N. Y. Filed Apr. 26, 1927. Serial No. 186,642. 13 Claims. (Cl. 123—32.)



1. The method of converting heat energy of fuel into useful working energy which consists in compressing a gas or vapor which includes a medium supporting combustion, then gradually introducing the fuel to said compressed gas and in effecting temperature elevation of the fuel by the frictional effect imposed upon the fuel and attendant upon and by this introduction so that the fuel is raised to a temperature of such extent that the fuel will, on account of its own temperature and contained heat and irrespective of the degree of compression of the gas, ignite, and of continuing admission of said fuel while expansion of the burning gases occurs, then discontinuing said admission and further expanding the resultant products of combustion while recovering useful power from said expanding gases.

1,804,414. GRINDING MACHINE. WALDO J. GUILD, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 15, 1927. Serial No. 206,085. 12 Claims. (Cl. 51—50.)

1. In an internal grinding machine, the combination with a grinding wheel, a work holding device, and means for reciprocating one of said parts relative to the other, of a wheel dressing device having a plurality of operative portions in the path of said grinding wheel, means supporting said dressing device which, when actuated, shifts said dressing device from a condition in which it will assume one operative position to a condition in which it will assume another operative position, and automatic means for extending the amplitude of said reciprocation a plurality of times during the operation on a single workpiece, and for actuating said dresser supporting and shifting means, whereby to dress said wheel a plurality of times during said operation from distinctly different positions of said dressing device.

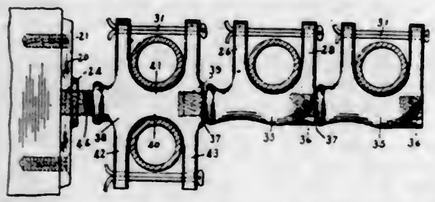


1,804,415. BRUSH. LEONARD LESLIE HALES, Winnipeg, Manitoba, Canada. Filed Sept. 27, 1929, Serial No. 395,555, and in Canada June 14, 1929. 3 Claims. (Cl. 306—20.)



5. In a device for supporting a rod-like article, a member having a stud extending therefrom and adapted to be secured to a support, said member having a pair of spaced apart arms extending laterally from one side thereof in substantially parallel relation and adapted to receive the rod-like member therebetween and support said member on one of said arms, said arms being provided adjacent their free ends with aligned openings and a pin-like member passed through said openings and releasably secured therein to hold the rod-like member in place.

1,804,416. PIPE HANGER FOR ELECTRICAL CONDUITS AND THE LIKE. WILLIAM R. HATHAWAY, New Haven, Conn., assignor to United Advertising Corporation, New Haven, Conn. Filed July 9, 1927. Serial No. 204,578. 5 Claims. (Cl. 248—34.)

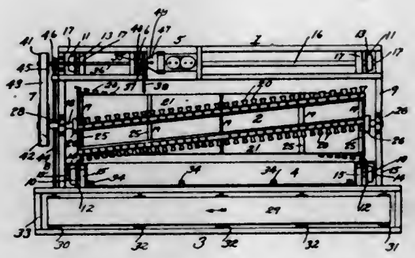


1,804,417. COMPOSITION FOR AND METHOD OF HEAT AND FIRE PROOFING PAPER, CRAFT BOARD, AND THE LIKE. OTTO HERTING, Philadelphia, Pa., assignor to Sani Paper Products Co. Inc., Philadelphia, Pa., a Corporation of Delaware. Filed June 15, 1926. Serial No. 116,238. 27 Claims. (Cl. 91—70.)

1. A heat resisting material comprising a fibrous material impregnated with titanium silicate.

14. The method of treating fibrous material to render it resistant to heat including impregnating the material with products resulting from the interaction in the presence of water of sodium silicate, sodium borate, aluminium sulphate and titanium sulphate.

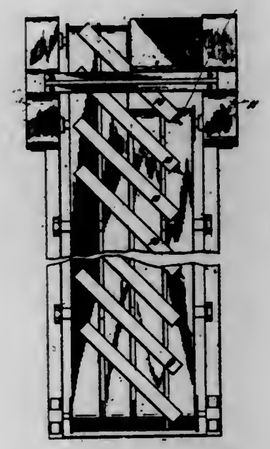
1,804,418. ROAD SUBGRADING MACHINE. VIRGIL R. HUGHES, Belvedere Gardens, Calif. Filed Feb. 13, 1929. Serial No. 339,541. 2 Claims. (Cl. 37—108.)



1. A road sub-grading machine comprising a truck with wheels arranged to travel on the header boards of a roughly graded road, a motor mounted on said truck, a drum extending transversely of and journaled on said truck, cutting teeth on said drum, means to enable said motor to drive the wheels of said truck to cause the truck to travel forwardly on said header boards, means to enable said motor to rotate said drum in the reverse direction to the rotation of the truck wheels, so that the dirt cut by the drum teeth will be thrown forwardly of the truck from the road bed and a conveyor on the truck for receiving said cut dirt and conveying the same to one side of the road, and an apron on the truck extending between the lower part of said drum to said conveyor for directing the dirt cut by the drum teeth to the conveyor.

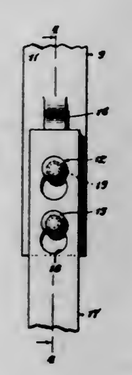
1,804,419. MACHINE AND METHOD FOR REMOVING VALVE STEMS FROM INNER TUBES. EDWARD HUTCHENS, Cudahy, Wis., assignor, by mesne assignments, to H. Muehlstein & Co. Inc., New York, N. Y., a Corporation of New York. Filed Oct. 18, 1926. Serial No. 142,508. 26 Claims. (Cl. 29—84.)

1. In a machine of the class described, a pair of standards, a lower roll supported in both standards, a shorter upper roll supported in one standard, the other end being free, means for preventing distortion of the free end of said shorter roll, a plurality of endless feeder belts of an aggregate width approximating the width of said lower roll, the belts adjacent the length of the shorter upper roll ending clear of said rolls and the remaining belts passing over said lower roll.



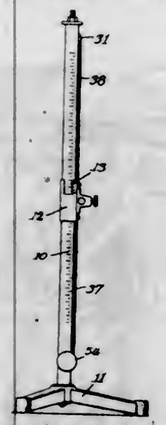
24. The method of removing a valve stem from a tube which consists in creating a relative movement between the tube and a deborning position and utilizing said movement to force any air in said tube to the valve stem end thereof and to thus break or stretch said end of the tube whereby said stem is separated from the tube thereby.

1,804,420. CEILING SUPPORTING STRAP. RAYMOND E. KELLEY, Buffalo, N. Y. Filed Jan. 13, 1930. Serial No. 420,385. 7 Claims. (Cl. 72—118.)



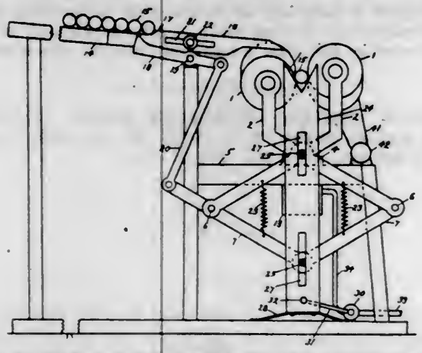
1. A strap for supporting ceilings or the like, comprising an anchoring strap, a supported strap, means for suspending said supported strap at one side and from the lower end of said anchoring strap, and a lip formed to extend outwardly from the side of said anchoring strap, said lip being adapted to be bent to a position across the upper end of said supported strap to prevent displacement thereof.

1,804,421. COMPARATOR. PAUL E. KLOPSTEG, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed May 11, 1929. Serial No. 362,344. 11 Claims. (Cl. 33—169.)



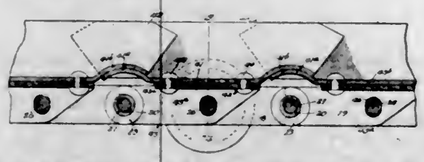
3. In a device of the class described, a pillar having a scale upon the face thereof, a carriage provided with an index readable in cooperation with said scale mounted to travel along the pillar and having two bores at right angles to one another to receive supports for pointers.

1,804,422. AUTOMATIC FEEDER FOR CENTERLESS GRINDERS. JOHN M. KOCH, Reading, Pa. Filed Mar. 14, 1930. Serial No. 435,820. 6 Claims. (Cl. 15—215.)



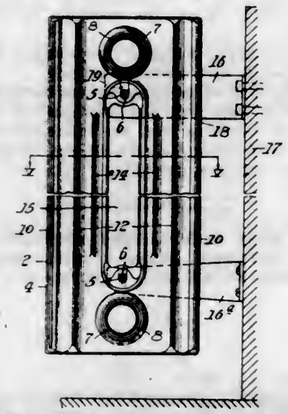
1. In an automatic feeding device for centerless grinding machines, the combination with feed rolls, of means to deliver rods to be ground to said rolls, means to control said delivering means by the movement of said rods through said grinding machine, said feed rolls being adapted to move said rods into engagement with said grinding machine, and means to render said feed rolls inoperative when said rods become engaged by said grinding machine.

1,804,423. APRON CONVEYER. PAUL F. KRENZKE, Chicago, Ill. Filed Nov. 21, 1928. Serial No. 320,793. 8 Claims. (Cl. 198—196.)



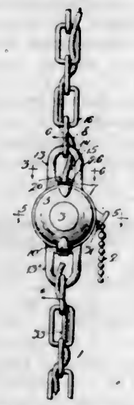
1. In an apron conveyer, the combination of an endless chain, sprocket wheels for supporting and driving the chain, a series of pans having lapped ends, links secured fixedly to the inner faces of the pans, and connected movably to the pivot pins of the chain so that the overlapping end of each pan is free to move transversely to and from the underlying end of the adjoining pan during travel between the sprocket wheels, and means comprising members connected to the chain for limiting the outward movement of the pans.

1,804,424. RADIATOR. THOMAS E. LANDVOIGT, Westmont, Pa., assignor to National Radiator Corporation, Johnstown, Pa., a Corporation of Delaware. Filed Sept. 25, 1928. Serial No. 308,274. 2 Claims. (Cl. 257—151.)



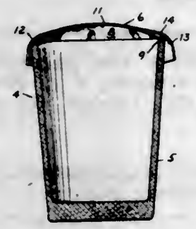
2. In a radiator, a plurality of matched sections joined together, the sections having oppositely directed vertical flanges thereon at the outer edges thereof which contact with the flanges of adjacent sections whereby the front and rear faces present a substantially continuous surface, said flanges terminating at the top and bottom of the sections whereby a plurality of open vertical flues are provided between the sections, radiating fins on the sections of less width than the flanges projecting into the flues, said sections having central vertically elongated openings therethrough between the top and bottom thereof, some of the fins extending throughout the length of the column, and other of the fins at each side of the opening being of less height than the height of the openings.

1,804,425. LINK SWITCH. CHARLES M. LEFKOWITZ, New York, N. Y. Filed Aug. 9, 1928. Serial No. 298,429. 8 Claims. (Cl. 200—168.)



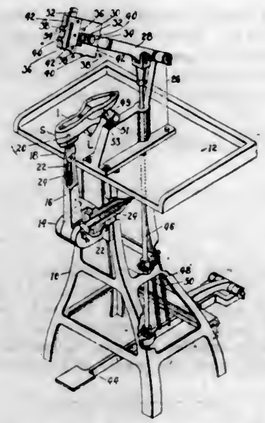
1. A switch adapted to be supported in the form of a link, including a switch mechanism and means for enclosing the same, comprising a shell member having oppositely extending yokes projecting therefrom to be engaged by chain links or other supporting members, said shell member having openings adjacent said yokes for the passage of feed wires in the switch mechanism, and a second shell member co-operating with said first shell member to enclose the switch mechanism, and means for detachably securing said second shell member to said first shell member to permit the shell to be opened while said first shell member remains supported as a link.

1,804,426. ANT POISON FEEDER. LEO A. MATTES, Berkeley, Calif. Filed Aug. 9, 1926. Serial No. 128,028. 2 Claims. (Cl. 43—131.)



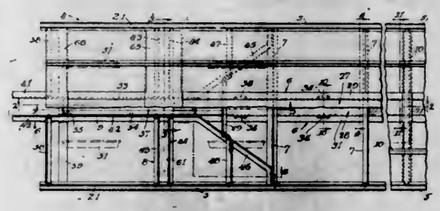
1. An insect-poison feeder comprising a container having an open upper end provided with an annular rim located in its entirety in a common plane and a flanged resilient cover fitted over and holdingly engaged with the open end of the container, said cover having indentations at spaced points arranged to engage said rim and to define insect entrance openings between said indentations and said rim and cover, the flange of said cover being spaced outwardly from said container to permit of access to said insect entrance openings.

1,804,427. METHOD OF AND APPARATUS FOR LOCATING ELEMENTS UPON SHOE-BOTTOMS. FRED L. MOONEY, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 10, 1929. Serial No. 377,166. 26 Claims. (Cl. 1—19.)



1. The method of locating elements upon shoe-bottoms, which consists in bringing together a shoe-bottom and a gaging member to form a recess, and inserting an end of an element in the recess to locate it.

1,804,428. CAR UNDERFRAME CONSTRUCTION. WILLIAM H. MUSSEY, Chicago, Ill., assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 18, 1929. Serial No. 356,077. 14 Claims. (Cl. 105—414.)



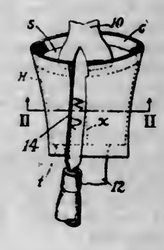
1. In a railway car, a pair of side sills, a center sill construction between said side sills, said construction comprising an upper chord member and a lower chord member spaced apart vertically, said members being in the form of channels arranged back to back, each having its side edges turned outwardly to form horizontal flanges, tie members extending between said chords and having their ends rigidly connected to said side sills.

2. In an underframing construction for railway cars, a pair of side sills, a center sill construction comprising an upper and a lower channel-shape chord member, said members being turned back to back and spaced apart vertically and having their longitudinal edges extending horizontally outwardly, a plurality of tie members extending between said chord members, and means for rigidly connecting said tie members to said side sills and chord members.

1,804,429. PRODUCTION OF CONCENTRATES OF RHENIUM. WALTER NODDACK and IDA NODDACK, Berlin-Grunewald, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 13, 1929, Serial No. 346,765, and in Germany Nov. 22, 1928. 2 Claims. (Cl. 23—19.)

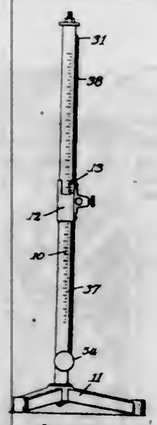
1. The process of producing concentrates of rhenium, which consists in directly dissolving rhenium containing raw materials and precipitating the rhenium from the solution as sulphide.

1,804,430. METHOD OF COVERING HEELS. WILLIAM H. NUTT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 24, 1929. Serial No. 334,716. 16 Claims. (Cl. 12—147.)



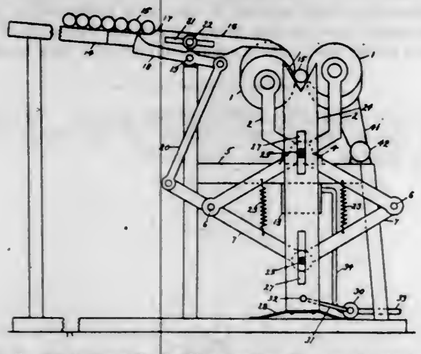
1. That improvement in methods of covering heels which consists in overlapping two portions of a heel covering upon a heel surface to be covered thereby, and cutting diagonally through both of said cover portions while they remain overlapped to form on said cover portions beveled edge faces transversely disposed at the same inclination to the adjacent portion of the heel cover surface.

1,804,421. COMPARATOR. PAUL E. KLOPSTEG, Chicago, Ill., assignor to Central Scientific Company, Chicago, Ill., a Corporation of Illinois. Filed May 11, 1929. Serial No. 362,344. 11 Claims. (Cl. 33—169.)



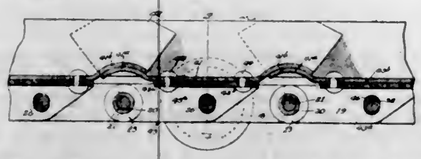
2. In a device of the class described, a pillar having a scale upon the face thereof, a carriage provided with an index readable in cooperation with said scale mounted to travel along the pillar and having two bores at right angles to one another to receive supports for pointers.

1,804,422. AUTOMATIC FEEDER FOR CENTERLESS GRINDERS. JOHN M. KOCH, Reading, Pa. Filed Mar. 14, 1930. Serial No. 435,820. 6 Claims. (Cl. 15—215.)



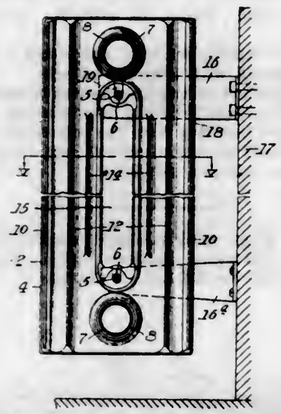
1. In an automatic feeding device for centerless grinding machines, the combination with feed rolls, of means to deliver rods to be ground to said rolls, means to control said delivering means by the movement of said rods through said grinding machine, said feed rolls being adapted to move said rods into engagement with said grinding machine, and means to render said feed rolls inoperative when said rods become engaged by said grinding machine.

1,804,423. APRON CONVEYER. PAUL F. KRENZKE, Chicago, Ill. Filed Nov. 21, 1928. Serial No. 320,793. 8 Claims. (Cl. 198—196.)



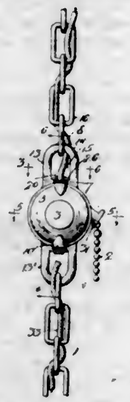
1. In an apron conveyer, the combination of an endless chain, sprocket wheels for supporting and driving the chain, a series of pans having lapped ends, links secured fixedly to the inner faces of the pans, and connected movably to the pivot pins of the chain so that the overlapping end of each pan is free to move transversely to and from the underlying end of the adjoining pan during travel between the sprocket wheels, and means comprising members connected to the chain for limiting the outward movement of the pans.

1,804,424. RADIATOR. THOMAS E. LANDVOIGT, Westmont, Pa., assignor to National Radiator Corporation, Johnstown, Pa., a Corporation of Delaware. Filed Sept. 25, 1928. Serial No. 308,274. 2 Claims. (Cl. 257—151.)



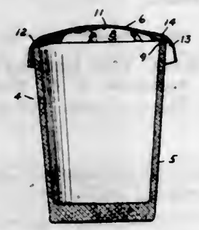
2. In a radiator, a plurality of matched sections joined together, the sections having oppositely directed vertical flanges thereon at the outer edges thereof which contact with the flanges of adjacent sections whereby the front and rear faces present a substantially continuous surface, said flanges terminating at the top and bottom of the sections whereby a plurality of open vertical flues are provided between the sections, radiating fins on the sections of less width than the flanges projecting into the flues, said sections having central vertically elongated openings therethrough between the top and bottom thereof, some of the fins extending throughout the length of the column, and other of the fins at each side of the opening being of less height than the height of the openings.

1,804,425. LINK SWITCH. CHARLES M. LEFKOWITZ, New York, N. Y. Filed Aug. 9, 1928. Serial No. 298,429. 8 Claims. (Cl. 200—168.)



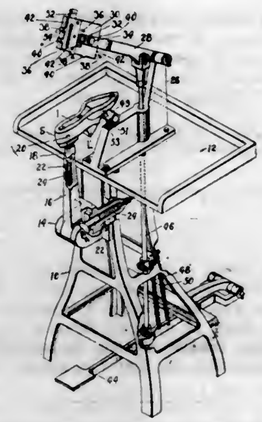
1. A switch adapted to be supported in the form of a link, including a switch mechanism and means for enclosing the same, comprising a shell member having oppositely extending yokes projecting therefrom to be engaged by chain links or other supporting members, said shell member having openings adjacent said yokes for the passage of feed wires in the switch mechanism, and a second shell member co-operating with said first shell member to enclose the switch mechanism, and means for detachably securing said second shell member to said first shell member to permit the shell to be opened while said first shell member remains supported as a link.

1,804,426. ANT POISON FEEDER. LEO A. MATTES, Berkeley, Calif. Filed Aug. 9, 1926. Serial No. 128,028. 2 Claims. (Cl. 43—131.)



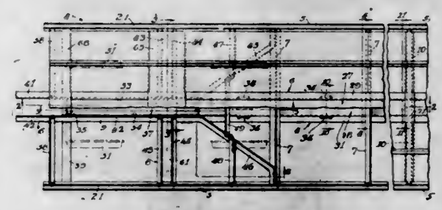
1. An insect-poison feeder comprising a container having an open upper end provided with an annular rim located in its entirety in a common plane and a flanged resilient cover fitted over and holdingly engaged with the open end of the container, said cover having indentations at spaced points arranged to engage said rim and to define insect entrance openings between said indentations and said rim and cover, the flange of said cover being spaced outwardly from said container to permit of access to said insect entrance openings.

1,804,427. METHOD OF AND APPARATUS FOR LOCATING ELEMENTS UPON SHOE-BOTTOMS. FRED L. MOONEY, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 10, 1929. Serial No. 377,166. 26 Claims. (Cl. 1—19.)



1. The method of locating elements upon shoe-bottoms, which consists in bringing together a shoe-bottom and a gaging member to form a recess, and inserting an end of an element in the recess to locate it.

1,804,428. CAR UNDERFRAME CONSTRUCTION. WILLIAM H. MUSSEY, Chicago, Ill., assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Apr. 18, 1929. Serial No. 356,077. 14 Claims. (Cl. 105—414.)



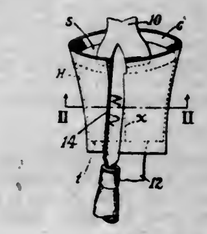
1. In a railway car, a pair of side sills, a center sill construction between said side sills, said construction comprising an upper chord member and a lower chord member spaced apart vertically, said members being in the form of channels arranged back to back, each having its side edges turned outwardly to form horizontal flanges, tie members extending between said chords and having their ends rigidly connected to said side sills.

2. In an underframing construction for railway cars, a pair of side sills, a center sill construction comprising an upper and a lower channel-shape chord member, said members being turned back to back and spaced apart vertically and having their longitudinal edges extending horizontally outwardly, a plurality of tie members extending between said chord members, and means for rigidly connecting said tie members to said side sills and chord members.

1,804,429. PRODUCTION OF CONCENTRATES OF RHENIUM. WALTER NODDACK and IDA NODDACK, Berlin-Grunewald, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Mar. 13, 1929, Serial No. 346,765, and in Germany Nov. 22, 1928. 2 Claims. (Cl. 23—19.)

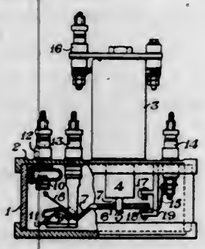
1. The process of producing concentrates of rhenium, which consists in directly dissolving rhenium containing raw materials and precipitating the rhenium from the solution as sulphide.

1,804,430. METHOD OF COVERING HEELS. WILLIAM H. NUTT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 24, 1929. Serial No. 334,716. 16 Claims. (Cl. 12—147.)



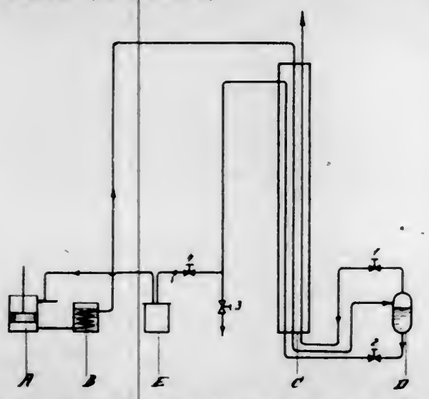
1. That improvement in methods of covering heels which consists in overlapping two portions of a heel covering upon a heel surface to be covered thereby, and cutting diagonally through both of said cover portions while they remain overlapped to form on said cover portions beveled edge faces transversely disposed at the same inclination to the adjacent portion of the heel cover surface.

1,804,431. ELECTRIC RELAY. LESLIE H. PETER, ERIC W. CHALLANS, and RODERICK M. MACGREGOR, London, England, assignors, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 31, 1930, Serial No. 440,218, and in Great Britain Apr. 16, 1929. 1 Claim. (Cl. 175—336.)



A relay comprising an electromagnet, pins projecting vertically downward from the pole pieces of said magnet, an armature apertured to receive said pins with clearance and mounted to slide thereon toward and away from said pole pieces, and fixed abutments for limiting the movements of said armature.

1,804,432. PROCESS OF FRACTIONATING, COOLING, AND CONDENSING GAS MIXTURES. FRANZ POLITZER, Solln, by Munich, Germany. Filed May 10, 1924, Serial No. 712,452, and in Germany May 31, 1923. 5 Claims. (Cl. 183—115.)



2. A method of cooling gaseous mixtures containing carbon-dioxide below the solidification temperature of the latter, consisting in adding to this mixture hydrocarbons, compressing the mixture, cooling the gas and choosing the total pressure so as to cause the hydrocarbons of the gaseous mixture to liquefy in the same range of temperatures in which the carbon-dioxide, at its partial pressure in the gaseous mixture, might solidify, using the liquid hydrocarbons as a solvent for the carbon-dioxide and preventing thus the solidification of the latter.

1,804,433. AERONAUTICAL PROPELLER. SYLVANUS ALBERT REED, New York, N. Y., assignor to The Reed Propeller Co. Inc., New York, N. Y., a Corporation of New York. Filed Dec. 3, 1928. Serial No. 323,480. 12 Claims. (Cl. 170—173.)



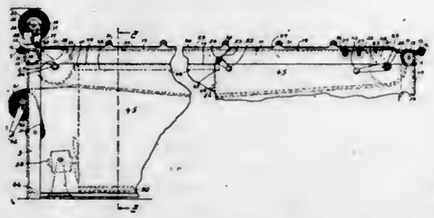
1. A metal aeronautical propeller whose blades are hollow in the immediate vicinity of the hub, are composite for a substantial part of the blade length, and are integral and solid from thence to the tips.

1,804,434. AERONAUTICAL PROPELLER AND METHOD OF MAKING THE SAME. SYLVANUS A. REED, New York, N. Y., assignor to The Reed Propeller Co. Inc., New York, N. Y., a Corporation of New York. Filed Dec. 28, 1928. Serial No. 328,992. 9 Claims. (Cl. 170—165.)



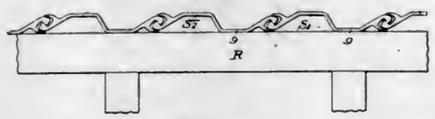
1. An aeronautical solid forged metal propeller blade, divided into a plurality of blades by longitudinal slits of progressively increasing length from the edges inwardly toward the longitudinal center of the blade, the slits, in each instance extending from the blade tip only part way to the blade root and through from one face of the blade to the other.

1,804,435. MACHINE FOR DECORATING FABRICS. RYAH REISLEY, Sunnyside, N. Y. Filed June 25, 1929. Serial No. 373,575. 3 Claims. (Cl. 41—1.)



1. In a machine for decorative work on fabrics, a frame, two substantially parallel endless conveyor belts movably arranged upon the surface of said frame, means for adjusting said belts towards and away from each other, a plurality of pins protruding from said belts, said pins allowing said fabric to be stretched thereon between said belts, a curtain substantially parallel to the surface of said frame and partitioning off a section of said fabric stretched between said belts, a partition extending from the end of said curtain to the lower side of said fabrics stretched across said belts, means for swinging said partition around an axis parallel to said fabrics stretched across said belts and means for moving said belts in coextensive unison along the surface of said frame.

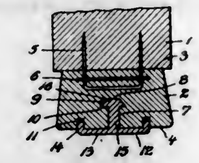
1,804,436. INTERLOCKING SHEET PILING. NORMAN C. RENDLEMAN, Pittsburgh, Pa., assignor to Jones & Loughlin Steel Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 8, 1927. Serial No. 231,843. 2 Claims. (Cl. 61—60.)



1. A sheet piling section comprising a web having interlocks on the edges thereof adapted to engage like interlocks of an adjacent section, the web having generally flat portions lying at opposite sides of the section, and an intermediate angular portion, the section being radially symmetrical about the center of gravity of the section.

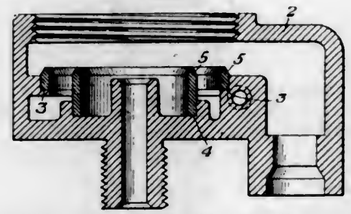
1,804,437. COMBINATION SHOE AND GLIDE FOR FURNITURE. BRANCH C. RICE, Cleveland, Ohio. Filed Aug. 16, 1929. Serial No. 386,327. 4 Claims. (Cl. 16—42.)

3. In a combination shoe and glide for furniture, the combination of a shoe constructed of resilient material, the shoe having a base, the shoe being provided with a recess extending upwardly from the base, the shoe having a



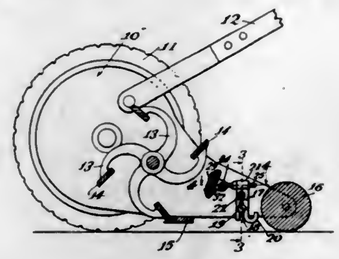
groove in its base, a glide, the glide having a flange adapted to enter said groove, and the glide having means adapted to enter said recess for securing said glide to said shoe.

1,804,438. VALVE. GEORGE A. ROBERTSHAW, Greensburg, Pa. Filed July 13, 1927. Serial No. 205,481. 5 Claims. (Cl. 251—158.)



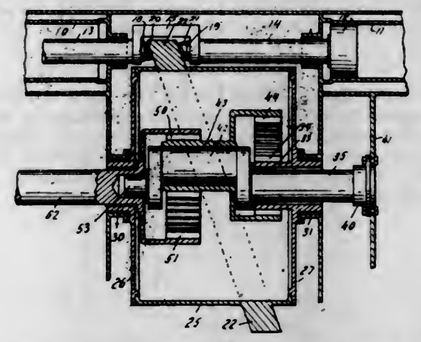
1. As an article of manufacture, a brass valve body having a brass seat therein, the materials of said valve body and seat both containing copper but in different proportions, the proportion of copper in the valve body being greater than the proportion of copper in the valve seat.

1,804,439. LAWN MOWER SHARPENER ATTACHMENT. IRA A. SHANTON, St. Petersburg, Fla. Filed Aug. 8, 1928. Serial No. 298,289. 4 Claims. (Cl. 76—82.1.)



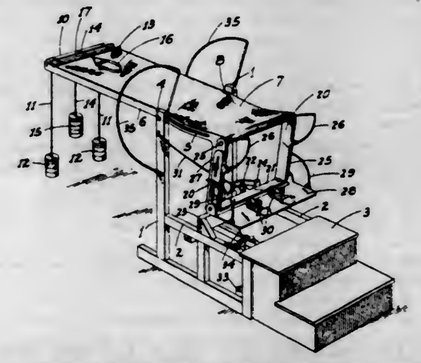
1. The combination with a lawn mower of clamping plates adjustably mounted on the inner faces of the side frames of the lawn mower, angle brackets having their outer legs composed of parallel members, the outer members of each pair of parallel members being seated in said clamping plates, means adjustably mounted on the inner members of each pair of parallel members for engaging the clamping plates for limiting the rearward movement of said angle brackets the inwardly projecting legs of said angle brackets being threaded, a channel shaped sharpening element carrier positioned directly in front of the threaded inwardly projecting legs of said angle brackets, slotted ears projecting rearwardly from said channel-shaped carrier, which slotted ears receive the threaded ends of the angle brackets, nuts mounted on the threaded legs of said angle brackets on opposite sides of said ears and a sharpening element arranged within said channel-shaped carrier.

1,804,440. CRANKLESS ENGINE. THOMAS L. SHERMAN, New York, N. Y., assignor to Michell-Crankless Engines Corporation, New York, N. Y., a Corporation of New York. Filed July 30, 1929. Serial No. 382,105. 18 Claims. (Cl. 74—14.)



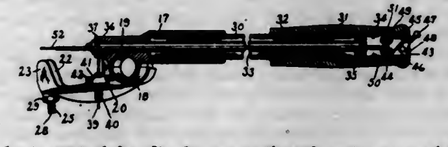
1. In a mechanism of the character described, a swash plate, a housing associated therewith and rotatable with the swash plate, and gearing within said housing including a gear element operatively connected to the housing and elements operatively driven thereby.

1,804,441. VERTEBRÆ STRETCHER. ANTONE J. SILVA, Milton, Calif. Filed Nov. 24, 1930. Serial No. 497,645. 6 Claims. (Cl. 128—75.)



5. A vertebræ and body stretching apparatus comprising a normally horizontal body supporting structure, a platform mounted in connection with said structure at one end substantially parallel thereto but below the same a distance approximately that between the knee and foot of a person, foot securing means on said platform, means pivotally supporting said structure to enable the same to be tilted to a vertical position with the platform uppermost, and releasable catch means normally holding the structure against tilting movement.

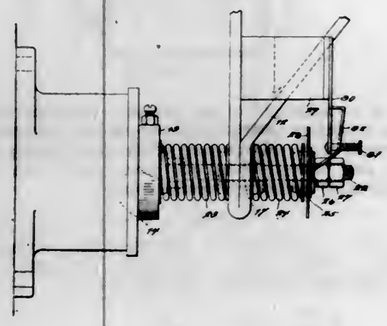
1,804,442. CONTROL HANDLE FOR MOTOR BOAT ENGINES. WOODRUFF R. SMITH, West Haven, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn. Filed Oct. 18, 1928. Serial No. 313,292. 10 Claims. (Cl. 115—18.)



1. A control handle for an outboard motor comprising a hollow arm, means at one end of said arm for attaching

the arm to a motor, a grip rotatably mounted on the other end of said arm, a tube connected to said grip and extending through the hollow arm and adapted to control the operation of a part of said motor, and a switch on the outer end of said grip, said switch being connectible to the ignition system of the motor through said tube and adapted to interrupt the operation of the latter.

1,804,443. DOOR-HOLDING MEANS AND RELEASE. WALTER H. SMITH, Philadelphia, Pa., assignor, by mesne assignments, to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 6, 1929. Serial No. 412,196. 14 Claims. (Cl. 105—395.)



1. In combination, a vehicle having a door, closing means associated with the door, electromagnetic means for maintaining the door in open position against the action of the closing means, a circuit for said electromagnetic means, and means opening the circuit of the electromagnetic means when the car is in motion.

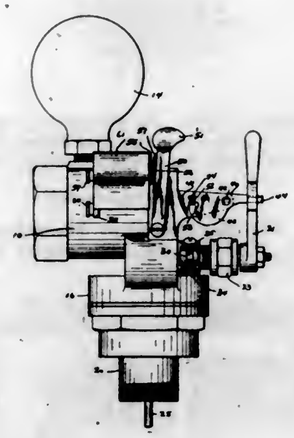
2. In combination, a vehicle having a door, closing means associated with the door, means for holding the door in open position against the action of the closing means, and means rendering said holding means inoperative when the vehicle is in motion.

1,804,444. AIR HEATER. CYRIL A. SOANS, Wheaton, Ill. Filed Mar. 11, 1929. Serial No. 346,128. 12 Claims. (Cl. 257—139.)



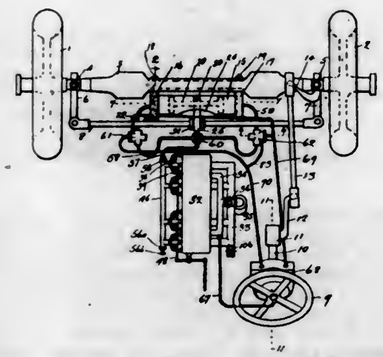
4. In an air heater, the combination of a tubular body provided with a series of extruded parts spaced apart along the body and forming grooves in the exterior of the latter, and a series of spaced fins fitting between said extrusions, the fins being arranged in pairs with an integral flange-like connecting-and-spacing part between the fins of the pair tending to exert opposed forces on the fins in the direction of the spacing and thereby to change said spacing so as to cause said fins to maintain resilient contact with the side walls of the grooves.

1,804,445. FILLING DEVICE. ARTHUR STEVENS, Buffalo, N. Y., assignor to The Vol-U-Meter Co., Inc., Buffalo, N. Y., a Corporation of New York. Filed Oct. 20, 1927. Serial No. 227,566. 9 Claims. (Cl. 249—63.)



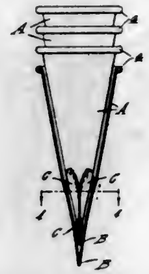
1. A liquid filling device comprising a normally open filling valve, mechanically operated trigger means for retaining the valve in its open position, a normally closed electric circuit, electromagnetic means associated with the electric circuit for causing the release of said trigger means, and cut-off means connected in the electric circuit and controlled by the liquid when a predetermined amount has flowed through the device.

1,804,446. MEANS FOR APPLYING ENGINE EXPLOSION PRESSURE. CHARLES LAWRENCE STOKES, Los Angeles, Calif. Filed Aug. 2, 1924. Serial No. 729,849. 5 Claims. (Cl. 180—79.2.)



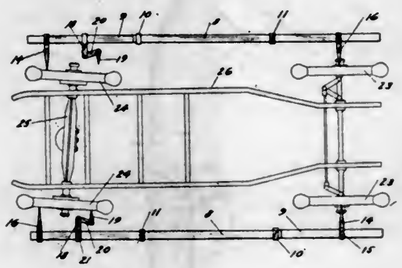
1. In combination, a vehicle, an internal combustion engine for propelling said vehicle, a reservoir, means for storing the exhaust gases of said engine under pressure developed in said cylinder prior to the opening of the exhaust valve thereof, means for steering said vehicle, and mechanism for utilizing the pressure of said gases for operating said steering means.

1,804,447. FLOWER VASE. DWIGHT H. WAGNER, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of West Virginia. Filed Oct. 4, 1930. Serial No. 486,350. 4 Claims. (Cl. 47—41.)



1. A vase of substantially conical form having indentations therein adjacent to the apex to reduce the cross sectional area of the base portion of the vase to facilitate the insertion of the same into the ground.

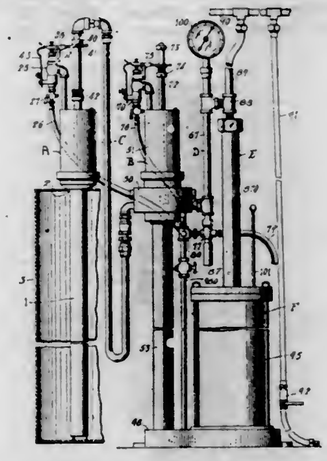
1,804,448. TRACKING GAUGE FOR AUTOMOBILES. HENRY WOCHNER, Rock Island, Ill., assignor to Bear Manufacturing Company, Rock Island, Ill. Filed July 5, 1929. Serial No. 376,051. 3 Claims. (Cl. 33—203.)



1. In a device of the class described, an extensible gauge bar, a pair of supports therefor, including members capable of adjustment vertically, and indicating devices on said bar and capable of adjustment longitudinally of the bar and means whereby said devices are capable of being held in adjusted positions.

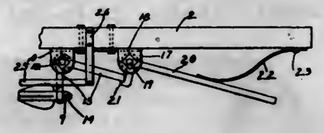
1,804,449. HIGH PRESSURE LUBRICATING APPARATUS. JOSEPH W. WOODRUFF, Elizabeth, N. J. Filed June 15, 1929. Serial No. 371,110. 8 Claims. (Cl. 221—47.1.)

7. Pressure grease distributing apparatus comprising a conduit for supplying grease from a source to a remote point, a plurality of devices connected in said conduit, one having an inlet connected to said source and an outlet, and another device having an inlet connected to said outlet of the first device and an outlet connected to the inlet of the next successive device, each device being constructed to raise the pressure of the grease received from the next preceding device and force it through said conduit to the next succeeding device, a motor for operating each of said



devices, and means controlling all of said motors and actuated by the pressure of the grease at the outlet of the last device.

1,804,450. ARROW TESTING DEVICE. SAMUEL C. ALLEN, Montgomery County, near Dayton, Ohio, assignor, by mesne assignments, to Dayton Racquet Company, Inc., Dayton, Ohio, a Corporation of Ohio. Filed Apr. 19, 1928. Serial No. 271,318. 2 Claims. (Cl. 273—107.5.)



1. An arrow flight-testing device comprising a horizontal fixed member, a bow, means for securing the middle portion of the bow to said member, a string connected at the ends of the bow, a bell crank lever pivoted to said member, one end of said lever being bifurcated to receive an arrow and to engage the string when drawn back by the latter, and a trigger lever also pivoted to said member, the front end of said trigger member formed to hook shape to engage the free end of the bell crank level for the purpose specified.

1,804,451. PROCESS OF TREATING PETROLEUM. TROY M. ANDREWS and CARL E. LAUER, Port Arthur, Tex., assignors, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed June 6, 1925. Serial No. 35,476. 3 Claims. (Cl. 87—5.)

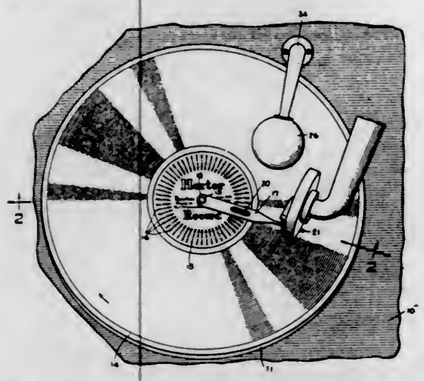
1. A method of treating naphthenic base crude petroleums for the recovery of naphthenic acids therefrom, which comprises, separating the crude oil by distillation into three major portions, consisting essentially of a light oil distillate, an intermediate lubricating oil distillate containing a substantial quantity of naphthenic acids and a heavy still residue, redistilling the lubricating oil distillate in the presence of alkali to produce redistilled lubricating oils substantially free from naphthenic acids and a small still residue containing in concentrated condition the alkali salts of the naphthenic acid content of the original lubricating oil distillate, treating this still residue with alcohol to dissolve the alkali salts, and separating the alcoholic solution of the alkali salts from the residual hydrocarbon oil.

1,804,452. METALLIC STRUCTURAL MEMBER. FRANCIS M. BARTON, Chicago, Ill., assignor, by mesne assignments, to Scott-Weiss Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 7, 1928. Serial No. 245,083. 4 Claims. (Cl. 72—115.)



1. A structural member formed of metal and comprising a pair of oppositely facing side walls having integral ribs operative to form a row of sockets for receiving attaching devices, the parts of the ribs adjacent to the ends of the sockets entered by the attaching devices being beveled to form guide surfaces for directing said devices into the sockets.

1,804,453. RECORD READING DEVICE. JACOB T. BASSECHES, New York, N. Y. Filed June 14, 1928. Serial No. 285,313. 17 Claims. (Cl. 40—130.)

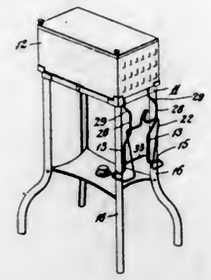


1. The method of obtaining visual readings from a moving sound record to identify the record which comprises presenting a plurality of markings associated therewith, within a zone of predetermined observation in numbers within a period of time to give persistence of vision and simulate a substantially stationary visual representation of a graphic outline.

1,804,454. PROCESS FOR HARDENING ARTICLES MADE OF IRON OR STEEL. WALTER BECK, Frankfort-on-the-Main, Germany, assignor to Deutsche Gold & Silber Scheideanstalt, vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation. Filed Sept. 1, 1927, Serial No. 217,010, and in Germany Sept. 6, 1926. 3 Claims. (Cl. 148—15.)

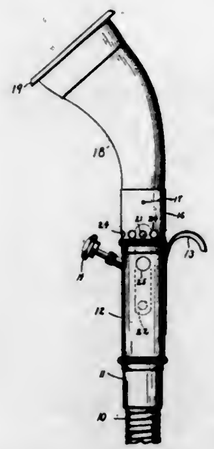
1. A hardening mixture for hardening iron and steel containing sodium cyanide, sodium cyanamide and about 8% of finely divided charcoal distributed therethrough.

1,804,455. DOCUMENT HOLDER. ALFRED V. BODINE and JOSEPH M. LUCARELLE, Bridgeport, Conn., assignors to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed July 7, 1926. Serial No. 120,960. 5 Claims. (Cl. 211—51.)



3. A file rack comprising a frame having a pair of depending members and made of wire bent to form a pocket and having means for suspending the pocket from a bar connecting a pair of legs of a stand, means adapted to rest against the front of the legs of the stand, and means secured to one of said depending members adapted to engage the rear of said legs and the other depending member for holding the frame securely against said stand.

1,804,456. ACOUSTIC DEVICE. ALFRED V. BODINE, Bridgeport, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed Nov. 30, 1926. Serial No. 151,647. 11 Claims. (Cl. 181—21.)

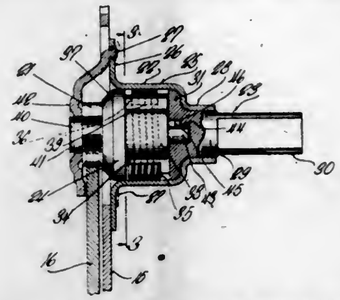


1. In combination, a hand-held part; a mouthpiece slidably connected to the hand-held part and freely removable therefrom; and a spring catch comprising means mounted on the hand-held part, cooperating means on the mouthpiece, and mannally operable releasing means to permit the easy removal of the mouthpiece from the hand-held part.

1,804,457. CLUTCH MECHANISM. STEPHEN F. BRIGGS, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed May 14, 1926, Serial No. 109,090. Renewed Dec. 19, 1927. 15 Claims. (Cl. 192—8.)

1. In a device of the character described, a normally stationary housing, a rotatable driving member having one end located within the housing, a rotatable driven

member having one end located within the housing, a pair of spaced lugs carried by the end of the driving member within the housing, a spring coiled about the lugs of the driving member with its ends directed inwardly over adjacent ends of the lugs, the peripheral surface of the spring normally frictionally gripping the wall of the housing to resist rotation of the driving member therein, and a driving key carried by the driven member and

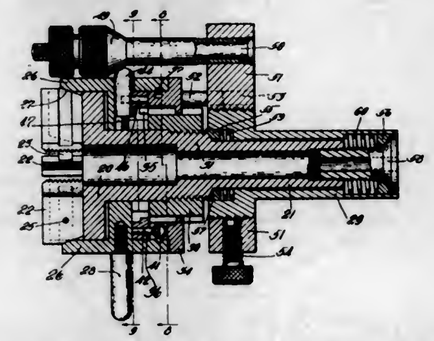


engageable between the inturned ends of the spring and the adjacent lug ends, whereby rotational stress applied to the driving member draws the spring ends together to reduce the frictional contact between the spring and housing and rotates the driven member, and a rotational stress applied to the driven member tends to spread the inturned ends of the spring to increase its frictional contact with the housing and prevent rotation of the member.

1,804,458. PURIFICATION OF HALOGENATED HYDROCARBONS. EDGAR C. BAITON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Oct. 12, 1928. Serial No. 312,216. 8 Claims. (Cl. 260—160.)

1. The method of treating the reaction product resulting from the direct action of a halogen upon toluene in the presence of a halogenating catalyst wherein side-chainhalogenation chiefly occurs, which comprises washing such product with an aqueous medium to remove inorganic impurities, drying and then distilling the so purified product in contact with metallic surfaces.

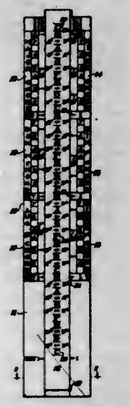
1,804,459. SCREW-CUTTING DIE. ERNEST T. BYSSHE and ROBERT R. FINN, Springfield, Vt., assignors to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Apr. 5, 1927. Serial No. 181,068. 14 Claims. (Cl. 10—95.)



1. In combination, a screw-cutting die having a shank with a pair of oppositely inclined frusto-conical faces coaxial therewith, a supporting member, and means providing a floating connection between said die and member, said means comprising a pair of cone washers having inclined frusto-conical faces engaging the frusto-conical faces of said die, and means for pressing said mutually engaging faces together.

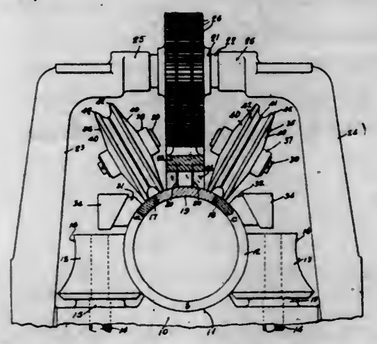
6. In a screw-cutting die, a body portion, radially slidable chasers carried by said portion having cam faces on their outer ends, means for moving said chasers inwardly comprising a cam member mounted for limited camming movement on said cam faces whereby the chasers are moved inwardly to closed position, means for moving said cam member, and means for locking said cam member in its limiting position of camming engagement with said chasers, said locking means comprising an annular member having end faces, one of which engages said cam member when the annular member is in locking position, the other of which engages the body portion of the die, said locking member having locking engagements with both the cam member and body portion distributed around its entire periphery.

1,804,460. CHORD FINDER. RAYMOND CORDIER, Canton, Ohio. Filed May 25, 1928. Serial No. 280,529. 2 Claims. (Cl. 84—474.)



1. A chord finder including an indicator member and a designator member movable with respect to each other, a plurality of tone designators on the designator member, and a plurality of means on the indicator member for visually indicating the tones of chords on the designator member and for covering from view all the other tone designators on the designator member.

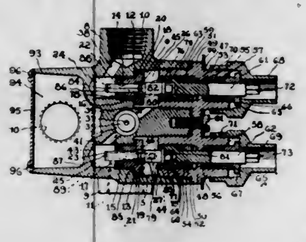
1,804,461. METHOD OF AND MEANS FOR WELDING WITHOUT ELECTRICAL LEAKAGE. WILLIAM E. CRAWFORD, Wauwatosa, and REIMAR C. F. KURTZE, Milwaukee, Wis., assignors to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Mar. 12, 1928. Serial No. 261,025. 9 Claims. (Cl. 219—6.)



1. The combination with supporting means to guide an article along a predetermined path, of means for feeding

said article along said path, idler rollers in the path of the article to create circumferential stresses therein, a rotatable electrode having laminations on the periphery thereof adapted to contact with the article, and another electrode to effect the passage of heating currents through a portion of the article.

1,804,462. VALVE. LEWIS W. EGGLESTON, Detroit, Mich., assignor to American Radiator Company, New York, N. Y., a Corporation of New Jersey. Filed June 16, 1928. Serial No. 285,803. 11 Claims. (Cl. 137—139.)

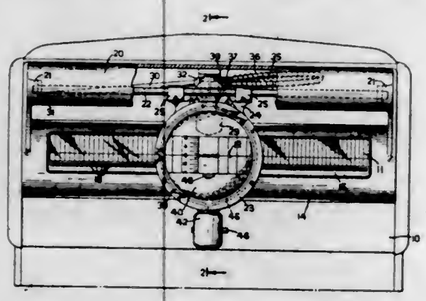


2. A valve of the character described, comprising a casing having an inlet and an outlet connected by a passage through said casing, valve seat means in said passage, a valve operative to seat under force of gravity on said means to close said passage, said valve having a stem comprising a solenoid core, a solenoid winding in said casing around said core whereby energization of said solenoid opens said valve, a metering valve in said passage between said inlet and said first valve, said casing having a by-pass leading from said passage between said valves to said outlet, and a metering valve in said by-pass.

1,804,463. FREEZING POINT LOWERING COMPOSITION. ALBERT N. ERICKSON, Elmhurst, N. Y. Filed Nov. 7, 1925. Serial No. 67,697. 7 Claims. (Cl. 252—5.)

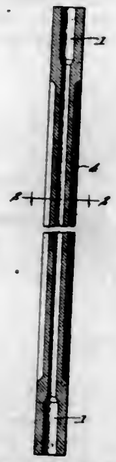
1. A freezing point lowering composition for automobile cooling systems, consisting of non-corrosive nitrate and a colloid.

1,804,464. MAGNIFYING DEVICE. FREDERICK L. FULLER, Trenton, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed June 27, 1928. Serial No. 288,603. 12 Claims. (Cl. 88—39.)



1. Apparatus comprising a scale chart and a magnifying device therefor, said device comprising a magnifying lens, a frame for said lens, means for movably supporting said frame, an illuminating device carried by said frame, a cable carrying wire connections for said illuminating device, and means for holding the cable out of the path of said frame.

1,804,465. HEAT TRANSFER TUBE. FRANCIS X. GOVERS, Lawrenceville, Ill., assignor to Indian Refining Company, Lawrenceville, Ill., a Corporation of Maine. Filed Nov. 5, 1928. Serial No. 317,300. 3 Claims. (Cl. 257—262.)

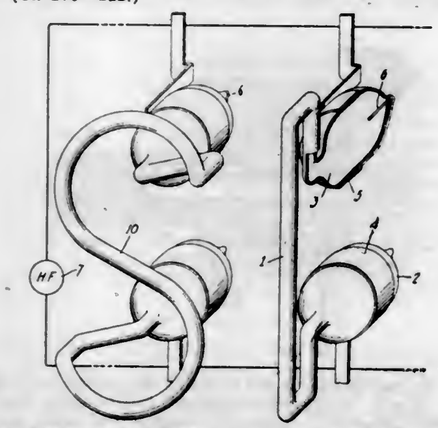


1. A heat-transfer tube having an overall peripherally uniform diameter, a bore of circular cross-section throughout its length, and longitudinally extending exterior ribs whose outer ends are within said periphery, said ribs being of less length than the tube.

1,804,466. PROCESS OF MAKING DIARYLAMINES. WILLIAM J. HALE, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 28, 1926. Serial No. 132,822. 14 Claims. (Cl. 260—128.)

1. A process of making diarylamines, which comprises reacting between a nuclear mono-halogenated aromatic compound and ammonia in proportion not exceeding three moles of the latter to one of the former, in the presence of a copper compound as catalyst.

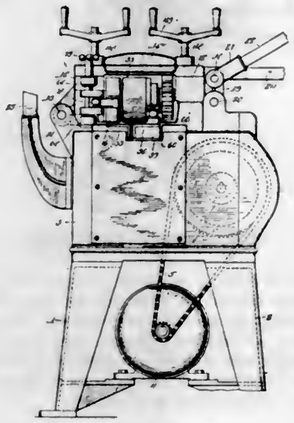
1,804,467. ELECTRIC DISCHARGE DEVICE. WILLIAM F. HENDRY, Ossining, N. Y., assignor, by mesne assignments, to Manhattan Electrical Supply Company, Inc., Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 9, 1926. Serial No. 147,298. 4 Claims. (Cl. 176—122.)



2. The method of making and operating gas filled luminous signs which comprises providing an external and an internal electrode, bridging a source of current across said electrodes until the sign is "cured", then connecting

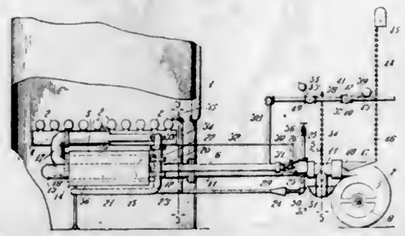
said internal electrode with a second external electrode, and bridging a current source across said external electrodes.

1,804,468. ANGLE BAR BENDING MACHINE. JOHN JENSEN, Rockford, Ill., assignor to Whitney Metal Tool Company, Rockford, Ill., a Corporation of Illinois. Filed Aug. 25, 1927. Serial No. 215,331. 19 Claims. (Cl. 153—57.)



1. In an angle bar bending machine, a bar supporting table, a pair of driving rolls in tangential relation to the plane of said table and to each other, a bending roll positioned oppositely of said table and traversing the plane thereof and a rear guide roll coacting with said bending roll at a point adjacent the point of contact between said bending roll and a bar to be operated upon.

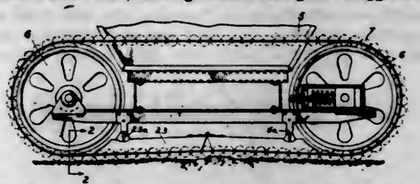
1,804,469. HYDROCARBON BURNER. GEORGE B. JOHNSON, Evanston, Ill. Filed Sept. 6, 1927. Serial No. 217,685. 6 Claims. (Cl. 158—62.)



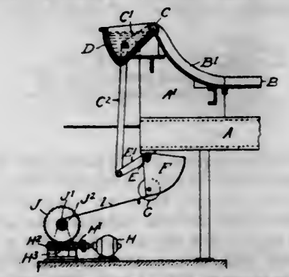
1. In a fuel oil burner, a main burner, a retort, means for feeding oil directly into the retort, means distinct from the main burner for heating the retort, means for forcing air under pressure into one end portion of the retort through the retort and from the other end portion of the retort to the main burner and means controlled by the temperature in the retort for regulating the amount of heat applied to the retort.

1,804,470. ENDLESS BAND TRACK FOR VEHICLES. HARRY A. KNOX, Davenport, Iowa. Filed May 18, 1929. Serial No. 364,257. 10 Claims. (Cl. 305—8.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. The combination with a vehicle provided with wheels having spaced resilient rims and central spaced flanges, of an endless track tensioned by the wheels and comprising a pair of bands, transverse grousers on the outer tread of each band, said grousers being in staggered relation, and a lug secured at each end of the grousers, the inside lugs enterable between the spaced flanges of the wheels.

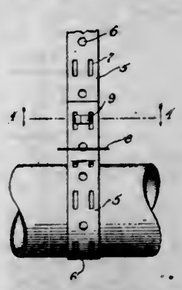


1,804,471. LADLE ACTUATING MECHANISM. JAMES B. LADD, Ardmore, Pa., assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Jan. 14, 1928. Serial No. 246,681. 3 Claims. (Cl. 221—65.)



1. The combination of a segmental casting ladle pivotally supported at its pouring lip having vertical side walls and a rear wall having the conformation of a segment of a cylinder concentric with the pivot of the ladle, of a constant speed motor and mechanism actuated by said motor for tilting the ladle adapted to tilt the ladle with constant angular velocity.

1,804,472. PIPE HANGER. JOHN W. LESLIE, Evanston, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company, a Corporation of Delaware. Filed Aug. 16, 1926. Serial No. 129,332. 8 Claims. (Cl. 248—41.)



3. A hanger comprising a slotted metallic strip adapted to be passed around a pipe or the like and means independent of said strip for joining portions of said strip comprising a collar adapted to fit over said portions having a lug formed integral therewith, said lug being adapted to pass through the slots in said strip portions and be bent over to fasten the portions together.

1,804,473. VALVE FOR GAS BURNERS. CHARLES V. LINDBLOOM, Cranford, N. J., assignor, by mesne assignments, to Hi-Heat Gas Co. Inc., New York, N. Y., a Corporation of New York. Filed May 28, 1928. Serial No. 280,078. 2 Claims. (Cl. 299—136.)

2. A valve for atomizing fuel, including a tube through which the fuel passes, a cap for said tube having an end

wall provided with an outlet orifice and having an expansion chamber adjacent said orifice, said cap having a threaded bore adapted to be threaded into said tube, a filling member insertible into said cap and having a lateral flange and a tubular projection, said tubular extension



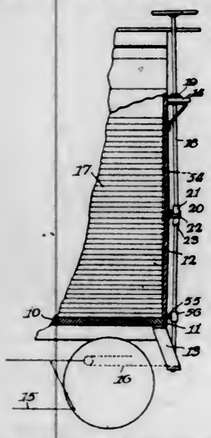
being adapted to fit the bore of said tube, said lateral flange being adapted to be clamped between the end of said tube and the end wall of said cap, said filling member having an orifice communicating with said expansion chamber, and a needle for regulating the flow of fluid through said orifices.

1,804,474. PLUG FOR ELECTRIC CIRCUITS. LUCILLE MARTIN, Long Beach, Calif. Filed June 4, 1928. Serial No, 282,842. 1 Claim. (Cl. 173—361.)



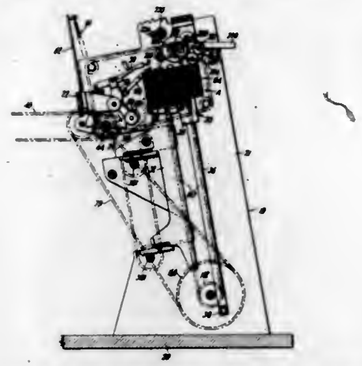
In a plug for an electric circuit socket, the combination of a cylindrical body having a recessed end, a soft rubber beaded jacket on said body, an elongated rectangular hollow handle having one end integral with said body, an annular bead on the free end of said handle, a soft rubber cushion on said bead, spring contact points having flanges seated on the recessed end of said body, wires extended through said hollow handle, screws for securing the ends of said wires and flanges of said contacts to said body, bosses integral with said handle and body, and other screws extended through said bosses so as to pinchingly engage the wires extended through said handle, said screws and spring contacts arranged so that they are accessible from the exterior of said body and handle so the parts can be easily assembled, replaced or repaired.

1,804,475. RAILWAY BRAKE. CHARLES J. NASH, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., A Corporation of Illinois. Filed Aug. 31, 1928. Serial No. 303,221. 12 Claims. (Cl. 74—112.)



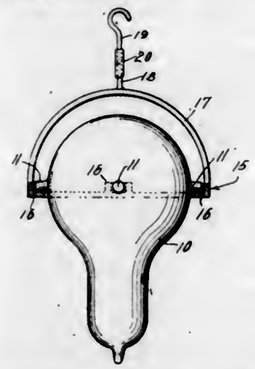
1. In a car, a car end adapted to be deflected by the lading within the car, a brake shaft, extending along the car end and journaled in upper and lower bearings, said shaft including two sections and an intermediate universal joint and a third bearing connecting the universal joint and the car.

1,804,476. ENVELOPE FEED MECHANISM. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Oct. 21, 1926. Serial No. 143,047. 7 Claims. (Cl. 271—1.)



1. In a blank feeding machine, means for holding a stack of blanks, means for elevating an end of the topmost blank, means for blowing the released portion of the blank against a conveying element, means for gripping the blank against said element comprising a roller cooperating with said element and means to move same back and forth along the periphery of said element.

1,804,477. FIRE EXTINGUISHER. CLAYTON W. OLD, Montclair, N. J., assignor to International Fire Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 7, 1926. Serial No. 153,072. 9 Claims. (Cl. 169—26.)



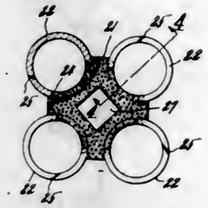
1. A fire extinguisher and support therefor comprising in combination, a frangible fire extinguisher container having projections formed thereon extending laterally from the outer surface thereof, and a frame encircling said container and having sockets adapted to receive said projections, said container having an elongated portion extending downwardly through said support.

4. In combination, a frangible container having laterally offset portions, a frame having portions adapted to engage and support said offset portions and having other portions adapted to permit the passage therethrough of said offset portions.

1,804,478. MULTIPLE CONDUIT AND SPACING SUPPORTS THEREFOR. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Mar. 9, 1928. Serial No. 260,452. 11 Claims. (Cl. 247—34.)

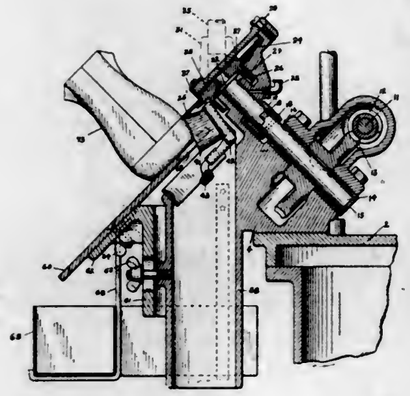
1. An article of manufacture, comprising a plurality of water proofed fiber conduit sections in side-by-side

relation, and spaced members at intervals along the sections for holding the sections in predetermined relative positions, said members each consisting of a collar extend-



ing around each section and a molded core interlocking with said collars and anchoring them in predetermined relative position.

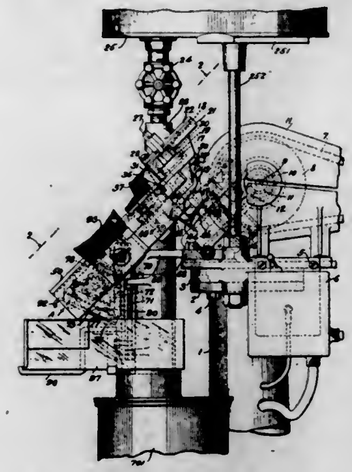
1,804,479. COATING AND MARKING MACHINE. HERBERT R. POLLEYS, New Haven, Conn., assignor to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed Mar. 31, 1927. Serial No. 179,772. 9 Claims. (Cl. 91—40.)



1. In a cementing machine, a flat support upon which the sole portion of a footwear article may be moved while resting thereon, yieldably mounted means extending above the support and yieldably mounted for movement in one plane only whereby a coat of cement can be applied to the lower portion of the upper of the article as the latter is moved on the support, and means for supplying cement to said last means.

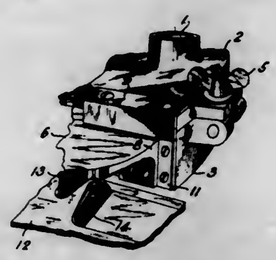
1,804,480. CEMENT APPLYING MACHINE. HERBERT R. POLLEYS, New Haven, Conn., assignor to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed May 19, 1928. Serial No. 279,040. 9 Claims. (Cl. 12—80.)

9. In a cementing machine in combination, means for supplying cement, a rotating disk for conducting the cement to the surface of a juxtaposed article, said disk acting to mark off the area to which the cement is supplied, a brush for spreading a cement over the surface to



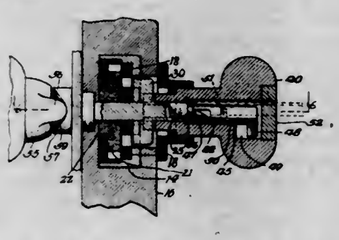
which it is supplied, and resilient means for urging the brush into contact with the surface to which the cement is supplied.

1,804,481. LATEX APPLYING MACHINE. HERBERT R. POLLEYS, New Haven, Conn., assignor to National India Rubber Company, Bristol, R. I., a Corporation of Connecticut. Filed Sept. 14, 1928. Serial No. 305,998. 4 Claims. (Cl. 12—80.)



1. In a machine for applying a liquid material to footwear in combination, a rotatable disc for applying a bead of liquid material to a shoe upper, and means for supplying such liquid material to the disc and the shoe upper at a point adjacent the point of application.

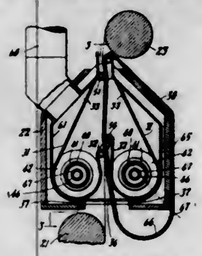
1,804,482. DOORLOCK. JOSEPH REIF, Hebron, Ind., assignor of one-half to Francis E. Ling, Hebron, Ind. Filed Apr. 4, 1928. Serial No. 267,181. 9 Claims. (Cl. 70—91.)



1. In a door lock, the combination of a case, a lock-bolt movable in the case, inner and outer handles, bolt-

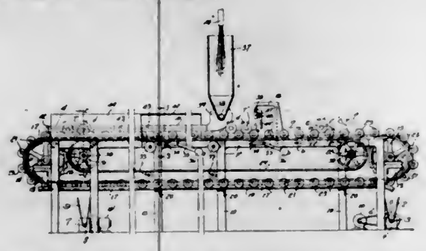
shifting means comprising a rotatable and longitudinally slidable stem, one of the handles being connected to said stem so that the latter is rotatable and slidable thereby, means operable upon slide movement of the stem in one direction to render the bolt inoperable by the shifting-means, and key operable means adjacent the other handle for slidably shifting the stem in the opposite direction to render the shifting-means operable to shift the bolt.

1,804,483. APPARATUS FOR USE IN FINISHING PAPER. STUART W. WEBB, Brookline, JOHN G. CALLAN, Cambridge, and ALBERT ALLEN, Winchester, Mass., assignors, by mesne assignments, to Eastern Manufacturing Company, Boston, Mass., a Corporation of Maine. Original application filed Mar. 22, 1926, Serial No. 96,507. Divided and this application filed July 2, 1927. Serial No. 203,085. 9 Claims. (Cl. 92—76.)



1. A steam box comprising a receptacle having openings through which a continuous web of paper may be passed into and out of said receptacle, sealing elements positioned in pairs on opposite faces of the web at said openings, the elements of each pair being relatively offset lengthwise of the web, and means for directing steam into said casing.

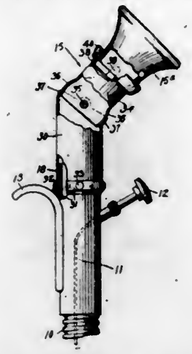
1,804,484. BOTTLE-SILVERING MACHINE. MINER P. WETMORE, Norwich, Conn., assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed July 30, 1927. Serial No. 209,605. 20 Claims. (Cl. 91—12.2.)



1. In a machine of the class described, a movable carrier comprising spaced rollers for supporting cylindrical bodies, means for mounting said rollers to rotate about their axes, and rotary means engaging said rollers at the bottom to rotate the same independently of the forward movement of said carrier, whereby the cylindrical bodies supported on said rollers are rotated without being engaged by said rotating means.

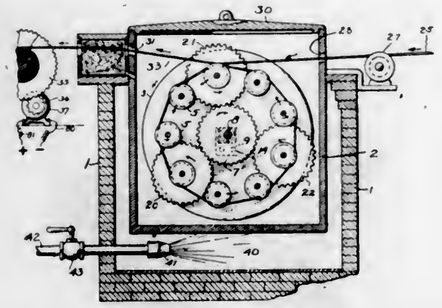
1,804,485. SOUND COLLECTING AND TRANSMITTING MEANS. CHARLES K. WOODBRIDGE, New York, N. Y., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Original application filed May 29, 1924, Serial No. 716,626, and in Great Britain Apr. 20, 1925. Divided and this application filed Nov. 24, 1926. Serial No. 150,578. 6 Claims. (Cl. 181—21.)

1. In combination, a sound-collector comprising a hand-held part; a mouthpiece; means for suppporting the mouthpiece; pivotal means between the hand-held part and the last-named means, to allow adjustment of the mouthpiece with relation to the hand-held part; and means whereby



the mouthpiece and its supporting means may be rotated about the axis of the hand-held part to adjust the former with relation to the latter.

1,804,486. APPARATUS FOR TREATING WIRES. PARVIN WRIGHT, Seattle, Wash. Filed Aug. 18, 1928. Serial No. 300,490. 18 Claims. (Cl. 204—5.)



15. In an apparatus for treating wire in combination with a tank, a rotatable drum therein for receiving and supporting said wire said drum comprising heads and a plurality of threaded rollers supported therebetween, said rollers geared for planetary movement.

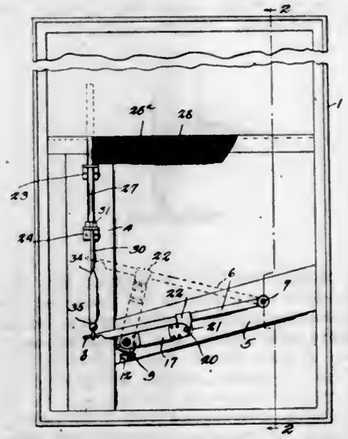
1,804,487. BOOK MIRROR. SHOJIRO YOSHIOKA, New York, N. Y., assignor to Rinkichi Doi, Sendai, Japan. Filed Oct. 27, 1927. Serial No. 229,145. 1 Claim. (Cl. 45—18.)



A mirror mounting comprising a flat surface, a substantially U-shaped member applied to said surface, the sides and bight portion of said U-shaped member inclined with respect to the surface to form therewith a triangular groove, a mirror provided with inclined edges received in said guides and slidable through the open end of said member to a position in said bight portion, a curved re-

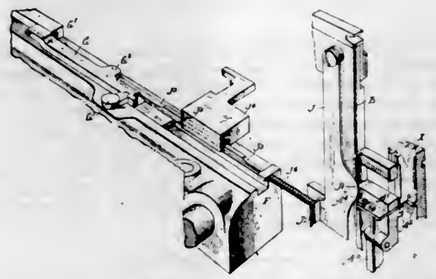
silient member mounted in a recess of said surface adjacent to said bight portion to engage the under side of said mirror, a strip extending diametrically of said mirror and projecting beyond an edge thereof.

1,804,488. MECHANICAL MOVEMENT. LEE H. ADAMSON, Beverly Hills, Calif. Filed July 30, 1929. Serial No. 382,224. 8 Claims. (Cl. 74—14.)



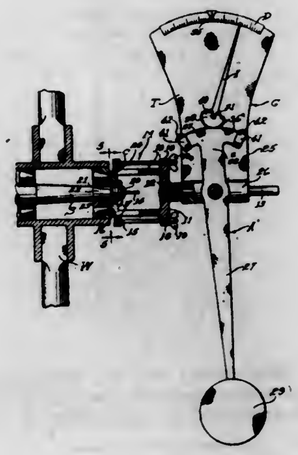
1. In a mechanical movement, upper and lower bearings, a staff mounted to rotate and to slide longitudinally in the uper bearing, a strip mounted to slide longitudinally in the lower bearing, the strip and the lower bearing having elements which cooperate to impart rotation to the strip when the strip is moved longitudinally, means under the control of an operator for moving the strip longitudinally, and a nut threaded on the staff and having seats in its edge, the staff being provided in its end with a slot receiving one terminal of the strip, the strip having fingers received in the seat of the nut.

1,804,489. TYPOGRAPHICAL COMPOSING AND CASTING MACHINE. EDGAR H. ATKINS, Richmond, Va., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Jan. 13, 1926. Serial No. 80,876. 7 Claims. (Cl. 199—52.)



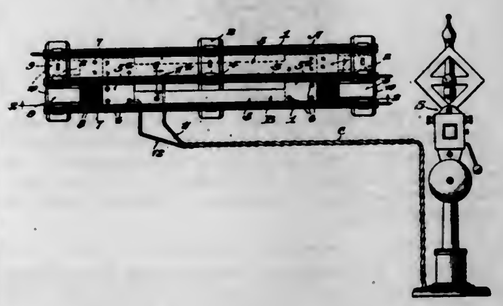
1. In a typographical composing and casting machine, the combination of an assembling elevator provided with a retractible rail for supporting composed matrices in an upper position therein, a stop member adjustable to active or inactive position to determine the level at which the composed matrices are presented to the mold, and a safety device operative in the active position of said stop member and elevator rail to engage the latter directly and lock the elevator.

1,804,490. WHEEL GAUGE. WALTER BAGGE, Los Angeles, Calif., assignor of one-third to Ernest Bagge and one-third to Arthur B. Imhoff, Los Angeles, Calif. Filed Aug. 23, 1927. Serial No. 214,974. 18 Claims. (Cl. 33—203.)



8. In a device of the character described, a mounting comprising a head having an extension upon which a gauge is adapted to be supported, and means by which the head is adapted to be detachably secured to the spindle of a vehicle wheel with the longitudinal axis of said extension disposed in alinement with the longitudinal axis of the spindle.

1,804,491. EQUIPMENT CONTROLLING UNIT. HARRY S. BECKER, River Forest, Ill., assignor to American Flyer Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1930. Serial No. 487,855. 18 Claims. (Cl. 246—255.)

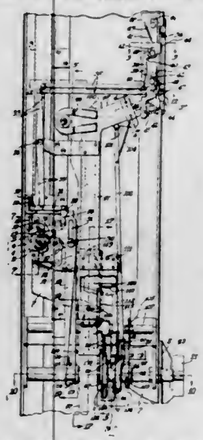


1. An attachment for standard railway track sections including a contact plate, insulated bases for mounting the plate at its ends, and spring clips carried by said insulating bases adapted for engagement with the ties of said track section.

1,804,492. VENDING MACHINE. HARRY S. BENJAMIN, Detroit, Mich. Filed May 11, 1928. Serial No. 276,829. 9 Claims. (Cl. 194—91.)

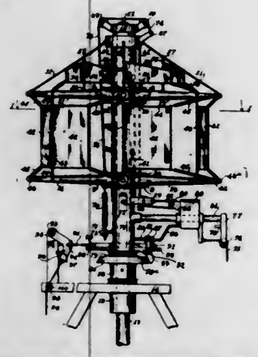
1. In a vending machine, the combination of a rotary member, a manually operated operating member rotatable independently of said rotary member, means for

connecting and disconnecting said members, a lever for controlling the operation of said connecting means and provided with means for engaging one of said members,



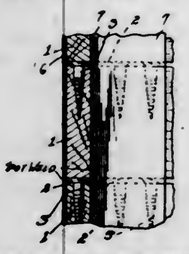
said member being formed with two paths of travel for said means, and means whereby the path of travel taken by said means is determined by the insertion of a coin.

1,804,493. FLUID MOTOR. ISRAEL BENJAMINS, Brooklyn, N. Y., assignor to Rose Benjamins, Brooklyn, N. Y. Filed June 7, 1928. Serial No. 283,511. 12 Claims. (Cl. 170—21.)



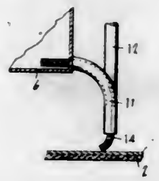
1. In a fluid motor a power wheel, a load shaft loaded for relatively high winds, a means for operatively connecting said wheel to said shaft, an automatic means for disconnecting the same at low speeds of said wheel and a means for varying and adjusting the action of said disconnecting means.

1,804,494. REENFORCED WOOD BOX OR CRATE. WALTER O. BROWN, Detroit, Mich. Filed Jan. 18, 1930. Serial No. 421,633. 8 Claims. (Cl. 217—65.)



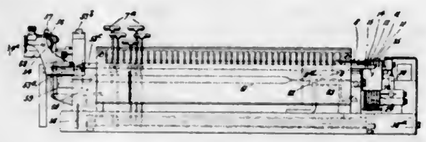
1. In a box or crate, a series of panels forming the side walls of the box, each consisting of a series of slats in spaced relation arranged in the same plane, a corner fastening means for the panels consisting of an inner and an outer sheet metal angle member and metal spacers between the angle members and positioned in the spaces between the slats of the respective panels, the angle members both being welded to the spacers.

1,804,495. APPARATUS AND METHOD OF ORNAMENTING PAPER. FRANK G. CRANE and JOSEPH M. WARD, Detroit, Mich. Filed July 3, 1929. Serial No. 375,817. 9 Claims. (Cl. 92—40.)



1. The combination with a forming web of a paper making machine and a suction box operatively associated therewith, of a plurality of color troughs disposed transversely above said forming web in superimposed relation in advance of said suction box, a plurality of conduits leading from the several troughs and having their lower ends arranged in alinement and adjacent to but spaced from the forming web, the conduits of the several troughs being arranged in alternating relation, and wicks in said conduits having their lower ends projecting therefrom into coacting relation to the pulp or web of paper on the forming web.

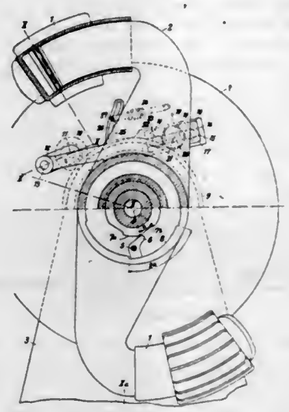
1,804,496. TELEGRAPHIC TRANSMITTING AND TAPE PERFORATING APPARATUS. FREDERICK GEORGE CREED and REGINALD DENNIS SALMON, Croydon, England, assignors, by mesne assignments, to Creed & Company Limited, Croydon, England, a Company of Great Britain. Filed Aug. 16, 1926, Serial No. 129,441, and in Great Britain Oct. 22, 1925. Renewed Mar. 19, 1931. 27 Claims. (Cl. 178—17.)



1. A telegraphic keyboard, comprising a single electric signalling switch, a tape perforating punch arrangement and a single series of longitudinally movable combination bars mechanically associated with both the switch and punch arrangement aforesaid, whereby electric signal combinations can be transmitted simultaneously with the mechanical production of a record of such signal combinations, or whereby either signal combinations alone, or punched tape alone, can be respectively transmitted or mechanically produced.

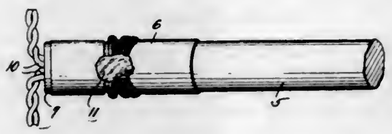
1,804,497. ROTARY ENGINE AND PUMP. JEAN DAP, Puteaux, France, assignor to Dap-Motor-Patent-Gesellschaft m. b. H., Cologne-Holweide, Germany. Filed May 26, 1927, Serial No. 194,460, and in Germany July 3, 1926. 8 Claims. (Cl. 123—43.)

1. In a machine of the class described, means for locking the intermittently rotating group both ways during its stationary period to the stationary part of the machine, and positively controlled mechanism separate from the mechanism transmitting the power forces connecting the two groups adapted to hold said intermittently rotating group still during its stationary period and to forward said intermittently rotating group with a mean



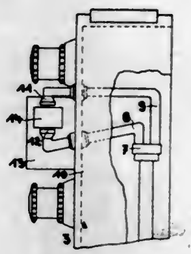
speed of twice the machine speed without shocks at the commencement and finish during the moving periods of said group.

1,804,498. MOP HANDLE FASTENER. JOHN W. DOTY, Olney, Ill., assignor to Community Construction Co., Olney, Ill., a Corporation. Filed July 19, 1928. Serial No. 293,925. 2 Claims. (Cl. 306—1.)



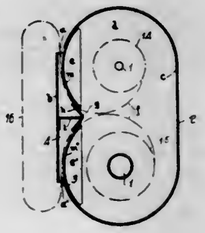
1. A connector for mop heads and handles, comprising a tubular body portion bent and crimped at a point intermediate its ends, soldering material positioned on the crimped portion to hold the body portion in its bent condition, one end of the body portion adopted to receive a mop handle, the opposite end of the body portion adapted to receive a plug forming a part of a mop head.

1,804,499. CINEMATOGRAPHIC PROJECTION APPARATUS. MAX ENGELMANN, Lausa, Germany. Filed Oct. 4, 1927, Serial No. 223,977, and in Germany Oct. 29, 1926. 1 Claim. (Cl. 88—17.)



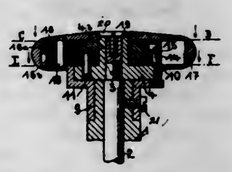
The combination with a cinematographic projection head and a film gate supported by said head and disposed outwardly thereof, of a vertically extending pipe arranged within said head, a coupling arranged upon the upper end of said pipe, branch pipes each having one end connected to said coupling and its opposite end extended exteriorly of the head and projecting near the film gate on the latter, a nozzle secured and connected to each of said projecting ends of the branch pipes extended exteriorly of the head, said nozzles being disposed adjacent the film gate on each side thereof, and a main coupling arranged exteriorly of the head and connected to the lower end of the vertically extending pipe within the head, whereby an air supply conduit may be directly connected to said coupling for the purpose specified.

1,804,500. FILM BOX. EMANUEL GOLDBERG and OTTO FISCHER, Dresden, Germany. Filed Dec. 1, 1927, Serial No. 237,085, and in Germany Apr. 21, 1927. 4 Claims. (Cl. 242—71.)



1. A film box comprising a casing having compartments therein for receiving exposed and unexposed films, an extension formed with said casing, said casing having a film opening therein communicating with said extension, a ledge arranged within said extension for dividing the same into oppositely extended elongated passageways whereby the film passing through said opening may travel to and from said casing, and a lightproof shutter arranged within said passageways.

1,804,501. ADJUSTING KNOB FOR FRAMING DEVICES. KURT HOFFMANN, Dresden, Germany. Filed Jan. 25, 1927, Serial No. 163,471, and in Germany and France Mar. 23, 1926. 8 Claims. (Cl. 88—17.)

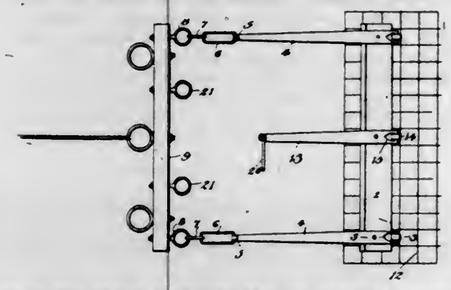


1. The combination with a moving picture machine having a rotatable shaft of the framing mechanism therefor, an adjusting mechanism for said shaft, releasable means for retaining said shaft against accidental movement and means for operatively connecting said adjusting mechanism with said retaining means to release the latter when said adjusting mechanism is operated.

1,804,502. WIRE STRETCHER. PERRY G. JARVIS, Minnora, W. Va. Filed June 5, 1928. Serial No. 283,023. 1 Claim. (Cl. 254—83.)

A wire stretcher comprising clamping jaws, upper, lower and intermediate pairs of horizontally extending bars fixed to the jaws, one bar of each pair of bars terminating in a hook and the other bar terminating in an eye engaging said hook whereby said jaws are pivotally connected together, the bars of each pair of bars diverging outwardly from said jaws, a crank handle having a collar journaled in a bearing formed in the free end of one of the bars of

said intermediate pair of bars, a clamping rod secured terminally to the other bar of said intermediate pair of bars and having the free end threaded into said collar, rota-

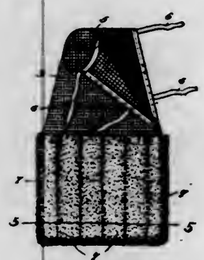


tion of said handle advancing said rod through said collar to clamp said jaws together, and means on the free ends of the upper and lower pairs of bars for exerting strain thereon to perform the stretching operation.

1,804,503. NITROCELLULOSE COMPOSITION. JOHN HALL GARDNER, College Park, Md. Filed Oct. 15, 1925. Serial No. 62,651. 3 Claims. (Cl. 134—79.)

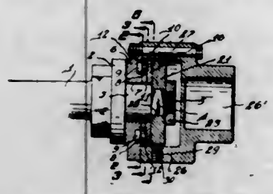
2. A composition of matter comprising nitrocellulose and phenoxy ethyl acetate.

1,804,504. MOP ATTACHMENT FOR BROOMS. FRED A. HENDERSON, Creston, Iowa. Filed Oct. 15, 1929. Serial No. 399,811. 2 Claims. (Cl. 15—247.)



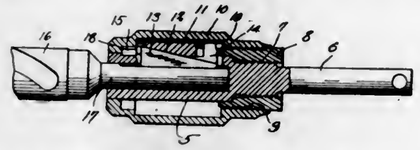
1. A mop attachment for brooms of the character described, comprising a fabric upper member formed with an opening at its top and at one side extending to its lower end with fastening tapes secured thereto, a lower fabric member fixedly secured to the lower end of said upper member, and a series of rows of yarn fibres fixedly secured to the outer face of the lower member, said lower member and fibres entirely surrounding the broom, said fibres being fixedly secured to said lower member by vertical lines of stitching.

1,804,505. DRIVER FOR REAMERS AND THE LIKE. ALBERT C. HOEH, Royal Oak, Mich. Filed Jan. 6, 1930. Serial No. 418,690. 5 Claims. (Cl. 279—16.)



1. A tool driver comrising a shank, a floating disk mounted on said shank, a fixed disk mounted on said shank, a plurality of disks loosely mounted between said fixed disk and said floating disk, inter-engaging lugs and perforations on all of said disks, a tool holder having a portion adapted to receive a tool and a portion adapted to surround certain of said disks and to be secured to said first named floating disk, and resilient means mounted in said tool holder to act upon said fixed disk for normally preventing floating movement of said floating disk.

1,804,506. DRILL CHUCK. HARDY LINDBLAD, Frederic, Wis. Filed Sept. 17, 1928. Serial No. 306,413. 1 Claim. (Cl. 279—87.)



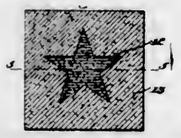
A drill chuck comprising a body portion having a hollow end formed with an elongated offset portion and having openings at the ends of the elongated offset portions, the inner surface of the offset portion being inclined, a key having an inclined surface engaging the inclined surface of the offset portion, and having enlargements at the ends of the key extended through the openings of the body portion, said key adapted to engage the shank of a drill positioned in the hollow end of the body portion to secure the drill against movement, a shell surrounding the hollow end of the body portion and engaging one of the enlargements of the key to force the key longitudinally of the body portion, and a nut on the body portion for moving the shell into engagement with the key.

1,804,507. WOODWORKING BENCH PLANE. JOHN MANNING, Baine Harbor, Newfoundland. Filed Feb. 5, 1930, Serial No. 426,124, and in Canada Feb. 7, 1929. 1 Claim. (Cl. 145—18.)



In combination with a plane having a threaded bore in the forward part thereof, a body mounting having an exteriorly threaded stem adapted to seat in said threaded bore, an enlarged plate with an upstanding peripherial flange and a large vertical grease cup socket exteriorly threaded, a central perforation extending through said stem from said grease cup socket and a globular knurled cap for said grease cup socket, interiorly threaded for engagement therewith and exteriorly flared at the bottom to seat snugly with the peripherial flange of said body mounting.

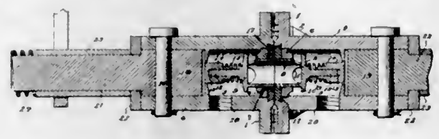
1,804,508. TRANSPARENT TILE AND METHOD OF MAKING SAME. JOHN T. NICHOLSON, Laramie, Wyo. Filed Oct. 11, 1926. Serial No. 140,989. 18 Claims. (Cl. 41—36.)



13. A paneling unit including a transparent sheet whose inner surface is provided with an ornamenting layer of

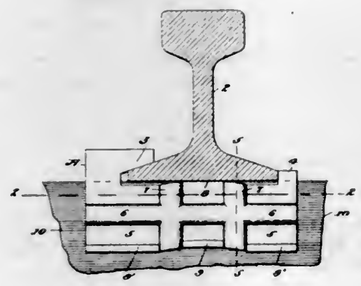
granular material secured thereto and which material is distributed on said surface in accordance with a predetermined design, a fabric layer covering the granular material, and a base member covering the fabric layer and separated from the granular material by said layer.

1,804,509. AUTOMATIC COUPLER FOR AIR LINE HOSE OF RAILWAY CARS. JOHN NOFFSINGER, Jewell, Ohio. Filed June 5, 1929. Serial No. 368,578. 1 Claim. (Cl. 284—5.)



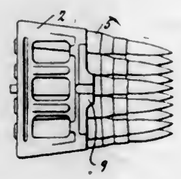
A train line coupler comprising a plate having a centrally disposed valve mechanism, and having an opening at one side of the valve mechanism and a horn at the opposite side of the valve mechanism constituting a guide, the inner end of the guide being cylindrical and provided exteriorly with longitudinal ribs, a plurality of lugs being provided upon the outer face of the plate about the opening and guide and together with the ribs of the guide serving to remove ice when companion couplers are brought together and the guide of each plate engaged through the opening of the other plate.

1,804,510. RAILWAY RAIL ANCHOR. HARRY G. NORWOOD, Washington, D. C., assignor to Theodore F. von Dorn, New York, N. Y. Filed May 21, 1930. Serial No. 454,495. 7 Claims. (Cl. 238—330.)



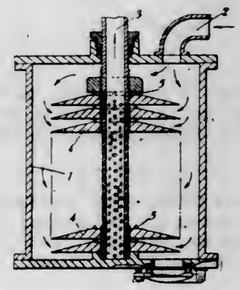
1. A one-piece track rail anchor adapted to be secured to the rail base, comprising a body portion formed with a longitudinal depression intermediate its height and a plurality of vertical depressions intermediate its length.

1,804,511. COMBINATION OF CARTRIDGE CLIP AND FOLLOWER. JOHN D. PEDERSEN, Jackson, Wyo. Filed Feb. 14, 1929. Serial No. 339,916. 6 Claims. (Cl. 42—88.)



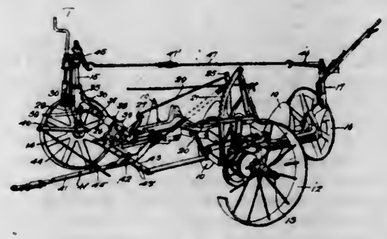
1. In a magazine rifle in combination, a cartridge clip containing a double row stack of cartridges in staggered relation and adapted to be introduced with said cartridges into the magazine chamber of the rifle, and a follower provided with means for presenting in the alternative a right or left handed stepped surface for engaging both rows of cartridges at the bottom of said stack.

1,804,512. FILTER. JOSEPH ALLEN PICKARD, Acton, London, England, assignor to Metafilters Limited, London, England, a British Company. Filed Nov. 12, 1928, Serial No. 318,854, and in Great Britain Dec. 2, 1927. 3 Claims. (Cl. 210—178.)



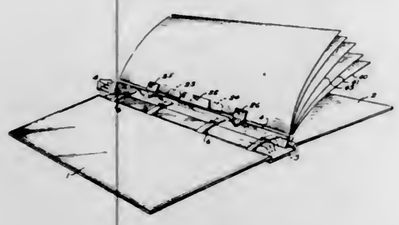
1. A filter of the multi-plate type comprising a vessel, an inlet thereto, an outlet therefrom, a pile of plates having substantially impermeable surfaces, each plate comprising a flat-faced central portion having a central aperture therethrough, a tapering edge portion extending from said central portion, and spaced protuberances of predetermined size on the flat-faced central portion adjacent the central aperture whereby the distance apart of the adjacent faces of the adjacent plates is predetermined, and means for retaining the plates assembled with their central apertures aligned, said aligned apertures being in communication with the vessel outlet.

1,804,513. TILLAGE IMPLEMENT. CHARLES T. RAY, Louisville, Ky. Original application filed Sept. 6, 1921, Serial No. 498,695. Patent No. 1,643,519, dated Sept. 27, 1927. Divided and this application filed Sept. 10, 1926. Serial No. 134,641. 6 Claims. (Cl. 97—181.)



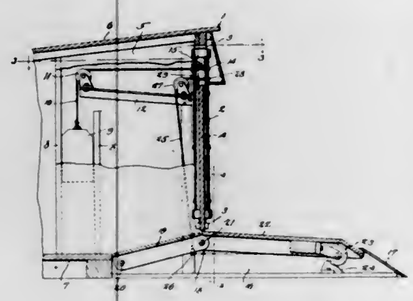
1. A tillage implement having a frame and land and furrow wheels, the furrow wheels having mountings provided with upright shafts connected to permit simultaneous steering movement thereof, a draft bar having a transversely variable pivotal connection at its rear end with the frame, the front furrow wheel shaft having a radial arm, a connecting rod having one end pivoted to said arm and a connection between the other end of the connecting rod and the draft bar, said connection comprising an element having pivotal movement on a vertical axis relatively to and adjustable longitudinally of, said bar.

1,804,514. BINDER. CHARLES E. RIDDIFORD, Washington, D. C. Filed Feb. 24, 1930. Serial No. 430,989. 18 Claims. (Cl. 129—19.)



12. In a binder, a stub having oppositely directed holding prongs, and a leaf-securing member having pockets adapted to flexibly engage with said prongs.

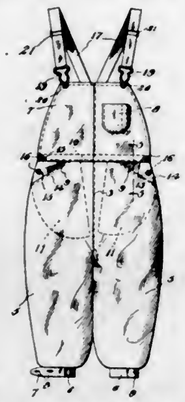
1,804,515. DOOR OPERATING MECHANISM. IVY B. ROBERTSON, Charlotte, N. C., assignor of one-third to Floyd M. Gresham, Charlotte, N. C. Filed Oct. 22, 1929. Serial No. 401,533. 4 Claims. (Cl. 268—35.)



1. In a device of the class described, a building having a doorway, a vertical shaft journaled on the building adjacent to the doorway, a door carried by the shaft, a box-like housing mounted on the building to the rear of the shaft, vertical guides located within the housing, a substantially horizontal bracket supported within the housing, pulleys within the housing and mounted on the ends of the bracket, a weight located within the housing and slidable in the guides, a flexible element wound in one direction about the shaft above the door and located in the housing, the flexible element extending in a substantially horizontal direction over one pulley and downward to connection with the weight, a platform supported below the door for vertical movement, a second flexible element wound in an opposite direction about the shaft above the door and located in the housing, the second flexible element extending in a substantially horizontal direction over the other pulley and downwardly to connection with the platform.

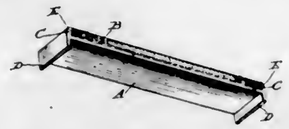
1,804,516. KNICKERALLS. LUTHER C. ROBERTSON, Cordova, Ala. Filed June 7, 1928. Serial No. 283,529. 1 Claim. (Cl. 2—227.)

A garment of the character specified comprising a front portion having a bib thereon and having side portions cut diagonally, a waistband reinforcing the bib at its juncture with the front portion and extending over the diagonal edges, side pockets including front and rear walls, the front walls being attached at their top edges to the diagonal edges of the front portion and the rear walls extending above the front walls and the diagonal



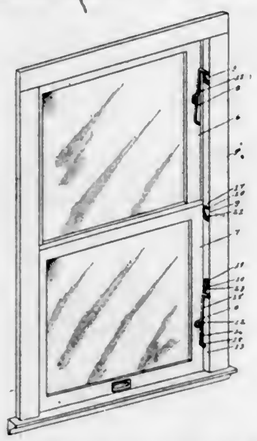
edges and attached to the waistband and side portions of the bib, and facing covering the exposed portions of the rear walls.

1,804,517. SLUG CASTING MACHINE AND TYPE BARS CAST THEREBY. JOHN R. ROGERS and EDWARD A. SYTZ, Brooklyn, N. Y., assignors to Mergenthaler Linotype Company, a Corporation of New York. Filed Sept. 25, 1928. Serial No. 308,197. 19 Claims. (Cl. 199—55.)



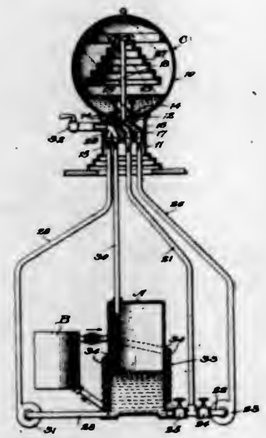
1. A type bar or slug bearing on one edge a line of printing characters and formed at its opposite ends only with transverse spacing ribs projecting laterally therefrom, said ribs being located beyond the ends of the line of printing characters and adapted to contact with the side face of an adjoining slug.

1,804,518. AUTOMATIC WINDOW LOCK. GEORGE D. SHINN, Russellville, Ark. Filed July 10, 1928. Serial No. 291,592. 4 Claims. (Cl. 292—202.)



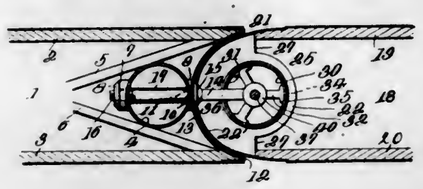
1. A window sash lock comprising catches attached to the window frame each consisting of a plate having a vertical flange extending at right angles thereto, the outermost edge of said flange being inclined towards the window frame, and a pivoted latch member attached to the sash having angularly bent ends adapted to automatically engage over the flanges of the catches.

1,804,519. DISPENSING AND DISPLAY DEVICE. HARRY C. SMITH and DANIEL ROLAND VANNEMAN, New York, N. Y., assignors to The Autodrink Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 2, 1929. Serial No. 344,028. 6 Claims. (Cl. 40—126.)



1. In a beverage dispensing and display device, a beverage storage receptacle, a beverage display container, and means connected with said storage receptacle operable to take a predetermined quantity of beverage therefrom and to circulate it through said display container independently of the beverage contained in said storage receptacle.

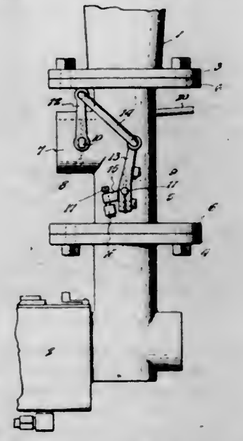
1,804,520. CONCENTRIC HINGE CONNECTION FOR AIRPLANE CONTROL SURFACES. BAYARD S. STEWART, Hazleton, Pa., assignor of four-fifths to General Aircraft Corporation, Hazleton, Pa., a Corporation of Delaware. Filed Mar. 30, 1928. Serial No. 265,944. 16 Claims. (Cl. 244—29.)



1. In an airplane, the combination with the primary structure, of a control surface, pivot eye bolts secured within either the primary structure or control surface and having their eyes pivotally mounted in the spar of the other surface.

1,804,521. INTERNAL COMBUSTION ENGINE. ARCHIBALD SWINGLE, Roundup, Mont. Filed Feb. 23, 1928. Serial No. 256,426. 1 Claim. (Cl. 123—97.)

A device of the character described comprising a tubular body adapted to be secured in the path between the carbureter and intake manifold of an internal combustion engine and having attaching means at its ends, a tubular side arm leading from said body intermediate its ends and open to atmosphere, upper and lower butterfly valves located respectively in said arm and in the body below the arm, pivot rods for said valves journaled in walls of the arm and body with their ends projecting outwardly therefrom, a lever fixed upon one end of the rod for the upper valve, a lever clamped about the corresponding end of the rod for the lower valve and adjustable circumferentially thereof, means to limit swinging movements of the



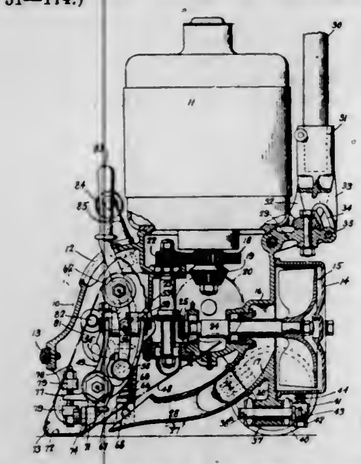
last-mentioned lever when secured in a set position upon its rod, a pitman link having its ends pivotally engaged with free ends of said levers and causing simultaneous movements of the levers and valves, an actuating lever engaged about the other end of the lower rod, a pin projecting transversely from the corresponding end of the upper rod, and a spring having one end engaged about the last-mentioned end of the lower rod and other end engaged with said pin and exerting pull thereon to yieldably retain the valves in a normal position of adjustment with one valve open and the other closed.

1,804,522. FOUNTAIN PEN. FRANK T. WALSH, Springfield, Mass., assignor to Leboeuf Fountain Pen Co., Inc., Springfield, Mass., a Corporation of Massachusetts. Filed July 8, 1929. Serial No. 375,764. 2 Claims. (Cl. 120—46.)



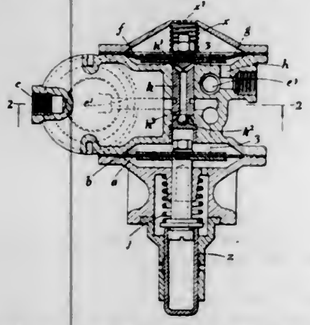
1. In a fountain pen, a tube having a finger opening in its wall, a collapsible reservoir within the tube, a single presser bar bearing against one side of the reservoir within the tube and extending past the finger opening, said presser bar having a transverse slot adjacent one end, a tongue struck up integrally from the material of the tube and extending part way only across the interior of the tube, said tongue passing through the slot in the presser bar so as to form the sole guiding connection between the tube and the presser bar.

1,804,523. EDGING MACHINE. HARRY H. WOLFE and HARRY L. MYERS, Toledo, Ohio, assignors to The American Floor Surfacing Machine Company, Toledo, Ohio. Filed Dec. 17, 1927. Serial No. 240,837. 8 Claims. (Cl. 51—174.)



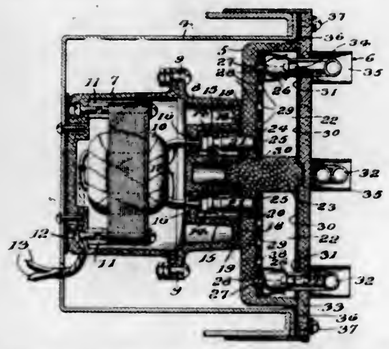
1. In an edging machine of the class described, a body comprising a longitudinally elongated gear casing provided with outwardly extending side flanges defining open-sided belt compartments, the forward side of said body including an outwardly and downwardly inclining portion terminating in spaced relation to the floor, a horizontal bumper carried by the lower end portion thereof, adjustably mounted resilient shoes supported in the forward and lower portions of said compartments, substantially beneath said buffer, a driving pulley located in each compartment, operating means for the pulley including a prime mover supported on said body, endless abrasive belts located in the compartments, and trained over the pulleys and shoes, an operating handle connected to the body, the dust collecting means including outwardly directed branches having their intake ends located beneath the bottom flights of said abrasive belts, together with spring pressed belt tensioning means located in each compartment, and cooperable with the complemental bearings, and a manually operable means for acting upon the tensioning means for moving it in a direction to release the belts to facilitate replacement.

1,804,524. LIQUID PUMP. CLEMENT BROWN, Perry Barr, Birmingham, England, assignor to Amalgamated Carburetters Limited, Perry Barr, Birmingham, England. Filed Nov. 1, 1930, Serial No. 492,775, and in Great Britain Oct. 31, 1929. 1 Claim. (Cl. 103—40.)



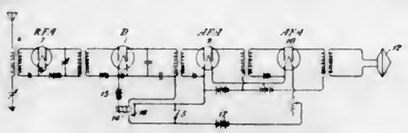
Apparatus for pumping liquids, comprehending in combination a casing providing a pump chamber, a pumping diaphragm in said chamber, a supply conduit leading to said pumping chamber, a discharge line leading from said chamber, a control chamber in said pump casing communicating with said discharge line, a control diaphragm in said control chamber subjected to pressure of liquid in the discharge line, a slide valve connected to said control diaphragm, a supply port in said slide valve normally open to said supply line and allowing flow therefrom to the pump chamber, a pump inlet valve between said supply port and the pump chamber, a pump discharge valve in the discharge line between the pump and the control chamber, and a by-pass port in said slide valve communicating between the control chamber and the supply line and normally closed, whereby excessive pressure in the discharge line will move the control diaphragm and slide valve to first move the supply port out of register with the supply line, and increased excessive pressure moves the slide valve further to open the by-pass port.

1,804,525. GAS LAMP SOCKET AND TRANSFORMER. JOSEPH O. CADIEUX, Meriden, Conn. Filed Apr. 16, 1930. Serial No. 444,729. 12 Claims. (Cl. 40—130.)



1. A tube base having bus bars movable thereon, spaced terminals connected therewith, means for isolating said bus bars and clips positioned on said bus bars and adjustable thereon.

1,804,526. RADIO RECEIVING CIRCUIT. HARRY B. COXHEAD, Hollis, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 1, 1926. Serial No. 133,035. 7 Claims. (Cl. 250—27.)



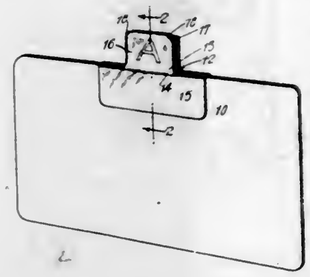
1. In a high frequency signaling system, a transmitting station and a receiving station, a detecting device and amplifying device in the receiver circuit, a relay in the circuit of said detecting device adapted to close the power circuits for the amplifying device during recpetion of the desired radio carrier wave and to open said power circuits when no such carrier wave is being received.

1,804,527. AROMATIC SULFONIC ACIDS AND PROCESS OF PREPARING THE SAME. KARL DACHLAUER and EMIL THIEL, Hochst-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 27, 1926, Serial No. 112,131, and in Germany June 2, 1925. 17 Claims. (Cl. 260—159.)

1. The process which comprises causing a strong sulfonating agent to act at a temperature of about 50° C. to 140° C. upon a mixture comprising an aromatic hydrocarbon and a compound of the group including methyl alcohol and ethyl alcohol.

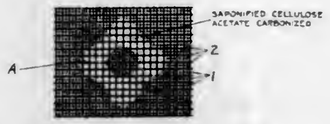
17. As new products ethyl-isopropyl-naphthalene sulfonic acids.

1,804,528. INDEX OR FILING CARD. HAROLD W. DONNELL, New York, N. Y. Filed Mar. 10, 1930. Serial No. 434,753. 2 Claims. (Cl. 129—16.8.)



1. In combination with an index card having a finger tab extending from one of the edges thereof, a protector member constructed of a single piece of bendable transparent material and being of substantially inverted U-shape in cross-section fitting over said finger tab and down against opposite sides of said index card, the opposed side walls of said protector member being outwardly offset on a plane above the adjacent edge of said index card and adhesively secured thereto below said edge, while the portions of the opposed side walls and bight portion of the said member above the adjacent edge of said card are disposed in spaced relation with respect to the opposite sides of said finger tab to facilitate the free insertion of a double index tab therebetween.

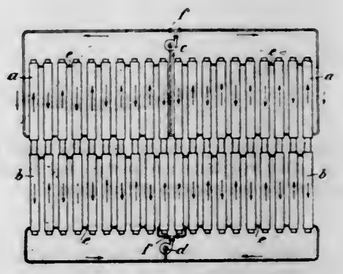
1,804,529. ORNAMENTAL FABRIC CONTAINING DERIVATIVES OF CELLULOSE AND METHOD OF PRODUCING THE SAME. CAMILLE DREYFUS, New York, N. Y. Filed Dec. 16, 1927. Serial No. 240,616. 14 Claims. (Cl. 41—41.)



1. Process of treating fabrics containing organic substitution derivatives of cellulose comprising applying a saponifying material locally to said fabric to convert at least part of said organic substitution derivative of cellulose into a saponification product and then removing said converted cellulose derivative by carbonization.

1,804,530. HEATING DEVICE FOR THE DRY SPINNING METHOD OF PRODUCING ARTIFICIAL THREADS. ALFRED FRIEDERICH, Berlin, Germany, assignor to Aceta G. m. b. H., Berlin-Lichtenberg, Germany, a Corporation of Germany. Filed June 7, 1929, Serial No. 369,219, and in Germany June 9, 1928. 1 Claim. (Cl. 18—8.)

An apparatus for spinning artificial threads according to the dry spinning method comprising in operative combination at least two spinning cells, the upper part as well as the lower part of each spinning cell, being provided each with a water jacket, means for connecting the upper jackets successively, means for connecting the lower jackets successively, means for circulating a heating medium through the upper jackets and means for circulating the heating medium through the lower jackets in opposite direction to that of the upper jackets.

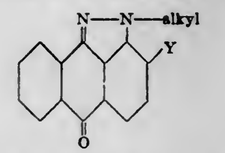


1,804,531. NEW VAT DYESTUFFS OF THE DIPYRAZOLANTHRONE SERIES AND PROCESS OF MAKING SAME. RUDOLF HEIL, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 5, 1927, Serial No. 224,283, and in Germany Oct. 9, 1926. 2 Claims. (Cl. 260—45.)

2. As a new compound the vat dyestuff of the dipyrazolanthrone series, containing a benzylidene group being when dry a golden yellow powder, crystallizing from organic solvent of a higher boiling point in the scales of golden lustre, soluble in concentrated sulfric acid with a bluish red color, dyeing cotton from a bluish green colored hydrosulfite vat blue shades turning to a pure yellow when exposed to the air, which compound is substantially identical with a product obtainable by heating to about 100–150° dipyrazolanthrone with benzaldehyde in presence of an acid chloride as condensing agent.

1,804,532. PROCESS FOR MANUFACTURING VAT DYESTUFFS OF THE ANTHRAQUINONE SERIES. ALFRED HOLL, Offenbach-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 16, 1928. Serial No. 300,146, and in Germany Sept. 10, 1927. 11 Claims. (Cl. 8—6.)

1. The process which comprises treating a substituted alkylpyrazolanthrone of the probable general formula:

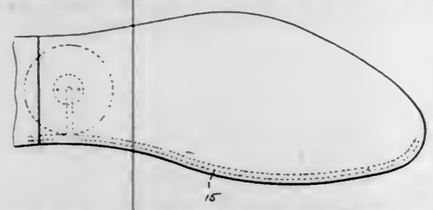


wherein Y means a halogen, a sulfonic, a mercapto or an alkylated mercapto group with a reducing agent and converting the leuco compound thus obtained into the dimolecular dyestuff by means of an oxidizing agent.

1,804,533. VENTILATED SHOE. ANTONIO JANDOC and BEN A. LAGMAY, Wilmette, Ill. Filed Sept. 26, 1929. Serial No. 395,340. 2 Claims. (Cl. 36—3.)

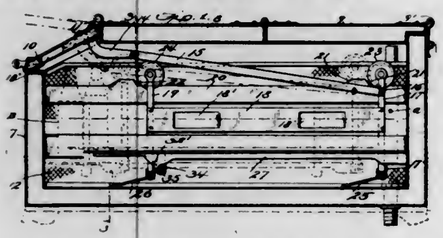
1. A ventilating device for shoes comprising a compressible bulb for disposition within the shoe above the heel portion thereof, a conduit extending from the central

portion of the bulb toward one side of the shoe, a hollow cross member at the free end of the conduit, inlet and



outlet valves at opposite ends of the said cross member, and a tube extending from the outlet end of the cross member toward the toe portion of the shoe.

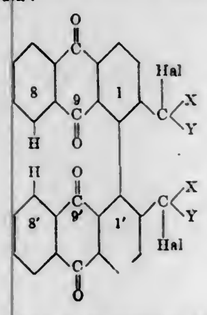
1,804,534. PACKAGE DISPENSING APPARATUS. ELMER M. JONES, Atlanta, Ga. Filed Jan. 7, 1929. Serial No. 330,844. 18 Claims. (Cl. 312—36.)



1. A package dispensing apparatus including a container, a movable exit closure for said container, a guideway for the packages mounted in said container, a receptacle for one package independent of the guideway and adjacent the exit of the container, and means operative by the opening movement of the closure to engage and move all of the packages on the guideway towar said receptacle, deliver one of them to said receptacle and deposit the remaining packages on the guideway, said means being restored to normal position by the closing movement of said closure.

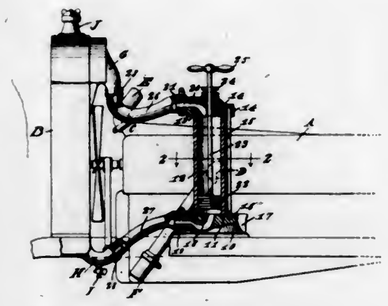
1,804,535. VAT DYESTUFFS. MAX ALBERT KUNZ, Mannheim, and KARL KORBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 14, 1929, Serial No. 414,244, and in Germany Dec. 15, 1928. 6 Claims. (Cl. 260—61.)

8. A process for the manufacture of vat dyestuffs which comprises treating with a weak alkaline condensing agent having a reducing action 1.1'-dianthraquinonyls of the general formula:



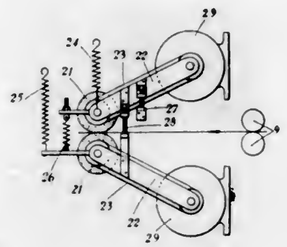
in which X and Y may be hydrogen or halogen, the oxygen atoms in the 9 and 9' positions and the hydrogen atoms in the 8 and 8' positions may be replaced by linkages connecting the said positions with each other and in which the anthraquinonyl radicles may be substituted.

1,804,536. ENGINE COOLING SYSTEM CLEANER. JOHN J. LUDWIG, Carpenter, S. Dak. Filed June 1, 1929. Serial No. 367,767. 1 Claim. (Cl. 141—1.)



An apparatus for cleansing an automobile radiator of accumulations by a repeated flow of cleansing fluid alternately in opposite directions in the radiator, which apparatus comprises a pump embodying a cylinder, a base supporting the cylinder in upright position and closing the lower end of the cylinder, a cap closing the upper end of the cylinder, a reciprocatory piston fitting in the cylinder, a stem extending from the head of the piston through the cap and provided with a hand grip whereby the piston may be manually reciprocated, fluid conduits leading from the said base and the cap, a flexible hose connected at one end with each conduit, and means at the outer ends of the two hose for connection with the inlet and outlet connections of the radiator.

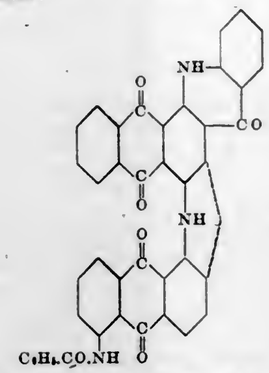
1,804,537. MACHINE FOR REMOVING THE SURFACE SCALE FROM METAL PLATES. WYATT MEACHER, London, England. Filed Sept. 15, 1928, Serial No. 306,198, and in Great Britain Sept. 23, 1927. 7 Claims. (Cl. 51—80.)



1. In a machine for grinding simultaneously the upper and lower surfaces of metal plates adjacent the edges thereof, the combination of independently driven grinding wheels engaging the plates on opposite sides thereof, means for clamping the plates opposite the point of engagement of the grinding wheels with the plates, means for moving the plates relatively to the grinding wheels and tangentially thereto, pivoted arms carrying said grinding wheels and spring means for maintaining said pivoted arms in floating condition.

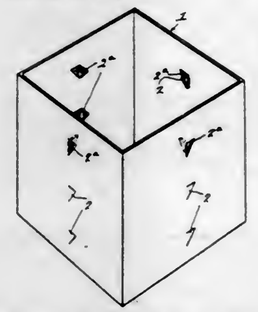
1,804,538. VAT DYESTUFFS. WALTER MIEG, Vohwinkel, near Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 27, 1927, Serial No. 229,274, and in Germany Nov. 4, 1926. 4 Claims. (Cl. 260—37.)

1. As a new product a vat dyestuff having most probably the formula:



being a dark powder soluble in concentrated sulfuric acid with a deep blue coloration soluble in boiling nitrobenzene with an olive coloration; dyeing cotton from the vat fast olive tinged brown shades.

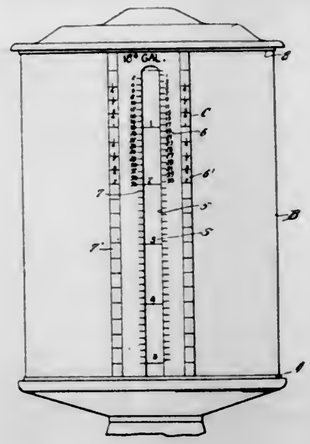
1,804,539. CONTAINER. WALTER MINECK, Cedar Rapids, Iowa. Filed June 5, 1930. Serial No. 459,278 2 Claims. (Cl. 206—56.)



1. In a container of the character described, embodying a permanent bottom having a central aperture, and a false bottom to support the goods and adapted to be adjusted by hand within the container by passing the hand through the aperture in the bottom, a plurality of angular tongues struck out of each wall of the container and adapted to be bent inwardly to form substantially triangular rests constituting substantially straight supporting edges, at substantially right angles to the walls of the container and arranged to support the said false bottom at various heights within the container.

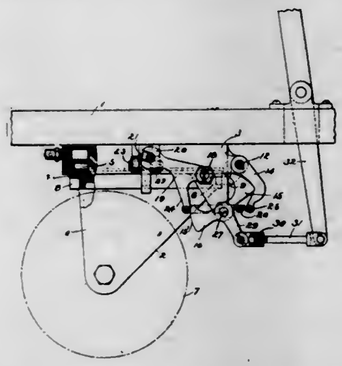
1,804,540. PRICE CHART FOR GASOLINE PUMP BOWLS. JOSEPH MORASKY, Brodhead, Colo. Filed Apr. 12, 1930. Serial No. 443,766. 1 Claim. (Cl. 40—125.)

In combination with a gasoline pump having a visible dispensing cylinder upon which indicia are placed indicating a number of gallons of liquid in the dispensing cylinder, a price gage placed in contact with the cylinder and comprising an elongated strip provided with a longitudinal sight slot, through which the indicia are visible, said strip on each side of said sight slot and adjacent to the side walls thereof provided with scales including a series of indications representing cents, the strip being provided adjacent to its side edges with a second series of indications representing fractions of a gallon, and an-



nular clamping bands placed about the cylinders and the opposite ends of the strips for holding the same in place on the cylinder.

1,804,541. CONTAINER HAVING SWIVEL CASTERS. DONALD W. PERIN, Brookline, Mass., assignor to Perin-Walsh Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 6, 1925. Serial No. 60,900. 7 Claims. (Cl. 280—49.)

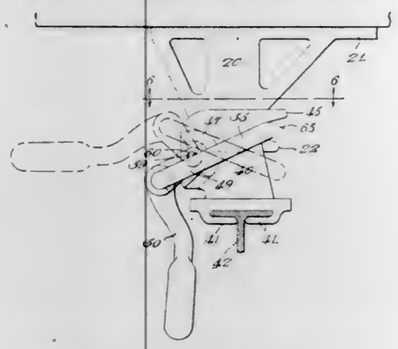


1. In a container having a plurality of swivel casters, independently operable locking means for each caster, said locking means comprising a locking lug, a spring tending at all times to force said lug into locking engagement with said caster, and an actuator having a sliding engagement with said lug and acting in one position to hold said lug against the tension of the spring, out of locking engagement with said caster, the actuator coacting directly with the lug independently of the spring.

1,804,542. LOCKING MEANS. DONALD W. PERIN, Brookline, Mass., assignor to American Freight Service, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 11, 1927. Serial No. 232,589. 12 Claims. (Cl. 296—35.)

1. Means for locking a removable container upon a platform including a slotted member fixed upon said platform, a second member fixed upon said container

and adapted, when said container is in the desired position upon said platform, to enter the slot in said platform member, a tongue on said container member and a ball carried by said platform member which engages



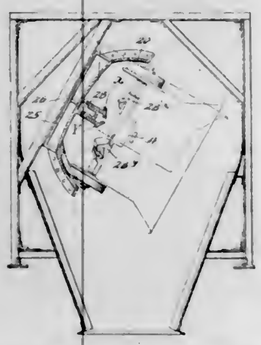
said tongue and prevents any upward movement of said container relative to said platform or any movement of translation of the container over the platform in one direction.

1,804,543. CAR DUMPING APPARATUS. JOHN D. PUGH, Baltimore, Md. Filed Apr. 15, 1927, Serial No. 184,155. Renewed Jan. 23, 1930. 15 Claims. (Cl. 214—62.)



1. Dumping apparatus for mine cars and the like comprising a flanged beam disposed in the form of a helix about a substantially horizontal axis, said beam being formed with two cut away portions intermediate its ends for the passage of beam engaging members.

1,804,544. CAR DUMPING APPARATUS. JOHN D. PUGH, Baltimore, Md. Filed Sept. 22, 1928. Serial No. 307,560. 30 Claims. (Cl. 214—62.)



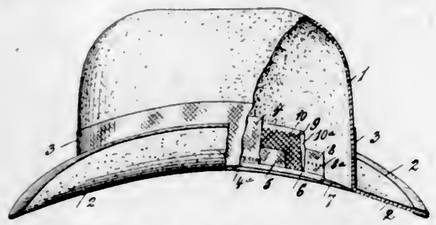
1. Apparatus for dumping cars or the like comprising, in combination, a helical guide, a dump car adapted to be inverted and emptied as it is moved axially of said guide, two guide engaging members carried by said car, one in advance of the other, and both engaging said guide and supporting the car therefrom, the arrangement being such that the center of gravity of the loaded car lies in or close to the axis of the helical guide.

1,804,545. BOOT, SHOE AND SIMILAR FOOTWEAR, JOHN WILLIAM RADBURNE, Rushden, England, assignor to Barrow, Hepburn & Gale, Limited, London, England, a British Company. Filed Jan. 26, 1929, Serial No. 335,232, and in Great Britain Jan. 27, 1928. 2 Claims. (Cl. 12—142.)



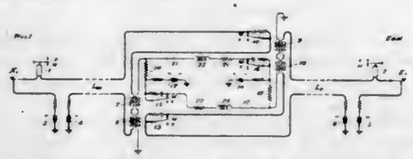
1. A method of resoling shoes, consisting in removing the worn part of the old sole from the insole of a shoe, loosening a portion of the waist of the old sole, skiving a long bevel on the inner surface of the loosened portion of the waist of the old sole, skiving a similar bevel on the outer surface of a new sole, applying a coating of an adhesive solution to the inner surface of the loosened waist portion of the old sole, to the inner surface of the new sole and to the bevelled portions of each part, arranging the new sole in position relatively to the shoe with the skived waist end of the new sole between the free loosened edge of the waist of the old sole and the insole of the shoe, pressing the bevelled portions together and the loosened waist portion of the old sole and the new sole on to the insole, and allowing the solution to set with the parts in contact with each other so that the new sole is attached without stitching and without tacks.

1,804,546. SWEATBAND FOR HATS. BRUNO REICHELT, Nutley, N. J. Filed Oct. 4, 1928. Serial No. 310,378. 2 Claims. (Cl. 2—181.)



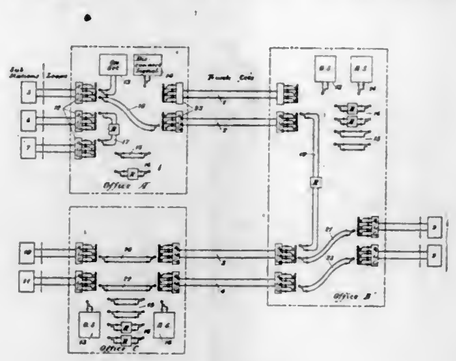
1. A device for use with hats comprising a member adapted to be disposed between the hat and the sweat band thereof, said member having a looped portion one side of which is waterproof and the other absorbent of moisture, a wing formed on said member on one side of the loop and adapted to be attached to the hat, and another wing formed on the other side of the loop and adapted to be attached to the sweat band for supporting the same, and means for carrying a fibre cord.

1,804,547. TELEGRAPH REPEATER ARRANGEMENT. ROY B. SHANCK, Flushing, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,136. 10 Claims. (Cl. 178—71.)



1. A telegraph repeater comprising relay means controlled jointly by a line circuit and an auxiliary circuit, and impedance means associated with said auxiliary circuit for causing the rate at which the current therein builds up to be slower than the rate at which said current dies down.

1,804,548. TELEGRAPH EXCHANGE SYSTEM. GILBERT S. VERNAM, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Apr. 3, 1929. Serial No. 352,136. 33 Claims. (Cl. 178—69.6.)



1. A telegraph exchange system comprising in combination, a plurality of central offices, loop circuits extending from each office to a plurality of subscribers' telegraph stations individual to such office, telegraph trunk circuits interconnecting said offices, link circuits at each office for interconnecting the loop circuits terminating thereat, or for connecting a loop circuit to a trunk circuit for communication purposes, operators' telegraph sets at the central offices with means independent of said link circuits for operatively associating the same with a loop or trunk circuit.

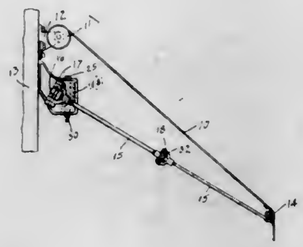
1,804,549. ARCH SUPPORT FOR SHOES. FRIEDRICH TEMLER, Cologne-Nippes, Germany. Filed Apr. 24, 1929, Serial No. 357,663, and in Germany Nov. 8, 1928. 7 Claims. (Cl. 36—71.)



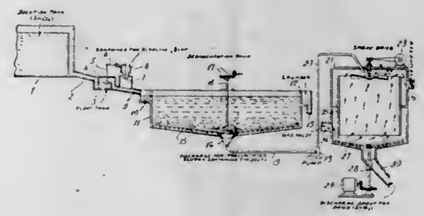
1. In an arch support for shoes the combination of a substantially flat retaining spring, two sockets fixed to said spring, one at each end thereof, one of said sockets having a slot at the top, an arched foot supporting spring having at one end thereof a lug adapted to enter the slotted socket by passing through said slot, the other end being adapted to engage into the other socket, and a bar fulcrumed on said lug, adapted to engage under the edges of said slot.

1,804,550. ADJUSTING DEVICE FOR AWNING ARMS. HARRY BRANCH, Terra Haute, Ind. Filed Mar. 1, 1930. Serial No. 432,362. 6 Claims. (Cl. 156—44.)

4. In combination with a jointed awning arm adapted to support the outer edge of an awning in fixed position when said awning is lowered and adapted to fold to permit raising of said awning, an adjusting device for adjusting the fixed position of said awning, including a stationary member, a member mounted thereon free for movement about a substantially horizontal axis and adapted to be connected to the inner end of said awning arm, a worm gear associated with said last-mentioned member and adapted to move the same about said axis for adjusting the angle of said arm, and a worm engaging said worm gear for rotating the same and for locking the same in a desired position.



1,804,551. RECOVERY OF TIN COMPOUNDS. GIBSON BUTTFIELD, Rockview Heights, North Plainfield, N. J., assignor to The Vulcan Detinning Company, Sewaren, N. J., a Corporation of New Jersey. Filed Apr. 28, 1927. Serial No. 187,164. 12 Claims. (Cl. 23—144.)



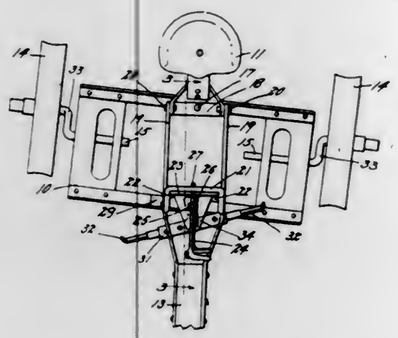
7. The process of recovering a tin compound from a tin-bearing acid liquor from which a tin compound is precipitated upon neutralization, which consists in continuously adding to a flowing stream of said liquor an alkaline agent in amount proportional to the degree of acidity and the volume of flowing liquor, collecting the resulting tin bearing precipitate by sedimentation and removing the supernatant liquor by decantation.

11. The process of recovering a tin compound from a tin-bearing acid liquor which comprises sedimenting the tin bearing precipitate in the form of stannic hydroxide produced by neutralizing the acid liquor, and subjecting the resulting sediment to spraying and concurrent drying.

1,804,552. FOOT GUIDING MECHANISM. THADDEUS E. CLINE and RAY E. TIPTON, Denver, Colo. Filed Feb. 28, 1930. Serial No. 432,019. 4 Claims. (Cl. 280—97.)

1. A guide mechanism for farm implements of the type having a frame and a tongue, comprising: a tongue member pivoted to said frame adjacent its rear; tongue supporting members secured to said tongue member at their one extremity and to said tongue at their other extremity; a bracket member supported intermediate

said tongue supporting members; a T-shaped lever pivoted to said bracket member; a stem on said lever arranged to



engage projections supported from said frame so as to swing the latter about its pivot; and foot rests extending from the extremities of said T-shaped lever.

1,804,553. APPARATUS FOR FRACTIONATION OF HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 14, 1926. Serial No. 81,157. 3 Claims. (Cl. 196—139.)



1. Apparatus for rectifying hydrocarbon oil vapors, comprising in combination a vertical cylindrical shell, means near the bottom thereof for admitting vapors to be rectified, means near the top thereof for withdrawing uncondensed vapors and gases, means also near the top thereof for discharging a cooling liquid into said shell, a baffle in said shell comprising a thin strip of metal of corrugated cross section, a central vertical core rod for supporting said baffle, the inner edge of said baffle being wrapped or wound around said core rod forming a series of spaced convolutions, the spacing of said convolutions being decreased toward the top of said rod, and the strip extending radially from said rod at all points of contact therewith, the outer edge of said strip being in contact with said shell, the corrugations of said strip being parallel and concentric and extending substantially the full length of said strip.

1,804,554. METHOD AND APPARATUS FOR FRACTIONATION OF HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 12, 1926. Serial No. 147,890. 3 Claims. (Cl. 196—139.)



1. An apparatus for rectifying hydrocarbon oil vapors comprising an elongated vertical shell, a vapor inlet adjacent the lower portion of said shell, a vapor outlet adjacent the upper portion of said shell, a continuous helical baffle within said shell, radial corrugations in said baffle, and perforations in the crests of said corrugations.

1,804,555. PAPER PULP CONTAINER. MARINO GENTILE, Chicago, Ill., assignor of one-half to Samuel W. Weis, Chicago, Ill. Filed Oct. 20, 1928. Serial No. 313,952. 2 Claims. (Cl. 91—68.)

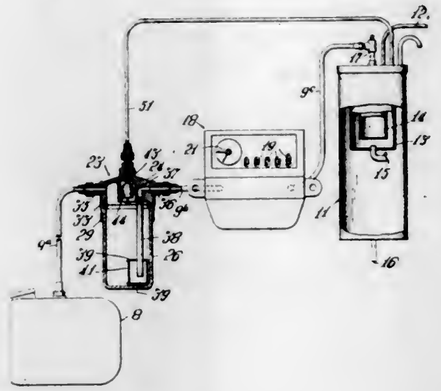
1. A paper pulp receptacle impervious to hot and cold substances that contain water, oil or grease, the said receptacle having a coating of gelatin applied to the paper and over the gelatin having a coating of cellulose ester containing a modifying agent to render the said coating layers strongly adherent to each other.

1,804,556. COMPOSITE COVERING MATERIAL. MARINO GENTILE, Chicago, Ill., assignor of one-half to Samuel W. Weis, and one-fourth to George Pick, Chicago, Ill. Filed June 26, 1929. Serial No. 373,952. 3 Claims. (Cl. 91—68.)

1. An integral transparent wrapping sheet of the character described consisting of a thin film of a protein substance as a base, a coating of cellulose nitrate applied to each face of said film and having incorporated therein a non-hygroscopic bonding agent (other than castor oil) in such a quantity as to cause the cellulose nitrate coating to become integrally united with the protein film on each side thereof, the thickness of the said film and coating respectively being such as that said resultant wrapping sheet will be tough, pliable, transparent, moisture, grease and water proof and adapted to readily conform to the shape of packages and the like without cracking or separating.

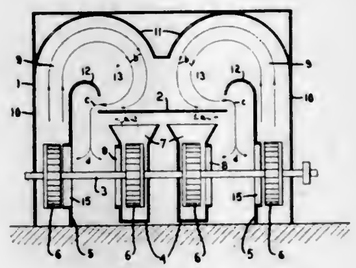
1,804,557. FUEL METERING APPARATUS. LAWRENCE E. GOULD, Chicago, and JARRETT T. LAKE, Wilmette, Ill., assignors to Economy Electric Devices Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 29, 1928. Serial No. 309,234. 4 Claims. (Cl. 137—78.)

3. In a liquid fuel supply system, the combination with a supply tank, a vacuum feed tank adapted to receive the fuel, and a flow meter connected with said vacuum feed tank for measuring and indicating the quantity of fuel conveyed to said latter tank, of means for conveying the fuel from said supply tank to said flow meter, said means affording a duct between said supply tank and the flow



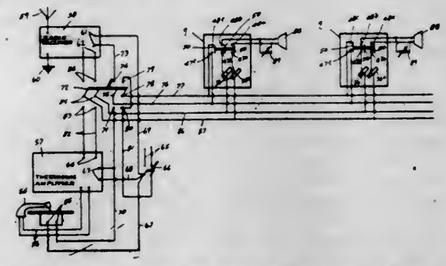
responsive element of said meter which is permanently open under all operating conditions of the system, means for by-passing air and vapor around the flow responsive element of the meter, and a float controlled valve for controlling said by-pass means.

1,804,558. AIR CIRCULATING DEVICE FOR DRYING FLAT FABRICS. HERMANN HAAS, Lennep, Germany. Filed Jan. 31, 1930, Serial No. 424,962, and in Germany Feb. 11, 1929. 2 Claims. (Cl. 34—48.)



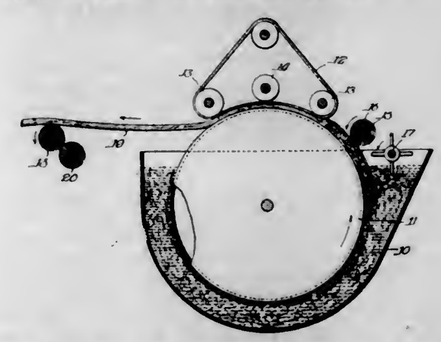
2. In a drying apparatus for drying sheet material, the combination with a drying chamber to receive said sheet material, of a plurality of axially-aligned centrifugal fans situated on one side of the sheet material, a common drive shaft for the rotors of said fans, the central fans having discharge openings to deliver air against that side of the sheet material which faces the said shaft, the fans at the ends of the shaft having associated therewith discharge ducts which lead to the other side of the sheet material and terminate in semi-circular baffle plates by which the air delivered from said end fans is directed against the opposite face of the sheet material.

1,804,559. SIGNAL RECEIVING AND DISTRIBUTING SYSTEM. FRANK HOKE, Indianapolis, Ind., assignor to Holcomb & Hoke Manufacturing Company, a Corporation of Indiana. Filed Aug. 12, 1929. Serial No. 385,485. 4 Claims. (Cl. 179—6.3.)



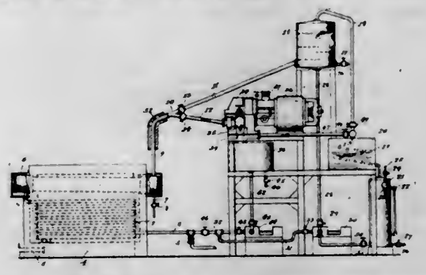
4. In a signal receiving system, the combination of a main signal receiving circuit, a plurality of receiving devices and a coin control box associated with each of said devices and located adjacent thereto each box including a switch adapted to operatively connect the associated receiving device to the main receiving circuit upon the insertion of a coin, and a time controlled mechanism adapted to break said circuit at a predetermined time after the making thereof.

1,804,560. MANUFACTURE OF FIBER BOARD. ERWIN H. HUSSEY, Springfield, Ohio. Filed Mar. 31, 1930. Serial No. 440,181. 8 Claims. (Cl. 92—42.)



1. The method of forming thick fiber sheets which is characterized by forming the sheet from wet stock and while the sheet is still wet lightly engaging the surface of the sheet with a rotating brush to remove surface inequalities.

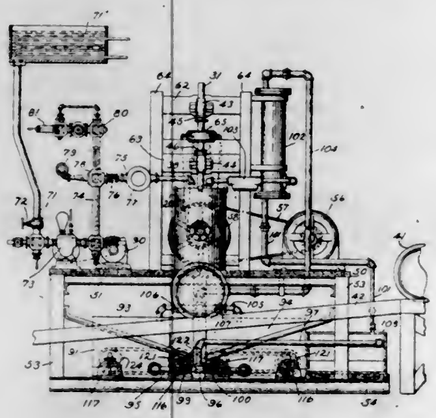
1,804,561. APPARATUS AND PROCESS OF GENERATING POWER. LESTER KIRSCHBRAUN, Chicago, Ill. Filed Dec. 29, 1919, Serial No. 347,991. Renewed Oct. 1, 1927. 2 Claims. (Cl. 196—58.)



1. A process of treating hydrocarbons, comprising passing oil in a small stream through a heating coil where it

is subjected to a cracking temperature, in discharging the oil into a vapor chamber where vaporization occurs, in discharging at regulated intervals the vapors from said chamber to an engine to utilize the expansive energy of said vapors in the development of power and to effect a separation of heavier from lighter oil constituents, in discharging the heavier condensed fractions from said engine, and in discharging the uncondenser fractions for condensation and collection.

1,804,562. APPARATUS FOR MAKING AQUEOUS BITUMINOUS EMULSIONS. LESTER KIRSCHBRAUN, Leonia, N. J., and FREDERICK C. OVERBURY, Pasadena, Calif., assignors to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Continuation of application Serial No. 624,184, filed Mar. 10, 1923. This application filed Mar. 5, 1928. Serial No. 259,341. 14 Claims. (Cl. 134—1.)



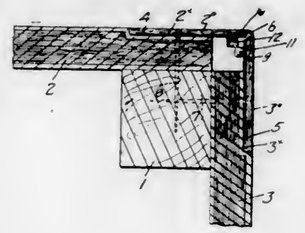
1. An apparatus for making emulsions, comprising in combination, a container for holding a pool of the end product, means including a propelling means in the container mounted axially on rotating means for forcing said product downwardly in a path adjacent the axis of rotation of the propelling means, means for heating heat liquefiable material, means for introducing said heat liquefiable material therefrom to the container, means for introducing water and dispersive media to the container, and regulatory means for containuously withdrawing quantities of the end product from the pool at substantially the rate at which the materials fed to the container are introduced.

1,804,563. VANITY CASE. MAX KLINE, Bronx, and MAX KAPLAN, New York, N. Y., assignors to Superior Products Corporation, Elizabeth, N. J., a Corporation of New Jersey. Filed Jan. 15, 1930. Serial No. 420,834. 5 Claims. (Cl. 132—83.)



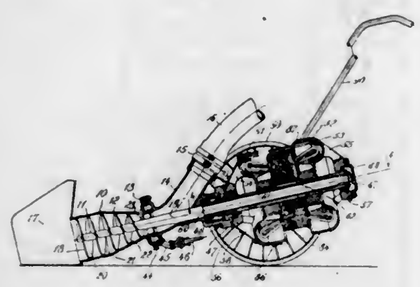
1. A container comprising an arcuate bottom plate having a recessed annular margin, a ring having a part engaged in the recess and bent re-entrantly to constitute the edge of the container, said ring having an overlying annular element constituting a fixed part of the container top, a cylindrical flange at the inner edge of the annular element extending towards said bottom plate, a cup resting on said plate and having a raised peripheral flange tightly engaged in said cylindrical flange, hinge eyes set in the overlying element of said ring, an arcuately curved cover, a hinge eye integral with the edge of said cover to engage the first named hinge eyes, a clip opposite the hinge eyes, and resilient means for detachably securing said cover when in a closed position.

1,804,564. EXTERIOR CORNER CONNECTION FOR WALL BOARDS. DAVID MCCHESNEY, Kirkland Lake, Ontario, Canada. Filed May 31, 1930. Serial No. 458,507. 2 Claims. (Cl. 72—121.)



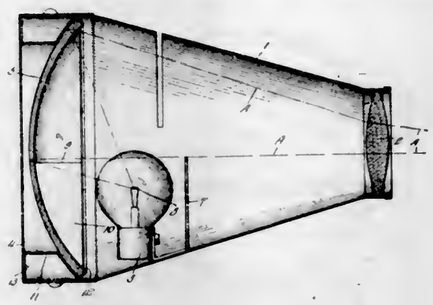
1. In a wall board corner connection, the combination with a corner post, of a wall board having a recessed outer edge placed against each outer face of a corner post, an angle plate the arms of which are counter sunk in the recesses, securing means extending through the arms of the plate, recessed portions of the wall board and into the post, and a plastic filler for the recess covering the arms of the plate.

1,804,565. PORTABLE PUMP. JOSEPH H. MORROW, Catasauqua, Pa., assignor to Fuller Company, a Corporation of Pennsylvania. Filed Aug. 15, 1928. Serial No. 299,718. 13 Claims. (Cl. 302—17.)



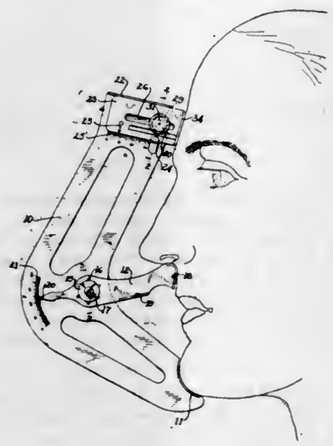
1. Apparatus for conveying pulverized material comprising a casing having an open end for the admission of material, an offset discharge elbow connected to the other end of the casing, a screw shaft within the casing and extending through a wall of the discharge elbow, a bushing surrounding the shaft and secured thereto beyond the elbow, the bushing being supported in spaced bearings and driving means secured to the bushing between the bearings.

1,804,566. LAMP CONSTRUCTION. RALPH A. MULLANEY, Chicago, Ill. Filed Mar. 19, 1931. Serial No. 524,125. 1 Claim. (Cl. 240—41.15.)



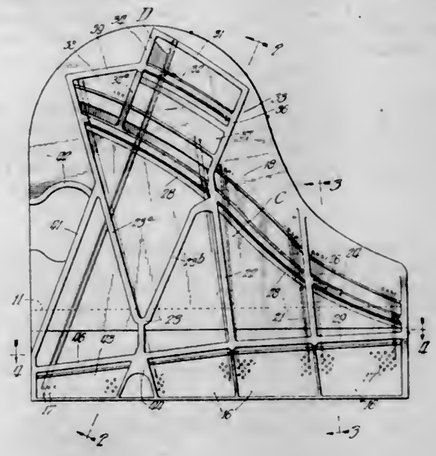
A lamp construction comprising a reflector having a reflecting surface of revolution and a light source in front of said reflector, the lower edge of the effective reflecting surface lying substantially in a horizontal plane and the light source being in front of the focal point whereby the rays from the reflector will be convergent and the upper edge of the light pattern beyond the focal point of the reflected rays from the light source will be substantially horizontal, a condensing lens in front of said light source in the path of the reflected rays, said light source being below the lowermost reflected rays whereby bulb absorption is eliminated and an undistorted light pattern is secured, and a light screen in front of said light source to prevent direct rays from the light source from striking the condensing lens.

1,804,567. DENTAL GAUGE. LUCIAN A. PRAY, Racine, Wis. Filed Nov. 16, 1927, Serial No. 233,632. Renewed Jan. 19, 1931. 8 Claims. (Cl. 33—174.)



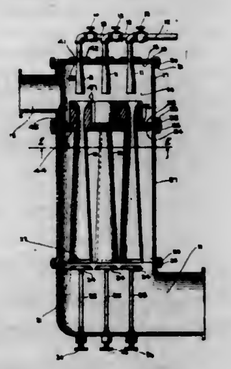
1. In a dental gauge, the combination of a support, and face-engaging means including a forehead-engaging part and an upper-lip-engaging part and a chin-engaging part, the upper-lip-engaging part being formed by a lever pivotally mounted on said support for movement in the plane of the facial profile and one of the other two parts being formed by a movable member adjustably mounted on said support for displacement toward and away from the face.

1,804,568. PIANO. ROBERT J. SCHMUDE, Chicago, Ill. Filed Feb. 27, 1930. Serial No. 431,821. 6 Claims. (Cl. 84—184.)



1. In a piano, a sounding board, a plurality of strings, a string plate including means for supporting and tensioning the strings, and a bridge over which the strings are extended supported entirely by the string plate, sounds produced by the strings being resonated by the sound board without direct contact herewith.

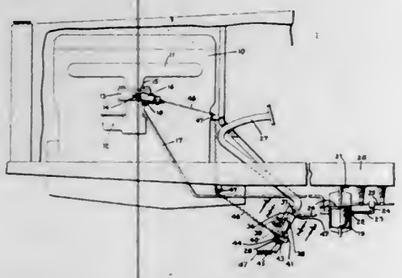
1,804,569. AIR EJECTOR. ULRICH A. TADDIKEN, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 26, 1929. Serial No. 335,318. 2 Claims. (Cl. 230—103.)



1. In vacuum-producing apparatus, the combination of an upper shell member, a lower shell member, a pair of plates secured between the upper and the lower shell members and having aligned openings therein, the lower plate having openings of sufficient size to permit of the passage of the major portion of the diffusers therethrough, said diffusers having flanges to rest upon the upper surface of the lower plate and the upper plate having the openings thereof engaging about the upper portions of the diffusers so that the lower surface of such upper plate engages the upper surfaces of the diffuser flanges, a pair of plates closing the upper end of the upper shell and the lowermost plate thereof having openings through which the motive fluid nozzles depend so that flanges provided on such nozzles may rest on the upper surface of the lowermost plate and the uppermost plate

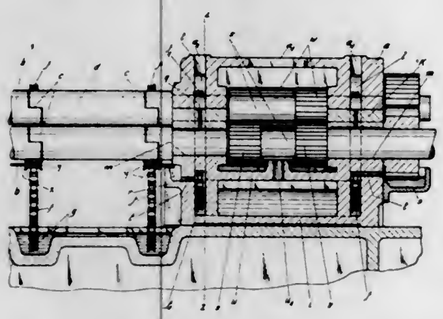
having openings therein to engage with the upper ends of the steam nozzles so as to engage the upper surfaces of said nozzle flanges, the motive fluid nozzles being aligned with the diffusers, valves for controlling the supply of motive fluid to the nozzles, and valves carried by the lowermost shell member for controlling the discharge ends of the diffusers.

1,804,570. BRAKE ACTUATING MECHANISM. WILLIAM H. TOPP, Richmond, Ind., assignor, by mesne assignments, to The Starr Piano Company, Richmond, Ind., a Corporation of Indiana. Filed Aug. 30, 1928. Serial No. 302,948. 7 Claims. (Cl. 188—152.)



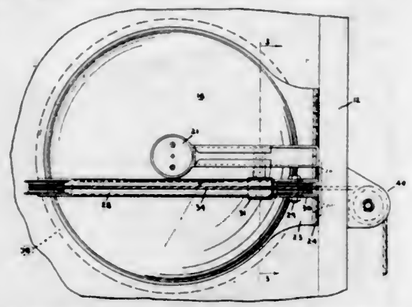
1. In combination, power operating means responsive to differences of pressure, a source of suction, valve means and conduits for controlling the operation of said power means by the suction of said source of suction, a pivotally mounted pedal, rodding operable by said power means and having connection with said pedal, said connection comprising a member carried by said pedal, an arm extending from said member and having a portion thereof overlying the pivotal axis of said pedal, and means connecting said valve means with said arm at a point coextensive with the pivotal axis of said pedal when said member and said pedal are in a definite relation to each other.

1,804,571. LUBRICATING ARRANGEMENT FOR PLATE STRAIGHTENING OR ROLLING MACHINES. FRITZ UNGERER, Pforzheim, Germany. Filed Jan. 11, 1929, Serial No. 331,908, and in Germany Jan. 16, 1928. 8 Claims. (Cl. 308—128.)



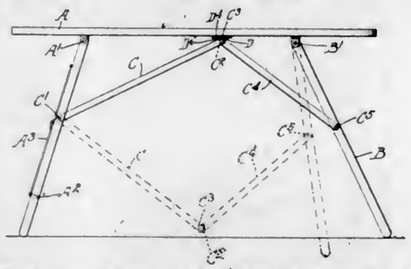
1. A lubricating arrangement for plate straightening or rolling machines, comprising in combination with the accumulated clutch points of the straightening rolls with the clutch shafts and of the driving shafts with said clutch shafts, an endless chain on each clutch point, and an oil sump under the clutch points into which the chains dip to draw oil and to supply the same to the clutch points during the operation of the machine.

1,804,572. AEROPLANE LANDING LIGHT. EARL VAN HORN, Los Angeles, Calif., assignor to Goodyer's Inc., Los Angeles, Calif., a Corporation of Nevada. Filed Nov. 20, 1929. Serial No. 408,534. 8 Claims. (Cl. 240—7.1.)



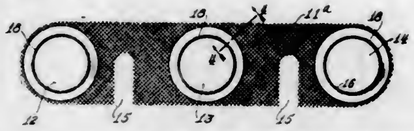
1. A landing light comprising a pivotally mounted lamp housing having an enclosing lens, the pivotal connection being adapted for connection to a fixed part of an aeroplane, the lamp being enclosed in one position in the aeroplane passing in and out of an opening and adapted when enclosed to have the lens parallel to a lower surface, a pivotally mounted arm, a slidable connection between the arm and the housing, the arm being pivoted to a fixed part of the aeroplane, means to move the arm in an arcuate motion, the movement of the arm shifting the housing from a position enclosed in the aeroplane structure or to a position exposed with the lens in the second position substantially at right angles to that of the enclosed position.

1,804,573. IRONING TABLE. BERKELEY S. VAUGHAN, Geneva, Ill., assignor to Wheeler Screen Company, Geneva, Ill., a Corporation of Illinois. Filed Apr. 27, 1928. Serial No. 278,218. 6 Claims. (Cl. 68—10.)



1. In an ironing board and collapsible support therefor, a board member, a support pivoted adjacent one end thereof, a second support pivoted adjacent the other end thereof, a brace pivoted to each of said supports, the opposite ends of said braces being permanently pivoted to each other and means directly on the board for readily removably fixing said opposite ends of said braces to the board intermediate the pivot points of said supports.

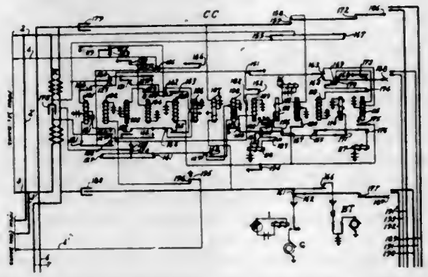
1,804,574. GASKET. JOHN H. VICTOR, Chicago, Ill., assignor to Victor Manufacturing & Gasket Co., a Corporation of Illinois. Filed Aug. 11, 1927. Serial No. 212,205. 3 Claims. (Cl. 288—1.)



1. In an article of the class described, the combination of a flexible and manually extensible supporting body,

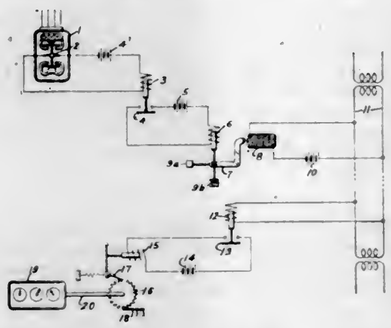
having a pair of holes adapted to substantially fit a pair of gaskets, with a pair of gaskets, said gaskets being fixedly secured to said body at the edges of said holes, and said body being formed of a material manually distortable laterally and longitudinally to locate said holes and gaskets in substantial registration with a pair of portholes.

1,804,575. TELEPHONE SYSTEM. JOHN H. VOSS, Berwyn, and THOMAS F. CROCKER, Chicago, Ill., assignors to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed July 5, 1929. Serial No. 376,215. 18 Claims. (Cl. 179—27.)



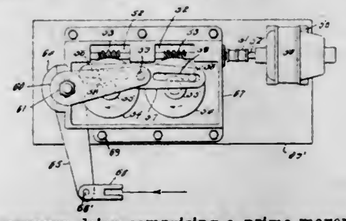
1. In a telephone system comprising a main exchange and a branch exchange, switching apparatus at the main exchange for completing connections between main exchange subscribers and branch exchange subscribers, other switching apparatus at the main exchange for completing connections between branch exchange subscribers, a branch exchange attendant's position located at a point remote from the main exchange, a main exchange trunk terminating in said first switching apparatus, and a branch of said trunk extending from said first switching apparatus to said position.

1,804,576. REMOTE METERING SYSTEM. GRIFFIN G. WAITE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1927. Serial No. 234,489. 4 Claims. (Cl. 179—2.)



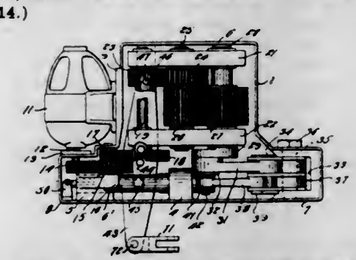
1. A remote metering system comprising a watt-hour meter impulse sender, a relay responsive to the impulse sender, an adjustable resistor device connected to an energized telephone circuit, a solenoid device disposed to be controlled by the relay for periodically varying the effectiveness of the adjustable resistor device to effect the periodic generation of current impulses in the telephone circuit corresponding in number to the operations of the impulse sender, a registering device, and means responsive to the impulses transmitted over the telephone circuit for actuating the registering device.

1,804,577. DRIVING MECHANISM. RAYMOND A. WALTER, New York, N. Y., assignor to Conveyor Sales Company, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1927, Serial No. 173,136. Renewed Apr. 24, 1930. 10 Claims. (Cl. 74—14.)



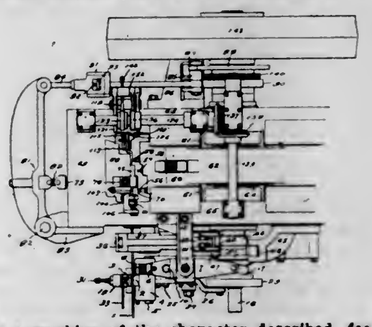
1. A conveyor drive comprising a prime mover, a shaft coupled to the prime mover, aligned worm gears mounted on the shaft, ring gears in engagement with the worm gears, wrist pins fixed on the ring gears, a bar having slots to receive the wrist pins, sliding on the ring gears, a bell crank operated by the sliding bar, and means to attach the drive to a conveyor.

1,804,578. DRIVING MECHANISM FOR RECIPROCATING CONVEYERS. RAYMOND A. WALTER, New York, N. Y., assignor to Conveyor Sales Company, New York, N. Y., a Corporation of New York. Filed July 1, 1927. Serial No. 202,912. 10 Claims. (Cl. 74—14.)



1. A driving motor for a reciprocating conveyer embodying a motion translating mechanism comprising a connecting rod having one end eccentrically mounted on a rotary power transmitting device and the other end pivoted to a fulcrumed rocking lever, and a connecting rod having its respective ends pivotally mounted on the fulcrumed rocking lever, in offset relation with respect to the first connecting rod, and to a reciprocating member operating in a longitudinal plane, and floatable means to drive the conveyer.

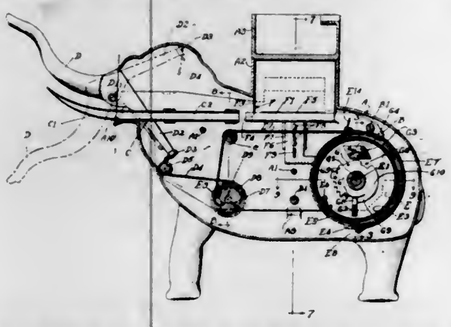
1,804,579. MANUFACTURE OF NUT BLANKS. WILLIAM L. WARD, Port Chester, N. Y., assignor to Russell, Burdsall & Ward Bolt & Nut Company; Port Chester, N. Y., a Corporation of New York. Filed Mar. 15, 1927. Serial No. 175,468. 24 Claims. (Cl. 10—76.)



1. In a machine of the character described, feed jaws, mechanism for opening and closing said jaws, mechanism

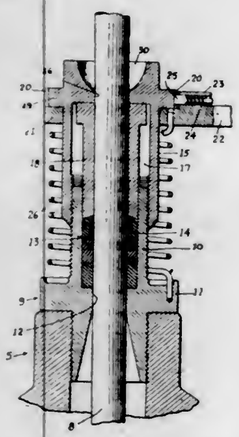
for reciprocating said jaws, and mechanism for piercing the stock, said feed jaws being closed on the stock and retracted equal to the lengthwise expansion of the stock while the stock is being pierced.

1,804,580. CIGARETTE DISPENSER. WALTER L. WHITESIDES, Long Beach, Calif. Filed Mar. 15, 1929. Serial No. 347,387. 13 Claims. (Cl. 312—75.)



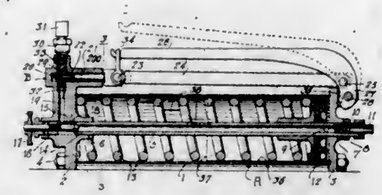
1. A cigarette dispenser comprising a hollow body including a receptacle accessible from the top for filling, an ejecting mechanism enclosed by said body, an ejector tube leading from said receptacle outwardly through said body, an operating member mounted on said body and operatively connected with said ejecting mechanism, said ejecting mechanism including a band provided with an ejector thereon movable through said receptacle into engagement with and for moving a cigarette into said tube when moved in one direction, spring means connected with said bands for moving the band and ejector rearwardly and externally of said receptacle for restoring the ejector to normal position.

1,804,581. STUFFING BOX. WILSON B. WIGLE, Compton, Calif. Filed Mar. 26, 1929. Serial No. 349,997. 2 Claims. (Cl. 286—34.)



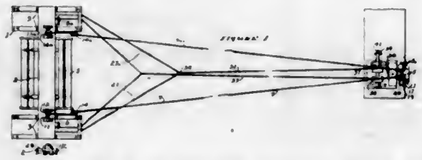
1. A stuffing box construction comprising a lower bored member for the reception of packing elements, said member having a concentric counterbore for the passage of a pump rod, a gland member engaging said packing elements, an upper bored member engaging the lower member, a coiled spring interposed between said upper and lower box members, means to wind said spring to increase its tension, and means to maintain the tension in the spring after a winding operation, whereby as the packing elements wear the spring will rotate the upper box member downwardly to compress the packing elements.

1,804,582. PRESSURE GREASING APPARATUS. JOSEPH W. WOODRUFF, Elizabeth, N. J. Filed Aug. 11, 1927. Serial No. 212,248. 3 Claims. (Cl. 221—47.3.)



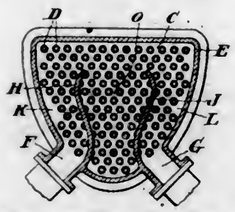
1. Apparatus of the character described, comprising a reservoir for grease including a cylinder having an outlet extending at substantially right angles to its axis at one end thereof, a mannally operable pump including a cylinder disposed axially parallel to said cylinder at one side thereof and having an inlet communicating with said outlet of the cylinder, said pump cylinder also having an outlet passage, a piston reciprocable in said pump cylinder, an operating lever having two angularly disposed arms of different lengths, means for pivotally connecting the outer end of the shorter arm to the end of said cylinder opposite said pump cylinder with the longer arm normally disposed substantially parallel to and adjacent said cylinder, and a link having one end pivotally connected to said piston and the other end articulated to the inner end of said short arm of said lever and disposed between said long arm of said lever and said cylinder.

1,804,583. WATER WHEEL. GEORGE M. ASK, Kirkwood, Calif. Filed Oct. 12, 1929. Serial No. 399,363. 3 Claims. (Cl. 170—107.)



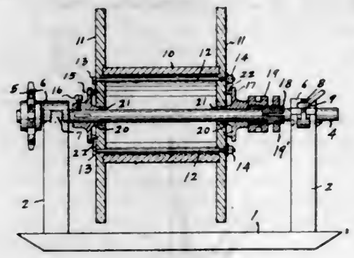
1. A structure of the character described comprising, a supporting means adapted to float upon a stream, a water wheel mounted for vertical adjustment on the supporting means, a fixed anchorage, a pair of cables connected to the wheel and to the anchorage, means for actuating the cables to move the wheel in a vertical plane, and means for actuating the cables to swing the wheel about its vertical axis, and power transmission means connected to the wheel.

1,804,584. CONDENSER. PAUL A. BANCEL, Montclair, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 18, 1929. Serial No. 393,435. 6 Claims. (Cl. 257—43.)



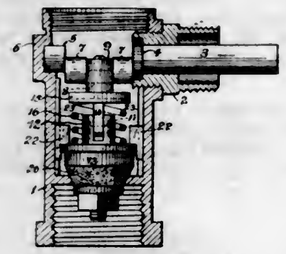
1. A condenser, comprising a water box having an inlet opening, tubes communicating with the water box, and means in the water box forming a plurality of communicating passages therein to assure against a wide variation between the velocity of the water at the inlet opening and the velocity at which it flows through the water box.

1,804,585. LINE CHANGING REEL. LAWRENCE D. BARNER and GUS OTTO SHELANDER, Beaumont, Tex. Filed Oct. 17, 1928. Serial No. 313,119. 2 Claims. (Cl. 242—117.)



1. The combination with a shaft, of a removable spool thereon, end clamps on the shaft adapted to engage the respective ends of said spool and releasable means provided to hold one of said end clamps in engaging relation with the adjacent end of said spool, said releasable means comprising a split bushing on the shaft, a lock nut on the bushing adapted to lock said bushing with the shaft and a clamp nut on the bushing adjustable into abutting relation with the adjacent clamp.

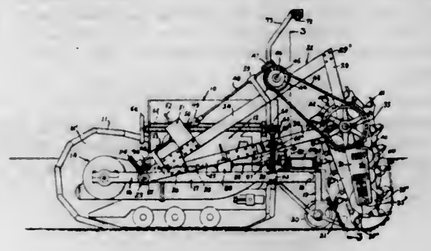
1,804,586. QUICK-OPENING VALVE. GEORGE J. BELKNAP, Bridgeport, Conn. Filed Oct. 3, 1929. Serial No. 397,135. 4 Claims. (Cl. 251—132.)



2. A quick opening valve of the character described, comprising in combination, a body having a valve seat, a crank shaft journaled in the body, a disc holder, a disc therefor, a crank connection having a head journaled on the crank shaft and a tail piece adjustably pivoted to the disc holder to permit of an independent movement of said crank connection and disc holder, a washer underlying the crank connection head, and a spring located between the washer and disc holder to seat the disc independently of the crank shaft.

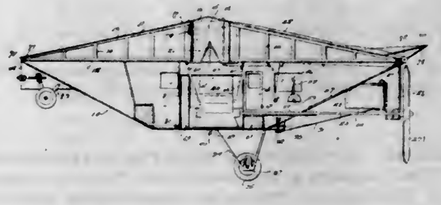
1,804,587. EXCAVATOR. RUDOLPH M. BOWMAN and BRUCE L. BOWMAN, Hollywood, Calif. Filed Dec. 28, 1926. Serial No. 157,476. 7 Claims. (Cl. 37—192.)

6. In a device of the class described, an endless trend tractor, a frame rigidly secured to said tractor and extending beyond the front of said tractor, a bull wheel adapted to support the front end of said frame, another frame pivotally connected adjacent the rear thereof to said first frame, means at the front of said pivoted frame



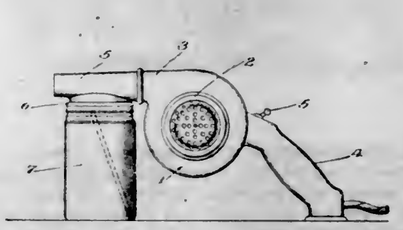
for supporting an endless digging mechanism, and means on said first frame coacting with means on said pivoted frame for raising or lowering said pivoted frame.

1,804,588. AIRSHIP. CLINTON D. BOWKER, Phoenix, Ariz. Filed May 1, 1930. Serial No. 449,046. 15 Claims. (Cl. 244—5.)



1. An airship having a fuselage and a circular supporting plane, the fuselage extending diametrically across the under surface of the plane and being attached thereto and having a length approximately equal to the diameter of the supporting plane, the leading edge of the supporting plane extending upward.

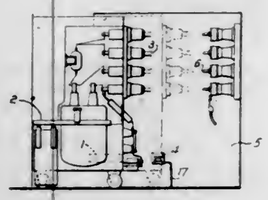
1,804,589. SPRAYING UNIT. ADAM A. BREUER, Chicago, Ill. Filed Feb. 16, 1928. Serial No. 254,717. 6 Claims. (Cl. 299—89.)



4. A spraying apparatus including a blower, an air discharge pipe leading therefrom and having an aperture

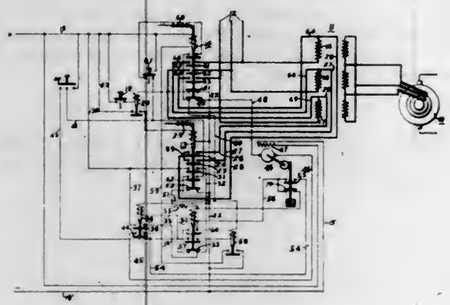
in the underside of the pipe, an open mouthed receptacle, a cap, said receptacle and cap having interfitting connections for securing the same together, said cap having an aperture adapted to register with the aperture in said discharge pipe, a disc having a portion entering said apertures and having a portion engaging the inside surface of said cap for attaching said cap to said discharge pipe with the apertures in registering position, and a pipe for liquid passing through said disc and terminating within the receptacle at a point adjacent the bottom of the same.

1,804,590. SWITCH MECHANISMS. JAMES M. BROWN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 12, 1926. Serial No. 101,356. 3 Claims. (Cl. 175—298.)



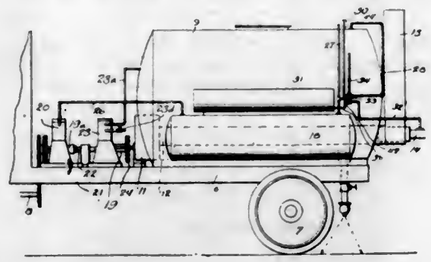
3. The combination with a truck switch and cell therefor having cooperating main contacts, of a relatively long contact plate mounted horizontally on the truck, and contact fingers mounted on the truck cell for cooperating with the contact plates to maintain a ground connection for a time after the main contacts have been disengaged during withdrawal operation of the truck from the cell.

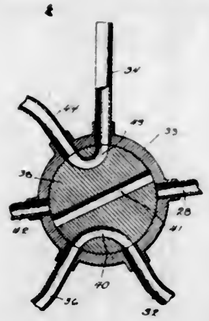
1,804,591. SYNCHRONOUS MACHINE STARTING SYSTEM. CHARLES A. BUTCHER, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 31, 1927. Serial No. 243,881. 6 Claims. (Cl. 171—118.)



1. The combination with a source of power of a synchronous machine and a plurality of transformers having primary and secondary windings, said primary windings disposed to be connected in star relation for starting the synchronous machine, and in delta relation for the running condition of the synchronous machine, means for changing from star to delta connections and a time-element relay for causing a predetermined period of time to elapse between the interruption of the star connection and the completion of the delta connection of the transformers.

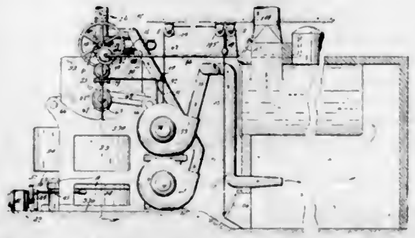
1,804,592. DISTRIBUTING TANK. CURTIS D. CHASE, Alston, Mass., assignor to Chase Holding Corporation, a Corporation of Pennsylvania. Filed Oct. 19, 1927. Serial No. 227,343. 13 Claims. (Cl. 299—35.)





1. In an apparatus of the character described, in combination, a supporting frame, a heating tank mounted thereon, a source of heat directly associated with said tank for heating the contents thereof, and means for insuring venting of the tank when the source of heat is in operation.

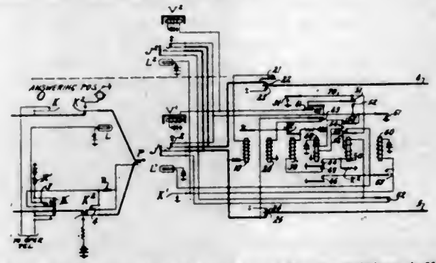
1,804,593. APPARATUS AND METHOD FOR HANDLING PULVERIZED FUEL. GEORGE A. CONRATH, Des Moines, Iowa, assignor of one-half to Charles S. Denman, Des Moines, Iowa. Filed May 10, 1926. Serial No. 107,966. 24 Claims. (Cl. 110—104.)



1. In an apparatus of the class described, a pulverizer, fuel feeding mechanism for supplying fuel thereto, means for supplying air to the feeding mechanism to be mixed with the fuel before the fuel enters the pulverizer, means for withdrawing fuel from the pulverizer, and means for simultaneously controlling the feeding mechanism, the supply of air to the feeding mechanism and the drawing of fuel from the pulverizer.

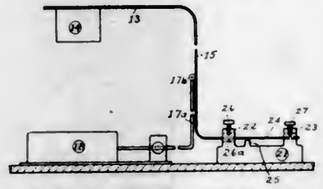
16. A method of handling coal comprising the supplying of air to the coal before it is pulverized and during the pulverizing operation, the removal of the coal from the point of pulverizing and the simultaneous cooperative controlling of the supply of coal for pulverizing, the supply of air to the coal, and the removal of the coal from the point of pulverizing.

1,804,594. TELEPHONE SYSTEM. THOMAS F. CROCKER, Chicago, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Apr. 28, 1928, Serial No. 273,544. Renewed Oct. 13, 1930. 27 Claims. (Cl. 179—41.)



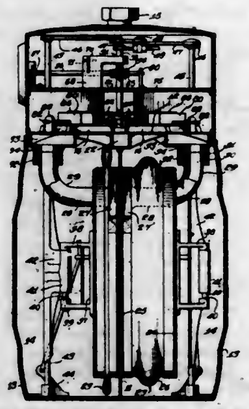
12. In a telephone system, a trunk comprising talking conductors and a sleeve conductor, a cord circuit adapted to be connected to said trunk, a key for said cord circuit, a relay for connecting ringing current to said trunk, and circuit connections including one talking conductor and the sleeve conductor of the trunk and said key for operating said relay.

1,804,595. ELECTRIC DISPLAY DEVICE. MERRITT E. CURTISS, Pittsburgh, Pa. Filed Nov. 11, 1929. Serial No. 406,230. 3 Claims. (Cl. 40—126.)



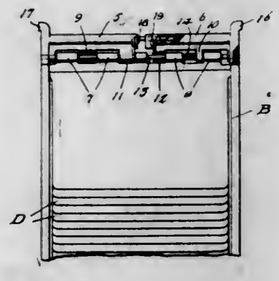
1. In a display device the combination of a translucent figure, a source of light, a resilient shade carrying arm arranged to vibrate between the translucent figure and the source of light, positively actuated means arranged to act upon said resilient arm to vibrate the same and mounting means for the resilient arm arranged to vary the effective length thereof and thereby vary the amplitude and frequency of its vibrations.

1,804,596. GAS METER. JAMES C. DICKINSON, Atlantic City, N. J., assignor of twenty-six one-hundredths to Chester Grey and twenty-six one-hundredths to Robert W. Wiederwax, Atlantic City, N. J. Filed Mar. 7, 1928. Serial No. 259,829. 4 Claims. (Cl. 73—1.)



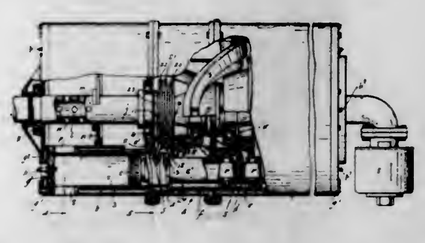
1. In a gas meter, a diaphragm support, a diaphragm including a circular disk arranged adjacent said support, said diaphragm being provided with a gas port, a pipe rigidly connected to said disk and communicating at one end with said port, means to which the opposite end of said pipe is detachably connected and constituting an inlet and outlet conduit therefor, a socket radially disposed with respect to said disk and carried by said support remote from said pipe, and a radial projection carried by said disk and slidably fitting in said socket.

1,804,597. CARD INDEX FILE CABINET. JOHN W. DONALDSON, Irvington, N. Y., and BERNARD L. POLKOSNIK, Greenwich, Conn. Filed Oct. 22, 1927. Serial No. 227,950. 3 Claims. (Cl. 45—2.)



1. In a card index, the combination with a cabinet, of a tray slidably mounted within the cabinet, stops located at the forward end of the cabinet, an extension pivotally connected to the inner end of the tray and normally held in alignment with the longitudinal plane of the tray, and formed of a pair of normally spaced sections, one of the sections being adapted to have slidable movement on the tray, a pair of manipulating elements formed respectively transversely of the sections, and means carried by the sections and adapted to engage the stops on the cabinet, when the tray is slid outwardly, to prevent accidental detachment of the tray from the cabinet.

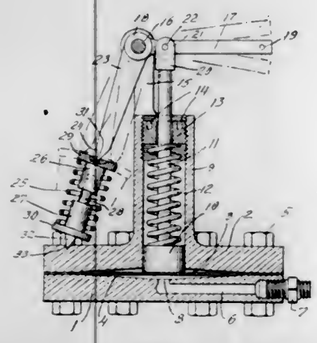
1,804,598. INTERNAL COMBUSTION ENGINE. HARRY W. EARL, Portland, Oreg., assignor to Earl Aircraft Corporation, Portland, Oreg., a Corporation of Oregon. Filed July 18, 1928. Serial No. 293,674. 5 Claims. (Cl. 123—58.)



1. In an internal combustion engine of the character described, comprising a shaft and a cylinder arranged parallel with the shaft, the combination of a sleeve valve element located within and controlling the ports of the cylinder, said sleeve valve element comprising members rotatable one within the other, a piston reciprocated within said sleeve valve element, a driving connection between the piston and the shaft, plural transverse cams carried by said shaft in parallel planes, rocker arms operated by said cams, said rocker arms having members

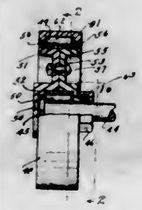
riding on said cams, respectively, means connecting the rocker arms with the members of said valve elements, respectively and the contour of said cams being adapted to impart to said rocker arms an oscillating movement, whereby to operate the members of said sleeve valve element relatively to the operation of said piston.

1,804,599. PRESSURE OPERATED CONTROL MECHANISM. WALTER L. EDEL, New Haven, Conn., assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed May 19, 1927. Serial No. 192,775. 3 Claims. (Cl. 137—156.)



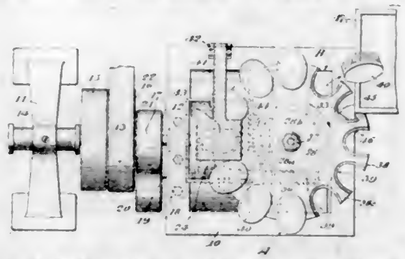
1. A pressure operated control mechanism comprising a casing, a diaphragm mounted in the casing, means permitting pressure to be exerted on one side of the diaphragm, a spring pressed rod engaging the other side of the diaphragm, a pivotally mounted control arm connected to said rod and adapted to be connected to a member to be operated, a second arm fixed to said control arm and arranged at an angle thereto, a spring operatively associated with the end of the second arm, and a pivoted support for said spring, said control arm moving as a unit with the diaphragm, rod and second arm to produce a "snap" action.

1,804,600. GUARD WHEEL FOR SAFETY RAILWAY TRUCKS. ELMER ROCKWOOD EDSON, Portland, Oreg. Filed July 12, 1928. Serial No. 292,301. 4 Claims. (Cl. 308—183.)



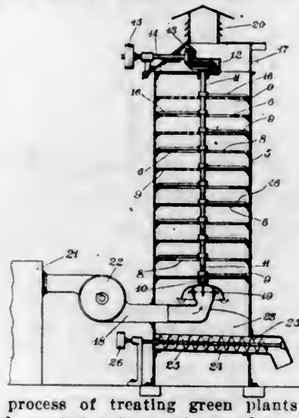
1. A guard wheel for high speed railways, comprising an annular member constituting a rim, said rim having a transversely flattened outer surface and an endlessly recessed inner surface, a pair of complementary webs within said rim, said webs having circumferentially an endless recess complementing the aforesaid recess in said rim, revolving bearings within said recesses, said webs having a hub provided with an endless recess, and revolving bearings within the last mentioned recess.

1,804,601. BRUSH CLEANING MACHINE. WILLIAM S. ELLIOT, Northampton, Mass., assignor, by mesne assignments, to Pro-phy-lac-tic Brush Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 10, 1929. Serial No. 384,852. 5 Claims. (Cl. 15—38.)



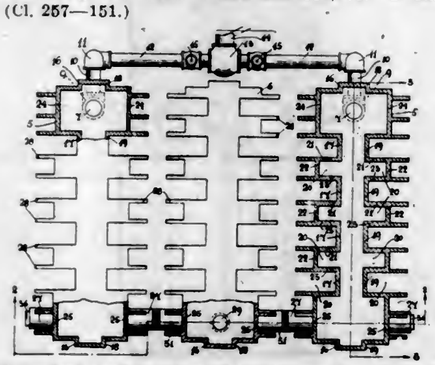
1. In a brush cleaning machine, in combination, a rotating cleaning drum, a travelling brush holder for moving the brushes to be cleaned across the periphery of said drum in a plane at right angles to the plane of rotation of the latter, and common driving means for said drum and brush holder.

1,804,602. PROCESS OF TREATING HAY. OSCAR ERF, Columbus, Ohio. Filed July 18, 1927. Serial No. 206,555. 4 Claims. (Cl. 99—11.)



1. The process of treating green plants constituting cattle feed consisting in topping said plants, promptly subjecting the toppings to a crushing and shredding action and then promptly subjecting them to a pulverizing action together with heat and suitable gases.

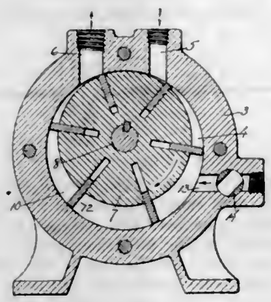
1,804,603. RADIATOR. ANDREW GEDEON, Chicago, Ill. Filed Aug. 28, 1929. Serial No. 388,978. 2 Claims. (Cl. 257—151.)



1. A device of the class described consisting of a pair of end units and an intermediate unit, each of said units

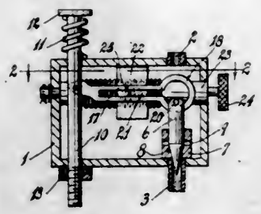
having a main inner space extending longitudinally of said unit, from which space blind channels extend sidewardly, a nipple on the bottom of each of said units adjacent one end thereof, and communicating with the interior of the corresponding unit, a pair of nipples extending laterally of each unit communicating with the interior thereof and adapted to be connected with an adjacent nipple, a pipe line connected with the nipples in the bottom of the end units and adapted to conduct a heating medium into said units, a valve interposed in said pipe line and regulating the flow of the heating medium and a clack valve arranged in each of the nipples extending laterally from the intermediate units and adapted to be closed by the pressure of the heating medium against one side of said valve.

1,804,604. PUMP. ALFRED J. GILBERT, Windsor, Conn., assignor to The Silent Glow Oil Burner Corporation, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 4, 1927. Serial No. 210,479. 8 Claims. (Cl. 103—7.)



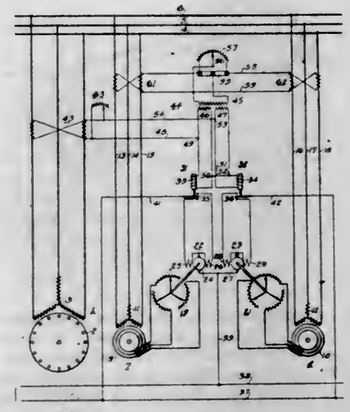
7. A pump comprising a case, a piston rotatably mounted in the case to create a chamber of varying capacity in different parts thereof, said case having inlet ports opening to different parts of said chamber, vanes mounted in the piston and movable radially thereof, the distance between the vanes being less than the interval between said ports, and means for rotating said piston.

1,804,605. AIR CONTROL FOR INTERNAL COMBUSTION ENGINES. JAMES C. GORDON, Los Angeles, Calif. Filed Apr. 2, 1930. Serial No. 440,965. 4 Claims. (Cl. 137—139.)



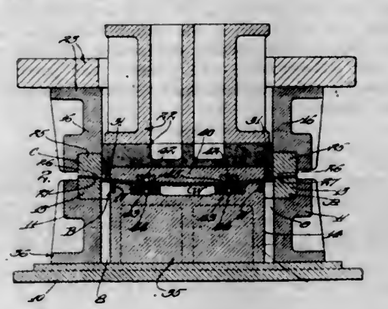
1. An air control for internal combustion engines, comprising a case, an outlet fitting extending from the case, a valve adapted to close said outlet fitting, a rod extending into the case, a link pivotally secured to the rod, a loop on the free end of the link, a pin extending through the valve and through the loop, a block adjustably mounted in the case, said link having a slot therein, a pin extending from the block into the slot, and manual means to adjust said block relative to the link.

1,804,606. REGULATOR SYSTEM. ERNST GRAU, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 7, 1927, Serial No. 231,487, and in Germany Nov. 11, 1926. 4 Claims. (Cl. 172—239.)



1. In an electric feed-control system, a plurality of work devices, a common driving motor for operating said work devices, separate motors for feeding the work to said several work devices, a regulator for each of said feed motors comprising a magnet winding, a circuit for each of said windings, means for energizing said windings in accordance with the load on said driving motor, and means for introducing voltages into the circuits of said windings which vary in accordance with variations in the load distribution on said feed motors.

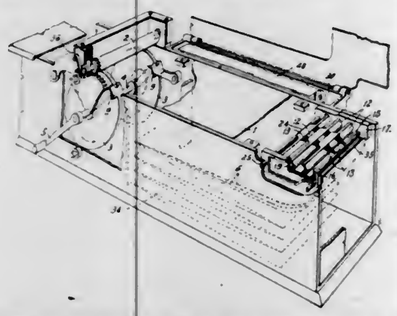
1,804,607. METHOD OF AND APPARATUS FOR MAKING AUTOMOBILE DOORS. OTTO J. GROEHN, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 1, 1928. Serial No. 274,232. 9 Claims. (Cl. 113—49.)



1. In an apparatus for making metal automobile door panels, the combination of means for shaping a metal blank to the required curvature of the door, means for piercing a preliminary window opening, means for drawing the metal area around said opening to provide an offset area, and means for cutting a final window opening around said preliminary opening.

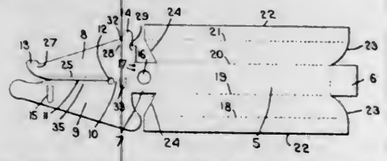
5. The method of making metal automobile door panels which comprises shaping a blank of sheet metal to the desired curvature of the door, piercing the blank to provide an opening of substantial size, drawing the metal surrounding said opening to form a pan shaped depression, trimming said opening, and turning the outer edges of the blank to form a flange.

1,804,608. STRIP ALIGNING APPARATUS FOR MANIFOLD RECORD MACHINES. LOUIS F. HAGEMANN, Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Ontario, Canada. Filed Oct. 5, 1926. Serial No. 139,572. 16 Claims. (Cl. 271—2.1.)



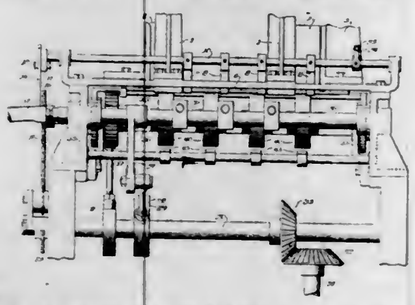
1. In an apparatus of the character described, in combination, a pair of gripper jaws adapted to cooperate to grip a record strip advancing therebetween, one of said jaws including friction filaments so disposed that their sides cooperate with the other jaw to grip said strip, and means adapted to cause said gripping with resilient effect.

1,804,609. ENVELOPE SEALER. ALFRED HALL, East Jaffrey, N. H. Filed Apr. 13, 1928. Serial No. 269,751. 1 Claim. (Cl. 120—6.)



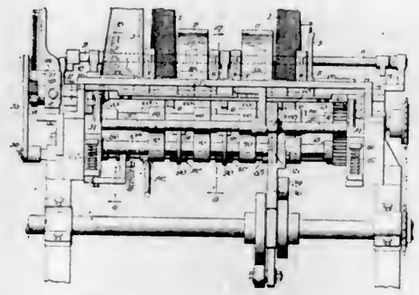
An envelope sealer comprising a hollow handle portion, a pad-receiving portion having a pad thereon and a presser foot portion, said sealer being made from a single piece of sheet material and having a body portion bent along spaced parallel lines to form the sides of the hollow handle and also having a tab at one end which is bent to form the end wall of the hollow handle at one end thereof and a neck portion connecting the body portion with the pad-receiving and presser foot portions, said neck portion being bent to form the other end wall of the hollow handle.

1,804,610. FEEDING MECHANISM. SEVERIN HALVORSEN, Chicago, Ill., assignor to The Newspaper Stuffing Machine Company, Seattle, Wash., a Corporation of Washington. Filed June 5, 1924, Serial No. 718,170. Renewed May 5, 1930. 14 Claims. (Cl. 271—29.)



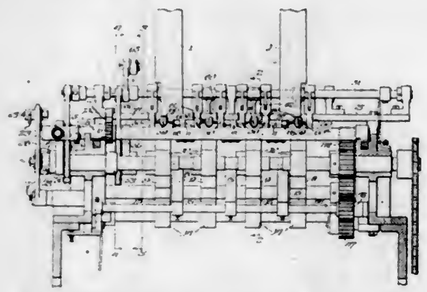
1. In a feeding machine a stack of flat articles fixed means for supporting the rear portions of said articles, movable means for supporting the front portions of said articles, said means comprising swinging fingers suspended from a rock shaft for alternately supporting and releasing said articles, an oscillatable arm having pneumatic means for engaging and flexing the lowermost of said articles, and withdrawing means comprising cooperating rotary members, one of said members having a resilient portion, the other said member having a recessed portion for engaging said articles.

1,804,611. PNEUMATIC FEED MECHANISM. SEVERIN HALVORSEN, Chicago, Ill., assignor to The Newspaper Stuffing Machine Company, Seattle, Wash., a Corporation of Washington. Filed Dec. 22, 1924. Serial No. 757,341. 36 Claims. (Cl. 271—29.)



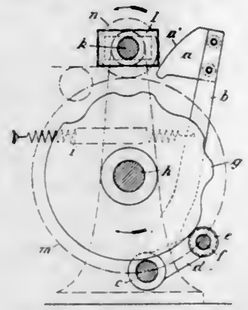
1. The combination with means for supporting a stack or pile of articles, said supporting means including movable devices, movable to support and release one edge of said articles, pneumatic means for drawing down the released edge of the lowermost article, means for operating said pneumatic means, said pneumatic means being mounted for bodily movement below the stock or pile and for rotative movement during such bodily movement, a segmental roll for acting on the released edge of said lowermost article to swing the same further downwardly and backwardly and a feed roll cooperating with the said segmental roll to engage the downwardly and backwardly swung edge of said article and feed the same.

1,804,612. PNEUMATIC FEED MECHANISM. SEVERIN HALVORSEN, Chicago, Ill., assignor to The Newspaper Stuffing Machine Company, Seattle, Wash., a Corporation of Washington. Refiled for abandoned application Serial No. 11,439, filed Feb. 25, 1925. This application filed Mar. 21, 1929. Serial No. 348,944. 4 Claims. (Cl. 271—29.)



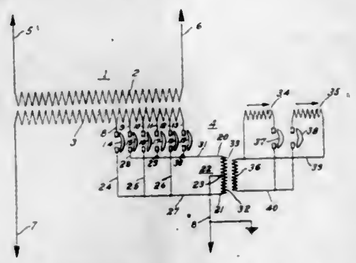
1. Feeding mechanism comprising reciprocatory pin members for engaging the pack to hold all of the same in position except one or more endmost member, means for reciprocating said pin devices and supplemental engaging members for holding the few endmost articles and permitting the same to be withdrawn, and means for reciprocating said pin engaging devices, said means comprising a rod having a head carrying said devices, a swinging arm actuating said rod, a rock shaft carrying said arm, a second arm on said rock shaft, a link connected with said second arm, a bell crank connected with said link, and a reciprocatory cam actuated device for operating said bell crank.

1,804,613. FOLDING TOOL FOR MATCH-BOX MAKING MACHINES. LUDWIG HENNINGER, Durlach, Germany, assignor to Badische Maschinenfabrik & Eisengiesserei vormals G. Sebold und Sebold & Neff, Durlach, Germany. Filed Sept. 4, 1929, Serial No. 390,229, and in Germany June 16, 1928. 2 Claims. (Cl. 93—54.)



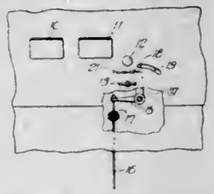
1. In a box forming machine comprising a grooved mandrel, a rocking knife-like folding member and a cam for continuously controlling said member, the folding edge of said member being so curved and the cam faces of said cam being so shaped that the curved edge of the folder during the operation thereof forms a substantially straight line adjacent the base of the groove along the sides of the mandrel and remains along the sides of the mandrel and remains in said groove for substantially the entire time required by any one side of the mandrel to move along the folder.

1,804,614. TAP CHANGING SYSTEM. LELAND H. HILL, Collingswood, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 14, 1928. Serial No. 292,771. 5 Claims. (Cl. 171—119.)



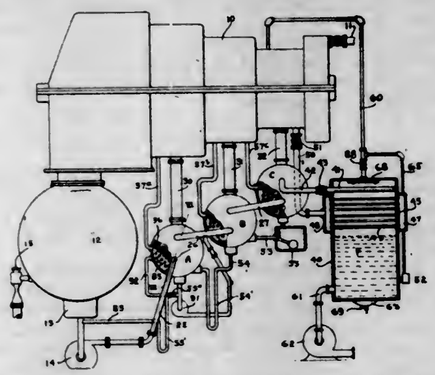
1. In combination, a main transformer having a primary and a secondary winding, one of said windings having a plurality of taps, an auxiliary transformer having a primary and a secondary winding, means for connecting said taps alternately to opposite terminals of said secondary winding of said auxiliary transformer, the midpoint of said secondary winding constituting a terminal for the tapped winding of said main transformer, and means including two windings energized by said main transformer and switches for connecting the one or the other of said windings to the primary winding of said auxiliary transformer to increase or decrease the terminal voltage of the transformer with respect to the voltage of the tapped portion of said winding.

1,804,615. FOOT CONTROLLED ACCELERATOR AND BRAKE MECHANISM. ORVILLE Q. HINDS, Chicago, Ill. Filed May 27, 1927. Serial No. 194,556. 2 Claims. (Cl .74—81.)



1. In a motor driven vehicle provided with fluid brake mechanism, an accelerator pedal adapted to be depressed, and a mechanism for controlling the fluid brake, said mechanism comprising a bell crank with a connection to the fluid brake on one arm thereof, and a foot engaging projection on the other arm thereof, the projection extending through the floor board adjacent the accelerator pedal, and being movable sidewise by the foot, without releasing control of said accelerator pedal.

1,804,616. MULTISTAGE FEED WATER HEATING. FRANCIS HODGKINSON, Swarthmore, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1925. Serial No. 70,137. 1 Claim. (Cl. 60—48.)

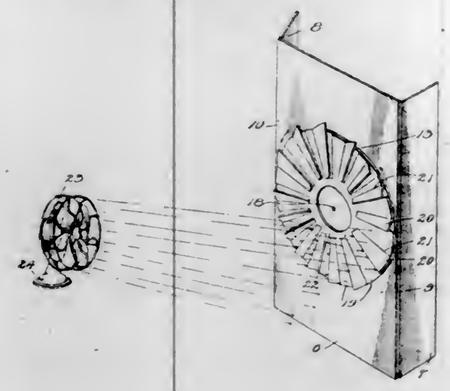


The combination with a multi-stage turbine and evacuating apparatus including a condenser connected to the exhaust opening of the turbine, of a deaerating chamber, means for supplying heated feed water to be deaerated to the deaerating chamber, and conduit means connecting the deaerating chamber with an intermediate stage of the turbine having a pressure below the saturation pressure of the feed water to be deaerated, said turbine, condenser and conduit means being arranged to draw liberated gases from the deaerating chamber and to utilize said gases as motive fluid in a relatively low pressure stage of the turbine.

1,804,617. ADVERTISING NOVELTY STAND. JULIUS HORWATH, Chicago, Ill., assignor to Newman-Rudolph Lithographing Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 17, 1929, Serial No. 393,209. Renewed Sept. 29, 1930. 4 Claims. (Cl. 40—39.)

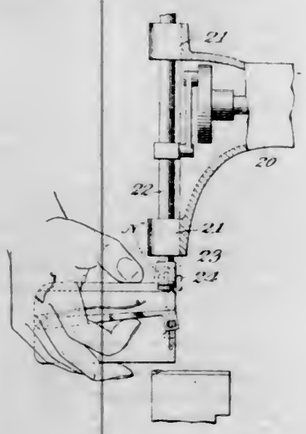
1. In a display stand, the combination of a stationary panel having suitable display matter on its front face, a stud secured to and projecting backwardly from the rear face of said panel and located exclusively to the rear of said panel, a circular panel having a central eyelet journaled upon said stud and secured in place thereon, suitable display matter on the front face of said rotary panel located in circular fashion around the same and of a nature

to harmonize with the display matter on the front face of the stationary panel, there being an aperture in the stationary panel in position to expose said matter on the rotary panel to view as the panel is rotated, a circular panel secured to the back face of the rotary panel and provided with a series of wings or blades reaching rearwardly from the rotary panel at a substantial angle and



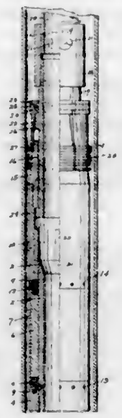
connected to the rotary panel on substantially radial lines of fold, all of said wings or blades facing in the same direction of rotation, and means for creating a current of air against the wings or blades at one side of the device comprising a relatively small motor-driven fan located in position to create a current of air against the wings or blades substantially at one side of the center of rotation only, substantially as described.

1,804,618. NEEDLE LOADER FOR SEWING MACHINES. MERTON W. HOWARD, Lynn, Mass., assignor to Howard Development Company, Lynn, Mass., a Corporation of Massachusetts. Filed Feb. 4, 1930. Serial No. 425,784. 10 Claims. (Cl. 112—225.)



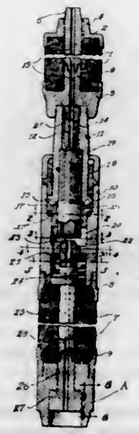
1. A needle loading device for a sewing machine having a needle bar, comprising a magazine for holding a column of needles, a spring pressed follower acting against the column of needles, a feed member having means engageable beneath the point of the leading needle of the column for shifting the needle into the needle bar, and means for positioning said device relative to the needle bar.

1,804,619. PACKER. GRANVILLE A. HUMASON, Houston, Tex. Filed Nov. 23, 1929. Serial No. 409,222. 8 Claims. (Cl. 166—12.)



8. A packer including a tubular packer support, an expansible packing element thereon, a tubular screen support below the packer support, a tubular section connected to the packer support and having a swiveling connection with the screen support and including a downwardly tapering lower expander, casing engaging means about said expander and having a releasable threaded connection with said tubular section, a yieldable seat supported on said screen support and whose upper end engages said casing engaging means, a setting nipple above said packing element and having an upwardly tapering upper expander, casing engaging means about said upper expander, means having a threaded connection with said setting nipple said last mentioned means and said last mentioned casing engaging means having means which interengage and through which the latter may be actuated by the former out of casing engaging position.

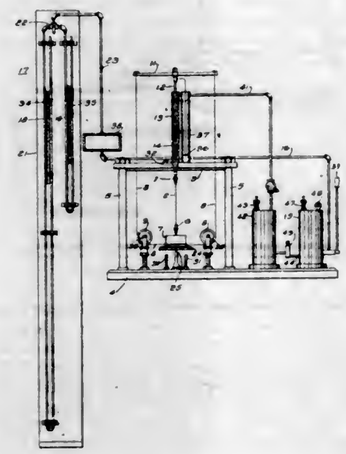
1,804,620. SAND TESTING TOOL. FRANK HUX, Bruni, Tex., assignor to Standard Drilling and Sand Testing Company, Webb County, Tex., a Corporation of Texas. Filed July 1, 1929. Serial No. 375,171. 5 Claims. (Cl. 166—1.)



1. A sand testing tool for oil wells, comprising a housing, a tubular element rotatably seated and projecting

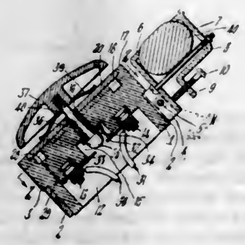
into the upper end of the housing and extending therefrom above; a tubular element seated and projecting into the lower end of the housing and depending therebelow; a valve threadedly-engaged with said upper tubular element, said valve channeled from end to end and adapted to provide open communication with and between said upper and lower tubular members when a test of the well is being had; the valve being lowered to open and closed positions before and after the test is secured by a right hand rotation of said upper projecting element; in combination with packers above and below said housing.

1,804,621. TORSION TESTING MACHINE. PAUL L. IRWIN, Pittsburgh, Pa. Filed Feb. 20, 1929. Serial No. 341,306. 10 Claims. (Cl. 265—1.)



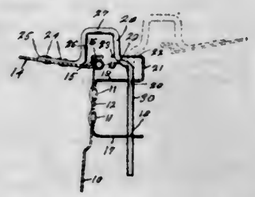
1. In a device for measuring the torsional characteristics of wires, in combination, stationary means for holding one end of the specimen, movable means for holding and exerting torque on the other end of the specimen, hydraulic means for actuating the movable holding means, and pneumatic means for measuring the torque exerted by the holding means.

1,804,622. CIRCUIT CLOSER. CHESTER W. JOHNSON, Boston, Mass., assignor to The A. L. Smith Iron Works, Chelsea, Mass., a Corporation of Massachusetts. Filed Apr. 25, 1928. Serial No. 272,678. 4 Claims. (Cl. 200—59.)



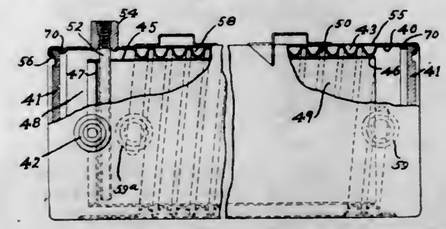
1. A switch as and for the purpose described, comprising a base of insulating material having a groove in one face, a cover overlying and closing said groove and formed of conductive material, a conductor located in said groove separated from the cover, and means for connecting the conductors of an electric circuit in connection, respectively, with said cover and said conductor.

1,804,623. KITCHEN UTENSIL. LOUIS J. KAPLAN, Greenwich, Ohio, assignor, by mesne assignments, to The Kitchen Katch-all Corporation, Greenwich, Ohio, a Corporation of Ohio. Filed Sept. 6, 1928. Serial No. 304,191. 3 Claims. (Cl. 220—33.)



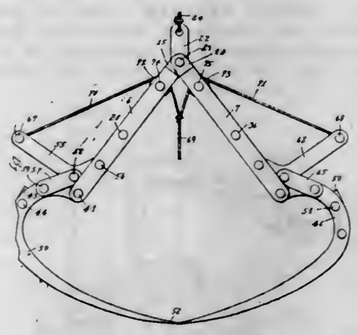
1. In combination with a receptacle open at its top, a cover therefor, a stud attached to said cover and having a downwardly directed end, a cam formed on said stud, and a bracket secured to said receptacle and adapted to receive said end, said bracket comprising a laterally extending portion perforated adjacent its outer end, an upwardly extending portion, and an inwardly extending portion, said last-named portion being bifurcated, and said stud end being received between the furcations of said last-named portion and in the perforation of said first-named portion.

1,804,624. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 31, 1928. Serial No. 296,475. 6 Claims. (Cl. 257—28.)



1. A refrigerant container comprising in combination a pair of sheets forming a double wall, and a boss secured to one sheet and passing through an opening in the other sheet, the opening being larger than the boss to permit relative displacement of the sheets in the direction of their surfaces.

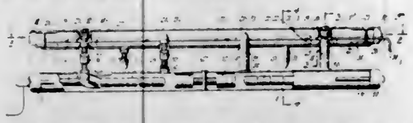
1,804,625. HAYFORK. GOTTFRED KNOTT, Davis Junction, Ill. Filed Mar. 27, 1930. Serial No. 439,321. 6 Claims. (Cl. 294—107.)



1. A hay fork comprising at least two side arms, curved tines pivotally attached to the lower end of each of said side arms to move between an open and a closed position, toggle joints connecting said tines with said side arms intermediate the ends of each, said joints being arranged

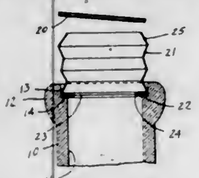
to occupy a position past the center line thereof to hold said tines in their closed position and to be drawn through center to move said tines to their open position.

1,804,626. LOOSE LEAF BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor, by mesne assignments, to Stationers Loose Leaf Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed June 4, 1928. Serial No. 282,725. 5 Claims. (Cl. 129—1.)



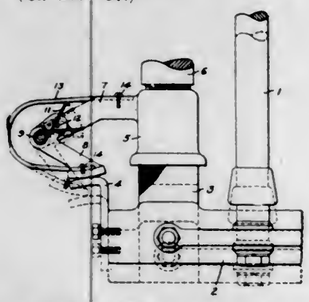
2. In a loose leaf binder, a pair of binder heads, a substantially flexible post member extensibly connected with one head and adapted to be passed into the other, means concealed within said other binder head for readily detachably connecting the same with the end of the binder post passed therein, a bridge bar adapted to engage the topmost of a body of leaves adapted to be secured between the binder heads, and a binder post rigid therewith and adapted to be passed through the leaves.

1,804,627. SANITARY POURING CAP. EMERY D. LUKENBILL, Indianapolis, Ind. Filed Feb. 16, 1929. Serial No. 340,407. 8 Claims. (Cl. 215—51.)



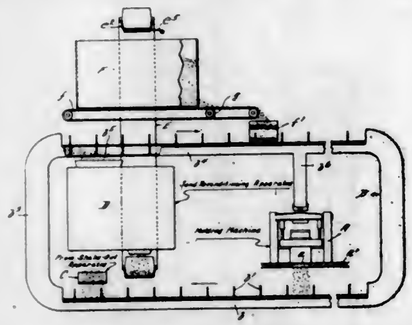
1. A unitary sealing and sanitary pouring cap construction of substantially standard cap dimensions for standard capping machine application to milk bottles and the like, comprising a base seatable in the cap seat of the bottle mouth and having an aperture therethrough spaced from the peripheral edge of the cap, a collapsible pouring spout secured to the base and in registration with the base aperture and having an open sterile mouth, and a cover detachably associated with the spout for maintaining the sterility of the open mouth of the spout until separated therefrom for non-contaminating pouring, said base, spout and cover being simultaneously applied to the bottle in a single capping operation.

1,804,628. CIRCUIT BREAKER. JOHN B. MACNEILL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 6, 1928. Serial No. 317,499. 10 Claims. (Cl. 200—87.)



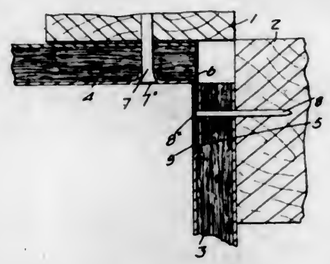
1. The combination with a main contact for a circuit interrupter having an arcing contact associated therewith, of a spring for retaining the arcing contact in a neutral position beyond the main contact when said members are in open circuit position, and a current path so associated with the arcing contact that said contact is biased beyond its neutral position when the circuit interrupter is being actuated to open position.

1,804,629. MEANS FOR TREATING MOLDING SAND. FRANK E. MCCABE, Cleveland, Ohio, assignor to The Grabler Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 25, 1927. Serial No. 178,252. 2 Claims. (Cl. 22—89.)



1. In foundry apparatus wherein sand is separated from castings, reconditioned and returned to a hopper at a molding station, a plurality of storage tanks adapted to hold reconditioned sand, means for selectively filling said tanks and means for selectively emptying said tanks into said hopper, said means and said tanks being so arranged that the sand delivery is substantially continuous and caking and drying of reconditioned sand is prevented.

1,804,630. INTERIOR WALL BOARD CONNECTION. DAVID MCCHESNEY, Kirkland Lake, Ontario, Canada. Filed May 19, 1930. Serial No. 453,738. 1 Claim. (Cl. 72—121.).



The combination with a supporting structure, a wall board portion provided with a recess in its inner face extending from the edge thereof and a wall board portion cut to the required length and set at right angles to the aforesaid wall board portion so that its end is opposite the the recess thereof, an angle member or plate one arm of which is counter sunk within the recess and fits the end face of the adjacent wall board portion, the other arm extending between the adjacent wall board portion and the supporting structure, a securing nail extending through each wall board portion and the angle plate into the supporting structure the heads of which are counter sunk, and a filling for the recess covering the head of one nail and for the orifice formed by the counter sinking of the head of the other nail.

1,804,631. MANUFACTURE OF SULPHATES. RALPH H. MCKEE, New York, N. Y., assignor to Tennessee Corporation, a Corporation of New York. Filed Nov. 1, 1924. Serial No. 747,391. 3 Claims. (Cl. 23—118.)

1. The process of recovering potassium sulphate and aluminum sulphate from potassium and aluminum bearing sericitic silicates which comprises treating such silicates in coarsely ground condition with sulfuric acid of from 30 to 60 per cent. strength.

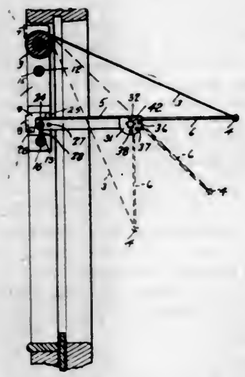
1,804,632. DENATURED SPIRITS AND METHOD OF MAKING THE SAME. RALPH H. MCKEE, Leonia, N. J. Filed May 9, 1925. Serial No. 29,219. 2 Claims. (Cl. 202—77.)

1. The process of denaturing an alcohol which comprises adding thereto a liquid fraction of shale oil freely soluble therein and having an exceedingly unpleasant taste, said fraction comprising unsaturated olefinic hydrocarbons distilling in the gasoline boiling range.

1,804,633. PROCESS OF MAKING FIREPROOFED WOOD AND LIKE CELLULAR PRODUCTS. RALPH H. MCKEE, Jersey City, N. J. Filed Jan. 9, 1928. Serial No. 245,629. 2 Claims. (Cl. 91—68.)

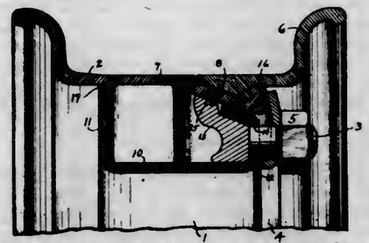
1. The process of producing fire-proofed wood and like dense cellular products which comprises treating such products with a solution of ammonium phosphate in the presence of free ammonia, such treatment being conducted at substantially atmospheric pressure, and at a temperature not materially in excess of prevailing atmospheric temperature, and drying the treated products.

1,804,634. ADJUSTABLE SHADE. ROSS M. MEUNIER, Glendale, Calif. Filed Feb. 3, 1930. Serial No. 425,456. 7 Claims. (Cl. 156—44.)



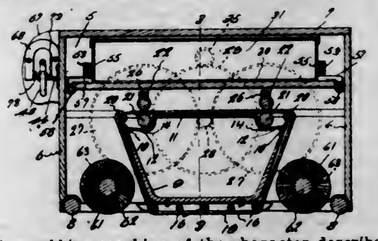
4. An adjustable shade for windows comprising a free roller shade, supporting arms, means for pivotally mounting said supporting arms on a window frame, adjustable shade holding arms pivotally mounted on the swinging ends of said supporting arms, the ends of said adjustable shade-holding arms being bent, a tubular pull rod in the end of said shade the ends of which rod receive the bent ends of said adjustable shade-holding arms, means for holding said supporting arms in vertical position, means for limiting the upward movement of said supporting arms in horizontal position and means for positively holding said adjustable shade-holding arms either in longitudinal alignment with or at an angle to said supporting arms.

1,804,635. VEHICLE WHEEL STRUCTURE. FRANK H. MEYER, Warren, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 12, 1927. Serial No. 160,545. 13 Claims. (Cl. 301—19.)



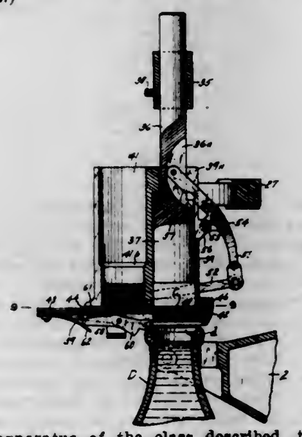
12. A wheel assembly including a channel shaped felloe and a plurality of bolts carried by the felloe, each bolt having an enlarged head, formed with a tapered rim seating surface disposed within the channel of the felloe.

1,804,636. SCRUBBING MACHINE. JOHN MILANOVICH, Hollidays Cove, W. Va., assignor of one-third to George H. Marsh, Hollidays Cove, W. Va. Filed Apr. 21, 1930. Serial No. 446,150. 4 Claims. (Cl. 15—51.)



1. A scrubbing machine of the character described comprising a housing, a handle for manipulating the machine, a clean water receptacle in the housing, valved outlets at the front and rear ends of the clean water receptacle, a scrubbing brush mounted in the said casing underlying each valved outlet, and means for selectively opening the front or rear valve accordingly as the machine is moved forwardly or rearwardly.

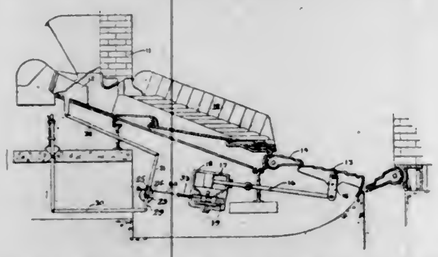
1,804,637. CAPPING MECHANISM. CLIFFORD MORROW, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Filed May 22, 1928. Serial No. 279,699. 5 Claims. (Cl. 226—92.)



1. In apparatus of the class described, the combination of a support, a member movable upwardly and

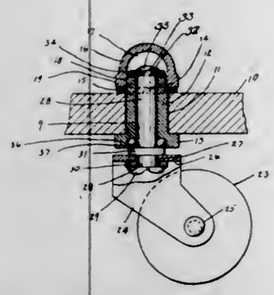
downwardly on said support and arranged to hold a bottle, a capping mechanism on said support comprising a fixed element engaging a cap to seat it in the bottle mouth in the upward movement of the bottle and an element movable on said fixed element, a reciprocating feeder carried by said movable element, a linkage connected to said elements and operated by their relative movements for reciprocating said feeder, means for locking the feeder against movement, said means including a device disposed in the path of movement of a portion of the bottle for preventing operation of said locking means.

1,804,638. ACTUATING MEANS FOR FUEL AGITATORS. DONALD J. MOSSHART, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 22, 1925. Serial No. 32,103. 9 Claims. (Cl. 110—33.)



6. In a furnace, the combination with an automatic stoker including fuel feeding means and a fuel agitating grate section forming a part of the fuel supporting surface thereof, of mechanism operating in response to the operation of the fuel feeding means for intermittently operating said agitating grate section for predetermined periods of time.

1,804,639. BALL BEARING CASTER. CLARENCE B. NOELTING and WILLIAM H. NOELTING, Evansville, Ind., assignors to Faultless Caster Company, Evansville, Ind., a Corporation. Filed Apr. 20, 1928. Serial No. 271,447. 1 Claim. (Cl. 16—38.)

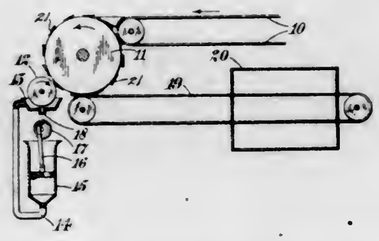


In a caster construction the combination of a caster stem receiving sleeve having an exteriorly threaded upper end and an outwardly shouldered load engaging lower end, a chambered member interiorly threaded and receivable by the end of said sleeve, a caster stem swiveled in said sleeve and having its upper end projecting into and terminating within said chamber, means interposed between the chamber projecting end of the stem and the sleeve and mounted within the chamber for permanently connecting said stem to said sleeve, said sleeve having a laterally enlarged bore at its lower end for lateral and axial thrust bearing, said stem including a laterally enlarged portion for cooperating therewith for axial and lateral thrust, anti-friction elements interposed therebetween and seatable in the bore and engaging the stem and the enlargement thereof, said stem connecting means permitting sufficient relatively axial movement for free swiveling but insufficient relative axial movement to permit anti-friction element escapement, and a horn, said laterally enlarged stem portion cooperating therewith for horn anchorage.

1,804,640. VEGETABLE PROTEIN-BASE GLUE. GEORGE H. OSGOOD, Tacoma, Wash. Filed Aug. 11, 1926. Serial No. 128,626. 1 Claim. (Cl. 87—17.)

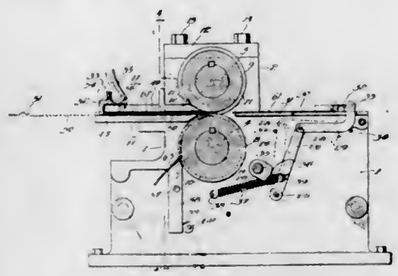
A fluid adhesive compound adapted to form a water-resistant, strong, non-abrasive glue comprising a mixture with one hundred parts of peanut meal, of about sixteen parts of hydrated lime, ten parts of sodium carbonate, thirty parts of sodium silicate, and two parts of copper sulphate, mixed with about four hundred parts of water.

1,804,641. MANUFACTURE OF GRAMOPHONE RECORDS. NOEL PEMBERTON-BILLING, Twickenham, England, assignor, by mesne assignments, to American and Dominions Unbreakable Records Limited, London, England. Filed Nov. 17, 1926, Serial No. 148,958, and in Great Britain Nov. 24, 1925. 1 Claim. (Cl. 91—55.)



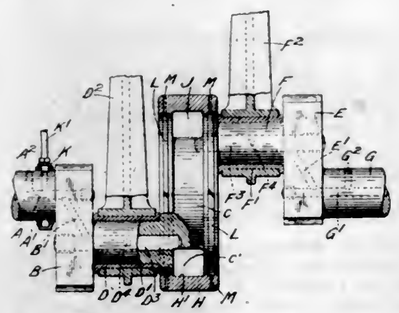
Apparatus for coating gramophone record bases with liquid record material, comprising in combination means to convey the bases separately past a coating device for applying the coating to the bases, which device is supplied with coating material in excess of that required for coating the bases, means including a pump for agitating the liquid recording material and for continually circulating it between a supply reservoir and the coating device, a heating chamber for drying the coated bases, and means for conveying said bases from the coating device through said chamber.

1,804,642. APPARATUS FOR CUTTING INDEX ELEMENTS. FRANK D. POWELL, Chicago, Ill., assignor to Acme Card System Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1928. Serial No. 276,518. 5 Claims. (Cl. 164—61.)



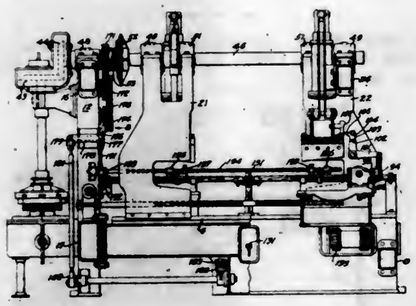
1. A machine comprising in combination, means for shearing from a sheet bearing data thereon in spaced parallel lines the portion between the lines of data to leave the data bearing strips of predetermined width each bearing a line or more of such data, means for actuating such shearing means, means for separating and removing as waste the unprinted waste strips sheared from between adjacent data bearing strips, removable means for separately collecting the data bearing strips comprising receiving means adapted to retain the strips in order relative to the data thereupon.

1,804,643. CRANKSHAFT. HARRY RALPH RICARDO, London, England. Filed Feb. 20, 1930, Serial No. 430,099, and in Great Britain Apr. 2, 1929. 2 Claims. (Cl. 184—6.)



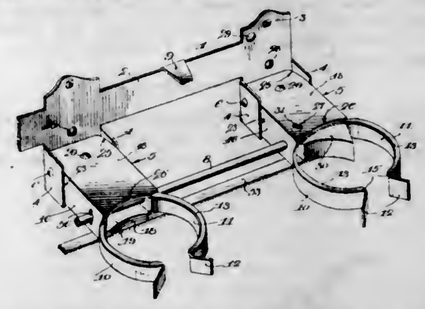
1. In a crankshaft having a passage for lubricating oil therethrough the combination of a crank web of circular cross-section in a plane at right angles to the crankshaft, an annular inertia member mounted on the web and capable of rotational movement thereon about the crankshaft axis, the inertia member and crank web having grooves so formed as to provide an annular chamber between these two parts into which chamber the lubricating oil can flow in its passage through the crankshaft whereby the apparatus acts as a centrifugal separator for the oil tending to cause impurities therein to be thrown outwards against the inner circumferential surface of the inertia member, and means for frictionally connecting the inertia member to the crank web.

1,804,644. BOX BLANK SLOTTING MACHINE. LELAND S. ROSENER, San Francisco, Calif., assignor to Fibreboard Products Inc., San Francisco, Calif., a Corporation of Delaware. Filed Apr. 3, 1929. Serial No. 352,203. 21 Claims. (Cl. 164—48.)



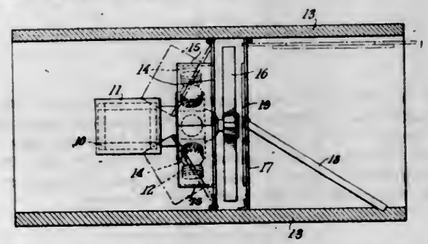
1. A box blank slotting machine comprising reciprocating slotting knives, an intermittently operating endless conveyor synchronized with said knives for feeding and discharging the blanks, and means for positioning the blanks with respect to the knives when the conveyor is at rest.

1,804,645. HOLDER FOR MILK BOTTLES AND THE LIKE. THOMAS C. ROUSE, Wilmington, Del. Filed Dec. 3, 1928, Serial No. 323,438. Renewed Sept. 30, 1930. 18 Claims. (Cl. 232—41.5.)



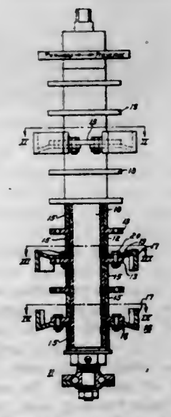
18. A holder comprising a holding member having relatively movable arms each with connected double jaws in confronting relationsbip.

1,804,646. ENGINE TESTING APPARATUS. EARLE A. RYDER and ALEXANDER H. KING, West Hartford, Conn., assignors to The Pratt & Whitney Aircraft Co., Hartford, Conn., a Corporation of Delaware. Filed Mar. 13, 1929. Serial No. 346,778. 14 Claims. (Cl. 70—51.)



1. An air dynamometer comprising a propeller secured to an engine being tested, a cylindrical casing surrounding the engine, a baffle in front of said propeller, whereby air will be drawn past said engine and thrown radially by said impeller past said baffle.

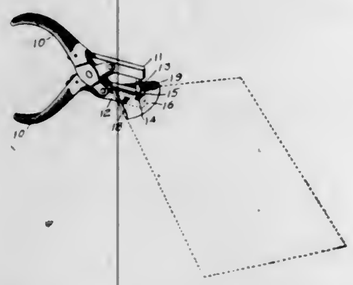
1,804,647. CONTROLLER DRUM. OTTO P. SCHUSTER, Irwin, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 19, 1929. Serial No. 348,348. 5 Claims. (Cl. 200—8.)



1. In a contact drum, in combination, a shaft, an insulating sleeve mounted on the shaft, support plates

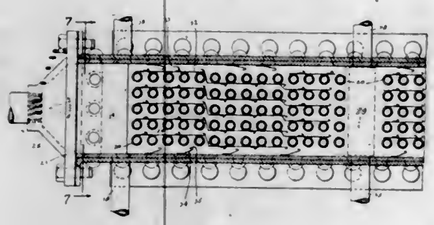
mounted on the shaft and insulated therefrom by the sleeve, spacing members interposed between the support plates, contact members having inwardly extending flanges disposed to be connected to the support members, and a contact plate extending transversely of the flanges, said contact plate being disposed symmetrically with reference to a central horizontal plane extending through the support plates.

1,804,648. LOCATING DEVICE FOR PLIER PUNCHES. HAROLD F. SCRIBNER, New York, N. Y. Filed July 12, 1928. Serial No. 292,272. 6 Claims. (Cl. 164—121.)



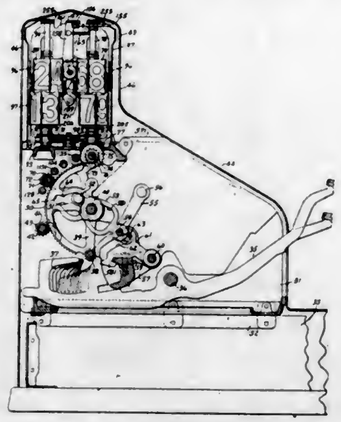
1. A material locating device for a perforating tool of the plier type combining perforating elements; and a sheet of metal having upturned material locating edge portions, disposed at an angle of substantially 90° and diverging outwardly from a point in the general plane of the jaws rearwardly of the perforating elements.

1,804,649. APPARATUS FOR CONDITIONING AIR. CLINTON F. SHADLE, Indianapolis, Ind., assignor to Air Development Company, Inc., a Corporation of New York. Filed Feb. 11, 1929. Serial No. 339,056. 7 Claims. (Cl. 183—32.)



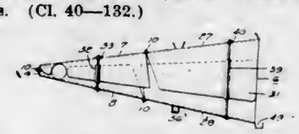
2. An air conditioner of the character described including an elongated tank through which air is adapted to pass, a plurality of tubes extending across said tank in communication with the exterior thereof, a plurality of zig-zag baffle plates mounted on the sides of said tubes for directing the air in a sinuous path past said tubes, hook shaped baffles mounted on said plates, and means mounted exteriorly of said tank in position to cause a cooling medium to pass through said tubes from one side of the tank to the other, said tubes being so positioned within said tank as to cool the air passing therethrough.

1,804,650. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Mar. 15, 1928. Serial No. 261,996. 45 Claims. (Cl. 235—23.)



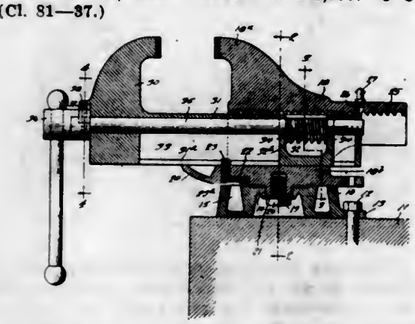
1. In an indicating mechanism, the combination of an indicator body having a plurality of plane faces arranged in a plurality of series; means to rotate the indicator body to select for display a character on one of the plane faces; and separate means to shift the indicator to expose the selected character.

1,804,651. REFLECTOR. FREDERIC SHIPMAN, San Francisco, Calif. Filed Mar. 27, 1929. Serial No. 350,222. 2 Claims. (Cl. 40—132.)



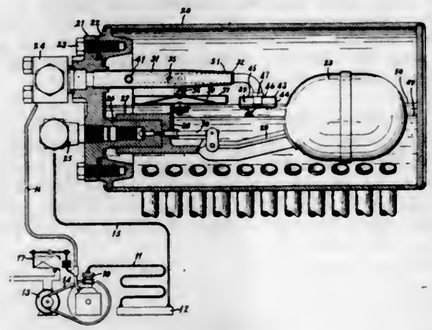
1. A light reflecting device for illuminating a sign plate comprising a plurality of reflecting surfaces extending from a common line, a plurality of reflecting surfaces connected to said first reflecting surfaces, a line source of light disposed substantially adjacent to the convergence of said first surfaces, means for adjusting the angularity of the first reflecting surfaces and means for adjusting the second plurality of reflecting surfaces in relation to the first reflecting surfaces independently of the adjustment of the first surfaces.

1,804,652. VISE. HOWARD W. STEIGER, Lakewood, Ohio. Filed June 24, 1930. Serial No. 463,399. 8 Claims. (Cl. 81—37.)



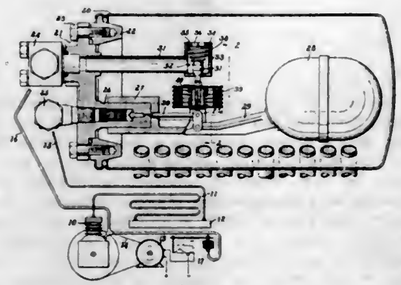
1. In a vise, a fixed base member, a movable base member rotatably connected to said fixed base member, a jaw member fixed to said movable base member, an opening between said base and jaw, a sliding jaw member having an elongated shank extending into said opening and provided with a groove in the bottom surface thereof, and a combined guide and stop member extending through said movable base member within the limits of said fixed base member and into said groove, and adapted to rest on said fixed base member.

1,804,653. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 31, 1929. Serial No. 417,703. 10 Claims. (Cl. 62—95.)



4. In refrigerating apparatus wherein is utilized a working fluid comprising a refrigerant and a liquid separable by gravity, the combination of an evaporator, means for supplying said liquid and liquid refrigerant to and for withdrawing gaseous refrigerant from said evaporator, and means responsive to pressure due to changes in temperature of said evaporator, said last named means cooperating with said vapor withdrawing means during a part only of the operation of the withdrawing means for returning liquid to said withdrawing means.

1,804,654. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 31, 1929. Serial No. 417,705. 6 Claims. (Cl. 62—126.)



3. In refrigerating apparatus utilizing as a working fluid a refrigerant and a lubricant which separate by gravity, means for maintaining a substantially constant quantity of liquid refrigerant in the evaporator, means for removing by gravity the lubricant collecting on the surface of the liquid refrigerant in the evaporator, said means including a valve disposed at the lubricant level desired to be maintained in the evaporator, and means responsive to conditions within said evaporator for operating said valve.

1,804,655. HALTER. KNUTE SWANJORD, Balaton, Minn., assignor of one-fourth to Ervil H. Erickson, one-fourth to Ole A. Erickson, and one-fourth to Ira Hensted, Balaton, Minn. Filed June 20, 1929. Serial No. 372,435. 4 Claims. (Cl. 54—24.)



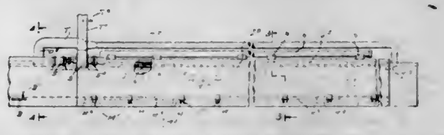
1. A halter comprising a strand of flexible material having detachable hooks at its ends, said strand having a bight formed at its central portion comprising the head band of said halter, the portions adjacent and extending from said bight forming the sides of the halter, a nose band having detachable connections at its ends secured to said sides, the end portions of said strand beyond said nose band being crossed and said hooks at the ends thereof being connected to said strand at the sides of said bight, and a ring embracing said crossed portions to which a leading member may be connected.

1,804,656. WAVE OPERATED PUMP. JAMES R. SWIFT, Highland, N. Y. Filed Apr. 1, 1930. Serial No. 440,669. 1 Claim. (Cl. 230—66.)



A wave operated pump, comprising in combination with a vertical tubular standard having a base and an air outlet, said standard reduced in diameter near its upper end, a tubular member mounted thereon in a freely rotatable manner, a closed head mounted thereon and rotatable therewith, a transverse shaft rotatably mounted in said head with its ends projecting therefrom, a float operated arm secured to the ends of said shaft, a pair of air compressors mounted within said head and piped to the air outlet, a compressor shaft for operating said air compressors, a gear secured thereon and a gear secured on the transverse shaft in said head and in mesh with and adapted to rotate the gear on the compressor shaft.

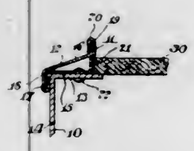
1,804,657. TUNNEL KILN. THOMAS TALBOT, Sedgley, near Dudley, Worcester, England, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 22, 1929. Serial No. 379,973. 9 Claims. (Cl. 25—142.)



1. In a tunnel kiln comprising a heating zone and a cooling zone with a goods passageway therethrough, the

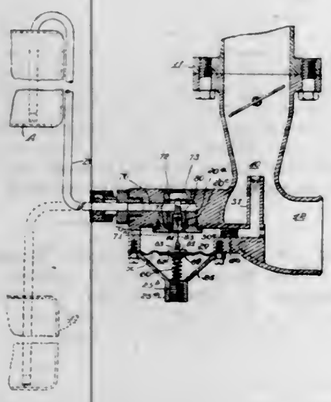
improvement which comprises a fluid channel adjacent said goods passageway in one portion of the cooling zone, a second cooling zone portion between said first mentioned portion and said heating zone and means for circulating a cooling medium through said channel in said first mentioned portion at a pressure below atmospheric and delivering said medium to said second mentioned portion at a pressure above atmospheric.

1,804,658. AUTOMOBILE BODY AND MOUNTING THEREFOR. JOHN P. TARBOX, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 16, 1927. Serial No. 213,293. 11 Claims. (Cl. 296—28.)



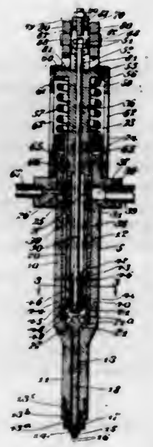
5. In a vehicle construction, an underframe side sill of angle section having a vertical branch and a transversely extending branch at the top of the vertical branch, and a body structure having a threshold portion, said threshold portion being generally of Z-section and seated on the transversely extending branch of the sill through the web portion of the Z, the arms of the Z forming respectively, a door overlap and an outer overlap for the sill.

1,804,659. CARBURETOR. PERCIVAL S. TICE, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Feb. 16, 1927, Serial No. 168,529. Renewed May 1, 1930. 6 Claims. (Cl. 261—69.)



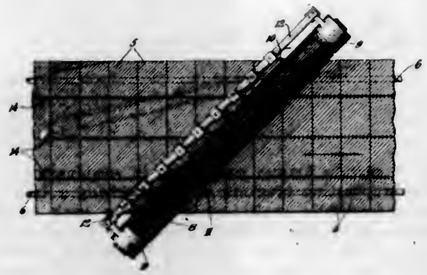
1. A carburetor for internal combustion engines comprising in combination with a fuel mixture conduit adapted for discharge connection into the intake manifold of the engine and having an air inlet; a fuel chamber having connection with a fuel source and means for maintaining predetermined pressure on the liquid in said chamber, a fuel delivery duct extending from said chamber for discharge in the fuel mixture conduit at a substantial distance above the fuel level of the fuel chamber; the means for maintaining the predetermined pressure in the fuel chamber consisting of a conduit for fuel flow from the source to said chamber, a valve in said conduit and means by which the pressure of the fuel from the source is balanced in the opposite directions for seating and unseating the valve, said chamber having a movable wall for expanding and reducing the chamber capacity, said wall being operatively connected with said balanced valve for closing it by the chamber-expanding movement of said wall, and opening it more or less by its chamber-reducing movement, yielding means acting on said moving wall for chamber-reducing movement, and means for adjusting said yielding means in predetermined relation to the pressure of a liquid column in the fuel duct leading from said chamber to the discharge of said duct in the fuel mixture conduit.

1,804,660. LIQUID FUEL FEEDING MEANS FOR INTERNAL COMBUSTION ENGINES. OTIS D. TREIBER, Narberth, Pa., assignor to Treiber Diesel Engine Corporation, Camden, N. J., a Corporation of New Jersey. Filed Mar. 31, 1927. Serial No. 179,820. 2 Claims. (Cl. 123—140.)



1. A device of the character described for the delivery of liquid fuel into the cylinder of an internal combustion engine, which device comprises a tubular casing having a fuel discharge opening at its inner end, a valve for closing the said discharge opening, a plunger located within the said casing which plunger includes a member the inner half part of which is provided with a relatively large axial opening into which liquid fuel is adapted to be delivered, a valve structure for controlling the discharge of fuel from the opening in said member, a rod having connection with a valve of the said valve structure and extending axially of the said member outwardly beyond the outer end thereof, yielding means tending to cause outward movement of said rod with respect to the said member, and means which is adapted to cause the said member and the said rod to move inwardly first as a unit and which thereafter causes the said rod to move inwardly more rapidly than the said member, and means whereby the unitary inward movement of the said member and the said rod operates to open the first named valve.

1,804,661. CORRUGATING MACHINE. JOSHUA WAGNER, Brooklyn, N. Y., assignor, by mesne assignments, to Diagonal Corrugated Patent Corporation, New York, N. Y., a Corporation of New York. Filed June 18, 1929. Serial No. 371,909. 7 Claims. (Cl. 154—30.)



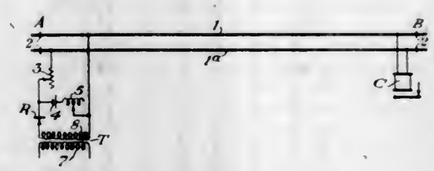
1. A machine for obliquely corrugating sheet material, having a corrugated traveling conveyor wherein the corrugations run oblique to its path of travel, a corrugating roller having longitudinal corrugations, said roller being rotatable about an axis parallel to the first mentioned corrugations.

1,804,662. DIE BLANKS AND METHOD OF MAKING DIES. FRANK O. WELLS, Greenfield, Mass. Filed Mar. 3, 1927. Serial No. 172,320. 13 Claims. (Cl. 76—101.)



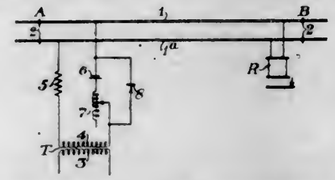
1. The method of simultaneously forming a two part die which consists in first forging a blank with an integral thin web which connects the two spaced die portions, with the lands of each die spaced and located opposite each other and having chip recesses back of the lands, next reducing the blank to the correct finished thickness, next forming an opening through the web and between the lands, next finishing the opposite edges of the lands to size, next forming threads on the lands and relieving the threads, next removing the thin web to separate the dies, then hardening and tempering.

1,804,663. ELECTRICAL APPARATUS. CONRAD H. ZIERDT, Rosedale, Penn Township, Allegheny County, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 4, 1930. Serial No. 433,081. 8 Claims. (Cl. 246—40.)



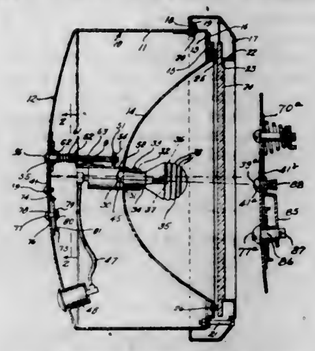
1. In combination, a direct current load, a transformer having its primary connected with a source of alternating current and its secondary connected with said load through a rectifier and a current limiting resistance, and a battery and an inductive reactor connected in series across the secondary circuit of said transformer between said rectifier and said resistance.

1,804,664. POWER SUPPLY SYSTEM. CONRAD H. ZIERDT, Rosedale, Penn Township, Allegheny County, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1930. Serial No. 485,703. 2 Claims. (Cl. 246—40.)



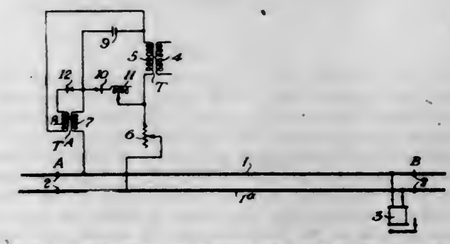
1. In combination, a source of alternating current, a load connected therewith, a battery and a reactor connected in series between one terminal of said source and said load, and a rectifier connected in multiple with said battery and said reactor and poled to prevent the flow of current from said battery through the rectifier.

1,804,665. LAMP FOCUSING MECHANISM. SAMUEL F. ARBUCKLE, Detroit, Mich., assignor to Monogram Lens Corporation, Paterson, N. J., a Corporation of Delaware. Filed Oct. 12, 1926, Serial No. 141,054. Renewed May 17, 1930. 5 Claims. (Cl. 240—442.)



1. In a lamp adjusting mechanism, a casing, a reflector, a socket movably positioned in an aperture in said reflector, a member slidably mounted adjacent said casing, means connecting said socket and member, means to move said member with respect to said casing, an arm adjacent said member and on the opposite side thereof from said casing and means to draw said arm toward said casing whereby said member is gripped between said arm and casing.

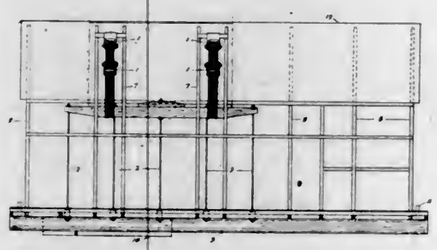
1,804,666. RAILWAY TRACK CIRCUIT APPARATUS. DAVID C. BETTISON, Omaha, Nebr., assignor of one-half to Frank W. Pfleging. Filed Jan. 22, 1930, Serial No. 422,556. Renewed Mar. 13, 1931. 5 Claims. (Cl. 246—34.)



5. In combination, a section of railway track, a track circuit for said section including a track relay connected

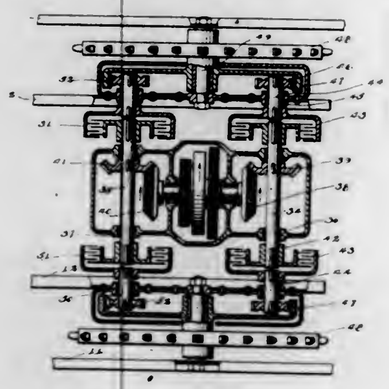
across the rails at one point and a source of alternating current and a battery connected in series across the rails at another point, and means for supplying direct current to said battery from said alternating current source at a rate proportional to the amount of alternating current drawn from said source by said track circuit.

1,804,667. FLOATING MARINE WAY. FRED BITTE, Portland, Oreg. Filed May 12, 1930. Serial No. 451,620. 4 Claims. (Cl. 114—68.)



1. In a floating marine ways, a carriage consisting of the combination of two timbers, of rectangular cross section, separated by six bracing timbers, two of which run directly between the timbers and four of which run diagonally between said timbers, and from each of which five iron rods, equally spaced along the length of each of said timbers, are dropped to five timbers directly below and running at right angles to said timbers, the lower timbers being held in position by two bilge block slides and by two lengths of angle iron, each length fixed to the iron rods by means of U bolts.

1,804,668. POWER TRANSMISSION. JOHN F. BOLGIANO, Dayton, Ohio. Filed July 12, 1924. Serial No. 725,594. 13 Claims. (Cl. 180—17.)



4. In a tractor, a frame, a pair of independent driver wheels at opposite sides of said frame, a power transmission mechanism between said wheels comprising continuously driven forward and reverse shafts, low speed gears in constant driving relation with said shafts through the underrunning portion of an over-running clutch, high speed gears selectively connected with the power means of the tractor having connection with said shafts through the over-running portion of the said over-running clutch, and means for selectively connecting said shafts with said driver wheels.

1,804,669. CURTAIN FIXTURE AND SUPPORTING BRACKETS THEREFOR. JAMES H. BOYE, Chicago, Ill., assignor to James H. Boye Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 16, 1929. Serial No. 332,862. 4 Claims. (Cl. 156—19.)



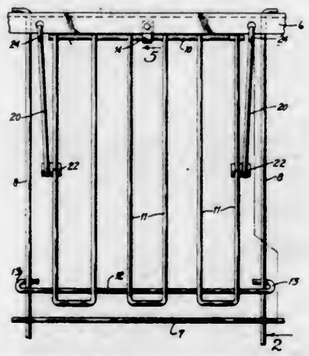
1. A curtain fixture, comprising in combination a pair of rod-supporting brackets each comprising a base plate and a forwardly projecting upstanding hook having a concave inner edge extending from the tip of the hook to said base plate, and a curtain rod having rearwardly directed end portions formed wtih apertured top walls to engage over said hooks, said apertures being spaced from the ends of said rod a distance approximately equal to the distance from the top of a hook to the lower end of its concave inner edge.

1,804,670. NASAL PELLET. EDWARD J. BRENNAN, Harrisburg, Pa., assignor to Nasalets Inc., New York, N. Y., a Corporation of New York. Filed Apr. 11, 1930. Serial No. 443,288. 4 Claims. (Cl. 128—198.)



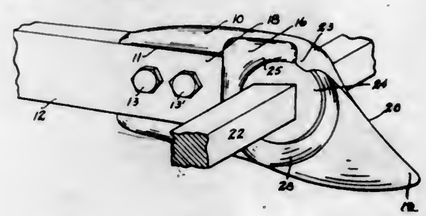
3. A device for use in the treatment of colds and the like comprising a pellet formed of a sheet of soft absorbent fibrous material carrying a quantity of inhalant and loosely wound into a substantially cylindrical roll, the successive layers of said roll being spaced to provide a plurality of air passages extending longitudinally of the roll.

1,804,671. POULTRY COOP GATE. ERNEST R. CARR, Clinton, Iowa, assignor to The Collis Company, Clinton, Iowa, a Corporation of Iowa. Filed Sept. 22, 1930. Serial No. 483,434. 9 Claims. (Cl. 119—17.)



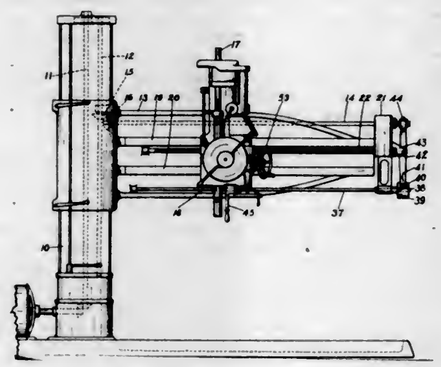
1. In combination with a coop having a frame defining an opening with guide wires at opposite sides thereof, a gate in which is comprised a bottom horizontal wire with its ends looped around the guide wires, a series of vertical wires joined at their lower ends to the horizontal wire, a top horizontal wire connected to the vertical wires, a latch with which the top wire is adapted to engage to hold the gate closed, and a pair of link arms pivotally connected to the coop structure above the gate and to the latter at a point intermediately of its upper and lower ends adapted to cause the gate to move in and swing to a substantially horizontal position while its lower horizontal wire remains looped upon the guide wires.

1,804,672. SHOE BEARING. CLAUDE C. CALKINS, Spokane, Wash. Filed Dec. 7, 1929. Serial No. 412,436. 6 Claims. (Cl. 97—42.)



1. A shoe bearing of the character described comprising a body member having a forwardly projecting and downwardly inclined nose, a bearing formed partly integral with the body member and partly of a removable section aligned therein, a rotatable flanged journal member in said bearing, a recess on one side of the body member to receive the flange of the journal member, a lip integral with the body member to engage over the flange, and means upon the removable bearing member to prevent lateral displacement of the rotatable journal.

1,804,673. RADIAL DRILL. NORMAN B. CHACE, Cincinnati, Ohio. Filed Oct. 14, 1925. Serial No. 62,486. 5 Claims. (Cl. 77—28.)

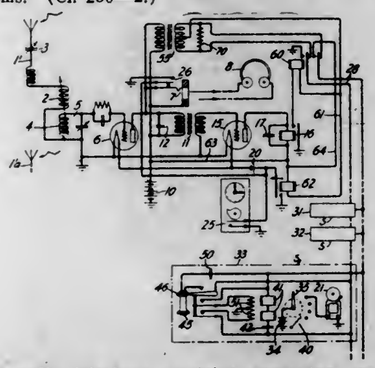


5. A machine having in combination a supporting rail, a power means, a screw shaft extending longitudinally of the rail, reversible means for driving the screw shaft from the power means, a carriage reciprocally mounted on the rail, a worm wheel on the carriage and engaging the screw for converting rotatory motion of the screw into movement of the carriage longitudinally of the rail, a manually operable means on the carriage, gearing associated with the worm wheel and the manually operable means for transmitting motion of the manually operable means to the worm wheel, said gearing being incapable of transmitting motion of the worm wheel to the manually operable means, and means for controlling transmission of power from the power means through the reversible power transmitting means to the screw shaft.

1,804,674. PHOTOGRAPHIC SENSITIZER AND PROCESS FOR MAKING IT. HANS T. CLARKE, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 2, 1926. Serial No. 85,588. 12 Claims. (Cl. 260—41.)

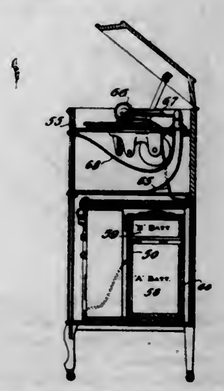
1. A dye effective for the sensitization of photographic emulsions to that portion of the spectrum beyond 780 μ, produced by the chemical action of a strong base upon a quaternary ammonium salt derived from lepidin, and iodoform, and the crystals of which are in the form of golden green leaflets.

1,804,675. SIGNALING SYSTEM. HENRY P. CLAUSEN, Mamaroneck, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1927. Serial No. 171,971. 9 Claims. (Cl. 250—2.)



1. A radio telephone receiving apparatus comprising a space discharge device, a local source of power therefor, timing means for normally disassociating and for periodically associating for short periods said device and said source of power, a circuit controlling device controlled by said space discharge device and controllable through said device from a distant radio transmitting station, whereby said transmitting station may operate said circuit controlling device during said periods and means operable by a local operator for associating said device and source of power independently of said timing means whereby said receiving apparatus may be maintained energized for longer periods when desired.

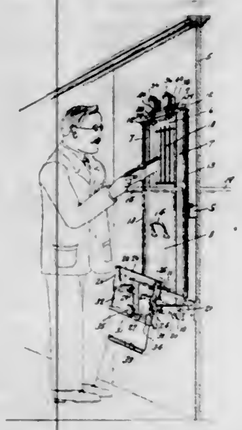
1,804,676. RADIO APPARATUS. WILLIAM J. DALTON, Bridgeport, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Mar. 5, 1925. Serial No. 18,131. 4 Claims. (Cl. 250—14.)



1. In combination, a cabinet, a radio set, and an open-ended frame non-rotatably mounted within the cabinet

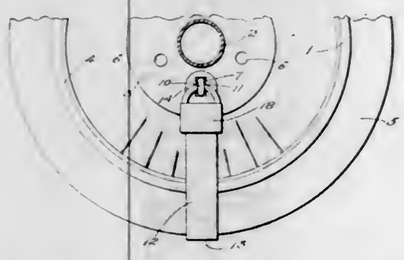
including a set supporting base, side walls, and a top wall, and an antenna disposed about the frame and extending substantially throughout its depth, the depth of said frame substantially approaching its other dimensions whereby the antenna is non-directional, said set being indisposed within and surrounded by said frame and antenna.

1,804,677. PROTECTIVE STRUCTURE FOR CASHIER AND TELLER WINDOWS. FRANK DAVIS, Brooklyn, N. Y. Filed Jan. 28, 1930. Serial No. 424,093. 3 Claims. (Cl. 268—2.)



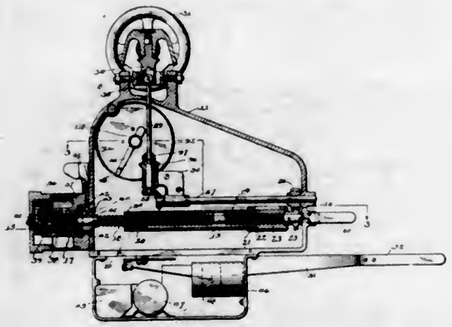
1. In means to control a self-closing protective closure for pay windows, a releaseable detent mechanism for retaining said closure in normal open position, comprising a pivoted detent lever, means on said closure engageable by said detent lever, a fixed housing adjacent to said detent lever, a spring-pressed plunger mounted in said housing to yieldably thrust said detent lever in closure engaging position, a swingable means having a laterally extending presser board engageable by the leg of a person positioned behind the window, and means carried by said swingable means to engage and turn said detent lever to closure releasing position.

1,804,678. AUTO WHEEL AND TIRE LOCK. CHARLES HUGH DUFFY, Miami, Fla. Filed Apr. 18, 1928. Serial No. 270,938. 1 Claim. (Cl. 70—90.)



A device of the character described including, in combination with a wheel and tire and a wheel-retaining nut comprising a wrench accommodating portion and having a transverse hole therethrough, a metal loop-shaped member adapted to straddle the tire, the ends of said member being adapted to extend to the said wheel-retaining nut, one of said ends being provided with means for engagement with the nut, the other of said ends being provided with means for engagement with the nut to prevent rotation of the nut relatively to the said loop-shaped member and adapted to be retained in such engagement with the nut by a padlock secured in the hole in the nut.

1,804,679. BOMB SIGHT. GEORGES ESTOPPEY, Dayton, Ohio. Filed Jan. 7, 1925. Serial No. 1,024. 33 Claims. (Cl. 33—46.5.)



1. In a sighting apparatus for use with a moving object, in combination, a sighting member, manually controlled means for moving said member to continuously follow the movement of a distant object sighted, a mechanism comprising a screw connected to said means, a device controlled by said mechanism to be moved thereby to determine the instant when a releasable object should be released from said body to fall on the object sighted, and means for lengthwise adjusting said screw and said device in correspondence with and to compensate for air lag correction.

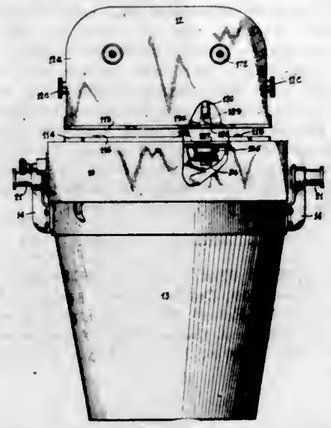
9. In a sighting apparatus for use with a moving object, in combination, a sighting member, manually controlled means for moving said member to follow the movement of a distant object sighted, a mechanism connected to said means, a device controlled by said mechanism to be moved thereby to determine the instant when a releasable object should be released from said body to fall on the object sighted, a sighting device cooperating with said sighting member, and compensating means for laterally adjusting said sighting device for compensating for the transverse component of winds.

28. In a sighting apparatus for use with a moving body, in combination, an indicating needle, clock work connected to drive said needle including a main spring and an escapement, a device for starting and stopping the indicating needle, a rotatable member, a mechanism operated at a pre-determined position of said member by rotating said member in one direction to operate said device and start the needle, a manually controlled wheel for rotating said member, and a stop for said wheel to stop the same at a position immediately adjacent to the position corresponding to said predetermined position of said member.

1,804,680. FILM-CHANGING AND POSITIONING DEVICE FOR CAMERAS. SHERMAN M. FAIRCHILD, New York, N. Y. Original application filed Mar. 1, 1923, Serial No. 622,032. Divided and this application filed Dec. 23, 1926. Serial No. 156,560. 29 Claims. (Cl. 95—34.)

1. In an aerial camera having an exposure plane in which a film positioning plate is arranged, film-feeding means, film guide rollers adjacent to said plane to determine the plane of movement of the film, and a pressure-plate adapted to press the film on said film positioning plate into the exposure plane, and movable from the exposure plane through the movement plane of the film to permit feeding movement of the film without contact

with the pressure plate, means for actuating said pressure plate comprising a plurality of elements positively actu-



ated by said feeding mechanism and directly connected to said pressure plate by pressure resisting resilient members.

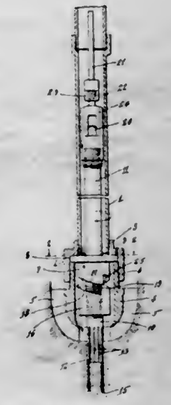
1,804,681. EXPANSIBLE BIT. GEORGE N. FITCH, Ventura, Calif. Filed May 6, 1930. Serial No. 450,168. 20 Claims. (Cl. 255—76.)



1. An expansible bit comprising a slotted body, cutter carriers fulcrumed in said slots transverse of the drilling axis of said bit so that their cutter ends may be swung outwardly to expanded position and inwardly to collapsed position, an axially movable mandrel having upper and lower heads, a cavity formed between said carriers below their fulcrums to accommodate the lower head, said heads being spaced in relation to said carriers so that with progressive advance of the mandrel towards the lower end of the body the lower head is disposed in said cavity to enable collapsion of the carrier, then the lower head is disposed between said carriers to expand said carriers, and next the lower head is cleared of said carriers and the upper head is disposed between said carriers to collapse the latter, and means to advance said mandrel.

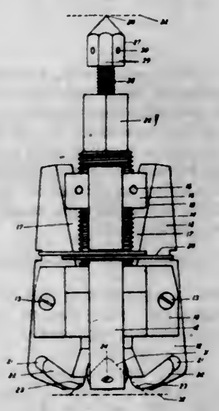
1,804,682. CORE DRILLING ATTACHMENT. GEORGE S. FOSNAUGH, Compton, and HENRY H. THRASHER, Southgate, Calif. Filed Nov. 2, 1929. Serial No. 404,288. 3 Claims. (Cl. 255—72.)

1. In a core-taking drill or reamer, the combination of rotatable drill tubing, a non-rotating core barrel passing upwardly through the tubing, a collar mounted to rotate with the tubing, a collar carried by the core-barrel, and correlated cam means on the said collars operating to



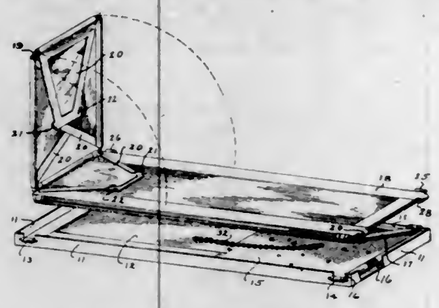
support the tubing and raise the same on the collar of the core-barrel and thereafter to permit the tubing to descend, thereby driving the core-barrel through the formation without rotation.

1,804,683. RIVET ROLLING DEVICE. JOHN GARDINER, Los Angeles, Calif. Filed Mar. 31, 1930. Serial No. 440,344. 2 Claims. (Cl. 78—47.)



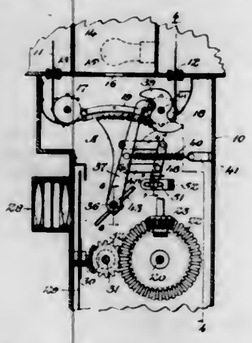
1. A rivet tightening tool comprising: a body; vertical slots in said body; a plurality of arms swingingly supported in said slots; hardened steel rollers revolvably supported at the lower end of said arms; means for adjusting the inclination of said arms; means for revolving said body and means for advancing said rollers into contact with a rivet head.

1,804,684. COLLAPSIBLE MINNOW TRAP. JAMES C. GOODLET, Indianapolis, Ind. Filed Feb. 12, 1930. Serial No. 427,765. 6 Claims. (Cl. 43—105.)



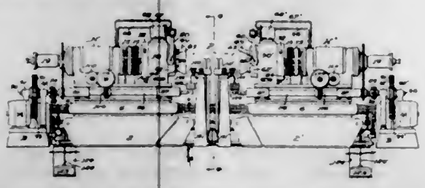
1. In a minnow trap, a base, enclosing walls hinged thereto, and an entrance funnel formed of wings detachably securable one to the other by an ear in one passed through a slot in the other, all of said parts being proportioned to permit of their being folded to form a flat compact package within the confines of the base.

1,804,685. MOTION PICTURE APPARATUS. WILLIAM K. GRIMM, Elkhart, Ind. Filed Feb. 4, 1929. Serial No. 337,189. 4 Claims. (Cl. 88—16.8.)



1. In a motion picture apparatus, means to move a film continuously, a rotatable shaft transverse the film, an arm fixed on the shaft, means to oscillate said arm and shaft in synchronism with the movement of the film, a reflector fixed on said shaft, and a framing mask overlying the film, said framing mask being loosely mounted on the shaft and connected to said arm by an adjustable lever and linkage whereby the position of the framing mask with respect to the reflector may be altered.

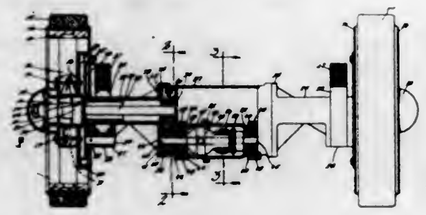
1,804,686. THREAD MILLING MACHINE. PETER P.-G. HALL, Philadelphia, Pa. Filed Nov. 10, 1922. Serial No. 600,041. 12 Claims. (Cl. 10—154.)



1. A machine of the class described comprising a supporting bed, a pair of milling heads supported in opposed relation on the bed and each adapted to cause a rotating milling cutter to move in a planetary orbit about a stationarily supported piece of work disposed between the heads, means for actuating the heads, means for simultaneously moving the heads longitudinally of the supporting bed in opposite directions, and means adjacent and longitudinally movable with each head for chucking the work in a stationary position between the heads.

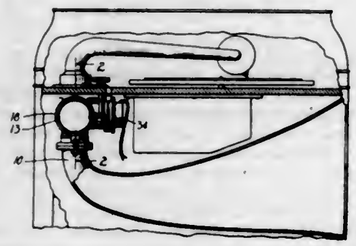
10. In a machine of the class described having a bed provided with ways and a carriage slidable on said ways, means for protecting said ways from an accumulation of chips and the like and comprising a sheave disposed adjacent each end of the ways and aligned therewith and a flexible element secured at its ends to the opposite ends of the carriage and extending over both of said sheaves and over the exposed portions of the ways.

1,804,687. MOTOR VEHICLE CONSTRUCTION. ALEXANDER C. HAMILTON, Detroit, Mich., assignor, by mesne assignments, to Relay Motor Products Corporation, Bridgeport, Conn., a Corporation of Delaware. Filed Aug. 23, 1926. Serial No. 130,829. 8 Claims. (Cl. 180—10.)



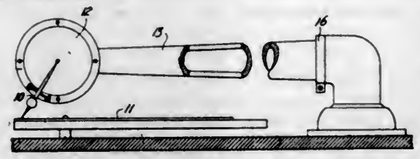
1. In a driving mechanism for a motor vehicle, in combination, a pair of aligned housing members connected together at their adjacent ends by a member bridging said ends, an axle shaft rotatably carried by each of said housings, said shafts being relatively widely spaced from each other at their adjacent ends, a wheel connected to the outer end of each of said shafts, a gear secured to the inner end of each of said shafts, a pair of aligned shafts rotatably supported eccentrically of and normally below said axle shafts, gears on the ends of the last mentioned pair of shafts meshing with the corresponding gears on said axle shafts, a differential mechanism connecting said pair of shafts, and a propeller shaft operatively connected to said differential mechanism for driving the same, said propeller shaft being supported to swing about the axis of said pair of shafts relative to said housings.

1,804,688. ACOUSTIC DEVICE. HENRY C. HARRISON, Port Washington, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 28, 1927. Serial No. 202,072. 16 Claims. (Cl. 181—27.)



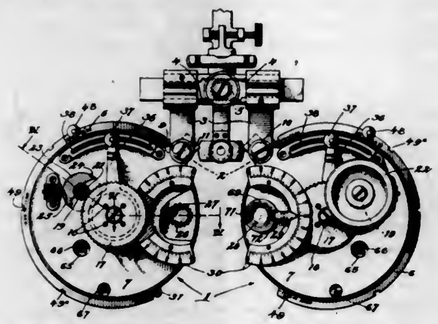
1. In an acoustic transmission line, an attenuating network of acoustic resistances comprising a section having both series of shunt resistance components.

1,804,689. ACOUSTIC DEVICE. NEWMAN H. HOLLAND, Montclair, N. J., assignor to Western Electric Company, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1926. Serial No. 105,747. 7 Claims. (Cl. 274—23.)



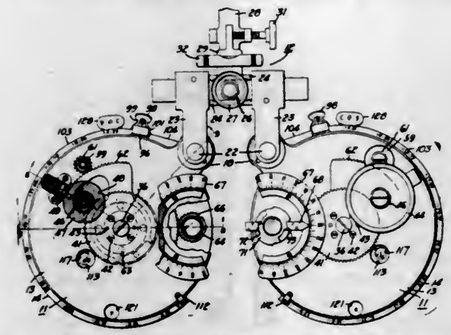
2. An acoustic element, comprising a plurality of longitudinal and co-extensive sections of resonant metallic materials which transmit sound vibrations at different velocities, means for holding said sections in longitudinal contact with each other, so that any motion of one section which is not common to all is opposed by the friction between this one section and the other sections with which it is in contact.

1,804,690. OPTOMETRIST INSTRUMENT. CLYDE L. HUNSICKER, San Francisco, Calif., assignor, by mesne assignments, of one-half to Aaron S. Green and Louis D. Green. Filed Oct. 25, 1926. Serial No. 143,853. 20 Claims. (Cl. 88—22.)



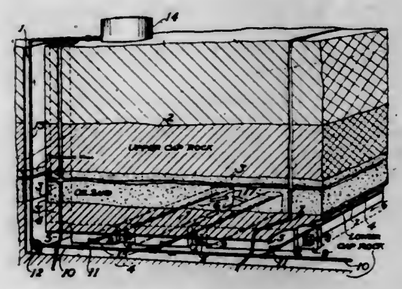
1. In an optical instrument of the character mentioned, a rotatably mounted support fitted with a series of minor lenses of graduated strength, a second rotatable support, a plurality of planetary members on said second rotatable support, each fitted with a plurality of major lenses of gradnated strength, and means for turning the planetary members one lens space upon each complete revolution of the minor lens-support.

1,804,691. OPHTHALMOLOGICAL INSTRUMENT. CLYDE L. HUNSICKER, San Francisco, Calif. Filed May 4, 1927. Serial No. 188,734. 27 Claims. (Cl. 88—22.)



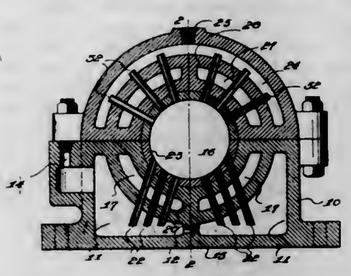
1. In a device of the class described, a movable member carrying a plurality of minor lenses, another movable member carrying a plurality of major lenses, means mechanically connecting said members whereby upon movement of one of said members, any one major lens may be superposed with any one minor lens upon movement of one of said members, and means for disengaging said mechanical connection.

1,804,692. METHOD AND APPARATUS FOR WORKING OIL SANDS. CHARLES F. JACKSON, Minneapolis, Minn., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Sept. 27, 1926. Serial No. 137,871. 2 Claims. (Cl. 262—3.)



1. The method of operating an oil field, which comprises forming a main gallery with a pair of adjacent and substantially parallel branch galleries a short distance below the oil-bearing stratum, drilling holes for explosive charges in the region lying between the branch galleries, except near the main gallery, exploding charges in said holes to disrupt and weaken said region, whereby the oil-bearing stratum is caused to settle with the formation of an artificial fault therein, preventing access from said branch gallery to the main gallery, except through collecting pipes, and withdrawing oil through said pipes.

1,804,693. WATER COOLED BEARING. JOHN D. JONES, Portland, Oreg. Filed June 19, 1926, Serial No. 117,080. Renewed Sept. 24, 1930. 3 Claims. (Cl. 308—77.)

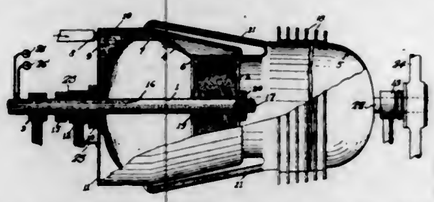


1. A bearing having a journal opening, a cooling chamber spaced about the journal opening, a lubricant supply chamber spaced about the cooling chamber, inflow and outflow conduits spaced upon opposite sides of the plane of maximum contact, said inflow and outflow conduits forming communication from the journal opening to the lubricant supply chamber and passing through the cooling chamber.

1,804,694. MERCURY VAPOR TURBINE. LLOYD T. JONES, Berkeley, Calif. Filed Apr. 28, 1924. Serial No. 709,453. 7 Claims. (Cl. 60—36.)

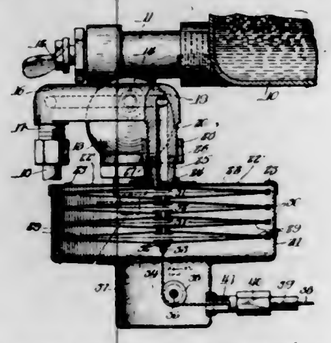
7. A rotor engine operated by mercury vapor, said engine comprising a condensation chamber and a vaporization chamber and impeller means interposed between and in

longitudinal alignment with said condensation and vaporization chamber, said impeller means and vaporization and condensation chambers being rotatable as a unit, and



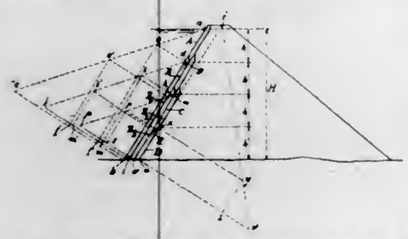
one or more passageways extending from one chamber to the other and in communication therewith whereby said mercury is returned by centrifugal force due to the rotation of said engine.

1,804,695. LIQUID LEVEL GAUGE. CARL KNOBLOCH, Middletown, Conn. Filed July 30, 1926. Serial No. 125,844. 2 Claims. (Cl. 73—54.)



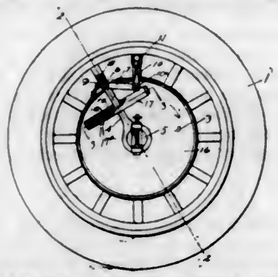
1. In a liquid level gauge, the combination of a container for liquid, a vertically disposed self-contracting bellows diaphragm subject externally to atmospheric pressure located beneath and at its upper end communicating with said container, an indicator, a mechanical connecting element between the lower end of said diaphragm and said indicator operating to transmit contracting movement of said diaphragm to said indicator, and a spring exerting a constant pull on said connecting element and actuating said indicator in the reverse direction during the expanding movement of said diaphragm.

1,804,696. DAM CONSTRUCTION. JOSEPH KRAČMER, Brno, Czechoslovakia. Filed Mar. 9, 1929. Serial No. 345,624. 8 Claims. (Cl. 61—30.)



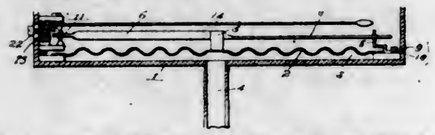
1. In a dam construction, the combination with a dam body composed of material penetrable by water, of a watertight construction which comprises a series of spaced substantially parallel walls extending across the entire width of the dam body, said walls including two upstream walls of substantially equal height, the other walls successively decreasing in height; said walls providing a set of watertight spaces adapted to be filled partially with water and partially with air to permit rise of water level in a space without overflow into adjacent spaces, means for sealing said spaces at the tops thereof, and means for establishing communication between said spaces and the atmosphere.

1,804,697. BRAKE AND METHOD OF ACTUATING THE SAME. HUGH C. LORD, Erie, Pa. Filed Jan. 26, 1925. Serial No. 4,865. 53 Claims. (Cl. 188—2.)



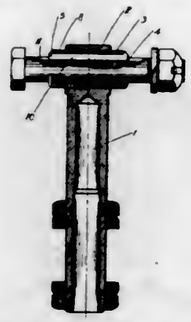
1. In a brake the combination with a rotating member and a brake member acting frictionally on the rotating member of devices comprising means setting the brake member, said devices compelling a braking effort corresponding in torque resistance to the setting of the devices.

1,804,698. PRESSURE GAUGE. GEORGE P. LUCKEY, Lancaster, Pa. Filed Feb. 18, 1928. Serial No. 255,327. 5 Claims. (Cl. 73—110.)



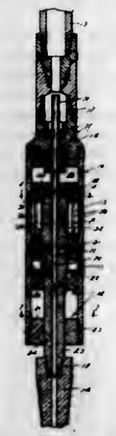
2. A device of the character described including a casing, a diaphragm fixed therein to form a chamber in the casing, an arm mounted on the diaphragm in a plane substantially parallel to the plane of the diaphragm, one portion of the arm being a spring, an adjustable clamp for holding the outer end of the spring portion of the arm relative to said casing, the other end of the arm being bifurcated to form two fingers, a pointer, means for rotatably mounting the same, said means including a spiral shaft lying in the bifurcated portion of the said arm and adapted to be snugly straddled by the said fingers thereof.

1,804,699. SHAFT KEYING DEVICE. DWIGHT C. MAIER, Bryan, Ohio. Filed Jan. 20, 1922. Serial No. 530,721. 1 Claim. (Cl. 287—52.05.)



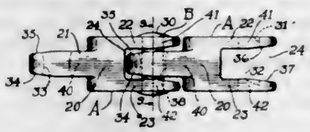
The combination with a shaft having a longitudinal recess in the surface thereof, of a sleeve mounted thereon, said sleeve having a corresponding longitudinal recess opposed to said shaft recess, a key extending throughout the length of said sleeve and engaging in both of said recesses and projecting ears integral with said key and on the ends thereof for securing said key to said sleeve, said sleeve being provided with angularly extending surfaces engaged by said projecting ears on said key ends, said angularly extending surfaces being cut at an acute angle relative to the longitudinal recess in said sleeve.

1,804,700. JARRING TOOL. WILLIAM H. MAXWELL, Los Angeles, Calif. Filed Apr. 5, 1927. Serial No. 181,060. 3 Claims. (Cl. 255—27.)



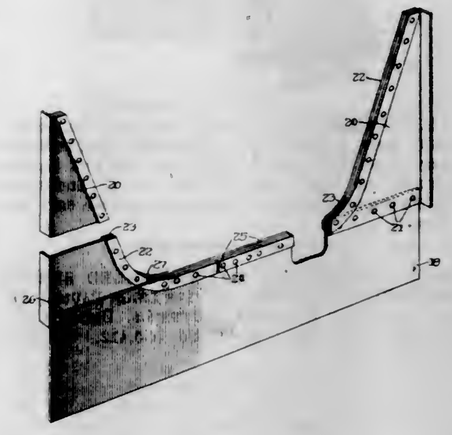
1. A well tool of the character described including two sections having co-operating parts forming a closed compression chamber and a closed receiving chamber, means for admitting fluid freely from the receiving chamber to the compression chamber, and means for freely passing fluid from the compression chamber after the fluid in the compression chamber has operated to retard movement between the sections, there being a fluid circulation opening through the tool.

1,804,701. CHAIN CONVEYER. JULIUS J. MOJONNIER, Oak Park, Ill., assignor to Mojonnier Bros. Co., a Corporation of Illinois. Filed Apr. 1, 1929. Serial No. 351,620. 8 Claims. (Cl. 198—189.)



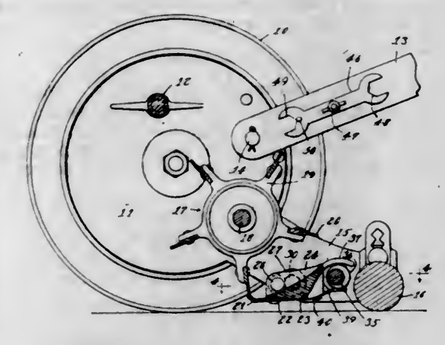
1. A conveyer chain composed of links each having a central block-like body provided with tooth-engaging surfaces, a central vertical leaf-like projection extending from one end of said body and a pair of similar outer projections extending from the other end of said body, said outer projections being spaced apart far enough to provide a slot wider than said central projections, the central projection of one link being adapted to fit loosely within the slot of the next link, thus providing for a limited lateral relative movement of the links as well as for the usual vertical movement, the upper surface of the chain being transversely crowned and the outer ends of said projections near said upper surface and the body corners in longitudinal alignment with said projections all being rounded to avoid interfering with articles being conveyed, and a transverse pivot pin for each set of interleaved projections loosely connecting the adjacent links to permit of said lateral and vertical movements.

1,804,702. CAR CONSTRUCTION. JOHN O. NEIKIRK, Chicago, Ill., assignor to Rodger Ballast Car Company, Chicago, Ill., a Corporation of Maine. Filed Sept. 5, 1930. Serial No. 479,855. 4 Claims. (Cl. 105—411.)



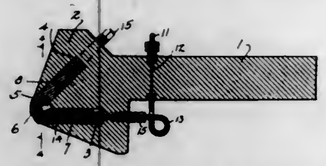
1. In combination with a railroad car having side walls, a gusset extending between and secured to said side walls comprising a lower portion and upstanding side portions secured to opposite sides of said lower portion, and reinforcing means on the upper edge thereof composed of two complementary parts having their jointure to one side of the center of said gusset.

1,804,703. LAWN MOWER. WINFIELD S. NICHOLS, Rockford, Ill. Filed Feb. 10, 1930. Serial No. 427,121. 20 Claims. (Cl. 56—294.)



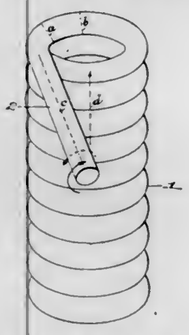
16. In a lawn mower, the combination with the frame, and a cutter bar pivotally mounted therein on the longitudinal axis parallel with the cutting edge thereof, of a longitudinal member extending rearwardly from the cutter bar and having a fork at the rear thereof, and an eccentrically mounted member received in said fork and arranged when turned to tilt the cutter bar about its longitudinal axis, one side of the fork being rigid with said member providing a bearing surface for engagement with the eccentric, and the other side of the fork being yielding and bearing against the eccentric on the opposite side thereof, whereby the eccentric is yieldingly held against turning out of adjusted position.

1,804,704. PRESSURE BAR FOR VENEER MACHINES. GEORGE H. OSGOOD, Tacoma, Wash. Filed June 7, 1930. Serial No. 459,699. 3 Claims. (Cl. 144—213.)



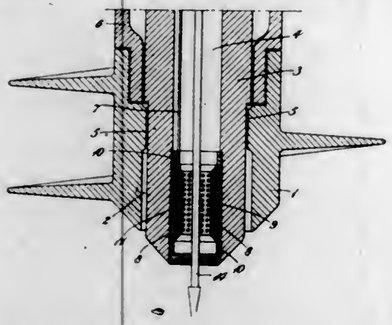
1. In a pressure bar for veneer machines, a main bar; a rotary nose; a plurality of separated complementary bearing blocks supported in said main bar and together supporting the rotary nose between them; and means for supplying a lubricant in the space between said bearing blocks.

1,804,705. METHOD OF MAKING COILED SPRINGS AND SPRING CASINGS. CHARLES LEIGH PAULUS, Dayton, Ohio, and HERBERT O. RUSSELL, Detroit, Mich. Filed Apr. 18, 1922. Serial No. 555,412. 4 Claims. (Cl. 153—64.)



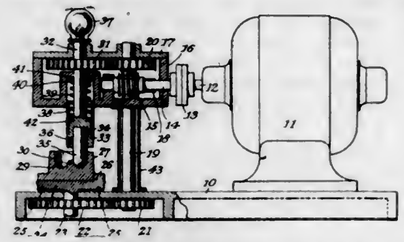
1. In the art of making coiled springs, the herein described method, consisting in winding a rod or wire into a coil and simultaneously causing the convolutions of the coil to assume a closed contactual relation by imparting an axial twist to the rod or wire.

1,804,706. PILE SCREWING APPARATUS. WILLIAM ARCHIBALD RADICE, Westminster, England, assignor to Braithwaite and Company Engineers Limited, London, England. Filed Apr. 21, 1930, Serial No. 445,941, and in Great Britain June 24, 1929. 9 Claims. (Cl. 61—80.)



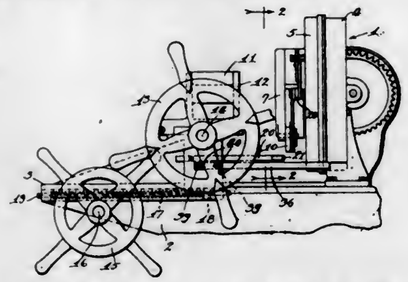
1. Pile screwing apparatus comprising in combination a screw head, a tubular screwing key engaging the head, an orificed chamber near the lower end of the bore on the key and means for delivering air under pressure to the chamber.

1,804,707. MIXING MACHINE. PHILIP GORDON RUDIN, Pittsburgh, Pa. Filed Nov. 18, 1929. Serial No. 407,892. 4 Claims. (Cl. 259—81.)



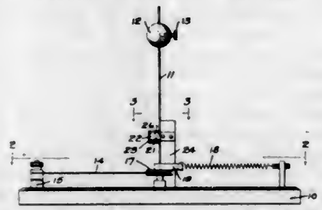
1. In a mixing machine, a mortar having an annular channel of symmetrical cross section in relation to the center line of said channel; a pestle shaped to operate in said channel, so that its end is adapted to completely fill out the cross section of said channel while being rotated therein; means to rotate said mortar; means to rotate said pestle, said mortar and said pestle being excentrically arranged so that said pestle may travel along said channel while said mortar is being rotated.

1,804,708. THREAD CUTTING MACHINE. ANTONE SCHUMACKER, Chicago, Ill. Filed June 2, 1927. Serial No. 195,998. 4 Claims. (Cl. 10—96.)



1. In a thread-cutting machine having a rotative die-supporting head, thread-cutting dies on and rotative with said head, and movable work-supporting and feeding means, the combination of die-setting and releasing lever pivotally supported on and rotative with said head, a cam mounted on and in rotative relation to said head and in engagement with said die-setting and releasing lever and dies and forming a connection between the same, means operatively connected with said work-supporting and feeding means and adapted to engage said die-setting and releasing lever on said head, for releasing the dies, and means operatively connected with and adapted to be operated by said movable work-supporting and feeding means, for automatically setting the thread-cutting dies in thread-cutting position in the rotative head.

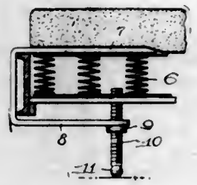
1,804,709. THERMOMOTIVE DEVICE. MILTON H. SHOENBERG, San Francisco, Calif. Filed Jan. 23, 1928. Serial No. 248,956. 6 Claims. (Cl. 200—113.)



1. In a device of the class described, a lever made of a spring strip, a support to which one end of said strip

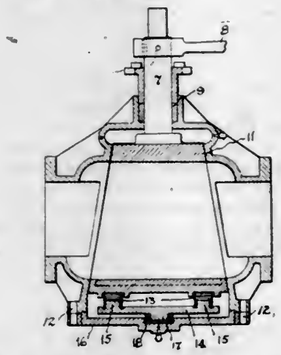
is rigidly secured, a weight carried by said strip, thermal electric means imparting a pendulum movement to said lever, and means for automatically changing the effective lever arm of said strip during each complete swing of said weight.

1,804,710. ATTACHMENT FOR BEDS. OAKLEY SMITH, Chicago, Ill. Filed Nov. 7, 1930. Serial No. 494,008. 3 Claims. (Cl. 5—226.)



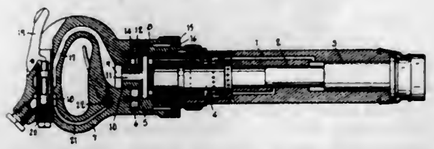
1. An attachment for a bed comprising a U-shaped structure, the unattached end of one arm whereof is provided with an adjustable leg, whereby the other arm of said U-shaped structure may be inserted transversely of the mattress of a bed and the leg adjusted to provide relative stability to the supported area of the mattress.

1,804,711. VALVE. THOMAS RUSSELL SMITH, Youngstown, Ohio. Filed Apr. 9, 1927. Serial No. 182,333. 4 Claims. (Cl. 251—112.)



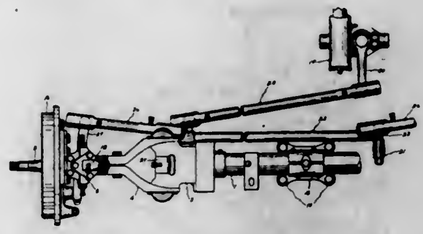
1. In a valve, the combination of a valve body, a tapering valve-plug therein having an operating handle at its small end, a set of symmetrically positioned decentered springs supporting said plug, a disk engaging said springs, a closure-head secured to the valve body, and means for preventing dragging action by the springs, said means including ball bearing elements between said valve-plug and said closure-head.

1,804,712. PNEUMATIC HAMMER. HERMAN A. STEVENS, Kalamazoo, Mich. Filed Aug. 4, 1930. Serial No. 472,830. 6 Claims. (Cl. 121—36.)



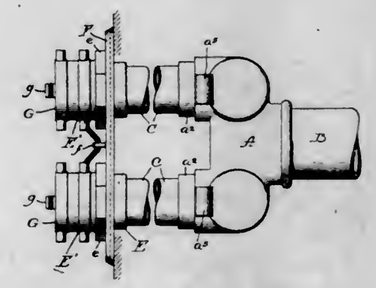
5. In a pneumatic tool, the combination of a cylinder and coacting plunger, the cylinder being provided with a head having an inlet therein, a handle provided with a cushioning chamber in which said head is reciprocatingly mounted, said cylinder inlet being in communication with said cushioning member, a control valve for said inlet passage, and a valved by-pass for said control valve.

1,804,713. STEERING CONTROL. WILLIAM S. STOCKTON, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 26, 1926. Serial No. 150,743. 2 Claims. (Cl. 280—95.)



1. In a steering control for a motor vehicle having dirigible wheels independently movable in a vertical direction, the combination with a wheel knuckle, of an arm pivotally mounted on the vehicle and having a ball joint connection with said knuckle, a spring having a ball joint connection to said knuckle and a fixed connection to the vehicle, a lever having a pivotal mounting on said vehicle concentric with the axis of said arm and extending toward said spring, a rod having ball joint connections with said lever and said knuckle for rotating the knuckle in its ball joint mountings and means for operating said lever.

1,804,714. STAND PIPE CONNECTION FOR BUILDINGS. WILLIAM H. SYMONDS, Chicago, Ill., assignor to W. D. Allen Manufacturing Company, Chicago, Ill., a Corporation. Filed Mar. 4, 1927, Serial No. 172,702. Renewed Oct. 4, 1930. 8 Claims. (Cl. 137—18.)

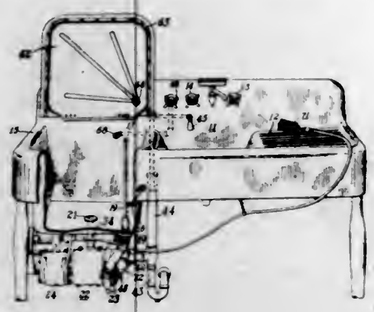


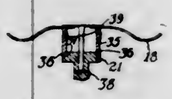
1. A stand pipe connection for buildings comprising a casing adapted to be disposed horizontally at the inside of a building wall and having an outlet on one side and a plurality of threaded inlets on another side, valves within the casing for controlling said inlets, a plurality of threaded nipples for engaging said inlets and adapted to be disposed through the wall, and hose couplings threaded to the outer ends of said nipples.

1,804,715. COMBINATION SINK AND CONVERTIBLE DISHWASHER. THEODORE TAFEL, Jr., Ben Avon, Pa., assignor to Standard Sanitary Manufacturing Co., a Corporation of Pennsylvania. Filed Mar. 31, 1928. Serial No. 266,190. 5 Claims. (Cl. 141—9.)

1. A kitchen fixture having in combination a washing compartment, a drain located in the bottom of said compartment, a water inlet located adjacent one wall of said compartment, a frusto conical shaped member on the bottom of said compartment and having an aperture in the top thereof, an article holding basket frictionally supported on said frusto conical shaped member, and a pro-

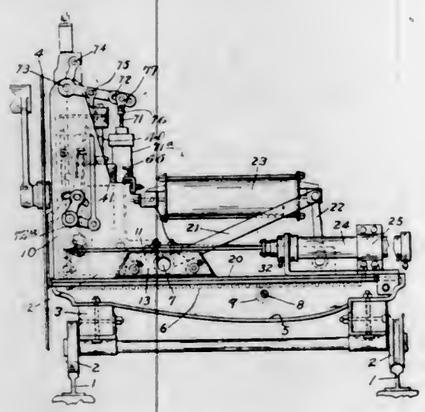
jection on said basket extending into the aperture in said frusto conical shaped member, the top of said frusto conical shaped member being substantially flush with the bottom of said compartment to permit the use of said com-





partment for washing clothes, a removable nozzle connected to said water inlet for directing water into said basket and means located outside of said compartment for rotating said frusto conical shaped member and said basket.

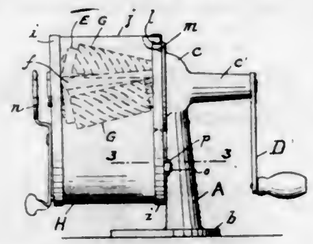
1,804,716. SAWMILL SETWORK. GEORGE TANNER, Sandpoint, Idaho. Filed Mar. 28, 1929. Serial No. 350,646. 8 Claims. (Cl. 143—124.)



1. The combination with a reciprocable knee having spaced slotted side walls, operating means therefor, and a support, a pin disposed transversely of the knee, and rollers on said pin movable in the slots of the knee, of a carriage at each side of the knee for supporting said pin, and anti-friction devices on the carriage.

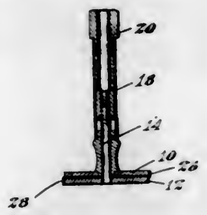
1,804,717. PENCIL SHARPENER. FRANK THOMPSON, Camden, N. J., assignor to C. Howard Hunt Pen Company, Camden, N. J., a Corporation of New Jersey. Filed May 3, 1929. Serial No. 360,142. 4 Claims. (Cl. 120—96.)

1. In a pencil sharpener, in combination, a support, a able cooperating means on the receptacle and support engaged by relative rotary movement of the receptacle and support to hold the former on the latter, and releas-



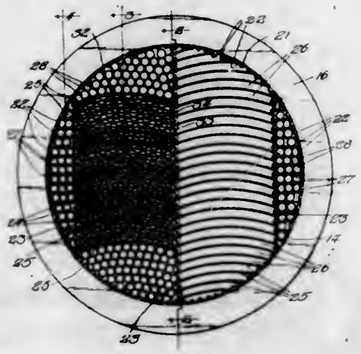
able cooperating means on the receptacle and support operative to prevent a reverse rotary movement tending to disengage the first mentioned means.

1,804,718. SAFETY RAZOR. RALPH E. THOMPSON, Brookline, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Sept. 28, 1929. Serial No. 395,852. 10 Claims. (Cl. 30—12.)



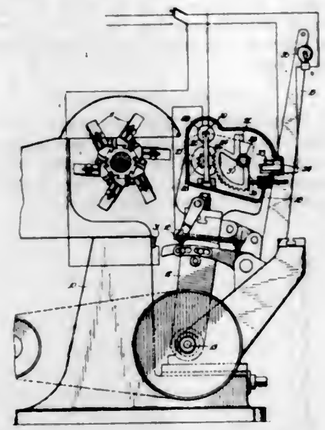
1. A safety razor having cooperating cap and guard members, means for drawing said members into clamping engagement, and an interposed blade with flanges for engaging said members and relatively positioning them both longitudinally and angularly.

1,804,719. VEHICLE LIGHT DIRECTOR. EDWIN S. TIMMONS, Chicago, Ill. Filed Oct. 17, 1929. Serial No. 400,206. 8 Claims. (Cl. 240—48.4.)



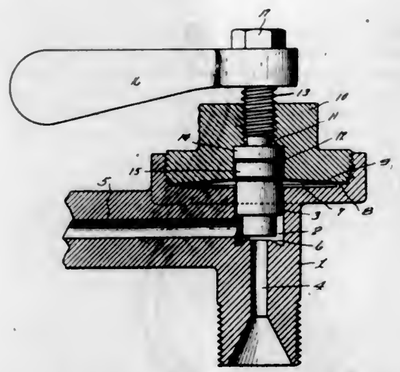
1. In a device of the character described, the combination with a casing, of vertically extending partition members in said casing, a series of plates disposed in parallelism in said casing, and plate edge receiving means on confronting surfaces of said casing and partition members to enable the deformed association of said plates therewith, said plates extending axially through said casing to direct the light rays along predetermined paths.

1,804,720. SIGNALING DEVICE FOR AN AUTOMATIC LATHE. DAVID TURCOTT, Beloit, Wis., assignor to Yates-American Machine Company, Beloit, Wis., a Corporation of Delaware. Filed June 23, 1928. Serial No. 287,854. 5 Claims. (Cl. 142—1.)



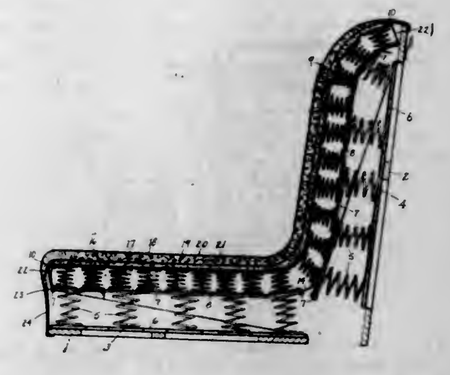
1. In a lathe, a rotating cutter head adapted to operate on a rotating piece of stock, means for rotating the stock, means for advancing the stock-rotating means, stops for determining the extent to which the stock-rotating means is advanced toward the cutter head, which stops must be maintained continuously in engagement while the piece of stock makes at least one complete revolution in order to complete the cutting operation, means for indicating when the cutting operation is finished, and means for normalizing said indicating means in case the stops are not maintained continuously in engagement during the cutting operation.

1,804,721. VALVE MECHANISM. WILLIAM S. VALMORE, Mansfield, Ohio. Filed Sept. 21, 1928. Serial No. 307,508. 3 Claims. (Cl. 251—31.)



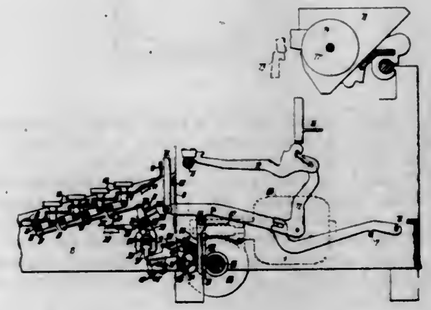
1. In a valve mechanism of the character described the combination of a valve body having a valve chamber having an inlet passageway and an outlet passageway leading therefrom, a valve disposed within said valve chamber, said valve body having an annular inclined diaphragm seat formed thereon, a diaphragm secured on said diaphragm seat, a valve bonnet secured in said valve body and holding said diaphragm against its seat and a valve actuating member carried by said valve bonnet and adapted to be actuated to flex said diaphragm to move said valve to closed position.

1,804,722. SPRING SEAT STRUCTURE. DESIRE H. VAN HOVE, Royal Oak, Mich., assignor to L. A. Young Spring and Wire Corporation, Detroit, Mich. Filed July 28, 1928. Serial No. 295,991. 5 Claims. (Cl. 155—179.)



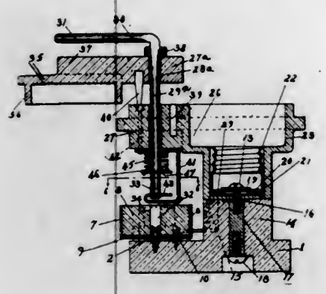
3. The combination with seat and back supports, of a seat unit and a back unit mounted on said supports in cooperating relation and each comprising body springs and a top border frame, a combined seat and back superstructure superimposed on said seat and back units and comprising body springs arranged in rows from front to rear, coiled spring top and bottom tie members arranged between said rows of springs and fixedly secured to springs of adjacent rows, an upholstery covering provided with inner flaps secured to the top border frames of said seat and back units, and an upholstery covering having a skirt portion secured to said supports.

1,804,723. TYPEWRITING MACHINE. RICHARD VON REPPERT, Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 28, 1928. Serial No. 308,947. 19 Claims. (Cl. 197—17.)



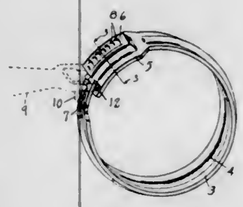
1. In a machine of the character described, a constantly-rotating power-roller, a typing mechanism, a key disconnected from said typing mechanism, a frictional pendant-member connected to the typing mechanism and connectible with the power-roller for actuation thereby, a spring-actuated pressure-lever engageable with the pendant-member, a lock for the pressure-lever arranged to be released by the key to establish operative connection between the friction pendant and the power-roller, and means mounted upon said pressure-lever, operable first to connect the pendant with the power-roller for actuation and then to reset the pressure-lever to normal position, to be relocked independently of the key.

1,804,724. FUSIBLE SWITCH MECHANISM. GEORGE E. WADSWORTH, Erlanger, Ky., assignor, by mesne assignments, to The George B. Wadsworth Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 20, 1929. Serial No. 372,509. 8 Claims. (Cl. 200—50.)



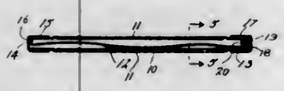
1. In a switch, a base of insulating material bearing a fuse receptacle, a rotary switch, a cover for the fuse receptacle, an operating shaft for the rotary switch, said operating shaft adapted to be brought into and out of engagement with said rotary switch and means to prevent the said shaft being disengaged from the said switch in any but the off position thereof, means to prevent the engagement of the said shaft with the said switch when the said cover is open, and to prevent the opening of said cover when said shaft is in engagement with said switch.

1,804,725. HOSE CLAMP. WARD C. WALKER, Battle Creek, Mich. Filed Feb. 27, 1930. Serial No. 431,746. 2 Claims. (Cl. 24—19.)



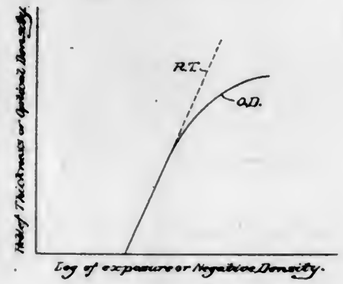
1. A hose clamp formed of a single piece of sheet metal consisting of a band portion having a longitudinal rib struck outwardly therefrom, the portion of the rib at the end of the band having a series of indentations therein providing ratchet teeth, and a head portion having a central longitudinal loop-like keeper struck outwardly therefrom and adapted to receive the end of the band, the top of said loop having a series of indentations therein providing a plurality of inwardly directed ratchet teeth on the end of said band.

1,804,726. COIN BANK. JESSE J. WARREN, Jr., Philadelphia, Pa. Filed Nov. 15, 1929. Serial No. 407,305. 1 Claim. (Cl. 232—4.)



As a new article of manufacture, a coin bank consisting of a casing having its sides slotted longitudinally, a cap secured upon one end of said casing, said cap having a slot therein for the passage of the coins, a plate spring having one end thereof secured to an inner wall of the casing the opposite end terminating in a lip positioned in proximity to the coin slot in the cap, said spring being so bent as to hold coins within the bank against rattling, and a lock-up cap adapted to fit upon the opposite end of the casing, said cap having two spring actuated bolts positioned therein, and means for retracting said bolts by the use of a key.

1,804,727. PHOTOGRAPHY. EASTMAN A. WEAVER, Brookline, Mass., assignor, by mesne assignments, to Technicolor Motion Picture Corporation, Boston, Mass., a Corporation of Maine. Filed Nov. 2, 1921. Serial No. 512,391. 34 Claims. (Cl. 95—5.)



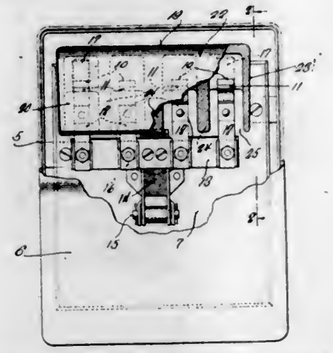
1. Picture film which is largely absorptive of light of one color and which is largely transmissive of light of another color, the absorptivity of the film being of such character and quantity as to restrict light of the first color to a shallow depth while permitting light of the other color to penetrate deeply.

1,804,728. VEHICLE ARM OR PROP. GARDNER E. WHEELER and CHARLES OPPE, New Haven, Conn. Filed Dec. 27, 1927. Serial No. 242,578. 1 Claim. (Cl. 296—120.)



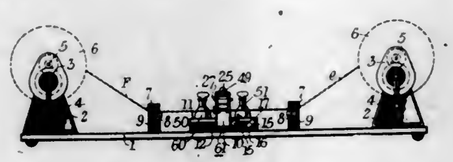
In a vehicle prop, a pair of substantially solid arms hingedly connected together, shanks on said arms, said shanks being generally elliptical in cross-section, extensions on the opposite sides of the solid portions of said arms, said extensions being parallel to the major axes of the generally elliptical shanks and spaced therefrom, and relatively thin walled tubular members shaped to fit and tightly received on said shanks, the extensions and shanks cooperating to form sockets in which the ends of the tubular members are received.

1,804,729. ELECTRICAL SWITCH. GUSTAV O. WILMS and FREDERICK F. LOOCK, Milwaukee, Wis., assignors, by mesne assignments, to The Reliance Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 17, 1927. Serial No. 226,665. 12 Claims. (Cl. 200—144.)



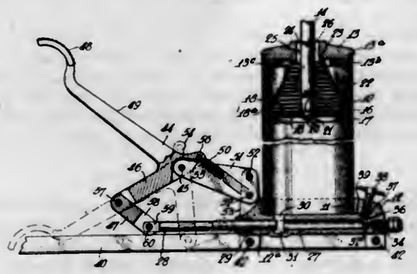
1. A device for limiting destructive arcing between the contacts of an electric switch, comprising a hood formed of insulating material closed on all sides except its bottom to form a confining chamber substantially encasing the contacts, and means readily removably mounting the hood.

1,804,730. FILM EDITING MACHINE. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 23, 1928. Serial No. 256,282. 19 Claims. (Cl. 88—14.)



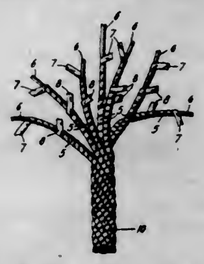
1. In a film splicing block, the combination with a base, a stationary table mounted thereon, a movably mounted table, parallel links supporting the movable table on the base, a movable cutter and a pair of fixed cutting blades, the movable table being adapted to swing over the top of one cutting blade on the parallel links.

1,804,731. HIGH POWER PEDAL-OPERATED GREASE GUN. HERMAN ALBERTINE, Rutherford, N. J. Filed Jan. 7, 1929. Serial No. 330,803. 7 Claims. (Cl. 221—47.1.)



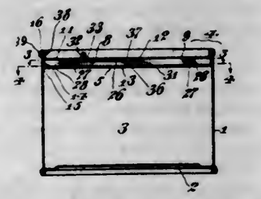
1. In a grease gun of the character which includes a base, an upright reservoir thereon, a substantially horizontal pump cylinder formed in said base having an intake receiving grease from the reservoir and a plunger working horizontally in the cylinder, foot-operated power multiplying means for actuating the plunger including an angular lever, a fulcrum for the elbow of the lever laterally offset from but fixed relatively to the base and a link connecting one end of the lever to the pump plunger, the arms of the lever being disposed at an acute angle to each other and spring means normally holding the lever with its power receiving arm disposed at approximately 45° to the horizontal.

1,804,732. FLEXIBLE CONDUCTOR. JOHN L. ALDEN, Wyncote, Pa., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 28, 1928. Serial No. 265,243. 4 Claims. (Cl. 173—13.)



1. A flexible conductor comprising a plurality of strands, said strands consisting of a central conducting core having a plurality of metallic tapes wound thereon and said strands being twisted around a central core of conducting material.

1,804,733. TOY BANK. ADRIAN C. BALSON, Philadelphia, Pa. Filed Mar. 6, 1929. Serial No. 344,682. 7 Claims. (Cl. 232—4.)



1. A toy bank comprising a pair of relatively movable members respectively provided with coin-receiving and discharge openings, and means for maintaining said members in predetermined relation, said means comprising a plurality of guiding shoulders upon one of said members in engagement with the other member.

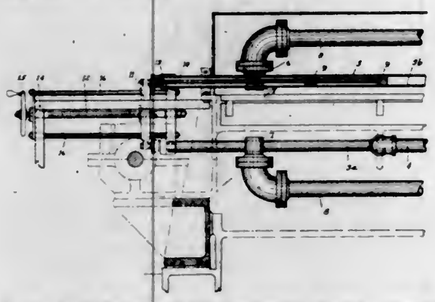
1,804,734. HINGED BEZEL FOR CLOCKS. WERNER H. BALZER, New York, N. Y., assignor, by mesne assignments, to Arthur K. Kempton, Jackson Heights, Long Island, N. Y. Filed Nov. 17, 1927. Serial No. 233,783. 2 Claims. (Cl. 58—53.)



1. A device of the class described, comprising a stationary ring having an external annular flange, a bezel

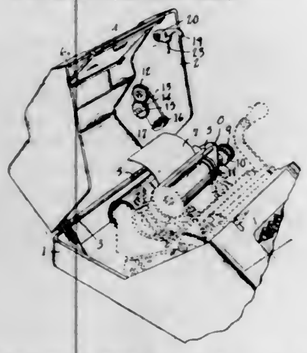
ring to hold a cover glass, said bezel ring having a rearwardly projecting annular shoulder to normally overlie and abut said flange of said stationary ring, a perforate hinge knuckle extending rearwardly from and beyond said shoulder, said flange of said stationary ring having an indented notch to receive said hinge knuckle and also having a bore aligned with the perforation of said hinge knuckle, the outer ends of said bore terminating in the circumferential face of said flange, a pintle mounted in said bore and extending through said perforate hinge knuckle, and the annular shoulder of said bezel ring adjacent each end of said hinge knuckle having inwardly beveled clearance spaces extending from the exterior periphery thereof downwardly to intersect the interior face thereof.

1,804,735. HYDRAULIC SCALER. HUGH C. BARNES and GEORGE A. DRIEST, Middletown, Ohio, assignors to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Oct. 2, 1929. Serial No. 396,839. 6 Claims. (Cl. 299—104.)



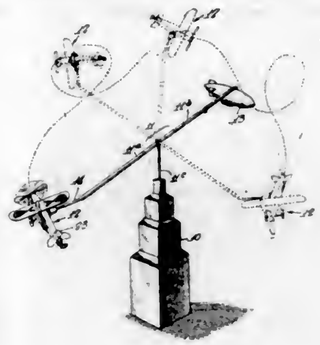
1. In a hydraulic scale removing device, perforated delivery pipes to form a spray, means for introducing fluid under pressure at the center of the said pipes, and means for adjusting the effective width of the said spray, said means comprising pistons movable in said pipes to or over said central openings and means for holding said pistons in place against hydraulic pressure.

1,804,736. MANUAL PAPER FEEDING MECHANISM FOR ADDING MACHINES. GLENN J. BARRETT, Chicago, Ill., assignor to Portable Adding Machine Company, Chicago, Ill. Filed Dec. 24, 1928. Serial No. 328,257. 3 Claims. (Cl. 271—2.3.)



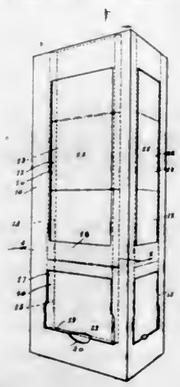
1. In combination with a movable case enclosing a printing platen and paper tape of an adding machine or similar device, of a disconnectible means for manually feeding said paper comprising a feeding knob or finger piece outside said case, an actuating pinion attached thereto, an adjustable idler pinion always in mesh with said actuating pinion, and a pinion connected to said printing platen normally in mesh with said idler pinion which is separable therefrom.

1,804,737. AIRPLANE TOY. SAMUEL I. BERGER, Newark, N. J. Filed Sept. 17, 1928. Serial No. 306,460. 9 Claims. (Cl. 272—31.)



1. A self-propelled air-craft toy, including a support, a beam rotatable and tiltable thereon, a toy aircraft on one end of the beam, means counter-balancing said beam, a motor operated propeller means for causing the air-craft to rise and fly in a circular path, gravitationally released means to rotate the air-craft on its transverse axis when a predetermined angularity of the beam is obtained and means preventing such rotation in other positions of the beam.

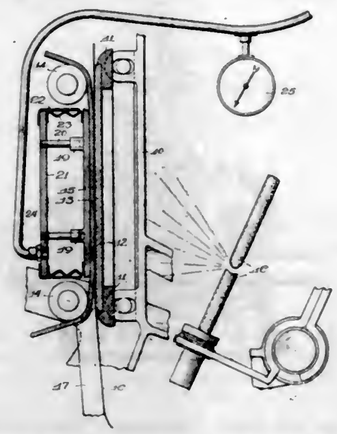
1,804,738. PAPER BOX OR THE LIKE. SAMUEL BERGSTEIN, Middletown, Ohio. Filed May 25, 1929. Serial No. 365,912. 5 Claims. (Cl. 206—44.)



1. A box triangular in cross-section, presenting a plurality of apertures on each of its faces, in vertical alignment one aperture with another for displaying the contents of the box, opposite vertical edges of said upper apertures acting to retain said contents, the edges of said lower apertures acting to retain a unit of said contents releasably, and a plurality of channular panels retained inside the box, one adjacent each face thereof, by frictional engagement one panel with another, for supporting the contents of the box relative to said apertures.

1,804,739. MACHINE FOR MAKING BLUE PRINTS AND OTHER PHOTOPRINTS. HAROLD J. BRUNK, Chicago, Ill., assignor to C. F. Pease Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 18, 1928. Serial No. 255,481. 4 Claims. (Cl. 95—76.)

1. Photoprinting apparatus comprising a sheet of transparent material, a source of light on one side thereof, means for drawing a sheet of sensitized paper continuously past the opposite side thereof, a chamber having a rigid movable wall adjacent said sheet of sensitized paper and containing a fluid under pressure whereby said wall may press said moving paper against said transparent material, and means within said chamber for maintaining said wall parallel with said transparent material.



1,804,740. WATERPROOF AND DIELECTRIC ASBESTOS LUMBER. EDWARD J. BUCZKOWSKI, Ambler, Pa., assignor to Ambler Asbestos Shingle & Sheathing Company, Ambler, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1930. Serial No. 426,193. 5 Claims. (Cl. 92—21.)

1. A waterproof and insulating slab composed of asbestos fiber material hydraulic cement and asphalt, the asphalt being introduced prior to the formation of the slab.

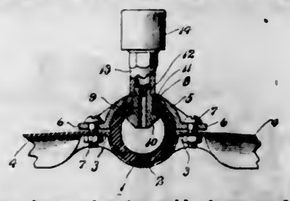
1,804,741. WINDOW CONSTRUCTION. FRED BUTZBACH, Clinton, Iowa. Filed Apr. 15, 1929. Serial No. 355,248. 8 Claims. (Cl. 20—55.)



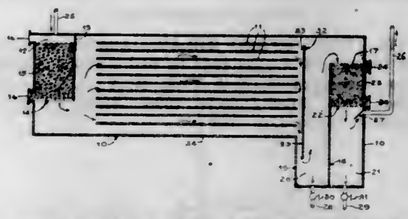
1. In a window construction, a head casing having its lower edge provided with a central longitudinal groove throughout its length.

1,804,742. SPRINKLING APPARATUS. ROBERT B. CAMPBELL, Muskegon Heights, Mich., assignor to Desmond Manufacturing Company, Muskegon Heights, Mich., a Corporation of Michigan. Filed June 21, 1929. Serial No. 372,557. 3 Claims. (Cl. 299—106.)

3. In a construction of the class described, a length of hose having an opening through its upper side, a holding bar located transversely across and under the hose, a clamp extending over the hose, means for detachably connecting the clamp to said holding bar, an outlet sleeve mounted in said opening in the hose and extending through the clamp, means for securing said sleeve in permanent relation to the hose whereby said clamp and the holding bar may be removed without affecting said outlet sleeve, and a sprinkler head detachably secured at the outer end of the outlet sleeve whereby it may be removed therefrom to permit closing said outlet sleeve to stop passage of water therethrough.

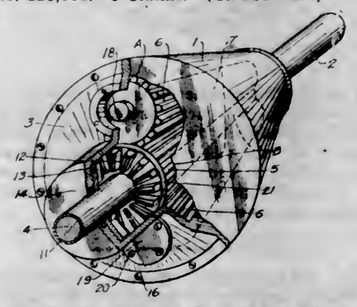


1,804,743. APPARATUS FOR DESLUDGING LIQUIDS. HUGH HARLEY CANNON, Los Angeles, Calif., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif., a Corporation of California. Filed Feb. 16, 1929. Serial No. 340,383. 10 Claims. (Cl. 210—43.)



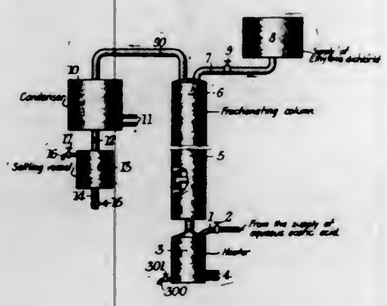
1. Apparatus for separating fluent sludge from a liquid in which said sludge is suspended, comprising: a substantially closed vessel horizontally disposed; imperforate partitions of less length than that of said vessel, so placed as to divide said vessel into a number of relatively wide and shallow substantially horizontal channels and to cause said liquid to flow through said channels in parallel, and means for introducing sludge-containing liquid into one end of said vessel and for separately withdrawing liquid and sludge from the opposite end of said vessel.

1,804,744. HYDRAULIC CLUTCH. ULYSSES G. CHARLES, Wichita, Kans., assignor of one-fourth to Darcey E. Dunne, Jr., Wichita, Kans. Filed Dec. 27, 1929. Serial No. 416,864. 6 Claims. (Cl. 192—61.)



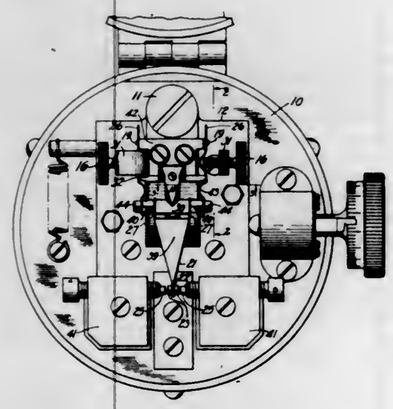
1. In a hydraulic clutch, a drive and a driven shaft, a housing axially aligned with said shafts and being securely attached to one of the shafts, the housing having compression chambers and being filled with fluid, conical gear elements positioned in the housing, one of the gears slidably engaging on one of the shafts and rotatable therewith, and means to move the gear longitudinally to control the compression of fluid within the housing.

1,804,745. PROCESS OF REMOVING WATER FROM AQUEOUS ACETIC ACID. HANS T. CLARKE and DONALD F. OTHMER, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 12, 1927. Serial No. 232,916. 12 Claims. (Cl. 202—42.)



8. In the process of dehydrating aqueous acetic acid the step of mixing ethylene dichloride with the aqueous acetic acid and distilling water and ethylene dichloride from the mixture.

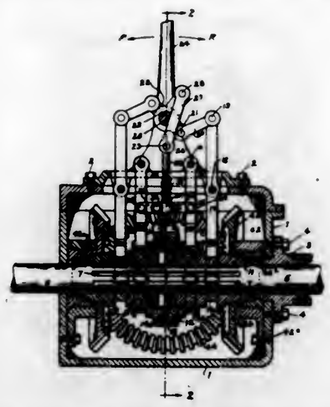
1,804,746. HIGH SPEED RELAY. AUSTEN M. CURTIS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 23, 1928. Serial No. 287,714. 8 Claims. (Cl. 175—336.)



1. In an electromagnetic device, a vibrating armature, means comprising two partly arcuate contractile springs tensioned longitudinally to flex in a plane perpendicular to the axis of said vibrating armature, and adjustable means individual to each of said springs for exerting a lateral adjustable pressure upon each of said springs for varying the tension thereof.

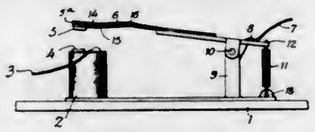
1,804,747. GEAR SHIFT. GUSTAV E. DANIELSON, Seattle, Wash., assignor of one-fourth to Adolph Bohm, Seattle, Wash. Filed Feb. 5, 1930. Serial No. 426,154. 4 Claims. (Cl. 74—59.)

1. In a gear shift mechanism the combination of a casing, a drive shaft and a driven shaft revoluble therein, means adapted to positively connect the two shafts, means to frictionally connect them, a lever for automatically first throwing into engagement the frictional means and later to throw into engagement the positive means for rotation of the shafts in one direction, another frictional means including a pair of clutches adapted to connect the
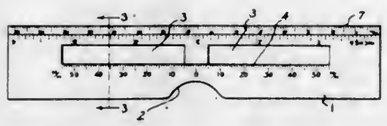


two shafts and power transmission means between the pair of clutches for accomplishing said connection for rotation of the shafts in the opposite direction.

1,804,748. ELECTRIC SWITCH. GEORGE H. DERRICK, deceased, Oakland, Calif., by Victory A. Derrick, executrix, Oakland, Calif., assignor, by mesne assignments, to Instograph, Ltd., a Corporation. Filed Mar. 19, 1928. Serial No. 262,902. 2 Claims. (Cl. 200—87.)



1. A relay switch comprising a base, an electromagnet supported by the base, a spring controlled armature including contiguous strips of spring metal bent upwardly from the base intermediate their ends and a spacing member interposed between the ends of the strips.

1,804,749. MEASURING DEVICE. DANIEL DESMOND, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Feb. 24, 1928. Serial No. 256,515. 1 Claim. (Cl. 33—200.)



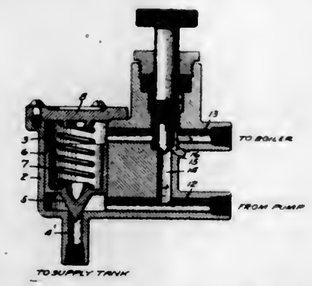
In a device of the character described, an elongated relatively thin base member having its material disposed in a single plane and said member forming a single unitary integral structure and having a pair of separated slots, each slot extending longitudinally of the base and intermediate the center and an end thereof and said base member having scale means adjacent one edge of the slots, said slots being so arranged that the pupils of the eyes may be seen therethrough, one in each slot, and the scale being so arranged that the distance between the said pupils may be read thereon, and said base member also having a recess in one edge central of the slots and adapted to fit over the nose.

1,804,750. DISK HARROW. WILLIAM D. DEWEND, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Feb. 16, 1929. Serial No. 340,511. 8 Claims. (Cl. 55—83.)



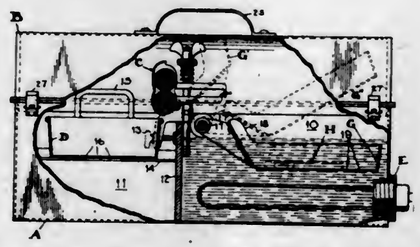
1. A harrow comprising a draft member, gangs pivotally connected to said draft members on a single pivot, and means for adjusting the angle of said gangs vertically with respect to said pivot.

1,804,751. BOILER FEED WATER CONTROL DEVICE. WARREN DOBLE, Berkeley, Calif., assignor to Doble Steam Motors Corporation, Wilmington, Del., a Corporation of Delaware. Filed Oct. 6, 1924. Serial No. 742,036. 1 Claim. (Cl. 137—153.)



The combination with a body having therein a cylinder, a pair of conduits communicating with said cylinder adjacent opposite ends thereof, a duct joining said conduits, and an outlet from said cylinder; of a cylinder head closing one end of said cylinder, a cup-shaped piston reciprocable in said cylinder, a spring within said cup-shaped piston and abutting said cylinder head for biasing said piston toward said outlet, a conical valve on said piston adapted when seated in said body to close said outlet, and an adjustable needle valve for changing the area of said duct for regulating pressures communicated to opposite sides of said piston through said conduits.

1,804,752. APPARATUS FOR HEATING AND STERILIZING TOWELS. EDWARD G. DOOLEY, Los Angeles, Calif., assignor of forty-nine per cent to Frank M. Hiyake, Los Angeles, Calif. Filed June 13, 1928. Serial No. 285,148. 2 Claims. (Cl. 167—8.)



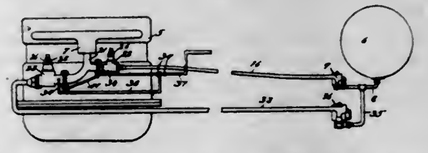
2. An apparatus of the character described, comprising a receptacle having a hot water compartment and a steam compartment, a wringer adapted to wring towels from said hot water compartment into said steam compartment, a basket detachably mounted in said steam compartment, a communicating cover for said steam compartment and said hot water compartment, and means for mechanically feeding the towels into said wringer.

1,804,753. CONSTRUCTION MATERIAL. GORDON C. DOUGLAS, Covina, Calif., assignor of one-half to David G. Small, Los Angeles, Calif. Filed June 25, 1928. Serial No. 288,064. 4 Claims. (Cl. 72—36.)



1. As an article of commerce, a preformed acoustic tile comprising, a base of plaster board, a layer of porous cementitious material having cavities exposed on its surface bonded to one side of said base during the setting of the porous cementitious material and provided with means adapted to cooperate with fastening means to attach said tile to walls and ceilings.

1,804,754. DUPLEX FUEL SUPPLYING APPARATUS FOR INTERNAL COMBUSTION ENGINES. WILLIAM A. EDWARDS, Chicago, Ill. Filed Aug. 22, 1923, Serial No. 658,689. Renewed May 5, 1930. 8 Claims. (Cl. 123—127.)

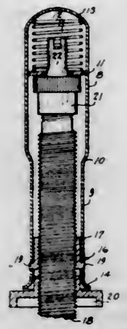


1. In a duplex apparatus of the character described, the combination of an internal combustion engine and a source of fuel supply remote therefrom, of a primary fuel mixture producing apparatus comprising a mixing device in proximity to the fuel supply for producing a preliminary mixture of air and liquid fuel, a pipe through which the said mixture is conducted, a secondary air valve interposed in said pipe in proximity to the engine, and a throttle valve interposed between said air valve and the engine, an auxiliary fuel mixture producing apparatus comprising a mixer in proximity to the fuel supply for producing a preliminary mixture of fuel and air; a pipe through which said mixture is conducted, a secondary air valve interposed in said pipe in proximity to the engine, and a throttle valve between said secondary air valve and the engine, and an operating connection between said throttle valves whereby said auxiliary air apparatus is thrown into operation upon the operation of the primary apparatus at a predetermined capacity.

1,804,755. DUST CAP FOR PNEUMATIC TIRE VALVES. EARLING W. EIDEMILLER, Medina, Wash. Filed Apr. 21, 1928. Serial No. 271,736. 1 Claim. (Cl. 152—12.)

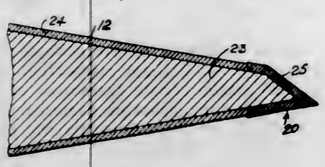
In readily removable dust cap means for a valve stem and cap of a pneumatic tire valve a tubular dust cap embodying two integral cylindrical sections of larger and smaller diameter, an inclined shoulder at the point of connection between the larger and smaller sections, the end of said larger section being closed and the end of said smaller section being open and being expanded to form a bell shaped mouth, said dust cap having L shaped bayonet slots at said open end, the longitudinal portions of said

bayonet slots being formed partly in said bell shaped mouth, longitudinally extending ribs formed on the exterior of said smaller section and extending between said inclined shoulder portion and said bell shaped mouth, a circular spring supporting washer movable within said larger section of said tubular cap and arranged to rest on said shoulder portion when the dust cap is removed from



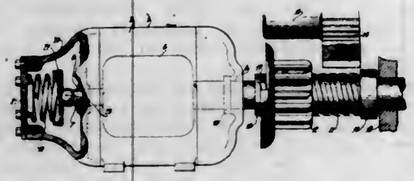
the valve stem, a spring operatively disposed within said section of larger diameter and arranged to press against said spring supporting washer and the closed end of the larger section, the spring being compressed when the dust cap is engaged with the valve stem by the valve stem cap engaging and shifting the spring supporting washer, and lugs associated with the valve stem to be received and retained in the bayonet slots.

1,804,756. SHOVEL TOOTH. FRANK ELWOOD, Carbondale, Ill., assignor of one-half to Frank A. Thompson, Carbondale, Ill. Filed Aug. 30, 1929. Serial No. 389,414. 5 Claims. (Cl. 37—142.)



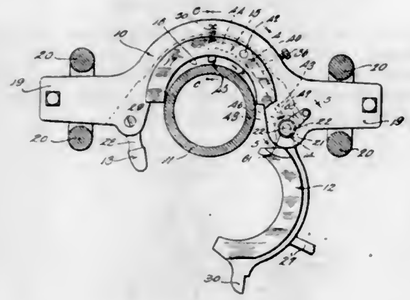
4. A point for a shovel tooth including a central core of hard and tough steel, a chisel shaped tip of extremely hard material surrounding the forward end of said core and a plating of hardened steel extending rearwardly from said tip and encasing the remainder of said core.

1,804,757. ENGINE STARTER. JOHN W. FITZGERALD, Milwaukee, Wis., assignor to Briggs and Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed May 19, 1928. Serial No. 279,174. 2 Claims. (Cl. 74—7.)



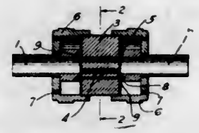
1. An engine starter, comprising the combination with a member operatively connected with an engine, of a motor including a housing, a rotor and a shaft having axial movement in the housing and projecting therebeyond, a driving member mounted to travel longitudinally of the projected end of the shaft and into engagement with the engine member and to rotate therewith, spring means engaged with the housing adjacent the opposite end of the shaft, and anti-friction means disposed between the free end of the spring means and said opposite end of the shaft, whereby the spring means yieldably resists axial movement of the motor shaft in a direction opposite to the direction of movement of the driving member to engage the engine member.

1,804,758. ELEVATOR. JOSEPH G. FITZPATRICK and ROBERT W. FLINT, Anaheim, Calif., assignors to Joseph F. Flint, Long Beach, Calif. Filed Dec. 23, 1929. Serial No. 416,112. 13 Claims. (Cl. 294—90.)



1. An elevator of the character described including, a body adapted to be arranged around an object, a gate pivotally attached to the body and adapted to retain an object in the body, a pivot pin connecting the body and gate, and means acting torsionally directly on the pivot pin for shifting the gate to the closed position.

1,804,759. ACOUSTIC DEVICE. PAUL B. FLANDERS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 28, 1928. Serial No. 273,524. 6 Claims. (Cl. 181—27.)

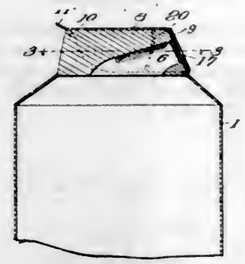


1. An acoustic attenuator comprising series and shunt impendances at least one of which is in the form of a sound passage less than 0.003 inch wide in a direction substantially perpendicular to the direction in which sound waves are transmitted therethrough.

1,804,760. DISPENSING CLOSURE FOR CONTAINERS. SUSAN E. FOX, Paris, Tenn. Substitution for abandoned application Serial No. 65,543, filed Dec. 7, 1915. This application filed Feb. 12, 1930. Serial No. 427,998. 3 Claims. (Cl. 221—60.)

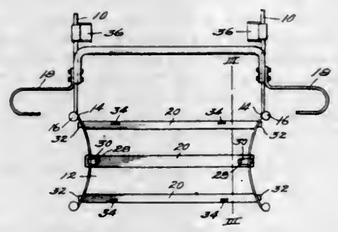
1. A container including a body portion having a substantially frusto-pyramidal spout extending longitudinally from one end thereof and provided with a discharge passage opening through one end wall of the spout, a closure corresponding in shape to the spout and pivotally mounted thereon and having an inwardly bulged portion adapted

to fit within the mouth of the discharge passage when the closure is in closed position, the ends of the side walls of the closure on opposite sides of the bulged portion being



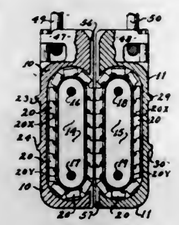
bent to form channels, and a packing strip seated in said channels and extending over the bulged portion of the closure.

1,804,761. BUMPERETTE TRUNK RACK. CHARLES B. FRITTS, Kansas City, Kans. Filed Aug. 6, 1930. Serial No. 473,316. 8 Claims. (Cl. 293—55.)



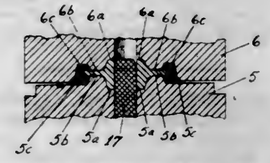
1. A rack of the character described having end members swingable to serve as bumperettes when the rack is disassembled.

1,804,762. WIRE LINE CLAMP. HENRY E. GARDEN, Augusta, Kans. Filed May 31, 1929. Serial No. 367,305. 6 Claims. (Cl. 24—125.)



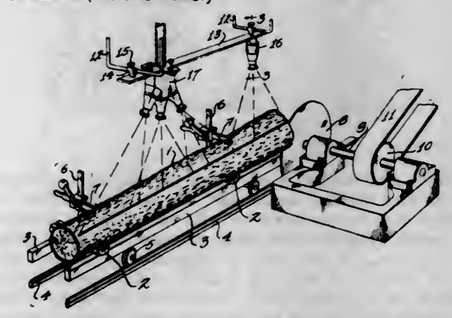
1. In a device of the class described a pair of housing members arranged side by side and with hollowed out spaces for receiving endless chain elements; a block within each housing member and rigid thereto and a chain element enveloping its respective block; each chain link having its outer face hollowed as a shoe for contacting an intermediate wire cable; an extended portion for each housing member, each having a threaded block adapted to receive a threaded clamping shaft; a shaft having right hand and left hand threaded portions for cooperation with said threaded blocks; a shaft hinged to one block and passing through a hole through the second housing block as a guiding means; and a hinged latch on one housing member and a boss on the other housing member adapted for latching engagement.

1,804,763. PROCESS OF MAKING CAR WHEELS. ROBERT C. GOOD, Edgewood, and HARRY HOLIDAY, Glenshaw, Pa., assignors, by mesne assignments, to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Jan. 9, 1928. Serial No. 245,296. 3 Claims. (Cl. 29—168.)



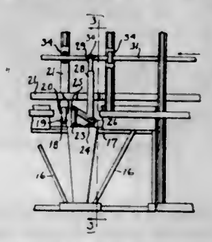
1. That process of forming a wheel, which consists in forming a metal block having a hard metal exterior and a tough metal interior, and forging said block in dies arranged to expand it into a wheel having a rim, plate and hub, the exterior metal of the block being insufficient to fill the rim portion defined by the pressing means.

1,804,764. APPARATUS FOR AND METHOD OF CUTTING MATERIAL. EDWIN J. GRANT, Los Angeles, Calif. Filed Dec. 1, 1928. Serial No. 323,080. 4 Claims. (Cl. 143—168.)



1. A cutting apparatus comprising a cutting member operating in a fixed plane, guide means adapted to support and guide material to be cut from an exterior position into said cutting member, stop means adjustable toward and from the plane of said cutting member and adapted to cooperate with material to be cut while on said guide means, and means for projecting a plurality of lines of light upon material upon said guide means parallel to said cutting plane, while said material is in said exterior position, said lines of light projected by said means providing intangible lines which may be followed by the cutting means in any definite desired relation or position determined by the stop means.

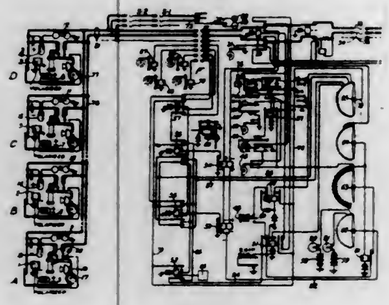
1,804,765. AIRCRAFT. JOSEPH M. GWINN, Jr., Buffalo, N. Y., assignor to Consolidated Aircraft Corporation, Buffalo, N. Y., a Corporation of Delaware. Filed Feb. 27, 1929. Serial No. 343,212. 4 Claims. (Cl. 244—29.)



1. An aileron control system comprising a control member, an aileron, a pivotal support therefor, a lever, a

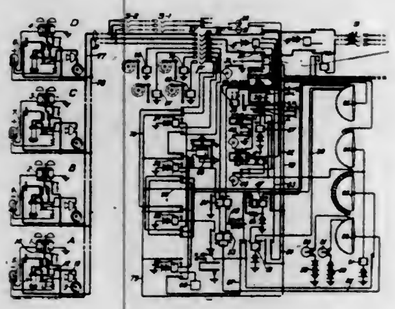
bracket fixed to said aileron and providing a pivotal support mounting one end of said lever for rocking movement about an axis inclined to planes normal to the aileron, an interconnection between the said control member and the other end of said lever, and means restraining said lever for movement in a plane substantially coinciding with the plane of the aileron, equal movements of the interconnection producing unequal angular movements of the aileron about the aileron axis from a normal position.

1,804,766. TELEPHONE SYSTEM. ALFRED E. HAGUE, West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1930. Serial No. 445,552. 12 Claims. (Cl. 179—8.5.)



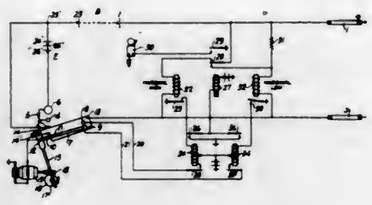
1. In combination, a telephone line having a plurality of stations thereon, signal bells, one for each station, discharge devices, one in circuit with each bell and arranged to permit current to flow when subjected to a given potential, a relay at one station responsive to current of a given polarity, a relay at another station responsive to current of opposite polarity, and other discharge devices in circuit with said relays and arranged to permit current to flow when subjected to potential of a lower value than that which causes current to flow in said first mentioned devices.

1,804,767. TELEPHONE SYSTEM. ALFRED E. HAGUE, West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1930. Serial No. 445,554. 10 Claims. (Cl. 179—8.5.)



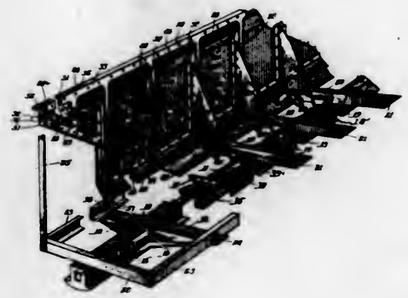
5. The combination in a telephone system of a line having a number of stations, signal devices, one at each of said stations, current-controlling devices, one in circuit with each of said signal devices, means for applying current to said line for selectively energizing said signal devices, and means responsive to the energization of said signal devices for identifying said stations.

1,804,768. VOLTAGE CONTROL SYSTEM. HERMAN HENRY HARBECKE, Chicago, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Jan. 26, 1928. Serial No. 249,622. 10 Claims. (Cl. 171—314.)



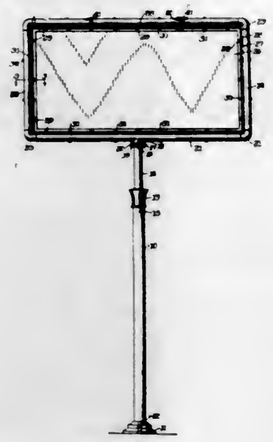
1. In a voltage regulating system, a storage battery and a discharge circuit therefor, a plurality of normally disconnected reserve cells, a first relay connected across said battery and responsive to a lowering of the voltage thereof below a predetermined limit, a second relay having an operating winding and a holding winding, means operated by said first relay for closing a circuit for said second relay over its operating winding, a third relay operated by said second relay for restoring said first relay to its original position to disconnect the operating winding of said second relay, a switching device and a circuit therefor, means operated by said second relay for closing the circuit of said switching device and for including its holding winding in said circuit, means operated by said switching device for including said reserve cells in the discharge circuit of said battery, and means then operated by said switching device for interrupting its own circuit and the circuit over the holding winding of said second relay to restore said second and third relays to original position and to maintain said reserve cells in the discharge circuit.

1,804,769. CAR CONSTRUCTION. HARRY S. HART and DAVID HINDAHL, Chicago, Ill. Filed Aug. 10, 1929. Serial No. 384,965. 6 Claims. (Cl. 105—249.)



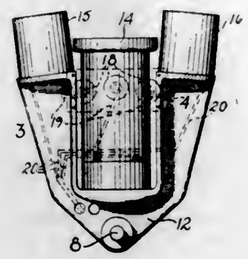
1. In a device of the character described, a center sill formed as a single integral casting and having end portions of substantially box-like beam construction and an intermediate portion of substantially inverted V cross section, providing shedding surfaces.

1,804,770. STRUCTURE FOR SIGNS. ABE HERSHFIELD, Goshen, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Jan. 16, 1930. Serial No. 421,106. 2 Claims. (Cl. 40—125.)



1. In a sign structure, a sign member, a reinforcing frame secured to said member, slidable brackets on said reinforcing frame, a tubular frame, and means associated with said tubular frame for engaging said slidable brackets and thereby holding said reinforcing frame in said tubular frame.

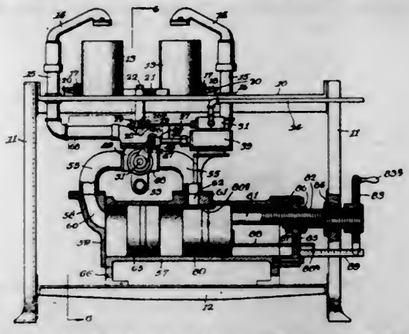
1,804,771. ADJUSTABLE LIGHT SOURCE FOR PHOTOGRAPHIC PRINTING MACHINES. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 22, 1929. Serial No. 401,407. 14 Claims. (Cl. 95—73.)



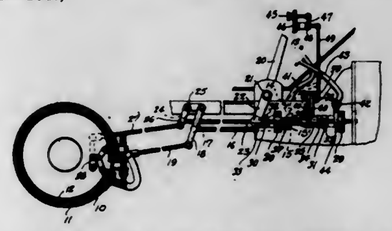
1. In a photographic printing machine the combination with a printing panel, of a source of light for said printing panel comprising a plurality of lamps and a pivotal base supporting said lamps.

1,804,772. LARD FILLING MACHINE. JAMES W. HUBBARD, Chicago, Ill., assignor to The Mechanical Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 28, 1928. Serial No. 295,876. 10 Claims. (Cl. 226—107.)

1. A machine for filling cans with a fluid, comprising a plurality of discharge conduits for said fluid, means for supporting cans in a plurality of paths of movement to said discharge conduits, and means actuated by the movement of a can along one of said paths to effect the discharge of said fluid from one of said conduits into a can positioned on another of said paths.

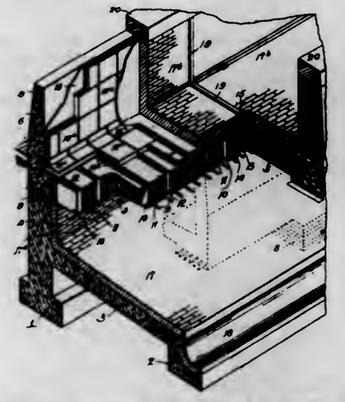


1,804,773. AUXILIARY BRAKE OPERATING MECHANISM. HARVEY HUBBELL, Jr., Bridgeport, Conn. Filed Oct. 27, 1927. Serial No. 229,039. 9 Claims. (Cl. 188—106.)



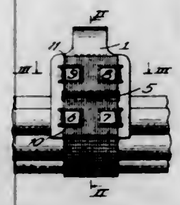
9. In a brake mechanism for motor vehicles, an emergency brake, means for applying said brake, separate power means for applying said brake, means for normally holding the power means ineffective, personally operated means for releasing the holding means, and means for resetting the power means in ineffective position.

1,804,774. PICKLING TANK CONSTRUCTION. EDWIN B. HUDSON, Butler, Pa., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Sept. 18, 1928. Serial No. 306,688. 12 Claims. (Cl. 72—14.)



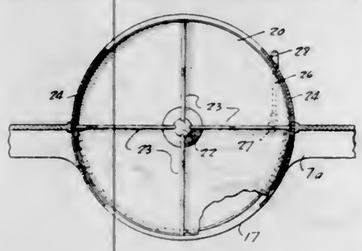
1. In a tank construction, an open cellular structure having a mastic seal on both sides thereof whereby a hydrostatic head within the tank is prevented from acting upon the outermost seal layer.

1,804,775. CABLING CLIP. SAMUEL PIERRE HULL, Yonkers, and JOHN J. CORCORAN, Albany, N. Y., and FREDERICK C. LAVARACK, Montclair, N. J. Filed Sept. 4, 1929. Serial No. 390,224. 1 Claim. (Cl. 248—33.)



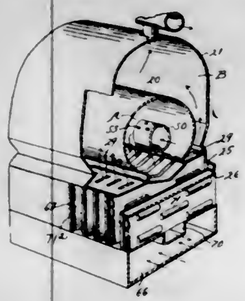
In a cabling clip, in combination: a plate formed with a hook, a slot and tabs; a textile flexible ribbon like member having both ends passing through the slot and bent back to lie in opposite directions on the plate and underneath the tabs.

1,804,776. SAFETY CAGE WINDOW. CHARLES T. JAMES, Los Angeles, Calif. Filed July 15, 1929. Serial No. 378,250. 2 Claims. (Cl. 20—1.01.)



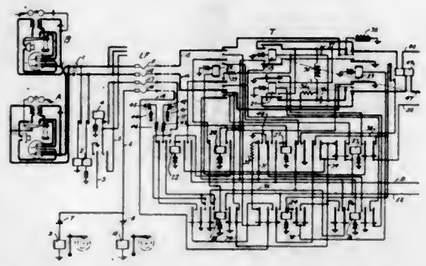
1. In a cage, a front wall having an opening for passage of valuables, a table at the base of said opening; a turnstile rotatably disposed in said opening comprising upright walls to close said opening at all angular positions of said turnstile, and a base wall rotatable with said upright walls and serving as a rotary carrier for articles; and a housing for said turnstile disposed within said opening and comprising a circular base mounted on said table and diametrically opposed sectors including top and side walls thereby at all positions of said turnstile closing the space in front of said front wall from that behind.

1,804,777. BOILER CONSTRUCTION. HORACE M. JEROME, Detroit, Mich., assignor, by mesne assignments, to Garfield A. Wood, Detroit, Mich. Filed Sept. 19, 1927. Serial No. 220,572. 11 Claims. (Cl. 122—115.)



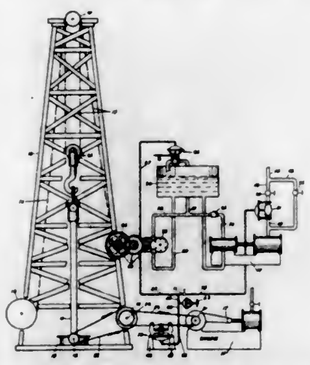
1. A heat machine comprising a horizontal combustion chamber, a horizontally extending flue conduit below said combustion chamber, a series of parallel vertical flue passageways between said combustion chamber and flue passageways, a water chamber surrounding said combustion chamber, a water tank below said flue passageways and a series of water passageways connecting said water chamber and said water tank and arranged intermediate flue passageways in heat conducting relation thereto.

1,804,778. TELEPHONE SYSTEM. LEWIS H. JOHNSON, Madison, N. J., and RAY L. STOKELY, Floral Park, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 12, 1929. Serial No. 392,114. 10 Claims. (Cl. 179—8.5.)



2. In a telephone system, a line, a plurality of subscribers' stations permanently connected to said line, a message register individual to each of said stations, a conductor permanently connected to a plurality of said registers, a positive source of current, a negative source of current, means for connecting said positive source to said conductor to operate one of said registers, and means for connecting said negative source to said conductor to operate another of said registers.

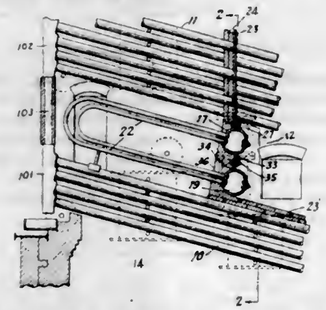
1,804,779. MECHANICAL ROTARY DRILLING CONTROL. PHILIP JONES and PAUL W. PRUTZMAN, Los Angeles, Calif. Filed June 24, 1929. Serial No. 373,369. 8 Claims. (Cl. 255—19.)



1. In an apparatus for rotary well drilling including a drill string, a rotary table for revolving said string, a drilling line for partially supporting the weight of said drill string, a secondary feeding means associated with said drilling line and operated by fluid pressure for raising and lowering said drill string, and a prime mover adapted to drive said rotary table through the medium of a flexible band of which one side is in tension; a device for controlling said secondary feeding means comprising: means for deflecting the tension side of said band from a straight line; means for transmitting the thrust of said deflecting means to a fixed collapsible

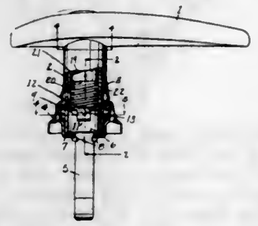
reservoir containing liquid, thereby displacing a portion of said liquid; and means for transmitting said displaced liquid to a pressure-responsive means adapted to regulate the pressure of liquid in said secondary feeding means.

1,804,780. HEADER AND SUPPORT THEREFOR. WILLIAM A. JONES, Westerleigh, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed July 29, 1922, Serial No. 578,294. Divided and this application filed Nov. 13, 1928. Serial No. 319,152. 16 Claims. (Cl. 122—476.)



13. In a fluid heater, a pair of horizontally extending, substantially parallel headers disposed adjacent one another and one above the other, and heating tubes connecting the headers, means for supporting the upper header, and means independent of said tubes for suspending the lower header from the upper header.

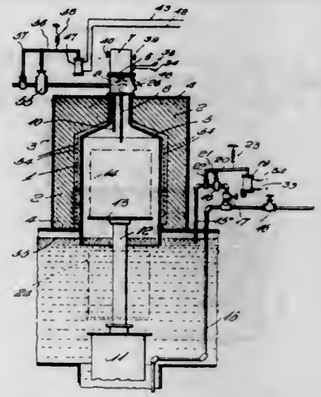
1,804,781. KNOB OR HANDLE LOCK. ISAAC S. KEELER, Grand Rapids, Mich., assignor to Keeler Brass Company, Grand Rapids, Mich. Filed June 29, 1928. Serial No. 289,117. 2 Claims. (Cl. 70—91.)



1. The combination of a rotatably supported hand piece provided with a sleeve having longitudinal slots adjacent its inner end, a locking unit having a spiral cam at its inner end, a spindle provided with a transversely slotted head rotatable within the inner end of said sleeve, a bolt having a tongue-like part engageable with the slot of said head and provided with lugs engaging said longitudinal slots in said sleeve whereby the bolt is supported for longitudinal movement within the sleeve to be moved into and out of engagement with said spindle, said bolt being chambered to receive said cam on said locking unit and provided with a lug coacting therewith, and a coiled spring arranged within said bolt to actuate the same to spindle engaging position.

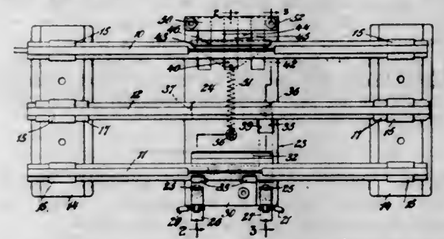
1,804,782. PRESSURE CONTROL IN FURNACES. LEON C. KOENIG, Chicago, Ill., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 3, 1929. Serial No. 360,188. 12 Claims. (Cl. 266—5.)

5. In an annealing furnace, a heat treatment chamber, means for introducing a charge into said furnace and removing said charge therefrom, pressure control means operative in accordance with the pressure within said furnace for regulating the pressure to which said charge is



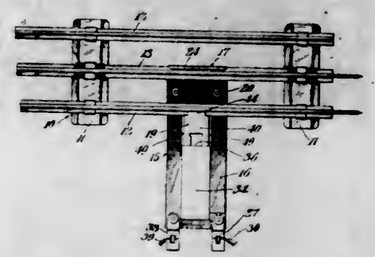
subjected, and maintaining a non-oxidizing atmosphere within said chamber throughout the period of heat treatment of said charge with respect to said furnace.

1,804,783. CLIP FOR TOY ELECTRIC RAILWAY TRACKS. JOHN C. KOERBER, South Orange, N. J. Filed Feb. 17, 1928. Serial No. 255,073. 25 Claims. (Cl. 191—29.)



1. A universal toy track clip comprising a base, a rail engaging contact mounted on said base and means for attaching the clip to toy railway tracks of different gauge, one of said contacts comprising a strip of metal mounted on said base and arranged to extend along and engage the bottom of the third rail of said tracks.

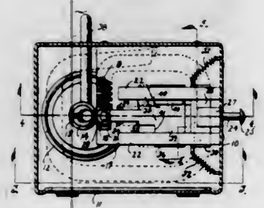
1,804,784. TOY RAILWAY TRACK CLIP. JOHN C. KOERBER, South Orange, N. J. Filed July 16, 1928. Serial No. 293,000. 13 Claims. (Cl. 191—29.)



1. The toy railway track clip comprising a base, a third rail engaging contact carried by said base, a second contact slidably mounted on said base and movable toward and away from said track, said second contact being adapted for engagement with the outside of an outside rail of said track, and said second contact having a sufficient

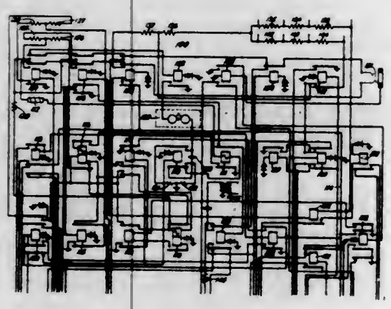
range of movement to permit of its engaging the outside rails of tracks of different gage, and a compression spring located in said second named contact and adapted to move said second named contact through said range.

1,804,785. LIQUID VENDING MACHINE. WILLIAM C. F. KRUEGER, Detroit, Mich. Filed Aug. 19, 1929. Serial No. 386,962. 1 Claim. (Cl. 194—82.)



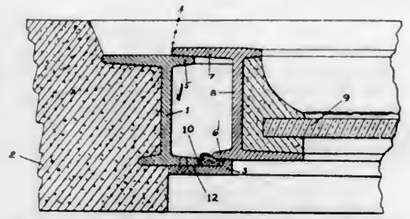
In a vending machine, a cabinet, a platform therein, a pair of spaced guides on said platform each formed with a longitudinal slot, a projecting member mounted between said guides and formed with guide members projecting through the slots thereof for slidably supporting the projecting member above the platform, a plunger device slidably mounted on said platform between said guides and normally freely movable beneath said projecting member, said projecting member being formed with a seat to receive a separate device whereby the latter projects into the plane of the projecting member, said projecting member being formed with a lateral projection thereon, a hooked retracting member projecting forwardly from said plunger device and loosely engaging the projection on said projecting member, and a spring for retracting the plunger device.

1,804,786. TELEPHONE TESTING SYSTEM. WALTER KUHN, Staten Island, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,782. 8 Claims. (Cl. 179—175.)



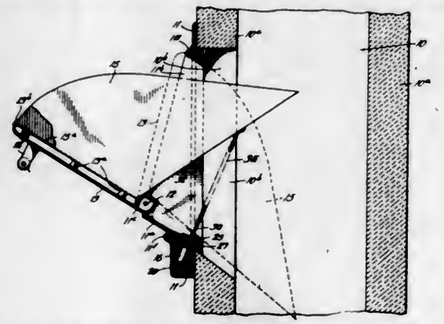
1. In a testing system, a primary testing set, a secondary testing set, means to interconnect a relay circuit therebetween, means in said secondary testing set for causing a relay in said circuit to transmit impulses of variable characteristics, electromagnetic means in said primary testing set responsive only to impulses of a particular character for testing the characteristics of said relay, and a second electromagnetic means in said primary testing set responsive only to impulses of different characteristics for associating said first electromagnetic means with the said relay circuit.

1,804,787. METAL WINDOW. FRANK KULLMER, San Francisco, Calif., assignor, by mesne assignments, to Soulé Steel Company, San Francisco, Calif., a Corporation of California. Filed June 19, 1929. Serial No. 372,194. 4 Claims. (Cl. 189—65.)



1. Metal window construction comprising a fixed frame and a swinging sash, the sash arranged with a portion to overlap and seat against the fixed frame when the sash is closed, and a strip of resilient sealing material mounted on and projecting outward from the fixed frame in a position to be partially overlapped and engaged by the extreme edge of the sash when closed and be deflected laterally away from said edge.

1,804,788. HOPPER AND CHECK. FREDERICK C. KUMMER, Milwaukee, Wis., assignor to Kerner Incinerator Company, a Corporation of Wisconsin. Filed Feb. 25, 1928. Serial No. 256,951. 9 Claims. (Cl. 193—34.)



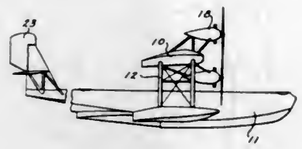
1. In combination with a chute or the like having an opening in a wall thereof, a hopper member mounted in said opening and movable to and from open and closed positions, and yielding means connected to said hopper and a wall of said chute to check the hopper as it approaches either of said positions while permitting free movement of said hopper intermediate its terminal approaches.

1,804,789. FOLDABLE RULE. EMIL KWARTZ, Seattle, Wash. Filed Apr. 9, 1928. Serial No. 268,624. 4 Claims. (Cl. 33—120.)



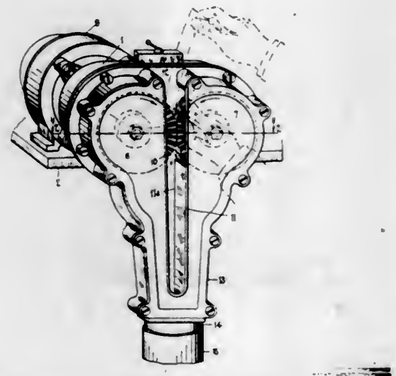
3. A foldable rule comprising a plurality of straight members pivotally connected together adjacent to their respective ends, said members being of concavo-convex form in transverse section and arranged to swing about the axes of their pivotal connections with each other, the surfaces of each member in proximity of its pivotal connections with other members being adapted to engage the surfaces of the members next above and below respectively.

1,804,790. AIRCRAFT. ISAAC M. LADDON, Buffalo, N. Y., assignor to Consolidated Aircraft Corporation, Buffalo, N. Y., a Corporation of Delaware. Filed Sept. 5, 1928. Serial No. 303,997. 4 Claims. (Cl. 244—14.)



1. In an aircraft, in combination, a single sustaining plane, a car spaced a substantial distance from and attached centrally below said plane, a power unit at each side of said car each including a motor and having a tractor propeller operating in a plane ahead of the leading edge of the sustaining plane with the circular paths of the propeller tips extending above the edge of the said sustaining plane, and a power unit centrally positioned above said sustaining plane and including a motor and a tractor propeller operating in a plane ahead of the leading edge of the sustaining plane, all of said propellers revolving substantially in a common transverse geometric plane.

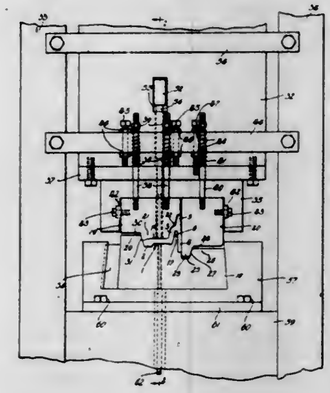
1,804,791. MACHINE FOR CLEANING TROUSER CUFFS. JOSEPH T. LA MEASURE and LAURENCE J. LA MEASURE, Detroit, Mich. Filed Dec. 5, 1927. Serial No. 237,767. 5 Claims. (Cl. 15—40.)



3. In a machine of the character described, the combination with a rotary brush for removing dirt from garments, of a casing enclosing said brush having a reduced hopper-forming portion below the brush, said casing having an elongated slot in one of its walls extending in a plane substantially tangential to said brush, for guiding garments past said brush.

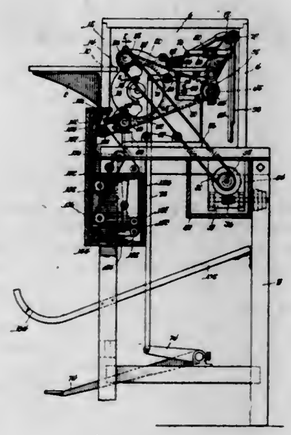
1,804,792. DIE. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Filed May 16, 1929. Serial No. 363,638. 6 Claims. (Cl. 78—76.)

1. In combination in means for reforming rail joint angle bars of the continuous type, a press comprising a bed and a cross head, a lower die fixed to the bed and having a bar receiving cavity and an upwardly projecting blade adapted to enter between the base and the flange of the bar, an upper die holder carried by the cross head, an upper die comprising two sections mounted in the holder for relative movement toward and away from each other, means for supporting said sections in the holder for relative vertical movement therein, stops disposed to contact the sections of the upper die during upward travel thereof with the cross head, certain of the



stops contacting one of the upper die sections in advance of contact of the other stops with the other of said sections, and means for forcing the sections of the upper die toward each other as the dies are closed under pressure.

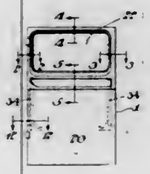
1,804,793. DEVELOPING APPARATUS WITH BLANKET ADJUSTMENT AND SPRAY APPLICATION OF LIQUID AMMONIA. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzgin Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 9, 1928. Serial No. 245,833. 6 Claims. (Cl. 95—94.)



1. In a developing apparatus, the combination of an enclosing casing, carrier members mounted therein, means for driving same, means introducing light sensitive material between said carrier members, a spray nozzle in said casing, a pipe connected with said spray nozzle and connecting to a source of air pressure, a second pipe connected to said spray nozzle and connected to a source

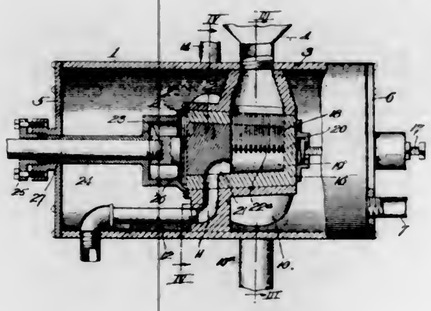
of liquid ammonia, said spray nozzle being constructed and arranged to project the liquid ammonia, in the form of a fine breath-like mist, onto said carrier members.

1,804,794. DOOR FOR CLOSED VEHICLE BODIES. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 3, 1927. Serial No. 230,703. 14 Claims. (Cl. 296—44.)



1. In an automobile door, a one piece window frame stamping in which is made the window opening together with a one piece glass run channel stamping embracing said opening and connected to the frame stamping.

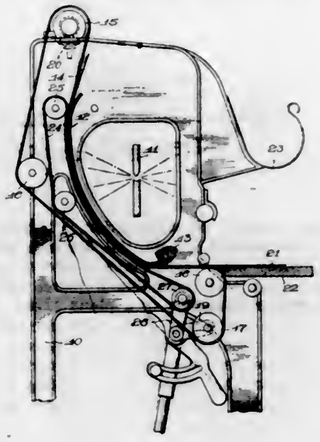
1,804,795. BEVERAGE MAKING MACHINE. JAMES W. LEE, Kansas City, Mo. Filed Apr. 1, 1929. Serial No. 351,552. 7 Claims. (Cl. 53—3.)



1. A beverage machine comprising a casing provided with a stock-charging port, two liquid-charging ports, a beverage-discharging port and a waste port, and a movable receptacle in said casing having communicating stock-receiving and beverage-holding chambers; the stock-receiving chamber being adapted for successive registration with the stock-charging port and one of the liquid-charging ports and the waste port, and the other chamber for successive registration with the beverage-discharging port and the other liquid-charging port of the casing; the registration of the beverage chamber with the last-named port occurring during registration of the stock-receiving chamber with the waste port.

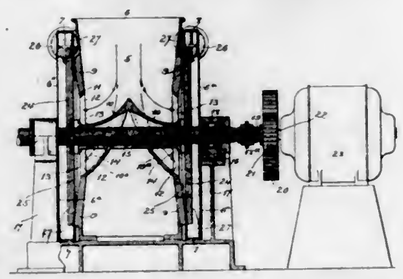
1,804,796. MACHINE FOR MAKING BLUE PRINTS AND OTHER PHOTOPRINTS. THOMAS LORD and HAROLD J. BRUNK, Chicago, Ill., assignors to C. F. Pease Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 18, 1928. Serial No. 255,459. 5 Claims. (Cl. 95—75.)

1. A blue-print machine comprising a source of light, a transparent member, a belt having means to cause it to slide over the surface of said transparent member remote from said light source and carry with it the sensitized paper and negative and a resilient belt movable



with and held against the outside of said first belt and mounted under tension to hold said paper and negative in intimate contact.

1,804,797. APPARATUS FOR DISINTEGRATING CANE STALKS PREPARATORY TO THE EXTRACTION OF THE JUICE FROM SAME. WILLIAM HENRY MORGAN, Alliance, Ohio, assignor, by mesne assignments, to The Morgan Hurrycane Company, New York, N. Y., a Corporation of Florida. Filed Feb. 28, 1925, Serial No. 12,411. Renewed July 26, 1930. 12 Claims. (Cl. 146—114.)

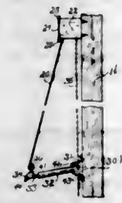


1. In a disintegrator for sugar producing material, the combination of two stationary disks, shearing knives mounted on the inner faces of said disks, a hopper formed between the upper portions of said disks, the said disks being provided with openings communicating with the hopper adjacent the centers of the disks, the bottom of the hopper being cone-shaped and extending below said openings, a rotary shaft passing through said disks, and non-adjustable disks secured to said shaft and provided on their inner faces with shearing knives which co-act with the knives on the stationary disks.

1,804,798. ROLLING AWNING. NELS H. NELSON, Des Moines, Iowa. Filed Mar. 10, 1930. Serial No. 434,661. 9 Claims. (Cl. 156—44.)

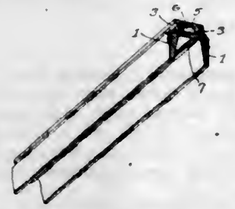
5. In a device of the class described, a hinged frame, a rotatably mounted shaft, a flexible awning element having one end secured to said shaft, a binder strip

secured to the free end of said flexible awning, a hook portion formed on said binder strip and engaging said frame, a plurality of transversely extending elongated slots in said hook portion, and a plurality of projections on the portion of the frame in said hook portion extend-



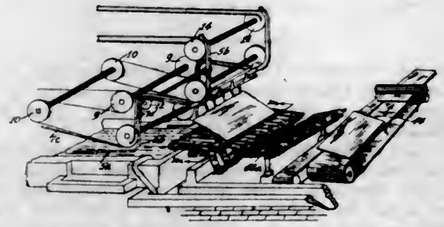
ing into and through said slots, respectively; said projections extending at approximately a forty-five degree angle from the horizontal when said awning element is rolled on said shaft and said frame is in approximately a vertical position.

1,804,799. RUBBER STRIPPING FOR DOORS OR WINDOWS. FREDERICK C. PALENSKE, St. Joseph, and WILLIAM A. ROBBINS, Benton Harbor, Mich. Filed Apr. 5, 1929. Serial No. 352,633. 6 Claims. (Cl. 296—44.5.)



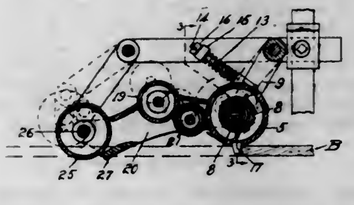
1. A rubber strip for use in forming a tight joint in any desired structure, comprising a rubber channel having an integral base portion and flexible side walls having an anchoring portion by which the strip is fastened in place on the structure, and having a flexible web disposed obliquely in the channel and integral with the base portion of the strip and adapted to engage the edge of some element of said structure, when the edge portion of said element is moved in the channel strip, said oblique web being flexed toward one side wall and toward the base, by said element, providing a tight joint between the strip and the edge of said element for the full length of said edge.

1,804,800. CONTINUOUS PICKLING MACHINE. CHARLES B. PALMER, Van Nuys, Calif., and KRISTIAN KRONBORG, Middletown, Ohio, assignors to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Original application filed Nov. 9, 1926, Serial No. 147,311. Divided and this application filed Mar. 30, 1929. Serial No. 351,273. 5 Claims. (Cl. 198—177.)



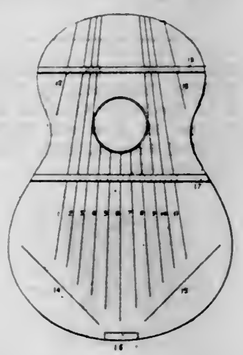
5. In a conveyor device for a continuous sheet metal pickler, carriers each having a plurality of depending arms with forwardly turned-up lower ends forming sheet-supporting abutments, said arms shaped to support a sheet in an upright position tilted backward at an angle to the vertical and carried in advance of said arms, whereby said sheet may be carried on said arms through a tank of pickle liquor, conveying means to engage and move said carriers, and sheet delivery means, operative between said arms, to raise the lower edge of said sheet above said abutments during the continuous motion of said carrier, and then move said lower edge more rapidly ahead in the direction of travel of said carrier to cause said sheet to leave said arms and fall flat on said sheet delivery means.

1,804,801. LUMBER MARKER. NEAL PANABAKER, Coeur D'Alene, Idaho. Filed June 1, 1929. Serial No. 367,697. 1 Claim. (Cl. 101—35.)



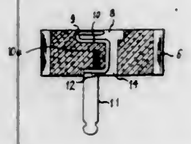
The combination with a supporting arm, a pivoted yoke, pivoted links and a roller frame pivoted in the yoke and links, of a trip arm on the frame and a supporting roller journaled in the frame, an inking roller and a transfer roller journaled in the frame, a spring returned printing roller journaled in the frame and a stop lug therefor, a trip lug on the printing roller, and a cushion spring between the yoke and arm.

1,804,802. CONSTRUCTION OF GUITARS. JUAN PASTOR, Buenos Aires, Argentina. Filed Jan. 26, 1928. Serial No. 249,704. 2 Claims. (Cl. 84—291.)



1. A guitar having a sound opening in its front wall comprising a plurality of strengthening ribs diagonally extending over the inner face of the side walls of the instrument for connecting its front and rear walls and causing a vibration of said front and rear walls in unison, a pair of cross-bars, a plate on said cross bars having a central opening of a dimension of the opening in the front wall of the instrument, a tube in said opening extending to a distance below the opening in the front wall for amplifying and syntonizing the sound, and a means for allowing an air current to pass through the instrument.

1,804,803. ELECTRIC PLUG CONNECTION. ERVIN M. PATTISON, Detroit, Mich. Filed Aug. 13, 1928. Serial No. 299,188. 2 Claims. (Cl. 173—361.)



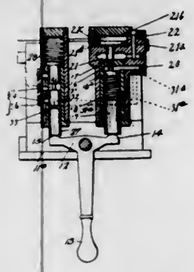
1. In an electrical connecter, the combination with a plug having an insulating body and carrying upon one end of said body a pair of contacts laterally projecting from said body, of a combined plug and socket member comprising an insulating body formed at one end with a socket for receiving the contact-mounting end of said plug, and comprising a pair of contact members seated adjacent to said socket at opposite sides thereof and engageable by the contacts of the plugs when the latter is rotated within said socket, and further comprising a pair of contact tongues projecting from the opposite end of said socket member to that formed with the socket and respectively electrically joined with said keepers.

1,804,804. REENFORCED SURFACE FLOOR. WILLIAM S. PATTISON, Kansas City, Kans. Filed Aug. 22, 1929. Serial No. 387,659. 3 Claims. (Cl. 94—8.)



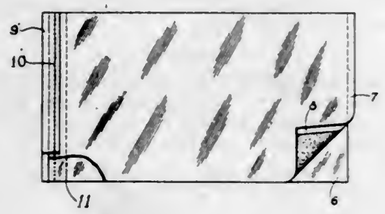
1. In a re-enforced surface floor, re-enforcing bars disposed side by side with their lower edges adapted to rest upon a suitable base, adjacent bars having spacing means of less depth than the depth of said bars, separating the latter and having locking means for holding said bars spaced apart, and filling material between said bars, passages being provided between the bars past said spacing and locking means adapted to receive said material.

1,804,805. PNEUMATIC FEEDING MECHANISM FOR MACHINE TOOLS. FREDERICK E. PHILLIPS, Newport, Ky., assignor of one-fourth to Allen & Allen, a Firm composed of Alfred M. Allen and Marston Allen, Cincinnati, Ohio. Filed June 15, 1926. Serial No. 116,222. 2 Claims. (Cl. 121—45.)



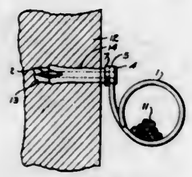
1. In combination with a movable member in a machine tool, a cylinder having a piston operatively connected with said member, a source of air pressure and means for introducing air therefrom into said cylinder, said means comprising a valve and a control handle resiliently connected therewith, an air passage connected into said cylinder, and said valve having two heads of different surface area connected therewith, the smaller of said heads being exposed to the source of air pressure, and the larger of said heads exposed to the pressure in said air passage, the said heads so arranged that air pressure against said smaller head will move the valve to closing position, and the air pressure against said larger head will also move said valve to closing position, whereby the introduction of air into the passage is regulated by the excess of the pressure of the resilient connection over that of the smaller head, with the pressure of the larger head directed so as to compensate for excessive introduction of air into said air passage.

1,804,806. TABLET. LELAND A. PHILLIPS, Rochester, N. Y., assignor to The Phillips Ribbon & Carbon Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 14, 1929. Serial No. 339,865. 6 Claims. (Cl. 282—22.)



1. A tablet comprising a backing sheet, a plurality of record sheets and a carbon sheet arranged in the order named upon said backing sheet, said record sheets being longitudinally fanned at one end, a binding covering one of the ends of all the sheets, and fastening means securing the binding and said sheets together.

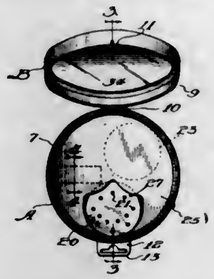
1,804,807. DRIVE RING. HENRY W. PLEISTER, Westfield, and JOHN KARITZKY, Garwood, N. J., assignors to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed Aug. 1, 1928. Serial No. 296,743. 2 Claims. (Cl. 248—36.)



1. A new article of manufacture comprising a rigid non-separable drive ring formed of a separate ring having an eye, a separate shank of hard metal having a driving head on one side of the eye and adapted to protect the eye from blows of a hammer or similar tool, and a collar mounted on the shank on the other side of the eye, and adapted to secure the shank and eye together and form a strong joint between the ring and shank.

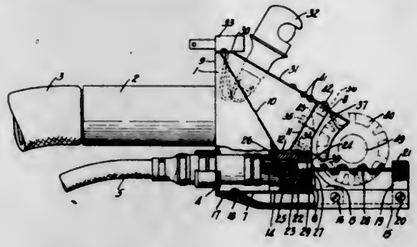
1,804,808. VANITY CASE. HARRY V. PRETOT, Elgin, Ill., assignor to Illinois Watch Case Company, Elgin, Ill., a Corporation of Illinois. Filed May 3, 1929. Serial No. 360,138. 2 Claims. (Cl. 132—83.)

1. In a vanity, the combination of a case across which is extended a platform having therein three openings two of which open into a loose powder compartment and the third into a cup containing a compact, a perforated disk resiliently fitted into one of the openings communicating with the powder compartment, and a plate mounted for rotation on the platform having an opening adapted to uncover successively the three platform openings to afford access to the material therewithin, the several openings



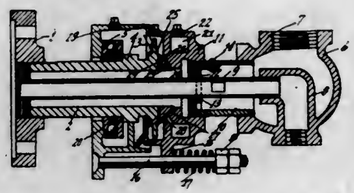
occupying such relative positions that the loose powder compartment may be completely shut off while the compact opening is occluded in whole or in part.

1,804,809. VACUUM CLEANER APPARATUS. WILLIAM T. PRITCHARD, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 2, 1929. Serial No. 352,039. 5 Claims. (Cl. 15—158.)



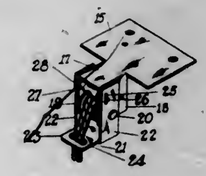
1. A vacuum cleaner nozzle comprising an upper portion having a forwardly directed inlet, and a lower portion extended beyond said upper portion, a rotatable member supported in the lower portion, said upper portion projecting over part of the rotatable member, said nozzle having an outlet for connection to a suction device, and means for connecting the rotatable member to a driving motor.

1,804,810. PACKING BOX. JOHN H. REEDY, Hamilton, Ohio, assignor of one-half to Albert O. Rolfe, Hamilton, Ohio. Filed Apr. 25, 1928. Serial No. 272,844. 1 Claim. (Cl. 285—10.)



A packing box for attachment to the flange of a rotary machine element to which fluid is to be supplied and fluid syphoned away, comprising a threaded nipple having a flat flanged outer face, a shoulder on said nipple, a thrust ball bearing assembly retained by said shoulder, a housing having a shoulder for retaining the other side of said bearing assembly, a smaller pipe extending through said nipple, another nipple having a supporting flange through which said smaller pipe extends, a housing mounted on said last noted nipple, said housing having a concave bearing portion, resilient means securing said housings together, a convex composition bearing received within the concave bearing portion of said second noted housing, having a flat face engaging the flat flanged outer face of the first noted nipple, a reducing T threaded on said second noted nipple, said smaller pipe threaded into the reduced threaded portion of said T, and said second noted nipple threadably engaging an unreduced threaded portion of said T.

1,804,811. CABLE LOCK FOR WINDOW BLINDS. WILLIAM E. ROSEL, Columbus, Ohio, assignor to The Yardley Screen & Weatherstrip Company, Columbus, Ohio, a Corporation of Ohio. Filed June 25, 1929. Serial No. 373,671. 4 Claims. (Cl. 156—17.)



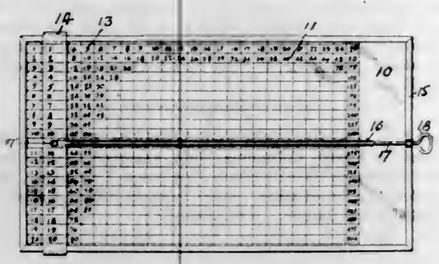
2. A Venetian blind having a stationary suppporting bar, a plate secured to said bar and provided with a pulley housing, a pulley journaled in said housing around which a slat operating cable is trained, a frame arranged adjacent said housing and pivoted to swing on the journal for said pulley, said frame extending above and below said pulley and formed with a lateral extension having an opening therein through which the free end of said cable projects, a cable engaging roller carried by the upper end of said frame, and means formed with said frame and housing for moving said roller towards said pulley into and out of clamping engagement with the cable passing around the pulley upon the rocking movement of said frame caused by the manipulation of said cable.

1,804,812. ARTIFICIAL DENTURE. EDWARD A. SATTLER, Buffalo, N. Y., assignor to George J. Sattler, Buffalo, N. Y. Filed Aug. 10, 1929. Serial No. 384,815. 2 Claims. (Cl. 32—9.)



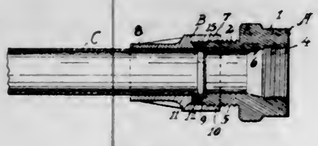
1. An artificial denture mounting comprising a tooth body provided on its rear side with a tenon the upper parts of whose sides are vertical and the lower parts thereof inclined toward each other, and a backing having a socket provided with side walls the upper parts of which are vertical and engage the vertical side faces of said tenon and the lower parts of which incline toward each other and engage with the inclined lower parts of the sides of said tenon, and said body being provided on opposite sides of said tenon with recesses having inclined bottoms converging forwardly and said backing having wings on opposite sides of said socket, the front sides of which are inclined and engage with the correspondingly inclined bottoms of said recesses.

1,804,813. EDUCATIONAL DEVICE. REINHARDT SCHARF, Thiensville, Wis. Filed Jan. 31, 1928. Serial No. 250,763. 2 Claims. (Cl. 35—2.)



1. A multiplying device formed as a sheet having numbers on both sides thereof arranged in arithmetical progression in vertical columns and horizontal rows, a sliding multiplier formed as a band encircling the sheet and provided on each side with numbers arranged in arithmetical progression, a rod supported and guided for longitudinal movement at one end at the edge of the sheet and attached at its other end to the said band and spacing the latter from the surfaces of the sheet to avoid wearing such surfaces, whereby when the rod is operated longitudinally to move the band to position the movable multiplier in proximity to a selected vertical column on the sheet, the product of the multiplication of the number at the top of the column by the selected number in the selected vertical column on the movable multiplier will be indicated by a number of the sheet adjacent the selected number on the multiplier.

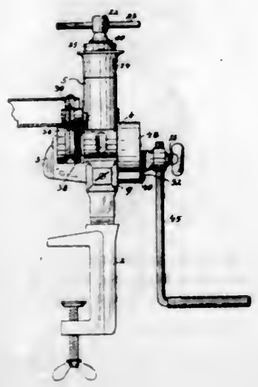
1,804,814. PIPE COUPLING AND METHOD OF FORMING THE SAME. CHARLES F. SCHULTIS, Cleveland, Ohio, assignor, by direct and mesne assignments, to The Simplex Copper Joint Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 3, 1928. Serial No. 251,521. 2 Claims. (Cl. 285—88.)



2. In a pipe connection of the class described, the combination with a coupling member having clamping means therein, of a tube having an integral flange adjacent to but not at one end thereof and at an angle to a plane perpendicular to the axis of the tube, said flange comprising a portion of the tube bent back upon itself and held in the clamping means in the coupling member, the opposite walls of the flange being pressed together to provide a substantially continuous bore.

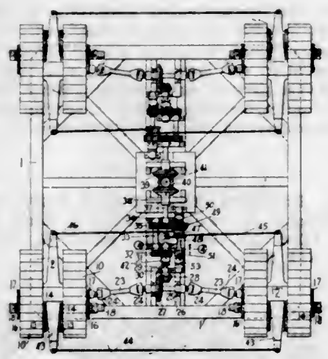
1,804,815. MACHINE FOR DEFORMING PIPES. CHARLES F. SCHULTIS, Cleveland, Ohio, assignor, by direct and mesne assignments, to The Simplex Copper Joint Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 11, 1928. Serial No. 253,590. 5 Claims. (Cl. 153—9.)

1. A pipe deforming machine of the class described, comprising, in combination, pipe deforming instrumentalities, means for including an operating member in the machine to operate the deforming instrumentalities, and means



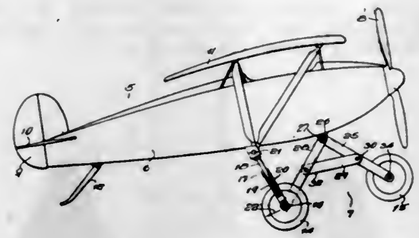
permitting of the rotation of the whole machine to perform the deforming functions when the operating member is not included in the machine.

1,804,816. CRAWLING TRACTION MECHANISM. DWIGHT J. SHELTON, Marion, Ohio, assignor to The Marion Steam Shovel Company, Marion, Ohio, a Corporation of Ohio. Filed Feb. 13, 1925. Serial No. 8,899. 14 Claims. (Cl. 180—9.1.)



1. In a machine of the character described, a base frame, a vertical post depending from said base frame, a truck frame arranged beneath said base frame and having a socket to receive the lower end of said post, said socket having its lateral walls converging toward the bottom thereof and having its front and rear walls substantially parallel, the lower end of said post being rounded to permit said truck frame to have tilting movement about a longitudinal axis, said truck frame also having laterally extending trunnions, crawling traction devices pivotally mounted between their ends on the respective trunnions, and means for actuating said crawling traction devices.

1,804,817. LANDING GEAR FOR AEROPLANES. JOSEPH SILVERMAN, Chicago, Ill. Filed Feb. 14, 1929. Serial No. 339,775. 10 Claims. (Cl. 244—2.)



1. In an aerial craft the combination of a fuselage, a pair of arms converging toward said fuselage and having a common pivot attachment at their meeting ends thereto, a main landing wheel journaled at the opposite end of one of said arms and an auxiliary landing wheel journaled at the opposite end of the other arm and disposed forwardly and above said first wheel.

1,804,818. WELL PACKER. GEORGE A. SPANG, Butler, Pa., assignor to Spang and Company, Butler, Pa., a Corporation of Pennsylvania. Filed Mar. 11, 1929. Serial No. 345,933. 7 Claims. (Cl. 166—12.)



1. A well packer having in combination a tube, a sleeve of resilient well packing material thereon, means on said tube for expanding said sleeve into sealing engagement with the wall of the well hole, packer supporting slips adapted to engage said wall for supporting said packer in position and an actuator slidable within said tube, adapted to be operated by engagement with the bottom of the well hole for simultaneously operating said expanding means and said slips.

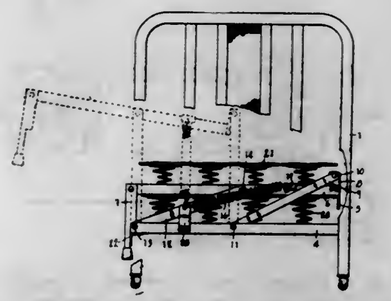
1,804,819. SIDE WALL DRILLING ORGANIZATION. EDWARD A. SPENCER, Jr., Los Angeles, and FAY OLIVER, Whittier, Calif. Filed May 2, 1928. Serial No. 274,406. 15 Claims. (Cl. 255—61.)

1. A side wall channeling organization, for use in underground bore holes, comprising: a main body member; means for suspending said body member from a drill string; a drill member adapted to be projected laterally



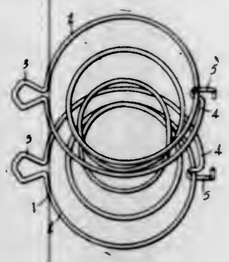
from said body member; and means rotatable relative to said body member for imparting rotation to said drill member from said drill string.

1,804,820. SOFA BED. GEORGE A. STACKHOUSE, Oakland, Calif., assignor to L. A. Young Spring and Wire Corporation, Detroit, Mich. Filed Apr. 12, 1929. Serial No. 354,455. 3 Claims. (Cl. 5—22.)



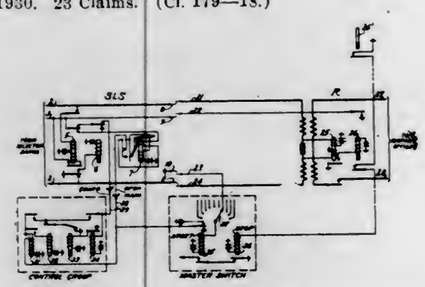
1. In a sofa bed, the combination with a main section provided with legs and comprising side rails and angle iron end members, the end members being disposed with their angles facing inwardly and upwardly, an adjustable section comprising side rails and angle iron end members, the end members being disposed with their angles facing upwardly and inwardly, said adjustable section having upwardly projecting arms at the rear corners thereof, a pair of links pivoted at their upper ends to the said arms and at their lower ends on their inner side of the upwardly projecting flanges of the main section end members and centrally thereof, said links having oppositely offset ends, a second pair of links pivoted on the inner side of the upwardly projecting flanges of the main section end members at the front ends thereof and to the outer sides of the end members of the adjustable section centrally thereof, a bed spring unit on the main section, and legs at the forward corners of the adjustable section shouldered to engage and be supported by the front rails of the main section when the adjustable section is collapsed thereon, the adjustable section resting upon and supported by said bed bottom spring unit.

1,804,821. SPRING STRUCTURE. GEORGE A. STACKHOUSE, Oakland, Calif., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Filed July 5, 1929. Serial No. 376,131. 8 Claims. (Cl. 155—179.)



8. In a spring structure, the combination of body springs, the end coils of which terminate in hooks, said body springs being arranged in rows with corresponding springs of the several rows in transverse alinement, side members of flexible material provided with longitudinal pockets at their edges, cross members of flexible material arranged between the rows of springs and having longitudinal pockets at their edges, and border and cross tie members arranged in said pockets, certain of the outer body springs having their hooks clamped upon the enclosed border members, the hooks of the other body springs being clamped upon the enclosed cross tie members and adjacent springs.

1,804,822. TELEPHONE SYSTEM. JOHN I. BELLAMY, Brookfield, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed June 15, 1928. Serial No. 285,530. Renewed May 24, 1930. 23 Claims. (Cl. 179—18.)



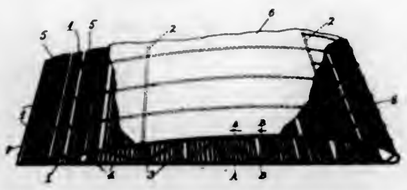
1. In a telephone trunking system, a plurality of incoming trunks each terminating in a preselecting switching mechanism, a lesser plurality of outgoing trunks accessible in common to all said mechanisms, means for making busy all idle incoming trunks when any incoming trunk is taken for use, means for thereafter operating the switching mechanism in which the seized trunk terminates, means common to all said preselecting switching mechanisms for preselecting another outgoing trunk, and means for maintaining the busy condition on the incoming trunks until said preselecting means has preselected another trunk.

1,804,823. UNI-LAYER RIGID AIRPLANE WING. JOSEPH BLONDIN, Los Angeles, Calif. Filed July 9, 1929. Serial No. 376,917. 6 Claims. (Cl. 244—31.)



1. An airplane supporting surface consisting of a thin, single layer, solid body of rigid, spar-forming character and having a series of longitudinal, ventral spars exposed to air-flow and forming longitudinal channels endwise of the surface.

1,804,824. AEROPLANE WING. WALTER M. CROSS, Kansas City, Mo. Filed June 22, 1928. Serial No. 287,399. 4 Claims. (Cl. 244—31.)



4. Aeroplane wing construction, comprising a skeleton frame of upper and lower former members defining the contour of the wing, braces between the former members, corrugated sheets inside of the formers and extending substantially their entire length and a plain surfaced covering outside of the formers and skeleton frame.

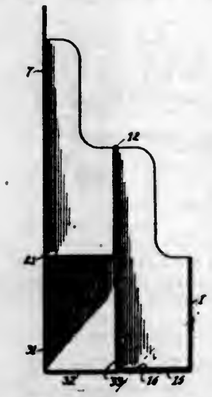
1,804,825. MEANS ON FIREARMS FOR MEASURING ANGLES IN THE FIELD. LARS ERIC MARTIN CLEMENSSON DAHLBERG, Kristianstad, Sweden. Filed Feb. 12, 1930, Serial No. 427,907, and in Sweden July 20, 1929. 19 Claims. (Cl. 42—1.)



1. A fire-arm having a breech-block provided with a handle and means on said handle for measuring angles.

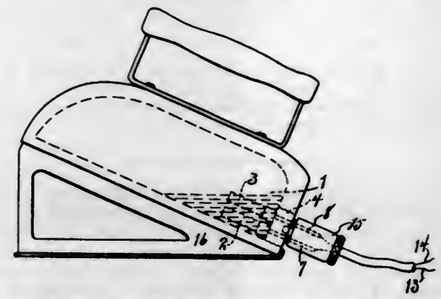
1,804,826. SHIPPING AND DISPLAY CONTAINER. MORRIS M. EINSON, Yonkers, N. Y., assignor to Einson-Freeman Co., Inc., a Corporation of New York. Filed May 5, 1928. Serial No. 275,325. 4 Claims. (Cl. 206—44.)

1. A packing and display container, cut, bent, and formed from a single blank of material transversely foldable to provide a staggered pair of open ended display racks, the back of the assembly including at one end an integrally formed, extending foldable member arranged to extend downwardly from the back to the supporting



surface and forwardly on the supporting surface to the back of the lower display rack, thus to provide a supporting easel for the device when in display position.

1,804,827. SADIRON. WALTER W. EVERTS, Fort Worth, Tex., assignor to Sid Post, Fort Worth, Tex. Filed Aug. 5, 1929. Serial No. 383,680. 2 Claims. (Cl. 219—25.)



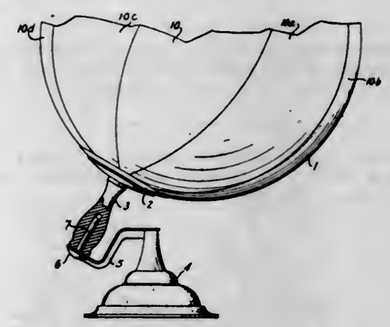
1. A sadiron comprising a casing having a relatively large interior chamber for containing water and steam, means for sealing said chamber consisting of a plug screwed into said casing and perforated for receiving electric terminals, terminals and porcelain tubes surrounding portions of said terminals, washers sealing and insulating said plug about said terminals, and conductors carried by said terminals.

1,804,828. COLLAPSIBLE GLOBE. PAUL GARRIGUE, New York, N. Y. Filed Feb. 10, 1928. Serial No. 253,283. 6 Claims. (Cl. 35—5.)



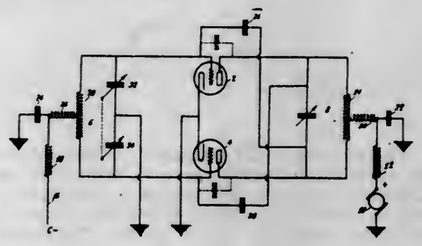
1. In a collapsible globe, in combination, a collapsible envelope having an opening therein, a ring insertable in said envelope, a base plate arranged to receive said ring and extending outwardly from the ring-receiving portion to form a support for the lower portion of said envelope, and means carried by said base plate for securing said ring and said base plate in position, said means comprising a gripping member extending over said ring at a plurality of points.

1,804,829. COLLAPSIBLE GLOBE AND MOUNTING FOR SAME. PAUL GARRIGUE, New York, N. Y. Filed June 30, 1928. Serial No. 289,411. 10 Claims. (Cl. 35—5.)



1. A support assembly for a collapsible globe having an envelope, said assembly comprising in combination, a base secured to said envelope, and a mount to which said base may be attached, said base and mount being provided within the periphery with interlocking means for detachably securing said base and mount together, said interlocking means being concealed when said plates are secured together.

1,804,830. PREVENTION OF PARASITICS IN ELECTRON EMISSION TUBE CIRCUITS. CLARENCE W. HANSELL, Port Jefferson, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 24, 1928. Serial No. 328,135. 5 Claims. (Cl. 179—171.)

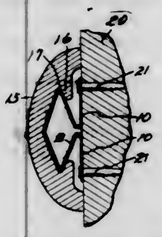


1. The method of preventing pushpush parasitics in a pushpull electron emission tube stage which includes causing the pushpush parasitics to take the capacitive rather than the inductive path from the control electrodes to the cathodes of the tubes, in order to make the potential of these parasitics applied to the control electrodes degenerative in phase.

1,804,831. TWO PART FINISHING MOLDING. FRANCIS D. HARDESTY, Pleasant Ridge, Mich., assignor to Herron-Zimmers Molding Company, Detroit, Mich., a Corporation of Michigan. Filed June 29, 1929. Serial No. 374,902. 5 Claims. (Cl. 296—135.)

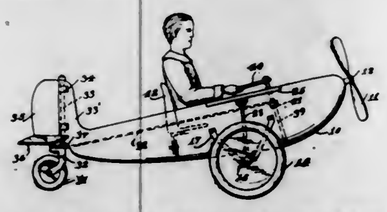
1. An elongated two part finishing molding comprising an elongated channeled molding having laterally extend-

ing recesses in its inside walls and an elongated nailing strip comprising an elongated base provided with upstanding quadrilateral loops adapted to be flattened di-



agonally, whereby, when said molding is applied, the lateral corners of said loops become projected into said recesses to thereby fix the parts together.

1,804,832. CHILD'S VEHICLE. JAKOB HOJNOWSKI, Nekoosa, Wis. Filed May 29, 1930. Serial No. 456,926. 2 Claims. (Cl. 208—42.)



1. A pedal operated child's vehicle comprising a body simulating the body of an aeroplane, side wings pivotally attached to said body, a crank shaft, members attached to said crank shaft, and pivoted at the underside of the wings, and pedals to rotate said shaft for flopping said wings.

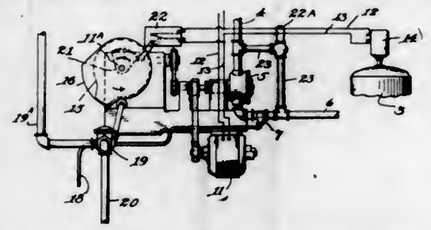
1,804,833. ORNAMENTAL ARTICLE AND METHOD OF MAKING THE SAME. WALTER C. JOHNSTON, Polk City, Fla. Filed Aug. 22, 1929. Serial No. 387,743. 4 Claims. (Cl. 63—2.)



1. The above described method of fastening a natural tooth to another element having an irregularly shaped shank which consists in first forming an undercut socket in the dentine of the root portion of said tooth to receive said shank; then softening the dentine of the tooth to render the same yielding; then forcing said shank endwise into said socket while the dentine is soft so that the latter fits itself to the irregular shape of said shank, and lastly, restoring said dentine to its original hard condition to secure said shank within the socket.

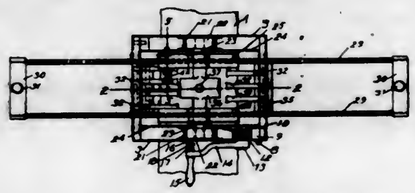
1,804,834. WATER SOFTENING APPARATUS AND METHOD OF AUTOMATICALLY CONTROLLING THE REGENERATING CYCLES IN A WATER SOFTENING SYSTEM. FRANK X. LAUTERBUR, EDWARD J. LAUTERBUR, and HOWARD L. MINTCHELL, Sidney, Ohio, assignors to The Peerless Bread Machine Company, Sidney, Ohio, a Corporation of Ohio. Filed Jan. 21, 1928. Serial No. 248,489. 16 Claims. (Cl. 210—24.)

1. Water softening apparatus comprising a tank for softening material, a tank for regenerating material, and a pressure tank for soft water, means for replenishing the supply of soft water in said pressure tank periodical-



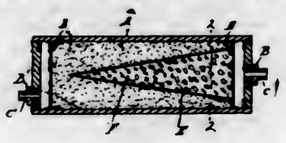
ly in accordance with variations in pressure in said pressure tank, and means for controlling cycles of regeneration by said periodically softening means.

1,804,835. GAIN MAKING DEVICE. LYLE D. LEWIS, Corwin Center, Pa. Filed Aug. 2, 1929. Serial No. 383,115. 7 Claims. (Cl. 144—133.)



1. In a gain making device, the combination of a main frame; means for securing the frame to a pole; a guide frame; and reciprocating gain side and bottom forming cutters carried by the guide frame.

1,804,836. SCRUBBER FOR REFRIGERATING APPARATUS. HUBERT R. LORANGER, Highland Park, and UBALD R. LORANGER, Detroit, Mich.; Marie F. Loranger executrix of said Ubald R. Loranger, deceased; assignors to Automatic Freezer Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 16, 1924. Serial No. 720,446. 7 Claims. (Cl. 62—115.)



1. The combination with a refrigerating system using a medium adapted to be liquefied and having acid forming properties, of a scrubber located in a position in said system where said medium is in the liquid state, said scrubber containing a substance for removing acid impurities carried by said medium.

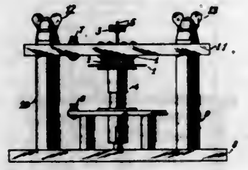
1,804,837. ELECTRIC WELDING OF CAST IRON. ERNEST LUNN, Chicago, Ill., assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 19, 1929. Serial No. 415,242. 2 Claims. (Cl. 219—10.)



1. The method of arc-welding cast iron which consists in forming anchorage openings in contiguous sur-

faces of the parts to be joined, pre-heating the bottom and wall bases of the respective openings and burning away portions of base adjacent wall metal and depositing molten metal to fill the cavities in the wall metal, and subsequently depositing additional metal to fill said openings and effect homogeneous union with the wall metal, and uniting the metal in the several openings by metal pads developed in areas between said openings.

1,804,838. CONVERTING ELECTRICAL OSCILLATIONS INTO MECHANICAL MOVEMENT. ALEXANDER MEISSNER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, a Corporation of Germany. Filed May 26, 1927, Serial No. 194,361, and in Great Britain Apr. 7, 1927. 8 Claims. (Cl. 171—327.)



1. A device for converting electrical energy into mechanical movement which comprises, a pair of stator plates, a piezo-electric body rotatably mounted between said plates, and means to impress an alternating current upon said plates whereby to cause said body to rotate.

1,804,839. FASTENER LOCK. LYNDON F. MOTT, Houston, Tex. Filed Apr. 16, 1929. Serial No. 355,537. 3 Claims. (Cl. 292—281.)



2. A fastener for screens and the like including a screw eye attached to one of two parts to be secured together and a hook attached to the other part, and engageable in said eye, an arm attached to said eye and turnable with the eye into substantially parallel relation with the hook, to effect the movement of said eye into interlocking relation with the hook.

1,804,840. MANUFACTURE OF GREY TO BLACK VAT DYESTUFFS. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 6, 1927, Serial No. 159,502, and in Germany Jan. 12, 1926. 3 Claims. (Cl. 260—61.)

2. The process of producing new vat coloring matters which consists in treating amino-dibenzanthrone with a methyl ester of sulfuric acid in the absence of agents capable of combining with acids.

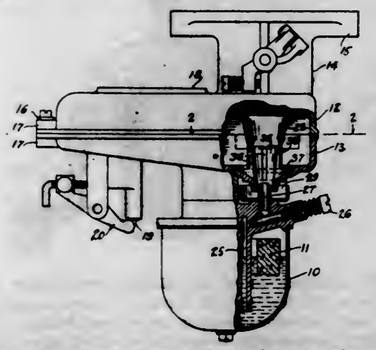
1,804,841. FABRIC PAD. JULIA B. PEDROLI, Los Angeles, Calif. Filed June 17, 1929. Serial No. 371,398. 1 Claim. (Cl. 155—188.)

For attachment to the rungs of a chair, a spring wire frame conforming to the shape of the rung and of a size to clamp tightly around the rung, said frame being notched to clear cross braces connecting the rungs, a



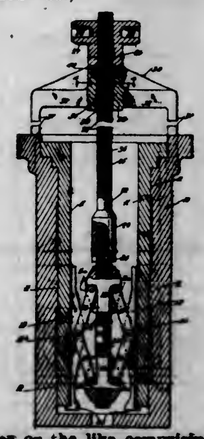
suitable cover sewed around the frame, and a rubber pad fastened to the inner surface of said cover, said pad being made with lengthwise V-shaped grooves.

1,804,842. CARBURETOR. HARRY W. POTTER, Birmingham, Mich. Filed Sept. 17, 1928. Serial No. 306,383. 1 Claim. (Cl. 261—63.)



In a carburetor, a two part mixing chamber casing having its lower part in the shape of a shallow pan with an aperture in its bottom wall, a substantially cylindrical elongated, hollow, open ended, boss 35, in said pan and integral with the wall thereof and having slots in its side wall running to the upper edge for providing communication between the interior of said boss and the interior of the pan, and a thin walled, flared, open ended tube mounted on said boss and forming an extension thereof, said tube being so mounted on said boss as to expose a portion of each of said slots and to close the remaining portion of each slot.

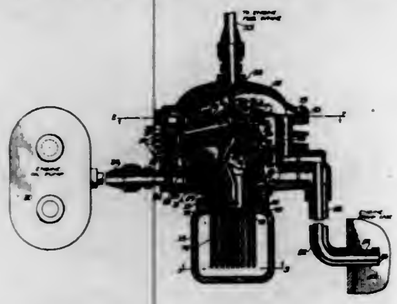
1,804,843. LINER PULLER. JAMES J. SANTIAGO, Los Angeles, Calif., assignor to John Grant, Los Angeles, Calif. Filed Dec. 14, 1929. Serial No. 414,073. 8 Claims. (Cl. 254—30.)



1. A liner puller or the like comprising a plurality of liner engaging shoes, mounting means for said shoes in-

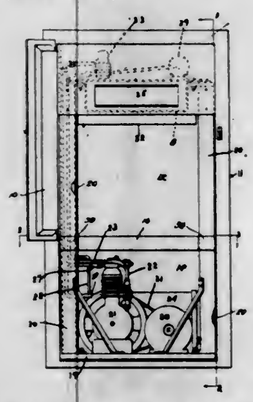
cluding a rotatable arbor and means whereby rotation of the arbor in opposite directions will contract and expand the shoes, a screw-threaded operating shaft forming an extension of said arbor, a cylinder engaging spider through which said operating shaft is slidable, and an operating nut screw-threaded on the operating shaft and bearing against the spider.

1,804,844. OIL-RECTIFYING SYSTEM FOR INTERNAL-COMBUSTION ENGINES. RALPH L. SKINNER, Detroit, Mich., assignor, by direct and mesne assignments, of one one-hundredth to said Ralph L. Skinner and ninety-nine one-hundredths to Thomas H. West, Wilmette, Ill. Filed Mar. 22, 1928, Serial No. 263,646. Renewed Mar. 16, 1931. 29 Claims. (Cl. 123—196.)



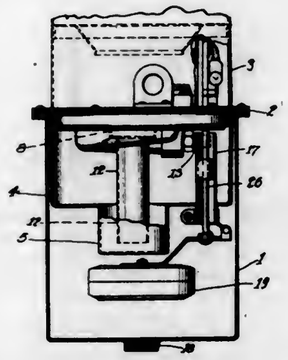
1. The combination of an oil-container, means to admit impure lubricating oil from an internal-combustion engine into said container, a valve controlling said oil-admission, thermostatic means in the oil of said container governing the action of said valve, means to deliver the reclaimed oil from said container, means to remove the vaporized diluents freed from the oil from said container, and a plug of highly heat-conductive material in heat-transmission relation with said container and adapted to extend into the exhaust system of the engine, said plug having a cross-sectional constriction permitting a quick initial heating of the plug to the heat-transmission capacity of said constriction and thereafter restricting such heat-transmission to less than that of the heat capable of being absorbed from the exhaust gases by that part of the plug with which they come into contact.

1,804,845. REFRIGERATING MECHANISM SUPPORT AND CABINET THEREFOR. MAXWELL H. SPREEN, Detroit, Mich. Filed June 16, 1927. Serial No. 199,213. 8 Claims. (Cl. 62—116.)



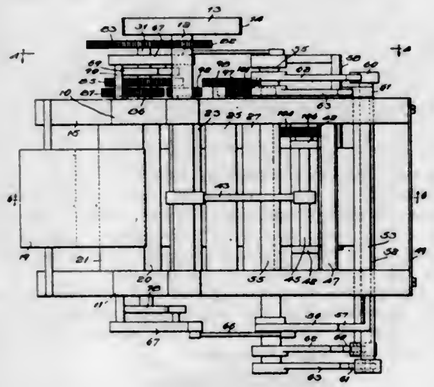
1. A self contained mechanical refrigerator unit comprising a cabinet having a refrigerated compartment and a refrigerating mechanism compartment, mechanical refrigerating apparatus comprising refrigerant expansion means adapted to be disposed in said refrigerated compartment and refrigerant compressing mechanism adapted to be disposed in said mechanism compartment, a frame independent of said cabinet comprising a base on which said refrigerant compressing mechanism is assembled and uprights unitary with said base on which said refrigerating apparatus is assembled, all as a unit, said cabinet and said frame being so constructed and arranged as to permit said frame to be then inserted into said cabinet with said apparatus thereon.

1,804,846. CENTRIFUGAL PUMP. JOHN H. STEWART, Cincinnati, Ohio. Filed Mar. 24, 1926. Serial No. 97,106. 11 Claims. (Cl. 103—5.)



1. In combination with a centrifugal pump, a Venturi tube disposed at the discharge end of said pump, a sump into which said Venturi tube discharges, a suction pipe from a supply to be pumped connected with said Venturi tube, a suction passage from said sump to said pump, a reservoir below said sump, an overflow from said sump to said reservoir, and an outlet from said reservoir.

1,804,847. PAPER INTERFOLDING MACHINE. LOUIS A. STRAUBEL, Green Bay, Wis. Filed Jan. 20, 1930. Serial No. 422,031. 13 Claims. (Cl. 270—39.)



1. In an interfolding machine, the combination of means for advancing and partially cutting the work material, and a pair of oscillating rollers between which the partially cut work material is fed for completely severing same.

1,804,848. PISTON OIL SAVING RING. GUSTAF W. SUNDBERG and LEWIS J. EDMUNDS, Los Angeles, Calif. Filed July 8, 1920. Serial No. 394,798. 1 Claim. (Cl. 74—109.)



The combination with the usual cylinder, its cooperating piston, and compression packing and sealing rings, of an oil saving ring having a split, relatively resilient, non-compression, non-sealing body portion provided with a beveled upper outer edge adapted to be easily pushed over oil on the inner surface of a cylinder during the compression stroke of the piston, and two wiping edge portions adapted to bring the oil downwardly with them on the return stroke of the piston, the wiping edge portions being spaced by an upwardly and inwardly inclined wall of the lower wiping portion connecting the same with the bottom of the upper wiping portion, and the two wiping portions being normally projected to the same extent from the body portion to present the wiping edges in the same plane with reference to the surface of the cylinder so that both wiping edges operate in the same manner at all time with reference to the inner surface of the cylinder.

1,804,849. FUEL REGULATOR. ALFRED H. THOMPSON, Los Angeles, Calif. Filed Aug. 16, 1926. Serial No. 129,506. 15 Claims. (Cl. 236—102.)



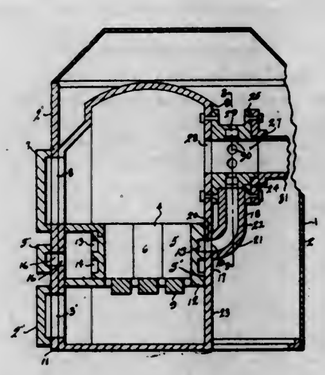
1. In a device of the character described, a valve; a valve seat for said valve; a valve stem to which said valve is fixed; another valve fixed to said valve stem and movable therewith; and a movable valve seat upon which said other valve is adapted to seat.

1,804,850. UNDERREAMER WITH AN HYDRAULIC TRIGGER. JAMES R. TRIPLETT, Whittier, Calif.; William H. Campbell, Los Angeles, Calif., and William H. Maxwell, Beverly Hills, Calif., executors of said James B. Triplett, deceased, assignors to John Grant, Los Angeles, Calif. Filed Oct. 18, 1926. Serial No. 142,277. 23 Claims. (Cl. 255—75.)



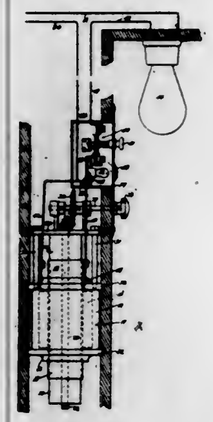
1. A well reamer including an expansible cutter, an operating member for the cutter operable to move the cutter outwardly, means normally tending to operate said member, and a fluid pressure actuated releasable control for holding said means against operation.

1,804,851. HOT AIR FURNACE. JAMES ELIPHAS WITTE, Newport, Ky. Filed Sept. 12, 1927. Serial No. 218,916. 17 Claims. (Cl. 126—99.)



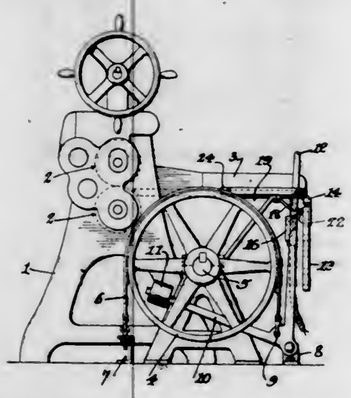
1. In a furnace, the combination with a casing, a fire drum in said casing and having a fire pot therein, an air inlet in said drum, a smoke outlet in said drum, tubular means for conducting the smoke to the flue, and means connecting said tubular means with said drum at said outlet whereby products of combustion are adapted to flow from said chamber toward said flue, of an inner lining in said drum having a circumferential groove and a vertical groove in its outer side, and means to permit air to flow from said grooves into said second mentioned means.

1,804,852. CIRCUIT CONTROLLING REACTANCE COIL. FRANK J. ZAMBONI, Hynes, Calif., assignor, by mesne assignments, to Nuway Electric Company, Los Angeles, Calif., a Corporation of Delaware. Filed May 10, 1927, Serial No. 190,150. Renewed Dec. 10, 1929. 5 Claims. (Cl. 171—242.)



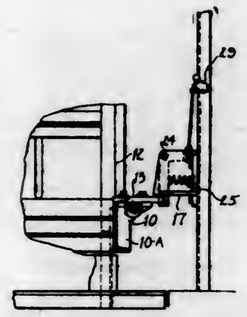
1. A reactance coil, comprising a coil winding of substantially cylindric form, a cylindric guide tube within the coil, a magnetic sheathing surrounding the coil of substantially cylindric form and symmetrical with relation to the coil axis, magnetic end pieces at the ends of the coil winding, integral with the exterior sheathing and also symmetric with relation to the coil axis, said end pieces having annularly disposed parts which reach inwardly to the inner surface of the guide tube, a pair of magnetic cores fitting within and slidable along the guide tube, said cores making a close sliding fit within the tube and being symmetric with relation to the coil axis, exterior guide tubes of non-magnetic material mounted in and extending from the end pieces, and means to move the two cores equally and oppositely including a screw shaft having right and left hand threaded portions.

1,804,853. SAFETY DEVICE FOR USE ON A DOUGH ROLLING MACHINE COMMONLY KNOWN TO THE BAKING INDUSTRY AS A DOUGH BRAKE. JOSIE C. BAREFOOT, Charlotte, N. C. Filed Apr. 17, 1930. Serial No. 445,151. 10 Claims. (Cl. 107—12.)



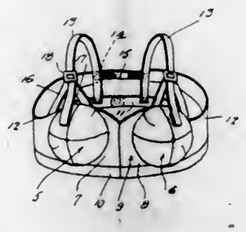
10. In a safety device for a dough rolling machine, the combination of a manually operable swinging depending apron, a latch arranged to be actuated by the apron, a push button electric switch adapted to be actuated by the latch, a latch releasing device arranged to be simultaneously actuated by the apron, a brake release lever adapted to be released by the actuation of the latch member, a brake for the operating mechanism of the dough rolling machine arranged to be applied on release of the brake releasing lever, said brake mechanism comprising a brake band clamped at one end of the floor or base of the machine, and an adjustable weighted brake-applying arm to which the other end of the brake band is attached, said brake band being positioned to engage a fly wheel of the dough rolling machine.

1,804,854. PRESS BOX LATCH. JOSEPH BEHLE, THOMAS W. AVEN and HUGO LINNARTZ, Dallas, Tex., assignors to The Murray Company, Dallas, Tex., a Corporation of Texas. Filed Aug. 13, 1928. Serial No. 299,314. 9 Claims. (Cl. 100—19.)



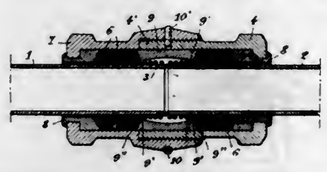
1. In a press box latch device, a keeper for mounting on a press box, means for adjusting the keeper to compensate variations in the position of the box, and a latch for mounting on the press frame in the path of the keeper.

1,804,855. BRASSIÈRE. MARY A. BOLLWINE, Tampico, Mexico. Filed Nov. 8, 1929. Serial No. 405,705. 1 Claim. (Cl. 2—42.)



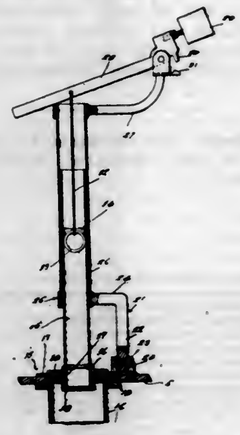
A brassière comprising a pair of breast pockets, a connecting web of fabric between the pockets and joining the same together in relatively spaced relation, a triangular shaped fabric extension secured at its base portion to the outer side of each pocket, shoulder straps respectively secured at one end to a pocket and at the other end to the apex of one of the said triangular extensions, a waist band co-extensive with the said web and triangular extension, and secured adjacent the lower longitudinal edges thereof with its opposite ends tapered to conform with and merge into the taper of the said triangular extensions, and an elastic strap permanently connected to the apex of one triangular extension and having separable connection with the apex of the other triangular extension.

1,804,856. PIPE JOINT. CHARLES GUSTAVE BOUTRY, Meudon, France. Filed Feb. 8, 1929, Serial No. 338,495, and in France Feb. 15, 1928. 3 Claims. (Cl. 285—122.)



1. A pipe coupling for smooth pipes, comprising a helical spring secured to the opposing ends of a pair of alined pipes, a packing box made in two sections screw threaded and coupled together and enclosing at the extremity of each section a gland and a plurality of packing discs embracing each of the pipes; a collar interposed between the innermost discs of each set, and having a bore of greater diameter than the pipes and of oval shape in longitudinal section, said collar enveloping the spring and having inwardly inclined oblique edges which abut against the adjacent packing discs having corresponding oblique faces, the glands being of greater diameter interiorly than the pipes to permit limited angular displacement of the pipes without causing leakage of the joint.

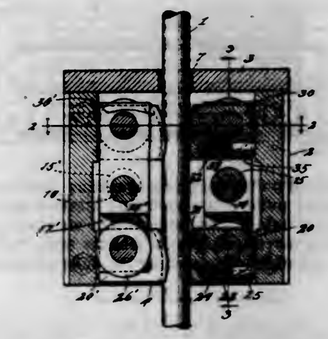
1,804,857. FLUSH TANK CONTROL VALVE. HENRY C. BRENNAN, Wickford, R. I. Filed June 12, 1929. Serial No. 370,347. 5 Claims. (Cl. 4—67.)



3. In a structure of the class described, a fitting for use in association with the valve control of mechanism of a flushing tank of the class described comprising a single body including an externally screw threaded nipple, a retaining nut on said nipple, an outstanding annular flange at the top of the nipple, said nipple being provided with a bevelled valve seat, and an upstanding eccentric attaching neck, together with a substantially L-shaped one piece bracket having a screw threaded stem detachably connected with said neck and having its horizontal arm portion provided with a two-part sleeve engaging clamp disposed centrally over said nipple.

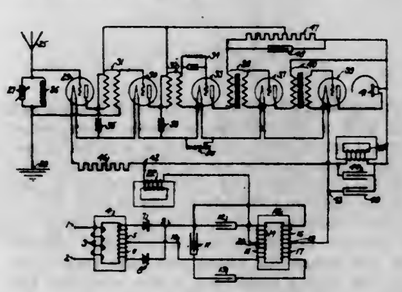
1,804,858. CLIMBING OR LIFTING JACK. GEORGE T. BURRELL and ANDREW VERNE JACKSON, Chicago, Ill., assignors to Burrell Engineering & Construction Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 29, 1927. Serial No. 164,644. 30 Claims. (Cl. 254—107.)

1. A device of the character described, comprising a casing mounted for movement on a fixed object, a shaft journaled in said casing, upper and lower yokes mounted on said shaft, jaws mounted in said yokes, said jaws being in contact with said object, and being adapted for gripping said object when moved in one direction and for



sliding over said object when moved in the opposite direction and cam portions provided on said shaft whereby thte rotation of said shaft causes a sliding movement of said jaws, in directions opposite to each other.

1,804,859. FILTERING ELECTRIC CURRENTS. GEORGE B. CROUSE, Stamford, Conn., assignor, by mesne assignments, to Conner Crouse Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 12, 1923. Serial No. 680,096. 21 Claims. (Cl. 250—27.)



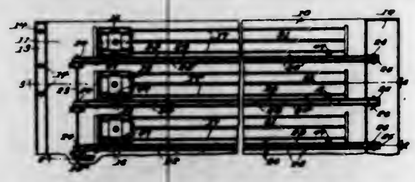
8. In apparatus for energizing an audion circuit from a source of alternating current, a rectifier, a filter mesh for suppressing alternating components passed by said rectifier and having output terminals across which said circuit may be connected, and means between said output terminals and said circuit for suppressing residual alternating components passed by said filter mesh, said filter mesh and said means having substantially different frequency-suppression characteristics.

14. An electrical filter for use between an audion circuit and a source of direct current having alternating components, said filter comprising four impedances serially connected as the four balancing arms of a Wheatstone bridge, two non-adjacent arms being conductive, and the other two non-adjacent arms being substantially non-conductive for direct currents, the conjugate pairs of junction points of said arms serving as terminals for said audion circuit and said source, respectively.

1,804,860. GAME. JOHN DONLIN, Brooklyn, N. Y. Filed Mar. 15, 1929. Serial No. 347,281. 2 Claims. (Cl. 104—173.)

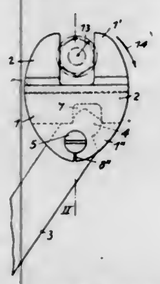
1. A game apparatus comprising a platform having levels and pits respectively at the ends thereof, track sections arranged upon the platform, vehicles mounted for oscillatory movement upon said tracks and forming the

means of communication between the levels and pits, operating shafts disposed adjacent the ends of said tracks, pulley wheels loosely and fixedly mounted upon the operating shafts respectively, clutch mechanisms for both the



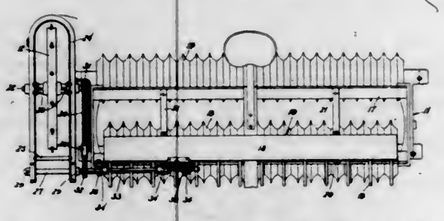
fixedly connected pulley equipped operating shaft and the loosely mounted pulleys, an operating mechanism having connection with said shafts, and switch members located in the paths of movement of said vehicles upon the tracks to stop said vehicles upon reaching the ends of the tracks.

1,804,861. ADJUSTABLE WRENCH. HANS DORN, Berlin, Germany. Filed July 18, 1927, Serial No. 206,670, and in Germany July 31, 1926. 6 Claims. (Cl. 81—127.)



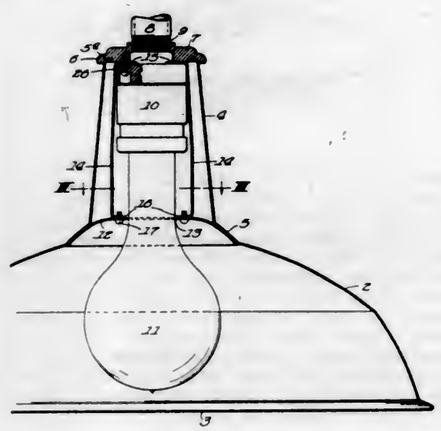
1. An adjustable wrench comprising a head, a fixed jaw on said head, a movable jaw, a handle fulcrumed on said fixed jaw, a spiral spring arranged in a recess of said handle so as to surround the pin on which said handle is fulcrumed, its inner end being attached directly to said handle and its outer end directly to said head, a cam on said handle, the perimeter of said recess extending substantially through the point where said cam adjoins said handle, and means for fitting and imparting initial tension to said spring comprising a slot extending from the outer edge of said head to said recess and adapted to receive one end of said spring.

1,804,862. COMBINED SEEDER, PACKER, AND PULVERIZER. CECIL A. DUNCAN and THOMAS W. MORSFIELD, Pulaski, Va. Filed Oct. 25, 1927. Serial No. 228,657. 5 Claims. (Cl. 111—52.)



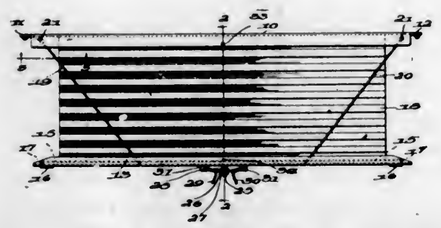
1. In combination with a combined ground roller and packer having a frame; a seed hopper supported on the frame and having feeding mechanism; a fixed shaft on the frame projecting beyond one end thereof; a U frame journaled on said shaft; a ground wheel journaled on said U shaped frame; and means connected to the wheel and to the feeding mechanism to operate the latter.

1,804,863. LAMP SUPPORT. WILLIAM A. DUNLAP, Pittsburgh, Pa. Filed June 19, 1929. Serial No. 372,071. 10 Claims. (Cl. 240—78.)



7. In combination with a reflector shell having a middle concaved portion and an upper socket holding cap and means supporting a lamp socket therefrom, a lower concaved closing disk extending across under the base of the neck engaging said concaved portion, and means having an upper connection with the socket support and attached to the disk whereby the reflector shell is carried thereby.

1,804,864. SHADE. RAY E. ELLIS, Los Angeles, Calif. Filed Mar. 19, 1930. Serial No. 437,125. 20 Claims. (Cl. 156—16.)

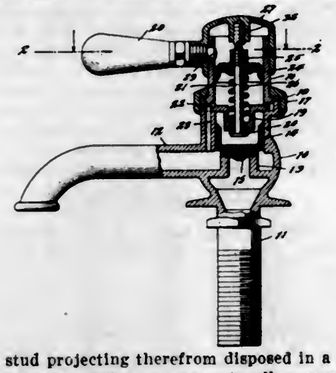


3. In a device of the class described, a pair of bars in parallel relation, an extensible web connecting said bars, an arm connecting between said bars, and spring means acting on said arm and tending to bring the bars together.

1,804,865. HYDRAULIC FAUCET. JOHN ERICKSON, Troy, N. Y., assignor of fifty-one one-hundredths to Sweet & Doyle Foundry & Machine Co., Troy, N. Y., a Corporation of New York. Filed July 10, 1926. Serial No. 121,519. 4 Claims. (Cl. 137—139.)

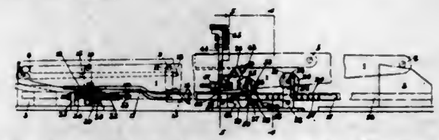
1. In a device of the class described, a body portion having an inlet and an outlet for a fluid, a plunger adapted to cover said inlet and having an aperture for the passage of fluid, means forming a closed chamber above the plunger wherein the fluid passing through the aperture is confined, a valve for controlling the flow of fluid

from the closed chamber to the outlet, and means for operating said valve, said operating means including a cap



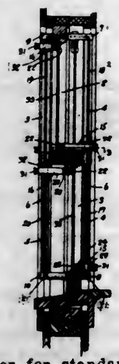
having a stud projecting therefrom disposed in a cam slot, which slot has a portion cut away to allow movement of said cap in the direction of the valve.

1,804,866. SHAPER MECHANISM FOR WINDING YARN ON WEFT BOBBINS IN SPINNING MULES. FRED CUNNINGHAM FIRTH, Upper Batley, STANLEY JESSOP, SENIOR, Batley, and CLIFFORD THORNES TATTERSFIELD, Dewsbury, England. Filed Aug. 19, 1929, Serial No. 386,883, and in Great Britain Dec. 7, 1928. 12 Claims. (Cl. 118—28.)



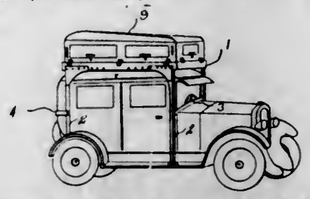
1. A shaper mechanism for spinning mules, comprising a main shaper rail, an auxiliary shaper rail movably connected to said main shaper rail, means for raising said auxiliary shaper rail above said main shaper rail, means for maintaining the auxiliary shaper rail in its raised position, a rack bar, means on said rack bar for lowering the auxiliary shaper rail, means operatively associated with said rails and said rack bar adapted initially to wind on the bobbins or cops a predetermined bunch of yarn of relatively short chase at the bottom thereof and thereafter a longer or normal chase whereby to provide a demarkation between the short chase and the normal chase.

1,804,867. WINDOW CLEANER. CHARLES F. FISHER, Veteran's Home, Calif. Filed Dec. 27, 1927. Serial No. 242,810. 3 Claims. (Cl. 15—251.)



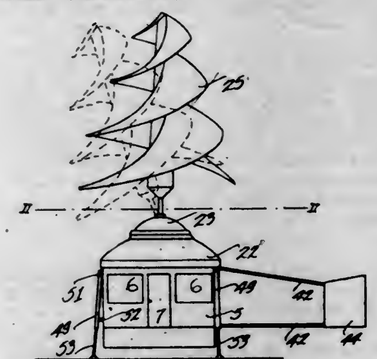
1. A window cleaner for standard two sash windows comprising four squeegees for simultaneously cleaning the inner and outer surfaces of two window panes, and means connecting said squeegees together for causing all of said squeeges to operate simultaneously.

1,804,868. LUGGAGE CARRIER. NELLIE M. GAGE, Dayton, Ohio. Filed Sept. 20, 1928. Serial No. 307,298. 3 Claims. (Cl. 224—29.)



1. The combination with a vehicle having a top and a supporting structure applied thereto and including uprights and a horizontal frame, said frame comprising L-shaped bars to provide a recess, of a receiver for the articles to be transported removably engaged in the recess and disposed above the top of the vehicle.

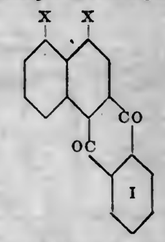
1,804,869. FLYING MACHINE. BENJAMIN GAMBARINI, Alameda, Calif. Filed Feb. 10, 1930. Serial No. 427,266. 2 Claims. (Cl. 244—19.)



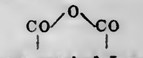
1. In a device of the character described, a cabin, a rotary disc positioned on said cabin, a propeller shaft extending through said disc, a propeller secured thereto, means for rotating said disc and means for tipping said propeller with respect to the center of said disc.

1,804,870. NEW COMPOUNDS OF THE BENZANTHRAQUINONE SERIES. RUDOLF M. HEIDENREICH, Elberfeld, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 15, 1927, Serial No. 226,528, and in Germany Oct. 23, 1926. 4 Claims. (Cl. 260—61.)

3. A process for the manufacture of new compounds of the benzanthraquinone series which consists in heating to an elevated temperature in the presence of an acid condensing agent a compound of the general formula:

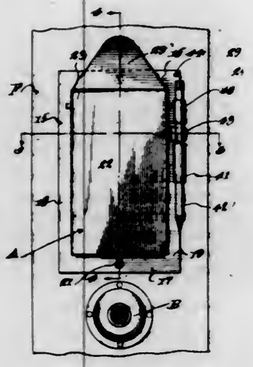


wherein X stands for the carboxylic acid group, or both X's jointly stand for the group:



and where the nucleous marked I may be substituted by halogen atoms.

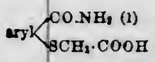
1,804,871. DOOR REGISTER. HERMAN H. HELLAND, Fargo, N. Dak. Filed Nov. 9, 1929. Serial No. 405,981. 3 Claims. (Cl. 45—58.)



1. A device for permitting callers to make notations of their unanswered visits at the place of their visits comprising a frame plate having struck out side walls, means for connecting the frame plate with a door frame, a hinge cover comprising a front wall and inwardly extending top, bottom, and side walls for receiving the struck out walls of the frame plate, a hinge pin extending through the side walls of the cover and the walls of the frame plate, a writing pad detachably connected with the inner face of the cover and arranged in the plane of the walls of said cover, and a manipulating thumb piece carried by the upper end of the cover.

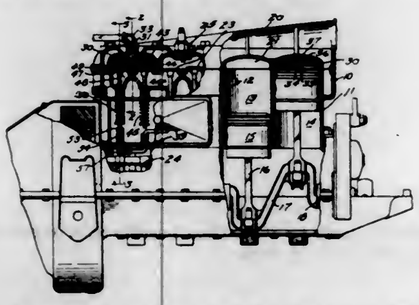
1,804,872. PROCESS OF CONVERTING ARYLCARBOXYAMINO-O-THIOGLYCOLLIC ACIDS INTO HYDROXYTHIONAPHTHENE COMPOUNDS. ERWIN HOFFA, Hochst-on-the-Main, JENS MÜLLER, Hanau-on-the-Main, and FRITZ MÜLLER, Hochst-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 9, 1927, Serial No. 211,852, and in Germany Apr. 16, 1927. 4 Claims. (Cl. 260—53.)

1. The process which comprises causing an alkaline acting agent to act upon a compound of the following general formula:



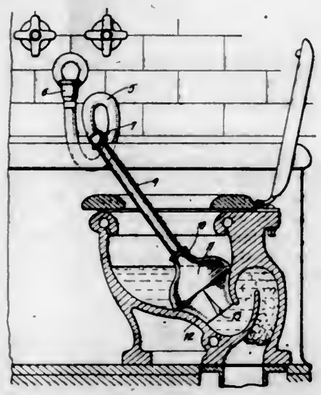
while heating the reaction mixture.

1,804,873. COMPRESSOR AND MEANS FOR CONVERTING FORD MOTORS INTO SAME. WILLIAM E. HOFFMAN, Los Angeles, Calif. Filed May 28, 1927. Serial No. 194,994. 21 Claims. (Cl. 230—41.)



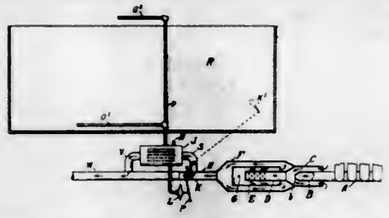
1. In combination: a motor body having a power-cylinder and a compressor-cylinder including a head part providing chambers, one chamber being disposed at the upper end of each cylinder; an insert member disposed in one of said chambers at the upper end of said compressor-cylinder; a pair of pistons, one being in each of said cylinders; a crankshaft carried by said motor body; a pair of connecting-rods, each being connected to one of said pistons and said crank-shaft intake and exhaust mechanism for said power-cylinder; an intake-valve for said compressor-cylinder; an exhaust valve in said insert-member; and an exhaust-pipe fixture connected to said head part, and communicating with a passage closed by said exhaust-valve.

1,804,874. DRAIN CLEANER. MARTIN HRIBAR, Forest Hills, N. Y. Filed Sept. 28, 1929. Serial No. 395,837. 2 Claims. (Cl. 4—256.)



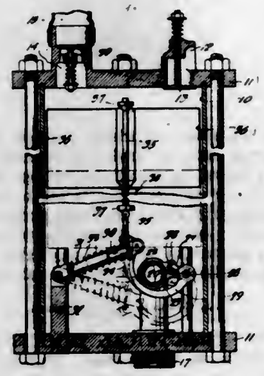
2. In a device of the class described, a resilient force cup provided with a flexible nipple adapted to be flexed within said cup or flexed to extend outwardly therefrom, depending upon the particular type of drain to be cleaned, and a V-shaped notch extending inwardly from the free edge of said nipple for facilitating free inward and outward flexing of said nipple.

1,804,875. BUS HEATING SYSTEM. LEE P. HYNES, Albany, N. Y., assignor, by mesne assignments, to Consolidated Car-Heating Company, Inc., Albany, N. Y., a Corporation of New York. Filed Feb. 2, 1926. Serial No. 85,500. 3 Claims. (Cl. 237—12.1.)



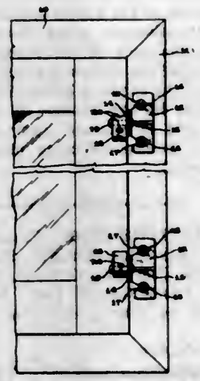
2. In a heating system, the combination with a boiler provided with a heating chamber, and a radiator located in the space to be heated and connected with said boiler, of a device for reburning exhaust gases of an internal combustion engine, an exhaust pipe for said reburned gases, a duct joining said exhaust pipe and leading to the heating chamber of said boiler, a damper located at the junction of the duct with the exhaust pipe to selectively control delivery of reburned gases to said heating chamber or to said exhaust pipe, means connected with the boiler for actuating said damper, and means for manually operating said damper independently of the first mentioned actuating means.

1,804,876. HYDRAULICALLY OPERATED AIR COMPRESSOR AND THE LIKE. AUBREY CARLYLE JAMIESON, Kew, JOHN FRANCIS GARDINER, Gardenvale, and WILLIAM JOHN MCDONALD, Preston, Australia. Filed Aug. 5, 1929, Serial No. 383,598, and in Australia Aug. 13, 1928. 7 Claims. (Cl. 230—91.)



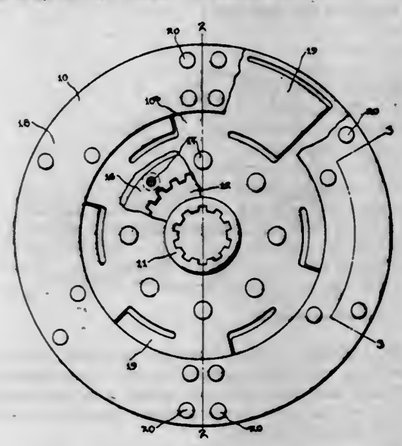
1. A hydraulically operated air compressor comprising a chamber having inlet and discharge pipes projecting thereinto and having closed ends, a sleeve valve oscillatively mounted on the ends of the inlet and discharge pipes, ports in the inlet and discharge pipes adapted to register with co-acting ports in the sleeve valve, a float in the chamber, and mechanism controlled by the float for periodically actuating the sleeve valve to open and close the inlet and discharge ports.

1,804,877. CAM LOCK FOR SCREENS AND STORM WINDOWS. HERBERT L. JOHNSON and JAMES H. GRANT, Dexter, Me. Filed May 16, 1929. Serial No. 363,595. 4 Claims. (Cl. 292—240.)



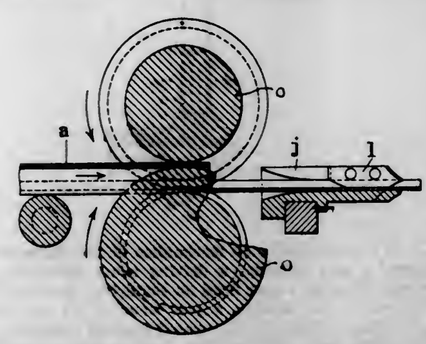
1. In combination with a window frame and covering element therefor, brackets mounted on the frame on opposite sides of the latter and embodying projecting arms acting as side guides for the covering element, and clamping members carried at the extremity of the arms and in bearing engagement with the outer face of the covering element.

1,804,878. FRICTION CLUTCH DISK. FRANK H. JONES, Upper Sandusky, Ohio. Filed Oct. 29, 1929. Serial No. 403,260. 9 Claims. (Cl. 192—107.)



9. A friction clutch disk having a circular series of bowed spring tongues projecting from opposite faces but depressible into the plane of the disk, and friction elements spanning said tongues and secured to the disk at points between adjacent tongues to continuously tension said elements by the resilient pressure of the tongues.

1,804,879. METHOD OF ROLLING METALS AND APPARATUS THEREFOR. KARL KARIUS, Achern-in-Baden, Germany. Filed Dec. 31, 1925, Serial No. 78,613, and in Germany Jan. 7, 1925. 6 Claims. (Cl. 80—66.)

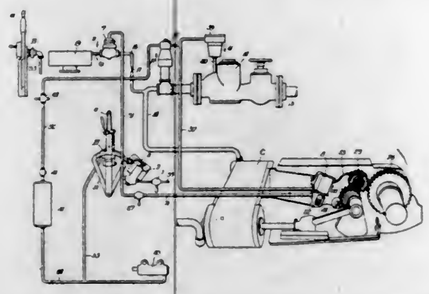


1. A method of rolling iron sections, consisting in rolling the section to approximate structural form to provide a body and a thinned portion and a thicker rim portion, drawing the section through a guide provided with a twist before the section passes through the finishing rolls to bend the rim only to overlie the thinned portion.

1,804,880. HALOGEN DERIVATIVE OF DIBENZOPYRENEQUINONES. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE and ERICH BERTHOLD, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 20, 1929, Serial No. 379,868, and in Germany July 26, 1928. 2 Claims. (Cl. 260—61.)

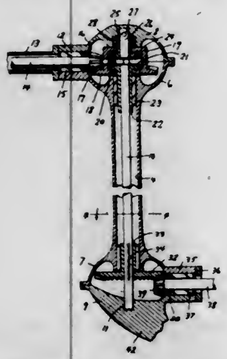
1. A process of producing halogen derivatives of dibenzopyrenequinones, which comprises heating a nitrodibenzopyrenequinone with a halogenating agent, at least until all nitro groups are eliminated.

1,804,881. SAFETY DEVICE FOR LOCOMOTIVE BOOSTERS. LE ROY R. LINN and CHARLES N. REMFRY, Proctor, Minn. Filed Apr. 9, 1927. Serial No. 182,341. 12 Claims. (Cl. 105—48.)



1. In a device of the character described, the combination of a reversing lever, a booster, and means associated with said lever for preventing operation thereof to reverse position until steam pressure has been exhausted from the booster cylinder.

1,804,882. BOAT PROPULSION MECHANISM. LAWRENCE C. LONGSTREET, Dunellen, N. J., assignor of one-third to George Voehl, Dunellen, N. J. Filed Mar. 6, 1930. Serial No. 433,638. 2 Claims. (Cl. 115—34.)

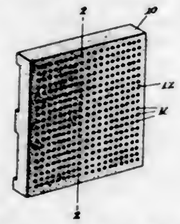


1. In a boat propulsion mechanism of the character described, a gear housing, a driving shaft extending into the gear housing, a gear fixed on the driven shaft and disposed within the housing, a gear mounted for rotation in the housing and disposed in spaced opposed relation to the first named gear, said driving shaft extending rotatably into the housing and having a pinion gear fixed on its inner end, a ring gear mounted for rotation in the housing in mesh with the pinion gear for actuation thereby, planetary gears rotatably mounted on the ring gear and in mesh with the first and second named gears, a propeller shaft operatively connected to the driven shaft for actuation thereby and means for releasably retaining the second named gear against rotation in the housing in a manner to operatively connect the driving shaft to the driven shaft.

1,804,883. ALLOY METAL FOR BEARINGS. WALTHER MATHESIUS and MARTIN W. NEUFELD, Berlin-Charlottenburg, Germany. Filed Feb. 24, 1927, Serial No. 170,735, and in Germany May 17, 1926. 3 Claims. (Cl. 75—1.)

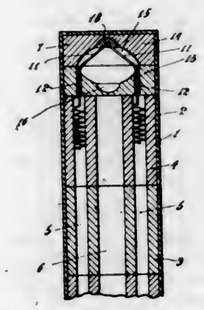
1. A bearing metal consisting of lead hardened by alkali metals and metals of the alkaline earths, containing 0.60–0.65 per cent. Na; 0.75–1. per cent. Ca; 0.20–0.25 per cent. Mg; 0.10 per cent. Al, the Pb constituting the main bulk of the alloy.

1,804,884. ACOUSTIC SLAB. MARCUS MAZER, Philadelphia, Pa. Filed Sept. 13, 1929. Serial No. 392,316. 2 Claims. (Cl. 72—18.)



1. An acoustic slab, comprising a dense, rigid body portion of fire-proof material having substantially a minimum inherent co-efficient of sound absorption, said body portion having in its exposed face a predetermined number of indentations of a depth and size proportioned to the absorptive quality desired, whereby to produce an acoustic slab having a permanent and fixed co-efficient of absorption and which is unalterable in handling and use.

1,804,885. ELECTRICAL IMMERSION HEATER. ROBERT FAULKNER MCCARTNEY, Wellington, New Zealand. Filed Dec. 27, 1929, Serial No. 416,913, and in New Zealand Jan. 21, 1929. 3 Claims. (Cl. 219—41.)



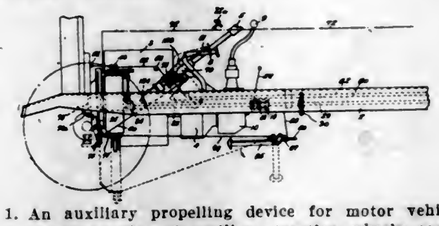
1. An electrical immersion heater including a container, electrical heating means therein including insulating means and resistance wires arranged therethrough, means situated at one end of the heater and providing a chamber into which the resistance wires project, and a fusible metal joint for the ends of the wires normally situated at the upper end of the chamber which on excessive heating melts, breaks the contacts between the wires and flows into and collects in the bottom of the chamber from which point it will be retained ready to join the ends of the wires upon the heater being placed in the proper position and heated.

1,804,886. CARTRIDGE FUSE. CLARENCE T. MCDONALD and HERBERT RAY COOK, Chicago, Ill., assignors to Jefferson Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 3, 1927, Serial No. 230,707. Renewed Sept. 24, 1930. 16 Claims. (Cl. 200—132.)



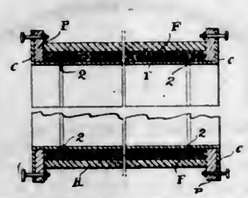
1. A renewable cartridge fuse having, in combination, a casing, a terminal blade, a plate forming an end closure slidable on said blade, and a collar carried by said casing, said collar being internally screw threaded to engage corresponding threads exteriorly formed on said plate to secure said plate and blade on said casing.

1,804,887. AUXILIARY PROPELLING MEANS FOR MOTOR VEHICLES. ARTHUR E. MILLER, Sacramento, Calif. Filed Mar. 7, 1927. Serial No. 173,559. 21 Claims. (Cl. 180—1.)



1. An auxiliary propelling device for motor vehicles comprising a series of auxiliary traction wheels, means for moving said traction wheels into contact with the ground and for driving them to support and propel the vehicle, an axle locking lever actuated by the downward movement of the traction wheels to engage beneath an axle of the vehicle, and means connected with said axle locking lever and with the steering shaft of the vehicle for connecting said steering shaft to the traction wheels when the axle locking lever is in axle engaging position whereby said steering shaft can control the direction of movement of the vehicle when being supported on or propelled by said traction wheels.

1,804,888. PIPE COILED WITH STEEL WIRE FOR PRESSURE CONDUITS AND VESSELS UNDER PRESSURE. SIMON PIERRE MONSCH, Pontezer, near Guingamp, France. Filed Nov. 25, 1927, Serial No. 235,666, and in France Dec. 2, 1926. 5 Claims. (Cl. 137—75.)



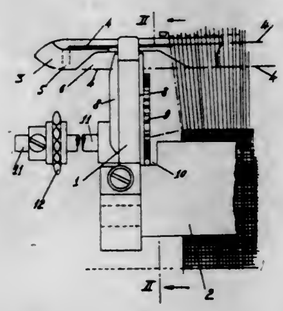
1. A pressure tube comprising a cylindrical metal member, and a plurality of continuous wires wound convolutely on said member, the tension of said wound wire varying with each successive wind.

1,804,889. LIQUID VENDER. LOUIS H. MORIN, New York, N. Y., assignor, by mesne assignments, to Doehler Vending Machines, Inc., a Corporation of New York. Filed Mar. 11, 1929. Serial No. 345,944. 11 Claims. (Cl. 221—103.)



1. In a machine for vending liquid, a container for the liquid, an open top upright cylinder fixed to the bottom of the container and provided at its open upper end with side extensions forming piston guides, a piston to reciprocate into and out of the open upper end of the cylinder, a freely open delivery tube communicating with the lower end of the cylinder below the piston and having an open upper discharge end above the top of the container, an operating link connected to the piston and extending at its upper end above the top of the container, an operating rod connected at its upper end to the upper end of the said link and extending downwardly through and beyond the bottom of the container, a liquid tight guide sleeve for the said operating rod rigidly carried by and projecting upwardly from the bottom of the container and terminating at its upper end above the top of the container, and manually operable means engaging with the lower end of the said operating rod to reciprocate the latter in a similar manner at each operation of the machine for thereby delivering a measured quantity of the liquid.

1,804,890. SHUTTLELESS LOOM. RAMON GARCIA MOYA, Cornella de Llobregat, Spain. Filed Nov. 22, 1927, Serial No. 235,088, and in Spain Nov. 24, 1926. 1 Claim. (Cl. 139—124.)



In a shuttleless loom of the type described, in which the weft is inserted by a reciprocating weft carrying arm the combination of a selvedge forming mechanism comprising a continuously rotating drum, said drum having a toothed crown, a toothed pinion, meshing with the toothed crown of said drum, a thread bobbin in said drum, a weft engaging finger on the drum projecting tangentially from the drum and adapted to catch the loop of the weft inserted by the weft carrying arm and a channel in said drum to receive this weft thread and carry said thread around the bobbin, said drum being rotated in timed relation with respect to the movement of the weft carrying arm, whereby when said weft-carrying arm reaches the end of its travel the tooth of the drum catches the weft thread carried by the arm.

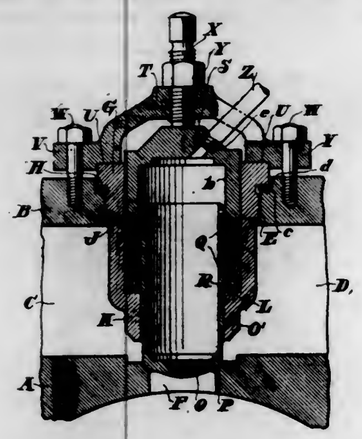
1,804,891. CONTAINER FOR INSECTICIDES, ETC. MILTON THAYER NEWMAN, Jacksonville, Fla. Filed Feb. 23, 1929. Serial No. 342,186. 4 Claims. (Cl. 43—131.)



1. In a container of the class described the combination of a body having a compartment therein and a box-like closure having a passageway for slidably receiving said

body, the said body and closure each having side walls, each having openings therein in such relation that the body and closure may be interfitted to shut off the openings of one with respect to the other to completely enclose the compartment of the body and the contents thereof, the parts being relatively reversible for interfitting to align said openings for the provision of ingress and egressways to the compartment of the body.

1,804,892. CLEARANCE VALVE ASSEMBLY. FREDERICK W. PARSONS, Elmira, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 22, 1927. Serial No. 227,971. 1 Claim. (Cl. 137—153.)



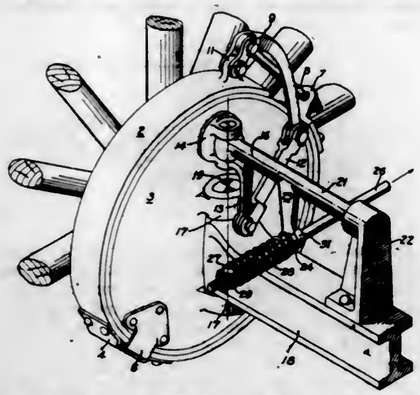
A clearance valve assembly comprising a cylindrical valve guide having a differential bore, a plug member slidable in the guide for closing said bore at its outer end and having a chamber to receive pressure fluid from a source, an aperture for the admission of pressure fluid from an external source into the chamber, a cylindrical clearance valve member of uniform diameter throughout its length reciprocable within said guide and having one unbroken guiding surfaces of uniform diameter, packing surrounding said valve member, and means cooperating with said plug for uniformly compressing said packing from the exterior of the valve assembly and comprising a stationary spider and one set screw adapted to be screwed against said plug member for compressing the packing.

1,804,893. PROCESS OF DECOMPOSING LIGNIFIED FIBERS. WALTER SEIDEL and RUDOLF FINGADO, Dormagen, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 21, 1930, Serial No. 422,481, and in Germany Jan. 25, 1929. 3 Claims. (Cl. 92—11.)

3. The process which comprises heating a mixture of chips of red pine wood and acid calcium sulfite dye to about 130–150° and then adding about 10% of oxygen, calculated on the amount of the wood, in small portions to the reaction mixture in the course of about 4 hours, thereby maintaining the temperature.

1,804,894. BRAKE MECHANISM. CHARLES E. STARR, Los Angeles, Calif. Filed Apr. 7, 1926. Serial No. 100,285. 3 Claims. (Cl. 188—194.)

1. A brake mechanism including a brake drum backing plate, a lever arm movably mounted on said plate outside the drum and the movement of which operates the brake mechanism, a shaft fixed for movement with said arm.



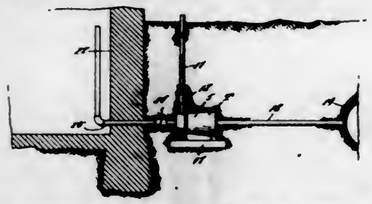
an arm fixed to said shaft,. a rod for moving said arm, and means interposed between the rod and arm for limiting the stress applicable to said arm by the rod.

1,804,895. AUTOMOBILE HOOD LINING. ROBERT J. STEPHENSON, Auburn, N. Y., assignor to Stephenson Protectahood Corporation, Auburn, N. Y., a Corporation of New York. Filed Aug. 26, 1927. Serial No. 215,657. 2 Claims. (Cl. 154—44.)



1. An automobile hood lining of sheet-like form consisting of a sheet of double lined jute fiber, said sheet of fiber being resilient and flexible, a covering of asbestos on one side of said sheet of fiber, and a covering of felt on the opposite side of said fiber, said lining being flexible whereby it may readily conform to the shape of a hood and inherently capable of retaining the shape imparted to it when applied to said hood.

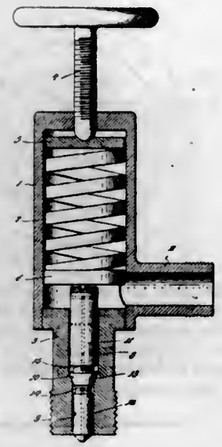
1,804,896. GAS DISTRIBUTION APPARATUS. JOSEPH F. SULLIVAN, Archibald, Pa. Filed Feb. 23, 1929. Serial No. 342,006. 1 Claim. (Cl. 48—193.)



A gas distribution system including in combination; a gas distributing main, a gas collecting member formed from a frusto-conical body having its smaller end closed by a plate and its larger end opened and flared outwardly, a foot on the periphery of the larger end of said body, a flange on the outside of said body at the smaller end thereof, said flange and said foot functioning as supporting means, a gas conduit connected to the distributing main and extending through said gas collecting member, a screen disposed at the larger end of said body and surrounding said conduit, and a vent pipe for leaking gas rising from the body in communication with the interior thereof adjacent the smaller end of said body.

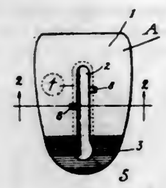
CARNEGIE LIBRARY OF ATLANTA

1,804,897. HIGH PRESSURE RELIEF VALVE. STANLEY P. THOMAS, Merced, Calif. Filed May 23, 1928. Serial No. 280,030. 3 Claims. (Cl. 137—53.)



1. A pressure valve including a valve body having an inlet and an outlet, said inlet embodying end portions of different diameters and an intermediate tapering portion forming a valve seat, a valve plug within the inlet and comprising an intermediate conical valve and end portions of different diameters loosely fitting the respective end portions of the said inlet to leave a small space for a pressure fluid, said valve plug having annular grooves adjacent the conical valve portion, and having radial openings and axial openings in the respective end portions, the radial openings connecting the respective annular grooves with one end of an axial opening, and the other ends of the axial openings connecting with the inlet and the outlet respectively, and means normally holding the valve seated.

1,804,898. FALSE TOOTH. GEORGE W. TOFT, Mountain View, Calif. Filed Aug. 8, 1928. Serial No. 298,327. 7 Claims. (Cl. 32—9.)



4. A porcelain false tooth having a longitudinally extending groove with thin lips projecting toward each other, and pins disposed on each side of the groove and being embedded in the tooth for reinforcing the lips.

1,804,899. COMPOSITE METAL. HERMANN VON FORSTER, Niederursel, near Frankfort-on-the-Main, and EMIL LAY, Eschersheim, near Frankfort-on-the-Main, Germany, assignors to Metallgesellschaft Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 11, 1929, Serial No. 391,982, and in Germany Apr. 20, 1927. 4 Claims. (Cl. 22—219.)

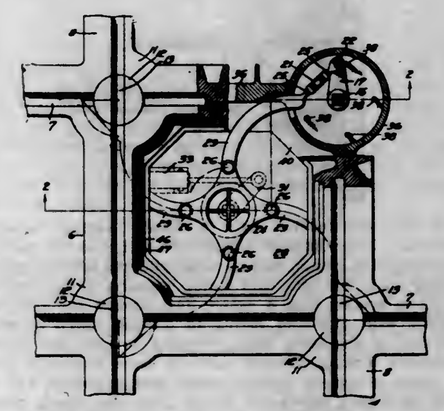
1. A composite metal produced by welding a coating of copper-zinc alloy onto an iron core by the casting-on process, characterized in that the copper-zinc alloy contains over 60% of copper and less than 0.01% of lead.

1,804,900. OIL WELL PUMP. JOHN C. VROMAN, Chelsea, Okla., assignor of one-half to Ed L. Jones, Tulsa, Okla. Filed Mar. 6, 1929. Serial No. 344,779. 5 Claims. (Cl. 74—109.)



1. In a deep well pump, a plunger consisting of a central tube having an external shoulder on one end and locking means on its other end, a ram slidably fitted about the tube and having an internal shoulder abutting the shoulder on the tube to support the tube, said ram being constructed at its upper end to be connected to a pump rod and having an externally reduced portion, balls about said reduced portion of the ram, a sleeve slidably mounted on said tube and encircling the balls and the ram, the lower end of the sleeve and the lower end of the ram defining a normally closed chamber about the tube, the reduced portion of said ram being connected with said closed chamber by means of a passageway large enough to readily allow the balls to traverse same, and packing surrounding the tube below the sleeve and held in place by the locking means on the end of the tube.

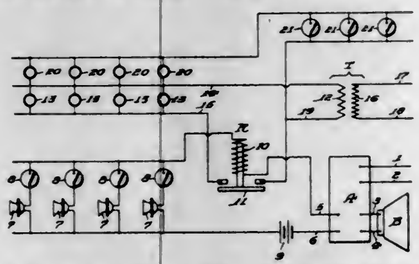
1,804,901. RAIL CROSSING. CURT USCHMANN, Glendale, Calif., assignor to Continuous Rail Crossing Corporation, Reno, Nev., a Corporation of Nevada. Filed Apr. 8, 1929. Serial No. 352,122. 5 Claims. (Cl. 246—378.)



1. A railroad crossing comprising intersecting rails, a casing at the intersection of said rails, a turntable in said casing adapted to rotate therein between two extreme positions, said turntable having a groove adapted to be

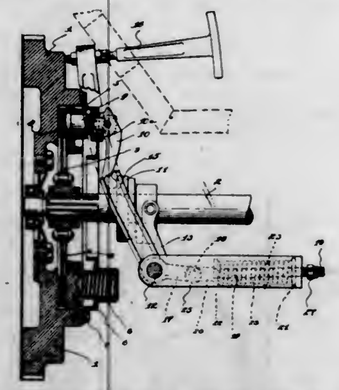
aligned in extreme position with either of said rails, an actuator centrally disposed with respect to said intersecting rails, linkage connecting said actuator with said turntable, a second actuator mounted upon said first actuator, and means attached to said second actuator for locking said turntable in either of said extreme positions.

1,804,902. ANNUNCIATOR SYSTEM. KENNETH B. WALTON, Atlantic City, N. J. Filed May 15, 1929. Serial No. 363,332. 2 Claims. (Cl. 179—1.)



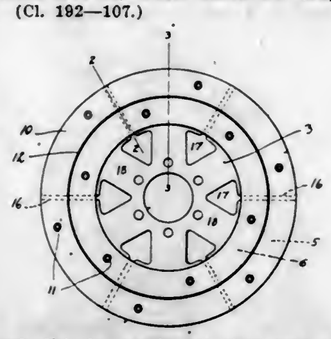
1. In an annunciator system, the combination of an amplifier, a microphone circuit interconnected with said amplifier and including a source of current, reproducing means also interconnected with said amplifier, a plurality of transmitting microphones connected in parallel across said circuit, a switch interconnected with each microphone and adapted to normally interrupt the circuit therethrough, a normally open signal circuit including a source of current, a plurality of signals connected in parallel across said signal circuit, one of said signals being associated with each of the said microphones, and means adapted to close the signal circuit when any one of said switches is closed.

1,804,903. LEVER BOOSTER. ERNEST E. WEMP, Detroit, Mich. Filed Mar. 31, 1927. Serial No. 179,824. 2 Claims. (Cl. 192—99.)



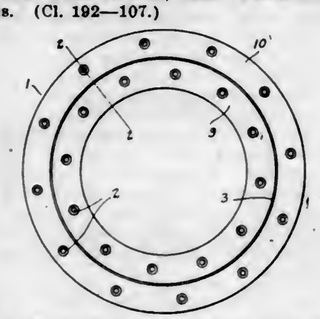
2. The combination with a clutch having packing springs, a lever operable against the action of the springs to release the clutch, an arm rigid with the lever, a spring acting upon this arm, said spring and arm being disposed so as to operate over a center line through the arm and spring, said arm and spring in normal clutch engaged position of the lever being disposed so that the spring creates a turning moment upon the lever reverse to that of lever movement during clutch disengagement and so that in initial movement of the lever for clutch disengagement the arm and spring move over said center line whereby the turning moment exerted upon the lever by the spring is in the direction of lever movement for clutch disengagement whereby to aid in the movement of the lever for clutch disengagement.

1,804,904. CLUTCH DISK. ERNEST E. WEMP, Detroit, Mich. Filed Jan. 24, 1929. Serial No. 334,621. 5 Claims. (Cl. 192—107.)



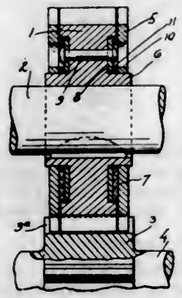
1. A clutch disk for use in the plate type of clutch comprising a distortable metal disk having an outer distorted section substantially V-shaped in cross-section taken radially thereof arranged to be flattened when the disk is engaged and designed to give a relatively large resistance to flattening.

1,804,905. CLUTCH FACING. ERNEST E. WEMP, Detroit, Mich. Filed Jan. 31, 1929. Serial No. 336,347. 7 Claims. (Cl. 192—107.)



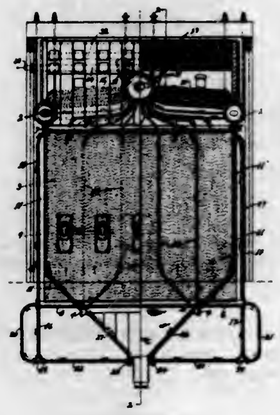
1. For a distortable clutch disc, a circumferentially scarfed facing.

1,804,906. GEAR SILENCER CONSTRUCTION. ERNEST E. WEMP, Detroit, Mich. Filed Oct. 31, 1929. Serial No. 403,696. 10 Claims. (Cl. 74—28.)



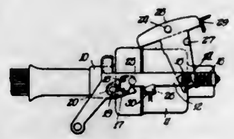
1. The combination with mating gears, a back-lash silencer construction comprising a silencer gear disposed along side of one of the mating gears, a rubber element bonded to the silencer gear, a holding washer bounded to the rubber element, and means for securing the holding washer to the said mating gear in such manner that the teeth of the silencer are staggered and displaced angularly upon their meshing with the teeth of the other mating gear so that the rubber element is normally under tension.

1,804,907. BOILER. BENJAMIN B. WHITTAM, Elizabeth, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 11, 1926. Serial No. 154,093. 6 Claims. (Cl. 122—235.)



1. In combination, a furnace having a vertically disposed wall with a plurality of pulverized coal burners therein adapted to project burning fuel into the furnace and lengthwise thereof, a steam and water drum extending lengthwise of the furnace, a plurality of vertically disposed rows of water tubes extending lengthwise of the furnace between the burners, and means connecting each of said rows to said drum.

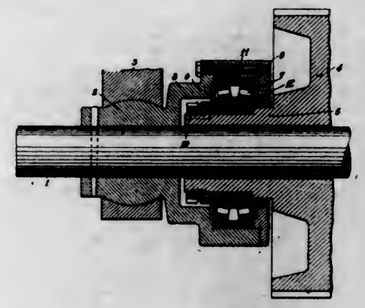
1,804,908. SOCKET CONNECTION FOR ELECTRICAL CONDUCTORS. ALFRED WICHERT, Mannheim-Neuostheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Apr. 23, 1927, Serial No. 186,113, and in Germany May 1, 1926. 4 Claims. (Cl. 173—332.)



1. A connecting device for electrical conductors comprising, in combination, a socket member, a movable plug member for cooperation therewith, a movable cover for the socket member, and an operating member for cooperation with the plug member to hold it in position and for cooperation with the cover member to move it to and from closed position.

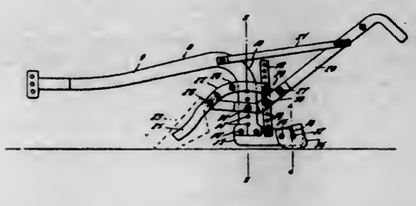
1,804,909. MOUNTING FOR NONDRIVEN ROLLS. GUNNAR WISTRAND, Berlin, Germany, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Corporation of Sweden. Filed Jan. 20, 1930, Serial No. 422,013, and in Germany Mar. 12, 1929. 7 Claims. (Cl. 308—209.)

1. A mounting for non-driven rolls comprising a funnel-shaped bearing housing resting with its narrow part in a support and fixed to a stationary axle passing through the roll, and an antifriction bearing mounted



with its outer race in said housing inward of the support and having its inner race mounted on the neck on the end of the roll.

1,804,910. PLOW. SILL WOYCHESHIN, Marlin, Tex. Filed June 7, 1929. Serial No. 369,190. 2 Claims. (Cl. 97—109.)

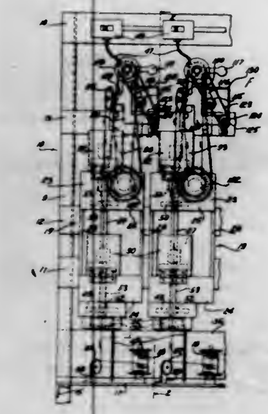


1. In a plow construction of the class described, a beam having a downturned standard at its rear end, a landslide connected to and extending rearwardly at right angles from the lower end portion of said standard, an upright connected with said landside and rising vertically therefrom in spaced parallelism to said standard, said standard and said upright having vertically spaced parallel openings, a stock constructed to accommodate a ground engaging implement, said stock having its rear end portion embracing said standard and provided with a bolt for adjustable position in the openings in said upright, a handle structure, a connecting member between the handle structure and the intermediate portion of the said stock, said connecting member having a bolt intermediate its ends for adjustable position in the openings of said standard and also provided with a bolt at its rear portion for adjustable position in the openings in said upright.

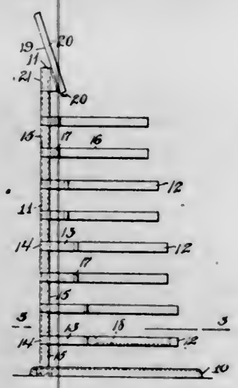
1,804,911. CORE COVERING APPARATUS. JOHN LESLIE ALDEN, La Grange, Ill., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1929. Serial No. 357,836. 5 Claims. (Cl. 117—34.)

4. In an apparatus for covering a core, an integral framework having a plurality of housings in spaced relation, a common shaft extending through the housings, means for rotating the shaft, separate hollow shafts supported by and extending through each of the housings and in alinement with each other, material supplying and serving means supported by each of the separate

shafts, means for drawing a core through the hollow shafts in series, and means in each housing interconnecting the common and separate shafts causing material to be served upon the core in different directions by the adjacent separate shafts.



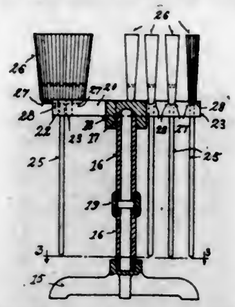
1,804,912. RACK. MARK ANTON, West Orange, N. J., assignor to Pie Bakeries of America, Inc., Newark, N. J. Filed May 1, 1929. Serial No. 359,499. 1 Claim. (Cl. 211—78.)



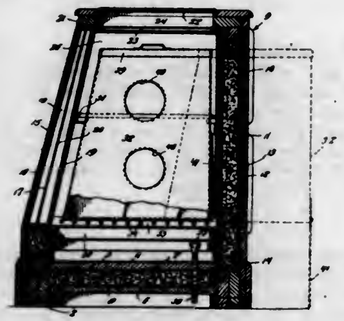
A rack comprising a base, a post extending upwardly from the base, trays made of strip metal bent to form a ring and including arms formed of strip metal bent into a closed loop at one end and having divergent ends secured to the trays, tubular spacers alternating with the closed loops of the arms and fitting on the post, and wires spanning the trays to form supports at the bottom thereof.

1,804,913. DISPLAY AND VENDING APPARATUS. EDWARD BRUNHOFF, Wyoming, Ohio. Filed Sept. 5, 1928. Serial No. 303,990. 1 Claim. (Cl. 211—70.)

A display and vending apparatus for brooms or the like comprising a base, a pedestal therefor, a rotatable head mounted upon said base, said head having a plurality of angularly extended arms, each of said arms having a pair of spaced racks extended in a horizontal plane at right angles to each respective arm and each pair of said racks having aligned notches along their upper edges for reception of a broom head when suspended therefrom.

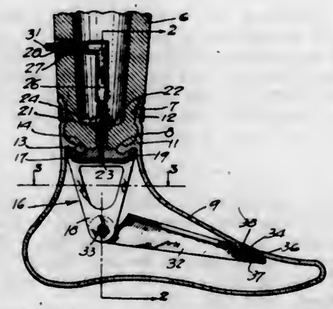


1,804,914. COMBINATION REFRIGERATOR AND SHOW CASE. PHILIP H. CHRISTOPHER, Fairmont, W. Va. Filed Mar. 25, 1929. Serial No. 349,667. 3 Claims. (Cl. 62—37.)



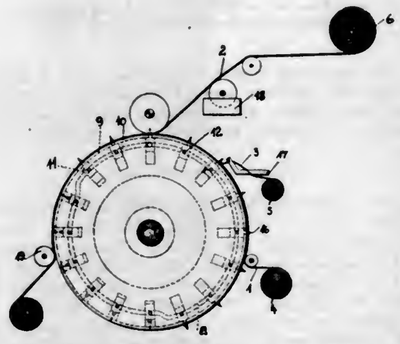
1. In a refrigerator show case of the class described, a refrigerating compartment, a food compartment having communication with the refrigerating compartment, the rear side of each compartment being provided with a doorway, a door therefor, a plurality of spaced rollers arranged horizontally in the bottom of the refrigerating compartment, and a refrigerant container mounted for movement into and out of the refrigerating compartment through the doorway on said rollers.

1,804,915. ARTIFICIAL LIMB. JOHN A. COLLINS, Oakland, Calif. Filed Jan. 7, 1929. Serial No. 330,796. 14 Claims. (Cl. 3—8.)



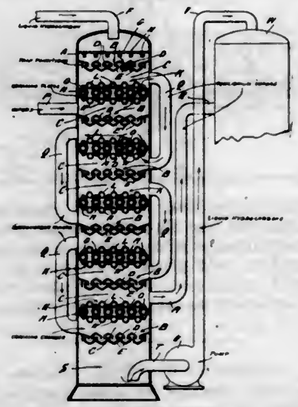
1. An artificial foot comprising an inflatable foot member, adapted to be secured over the end of a stump, clamping means within the foot member for securing said member to the stump, said clamping means having an air passage therethru, and shut off means in operative relation to the said passage to allow the inflation and the deflation of said member at will.

1,804,916. MACHINE FOR PRODUCING TAPE LOOPS. MARIE COTTE, Leipzig, Germany. Filed Feb. 21, 1930, Serial No. 430,438, and in Germany Feb. 22, 1929. 3 Claims. (Cl. 154—1.)



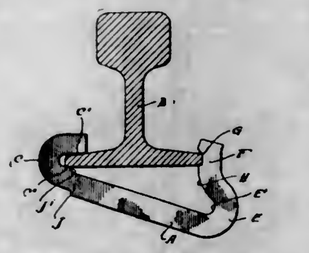
1. A machine for producing tape loops consisting of tape interposed between two strips of paper for suspending adhesive fly paper, pictures and the like, comprising a drum, two rows of radially movable and withdrawable pins arranged in the said drum, a stationary curved path adapted to move said pins outwardly over the circumference of said drum, means for feeding an endless web of paper to said drum, a thread guide adapted to be moved to and fro axially to the drum and to place an endless tape in serpentine fashion around the said pins, and means for uniting a second web with the said tape and first web, the feeding and uniting of the webs and tape taking place while the said pins are extended.

1,804,917. CRACKING PROCESS. WILLIAM P. DEPPE, Brightwaters, and LELAND L. SUMMERS, New York, N. Y.; Llewellyn L. B. Summers and Arthur Young administrators of said Leland L. Summers, deceased. Filed Feb. 8, 1924. Serial No. 691,363. 16 Claims. (Cl. 196—66.)



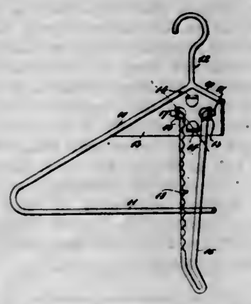
1. The process of cracking petroleum, which comprises introducing the liquid hydrocarbons to be cracked into a retort chamber at the upper end of a column, spreading said liquid in thin films over highly heated plates in said chamber, introducing vapors of hydrocarbons into said chamber, integrating said vapors with the liquid hydrocarbons while maintaining approximate equilibrium therebetween, then passing the liquid hydrocarbons and vapors into a second retort chamber lower down in the column, and repeating the operation.

1,804,918. ANCHORING DEVICE. RAYMOND DINKLAGE, Glen Ridge, N. J. Filed Sept. 7, 1928. Serial No. 304,479. 11 Claims. (Cl. 238—330.)



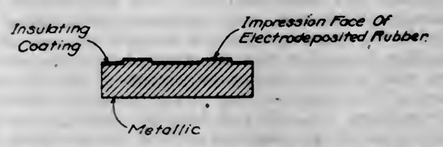
1. A rail anchor for use with track rails having a hook end adapted to lock with a rail finger when the anchor is in applied position and means to hold the hook end in released position while the anchor is in applied position to permit the anchor to be freed from the rail.

1,804,919. GARMENT HANGER. JAMES DOCKETT, Jr., Roxbury, Mass. Filed Apr. 17, 1930. Serial No. 444,992. 3 Claims. (Cl. 223—61.)



1. A garment hanger comprising in combination a pair of angularly related arms, a web connecting said arms, said web being provided with a pair of oppositely-disposed sockets and a hook of resilient material detachably secured to said web, said hook having an upper and lower arm each terminating in an end substantially at right angles to the arm of which it forms a part and each being shaped to fit into one of said socktes whereby said hook is held by the elasticity thereof to said web substantially at right angles to the plane thereof.

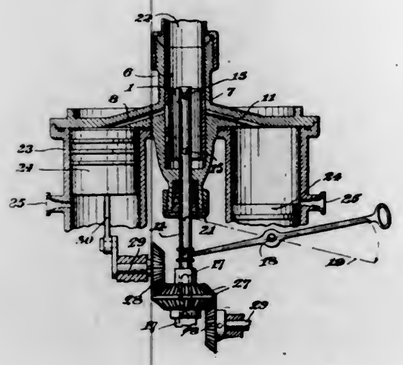
1,804,920. METHOD OF PRODUCING PRINTING PLATES. JUNIUS D. EDWARDS, Oakmont, Pa. Filed July 31, 1929. Serial No. 382,596. 3 Claims. (Cl. 101—401.1.)



1. The method of producing printing plates having impression faces of rubber which consists in preparing a

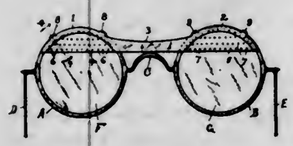
base having that portion of the surface thereof representing the design to be printed of electrical conducting material, and other portions of such surface of insulating material, and coating the first named portion with rubber by electro-deposition.

1,804,921. ROTARY VALVE GEAR. FREDERICK WASHINGTON ELLYSON, Munich, Germany. Filed Dec. 4, 1925, Serial No. 73,100, and in Germany Apr. 14, 1925. 3 Claims. (Cl. 121—122.)



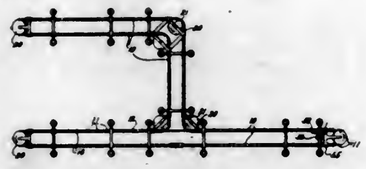
1. A rotary slide valve mechanism for a multi-cylinder engine comprising in combination a cylindrical valve seat having fluid distributing channels at circumferentially spaced intervals to the several cylinders and adapted to receive driving fluid, a slide valve body in said seat, said body consisting of an eccentrically bored hollow cylinder slit in longitudinal direction at its thinnest element, said valve body having two ports of relatively different size and shape extending for some distance circumferentially out of opposite sides of the longitudinal slit and spaced from one another longitudinally of the valve body, a valve stem at the axis of the valve body adapted to longitudinally position and to rotate the valve, means rotated by the engine for rotating the stem and other means for longitudinally shifting said stem in order to shift the valve body so as to bring the one or other of said ports during rotation of the valve into successive registry with said distributing channels.

1,804,922. GLARE ELIMINATOR. EDWARD A. FELTMAN and EZRA C. A. WICKEMEYER, Richmond, Ind. Filed Nov. 21, 1928. Serial No. 320,881. 1 Claim. (Cl. 88—41.)



In combination with spectacles, a glare eliminator consisting of a single piece of sheet metal having closely associated very small apertures formed therethrough and extending throughout, said eliminator being formed to provide two segmental portions spaced apart and corresponding in contour with the upper edges of the spectacles, with a bridge portion to correspond with the nose piece of the spectacles and connecting said segmental portions, and a plurality of tongues radiating from the upper edges of the segmental portions and bent over the upper portions of the spectacles forming clips retaining the glare eliminator in connection with the spectacles.

1,804,923. CONVEYING SYSTEM. VALENTINE WALTER FERNEKES and WILLIAM HARRY RAY, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 1, 1928. Serial No. 282,122. 6 Claims. (Cl. 198—177.)

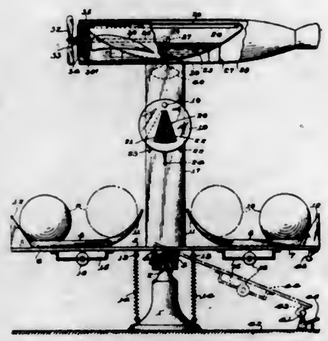


1. In a conveying system, an endless cable, a spherical self-tightening member carried thereby for supporting articles, and tubular means forming a direct bearing for the spherical member for guiding it through various angles.

1,804,924. METHOD OF PRODUCING METALLIC POWDERS. EUGENE FITZPATRICK, Woodhaven, CHARLES W. CLARK, Bellerose, and PETER A. TIERNAN, Laurel Hill, N. Y., assignors to Nichols Copper Company, New York, N. Y., a Corporation of New York. Filed June 20, 1928. Serial No. 287,033. 12 Claims. (Cl. 204—6.)

3. Method of producing copper powder, which comprises electrolytically disintegrating substantially pure metallic copper to produce relatively fine copper particles, maintaining said particles free from atmospheric contact and while so maintained washing them free from the electrolyte and submerging in water, placing said submerged particles in vacuo and evaporating said water while maintaining sufficient vacuum to rapidly remove all volatile matter and until said particles are dry, to thereby prevent oxidation of said particles.

1,804,925. TOY OR ADVERTISING DEVICE. JOHN GALLAGHER, Philadelphia, Pa. Filed Apr. 24, 1930. Serial No. 446,953. 8 Claims. (Cl. 40—51.)

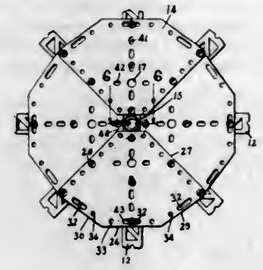


1. A device of the class described, comprising a platform, a fulcrum for said platform, opposed springs to continue the oscillation of said platform when once started, guides carried by said platform provided at their opposite ends with stops, and rolling members movable with respect to said guides as said platform oscillates.

1,804,926. CONSTRUCTION TOY. ALFRED C. GILBERT, Hamden, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed May 4, 1927. Serial No. 188,779. 1 Claim. (Cl. 46—35.)

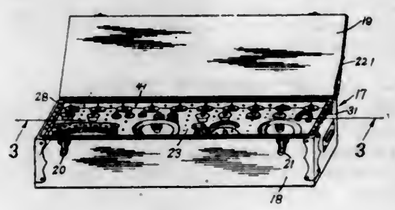
In a construction toy, the combination of a hub plate comprising a plurality of substantially sector-shaped

plates, each of said plates having radially disposed side edges of equal length, an inner edge portion at right angles to the line bi-secting the angle between the side edges, and an outer edge portion joining the ends of the side edges and forming three sides of a dodecagon, each of said plates having perforations equally spaced along the edge portions thereof, the radially disposed side edges of adjacent plates overlapping whereby the perforations therein coincide to receive securing means, each of the inner edge portions be-



ing spaced outwardly from the center of the hub plate, a disk-like member having a bushing extending axially outwardly through the opening formed between the inner edge portions of the plates and having a disk-like portion provided with perforations coinciding with the perforations adjacent the inner edges of the plates, and securing means passing through the coinciding perforations in the side edges of the plates and through the perforations in the disk-like member and inner edges of the plates to secure the same together.

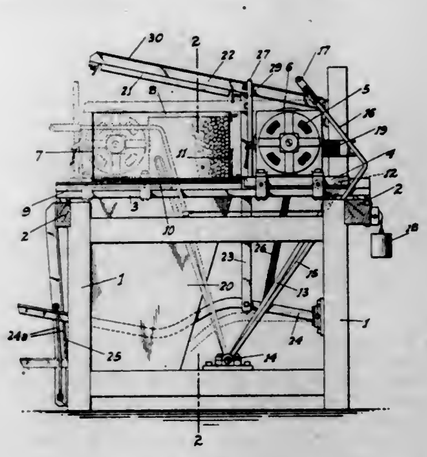
1,804,927. CONTAINER FOR CONSTRUCTION TOYS AND LIKE SETS. ALFRED C. GILBERT, Hamden, Conn., assignor, by mesne assignments, to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed Mar. 8, 1928. Serial No. 260,221. 8 Claims. (Cl. 46—35.)



1. In a toy chest or the like, a chest body, a cover for said chest and a relatively flat shallow tray, said tray being made of sheet material and provided with integrally formed laterally projecting flat flanges thereon adapted to overlie a portion of said body to support said tray in the chest, said flanges being clamped between the cover and portion of the body when the cover is in closed position.

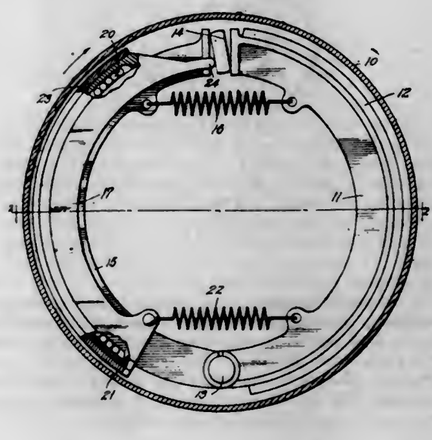
1,804,928. ASPARAGUS TRIMMING MACHINE. THOMAS GILL, Jersey, Calif. Filed May 27, 1930. Serial No. 456,051. 9 Claims. (Cl. 146—81.)

1. An asparagus trimming machine for use in connection with a double asparagus holding rack from both sides of which the butts of asparagus stalks initially project, including supporting and locating means for the rack, cutters mounted for movement in parallel planes adjacent and



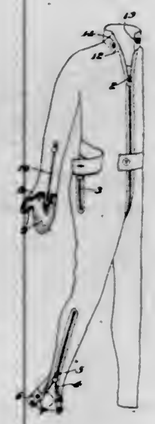
along the sides of the rack, and means for moving the cutters simultaneously to cause them to be drawn through the projecting butts.

1,804,929. EXPANDING BRAKE. ALBERT HENRY GODFREY GIRLING, Harlow, England, assignor to Bendix Brake Company, South Bend, Ind. Filed June 14, 1926, Serial No. 115,970, and in Great Britain June 17, 1925. Renewed Nov. 27, 1929. 15 Claims. (Cl. 188—78.)



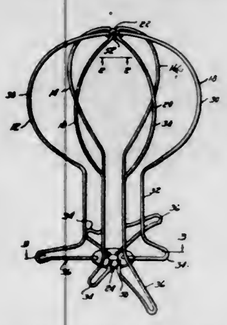
6. A brake lever having a brake shoe thereon adapted for installation in a vehicle braking mechanism comprising an expanding device and a rotary member to be braked, said shoe being movable relatively to the lever under the tangential drag of the rotary member, and having means for contacting with the expanding device to augment the expanding action thereof, said means comprising an extension of the shoe disposed intermediate the shoe and expanding device.

1,804,930. SPORT GARMENT. MIRIAM C. HEAD and FRANCIS HEAD, Newton, Mass. Filed May 20, 1929. Serial No. 364,479. 2 Claims. (Cl. 2—79.)



2. An over-garment including a body portion having sleeves, mittens integral with said sleeves, each sleeve having a slit from the arm portion, through the wrist portion, into the hand portion of the mitten through which the hand can be withdrawn from the garment, and a slide operated fastener for closing each slit.

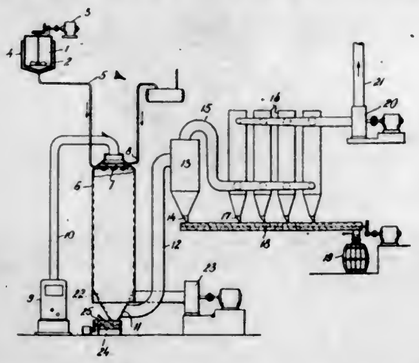
1,804,931. SUPPORT FOR HATS AND THE LIKE. FAIRFIELD W. HOBAN, New York, N. Y., assignor to Fairfield Specialties Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 1, 1929. Serial No. 403,961. 15 Claims. (Cl. 223—18.1.)



1. A support comprising end members, and a plurality of vertically extending members connected to said end members, said vertically extending members having upper portions conjointly forming a relatively enlarged support and certain of said members having angular lower portions extending below the lower end member to form feet for supporting the device upon a surface.

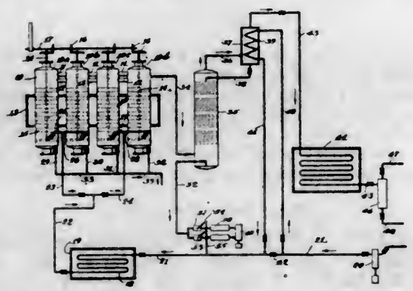
1,804,932. MANUFACTURE OF SOAP POWDER. ROBERT L. HOLLIDAY, New York, N. Y., assignor, by mesne assignments, to Colgate-Palmolive-Peet Company, Chicago, Ill., a Corporation of Delaware, and The Procter & Gamble Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 19, 1926. Serial No. 102,861. 2 Claims. (Cl. 87—16.)

1. The process of producing a dry appearing relatively high water containing soap powder product consisting mainly of soap and soda ash with the soda ash in a predominating amount, which comprises preparing a soap and soda ash mixture with an amount of water sufficient to dissolve substantially all of the soda ash ingredient, the proportion of water being substantially in excess of the amount desired in the finished product so as to render the mixture free-flowing to permit its being broken up into liquid drops by spraying and permitting its being handled through pumps and pipe lines with ordinary care without danger of solidification therein, spraying said soap powder mixture to thus subdivide it into drops, effecting removal of a portion of the moisture content of the sprayed soap powder mixture down to substantially 40% by bringing a current of heated moisture absorbing treating gas into contact with the sprayed particles of the said mixture, regulating the total moisture absorbing capacity



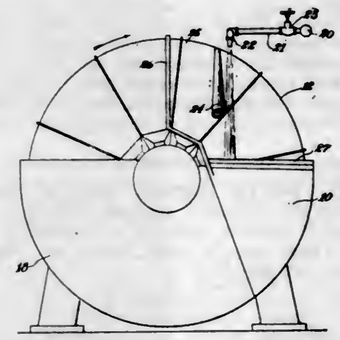
of the treating gas relative to the total amount of water desired to be removed from the product being treated to thereby inhibit the removal of moisture from said particles of sprayed soap powder mixture while the said mixture still has a relatively high water content, effecting incorporation of a major portion of said relatively high water content with the other constituents of the said soap powder mixture as water of crystallization to produce an ultimate product in apparently dry powder form by continuing the treatment of the sprayed soap powder mixture having said relatively high water content in a treating gas of controlled low moisture absorbing capacity until the said sprayed material under treatment has assumed an apparently dry condition, and then separating the apparently dry powder product from the treating gas to constitute the finished product.

1,804,933. TREATING HYDROCARBON OILS. WILL K. HOLMES, Tulsa, Okla., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 13, 1925. Serial No. 49,931. 2 Claims. (Cl. 196—69.)



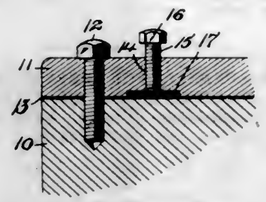
1. The process of converting high boiling hydrocarbon oils into lower boiling products that comprises passing a stream of oil under pressure through a heating coil and delivering it into an enlarged chamber where cracking, distillation, and carbon deposition are effected, applying heat to the coil to raise the oil in transit to a cracking temperature and maintaining a cracking temperature on the oil in said chamber, normally withdrawing tar from the cracking chamber at a normal rate, temporarily increasing the quantity of oil charged through the coil and increasing the rate of tar withdrawal above the normal rate at such times as the gravity of the oil in the chamber exceeds a predetermined density, and concurrently increasing the application of heat to the coil to substantially maintain the rate of distillation from the chamber and the temperature of the oil emerging from the exit of the coil.

1,804,934. FLUID PRESSURE DISCHARGE FOR CONTINUOUS FILTERS. JOHN T. HOYT, Hazleton, Pa., assignor, by mesne assignments, to Oliver United Filters Inc., San Francisco, Calif., a Corporation of Nevada. Filed Sept. 9, 1927. Serial No. 218,443. 4 Claims. (Cl. 210—200.)



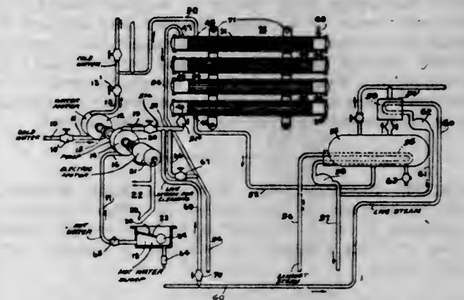
1. In a continuous suction filter of the class described, a rotating filter medium, a support therefor, and a washing and sluicing cake removal mechanism mounted on said support comprising a fluid pressure conduit, a fixed nozzle on said conduit, said nozzle adapted to direct fluid pressure means against said filter medium at a substantially constant angle.

1,804,935. MACHINE ELEMENT. EDWARD JACOBUS, East Orange, N. J. Filed Mar. 7, 1929. Serial No. 345,187. 1 Claim. (Cl. 29—84.)



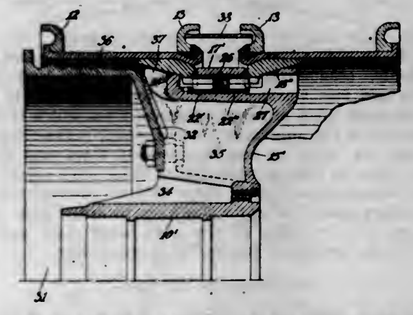
In a motor combination of a cylinder block and a cylinder head, a gasket seated between them, bolts securing the parts together to form a tight closure, and spaced bolts screwed into the cylinder head and adapted to be forced against the element beneath when the first mentioned bolts are removed whereby the cylinder head can be raised evenly to prevent damage to said gasket.

1,804,936. SYSTEM OF HEAT INTERCHANGE. GEORGE T. JACOCKS, Brooklyn, N. Y., assignor, by mesne assignments, to Alco Products Incorporated, New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 249,924. 12 Claims. (Cl. 257—11.)



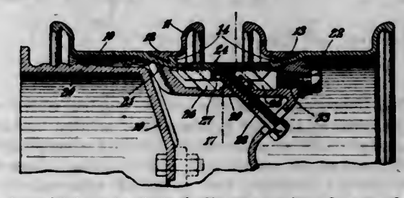
1. A system of heat interchange comprising, in combination, a source of cold liquid, a liquid motor connected to said source for actuation by said liquid, a source of heated liquid, a liquid pump connected to said source of heated liquid for pumping said heated liquid, and adapted to be actuated by the said motor, outlets for said motor and pump, and a heat interchanger connected with the outlets from said motor and pump.

1,804,937. VEHICLE WHEEL. CHARLES G. KELLER, Poughkeepsie, N. Y. Filed Aug. 21, 1926. Serial No. 130,569. 15 Claims. (Cl. 301—12.)



1. A vehicle wheel having a plurality of spokes each presenting at its outer end an outwardly facing surface inclined at an angle to the axis of the wheel, and an outwardly extending lug at the inner end of said surface, a rim having a plurality of lugs each presenting an inwardly facing inclined surface adapted to register with the inclined surface of a corresponding spoke, and clamping bolts each carried by and having threaded engagement with one of said first mentioned lugs and adapted to engage with one of said second mentioned lugs to force the rim axially and firmly engage the opposed inclined surfaces.

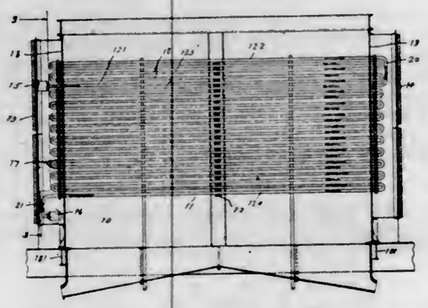
1,804,938. VEHICLE WHEEL. CHARLES G. KELLER, Poughkeepsie, N. Y. Filed Oct. 21, 1926. Serial No. 143,051. 8 Claims. (Cl. 301—12.)



1. A vehicle wheel including a pair of spaced rims each having a projection extending in a radially inward

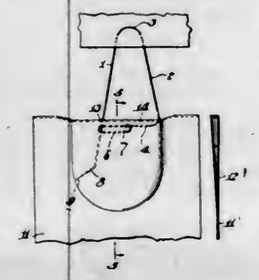
direction and presenting a shoulder facing toward one edge of the rim and an inclined wall facing toward the opposite edge of the rim, the rims being so positioned that the shoulders face toward each other, and a plurality of separate spokes each presenting a pair of oppositely inclined converging faces relatively movable toward and from each other in an axial direction and adapted to engage the inclined faces of said rim projections, a spacing member adapted to engage with and between said rim shoulders, and means projecting through the spoke in a direction having an axially inward component for moving the spacing member into and out of operative position.

1,804,939. ECONOMIZER. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 16, 1929. Serial No. 363,644. 7 Claims. (Cl. 257—240.)



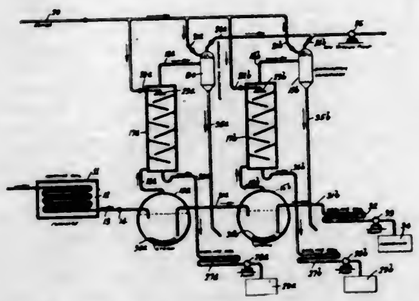
1. In an economizer, a gas flue in which the gases flow upwardly, economizer tubes extending back and forth across said flue, means for conducting feed water to first intermediate tubes of said economizer from which it flows upwardly to the uppermost tubes thereof, connections for causing the water to flow downwardly from said uppermost tubes to second intermediate tubes next below said first intermediate tubes, from which said second intermediate tubes the water flows downwardly from tubes at one level to tubes at the next lower level until it reaches the lowermost tubes of said economizer.

1,804,940. ART OF TAGGING. MATHIAS R. KONDOLF, Lower Merion Township, Montgomery County, Pa., assignor to The Lox Seal Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 11, 1927. Serial No. 182,721. 9 Claims. (Cl. 40—24.)



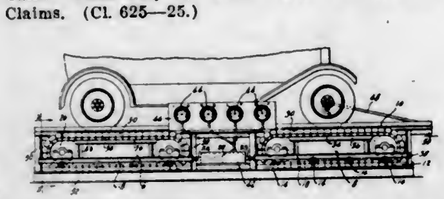
1. The improvement in the art of tagging which comprises a substantially flat tag formed of printed laminated readily rupturable sheet material forming a substantially flat section and an end pocket and a hanger comprising legs connected together and engaging adjacent to the juncture thereof an article and having means for engaging said legs together within the pocket of said tag.

1,804,941. VACUUM DISTILLATION. WILLIAM B. LOGAN, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 27, 1927. Serial No. 242,651. 3 Claims. (Cl. 196—77.)



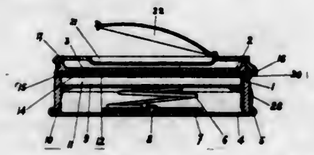
1. The process of distilling mineral lubricating oil which comprises continuously vaporizing the oil under an absolute pressure not exceeding 25–50 mm. of mercury, passing evolved vapors into a tower, introducing water into the upper portion of the tower whereby a portion of said vapors are condensed and the water evaporated, withdrawing steam and oil vapors from the upper portion of the tower and withdrawing condensate comprising the desired lubricating oil from the lower portion of the tower.

1,804,942. BRAKE TESTING DEVICE. FABIAN E. MACABEE and EDWARD L. MACABEE, Hayward, Calif., assignors of one-half to Harry C. Schroeder, Oakland, Calif. Filed May 3, 1927. Serial No. 188,440. 5 Claims. (Cl. 625—25.)



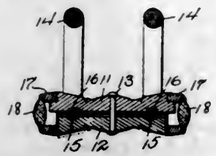
5. A brake testing machine for vehicles, comprising a plurality of units, each unit comprising a movable frame, a member movably mounted in said frame and presenting an endless path along which a vehicle wheel may be caused to roll, the path and the two movements being in parallel planes, means for moving said member to produce such rolling of the wheel and also a reactive movement of the frame, fluid pressure means controlled by such reactive movement of the frame to produce pressure proportional to such movement, and means responsive to such pressure for indicating the amount thereof.

1,804,943. DISPENSER FOR PULVERULENT SUBSTANCES AND THE LIKE. CÉCILE MARIE LOUISE MAILLARD, Nogent-Le-Roy, France. Filed Sept. 7, 1928, Serial No. 304,406, and in France Sept. 16, 1927. 9 Claims. (Cl. 132—82.)



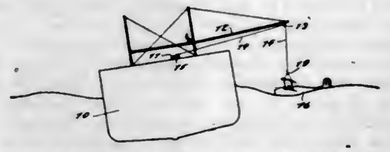
1. A device of the character described having, in combination, a container for pulverulent and like material having a stationary foraminous top wall, a follower piston in said container, spring means for urging said piston toward said foraminous top wall whereby to force said pulverulent material against said wall, a frame rotatably supported in said container, said frame carrying a screen substantially in contact with the under side of said foraminous top wall, and oscillatory means projecting laterally from said container at one side thereof for imparting rotative movement to said frame.

1,804,944. CUFF BUTTON. EDUARD MERZ, South Orange, N. J., assignor to Charlton & Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 24, 1930. Serial No. 430,511. 4 Claims. (Cl. 24—102.)



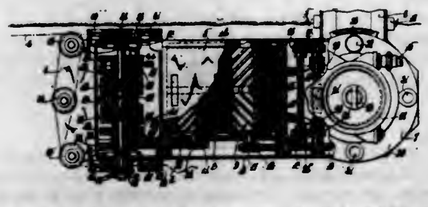
1. A cuff button comprising a bar split longitudinally and recessed near the ends, and rings adapted to swing on the ends of the bar and having square portions in the recesses of the bar whereby the rings can be held in extension of the bar or entirely to one side thereof.

1,804,945. DEVICE FOR HOISTING A FLOATING OBJECT SUBJECT TO WAVE ACTION. THOMAS SPENCER MILLER, South Orange, N. J. Filed June 19, 1928. Serial No. 286,512. 10 Claims. (Cl. 114—.05.)



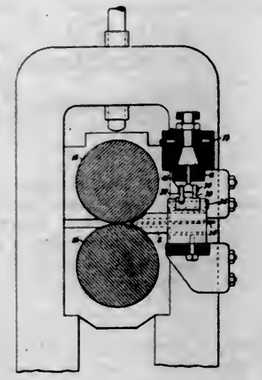
8. A winch adapted to hoist a float in a seaway comprising a substantially constant speed motor for driving a pump, means for varying the stroke of the pump and the flow of liquid therefrom, a hydraulic motor operable by fluid from the pump, said hydraulic motor driving a train of gearing, a tension governor, and automatic means whereby said tension governor controls the speed of pumping.

1,804,946. MINING MACHINE. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 18, 1923, Serial No. 646,001. Renewed Sept. 15, 1930. 93 Claims. (Cl. 262—80.)



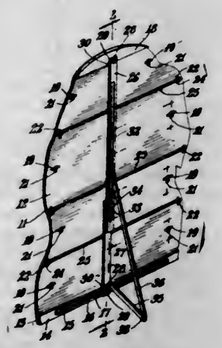
1. In a mining machine, a motor, cutting mechanism driven thereby including a pivoted cutter bar, feeding mechanism including a feed operating member and a take-up member each rotatable on a transverse axis, a shaft rotatable therewith, and means for driving either member including variable speed driving connections between said shaft and motor.

1,804,947. ROLLING MILL GUIDE. PER GUNNAR PALMGREN, Gottenborg, Sweden. Filed Oct. 17, 1929, Serial No. 400,208, and in Sweden Oct. 23, 1928. 5 Claims. (Cl. 80—51.)



1. The combination with rolls of a rolling mill and an electric motor for driving the rolls, of a guide for the material adapted to open and close, an electro-magnet for actuating the guides, the circuits of the motor and magnet being so connected that the operating load when rolling the metal acts on the circuit of the motor energizes the magnet and closes the guides.

1,804,948. ADVERTISING DEVICE. ISIDOR FRED PETIGOR, New York, N. Y. Filed June 3, 1929. Serial No. 368,115. 9 Claims. (Cl. 40—125.)

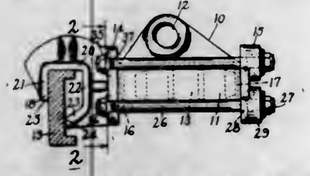


1. A pictorial advertising device comprising a member of sheet material, a stiffening member extending across one end of said sheet material member, a second stiffening member extending across the other end of said sheet member and having a longitudinal slot therein to provide two parallel strips, one of said strips being secured to the sheet material member, and an adjustable strut extending between the other strip and the first named stiffening member for holding them apart.

1,804,949. VIBRATOR. GEORGE B. PICKOP, New Haven, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn. Filed Apr. 4, 1929. Serial No. 352,549. 1 Claim. (Cl. 259—72.)

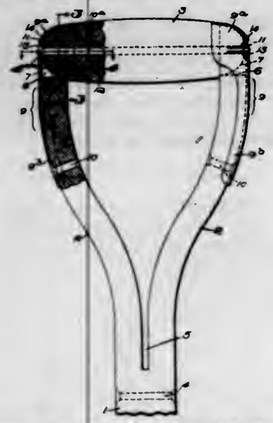
In a vibrator, a casing, a vibratory piston in said casing, heads one at each end of said casing, and bolts for

securing the heads to said casing and to one another, one of said heads being provided with parts in alignment with and overlying the ends of the bolts, said heads being provided with apertures through which the bolts pass and in which the bolts are normally restricted to movement



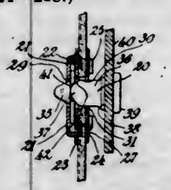
in an axial direction, the head provided with the overlying parts being provided with lateral slots extending into the bolt receiving openings through which the adjacent ends of broken bolts may be withdrawn in a lateral direction, the bolts being restricted to axial movement in the other head at all times.

1,804,950. SPLIT D-HANDLE. WILLIAM A. READY, Brookline, Mass. Filed Feb. 19, 1929. Serial No. 341,132. 7 Claims. (Cl. 294—57.)



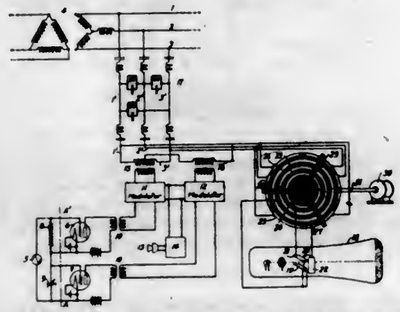
1. A D-handle comprising, in combination, a one-piece stem having one end split to provide two diverging arms at one end of the stem, a grip-piece located between the free ends of said arms, tongue and groove means locking said grip-piece with said arms to prevent relative turning movement, the grooves extending entirely through the arms, a metal reinforcing element secured directly to each arm, each of said reinforcing elements having a portion closely fitting the free end of an arm to conceal the tongue and groove means and strengthen the connection between the arm and grip-piece thereby to prevent splitting and means engaging only the grip-piece and the reinforcing elements to secure the reinforcing elements, arms and grip-piece together against lateral separation.

1,804,951. SNAP FASTENER. DANIEL I. REITER, New York, N. Y. Filed July 16, 1930. Serial No. 468,287. 6 Claims. (Cl. 24—218.)



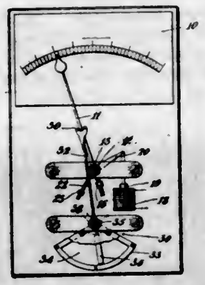
1. A snap fastener comprising a casing having an aperture therein through which a stud may be passed, a flexible stud-retaining element in said casing having a pair of expansible arms lying just within the margin of said aperture and a stud having an abrupt, outer, inwardly-facing, annular shoulder and a flaring, inner, outwardly-facing, annular shoulder to serve as a spreader, the arms of the stud-retaining element having relatively flat surfaces on the sides which engage the abrupt shoulder of said stud when inserted and flaring surfaces to be engaged by said spreader.

1,804,952. WAVE SIGNALING SYSTEM. FRANCIS X. RETTENMEYER, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 21, 1925. Serial No. 70,529. 10 Claims. (Cl. 179—2.5.)



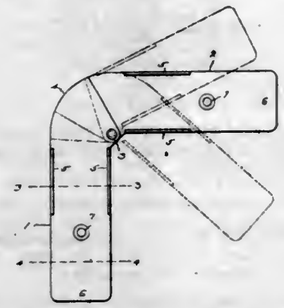
6. In a three-phase wave transmitting system, a source of two-phase modulated carrier current, means for deriving three-phase current from said modulated two-phase current, a three-phase line and a wave filter connected between the source of said three-phase current and said line, said wave filter comprising equal reactive impedance elements connected in series in each phase and equal reactive impedance elements connected in shunt between phases, said impedance elements having values precomputed in terms of two limiting frequencies and of the impedance of said source, whereby waves from said source having frequencies between said limiting frequencies are transmitted with small attenuation through the filter and waves of other frequencies are strongly attenuated.

1,804,953. MEASURING INSTRUMENT. FRANK W. ROLLER, East Orange, N. J., assignor to Roller-Smith Company, a Corporation of New York. Filed Jan. 13, 1926. Serial No. 80,867. 6 Claims. (Cl. 73—151.)



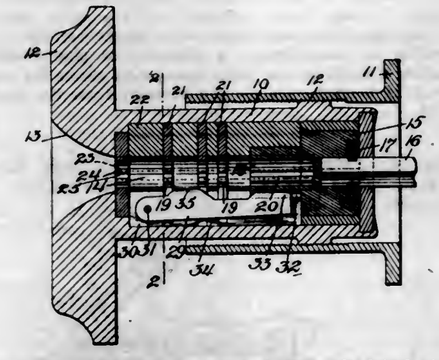
6. In a measuring instrument, a rotary element, a needle secured thereto and extending away from said element at one side thereof, a damping device comprising a receptacle located at the opposite side of said element and a vane in said receptacle pivotally mounted about an axis parallel to the axis of said element, and means for operatively connecting said needle and vane consisting of an arm rigid with said vane and formed with a forked end which embraces said needle.

1,804,954. ADJUSTABLE ELECTRICAL CONDUIT ELBOW. CHARLES E. RUTHERFORD, West Hartford, Conn., assignor to The Wiremold Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 7, 1929. Serial No. 397,844. 4 Claims. (Cl. 247—31.)



1. A conduit elbow comprising a substantially flat base composed of two members that are pivoted together near one edge and that have their connected ends overlapping, and a channel-shaped cap designed to fit over the base, said cap being composed of two members with the walls on one side permanently joined, and the walls on the other side curved and having a telescopic relation, whereby the base members may be adjusted to a required angular relation, and the cap members may be bent to the same angular relation without disconnection or leaving any opening which would expose conductors in the elbow.

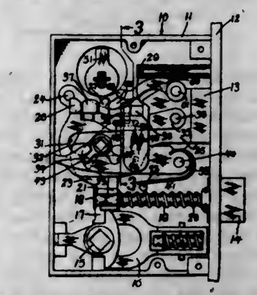
1,804,955. LOCK. WALTER SCHLUMPF, Flushing, N. Y. Filed Apr. 16, 1928. Serial No. 270,238. 1 Claim. (Cl. 70—91.)



A lock comprising a casing including cylindrical pieces and washers arranged side by side forming a key channel, the washers having symmetrically spaced teeth on their inner curved faces projecting into the key channel so formed and a barrel rotatable at the end of the casing the barrel having a recess with projections corresponding to those on the washers and normally aligned therewith whereby a cylindrical serrated key can be inserted in the lock without regard to its rotative position.

1,804,956. LOCK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn. Filed Mar. 7, 1929. Serial No. 344,975. 11 Claims. (Cl. 70—47.)

1. A cylinder lock comprising a casing, a rotatable key plug in said casing, a rollback mounted on said key plug, an element mounted on said rollback having a radially directed slot, an abutment having a stem slidably received in said slot, the stem of said abutment being provided with a radially directed slot, a fixed element passing through said last named slot and into said rollback, said fixed element serving to limit movement of the stem in the slot of the slotted element, a compression spring mounted in the stem and having one of its ends in engagement with the fixed element, while the other end of the spring is in engagement with the abutment



and urges the latter radially outwardly, said key plug being provided with a key receiving slot and the stem being carried in the slotted element adjacent said key receiving slot, whereby it may be engaged by a key inserted in the key plug to be held outwardly against the fixed element.

1,804,957. FURNACE BLOCK. ROLFE SHELLENBERGER, Bethlehem, Pa., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed Mar. 7, 1928. Serial No. 259,722. 4 Claims. (Cl. 72—16.)



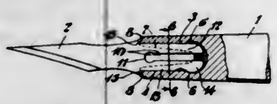
1. A furnace wall comprising blocks, each having a metallic backing, refractory facings supported on said backings forming the face of a combustion chamber and covering said backings and shielding same from the heat of said furnace, a layer of relatively low heat conductive material located between each backing and refractory facing whereby the rate of heat transfer between said backings and refractory facings is reduced so as to permit a high surface temperature on the side of said facings toward the furnace and relatively low temperature of the metal of said backing.

1,804,958. CRANK ARM BEARING. ALBERT H. STEBBINS, Los Angeles, Calif. Filed Mar. 21, 1928. Serial No. 263,366. 3 Claims. (Cl. 208—26.)



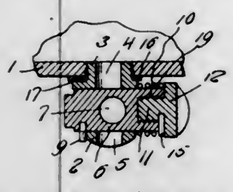
1. In a machine of the class described, in combination, a vibratory frame, a fixed supporting frame, and means for movably supporting the vibratory frame upon the fixed frame, comprising crank arms for supporting the vibratory frame in a suspended condition and having laterally extending shafts near their opposite ends, a non-metallic resilient pad snugly mounted upon each shaft, projections upon the shafts for non-rotatively engaging the bore of the pads, and housings having pad gripping projections and constructed to non-rotatably secure one pad of each crank arm to the fixed frame and the other pad of each crank arm to the vibratory frame so that the turning movement of the shafts in the pads will be absorbed by the yielding material of the pads without causing the shafts to rotate in the pads as journals.

1,804,959. SURGICAL KNIFE. ALEXANDER A. S. STUART, Ridgefield Park, N. J. Filed May 31, 1930. Serial No. 458,019. 4 Claims. (Cl. 30—9.)



1. A surgical knife comprising a blade integrally formed with a flat shank in the plane of the blade and longitudinally bifurcated to form two flexible and resilient fingers; a locking projection integrally formed on one of said fingers at a point spaced materially from the blade and projecting transversely outward from the outer longitudinal edge of the finger and having camming surfaces at the forward and rear edges thereof; a handle formed at one end with a flat shank-receiving socket defining an entrance passage of less width than the expanded shank and locking projection and laterally extended to form locking shoulders extending transversely outward from the opposite longitudinal edges of said passage near the inner end thereof, the shank fingers being compressible toward each other in the plane of the shank and blade for endwise insertion of the shank into the socket and expansible to snap the locking projection into yieldable locking engagement with either of said locking shoulders, the handle, shank and locking projection being formed to cooperate for the insertion and locking of the shank in transversely reversed positions and for the withdrawal of the shank by an outward pull upon the blade through an implement inserted in shank bifurcation, and the handle cross section extending outward beyond the inserted locking projection in both of its locked positions to shield the locking projection from contact with the hand of the user of the knife.

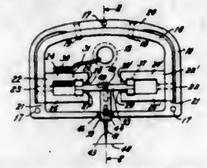
1,804,960. OIL VALVE DRAIN. JOSEPH H. THIBEAULT, Ware, Mass. Filed Mar. 29, 1928. Serial No. 265,740. 2 Claims. (Cl. 251—163.)



1. In a device of the class described, a crank case, a casing having a neck threaded into the lower portion of the crank case, a plug mounted to rotate in the casing and controlling the flow of oil from the crank case through the casing, one end of the casing being formed with a notch, a pin radiating from the plug and engageable within the notch, one end of the plug remote from the pin being provided with an inwardly directed threaded bore, a shank threaded in said bore, a tool engaging head formed on the shank being of greater diameter than the plug to provide a shoulder, a spring disposed about the valve impinging against the shoulder provided by the head and the casing to hold the pin in the notch and lock the plug against casual displacement, and a pin in the plug extending into the shank for locking the shank against rotation in the bore.

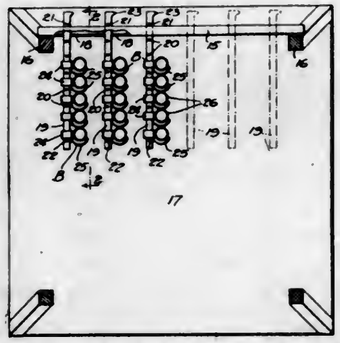
1,804,961. ELECTROMAGNETIC INSTRUMENT. ADOLPH A. THOMAS, New York, N. Y. Filed Oct. 12, 1928. Serial No. 312,003. 28 Claims. (Cl. 179—100.41.)

28. In an electromagnetic translating instrument, the combination of a magnet having pole pieces, a vibratory armature bar having its ends in operative relation to said pole pieces, and compressible elastic means inserted between said pole pieces, and the opposite sides of each



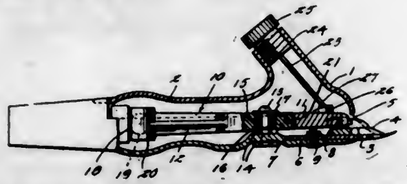
armature end, said elastic means being in pressure contact with said armature and constituting the sole support for the armature.

1,804,962. FINGER BOARD. LESTER RAY THORPE, East Bakersfield, Calif. Filed July 22, 1929. Serial No. 380,044. 8 Claims. (Cl. 211—70.)



4. A device of the character described comprising a support, a finger board slidable on the support, means for limiting sliding movement of the finger board in one direction on the support, a plurality of pipe holding brackets slidable on the finger board, and means for confining the brackets against displacement from the finger board.

1,804,963. ANIMAL SHEARS. THOMAS H. TROY, Boise, Idaho. Filed Aug. 8, 1929. Serial No. 384,248. 2 Claims. (Cl. 30—1.)



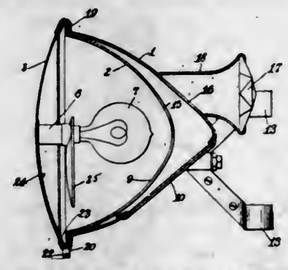
1. A shears of the character set forth, comprising a comb having a large number of short and closely related teeth, a support for the comb extending from the rear end thereof to a point close to the rear ends of the teeth, a bar extending across the comb and contacting throughout its entire length with the upper surface of the comb, screws passing through the support and comb and engaging the bar, a shoulder at the rear end of the support contacting with the rear end of the comb, a movable cutter blade mounted upon the comb, a stationary post adjacent the rear ends of the comb and support, a swivel bar embodying a short front and a long rear section, means pivotally connecting the sections together, said means comprising a plurality of spaced interfitting lugs, and a pivot extending through said lugs, the long fork section being connected to the post adjacent said pivotal connection and the short front section being located above the bar, means securing the front end of the long fork section to the movable cutter blade, a seat secured to the short post section adjacent the front end of the latter and provided with a downwardly and rearwardly inclined upper surface, and a tension bar contacting with said surface of the seat.

1,804,964. BASE EXCHANGE ZEOLITE AND PROCESS OF PREPARING SAME. FREDERICK M. TSCHIRNER, Medford, N. J., assignor to Zeolite Chemical Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 4, 1928. Serial No. 252,032. 23 Claims. (Cl. 23—112.)

15. The process of treating a natural water softening zeolite to improve its water softening qualities which comprises subjecting it to the action of phosphoric acid.

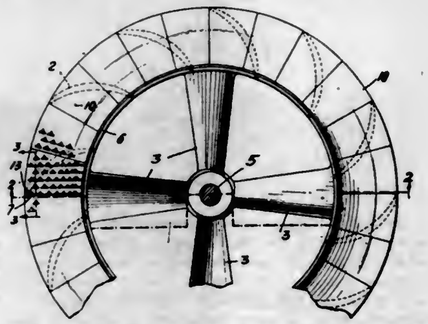
21. A base exchange water softening compound containing insoluble hydrous alumina phosphates possessing base exchange properties.

1,804,965. HEAD LAMP FOR MOTOR VEHICLES. EMILE GUSTAVE EDOUARD VIVES, deceased. St. Pe, France, by Suzanne Jeanne Cazautet (widow Vives), administratrix, St. Pe, France. Filed Nov. 22, 1927, Serial 235,097, and in France Nov. 24, 1926. 2 Claims. (Cl. 240—7.1.)



1. An automobile auxiliary headlight comprising in combination a casing having light transmitting apertures for both forward and combined rear and side beams of light, a main reflector, a single source of light located at the focus of the main reflector, supplementary reflecting means for intensifying both beams of light constructed as a single member and mounted within the main reflector between the front light transmitting aperture and the source of light, and a common support for both the supplementary reflecting means and the source of light detachably associated with the main reflector.

1,804,966. MIXING, DISSOLVING OR DISPERSING APPARATUS. KENNETH S. VALENTINE, Hollis, N. Y., assignor to The Turbo-Mixer Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 4, 1929. Serial No. 352,359. 21 Claims. (Cl. 259—96.)

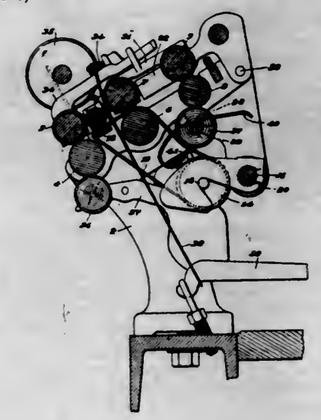


1. In apparatus of the class described, in combination with a tank, and material circulating means therein, including a rotor, a multiplicity of relatively small baffle blades on portions thereof for rapid disintegration, dispersal or diffusion of circulated materials, the baffle blades being located on plates secured to the rotor.

1,804,967. PROCESS OF PRODUCING CELLULOSE FROM LIGNIFIED MATERIAL. ROBERT B. WOLF, New York, N. Y., and RAYMOND P. HILL, Glen Rock, and RAYMOND S. HATCH, East Orange, N. J., assignors to Ligno-Cellulose Corporation, New York, N. Y., a Corporation of Delaware. Filed June 13, 1930. Serial No. 460,976. 10 Claims. (Cl. 92—11.)

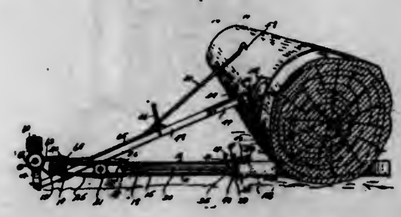
1. The method of recovering cellulose from cellulose-containing material which comprises digesting the material at a pressure exceeding six atmospheres with a water solution free from inorganic bases and containing more than 12% of free SO_2.

1,804,968. MANUFACTURE OF YARN. EDMUND E. BLAKE, Saco, Me., assignor to Saco-Lowell Shops, Newton, Mass., a Corporation of Massachusetts. Filed Feb. 27, 1929. Serial No. 343,127. 21 Claims. (Cl. 19—131.)



1. The herein described method comprising the steps of subjecting a cotton roving to a preliminary draft by grasping it firmly between moving drafting elements at points spaced at least 1 1/16ths inches apart, driving said elements at a ratio of between 1.20 and 1.45 and thereby feeding the roving through them while they draw it, next subjecting said roving to a main draft, then spinning the roving so drafted and passing the roving continuously from the first of said drafting operations to the next and from the latter to the spinning operation.

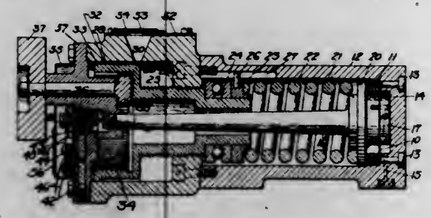
1,804,969. POWER DRAG SAW. JESSE T. BOLEN, Beaverton, Oreg., assignor of one-fourth to Katie D. Christy and one-fourth to Fred Christy, Klamath Falls, Oreg. Filed Feb. 11, 1928, Serial No. 253,719. Renewed Oct. 2, 1930. 11 Claims. (Cl. 143—68.)



10. In a power saw, a supporting frame formed to provide upper and lower rails, a sprocket wheel mounted

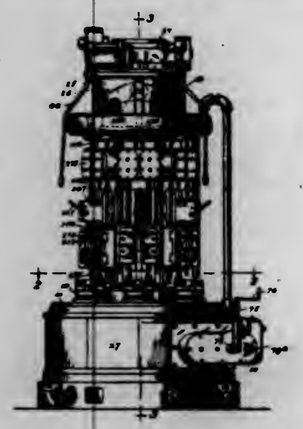
upon one end of said frame and disposed laterally of said rails, a slide mounted at the other end of the frame, a sprocket wheel carried by said slide in alignment with the first named sprocket wheel, means for exerting elastic tension on said slide to draw it away from the first named sprocket wheel, an intermediate slide freely movable upon said rails, a sprocket wheel carried thereby in alignment with the first named sprocket wheels and larger than the same, an endless chain passing over all of said sprocket wheels and engaged therewith, the chain including a link having an inwardly extending lug, a connecting rod pivotally connected to the lug, a saw connected to the connecting rod, the supporting frame having an extension, and the connecting rod at its junction with the saw carrying a member having rocking and sliding engagement with said extension.

1,804,970. PRESSURE MEASURING INSTRUMENT. ROY W. BROWN, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 7, 1926. Serial No. 139,999. 3 Claims. (Cl. 73—110.)



3. A fluid pressure measuring device, comprising a housing, a diaphragm contained therein, means for connecting a source of fluid to the housing on one side of the diaphragm, pressure means operable upon the other side of the diaphragm, means for indicating the amount of pressure exerted against the diaphragm by said pressure means, and means for indicating the normal or balanced position of the diaphragm, said means comprising a circuit including relatively movable contacts operable by the diaphragm.

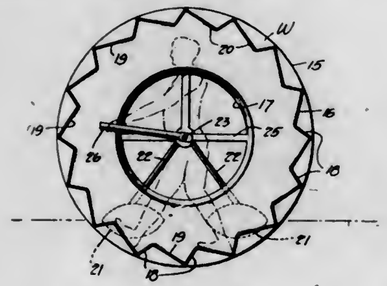
1,804,971. MULTIPLE SPINDLE CENTER TURNING MACHINE. EDWARD P. BULLARD, Jr., Stratford, Conn., assignor, by mesne assignments, to The Bullard Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 2, 1925. Serial No. 27,848. 53 Claims. (Cl. 29—38.)



1. In a center turning machine tool a continuously rotating carrier, a plurality of rotatable work holders carried thereby, a non-rotatable tool holder also mounted on the carrier and adapted to have reciprocatory movement at an angle to the axis of the work holder, means for reciprocating said tool holder, and change speed means between said last means and said tool holder whereby the speed of the tool holder may be varied with respect to said laat means.

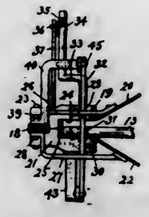
36. In a multiple spindle center turning machine having a loading station and including, a rotatable carrier mounted to rotate about a vertical axis, a series of rotatable work holders mounted thereon for rotation about vertical axes arranged in radially spaced relation about the axis of said carrier, a series of center supports carried by said carrier in coaxial relation to said work holders adapted to support the work at the other end, a non-rotatable tool holder carried by said carrier in respect to each work holder, reciprocatory means for each tool holder adapted to reciprocate it, means common to the several reciprocatory means for imparting successive and equal reciprocatory movement thereto as the carrier is rotated, and means between said last means and said respective tool holders whereby the relative speeds of said tool holders may be varied with respect to said means and to each other.

1,804,972. WATER VEHICLE. CARLOS DE MARCHI, Los Angeles, Calif. Filed Apr. 28, 1930. Serial No. 448,047. 7 Claims. (Cl. 115—20.)



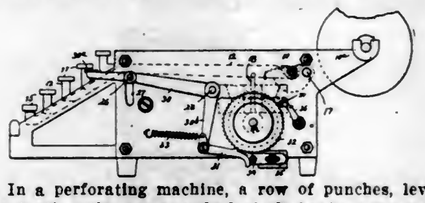
1. A water vehicle comprising pontoons, a wheel mounted upon the pontoons for rotative movement, means on the wheel for imparting rolling movement thereto on the water when rotated, and foot operated means fixed on the inner periphery of the wheel by which the latter can be rotated.

1,804,973. COUPLER. SPENCER C. DUTY, Cleveland, Heights, Ohio. Filed Apr. 25, 1930. Serial No. 447,178. 7 Claims. (Cl. 280—33.44.)



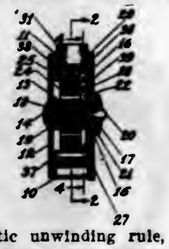
1. In combination, a coupler member for use in connection with a tongue having an opening therethrough, said member comprising jaws adapted to receive said tongue, a coupling pin adapted to be projected through openings in said jaws and through said tongue opening, and a pair of squeeze bars movable transversely of said jaws for drawing said tongue into position in alignment with said jaw openings.

1,804,974. PERFORATING MACHINE. KELLEY D. EVANS, Hamilton, Ohio, assignor of one-half to C. E. Hooven, Hamilton, Ohio. Filed Apr. 30, 1927. Serial No. 187,767. 6 Claims. (Cl. 164—112.)



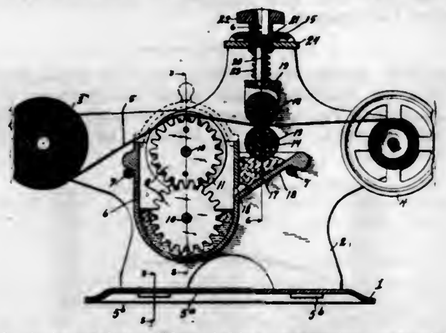
1. In a perforating machine, a row of punches, levers for actuating the same, a feed shaft having means for engaging and feeding a sheet and having its axis substantially in the same plane with the punches, and means operated by the depression of any of said levers for turning the shaft prior to the perforating of the sheet by the punch corresponding to such lever.

1,804,975. AUTOMATIC UNWINDING RULE. MAXWELL EISENSTEIN, New York, N. Y. Filed May 14, 1930. Serial No. 452,149. 7 Claims. (Cl. 33—138.)



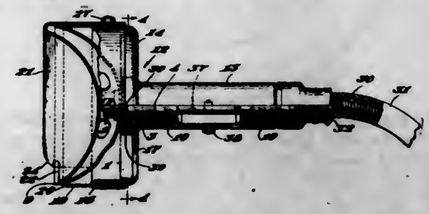
7. In an automatic unwinding rule, the combination with a dished casing of a dished rotor mounted in said casing, said rotor comprising two spaced side walls and one of said side walls being provided with a handle, a spring measuring rule attached to and wound manually on the outer periphery of said rotor by means of said handle, spring means within the rotor for rotating said rotor and for automatically unwinding said spring rule, the said side walls of the rotor being provided with means for engaging with the side edges of the said spring measuring rule and assisting in unwinding said rule, a roller for guiding the free end of said rule and a spring for arresting its outward motion from the casing when unwound, and the said spring measuring rule being of arcuate cross-section and rigid when unwound and of rectangular cross-section and flexible when wound in said casing.

1,804,976. RIBBON INKING DEVICE. JAMES G. FORTIER, Chicago, Ill., assignor to Ribbon-Ink Co., Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 15, 1928. Serial No. 299,709. 6 Claims. (Cl. 91—50.)



1. A typewriter ribbon inking apparatus comprising means for mounting a supply roll for rotation, means for mounting a take-up spool for rotation, an inking roller over which the ribbon passes from the supply roll to the take-up spool, a pair of wringer rollers between which the ribbon passes from the inking roller to the take-up spool and means for so mounting the upper wringer roller that it may be readily removed without the use of tools to facilitate placement of the ribbon from the supply roll to the take-up stool, the frame of the apparatus having a pair of openings therein, said mounting means comprising a pair of spring members engageable and disengageable with respect to said openings.

1,804,977. CUTTING IMPLEMENT. ERNEST A. GALLISON, Watertown, and ALBERT S. MACDONALD, Quincy, Mass., assignors, by mesne assignments, to Bay State Fishing Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 25, 1928. Serial No. 249,861. 4 Claims. (Cl. 17—7.)

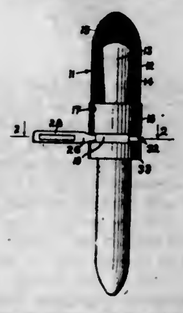


1. A cutting implement of the class described, comprising a rotary cup-like knife and having an annular cutting edge, a plurality of openings spaced inwardly from the edge of the knife, a drive shaft secured to the mid-portion of the knife, an annular guide and guard surrounding the knife, a handle surrounding the shaft and forming a continuation of said guide and guard, and a guard portion protecting the major segmental portion of the cutting edge, said guide and guard being connected to said handle by a wall at the rear of the knife, said wall having openings therein.

1,804,978. SAFETY PAPER. JOHN GENOESE, San Francisco, Calif. Filed Mar. 1, 1926. Serial No. 91,624. 2 Claims. (Cl. 134—33.)

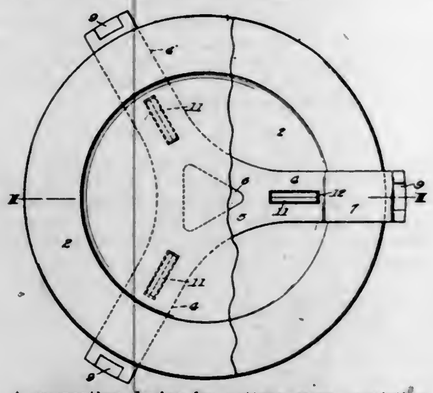
1. A fluid for use in producing a safety paper comprising the solution formed by combining approximately five ounces of alcohol, two quarts of water, a quarter ounce of iodine, a quarter ounce of cobaltous nitrate, and one eighth ounce of sodium thio-sulphate.

1,804,979. CIGAR OR CIGARETTE ASH PROTECTOR. ALPHONSE HAAS, San Bernardino, Calif. Filed Feb. 26, 1929. Serial No. 342,903. 5 Claims. (Cl. 131—51.)



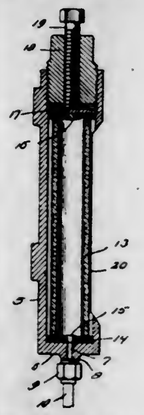
1. An ash protector comprising in combination a first ring, a second ring detachably connected thereto, a clamp having a pair of jaws mounted in the second ring and a hollow structure attached to the first ring adapted to receive the ash of a cigar or cigarette secured in the jaws extending longitudinally through the two rings.

1,804,980. SUPPORTING DEVICE FOR POTTERY. BENJAMIN D. HARDESTY, Beaver Falls, Pa., assignor to Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed May 17, 1928. Serial No. 278,372. 5 Claims. (Cl. 25—153.)



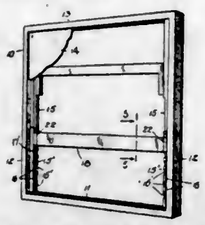
1. A supporting device for pottery ware consisting of a tripod shaped triple arm body of skeleton form having upwardly sloping ends with downwardly extending pedestals each provided with an upper socket and a lower lug and having on the upper face of each arm a depressed rectangular shouldered bearing face for a separable ware supporting abutment, and an elongated abutment therein having a flat base seated in said bearing face with clearance at the ends and sides.

1,804,981. OIL PRESSURE GAUGE. EWING THOMAS HARRIS, Seminole, Okla. Filed June 18, 1928. Serial No. 286,396. 1 Claim. (Cl. 73—31.)



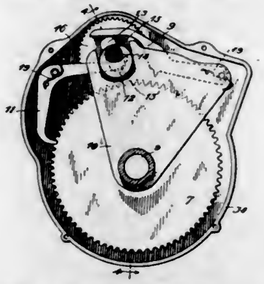
An oil pressure gauge for force feed lubricating systems comprising a tubular metal casing having a bottom wall provided with a central inlet adapted for connection with the pressure line of the lubricating system, a packing washer provided with a groove and seated on the bottom wall of the casing, a transparent tube in the casing seated at its lower end in said packing washer groove, a closure disk provided with a groove on the upper end of said tube within the upper portion of the casing, a rigid follower plate disposed on the closure disk, a plug removably secured in the upper end of the casing, and a set screw threaded axially through said plug with its lower end projecting and engaging the following plate to tightly and uniformly seat the tube in the washer groove and the groove of the closure disk on the tube when adjusted downwardly, said casing being cut away at one side of provide a sight opening through which said tube is exposed to view for the major portion of its length.

1,804,982. SILVER NITRATE HOLDER FOR PROCESS CAMERAS. HOWARD R. HAYS, Philadelphia County, Pa., assignor to Howard S. Levy and Lionel F. Levy, Philadelphia, Pa. Filed Oct. 31, 1929. Serial No. 403,686. 6 Claims. (Cl. 95—70.)



1. The combination of a plate holder and a wet plate carrier of the character described, and complementary inclined tongue and groove supporting means between the plate holder and carrier to support the latter.

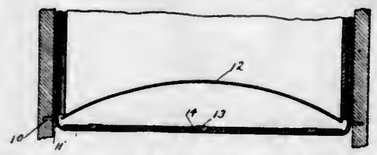
1,804,983. REVERSING MECHANISM. JOSEPH E. HIGGINS, Grand Island, Nebr. Filed Mar. 4, 1930. Serial No. 433,139. 14 Claims. (Cl. 74—50.)



1. A reversing mechanism comprising a movably mounted member, clutch means adapted for driving said member in one direction or the other, rotary means having one off-center portion for imparting proceeding and receding movements or strokes to said clutch means, said rotary means having a second off-center portion for controlling engagement and disengagement of said clutch means with said member in timed relation with the strokes of said clutch means, and means for effecting relative adjustment of said off-center portions about the axis of said rotary means to cause clutch engagement upon either the proceeding or receding strokes of said clutch means.

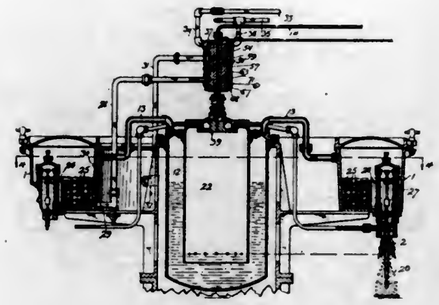
10. In a mechanism of the class described, two co-axially mounted members one of which is adapted to drive the other, a projection on said other member, and a shiftable abutment mounted on the driving member and having abutment portions at opposite sides of the axis of said members, either of said abutment portions being adapted for co-action with said projection in operatively connecting the two members.

1,804,984. DOOR STRUCTURE. CARL H. HOFFSTETTER, Erie, Pa., assignor to Odin Stove Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed May 21, 1930. Serial No. 454,484. 10 Claims. (Cl. 126—194.)



1. In a door structure, the combination of a frame with pintle openings therein; a door in the frame having a pintle connection at one side of the door and an opening in register with the opening in the frame; a pintle-receiving cavity in the door at its opening; and pintles for the door, one of which is insertable from the cavity into the opening.

1,804,985. BOTTLING MACHINE. ALBERT F. HOFFMAN, Newark, N. J. Filed Feb. 10, 1928. Serial No. 253,481. 9 Claims. (Cl. 226—70.)



1. A bottling machine comprising a rotative chamber for holding a supply of liquid for the filling operation, and a cooling device associated with the chamber to rotate therewith and comprising headers, a plurality of tubes connected at opposite ends to the respective headers in multiple relation, and means for introducing cooling liquid into one of said headers and for withdrawing it from the other, to cause a circulation of the cooling fluid through said tubes.

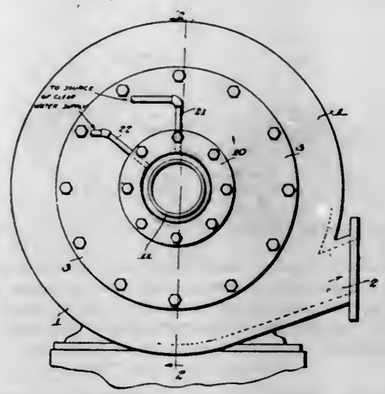
1,804,986. BLANK CARTRIDGE. CHARLES L. HOLDEN, Kings Mills, and PHILIP P. QUAYLE, Lebanon, Ohio, assignors to The Peters Cartridge Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 1, 1930. Serial No. 432,463. 5 Claims. (Cl. 102—14.)



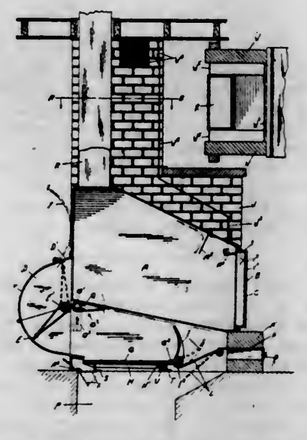
1. A blank cartridge for use in talking moving pictures, comprising, an outer case adapted to fit in the arms to be used, an inner shell disposed in and spaced from the outer case, a primer carried by said inner shell and appropriately located for use in said arms, a charge in said inner shell, and means for constricting said charge in said inner shell to produce sound waves of similar frequencies but lesses amplitude than the sound waves produced by normal gun fire.

1,804,987. SUCTION PUMP. MORTON HOPSON, Eustis, Fla. Filed Aug. 8, 1928. Serial No. 298,348. 3 Claims. (Cl. 103—133.)

1. A centrifugal suction dredging pump having axial intake and peripheral discharge passages and a pump case provided with a tubular axial extension on its intake side, a suction intake pipe having its inner end coupled to the end of said tubular extension, a rotary impeller in said case, a tubular sleeve carried by said impeller and disposed within the tubular extension of the pump case with its outer end in spaced relation to said suction intake pipe to provide an annular channel therebetween and a supplemental suction passage formed in said tubular extension communicating with said annular channel and with a source of liquid supply to supply, through the suction of the matter drawn through said intake pipe, liquid maintaining the fluidity of the intake of the pump.



1,804,988. FURNACE. FRANK D. HOWE, Cuyahoga Falls, Ohio. Filed Apr. 5, 1926. Serial No. 99,738. 8 Claims. (Cl. 110—33.)

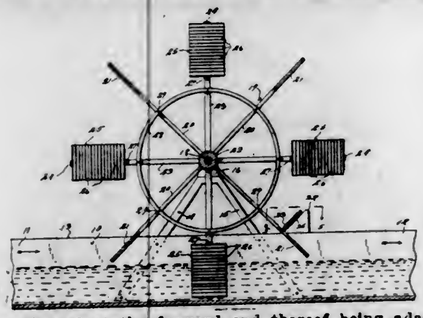


1. A furnace, one wall of which is transparent, said furnace including a grate, said furnace having an inlet and means associated therewith for feeding fuel horisontally onto the grate at a point remote from the transparent wall whereby a zone of substantially smokeless combustion is produced adjacent said wall, and a movable abutment cooperating with the grate adjacent said transparent wall for forcing burning fuel back upon the fresh fuel and for facilitating heaping of the fuel upon the grate.

1,804,989. FISH CONTROL APPARATUS. MELVIN R. JEFFREY, Missoula, Mont. Filed Mar. 6, 1930. Serial No. 433,743. 7 Claims. (Cl. 210—175.)

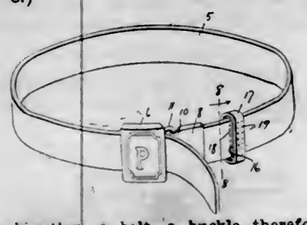
1. A fish control wheel of the character described comprising a standard and a wheel member rotatably mounted on the standard and adapted to be positioned in a flume, said wheel comprising a plurality of radially inclined pad-

die members, and a plurality of tubular screening members alternately positioned between said paddle members and adapted for rotation therewith, said screening members



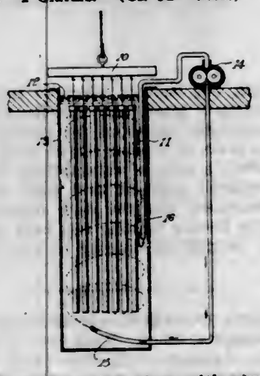
when clogged at the forward end thereof being adapted to be rotated rearwardly by pressure of the water at the forward end thereof into a substantially horizontal cleaning position.

1,804,990. BELT. SAM C. JIMOPOULOS, St. Louis, Mo., assignor of four-tenths to Ralph Nolen, St. Louis, Mo. Filed Mar. 12, 1930. Serial No. 435,195. 2 Claims. (Cl. 241—8.)



1. In combination, a belt, a buckle therefor, and an attaching device engageable with one end of said belt, and having means for detachable engagement with said buckle for securing the latter to said one end of the belt, a pair of inner and outer loop members circumjacent said belt inwardly form said one end, said inner loop member having one side thereof stitched to said belt, and the opposite side of said inner loop member stitched to an adjacent side of said outer loop member.

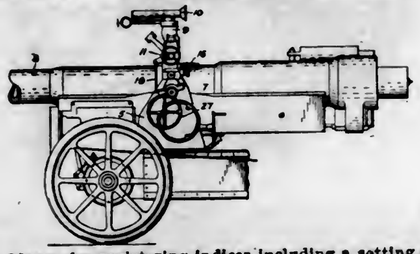
1,804,991. PROCESS AND APPARATUS FOR COATING. GUSTAVE A. JOHNSON, Irvington, N. J., assignor to American Steel Pipe Co. Inc., Irvington, N. J., a Corporation of New Jersey. Filed Dec. 20, 1928. Serial No. 327,250. 4 Claims. (Cl. 91—70.1.)



3. The method of coating pipes with aluminum which comprises dipping the pipes vertically in a tank containing a bath of aluminum powder and a liquid vehicle, which bath is circulated upwardly with a whirling motion from below the pipes so as to enter the interior of the pipes and to evenly flow over the exterior of the pipes.

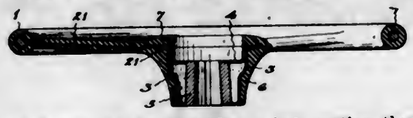
4. The method of coating metal objects with a coating metal which comprises applying a coat of finely divided metal suspended in a liquid vehicle to the surface of the object and baking below the carbonizing temperature of the vehicle for a length of time sufficient to produce a surface alloying of the coating metal with the base metal; applying a second coat of the same material and baking it at a relatively higher temperature below the carbonizing temperature for a longer period of time.

1,804,992. MEANS FOR REGISTERING INDICES OF FIRE CONTROL SYSTEMS. JAMES C. KARNES, Buffalo, N. Y. Filed July 30, 1928. Serial No. 296,356. 4 Claims. (Cl. 33—48.) (Granted under the act of Mar. 3,1883, as amended Apr. 30, 1928; 370 O. G. 757.)



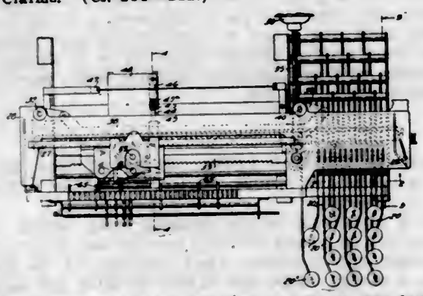
4. Means for registering indices including a setting arm and a gun arm movably mounted to pass each other, a plunger carried by one of the arms, and a block carried by the other arm and adjustable in the direction of movement of said arm, said block provided with a recess for receiving the plunger.

1,804,993. STEERING WHEEL. HERMAN T. KRAFT, Akron, Ohio, assignor to The H. A. Husted Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 18, 1929. Serial No. 356,106. 9 Claims. (Cl. 74—33.)



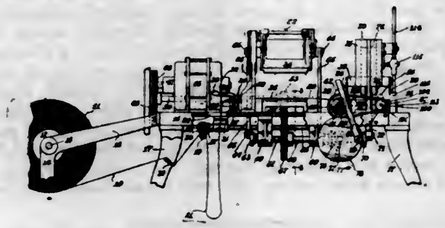
1. In a steering wheel spider, a hub portion therefor, comprising an outer cup-shaped member, an inner cup-shaped member nested in said outer member and a tubular hub positioned between said cup-shaped members and having lugs at opposite ends thereof engaging the bottoms of said cup-shaped members.

1,804,994. CARD PUNCH. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 18, 1923. Serial No. 681,334. 7 Claims. (Cl. 164—112.)



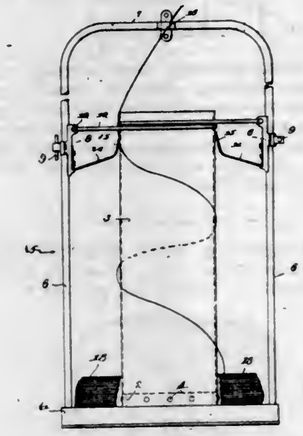
7. In a perforating machine comprising punches, a series of power driven operating bars, a step-by-step moving carriage, and means traveling with said carriage whereby any such bar when operated may actuate a punch to perforate a stationary card in whatever position said carriage may be at the time.

1,804,995. STATISTICAL CARD PRINTING AND CUTTING MACHINE. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed July 16, 1927. Serial No. 206,740. 5 Claims. (Cl. 164—48.)



1. In a device of the character described, the combination with means for severing cards from a strip by simultaneously cutting the same along two transverse lines spaced in accordance with a predetermined length of card, of intermittent feeding means to advance the strip between cutting operations a distance slightly greater than the length of a card.

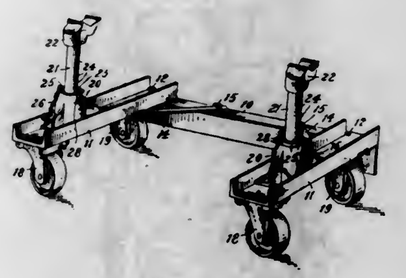
1,804,996. WIRE SUPPORT AND GUIDE. ALBERT S. MACDONALD, Quincy, Mass., assignor, by mesne assignments, to Bay State Fishing Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 23, 1928. Serial No. 263,997. 7 Claims. (Cl. 242—129.)



1. A device of the class described, comprising a central cylindrical guide, a support at the lower end of the guide adapted to hold a wire coil concentrically arranged about the guide, an element above the support and juxtaposed to the guide to hold the wire in frictional engagement with the surface of the same when it is being drawn from the coil, a frame about the guide, and an opening in the upper part of the frame to receive wire from the guide.

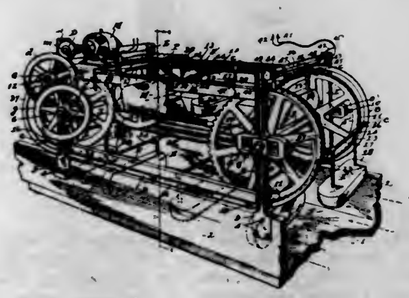
1,804,997. DOLLY. ROBERT E. MANLEY, York, Pa., assignor to Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed Oct. 15, 1926. Serial No. 141,846. 3 Claims. (Cl. 280—61.)

1. In a dolly, a plurality of parallel beams, a pair of wheels for each of the parallel beams, and a supporting member on each of the parallel beams between the wheels, and a single transverse bar connecting the rear ends of the two beams so as to leave the space between the beams



free and unrestricted so that a wheeled jack bearing an automobile may be moved in between the parallel bars and while so positioned be lowered to transfer the automobile from the jack to the supporting members.

1,804,998. METHOD OF AND MEANS FOR COLLECTING MAGNETIC MATERIALS AND SEPARATING THEM FROM OTHER MATERIALS. JAMES N. MCCRACKEN, Los Angeles, Calif., assignor to Black-sand Mining and Manufacturing Company, Ltd. Filed May 16, 1928. Serial No. 278,509. 6 Claims. (Cl. 209—218.)

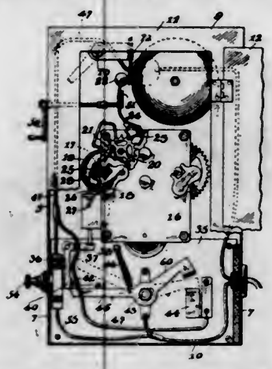


1. A method of separating magnetic materials from non-magnetic materials, the method consisting in arranging a series of electro-magnets so that the magnets are alternately in a substantially horizontal position and alternately in a substantially vertical position; moving a mixed volume of the materials in a passage; causing the magnets to be energized and, while energized, to move through the mixed volume of materials so that some portions of the magnetic materials will be collected by the horizontally disposed magnets, while other portions of the magnetic materials will be collected by the vertically disposed magnets; continuing the movement of the electro-magnets out of the passage; and causing the magnets to be de-energized during a period of their travel out of the passage, thereby effecting the discharge of the collected magnetic materials from the magnets.

1,804,999. ILLUMINATED CLOCK. EMIL A. MEYER, Springfield, Ohio. Filed May 24, 1928. Serial No. 280,185. 2 Claims. (Cl. 200—39.)

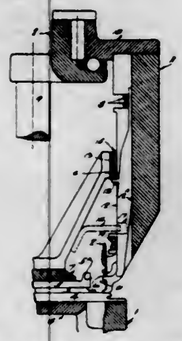
1. The combination with a time switch of a clock train including a shaft, actuating means rotating with said shaft, trip means in the path of driving movement of

said actuating means, said trip means being movable out of the path of reverse movement of said actuating means,



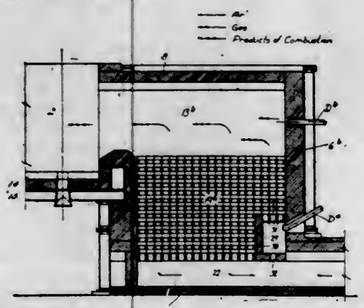
and a member normally holding said switch open and adapted to move to release said switch upon movement of said trip means.

1,805,000. KNITTING MACHINE. MAX C. MILLER, Cumberland, R. I. Filed Apr. 7, 1924. Serial No. 704,562. 35 Claims. (Cl. 66—104.)



1. In a knitting machine the combination with the needles, means including thread guides for feeding two separated yarns, and sinkers for progressively sinking the yarn between the needles, of additional devices acting on the yarns to position them one above the other in advance of the sinking point.

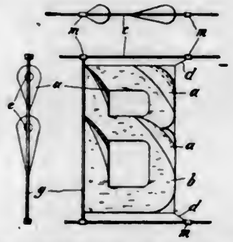
1,805,001. FURNACE. GEORGE NAISMITH and DONALD M. NAISMITH, Pittsburgh, Pa., assignors to Donald M. Naismith. Filed Dec. 9, 1929. Serial No. 412,738. 4 Claims. (Cl. 263—15.)



2. In a furnace, main walls enclosing a main heating chamber and side-by-side lower vertically circulating air-preheating chambers having regenerative checkwork therein and an upper mixing portion communicating with the heating chamber, means for alternately supplying air to and withdrawing waste gases from said chambers, an enclosed supplemental chamber in the lower portion of each checkerwork chamber communicating downwardly with the air supply and upwardly through the checkerwork, and a fuel supply pipe leading into said supplemental chamber.

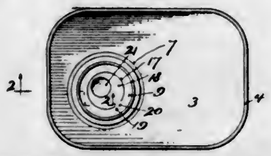
4. A furnace having a main heating chamber, a middle vertical wall terminating at the inner side of the heating chamber, a pre-heating chamber at each opposite side of said wall providing an upper mixing, combustion and delivery conduit leading to the heating chamber, means for introducing fuel thereinto remote from the heating chamber, air pre-heating checkerwork in the lower portion of each chamber below the upper mixing portion thereof, means for supplying air upwardly through the pre-heating checkerwork, an enclosed chamber in the lower portion of each checkerwork chamber communicating downwardly with the air supply and upwardly through the checkerwork, and a fuel supply pipe leading into said supplemental chamber.

1,805,002. LETTERS, FIGURES, AND SIGNS FOR EXHIBITION FROM AIRCRAFT. FRITZ NEUMEYER, Berlin-Charlottenberg, Germany. Filed Sept. 19, 1929, Serial No. 393,661, and in Germany Sept. 21, 1928. 20 Claims. (Cl. 40—127.)



1. Means for advertising from aircraft comprising parallel wires, stiffening members therefor extending perpendicularly between said wires, characters individually attached to said wires, sustaining means for said characters, a roller and means for winding and unwinding the assembly of wires, stiffening members, and characters, on and off said roller.

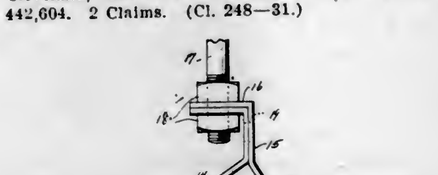
1,805,003. FRANGIBLE SEAL FOR RECEPTACLES. ISIDOR NEWMAN, Bronx, N. Y. Filed Oct. 5, 1929. Serial No. 397,467. 1 Claim. (Cl. 220—28.)



In an article of the class described, a receptacle, a sealing member forming a closure for said receptacle, said sealing member having a scoring for weakening the same, disposed in the form of a ring whereby the disk enclosed by said ring may be fractured, said disk having a depression disposed eccentric to said disk and adapted to be engaged by an implement for fracturing said sealing member along said scoring.

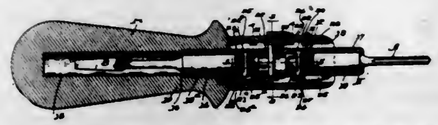
1,805,004. GRADING LEVEL. RALPH G. NEWSOME, Newport News, Va. Filed June 22, 1928. Serial No. 287,488. 2 Claims. (Cl. 33—73.)

1. In a grading level, the combination with a straight edge, of a base bar secured upon said straight edge and having upstanding ears intermediate its ends, a spirit level proper including a bubble tube holder pivoted intermediate its ends between said ears and upon a transverse horizontal axis for longitudinal tilting adjustment, adjusting screws threaded through the ends of said bubble tube holder and bearing upon said base bar for use in



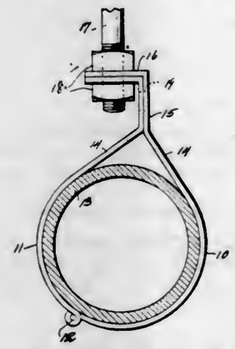
tiltably adjusting said bubble tube holder, said bubble tube holder comprising an elongated hollow body portion having an arcuate top wall provided with a longitudinal slot, and an elongated arcuate bubble tube mounted on said wall of the holder and provided with a series of transverse graduations from end to end exposed through said slot.

1,805,005. COMBINATION TOOL. WILLIAM E. PHILLIPS, La Crescenta, Calif. Filed Apr. 8, 1929. Serial No. 353,479. 11 Claims. (Cl. 7—15.)



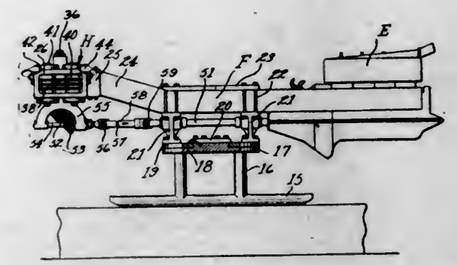
1. A tool comprising a hollow handle member, a holder having instruments on opposed extremities thereof and insertable from one extremity or the other into the handle member to accordingly dispose one instrument in the latter and expose the other instrument in a position for use or vice versa, and means for securing the holder in the handle member in either of its positions, comprising a projection on the holder, and a socket member movably mounted on the handle member and having an entrance opening through which the projectile is insertable into the socket member when occupying one position, the projection abutting a wall of the socket member when occupynig another position, to thereby prevent withdrawal of the holder from the handle member.

1,805,006. PIPE HANGER. PATRICK J. NEILON, East Cleveland, Ohio. Filed Apr. 8, 1930. Serial No. 442,604. 2 Claims. (Cl. 248—31.)



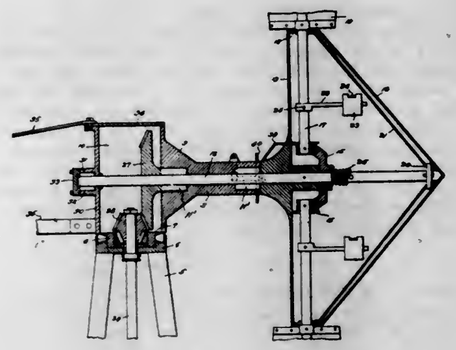
1. A pipe hanger of the character described, comprising two sections hinged to each other, the sections at their free ends being bent upward and inward in convergent relation to each other, then extending upward and then horizontally whereby said angular extremities may be disposed in overlapping relation, the angular extremities being apertured for the passage of a supporting member.

1,805,007. PIPE COUPLING APPARATUS. ELMER C. PEDLEY, Chino, Calif. Filed Dec. 27, 1927. Serial No. 242,845. 9 Claims. (Cl. 255—35.)



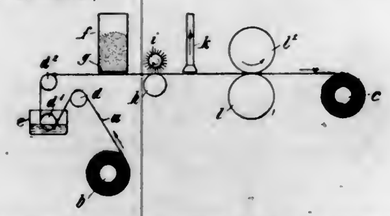
1. A pipe coupling apparatus comprising a head, a frame on the head, a shaft journaled in the frame, a sprocket wheel secured to the shaft, other sprocket wheels journaled in the head, a chain trained about the first sprocket and having engagement with only the confronting sides of the other sprockets to provide a looped portion beyond the sprockets which is adapted to receive a pipe, and means for driving the shaft to effect driving of the chain.

1,805,008. WINDMILL. OSCAR T. RUDE, Mona, N. Dak. Filed Apr. 11, 1928. Serial No. 269,131. 2 Claims. (Cl. 170—68.)



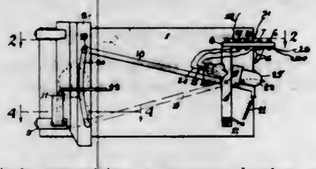
1. A windmill comprising a rotating head having a plurality of blades extending radially therefrom, a horizontally disposed shaft rotatably supporting the head, a rotatable shaft for each of said blades, a gear segment carried by each of said blade shafts, a gear freely mounted on said first named shaft operatively connecting each of said gear segments, wind pressure responsive means for angularly adjusting said blades comprising a coil spring yieldably connecting the said first named shaft with said freely mounted gear, said spring being operable to maintain the blades in a predetermined angular position during rotation of the blades under normal wind conditions and adapted to yield to abormal wind pressure whereby to feather the blades, arms extending radially of the blade shaft and adjustable longitudinally thereon, and weights carried by said arms and adapted to trail upon excessive speed of the head for automatically adjusting the angle of the blades, said spring and said weight being arranged to act oppositely on said blades.

1,805,009. COLOR SCREEN FILM AND PROCESS FOR MANUFACTURING THE SAME. RUDOLF RUTH, Schwedt, Germany. Filed Nov. 8, 1926, Serial No. 147,117, and in Germany Nov. 23, 1925. 3 Claims. (Cl. 95—81.5.)



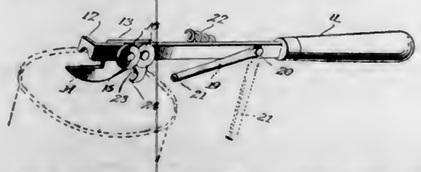
1. A process for the manufacture of a color screen film consisting of a supporting colloid and colloidal screen elements the original spherical shape of which is flattened, wherein the supporting colloid is provided with a layer of screen grains and the whole then passed between pressure rollers, of which the roller acting on the screen grains is heated.

1,805,010. TIME SWITCH. ROMILLY T. RUTHERFORD, Alameda, Calif., assignor to Wood-Barrett Corporation, Ltd., a Corporation of California. Filed Dec. 9, 1929. Serial No. 412,799. 12 Claims. (Cl. 194—9.)



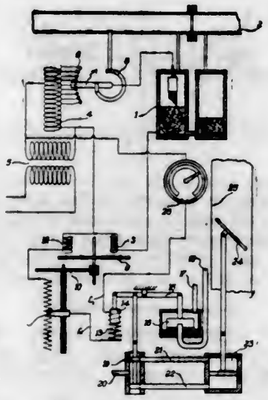
1. A switch comprising a support having a coin or token chute thereon, a rod pivotally mounted on the support having means for intercepting a coin or token dropped into the chute, the said rod being adapted to be moved by a coin or token when dropped into the chute, a thermostat mounted on the support, a plurality of contact points carried by the rod, the said contact points being connected with the terminals of a number of circuits, a wire leading from one of the terminals and one of the contact points to the thermostat, and means engaging with the thermostat for temporarily supporting a coin or token in the chute.

1,805,011. COMBINATION HOUSEHOLD IMPLEMENT. JOSEPH SALOMONE, Brooklyn, N. Y. Filed May 22, 1929. Serial No. 365,160. 1 Claim. (Cl. 7—1.)



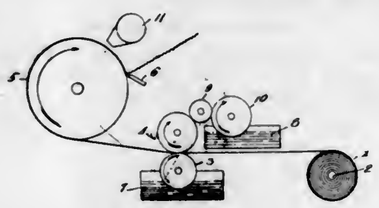
In a tool of the kind described, a shank having a handle at one end and having the other end portion extending laterally thereto, a plate secured to the side of said shank behind said lateral extension and spaced rearwardly therefrom, said plate having a cutter blade thereon underlying and projecting beyond said extension, overlapping discs positioned on the side of said shank opposite said plate, means extending through the axis of said discs, said shank and said plate for molding said parts together; said discs extending beyond the side edges of said shank, said extension having a notch in the edge thereof opposite said blade and positioned to one side of said blade.

1,805,012. MEANS FOR REGULATING COMBUSTION IN BOILER FURNACES. ALEXANDER G. S. SANDISON, Kelda, Baltasound, Shetland Islands. Filed Oct. 5, 1928, Serial No. 310,488, and in Great Britain Nov. 4, 1927. 18 Claims. (Cl. 236—24.5.)



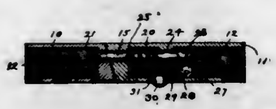
1. A combustion regulating system for a furnace comprising a measuring circuit including a resistance variable as a function of steam flow from the furnace, a control circuit, an electro-dynamic device in said circuits and inductively acted upon by the current in said circuits for regulating the control current in accordance with variations in steam flow, an electro-magnetic device in said control circuit and furnace control means actuated by said last named device to restore said steam flow to its correct value.

1,805,013. METHOD FOR MAKING FAST COLORED CREPE PAPER. GALEN H. SAYLER, Chicago, Ill., assignor to Dennison Manufacturing Company, Framingham, Mass., a Corporation of Massachusetts. Filed May 16, 1929. Serial No. 363,553. 3 Claims. (Cl. 8—5.)



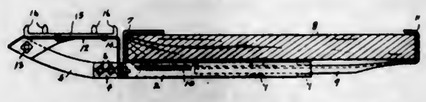
1. A method for making non-bleeding colored paper, which comprises treating a sheet of paper simultaneously with a dye solution and with a solution of fixing reagent.

1,805,014. RAIL LOCKING MEANS. JACOB RUPPERT SCHALK, Rhinebeck, N. Y. Filed Mar. 22, 1928. Serial No. 263,816. 1 Claim. (Cl. 287—103.)



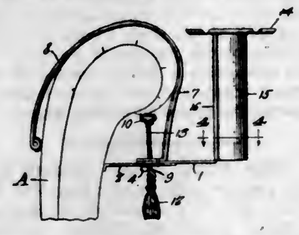
In a marine hinged guard rail locking device, and in combination with two engaging rail members formed with recessed ends for attachment to the adjacent ends of the guard rail, one of said members formed with a dove-tail slot adapted to engage with a dove-tail lug on the other member to form a joint between said members, a lug formed within the recess of one member, a bolt slidably mounted therein and in the end of said member and engaging the end of the other member, a spring mounted on said bolt between said lug and the end of the member to retain said bolt in a locked position, and a releasing finger operated means secured to said bolt for withdrawing the same.

1,805,015. SADIRON HOLDER. ALFRED L. SCHULZE, Houston, Tex. Filed Oct. 4, 1929. Serial No. 397,207. 5 Claims. (Cl. 68—27.)



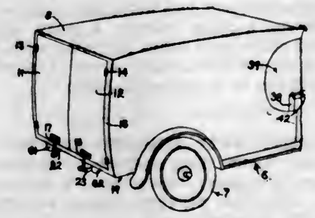
3. An iron holder including a frame formed of two parts, a yieldable member connecting said parts, a clamp hook carried by each part, said hooks being engageable with opposite margins of a support, one end of the frame being extended beyond the corresponding clamp and a supporting platform on said extended end.

1,805,016. ASH TRAY. MIKE SCHWARTZ, Cleveland, Ohio. Filed Mar. 1, 1929. Serial No. 343,645. 3 Claims. (Cl. 248—20.)



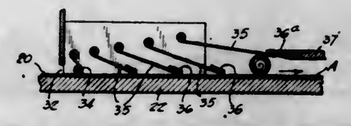
1. A support for ash trays comprising a base having vertical and horizontal portions and said vertical portion adapted to support a receptacle, an arm-engaging member slidably and adjustably secured to the horizontal portion and adapted to have one end thereof brought into an engagement with a fixed support below the latter's upper edge, an arm engaging member secured to said base and adapted to engage over the fixed support, and a spring pressed element carried by the horizontal portion and adapted to engage the fixed support between said first and second mentioned arm-engaging members.

1,805,017. DOOR OPERATING MECHANISM FOR DELIVERY TRUCKS. MALCOLM G. SCOTT, Los Angeles, Calif. Filed May 29, 1929. Serial No. 367,097. 7 Claims. (Cl. 268—3.)



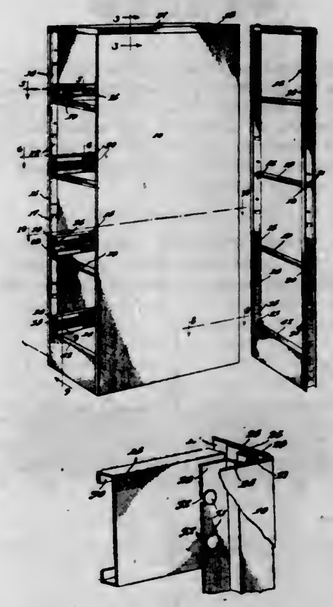
1. A device for operating a pair of doors carried upon a vehicle body, comprising a guide rod rigid with the under side of the body and extending longitudinally from a point beneath the free edges of the doors when closed, a slipper reciprocably mounted on said rod, a pair of rigid arms each pivoted at one end to said slipper and at the other end to one of said doors, and means accessible to the driver of the vehicle for reciprocating said slipper.

1,805,018. MOLDING MACHINE. FRANK A. SCRUGGS, Los Angeles, Calif. Filed Nov. 13, 1929. Serial No. 406,892. 8 Claims. (Cl. 107—9.)



2. In a mechanism of the class described, a dough carrier, means associated with the carrier for successively condensing, distending and shaping a mass of dough, coiling mechanism above the carrier and positioned with respect to the condensing, distending and shaping means to cause transference of the coiled dough thereto, said coiling mechanism comprising a series of vertically swinging flat members inclined towards the condensing, distending and shaping means and having their axes mounted in progressively stepped relation towards the condensing means and having portions adapted to freely rest upon the carrier and in the path of movement of dough upon the carrier, and means for operating upon the condensing, distending and shaping means for applying respectively varying pressures to the dough.

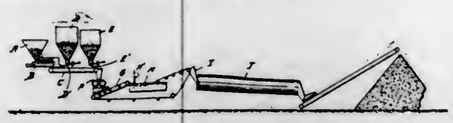
1,805,019. METAL CABINET. SAMUEL SMILEY, Jr., Cincinnati, Ohio, assignor to The Globe-Wernicke Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 21, 1928. Serial No. 327,686. 11 Claims. (Cl. 312—141.)



1. In a metal cabinet, the combination of a rear panel and side panels, the side edges of said rear panel providing

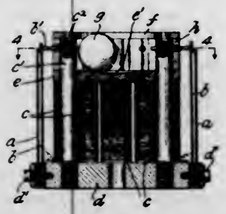
vertical slots, which slots extend inwardly from the side edges of the back and thence turn forwardly, and said side panels having inwardly and forwardly turned flanges along their respective rear edges for disposal in the corresponding slots of the back.

1,805,020. APPARATUS FOR PRODUCING LIGHT AGGREGATES. HARRY H. SMITH, Massillon, Ohio, assignor to Industrial Silica Corporation, Youngstown, Ohio, a Corporation. Filed May 14, 1930. Serial No. 452,441. 6 Claims. (Cl. 18—1.)



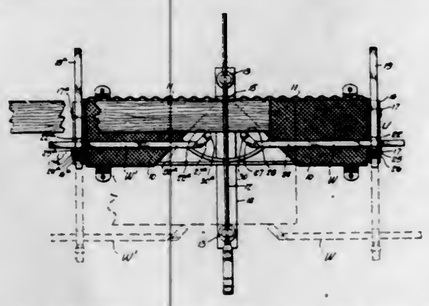
1. Apparatus for producing an aggregate material comprising means for feeding raw material to a conveyor, supplementary feeding means adapted to feed additional materials to the raw material to produce a mix, mixing means for homogeneously mixing and crushing the said materials, an oil bath adapted to receive the crushed mixture, means for passing the said mixture to the said oil bath, a firing kiln, and means to cause the said mixture to pass from the bath to said kiln.

1,805,021. ELECTROMAGNETIC SELECTOR DEVICE. CHARLES WILLIAM SOMERSOALE and JOHN ANDREW BELILE, Montevideo, Uruguay. Filed May 7, 1928, Serial No. 275,806, and in Great Britain Dec. 7, 1927. 8 Claims. (Cl. 200—98.)



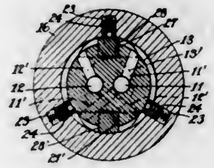
1. An electro-magnetic selector device comprising in combination a plurality of independently energizable electro-magnets, not less than three, disposed in a circle about a common centre, an armature, and means for normally holding said armature at said common centre, the said armature having freedom of movement radially towards any of said electro-magnets.

1,805,022. WORK HOLDING DEVICE FOR MITER BOXES. ERIC SODERGREN, Sierra Madre, Calif. Filed Apr. 8, 1930. Serial No. 442,629. 6 Claims. (Cl. 143—86.)



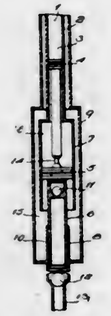
1. In combination, a miter box, a pair of supports secured to the bed of the miter box at opposite ends thereof, and having guideways, carriages slidable in the guideways for movement transversely with respect to the bed of the miter box and having transversely extending openings therethrough, a pair of members having work engaging portions, and slidably mounted in the openings of the carriages to overlie the bed of the miter box for movement through said openings longitudinally with respect to the bed, means for securing the carriages in selected positions of adjustment, and means for securing the members in selected positions of adjustment.

1,805,023. FLUID OPERATED DRIVING MEANS. LUTHER W. SPRINGSTEEN, Afton, N. Y., assignor to National Hydrodriv Company, Binghamton, N. Y., a Company of New York. Filed Jan. 7, 1927. Serial No. 159,616. 6 Claims. (Cl. 121—56.)



1. In a rotary engine, the combination of a casing and a shaft member, one shiftable relatively to the other, said shaft member comprising a shaft having an enlarged concentrically formed portion, one of said members having a plurality of resilient controlled shiftable members and one of said members having a plurality of resiliently controlled eccentrically located shiftable shoes, each of said propellers and each of said shoes having an opening therethrough for relieving the pressure in the rear thereof, each of said shoes comprising a pair of connected, spaced segmentally formed wings, and said enlarged portion having rabbeted ends for the reception of said wings.

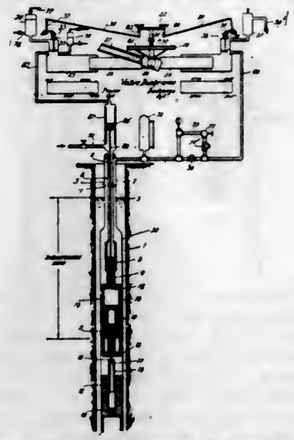
1,805,024. DEEP WELL PUMP. WILBUR N. SQUIRES, Joplin, Mo., assignor to Hydraulic Deep Well Pump Company, Joplin, Mo., a Corporation of Missouri. Filed May 14, 1928. Serial No. 277,591. 9 Claims. (Cl. 103—46.)



1. In combination in a deep well pump, a power cylinder, a piston therein, a pump cylinder, a pump plunger connected to said piston, and means providing sediment chambers for each of said cylinders to permit abrasive material from the cylinders to gravitate thereinto.

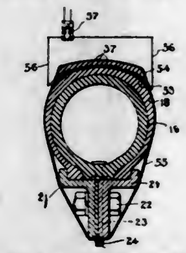
1,805,025. DEEP WELL PUMPING SYSTEM. WILBUR N. SQUIRES, Joplin, Mo., assignor to Hydraulic Deep Well Pump Company, Joplin, Mo., a Corporation of Missouri. Filed Jan. 21, 1929. Serial No. 333,869. 10 Claims. (Cl. 103—46.)

1. In a deep well pump, the combination with a pair of liquid columns one within the other, a piston located in the well and between said columns, a second piston at the head of the well and rigidly attached to said first piston and held apart therefrom by a pressure permanently



maintained on one of said columns, a pump plunger attached to said first piston, and means for applying impulses of pressure alternately to said columns to operate said pistons to cause said plunger to make strokes.

1,805,026. METHOD OF SECURING A TREAD TO A TIRE CARCASS. WILL C. STATE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Sept. 7, 1928. Serial No. 304,497. 7 Claims. (Cl. 18—59.)



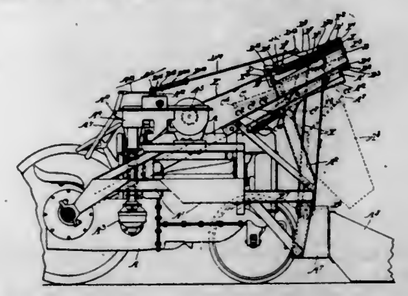
5. The method of securing a tread to a tire carcass which includes mounting a tire carcass for rotation, applying a gum strip to the carcass, embedding a portion of an electrical conductor in the gum strip adjacent an edge thereof rotating the carcass to draw the conductor from a source of supply, moving the source of supply axially of the carcass as the latter is rotated to cause the winding of spaced convolutions of the conductor circumferentially upon the carcass, applying a tread to the carcass, confining the tread and carcass under pressure and passing an electric current through the conductor to vulcanize the tread to the carcass.

1,805,027. BAR HANGER. JOHN A. ADELL, Orange, Mass. Filed Oct. 8, 1928. Serial No. 310,950. 2 Claims. (Cl. 247—22.)



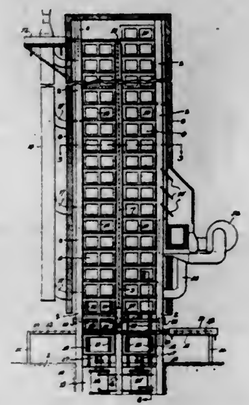
1. In a bar hanger, the combination of a supporting bar having a pair of flanges at opposite sides in the same plane and an outlet box having two pairs of flanges formed integral therewith and projecting from the closed side thereof and bent inwardly toward each other in the same plane and spaced from the wall of the box sufficiently to allow the flanges of the bar to slide under them.

1,805,028. SHOVEL HEAD. WILLIAM C. ANTHONY, CHARLES H. BENEDICT, and LESTER WACHTER, Streator, Ill., assignors to Anthony Company, Streator, Ill., a Corporation of Illinois. Filed Nov. 6, 1926. Serial No. 146,604. 8 Claims. (Cl. 37—126.)



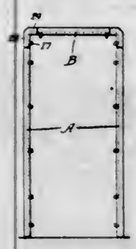
5. In combination with a material handling apparatus having a receptacle and means for moving such receptacle, a mechanical throw-out mechanism adapted to prevent movement of such moving means and two operating means each adapted to operate such throw-out mechanism one in response to any excessive load put upon such moving mechanism and the other adapted to act in response to movement of such receptacle the final throw out operating member being in each case the same.

1,805,029. CORE OVEN. WEDWORTH V. BAKER, Detroit, Mich. Filed June 15, 1927. Serial No. 198,909. 5 Claims. (Cl. 198—85.)



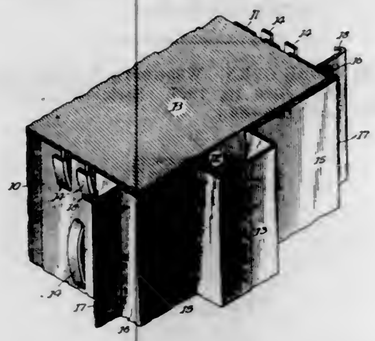
1. A device for raising and lowering material in a furnace comprising ascending and descending columns of carriers mounted therein, independent elevators mounted under each of said columns, pivoted detents mounted adjacent said ascending columns, springs holding said detents in a position where they engage said columns in a manner permitting the same to be elevated and for holding said column against downward movement when the elevator thereunder has been lowered, dogs pivoted intermediate their ends adjacent said descending columns, spring pressed plungers mounted upon the elevator beneath said descending column engaging said dogs beneath their pivots and holding the upper ends thereof into the path of the lowermost carrier in said descending column, said plungers being adapted to engage said dogs above their pivots when said elevator moves upwardly to cause the upper ends of said dogs to move outwardly when the elevator raises the weight of said column of carriers from said dogs and thereby permit the lowermost carrier in said column to be lowered away from said dogs.

1,805,030. METAL BUCK AND WOOD JAMB. ISAAC A. BAUM, Chicago, Ill. Filed Aug. 5, 1929. Serial No. 383,524. 7 Claims. (Cl. 189—46.)



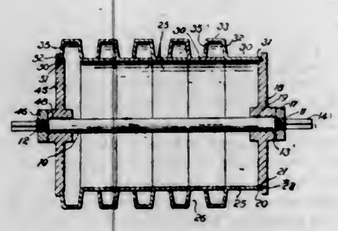
1. In combination, a frame for wall openings comprising side and head members shaped to cooperate with the edges of the wall at the opening, a plurality of spaced generally U-shaped clips secured to the outer faces of the frame members, and a wood jamb held in said clips.

1,805,031. REENFORCED METAL JAMB CONSTRUCTION. ISAAC A. BAUM, Chicago, Ill. Filed Apr. 7, 1930. Serial No. 442,242. 5 Claims. (Cl. 189—46.)



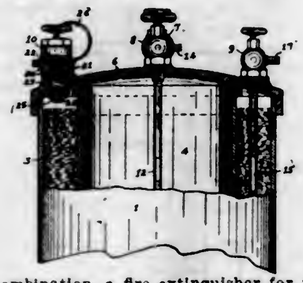
1. In metal frame construction, the combination of a channel shaped metal jamb, the flanges of which are adapted to contact the faces of a tile wall, and a continuous strip secured to said channel flanges and web, the outer margin of which is rebent to form a plaster anchor, said strip constituting a plaster treminal and ground.

1,805,032. DRUM FOR MANUFACTURING ENDLESS RUBBER ARTICLES. JO D. BERWICK, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 16, 1929. Serial No. 355,642. 6 Claims. (Cl. 154—3.)



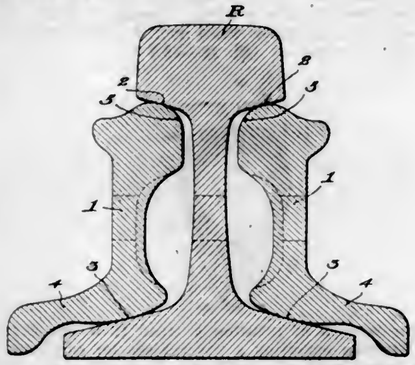
1. A drum for assembling and curing endless belts, comprising a plurality of annular sections interlocked one with another in telescoping relation to form a hollow construction, a shaft, and means for supporting the end sections upon the shaft.

1,805,033. FIRE EXTINGUISHER. JOHN R. BOYD, Pittsburgh, Pa., assignor to Robert L. Wickline, Pittsburgh, Pa. Filed July 17, 1929. Serial No. 378,939. 4 Claims. (Cl. 169—31.)



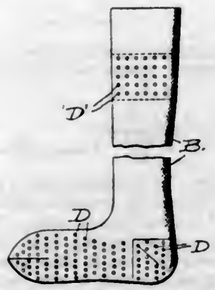
1. In combination, a fire extinguisher for using carbon tetra-chloride solution comprising a solution tank, a compressed air tank, valve-controlled means establishing communication between said tanks, means for regulating the discharge from said solution tank, and means for automatically maintaining atmospheric pressure in said solution tank, said last mentioned means further preventing the entrance of air therethrough to said solution tank.

1,805,034. RAIL JOINT CONSTRUCTION. BANCROFT G. BRAINE, New York, N. Y., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed July 14, 1930. Serial No. 467,875. 5 Claims. (Cl. 238—243.)



1. A rail joint construction including the rail, and a joint member provided with upper and lower laterally curved surfaces respectively contacting with the flat underside of the rail head and the flat upperside of the rail flange.

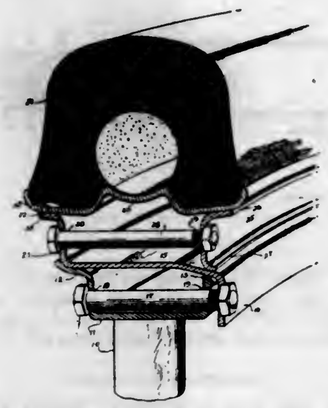
1,805,035. HOSIERY. HARRY BRANLEY, Honesdale, Pa. Filed Feb. 21, 1930. Serial No. 430,435. 1 Claim. (Cl. 66—178.)



In a stocking or sock, the combination with the leg part having a top portion adapted to be turned downward-

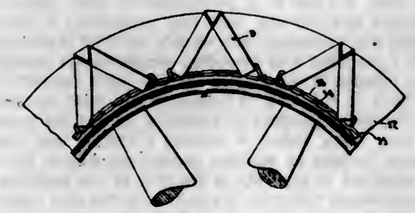
ly. of said leg part having a plurality of knitted openings therein so located as to be covered when said top portion is turned downwardly.

1,805,036. EXTENSION FELLY. RICHARD S. BURDETTE, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 29, 1926. Serial No. 84,587. 3 Claims. (Cl. 301—10.)



1. The combination with a wheel felly provided with seating surfaces for a tire-carrying rim, of an annular member demountably secured upon the seating surfaces for supporting one edge portion of a tire carrying band of greater internal diameter than the rim and a removable ring for supporting the opposite edge portion of the base band.

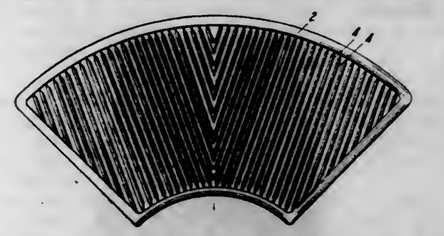
1,805,037. TRACTIVE DEVICE FOR TIRES. GEORGE R. BURRELL, Akron, Ohio., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 24, 1928. Serial No. 280,216. 4 Claims. (Cl. 152—14.)



4. An anti-skid chain comprising a pair of normally annular members adapted to be supported at the sides of a tire, each member being provided with circumferentially spaced integral eyes and rubber tractive devices having their ends looped through the eyes and vulcanized to form integral connections.

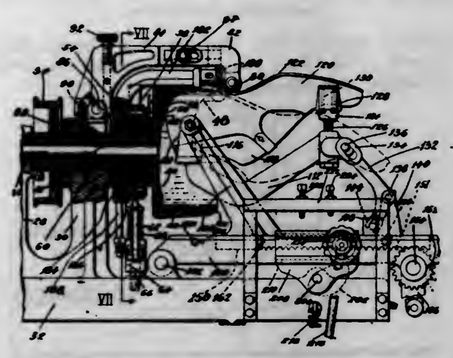
1,805,038. MAT. EARLE W. DERR, Akron, Ohio, assignor to Rubber Craft Products Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 11, 1927. Serial No. 232,569. 4 Claims. (Cl. 154—49.)

1. A mat or the like composed of a body of sponge rubber, and a comparatively thick covering layer of rubber of substantially the consistency of a tire tread stock of substantially even thickness throughout, the cover being formed with a plurality of closely spaced irregularities which present protuberances including sponge rubber,



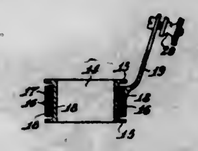
and being sufficiently unyielding so that they do not completely flatten out when pressure is applied thereto, the body of the mat and its cover being vulcanized together.

1,805,039. MACHINE FOR AND METHOD OF HEEL-SEAT FITTING. SIDNEY J. FINN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 15, 1926. Serial No. 122,727. 81 Claims. (Cl. 12—31.5.)



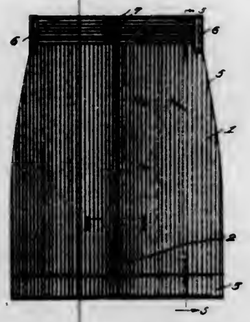
1. A heel-seat fitting machine having, in combination, a work support arranged to support a shoe to be operated upon, a cutter having a cutting edge curved about an axis extending in the general direction of the length of a shoe upon said support, and means for causing relative movement of the cutter and the shoe upon the support to cause the cutter to trim surplus material from the peripheral portion of the heel-seat of a shoe.

1,805,040. ELECTRICAL WARMING MEANS OR DEVICE FOR USE WITH INTERNAL COMBUSTION ENGINES TO FACILITATE STARTING THEREOF. CECIL REGINALD DOWNER GROVES, Thornton Heath, England. Filed Nov. 28, 1928, Serial No. 322,502, and in Great Britain Jan. 10, 1928. 3 Claims. (Cl. 219—38.)



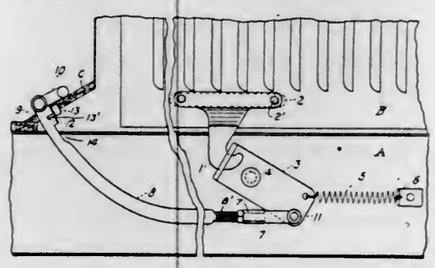
1. An electrical heating device comprising an inner member of conducting material, a ring of conducting material surrounding said inner member, a resistance coil between said member and said ring connected at one end with the former and at its other end with the latter, and means insulating all portions of said coil between its ends from said member and said ring.

1,805,041. SAMPLE DISPLAY. JULIUS HARRY HARRIS and CHARLES FRANKLIN BURNEY, Dallas, Tex. Filed June 19, 1930. Serial No. 462,308. 2 Claims. (Cl. 35—17.)



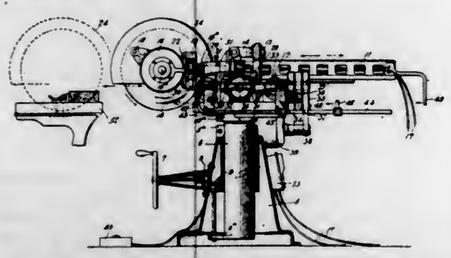
1. A sample display for trousers comprising a sheet of material provided therealong with a crease, a waist band strip secured across one end portion of the sheet a cuff secured across the opposite end of the sheet and belt loops positioned across said waistband.

1,805,042. HOOD LOCK. WALTER GEORGE ROBERT HEINE, Detroit, Mich. Filed May 12, 1927. Serial No. 190,663. 4 Claims. (Cl. 70—14.)
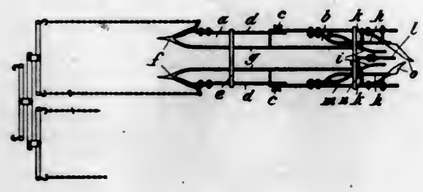


1. In combination with the chassis, hood and toe-board of an automobile, a hook carried by said hood, a latch pivoted to said chassis and having one end adapted to engage said hook, a spring connecting said latch to the chassis and adapted to bring said latch into engagement with the hook, and operating means extending from said latch through said toe-board, said operating means being provided with a notch to engage said toe-board to maintain said latch in one of its positions of adjustment.

1,805,043. SAWING MACHINE. JOHN O. HORTON, Montrose, Pa., assignor to Beach Manufacturing Company, Montrose, Pa., a Corporation of Pennsylvania. Filed June 5, 1930. Serial No. 459,355. 11 Claims. (Cl. 143—6.)



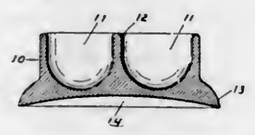
1. A cutting machine comprising a pedestal, a column, a cradle, a ram, a rotary cutter mounted for angular adjustment about a horizontal axis and means for rotating it mounted on the ram, together with a rotor and means for reciprocating the ram operated by the motor mounted on the cradle to be angularly adjusted therewith.

1,805,044. BEET TOPPER. RUDOLF LAEMMLEN, Grossgartach, near Heilbronn, Germany. Filed July 14, 1930. Serial No. 467,879, and in Germany May 5, 1928. 4 Claims. (Cl. 55—107.)



1. Beet topper with rails for the beet top and cutters in a frame, said frame being pivotally connected to a front carriage, said carriage carrying in front outwardly inclined guide shoes and provided at the rear end with rotary disks.

1,805,045. PIN AND CLIP TRAY. MELVIN S. LOWER, Barberton, Ohio, assignor to The Sun Rubber Company, Barberton, Ohio, a Corporation of Ohio. Filed May 10, 1928. Serial No. 276,631. 1 Claim. (Cl. 206—72.)

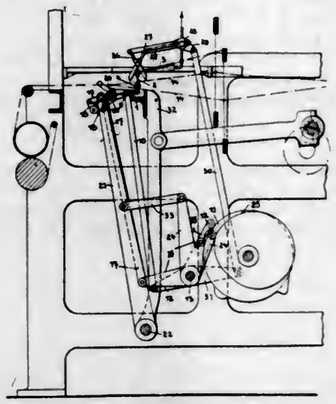


A tray for use as a receptacle for pins, clips, paper fasteners and the like, said tray comprising a one-piece, molded and vulcanized body of soft, resilient rubber formed with a partition wall providing compartments having bottoms rounded to merge with the side walls thereof so that the base of the tray is comparatively stiff, the base of the tray being enlarged to provide a lip and the bottom of the tray being dished to provide a suction cup, said lip adapted to form an effective suction cup despite the rigidity imparted to the body of the tray by the partition and the additional rubber at the bottom of the tray due to the rounding of the bottoms of the compartments, said base being thinnest along the bottom of the compartments so that in the action of the suction cup the base will bend along two lines substantially parallel to the partition.

1,805,046. PROCESS OF PICKING THE WEFT THREADS IN LOOMS FOR WEAVING PREPARATORY CHENILLES. JOHANNES MENSCHNER, Rosswein, Germany, assignor to the Firm Koch & Te Kock, Voigtland, Germany. Filed Oct. 4, 1929. Serial No. 397,188, and in Germany Jan. 14, 1928. 5 Claims. (Cl. 139—127.)

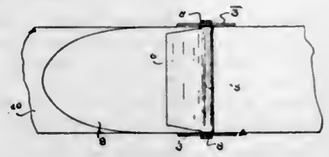
1. The combination in a loom for weaving chenille material, of means for picking, selecting and conveying weft threads, of gripping means operated to grip the front end of a thread, means actuated to pull the thread for a predetermined distance and then push the thread into V-

shape, cutters cooperating with the gripping means, controlling mechanism, and actuating means which selects



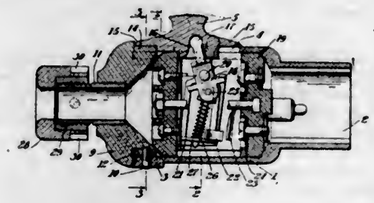
and conveys succeeding weft threads through the shed, the lay operating to bring the weft thread into its final position.

1,805,047. STRAP CONNECTION. EDWIN S. MIX, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Feb. 25, 1929. Serial No. 342,527. 3 Claims. (Cl. 24—191.)



3. A strap slide comprising a front plate provided with side flanges and a clamping member pivotally mounted in said side flanges and having a clamping portion on one side and two pintles projecting from opposite side edges of said clamping member and also from that side of the clamping member opposite the clamping portion, the pintles having outer bearing surfaces turning in the side flanges, and that side of the clamping member from which the pintles project having a space which is substantially as wide as the distance between the side flanges, so that the clamping member when swung substantially 180° will provide a space between the clamping member and the buckle frame, as well as between the inner ends of the pintles through which a strap may be passed.

1,805,048. ELECTRIC LAMP SOCKET. KENNETH PERKINS, Elizabeth, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed June 16, 1928. Serial No. 285,801. 3 Claims. (Cl. 173—346.)

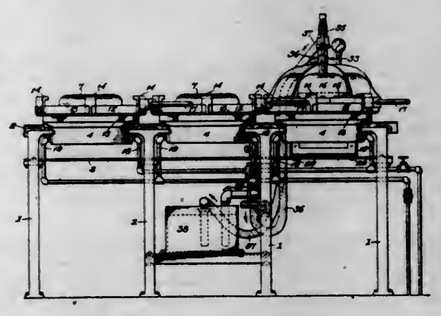


2. An electric lamp-socket comprising a socket-shell having a longitudinally extending slideway, a socket-switch mechanism received in said shell and having a pivoted switch-operating lever movable lengthwise of the socket-shell, and an operating button mounted in said slideway and supported by the socket-shell, said button being formed in its under side with a slot in which said operating lever freely extends.

1,805,049. IRON-NICKEL-COPPER ALLOY. NORMAN B. PILLING, Elizabeth, N. J., assignor to The International Nickel Company, Inc., a Corporation of Delaware. Filed Nov. 16, 1928. Serial No. 319,998. 4 Claims. (Cl. 75—1.)

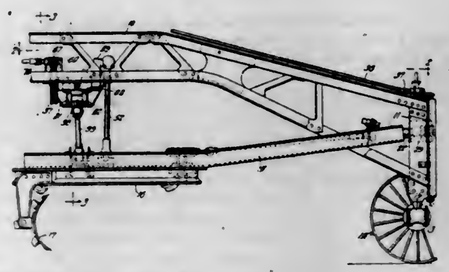
1. An alloy composed substantially of 26% to approximately 74% iron, approximately 25% to approximately 60% nickel, approximately 1% to approximately 26% copper, the nickel content being not less than 1.85 times the copper content to insure homogeneity, and carbon exceeding .40% and being under 2.0%, whereby an alloy is produced which is of substantially uniform softness.

1,805,050. HAT SHAPING MACHINE. JOSEPH F. ROSELLE, Cincinnati, Ohio. Filed Mar. 1, 1930. Serial No. 432,420. 3 Claims. (Cl. 223—31.)



1. In a hat shaping machine, a plurality of stationary heating drums each recessed to encircle the crown portion of a hat shaping die, and a pressure head hingedly and translatively supported for interchangeably cooperating with a selected one of said heater drums for enclosing a hat shaping die and providing a flexible and expansible diaphragm and core for compressing the hat against the hat shaping surfaces of the die.

1,805,051. ROAD GRADER. WILLIAM J. SCHLACKS, Chicago, Ill., assignor to Ryan Mnfg. Corporation, Chicago, Ill., a Corporation of Illinois. Filed July 28, 1928. Serial No. 295,912. 13 Claims. (Cl. 37—156.)

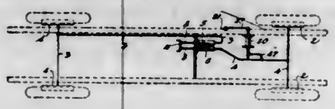


1. In a road grader, a main frame having a hollow front post, a drawbar having its front end extending into said post and means for reciprocating the front end of the drawbar vertically within said post.

1,805,052. PROCESS FOR PREVENTING THE DISSOLUTION OF METALS IN PICKLING BATHS. LORIN B. SEBRELL, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 21, 1927. Serial No. 227,859. 18 Claims. (Cl. 148—8.)

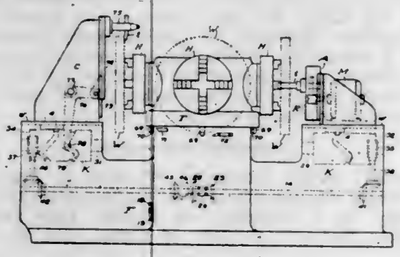
1. A bath for pickling metals containing a non-oxidizing mineral acid and a reaction product of an aldehyde and hydrogen sulphide.

1,805,053. BRAKE MECHANISM. LYLE K. SNELL, Detroit, Mich. Filed July 6, 1926. Serial No. 120,660. 8 Claims. (Cl. 188—151.)



1. In a fluid pressure braking system for vehicles including fluid operated steering wheel brakes, a pressure regulating device for controlling the pressure of fluid for operating said brakes by controlling the escape of fluid during brake activity conditions, and means for operating said regulating device, including a swinging arm and an operative connection between said arm and the steering wheel turning means whereby operating pressure applied to said brakes is reduced in proportion to the turning movement of said wheels in steering the vehicle, brake applying means including fluid conduits to the brake mechanism, said conduits being permanently open to the passage of fluid.

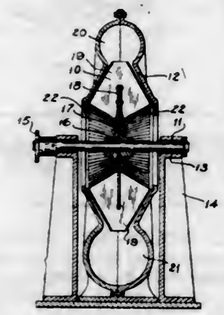
1,805,054. WORK ROTATING TYPE OF CHUCKING MACHINE. JOSEPH JOHN SPAING, New Britain, Conn., assignor to The Goss and Deleeuw Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 31, 1928. Serial No. 266,386. 20 Claims. (Cl. 29—38.)



15. A chucking machine of the work-rotating type combining a rotatable work-turret; a plurality of sets of rotating work-spindles supported on said turret with their axes substantially radial thereto, said sets of spindles being spaced apart in the direction of the axis of said work-turret; a work-holder secured to the outer end of each of said spindles; and tools arranged about the periphery of said turret and adapted successively to operate on work-pieces carried by said work-holders.

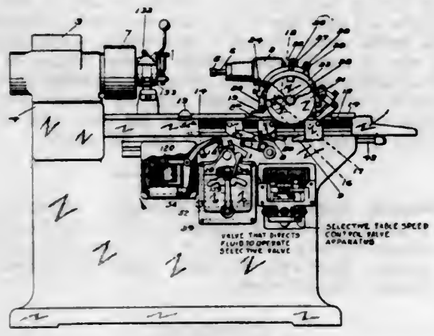
20. A chucking machine combining a work-turret; a plurality of rotatable spindles journaled in said work-turret; a work-holder carried by each of said spindles; a friction clutch element and a toothed clutch element fixed upon each of said spindles; a combined gear and clutch unit rotatably and translatably journaled on each of said spindles intermediate said friction and toothed clutch elements, said unit being provided with a gear, a friction surface and a toothed surface, said surfaces being adapted to engage said friction and toothed elements respectively; a drive shaft common to all of said spindles; a jack shaft journaled in said work turret adjacent each of said spindles; a driving connection between said drive shaft and each of said jack shafts; a gear fixed to each of said jack shafts and meshing with the gear on one of said spindles; and individual hand levers carried by said work-turret to shift each of said combined gear and clutch units axially selectively to engage said friction and toothed clutches.

1,805,055. BLOWER. JOSEPH JOHN STOETZEL, Queens Village, N. Y., assignor to G & G Atlas Systems, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 27, 1926. Serial No. 157,182. 5 Claims. (Cl. 230—128.)



1. In a blower of the centrifugal type, a fan wheel having radially extending vanes whose number is such and whose areas are so proportioned to the speed of rotation of the wheel and to the volume of the air flow as to cause the air passing through the outlets of the fan wheel to travel at a velocity equal to the peripheral velocity of the wheel.

1,805,056. GRINDING MACHINE. EDWARD M. TAYLOR, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 17, 1927. Serial No. 220,248. 18 Claims. (Cl. 51—50.)

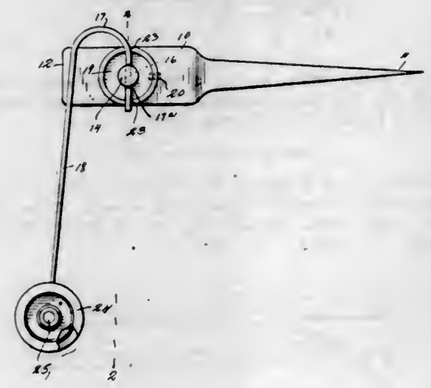


1. In a grinding machine, the combination with a grinding wheel, work holding means, and a table or carriage carrying one of said parts, of fluid pressure means to reciprocate said table or carriage, a valve comprising a main port, a second main port, a further plurality of ports always connected to the first main port but not to the second, and a single movable member which in each position connects one and only one of said plurality of ports to the second main port, and means for shifting said single movable member to cause the table or carriage to move at different speeds.

1,805,057. ACCELERATOR OF VULCANIZATION. JAN TEPPEMA, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed Dec. 10, 1927, Serial No. 239,267, and in Great Britain Aug. 27, 1928. Divided and this application filed Nov. 26, 1928. Serial No. 322,086. 8 Claims. (Cl. 18—53.)

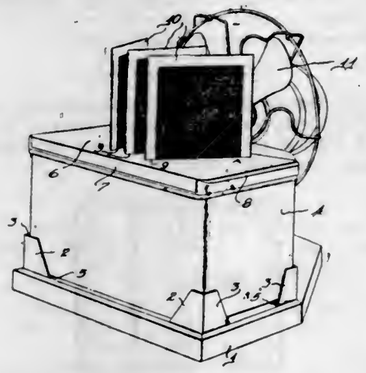
4. A method of treating rubber which comprises subjecting it to vulcanization in the presence of a reaction product of a benzoyl nitro phenyl sulphur halide and an alkali salt of a mercaptobenzothiazole.

1,805,058. UNDERCUTTER FOR SAWING LOGS. JERRY S. VALLEY and EARL P. FORD, Matlock, Wash. Filed Aug. 27, 1929. Serial No. 388,788. 2 Claims. (Cl. 143—163.)



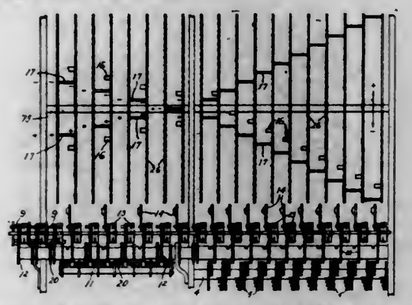
1. A saw supporting device for undercutting including a spike adapted to be driven into a log, a bolt extending through the spike, a stiff leaf spring having one end returned upon itself, the bolt having a slot through which the returned end of the leaf spring passes, the free end of the spring carrying a roller adapted to engage the saw, and means carried by the bolt whereby the spike and spring may be rigidly engaged to each other in a plurality of different angular relations.

1,805,059. HUMIDIFIER. WILLIAM G. WAGENHALS, Detroit, Mich. Filed Apr. 28, 1930. Serial No. 447,950. 2 Claims. (Cl. 261—104.)



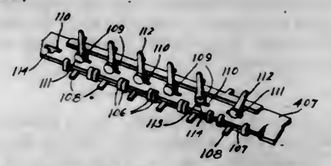
1. A humidifier comprising a base having a fan mounted thereon, vertical walls mounted upon said base, a water containing receptacle supported upon said base by said vertical walls, a plurality of capillary plates inserted in said receptacle to project upwardly therefrom, and a cover plate for said receptacle having slots arranged to support said capillary plates whereby the latter obstruct the flow of air created by said fan.

1,805,060. CALCULATING MACHINE. EDWARD C. WALTER, Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed June 24, 1930. Serial No. 463,442. 2 Claims. (Cl. 235—133.)



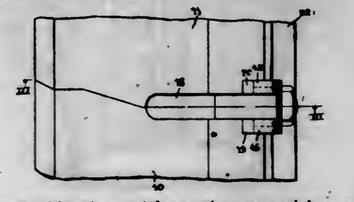
1. In a calculating machine having differential value actuators and numeral wheels shiftably related thereto; carry mechanism including a plurality of settable, delayed operation devices, a plurality of devices operable upon a numeral wheel simultaneously with the passage of a lower order wheel to decimal position and located in denominational orders between certain of said first-named devices.

1,805,061. REGISTER. EDWARD C. WALTER, Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed July 22, 1930. Serial No. 469,823. 3 Claims. (Cl. 235—132.)



1. In a register having numeral wheels; resetting means including devices associated with each numeral wheel, said resetting devices being individually adjustable to active or inactive present position, in correspondence with or alternatively in contrast to the adjustment of the resetting devices related to the next adjacent higher and lower order numeral wheels.

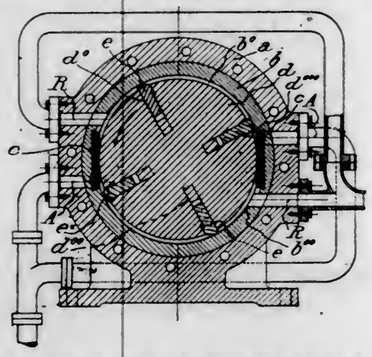
1,805,062. LATCHING DEVICE FOR SPLIT RIMS. ALVA W. WOODWARD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 9, 1928. Serial No. 291,171. 11 Claims. (Cl. 301—35.)



9. The combination with a rim comprising a transversely split member and an endless member disposed

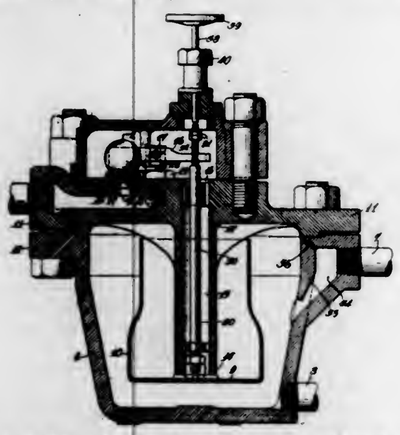
upon the outer periphery of the split member adjacent one edge thereof, the split in the first mentioned member being enlarged beneath the endless member, of a lug connected to the endless member and having portions engaging the ends of the split member on each side of the enlarged portion of the split.

1,805,063. ROTARY PUMP. CASIMIR WRONA, Ugine, France. Filed Aug. 15, 1929, Serial No. 386,099, and in Luxemburg Sept. 8, 1928. 3 Claims. (Cl. 103—136.)



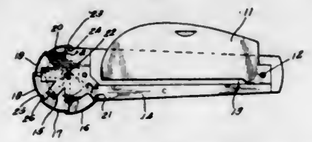
1. In a pump of the type described having a stator, the combination of a rotor concentrically disposed within said stator having a diameter smaller than said stator, a plurality of pairs of inlet and outlet conduits disposed in pairs, opening into the space existing between said rotor and said stator, a plurality of radially disposed slidably mounted paddles carried by said rotor adapted to contact with said stator, a plurality of cut-off plates carried by said stator contacting with said rotor for successively pushing said paddles into said rotor when passing from an inlet conduit to an outlet conduit, there being a pressure retaining recess formed in said stator around each of said outlet conduits and a projection carried by each of said paddles adapted to slide in a groove formed in said rotor opening into the space therearound whereby said paddles are slightly raised by the pressure developed in said pump when passing over said plates and friction reduced.

1,805,064. STEAM TRAP. DAVID ROBERT YARNALL, Philadelphia, Pa., assignor to Yarnall-Waring Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 6, 1926. Serial No. 127,534. 1 Claim. (Cl. 137—103.)



In a steam trap for intermittent discharge, a trap bucket, a compartment therefor, a plurality of spaced independent discharge valves each comprising a seat and a ball adapted to roll over and away from the valve opening, a projection movable with the trap bucket, a lever having one end adapted to engage all of the balls to roll them from their seats, heavier at the end which engages the balls so as normally to exert no pressure upon them, and at its opposite end coming within the path of movement of the projection and a pivot for the lever between its ends.

1,805,065. POCKET IMPLEMENT. OTTO ALTENBACH, Los Angeles, Calif. Filed May 17, 1927, Serial No. 192,029. 5 Claims. (Cl. 7—11.)



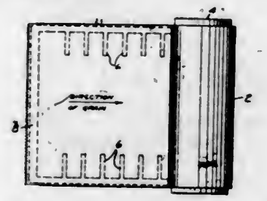
1. A pocket knife, having a tool at one end, and a guard for the tool comprising a plurality of pivoted sections forming a continuous cover.

1,805,066. GAS BURNER OR NOZZLE. PIERRE JULES JUSTINIEN ANDRIEUX, Montebourg, France. Filed Apr. 23, 1929, Serial No. 357,534, and in France May 2, 1928. 5 Claims. (Cl. 158—99.)



1. In a process for burning gaseous, liquid or powdered solid fuel, the steps consisting in blending fuel with a fluid supporting combustion, in forming said mixture into an annular and substantially cylindrical layer having thin walls with respect to its diameter, in imparting to said mixture a high velocity while thoroughly guiding same, in surrounding said layer with an external sheath of fluid supporting combustion formed into a substantially hollow cylinder, the inner diameter of which is substantially equal to the outer diameter of said layer and so guided that it will come tangentially into contact with said layer, and in guiding both said annular layer and sheath in contact with one another, while substantially preventing them from mixing together, whereby they will be able to flow through a surrounding heated medium while substantially keeping their cylindrical shape and without burning till the outer sheath will be sufficiently heated by the surrounding medium.

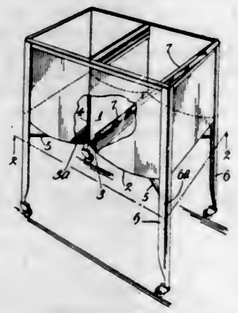
1,805,067. MULTIPLY BAG AND METHOD OF PRODUCING THE SAME. BARTLETT ARKELL, New York, N. Y. Filed Apr. 26, 1928. Serial No. 272,915. 9 Claims. (Cl. 229—55.)



7. A multi-ply bag comprising a paper strip wound upon itself a plurality of times so as to form a tube

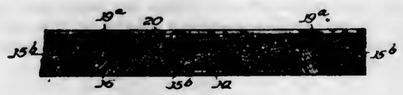
with the grain of the paper extending generally transversely of the tube, the outer end of the strip being secured to the underlying portion of the strip, the marginal edges of adjacent convolutions being secured together by substantially continuous longitudinally extending strips of adhesive, and the major portions of adjacent convolutions being otherwise left unsecured, and a satchel type bottom on at least one of the ends of the tube.

1,805,068. WASHTUB. JOHN L. ARLT, Saginaw, Mich., assignor to Fred W. Stork and John L. Arlt, doing business as Ideal Manufacturing Company, Saginaw, Mich. Filed Feb. 10, 1930. Serial No. 427,190. 1 Claim. (Cl. 68—31.)



Twin tubs having flat upright side walls positioned with two of the side walls together, supporting legs engaging the outside corners of said tubs, and tie members beneath the tubs and connecting diagonally opposed legs to hold the said side walls together.

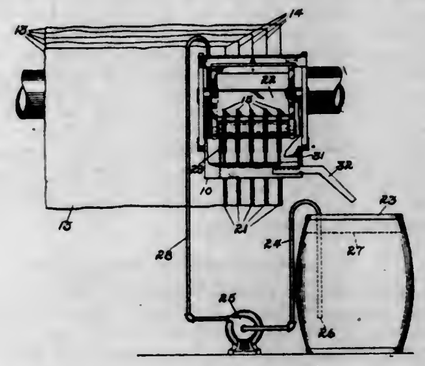
1,805,069. METHOD OF MAKING INSULATING BLOCKS IN THE FIELD. HAROLD S. ASHENHURST, Chicago, Ill., assignor, by mesne assignments, to Insulex Corporation, Chicago, Ill., a Corporation of Delaware. Original application filed Sept. 10, 1924, Serial No. 736,893. Divided and this application filed Mar. 3, 1925. Serial No. 12,882. 2 Claims. (Cl. 72—16.)



1. The process of making a light weight insulating block and reenforcing it and inserting it in a wall structure while still green, which comprises casting the body of the block in a mold from plastic material adapted to expand by chemical action and set in cellular condition in bonded relationship to a base member of fibrous material held stationary in said mold, said body material being exposed at the edges and one face of the block, and shaping said block while still plastic into intimate engagement with the adjacent elements of a wall.

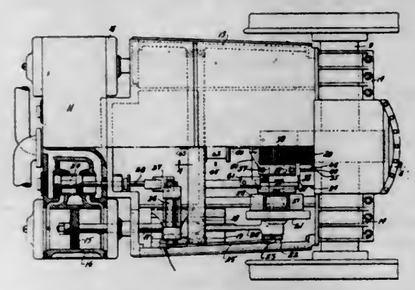
1,805,070. METHOD OF AND APPARATUS FOR APPLYING COATING. ADELMER M. BATES, deceased, Chicago, Ill., by Clara H. Bates, administratrix, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Original application filed Jan. 19, 1925, Serial No. 3,438, and in Great Britain Jan. 22, 1925. Divided and this application filed Mar. 25, 1926. Serial No. 97,424. 5 Claims. (Cl. 91—12.)

1. Adhesive applying means comprising a tank adapted to contain adhesive material, a disc mounted rotatably with its lower edge in position to run in the surface of a pool of adhesive material in the tank, a scraper, plate or doctor at the side of the disc which rises from the



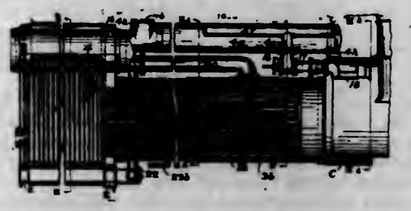
pool during operation, and an overflow opening in the side of the tank towards which the bottom of the disc moves and substantially at the level of the bottom of the disc.

1,805,071. RAILWAY BOOSTER. EINAR JOHAN BRING, Franklin, Pa., assignor to Franklin Railway Supply Company, a Corporation of Delaware. Filed Oct. 16, 1925. Serial No. 62,724. 16 Claims. (Cl. 105—48.)



1. The combination with a railway booster and the axle to be driven thereby, of connecting means between them automatically and intrinsically ineffective when the locomotive speed exceeds that of the booster, said means including a gear on said axle and a cooperating driving gear on the booster shaft, the axis of rotation of said driving gear being shiftable toward and away from said axle.

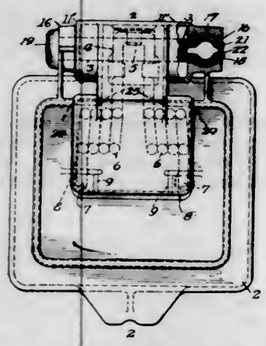
1,805,072. LOCOMOTIVE BOILER. ALFRED W. BRUCE, New York, N. Y. Original application filed Jan. 11, 1927, Serial No. 160,330. Divided and this application filed Nov. 19, 1927. Serial No. 234,346. 9 Claims. (Cl. 122—94.)



1. In a boiler of the locomotive type, the combination of a throttle valve; a fire box section the sides of which

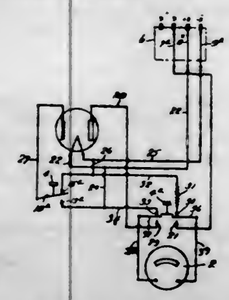
are formed of water tubes; a hollow mud ring communicating with the lower ends of said water tubes; a cylindrical boiler shell section connected to and extending forwardly from the fire box section; a plurality of fire tubes in said cylindrical boiler shell section; a drum extending forwardly from the rear of the fire box section, said drum communicating with the upper ends of the water tubes thereof; a conduit establishing communication between the drum and the forward portion of the cylindrical boiler shell section; means connecting the upper portion of the barrel and the mud ring to afford communication therebetween; a steam receiving chamber communicating with the forward end of the drum and extending forwardly thereof; and a steam delivery connection through which steam passes from the steam receiving chamber to the throttle valve.

1,805,073. JOURNAL BOX. VINCENT J. BURRY, Berwyn, Ill., assignor to Woodman Railway Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 8, 1927. Serial No. 211,361. 4 Claims. (Cl. 308—52.)



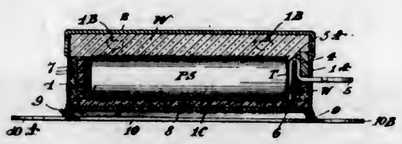
1. A journal box provided with a lid having perforations to receive a fastening member, one of said perforations having an interior rounded enlargement, and a fastening member having a split end expanded into conformance with the contour of said enlargement.

1,805,074. RADIO TESTING DEVICE. JOEL A. BURTCH, Cleveland, Ohio, assignor, by mesne assignments, to Jewell Electrical Instrument Company, a Corporation of Illinois. Filed May 22, 1925. Serial No. 31,999. 10 Claims. (Cl. 250—27.)



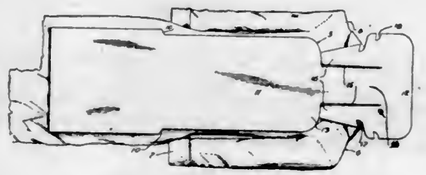
1. In a testing device, the combination of a tester plug having plate and filament contacts and adapted to engage the socket contacts of an audion tube circuit, with conductors leading from said plug contacts, an electrical measuring instrument associated with said conductors and plug, an audion tube socket, and switch means for connecting said instrument to measure voltage or current conditions at said tube socket terminals.

1,805,075. ELECTRICAL CONDENSER. BENJAMIN J. BUTLER, Somerville, Mass., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Filed Jan. 18, 1928. Serial No. 247,491. 4 Claims. (Cl. 175—41.)



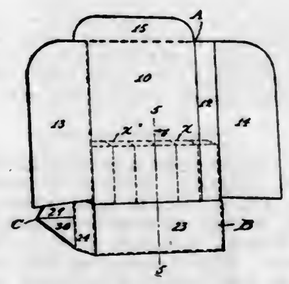
3. In combination with an electrical condenser, a container therefor, a pair of terminal members extending through said container and contacting with opposite armatures of said condenser, a positioning piece for said terminal members, means for securing said members to said positioning piece, an insulating member secured to said terminal and means for clamping said insulating member within said container.

1,805,076. FORM FOR DRESSES. JOEL B. CARLSTON, Galesburg, Ill. Filed June 9, 1927. Serial No. 197,539. 4 Claims. (Cl. 223—18.6.)



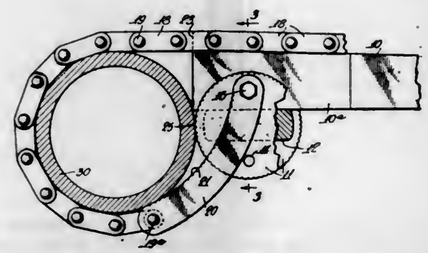
1. A dress form for supporting a dress folded thereon, having in combination a flexible body portion; a head portion; a neck portion for connecting said body portion and said head portion; extensions depending from said head portion, providing slots between said extensions and said connecting neck portion for locking the upper end of said dress in position, the middle part of said body portion having offsets serving to maintain the configuration of the hip portion of said dress, the upper part of said body portion having shoulders adjoining the neck, said shoulders being immediately adjacent the projecting ends of said extensions.

1,805,077. FOLDING TILT DISPLAY CONTAINER. WILLIAM S. CARTER, New York, N. Y. Filed Nov. 30, 1927. Serial No. 236,788. 5 Claims. (Cl. 206—44.)



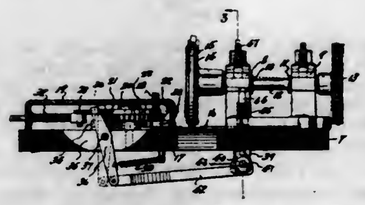
1. In a foldably formed container a display portion, a pocket forming portion, having thereon an inner rear wall section, which is continuous with said display section, a bottom section, foldably connected to said inner rear wall section, an inner front wall section, foldably connected to said bottom section, and an outer front wall section, foldably connected to said inner front wall section, said display portion with said inner rear wall section having at the sides thereof a pair of panel connecting sections, foldably connected thereto, and a pair of panels at the sides of said panel connecting sections, foldable to open free hanging positions, when the container is assembled for display, and foldable to closing position, when the container is in assembled closed form, combined with a pair of outer end wall sections, foldably connected to said outer front wall section, an outer rear wall section, adjacent to and foldably connected to one of said outer end wall sections, and an easel forming portion, foldably connected to said outer rear wall section, said easel to support said container, when assembled for display, and said easel portion being foldable, to lie flat against the rear of said container, when the latter is in assembled closed form, to permit a slip over cover to be drawn over the easel and the upper portion of the container in the assembled closed form of the latter.

1,805,078. PIPE WRENCH. THOMAS F. CUNNINGHAM and ARTHUR H. GIFFORD, Boonton, N. J. Filed July 18, 1929. Serial No. 379,094. 9 Claims. (Cl. 81—64.)



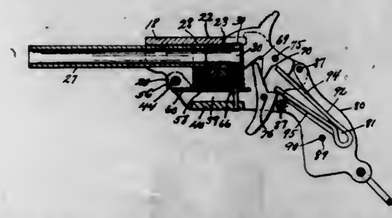
1. In a pipe wrench, a handle lever, a shoe fixed to the end of the lever and adapted to provide a fulcrum at its point of engagement with a pipe, an articulated flexible device to encircle the pipe, pivotally connected at one end to the lever, a member on the handle to be selectively engaged with one of the free links of the articulated device, said member being fixed on the handle at a greater distance from the fulcrum point than the distance of the pivot from the fulcrum point, the shoe comprising a pair of spaced disks to straddle the lever and movable to present different fulcrum surfaces to a pipe, a web block rigidly connecting the disks and including a flattened portion to lie against the edge of the lever.

1,805,079. COIN COUNTING MACHINE. EDWARD P. DONNELLAN, Brooklyn, N. Y., assignor to Standard-Johnson Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 15, 1930. Serial No. 444,388. 10 Claims. (Cl. 133—8.)



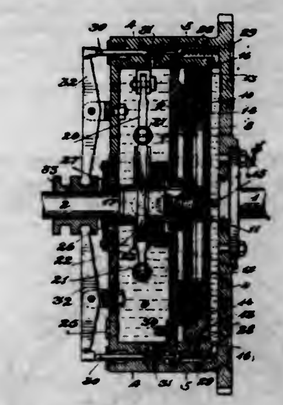
1. In a coin counting machine having a counting mechanism including an actuating star-wheel and lock means for said counting mechanism including a spring biased lock lever; a coin propelling wheel to engage and move coins in actuating relation to said star-wheel, a rotated shaft for driving said propelling wheel, bearings for said shaft, the inners of said bearings being adapted to support the wheel carrying end portion of said shaft subject to vertical play whereby the same may be lifted to raise said propelling wheel out of coin engagement, means to so lift said shaft, and means actuated by a locking movement of said lock lever for operating said lift means.

1,805,080. PISTOL CHARM. SAMUEL DOSICK, Providence, R. I. Filed Oct. 23, 1929. Serial No. 401,652. 3 Claims. (Cl. 42—54.)



2. In a pistol charm, a carrier frame comprising interspaced side walls, forwardly directed arms integral with the lower portions of the walls, a barrel casing pivotally supported by the arms and engageable with the walls, a barrel in the casing, a pivot member in the lower portion of the side walls, a vertical trigger pivoted intermediate its length upon said member, and a spring fixed to the arms and normally out of engagement with the trigger projecting between the side walls in the path of the trigger above the plane of the pivot member.

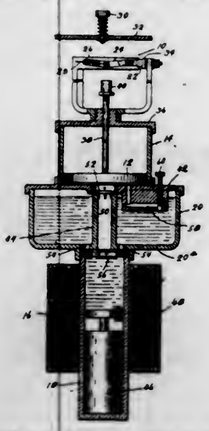
1,805,081. CLUTCH FOR MOTOR CARS. BOHUMIL DRKAL, Buenos Aires, Argentina. Filed Feb. 2, 1929. Serial No. 337,074. 3 Claims. (Cl. 192—85.)



1. A device of the character described having in combination with a driving shaft and a driven shaft, a clutch casing member rotatably secured to the driving shaft and formed with a fluid supply chamber and a compression chamber therein and with inlet and outlet passages from the compression chamber to the supply chamber, a clutch plate rotatively secured to the driven shaft and positioned within the compression chamber, a piston clutch element operable within the compression chamber, to effect coupling engagement with the clutch plate, pumping means within the supply chamber supported to be rotatable with the casing and connected to the inlet passages, actuating means for the pumping means carried by the driven member whereby the fluid will be pumped into the compression chamber in response to relative movement be-

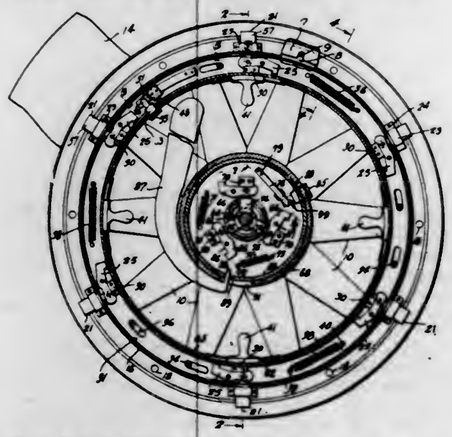
tween the driving and driven shafts and valve means for opening and closing the outlet passages under the control of the operator.

1,805,082. COUNTING RELAY. WILLIAM S. EDSALL, Brookline, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Nov. 19, 1927. Serial No. 234,384. 9 Claims. (Cl. 200—97.)



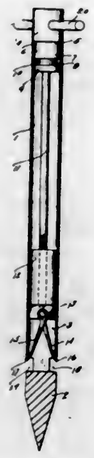
1. A counting relay including a circuit controller adapted to remain in one position until moved therefrom to control its circuit, an operating cylinder, a piston therein normally disposed in the bottom of the cylinder and adapted to return to such position when moved therefrom and being normally free from operative connection with said circuit controller and adapted to actuate said circuit controller when moved to the end of its stroke in said cylinder, a pump piston and cylinder for supplying fluid to said operating piston and cylinder, and a passage between said cylinders providing for free transfer of fluid from said pump cylinder to said operating cylinder, said operating cylinder having a larger volume than the pump cylinder so that it requires a number of strokes of the pump piston to fill the operating cylinder and effect operation of the circuit controller.

1,805,083. LOCK FOR AUTOMOBILE TIRES, WHEELS, AND OTHER DEVICES. CASIMIRO FERRO, Bayonne, N. J. Filed Nov. 25, 1929. Serial No. 409,593. 14 Claims. (Cl. 70—90.)



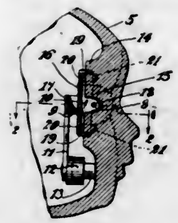
14. In a device for locking an automobile tire rim to a wheel, radially movable securing elements adapted to engage the outer side of the rim and clamp it on the wheel, a pivoted cam member connected to each securing element and having cam surfaces, a movable operating member, means for shifting the operating member in opposite directions, means carried by the operating member to engage said cam surfaces to shift the securing elements in opposite directions, and means for locking the operating member in position to hold the securing elements in clamping position.

1,805,084. TENT STAKE. PETER C. GIANINI, Portland, Oreg. Filed June 24, 1929. Serial No. 373,247. 4 Claims. (Cl. 135—15.)



3. In a device of the class described, the combination of a body element having a driving point and a driving head associated with oppositely disposed ends of the body element, a spindle extending longitudinally of the body element and fixedly secured to the driving head and in threaded engagement with a core slidably disposed within the body element and fastening tongues hingedly associated with the lower extremity of the core and adapted to be extended or repressed as the core is manipulated.

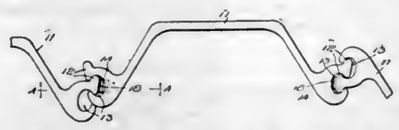
1,805,085. EYE MOUNTING FOR DOLLS. LEO J. GRUBMAN, Belle Harbor, N. Y. Filed Jan. 2, 1926. Serial No. 78,728. 16 Claims. (Cl. 46—40.)



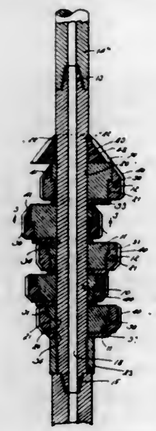
1. An attaching and supporting member for oscillatory eye mountings for dolls having integrally formed parts positioned in angular relation to each other and having means adapted to be impaled in angularly related surfaces internally formed upon the front wall of a doll head.

1,805,086. PILING SPACER. GEORGE A. GUYER, Chicago, Ill. Filed Feb. 15, 1930. Serial No. 428,741. 8 Claims. (Cl. 61—62.)

1. A unitary device of the kind described comprising a relatively thick spacer member, a relatively thin longitudinally extending supporting member and a lateral member projecting from the device, the thickness of the spacing member being less than the distance from the free end of the lateral member to the opposite face of the device.

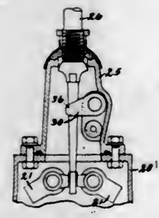


1,805,087. WELL TOOL. LELAND S. HAMER, Long Beach, Calif., assignor, by direct and mesne assignments, of one-half to Kenneth A. Wright, Los Angeles, Calif., and one-half to Ernest Koppl, Long Beach, Calif. Filed Mar. 7, 1927. Serial No. 173,250. 6 Claims. (Cl. 255—74.)



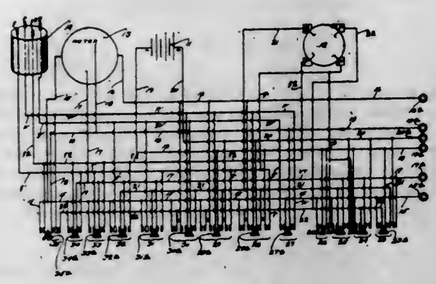
1. A well tool including a vertical shank polygonal in cross sectional configuration, a bearing having an eccentric opening corresponding to the shank to slidably receive it, a cutter mounted for rotation on the bearing, and cooperating shoulders on the cutter and bearing holding the cutter against upward movement on the bearing.

1,805,088. MOTOR VEHICLE LOCK. FRANCIS D. HARDESTY, Dayton, Ohio. Filed June 25, 1923. Serial No. 647,438. 9 Claims. (Cl. 70—127.)



1. In an automotive vehicle provided with a change speed transmission and a motor involving electric ignition, a device included in the transmission tending normally to lock said transmission; means for retaining said device in unlocked position; and means operated upon breaking the ignition circuit to release the retaining means.

1,805,089. RADIO TESTING DEVICE. DOUGLASS HAWLEY, Minneapolis, Minn., assignor to Jewell Electrical Instrument Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 23, 1926. Serial No. 104,044. 37 Claims. (Cl. 250—27.)



1. A testing device of the kind described comprising a plug adapted to be inserted into a socket of an electron tube circuit and having contacts corresponding to those of the removed tube, the contacts of said plug having leads corresponding to the socket contacts, an indicating meter having leads, a socket forming part of the testing apparatus and having connection with the leads extended therefrom, and a plurality of switches, each switch involving a plurality of contacts and the contacts of said switches having leads, certain of which are connected to the several leads above noted, certain of the switch contacts and their leads being arranged for testing of the condition of the several circuits of the electron tube circuit and certain thereof being arranged for testing the condition of a tube inserted in the socket of said testing device, the condition of the tested circuits and the tube to be tested being indicated on said meter.

11. In a testing device for audion circuits, the combination of a connector member adapted to be connected to an audion tube socket and having a plurality of contacts for engagement with the contacts of the socket, conductors leading from said connector contacts, and an electrical measuring instrument connected to predetermined conductors and adapted to determine the voltage conditions existing at the corresponding predetermined contacts of said audion tube socket.

1,805,090. SHUTTLE AND METHOD OF MANUFACTURE. PAUL W. HILLS, Auburn, N. Y., assignor to Allen and Hills, Incorporated, Auburn, N. Y., a Corporation of New York. Filed Sept. 23, 1929. Serial No. 394,551. 10 Claims. (Cl. 139—196.)



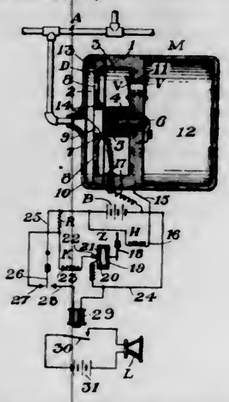
1. In a shuttle, molded end portions and opposed side members having their opposite ends joined to the molded end portions, said side members being reinforced with fabric.

1,805,091. DOORLATCH. GEORGE L. HINMAN, New Haven, Conn., assignor to The Greist Manufacturing Co., New Haven, Conn., a Corporation. Filed Dec. 15, 1927. Serial No. 240,181. 3 Claims. (Cl. 292—164.)



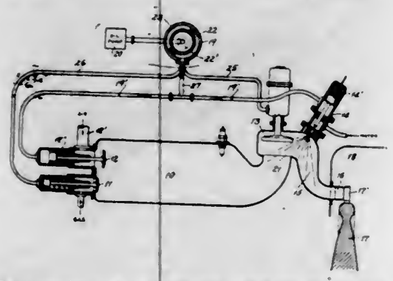
1. A door latch, having a reciprocating latch-bolt; inside and outside handles; inside and outside roll-backs respectively connected with the said handles; and a blocking-finger carried by the inside roll-back and movable by a supplementary reverse movement of the inside handle into the path of movement of the outside roll-back for preventing the retraction of the bolt by the said outside handle.

1,805,092. SIGNALING APPARATUS. HAROLD O. HOLTE, deceased, Pittsburgh, Pa., by Halvor Holte, administrator, Crookston, Minn., assignor to the Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 26, 1926. Serial No. 117,314. 3 Claims. (Cl. 177—352.)



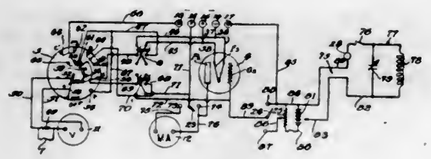
2. A fluid pressure responsive device comprising a chamber having two openings one of which communicates with a fluid pressure system, a closed reservoir communicating with the other opening, a flap valve at each end of said second opening, a diaphragm stretched across said chamber between said two openings, and a microphone having two coacting members one of which is attached to said chamber and the other to said diaphragm.

1,805,093. COOLING DEVICE FOR COMBUSTION GAS TURBINES. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Mar. 12, 1927. Serial No. 174,892. 5 Claims. (Cl. 60—41.)



1. In a turbine, a combustion chamber having an inlet for scavenging air and an outlet for combustion gases, a turbine wheel, nozzles in operative relation to said wheel, a channel connecting said nozzles with said outlet, a valve controlling said inlet, another valve controlling said outlet, and a jet means for injecting a cooling liquid into the stream of scavenging air at a point adjacent to said outlet valve.

1,805,094. SET CHECKER. JOSEPH C. HOOVER, Detroit, Mich., assignor, by mesne assignments, to Jewell Electrical Instrument Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 25, 1926. Serial No. 143,976. 10 Claims. (Cl. 250—27.)



1. In a testing device for audion tube circuits, the combination of a test connector having contacts corresponding to audion tube terminals and adapted to engage the socket contacts of an audion tube circuit, with a plurality of flexible conductors leading from the contacts of said connector to said testing device, electrical measuring means for indicating the electrical conditions existing at predetermined contacts of said audion tube circuit and a unitary rotary selector switch having test indicia for indicating the various tests controlled by said selector switch and having contacts and circuits for selectively connecting said electrical measuring means to said conductors to indicate the various electrical conditions in the audion circuit on said measuring means.

1,805,095. TRAFFIC SIGN STAND. JOSEPH T. HORNI, Newark, N. J. Filed June 11, 1929. Serial No. 370,073. 15 Claims. (Cl. 40—145.)



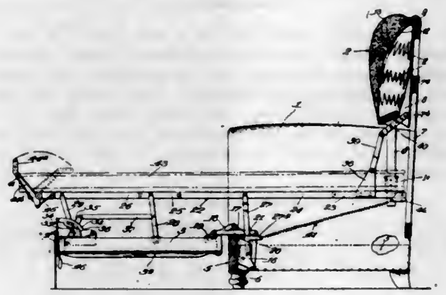
1. In a traffic sign stand, the combination comprising a base plate having a central conical socket, a sign supporting stanchion located centrally in said socket, and wedges in the socket holding the stanchion securely in its central position, said base and said wedges having flanges and bolts passing through orifices in said flanges whereby the wedges may be drawn into the socket and grip the stanchion.

1,805,096. FERTILIZER DISTRIBUTOR. HOWARD M. JOHNSTON and OSBORNE H. SHENSTONE, Toronto, Ontario, Canada, assignors to Massey-Harris Company, Limited, Toronto, Canada. Filed Apr. 11, 1930. Serial No. 443,384. 5 Claims. (Cl. 221—126.)



1. A machine for distributing fertilizer including a receptacle having fertilizer outlets at opposite sides; distributor members extending transversely for causing the fertilizer to be discharged through the outlets; and means connected with the opposite ends of each member for oscillating the members about their centers.

1,805,097. DAVENPORT BED. ADOLPH KROSNER, Naperville, Ill., assignor to Kroehler Manufacturing Company, Naperville, Ill., a Corporation of Illinois. Filed Feb. 17, 1930. Serial No. 428,890. 2 Claims. (Cl. 5—59.)



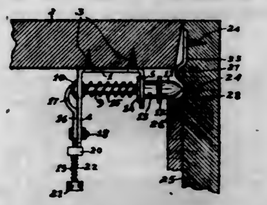
1. A davenport bed comprising a main frame including stationary base and back frames, a seat frame hinged to said base frame, an extensible bed frame consisting of pivotally connected sections, levers connecting said bed frame sections with said base and seat frames whereby the same are simultaneously elevated and extended in the swinging of said seat frame into open position, a back-rest consisting of a frame bearing against said back frame and having rails extending downwardly adjacent each end thereof and slidably mounted in stationary guides on said main frame, and links operatively connecting the adjacent bed section with said back-rest at points adjacent the upper portion of said rails, whereby the latter is raised and lowered with the movement of said bed section to and from extended position.

1,805,098. DYE BATH AND PROCESS OF DYEING. RICHARD G. KNOWLAND, Wollaston, and NATHANIEL KOSAK, Everett, Mass., assignors to Nashua Manufacturing Company, Nashua, N. H., a Corporation of New Hampshire. Filed Mar. 12, 1928. Serial No. 261,178. 8 Claims. (Cl. 8—5.)

1. That improvement in methods of vat dyeing fabrics which consists in dyeing the goods in a dye bath made alkaline by the addition of a suitable quantity of a quarternary ammonium base, and subsequently, while the goods still contain a considerable percentage of said bath, drying the goods at a temperature serving to decompose said base.

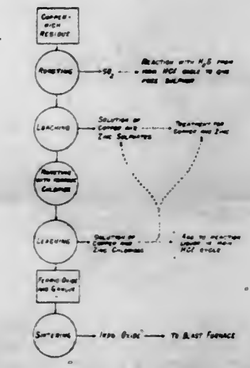
8. A vat dye bath containing suitable proportions of a dye, a reducing agent, and a quarternary ammonium base.

1,805,099. DOOR FASTENER. FREDERICK KUMBER, Pittsburgh, Pa. Filed Nov. 29, 1929. Serial No. 410,356. 2 Claims. (Cl. 292—70.)



1. In combination, a door fastener comprising a supporting bracket provided with a pair of spaced rearwardly extending arms, a sleeve mounted and longitudinally shiftable in the outer of said pair of arms and provided with a flange disposed on the inner side of said outer arm, a latching bolt shiftably extending through the inner of said pair of arms and through said sleeve, a latching tip removably connected to the outer end of said latching bolt and abutting against the outer end of said sleeve, a head formed at the inner end of said latching bolt and abutting against said inner arm for limiting the outward movement of said latching bolt, a spring mounted on said latching bolt intermediate of said pair of arms and engaging said sleeve flange for normally forcing said latching bolt outwardly to the latching position, and means carried by said inner arm and operable for engaging said head to secure said latching bolt in the latching position.

1,805,100. TREATMENT OF COPPER RICH MATERIAL. STANLEY ISAAC LEVY, London, England. Original application filed Mar. 1, 1928, Serial No. 258,439, and in Great Britain Feb. 10, 1928. Divided and this application filed Apr. 26, 1929. Serial No. 358,350. 1 Claim. (Cl. 75—18.)

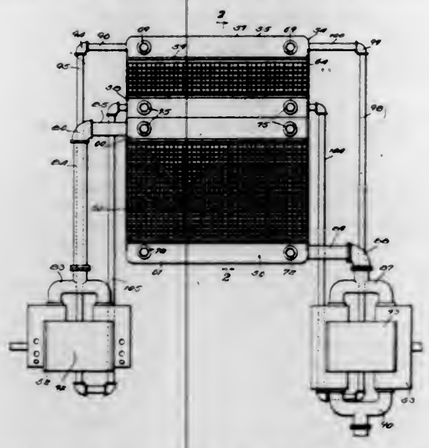


A process for the recovery of copper and zinc from the residues left on treatment of the "mainly soluble" residue from iron pyrites with hydrochloric acid, consisting in roasting such residue in air, whereby the copper and zinc are converted into sulphates, extracting the roasted residue thus obtained with solvent, chloridizing the residue left after extraction of the roasted residue by roasting with ferrous chloride, and extracting the residue after the chloride roasting operation.

1,805,101. HEAT EXCHANGE DEVICE. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Mar. 25, 1927. Serial No. 178,490. 4 Claims. (Cl. 257—137.)

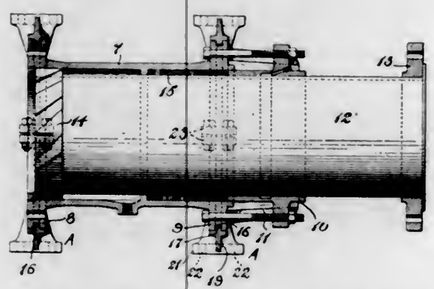
4. In a device of the kind described, the combination of a plurality of radiator units arranged in the same plane,

one of said units providing an element of a liquid passage, and the other providing an element of a fluid passage, air advancing means arranged at one side of said units in a plane substantially parallel to the plane of said radiator units and providing means for advancing air



through said radiator units, a housing, said radiator units being extended across an opening in said housing, said housing having means communicating with the atmosphere and said housing providing an element of a support for said air advancing means.

1,805,102. EXPANSION JOINT AND ANCHORAGE THEREFOR. GEORGE F. MURPHY, Philadelphia, Pa. Filed Oct. 12, 1926. Serial No. 141,171. 3 Claims. (Cl. 248—31.)



3. An anchor adapted to support an expansion joint provided with an annular flange at an end thereof for attachment, said anchor comprising a split ring adapted to embrace the flange, the two parts of which are complementary, each part being provided with a base pad and each being provided at its ends with a pad for securing the parts together, the body portion of each part being provided with means adapted to interlock with the flange to prevent displacement of the joint longitudinally.

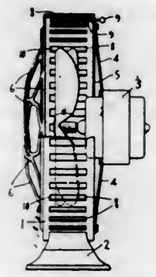
1,805,103. RUBBER ACCELERATOR. DONALD H. POWERS, Penns Grove, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 10, 1927. Serial No. 190,383. 10 Claims. (Cl. 18—53.)

10. The process of treating rubber, which comprises incorporating with the rubber a vulcanizing agent and about 0.5% of the reaction product of 1 mole of carbon disulfide and 2 moles of morpholine and thereafter vulcanizing at 20 pounds steam pressure.

1,805,104. PORTLAND CEMENT AND PROCESS FOR PRODUCING THE SAME. ELLIS WATMOUGH REED-LEWIS, Detroit, Mich., assignor to The Super Cement Co., a Corporation of Michigan. Filed Aug. 11, 1927. Serial No. 212,357. 4 Claims. (Cl. 106—25.)

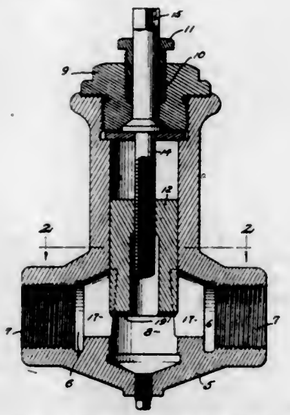
1. A Portland cement consisting of a ground clinker and gypsum, said gypsum having tannin incorporated therein, and a quantity of chemically active silica substantially sufficient to combine with the calcium oxide liberated upon the hydration of the mixture.

1,805,105. ELECTRIC FAN. CLARENCE RINGWALD, North Hampton, Ohio, assignor to Robbins & Myers, Inc., Springfield, Ohio, a Corporation of Ohio. Filed Sept. 30, 1929. Serial No. 396,077. 2 Claims. (Cl. 230—275.)



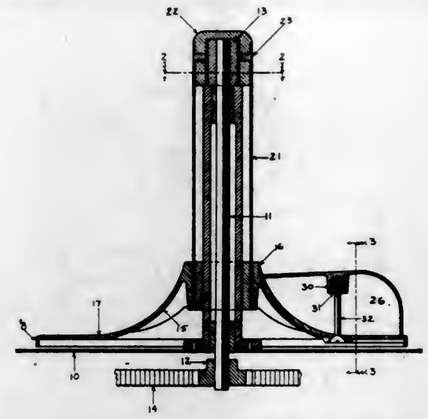
1. In a portable ventilating fan, a base adapted to set on a desk or similar structure, a cylindrical casing attached to said base and extending upwardly therefrom, an electric motor and fan supported rigidly by said casing with the fan housed by said casing, said casing being open at its ends and also having air admission openings about its periphery, and means for regulating the size of said peripheral openings.

1,805,106. VARIABLE FLOW RESISTANCE. HENRY H. ROBINSON, Los Angeles, Calif. Filed Jan. 27, 1930. Serial No. 423,757. 2 Claims. (Cl. 251—62.)



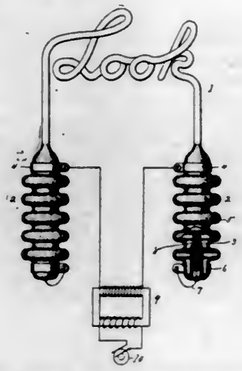
1. Construction of the character described, comprising; a body member having a straight flow passage therethrough, and a laterally extending cylindrical bore intersecting said passage; and a cylindrical plug within said bore, adapted for being longitudinally positioned therein to variably intercept said passage, said passage being of triangular cross-section where it is intersected by said bore; one pair of the opposed apexes of the triangular sections of the flow passage being rounded, spaced from the main wall of the passage, and being so disposed as to afford the only openings through the flow passage when the plug is in its nearly closed position.

1,805,107. AGITATOR MECHANISM FOR WASHING MACHINES. JOHN ROCKE, Bloomington, Ill. Filed Dec. 15, 1927. Serial No. 240,086. 5 Claims. (Cl. 259—101.)



1. An agitator for washing machines comprising a metal disk, a hollow blade of plastic material, the edges of said hollow blade contacting with said disk throughout their length, and means for detachably clamping said blade to said disk so as to form a water-tight joint.

1,805,108. ELECTRIC DISCHARGE DISPLAY DEVICE. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Patents Company, New York, N. Y., a Corporation of Delaware. Filed June 26, 1926. Serial No. 118,865. 8 Claims. (Cl. 176—126.)

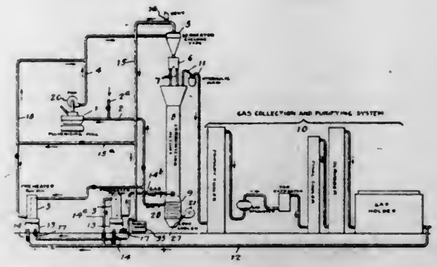


1. An electric discharge device comprising, in combination, a container having translucent dielectric walls and containing a monatomic gas and gas absorptive, conductive discharge electrodes, with inductive discharge electrodes and means for maintaining said inductive discharge electrodes at a higher potential than said other electrodes.

8. In an electric discharge device, means for continuously occluding ordinary gases and continuously liberating occluded or mechanically entangled rare gases.

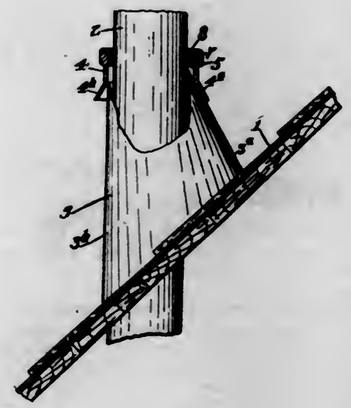
1,805,109. PROCESSING OF COAL. WALTER RUNGE, East Orange, N. J., and EDWIN A. PACKARD, Yonkers, N. Y., assignors, by mesne assignments, to International Coal Carbonization Company, a Corporation of Delaware. Filed Mar. 12, 1925. Serial No. 14,998. 9 Claims. (Cl. 202—16.)

1. In the process of carbonizing powdered coal, the steps of pulverizing and drying coal prior to carbonization comprising feeding coal to a mill wherein all of the coal fed thereto is pulverized, continuously introducing a hot gaseous medium into the mill and carrying out the pulverizing operation, continuously conducting the pulverized coal in suspension in said gaseous medium from the



mill and introducing a gaseous medium hotter than the coal and gas leaving the mill, but not sufficiently hot to cause ignition of the coal into the mixture while in transit on the way to a place where the coal is separated from the gaseous medium, and separating the coal thus treated from the gaseous medium.

1,805,110. ROOF JOINT. JOHN LEO SCHALLER, Wellesley, Mass. Filed Aug. 19, 1925. Serial No. 51,262. 4 Claims. (Cl. 285—31.)

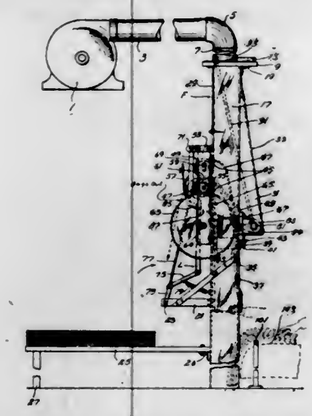


1. A roof joint comprising a flexible frustro-conic riser and a rigid collar having an interiorly beveled lower skirt bearing surface of irregular conic section of varying inclination telescopically fitted upon said riser and independently rotatably adjustable thereon into a position wherein a portion of the zone of mutual bearing contact between the riser and the bevelled skirt of the collar occupies a secant plane which is generally horizontal.

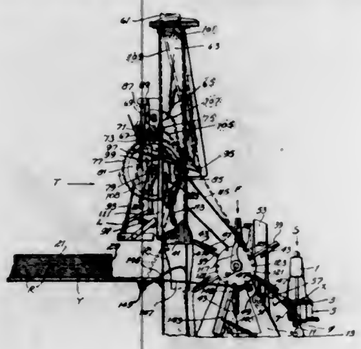
1,805,111. BAG TURNING APPARATUS. CHARLES F. SPARKS, St. Louis, Mo. Filed June 7, 1926. Serial No. 114,285. 14 Claims. (Cl. 223—20.1.)

1. A bag turning machine comprising a substantially vertical casing, valved means for intermittently drawing

air upwardly in the casing to turn a bag therein, and discharge rolls forming a portion of the wall of the casing at an upward point adapted to feed bags from said casing, said means for intermittently drawing air being operable independently of the roll surfaces.



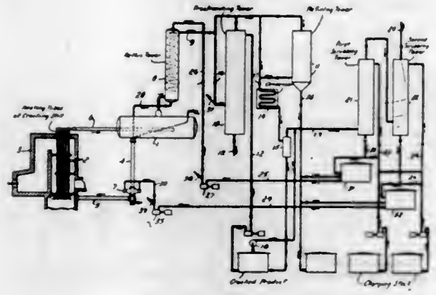
1,805,112. APPARATUS FOR MANUFACTURING BAGS. CHARLES F. SPARKS, St. Louis, Mo. Filed Nov. 22, 1926. Serial No. 149,872. 6 Claims. (Cl. 112—10.)



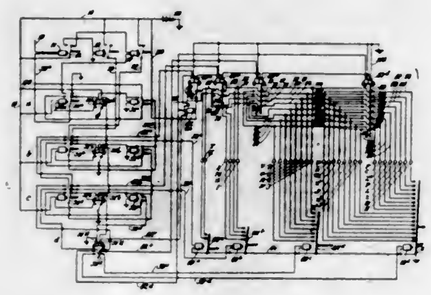
1. Bag manufacturing apparatus comprising a sewing machine, feeding apparatus working in connection with the outlet of the sewing machine, clamping means on said feeding apparatus adapted to effect support of a bag such that the bag hangs downwardly and a bag turner cooperating with the feeding apparatus to receive bags therefrom and turn them.

1,805,113. ART OF CRACKING HYDROCARBONS. GEORGE H. TABER, Jr., Rye, N. Y., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Oct. 11, 1928. Serial No. 311,738. 2 Claims. (Cl. 196—48.)

1. In cracking operations for the production of lighter hydrocarbon oils from heavier hydrocarbon oils in which vapors and gases are taken off and subjected to a condensing operation, the improvement which comprises subjecting the gas and vapor mixture remaining uncondensed thereafter successively to a first absorbent treatment with raw stock subsequently supplied to the cracking operation and then to a second absorbent treatment with raw stock subsequently supplied to the cracking operation, subjecting the vapors taken off from the cracking operation to a refluxing operation before subjecting them to the first mentioned condensing operation and introducing the raw stock containing constituents absorbed in the first absorbent treatment into direct contact with the vapors therein, supplying reflux condensate and unvaporized raw stock from this refluxing operation to the cracking operation proper, and supplying the raw stock containing constituents absorbed in the second absorbent treatment to the cracking operation so that these absorbed constituents must pass with the stock directly to the zone of maximum temperature in the cracking operation proper.



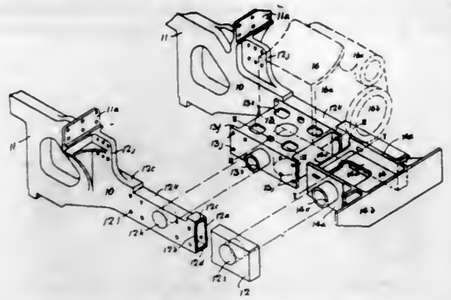
1,805,114. PRINTING TELEGRAPH RECEIVER. ROBERT TEVIS, Jamaica, N. Y., assignor of six-tenths to Edwin B. Lapham, Hoboken, N. J. Filed Apr. 19, 1927. Serial No. 185,055. 14 Claims. (Cl. 178—26.)



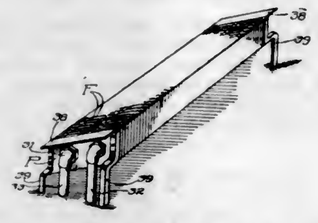
1. In an electric receiving apparatus adapted to receive intermittent electric impulses of two kinds, a pair of electromagnets, a normally open electric circuit, a switch normally connecting one of said magnets into the circuit, means controlled by one of said kinds of impulses for throwing the switch to connect the other of said magnets into the circuit, and means automatically operable during intervals between said impulses for closing said circuit to energize the magnet connected therein.

1,805,115. LOCOMOTIVE STRUCTURE. CHARLES W. TODD, Schenectady, N. Y. Original application filed Mar. 28, 1928, Serial No. 265,388, now Patent No. 1,731,511, dated Oct. 15, 1929. Divided and this application filed Oct. 1, 1929. Serial No. 396,425. 18 Claims. (Cl. 105—44.)

1. A cross-tie for locomotive side frames, comprising a pair of elongated vertical side walls, a transverse wall connecting the side walls, and a dowel projecting laterally outward from each side wall, adapted for engagement in a complementally shaped aperture in a side frame to hold the same against both vertical and longitudinal relative movement.

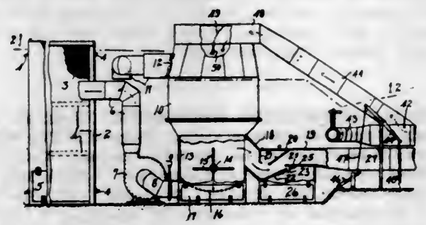


1,805,116. RADIATOR. REUBEN N. TRANE, La Crosse, Wis. Filed Apr. 23, 1926, Serial No. 104,196. Renewed Oct. 22, 1930. 20 Claims. (Cl. 257—136.)



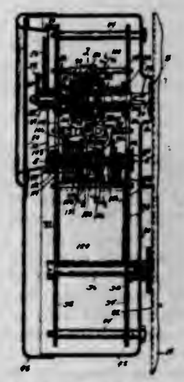
8. A radiator unit comprising horizontal heat tubes, a multiplicity of vertically disposed radiating fins mounted on the tube in spaced relation, a pair of end plates mounted on the heat tube adjacent the first and last fin respectively, heating fluid inlet and outlet connections for the heat tube beyond the respective end plates, offset flanges on the end plates extending at right angles to the direction of air flow through the radiator for overlying the space occupied by said connections whereby the outer corners of the flanges define an all over perimeter for the radiator unit within which air may flow only between the fins and depending legs secured to the end plates for supporting the unit a fixed distance above the floor, the lower ends of the legs being positioned substantially in alignment with the outer corners of said flanges.

1,805,117. APPARATUS FOR TREATING FIBERS AND THE LIKE. KILIAEN M. VAN RENSSELAER, Woodmere, and HUGO R. SWANSON, Brooklyn, N. Y., assignors to Triangle Kapok Machine Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed Oct. 22, 1929. Serial No. 401,584. 4 Claims. (Cl. 19—144.)



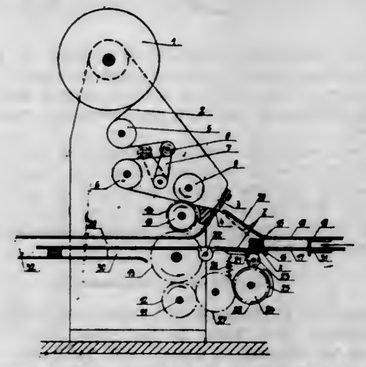
1. In a fiber treating apparatus of the type described the combination comprising an aeration tank, a rotatable paddle in the base of the tank, a closed circulatory pipe system connecting the base of the tank with the top, means in the pipe system for causing air to circulate therethrough so as to be delivered into the top of the tank and removed from the bottom, a screen in the aeration tank below the paddles and suction means connected to the aeration tank below the screen for removing the dust and dirt therefrom.

1,805,118. MAXIMUM DEMAND GAS METER. HANS VITTINGHOFF, Winchester, Mass., assignor, by mesne assignments, to Stone & Webster, Incorporated, a Corporation of Delaware. Filed June 16, 1926. Serial No. 116,457. 23 Claims. (Cl. 235—104.)



1. A gas meter having an enclosing casing, internally-contained metering mechanism having an exposed shaft, a maximum demand metering mechanism disposed externally of said casing and having a shaft which has a detachable connection with said exposed shaft which is disconnectible by movement of said demand mechanism axially of said shaft, and a casing enclosing said maximum demand metering mechanism and also enclosing said exposed shaft, said casing having a front opening, a removable closure therefor and means detachably securing said casing to said gas meter casing and accessible only through the aforesaid front opening when the closure therefor is removed.

1,805,119. APPARATUS FOR COMBINING HORIZONTAL LAYERS OF ARTICLES. ROBERT WILHELM VOIGT, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Müller & Co., Dresden, Germany. Filed May 21, 1929, Serial No. 364,832, and in Germany Mar. 2, 1928. 7 Claims. (Cl. 226—5.)



1. Apparatus for combining horizontal layers of articles, such as cigarettes fed along a feed track, with

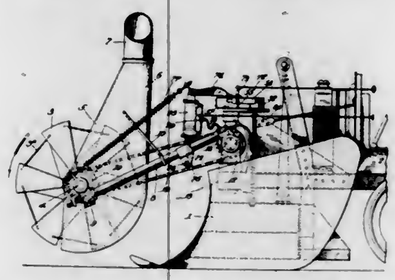
a paper blank or the like, comprising means for depositing the paper blank on a support, means for moving the support vertically to the level of the feed track and means for pushing the articles forwards together with the blank.

1,805,120. CONTROL APPARATUS FOR POWER-TRANSMITTING MECHANISM. RUDOLF VON ERHARDT, South Hadley, Mass. Filed Feb. 15, 1929. Serial No. 340,144. 12 Claims. (Cl. 74—39.)



4. The combination with a change-speed gear transmission mechanism including a clutch therefor, of a control device for shifting gears of said transmission mechanism, said control device presenting a single movable element to the operator's hand, means for relieving said movable element from any force reactions substantially exceeding those set up between the cooperating faces of said gear transmission mechanism while said mechanism is being operated with said clutch in disengagement, said means including instrumentalities whereby after operatively establishing a chosen speed ratio by said single movable element a further movement of the said single movable element will engage and the reversal of said further movement re-disengage said clutch.

1,805,121. SNOW REMOVER. ARTHUR B. WEBB, Milwaukee, Wis., assignor to The Rightway Corporation, a Corporation of Indiana. Filed Jan. 9, 1928. Serial No. 245,336. 20 Claims. (Cl. 37—43.)

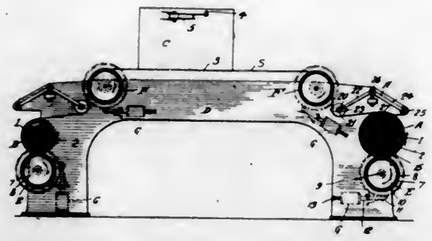


1. The combination with a snow plow, of a rotary snow remover narrower than the plow mounted to project in advance of the latter to form a narrow path in the snow in advance of the plow, and means for rotating said remover.

9. The combination with a vehicle, of a boom mounted on the vehicle so as to project therefrom, a rotary wheel mounted on the outer end of said boom so as to revolve about an axis transverse to the boom, said wheel comprising radial trough-shaped buckets, and means for rotating said wheel.

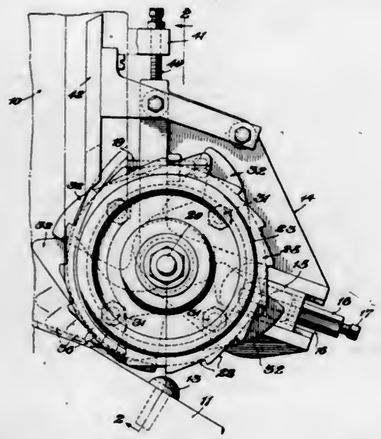
1,805,122. SYNCHRONOUSLY POSITIVE FEED. EMIL WEINHEIM, New York, N. Y. Filed Mar. 27, 1928. Serial No. 265,208. 1 Claim. (Cl. 242—65.)

In combination in a machine for propelling a strip intermittently measured distances, an unwinding roll for said strip; a winding roll for said strip; several rotary propellers adapted frictionally to engage said strip one at the locality of said unwinding roll, one at the locality of said winding roll and one or more at localities intermediate said winding and unwinding rolls; an intermittent



actuator; power means controlled by said actuator for simultaneously imparting an increment of rotation to each of said rotary propellers; and a resilient take-up for said strip comprising a deflector of substantial mass adapted to engage and deflect said strip from its tangential path between two of said rotary propellers.

1,805,123. CLEARANCE MECHANISM FOR IMPROPERLY ALIGNED ARTICLES. RICHARD LESTER WILCOX, Waterbury, Conn., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 20, 1930. Serial No. 422,147. 13 Claims. (Cl. 10—162.)

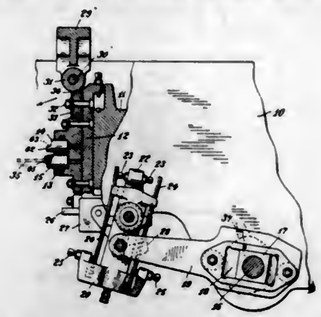


1. In a clearance mechanism; a rotary member; a clearance wheel connected therewith; a kicker associated with the rotary member upon a pivot mounting, the axis of which is substantially parallel with that of the rotary member; and cam means for actuating the kicker upon its pivot mounting located nearer the axis of the rotary member than the kicker.

1,805,124. UPSETTING MECHANISM. RICHARD LESTER WILCOX, Waterbury, Conn., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 23, 1927. Serial No. 193,648. 3 Claims. (Cl. 78—81.)

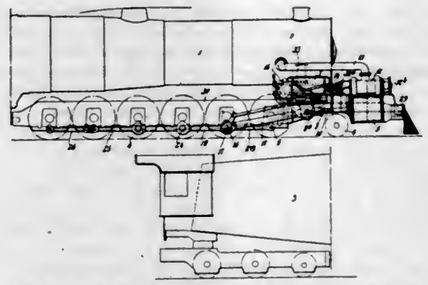
1. The method of automatically upsetting a rod by first rigidly gripping the rod at a distance back of its end, then applying lateral pressure to one side of that portion of the rod projecting beyond the gripping means

to bend such portion at an angle to that part thereof within the gripping means and finally, while the rod is still retained by the gripping means, apply upsetting



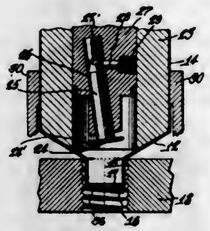
pressure to the outer end of the bent portion of the rod in a path substantially parallel to the axis of the turned portion to upset the same.

1,805,125. LOCOMOTIVE CONSTRUCTION. WILLIAM E. WOODARD, Forest Hills, N. Y. Filed May 8, 1928. Serial No. 276,024. 18 Claims. (Cl. 105—37.)



1. A locomotive including, in combination, a boiler and smokebox, a lending truck, six pairs of drivers, saddle and cross head guides between the leading truck and the forward driver, a pair of cylinders in advance of the saddle adapted to drive all of said drivers and multipart articulated main driving rods coupled to #2 drivers.

1,805,126. THREADING METHOD AND MECHANISM. EDWIN H. BARKER, Moylan, Pa., assignor to A. H. Wirz, Inc., a Corporation of Pennsylvania. Filed Nov. 10, 1928. Serial No. 318,334. 17 Claims. (Cl. 153—72.)



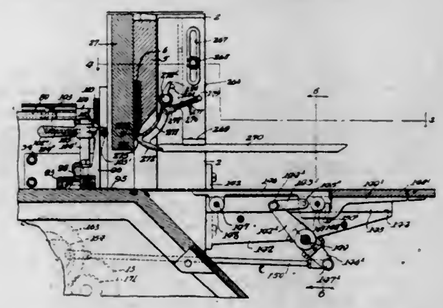
3. The method of forming a thread upon an initially closed discharge nipple of a collapsible tube, which consists in forming the nipple with thin side walls, supporting the side walls externally along spiral lines corresponding with the bottoms of the thread grooves, and rolling the thread from the interior outwardly at an angle to the axis of the thread.

15. In a machine for rolling a thread from the inside outwardly of a cylindrical discharge nozzle integral with a collapsible tube, a rotatable shaft, a mount for the shaft adapted to fit within the tube, a removable external thread form adapted to surround the nipple, an operating tool carried by the shaft and means for rotating the shaft.

1,805,127. PROCESS FOR CONCENTRATING AQUEOUS SOLUTIONS OF LOWER ALIPHATIC ACIDS. JOSEPH BILLING, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed July 1, 1929, Serial No. 375,341, and in Great Britain July 11, 1928. 12 Claims. (Cl. 260—122.)

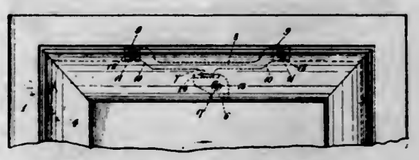
1. Process for concentrating aqueous solutions of lower aliphatic acids comprising concentrating in a plurality of stages by extraction with solvent media, employing media, for the various stages such that the ratio of the solubility of the lower fatty acid in the extracting medium to that of water in the extracting medium in the ternary mixture increases successively from stage to stage.

1,805,128. PAPER CUTTING AND TRIMMING MACHINE AND GAUGE AND GAUGE-STOP, CARRIER, HOLD-DOWN, AND SAFETY MECHANISM THEREFOR. EDWARD M. BRACKETT and DIETRICH DANEKE, Topeka, Kans., assignors to Edward M. Brackett and Fred M. Brackett, Copartners doing business under the firm name and style of The Brackett Stripping Machine Company, Topeka, Kans. Filed Apr. 30, 1928. Serial No. 273,967. 10 Claims. (Cl. 164—51.)



1. In a cutting machine having a movable knife and knife-operating means, the combination of a feed table and a movable carrier table located on opposite sides of the knife, a supporting track upon which said carrier table is reciprocatingly mounted and movable toward and from the knife, and carrier-table operating means connected with the carrier table, including means for regulating and coordinating the operations of the carrier table relatively to the movements of the knife.

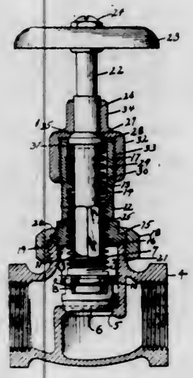
1,805,129. LATCH FOR DOORS. JAMES P. BURT, Taunton, Mass., assignor to Glenwood Range Company, Taunton, Mass., a Corporation of Massachusetts. Filed Nov. 27, 1929. Serial No. 410,104. 4 Claims. (Cl. 292—76.)



1. In a door assembly having a casing member enclosing a doorway and a door member controlling the doorway,

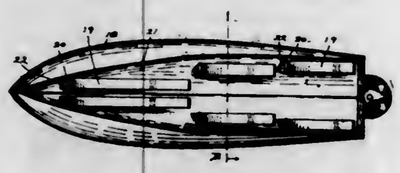
releasable means for holding the door closed comprising a keeper secured to one of said members, a resilient bar secured to the other of said members, means for securing the opposite ends of said bar to said other of the members, and a tongue connecting with said bar between the opposite secured ends thereof with extension through the doorway to have releasable engagement with the keeper when the door is in a closed position.

1,805,130. VALVE. NICHOLAS DE VITO, St. Louis, Mo. Filed Sept. 27, 1928. Serial No. 308,667. 1 Claim. (Cl. 251—47.)



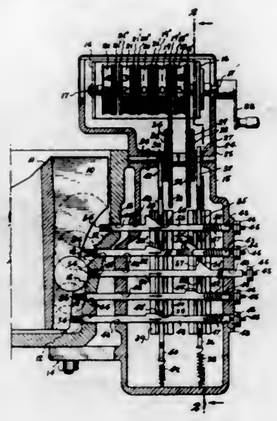
A valve having a body portion and a valve seat formed in the body portion of said valve, a plug for selective engagement in the valve seat of the body portion of said valve, an auxiliary stem, said plug secured to said stem, a bonnet, said auxiliary stem secured in said bonnet, a nut, said nut securing said bonnet to the body portion of said valve, a valve stem having one end in sliding engagement in a rectangular hole in said auxiliary stem, an annular beveled ground seat formed on said valve stem, a ground seat steam nut in rotative contact with a cylindrical portion of said valve stem and securing the valve stem in operative position relative said bonnet, an annular beveled ground seat formed in said ground seat steam nut, the ground seats of said valve stem and said ground seat steam nut held together in sliding engagement by a spring enveloping said valve stem, resting at one end on an internal annular flange formed in said bonnet and in contact with a washer at its other end, which washer is in contact with a section of said valve stem.

1,805,131. BOAT. THEODORE LEWIS DONALDSON, Poughkeepsie, N. Y., assignor to Jacob Ruppert Schalk Rhinebeck, N. Y. Filed June 8, 1928. Serial No. 283,949. 1 Claim. (Cl. 114—66.5.)



In a boat of the class described and in combination with a bottom and a keel, of a series of rectangular planes disposed each side of the keel in a staggered position and having their forward ends secured to the boat bottom, and their rear ends secured thereto at an angle therewith.

1,805,132. COIN COUNTING MECHANISM. EDWARD P. DONNELLAN, Brooklyn, N. Y., assignor to Standard-Johnson Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 19, 1927. Serial No. 234,312. 4 Claims. (Cl. 133—8.)



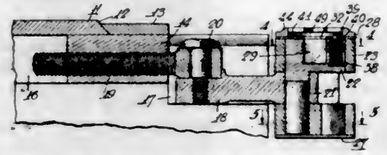
1. An accumulating register for counting coins according to their values, comprising a series of registering wheels having actuating gears and carry over means intermediate adjacent wheels, a vertically reciprocable units rack plate, intermediate transmission means between the actuating gear of the units registering wheel and said units rack plate, a vertically reciprocable tens rack plate, intermediate transmission means between the actuating gear of the tens registering wheel and said tens rack plate, a series of slidable cam rods corresponding to the respective denominations of coins to be counted and adapted to be actuated by the coins, said cam rods having lift cam elements directly cooperating with one or the other of said rack plates according to the denomination of coin by which a particular cam rod is actuated, said lift cam elements being of various sizes proportional to the value of the different coins, said rack plates having abutments engageable by said lift cam elements.

1,805,133. APPAREL GARMENT. EWEN COOPER DUFF, New York, N. Y., assignor to Kops Bros. Inc., New York, N. Y., a Corporation of New York. Filed Aug. 3, 1928. Serial No. 297,342. 3 Claims. (Cl. 2—30.)



1. In an apparel garment, a step-in girdle comprising a front member, a back member, and side members of elastic material, a brassière comprising a front member, a back member and side members all of inelastic material, the lower edge portions of the side members and the back member of the brassière underlying the upper portions of the side members and back member of the girdle, the distant upper edge portions of the back member of the girdle being permanently connected to the distant edges of the lower portions of the back member of the brassière along substantially vertical lines each extending from the upper edge of the girdle to the lower edge of the brassière the back member of the girdle being further permanently connected to the back of the brassière by elastic straps, the side members of the girdle being otherwise unconnected to the side members of the brassière.

1,805,134. PLATE LOCKING MECHANISM FOR PRINTING PRESSES. WILLIAM DURRANT, Plainfield, N. J. Filed Oct. 16, 1928. Serial No. 312,785. 11 Claims. (Cl. 101—378.)



1. In a locking mechanism of the character described, a thrust block, a clamping member movable with respect to the thrust block and including a crank pin, means operatively connecting the clamping member to the pin, and a guide engaging the free end of the crank pin.

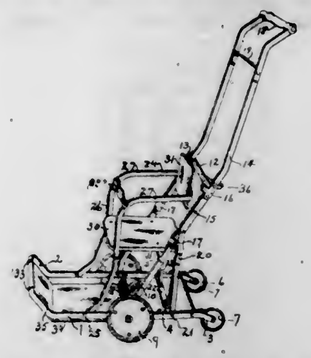
1,805,135. BABY CARRIAGE. JOHN A. EBERLE, St. Louis, Mo., assignor to The Perfection Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 24, 1927. Serial No. 215,013. 1 Claim. (Cl. 280—41.)



In a baby carriage, a rigid body frame, a flexible body carried thereby, a foldable wheel mounted frame supporting said body frame, a plurality of transverse braces connecting the members of said wheel mounted frame, said transverse braces being distributed along the length of said flexible body when folded and arranged to decrease the depth of said flexible body, a folding handle, and an awning on said handle, said handle and awning adapted to lie in close proximity to said body frame to retain bedding within the body when the device is folded.

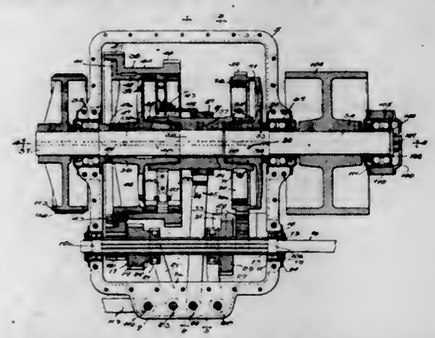
1,805,136. CHILD'S VEHICLE. JOHN A. EBERLE, St. Louis, Mo., assignor to The Perfection Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 22, 1928. Serial No. 301,357. 3 Claims. (Cl. 280—36.)

1. In a child's vehicle, a carriage frame, wheels mounted thereon, a rigid chair frame pivotally connected thereto, a chair supporting frame pivotally connected to the carriage frame and supporting the chair frame, a brace serving as a prop between the carriage frame and chair



supporting frame, and means for holding the brace in its propping position, said chair frame, chair supporting frame and brace being adapted to fold upon the carriage frame on releasing the holding means.

1,805,137. TRANSMISSION AND REVERSE GEAR. JAMES B. FISHER and JAMES E. DE LONG, Waukesha, Wis., assignors to Waukesha Motor Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Nov. 15, 1928. Serial No. 319,687. 2 Claims. (Cl. 74—59.)

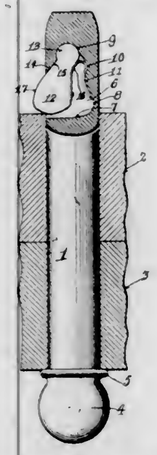


1. In a transmission, a driven shaft, a forward drive gear structure having a hub loose on the shaft, a reverse drive gear structure having a hub loose on the shaft, a driving hub keyed on the shaft between the gear structures and having its ends recessed, the recessed ends of the driving hub providing sleeves receiving the hubs of and extending into the gear structures, said gear structures being held against movement away from each other and the driving hub acting to space the gear structures apart and to hold them against movement toward each other, said gear structures being open at their inner ends and constituting clutch drums, means at the ends of said sleeves and cooperating with the drums for clutching either of the gear structures, optionally, to the driven shaft, a drive shaft, and means for establishing driving connections between the drive shaft and either of the gear structures, optionally.

1,805,138. COUPLING PIN. FIELD FREDENDALL, Kaukauna, Wis. Filed Mar. 22, 1929. Serial No. 349,253. 1 Claim. (Cl. 85—3.)

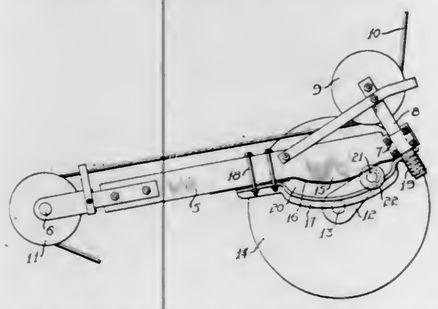
A coupling pin having a cavity extending through one wall, one end wall of the cavity extending transversely of the pin and the other wall rounded to form an arcuate seat, a catch member formed with a rounded head adapted to be loosely mounted in the arcuate seat, the inner lon-

gitudinal wall of said cavity having a curved shoulder with oppositely curved portions upon the sides of the shoulder, a U-shaped spring having one side conforming to the inner wall of the cavity and the other side bearing against the catch member to normally project a



portion of the catch member beyond the outer surface of the pin, the normally extending portion of the catch member having a rounded surface adapted to be engaged for moving the catch member into a cavity within the outer contour of the pin, and means for limiting the movement of the catch member from the cavity.

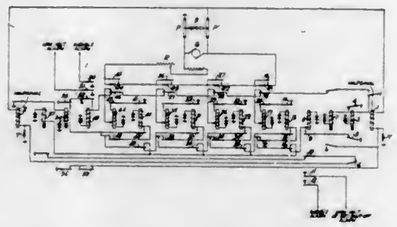
1,803,139. DRILLING MACHINE. BRUCE Z. GOOD, Tiffin, Ohio, assignor to The Loomis Machine Company, Tiffin, Ohio, a Corporation of Ohio. Filed Jan. 23, 1930. Serial No. 422,941. 1 Claim. (Cl. 255—11.)



In a drilling machine, the combination of a spudding beam pivoted at its rear end, a guide mounted on the forward end of said beam, a flexible line associated with said guide, said beam having a slot extending longitudinally of its front end, and a crank rotating about a horizontal axis and having a pin riding in said slot to rock the beam and thereby control the tightening and the releasing of said line, said slot being curved upwardly toward each end.

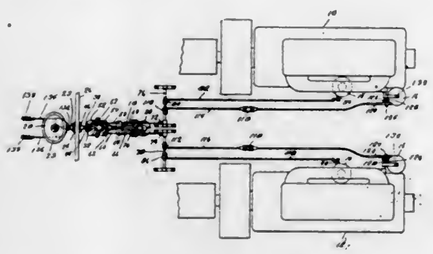
1,805,140. VOLTAGE REGULATING SYSTEM. KENNETH W. GRAYBILL, Villa Park, Ill., assignor to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 5, 1929. Serial No. 390,474. 3 Claims. (Cl. 171—314.)

1. In a battery charging system employing a constantly running generator for supplying charging current at a variable rate to a storage battery having predetermined high and low voltage limits, a plurality of resistance elements in series with the generator field, a low voltage test relay normally bridged across the terminals of said battery and adapted to release each time the battery voltage drops below said low limit, a series of relays, one relay for each of said resistance elements, operated one at a time successively with each release of said loy relay to shunt out its associated resistance to increase the charging rate of said generator, a high voltage test relay



normally bridged across the terminals of said battery and adapted to energize each time said battery voltage rises above said high limit, and a second series of relays, one associated with each of said first series of relays and operated one at a time successively with each energization of said high relay to release the associated relay of the first series to remove the shunt about the associated resistance to decrease the charging rate of said generator.

1,805,141. STEERING MECHANISM FOR TWIN ENGINE TRACTORS. ORRIS A. HARKNESS, Veazie, Me., assignor to Great Northern Paper Company, Millinocket, Me., a Corporation of Maine. Filed May 28, 1928. Serial No. 281,033. 9 Claims. (Cl. 180—17.)

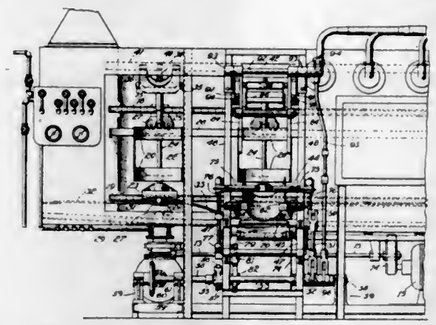


1. Steering mechanism for twin engine tractors comprising throttle operating members each independently associated with a separate engine and both arranged to move in the same direction to control their respective engines in the same sense, a steering shaft rotatable in opposite directions, and members having independent reversely screw threaded driving connections with said shaft and movable respectively toward and away from each other on opposite movements of said shaft and having operative connections with said throttle operating members whereby a rotation of the shaft in one direction advances one and simultaneously retards the other throttle operating member.

1,805,142. UNLOADING MECHANISM FOR CAN WASHING MACHINES. IRVING R. HIPPENMEYER, Waukesha, Wis., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1929. Serial No. 376,255. 6 Claims. (Cl. 29—84.)

1. In a can washing machine, a can unloading mechanism comprising a chute operable to receive a can in inclined position and to swing said can to upright position, an operatively mounted bar having a portion extending

transversely of said chute to engage and retain said can therein, means operable by said chute for disengaging said

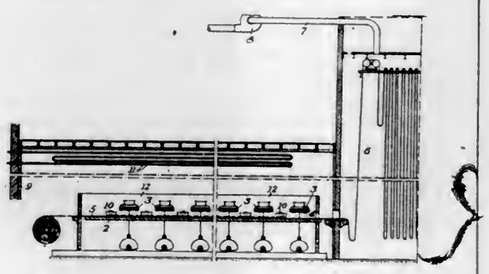


bar from said can as said chute is swung into upright position, and a conveyor adapted to receive said can from said chute when disengaged from said bar.

1,805,143. ENAMEL WARE. OSCAR HOMMEL, Pittsburgh, Pa. Filed Dec. 13, 1929. Serial No. 413,932. 4 Claims. (Cl. 91—73.)

1. The method herein described of coating iron and steel articles with vitreous enamel which consists in applying to the surface of the article an initial coating of a jelly containing a solution of a salt of a metal of the iron group, applying to the initially coated surface a vitreous material, and firing the so prepared article.

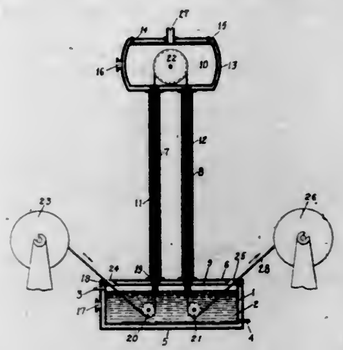
1,805,144. MANUFACTURE OF PRINTED FLOOR COVERINGS. ALFRED JONES, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Aug. 13, 1926. Serial No. 129,026. 18 Claims. (Cl. 101—199.)



1. The method of applying lacquer paint to a floor covering which consists in applying the paint first to a printing block, and pressing the printing block against the floor covering while maintaining an atmosphere about the printing block which precludes any substantial evaporation of the lacquer solvents on the printing block.

1,805,145. IMPREGNATING APPARATUS. CARL KOOPS, New York, N. Y., assignor to J. P. Devine Manufacturing Co., Buffalo, N. Y., a Corporation of New York. Filed Apr. 24, 1930. Serial No. 446,804. 7 Claims. (Cl. 91—46.)

1. In apparatus of the class described, in combination, a receptacle for impregnating material, a vacuum chamber located above said receptacle, a pair of conduits connecting said receptacle with said vacuum chamber and means for conducting the material to be impregnated through the impregnating material in said receptacle, thence

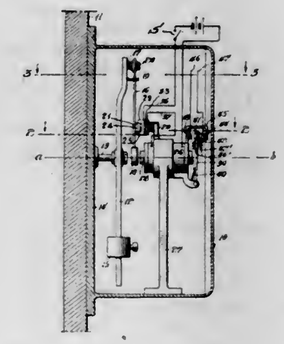


through one of said conduits to said vacuum chamber, then through the other of said conduits to said receptacle, and thence from said receptacle.

1,805,146. RUBBER TIRE AND PROCESS OF MAKING. LAURITS A. LAURSEN, Akron, Ohio, assignor of one-fourth to Pearl Lucile Laursen, Akron, Ohio. Filed Nov. 24, 1925. Serial No. 71,475. 16 Claims. (Cl. 154—14.)

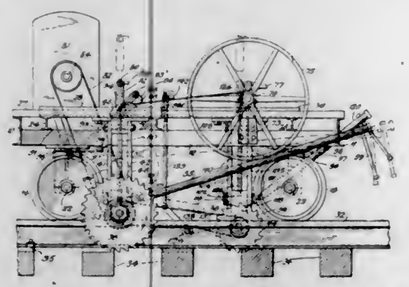
1. The process of making a rubber tire of rubber stock and reinforcing cord structure, consisting of shrinking the cord structure, and curing the stock and cord structure together while the cord structure is in shrunken condition, to provide reserve stretching capacity for the cord structure.

1,805,147. PENDULUM CONTROLLED CIRCUIT CLOSER. HOWARD J. MURRAY, New York, N. Y., assignor to R. M. Company, Inc., East Pittsburgh, Pa., a Corporation of Delaware. Filed Jan. 12, 1921. Serial No. 436,804. 6 Claims. (Cl. 177—314.)



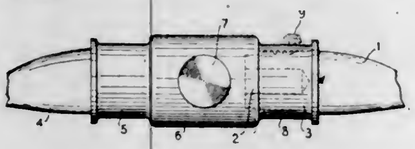
1. In a device of the class described, the combination with a support, a pendulum fulcrumed to said support to swing about a horizontal axis, a second pendulum fulcrumed to said first pendulum above said axis, and normally having its bob in said axis, said second pendulum provided with a pair of fingers adjacent said axis and spaced apart in the plane of swing of the pendulum, means for forming an electric circuit including a circuit closer comprising said fingers and an element disposed between the fingers whereby a swing of the second pendulum in either direction will cause the same to move one of the fingers into engagement with said element of the circuit closed and thus close the electric circuit.

1,805,148. APPARATUS FOR MARKING OR SCORING SURFACES. ANDREW J. NEAFIE, Mountain Lakes, N. J. Filed July 10, 1928. Serial No. 294,477. 6 Claims. (Cl. 144—133.)



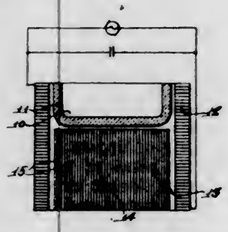
1. Apparatus for cutting and scoring surfaces which comprises a platform, means for supporting it a predetermined distance from the surface to be scored, a saw, means supporting said saw, means connecting said saw support and the platform to adjust the saw a given distance from the platform, means for clamping the saw supports in any adjusted position, cables connecting the saw supports with the platform, and means on the platform connected to the cables to raise the saw to an inoperative position.

1,805,149. METHOD OF BALANCING PROPELLER BLADES. ARVID NELSON, Milwaukee, Wis., assignor to The Hamilton Standard Propeller Corporation, West Homestead, Pa., a Corporation of Pennsylvania. Filed Dec. 12, 1928. Serial No. 325,490. 3 Claims. (Cl. 170—159.)



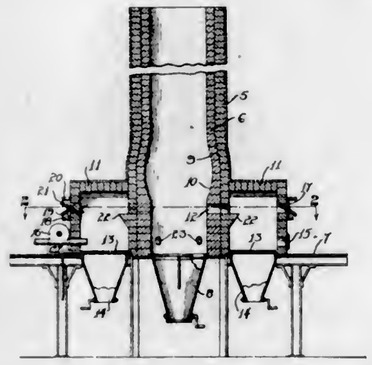
1. In the method of balancing propeller blades for aircraft, the steps of fitting a master blade to one arm of a hub; fitting a new blade to the opposite arm of said hub, said new blade having an axial recess in its shank; placing a sufficient quantity of material on the exterior of the shank of said new blade radially from said recess to statically balance said blades; and subsequently placing said material in said recess and securing it in the bottom of said recess solely by compression of said material.

1,805,150. INDUCTOR TYPE FURNACE. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Trenton, N. J., a Corporation of New Jersey. Filed Aug. 2, 1928. Serial No. 296,937. 14 Claims. (Cl. 266—1.5.)



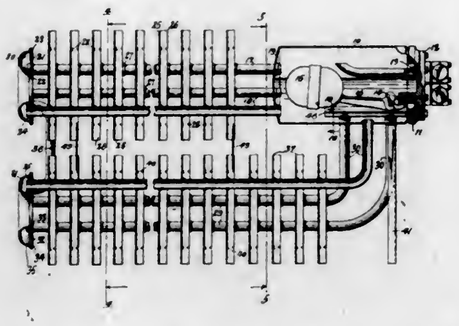
1. The method of reducing the inductor heat losses in a furnace inductor surrounding a charge free from interthreading of transformer iron and much wider than its depth, which consists in increasing the axial length of the inductor much below the bottom of the charge, and in providing a highly permeable path for magnetic lines in the space within the inductor below the charge.

1,805,151. LIME KILN. EMBRA T. REED, Elmore, Ohio. Filed Dec. 4, 1929. Serial No. 411,421. 3 Claims. (Cl. 222—3.)



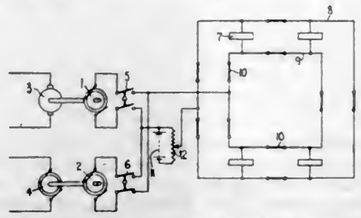
1. In a lime kiln, the combination of a stack, a fire chamber adjacent the base of the stack and provided with fire eyes leading from the upper part thereof into the stack, doors leading into the fire chamber in front of the fire eyes for poking the lime, a shoulder beneath the fire eyes and extending toward the front of the fire chamber to deflect the flow of gases away from the fire eyes and means for directing an oxidizing agent into contact with the gases thus deflected and in a direction to blow said gases away from said doors and toward the fire eyes.

1,805,152. VAPORIZER FOR REFRIGERATOR SYSTEMS. FRANKLIN G. SLAGEL, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Apr. 1, 1929. Serial No. 351,482. 4 Claims. (Cl. 62—95.)



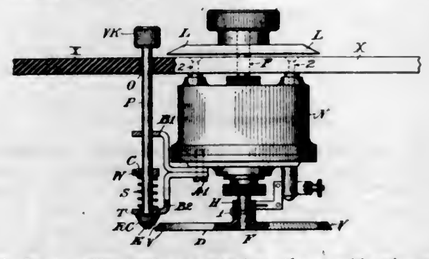
2. A vaporizer for refrigerator systems, comprising a vaporizing chamber, and a plurality of sets or clusters of vaporizing tubes, one set being straight and connected at one end with an end of said chamber, and the other set being of elbow form and having parts thereof parallel with the first mentioned set and other parts at right angles thereto and connected with the side of said chamber, a manifold connecting the rear ends of the tubes of each set, and pipes connecting said manifolds.

1,805,153. TELEPHONE SYSTEM. SIDNEY REYNELL SMITH, London, England, assignor to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 14, 1929, Serial No. 392,524, and in Great Britain Nov. 6, 1928. 4 Claims. (Cl. 179—90.)



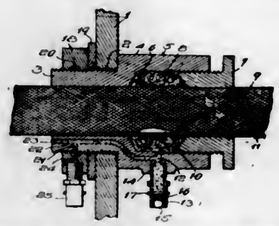
1. In combination, a polarized impulse transmitting relay, an alternating current source with a substantially sine wave output of a desired frequency for alternately energizing and deenergizing said relay to transmit impulses at a desired speed, and a source of direct current superimposed upon the alternating current to alter the duration of the positive and negative waves and thereby alter the impulse ratio of the impulses transmitted by said relay.

1,805,154. VERNIER. WILLIAM STUART WEBSTER, Roslindale, Mass., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Filed Oct. 1, 1924. Serial No. 740,906. 13 Claims. (Cl. 74—7.)



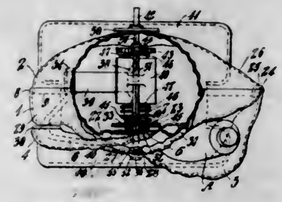
1. In a radio tuning apparatus, the combination with the variable tuning element, of a rotatable operating member therefor, means for the direct manual rotation of said operating member, a dial surrounding said operating member, and a vernier comprising a rotatable member independent of said dial and secured to said rotatable operating member to rotate therewith and having a beveled friction surface, a second rotatable member having a beveled friction surface adapted to the beveled surface of said first vernier rotatable member; and a rotatable and reciprocable spindle on which said second beveled member is mounted.

1,805,155. STUFFING BOX. RALPH M. WEEKS, New London, Conn., assignor to Electric Boat Company, Groton, Conn., a Corporation of New Jersey. Filed Oct. 29, 1928. Serial No. 315,652. 8 Claims. (Cl. 247—1.)



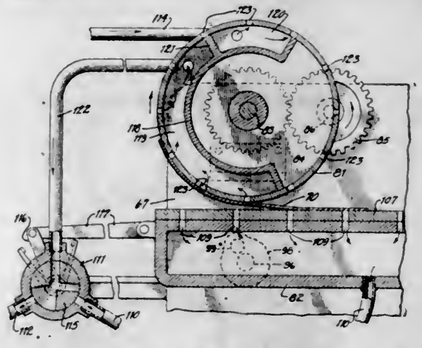
1. In combination, a partition, a stuffing box comprising a body having a reduced neck extending through the partition, the body having a packing space and being provided with two ducts communicating with said space, one of the ducts opening through the body and the other duct extending through the neck and opening therethrough at the opposite side of the partition from said body, a nut screwed onto the neck and cooperating with said body for clamping the stuffing box to the partition, means forming a fluid tight closure between said stuffing box and the partition, the nut hgaving a circumferential groove in its inner face encompassing the outer opening of the neck duct and the nut having a duct opening into said groove, tubular fittings secured in the outer ends of the body duct and the nut duct, respectively, and inwardly opening valves normally closing said fittings.

1,805,156. ANIMATED TOY. PETER PAUL WEHNER, Cincinnati, Ohio. Filed June 13, 1929. Serial No. 370,658. 6 Claims. (Cl. 46—40.)



1. An animated toy comprising a piece of sheet material having an opening simulating a mouth, and a flap bent back from said opening, simulating teeth, a simulation of a brush in said opening adjacent to said flap, and means for moving said simulation of a brush.

1,805,157. BOOKBINDING MACHINE. RAYMOND E. ACKLEY, Chicago, Ill., assignor to R. R. Donnelley & Sons Company, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1929. Serial No. 369,862. 8 Claims. (Cl. 154—41.)

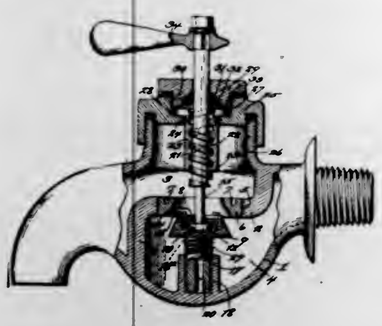


1. In a bookbinding machine, means for gripping and advancing a book, means for gluing the back of the book, and mechanism for applying a super in timed relation thereto comprising means for feeding super from a roll, means for cutting a strip from the roll, means for moving said strip adjacent the book and at the same speed as the book, and means for progressively forcing the strip into contact with said book.

1,805,158. RESEATING LEAKPROOF FAUCET AND VALVE. ARTHUR J. BACON, Philadelphia, Pa., assignor of one-half to Maurice H. Clyman, Camden, N. J. Filed Feb. 28, 1930. Serial No. 432,215. 2 Claims. (Cl. 251—38.)

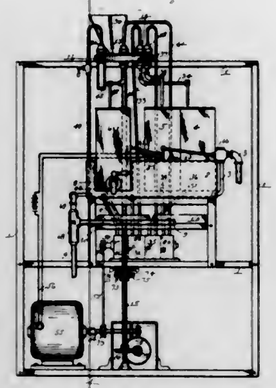
1. In a combined faucet and valve, a casing having a lower pressure chamber and a fluid release chamber

above, a valve seat formed in a wall dividing the two chambers, a disc valve engaging said seat in a direction from the pressure chamber and aided in its engagement with the seat by the fluid pressure, a socket formed on the bottom of the pressure chamber, the disc valve having a depending stem loose in the socket, a spring surrounding said stem and engaged between the top of the socket and the valve to urge the valve toward its seat, a screw stem rising from the disc valve and having a loose



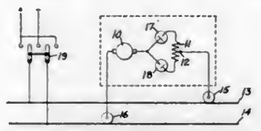
connection with the disc valve, said loose connection between the rising stem and the valve being such as will permit the disc valve to move with the screw stem when the latter is rotated when it is desired to close the valve against the seat, and means for mounting the screw stem in the top of the faucet casing, said last named means having an element, adapted to be loosened, thereby permitting the screw stem to be rotated for grinding the disc valve to its seat without shutting off the pressure.

1,805,159. PERCOLATING APPARATUS. ROBERT BAUER and GEORGE J. LUDWIG, Grand Rapids, Mich. Filed Sept. 30, 1929. Serial No. 396,020. 9 Claims. (Cl. 53—3.)



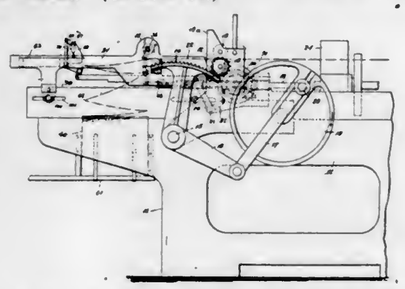
1. In an organization of the character described, a plurality of percolators comprising; a base plate having circularly disposed openings therethrough provided with screens forming the bottoms of the percolators respectively and a vent for the percolated substance; a member on the base plate having circularly disposed openings therethrough forming the sides of the percolators respectively, said member's openings being adapted to contain a charge of the substance to be percolated and being brought into percolator-forming registration with the screened openings respectively by the rotation of said member.

1,805,160. DIRECTIONAL CONTROL OF DYNAMO-ELECTRIC DEVICES. MAURICE E. BIVENS, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 5, 1928. Serial No. 303,989. 1 Claim. (Cl. 172—179.)



In combination, an electric motor having a rotatable armature and a field winding provided with a mid-tap, and a pair of asymmetrical current conducting units connected to the ends of said field winding for reversing the dynamo-electric reaction between the armature and field upon a reversal in the energization of the motor.

1,805,161. FOLDING MACHINE. CARL W. BRENN, Montclair, N. J. Filed Nov. 14, 1928. Serial No. 319,315. 28 Claims. (Cl. 270—61.)

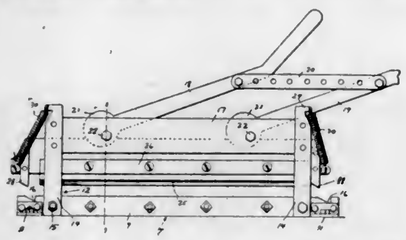


1. A machine for folding a strip of fabric of indefinite length to form a zig-zag folded pile comprising a gage plate held stationary in a predetermined position during the folding operation; and web-advancing means operative to cause the web intermittently to stop with a line of fold thereon located in the said predetermined position.

1,805,162. PREPARATION OF ALIPHATIC ACID CHLORIDES. EDGAR C. BRITTON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich, a Corporation of Michigan. Filed Oct. 11, 1928. Serial No. 311,972. 15 Claims. (Cl. 260—123.)

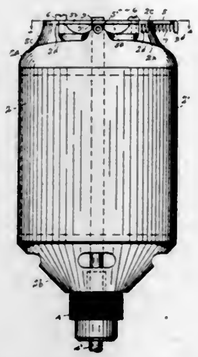
1. The method of making an aliphatic acid chloride, which comprises reacting between the corresponding acid and sulphur tetrachloride in the presence of an anhydrous metallic chloride which is capable of forming a substantially stable double compound with sulfur tetrachloride.

1,805,163. BELT CUTTER. THOMAS E. BUCKNER, Burkburnett, Tex. Filed June 14, 1930. Serial No. 461,161. 8 Claims. (Cl. 164—57.)



1. In a material cutting device of the class described, a bed plate assembly comprising a central anvil forming member provided in its top with a knife edge receiving groove, and a pair of facing plates on opposite sides of said member, a carrier movable toward and from said bed plate assembly, said carrier including a cutter, supporting means for the carrier, and operating means cooperable therewith.

1,805,164. SHAFT HOLDER FOR APPLYING CHUCKS. RAY L. CARTER, Phoenix, N. Y., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Jan. 31, 1930. Serial No. 425,019. 3 Claims. (Cl. 172—36.)



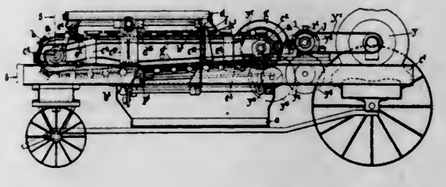
1. The combination with an encased electric motor including the armature shaft and a chuck threaded to one end thereof, the other end of the shaft having a reduced portion projecting beyond the corresponding end of the casing, of a holding member reciprocable in ways formed in said end of the casing having an elongated opening to receive the shaft, a portion of said opening being substantially the diameter of the shaft, an adjacent portion of the opening being contracted to receive the reduced portion of the shaft when the member is moved manually in one direction, to prevent rotation thereof, and compression means to move the member in the opposite direction to free the shaft.

1,805,165. HOT WATER HEATER. LOUIS S. DENNEY, Mount Vernon, Ohio. Filed Feb. 14, 1930. Serial No. 428,471. 3 Claims. (Cl. 122—156.)



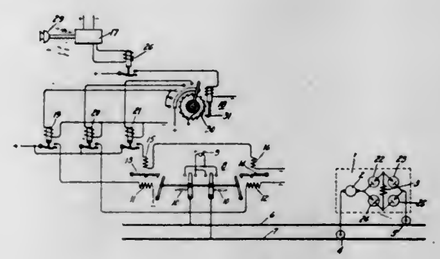
1. A hot water heater, comprising a pair of shell sections provided with abutting flanges at their marginal edge portion, a packing interposed between said flanges for sealing the sections together, detachable means engaging said flanges for securing the sections detachably together and admitting of the separation of the sections for cleaning the interior thereof, an independent flue section enclosed within said shell sections and provided at its lower end with a burner receiving drum opening through one edge portion of the shell sections and provided at its upper end with an outlet drum provided with an outlet pipe leading through the top of the shell sections, means for circulating water downwardly through the shell sections and about said flue section, said flue section and the inner walls of said shell sections being corresponding corrugated throughout substantially the height of the heater to provide relatively long sinuous flue and water passages.

1,805,166. PREPARATION OF VEGETABLE FIBERS. DOUGLAS WILLIAM DRON, Belfast, Ireland. Filed Oct. 2, 1929, Serial No. 396,757, and in Great Britain Nov. 7, 1928. 10 Claims. (Cl. 19—18.)



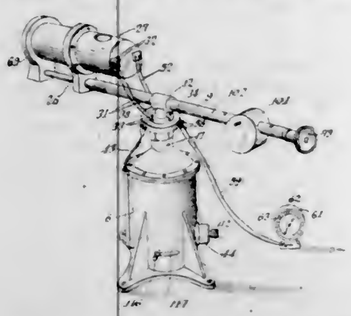
1. A machine for decorticating "pita" or other fibers comprising a broad multi-compartment conveyor with the compartments in parallel thereon gripping devices transversely of said conveyor for gripping a leaf section in each compartment simultaneously, means for automatically dropping a leaf section into each compartment simultaneously, means for positioning said leaf sections in said gripping devices, means for removing the waste material from the fiber and means for automatically and independently discharging the extracted fiber and the butt ends of the leaf sections from the machine.

1,805,167. ELECTRIC CONTROL SYSTEM. ALAN S. FITZ GERALD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 25, 1928. Serial No. 288,012. 6 Claims. (Cl. 104—149.)



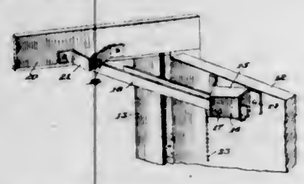
1. In combination, a dynamo-electric machine, means for producing current impulses in response to verbal commands of the operator, and means responsive to a certain number of said current impulses for causing said dynamo-electric machine to operate in one direction and responsive to a different number of said current impulses for causing said dynamo-electric machine to operate in the other direction, whereby the direction of operation of said machine may be selectively controlled in response to different verbal commands of the operator.

1,805,168. CENTRIFUGAL CASTING MACHINE. ROBERT P. FRIST, Jr., Long Beach, Calif. Filed Mar. 27, 1929. Serial No. 350,333. 15 Claims. (Cl. 22—65.)



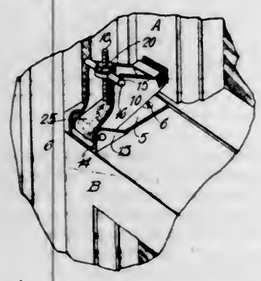
1. A casting machine comprising an arm, means for suddenly imparting rotation to said arm about an axis spaced from an end thereof and maintaining said rotation at a speed as great as the initial speed of said arm, a crucible supported upon said arm adjacent said end thereof, a mold, and means for securing said mold to said arm beyond said crucible from said axis with the gate of the mold in register with an outlet from said crucible.

1,805,169. DOOR HOLDER. GEORGE L. FULLER, Orangeburg, S. C. Filed Feb. 26, 1930. Serial No. 431,571. 1 Claim. (Cl. 292—265.)



A holder for a swinging door comprising a sheet metal bracket adapted to be attached to the top portion of the door, a trough-like sheet metal latch pivoted to said bracket and provided near its free end with a notch, a spring coiled around the pivot of said latch and adapted to lift said free end of said latch, a sheet-metal bracket to be attached to a frame part for said door and adapted to be engaged by the notched part of said latch, when said door is opened, and a pull-down member for releasing said latch when desired.

1,805,170. SASH LOCK. SAMUEL GOLDMAN, Brooklyn, N. Y. Filed Apr. 24, 1930. Serial No. 446,937. 6 Claims. (Cl. 292—212.)



1. A device of the character described, comprising a base, a window sash engaging fastening element pivotally carried thereby, a threaded member carried by the base, a cross arm for engagement with the fastening element, and means carried by the threaded member for maintaining engagement of the cross arm with the fastening element.

1,805,171. ORNAMENTED CANDLE. HARRY H. GRIEVES and ELIZABETH D. FAUTH, Whiting, Ind., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Oct. 27, 1924. Serial No. 746,065. 6 Claims. (Cl. 87—21.)



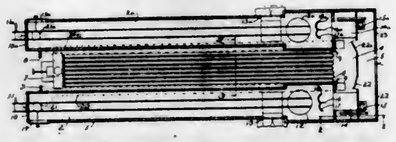
1. The method of ornamenting a wax candle which comprises dipping said candle into a molten composition containing from 30 to 60% stearic acid and a non-mineral wax having a melting point not higher than that of Japan wax, removing the candle and cooling it, whereby crystalline deposits of stearic acid form in the dipped coating.

1,805,172. SOUND POST FOR STRINGED MUSICAL INSTRUMENTS. WILLIAM A. GRIFFITH and WALTER L. MYERS, Holly, Colo. Filed May 2, 1930. Serial No. 449,278. 2 Claims. (Cl. 84—277.)



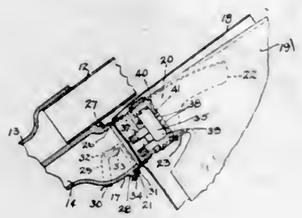
2. A sound post for stringed musical instruments comprising a metallic sleeve having a bore with the ends thereof flared, plugs of different material from the sleeve engaging the ends of said sleeve, and tapering portions on the plugs and frictionally engaging the walls of the flared portions of the sleeve.

1,805,173. DEHYDRATOR. HENRY M. GRIFFOUL, San Jose, Calif. Filed Apr. 9, 1929. Serial No. 353,752. 3 Claims. (Cl. 34—46.)



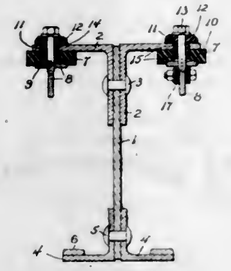
2. A dehydrator comprising an air heating tunnel, a plurality of dehydrating tunnels, a chamber communicating with all of the tunnels, air circulating means within the chamber, and additional means within the chamber operable to regulate the flow of air from the heating tunnel and from the outside atmosphere.

1,805,174. VACUUM CLEANER. ELMER E. GUDKA, Toledo, Ohio, assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Aug. 31, 1929. Serial No. 389,684. 6 Claims. (Cl. 285—171.)



2. In a vacuum cleaner, the combination of an air-conducting tube, a bag having a neck adapted to telescope with such tube, and means for holding such neck in such telescoped relation; said means comprising a band having parts attached to such tube, other parts adapted for contracting around such tube, and a flared end for facilitating the placement of such neck.

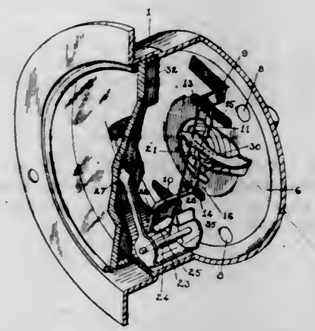
1,805,175. MOTOR CONVEYOR TRACKWAY. EDWARD HANAK, Houston, Tex. Filed Aug. 8, 1929. Serial No. 384,360. 6 Claims. (Cl. 191—22.)



4. In conveyor trackways, an I-beam, T-shaped conductor rails located beneath the upper lateral flanges of the I-beam, insulating spacing blocks located between said upper lateral flanges and said conductor rails, said upper lateral flanges and said blocks having aligning apertures, bushings having flanged heads projected into said apertures, cap screws passing through said bushings and threaded into said conductor bars, and sealing washers between said bushings and said upper lateral flanges for the purpose specified.

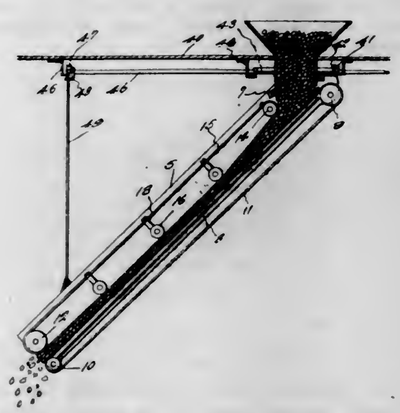
1,805,176. PRESSURE GAUGE. HERBERT HASTINGS, Rochester, N. Y. Filed Feb. 27, 1926. Serial No. 91,237. 15 Claims. (Cl. 73—110.)

1. In a pressure gauge having a diaphragm and a base surrounding said diaphragm, the combination of a shaft contacting with said diaphragm to rotate said shaft on the movement of said diaphragm, a pointer unit, a crank on said shaft, a straight flexible member mounted on said base and held rigid at one end thereof, the free end of said flexible member holding said pointer unit and said crank yieldingly in contact with each other, a movable lug on said base adapted to be swung in a vertical plane parallel to said straight flexible member and either rest against said flexible member or be held away from it at a variable distance for the purpose of controlling the tension of said flexible member.



14. A pointer unit for a gauge comprising two parallel bosses joined together by a yoke, said bosses having perforations therein adapted to form bearings for a stud, a pointer on one of said bosses, a bracket turned up on the other boss, a crank formed on said bracket, said crank being notched at the side to form a reduced neck, the crank outward of the notched part having a contact surface on one side having a geometric curvature.

1,805,177. LOWERING APPARATUS. WILLIAM HODNETT, Fillmore, N. Y. Filed May 28, 1930. Serial No. 456,555. 2 Claims. (Cl. 198—165.)



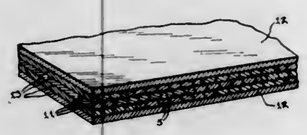
1. In an apparatus for lowering produce, a frame including a pair of spaced parallel inclined side pieces, an upper and a lower endless belt carried by and arranged between the side pieces, the upper belt ending short of the lower belt at its top terminal, a hopper carried by and arranged between the side pieces terminating between the top terminals of said belts for introducing produce therebetween, and spring pressed rollers carried

by said side pieces engaging the inner run of the top belt for urging said run toward the adjacent run of the lower belt, all of the spring pressed rollers being spaced from the top terminal of the upper belt to permit the proper introduction of the produce between the belts from said hopper.

1,805,178. REVIVIFYING SPENT FULLER'S EARTH. NORMAN E. LEMMON, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Mar. 20, 1925. Serial No. 17,132. 5 Claims. (Cl. 252—2.)

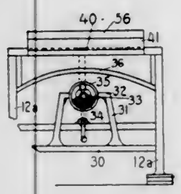
1. In the method of revivifying spent filtering materials employed in decolorizing petroleum oils, the steps of washing such filtering materials with a mixture containing naphtha, benzol and alcohol.

1,805,179. VENEER ARTICLE AND METHOD OF MANUFACTURE. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Aug. 18, 1928. Serial No. 300,528. 4 Claims. (Cl. 144—309.)



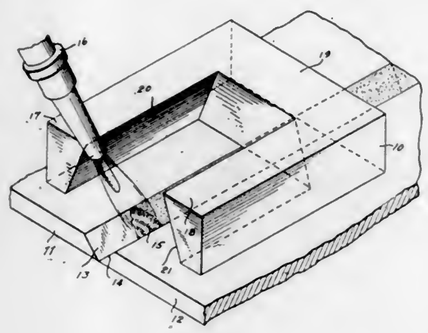
1. A laminated veneer panel, including a core formed of superposed units, each unit consisting of a plurality of fibrous strips connected together by sewing thread, layers of adhesive between the units integrally connecting the same together, and a facing strip secured to one of said units by a layer of adhesive.

1,805,180. TILE MAKING ATTACHMENT TO VIBRATING MACHINES. EUGENE E. MCWAIN, Los Angeles, Calif. Filed May 5, 1928. Serial No. 275,436. 2 Claims. (Cl. 25—41.)



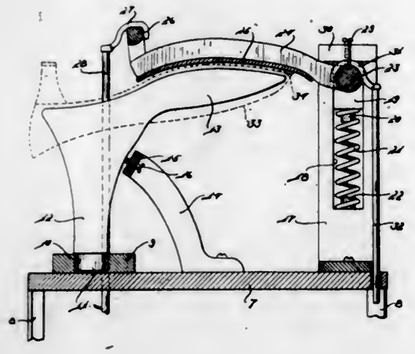
1. In combination with a brick making machine an attachment mountable upon the top portion thereof, and consisting of a top plate, means securing the top plate removably upon said frame, the main body portion of said top plate being raised, a holder having a socket into which the raised portion of said top plate projects, a core box removably registered upon said holder, said top plate, holder and core box having a series of alining holes, and means retractably mounted beneath the top of said frame and designed to project plungers thru all of the alining holes for the purpose of providing the holes of hollow tiles.

1,805,181. HEAT RETAINING HOOD FOR GAS OR ELECTRIC FUSION WELDING. SAMUEL W. MILLER, Hollis, N. Y., assignor to Oxweld Acetylene Company, a Corporation of West Virginia. Filed Nov. 6, 1928. Serial No. 317,607. 3 Claims. (Cl. 113—111.)



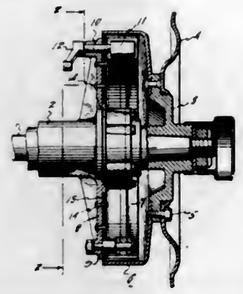
1. A hood for use during welding and adapted to partially surround the weld during its formation, said hood comprising an integral U-shaped member, the inner walls of the sides of said member converging upwardly to form a reflecting surface whereby a portion of the heat is reflected back onto the weld.

1,805,182. SHOE PRESS. ERNESTO B. NAPOLITANO, Detroit, Mich. Filed Oct. 5, 1928. Serial No. 310,469. 4 Claims. (Cl. 12—33.)



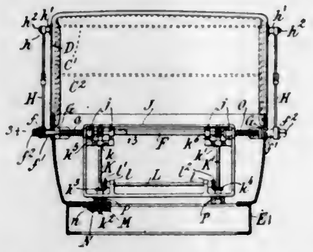
4. In a shoe press of the class described: a last; a supporting member for said last, said last being tiltable relative to said supporting member; a yieldable presser member for pressing a shoe against said last; a frame for supporting said presser member; and means engageable with opposite ends of said frame bodily movable for moving said frame bodily and pressing said presser member into engagement with a shoe on said last.

1,805,183. BRAKE CLOSURE. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Apr. 12, 1930. Serial No. 443,887. 13 Claims. (Cl. 188—218.)



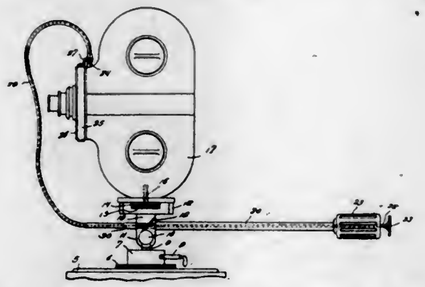
5. A brake apparatus comprising a metallic brake drum and a non-metallic disc positioned at the open face.

1,805,184. VEHICLE TOP OPERATING MECHANISM. PAUL PEDERSEN, New York, N. Y. Filed Mar. 15, 1929. Serial No. 347,207. 8 Claims. (Cl. 296—112.)



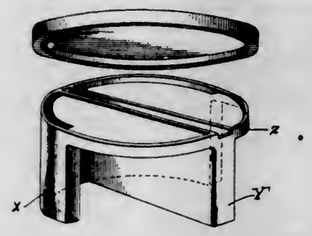
1. A vehicle top lowering and raising mechanism, comprising a rigid frame disposed within the vehicle body substantially parallel to the rear wall thereof, said frame having bearings therein, a horizontally disposed shaft carried by said frame, the ends of said shaft extending through the oppposite sides of the vehicle body at the rear thereof, toggle brackets connected to the ends of said shaft and to the vehicle top, means carried by said frame for rotating said shaft, and driving means controllable by the operator of the vehicle for driving said first named means.

1,805,185. COMBINED SUPPORT AND SHUTTER ACTUATING MEANS FOR CAMERAS. JOSEPH M. RAMSEY, Lakewood, Ohio. Filed Oct. 14, 1929. Serial No. 399,565. 6 Claims. (Cl. 95—53.)



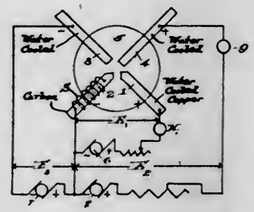
1. A device of the class described comprising a support, means for mounting a camera on said support for being adjusted relative thereto, said mounting means including a movable camera supporting member and a handle operable to adjust said camera supporting member and secure it in any position of adjustment, and means carried by said handle and adapted to be operatively connected to the shutter actuating element of the camera for operating the latter.

1,805,186. SOUND SCREENING DEVICE FOR HYDROPHONES. LEON H. RICHMOND, Fort H. G. Wright, N. Y. Filed Mar. 29, 1928. Serial No. 265,671. 11 Claims. (Cl. 181—0.5.)



1. A sound screen comprising a hollow metallic shell having a plurality of sheets of fibrous substance introduced therein, said sheets being cut into shaped strips and arranged in such a manner that the strips of adjacent sheets are arranged at right angles to each other.

1,805,187. APPARATUS FOR AND METHOD OF EXCITING ELECTRICAL OSCILLATIONS. TOM C. RIVES, New Haven, Conn. Filed June 20, 1927. Serial No. 200,180. 8 Claims. (Cl. 250—36.)

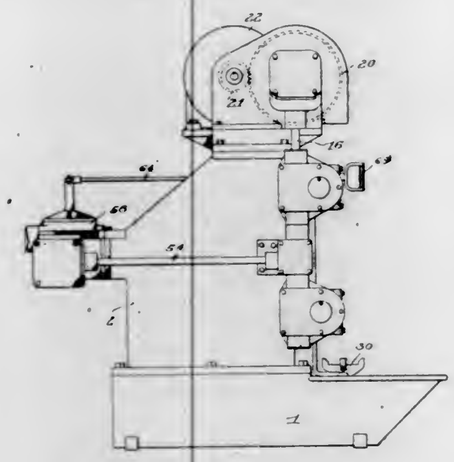


1. An apparatus for producing electrical oscillations comprising in circuit an arc chamber inclosing a pair of arcing electrodes, variable voltage supply means therefor, a pair of control electrodes arranged in said chamber in spaced and opposed relation to said arcing electrodes each of said opposed electrodes being of opposite polarity and having variable voltage supply means therefor, whereby said control electrodes are adapted to attract, repel, and thus regulate the electron flow caused by the arcing of said arc electrodes in accordance with the variance of voltages applied to the various electrodes, and means for automatically discontinuing current flow in the control electrodes upon the blowing out of said arc electrodes.

1,805,188. MACHINE TOOL. ROLAND RUSSELL ROBERTS and WORTHY J. FORWARD, Rochester, N. Y., assignors to Consolidated Machine Tool Corporation of America, Rochester, N. Y., a Corporation of Delaware. Filed Mar. 7, 1927. Serial No. 173,398. 14 Claims. (Cl. 90—16.)

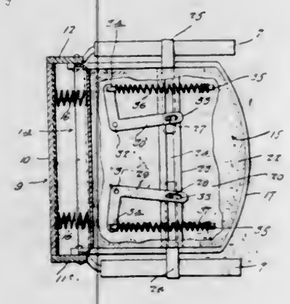
1. A crank shaft milling machine comprising a plurality of cutter spindles arranged one above the other in different horizontal planes on fixed supports, and a work

support including means that permit positioning and clamping a crank shaft vertically supported on and



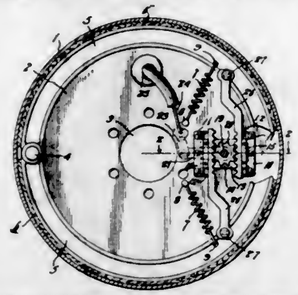
engaging the work support at its lower end, the work support being movable bodily horizontally to feed the vertically arranged crank shaft past the cutters.

1,805,189. BARBER CHAIR. FREDERICK E. ROTHE, Wentzville, Mo. Filed Dec. 23, 1929. Serial No. 416,081. 1 Claim. (Cl. 155—131.)



A back for barber chairs comprising a back frame including an open front, a back wall, and side walls extending from the back wall, an inner cushion disposed within the frame and retractile with respect thereto, an outer cushion pivotally connected to the back frame, a channel bar extending transversely of and disposed in the outer cushion, a pair of supporting arms slidable in the channel bar, and retractile means for extending the arms beyond the sides of the outer cushion for engagement with the arms of a chair for supporting the outer cushions when extended from the back frame, and said means including an angular link for each supporting arm, and a compressible spring associated with the arm.

1,805,190. BRAKE OPERATOR. HARRY H. SEMMES, Chevy Chase, Md., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 4, 1929. Serial No. 368,389. 6 Claims. (Cl. 188—78.)



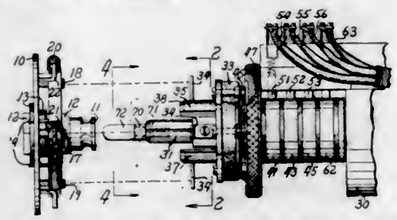
1. In a brake mechanism a drum, brake shoes associated therewith, an operator therefor comprising a freely slidable carriage and a pinion mounted thereon, a plurality of rack bars engaging the pinion, one end of each bar being connected to a brake shoe.

1,805,191. BOOKHOLDER. FRANK SKRIPKIN, Toronto, Ontario, Canada, assignor to Arthur S. Porter, Islington, Ontario, Canada. Filed Sept. 6, 1930. Serial No. 480,140. 4 Claims. (Cl. 129—38.)



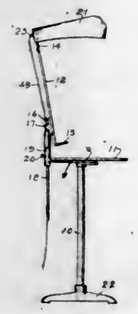
3. A book holder comprising a back portion formed of strip material; a sheet-metal strip arranged at right angles to the back portion and pivoted at one end thereof, the other end of the said back portion being bent at right angles thereto and having an opening extending therethrough; and a hook formed on said strip adapted to enter said opening from the outer side of the said other end.

1,805,192. TESTING DEVICE FOR CENTRIFUGAL SWITCHES. AURILE T. SMITH, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 23, 1929. Serial No. 342,110. 6 Claims. (Cl. 175—183.)



1. A testing device for centrifugal switches comprising means for detachably receiving a switch, means acting to rotate said receiving means with gradually increasing speed, an electrical circuit controlled by said switch, an indicating device in said circuit to indicate when said switch is operated, and means for measuring the speed of rotation of the switch at the instant said indicating device is operated.

1,805,193. LAMP SHADE AND SUPPORT THEREFOR. EDWARD J. SMITH, Cleveland, Ohio, assignor to Mary E. Smith, Cleveland, Ohio. Filed May 8, 1929. Serial No. 361,294. 8 Claims. (Cl. 240—4.)

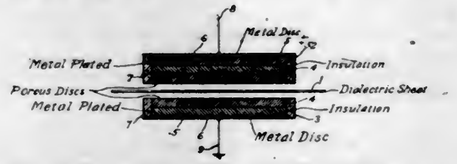


8. A music stand having a rack at the top thereof, a lamp shade of triangular outline detachably mounted at the base of said triangle upon the upper edge of said rack, and having the vertex extended forward from said rack and a flat plate adjustably mounted on the under surface of said shade for adjustment toward and from said vertex, a lamp pivotally mounted on the under surface of said shade and upon said plate for swinging in a vertical plane, and a shelf mounted adjacent the rack and beneath the shade, the said rack being vertically adjustable toward and from the said shelf to vary the intensity of light directed upon the latter without varying the degree of illumination of the rack, and the sides of the triangle adjacent said vertex having border flanges diverting toward the said base, thereby restricting the rays from the lamp substantially to the surface of said rack and shelf.

1,805,194. TREATMENT OF ALDEHYDE-AMINES. SHERMAN I. STRICKHOUSER, Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Apr. 17, 1929. Serial No. 355,984. 14 Claims. (Cl. 23—250.)

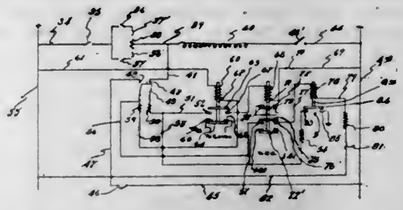
1. The method of retarding the deterioration of aldehyde-amine condensation products which comprises treating said products with a poly hydroxy aromatic body.

1,805,195. ELECTRIC SURGE RECORDER. RAGNAR TANBERG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1928. Serial No. 325,984. 5 Claims. (Cl. 234—1.5.)



1. An electric surge recorder comprising a sheet of dielectric material, and means for simultaneously puncturing said sheet with a plurality of openings in accordance with the magnitude of the current of a single electric impulse discharge.

1,805,196. AUTOMATIC BRAKE RELAY. PHILIP D. TARDIFF, Detroit, Mich. Filed Mar. 3, 1926. Serial No. 91,966. 1 Claim. (Cl. 187—31.)



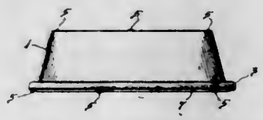
In an electrically operated elevator having electrically controlled gates and brakes and an operating line for supplying electric current to the operating mechanism: direction switches for controlling the flow of current through said operating line; a switch normally closed upon the opening of said gates; and means operable upon the closing of said second mentioned switch while either of said direction switches is closed for breaking the circuit to said operating line.

1,805,197. WEB GUIDE ROLLER. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed May 15, 1928, Serial No. 277,959. Renewed Oct. 4, 1930. 9 Claims. (Cl. 271—2.1.)



1. As an article of manufacture, a guide-roller for a printing press comprising a series of independent roller sections each rotatable independently of the others and each of a length equal to one page width of the web.

1,805,198. FOOD SERVICE DEVICE. JOHN B. ZALLIO, Chicago, Ill. Filed Mar. 18, 1930. Serial No. 436,671. 6 Claims. (Cl. 65—53.)



1. In an article of the character described the combination of a hollow body provided with a continuous tubular edge formation, and contact means engaged in said tubular formation and projecting through apertures in the wall of and spaced along said tubular formation to form spaced contact portions.

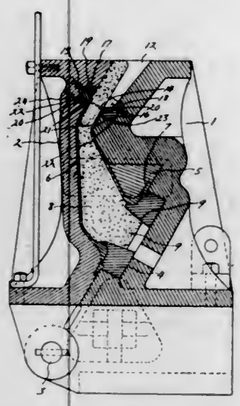
1,805,199. PREPARATION OF COLLOIDAL METAL. GELLERT ALLEMAN, Wallingford, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Dec. 11, 1929. Serial No. 413,423. 12 Claims. (Cl. 252—6.)

1. The method of preparing colloidal metal including decomposition of an amyl derivative of the metal by heat.

1,805,200. MOLD. ARTHUR T. BATEMAN and ANDREW IRVINE, Detroit, Mich., assignors to Bohn Aluminum & Brass Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 30, 1928. Serial No. 296,378. 9 Claims. (Cl. 22—126.)

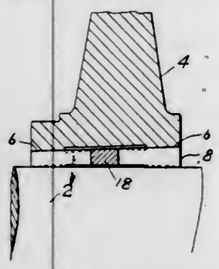
1. A mold adapted for use in forming a vacuum cleaner nozzle having a curved passage therethrough with ad-

jacent portions of the wall forming the passage merging into each other and an annular flange at one end, said mold comprising a stationary permanent section, a pivotal permanent section adapted to cooperate therewith to form an upright mold cavity, the permanent sections occupying a position such that the portion of the mold cavity



forming the annular flange of the nozzle is at the lower end of the cavity, one of said permanent sections being provided with gate means communicating with the upper end of the mold cavity and a sand core carried by said stationary section and insertable into place when the permanent sections are separated.

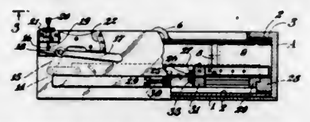
1,805,201. SLEEVE FOR HIGH SPEED WHEELS. RUDOLPH BIRMANN, Trenton, N. J., assignor to De Laval Steam Turbine Company, Trenton, N. J., a Corporation of New Jersey. Filed May 3, 1929. Serial No. 360,283. 9 Claims. (Cl. 287—52.)



1. Means for mounting a rotor upon a shaft including an annular supporting portion carrying two series of resilient axially extending members, the members of one series having outer bearing surfaces and the members of the other series having inner bearing surfaces, the normal difference of radii of the outer and inner surfaces being greater than the normal difference of radii of the portions of the rotor and shaft with which the respective surfaces are to contact, whereby, in the assembly of said means between the rotor and shaft the members are displaced so that they resiliently press in opposite directions to maintain engagement with the rotor and shaft respectively.

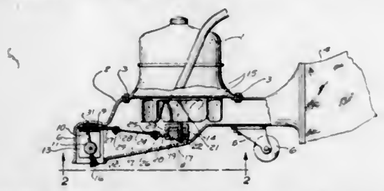
1,805,202. PHOTO COMPOSING SCREEN AND PLATE HOLDER. HERMAN C. BOEDICKER, New York, N. Y. Filed Apr. 18, 1928. Serial No. 271,014. 5 Claims. (Cl. 95—69.)

1. In screen and plate holders for photographic composing machines, a casing having an image aperture, and an aperture for receiving a plate holding slide, a screen holder within the casing and in register with said image aperture, means operable from a point exterior the casing to advance and retract the screen holder, slide ways pro-



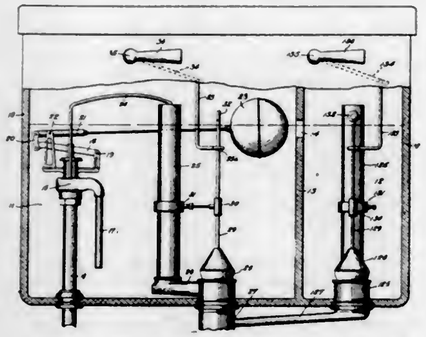
vided by the casing, a plate holder slide in said slide ways and projected through a said second aperture formed in the casing, and means carried by said slide for supporting a plate.

1,805,203. VACUUM SWEEPER. JOSEPH BRASTY, Maple Heights, Ohio, assignor of one-third to Julius B. Lewis, Cleveland, Ohio, and one-third to Lewis Colton, Cleveland, Ohio. Filed June 21, 1929. Serial No. 372,691. 2 Claims. (Cl. 15—8.)



1. The combination with a suction nozzle of a vacuum sweeper the side walls of the nozzle having inner projections, of an oscillating brush extending across the nozzle, a U-shaped bracket bar fitting in the nozzle and supporting the brush, the ends of said bar fitting against said side walls and having notches in which said projections are engaged, and means to oscillate the brush.

1,805,204. CLOSET FLUSHING DEVICE. CHARLES WATKINS BROWN, San Diego, Calif. Filed Oct. 12, 1929. Serial No. 399,350. 6 Claims. (Cl. 4—40.)

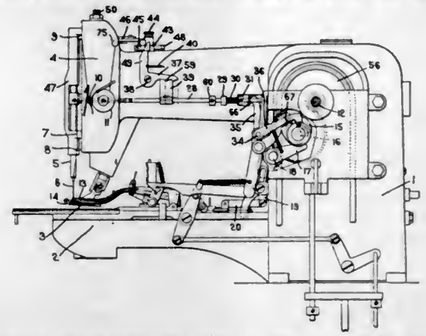


1. A closet flushing device comprising two float valves and two seats with openings therefor, container walls forming separate water spaces for delivering water to the passage through each valve opening and a single closet connection having branches leading from the respective valve openings.

1,805,205. BUTTONHOLE SEWING MACHINE. AXEL F. CARLSON, Cambridge, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Mar. 20, 1928. Serial No. 263,103. 10 Claims. (Cl. 112—255.)

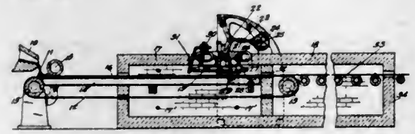
1. In a sewing machine adapted to perform a predetermined sewing cycle and provided with a stop motion to

bring it to rest at the end of said cycle, the combination with stitch-forming mechanism, of a tension for the thread, normally-idle means rendered operative after the stitch-



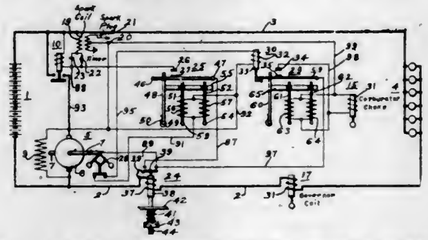
forming mechanism has come to rest to release the tension, a latch for maintaining said tension released, and means to release the latch after the first stitch has been formed in the next sewing cycle.

1,805,206. SHEET GLASS APPARATUS. JOSEPH P. CROWLEY, Toledo, Ohio, assignor to Libbey-Owens Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 22, 1924. Serial No. 751,418. 7 Claims. (Cl. 49—3.)



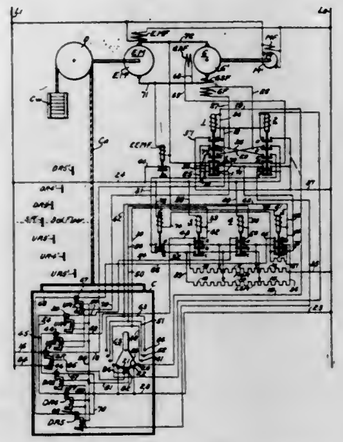
1. Means for pressing a moving sheet of glass to a substantially flat uniform thickness, including a substantially horizontal movable conveyer for supporting said sheet, a pressing member mounted above said sheet, a horizontal supporting member for the pressing member, arms carried by the pressing member and having rollers movably supported by the supporting member, and means for moving the pressing member horizontally with respect to said supporting member when said pressing member is in engagement with the sheet.

1,805,207. CONTROL SYSTEM FOR FARM LIGHTING PLANTS. THOMAS W. DRURY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 7, 1928. Serial No. 324,522. 6 Claims. (Cl. 290—31.)



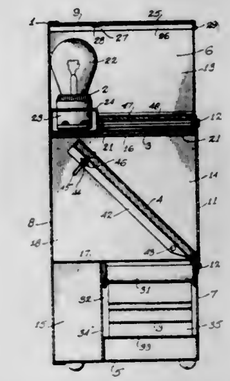
6. In a system for controlling the choking operation of an internal combustion engine provided with a carburetor having a choker valve therefor, in combination, means for cranking said engine, means responsive to the cranking of said engine for actuating said choker valve, temperature responsive means for controlling said valve actuating means, and means responsive to the speed of said engine for precluding the operation of said temperature responsive means until the speed of said engine has reached a predetermined value.

1,805,208. ELEVATOR CONTROL SYSTEM. WILLIAM F. EAMES, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1929. Serial No. 337,308. 17 Claims. (Cl. 172—152.)



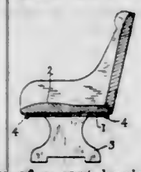
18. In an elevator control system, an elevator car operable past a plurality of floors, motive means therefor, control means for said motive means for operating said motive means at a plurality of speeds, including a plurality of deceleration resistors, a car switch for actuating said control means to select the operating speed of said motive means, transfer means for rendering one of said resistors normally effective, and operable to render another of said resistors effective, and means operable upon selection of one speed by said control actuating means for actuating said transfer means.

1,805,209. DISPLAY DEVICE. ALBERT J. ELLERN, Chicago, Ill., assignor to Travelad Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 24, 1928. Serial No. 314,701. 5 Claims. (Cl. 40—32.)



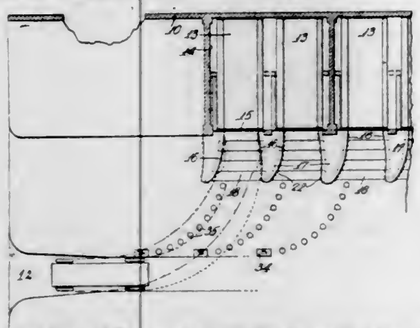
1. A device of the class described comprising a light-transmitting display screen bearing indicia, a source of light on one side of the plane of said screen, a mirror located on the opposite side of said plane for reflecting the images of said indicia, a movable partition adapted to be shifted to a position between said source of light and said screen, and means for moving said screen to cause the images to move on said mirror.

1,805,210. SOUND-ABSORBING STRUCTURE. WILLIAM E. FOSTER, Cleveland Heights, Ohio. Filed Apr. 17, 1929. Serial No. 355,909. 5 Claims. (Cl. 181—30.)



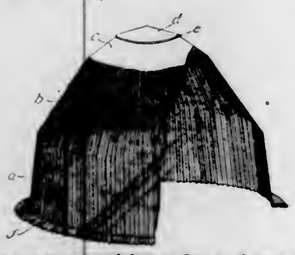
1. The combination of a seat having its under-side exposed to sound vibrations, and sound-absorbing means applied to the underside thereof, said means having a greater sound-absorbing capacity than the material of the seat itself.

1,805,211. AUTOMOBILE GUIDING APPARATUS. ERNST GEIGER, Irvington, N. J. Filed Mar. 6, 1929. Serial No. 344,678. 20 Claims. (Cl. 238—3.)



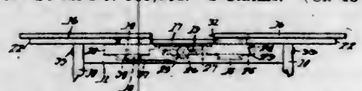
1. A vehicle guiding means including a stationary curb adapted to engage the wheel of a vehicle and a laterally yieldable platform arranged in operative relationship to the curb and upon which the wheels of the vehicle are adapted to travel.

1,805,212. PLANT COVER. FRIEDRICH GRAFFENBERGER, Milwaukee, Wis., assignor to Milwaukee Lace Paper Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 30, 1928. Serial No. 296,281. 6 Claims. (Cl. 47—28.)



1. A plant cover comprising a dome of translucent material formed of a single sheet of material in a series of frusto-conical sections some of which are fluted.

1,805,213. EXTENSION TABLE. MARCUS J. GREENWOOD, Gardner, Mass., assignor to Greenwood Associates, Gardner, Mass., a Voluntary Association. Filed Sept. 3, 1929. Serial No. 389,961. 4 Claims. (Cl. 45—112.)

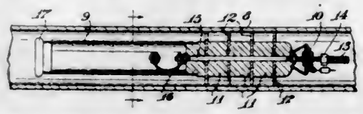


1. In an extension table, the combination of a pair of end pieces normally constituting the table top, a center piece normally resting under the adjacent ends of the end pieces, a pin on each end piece, a pair of slides at opposite sides of the table, each having a rack, a pinion meshing with each rack, a cam carried by each pinion and a pin on each slide located in position to be engaged by the corresponding pin on the end piece, whereby the cams will be raised to raise the center piece.

1,805,214. DELAY POWDER. GEORGE C. HALE, Dover, N. J. Filed Jan. 3, 1925. Serial No. 462. 6 Claims. (Cl. 52—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

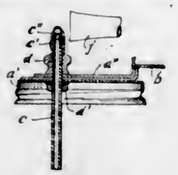
1. A delay powder for time fuses embodying an oxide of lead, silicon and a substance capable of reacting with the lead oxide and forming a binder.

1,805,215. MEANS FOR COATING METALLIC ARTICLES, PARTICULARLY THE INTERIORS OF WATER MAINS (IN SITU). FREDERICK WILLIAM HAMMOND, Chepstow, England. Filed May 13, 1930, Serial No. 452,116, and in Great Britain Mar. 5, 1930. 3 Claims. (Cl. 204—1.)



1. Improved means for depositing a protective coating on metallic articles, including a colloidal solution or emulsion or fluxed bitumen and other ingredients in an aqueous medium from which said coating is deposited by electrolysis, an anode consisting of the positively charged water pipe to be coated, a cathode consisting of a negatively charged copper cylinder movable through said water pipe by a rope attached to a bridge-piece on said cylinder, a travelling carriage of insulating material supporting said cylinder and fitted with rubber discs or rings, a waterproof cable connected to a terminal on the front of said carriage, a conductor and flexible lead between said terminal and cylinder, a wooden box on rear of said cylinder and a source of direct electric current.

1,805,216. SPRAYING ATTACHMENT. CHARLES B. LAWRENCE and EUGENE F. MARTINET, Cleveland, Ohio, assignors to The P. A. Geier Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 30, 1928. Serial No. 273,888. 3 Claims. (Cl. 299—88.)

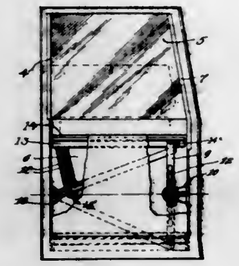


1. In a spraying device of the class described, the combination with the containing chamber and its associated liquid tube, of an axially adjustable tip thereon, an air chamber, and a spraying nozzle removably fitting said air chamber having an elongated discharge aperture positioned adjacent to and comprehending the adjustment of the tip, substantially parallel with the axis of the liquid tube, substantially as set forth.

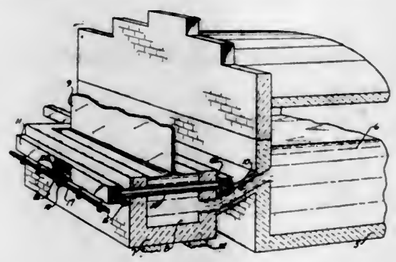
1,805,217. WINDOW REGULATOR. JOHN D. LAWRENCE and STANLEY W. NICHOLSON, Toledo, Ohio, assignors, by mesne assignments, to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 4, 1920. Serial No. 408,289. 4 Claims. (Cl. 268—126.)

1. In a window control mechanism, the combination with a member having a window opening provided with

opposed vertical and inclined edges, a vertical slidable closure for said opening, said closure conforming in shape with the window opening and being free from engagement with the inclined edge thereof, except in its substantially closed position, means engaging the lower portion of said closure and providing a fulcrum therefor when the inclined edge of the closure is disengaged from the corresponding edge of the opening and means engaging said closure adjacent the inclined edge thereof and laterally outward from said fulcrum tending to rock said closure on said fulcrum and force the same at all times against the vertical edge of said opening.



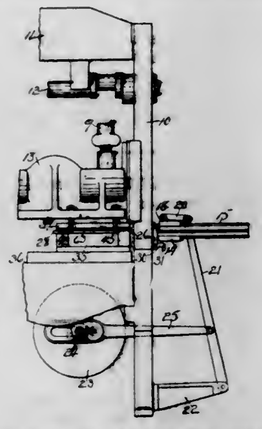
1,805,218. TEMPERATURE CONTROL MEANS FOR MOLTEN GLASS. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 5, 1928. Serial No. 267,529. 8 Claims. (Cl. 49—17.)



4. In apparatus for producing sheet glass, a drawing chamber containing a mass of molten glass from which the sheet is adapted to be drawn, a plurality of heat conducting flues submerged within the mass of molten glass and extending transversely of the chamber at spaced locations longitudinally thereof, intake and exhaust manifolds arranged at opposite sides of the drawing chamber and with which the opposite ends of said flues communicate, means for creating a continuous circulation of gaseous fluid through the manifolds and flues, means associated with the intake manifold for heating the gaseous fluid prior to its passage through said flues, and a damper associated with the intake end of each flue for controlling the amount of heated gaseous fluid passing therethrough to the outlet manifold.

1,805,219. FEEDING MECHANISM FOR PUNCH PRESSES. GEORGE FRANKLYN MATTESON, Rocky Hill, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed May 2, 1925. Serial No. 27,573. 28 Claims. (Cl. 153—2.)

1. A machine comprising means for moving a blank in one direction to a position for operation thereon, means for moving said blank in a transverse direction to another and different position for operation thereon, a single means carrying work performing elements for performing successive operations upon said blank in said different positions, and means for further moving the blank in its initial direction of movement.

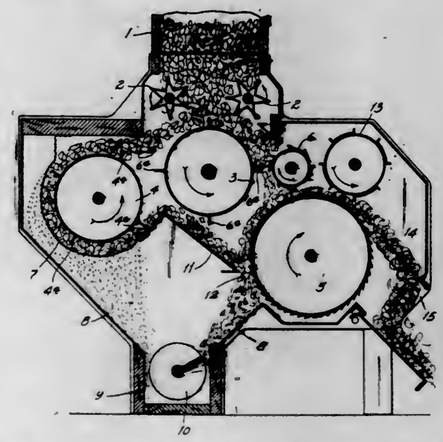


1,805,220. METHOD OF AND APPARATUS FOR BLOCKING HATS. MAURICE MILLER, Pottstown, Pa. Filed July 11, 1928. Serial No. 291,793. 2 Claims. (Cl. 223—23.)



1. In a hat blocking machine, a table, shelves carried thereby, a brim treating member above said table comprising a chambered casing having the central portion of its top face imperforate and the portions surrounding said imperforate portion apertured, and means under the control of the operator to pass steam to the chamber of said casing.

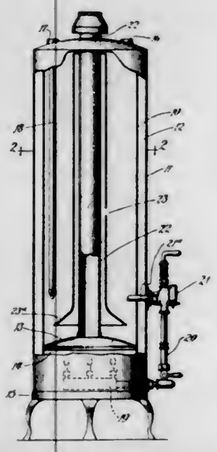
1,805,221. COMBINATION FEEDER-CLEANER AND EXTRACTING MACHINE. JOHN B. MITCHELL, Dallas, Tex. Filed Sept. 23, 1929. Serial No. 394,526. 9 Claims. (Cl. 19—37.)



1. In a combination cotton feeding, cleaning and extracting machine, feeding mechanism for delivering a

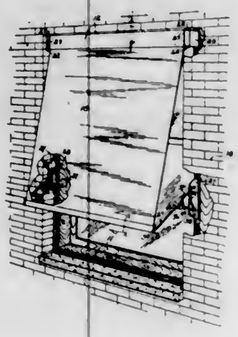
regulated stream of the harvested cotton to the machine, cleaning mechanism positioned to receive the delivered cotton, extracting mechanism adapted to act upon cotton mixed with hulls and sticks passing from the cleaning mechanism and comprising a saw cylinder and a co-operating kicker roll, and means for continuously delivering cotton from the cleaning mechanism to the extracting mechanism and for returning that part of the stream of cotton rejected by the kicker roll to the cleaning mechanism.

1,805,222. WATER HEATER. JAMES P. MORLEY, Michigan City, Ind., assignor to Bastian-Morley Company, La Porte, Ind., a Corporation of Indiana. Filed July 16, 1928. Serial No. 293,112. 6 Claims. (Cl. 122—159.)



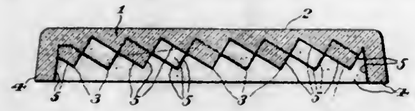
4. A thermo-siphonic device for heating and circulating water in a tank comprising a conduit member adapted to be mounted within the tank, and means associated with said conduit member for segregating the water in said tank immediately adjacent the wall of said conduit into an annular series of relatively thin, separated streams which engage and pass longitudinally along in immediate contact with the outer wall surface of said conduit, and means for passing a heating medium through said conduit.

1,805,223. AWNING. NELS H. NELSON, Des Moines, Iowa. Filed May 13, 1929. Serial No. 362,731. 9 Claims. (Cl. 156—44.)



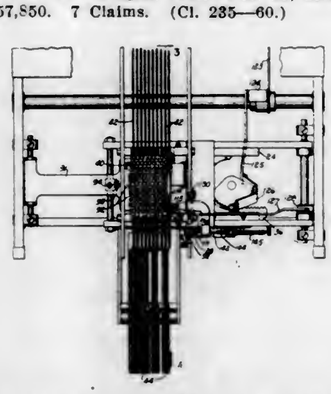
4. In a device of the class described, a flexible element, a swinging frame, a binder strip secured to said flexible element, a hook portion formed on said binder strip for detachably engaging the outer end of said frame; said hook portion having its free end bent inwardly beyond said frame when said frame is in the same for yieldingly retaining said frame in said hook portion.

1,805,224. REFLECTOR AND METHOD OF PROVIDING THE REFLECTING SURFACE THEREOF WITH MEANS FOR COLORING THE LIGHT REFLECTED THEREFROM. VICTOR L. OESTNAES, Westfield, N. J., assignor to American Gasaccumulator Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Mar. 16, 1928. Serial No. 262,113. 2 Claims. (Cl. 88—1.)



1. A light reflector comprising a transparent member having upon its rear side a plurality of projections the surfaces of each of which are arranged in right angular or approximately right angular relation to each other, and a transparent coating upon the said surfaces having embodied therein a coloring substance, the rear surface of the said coating being the reflecting surface of the said reflector.

1,805,225. CALCULATING MACHINE. WALTER J. PASINSKI and JOHN MAGNUS, Detroit, Mich., assignors to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 29, 1928. Serial No. 257,850. 7 Claims. (Cl. 235—60.)

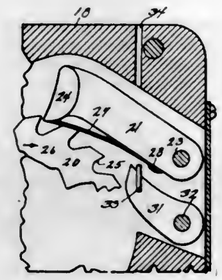


4. In combination, in a machine of the class described having a laterally movable field of setting-up devices comprising rows of pins with the same number of pins in each row, means for selectively setting up said devices, and means for tabulating said field of setting-up devices laterally step by step; a stationary field of stops comprising a plurality of rows of movable stop pins with the number of pins in some rows differing from that in others, means for moving the field of setting-up devices bodily into engagement with the stationary field of stops to collectively position certain of said stops, and means for selectively positioning the stops in any row of said stationary field of stops in excess of the number corresponding to the number of setting-up devices in each row of said devices.

1,805,226. REVERSE MOTION CHECK. EDGAR J. RICHARDSON, Sheridan, Wyo. Filed Aug. 5, 1929. Serial No. 383,663. 9 Claims. (Cl. 192—4.)

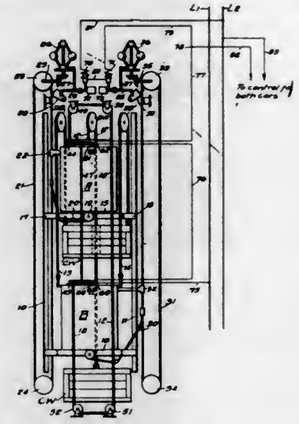
1. In a reverse motion check, in combination with a vehicle transmission housing and a transmission shaft

journalled therein, a ratchet wheel secured to the shaft, a pawl pivoted relative to the housing in position to engage the ratchet to check reverse movement of the shaft, and a silencing spring comprising a spring element secured at one end to the pawl and extending substantially



tangentially of the ratchet wheel between the pawl and the wheel, to engage the wheel and to support the weight of the pawl against the wheel, one end of the spring being free to recede away from the wheel to allow the pawl to engage the wheel.

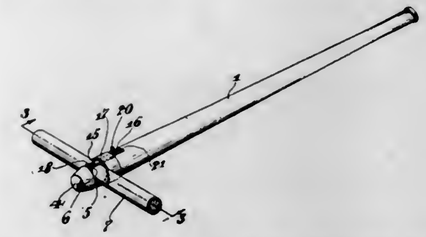
1,805,227. MULTIPLE-CAR ELEVATOR. WALTER S. RUGG, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 27, 1929. Serial No. 366,347. 11 Claims. (Cl. 187—16.)



1. The combination with a plurality of elevator cars operable in the same hatchway and motive means for actuating said cars, of a safety mechanism therefor comprising a movable member disposed on each of said cars, means connected to each of said movable members and operably responsive to relative motion of said cars for operating said movable members, and means responsive to operation of said movable members for rendering said motive means inoperative when said cars approach each other within a predetermined distance.

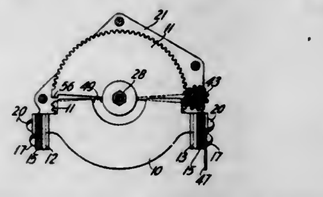
1,805,228. CIGARETTE HOLDER. JAMES HERMAN ABBOTT, Philadelphia, Pa. Filed Dec. 12, 1927. Serial No. 239,284. 5 Claims. (Cl. 131—10.)

1. A holder for holding cigarettes at points intermediate their opposite ends when they are being smoked, the said holder comprising an elongated stem-like portion having a passageway extending lengthwise thereof through which the smoke from a burning cigarette is adapted to be drawn and the said holder having at its outer end an opening extending transversely therethrough



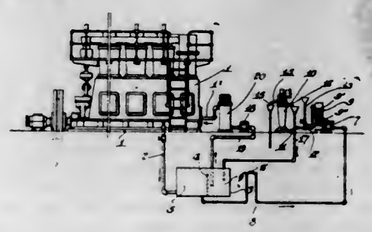
with which the outer end of the said lengthwise extending passageway is in communication, the said transversely extending opening being adapted to receive and hold a cigarette.

1,805,229. VARIABLE ELECTRICAL APPARATUS. GEORGE F. ATWOOD, Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 28, 1926. Serial No. 132,080. 7 Claims. (Cl. 175—41.5.)



1. In a variable condenser, a plurality of stationary plates, a plurality of movable plates insulated from said stationary plates and having gear teeth at a peripheral portion, a pinion gear in mesh with the gear teeth of one of said movable plates, means for revolving said pinion gear to move one of said movable plates between adjacent stationary plates, and means for positioning a second of said movable plates into mesh with said pinion gear as said first mentioned movable plate is moved out of mesh with said pinion gear.

1,805,230. LUBRICATING SYSTEM. ARTHUR U. AYRES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 22, 1926. Serial No. 96,477. 11 Claims. (Cl. 184—6.)



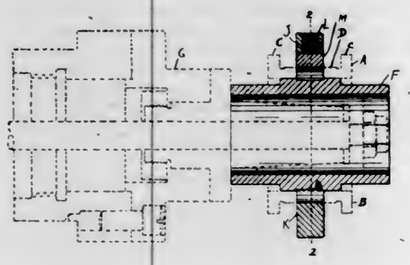
1. A lubricating system for supplying oil to parts to be lubricated which comprises means for collecting and settling oil that has been used for the lubrication of said parts, means for centrifuging a heavier portion of the settled oil, and means for recirculating to said parts the lighter portion of the settled oil together with centrifuged oil both substantially free of unsettled oil, in a continuous sequence of operations.

1,805,231. DOLL. ABE BLAUSTEIN, New York, N. Y. Filed July 11, 1930. Serial No. 467,262. 3 Claims. (Cl. 46—40.)



1. A doll having movable eyes and mouth, a bellows cry sounder supported in the doll and exposed through an opening so as to be compressible to give out crying sounds, a lever connected with the movable mouth, a weight connected with the movable eyes and resting on said lever, and means associated with said bellows cry sounder and coactable with said lever to move the latter element for moving the mouth and eyes simultaneously with the crying operation, and moving the eyes and mouth several times for each depression of the bellows cry sounder.

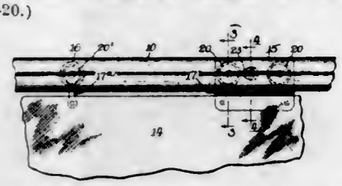
1,805,232. MEANS FOR HOLDING HALF BEARINGS ABOUT AN ARBOR PREPARATORY TO MACHINING. LOWELL C. BLOMSTROM, Detroit, Mich., assignor to Federal Mogul Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 6, 1927. Serial No. 211,085. 8 Claims. (Cl. 82—43.)



1. Means for holding a pair of half-bearings in position about a supporting element for machining operations upon selected portions of their periphera, comprising in combination therewith a two-piece ring having interlockable portions adapted to be united about the intermediate portions of the half bearings after the latter have been placed in position about the supporting element, and a screw carried by one of said ring sections, adapted to be moved transversely of the lengthwise axis of the supporting element and of the assembled half-bearings into frictional engagement with the outer surface of one of the half-bearings.

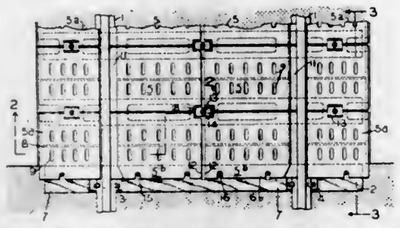
6. The combination, with a two-piece ring formed of terminally interlockable separable pieces, of a screw member adjustably engaging through one of said pieces transversely of the cylindrical axis of said ring when assembled, said screw member when projected against a mass encircled by said ring being adapted to exert a separating influence on the parts thereof which is resisted by the interlocked position of the ends of the component parts thereof, thereby effecting a holding action by the ring structure as a whole upon a pair of half-bearing shells surrounded thereby, and an arbor member positioned coaxially within said half-bearing shells, against whose surface the half-bearing shells are adapted to be pressed by the described action of said ring structure.

1,805,233. CURTAIN SUPPORT. JAMES H. BOYE, Chicago, Ill., assignor to James H. Boye Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 21, 1930. Serial No. 454,246. 5 Claims. (Cl. 156—20.)



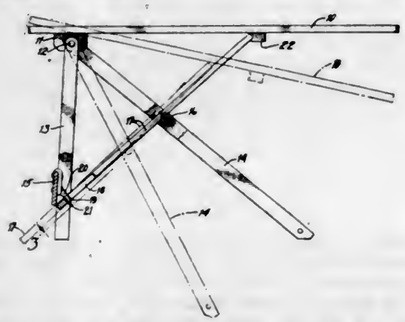
4. As an element of a draw curtain support, a curtain hanger slide comprising a plate, a pair of rollers mounted on one side of said plate to travel in a longitudinally slotted hollow curtain rod, an inclined laterally extending tongue on said plate located between said rollers and adapted to project into the rod through the slot thereof, said tongue being longitudinally slotted for the passage of the cord therethrough, and a clamp screw mounted in said plate adjacent to the base of said tongue adapted to pinch the cord against a wall of the slot of said tongue.

1,805,234. RAILWAY GRADE CROSSING CONSTRUCTION. GEORGE R. BURKHARDT, Chicago, and CHARLES W. BREED, Western Springs, Ill. Filed Aug. 12, 1929. Serial No. 385,135. 11 Claims. (Cl. 238—8.)



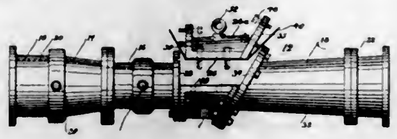
1. A metallic railroad crossing composed of substantially rectangular units arranged in rows parallel with the rails of the track, said units being tubular and having laterally extending flanges by which they are suppported.

1,805,235. FOLDING TABLE. CHARLES G. CARLSON, Chicago, Ill. Filed May 7, 1930. Serial No. 450,354. 8 Claims. (Cl. 69—10.)



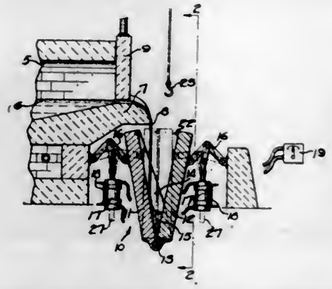
1. An ironing table comprising a board, a pair of leg members pivotally secured thereto, a rigid stay pivotally mounted on one leg member, means on the board adapted to be engaged by the stay, and means including a pin on the other leg member and an L-shaped slot in the stay in which the pin runs for securing the stay to said other leg member against lengthwise movement when erected.

1,805,236. VENTURI METER. FREDERICK N. CONNET, Providence, R. I., assignor to Builders Iron Foundry, Providence, R. I., a Corporation of Rhode Island. Filed Oct. 25, 1927. Serial No. 228,678. 4 Claims. (Cl. 137—75.)



1. A Venturi meter tube particularly adapted for measuring fluids in which reposition or clogging takes place requiring clearing of the meter at intervals, which comprises a converging tube section, a diverging tube section, and a throat section, said Venturi tube having a removable wedge portion at the throat thereof, whereby said portion may be readily removed and replaced without the disturbance of the adjacent sections of the meter.

1,805,237. SHEET MOLDING APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 8, 1926. Serial No. 86,735. 4 Claims. (Cl. 49—72.)



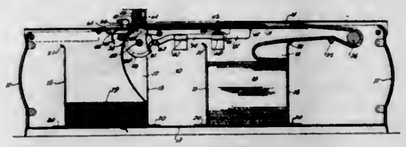
1. In sheet glass apparatus, a mold comprising a pair of approximately vertical mold plates pivotally associated with one another and normally positioned in upwardly diverging relation to create a mold cavity therebetween for receiving therein a quantity of molten glass, and means for moving said plates toward one another to reduce the molten glass therebetween to sheet form, including a link mechanism associated with each plate, and separate operating means for each link mechanism.

1,805,238. VENETIAN BLIND. WALTER E. DUNCANSON, New York, N. Y., assignor to J. G. Wilson Corp., New York, N. Y., a Corporation of Virginia. Filed Mar. 27, 1928. Serial No. 264,983. 7 Claims. (Cl. 156—17.)



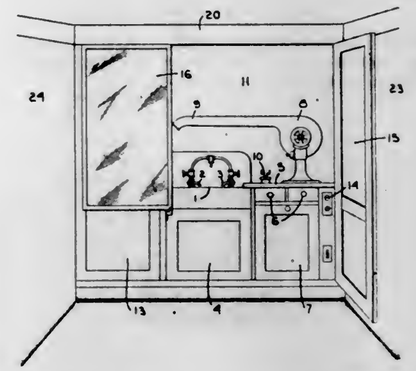
1. In a venetian blind, a plurality of detachable resilient slats supported by supporting tapes, guide members therefor fastened to the sides of a window casing, the flexing of the slats, making the same detachable from the guide members.

1,805,239. AUTOGRAPHIC REGISTER. WILLIAM E. DUNNING, Alliance, Ohio, assignor to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed Sept. 20, 1930. Serial No. 483,268. 14 Claims. (Cl. 282—16.)



1. An autographic register including a casing adapted to contain a longitudinally folded record strip, a table in the casing, a moveable knife in the casing, feed rolls for feeding the folded record strip over the knife to cut the strip along its folded edges, and means cooperating with the moveable knife for holding the strip taut across the table to permit writing upon the strip.

1,805,240. HAIR-DRESSING BOOTH. BERTHOLD W. FRANKEL, Brookline, Mass. Filed July 11, 1928. Serial No. 291,908. 1 Claim. (Cl. 20—1.11.)

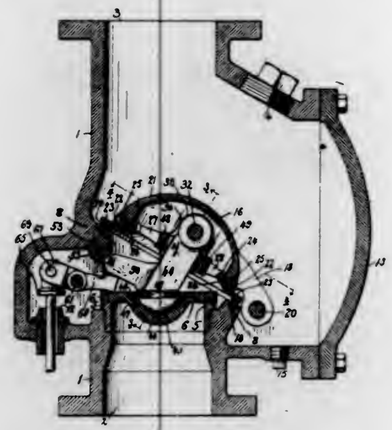


A hair-dressing booth having at one end a closet provided with a swinging door and a compartment adjacent said closet to receive working apparatus and a two-part closure for said compartment comprising a swinging door or panel and a sliding mirror, the door or panel being pivotally hung at the end of the compartment opposite the closet and when closed partially closing the compartment and the mirror being slidable toward and from the free edge of the door when the latter is closed and in a plane parallel thereto, said mirror being of a dimension to close the portion of the compartment between the free edge of the door or panel when the latter is closed and the closet, and being slidable in front of the closed closet door to open the compartment.

1,805,241. DRY PIPE VALVE. WILLIAM B. GRIFFITH, Audubon, N. J., assignor to Star Sprinkler Corporation, a Corporation of New Jersey. Filed Sept. 23, 1926. Serial No. 137,218. 4 Claims. (Cl. 169—21.)

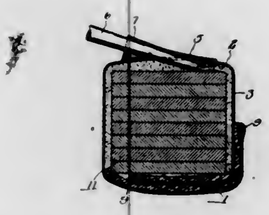
1. A dry pipe valve comprising a casing having an air valve seat and a water valve seat formed therein, a clapper pivoted upon the casing, an air valve, a clamp-ring secured to the clapper adapted for holding the air valve upon the clapper, a bearing mounted upon said clamp-ring,

a shaft in said bearing, a lever having one end pivoted upon said shaft, a water valve pivotally mounted upon said lever, a part upon the casing forming a stop, and an



arm fixed to the lever adapted to engage said stop when the water valve is in the closed position upon the water valve seat.

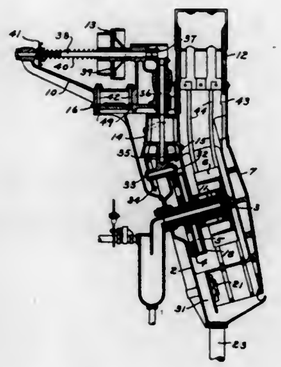
1,805,242. LEAF SPRING OILER. WILLIAM GRUS, Jr., Los Angeles, Calif. Filed July 2, 1926. Serial No. 120,059. 2 Claims. (Cl. 184—1.)



1. A leaf spring oiler comprising a waterproof flexible fabric cover sheet and an inner absorbent pad substantially coextensive therewith of a length to overlap when wrapped transversely about a leaf spring, the pad only having a recess extending from the top downwardly over the edges and constituting a reservoir and passages for saturating the pad and confining a body of lubricant against a portion of the edges of the leaves, the cover sheet having an oil filling aperture above the recess at the top of the pad, and a flexible cover for the aperture composed of a strip of the cover sheet material extending over the aperture and attached at its ends only at a distance from the aperture so that an oil can spout may be inserted from either side and into the aperture for filling the reservoir.

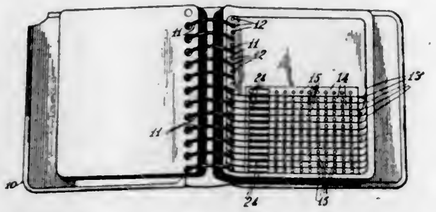
1,805,243. CAN FEEDING MECHANISM. OSWALD H. HANSEN, Milwaukee, Wis., assignor to Hansen Canning Machinery Corporation, Port Washington, Wis. Original application filed Sept. 22, 1922, Serial No. 589,888. Patent No. 1,677,443, dated July 17, 1928. Divided and this application filed Sept. 25, 1926. Serial No. 137,797. 8 Claims. (Cl. 198—22.)

1. In combination, means forming a chamber and a chute for delivering a succession of cylindrical cans with their axes horizontal downwardly toward said chamber, a feed drum having a helical projection extending into one side of said chute, said drum being directly engageable with the open end edges and said projection being rollably engageable with the lower curved side portions of the successive cans passing through said chute to re-



tard the travel of upper cans and to deliver the successive lower cans in definitely spaced relation into said chamber, and means associated with the opposite side of said chute for urging the successive cans into operative engagement with said projection.

1,805,244. INDICATING MEANS. ROSS HAWKINS, Chicago, Ill., assignor to Harold E. Hawkins, Chicago, Ill. Filed Sept. 26, 1927. Serial No. 221,872. 4 Claims. (Cl. 129—1.)



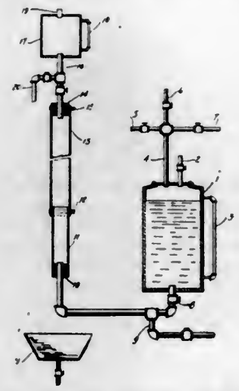
1. Indicating means of the character described comprising a record or data receiving sheet, one marginal edge whereof is provided with a plurality of pockets open at one side, each pocket being provided with a sight-opening, and signaling slips insertible in said pockets.

3. In combination with a loose leaf binder, a plurality of sheets arranged in the binder so as to expose the lower marginal edge of each subjacent sheet, a strip of thin flexible material disposed throughout the lower marginal edge of each sheet and of width corresponding with the width of the exposed marginal edge of each sheet so as to maintain alignment of the superposed sheets, each of said strips being secured to the sheet at various points so as to provide a plurality of uniform pockets open at one longitudinal edge of the strip, each pocket being formed to permit visibility of its contents.

1,805,245. METHOD OF MAKING ARTICLES OF RUBBER AND FIBROUS MATERIAL, AND PRODUCT. ERNEST HOPKINSON, New York, and WILLIS A. GIBBONS, Little Neck, Long Island, N. Y., assignors to New York Belting & Packing Company, New York, N. Y., a Corporation of New York. Filed June 8, 1925. Serial No. 35,614. 12 Claims. (Cl. 91—68.)

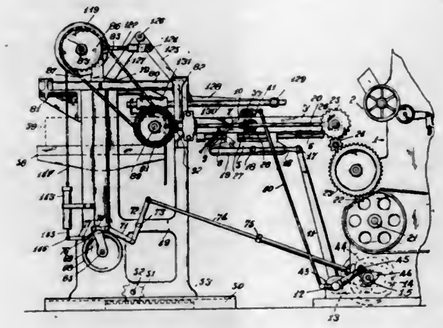
1. A process of manufacturing an article composed of fibrous material and rubber which consists in exposing

a surface of fibrous material to a water dispersion of rubber, continuously withdrawing the water through said fibrous material until a desired thickness of insoluble



constituents of the water dispersion has been deposited on said surface from the water dispersion, and forming an integral fabric and rubber article by drying the deposit on the fibrous material.

1,805,246. FEEDING DEVICE FOR PRESSES. JOSEPH A. JOHNSON, Chicago, and GEORGE W. CHALMERS, Summit, Ill., assignors to International Patents Development Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 10, 1924. Serial No. 749,088. 13 Claims. (Cl. 271—31.)

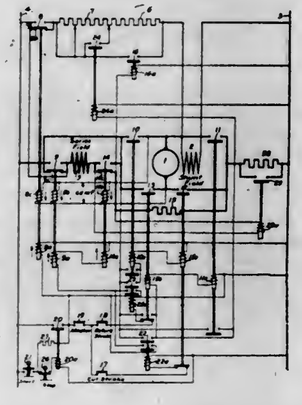


1. A sheet feeding apparatus, comprising a support for the stacked sheets, a vacuum cup for lifting the uppermost sheet, a plunger at the lower end of which the cup is carried, means for raising and lowering the plunger, there being a passage in the plunger communicating with the cup at its lower end and opening out through the side of the plunger at its upper end a guide block through which the plunger is reciprocated, there being a port in the guide block communicating with an exhausting apparatus, the passage in the plunger being brought into communication with the port when lowered and into communication with the open air when raised, and means for tilting the cup when raised.

1,805,247. PROCESS OF PURIFYING SULPHURIC ACID. FRANKLIN ERNEST KIMBALL, Long Beach, Calif. Filed Aug. 14, 1930. Serial No. 475,388. 2 Claims. (Cl. 23—173.)

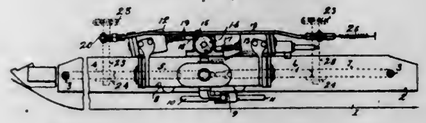
2. The process of oxidizing organic matter and carbon in sulphuric acid consisting in dissolving one per cent of antimonous sulphate therein, continuously agitating the sulphuric acid in a suitable vessel by continuously supplying air at a temperature of 500 degrees Fahrenheit thereto, continuously supplying the sulphuric acid containing the antimonous sulphate thereto, continuously withdrawing sulphuric acid therefrom, continuously withdrawing air therefrom, cooling same, collecting condensed sulphuric acid and continuously returning it back to the vessel.

1,805,248. MOTOR CONTROL SYSTEM. GEORGE E. KING, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 15, 1926. Serial No. 141,715. 19 Claims. (Cl. 172—240.)



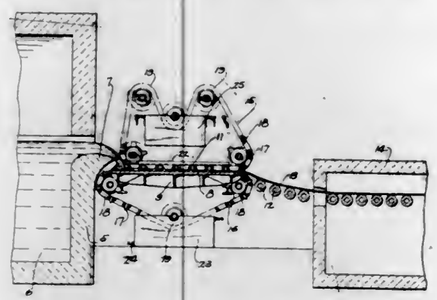
1. A system of motor control comprising a reversible motor having an armature winding, a series field winding and a shunt field winding, a braking resistor, a source of power, means for connecting said motor windings to said source, means rendered active upon failure of said power for connecting said shunt field winding across the armature winding, and means for connecting said braking resistor and said series field winding in series relation with the armature winding in a manner to aid the shunt field winding to provide automatic electric braking when the motor is running in either direction.

1,805,249. LOCK FOR FOLDING DOORS. THOMAS LAURENT, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Oct. 1, 1927. Serial No. 223,278. 7 Claims. (Cl. 268—64.)



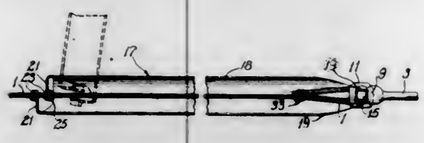
1. The combination with a plurality of folding doors and an engine for moving the doors of a valve for controlling the operation of the engine, separate penumatic means for operating said valve, means for locking the doors closed and means mechanically connected with said valve operating means and said locking means for releasing said locking means upon the operation of the valve.

1,805,250. SHEET WIDTH MAINTAINING DEVICE. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 5, 1926. Serial No. 146,818. 9 Claims. (Cl. 49—17.)



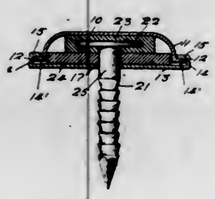
1. In sheet glass apparatus, a slab, means for flowing glass thereon, and means contacting with the edges of the flow while on said slab and moving therewith to prevent narrowing thereof.

1,805,251. GUY GUARD. CLAUDE L. MATTHEWS, St. Louis, LESTER PIERCE BOLL, University City, and LINDELL LLOYD CRUMP, Kirkwood, Mo., assignors to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 15, 1930. Serial No. 502,342. 6 Claims. (Cl. 189—31.5.)



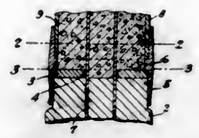
1. A guy guard comprising a longitudinal body portion, spaced gripping means formed on said body portion, said means being adapted to freely receive a guy strand therebetween when said body portion is angularly disposed to said guy strand, said means being adapted to securely engage said guy strand when said body portion is angularly turned to substantially align with said strand.

1,805,252. FURNITURE LEG SHOE. ROBERT E. MILLER, Bronxville, N. Y. Filed Apr. 19, 1928. Serial No. 271,106. 5 Claims. (Cl. 16—42.)



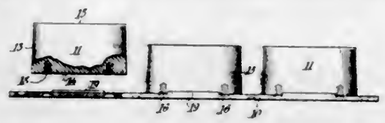
1. A sliding shoe for furniture, comprising a rigid bottom member and a rigid upper member defining an enclosed chamber between them, said members being relatively movable to vary the distance between them, an attaching element having a head within said chamber and a stem extending out of said chamber through said upper member, and a resilient padding between said members for yieldably holding them apart, a portion of said padding lying between said head and said upper member.

1,805,253. COMPOSITE PILE. LOUIS NADEL, New York, N. Y., assignor to Pierce Steel Pile Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 21, 1930. Serial No. 445,875. 2 Claims. (Cl. 61—57.)



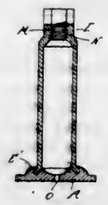
1. A composite pile comprising a wood pile, a plate thereon having a central opening, an external sleeve embracing the top of the wood pile and having an internal rib intermediate its ends overlying the margin of said plate, a permanent form stepped in the portion of said sleeve above said rib, a tubular dowel driven part way into the wood section, and a concrete filling inside said form and inside and outside the portion of said tubular dowel above the wood.

1,805,254. RUNNER BLOCK AND MOUNTING MEANS THEREFOR. JACOB R. OSBORN, Du Bois, Pa. Filed Nov. 17, 1925. Serial No. 69,629. 5 Claims. (Cl. 51—209.)



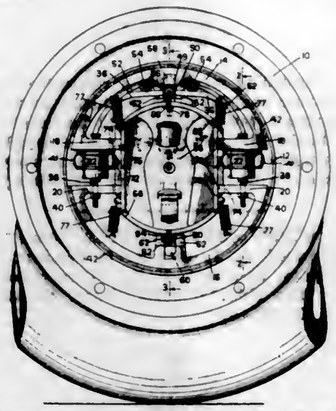
1. The combination, with a grinding deck, of a plurality of grinding runner blocks, a common mounting bar therefor, individual attaching means whereby each of said blocks may be detachably secured to the exposed face of said bar, and means whereby said bar and the attached blocks may be detachably secured to said deck, said bar-attaching means being readily accessible, for application and removal, from the block-receiving surface of the deck.

1,805,255. VALVE TAPPET AND METHOD OF FORMING THE SAME. WILLIAM C. OSTERHOLM, Oak Park, Ill., assignor to Wilcox Products Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed Apr. 21, 1924, Serial No. 708,048. Divided and this application filed Dec. 27, 1926. Serial No. 157,847. 6 Claims. (Cl. 29—156.7.)



1. The method of manufacturing tappets and the like comprising the forming of a head with an annular recess therein bounded on the inner side by a conical surface, said head member having an annular flange extending substantially parallel to the axis of said head and forming the outer side of said recess, the forming of a separate tubular stem member, the end portion of which is of uniform diameter, applying endwise pressure to said head and stem to flare the end of said tubular member and conform the same to said conical surface, and pressing said annular flange inwardly to turn the same into such frictional inter-locking engagement with said flared tubular end as to prevent rotation of said head and stem.

1,805,256. HYDRAULIC BRAKE. ALBERT D. PENTZ, New York, N. Y., assignor to Pentz Motor Brake Corporation, New York, N. Y., a Corporation of New York. Filed May 26, 1927. Serial No. 194,272. 8 Claims. (Cl. 188—152.)



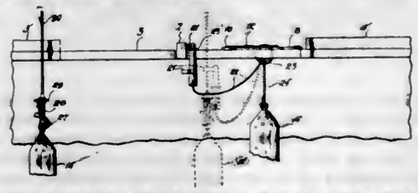
1. In a brake for vehicles, in combination, a brake drum, two semicircular brake shoes oppositely disposed within said drum, and a pair of hydraulic thrust devices between said shoes for forcing them apart and into contact with said drum, said devices being fast to one of said shoes and arranged to thrust directly against the other of said shoes so that the reaction on one shoe will be equal to the thrust on the other shoe.

1,805,257. DISPENSING BOTTLE STOPPER. FREDERICK D. PITT, Kansas City, Mo. Filed Sept. 8, 1927. Serial No. 218,209. 7 Claims. (Cl. 215—78.)



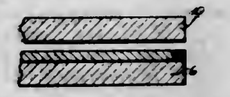
1. A dispensing bottle stopper including an elastic channeled body adapted for location in a bottle neck and having an annular shoulder for engaging the rim of the neck, a cap on said body, an attaching member on said cap having a cam portion engageable with the bottle neck to press the shoulder against the neck rim and retain the stopper, and a valve controlling outlet through the body channel.

1,805,258. AIR MAIL EXCHANGE DEVICE. CORNELIOUS C. PURSLEY, Hillsboro, Tex., assignor of one-half to Douglas W. Cooper, Hillsboro, Tex. Filed July 21, 1930. Serial No. 469,404. 5 Claims. (Cl. 258—1.)



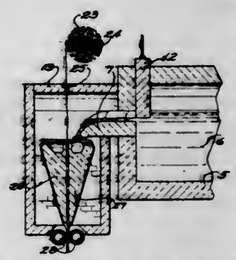
1. An air mail exchange apparatus comprising an elevated support, a platform disposed above the support, said platform formed with inwardly converging guideways leading to a longitudinal opening in the platform; means adjacent said guideways for suspending an outgoing mail bag; a cable adapted to be suspended from an aeroplane and carrying means for suspending an incoming mail bag; means on said platform for automatically releasing said in-coming mail bag by contact with said cable; and a tripping mechanism on said platform for releasing said outgoing mail bag in conjunction with said cable.

1,805,259. PROCESS OF PRODUCING LAMINATED GLASS. JAMES W. H. RANDALL, New York, N. Y., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 24, 1928. Serial No. 256,592. 2 Claims. (Cl. 49—81.)
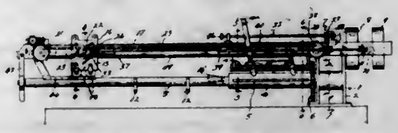


1. The process of producing laminated glass consisting in arranging a sheet of non-brittle material on a sheet of glass, mounting sealing material strips on said sheet of glass and around the non-brittle sheet and in the same plane therewith, then placing a second sheet of glass thereover and combining the whole into a composite structure.

1,805,260. SHEET GLASS APPARATUS. JOSEPH A. REECE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 16, 1927. Serial No. 206,145. 2 Claims. (Cl. 49—32.)



2. In sheet glass apparatus, a substantially vertically arranged slab composed of two adjacent sections having a vertical opening therebetween, each section having a though in its upper end and the opposite ends of the troughs of the two sections communicating with one another, means for flowing glass into one of said troughs from where a portion of it will pass into the other trough, the glass flowing from the troughs downwardly over the slab to form a sheet, means for passing a wire mesh downwardly through the opening between the slab sections, and a pair of rolls for reducing the sheet to the desired thickness as it leaves said slab.

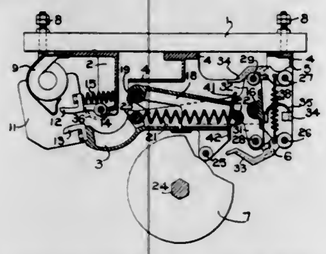
1,805,261. MACHINE FOR MAKING SHELLS FOR AUTOMOBILE HEATERS AND THE LIKE. THOMAS H. ROBERTS and JOHN R. HOLMES, Detroit, Mich., assignors to James W. Kelch, Detroit, Mich. Filed Dec. 31, 1928. Serial No. 329,619. 17 Claims. (Cl. 113—34.)



1. In a machine for making shells for automobile heaters, means including a mandrel for bending a sheet of ma-

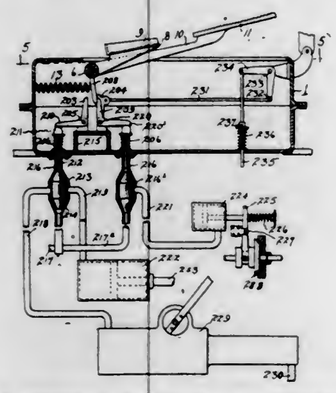
terial into the approximate form of the shell, a support for the mandrel having a portion projecting beyond one end of the mandrel for supporting the sheet after the bending operation, and means movable longitudinally of the supporting means for seaming the ends of the sheet to form the finished shell.

1,805,262. CONTROL APPARATUS. EDWARD E. ROSE, Edgewood, Pa., and JOHN T. WELSH, Westfield, N. J.; said Rose assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1927. Serial No. 199,146. 3 Claims. (Cl. 200—68.)



1. A circuit-interrupting device comprising a frame, a stationary contact member carried by the frame, a movable contact member disposed to engage the stationary contact member, the movable contact member being pivotally mounted on the frame, resilient latching members disposed to engage the movable contact member, an arm pivotally mounted on the frame for operating the movable contact member, a cam member for actuating the arm resilient means connecting the freely movable ends of the cam actuated arm and the movable contact member, said resilient means being disposed to bias the movable contact member to different positions in response to the movement of the cam actuated arm and to cause said arm to continuously react against the cam, and means operated upon the actuation of said arm for operating the latching members to release the movable contact member when the arm reaches different predetermined positions, to utilize the resilient means in actuating the movable contact member.

1,805,263. HEEL AND TOE CONTROL OF VEHICLES. HAROLD ROWNTREE, Scarsdale, N. Y., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Feb. 9, 1929. Serial No. 338,672. 12 Claims. (Cl. 180—77.)



1. In a pneumatic car control, the combination with pneumatic brake, door operating and clutch mechanism, of a single lever for controlling said mechanism.

1,805,264. ATTACHING MEANS FOR REMOVABLE DENTURES. CARL H. SCHEU, Lakewood, Ohio. Filed Dec. 1, 1927. Serial No. 236,911. 12 Claims. (Cl. 32—12.)



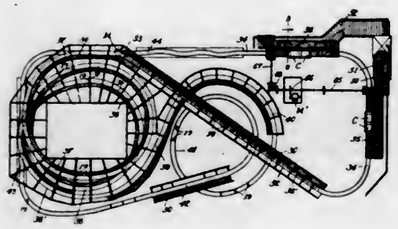
10. In a fastening means for a removable denture, a box-like member adapted to be positioned in the side of a tooth having a vertically arranged fin defining a pair of longitudinally disposed recesses, and a complementary member having portions adapted to be detachably received and supported in the recesses of said first named member.

1,805,265. SCREW CONVEYER PILE. JOHN W. TAUSIG, Englewood, N. J., assignor to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 17, 1926. Serial No. 88,727. 4 Claims. (Cl. 61—57.)



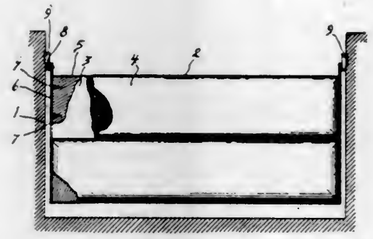
4. The method of forming a concrete pile in situ which comprises driving a screw conveyer having a bore lengthwise through it into position, filling the hole formed thereby with concrete, inserting a reinforcing rod through the bore of the conveyer, and finally withdrawing the conveyer, leaving the reinforcing rod in position in the finished pile.

1,805,266. AMUSEMENT COASTER RAILWAY. HARRY G. TRAVER, Beaver Falls, Pa. Filed Apr. 11, 1927. Serial No. 182,719. 10 Claims. (Cl. 104—63.)



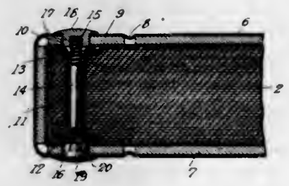
1. In a coaster amusement railway, a continuous track having a loading and unloading station interposed in a low and level section thereof, an ascending section leading from the loading station and a declivous section leading from the top of the ascending section arranged in successive loops evolved about an axis intermediate the perpendicular and horizontal.

1,805,267. BOWLING ALLEY PIT CUSHION STRUCTURE. THEODORE R. TREIBER, Chicago, Ill., assignor, by mesne assignments, to The Brunswick-Balke-Collender Company, a Corporation of Delaware. Filed Oct. 17, 1927. Serial No. 226,592. 1 Claim. (Cl. 273—53.)



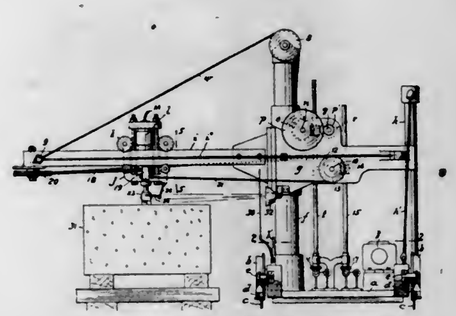
In a bowling alley pit cushion structure the combination with a rectangular pit cushion having a continuous groove about the sides thereof, of U-shaped pivot members adapted to be attached in upright positions to stationary means at the ends of the cushion, a right angled U-shaped supporting member embracing three sides of the cushion and engaged in said groove and adapted for reversal thereon and to be secured therewith, and alined outwardly projecting pivot pins secured at the ends of said supporting member for engagement in said first mentioned pivot members to pivotally support the cushion.

1,805,268. CHECK BOOK. LOUIS F. TRESBACK, Teaneck Township, Bergen County, N. J. Filed June 4, 1930. Serial No. 459,159. 1 Claim. (Cl. 281—25.)



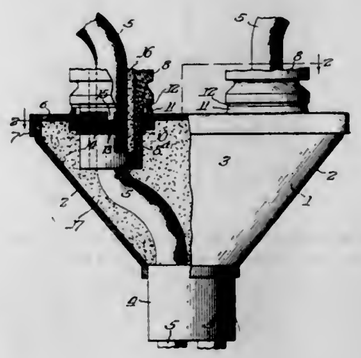
A book comprising a cover having a back portion provided with aligned apertures, a filler consisting of a plurality of sheets secured together by a tubular rivet having upset ends, a bolt provided with threaded ends, positioned in the rivet, and a pair of nuts adapted to be positioned in the apertured portions of said cover back and to have threaded engagement with the threaded ends of said bolt to detachably secure the filler to the cover back, each of said nuts being of a diameter and length to substantially fill the apertured portion of said cover back and to bear against the adjacent end of the rivet and being provided with a flat head adapted to overlie the apertured portion of the back, whereby the filler may be detachably secured in and be detached from the book back without distorting said book back.

1,805,269. STONE DRESSING MACHINE. WILBER H. VAN SICKEL, Langhorne, Pa., assignor to The Dallett Company, Philadelphia, Pa., a Corporation of New Jersey. Filed June 22, 1927, Serial No. 200,618. Renewed Oct. 18, 1930. 6 Claims. (Cl. 125—8.)



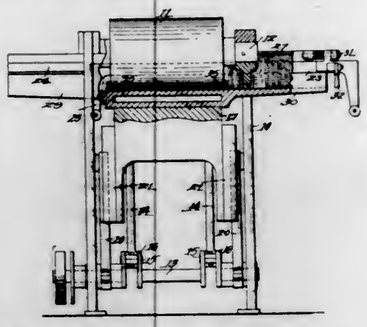
1. A stone dressing machine comprising a mobile base, an arm adjustably supported from said base, a power actuated tool supported by and adapted to travel relative to said base, means for adjusting said arm and for moving said tool relative to said arm, prime movers supported on said base and adapted to actuate said means, a prime mover for moving said base, an operator's station on said base and means for the control of said prime movers located at said operator's station.

1,805,270. ELECTRICAL CONNECTER. PAUL F. WILLIAMS, Chicago, Ill., assignor to G & W Electric Specialty Co., Chicago, Ill., a Corporation of Illinois. Filed June 17, 1922. Serial No. 569,058. 1 Claim. (Cl. 217—6.)



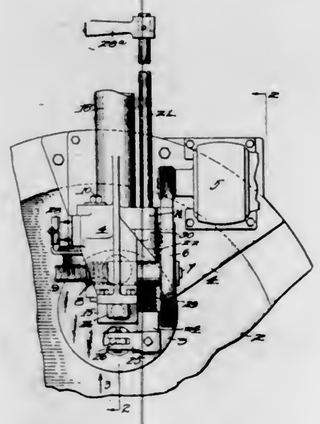
A device of the class specified, comprising a shell, a screw-threaded aperture therein, an outlet arranged to occupy the said aperture, an exteriorly screw-threaded flexible collar secured to the outlet, a notch in the collar, a key in the outlet integral therewith, the said key engaging the said notch, whereby the rotation of the outlet will transmit rotation to the collar.

1,805,271. DOUBLE MATRIX OPERATING DEVICE. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Oct. 28, 1926, Serial No. 144,876. Renewed Oct. 2, 1930. 14 Claims. (Cl. 22—5.)



1. In a stereotype plate casting device, the combination with a mold comprising a convex core and a concave back, of means whereby a matrix can be moved out of the mold in an axial direction and supported at the end of the mold.

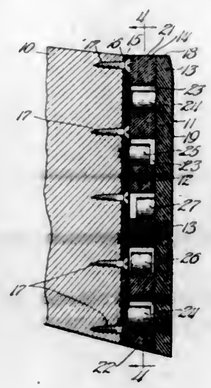
1,805,272. ELECTRICALLY OPERATED METAL PUMP. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Dec. 18, 1926, Serial No. 155,667. Renewed Apr. 15, 1930. 11 Claims. (Cl. 22—70.)



1. In a stereotype plate metal pump, the combination with the pump, its piston and a by pass valve which, when opened, prevents the pump from forcing metal up the spout thereof, of power operated means for lifting the piston to discharge metal, of a switch for controlling said power operated means, hand-operated means for closing said switch and opening the by-pass, and automatic means for thereafter throwing off the power when the piston has made a complete stroke in both directions.

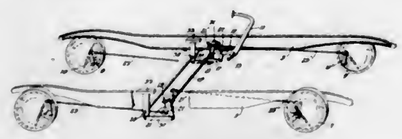
1,805,273. RECOIL PAD FOR GUNS. ALBERT H. AMMANN, Chicago, Ill., assignor to Jostam Manufacturing Co., Chicago, Ill., a copartnership composed of W. D. Stannard and A. H. Ammann. Filed Sept. 3, 1926. Serial No. 369,853. 12 Claims. (Cl. 42—74.)

6. In a recoil pad, the combination of a resilient casing with a plurality of resilient bodies of different size for engaging the walls of said casing at different stages of distortion of said pad.



7. In a recoil pad for guns the combination of a support with a resilient rubber cushion carried by said support and having a closed air pocket, said cushion comprising porous rubber adapted to throttle the passage of air from said pocket to improve the resilient characteristics of said pad.

1,805,274. BRAKE. BERNARD H. ANDERSON, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 3, 1929. Serial No. 375,737. 2 Claims. (Cl. 188—204.)

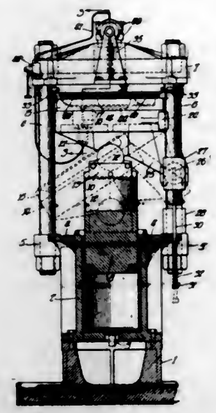


1. In brake operating mechanism, front wheel brakes, rear wheel brakes, brake operating means, connections between the brake operating means and brakes including a rock shaft, means to support said rock shaft for movement whereby said rock shaft may function to effect equalization between the front brakes and rear brakes, inertia means, connections from said inertia means to said rock shaft supporting means whereby said inertia means may, under the influence of deceleration, move said rock shaft supporting means and thereby move said rock shaft to unbalance equalization and vary the intensity of brake action of the front wheel brakes and rear brakes.

1,805,275. FORMING PRESS. JOSEPH W. BISHOP, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 249,843. 8 Claims. (Cl. 18—16.)

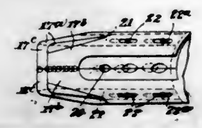
1. In a press, a movable platen, a mold on said platen, a support, a plurality of additional molds shaped to act as complements to the first mentioned mold and slidably mounted on said support, for substantially straight line movement, a cylinder, a double-acting piston rigidly

secured to said additional molds, reciprocable by fluid pressure in said cylinder for sliding said additional molds



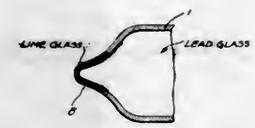
on said support to align any selected one of them with the first mentioned mold, and means for moving said platen to compress the aligned molds together.

1,805,276. PLIERS FOR CUTTING AND SCRAPING INSULATIONS FROM WIRES. THEODORE CHUCTO, Rockaway Beach, N. Y. Filed Feb. 5, 1929. Serial No. 337,552. 2 Claims. (Cl. 81—9.5.)



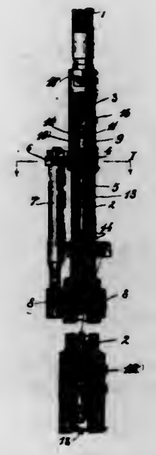
1. A pair of pliers of the class described comprising a pair of opposed jaw members pivotally connected and operable by handles extended to the rear of the pivot point, insulation stripping walls with opposed knife edges disposed within the outer surface of the pliers with wire passage notches for different gauge wires slidably mounted upon the jaw members and formed with slots, each of the insulation stripping walls consisting of front and rear plates and screws engaged through the said slots and into said jaw members for holding the front and rear plates in relative positions for determining the sizes of the wire passage notches.

1,805,277. CASING STRUCTURE FOR ELECTRICAL APPLIANCES. PAUL K. CHAMBLEY, Elkhart, Ind., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Mar. 5, 1930. Serial No. 433,312. 4 Claims. (Cl. 200—152.)



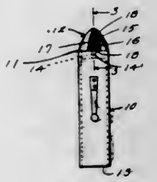
1. A mercury switch comprising an outer envelope of lead glass, electrodes sealed therein, a body of mercury in the envelope cooperable with the electrodes, and a sealing tip constituted of lime glass and fused to the lead glass of the outer case.

1,805,278. RIFLE ATTACHMENT FOR FIRING MINIATURE AMMUNITION. KARL DANTHINE, Bern, Switzerland, assignor to Heinrich Surber, Zurich, Switzerland. Filed Dec. 1, 1928, Serial No. 322,992, and in Switzerland Dec. 8, 1927. 9 Claims. (Cl. 42—77.)



4. A device for firing small calibre ammunition from rifles, comprising an auxiliary barrel disposed co-axially of the rifle barrel and extending in its entirety beyond the end of the rifle barrel, and means insertible in the bore of the rifle barrel to support the said auxiliary barrel beyond the end of the rifle barrel.

1,805,279. FOUNTAIN PEN ERASER AND BURNISHER. WILLIAM M. FLOYD, Cincinnati, Ohio. Filed Sept. 8, 1930. Serial No. 480,556. 4 Claims. (Cl. 120—36.)

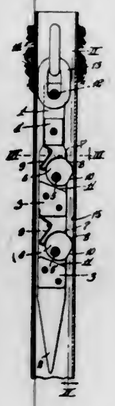


1. In combination with a fountain pen cap, a cone shaped member, means for securing the cone shaped member to the closed end of the cap, said cone shaped member having a pair of diametrically opposed recesses in the surface thereof, an erasing member mounted in one of said recesses, and a burnishing member mounted in the other of said recesses.

1,805,280. PIPE PULLER FOR REMOVING OR PULLING PIPES OR CASINGS FROM WELLS AND THE LIKE. J. RAY GILL, Portland, Mo. Filed Apr. 20, 1929. Serial No. 356,683. 3 Claims. (Cl. 294—97.)

1. A pipe puller comprising a pair of vertically extending side members, and a spring actuated dog having an

arcuate gripping surface supported between said side members adapted to engage the interior of a pipe length

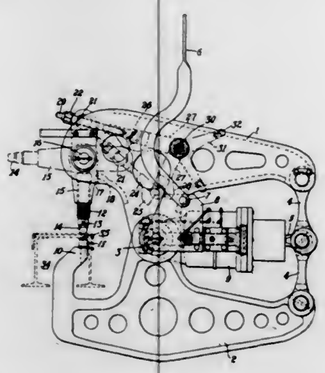


when the puller is mounted in the pipe and force opposing edges of said members against the opposite side of the pipe.

1,805,281. PROCESS FOR EFFECTING ESTER CONDENSATIONS. PAUL HALBIG and FELIX KAUFLER, Munich, Germany, assignors to Dr. Alexander Wacker Gesellschaft fur Elektrochemische Industrie, Munich, Germany, a Corporation. Filed Apr. 19, 1929, Serial No. 356,595, and in Germany May 14, 1928. 6 Claims. (Cl. 260—106.)

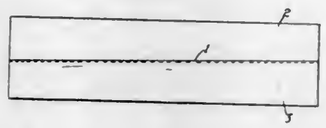
1. Process for effecting the condensation of esters comprising heating an alkyl ester of aliphatic monocarboxylic acid in the presence of an alkali metal alcoholate and distilling off the alcohol formed thereby during the reaction.

1,805,282. PINCH RIVETER. KARL R. HAMMERSTROM, Hammond, Ind., and LARS H. VOLD, Butler, Pa. Filed Nov. 4, 1927. Serial No. 231,016. 3 Claims. (Cl. 78—48.)



1. A riveting machine comprising in combination a pair of levers, a die holder pivotally mounted on one of said levers, and a die secured on the other of said levers in cooperative alinement with said die holder, and an abutment on said lever for engaging the die holder in its vertical operative position, and a toggle mechanism for moving said holder out of alinement with its cooperating die, said toggle mechanism being provided with abutments for securing the movable die holder against displacement when in its operative position.

1,805,283. METHOD OF MANUFACTURING HOLLOW ARTICLES. KARL R. HAMMERSTROM, Butler, Pa. Filed Nov. 5, 1927. Serial No. 231,376. 3 Claims. (Cl. 113—33.)



1. The method of forming tapered hollow articles which comprises forming a blank by cutting skelp of rectangular shape at an angle along one side thereof, the angle corresponding to the degree of taper desired in the hollow article and subjecting the blank so made to a series of die pressing operations to form a cylindrical structure with the edges of the skelp in substantial abutment.

1,805,284. AUTOMOBILE BUMPER. GALE H. HEDRICK, Glenshaw, Pa., assignor to Gem Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 8, 1930. Serial No. 442,519. 5 Claims. (Cl. 293—55.)



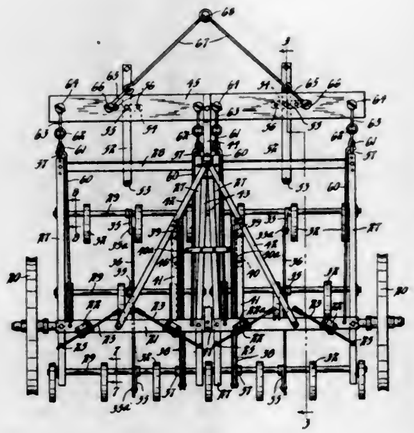
1. A clamp for fastening bumpers for automobiles comprising a medallion having a peripheral flange, and a clamping bracket secured to said flange in spaced relation with said medallion, said bracket having a relatively narrow opening for a bolt the head of which is complementary to the shape of said opening whereby the bolt may be inserted with its head in the space between the bracket and medallion and turned with the longitudinal axis of the head at right angles to the longitudinal axis of said opening.

1,805,285. CENTER TESTER. JOSEPH H. JACOBS, Rochester, N. Y. Filed Apr. 1, 1929. Serial No. 351,665. 4 Claims. (Cl. 33—169.)



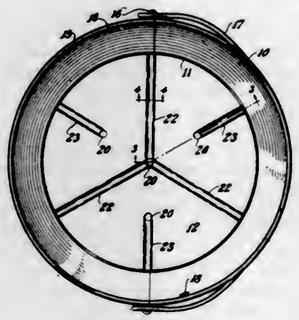
1. A center tester comprising, in combination, a tubular handle having a plurality of radially spaced cuts extending inwardly from one end thereof, whereby a plurality of spaced fingers are formed, the inner surfaces of the fingers being concave near their free ends, a scriber attached to the handle, one end of said scriber terminating in a conical point adapted to be inserted into a depression, the other end terminating in a ball adapted to be seated in the concave portions of the fingers and means for ejecting the ball from its seat.

1,805,286. HARROW HAVING SPRING TEETH. JOHN R. KOVAR and LOUIS W. KOVAR, Owatonna, Minn., assignors to Joseph J. Kovar Company, Owatonna, Minn., a Corporation of Minnesota. Filed Sept. 14, 1927. Serial No. 219,424. 11 Claims. (Cl. 55—92.)



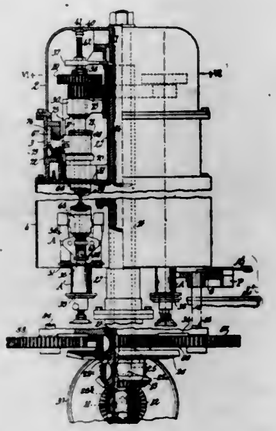
1. A harrow having in combination, a pair of tooth-carrying sections comprisings a pair of spaced relatively movable drag bars, a tie bar to which said drag bars are flexibly connected for universal movement, and a runner pivotally connected to said tie bar for supporting each section when said sections are operating.

1,805,287. FRUIT PICKING PAIL. ARTHUR J. KRANTZ, Dover, Ohio, assignor to The Reeves Manufacturing Company, Dover, Ohio, a Corporation of Ohio. Filed May 21, 1929. Serial No. 364,786. 5 Claims. (Cl. 220—1.)



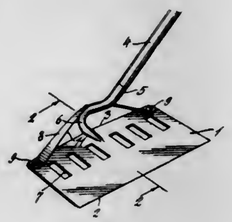
1. A fruit picking pail having an enlarged open top end and a drain aperture in its bottom, said aperture being countersunk to prevent marring of fruit contacting therewith.

1,805,288. MACHINE FOR SEAMING CAN HEADS. PETER KRUSE, Brooklyn, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of Delaware. Filed Feb. 28, 1929. Serial No. 342,046. 15 Claims. (Cl. 113—24.)



1. A machine for seaming tops on cans or the like, said machine comprising a plurality of rotary seaming-heads, means for carrying said heads progressively through an orbital path, and driving means adapted to synchronously rotate adjacent seaming-heads in opposite directions.

1,805,289. HOE. SHICHIGORO KUNO, Ogden, Utah. Filed Aug. 27, 1929. Serial No. 388,716. 1 Claim. (Cl. 97—65.)

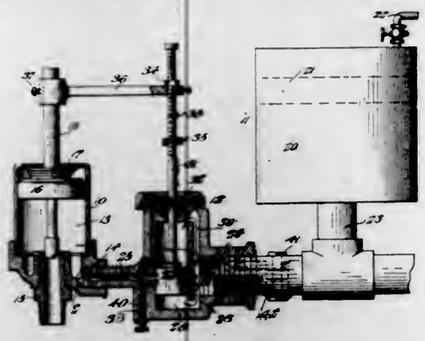


A hoe comprising a blade having a shank of gooseneck shape secured to the center of the rear edge thereof, the end of the shank being provided with attaching means for a handle, a narrow auxiliary blade having its ends connected with the rear corners of the blade, the auxiliary blade being bowed away from the blade in the direction in which the shank extends and secured at its center to the gooseneck shank, the front edge of the auxiliary blade being sharpened.

1,805,290. AUTOMATIC CONTROL FOR LUBRICATORS. JOHN FRANKLIN MACINDOE, Philadelphia, Pa. Filed July 28, 1928. Serial No. 295,982. 9 Claims. (Cl. 184—103.)

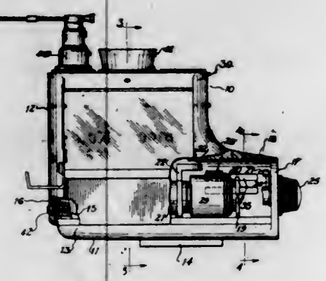
5. A lubricator control system comprising a lubricator attached to a part to be lubricated and arranged to automatically and continuously discharge lubricant therefrom,

under pressure, a source of lubricant having a discharge conduit to supply said lubricator, a valve in said conduit,



means operable at a predetermined lubricant level for opening said valve to replenish said lubricator, and means for varying the effective level of said lubricator.

1,805,291. COMBINED HEATER AND ILLUMINATOR. EDWARD L. MONNOT, Canton, Ohio, assignor to The Harvard Company, Canton, Ohio, a Corporation of Ohio. Filed Sept. 10, 1929. Serial No. 391,608. 9 Claims. (Cl. 219—45.)



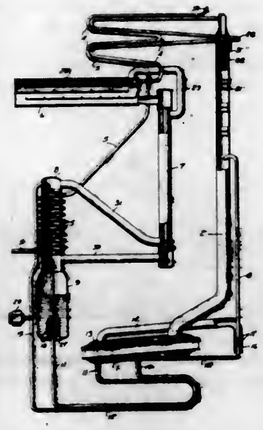
1. A combined heater and illuminator including walls forming a chamber, an electric heater lamp within the chamber, one of the walls having openings formed therein for receiving articles to be heated in the chamber, another of the walls having an illuminating opening formed therein, a rheostat in the chamber for variably controlling the lamp, and a baffle wall between the rheostat and the lamp.

1,805,292. SHINGLE AND METHOD OF MAKING SAME. FRED A. MOSHER, Grand Rapids, Mich., assignor to Logan-Long Company, Chicago, Ill., a Corporation of Ohio. Filed Apr. 24, 1928. Serial No. 357,720. 6 Claims. (Cl. 108—7.)



6. A composition shingle having a mutilated and charred edge.

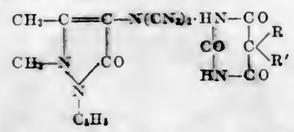
1,805,293. ABSORPTION REFRIGERATING APPARATUS. CARL GEORG MUNTERS, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 27, 1929, Serial No. 350,150, and in Germany Apr. 12, 1928. 8 Claims. (Cl. 62—119.5.)



1. That improvement in the art of refrigeration through the agency of an absorption system including an absorber, a circulating chamber and a generator which comprises flowing strong absorption liquid from the absorber to the circulating chamber, heating the liquid to vaporize a portion of the refrigerant from solution therein, conveying the resulting vapor and remaining liquid through separate conduits to a cooler point outside said chamber, raising the liquid by the vapor due to thermo-siphon action to a level above the absorber, heating the liquid to vaporize further refrigerant and flowing the remaining liquid to the absorber.

1,805,294. COMPOUND OF DIALKYL BARBITURIC ACIDS AND PROCESSES FOR MAKING THE SAME. ERNST PREISWERK, Basel, Switzerland, assignor to Hoffman-La Roche Inc., Newark, N. J., a Corporation of New Jersey. Original application filed July 10, 1925, Serial No. 42,826, and in Switzerland July 23, 1924. Divided and this application filed Dec. 17, 1927. Serial No. 240,939. 3 Claims. (Cl. 260—33.)

1. As new products, the isolated compounds of the general formula

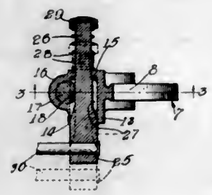


wherein R and R′ are the same or two different alkyl groups but in any compound in which either represents the isopropyl group the other does not represent the allyl group and in any compound in which either represents the ethyl group the other does not represent the ethyl group.

1,805,295. BOTTLE CAPPER. HAROLD G. RICE, Chicago, Ill. Filed Jan. 14, 1929. Serial No. 332,299. 10 Claims. (Cl. 226—84.)

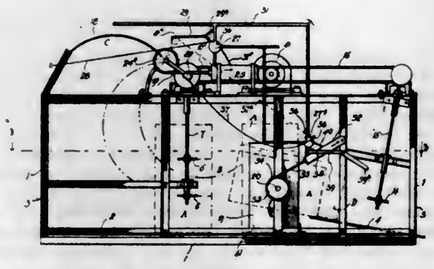
3. In a device of the class described and in combination, a frame comprising a base portion and a vertical overhanging guide portion and having a transverse opening constituting a bearing adjacent said guide portion, a capping plunger slidably mounted in said guide portion

and having rack teeth formed thereon, a shaft rotatably mounted in said bearing and having a pinion formed thereon adapted to co-operate with said rack for reciprocating the same, said shaft being reduced in diameter adjacent said pinion and having an endwise displacement within said bearing sufficient to disengage the pinion from the rack teeth of the plunger, means for rotating the shaft,



and means normally maintaining said pinion in operative engagement with said rack and also permitting said shaft to be axially displaced a distance equal to the width of said pinion to bring the reduced portion of the shaft across the plunger, whereby the pinion may be disengaged from the rack teeth and the plunger freed for quick endwise adjustment.

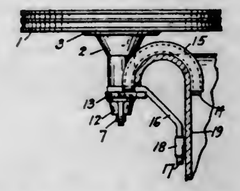
1,805,296. MEANS FOR SCORING ICE BY FLUID PRESSURE. ROBERT H. ROARK, Waco, Tex., assignor, by mesne assignments, to The General Ice Scoring Machine Company, Dallas, Tex., a Corporation of Delaware. Filed Nov. 7, 1927. Serial No. 231,720. 3 Claims. (Cl. 125—13.)



1. In an ice scoring machine, guide means at the entrance end, scoring saws above said guide means, fluid pressure operated means for feeding blocks of ice along the guides between the saws, a tilting cage receiving successive blocks subsequent to their passage between said saws, automatically operating fluid pressure means for tilting said cage for turning the blocks through an arc of substantially 90° as soon as the initial scoring operation is completed, scoring saws at the outlet end between which the blocks pass subsequent to being tilted, gravity means for feeding the blocks between the second named saws, and means engaged by the block of ice in its passage between the last-named saws for cutting off and releasing the fluid from said cage tilting means to permit the cage to return to position for operating upon another block of ice.

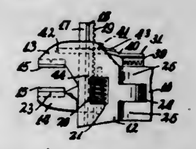
1,805,297. BATHTUB CHAIR. THOMAS A. SADUSKY, ALBERT L. MARLOWE, and FRANK D. MILLER, Denver, Colo. Filed Oct. 7, 1929. Serial No. 397,926. 8 Claims. (Cl. 155—36.5.)

3. A bath tub chair having a pivotally mounted seat and composed of a seat unit and a support, the support being composed of a hook unit adapted to hook over the top of the wall of the tub and a brace unit having means adapted to position the chair against either upward or downward



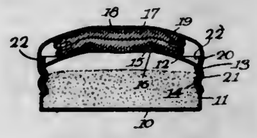
movement, and an assembly bolt and nut adapted to assemble the three units while permitting free pivotal movement of the seat unit on the support.

1,805,298. WRENCH. FREDERICK SCHWEIGERT, New York, N. Y. Filed Jan. 18, 1930. Serial No. 421,642. 4 Claims. (Cl. 81—58.)
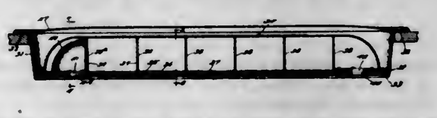


1. A wrench, comprising a head member with stationary and adjustable jaws pivotally connected with a handle, means for holding said head member in adjusted angular positions on its pivotal axis, means for securing said holding means in the adjusted positions and means automatically releasing said securing means in the closed position of the jaws.

1,805,299. TOILET PACKAGE. ROBERT H. VAN SANT, Chicago, Ill. Filed Apr. 2, 1928. Serial No. 266,572. 2 Claims. (Cl. 132—82.)



1. In a toilet package, a container having a convex top wall provided with a single comparatively large axial opening therein, the inner surface of said top wall sloping toward said opening, the marginal edge of said wall surrounding said opening being extended upwardly to form an upstanding flange, the side wall of said container extending upwardly beyond the top to form a continuous flange for preventing toilet material falling on said top from sliding off the same, an applicator of substantially greater area than said opening adapted to be positioned on said flange and top wall over said opening, and a cap for said container for holding said applicator in position on said flange for closing said opening.

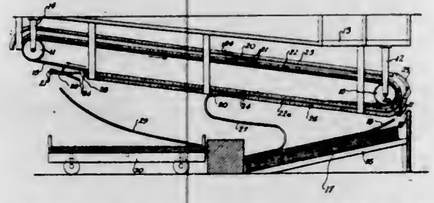
1,805,300. AUTOMOBILE HEATER. PAUL F. VICTOR, River Forest, Ill. Filed May 15, 1929. Serial No. 363,145. 7 Claims. (Cl. 257—136.)



1. In a device of the class described, the combination of a shell forming an elongated heating chamber, said

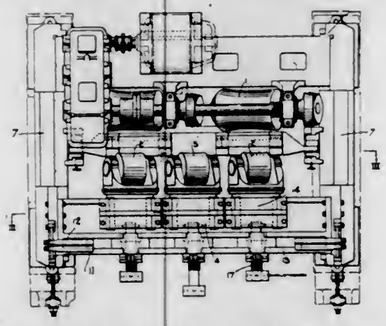
chamber being provided with a gas inlet and a gas outlet, and a longitudinally extending plate provided with upwardly struck spaced baffles extending transversely of said chamber, the baffles each provided with a recess at a predetermined position on its periphery and extending in close proximity to the walls of the chamber at either side of said recess to define a passage whereby a substantial proportion of the gases are caused to move in relatively close proximity to the wall of the chamber in the vicinity of the recess.

1,805,301. SHEET OPENER. CHARLES C. WENDLING, Dover, Ohio. Filed Nov. 23, 1929. Serial No. 409,238. 9 Claims. (Cl. 29—17.)



1. Sheet opening mechanism including a spaced plurality of tongs, means for continuously moving the tongs in a continuous path toward and from one end of a pack of sheets, tracks for holding each of the tongs open as it approaches said end of the pack, and tracks for closing each of the tongs and holding it closed as it engages the uppermost sheet of the pack and moves backward therefrom, peeling said uppermost sheet from the pack.

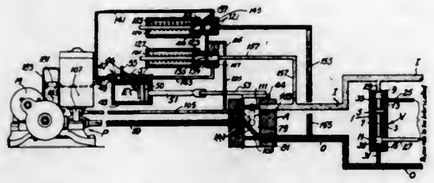
1,805,302. ROUND STRAIGHTENER. GEORGE A. WISE, Pittsburgh, Pa., assignor to Sutton Engineering Company, a Corporation of Pennsylvania. Filed Oct. 1, 1929. Serial No. 396,430. 1 Claim. (Cl. 153—60.)



In a cross roll straightening machine the combination of driven rolls stationary as to linear movement, idler rolls, an idler roll mounting frame common to all the idler rolls and movable toward and from the driven rolls for rough adjustment of the idler rolls relatively thereto, an individual mounting bracket for each idler roll mounted in the frame for movement therein in the plane of movement of the frame and support throughout against forces acting angularly to its path of movement, and means for producing independent movement of each of the idler roll brackets in the frame to effect a fine adjustment of the idler rolls relatively to the driven rolls.

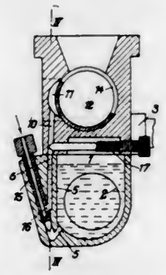
1,805,303. LUBRICATING SYSTEM. FRANK S. BARKS, St. Louis, Mo. Filed Dec. 1, 1930. Serial No. 499,172. 36 Claims. (Cl. 184—7.)

1. In apparatus of the class described, fluid conduit lines, delivery means associated with said lines for delivering a fluid alternately to a plurality of points, a source of fluid under high pressure, means for directing said fluid under high pressure alternately to said lines to effect alternation of the action of said delivery means, and means



operating said directing means to redirect said fluid into another of said lines upon the attaining of a predetermined adjustable maximum pressure in the line into which the fluid is then being directed.

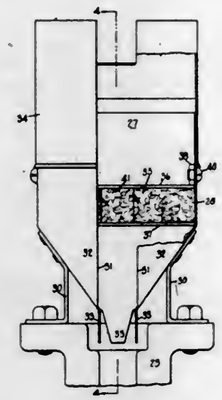
1,805,304. VAPORIZER FOR INTERNAL COMBUSTION ENGINES. OTTO BAUMGARTNER, Wollinsen, Switzerland. Filed Jan. 23, 1930, Serial No. 422,934, and in Switzerland Dec. 16, 1929. 1 Claim. (Cl. 261—121.)



In a nozzleless vaporizer of hydrocarbons for internal combustion engines and in combination, a two-part casing, studs with nuts for joining said parts tightly, a float chamber and a first vaporizing and mixing chamber, both in the lower part of the casing, and a fuel passage connecting the two chambers, a needle-screw arranged at an acute angle to said fuel passage and adapted to control the same, and an axial air inlet in said screw having an opening into the fuel passage, two window-shaped air inlets in the upper part of the casing, and two air passages connecting the same to the first vaporized chamber, needle-screws adapted to control said air passages, a second mixing and vaporizing chamber in the upper part of the casing, and a rotary sleeve-like valve member fitted into said second mixing chamber, and a fuel passage arranged between the two air passages and connecting the first with the second vaporizing chamber, and cell-shaped slits constituting the openings of said fuel passage into the second vaporizing chamber.

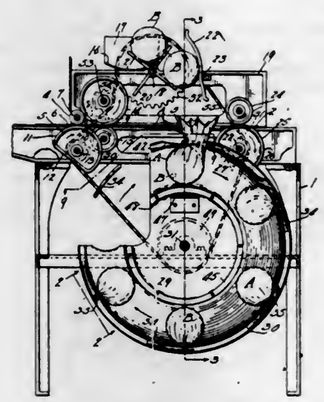
1,805,305. LUBRICATING DEVICE FOR ELEVATOR GUIDE RAILS. THOMAS BRADY, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 19, 1929. Serial No. 393,708. 3 Claims. (Cl. 184—22.)

3. In an elevator installation; a hatchway; a body movable therein; guide rails in said hatchway; guide shoes carried by said body adapted to cooperate with said guide rails to guide the movement of said body in said hatchway; means adapted to apply lubricant to said guide rails near their upper ends; lubricant distributors carried by said body, each distributor comprising, a housing, one end wall and the side walls of said housing having portions which converge near their lower ends, an absorbent pad in said housing, and retainers adapted to support said pad in said housing, said retainers and the front wall and top of said housing being cut away to permit a guide rail to extend into said housing for cooperation with said pad, whereby upon movement of said body said pads wipe lubricant from said guide rails and absorb said lubricant to prevent splashing of said lubricant



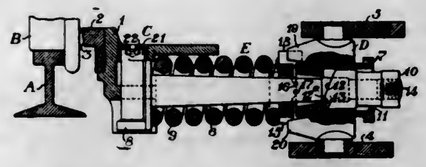
by said guide shoes, and said converging portions direct the lubricant flowing from said pad, upon saturation thereof, onto said guide rails and the surfaces of said guide shoes cooperating therewith to distribute the lubricant along said guide rails.

1,805,306. METHOD AND APPARATUS FOR WRAPPING ARTICLES. HARRY CLARK, Middleport, and ROBERT E. METCALF, Gasport, N. Y. Filed Oct. 27, 1928. Serial No. 315,514. 22 Claims. (Cl. 93—5.)



1. A machine for wrapping articles in sheets of paper, comprising a support for holding a sheet outspread and having an aperture smaller than the sheet through which an article and the sheet may pass, together when deposited thereon over said aperture, means for gathering together the edges of said sheet which last pass through said aperture to complete the enclosure of the articles, holding said edges and through said edges drawing the enclosed article in a prescribed path, and means for rotating the enclosed article while so moving about the held edges to twist the gathered edges and prevent unwrapping of the enclosed article when the wrapped article is released.

1,805,307. RAILWAY CAR RETARDER. HAROLD C. CLAUSEN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 24, 1930. Serial No. 484,085. 10 Claims. (Cl. 188—62.)



1. In combination, a braking bar located beside a track rail and movable into engagement with the wheels of a car for retarding the motion of the car, a sleeve pivotally supported in the trackway, a bolt having its head pivotally connected with said braking bar and having its shank extending through said sleeve with sufficient clearance to permit limited movement of said bolt with respect to said sleeve, a compression spring on said bolt between its head and said sleeve, and a nut screwed onto the shank of said bolt for compressing said spring, said nut being provided with a cam surface having a projecting portion which engages said sleeve at a region of contact which is located outside of the axis of said bolt.

1,805,308. LABELING. LYMAN W. DIXON, Maywood, Ill. Filed Feb. 19, 1930. Serial No. 429,833. 3 Claims. (Cl. 216—62.)

1. A method of adhesively attaching a paper label to a sheet of cellophane, which comprises coating the back of the label with a solution of manila gum in alcohol, permitting the alcohol to evaporate, moistening the residual resinous layer with a solution of castor oil in alcohol, and applying the moistened label to a sheet of cellophane.

1,805,309. DENTAL APPARATUS. FREDERIC B. EGGLER, Goppingen, Germany. Filed Sept. 4, 1928. Serial No. 303,929. 1 Claim. (Cl. 32—7.)

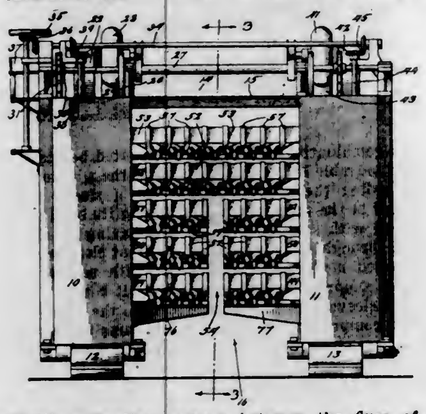


In dental apparatus, the combination of a guide rod, a socket attached to the end of said guide rod, an insertion piece adapted to be introduced into said socket, a slide member adapted to slide on said rod, a flap, a hinge oscillatably fixing said flap on said socket, and a stud on said flap for holding said insertion piece.

1,805,310. COTTON PICKER. NICHOLAS F. HIGGINS, Chicago, Ill. Filed Jan. 10, 1930. Serial No. 419,889. 8 Claims. (Cl. 56—14.)

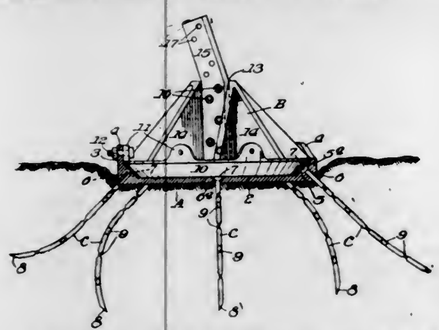
1. In a machine of the class described, the combination of a pair of side sections, each including suitable ground travelling and supporting devices, said sections being separated from each other at their lower portions a distance to correspond to the rows of plants to be picked, means for joining together the upper portions of said sections above the plants of a row being picked, each section including a receiving hopper in its rear portion, a longitudinally extending flue, a plenum blower for the front end of said flue and a suction blower for the rear end of said flue, said suction blower delivering into the hopper of the corresponding section, means for driving all of said blowers at constant speed, means for driving the ground travelling devices at variable speed, a pair of upwardly and

rearwardly extending flues in each section, the upper ends of said flues terminating in the longitudinally extending flue of the corresponding section, a series of transverse horizontally extending flues in each section having their inner ends in communication with the upwardly and rearwardly extending flues of such section, the lowermost horizontally extending flues of the two sections approaching each other without contact to thereby establish a lon-



gitudinally extending passage between the flues of the two sections, the upper-most horizontally extending flues of the two sections being continuous between the two sections, there being a series of boll openings in the lower portion of each horizontally extending flue section, together with means adjacent to each of said openings operative effectively to remove bolls from the plant and deliver the same into the flue openings to be there subject to the current of inflowing air, substantially as described.

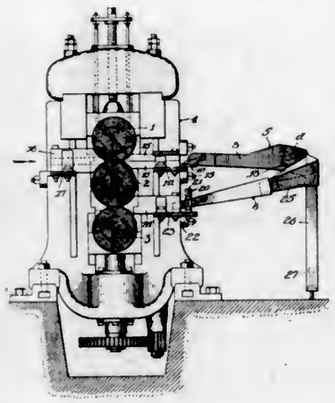
1,805,311. FOOTING FOR TOWERS OR THE LIKE. HAROLD O. HILL, Aspinwall, Pa. Filed July 26, 1929. Serial No. 381,157. 6 Claims. (Cl. 189—21.)



1. A footing for towers and the like comprising a base, stub or leg attaching means mounted on and secured to the base comprising a base portion and upwardly extending means, means for securing the base portion to the base, and a plurality of rods or the like extending downwardly into the ground through openings in the base, said rods having heads countersunk in the base and covered by said base portion.

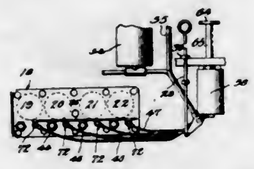
1,805,312. REPEATER. LEE H. HOOK, PERCY EVANS, and CHARLES S. WALLRAB, Chicago Heights, Ill., assignors to Calumet Steel Company, Chicago, Ill., a Corporation of Illinois. Filed May 3, 1928. Serial No. 274,800. 5 Claims. (Cl. 80—52.)

4. In a rolling mill, in combination, a set of three-high rolls, a pair of supports disposed at different vertical elevations on one side of the rolls in outward spaced relation thereto and arranged with one support for the pass between the upper and the intermediate rolls and the other support for the pass between the intermediate and the lower rolls, a repeater device on the same side of the rolls as the supports and arranged beyond the same, said repeater device comprising two parts only, one part forming a receiving portion and being in the form of an upwardly opening trough with a loop return section with the entrance end of the trough mounted on the upper support to receive the work from the rolls opposite such support, the other part of the repeater device form-



ing a delivery portion therefor and being in the form of a tubular spout, having a telescopic fit at one end with the loop return section and the other end mounted on the lower support to deliver the work to the rolls opposite the same, guide means for the work between the supports and the rolls opposite which the supports are respectively arranged, and a support for the portion of the repeater device beyond the mill, the receiving portion of the repeater device extending substantially horizontally outward from the upper support, and the loop return section and the delivery spout being downwardly inclined toward the lower support.

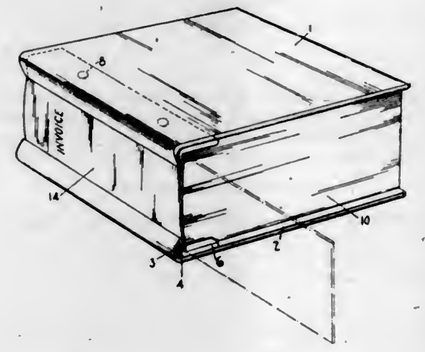
1,805,313. STARTER FOR INTERNAL COMBUSTION ENGINES. GEORGE R. LAWRENCE, Chicago, Ill., assignor to Lawrence Engine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 28, 1927. Serial No. 236,167. 10 Claims. (Cl. 123—180.)



1. The combination with an internal combustion engine having cylinders and pistons working therein, and also having spark plugs and a high tension distributor for delivering sparking current to said plugs in timed relationship with respect to the piston movements, of an air starter cylinder, a plunger working therein, a starting nipple in each cylinder having a discharge nozzle reaching into the combustion chamber thereof for the spray delivery of combustible mixture thereinto, a metering valve including a rotatable plug having therein a series of metering pockets corresponding to the individual

cylinders, said valve also including a common supply passage for combustible liquid, communicating with all of the metering pockets when the plug is turned into a given position to thereby fill said pockets with individual firing charges, said valve also being provided with transverse ducts aligning with the metering pockets of the plug, said plug being provided with transverse passages communicating with said metering pockets and aligning with the ducts aforesaid when the plug is turned to a position where the metering pockets are isolated from the fuel supply passage, said ducts communicating individually with the lower portion of the air starting cylinder, and individual passages from the ducts to the individual starting nipples, substantially as described.

1,805,314. BINDER FOR LOOSE LEAF BOOKS. WILLIAM J. MORTON, San Francisco, Calif., assignor to The McBee Binder Company, Athens, Ohio, a Corporation of Ohio. Filed Apr. 16, 1930. Serial No. 444,688. 7 Claims. (Cl. 281—36.)



7. A lose leaf binder comprising a pair of covers, portions of which project beyond the rear edges of the leaves to be bound and extend inwardly towards each other and are spaced from said rear edges, and a sliding back fitted to said space.

1,805,315. POWER DRIVE FOR FLAT KNITTING MACHINES. JOHANN GOTTFRIED MÜLLER, Kiel-Ellerbek, Germany. Filed Jan. 11, 1930, Serial No. 420,166, and in Germany Feb. 16, 1927. 5 Claims. (Cl. 66—60.)

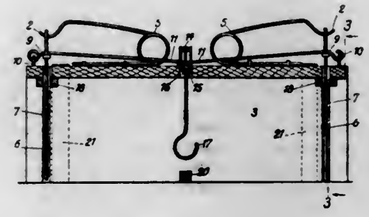


1. A power drive for flat knitting machines, particularly such with short carriage, in which a runner is moved backwards and forwards by means of an endless chain or the like running over sprocket wheels continually in the same direction, comprising in combination with said driving chain and said runner, a horizontal pin on said runner, a toothed driving wheel segment on said runner, said teeth adapted to engage in the two end positions respectively with said driving chain and, on the runner attaining a certain adjustable length of travel, to pass from one side of said chain to the other turning thereby through 180°.

1,805,316. PROCESS FOR THE TREATMENT OF FIBERS. HERMAN G. REICHARD, Brooklyn, N. Y. Filed Aug. 10, 1929. Serial No. 385,064. 10 Claims. (Cl. 8—2.)

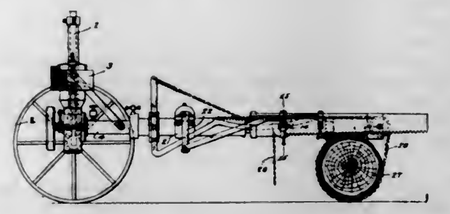
10. In a process for the treatment of fibers, the steps which include treating the fiber with ferric chloride and then bleaching the thus treated fiber by means of hydrogen peroxide in an alkaline solution.

1,805,317. TRAP FOR BEASTS OF PREY. JOHANN SCHOBER, Kleinholzhausen Post Grossholzhausen, near Rosenheim, Germany. Filed Aug. 27, 1929. Serial No. 388,836. 1 Claim. (Cl. 43—86.)



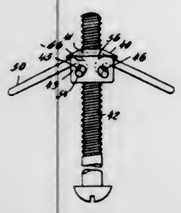
A trap for beasts of prey comprising a housing open at the two ends and having guide grooves, two catching bows arranged one near each end inside said housing and adapted to slide in said grooves, springs mounted on the roof of said housing and tending to force said bows upwards towards the roof of said casing, two locking bars hinged one at each end and extending towards the middle of the roof of said housing and adapted to hold said bows in lowered position against the action of said springs when the trap is set, a transverse bar hinged on said roof and adapted to bear on the free ends of said locking bars, an axle mounted in the middle of the roof, a spiral spring mounted on said axle, a bait hook formed by one end of said spring extending inside said housing, and a catch formed by the other end of said spring adapted to engage said transverse bar in lowered position against the action of the first named spiral springs transmitted through said bows and said locking bars.

1,805,318. LOG AND TREE SAW. WILLIAM J. STEFFLER, Anderson, Ind. Filed Nov. 7, 1929. Serial No. 405,475. 3 Claims. (Cl. 143—68.)



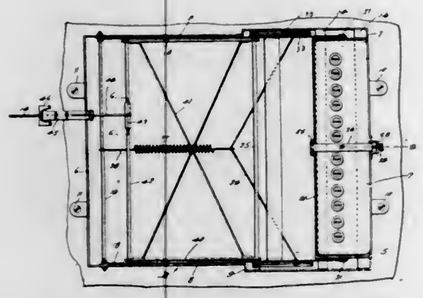
1. A saw comprising a frame, tubular sections carried by the frame, a motor mounted upon the frame, a saw guide carried by the sections, a blade slidable with relation to the guide, means operatively connecting the motor with the blade, a guide arm pivoted upon the sections and having an end portion overlapping the blade, springs connected at one end with the blade operating means, and at their other ends with the guide arm at points beyond the opposite sides of the end edge of the blade, and spring means tending to hold the overlapping portions of the blade and arm in a depressed position.

1,805,319. TOGGLE BOLT. CHARLES C. TOMKINSON, Plainfield, N. J., assignor, by mesne assignments, to J. Edward Ogden Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 10, 1927. Serial No. 174,130. 28 Claims. (Cl. 85—3.)



6. A toggle head adapted for use with a toggle bolt and comprising a supporting member, a wing pivotally associated with said member and formed of resilient material, said wing and member having portions coacting to effect the swinging of the wing to open position under force derived from the resiliency of the wing.

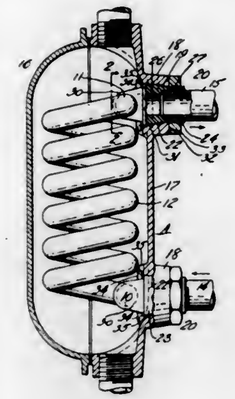
1,805,320. CYLINDER HEAD STAND. WILLIAM LEE ROY TRIMBLE, Granbury, Tex. Filed Mar. 30, 1929. Serial No. 351,332. 7 Claims. (Cl. 29—89.)



1. A stand of the class described for a cylinder head including a base structure, a swinging structure mounted in the base structure, a holder rotatably mounted in the swinging structure, a ledge on which the head may be rested, a pair of links pivoted together and pivoted to the swinging structure and base structure for holding the swinging structure raised, said holder comprising a rectangular frame with plates across the ends thereof so that a cylinder head may be mounted therein, and adjustable strap means on the frame for holding said head in place.

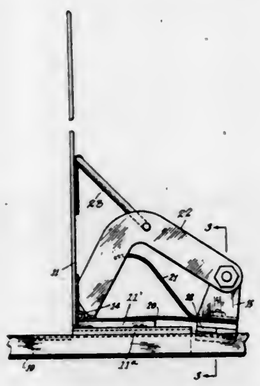
1,805,321. PIPE COUPLING OR CONNECTION. HERBERT G. ULLMAN, Tuckahoe, N. Y. Filed Sept. 14, 1927. Serial No. 219,455. 2 Claims. (Cl. 285—50.)

1. In a coupling device for securing the ends of two pipes to the opposite sides of the wall of a chamber in which one of said pipes is so arranged that its end is disposed in lateral relation to said coupling device and wherein said wall is formed with an opening through which said device extends, the combination of a tapered plug having a passage extending lengthwise therethrough and to the outer end of which said other pipe is connected, a tapered seat extending axially of the opening of said wall and into which said tapered plug fits with its ends disposed at opposite sides of said wall, a transverse face arranged exteriorly of said opening at the outer side of the said casing, a threaded member engaging a correspondingly threaded part of said plug and bearing against said face to draw said plug into and hold



the same in said seat, and an integral enlargement on the inner end of said plug and having a lateral opening which is continuous with said passage and into which said laterally approaching end of said first pipe is secured.

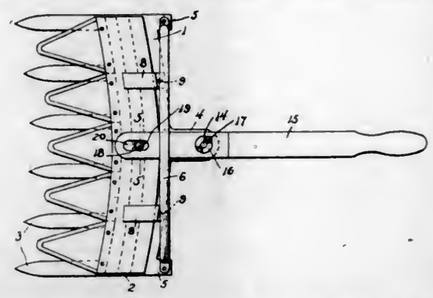
1,805,322. MOVABLE PRESSURE DEVICE. NELSON S. WELK, Athens, Ohio, assignor to The McBee Binder Co., Athens, Ohio, a Corporation of Ohio. Filed Oct. 6, 1925. Serial No. 60,787. 5 Claims. (Cl. 129—30.)



4. A movable pressure device, comprising a follower plate, track members adapted to be mounted in the base of a tray, means for slidably mounting said follower plate on said track members, a locking means for said follower plate mounted on said track members, a spring device connecting said follower plate and said locking means, said device adapted to move said locking means into active engagement with said track members.

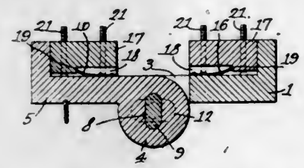
1,805,323. HEDGE TRIMMER. EARL L. YOUNG, San Fernando, Calif. Filed July 25, 1930. Serial No. 470,701. 7 Claims. (Cl. 0—11.)

1. In hedge trimmers, a base having fingers extending forwardly therefrom, a cutter bar extending laterally of the base and having a plurality of cutting blades overlying said fingers, said bar and said base having tongue and



groove connection of curvilinear form, and means to move said cutter bar in the curvilinear direction for the purposes described.

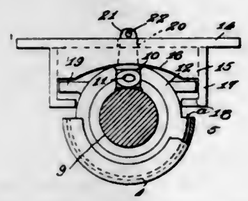
1,805,324. HINGE. HARRY RAY BIRD, Taft, Calif. Filed Sept. 3, 1930. Serial No. 479,533. 5 Claims. (Cl. 16—168.)



1. A hinge including leaves, a pair of ears carried by one of the leaves, there being a slot in one of said ears and a bore in the other ear, an intermediate ear extending from the other leaf having a slot movable into and out of register with the first named slot, a pintle having a key fitted in the slot in the intermediate ear and adapted to withdraw through the other slot when said slots are in alignment, oppositely extending stems on said key extending through the respective ears of the pair, and a key rotatably mounted on one of the stems and removably seated in the slot in one of the ears of the pair.

5. A hinge including separable leaves each having a groove extending thereinto from one edge, a spring secured in the groove, an attaching plate slidable longitudinally into the groove, means carried by said plate for engagement by the spring to hold the plate and leaf against separation, said means including a spring receiving groove extending longitudinally of the plate and provided with a shoulder for engaging the spring, said groove being opened at one end to expose the spring for engagement by a releasing device.

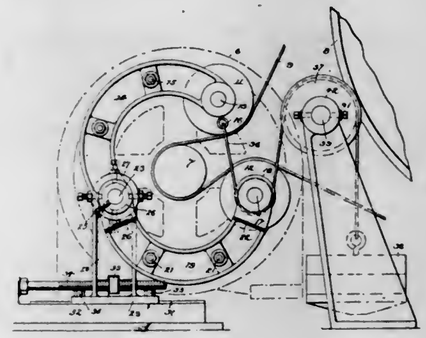
1,805,325. BEARING BOX. DANIEL CLYDE BROWN, West Pittston, Pa. Filed Mar. 12, 1930. Serial No. 435,259. 2 Claims. (Cl. 308—48.)



1. A bearing box comprising a body for housing the axle end and the bearings therefor, the body being open

at one end and provided at its said end with a flange extending about substantially the lower half of the said end and provided with a groove, in its inner side, extending longitudinally thereof, a cap for closing said end of the body having an outstanding semi-circular flange to seat within the said groove and hold said cap in closed position in one position of rotation of the cap, rotation of the cap to the reverse position permitting of direct removal of the cap from the body, a head disposed above the body, means upon the head in proximity to the ends of the flange to prevent rotative displacement of the cap with respect to the body.

1,805,326. BELT DRIVE. WILLIAM SYLVESTER BUNKER, Foxboro, and GEOFFREY LEONARD HANSCOM, South Walpole, Mass., assignors to Bird Machine Company, South Walpole, Mass., a Corporation of Massachusetts. Filed May 20, 1927. Serial No. 193,023. 14 Claims. (Cl. 64—5.)



1. In combination, a pair of pulleys and a belt adapted to run on said pulleys in either direction, two tension pulleys engaging opposite runs of said belt, and yielding means connecting said tension pulleys including a flexible connecting member permitting independent motion of each pulley, and a weight for stressing said member.

1,805,327. SIGN. JOHN T. CARR, Trenton, N. J. Filed Sept. 24, 1930. Serial No. 484,173. 5 Claims. (Cl. 40—135.)

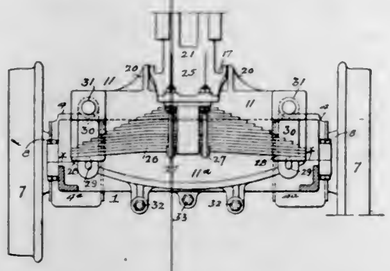


1. A sign including a wire mesh base, a flexible transparent waterproof filling for said base, a coating for said filling, said coating covering the filling except at the points where a display member is to be illustrated, and an outline coating at the opposite side of said filling, said outline coating extending around the outline of said display member.

1,805,328. LOCOMOTIVE TRUCK. EDWARD O. ELLIOTT, Jenkintown, Pa. Filed Nov. 29, 1930. Serial No. 499,083. 8 Claims. (Cl. 105—174.)

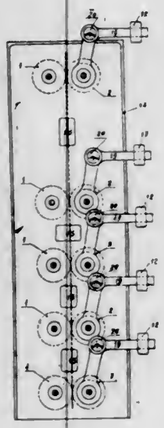
1. The combination in a locomotive truck, of a main frame; rockers resting upon the frame; a rocker casing supported by the rockers; a center pin bolster located

above the rocker casing and having arms; semielliptic springs having their center bearings on the underside of



the arms, the ends of the springs being carried by the rocker casing; an axle; and boxes for the axle, said boxes being mounted in the main frame.

1,805,329. GLASS SHEET DRAWING APPARATUS. PAUL ESCOLE, Jeumont, France, assignor to Ateliers de Construction & Fonderies de Jeumont, Jeumont, France, a French Societe Anonyme. Filed Dec. 12, 1928, Serial No. 325,454, and in France May 5, 1928. 5 Claims. (Cl. 49—17.)



1. In glass sheet drawing apparatus including a pair of rollers and means for pressing said rollers against opposite faces of the sheet, a suspension device for the movable roller, comprising a bearing bush for the trunnion of said roller, a bearing block through which pressure is exerted upon said trunnion, and a spherical seating of said bush within said bearing block.

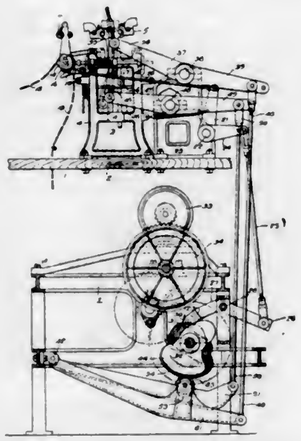
1,805,330. EXTENSION BIT. THOMAS J. FEGLEY and GEORGE O. LEOPOLD, Philadelphia, Pa., assignors to North Bro's. M'f'g. Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 13, 1930. Serial No. 428,111. 3 Claims. (Cl. 279—90.)

1. The combination in an extension bit, of a spindle; a head secured to the spindle; a socket adapted to slide on the head and a spring arranged to project the socket; a slotted casing enclosing the socket; means for vertically adjusting the casing; and a key adapted to travel in a slot in the casing, the slot having a lateral portion to allow the sleeve to be turned to a limited extent independently of the spindle, so that when the parts are in one position the opening in the end of the casing will align with the



opening in the socket, and when in the other position it will be out of line and lock the shank of the bit in the socket.

1,805,331. LOOM. CHARLES L. FETTERLY, New Brunswick, and WILLIAM E. SMITH, Milltown, N. J., assignors to Gulbenkian Seamless Rug Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Aug. 1, 1930. Serial No. 472,374. 10 Claims. (Cl. 139—59.)

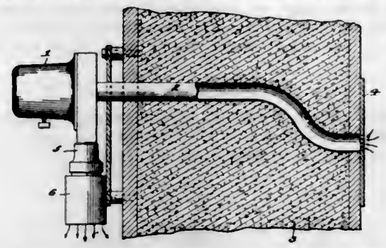


1. The described method of weaving which involves the use of independently operable grids in the jacquard mechanism of a loom, for controlling the pattern warps of the fabric being woven, to bring desired pattern warps to corresponding positions on the opposite faces of the fabric respectively, and the use of alternately disposed back and face cards in a single string of jacquard cards for successively selecting the pattern warps to be controlled by the respective grids.

1,805,332. BANK VAULT VENTILATOR SYSTEM. BYRON C. GOSS, Cleveland, Ohio. Filed May 15, 1930. Serial No. 452,714. 1 Claim. (Cl. 98—39.)

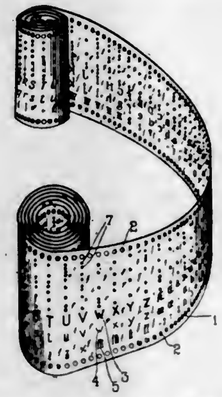
In a vault ventilating system, an air circuit comprising an inlet, a positive air drive, and an outlet, a 3-way

valve comprising an intake and two exhausts, the intake of said valve connected to said outlet, one exhaust connected



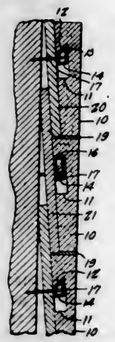
to an irritating gas filter and the other exhaust opening into the vault, which on turning said valve the gas filter may be disconnected from said air circuit.

1,805,333. PHOTOGRAPHIC PRINTING PROCESS AND APPARATUS THEREFOR. EDGAR KENNETH HUNTER, London, England, assignor, by mesne assignments, to Kodak Limited, London, England, and Intertype Limited, London, England. Original application filed Sept. 20, 1922, Serial No. 589,365, and in Great Britain Sept. 21, 1921. Divided and this application filed Dec. 18, 1925. Serial No. 76,286. 8 Claims. (Cl. 95—4.5.)



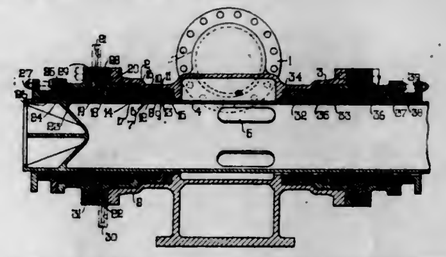
1. As an article of manufacture a flexible film strip having a number of alphabets each of a different type arranged lengthwise in sequence thereon.

1,805,334. WALL CONSTRUCTION. JAMES F. KELLY, Clifton, N. J. Filed Jan. 24, 1930. Serial No. 423,217. 2 Claims. (Cl. 72—19.)



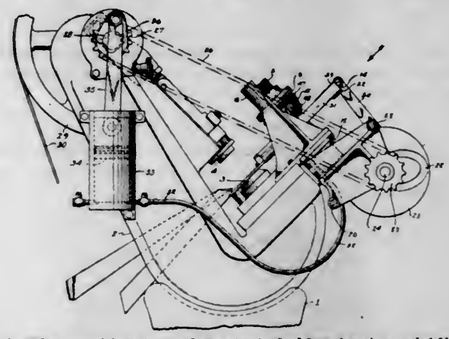
1. In a wall construction, a base, vertically spaced horizontally disposed strips secured thereto, said strips having inwardly inclined upper faces, bricks having longitudinally disposed slots in their rear faces to receive the strips, said slots having inclined upper walls for engagement over the inclined faces of the strips to provide an interlocking engagement, means to hold the bricks against independent longitudinal movement on said strips, and a plastic filling between the adjacent edges of the strips.

1,805,335. EXPANSION PIPE JOINT AND THE LIKE. WILLIAM MARSDEN KERMODE and CHARLES ST. CLAIR PLUMMER, Bradford, England. Filed Apr. 11, 1928, Serial No. 269,269, and in Great Britain June 7, 1927. 1 Claim. (Cl. 285—184.)



A fluid pressure pipe joint including a tubular element, an outer casing extending around said tubular element to form at least one packing box, a plurality of series of at least two packing cups in said packing box, a pair of split elastic metal packing rings in each of said cups at least one clip ring in each of said cups, a spherical surfaced bearing member at one end of each series of cups and spring means at the other end of each of said series adapted to press the cups towards said bearing member in a direction axially of the angular element, at least one of said groups of cups being spring pressed in a direction opposite to at least one other of said groups.

1,805,336. BLANK FEEDING MECHANISM FOR PUNCH PRESSES. WALTER KOWAL, New York, N. Y., assignor to Phoenix-Hermetic Company, Chicago, Ill., a Corporation of New York. Filed Aug. 14, 1929. Serial No. 385,947. 10 Claims. (Cl. 271—32.)

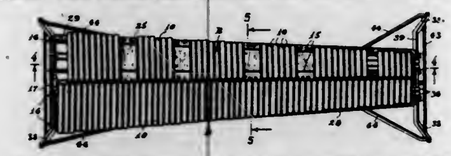


1. The combination of a stack holder having yielding spaced dogs for supporting stacked blanks, said dogs having the supporting faces thereof provided with inclined threads arranged so as to be successively engaged by the blanks as they are withdrawn from the stack holder, and means for forcibly withdrawing the lowermost blank past said threads.

1,805,337. AMUSEMENT APPARATUS. WILLIAM J. MAHONEY, New York, N. Y. Filed Feb. 3, 1930. Serial No. 425,621. 10 Claims. (Cl. 84—403.)

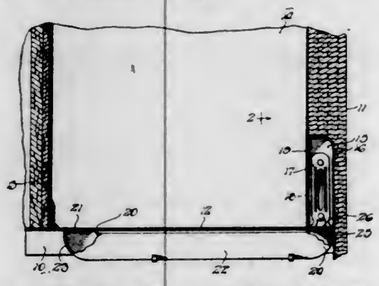
2. A musical device including means for yieldably supporting in a common plane, a plurality of sound produc-

ing elements consisting of groups of note bars, the bars of each group arranged in side by side relation and having the same tone value and the groups having relatively different tone values and said elements mounted to support



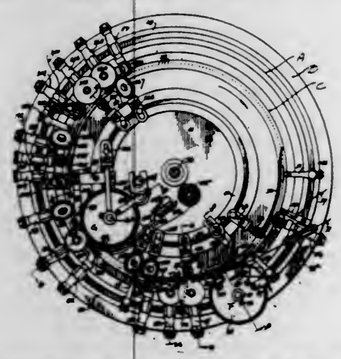
a dancer while dancing and playing on said elements, said supporting means including guard means disposed out of said common plane for limiting the tilting of said note bars.

1,805,338. HEATING APPARATUS. FRANK J. McADAMS, Chicago, Ill. Filed June 21, 1929. Serial No. 372,778. 4 Claims. (Cl. 257—136.)



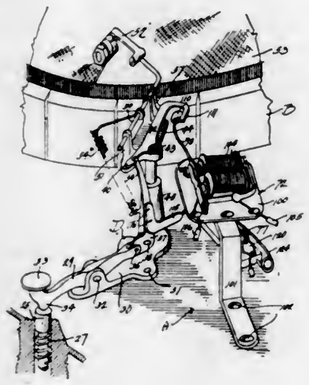
3. In combination with a room having a recess in one wall thereof, a lining for said recess, said recess having an opening in the lower wall thereof, a heating element arranged in said recess over said opening, the floor of said room having an opening therein adjacent the wall opposite the wall having said recess therein, means providing a register construction for closing said last named opening, a duct extended between the joists supporting said floor construction from said register construction in said second named opening to the opening in the lower wall of said recess whereby air picked up at the register end of said duct will pass therethrough into said recess, and means for directing said air through said recess over said heating element, said last named means including a grille construction therein in the upper portion thereof whereby said air may escape from said recess after passage over said heating element.

1,805,339. KNITTING MACHINE. HARRY MCADAMS, Philadelphia, Pa. Filed July 26, 1927. Serial No. 208,483. 11 Claims. (Cl. 66—80.)



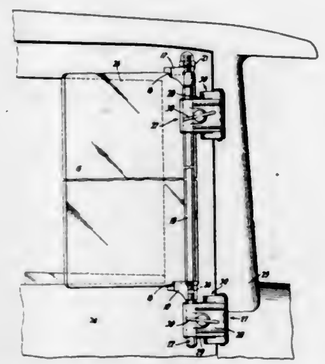
1. In a knitting machine a cylinder having needles, a yarn introducing wheel provided with means to pass between the needles and introduce a yarn in looped relation at the opposite side of the needles from said wheel, and means at the sides of the needles where the loops are produced for holding the loops against retraction as the means of the wheel which forms said loops are withdrawn.

1,805,340. STOP MOTION MECHANISM. HARRY MCADAMS, Margate City, N. J. Filed Mar. 14, 1929. Serial No. 346,985. 2 Claims. (Cl. 66—158.)



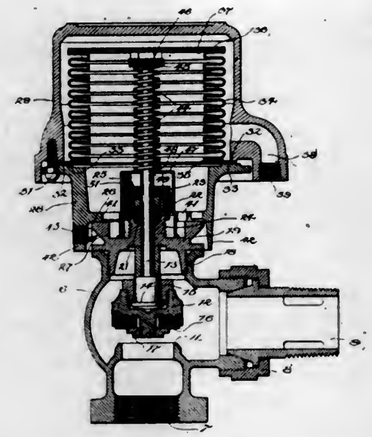
1. In a stop motion mechanism, a support, a controlling lever pivoted upon the support, a detent pivoted on the support engageable with the lever releasably to hold the said inner inoperative, said detent spaced from its pivot having an opening therein, and an electro-magnetically operated device provided with a vibratory armature operatively extending into the opening of the detent so that upon closing of a circuit through the electro-magnet device the armature will vibrate across the opening against the detent for releasing said lever.

1,805,341. WING SHIELD SUPPORT. THEODORE B. NISBET, Irvington, N. Y. Filed Dec. 17, 1927. Serial No. 240,772. 11 Claims. (Cl. 296—84.)



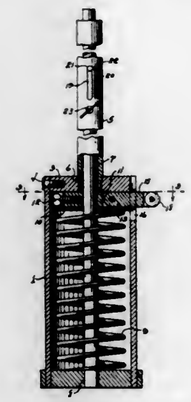
1. The combination with a passenger-carrying body, a door therein having a window, and two hinges, one leaf of each hinge being attached to the door at its edge and the other leaf being attached to said body, of a shield for said window and means for so attaching said shield to said hinges as to turn with said door.

1,805,342. VALVE MOTOR. CARL A. OTTO, Milwaukee, Wis., assignor to Johnson Service Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 30, 1930. Serial No. 492,323. 5 Claims. (Cl. 137—153.)



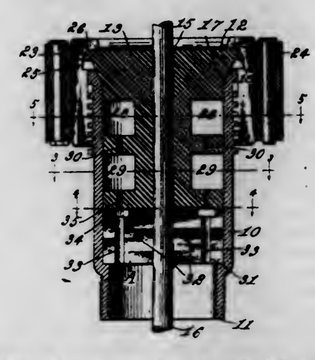
1. As a new article of manufacture, a combined spring seat and gland nut adjusting member for motor actuated valves, comprising a cup-like body adapted to embrace and turn with the nut without partaking of its axial motion, and having a spring seat formed thereon.

1,805,343. INSTRUMENT FOR DETECTING IRREGULARITIES IN THE BORES OF PIPES AND THE LIKE. JOHN A. ROBBINS, Lawrenceville, Ill. Filed Nov. 22, 1929. Serial No. 409,155. 2 Claims. (Cl. 33—174.)



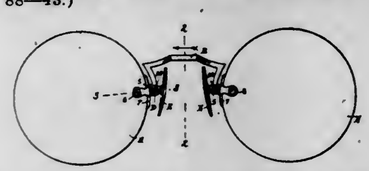
1. In an instrument for testing tubes and pipes for irregularities in the bores thereof, a cylinder, a tube extending from the cylinder and having a longitudinal slot therein and provided, at one side of the slot, with scale marks, a stem slidable in the said tube and having a pointer thereon for registration with the scale marks, a spider adjustably mounted upon the stem and slidable within the cylinder, the cylinder being closed at its end through which the stem extends, the spider being engageable against the inner side of the closed end, means within the cylinder yieldably holding the spider in such engagement, arms radiating from the spider and pivotally connected therewith, the cylinder having longitudinally extending slots therein and the said arms extending through said slots, and anti-friction elements carried at the outer ends of the arms for contact with the inner surface of the wall of the tube or pipe to be tested, whereby when the anti-friction element of any of the arms engages an irregularity in the surface of the tube or pipe to be tested, the arm will be displaced and the movement of the stem in the tube thus effected will, in turn, effect the registration of the pointer with the scale.

1,805,344. OIL SAVING DEVICE. FRED SIEFKEN, Torrance, Calif. Filed Feb. 13, 1929. Serial No. 339,656. 1 Claim. (Cl. 286—26.)



A packing gland comprising a coupling including an attaching sleeve upon one end having a polish rod passed centrally therethrough, a washer of separable formation clamped about the polish rod within the coupling, a packing of yieldable formation including a central bore to accommodate that portion of the polish rod above the washer, said packing being split longitudinally thereof from the central bore outwardly to one side to facilitate accommodation of the polish rod within the central bore of the packing from the side, the packing being further provided with spaced annular chambers wholly within the body thereof and in communication with each other and the inner side wall of the coupling, the washer having passageways in the bottom thereof in communication with the bore of the sleeve and chambers to facilitate admission of fluids therein under pressure and to compress the adjacent portions of the packing about the polish rod, a clamping member carried by and adjustably mounted upon the coupling, and a flange portion inwardly projecting from the outermost end of the clamping member beyond the adjacent periphery of the coupling frictionally engaging the packing to retain same seated against the upper side of the washer.

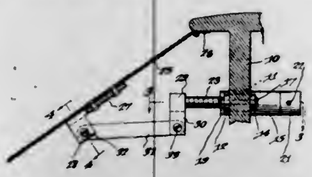
1,805,345. BOX STUD FOR NOSE BRIDGES. VINCENT TANASSO, New York, and JACOB J. POMERANZ, Brooklyn, N. Y. Filed Feb. 9, 1929. Serial No. 338,784. 1 Claim. (Cl. 88—43.)



In an eyeglass or spectacle construction, a nose bridge formed of a thin flat sheet of resilient material having a bight portion and depending leg portions disposed in the same plane with each other and in a vertical plane coinciding with the plane of the lenses and a box stud having its major width disposed in a plane coincident with the nose bridge and provided with a vertical bore receiving the lower terminals of the nose bridge leg portions and securing

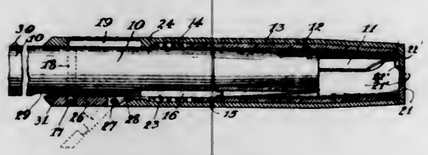
means passing through said box studs and said terminal portions and disposed on axes parallel to the axes of the lenses.

1,805,346. WINDSHIELD VISOR. PETER J. WARAKSA, El Paso, Tex. Filed Oct. 28, 1927. Serial No. 229,459. 1 Claim. (Cl. 296—95.)



A device for adjusting the angular position of the sun visor of an automotive vehicle, comprising, in combination with a windshield having an opening therein and a sun visor hinged at its upper end to the top of the vehicle, a re-enforcing plate on said windshield having an opening therein aligned with the opening in said windshield, a supporting plate on the opposite side of said windshield having a collar extending therefrom having the interior opening thereof aligned with the opening in said windshield, a sleeve extended through said aligned openings, a headed end on said sleeve disposed in abutment with said reenforcing plate, said sleeve having a screw threaded portion on the periphery thereof on the end opposite said headed end, a handle member mounted on said screw threads and disposed in abutment with the outer end of said collar whereby to hold said sleeve in said openings against lateral movement, said sleeve having the inner periphery thereof screw threaded, a screw member threadedly mounted in said screw threaded sleeve and movable axially with respect to said sleeve when said handle is moved to rotate said sleeve, a block connected to the outer end of said screw member and connected thereto in such a manner that said screw member may be rotated relative to said block, a link connected to said block and pivotally connected to a bracket on said visor whereby when said screw is moved by rotation of said handle member said link will transmit the movement thereof to said visor to move said visor into various angular positions with respect to the windsheld.

1,805,347. CLOSURE DEVICE FOR FOUNTAIN PENS. RICHARD WEINGART, New York, N. Y., assignor to Eveready Pen Company, Inc., New York, N. Y., a Corporation of New York. Filed June 5, 1930. Serial No. 459,327. 20 Claims. (Cl. 120—49.)



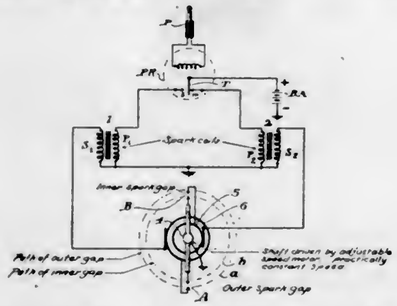
1. A fountain pen, a body with a writing nib, a housing for the nib including two members connected by guide connections with the body for relative movement, both members being connected for endwise movement and one being connected for independent turning movement, said members having cooperative segment ends and openings, the segment end of one member being formed to seat in the opening of the other member, and the member having turning movement being adapted through the turning thereof to position its segment end opposite the segment end of the other member and its opening in registry with the opening of the other member, whereby to alloy the projections of the nib through the registering openings.

1,805,348. FOUNTAIN PEN. RICHARD WEINGART, New York, N. Y., assignor to Eveready Pen Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 5, 1930. Serial No. 479,837. 8 Claims. (Cl. 120—49.)



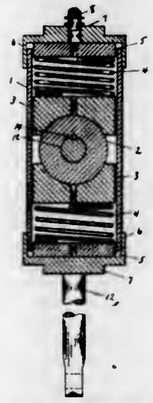
1. A fountain pen the body and nib of which are provided with a covering consisting of a pair of barrels connected for relative longitudinal movement, each of said barrels at the nib end of the pen including a plug and a seat opening, the plug of each barrel being shaped to fit into and effect a seal with the seat opening of the other barrel, said plugs being insertable in and removable from the seat openings on longitudinal movement of one of the barrels.

1,805,349. SIGNAL DISTORTION INDICATOR. RALEIGH J. WISE, Bloomfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Feb. 7, 1928. Serial No. 252,564. 4 Claims. (Cl. 178—69.)



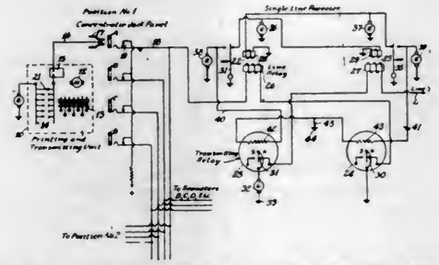
1. In combination, a source of signals comprising positive and negative current impulses transmitted in cycles, a relay responsive thereto, means operated in substantial synchronism with said signals to indicate upon separate paths the time cycle of said respective signals, and means controlled by said relay and cooperating with said first means for indicating the time of operation of said relay for each signal impulse.

1,805,350. VEHICLE SPRING SNUBBER. VALENTIN C. WORLEIN, Chicago, Ill. Filed July 19, 1930. Serial No. 469,138. 5 Claims. (Cl. 188—130.)



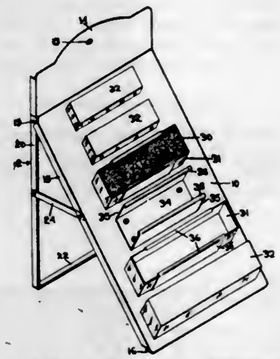
1. In combination with a housing, a crank rotatably mounted therein, a ball mounted upon the end of said crank disposed within the housing, friction members in contact with said ball, compression means, and springs between said friction members and said compression means.

1,805,351. REPEATING APPARATUS FOR CONCENTRATION UNITS. ALBERT ATHERTON, Bloomfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Sept. 16, 1929. Serial No. 393,052. 5 Claims. (Cl. 178—4.)



1. The combination with a concentration unit having a telegraph printer associated therewith, of a number of telegraph lines terminating at said concentration unit, repeaters intermediate certain of said lines and said concentration unit, means at the concentration unit for reversing the polarity of current applied to the repeaters and means for supplying current of uniform polarity from said repeaters to the lines when current of either polarity is applied at the concentration unit.

1,805,352. DISPLAY STAND. WILLIAM H. AVERILL, Dorchester, Mass., assignor to Pike Manufacturing Company, Pike, N. H., a Corporation of New Hampshire. Filed May 2, 1928. Serial No. 274,373. 5 Claims. (Cl. 206—80.)

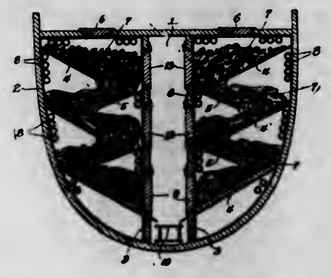


1. A display stand comprising a supporting plate, a U-shaped clip fastened thereon and having parallel sides spaced to hold a box closely therebetween, inwardly turned flanges on the sides of the clip arranged to engage the top edges of a box held therein, and means associated with said plate for engaging the ends of said box to prevent longitudinal movement thereof, said sides of the clip being thin and of such dimensions that the regular box cover may fit over the box supporting members and conceal them from view.

1,805,353. PROCESS FOR DECHLORINATING WATER. ERNST BEEL, Darmstadt, Germany. Filed Oct. 10, 1929, Serial No. 398,804, and in Germany May 10, 1926. 9 Claims. (Cl. 210—28.)

1. A water purifying process which comprises treating the water with chlorine or perchloride compounds, treating the chlorinated water with a lignin bearing material to convert the chlorine into lignin chloride and substantially continuously maintaining throughout the treatment the ratio between the lignin and the chlorine at a proportion of substantially 2 to 1 parts by weight or above.

1,805,354. BIN FOR STORAGE OF FISH. CLARENCE BIRDSEYE, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed May 3, 1928. Serial No. 274,769. 3 Claims. (Cl. 62—1.)



1. A bin for the storage of fish comprising enclosing walls, inwardly and downwardly extending shelves alternately projecting in staggered relation from opposite walls, an opening through which fish can be delivered onto the topmost shelf and an opening adjacent the bottom of the bin through which the fish can be discharged.

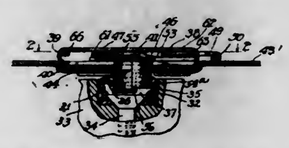
1,805,355. BASIC COMPOUNDS AND PROCESS OF PREPARING THEM. MAX BOCKMÜHL, Frankfort-on-the-Main-Hochst, and ROBERT KNOLL, Hornau-on-the-Taunus, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 26, 1929, Serial No. 416,742, and in Germany Jan. 2, 1929. 17 Claims. (Cl. 260—124.)

1. The process which consists in causing a compound of the following formula:

$$R-C\begin{matrix}O\\X\end{matrix}$$

wherein R stands for an aliphatic residue containing at least 10 carbon atoms and X stands for OH, O-alkyl, halogen, NH_2 or a NH_2-group the hydrogen atoms of which are substituted by alkyl, aryl or aralkyl, to react with an amino alcohol containing at least two amino groups one of which being a tertiary one.

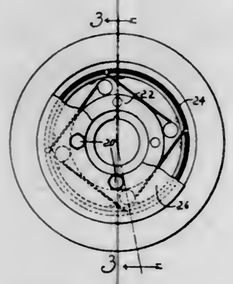
1,805,356. ADJUSTABLE LATCH LOCK FASTENER. HELGE A. BORRESEN, Chicago, Ill., assignor to United Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Dec. 16, 1922. Serial No. 607,345. 15 Claims. (Cl. 29—211.)



1. A three-side lock fastener comprising, in combination, a socket presenting a stud-receiving aperture, a cooperating stud having a shank portion for passage through said aperture, said shank portion having an opening in one side thereof, a locking portion projecting into the opening in said shank portion, means on the locking portion for locking the stud with the socket, at-

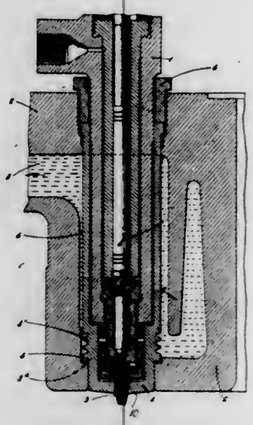
taching means securing the stud to a flexible support, and means cooperating with the locking portion and extending substantially parallel to the flexible support, whereby it may be operated by initial movement of the flexible support relative to said stud thereby to shift said locking portion out of locking engagement with the socket and permit separation of the stud from the socket by a pull exerted upon a predetermined side only of the flexible support.

1,805,357. VIBRATION DAMPENER. CARL BREER, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Filed Jan. 24, 1927. Serial No. 163,117. 8 Claims. (Cl. 74—6.)



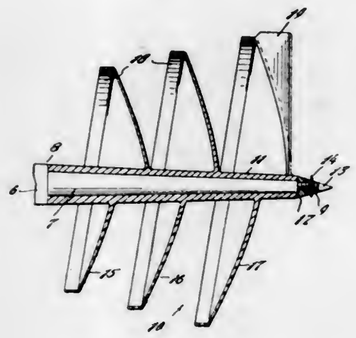
3. In a vibration dampener of the class described comprising a crankshaft having a flywheel thereon, a member on said crankshaft rotatable therewith and spaced from the flywheel, an inertia ring relatively rotatable on said member, and a radially expansible member rotatable with said member for frictionally engaging with said ring to form a driving connection therebetween.

1,805,358. FUEL VALVE OF INTERNAL COMBUSTION ENGINES. WALTER SCOTT BURN, Hartlepool, England. Filed Apr. 16, 1928, Serial No. 270,527, and in Great Britain Dec. 19, 1927. 7 Claims. (Cl. 123—173.)



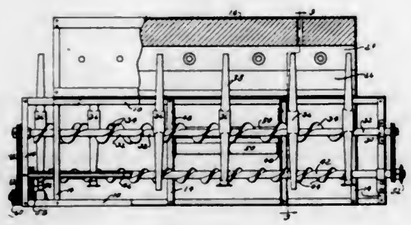
1. In an internal combustion engine having a water cooled cylinder head and a fuel nozzle substantially enclosed in a heat conducting sleeve penetrating the water space and the outer and inner walls of said cylinder head, means for promoting over the exterior surface of the fuel valve containing sleeve a flow of cooling water at a velocity higher than that normally obtaining in the main water space of the cylinder head.

1,805,359. PROPELLER. ALFRED DE POLO, Connellsville, Pa. Filed July 20, 1929. Serial No. 379,852. 2 Claims. (Cl. 170—156.)



1. As a new product of manufacture, a propeller of the class described comprising a centralized hub tapered in diameter and thickness from the inner toward the outer end, and a plurality of integral sectors composed of spiral convolutions, advancing in diameter and receding in helical form from the inner toward said outer ends, the sectors being of general cupped or curvate configuration in cross section, and formed with peripheral flanges constituting power concentrating and confining rims, the outermost convolutions terminating in fins, said fins being disposed at approximate acute angles with respect to the longitudinal axis of the hub, and being graduated from the hub toward the periphery of said section.

1,805,360. HEAT TREATING FURNACE. RAY A. DE VLIEG, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 8, 1928. Serial No. 304,736. 8 Claims. (Cl. 263—6.)



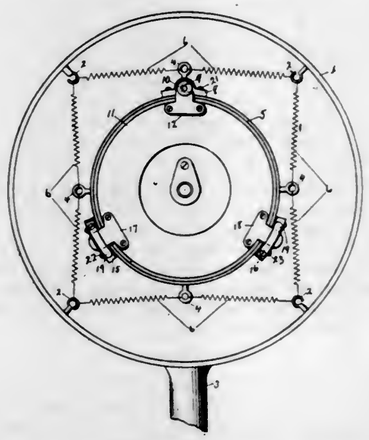
7. A furnace of the class described comprising an oven portion having an opening in its lower wall extending longitudinally thereof from one end of the oven to the other end, a pair of spaced shafts below said opening, a pair of spiral flanges, one on each of said shafts, at least one pair of corresponding ends of said shafts terminating within the limits of an end of said oven portion.

1,805,361. COLOR PHOTOGRAPHY. LOUIS DUFAY, Versailles, France, assignor to Harold Wade, London, England. Filed Mar. 8, 1929, Serial No. 345,604, and in Great Britain Aug. 3, 1928. 13 Claims. (Cl. 95—81.5.)



1. A method of making a multicolour photographic screen consisting in applying to a film of a cellulose ester of an organic acid a coating of cellulose nitrate in solution, drying the coating and thereafter treating said coating to produce therein a multiplicity of differently-coloured regions.

1,805,362. MICROPHONE AND MICROPHONE MOUNTING. HUGH J. ELLIS, Berwyn, Ill. Filed Oct. 9, 1929. Serial No. 398,367. 6 Claims. (Cl. 179—146.)



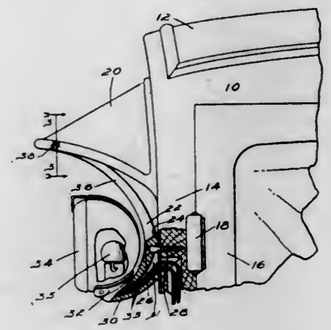
1. In a microphone for use in radio broadcasting, the combination of an outer ring, an inner ring supported within said outer ring by means of tension springs, a microphone unit removably mounted within said inner ring, substantially as shown and described.

1,805,363. GARMENT HOLDER, FOLDER, SUPPORTER, AND BOX STRENGTHENER. JOHN HART, Union City, N. J. Filed Nov. 28, 1928. Serial No. 322,412. 2 Claims. (Cl. 206—7.)



2. Means for retaining a garment against displacement within a garment box, comprising a garment engaging member to extend across the interior of the box in retaining engagement with a garment within the box, and substantially inverted U-shaped loops adapted to overhang the upper edges of the respective opposite walls of the box and engaging the inner and outer faces of the respective walls for removably supporting the member in a proper position.

1,805,364. SUPPORTING BRACKET. HERBERT V. HENDERSON, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 393,091. 7 Claims. (Cl. 240—57.)

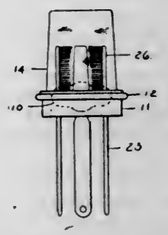


1. A device of the class described comprising in combination, a vehicle body, a visor on said body, a bracket between said body and said visor, and a lamp on said bracket.

1,805,365. PROCESS OF ETHERIFYING CELLULOSE. EUGEN HUBER, Leverkusen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 20, 1928, Serial No. 263,216, and in Germany Mar. 25, 1927. 3 Claims. (Cl. 260—152.)

1. The process which comprises introducing cellulose into a mixture of an aromatic high boiling tertiary amine and water, stirring until a homogeneous dispersion has formed, introducing then the amount of caustic alkali which is necessary for effecting conversion of the cellulose into alkali cellulose and subjecting the alkali cellulose thus formed in the reaction mixture to the action of an etherifying agent.

1,805,366. TOOTHBRUSH AND TUMBLER RACK. MAX KADEN, New Britain, Conn. Filed Nov. 28, 1927. Serial No. 236,126. 2 Claims. (Cl. 248—63.)

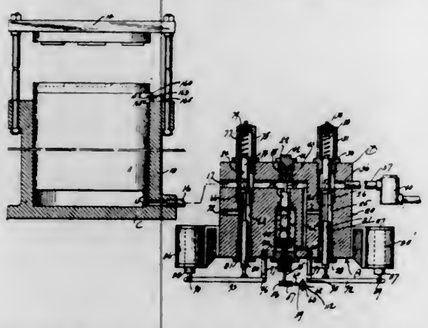


1. A tooth brush holder comprising a cylindrical wall that is provided with inwardly directed means for supporting a tooth brush, a second cylindrical wall spaced from said first mentioned wall and supported therefrom by means of an intermediate platform of annular form, and a ring engaged with the periphery of said second wall serving as the support for said holder.

1,805,367. AUTOMATICALLY OPERATED PRESS. RONALD T. KING, Burlington, N. J. Filed Apr. 18, 1929. Serial No. 356,190. 6 Claims. (Cl. 138—17.)

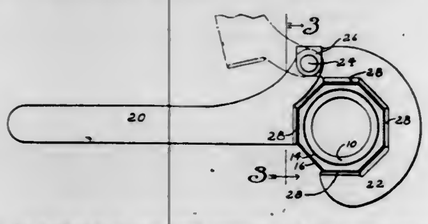
1. In mechaniam for controlling the admission of high and low pressures to the cylinders of an hydraulic

press, the combination of a pressure supply main, valve means for controlling admission of low pressure to the said main, valve means for controlling admission of high pressure to the said main, means operated by the flow of low pressure to the main at the time that the hydraulic press meets work resistance for automatically



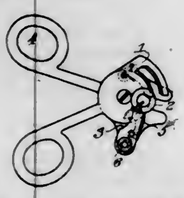
opening the last mentioned valve for admission of high pressure to said main, an exhaust valve for releasing pressure from said main, and delayed action means automatically operated by the means which opens the high pressure valve means for opening the exhaust valve and releasing the pressure after the high pressure has operated the hydraulic press for a predetermined interval.

1,805,368. WRENCH. HOWARD E. MAYNARD, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 23, 1929. Serial No. 342,072. 2 Claims. (Cl. 81—98.)



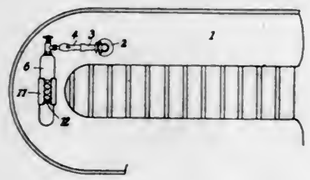
1. In a device of the class described, a U shaped stamping; nut engaging shoulders upturned about the inner periphery of said U shaped stamping for engagement with a plurality of faces on a nut; an ear turned back upon itself at one end of said U shaped stamping and on the same side as the aforesaid shoulders; a pin passing through the ear and stamping, and a handle pivoted on said pin and adapted to engage another face of a nut in said wrench.

1,805,369. DEVICE FOR OPENING VIALS. WILHELM MERCK, Darmstadt, Germany. Filed Mar. 8, 1928, Serial No. 260,219, and in Germany Mar. 18, 1927. 1 Claim. (Cl. 49—52.)



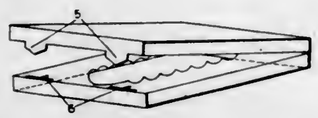
A device for opening vials comprising a scissor-like mechanism, a semi-circular shaped glass-cutter taking up the position of one of the scissor-blades, a plate with an U-shaped incision taking up the position of the other blade; a small axle mounted on this plate, an arm with a small round plate of medium-hard material on the one end as striker, connected to the axle on the other end; an actuating spring wire around the axle, a disengaging pin mounted on the arm in the direction towards the plate with the incision, a spring wire actuated nose connected pivotally to the glass-cutter, of sufficient length to press the disengaging pin and thereby the arm and the small plate on it away from the glass-cutter when closing the grips of the scissors and to slip from the disengaging pin when the grips of the scissors are closed, whereby the striker is rapidly moved forward in the direction toward the glass-cutter.

1,805,370. METHOD OF AND APPARATUS FOR INFLATING INFLATABLE BODIES, SUCH, FOR EXAMPLE, AS INFLATABLE BOATS. HERMAN MEYER, Berlin, Germany. Filed Dec. 27, 1929, Serial No. 417,012, and in Germany Jan. 9, 1929. 1 Claim. (Cl. 9—2.)



A boat comprising an inflatable hull of limp flexible material provided with a stud, a container for compressed gas and a duct detachably connecting the container to the stud, said duct including an injector nozzle for the gas and openings for the admission of air so that the gas as it enters the hull draws and forces atmospheric air also into the hull, thereby causing the hull to be inflated with a mixture of gas and air.

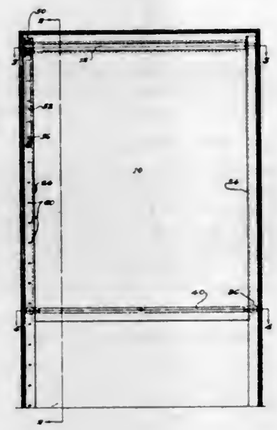
1,805,371. CARTON OR LIKE CONTAINER FOR CIGARETTES AND THE LIKE. WALTER EVERETT MOLINS, Deptford, London, England. Filed Apr. 5, 1928, Serial No. 267,775, and in Great Britain Apr. 22, 1927. 5 Claims. (Cl. 229—27.)



1. A container having a pair of pockets hingedly connected at one end thereof, whereby the pockets may be closed by folding one upon the other so that the opposing faces engage, one of said pockets being provided with a slot in the opposing face thereof, and the other pocket being provided with a co-operating tongue extending toward the opposing face of the other pocket as the pockets are moved to closing position, whereby the tongue automatically enters the said slot during such movement and is frictionally retained therein to hold the pockets in closed relationship.

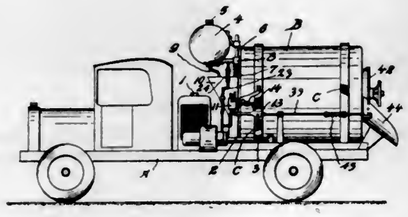
1,805,372. WINDOW SHADE. PATRICK RAINSFORD, Dorchester, Mass. Filed Sept. 15, 1930. Serial No. 481,843. 2 Claims. (Cl. 156—26.)

2. A window shade comprising a springless shade roller journaled at opposite ends, a curtain shade wound upon the roller, U-shaped guides each having a narrow guiding slot to engage opposite edges of the shade, rearwardly extending ears projecting from the upper portions of the guides to form bearings for the opposite ends of the shade roller, a slot formed in the upper portion of one of the guides, a flexible pull reversely



wound upon the end of the shade roller and extending through the slot, a series of spaced openings formed lengthwise of the guide, and a latch upon the pull designed to selectively engage with the openings for locking the shade in any adjusted position.

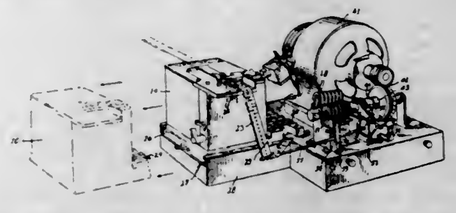
1,805,373. TRUCK MIX METER. JOHN F. ROBB, Cleveland Heights, Ohio, assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed May 2, 1930. Serial No. 449,299. 19 Claims. (Cl. 83—73.)



1. In combination, a truck mixer type of concrete mixing machine, comprising a mixing drum and discharge means, a lock device for said discharge means to prevent opening thereof, means for setting the mixing drum into operation, a batchmeter controlling said discharge means, and instrumentalities between the means for setting the mixing drum into operation and said batchmeter to control starting of the latter.

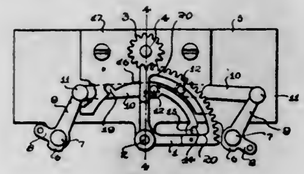
1,805,374. DISTRIBUTOR-TRANSMITTER FOR SIMPLEX TELEGRAPH CIRCUITS. SAMUEL W. ROTHERMEL, Lynbrook, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,726. 5 Claims. (Cl. 178—17.)

1. A distributor-transmitter for a telegraph system comprising a perforated tape transmitter and a distributor, said distributor having a plurality of switches each having one contact connected to the line and the opposite contact connected to the transmitter and a plurality of



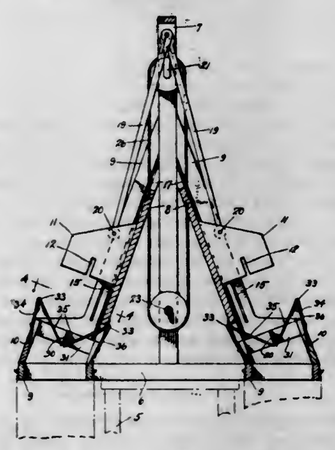
cams for closing said switches in succession to distribute to the line in proper sequence the character combinations previously set up by said tape transmitter.

1,805,375. MECHANICAL MOVEMENT. CHARLES H. SAMPSON, Rochester, N. Y., assignor to Sampson Permagraph Company Inc., Rochester, N. Y., a Corporation of New York. Filed Feb. 18, 1929. Serial No. 340,845. 4 Claims. (Cl. 74—83.)



1. The combination with a shiftable member, and two shifting mechanisms normally out of driving connection with said member, a guide on the shiftable member for holding one shifting mechanism out of driving connection with the shiftable member while the latter is shifted away from normal position, and a fixed guide cooperating with a shifting mechanism when the latter is shifting the shiftable member to hold said shifting mechanism in connection with the shiftable member.

1,805,376. SEED POTATO CUTTER. THOMAS SAMSON, Grafton, N. Dak. Filed Feb. 19, 1930. Serial No. 429,681. 1 Claim. (Cl. 146—169.)

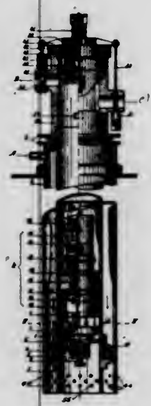


In a mechanism of the class described, a horizontal frame, a vertical frame rising from the central portion

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of the horizontal frame, a pair of plates rising upwardly from the horizontal frame and alining inwardly toward each other to the vertical frame, a plurality of blades associated with the lower portion of each plate, said blades being arranged in cross relationship, follower blocks slidable on the plate, pitmen engaged with the follower blocks, a crank shaft journaled in the vertical frame with which said pitmen are engaged, said pitmen to straddle said vertical train in a manner to afford reciprocatory movement of the follower blocks in their respective inclined plates, on the opposite sides of the vertical frame, means for rotating the crank shaft to cause reciprocation of the follower block, said follower block having grooved faces to receive the blades, side boards on the plates having longitudinally extending slots, and pins extending from the block through the slots, a strip extending along the center of each plate, and lugs extending inwardly from the block under the strip, box like structures on the lower portions of the plates for engaging the blades, rods extending along the inner and outer sides of the box like structures, guide plates rockably mounted on said rods extending between the blades, and springs urging the guide plates upwardly against the under side of the blade.

1,805,377. DEVICE FOR RAISING FLUIDS FROM BOREHOLES. BRUNO SCHWEIGER, Lipinki K/Biecza Zach Malopolska, Poland. Filed Dec. 8, 1928, Serial No. 324,602, and in Germany June 2, 1926. 6 Claims. (Cl. 103—52.)



1. Apparatus for raising fluids from deep and narrow boreholes with low fluid levels, comprising tubing having inlets at its bottom for the fluid to be raised, and also having an inlet and an outlet for compressed air and an outlet for the fluid; a valved raising piston within the tubing moved from the bottom of the borehole for the full height of its lifting stroke by the compressed air and then falling back upon the bottom by gravity; and a bottom valve below the raising piston for controlling the admission of fluid and air between it and said raising piston; the valve of the raising piston being closed by the increasing pressure of the air under it when the raising piston falls at too great an acceleration so as to throttle the air escaping above the raising piston, said raising piston having means for controlling the movement of the bottom valve.

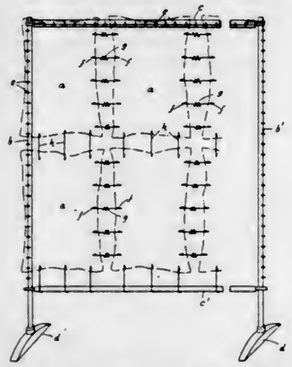
1,805,378. INTERCHANGEABLE SIGN. MAURICE SEND, Detroit, Mich. Filed May 17, 1930. Serial No. 453,148. 1 Claim. (Cl. 40—142.)

In a sign, a back member having a longitudinal groove, the lateral walls of said groove converging towards the mouth thereof, a character, and a resilient loop projecting directly from the back of said character, said loop having greater maximum width than the mouth of said



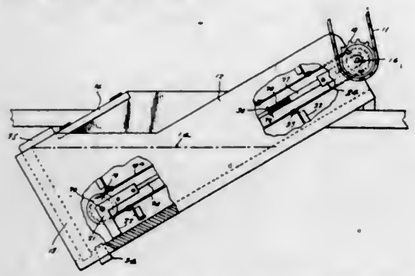
groove and receivable in said groove under tension, said loop being entirely receivable in said groove whereby the back of said character engages said back member.

1,805,379. MEANS FOR STRETCHING RABBIT AND OTHER SKINS. GEORGE GRINLEY SHARPE, Ulcombe, England, assignor to The Governor and Company of Adventurers of England Trading into Hudson's Bay, London, England, a British Company. Filed May 31, 1928, Serial No. 281,885, and in Great Britain Aug. 9, 1927. 2 Claims. (Cl. 149—21.)



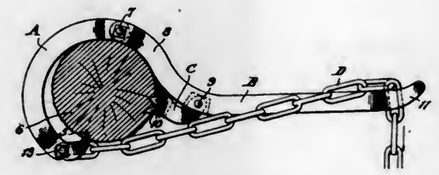
2. A device for stretching skins of animals, comprising a vertical frame including a pair of side members, a top member connecting said side members adjacent their upper ends, a bottom member having its end slidable longitudinally of side members, a skin-engaging means carried by each of said side and top members and skin-engaging hooks detachably mounted on said bottom member.

1,805,380. FRUIT DIPPER. CARL W. SHATTO, Sebastopol, Calif. Filed Dec. 13, 1929. Serial No. 413,819. 3 Claims. (Cl. 198—208.)



1. A fruit dipper of the type described for association with a conventional fruit peeler comprising a trough having an inclined bottom and its upper end open and its lower end closed so as to retain a quantity of treating fluid, a shaft carrying a roller at the upper end of the trough, a drive sprocket on one end of the shaft, a roller on a shaft journaled in brackets rested in the lower end of the trough, a conveyor belt trained between said rollers, rigid longitudinally adjustable means connected between said shafts for adjustably and automatically tensioning the conveyor belt, the connection of said means with the shaft at the upper end of the trough being pivotal so as to permit the lower end of the conveyor to be swung out of the lower end of the trough without disturbing the operative relation of the drive sprocket with the driving means of the peeler.

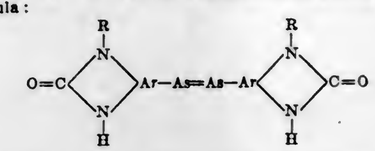
1,805,381. POST TWISTER. JOHN SHIMKO, Uniontown, Pa. Filed June 21, 1929. Serial No. 372,669. 4 Claims. (Cl. 254—131.)



1. In a post twister, the combination of a post-engaging hook, a shank connected thereto and having a seat at the free end, teeth carried by the shank and projecting toward the hook, and a flexible pull chain connected at one end to the hook and adapted to extend over the seat on the shank.

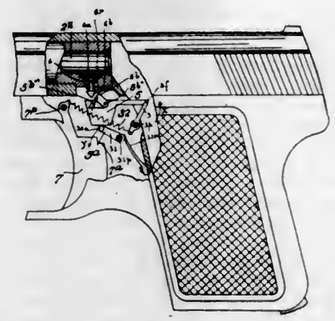
1,805,382. ARSENOBENZIMIDAZOLONS. KARL STREITWOLF, Frankfort-on-the-Main, and ALFRED FEHRLE, Badsoden, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 17, 1927, Serial No. 234,034, and in Germany Dec. 2, 1926. 2 Claims. (Cl. 260—15.)

1. As new products, the arsenobenzimidazolones of the formula:



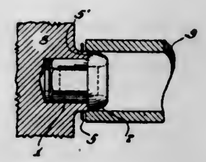
wherein R stands for alkyl or alkylene and Ar for a benzene nucleus.

1,805,383. AUTOMATIC PISTOL. LEON THIRY, Brussels, Belgium. Filed May 3, 1929, Serial No. 360,130, and in Germany May 7, 1928. 5 Claims. (Cl. 42—7.)



5. Automatic weapon comprising a safety arrangement placed in its safety position by the withdrawal of the magazine by means of the penetration of an element into the seat of the magazine and means for obstructing this element in its safety position by a portion actuated by an element, a portion of which is extended beyond the chamber of the gun when the latter contains a cartridge, so that returning the machine to place is prevented while a cartridge remains in the chamber of the gun.

1,805,384. METHOD OF MAKING CAP NUTS. GEORGE A. VIS, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 2, 1927. Serial No. 171,914. 2 Claims. (Cl. 10—86.)

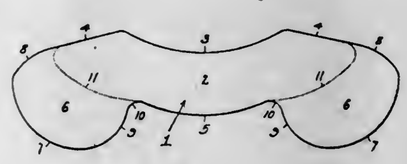


1. The method of making nuts which comprises the formation of a blank into the shape of the nut by pressure between dies producing a flash, thereby providing on the nut a reference surface comprising the flash produced by said die pressing operation, thereafter using said reference surface to locate and align the axis of the nut for a succeeding operation or operations, and finally cutting off the flash after such operation or operations.

1,805,385. HARDENED ARTIFICIAL MASS AND PROCESS OF PREPARING IT. ARTHUR VOSS, Frankfort-on-the-Main-Hochst, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 19, 1928, Serial No. 307,042, and in Germany Sept. 29, 1927. 14 Claims. (Cl. 260—4.)

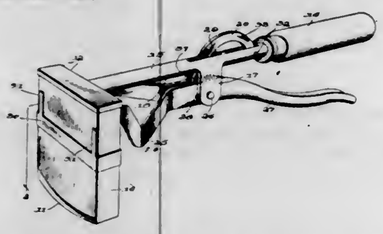
7. The process which consists in heating condensation products, obtained from chloroacetic acid and the condensation product of phenol and formaldehyde, with the addition of glycerine to a temperature of between 100° C. and 200° C.

1,805,386. PROTECTIVE DEVICE. HAROLD V. ALLEN, East Bethel, Vt. Filed Mar. 21, 1930. Serial No. 437,845. 2 Claims. (Cl. 36—70.)



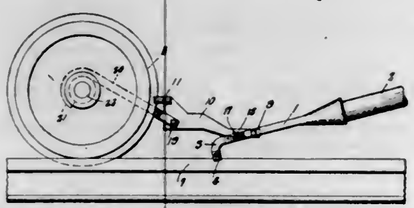
1. A protective device for use in protecting socks and stockings while polishing shoes, which device comprises a blank of flexible sheet material having side portions to be fitted over the sides and top of the instep of the foot, and a connecting intermediate portion to extend around the ankle and heel, the said blank being provided with end portions extending from the ends, and under sides of the intermediate portion, and connected therewith along a weakened line.

1,805,387. ICE CREAM SCOOP. JAMES L. BALTON, Baltimore, Md., assignor to Joseph Shapiro, Baltimore, Md. Filed July 25, 1928. Serial No. 295,138. 4 Claims. (Cl. 107—48.)



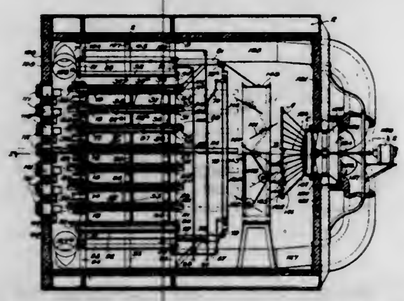
1. An ice cream scoop including a scoop body; an ejector mounted in said scoop body, said ejector provided with rollers mounted on a shaft carried by said ejector; a stem perpendicular to said scoop, and means mounted on said stem for actuating said ejector.

1,805,388. FREIGHT CAR PUSHER. DESMOND B. BROOKS, Haxtun, Ohio. Filed Sept. 16, 1929. Serial No. 392,985. 4 Claims. (Cl. 254—37.)



1. In a device for the purpose set forth, a lever having a downturned and offset end providing a rail engaging fulcrum, a jaw having a shank pivoted to the lever, and said jaw being bifurcated to engage with the rim of the wheel and a hooked element pivotally secured to the shank of the jaw and designed to be arranged over the axle of the wheel.

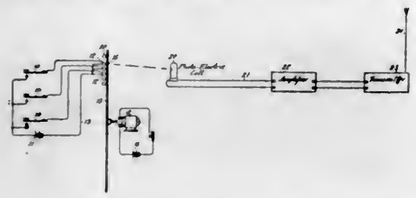
1,805,389. FABRICATING MACHINE FOR LAMINATED GLASS PRODUCTS. WILLIAM C. BULL, Brooklyn, N. Y., assignor to William C. Bull, Inc., a Corporation of Delaware. Filed July 12, 1927. Serial No. 205,132. 29 Claims. (Cl. 18—17.)



2. A glass product fabricating machine including an oven, a press therein having opposite pliable pressure members, pressure and vacuum means acting against said members, and a single control for said pressure and vacuum means.

21. A glass product fabricating machine including an oven, a press assemblage mounted within the oven, heating elements arranged in the oven spaces about the press assemblage, and an air circulating system including an air impeller for directing a volume of air into the oven chamber, an air spreader associated with said impeller to spread the air at its point of entry into the oven chamber and piping communicating with the impeller and the front part of the oven chamber to provide for the return of the air from that part of the oven.

1,805,390. MESSAGE TRANSMISSION. ALBERT B. CLARK, Dorchester, Mass., assignor of forty per cent to Alfred H. Howard, Boston, Mass. Filed Feb. 2, 1929. Serial No. 336,994. 9 Claims. (Cl. 178—4.)

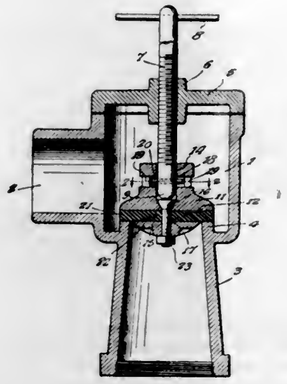


1. A method of communication which includes the energizing of a plurality of lights by a plurality of associated signal devices, and successively and intermittently superposing light from said lights upon light responsive means to propagate a single signal in response to said intermittent and successive superposings of said lights.

1,805,391. VALVE. RALPH A. DOUDS, Lakeland, Fla., assignor to William Peacock and Robert Peacock, Lakeland, Fla. Filed Apr. 11, 1929. Serial No. 354,388. 6 Claims. (Cl. 251—46.)

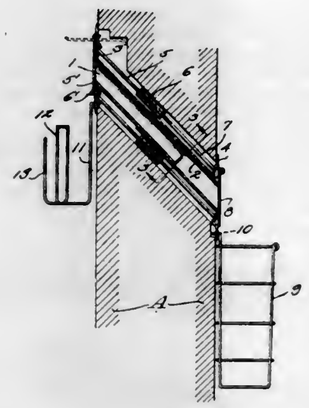
4. A valve comprising a casing formed with an inlet and an outlet and having a valve seat about the inlet, a stem extending into the casing and adjustable towards and away from the inlet, a valve head loose about the inner end portion of said stem and formed with a pocket receiving the inner end of the stem, a pin within the pocket passed through the inner end portion of said stem to retain the valve head in engagement with the stem, said valve head having a side opening communicating with the pocket to permit insertion of the pin, a sealing disk fitting against said valve head, a facing for said disk having arms extending into the inlet to serve as guides, and a fastener passed through the lower portion of the valve head and through the sealing disk and facing and having a head at its upper end received in said pocket, the stem when moved inwardly being adapted to bear against the head of said fastener and move the valve head towards the inlet and seat the disk against the valve seat.

1,805,392. VALVE. RALPH A. DOUDS, Lakeland, Fla., assignor to William Peacock and Robert Peacock, Lakeland, Fla. Filed Nov. 27, 1929. Serial No. 410,236. 4 Claims. (Cl. 251—46.)



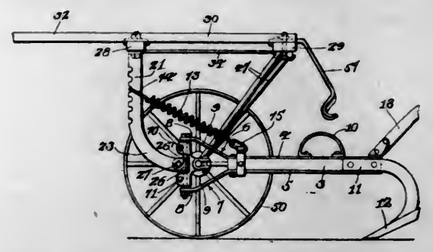
1. In a valve structure, a threaded stem having a transverse opening adjacent its inner end, a head formed with an axially extending passage enlarged intermediate its ends to form a chamber and at opposite sides of the chamber formed with openings communicating with the chamber, a sealing disk against said head, a fastener inserted through the end of said passage on one side of said chamber and passed through said disk, said fastener having a head seated in said passage in spaced relation to said chamber, a stem rotatably received in said passage and extending past the chamber and bearing against the head of said fastener, and a pin inserted through a side opening of the chamber and passed through the transverse opening of said stem.

1,805,393. MAIL RECEIVER. ZADA LIZZIE FANCHIER, Wichita Falls, Tex. Filed Jan. 23, 1928. Serial No. 248,887. 2 Claims. (Cl. 232—20.)



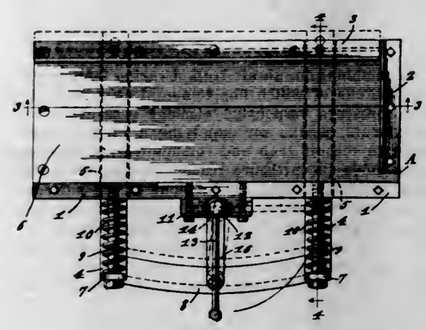
2. In a mail receiver, a chute formed from telescopically mounted sections adapted to be arranged in an opening formed in the wall of a building, threaded bolts carried by said sections, and means threadedly receiving said bolts for securing the sections in cooperative adjusted positions with respect to each other.

1,805,394. STRADDLE ROW CULTIVATOR. JACK H. L. GAMBLE, Headland, Ala. Filed Oct. 10, 1929. Serial No. 398,699. 4 Claims. (Cl. 97—156.)



1. In a straddle row cultivator, a frame including front rear and side bars, a two-part adjustable axle, said parts adjustable laterally relatively to each other, means for securing said axle to said rear bar and for maintaining the axle in its adjusted position, a pair of rearwardly directed spaced beams, a vertically disposed coupling element attached to and extended forwardly from each axle part, a pair of straps extending forwardly from each beam and opposing the top and bottom of a coupling element, a pivot bolt attached to each element and connecting a pair of straps to the latter, a yoke extending forwardly from each bolt intermediate the ends of the latter, a pair of depending rearwardly directed brace members having the upper ends thereof secured to said front bar and their lower ends to said yoke, said members being toothed, a rack extending transversely of each beam, and downwardly inclined spaced coiled springs for selective connection at their upper ends to the teeth of said members and at their lower ends to the teeth of said rack.

1,805,395. WORK TABLE AND CLAMP. JAMES F. GLASS, Conroe, Tex. Filed Mar. 13, 1930. Serial No. 435,555. 3 Claims. (Cl. 144—291.)



1. A device of the class described comprising a table having a stationary flange at its rear side, a movable flange at the front side, bars passing through the table and connected with the movable flange, springs associated with the rear parts of the bars for holding the flange in clamping position and means at the rear of the table for moving the bars forwardly against the action of the springs to move the front flange forwardly.

1,805,396. EYESHIELD FOR SPECTACLES. ALLEN H. HAVENS, St. Petersburg, Fla. Filed Nov. 20, 1928. Serial No. 320,556. 5 Claims. (Cl. 88—41.)

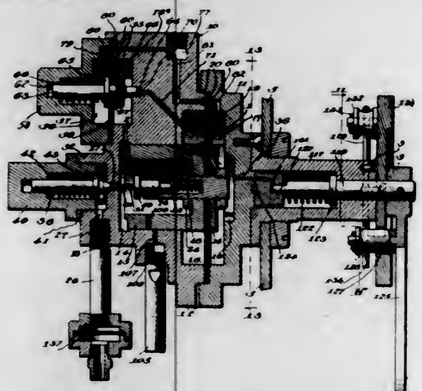
1. An eye shield for spectacles consisting of a pair of lens cover members connected together at the upper edge by a portion integral therewith, the upper edge being pro-

vided with a return bent rolled flange, the portion of the rolled flange over each lens cover being formed with a depending shoulder of short length to clip over the respective lens frames, and the rolled flange between the shoulders being provided with a depending flat flange to stiffen the eye shield.



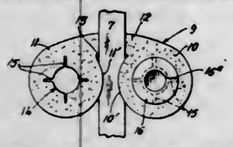
5. A shield for the eyes consisting of a single sheet of tinted celluloid bifurcated to provide two portions covering the eyes of the wearer, and an integral rolled portion along the upper edge and a flat portion extending downwardly over the sheet and terminating short of the bifurcation.

1,805,397. PNEUMATIC TIRE INFLATING AND DEFLATING APPARATUS. WILLIAM A. HARRIS, Greenville, S. C. Filed July 26, 1927. Serial No. 208,612. 23 Claims. (Cl. 50—10.)



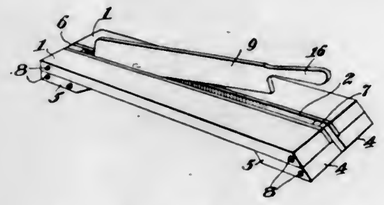
1. In combination, an air trap, a casing having air compartments, one of which has communication with the air trap, a pressure responsive element separating the air compartments, means for supplying a predetermined air pressure to the air trap and communicating air compartment to move the pressure responsive element in one direction, and means operable incident to the movement of the pressure responsive element to permit tire inflating pressure to pass into the other air compartment and conducted to a tire, the tire pressure being communicated to the last mentioned chamber when the tire has been inflated to a predetermined degree to actuate the pressure responsive element to normal position to cut off further air supply to the tire, and a signal moved to operative position prior to the admission of tire inflating pressure into the compartment and retained in said position by the pressure responsive element during the inflation operation.

1,805,398. SHOE BUCKLE CONNECTING MEANS. HENRY HELFANT, Arverne, N. Y. Filed Nov. 1, 1929. Serial No. 404,129. 2 Claims. (Cl. 2—245.)



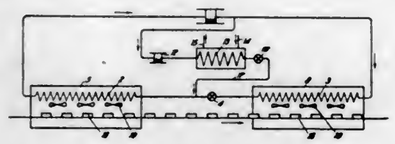
1. The combination with a shoe buckle having a bar attached to the rear side of a connector yoke having wings disposed in overlapping relation to each other around said bar, and a snap button element having interfitting relation with the wings to hold said yoke coupled to said bar, said wings having registering openings therein to receive said element.

1,805,399. CUTTING DEVICE. JOSEPH H. HENDRICK, Oakland, Ky. Filed Apr. 7, 1930. Serial No. 442,311. 2 Claims. (Cl. 164—44.)



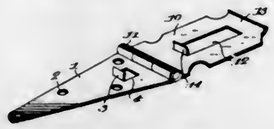
1. In a device of the class described, the combination of spaced parallel primary members, auxiliary members beneath said primary members, metal strips secured to the inner faces of said primary members, metal bushings extending transversely through said auxiliary members, said metal bushings provided with annular flanges on their inner ends positioned below the lower edges of said blade strips and against the inner faces of said auxiliary members, a spindle journalled in said bushings, said spindle provided with a central squared portion and a shear blade mounted on said central squared portion between said metal strips and primary members.

1,805,400. REFRIGERATION APPARATUS. MORITZ HIRSCH, Frankfort-on-the-Main, Germany. Filed May 15, 1928, Serial No. 277,900, and in Germany May 12, 1927. 3 Claims. (Cl. 62—115.)



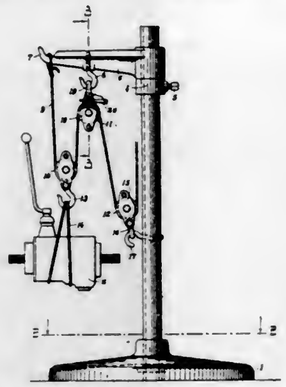
1. A refrigerating plant having an evaporator for refrigerating a material, a condenser, an auxiliary condenser, a compressor for said condenser, a compressor for said auxiliary condenser, said compressors being connected in series, the suction side of one of them being connected to said evaporator, its delivery side being connected with said condenser, the suction side of the other compressor being connected with the delivery side of the first compressor and its delivery side being connected with said auxiliary condenser, and means for supplying the refrigerated material to one of said condensers.

1,805,401. SAFETY HASP. EDWARD K. JANNEY, Buena Vista, Va. Filed Sept. 27, 1929. Serial No. 395,620. 3 Claims. (Cl. 292—281.)



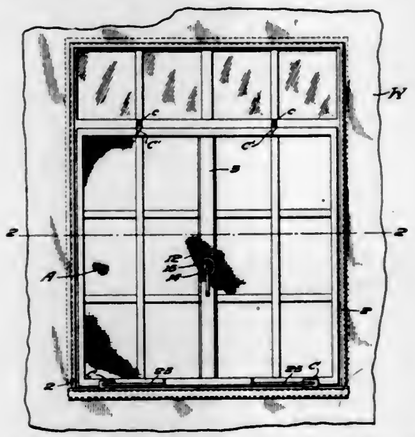
1. A hasp composed of hingedly connected members provided on their inner faces with interlocking elements to hold said members yieldably in folded inoperative position.

1,805,402. AUTOMOBILE TRANSMISSION HOIST. OLOF JOHNSON, Northville, N. Y. Filed Apr. 9, 1928. Serial No. 268,527. 1 Claim. (Cl. 254—139.)



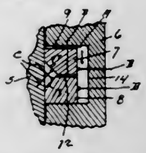
A hoist for automobile transmissions and other objects, including a supporting standard and arm, a pulley structure carried by said arm, a pulley structure carried by said standard, a pulley structure adapted to be connected with the transmission to be lifted, a cable extending through all of said pulley structures and connected at one end with said arm whereby when the cable is pulled in one direction said transmission will be raised, the pulley structure carried by said arm having a solid frame with a passage-way above the cable extending therethrough, a wedge positioned in the passageway, and means connecting the wedge to the frame of the pulley structure so that the small end of the wedge extends in the same direction as the free end of the arm whereby when the load of the transmission is applied to the second named pulley structure movement of the cable will cause the wedge to squeeze the cable to prevent an appreciable movement thereof, and when a pulling force is applied to the cable to draw the same towards the standard, the wedge will be loosened.

1,805,403. CASEMENT WINDOW STRUCTURE. THEODORE JOHNSON, Erie, Pa., assignor to Johnson Metal Products Co., Erie, Pa. Filed Apr. 26, 1929. Serial No. 358,389. 31 Claims. (Cl. 189—69.)



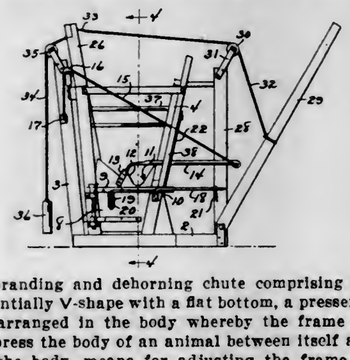
1. A casement window assembly unit comprising a frame for positioning in a wall opening; an out-swinging sash on the frame; and a window lock comprising a locking member and handle mounted on the frame, the frame, member and handle being associated as a unitary structure.

1,805,404. PISTON RING. PAUL LEO JOSLYN, San Francisco, Calif. Filed Oct. 14, 1927. Serial No. 226,207. 1 Claim. (Cl. 74—109.)



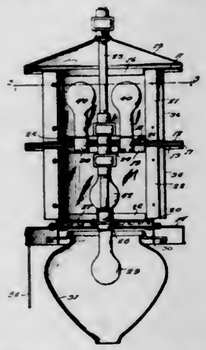
In a piston ring, a pair of super-imposed ring sections, said ring sections having their abutting ends chamfered in a direction toward the outer periphery, a series of grooves formed in the upper surface of each of said ring sections, the area of the abutting surface of said ring sections, and said chamfered edges being such that pressure exerted thereagainst will balance to a substantial degree any internal pressure tending to expand said rings.

1,805,405. BRANDING AND DEHORNING CHUTE. WILLIAM L. KUHNS, Clayton, N. Mex. Filed Dec. 26, 1928. Serial No. 328,412. 5 Claims. (Cl. 119—98.)



1. A branding and dehorning chute comprising a body of substantially V-shape with a flat bottom, a presser frame tiltably arranged in the body whereby the frame can be used to press the body of an animal between itself and one side of the body, means for adjusting the frame in the body so that the chute can be used with different sizes of animals, one side of the body being composed in part of vertically arranged removable spaced bars whereby a branding iron can be passed through any desired space between a pair of bars.

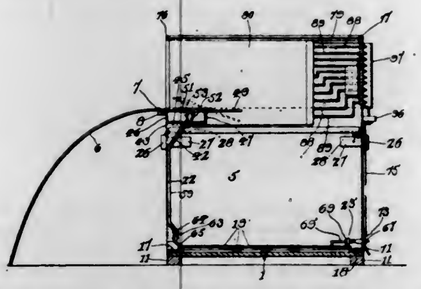
1,805,406. TRAFFIC SIGNALING SYSTEM AND SIGNAL. ROLPH J. LACKNER, Ozone Park, N. Y., assignor to Lackner Products Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed May 13, 1925. Serial No. 30,041. 1 Claim. (Cl. 177—329.)



In a traffic signal, a casing, a post extending vertically in said casing and constituting a conduit for conductor

wires, said casing being divided into upper and lower compartments and consisting of a hood secured to said post and projecting radially therefrom, a head for the upper compartments disposed about said post in spaced relation thereto and having its outer marginal portion joined to said hood and its inner marginal portion formed with a depending flange, a bottom for the upper chamber fitting about said post and formed with an annular shoulder spaced from its outer margin, a disk secured about said post and supporting said bottom, a head for the lower compartment disposed about the post in spaced relation thereto and having its outer marginal portion secured to the bottom of the upper chamber and its inner marginal portion formed with a depending flange spaced about said disk, a bottom for the lower compartment carried by said post and having an upstanding annular flange, lamp sockets extending through openings in the disk and bottom of the upper compartment to support bulbs in the compartments, transparent wall sections for the compartments bearing against the flanges and shoulder, and securing means for the wall sections between adjacent side edges thereof.

1,805,407. COMBINED TRAPPING AND ELECTROCUTING APPARATUS. LEONCIO LAGARDE, Mexico, Mexico, assignor of one-half to Celso Martinez, Mexico, D. F., Mexico. Filed June 24, 1929. Serial No. 373,459. 6 Claims. (Cl. 43—99.)



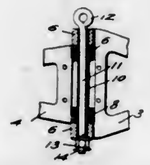
1. In a combined trapping and electrocuting apparatus for rodents a trapping chamber having its bottom provided with oppositely disposed, spaced electrodes, means arranged between said electrodes for maintaining a rodent, after being electrocuted above and in spaced relation with respect to the electrodes, a pair of counterbalanced, oppositely shiftable, pivoted trap doors within said chamber near the top thereof for normally closing it, removable pivot elements for said trap doors, and means to provide a passageway above and of less length than said trap doors.

1,805,408. WELL STRAINER. JOHN M. LOSACK, Orchard, Tex. Filed Jan. 25, 1930. Serial No. 423,427. 2 Claims. (Cl. 166—8.)



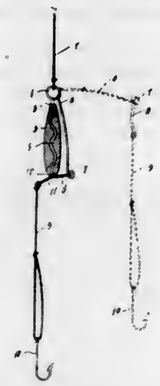
1. A well strainer comprising a tubular body having a spiral recess extending along the body along its outer surface, the bottom of the recess being formed with a groove and there being perforations extending from the bottom of the groove into the interior of the body and a metallic ribbon-like strip disposed in said recess, the strip being transversely slotted throughout its length.

1,805,409. HARROW DRAWBAR AND HINGE THEREFOR. ELI J. MASON and HERBERT L. CROFT, Calamus, Iowa; E. L. Miller, administrator of said Herbert L. Croft, deceased, assignor to said Mason. Filed Jan. 27, 1930. Serial No. 423,843. 1 Claim. (Cl. 55—84)



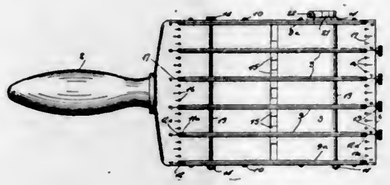
The combination with relatively movable sections of a harrow drawbar, of a hinge connection between the sections including leaves attached to the respective sections, alining sleeves thereon, a tubular pintle extending through all of the sleeves for transmitting transverse thrust from one section to the other, a draw bolt extending through the pintle and relieves thereby from transverse thrust, and a draft element attached to the front end of the bolt, said bolt constituting means for transmitting longitudinal pull from the draft element to the back ends of the hinges at the sleeves.

1,805,410. FISHING LINE. FURMAN H. MCCALL, Anderson, S. C., assignor of one-half to Carl C. McCall, Greenville, S. C. Filed Nov. 14, 1928. Serial No. 319,291. 1 Claim. (Cl 43—15.)



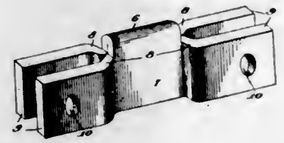
A fishing line appliance, comprising a coiled loop of spring wire adapted to be secured to a fishing line, the ends of the wire forming said loop being extended therefrom and normally spaced from one another, one of said wire ends being provided with bends, a sinker secured to the last mentioned wire end and held thereon by said bends, a link pivotally secured to the other wire end and having an opening therein to engage the extremity of the first wire end, and a fish hook supported on the free end of the link, said link being releasable from the wire end engaged in said opening when the fish hook is pulled releasing the wire ends to permit them to resume spaced relation, the sinker holding the end on which it is secured temporarily inert whereby the other end moves upwardly to impart an upward jerk to the hook.

1,805,411. MEAT CUTTER. JOSÉ N. MONTERIO, New Bedford, Mass. Filed Mar. 11, 1929. Serial No. 346,237. 8 Claims. (Cl. 146—210.)



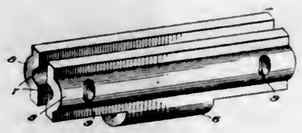
1. In a meat slicer, a backing, edge blades fixed to the backing, intermediate blades adjustable transversely of the backing, and independent means for adjusting each blade, each intermediate blade adjusting means including rack and pinion mechanism operable from one end of the backing.

1,805,412. SPRING NUT LOCKING DEVICE FOR RAIL JOINTS. HARRY G. NORWOOD, New York, N. Y., assignor to Theodore F. Von Dorn, New York, N. Y., Filed Sept. 20, 1929. Serial No. 394,064. 4 Claims. (Cl. 151—38.)



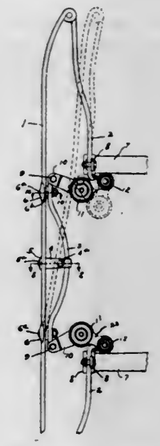
1. A spring nut locking device for rail joints, comprising a single piece of spring steel folded upon itself at its central portion, a vertical depression formed at each face of its central portion, a longitudinal portion extending from each side of its central portion to each outer end thereof, and an opening formed at each end portion for the reception of a securing bolt.

1,805,413. SPRING NUT LOCKING DEVICE FOR RAIL JOINTS. HARRY G. NORWOOD, New York, N. Y., assignor to Theodore F. Von Dorn, New York, N. Y. Filed Sept. 20, 1929. Serial No. 394,065. 5 Claims. (Cl. 151—38.)



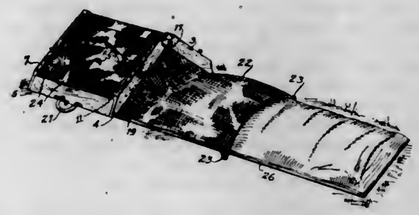
1. A spring nut locking device for rail joints, comprising a single piece of spring steel horizontally folded upon itself at its central portion to form two oppositely disposed horizontal members, each of said members being formed with a longitudinally disposed recess in its central inner face extending throughout its length.

1,805,414. BUMPER MECHANISM. EMIL F. OHLENDORF, Moline, Ill. Filed Mar. 26, 1930. Serial No. 439,196. 17 Claims. (Cl. 293—55.)



8. In a bumper mechanism, a resistance unit pivotally mounted on the rear bumper bar and pivotally connected to the front bumper bar.

1,805,415. INSECT PROTECTOR. GEORGE RICHARD PENDARVIS and ELIZABETH LYDIA PENDARVIS, Hampton Roads, Va. Filed Dec. 13, 1928. Serial No. 325,835. 5 Claims. (Cl. 190—2.)



4. A retiring kit comprising frame members secured at an angle to each other and covered with protective material to form a head cover, said frame members having back and front sides, a ground flap secured to the back side of said members.

1,805,416. ARTIFICIAL BAIT. CARL S. RAYMOND, Flint, Mich. Filed Oct. 29, 1929. Serial No. 403,305. 3 Claims. (Cl. 43—42.)



3. An artificial bait comprising an elongated convexo-concave body with a comparatively straight back and with

the side edges thereof made serpentine and the convexities of one edge arranged in staggered relation to the convexities of the other to facilitate the zig-zag movement of the bait through the water.

1,805,417. ELONGATED TABLET PACKAGE AND WRAPPING. WILLIS JOSEPH RITZEL, Pasadena, Calif. Filed Mar. 12, 1929. Serial No. 346,363. 6 Claims. (Cl. 206—46.)



1. A package consisting of a tablet of long, narrow, thin contour, an inner sealing wrapper, and a tablet engaging and ejecting strip having a portion fast to said inner wrapper and extending down about the bottom of said tablet and then up along the side face thereof and protruding out of the upper end of said unit in alignment therewith, said inner wrapper having its side portions folded toward each other into longitudinally overlapping relation and having its lower end portion and its upper end portion with said strip extending therethrough folded toward each other flat against the same side of the unit, and the portion of said strip extending beyond the extreme end of the upper end portion of said inner wrapper being thereafter folded in the reverse direction flat against the outer face of said upper end portion of said inner wrapper and extending appreciably above the extreme upper portion of the rest of the unit, in combination with an individual outer wrapper permanently relatively immovably secured to said inner wrapper and operatively constituting an endless band extending in tight contact at substantially all points about said inner wrapper and the folded ends thereof and between the extreme end portions of said inner wrapper to seal the same against the atmosphere, the said outer wrapper extending across a portion of the reverse fold of the ejector strip to maintain the projecting end portion thereof in proper position extending upward beyond all other portions of the upper end of said unit so as to be easily gripped between the user's teeth or lips, and said outer wrapper being provided with a "hold tab" projecting downward from the lower end of said unit beyond all other portions thereof so as to be easily and certainly grasped between the thumb and forefinger of the user's free hand.

1,805,418. ELONGATED TABLET PACKAGE AND WRAPPING. WILLIS JOSEPH RITZEL, Pasadena, Calif. Filed Aug. 26, 1929. Serial No. 388,365. 9 Claims. (Cl. 206—46.)

1. A package comprising a tablet of long, narrow, thin contour formed with a shoulder at a distance from one of its ends, in combination with a wrapping applied snugly about a portion of said tablet and having a portion ex-



tending across the face of said shoulder and resisting unintentional endwise separation of said tablet and said wrapping.

1,805,419. GLARE SHADE FOR AUTOMOBILES. ANTONEY F. SCHLAIS, Ironwood, Mich. Filed Jan. 23, 1930. Serial No. 422,858. 1 Claim. (Cl. 296—97.)

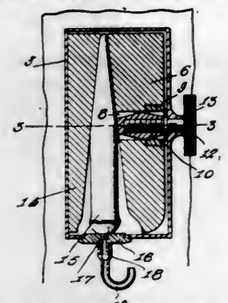


A device of the class described comprising attaching brackets, bearing arms extending forwardly therefrom, a rod securing said bearing arms to the brackets, a rock shaft journaled in the arms adjacent their free ends, a shade carried by the rock shaft, draw means to operate the rock shaft to move the shade to operative position, and spring means surrounding the rock shaft and fastened thereto at one end and to one of the bearing arms at the other end normally urging the shade into contact with said rod.

1,805,420. TUBE HOLDER. JOHN HENRY SCHWEER, Long Beach, Calif. Filed June 29, 1929. Serial No. 374,745. 1 Claim. (Cl. 221—60.)

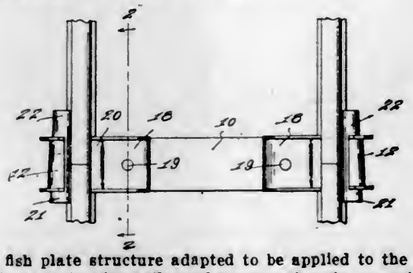
A device of the class described comprising a casing, a pair of jaws arranged in the casing and having their adjacent faces tapering to form a wedge shaped space between them to receive a paste tube, one jaw member having a centrally arranged transverse opening therein, a nut tapering from its center to each end for fitting in the opening, trunnions on the nut, bearing means in the walls of the opening for receiving the trunnions, said nut having

a threaded socket therein, a screw shaft rotatably arranged in one side of the casing and having a threaded part en-



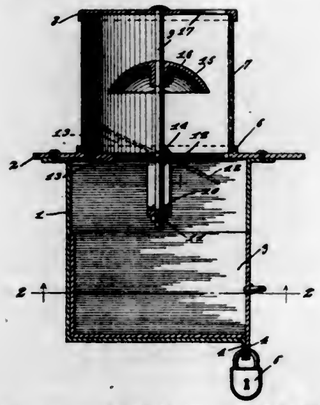
gaging the socket, a handle on the outer end of the shaft and discharge means at one end of the casing through which the paste forced from the tube by the jaws will pass.

1,805,421. FISHPLATE WITH LUGS. ORVILLE B. SHAHAN, Tunnelton, W. Va. Filed Nov. 11, 1929. Serial No. 406,460. 1 Claim. (Cl. 238—10.)



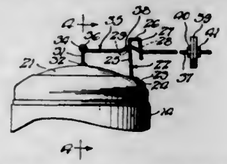
A fish plate structure adapted to be applied to the web portions of abutting rails, and a supporting tie, comprising a plate body provided at its base flange with spaced ears adapted to lie at the sides of the tie, said body having a flange portion provided with spaced openings adapted to register with corresponding openings in the web portions of the rails, pins passing through said openings and fitting snugly therein and having heads lying at the side of the web portion of the body, a wedge adapted to bear against said pins and means for holding the wedge upon the web of the body and pins.

1,805,422. COIN BOX. GEORGE LESLIE SMITH, Rock Island, Ill. Filed Oct. 28, 1929. Serial No. 403,000. 1 Claim. (Cl. 232—7.)



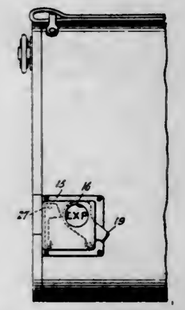
A coin box comprising a support having an opening therein, a transparent member resting on the support and surrounding the opening, a cover for the transparent member having a slot therein, a cross piece depending from the support under the transparent member, a rod passing through the cover and through said cross piece for holding the parts assembled, a bell on the rod adapted to be struck by the coins dropped into the slot, a disk pivoted to the rod and forming a bottom for the transparent member, a weight on the disk, a stop on the rod whereby the weight normally holds the disk in horizontal position, said disk tilting under the weight of coins collecting thereon, a casing depending from the supporting member and surrounding the opening in the supporting member and a drawer in the casing for receiving the coins dropping from the disk.

1,805,423. DRAFT REGULATOR. CARL O. STALEY, Congress Park, Ill. Filed Apr. 27, 1929. Serial No. 358,602. 2 Claims. (Cl. 236—45.)



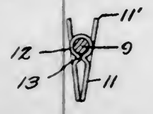
1. In a draft regulator of the character stated, a member adapted for connection with a flue pipe including a cylindrical neck portion adapted to be projected into a flue pipe and including a frusto-conical head portion having a centrally disposed circular opening provided therein, a movable cap member substantially a spherical segment in shape movable in a vertical plane interiorly of said frusto-conical portion for closing said opening, the lower annular edge portion of said last-named member being adapted for having abutting engagement with the upper annular edge of said frusto-conical portion interiorly thereof, a bracket carried by said frusto-conical portion including a substantially U-shaped portion at the upper end thereof providing an arm portion, said bracket having an opening formed in the stem portion thereof and having a slot formed in said arm portion, a lever extended through said opening and said slot, means for connecting one end of said lever to said movable cap member, and adjustable means on the other end of said lever for counterbalancing said movable cap member.

1,805,424. EXPOSURE INDICATING ATTACHMENT FOR CAMERAS. LOUIS STANKEWITZ, New York, N. Y. Filed Feb. 21, 1930. Serial No. 430,349. 7 Claims. (Cl. 95—32.)



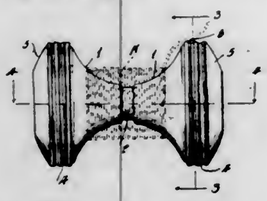
1. An attachment for cameras including a casing over the film window, a shutter within said casing for closing said film window, a latch within said casing for controlling said shutter, and means for moving said latch to release said shutter to close said window upon movement of the lens shutter of the camera, said latch having an enlarged end with bearing members and a remote end secured to said casing.

1,805,425. CLAMP. CHARLES E. STOCKS, El Paso, Tex. Filed Jan. 11, 1929. Serial No. 331,822. 1 Claim. (Cl. 24—259.)



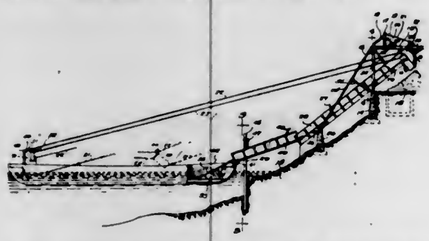
A resilient clamping member formed from a single blank of material folded upon itself to provide a split hollow tubular member of uniform diameter throughout its length, the free longitudinal edges of said tubular member normally substantially contacting to close the tubular member, and extended to provide a pair of converging jaws co-extensive in length with the tubular member and having their free ends normally engaged, and finger-engaging extensions projecting from the jaws in the same plane therewith and terminating above the tubular member at opposite sides thereof.

1,805,426. CHALK LINE SPOOL. FRED L. VANATTA, Orland, Ind. Filed June 20, 1929. Serial No. 372,462. 2 Claims. (Cl. 206—47.)



1. A chalk line spool having a hollow body portion provided with threaded extremities, threaded caps adapted to engage said threaded extremities, each of said caps having an inwardly bulged portion to receive a thumb and finger in unwinding the spool, and a spring clip secured to one of said caps and adapted to engage a chalk line.

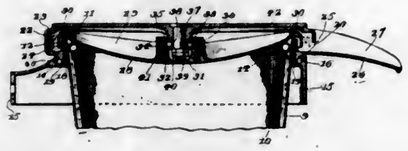
1,805,427. UNLOADING APPARATUS. WILLIAM WALTON VENABLE, Charleston, W. Va. Filed Sept. 20, 1926. Serial No. 136,653. 3 Claims. (Cl. 214—14.)



1. A conveyor through comprising a substantially U-shaped inclined body having an opening adjacent its upper end, a depending support carried by said trough within the lower portion of said opening and adapted to support a conveyor bucket therein, and a pair of angular members arranged at the upper limit of said opening and having their lower ends curved inwardly toward said support.

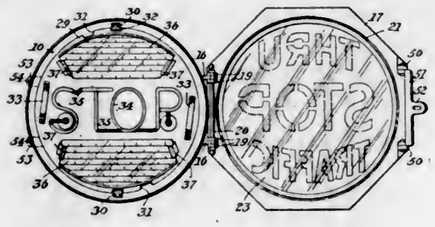
1,805,428. CENTRIFUGAL CLOTHES DRIER. HAROLD F. VIEAU, Liverpool, N. Y., assignor of one-third to Roy C. Higby, Big Moose, N. Y., and one-third to Edward J. O'Neill, Syracuse, N. Y. Filed June 11, 1927. Serial No. 198,273. 13 Claims. (Cl. 210—75.)

1. In an apparatus for the purpose set forth a vertically disposed revoluble receptacle forming a combined rinsing and drying chamber, an adjustable drain board, means carried at the top of the receptacle to permit of adjustably



positioning said board circumferentially with respect to the receptacle for directing the overflow from said chamber to the point desired.

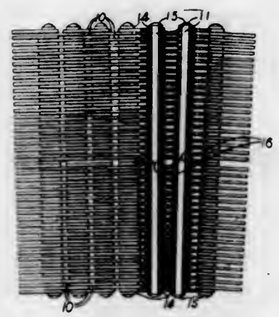
1,805,429. TRAFFIC SIGNAL. WILLIAM B. MCGILL, Dormont, Pa., assignor to Neon Signal Devices, Inc., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1929. Serial No. 399,979. 5 Claims. (Cl. 40—133.)



7. A signal housing including a rim, a transparency therein, and a stencil overlying the transparency and having its face and edge spaced from said rim.

11. In a sign, the combination with a housing, stencil cutouts in one wall of the housing forming sign characters, of a luminous tube within the housing adjacent certain of said cutouts and conforming thereto in shape, for illuminating said last mentioned cutouts by direct rays and the other cutouts by reflected rays.

1,805,430. CHAIN CONVEYER. GEORGE E. ROWE, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Feb. 6, 1928. Serial No. 252,127. 8 Claims. (Cl. 198—193.)

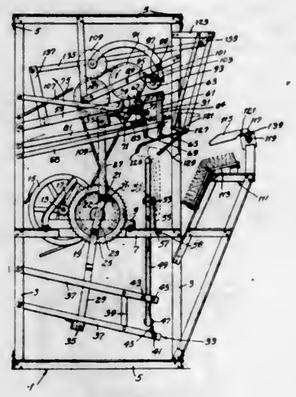


1. In a chain conveyer, a plurality of connecting links having apertures in each end thereof, connecting rods of a less diameter than said apertures for holding the links side by side, and bushings for reducing the lost motion between rods and apertures at the middle of the rod.

1,805,431. COMPOSITION FOR THE MANUFACTURE OF CONDUITS AND THE LIKE. CARROLL D. RYDER, Danbury, Conn. Filed Jan. 25, 1928. Serial No. 249,497. 2 Claims. (Cl. 106—24.)

1. A fluid carrying molded conduit, composed of a pouring composition comprising a mixture composed wholly of a sand-free aggregate of coarsely broken limestone particles having rough uneven surfaces and fine limestone particles of powdery consistency having a structural and natural affinity for said coarse particles, cement, and water acting as a mixing agent, said powdered limestone adapted to enter into solid, homogeneous interlocked relation with the rough uneven surface of the coarse limestone particles, whereby a non-porous conduit is produced in which fracture will be trans-fragmentary as respects said coarse limestone particles.

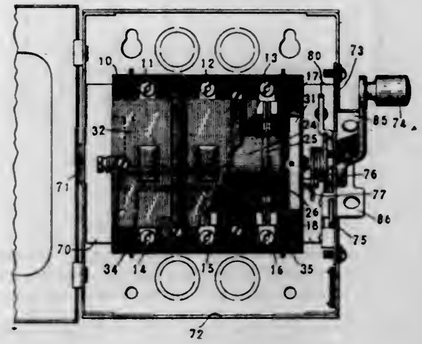
1,805,432. BAG TURNING APPARATUS. CHARLES F. SPARKS, St. Louis, Mo. Filed July 25, 1928. Serial No. 295,262. 10 Claims. (Cl. 223—20.)



1. In a bag turning apparatus, reciprocatory means carrying pivoted sticks adapted to turn bags, means for supporting and guiding said sticks, said sticks being curved so as to provide a predetermined movement thereof through the guiding means while turning the bags.

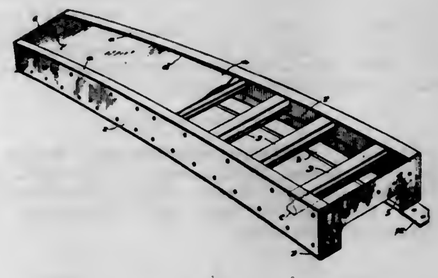
1,805,434. REVERSING SWITCH. FRANK A. YOUNG, Meriden, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Aug. 23, 1930. Serial No. 477,235. 19 Claims. (Cl. 200—15.)

1. A reversing switch including at least two pairs of stationary contacts, a switch member rotatable between said contacts and comprising a number of insulating members, two pairs of divided conducting blades each pair being secured between two of said insulating members, two double ended blades each secured between two of said insulating members, and having contact portions in the same plane as the contact ends of the divided blades of each pair and



rods connecting each of the divided blades with the oppositely disposed member of the other pair of divided blades.

1,805,435. TUNNEL LINING UNIT. EUGENE C. AMSDEN, Boston, Mass., assignor to Amsden & Barnard, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Mar. 19, 1930. Serial No. 437,035. 8 Claims. (Cl. 61—45.)

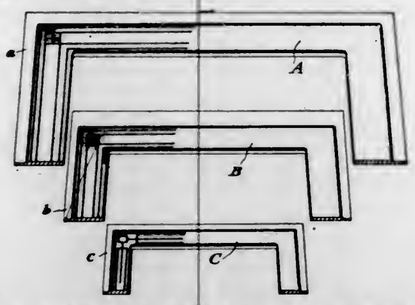


1. A tunnel lining unit comprising two side supports each of angular cross-sectional form and each having a web extending from front to back of the unit and a flange bent inwardly from said web at the inner edge thereof, said flange and the part of the web adjacent thereto being thicker than the parts of the web more remote from said flange, and a back plate connecting said supports and welded to them.

1,805,436. PICTURE FRAME AND METHOD OF MAKING SAME. EDMUND J. BARNARD, Cambridge, Mass., assignor to Boston Book Binding Company, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 24, 1930. Serial No. 430,661. 9 Claims. (Cl. 40—154.)

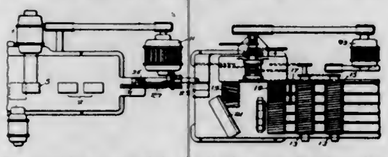
1. That improvement in processes of making picture frames which consists in impressing in a board of thermoplastic material designs for a plurality of front frame sections arranged in nested relationship, and subsequently

cutting said board to form individual frame sections therefrom, each section bearing a design and each having a complete frame outline.



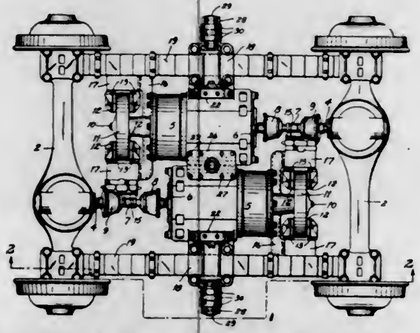
8. A picture frame having a front section of thermoplastic board embossed to give it a surface structure unlike that of the original board and having metal leaf stamped therein in lines and areas forming parts of a design, said front section having a ground work of a color different from that of the original material.

1,805,437. WOOD PLANING MACHINE. LAURENCE E. BLOOD, Boston, and JOHN B. WIARD, Brookline, Mass., assignors to S. A. Woods Machine Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 12, 1929. Serial No. 385,328. 9 Claims. (Cl. 144—242.)



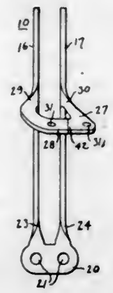
1. In combination with a planing mechanism including planing knives and a feeding means for traversing a board past the same, an overrunning feeding means for delivering boards from a supply to said first feeding means, and means individually controllable for independently driving either or both of said feeding means.

1,805,438. ELECTRIC CAR TRUCK. NELSON R. BROWNYER, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Dec. 14, 1929. Serial No. 413,993. 13 Claims. (Cl. 105—139.)



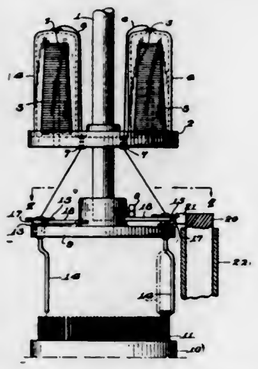
1. A car truck comprising wheeled axles, housings therefor, side springs connecting the axle housings, a transverse housing member mounted on said side springs, and motors mounted in said housing member and operatively connected respectively to said axles to actuate the same, each connection comprising two universal joints.

1,805,439. AIRCRAFT FITTING. ANDREW J. FAIRBANKS, Dayton, Ohio, assignor, by mesne assignments, to Consolidated Aircraft Corporation, Buffalo, N. Y., a Corporation of Delaware. Filed May 8, 1929. Serial No. 361,389. 11 Claims. (Cl. 244—31.)



1. An airplane fitting of the class described, comprising a pair of parallel elongated straps providing an anchorage at one end thereof, and a lug interconnecting said straps and extending out laterally therefrom and forming a second anchorage.

1,805,440. KNITTING MACHINE., CHARLES E. MINCEMOYER, Milton, Pa., assignor of one-half to Carl E. Hecht, Milton, Pa. Filed Jan. 30, 1929. Serial No. 336,131. 2 Claims. (Cl. 66—135.)

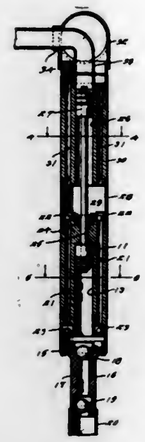


1. The combination of a knitting machine comprising a cylinder of needles and a support rotatable in synchronism therewith, with a yarn guide rotatably carried by said support upon an axis eccentric to the axis of said support and comprising a toothed head having a central bore and a tube communicating with said bore and having its free end terminating laterally of its axis of rotation with respect to said support and below the level of the upper ends of said needles when they are in raised position, a relatively stationary toothed rack adapted to engage and rotate the toothed head of said guide with respect to said support and to said needles while in a predetermined portion of its path or orbit, to cause yarn from the free end of said guide tube to encircle a predetermined set of needles, and resilient frictionally braking means engaging and limiting the rotation of said head with respect to said support to only the movement imparted thereto by said rack.

1,805,441. DEEP WELL PUMP. WILBUR N. SQUIRES, Joplin, Mo. Filed Jan. 8, 1927. Serial No. 159,896. 16 Claims. (Cl. 103—46.)

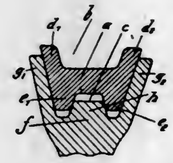
1. In deep well pumping apparatus, a pair of aligned cylinders, a coupling connecting adjacent ends of the

cylinders and maintaining the cylinders in alignment, valves controlling the introduction of fluid to the outer end of one of the cylinders and discharging said fluid to the connection between the cylinders, a discharge line communicating with the connecting coupling, the coupling



engaging end of the last named cylinder being closed, and pistons in said cylinders connected for simultaneous movement, one of said pistons being a motor piston and the other being a pumping piston, the discharge of the pump being external of the motor piston.

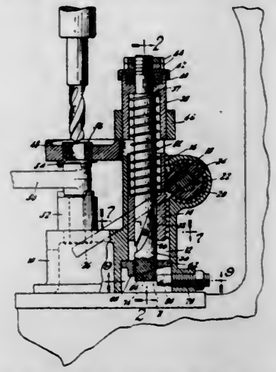
1,805,442. WEDGE SHAPED DRIVING BELT. LUDWIG WALLFISCH, Hirschberg, Germany. Filed Dec. 14, 1929, Serial No. 414,178, and in Germany Dec. 14, 1928. 1 Claim. (Cl. 74—62.)



A wedge-shaped driving belt for power transmission which is of H-shaped cross section having two upper and two lower side flaps so that owing to the curvature of the belt around the belt pulley the upper side flaps bear against the pulley with their outer surface and the lower side flaps with their inner surface.

1,805,443. CLAMPING DEVICE. VERNON E. WALTERS, Detroit, and IRVING GRANT, Grosse Pointe Park, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 12, 1928. Serial No. 277,285. 5 Claims. (Cl. 77—62.)

1. A clamping device comprising, in combination, a fixed member, a movable member, an axially movable sleeve carried in said fixed member, a shaft connected to said movable member and rotatably and axially movable in said sleeve, inclined surfaces on said fixed member, inclined surfaces on said shaft, means to move said sleeve, shaft and movable member toward said fixed member, and connecting means between said shaft and sleeve so constructed that axial movement of the sleeve causes rotary and axial movement of said shaft in said sleeve to cause

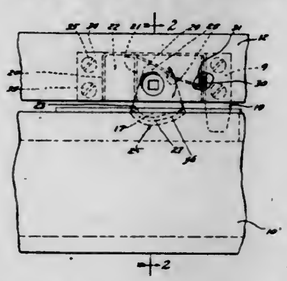


said inclined surfaces to become engaged for the purpose of producing a clamping action between said fixed and movable members.

1,805,444. DESULPHURIZING LIQUID HYDROCARBON. HENRY H. WILSON, Regina, Saskatchewan, Canada, assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Jan. 11, 1928, Serial No. 246,103, and in Canada Jan. 31, 1927. 4 Claims. (Cl. 196—32.)

1. In the treating of low boiling petroleum oils containing sulphur in one or more of the forms, elemental sulphur, hydrogen sulphide, and mercaptans, the improvement which comprises bringing the oils in liquid phase into intimate contact with potassium hydroxide in the substantial absence of water.

1,805,445. DECK DOORLOCK. JOHN F. WILSON, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 29, 1927. Serial No. 209,250. 8 Claims. (Cl. 70—14.)

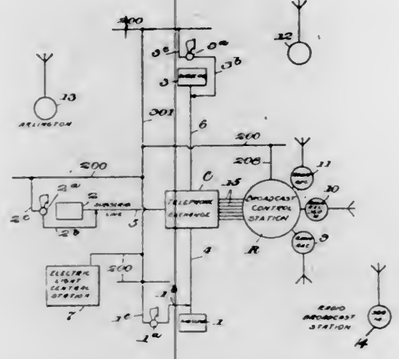


1. In a door lock, a plate attached to the stationary member, a finger on said plate, a catch attached to the door, an arcuate flange projecting from said catch, a depression in said flange, said finger seating in said depression when the door is in locked position.

1,805,446. RADIO BROADCASTING SYSTEM. EDWARD E. CLEMENT, Washington, D. C., assignor to Edward F. Colladay, Washington, D. C. Original application filed Oct. 6, 1923, Serial No. 667,024. Patent No. 1,576,809, dated Mar. 9, 1926. Divided and this application filed Mar. 8, 1926. Serial No. 93,325. 11 Claims. (Cl. 179—2.5.)

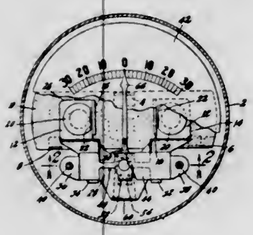
1. In a broadcasting system, the combination of a central broadcasting station serving a local or regional area, sub-

scribers' stations in said area, a common power wire net work connecting said central station and said subscribers' stations, a primary transmitting station, means for transmitting broadcast matter from said primary station to said central station and means at said central station arranged to relay said broadcast matter over said net work



to its local subscribers as modulated carrier current, together with means at each subscriber's station to receive and demodulate said carrier current, and other means actuated in the operation of said receiving means for signaling between the subscriber's station and the central station.

1,805,447. AMMETER. JESSE E. ESHBAUGH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Apr. 19, 1929. Serial No. 356,478. 14 Claims. (Cl. 171—95.)



1. In an electric measuring instrument, a conductor, a magnet secured to the conductor, and a soft iron member positioned between the conductor and the polar areas of the magnet to concentrate the lines of force of the conductor to reduce the effects of demagnetization on the magnet.

1,805,448. CORROSION-RESISTANT ALUMINUM ALLOY ARTICLE. FRANCIS C. FRARY, Oakmont, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 30, 1929. Serial No. 410,877. 7 Claims. (Cl. 148—32.)

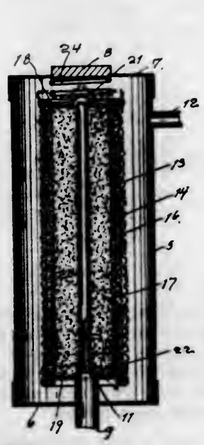
1. A corrosion-resistant article of aluminous metal comprising a main body or core of aluminum-copper alloy and a hard, wrought, protective coating of copper-free aluminum alloy cohesively united with the core, the coating alloy being resistant to corrosion after heat-treatment without artificial aging, and both alloys being susceptible of substantial improvement in physical properties by heat-treatment without artificial aging.

1,805,449. CLARINET. EDWARD J. GULICK, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed July 10, 1929. Serial No. 377,274. 7 Claims. (Cl. 84—382.)



4. In combination, a tubular metal clarinet body provided with an opening in the wall thereof, and a toue-opening socket mounted in said body wall opening, said socket being provided with a belled bore which is in communication with the instrument body interior.

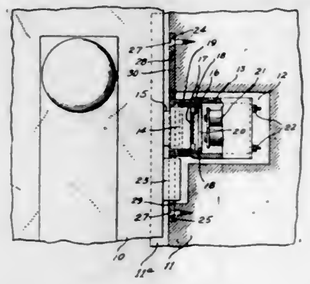
1,805,450. OIL FILTERING AND REFINING MEANS. LEE HARVEY, San Francisco, Calif., assignor to Hiram Parley Burke, Alpine, Ariz. Filed July 1, 1929. Serial No. 375,286. 1 Claim. (Cl. 210—183.)



In an oil filtering and refining device, a case, a bottom and a top for said case and detachably secured with respect thereto, an inlet pipe extending centrally through the bottom and terminating above said bottom in tapered formation, an outlet pipe extending laterally from said case, a filtering element including a cap, a dome centrally formed with said cap, a bottom having a raised conical portion disposed for fitting engagement with the tapered upper end of said inlet pipe, a pipe formed with and rising from the raised conical portion and being provided with a serrated upper end projecting to the dome, said cap and bottom of the filtering element being provided

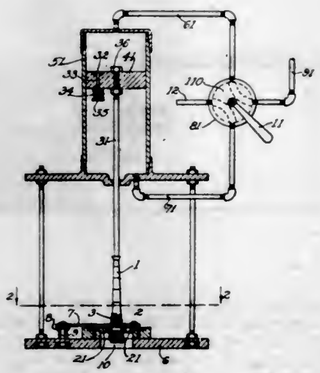
with annular substantially channel shaped recesses arranged at the outer perforations thereof, concentrically arranged cylindrical screen members surrounding the serrated pipe and having their ends secured in the recesses, a fabric element between the screen members, resilient means for urging the conical portion in engagement with the inlet pipe so that the latter is in registration with the serrated pipe, and a plastic refining medium applied to the innermost screen member and arranged therein.

1,805,451. LOCKING MECHANISM. HENRY F. KEIL, Scarsdale, N. Y., assignor to Francis Keil & Son, Inc., a Corporation of New York. Filed Oct. 22, 1925. Serial No. 64,216. 10 Claims. (Cl. 70—52.)



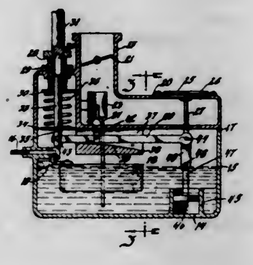
1. In a device of the class described, in combination, an elongated metal plate member adapted to be positioned flatwise against a door frame and having therein a plurality of openings, any one of which is adapted to receive a bolt from a lock on the door, opposed wall portions of said openings being tapered toward the outer surface of said plate member, and removable metal pieces shaped to fit into and close said openings to render any of said openings inoperative independently of the others, said metal pieces being adapted in position to rest substantially flush with the outer surface of said plate and being removable only from the rear thereof.

1,805,452. BOBBIN-STRIPPING MACHINE. WILLIS W. LINDER, Salisbury, N. C., assignor to The Terrell Machine Company, Charlotte, N. C., a Corporation of North Carolina. Filed Aug. 15, 1929. Serial No. 386,117. 5 Claims. (Cl. 28—20.)



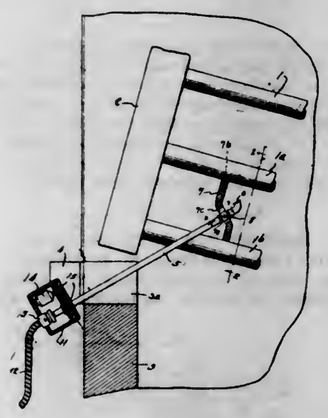
1. In a bobbin-stripper machine, the combination with a bobbin-stripper device, and a bobbin-engaging device, of fluid-pressure actuated means whereby relative movement between the bobbin and the stripper-device is yieldingly produced and the stripping thereby effectuated.

1,805,453. AIR VALVE CARBURETOR. LESTER E. PERRINE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 16, 1928. Serial No. 270,341. 9 Claims. (Cl. 261—64.)



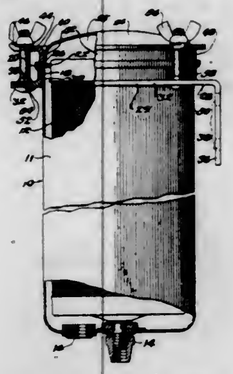
1. In a carburetor, a passage through which air is adapted to flow to the cylinders of an internal combustion engine, a valve for controlling the flow of air through the passage, a spring for resisting the opening of the valve, and means for transmitting the movement of the valve to the spring including a lever having a varying fulcrum.

1,805,454. BOILER CLEANER. NORMAN L. SNOW, FRANK BOWERS, and CURTIS L. HOWSE, Detroit, Mich., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 15, 1924. Serial No. 737,816. 36 Claims. (Cl. 122—392.)



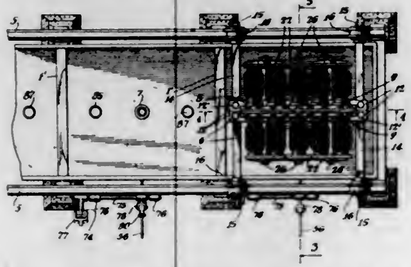
4. In a boiler cleaner for a water tube boiler, the combination with an impact member, of means for actuating said impact member into repeated contact with the outside of a water tube during operation of the boiler, and means for discharging a cooling fluid upon said tube.

1,805,455. DETACHABLE FILTER COVER. LEROY P. STERLING, Williamsport, Pa., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Aug. 10, 1928. Serial No. 298,843. 8 Claims. (Cl. 220—61.)
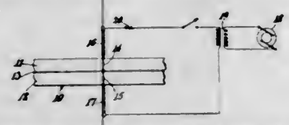


1. In a container, a cover, a unitary supporting ring and bracket for said container, and means connected with said ring-bracket for permanently and rigidly securing said cover to said container.

1,805,456. MECHANISM FOR USE IN PROCESS OF TREATING YARN. WALTER C. VOLK, Rome, N. Y., assignor to Skenandoa Rayon Corporation, Utica, N. Y., a Corporation of New York. Filed Apr. 15, 1929. Serial No. 355,283. 21 Claims. (Cl. 8—19.)



1. A yarn processing apparatus comprising a movable carriage, means supporting said carriage for movement thereon, a chambered head mounted on the carriage, a perforated bobbin adapted to carry yarn secured to said head, means for supplying fluid through the head to the interior of the bobbin, and fluid-supplying means adapted in a predetermined position of said carriage to be connected to said head for supplying fluid thereto.

1,805,457. METHOD FOR CUTTING GLASS. PAGE S. HASELTON, Upper Montclair, N. J., assignor to Bessie L. Gregg, Forest Hill Gardens, N. Y. Filed Apr. 17, 1929. Serial No. 355,738. 6 Claims. (Cl. 49—50.)



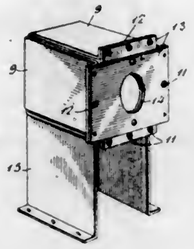
4. In the manufacture of laminated glass having layers of glass separated by a layer of cellulosic or other shatter preventing binding material, the process of removing the binding material along a desired line which comprises subjecting the material at said line to a substantially localized high temperature sufficient to cause burning thereof.

1,805,458. OIL COMPOSITION AND PROCESS OF INHIBITING OXIDATION THEREOF. THOMAS HUNTON ROGERS, Wilmington, Del., assignor to E. I. du Pont de Nemours & Co., Wilmington, Del., a Corporation of Delaware. Filed Aug. 21, 1922. Serial No. 583,364. Renewed Mar. 5, 1927. 20 Claims. (Cl. 134—79.)

1. The process of retarding the development of rancidity in unsaturated fatty oils which comprises mixing with such an oil an hydroxy-polybasic aliphatic carboxylate.

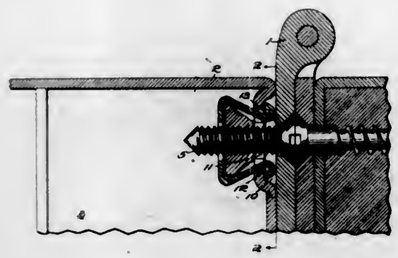
12. A coating composition comprising nitrocellulose, a vegetable oil, and an hydroxy-polybasic aliphatic acid compound capable of retarding development of rancidity in said oil.

1,805,459. MAGNETIC DEVICE. RALPH R. BATCHER, Hollis, N. Y. Filed Apr. 27, 1929. Serial No. 358,732. 7 Claims. (Cl. 174—115.5.)



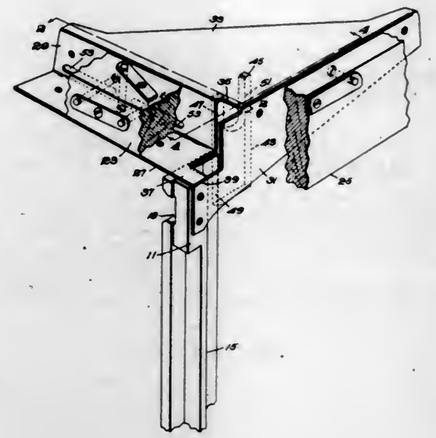
1. In an electro-magnet comprising a core and a coil wound thereon, means for extending the core to bring the pole-pieces thereof into relation to form an annular gap between them, the said means consisting of a plurality of shaped strip members secured to the core and arranged in nested relation to form an enclosing casing for the magnet winding.

1,805,460. NUT AND SCREW FASTENING. FRED S. CARR, Newton, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed July 22, 1925. Serial No. 45,273. 3 Claims. (Cl. 85—32.)



1. A fastening unit including a nut-holder presenting opposed converging resilient fingers, a nut assembled with said holder, said nut presenting tapered sides cooperating with said converging fingers and opposed stops presented by said holder for preventing disassembly of said nut from said holder by movement of said nut transversely relative to said resilient fingers, said nut being free to shift laterally in all directions relative to said holder.

1,805,461. ROOF AND PILLAR CONSTRUCTION FOR AUTOMOBILE BODIES. FREDERICK J. KUBLER, New York, N. Y., assignor to A. S. Campbell Company, East Boston, Mass., a Corporation of Massachusetts. Filed Aug. 22, 1928. Serial No. 301,323. 9 Claims. (Cl. 296—28.)



1. In an automobile body construction in combination with a body pillar, an angle receiving the roof of side rail and having its horizontal flange resting on and secured to the top of the pillar, a vertical web to receive the roof front rail lapping on and secured to the front of the pillar, and a substantially horizontal web connecting said front rail web and the upright flange of said angle.

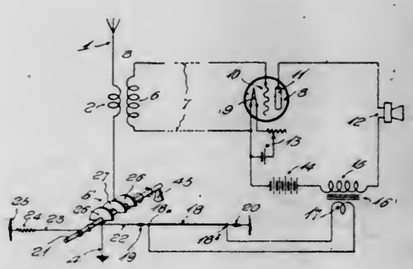
1,805,462. FASTENER ASSEMBLY. WALTER I. JONES, Arlington, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 4, 1929. Serial No. 397,401. 3 Claims. (Cl. 24—208.)

1. A fastener installation comprising, in combination, a carrying medium, a fastener part located at one side of the carrying medium and having collapsible means providing an annular groove located adjacent to the carrying medium and an attaching part located at the opposite side of the carrying medium and having means passing through the carrying medium and clenched within the annular



groove presented by the snap fastener part and said means being further clenched when said collapsible means is flattened toward the said carrying medium.

1,805,463. MEANS FOR CONTROLLING THE AMPLITUDE OF ALTERNATING CURRENT. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 7, 1929. Serial No. 405,438. 10 Claims. (Cl. 250—20.)



1. In a system for automatically controlling the amplitude of alternating current, an output circuit, an input circuit, temperature actuated responsive means in said output circuit controlled by amplitude changes in current delivered to said output circuit from said input circuit, and means in said input circuit for controlling the amplitude of current delivered to said input circuit, said last mentioned means being controllable in accordance with the operation of said first mentioned means.

Patents Nos. 1,805,464 to 1,806,578

THE OFFICIAL GAZETTE

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Reissues	11—No.	18,069 to No.	18,079, inclusive.
Designs	50—No.	84,175 to No.	84,224, inclusive.
Patents	1,115—No.	1,805,464 to No.	1,806,578, inclusive.
Total	1,477		

Changes in Classification

Order No. 8,190, April 30, 1931, directs:

In *class 8, Bleaching and Dyeing* (Division 63), abolish the following subclass:

8 **Renovating dress.**

The patents formerly contained in this subclass have been placed for the most part in class 68, Laundry, subclass 38, Renovating dress, established in this order.

In *class 68, Laundry* (Division 27), establish the following subclass:

38 **Renovating dress.**

The patents contained in this subclass have been taken for the most part from class 8, Bleaching and Dyeing, subclass 8, Renovating dress, abolished in this order.

For patents to dry cleaning compositions, see class 87, Oils, Fats, and Glue, subclass 5, Detergents. For patents to removing shine by raising the nap, see class 26, Textiles, Cloth Finishing, subclass 29, Napping. For patents to renewing the dye luster and redyeing, see class 8, Bleaching and Dyeing, subclass 5, Dyeing processes.

In *class 72, Masonry and Concrete Structures* (Division 33), abolish the following subclass, with its definition:

15.5 **Checker bricks.**

The patents formerly contained in this subclass have been placed for the most part in class 263, Heating, subclass 51, Checker bricks, established in this order.

In *class 263, Heating* (Division 3), establish the following subclass and definition:

51 **Checker bricks.**

51. CHECKER BRICKS. Patents directed to the masonry structure itself and elements thereof in which the bricks are so arranged as to furnish a large radiating or exposed structure.

Note.—See this class, subclasses 19, 20, and 46.

Note.—See class 72, MASONRY AND CONCRETE STRUCTURES, for elements of ordinary masonry structures.

Note.—See classes 158, LIQUID AND GASEOUS FUEL BURNERS, subclasses 4, 5, and 7.5; 202, DISTILLATION, subclasses 111, 122, 123, 130, 140, 143, 144, 146, 148, and 267; and 266, METALLURGICAL APPARATUS, subclass 14.

The patents contained in this subclass have been taken for the most part from class 72, Masonry and Concrete Structures, subclass 15.5, Checker bricks, abolished in this order.

In *class 235, Registers* (Division 23), establish the following subclasses and definitions:

145 **Keyboards**
146 Auxiliary.

145. KEYBOARDS. Those portions of registers, usually manually actuated, including keys, shift keys, space bars, etc., which control and initiate the action of the machine to determine what numbers shall be introduced and how; also to control subsidiary operations of the machine.

146. KEYBOARDS, AUXILIARY. Keyboards as defined above which are supported above or otherwise adjacent to the main keyboard of the machine, often for performing some function additional to that of the main keyboard.

The patents contained in subclass 145, above, have been taken for the most part from class 235, Registers, subclasses 26, Cash registers, Key arresters, and 130, Locking Mechanism, and those contained in subclass 146 have been taken from class 235, Registers, subclass 60, Calculators, Recording, Key set.

Condition of Applications Under Examination at Close of Business May 2, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 96,264; Trade-Mark Division, 1,307. Oldest new case, Aug. 7, 1930; oldest amended, Aug. 7, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Nov. 15	Dec. 5	770
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Oct. 16	Oct. 17	1,429
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment.	Nov. 10	†Jan. 28	977
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating.	Oct. 17	Oct. 20	899
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters.	Oct. 20	Oct. 23	892
318	6. LEWERS, A. M., Carbon Chemistry.	Sept. 29	Sept. 20	2,180
106	7. JARBOE, C. G., Optics; Photography.	Sept. 16	Sept. 16	2,102
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets.	Sept. 15	Sept. 30	1,574
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors.	Nov. 4	Nov. 6	1,488
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops.	Nov. 5	Nov. 26	1,066
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Nov. 15	Dec. 4	853
380	12. HENRY, C. C., Machine Elements.	Sept. 19	Oct. 21	1,376
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Nov. 12	Nov. 12	1,131
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Oct. 7	Oct. 13	1,298
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics.	Sept. 22	Sept. 22	2,592
242*	16. SPENCER, C. J., Telegraphy; Telephony.	†Jan. 7	†Jan. 12	902
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Sept. 4	Sept. 9	1,557
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices.	Oct. 20	Oct. 22	1,215
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Sept. 11	Sept. 8	2,160
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Oct. 22	Oct. 22	1,035
212	21. THOMPSON, T. J., Textiles; Cloth Finishing.	Oct. 25	Dec. 23	959
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Nov. 12	Nov. 28	948
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers.	Sept. 9	Sept. 9	1,086
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines.	Sept. 24	Oct. 3	970
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Cumminutors.	Oct. 10	Oct. 13	1,504
228*	26. HODGES, J. S., Electricity, Generation; Motive Power.	Oct. 30	Nov. 6	1,000
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Oct. 13	Oct. 9	1,141
225	28. BENSON, A. R., Internal-Combustion Engines.	Oct. 2	Oct. 2	1,850
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools.	Nov. 13	Nov. 1	592
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Nov. 14	†Jan. 31	938
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils.	Aug. 7	Aug. 7	2,577
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation.	Dec. 3	Dec. 5	1,383
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Oct. 15	Oct. 10	2,654
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Jan. 2	†Jan. 3	801
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet.	†Feb. 12	†Feb. 20	991
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Sept. 9	Sept. 18	2,304
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers.	Oct. 6	Oct. 4	1,674
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Dec. 11	Dec. 10	615
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution.	Oct. 12	Oct. 12	1,656
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles.	Sept. 15	Oct. 17	3,035
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Nov. 3	Nov. 4	869
223*	42. CUTTING, H. O., Electric Signaling.	Oct. 2	Oct. 2	1,465
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Nov. 12	Nov. 12	1,658
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration.	Sept. 2	Sept. 6	2,251
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices.	Sept. 10	Sept. 10	2,311
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Nov. 3	Nov. 3	1,209
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors.	Oct. 16	Oct. 21	2,191
212*	48. ROEPKE, O. B., Electricity, General Applications.	Oct. 8	Oct. 9	1,212
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Dec. 8	Dec. 8	1,192
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating.	Sept. 10	Sept. 10	2,526
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission.	Aug. 25	Aug. 25	2,292
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Nov. 10	Nov. 10	1,599
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Jan. 7	†Jan. 12	961
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes.	Sept. 2	Sept. 2	2,637
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery. {Designs.	†Mar. 23	†Mar. 23	239
		†Apr. 13	†Apr. 18	277
		Sept. 18	Sept. 19	1,937
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation.	Oct. 15	Oct. 2	811
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Sept. 8	Sept. 15	1,494
270*	58. DOWELL, E. F., Abrading; Typewriting.	Nov. 10	Nov. 10	1,711
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Sept. 2	Sept. 3	2,054
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Sept. 5	Sept. 3	2,158
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Sept. 2	Sept. 4	2,541
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers.	Aug. 21	Aug. 21	2,465
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	†Apr. 7	†Apr. 16	1,087
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND. {Trade-Marks. {Labels and Prints.	†Apr. 4	†Apr. 21	220

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

Supreme Court of the United States

SMITH *v.* SPRINGDALE AMUSEMENT PARK, LIMITED, WILLIAMS AND BROWN

No. 315. Decided April 13, 1931

1. PATENTS — INFRINGEMENT — DOG-RACING AMUSEMENT. Patent No. 1,379,224 for dog-racing amusement, Claims 1 and 2 construed and *Held* not infringed.
2. SAME — VALIDITY — STARTING CAGE FOR RACING DOGS. Patent No. 1,507,439, for starting cage for racing dogs, *Held* invalid for lack of invention over the prior art.

ON WRIT of certiorari to the United States Circuit Court of Appeals for the Sixth Circuit.

Decree affirmed.

Mr. Meyer I. Goldberg (*Mr. John E. Sater* and *Mr. E. Howard McCaleb* on the brief) for Smith.

Mr. Paul Bakewell for Springdale Amusement Park, Limited, et al.

Mr. Chief Justice HUGHES delivered the opinion of the Court.

This is a suit for the infringement of Letters Patent No. 1,379,224, No. 1,507,440, and 1,507,439, relating to devices for dog races. Judgment in the district court dismissing the complaint was affirmed by the circuit court of appeals. 39 F.(2d) 92; 40 F.(2d) 173. This Court granted a writ of certiorari because of conflict with a decision of the Circuit Court of Appeals for the Fifth Circuit. *American Electric Rabbit Association* v. *New Orleans Kennel Club*, 26 F.(2d) 1016.

Patent No. 1,379,224 was before this Court in *Smith* v. *Magic City Kennel Club*, decided February 25, 1931. 282 U. S. —, 404 O. G. 1043. Referring to the prior art, the Court found that the patentee's improvement was in a limited field. There was no invention in a combination consisting of a covered rail track, conveyer car and an arm projecting over the course and connected with a mechanical lure carried before racing dogs. The patent could be sustained only by virtue of the distinctive feature of the arm employed. This was described in claim 1 as "an arm extending through the longitudinal opening of the casing in a projecting position over the track and adapted to carry a lure, and a wheel rotatably mounted on and supporting the arm at the projecting end thereof", and, in claim 2, as "a horizontally extending arm hinged to said car extending midway of said course, a wheel rotatably mounted near the end of said arm, and resting upon the ground, a platform supported by said arm and a lure or quarry mounted upon said platform for attracting the dogs". The Court reached the conclusion that a rigid, horizontal arm, without hinge or wheel, was not the subject of either claim. In this view, the device of the defendant does not infringe.

Patent No. 1,507,440, relating to "housing for conveyer cars and tracks," we have held to be invalid for want of invention. *Smith* v. *Magic City Kennel Club*, *supra*.

Patent No. 1,507,439 is for an improvement in starting cages for racing dogs. The single claim is as follows:

> In a starting cage for racing dogs, a frame comprising a box-like structure divided into a plurality of compartments and comprising walls formed of wire mesh partially covered with fabric, individual rear doors for each of the compartments and a single front door hinged at its upper end to the top walls of the frame, divergent inclined members secured to the top of the said frame and extending upwardly and outwardly beyond the face of the front door and having their outer ends in the plane of the side walls of the box-like structure, springs secured to the outer ends of said inclined members and to the door and lying in the plane of the hinges, and a latch at the bottom of the cage for coaction with the lower edge of the front door to hold the front door normally closed against the tension of said springs, said springs adapted to raise the front door upon release of the latch.

In the light of the proceedings in the Patent Office upon the rejection of earlier claims, the claim can have but a narrow application. We agree with the circuit court of appeals that the particular sort of spring support and the wire mesh partitions partially covered with fabric, as well as the other elements, are but forms of construction within the range of ordinary mechanical skill. There was an utter absence of invention justifying the issue of this patent.

Decree affirmed.

U. S. Court of Customs and Patent Appeals

IN RE FOX

No. 2,579. Decided February 3, 1931

PATENTABILITY — ANNULAR PACKING.

Claim 1 for an annular packing *Held* patentable over the prior art, claims 2 and 7 *Held* unpatentable.

APPEAL from the Patent Office. Modified.

Mr. Louis E. Giles and *Messrs. Fraser, Myers & Manley* for Fox.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

This is an ex parte application of appellant, in which he seeks a patent on an improvement in packing, adapted for use in ammonia compressors and like machines. Several claims were filed, some of which were allowed. Four claims, numbered 1, 2, 7 and 8, were rejected by the Examiner. Claim 8, afterwards numbered as claim 12, was thereafter allowed by the Board of Appeals, and the Examiner's decision in rejecting claims 1, 2 and 7 was affirmed. These claims are as follows:

> 1. An annular packing comprising a series of rings mounted side by side in coaxial relation, said series including hollow, perforated, lubricant containing, soft metal rings of convex polygonal cross section having outer

and inner cylindrical walls and outwardly bulging annular uniting walls, and alternating soft metal rings having surfaces complemental to the adjacent surfaces of said hollow rings and filling the intervening annular spaces.

2. An annular packing comprising a series of rings mounted side by side in coaxial relation, said series including hollow, perforated, soft metal rings of hexagonal cross section having inner and outer cylindrical surfaces connected by opposed conical surfaces, said hollow rings being filled with lubricant, and intervening soft metal rings, having complemental conical surfaces, filling the annular spaces between the rings of hexagonal cross section.

7. An annular packing as specified in claim 1 in which the ring elements are made in separable sections so assembled that the joints between the sections of each ring break joints with those of adjacent rings.

Appellant's device, upon which he seeks a patent, consists of an annular packing for piston rods and the like, and is made up of a series of hollow rings containing lubricating material, preferably a composition of heavy grease and graphite, and which rings have openings or perforations therein for the escape of the lubricant. The preferred cross section of these lubricating rings is hexagonal. They are separated by X-shaped metallic expansion rings, the surfaces of which make close contact with the adjacent walls of the lubricating rings. In that part of each of these X-shaped expansion rings which forms a V, and is adjacent to the moving part, a Babbitt metal triangular ring is inserted. Abutment rings are provided to fill the cavities at the ends of the packing. That portion of the X-shaped cavity forming a V, and lying on the outside of the packing, is filled with a soft rubber ring. Thus, when the packing is in place, all parts of the space between the moving part and the walls of the stuffing box are completely filled. Lead is preferably used as a material for the lubricating rings and abutment rings.

The X-shaped rings are preferably of Babbitt metal. The hollow rings are inserted in such a way as to break joints with each other, and are, when assembled, forced into contact with the surface of the moving part and the stuffing box by means of a follower of the ordinary type. Whenever it is desired to tighten the packing on account of wear, this follower is moved forward, and thus, by the flattening of the annular rings, all space in the stuffing box is closed and the packing brought into close contact with the moving part.

The Board of Appeals rejected claim 1, on reference to Huhn, 1,079,857, November 25, 1913. Claim 2 was rejected on Pitschel (Ger.) 278,042, September 18, 1914, or Huhn, in view of the patent to Gerhard (Fr.) 477,280, October 8, 1915. Claim 7 was rejected on Judd, 1,038,759, September 17, 1912, as well as on Huhn.

The patent to Huhn is for a metal ring packing, and shows a series of annular hollow rings of triangular shape, made of white metal, filled with lubricant, and having holes therein for the exudation of the lubricant. These rings are circular and have their bases contacting with the moving part. Between these triangular rings are disposed other triangular rings having their bases contacting with the outer walls of the stuffing box, and which are made of cast iron or copper bronze. These two sets of rings are forced into close contact by followers, and when it is desired to take up any looseness caused by wear in the packing or moving part, the followers are tightened by screw threads. When this is done, the apexes of both sets of these triangular rings lose contact with the surface of the stuffing box or moving part, as the case may be, leaving spaces filled with air, or lubricant, if any be present.

We do not believe the Huhn reference is an anticipation of appellant's first claim for at least three reasons: first, the Huhn hollow rings do not have outwardly bulging, annular uniting walls; second, his packing does not have alternating soft metal rings; third, such rings do not fill the intervening annular spaces. It is admitted by the Solicitor of the Patent Office, as well as by the tribunals below, that there are these three points of difference, but these, it is stated, are not patentable distinctions. We do not find ourselves in agreement with this conclusion. It is quite apparent that the applicant's device would operate in a substantially different way than that of Huhn, and that his invention, as embodied in his first claim, is novel and not anticipated by any of the references cited. It will be observed, in connection with this claim, that the claim does not rest upon a hexagonal cross section. Not only the claim, but the specifications as well, are amply broad enough to cover any kind of annular ring with bulging sides. We are of opinion, therefore, that this claim should be allowed.

Claim 2 is based upon metal rings of hexagonal cross sections and intervening metal rings having complemental conical surfaces. We agree with the Board of Appeals that this is anticipated by the patents to Pitschel or Huhn in view of Gerhard. Gerhard shows a packing having hexagonal lubricant filled rings and the conical surfaced intervening rings are shown by both Huhn and Pitschel.

Claim 7 rests upon annular rings being so placed that the joints are broken with each other. This is old in the art and is shown by several of the references, particularly by Judd.

We are therefore of opinion that the rejection of claims 2 and 7 was not erroneous. The decision of the Board of Appeals is affirmed as to claims 2 and 7, and reversed as to claim 1, and patent will issue upon said claim 1.

Modified.

U. S. Court of Customs and Patent Appeals

IN RE BURROWS

No. 2,602. Decided June 4, 1930

[40 F.(2d) 1011]

1. PATENTABILITY — REFRIGERATING DISPLAY COUNTER. Certain claims for a refrigerating display counter *Held* unpatentable since they "are too broad and cover more than appellant's disclosure."

2. SAME—SAME—NONANALOGOUS ARTS. Flooring for indoor skating rinks *Held* to be a nonanalogous art to refrigerating display counters.

3. SAME—SAME—SAME. Certain claims for a refrigerating display counter *Held* patentable since the substitution of the method of refrigerating a skating rink floor for that of a refrigerating counter for food constituted invention.

APPEAL from the Patent Office. Modified.

Mr. A. Miller Belfield, Mr. Joseph R. Milans, and *Mr. Calvin T. Milans* for Burrows.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.:*

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, rejecting claims 11 to 25 inclusive of applicant's application for a patent on a display counter, and also is an appeal from the decision of the Board of Appeals refusing to admit and allow claim 26, which was submitted before the Board of Appeals for the first time. In this court appellant abandoned his contentions as to claim 26.

The rejected claims, 11 to 25, read as follows:

11. An apparatus of the class specified having a refrigerating display support and means for maintaining said support in refrigerating condition.

12. An apparatus of the class specified having a frozen display support and means for maintaining said support in frozen condition.

13. An apparatus of the class specified having a refrigerating supporting element for use in connection with the display of perishable articles and means for maintaining said element in a refrigerating condition.

14. An apparatus of the class specified having an icelike refrigerating element for use in displaying perishable articles said element being composed in part of solid material and in part of frozen liquid and means for maintaining said element in refrigerating condition.

15. An apparatus of the class specified having a refrigerating element for use in displaying perishable articles, said element consisting of granular material and frozen liquid and means embedded in said element adapted to maintain same in frozen condition.

16. An apparatus of the class specified having a refrigerating element for use in displaying perishable articles, said element comprising an icy structure containing refrigerating pipes adapted to freeze said element and maintain same in frozen condition.

17. An apparatus of the class specified comprising a refrigerating element adapted for use in the display of perishable articles, said element being composed of sand and ice and refrigerating pipes embedded therein.

18. An apparatus of the class specified having an icelike element adapted for use in the display of perishable articles and an upstanding rim projecting above the surface of said element.

19. An apparatus of the class specified having an icelike element adapted for use in connection with the display of perishable articles, said element consisting of sand and ice and embedded refrigerating pipes and an upstanding rim surrounding said element and projecting above the surface of the same.

20. The method of displaying perishable articles which consists in forming an icelike refrigerating element, placing articles to be displayed above said element and maintaining said element in an icelike condition.

21. The herein described method which consists in forming an icelike element of solid material and frozen liquid placing articles to be displayed above said element, and maintaining said element in an icelike condition.

22. The herein described method which consists in forming a refrigerating element by combining sand and water, freezing the latter, placing articles to be displayed above said element and maintaining said element in said frozen condition.

23. An apparatus of the class specified having an icelike refrigerating support for use in displaying perishable articles, said support being composed in part of solid material and in part of frozen liquid, and means for maintaining said support in refrigerating condition.

24. An apparatus of the class specified having a refrigerating support for supporting perishable articles for display purposes, said support consisting of granular material and frozen liquid, and means embedded in said support and adapted to maintain the same in frozen condition.

25. An apparatus of the class specified having a refrigerating support for supporting perishable articles for display purposes, said support being composed of sand and ice and conditions refrigerating pipes.

The application, which is for the reissue of appellant's Patent No. 1,514,128, discloses a counter in the top of which is set a pan having therein refrigerating coils covered with sand to which water is added. Ice is formed to provide a top surface of smooth ice which, if the top be kept level and clear, will simulate the glass top of a table, counter or show case. The edges of the tray or pan form a guard to keep the articles from sliding off the ice surface.

The claims were rejected on the following references: Carpenter, 938,554, November 2, 1909. Hildebrandt, German, 183,112, April 6, 1907.

Carpenter disclosed a display counter in a refrigerating case having a wooden floor for supporting the food to be displayed and refrigerating coils beneath the floor. The cooling of the wood is brought about by the circulation of air over the coils beneath the floor. It will be noted that the wooden floor could not be maintained in refrigerating condition since it is a nonconductor.

The German patent to Hildebrandt discloses a flooring for indoor skating rinks. The manner of forming the ice and maintaining the same is almost identical with the method of applicant.

[1] Claims 11, 12, 13, 18, 19, 20, 21 and 25 are too broad and cover more than appellant's disclosure.

Claims 14, 15, 16, 17, 22, 23 and 24, we think, describe the invention and their allowance or rejection involves the sole question as to whether or not it involved invention to substitute the method disclosed in the German patent for freezing and indoor skating floor, and maintaining the same in frozen condition, for the construction of a refrigerating device.

Appellant points out that the Carpenter device discloses nothing more than a shelf for displaying goods in a display case without disclosing that the same is constructed so as to remain in refrigerating condition, and further, that the German patent is taken from a nonanalogous art.

We agree with applicant that the Carpenter patent does not anticipate the refrigerating character of appellant's structure.

The rule on the question of rejecting claims on disclosures in nonanalogous art is clearly stated in *Potts* v. *Creager*, 155 U. S. 597,607; 70 O. G. 494, in which case the court, through Mr. Justice Brown, said:

> Indeed, it often requires as acute a perception of the relation between cause and effect, and as much of the peculiar intuitive genius which is a characteristic of great inventors, to grasp the idea that a device used in one art may be made available in another, as would be necessary to create the device *de novo*. And this is not the less true if, after the thing has been done, it appears to the ordinary mind so simple as to excite wonder that it was not thought of before. The apparent simplicity of a new device often leads an inexperienced person to think that it would have occurred to any one familiar with the subject; but the decisive answer is that with dozens and perhaps hundreds of others laboring in the same field, it had never occurred to any one before. The practised eye of an ordinary mechanic may be safely trusted to see what ought to be apparent to every one. As was said by Mr. Justice Bradley, in *Loom Company* v. *Higgins*, 105 U. S. 580, 591: "Now that it has succeeded, it may seem very plain to any one that he could have done it as well. This is often the case with inventions of the greatest merit. It may be laid down as a general rule, though perhaps not an invariable one, that if a new combination and arrangement of known elements produce a new and beneficial result never attained before, it is evidence of invention."
>
> As a result of the authorities upon this subject, it may be said that, if the new use be so nearly analogous to the former one, that the applicability of the device to its new use would occur to a person of ordinary mechanical skill, it is only a case of double use, but if the relations between them be remote, and especially if the use of the old device produce a new result, it *may* at least involve an exercise of the inventive faculty. Much, however, must still depend upon the nature of the changes required to adapt the device to its new use. (Italics quoted.)

It is argued by the Solicitor for the Patent Office that appellant was entitled to no more than he ob-

tained by the claims which were allowed in the Patent Office, which claims covered features of appellant's structure not disclosed in the references, and that the substitution of the method of refrigerating the skating rink floor for the method of providing a display shelf did not constitute invention but was merely a substitution which mechanical skill, alone, would suggest.

[2, 3] The record discloses that the idea occurred to no one but the applicant, and we can not agree that the substitution of a process connected with a floor used in a skating rink for that of a refrigerating counter for food did not constitute inventive genius. Certainly, there is considerable doubt on this question. This doubt should have been resolved in favor of the applicant.

The decision of the Board of Appeals is affirmed as to claims 11, 12, 13, 18, 19, 20, 21, 25 and 26, and reversed as to claims 14, 15, 16, 17, 22, 23 and 24.

Modified.

UPON RECONSIDERATION

Decided February 11, 1931

This case was decided on June 4, 1930, and this court reversed the decision of the Board as to claims 14, 15, 16, 17, 22, 23 and 24, and affirmed the decision of the Board as to claims 11, 12, 13, 18, 19, 20, 21, 25 and 26.

At the time of argument before this court, there being more claims in number than were required to cover appellant's invention, counsel for appellant was asked if he would withdraw some of the claims, whereupon appellant's counsel did withdraw a number of the claims, but which number did not include claims 14, 15 and 17.

After our decision was handed down, the Solicitor for the Patent Office requested that the case be reconsidered and the opinion modified for the reason that at page 2 in the brief of appellant, claims 14, 15 and 17 had been withdrawn and were not discussed by appellant or by the Solicitor for the Patent Office. Rehearing was granted and the case was reargued on January 8, 1931. The court has reconsidered the case and concludes that since claims 14, 15 and 17, on account of said withdrawal in the brief of appellant, were not considered as being before us for argument by the parties, they should not have been passed upon by this court.

Claims 14, 15 and 17 are now regarded as not being before us on appeal. Claim 16 was never withdrawn. Claims 22, 23 and 24 having been withdrawn by reason of the suggestion of the court at the time of argument, the appellant upon rehearing requested that he be permitted to withdraw his withdrawal of the same. In view of these facts and the fact that claims 22, 23 and 24 were fully discussed by both sides, we shall regard them as having been before us for decision.

Our decision is, therefore, modified and the decision of the Board of Appeals is affirmed as to claims 11, 12, 13, 18, 19, 20, 21, 25 and 26, and reversed as to claims 16, 22, 23 and 24, and the appeal is dismissed as to claims 14, 15 and 17.

Modified.

U. S. Court of Customs and Patent Appeals

IN RE DE LANY

No. 2,569. Decided February 3, 1931

PATENTABILITY—RECIPROCATING ENGINES.

A claim for a reciprocating engine *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Nelson J. Jewett and *Messrs. Browne & Phelps* for De Lany.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office rejecting claim 9 of appellant's application on the ground that said claim is not readable on appellant's disclosure and that it is unpatentable over the prior art. The appealed claim reads as follows:

In a reciprocating engine, two pistons adapted to reciprocate in opposite directions, a space between the said pistons, an open ended cylinder in which said pistons work, two crank shafts to which the pistons are respectively connected, means to prevent relative movement between the crank shafts, the arrangement being such that one of the cranks is approximately at right angles to its connecting rod when the two pistons are nearest to each other.

The references relied upon are: Reardon, 604,415, May 24, 1898; Pratt, 689,745, December 24, 1901; Manz, 954,982, April 12, 1910; Crew, 1,126,713, February 2, 1915; Jackson, 1,191,311, July 18, 1916.

The application of appellant discloses a reciprocating engine having two pistons adapted to reciprocate inside an open-ended cylinder, the pistons being connected to cranks or shafts by connecting rods. To prevent relative movement between the shafts or cranks, synchronized connecting rods are described. The essence of appellant's alleged invention, as stated in his specification, is "the provision of an engine in which the maximum cylinder pressure will act upon the crank at its position of greatest torque."

Appellant's application was filed May 23, 1924. It appears that a patent for the same alleged invention was allowed to one James Shearer on October 11, 1927, upon an application filed December 31, 1924. This patent being allowed while appellant's application was pending, it was inadvertently issued. Appellant adopted the claim of the Shearer patent and presented it in an amendment to his application three days after the Shearer patent was granted, requesting an interference with the Shearer patent. The Primary Examiner held that said claim did not read upon appellant's disclosure, and also that it was anticipated by prior patents.

Appellant, in his brief, gives what purports to be a statement of certain proceedings had with reference to a proposed declaration of interference, but as such proceedings do not appear in the record we can not consider them, even if relevant to the issues in this case. However, from appellant's statement in his brief, we do not see that such proceedings are in any way relevant to the question before us.

Appellant took an appeal from the decision of the Primary Examiner to the Board of Appeals, which tribunal affirmed the decision of the Examiner, both upon the ground of lack of disclosure and anticipation by prior patents.

The first question presented is the finding of the tribunals of the Patent Office that appellant's claim does not read upon his disclosure as set out in his specification. This depends upon the construction to be given to the phrase "approximately at right angles" in that part of the claim reading as follows:

* * * the arrangement being such that one of the cranks is approximately at right angles to its connecting rod when the two pistons are nearest to each other.

It appears that, according to appellant's specification and drawings, at the point where the two pistons are nearest to each other, the angle between one of the cranks and its connecting rod is 116°, and it is contended by the Solicitor for the Patent Office that this is so far from a right angle that the word "approximately" can not include it. Appellant contends that the patent to Shearer, from which the claim in issue is copied, has an even greater angle at the point mentioned, and yet the Patent Office held that Shearer's specification did support the claim. The construction of the word "approximately", when considered in connection with appellant's disclosure in his specification, presents a difficult question; but, for the purposes of this case, in view of the conclusion which we have reached, we may assume, without deciding, that the claim does read upon appellant's disclosure in his specification.

The second ground of rejection by the tribunals of the Patent Office is that the invention covered by the claim was anticipated by the references cited. Upon this point, the Board of Appeals said:

As to the rejection of the claim on the prior art, the patents to Jackson, Crew and Pratt all have the same object in view as the appellant and Shearer, but instead of using a crank shaft at each end of the cylinder they use a single crank shaft and operate the further piston by side connecting rods. The object in view is well stated on page 3, lines 23–38 of Jackson's specification. An engine of this type is the equivalent of one in which a second crank shaft is used at the other end of the cylinder with connections to cause the cranks to rotate in unison, such arrangement being shown in Manz or Reardon. The brief questions whether it would be possible without considerable study to arrange the cranks in such an engine, when the cranks are of equal length, so that the desired result can be effected. There is no difficulty at all in doing so as it is only necessary to draw the right hand crank and its connecting rod at a right angle, with the pistons at their nearest possible point and locate the left hand crank 90° behind the other in its rotation, as disclosed in Jackson. It makes no difference whether the cranks are of the same or equal length, as it means only that one piston has a longer traverse. Jackson prefers to make them unequal for the reason given on page 3, lines 86–91.

We find nothing patentable in claim 9 over the art cited and the decision of the Examiner is affirmed on both grounds.

We are fully in accord with the views expressed in the language quoted above. Lines 23–38 on page 3 of Jackson's specification, cited by the Board in its opinion, read as follows:

It is one of the characteristic features of my improved engine that the theoretical maximum explosion pressure on the pistons is reached approximately at a time when one of the cranks, to wit, the crank 30 as herein shown, approaches a position to exert its greatest power to rotate the crank shaft, and the relation of the crank travel and high compression to the crank 30 is such that the pressure continues to act with high efficiency upon said crank 30 while it is moving through the arc of its rotary travel in which its most effective lever arm is presented to rotate the crank shaft, or from slightly beyond the position shown in Fig. 6 to about that shown in Fig. 8.

The Board of Appeals, in that part of its decision quoted, has made it so clear that appellant's device lacks invention that nothing further need be said upon that subject.

Appellant contends that it is not only the settled rule of patent practice that, in cases of doubt as to patentability, the doubt should be resolved in favor of the applicant, but that where, in a case such as the one before us, the claim has already been allowed in a patent, with which patent appellant seeks an interference, appellant's claim should be allowed unless it is absolutely anticipated, leaving no possibility of an opposite opinion, and cites in support of this contention the decision of this court in the case of *In re Engelhardt*, 17 C. C. P. A. (Patents) 1244, 400 O. G. 678, 40 F.(2d) 760. In that case, which presented a very extraordinary situation, as will appear from the opinion, we said:

Of course we must find that the Board of Appeals erred in its decision before we can reverse it. The fact that strong equities may exist in favor of appellant does not justify us in finding error where none exists, but we think it is proper for us to consider these facts in determining the weight to be given to the fact that all of the tribunals of the Patent Office concurred in finding lack of patentability in appellant's claims. We have a right to consider that a patent has been issued by the Patent Office, a patent covering the very claims here in issue, that such patent is beyond recall by it, and that it will be considered in any court as presumptively valid.

Before we would be justified in finding error upon the part of the Board of Appeals in finding that the invention covered by appellant's claim was anticipated by the references relied upon, we must be in doubt as to the applicability of such references. We have no such doubt, and therefore, although a patent upon the same claim has been granted to Shearer, the decision of the Board of Appeals must be affirmed.

Affirmed.

Patent Suits

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1,221,030, H. D. Currier, Telephone system; 1,283,400, same, Trunk circuit; 1,556,761, Currier & Eaton, same; 1,594,877, same, Telephone system; 1,261,492, H. D. Currier et al., same, filed Mar. 25, 1931, D. C., W. D. N. Y., Doc. 350, *Kellogg Switchboard & Supply Co.* v. *New York Telephone Co. et al.*

1,221,035. (See 1,201,270.) 1,261,492. (See 1,221,030.)

1,283,400. (See 1,221,030.)

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1,348,157. (See 1,201,270.) 1,358,182. (See 1,428,762.)

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1,407,948, B. G. Rand, Card index cabinet; 1,429,628, J. H. Rand, jr., Record cabinet, filed Mar. 25, 1931, D. C., S. D. Ohio, W. Div., Doc. E 725, *Remington Rand, Inc.*, v. *International Visible Systems Corp.*

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1,494,075, L. Murray, Belt and process of making same; 1,610,942, J. R. Gammeter, Endless belt and method of making; 1,657,300, H. W. Delzell, Reenforced side-driving belt, D. C. Minn., 4th Div., Doc. E 1218, *Durkee Atwood Co. et al.* v. *The Miller Rubber Co.* Dismissed by consent Mar. 3, 1931.

1,502,540. (See 1,395,893.)

1,502,547, R. Calvert et al., Diatomaceous earth product and process of making, filed Mar. 17, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E T–77–H, *Celite Corp.* v. *The Dicalite Co.*

1,507,016. (See 1,201,270.) 1,507,826. (See 1,588,354.)

1,525,941. (See 1,201,270.) 1,527,464. (See 1,395,893.)

1,556,761. (See 1,221,030.) 1,558,450. (See 1,422,075.)

1,559,520, T. M. Fairbairn et al., Putting green and similar playing surface, D. C. Minn., 4th Div., Doc. E 1734, *National Pipe Products Corp. et al.* v. *H. S. Call.* Consent decree holding all claims valid and infringed (notice Mar. 24, 1931).

1,566,622. (See 1,428,762.)

1,569,413, A. Weingaertner, Weather strip for windows, filed Jan. 29, 1930, and 1,646,155, D. Kulage, Weatherstrip unit, entered by counterclaim Mar. 19, 1930, D. C., E. D. Mo., E. Div., Doc. 8918, *W. J. Moslank* v. *D. Kulage et al.* Patent 1,569,413 held valid but not infringed; 1,646,155 held valid and claims 1, 6, 7, 8, 9, and 10 held infringed Mar. 23, 1931.

1,588,354, L. J. Grubman, Sound producing device; 1,507,826, same, Sound producing device for dolls, D. C., S. D. N. Y., Doc. E 49/385, *Voices, Inc.*, v. *Goodyear Toy Co., Inc.* Dismissed without prejudice Mar. 23, 1931.

1,594,877. (See 1,221,030.) 1,610,942. (See 1,494,075.)

1,630,543, W. H. Scott, Receptacle filling and draining device, filed Mar. 25, 1931, D. C. Mass., Doc. E 3409, *W. H. Scott* v. *Siph-O-Products Corp. et al.*

1,634,032, H. Leoni, Necktie and lining therefor, D. C., S. D. N. Y., Doc. E 49/218, *Franc-Strohmenger & Cowan, Inc.*, v. *Flex Thread Corp. et al.* Dismissed on merits Mar. 23, 1931.

1,646,155. (See 1,569,413.)

1,646,563, J. R. Sonneborn, Box wrapping system, filed Mar. 24, 1931, D. C., M. D. Pa., Doc. E 792, *Autokraft Box Corp.* v. *The Merchants Cigar Box Co.*

1,657,300. (See 1,494,075.) 1,662,436. (See 1,404,936.)

1,662,437. (See 1,405,936.) 1,677,436. (See 1,405,936.)

1,680,207. (See 1,201,270.)

1,681,727, F. M. Emerson, Artificial cast stone and process of producing same, filed Mar. 24, 1931, D. C., S. D. N. Y., Doc. E 59/71, *Varitex Co.* v. *A. Vinci et al.* (*National Cast Stone Co.*). Doc. E 59/70, *Varitex Co.* v. *New York Cut Cast Stone Corp.*

1,694,702, B. B. Deitel, Vanity case; 1,715,821, same, Novelty case, filed Mar. 23, 1931, D. C., S. D. N. Y., Doc. E 59/68, *B. B. Deitel* v. *Unique Specialty Corp. et al.*

1,698,592, C. V. Hill, Refrigerator display case, filed Mar. 2, 1931, D. C., E. D. Pa., Doc. 6445, *C. V. Hill & Co., Inc.*, v. *M. Stein et al.*

1,712,783, M. Alpern, Finger ring, filed Mar. 25, 1931, D. C., S. D. N. Y., Doc. E 59/83, *I. Papick et al.* (*Papick & Schantzer*) v. *Stern & Stern, Inc.*

1,715,821. (See 1,604,702.)

1,722,005, J. A. McCarthy, Soot and grease extractor, filed Mar. 12, 1931, D. C. Md., Doc. E 1854, *Aluminate Co., Inc.*, v. *Monarch Products Co., Inc.*

1,739,280, M. C. Behrman, Razor and blade therefor; 1,773,614, G. Dalkowitz, Safety razor, filed Jan. 30, 1931, D. C., E. D. Pa., Doc. 6407, *American Safety Razor Corp.* v. *Fringe Bros. Co.*

1,747,747, O. B. Walters, Blade controlling device for road maintainers, D. C., S. D. Iowa (Des Moines), Doc. E 4442, *O. B. Walters* v. *C. R. Miller Tractor Co.* Dismissed Mar. 24, 1931.

1,773,614. (See 1,739,280.)

1,781,139, C. Talley, Hospital chart and card holder, filed Mar. 20, 1931, D. C., S. D. N. Y., Doc. E 59/50, *C. Talley* v. *The Presbyterian Hospital of New York City.*

1,784,548, C. Seidman, Corded-edge knit neckband for sweater, filed Feb. 26, 1931, D. C., E. D. Pa., Doc. 6437, *C. Seidman* v. *Carthage Knitwear Corp.*

1,791,030, L. L. Jones, Radio receiving system, filed Mar. 27, 1931, D. C., S. D. N. Y., Doc. E 59/88, *L. L. Jones et al.* v. *Radio Corp. of America.*

Re. 17,207, O. A. Collings, Waterproof plastic, C. C. A., 8th Cir. (St. Louis), Doc. 8954, *Kansas City Southern Ry. Co. et al.* v. *Silica Products Co.* Decree modified and affirmed Mar. 17, 1931.

Re. 17,469, E. Bocchino, Safety device for fire escapes, filed Dec. 1, 1930, D. C. N. J., Doc. E 4158, *Safety Device Fire Escape Co., Inc., et al.* v. *General Iron & Brass Co.* Doc. E 4152, *Safety Device Fire Escape Co., Inc., et al.* v. *I. Golish.*

Re. 17,514, McCabe & Schoenholz, Pocket book top; Des. 80,008, same, Pocketbook latch, D. C., S. D. N. Y., Doc. E 55/178, *McCabe & Schoenholz, Inc.*, v. *Artistic Wire Forming Co., Inc.* Consent decree for injunction Mar. 23, 1931.

Re. 17,885, J. H. Janowitch, Shirt collar stiffener, filed Mar. 25, 1931, D. C., S. D. N. Y., Doc. E 59/73, *Lakewood's Patents Corp.* v. *H. H. Newman et al.*

Des. 54,296, E. F. Wood, Emblem button, D. C., S. D. N. Y., Doc. E 57/63, *The American Legion* v. *General Embroidery & Military Supply Co., Inc.* Consent decree for plaintiff (notice Mar. 26, 1931).

Des. 80,008. (See Re. 17,514.)

Des. 81,431, D. V. Belknap, Textile fabric, filed Jan. 26, 1931, D. C., E. D. Pa., Doc. 6395, *Monumental Mills* v. *E. Wood.*

Adjudicated Patents

(D. C. N. J.) Ornstein patent, No. 1,142,361, for process of antisepticizing water, claims 4, 5, 6, 8, 10 *Held* valid and infringed. *Electro Bleaching Gas Co.* v. *Paradon Mfg. Co.*, 47 F.(2d) 666.

(C. C. A. Minn.) Woodley patent, No. 1,156,122, for fibrous composition and process of manufacture, *Held* invalid. *Woodley* v. *American Container Corporation*, 47 F.(2d) 454.

(C. C. A. N. Y.) Peters patent, No. 1,225,051, for portable electric lamp, claims 1 and 2 *Held* not infringed. *Faries Mfg. Co.* v. *S. W. Farber Mfg. Co.*, 47 F.(2d) 571.

(C. C. A. Okl.) Godbald and Fletcher patent, No. 1,320,384, for drill-cutter, claims 3 and 4 *Held* valid and infringed. *Hughes Tool Co.* v. *International Supply Co.*, 47 F.(2d) 490.

(C. C. A. N. Y.) Wachsman patent, No. 1,358,483, for stop mechanism for knitting-machines, *Held* not infringed. *Wachsman* v. *Wachsman*, 47 F.(2d) 579.

(D. C. Cal.) Keszthelyi patent, No. 1,474,905, for tool joint, claims 1, 2 and 3 *Held* invalid. *Keszthelyi* v. *Doheny Stone Drill Co.*, 47 F.(2d) 648.

(C. C. A. Okl.) Scott patent, No. 1,480,014, for self-cleaning roller drill, claims 1, 2, 3 and 4 *Held* not infringed. *Hughes Tool Co.* v. *International Supply Co.*, 47 F.(2d) 490.

(C. C. A. N. Y.) Hazeltine patent, No. 1,533,858, for method and means for neutralizing capacity coupling in audions, claims 1, 2, 5 and 13 *Held* valid and infringed. *Hazeltine Corporation* v. *National Carbon Co.*, 47 F.(2d) 573.

(C. C. A. N. Y.) Walter patent, No. 1,652,262, for dumping mechanism for semitrailers, claim 2 *Held* invalid, claim 3 not infringed. *Heil Co.* v. *Walter*, 47 F.(2d) 551.

(C. C. A. N. Y.) Kesten reissue patent, No. 15,733, for automatic brake for elevators, claims 1, 7 and 8 *Held* invalid. *Otis Elevator Co.* v. *Atlantic Elevator Co.*, 47 F.(2d) 545.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,715,977, C. J. Bates, jr., and C. P. Bartels, Safe filling, decided April 27, 1931, claim 1.

Pat. 1,718,044, J. M. High, jr., Vibrating motor, decided April 30, 1931, claims 1, 2, 3, 4, and 5.

Pat. 1,762,925, L. A. Jones and C. M. Tuttle, Sound film with sensitometric scale, decided April 8, 1931, claim 1.

Disclaimers

Reissue No. 16,297.—*Humprey F. Parker*, Philadelphia, Pa. CONTROL FOR ELECTRIC ELEVATORS. Patent dated March 23, 1926. Disclaimer filed May 1, 1931, by the assignee, *Otis Elevator Company.*

Hereby enters this disclaimer to claims 34, 35, 36, and 37 in said patent, which are in the following words, to-wit:

"34. A control system for an elevator car comprising a plurality of switches, one for each of a plurality of landings, operable to cause the stopping of the car at the landings for which said switches are operated upon its approaching said landings in the down direction, a plurality of additional switches, one for each of said landings, operable to cause the stopping of the car at the landings for which said additional switches are operated upon its approaching said landings in the up direction, switching mechanism, said switching mechanism being operable to cause the starting of the car from each and every landing.

"35. A control system for an elevator car comprising, a plurality of sets of switches, each set comprising a switch for each of a plurality of landings, the switches of each set being operable to cause the stopping of the car at the respective landings upon its approaching said landings in the down direction, and a plurality of additional sets of switches, each additional set comprising a switch for each of said landings, the switches of each additional set being operable to cause the stopping of the car at the respective landings upon its approaching said landings in the up direction.

"36. A control system for an elevator car comprising, a plurality of sets of switches, each set comprising a switch for each of a plurality of landings, the switches of each set being operable to cause the stopping of the car at the respective landings upon its approaching said landings in the down direction, a plurality of additional sets of switches, each additional set comprising a switch for each of said landings, the switches for each additional set being operable to cause the stopping of the car at the respective landings upon its approaching said landings in the up direction, and switching mechanism, said switching mechanism being operable to cause the starting of the car from each and every landing.

"37. A control system for an elevator car comprising, a plurality of up switches within the car, one for each of a plurality of landings, and a plurality of up switches without the car, one at each of said landings, both the up switches within the car and the up switches without the car being operable to cause the stopping of the car at the respective landings upon its approaching said landings in the up direction; a plurality of down switches within the car, one for each of said landings, and a plurality of down switches without the car, one at each of said landings, both the down switches within the car and the down switches without the car being operable to cause the stopping of the car at the respective landings upon its approaching said landings in the down direction; and switching mechanism

within the car, said switching mechaniam being operable to cause the starting of the car from each and every landing in either direction."

1,585,452.—*John M. Widmer*, Cedar Rapids, Iowa. MANUFACTURE OF STARCH. Patent dated May 18, 1926. Disclaimer filed May 5, 1931, by the assignee, *Penick & Ford, Ltd. Incorporated.*

Therefore, enters the following disclaimer:

Disclaims from claims 1, 2, 4, 5, 8, 13, and 18 all processes, excepting those for manufacturing starch from corn in a system wherein the solubles formerly permitted to run to waste and the waters separated from insolubles are recovered, and wherein, in the separating operations, starch and gluten are washed from bran in a sieve system which includes sieves having minute openings, and wherein starch, gluten, and water are separated from each other at a stage following the bran-washing operation, and wherein the separated starch is washed and wash water and solubles therefrom are included in the recovery.

Further disclaims from claim 1 all processes, which do not include steeping the corn in a portion of the water which has been separated from starch and gluten subsequent to a starch tabling operation, and withdrawal of steep water and recovery of solubles therein, and the reuse of another portion of such water, in connection with necessary make-up water, in effecting separations preceding the starch tabling operation, and which do not include also washing the starch after separation thereof and reusing the wash water as make-up water.

Further disclaims from claim 4 all processes which do not include the re-use of starch wash water as make-up water and introduction of SO_2 into the separating system through the medium of said wash water.

Further disclaims from claim 8 all processes which do not include, as a part of the separating operations, the separation of germs from other insoluble corn constituents prior to the bran-washing operation, and which do not include steeping the corn in a minor portion of the separated water and reusing a major portion of the separated water and starch wash water, as make-up water, in separating operations preceding the step of separating starch, gluten, and water from each other.

Disclaims from claim 14, all processes which do not pertain to the manufacture of starch from grains having as constituents substantial amounts of bran and gluten constituting portions of the materials subjected to separating operations.

Further disclaims from claim 18 all processes which do not include, as a part of the separating operations, separation of germs from insoluble corn constituents prior to the bran-washing operation and which do not include, as a part of the operations of recovering solubles, the withdrawal of steep water and recovery of solubles therein.

1,748,180.—*Charles D. Lawhon*, Knoxville, Tenn. SOLDERING FLUX. Patent dated February 25, 1930. Disclaimer filed April 24, 1931, by *The Fulton Sylphon Company.*

Hereby enters its disclaimer of claims 3 and 4 of said Letters Patent No. 1,748,180, reading as follows:

"3. A soldering flux comprising aniline hydrochloride.

"4. In the art of soldering, the step of cleaning the metal surfaces and facilitating the flow of solder thereon which comprises applying aniline hydrochloride thereto and releasing hydrogen chloride therefrom by heat."

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, May 5, 1931.*

Salomon Bros., their assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Charles J. Wouters, of 3120 Harrison Street, Oakland, Calif., to effect the cancellation of the trade-mark registration of Salomon Bros., of 15 Burling Slip, New York, N. Y., No. 103,363, dated March 30, 1915, and the notice of such proceeding sent by registered mail to the said Salomon Bros. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Salomon Bros., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Interference Notices

U. S. PATENT OFFICE, *Washington, Apr. 14, 1931.*

George F. Colley, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications for patent of George F. Colley, 1284 Union Avenue, Los Angeles, Calif., and of Stephen Seth, 882 Park Avenue, Baltimore, Md., and counsel for Colley having stated that they do not know the present whereabouts of said Colley, notice is hereby given that unless said George F. Colley, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

THOMAS E. ROBERTSON,
Commissioner.

U. S. PATENT OFFICE, *Washington, Apr. 18, 1931.*

Loughlin & Company, their assigns or legal representatives, take notice:

An interference having been declared by this office between the application of M. M. Fleron & Son, Inc., 113 North Broad Street, Trenton, N. J., for registration of a trade-mark and trade-mark registered May 13, 1930, No. 270,829, to Loughlin & Company, 703 Mount Vernon Place, Washington, D. C., and a notice of such declaration sent by registered mail to said Loughlin & Company at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Loughlin & Company, their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, April 22, 1931.*

H. H. Palmer & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of John F. Jelke Company, Hillsboro and Northeastern R. R. Track, Hillsboro, Wisconsin, for registration of a trade-mark and trade-mark registered April 24, 1917, No. 776,354, to H. H. Palmer & Co., 45 Harrison Street, New York, N. Y., and the Office having failed to secure satisfactory service upon said H. H. Palmer & Co. at the said address, notice is hereby given that unless said H. H. Palmer & Co., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

CARNEGIE LIBRARY OF ATLANTA

TRADE-MARKS

OFFICIAL GAZETTE, MAY 19, 1931

[VOL. 406. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 312,482. HUME-SINCLAIR COAL MINING COMPANY, Kansas City, Mo. Filed Mar. 24, 1931.



The exclusive use of the words "Coal" and "Leaps into Flame" is disclaimed apart from the mark as shown on the drawing.

For Coal.

Claims use since Mar. 9, 1931.

CLASS 2

Receptacles

Ser. No. 311,842. HOWARD E. LOVETT, Pittsburgh, Pa. Filed Mar. 6, 1931.



The drawing is lined for red.

For Metal Boxes for Used Razor Blades.

Claims use since Feb. 5, 1931.

Ser. No. 312,830. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Apr. 2, 1931.



For Collapsible Tubes.

Claims use since May 12, 1930.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 270,310. THE DOW CHEMICAL COMPANY, Midland, Mich. Filed July 30, 1928.



Applicant is the owner of registration No. 140,588 effected under the 10-year proviso of the 1905 act.

For Cleaning Compositions—Namely, Oil, Fat, and Grease Removers; Tar, Gum, and Organic Resin Removers; Washing and Cleaning Compounds; and Dry Cleaning and Spotting Fluids.

Claims use since 1917.

Ser. No. 307,943. GOLDEN EAGLE SOAP COMPANY, San Francisco, Calif. Filed Nov. 15, 1930.

CAMPAMENTO

For Soap.
Claims use since July 15, 1930.

Ser. No. 312,483. DAVID P. LAVIETES, doing business as Pequot Soap Works, Inc., Brooklyn, N. Y. Filed Mar. 24, 1931.

PEQUOT

For Laundry Soap for Washing Machines and General Household Use.
Claims use since Dec. 15, 1930.

Ser. No. 312,647. HANSON-VAN WINKLE-MUNNING COMPANY, Matawan, N. J. Filed Mar. 28, 1931.

ACME

For Buffing Compounds.
Claims use since 1888.

Ser. No. 313,037. HARTFORD PRODUCTS CORPORATION, Hartford, Conn. Filed Apr. 7, 1931.

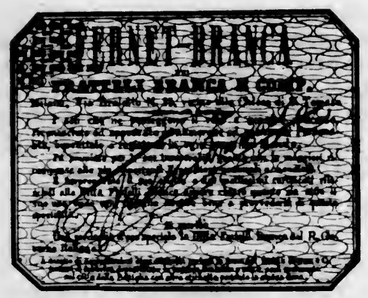
RITZ

For Razor Stroppers.
Claims use since November, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 272,395. FRATELLI BRANCA, Milan, Italy. Filed Sept. 14, 1928.



The representation of the label is disclaimed per se. The facsimile signature "Fratelli Branca & C." appears on a label running on a diagonal line from the inferior right angle to the superior angle in black ink. All wording with the exception of "Branca", "Fratelli Branca E Comp" and the facsimile signature is disclaimed apart from the mark as shown on the drawing. Applicant is the owner of registered Trade-Mark No. 270,734.
For Stomach Bitters.
Claims use since 1924.

Ser. No. 272,396. FRATELLI BRANCA, Milan, Italy. Filed Sept. 14, 1928.



The representation of the label is disclaimed per se. All wording with the exception of "Branca" and "L. Gandolfi & Co." is disclaimed apart from the mark as shown on the drawing. Applicant is the owner of registered Trade-Mark No. 270,734.
For Stomach Bitters.
Claims use since 1912.

Ser. No. 272,397. FRATELLI BRANCA, Milan, Italy. Filed Sept. 14, 1928.



The representation of the label is disclaimed per se. All wording with the exception of "Branca," "Fratelli Branca & C.," and "L. Gandolfi & Co., Inc." is disclaimed apart from the mark as shown on the drawing. Applicant is the owner of registered Trade-Mark No. 270,734.
For Stomach Bitters.
Claims use since 1924.

Ser. No. 287,703. SAM M. HILL, doing business as Hill's Mfg. Co., Galveston, Tex. Filed July 26, 1929.

FLY ZING

For Insecticide.
Claims use since Mar. 1, 1926.

Ser. No. 295,417. THE BARRETT COMPANY, New York, N. Y. Filed Jan. 31, 1930.

Carbosota

For Creosote Oil for Use as a Wood Preservative and Disinfectant.
Claims use since Dec. 20, 1911.

Ser. No. 302,647. HERMANN SCHELLENBERG, Berlin, Germany. Filed June 20, 1930.



Die Dame mit der Glatze

The portrait of a bald-pated woman forming a feature of the mark is fanciful.
For Compound for Washing and Nourishing the Hair and Supplying the Scalp with Substances Which Assist and Increase the Growth of Hair, Liquid for Washing the Hair and for Restoring the Natural Dye of the hair, Hair-Restorer, Hair Dye, and Perfumery.
Claims use since Oct. 14, 1929.

Ser. No. 303,281. GUSTAVE GLATZER, New York, N. Y. Filed July 9, 1930.

SYLVA CROSS

For Rose Disinfectant, Insecticides, Disinfectants, Toilet Water, Perfumes, Florida Water, Face Powder, Rouge, Lip Sticks, Tooth Paste, Styptic Pencils, Tooth and Mouth Wash, Witch-Hazel, Castor Oil, Essence of Peppermint, Baking Powder, Petroleum Jelly, Catarrhal Jelly, Salves for the Treatment of Skin Disorders, Camphorated Oil, Spirits of Camphor, Peroxide, Foot Powder, Iodine, Alcohol Rub; Liniments for External Use in Treatment of Muscular Pains and Aches, Rheumatism, Neuralgia, Sprains, and Bruises; Mineral Oil Used Internally as a Lubricant, Castoria, Bronchial Lozenges, Iron Tablets, Charcoal Tablets, Cold Tablets, Digestive Tablets, Headache Tablets, Aspirin Tablets; Pills for Use as a Cathartic and for the Treatment of the Kidneys, Liver, and Stomach; Soda-Mint Pills, Bath Salts, Bay Rum, Cold Cream, Lemon Cream, Massage Cream, Vanishing Cream, Honey and Almond Cream, Glycerine and Rose Water, Brilliantine, Hair Tonic, Hair Pomade, Talcum Powder, Tonic Shampoos, Smelling Salts, Roach Powder, Laxative Tablets, After Shaving Lotion.
Claims use since Oct. 1, 1928.

Ser. No. 307,647. EMANUEL GIANIKOS, Cleveland, Ohio. Filed Nov. 7, 1930.

Diz-Relief

TRADE MARK

Applicant disclaims the words "Relief" and "Trade Mark" appearing on the drawing.

For Medicine for External Use in Eliminating Dizziness.

Claims use since Feb. 1, 1928.

Ser. No. 308,223. MRS. F. ANDREW SCOTT, Los Angeles, Calif. Filed Nov. 22, 1930.

MRS F. ANDREW SCOTT



RIDGE-X

The picture forming a part of the mark is fanciful. The wording on the box except the word "Ridge-X" is disclaimed.

For Creams Used for Treating and Keeping the Finger-Nails Free from Ridges and Pits.

Claims use since Nov. 1, 1929.

Ser. No. 308,870. UNIVERSAL BOTTLED GAS CORPORATION, Rochester, N. Y. Filed Dec. 11, 1930.

BLU-SPOT GAS

The lining in the drawing indicates the colors blue and yellow. The word "Gas" is disclaimed apart from the mark as shown.

For Liquid Gas.

Claims use since Dec. 3, 1930.

Ser. No. 309,837. THOMAS A. WATSON, doing business as Watson Chemical Laboratories, Chicago, Ill. Filed Jan. 10, 1931.

CALTONE

For Medical Compound for Acidity of the Stomach, Flatulence, Sour Stomach, and a Stimulant to the Appetite.

Claims use since Dec. 15, 1930.

Ser. No. 310,076. SAMUEL STEIGROD, doing business as Gento Laboratories, Paulsboro, N. J., assignor to L. Weinberg Company, Philadelphia, Pa. Filed Jan. 17, 1931.

GENTO

G

For Medicine for Dyspepsia, Acid Stomach, and Indigestion.

Claims use since May 1, 1929.

Ser. No. 311,630. MARY E. STEWART, doing business as Stewart & Cobb Chemical Co., Covington, Ky. Filed Mar. 2, 1931.

MARVEL-GLO

For Compound for Deodorizing the Breath.

Claims use since Feb. 9, 1931.

Ser. No. 311,897. KARL WOOD, doing business as The Haywood Company, Memphis, Tenn. Filed Mar. 7, 1931.

NADROX

For Nasal Oils.

Claims use since Nov. 10, 1930.

Ser. No. 311,901. HOUSTON SALT CO., Houston, Tex. Filed Mar. 7, 1931.

HOUSTON BRAND



SALT

The trade-mark consists in part of the portrait of Gen. Sam Houston. Applicant disclaims the right to the exclusive use of the words "Brand" and "Salt" shown on the drawing.

For Salt.

Claims use since Feb. 10, 1931.

Ser. No. 311,931. RICHARDS LABORATORIES, Duluth and Grand Rapids, Minn. Filed Mar. 9, 1931.

MOSSINE

R.L.

For Preparation for the Treatment of Cold in the Head, Throat, and Chest.

Claims use since Jan. 19, 1930.

Ser. No. 311,988. WILLIAM H. VOORHIES, Decatur, Ill. Filed Mar. 10, 1931.



STORK-IT

For an Antiseptic Medicinal Preparation for Use in the Treatment of Amenorrhea or Suppressed Menstruation.

Claims use since Mar. 10, 1931.

Ser. No. 311,997. DUREX PRODUCTS INC., New York, N. Y. Filed Mar. 11, 1931.

MENSINGA

For Pessaries Used as Medicated Suppositories.

Claims use since September, 1928.

Ser. No. 312,035. AMERICAN MAIZE-PRODUCTS COMPANY, New York, N. Y. Filed Mar. 12, 1931.

AMAIZO

For Gloss Starch.

Claims use since Oct. 4, 1920.

Ser. No. 312,059. THE NORWICH PHARMACAL COMPANY, Norwich, N. Y. Filed Mar. 12, 1931.

Respamol

For Liquid Demulcent Preparation Given as an Expectorant and Bronchial Antispasmodic in Diseases of the Respiratory Tract.

Claims use since Feb. 16, 1931.

Ser. No. 312,065. ERNEST G. RURUP, doing business as Scientific Laboratories of America, San Francisco, Calif. Filed Mar. 12, 1931.

LUCKY STRIKE

For Dental Creams.

Claims use since Sept. 2, 1914.

Ser. No. 312,188. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Mar. 16, 1931.

Vaduril

For a Calcium Compound for Diseases on the Basis of Calcium Deficiency, Exudative Diathesis, Serum Sickness, Anaphylaxis, General Inflammations, and Relative Conditions.

Claims use since Feb. 1, 1931.

Ser. No. 312,219. THE GRIFFITH LABORATORIES, INC., Chicago, Ill. Filed Mar. 16, 1931.

HANSA

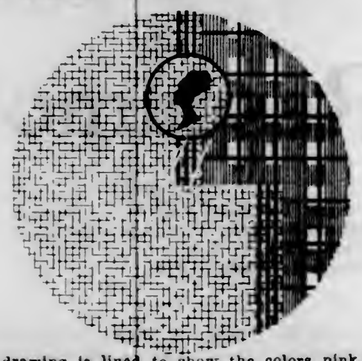
POKELSALZE

No claim is made to the word "Pokelsalze" except as associated with the rest of the mark.

For Curing Salt.

Claims use since Jan. 30, 1930.

Ser. No. 312,280. THE ARMAND COMPANY, Des Moines, Iowa. Filed Mar. 17, 1931.



The drawing is lined to show the colors pink, white, blue, black, and beige.

For Toilet Powder.

Claims use since Feb. 10, 1931.

Ser. No. 312,294. OMER H. EDWARDS, doing business as Royal Digesto Co., Stanford, N. Y. Filed Mar. 19, 1931.



For Liquid Medical Preparation for the Relief of Indigestion.

Claims use since August, 1928.

Ser. No. 312,316. SOCIETE ANONYME JEAN PATOU, Paris, France. Filed Mar. 19, 1931.



For Perfumes, Face Lotions, Face Powder, Talcum Powder, Sachets, Face Creams, Bath Salts, Brilliantine, Lip Rouge, and Toilet Water.

Claims use since Nov. 21, 1930.

Ser. No. 312,323. THE PETER CORPORATION, Lowell, Mass. Filed Mar. 18, 1931.

VITA-GLO

For Cleansing Cream, Face Cream, and Cold Cream.

Claims use since Mar. 10, 1931.

Ser. No. 312,324. HULDA A. VINJE, doing business as Mar-Vel Products Co., Chicago, Ill. Filed Mar. 18, 1931.



The words "Teething Balm" appearing in connection with my trade-mark are disclaimed.

For Soothing Lotions, Salve or Ointment for Mouth Gum Irritations.

Claims use since Jan. 15, 1930.

Ser. No. 312,369. EDWARD J. FAY, New York, N. Y. Filed Mar. 21, 1931.

TEZA

For Perfumes, Face, Talcum, and Bath Powders, Toilet Water, Face Creams, Rouge, Cologne, and Lipstick.

Claims use since June, 1930.

Ser. No. 312,433. JEAN JORDEAU, INC., South Orange, N. J. Filed Mar. 23, 1931.

ZiP

The applicant is the owner of registered trade-mark No. 180,441.

For Depilatories.

Claims use since Jan. 15, 1912.

Ser. No. 312,551. JAMES A. CURRENT, doing business as Current Medicine Co., Lorain, Ohio. Filed Mar. 26, 1931.

Jankona

For Medicine for the Treatment of Impure Blood, Stomach, Liver, and Bowel Ailments.

Claims use since Mar. 12, 1931.

Ser. No. 312,570. PACIFIC REMEDY CORPORATION, New York and Brooklyn, N. Y. Filed Mar. 26, 1931.

BARK • LAX

For Medicinal Preparation Designed to be Used as a Laxative for Dogs.

Claims use since February, 1931.

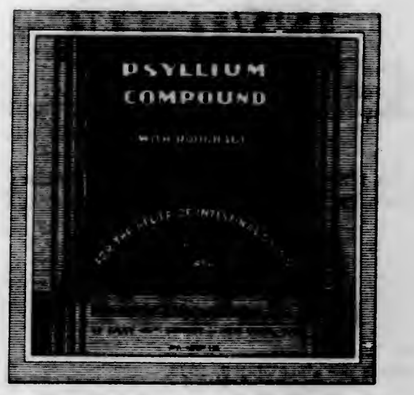
Ser. No. 312,571. RENOTRAT CORPORATION OF AMERICA, New York, N. Y. Filed Mar. 26, 1931.

RENOTRAT

For Preparation for Kidney Diseases.

Claims use since Mar. 23, 1931.

Ser. No. 312,619. MUNSCH LABORATORIES, INC., New York, N. Y. Filed Mar. 27, 1931.



The drawing is lined to indicate the color blue. No claim is made to the printed language appearing on the drawing with the exception of "Munsch", "Munsch Laboratories", and "Ad Naturam". No claim is made to the representation of a label per se.

For Compound of Plantago Psyllium.

Claims use since Feb. 10, 1931.

Ser. No. 312,621. NINETY-NINE CHEMICAL CORPORATION, Memphis, Tenn. Filed Mar. 27, 1931.

99

For Insecticides—Namely, Roach Powder.

Claims use since Nov. 21, 1929.

Ser. No. 312,779. G. S. STODDARD & CO., INC., New York, N. Y. Filed Mar. 31, 1931.

ZYMOTERIC

For Medicinal Tablets Used as an Aid to Intestinal Digestion and for Treating Diabetes Mellitus.

Claims use since Jan. 1, 1930.

Ser. No. 312,782. JOHN HIGGINS & COMPANY, LTD., Waterford, N. Y. Filed Mar. 31, 1931.

CYNE-EASE

For Medicinal Sprays and Inhalants for the Treatment of Sinus Trouble, Head-Colds, and Catarrh.

Claims use since Oct. 15, 1930.

Ser. No. 312,793. CANTEEN CO., INC., Union City, N. J. Filed Apr. 1, 1931.

INVICTUS

For Foot Cream.
Claims use since Apr. 15, 1919.

Ser. No. 312,831. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Apr. 2, 1931.

ALCOA

For Welding Flux.
Claims use since May 9, 1930.

Ser. No. 312,832. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Apr. 2, 1931.



For Welding Flux.
Claims use since May 9, 1930.

Ser. No. 312,923. FRANK LOTITO, doing business as West Coast Wine Jelly Co., Los Angeles, Calif. Filed Apr. 3, 1931.

GONDOLA

For General Medicinal Tonic Having a Wine Base.
Claims use since Mar. 1, 1930.

Ser. No. 312,951. EARL R. HARFORD, doing business as Bond Chemical Company, Middletown, N. Y. Filed Apr. 4, 1931.

Hygechlor

For Cleaning and Bleaching Disinfectant.
Claims use since August, 1929.

CLASS 7

Cordage

Ser. No. 313,339. THE EDWIN H. FITLER CO., Philadelphia Pa. Filed Apr. 14, 1931.

P. B. T.

For Bundling Twine.
Claims use since June 16, 1927.

Ser. No. 313,340. THE EDWIN H. FITLER CO., Philadelphia, Pa. Filed Apr. 14, 1931.

DOMESTIC

For Manila Rope.
Claims use since Jan. 30, 1929.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 313,064. RUBEN E. WALL, doing business as Whoopee Pipes, Buffalo, N. Y. Filed Apr. 7, 1931.

WHOOPEE

For Smoking Pipes.
Claims use since December, 1929.

CLASS 10

Fertilizers

Ser. No. 312,918. HUDSON VALLEY FUEL CORPORATION, Troy, N. Y. Filed Apr. 3, 1931.

NUSOIL

For Sulphate of Ammonia for Fertilizer.
Claims use since Mar. 20, 1931.

CLASS 12

Construction Materials

Ser. No. 296,157. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany. Filed Feb. 17, 1930.



For Refractory Stones, Refractory Bricks, Coke Oven Stones, and Coke Oven Bricks, Silica Stones, and Silica Bricks, Fire-Clay Bricks, Insulating Stones, and Other Compositions Used for Insulating Against Heat, Cold, and Sound; Ammonia Bricks Used for Furnace Lining; Blast Furnace Products—Namely, Slag Bricks, Slag Wool, Tar-Macadam; Blast Furnace Cement, Iron Portland Cement, Lime, Plaster, Mortar, Pyrolignite of Lime; Ground Refractory Schamotte, Basic and Semi-Acid Schamotte Stones, Acid-Resisting Stones, Prepared Stones, Prepared Broken Stones, Artificial Stones, Fabricated Structural Shapes, Including Girders, Steel Sheet Piling, Mooring Masts; Knocked-Down Structures and Buildings Including Lift Frames, Bridges, Loading Bridges, Railway Sheds, Airship and Balloon Sheds, Work Sheds, Slaughter Houses, Housings and Scaffoldings for Blast Furnaces; Swimming Docks, Lock Doors, Weir Doors, Weir Shutters, and Other Constructional Parts for Weirs of Various Types, All Said Goods Being Materials or Parts Used for Constructional Purposes.
Claims use since July 8, 1918.

Ser. No. 306,822. MARVEX INC., Canton, Ohio. Filed Oct. 16, 1930.

MARVEX

For Composition Material for Constructing the Surface of Miniature Golf Greens or the Like
Claims use since September, 1930.

Ser. No. 309,427. GENERAL INSULATING & MFG. CO., Alexandria, Ind. Filed Dec. 29, 1930.

Gimco FLEXFELT

For Heat and Cold Insulation Material in Which Mineral Wool is the Main Ingredient in Sheet, Granulated, Wool, and Brick Form.
Claims use since Feb. 7, 1924.

Ser. No. 309,428. GENERAL INSULATING & MFG. CO., Alexandria, Ind. Filed Dec. 29, 1930.

Gimco SAVALL

For Heat and Cold Insulation Material in Which Mineral Wool is the Main Ingredient in Sheet, Granulated, Wool, and Brick Forms.
Claims use since Jan. 1, 1930.

Ser. No. 311,551. SANIMETAL TILE CORPORATION, New York, N. Y. Filed Feb. 28, 1931.

SANIMETAL TILE CORP.

For Enamel Tiles.
Claims use since Jan. 12, 1931.

Ser. No. 312,394. VISCO-MENT CORPORATION, Chicago, Ill. Filed Mar. 21, 1931.

Mulsi-falt

For Emulsified Asphalt.
Claims use since Sept. 1, 1930.

Ser. No. 312,512. R. E. CONREY, doing business as Aquabar Waterproofing Products, Philadelphia, Pa. Filed Mar. 25, 1931.

AQUABAR

For Moisture-Resistant Compounds for Application to Plastic Masonry Surfaces.
Claims use since January, 1907.

Ser. No. 312,515. J. H. France Refractories Co., Snow Shoe, Pa. Filed Mar. 25, 1931.

FRANCITE

For Refractory Cement.
Claims use since Apr. 21, 1930.

Ser. No. 312,516. J. H. France Refractories Co., Snow Shoe, Pa. Filed Mar. 25, 1931.

HYDRECON

For Refractory Concrete.
Claims use since Aug. 4, 1930.

Ser. No. 312,554. The Dextone Company, New Haven, Conn. Filed Mar. 26, 1931.

DEXTONE

For Articles Made from Artificial Stone—Namely, Base Course Blocks, Water Table Blocks, Plinths, Pilaster Capitals, Pilaster Bases, Pilaster Shafts, Column Bases, Column Capitals, Column Shafts, Architraves, Archivolts, Frieze, Molding, Coping, Cornices, Stylobates, Balusters, and Rails.
Claims use since Aug. 1, 1921.

Ser. No. 312,700. Curtis Companies, Incorporated, Clinton, Iowa. Filed Mar. 30, 1931.

UP-'N'-OVER

For Fabricated Doors.
Claims use since Mar. 1, 1931.

Ser. No. 312,755. Sidney C. Fournet, New Orleans, La. Filed Mar. 31, 1931.

BORGLOSS

For Wall Board and Tile—Namely, Interior Walls, Base, Borders, Trim, Ceilings, Wainscoat, Risers, Arches.
Claims use since Jan. 4, 1931.

CLASS 13

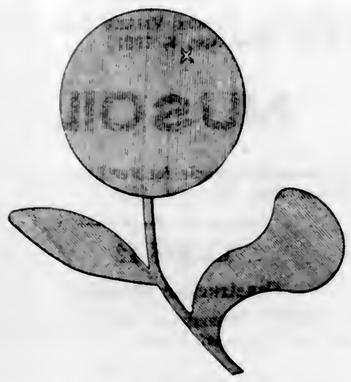
Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 306,297. Ferruccio Guidetti, New York, N. Y. Filed Oct. 1, 1930.

WATAIRWAY

For Water Closets, Bidets, Lavatories, Air Nozzles, Water Nozzles, Air Valves, Water Valves, Flushing Arms for Water Closets for Sanitary Cleansing of the Body, Supports Therefor, and Controlling Levers and Valves for Said Flushing Arms.
Claims use since Sept. 1, 1930.

Ser. No. 310,836. Polar Ware Company, Sheboygan, Wis. Filed Feb. 7, 1931.



The drawing is lined for red and green.
For Vitreous Enamel Pots, Pans, and Kettles for Cooking and Sanitary Purposes for the Home, Restaurant, and Hospital; Sinks, and Restaurant Steam Tables, All Made of Vitreous Enamel; and Combinets and Chambers, all Made of Vitreous Enamel.
Claims use since Aug. 1, 1930.

Ser. No. 310,907. Barr & Creelman Co., Rochester, N. Y. Filed Feb. 10, 1931.



No claim is made to the exclusive right to the use of the slogan contained within the triangular figure nor to the representation of the goods appearing within the circular portion. The lining on the drawing is for shading and contrast purposes only.
For Bathtubs, Lavatory Basins, Water Closets or Toilets, Bowls and Seats Therefor; Toilet Tanks, Float Balls, Flush Valves and Ball Cocks Therefor; Bathroom Fixtures—Namely, Soap Dishes and Holders, Towel Racks, Sponge Holders; Kitchen Sinks, Mop Sinks, Drain Boards; Fixed Laundry Trays; Bath Showers, Including Shower Heads, Curtains, and Curtain Hangings; Bath Sprays; Faucets, Cocks, and Bibbs; Bath Supply, Waste, and Overflow Pipes; Lavatory and Sink Traps; Shutoff Valves, Sink Brackets, Sink Strainers, Soil Pipes and Soil Pipe Elbows and Branches, Union Connectors; Gas, Water, and Cast Iron Piping and Fittings Therefor; Indoor Sanitary Closets Designed for Chemical Treatment, and Septic Tanks.
Claims use since April, 1930.

Ser. No. 312,095. Cromwell Silver Mfg. Corp., New York, N. Y. Filed Mar. 13, 1931.



The words "Old English Genuine Pewter" are disclaimed herein apart from the mark shown in the drawing.
For Fruit Bowls, Cake Plates, Bread Trays, Sandwich Trays, Flower Vases, Cheese and Cracker Dishes, Bon Bon Dishes, Salt and Pepper Sets, Candy Dishes, Cocktail Shakers, Relish Dishes, Ice Cream Sets, Coffee and Tea Sets, Serving Trays, Consoles, Mayonnaise Sets, Nut Bowls, Water Pitchers, Sugar and Creamer Sets, Crumb Sets, Butter Dishes, Vegetable Dishes, Well and Tree Platters, Coasters, Gravy Bowls, all Made of Pewter.
Claims use since Mar. 9, 1931.

Ser. No. 312,339. Fulflo Specialties Company, Blanchester, Ohio. Filed Mar. 20, 1931.

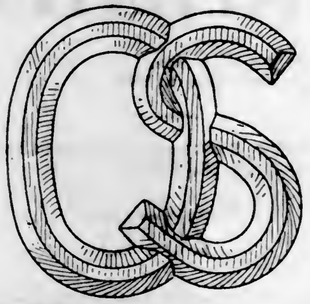
FULFLO

For Bronze, Brass, Iron and Acid Resistant Metal Valves—Namely, Shut Off Valves, Check Valves, Bypass Valves, Relief Valves, Blowoff or Pop Valves.
Pop Valves.
Claims use since Jan. 1, 1910.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 309,986. Omaha Steel Works, Omaha, Nebr. Filed Jan. 15, 1931.



For Steel Castings.
Claims use since Dec. 5, 1930.

CLASS 15

Oils and Greases

Ser. No. 288,378. Halstead Oil Company, Inc., New York, N. Y. Filed Aug. 10, 1929.

SPRINGEEZ OIL
LUBRICANT SUPREME

The descriptive words "Oil" and "Lubricant" are hereby disclaimed apart from the other features of the mark as shown in the drawing. Applicant hereby disclaims the term "Spring-ees" apart from the other features of the mark as shown in the drawing.
For a Preparation for Use as a Rust Solvent and Lubricant, and Lubricating Oils and Greases.
Claims use since July 17, 1929.

Ser. No. 299,531. Union Oil Company of California, Los Angeles, Calif. Filed Apr. 26, 1930.

UNIVALVE

For Lubricating Oils.
Claims use since Apr. 5, 1930.

Ser. No. 311,948. James B. Berry's Sons Company, Chicago, Ill. Filed Mar. 10, 1931.

IVORY
100% Pure Pennsylvania
MOTOR OIL

Applicant makes no claim to the words "100% Pure Pennsylvania Motor Oil" in the drawing except in the association shown.
For Gasoline and Motor Lubricating Oil.
Claims use since Jan. 1, 1931, on motor lubricating oil; since Mar. 6, 1929, on gasoline.

Ser. No. 312,170. Apex Oil Co., St. Louis, Mo. Filed Mar. 16, 1931.

SILENT FLASH

For Gasoline.
Claims use since Dec. 1, 1930.

Ser. No. 312,208. THE TWIN CITIES DISTRIBUTING COMPANY, Covington, Ky. Filed Mar. 16, 1931.

TWINCo.

For Lubricating Oils, Motor Fuel Oils, and Lubricating Greases.
Claims use since Dec. 27, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 306,673. ELCO PAINT PRODUCTS INC., doing business as Elco Paint Sales Co., New York, N. Y. Filed Oct. 11, 1930.

ELCO-LUSTR

For Stippie Paints, Enamel Paints, Penetrating Stains, Primers, Mill White Paints, Wood Fillers, Cement Coating (a Paint for Cement Walls), Exterior Paints, Barn Paints, Oxide Paints, Bronze Paints (Powder Form), Putty, Varnishes, Paint Tinting Colors (Paste Form), Paint Removers, Dissolved Shellacs, Paint Driers, Shingle Stain, Floor Paints, Flat White Paints, Turpentine Substitute, Ready Mixed Paints, Bronze Paints (Liquid Form), and Roof Paints.
Claims use since March, 1919.

Ser. No. 311,203. RONUK, LIMITED, doing business as Ronuk Sanitary Polish Works, Portslade, near Brighton, England. Filed Feb. 18, 1931.

RONUK

For Floor Polish, Furniture Cream, Floor Dressing, and Motor Car Polish.
Claims use since January, 1896.

CLASS 17

Tobacco Products

Ser. No. 310,966. SALVATORE ALFE, doing business as S. Alfe Cigar Company, Philadelphia, Pa. Filed Feb. 12, 1931.



No claim is made to the words "Five," "Ten," "Cents," "Tagliati," and "Sigari" apart from the mark as shown.
For Cigars.
Claims use since July, 1927.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 279,925. HUGO JUNKERS, Dessau, Germany. Filed Feb. 26, 1929.



For Electrically Heated Boilers for the Production of Hot Water and Steam, Electrical Stoves, Electrical Radiators, Electrical Roasting and Baking Ovens, Electrical Grills, Electrical Cooking Stoves, Electrical Lamps for Illumination, Electrical Glow Lamps for Weak Currents, Thermostat-Controlled Electric Switches, Electric Lamps, Electrical Motors and Generators, Electrical Fans.
Claims use since May 28, 1924.

Ser. No. 309,588. ERNEST E. HIGHFILL, doing business as The Safe Way Auto Light Co., Los Angeles, Calif. Filed Jan. 3, 1931.

Safe-Ray

For Electric Lamps for Use on Vehicles to Display Manual Signals.
Claims use since Dec. 18, 1930.

Ser. No. 309,738. MILES A. LONG, doing business as Cardinal Radio Mfg. Co., Los Angeles, Calif. Filed Jan. 8, 1931.

CINDERELLA

For Radio Receiving Sets.
Claims use since Nov. 1, 1930.

Ser. No. 310,493. SOAPLESS FOAM, LIMITED, London, England. Filed Jan. 28, 1931.

ZOTIS

For Electrically-Operated Aerating Equipment for Producing Lather or Foam for Shampooing the Hair.
Claims use since December, 1929.

Ser. No. 310,888. SPENCER THERMOSTAT COMPANY, Cambridge, Mass. Filed Feb. 9, 1931.

KLIXON

For Temperature Controlled Electric Switches Used, for Example, in the Control of the Gas-Burning Furnaces.
Claims use since Sept. 3, 1930.

Ser. No. 311,936. THE STANLEY WORKS, New Britain, Conn. Filed Mar. 9, 1931. Under section 5b of the act of 1905 as amended in 1920.

STANLEY

For Electric Tools Consisting in Drills, Hammers, Screw Drivers, Grinders (Bench, Aerial, and Pedestal), Saws, Shears, and Sanders.
Claims use since February, 1928.

Ser. No. 312,535. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., and New York, N. Y. Filed Mar. 25, 1931.

SINGER

For Electric Vacuum Cleaners and Dust-Bags Therefor.
Claims use since November, 1928.

Ser. No. 312,545. BURNDY ENGINEERING COMPANY, INC., New York, N. Y. Filed Mar. 26, 1931.

TAPIT

For Electrical Connectors for Wires, Cables, Tube, Rod, and the Like.
Claims use since Mar. 1, 1930.

Ser. No. 312,638. BLAKE MANUFACTURING COMPANY, Springfield, Mass. Filed Mar. 28, 1931.

SUNLIGHT BATTERIES

No claim is made to the word "Batteries" apart from the mark shown.
For Dry Batteries.
Claims use since June 4, 1928.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 298,426. MILTON BRADLEY COMPANY, Springfield, Mass. Filed Apr. 5, 1930.

CHECK And DOUBLE CHECK!

For Games Played with Cards and Dice.
Claims use since Mar. 31, 1930.

Ser. No. 306,734. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Oct. 14, 1930.

PROTECTO

For Fishing Reel Cases.
Claims use since Oct. 1, 1930.

Ser. No. 311,012. AUGUSTA WASSON, Whitestone, Long Island, N. Y. Filed Feb. 12, 1931.

WASSY

For Dolls.
Claims use since Sept. 1, 1930.

Ser. No. 311,455. WHOLESALE RADIO SERVICE CO., INC., Wilmington, Del., and New York, N. Y. Filed Feb. 25, 1931.



No claim is made to the words "Athletic Goods" except as used in the mark shown in the drawing.
For Complete Line of Sporting and Athletic Goods—Namely, Baseball Gloves, Bats, Masks, Balls, Tennis Balls, Rackets, Covers, Presses, Golf Bags, Golf Sticks, Footballs, Basketballs, Soccer Balls, Striking Bags, Boxing Gloves, and Skates.
Claims use since Feb. 1, 1931.

Ser. No. 311,465. WILLIAM BAMBER, Banstead, Surrey, England. Filed Feb. 26, 1931.

MEXiT

For Constructional Toys.
Claims use since June 1, 1930.

Ser. No. 311,781. THE HOME BILLIARDETTE TABLE COMPANY, INC., Chicago, Ill. Filed Mar. 5, 1931.



The drawing is partially lined for the color red.
For Pool Tables.
Claims use since Feb. 2, 1931.

Ser. No. 311,787. GEORGE K. MANTAS, Brooklyn, N. Y. Filed Mar. 5, 1931.



GOLD STAR

The drawing is lined for gold.
For Apparatus for Table Golf—Namely, Game Pieces for Arrangement on Billiard Tables, Pool Tables, and the Like.
Claims use since Nov. 12, 1930.

Ser. No. 311,803. JOHN TRAIN, Pipestone, Minn. Filed Mar. 5, 1931.

INSTRUCTO

For Card Games.
Claims use since Nov. 15, 1930.

Ser. No. 312,393. DELLAS J. SPENCE, doing business as Taneycomo Fish Bait Company, Branson, Mo. Filed Mar. 21, 1931.

TAN-CO-MO

For Prepared Fish Bait.
Claims use since Mar. 15, 1926.

Ser. No. 312,513. ESSEX RUBBER COMPANY INC., Trenton, N. J. Filed Mar. 25, 1931.



For Inflatable Rubber Play Balls and Swimming Tubes.
Claims use since Oct. 29, 1930.

Ser. No. 312,653. MAXWELL M. KAHN, dong business as Maxwell Rubber Products, Belleville, N. J. Filed Mar. 28, 1931.

TAMBY

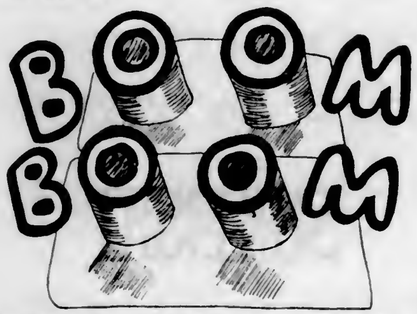
For Toy Animals and Other Toy Figures Made of Rubber.
Claims use since Feb. 7, 1931.

Ser. No. 312,758. CLAUDE E. HOOPER, New York, N. Y. Filed Mar. 31, 1931.

Boom Boom

For Games Employing Boards or Charts, and Boards or Charts for Playing Games.
Claims use since Mar. 5, 1931.

Ser. No. 312,759. CLAUDE E. HOOPER, New York, N. Y. Filed Mar. 31, 1931.



For Games Employing Boards or Charts, and Boards and Charts for Playing Games.
Claims use since Mar. 5, 1931.

Ser. No. 313,194. EDWIN J. KLIN, Chicago, Ill. Filed Apr. 10, 1931.

"SOCK-EM"

For Golf Clubs.
Claims use since Dec. 1, 1930.

Ser. No. 313,236. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Apr. 11, 1931.

BALQUIL

For Fishing Floats.
Claims use since Mar. 30, 1931.

Ser. No. 313,237. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed Apr. 11, 1931.

COMRADE

For Fishing Reels.
Claims use since Apr. 1, 1931.

Ser. No. 313,245. VICTOR KENEY, Woodside, Long Island, N. Y. Filed Apr. 11, 1931.



No claim is made to the words "Trade Mark" apart from the mark shown on the drawing.
For Doll Eyes and Eye Lashes, Dolls, Face Masks, and Animal Toys.
Claims use since Apr. 6, 1931.

Ser. No. 313,263. WOLVERINE SUPPLY & MANUFACTURING COMPANY, Pittsburgh, Pa. Filed Apr. 11, 1931.



For Toy Sets Comprising Gardening Tools, Gardening Implements, Flower Pots, and Seeds.
Claims use since Feb. 20, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 310,330. DURO METAL PRODUCTS COMPANY, Chicago, Ill. Filed Jan. 24, 1931.

DURO CHROME

The word "Chrome" is disclaimed apart from the mark as shown.
For Automotive Tools—Namely, Socket Wrenches, Socket Wrench Kits Comprising Containers and Sets of Wrenches, Valve Reamers, and Valve Grinding Machines.
Claims use since Jan. 13, 1931.

Ser. No. 310,499. WESTERN PRECIPITATION COMPANY, Los Angeles, Calif. Filed Jan. 28, 1931.



For Apparatus for Subjecting Gases to Centrifugal Action.
Claims use since Jan. 13, 1931.

Ser. No. 311,389. LUTHER GRINDER & TOOL COMPANY, Milwaukee, Wis. Filed Feb. 24, 1931.

MASTER

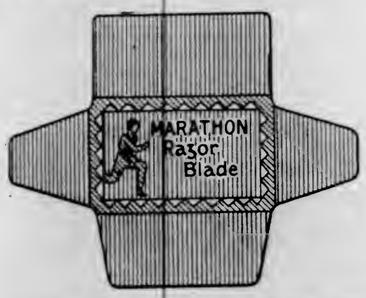
For Hand Power Sharpening Grinders.
Claims use since Sept. 16, 1930.

Ser. No. 312,179. ALBERT A. FISH, doing business as Richards Manufacturing Company, Philadelphia, Pa. Filed Mar. 16, 1931.

SAVE-ALL

For Mixture Control Valves for Carbureters.
Claims use since Mar. 12, 1931.

Ser. No. 312,263. Marathon Razor Blade Co., Inc., Irvington, N. J. Filed Mar. 18, 1931.



The words "Razor Blade" are disclaimed apart from the mark shown in the drawing. Applicant disclaims the representation of the carton and the exclusive use of the red label apart from the mark as shown in the drawing.

For Razors, Pen Knives, Scissors, Razor Blade Holders.
Claims use since Mar. 19, 1930.

Ser. No. 312,709. Leo M. Harvey, doing business as Harvey Machine Company, Los Angeles, Calif. Filed Mar. 30, 1931.



No claim is made to the separate word "Clipper" apart from the mark as shown.

For Fruit and Nut Clippers and Shears.
Claims use since Feb. 15, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 308,046. The Van Beuren Corporation, New York, N. Y. Filed Nov. 18, 1930.

VAGABOND ADVENTURE SERIES

No claim is made to the words "Adventure Series" apart from the mark as shown.

For Motion-Picture Films for Use by Motion-Picture Exhibitors.
Claims use since March, 1930.

Ser. No. 312,038. Bennett Pumps Corporation, Muskegon Heights, Mich. Filed Mar. 12, 1931.

STATIONETTE

For Portable Liquid Dispensing Apparatus Including a Liquid Measuring Pump.
Claims use since July 5, 1930.

Ser. No. 312,390. David C. Rockola, Chicago, Ill. Filed Mar. 21, 1931.

WEIGHT-O-MATIC

For Weighing Scales,
Claims use since Feb. 15, 1931.

Ser. No. 313,090. I. Newman & Sons, Inc., New York, N. Y. Filed Apr. 8, 1931.

NEWMAN-BERLEI

For a Device or Apparatus for Determining Basic Types of the Human Figure to Assist in the Designing of Foundation Garments That Will Fit Each Individual Figure.
Claims use since Feb. 25, 1931.

Ser. No. 313,119. The Bishop Company, North Attleboro, Mass. Filed Apr. 9, 1931.

MARQUIS

For Ophthalmic Mountings and Parts Thereof.
Claims use since Feb. 1, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 311,857. The Weidlich Bros. M'f'g. Co., Bridgeport, Conn. Filed Mar. 4, 1931.

BLUE RIBBON

For Trophies Consisting of Loving Cups, Sport Statuette Figures and Plaques and the Like and Made or Plated with Precious Metal.
Claims use since Feb. 17, 1931.

Ser. No. 312,073. Waite, Thresher Corporation, Providence, R. I. Filed Mar. 12, 1931.

VICTORIANA

For Jewelry for Personal Wear or Adornment, Not Including Watches.
Claims use since Feb. 2, 1931.

Ser. No. 312,493. Premier Jewelry Company, New York, N. Y. Filed Mar. 24, 1931.



No claim is made to the exclusive use of the words "Sta-Strung," "Guarantee," and "See Other Side" apart from the mark as shown on the drawing.

For Unbreakable Necklace Cables.
Claims use since Jan. 2, 1931.

Ser. No. 312,494. Premier Jewelry Company, New York, N. Y. Filed Mar. 24, 1931.

PREMIER

No claim is made to the exclusive use of the representation of the goods apart from the mark as shown on the drawing.

For Unbreakable Necklace Cables.
Claims use since Jan. 2, 1931.

Ser. No. 312,514. Fifth Avenue Platinum Shops, Inc., New York, N. Y. Filed Mar. 25, 1931.

BLUE RIVER

For Finger Rings and Other Articles of Jewelry for Personal Wear, Not Including Watches.
Claims use since Feb. 1, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 297,760. The Paraffine Companies, Inc., San Francisco, Calif. Filed Mar. 22, 1930.

PABCO

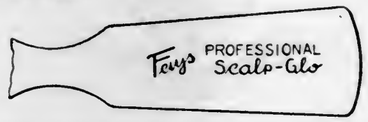
For Paint Brushes.
Claims use since Jan. 1, 1923.

Ser. No. 306,291. Stametco Broom & Mfg. Co. Inc., St. Paul, Minn. Filed Oct. 1, 1930.

Zipp Over

For Brooms and Mop Attachments for Brooms.
Claims use since Aug. 15, 1930.

Ser. No. 312,368. Edward J. Fay, New York, N. Y. Filed Mar. 21, 1931.



No claim is made to the exclusive use of the representation of the brush handle and the word "Professional" apart from the mark as shown on the drawing.

For Hair and Toilet Brushes.
Claims use since January, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 306,238. R. C. Heller Co., Inc., Baltimore, Md. Filed Sept. 30, 1930.

GOLD BOND

For Mattresses.
Claims use since 1913.

Ser. No. 311,333. Helan Haills-Karlebach, New York, N. Y. Filed Feb. 21, 1931.

THE SILENT VALET

For Clothes Costumers.
Claims use since Nov. 8, 1930.

Ser. No. 311,477. The Hoosier Manufacturing Company, New Castle, Ind. Filed Feb. 26, 1931.

HOOSIER

For Kitchen and Breakfast Room Furniture—Namely, Kitchen Cabinets, Tables with Wood and Porcelain Tops, Stools, Chairs, and Various Types of Cabinets for Kitchen Use Including Portable and Built-In Units.
Claims use since Sept. 1, 1900.

Ser. No. 312,077. Wilson-Jones Company, Chicago, Ill. Filed Mar. 12, 1931.

VISIREF

For Visible Card Index Cabinet.
Claims use since Dec. 19, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 279,932. Hugo Junkers, Dessau, Germany. Filed Feb. 26, 1929.



For Coal, Wood, Oil, Vapor, and Gas Heaters and Stoves; Ventilating Fans and Coolers, Heating and Cooling Radiators, Metallic Stacks and Chimneys, Oil and Gas Burners, Hearths; Dryers for Chemicals, Textile Fibres, and Fabrics and for Wood, Oil, Vapor, Gas, and Calcium Lamps.
Claims use since May 28, 1924.

Ser. No. 310,815. THE WEHALE COMPANY, Newark, Ohio. Filed Feb. 6, 1931.

WELFARE

For **Stoves and Ranges** Including Both Heating and Cooking Stoves Adapted to Use Gaseous, Liquid, or Solid Fuel.
Claims use since February, 1920.

Ser. No. 312,367. ECHOLS BROS. RADIATOR WORKS, Fort Worth, Tex. Filed Mar. 21, 1931.

EASY-WELD

For Acetylene Gas Generators.
Claims use since Oct. 1, 1930.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 312,573. THE RUSSELL MANUFACTURING COMPANY, Middletown, Conn. Filed Mar. 26, 1931.

RUSCO

For **Belting Made of Rubber for Power Transmission, Elevating and Conveying Purposes.**
Claims use since Aug. 2, 1930.

CLASS 36

Musical Instruments and Supplies

Ser. No. 308,534. CZECHOSLOVAK MUSICAL INSTRUMENTS COMPANY, New York, N. Y. Filed Dec. 3, 1930.

ARTEX

For Violins, **Violas, Cellos, Double Basses,** Mandolins, Banjo Mandolins, **Ukuleles, Banjo Ukeleles,** Tenor Ukuleles, Tiples, Banjos, **Tenor Banjos, Guitars,** Tenor Guitars, Accordions, Piano **Accordions, Harmonicas,** Megaphones, Zithers, Lutes, Lute **Mandolins, Flutes,** Drums, Trumpets, Cornets, Trombones, **Saxophones, Circular** Altos, Upright Altos, Clarinets, Alto **Clarinets, Baritones,** Basses, Melophones, Metal Clarinets, **Oboes,** Sousaphones, Bassoons, Bugles, Fifes, French Horns, **Ocarinas,** Piccolos, Cymbals, Xylophones, Mouthpieces, **Reeds,** Mutes, Music Stands; Bows for Violins, Cellos, **Basses, Violas;** Tuning Pipes for Violins, Cellos, Basses, Violas; Bridges for Violins, Cellos, **Basses, Violas;** Chinrests for Violins, Cellos, Basses, **Violas;** Pegs for Violins, Cellos, Basses, Violas; Tailpieces for Violins, Cellos, Basses, Violas; Mutes for Violins, Cellos, Basses, Violas; Bow Hair for Violins, Cellos, Basses, Violas; Strings for Violins, Cellos, Basses, Violas, Mandolins, Guitars, Tenor Benjos, Banjos, Zithers, Ukuleles.
Claims use since May 1, 1930.

CLASS 37

Paper and Stationery

Ser. No. 309,771. EDWARDS & DEUTSCH LITHOGRAPHING COMPANY, Chicago, Ill. Filed Jan. 9, 1931.

REPEAL-GRAM

For Correspondence Forms and Partially-Printed Forms Sold as Such.
Claims use since July 8, 1930.

Ser. No. 310,000. VELDOWN COMPANY, INC., New York, N. Y. Filed Jan. 15, 1931.



The background of the trade-mark being lined to indicate pink and the stripes being lined to indicate grey.
For Cleansing Tissues Formed of Paper.
Claims use since Nov. 1, 1930.

Ser. No. 311,004. SHEETPAINT PRODUCTS CORPORATION, New York, N. Y. Filed Feb. 12, 1931.



No claim being made to the exclusive use of the words "A Product" apart from the mark as shown in the drawing (the drawing being lined to indicate the colors yellow, green, and red.)
For Wall Coverings of Coated Paper.
Claims use since Dec. 18, 1930.

Ser. No. 311,584. THE J. L. MAY COMPANY, New York, N. Y. Filed Feb. 28, 1931.



Applicant disclaims the words "Pintickets," "Labels," "Tags," and "Specialties" appearing on the drawing.
For Pintickets, Labels, and Tags.
Claims use since July, 1916.

Ser. No. 311,733. HURLBUT PAPER COMPANY, South Lee, Mass. Filed Mar. 4, 1931.

Papers by Hurlbut

Applicant disclaims an exclusive right to the word "Papers" apart from the mark shown in the drawing.
For Writing and Printing Paper.
Claims use since Apr. 1, 1930.

Ser. No. 312,497. THE ROYAL LACE PAPER WORKS, INC., Brooklyn, N. Y. Filed Mar. 24, 1931.

Sello-Pakt

For Paper Products—Namely, Shelf Paper, Lace Paper, Doilies, Napkins, Towels, Tissue Paper, and Fancy Printed Lace Paper in Rolls and Sheets.
Claims use since Jan. 21, 1931.

CLASS 38

Prints and Publications

Ser. No. 298,574. KEITH CORPORATION, Chicago, Ill. Filed Apr. 9, 1930.

BEAUTIFUL HOMES

For Magazines.
Claims use since April, 1926.

Ser. No. 301,900. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y. Filed May 31, 1930.

Blue Band MAGAZINE

For Monthly Magazine.
Claims use since May 9, 1930.

Ser. No. 310,586. MICHAEL DESTIN PELLETIER, New York, N. Y. Filed Jan. 30, 1931.

"Your Naborhood Who's Who—What?"

For Cartoons, Advertising Circulating Letters, and a Periodical Publication.
Claims use since September, 1928.

Ser. No. 311,211. UNITED STATES COAST ARTILLERY ASSOCIATION, Washington, D. C. Filed Feb. 18, 1931.

COAST ARTILLERY JOURNAL

For Monthly Periodical.
Claims use since July 1, 1922.

Ser. No. 311,928. PURITY OATS COMPANY, Keokuk, Iowa. Filed Mar. 9, 1931.

FLAMIN' MAMIE

For Printed Mailing Card Published Weekly.
Claims use since Sept. 29, 1927.

Ser. No. 312,292. DISK-O-KNOWLEDGE, INC., New York, N. Y. Filed Mar. 19, 1931.

"DISK-O-KNOWLEDGE"

The word "Disk" shown on the drawing is disclaimed apart from the mark as shown.
For Maps and Charts.
Claims use since Mar. 10, 1931.

Ser. No. 312,526. OHIO STATE AUTOMOBILE ASSOCIATION, Columbus, Ohio. Filed Mar. 25, 1931.

Ohio State Motor News

For Periodical Publications.
Claims use since Jan. 5, 1931.

Ser. No. 312,625. PULITZER PUBLISHING COMPANY, St. Louis, Mo. Filed Mar. 27, 1931.

Speaking From Experience by MARTHA CARR

The drawing presented herewith is lined merely for the purpose of shading, the lining not being intended to indicate any particular color or colors. No claim is made to the words "Martha Carr" apart from the mark shown.

For Section Department or Column of Newspapers.

Claims use since Mar. 23, 1931.

Ser. No. 312,733. AMERICAN INSTITUTE OF BANKING, New York, N. Y. Filed Mar. 30, 1931.



No claim being made to the words "Banking Education" apart from the mark shown.

For Booklets.

Claims use since June, 1918.

CLASS 39

Clothing

Ser. No. 277,637. OMAHA CAP MANUFACTURING COMPANY, Omaha, Nebr. Filed Jan. 5, 1929.



The parallel horizontal lines within the outlined shield in the drawing and specimens are shading lines forming a part of the shield design and are not a conventional representation of any color.

For Men's and Boys' Caps.

Claims use since Oct. 11, 1928.

Ser. No. 296,198. RAND SHOE COMPANY, New Orleans, La. Filed Feb. 18, 1930.

Jeannine

For Leather Shoes and Boots.

Claims use since Jan. 15, 1930.

Ser. No. 309,600. J. HILBORN & W. E. REED, INC., New York, N. Y. Filed Jan. 3, 1931.

POLOVER ALL WOOL KNIT TO FITU

Applicant disclaims the words "All Wool" and "Knit to Fitu."

For Articles Made of Knitted Fabric—To-wit, Hosiery and Sweaters Made of Woolen Yarn.

Claims use since Oct. 1, 1930.

Ser. No. 311,294. WEST COAST KNITTING MILLS, Los Angeles, Calif. Filed Feb. 20, 1931.

Hollywood

For Swimming Suits.

Claims use since Apr. 2, 1930.

Ser. No. 311,484. JACOB L. ORENT, Brooklyn, N. Y. Filed Feb. 26, 1931.

TWIN FASHION

No claim is made to the word "Fashion" apart from the mark shown on the drawing.

For Ladies' Fur Coats.

Claims use since Feb. 1, 1931.

Ser. No. 311,631. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Mar. 2, 1931.

USCO

For Boots and Shoes Made Wholly or in Part of Rubber and for Rubber Soles.

Claims use since Jan. 22, 1931.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 311,911. BAILEY COMPANY, Cleveland, Ohio. Filed Mar. 9, 1931.

MASTERFIELD

For Men's and Boys' Clothing.

Claims use since Jan. 28, 1931.

Ser. No. 311,915. HAHN DEPARTMENT STORES, INC., Wilmington, Del. Filed Mar. 9, 1931.

MILLAY

For Hosiery.

Claims use since Mar. 2, 1931.

Ser. No. 312,102. THE JUVENILE SHOE CORPORATION OF AMERICA, Aurora, Mo. Filed Mar. 13, 1931.

DUDE RANCH
CAMP-MOCS

For Boots and Shoes of Leather, Including Moccasins.

Claims use since Feb. 16, 1931.

Ser. No. 312,115. NEW BALANCE ARCH COMPANY, INC., North Cambridge, Mass. Filed Mar. 13, 1931.

NEW BALANCE ARCH

For Men's, Women's, and Children's Boots and Shoes Made Wholly or in Part of Leather, Rubber, Canvas, or Textile Material.

Claims use since Mar. 1, 1906.

Ser. No. 312,500. STRAUS, ROYER & STRASS, INC., Baltimore, Md. Filed Mar. 24, 1931.



For Women's and Children's Dresses, Shirts, Shorts, Blouses, Gym Bloomers, Skirts, Suits, Middy Blouses, Jackets, Blazers, Pajamas, Longies, Vests, Vestees, Knickers, Tuxedo and Running Pants.

Claims use since Feb. 28, 1931.

Ser. No. 312,814. PROPPER-MCCALLUM HOSIERY CO., INC., New York, N. Y. Filed Apr. 1, 1931.

GARTUK

For Hosiery.

Claims use since Mar. 5, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 310,751. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England. Filed Feb. 5, 1931.

FIDENKA

For Braid Made of Cellulose.

Claims use since Aug. 17, 1929.

Ser. No. 311,419. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England, Filed Feb. 25, 1931.

FIDUCIA

For Braid Made of Cellulose.
Claims use since Aug. 17, 1929.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 293,616. CLARK & GLENDON INC., New York, N. Y. Filed Dec. 13, 1929.

Kerrydell

For Damask Fabrics.
Claims use since Sept. 1, 1929.

Ser. No. 297,848. CARSON PIRIE SCOTT & CO., Chicago, Ill. Filed Mar. 25, 1930.

LINSPUN PRINTS

No exclusive claim is made to the word "Prints" apart from the mark shown in the drawing.
For Cotton Piece Goods.
Claims use since July 1, 1928.

Ser. No. 300,281. INTERNATIONAL MERCHANDISING SYNDICATE, INC., New York, N. Y. Filed May 10, 1930.

Siesta

For Mattress Ticking in the Piece.
Claims use since November, 1929.

Ser. No. 303,947. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England. Filed July 29, 1930.

FIDUCIA

For Piece Goods All Made of Cellulose.
Claims use since Aug 17, 1929.

Ser. No. 306,001. MICHEL DASSONVILLE, Paris, France. Filed Sept. 24, 1930.

MIKI

For Knitted, Netted, and Textile Fabrics in Piece Goods of Artificial Vegetable Material.
Claims use since Apr. 1, 1930.

Ser. No. 307,147. BRAND & OPPENHEIMER, INCORPORATED, New York, N. Y. Filed Oct. 24, 1930.

BON CEL

For Cotton Piece Goods.
Claims use since July 15, 1930.

Ser. No. 308,355. CARLIN COMFORTS, INC., New York, N. Y. Filed Nov. 28, 1930.

CARLINESE

For Comfortables Constructed of Textile Fabrics.
Claims use since Oct. 20, 1920.

Ser. No. 310,957. S. SLATER & SONS, INC., New York, N. Y. Filed Feb. 11, 1931.

DULAINE

For Rayon, Silk, Cotton, Linen, and Pile Fabrics and/or Combinations Thereof.
Claims use since Mar. 25, 1930.

Ser. No. 311,215. C. M. DELAND, New York, N. Y. Filed Feb. 18, 1931.

Velvemont

For Woolen Piece Goods.
Claims use since Jan. 2, 1925.

Ser. No. 311,360. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Feb. 24, 1931.

La Loie Splendide

No claim is made to the word "Splendide" apart from the mark shown in the drawing.
For Pile Fabrics in the Piece.
Claims use since Feb. 17, 1931.

Ser. No. 311,529. LESHER, WHITMAN & CO., INC., New York, N. Y. Filed Feb. 27, 1931.



For Bedspreads, Made-Up Window Draperies, and a Fabric with a Warp of Cotton, or of Cotton and Mohair Mixed, or of Cotton and Silk Mixed, or of Cotton and Artificial Silk Mixed, and a Filling of Wool, or Mohair, or Alpaca, or Silk, or Cotton, or Artificial Silk, Singly or Combined.
Claims use since Feb. 20, 1931.

Ser. No. 312,022. THE WEDLER-SHUFORD CO., St. Louis, Mo. Filed Mar. 11, 1931.



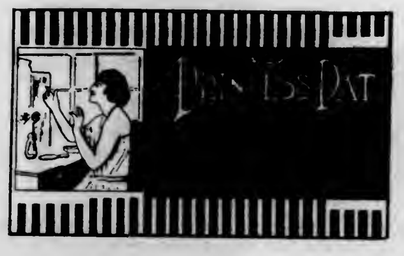
No claim is made to the exclusive use of the word "Napkins" apart from the trade-mark shown.
For Infants' Textile Napkins.
Claims use since Feb. 3, 1931.

Ser. No. 312,033. AMERICAN BLEACHED GOODS COMPANY, INC., New York, N. Y. Filed Mar. 12, 1931.

PERMAFAST

For Cotton Piece Goods.
Claims use since Feb. 5, 1931.

Ser. No. 312,161. PRINCESS PAT PRODUCTS LIMITED, Toronto, Ontario, Canada. Filed Mar. 14, 1931.



The portrait appearing on the drawing is fanciful.
For Hair Nets.
Claims use since Dec. 15, 1920.

406 O. G.—39

Ser. No. 312,581. E. F. TIMME & SON, New York, N. Y. Filed Mar. 26, 1931.

KARALAINE

For Pile Fabrics in the Piece.
Claims use since Mar. 18, 1931.

Ser. No. 312,586. HYDROPEL PROCESS COMPANY, Boston, Mass. Filed Mar. 26, 1931.

HYDROPEL

For Woolen, Silk, Rayon, Artificial Silk, Hair, and Cotton Piece Goods and Piece Goods Containing a Mixture of Same.
Claims use since Oct. 16, 1930.

Ser. No. 312,599. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Mar. 27, 1931.

CELANGE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Mar. 26, 1931.

Ser. No. 312,600. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Mar. 27, 1931.

DOECEL

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Mar. 26, 1931.

Ser. No. 312,686. ASSOCIATED APPAREL INDUSTRIES, INC., Chicago, Ill. Filed Mar. 30, 1931.

PARAGOLD

For Elastic Webbing for Use in Making Garments.
Claims use since Mar. 7, 1931.

CLASS 43

Thread and Yarn

Ser. No. 305,998. MICHEL DASSONVILLE, Paris, France. Filed Sept. 24, 1930.

MIKI

For Thread and Yarn of Artificial Vegetable Material and for Mixtures of the Same with Cotton, Silk, or Wool.
Claims use since Apr. 1, 1930.

Ser. No. 311,352. ACETA G. M. B. H., Berlin-Lichtenberg, Germany. Filed Feb. 24, 1931.

ACETA

For Threads and Yarns of Artificial Silk.
Claims use since Apr. 11, 1927.

Ser. No. 312,336. DU PONT RAYON COMPANY, Buffalo, N. Y. Filed Mar. 20, 1931.

DU PONT

ACELE

For Cellulose-Acetate Yarns, Threads, and Filaments.
Claims use since Feb. 10, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 312,816. RESEARCH PRODUCTS CORPORATION, New York, N. Y. Filed Apr. 1, 1931.

SPECIFIX

For Dental Alloy.
Claims use since Mar. 30, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 292,951. PACIFIC PRODUCTS, INC., San Francisco, Calif. Filed Nov. 26, 1929.



For Mineral Water.
Claims use since Nov. 8, 1929.

Ser. No. 300,214. MAYFLOWER BEVERAGE CO., INC., Jamaica Plain, Mass. Filed May 9, 1930.

MAYFLOWER

For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks; Syrups and Extracts for Making Same, and Ginger Ale.
Claims use since Apr. 24, 1930.

Ser. No. 313,193. KLEE & COLEMAN, Indianapolis, Ind. Filed Apr. 10, 1931.

Trulé

For Non-Alcoholic, Non-Cereal, Maltless Beverage Sold as a Soft Drink and Sirups and Extracts for Making the Same.
Claims use since Mar. 1, 1931.

CLASS 46

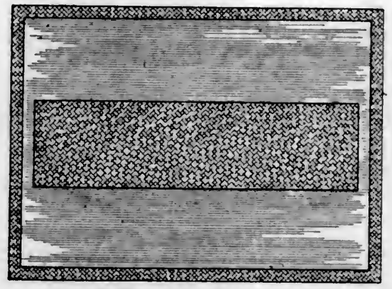
Foods and Ingredients of Foods

Ser. No. 284,413. NEW ENGLAND FISH COMPANY, Seattle, Wash. Filed May 21, 1929.

NEFCO

For Fish, and Seafoods—Namely, Fresh, Chilled, Frozen, Canned, Smoked, and Salted Fish (Whole and in Steaks and Fillets); Fresh Shucked Oysters in Cans, Fresh Clams, Fresh Crabs, and Pulverized Fish Meal Suitable for Stock Food.
Claims use since January, 1929.

Ser. No. 284,415. NEW ENGLAND FISH COMPANY, Seattle, Wash. Filed May 21, 1929.



The drawing is shaded to indicate the colors orange and blue.
For Fish and Seafoods—Namely, Fresh, Chilled, Frozen, Canned, Smoked, and Salted Fish (Whole and in Steaks and Fillets); Fresh Shucked Oysters in Cans, Fresh Clams, Fresh Crabs, and Pulverized Fish Meal Suitable for Stock Food.
Claims use since Jan. 17, 1929.

Ser. No. 297,916. J. S. IVINS' SON, INC., Philadelphia, Pa. Filed Mar. 26, 1930.



The words "They are Better" are disclaimed apart from the mark as shown on the drawing.
For Cookies, Cakes, and Crackers.
Claims use since Jan. 18, 1930.

Ser. No. 303,356. G. VIVIANO, INC., Detroit, Mich. Filed July 10, 1930.



The lining on the drawing is for the purposes of shading only.
For Fish Paste; Fish Products—Namely, Canned Tunny Fish, Hors d'Œuvre Fish Cocktail, Antipasto, Filet of Mackerels, Sardines, Filets of Kippered Herrings, Kippered Herring, and Anchovies; Jellies.
Claims use since July 1, 1928.

Ser. No. 305,827. PURESWEET CONFECTIONS, INC., Tulsa, Okla. Filed Sept. 18, 1930.

"Just Enough"

For Candy.
Claims use since Oct. 28, 1929.

Ser. No. 306,960. NYAL COMPANY, Detroit, Mich. Filed Oct. 20, 1930.

Sweet Treet

For Candy.
Claims use since Aug. 28, 1930.

Ser. No. 307,743. JOHN R. SILVA, doing business as John R. Silva & Co., Brooklyn, N. Y. Filed Nov. 10, 1930.

NOSSOS

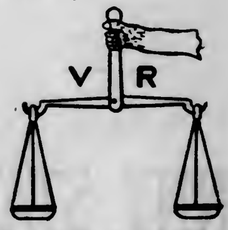
For Coffee, Olive Oil, Cocoa, Tea, Canned Sardines, Canned Salmon, Canned Tuna Fish, Canned Asparagus, Canned Green Peas, Canned String Beans, Canned Tomatoes, Salad Oil, Strawberry Jelly, Orange Marmalade, and Dried Assorted Fruits.
Claims use since June 1, 1930.

Ser. No. 307,774. THORKILD NORDBY HANSEN, Chicago, Ill. Filed Nov. 11, 1930.

Milkmellow

For Powder Used in the Preparation of Food Drinks.
Claims use since June 19, 1930.

Ser. No. 308,493. VALERIA RUTECKI, Philadelphia, Pa. Filed Dec. 1, 1930.



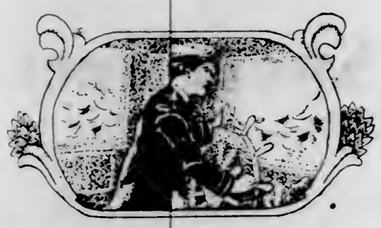
For a Food Preparation in Liquid Form for Use as a Body Builder for Persons Afflicted with Consumption, Tuberculosis, and General Weakness.
Claims use since Oct. 1, 1930.

Ser. No. 309,224. WALTER WHEELER BOWEN, doing business as Wafelteen Syrup Co., Miami, Fla. Filed Dec. 22, 1930.

WAFELTEEN SYRUP

The word "Syrup" is disclaimed apart from the other features of the mark shown in the drawing.
For Table Syrup.
Claims use since Dec. 10, 1930.

Ser. No. 309,867. PIONEER SALES CO., Philadelphia, Pa. Filed Jan. 12, 1931.



For Malt Extract.
Claims use since Nov. 15, 1930.

Ser. No. 310,072. PULVER COMPANY, INC., Rochester, N. Y. Filed Jan. 17, 1931.



For Chewing Gum.
Claims use since Sept. 18, 1930.

Ser. No. 310,496. STUART BROS. CORPORATION, Bartow, Fla. Filed Jan. 28, 1931.

SUNNY STATE

For Fresh Citrus Fruits.
Claims use since Dec. 18, 1930.

Ser. No. 311,439. GEORGE M. MEYER, doing business as Meyer Food Products Co., Cincinnati, Ohio. Filed Feb. 25, 1931.

MEYER'S

For Horse Radish, Horse Radish and Mustard, Mexican Style Horse Radish.
Claims use since Jan. 2, 1920.

Ser. No. 311,643. CHAS. W. BAUERMEISTER CO., Terre Haute, Ind. Filed Mar. 3, 1931.

THE "Forsite" CLUB

For Canned Fruits, Canned Vegetables, Canned Pork and Beans, Canned Hominy, Canned Sauer Kraut, Chili Con Carne, Canned Fish, Tomato Catsup, Prepared Mustard, Mayonnaise, Macaroni, Olives, Peanut Butter, Pickles, Salad Dressing, Coffee, Tea, Cocoa, Jams, Jelly, Preserved Fruit, Mincemeat, Breakfast Cereal, Rolled Oats, Pancake Flour, Buckwheat Flour, Tapioca, Jelly Powder, Rice, Sugar, Flavoring Extracts for Foods, Canned Milk, Dried Fruits, Table Syrup, Crackers, Dried Vegetables, and Spices.
Claims use since 1929.

Ser. No. 311,789. ROETHLISBERGER & CO. INC., New York, N. Y. Filed Mar. 5, 1931.



The word "Cheez" is disclaimed when used apart from the mark shown on the drawing.
For Cheese.
Claims use since Mar. 3, 1931.

Ser. No. 311,814. EDITH K. BAKER, Fort Myers, Fla. Filed Mar. 6, 1931.

SENFORMOR

For Conserves, Marmalades, Pickles, Jellies, Canned Fruits, Chutney, Candies, Candied Fruits, and Fruit Peels.
Claims use since Mar. 3, 1930.

Ser. No. 311,949. E. J. BRACH & SONS, Chicago, Ill. Filed Mar. 10, 1931.

Carolina Blacks

For Candy.
Claims use since Dec. 1, 1930.

Ser. No. 312,034. AMERICAN MAIZE-PRODUCTS COMPANY, New York, N. Y. Filed Mar. 12, 1931.

AMAIZO

For Corn and Cane Syrups, Cane and Maple Syrups, Corn Syrups, Corn Oils, and Cornstarch.
Claims use since Oct. 4, 1920.

Ser. No. 312,036. AMERICAN MAIZE-PRODUCTS COMPANY, New York, N. Y. Filed Mar. 12, 1931.

DON AMAIZO

For Corn Salad Oil.
Claims use since Jan. 4, 1927.

Ser. No. 312,054. JOE LOWE CORPORATION, Brooklyn, N. Y. Filed Mar. 12, 1931.

GYRO-FAT

The word "Fat" is disclaimed apart from the mark as shown in the drawing.
For Edible Fats, More Particularly for Frying Purposes.
Claims use since Feb. 2, 1931.

Ser. No. 312,143. ARTHUR W. FEY, Hazleton, Pa. Filed Mar. 14, 1931.

NUT-O-WHIP

No claim is made to the word "Nut" or the word "Whip" apart from the mark as shown.
For Marshmallow Whip Containing Nuts.
Claims use since Feb. 28, 1931.

Ser. No. 312,812. PABST CORPORATION, doing business as Europa Malt Syrup Co., Milwaukee, Wis. Filed Apr. 1, 1931.

OLD SETTLER

For Malt Syrup.
Claims use since May 9, 1930.

Ser. No. 312,964. STERLING PRODUCTS CO., Evansville, Ind. Filed Apr. 4, 1931.

HOOSIER GIRL



The picture of the girl appearing in the drawing is fanciful.
For Malt Extract.
Claims use since Feb. 26, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 310,959. THE O. & W. THUM COMPANY, Grand Rapids, Mich. Filed Feb. 11, 1931.



No claim is made to the representation of a label or carton per se, and no claim is made to the exclusive use, apart from the mark as shown, of any of the wording appearing on the drawing other than the word "Tanglefoot."
For Sticky Fly Paper.
Claims use since May 26, 1930.

Ser. No. 312,885. ERICH BEYER, Chicago, Ill. Filed Apr. 2, 1931.



For Animal Watering Troughs.
Claims use since Jan. 1, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 19, 1931

283,083. HATS FOR WOMEN, MISSES, AND GIRLS AND LINGERIE FOR WOMEN, MISSES, AND GIRLS CONSISTING OF PAJAMA SUITS, LOUNGING ROBES, NEGLIGEES, DANCE SETS, PANTIES, BRASSIÈRES, BLOOMERS, SLIPS, SKIRTS, GOWNS, TEDDIES, AND COMBINATIONS. FOX-COFFEE-EDGE CO., Dallas, Tex.
Filed January 6, 1931. Serial No. 309,638. PUBLISHED MARCH 3, 1931. Class 39.

283,084. MACHINES AND APPARATUS FOR ELECTRIC AND ELECTROAUTOGENOUS CUTTING, WELDING, AND SOLDERING. "GRIESOGEN" GRIESHEIMER AUTOGEN VERKAUFS-GESELLSCHAFT M. B. H., Frankfort-on-the-Main-Gresheim, Germany.
Filed January 7, 1931. Serial No. 309,686. PUBLISHED MARCH 3, 1931. Class 21.

283,085. FINGER RINGS AND MOUNTINGS THEREFOR. BENJAMIN & EDWARD J. GROSS CO. INC., New York, N. Y.
Filed January 7, 1931. Serial No. 309,690. PUBLISHED MARCH 3, 1931. Class 28.

283,086. AUTOMOBILES AND MOTOR-DRIVEN TRUCKS AND STRUCTURAL PARTS THEREOF. GENERAL MOTORS CORPORATION, Detroit, Mich.
Filed January 16, 1931. Serial No. 310,014. PUBLISHED MARCH 3, 1931. Class 19.

283,087. FLAME ARRESTER AND BREATHING VALVE. THE STATTITE COMPANY, Houston, Tex.
Filed January 17, 1931. Serial No. 310,075. PUBLISHED MARCH 3, 1931. Class 13.

283,088. ANTISEPTICS. THE PEPSODENT CO., Chicago, Ill.
Filed December 23, 1930. Serial No. 309,284. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,089. WATERPROOFING PREPARATIONS. STRUCTURAL WATERPROOFING CO., INC., New York, N. Y.
Filed December 26, 1930. Serial No. 309,360. PUBLISHED FEBRUARY 24, 1931. Class 12.

283,090. BITUMINOUS COMPOUNDS FOR ROAD-MAKING OR ROAD-DRESSING PURPOSES. THE BRITISH TAROLEUM COMPANY, LIMITED, London, England.
Filed December 29, 1930. Serial No. 309,409. PUBLISHED FEBRUARY 24, 1931. Class 12.

283,091. PREPARATION FOR USE IN THE TREATMENT OF CARDIAC CONDITIONS. THE GRISARD LABORATORIES, INCORPORATED, Winchester, Tenn.
Filed December 30, 1930. Serial No. 309,472. PUBLISHED MARCH 3, 1931. Class 6.

283,092. FACE BRICK. STREATOR BRICK COMPANY, Streator, Ill.
Filed January 2, 1931. Serial No. 309,574. PUBLISHED MARCH 3, 1931. Class 12.

283,093. BITUMINOUS EMULSIONS FOR USE IN TREATING CONCRETE ROADWAYS AND THE LIKE. PIONEER PAPER COMPANY, Los Angeles, Calif.
Filed January 3, 1931. Serial No. 309,602. PUBLISHED MARCH 3, 1931. Class 12.

283,094. GLAZED AND UNGLAZED CLAY BUILDING TILE. CLAY PRODUCTS COMPANY, INC. OF INDIANA, Brazil, Ind.
Filed January 9, 1931. Serial No. 309,770. PUBLISHED MARCH 3, 1931. Class 12.

283,095. LADIES' AND MISSES' SHOES, SLIPPERS, PUMPS, AND LOW QUARTERS OF LEATHER, FABRIC, AND COMBINATIONS THEREOF. CARMO SHOE MFG. CO., Carthage, Mo.
Filed December 20, 1930. Serial No. 309,188. PUBLISHED MARCH 3, 1931. Class 39.

283,096. BIRTHDAY-CANDLE HOLDERS. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio.
Filed December 20, 1930. Serial No. 309,184. PUBLISHED MARCH 3, 1931. Class 34.

283,097. HATS FOR MEN. BYRON HAT CORPORATION, New York, N. Y.
Filed December 22, 1930. Serial No. 309,229. PUBLISHED FEBRUARY 24, 1931. Class 39.

283,098. FLASH LIGHTS. BOND ELECTRIC CORPORATION, Jersey City, N. J.
Filed December 23, 1930. Serial No. 309,259. PUBLISHED MARCH 3, 1931. Class 21.

283,099. PORTABLE ELECTRIC-LIGHT OUTFITS AND FITTINGS. IRA F. DASH, doing business as Darow Manufacturing Co., New York, N. Y.
Filed December 27, 1930. Serial No. 309,375. PUBLISHED MARCH 3, 1931. Class 21.

283,100. BOOTS, SHOES, SLIPPERS, AND HOUSE SLIPPERS MADE OF LEATHER, FELT, AND OTHER COTTON AND WOOLEN FABRICS AND COMBINATIONS OF THESE MATERIALS. RESTFEL SLIPPER CO., INC., New York, N. Y.
Filed December 27, 1930. Serial No. 309,396. PUBLISHED MARCH 3, 1931. Class 39.

283,101. FABRIC GLOVES. GOESSLING INC., New York, N. Y.
Filed January 2, 1931. Serial No. 309,560. PUBLISHED MARCH 3, 1931. Class 38.

283,102. ELECTRIC WELDING TORCH. WARNER ENGINEERING CORPORATION, LTD., Pomona, Calif.
Filed January 2, 1931. Serial No. 309,578. PUBLISHED MARCH 3, 1931. Class 21.

283,103. CARBON PAPER. HORDER'S INC., Chicago, Ill.
Filed December 31, 1930. Serial No. 309,523. PUBLISHED MARCH 3, 1931. Class 11.

283,104. PRINTING PLATES. ADDRESSOGRAPH COMPANY, Chicago, Ill.
Filed January 2, 1931. Serial No. 309,547. PUBLISHED MARCH 3, 1931. Class 50.

283,105. WRENCHES, WRENCH SETS, WRENCH SOCKETS, TOOL HANDLES, AND SCREW DRIVERS. J. H. WILLIAMS & Co., Buffalo, N. Y.
Filed January 2, 1931. Serial No. 309,579. PUBLISHED MARCH 3, 1931. Class 23.

283,106. ASBESTOS PACKING FOR PACKING GLANDS AND VALVE STEMS OF ENGINES, RADIATORS, PUMPS AND SIMILAR USES. CHARLES LAURENCE WILLIS, Brooklyn, N. Y.
Filed January 3, 1931. Serial No. 309,597. PUBLISHED MARCH 3, 1931. Class 35.

283,107. KITCHEN SCALES. HANSON SCALE COMPANY, Chicago, Ill.
Filed January 5, 1931. Serial No. 309,615. PUBLISHED MARCH 3, 1931. Class 26.

283,108. SAFETY-RAZOR BLADES. DANIEL H. RIDER, New York, N. Y.
Filed January 5, 1931. Serial No. 309,621. PUBLISHED MARCH 3, 1931. Class 23.

283,109. FURNITURE. THE MCCLELLAN MANUFACTURING CO., Los Angeles, Calif.
Filed January 8, 1931. Serial No. 309,739. PUBLISHED MARCH 3, 1931. Class 32.

283,110. CLOCKS. THE E. INGRAHAM COMPANY, Bristol, Conn.
Filed January 12, 1931. Serial No. 309,858. PUBLISHED MARCH 3, 1931. Class 27.

283,111. CLOCKS. THE E. INGRAHAM COMPANY, Bristol, Conn.
Filed January 12, 1931. Serial No. 309,859. PUBLISHED MARCH 3, 1931. Class 27.

283,112. CLOCKS. THE E. INGRAHAM COMPANY, Bristol, Conn.
Filed January 12, 1931. Serial No. 309,860. PUBLISHED MARCH 3, 1931. Class 27.

283,113. RADIOANTENNA. GOLDBERG BROTHERS, Denver, Colo.
Filed October 6, 1930. Serial No. 306,438. PUBLISHED MARCH 3, 1931. Class 21.

283,114. AUTOMATIC STOKERS. FIRE-O-MATIC, INC., Portland, Oreg.
Filed October 6, 1930. Serial No. 306,435. PUBLISHED MARCH 3, 1931. Class 34.

283,115. PAPER OR CARDBOARD CANS ESPECIALLY ADAPTED FOR HOLDING FOODSTUFFS. IOWA FIBER BOX COMPANY, Keokuk, Iowa.
Filed September 19, 1930. Serial No. 305,863. PUBLISHED MARCH 3, 1931. Class 2.

283,116. MEN'S, WOMEN'S, AND CHILDREN'S HATS OF FELT, STRAW, AND VELOUR AND MEN'S AND BOYS' CAPS OF FABRIC. THE MALLORY HAT COMPANY, Danbury, Conn.
Filed August 21, 1930. Serial No. 304,874. PUBLISHED MARCH 3, 1931. Class 39.

283,117. ORNAMENTAL GIFT BOXES AND CONTAINERS FOR CONFECTIONS, STATIONERY, AND LIKE ARTICLES SUITABLE FOR GIFTS MADE IN REPRESENTATION OF A BOOK AND EMPTY. PHILIP V. SPINNER & Co., Chicago, Ill.
Filed June 21, 1930. Serial No. 302,699. PUBLISHED MARCH 3, 1931. Class 2.

283,118. KNEE PADS FOR CLEANING, SCRUBBING, OR THE LIKE. NELLIE MACKAY, Jackson Heights, Long Island, N. Y.
Filed December 8, 1930. Serial No. 308,741. PUBLISHED MARCH 3, 1931. Class 50.

283,119. RODS, SAND CASTINGS, AND FORGINGS WHICH ARE OF NONFERROUS METAL IN THE ROUGH AND SEMIFINISHED. MUELLER BRASS CO., Port Huron, Mich.
Filed November 28, 1930. Serial No. 308,382. PUBLISHED MARCH 3, 1931. Class 14.

283,120. INTERNAL-COMBUSTION ENGINES. CLIMAX ENGINEERING COMPANY, Clinton, Iowa.
Filed September 26, 1930. Serial No. 306,089. PUBLISHED MARCH 3, 1931. Class 23.

283,121. AGRICULTURAL LIME. THE WASHINGTON BUILDING LIME COMPANY, Engle, W. Va., and Baltimore, Md.
Filed July 9, 1930. Serial No. 303,309. PUBLISHED MARCH 3, 1931. Class 10.

283,122. HOUSEHOLD AND OFFICE CHAIRS AND ROCKERS. THE C. F. STREIT MFG. CO., Cincinnati, Ohio.
Filed July 3, 1930. Serial No. 303,129. PUBLISHED MARCH 3, 1931. Class 32.

283,123. VENDING MACHINES. THE AUTOMATIC MERCHANDIZER, INC., East Cambridge, Mass.
Filed May 22, 1930. Serial No. 301,006. PUBLISHED MARCH 3, 1931. Class 23.

283,124. WOMEN'S COATS. CHICAGO MAIL ORDER COMPANY, Chicago, Ill.
Filed December 13, 1930. Serial No. 308,927. PUBLISHED MARCH 3, 1931. Class 39.

283,125. HOSIERY. NOMEND HOSIERY MILLS M. B. LAUBACH CO. INC., Philadelphia, Pa.
Filed December 12, 1930. Serial No. 308,901. PUBLISHED MARCH 3, 1931. Class 39.

283,126. MALT SYRUP. PURE-TEST FOOD PRODUCTS COMPANY, Chicago, Ill.
Filed December 15, 1930. Serial No. 308,999. PUBLISHED MARCH 3, 1931. Class 46.

283,127. LADIES' AND CHILDREN'S WEARING APPAREL, BEING THAT OF PAJAMAS, COMBINATION PAJAMA SETS, COATS, APRONS, HOUSE DRESSES, UNDERWEAR, AND GOWNS IN THE NATURE OF UNDERGARMENTS, ALL OF TEXTILE FABRIC. LA MODE GARMENT CO., INC., Chicago, Ill.
Filed December 11, 1930. Serial No. 308,865. PUBLISHED MARCH 3, 1931. Class 39.

283,128. PREPARATION FOR FLAVORING CAKES, PUDDINGS, AND SAUCES. RALPH PICHEL, Hartsdale, N. Y.
Filed November 22, 1930. Serial No. 308,219. PUBLISHED MARCH 3, 1931. Class 46.

283,129. SALAD DRESSINGS, TOMATO KETCHUP, CHILI SAUCE, ETC. SAMUEL SCHOENDORF, doing business as Red Top Products Co., Asbury Park, N. J.
Filed September 19, 1930. Serial No. 305,881. PUBLISHED MARCH 3, 1931. Class 46.

283,130. MEN'S CLOTHING—NAMELY, OVERCOATS, TOPCOATS, AND SUITS. EAGLE CLOTHES, New York, N. Y.
Filed July 12, 1930. Serial No. 303,422. PUBLISHED MARCH 3, 1931. Class 39.

283,131. ROOFING CEMENT FOR ROOFS OF ALL TYPES. THE TROPICAL PAINT AND OIL COMPANY, Cleveland, Ohio.
Filed June 23, 1930. Serial No. 302,753. PUBLISHED AUGUST 12, 1930. Class 12.

283,132. CERTAIN NAMED WEARING APPAREL. JOHN B. ARNOLD, doing business as Arnold's Men's Shops, Brooklyn, N. Y.
Filed May 31, 1930. Serial No. 301,780. PUBLISHED AUGUST 19, 1930. Class 39.

283,133. SILK PIECE GOODS, ARTIFICIAL-SILK PIECE GOODS, AND THE LIKE. L. & E. STIRN, New York, N. Y.
Filed December 16, 1930. Serial No. 309,038. PUBLISHED FEBRUARY 24, 1931. Class 42.

283,134. WOVEN FABRICS COMMONLY REFERRED TO AS ARTIFICIAL SILK OR RAYON. BRYBRO FABRICS, INC., New York, N. Y.
Filed December 23, 1930. Serial No. 309,261. PUBLISHED MARCH 3, 1931. Class 42.

283,135. OPEN-MESH LINEN CLOTH IN THE PIECE. JAMES F. WHITE & CO. INC., New York, N. Y.
Filed December 31, 1930. Serial No. 309,542. PUBLISHED FEBRUARY 24, 1931. Class 42.

283,136. SILK PIECE GOODS. C. K. EAGLE & COMPANY, INC., New York, N. Y.
Filed January 6, 1931. Serial No. 309,634. PUBLISHED MARCH 3, 1931. Class 42.

283,137. BROAD SILKS AND SILK MIXTURES. THE SCHWARZENBACH HUBER CO., New York, N. Y.
Filed January 6, 1931. Serial No. 309,655. PUBLISHED MARCH 3, 1931. Class 42.

283,138. SILK FABRICS IN THE PIECE. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y.
Filed January 9, 1931. Serial No. 309,785. PUBLISHED MARCH 3, 1931. Class 42.

283,139. SILK FABRIC IN THE PIECE. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y.
Filed January 9, 1931. Serial No. 309,786. PUBLISHED MARCH 3, 1931. Class 42.

283,140. WELDING UNIONS. BONNEY FORGE & TOOL WORKS, Allentown, Pa.
Filed January 12, 1931. Serial No. 309,842. PUBLISHED FEBRUARY 24, 1931. Class 14.

283,141. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed January 13, 1931. Serial No. 309,880. PUBLISHED MARCH 3, 1931. Class 42.

283,142. BROAD SILKS AND SILK MIXTURES. THE SCHWARZENBACH HUBER CO., New York, N. Y.
Filed January 13, 1931. Serial No. 309,908. PUBLISHED MARCH 3, 1931. Class 42.

283,143. SILK FABRICS IN THE PIECE. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y.
Filed January 15, 1931. Serial No. 309,987. PUBLISHED MARCH 3, 1931. Class 42.

283,144. SILK FABRICS IN THE PIECE. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y.
Filed January 15, 1931. Serial No. 309,988. PUBLISHED MARCH 3, 1931. Class 42.

283,145. NITROGLYCERIN, NITROGLYCERIN DYNAMITES, AMMONIUM-NITRATE DYNAMITES, GELATIN DYNAMITES, BLACK POWDER, BLASTING CAPS, FUSES, DETONATORS, AND CARTRIDGES. BURTON EXPLOSIVES, INC., Cleveland, Ohio.
Filed January 15, 1931. Serial No. 310,004. PUBLISHED MARCH 10, 1931. Class 9.

283,146. WOOLEN PIECE GOODS. AMERICAN WOOLEN COMPANY, Boston, Mass.
Filed January 24, 1931. Serial No. 310,326. PUBLISHED MARCH 3, 1931. Class 42.

283,147. GRAPE JUICE. JACOB F. POLEFSKY, doing business as Continental Pure Products Co., New York, N. Y.
Filed January 29, 1931. Serial No. 310,531. PUBLISHED MARCH 10, 1931. Class 45.

283,148. WIRE ROPE. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed January 29, 1931. Serial No. 310,536. PUBLISHED MARCH 10, 1931. Class 7.

283,149. GINGER ALE. CLOVER LEAF PRODUCTS COMPANY, Los Angeles, Calif.
Filed January 30, 1931. Serial No. 310,554. PUBLISHED MARCH 10, 1931. Class 45.

283,150. OUTER WEARING APPAREL FOR WOMEN AND GIRLS—NAMELY, DRESSES AND FROCKS. FOREST CITY MFG. CO., St. Louis, Mo.
Filed December 20, 1930. Serial No. 309,199. PUBLISHED MARCH 3, 1931. Class 39.

283,151. MALT SYRUP. JOSEPH DI SANTO, doing business as Di Santo & Co., Duluth, Minn.
Filed December 30, 1930. Serial No. 309,464. PUBLISHED MARCH 3, 1931. Class 46.

283,152. PACKAGE AND BULK, GROUND, OR BEAN COFFEE, WHOLE AND GROUND SPICES, TEA, AND RICE. POLIN BROS. & BERKOWITZ, INC., New York, N. Y.
Filed December 30, 1930. Serial No. 309,482. PUBLISHED MARCH 3, 1931. Class 46.

283,153. EMULSIFIED ASPHALT AND MAGNESITE MATERIALS FOR PLASTIC AND MASTIC FLOOR COVERINGS INTENDED TO BE MANUFACTURED IN PLACE AND FOR PLASTIC AND MASTIC FLOORS. SELBY, BATTERSBY & CO., Philadelphia, Pa.
Filed December 19, 1930. Serial No. 309,178. PUBLISHED FEBRUARY 24, 1931. Class 12.

283,154. VALVES—NAMELY, ANGLE VALVES, BLOW-OFF VALVES, BUTTERFLY VALVES, CHECK VALVES, CROSS VALVES, GATE VALVES, AND GLOBE VALVES, AND PARTS THEREOF. THE OHIO INJECTOR COMPANY, Wadsworth, Ohio.
Filed January 7, 1931. Serial No. 309,699. PUBLISHED MARCH 10, 1931. Class 13.

283,155. VALVES—NAMELY, ANGLE VALVES, BLOW-OFF VALVES, BUTTERFLY VALVES, CHECK VALVES, CROSS VALVES, GATE VALVES, AND GLOBE VALVES, AND PARTS THEREOF. THE OHIO INJECTOR COMPANY, Wadsworth, Ohio.
Filed January 7, 1931. Serial No. 309,698. PUBLISHED MARCH 10, 1931. Class 13.

283,156. WATCHES. BENRUS WATCH CO., New York, N. Y.
Filed December 31, 1930. Serial No. 309,500. PUBLISHED MARCH 3, 1931. Class 27.

283,157. PHOTOGRAPHIC FILM. AGFA ANSCO CORPORATION, Binghamton, N. Y.
Filed December 26, 1930. Serial No. 309,326. PUBLISHED MARCH 3, 1931. Class 26.

283,158. PHOTOGRAPHIC FILM. AGFA ANSCO CORPORATION, Binghamton, N. Y.
Filed December 26, 1930. Serial No. 309,325. PUBLISHED MARCH 3, 1931. Class 26.

283,159. PHOTOGRAPHIC FILM. AGFA ANSCO CORPORATION, Binghamton, N. Y.
Filed December 26, 1930. Serial No. 309,324. PUBLISHED MARCH 3, 1931. Class 26.

283,160. HOSE OF FABRIC AND RUBBER. EUREKA FIRE HOSE MANUFACTURING COMPANY, New York, N. Y.
Filed December 24, 1930. Serial No. 309,308. PUBLISHED MARCH 3, 1931. Class 35.

283,161. MATTRESSES. CREAM CITY BEDDING COMPANY, Milwaukee, Wis.
Filed December 22, 1930. Serial No. 309,233. PUBLISHED MARCH 3, 1931. Class 32.

283,162. STOCK WATERERS. RITCHIE MANUFACTURING COMPANY, Marshalltown, Iowa.
Filed December 19, 1930. Serial No. 309,175. PUBLISHED MARCH 3, 1931. Class 50.

283,163. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed December 16, 1930. Serial No. 309,025. PUBLISHED MARCH 3, 1931. Class 42.

283,164. DISPENSING BOXES MADE PRINCIPALLY OF CORRUGATED BOARD. IOWA FIBER BOX COMPANY, Keokuk, Iowa.
Filed January 12, 1931. Serial No. 309,861. PUBLISHED MARCH 10, 1931. Class 2.

283,165. ADHESIVE TAPE. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass.
Filed January 10, 1931. Serial No. 309,814. PUBLISHED MARCH 3, 1931. Class 5.

283,166. WHEAT FLOUR. HUBBARD MILLING COMPANY, Mankato, Minn.
Filed January 13, 1931. Serial No. 309,895. PUBLISHED MARCH 3, 1931. Class 46.

283,167. COTTONSEED CAKE AND COTTONSEED MEAL. SOUTHLAND COTTON OIL COMPANY, Paris, Tex.
Filed January 14, 1931. Serial No. 309,949. PUBLISHED MARCH 3, 1931. Class 46.

283,168. LAUNDRY WASHING MACHINES. THE ASSOCIATED MERCHANDISING CORPORATION, New York, N. Y.
Filed January 20, 1931. Serial No. 310,154. PUBLISHED MARCH 10, 1931. Class 24.

283,169. WIRE FABRIC. NEW YORK WIRE CLOTH COMPANY, Wilmington, Del., and New York, N. Y.
Filed January 21, 1931. Serial No. 310,225. PUBLISHED MARCH 10, 1931. Class 13.

283,170. PAPER BAGS. BROOKLYN STANDARD BAG CO. INC., Brooklyn, N. Y.
Filed January 22, 1931. Serial No. 310,244. PUBLISHED MARCH 10, 1931. Class 2.

283,171. PAPER BAGS. BROOKLYN STANDARD BAG CO. INC., Brooklyn, N. Y.
Filed January 22, 1931. Serial No. 310,245. PUBLISHED MARCH 10, 1931. CLASS 2.

283,172. GOLF BALLS. EDWARDS & WALKER COMPANY, Portland, Me.
Filed February 2, 1931. Serial No. 310,639. PUBLISHED MARCH 10, 1931. Class 22.

283,173. OPHTHALMIC MOUNTINGS. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed January 16, 1931. Serial No. 310,008. PUBLISHED MARCH 3, 1931. Class 26.

283,174. CHAIR, SEAT, OR AUTOMOBILE CUSHIONS MADE OF RESILIENT FIBRE, SPONGE RUBBER, OR OTHER FILLER AND ENCLOSED IN EITHER PERMANENT OR REMOVABLE COVERINGS. DANIEL L. IRVIN, New York, N. Y.
Filed January 20, 1931. Serial No. 310,170. PUBLISHED MARCH 3, 1931. Class 32.

283,175. TIME DATERS AND TIME-DATING MACHINES. INSTOGRAPH, LTD., Oakland, Calif.
Filed January 21, 1931. Serial No. 310,220. PUBLISHED MARCH 3, 1931. Class 20.

283,176. WALL CABINETS. THE SERVIDOR COMPANY, New York, N. Y.
Filed January 22, 1931. Serial No. 310,261. PUBLISHED MARCH 3, 1931. Class 32.

283,177. PULLEYS. ATLAS LEATHER COMPANY, Caseyville, Ill.
Filed January 23, 1931. Serial No. 310,278. PUBLISHED MARCH 3, 1931. Class 23.

283,178. PULLEYS. ATLAS LEATHER COMPANY, Caseyville, Ill.
Filed January 23, 1931. Serial No. 310,279. PUBLISHED MARCH 3, 1931. Class 23.

283,179. RADIO RECEIVING AND TRANSMITTING SETS AND PICTURE RECEIVING AND TRANSMITTING SETS. BRITISH RADIOSTAT CORPORATION LIMITED, Montreal, Canada, and London, England.
Filed January 23, 1931. Serial No. 310,281. PUBLISHED MARCH 10, 1931. Class 21.

283,180. BATHING FLOATS FOR INDIVIDUAL USE AND WATERBOARDS. CARL C. HARRIS, Orange, Mass.
Filed December 22, 1930. Serial No. 309,241. PUBLISHED MARCH 10, 1931. Class 22.

283,181. AUTOMOBILES AND CONSTRUCTIVE PARTS THEREOF. SOCIÉTÉ ANONYME DES USINES RENAULT, Billancourt, France.
Filed December 27, 1930. Serial No. 309,398. PUBLISHED MARCH 10, 1931. Class 19.

283,182. AUTOMOBILES AND CONSTRUCTIVE PARTS THEREOF. SOCIÉTÉ ANONYME DES USINES RENAULT, Billancourt, France.
Filed December 27, 1930. Serial No. 309,400. PUBLISHED MARCH 10, 1931. Class 19.

283,183. BISCUIT, CRACKERS, COOKIES, WAFERS, AND CAKE. NATIONAL BISCUIT COMPANY, New York, N. Y.
Filed October 21, 1930. Serial No. 307,005. PUBLISHED MARCH 3, 1931. Class 46.

283,184. WHEAT FLOUR USED FOR THE MANUFACTURE OF MACARONI, SPAGHETTI, AND OTHER ALIMENTARY PASTES. GENERAL MILLS, INC., Minneapolis, Minn.
Filed November 1, 1930. Serial No. 307,447. PUBLISHED MARCH 3, 1931. Class 46.

283,185. BUTTER. BEATRICE CREAMERY COMPANY, Chicago, Ill.
Filed November 6, 1930. Serial No. 307,575. PUBLISHED DECEMBER 30, 1930. Class 46.

283,186. BREAD. ANTHONY ROBERT BURGHARDT, doing business as Burghardt's Rye Bread Bakery, Detroit, Mich.
Filed December 1, 1930. Serial No. 308,476. PUBLISHED MARCH 3, 1931. Class 46.

283,187. STAPLES FOR SECURING ELECTRICAL AND OTHER CONDUCTORS TO SUPPORTING SURFACES. NATIONAL ELECTRIC APPLIANCE CORPORATION, Bridgeport, Conn.
Filed December 10, 1930. Serial No. 308,834. PUBLISHED MARCH 10, 1931. Class 13.

283,188. GLUE. SWIFT AND COMPANY, Chicago, Ill.
Filed December 12, 1930. Serial No. 308,913. PUBLISHED MARCH 3, 1931. Class 5.

283,189. SHOTGUNS, RIFLES, PISTOLS, AND GUN CASES. BROWNING ARMS COMPANY, Ogden, Utah.
Filed August 15, 1930. Serial No. 304,648. PUBLISHED OCTOBER 14, 1930. Class 9.

283,190. KNIT WOOL, WOOL-MIXED CLOTH, AND WOOL AND RAYON CLOTH. FAITH MILLS, INC., Averill Park, N. Y.
Filed September 18, 1930. Serial No. 305,808. PUBLISHED FEBRUARY 24, 1931. Class 42.

283,191. WOVEN RUGS MADE FROM RAYON CHENILLE YARN. CRAWSHAW CARPET COMPANY, Newburgh, N. Y.
Filed October 14, 1930. Serial No. 306,730. PUBLISHED MARCH 3, 1931. Class 42.

283,192. OILCLOTH. ANDREW MCLEAN COMPANY, New York, N. Y., and Passaic, N. J.
Filed October 17, 1930. Serial No. 306,866. PUBLISHED MARCH 10, 1931. Class 20.

283,193. WRIST WATCHES. THE AMERICAN NEWS COMPANY, INC., New York, N. Y.
Filed November 12, 1930. Serial No. 307,793. PUBLISHED MARCH 3, 1931. Class 27.

283,194. CELLULOSE PRODUCTS IN BOARD OR SHEET FORM. NATIONAL BLANK BOOK CO., Holyoke, Mass.
Filed November 12, 1930. Serial No. 307,822. PUBLISHED MARCH 3, 1931. Class 50.

283,195. CORDUROYS IN THE PIECE. A. D. JUILLIARD & CO., INC., New York, N. Y.
Filed November 15, 1930. Serial No. 307,945. PUBLISHED MARCH 3, 1931. Class 42.

283,196. PIECE GOODS OF WOOL, COTTON, AND SILK AND MIXTURES OF THE SAME. SOCIETE A RESPONSABILITE LIMITEE RODIER, Paris, France.
Filed December 3, 1930. Serial No. 308,560. PUBLISHED FEBRUARY 24, 1931. Class 42.

283,197. GIFT BOXES AND CONTAINERS FOR CONFECTIONS, STATIONERY, PLAYING CARDS, AND THE LIKE, ALL RESEMBLING A BOOK IN APPEARANCE. PHILIP V. SPINNER & CO., Chicago, Ill.
Filed June 21, 1930. Serial No. 302,701. PUBLISHED MARCH 10, 1931. Class 2.

283,198. FIBROUS COMPOSITION ARTICLES—NAMELY, JARDINIERS, VASES, FLOWER BOXES, PAILS, BASKETS, AND URNS. AMERICAN LACE PAPER CO., Milwaukee, Wis.
Filed June 25, 1930. Serial No. 302,800. PUBLISHED MARCH 10, 1931. Class 2.

283,199. CHEESE. LINDA C. BRUHN, doing business as Rock Cheese & Butter Co., Auburndale, Wis.
Filed August 22, 1930. Serial No. 304,909. PUBLISHED MARCH 3, 1931. Class 46.

283,200. MEN'S, BOYS', AND YOUTHS' CLOTHING—TO WIT, WORK SHIRTS, WORK SUITS, AND BOYS' PLAY SUITS. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y.
Filed January 2, 1931. Serial No. 309,568. PUBLISHED MARCH 3, 1931. Class 39.

283,201. LADIES' OVERALLS (BEACH, COMMERCIAL, AND DOMESTIC). MEN'S OVERALLS AND SUSPENDER-BACK WORK TROUSERS, BOYS' AND YOUTHS' OVERALLS AND SUSPENDER-BACK WORK TROUSERS, AND CHILDREN'S OVERALLS AND SUSPENDER-BACK TROUSERS. THE MARYLAND COMPANY, Baltimore, Md.
Filed January 3, 1931. Serial No. 309,590. PUBLISHED MARCH 3, 1931. Class 39.

283,202. INHALENT FOR TREATMENT OF RESPIRATORY INFECTIONS OF POULTRY AND HOGS. STANDARD CHEMICAL MANUFACTURING COMPANY, Omaha, Nebr.
Filed December 15, 1930. Serial No. 309,008. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,203. CLARIONETS. SIMSON & FREY, INC., New York, N. Y.
Filed November 20, 1929. Serial No. 292,639. PUBLISHED MARCH 3, 1931. Class 36.

283,204. INTERNAL-COMBUSTION ENGINES FOR LAND, AIR, AND WATER VEHICLES (EXCEPT MOTOR CYCLES AND SIDE CARS) BUT NOT INCLUDING SUCH ENGINES FOR STATIONARY USE. THE SUNBEAM MOTOR CAR CO., LTD., Wolverhampton, England.
Filed November 18, 1929. Serial No. 292,605. PUBLISHED APRIL 15, 1930. Class 23.

283,205. INTERNAL-COMBUSTION ENGINES. CLIMAX ENGINEERING COMPANY, Clinton, Iowa.
Filed October 30, 1929. Serial No. 291,760. PUBLISHED MARCH 3, 1931. Class 23.

283,206. GARTER AND CORSET BELTS AND CORSETS. LANE BRYANT, INC., New York, N. Y.
Filed October 30, 1929. Serial No. 291,727. PUBLISHED MAY 6, 1930. Class 39.

283,207. EMPTY BASE-METAL VANITY CASES AND SIMILAR POCKET OUTFITS ADAPTED TO CONTAIN ROUGE, PERFUMES, AND OTHER BEAUTY PRODUCTS. CLEO PATON, Paris, France.
Filed October 12, 1929. Serial No. 291,021. PUBLISHED MARCH 3, 1931. Class 2.

283,208. HAND WHEELS FOR CAR BRAKES. UNIVERSAL DRAFT GEAR ATTACHMENT CO., Chicago, Ill.
Filed October 11, 1929. Serial No. 290,987. PUBLISHED MARCH 10, 1931. Class 19.

283,209. BOILER BREECHINGS; UNIT AIR HEATERS IN WHICH THE HEATING MEDIUM IS STEAM, COAL, GAS, OR OIL; SMOKESTACKS, WIND-ACTUATED ROOF VENTILATORS, AND VENTILATING DUCTS. ALPHA TANK & SHEET METAL MFG. CO., St. Louis, Mo.
Filed October 7, 1929. Serial No. 290,733. PUBLISHED MARCH 10, 1931. Class 34.

283,210. RUBBER BOOTS AND SHOES, RUBBER OVERSHOES, AND RUBBER-SOLED CANVAS SHOES. HOOD RUBBER COMPANY, INC., Watertown, Mass.
Filed September 11, 1929. Serial No. 289,628. PUBLISHED MAY 13, 1930. Class 39.

283,211. CUTTER BLADES FOR ROTARY CUTTER HEADS. E. C. ATKINS AND COMPANY, Indianapolis, Ind.
Filed August 22, 1929. Serial No. 288,832. PUBLISHED NOVEMBER 26, 1929. Class 23.

283,212. RESISTANCE UNITS, RHEOSTATS, SWITCHES FOR ELECTRICAL CIRCUITS, ELECTROMAGNETS, ELECTROMAGNETIC REPRODUCERS OF THE TYPE KNOWN AS PHONOGRAPH PICK-UPS. HARDWICK, HINDLE, INC., Newark, N. J.
Filed August 9, 1929. Serial No. 288,335. PUBLISHED MARCH 3, 1931. Class 21.

283,213. MOTHPROOFING AND REPELLANT CHEMICAL. NATIONAL MOTH-PROOFING SERVICE, Chicago, Ill.
Filed July 26, 1929. Serial No. 287,714. PUBLISHED MARCH 3, 1931. Class 6.

283,214. ELECTRICALLY-OPERATED AUDIBLE WARNING DEVICES CONSISTING OF BURGLAR ALARMS, HORNS FOR USE ON MOTOR BOATS, AUTOMOBILES, AND SIMILAR VEHICLES, AND CALL-SIGNAL EQUIPMENT FOR USE IN FACTORIES AND THE LIKE. THE MOTOMETER COMPANY, INC., Long Island City, N. Y., assignor to Moto Meter Gauge and Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware.
Filed July 12, 1929. Serial No. 286,997. PUBLISHED MARCH 3, 1931. Class 21.

283,215. STORAGE "A" AND "B" BATTERIES. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed June 27, 1929. Serial No. 286,279. PUBLISHED SEPTEMBER 24, 1929. Class 21.

283,216. COMPOUND FOR RELIEVING STOMACH DISTRESS. CHARLES F. MUNROE, doing business as Oneida Laboratories, Oneida, N. Y.
Filed September 1, 1930. Serial No. 305,203. PUBLISHED MARCH 3, 1931. Class 6.

283,217. ASPHALT, PAVEMENT MATERIALS, ASPHALTIC BINDERS, AND ASPHALTIC EMULSIONS AND COMPOUNDS. AMERICAN BITUMULS COMPANY, Wilmington, Del.
Filed September 15, 1930. Serial No. 305,688. PUBLISHED MARCH 3, 1931. Class 12.

283,218. PACKED AND LOOSE MACARONI. WYCKOFF MACARONI MFG. CO., Brooklyn, N. Y.
Filed December 30, 1930. Serial No. 309,494. PUBLISHED MARCH 3, 1931. Class 46.

283,219. OINTMENT TO BE USED FOR THE TREATMENT OF RINGWORM OF THE FEET AND GENITOCRURAL REGION. A. I. O. COMPANY, Chicago, Ill.
Filed August 18, 1930. Serial No. 304,711. PUBLISHED MARCH 3, 1931. Class 6.

283,220. WALL AND FLOOR TILES AND FOUNDATION SHEETS FOR TILES. PORCELAIN TILE COMPANY, Chicago, Ill.
Filed June 19, 1930. Serial No. 302,598. PUBLISHED MARCH 3, 1931. Class 12.

283,221. VENEREAL-DISEASE PREPARATION IN TABLET AND GELATINE FORM. AUGUST KARRETH, doing business as Lultpold-Werk, Chemisch-Pharmazeut'sche Fabrik, Munich, Germany.
Filed June 6, 1930. Serial No. 302,221. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,222. MOTOR-FUEL OILS AND GASOLINE. THE DERBY OIL COMPANY, Wichita, Kans.
Filed December 15, 1930. Serial No. 308,980. PUBLISHED MARCH 3, 1931. Class 15.

283,223. MEN'S, WOMEN'S, AND CHILDREN'S BOOTS, SHOES, AND SLIPPERS MADE WHOLLY OR IN PART OF LEATHER, CANVAS, RUBBER, OR TEXTILE MATERIAL. CLAUDE H. DANIELS, Boston, Mass.
Filed December 12, 1930. Serial No. 308,882. PUBLISHED FEBRUARY 24, 1931. Class 39.

283,224. METAL SIGN OR DISPLAY FRAMES. JOSEPH H. BOHAN, doing business as The Teleframe Company, Chicago, Ill.
Filed December 11, 1930. Serial No. 308,851. PUBLISHED MARCH 3, 1931. Class 13.

283,225. NAPKIN HOLDERS, NAPKIN RINGS, NAPKIN MARKERS. HELEN WELDER, San Antonio, Tex.
Filed December 10, 1930. Serial No. 308,842. PUBLISHED MARCH 3, 1931. Class 28.

283,226. LADIES', MISSES', AND CHILDREN'S READY-TO-WEAR HATS. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y.
Filed December 9, 1930. Serial No. 308,792. PUBLISHED MARCH 3, 1931. Class 39.

283,227. RADIO RECEIVING SETS AND PARTS THEREOF. GENERAL MOTORS RADIO CORPORATION, Dayton, Ohio.
Filed November 29, 1930. Serial No. 308,472. PUBLISHED MARCH 3, 1931. Class 21.

283,228. RADIO RECEIVING INSTRUMENTS AND STATION-WAVE-LENGTH INDICATORS ADAPTED TO BE EMBODIED THEREIN. F. A. D. ANDREA, INC., New York, N. Y.
Filed November 22, 1930. Serial No. 308,180. PUBLISHED MARCH 3, 1931. Class 21.

283,229. BRASSIÈRES. MODEL BRASSIERE CO. INC., Brooklyn, N. Y.
Filed November 17, 1930. Serial No. 307,983. PUBLISHED FEBRUARY 24, 1931. Class 39.

283,230. ELECTRIC STORE SIGNS. JOSEPH GRANAT, San Francisco, Calif.
Filed November 10, 1930. Serial No. 307,715. PUBLISHED MARCH 3, 1931. Class 21.

283,231. OIL BURNERS. LEOMINSTER OIL BURNER CORPORATION, Leominster, Mass.
Filed October 27, 1930. Serial No. 307,240. PUBLISHED MARCH 3, 1931. Class 34.

283,232. BOOTS, SHOES, AND SLIPPERS OF LEATHER, RUBBER, OR FABRIC AND/OR COMBINATIONS THEREOF FOR MEN, WOMEN, AND CHILDREN. LORD & TAYLOR, New York, N. Y.
Filed October 16, 1930. Serial No. 306,821. PUBLISHED MARCH 3, 1931. Class 39.

283,233. MEN'S HATS AND CAPS, AND WOMEN'S AND MISSES' HATS. COPLEY HAT COMPANY, INC., New York, N. Y.
Filed October 15, 1930. Serial No. 306,770. PUBLISHED MARCH 3, 1931. Class 39.

283,234. RADIO RECEIVING SETS, RADIO LOUDSPEAKERS, ELECTRICAL AMPLIFYING UNITS, ETC. WRIGHT, DE COSTER, INC., St. Paul, Minn.
Filed October 6, 1930. Serial No. 306,480. PUBLISHED MARCH 3, 1931. Class 21.

283,235. [WITHDRAWN.]

283,236. SCALP TONIC, A TONIC TO PROMOTE GROWTH OF THE HAIR AND OVERCOME HAIR AFFECTIONS; BRILLIANTINE TO GIVE THE HAIR A GLOSS, CLEANSING CREAM. MARY F. LEWIS, Cleveland, Ohio.
Filed March 16, 1928. Serial No. 263,272. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,237. TEAS, COFFEES, SPICES, SUGAR, SELF-RISING FLOUR, CORN MEAL AND CRACKER MEAL, RICE, BREAKFAST CEREAL, MOLASSES, TABLE SYRUPS; DRIED FRUITS, DRIED VEGETABLES; AND GREEN VEGETABLES—NAMELY, TOMATOES, BEANS, CAULIFLOWER, RADISHES, CABBAGE, CORN, CARROTS, TURNIPS, SPINACH, KALE; SLICED BACON AND HAMS, BUTTER AND OLEOMARGARIN, EGGS, LARD, CHEESE, CAKES, BREAD, CONDENSED AND EVAPORATED COCOA, CORNSTARCH, MACARONI, SPAGHETTI, AND NOODLES. DAVID PENDER GROCERY COMPANY, Norfolk, Va.
Filed May 4, 1928. Serial No. 265,893. PUBLISHED MARCH 3, 1931. Class 46.

283,238. THERMAL INSULATING PAPER. MOSINEE PAPER MILLS COMPANY, Mosinee, Wis.
Filed October 1, 1930. Serial No. 306,278. PUBLISHED FEBRUARY 24, 1931. Class 12.

283,239. LIQUID PREPARATION FOR CLEANSING, BLEACHING, STERILIZING, SOFTENING WATER, AND REMOVING STAINS. THE HILEX COMPANY, St. Paul, Minn.
Filed October 23, 1930. Serial No. 307,095. PUBLISHED MARCH 3, 1931. Class 6.

283,240. ANTIFREEZE SOLUTION, LIQUID PREPARATIONS FOR STOPPING LEAKS IN AUTOMOBILE RADIATORS, ETC. PURITAN SOAP COMPANY, Rochester, N. Y.
Filed October 28, 1930. Serial No. 307,289. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,241. ANTIFREEZE SOLUTION, LIQUID PREPARATIONS FOR STOPPING LEAKS IN AUTOMOBILE RADIATORS, ETC. PURITAN SOAP COMPANY, Rochester, N. Y.
Filed October 28, 1930. Serial No. 307,290. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,242. PHARMACEUTICAL PREPARATION FOR THE TREATMENT OF COUGHS, COLDS, CATARRHS, AND SIMILAR DISEASES OF THE RESPIRATORY ORGANS. DR. C. J. PENICHET, Habana, Cuba.
Filed October 30, 1930. Serial No. 307,367. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,243. ACOUSTICAL PLASTER. KALITE COMPANY, LIMITED, Pasadena, Calif.
Filed November 4, 1930. Serial No. 307,529. PUBLISHED DECEMBER 30, 1930. Class 12.

283,244. COMPOUND FOR PROLONGING BLOOM LIFE OF CUT FLOWERS. FRED L. SIGMUND, doing business as Sigmund Chemical Company, Moorestown, N. J.
Filed November 8, 1930. Serial No. 307,690. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,245. COUGH COMPOUND. THE ANDRE CO., Gulfport, Miss.
Filed November 11, 1930. Serial No. 307,757. PUBLISHED MARCH 3, 1931. Class 6.

283,246. CEMENTITIOUS COATINGS IN SEMILIQUID FORM ADAPTED TO BE SPREAD ON ROOFS TO STOP SMALL LEAKS AND ROOF CEMENTS IN PASTE FORM ADAPTED TO CLOSE THE LARGER LEAKS. STELWAGON MANUFACTURING COMPANY, Philadelphia, Pa.
Filed November 14, 1930. Serial No. 307,004. PUBLISHED FEBRUARY 24, 1931. Class 12.

283,247. CREAMS FOR DISORDERS OF THE SKIN. BORIS BOROWIKOW, doing business as Borowikow Laboratories Co., Brooklyn, N. Y.
Filed November 18, 1930. Serial No. 308,006. PUBLISHED MARCH 3, 1931. Class 6.

283,248. LINIMENT TO BE APPLIED IN THE CASE OF SPRAINED ANKLES, ETC., RHEUMATISM, STIFF NECKS, AND THE LIKE. PAT CHEMICAL CO., Milwaukee, Wis.
Filed November 22, 1930. Serial No. 308,216. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,249. COMPOSITION TILE. WHITING-MEAD CO., Los Angeles, Calif.
Filed November 24, 1930. Serial No. 308,276. PUBLISHED FEBRUARY 24, 1931. Class 12.

283,250. FACIAL PACK FOR BLEACHING AND SOFTENING THE SKIN AND DRAWING THE IMPURITIES FROM THE PORES. BONCILLA LABORATORIES, INC., Indianapolis, Ind.
Filed November 28, 1930. Serial No. 308,352. PUBLISHED MARCH 3, 1931. Class 6.

283,251. PERFUME EXTRACT AND TOILET WATER. LANVIN PARFUMS, INC., Wilmington, Del., and New York, N. Y.
Filed November 29, 1930. Serial No. 308,449. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,252. HARDWOOD FLOORING AND TRIM. BRADLEY LUMBER COMPANY OF ARKANSAS, Warren, Ark.
Filed December 1, 1930. Serial No. 308,475. PUBLISHED MARCH 3, 1931. Class 12.

283,253. SUPPLIES PRINCIPALLY USED BY MORTICIANS. NATIONAL SELECTED MORTICIANS, Chicago, Ill.
Filed December 2, 1930. Serial No. 308,514. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,254. LUMBER, BEAMS, SCANTLING, POLES, PILING, AND POSTS. JACKSON LUMBER COMPANY, Lockhart, Ala.
Filed December 3, 1930. Serial No. 308,547. PUBLISHED MARCH 3, 1931. Class 12.

283,255. TOILET WATER. CRUSELLAS RHUM QUINQUINA CO., INC., New York, N. Y.
Filed December 11, 1930. Serial No. 308,858. PUBLISHED MARCH 3, 1931. Class 6.

283,256. STEEL SASH. FEDERAL STEEL SASH COMPANY, Waukesha, Wis.
Filed December 12, 1930. Serial No. 308,885. PUBLISHED FEBRUARY 24, 1931. Class 12.

283,257. MEDICINAL COMPOUND IN THE FORM OF A TABLET FOR THE TREATMENT OF STOMACH DISORDERS CAUSED BY HYPERACIDITY OR FAULTY DIET. WILLIAM H. FRASER, St. Paul, Minn.
Filed December 15, 1930. Serial No. 308,985. PUBLISHED FEBRUARY 24, 1931. Class 6.

283,258. PLAYING CARDS. AMORY P. ECKLEY, San Francisco, Calif.
Filed January 10, 1930. Serial No. 294,628. PUBLISHED MARCH 10, 1931. Class 22.

283,259. MEDICINAL OIL FOR INTERNAL USE FOR THE TREATMENT AND RELIEF OF DISEASES OF THE KIDNEYS, BLADDER, AND OTHER URINARY ORGANS. CHRISTINA S. JOHNSON, doing business as M. Coward, successor to C. Sylvester, Brooklyn, N. Y.
Filed January 13, 1930. Serial No. 294,734. PUBLISHED MARCH 3, 1931. Class 6.

283,260. PYROPHORIC CIGARETTE AND CIGAR LIGHTERS. EISENSTADT MANUFACTURING COMPANY, St. Louis, Mo.
Filed March 6, 1930. Serial No. 296,909. PUBLISHED MARCH 10, 1931. Class 34.

283,261. COFFEE EXTRACT AND CONCENTRATED COFFEE. F. B. CHAMBERLAIN COMPANY, East St. Louis, Ill., and St. Louis, Mo.
Filed March 8, 1930. Serial No. 297,003. PUBLISHED APRIL 29, 1930. Class 46.

283,262. STOVES AND LAMPS OPERATED BY COAL, WOOD, VAPOR, AND GAS; LAMP BRACKETS, CANDLESTICKS, PYROPHORIC CIGAR LIGHTERS, METAL REFLECTORS, HUMIDIFIERS, AND LAUNDRY DRYING HEATERS. WÜRTTEMBERGISCHE METALLWARENFABRIK, Geislingen-Steige, Germany.
Filed March 17, 1930. Serial No. 297,464. PUBLISHED MARCH 10, 1931. Class 34.

283,263. METAL-BOUND FELT WEATHER STRIPS FOR USE ON DOORS AND WINDOWS. PROTECTO MANUFACTURING COMPANY, Chicago, Ill.
Filed March 22, 1930. Serial No. 297,777. PUBLISHED FEBRUARY 24, 1931. Class 12.

283,264. CHILDREN'S SHOES OF RUBBER, LEATHER, AND FABRIC AND COMBINATIONS THEREOF. GROUND GRIPPER SHOE COMPANY, INC., New York, N. Y.
Filed April 3, 1930. Serial No. 298,326. PUBLISHED MARCH 3, 1931. Class 39.

283,265. DISINFECTANTS, CHEMICAL PRODUCTS FOR PHOTOGRAPHIC PURPOSES, CHEMICALS AND CHEMICAL MATERIALS AS HARDENING AND SOFTENING MEDIA FOR PLASTIC COMPOSITIONS, AND CHEMICAL PLASTICIZERS FOR NITROCELLULOSE LACQUERS, FILMS. DEUTSCHE HYDRIERWERKE, A.-G., Berlin-Charlottenburg, Germany.
Filed April 5, 1930. Serial No. 298,430. PUBLISHED MARCH 3, 1931. Class 6.

283,266. AUTOMOBILE TIRES. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed April 23, 1930. Serial No. 299,310. PUBLISHED MARCH 3, 1931. Class 35.

283,267. SALTED PEANUTS AND ROASTED PEANUTS. J. P. GIBBONS, Jr., doing business as Peanut Products Company, Hamlet, N. C.
Filed April 30, 1930. Serial No. 299,700. PUBLISHED DECEMBER 16, 1930. Class 46.

283,268. SWEATERS, KNITTED JACKETS, AND SLIP-OVERS FOR MEN, WOMEN, AND CHILDREN. PECKHAM-FOREMAN, INC., New York, N. Y.
Filed May 2, 1930. Serial No. 299,858. PUBLISHED MARCH 3, 1931. Class 39.

283,269. RAZOR BLADES, METAL HOLDERS FOR RAZOR BLADES, KNIVES, SCISSORS. MARATHON RAZOR BLADE CO., INC., Irvington, N. J.
Filed May 5, 1930. Serial No. 299,979. PUBLISHED MARCH 3, 1931. Class 23.

283,270. RAZOR BLADES, RAZOR-BLADE HOLDERS, RAZORS, PENKNIVES, SCISSORS. MARATHON RAZOR BLADE, CO., INC., Irvington, N. J.
Filed May 9, 1930. Serial No. 300,213. PUBLISHED MARCH 3, 1931. Class 23.

283,271. TOILET SEATS. KOHLER COMPANY, Kohler, Wis.
Filed May 10, 1930. Serial No. 300,285. PUBLISHED MARCH 3, 1931. Class 13.

283,272. WOOLEN PIECE GOODS. COWAN WOOLEN COMPANY, Lewiston, Me.
Filed May 14, 1930. Serial No. 300,477. PUBLISHED FEBRUARY 24, 1931. Class 42.

283,273. RICE. THE ASIA COMPANY, Los Angeles, Calif.
Filed May 17, 1930. Serial No. 300,703. PUBLISHED MARCH 3, 1931. Class 46.

283,274. SHEETINGS, PILLOW TUBINGS, SHEETS, AND PILLOWCASES. AURORA COTTON MILLS, Aurora, Ill.
Filed May 21, 1930. Serial No. 300,913. PUBLISHED FEBRUARY 24, 1931. Class 42.

283,275. PRESSURE GAUGES, INDICATING GAUGES, RECORDING GAUGES, ETC. CONSOLIDATED ASHCROFT HANCOCK COMPANY, New York, N. Y.
Filed December 19, 1929. Serial No. 293,871. PUBLISHED MARCH 3, 1931. Class 26.

283,276. DRY-CELL BATTERIES. FRENCH BATTERY COMPANY, Madison, Wis., assignor to Transitone Automobile Radio Corporation, Philadelphia, Pa., a Corporation of Delaware.
Filed January 2, 1930. Serial No. 294,297. PUBLISHED MARCH 3, 1931. Class 21.

283,277. ELECTRON TUBES. CHAMPION RADIO WORKS, INC., doing business as Legion Laboratories, Danvers, Mass.
Filed January 8, 1930. Serial No. 294,502. PUBLISHED FEBRUARY 3, 1931. Class 21.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

283,278. (CLASS 38. PRINTS AND PUBLICATIONS.) FRESHIE, Austin, Tex. Filed Jan. 10, 1931. Serial No. 309,811.

FRESHIE

For Publication Issued Annually.
Claims use since September, 1926.

283,279. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) INDIANA BAND INSTRUMENT COMPANY, Elkhart, Ind. Filed Nov. 22, 1930. Serial No. 303,205.

INDIANA

For Trumpets, Cornets, Slide and Valved Trombones, Mellophones, Upright Alto Horns, French Horns, Baritone Horns, Bass Horns, Saxophones, and Clarinets.
Claims use since Apr. 1, 1929.

283,280. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE WHITNEY BLAKE COMPANY, Hamden, Conn. Filed Sept. 24, 1930. Serial No. 306,025.

Neonlite

For Electric Wires and Cables.
Claims use since December, 1927.

283,281. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) VOIGTLÄNDER & SOHN, AKTIENGESELLSCHAFT, Brunswick, Germany. Filed Sept. 4, 1930. Serial No. 305,329.

Voigtländer

For Photographic Apparatus—Namely, Plate Cameras, Roll-Film Cameras, Stereo Apparatus; and Photographic Accessories—Namely, Plate Holders, Film-Pack Adapters; Further Photographic Lenses for All Purposes of Photography and Reproduction, Supplementary Lenses, Yellow Filters, Finger Magnifiers, and Exposure Calculators.
Claims use since 1909.

283,282. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) THE C. A. KIGER COMPANY, Kansas City, Mo. Filed Aug. 27, 1930. Serial No. 305,081.

The VIRGINIA

For Finger Rings.
Claims use since June 1, 1929.

283,283. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CLARKSON, INC., Suffern, N. Y. Filed July 9, 1930. Serial No. 303,274.

SUN-SHIELD

For Cream or Liquid Lotion to be Applied to the Body to Prevent Sunburn on Exposure.
Claims use since Apr. 1, 1930.

283,284. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FABRIK CHEM. PHARM. PRÄPARATE DALLMANN & CO., Wiesbaden-Schierstein, Germany. Filed May 31, 1930. Serial No. 302,265.

KOLA
DALLMANN

For Pharmaceutical Preparations—Namely, Tablets and Pastilles for Use as Stimulants for Physical and Mental Fatigue.
Claims use since Jan. 1, 1915.

283,285. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PABST CORPORATION, Milwaukee, Wis. Filed May 29, 1930. Serial No. 301,690.

'Old Country'

For Malt Syrup.
Claims use since Apr. 4, 1930.

283,286. (CLASS 37. PAPER AND STATIONERY.) THE MENASHA PRODUCTS COMPANY, Chicago, Ill. Filed Nov. 2, 1929. Serial No. 291,924.

CAMBRAY

For Paper Napkins.
Claims use since June 12, 1929.

283,287. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE KAWNEER COMPANY, Niles, Mich. Filed Sept. 30, 1929. Serial No. 290,416.

EASYSET

For Show Cases, Metal Show Cases, and Metal Constructional Parts of Show Cases.
Claims use since Feb. 28, 1913.

283,288. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA ORCHARD CO., Los Angeles, Calif. Filed Apr. 22, 1930. Serial No. 299,253.

THE ORIGINAL KING CITY PINK

For Dried Beans.
Claims use since Mar. 29, 1930.

283,289. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA ORCHARD CO., Los Angeles, Calif. Filed Apr. 22, 1930. Serial No. 299,252.

KING CITY PINK BEANS

For Dried Beans.
Claims use since Mar. 29, 1930.

283,290. (CLASS 32. FURNITURE AND UPHOLSTERY.) COWDIN COMPANY, Portland, Oreg. Filed Apr. 10, 1930. Serial No. 298,617.

Cowdin

For Tables for Office and Household Use.
Claims use since Feb. 10, 1930.

283,291. (CLASS 20. LINOLEUM AND OILED CLOTH.) ARMSTRONG CORK COMPANY, Lancaster, Pa. Filed Apr. 7, 1930. Serial No. 298,480.

STERLING

For Felt-Base and Similar Floor Coverings, Both Piece Goods and Rugs.
Claims use since Dec. 17, 1929.

283,292. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE CLEVELAND FRUIT JUICE COMPANY, Cleveland, Ohio. Filed Feb. 24, 1930. Serial No. 296,396.

IMPROVED BITTERSWEET

For a Prepared Chocolate Sirup Used as a Flavoring for Ice Cream and Food Beverages and as a Sundae Dressing.
Claims use since Oct. 1, 1929.

283,293. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) KELSEY HEATING COMPANY, Syracuse, N. Y. Filed Feb. 15, 1930. Serial No. 296,064.

CONDITIONAIRE

For Steam and Hot-Water Boilers and Hot-Air Furnaces.
Claims use since Jan. 15, 1930.

283,294. (CLASS 37. PAPER AND STATIONERY.) CATERINA SAGE IN BOURBON DEL MONTE PRINCIPESSA DI SAN FAUSTINO, Genoa, Italy. Filed Jan. 21, 1930. Serial No. 295,016.

CLIP-ALL

For Holder for Loose-Paper Leaves, Paper Pads, Score Cards, Billing Sheets, and the Like.
Claims use since Dec. 31, 1929.

283,295. (CLASS 2. RECEPTACLES.) THE MENASHA PRODUCTS COMPANY, Chicago, Ill. Filed Dec. 21, 1929. Serial No. 293,981.

FOOD SHOP

For Paper Food Pails and Cartons.
Claims use since Nov. 7, 1929.

283,296. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) ELEVATOR SUPPLIES COMPANY, INC., Hoboken, N. J. Filed Apr. 25, 1929. Serial No. 282,983.

FLASH-SET

For Elevator Signaling Apparatus of a Character Involving the Use of Electric Lights, Circuits to Said Lights, and Electromagnetically Controlled Means for Closing Said Circuits.
Claims use since December, 1928.

283,297. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) WEBSTER ELECTRIC COMPANY, Racine, Wis. Filed Feb. 28, 1931. Serial No. 311,587.

Webster

For Audio-Frequency Amplifiers Comprising Assembled Units for Amplifying Electric Signals, Audio-Frequency Transformers, Choke Coils, Electric Pick-Up Tone Arms, Electric Pick-Up Voltage Controls, Electrical Sockets and Plugs, Electrical Phonograph Pick-Ups, Power Transformers, High-Voltage Ignition Transformers, Energizing Transformers for Electric Signs, and Voltage and Current Regulating Devices of the Moving Coil Type.
Claims use since 1920.

283,298. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) EAGLE ELECTRIC MFG. CO., INC., Brooklyn, N. Y. Filed Feb. 24, 1931. Serial No. 311,371.

GLOCOIL

For Electric Heating Elements for Radiant Heaters.
Claims use since January, 1923.

TRADE-MARK REGISTRATIONS RENEWED

36,638. MEDICINAL REMEDIES. Registered June 25, 1901. B. S. MCKEAN & CO. Renewed June 25, 1931, to B. S. McKean, Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

36,703. CERTAIN NAMED PAPER. Registered July 9, 1901. FORT ORANGE PAPER COMPANY, Castleton, N. Y. Renewed July 9, 1931, to Fort Orange Paper Company, Castleton-on-Hudson, New York, a Corporation of New York.

36,727. WIRE FENCING. Registered July 9, 1901. UNION FENCE CO., De Kalb, Ill. Renewed July 9, 1931, to The American Steel and Wire Company of New Jersey, Cleveland, Ohio, a Corporation of New Jersey, assignee.

36,747. TONIC. Registered July 16, 1901. KNOLL & CO., Ludwigshafen, Germany. Renewed July 16, 1931, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

36,934. COFFEE AND TEA. Registered August 20, 1901. BLACK HAWK COFFEE AND SPICE COMPANY, Waterloo, Iowa, a Corporation of Iowa. Renewed August 20, 1931.

37,175. LUBRICANTS. Registered October 8, 1901. NEW YORK & NEW JERSEY LUBRICANT CO. Renewed October 8, 1931, to New York & New Jersey Lubricant Company, New York, N. Y., a Corporation of New York, assignee.

78,783. A MEAT-PRESERVATIVE. Registered July 12, 1910. FIGARO CHEMICAL CO. Renewed July 12, 1930, to The Figaro Company, Dallas, Tex., a Corporation of Arizona, successor.

81,456. COFFEE. Registered April 11, 1911. GRANGER & CO., Buffalo, N. Y., a Corporation of New York. Renewed April 11, 1931.

81,813. PAJAMAS, DRAWERS, AND UNION SUITS. Registered May 9, 1911. MARYLAND OILED CLOTHING COMPANY. Renewed May 9, 1931, to Excelsior Varsity Underwear Corporation, Baltimore, Md., a Corporation of Maryland, assignee by mesne assignments.

82,338. PLOWS. Registered June 20, 1911. LA CROSSE PLOW COMPANY, La Crosse, Wis. Renewed June 20, 1931, Allis-Chalmers Manufacturing Company, West Allis, Wis., a Corporation of Delaware, assignee.

82,423. GLUES. Registered June 27, 1911. J. & G. COX, LIMITED, Edinburgh, Scotland, a Corporation of Great Britain. Renewed June 27, 1931.

82,470. TOBACCO-PIPES. Registered June 27, 1911. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C., a Corporation of New Jersey. Renewed June 27, 1931.

82,471. SMOKING AND CHEWING TOBACCO, CIGARS, CIGARETTES, AND SNUFF. Registered June 27, 1911. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C., a Corporation of New Jersey. Renewed June 27, 1931.

82,596. ADHESIVE PASTE. Registered July 11, 1911. THE "GLOY" MANUFACTURING COMPANY, LIMITED. Renewed July 11, 1931, to Gloy & Empire Adhesives, Limited, London, England, a Corporation of Great Britain, assignee.

82,597. MASSAGE-CREAM, TOILET CREAM, TALCUM POWDER, FACE-POWDER, TOOTH-PASTE, AND A LOTION. Registered July 11, 1911. GOODRICH DRUG CO. Renewed July 11, 1931, to Velvetina Company, Inc., Omaha, Nebr., a Corporation of Nebraska, assignee.

82,621. FERTILIZERS. Registered July 11, 1911. ARNOLD OTTO MEYER, Hamburg, Germany. Renewed July 11, 1931, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

82,837. PERFUMERY. Registered July 25, 1911. SOCIEDAD VINICOLA, S. & L. DURLACHER, Hamburg, Germany. Renewed July 25, 1931, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

83,221. KID LEATHER MADE FROM HAIR SHEEPSKIN. Registered August 29, 1911. CASTLE KID CO. Renewed August 29, 1931, to Castle Kid Co., Inc., Camden, N. J., a Corporation of New York, assignee by mesne assignments.

83,417. SOAPS AND SOAP POWDERS. Registered September 12, 1911. KARL AUGUST LINGNER, Dresden, Germany. Renewed September 12, 1931, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

83,541. CERTAIN CHEMICALS. Registered September 26, 1911. BADISCHE ANILIN- & SODA-FABRIK, Ludwigshafen-on-the-Rhine, Germany. Renewed September 26, 1931, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

83,542. CERTAIN CHEMICALS. Registered September 26, 1911. BADISCHE ANILIN- & SODA-FABRIK, Ludwigshafen-on-the-Rhine, Germany. Renewed September 26, 1931, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

83,571. VEGETABLE-TANNED LEATHER MADE OF CALF, KIP, AND CATTLE HIDES. Registered September 26, 1911. A. F. GALLUN & SONS. Renewed September 26, 1931, to A. F. Gallun & Sons Corporation, Milwaukee, Wis., a Corporation of Wisconsin, assignee by mesne assignments.

83,572. CHROME-TANNED LEATHER MADE OF CALF, KIP, AND CATTLE HIDES. Registered September 26, 1911. A. F. GALLUN & SONS. Renewed September 26, 1931, to A. F. Gallun & Sons Corporation, Milwaukee, Wis., a Corporation of Wisconsin, assignee by mesne assignments.

83,573. VEGETABLE-TANNED LEATHER MADE OF CALF, KIP, AND CATTLE HIDES. Registered September 26, 1911. A. F. GALLUN & SONS. Renewed September 26, 1931, to A. F. Gallun & Sons Corporation, Milwaukee, Wis., a Corporation of Wisconsin, assignee by mesne assignments.

83,617. IMPLEMENTS FOR DISABLING OR KILLING INSECTS. Registered September 26, 1911. UNITED STATES WIRE MAT CO. Renewed September 26, 1931, to U. S. Manufacturing Corporation, Decatur, Ill., a Corporation of Illinois, by change of name.

83,684. CERTAIN HERB MEDICINES. Registered October 3, 1911. MONICKE HERB COMPANY. Renewed October 3, 1931, to Monicke Herb Company, Sheboygan, Wis., a firm, successor.

83,690. WHEAT-FLOUR. Registered October 3, 1911. THE REA-PATTERSON MILLING COMPANY, Coffeyville, Kans., a Corporation of Kansas. Renewed October 3, 1931.

83,693. BLENDED COFFEE. Registered October 3, 1911. WILLIAM S. SCULL COMPANY, Camden, N. J., a Corporation of New Jersey. Renewed October 3, 1931.

83,694. OXID-OF-ZINC ADHESIVE PLASTER. Registered October 3, 1911. SEABURY & JOHNSON, New York, N. Y., a Corporation of New Jersey. Renewed October 3, 1931.

83,799. WOOD-POLISHING OIL. Registered October 10, 1911. WILLIAM H. ZINSSER. Renewed October 10, 1931, to William Zinsser & Co., Inc., New York, N. Y., a Corporation of New York, assignee.

LABELS

REGISTERED MAY 19, 1931

39,143.—*Title:* BRADCO. For Eggs. BRADFORD COUNTY EGG CLUB, Athens, Pa. Published March 10, 1931.

39,144.—*Title:* BURGESS STRAIGHT-THRU EXHAUST MUFFLER. For Exhaust Mufflers. BURGESS BATTERY COMPANY, Madison, Wis. Published April 6, 1931.

39,145.—*Title:* WHOLE WHEAT. For Bread. CENTRAL WAXED PAPER COMPANY, Chicago, Ill. Published April 10, 1931.

39,146.—*Title:* SLICED. For Bread. CENTRAL WAXED PAPER COMPANY, Chicago, Ill. Published April 10, 1931.

39,147.—*Title:* MERCEDES HOSIERY DE LUXE. For Women's Hosiery. CHENANGO KNITTING COMPANY, INC., Sherburne, N. Y. Published July 2, 1929.

39,148.—*Title:* CHOCCO-YEAST. For Yeast Cakes. CHOCCO-YEAST, INC., Springfield, Mass. Published March 19, 1931.

39,149.—*Title:* DAVIS' UNION REMEDY. For Medicinal Preparation. CHAS. TRIP DAVIS, Pensacola, Fla. Published February 23, 1931.

39,150.—*Title:* HEBREW MOVABLE ALPHABET. For a Box for an Alphabet of Hebrew Letters Made in Wood and in Various Sizes. BENJAMIN DELEGATOR, Cincinnati, Ohio. Published January 6, 1931.

39,151.—*Title:* BOXKOL. For Coal. JACK J. DREW, Pittsburg, Okla. Published April 4, 1930.

39,152.—*Title:* PLASCO. For Preparation for Use in the Treatment of Local Inflammation and Congestion of all Kinds. SUTE MATSU ENDO, Honolulu, Territory of Hawaii. Published March 5, 1931.

39,153.—*Title:* FLA-VO-KRISP. For Roasted Salted Nuts. THE FLA-VO-KRISP COMPANY, Chicago, Ill. Published October 4, 1930.

39,154.—*Title:* I. S. CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 19, 1931.

39,155.—*Title:* THE MAY CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 26, 1931.

39,156.—*Title:* JOSEPH, INC. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 12, 1931.

39,157.—*Title:* NATIONAL MAID. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 20, 1930.

39,158.—*Title:* THE BOARDMAN SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 25, 1931.

39,159.—*Title:* THE CAVALIER SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 28, 1931.

39,160.—*Title:* SMART SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 5, 1931.

39,161.—*Title:* ARCH CRAFT. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 30, 1931.

39,162.—*Title:* FASHION QUEEN. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 4, 1931.

39,163.—*Title:* BEVERLY HILLS VANITIES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 3, 1931.

39,164.—*Title:* FELSER BROS. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 2, 1931.

39,165.—*Title:* MODERN SPORT GIRL. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published October 15, 1930.

39,166.—*Title:* NADELL BROS. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published November 25, 1930.

39,167.—*Title:* LA PARISIENNE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 2, 1931.

39,168.—*Title:* IRVING LEVY & CO. INC. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published October 3, 1930.

39,169.—*Title:* THE HOLLYWOOD GIRL. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 19, 1931.

39,170.—*Title:* HUDSON SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 10, 1931.

39,171.—*Title:* BETTY GALE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 26, 1930.

39,172.—*Title:* HURD SHOE CO. INC. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 1, 1930.

39,173.—*Title:* SUSAN STRONG. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 2, 1931.

39,174.—*Title:* JUVENILE FOOTWEAR. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 14, 1931.

39,175.—*Title:* MONROE BROS. & CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 5, 1931.

39,176.—*Title:* QUICK ELASTIC HOT STARCH IN 30 SECONDS. For Starch. THE HUBINGER CO., Keokuk, Iowa. Published April 22, 1931.

39,177.—*Title:* MISTLETO. For Salad Dressing. KADANE-BROWN, INC., Dallas, Tex. Published April 6, 1931.

39,178.—*Title:* MISTLETOE. For Sandwich Spread. KADANE-BROWN, INC., Dallas, Tex. Published April 6, 1931.

39,179.—*Title:* MISTLETOE. For Mayonnaise. KADANE-BROWN, INC., Dallas, Tex. Published April 6, 1931.

39,180.—*Title:* JEWELER'S POLISH. For Silver Polish. MIDWAY CHEMICAL CO., Chicago, Ill. Published November 18, 1930.

39,181.—*Title:* RADIANT DE LUXE CLEANING FLUID. For Cleaning Fluid. MIDWAY CHEMICAL CO., Chicago, Ill. Published September 27, 1930.

39,182.—*Title:* MOFFAT COAL. For Coal. THE MOFFAT COAL COMPANY, Denver, Colo. Published February 14, 1931.

39,183.—*Title:* OAK CREEK COAL. For Coal. THE MOFFAT COAL COMPANY, Denver, Colo. Published March 27, 1931.

39,184.—*Title:* ARROWHEAD CREPE TISSUE. For Toilet Paper. NORTHERN PAPER MILLS, Green Bay, Wis. Published April 13, 1931.

39,185.—*Title:* PROMISED LAND GRAPES. For Grapes. DOMINIC PAGANO, Fresno, Calif. Published August 15, 1930.

39,186.—*Title:* REEFER'S NO-MOTH CEDARAIRE. For Preparations for Protection Against Moths. REEFER'S NO-MOTH, INC., New York, N. Y. Published March 28, 1931.

39,187.—*Title:* MOTHINE. For Preparation Which Kills Moths, Moth Eggs and Larvæ. REGAL PRODUCTS CO., New York, N. Y. Published April 13, 1931.

39,188.—*Title:* SEAM-A-DEX. For Women's Hosiery or Stockings. DAVIS S. SAQUI, New York, N. Y. Published March 27, 1931.

39,189.—*Title:* 2 IN 1 BUTTER-NUT. For Bread. SCHULZE BAKING COMPANY, Kansas City, Mo. Published April 9, 1931.

39,190.—*Title:* BONITA. For Coffee. STANDARD BRANDS INCORPORATED, New York, N. Y. Published March 3, 1931.

PRINTS

REGISTERED MAY 19, 1931

13,197.—*Title:* CREAM OF THE CROP. For Fruits. O. B. ANDREWS COMPANY, Chattanooga, Tenn. Published December 12, 1930.

13,198.—*Title:* WIN NATION-WIDE APPROVAL. For Tires. THE FISK TIRE CO., INC., Chicopee Falls, Mass. Published October 1, 1930.

13,199.—*Title:* AIR-FLIGHT PRINCIPLE. For Tires. FISK TIRE CO., INC., Chicopee Falls, Mass. Published September 2, 1930.

13,200.—*Title:* WHAT BECOMES OF A DOLE PINEAPPLE. For Pineapple. HAWAIIAN PINEAPPLE COMPANY, LTD., San Francisco, Calif., and Honolulu, Territory of Hawaii. Published January 2, 1931.

13,201.—*Title:* STAYBESTOS. For Asbestos Brake Lining. HOWARD JONES, Sellersville, Pa. Published January 2, 1930.

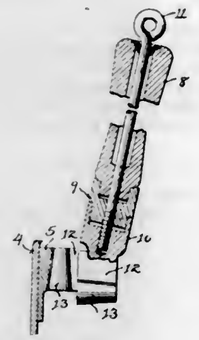
13,202.—*Title:* IN RETURN FOR '30-SECONDS-EACH-NIGHT' (±34-BA-1931). For Liquid Petrolatum. E. R. SQUIBB & SONS, New York, N. Y. Published April 1, 1931.

13,203.—*Title:* IN RETURN FOR "30-SECONDS-EACH-NIGHT" (±34-AZ-1931). For Liquid Petrolatum. E. R. SQUIBB & SONS, New York, N. Y. Published April 1, 1931.

REISSUES

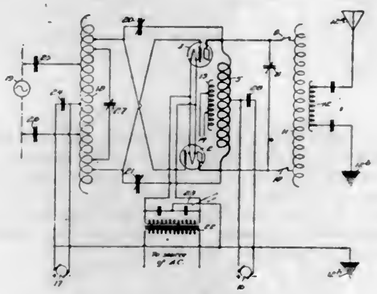
MAY 19, 1931

18,069. DETACHABLE COOKING UTENSIL HANDLE. ELMER E. DRUMM, Manitowoc, Wis., assignor to Aluminum Goods Mfg. Co., Manitowoc, Wis. Original No. 1,732,003, dated Oct. 15, 1929, Serial No. 303,795, filed Sept. 4, 1928. Application for reissue filed July 21, 1930. Serial No 469,570. 4 Claims. (Cl. 53—8.)



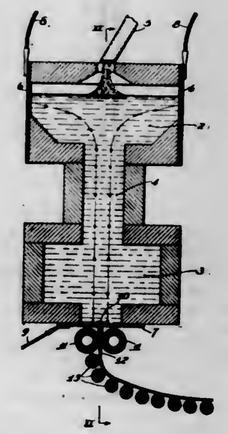
1. The combination of a utensil, a socket member carried by said utensil and provided with a vertical aperture tapered outwardly toward the bottom of said socket member, and a restricted slot between said aperture and the front of said member, a handle, an attaching block removably connected to one end of said handle a pair of webs carried by said block and projecting therefrom at an angle to one another, and tapered lugs carried by said webs for engagement in the vertical aperture in said socket member.

18,070. INDUCTANCE SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Original No. 1,753,408, dated Apr. 8, 1930. Serial No. 327,988, filed Dec. 22, 1928. Application for reissue filed Mar. 14, 1931. Serial No. 522,709. 12 Claims. (Cl. 250—17.)



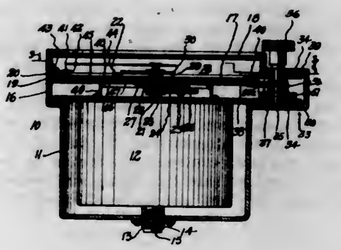
1. An inductance system comprising in combination a metallic member of helical form providing a double passage for the circulation of liquid, a load circuit inductively coupled with said metallic member, a path to ground, having low impedance to radio frequency currents, said path being connected with said metallic member intermediate the ends thereof for defining the electrical center therein and means provided at the electrical center of the inductance whereby said liquid may be admitted to said passage.

18,071. APPARATUS FOR MELTING GLASS AND SIMILAR SUBSTANCES. HARRY F. HITNER, Oakmont, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Original No. 1,761,342, dated June 3, 1930, Serial No. 337,297, filed Feb. 4, 1929. Application for reissue filed Dec. 13, 1930. Serial No. 502,232. 5 Claims. (Cl. 49—33.)



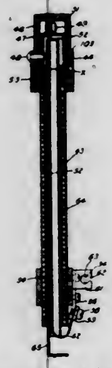
5. A tank for melting glass and similar substances, wherein the substance acts as a resistor, comprising a metal electrode constituting one of the walls of the tank, and having an opening therethrough for the discharge of melted material, a second electrode at a point remote from the said first electrode positioned so as to transmit current through the material in the tank at said point, and means for supplying electric current to the electrodes.

18,072. INDICATOR. PAUL KOLLSMAN, Woodhaven, N. Y., assignor to Kollsman Instrument Company, Inc., Brooklyn, N. Y., a Corporation of New York. Original No. 1,741,702, dated Dec. 31, 1929, Serial No. 383,931, filed Aug. 6, 1929. Application for reissue filed Dec. 22, 1930. Serial No. 504,188. 36 Claims. (Cl. 116—129.)



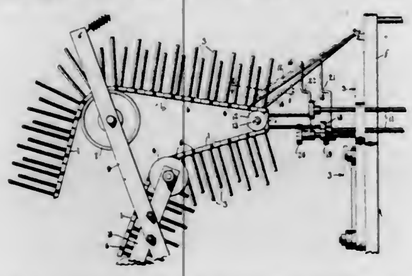
1. A device of the character described, including an indicator, said indicator having scale means, a pointer, a reference means, other means coacting with the pointer and the reference means to cause them to move relatively to each other in synchronism with respect to the scale means, and means to cause the pointer and reference means to move through equal angles in setting the device.

18,073. FUSE MECHANISM. MAURITS J. SANDIN, Wilkins Township, Allegheny County, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original No. 1,684,518, dated Sept. 18, 1928, Serial No. 510,280, filed Oct. 25, 1921. Application for reissue filed Sept. 17, 1930. Serial No. 482,630. 25 Claims. (Cl. 200—127.)



25. In a circuit interrupter, a housing having a bottom wall with an opening therein, spaced terminal members in said housing, a door hinged to said housing adjacent said bottom wall, a fuse receptacle having spaced contact members to engage said terminal members, said receptacle having an open end and being mounted on said door so that said open end extends into said opening in the bottom wall when the door is closed.

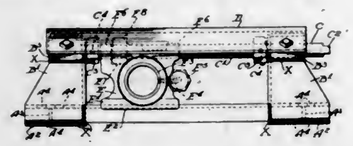
18,074. CONTROL FOR KNITTING MACHINES. HARRY WEINRUB, New York, N. Y. Original No. 1,791,989, dated Feb. 10, 1931, Serial No. 419,032, filed Jan. 7, 1930. Application for reissue filed Mar. 9, 1931. Serial No. 521,321. 4 Claims. (Cl. 66—85.)



3. In a pattern mechanism for knitting machines, a pair of bar link chains, one at each end of the knitting machine, each bar link of said chains being provided with holes to receive removable pins, control bars, actuation of which positions yarn guides to control the pattern, means for feeding said bar links successively to a position opposite said control bars, means for reciprocating said bar link chains alternatively to cause said pins to engage and move said control bars, means to reverse the direction of feed of said bar links, and removable pins carried by said bar links to actuate said reversing means.

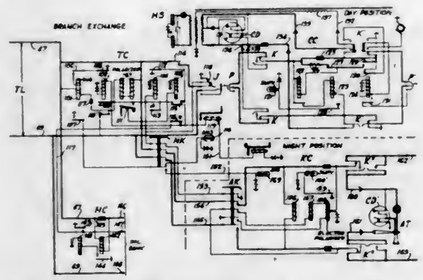
18,075. ADJUSTABLE BEARING. AXEL K. SJOLANDER, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,778,231, dated Oct. 14, 1930, Serial No. 242,456, filed Dec. 24, 1927. Application for reissue filed Feb. 16, 1931. Serial No. 516,230. 10 Claims. (Cl. 308—59.)

1. In combination in an adjustable bearing support member, a main base member comprising a supporting frame work and guiding track, such member provided with end portions, a bearing block formed to engage said track element and adapted to be moved therealong, a moving and controlling shaft mounted for rotation in the end portions of such base member, provided with a thread, so that rotation of the shaft causes the bearing block to



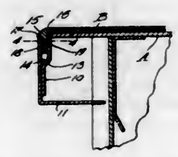
move along the base member, the bearing block being located between the track and the shaft, and a covering member, removably attached to the upward end portions, lying above and extending laterally and downwardly with relation to such threaded shaft, whereby the shaft is protected from the deposit of dirt and foreign matter in general.

18,076. TELEPHONE SYSTEM. CLARENCE E. LOMAX, Oak Park, Ill., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Original No. 1,658,450, dated Feb. 7, 1928, Serial No. 4,691, filed Jan. 26, 1925. Application for reissue filed Nov. 3, 1930. Serial No. 493,194. 28 Claims. (Cl. 197—27.)



1. In a telephone system, an automatic connector switch having line wipers and a test wiper, a line accessible to said connector switch, a line relay and a cut-off relay for said line, a relay in said connector switch energized responsive to the idle condition of said line when the wipers are brought into engagement with the contacts thereof to close a circuit for said cut-off relay over said test wiper, and a second relay energized responsive to the energization of said first relay to connect the line wipers to the connector switch.

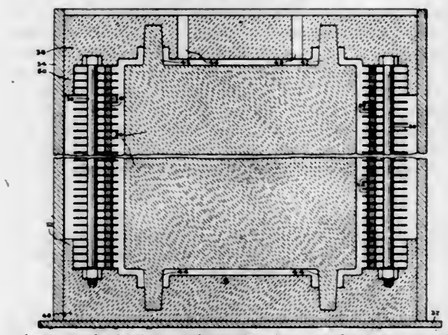
18,077. BINDING MEANS FOR THE SURFACE COVERINGS OF FURNITURE. ALGOT J. E. LARSON, Jamestown, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y. Original No. 1,705,156, dated Mar. 12, 1929, Serial No. 592,747, filed Oct. 6, 1922. Application for reissue filed Mar. 12, 1931. Serial No. 522,115. 7 Claims. (Cl. 45—31.)



1. The combination with the top member of an article of furniture, and a surface covering for the same.

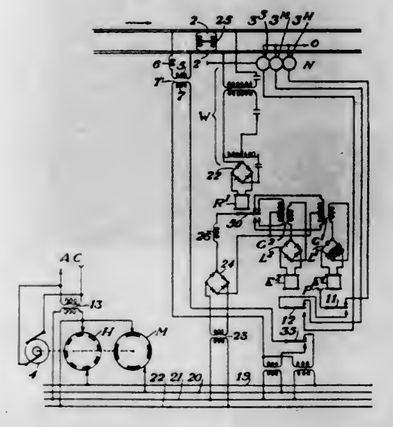
of an edge strip rigidly secured to said top member and extending along the edge face thereof, said edge face and said edge strip forming between them a groove with fixed walls which opens adjacent the edge of said covering, and a removable, unattached binding strip seated in said groove and having a protruding portion which conceals the groove and bounds the edge of said covering, said binding strip being releasably secured in said groove by engagement with rigid parts of the fixed walls of the groove.

18,078. PROCESS OF MANUFACTURING HEAT EXCHANGERS. JOHN OTTO OLSON, St. Paul, Minn. Original No. 1,742,556, dated Jan. 7, 1930, Serial No. 165,860, filed Feb. 4, 1927. Application for reissue filed Nov. 22, 1930. Serial No. 497,591. 16 Claims. (Cl. 22—203.)



1. A method of manufacturing heat exchangers provided with a multiplicity of thin fins integrally joined thereto, which consists in assembling a stack of apertured plates with the apertures in alinement, spacing said plates with forms provided with previously-fabricated metal openings adjacent the alined apertures of the plates beyond which the margins of the plates around said apertures project inwardly, inserting a core within the chamber formed by the plates and forms, and casting a hollow body of metal within said chamber and around said core and attached to said projecting margins.

18,079. RAILWAY TRAFFIC CONTROLLING APPARATUS. CLARENCE S. SNAVELY, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original No. 709,920, dated Apr. 23, 1929, Serial No. 142,162, filed Oct. 18, 1926. Application for reissue filed Nov. 25, 1930. Serial No. 498,192. 14 Claims. (Cl. 246—38.)

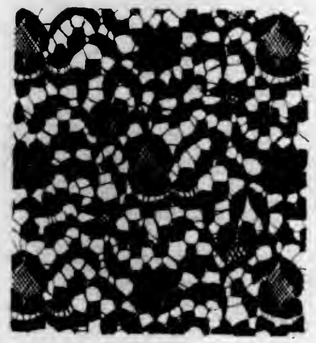


10. In combination, a stretch of railway track divided into sections, a track relay having a winding connected with the rails of each section and responsive to periodic interruptions of alternating current in such rails, a plurality of decoding relays associated with each section, means for selectively energizing said decoding relays in accordance with the rate of operation of the associated track relay, and means controlled by the decoding relays for each section for supplying alternating current to the rails of the section next in the rear periodically interrupted at different rates according to the conditions of the decoding relays.

DESIGNS

MAY 19, 1931

84,175. LACE. WILLIAM R. ADAIRE, Philadelphia, Pa., assignor to New England Lace Mills, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 19, 1931. Serial No. 39,140. Term of patent 3½ years.



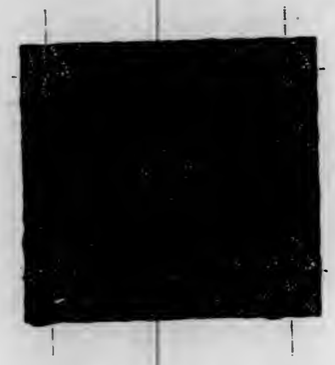
The ornamental design for lace, substantially as shown.

84,176. SPECTACLE FRAME. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Mar. 18, 1931. Serial No. 39,133. Term of patent 14 years.



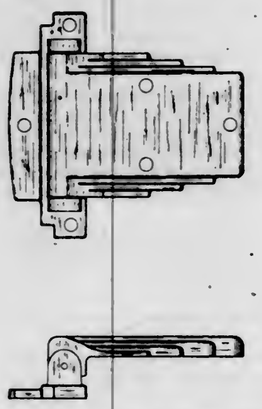
The ornamental design for a spectacle frame as shown.

84,177. LACE. BEN A. BALL, Pawtucket, R. I., assignor to American Textile Co., Inc., Pawtucket, R. I., a Corporation of Rhode Island. Filed Mar. 17, 1931. Serial No. 39,130. Term of patent 7 years.



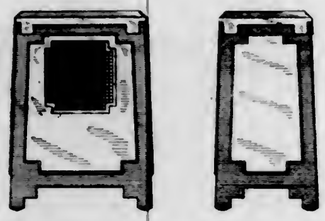
The ornamental design for lace, substantially as shown and described.

84,178. HINGE. GEBHARD C. BOHN, St. Paul, Minn. Filed Mar. 4, 1931. Serial No. 38,925. Term of patent 14 years.



The ornamental design for a hinge, substantially as shown.

84,179. ELECTRIC HEATER. EARL C. BOOTH, Indianapolis, Ind. Filed Oct. 27, 1930. Serial No. 37,394. Term of patent 7 years.



The ornamental design for an electric heater, as shown and described.

84,180. COMBINATION CURTAIN POLE AND CURTAIN SUSPENDING MEANS. JACK C. CARLTON, Southgate, Calif., assignor to A. Lipton, doing business as Allied Metal Industries, Inglewood, Calif. Filed Aug. 4, 1930. Serial No. 36,542. Term of patent 3½ years.



The ornamental design for a combination curtain pole and curtain suspending means, as shown and described.

84,181. COMBINATION CURTAIN POLE AND CURTAIN SUSPENDING MEANS. JACK C. CARLTON, Southgate, Calif., assignor to A. Lipton, doing business as Allied Metal Industries, Inglewood, Calif. Filed Aug. 4, 1930. Serial No. 36,543. Term of patent 3½ years.



The ornamental design for a combination curtain pole and curtain suspending means as shown and described.

84,182. COMBINATION CURTAIN POLE AND CURTAIN SUSPENDING MEANS. JACK C. CARLTON, Southgate, Calif., assignor to A. Lipton, doing business as Allied Metal Industries, Inglewood, Calif. Filed Aug. 4, 1930. Serial No. 36,544. Term of patent 3½ years.



The ornamental design for a combination curtain pole and curtain suspending means as shown and described.

84,183. PAPER DOILY. FRED A. CONRAD, Milwaukee, Wis., assignor to American Lace Paper Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 16, 1931. Serial No. 39,099. Term of patent 14 years.



The ornamental design for a paper dolly as shown and described.

84,184. EAR RING. LOUIS A. DELAMOTHE, Oakland, Calif. Filed Mar. 6, 1931. Serial No. 38,960. Term of patent 3½ years.



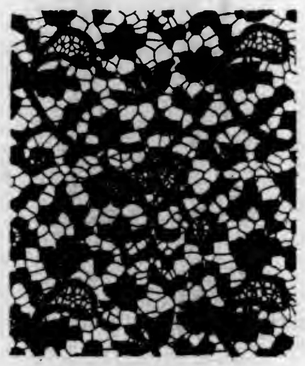
The ornamental design for an ear ring as shown.

84,185. LACE. BERT EDSON, Pawtucket, R. I., assignor to New England Lace Mills, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 6, 1931. Serial No. 38,981. Term of patent 3½ years.



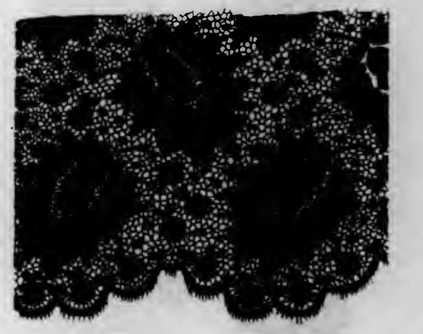
The ornamental design for lace, substantially as shown.

84,186. LACE. BERT EDSON, Pawtucket, R. I., assignor to New England Lace Mills, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 6, 1931. Serial No. 38,983. Term of patent 3½ years.



The ornamental design for lace, substantially as shown.

84,187. LACE. BERT EDSON, Pawtucket, R. I., assignor to New England Lace Mills, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 6, 1931. Serial No. 38,984. Term of patent 3½ years.

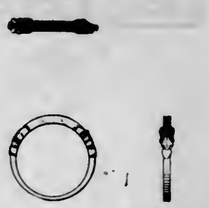


The ornamental design for lace, substantially as shown.

84,188. RESTAURANT BUILDING. FRANK S. FENTON, Cincinnati, Ohio, assignor to Fenton's Sandwich, Inc., Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 1, 1930. Serial No. 35,095. Term of patent 3½ years.

The ornamental design for a restaurant building as shown and described.

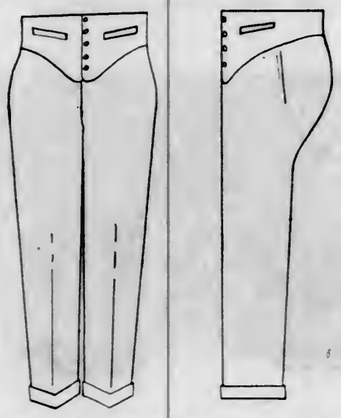
84,189. FINGER RING OR SIMILAR ARTICLE. ABRAHAM SUDEROV, New York, N. Y. Filed Mar. 11, 1931. Serial No. 39,025. Term of patent 3½ years.



The ornamental design for a finger ring or similar article, substantially as shown.

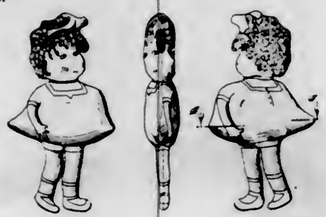
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84,190. COMBINED VEST AND TROUSERS. SAMUEL GOLDSTEIN, Chicago, Ill. Filed Aug. 18, 1930. Serial No. 36,696. Term of patent 3½ years.



The ornamental design for a combined vest and trousers as shown.

84,191. DOLL. HELEN B. HEBERT, San Diego, Calif. Filed Jan. 15, 1931. Serial No. 38,313. Term of patent 7 years.





The ornamental design for a doll, substantially as shown.

84,192. CORNER CLAMP FOR STORE FRONT CONSTRUCTION. FRED HIMMEL and ISIDORE HIMMEL, New Haven, Conn., assignors to The Himmel Brothers Company, New Haven, Conn., a Corporation. Filed Apr. 2, 1931. Serial No. 39,352. Term of patent 14 years.





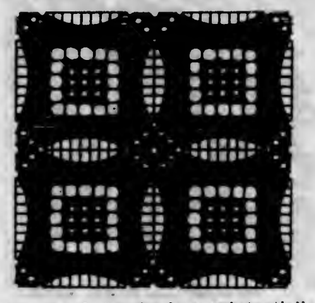
The ornamental design for a corner-clamp for store-front construction as shown.

84,193. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Mar. 16, 1931. Serial No. 39,109. Term of patent 3½ years.



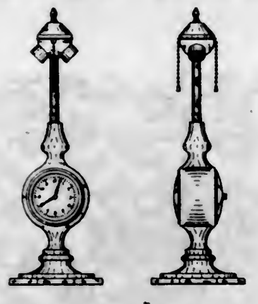
The ornamental design for lace, substantially as shown and described.

84,194. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Mar. 19, 1931. Serial No. 39,144. Term of patent 3½ years.



The ornamental design for lace, substantially as shown and described.

84,195. COMBINED LAMP AND CLOCK OR SIMILAR ARTICLE. JACOB KOHUT, St. Louis, Mo. Filed Mar. 9, 1931. Serial No. 39,008. Term of patent 14 years.





The ornamental design for a combined lamp and clock or similar article substantially as shown.

84,196. TEXTILE FABRIC. WILLIAM KREIELSHEIMER, New York, N. Y. Filed Mar. 10, 1931. Serial No. 39,019. Term of patent 3½ years.



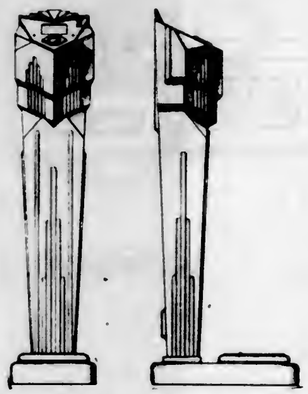
The ornamental design for a textile fabric substantially as shown and described.

84,197. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 24, 1931. Serial No. 38,805. Term of patent 3½ years.



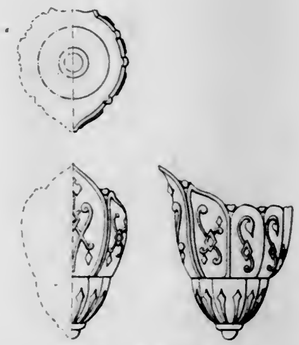
The ornamental design for a dress substantially as shown.

84,198. SCALE. THOMAS LONG, Chicago, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 23, 1931. Serial No. 39,211. Term of patent 14 years.



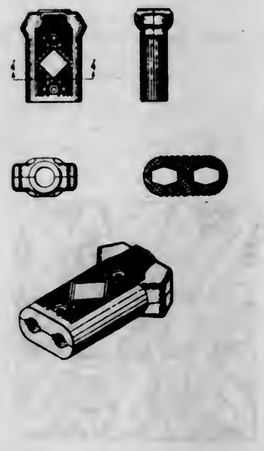
The ornamental design for a scale as shown.

84,199. SHADE FOR AN ELECTRIC LAMP. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 17, 1931. Serial No. 39,124. Term of patent 3½ years.



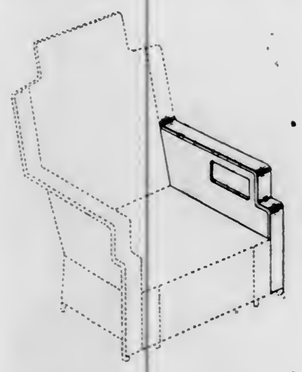
The ornamental design for a shade for an electric lamp, substantially as shown and described.

84,200. ELECTRIC APPLIANCE PLUG. GEORGE J. MEUER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 1, 1931. Serial No. 39,315. Term of patent 14 years.



The ornamental design for an electric appliance plug, substantially as shown.

84,201. CHAIR OR THE LIKE. VINCENT OLIVA, New York, N. Y., assignor to Grand Central Wicker Shop, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 23, 1929. Serial No. 33,532. Term of patent 3½ years.



The ornamental design for a chair or the like, as shown.

84,202. LACE. SAMUEL H. PAGE, Stratford, Conn., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 24, 1931. Serial No. 39,227. Term of patent 3½ years.

The ornamental design for a lace substantially as shown.

84,203. WALL PLATE FOR LIGHTING FIXTURES. ROSA MAY PICKARD, Wilmette, Ill. Filed Mar. 9, 1931. Serial No. 39,009. Term of patent 7 years.



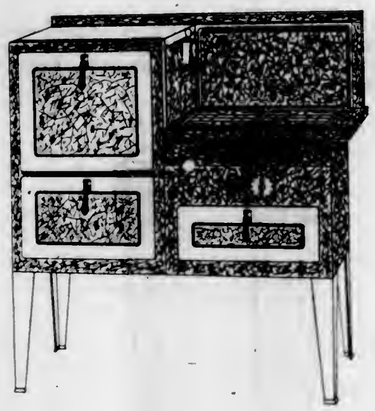
The ornamental design for a wall plate for lighting fixtures as shown.

84,204. TIE BACK FOR CURTAIN DRAPERIES. ROSA MAY PICKARD, Wilmette, Ill. Filed Mar. 9, 1931. Serial No. 39,010. Term of patent 7 years.



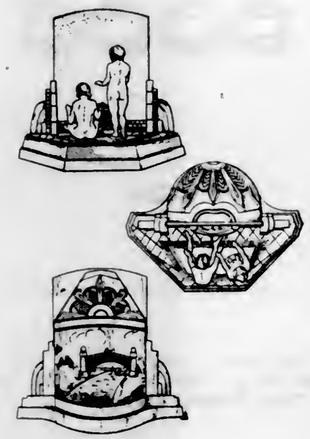
The ornamental design for a tie back for curtain draperies as shown.

84,205. GAS STOVE. ALFRED J. REEDY, Battle Creek, Mich., assignor to A-B Stove Company, Battle Creek, Mich. Filed Mar. 16, 1931. Serial No. 39,108. Term of patent 7 years.



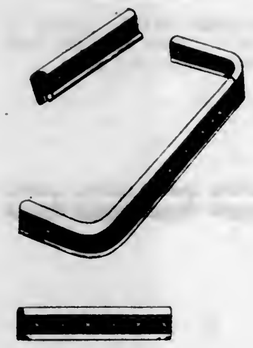
The ornamental design for a gas stove, as shown.

84,206. LAMP. WILLIAM H. SHLESINGER, Brooklyn, N. Y. Filed Mar. 25, 1931. Serial No. 39,241. Term of patent 3½ years.



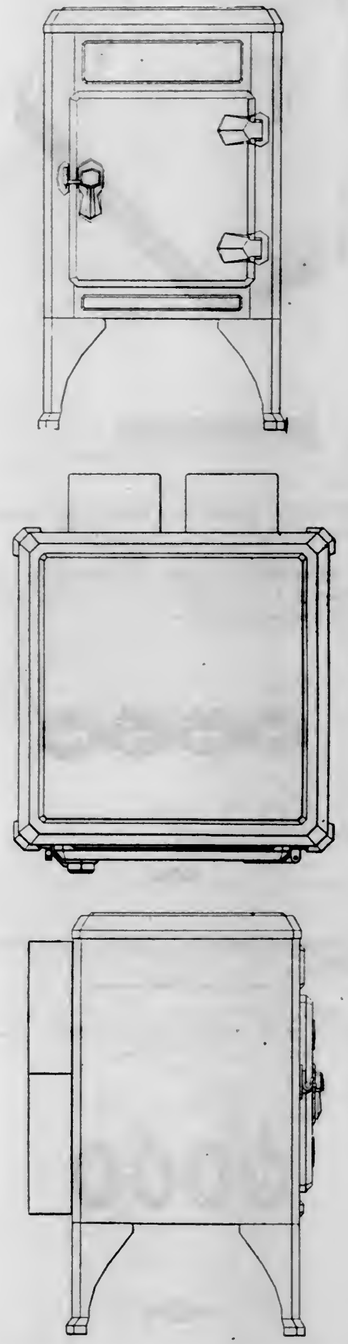
The ornamental design for a lamp, as shown.

84,207. DRAPERY ROD. WALTER EDWARD SMITH, Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed Feb. 24, 1931. Serial No. 38,803. Term of patent 14 years.



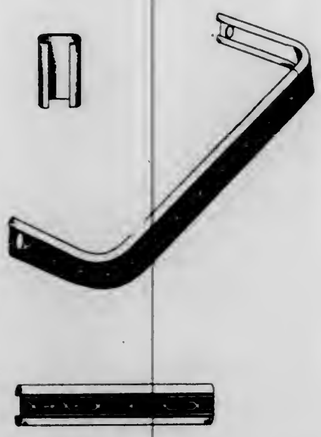
The ornamental design for a drapery rod, as shown.

84,208. REFRIGERATOR CABINET. RUSSELL T. SMITH, Greenville, Mich. Filed Mar. 23, 1931. Serial No. 39,216. Term of patent 7 years.



The ornamental design for a refrigerator cabinet, substantially as shown.

84,209. DRAPERY ROD. WALTER EDWARD SMITH, Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed Feb. 24, 1931. Serial No. 38,804. Term of patent 14 years.



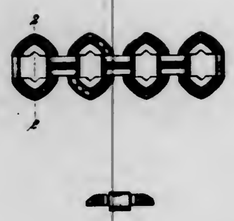
The ornamental design for a drapery rod, as shown.

84,210. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I. Filed Mar. 28, 1931. Serial No. 39,274. Term of patent 3½ years.



The ornamental design for a bracelet chain, substantially as shown.

84,211. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I. Filed Mar. 28, 1931. Serial No. 39,275. Term of patent 3½ years.



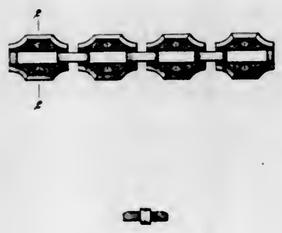
The ornamental design for a bracelet chain, substantially as shown.

84,212. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I. Filed Mar. 28, 1931. Serial No. 39,276. Term of patent 3½ years.



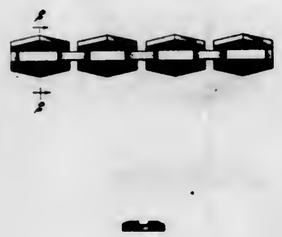
The ornamental design for a bracelet chain, substantially as shown.

84,213. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I. Filed Mar. 28, 1931. Serial No. 39,277. Term of patent 3½ years.



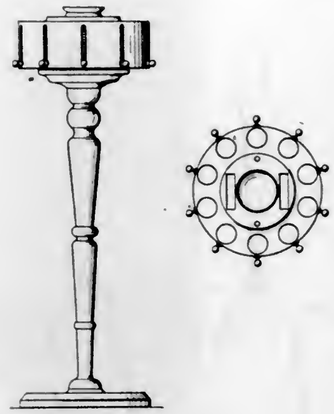
The ornamental design for a bracelet chain, substantially as shown.

84,214. BRACELET CHAIN. ALBERT E. R. SPEIDEL, Edgewood, R. I. Filed Mar. 28, 1931. Serial No. 39,278. Term of patent 3½ years.



The ornamental design for a bracelet chain, substantially as shown.

84,215. COMBINATION CHIP RACK AND SMOKING STAND. AARON STAAT, Cincinnati, Ohio. Filed Mar. 7, 1931. Serial No. 38,992. Term of patent 7 years.



The ornamental design for a combination chip rack and smoking stand, substant'ally as shown.

84,216. FINGER RING OR SIMILAR ARTICLE. ABRAHAM SUDEROV, New York, N. Y. Filed Mar. 11, 1931. Serial No. 39,023. Term of patent 3½ years.



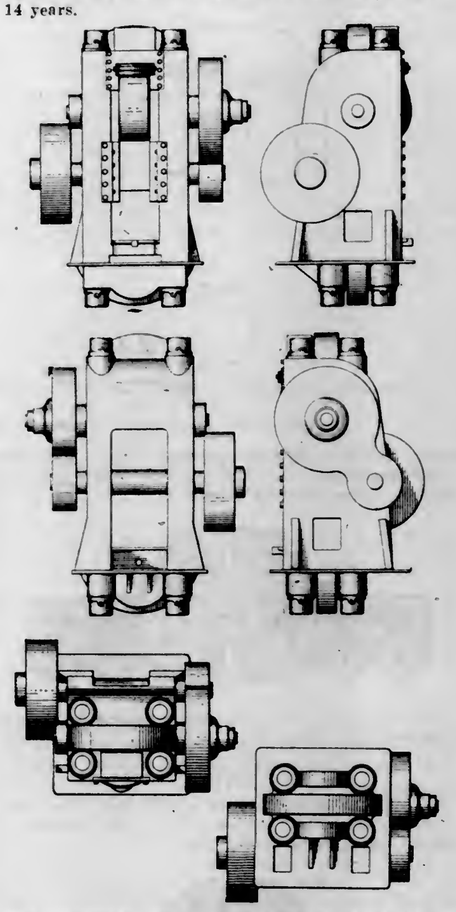
The ornamental design for a finger ring or similar article, substantially as shown.

84,217. FINGER RING OR SIMILAR ARTICLE. ABRAHAM SUDEROV, New York, N. Y. Filed Mar. 11, 1931. Serial No. 39,024. Term of patent 3½ years.



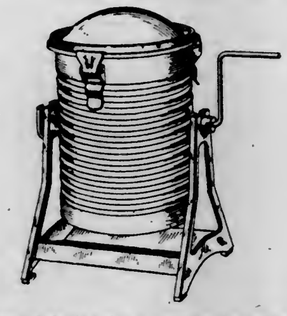
The ornamental design for a finger ring or similar article, substantially as shown.

84,218. PRESS. WILLIAM L. CLOUSE, Tiffin, Ohio, assignor to The National Machinery Company, Tiffin, Ohio. Filed Feb. 10, 1931. Serial No. 38,603. Term of patent 14 years.



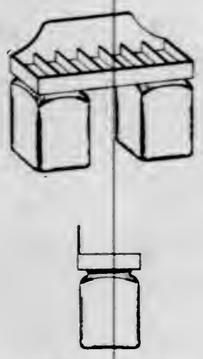
The ornamental design for a press, as shown and described.

84,219. COMBINED WASHING MACHINE CASING AND SUPPORT THEREFOR. LEE B. GREEN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 12, 1931. Serial No. 39,051. Term of patent 14 years.



The ornamental design for a combined washing machine casing and support therefor, substantially as shown.

84,220. DISPLAY STAND. RUBEN B. LUSTIG, Kansas City, Mo. Filed Mar. 9, 1931. Serial No. 39,004. Term of patent 14 years.



The ornamental design for a display stand, as shown.

84,221. LACE TRIMMING OR THE LIKE. MAX SADINOFF, Brooklyn, N. Y. Filed Aug. 12, 1930. Serial No. 36,634. Term of patent 3½ years.



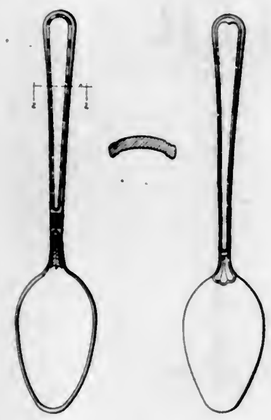
The ornamental design for lace trimming or the like substantially as shown.

84,222. LACE TRIMMING OR THE LIKE. MAX SADINOFF, Brooklyn, N. Y. Filed Aug. 12, 1930. Serial No. 36,635. Term of patent 3½ years.



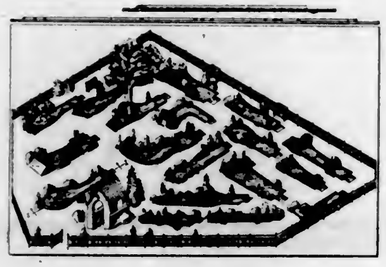
The ornamental design for lace trimming or the like substantially as shown.

84,223. SPOON OR SIMILAR ARTICLE. AXEL H. STAF, Providence, R. I., assignor to Gorham Mfg. Co., Providence, R. I. Filed Feb. 13, 1931. Serial No. 38,649. Term of patent 14 years.



The ornamental design for a spoon or similar article, substantially as shown and described.

84,224. TOY GOLF COURSE. DOMENIC A. VALVANO, Linden, N. J. Filed Jan. 15, 1931. Serial No. 38,317. Term of patent 7 years.

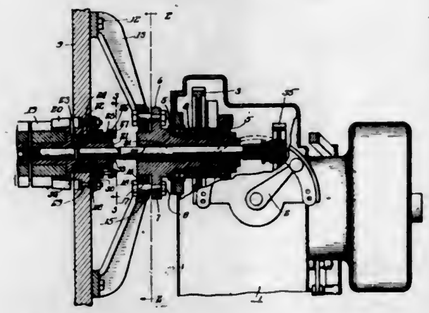


The ornamental design for a toy golf course substantially as shown.

PATENTS

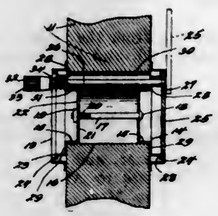
GRANTED MAY 19, 1931

1,805,464. POWER CHURN. ARTHUR H. BOILEAU, Cedar Rapids, Iowa, assignor to Cherry-Burrell Corporation, Cedar Rapids, Iowa, a Corporation of Delaware. Original application filed June 4, 1928, Serial No. 282,750. Divided and this application filed Feb. 26, 1930. Serial No. 431,387. 7 Claims. (Cl. 259—85.)



1. In a churn, a roll in said churn, a packing gland secured to the end of the churn and outside thereof, a roll box arranged inside of said churn and extending through said packing gland, said roll box having a square opening therein, and a shaft having a square end adapted to engage said opening for forming a driving connection between the roll and shaft.

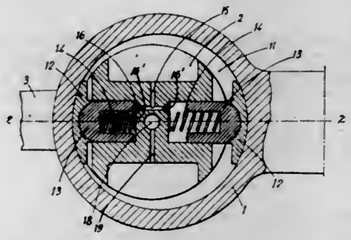
1,805,465. SPEAKING TUBE APPARATUS. JOHN M. CLIFFORD, Providence, R. I. Filed May 20, 1929. Serial No. 364,562. 14 Claims. (Cl. 181—22.)



1. A speaking tube device for partitions, in combination, interchangeable inner and outer mouth pieces having shoulders adapted to fit securely into the ends of an opening through the partition, and a bolt passing centrally through the mouth pieces and provided with a nut adjustable on the bolt whereby the device is adapted to fit partitions of various thicknesses.

1,805,466. FRICTIONAL SHOCK ABSORBER WITH HYDRAULIC CONTROL. GEORGES HENRI ERNEST DE RAM, Boulogne-sur-Seine, France. Filed Sept. 11, 1928. Serial No. 305,271, and in France Sept. 17, 1927. 1 Claim. (Cl. 188—130.)

A suspension shock-absorber for vehicles, adapted to be interposed between the underframe and the axle of the said vehicles, comprising a body member with a cylindrical bore, caps closing the said body member at its two ends, a shaft, rotatable inside the cylindrical bore of the said body member, a chamber provided at one end of the said shaft, a piston reciprocable inside the said chamber parallel to the shaft, a friction member separating the said piston from the corresponding cap of the said body member, a friction member interposed between the end of the shaft opposite to the said piston and the other cap of the said body member, the cylindrical bore of the said body member having an eccentric groove, radial chambers



made in the said shaft, small pistons located in the said chambers and also arranged in the said eccentric groove, passages connecting the said radial chambers with the said shaft chamber, whereby the relative rotation of the said body member and shaft displaces a body of liquid inside the said body member, which liquid acts upon the said friction members, so as to brake the rotation of the said shaft.

1,805,467. TREATMENT OF CELLULOSE DERIVATIVES OR PRODUCTS MADE THEREWITH. HENRY DREYFUS, London, England. Filed Mar. 4, 1927, Serial No. 172,921, and in Great Britain Mar. 16, 1926. 15 Claims. (Cl. 8—5.)

1. Process of dyeing material containing a cellulose ether, which comprises a loading operation wherein the material is swelled and impregnated with a solution of a salt of a loading metal and the metal is fixed in the material as an insoluble compound, and a subsequent operation comprising the application to the loaded material of a coloring matter that has but little affinity for the unloaded cellulose ether material.

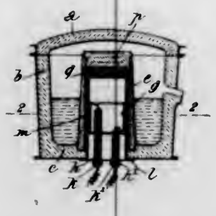
13. As a new article of manufacture, a material comprising a cellulose ether loaded with a water-insoluble metal salt and dyed with a dyestuff which has but little affinity for unloaded cellulose ether material.

1,805,468. TREATMENT OF CELLULOSE DERIVATIVES OR PRODUCTS MADE THEREWITH. HENRY DREYFUS, London, England. Filed Mar. 4, 1927, Serial No. 172,922, and in Great Britain Mar. 16, 1926. 15 Claims. (Cl. 8—5.)

1. Process of dyeing material containing a cellulose ester of an organic acid that is a homologue of acetic acid, which comprises a loading operation wherein the material is swelled and impregnated with a solution of a salt of a loading metal and the metal is fixed in the material as an insoluble compound, and a subsequent operation comprising the application to the loaded material of a coloring matter that has but little affinity for the unloaded cellulose ester material.

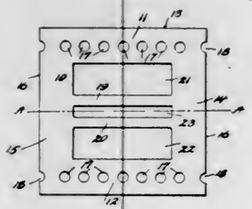
13. As a new article of manufacture, a material comprising a cellulose ester of an organic acid which is a homologue of acetic acid, loaded with a water-insoluble metal salt and dyed with a dyestuff which has but little affinity for unloaded cellulose ester material.

1,805,469. ELECTRIC FURNACE. RENÉ DUFOUR, Paris, France. Filed July 28, 1927, Serial No. 209,111, and in Belgium Aug. 4, 1926. 6 Claims. (Cl. 266—1.5.)



1. A high frequency furnace comprising a plurality of insulated chambers, a coil located inside each chamber, said coils being of the air-wound type, and a furnace chamber external to said insulated chambers, said insulated chambers being so positioned that the magnetic fields of the coils, contained therein, overlap when high frequency currents are supplied to the coil terminals.

1,805,470. BUILDING UNIT. KENNETH W. DUNWODY, Macon, Ga. Filed June 6, 1929. Serial No. 368,872. 2 Claims. (Cl. 72—41.)



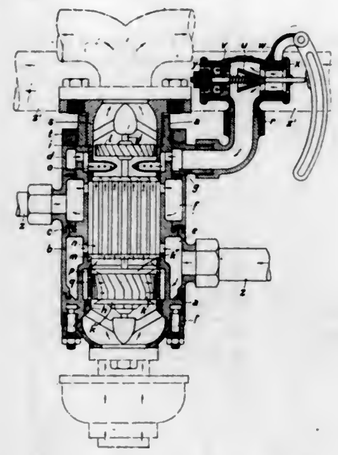
1. A hollow building unit having relatively thick stretcher and header walls, said header walls being connected by a pair of vertical hand hold webs disposed in parallel relation to the stretcher walls, each of the stretcher walls being provided with a longitudinal series of vertical openings, the end openings of each series being intersected by the header face of said unit whereby a mortar key is provided near each end of the header faces.

1,805,471. EAR SUCTION CUP. LEE R. ENGLAND, Carter, Okla. Filed Aug. 15, 1929. Serial No. 386,017. 3 Claims. (Cl. 128—300.)



1. A suction cup, comprising a substantially cylindrical hollow resilient body, a resilient dome-like head closing one end of the body, a relatively broad soft rim surrounding the edge of the body at the other end thereof, a metal reinforcing liner within the cylindrical portion of the body, and resilient means supporting the dome-like end thereof to normally force the same outwardly.

1,805,472. PROCESS AND DEVICE FOR TREATING FUEL AIR MIXTURES FOR INTERNAL COMBUSTION ENGINES. JOHANN GRIVIN, Riga, Latvia. Filed Dec. 1, 1927, Serial No. 237,094, and in Latvia Dec. 4, 1926. 3 Claims. (Cl. 48—180.)



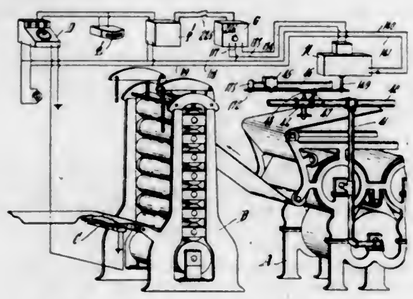
3. A fuel air interceptor comprising a centrifugal wheel, a heating chamber round the centrifugal wheel, a superheater above the centrifugal wheel, tongue-shaped secondary air inlets above the said superheater, a mixing wheel coupled with the centrifugal wheel above the said tongue-shaped air inlets, the mixing wheel being adapted to serve as a driving element to the centrifugal wheel.

1,805,473. SYNTHETIC RESIN AND PROCESSES OF MAKING THE SAME. LESTER V. ADAMS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 1, 1928. Serial No. 274,370. 10 Claims. (Cl. 260—8.)

1. A resin resulting from the reaction of a polyhydric alcohol, a polybasic acid and an organic compound of a metal.

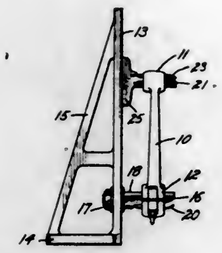
7. A resin resulting from the reaction of a polyhydric alcohol, a polybasic acid, and a calcium soap.

1,805,474. APPARATUS FOR CONTROLLING MOISTURE CONTENT OF PAPER OR THE LIKE. ALBERT ALLEN, Winchester, and JOHN G. CALLAN, Cambridge, Mass., assignors to Atlantic Precision Instrument Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 24, 1927. Serial No. 228,220. 6 Claims. (Cl. 34—48.)



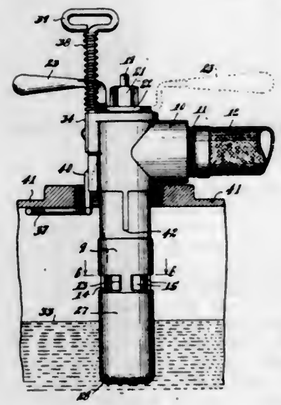
1. In combination with a drier, and a valve for controlling the supply of steam to said drier, of a lever movable to open and close said valve, a weight movable along said lever to control by its position thereon the angular position of said lever, and a device responsive to the moisture content of said material coming from said drier for controlling the position of said weight.

1,805,475. CONNECTING ROD ALIGNING GAUGE. RUSSELL T. ANDERSON, Denver, Colo. Filed Apr. 12, 1928. Serial No. 269,405. 3 Claims. (Cl. 33—180.)
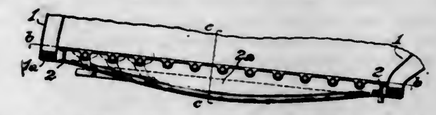


2. A connecting rod aligning gauge comprising: a T-shaped member; a straight edge along the top of the head thereof; two parallel straight edges along the stem thereof, said latter two edges lying in a common plane to which said first straight edge is perpendicular, said stem being arranged to pass into a bearing in a connecting rod; and spring means carried by said T-shaped member for forcing said latter two edges against said bearing.

1,805,476. COMBINATION HOSE END INDICATOR AND VALVE. ALFRED C. ANDREASEN, Oak Park, Ill., assignor to Air-Way Pump Company, Chicago, Ill., a Corporation of Illinois. Filed May 12, 1930. Serial No. 451,695. 7 Claims. (Cl. 116—118.)



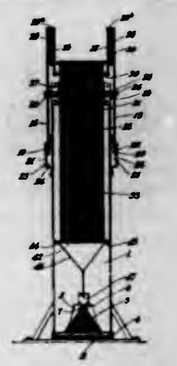
1. A device of the character described adapted to be secured to the discharge end of a liquid dispensing conduit, comprising a supporting member provided with a liquid passageway, a portion of said device adapted to extend interiorly of a liquid receiving vessel, means operable by the liquid within said vessel for visually indicating the upper level of said liquid, valve means for controlling the supply of liquid, and means for clamping said device to said vessel.

1,805,477. GRATE SUPPORT. GEORGE B. ASHWORTH, Amsterdam, N. Y. Filed June 26, 1928. Serial No. 288,316. 7 Claims. (Cl. 126—152.)



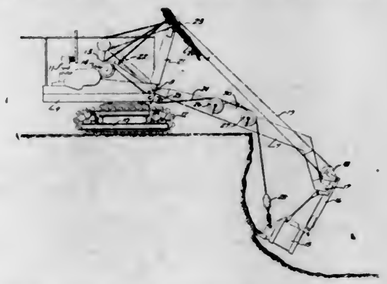
1. In a locomotive, the combination of a steam boiler firebox having inner and outer sheets; a grate support structure therein, comprising side and end members disposed within the walls of the boiler and connected to same for support; and separately formed sealing plates, located on the tops of the side and end members, and contacting with the adjoining firebox sheet.

1,805,478. PROCESS OF MAKING PLAITED LEATHER. FRANK BARBER, College Point, N. Y. Filed Feb. 27, 1929. Serial No. 342,961. 16 Claims. (Cl. 139—17.)



1. The process which comprises producing a plaited sheet of leather by doubling a series of longitudinal strips of leather, supporting the doubled ends in a series and the other ends of said strips in two widely separated series with the free-end portion of the strip, which is adjacent to the free-end portion of the next strip, located in a different series therefrom, and then introducing transverse strips of leather so that successive transverse strips are located with the loops against alternating edges of the series of longitudinal strips between said longitudinal strips by inserting one free-end of a transverse strip, reversing the relative positions of the two series of ends of the longitudinal strips, and then inserting the remaining end of said transverse strip between said series.

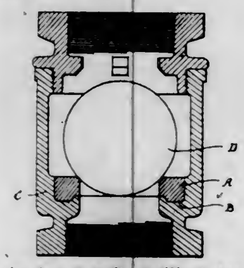
1,805,479. PULL SHOVEL. PAUL BURKE, Green Bay, Wis., assignor to Northwest Engineering Corporation, a Corporation of Wisconsin. Filed June 29, 1927. Serial No. 202,401. 8 Claims. (Cl. 214—138.)



1. In an excavating machine of the type described, the combination with a support, of a boom pivoted there-

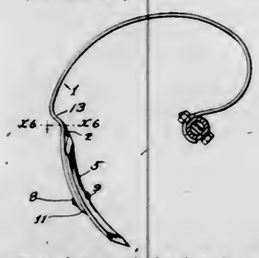
on, a dipper and dipper handle pivotally carried by the boom and movable toward said support during digging, a hoisting cable associated with the dipper and boom, and a dragline associated with the dipper and means for guiding said dragline along the boom and beneath the same reeved to produce a downward pull on the boom adjacent its pivot to produce a thrusting effort on the dipper.

1,805,480. CHECK VALVE FOR VOLATILE LIQUIDS. GORDON V. COLLINS, Hamilton, Ontario, Canada, assignor to John K. Richardson, St. Mary's, Ontario, Canada. Filed Aug. 1, 1927. Serial No. 209,964. 6 Claims. (Cl. 251—138.)



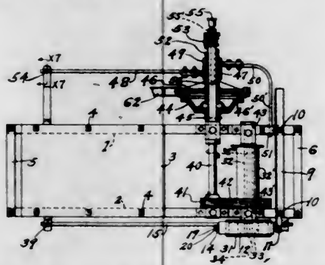
1. A valve having a soft, resilient seat formed of a congealed composition of materials and being impervious to the action of gasoline or mineral oils.

1,805,481. SPRING HARROW TOOTH. JACOB V. DYRR, Bell, Calif. Filed Dec. 26, 1928. Serial No. 328,513. 6 Claims. (Cl. 55—97.)



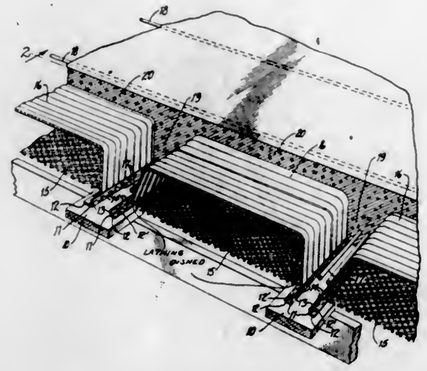
1. A harrow spring tooth having a tooth point seat provided with a countersunk bolt-hole; a tooth point having a bolt-hole countersunk at the front and a projection at the back to engage the countersink in the point seat; a bolt in the bolt-holes and a nut on the bolt adapted to hold the bolt head seated in the countersink of the tooth point.

1,805,482. REMOTE CONTROL HOIST. JACOB V. DYRR, Bell, Calif. Filed Dec. 26, 1928. Serial No. 328,515. 6 Claims. (Cl. 254—187.)



1. In a hoist, the combination of a power shaft provided with a normally released clutch; ratchet means; a windlass driven by the power shaft through the ratchet means and in one direction only; a normally set brake to hold the windlass; independent means under the control of an operator to cause engagement of the clutch; and independent means under the control of the operator to release the brake.

1,805,483. FLOOR CONSTRUCTION. ERNEST E. FLETCHER, Chicago, Ill. Filed Sept. 7, 1929. Serial No. 390,965. 5 Claims. (Cl. 72—66.)



2. A concrete floor comprising integral concrete beams, inverted pans between said beams, lathing material beneath said pans and receiving the edges thereof, angle irons supporting said lathing material and comprising a web extending into the concrete beam and firmly secured thereto.

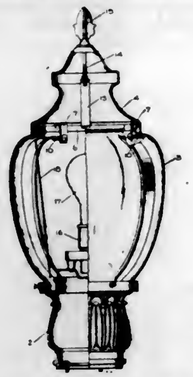
1,805,484. HARROW HITCH. CAMERON H. GEMBERLING, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed June 13, 1928. Serial No. 285,180. 6 Claims. (Cl. 55—83.)



1. In a gang harrow, a drawbar, a gang of implements at the side of the drawbar, a fixed draft connection between the drawbar and the outer sides of the gang, a longitudinally shiftable draft bar pivotally connected to the inner side of the said gang, means for holding said gang in working and non-working position, a lever associated with said means and pivoted intermediate its ends to the forward end of said drawbar, said lever having the upper end thereof connected to said draft bar, and a draft clevis connected to the lower end of said lever.

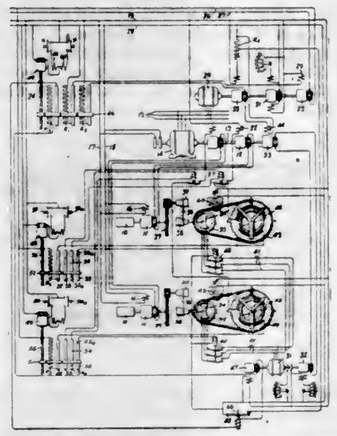
1,805,485. LIGHTING UNIT. CROMWELL A. B. HALVORSON, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 22, 1928. Serial No. 321,196. 6 Claims. (Cl. 240—25.)

1. In combination in a lighting unit, a globe for enclosing a source of light, said globe having sides which extend at substantial angles to each other, a shield for the light located between the central axis and a side of the globe, and means for supporting the shield in place



in such relation that the edges of the shadow formed by the shield when the light is turned on fall along the edges of one of said sides.

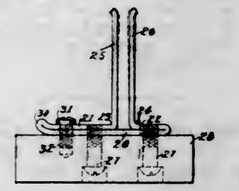
1,805,486. SYSTEM OF SPEED CONTROL. EDWARD H. HORSTKOTTE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 11, 1929. Serial No. 331,758. 5 Claims. (Cl. 172—293.)



1. In a segregated paper machine drive, a plurality of motors and a corresponding separate supply generator for each of said motors, means for simultaneously varying the voltages supplied to each of said motors to vary their speeds simultaneously over a range of predetermined values so as to maintain predetermined ratios therebetween comprising a common source of excitation for said generators and means for varying said source to vary the excitation of said generators, and means responsive to variations in the speeds of the motors for varying the excitation of said generators to maintain the speeds of said motors constant at any one of said predetermined values.

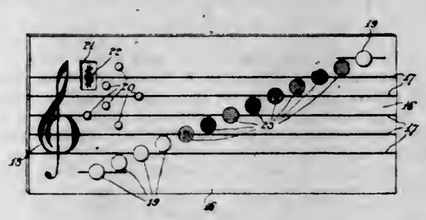
1,805,487. ELECTRICAL CONTACT JAW. ERNEST G. JOHNSON, Boston, Mass., assignor, by mesne assignments, to The Palmer Electric & Manufacturing Co., Waltham, Mass., a Corporation of Massachusetts. Filed Aug. 13, 1924. Serial No. 731,777. 5 Claims. (Cl. 200—166.)

1. Electrical contact jaws comprising a pair of electrically connected strip contact members spaced apart to receive a conductor member therebetween, each of said contact members having an integral fixed base portion at its lower end extending initially away from the other con-



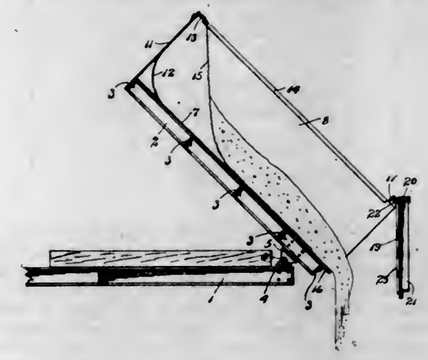
tact member, and at least one of said contact members having its free end bent downwardly and facing the other contact member to form a double prong.

1,805,488. APPARATUS FOR TEACHING MUSIC. JOHN MYRON JOLLS, Philadelphia, Pa. Filed Sept. 13, 1928. Serial No. 305,633. 6 Claims. (Cl. 84—471.)



4. In apparatus for teaching music, the combination of a plurality of charts each having designated thereon a staff, a clef signature, a particular key signature, and a plurality of notes at certain places on said staff, said notes bearing indicia of their syllable names; and a plurality of boards each having a staff designated thereon and two groups of perforations formed therein; a plurality of members having designated thereon characters indicating sharps and flats, and being provided with teats for insertion in the perforations of one group in the perforated boards; and a plurality of note indicating disks adapted to be inserted in the perforations in the other group in the perforated boards as indicated by the charts.

1,805,489. VEHICLE BODY. ARTHUR G. KERR, Seattle, Wash., and DONALD MERCHANT, San Francisco, Calif., assignors to Wood Hydraulic Hoist & Body Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 5, 1927. Serial No. 237,658. 3 Claims. (Cl. 296—1.)



1. A truck body comprising, an elongated substantially semi-cylindrical body member, a vertical front plate closing

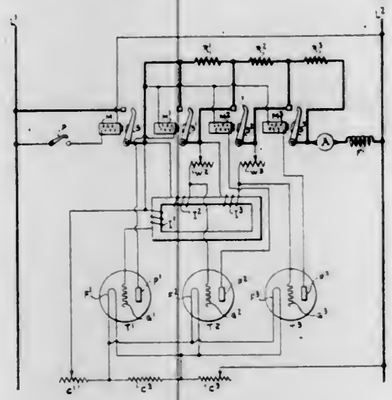
the front end thereof and permanently secured thereto, a pivotally mounted tail gate adapted to close the rear end of the body member when in one position, and an elongated fabric strip attached at its front end to the front end plate of the body near its upper end and adapted to lie within the body and against the bottom thereof, said strip being freely movable relative to the body excepting at said point of attachment.

1,805,490. MOP CONSTRUCTION. ARTHUR C. KOOTZ, Milwaukee, Wis. Filed Aug. 15, 1927. Serial No. 212,933. 3 Claims. (Cl. 15—229.)



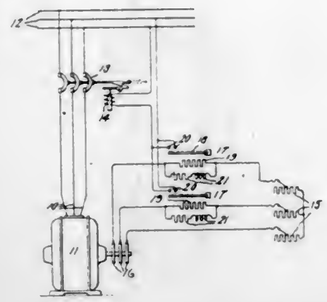
1. In a mop, the combination with a mop body having a frame-receiving pocket, of a frame extending through said pocket and having its free ends extending inwardly of its periphery, a frame connector comprising a sheet metal member bent to provide adjacently disposed yielding channel members providing pockets receiving the free ends of said frame, a handle connector, and a pivot bolt extending through said handle connector and the inner and outer sides of said channel members above said pockets and applying pressure to draw the sides of said channel members together to clamp the ends of the frame thereto.

1,805,491. MOTOR CONTROLLER. CLARENCE W. KUHN, North Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed May 26, 1928. Serial No. 280,759. 12 Claims. (Cl. 172—288.)



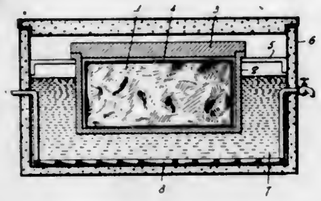
11. In a motor controller, the combination with accelerating switches to be operated in sequence, said switches each having a coil to be subjected to control by an electronic valve, of a plurality of units each including an electronic valve and an impedance to supply transient currents to said valve and commutatable connections for the impedances of said units providing for their inclusion in the motor circuit upon completion of the latter and for their exclusion progressively upon sequential closure of said accelerating switches.

1,805,492. PROTECTIVE DEVICE FOR INDUCTION MOTORS. CAMPBELL MACMILLAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 23, 1928. Serial No. 314,463. 8 Claims. (Cl. 175—294.)



1. An induction motor having a primary winding connected to an alternating current circuit and a rotor winding, and means controlled by the frequency and current in said rotor winding for disconnecting said primary winding from said alternating current circuit in response to different values of rotor current as the frequency thereof varies.

1,805,493. REFRIGERATING APPARATUS AND METHOD. JAMES W. MARTIN, Jr., Yonkers, N. Y., assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed May 26, 1928. Serial No. 280,740. 6 Claims. (Cl. 62—91.5.)

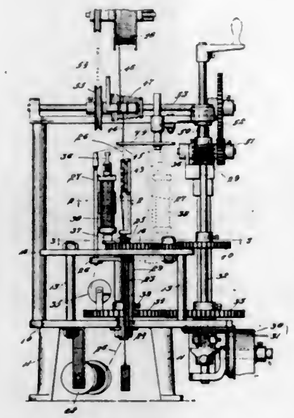


1. The method of automatically controlling the refrigerating effect of solidified carbon dioxide for a range of temperatures above the freezing point of freezable products to be refrigerated thereby, which method includes enclosing the solidified carbon dioxide in an insulating container in heat exchange relation with the upper portions only of a body of liquid having a desired freezing point not lower than the freezing point of the material to be refrigerated and which automatically reverses its thermo convection circulation so that the warmer liquid flows downward at a temperature substantially above the freezing point of said liquid, thereby freezing a layer of ice variably insulating the solidified carbon dioxide to compensate for variations in temperature of the unfrozen part of the liquid; and utilizing the low level portion of said body of liquid as a heat transfer medium for refrigerating the freezable product.

1,805,494. CORE COVERING MACHINE. GEORGE F. MCCAHEY, Providence, R. I., assignor of one-half to William C. Johnson, Providence, R. I. Filed May 20, 1929. Serial No. 364,660. 5 Claims. (Cl. 96—3.)

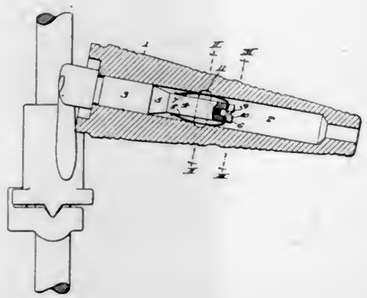
1. In a core-covering machine, core-feeding means, a deck plate, a pair of supply packages having strands for

covering the core, one operatively supported below and the other operatively supported above said deck plate, and a pair of guide members for the strands of said packages one supported below and extending through said deck plate, and the other above said deck plate for guid-



ing the strands from the correspondingly located packages, and means for revolving said guide members in different paths and in opposite directions about the core, said paths being disposed to cross each other twice in each revolution to lay the covering strands alternately under and over each other upon the core.

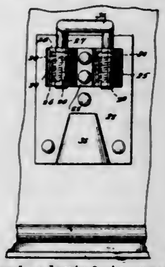
1,805,495. COP CONE HOLDER FOR CREELS. JOHN O. MCKEAN, Westfield, Mass., assignor to Foster Machine Company, Westfield, Mass., a Corporation of Massachusetts. Filed Oct. 4, 1928. Serial No. 310,261. 3 Claims. (Cl. 242—131.)



1. A cop cone holder comprising a spindle, a screw engaging the outer end of the spindle and an expansion spring rotatably mounted on the screw and arranged to frictionally engage the interior walls of the cone.

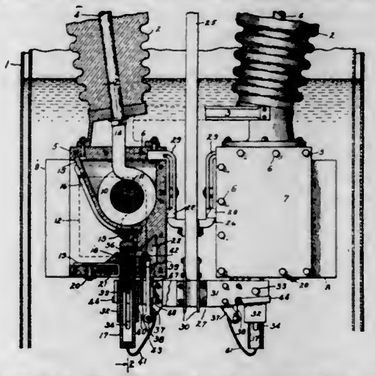
1,805,496. HOOD CATCH. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 3, 1928. Serial No. 274,818. 4 Claims. (Cl. 292—114.)

1. In a hood catch or the like, a hold down clamp, a keeper yieldable downwardly in parallel relation to the hood adapted to be engaged by said clamp and permitting lateral play between said keeper and said clamp, spring means acting to draw said clamp downwardly and move said keeper downwardly and cam means between said



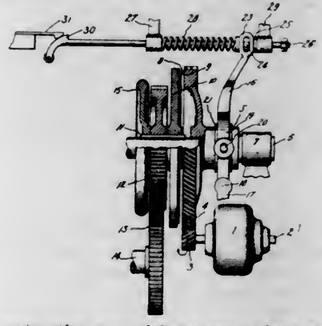
clamp and the hood adapted to press the hood downwardly and inwardly under the action of said spring means.

1,805,497. ELECTRIC SWITCH. WILLIAM E. PAUL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 24, 1928. Serial No. 328,161. 16 Claims. (Cl. 200—150.)



1. Apparatus for interrupting an alternating current at or near the zero value thereof comprising cooperating fixed and movable contacts, conducting means forming a loop in circuit with the contacts including a movable portion arranged to control the separation of the contacts, and means for yieldingly opposing the electromagnetic effect of the current in said loop.

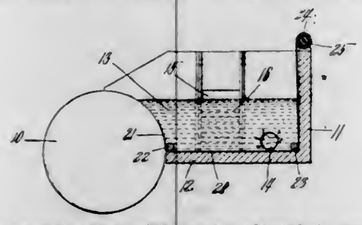
1,805,498. CLUTCH MECHANISM FOR LOOMS AND THE LIKE. IRA E. ROGERS, Marblehead, and WILLIAM C. SCOTT, Quincy, Mass., assignors to General Electric Company, a Corporation of New York. Filed July 8, 1927. Serial No. 204,381. 6 Claims. (Cl. 192—101.)



1. A construction comprising a gear wheel which forms the movable element of a clutch, a pinion meshing with

the gear wheel, a motor for driving them, and means normally holding the gear wheel in clutch-engaging position, characterized by the fact that the gear wheel and pinion are provided with helical teeth and that the normal direction of rotation is such that the axial thrust due to the helical teeth is in a direction to tend to move the gear wheel in a direction to release the clutch.

1,805,499. MASK FOR CYLINDER MOLDS. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Feb. 14, 1930. Serial No. 428,341. 6 Claims. (Cl. 92—42.)

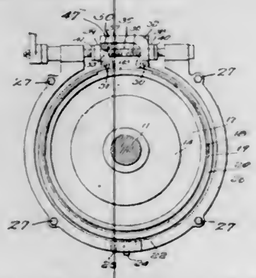


1. In combination with a vat adapted to contain a pool of stock and a cylinder mold mounted to present a portion of its surface to a pool in said vat, a mask covering a part of said portion of surface, the arc of engagement of said mask with said surface being variable from point to point lengthwise of the mold.

1,805,500. LIQUID TO BE USED AS HEAT TRANSFERRING MEDIUM. WILLIAM STOREY SHERMAN, Brooklyn, N. Y., assignor, by mesne assignments, to General Frigheatone Co. Inc., a Corporation of New York. Filed Jan. 9, 1930. Serial No. 419,533. 9 Claims. (Cl. 252—5.)

1. A heat transferring liquid comprising diethyleneglycol, linseed oil and a mutual solvent thereof.

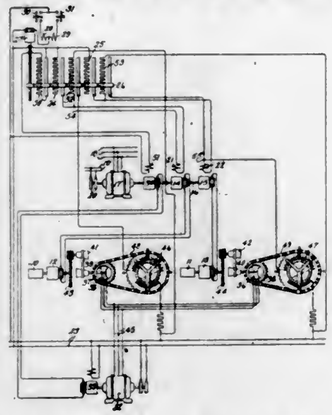
1,805,501. BRAKE BAND. JOHN W. TATTER, Chicago, Ill., assignor to Lewis Differential Company, Chicago, Ill., a Corporation of Illinois. Original application filed Nov. 3, 1926, Serial No. 145,970. Divided and this application filed June 10, 1929. Serial No. 369,842. 10 Claims. (Cl. 188—259.)



1. A flexible brake band of substantially rectangular cross section which diminishes in cross-sectional area from its central portion to the ends thereof.

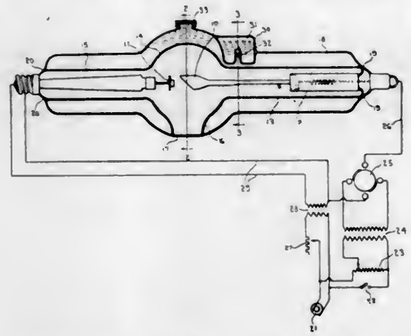
1,805,502. CONTROL SYSTEM FOR DYNAMO-ELECTRIC MACHINES. LOUIS W. THOMPSON and EDWARD H. HORSTKOTTE, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Apr. 16, 1929. Serial No. 355,554. 9 Claims. (Cl. 172—293.)

5. In combination, a motor, a generator for supplying the motor, means comprising a variable resistor in the field circuit of said generator for adjusting the basic speed of said motor, speed regulating means for said motor including a resistance device in the field circuit of said generator and means responsive to fluctuations



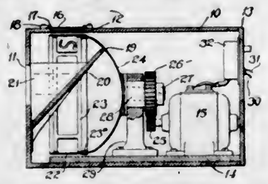
in the speed of said motor for varying said resistance device, a potentiometer resistance in parallel with said regulating resistance, and means for varying said potentiometer resistance in unison with said variable resistor.

1,805,503. X-RAY TUBE. JULIUS B. WANTZ, Oak Park, Ill., assignor to General Electric X-Ray Corporation, Chicago, Ill., a Corporation of New York. Filed June 25, 1928. Serial No. 288,166. 3 Claims. (Cl. 250—35.)



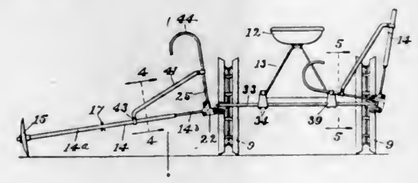
1. An electron discharge device comprising an envelope, a surrounding jacket forming with said envelope a chamber for insulating liquid, and means in said chamber for compensating for the expansion of such liquid.

1,805,504. SIGN AND DISPLAY DEVICE. MAX WASSERBERG, Flushing, N. Y., assignor of one-half to Samuel Steinfeld, New York, N. Y. Filed Oct. 2, 1928. Serial No. 309,834. 2 Claims. (Cl. 40—130.)



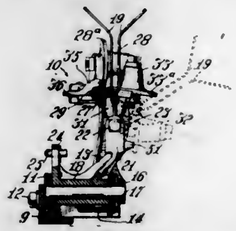
1. A device of the class described comprising a casing, an opening in one wall of said casing, a reflector angularly disposed with reference to the line of vision through the opening in said casing, means admitting rays of light from a source into the casing and onto said reflector in a path angular with respect to said line of vision, a translucent panel constituting part of said last named means, means for supporting a characterized element having translucent properties adjacent said panel in said path of light, said last named means being detachable with respect to the casing, and means for moving said element to bring successive sections thereof into position relatively to said panel and reflector, said last named means involving a source of power arranged in said casing and in operative engagement with the element supporting means through a member movable around said angularly disposed reflector.

1,805,505. PLANTER MARKER. CHARLES H. WHITE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed July 30, 1927. Serial No. 209,513. 7 Claims. (Cl. 97—230.)



1. In a planting implement, the combination of a marker pivotally mounted on the implement for swinging movement into and out of operative position, and handle means for swinging said marker comprising laterally spaced handle portions which are presented successively within convenient reach of the operator as the marker is moved between its operative and inoperative positions.

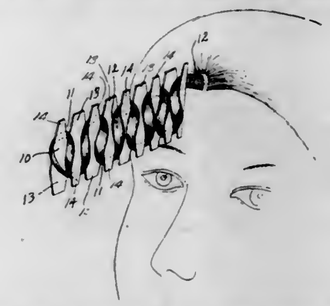
1,805,506. WIRE DOFFING MECHANISM FOR PLANTERS. CHARLES H. WHITE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Sept. 6, 1927. Serial No. 217,569. 12 Claims. (Cl. 111—48.)



1. The combination with a planting implement comprising a check-head and a check-row wire cooperating therewith, of releasable holding means comprising part of said check-head for normally holding the check-row wire in operative position in the head, and cooperating members on said check-head and on said check-wire adapted by their engagement to release said holding means from said check-head for automatically doffing said wire.

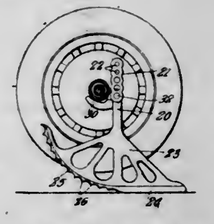
1,805,507. HAIR WAVER. ELLA M. ADAMS, New York, N. Y. Filed Apr. 5, 1929. Serial No. 352,727. 4 Claims. (Cl. 132—33.)

1. In a hair waving device, a plate having a plurality of hair loop supporting and hair loop compressing projections defining a plurality of V-notches extending inwardly from the opposite sides thereof, said notches being adapted to receive a strand of hair looped over every second projection between said notches the alternate



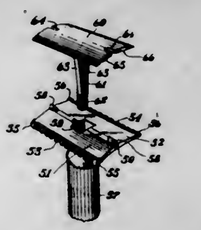
projections being adapted to compress and hold the curved portions of the strand without subjecting the intermediate portions thereof to substantial tension or destroying the fluffiness of such intermediate portions.

1,805,508. VEHICLE JACK. FEDELE ANGELILLO, New York, N. Y. Filed Nov. 17, 1930. Serial No. 496,111. 2 Claims. (Cl. 254—94.)



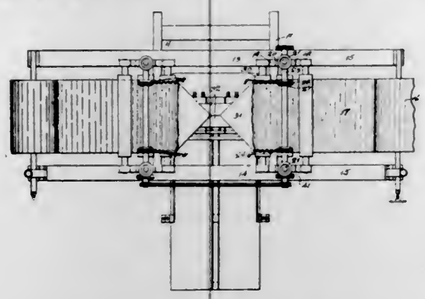
1. In a jack for wheeled vehicles having an axle between each pair of wheels, a base member having an arcuately curved portion provided with teeth to engage a surface, a web having a stem integral with said base, an elongated head on said stem having a row of spaced perforations, a hook having a pin engageable selectively in any of the head perforations, said hook adapted to partially encircle the lower side of said axle, and an abutment on said hook to engage the side of said head and stem.

1,805,509. SAFETY RAZOR. MARCUS B. BEHRMAN, Brooklyn, N. Y., assignor to American Safety Razor Corporation, Brooklyn, N. Y., a Corporation of Virginia. Filed May 11, 1928. Serial No. 276,832. 32 Claims. (Cl. 30—12.)



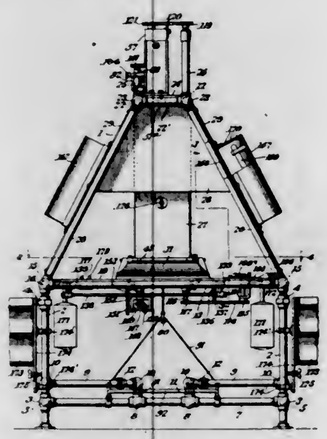
31. A safety razor blade having oppositely arranged cutting edges and a line of weakness substantially parallel to and intermediate the cutting edges whereby said double-edged blade can be severed along said line of weakness into two single edged blades, each section being provided with means for locating it as a blade in a razor.

1,805,510. MACHINE FOR FOLDING AND SCALLOPING PAPER SHEETS. SAMUEL J. CAMPBELL, Green Bay, Wis., assignor to Hudson-Sharp Machine Company, Green Bay, Wis., a Corporation of Wisconsin. Filed Aug. 19, 1929. Serial No. 386,767. 6 Claims. (Cl. 270—67.)



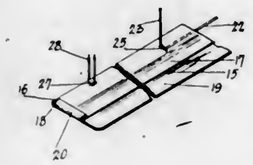
1. In a machine of the class described, the combination of a frame adapted to support a paper roll, roller means for producing a scalloped edge cut along each edge of the paper web as it is fed from the roll and means for directing the elimination from the machine of the trimmed off edges, a former plate located beyond the edging means and adapted to longitudinally fold a paper web, cross-cutting roller means located beyond the former plate, one of said rolls being provided with a scallop cutting die adapted to cross-cut the folded paper web along the cutting line, and means for positively driving the edging cutters and the cross cutters in timed relation to one another.

1,805,511. APPARATUS FOR MAKING ANIMATED PICTURES. ARTHUR WILTSEE CARPENTER, New York, N. Y., assignor, by mesne assignments, to Audio-Cinema, Incorporated, Long Island City, N. Y., a Corporation of New York. Filed June 18, 1927. Serial No. 199,798. 17 Claims. (Cl. 88—16.)



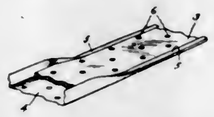
1. In a picture photographing apparatus, means to support a picture sheet for photographing it, comprising an outer frame defining a rectangular opening; a rectangular inner frame removably fitting in said opening and defining a rectangular aperture, the inner frame being formed with a countersunk ledge at the edges of its aperture; a flat plate supported by said ledge and closing the aperture; independently adjustable supporting posts threaded upwardly through the outer frame and loosely supporting the inner frame adjacent its four corners; a plurality of upstanding projections carried by the inner frame adjacent one edge of said plate; a pad of compressible material extending over the plate and the inner frame and formed with openings to receive said projections, the projections extending through the pad to enter openings in a picture sheet upon the pad and hold the sheet in place; a frame hinged to one side of the outer frame to fold down over the top thereof; and a glass presser plate carried by said hinged frame to flatten the picture sheet against the pad, the inner frame being reversible from front to rear and the glass plate being formed with openings to provide clearance for the said projections in either position of the inner frame.

1,805,512. AUTOMATICALLY ACTUATED WEATHER STRIP. EDGAR J. CHANDLER, Oakland, Calif., assignor of one-half to Harold M. Steves, Oakland, Calif. Filed Nov. 1, 1929. Serial No. 404,009. 2 Claims. (Cl. 20—67.)



1. A weather-strip adapted to be hingedly secured to a swinging closure between one edge thereof and its frame, said strip comprising a metal strip bent upon itself to form a clamp, one of the members of the clamp having an end portion bent to overlap the other member of the clamp, an upwardly extending integral arm on one end of said clamp, a spring rod carried by the clamp, said rod having an arm extending upwardly from the clamp and mounted in a recess in the closure, said rod having a flat hooked end fitted in the bend in the clamp.

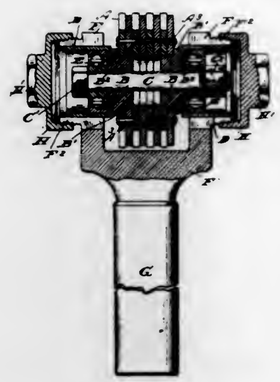
1,805,513. SHIELDING MEANS FOR HIGH TENSION CABLE. EUGENE L. CRANDALL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 20, 1929. Serial No. 408,589. 6 Claims. (Cl. 173—264.)



1. An electrostatic shield for an electric cable comprising a strip of insulating material and a strip of metal foil wider than said material having its edges folded back over the edges and part of the top surface of said material and embedded therein.

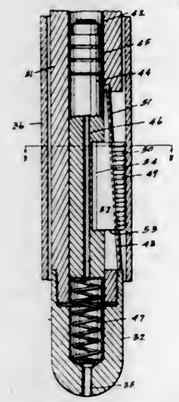
1,805,514. EMERY WHEEL DRESSING TOOL. CONSTANT DE MATTIA, Detroit, Mich., assignor to Vincent Steel Process Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 12, 1930. Serial No. 474,695. 1 Claim. (Cl. 125—37.)

A device of the character described, comprising a plurality of annular discs having V-shaped peripheral teeth, means for securing said discs together to form a unit with the teeth of the respective discs in staggered relation; a supporting arbor revolvable with the cutting disc, a pair of sleeves fitted with anti-friction bearings, in which the arbor is journaled, an arm having a yoke-shaped end with tapering screw-threaded split hubs to receive and grip the sleeves, and caps having tapering



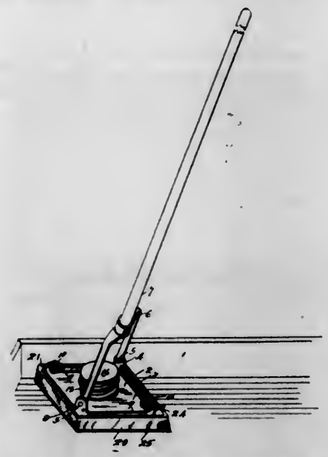
tapped screw-threaded flanges engaging said hubs, whereby upon adjustment of the caps the hubs may be compressed to grip and hold said sleeves against rotation.

1,805,515. INSIDE PIPE CUTTER. HARVEY J. DENNEY, Westlake, La. Filed July 18, 1930. Serial No. 468,869. 4 Claims. (Cl. 81—195.)



1. A device for cutting and removing pipe from a well bore comprising a tubular cutter body, outwardly movable cutters therein, an anchoring device having a swivelling connection with the body, outwardly movable anchoring jaws therein adapted to engage the pipe to anchor the cutting means against longitudinal movement in the pipe during cutting operations, separate means operatably connected with the cutters and jaws, respectively, and adapted to be actuated, simultaneously, by fluid pressure to move the cutters and jaws outwardly into active position in engaging relation with the pipe, a pulling device connected to said anchoring device and embodying outwardly movable pipe pulling jaws, means operatable by said pressure and effective to move said pulling jaws into active position in engagement with the pipe.

1,805,516. DIAMOND FLOOR POLISHER. CHARLES E. ERICSON, Los Angeles, Calif. Filed Oct. 12, 1929. Serial No. 399,234. 2 Claims. (Cl. 91—39.)

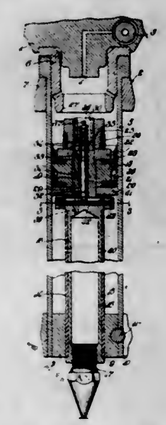


1. A floor waxing iron having a lozenge shaped body, said iron having a rim bead around its top and a set of V-shaped spring grips whose remote ends are pivoted on the iron rim and whose sides are yieldably connected by a crotch loop and are operative to clinch a smoothing cloth over the beads.

1,805,517. MANUFACTURE OF RUBBER COMPOSITIONS. WILLIAM FELDENHEIMER, London, England. Filed Mar. 14, 1924, Serial No. 699,846, and in Great Britain Mar. 27, 1923. 3 Claims. (Cl. 106—28.)

2. The process of manufacture of rubber compositions containing clay, comprising the steps of suspending clay in water by addition of sodium pyrophosphate in the presence of rosin, removing any undeflocculated matter, flocculating the clay from its suspension by the aid of a strong acid, and incorporating the so obtained flocculated product of low acidity with the rubber mixing.

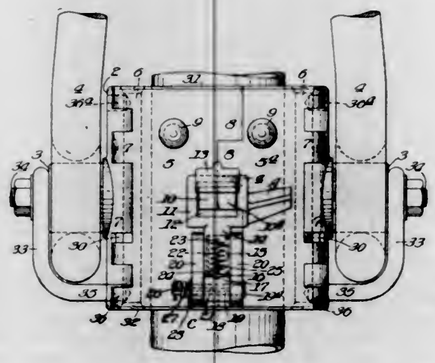
1,805,518. ROCK DRILL FEEDING DEVICE. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Aug. 18, 1930. Serial No. 475,946. 15 Claims. (Cl. 116—124.)



1. In a drilling mechanism, relatively movable feed cylinder and piston elements, the latter having a piston

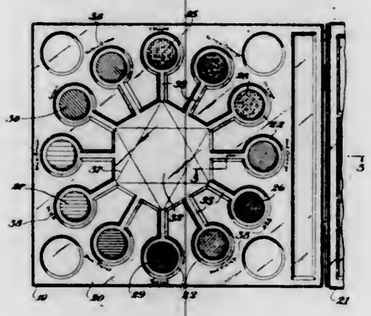
rod, and means for indicating the attainment of maximum extension between the cylinder and piston including a tell-tale port in the piston and means for supplying air thereto only at about the limit of feed.

1,805,519. CASING ELEVATOR. EDGAR E. GREVE, Bellevue, Pa., assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Sept. 7, 1929. Serial No. 390,891. 7 Claims. (Cl. 294—90.)



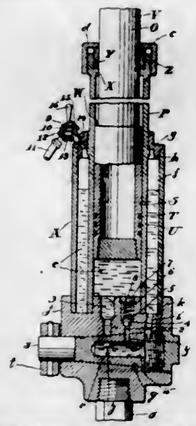
1. In a casing elevator, a reversible body member having similar end portions, trunnions projecting from the body, a bail pivotally connected with the trunnions, said body being provided with a recess adjacent each end, and a body-retaining member having a portion entered in one of the said recesses.

1,805,520. COLOR ARRANGEMENT. WALTER GRUMBACHER, New York, N. Y., assignor to M. Grumbacher, New York, N. Y., a Copartnership composed of Max Grumbacher and Walter Grumbacher. Filed Feb. 7, 1929. Serial No. 338,070. 3 Claims. (Cl. 41—5.)



2. A paint box comprising a plate having a series of depressions arranged in a circle, color pigments in said depressions, a central mixing chamber formed in said plate, said chamber being hexagonal in shape and so arranged that any two diametrically opposed apices of the hexagon point to colors which when mixed will give neutral gray and any three alternate apices also point to colors which when mixed will give neutral gray.

1,805,521. FEEDING DEVICE FOR ROCK DRILLS. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 19, 1928. Serial No. 313,528. 4 Claims. (Cl. 121—9.)



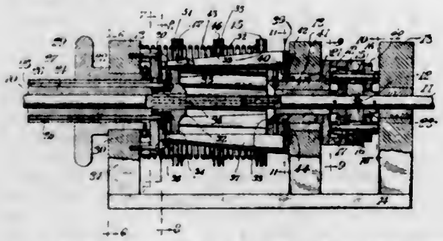
1. A feeding device for rock drills, comprising a pair of relatively movable members, one of which is adapted to be connected to the rock drill, a reservoir for liquid, means for introducing a pressure medium into the reservoir to force liquid therefrom into one of the members to actuate the other member and the rock drill in the direction of the material intended to be drilled, means interposed between the reservoir and said members for automatically controlling the flow of liquid from the reservoir into the member, and a manually operable valve for controlling the flow of liquid from the member to the reservoir and from the reservoir to said means.

1,805,522. CAP. ALEXZANDER HOROS and STEPHEN HOROS, Philadelphia, Pa. Filed Mar. 15, 1930. Serial No. 436,008. 4 Claims. (Cl. 2—197.)



1. A cap comprising a disc and an annulus of launderable fabric seamed together at their perimeters, said annulus having a V-shaped slit with its base at the inner circumference and its apex at the outer circumference, and an expansible filler for the slit.

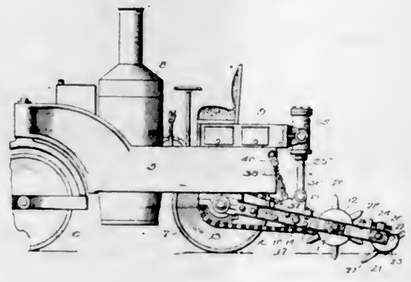
1,805,523. VARIABLE TRANSMISSION. CORTLANDT J. LANGLEY and WILLIAM F. O'GORMAN, New York, N. Y., assignors to Charles W. Bumstead, Highland Park, N. J., trustee. Filed June 27, 1929. Serial No. 373,974. 3 Claims. (Cl. 74—34.)



1. A structure of the kind described, comprising a driving shaft and a driven shaft in end alignment, a

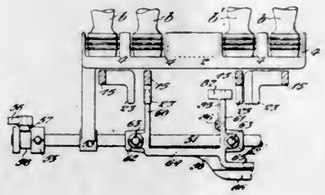
planetary gear system connecting the shafts and comprising a rotor having gears on opposite sides connected to the appropriate shafts, a housing for one set of gears rotatable on the driving shaft and connected to the rotor, a differential braking connection between the driving shaft and the housing, and a separate clutch connection between the driving shaft and the housing.

1,805,524. SCARIFYING ATTACHMENT FOR PAVING ROLLERS. HARRY W. LASTER, Oak Park, Ill., assignor of one-half to Joseph W. Schindler, Elmhurst, Ill. Filed Feb. 7, 1930. Serial No. 426,459. 10 Claims. (Cl. 262—9.)



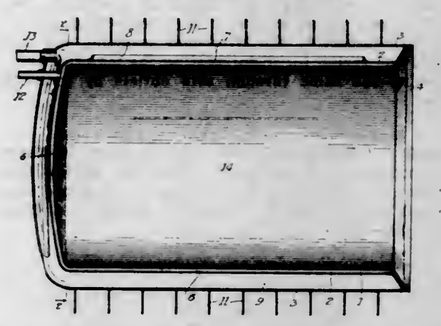
1. A scarifying attachment for paving rollers comprising a supporting element arranged for attachment to a paving roller, a spiked roller and a scarifier mounted on said supporting element, power operated means for rotating said spiked roller, and a ram connected to said supporting element and operating to depress the same and therewith the spiked roller and scarifier.

1,805,525. AUTOMATIC LOOM. WILFRID J. LEMIEUX and JAMES HOOD, New Bedford, Mass., assignors to Beacon Manufacturing Company, New Bedford, Mass., a Corporation of Massachusetts. Filed Oct. 29, 1928. Serial No. 315,824. 20 Claims. (Cl. 139—232.)



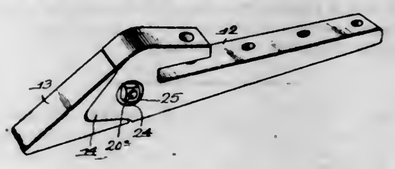
1. A filling-replenishing mechanism for multi-shuttle looms comprising a filling-detector operative upon the depletion of the filling in one shuttle to replenish the filling in this shuttle, and means set in operation by the same action of the filling-detector to change the filling in an associated shuttle when this latter shuttle is called.

1,805,526. EVAPORATOR. CARL E. L. LIPMAN, Chicago, Ill., assignor to Lipman Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 8, 1930. Serial No. 449,377. 14 Claims. (Cl. 62—95.)



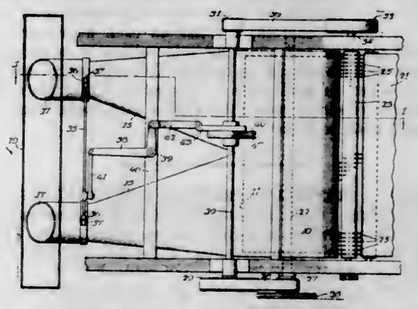
4. An evaporator comprising a plurality of spaced shells formed to provide a plurality of spaced concentric refrigerating chambers therebetween, said chambers being in communication with each other, a liquid refrigerant supply to one of said chambers and a suction connection to another of said chambers.

1,805,527. REVERSIBLE DIPPER TOOTH. VAN CORTRIGHT MEKEEL, Oak Park, Ill. Filed Mar. 9, 1929. Serial No. 345,718. 3 Claims. (Cl. 37—142.)



2. A two-part reversible dipper tooth, comprising a base casting with a bifurcated nose presenting spaced nibs, and a transverse integral web connecting said nibs, and a point having recesses on its side faces to receive said nibs and provide locking engagement therewith substantially throughout their length, with an interior gusset cut-out at the center to clear said web, and means for locking said point and base together.

1,805,528. FEEDING MECHANISM FOR INTERLACING MACHINES. GARRETT W. MUDD, Chicago, Ill., assignor to Manufacturers Machinery Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 4, 1928. Serial No. 303,940. 4 Claims. (Cl. 19—72.)



1. Means for feeding hair to and distributing the same in an interlacing machine embodying a casing having an

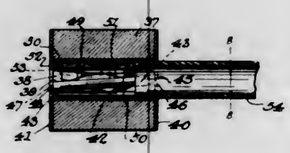
inlet for the material, a discharge outlet from the casing having two spaced delivery openings, downwardly curved extended delivery spouts individual to said outlets and swingingly supported with respect thereto, cam means common to said spouts for imparting a swinging movement to said spouts in unison for distributing the material with respect to the interlacing machine, and means within the casing for disintegrating the material and for throwing the same through said outlets by centrifugal force.

1,805,529. OPHTHALMIC MOUNTING. JOHN N. NELSON, Providence, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Sept. 30, 1927. Serial No. 223,027. 4 Claims. (Cl. 88—45.)



1. In an ophthalmic mounting, a yoke-shaped nosepiece including a relatively rigid cross-bar portion, thin resilient elongated side arms integral therewith, said arms each having a rearwardly extending end portion, and lens engaging members and nose guard members secured to said rearwardly extending end portions.

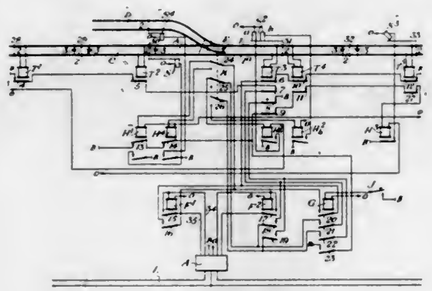
1,805,530. CLUTCH. ADOLF SCHACHER, Philadelphia, Pa., assignor of one-half to Daniel Simon, Philadelphia, Pa. Filed Apr. 7, 1928. Serial No. 268,246. 3 Claims. (Cl. 192—45.)



1. In combination with a cylindrical piece of proper diameter, a clutching device adapted to be used therewith comprising a clutch body, a plurality of three or more, substantially flat floors, positioned longitudinally of said body in notches therein, a roller on each floor having a tapered forward end adapting said rollers to be adjusted automatically outward to engage the cylindrical surface of said piece, as said piece is entered into said body, and means for retaining said rollers upon said floors when disengaged with said piece.

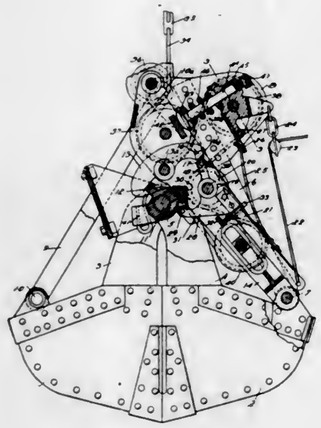
1,805,531. RAILWAY TRAFFIC CONTROLLING APPARATUS. CARL F. STOLTZ, Delhi, Ohio, assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1929. Serial No. 403,211. 9 Claims. (Cl. 246—8.)

1. In combination, a section of railway track, a track circuit including a track relay for said section, a signal governing traffic through said section, a remote controlled selector associated with said signal, means for normally controlling said signal by said track relay and said selector, and manually operable means for removing said signal from



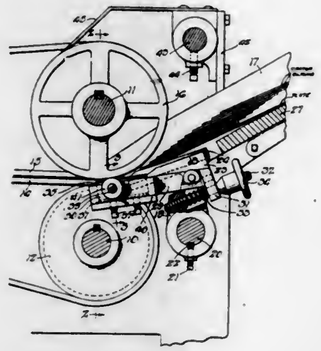
control by said selector whereby the signal may function as an automatic signal in the event of failure of the selector or of the line over which it is controlled.

1,805,532. CLAMSHELL BUCKET. GEORGE F. THOMPSON, Erie, Pa., assignor to G. H. Williams Company, Erie, Pa., a Corporation of Pennsylvania. Filed June 26, 1928. Serial No. 288,363. Renewed Jan. 30, 1931. 4 Claims. (Cl. 37—184.)



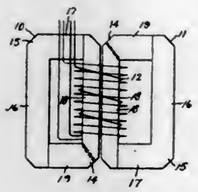
4. In a clam shell bucket, the combination of bucket members; a pivotal connection between the members; a head; links extending from the head to the bucket members at points remote from the pivot; a power arm pivotally mounted on one of the bucket members; a latch mounted on the power arm; a hook connection between the latch and bucket members adjacent to the pivotal connection, said latch connection tending under load to disengage; a trip lever on the power arm operating on the latch, the engaging surfaces of the trip lever and latch tending to lock the trip lever against disengagement under pressure of the latch; means for adjusting the trip lever relatively to the latch; and a cable connection extending between the head and the power arm.

1,805,533. MEANS OF SEALING CARTONS. FRANK B. TOMLINSON, Louisville, Ky., assignor to Reynolds Metals Company, Louisville, Ky. Filed Oct. 22, 1929. Serial No. 401,432. 9 Claims. (Cl. 93—58.)



9. A box forming machine comprising blank feeding means, a tray, penetrating means in said tray adapted to engage blanks in said feeding means, and a guide upon said tray cooperating with said feeding means to regulate the penetration of said penetrating means into blanks.

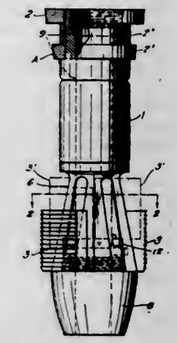
1,805,534. MAGNETIC CORE FOR ELECTRICAL APPARATUS. MATTHEW O. TROY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 18, 1929. Serial No. 415,003. 5 Claims. (Cl. 175—356.)



1. A transformer core including magnetic laminations formed of a high grade expensive material and a lower grade less expensive material, the winding leg portion of each of said laminations being formed of the high grade material and being welded to a yoke portion formed of the lower grade material to form a unitary lamination section, the ends of each of said lamination sections being connected by an L-shaped lamination section of the lower grade material.

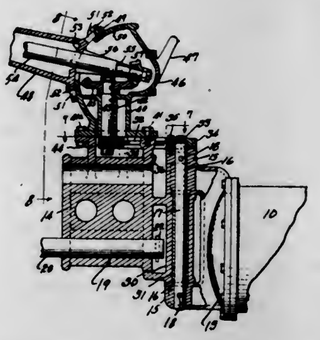
1,805,535. HOLLOW CASING SPEAR. WILLIAM H. VREELAND, Augusta, Kans. Filed June 23, 1930. Serial No. 463,162. 3 Claims. (Cl. 294—96.)

1. In a hollow casing spear of the class described comprising an apertured pyramidal block and slips slidably engaging thereon, the apertures being diametrically positioned, a jointed detent, the outer ends of which extend thru their respective apertures and on which their respective slips will rest as disengaging means therefor,



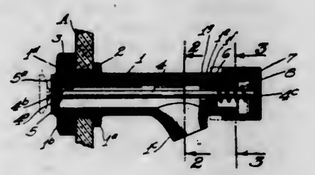
means to break the detents to release the slips for engagement, the said means operating in the hollow of the spear.

1,805,536. STEERING MECHANISM. ROLLIN H. WHITE, Cleveland Heights, Ohio. Original application filed Sept. 21, 1927, Serial No. 220,895. Divided and this application filed Sept. 27, 1928. Serial No. 308,774. 3 Claims. (Cl. 280—87.)



1. In a tractor having a main frame and a coupling swivelled thereto, steering mechanism for moving said tractor laterally relative to said coupling comprising a rack fixed to said main frame, gearing associated with said rack and carried by said coupling, a manually operable shaft, for actuating said gearing, and a column for supporting said shaft, said column, shaft and shaft gear being detachably associated as a unitary structure with the remainder of said steering mechanism.

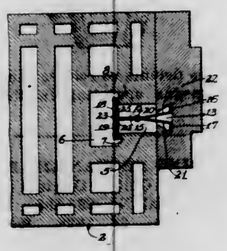
1,805,537. NONCORRODIBLE FAUCET. RONALD S. ALLAN, Los Angeles, Calif. Filed Mar. 21, 1928. Serial No. 263,392. 2 Claims. (Cl. 251—137.)



1. In a valve of the class described, a non-corrodible non-metallic tubular casing having securing means at

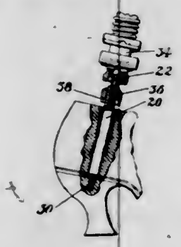
one end and a valve seat in said end, and a discharge spout intermediate its ends, a non-corrodible non-metallic valve rod reciprocally mounted within said casing, guide means within and intermediate the ends of said casing through which said rod extends, a non-corrodible non-metallic valve secured to the one end of said rod adapted to engage said seat, a valve button reciprocally mounted on the opposite end of said casing and connected with the opposite end of said rod, and a spring mounted within said casing in engagement with said button adapted to force the same outwardly and said valve against its seat.

1,805,538. BUILDING CONSTRUCTION. OSCAR T. ANDERBERG, Mason City, Iowa. Filed Dec. 19, 1928. Serial No. 326,962. 12 Claims. (Cl. 72—98.)



1. A device for holding a frame at an opening in a wall, the wall and frame having channels at the opening and connecting means extending into said channels for holding the frame in place, a channel having shoulders, and a locking means engaging said shoulders and connecting means for holding the connecting means in place, said connecting means being spaced from the sides of said channel to provide insulating spaces adjacent said connecting means.

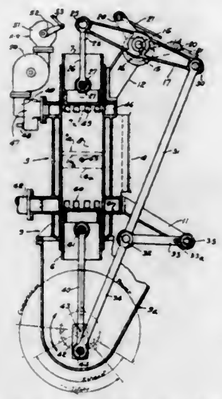
1,805,539. DEVICE FOR ATTACHING HEELS. FREDERIC E. BERTRAND, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Dec. 14, 1922, Serial No. 606,880. Divided and this application filed June 27, 1928. Serial No. 288,620. 13 Claims. (Cl. 12—125.)



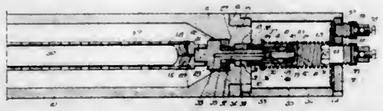
1. A heel fastening device comprising, in combination, a shank adapted to extend through a last, a threaded portion at one end of the shank to engage a heel, a driver-engaging head at the opposite end of the shank, and a last-clamping nut threaded upon the shank.

1,805,540. INTERNAL COMBUSTION ENGINE. SAMUEL B. BROWN, Los Angeles, Calif. Filed Jan. 7, 1930. Serial No. 419,093. 2 Claims. (Cl. 123—51.)

1. In an internal combustion engine, two opposed pistons, a piston cylinder common to said pistons, a piston rod pivotally connected to each of said pistons, a rocker arm having a pivotal support between its ends, a rocking head, a fixed support for said rocking head to which the latter is pivoted, said rocker arm being pivotally connected with said head at a point eccentric to the pivotal mounting of the latter, means to adjust the position of said head upon its pivot to vary the location of the pivotal support of said rocker arm, one end of said rocker arm being pivotally connected with the outer end of one of said piston rods and the other end of said rocker arm being operatively connected with the outer end of the other of said piston rods to coordinate the movements of said pistons, and a crank shaft operatively connected with said pistons.

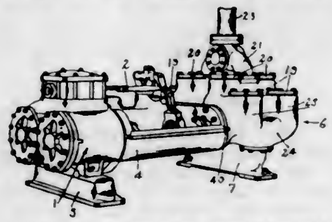


1,805,541. BLASTING CARTRIDGE. DENT FERRELL and ARTHUR W. HELMHOLTZ, Harrisburg, Ill., assignors to Safety Mining Company, Harrisburg, Ill., a Corporation of Illinois. Filed Feb. 19, 1927. Serial No. 169,441. 40 Claims. (Cl. 102—6.)



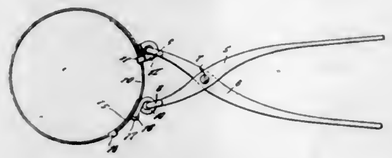
1. A blasting cartridge comprising a rigid container having a rupturable wall at one end and a perforated rigid wall at its opposite end, an electrical conducting inlet member positioned through the perforation and insulated from said casing, a cap member enclosing said inlet member having two electrical terminals, one connected directly thereto and the other insulated therefrom, and a yielding conductor between said last mentioned terminal and said inlet member.

1,805,542. PUMP. JOHN W. GARDNER, Quincy, Ill., assignor, by mesne assignments, to Gardner-Denver Company, a Corporation of Delaware. Filed Mar. 2, 1926. Serial No. 91,740. 29 Claims. (Cl. 103—175.)



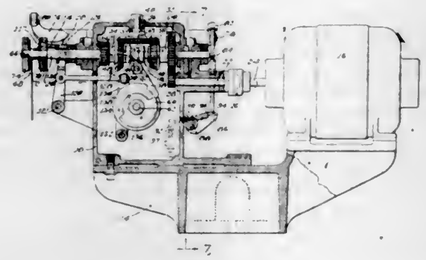
1. In a pump mechanism including a cylinder and a piston therein, means forming a suction passage extending laterally beneath and then upwardly at one side of said cylinder, longitudinally thereof, and then upwardly at each end thereof, means constantly forming a lateral chamber above said cylinder at each end thereof adapted to communicate with said suction and communicating with said cylinder, means forming a discharge above each end of said cylinder, and laterally spaced suction and discharge valves at each end of the cylinder controlling the flow through said lateral chamber and disposed in said chamber in vertically spaced decks.

1,805,543. PISTON RING COMPRESSOR. LUDWIG B. GLANTZ, Minden, Nebr. Filed July 8, 1929. Serial No. 376,629. 3 Claims. (Cl. 29—86.4.)



2. In a tool of the class described, an elongated band formed adjacent one end with a series of spaced openings, a plate having means engaging the band for slidably retaining the plate on the band, and a projection on the plate for reception in the openings, said projection adapted to be engaged by a tool engaging the opposite end of the band for contracting the latter.

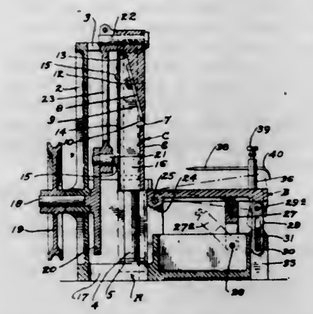
1,805,544. WINDING MACHINE. OTTO R. HAAS, North Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 24, 1929. Serial No. 357,842. 24 Claims. (Cl. 242—22.)



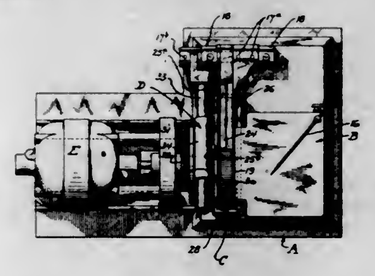
1. A bobbin winding machine having, in combination, a winding shaft, driving connections therefor including an electric motor, an arm adapted to contact with the mass of thread on the bobbin, and a switch actuated from the arm to turn off the motor.

1,805,545. PLANER. FRANK H. HOWLETT, Oakland, Calif., assignor to Fred Wolfsohn, San Francisco, Calif. Filed Nov. 17, 1928. Serial No. 320,199. 6 Claims. (Cl. 32—5.)

4. A device of the character described comprising a planer head having a planer face formed on one side thereof, said planer face having a slot formed therein and having the portion above said slot projecting forwardly of the portion below said slot, a knife carried by the planer head and projecting through the slot, means for reciprocating the planer head and work supporting means adjacent the planer head.

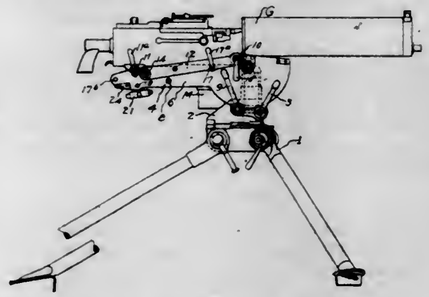


1,805,546. PLANER. FRANK H. HOWLETT, Oakland, Calif., assignor to Fred Wolfsohn, San Francisco, Calif. Filed Feb. 19, 1930. Serial No. 429,631. 5 Claims. (Cl. 32—5.)



1. In a device of the character described a pivotally mounted planer head having a planer face thereon and a blade extending through said face, driving means for causing said planer head to oscillate, said means varying the ratio of power transmitted to said planer head during its oscillatory strokes.

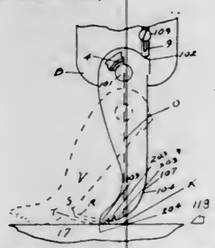
1,805,547. MACHINE GUN MOUNT. GEORGE IRONSIDE, Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed Feb. 24, 1930. Serial No. 430,736. 12 Claims. (Cl. 89—40.)



1. In a mount for a machine gun, the combination of a tripod, a head carried by the tripod, a cradle connected with the head for movement about a horizontal axis, and

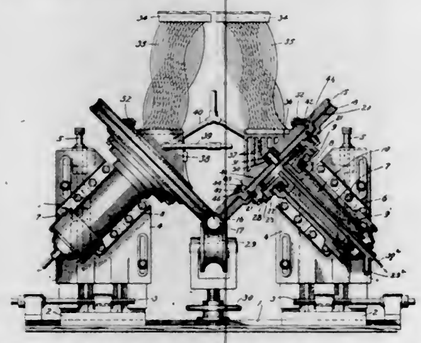
a means relatively movable with respect to the cradle and adapted to engage a machine gun at the horizontal trunnion axis thereof to hold the said gun in either of two positions with the said axis either adjacent the cradle axis or relatively remote therefrom, the gun when in the first position being relatively low and in normally fixed relationship to the cradle so that the angle of the gun may be adjusted by moving the cradle about its axis and the gun when in the second position being freely adjustable about its trunnion axis and being bodily movable to a relatively high position upon movement of the cradle to its upright position.

1,805,548. BOBBIN TRANSFER FEELER. HAROLD M. JEFFREY, Methuen, Mass., assignor to Patent Protection Corporation, Lowell, Mass., a Corporation of Massachusetts. Filed Aug. 29, 1927. Serial No. 216,201. 12 Claims. (Cl. 139—286.)



7. A feeler finger having near one end a pivot and having its other end cut on a curve the focus of which is at a point different from said pivot and having teeth cut out of the curved part and successively receding from the end, the tooth nearest the end being blunt.

1,805,549. ELECTRIC WELDING. JOHN F. LAWSON, Brooklyn, N. Y. Filed Aug. 27, 1925. Serial No. 52,727. 27 Claims. (Cl. 219—6.)

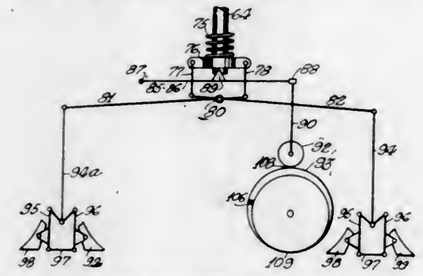


1. In an electric welding machine of the kind indicated, means effecting an electrical connection between a roller electrode thereof and the transformer comprising a rotating body and a stationary body, a crevice being formed between an end face of said rotating body and the proximate face of the stationary body, and an electrically conducting fluid in said crevice.

1,805,550. WOOD PRODUCT AND METHOD OF PRODUCING THE SAME. CHARLES B. LIPMAN and AARON GORDON, Berkeley, Calif., assignors to the regents of the University of California, Berkeley, Calif., a Corporation of California. Filed Nov. 5, 1927. Serial No. 231,306. 5 Claims. (Cl. 99—12.)

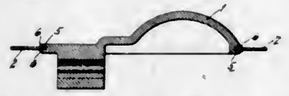
1. A method of protecting wood with a substance toxic to animal and bacteria life and fungus growth, which consists in injecting into a living tree a toxic substance capable of distribution by the sap flow of the tree and permitting the toxic substance to be distributed throughout the entire cellular and fibrous structure of the tree by the actual sap circulation of the tree, and treating said structure simultaneously with the impregnation to reduce and fix the toxic substance within the cellular and fibrous structure of the tree.

1,805,551. BRAKING SYSTEM. MATTHEW H. LOUGHRIDGE, Bogota, N. J. Filed Sept. 2, 1924. Serial No. 735,276. 114 Claims. (Cl. 188—180.)



31. A mechanism supporting a load and including a braking system comprising a rotary driving element and a driven element operatively connected, said braking system operated by said load, means for releasing said braking system when the speed of the driving element exceeds the corresponding speed of the driven element.

1,805,552. METHOD OF MAKING LIQUID CONTAINERS AND CONTAINER SO PRODUCED. JAMES L. NELSON, St. Louis, Mo., assignor to C. Nelson Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 10, 1929. Serial No. 331,507. 2 Claims. (Cl. 113—120.)



1. A method of securing a casting in an opening in a sheet metal wall which consists in forming a groove in the edges of the casting, tinning the walls of said groove and the marginal portions of the sheet metal wall around the opening in which the casting is to be mounted, then placing the casting in said opening with the marginal edges of the sheet metal wall around said opening confined closely in said groove, and then applying along the edges of the casting at opposite sides of the sheet metal wall and against the surfaces of said wall continuous and impervious lines of solder.

2. A tank comprising a sheet metal wall having an opening therein provided with tinned surfaces along the marginal edges of said wall about said opening, a casting having grooves in its edges, the walls of which grooves are tinned and which casting is located in said opening, and the marginal edges of the sheet metal wall about said opening being received in said grooves, and solder uniting the edges of the casting with the surfaces of the sheet metal wall at the sides of said grooves on both sides of said wall.

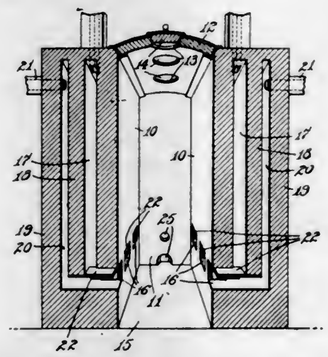
1,805,553. SHOE NAIL. JOSEPH H. POPE, Hamilton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed June 16, 1920, Serial No. 389,397. Divided and this application filed Oct. 25, 1926. Serial No. 143,971. 4 Claims. (Cl. 85—10.)

1. A shoe-nail comprising a body portion having a point with an inclined surface arranged to cause the deflection of the body in a predetermined relation to a shoe when the nail is driven, and a radial guide-fin of



less width laterally of the body than said body and extending longitudinally of the body at the side opposite the inclined surface.

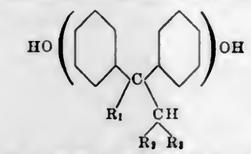
1,805,554. SMELTER. OSCAR POTTER, Downers Grove, Ill., assignor of one-half to George M. Bard. Filed Feb. 18, 1929, Serial No. 340,801. Renewed Oct. 6, 1930. 2 Claims. (Cl. 266—29.)



1. A smelting furnace comprising a main chamber formed by bounding walls and a normally closed top, a chimney duct formed alongside one of said walls, an air supply duct formed alongside the chimney duct and subject to the heating influence of the burning gases passing through said chimney duct, and tuyères leading from the air duct across the chimney duct to the smelting chamber, and ducts connecting the smelting chamber and chimney.

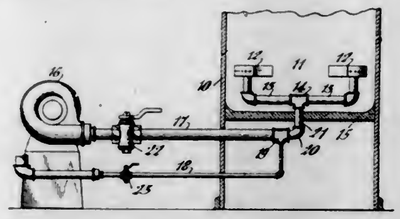
1,805,555. PRODUCTION OF ALKYLPHENOLS. WALTER SCHOELLER, Berlin-Charlottenburg, HANS JORDAN, Berlin-Steglitz, and REINHARD CLERC, Berlin, Germany, assignors to Schering-Kahlbaum A.-G., Berlin, Germany. Filed June 22, 1928, Serial No. 287,636, and in Germany July 14, 1927. 6 Claims. (Cl. 260—154.)

1. The process of producing alkylphenols comprising heating a dihydroxydiphenyl-methane of the formula



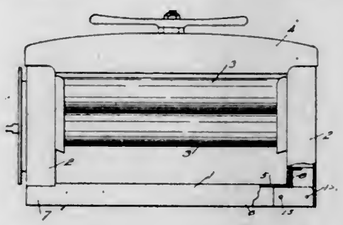
wherein R_1, R_2 and R_3 each is a hydrogen atom or an univalent alkyl radical, or R_1 and R_2 together a bivalent alkylene radical forming with the two adjacent carbon atoms a cyclic system and wherein the two aryl nuclei also can have other substituents, in a hydrogen atmosphere in the presence of a hydrogenation catalyst until two hydrogen atoms have entered into combination.

1,805,556. HEATING APPARATUS. HOWARD L. SCHRANKEL, Buffalo, N. Y. Filed Feb. 2, 1929. Serial No. 337,142. 4 Claims. (Cl. 158—118.)



1. In a gas burning device of the character described, a burner, a mixture-conducting pipe connected thereto, a pipe for delivering air under pressure to the inlet end of said mixture-conducting pipe and disposed at substantially right angles thereto, a gas supply pipe connected to said air pipe at a point adjacent to its connection with the mixture-conducting pipe, the outlet end of said gas pipe terminating at the bore of the air pipe, and means interposed between the inlet end of the mixture-conducting pipe and the outlet end of said air pipe for effecting an intimate mixing of the air and gas.

1,805,557. WRINGER FRAME. ERNEST J. SCHUDA, Erie, Pa., assignor to Lovell Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Dec. 20, 1927. Serial No. 241,303. 2 Claims. (Cl. 68—32.)

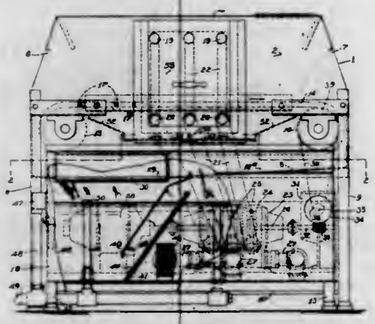


1. In a wringer frame, the combination of a base of channel shape with top and side walls, the side walls extending beyond the top wall; a side stile of box form narrower than the base and arranged between the extending sides, the stile being formed with an outer wall, side walls, and an inner wall, the inner wall being severed vertically and having a roll rod receiving slot, the inner wall terminating at the top of the base and the bottom ends of the side walls of the stiles having inwardly extending ears extending along the side walls of the base below the top wall of the base; and means for securing the base and stile together.

1,805,558. WASHING MACHINE. GEORGE WEBB, West Hartford, Conn., assignor to Colt's Patent Fire Arms Manufacturing Co., Hartford, Conn., a Corporation of Connecticut. Filed May 5, 1928. Serial No. 275,502. 2 Claims. (Cl. 141—1.)

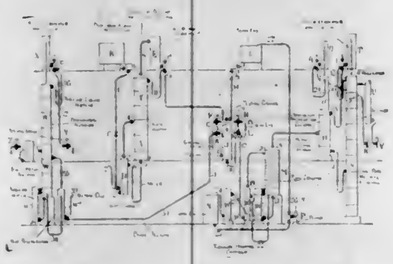
1. A washing machine of the class described, comprising in combination a casing open at the ends and having parallel side walls with an opening in one of them, a substantially horizontal endless open-work conveyor for moving the articles to be washed longitudinally through the casing, the said conveyor being located with its lower run at a level above the bottom of the said side opening, a tank at least partly at one side of the casing and below the side opening therein, means for withdrawing liquid from the tank and delivering it against articles being moved by the conveyor, a shield under the lower run of the conveyor for receiving the liquid so delivered and

returning it laterally through the side opening into the tank, and a substantially horizontal screen in the casing between the upper and lower runs of the conveyor, the



said screen being out of register with the said side opening and serving to receive and retain articles passing through the upper run of the conveyor so as to prevent them from being deposited on the lower run thereof.

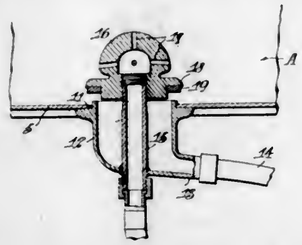
1,805,559. PROCESS FOR CONTINUOUS RECTIFICATION OF CRUDE METHYL ALCOHOL. EMILE AUGUSTIN BARBET, Paris, France. Filed Dec. 22, 1925, Serial No. 77,080, and in France Dec. 22, 1924. 1 Claim. (Cl. 202—55.)



Process of obtaining purified methyl alcohol and purified acetone from crude methyl alcohol containing acetone by continuous treatment consisting in rectifying the crude methyl alcohol, condensing the emitted vapors, causing the condensate to flow in countercurrent to a stream of an aqueous solution of caustic alkali in which the methyl alcohol is dissolved while the acetone remains insoluble, separating the acetone from the caustic alkali of methyl alcohol, separating by continuous distillation the methyl alcohol from the caustic soda and rectifying the alcohol obtained for collecting on the one hand the pure methyl alcohol and on the other hand separating the products entrained therewith, the separated alkaline solution being again brought into contact with the crude methyl alcohol, the crude acetone separated from the crude methyl alcohol being submitted to a continuous rectification whereby it is possible to obtain the acetone in the state of purity, and separately recovering the products entrained therewith.

1,805,560. TUB. JOSEPH BARTA, Martins Ferry, Ohio. Filed Jan. 19, 1931. Serial No. 509,841. 4 Claims. (Cl. 68—31.)

1. A tub including a bottom having a waste opening and a peripheral wall; a waste pipe communicating with the opening in the bottom of the tub; a water inlet pipe extending upwardly through the waste pipe and through the opening in the bottom of the tub; and a discharge



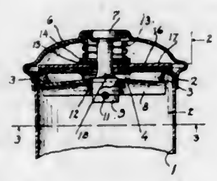
nozzle adjustably secured to the upper end of the water inlet pipe and normally sealing the waste opening in the bottom of the tub.

1,805,561. FOLDING CLOTHES HANGER. JOSEPH BECKER, Montclair, N. J. Filed July 31, 1929. Serial No. 382,488. 7 Claims. (Cl. 223—64.)



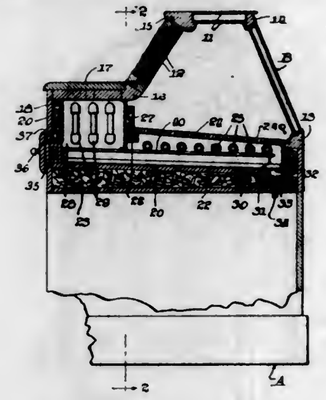
1. A garment hanger comprising arms pivoted to each other for movement from an extended position to a folded position, and support-engaging means movably carried by one arm only and movable into and out of position to engage the other arm and retain the arms in an extended position.

1,805,562. CLOSURE FOR A FILLER OPENING FOR RECEPTACLES. FREDERICK F. BEGUE and JAMES A. MCINTOSH, Detroit, Mich., assignors to Standard Tube and Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 21, 1928. Serial No. 320,820. 10 Claims. (Cl. 220—40.)



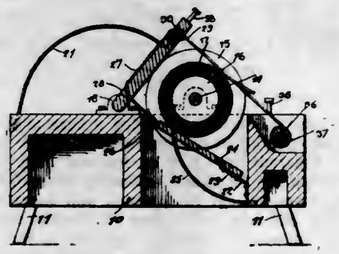
1. A closure cap for attachment to a tube or the like to be closed which is provided with double bayonet type slots with cam shaped shoulders between the slots, comprising a cap for fitting over the tube, a stud depending centrally of the cap, a cross member on the lower end of the stud for passing through the said slots, and for engagement under the shoulders upon relative rotational movement of cap and tube, a sealing member in the cap, and resilient means acting upon said sealing member and arranged to urge the sealing member against the top of the tube as a said cross member is moved along the cam surfaces.

1,805,563. REFRIGERATED DISPLAY COUNTER. JOSEPH BLAHEK, Chicago, Ill. Filed May 25, 1928. Serial No. 280,478. 4 Claims. (Cl. 62—89.5.)



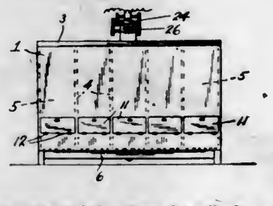
1. In a display counter, the combination of a display compartment provided with an apertured floor, cooling coils located below the apertured floor, the coil sections being in spaced relation to one another, and a removable drawer pan located below the cooling coils and positioned to catch and retain scraps of material falling between the coils, said drawer pan being removable through an opening at the rear of the counter.

1,805,564. WIRE REEL CARRIER. JOHN BODNAR, Atlasburg, Pa. Filed Apr. 15, 1930. Serial No. 444,584. 7 Claims. (Cl. 242—156.)



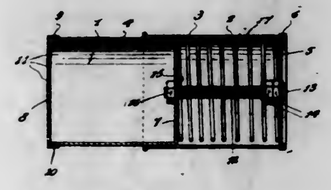
1. The combination with a wire reel; of a reel brake bearing on the reel, a wire brake bearing on the outer convolutions of wire on the reel; and means to apply said brakes simultaneously, said means being arranged to apply the reel brake more forcibly than the wire brake.

1,805,565. CABINET FOR STORING AND PRESERVING FRUITS AND VEGETABLES. HARRY C. BROOKS, Washington, D. C. Filed Aug. 13, 1929. Serial No. 385,623. 6 Claims. (Cl. 312—115.)



3. In an apparatus of the class described, a cabinet comprising a plurality of compartments arranged side-by-side and disposed in opposed series, hinged top members for said compartments having perforations therein, hinged outlet members adjacent the bottom of said compartments and means intermediate the series of compartments for distributing water over the perforated top members to permit water to circulate through said compartments to preserve the contents of the latter.

1,805,566. NOISE PRODUCING TOY. WILLIAM J. CIPRA, Cleveland, Ohio. Filed Jan. 29, 1931. Serial No. 512,139. 7 Claims. (Cl. 46—146.)

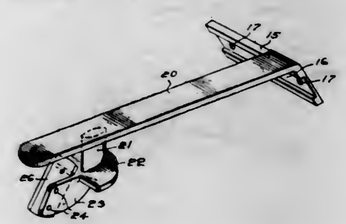


1. A sound producing device comprising companion sections telescoping one within the other, a roughened shaft extendng longitudinally of the outer section, the inner section being provided with a disk formed with an opening slidably receiving the shaft, the disk constituting a noise producing element actuated by contact with roughened portions of the shaft when the two sections are moved longitudinally of each other.

1,805,567. PRODUCTION OF BERYLLIUM AND OTHER METALS. HUGH S. COOPER, Cleveland, Ohio, assignor to Beryllium Development Corporation, a Corporation of Delaware. Filed Dec. 6, 1924. Serial No. 754,446. 1 Claim. (Cl. 204—19.)

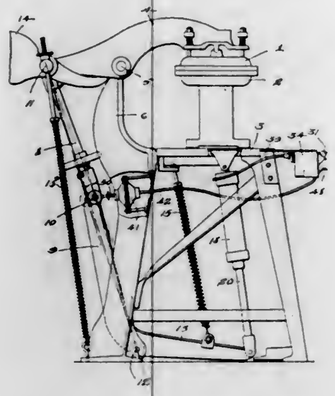
The process of making beryllium which comprises heating a beryllium compound in the presence of a chlorinating agent under reducing conditions until a substantially oxygen-free chloride of beryllium is formed, and collecting and electrolyzing said chloride, all under anhydrous conditions.

1,805,568. SPLITTING ATTACHMENT FOR LOOMS. SUMTER L. CROLLEY and DEWEY L. JONES, Camden, S. C. Filed July 26, 1930. Serial No. 471,023. 4 Claims. (Cl. 164—88.)



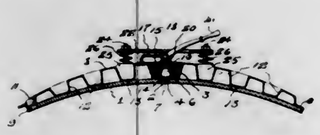
1. A cloth splitting attachment for looms, comprising a generally horizontal arm, means for attaching the arm to the breast beam of the loom, a depending shank secured to the arm at a point spaced a substantial distance from its free end, inclined wings arranged upon opposite sides of the shank and secured to the same near its lower end to engage beneath the split fabric, a bracket secured to the lower end of the shank and extending below the wings, and a blade secured to the bracket and arranged adjacent to the wings, the arrangement being such that the blade is covered by the free end portion of the arm.

1,805,569. ACTUATING MECHANISM FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Dec. 2, 1926, Serial No. 152,277. Renewed May 2, 1930. 8 Claims. (Cl. 68—9.)



1. A pressing machine including cooperating pressing elements, one of which is movable toward and from the other, power mechanism connected to the movable element for moving it into closed position including a toggle movable into a straightened locked position, means tending to open the press when the toggle is out of straightened position, a single acting fluid motor connected to the toggle mechanism to move it into locked position, a feed pipe for supplying fluid to said motor, and manual means for controlling the flow of fluid to and from the motor, an additional fluid motor and means operated thereby for coacting with the toggle mechanism when it is moved to its locked position and the press is closed, to control the initial movement of the toggle out of locked position, a pipe connecting the additional fluid motor to the feed pipe, and a manually operable valve in the last mentioned feed pipe.

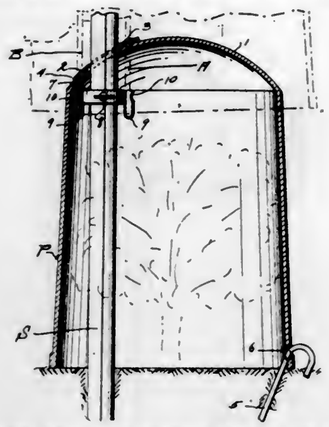
1,805,570. PRESSING ELEMENT FOR LAUNDRY AND GARMENT PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Feb. 15, 1929, Serial No. 340,139. Renewed Oct. 8, 1930. 5 Claims. (Cl. 68—9.)



1. A pressing element for pressing machines comprising a plate having a pressing face and a lengthwise slot opening through its opposite faces, a conduit mounted on the plate and having a lengthwise rib portion fitting the slot and formed with jet openings through which a fluid may be discharged from the conduit to the pressing face.

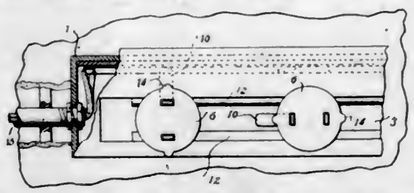
1,805,571. PLANT PROTECTOR. WALTER T. DAVIS, Parkersburg, W. Va. Filed July 31, 1930. Serial No. 472,054. 3 Claims. (Cl. 47—28.)

1. In combination, a plant protector having a closed end provided with an opening, a stake extending through said opening permitting the protector to be readily raised and lowered along the stake, and means carried by the stake for holding said protector in a raised position, the opening



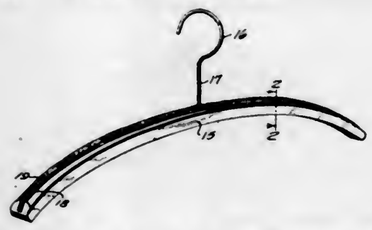
in the closed end of the protector being to one side of the axial center of said end permitting the protector to be swung laterally with respect to the stake.

1,805,572. MULTIPLE BASE PLUG RECEPTACLE. MARTIN J. DE MASK, Pittsfield, Mass. Filed July 5, 1927. Serial No. 203,505. 7 Claims. (Cl. 247—3.)



1. An electric outlet comprising a base plug receptacle having an opening in one side extending the full length thereof to permit travel of an inserted plug, conducting strips within the receptacle extending through the length thereof at one side of the opening and electrically insulated from one another, a plug of circular cross section insertible endwise through the opening in the receptacle and movable sidewise along the receptacle, means to retain the plug in the receptacle, and contacts projecting radially from the plug whereby rotation of the plug within the receptacle at any point in the length of the latter will engage the contacts with the conducting strips or disengage them therefrom.

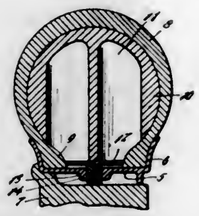
1,805,573. COAT HANGER. CARRIE MAY DINSMORE, Walnut Park, Calif. Filed May 31, 1927. Serial No. 195,537. 1 Claim. (Cl. 223—64.)



A garment hanger having a longitudinally curved body provided with a groove in its upper surface co-extensive

in length with the body, and a strip of fibrous material secured within said groove so that all of its fibers are upstanding and projecting an appreciable distance beyond the surface of the body so as to cause a portion of the material to flex in any direction under the weight of a garment supported on the hanger.

1,805,574. VEHICLE WHEEL. CHARLES G. FAWKES, Denver, Colo. Filed June 24, 1929. Serial No. 373,265. 1 Claim. (Cl. 152—5.)



In a wheel structure, a rim having flanges, a casing having laterally spaced beads engaged with the flanges, a core of resilient material within the casing being provided with laterally spaced radial pockets defining an intervening central partition wall and outer side walls of greater cross sectional thickness than the said central partition wall and having inner and outer relatively straight and arcuately curved surfaces, an expansible band positioned between the beads of the casing to space the same and being engaged with said partition, and a pressure member carried by said rim and engaged with said band.

1,805,575. PROPELLING PENCIL. HERMANN FELGER, Nuremberg, Germany. Filed Mar. 14, 1929, Serial No. 347,095, and in Germany Mar. 21, 1928. 1 Claim. (Cl. 120—18.)



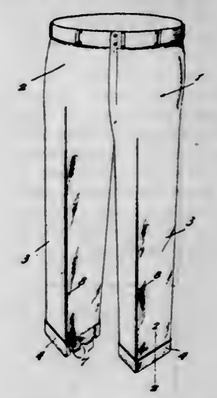
A propelling pencil comprising the combination with a casing having an opening for the lead in one end thereof and a lead holder in said casing including a flat bar twisted to form a screw, of guiding means for said lead holder comprising a cap fixed in the middle of the casing and having a slot therein for receiving the twisted portion of the lead holder so as to act as a nut therefor, a second cap rotatable but not longitudinally displaceable in the casing at the end thereof remote from the end having the opening for the lead, said second-mentioned cap having a slot therein for receiving the untwisted portion of the lead holder so as to act as a longitudinal guide for said portion, and a knob on said second-mentioned cap, as and for the purposes set forth.

1,805,576. CUSHIONING STRIP. BENJAMIN B. FELIX, Chicago, Ill. Filed Sept. 24, 1926, Serial No. 137,609. Renewed Oct. 11, 1929. 1 Claim. (Cl. 154—45.5.)



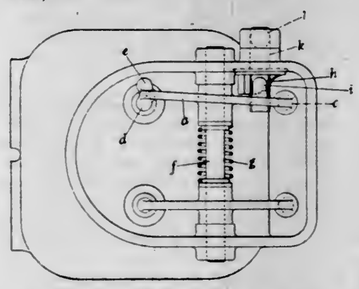
A cushioning strip comprising a length of readily compressible material and a substantially inextensible longitudinal cord imbedded therein in a non-straight line whereby the strip may be stretched to the point where such inextensible cord is in the form of a straight line.

1,805,577. CUFF FOR TROUSERS. LOUIS W. FREEMAN, Gary, W. Va. Filed May 28, 1930. Serial No. 456,711. 5 Claims. (Cl. 2—227.)



1. Trousers having lower ends of the legs formed with cuffs, openings being formed in the inner wall of each cuff in spaced relation to each other and each having a straight lower edge substantially coincident with the lower edge of the cuff.

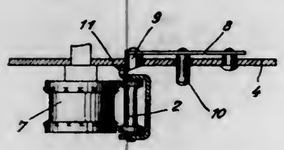
1,805,578. VALVE OPERATING MECHANISM OF INTERNAL COMBUSTION ENGINES. JOSEPH GARDNER and JOSEPH HUGH STOTT GARDNER, Patricroft, near Manchester, England, assignors to L. Gardner & Sons Limited, Patricroft, near Manchester, England, a British Company. Filed Aug. 30, 1929, Serial No. 389,485, and in Great Britain Jan. 4, 1929. 2 Claims. (Cl. 123—182.)



1. In internal combustion engines of the compression ignition type, the combination with the inlet valve, of a

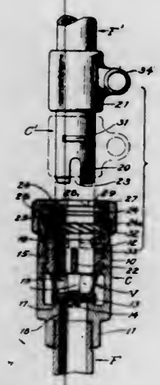
rocker arm having two operative faces for engaging the valve stem, one face leaving a relatively considerable clearance between itself and the valve stem, a shaft carrying said rocker arm, a scroll cam for traversing said arm axially along said shaft to bring one or other of said faces into operation, a spring around the shaft opposing said traversing movement, and means for limiting the movement of the rocker arm in a direction to allow of the closure of the inlet valve.

1,805,579. FILM TRANSPORTING DEVICE IN A MOTION PICTURE APPARATUS. LEO GOLDHAMMER, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed July 8, 1929, Serial No. 376,765, and in Germany July 10, 1928. 1 Claim. (Cl. 88—17.)



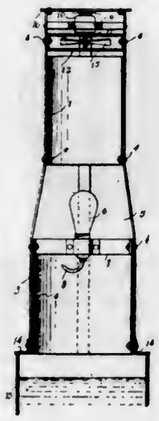
In a film transporting device in motion picture apparatus a film transporting drum, a swinging holder containing pressure rollers for pressing the film towards the film transporting drum, a bolt pivotally fixing one end of the roller-holder to the base-plate, a spring pressing the roller-holder in its open portion away from the transporting drum, a locking pin and a releasing button mounted on a leaf-spring, which locking pin engages the roller-holder in its operative position.

1,805,580. COUPLING. KENNETH C. HAZLETT and CLARENCE W. HAZLETT, Santa Monica, Calif. Filed Aug. 25, 1928. Serial No. 302,062. 8 Claims. (Cl. 284—19.)



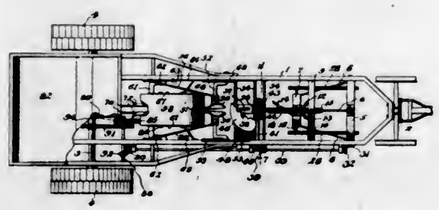
1. A coupling of the character described comprising a body member adapted to be secured to a fluid supply conduit and having an outlet port, a valve controlling the port, means for mounting the valve for movement to open or close the port according as the valve is rotated in one direction or the other, an actuator for the valve adapted to be secured to a fluid discharge conduit, and insertable into the body member for operative engagement with the valve to open or close the latter according as the actuator is rotated in one direction or the other, means for detachably connecting the actuator to the body member, and means for producing a fluid-tight seal between the actuator and body member when the valve is open comprising a gasket of yieldable material surrounding the actuator when the latter is inserted into the body member, and means on the valve operable when the valve is moved to open position to force the gasket into fluid sealing engagement with the actuator.

1,805,581. INSECT DESTROYER. WILLIAM W. HESS, Robinson, Ill. Filed July 11, 1928. Serial No. 291,969. 2 Claims. (Cl. 43—113.)



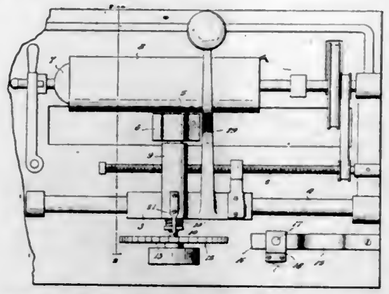
1. An insect destroyer, comprising a lower drum, an upper drum, strips connecting the drums to hold the same in spaced relation and having their upper ends extended above the upper drum, a bracket carried by the lower drum, and an illuminating element supported by the bracket and extended into the space between said drums, a bracket supported by the extended ends of a pair of strips, a motor supported thereby, a fan disposed above the upper drum and driven by the motor for creating a blast of air in the upper drum for discharge therefrom into the lower drum, and means carried by the lower drum for supporting the same upon a vessel adapted to contain a destroying liquid.

1,805,582. BEET HARVESTER. JAMES E. HOVERMALE, San Quentin, Calif. Filed Feb. 8, 1929. Serial No. 338,540. 3 Claims. (Cl. 55—107.)



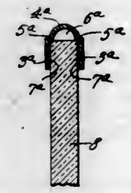
1. In a beet harvester, the combination of a main frame, an arched topper frame carried by the main frame, shoes carried by the lower ends of the topper frame to run at opposite sides of a row of beets, a knife secured to one of said shoes and extending obliquely rearwardly therefrom across the path of the other shoe at the rear of the latter, and a wheel mounted in the topper frame for relative vertical movement to engage the beet tops between the shoes.

1,805,583. SHAVING MACHINE FOR CYLINDRICAL SOUND RECORDS. BRUNO E. JACOB, Ripon, Wis. Filed May 15, 1929. Serial No. 363,257. 1 Claim. (Cl. 82—11.)



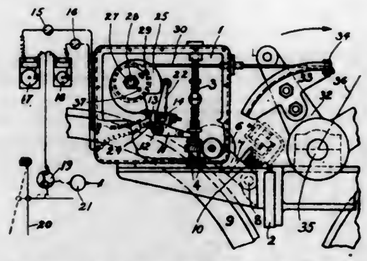
A machine for shaving cylindrical sound records comprising a cylinder receiving mandrel, a screw feed shaft geared to the mandrel, a carriage detachably connected with the screw feed shaft, a blade holder on the carriage, a screw, connecting means between the screw and blade holder, a knob on the screw for manual adjustment thereof, a wheel fixed to the screw and provided with groups of teeth of different size and having a scale to facilitate selection of the desired group of teeth, a trip in the path of the toothed wheel, and means for adjusting the trip to vary the period of action on the selected group of teeth.

1,805,584. GLASS PROTECTOR. JESSE B. KEMP, Pomona, Calif. Filed Jan. 10, 1930. Serial No. 419,950. 2 Claims. (Cl. 312—137.)



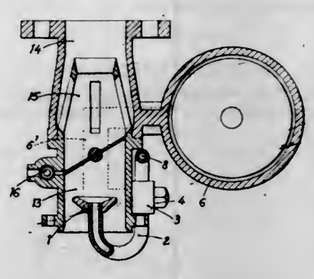
1. A protector of the class described, comprising strips of soft bendable metal connected by a hollow bead, there being shoulders at the places where the bead joins the strips.

1,805,585. STEAM ENGINE OPERATION EFFICIENCY DEVICE. RONALD FRANK KNIGHT, Ramsey, N. J. Filed May 1, 1928. Serial No. 274,328. 22 Claims. (Cl. 105—48.)



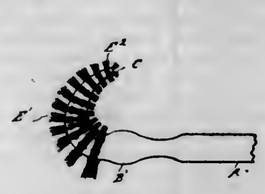
1. A locomotive, in combination with a device which can be cut in and cut out by manipulation of the engine throttle, and which, when predetermined relation exists between the speed of the engine and the position of the cut-off controlling means, co-operates with the operator's sense of hearing to apprise him of that fact.

1,805,586. CARBURETOR. JEAN LAVERGNE, Paris, France. Filed Dec. 12, 1927, Serial No. 239,601, and in France Dec. 31, 1926. 2 Claims. (Cl. 261—76.)



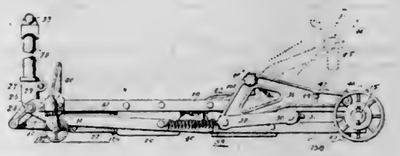
1. In a carburetor, a body having an internal passage, a constant level fuel reservoir, a member located in the passage of the carburetor and disposed perpendicularly to the direction of flow therethrough, and means for supplying fuel to said passage at a point rearwardly of said member, with relation to the direction of flow of fluid through the passage, a nozzle located in said passage and means for supplying air under pressure to said passage in the vicinity of the nozzle, said nozzle being adapted to carburete air under pressure and said air producing a vacuum for causing delivery of fuel from said fuel supply means.

1,805,587. BRUSH FOR CLEANING ARTIFICIAL DENTURES. JOSEPH FRANCIS MANLEY, Scranton, Pa. Filed Sept. 9, 1929. Serial No. 391,433. 3 Claims. (Cl. 15—167.)



1. A brush for artificial dentures comprising a handle portion terminating in a curved portion of increasing radius from the handle to its outer end upon both inner and outer peripheries and being also of a gradually decreasing cross section, and bristles secured to and projecting from said curved portion on both convex and concave sides thereof.

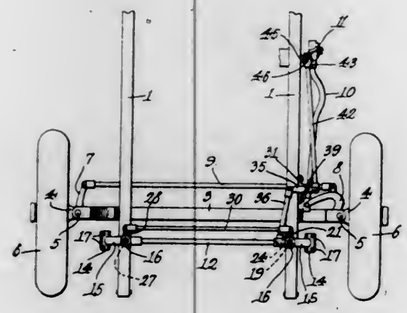
1,805,588. HYDRAULIC JACK. ROBERT E. MANLEY, York, Pa., assignor to Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed Jan. 5, 1926. Serial No. 79,435. 8 Claims. (Cl. 138—9.)



8. In a reservoir for a ram and pump, a check body having a valved passageway therethru from the pump to the

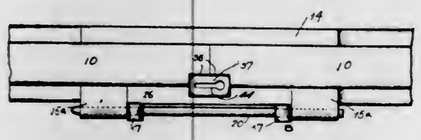
ram, a passageway between the ram and the reservoir, a valve therein, adjustable resilient means for closing the valve, and manually controlled means for releasing the valve from said resilient means to return fluid from the ram cylinder to the reservoir.

1,805,589. DIRIGIBLE HEADLIGHT. ARCHIE BAWLIN MCKAY, New London, Conn. Filed Feb. 7, 1929. Serial No. 338,284. 1 Claim. (Cl. 240—62.52.)



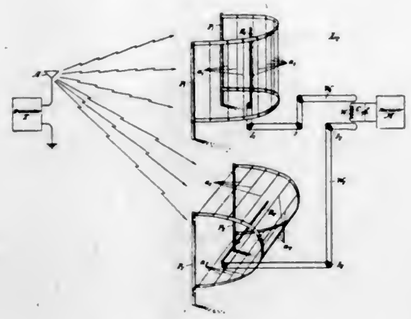
The combination with the fenders and chassis bars of a vehicle, of a support extended between and connecting the fenders, vertical lamp shafts journaled in the support, a lamp carried by each lamp shaft, an inwardly extended arm on the lower end of one lamp shaft and located directly beneath the support, rearwardly extended brackets secured to the lamp shafts and located immediately above the chassis bars, the chassis bars extending outwardly beyond the brackets, a connecting rod pivoted to the brackets, a second vertical shaft journaled on the outer side of one chassis bar and provided at its upper end with an inwardly extended arm located above the said chassis bar, a second connecting rod pivoted to the last-specified arm at a point spaced inwardly from the outer edge of said chassis bar, the second connecting rod being inwardly inclined, said chassis bar extending outwardly beyond all portions of the second connecting rod, the second connecting rod being pivoted to the first-specified arm at a point immediately below the support, and means connecting the lower end of the second-mentioned shaft to a part of the steering mechanism of the vehicle.

1,805,590. JOINT CHAIR AND RAIL LOCK. STEVE NAGY, Woodbridge, N. J. Filed Aug. 22, 1930. Serial No. 477,079. 7 Claims. (Cl. 238—260.)



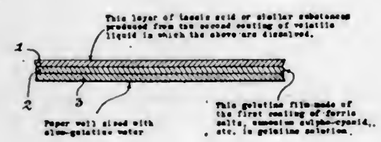
1. In a rail joint chair and lock, the combination with meeting rail ends carrying lateral lock bolt keepers, of a lock device engaged with the keepers, and a joint chair inclosing the lock device.

1,805,591. SIGNALING SYSTEM. RUSSELL S. OHL, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 18, 1926. Serial No. 155,726. 6 Claims. (Cl. 250—11.)



1. The combination of a pair of antenna arrays located about the surfaces of two cylindrical parabolas which make a predetermined angle with one another, respectively, and means for rendering said antenna arrays receptive to components of transmitted signals making corresponding angles with one another without regard to the angle of polarization of said transmitted signals.

1,805,592. BLACK LINE PHOTOGRAPHIC SENSITIZED PAPER AND PROCESS OF MAKING THE SAME. RYO OMOTO, Tokyo-Fu, Japan, assignor of one-half to Manabu Tada, Tokyo, Japan. Filed Jan. 25, 1928, Serial No. 249,504, and in Japan Feb. 9, 1927. Renewed Mar. 27, 1931. 4 Claims. (Cl. 95—7.)

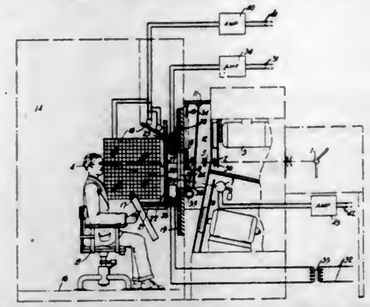


1. A sensitized photographic paper comprising paper having a coating of ferric salts and a superposed coating of tannic acid.

1,805,593. PROCESS OF PRODUCING VITAMINE PREPARATIONS. AAGE WILLAND OWE, Oslo, Norway. Filed July 8, 1926. Serial No. 121,269. 3 Claims. (Cl. 167—81.)

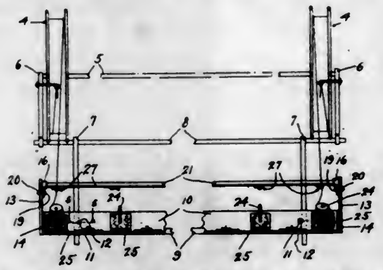
1. Process of producing vitamine preparations comprising in combination the steps of saponifying fat rich in vitamines with a solution of caustic alkali in a substantially non-dissociating liquid so as to obtain a solution of substantially non-dissociated alkali metal soaps, incorporating a proportion of an edible fat into the resulting solution of non-dissociated soaps so as to dissolve the vitamines contained therein and separating the vitaminized fat from the solution of non-dissociated soaps.

1,805,594. COMMUNICATING SYSTEM. RALZEMOND D. PARKER, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 29, 1930. Serial No. 439,986. 7 Claims. (Cl. 178—6.)



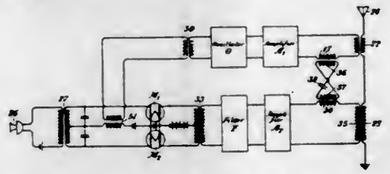
1. A combined telephone and simultaneously operable two-way television system including a plurality of stations, a booth at each station, an image integrator and analyzer associated with each booth and operative with respect to a person therein, and telephone instruments in each booth but out of range of said analyzer.

1,805,595. WINDING MACHINE ATTACHMENT. LOUIS FRANCIS PHELAN, Stonington, Conn. Filed July 21, 1928. Serial No. 294,458. 3 Claims. (Cl. 242—18.)



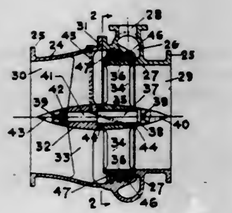
1. In combination with a winding machine which includes a plurality of cop receiving spindles and a swift supported above the spindles, an attachment including a base extending longitudinally of the machine between the cop receiving spindles and the swift, brackets extending outwardly from the base, rail supporting sockets adjustably mounted on said brackets, a rail supported between said sockets, yarn package supporting spindles mounted on said base, yarn guide means on said rail, and respectively including a guide member and a supporting element therefor, and means for adjustably mounting the supporting element on said rail.

1,805,596. SIGNALING SYSTEM. RALPH K. POTTER, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 24, 1926. Serial No. 137,567. 12 Claims. (Cl. 250—6.)



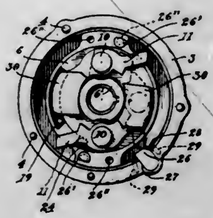
1. The method of signaling which consists in generating a wave of carrier frequency, transmitting the carrier frequency wave at a suitable energy level through space, generating voice frequency signals, producing a side band of the carrier frequency corresponding to said voice frequency signals, raising the energy level of the side-band to that of the carrier frequency, combining the side-band with the carrier frequency, and neutralizing the reaction of the energy of the carrier frequency upon that of the side-band.

1,805,597. METHOD OF AND MEANS FOR PROPELLING WATER CRAFT. ALEXANDER MCKENZIE PRATT, Newcastle, New South Wales, Australia. Filed Feb. 19, 1930, Serial No. 429,679, and in Australia Feb. 28, 1929. 7 Claims. (Cl. 115—16.)



1. Improved propelling unit for water craft consisting of a propeller with a rim formed upon and encircling the tips of all the blades, turbine blades carried upon said rim, a mounting case within which said propeller is revolvably mounted, coacting turbine blades carried by said case, and means for directing fluid motive force to said blades.

1,805,598. IMPULSE COUPLING. CURT FREDERICK REIS, Chicago, Ill., assignor to Excel Magneto Company, Chicago, Ill. Filed Dec. 6, 1929. Serial No. 412,235. 9 Claims. (Cl. 123—149.)

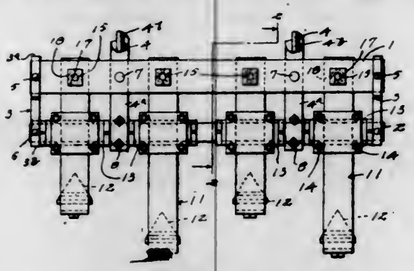


2. In an impulse coupling for magnetos, a driving member, a driven member, a casing in which said members are mounted, a stop lug on the interior of said casing, pawls on said driven member adapted to engage said stop lug, a spiral spring disposed between said members with its ends seated in recesses formed in the respective members, pins on said driving member for disengaging the pawls from the stop lug, said driving member provided with a second recess, and a shock absorbing member seated in said last-named recess.

1,805,599. COTTON CHOPPING ATTACHMENT FOR CULTIVATORS. JOHN H. ROBERTS, Hatfield, Ark. Filed Mar. 8, 1930. Serial No. 434,285. 3 Claims. (Cl. 97—23.)

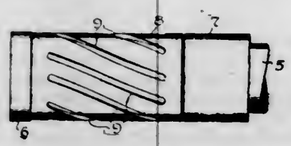
1. A cultivator attachment of the character set forth, comprising a frame embodying a front bar and a rear shaft, attaching brackets secured to the frame, standards having straight front portions and curved rear portions, the straight standard portions extending across the shaft and having their front ends positioned in contact with the

rear side of the bar and the rear portions of the standard extending downwardly and forwardly, blades secured to the lower ends and the rear portions of the standards, means



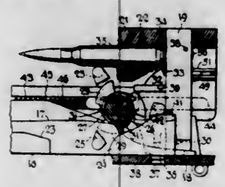
rockably connecting the standards to the shaft, and means cooperative with the bar and standards to yieldingly hold them against rocking movement.

1,805,600. SPRING DEVICE. CHARLES L. ROSS, Washington, D. C. Filed Apr. 27, 1929. Serial No. 358,545. 6 Claims. (Cl. 267—1.)



1. A buffer comprising a hollow cylinder arranged to be loaded in the direction of its axis and having a plurality of quick pitch spiral slots extending through its walls, and characterized by the capability of absorbing and dissipating energy of impact without substantial recoil.

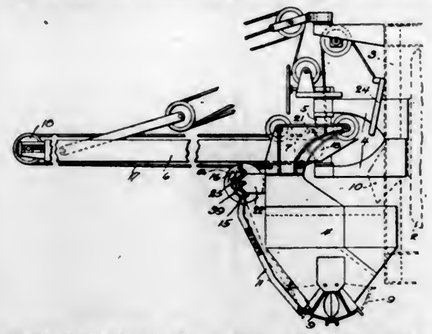
1,805,601. FIREARMS. CHARLES L. ROSS, Washington, D. C. Filed Oct. 14, 1930. Serial No. 488,650. 27 Claims. (Cl. 42—25.)



1. An extractor mechanism comprising a lever having an extracting nose for engaging a cartridge case; a guide for said lever about which the lever pivots and relatively to which it is free to move radially; and a cam mechanism operable to shift said extractor radially to cause the nose to engage a cartridge, then swing it in an extracting direction, then withdraw it radially from engagement with the cartridge and then free the extractor to permit it to return to its initial position.

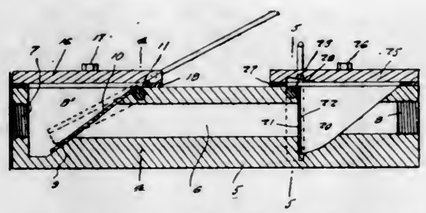
1,805,602. CONCRETE DELIVERY APPARATUS. SAMUEL SHAFER, Jr., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 15, 1929. Serial No. 347,409. 8 Claims. (Cl. 94—44.)

1. The combination with a conveying receptacle provided with a door through which its contents may be discharged and a track along which it may travel, of a free-running cable that moves as the receptacle moves along the track, means through which the cable may be connected with the door of the receptacle for opening the latter, means for arresting the free movement of the cable to open the door



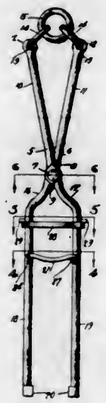
and means whereby the door will be maintained in the open position it occupies when the restraint on the free movement of the cable is removed.

1,805,603. AUTOMATIC CHECK VALVE. IRA D. SMITH, Eastland, Tex. Filed Apr. 17, 1930. Serial No. 445,017. 2 Claims. (Cl. 137—153.)



1. A safety valve of the class described including a body having a bore extending therethrough with flat valves one of which closes in the direction of the flow through the bore and the other closes in the opposite direction, and means on the second valve for engaging means on the first valve to hold the first valve open when the pressure of the flow is sufficient to swing the second valve to an open position.

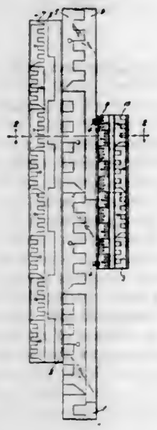
1,805,604. GRAPPLING HOOK. ANTON STRAKA, Chicago, Ill. Filed Dec. 9, 1930. Serial No. 501,133. 4 Claims. (Cl. 294—118.)



1. A well fishing tool of the character described, comprising a pair of crossed pivoted levers, connecting links

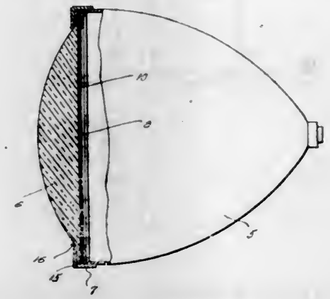
connecting the upper ends of the crossed levers, parallel jaw portions formed on the opposite ends of the crossed levers, friction gripping members secured to the free ends of the spaced parallel portions, means pivoted to one of the spaced parallel portions, having its free end engaging the opposite parallel portion, a detent carried by the spaced parallel portion in close relation to the free end of the first named means for limiting the downward movement thereof and a locking ring slidably mounted upon the spaced parallel portions.

1,805,605. STADIA ROD. HUBERT R. THORNBURGH, Leonia, N. J., assignor to Shell Petroleum Corporation, a Corporation of Virginia. Filed May 13, 1929. Serial No. 362,639. 2 Claims. (Cl. 33—74.)



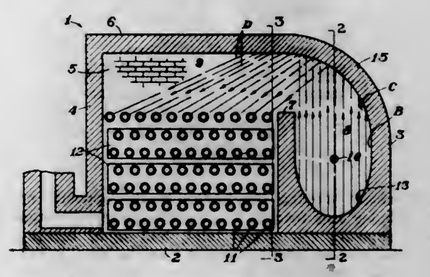
1. A stadia rod for use in gravimetric torsion balance surveys comprising a plurality of faces, each face having a pair of parallel scales thereon, one of said scales being graduated to represent a constant for a separate predetermined radius of levelment times the height, and the other of said scales being graduated to represent a different constant times the height unit.

1,805,606. ANTIGLARE ATTACHMENT FOR HEADLIGHTS. HANS PETER VERDICH, Aberdeen, S. Dak. Filed Jan. 23, 1930. Serial No. 422,873. 1 Claim. (Cl. 240—48.4.)



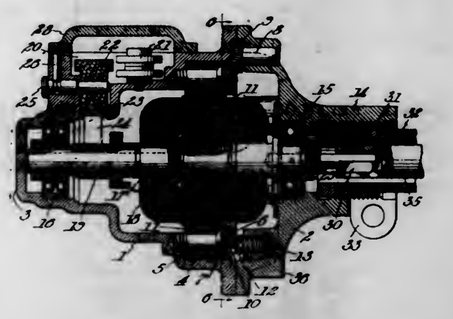
A dimmer attachment of the type described for positioning behind the lens of a vehicle headlight comprising an annulus positioned in contact with said lens at the marginal portion thereof, and an non-circular sheet of light diffusing material secured at its outer edge to said annulus, said annulus being further positioned between the casing of the headlight and said lens, and a second annulus secured to the said annulus and being deformed to overlie the front marginal portion of the lens for retaining the same, said lens and annuli being mounted on the headlight casing by an annular lens mounting ring member.

1,805,607. OIL HEATER. CARY R. WAGNER, Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed July 21, 1930. Serial No. 469,402. 5 Claims. (Cl. 196—116.)



3. In an oil heater, a furnace setting formed to include an internally situated bridge wall which divides the setting internally into burner and tube compartments, a burner situated within said burner compartments and a plurality of horizontally arranged tubes disposed in rows or passes within said tube compartments, the walls of said burner compartments being curved to concentrate through reflection the radiant heat developed within said burner compartment upon the oil inlet ends of the tubes comprising the upper pass in said tube compartment.

1,805,608. MAGNETO. EDWARD F. WESTON, Newark, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a Corporation of New Jersey. Filed May 27, 1929. Serial No. 366,488. 14 Claims. (Cl. 171—209.)

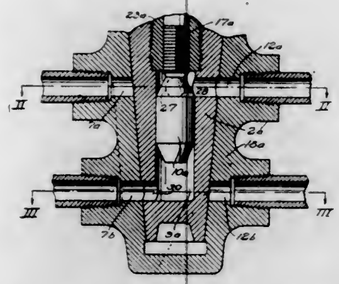


1. A magneto comprising an armature, a circular magnet having pole pieces cooperating with said armature, a casing housing said armature and magnet, a magnetic shunt supported in said casing for angular adjustment about the axis of said magnet, and means for angularly adjusting said shunt about its axis.

1,805,609. LUBRICATING SYSTEM. TOM WILSON, Homestead, Pa. Filed Mar. 30, 1929. Serial No. 351,160. 1 Claim. (Cl. 184—7.)

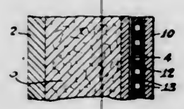
A device for use in a lubricating system in order to supply a predetermined amount of lubricant, said device

romprising a valve casing provided with two inlets and two outlets, a valve having an axially extending cylinder containing a piston, said valve being provided with passageways to supply lubricant from one inlet through a passageway in the valve to the cylinder, the outlet opposite thereto and the other inlet being closed, the incom-



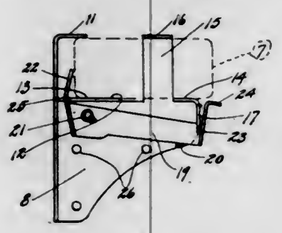
ing lubricant moving the piston to the opposite end of the cylinder and forcing a measured charge through the outlet opposite the closed inlet, and upon turning the valve the second inlet is opened and the first closed, the first outlet closed and the second opened, the piston being moved to the opposite end of the cylinder.

1,805,610. VAULT AND SAFE CONSTRUCTION. JOHN W. YOUNG, Ben Avon, Pa., assignor to Federal Laboratories, Inc., Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 6, 1928. Serial No. 317,581. 3 Claims. (Cl. 109—6.)



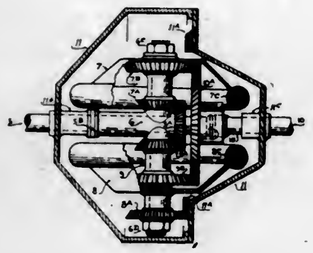
1. A safe comprising an outer wall, an inner wall, filling material between said walls, a casing spaced from one of said walls, a perforated plate of less thickness than the space between the wall and the casing arranged in said space, and a material adapted to liberate gas when heated supported by said perforated plate.

1,805,611. SELF-LOCKING COMBINATION VENETIAN BLIND BRACKET. FRED J. BURNS, Saginaw, Mich., assignor to Columbia Mills, Inc., Saginaw, Mich., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 391,184. 12 Claims. (Cl. 156—17.)



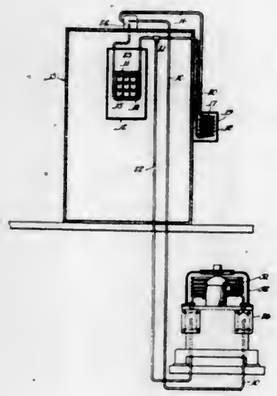
4. A combination bracket for removably holding a supporting bar comprising a horizontal supporting shelf, inwardly turned sections for engaging the top of the bar, a locking member pivotally connected to said bracket, means on said member for forcing the bar outwardly when the locking member is shifted to unlocked position, and means for holding said member in locked position.

1,805,612. POWER TRANSMISSION CONSTRUCTION. PAUL CHAPMAN, Bayside, N. Y. Filed Jan. 23, 1931. Serial No. 510,727. 7 Claims. (Cl. 74—34.)



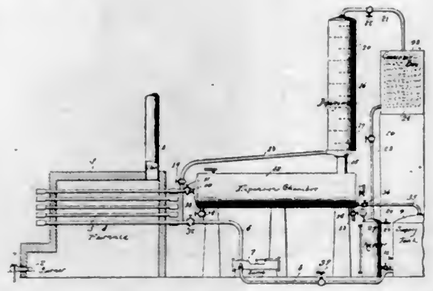
1. In power transmission construction, a fixed supporting casing, a driving shaft extending into one end of said casing, a driven shaft extending into the opposite end of said casing coaxially with said driving shaft, a rotor freely mounted coaxially on said driving shaft for rotation thereabout, cylindrical arms on said rotor projecting radially therefrom, one or more gyrators mounted coaxially on said cylindrical arms for revolution thereabout, a bevel gear fixedly mounted on said driving shaft beyond said rotor, bevel gears fixedly mounted on said gyrators in mesh with said beve lgear on said driving shaft to revolve said gyrators around said cylindrical arms, bevel gears fixedly mounted on said gyrators in mesh with a bevel gear fixedly mounted on the said driven shaft, suitable weights of ring form fixedly mounted coaxially on said gyrators for revolution therewith, a bevel gear fixedly mounted on the said driven shaft in mesh with said bevel gears on said gyrators to transmit power delivered by said driving shaft to said driven shaft.

1,805,613. REFRIGERATING APPARATUS. GEORGE J. COOKE, Chicago, Ill. Filed May 11, 1929. Serial No. 362,399. 3 Claims. (Cl. 62—115.)



1. In an ammonia refrigeration system, an expansion coil, condensing means including a condenser coil, a block tin pipe supply or liquid line connecting said condenser coil and said expansion coil, and a block tin pipe return line connecting said expansion coil and said condensing means, said block tin supply and return lines having relatively thin side walls and being no greater than five eighths of an inch in diameter.

1,805,614. APPARATUS FOR CRACKING OIL. GUSTAV EGLOFF and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 28, 1921, Serial No. 456,220. Renewed Feb. 21, 1929. 1 Claim. (Cl. 196—107.)

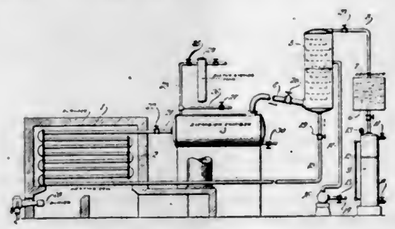


An apparatus for treating oil, comprising a heating coil located in a furnace and an expansion chamber located outside of the furnace with which said coil communicates, a dephlegmator connected to said expansion chamber, means for condensing and collecting the vapors issuing from the dephlegmator; a raw oil supply tank, a charging line leading from said tank to said coil, a pump interposed in said charging line, a connection between the expansion chamber and said supply tank, a connection between said charging line and said expansion chamber, valves interposed in said connections permitting the coil to be shunted to provide for a local circulation of the oil from the supply tank through the expansion chamber to cool said expansion chamber.

1,805,615. PROCESS FOR CRACKING HYDROCARBON PRODUCTS. GUSTAV EGLOFF and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 25, 1921, Serial No. 464,367. Renewed July 2, 1928. 1 Claim. (Cl. 196—47.)

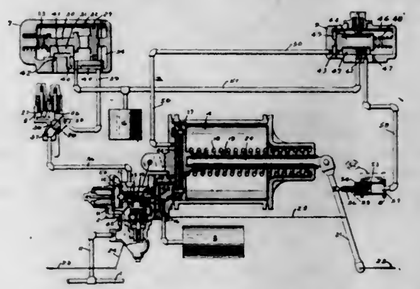
A process for cracking wax oil, consisting in introducing a body of oil to a still, in maintainng said oil while undergoing distillation in the still under a gradually decreasing self imposed vapor pressure ranging from a maximum of at least 350 pounds per square inch, and in increasing the temperature substantially as the pressure on the oil is decreased.

1,805,616. PROCESS OF TREATING PETROLEUM OILS. GUSTAV EGLOFF and JACQUE C. MORRELL, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Mar. 4, 1922, Serial No. 541,055. Renewed May 17, 1927. 3 Claims. (Cl. 196—24.)



1. A process for converting hydrocarbon oils, consisting in subjecting the oil to a cracking temperature, in transferring the heated oil to a reaction zone, in injecting into the oil in said reaction zone a mixture of sulphur dioxide and steam, in condensing the vapors evolved from the oil and in maintaining a regulated pressure upon the oil during treatment.

1,805,617. BRAKE RELEASE DEVICE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1930. Serial No. 429,288. 15 Claims. (Cl. 303—68.)



1. In a vehicle brake, the combination with a mechanism operative to effect an application of the brakes and operative to effect the release of the brakes, of fluid pressure means operative to apply braking power to said mechanism and operative to relieve said mechanism of braking power, and pneumatic means for operating said mechanism to release position when the mechanism is relieved of braking power and for maintaining said mechanism in release position.

1,805,618. STOKER. ROBERT A. FORESMAN, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Feb. 4, 1929, Serial No. 337,445. Divided and this application filed Apr. 7, 1930. Serial No. 442,358. 12 Claims. (Cl. 110—33.)

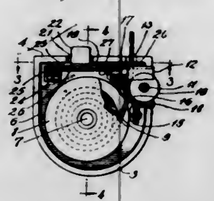


1. In combustion apparatus, a progressive feed overfeed grate comprising, in combination, a series of rectangular-shaped grate frames pivotally connected together in end-to-end relation and extending in the direction of fuel feed; and grate bars detachably secured within the grate frames and arranged longitudinally in the direction of fuel feed; said grate bars having projecting portions at the ends thereof overlapping with one another to provide a substantially unbroken, fuel-supporting surface.

1,805,619. DEVICE FOR DISPENSING PIPE CLEANERS. THEODORE S. FULLER, Montclair, N. J. Filed Mar. 13, 1930. Serial No. 435,444. 2 Claims. (Cl. 242—142.)

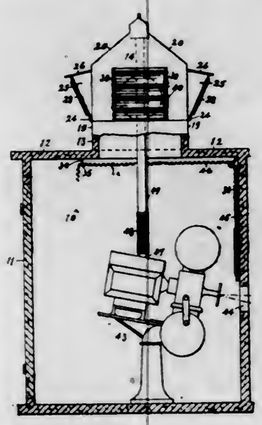
1. In a pipe cleaner dispenser, the combination with a casing, of a reel mounted in said casing for supporting a strand of pipe cleaner material, there being an opening

in said casing, an abutment disposed adjacent to said opening, a feeding wheel disposed opposite to said abutment to receive the free end of the pipe cleaner material and co-operating with said abutment to feed a length of said material through said opening when said feeding wheel is



operated, a shearing blade pivotally mounted in said casing, said shearing blade having a knife edge disposed adjacent to said opening in position to engage and cut off the length of material discharged when said shearing blade is operated, and a spring for engaging said shearing blade normally to maintain it out of cutting position.

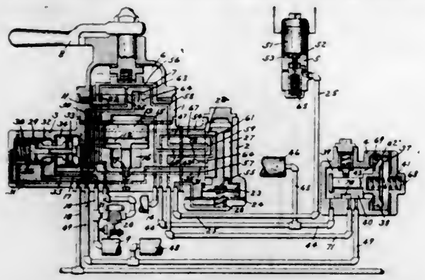
1,805,620. VENTILATING SYSTEM FOR PROJECTING ROOMS. BARNEY GOLDMAN, New York, N. Y. Filed Apr. 5, 1930. Serial No. 441,770. 2 Claims. (Cl. 98—33.)



1. A ventilating system comprising a room having a projecting machine arranged therein, a skylight enclosure extending upwardly from the top of the room, a conduit located in the upper part of the skylight, a flexible tube connecting the conduit with the projecting machine, a blower mounted on the top of the room outside of the skylight communicating with the conduit to suck the heated air from the projecting machine to the exterior of the skylight, an inlet for conducting air into the room, gravity operated shutters normally closing a vent in the skylight, and a fan situated in the skylight for operating the shutters.

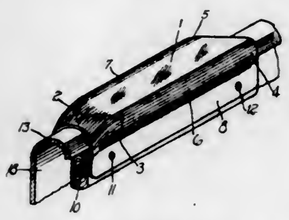
1,805,621. TRAIN CONTROL DEVICE. JOHN N. GOOD, Wilmerding, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 11, 1930. Serial No. 427,484. 5 Claims. (Cl. 303—18.)

1. In a fluid pressure brake apparatus, the combination with a brake pipe and means for normally maintaining the brake pipe charged with fluid under pressure, of means for automatically effecting a reduction in brake pressure and for cutting off the supply of fluid under pressure to the brake pipe, and means for relaying the initiation of the automatic brake application for a predetermined period



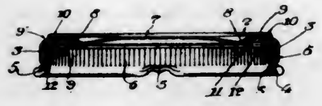
of time, the brakes being initially applied during said period of time by the reduction in brake pipe pressure due to leakage from the brake pipe.

1,805,622. BATHTUB SEAT AND HAND REST. HARLEY E. GOODWIN, Hartford, Conn. Filed Nov. 29, 1929. Serial No. 410,467. 2 Claims. (Cl. 4—185.)



1. In a device of the character described a bathtub wall having an overhanging top rail, a combination seat and hand rest having downwardly extending wings engaging the sides of the top rail portion, and a filler member positioned beneath the curved overhanging rail and detachably connected to the rest.

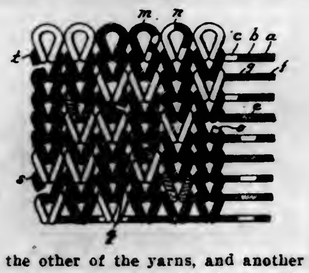
1,805,623. ROTARY CAP HAVING SEALING MATERIAL FLOWED THEREINTO. CHARLES HAMMER, Hollis Court Boulevard, N. Y., assignor, by mesne assignments, to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Dec. 21, 1928. Serial No. 327,602. 15 Claims. (Cl. 215—38.)



1. A sealing cap comprising a cover part, a depending skirt, a plurality of concentric grooves in the cover portion of said cap, and sealing material common to said grooves, said grooves co-operating with each other to hold the sealing material in position.

1,805,624. KNITTED FABRIC AND PROCESS OF MAKING THE SAME. WILBUR L. HOUSEMAN, Somerton, Pa., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 30, 1929. Serial No. 403,392. 8 Claims. (Cl. 66—36.)

1. A knitted fabric including at least two series of courses with courses of one series between successive courses of the other series, the two series being formed by separate yarns, the courses of one series having one portion in which two yarns are knit into loops with one of the yarns



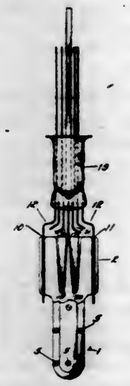
overlying the other of the yarns, and another portion in which the two yarns are knit into loops with the second yarn overlying the first yarn.

1,805,625. KNITTING MECHANISM. WILBUR L. HOUSEMAN, Somerton, Pa., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Original application filed Feb. 20, 1929. Serial No. 341,374. Divided and this application filed Apr. 21, 1930. Serial No. 445,906. 6 Claims. (Cl. 66—36.)



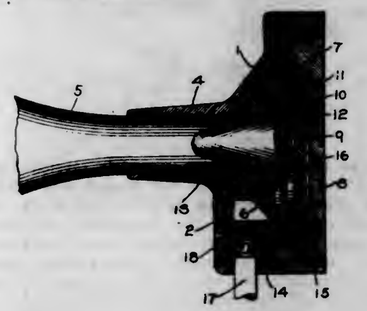
1. Knitting mechanism comprising a needle cylinder, needles movably mounted in the cylinder, devices cooperating with the needles to form loops at a stitch forming point, means for guiding yarns to the needles, one of the guiding means and the needles being arranged so that when the needles are in normal position they will fail to engage a yarn from the last named guiding means, means for deflecting needles out of normal position to effect engagement thereof with said yarn, and means for selectively effecting either normal or reverse plating of yarns during the formation of loops.

1,805,626. RADIO APPARATUS. JAMES D. JORDAN, Elmhurst, Ill., assignor to Grigsby Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 5, 1930. Serial No. 426,003. 11 Claims. (Cl. 250—27.5.)



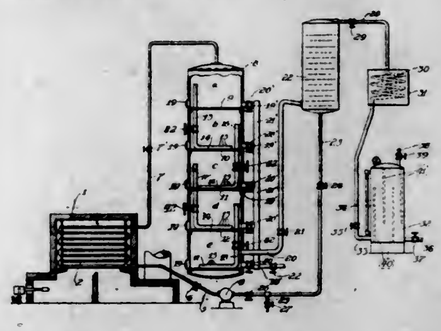
1. A jig for maintaining a shaped filament and mount in welding position consisting of a plurality of complementary plates, means for maintaining said plates in locked relationship, said plates being provided with means for maintaining a filament in a V shape and being provided with other means adapted to receive certain of the supporting arbors in said mount, said plate also having an aperture located where the bight of the filament occurs, and a removable pin in said channel for engaging said filament bight.

1,805,627. SIGNAL HORN. CECIL S. KELLEY, East McKeesport, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1930. Serial No. 426,077. 5 Claims. (Cl. 116—142.)



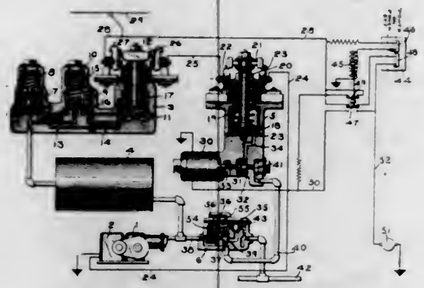
1. A sound producing device comprising a casing, a diaphragm mounted in said casing and subject to fluid pressure in chambers at opposite sides of the diaphragm, and means for supplying fluid under pressure to said chambers.

1,805,628. PROCESS AND APPARATUS FOR CRACKING OIL. LESTER KIRSCHBRAUN, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Aug. 21, 1922. Serial No. 583,408. 2 Claims. (Cl. 196—107.)



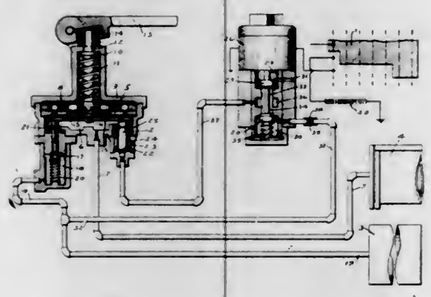
2. A process for converting high boiling point hydrocarbon oils into a lower boiling point product, consisting in initially subjecting the oil to cracking conditions of temperature and pressure in a heating zone, in thereafter collecting the oil in a plurality of separated pools in an enlarged reaction zone, in maintaining successively lower pressures on said pools, in admitting the hot oil from the heating zone to the pool maintained under the highest pressure, in causing the vaporous constituents evolved from the oil in each pool, except the last, to percolate through the body of oil in the next succeeding pool, in taking off vapors for dephlegmation from the last of said successive pools, and in preventing the return of unvaporized residual oil from said pools to said heating zone.

1,805,629. COMPRESSOR CONTROL DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1930. Serial No. 424,232. 11 Claims. (Cl. 303—1.)



1. The combination with a vehicle carried fluid compressor, an electric motor for driving said compressor, and a governor controlled by variations in the pressure of fluid compressed by the compressor for controlling the motor circuit, of an electric motor for driving the vehicle, electrically controlled means for also controlling the compressor motor circuit, and means for energizing said electrically controlled means by the counter electromotive force of the vehicle motor.

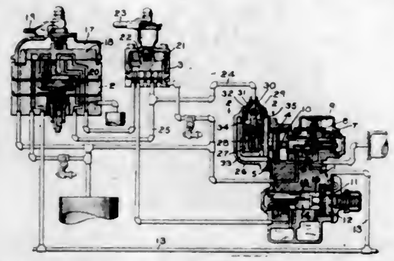
1,805,630. DYNAMIC AND FLUID PRESSURE BRAKE CONTROL. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1930. Serial No. 424,233. 6 Claims. (Cl. 303—3.)



1. In a vehicle braking apparatus, the combination with a brake cylinder and a brake valve device for controlling the admission of fluid to the brake cylinder, and having a release valve for controlling the release of fluid from the brake cylinder, means for controlling a dynamic brake, and mechanism controlled by said means for controlling the supply of fluid under pressure to the brake cylinder through a communication controlled by said release valve.

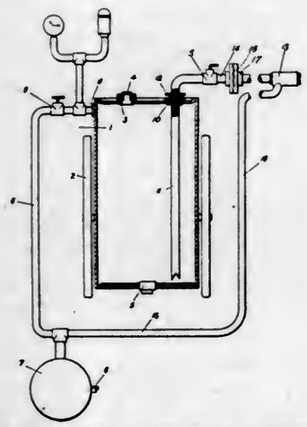
1,805,631. FLUID PRESSURE BRAKE DEVICE. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 15, 1930. Serial No. 428,676. 4 Claims. (Cl. 303—84.)

1. In a locomotive brake equipment, the combination with a brake cylinder, valve means for controlling the supply of fluid under pressure to said brake cylinder, and a piston operated by an increase in pressure in an application cylinder for operating said valve means, of an application cylinder pipe through which fluid under pressure is supplied to said application cylinder, and a



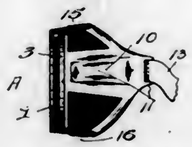
valve device providing a normally open communication from said cylinder to said pipe and operated by fluid pressure in the application cylinder upon breakage of said pipe for cutting off communication from the application cylinder to the application cylinder pipe.

1,805,632. PROCESS FOR ATOMIZING AND SPRAYING SEMIFLUID MATERIAL CONTAINING ASBESTOS FIBER. KARL A. MILAR, Chicago, Ill. Filed Nov. 28, 1927. Serial No. 236,147. 1 Claim. (Cl. 91—68.)



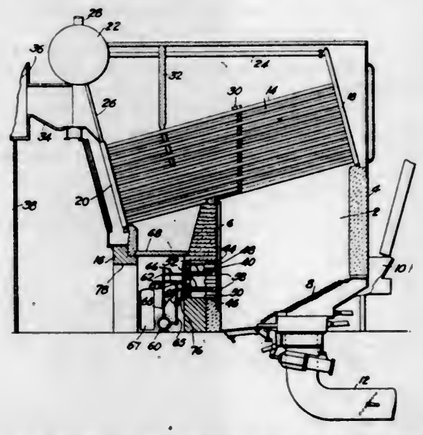
The herein described process which includes first providing a semi-fluid material containing fibrous matter; forcing said material by means of compressed air, into and through a spray gun and, while forcing said material to the spray gun, straining the larger particles of fibrous matter therefrom; and atomizing said material, including the fibrous matter, by separately supplying compressed air to the spray gun.

1,805,633. GOGGLES. JOHN L. MORAN and ALVIN J. LEE, Spokane, Wash., assignors, by direct and mesne assignments, of one-fourth to Francis E. P. Wilder, Spokane, Wash., and one-fourth to Robert Malcom, Chicago, Ill. Filed May 28, 1930. Serial No. 456,506. 4 Claims. (Cl. 2—14.)



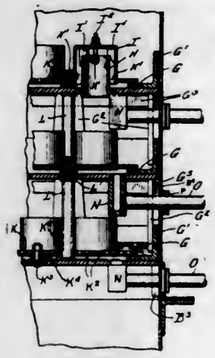
1. The combination in a pair of goggles with complementary cups, of integral slotted bridge-flanges on the cups and a bridge-strap, said flanges being spaced back of the lens of each cup, an integral, outset temple housing on each cup having its front wall terminating back of the lens of the cup, upper and lower vent openings in the cups, and rubber shields seated in grooves adjacent the bridge flanges forming continuations of the rear edges of the cups.

1,805,634. FURNACE. JOHN FRANCIS O'CONNOR, Toledo, Ohio, assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1921. Serial No. 448,280. 8 Claims. (Cl. 110—22.)



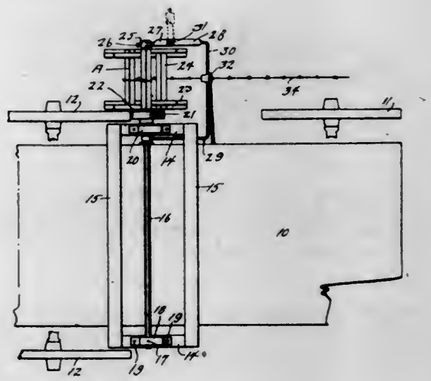
1. In a furnace, a fire chamber having a wall formed to provide a series of openings uniformly spaced horizontally across the width of the chamber through which air may enter into said chamber, a plurality of vertically spaced burners mounted in each of said openings, means for individually controlling the respective burners from the outside of said chamber, and means for controlling the flow of air through the individual openings.

1,805,635. REFLUX TOWER. JOHN PRIMROSE, Richmond, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 6, 1924. Serial No. 748,115. 2 Claims. (Cl. 261—113.)



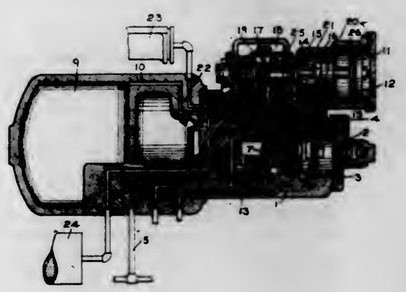
1. In oil and vapor separating apparatus, the combination with a vertical casing having a plurality of bubble trays therein, of a liquid reservoir carried by each tray, and a lateral outlet pipe connected to each of said reservoirs and projecting through the casing and through which a portion of the liquid collecting on the tray may be withdrawn from the casing.

1,805,636. WIRE REELING ATTACHMENT. WILLIAM C. SAUNDERS, Hinton, Iowa. Filed July 13, 1929. Serial No. 378,116. 7 Claims. (Cl. 242—92.)



1. In a wire reeling attachment for a farm wagon having a wagon box, a step supported by the box, a reel shaft pivoted to the step and extending transversely under the box, a reel carried by the other end of the shaft, a pulley for driving the reel, adapted to engage the rim of a wheel of the wagon, and a lever engaging the shaft and pivoted to the side of the wagon box to urge the pulley into engagement with the wheel.

1,805,637. FLUID PRESSURE BRAKE. FRANCIS E. SCHWENTLER, St. Louis, Mo., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 15, 1930. Serial No. 428,555. 3 Claims. (Cl. 303—57.)



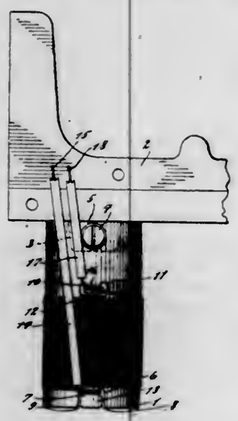
1. In a fluid pressure brake, a brake cylinder, a distributing valve device comprising a valve for controlling the supply of fluid under pressure to the brake cylinder, an application chamber, a differential piston for actuating said valve and having one piston head subject to the pressure of the application chamber and the other piston head subject to brake cylinder pressure, means for connecting the chamber intermediate said piston heads either to the atmosphere or to the brake cylinder, and means for supplying fluid under pressure to the application chamber.

1,805,638. RADIO COUPLING COIL. THEODORE JOHNSON SCOFIELD, GEORGE ALFRED WHITE, and JOSEPH DAYTON HAMMOND, Jackson, Mich., assignors to The Sparks-Withington Company, a Corporation of Ohio. Filed Oct. 30, 1929. Serial No. 403,328. 4 Claims. (Cl. 175—359.)



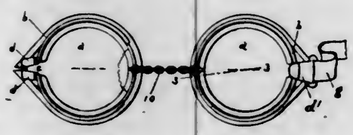
1. In electric coils, a spool, a flange on said spool having a transverse notch, pins in said flange on each side of said notch, and a coil wound on said spool adjacent the flange, the ends of said coil being secured to said pins.

1,805,639. ELECTRICAL TRANSFORMER AND INDUCTANCE COIL. THEODORE JOHNSON SCOFIELD, Jackson, Mich., assignor to The Sparks-Withington Company, a Corporation of Ohio. Filed Oct. 30, 1929. Serial No. 403,527. 2 Claims. (Cl. 175—359.)



2. An electromagnetic coil consisting of an insulation tube having two spaced holes and slots of less width than the diameter of said holes joined together and entering the holes at the outside periphery thereof to form a notched tongue, and a coil of wire wound on said tube having one end wrapped around said tongue in the notch thereof.

1,805,640. ADJUSTING MEANS FOR GOGGLES. HARRY F. SHINDEL, Reading, Pa., assignor to Willson Products, Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1930. Serial No. 485,643. 10 Claims. (Cl. 2—14.)



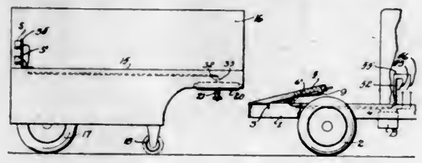
1. Goggles comprising a pair of head-secured lens frames, and a connecting bridge of determined length, said frames having variable peripheral connections for the bridge ends whereby the spacing of the frame centers may be determinedly varied.

1,805,641. AUTOMATIC STOKER. ALEXANDER I. SNOW, Worcester, Mass., assignor to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed May 9, 1927. Serial No. 189,905. 16 Claims. (Cl. 110—44.)



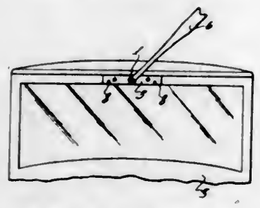
7. An underfeed stoker comprising separately reciprocable hollow side bars and bottoms forming parallel retorts, a row of tuyères for each side bar, partitions within the side bars forming separate air passages and dampers mounted on the side bars to control the flow of air in said passages.

1,805,642. TRACTOR AND TRAILER COUPLING. HUGH B. STRACHAN, Bedford, Ohio, assignor of one-third to Walter S. Ross, Bedford, Ohio. Filed Oct. 14, 1929. Serial No. 399,529. 2 Claims. (Cl. 280—33.1.)



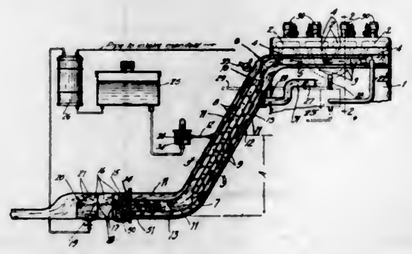
1. The combination of a motor driven road tractor, a trailer adapted to be hauled by the tractor, mechanical coupling members respectively associated with the tractor and trailer adapted to lock the tractor and trailer together while permitting relative horizontal pivotal movement between the tractor and trailer when the coupling members are mutually associated, and electrical coupling members including relatively yielding cooperating sliding contacts carried respectively at all times by the mechanical coupling members, one of said contacts being arcuately extended about the pivot axis with relation to its cooperating contact through an angle corresponding substantially to the maximum horizontal swing of the trailer, whereby electrical communication between the tractor and trailer will be maintained throughout the cooperation thereof.

1,805,643. AUTOMOBILE OR TRAFFIC SIGNAL. WILLIAM A. STREET, Belington, W. Va. Filed Oct. 13, 1930. Serial No. 488,292. 1 Claim. (Cl. 116—51.)



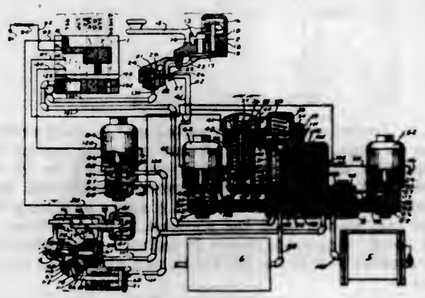
In combination with an upper frontal part of an automobile, a stub shaft journaled centrally through the said part, a signal arm rigidly secured to the outer end of the stub shaft, the said arm being of such length as not to extend beyond the sides of the automobile when thrown over to either side but being visible above the top of the car when turned angularly upward at either side or when directed straight up, a handle rigidly secured to the inner end of the said shaft, position indicating studs mounted under the said handle and whereby the angularity of elevation of the said arm may be indicated to the driver through the sense of touch, the said studs serving also as finger holds for steadying and supporting the driver's hand while maintaining the signal arm in the required position, and stop pins arranged laterally for the said arm to rest upon when not in use.

1,805,644. PROCESS AND APPARATUS FOR PREPARING CHARGES FOR POWER DEVICES. GEORGE SWARTZ, Albany, N. Y., assignor of one-half to Charles H. Andros, Nassau, N. Y. Filed Aug. 16, 1926. Serial No. 129,501. 14 Claims. (Cl. 123—25.)



1. An internal combustion engine comprising an exhaust pipe, a carbureter, a water jacket about said pipe, means for directing the flow of air to the carbureter through the water in said jacket, means for cutting off or regulating the quantity of air so flowing, and means for admitting air to the carbureter without passing it through said water.

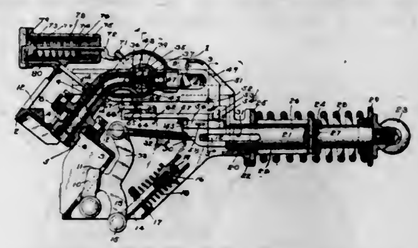
1,805,645. SAFETY CAR EQUIPMENT. FRANK B. THOMAS, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 18, 1930. Serial No. 421,639. 7 Claims. (Cl. 303—6.1.)



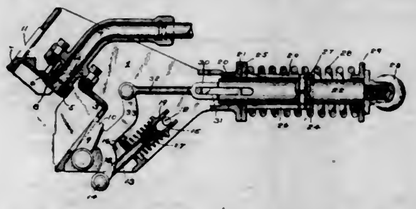
1. The combination with a door engine for controlling the opening and closing of a car door, a handle, and electrically operated means for controlling the release of the brakes, of means controlled by said handle and means controlled by said door engine for preventing the operation of said electrically operated means to effect a release of the brakes.

1,805,646. BRAKE PIPE CUT-OFF VALVE. THOMAS H. THOMAS, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 7, 1928. Serial No. 304,607. 3 Claims. (Cl. 284—6.)

1. The combination with an automatically operable train pipe coupling having a plurality of train pipe passages, one of which is controlled by a valve, of means actuated when the coupling is connected to a counterpart coupling for rotating the valve to partially open the passage, and means actuated by the pressure of fluid in another passage for subsequently rotating the valve to its wide open position.



1,805,647. TRAIN PIPE COUPLING. THOMAS H. THOMAS, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 17, 1928. Serial No. 306,510. 3 Claims. (Cl. 285—58.)



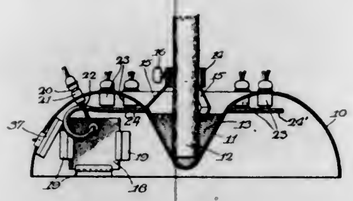
1. The combination with a train pipe coupling adapted to couple with a counterpart coupling and having means for locking the couplings in the coupled position, of a spring acting on the locking means and tending to move the same to the locked position, a second spring acting on the locking means and tending to move the same to the unlocked position, and means for relieving the locking means of the pressure of the second spring upon movement of the couplings to the coupled position.

1,805,648. PLASTER BOARD CLIP. FREDERICK M. VENZIE, Philadelphia, Pa. Filed July 30, 1930. Serial No. 471,719. 3 Claims. (Cl. 72—118.)



1. A plaster board clip of the character stated comprising a one-piece metallic member having an elongated relatively broad, flat, plate-like body arranged to have plaster board ends abut against its opposite faces, said body being provided with an elongated, narrow slot extending in the direction of the length of said body to provide a hook-like prong disposed in the same plane with said body and arranged for frictional engagement over the flanged edge of an angular support for free detachment, a plurality of spaced fingers struck out from said body at right angles thereto and from opposite sides thereof for free support of plaster boards with the faces of the plaster boards resting against the faces of said fingers, and generally curved terminal portions for the respective fingers to prevent abrasion of the faces of the plaster boards.

1,805,649. CHRISTMAS TREE STAND. HUGO H. WERMINE, Villa Park, Ill., assignor to Belden Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 14, 1927. Serial No. 167,938. 3 Claims. (Cl. 248—38.)

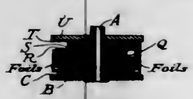


1. A stand of the class described comprising an inverted, generally bowl shaped base formed from a single sheet of material, said sheet having a centrally disposed part depressed so as to form a receptacle for receiving and positioning the lower end of a Christmas tree or the like in the base, a marginal portion of said sheet, spaced from the receptacle, being turned downwardly to form a support for the receptacle, and means carried by said base for engaging the trunk of the tree at a point spaced upwardly from its lower end for maintaining the tree in upright position.

1,805,650. PROCESS OF PROTECTING SAND MOLDS AND CORES. EUGENE A. BALSLEY, Wheeling, W. Va., and LUCIEN I. YEOMANS, Chicago, Ill., assignors to Lucien I. Yeomans, Inc., Chicago, Ill., a Corporation of Illinois. Filed July 5, 1929. Serial No. 376,280. 1 Claim. (Cl. 22—192.)

The process of structurally strengthening the fragile projections and the surfaces adjacent thereto of a sand mold or core to protect such projections from wash which consists in spraying with molten metal such projections and adjacent surfaces, the remaining surface area being not coated with metal in order to permit escape of vapors from such uncoated surfaces.

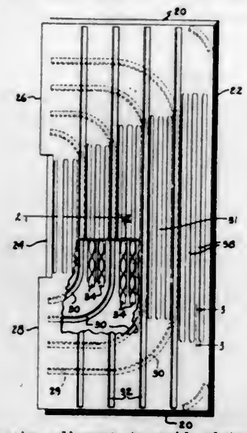
1,805,651. CONDENSER MANUFACTURE. BENJAMIN J. BUTLER, Somerville, Mass., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Filed Nov. 16, 1926. Serial No. 148,665. 7 Claims. (Cl. 29—84.)



1. An assembling device for an electrical condenser having projecting foils to be folded over on top of the stack, which comprises a building surface including outer stationary portions and an intermediate depressible support adjacent the stationary portions; foil-alining means; and a device locking said support in its depressed position.

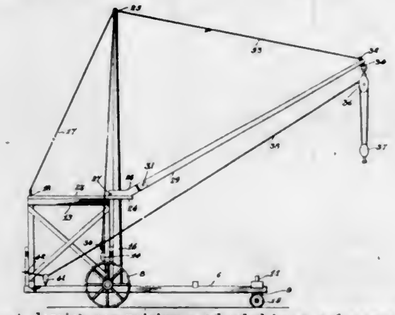
1,805,652. AIR HEATER. VIRGINIUS Z. CARACRISTI, Bronxville, N. Y. Filed May 8, 1925. Serial No. 28,872. 3 Claims. (Cl. 257—245.)

1. An air heating element for an air heater of the class described having, in combination, two plates arranged side by side and spaced apart, a plurality of partitions arranged in parallel relation between the plates to provide a plurality of air passages, and devices arranged in said air passages tending to cause a part of the air passing through each of said passages to traverse a spiral path, opposite sides of each of said devices being



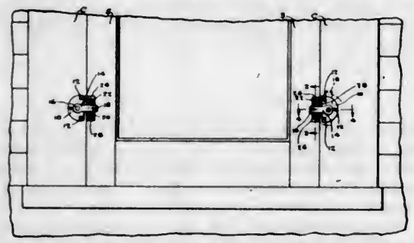
arranged closely adjacent to said plates, and the air passing between the plates being heated by the application of heat to the outer surfaces of the plates.

1,805,653. LIFTING AND TRANSFERRING DEVICE. WILLIAM S. CARMODY, Salem, N. J. Filed Oct. 15, 1929. Serial No. 399,827. 2 Claims. (Cl. 212—53.)



1. A derrick comprising a wheeled base, a frame erected upon the base, a platform upon and extending beyond the frame over the base and having an opening in its extended end, a mast projected downwardly through said opening and stepped on the base, a collar encircling the mast and bearing upon the platform, a boom pivoted to said collar, detachable means to maintain the verticality of the mast, and tackle carried in part at the end of the boom.

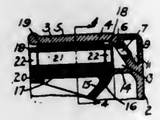
1,805,654. FASTENER FOR STORM AND SCREEN SASHES. PAUL M. DEHN, Alice, N. Dak. Filed Feb. 24, 1930. Serial No. 430,639. 1 Claim. (Cl. 292—202.)



A fastener for storm and screen sashes comprising a base plate, means for securing said base plate to a window

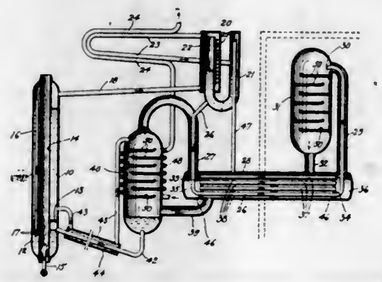
casing, a locking lever of springy sheet metal pivoted near one end to said plate, a hand-engageable member on the other end of said locking lever, a projection on said locking lever, a wedge member, and means for securing said wedge member to the sash, said wedge member having a number of depressions any one of which is adapted to be engaged by said projection when said locking lever is turned on its pivot.

1,805,655. COOLING DEVICE FOR AUTOMOTIVE BRAKES. SIDNEY G. DOWN, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 26, 1927. Serial No. 171,182. 12 Claims. (Cl. 188—264.)



5. A brake drum for automotive vehicles, said drum having a web adapted to be secured to a wheel of said vehicle, a brake flange, a sloping web connecting said flange and securing web, said sloping web having ventilating openings formed therein, means projecting from said sloping web, exterorly of the drum, for inducing air to flow through said openings, and means projecting from said web, interiorly of the drum for inducing the air flowing through said opening, to now against said brake flange.

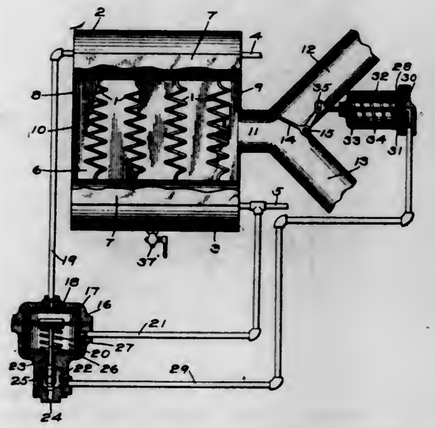
1,805,656. REFRIGERATION. BO KARL GEORGE EHNBOM, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 15, 1928, Serial No. 312,624, and in Germany Jan. 6, 1928. Renewed Sept. 29, 1930. 22 Claims. (Cl. 62—119.5.)



1. In a refrigerating system comprising interconnected vessels including a generator, a condenser, an evaporator and an absorber, said evaporator and absorber being interconnected to form a cycle for circulation of an auxiliary agent in the presence of which a cooling agent evaporates and plates within the said cycle of the system for providing gas and liquid contact surface, the combination therewith of wire screening under said plates and adjacent thereto for holding capillary films of liquid on the under-sides of the plates.

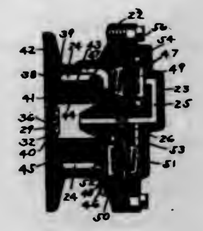
7. A vessel suitable for use in a refrigerator system comprising a plurality of superposed plates having parts adapted to permit formation of pools of liquid on said plates and wire screening under said plates and adjacent thereto for holding capillary films of liquid on the undersides of the plates.

1,805,657. AIR PURIFIER. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 9, 1927. Serial No. 189,764. 13 Claims. (Cl. 257—3.)



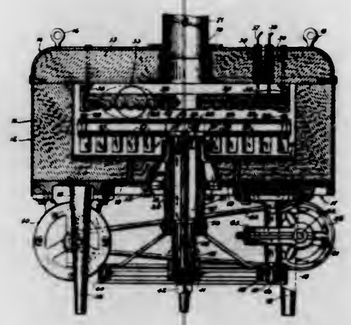
12. The combination with means interposed in the flow of fluid for separating oil and water from the flowing fluid and for conducting said separated oil and water from the path of the flowing fluid, of means operated upon the clogging of the separating means for supplying a heated current of air around the separating means to cause the clogging matter to flow from said separating means.

1,805,658. TRIPLE VALVE CYLINDER CAP. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1928. Serial No. 300,984. 14 Claims. (Cl. 303—88.)



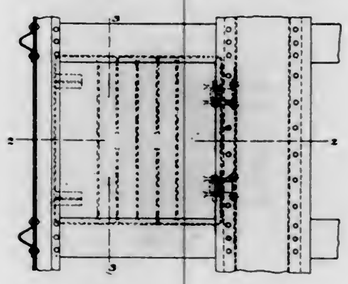
1. A valve device having a piston chamber open at one end, a cap enclosing the chamber, said cap having a chamber provided with a vented wall adjacent the piston chamber, means for supplying fluid to the chamber in the cap, a filter mounted in the cap and surrounding the vents in the wall, and a check valve controlling a by-pass around the filter and operated upon clogging of the filter to permit flow of fluid from the cap chamber through the by-pass passage.

1,805,659. ROASTING FURNACE. EDWARD J. FOWLER, deceased, Redwood City, Calif., by Edith Mary Fowler, executrix, Redwood City, Calif., and Dudley Baird, Berkeley, Calif., assignors to Nichols Copper Company, New York, N. Y., a Corporation of New York. Filed Jan. 24, 1928. Serial No. 249,134. 10 Claims. (Cl. 263—26.)



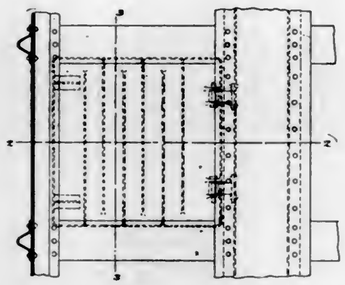
1. In a roasting furnace, a hearth, a rotatable substantially vertically extending shaft carrying a rabble arm, located over said hearth within the furnace, and means extending longitudinally of said shaft to the exterior of the furnace for effecting vertical adjustment of the rabble arm in respect to said shaft.

1,805,660. CAST METAL HOPPER DOOR. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 249,999. 17 Claims. (Cl. 105—280.)



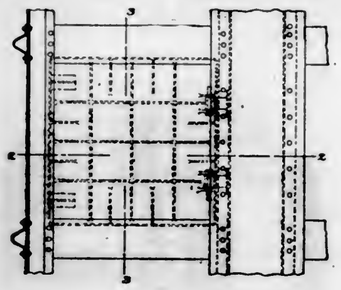
11. A hinged door for a railway car consisting of an integral casting comprising a panel, a flange adjacent the margins thereof, and a pair of reinforcing ribs which cross each other and terminate into the panel adjacent the corners of the door.

1,805,661. CAST METAL DROP DOOR. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 250,000. 8 Claims. (Cl. 105—280.)



1. A hinged door for a railway car consisting of an integral casting comprising a panel with flanges adjacent opposite margins thereof, reinforcing ribs springing from the panel and merging into one of said flanges, and other renforcing ribs springing from the panel and merging into the other of said flanges.

1,805,662. HOPPER DOOR OF CAST METAL. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 250,001. 8 Claims. (Cl. 105—280.)

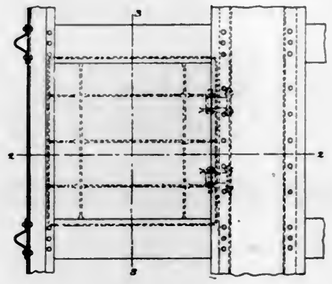


1. A hinged door for a railway car consisting of an integral casting comprising a panel having a smooth surface on one side with a continuous flange adjacent its perimeter varying depth reinforcing ribs terminating within the panel adjacent the opposite portions of the flange, and other reinforcing ribs angularly disposed to and merging into the first mentioned ribs.

1,805,663. DROP DOOR OF CAST METAL. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 250,002. 6 Claims. (Cl. 105—280.)

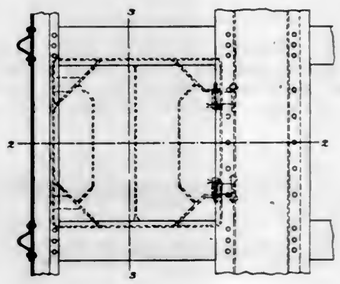
1. A hinged door for a railway car consisting of an integral casting comprising a panel having a smooth

surface on one side with a continuous flange adjacent its perimeter, reinforcing ribs terminating within the panel adjacent the opposite portions of the flange, and other



reinforcing ribs having their opposite ends terminating into said panel adjacent the first mentioned ribs and positioned normal thereto.

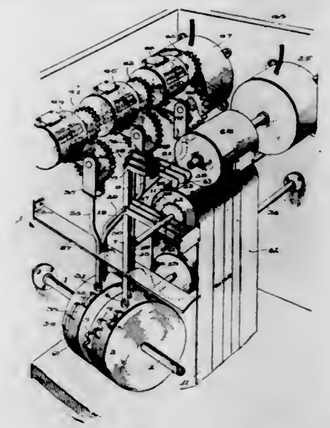
1,805,664. CAST HOPPER DOOR. GARTH G. GILPIN, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 250,003. 4 Claims. (Cl. 105—280.)



1. A hinged door for a railway car consisting of an integral casting comprising a panel with a continuous flange adjacent its perimeter, a secondary rib crossing each corner with its opposite ends merging into the flange, and a primary rib connecting the secondary ribs on the same side of the door.

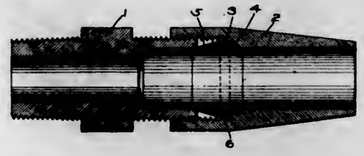
1,805,665. WIRED RADIO PROGRAM APPARATUS. CLINTON W. HOUGH, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Apr. 27, 1927. Serial No. 186,948. 4 Claims. (Cl. 234—36.)

1. In a signal receiving apparatus a plurality of signal receiving circuits a tuning mechanism for adjusting the signal receiving circuits to a plurality of predetermined positions, printing mechanism actuated upon the setting of said tuning apparatus in any selected position, and means for recording the time at which said tuning apparatus was set into a selected position and the time at which it was set into another position for determining



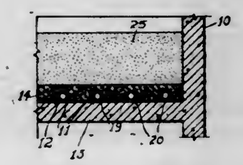
the time period over which any selected one of said signal receiving circuits is rendered effective for the reception of signals.

1,805,666. TUBE COUPLING. HENRY D. HUKILL, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed July 19, 1928. Serial No. 293,809. 3 Claims. (Cl. 285—122.)



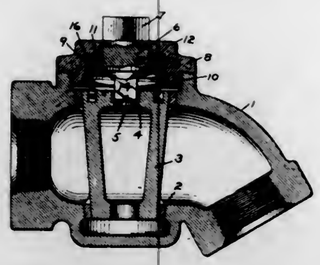
1. The combination with a pair of coupling members, of a sleeve having opposed tapered surfaces tapered to a thin edge, one tapered surface engaging a surface of corresponding taper on one of the coupling members and the thin edge of the other tapered surface contacting with a more abrupt tapered surface on the other coupling member.

1,805,667. WATER TREATMENT DEVICE. HARRY NEVILLE JENKS, Sacramento, Calif. Filed June 7, 1926. Serial No. 114,061. 4 Claims. (Cl. 210—130.)



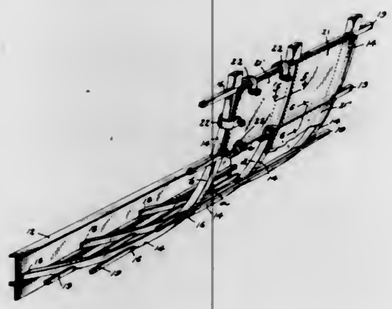
1. A filter bottom for a water treatment device comprising a porous filtration medium made of cemented materials, said medium having a plurality of longitudinally extending conduits, said conduits having a plurality of spaced apart apertures therein, there being a channel located beneath each conduit and communicating with its respective conduit through said apertures.

1,805,668. PACKING RING. CECIL S. KELLEY, East McKeesport, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 1, 1926. Serial No. 106,010. 2 Claims. (Cl. 286—7.)



1. The combination with a fixed member having a flat contact face and a movable member spaced from the fixed member, of an elongated packing ring disposed in the space between said members having a long diameter and a short diameter and having a curved face in engagement with said flat face and terminating in the long diameter of the ring, whereby a sliding rolling movement of the curved face on the flat face is effected as the movable member recedes from or approaches the fixed member.

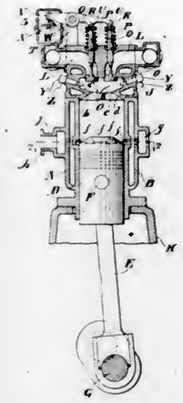
1,805,669. METAL BOAT CONSTRUCTION. DIMITRI LIAMIN, Los Angeles, Calif. Filed July 17, 1928. Serial No. 293,479. 5 Claims. (Cl. 114—79.)



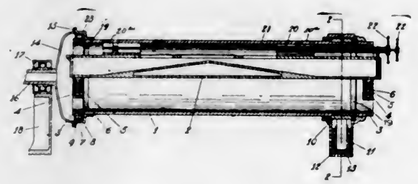
1. A method of constructing metal boats which includes: the formation of curved transverse ribs by cutting such ribs from substantially flat plates; providing said transverse ribs with aligned recesses; welding said ribs in spaced relation with each other to a keel; placing longitudinal ribs upon said transverse ribs by cold bending substantially straight metal bars into said aligned recesses and welding thereto to form a frame work; and plating said frame work by cold pressing flat metal plate sections into engagement with said ribs and welding said plate sections to said ribs, said transverse ribs and said longitudinal ribs being so positioned that the plates may be cold bent into engagement therewith without buckling.

1,805,670. INTERNAL COMBUSTION ENGINE. RALPH MILLER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 1, 1929. Serial No. 404,097. 5 Claims. (Cl. 123—65.)

1. In a two-cycle internal combustion engine, the combination of a cylinder and a head therefor, a combustion chamber in the head, means for injecting fuel from the sides to the center of the combustion chamber, an exhaust valve for the combustion chamber, a passage in the wall of the cylinder to direct pressure fluid into the cylinder along a line off-set from the longitudinal axis of the cylinder to cause a spiral motion of such pressure fluid in the cylinder, said passage being controlled by the piston, and a lateral wall projecting from the head having a restricted opening between the cylinder and the combustion chamber and through which the pressure fluid whirls in decreasing spirals into the combustion chamber and impinges against the end wall thereof to spread outwardly and reverse the course of the pressure fluid, thereby effecting both a whirling and a tumbling turbulence in the combustion chamber for diffusing the fuel injected from the sides of the chamber.

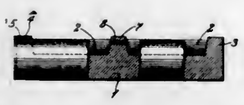


1,805,671. GEARLESS SUCTION ROLL. WILLIAM H. MILLSPAUGH, Sandusky, Ohio, assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Filed Mar. 17, 1928. Serial No. 262,474. 9 Claims. (Cl. 92—53.)



1. In combination with a suction roll shell, means adapted to create within said shell a predetermined hydraulic head.

1,805,672. BLASTING CARTRIDGE. ERLE ORMSBY, St. Louis, Mo., assignor to Central Mine Equipment Company, St. Louis, Mo., a Corporation of Missouri. Filed June 21, 1928. Serial No. 287,159. 5 Claims. (Cl. 102—6.)



1. A blasting cartridge comprising an elongated metallic body having a longitudinal recess in one side thereof arranged to receive explosives and closed at one end by a part of said body preventing longitudinal direction of the explosive forces, and means in connection with said closed end for engagement with the inner end of a device extended longitudinally into the hole in which the shell is mounted for turning the shell to adjusted positions in the hole and permitting outward longitudinal withdrawal of said device from engagement with said shell and from the hole in which the shell is mounted.

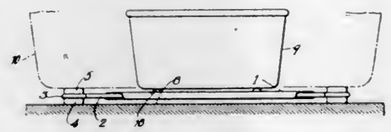
1,805,673. LEAD PENCIL. ARTHUR F. POOLE, Westport, Conn., assignor to The Wahl Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 15, 1924. Serial No. 743,841. 11 Claims. (Cl. 120—18.)



1. A pencil comprising a casing section having a central lead guide tube, lead propelling mechanism including a threaded tube and a plunger adapted to be moved through said lead guide, a pencil tip detachably connected to the front of said casing section and having a lead guide tube adapted to register with the lead guide tube of said casing section, the rearmost portion of said lead guide tube of said pencil tip having a beveled mouth to facilitate the entry of said lead into said tip lead guide tube, said casing section having a lead magazine disposed about said casing lead guide tube and having an open end positioned adjacent and opposite the beveled mouth of said tip lead guide tube to facilitate the transfer of lead from said magazine to the lead guide tube of said tip.

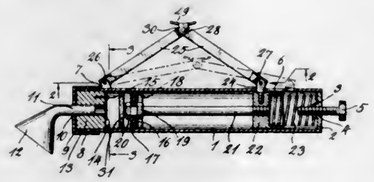
4. In a pencil provided with a slotted plunger tube in its front portion, the combination of a casing, a tip at the front end of said casing, an eraser seat at the rear end of said casing for retaining an eraser, a lead propelling mechanism operable in said plunger tube for advancing a lead through said tip, and means operable by the movement of said lead propelling mechanism for pushing said eraser outwardly in its seat to compensate for the wear on the eraser.

1,805,674. STAND. ALBERT B. RAMSPERGER, Richmond Hill, N. Y. Filed Oct. 22, 1927. Serial No. 227,962. 1 Claim. (Cl. 248—41.)



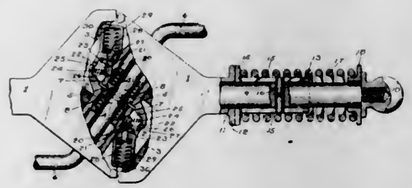
A stand of the character described comprising a metal plate and a wire to which the edges of the plate are fastened and which has loops and legs fastened in said loops of wire.

1,805,675. MASSAGE DEVICE. ALFRED P. RUDOLPH, Denver, Colo. Filed Jan. 18, 1930. Serial No. 421,719. 2 Claims. (Cl. 128—300.)



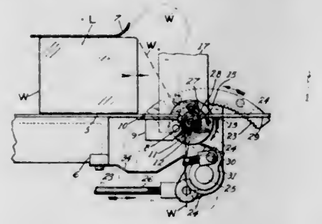
1. A hand operated vacuum massage device comprising, in combination, a cylinder formed from a tubular member having one end closed and the other open, a piston slidably mounted in the cylinder, a guide member secured to the piston and spaced from the latter, said guide member engaging the wall of the cylinder, a spring located between the guide member and the closed end, said spring being under compression and exerting a force tending to move the piston towards the open end, the tubular member having a slot, a pin secured to the guide member and extending through the slot, means comprising a toggle having one end attached to the pin and the other end connected with the tubular member for moving the piston against the force exerted by the spring and an applicator secured in the open end of the tubular member.

1,805,676. AUTOMATIC TRAIN PIPE COUPLING. GEORGE W. RUMMEL, Swissvale, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 20, 1928. Serial No. 307,182. 4 Claims. (Cl. 285—58.)



1. The combination with a train pipe coupling adapted to automatically couple with a counterpart coupling and having a nose adapted to engage a recess formed in the counterpart coupling, a pivotally mounted sleeve, a pin slidably mounted in the sleeve, and a spring pressed plunger for projecting the pin into engagement with the nose of a counterpart coupling and lock the same in coupled position.

1,805,677. PAPER-FEED FOR WRAPPING MACHINES. FRANK REINHOLD SCHMITT, Queens Village, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Feb. 1, 1930. Serial No. 425,210. 16 Claims. (Cl. 93—2.)

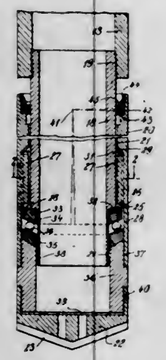


1. The combination with article wrapping mechanism operating to pull from a source of supply of wrapping material a length thereof sufficient to closely wrap the article, of wrapper material feeding means operating on the portion of the wrapping material trailing said length to follow said length with an additional adjoining length of material to produce loose wrapping of the article.

1,805,678. SELF-SEATING DEVICE FOR DRILLING BITS. EGGLESTON SMITH, Mamaroneck, N. Y., assignor to Eggleston Drilling Corporation, Dover, Del., a Corporation of Delaware. Filed Sept. 27, 1926. Serial No. 137,840. 15 Claims. (Cl. 255—28.)

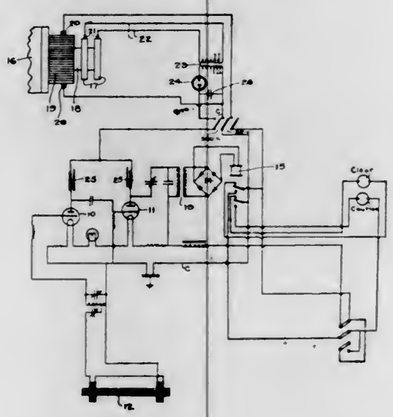
1. A self-seating device for earth-boring bits comprising a pair of telescoping driving and driven members,

means for imparting rotation from one member to the other, and having coacting angularly disposed feeding pressure transmitting surfaces, said members fitting loosely together so as to permit a limited relative oscillation on said surfaces, and a packing ring mounted between said members to prevent the escape of drilling fluid from the



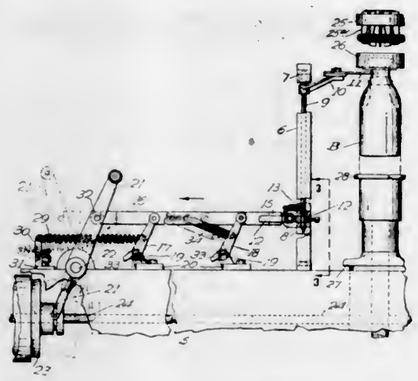
interior of the inner member, said packing ring being composed of yielding material and supported on one of said members with its sides free to move longitudinally with respect to the members so that the relative longitudinal movement between the members is taken up by flexing of the material of the ring.

1,805,679. APPARATUS FOR AND METHOD OF DEVELOPING HIGH VOLTAGE DIRECT CURRENT SUPPLY. CHARLES S. WILLIAMS, Kingston, Pa., assignor to Electric Service Supplies Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 31, 1928. Serial No. 303,133. 2 Claims. (Cl. 246—63.)



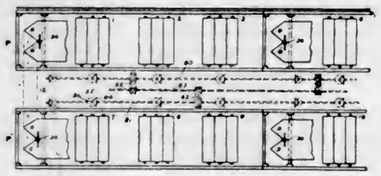
1. In the locomotive circuit of an automatic train control system, in combination, an amplifier, locomotive control apparatus, a direct current generator having a single commutator for delivering low voltage current to said apparatus and to the filament circuit of said amplifier, a pair of collector rings operatively associated with said single commutator of the generator, a transformer having its primary terminals connected to said rings for developing a relatively high alternating current voltage directly from said commutator and a rectifier included in the secondary circuit of the transformer for rectifying the alternating current voltage, the terminals of said secondary circuit being respectively connected to the plate reactors of the amplifier and the common wire of the locomotive circuit.

1,805,680. SAFETY-DEVICE FOR BOTTLE CAP CRIMPING MACHINES. FRANCIS EDGAR YOUNGDAHL and CLAS JACOB JULSTEDT, Brooklyn, N. Y., assignors to The Lakewest Corporation, a Corporation of New York. Filed Oct. 9, 1928. Serial No. 311,364. 4 Claims. (Cl. 192—125.)



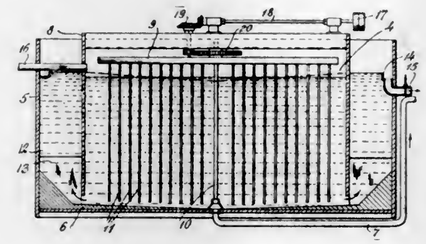
1. In a bottle capping machine, the combination with a progressively moving crimper head for crimping caps on bottles, of a support for the bottles operable to lower the capped bottles from the head after crimping, a control member positioned between the path of movement of said head and the tops of bottles normally lowered from said head for the purpose of engaging only bottles which stick in said head, and means actuated by said control member to stop the machine when a bottle engages said member.

1,805,681. ASSOCIATING MECHANISM. HARRY V. BALL, Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 20, 1927. Serial No. 185,147. 9 Claims. (Cl. 270—6.)



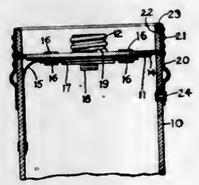
1. In a rotary multi-unit printing machine, the combination of two presses arranged side by side with a relatively wide aisle space between, each press including five or more printing units arranged in line the cylinders of which are positioned widthwise of the presses, formers for each press intermediate the units, web guides arranged to lead a web or webs across the space from below a former of one press and associate the led web or webs with web or webs coming from a former of the other press, and a delivery for each press arranged to deliver in opposite directions to each other.

1,805,682. SEWAGE TREATMENT. WARREN R. BORST, West New Brighton, N. Y. Filed Nov. 11, 1927. Serial No. 232,600. 6 Claims. (Cl. 210—8.)



1. The method of treating sewage which comprises agitating sewage in an open tank by means of a revolving agitator and rakes extending from above the exposed liquid surface to substantially the bottom of the tank thereby causing a vortex in the liquid within the tank and retaining the solids of the sewage in suspension near the center of the tank by means of the formed vortex.

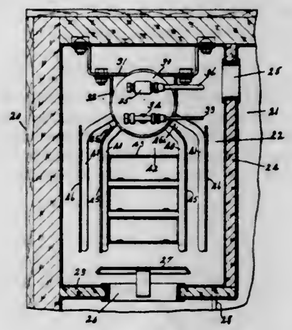
1,805,683. FLASHLIGHT. JAMES T. BROWN, Jamaica, N. Y., assignor to Bond Electric Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1928. Serial No. 267 195. 1 Claim. (Cl. 240—10.66.)



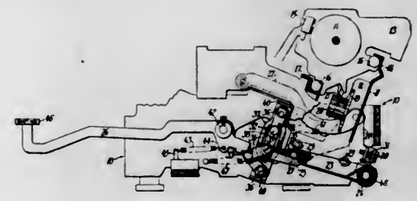
In a flashlight, in combination, a cylindrical battery containing a casing of non-conductive material, a lamp socket support comprising a disc of non-conductive material seated upon the end of the casing and of a diameter substantially that of the casing, a cylindrical member of non-conductive material of substantially the same outside diameter as the outside diameter of the casing and seated upon said lamp socket support disc, a hood collar telescoped over said end of the casing and formed with an inwardly extending flange at its outer end to engage the end of the cylindrical member remote from the lamp socket support disc, and means to permanently secure the hood collar to the casing to retain the parts rigidly together.

1,805,684. REFRIGERATING APPARATUS. RALPH H. CHILTON, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Nov. 20, 1926. Serial No. 149,771. 15 Claims. (Cl. 62—126.)

5. A cooling unit for mechanical refrigerators comprising an elongated header, and a plurality of conduits depending from the header, certain of which co-operate with the header to enclose a freezing space, and certain others being U-shaped loops arranged in downwardly extending rows, each row containing both branches of certain loops, said last mentioned loops being spaced from the freezing space and substantially entirely subjected to air circulating adjacent the cooling unit.

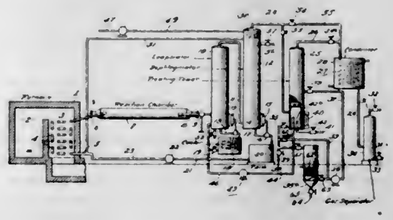


1,805,685. TYPEWRITING MACHINE. FREDERICK U. CONARD, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 4, 1928. Serial No. 275,133. 14 Claims. (Cl. 197—73.)



10. In a typewriting machine having a main frame, the combination with a platen and a supporting case-shift frame therefor, of means for reciprocating said frame between upper case and lower case position, stop-means to limit the shift-frame in its upward and downward movement, and means to move said stop-means as a unit to adjust the platen to the printing point.

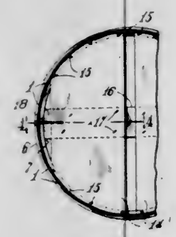
1,805,686. PROCESS FOR TREATING PETROLEUM HYDROCARBONS IN THE VAPOR PHASE. ROY CROSS, Kansas City, Mo., assignor to Cross Development Corporation, Wilmington, Del., a Corporation of Delaware. Filed Oct. 16, 1926. Serial No. 142,016. 5 Claims. (Cl. 196—28.)



4. A continuous method of purifying petroleum hydrocarbons comprising the steps of vaporizing the hydrocar-

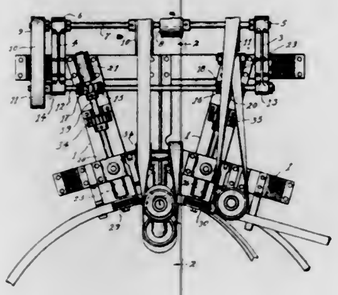
bons and bringing the evolved vapors into intimate contact with metallic sodium heated sufficiently to exist in the liquid phase, continuously circulating the treating liquid in counterflow relation with the oil vapor, diverting separated polymers and reaction products and supplying additional unused treating metal.

1,805,687. REENFORCED BASKET BOTTOM. CHARLES C. DAVIS, St. Joseph, Mich., assignor, by mesne assignments, to St. Joseph Iron Works, St. Joseph, Mich., a Corporation of Michigan. Filed Mar. 7, 1927. Serial No. 173,264. 2 Claims. (Cl. 217—123.)



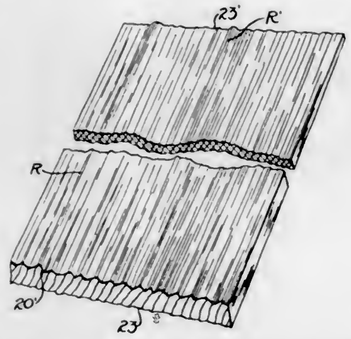
1. In a shipping basket, a cylindrical shell having an internal hoop at its lower end, a circular bottom within the shell and resting upon the upper edge of the hoop, and a batten extending across the under face of the bottom, the ends of the batten abutting the inside of the hoop, and fastenings securing the parts together.

1,805,688. METHOD AND MACHINE FOR RECLAIMING RUBBER AND FABRIC FROM TIRE BEADS. MAURICE E. DAVIS, Grand Rapids, Mich., assignor, by mesne assignments, to Leo Meyer Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 10, 1929. Serial No. 331,651. 6 Claims. (Cl. 164—61.)



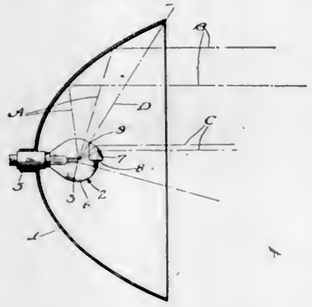
1. A machine of the class described comprising a frame, cooperating rollers journalled on said frame for feeding a tire bead lengthwise therethrough, a guide on said frame for positioning the bead after it passes through said feed rollers, and a pair of co-operating rotating disc cutters positioned to rotate in transverse planes for slicing a V-shaped strip from the bead after passing from said guide.

1,805,689. HAND SPLIT TAPERED SHAKE. FRANK L. DIETZ, Seattle, Wash., assignor of one-half to Edwin H. Luke, Seattle, Wash., and one-half to North Pacific Cedar Products Corporation, Seattle, Wash., a Corporation of Washington. Filed Apr. 18, 1928, Serial No. 270,956. Renewed Sept. 30, 1930. 3 Claims. (Cl. 108—S.)



1. A shake tapered from its butt to its tip, the two faces being naturally split, and with the natural corrugations exaggerated.

1,805,690. LIGHTING UNIT. ADIEL Y. DODGE, South Bend, Ind. Filed Jan. 10, 1929. Serial No. 331,614. 1 Claim. (Cl. 240—48.6.)

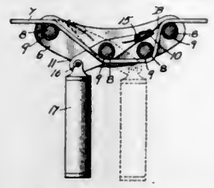


A light projecting apparatus comprising a concave reflector and an electric lamp in front of said concave reflector, said lamp comprising a transparent bulb and a concentrated light source in said bulb, said bulb having a lens integral therewith for lessening the divergence of the rays from the light source falling thereon, said lens projecting forwardly from the front of the bulb and having a convex front face above the horizontal plane through the light source and having a lower crescent shaped surface lying substantially in said horizontal plane, said lens having a greater refractive power vertically than horizontally whereby the upward rays striking the lens are refracted to a substantially horizontal direction while the laterally directed rays still diverge after being refracted.

1,805,691. RAZOR STROPPER. JOHN E. DREW, Jersey City, N. J., assignor to Wade & Butcher Corporation, a Corporation of New Jersey. Filed Apr. 12, 1927. Serial No. 183,029. 6 Claims. (Cl. 51—153.)

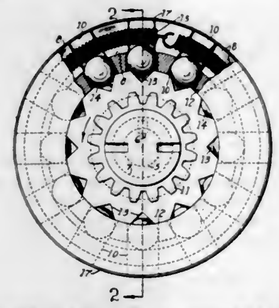
1. The combination with a razor strop, of a frame movably mounted on said strop and having offset means on opposite sides of said strop arranged to form in said strop two stropping sections of different angularity with respect

to the main body portion of the strop, a blade holder swingable in said frame for movement to either one of two positions in which a held blade engages said sections at different stropping angles, a handle, and connections be-



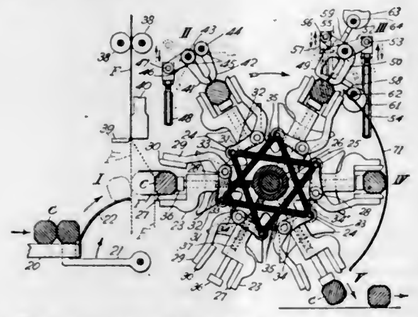
tween said handle and said holder in which the latter is fixed operating in either direction to first move the holder into one or the other of said stropping positions and then move said frame along said strop.

1,805,692. AUTOMATIC SLIP COUPLING. LESTER FERENCI, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Oct. 22, 1929. Serial No. 401,460. 3 Claims. (Cl. 192—103.)



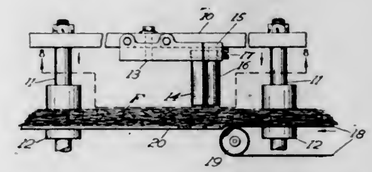
1. An automatic slip coupling comprising rotary driven and driving members, weighty clutch elements carried by one of said members and engaging the other member, and clutch element controlling means acting counter to the action of centrifugal force on said elements, the engaged member having a notched periphery about which said elements are arranged, and said means consisting of a resilient member encircling and contracting on said elements.

1,805,693. LOCK-JOINT FOLDING ATTACHMENT FOR CIGAR ENVELOPING MACHINES. FREDERICK C. GLADECK, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed June 19, 1929. Serial No. 372,026. 12 Claims. (Cl. 93—7.)



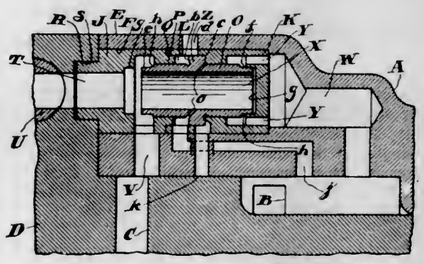
1. The combination with means for supporting a cigar and envelop therefor having outstanding edges, of means for pinching together the outstanding edges of the envelop over the cigar, mechanism for folding one edge over and tucking it behind the other, and a device for laying the folded and tucked edges flat on the cigar.

1,805,694. CUTTING FILLER TOBACCO FOR CIGAR BUNCHES. JOHN FREDRIK HALSTEAD, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed May 12, 1928. Serial No. 277,302. 8 Claims. (Cl. 131—39.)



7. Apparatus for preparing filler tobacco for cigar bunches, comprising a crooked knife for cutting the tobacco, and associated means for removing selected portions of tobacco spaced from the cut, said knife being corrugated and said removing means including a series of punches arranged in juxtaposition to concavities of said knife.

1,805,695. VALVE FOR ROCK DRILLS. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 9, 1927. Serial No. 182,322. 4 Claims. (Cl. 121—18.)

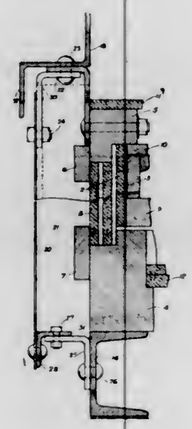


1. In a fluid actuated rock drill, the combination of a cylinder and a piston, a valve chest in the cylinder having an exhaust port therein, a hollow distributing valve in the valve chest through which pressure fluid passes, said valve being movable back and forth in the valve chest to admit pressure fluid to one end or the other of the cylinder, a flange on the valve controlling said exhaust port and having relatively large actuating pressure areas upon which pressure fluid from the cylinder may act to move the valve, said movement of the valve serving to partly uncover the exhaust port and permit the exhaust of pressure fluid acting on said actuating pressure areas, reduced ends on the valve adapted to alternately engage the valve chest and prevent the admission of pressure fluid over said ends to the cylinder, and shoulders defined by said reduced ends on the valve, said shoulders and the end surfaces of the valve forming relatively small actuating pressure areas upon which pressure fluid may act and complete the movement of the valve when the exhaust port is uncovered by the flange.

1,805,696. CAR CONSTRUCTION. AUGUST W. L. HARTBAUER, Chicago, Ill. Filed Nov. 19, 1928. Serial No. 320,399½. 14 Claims. (Cl. 105—423.)

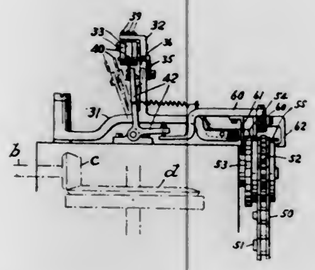
1. In a railway car, the combination of oppositely disposed frame members, an insulating wall positioned sub-

stantially between said frame members, a metallic sheathing removably secured to said frame members and spaced from said wall to provide an air chamber, and means to ventilate said chamber.



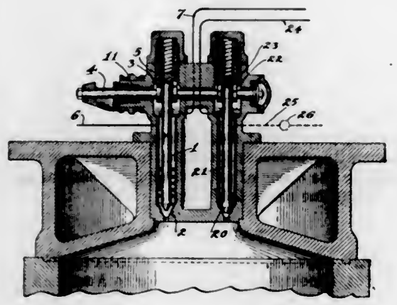
2. In a railway car, the combination of oppositely disposed frame members, an insulating wall positioned substantially between said frame members, a metallic sheathing, connecting members attached to said sheathing and removably secured to said frame members, and an air chamber between said sheathing and said wall, said connecting members being perforated to provide means to ventilate said chamber.

1,805,697. PATTERN MECHANISM FOR CIRCULAR KNITTING MACHINES. HAROLD E. HOUSEMAN, Edge Moor, Del., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Original application filed May 20, 1926, Serial No. 110,311. Divided and this application filed June 22, 1928. Serial No. 287,406. 45 Claims. (Cl. 66—138.)



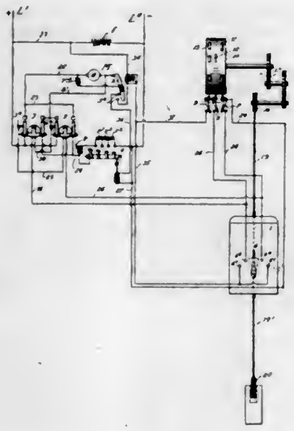
1. In a circular knitting machine, the combination with mechanism adapted to cooperate in the knitting operation and to be selectively operated, of a set of independently operable devices adapted to selectively operate said mechanism, operating means carrying said devices, selecting means which are adapted to be engaged by and position said devices as they are moved by their operating means, and pattern mechanism adapted to move the selecting means into position to selectively position said devices so that, in their subsequent operation by their operating means, they will selectively operate said mechanism.

1,805,698. INTERNAL COMBUSTION ENGINE. EMIL KÄGI, Winterthur, Switzerland, assignor to Busch-Sulzer Bros.-Diesel Engine Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 14, 1922, Serial No. 543,784, and in Switzerland Mar. 21, 1921. 9 Claims. (Cl. 123—27.)



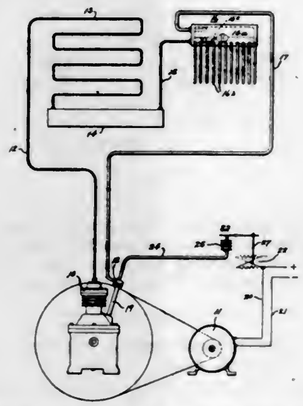
1. In an internal combustion engine, an inwardly closing air and fuel admission valve, an air admission valve, a cam shaft, a valve operating rock shaft operated by said cam shaft, and a valve lifting lever on said rock shaft for each of said valves.

1,805,699. MOTOR CONTROLLER. EDWIN F. KIECKHEFER, Milwaukee, Wis., assignor to A. Kieckhefer Elevator Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed May 11, 1925. Serial No. 29,403. 17 Claims. (Cl. 187—29.)



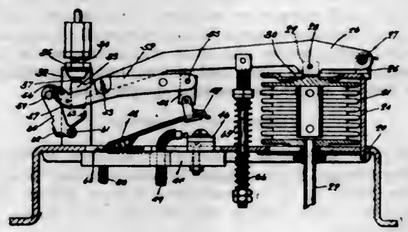
1. In a controller for an elevator or other device driven by an electric motor, the combination with motor control means whereby the driven device may be started and stopped, of means associated with the former means to effect predetermined positioning of the driven device if the stopping position thereof selected by said former means is within a given range of any one of a number of predetermined positions, the second mentioned means having a fixed location and being operable by and in synchronism with the driven device.

1,805,700. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 23, 1923, Serial No. 670,357. Renewed May 2, 1928. 3 Claims. (Cl. 62—4.)



3. A system having a low pressure side and a high pressure side, means for circulating refrigerant through said system, said low pressure side including an evaporator having a plurality of refrigerant ducts and having a supply reservoir for said ducts, said supply reservoir being directly connected with the high pressure side, a float actuated valve responsive to the quantity of refrigerant within the reservoir for controlling the flow of refrigerant from the high pressure side to the reservoir, and adjustable control means for the circulating means responsive to the pressure within said low pressure side, for varying the upper and lower temperature limits of the evaporator independently of one another.

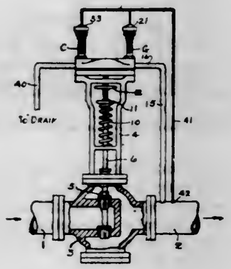
1,805,701. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed July 22, 1926. Serial No. 124,160. 4 Claims. (Cl. 236—28.)



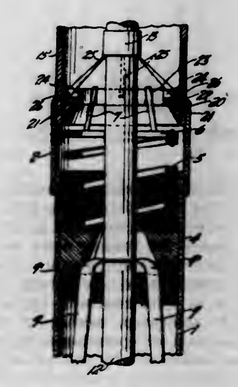
1. A controller for a refrigerating system comprising in combination an operating member responsive to conditions in the system, and a resistance member for said operating member comprising an adjustable casing, a plurality of spring members inside the casing adapted to resist the movement of said operating member in one direction, the adjustment of said casing determining the number of spring members made operative.

1,805,702. REDUCING VALVE. HENRY J. MASTENBROOK, Cleveland Heights, Ohio, assignor to The Swartwout Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 15, 1928. Serial No. 312,550. 1 Claim. (Cl. 50—11.)

In combination, a pipe, a fluid actuable valve in said pipe having a pressure chamber for actuating fluid and a part enclosing one side of said chamber for moving said valve, means exerting a force tending to move said valve in opposition to the force exerted upon said part, means for adjusting and varying said last named means, fluid conducting means extending from said pipe to said pressure chamber and fluid conducting means leading from said pressure chamber to a point of lower pressure than the pressure in said pipe, and means for controlling the inflow to said pressure chamber and outflow therefrom comprising independently operable and adjustable valves, one controlling the inflow and the other controlling the outflow to and from said chamber, each of said valves having an independently operating pressure chamber and a part for moving said valve enclosing one side of each of said chambers, said chambers having fluid communication with each other and with said pipe, one of said valve being movable toward open position whilst the other is moved toward closed position in response to changes in pressure in said pipe.

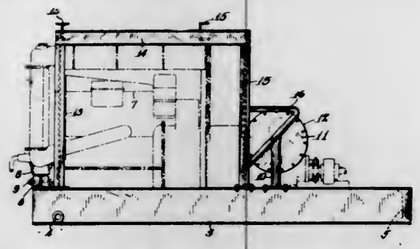


1,805,703. DRILL PIPE CUTTER. KEARNEY MITCHELL, Sulphur Mines, La. Filed May 2, 1930. Serial No. 449,102. 2 Claims. (Cl. 81—189.)



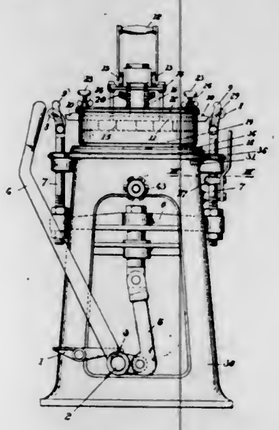
1. In a device of the character described, in combination with a drill pipe cutter including an operating pipe and lock prongs, a band secured in the operating pipe, a supporting ring rotatably mounted on the said band, means on the said supporting band to receive the said lock prongs, and supporting fingers pivoted to the said supporting ring.

1,805,704. TRACTOR SUPPORTING UNIT. JOSEPH S. OECHSLE, Philadelphia, Pa., assignor to Metalweld Service Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Aug. 29, 1923, Serial No. 659,897. Divided and this application filed Apr. 21, 1924. Serial No. 708,005. 2 Claims. (Cl. 248—14.)



1. A supporting framework for use with a standard tractor comprising spaced longitudinals of standard I-sections and transverse bracings of like cross section, and angle struts with integrally connected disc members, said latter members being arranged for bolting connection to the rear axle housing of said tractor.

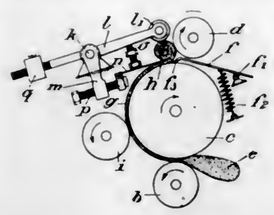
1,805,705. DOUGH DIVIDING AND WORKING MACHINE. GOTTFRIED RAUSCH, Ammendorf, near Halle-on-the-Saale, Germany. Filed Feb. 11, 1927, Serial No. 167,500, and in Germany Sept. 24, 1926. 27 Claims. (Cl. 107—20.)



11. A dough-dividing machine comprising a frame, a presser head pivoted to said frame, a press plate in said presser head, dividing knives arranged in said presser head, hand operated means for forcing down said knives into the dough, an adjustable stop on said frame, a lever fulcrumed on said presser head, operatively connected with said knives so as to withdraw said knives and adapted to be engaged by said stop, mechanism carried on the frame of said machine for operating said press plate, and automatic means connected with said press-plate operating mechanism for interrupting its operative connection with said press plate in a given relative position of said mechanism and said press plate.

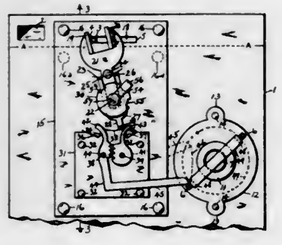
1,805,706. LOAF-FORMING MACHINE. GOTTFRIED RAUSCH, Ammendorf, near Halle-on-the-Saale, Germany. Filed May 12, 1928, Serial No. 277,329, and in Germany Dec. 7, 1927. 14 Claims. (Cl. 107—9.)

1. A dough-molding machine comprising a principal roller, a sheeting roller below said principal roller, and a coiling roller above said principal roller both these latter being arranged to cooperate with said principal roller to form a sheet of dough and then arrange it in a coil, said principal roller being adapted to carry the sheet of dough



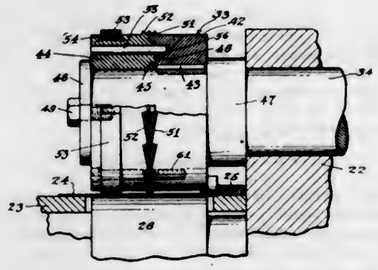
from said sheeting roller toward said coiling roller, and stationary means between the principal roller and the coiling roller for detaching the sheet from said principal roller so as to deflect it toward said coiling roller.

1,805,707. SHUTTER-LOCKING DEVICE FOR CAMERAS. LOUIS W. ROSEN, Brooklyn, N. Y. Filed Dec. 13, 1922. Serial No. 606,633. 11 Claims. (Cl. 95—31.)



1. In a camera of the class described, means for exposing a portion of film, either for instantaneous or time exposure, means for shifting said portion after each exposure has been made, and means for automatically locking said exposure means, after each and either kind of said exposures has been completed regardless of any prior shifting of film, and preventing operation as for a succeeding exposure until the exposed portion of film has been shifted, all of said exposure means being structurally independent of said locking means, and all of said locking means being assembled on one base and demountably superimposed as a unit on an external surface of said camera.

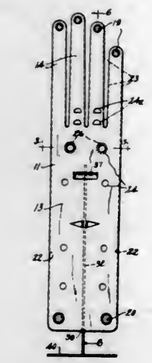
1,805,708. SCORING MACHINE. WILLIAM E. TAYLOR, East Orange, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed May 22, 1929. Serial No. 365,019. 8 Claims. (Cl. 113—15.)



1. In an apparatus for scoring blanks for tearing strip containers, the combination of a feeding table, feeding

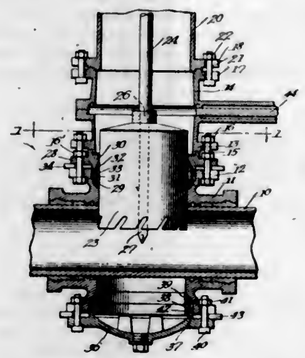
rollers for advancing a blank over said table, a scoring roller disposed above one of said feeding rollers and having means for scoring parallel bounding lines of the tearing strip in said blank, a two-part scoring roller embodying a roller body and a roller head disposed above another of said feeding rollers, and means carried by said body and said head for scoring diagonal lines between said parallel lines.

1,805,709. FORM FOR WASHING AND DRYING GLOVES. CORALLIE D. THOMA, New York, N. Y. Filed June 19, 1928. Serial No. 372,100. 4 Claims. (Cl. 223—19.)



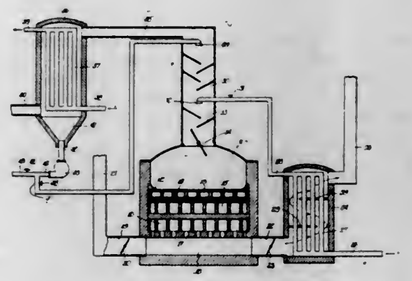
1. A device of the character described, including a form for gloves, said form including a hand proper and four digits therewith, and a thumb wholly separate from the hand proper, said thumb having a base portion to abut the hand proper, the said base portion and a portion adjacent to an edge of the hand proper constituting a plane sliding and abutment area for the base of the thumb, whereby the latter may be adjustable along the hand proper, and the thumb insertable into the glove with a uniform sliding contact of the base thereof along the hand proper.

1,805,710. PACKING FOR PIPE CUTTERS AND VALVE INSERTING MACHINES. JAMES M. WILKINS, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a Corporation of Illinois. Filed June 17, 1929. Serial No. 371,601. 3 Claims. (Cl. 77—41.)



1. In combination, a valve casing adapted to be secured to a main and having an opening therein, a valve cutter arranged to be inserted in said opening for severing a portion of the main, a valve unit arranged to be inserted in said opening when the cutter is removed therefrom, a packing around said opening for preventing the escape of liquid from the casing when the valve unit is mounted therein, said packing adapted to be loosened during the cutting operation and tightened when the valve unit is inserted in said opening, a gland for maintaining the packing in position, and an auxiliary packing connected to said gland for preventing the escape of fluid during the cutting operation.

1,805,711. METHOD FOR THE TREATMENT OF HEAVY HYDROCARBON MATERIAL. CHARLES W. ANDREWS, Chicago, Ill., and REGINALD D. ROGERS, Bayonne, N. J., assignors to C. P. T. Development Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 6, 1929. Serial No. 368,997. 3 Claims. (Cl. 196—50.)



1. The method of converting heavy hydrocarbons in liquid form into lighter hydrocarbons and coke in a chamber having a flat floor heated from below which comprises raising the hydrocarbons to a high temperature while flowing in a stream under a pressure sufficient to prevent undue vaporization, releasing the pressure, removing vaporized hydrocarbons and discharging the unvaporized hydrocarbons directly onto the heated floor of said chamber or onto the coke deposited thereon by the cracking and vaporization of the unvaporized hydrocarbon, and further removing vaporized lighter hydrocarbons.

1,805,712. RUBBER TREATING PROCESS AND PRODUCT. CHARLES E. BRADLEY and CONRAD FERRETTIE, Mishawaka, Ind., assignors to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed Dec. 8, 1925. Serial No. 74,198. 22 Claims. (Cl. 18—50.)

5. The method of improving the milling and calendering properties of rubber which comprises steeping crude rubber for substantially 24 hours in water at a temperature around 150 to 200 degrees Fahrenheit, then subjecting the resulting rubber in a closed container to substantially 25 to 50 pounds of live steam, and then drying the rubber.

1,805,713. RUBBER TREATING METHOD AND PRODUCT. CHARLES E. BRADLEY, Mishawaka, Ind., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed June 30, 1928. Serial No. 289,631. 10 Claims. (Cl. 18—50.)

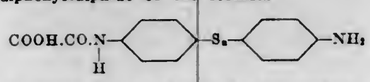
1. The method of treating rubber which comprises subjecting wet rubber to free oxygen and heat without drying.

1,805,714. MANUFACTURE OF AZO DYES. RAINALD BRIGHTMAN, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Feb. 12, 1930, Serial No. 427,959, and in Great Britain Feb. 21, 1929. 19 Claims. (Cl. 260—92.)

1. In the process of manufacturing new azo dyestuffs probably represented in the form of the free acid by the formula



where *n* represents 1 or 3 and X represents the residue of a coupling component; the step which comprises combining a diazotized oxamic acid derivative of a 4:4'-diaminodiphenylsulphide of the formula



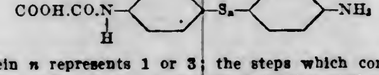
where *n* represents 1 or 3 with an azo dyestuff component.

1,805,715. MANUFACTURE OF AZO DYESTUFFS. RAINALD BRIGHTMAN, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Feb. 12, 1930, Serial No. 427,960, and in Great Britain Feb. 21, 1929. 11 Claims. (Cl. 260—81.)

1. In the process of manufacturing new azo dyestuffs suitable for dyeing wool, acetate rayon, viscose rayon and cotton and which may be represented by the probable formula:

$$Y-N=N-X-N=N-Z$$

wherein X represents the divalent residue of an intermediate coupling component, Z the coupled residue of an azo dye component, and Y represents the coupled residue of an oxamic acid derivative of the formula:



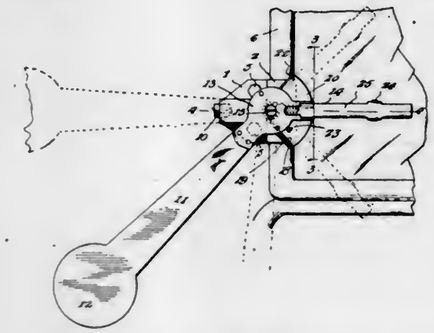
wherein *n* represents 1 or 3; the steps which comprise coupling a diazotized oxamic acid derivative of the above formula with an intermediate coupling component and causing the result to combine with a further component.

1,805,716. INDIVIDUAL CUP HEATER. MONROE S. CLAWSON, Montclair, N. J. Filed Nov. 9, 1929. Serial No. 405,972. 11 Claims. (Cl. 219—43.)



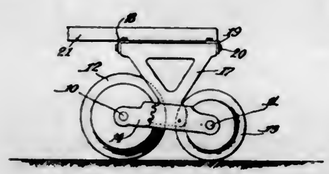
11. An electric heating device comprising a shell of insulating material having a base portion with a resistance coil embedded therein, contacts secured on said base portion and connected with the terminals of said coil, a supporting member mounted beneath and secured to said base portion and projecting therebeyond, and a switch assembly enclosed within a housing slidably mounted on said supporting member and including contacts engageable with said first named contacts, said housing being provided at its sides with downwardly curved portions constituting retaining means for back wiring.

1,805,717. DIRECTION SIGNAL FOR MOTOR VEHICLES. RUSSELL S. CUNARD, Everett, Pa. Filed Mar. 25, 1930. Serial No. 438,866. 4 Claims. (Cl. 116—52.)



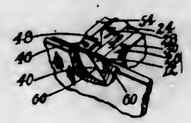
1. A direction signal for vehicles comprising a bracket adapted to be secured to a support, a semaphore arm having a lever at its inner end, a pin to pivotally mount said semaphore carried by said bracket and extending through the inner end portion of the semaphore, the bracket being formed with sockets spaced transversely from each other, abutments carried by said bracket with the sockets disposed between the same, a spring engaging said lever and one abutment to yieldably resist upward swinging of the semaphore, and a latch carried by said lever and engageable in said sockets to releasably secure the semaphore in a set position.

1,805,718. DOUBLE ROLLER PULVERIZER. HARRY S. DICKINSON, Moline, Ill., assignor to The Dunham Company, Berea, Ohio, a Corporation of Ohio. Filed July 26, 1928. Serial No. 295,423. 11 Claims. (Cl. 55—77.)



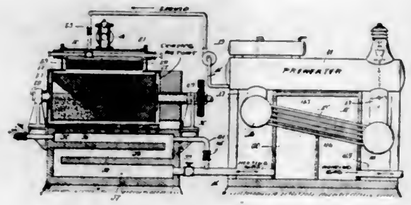
1. A soil pulverizer comprising a weight frame and roller carrying frames disposed below the weight carrying frame and rockably mounted thereon, said mounting including rolling surfaces, gear teeth adjacent the rolling surfaces for preventing relative slippage therebetween, and means for maintaining said surfaces substantially in contact.

1,805,719. CHANNELING MACHINE. ALBERT E. DUNHAM, Brockton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 22, 1928. Serial No. 287,575. 12 Claims. (Cl. 12—18.)



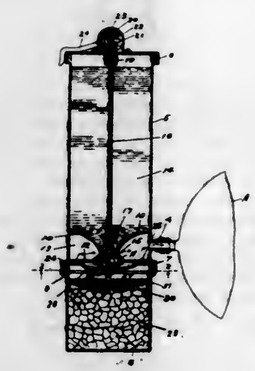
1. In a channeling machine, a main channel knife and an auxiliary channel knife movable to and from an operative position substantially in the plane of the main knife for cooperating with the main knife to cut a channel of increased depth in a sole, the auxiliary knife being constructed and, when operatively positioned, arranged relatively to the main knife to cut substantially in line with the main knife.

1,805,720. APPARATUS FOR DISTILLING AND COKING HEAVY HYDROCARBON LIQUIDS. ALEXANDER S. KNOWLES and CHARLES W. ANDREWS, Chicago, Ill., assignors to Tar & Petroleum Process Company, Chicago, Ill., a Corporation of Illinois. Filed June 25, 1928. Serial No. 288,183. 2 Claims. (Cl. 202—150.)



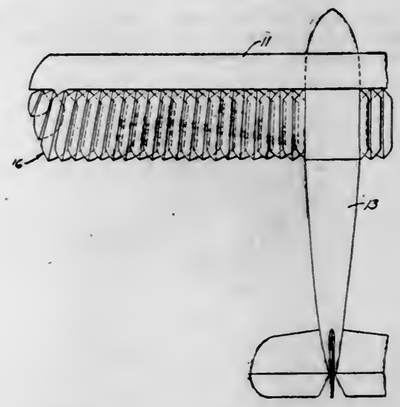
1. Apparatus for the treatment of heavy liquid hydrocarbons, comprising a distillation apparatus, means for continuously passing the liquid through the distillation apparatus, a heating chamber for the distillation apparatus, a closed, stationary coking chamber for treating heavy liquid residue from the distillation apparatus, a pipe for passing heated liquid from the distillation apparatus to the coking chamber, heating flues for the coking chamber and a connection for leading waste heating fluid from said flues to said heating chamber.

1,805,721. LIFE PRESERVING DEVICE. FRANK KOGL, St. Paul, Minn., assignor of one-half to Hans Steingassinger, Zell-on-the-Ziller, Austria. Filed May 26, 1930. Serial No. 455,653. 6 Claims. (Cl. 9—19.)



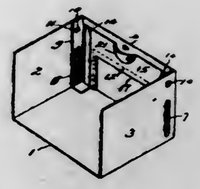
1. A generator for life preservers comprising a cylinder having a water chamber therein, a container for carbide or the like attached to the cylinder, a valve normally closing the water chamber and which when opened will permit water to flow into the container, said cylinder having an annular passageway about the valve for communication with the preserver, and valve controlled means normally closing the passageway with respect to the container.

1,805,722. AIRPLANE. CORNELIUS RAMAKERS and DAVID R. CARSLEY, Los Angeles, Calif., assignors to Soaring Plane Corporation, a Corporation of California. Filed June 18, 1929. Serial No. 371,904. 23 Claims. (Cl. 244—12.)



1. In a wing element for an airplane wing, the combination of: walls defining slots in the upper surface of said wing element, said slots being formed at an angle to the line of motion of said wing element; and means in said slots for directing air currents impinging on the forward leading portion of said wing element along said slots and discharging said air currents from the trailing edges thereof so as to produce a negative pressure on the upper surface of said wing element.

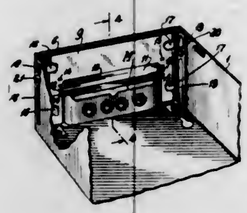
1,805,723. ELECTRIC METER PROTECTING CABINET. JOSEPH SACHS, Hartford, Conn. Filed Jan. 28, 1922. Serial No. 532,449. 2 Claims. (Cl. 247—2.)



1. An electric appliance enclosing cabinet adapted for protective relationship with an electric meter, comprising in combination, a cabinet body including connected rear and side walls, a cabinet end wall, normally positioned in fixed relationship with the rear and side walls but removable therefrom in the forward direction, the said end wall being provided with an opening therein extending forward from the rear edge thereof, a shutter adapted to be positioned immediately adjacent the end wall at the said opening, the said shutter being removable from the cabinet in the forward direction and having an opening therein extending forward from the rear edge thereof which opening is smaller than the opening in the end wall and adapted to register therewith and is of such size and shape as to approximately fit for protective purposes a part of an electric meter, and a front cover for the cabinet separate from the end wall and from the shutter and serving when closed to prevent access to the interior of the cabinet and to the said protected part of the meter, the said cover being so constructed that when closed it overlaps both the end wall and the shutter to prevent removal thereof and

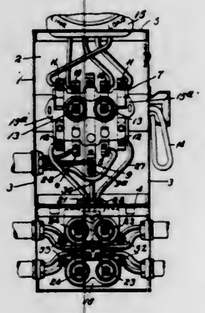
the said cover being openable independently of the end wall and shutter so as to provide access to the interior of the cabinet with the end wall and shutter in place and with the latter in protective relationship with the meter.

1,805,724. ELECTRIC METER PROTECTING CABINET. JOSEPH SACHS, Hartford, Conn. Filed Jan. 7, 1927. Serial No. 159,584. 16 Claims. (Cl. 247—2.)



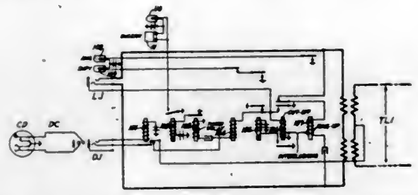
1. In an electric meter protecting cabinet adapted for enclosing a current controlling appliance and having an openable front cover, the combination of a main end wall plate separate from the cover and normally held in fixed position in the cabinet when the cover is opened, the said plate having a meter opening therein, shutter means and means for relatively movably connecting the shutter means with the main plate to enable the said means in one position to entirely close the said opening and in another position to leave the said opening at least partly unobstructed for approximately fitting the terminal portion of an electric meter.

1,805,725. FUSE BLOCK ATTACHMENT. JOSEPH SACHS, Hartford, Conn. Filed June 3, 1926. Serial No. 113,492. 17 Claims. (Cl. 247—2.)



1. A fuse block attachment for an electric appliance containing cabinet comprising in combination, a block adapted to be externally mounted immediately adjacent a wall of the said cabinet so as to at least partly close an opening therein, a pair of complemental fuse receiving contacts on the block accessible externally of the cabinet when the block is in place as aforesaid, a circuit wire connecting terminal electrically connected with one of the fuse receiving contacts on the block, and a continuous conductor having a permanent electrical connection with the other fuse receiving contact on the block so as to be included as a composite element of the complete fuse block attachment prior to its connection with the said cabinet and being long enough to extend through the said opening in the cabinet wall and to directly and of itself engage and connect with a conducting part of the appliance within the cabinet when the block is in place as aforesaid.

1,805,726. AUTOMATIC TELEPHONE SYSTEM. NORMAN H. SAUNDERS, Homewood, Ill., assignor to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed May 8, 1929. Serial No. 361,311. 40 Claims. (Cl. 179—27.)



22. In combination, a pendulum, momentarily applied means for starting the pendulum and for allowing it to attenuate, and means responsive to the attenuation of said pendulum for restarting it.

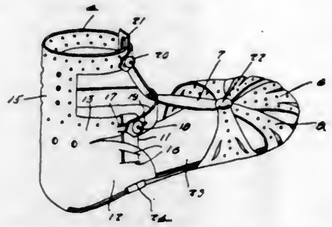
1,805,727. EARTH DRILLING APPARATUS. EGGLESTON SMITH, Newark, N. J., assignor to Eggleston Drilling Corporation, Dover, Del., a Corporation of Delaware. Filed Nov. 23, 1927. Serial No. 235,173. 16 Claims. (Cl. 255—72.)



1. An earth drilling apparatus comprising a rotary drilling bit, a rotary drive shaft extending throughout the drilled portion of the hole, and a device for operatively connecting the bit to the drive shaft including means for permitting the axis of the bit to move angularly with respect to the axis of the drive shaft so as to allow the drilling bit to seat upon the surface being cut when the axis of the drive shaft diverges from the axis of the hole, resilient means for transmitting feeding pressure from the drive shaft to the bit, and means for retracting the bit from the surface being cut when the resistance to rotation exceeds a predetermined amount.

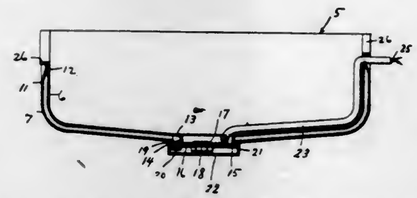
1,805,728. SANDAL. JOHN SOHN, Deadwood, S. Dak. Filed Oct. 14, 1930. Serial No. 488,653. 2 Claims. (Cl. 36—11.5.)

1. A sandal of the type described formed from a single blank of material, and provided with a separate inner sole, said blank comprising a sole portion, a heel engaging portion rising from the rear of the sole portion and provided with a plurality of ankle encircling straps, and portions thereof for engaging the sides of the heel; and a plurality of straps for engaging the toe portion of the foot and consisting of a central strap leading from the forward end of the sole portion and brought back over the foot to engage with the ankle encircling straps, and side straps for engaging the toe portion of the foot formed



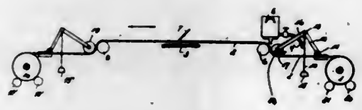
on the side edges of the forward portion of the sole portion, said straps brought to a common meeting point and there fastened together.

1,805,729. OIL PAN FOR INTERNAL COMBUSTION ENGINES. GEORGE TALLON, Malone, N. Y. Filed July 13, 1929. Serial No. 378,132. 4 Claims. (Cl. 184—106.)



3. An oil pan for internal combustion engines comprising inner and outer spaced walls to provide an air space extending along the sides and ends of the pan, said outer wall being provided with a drain opening in the bottom thereof for the interior of the pan, a plug for closing said opening, and said bottom wall being provided with a drain opening for the air space between said inner and outer walls, and a plug for closing said last mentioned opening.

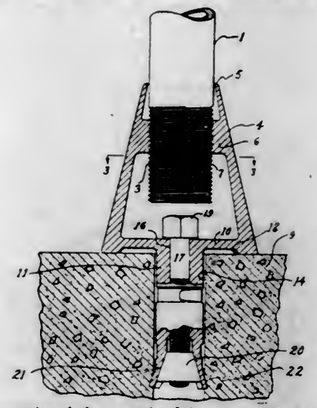
1,805,730. MEANS FOR IMPREGNATING AND COATING FLEXIBLE MATERIALS. EMIL WEINHEIM, New York, N. Y. Filed June 23, 1926, Serial No. 118,057, and in Germany July 13, 1925. 3 Claims. (Cl. 91—17.)



1. A machine for impregnating or coating a web of flexible material comprising a supply and a storage reel, a pair of feed rolls arranged intermediate said reels and comprising a roll mounted to rotate in a fixed bearing and a roll mounted to be displaced with respect to said first-mentioned roll, said rolls being adapted to engage opposite sides of the web, means for exerting uniform and resilient pressure on said displaceable roll, and means for applying a coating to the web while moving from said supply to said storage reel, said reels and said fixedly supported roll rotating independently of the web.

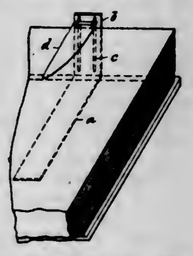
1,805,731. UPRIGHT CONSTRUCTION. LOUIS I. BECKWITH, Dorchester, Mass. Filed July 23, 1929. Serial No. 380,308. 7 Claims. (Cl. 189—28.)

1. A connection between the lower end of an upright and a floor, comprising a base member receiving and substantially enclosing the lower end of the upright, the upper portion of the base member having a part of small diameter in juxtaposition to the upright and having a lower portion of larger diameter in engagement with the surface of the floor, a central depending projection of



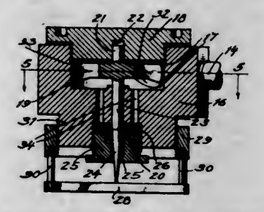
the base member being received in an opening in the floor and held against longitudinal movement in relation to the same, said base member being hollow and having an internally threaded annular flange intermediate its upper and lower portions, the upright being threaded into engagement with said flange.

1,805,732. BOOKMARKER. EMIL DITTMANN, Plon, Germany. Filed Sept. 6, 1930, Serial No. 480,159, and in Germany Sept. 14, 1929. 1 Claim. (Cl. 116—119.)



A book-marker of the character described, comprising a supporting strip having an upturned end portion formed with parallel, longitudinal slits, a marking tongue formed near one end with apertures arranged at the same distance apart as the slits of the supporting strip, and a connecting cord formed into a loop passing through said slits and apertures and engaging the strip and tongue portions intermediate thereof.

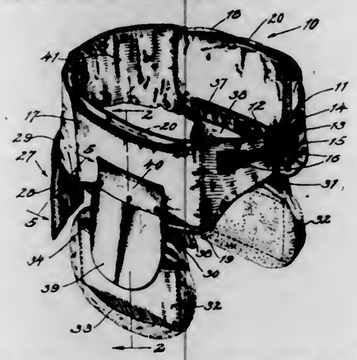
1,805,733. METERING VALVE. FRED GEOFFERY ECKSTINE, Los Angeles, Calif., assignor of one-half to Charles Benedict, Los Angeles, Calif. Filed Oct. 10, 1928. Serial No. 311,513. 10 Claims. (Cl. 251—29.)



6. A valve structure comprising a housing having a chamber therein, a liquid supply pipe in communication

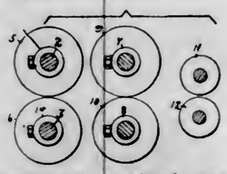
therewith, an orifice formed through the wall of said chamber and having a tapered wall, a valve stem extending through the orifice and having a tapered portion agreeing with the taper of the wall, a propeller member within the chamber and mounted upon the valve stem whereby a flow of liquid from the inlet pipe to the outlet orifice will cause rotation of the propeller and the valve stem, and means for adjustably maintaining the valve stem with relation to the orifice whereby a predetermined area of discharge opening will be established.

1,805,734. PAD FOR FOOTBALL PLAYERS. HOWARD H. JONES, North Hollywood, Calif. Filed Sept. 9, 1929. Serial No. 391,115. 6 Claims. (Cl. 2—2.)



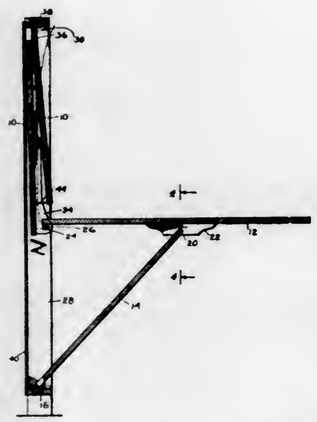
1. A protecting device for football players which comprises a girdle adapted to circumscribe the waist of the player, said girdle being formed of quilted material, a pair of pockets on the outside of the girdle and at opposite sides thereof adapted to overlie the region of the kidneys of the player, a pair of convex shield members, one of which is disposed in each of said pockets with its concaved portion facing inwardly and having flexible straps extending longitudinally thereof to bear against the girdle, a pair of thigh pads articulately connected to the girdle at points beneath the kidney pads, a pocket on the outside of each of said thigh pads, a pair of convex thigh shields, one disposed within each of said thigh pad pockets and having a fabric portion stretched longitudinally thereof to rest against the pad, and a pair of convex shield members, one articulately secured by its upper edge to the pocket of each kidney pad with its concave portion adapted to lie down thereover and with its lower concaved edge resting against the convex face of a corresponding thigh pad, said shields bridging the space occurring between the kidney and thigh pads.

1,805,735. BEVELING MACHINE. DANIEL W. B. KURTZ, Jr., Baltimore, Md. Filed June 30, 1930. Serial No. 465,029. 2 Claims. (Cl. 164—61.)



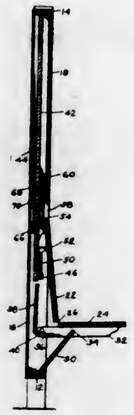
1. In combination with a pair of rotary beveling dies, said dies opposingly arranged, said dies having flat peripheral edges in cross section of relatively narrow width, said dies having beveled side walls terminating at said peripheral edges, said dies adapted to bevel two edges of a card at one operation, rotary slitting dies disposed adjacent the beveling dies in tracking relation thereto for severing the stock in the trough of the creases produced by the said beveling dies.

1,805,736. FOLDING FURNITURE. BRUNO LAURIS LAURSEN, Dunedin, Fla., assignor, by mesne assignments, of forty-eight per cent to Clearwater Lumber Company, Incorporated, Clearwater, Fla., a Corporation of Florida. Filed Apr. 23, 1927. Serial No. 185,969. 2 Claims. (Cl. 68—10.)



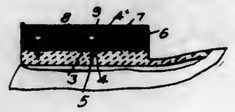
1. In a device of the class described, a cabinet having vertical side members with slots in the inner surfaces thereof, each slot comprising a long vertical section and a short horizontal section, an ironing board having at its cabinet end trunnions engaging said slots, a brace extending between and hinged to the lower portion of the cabinet and said board, a table top engaging said trunnions at its end toward the cabinet and having at an intermediate point of its length a hinged joint; said board brace and top being foldable within the cabinet while not in operative position, and said top being of a length and a width to close the front of the cabinet when the top is in inoperative position.

1,805,737. FOLDING FURNITURE. BRUNO LAURIS LAURSEN, Dunedin, Fla., assignor, by mesne assignments, of forty-eight per cent to Clearwater Lumber Company Incorporated, Clearwater, Fla., a Corporation of Florida. Filed Apr. 23, 1927. Serial No. 185,970. 2 Claims. (Cl. 68—10.)



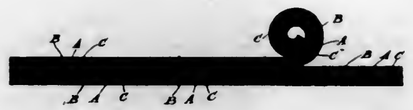
1. In a structure of the character described, in combination, upright side walls having lower and upper grooves in the inner surfaces thereof, each lower groove having an upright inclined portion and an upwardly and forwardly inclined portion at the lower end of the upright portion, and each upper groove having an upright portion and a forwardly extending portion at the lower end of said upright portion, a seat having trunnions disposed and movable in the lower grooves of said side walls, an ironing board having trunnions disposed and movable in the upper grooves of said walls and also having a grooved portion at its underside, and a seat back and ironing-board brace hingedly connected to the seat and having trunnion means disposed and movable in the grooved portion of the ironing board, whereby the seat, ironing board and seat back may be supported in operative and inoperative positions at the will of the operator and may be moved from either of said positions to the other by a single continuous operation.

1,805,738. DETACHABLE RUBBER HEEL. PING LEE, Windsor, Ontario, Canada. Filed Mar. 29, 1929, Serial No. 351,069. Renewed Mar. 30, 1931. 1 Claim. (Cl. 36—36.)



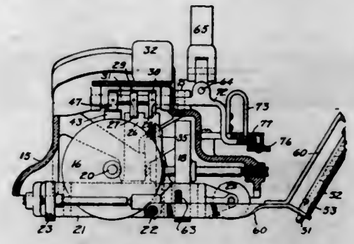
The combination with a shoe heel of a plate provided with dome fastener members secured to the face of the heel, a rubber heel provided with a recess conforming to the shape of the aforesaid plate, an opposing plate fitting within the base of the recess and provided with dome fastener receiving members, such recess being of a depth greater than the combined thickness of the opposing plates so that when the dome fastener members are engaged the edge portion of the rubber heel face is held compressed against the face of the shoe heel.

1,805,739. BUILT-UP ROOFING AND METHOD OF APPLICATION. WILLIAM J. MOELLER, Mount Healthy, and ARTHUR H. ZIMMERMAN, Lockland, Ohio, assignors to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Mar. 29, 1926. Serial No. 98,327. 1 Claim. (Cl. 108—9.)



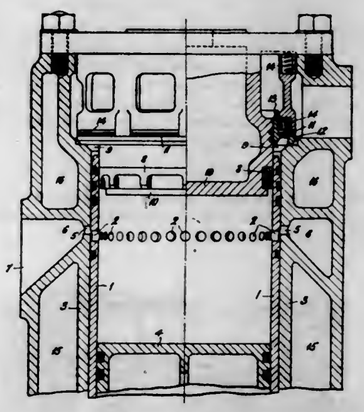
The method of forming upon a roofing support a built up roofing of layers of bituminous saturated sheets alternated with layers of a bituminous substance which comprises coating both sides of a saturated sheet with a layer of bituminous material of the desired thickness, forming the coated sheet, after the coating is set, into a roll, unrolling the roll onto the roofing support while applying a solvent to the coated sheet material slightly in advance of the line of tangency between the roll and the roofing support, then unrolling a second roll of the coated sheet material while applying a solvent to the surface of the material slightly in advance of the line of tangency between the roll and the upper surface of the first sheet, whereby in applying the sheet material to the surface below, any air bubbles or surplus solvent will be forced out from between the approaching surfaces due to the curvature of the sheet being applied and the weight of the unrolled portion of the sheet.

1,805,740. DRAFTING MACHINE. FREBERT J. PETERS, Richmond, Ind., assignor to The National Automatic Tool Company, Richmond, Ind., a Corporation of Indiana. Filed Dec. 21, 1928. Serial No. 327,630. 12 Claims. (Cl. 33—32.)



12. A drafting machine combining a movable casing member; a drawing instrumentality carried thereby; a plurality of sets of rollers journaled in said casing and having their axes transversely arranged, the axes of the rollers in each set being parallel; and means for selectively engaging one of said sets of rollers with the drawing surface.

1,805,741. HIGH PRESSURE GAS COMPRESSOR. EDWIN PRESTAGE, London, England, assignor of one-half to Broom & Wade Limited, High Wycombe, Buckinghamshire, England, a Company of Great Britain. Filed Sept. 25, 1930, Serial No. 484,377, and in Great Britain July 21, 1930. 5 Claims. (Cl. 230—179.)



1. A high pressure air or gas compressor comprising a cylinder with gas inlets spaced around its wall, a piston reciprocating in said cylinder, a cylinder head projecting into said cylinder and of such a diameter that it forms with the inner wall of the upper end of the cylinder an annulus, a housing at the upper end of said annulus, an automatic outlet valve in said housing and a sleeve valve reciprocating in said cylinder between said piston and cylinder head and the inner wall of said cylinder in a partly contrary direction to said piston and adapted to first trap the air or gas compressed into said annulus on the upward stroke of the piston and then to expel said air or gas therefrom through the outlet valve on its continued upward movement through said annulus.

1,805,742. ROD SUPPORTING BRACKET. EDWIN REYNOLDS, Vineland, N. J. Filed Jan. 21, 1930. Serial No. 422,300. 2 Claims. (Cl. 248—20.)

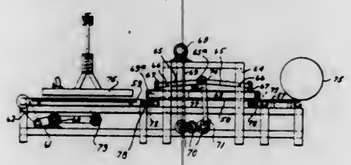
1. In a supporting bracket with self adjustable holders for towel bars a sheet metal blank having cut out U shaped

bodies within its outer edges said bodies having free ends disposed towards each other and in the same plane, said bodies being spaced apart by an intervening strip of metal at their free ends and integral with the body at their opposite ends, said bodies being exactly alike, said sheet blank



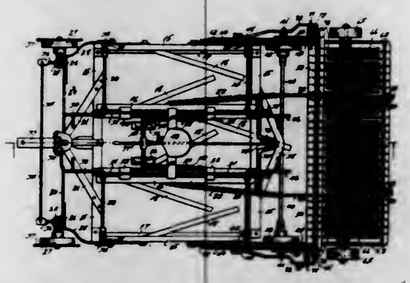
body being folded upon itself to form a head with U shaped semicircular bodies with parallel arms at right angles to the semicircular bodies, said arms being integral with the bracket supports, and said supports having fastening plates with apertures for screws to mount same.

1,805,743. SHEET CUTTING MACHINE. ARTHUR B. SAUNDERS, Nashua, N. H. Filed Aug. 29, 1929. Serial No. 389,185. 4 Claims. (Cl. 164—20.)



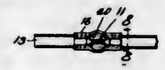
1. A machine for trimming sheets of asbestos and cement including a rectangular cutter, means for vertically reciprocating the cutter, and a conveyor for transporting the sheets to be cut and supporting them during the cutting operation, said sheets projecting beyond the edges of the conveyor support and the cutting blades engaging the projecting portions of the sheets.

1,805,744. HARVESTER. LEWIS A. SHAW, Washington County, Colo. Filed Aug. 19, 1929. Serial No. 386,835. 5 Claims. (Cl. 56—384.)



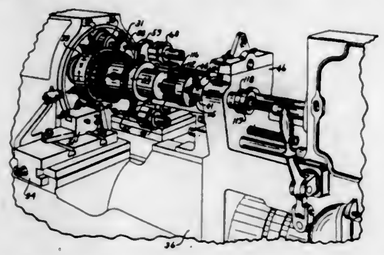
1. A harvester comprising a rigid frame, wheels supporting and altitudinally adjustable relative to said frame, manually-operable means carried by said frame for selective altitudinal adjustment of said wheels, a toothed raking frame in trailing relation laterally of said first frame and manually operable through a longitudinal vertical arc relative to said frame, a toothed, wheel-supported, lifting frame in cooperating relation with said raking frame and pivotally secured thereto, manually-operable means for moving both said raking frame and said lifting frame through a vertical arc relative to said first frame and means for limiting the vertical movement of said raking frame and continuing the vertical movement of said lifting frame relative to said raking frame.

1,805,745. UMBRELLA. RAYMOND A. TEEL, Glenolden, Pa. Filed Nov. 26, 1928. Serial No. 322,055. 3 Claims. (Cl. 135—32.)



2. In an umbrella the combination with a rib channeled longitudinally, of a sleeve embracing the rib having an integral socket portion closed by the rib, there being a slot intersecting that portion of the socket remote from the rib, and a stretcher extending through the slot and anchored at one end in the socket.

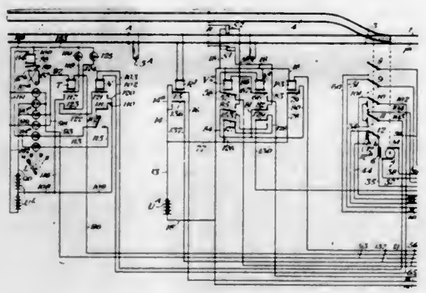
1,805,746. SCREW MACHINE. EDGAR WARNER, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Jan. 30, 1930. Serial No. 424,693. 65 Claims. (Cl. 101—401.5.)



1. In a knurling machine; the combination of a support member; a matrix carrier on the support member; means to rotate the matrix carrier; a plurality of matrices; and means to feed the matrices.

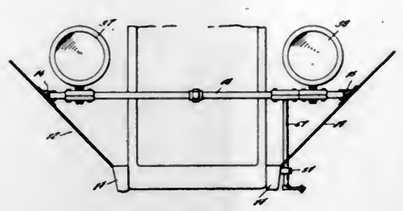
52. A method of manufacture of type wheels including the step of knurling a series of characters on stock; and the step of removing the surplus metal from the type wheel.

1,805,747. RAILWAY TRAFFIC CONTROLLING APPARATUS. ARTHUR R. WHITEHORN, Chicago, Ill., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 27, 1927. Serial No. 229,048. Renewed Apr. 30, 1930. 12 Claims. (Cl. 246—3.)



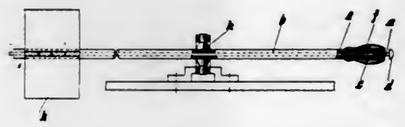
2. In combination with a railway traffic governing device, manually operable means located at a point remote from the device for moving the device to one position or another, a polarized relay located at such remote point, means for supplying said relay with current of one polarity or the other in accordance with the position of the device, and means effective under certain conditions of traffic adjacent the device to periodically interrupt the supply of such current to the relay.

1,805,748. DIRIGIBLE HEADLIGHT. GEORGE W. WILSON, Canfield, Ohio. Filed Feb. 18, 1930. Serial No. 429,248. 2 Claims. (Cl. 240—62.51.)



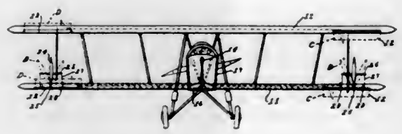
1. In combination with an automobile including a steering gear, a hollow transverse bar, a rod movably supported within the bar, gear casings supported on said bar, stub shafts mounted in certain of said casings, a drive shaft journaled in another of said casing, gears mounted on the drive shaft and stub shafts, means on the rods engageable with one stub shaft for turning said one stub shaft while the other stub shaft is stationary, means connecting the drive shaft within the steering gear to move said rod in either direction, said means on the rod movably supported thereon, and a limit stop on the gear casings supporting the lamp for said last-mentioned means.

1,805,749. ROWING DEVICE. FERDINAND ZOGLAUER, Peterswalds, near Arlau, Czechoslovakia. Filed Feb. 7, 1930. Serial No. 426,722. 3 Claims. (Cl. 9—24.)



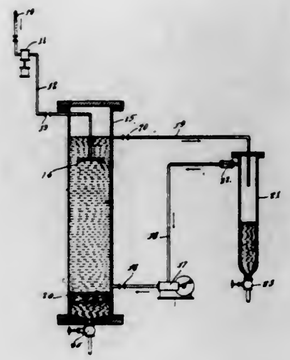
1. In a rowing device of the character described, the combination with an oar, a steel tube within which the loom of the oar is arranged, means for holding said loom within said steel tube, a handle surrounding the upper end of said tube, and striking blades in connection with the lower end of the said loom.

1,805,750. AUTOMATICALLY CONTROLLED AIRPLANE. ROBERT M. ADAMSON, Los Angeles, Calif. Filed Jan. 21, 1929. Serial No. 333,911. 15 Claims. (Cl. 244—29.)



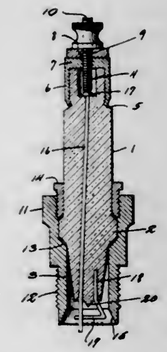
1. An automatically controlled airplane comprising a wing, fins movably mounted on the end portions of the wing, ailerons adjustably connected with the wing and connections between the fins and ailerons, said connections including a joy-stick.

1,805,751. PROCESS FOR TREATING, SEPARATING AND PURIFYING OILS. ERNST BERTHOLD AUERBACH, Berlin, Germany. Filed Sept. 8, 1927, Serial No. 218,368, and in Germany Sept. 25, 1926. 8 Claims. (Cl. 87—12.)



1. A process of fractionating oils comprising bringing said oils in contact with liquid carbon-dioxide, absorbing certain constituents of said oils in said liquid carbon-dioxide, separating the liquid carbon-dioxide from the remaining oil and then separating the absorbed constituents from the carbon-dioxide.

1,805,752. SPARK PLUG. BERT A. BIRDSALL, Decatur, Nebr., assignor of one-half to Henry C. King, Decatur, Nebr. Filed Apr. 2, 1929. Serial No. 351,958. 1 Claim. (Cl. 123—169.)

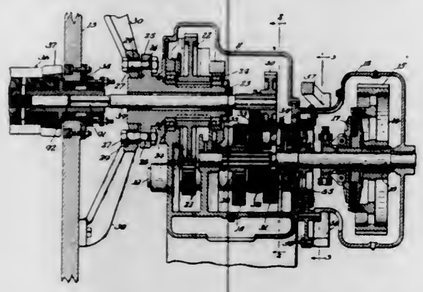


A spark plug, comprising a shell having an inner edge at one end beveled, an insulation body secured in the shell with one end adjacent said beveled edge, a main electrode extending through said body and projecting straight from said end, and an auxiliary electrode extending from said end of the body and having one portion angled to parallel the face of said bevel and a terminal portion extending transversely of and spaced from the adjacent straight portion of the main electrode.

1,805,753. POWER CHURN. ARTHUR H. BOILEAU, Cedar Rapids, Iowa, assignor, by mesne assignments, to Cherry-Burrell Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 4, 1928. Serial No. 282,750. 8 Claims. (Cl. 259—85.)

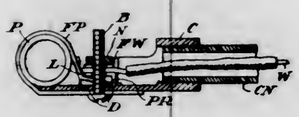
1. In a churn wherein there is included a drum, a drum driving shaft, a roll in the drum, a roll driving

shaft, and a main drive shaft, the combination therewith of a counter shaft adjacent said main drive shaft, gearing for rotating the drum driving shaft from the counter shaft, a shiftable gear on the main drive shaft selectively



engaging the gearing on the counter shaft for rotating the drum driving shaft at different speeds, and means for rotating the roll driving shaft from the main drive shaft.

1,805,754. ELECTRICAL CONNECTING DEVICE FOR ELECTRICAL CONDUCTORS. STEPHEN W. BORDEN, Summit, N. J., assignor, by mesne assignments, to Crouse-Hinds Company. Filed Apr. 8, 1926. Serial No. 100,683. 17 Claims. (Cl. 247—1.)



1. An electrical connecting device comprising a rigid portion and a conductor clamping portion and means for connection to another conductor, the rigid portion having means on a plurality of sides thereof for interchangeably engaging and thrusting against the conductor and the clamping member being adjustable into juxtaposition to any one of said sides.

1,805,755. COMPOSITION FOR PRODUCING IRRITATING SMOKE CLOUDS. DONALD B. BRADNER, Hamilton, Ohio. Filed Jan. 24, 1928. Serial No. 249,215. 4 Claims. (Cl. 167—47.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

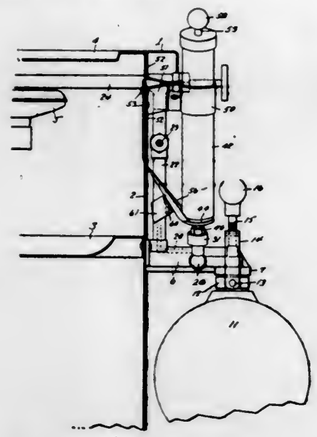
1. In a composition for producing irritating smoke cloud, a mixture of white phosphorus and a halogen derivative of acetophenone.

1,805,756. METHOD OF MAKING METAL ALKYL COMPOUNDS. EDGAR C. BRITTON, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Nov. 16, 1926. Serial No. 148,714. 30 Claims. (Cl. 260—11.)

20. In a method of making a lead alkyl compound, the steps which consist in treating magnesium with an ethyl halide in a non-reactive solvent medium, adding to the resulting product a lead halide at a temperature below 50° C., and finishing the reaction by heating at a temperature materially above 50° C.

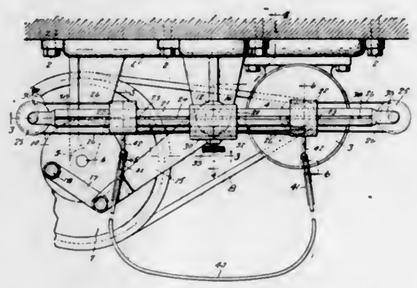
26. In a method of making a metal alkyl compound, the steps which consist in treating magnesium with an alkyl bromide, then with an alkyl chloride in a non-reactive carrier liquid, treating the resulting compound with a halide of the metal at a temperature not much in excess of room temperature, and finishing the reaction at a materially higher temperature.

1,805,757. AIR PUMP FOR PRESSURE FUEL TANKS. LEE S. CHADWICK, Shaker Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 13, 1927. Serial No. 160,846. 11 Claims. (Cl. 230—235.)



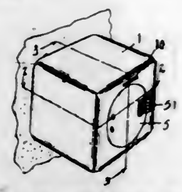
1. In combination with a receiver, an air pump, a ported part to which said pump is adapted to be applied for transmitting air from the pump to the receiver, a rotatable valve controlling the passage of air through the port of said part, means supporting the pump for rotation with its discharge opening in communication with said port, and further means releasably holding the pump in such position and in such manner as to permit of its being rotated, the pump and said valve having cooperating parts through which a driving connection is effected between the pump and valve whereby the valve is adapted to be rotated through the instrumentality of the pump.

1,805,758. VIBRATING APPARATUS. LEE S. CHADWICK, Shaker Heights, Ohio. Filed Apr. 6, 1928. Serial No. 267,829. 10 Claims. (Cl. 128—63.)



7. In a vibrating machine, the combination of a vibrating bar, mechanism for actuating the same, members movable along the bar on opposite sides of its center of oscillation, guides carried by the bar outwardly beyond the range of movement of said members, two flexible elements engaged; respectively, with said guides each having its opposite ends connected, respectively, to the opposed members whereby said members, when adjusted, are caused to move simultaneously like distances in opposite directions, means for securing the members in various adjusted positions along the bar, means for taking up slack in said flexible elements, and means for connecting the opposite ends of an applicator strap to said members.

1,805,759. SAFE. HARRY B. CHAMBERLAIN, Kalamazoo, Mich. Filed Aug. 3, 1928. Serial No. 297,170. 4 Claims. (Cl. 109—1.)



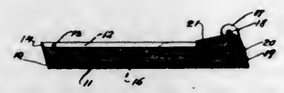
1. In a wall safe, the combination of an integral cast box recessed at its back, a vertical channel bar disposed in said recess, and bolts projecting inwardly therethrough with nuts at their inner ends for attaching said box, as specified.

1,805,760. DEPOSIT RECEPTACLE. GEORGE COUGHLIN, New York, N. Y. Filed Mar. 28, 1928. Serial No. 265,414. 7 Claims. (Cl. 232—59.)



1. A deposit receptacle including a tubular body having end closures, the upper one of the end closures having a coin slot, a tube of less area than the tubular body integral with and suspended frmo the upper end closure, spaced from the wall of said tubular body and projecting into the body, said tube communicating with said slot and being provided with stationary internal baffles.

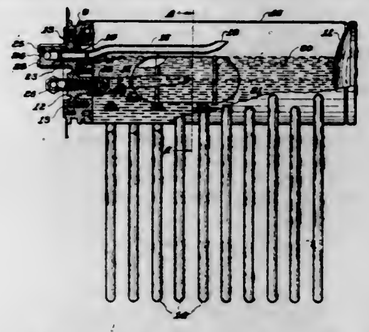
1,805,761. PAD. GENNARO DE PAMPHILIS, New York, N. Y. Filed June 12, 1929. Serial No. 370,204. 3 Claims. (Cl. 129—26.)



1. A sheet pad holder, comprising a pad support having upright and inclined pad-limiting means, said upright pad limiting means provided with weight guides, and a weight bar arranged between and having portions slidably mounted within said guides for exerting a pressure in the direction towards said pad support.

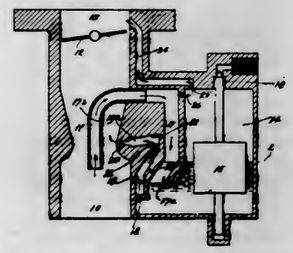
1,805,762. EVAPORATOR. DON G. ELLIS, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 21, 1928. Serial No. 263,563. 3 Claims. (Cl. 62—126.)

3. In a mechanical refrigerating system an evaporator having a removable head provided with refrigerant inlet and outlet openings, means for maintaining a relatively constant level of liquid refrigerant therein, and a removable outlet tube projecting into the evaporator through



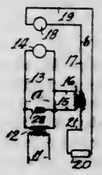
the outlet opening, said tube having an opening therein remote from the removable head and in a plane above the level of the liquid refrigerant.

1,805,763. CARBURETOR. ROY F. ENSIGN, South Pasadena, Calif., assignor to Ensign Carburetor Co., Ltd., Huntington Park, Calif., a Corporation of California. Filed June 22, 1926. Serial No. 117,671. 9 Claims. (Cl. 261—72.)



1. In a carburetor having mixture passage to which suction is applied, a fuel chamber, and walls defining a fuel passage leading from the fuel chamber into the mixture passage, said fuel passage having therein at a definite level an overflow edge to which fuel must be lifted to the discharged into the mixture passage; the combination of means to feed air into the liquid in the fuel chamber outside of said walls defining said fuel passage, and below the normal fuel level at a point vertically below said overflow edge in the fuel passage, and means to apply to the surface of the fuel in the fuel chamber a pressure lower than that in said air feeding means.

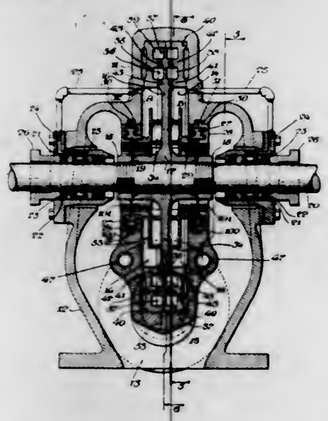
1,805,764. ELECTRIC CIRCUITS. EDWARD A. EVERETT, Long Island City, N. Y., and MATTHEW H. LOUGHRIDGE, Bogota, N. J.; said Loughridge assignor to said Everett. Filed Mar. 23, 1928. Serial No. 264,234. 6 Claims. (Cl. 175—374.)



6. In a system as described, the combination, a main circuit including a translating device, an auxiliary cir-

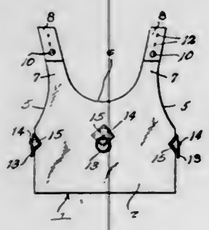
cuit including a second translating device, means for energizing each of said circuits and a transformer having a primary coil connected with said main circuit and a secondary coil connected with said auxiliary circuit means whereby when the translating device in the main circuit is energized said second translating device is deenergized and when the translating device in the main circuit is deenergized said second translating device is energized.

1,805,765. CENTRIFUGAL PUMP. RHEUEL H. FREDERICK, Irvington, N. J., assignor to Ames Pump Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 31, 1928. Serial No. 266,149. 10 Claims. (Cl. 103—110.)



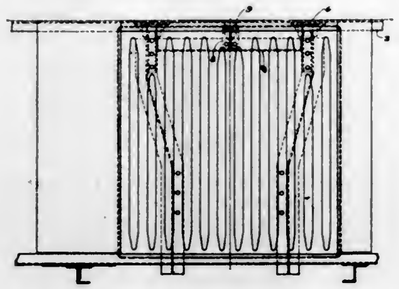
1. A centrifugal pump comprising a suction chamber having a liquid inlet, an impeller chamber having an outlet passage, an annular velocity chamber encircling the impeller chamber and in communication at its receiving end with said outlet passage, means for varying the capacity of said outlet passage, and a rotor mounted to rotate in the impeller chamber and velocity chamber, said rotor comprising a body having an impeller within the impeller chamber, vanes within the velocity chamber, and a liquid inlet to the impeller from the suction chamber.

1,805,766. INFANT'S GARMENT. ELMER H. GROVES, Minneapolis, Minn. Filed Sept. 17, 1929. Serial No. 393,193. 1 Claim. (Cl. 2—111.)



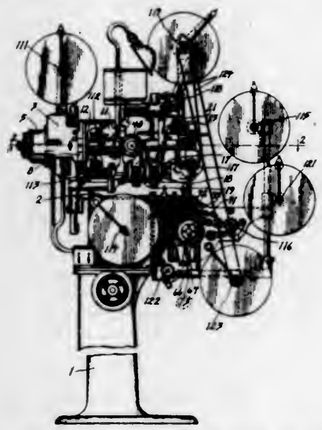
A garment of the character described comprising a tubular body encircling portion formed of a single piece of material, a series of flexible sheets stitched to the body portion in circumferentially spaced relation, an eyelet mounted on each sheet and projecting outwardly therefrom, a metallic coupling ring loosely mounted for swinging movement on each eyelet, and means extending circumferentially on the rear of the body encircling portion for adjusting said portion.

1,805,767. RAILWAY CAR CONSTRUCTION. AUGUST W. L. HARTBAUER, Chicago, Ill. Filed Mar. 23, 1929. Serial No. 349,380. 2 Claims. (Cl. 105—280.)



1. In a railway car of the dumping type having a center sill construction, a door attached to said center construction by a pair of hinges, a beam secured to the door adjacent the hinged edge thereof and extending substantially between the hinges, a bracket secured to said beam, and a shelf upon the center construction which supports the bracket when the door is in closed position.

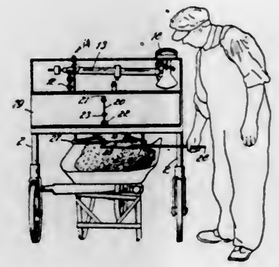
1,805,768. PHOTOGRAPHIC PRINTING MACHINE. ALBERT S. HOWELL, Chicago, Ill., assignor to The Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1928. Serial No. 266,659. 10 Claims. (Cl. 95—75.)



1. In a photographic printing machine the combination with a revoluble film feed sprocket comprising two axially spaced wheels and an axial shaft extending therebetween, of a film guide disposed for guiding superposed films engaged on said sprocket and provided with an exposure aperture between said wheels and facing inwardly of the sprocket, closed light passage means between said wheels and leading to said exposure aperture and angled to avoid said shaft and including a removable structure completing the angled portion thereof, and reflecting means carried on said removable structure for reflecting printing light through said passage means to said exposure aperture.

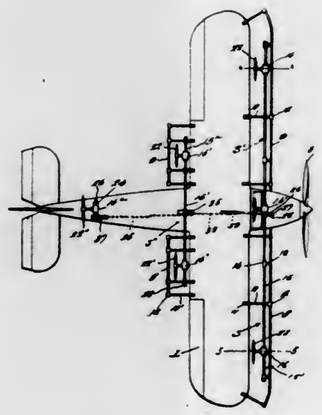
1,805,769. PORTABLE BATCHER. CHARLES S. JOHNSON, Champaign, Ill. Filed July 23, 1930. Serial No. 470,003. 5 Claims. (Cl. 265—27.)

1. A portable batcher for weighing a batch and discharging it into a wheelbarrow, comprising a supporting frame, legs upon which said frame is mounted for convenient movement and leveling and between two of which a wheelbarrow may be slid with the handles of the wheelbarrow projecting beyond one end of said frame, a hopper suspended in said frame in position to be directly above the center of a wheelbarrow inserted between said legs, a



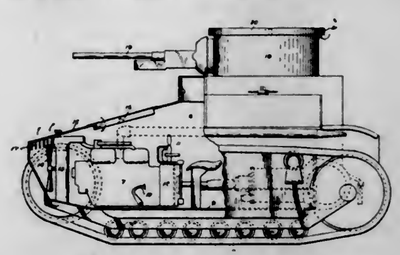
weighing scale mechanism connected to said hopper and mounted upon that end of said frame beyond which the handles of the wheelbarrow project, a gate for controlling the discharge from the hopper, and a handle for operating said gate, said handle projecting through the space between said two legs.

1,805,770. AEROPLANE. EARL RAYMOND KELLY, Kansas City, Kans. Filed Apr. 12, 1930. Serial No. 443,771. 4 Claims. (Cl. 244—14.)



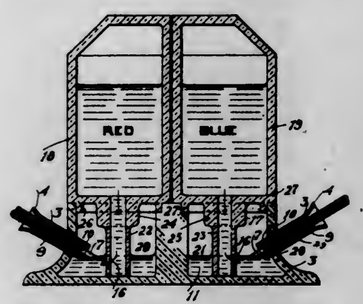
1. An aeroplane including in combination a fuselage, a transverse sustaining wing, a frame supported adjacent the leading edge of said wing on opposite sides of said fuselage, a rock shaft mounted in each of said frames, a housing carried by each of said rock shafts, a housing operatively connecting said rock shaft, a frame supported adjacent the trailing edge of said wing on opposite sides of said fuselage, a housing rockably mounted in each of said last mentioned frames, a rock shaft operatively connecting said last mentioned housing, a motor mounted in each of said housings, and having a drive shaft extending through the housing, a propeller carried by said drive shaft, and means for simultaneously rocking all of said rock shafts.

1,805,771. VEHICLE. HARRY A. KNOX, Davenport, Iowa. Filed Nov. 4, 1929. Serial No. 404,812. 6 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



6. In a vehicle of the class described, an enclosed body forming a single compartment, a power plant in the forward portion of the compartment, a driver's seat in rear of the power plant, and means for drawing air from the rear of the compartment for discharge forwardly of the power plant.

1,805,772. DESK STAND AND INK FOUNTAIN. FABYAN J. LAMARRE, Springfield, Mass. Filed Feb. 9, 1928. Serial No. 253,056. 1 Claim. (Cl. 120—4.)



An ink receiving desk stand comprising a base member to receive the ink, an elongated tubular member for receiving a pen holder having a shouldered opening at its inner end to receive the pen, a removable sleeve member in the tubular member having a shouldered opening, the shouldered opening of the tubular member serving as a stop for the sleeve member, the shouldered opening of the sleeve serving as a stop for the end of the pen holder to limit the distance the pen enters the ink in the base member.

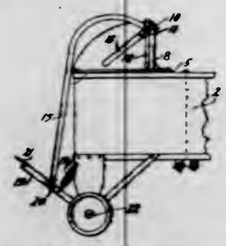
1,805,773. VEGETABLE GLUE AND METHOD OF MAKING SAME. IRVING F. LAUCKS and GLENN DAVIDSON, Seattle, Wash., assignors to I. F. Laucks, Incorporated, Seattle, Wash., a Corporation of Washington. Original application filed Oct. 29, 1923, Serial No. 671,881. Divided and this application filed Sept. 23, 1927. Serial No. 221,609. 20 Claims. (Cl. 87—17.)

1. A method of making an adhesive composition, which comprises treating a proteinous vegetable seed flour including fiber and other natural substances, and an aqueous alkaline medium and an alkali-soluble copper compound.

1,805,774. WRINGING MACHINE. SIMEON C. LAWLOR, Chicago, Ill., assignor to S. C. Lawlor Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 20, 1927. Serial No. 214,312. 2 Claims. (Cl. 15—262.)

1. In a wringer mechanism, a pair of rigidly mounted parallel plates, a stationary roller mounted between said

plates and having a bearing in each plate in a corner thereof, an inclined slot in each plate extending diagonally from a point near the bearing of the stationary roller in a straight line to the opposite upper corner of the plate, a movable roller having a shaft inserted at its ends through

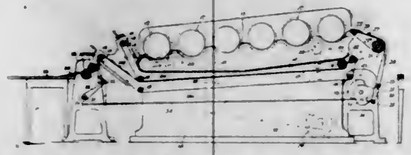


the slots of both plates, an operator operated rigid steel frame connected to the ends of the shaft of said movable roller for moving the same up and down in a straight line in said inclined slots into engagement with the stationary roller, and a spring means for returning the movable roller to its upper position.

1,805,775. **METHOD OF MAKING ESTERS OF THE FATTY ACIDS.** FRANK E. LICHTENTHALER, Newton Highlands, Mass. Filed Jan. 21, 1926. Serial No. 82,854. 5 Claims. (Cl. 260—106.)

5. The method of making ethyl acete which consists in mixing together dilute acetic acid, ethyl alcohol, sodium acid sulphate and anhydrous ammonium alum.

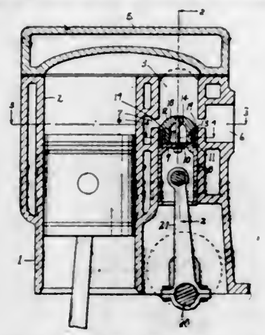
1,805,776. **COORDINATED IRONING AND FOLDING MACHINE.** WALDEMAR F. MAYER, Rutherford, N. J., assignor to The Alba Corporation, St. Albans, Vt., a Corporation of Vermont. Filed Dec. 21, 1928. Serial No. 327,577. 5 Claims. (Cl. 68—69.)



1. In an ironing and folding machine, an ironing mechanism having ironing and conveying devices and feeding devices to deliver a sheet to said ironing mechanism, a folding machine to receive the ironed sheet from said conveying devices and including a movable folding device, means to drive said conveying devices, and means connected to said driving means to actuate said feeding and folding devices coordinately and in timed relationship to one another whereby the sheet may be folded in definite predetermined widths.

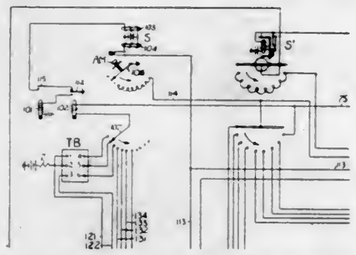
1,805,777. **VALVE STRUCTURE.** ARTHUR C. MCINTYRE and WILLIAM H. MCINTYRE, Kalamazoo, Mich. Filed Dec. 10, 1925. Serial No. 74,545. 10 Claims. (Cl. 123—188.)

1. In a valve structure, the combination of a cylinder open at the top and having an annular surrounding passage communicating with the cylinder through a continuous annular slot-like port, a piston valve body member having a recess in its inner end and an annular packing ring channel open at the inner end of the body member, a head member constituting an end wall for the packing ring channel, said head member having a reduced neck movably fitting said recess in said body member, a connection for said head member to said body member permitting limited movement thereof relative to the body member, and a packing including a pair of superimposed split rings arranged in said channel to break joints, the inner ring having a flange at its head end overhanging the outer ring, the width of the packing exceeding the width



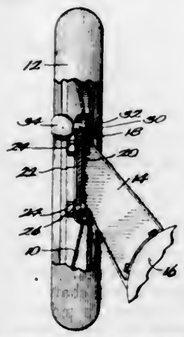
of the port and also exceeding the depth of said channel in said body member whereby the packing is subject to the thrust of the piston members.

1,805,778. **TELEPHONE SYSTEM.** RICHARD MERCER, Harrow, England, assignor to Associated Telephone & Telegraph Company, Kansas City, Mo., a Company of Delaware. Filed Feb. 26, 1927, Serial No. 171,119, and in Great Britain Mar. 26, 1927. 20 Claims. (Cl. 179—18.)



13. In combination, registering devices each arranged to register a series of impulses and a non-registering device, an impulse distributor, and means for operating said distributor between series of impulses so that a plurality of series of impulses are directed to a like plurality of said registering devices and one series of impulses is directed to said non-registering device.

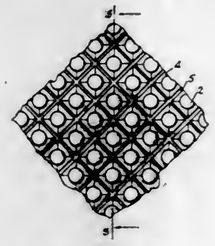
1,805,779. **LOCK.** RAYMOND METZ and WELLINGTON J. QUIRK, Evanston, Ill. Filed Dec. 13, 1926. Serial No. 154,342. 4 Claims. (Cl. 70—122.)



1. In a lock in combination, two members, the first entering the second, to be detachably secured together, a lock

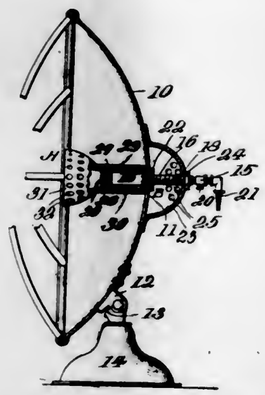
part carried by one of said two members located, when the parts are in locked position, inside said second member, key operated means for so moving the lock member that the first mentioned parts may be separated, and resilient means for normally urging the lock part into an unlocked position.

1,805,780. **COUNTERSUNK SUCTION ROLL SHELL.** WILLIAM H. MILLSPAUGH, Sandusky, Ohio, assignor to The Paper & Textile Machinery Company, Sandusky, Ohio, a Corporation of Ohio. Filed Dec. 13, 1926. Serial No. 154,363. 2 Claims. (Cl. 92—53.)



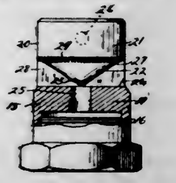
1. In a rigid cylindrical suction element, a wire supporting wall provided with a plurality of circular perforations throughout the greater part of its surface said perforations having surrounding outwardly inclined countersunk surfaces bounded at their outer edges by perimeters of angular configuration closely abutting one another on all sides and collectively presenting a net-like wire supporting surface carried by said element and lying between and filling the spaces between the countersunk outer ends of all said perforations, the aforesaid countersunk areas greatly increasing the effective suction area of said element without appreciably weakening the same.

1,805,781. **GAS HEATER.** HENRY H. MORETON, Santa Monica, Calif. Filed June 14, 1928. Serial No. 285,479. 14 Claims. (Cl. 126—92.)



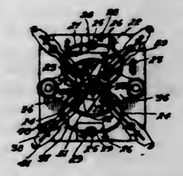
1. A gas heater of the character described comprising a circular reflector, an axially disposed burner section supported by said reflector and having a portion extended rearwardly through the reflector, a perforated burner disk closing the discharge end of said burner section, a retainer sleeve engaging said disk and said burner section so as to hold the disk in place, and a perforated casing of refractory material enclosing said sleeve and the discharge end of said burner section, so that combustion will take place within aid around said casing.

1,805,782. **SPRAY NOZZLE.** ELMER G. MUNZ, Detroit, Mich. Filed Jan. 16, 1928. Serial No. 247,195. 9 Claims. (Cl. 299—121.)



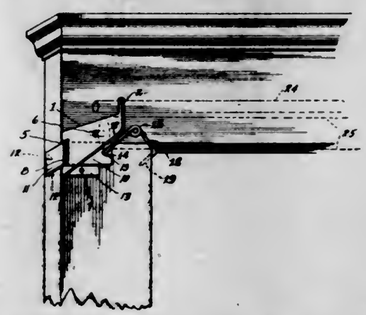
1. In a sprinkling system, the combination of a nozzle head having a substantially vertical discharge orifice, a conical deflecting surface arranged above the orifice in the path of the water issuing from said discharge orifice for spreading the same into a thin film, said surface being outwardly inclined in the direction of flow to direct the film laterally and outwardly, said surface being provided at its upper end with a series of unconfined grooves that extend in the direction of flow whereby said film is subdivided into a series of finely divided streams capable of being projected further than said film.

1,805,783. **SOCKET.** HALVOR M. OLSEN, Oak Park, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 6, 1926. Serial No. 152,737. 12 Claims. (Cl. 173—328.)



1. In a device of the character described comprising a base, means for holding an audion tube, a pair of spring members forming a double loop and secured at their respective ends to said base to form a resilient element, and means for securing said holding means to said resilient element to resiliently support said holding means from said base.

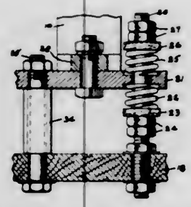
1,805,784. **SUPPORTING BRACKET.** RALPH PETERSON, Elbe, Wash. Filed Feb. 2, 1927. Serial No. 165,404. 2 Claims. (Cl. 156—24.)



1. A device of the character described comprising a bracket having a laterally extending base portion adapted to seat flatly against a casing and having teeth thereon for projection into the casing and having an opening therethrough adjacent the base, and an attaching plate extending through said opening with its inner portion support-

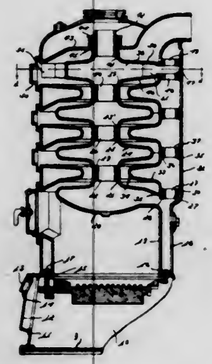
ingly overlying the base of the bracket and provided with a hole, and having its outer end turned inwardly to form a stop for engaging the edge of the casing with teeth turned inwardly from said stop for holding engagement with the casing and a spring having one end hooked within the hole in said plate and its other end in holding engagement with the inner edge of the casing.

1,805,785. REFRIGERATED FOOD CABINET. JOHN R. REPLOGLE, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed Aug. 25, 1924, Serial No. 733,913. Divided and this application filed Feb. 18, 1928. Serial No. 255,244. 3 Claims. (Cl. 248—16.)



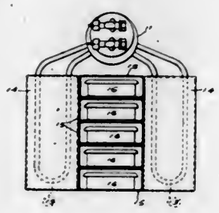
1. A resilient suspension device comprising, a supporting member and a frame member, a stud bolt having an intermediate portion loosely mounted in one of the members, a resilient element associated with each end of the stud bolt, means for retaining the resilient elements in operative relation between the member and the ends of the stud bolt, means for securing one end of the stud bolt rigidly to the other member, and means for securing the members rigidly together to render the suspension non-resilient.

1,805,786. FURNACE. JOHN SPOUSTA, River Rouge, Mich. Filed Feb. 9, 1928. Serial No. 253,147. 2 Claims. (Cl. 122—218.)



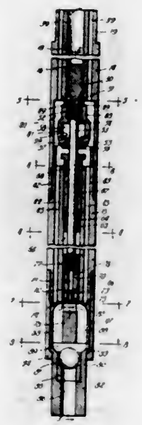
2. A furnace of the class described, comprising: a plurality of duplicate double walled sections, with the spaces between said walls in intercommunication, the inner wall of each of said sections being bulged inwardly away from the outer wall, a plurality of centrally disposed disc-like hollow intercommunicating members enclosed by said double walled sections, the edges of adjacent disc-like members extending in overlapping spaced relation to said bulged walls, the space between said bulged walls and said disc-like members forming sinuous passages for the escape of gas, a supporting section comprising spaced walls from continuations of the walls of the double walled sections, the space between said walls being in communication with the space between said doubled walled sections, a centrally disposed hollow globe shaped container connected to said supporting section and said disc-like members and establishing communication between the enclosed spaces of said sections and members and providing support for said disk-like members, a top disc-like hollow section communicating at its central portion with said disc-like members and having a hollow portion overlying the uppermost of said double walled sections and communicating therewith, a hollow top section communicating with said top disc-like section and having an exit flue in communication with said sinuous passages.

1,805,787. MECHANICAL REFRIGERATION. CHARLES C. SPREEN, Detroit, Mich., assignor to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 21, 1927. Serial No. 169,764. 3 Claims. (Cl. 62—95.)



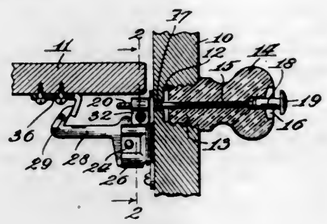
2. In refrigerating apparatus, a refrigerant expansion unit comprising a drum, separate depending pipe loops arranged in rows on each side of said drum, said pipe loops being in open communication with said drum, and separate heat transfer means thermally associated with the loops in each of said rows.

1,805,788. PUMP. WILBUR N. SQUIRES, Joplin, Mo., assignor to Hydraulic Deep Well Pump Company, Joplin, Mo., a Corporation of Missouri. Filed Sept. 16, 1927. Serial No. 219,922. 23 Claims. (Cl. 103—46.)



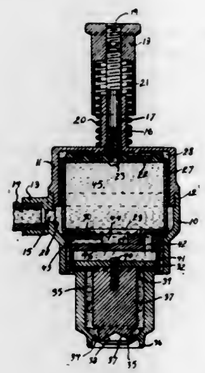
1. In combination, a motor cylinder, a double acting piston therein, a pump cylinder, a piston therein, a rod connecting the pistons, means to apply pressure alternately to opposite sides of the motor piston, and means for checking the motion of the moving parts at each end of their stroke, said means comprising chambers within which the pistons move, said chambers having restricted outlets and means for trapping fluid in said chambers during the corresponding strokes.

1,805,789. PUSH CATCH FOR DOORS. THOMAS F. STUART and HENRY A. MOORE, Los Angeles, Calif.; said Stuart assignor to Mary E. Bigelow, and said Moore assignor to Albert H. Brunner, Los Angeles, Calif. Filed Dec. 28, 1927. Serial No. 243,144. 2 Claims. (Cl. 292—227.)



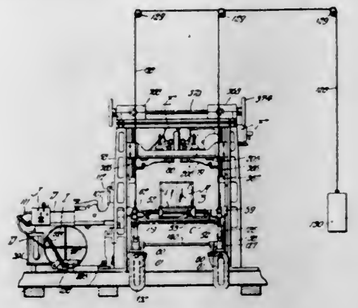
1. In a push catch for doors, a knob formed in a single piece from vitrified earthen material and having a portion adapted to be screw seated in a door, said knob having an axial opening, a push rod extending through said opening, a plate secured on the inner face of the door, a spring pressed hook pivotally mounted on said plate, a pair of plates adjustably clamped on the inner portion of said push rod for engaging said hook and swinging the same upon its pivot and said pair of plates having sliding connection with the plate on the inside of the door.

1,805,790. LIQUID DISPENSING VALVE. THOMAS L. TITUS, Omaha, Nebr., assignor of one-fourth to Myrtis Blackburn, Omaha, Nebr., and one-fourth to Francis K. Hart, Council Bluffs, Iowa. Filed June 20, 1928. Serial No. 286,870. Renewed Mar. 17, 1930. 3 Claims. (Cl. 221—103.)



1. In a structure of the class described, a piston, a cylinder fitting slidably upon said said piston and having end-openings for admitting fluid to opposite sides of the piston, means for actuating the piston longitudinally of the cylinder, the cylinder being movable longitudinally, fixed means forming stops for limiting the longitudinal movement of the cylinder in each direction, said fixed means at one end of the cylinder having a perforate seat engageable by said end of the cylinder and through which contents of the cylinder may be forced by movement of the piston toward the same while said end of the cylinder is engaged with said seat, and means for preventing return flow through said perforate seat to the cylinder during movement of the piston away from said seat, so that as said end of the cylinder is disengaged from the seat the cylinder-space may be refilled from a body of fluid surrounding the cylinder.

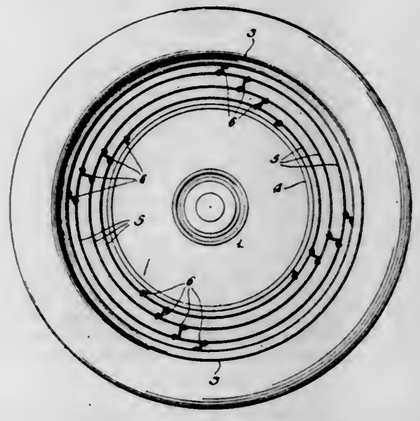
1,805,791. BOX STRAPPING MACHINE. SIDNEY W. TREAT, Chicago, Ill., assignor, by mesne assignments, to Signode Steel Strapping Company, a Corporation of Delaware. Filed Aug. 30, 1926. Serial No. 132,410. 40 Claims. (Cl. 100—31.)



3. A wrapping mechanism for folding a binder about a plurality of sides of a box, said mechanism comprising a fixed member and a pair of binder folding arms having spaced pivots thereon, said arms being adapted to receive said binder, and clamping means at the free ends of said arms for holding said binder on said arms during the folding thereof.

37. The combination of jaws for crimping a length of girth about a pair of strap ends, means for positioning an end of a continuous girth within said jaws, and means for subsequently severing said end from said continuous girth.

1,805,792. COOLING MEANS FOR VEHICLE WHEELS. ROBERT S. WENTWORTH, Germantown, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 28, 1926. Serial No. 157,511. 4 Claims. (Cl. 301—6.)

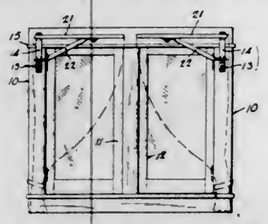


1. A brake drum heat dissipating device comprising a plurality of radially spaced bands of heat radiating material arranged between the brake drum and tire rim for dissipating by radiation the heat generated in the brake drum and for preventing the same affecting the tire rim.

1,805,793. WINDOW CURTAIN HANGER. JOHN WITTEMANN, Milwaukee, Wis. Filed Oct. 22, 1927. Serial No. 227,874. 3 Claims. (Cl. 156—22.)

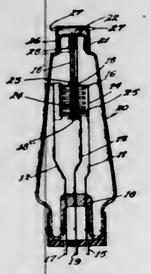
1. In a window curtain hanger, a supporting bracket comprising a back strip of metal having an outwardly

bowed portion intermediate its ends and an angular loop of metal having a vertically disposed middle portion separated from the back strip and connected thereto by arms at its ends above and below the said bowed portion, a curtain supporting bar and a brace therefor adjustably connected at one end to the bar and free at its other, the



free end of the brace and the corresponding end of the bar being spaced to receive between them the arms of the said loop, pivotal connections between the spaced ends of the said bar and brace and the loop, and means carried by the loop for maintaining the pivotal connection in position.

1,805,794. AUDION TUBE. GEORGE A. YANOCHOWSKI, La Grange, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 29, 1926. Serial No. 84,595. 3 Claims. (Cl. 250—27.5.)



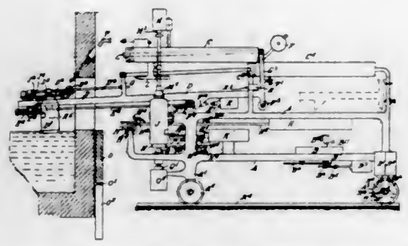
1. An audion tube including an evacuated bulb having reduced end portions, a tubular cathode member within said bulb the inner end of which is closed and its outer end flared and sealed to the upper reduced end portion of said bulb whereby the interior of the tubular cathode is separated from the evacuated portion of the bulb, a refractory member within said cathode having a pair of parallel orifices therein, a looped resistance element extending through said orifices, a top cap fitted onto the upper reduced portion of said bulb, terminals for said cap connected to said heating element, a base member fitted onto the lower reduced portion of said bulb, a terminal supported by said base member, and a split collar carried by said terminal making connection with said tubular cathode for positioning the same and for extending the electrical connection to said cathode.

1,805,795. FASTENING DEVICE. ANTON ZEINDLHOFER, Vienna, Austria, assignor to Groove Lock Co. Inc., New York, N. Y., a Corporation of New York. Filed Jan. 26, 1928. Serial No. 249,507. 1 Claim. (Cl. 292—162.)



A fastening device comprising a pair of frames hinged together, said frames each having a flat top, the top of one frame being wider than the top of the other and overlapping the same when the frames are in closed position, the wider top having an upstanding rib at one edge thereof, the other top having a flange at the edge thereof adjacent said rib and extending above and below the same, a portion of which abuts against said rib when the frames are in closed position, and a C-shaped catch slidably mounted up on and embracing said flange, one end of the C-shaped catch being adapted to engage the rib when the frames are in closed position to secure the same together.

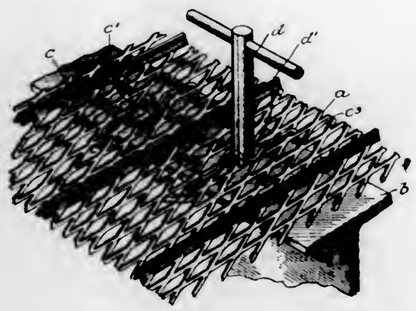
1,805,796. MACHINE FOR MAKING GLASSWARE. PIERRE ARBEIT, Paris, France, assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Apr. 24, 1925. Serial No. 25,574, and in France May 1, 1924. 34 Claims. (Cl. 49—5.)



1. Glass-working apparatus comprising fluid pressure actuated means for performing a plurality of glass fabricating operations, a rotary distributor for receiving and distributing fluid pressure to the several fabricating means in predetermined order and time, and fluid pressure means operable in response to predetermined movements of certain of said fabricating means respectively for imparting predetermined intermittent step-by-step rotary movements to said distributor.

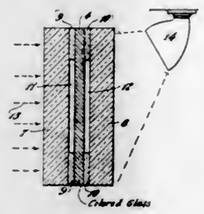
32. A glass working machine comprising a carriage, a parison mold mounted thereon and adapted to be projected within a glass furnace to gather a charge of molten glass by suction from a glass bath therein, penumatic means for determining the interval of time said mold remains in contact with said bath in said furnace, and a valve associated with said pneumatic means for varying said time interval.

1,805,797. LATH FASTENER. ALBERT J. BATES, Chicago, Ill., assignor, by mesne assignments, to Bates Expanded Steel Corporation, East Chicago, Ind., a Corporation of Delaware. Filed Oct. 11, 1926. Serial No. 140,705. 6 Claims. (Cl. 72—118.)



3. A fastener for securing a lath to a flanged beam, formed from a single strip of metal and consisting of a pair of oppositely facing hook-members adapted to extend through the lath, and an intermediate connecting member for bearing against the lath, said connecting member being normally of such length that the hook-members may be shifted without flexure to straddle the beam flange and having a straight and transverse central portion adapted to fit in a kerf or slot in a turning tool and sufficiently pliable to be bent by the tool relatively to the end portions of the connecting member in order to bring said end portions towards each other and thereby cause the hook-members to be drawn into interlocking relation with said flange.

1,805,798. COMBINED ELECTRIC SIGN AND MIRROR. MARK D. BEDROSSYAN, Springfield, Mass. Filed Dec. 2, 1929. Serial No. 411,195. 3 Claims. (Cl. 40—130.)

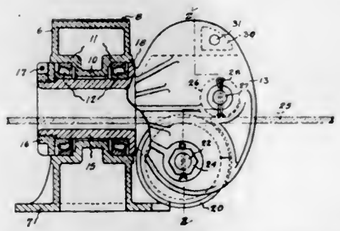


1. A combined sign and mirror having a portion of its silvering removed to form the characters of the sign proper, means for illuminating the characters comprising a bulb arranged above the silvered surface of the mirror, a reflector for projecting the rays downward onto the silvered surface, a colored glass back of the mirror, and means for reflecting the light onto and thru the colored glass onto the mirror whereby the characters composing the sign are colored and visible in the mirror, as described.

1,805,799. PROCESS FOR MAKING SULPHITE PULP FROM DOUGLAS FIR AND OTHER RESINOUS CONIFERS. HENRY K. BENSON, Seattle, Wash. Filed July 27, 1929. Serial No. 381,679. 3 Claims. (Cl. 92—2.)

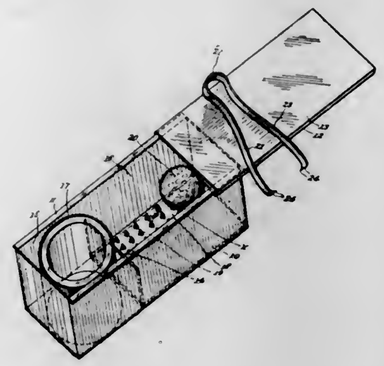
1. The improvement in processes of pretreatment of Douglas fir and other resinous coniferous chips with volatile alkali to eliminate resins, coloring matter and other non-cellulose materials contained therein so that the chips can subsequently be treated with sulphite solutions to manufacture pulp, comprising the circulation over uncrushed chips in enclosed systems of volatile alkali aqueous solutions at temperatures of 70–150° C., the subsequent substantial cooling of the solutions before release is made of pressure, and the draining and washing of the chips substantially at 70° C.

1,805,800. FAIRLEADER. KNUTE BERGER, Seattle, Wash. Filed July 23, 1929. Serial No. 380,332. 3 Claims. (Cl. 254—190.)



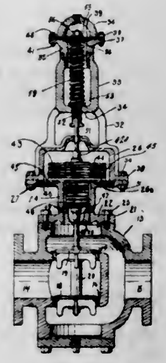
1. A fairleader comprising a main frame, a sheave frame having a shank rotatably supported in said main frame, said shank being tubular to permit the passage of a cable therethrough, a sheave in said sheave frame for supporting the cable in a position at one side of the axis of said shank, and counterbalancing means at the opposite side of such axis, whereby the sheave will be held in proper guiding position at all times regardless of the direction of the line of pull of the cable.

1,805,801. GOLF BALL PAINT KIT. HOWARD S. BOYLAN and GEORDIS F. BRETZ, Council Bluffs, Iowa. Filed Mar. 19, 1929. Serial No. 348,333. 3 Claims. (Cl. 91—60.)



1. A golf ball paint kit comprising a container closed at its bottom and sides and open at its top with flanges along its longitudinal edges, a slidable cover for the container having inturned flanges to interlockingly cooperate with the container flanges, a partition in the container dividing same into short and long compartments, a paint can contained in the short compartment in which the balls to be painted are adapted to be dipped, a ball drying rack removably mounted in the long compartment, and a pair of tongs for dipping the balls adapted to be contained in the long compartment.

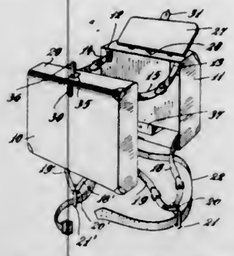
1,805,802. SENSITIVE FUEL GOVERNOR. LYLE W. BROWNE, Marshalltown, Iowa, assignor to The Fisher Governor Company, Inc., Marshalltown, Iowa. Filed Apr. 14, 1926. Serial No. 102,087. 1 Claim. (Cl. 137—153.)



In a governor valve structure, a valve proper including a valve body, a valve stem, a disk, a small bellows affixed

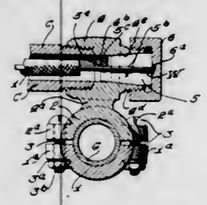
to one side of said disk and a large bellows to the other side thereof, said bellows being hydraulically connected together, a frame affixed to said valve body, means for securing said disk to the intermediate portion of said frame, a diaphragm housing carried by the outer end of said frame, a diaphragm therein, an operative connection between said diaphragm and said large bellows and means for applying pressure to said diaphragm from a source independent of the pressure within said valve structure.

1,805,803. LIFE SAVING DEVICE. LUIS BULGARINI, Buenos Aires, Argentina, assignor of one-third to Luis Salvo, Buenos Aires, Argentina, and one-third to Santiago Imas, New York, N. Y. Filed May 9, 1930. Serial No. 450,923. 10 Claims. (Cl. 9—17.)



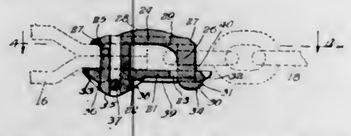
4. A device of the class described comprising a collapsible structure consisting of front and rear buoyant members, flexible connecting straps therebetween, releasable means for securing said members to each other to form a single compact structure, and recesses within said members, adapted to receive said straps when said members abut against each other.

1,805,804. GROUNDING CLAMP. HENDRIX K. CALDWELL, San Diego, Calif. Filed May 7, 1929. Serial No. 361,239. 5 Claims. (Cl. 247—1.)



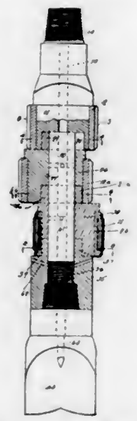
1. In a device of the class described, a grounded pipe clamp means, a nipple integral therewith, the one end of said nipple adapted to receive an electric conduit, said nipple provided with a bore continuing from said conduit, said bore diverging as it extends from said conduit forming a wedging surface, a plug means adapted to clamp a wire extending through said conduit and into said bore, and means for wedging said plug into said bore.

1,805,805. CLEVIS FOR BRAKES. PERCY B. CAMP, Maywood, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Dec. 4, 1926, Serial No. 152,587. Renewed Mar. 5, 1931. 3 Claims. (Cl. 59—86.)



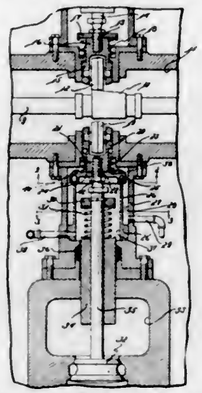
1. A clevis for connecting a small link of a railway brake chain with an end of a brake operating device, said clevis comprising a plate having an inner surface for fitting against the surface of said device and parallel to the plane of an end link of the chain, a pin carried by said plate and extending at substantially right angles thereto for extending through said device, a second pin also extending at approximately right angles to said plate for extending through said link of the chain, a second plate having perforations to receive said pin, said second plate adapted to lie flat against said device and means on the pins for holding said second plate in parallel relation to said chain link, said plates being provided with reinforcing flanges extending longitudinally thereof.

1,805,806. EXPANDING REAMING OR CUTTING TOOL. STEWART L. CAMPBELL, Berkeley, and JOHN GRANT, Los Angeles, Calif.; said Campbell assignor to said Grant. Filed Mar. 7, 1930. Serial No. 434,034. 6 Claims. (Cl. 255—74.)



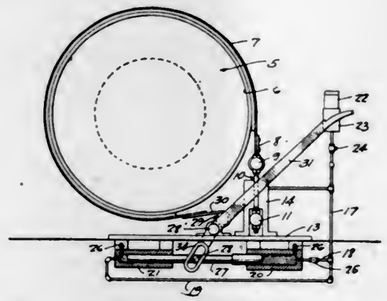
1. In an expansive tool of the character described, a mandrel, a plurality of carrier eccentrics mounted on the mandrel, at least one of said eccentrics being rotatable on the mandrel and rotatable with reference to the remaining eccentrics, wall contacting elements carried by the several eccentrics, and stop means to limit the relative rotation between the eccentrics comprising recesses in some of the eccentrics and stop lugs on the others which enter said recesses.

1,805,807. VALVE MECHANISM OIL JACKET. CHARLES COULOMBE, Detroit, Mich. Filed Apr. 17, 1930. Serial No. 445,013. 7 Claims. (Cl. 121—167.)



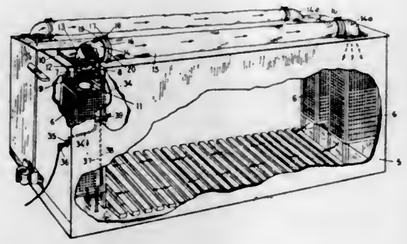
5. In combination: an engine having a steam chest communicable through a port with a cylinder; a lubricant chamber positioned above said steam chest; a cam shaft rotating in said lubricant chamber; a valve for closing said port; a spring for normally retaining said valve in closed position; cams on said cam shaft; a push mechanism projected through said steam chest and operable through engagement with a cam on said cam shaft for moving said valve to open position; a cylinder positioned in embracing relation to a portion of said push mechanism positioned above said steam chest to provide a condensate chamber for reception of condensate resulting from steam escaping thereinto from said steam chest; and a conduit for delivering condensate from said condensate chamber; a peripheral boss on said cylinder adjacent its lower end; a cylindrical neck concentrically arranged in embracing relation to said cylinder and closely engaging at its inner surface the periphery of said boss, the upper portion of said cylinder being spaced from said neck to provide an escaped lubricant receiving chamber for reception of lubricant escaping from said lubricant chamber around said push mechanism.

1,805,808. BOOSTER BRAKE DEVICE. ROLAND R. CAUM, Whittier, Calif. Filed Feb. 12, 1930. Serial No. 427,721. 15 Claims. (Cl. 188—151.)



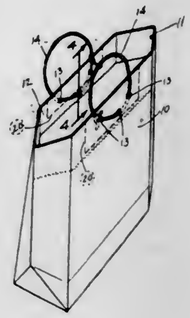
1. A brake mechanism comprising a brake drum, a brake shoe for said drum having a live end and a dead end, operating means secured to the live end of said shoe to apply the shoe to said drum; a fluid transmission system including an expansible chamber operator secured to the dead end of said brake shoe to cause displacement of fluid in the chamber of said operator on movement of the dead end of said shoe, an expansible chamber booster, fluid transmission means connecting the chambers of said operator and said booster, said booster being connected to said operating means to aid the application of the shoe to said drum.

1,805,809. COOLING APPARATUS. FRED JOHN DAY, Los Angeles, Calif. Filed Apr. 1, 1929. Serial No. 351,584. 2 Claims. (Cl. 62—24.)



1. In apparatus of character described, in combination, a car body having ice bunkers at opposite ends, a fabric tube adapted to be detachably mounted upon the top of said car to form a portion of means for circulating air through said bunkers, and means within said tube to maintain it in diametrical extension while permitting its longitudinal collapse.

1,805,810. PAPER SHOPPING BAG. WALTER H. DEUBENER, St. Paul, Minn. Filed Nov. 11, 1929. Serial No. 406,251. 2 Claims. (Cl. 229—54.)



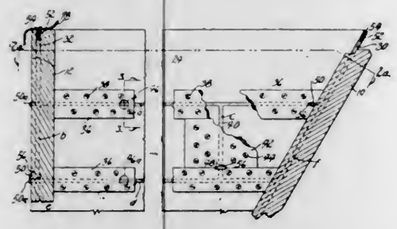
1. A paper shopping bag including a reinforced mouth and a substantially independent flexible complete loop forming handle therefor at each side, said loop extending in opposite directions through successive openings, there being at least three openings arranged substantially upon the arc of a circle the chord of which extends between the outer most openings, the bag having at least one loop receiving intermediate opening and positioned upon the opposite side of said chord from the mouth of the bag and an appreciable distance from said chord but not appreciably beyond the biscetors of the base angles of an inverted equilateral triangle, the sides of which are equal to the length of said chord and the base of which is constituted by said chord.

1,805,811. CIGARETTE PACK OPENER. AXEL P. DE VEGA, Boston, Mass. Filed Jan. 16, 1929. Serial No. 332,950. 6 Claims. (Cl. 131—59.)



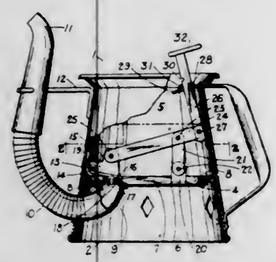
1. A cigarette pack opener of the character described comprising a thin flat blade of uniform thickness of a maximum width materially exceeding the thickness of a pack and converging at one end and of a length greater than the width of the package to provide a handle, operable to enter the pack between the ends of the cigarettes and the end of the enclosed wrapper and upon endwise movement selectively to cut a part or the whole of said end from the side walls of the wrapper.

1,805,812. BOAT SEAM SEALING METHOD. ARTHUR R. DE WITT, Harbor Springs, Mich., assignor of one-half to Carl L. Wright, Harbor Springs, Mich. Filed Feb. 24, 1930. Serial No. 430,499. 9 Claims. (Cl. 9—6.)



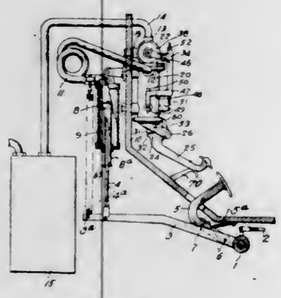
1. A boat seam sealing method comprising the construction of a boat with channeled seams, the forcing of heated air thru the seams and the forcing of a sealing compound into the seam at one point under sufficient pressure to force the compound throughout the length of the seam.

1,805,813. OIL MEASURE. HAROLD B. DONLEY, Columbus, Ohio, assignor to The Columbus Auto Brass Company, Columbus, Ohio, a Corporation of Ohio. Filed June 18, 1929. Serial No. 371,872. 1 Claim. (Cl. 221—16.)



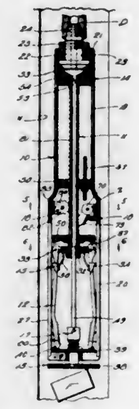
In a liquid measure, a body, a wall disposed within said body and serving to define the bottom of a liquid measuring chamber, said bottom being formed to include a diametrically extending level portion having a discharge opening at one end thereof, inclined portions sloping toward said level portion and a valve for opening and closing said discharge opening.

1,805,814. FLUID PRESSURE CONTROL. HERBERT U. DURANT, Los Angeles, Calif. Filed Mar. 5, 1929. Serial No. 344,191. 5 Claims. (Cl. 303—54.)



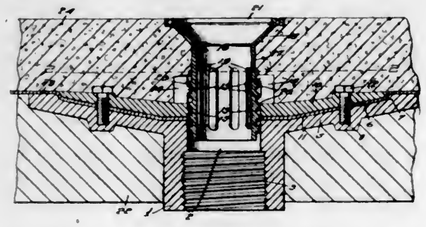
1. Pressure regulating means comprising a piston, a rotary valve adapted for oscillation to open or close the valve, the valve when open being adapted for pressure discharge to shift the piston in one direction, means for yieldably resisting said shifting of the piston, means for moving the yieldable means so as to oppositely shift the piston and adjust the tensioning of the yieldable means, and means for oscillating the valve for respectively closing and opening the valve by shifting the piston in said first mentioned direction and in said opposite direction.

1,805,815. FISHING TOOL. JOSEPH G. FITZPATRICK, Anaheim, Calif. Filed Mar. 5, 1930. Serial No. 433,268. 20 Claims. (Cl. 294—88.)



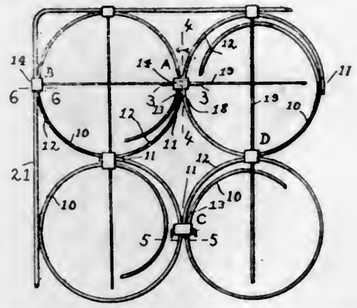
1. A tool of the character described including, gripping arms, means for normally urging the arms radially outward, fluid pressure means for operating the arms downwardly, means for moving the lower ends of the arms inwardly during downward movement, and releasable control means normally holding the arms against movement.

1,805,816. FLOOR DRAIN FIXTURE. WELLS S. FLEMING, Portland, Oreg. Filed Dec. 15, 1928. Serial No. 326,386. 1 Claim. (Cl. 285—37.)



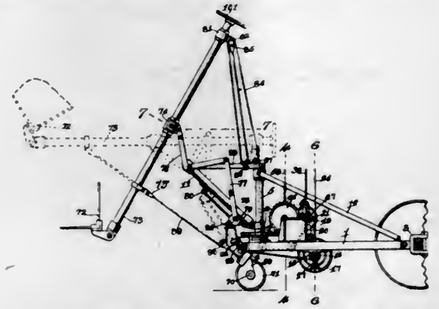
In a floor drain, a body having a tubular bore and an integral lateral flange, a plate formed with an opening to register with said bore, said body having a recess to receive the edge of said plate, a sheet of water-proofing material arranged between the plate and body, spaced studs rising from said plate at the edge of the opening therein, a pair of said studs being in diametrically-opposed relation and formed wtih segmental threads, the bore of the body being formed with corresponding threads, a drain section adapted to fit within said bore, said drain section being formed with diametrically-opposed segmental threads to cooperate with the threads of the studs and bore to secure and permit fine adjustment of the drain section, the relation of the threads on the drain section and studs permitting free vertical movement of the drain section when such threads are not in registry.

1,805,817. SPRING CUSHION CONSTRUCTION. WILLIAM B. FOSTER, Utica, N. Y., assignor to Foster Brothers Manufacturing Company, Utica, N. Y., a Corporation of New York. Filed Aug. 22, 1929. Serial No. 387,634. 3 Claims. (Cl. 5—275.)



2. In a spring cushion construction, the combination of a pair of adjacent coiled springs one of which has the extremity of its end coil free of the overlapping portion of said end coil and provided with a two-sided hook, an open-ended stirrup having two legs, said legs straddling the said hooked extremity and the adjacent portion of the end coils of both springs, and a locking wire extending transversely of the stirrup and through the legs of said stirrup beyond the wires of said springs and between the sides of said hook, and closing the opening of said stirrup, whereby the wires of said springs are retained in said stirrup, contact of the sides of said hook with said locking wire preventing endwise movement of the hooked extremity from the said locking wire while the base of the stirrup holds the connecting part of the hook closely upon said locking wire.

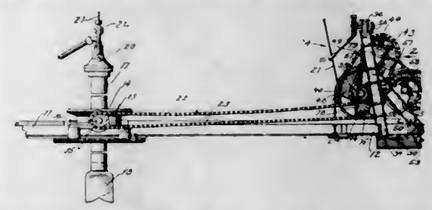
1,805,818. MANURE LOADER. RAYMOND H. FRISBIE, Kewaunee, Wis. Filed Jan. 20, 1930. Serial No. 422,172. 3 Claims. (Cl. 214—1.32.)



1. A device of the class described including a traction supported frame, an upright carried thereby, means for imparting rotating movement to said upright, an inclined supporting member connected with the upright, a bell crank at the outer end of the inclined supporting member, a movable arm pivotally mounted on one end of the bell crank, a fork member carried by one end of said arm and normally disposed in a lowered position, means for raising the fork supporting end of said arm and means for returning said arm to its normal position.

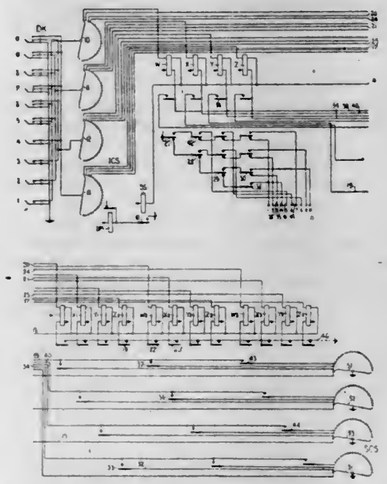
1,805,819. TWO-SPEED ROTARY DRIVE. EDWIN W. GOESER, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Oct. 11, 1928. Serial No. 311,731. 5 Claims. (Cl. 255—19.)

1. In combination: a derrick structure having a base and a rotary table; a plurality of draw-works uprights secured to said base at their lower ends and to the derrick at their upper ends; a rotatable drum rotatably supported by certain of said uprights; a line-shaft mounted on certain of said uprights above said drum; drum-drive means connected to said line-shaft and said drum; a jack-member rotatably supported by certain of said uprights near said base and operatively connected to said table;



jack-member operating-means for operatively connecting said line-shaft and said jack-member; a counter-shaft rotatably supported outside said derrick in a lower plane than said line-shaft and adapted to be driven by a prime mover; high-speed drive-means connected to said line-shaft and said counter-shaft; and low-speed drive-means connected to said line-shaft and said counter-shaft.

1,805,820. TELEPHONE SYSTEM. PERCY FRANK GUNNING, Liverpool, England, assignor to Associated Telephone & Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 25, 1929, Serial No. 349,604, and in Great Britain May 23, 1928. 5 Claims. (Cl. 179—90.)

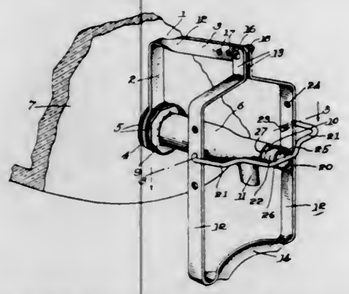


1. In an arrangement for controlling the operation of an impulse sender, a plurality of relay groups, means for operating said relay groups in turn to record successive digits of a number, and means whereby one of said relay groups controls the operation of the sender to transmit all the digits recorded.

1,805,821. AUTOMATIC FAUCET OPENING ATTACHMENT. VIRGIL B. HAIG, Los Angeles, Calif. Filed Sept. 4, 1928. Serial No. 303,887. 7 Claims. (Cl. 251—117.)

1. An automatic faucet opening attachment for faucets of the push button type, comprising fixed supporting means adapted to be secured to the outside of the faucet structure, lever means pivotally mounted on said supporting means and provided with a thrust-receiving member extending in position to be engaged by, and to receive an

inward thrust from, a receptacle brought into a position beneath the faucet outlet; actuating means in position to engage and exert inward pressure upon the push button of the faucet; and link means connected at the for-



ward end to said actuating means and pivotally connected at the rear end to said lever means at a position intermediate the thrust-receiving member and the axis of pivotal support of the lever means.

1,805,822. VEHICLE TOWING DEVICE. FRANK HANSES, Glenview, Ill. Filed Feb. 18, 1930. Serial No. 429,431. 6 Claims. (Cl. 280—33.9)



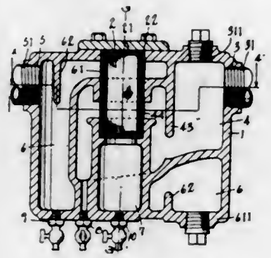
1. A towing device for motor vehicles comprising a draft member dimensioned and arranged for extending lengthwise of the vehicle frame; guide bearings for said draft member adapted to be mounted n the vehicle frame toward the front and rear ends thereof, stops carried by the draft member; springs arranged for co-operation with said stops respectively in the opposite longitudinal movements of the draft member through said guide bearings and to react between said stops and the respective guide bearings, the draft member being arranged at its opposite ends for towing connection with another vehicle.

1,805,823. DOLL EYE-BULB. SAMUEL HEILWEIL, New York, N. Y., assignor of one-half to Abraham Messer and one-half to Robert B. Messer, Brooklyn, N. Y. Filed Apr. 11, 1930. Serial No. 443,310. 5 Claims. (Cl. 46—40.)



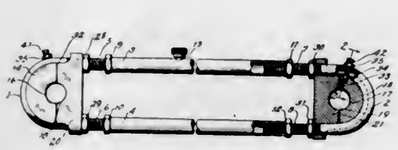
1. In combination with a doll's head, having openings at the eyes, eyeball members within the doll's head and behind said openings and consisting of electric bulbs with translucent eye-forming members on their fronts, sockets supporting said electric bulbs, a bracket supporting said sockets and pivotally mounted at its top end, a contact finger depending from said bracket and engageable with a stationary contact, an electric circuit including said lamps and contacts, and adjustable means for changing the center of gravity of said bracket and parts thereon for gravity control of said contact finger to close the circuit at desired positions of said doll's head.

1,805,824. AIR FILTER. LEO B. HENDRICKSON, Battle Creek, Mich., assignor to Union Steam Pump Company, Battle Creek, Mich. Filed Aug. 23, 1929. Serial No. 388,021. 2 Claims. (Cl. 183—66.)



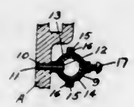
1. In an air filter, the combination of an outer shell, a central cylindrical screen chamber with a cover at one end thereof and a collecting well at the other, a cylindrical screen scroll therein, an annular intake chamber with an intake connection and surrounding and connecting with said screen chamber and connected thereto by an annular port, and an annular outlet chamber having outlet connection, said outlet chamber surrounding and communicating with a part of said screen chamber and connected thereto by an annular port.

1,805,825. ADJUSTABLE CONNECTING ROD. WALLIE HILLS and FRED W. HILLS, Ashton, Kans., assignors of one-third to Althelbert A. Fisk, Hutchinson, Kans. Filed Apr. 11, 1930. Serial No. 443,337. 5 Claims. (Cl. 74—47.)



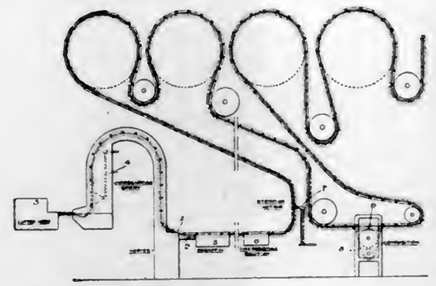
1. A connecting rod comprising a continuous hollow loop-shaped reservoir, bearings at the ends of the loops in ported communication with the reservoir and valves normally closing the ports, movable to uncover the ports upon movement of the connecting rod.

1,805,826. MOTOR LUBRICATING DEVICE. ROY E. LANGMACK, Minneapolis, Minn. Filed Jan. 14, 1929. Serial No. 332,377. 2 Claims. (Cl. 184—18.)



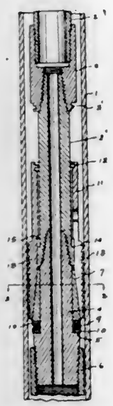
1. A device for connecting a lubricant pressure pipe to the cylinder of an internal combustion engine, comprising a tubular nipple secured in the cylinder and having an accurate head to receive the pipe, a cap member releasably secured to and complementing the head member to retain the pipe, brackets mounted on the engine, to support the pipe and for urging the same toward the cylinder to insure retention of the nipple therein.

1,805,827. PROCESS OF MAKING MATCHES. CLARE K. LIGHT, Oswego, N. Y., assignor, by mesne assignments, to The Diamond Match Company, a Corporation of Maryland. Filed July 30, 1930. Serial No. 471,631. 6 Claims. (Cl. 144—60.)



1. A process of making matches comprising applying wax to a portion of a splint at one end of the latter, then applying a free-flowing fire-resisting material to such portion, then blowing the material from such portion to and upon the unwaxed part of the splint, and finally applying match composition to the free end of such waxed portion.

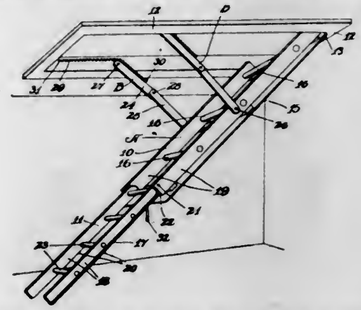
1,805,828. SPEAR. GEORGE A. LOWREY, Pelly, and WALTER F. HALL, Goose Creek, Tex. Filed July 19, 1927. Serial No. 206,974. 3 Claims. (Cl. 294—96.)



1. A pipe puller including an operating stem having an annular external abutment, a sleeve-like downwardly flared mandrel on said stem and supported by said abutment, expansible pipe engaging means around the stem above the mandrel, releasable interengaging means carried by the stem and engaging means respectively, adapted, when engaged to hold said pipe engaging means out of cooperating relation with the mandrel, said pipe engaging means having a free longitudinal movement on the stem when said interengaging means are released, and antifriction means between said abutment and mandrel to facilitate the free rotation of the stem relative to the mandrel.

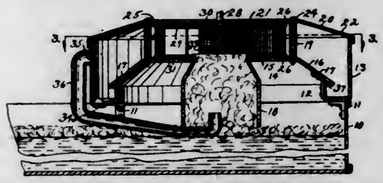
1,805,829. COLLAPSIBLE CONCEALING LADDER. REINHOLD B. MAERSCHKE, St. Paul, Minn. Filed Feb. 21, 1929. Serial No. 341,661. 5 Claims. (Cl. 228—50.)

5. A collapsible concealing ladder for buildings including, a frame and a closure hinged thereto, ladder portions one of which is fixed to said closure and the other slidable on said fixed portion, means for supporting said slidable portion upon said fixed portion slidably, and folding bracket means for supporting said closure and ladder portions in a manner to permit the same to be collapsed



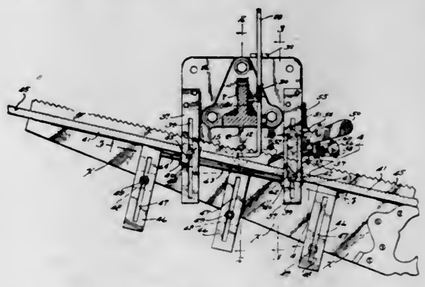
and folded into said frame when said closure is closed and to extend therefrom when said closure is open, and cam means for placing said slidable portion above said fixed portion.

1,805,830. FOAM DESTROYER. CHARLES DOREL MASON, Des Moines, Iowa. Filed May 20, 1929. Serial No. 364,508. 2 Claims. (Cl. 183—2.6.)



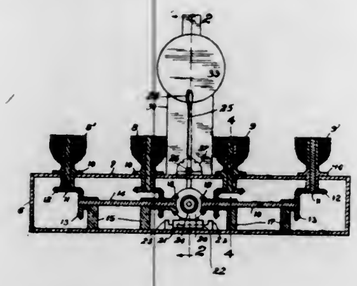
2. A foam destroyer comprising a screen, means for delivering foam to and through said screen at a high velocity for breaking the bubbles of the foam and condensing the same into a liquid, and means for returning vapors thus formed to said foam delivering means.

1,805,831. RE-TOOTHING MACHINE. VINCENT J. MATHIEU, New Bedford, Mass., assignor to Foley Saw Tool Company, Incorporated, Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 5, 1929. Serial No. 344,415. 5 Claims. (Cl. 76—29.)



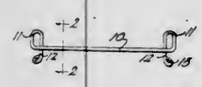
1. In a saw re-toothing machine, the combination with a tooth forming device including a movable die and means for operating the same, of a saw carrier, means for guiding the carrier for straight line movement past the die, means for imparting a step by step tooth spacing movement to the saw and carrier, and a clamping device for holding a saw on the carrier with the line, on which teeth are to be formed, parallel to the line of movement of the carrier, said carrier being adjustable in the plane of the saw and about the line of movement of the die to vary the pitch of the back edges of the teeth formed by the die.

1,805,832. SHOE SHINING MACHINE. JOHN SANGER MCDOWELL and WILLIAM CARSON, Midland, Ontario, Canada. Filed Apr. 25, 1930. Serial No. 447,236. 3 Claims. (Cl. 15—31.)



1. In a shoe shining machine, a supporting structure, two sets of brushes operably mounted thereupon, the brushes of each set being geared together for concurrent operation, a motor, means slidably supporting the motor, a driving element borne by the motor, a driven element carried by each brush set, and a hand lever fulcrumed on the aforesaid supporting structure and connected to the motor for shifting it to engage its driving element with one or the other of said driven elements.

1,805,833. CLIP. DANIEL MCLEOD, Jr., Dallas, Tex. Filed Jan. 6, 1930. Serial No. 418,956. 3 Claims. (Cl. 24—66.)



2. A clip comprising a straight elongated bar having its ends bent at an angle thereto and then rebent inwardly and parallel to the bent portion to form loops, the free end of said rebent portion being normally in contact with the bar and terminating at the side thereof opposite the loop.

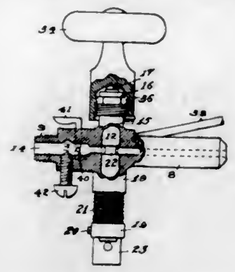
1,805,834. GLIDER PROPULSION DEVICE. GUSTAV A. MILLER, Seattle, Wash. Filed Sept. 16, 1930. Serial No. 482,233. 5 Claims. (Cl. 244—20.)



1. A glider propulsion device consisting of auxiliary wing members disposed below the fixed wings of a glider; said wings being pivoted at their adjacent ends to the glider body; a hand lever; a cross head disposed for vertical movement; guide for said cross head; linkage operatively connecting said cross head and both auxiliary wings; and linkage operatively connecting said cross head and the hand lever.

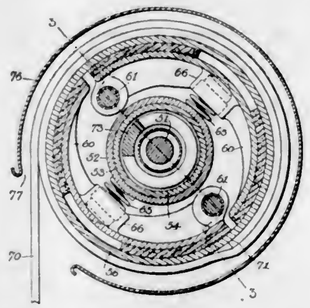
1,805,835. GAS APPLIANCE. ALBERT J. MILLIGAN, San Francisco, Calif. Filed Feb. 18, 1929. Serial No. 340,952. 8 Claims. (Cl. 126—52.)

1. In combination with a gas stove adapted to support a utensil; a gas burner; a service valve having a longitudinal hole therethrough and a transverse plunger slidable in said valve and having a passage registerable with said



hole; automatic means operated by said utensil for operating said plunger, and manual means for operating said plunger.

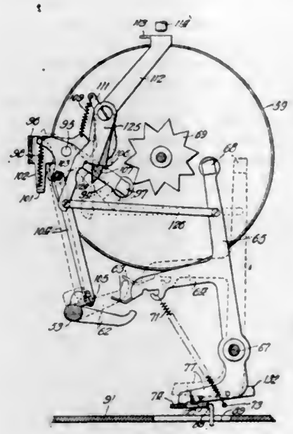
1,805,836. SHOCK ABSORBER. COURTNEY N. MITCHELL, Cleveland Heights, Ohio. Original application filed May 26, 1924, Serial No. 715,852. Divided and this application filed Nov. 2, 1928. Serial No. 316,772. 8 Claims. (Cl. 267—9.)



8. A rebound check for spring vehicles comprising in combination with a drum mounted rotatably on one of the two vehicle members between which the vehicle springs react; a spring connected to the drum for being tensioned by the rotation of the drum in one direction and for rotating the drum in the opposite direction by its reaction; means connecting the drum with the other vehicle member for rotating the drum in the direction for tensioning the spring by the separating movements of the vehicle members; a stud axle on which the drum is mounted for rotation; a pair of brake shoes pivotally carried by the stud axle for swinging about their pivots oppositely against the circumaxial surface of the drum, and means for pressing them thereagainst, the pivots of the two shoes being relatively remote in opposite direction from the axis of the stud axle and drum, both shoes trending from their pivots in the same circumferential direction, whereby the rotation of the drum in one direction causes both shoes to hug the circumaxial surface of the drum for increasing friction and its rotation in the opposite direction causes both shoes to be relaxed as to their pressure on the drum for diminishing friction.

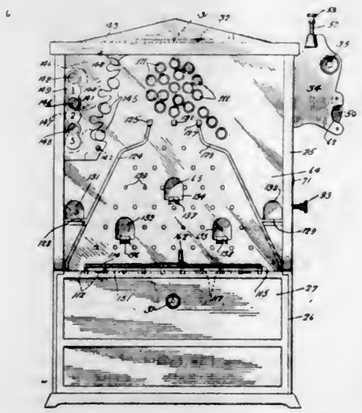
1,805,837. COIN-CONTROLLED VENDING MACHINE. FRED L. MILLS, Oak Park, Ill., assignor to Mills Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed July 12, 1928. Serial No. 292,237. 9 Claims. (Cl. 273—143.)

1. A machine comprising a plurality of rotatable reels, dispensing mechanism controlled by said reels, means for setting said reels in motion, automatic devices for stopping the rotation of said reels, and manually operable devices whereby the reels may be stopped independently of said automatic stopping means, said last-mentioned



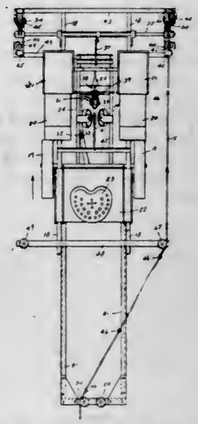
devices comprising a stop member on the reel, a spring-projected stop lever, a latch normally holding said lever out of action, and a member adapted to be actuated by the operator for releasing said latch.

1,805,838. TARGET PRACTICE VENDING MACHINE. FRED L. MILLS, Oak Park, Ill., assignor to Milk Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed July 16, 1928. Serial No. 292,927. 9 Claims. (Cl. 194—81.)



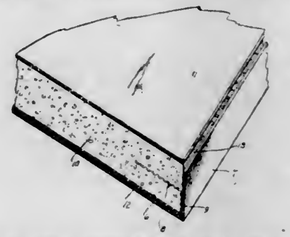
1. A machine of the class described, comprising a casing equipped with a coin slot and a coin receptacle, a plurality of targets visibly arranged within the casing and having designations associated therewith indicating rewards to be obtained or points to be scored, a driver whereby a coin after being inserted in said slot may be driven at said targets, the coins being retained in visible position outside said receptacle after being driven, means for transferring the coins from such position to said receptacle, and means operable by said last-mentioned means for changing the designations association with said targets.

1,805,839. PLANT-SETTING MACHINE. AUSTIN MORRIS, Greenwood, Ind. Filed Apr. 7, 1930. Serial No. 442,074. 3 Claims. (Cl. 111—3.)



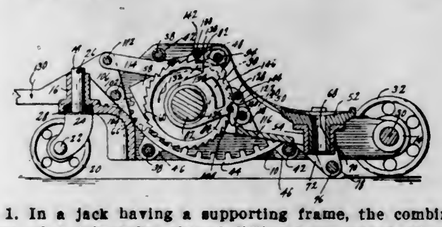
1. Plant-setting apparatus including a portable device adapted to be moved across a field, a receptacle carried thereby for the reception of a plant to be set, a hinged closure for said receptacle, and a reciprocable member automatically operable at predetermined intervals to engage said hinged closure for opening the same and to simultaneously discharge a plant from said receptacle.

1,805,840. REENFORCED AND PROTECTED WALL BOARD EDGE. GUSTAVE ADOLPH NEW, Port Clinton, Ohio, assignor to The American Gypsum Co., Port Clinton, Ohio, a Corporation of Ohio. Filed Jan. 20, 1930. Serial No. 422,035. 4 Claims. (Cl. 154—45.9.)



4. A plastic board comprising a body having a textile fabric strip embedded in the edge thereof, and paper coverings on opposite sides of the body, one of said coverings having a marginal flap folded against said edge and across said strip, said flap being attached to said edge by glue having a retarder mixed therewith.

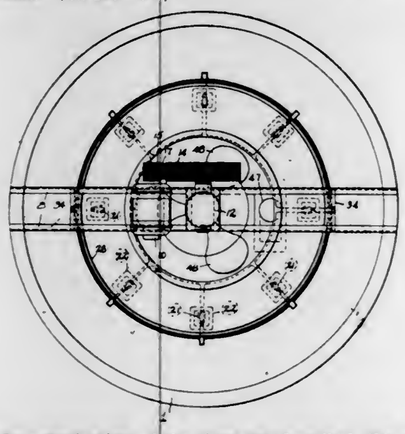
1,805,841. PLANETARY GEAR OPERATED LIFTING JACK. LEONARD D. NILSON, Wayzata, Minn., assignor to Marquette Manufacturing Company, St. Paul, Minn. Filed Dec. 5, 1927. Serial No. 237,739. 6 Claims. (Cl. 254—6.)



1. In a jack having a supporting frame, the combination of a triangular shaped lifting arm, means at one

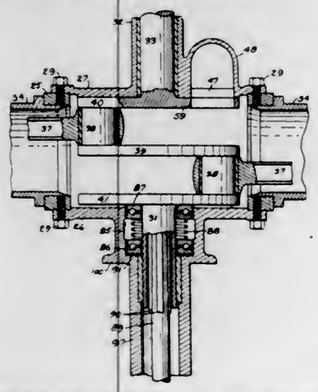
corner thereof for pivoting the lifting arm to the supporting frame, means at another corner for supporting a load engaging head and rotary means at the third corner of the lifting arm, means secured to the supporting frame with which the rotary means cooperates for moving the lifting arm relative to the frame when said rotary means is rotated and operating mechanism for giving said rotary means a step by step movement in either direction, said means comprising a shaft, a ratchet wheel mounted thereon, operating means oscillatably mounted on said supporting frame, and means pivoted on said shaft and operable from said operating means for rotating said ratchet wheel regardless of the position of the lifting arm relative to the supporting frame.

1,805,842. AGITATING MECHANISM. CECIL C. PECK, Lakewood, Ohio, assignor to The Hill Clutch Machine and Foundry Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 30, 1929. Serial No. 417,367. 9 Claims. (Cl. 259—97.)



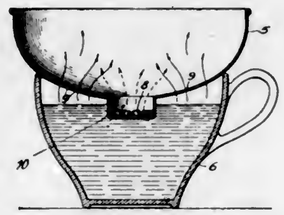
1. In a mechanism of the character described, the combination with a cylindrical chamber, of a tubular chamber having a restricted opening at the bottom thereof positioned coaxially therein, the wall of said tube around such opening progressively thickened to provide a smooth curve to said restricted opening, and means for producing a flow through said restricted opening from one of said chambers to the other.

1,805,843. INTERNAL COMBUSTION ENGINE. JAMES H. PIERCE, Bay City, Mich. Filed Nov. 5, 1928. Serial No. 317,212. 18 Claims. (Cl. 123—56.)



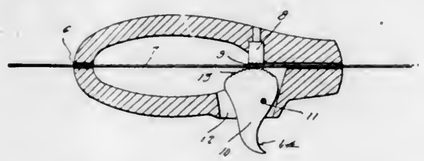
14. In an internal combustion engine of the two-stroke type, in combination, a crank case having an intake port in an end wall thereof, a crank-shaft rotatable in said crank-case, said crank-shaft having disc-like throws concentric to the main journals of said crank-shaft, a disc disposed between said end wall and the adjacent of said throws and normally closing said port, means for driving said disc from said crank-shaft, said disc having an opening therein co-operable with said port to control the admission of gas into said crank-case in timed relation with the angular relation of said crankshaft, said adjacent throw having an opening therein in alignment with said opening in said disc, a liner sleeve fitting both of said openings and secured to said adjacent throw, and fan blades of the axial displacement type carried in said liner for accelerating the flow of gas through said port.

1,805,844. VAPORIZER. CHARLES F. RUBSAM, Jackson, Mich. Filed June 14, 1929. Serial No. 370,807. 3 Claims. (Cl. 128—192.)



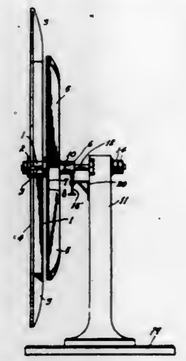
2. A vaporizing device of the character described, comprising a bowl adapted to set on the top of an ordinary vessel containing hot water, and provided at the central or bottom portion thereof with a depending pocket for holding a chemical, the margin of the bowl being adapted to rest loosely on the rim of the vessel and extending outwardly and upwardly from the rim-engaging part to form an enlarged chamber with an open top, the portion of the bowl between said rim-engaging part and the pocket being substantially flat and having a plurality of holes formed therein for directing steam from the vessel upwardly around the pocket and into the chamber.

1,805,845. TIE HANDLE. CALVIN P. ORR, Laona, Wis. Filed Jan. 31, 1930. Serial No. 424,960. 1 Claim. (Cl. 24—134.)



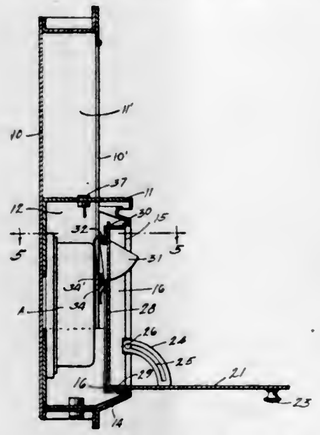
A device for facilitating the tying of wire about bundles consisting of an elongated hollow hand grip having a longitudinal passageway therethrough for receiving the wire to be grasped, the handle at one side thereof and adjacent to one end being provided with a longitudinally extending slot, a serrated gripping plug arranged in the interior of the handle on the opposite side thereof from said slot, and an eccentric gripping plate eccentrically pivoted within the slot and extending into the handle toward the plug and having its inner edge provided with outwardly disposed gripping teeth for coaction with said plug, and said plate having its outer end projected laterally from the handle through the slot and arcurately formed to provide a finger grip for increasing the gripping action of the inner end of the plate when the finger grip and the handle are simultaneously urged in a predetermined direction with respect to the wire.

1,805,846. LOOP ANTENNA. EARL F. POTTER, Glencoe, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 9, 1923. Serial No. 617,929. 6 Claims. (Cl. 250—33.)



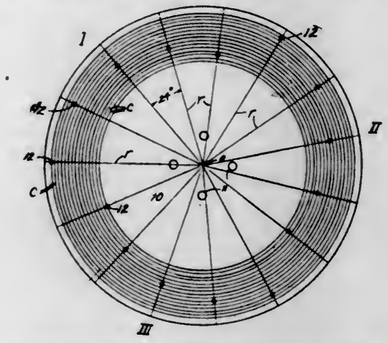
3. A device of the character described including a mounting plate, a support rotatably secured thereto, a loop aerial connected to said support, and an adjustable element secured to said support and associated with said loop aerial and adapted to be rotated relative thereto, means comprising a spiral slot and a finger engaging said slot adapted to move said adjustable element in a longitudinal direction when the said element is rotated.

1,805,847. TELEPHONE CABINET. CONRAD A. REETZ, Dallas, Tex., assignor to Atlas Metal Works, Dallas, Tex., a Corporation of Texas. Filed July 15, 1929. Serial No. 378,416. 2 Claims. (Cl. 312—112.)



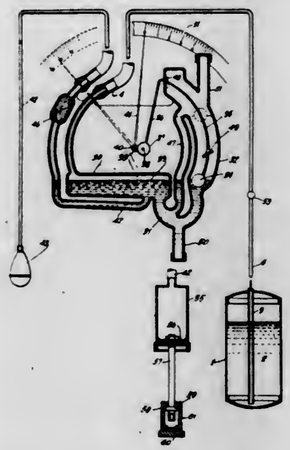
1. A telephone cabinet having an alcove at its upper portion and a compartment at its lower portion, the alcove having space for receiving a telephone stand, the compartment having space for receiving a bell box, a horizontal shelf mounted in the cabinet between the compartment and the alcove, a front frame surrounding the cabinet compartment below the shelf, the frame having openings to permit escape of bell vibrations, a casing extending inwardly from the frame, a removable panel mounted in the rear of said casing and concealing the bell box, a lamp hood mounted at an opening in the upper portion of the panel and extending outwardly therefrom whereby the rays of light are directed downwardly on the door when opened, and a door hinged at the base of said frame supported by brackets from the sides of the frame and serving as a desk when opened.

1,805,848. METHOD AND MEANS FOR SCANNING. ULISES A. SANABRIA, Louisville, Ky., assignor, by mesne assignments, to Western Television Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 7, 1929. Serial No. 369,169. 13 Claims. (Cl. 178—6.)



1. In apparatus of the class described an optical analyzing unit comprising a rotating disc provided with a plurality of apertures arranged in more than one spiral and so positioned that each aperture describes a separate circular path about the center of rotation.

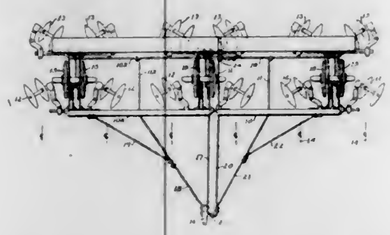
1,805,849. LIQUID LEVEL INDICATING SYSTEM. JACK D. SARTAKOFF, New York, N. Y., assignor, by mesne assignments, to Khetab Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 10, 1926. Serial No. 147,443. 7 Claims. (Cl. 73—54.)



1. In a liquid level indicating system, a pressure cylinder adapted to extend into the body of the liquid to be measured, in combination with an indicating instrument embodying a suitable casing, means for mounting the casing for pivotal adjustment on two distinct axes which are perpendicular to one another, a reservoir and a float chamber mounted within the casing and having a trapped connection with one another, a graduated scale associated with the casing, a pointer pivoted to the casing to traverse the scale, a float positioned within the float chamber, means operatively connecting the float with the pointer, whereby the rise and fall of liquid in the float chamber will cause the pointer to be operated, a body of liquid contained conjointly in the reservoir and float chamber, means for connecting the pressure cylinder with the reservoir, and means for introducing air under pressure into the

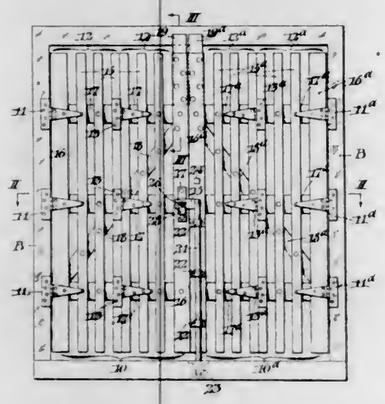
reservoir and pressure cylinder in sufficient amount to substantially balance the hydrostatic pressure of the liquid to be measured, whereby a corresponding liquid head is established in the float chamber and the pointer operated accordingly.

1,805,850. AGRICULTURAL IMPLEMENT. JOSEPH SCHERMULY, Wichita, Kans. Filed Sept. 15, 1928. Serial No. 306,122. 1 Claim. (Cl. 97—235.)



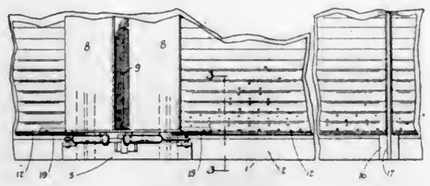
In an agricultural implement; a pair of right and left rectangular frame elements; a pair of wheel transport sets associated with one frame and a single set of wheel transport means associated with the second set; a hinge connection between the inner corner of one rectangular frame and the adjacent corner of the second frame as extended towards said corner element of the first frame; each frame having forwardly extending elements arranged in parallelism with and adjacent the line of draft of the composite machine, each forwardly extending element being rigid to its particular frame; said parallel extending elements having a hinged connection forwardly from the paired rectangular frames; and a draw bar element rigid to one of said forwardly extending elements and closely adjacent to said hinge.

1,805,851. GATE FOR DELIVERY VEHICLES. BERTRAM SEITZ, Philadelphia, Pa. Filed Sept. 1, 1928. Serial No. 303,378. 3 Claims. (Cl. 296—106.)



1. A double gate for delivery vehicles comprising opposing components each including interhinged sections adapted to close with their swinging edges engaging, the meeting edges of the respective components carrying limiting stops at their upper ends offset to contact the top of the vehicle body so that the gate closes flush with the back end of said body.

1,805,852. LIQUID DISTRIBUTOR. ROBERT D. SIMPSON, Columbus, Ohio. Filed Mar. 21, 1929. Serial No. 348,961. 2 Claims. (Cl. 210—4.)



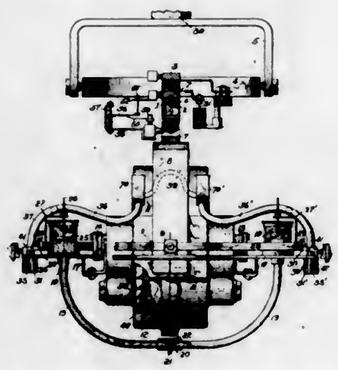
2. A liquid distributor for a filtering bed comprising a plurality of substantially horizontally positioned parallel V shaped troughs, said troughs having their side walls formed with perforations through which the liquid will percolate to the filtering bed arranged below said troughs, and a pair of flanged members arranged transversely of said troughs and forming the ends thereof serving also to support said troughs above said filtering bed.

1,805,853. APPLICATOR FOR VIBRATING MACHINES. WALLACE D. SMITH, Kalamazoo, Mich. Filed Mar. 16, 1929. Serial No. 347,475. 5 Claims. (Cl. 128—63.)



3. The combination with a vibrating machine, of a vibrating belt, an applicator consisting of a body part with parallel ribs, a pivotal back section supported thereby with elastic pads therebetween and a pivotal joint for maintaining the same elastically in position, and a back plate with means for embracing the said vibrator belt and maintaining the applicator in position.

1,805,854. NONPENDULOUS GYROCOMPASS. ELMER A. SPERRY, Jr., Brooklyn, N. Y., assignor, by mesne assignments, to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 8, 1919. Serial No. 336,690. 27 Claims. (Cl. 33—226.)



1. In a gyroscopic compass, the combination with a gyro-rotor and journal casing therefor, a frame in which

said casing is mounted for oscillation about a horizontal axis, a support for the frame, and means for suspending said frame for movement about a vertical axis comprising a ball freely resting on said support and on which said frame is pivotally suspended.

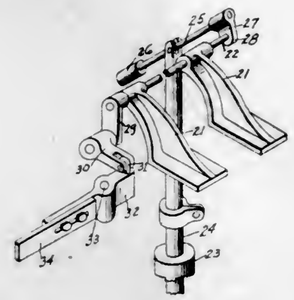
11. In a gyroscopic compass, a follow-up support, a sensitive element carried by said support, a plurality of contacts mounted on said support, a relatively movable cooperating contact pivoted on said support, means operating between said sensitive element and said movable contact for imparting movement thereto, and motive means controlled by said contacts for turning said support to follow the movements of said sensitive element.

26. In a gyroscopic compass, the combination with a gyroscope mounted with three degrees of freedom, of a liquid container mounted on either side of the gyroscope, means for gravitationally transferring liquid between the containers on tilting of the gyroscope whereby the north seeking property is imparted to the compass, differential air reaction damping means, and means whereby said damping means is brought into action by the liquid transfer between said containers.

1,805,855. CONCENTRATION OF ORES, MINERALS AND THE LIKE. JAMES L. STEVENS, Hayden, Ariz., assignor to Raconite Chemical Company, a Corporation of Arizona. Filed Jan. 15, 1929. Serial No. 332,741. 13 Claims. (Cl. 209—166.)

1. The method of concentration of minerals by flotation which comprises adding to a mineral pulp a reagent comprising an organic sulphur bearing product formed by reaction of a xanthate with disulphur-dichloride (S_2Cl_2), and then subjecting the pulp to a froth flotation operation in the presence of such reagent.

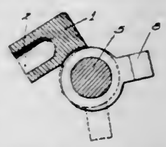
1,805,856. SCRAP REMOVING DEVICE FOR WOODWORKING MACHINERY. CARL F. STREIT and GEORGE J. KUEHNLE, Cincinnati, Ohio; said Kuehnle assignor to said Streit. Filed Feb. 15, 1929. Serial No. 340,315. 15 Claims. (Cl. 143—157.)



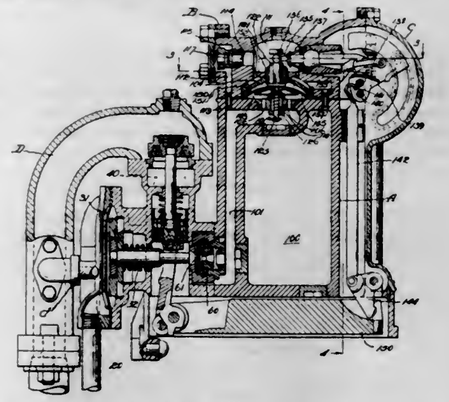
4. In combination with a sawing machine having a reciprocating table on which scraps of cut-off portions of work fall, means for wiping said scraps from said table, said means comprising pivoted wiping arms having extended ends movable through sectors over the surface of the table, and means operative incident to operation of said machine for actuating said wiping arms.

1,805,857. BATTERY TERMINAL CLAMP. WILLIAM H. TRIMBLE and JOHN N. CLARK, Dallas, Tex. Filed Feb. 4, 1929. Serial No. 337,351. 2 Claims. (Cl. 173—259.)

1. A battery terminal clamp comprising a body having a pair of ring shaped parts spaced apart with their openings in alignment and a curved wall connecting portions of the ring shaped parts together, a ring rotatably arranged between the ring parts and having a part contacting the inner face of the curved wall, said ring having an eccentric opening therein to receive the battery post and a handle connected with the ring and having an upwardly extending part.

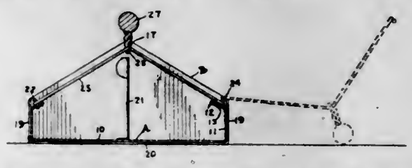


1,805,858. ACCELERATOR FOR DRY PIPE VALVE SPRINKLER SYSTEMS. EMIL TYDEN, Hastings, Mich. Filed Oct. 3, 1928. Serial No. 309,908. 7 Claims. (Cl. 169—17.)



1. In a fire extinguishing apparatus which comprises a sprinkler system having a construction for accelerating the action for admitting water to the sprinkler system characterized by a casing structure containing a chamber and passages affording chamber communication with the fluid pressure region of the system and having a movable element arranged to derive movement from change in the pressure derived from said fluid pressure region, the casing containing also a closed air chamber, the first mentioned chamber having a port of discharge into said closed air chamber at the upper part of the latter; means in the first mentioned passages restricting inflow to the first mentioned chamber relatively to the discharge flow therefrom to the second chamber, said first mentioned chamber and passages thereof to said discharge port being continuously dimensioned for free liquid flow relative to the restriction, and the course of said chamber and passages being continuously downward from the restriction to the discharge port, for preventing accumulation and trapping of liquid in said chamber and passages.

1,805,859. POULTRY FEEDING DEVICE. OLIVER C. WHITE, Gardena, Calif. Filed May 25, 1929. Serial No. 366,010. 2 Claims. (Cl. 119—61.)



1. A poultry feeding device, comprising a feeding trough having upstanding ends, and a guard adapted to

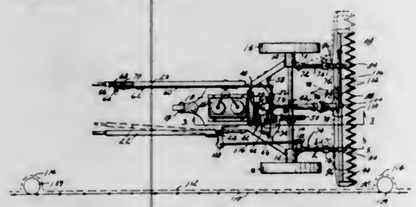
swing into and out of guard position, said guard being fabricated of spaced wires arranged transversely of the feeding trough and bent substantially in their center to form an angle, a wire connecting the apices of said angle and running substantially parallel with the trough thus forming a ridge, a second wire connecting the ends of said spaced wires on one side of said ridge and running substantially parallel with the trough, a third wire connecting the ends of said spaced wires on the opposite side of said ridge and running substantially parallel with said trough, said third wire extending through the said upstanding ends to form a pivotal connection for said guard.

1,805,860. COSMETIC POWDER CONTAINER. JAMES LESLIE YOUNGHUSBAND, Chicago, Ill. Filed Sept. 4, 1928. Serial No. 303,642. 6 Claims. (Cl. 132—83.)



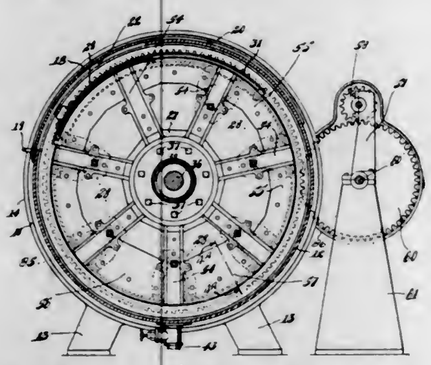
1. A container for loose powder comprising a receptacle for the powder, said receptacle having a plurality of shoulders formed in the walls thereof in different horizontal planes, and a plurality of flange members engaging said walls and resting against said shoulders with one flange to a shoulder.

1,805,861. FENCE ROW MOWER. JAMES H. BASS, Waukee, Iowa. Filed July 28, 1930. Serial No. 471,224. 8 Claims. (Cl. 56—25.)



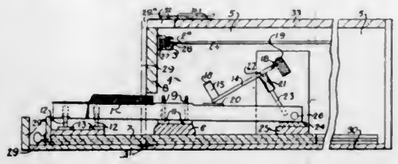
1. In a mower of the character disclosed, a wheeled frame, a mower member, mowing mechanism carried thereby, means for supporting the mower member transversely adjustable with respect to said frame and a lever for so adjusting the mower chamber.

1,805,862. WASHING MACHINE. CHARLES C. BATINA, Chicago, Ill. Filed May 31, 1928. Serial No. 281,653. 1 Claim. (Cl. 68—18.)



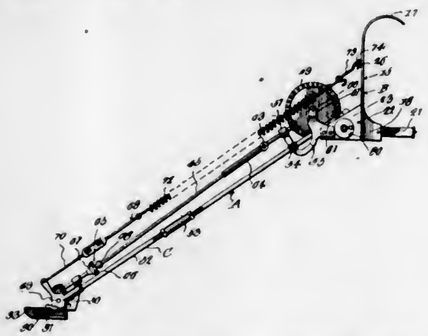
In a washing machine drum, journaled heads, said heads having radial enlargements for reenforcing the structure, a portion of the radial enlargements of said heads being of excess weight at one side of the axis of the drum whereby to determine the normal position of rest of the drum.

1,805,863. KEYBOARD OPERATED MUSICAL INSTRUMENT. ALICE VIOLET BENNETT, London, England. Filed Dec. 11, 1929, Serial No. 413,301, and in Great Britain Dec. 14, 1928. 8 Claims. (Cl. 84—403.)



2. A keyboard operated musical instrument comprising a box-like container, a series of sonorous bodies mounted within said container, a support slidably mounted within said container, a series of hammers carried by said support, a series of keys comprising a keyboard also carried by said support and adapted to operate said hammers, the arrangement being such that said support may be moved into a position in which the keyboard is located outside said container and in which the hammers when operated will strike said bodies and may also be moved into a position in which the keyboard is located within said container and said hammers operate in a portion of the container not occupied by said bodies.

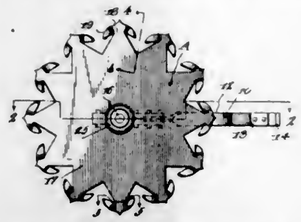
1,805,864. HAND MOWER. CARL R. BENZEL, Greeley, Colo. Filed Dec. 12, 1929. Serial No. 413,651. 4 Claims. (Cl. 30—11.)



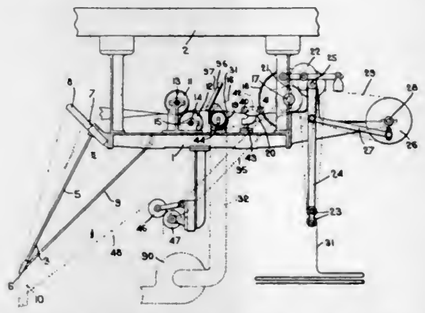
1. A mower comprising a body supporting device including a breast plate, means for attaching the breast plate to the wearer, a supporting bracket on the breast plate, a supporting rod rotatable in said bracket, a second bracket connected with the lower end of the supporting bar, a mower guard bar connected with the second bracket, a reciprocatory sickle bar carried by the mower bar, means for reciprocating the sickle bar from the frame bar, a worm rotatably carried by the supporting bracket, means for rotating the worm, means for locking the worm in an adjusted position, and a worm wheel keyed on the supporting rod meshing with said worm for rotating the rod, second bracket and guard bar upon the turning of the worm.

1,805,865. CULTIVATOR ATTACHMENT. CARL R. BENZEL, Greeley, Colo. Filed Dec. 23, 1929. Serial No. 416,046. 3 Claims. (Cl. 97—217.)

1. An attachment for cultivators comprising an attaching frame, an axle rotatably carried by said frame, a plurality of uniformly spaced ground working discs secured to the axle for movement therewith, a plurality of radially extending ground penetrating points on the periphery of each disc, and ground working blades carried by the opposite sides of each point.

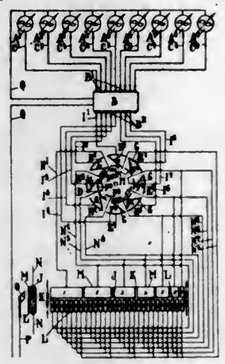


1,805,866. CLOTH-OPENING MACHINE. ALBERT BIRCH, Belmont, Mass. Filed Jan. 30, 1930. Serial No. 424,712. 8 Claims. (Cl. 26—1.)



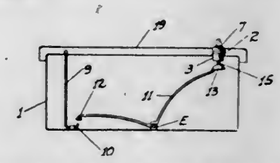
1. In a device of the class described, the combination with a supporting frame, of a triangular-shaped cloth-opening frame carried by the supporting frame and extending downwardly therefrom in an inclined direction, a belly-board at the base of the cloth-opening frame having a convex edge, means to draw the cloth to be opened upwardly over the triangular-shaped frame and belly-board, and detacking rollers for pulling a tacking thread from the cloth as it is fed to the cloth-opening frame.

1,805,867. TELEGRAPH SYSTEM. MANRICO COMPARE, Milan, Italy, assignor to S. A. Brevetti Italiani Esteri S. A. B. I. E., Turin, Italy. Filed Aug. 22, 1927, Serial No. 214,766, and in Italy Aug. 23, 1926. 6 Claims. (Cl. 178—22.)
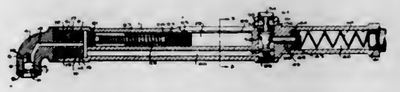


1. Method of transmitting signals consisting in successively conveying at a transmitting station groups of electrical impulses comprising a plurality of different frequencies upon a conveying means, each group corresponding to a signal and the frequencies of each group being conveyed into said conveying means, in collecting at the receiving station said different frequencies conveyed by said conveying means and in setting into action by means of said different frequencies a plurality of resonators of a set of resonators for controlling local control-circuits at the receiving station.

1,805,868. COMBINATION GAS-TANK CAP AND FEED SUPPLY LOCK. TONY S. GREER, Sacramento, Calif. Filed Feb. 10, 1930. Serial No. 427,134. 6 Claims. (Cl. 137—21.)



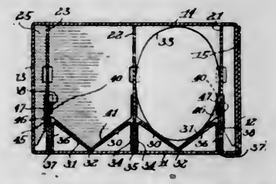
1. In combination with a tank having an outlet pipe leading therefrom, a filler tube thereon, and a cap for the tube; a closure for the tank end of the pipe, means between the cap and closure for selectively holding the latter in or out of closing relation with the pipe when the cap is in place on the tube, and means in corporated with said last named means to cause the closure to function to close the pipe whenever the cap is removed.

1,805,869. AIR PRESSURE GAUGE. LEON ARTHUR HALLSTEAD and HERBERT DAWSON, Buffalo, N. Y., assignors, by mesne assignments, to H. D. Taylor Co., Buffalo, N. Y., a Corporation of New York. Filed Nov. 24, 1924. Serial No. 752,052. 5 Claims. (Cl. 152—11.5.)



1. A combined air line nozzle and pressure gauge comprising an elongated casing having a tubular handle portion at one end for connection with an air line and provided with an air inlet valve chamber therein, a nozzle chamber at the opposite end of said casing, a longitudinal chamber opening at its outer end into the nozzle chamber, and an air passage paralleling the longitudinal chamber and connecting the nozzle chamber with the valve chamber, said handle portion being elongated and extending lengthwise of and from the longitudinal chamber; a valve operable in the valve chamber for controlling communication between the same and the air passage, a spring contained within the chamber of the handle portion for seating the valve, means for unseating the valve, a gauge mounted for movement lengthwise of and in the longitudinal chamber and operable in response to air pressure in the nozzle chamber, and a nozzle secured in and closing the nozzle chamber.

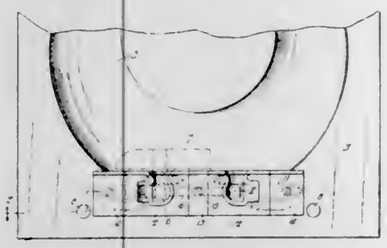
1,805,870. CONTAINER. HARRY A. INMAN, Newark, N. Y. Filed Aug. 22, 1930. Serial No. 476,988. 10 Claims. (Cl. 229—28.)



1. A container comprising a plurality of partitions movable longitudinally relative to each other from an expanded

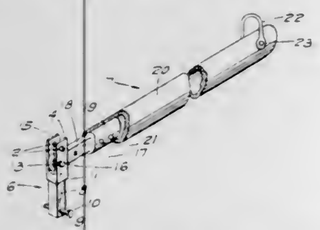
position spaced from each other to a collapsed position adjacent each other, an article supporting member connected to one partition and extending in a general direction toward a second partition, and means for supporting said member adjacent said second partition while permitting said member to move longitudinally relative to said second partition when the partitions are collapsed or expanded.

1,805,871. MOLD FOR TOILET SEATS. GEORGE JOHNSON, Muskegon, Mich., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Nov. 19, 1928. Serial No. 320,419. 3 Claims. (Cl. 18—34.)



1. In a device for molding a coating of plastic composition about a toilet seat core having projecting hinge lugs, the combination of a large mold for one side of the core, a pair of small molds for one side of the hinge lugs, adjustably secured to said large mold so that their position may be changed to correspond to the distance between the said lugs, a large mold for the other side of said core, and a single small mold for the other side of both of said lugs.

1,805,872. POLE UNLOADER. CLARENCE A. JORDAN and CHESTER C. COON, Oakland, Calif. Filed Jan. 11, 1930. Serial No. 420,138. 3 Claims. (Cl. 105—382.)

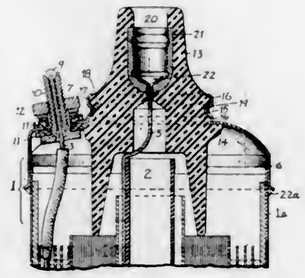


1. A pole unloader comprising an anchor member having a yoke formed at one end, the opposite end being adapted to fit into the stake pocket of a car, a stake member hingedly connected in said yoke, a locking pin, and aligning apertures in said yoke and said stake adapted to receive said locking pin.

1,805,873. METHOD OF PRODUCING POTASSIUM PHOSPHATE. OSCAR KASELITZ, Berlin, Germany. Filed June 17, 1929, Serial No. 371,722, and in Germany Nov. 19, 1928. 4 Claims. (Cl. 23—107.)

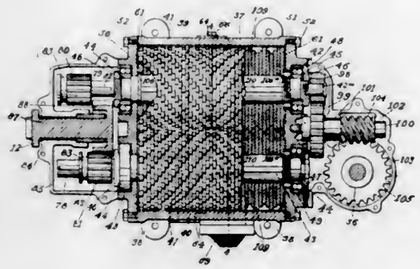
1. The process of producing mono-potassium phosphate from phosphoric acid and potassium chloride comprising heating potassium chloride with a quantity, in excess of the molecular, of dilute phosphoric acid having a concentration of at least 30% until the hydrochloric acid has been expelled and decomposing the acid salt resulting on cooling of the solution with so much water that monophosphate is separated out and a liquor is formed which is saturated with monophosphate (KH_2PO_4) and the double-salt $KH_2PO_4 \cdot H_3PO_4$.

1,805,874. TERMINAL CONSTRUCTION FOR IGNITION COILS. GUSTAVE J. LANG, Longmeadow, JOSEPH F. DRENNAN, Springfield, and BARTHOLD E. SCHLESINGER, Boston, Mass., assignors to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed June 1, 1929. Serial No. 367,682. 4 Claims. (Cl. 175—361.)



1. In an ignition coil having a housing, a high tension insulating cap secured in operative position by a portion of the body of the housing spun over said cap.

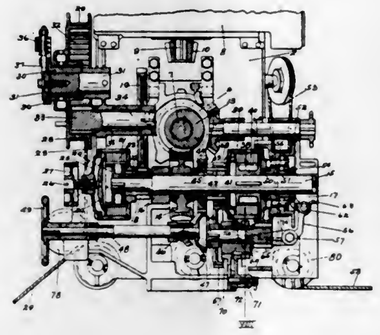
1,805,875. ROTARY ENGINE. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Feb. 13, 1917, Serial No. 453,715. Renewed Mar. 19, 1921. 15 Claims. (Cl. 121—70.)



1. In an engine of the class described, the combination with a pair of drums provided with a plurality of intermeshing zig-zag gear tooth pistons and corresponding grooves diverging in helical lines from the central plane of the drums and each extending over a portion of the circumference to the ends thereof, of a casing having a wall in close proximity on the inlet side only with the top of the gear teeth and cooperating therewith to produce sets of expansion chambers, a port in said casing for admitting fluid at the meeting point of the successive grooves and gear tooth pistons during the rotation of the drums, an open ended elongated exhaust port in said casing wall spaced from said admission port in the direction of rotation of the drums and extending longitudinally from end to end thereof, and clearance space at both ends of said drum auxiliary to said exhaust port as and for the purpose set forth.

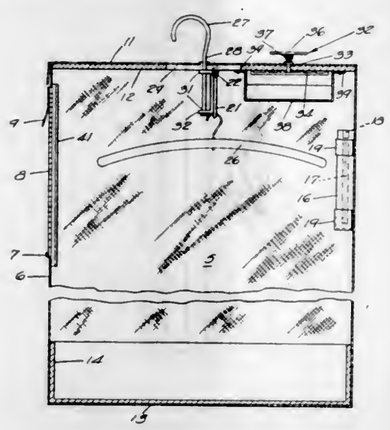
1,805,876. MINING MACHINE. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed June 8, 1928, Serial No. 644,164. Renewed Apr. 18, 1929. 9 Claims. (Cl. 262—30.)

1. In a machine of the class described, the combination with a main frame adapted to rest upon and slide in any direction over the mine floor, of an elongated kerf cutter projecting horizontally from said main frame, power devices upon the main frame adapted to actuate the kerf cutter, a flexible draft member adapted to be connected with a suitable abutment external of the machine, winding means upon the machine adapted to exert strain upon said draft member to move the machine towards said abutment at a relatively low speed, a second flexible draft member adapted to be connected with a suitable abutment external of the machine, winding means upon the machine adapted



to exert strains upon the last mentioned draft member to move the machine towards the last mentioned abutment, a high speed connection between said power devices and the winding means for said second draft member, an intermediate speed connection between said power devices and the winding means for said second draft member, and means for rendering either of said connections active as and for the purpose set forth.

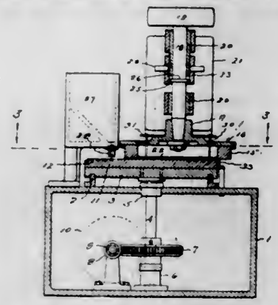
1,805,877. CLOTHES BAG. ABRAHAM J. LICHTIG, Oakland, Calif. Filed July 29, 1929. Serial No. 381,802. 6 Claims. (Cl. 206—7.)



5. In combination with a clothes bag having a portion thereof formed of an aromatic fibrous material, exteriorly operated means for abrading the inner surface of said fibrous material.

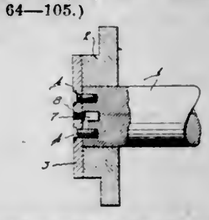
1,805,878. METAL BALL GRINDING MACHINE. JOHN J. MCINTYRE, Hartford, Conn. Filed Oct. 12, 1929. Serial No. 399,222. 2 Claims. (Cl. 51—130.)

1. A ball grinding machine comprising a rotatory metallic bed having a spiral groove in its face, mechanism for slowly rotating said bed, means for feeding balls into the inner end of said groove, means for directing balls out of the outer end of said groove, a rotatory abrasive



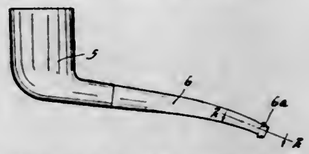
platen capable of vertical movement toward the bed, the axis of said platen being eccentric with relation to the axis of the bed, and mechanism for rapidly rotating said platen in the same direction as the rotation of the bed.

1,805,879. MECHANICAL OVERLOAD RELEASE. CHARLES A. MCKENNY, Detroit, Mich., assignor to The Joseph E. Barrett Co., Detroit, Mich., a Corporation of Michigan. Filed May 6, 1929. Serial No. 360,716. 5 Claims. (Cl. 64—105.)



1. The combination with a power-transmitting shaft and a loosely mounted sprocket thereon of means adapted to serve normally as a driving connection therebetween, said means comprising one or more metal bars held in alined transversely disposed slots cut in the end of the power-transmitting shaft and sprocket hub respectively, said driving connection being broken automatically when the safe-load carrying capacity of the driving means is exceeded.

1,805,880. MOUTHPIECE FOR PIPES. STEPHEN A. MERICKO, Hinckley, Minn. Filed Aug. 15, 1929. Serial No. 386,115. 5 Claims. (Cl. 131—12.)

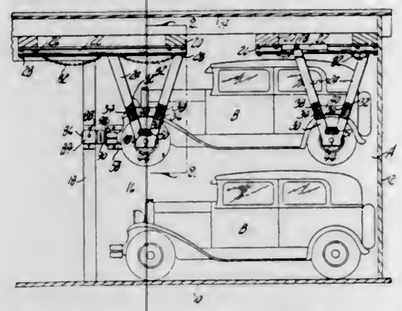


1. A mouth piece for pipes comprising, a stem having a smoke opening running therethrough and a tongue guard disposed in spaced relationship outwardly from the mouth end of said smoke opening to prevent the tongue of the smoker from coming in contact with the smoke opening, said tongue guard having an opening therethrough in direct alinement with said smoke opening.

1,805,881. OVERHEAD AUTOMOBILE DECKING FOR RAILWAY CARS. BERT A. MUSSELMAN, Des Moines, Iowa. Filed Sept. 8, 1930. Serial No. 480,468. 13 Claims. (Cl. 105—368.)

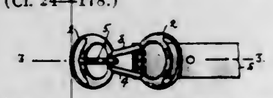
1. For use in a railway car or the like, decking of the character disclosed comprising suspension means hingedly

supported with respect to said railway car, the means of support being arranged along the upper side corners of said car, said suspension means being capable of swinging movement to an inoperative position against the roof of said car, thrust members mounted on said suspension members and means for securing said thrust members to the side walls of said car.



2. For use in a railway car or the like, decking of the character disclosed comprising suspension means hingedly supported with respect to said railway car, the means of support being arranged along the upper side corners of said car, said suspension means being capable of swinging movement to an inoperative position against the roof of said car, thrust members mounted on said suspension members and means for securing said thrust members to the side walls of said car, said thrust members being adjustable as to length.

1,805,882. BUCKLE. WILLIAM L. MYERS, Newark, and GEORGE D. HARRISON, Belleville, N. J., assignors to L. A. Myers, jr., Inc., Newark, N. J., a Corporation of New Jersey. Filed Sept. 18, 1930. Serial No. 482,666. 2 Claims. (Cl. 24—178.)



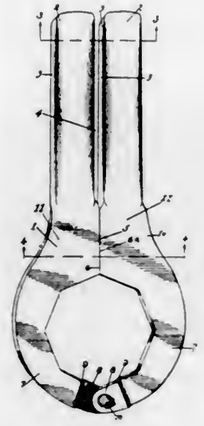
1. In a buckle, an integral, rigid frame comprising a pair of spaced strap engaging loops, a pair of spaced bars connecting the adjacent sides of said loops, the side between the connecting bars on one loop serving as a sewing bar for a strap, and a tongue hinged to the other loop on the side between the connecting bars with its free end adapted to bear against the opposite side of said loop.

1,805,883. METHOD OF PRODUCING BUILDING BOARD. CARL-JOHAN H. NORDENSWAN, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 24, 1928. Serial No. 256,819. 1 Claim. (Cl. 92—2.)

In a socket wrench, a pair of flat stampings or forgings each forming part of a socket, a meeting portion and one channeled handle portion, means for hinging the same together, and the opposing edges of the handle portions being spaced apart by the channeling so that when the socket forming portions are closed against each other, the opposing edges of the handle portions will be spaced from each other, thereby avoiding pinching of the hand of the operator.

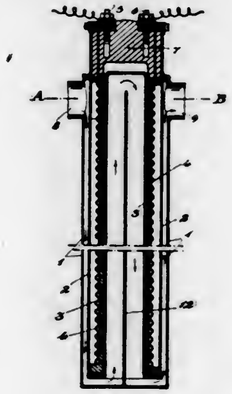
1,805,884. WRENCH. EWALD F. PAWSAT, Maysville, Ky., assignor to The Wald Manufacturing Company, Maysville, Ky., a Corporation of Kentucky. Filed Aug. 30, 1929. Serial No. 389,554. 1 Claim. (Cl. 81—78.)

In a socket wrench, a pair of flat stampings or forgings each forming part of a socket, a meeting portion and one channeled handle portion, means for hinging the same together, and the opposing edges of the handle portions being spaced apart by the channeling so that when



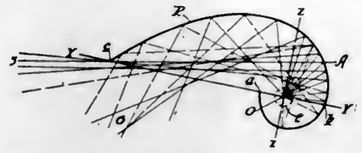
the socket forming portions are closed against each other, the opposing edges of the handle portions will be spaced from each other, thereby avoiding pinching of the hand of the operator.

1,805,885. ELECTRIC HEATER FOR LIQUIDS. EMILIO RINDERSPACHER, RAUL BERGARA, and CARLOS BERGARA, Buenos Aires, Argentina. Filed Jan. 20, 1928. Serial No. 248,159. 1 Claim. Cl. 219—39.)



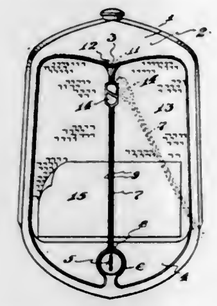
Electric heating apparatus for liquids, comprising in combination, a container comprising inner and outer concentric chambers for the passage therethrough of the liquid to be heated; electric heat generating means arranged between said inner and outer chambers and bisecting partitions arranged in one of said chambers extending from the bottom thereof to a point near its upper end, the partition in the other of said chambers extending from the upper end thereof downwardly to points near the bottoms of said chamber and so constructed and arranged as to compel the liquid to be heated to flow in close proximity to the walls of said chambers adjacent to said heat generating means throughout its passage through said container.

1,805,886. HEADLIGHT. CONRAD K. RIZER, New York, N. Y. Filed Oct. 31, 1930. Serial No. 492,392. 6 Claims. (Cl. 240—41.1.)



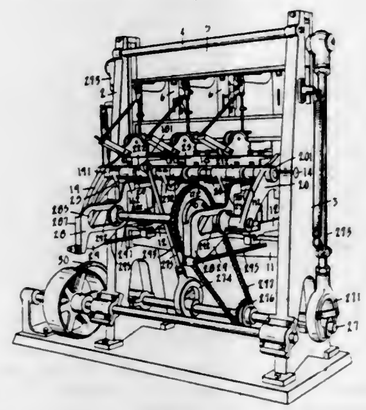
1. A light reflector of the character specified having a reflecting surface generated by the rotation of a continuously increasing parabolic arc in such a manner that the vertex of said arc describes a spiral.

1,805,887. RADIATOR BAR AND REENFORCING MEANS. ROBERT C. RUSSELL, Dallas, Tex., assignor to W. S. Shaw Company, Dallas, Tex. Filed Nov. 11, 1930. Serial No. 494,918. 5 Claims. (Cl. 293—54.)



4. As new article of manufacture, a bar capable of vertical securement to the top and bottom of a radiator shell and frictionally restrained against displacement at its points of securement.

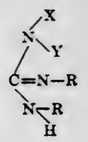
1,805,888. BOX MAKING MACHINE. ALBERT H. SCHMIDTKE, St. Joseph, Mich., assignor to St. Joseph Iron Works, St. Joseph, Mich. Filed Mar. 3, 1930. Serial No. 432,953. 7 Claims. (Cl. 1—10.)



1. In a machine of the class described, the combination of a suitable base, end uprights connected at the top, a reciprocating carrier head in guides on said uprights, staple drivers carried by the said head disposed to drive staples into a box therebeneath, end supports for receiving the box ends to support them while being stapled, an intermediate support for the central box partition, a fixed shaft between the said uprights, brackets at each end, a rockshaft carried by the said brackets, fixed jaws clamped to the said fixed shaft and with extension bearings embracing the rockshaft, slidable clamping jaws on said shafts to coact with the fixed jaws with springs for holding them yieldingly in open position, cam arms on the said rockshaft disposed to act upon the slidable jaws, cam rollers on said slidable jaws to coact with the said cam arms, an ejector head at each end of the machine with an ejector plunger guided for ejecting and controlling the movement of the said box ends, oblong cams on a suitable cam shaft carried by the said brackets in parallel relation to the rockshaft and fixed shaft, a slotted guide projection on each of the said ejector heads and having cam abutments for cooperating with the said cams, the said cams each being provided with a dwell to hold the box at rest while it is being clamped and stapled, a drive shaft, a gear on said shaft to drive the cam shaft at one half the rate of the drive shaft, eccentrics at each end of the drive shaft with connections for reciprocating the carrier head, and an intermediate eccentric on said drive shaft with a connection to said rockshaft timed to actuate the jaws and clamp the work while the same is being stapled.

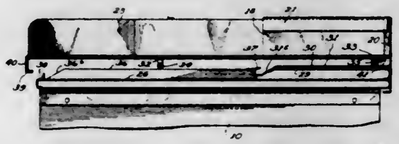
1,805,889. SUBSTITUTED GUANIDINE ALCOHOLS. WALTER SCHOELLER and HERBERT SCHOTTE, Berlin, Germany, assignors to the Firm Shering-Kahlbaum Aktiengesellschaft, Berlin, Germany. Filed June 21, 1926, Serial No. 117,569, and in Germany Jan. 7, 1925. 5 Claims. (Cl. 260—125.)

2. As a new product a substituted guanidine having the formula:



wherein R is a hydrogen atom, univalent hydrocarbon radical or an acyl group and the two R's may be the same or different, while X is a hydroxylated or alkoxylated alkyl group and Y a hydrogen atom or an alkyl group or X and Y form together a carbocyclic system, these products being bases capable of forming salts with acids and being decomposed by concentrated alkali.

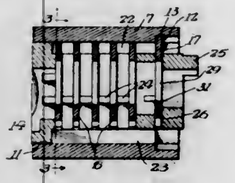
1,805,890. EXTENSIBLE DESK TOP. GEORGE W. SCHULZ, Cleveland, Ohio, assignor to Yawman & Erbe Manufacturing Co., Rochester, N. Y., a Corporation of New York. Filed Nov. 21, 1928. Serial No. 320,780. 5 Claims. (Cl. 45—90.)



1. An extensible furniture top construction comprising a fixed portion and a movable portion, an inclined flange on said fixed portion, a supplementary flange on the movable portion, guide means associated with said fixed portion, rollers carried by said movable portion and cooperating with said guides to cause the supplementary flanges to register when the top is in extended position,

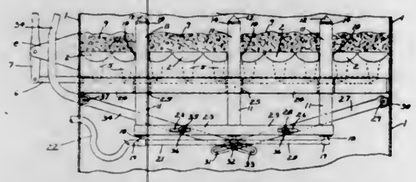
means for locking the inner end of the movable portion in extended position, said guide means causing the movable portion to cover the fixed portion when the top is in closed position.

1,805,891. LOCK. LYLE B. SHINN, Chicago, Ill., assignor to Chicago Lock Company, Chicago, Ill., a Corporation of Illinois. Filed July 19, 1930. Serial No. 469,083. 7 Claims. (Cl. 70—46.)



1. In a lock, the combination of a casing having a bore extending longitudinally therethrough, a plug rotatable in and removable from the bore and having formed therein a longitudinal slot for a key and a series of transverse slideways intersecting the slot, spring pressed substantially flat tumblers mounted slidably in the slideways and adapted to lock the plug against rotation in the casing, said tumblers being formed of metal stampings and having central slots therein through which the key may be inserted in order to shift the tumblers into an inoperative position, and tongues projecting outwardly from the face portions of the tumblers and lengthwise of the key slot and plug and arranged to engage and coact with parts of the plug to hold the tumblers in connected relation with the plug and prevent ejectment upon removal of the plug from the bore.

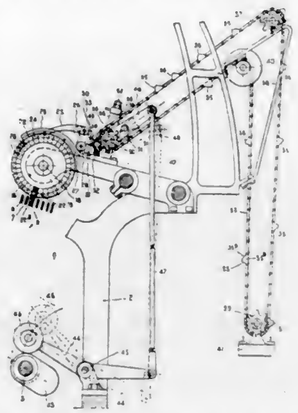
1,805,892. ADJUSTABLE AIR BLAST HEATER FOR LOCOMOTIVES. OSCAR H. STONE, near Dayton, and DAVID A. COOPER, Dayton, Ohio. Filed Jan. 18, 1930. Serial No. 421,837. 4 Claims. (Cl. 110—76.)



1. In a locomotive fire box including a series of grate bars mounted adjacent each other to support a bed of fuel, tubes formed with air discharge holes in their upper ends, vertically movable through said grate bars and fuel bed, lever means for adjusting said tubes to bring their air discharge ends a desired distance above the fuel bed, and means for delivering air under pressure to said tubes.

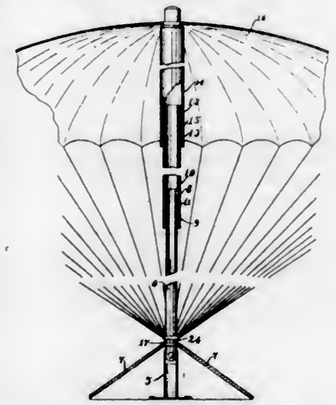
1,805,893. APPARATUS FOR KNITTING FULL FASHIONED HOSIERY. EDGAR J. THOMPSON, Montreal, Quebec, and RAYMOND H. HUBLER, Sherbrooke, Quebec, Canada, assignors to Canadian Silk Products Limited, Sherbrooke, Canada, a Corporation of Quebec. Filed May 28, 1928. Serial No. 281,246. 9 Claims. (Cl. 66—129.)

1. In a machine of the type described, reciprocatory thread carriers, an intermittently rotatable stepped abutment for varying the length of reciprocal travel of the carriers at predetermined course intervals, an endless chain, a series of spaced cam elements carried by said



chain, ratchet mechanism adapted and arranged to be intermittently actuated by said elements to turn said abutment, and means for driving said chain.

1,805,894. PARACHUTE. JOSEPH J. WAMPACH, St. Paul, Minn., assignor of one-half to Frank J. Wampach, Jordan, Minn. Filed Aug. 12, 1929. Serial No. 385,093. 2 Claims. (Cl. 244—21.)

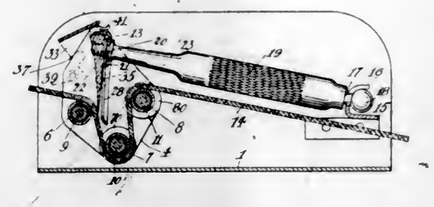


1. An aircraft parachute, comprising an extensible central frame member pivotally mounted on an airplane, each of the extensible portions of said frame having a shock absorbing member mounted between said frame member and the next extensible portion thereof to absorb the shock of opening thereof, the canopy of said parachute being connected to the outer portion of said extensible frame, the risers of said parachute being connected to said frame adjacent the point of pivotal support thereof, and a casing adapted to enclose said parachute and frame when in a folded collapsed position, said casing being split lengthwise and adapted to open to release the parachute therefrom.

1,805,895. SAFETY RAZOR. ALEC VERNON WATSON, St. Albans, England, assignor of one-half to Thomas Anderson Davis, London, England. Filed Apr. 7, 1928, Serial No. 268,243, and in Great Britain Apr. 22, 1927. 9 Claims. (Cl. 30—12.)

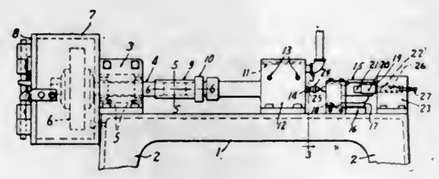
9. A safety razor comprising a hollow ground blade, a handle screwed at one end into a surface of said blade

and provided at the other end with locating means adapted for engaging a support, a clip seated on the back of



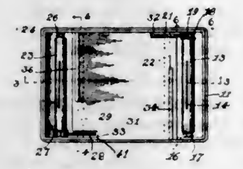
said blade and secured by the screwing in of said handle, and a spring biased blade guard supported by the clip so as to be swingable past the edge of the blade.

1,805,896. GRINDING WHEEL TESTING APPARATUS. HERMON G. WEINLAND, Springfield, Ohio, assignor to The Safety Grinding Wheel & Mch. Company, Springfield, Ohio, a Corporation of Ohio. Filed Mar. 21, 1928. Serial No. 263,484. 3 Claims. (Cl. 73—51.)



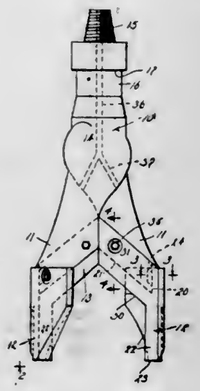
1. In a testing machine for grinding wheels, a grinding wheel mounting including a shaft for the wheel, an air motor having a shaft aligned with said wheel shaft, a flexible connection between said shafts, a speed indicating instrument having a shaft aligned with said motor shaft, and spring means for holding the same in uniform frictional engagement with said motor shaft.

1,805,897. RECORDING AND PROMPTING DEVICE. HARRY T. WILKINS, Philadelphia, Pa., assignor of one-half to Orville T. Bounds, Centralia, Ill. Filed Feb. 1, 1930. Serial No. 425,106. 4 Claims. (Cl. 281—7.)



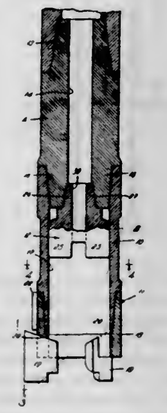
1. A recording and prompting device comprising a casing, a table within the casing, supply and receiving rollers journaled upon opposite sides of the table and provided with elements defining the width of the strip to be employed, and confining fingers juxtaposed to the table and attached at one end thereto and projected from opposite sides substantially paralell with the rollers and each stopping short of the side opposite its attachment, said fingers being spaced apart a distance greater than the width of the strip defined by the rollers.

1,805,898. WELL BIT. JESSE C. WRIGHT, Huntington Park, and LYNN F. BONNEY, Los Angeles, Calif., assignors to Wieman, Kammerer, Wright Co., Inc., a Corporation of California. Filed Oct. 1, 1927. Serial No. 223,340. 3 Claims. (Cl. 255—61.)



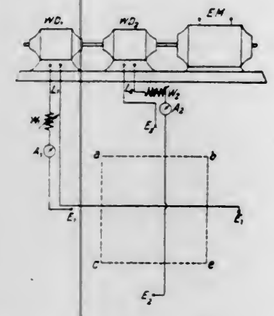
2. A well drilling bit including, a body, spaced legs projecting from the body, cutter units mounted on the legs having sockets receiving the lower end parts of the legs, and lugs on the cutter units fitting recesses in the said end parts.

1,805,899. WELL DRILLING BIT. JESSE C. WRIGHT, Los Angeles, Calif. Filed July 1, 1929. Serial No. 375,115. 4 Claims. (Cl. 255—61.)



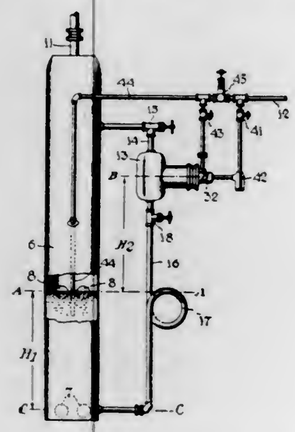
1. A well drilling tool including, an upper section having a longitudinal fluid passage, a tubular cutter detachably mounted on and projecting downwardly from the lower end of the upper section, and a core cutter closing the upper end of the tubular cutter and having a pin screw threaded into the lower end of the fluid passage and having a discharge fluid passage communicating with and of less diameter than the said fluid passage and discharging downwardly into the tubular cutter.

1,805,900. METHOD OF EXPLORING THE SUBSOIL. RICHARD AMBRONN, Gottingen, Germany. Filed Nov. 12, 1929, Serial No. 406,677, and in Germany Dec. 5, 1928. 5 Claims. (Cl. 175—182.)



1. Method of exploration of the subsoil comprising feeding it with alternating current under control of the form of oscillation ellipses of the field produced thereby and measuring the field of the ground currents.

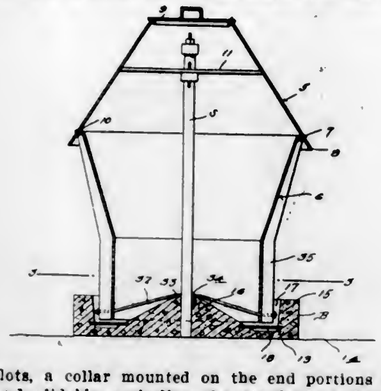
1,805,901. REFRIGERATION. JOHN G. BERGDOLL, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Nov. 19, 1929. Serial No. 408,363. 8 Claims. (Cl. 62—126.)



1. The combination with an evaporator, of means for maintaining a substantially constant liquid level therein, comprising a liquid containing manometer; a valve controlling the supply of liquid refrigerant to the evaporator; operating means for said valve responsive to the height of the liquid in said manometer; a pressure transmitting connection between said manometer and a point within the evaporator below the liquid level therein; and means for developing in said connection a vapor pressure at least equal to the head of the liquid refrigerant at said point.

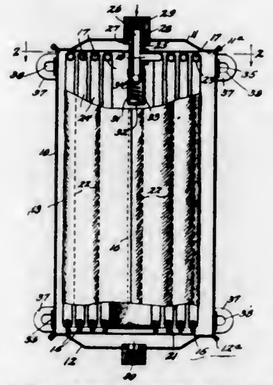
1,805,902. HOG FEEDER. LOUIS BIEL, Ridgeway, Iowa. Filed Feb. 26, 1929. Serial No. 342,846. 1 Claim. (Cl. 119—54.)

A feeder of the character described comprising a base, a vertical hollow standard mounted on the base having longitudinal slots in an upper portion thereof, an apertured cap on the upper end of the standard, a hanger suspended for vertical adjustment from the cap and depending therefrom into the standard, a rod mounted transversely on the lower end of the hanger and operable in



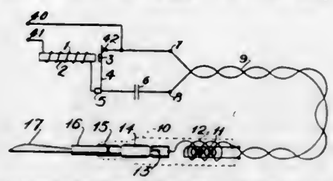
the slots, a collar mounted on the end portions of the rod and slidably encircling the standard, a horizontal bar slidable on the standard and resting on the collar, and a casing supported on the ends of the bar.

1,805,903. OIL FILTER. ARTHUR A. BULL, Detroit, Mich., assignor, by mesne assignments, to Handy Cleaner Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 23, 1928. Serial No. 294,738. 7 Claims. (Cl. 210—164.)



1. A filter of the character described, including in combination, a housing, a filtering bag wound into a spiral roll, means to suspend said bag within the housing and hold adjacent turns out of contact, said means conducting fluid to the interior of the bag throughout the full length of one spiral edge thereof, and means to conduct filtered fluid from the exterior of the bag.

1,805,904. ELECTROTHERAPEUTICAL DEVICE. CHARLES W. CARPENTER, Rockville Center, N. Y., assignor to Collins Development Corporation, New York, N. Y., a Corporation of New York. Filed July 10, 1929. Serial No. 377,264. 3 Claims. (Cl. 174—89.)



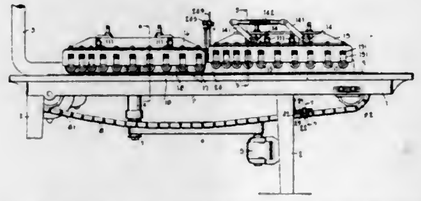
1. An electrotherapeutical device comprising, means for producing a plurality of alternating currents of variant high frequencies from a commercial current, a member comprising a partially exhausted envelope of vitreous material, a surgical instrument connected to said source of variant high frequency currents and means whereby said exhausted envelope is interposed electrically between said surgical instrument and said source of high frequency currents.

1,805,905. RELEASING THREADING DIE. THOMAS COTTER, Evansville, Ind. Filed Mar. 1, 1929. Serial No. 343,794. 3 Claims. (Cl. 10—94.)



1. In a releasing threading die, the combination with a die stock having a chamber for containing the die, of an expansible threading die located within said chamber and held in contracted, screw-threading condition by the walls of the chamber, said chamber being of a width permitting the die to bodily tilt therein and having a supplemental cavity or enlargement which permits the die to expand when said die is tilted, thereby to permit the die to open.

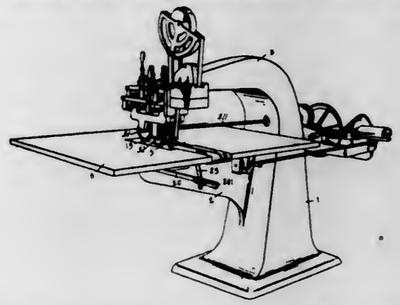
1,805,906. JOINTER. ALFRED A. DENNIS, Grand Rapids, Mich., assignor to Veneer Machinery Company, Grand Rapids, Mich. Filed Aug. 15, 1930. Serial No. 475,459. 11 Claims. (Cl. 144—90.)



1. In a jointer, the combination of a suitable bed, a jointer planer head on a vertical axis, an endless chain feed bed with means for driving the same on the bed of the said planer in proximity to the cutter head, yielding guide means for said feed bed on the cutter head side thereof, adjustable guide means for deflecting the opposite side of said feed bed to slightly curve the path of travel of the said feed bed, an adjustable presser feed roller member above the said feed bed opposite the said cutter head with yielding presser rolls therein, an endless belt conveyor around the said presser rolls, a clamp presser feed conveyor means in advance of the said presser feed roll comprising an adjustable clamp bar, spring pressed rollers carried thereby, parallel cam means for actuating the said clamp bar for clamping veneers against the said feed bed, an adjustable guide opposite the said clamp and feed means extending into proximity to the said cutter head, and a yielding table top opposite the said clamp means with springs for supporting the same above the level of the feed bed, the said table being provided with scale to set the work.

1,805,907. VENEER TAPING MACHINE. ALFRED A. DENNIS, Grand Rapids, Mich., assignor to Veneer Machinery Company, Grand Rapids, Mich. Filed Aug. 18, 1930. Serial No. 475,969. 5 Claims. (Cl. 144—279.)

1. In a veneer taping machine, the combination of a feed bed, a driven feed roll therein, feed bed presser rolls conical in form and disposed on converging shaft axles, spring pressed blocks therefor disposed in suitable sockets in the said frame, an adjusting lever for the springs of said blocks extending to the front of the said machine, an upper driven feed roll disposed in tangent relation to the spring pressed feed bed rolls in advance of the center line of their axes, presser rolls in advance of the said feed rolls, having screw thread spiral grooves thereon disposed

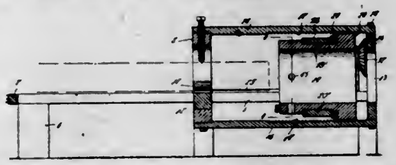


diagonally to converge toward the feed roll and disposed to engage the veneers each side of the tape, an auxiliary feed bed in advance of the said veneer taping machine, comprising a bed having a central dividing guiding rib, continuous conveyor rollers at front and rear of the means for adjusting the same, and a pair of continuous feed belts disposed at opposite sides of the said central dividing rib to operate in unison to advance veneers evenly and in matched relation to the said taping machine.

1,805,908. ELECTRICAL INDUCTIVE AND RESISTANCE HEATING DEVICE. EMIL FENDT and KARL SCHÖRO, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Dec. 19, 1929, Serial No. 415,346, and in Germany Dec. 28, 1928. 4 Claims. (Cl. 201—64.)

1. A heat-resisting electrical coil consisting of a layer of an insulating fibrous material, said insulating layer being impregnated with a cementitious substance containing a silicofluoride and an electrical conductor embedded in said layer.

1,805,909. PIPE FITTING APPARATUS. LOREN C. FENN and STUART DAVIS, Chinook, Wash. Filed Apr. 29, 1929. Serial No. 359,074. 3 Claims. (Cl. 10—89.)

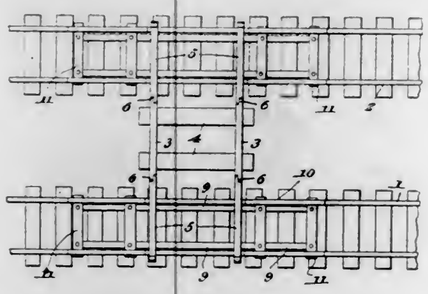


1. An apparatus of the class described comprising a clamp and a guide, a pair of bars connected to the clamp and to the guide and having opposed surfaces threaded, a cylinder having a threaded portion engaged in the bars, a cradle structure in which the cylinder is rotatably mounted, a slidable support for said cradle structure, means for supporting a tool in the cylinder for engaging a pipe held by the clamp, and means for rotating the cylinder.

1,805,910. TRANSFER MEANS FOR MINE CARS. EDWARD MARTIN HAWKINS, Glezen, Ind., assignor of one-half to Warren E. Pouder, Pike County, Ind. Filed June 21, 1930. Serial No. 462,906. 3 Claims. (Cl. 104—48.)

1. Means for transferring cars from one track to another track, comprising cross rails extending from one

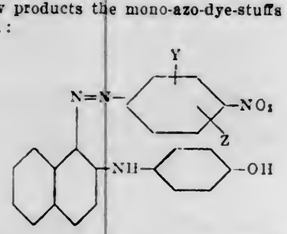
track to the other track, pairs of inclined rails connected to the aforesaid cross rails at both ends of the latter, and a transfer car adapted to travel on the cross rails, whereby



a car may be run up to the transfer car or run down from said transfer car onto either track without necessitating re-laying or shifting of the cross rails, said cross rails and inclined rails being connected together.

1,805,911. MONO-AZO DYE. WINFRID HENTRICH, Wiesdorf-on-the-Rhine, RUDOLF KNOCHE, Leverkusen-on-the-Rhine, and PAUL VIACK, Dessau-Anhalt, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 20, 1927, Serial No. 241,448, and in Germany Dec. 23, 1926. 3 Claims. (Cl. 260—90.)

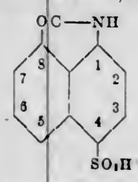
3. As new products the mono-azo-dye-stuffs of the general formula:



wherein Y represents SO_3H or $-CH_2SO_3H$ and Z represents hydrogen, alkoxy or a sulfonic acid group.

1,805,912. NEW DERIVATIVES OF ANTHANTHRONE AND PROCESS OF MAKING SAME. RICHARD HERZ, Frankfort-on-the-Main, and WERNER ZERWECK, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 7, 1927, Serial No. 224,755, and in Germany Oct. 13, 1926. 3 Claims. (Cl. 260—61.)

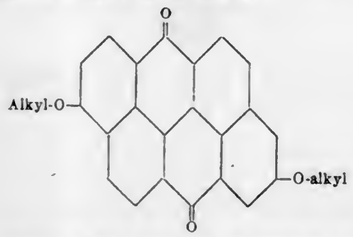
1. A process for producing new anthanthrone derivatives which process comprises saponifying a naphthostyril-sulfonic acid, corresponding probably to the formula:



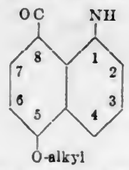
to the corresponding 1-aminonaphthalene-8-carboxy-monosulfonic acid diazotizing it, treating its diazocompound with reducing agents, converting the formed disulfonic acid derivative of 1.1'-dinaphthyl-8.8'-dicarboxylic acid by alkali fusion into the corresponding dihydroxyderivative, subjecting this to the action of acid condensing agents and treating finally the formed dihydroxy-anthanthrone with alkylating agents.

1,805,913. NEW ALKOXY DERIVATIVES OF ANTHANTHRONE AND PROCESS OF MAKING SAME. RICHARD HERZ, Frankfort-on-the-Main, and WERNER ZERWECK, Fechenheim, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 7, 1927, Serial No. 224,756, and in Germany Oct. 13, 1926. 7 Claims. (Cl. 260—61.)

4. As new compounds alkoxyderivatives of anthanthrone, corresponding probably to the formula:

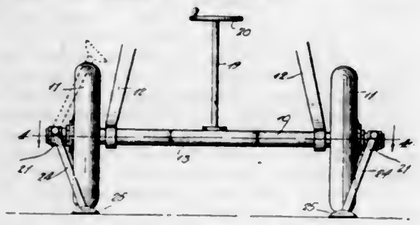


which compounds are when dry red powders, soluble in concentrated sulfuric acid with a green color and a reddish fluorescence, forming with an alkaline hydrosulfite solution a violet vat and dyeing cotton therefrom violet shades, turning to abrillian reddish oragne of a good fastness, when exposed to the air or soaped, which compounds are substantially identical with products obtainable by saponifying 5-alkoxynaphthostyrils of the formula:



to the corresponding 5-alkoxy-1-aminonaphthalene-8-carboxylic acids diazotizing them, treating the diazocompounds thus obtained with reducing agents and subjecting finally 5.5'-dialkoxy-1.1'-dianaphthyl-8.8'-dicarboxylic acids thus obtained to the action of acid condensing agents.

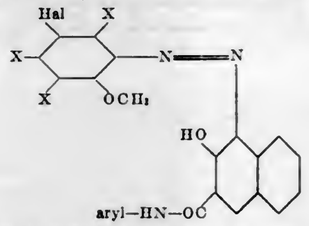
1,805,914. LANDING SKID FOR AEROPLANES. ALF N. LARSEN, Ogden, Utah. Filed Mar. 20, 1930. Serial No. 437,468. 3 Claims. (Cl. 244—2.)



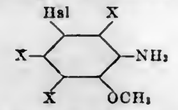
1. In combination with aeroplane landing gear including a shaft and a pair of landing wheels journalled thereon, bearing brackets fixed to the axle adjacent its ends, rock shafts supported in the respective bearings, skid arms fixed to respective rock shafts, skids carried by said arms, a pilot's control wheel, and means operatively connecting the wheel and shafts to rotate the latter simultaneously.

1,805,915. AZODYESTUFFS INSOLUBLE IN WATER AND PROCESS OF MAKING SAME. LEOPOLD LASKA, RUDOLF REYHER, and ARTHUR ZITSCHER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1928, Serial No. 325,384, and in Germany Dec. 12, 1927. 8 Claims. (Cl. 260—95.)

1. As new compounds the azodyestuffs of the probable formula:



wherein one X means halogen and the other X's mean hydrogen, which compounds are when dry orange to claret red powders, insoluble in water, yielding on reduction an 1-amino-2-hydroxy-3-naphthoic acid arylide and a dihalogen-2-anisidine of the general formula:

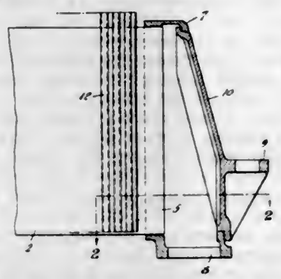


wherein X has the above signification.

1,805,916. PRODUCTION OF THIOETHERS OF THE ANTHRAQUINONE SERIES. ARTHUR LÜTTRINGHAUS, Mannheim, LUDWIG EIFFLAENDER, Ludwigshafen-on-the-Rhine, and FILIP KAČER, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 27, 1927, Serial No. 229,262, and in Germany Oct. 30, 1926. 4 Claims. (Cl. 260—58.)

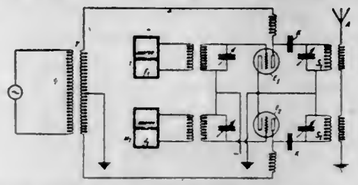
4. The process of producing anthraquinone-2-carboxy-1-thioethers which comprises acting on an anthraquinone-2-carboxylic acid with an aromatic compound, one of the said components containing a mercapto, the other a diazo group, the anthraquinone-2-carboxylic acid containing one of the said groups in the 1-position.

1,805,917. COOLER CONTACTING WITH CIRCULATING AIR. ALF LYSHOLM and GUNNAR CEDERSTRAND, Stockholm, Sweden, assignors to Aktiebolaget Ljungströms Ångturbin, Stockholm, Sweden, a Joint-Stock Company of Sweden. Filed Aug. 2, 1928, Serial No. 296,906, and in Sweden Aug. 4, 1927. 3 Claims. (Cl. 257—262.)



1. A cooler or condenser comprising pipes of flattened shape for the medium to be condensed, corrugated plates interposed between said pipes forming channels for circulating cooling air substantially at right angles to the longitudinal direction of said pipes, said pipes collected in groups, the ends of said pipes inserted in and connected with distributing or collecting chambers for the medium to be condensed or for the condensed medium, said corrugated plates extending with their corrugations from one of said pipes to the adjacent pipe, the outermost pipes of each of said groups provided on their external sides with corrugated plates of substantially half the height as the distance between two adjacent pipes in said groups.

1,805,918. OSCILLATION GENERATION. ALEXANDER MEISSNER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. Hallesches, Berlin, Germany, a Corporation of Germany. Filed Oct. 20, 1928, Serial No. 313,703, and in Germany Nov. 24, 1927. 1 Claim. (Cl. 250—36.)



A transmission system for reducing the effect of fading comprising a first master oscillator for generating a first frequency, a first space discharge device amplifier circuit having input and output circuits tuned to said first frequency adapted to amplify the oscillations generated from said first oscillator, a second master oscillator for generating a second frequency, a second space discharge device amplifier circuit having input and output circuits tuned to said second frequency adapted to amplify the oscillations generated from said first oscillator, an alternating current source coupled in push-pull to the output circuits of said space discharge device amplifiers so that said amplifiers are made operative alternately, and means to radiate the resulting energy from both said amplifiers.

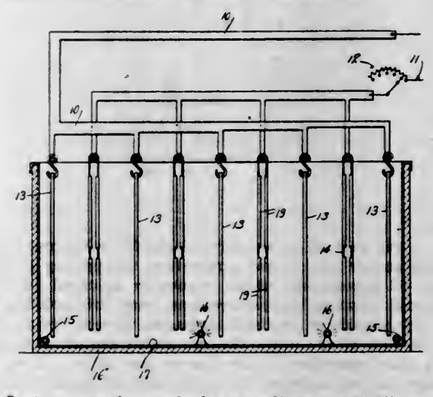
1,805,919. MANUFACTURE OF AZO DYESTUFFS. KURT H. MEYER, Mannheim, and CURT SCHUSTER, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 31, 1925. Serial No. 53,741. 7 Claims. (Cl. 8—5.)

1. As new articles of manufacture, azo coloring matters of the general formula:

$$O_2N-R-N=N-R-NH.CH_2.CH_2.OH$$

wherein R represents a residue of the benzene series which is free from sulfonic acid groups.

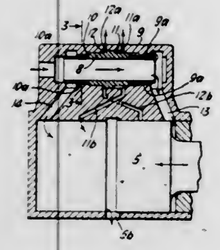
1,805,920. MAKING COPPER PLATED SHINGLES. FRED MUSCHLER, Denville, N. J. Filed Nov. 7, 1927. Serial No. 231,598. 4 Claims. (Cl. 204—8.)



3. A process for producing an adherent metallic coating upon an electrically non-conductive fibrous material which

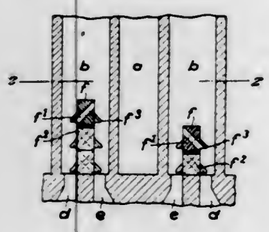
comprises coating the fibrous material first with a binder carrying a finely divided non-metallic conductor, and then with a binder having a finely divided conductor mixed therewith, immersing the coated article in a solution having a tendency to deposit metal by internal chemico-electrical reaction and causing the electrical current to flow between the conductor in the coating and the solution in such a manner as to assist the deposition of the metal as heretofore stated.

1,805,921. VALVE MECHANISM FOR FLUID PRESSURE TOOLS. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 23, 1928. Serial No. 301,461. 9 Claims. (Cl. 121—18.)



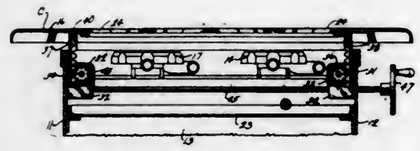
1. A fluid pressure motor comprising a cylinder, a piston reciprocable therein, and a valve for controlling the motive fluid supply to operate said piston and moving automatically in timed relation with the latter, said valve having opposed shift areas, vents for said areas, supply passages thereto under control of said piston, said vents being of less extent than said passages, said valve having opposed holding areas alternately effective to retain the valve in position, means maintaining said holding areas continuously in communication with the opposits ends of said piston chamber, and means alternately subjecting said holding areas to live motive fluid.

1,805,922. HORIZONTAL COKE OVEN. CARL OTTO, Essen-Ruhr, Germany. Filed Aug. 13, 1929, Serial No. 385,561, and in Germany July 14, 1928. 2 Claims. (Cl. 158—118.)



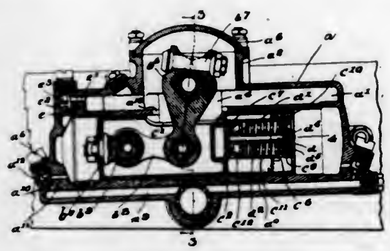
2. A gas and air mixer particularly for coke oven flues having an air and a gas perforation, comprising a plurality of superposed bricks removably mounted in the flues and between the perforations, each brick having a pair of oppositely inclined passages therein from one side thereof to the other through which the air and gas flows form one side of the flue to the other and each passage having a projection in the brick to guide the air or gas into the passage.

1,805,923. GAS RANGE. GUY A. ROBINSON, Cincinnati, Ohio. Filed July 24, 1929. Serial No. 380,622. 9 Claims. (Cl. 126—215.)



1. In a gas range the combination of a stationary lower frame portion including burners connected therewith, a top wall structure including grids for the respective burners, and means connected with the lower frame portion of the range for operatively elevating and lowering the top wall and the grids therewith.

1,805,924. HYDRAULIC SHOCK ABSORBER. FREDERICK HENRY ROYCE, West Wittering, near Chichester, England, assignor to Rolls Royce Limited, Derby, England. Filed Mar. 11, 1927, Serial No. 174,619, and in Great Britain Mar. 31, 1926. 2 Claims. (Cl. 188—88.)

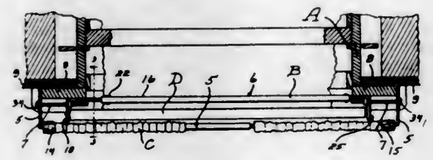


1. A hydraulic shock absorber of the type comprising a closed cylinder, a double-ended piston within such cylinder, a compression chamber on each side of the piston, restricted means of communication consisting of pathways and orifices from one chamber to the other, and means whereby the piston is moved to and fro by the "shocked" member to be restrained, characterized in that the piston is hollow, and further comprises a diaphragm with the central orifice extending across the piston, means including pathways in the body of the piston whereby each compression chamber is in free communication with the space on its side of the diaphragm immediately adjoining the diaphragm, a moving tubular member normally closed at one end and permanently open at the other, seating at its normally closed end on the orifice in the diaphragm, radial ribs projecting inwardly from the piston wall extending from the diaphragm for a suitable distance in the direction of, and constituting axial guides for, the tubular member, notches in the inner edges of the said ribs beyond the range of movement of the tubular member forming an annular recess, a split ring in such notches, a flat annular member in the circular space within the ribs abutting against the split ring, a coil spring reacting between the said annular member and the tubular member urging the tubular member to close the said orifice, a central hole in the normally closed end of the tubular member, a sleeve guide within the tubular member co-axial with, but spaced away from the said hole, and supported at its end nearer to the said hole by ribs extended from the wall of the tubular member, a mushroom member seating on the outer side of the said hole and the stem thereof projecting through the hole and through and for a distance beyond the sleeve guide, a thread on the end of the said stem, a nut screwed on the said thread and a coil spring reacting between the nut, and the said ribs urging the mushroom member to close the said hole.

1,805,925. PROCESS FOR THE OXIDATION OF LEUCO COMPOUNDS OF THE TRIARYL METHANE SERIES. KARL SCHMIDT, Leverkusen, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 20, 1928, Serial No. 313,935, and in Germany Oct. 28, 1927. 5 Claims. (Cl. 260—68.)

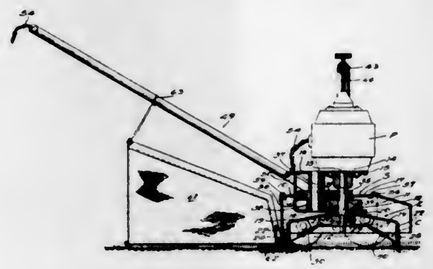
1. Process which comprises dissolving a leuco compound of a dyestuff of the triarylmethane series in a pyridine base and oxidizing the leuco compound by means of oxygen in the presence of a suitable copper salt.

1,805,926. CURTAIN AND SHADE FIXTURE. WALTER R. SCOTT, Washington, Pa. Filed Feb. 7, 1928. Serial No. 252,590. 4 Claims. (Cl. 156—23.)



1. In a combined curtain and shade fixture, a pair of hanger members, a tie member including bracket arms provided at each end thereof for receiving the trunnions of a shade roller, a bolt extending thru each hanger member and its adjacent bracket arm of the tie member and freely rotatable therein, and a nut disposed inwardly of each bracket arm for threaded reception of said bolts.

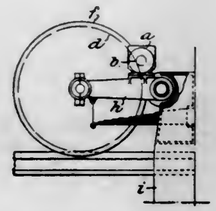
1,805,927. MOWING MACHINE. LEWIS SHARP, Huntington Park, Calif. Filed Feb. 27, 1929. Serial No. 343,182. 9 Claims. (Cl. 56—25.)



1. A machine of the character described comprising a raking element having blades, means for mounting the element for rotary movement about a vertical axis and for movement bodily over a lawn, with the blades of the element positioned substantially vertical, and to travel edgewise through the grass of the lawn as the element is rotated, whereby the blades will effect raking up of grass streamers traversing the lawn in response to rotation of the element during the movement thereof bodily over the lawn, and means for rotating the element.

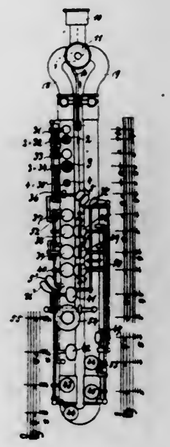
1,805,928. RUNNING GEAR FOR HIGH-SPEED SUSPENSION CARS. CURT STEDEFELD, Heidelberg, Germany. Filed Sept. 19, 1927, Serial No. 220,535, and in Germany Mar. 24, 1926. 6 Claims. (Cl. 105—109.)

1. Running gear for high-speed spring-mounted suspension cars comprising, in combination with the running wheels horizontal forked arms hinged to the car body, each of said forked arms carrying one of said wheels, at least one motor mounted adjacent to the turning axes of said forked arms, and toothed gears for transmitting the torque of said motors to the running wheels.



2. Running gear for high-speed suspension cars comprising, in combination with the running wheels, horizontal forked arms hinged to the car body, each of said forked arms carrying one of said wheels, at least one motor mounted on said forked arms and adjacent the axes thereof, and toothed gears for transmitting the torque of said motors to the running wheels.

1,805,929. CLARINET. FRIEDRICH STEIN, Saarbrucken, Germany. Filed Oct. 26, 1929, Serial No. 402,698, and in Germany Nov. 3, 1928. 8 Claims. (Cl. 84—381.)

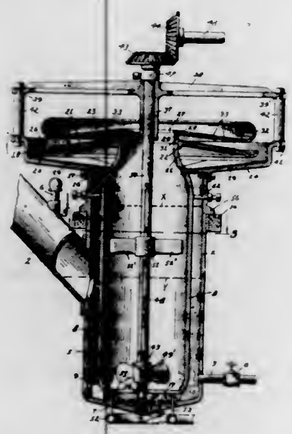


5. In a clarinet the combination of two tubes, a change-over valve enabling the said tubes to be used alternatively, and mechanism enabling said change-over valve to be actuated alternatively by the left thumb or the little finger of the player's right hand, the said tubes having note holes and valves for a continuous chromatic scale distributed between them, all within a range for fingering without substantial lateral shifting of the player's hands.

1,805,930. AMALGAMATOR. LEONARD D. STEPHENSON, Ashland, Oreg. Filed Apr. 18, 1928. Serial No. 269,786. 15 Claims. (Cl. 209—205.)

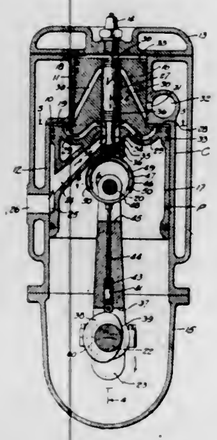
1. An amalgamator comprising a tank having a mercury well and arranged to receive a charge of slimes to be treated; a casing mounted within the tank; a power driven shaft axially disposed within the casing; an impeller adjustably mounted upon the shaft adjacent the bottom of the casing to circulate slimes upwardly through the casing, said impeller being provided with pitched impeller blades operative to lift and hold globules of

mercury from the well suspended in the circulating slimes; and means comprising a plurality of downwardly sloping



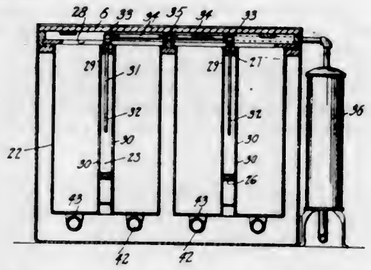
amalgamating plates mounted around the top of the casing for returning slimes overflowing from the casing back into the tank.

1,805,931. INTERNAL COMBUSTION ENGINE. FRANK F. TAYLOR, Santa Ana, Calif. Filed Jan. 4, 1930. Serial No. 418,555. 7 Claims. (Cl. 123—47.)



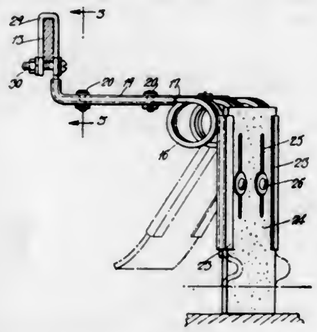
7. An engine having a cylinder with portions of different diameters, a differential piston working in said portions and co-acting therewith to define a fuel compressing chamber and a combustion chamber, a crankshaft, a connecting rod connected to the crankshaft and having a wrist pin connection with the piston, ducts in the piston through which fuel from a source of supply is adapted to be admitted to the fuel compressing chamber and from the latter to the combustion chamber, a valve mounted in the piston for controlling the flow of fuel through the ducts, a cam fixed to the crank of the crankshaft, a tappet engaging the cam and mounted in the connecting rod, an annulus freely receiving the wrist pin and composed of a pair of arcuate sections connected for relative oscillation, means for pivotally connecting one of said sections to the valve, and means for connecting the other section to the tappet so that movement of the latter by the cam will be transmitted by the annulus to the valve.

1,805,932. SYSTEM OF ICE-MANUFACTURE AND REFRIGERATION. GEORGE L. VAIL, Denver, Colo. Filed July 12, 1927. Serial No. 205,254. 6 Claims. (Cl. 62—159.)



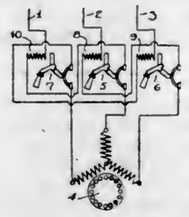
1. In a system of ice manufacture, a freezing unit comprising a freezing chamber subject to exterior temperature conditions, an insulated circulation space connected with the freezing chamber by a horizontal upper slot and a vertical lower slot in a side thereof, and means to effect a circulatory movement of water in the circulation space into the freezing chamber through the upper slot and out of the same through the lower slot.

1,805,933. TIRE GUARD FOR AUTOMOBILES. HAROLD VICTOR, Roselle, N. J. Filed Apr. 9, 1930. Serial No. 442,945. 1 Claim. (Cl. 280—160.)



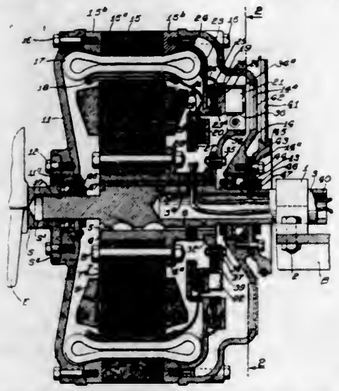
In a sweeper attachment for automobiles, a single length of bendable resilient wire, said wire bent into a spring coil and a pair of angularly disposed frames, plates secured to and covering said frame, a flexible sweeper element, and means for adjustably mounting said sweeper element on the plate of one of said frames.

1,805,934. PROTECTIVE DEVICE FOR ALTERNATING POLYPHASE SYSTEMS OF DISTRIBUTION. JOSEPH VOLKMANN, Glenside, Pa. Filed Sept. 18, 1925. Serial No. 57,249. 3 Claims. (Cl. 175—294.)



1. In a multiphase electrical distribution system, a plurality of phase lines leading to a motor, a circuit maker and breaker in each phase line and an electro magnet in each phase line, the electro magnet of each phase line being operatively associated with the circuit maker and breaker of the other phase lines, whereby the latter will be opened seriative, when the current in one line is so reduced as to overload the other lines.

1,805,935. ELECTRIC MOTOR GENERATOR. EATHELBERT W. WEATHERS, San Diego, Calif. Filed Nov. 2, 1926. Serial No. 145,723. 15 Claims. (Cl. 290—47.)

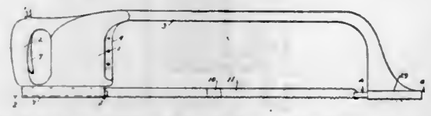


1. In a mechanism of the class described, a fixed hollow shaft, a field core mounted on and intermediate the ends of said shaft, a pair of end housing members revolubly mounted on said shaft at the opposite sides of said core, an armature core secured between and to the outer portions of said housing members, the inner portion of said core being provided with coil supporting means, a set of commuted coils mounted on said means around the circumference thereof, and another set of commuted coils mounted on said means and positioned inwardly from said first mentioned coils and adjacent the peripheral portions of said field core.

2. In a mechanism of the class described, a fixed hollow shaft, a field core mounted on and intermediate the ends of said shaft, a pair of end housing members revolubly mounted on said shaft at the opposite sides of said core, an armature core secured between and to the outer portions of said housing members, the inner portion of said core being provided with coil supporting means, a set of coils mounted on said means around the circumference thereof, another set of coils mounted on said means and positioned inwardly from said first mentioned coils and adjacent the peripheral portions of said field core, and a pair of annular commutators positioned within the housing and supported by said armature to one side of said field core in concentric relation with each other, the engaging faces of said commutators being transverse with their axes of revolution.

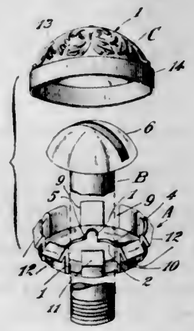
12. In a dynamo electric machine, a revolubly mounted armature, a pair of independent windings on said armature, each winding connected to a vertical commutator, said commutators being disposed in substantially concentric relation on one side of said armature.

1,805,936. SAW. VINCEY A. WILCOX, Los Gatos, Calif., assignor of one-half to Claude C. Parks, San Jose, Calif. Filed Apr. 30, 1930. Serial No. 448,712. 1 Claim. (Cl. 143—68.1.)



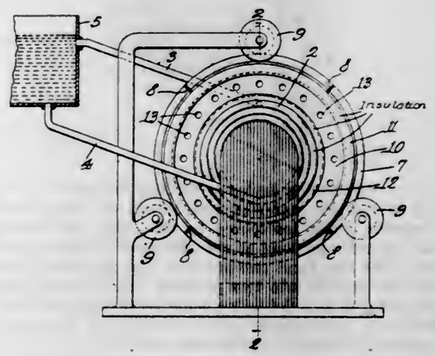
A device of the character described comprising, a supporting frame, spaced and aligned guides disposed thereon, a pair of opposed racks slidably mounted in each guide, a pinion journaled in each guide to mesh with the racks therein, saw blades mounted on the racks and disposed side by side whereby to make a single cut, a gear journaled in the frame and having an annular groove formed therein eccentrically disclosed relative to its axis of rotation, a pin mounted on one rack to engage said groove, and driving means for the gear mounted in the frame.

1,805,937. LOCK CAP FOR FASTENERS. JOSEPH BERGE, Montclair, N. J. Filed Dec. 27, 1928. Serial No. 328,718. 10 Claims. (Cl. 85—35.)



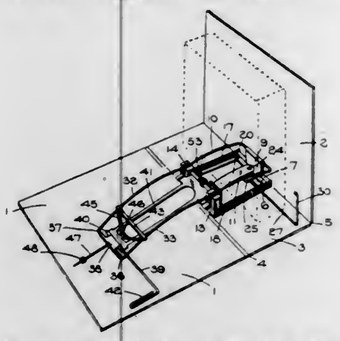
3. A device for ornamentating the ends of through fasteners comprising an anchoring member adapted to be securely held in position by said through fastener, locking devices on said anchoring means to prevent rotation of said fastener and of said anchoring means, locking means carried by said anchoring means, and an ornamental cover cap adapted for telescoping movement in one direction only relative to said locking means whereby said anchoring member securely locks said ornamental cover cap in position over one end of said fastener.

1,805,938. HEATING APPARATUS. WILLIAM L. CLOUSE, Tiffin, Ohio. Filed Mar. 15, 1929. Serial No. 347,402. 4 Claims. (Cl. 219—13.)



1. Heating apparatus including a transformer core, a primary thereon, means for cooling the primary, a secondary extending around the primary and including a ring having an opening for the reception of an object to be heated, and sheathing on the inner and outer peripheries of the ring, said sheathing constituting heat and electricity insulating means.

1,805,939. FILE FOR LETTERS OR OTHER PAPERS. JOHN FREDERICK DIXON, Wylde Green, England. Filed Sept. 16, 1929, Serial No. 393,017, and in Great Britain Sept. 19, 1928. 14 Claims. (Cl. 129—8.)



1. A file for letters, sheets, papers and the like comprising one or more primary prongs, mounting means therefor, a supporting guide with which the primary prong or prongs is or are adapted normally to engage, and a secondary or extension prong for each primary prong adapted to be engaged with the corresponding primary prong in a manner such that the latter is raised from the supporting guide and a continuous bridge is formed over the latter by such engaged primary and secondary prongs.

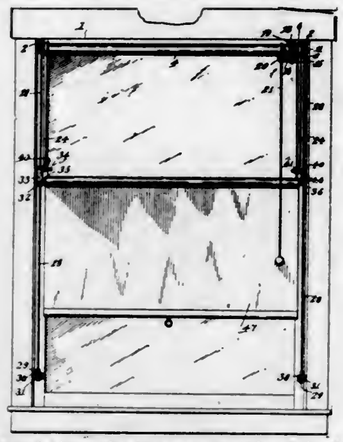
1,805,940. DISTRIBUTING DEVICE. FREDERICK J. DOLAN, Worcester, Mass., assignor to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 6, 1928. Serial No. 304,368. 8 Claims. (Cl. 302—28.)



1. A distributing device comprising an inlet pipe for air and pulverulent material, two branch conduits connected therewith, walls interposed in the inlet pipe serving to scoop spaced portions of the incoming material from the remainder and form two streams, and partitions separating each stream into two portions, one of said partitions being shaped as a deflecting baffle arranged to combine one portion of each stream with a portion of the other and conduct the same to the branch conduits.

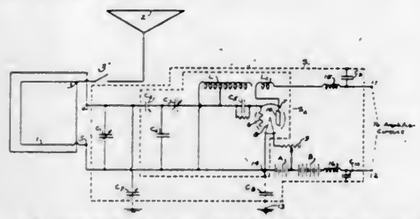
1,805,941. SHADE. CLARENCE M. EVELETH, River Forest, Ill., Filed Dec. 16, 1929. Serial No. 414,519. 5 Claims. (Cl. 156—27.)

1. In a device of the class described, a shaft having a recess in its periphery, a drum on the shaft and having an opening registering with the recess, an end plate abutting against the drum and forming one flange of the drum, a pintle mounted in the shaft and extended across the recess, the pintle having a shoulder engaging the end plate to hold the end plate and the drum on the shaft, a bearing wherein the pintle is journaled, and a shade-supporting



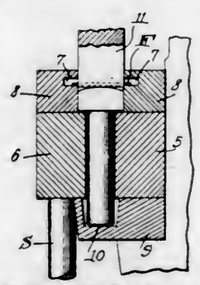
ribbon wound about the drum at one side of the flange, the ribbon passing through the opening and into the recess, one end of the ribbon being mounted on the pintle, within the recess.

1,805,942. RADIO LOOP ANTENNA SYSTEM. MALCOLM FERRIS, Washington, D. C. Filed Jan. 29, 1927. Serial No. 164,495. 5 Claims. (Cl. 250—33.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



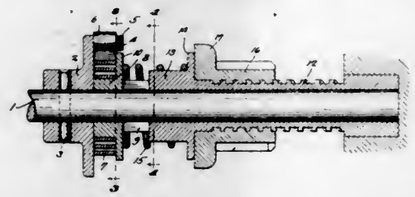
1. In a compensated radio compass receiver including a tuned loop antenna, a coupling unit and a detecting unit, a grounded shield surrounding the entire set with the exception of the tuned loop antenna, and a second shield surrounding the coupling and detecting units and disposed within the outer shield and insulated therefrom.

1,805,948. METHOD OF AND MECHANISM FOR TRIMMING FORGINGS. JOHN H. FRIEDMAN, Tiffin, Ohio, assignor to The National Machinery Co., Tiffin, Ohio. Filed July 21, 1927. Serial No. 207,483. 5 Claims. (Cl. 10—24.)



1. The combination with dies for receiving a forging, and trimming dies adjacent thereto for receiving a portion of the forging, said trimming dies having grooves for the reception of a flashing on the forging, of a shear for severing the engaged forging from stock extending beyond the first named dies, there being a recess in the shear adapted to register with one end of the severed forging, and means for punching the forging out of its flashing in the trimming dies and into the recess in the shear.

1,805,944. STARTER MECHANISM. EDWARD FROMM, Iowa Falls, Iowa. Filed Dec. 26, 1929. Serial No. 416,665. 1 Claim. (Cl. 74—7.)



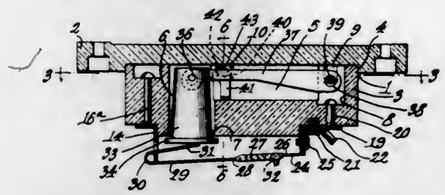
A transmission mechanism for self starters of internal combustion engines including a power shaft, a collar secured thereto, a flange projecting from one face of the collar, a clutch member mounted for rotation on the shaft and constantly thrusting against the collar, an annular flange thereon, a stop lug on said flange in the path of the flange on the collar, a flat spiral spring secured at the end of its outer convolution to the flange on the collar and having its inner convolution secured to the clutch member, said spring being held between the collar and the flange on the clutch member, a screw threaded sleeve slidably and rotatably mounted on the shaft, a clutch member at one end thereof in sliding engagement with the first named clutch member, a gear threaded on the sleeve, and a cushioning spring between and pressing in opposite directions against the clutch members.

1,805,945. DETONATING FIREWORK COMPOSITION. WILLIAM F. GEHRIG, Berkeley Heights, N. J. Filed Mar. 5, 1928. Serial No. 259,378. 5 Claims. (Cl. 52—28.)

1. A non-hygroscopic firework composition adapted to produce successive detonations when ignited, consisting in the herein named ingredients in the approximate proportions by weight as follows:

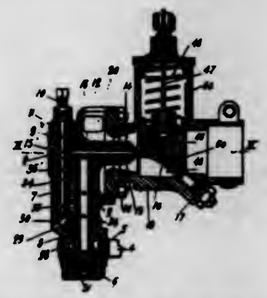
Potassium chlorate	35 parts
Magnesium oxide	35 parts
Phosphorous sesquisulphide	12 parts
Gum arabic	1 part
Potassium dichromate	5 parts
And a filler	8 parts

1,805,946. AUTOMATIC FIRE ALARM. JAMES E. GOODWIN, Cedar Bluff, Va. Filed Jan. 31, 1929. Serial No. 336,616. 3 Claims. (Cl. 200—142.)



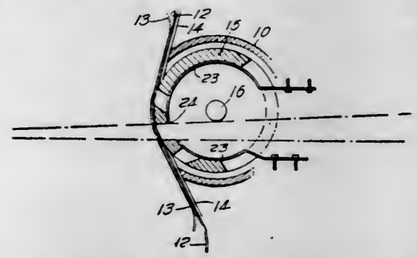
1. In a thermal switch, the combination of a frame, a lever fulcrumed on the frame for vertical downward swinging movement, a depending weight mounted on the lever, and constituting means for swinging the lever downwardly, a contact member on the frame and out of electrical engagement with the lever when the lever is raised, the lever engaging the contact member when the lever swings downwardly, responsive to the weight, a link embodying a fusible portion, the weight resting directly on a part of the link, to support the weight, hold the lever raised, and keep the lever out of electrical engagement with the contact member, and means for mounting the link on the frame at spaced points on opposite sides of the weight, both of said means being spaced from the lever and being independent thereof.

1,805,947. CARBURETOR. HENRI JULES GUIRAUD, Veuxhaulles, France, assignor to Societe Anonyme La Cooperation Agricole & Industrielle, Veuxhaulles, France. Filed Nov. 12, 1926, Serial No. 148,078, and in France Oct. 12, 1926. 2 Claims. (Cl. 261—41.)



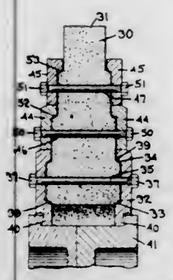
1. In a carburetor with a mixing chamber, a main nozzle and a slow speed nozzle, in combination, a flexible tube extending the slow speed nozzle and parallel in its free position to the axis of the mixing chamber of the carburetor and a throttling piston moving in said mixing chamber transversely to the axis thereof and having an end parallel to said axis of the mixing chamber, the end of said piston being provided with a groove of progressively increasing depth approaching the slow speed nozzle and adapted to receive said flexible tube.

1,805,948. MOTION PICTURE PRINTING MACHINE. GEORGE LANE, Poughkeepsie, N. Y., assignor, by mesne assignments, to Audio-Cinema, Incorporated, Long Island City, N. Y., a Corporation of New York. Filed June 27, 1928. Serial No. 288,695. 2 Claims. (Cl. 95—75.)



1. In a film strip printing machine, means having a printing aperture for the passage of light to the film, and means controlling the passage of light through said printing aperture comprising a member adjustable relative to said printing aperture, said member having a plurality of apertures spaced apart along the same and out of alignment in respect to the direction of the movement of adjustment of said member thereof, said member when adjusted bringing said apertures to register separately with the printing aperture for printing upon areas of said film which are disaligned longitudinally thereof, one area being for the motion pictures and the other for the sound track, substantially as described.

1,805,949. ABRASIVE WHEEL. THURE LARSSON, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 29, 1926. Serial No. 138,495. 13 Claims. (Cl. 51—207.)



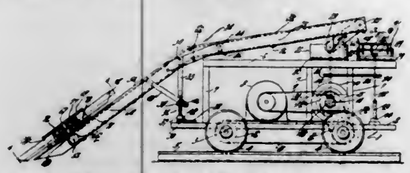
1. A segmental grinding wheel comprising a plurality of abrasive segments arranged in the form of an annulus, the annulus having on each of its opposite sides two opposed beveled clamping shoulders sloping in opposite directions and forming a wedge shaped clamping lug, a clamping plate on each side of the annulus provided with beveled faces corresponding with the clamping shoulders on the annulus, and means to draw the plates together, said parts being so arranged that the annulus is supported wholly by its beveled clamping shoulders.

1,805,950. AWNING. CLARENCE G. MACK, Toledo, Ohio, assignor to Hettrick Manufacturing Company, Toledo, Ohio. Filed Sept. 9, 1929. Serial No. 391,118. 4 Claims. (Cl. 156—15.)



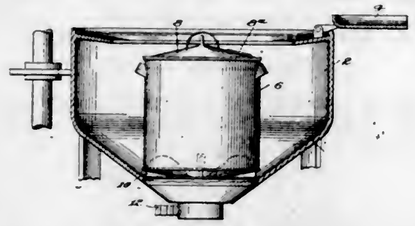
4. In combination with an awning frame, a crossbar having end portions, the end portions having plane surfaces, a pair of side bars having end portions, the end portions of the side bars having plane surfaces, an interconnecting member having plane surfaces and flanged edges, a pivotal member locating the plane surfaces of the crossbar on the plane surfaces of the interconnecting member, a second pivotal member locating the plane surfaces of the side bars on the plane surfaces of the interconnecting member to permit movement of the side bars relative to the crossbar to substantially a 90° angle.

1,805,951. COAL LOADING MACHINE. CUYLER C. MILLER, Jr., Gillespie, Ill. Filed Jan. 18, 1930. Serial No. 421,647. 6 Claims. (Cl. 198—11.)



1. In a device of the class described, a carriage, a race mounted thereon, a carrier rotatably mounted in the race, a gathering conveyor pivotally attached to the said carrier, means for supporting and maintaining the said conveyor in any adjusted position, another race mounted on the carriage, a carrier rotatably mounted in this race, a delivery conveyor pivotally attached to the said carrier and means for supporting this conveyor in any adjusted position.

1,805,952. CHURN ATTACHMENT FOR WASHING MACHINES. MILTON I. MORGAN and BALLARD C. TATE, Bristol, Tenn. Filed Nov. 1, 1927. Serial No. 230,232. 6 Claims. (Cl. 259—56.)



1. The combination with the oscillating member of a washing machine, of a churn and engaging means between said churn and member, said means projecting within the churn body and acting as an agitator.

1,805,953. MINERAL OIL AND ANTI-OXIDANT AGENT AND PROCESS. HAROLD A. MORTON, Akron, Ohio. Filed Aug. 17, 1928. Serial No. 300,373. 33 Claims. (Cl. 87—9.)

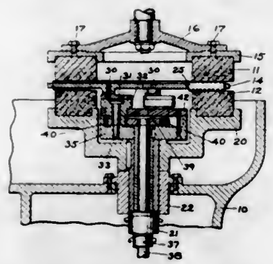
1. The method of retarding the oxidation of mineral oils consisting in adding to the oil a derivative of hydrogenated glyoxaline containing no strongly negative groups.

20. A mineral oil to which has been added a derivative of tetra hydroglyoxaline, wherein, each of the carbon atoms in the 4-5 positions has a hydrogen atom attached thereto and substituted in one or more of the 1-2-3 positions by a hydrocarbon residue.

1,805,954. SOAP AND SOAP PRODUCTS AND STABILIZING AGENT AND PROCESS. HAROLD A. MORTON, Akron, Ohio. Filed Aug. 17, 1928. Serial No. 300,372. 35 Claims. (Cl. 87—16.)

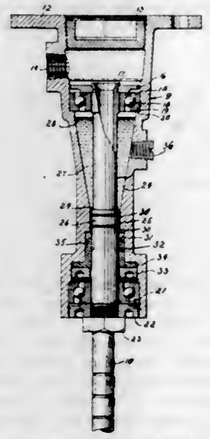
1. A soap having incorporated therein, a di-aryl tetra hydroglyoxaline.

1,805,955. METHOD OF AND APPARATUS FOR DRESSING ABRASIVE LAPS. SYDNEY PLAYER and HERBERT S. INDGE, Westboro, Mass., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 29, 1929. Serial No. 350,966. 5 Claims. (Cl. 125—11.)



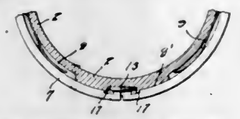
5. Apparatus for dressing the opposed faces of the lapping elements in a lapping machine having two abrasive laps and a work cage revolvable therebetween which has a plurality of work receiving openings adapted to hold work pieces in lapping contact with the laps, comprising several small cutting tools shaped and sized to fit loosely in and project through said openings in the work cage and having cutting faces on its opposite sides capable of cutting the abrasive surfaces of both laps when revolved in contact therewith.

1,805,956. SWIVEL COUPLING. HAROLD W. SHONNARD, Upper Montclair, N. J., assignor to Elevator Supplies Company, Inc., a Corporation of New York. Original application filed Aug. 7, 1924, Serial No. 730,705. Divided and this application filed Aug. 21, 1928. Serial No. 301,042. 4 Claims. (Cl. 285—96.)



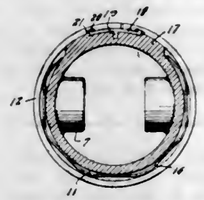
1. In combination, a tubular casing connected to a pressure line, a member within said casing having a cylindrical outer surface, a mass of lubricating material between the member and the casing having one end exposed to the line pressure, said casing being wider at said end than at the opposite end whereby said mass of lubricating material is adapted to multiply the resistance to the deformation of the lubricant at the end opposite to that exposed to the line pressure, and a packing between the member and the casing to prevent the escape of compressed lubricant.

1,805,957. AUTOMOTIVE PISTON. ARNOLD A. STEPHENS, Davenport, Iowa. Filed Dec. 30, 1926, Serial No. 158,110. Renewed Sept. 27, 1930. 5 Claims. (Cl. 74—108.)



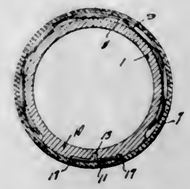
1. A restraining means for a bearing ring of the character described comprising a substantially circular base plate and chord extensions formed integral with the plate to slidably engage the internal face of the bearing ring and thereby limit its circumferential expansion.

1,805,958. HOLLOW PISTON. ARNOLD A. STEPHENS, Davenport, Iowa. Filed Nov. 23, 1926. Serial No. 150,307. 15 Claims. (Cl. 74—108.)



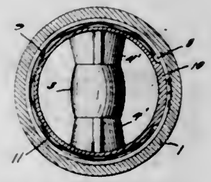
1. A hollow piston comprising a rigid head and resilient skirt portion, a split contractible and expansible bearing member in the head having less thermal expansion than the material of the piston and means to limit the expansion of the bearing member.

1,805,959. MOTOR PISTON. ARNOLD A. STEPHENS, Davenport, Iowa. Filed Dec. 10, 1926. Serial No. 153,812. 30 Claims. (Cl. 74—109.)



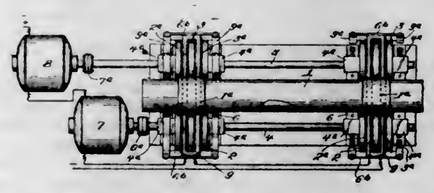
1. In combination with an engine cylinder a piston comprising a head and skirt of a material having a specific gravity less than iron, separate annular radially expansible sections of a ferruginous material carried by the head and skirt and means detachably mounted on the piston to restrain the expansion of the sections while permitting substantially free thermal expansion and contraction of the piston body.

1,805,960. PISTON CONSTRUCTION. ARNOLD A. STEPHENS, Davenport, Iowa, assignor of one-half to George E. Weeks, Davenport, Iowa. Filed Apr. 14, 1926, Serial No. 101,949. Renewed Apr. 9, 1931. 29 Claims. (Cl. 74—109.)



1. A piston comprising a head portion and a skirt portion, carrier bands mounted in the skirt portion, said bands being flush with the skirt portion on the thrust side of the piston but protruding beyond the skirt for the remainder of said skirt and means to limit the expansion of the bands.

1,805,961. MAGNETIC DRIVE FOR CENTRIFUGAL CASTING MACHINES. FRANK MCS. THOMAS, Easton, Pa. Filed Feb. 7, 1930. Serial No. 426,622. 11 Claims. (Cl. 22—65.)

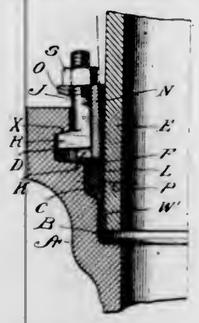


6. In a centrifugal casting machine a flask having a raised peripheral track, a pair of cradle rolls underlying said track, one of said rolls being of greater width than the track and having peripheral channels, magnetizing coils located in said channels, means for driving said channeled roll, and means for supplying electric current to magnetizing coils.

1,805,962. PIPE JOINT. FRANK MCS. THOMAS, Easton, Pa. Filed Dec. 31, 1927. Serial No. 243,931. 19 Claims. (Cl. 285—135.)

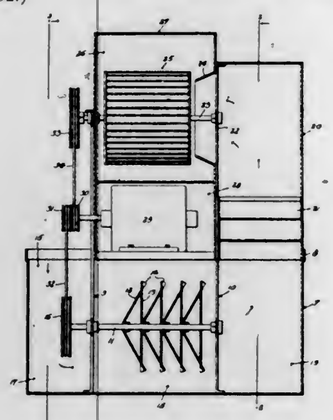
1. A flexible pipe joint comprising a bell, an abutting pipe within said bell, ring-shaped packing between said pipe and bell, said packing forming the sole contacting connection between said pipe and bell and spacing them

apart so that they may be misaligned flexibly about the packing as a pivot, a ring-shaped gland between the pipe, and bell extending within the mouth of the bell and



spaced from the pipe and bearing on said packing, and means slidably and rotatably associated with said gland for engaging the bell internally thereof.

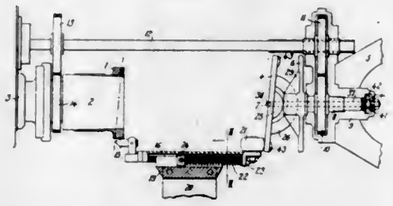
1,805,963. AIR COOLING AND CONDITIONING APPARATUS. WILLIAM S. TONCRAY, Phoenix, Ariz. Filed May 7, 1930. Serial No. 450,548. 3 Claims. (Cl. 261—92.)



1. In an apparatus of the class described, an open top water tank, a horizontal shaft mounted for rotation therein, a pulley on said shaft, a plurality of bladed agitating elements assembled on said shaft, a separating casing supported on the tank and including a plurality of baffle plates arranged in the path of movement of the moistened air, said casing provided with an air outlet, a fan housing communicating with said outlet, a shaft mounted for rotation in said housing, a fan carried by said shaft, a pulley on said shaft, an electric motor arranged in said housing, and provided with pulleys, and belts trained over the respective pulleys for simultaneously actuating the shaft, agitators and fans, said fan housing being provided with a final air outlet for discharging the conditioned air into the room.

1,805,964. APPARATUS FOR TURNING INCLINED SURFACES. BARNES NEVILLE WALLIS, Weybridge, England. Filed Oct. 6, 1930, Serial No. 486,851, and in Great Britain Sept. 26, 1929. 12 Claims. (Cl. 82—11.)

1. Means for producing, by turning, strengthening sleeves for use with tubular members, such sleeves having terminal flanges located at predetermined angles to their axes, comprising a work holder for carrying a sleeve blank from which the strengthening sleeve is to be made, a former plate mounted to rotate on an axis parallel with that of the sleeve blank and angularly adjustable relatively to its axis so that its face can be set at an angle to its axis corresponding to the angle which the axis of the sleeve is to subtend to the plane of the terminal flange,



a tool carrier adapted to be reciprocated parallel to the said axis of the former plate and sleeve blank by said former plate and means for rotating the sleeve blank and former plate synchronously, relatively to the tool carrier and means for traversing the tool carrier across the sleeve blank and former plate, while maintaining the tool in a position relative to the axis of the sleeve blank corresponding to the position of the tool carrier relative to the axis of the former plate.

1,805,965. NECKTIE. SAMUEL WELDON, Portland, Oreg. Filed May 17, 1928. Serial No. 278,438. 4 Claims. (Cl. 2—150.)

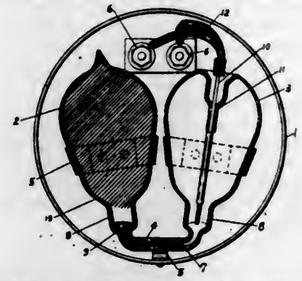


1. A necktie comprising a Y-shaped wire form including a looped stem and branched loops at its upper end, a fabric sheath about said stem and folded over said form, a tubular fabric underflap enclosing and secured to said sheath, a fabric upper-flap secured to the rear of said form and extending thereover to overlie said underflap, a fabric band extending horizontally about said upperflap and secured at its opposite ends to the rear of the tie, an elastic tape secured at one end to the rear of said under-flap, a hook-fastener loosely mounted on said tape arranged to be engaged over a collar-button, and a snap fastener for the free end of said tape.

1,805,966. GLASS CONTAINER FOR LIGHT OPERATED ELECTRIC SWITCHES. RAYMOND W. ARMSTRONG and IRA E. MCCABE, Chicago, Ill.; said Armstrong assignor to The Arcless Contact Company, a Corporation of Illinois. Filed Sept. 20, 1926. Serial No. 136,504. 2 Claims. (Cl. 200—141.)

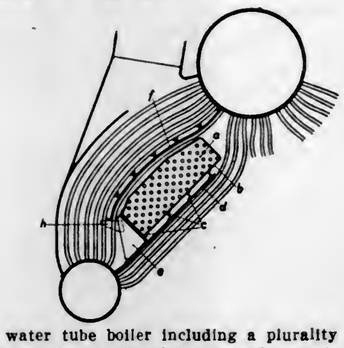
1. In a visible light-operated mercury tube switch, two interconnected gas containers having a portion of

lesser diameter connecting the end portions and adapted to contain a mercury seal therebetween, the end portion of one container having a greater coefficient of absorp-



tion of visible light than the contiguous connecting portion, said end portion conically tapering into the said connecting portion presenting an angular surface adapted to reflect rays of light impinging on the said container.

1,805,967. SUPERHEATER FOR WATER TUBE BOILERS. GUSTAV BAUER, Hamburg, Germany. Filed Nov. 6, 1930, Serial No. 493,838, and in Italy Oct. 30, 1929. 4 Claims. (Cl. 122—478.)



1. A water tube boiler including a plurality of steam generating tubes, a detachable superheater including a plurality of superheater tubes, and a frame structure holding said tubes together as a unit, and substantially horizontal runners disposed between said steam generating tubes and said frame structure for supporting said superheater unit, whereby said superheater unit is slidable in a substantially horizontal direction out of sliding contact with the steam generating tubes.

1,805,968. NECKTIE. VINCENT A. BIANCO, Culver City, Calif. Filed Mar. 19, 1930. Serial No. 437,078. 1 Claim. (Cl. 2—146.)



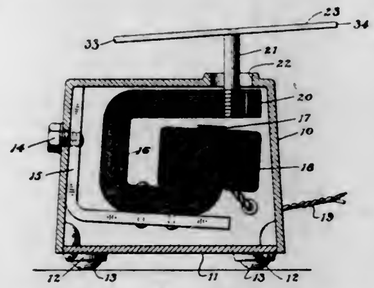
A necktie having an elongated strip forming the outside of the tie, such strip having its marginal edges stitched together and forming in effect a tube, such tube being flattened with folds forming the side edges of the tie with the stitching on the back of the tie, an elongated lining strip fitted inside of the outside tube and against the inside of the front portion of said tube, said lining strip having folds adjacent its sides turned toward the back of the tie inside the folds of the tube, the marginal edges of the lining strip being stitched to the back of the tube adjacent the side edges of such tube, leaving a space between the marginal edges of the lining strip and the stitching of the outer strip without any interlining directly bearing thereagainst.

1,805,969. PROTECTIVE GLASS WITH COLOR WEDGE FOR SPECTACLES TOGETHER WITH METHODS FOR MANUFACTURING SAME. CARL GUSTAF BOSTRÖM, Stockholm, Sweden. Filed Aug. 28, 1928, Serial No. 302,646, and in Sweden July 21, 1928. 2 Claims. (Cl. 49—81.)



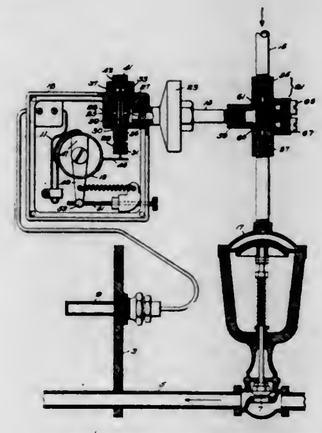
1. An article of manufacture, comprising a pair of glass plates secured together by a colorless cement compound of uniform thickness and possessing approximately the same transparency and refractory index as the glass plates, and a color wedge embedded in said compound, said color wedge being comparatively dense at one end and gradually fading into transparency toward its opposite end.

1,805,970. VIBRATOR FOR MOLDS AND DENTAL FLASKS. EDWARD BRIGGS, San Francisco, Calif., assignor to William J. Moran, Fairfax, Calif. Filed Nov. 13, 1929. Serial No. 406,973. 8 Claims. (Cl. 259—75.)



1. A device for vibrating flasks and the like which comprises a yielding magnetic core having its ends disposed adjacent each other, a single winding upon one end of said core, and a table mounted upon the other end of said core whereby when the core is energized with alternating current said table will be vibrated.

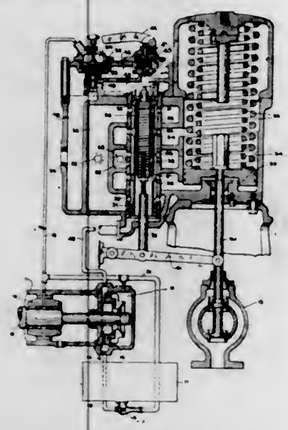
1,805,971. CONTROLLING MECHANISM. EDGAR H. BRISTOL, Foxboro, Mass., assignor to The Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1928. Serial No. 269,257. 6 Claims. (Cl. 286—86.)



1. In a controlling apparatus a supply line receiving pressure fluid from a source thereof, a delivery line there-

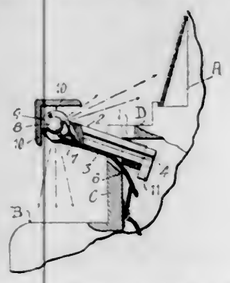
for leading to a mechanism to be operated thereby, a valve casing adapted to receive fluid from said lines having an exhaust port, a valve for the exhaust port, a device responsive to the fluctuations of a variable for moving said valve and thereby controlling pressure conditions in said delivery line, said supply line communicating with said casing and delivery line through a restricted bleeding opening, and a readily removable and replaceable element having a restricted bleeding opening and adapted to control the rate of exhaust from the delivery line.

1,805,972. FLUID PRESSURE GOVERNING MECHANISM. OZRO N. BRYANT, Moores, and ANTHONY F. SCHWENDNER, Essington, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 28, 1929. Serial No. 350,608. 13 Claims. (Cl. 264—14.)



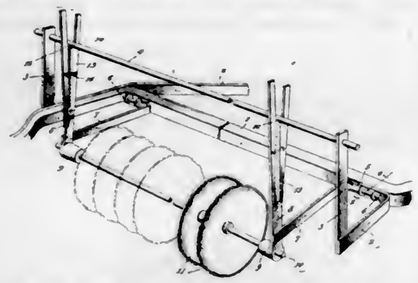
1. In a governing mechanism for a prime mover having an admission valve, the combination of means providing fluid pressure varying as a function of an operating condition of the prime mover, a fluid pressure relay for controlling the admission valve and including an operating piston and an element responsive to said variable fluid pressure for controlling the movements of the operating piston, said pressure-responsive element being biased in valve-closing direction and being biased by fluid pressure in valve-opening direction, and valve means responsive to an abnormal operating condition of the prime mover for releasing the fluid pressure acting on said element in valve-opening direction.

1,805,973. PIANO LIGHTING DEVICE. CHARLES EWEN CAMERON, Jr., East Orange, N. J., assignor to Lauter-Humana Co., a Corporation of New Jersey. Filed May 19, 1930. Serial No. 453,536. 4 Claims. (Cl. 240—4.)



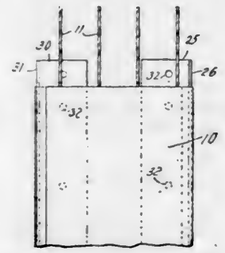
1. The combination of a piano including a case having a music support, a keyboard, a vertical wall extending upwardly from said keyboard and a horizontal wall meeting said vertical wall at approximately right angles, and extending toward said music support, said case having a recess opening outwardly through both said vertical wall and said horizontal wall, a lamp supporting bracket mounted on said case to move into and out of said recess, a lamp on said bracket, and a combined reflector and cover on said bracket having a vertical wall and a horizontal wall at approximately right angles to each other to direct light rays from said lamp to said music support and said keyboard respectively when said bracket is moved out of said recess and to contact with and form substantial continuations of said vertical and horizontal walls of said case respectively to close said recess when the bracket is moved thereinto.

1,805,974. DISK PLOW. ALEXANDER M. CAMPBELL, Winnipeg, Manitoba, Canada. Filed Feb. 3, 1930. Serial No. 425,611. 5 Claims. (Cl. 97—53.)



1. Means for the purpose set forth comprising in combination with a frame gang-carrying arms, means for pivotally mounting said arms upon the frame, posts rising from said arms, and means whereby said posts will yieldably engage the under side of a fixed member of the frame whereby normally the weight of the frame will be transmitted to the disks and under abnormal strain the disks may be permitted to rise relative to the frame.

1,805,975. PILE STRUCTURE. HARRY V. CAMPBELL, Freehold, N. J. Original application filed Oct. 20, 1926, Serial No. 142,855. Divided and this application filed Aug. 8, 1928. Serial No. 298,142. 7 Claims. (Cl. 61—59.)

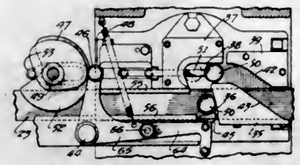


1. A pile having oppositely extending, exactly similar, angular recesses at the two side edges thereof, and oppositely extending longitudinal angle bars embedded in the pile structure, the outer edges of the bars being disposed in said recesses.

1,805,976. TRANSFER MECHANISM. ZENAS P. CANDEE, Waterbury, Conn., assignor to The Waterbury Farrel Foundry and Machine Company, Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 2, 1930. Serial No. 418,028. 4 Claims. (Cl. 198—24.)

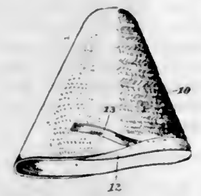
1. In a device of the character described, a moving belt; a rigid member upon one side thereof having a stop wall, and a tangential wall upon each side thereof; a stop

plate over the belt having guide faces upon opposite sides thereof; a rigid guideplate having a guide wall in extension of one of the said tangential walls and substantially parallel with one of the guide faces of the stop plate, the arrangement of the parts being such that there is an open space between the stop plate, rigid member and guide plate, and extending partially around the stop plate and through



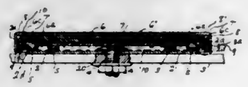
which an article travels from and to the belt in a continuous path through said open space; means for moving the article from the belt and placing it against said stop wall, and a member to push the article from said stop wall along one of said tangential walls toward the guide plate, and transitory means for pushing the article between the stop and guide plates which directs its travel back onto the belt.

1,805,977. HAT. JOHN CAVANAGH, South Norwalk, Conn., assignor to The Crofut & Knapp Company, South Norwalk, Conn., a Corporation of Connecticut. Filed July 26, 1929. Serial No. 381,325. 2 Claims. (Cl. 2—178.)



1. A felt hat brim having a reinforced edge portion, said reinforcing comprising a layer of felt felted into and crosswise of the grain of the hat brim.

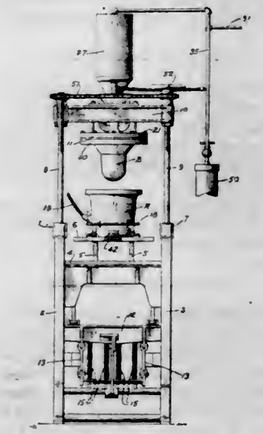
1,805,978. ROTARY FOOT PAD. HOWARD I. CLARK, Los Angeles, Calif. Filed Oct. 16, 1930. Serial No. 489,129. 4 Claims. (Cl. 280—163.)



1. A rotatable foot pad for automobile running-boards including concentric concave discs disposed one above the other, the concave portion of the uppermost disc nesting in the concave of the lowermost disc and forming therewith a race for a plurality of balls that render the uppermost disc rotatable relatively to the lowermost disc, adhesive means carried by the uppermost disc to prevent slipping of the foot when the user of the automobile steps upon said disc, and means to operatively clamp the peripheral margins of said discs to prevent separation thereof.

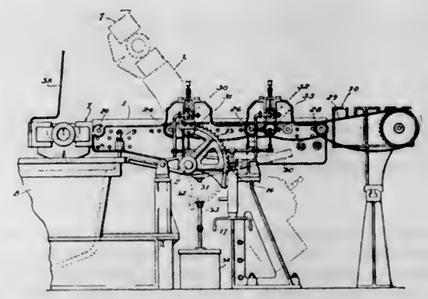
1,805,979. HAT SHAPING AND PRESSING MOLD. GEORGE H. EDWARDS, Mill Valley, Calif., assignor to Catalina Hats Ltd., San Francisco, Calif., a Corporation of California. Filed Jan. 23, 1929. Serial No. 334,411. 3 Claims. (Cl. 223—31.)

1. The combination with a female mold of the character described, of a cooperating male mold, said mold comprising a head member, a mold section secured thereto, said mold section being hollow and constructed of elastic material, means for inserting the elastic mold in the female



mold, said elastic mold being substantially filled with a liquid, and means for exerting air pressure on top of the liquid to expand the elastic mold with relation to the female mold.

1,805,980. TIN PLATE CONVEYER AND CLEANER. SAMUEL E. DIESCHER, Pittsburgh, Pa., assignor to S. Diescher & Sons, Pittsburgh, Pa., a Partnership consisting of Samuel E. Diescher and August P. Diescher. Filed Jan. 28, 1927. Serial No. 164,222. 7 Claims. (Cl. 91—12.1.)



1. The combination with a tinning machine and a branning machine for cleaning tin plate, of a conveyer arranged between them for moving plate from the former to the latter, said conveyer having continuous plate catcher rolls attached to its forward end and arranged above said tinning machine when the conveyer is in its operative position and said conveyer being pivotally mounted on a horizontal axis for swinging it and its attached plate catcher rolls from operative positions.

1,805,981. PROCESS OF MANUFACTURING FIBROUS BLOCKS. RICHARD BUCKMINSTER FULLER, Lawrence, N. Y., assignor, by mesne assignments, to The Soundex Corporation, a Corporation of Illinois. Original application filed Dec. 31, 1924, Serial No. 758,991. Divided and this application filed Mar. 1, 1927. Serial No. 171,908. 7 Claims. (Cl. 18—47.5.)

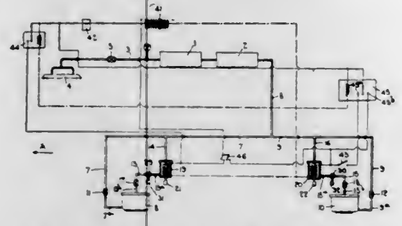
1. The process of producing fibrous blocks, which comprises the steps of treating fibrous material with a binder in substantially liquid form, subjecting the treated fibrous

material in the absence of surplus binder to violent agitation whereby compacted masses of the fibrous material are broken up, forming the fibrous material into blocks without the use of substantial pressure and letting the binder set whereby light masses are obtained of a rigid structure comprising a very high percentage of connected air spaces.

1,805,982. METHOD OF AND MATERIAL FOR PREVENTING METAL FROM CORRODING. JAMES H. GRAVELL, Elkins Park, Pa., assignor to American Chemical Paint Company, Ambler, Pa., a Corporation of Delaware. Filed Feb. 4, 1930. Serial No. 425,822. 14 Claims. (Cl. 148—7.)

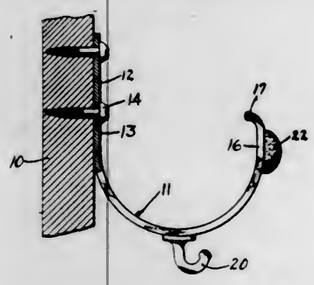
1. A material for preventing metal from corroding being an admixture of a material adapted to liberate phosphoric acid upon the application of heat and a neutralizer for phosphoric acid.

1,805,983. SYSTEM OF AND APPARATUS FOR OPERATING AND CONTROLLING THE DOORS OF RAIL OR ROAD VEHICLES. HORACE REGINALD HOCKLEY, Slough, England, assignor to G. D. Peters & Company, Limited, Slough, England, a British Company. Filed Dec. 4, 1928, Serial No. 323,758, and in Great Britain Dec. 9, 1927. 9 Claims. (Cl. 303—6.1.)



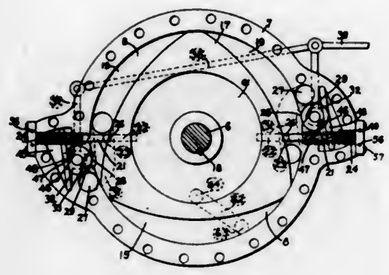
1. In a system of the type described for use on vehicles having power operated brakes and doors, the combination comprising a vacuum source, vacuum engines for operating the doors on the vehicle, vacuum engines for operating the brakes on the vehicle, connections between said door and brake engines and said vacuum source including electromagnetic valves, and means connected to said electromagnetic valves for energizing them when the brakes are applied including manually operated switches.

1,805,984. COMBINED DOOR BUMPER AND COAT HANGER. FRANKLYN H. HULL, Hawthorne, N. J., assignor to Austral W[illegible] Company, New York, N. Y., a Corporation of Maine. Filed Nov. 6, 1928. Serial No. 317,679. 2 Claims. (Cl. 248—22.)



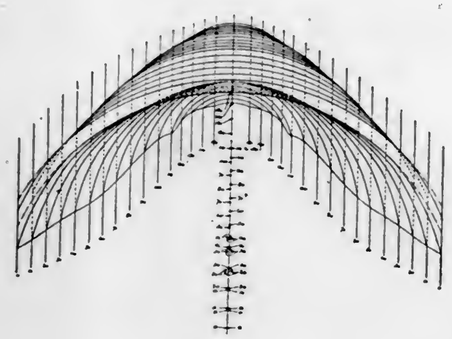
1. A combined door bumper and coat hanger comprising a U-shaped member, means to secure one arm of said member to a door, the other arm of said member having cushioning means serving as a door bumper and a hook carried on the said member.

1,805,985. HYDRAULIC BRAKE. CHARLES L. JOLLY, Wilmar, Calif. Filed Oct. 24, 1928. Serial No. 314,698. 6 Claims. (Cl. 188—90.)



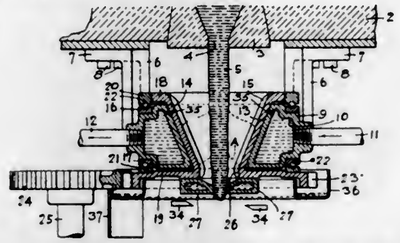
1. A hydraulic brake mechanism comprising a housing having a circular chamber therein, a shaft journalled axially of said chamber, a rotor rigid with said shaft, portions of the periphery of said rotor extending adjacent the bore of said chamber to define recesses therebetween, hydraulic fluid in said recesses, a gate slidably mounted in said housing, resilient means pressing the gate inward toward the rotor and into said recesses as they move therepast, a bypass connecting portions of said chamber with which the recesses come into register and upon opposite sides of said gate, means for controlling the flow of hydraulic fluid through said bypass, and means operable by said flow-controlling means for controlling the inward movement of said gate.

1,805,986. ARCH DAM. LARS R. JORGENSEN, Berkeley, Calif. Filed May 28, 1929. Serial No. 366,578. 7 Claims. (Cl. 61—30.)



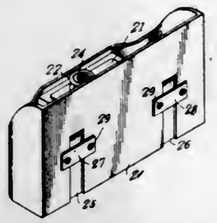
1. In a constant angle arch dam which is divided horizontally into a bottom, a middle and a top zone, and where said zones are superposed the top zone having the ends of the arches of sharper curvature towards the abutments than the central part of the arches, the central part of said arches projecting partly outside the middle zone on the downstream side, the amount of projection being maximum at the crown of the arch and diminishing to zero towards the haunches and towards lower elevations.

1,805,987. METHOD AND APPARATUS FOR FEEDING MOLTEN GLASS. JOHN R. KELLER, Carnegie, Pa., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 7, 1922. Serial No. 541,775. 41 Claims. (Cl. 49—55.)



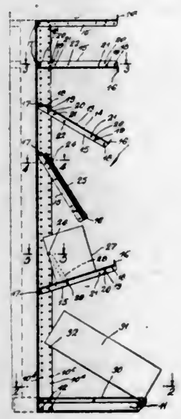
1. The method of producing mold charges of molten glass that comprises applying a variable centrifugal force to a descending body of glass to vary the rate of descent of different portions of said body of glass.

1,805,988. SUPPORT FOR ELECTRICALLY ACTUATED FIXTURES. CHARLES KRAFT, Jersey City, N. J. Filed Sept. 20, 1928. Serial No. 307,282. 3 Claims. (Cl. 173—338.)



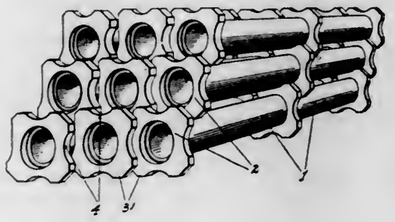
1. A container comprising a hollow casing having a pair of spaced grooves in its rear wall, bars fixed on said wall transversely across the upper portions of the grooves, and a pair of upright spring clips fixed on a support, said clips being receivable in the mentioned grooves and engageable with said bars.

1,805,989. SHELVING. ALBERT H. LEVENE, Newark, N. J. Filed May 15, 1929. Serial No. 363,372. 12 Claims. (Cl. 211—147.)



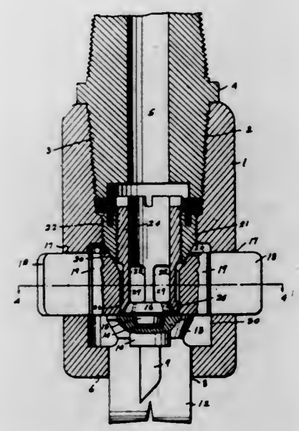
9. In shelving, spaced standards having a plurality of apertures arranged longitudinally thereof in vertically and laterally spaced relation, shelf members having flanges at the sides thereof, said flanges being provided with longitudinally and transversely spaced apertures, said shelf members being arranged between said standards, with the side flanges adjacent said standards, and fastening devices passed through at least two apertures in both flanges of each shelf member and through laterally spaced apertures in said standards so that said shelf members may be spaced apart at various vertical points and at different angles with relation to the standards.

1,805,990. CONDUIT ASSEMBLY. JOHN F. MAKOWSKI, Oakland, Calif., assignor to Fireproof Wall Company, Reno, Nev., a Corporation of Nevada. Filed July 20, 1929. Serial No. 379,813. 3 Claims. (Cl. 247—84.)



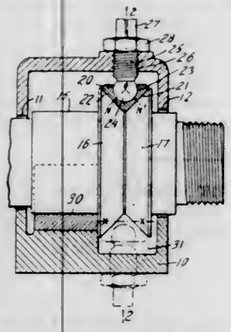
1. A conduit assembly including individual transversely separated conduits, each conduit comprising separate longitudinally alined sections, a member common to adjacent sections of a conduit at the joint between the same for connecting said sections together and means formed with said member to locate adjacent conduits in definitely spaced relation and preventing movement of one relative to the other.

1,805,991. DRILLING TOOL. CLAUDE W. METZGER, Houston, Tex. Filed July 9, 1928. Serial No. 291,227. 13 Claims. (Cl. 255—61.)



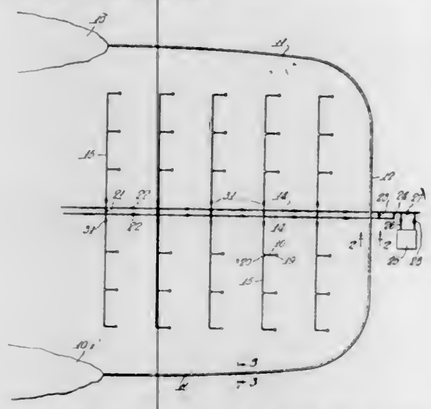
1. A drilling tool embodying a tubular head having vertical and lateral blade bearings, blades fitted through said bearings, abutments carried by the blades which abut the inner side of the head, removable, expansible, tubular means screwed into the head and abutting the inner ends of the blades, and clamping said abutments firmly against the head.

1,805,992. BEARING. Anthony G. M. Michell, Melbourne, Australia. Filed Aug. 16, 1928. Serial No. 299,941. 17 Claims. (Cl. 308—160.)



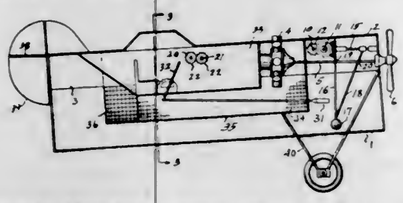
1. A combined journal and thrust bearing including in combination, a pair of relatively movable elements, one element having a substantially V-shaped groove, and the other element being pivotally mounted and having bearing surfaces adapted to fit within said groove.

1,805,993. METHOD OF AND APPARATUS FOR WATER FILTRATION. Anthony P. Miller, Pleasantville, N. J. Filed Nov. 27, 1928. Serial No. 322,140. 8 Claims. (Cl. 210—13.)



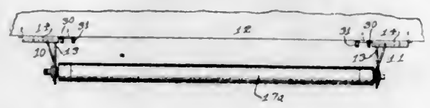
1. A gravity filtration apparatus including in combination with a reservoir and a stratum of sand at or below the bed thereof, a submerged main for filtered water disposed above the sand stratum and leading therefrom, feeders for said main, and well points connected to the feeders and having their screened inlet ends embedded in the sand, said feeders and well points being also submerged to effect a gravity feed to the main.

1,805,994. AEROPLANE. William Niemeyer, Sheridan, Tex. Filed Dec. 31, 1928. Serial No. 329,393. 5 Claims. (Cl. 244—29.)



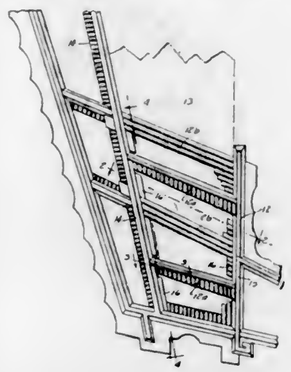
1. In an aeroplane a skeleton frame work forming a fuselage and of triangular vertical cross sectional contour, a substantially flat plane forming the top of said framework which is longer from front to rear than from side to side, and depending marginal side walls carried by said plane at substantially right angles thereto and extending from end to end thereof.

1,805,995. ADJUSTABLE SHADE ROLLER BRACKET. Joseph T. Palladino, Waterbury, Conn. Filed Jan. 20, 1930. Serial No. 421,915. 10 Claims. (Cl. 156—24.)



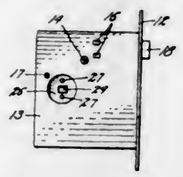
1. In a shade roller bracket, a guide frame to be attached to a window frame, an adjustable angle member slidable within said guide frame, said guide frame having a series of locking apertures, and said angle member having a spring strip tongue secured to the outer end thereof for selectively and interchangeably engaging in any one of said apertures.

1,805,996. LIGHTING FIXTURE PART. Samuel Perla, Brooklyn, N. Y. Filed Jan. 10, 1930. Serial No. 419,883. 6 Claims. (Cl. 240—78.)



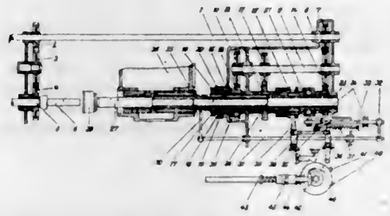
1. A cast lighting fixture part having a grille formed of end members and a plurality of cross members arranged in staggered relation and spaced to accommodate a glass panel.

1,805,997. DOORLATCH MECHANISM. Sherrie L. Rhiner, Pine Bluffs, Wyo. Filed May 2, 1930. Serial No. 449,164. 7 Claims. (Cl. 292—165.)



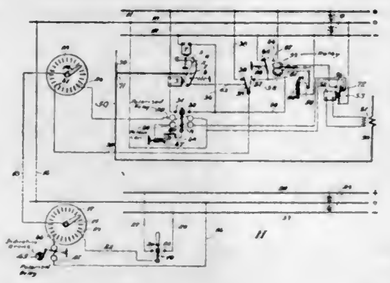
1. A door latch mechanism comprising: a latch bolt; a bolt operating mechanism; knobs mounted for swinging movement; keys projecting from said knobs so as to actuate said bolt operating mechanism; and springs positioned so as to force said keys to co-act with said operating mechanism.

1,805,998. SCREW CUTTING DEVICE FOR AUTOMATIC LATHES. Otto Schaerer and Fritz Poppensieker, Cologne, Germany, assignors to the Firm Alfred H. Schutte, Cologne-Deutz, Germany. Filed Aug. 2, 1929, Serial No. 382,865, and in Germany May 24, 1928. 8 Claims. (Cl. 29—40.)



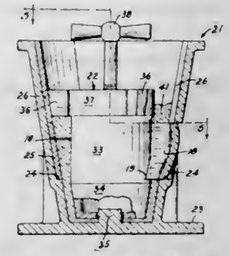
1. A screw cutting device for automatic lathes comprising a tool mounted for rotative and axial movements, a unidirectionally rotated mandrel for effecting the forward and backward motion of said tool, a mandrel guide rotating in the same direction as the mandrel and threadedly engaged therewith, and mechanism for driving said mandrel alternately at higher and lower speeds than the speed of rotation of said guide, substantially as set forth.

1,805,999. MEANS FOR INDICATING THE POSITION OF A CONNECTER SWITCH. Manfred Schleicher, Berlin-Charlottenburg, and Leo Brandenburger, Berlin-Halensee, Germany, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Nov. 16, 1927, Serial No. 233,545, and in Germany Mar. 22, 1927. 2 Claims. (Cl. 177—311.)



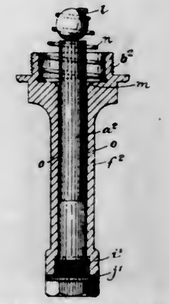
1. In a system for indicating the open and closed positions of a switch, the combination of an electric circuit controlled by the switch, an indicating device, electromagnetic means for variably operating the indicating device, means controlled by the switch in accordance with the open and closed position thereof for controlling the operation of the operating means to cause the indicating device to indicate the then position of the switch, an overload relay associated with the electric circuit controlled by the switch, a switching means, means controlled by the overload relay for operating the switching means, means controlled by the switching means for rendering the indicating device operating means non-responsive to the switch controlled means and to operate the indicator operating means to cause the indicator to indicate incorrectly that the switch is closed, and retarded operating means for restoring the switching means controlled by the overload relay to normal position and thereby restore the indicating device operating means to the control of the switch operated means to indicate the then position of the switch.

1,806,000. MOLDING APPARATUS. William B. Scott, Oakland, Calif., assignor to Marchant's Foundry Co., Oakland, Calif., a Corporation of California. Filed Mar. 4, 1930. Serial No. 433,042. 1 Claim. (Cl. 22—13.)



In molding apparatus for forming a tubular cast member having preformed vanes embedded therein to extend radially within the bore thereof, a core box, lining members in said core box cooperative to engage portions of said vanes to fixedly dispose the said vanes to extend into the core space of said box in circumferentially spaced alignment, a centering element adapted to be inserted into the core box and engageable with the vanes to maintain them in radial alignment, said centering element being tapered at its lower end and substantially cylindrical at the portion engageable with the vanes.

1,806,001. MEANS FOR CLEANSING OR FILTERING LUBRICATING OILS. Frederick Richard Simms, London, and Bertram Charles Joy, West Hampstead, London, England. Filed. Dec. 28, 1927, Serial No. 243,152, and in Great Britain Aug. 25, 1927. 4 Claims. (Cl. 209—215.)



1. A device for separating para-magnetic particles from lubricating oil, comprising an adaptor provided with means for securing it to an oil receptacle in communication with the ordinary drain aperture therein, and a magnetic device removably supported in said adaptor and having its inner end projecting beyond the end of the adaptor into the oil within said receptacle, the outer end of said adaptor being provided with an aperture through which the magnetic device may be removed without disconnecting the adaptor from the oil receptacle, and a removable closure for said aperture.

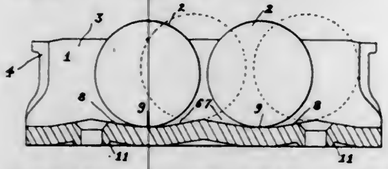
1,806,002. MEANS FOR CLEANSING OR FILTERING LUBRICATING OILS. Frederick Richard Simms, London, and Bertram Charles Joy, West Hampstead, London, England. Filed Dec. 28, 1927, Serial No. 243,153, and in Great Britain Nov. 14, 1927. 4 Claims. (Cl. 209—215.)



1. The combination with a magnet device for removing metallic particles from oil, of a removable collecting means surrounding portions of said magnet device to be

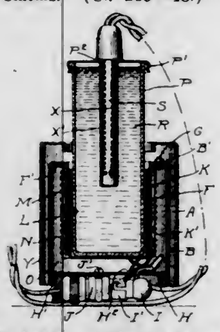
immersed in the oil, and detachably secured thereto, and comprising a sleeve formed separately from the magnet device and providing spaces for retaining the metallic particles collected by the magnet, and removable from the magnet with the collected particles for cleaning, the removal of the collecting device effectively cleaning the enclosed portions of the magnet device.

1,806,003. ROLLER SIDE BEARING. ARNOLD STUCKI, Pittsburgh, Pa. Filed Jan. 5, 1929. Serial No. 330,473. 3 Claims. (Cl. 308—226.)



1. A side bearing for lower bolsters of railway cars comprising a forged cage formed of a rolled channel section, the bottom of which is of substantially uniform thickness and adapted to provide a bearing surface transverse to the bolster, said bottom being pressed upwardly at spaced points between its ends to form two separate roller receiving pockets each of which is inclined upwardly at its ends, and bosses formed on the under side of the bearing surface at the outer ends of said pockets for supporting the inclined portions thereof.

1,806,004. ELECTRIC HEATER. WALTER K. TAVENDER, Haworth, N. J. Filed July 25, 1928. Serial No. 295,323. 6 Claims. (Cl. 219—43.)



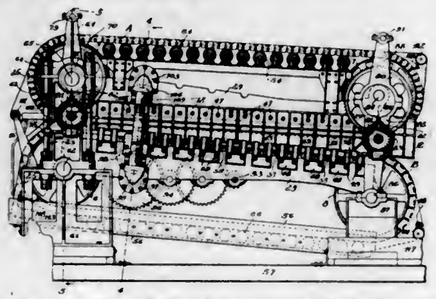
1. An electric heater of the character described comprising an inner and outer casing, means comprising discs for holding said casings together in spaced relation which project below said casings to serve as legs therefor and to provide an annular passage for air therebetween, a cup suspended from the upper end of said inner casing, a plurality of heating elements of relatively different heating capacity carried thereby, and electrical conductors connected to said heating elements and adapted to establish an electric circuit thru each of same.

1,806,005. FASTENING DEVICE. ANDRÉ THOMAS, Paris, France, assignor to Louise Thomas, Paris, France. Filed Oct. 16, 1929, Serial No. 400,002, and in France Sept. 26, 1929. 1 Claim. (Cl. 24—117.)



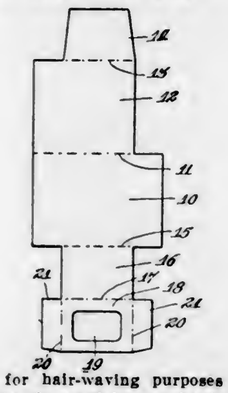
A fastening device for the bands or straps of shoes comprising a supporting portion constituted by a shallow hollow cylindrical element, an integral end member to said element at one end thereof, a boss at the centre of said end member, a screw threaded bore through the boss and end member, a base member at the other end of the cylindrical body, projecting pegs from the base member adapted to be attached to the body of the shoe by sewing, two elongated slots through the curved wall of the hollow cylindrical element in diametrically opposite positions, and a clamping element constituted by a button, a central screw threaded stem projecting from the button and adapted to screw into and through the screw threaded bore in the end of the supporting member, and a plate fixed to the inner end of the said screw threaded stem within the interior of the hollow cylindrical element and adapted when the button is screwed down to come into clamping engagement with the band or strap of the shoe inserted through the elongated openings, for the purposes set forth.

1,806,006. BOARD MAKING MACHINE. CHARLES A. UPSON and OTTO R. WINTER, Lockport, N. Y., assignors to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Mar. 10, 1927. Serial No. 174,316. 34 Claims. (Cl. 92—39.)



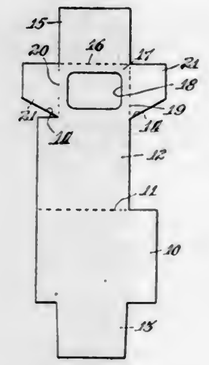
1. In a machine of the character described, the combination with a pressure chamber formed by upper and lower flights of pressure bars linked together in endless chains including means for driving the latter, said flights being convergent toward the delivery end of the machine, of pressure beds supporting the reaches of the chains which constitute opposite walls of the pressure chamber, said beds being provided with bearing rollers at the feeding end of the pressure chamber and the wider end of the latter, and with relatively stationary surfaces at the delivery or narrow end of the pressure chamber upon which the undersides of the pressure bars are received after they have left the said roller bearings.

1,806,007. HAIR WAVING WRAPPER. WARREN S. WATTS, Louisville, Ky., assignor to Arlette, Inc., Louisville, Ky., a Corporation of Delaware. Filed Dec. 7, 1928. Serial No. 324,504. 15 Claims. (Cl. 132—36.2.)



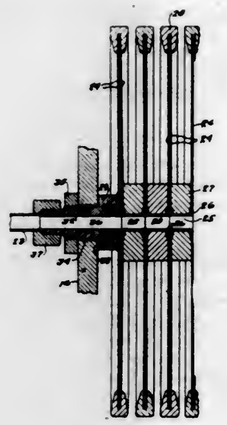
15. A sachet for hair-waving purposes comprising a plurality of sheets of material, one of said sheets having an opening therein, a lining sheet of impervious material between said sheets, and a pad between said sheets and extending across said opening.

1,806,008. HAIR WAVING WRAPPER. WARREN S. WATTS, Louisville, Ky., assignor to Arlette, Inc., Louisville, Ky., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,808. 12 Claims. (Cl. 132—36.2.)



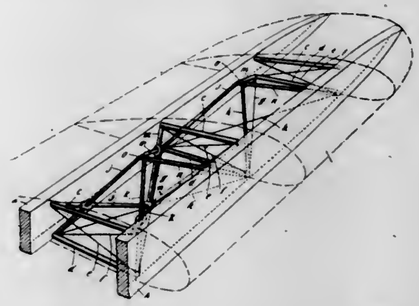
10. A blank for forming a sachet for hair waving and comprising a sheet adapted to be folded upon itself to provide a casing, a metal foil sheet in said casing, said blank having a plurality of extensions cooperating one with another to form an open sided pocket having a plurality of thicknesses of material at the back thereof, one of said extensions having a plurality of projecting sections foldable over another extension and adapted to be adhesively secured thereto.

1,806,009. BELLOWS AND METHOD OF MAKING THE SAME. CLARENCE J. WHITACRE, Detroit, Mich., assignor, by mesne assignments, to S. F. Arbuckle Corp., a Corporation of Delaware. Filed May 26, 1928. Serial No. 280,948. 14 Claims. (Cl. 137—156.5.)



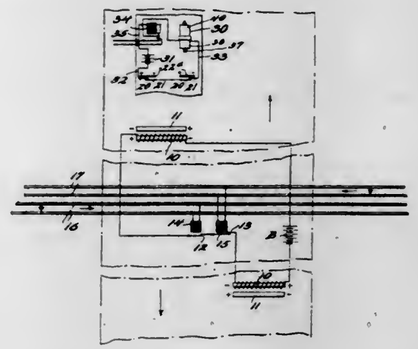
1. A bellows having the outer edges of the wall members thereof joined together in pairs by a yieldable nonmetallic material.

1,806,010. METHOD OF BRACING A CANTILEVER BEAM AGAINST TORSIONAL DEFLECTION. DAVID LEONARD HOLLIS WILLIAMS, Ickenham, England, assignor to Charles Richard Fairey, Hayes, England. Filed Oct. 16, 1928, Serial No. 312,854, and in Great Britain Nov. 16, 1927. 8 Claims. (Cl. 244—31.)



1. A cantilever beam for aircraft wings comprising a plurality of rectangular cellules and bracing means comprising a pyramid of bracing members within each cellule and having one entire side of the cellule as its base.

1,806,011. AUTOMATIC CONTROLLING SYSTEM FOR MOTOR VEHICLES. BENJAMIN F. WOODING, Montclair, N. J.; Daniel T. Dobyns administrator of said Benjamin F. Wooding, deceased. Filed Dec. 2, 1925. Serial No. 72,772. 9 Claims. (Cl. 246—63.)

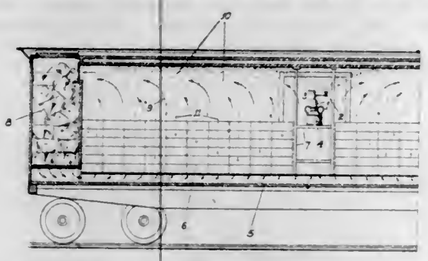


1. In a vehicle control system, a permanent magnet located beneath the surface of a roadway near the intersection thereof with a second roadway, an electro-magnet associated with said permanent magnet and adapted when energized to neutralize the action thereof, means controlled by a vehicle on said second roadway for controlling the circuit of said electro-magnet, and a vehicle having an alarm actuated by said permanent magnet.

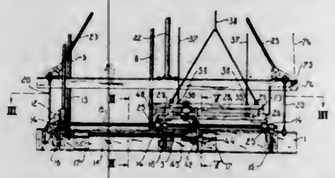
1,806,012. METHOD OF STERILIZING FRUIT IN REFRIGERATOR CARS. LESTER W. COLLINS, Modesto, Calif., assignor to Ansul Chemical Company of California, Modesto, Calif., a Corporation. Filed Sept. 21, 1929. Serial No. 394,297. 5 Claims. (Cl. 99—9.)

5. A method of sterilizing produce in a refrigerator car having air currents induced by the refrigerating means and flowing longitudinally of the car, consisting in discharging an undiluted sterilizing gas into the car in a space

at the central portion thereof between piles of containers of produce and in an upward direction, and under pressure so that when discharged the gas will strike the ceiling of the car and be spread out horizontally essentially through the movements of the air currents.



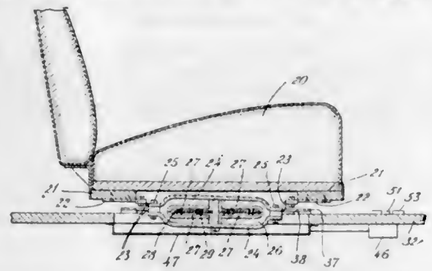
1,806,013. MACHINE FOR SAWING UNDER WATER. JACOBUS GROENEVELD DE KATER, The Hague, Netherlands. Filed Jan. 24, 1930, Serial No. 423,082, and in Germany Dec. 31, 1928. 10 Claims. (Cl. 29—73.)



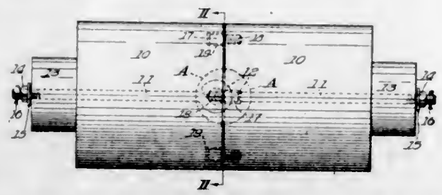
7. In a machine for sawing off an element such as a sheet piling below the water level, the combination with a frame being U-shaped in horizontal section, of guide ways secured to and extending in substantially parallel relation with the legs of said U, a carriage adapted for lengthwise movement along said guide ways, a saw associated with said carriage but adapted to move in transverse direction relative thereto, means for imparting to said saw reciprocatory transverse movement relative to said carriage, a feed screw associated with said frame and extending in parallel relation with said guide ways, means normally preventing said feed screw from rotation, a nut in operative engagement with said feed screw and engaging said carriage, a ratchet wheel secured to said nut, a member adapted for swinging motion about the axis of said feed screw, means associated with said reciprocatory transverse movement imparting means and adapted to impart swinging motion to said member, two ratchet pawls hinged to said member and adapted during swinging movement of said member to engage said ratchet wheel and impart thereto rotary motion the one pawl in forward and the other pawl in backward direction, a third ratchet pawl hinged to said carriage and adapted when engaging said ratchet wheel to prevent the same from rotation in backward direction, means interconnecting said third ratchet pawl with said backward rotary motion imparting ratchet pawl in such a manner that when the one engages the said ratchet wheel the other disengages the same and vice versa, means located in the path of said backward rotary motion imparting ratchet pawl and adapted to move same out of engagement with said ratchet wheel before said pawl has reached the end of its idle stroke, and means associated with said frame for clamping the same below the plane of movement of said saw to said element when horizontally straddled by said frame.

1,806,014. ADJUSTABLE SEAT FOR VEHICLES. GERHARD FLINTERMANN, Orange, N. J. Filed Jan. 7, 1929. Serial No. 330,719. 12 Claims. (Cl. 155—14.)

2. In an adjustable seat, the combination of a support therefor, means for movably mounting the seat on the support, cooperating parts for effecting movement of the seat relative to the support and non-metallic resilient means interposed at a point intermediate the longitudinal extremities of the seat in supporting relationship between the seat and the support, whereby the seat may have a limited longitudinal rocking movement on said support.

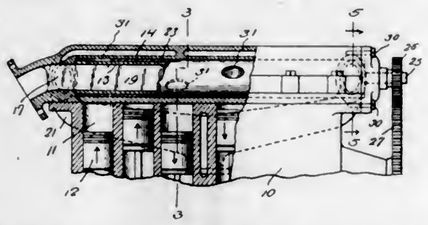


1,806,015. ROLL FOR FLATTENING METAL SHEETS. WILLIAM E. FOALE, Wilkinsburg, Pa. Filed Sept. 5, 1928. Serial No. 304,127. 8 Claims. (Cl. 153—57.)



8. A roll for flattening metal sheets, including a plurality of cylindrical roll sections arranged end to end in slightly spaced relation, a projecting member on one end of a section, and a recess in the adjacent end of another section to effect a loose connection therebetween.

1,806,016. ROTARY VALVE. EARL WILLIAM GRIFFITH, Dalhart, Tex. Filed June 9, 1930. Serial No. 460,000. 1 Claim. (Cl. 123—59.)



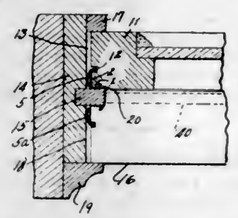
A rotary valve for explosive engines comprising spaced inner and outer stationary casings carried by the head of the engine, a longitudinal partition dividing the inner casing into inlet and exhaust chambers extending throughout the length of the casing, an end wall carried by the partition for closing the adjacent end of the exhaust chamber, said casings having aligned inlet and exhaust ports communicating with their respective chambers, a rotary valve sleeve insertable through an opening in one end of the head into the space between said inner and outer casings, a removable cap carried by said end of the head and closing the adjacent ends of said casings, said valve sleeve being closed at one end and having a circumferential series of spaced openings adjacent said end, said inlet chamber communicating at both ends with the inlet manifold of the engine, and through the spaced openings of the sleeve at one end thereof, and a shaft projecting from the closed end of the sleeve and journaled in said cap, whereby said sleeve can be rotated.

1,806,017. MOLD FOR PLASTIC SUBSTANCES, FOR INSTANCE, CHOCOLATE. JENS JOHANNES JENSEN, Copenhagen, Denmark, assignor to Messrs. Boggild & Jacobsen, Copenhagen, Denmark. Filed Mar. 26, 1930, Serial No. 439,154, and in Germany Apr. 8, 1929. 2 Claims. (Cl. 107—19.)



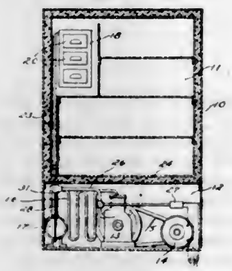
2. A mold of the class described, comprising upper and lower mold sections, a frame supporting the lower sections, a rail, spring arms carried by the rail and having their outer ends engaged with the upper mold sections, the lower sections having a plurality of upwardly and outwardly inclined projections upon their edges for guiding the edges of the upper sections for engagement with the edges of the lower sections, and a spring restrained hook slidably associated with the frame for engaging the rail to yieldably hold the edges of the respective sections in yielding contact.

1,806,018. WEATHER STRIPPING. LOUIS F. JULIEN, Detroit, Mich., assignor to Chamberlin Metal Weatherstrip Company, Detroit, Mich., a Corporation of Michigan. Filed May 9, 1929. Serial No. 361,585. 8 Claims. (Cl. 20—69.)



1. A metal weather strip for sliding window sash, comprising the combination with a sash having its rail provided with a groove in its outer side face respectively, of a metal weather stripping having a body provided with portions adapted to engage the grooves under spring pressure, and a resilient weather closing portion attached to the body and extending inwardly from the outer face of the sash.

1,806,019. REFRIGERATING MECHANISM. GLENN MUFFLY, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Dec. 10, 1929. Serial No. 413,102. 1 Claim. (Cl. 62—95.)

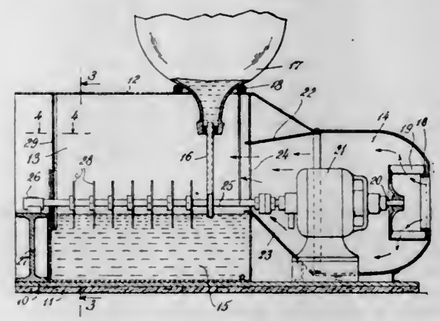


In a mechanical refrigerating system, in combination, a cabinet provided with a cooling compartment and a unit compartment separated by a wall, an evaporator in said cooling compartment, a compressing and a condensing unit in said unit compartment, a motor for driving said compressor, a pair of tubes, one positioned within the other for at least part of its length, extending from said evaporator through said wall and forming intake and discharge passages for said evaporator, the outer of said tubes being connected to said compressor unit and the inner of said tubes comprising a capillary tube connected to said condensing unit and forming the sole metering means for controlling the flow of liquid refrigerant to said evaporator, and means controlled by variation in pressure within the outer of said tubes for controlling the operation of said motor.

1,806,020. PROCESS FOR REVIVIFYING USED DECOLORIZING MATERIALS. CHARLES K. PARKER, Richmond, and FRANK A. BENT, Berkeley, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Aug. 22, 1927. Serial No. 214,562. 5 Claims. (Cl. 252—2.)

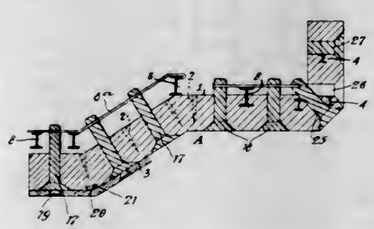
1. A process of revivifying used decolorizing clays, comprising distilling and partially carbonizing hydrocarbons present in said clays in the presence of added steam and air, and then removing the carbonized impurities by producing an endothermic reaction in the presence of steam, without substantial loss of combined water of the clay.

1,806,021. HUMIDIFIER. KARL D. PERKINS, New York, N. Y., assignor to Audiffren Refrigerating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 2, 1927. Serial No. 237,242. 4 Claims. (Cl. 183—22.)



1. In air conditioning apparatus, the combination of a chamber, said chamber providing a liquid-containing tank, a constant level liquid supply device, a rotatable shaft extending above the surface of the liquid, a plurality of spaced discs arranged on the shaft and partially immersed in the liquid, means for rotating the shaft and discs, means for producing a current of air through the chamber substantially parallel to the shaft, and a device for removing the excess liquid contained in the air.

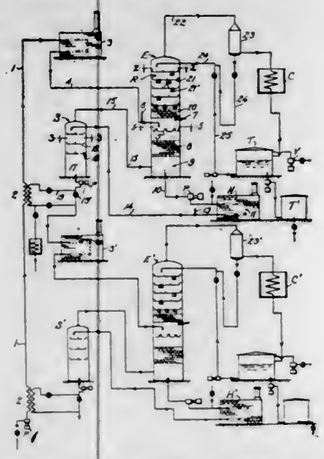
1,806,022. IGNITION ROOF FOR TRAVELING GRATE BOILER PLANTS. RICHARD POTH, Dortmund, Germany. Filed Oct. 5, 1926, Serial No. 139,740, and in Germany Oct. 17, 1925. 2 Claims. (Cl. 110—99.)



1. An ignition arch for traveling grate boiler plants comprising in combination main girders arranged above the

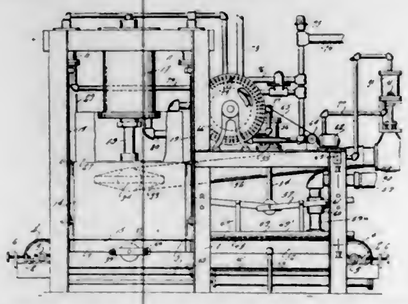
furnace chamber, auxiliary girders extending transversely of the main girders, supporting bricks including shanks having heads at one end and openings at the opposite end receiving the auxiliary girders whereby the supporting bricks are movably suspended thereon, a coherent body filling the space between the bricks, said body being supported by the heads of the bricks and forming with the latter a body constituting the top of the furnace chamber.

1,806,023. METHOD FOR THE DISTILLATION OF PETROLEUM. EDWARD G. RAGATZ, Los Angeles, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a Corporation of California. Filed Nov. 6, 1926. Serial No. 146,673. 7 Claims. (Cl. 196—88.)



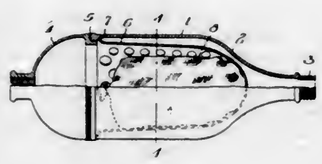
1. A method for the fractional distillation of petroleum oils comprising preheating an oil and introducing the same into an exhausting column in which lighter constituents are liberated, the temperature of the oil approximating that of the vapors in the column at the point of introduction of the oil, passing heated vapors through said column for the purpose of releasing lighter constituents therefrom, withdrawing the bottoms from said column and heating without cracking the same by a once-through passage in a coil to generate a quantity of vapors, separating said vapors and employing the same as said heated vapors for passage through said column to release said light constituents.

1,806,024. MINERAL FIBER FELTING. FRANK C. RUSSELL and CLINTON L. SAVIDGE, Toledo, Ohio, assignor to The Mineral Felt Insulating Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 5, 1929. Serial No. 411,791. 18 Claims. (Cl. 92—61.)



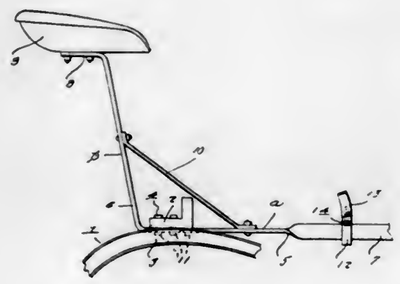
1. The method of forming a felted fiber block comprising confining a volume of liquid containing separated fiber, removing said liquid while maintaining a controlled resistance against the liquid flow therefrom.

1,806,025. DEVICE FOR DISTRIBUTING FERTILIZER AND THE LIKE. HARRY T. SEAMAN, Rochester, N. Y. Filed Dec. 8, 1927. Serial No. 238,642. 2 Claims. (Cl. 299—83.)



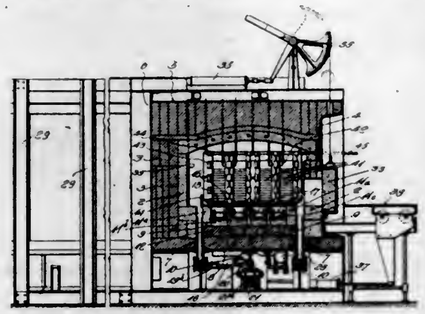
1. A portable device for insertion in a water line for distributing fertilizer or the like, comprising a hollow body having a smoothly contracted discharge end and having its other end closed and provided with an inlet, a perforated container housed in said body having an open end secured to the body adjacent its inlet end and having a closed contracted end located within said contracted end of the body and adjacent but spaced from the walls thereof to form a restricted passage therebetween, and a yieldable fabric container adapted to be detachably located in said perforated inner container and pressed toward the closed end thereof by water passing through said device.

1,806,026. SEAT ATTACHMENT. ADOLPH G. SEEDIG, Wheeler, Tex. Filed June 5, 1930. Serial No. 459,844. 1 Claim. (Cl. 155—51.)



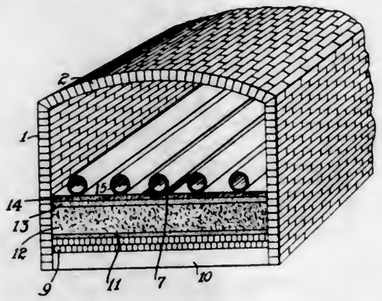
A seat attachment for a two row lister comprising a frame including a pair of spaced longitudinally extending arched side beams, a cross bar connecting said beams and supported on the throat portion of the latter, a seat bar consisting of angularly disposed flat spaced members extending in relatively vertical and horizontal planes about the said cross bar for positioning the latter in the crotch thereof, the horizontally extending member being secured to the under side of said cross bar and extending forwardly thereof and the vertically extending member extending rearwardly and upwardly above the said cross bar, a seat mounted on the upper end of said vertical member, the forwardly extending portion of said horizontal member being twisted intermediate its end to place the flat sides of its forward part in vertical planes and a foot rest member having its central part looped to embrace a portion of the said forward part and means for clamping the loop to the member.

1,806,027. ROTARY HEARTH FURNACE. EDWIN L. SMALLEY, Whitefish Bay, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 10, 1930. Serial No. 467,078. 20 Claims. (Cl. 266—1.5.)



1. In a rotary hearth furnace, an annular hearth having portions thereof adapted to register with a discharging door, a swinging baffle member extending over said hearth and disposed adjacent said discharging door in impinging alignment with article on said hearth, and means for electrically heating opposite sides of said swinging baffle.

1,806,028. TUBE WELDING FURNACE. JOHN M. STAUDE, Pittsburgh, Pa., assignor of one-third to Adam I. Duval and one-third to Carl A. Knott, Pittsburgh, Pa. Filed Mar. 29, 1930. Serial No. 439,897. 3 Claims. (Cl. 263—10.)

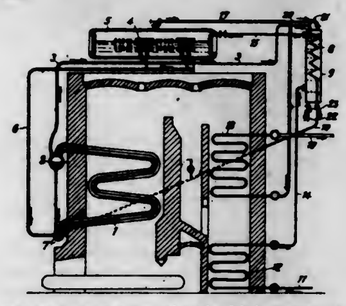


3. A heating furnace bottom comprising a supporting structure of brick having a thin layer of fused powdered magnesite and slag, a relatively thin layer of dolomite and slag and a layer of fused magnesite and slag, and a final or top layer of burned lime in superposed relation.

1,806,029. PROCESS FOR WORKING UP CRUDE PHOSPHATE AND POTASSIUM SALTS TO MIXED FERTILIZER. CARL THEODOR THORSSELL, Cassel, Germany. Filed Aug. 7, 1930, Serial No. 473,778, and in Germany Aug. 14, 1929. 3 Claims. (Cl. 71—7.)

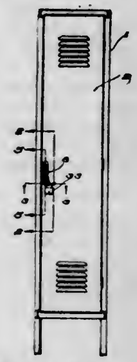
1. A process for working up crude phosphates and potassium salts into mixed fertilizers, consisting in stirring a liquor consisting of ammonium carbonate and ammonium chloride obtained in the process, with gypsum, also obtained in the process, separating off the calcium carbonate formed, treating the remaining liquor with potassium chloride and ammonia, thus precipitating potassium sulphate, employing the latter for the disintegration of crude phosphate with nitric acid in such a concentration as to produce a solution of potassium nitrate and phosphoric acid together with gypsum, further treating this solution to obtain a mixed fertilizer, the mother liquor from the potassium sulphate being cooled for the purpose of separating out a part of the ammonium chloride and saturated with carbonic acid, whereupon the gypsum obtained is stirred in as set forth.

1,806,030. BOILER GENERATING STEAM ACCORDING TO THE INDIRECT METHOD. ROBERT UHDE, Kassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung, Kassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Oct. 27, 1928, Serial No. 315,476, and in Germany Nov. 14, 1927. 6 Claims. (Cl. 122—33.)



1. In a steam generator wherein high pressure steam is indirectly generated by means of a heat carrier passing through the heating elements of a working steam boiler and circulating in a closed circuit a portion of which is heated by hot gases, and a feed-water heater having heating elements therein, said feed-water heater heating elements and said heating elements of the working steam boiler being connected in parallel with respect to the heat carrier circuit.

1,806,031. LOCKING MECHANISM. PAUL VIGNOS, Canton, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed Oct. 18, 1928. Serial No. 313,258. 14 Claims. (Cl. 70—14.)

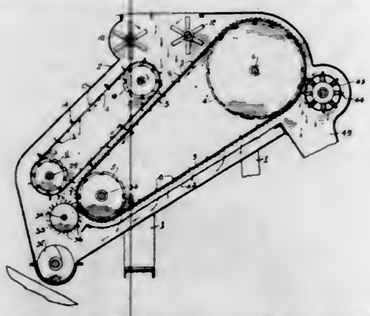


3. In combination with a door, a cabinet-lock plate secured to the rear face of the door and having a slotted portion extending at right angles thereto, and a slotted padlock clip slidably secured to said portion.

1,806,032. CLEANER AND HULL EXTRACTOR. JEFFREY JOHN WALLACE, Amite, La., assignor to Gullett Gin Company, Amite, La. Filed May 20, 1930. Serial No. 454,097. 5 Claims. (Cl. 19—37.)

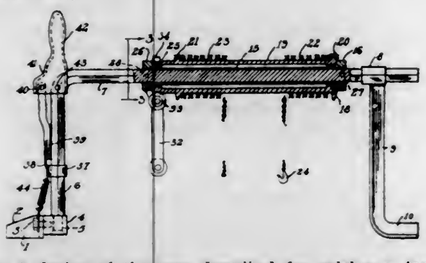
1. A cleaner and hull extracting device comprising in combination an endless conveyor belt having outwardly directed teeth, an endless conveyor belt having outwardly directed spikes and brushes, said belts arranged parallel with each other and so that the spikes will pass between

saw teeth and the brushes will wipe the saw teeth and at an inclination to the horizontal, means for feeding material between said belts at the top, means for re-



moving débris at the bottom, means for removing the cleaned material from the saw belt at the top, and means for operating said belts so that the adjacent reaches will travel at a differential speed but in the same direction.

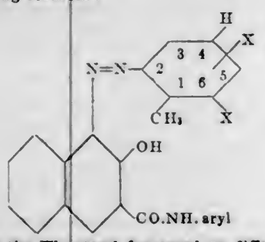
1,806,033. AUTOMOBILE TRANSMISSION LIFTING DEVICE. FRANCIS R. BEAL, Port William, Ohio. Filed Apr. 17, 1930. Serial No. 445,101. 3 Claims. (Cl. 254—145.)



1. A device of the type described for raising a transmission mechanism above the frame of an automobile, comprising a horizontal bar, a fixed vertical leg at one end of said bar, a vertical leg slidably secured to its other end, a drum carried by said bar between its legs, a chain secured at one end to the drum, with its other end free to be attached to said transmission mechanism, means for rotating said drum, a base member, and means pivotally connecting the lower end of the fixed leg to the base member whereby each may be moved about the axis of the other for the purpose specified.

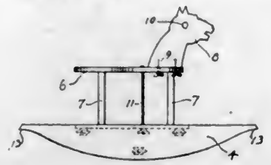
1,806,034. WATER-INSOLUBLE AZO DYESTUFFS AND MATERIAL DYED THEREWITH. KARL BECK and HERBERT KRACKER, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 5, 1928, Serial No. 324,052, and in Germany Dec. 17, 1927. 16 Claims. (Cl. 260—95.)

1. As new products, the water-insoluble azo dyestuffs of the following formula:



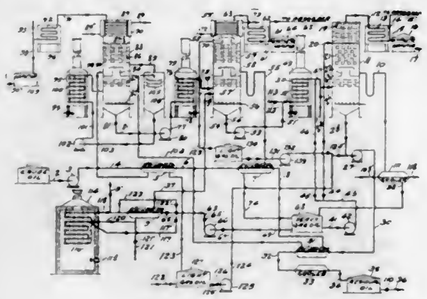
wherein both the X's stand for equal or different halogen atoms, of which the one not standing in a fixed position may stand in 3:- or in 5: position and wherein the aryl residue may be substituted or not, but must not contain any free sulfonic- or carboxylic groups, dyeing red shades fast to light.

1,806,035. ROCKING HORSE. JOHN HENRY BERNS, Jr., Tampa, Fla. Filed June 28, 1929. Serial No. 374,367. 5 Claims. (Cl. 272—54.)



1. A collapsible or knockdown rocking horse adapted for being packed within mailing limits, comprising a flat platform, mortised to receive legs, flat rockers, detachable means for securing the rockers to the platform, a flat seat mortised to receive legs, legs adapted for detachable seating within the mortises in the seat and in the platform, and a flat head having detachable means for securing it to the seat.

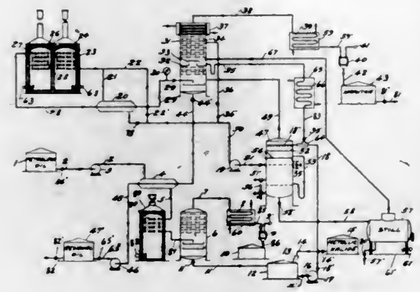
1,806,036. PROCESS FOR DISTILLING AND CRACKING PETROLEUM OILS. JOHN C. BLACK, Los Angeles, Calif. Filed Oct. 8, 1928. Serial No. 311,140. 13 Claims. (Cl. 196—49.)



1. A process of producing a maximum percentage of gasoline boiling point stock and a residuum of marketable fuel oil quality from a crude petroleum oil, comprising, separately separating by distillation and fractionation gasoline boiling point stock and a higher boiling light gas oil stock from a crude petroleum oil; separately separating by a second distillation and fractionation a light and a heavy gas oil fraction and a synthetic gasoline boiling point stock, from the crude petroluem oil residuum resulting from the first distillation and a cracked petroleum oil continuously introduced at a distillation temperature into a fractionating tower, said cracked petroleum oil being continuously produced by cracking the heavy gas oil stocks collected from the said second distillation step and from a subsequent cracking and distillation step of the residual oil produced in the said second distillation step, and then reducing the viscosity of the residual oil after the final distillation by commingling the same with a light gas oil separated by the first distillation.

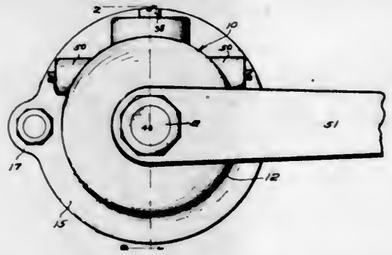
1,806,037. METHOD OF CRACKING OILS. JOHN C. BLACK, Los Angeles, Calif. Filed Nov. 14, 1928. Serial No. 319,396. 6 Claims. (Cl. 196—48.)

1. A process of producing gasoline boiling point hydrocarbons from higher boiling hydrocarbon oils, comprising, commingling petroleum oil with an anhydrous metallic halide suspended in petroleum oil at a temperature not greater than 300 degrees F., separating from the other products of the reaction, oil composed substantially of saturated hydrocarbons, subjecting the saturated hydrocarbons to thermocracking conditions by the application of heat under superatmospheric pressure to produce by thermomolecular decomposition, gasoline boiling point hydrocarbons, and higher boiling oils, separately separating



by fractionation and condensation, the gasoline boiling point hydrocarbons and a higher boiling distillate containing unsaturated hydrocarbons from a residual oil, continuously cooling the said separated higher boiling distillate containing unsaturated hydrocarbons, to a temperature not in excess of 300 degrees F. and commingling the same with the said petroleum oil containing the anhydrous metallic halide to be again processed.

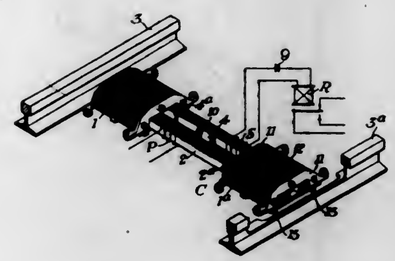
1,806,038. SHOCK ABSORBER. ADNA F. BLANCHARD, New York, N. Y., assignor to Guy C. Seaton, New York, N. Y. Filed May 11, 1929. Serial No. 362,329. 7 Claims. (Cl. 188—89.)



1. A case for devices of the character described comprising a body having a semi-circular piston chamber open on one side in the direction of its axis, a by-pass passage formed in the case adjacent the truncated side of the piston chamber and extending symmetrically with respect to the chamber and its axis, said passage having enlarged outer parts, and a reservoir formed in the body adjacent the passage and open at the upper side, openings being formed between respective sides of the piston chamber and ends of the passage, and between the reservoir and piston chamber.

1,806,039. APPARATUS RESPONSIVE TO THE PASSAGE OF RAILWAY VEHICLES. PAUL N. BOSSART, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1930. Serial No. 442,991. 3 Claims. (Cl. 246—63.)

1. Apparatus responsive to the passage of a railway vehicle, comprising two pole pieces so positioned in the trackway that the reluctance of the air gap between them is reduced by a magnetizable part of a passing vehicle, two parallel bars connecting said pole pieces and each provided with an air gap, a primary winding on one bar on one side of the air gap therein, a secondary winding on the other bar on the other side of the air gap therein, a source of alternating current connected with

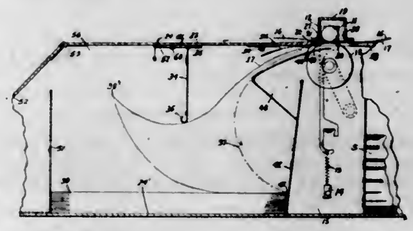


said primary winding and a relay connected with said secondary winding, said parts being so adjusted that in the absence of a vehicle sufficient current is induced in said secondary to keep said relay closed but that the effect of a passing vehicle is to reduce the current induced in the secondary below the release value of the relay.

1,806,040. AGE RESISTING VULCANIZED RUBBER COMPOSITION. HORACE G. BYERS, New York, N. Y., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 8, 1927. Serial No. 225,029. 6 Claims. (Cl. 18—50.)

3. The process of manufacturing a vulcanized rubber product possessing age resisting characteristics which comprises incorporating with said product prior to vulcanization p-phenyl amino p-hydroxy diphenyl amine.

1,806,041. MANIFOLDING MACHINE. HEZEKIAH W. CARROLL, Jr., Hoboken, N. J., assignor to Autographic Register Company, Hoboken, N. J., a Corporation of New Jersey. Filed Feb. 21, 1927. Serial No. 169,697. 9 Claims. (Cl. 282—16.)

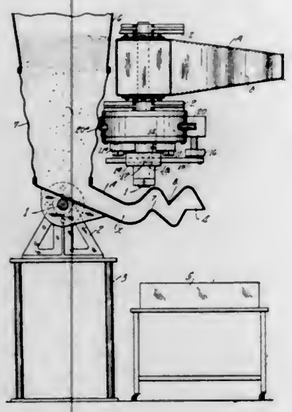


1. In a manifolding machine having a platen over which worksheets are fed; and means for feeding said worksheets over the platen: means located at said feeding means for separating certain of the worksheets from others as they approach and leave said feeding means.

1,806,042. MACHINE FOR FILLING MOLDING FLASKS. LIONEL A. CARTER, Webster Groves, Mo. Filed Oct. 31, 1929. Serial No. 403,826. 11 Claims. (Cl. 22—35.)

1. An apparatus for packing granular material in a receiving receptacle, consisting of a rockable member provided with a passageway through which the granular material travels, a discharge opening leading from said

passageway and disposed substantially opposite to the receptacle being filled, means for vibrating said member, and means for causing the granular material traveling



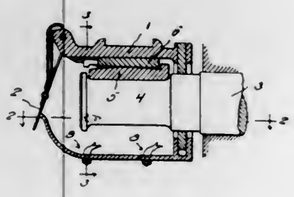
through said member to be projected through said discharge opening in the form of slugs of approximately determined quantities.

1,806,043. TREATMENT OF CELLULOSE DERIVATIVES OF PRODUCTS MADE THEREWITH. RENÉ CLAVEL, Basel-Augst, near Basel, Switzerland. Filed Jan. 29, 1926. Serial No. 84,764. 17 Claims. (Cl. 8—5.)

2. A process of dyeing cellulose acetate materials which comprises loading said materials by an operation comprising two stages, the first consisting in swelling and impregnating the materials with a solution of a salt of a loading metal, and the second consisting in treating the materials with a solution of a compound adapted to fix the metal therein as an insoluble salt, and thereafter dyeing the loaded materials with a dyestuff that has but little affinity for unloaded cellulose acetate material.

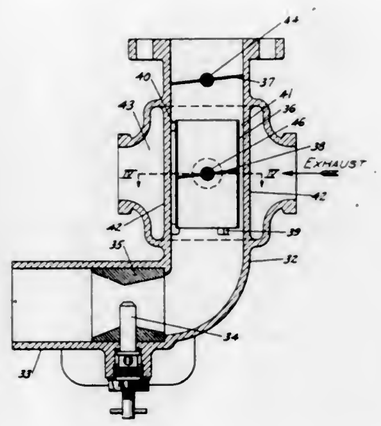
17. A fabric containing loaded cellulose acetate yarn dyed with a dyestuff that has but little affinity for unloaded cellulose acetate yarn.

1,806,044. JOURNAL BOX. LESLIE L. COGAN, Peru, Ind. assignor of one-half to Russell R. Rhodes, Peru, Ind. Filed Mar. 18, 1929. Serial No. 348,003. 5 Claims. (Cl. 308—89.)



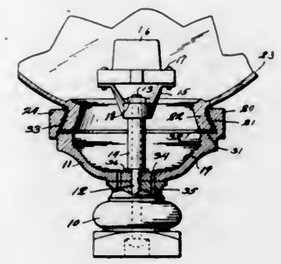
1. The combination with a journal box; of detachable and adjustable prongs extending from the walls of the box toward the journal, the inner end of each prong being directed laterally toward the inner end of the journal box.

1,806,045. CARBURETOR. WARD DECKER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed May 29, 1924. Serial No. 716,668. 4 Claims. (Cl. 261—13.)



1. In a carbureting tube, a mixing chamber having a pair of concentric passageways of uniform cross section, a throttle valve within said mixing chamber above said passageways for closing said chamber, a second throttle valve within one of said passageways for closing the same, and a lost motion linkage connecting said valves whereby both valves may be in the closed position simultaneously and opened in sequence, and means for heating one of said passageways.

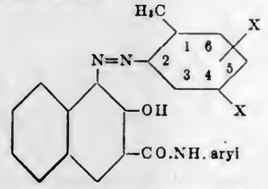
1,806,046. LIGHT GLOBE HOLDER. AMOS O. DEETER, Minot, N. Dak. Filed Jan. 11, 1930. Serial No. 420,256. 1 Claim. (Cl. 240—135.)



A combined light socket and globe holder comprising a base, a globe holding body, a light socket supporting member, and securing means extending through the base and the body and engaging the member whereby to hold said member and said body on the base, said securing means comprising an elongated threaded bolt, a sleeve positioned about the bolt and engaging at one end against the inner surface of the body, a nut for said bolt, and a socket supporting member interposed between the nut and the bolt.

1,806,047. WATER-INSOLUBLE AZO DYESTUFFS AND MATERIAL DYED THEREWITH. RICHARD DERESER and KARL MOLDAENKE, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 5, 1928, Serial No. 324,051, and in Germany Dec. 17, 1927. 20 Claims. (Cl. 260—95.)

1. As new products, the water-insoluble azo dyestuffs of the following formula:

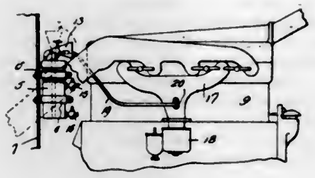


wherein both the X's stand for halogen, but at least one of which must be a bromine atom and wherein the aryl residue may be substituted or not, but is to contain no free sulfonic- or carboxylic groups, dyeing vivid red shades very fast to light.

1,806,048. CELLULOSE FIBERS, FABRICS AND ARTICLES. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Sept. 22, 1925. Serial No. 57,956. 25 Claims. (Cl. 8—13.)

1. A process for the weighting of material comprising an organic derivative of cellulose, which consists in swelling and impregnating said material with a salt of a weighting metal in solution, and subsequently treating to fix the metal in said material as an insoluble salt.

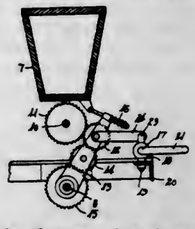
1,806,049. CHARGE HUMIDIFIER FOR EXPLOSIVE ENGINES. CHARLES EDWARD ENNIS, El Paso, Tex., and HARRY WALLACE CRAWFORD, Albuquerque, N. Mex. Filed Nov. 11, 1929. Serial No. 406,360. 3 Claims. (Cl. 261—121.)



1. A device to supply humidified air to the intake manifold of an explosive engine by inspiration, comprising a closed tank adapted to be partly filled with water, an air intake pipe leading into said tank in proximity to the bottom thereof and below the level of the water, an air intake and filler funnel swivelled to the upper end of said air intake pipe for selective horizontal or vertical positioning, and a conduit leading from the tank above the level of said water to said engine intake manifold.

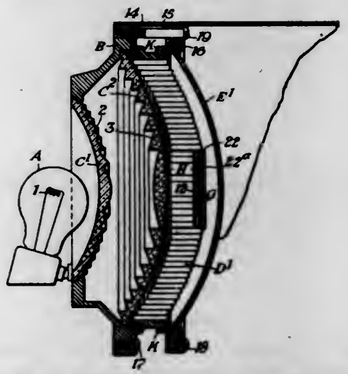
1,806,050. FOOT CONTROL FOR SEED PLANTERS. BERNARD FISCHER, St. Charles, Mo. Filed Aug. 13, 1928. Serial No. 299,202. 1 Claim. (Cl. 275—9.)

A drilling machine comprising a frame, a wheel-mounted axle supporting said frame, a bin mounted on the frame, right and left seed dropper shafts below the bin, two arms mounted for oscillation on said axle, gear wheels on said shafts, gear wheels on said arms geared to the axle and movable into and out of mesh with the firstnamed gear wheels, an operator's seat mounted on the frame behind the bin, right and left hand rock shafts journaled on the frame and having adjacent end portions bent back into hook formation to provide foot pedals, said pedals being arranged in front of the seat to be conveniently depressed by the feet of the operator, said rock shafts having arms,



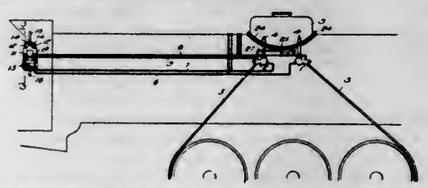
links connecting the firstnamed and secondnamed arms whereby the depression of said foot pedals will swing the firstnamed arms away from the firstnamed gear wheels, and spring means for yieldingly swinging the firstnamed arms toward the firstnamed gear wheels.

1,806,051. LIGHT SIGNAL. ARTHUR W. FISHER, Forest Hills Borough, and WESLEY B. WELLS, Wilkinsburg, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 29, 1927, Serial No. 202,194. Renewed Oct. 29, 1930. 1 Claim. (Cl. 177—329.)



A light signal comprising a frame, a doublet made up of two echelon lenses supported in said frame, an inner ring attached to said frame for holding the outer lens of said doublet in place in the frame, an L-shaped ring and an outer ring held together by screws, a cover glass mounted in said latter two rings, a channel-shaped ring located between said inner ring and said L-shaped ring, a screen structure supported in said channel-shaped ring for preventing phantom indications, and screws passing through said inner and outer rings and said L-shaped ring for holding all of the above-enumerated elements in place with respect to said frame.

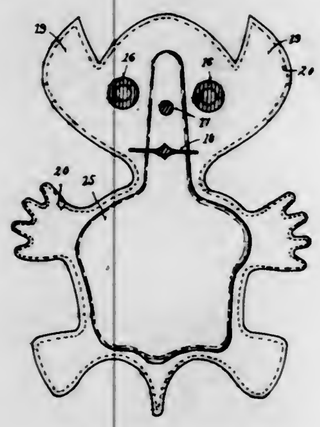
1,806,052. LOCOMOTIVE SANDING DEVICE. VIRGIL L. FRANTZ, Roanoke, Va. Filed Aug. 12, 1929. Serial No. 385,230. 1 Claim. (Cl. 291—5.)



In a locomotive sanding arrangement of the pneumatic type, the combination with a plurality of sanders each hav-

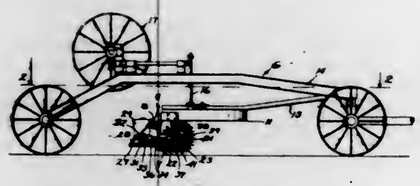
ing a sanding jet and a cleaning jet, of a sand box having outlets respectively communicating with said sanders, a valve device, pipes respectively connecting said valve device with each of said jets, pipes connecting each of the pipes interposed between the valve device and cleaning jets with the sand box, and check valves in the pipes leading to said box, said valve device having means for admitting fluid pressure to the sanding jets and for admitting a blast to the cleaning jets and sand box.

1,806,053. TOY. WALTER J. GALLAGHER, Cincinnati, Ohio. Filed May 1, 1929. Serial No. 359,647. 1 Claim. (Cl. 46—40.)



A toy comprising a flexible hollow body having a hollow head member provided with ears, a collapsible inflatable container within said body and head member, said ears having recesses communicating with said head member, whereby compression of said hollow body will cause movement of said ears by distension of a portion of said collapsible container into said recesses.

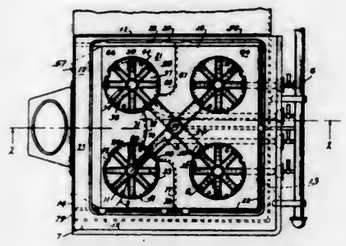
1,806,054. SWEEPING ATTACHMENT FOR ROAD GRADERS. GEORGE GARDNER, Redlands, Calif. Filed Feb. 15, 1928. Serial No. 254,430. 6 Claims. (Cl. 37—156.)



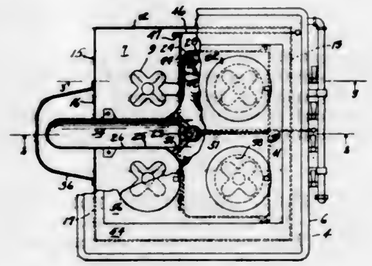
1. In a device of the character described, a bracket, a rotary brush mounted for rotation upon said bracket, means for removably mounting said bracket upon the mold board of a road grader, a motor adapted to be mounted on said grader and disconnectible means for operatively connecting said motor to said brush.

1,806,055. GAS STOVE. FREDERICK A. GERCICH, Oakland, Calif., assignor to Hammer-Bray Company, Oakland, Calif., a Corporation of California. Filed Nov. 17, 1927. Serial No. 233,864. 4 Claims. (126—39.)

1. In a stove having a top-gas-burner compartment defined beneath a closed cooking top, a member dividing said compartment into upper and lower chambers and having a perforation therein; a seat at said perforation; and a burner disposed in said compartment adjacent said perforation and directly engaging said seat whereby it may be supported in position by and entirely below the plane of said member.



1,806,056. AIR FEED AND VENT DEVICE FOR CLOSED TOP GAS STOVES. GEORGE HAMMER, FREDERICK A. GERCICH, and WILLIAM S. SMITH, Oakland, Calif., assignors to Hammer-Bray Company, Oakland, Calif., a Corporation of California. Filed Dec. 22, 1926. Serial No. 156,304. 2 Claims. (Cl. 126—39.)



1. In a stove, a top gas burner chamber having a closed cooking top thereover, front and rear sets of burners in said chamber, partitions associated with said cooking top and arranged to prevent a flow of burnt gases from said front burners through the chamber spaces at said rear burners, a flue exteriorly of said chamber, and a rearward channel shaped extension of one of said partitions projecting horizontally through the chamber and into said flue, said extension with its upper side closed by said top except at the free end thereof and defining a passage for products of combustion from the front burners only.

1,806,057. TEMPORARY BOOKBINDER. WALTER F. HEER, Bexley, Ohio. Filed Apr. 16, 1930. Serial No. 444,780. 4 Claims. (Cl. 129—19.)



1. A temporary binder comprising a head embodying a back and front wall and a connecting top wall and having a slot extending across the front wall and terminating in a wider opening in said top wall, an article to be attached to the head provided with a projection passable into and out from said slot, and a latch mounted upon the head and comprising a plate having a lateral flange along its top edge to extend across and close the receiving end of the slot formed in the top of the head, and a finger piece connected with the latch and operable from a point without the head.

1,806,058. BERRY GATHERER. ELOF HOLMGREN, Red Deer, Alberta, Canada. Filed May 4, 1928. Serial No. 275,153. 3 Claims. (Cl. 56—330.)



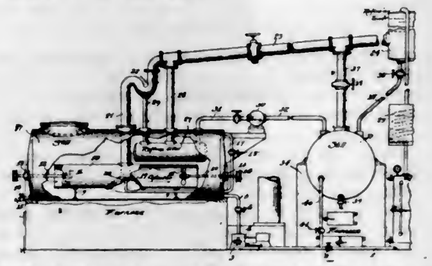
1. A berry gatherer including a one piece body having a transverse curved slot in one end portion of the top thereof; said top also having pairs of short parallel slots in its opposite end portion and directed toward the corners thereof; the sides of the body having longitudinal inwardly pressed portions near the upper edges thereof; a longitudinally adjustable flexible handle; a handle end member carried on said handle and adjustable in said transverse curved slot; a second handle member carried on the other end of said handle and removably engaged in one of said pairs of slots; the bottom of said body being divided into a plurality of integral spaced fingers directed forwardly and curved upwardly at their free ends; and a rearwardly inclined guard plate mounted on said fingers within said body.

1,806,059. ADJUSTABLE ANTIGLARE SHIELD. CHARLES I. HOOPLE, Honolulu, Territory of Hawaii. Filed May 14, 1928. Serial No. 277,631. 3 Claims. (Cl. 296—97.)



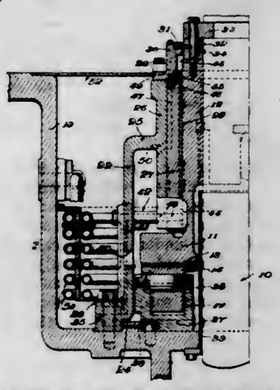
2. An adjustable anti-glare shield or the like comprising a support, a telescoping member having a universal connection with said support, a wedge-shaped member having a universal connection with said telescoping member, a bar slidable in said wedge-shaped member, a spring-pressed wedge disposed in said wedge-shaped member and frictionally contacting with said bar, whereby the latter may be adjusted along its length with respect to said wedge-shaped member and a glare shield or the like rotatably mounted on said bar.

1,806,060. APPARATUS FOR CONVERTING PETROLEUM OIL. WILLIAM R. HOWARD, Washington, D. C., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 27, 1921, Serial No. 525,094. Renewed Mar. 3, 1927. 5 Claims. (Cl. 196—99.)



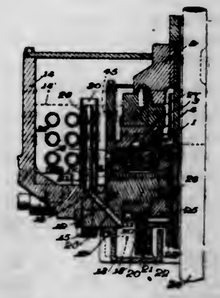
1. In an apparatus for converting hydrocarbon oils, the combination with a main still, a reflux still therein, of dephlegmating and condensing means connected to the main still by a vapor line, means for causing the vapors evolved in the main still to pass through the oil body prior to their introduction to the vapor line, and means for returning condensate from the vapor line to said reflux still disposed within the main still, a separate still for retreating the returned reflux condensate delivered thereto from the reflux still, means for continuously supplying oil to the still, and means for retaining a vapor pressure upon the system.

1,806,061. BEARING. HARRY A. S. HOWARTH, Frankford, Pa., assignor to Kingsbury Machine Works, Inc., Frankford, Philadelphia, Pa., a Corporation of Delaware. Original application filed Apr. 12, 1927, Serial No. 183,135. Divided and this application filed Dec. 21, 1928. Serial No. 327,665. 30 Claims. (Cl. 308—160.)



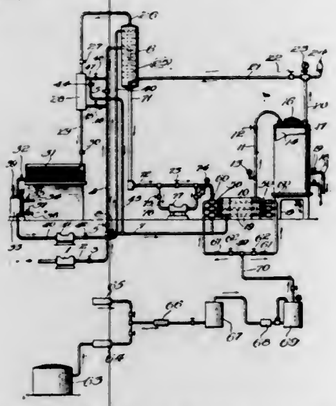
1. In a bearing, the combination with a vertical rotatable shaft, an oil reservoir surrounding the shaft, a nonrotatable bearing member for the shaft, and a self-aligning support for said bearing member mounted on the base of said reservoir.

1,806,062. BEARING. HARRY A. S. HOWARTH, Frankford, Pa., assignor to Kingsbury Machine Works, Inc., Frankford, Philadelphia, Pa., a Corporation of Delaware. Original application filed Apr. 12, 1927, Serial No. 183,135. Divided and this application filed Dec. 21, 1928. Serial No. 327,666. 28 Claims. (Cl. 308—160.)



1. In a combined thrust and steady bearing for a shaft provided with relatively rotatable thrust and steady bearing members, in combination with a pot or housing for the thrust bearing, a support for the stationary bearing member of the steady bearing mounted on the base of said pot or housing and within an aperture therein, said support including a member unitarily associated with the thrust bearing members, and a shell for the stationary member of the steady bearing rigidly attached to said member.

1,806,063. PROCESS AND APPARATUS FOR HYDROCARBON OIL CONVERSION. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 21, 1926. Serial No. 82,640. 5 Claims. (Cl. 196—67.)



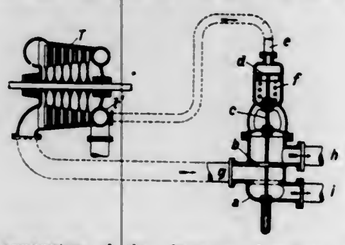
1. In a process for the pyrogenetic conversion of hydrocarbon oils from higher boiling point oils to lower boiling point products, the improvement in the step of heating the oil to a cracking temperature which comprises forcing the oil under mechanically applied pressure through an elongated, substantially horizontal passageway, introducing extraneous combustible fluid at spaced intervals along said passageway, and effecting combustion of said fluid submerged in the oil undergoing treatment.

1,806,064. TIRE CHAIN. FREIDRECK W. KERKMAN, St. John, Wash. Filed Jan. 23, 1928. Serial No. 248,778. 1 Claim. (Cl. 24—232.)



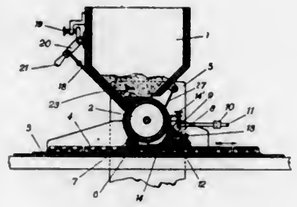
In a tire chain the combination with a pair of flat plates having a central rivet and relatively rotatable on the rivet, said plates having a boss and complementary recess on adjoining faces, and said plates having a pair of overlapping holes for the purpose described, of a series of tongues formed at the edges of the plates, said tongues being fashioned by oppositely extending bayonet slots in the two plates, and a link retained by each pair of complementary tongues.

1,806,065. STEAM TURBINE APPARATUS. KARL FREY, Ennetbaden, Switzerland, assignor to A. G. Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company. Filed Mar. 4, 1926, Serial No. 92,309, and in Germany Mar. 20, 1925. 4 Claims. (Cl. 60—89.)



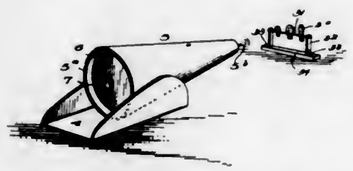
2. In apparatus of the character described, a fluid-pressure motor having a fluid-inlet and a fluid-outlet, means providing a plurality of fluid passages, valve means disposed for movement to a given position and being operable thereat to provide for communication between said fluid-outlet and one of said passages and for movement to a different position and being operable thereat to provide for communication between said fluid-outlet and another of said passages, and means responsive to high and low-pressure conditions at said fluid-inlet and being operable at such high-pressure condition to effect movement of said valve means to said given position thereof and being operable at such low-pressure condition to effect movement of said valve means to said different position thereof.

1,806,066. ART OF APPLYING FILLING MATERIALS TO PASTRY. OTTO KREMMLING, Hamersleben, near Oschersleben, Germany. Filed Apr. 30, 1928, Serial No. 274,015, and in Germany Apr. 30, 1927. 12 Claims. (Cl. 107—1.)



1. The method of filling fragile hollow forms open at one side which consists in filling the forms from a mass of material with a surplus of the material, wiping off a part of said surplus to form a crest of material, forcing the material into said forms and simultaneously wiping off the remainder of the surplus, and returning said remainder to the original mass.

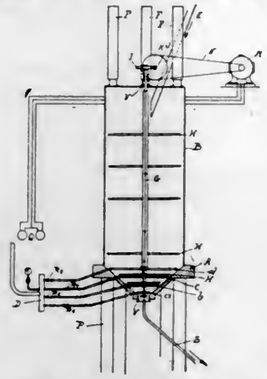
1,806,067. VORTEX RING TOY GUN. GEORGE J. LEJEUNE, Philadelphia, Pa. Filed June 17, 1929. Serial No. 371,456. 9 Claims. (Cl. 46—37.)



1. A vortex ring gun comprising a base, a barrel carried by said base, the barrel being open at both ends and decreasing in diameter in the direction of the discharge end, and movable closure means at the inlet barrel end for forcing air in the direction of the discharge end of the barrel.

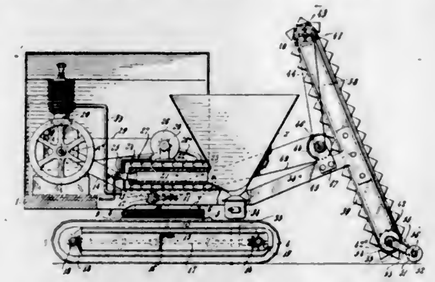
1,806,068. PROCESS FOR RENDERING HOMOGENEOUS FINELY PULVERIZED MATERIALS IN LARGE MASSES. MAX LEPERSONNE, Liege, Belgium, and EDOUARD HASTERT, Esche-sur-Alzette, Luxemburg, assignors to Société Anonyme des Ciments Luxembourgeois, Luxemburg, Grand Duchy of Luxemburg. Filed Oct. 11, 1926, Serial No. 140,986, and in France July 9, 1926. 1 Claim. (Cl. 83—73.)

The improvement in the process of rendering homogeneous a mass of pulverized material by incorporating with the mass a gaseous fluid to eliminate the mutual friction of the particles of the mass and mechanically stirring the mass, which improvement consists in introducing the gaseous fluid into the mass by injection at different heights from the bottom of the mass and simultaneously increasing the cross sectional area of the mass



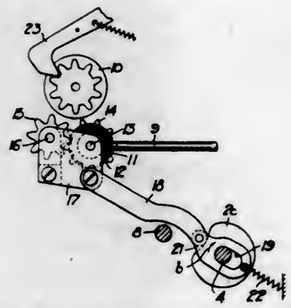
whereby the bridging layers are broken up and the mass has throughout the fluidity of a liquid, the mass being stirred at the same time and its fluidity maintained.

1,806,069. APPARATUS FOR MELTING SNOW. RICHARD LEWIS LLOYD, New York, N. Y. Filed Nov. 18, 1926. Serial No. 149,067. 1 Claim. (Cl. 126—343.5.)



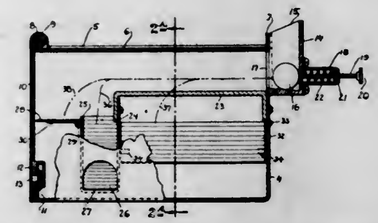
A melting apparatus of the character set forth comprising a vehicle provided with means for propelling it, a receiver for frozen material, and means upon the vehicle for heating air and blowing it through the material in the receiver, the receiver having a water outlet, and a trap for water communicating with said outlet to retain water to resist flow of air from the receiver through the trap.

1,806,070. CALCULATING MACHINE. CONRAD LUTTROPP, Stockholm, Sweden, assignor of one-half to Anders Lindahl, Stockholm, Sweden. Filed Nov. 12, 1924, Serial No. 749,459, and in Sweden Nov. 27, 1923. 3 Claims. (Cl. 235—60.)



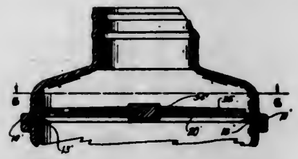
1. In a calculating machine of the type set forth including a totalizing mechanism comprising a set of numeral wheels, a shaft common to said wheels and a movable carriage in which the shaft is mounted; the combination with a crank shaft, of a spur gear for each numeral wheel, a stationary shaft on which the spur gears are loosely mounted, a swingable frame mounted on said shaft, a shaft carried by said frame, pinions on said last mentioned shaft in constant mesh with said spur gears, a counting drum from which to rotate said first mentioned spur gears upon rotation of siad crank, other means operated from the crank shaft when the latter is oscillated in one direction to upwardly swing said frame and the spur gears carried by the frame to cause each spur gear therein to mesh with a separate one of the numeral wheels and remain in mesh therewith during the major portion of the movement of the crank shaft and then be moved out of mesh, said means including a cam and a link longitudinally operated thereby and connected to said swingable frame.

1,806,071. GAME OF SKILL. LOUIS MAASS, Hartford, Conn. Filed Sept. 22, 1928. Serial No. 307,733. 10 Claims. (Cl. 273—119.)



1. In a game of skill operated by rolling objects, the combination of a closed box, an open compartment and a plurality of separated closed compartments within said box, an unobstructed runway extending from the end of said box, and spanning lengthwise the top of some of said closed compartments, said open compartment being arranged at one end of said runway, an outlet in said open compartments discharging to the outside of said box, an opening in said box at the end of said runway adjacent said box end to accommodate the passage of said rolling objects therethrough, and spring restrained pressure actuated means, to rollably impel said rolling objects through said last mentioned opening and along said runway and into any of said compartments.

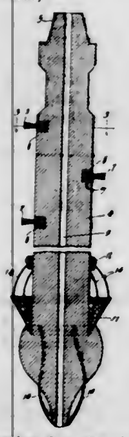
1,806,072. THERMOSTATIC VALVE. EDWARD J. LEVY, Cleveland, Ohio, now by judicial change of name Edward Levy Mayo, assignor to The Bishop & Babcock Mfg. Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 14, 1927. Serial No. 167,977. 3 Claims. (Cl. 236—34.)



1. In a thermostatic valve mechanism, the combination with a fluid conduit of a casing in the line of flow of the conduit, a transverse plate element in the casing, an annular valve seat on the plate, an aperture in the plate laterally of a central portion thereof and circumscribed by the valve seat, a thermostatic, dished, disk provided with an annular seat engageable peripheral edge portion and secured at a central portion thereof to the central portion of the plate and spaced axially therefrom, the disk being formed to snap the periphery thereof back and forth axially, in response to temperature changes of fluid in the

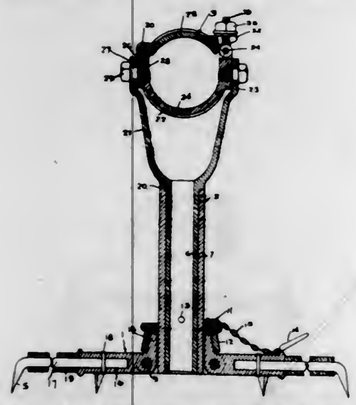
conduit, in one direction to move the peripheral edge into pressure sealing engagement with the valve seat to stop fluid flow in the conduit through the aperture, and in the other direction to unseal the edge portion and seat to permit said flow.

1,806,073. WELL CLEANING DEVICE. LAURENCE B. MACGREGOR, Long Beach, and ALBERT E. SPEAR, Olinda, Calif. Filed Jan. 14, 1928. Serial No. 246,690. 4 Claims. (Cl. 166—18.)



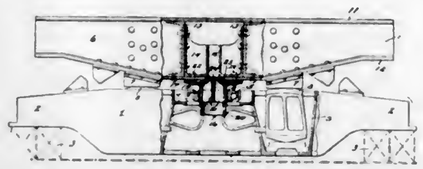
1. In a cleaning device for cleaning a screen in a deep well containing a liquid, the combination of a mandrel having a head at its lower end of considerably smaller diameter than the inside diameter of the screen with means for producing a swirling movement in the liquid as the cleaning device passes downwardly, a packing ring above the head having an outside diameter substantially equal to the inside diameter of the screen so as to rub the inner face of the wall of the screen, and a plurality of brushes carried by the mandrel above the head for engaging the screen.

1,806,074. SAFETY FIRE HOSE HOLDER. WALLACE MACGREGOR, Berkeley, Calif. Filed Mar. 9, 1927. Serial No. 173,806. 3 Claims. (Cl. 248—29.)



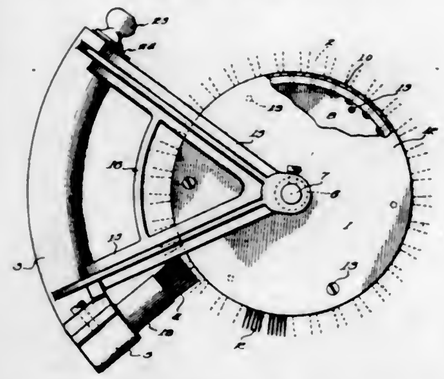
1. A safety fire hose holder comprising a base, an upright standard rotatably and adjustably mounted upon the base, a sectional circular clamp pivotally mounted upon the upper end of the standard and adapted to clamp around the coupling member which connects the nozzle with a flexible fire hose, said clamp conforming to the outline of the juncture between the fire hose and the nozzle, said clamp having openings therein conforming to projections of said coupling for locking the same.

1,806,075. BODY BOLSTER CENTER PLATE AND MOUNTING. MARK H. MARTIN, Baltimore, Md., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed July 14, 1928. Serial No. 292,809. 13 Claims. (Cl. 105—189.)



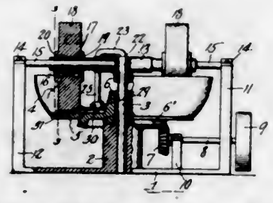
1. In a railway car truck structure, a body bolster, a truck bolster, and connecting means therefor comprising a member mounted for movement longitudinally of the truck bolster and restrained against movement transversely thereof, a casting secured within the body bolster at its center and a center plate member secured to the bolster and said casting and having a depending portion and rotatably engaged within said slidable member.

1,806,076. MEAT MARKER. HARRY HENRY MCKEE, Chicago, Ill., assignor to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed June 29, 1928. Serial No. 289,292. 3 Claims. (Cl. 101—4.)



1. A meat marker comprising a roller, needles projecting from the periphery thereof, a pair of spaced side brackets in which said roller is journaled, a handle on said brackets lying in the plane of the roller and extending in the general direction of the periphery thereof, a brush carried by said frame for inking said needles and an ink reservoir mounted in said handle and communicating with said brush for supplying ink thereto.

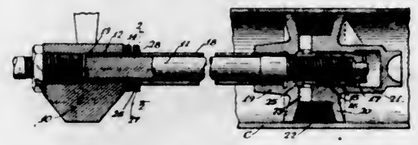
1,806,077. GRINDING AND MIXING PAN. WALTER E. MCMURRAY, Clearfield, Pa., assignor to Clearfield Machine Company, Clearfield, Pa., a Corporation of Pennsylvania. Filed Oct. 10, 1928. Serial No. 311,484. 21 Claims. (Cl. 83—45.)



1. In a rotary mill of the character described, the combination with a rotary pan, of a roll-supporting shaft,

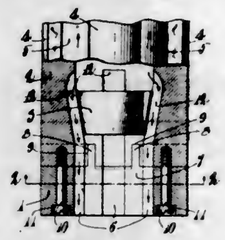
a bearing block movable eccentrically about the axis of said shaft, and a roll journalled on said bearing block and rotatable about an axis eccentric to the axis of said roll-supporting shaft.

1,806,078. EXPANSIBLE PACKER FOR HYDRAULIC PLUNGERS. ERWIN E. MILLER, Fullerton, Calif. Filed Oct. 20, 1926. Serial No. 142,885. 10 Claims. (Cl. 74—109.)



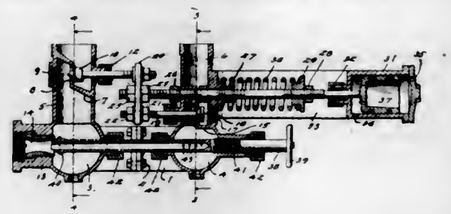
1. In a pump or the like, a plunger rod, a sleeve disposed about the plunger rod, a head rigidly mounted upon the sleeve, a second head threadedly mounted upon the plunger rod, an expansible packing disposed between the heads, there being projections on the opposed faces of the heads locking the heads against relative rotation, the projections on each head being tapered toward the opposite head.

1,806,079. CORE DRILL. JOSEPH S. MITCHELL, Chicago, Ill., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Nov. 5, 1923. Serial No. 672,794. 7 Claims. (Cl. 255—72.)



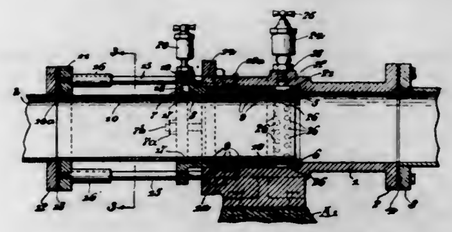
7. A core barrel comprising a core receiving barrel member having an internally fluted conical bore and a tapered core lifter carried in said bore and directly engaging the walls of the latter, said internal flutes forming fluid passages externally of the core lifter.

1,806,080. AUTOMATIC OIL BURNER REGULATOR. BENRY C. MOXLEY, Hequiam, Wash. Filed Oct. 3, 1928. Serial No. 309,932. 4 Claims. (Cl. 236—8.)



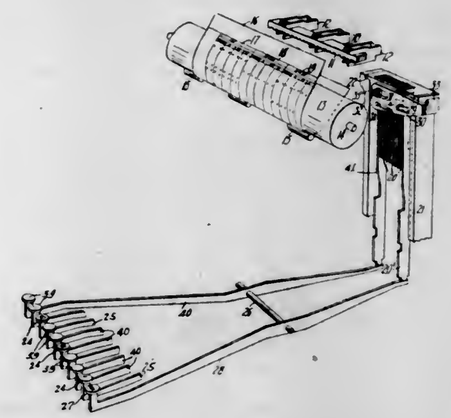
1. A fuel regulator for oil burners comprising an oil chamber, a mixing jet leading therefrom, a steam chamber, an inlet neck extending from each chamber and having a partition therein formed with a passage, valves for closing the passages in said partitions having stems projecting from the inlet necks transversely thereof and extending in opposite directions in overlapped and spaced relation to each other, a hollow stem extending through said steam chamber and entering said oil chamber and terminating in an open end adapted to enter the inner end of said jet when the stem is moved towards the jet and regulate flow of oil into the jet, steam inlet openings being formed in the stem within the steam chamber, and actuating means for said valves adjustably connected with the stems of the valves.

1,806,081. LUBRICATED EXPANSION JOINT. LOUIS L. PRATT, Philadelphia, Pa., assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 21, 1926. Serial No. 103,431. 4 Claims. (Cl. 285—162.)



1. The combination with expansion joint construction including male and female members having their respective free-end portions associated for relative movement longitudinally of said construction, and packing means interposed between said free-end portions, of means providing for application of lubricant to the outer surface of the free-end portion of said male member at a region in such construction intermediate said packing means and the free-edge portion of said male member such that applied lubricant is forced along the outer surface of said male member and between the same and said packing means under the influence of pressure conditions in said female member.

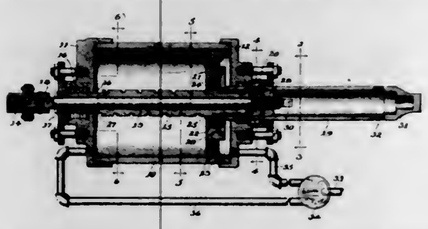
1,806,082. TYPEWRITING MACHINE. HENRY RESCH, Bayonne, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 19, 1926. Serial No. 149,339. 7 Claims. (Cl. 197—176.)



1. In a typewriting machine and in a tabulating mechanism for typing upon a work-sheet having a series of typing zones, with each zone subdivided into a series of columns, the typewriting machine including a carriage

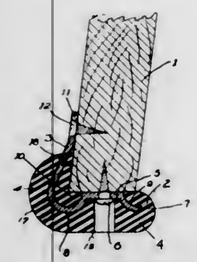
having zone-determining stops movable therewith, and the tabulating mechanism having a series of vertically-disposed denominational stops mounted within a stationary frame and operative to engage an advancing zone-stop to selectively arrest the carriage to permit typing within any column of the zone predetermined by the zone-stop, the combination of means for arresting the carriage in advance of a typing zone-position on the work-sheet prior to selectively tabulating the carriage denominationally into the zone to relieve the denominational stops from the carriage-impact, said means including an auxiliary key at the keyboard of the machine to operate a key-lever, a vertical push-bar liftable by the key-lever, and an auxiliary stop firmly mounted upon the stationary frame to be vibrated by the push-bar into the path of a zone-determining stop to arrest the carriage.

1,806,083. FLUID PRESSURE STARTING MECHANISM. THOMAS J. ROBERTS, Atlanta, Ga. Filed Nov. 21, 1927. Serial No. 234,868. 2 Claims. (Cl. 121—37.)



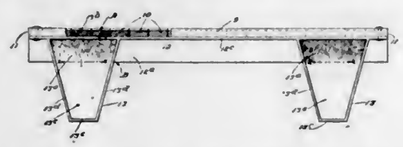
1. A starter comprising a cylinder, a piston mounted to reciprocate therein, an envelope carried rigidly by the piston and extending outwardly through one head of the cylinder and having an angular cross section and removable cap, a shaft extending longitudinally and axially through the cylinder and having one end enclosed within the envelope, means to apply a manual implement to the enclosed end when the cap of the envelope is removed, a worm mounted axially within the cylinder and rotating about the shaft and within the envelope, means carried by the piston to rotate the worm, separable clutch members, one of which is carried by the worm and one by the shaft, and means connecting the piston and worm providing an initial longitudinal movement of the worm for interengaging the clutch members.

1,806,084. TREAD. DE FOREST ROE, Cleveland, Ohio, assignor to The Colson Company, Elyria, Ohio, a Corporation of Ohio. Filed June 23, 1928. Serial No. 287,749. 2 Claims. (Cl. 45—137.)



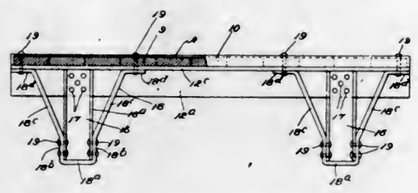
1. A tread for the bottom ends of furniture legs, comprising a rubber body having two angularly disposed divergent arms integrally secured together and means to secure the two arms to the bottom surface and a lateral surface of a furniture leg, said means comprising a metallic strip imbedded in the body, said strip being of generally L-shaped form and comprising an arm substantially deeply embedded within each of the arms of the body, said arms being apertured to receive securing screws passed therethrough, the apertured portions of the arms being inwardly deflected from intermediate portions and having inner surfaces disposed substantially in plane alignment with their associated inner furniture leg engaging arm faces.

1,806,085. PORTABLE PLATFORM AND METHOD OF MAKING THE SAME. ROBERT T. ROMINE, Mount Clemens, Mich. Filed July 3, 1926. Serial No. 120,301. 3 Claims. (Cl. 248—41.)



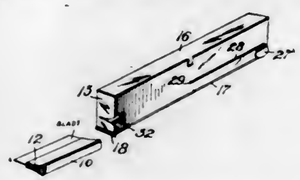
1. A portable platform comprising a load supporting floor, a longitudinal truss member at each side comprising a horizontal flange supporting the floor, and a vertical guide flange integral therewith, a depending channel leg comprising a central vertical web constituting an integral extension of said guide flange and extending in the plane of said guide flange.

1,806,086. PORTABLE LOADING PLATFORM. ROBERT T. ROMINE, Mount Clemens, Mich. Filed July 3, 1926. Serial No. 120,302. 5 Claims. (Cl. 248—41.)



2. In a portable platform, the combination of a platform floor, a pair of parallel T-shaped truss members mounted beneath said floor and extending along opposite sides thereof, each truss member comprising a vertical portion acting as a guide for a lift truck and also comprising inwardly and outwardly extending horizontal flanges united to said vertical portion, and supports located entirely at the outer sides of said vertical portions, each support comprising a vertical channel member having a central web secured to the vertical portion and outwardly extending parallel vertical flanges united to said web substantially the length of the support.

1,806,087. SHAVING EQUIPMENT. JACOB SCHICK, East Orange, N. J., assignor to Magazine Repeating Razor Company, a Corporation of New Jersey. Filed Oct. 8, 1926. Serial No. 140,408. 3 Claims. (Cl. 30—12.)



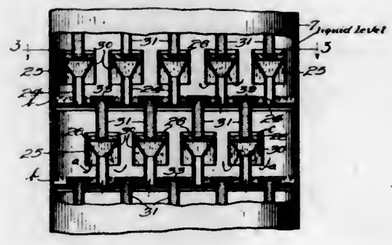
1. In razor equipment for transfer of razor blades, a razor blade magazine having an exit aperture, transfer means, in combination with a razor head, said head having a blade holding channel, cooperating means on said magazine and on said head, whereby either said magazine or said head may be guided bodily into longitudinal alignment and maintained in such alignment during the transfer of a blade from the magazine to the razor head.

1,806,088. FISH LURE. AUGUST F. SCHNELL, Kankakee, Ill. Filed Apr. 12, 1930. Serial No. 443,663. 6 Claims. (Cl. 43—45.)



1. A fish lure, comprising a lure body of rigid plate material having its greatest lateral enlargement near its rounded front end and tapering to its rear end at which point it is formed with a forked tail extension, said body being curved longitudinally in one direction and transversely in the other direction, with both curvatures ending at the junction with said tail extension, a fish hook secured at one end to said lure body, and means on said tail extension for holding the fish hook against lateral displacement.

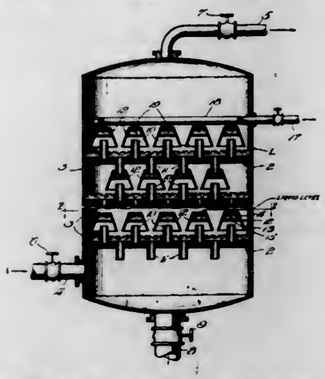
1,806,089. DEPHLEGMATOR. JEAN DELATTRE SEGUY, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 21, 1926. Serial No. 117,339. 7 Claims. (Cl. 261—113.)



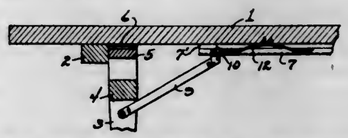
1. A dephlegmator consisting of a casing, a plurality of spaced foraminated plates mounted therein, open ended vapor pipes extending from one side of each plate, and open ended liquid pipes extending from the opposite side of each plate, the vapor pipes of one plate being in substantial alignment with the liquid pipes of the next highest plate, and means for preventing the vapors passing through the liquid pipes.

1,806,090. DEPHLEGMATOR. JEAN DE LATTRE SEGUY, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 9, 1926. Serial No. 153,491. 5 Claims. (Cl. 261—114.)

1. In a dephlegmator, the combination with a casing, of a plurality of spaced apart superimposed plates mounted therein, each of said plates having upwardly projecting open ended pipes, cap members mounted thereabove and spaced therefrom, said caps comprising an imperforate plate and flanges projecting above and below said imperforate plate to accumulate liquid pools above the plate and impart a downward movement of the vapors as they pass out of the open ended pipes.

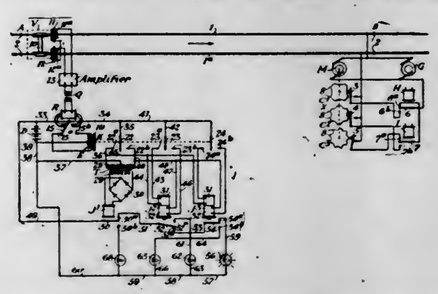


1,806,091. FOLDING TABLE. ROBERT W. SIMPSON, Salem, Ohio. Filed May 3, 1929. Serial No. 360,243. 1 Claim. (Cl. 45—11.)



A foldable table comprising a top, legs hingedly connected with the under side of the top, a substantially V-shaped brace member pivotally connected with each pair of legs, a pair of strips connected with the under face of the top and spaced apart, an angle-shaped member having one flange connected with each strip and its other flange extending into the space formed by the strips, said flange having a notch therein adjacent each end thereof and the upwardly extending flanges being spaced apart, each brace member having an upwardly extending projection at its free end which extends into the space between the two flanges, a cross pin carried by each projection and engaging the upper edges of said flanges and spring strips in the space between the two strips for forcing the pins into the notches to hold the legs in folded and unfolded position.

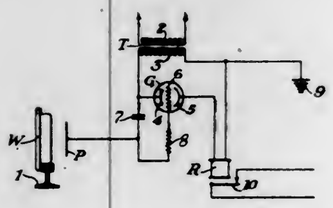
1,806,092. RAILWAY TRAFFIC CONTROLLING APPARATUS. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 7, 1930. Serial No. 426,563. 16 Claims. (Cl. 246—63.)



1. Railway traffic controlling apparatus comprising means for supplying the trackway with alternating cur-

rent periodically varied at different frequencies, a plurality of train carried contacts operated by energy received from the trackway and selectively responsive to the frequency of such periodic variations, a plurality of relays one controlled by each said contact and one of such relays controlled by all such contacts, and governing means controlled by said relays.

1,806,093. APPARATUS RESPONSIVE TO THE PASSAGE OF RAILWAY VEHICLES. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 7, 1930. Serial No. 459,713. 5 Claims. (Cl. 246—63.)



1. Apparatus responsive to the passage of a railway vehicle, comprising a plate mounted in the trackway in such position that when a vehicle passes it the plate and a portion of the vehicle form a condenser, a source of alternating current one terminal of which is connected with said plate through a fixed condenser and the other terminal of which is connected with ground, a grid glow tube the grid of which is connected with said plate, a relay, and a circuit for said relay including said source and the two electrodes of said tube in series, the parts being so proportioned that in the absence of a vehicle the tube is in conducting condition so that the relay is energized, whereas when a vehicle coacts with said plate, the relative potentials of the grid and one of the electrodes of said tube are changed so that the tube becomes non-conducting and the relay becomes deenergized.

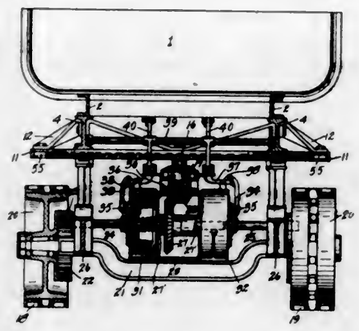
1,806,094. RAIL AND TIE PLATE. FRANK C. STOWELL, Medford, Mass. Filed May 21, 1928, Serial No. 279,237. Renewed Oct. 10, 1930. 5 Claims. (Cl. 238—304.)



1. A railway track rail having a flat face base provided with a recess having plate engaging transverse members triangular in cross section, a plate having a longitudinal channel, and a locking key confined in said channel and having transverse members interengageable with those of the rail and of like cross section.

1,806,095. MOTOR VEHICLE. JOHN T. SULLIVAN, Lewiston, Idaho. Filed July 19, 1927. Serial No. 206,877. 1 Claim. (Cl. 180—9.2.)

The combination in a motor truck with its frame, a central axle rigid with the frame, and driving belts at the outer sides of the frame, of a central housing supported on the axle and a transversely disposed driving shaft journaled in the housing, a drive gear on said shaft, a pair of clutch shafts alined with the drive shaft and journaled in the frame, clutch devices at the sides of the housing for the clutch shafts and means for independently operating the clutch devices, a longitudinally disposed pro-



peller shaft and a propeller pinion thereon, a vertical shaft journaled in the housing and a gear thereon for engaging the propeller pinion, and a pinion on the vertical shaft engaging the gear on the driving shaft.

1,806,096. PRODUCTION OF A CONCENTRATED CAUSTIC SODA PRODUCT. CARL SUNDSTROM and COKE S. LYKES, Syracuse, N. Y., assignors to Solvay Process Company, Solvay, N. Y., a Corporation of New York. Filed Apr. 9, 1925. Serial No. 21,879. 6 Claims. (Cl. 23—184.)

5. The process which consists in subjecting a concentrated crude caustic soda solution accompanied by undissolved suspended alkali metal salt impurities to cooling and vigorous mass agitation followed by settling of impurities and removal of the purified liquid product.

1,806,097. LATERAL MOTION MECHANISM. THOMAS H. SYMINGTON, Baltimore, Md., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed July 12, 1928. Serial No. 292,186. 9 Claims. (Cl. 105—186.)

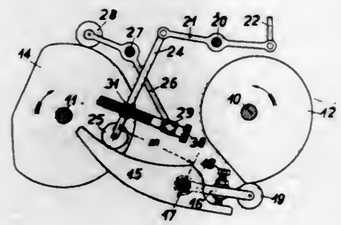


1. In a railway car truck, a lateral motion roller mechanism supporting the truck bolster for permitting movement thereof laterally of the side frames of the truck, and means for increasing the lift and travel as compared with accepted standards whereby to reduce the shock and effect damping of rolling tendencies of the car.

1,806,098. SPEED CONTROL APPARATUS FOR SPINNING MACHINES. HEINRICH TANNER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company. Filed Feb. 6, 1926, Serial No. 86,594, and in Germany Feb. 7, 1925. 3 Claims. (Cl. 118—32.)

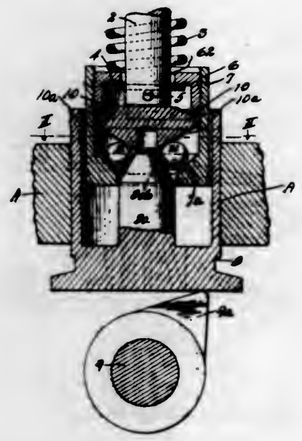
1. In speed control apparatus for spinning machines, a member supported for oscillatory movement and provided with a bearing edge, cam means for imparting such move-

ment to said member, a transmission element supported in engaging relation with said edge and for such movement with said member and for movement with respect to said edge such as to vary its point of engagement therewith, cam means for imparting movement to said element with respect to said edge, means providing an operative connection between said element and said second-named cam



means, and means forming part of said connecting means and being operable to provide for relative adjusting movement between the same and said element; said adjusting means comprising a sleeve carried by said connecting means, a screw rotatably mounted in said sleeve, and a nut receiving said screw and being carried by said transmission element.

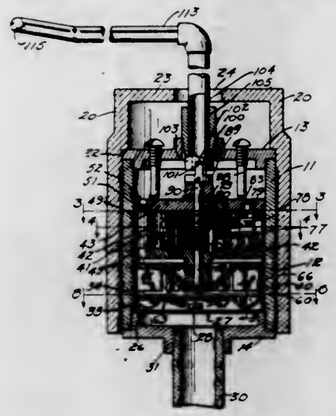
1,806,099. SELF ADJUSTING VALVE GEARING. HORACE T. THOMAS, Lansing, Mich. Filed May 10, 1929. Serial No. 361,951. 18 Claims. (Cl. 123—90.)



1. The combination of a valve stem, a part relatively movable within limits longitudinally of said stem and adapted to strike against, to actuate the same, said part being secured to and carried by said stem, a valve actuating means adapted to act through said part, and a clearance measuring and adjusting device forming a connection between said valve actuating means and said part.

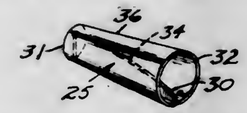
1,806,100. INTERMITTENT MOTION SPRINKLER. WALTER VAN E. THOMPSON, Los Angeles, Calif., assignor to Thompson Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed May 28, 1927. Serial No. 194,923. 25 Claims. (Cl. 299—69.)

1. In a sprinkler, the combination of: a reaction nozzle-unit adapted to move so as to supply water to an area to be irrigated; means for supplying water to said nozzle-unit; and an operating-unit actuated by the water sup-



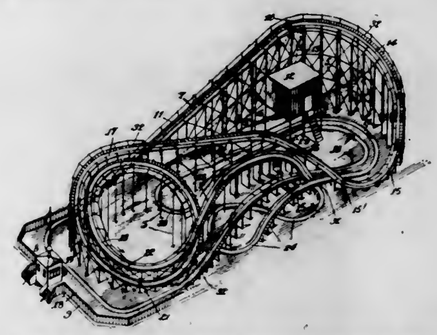
plied to said nozzle-unit adapted to stop the rotation of said nozzle-unit for periods of time to render the motion of said nozzle-unit intermittent.

1,806,101. TURBULENCE ARRESTER. WALTER VAN E. THOMPSON, Los Angeles, Calif., assignor to Thompson Manufacturing Company, Los Angeles, Calif., a Corporation of California. Filed Nov. 30, 1927. Serial No. 236,748. 4 Claims. (Cl. 299—113.)



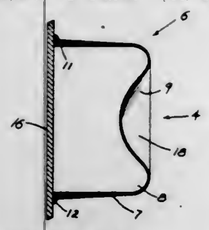
1. A turbulence arrester adapted to be placed in a fluid passage to arrest turbulence, comprising a sheet formed to provide a frusto-conical wall and an inwardly extended fin, said fin extending in the direction of the axis of said wall.

1,806,102. AMUSEMENT RIDE. HARRY G. TRAVER, Beaver Falls, Pa. Filed Sept. 20, 1928. Serial No. 307,246. 16 Claims. (Cl. 104—63.)



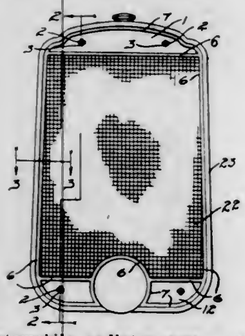
1. In an amusement railway, a continuous track having a loading and unloading station, an uptrack section extending from the loading station, a descending section leading from said uptrack section to a section interposed between said descending section and the unloading station and arranged with successive loops evolved about a common axis intermediate the perpendicular and horizontal.

1,806,103. VACUUM HEADREST FOR BATHTUBS. CARL E. TYLER, Los Angeles, Calif. Filed Feb. 26, 1930. Serial No. 431,396. 1 Claim. (Cl. 4—185.)



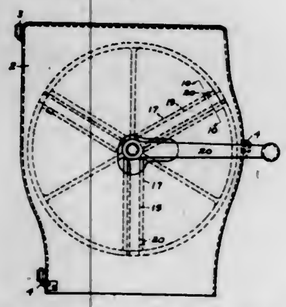
A vacuum cup headrest for a bather, comprising a hollow body of impervious material open at one end, said open end being conformable to a portion of the interior surface of a bathtub, to make intimate contact therewith throughout the periphery of said open end, and a resiliently flexible outer end on said body collapsible thereinto to define a cavity in its outer face adapted to receive and support a portion of a bather's head, said flexible end continuously pressing outwards when collapsed, to create a partial vacuum inside said body when said open end is engaged by said surface.

1,806,104. AUTOMOBILE RADIATOR SCREEN. GEORGE M. KENNEDY, Detroit, Mich. Filed May 26, 1930. Serial No. 455,533. 7 Claims. (Cl. 293—54.)



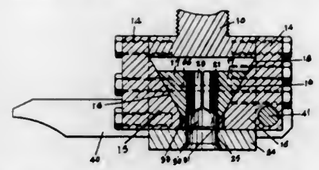
7. In an automobile radiator screen, a sheet metal frame having a central opening therein and formed to provide a channel about the opening, a screen covering the opening and pressed into the channel about the opening to place a tension on the screen, the channel being filled with solder to secure the screen to the frame and to maintain the screen taut on the frame.

1,806,105. SLICING MACHINE. HENRY F. KOEPF, Fort Wayne, Ind. Filed Oct. 8, 1928. Serial No. 311,057. 1 Claim. (Cl. 146—114.)



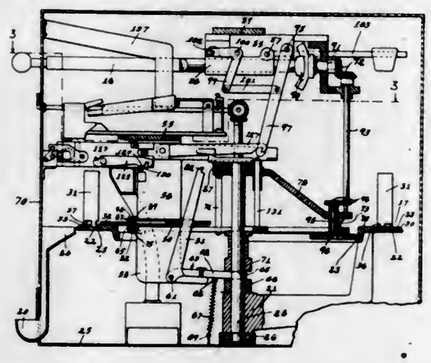
In a slicing machine, a frame, a hopper on the frame, the frame having an opening coincident with the hopper, a shaft revolubly mounted on the frame and cutting means on the shaft comprising a radially slotted disk secured to the shaft and a spider loosely mounted on the shaft having one edge of each arm of the spider sharpened and adapted to extend into the slots in the disk and each arm having a lug adapted to engage one wall of a slot.

1,806,106. VERTICAL PULL BROACHING MACHINE. FRANCIS J. LAPOINTE, Ann Arbor, Mich. Filed Jan. 4, 1929. Serial No. 330,345. 5 Claims. (Cl. 279—29.)



1. In a draw head for vertically operated pull broaching machines, the draw head having a pair of inclined surfaces extending towards the axis of the draw head and downwardly, a pair of dogs slidably supported on the said surfaces and having inwardly extending engaging parts for engaging the broach, the inwardly extending engaging parts having surfaces inclined upwardly to and outwardly from the axis of the draw head, a release bar extending beneath the lower ends of the dogs for engaging the dogs, and means for raising the release bar, the last named surfaces operating to separate the dogs and release the broach when the release bar is operated.

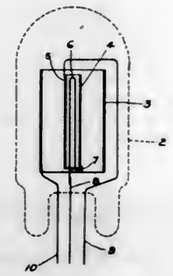
1,806,107. CHANGE MAKER. LOUIS H. LARSEN, Union City, N. J., and CLIFTON W. NIXON, New York, N. Y. Filed July 13, 1928. Serial No. 292,367. 12 Claims. (Cl. 194—2.)



3. In a change-maker, consisting of a rotary structure and a transmission connecter with coin-controlled devices adapted to be operated by different denominations of coins, actuators with connected slides arranged to be operated in one direction by said devices through the power of said connecter, a multiplicity of coin-holders on said structure provided with individual ejectors adapted selectively to be brought into position to be moved to and fro by said slides, and means effective for repositioning said actuators and connected slides.

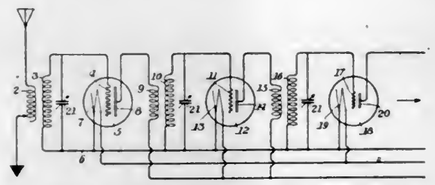
1,806,108. HOT CATHODE DEVICE. FREDERICK S. MCCULLOUGH, Edgewood, Pa. Filed Jan. 5, 1926. Serial No. 79,352. 1 Claim. (Cl. 250—27.5.)

An electron tube having a tubular cathode member, a heater wire having a loop inside the cathode member and extending longitudinally of said cathode tube, both ends of said wire being at the same end of the cathode, one end of said wire being connected to one end of the cathode, a heater current supply wire connected to the other end



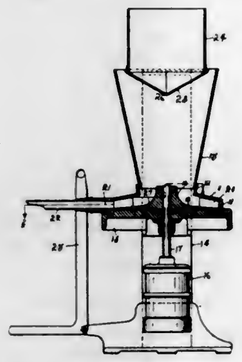
of the heater wire, and a second current supply wire connected to the cathode only at that end of the cathode opposite the end to which the heater wire is connected thereto.

1,806,109. AMPLIFICATION OF ELECTRICAL CURRENTS. FREDERICK S. MCCULLOUGH, Edgewood, Pa. Filed Nov. 2, 1926. Serial No. 145,775. 3 Claims. (Cl. 179—171.)



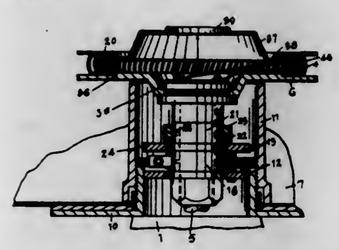
2. A system of radio frequency amplification having a plurality of amplifying stages, each of said stages having a thermionic tube, the capacity coupling between the grid and the plate in each succeeding stage being decreased toward the output end of the circuit.

1,806,110. AUTOMATIC CHARGE-FORMING AND FEEDING DEVICE. EDWARD W. MENKE and ESLI A. MARSH, Chicago, Ill., assignors, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Nov. 2, 1928. Serial No. 316,690. 6 Claims. (Cl. 226—48.)



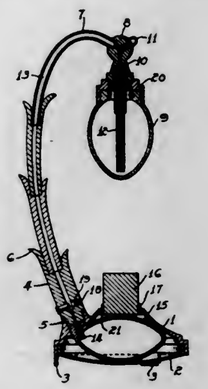
1. In combination, a casing having a vertical axis, a rotatable propeller within the casing and substantially concentric therewith, the casing having a discharge outlet substantially tangential thereof, a discharge spout connected with said outlet and adapted to enter a restricted opening in a receptacle, and a charge-forming device above the casing and adapted to discharge a separated amount of material forming a suitable charge for the receptacle, said propeller comprising a central hub, a disk extending from the lower side of the hub and blades on the upper side of the disk, the outer surface of the hub slanting gradually into the upper surfaces of the disk.

1,806,111. CANDY COTTON FORMING MACHINE. BUREN MOAD, Toledo, Ohio. Filed Sept. 10, 1929. Serial No. 391,687. 4 Claims. (Cl. 107—8.)



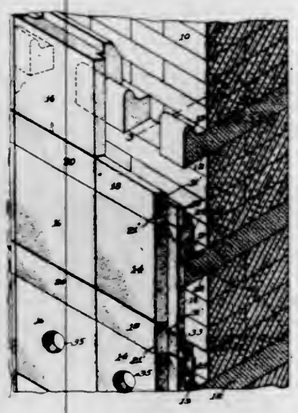
2. In a candy cotton machine, a spinner member formed channel-shape and having a bottom curved in its cross section and joined with the flanges by curved portions, the bottom of the channel having slots extending from the curved portion of the top to the curved portion of the bottom of the spinner member, a heat coil formed of a flattened spirulate band resting against the curved interior surface of the spinner member, a pair of rings connected to the band, a pair of arcuate contacts for making contact with each of the said rings, a pair of arms for supporting each pair of contacts; a pin for pivotally supporting the arms to locate the contacts on opposite sides of the ring, a tension spring for connecting the ends of the arms together for elastically pressing the contacts on opposite sides of each ring.

1,806,112. SPRAYING DEVICE. OSCAR J. MUTSCHEL, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 7, 1929. Serial No. 338,202. 4 Claims. (Cl. 299—88.)



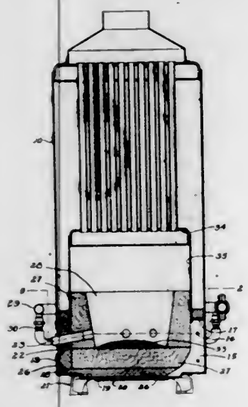
1. In a spraying device, a hollow base, a standard rising therefrom, a spray head supported by said standard, a liquid receptacle supported by said head, said standard having an air passageway therethrough operatively connected with said head, an air chamber housed within said base and connected to said passageway, and a plunger with its lower end housed within said base above the air chamber and depressible to compress said chamber and force air through said passageway.

1,806,113. FURNACE WALL. OSCAR NYGAARD, Saugus, Mass. Filed Feb. 4, 1926. Serial No. 85,916. 31 Claims. (Cl. 110—1.)



1. In combination with a permanent furnace wall a refractory lining comprising successive horizontal, vertically spaced tiers of bricks each being one brick in height suspended from the permanent wall, rows of filler bricks seated loosely in the spaces between said tiers, and means on the rear edge of each suspended brick for retaining said filler bricks within said spaces.

1,806,114. FURNACE. CHARLES B. PAGE, Evanston, Ill., assignor, by mesne assignments, to The G. W. Dulany Trust, Chicago, Ill., a Common-Law Trust. Filed June 21, 1929. Serial No. 372,605. 4 Claims. (Cl. 122—115.)



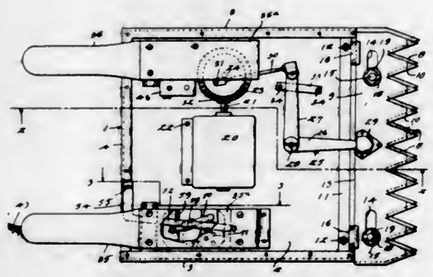
1. A furnace comprising, in combination, a circular casing having side and bottom walls and an inwardly extending flange at the top, heat insulating material lining the casing at the sides and bottom, refractory material inside of said heat insulating lining at the sides and bottom, said refractory material extending substantially above said inwardly extending flange, a plurality of openings through said side wall and linings, said openings being inclined inwardly and upwardly and also inclined in the same direction to the radii of said casing, and a burner in each of said openings.

1,806,115. HEATER PORCELAIN. ROBERT J. PARSONS, Schenectady, N. Y., assignor to Consolidated Car Heating Company, Inc., Albany, N. Y., a Corporation of New York. Filed Mar. 12, 1929. Serial No. 346,463. 4 Claims. (Cl. 219—19.)



4. The combination with a holding block for resistance wire provided with two parallel surface grooves connected across at one end, of a coil in said grooves, said coil being continued through said cross connecting groove and providing with end terminals at the opposite end of the block, said grooves having laterally offset bends at intervals so as to provide pinching spots shaped to grip and prevent vibration of said coil.

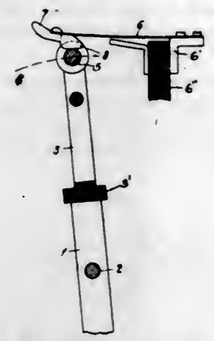
1,806,116. HEDGE TRIMMER. LOGAN S. PETERSON, McKeesport, Pa. Filed Apr. 22, 1930. Serial No. 446,344. 2 Claims. (Cl. 30—11.)



2. A hedge trimmer, comprising a casing, cutting mechanism at the front end of the casing, an electric motor in the casing, means connecting the motor to the cutting mechanism, a handle bar extending rearwardly from the casing, brackets extending upwardly from the bottom wall of the casing, a second handle bar extending rearwardly from the casing and provided with a shank secured to the brackets, a rheostat located below said shank and including a movable blade, leads connecting the rheostat to the motor, a lever located below said shank and pivoted to one of the brackets and limited in its movement in opposite directions by the other bracket, the lever extending through the rear end of the casing and provided at such end with an upstanding operating member, a guide secured to the blade, a post secured to the lever and engaging in the guide, and a spring secured at one end to said shank and at its other end to the lever.

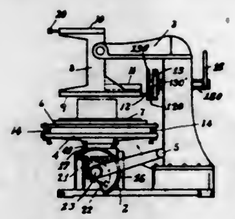
1,806,117. CONTACT DEVICE FOR ELECTRIC CIRCUIT BREAKERS. WILHELM HENNING PETERSÉN, Vasteras, Sweden, assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Corporation of Sweden. Filed June 12, 1929, Serial No. 370,182, and in Sweden June 23, 1928. 4 Claims. (Cl. 200—146.)

1. Electric contact device comprising a rotatable cylinder and a pair of contact fingers movable relatively to each other, said fingers bearing against said cylinder at the same side and bearing against one portion of said



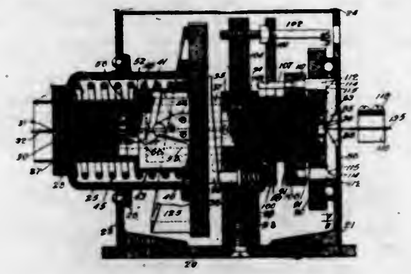
cylinder at the first contact and against another portion of said cylinder axially distant from the former at the final contact.

1,806,118. BRICK METER. STUART M. PHELPS, Pittsburgh, Pa., assignor to American Refractories Institute, a Corporation of Pennsylvania. Filed July 16, 1929. Serial No. 378,681. 1 Claim. (Cl. 33—143.)



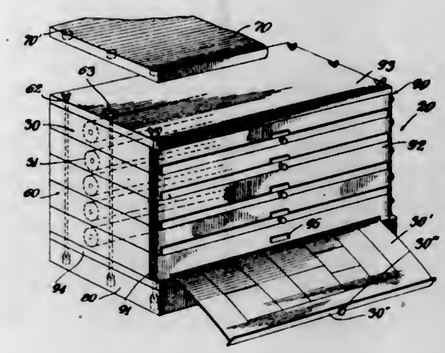
A three-dimension gauge comprising opposite jaws of which one is movable relatively to the second, the second jaw including a tumbler movable from one to the other of two alternate service positions, and presenting in one such service position a single face opposed to the first-mentioned jaw and presenting in the other service position two faces opposed to and spaced at unequal distances from the first-mentioned jaw.

1,806,119. METHOD OF AND APPARATUS FOR PRODUCING TUBULAR ARTICLES. GEORGE L. ROCK, Cicero, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 10, 1929. Serial No. 398,797. 10 Claims. (Cl. 92—55.)



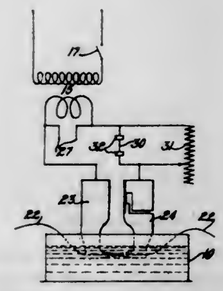
1. A method of producing tubular articles, which consists in isolating a section of the covering of a continuous coated core, removing the isolated section of the covering, and then severing the stripped section of the core.

1,806,120. DISPLAY DEVICE. ARTHUR SCHIFF, New York, N. Y. Filed Mar. 26, 1929. Serial No. 349,978. 14 Claims. (Cl. 40—83.)



1. A filing cabinet for maps, plans and the like, comprising a plurality of sections each comprising a pair of opposed side members, a plurality of cooperating spring-roller supports carried on the inner faces of the side members of each pair of said opposed side members, and a pivotally mounted false front associated with each of said sections.

1,806,121. METHOD OF AND APPARATUS FOR WELDING. CLAUDE THEODORE SIEBS, Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 22, 1926. Serial No. 110,888. 11 Claims. (Cl. 219—10.)



1. A method of welding and annealing, which consists of immersing the parts to be welded in a fluid to prevent oxidation and to aid in maintaining an annealing temperature, passing an electrical current through the parts to bring them to a welding temperature, and decreasing the current to prevent the temperature from exceeding a predetermined value and to anneal the parts.

1,806,122. CINEMATOGRAPH FILM. ALBERT HENRY SMITH, Edgbaston, England. Filed July 10, 1929. Serial No. 377,106. 4 Claims. (Cl. 88—19.5.)

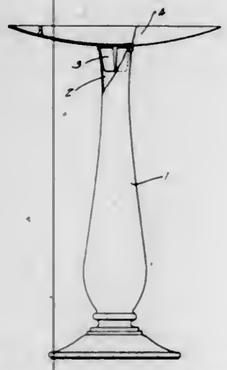
1. The combination with a cinematograph film having driving wheel perforations arranged in a longitudinal line adjacent the edge of the film, of a reinforcing strip extending longitudinally of the film having perforations registering with the perforations in the film, tongues secured to said reinforcing strip and extending through said film perforations to secure said strip to said film,

some of said tongues being bent rearwardly, while others are bent forwardly, the ends of the forwardly bent tongues



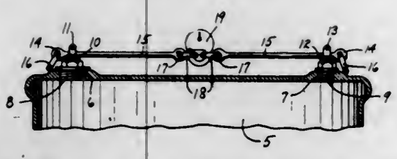
being extended beneath the ends of said rearwardly bent tongues in position to be protected thereby in passing through a camera or projecting machine.

1,806,123. BIRD BATH. EARLE S. SMITH, Toledo, Ohio, assignor to The Toledo Porcelain Enamel Products Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 20, 1929. Serial No. 348,406. 6 Claims. (Cl. 119—1.)



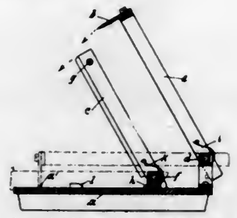
1. In a bird bath, in combination, a vertically disposed pedestal having an opening in its upper end, a removable water pan having a projection depending from its bottom, said opening in said column being adapted to receive said projection on said pan; and a receptacle formed by an integral partition in said pan adjacent to its periphery adapted to receive bird food.

1,806,124. LOCKING SYSTEM FOR CONTAINERS. WILLIAM H. SMITH, Copeland, Idaho. Filed Feb. 15, 1930. Serial No. 428,695. 1 Claim. (Cl. 70—125.)



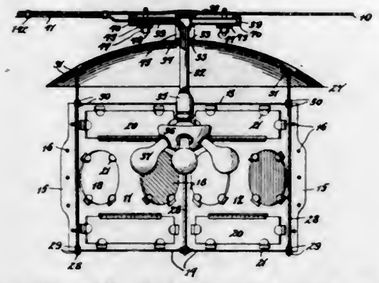
A locking device for a container having a bung-plug and a vent-plug, a tap plug for said bung and vent plugs, and an elongated eye for each of said tap plugs, comprising a rod slidably disposed through each of said eyes, an eye on each end of each of said rods, a ring permanently disposed through each of said rod eyes, and locking means for securing the two juxtaposed rings together when said rods are disposed in alignment.

1,806,125. FOLDING DEVICE FOR LETTER SHEETS. GOTTLOB SPOHN, Pforzheim, Germany. Filed May 6, 1929, Serial No. 360,938, and in Germany May 9, 1928. 2 Claims. (Cl. 270—61.)



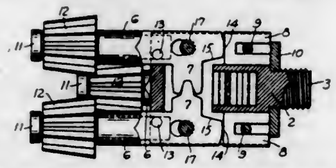
1. A device for folding letter sheets, comprising the table plate *a*, provided with the folding gutters *a'*, the brackets on the upper side of the table plate with the hand levers and folding bars *b*, *c*, registering with certain of said gutters and adapted to cooperate with them.

1,806,126. SAFETY TRAFFIC LIGHT. CHARLES F. SPRINGFELS, West Palm Beach, Fla. Filed Sept. 20, 1929. Serial No. 393,952. 9 Claims. (Cl. 40—132.)



1. A safety traffic light including a casing having an open upper end, a hood arranged over said casing and spaced therefrom, illuminating means arranged in said casing, signalling means arranged in the walls of said casing and illuminated by said illuminating means, the edges of said hood extending laterally beyond said casing whereby the light from said casing passes from said illuminating means between said casing and hood and is reflected downwardly around said casing by the marginal parts of said hood and means for suspending said casing from said hood comprising a plurality of rods depending from said hood and passing through openings provided in said hood and casing and means for rigidly and independently connecting said rods to said hood and casing.

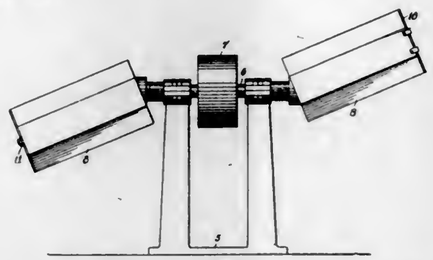
1,806,127. BOILER TUBE CLEANER. HARRISON L. STALEY, Martinsville, Ind. Filed Mar. 5, 1928. Serial No. 259,037. 4 Claims. (Cl. 15—104.13.)



1. In a tube cleaner, a head provided with a plurality of diametrically opposed longitudinal slots, transverse slots

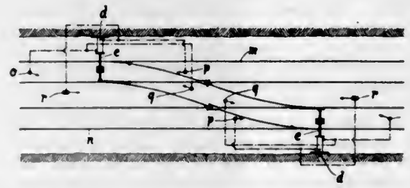
connecting said longitudinal slots, arms carrying rotatable cutters pivoted in said longitudinal slots and means in said transverse slots to connect operatively the arms in pairs.

1,806,128. PROCESS OF COATING ARC WELDING ELECTRODES. SIGMUND S. STEWART, Passaic, N. J., assignor to Wilson Welder & Metals Company, Inc., Hoboken, N. J., a Corporation of New York. Filed Apr. 25, 1930. Serial No. 447,397. 1 Claim. (Cl. 91—68.)



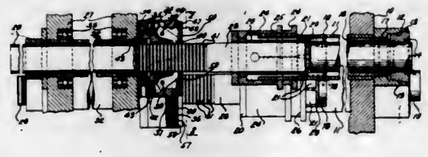
A process of coating arc welding electrodes with a frangible coating which consists in tumbling the electrodes one upon the other in the presence of a coating material, while maintaining the electrodes substantially parallel, and alternately inclining the electrodes in oppposite directions during the tumbling, whereby said electrodes are caused to shift longitudinally over one another with a gentle sliding movement under the influence of gravity alone.

1,806,129. DEVICE FOR CHANGING OVER THE POINTS IN MINE TRACKS FROM THE TRAVELING VEHICLE. GUSTAV STRUNK, Essen-Ruhr, Germany. Filed July 14, 1930, Serial No. 467,737, and in Germany June 6, 1929. 6 Claims. (Cl. 246—257.)



1. In a device for changing over pneumatically controlled pit track points in mine tracks from the traveling vehicle, a hanging wall of a lode; an actuating valve provided on the hanging wall; and a releasing lever for said actuating valve, hanging down so that it can be struck by the vehicle in the direction of travel.

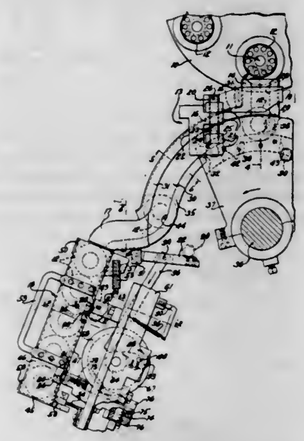
1,806,130. STOCK FEEDING DEVICE. JOHN S. STULL, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 391,177. 11 Claims. (Cl. 29—62.)



1. In a stock feeding device for machines, means for advancing stock to a working position, including a movable member engaging the stock, an element engageable with the rear end of the stock for association with the movable member when the length of the stock is such that the movable member is not operable to feed it further, said element being provided with a specially formed surface and means cooperating with said surface for preventing the retraction of the element when the movable member is retracted.

7. In a stock feeding device for machines, means for causing alternate holding and releasing of stock before and after working thereof, means operable in timed relation with the operation of the holding means for advancing the stock thereto, including a reciprocable contractile member for gripping the stock inserted therein, a hollow element engageable with the rear end of the stock for introduction into the reciprocable member when the length of the stock is such that the member is not operable to feed it further, and means cooperating with ratchet grooves formed peripherally upon the element for permitting the reciprocable member to advance the element therewith the stock, but rendered effective for preventing the retraction of the element when the member is retracted.

1,806,131. APPARATUS FOR HANDLING ARTICLES. JOHN S. STULL, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 17, 1929. Serial No. 393,154. 9 Claims. (Cl. 29—60.)

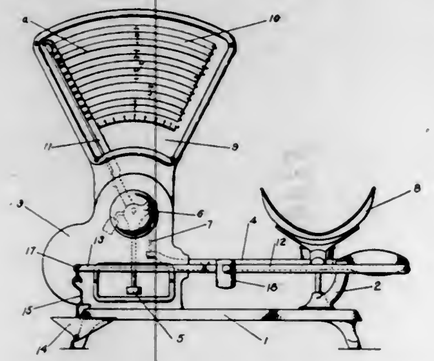


1. In an article handling and assembling apparatus, stationary and movable elements cooperating to provide means for receiving an article at a predetermined point, transferring and directing it to a predetermined discharge point, said movable element operable through an opening in the stationary element along a portion thereof intermediate the receiving and discharge points, a movable receptacle adjacent the latter point having a plurality of compartments each adapted to receive a predetermined number of articles, and means operatively associated with the movable element and the receptacle responsive after the transfer of a predetermined number of articles corresponding to the number of articles received by a compartment for moving the receptacle to present an empty compartment thereof to the discharge point for the reception of a similar number of articles.

6. In an article handling and assembling apparatus for attachment to an article working machine, an arcuate chute for receiving articles at predetermined intervals from the machine, an article carrier associated with the chute operable in timed relation with the reception of an article in the chute for receiving and transferring the article from the receiving end of the chute to the discharge

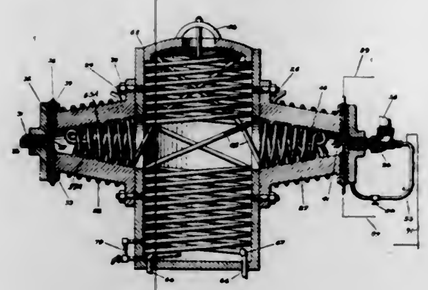
end thereof, a movable receptacle adjacent the discharge end of the chute having a plurality of compartments each adapted to receive a predetermined number of articles, and means operatively associated with the carrier and the receptacle responsive after the transfer of a predetermined number of articles corresponding to the number of articles received by a compartment for moving the receptacle to present an empty compartment thereof to the discharge end of the chute for the reception of a similar number of articles.

1,806,132. COUNTING SCALE. EDWARD G. THOMAS, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Dec. 29, 1920. Serial No. 433,921. 7 Claims. (Cl. 265—36.)



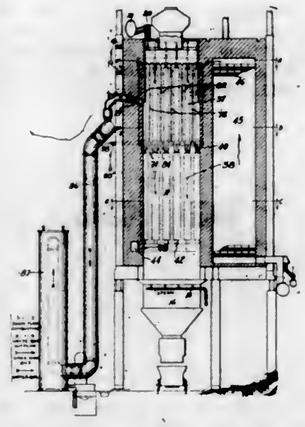
1. In a device of the class described, in combination, a chart, and an indicator co-operating therewith, said chart having a plurality of rows of graduations designated by index numbers adapted to be assigned to articles of various weights, said indicator bearing a count designation for each row of graduations.

1,806,133. POWER MECHANISM. WILLIAM M. THOMAS, Indianapolis, Ind. Filed Oct. 4, 1926. Serial No. 139,457. 2 Claims. (Cl. 60—46.)



1. In a power mechanism, a combustion products storage member, combustion chambers on opposite sides of said storage member, said chambers being tapered, a plurality of studs on the inner surfaces of said chambers, arranged in spiral formation, coiled water carrying members within said storage member and combustion chambers, the coils within said combustion chambers being spirally arranged for receiving said studs therebetween, nozzles in the said combustion chambers formed at the terminus of said spirally arranged coils, means for conveying fuel into the ends of said combustion chambers, and means for igniting said fuel as it enters said combustion chambers.

1,806,134. COKE OVEN. JOSEPH VAN ACKEREN, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 21, 1926. Serial No. 117,216. 12 Claims. (Cl. 202—121.)



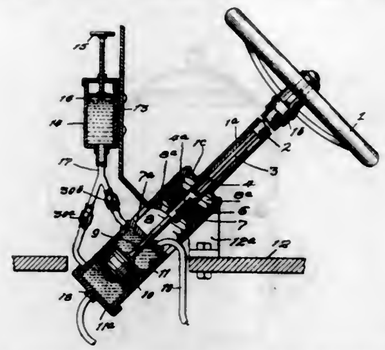
1. In a vertical retort battery for the carbonization of coal, in combination: a plurality of side-by-side continuous vertical coking chambers each adapted to receive through its top substantially continuously the charge to be coked and to discharge through its bottom substantially continuously the coked charge; heating walls therefor between and contiguous to said coking chambers and respectively comprising vertical flame flues; regenerators communicably connected with the flame flues of the respective heating walls; each of said heating walls having its vertical flame flues disposed in upper and lower flue sections which respectively have fuel gas conduits and air regenerator conduits, adapted for separately regulating the heating of said sections so that the upper portions of the coking chambers may be regulably heated for coal gas production and the lower portions for water gas production, and each of the heating walls having flow duct means common to and in communication with both flue sections for commingling and passing waste gases therefrom to said regenerators; distillate-gas offtake means communicably connected with the upper portions of said coking chambers for offtake of coal-gases of distillation at the upper parts of said coking chambers; means for introducing steam into the lower portions of said coking chambers for water gas production in the lower portions thereof; water-gas offtake means communicably connected with the coking chambers below said distillate-gas offtake means and above said means for introducing steam, and adapted for offtake from said coking chambers, separately from and independently of gas off-flow through the distillate gas offtake means for the coking chambers, of water gas produced in the lower portions of said coking chambers from said steam; and means for leading water-gas from said water-gas offtake means to the fuel gas conduits of at least one of said upper and lower flue sections of each of the heating walls for combustion in the flues of said sections.

1,806,135. AIRSHIP. WILLIS C. WARD, Orchard Lake, Mich. Filed July 8, 1929, Serial No. 376,734. Renewed Jan. 23, 1931. 6 Claims. (Cl. 244—5.)



1. An airship comprising a series of gas inflated elongated envelopes arranged in tandem and telescopically collapsible connections between said envelopes.

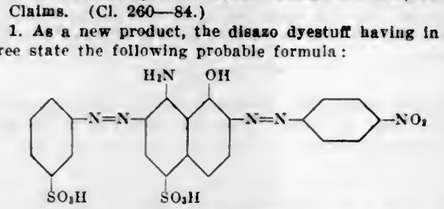
1,806,136. STEERING DEVICE. ABRAHAM WEISS, New York, N. Y. Filed Dec. 31, 1928. Serial No. 329,528. 2 Claims. (Cl. 280—87.)



1. A control for steering mechanism in motor vehicles, comprising a steering wheel, a squared shaft associated with said steering wheel, a hollow rod having a squared interior-coperating with said shaft, a casing having a fluid chamber, and a driving chamber through which said rod passes, means in said driving chamber and interlocked with said rod for causing the same to reciprocate upon rotation of said steering wheel, a plunger at the end of said rod contacting with fluid in said fluid chamber, ports through which fluid may pass upon displacement of said plunger, and means operable through displacement of fluid through one of said respective ports, to cause the contemplated directional displacement of a vehicle.

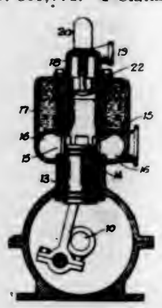
1,806,137. DISAZO DYE. BYRON L. WEST, Hamburg, N. Y., assignor to National Aniline and Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 12, 1930. Serial No. 443,922. 2 Claims. (Cl. 260—84.)

1. As a new product, the disazo dyestuff having in the free state the following probable formula:



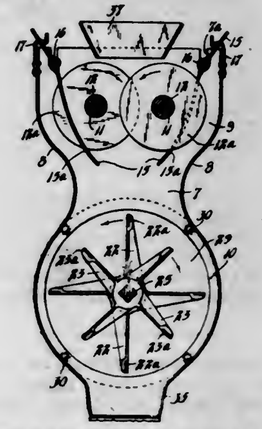
said dyestuff in the dry and pulverized state, and in the form of its sodium salt, being a brownish black powder, and dyes wool from an alkaline bath black shades.

1,806,138. TWO CYCLE INTERNAL COMBUSTION MOTOR. EDGAR C. WYCKOFF, Clinton, N. J. Filed Oct. 2, 1928. Serial No. 309,771. 4 Claims. (Cl. 123—59.)



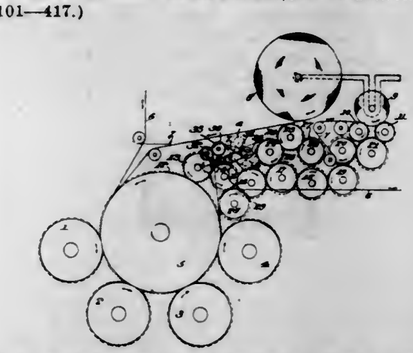
3. In a two cycle internal combustion motor the combination of a plurality of cylinders divided to provide communicating means for a surrounding common exhaust chamber, a jacket surrounding the cylinders and uniting the sections of the divided cylinders, a sleeve in each cylinder uniting its ends and whose walls constitute the bearing surface for pistons and having ports at the space between the divided cylinders, and intake valves.

1,806,139. MIXING MACHINE FOR PASTRY. CATHERINE L. ACKERMAN, Minneapolis, Minn. Filed July 17, 1929. Serial No. 378,938. 5 Claims. (Cl. 259—10.)



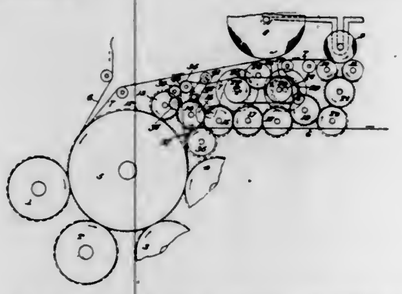
1. In a mixing machine, a casing having a receiving end and a delivery end, inner and outer, concentric, cooperating beaters in said casing each having circumferentially arranged horizontal beater bars, said inner beater being slidably fixed upon a joined two-piece shaft, one piece of said shaft being journaled in one side of said casing, a removable plate attached to an apertured portion of the opposite side of said casing and having a bearing wherein the other piece of said shaft is journaled, said outer beater being loosely mounted on said shaft within said casing and removable from said casing through said apertured portion thereof, and means for driving said beaters in opposite directions.

1,806,140. TENSION CONTROLLING MEANS FOR TRAVELING OFFSET WEBS. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 417,897. 4 Claims. (Cl. 101—417.)



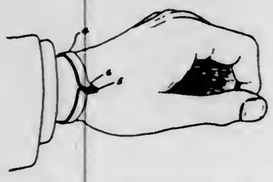
1. In a multicolor web perfecting printing press, a printing unit, a traveling offset web, an offset web rewinding mechanism, a web tension controlling mechanism therefor, and a web compensating device located between the printing unit and said web tension controlling mechanism.

1,806,141. TENSION CONTROLLING MEANS FOR TRAVELING OFFSET WEBS. HOWARD M. BARBER, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 417,898. 5 Claims. (Cl. 101—417.)
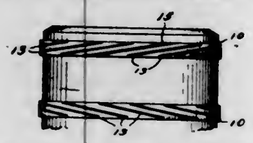


1. In a multicolor web perfecting printing press, a printing unit, a traveling offset web, an offset web rewinding mechanism, a web tension controlling mechanism therefor, a variable speed drive for the web tension controlling mechanism, and a web compensating device located between the printing unit and web tension controlling mechanism.

1,806,142. DEVICE AND METHOD OF CLASSIFYING PATRONS. LUE OSCAR BECK, Buffalo, N. Y. Filed Mar. 30, 1929. Serial No. 351,290. 2 Claims. (Cl. 40—21.)



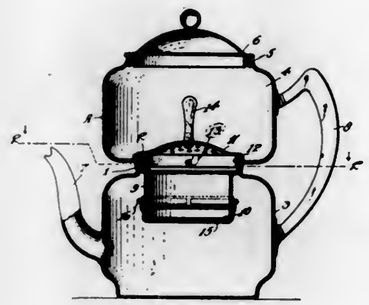
1. As an article of manufacture, a strip of light frangible sheet material forming an admission receipt, said strip having a length sufficient to encircle the human wrist and provide overlapping end portions, and a permanent metallic fastener having portions extending through and joining said overlapping ends to prevent removal of said strip from the wrist except by mutilation thereby destroying the receipt.

1,806,143. PISTON RING. HENRY E. BLOMGREN, Brooklyn, N. Y., assignor, by direct and mesne assignments, to The Simplex Piston Ring Company of America, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 14, 1923. Serial No. 624,960. 11 Claims. (Cl. 74—109.)



1. A packing ring comprising a body constructed to be fitted in the groove of a piston or the like, and having a multiplicity of longitudinally arranged slots therein opening through the inner and outer faces of the ring, and extending in overlapped relation a considerable distance circumferentially from adjacent one side of the ring to a like point adjacent the opposite side, whereby two continuous groove-fitting parts and intervening integral flexible elements are formed extending diagonally from one side part to the other of the ring and yieldable to longitudinal primary compression forces for the purposes indicated.

1,806,144. COFFEEPOT. HENRY BRUCKER, Maplewood, N. J. Filed Jan. 15, 1930. Serial No. 420,902. 1 Claim. (Cl. 53—3.)



Apparatus of the character described, comprising a body formed of one piece of material having an integral annular reduced portion intermediate its ends providing a downwardly tapered annular interior rib dividing said body into a top portion and a bottom portion, said bottom portion having an outlet opening, a perforate receptacle to contain a substance to be treated having one portion of a diameter less than said rib to pass therethrough and another tapered portion to removably fit said rib in substantially water-tight relation thereto so that said receptacle can be suspended directly upon said rib between said top portion and said bottom portion of the body, said top portion having an opening provided with a closure for application and removal of said receptacle, a perforated handled cover on said receptacle to retain the substance to be treated therein and serve as a handle for applying and removing said receptacle to and from said body, and means for removably securing said cover on said receptacle, whereby liquid placed in said top portion can trickle through said receptacle and drip into said bottom portion.

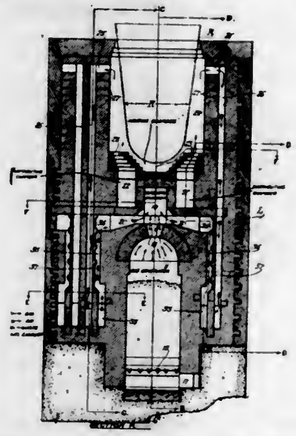
1,806,145. LADDER. HENRY H. BUSBY, Evanston, Ill. Filed Oct. 3, 1928. Serial No. 310,115. 6 Claims. (Cl. 228—34.)



1. As a new article of manufacture, a ladder formed from a flat strip of material bent transversely intermediate its ends and in alternately opposite directions

forming superposed steps, said strip being extended above and below the steps and such extensions being disposed substantially in a common plane, said steps being disposed directly above one another.

1,806,146. APPARATUS AND PROCESS FOR COKING LIQUEFIABLE CARBONACEOUS MATERIALS. EDGAR W. CLARKE and JOHN L. EIGENBROT, Evanston, Ill., assignors to American Tar Products Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 6, 1921. Serial No. 505,801. 18 Claims. (Cl. 202—12.)

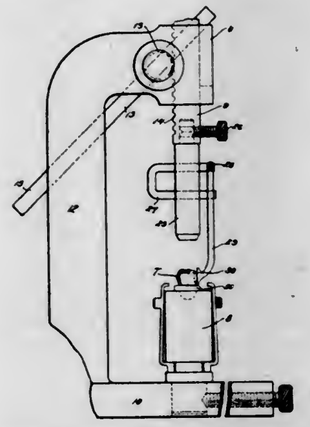


1. In a furnace construction for coking liquefiable carbonaceous materials, in combination: a gas generator; a long narrow combustion chamber receiving fuel gas from said gas generator; recuperators the inflow passages of which are communicably connected with said combustion chamber for supplying thereto the air required for the combustion of the gaseous fuel in said chamber; flues extending along the opposite sides of said combustion chamber and communicably connected therewith at the end opposite to the combustion chamber inlet; a heating chamber located above the combustion chamber and receiving products of combustion from said flues by series of ports respectively disposed on opposite sides of the longitudinal center of said heating chamber, the heating chamber being also communicably connected by outflow passages with the outflow passages of the recuperators; a metallic coking retort positioned in said heating chamber said retort having marginal flanging engaging in fluent sealing material to prevent passage of air therebetween; and means for preventing access of air past said coking retort into the heating chamber, whereby the coking of material contained in said coking retort is effected in a substantially non-oxidizing atmosphere by the combustion products discharged into the heating chamber from said flues; substantially as specified.

12. The process of coking liquefiable bituminous materials in metallic coking retorts which consists in surrounding a retort containing the material to be coked with a substantially non-oxidizing atmosphere maintained at a coking temperature and, when the coking is completed, cooling the retort and its contents in a substantially non-oxidizing atmosphere; substantially as specified.

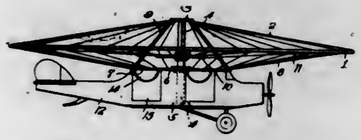
1,806,147. METHOD OF AND APPARATUS FOR MOUNTING DIE TEETH. JOHN M. CRAIGO, Hartford, Conn. Filed Apr. 24, 1929. Serial No. 357,731. 8 Claims. (Cl. 113—39.)

1. The herein described method which consists in positioning a tooth element upon a body of yielding, non-resilient material, then paralleling said element into predetermined alignment with a given line, then raising the tooth element on said line without disturbing its relation thereto, substituting for said body of yielding material a



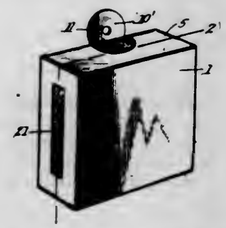
member to which said tooth element is to be anchored, and then moving said tooth element on said line into anchoring relation to said member.

1,806,148. SAFETY WING FOR AIRCRAFT. BERENT O. DAHL, Viroqua, Wis. Filed July 13, 1925. Serial No. 43,380. 4 Claims. (Cl. 244—6.)



1. A safety-wing for air-crafts comprising a round rim, hub with flanges, three sets of wire spokes stretched between said rim and flanges, the center set of wire spokes being fastened to a flange fitting loose around said hub, and made to slide up or down on the hub, and stationed by mechanical means to adjust the under surface of said safety-wing, substantially as described.

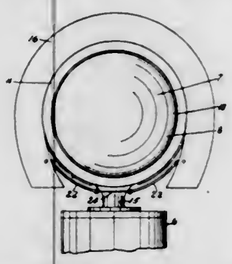
1,806,149. CONTAINER. CHARLES S. DAUGHERTY, Philadelphia, Pa. Filed May 29, 1928. Serial No. 281,411. 2 Claims. (Cl. 206—46.)



2. A package, a deodorizer in said package, said package comprising a single sheet of cardboard died to form box sides, top, and bottom, means in said package for permitting limited contact of the deodorizer with the air, said means consisting of a restricted opening in the bottom of the package and restricted openings in at least two of the sides, and a flap cut from the top for suspending the container and providing an aperture for permitting vaporization.

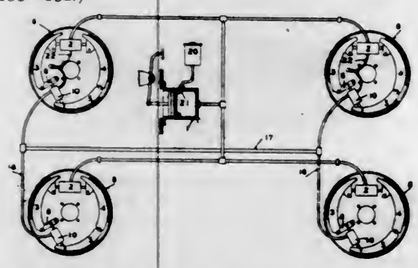
CARNEGIE LIBRARY OF ATLANTA

1,806,150. ADVERTISING DEVICE. HENRY E. DECKBACH, Cincinnati, Ohio. Filed Aug. 24, 1929. Serial No. 388,211. 4 Claims. (Cl. 40—131.)



1. The combination with a supporting body having a flange extending outwardly therefrom, of an advertising device comprising a plate having lugs secured to one side thereof adjacent the edge, portions of said lugs being spaced from the plate whereby channels are provided, the flange of the supporting body being receivable in the channels, and arms pivotally secured at one end to the plate, their free ends being attachable to the supporting body for holding the plate in an outwardly-extending position relative to the supporting body.

1,806,151. BRAKING APPARATUS. BURNS DICK, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Mar. 18, 1929. Serial No. 347,872. 5 Claims. (Cl. 188—152.)



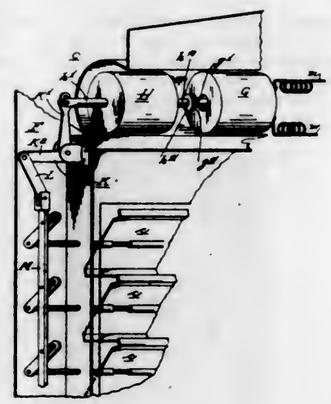
4. Braking apparatus for a plurality of moving parts, comprising a brake element for each part for restraining its movement, a floating brake element for restraining the movement of one of said parts, means for actuating said last named element and including a liquid pressure chamber, fluid means for transmitting the pressure produced by the braking drag on said floating element to said first mentioned brake elements, and means for establishing fluid communication between said last mentioned fluid means and said pressure chamber.

1,806,152. COMPOSITION OF MATTER. HARRY B. DYKSTRA and WALTER E. LAWSON, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed July 9, 1928. Serial No. 291,485. 11 Claims. (Cl. 134—26.)

1. A composition of matter containing a vinyl ester polymer and a poly-benzyl ether of a polyalcohol.

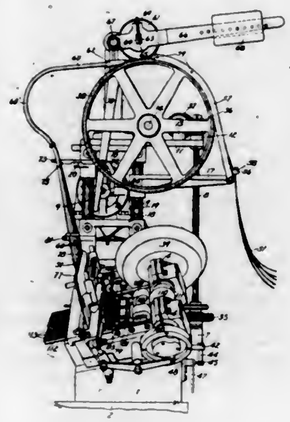
1,806,153. RADIATOR SHUTTER CONTROL FOR CONSERVING HEAT. WILLIAM A. EDWARDS, Chicago, Ill. Filed July 26, 1928. Serial No. 295,493. 8 Claims. (Cl. 123—174.)

1. In combination with an internal combustion engine having a circulatory cooling system and a radiator front provided with a shutter and connections for operating the same, a solenoid having its moving core member arranged for co-operating with the shutter-operating connections in the movement of said core resulting from energizing



the solenoid, the solenoid winding being connected in an electric circuit of the engine, a temperature-responsive element comprised in said connections, said element being mounted in position for being substantially affected by the temperature of the circulatory cooling liquid.

1,806,154. STRIP-FEEDING MECHANISM. CHARLES J. FANCHER, Windsor, Vt., and ROBERT A. JOHNSON, Longmeadow, Mass., assignors, by mesne assignments, to Woodward, Hubbard Company, Hill, N. H., a Corporation of New Hampshire. Original application filed Jan. 12, 1927, Serial No. 160,639. Divided and this application filed Dec. 21, 1927. Serial No. 241,572. 15 Claims. (Cl. 271—2.1.)



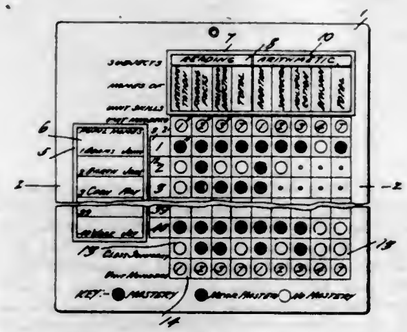
1. In strip-feeding mechanism, feeding mechanism for a strip, and a tubular member adapted to guide said strip, which member has the form of a compound curve to interrupt and divert said strip in its movement through said guide member, and enable the resiliency of the strip to be utilized in feeding.

1,806,155. SHAMPOO CAP. ADALINE FARRELLY, Chicago, Ill. Filed Apr. 12, 1930. Serial No. 443,901. 2 Claims. (Cl. 4—159.)



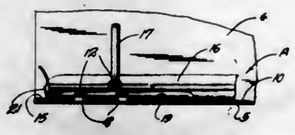
1. In a device of the class described, a closed frame, an open frame having its ends attached to said closed frame, the points of attachment being spaced apart to permit draining off therebetween and the open frame being inclined from said points of attachment, connecting means between the closed frame and the inclined portion of the open frame and a sheet of elastic material impervious to the passage of water arranged over the closed frame and having an opening for the reception of the head, said sheet having its marginal portion turned up and secured to the open frame and between the points of attachment of the ends of the open frame to the closed frame having its edge secured to the closed frame.

1,806,156. CHART. GUY FOX, Denver, Colo. Filed July 30, 1930. Serial No. 471,774. 4 Claims. (Cl. 116—136.)



1. A chart including a series of record spaces, each having an upstanding stud, and a series of flexible indicators formed with openings to engage said stud.

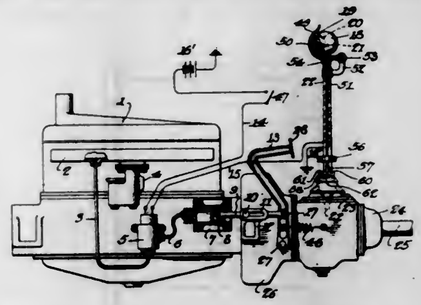
1,806,157. RING BINDER ATTACHMENT. CHARLES H. FRANZ, Jr., Milwaukee, Wis. Filed Aug. 8, 1930. Serial No. 473,816. 2 Claims. (Cl. 129—24.)



2. In a looseleaf binder, a cover including a back and sides, a base plate fitted against the inner face of the back, the marginal side edges of the back being folded over the base plate, attaching flaps formed on the inner edges of the sides and fitted against the folded edges of the back, reinforcing strips fitted against the flaps and means connecting the folded marginal edges of the back, the attaching flaps and the reinforcing strips to the base plate.

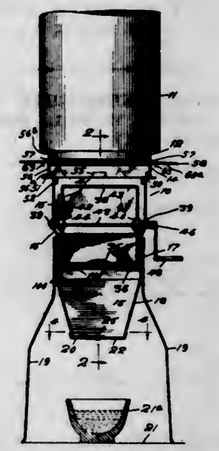
1,806,158. CLUTCH OPERATING MECHANISM. WALTER GIGER, Camden, N. J. Filed Apr. 1, 1929. Serial No. 351,531. 3 Claims. (Cl. 74—39.)

1. In a motor vehicle having a manifold and a transmission mechanism, a gear shift lever having a knob thereon, a clutch, a vacuum device connected to said clutch, an electric circuit including an electromagnetic valve positioned between the manifold and the vauum device and adapted to place the vacuum device in communication with the manifold in one position of the valve and in communication with the atmosphere in



another position of the valve, switch means on said knob for closing and opening said circuit independent of the speed of the engine, means for locking the gear shift lever in position, and means connecting the switch means with said locking means for simultaneously operating said switch means and said locking means.

1,806,159. DENTAL EQUIPMENT. MEYER D. GOLDBERG, Philadelphia, Pa. Filed Aug. 28, 1929. Serial No. 388,878. 4 Claims. (Cl. 209—283.)

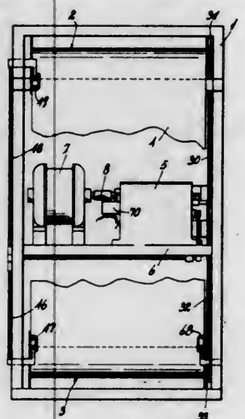


1. In combination, a sifter and dispensing device comprising a hopper having upper and lower open end portions, means within said hopper for sifting powdered material, an adjustable valved closure member removably mounted on said upper end portion of said hopper, a container having an open end and being otherwise closed, removably mounted on said member with the open end of said container adjacent said member, and an adjustable valved closure at the lower end of said device.

1,806,160. ADVERTISING MACHINE. THOMAS C. GRAHAM, Long Beach, Calif. Filed Aug. 9, 1929. Serial No. 384,740. 5 Claims. (Cl. 40—31.)

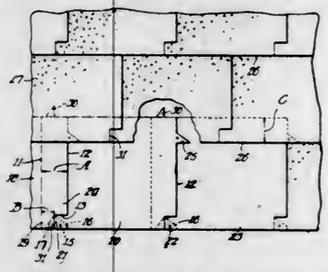
1. An advertising machine comprising a frame, upper and lower rollers journaled in the frame, a curtain positioned on the rollers, a gear box, a power shaft extending into the gear box, means to rotate said power shaft, a pair of sprocket shafts extending from the gear

box, sprockets on each of the last named shafts, one of said sprockets being adapted to rotate the upper roller and the other sprocket being adapted to rotate the lower roller, clutch means on each of said last named shafts, gear means between said power shaft and both of said clutches, timing means in the gear box, gear means adapted to rotate said timing means from the power shaft, clutch actuating means in the gear box, said clutch ac-



tuating means being operable from the timing means, clutch selector means in the gear box, means operable by the curtain to actuate said clutch selector means whereby one or the other of said clutches is actuated to drive a roller, means holding either of said clutches in engagement, and a second ceans operable by the curtain whereby said means holding the clutches is released.

1,806,161. SHINGLE MANUFACTURE. HARRY L. GUY, Chicago, Ill. Filed Jan. 19, 1931. Serial No. 509,702. 8 Claims. (Cl. 108—7.5.)



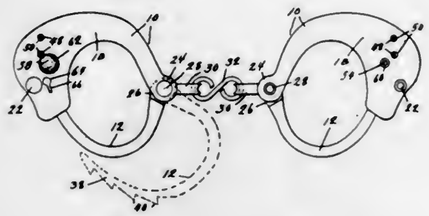
1. A roof covering comprising in combination, a plurality of horizontal courses of rectangular shingles made of flexible roofing material, one side edge of each shingle being straight andb eing provided with a notch extending inwardly of said side edge adjacent its lower edge and with a tab identical in outline with said notch and spaced downwardly from the top edge of the shingle and projecting outwardly from said side edge, the bottom edge of each shingle having an interlocking notch adjacent the other side edge, said notches of adjacent shingles being interlocked to overlap the side edges of said adjacent shingles with their lower edges in horizontal alinement, and a fastening nail driven through the corner of the shingle below the notch in the side edge of said shingle and being covered by a portion of the interlocked shingle, the side margin of the overlapping shingle extending laterally beyond the point of interlock and the side margin of the underlying shingle extending laterally inside the point of interlock, the overlying course of shingles being gauged by the said tabs on the next adjacent underlying course.

1,806,162. LACE AND LIKE FASTENING. PAUL HAHN, Berlin, Germany. Filed Feb. 20, 1930, Serial No. 430,072, and in Germany Sept. 8, 1928. 2 Claims. (Cl. 24—117.)



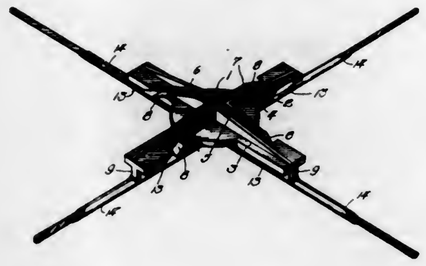
1. A lace and like fastening comprising two hingedly connected plates one of which has a straight clamping slit that is narrower than the thickness of the lace, a gateway for the lace leading at right angles into said slit at a point situated midway between the ends thereof, and an aperture through which the lace can be threaded, said aperture situated in alignment with said gateway.

1,806,163. TOY HANDCUFF. THEODORE JOHN HOGLUND, Gardner, Mass. Filed Nov. 19, 1928. Serial No. 320,363. 18 Claims. (Cl. 70—24.)



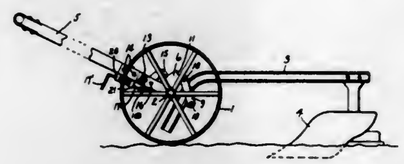
1. A toy hand cuff comprising an arcuate casing having an opening in one end, outer and inner walls, and opposed flat side walls, a cooperating arcuate shackle pivoted to said casing at the end opposite said opening and having a toothed end adapted to pass through said opening into said casing, a hooked locking member located within said casing on the outside of said shackle opposite the wrist-enclosure of the hand-cuff arranged releasably to engage the teeth of said shackle, and an unlocking member loosely extended through a flat side wall of said casing movable to raise said locking member from locking engagement with said shackle.

1,806,164. TROLLEY GUIDE. RICHARD ROY HOLDEN, Highland Park, Ill. Filed Oct. 10, 1930. Serial No. 487,671. 19 Claims. (Cl. 191—37.)



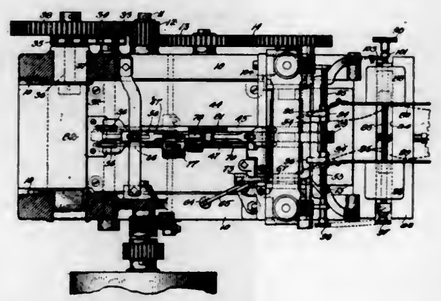
1. A trolley guide comprising an upper member for positioning the trolley wires and a lower member for guiding a trolley, the upper member having an upwardly bowed channel in its upper side to receive a trolley wire, and having means adjacent the ends of said channel for holding the wire down in said channel.

1,806,165. GARDEN IMPLEMENT. FRANK HURKA, Schenectady, N. Y. Filed Dec. 26, 1929. Serial No. 416,387. 6 Claims. (Cl. 97—59.)



5. An implement of the character described, comprising a pair of ground wheels, an axle therefor, a rocker member pivotally mounted on said axle and provided with a pawl engageable shoulder, a tool-supporting beam adjustably secured to said rocker member and extending rearwardly from said axle, a ground engaging tool secured to said beam, draft means pivotally mounted on said axle and extending forwardly therefrom when in the normal operating position, a latching pawl pivotally mounted on said draft means and adapted to engage the shoulder on said rocker member upon limited upward rotation of the draft means about said axle, and means for effecting the release of said pawl from engagement with the shoulder on said rocker member.

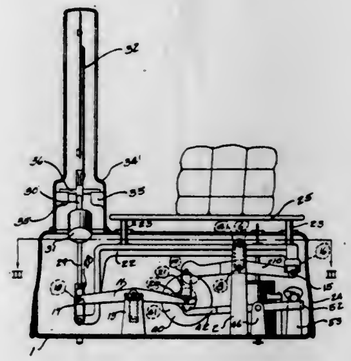
1,806,166. GRADING MACHINE. JAMES W. JOHNSTON, Manchester, N. H., assignor to Lacene Manufacturing Company, Manchester, N. H., a Corporation of Maine. Filed Feb. 4, 1929. Serial No. 337,245. 14 Claims. (Cl. 101—43.)



1. A grading machine of the kind having detecting mechanism for measuring successive blanks according to thickness, a normally open gate in advance of the detecting mechanism, grading mechanism, setting mechanism responsive to the detecting mechanism and controlling the grading mechanism and normally inoperative to preserve the grade measurements determined by the detecting mechanism, and a trip in the path of the blanks for controlling the gate, said trip being independent of and in advance of the grading mechanism, including in combination a second trip in the path of the blanks adapted to be operated by the blanks independently of the first named trip to render the setting mechanism operative to preserve said grade measurements.

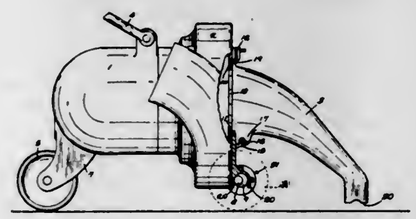
1,806,167. WEIGHING SCALE. LEONARD O. KELLEY, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Oct. 10, 1929. Serial No. 398,755. 9 Claims. (Cl. 265—36.)

1. In a weighing scale, in combination, indicating, counterbalancing mechanism and load receiving means in operative relation to each other, said load receiving means including a pair of even armed levers, each of



said levers having fulcrum, load and connecting pivots, one of said levers having a nose pivot, the edge of which is on a line coincident with the edges of its load pivots.

1,806,168. SUCTION CLEANER. JAMES B. KIRBY, West Richfield, Ohio. Filed Nov. 5, 1927. Serial No. 231,197. 21 Claims. (Cl. 15—16.)



1. In a suction cleaner, in combination, a casing having a recessed bracket, a shaft removably mounted in the recess and having eccentric portions on its ends, wheels journaled on said portions, means for securing said shaft in said recess, and means carried by said shaft and removable therewith for rotating said shaft and for holding it in different angular positions.

8. In a suction cleaner, a casing comprising a fan-housing and a motor-housing and a nozzle, said nozzle being detachably secured to said fan-housing, a bracket carried by said fan-housing separate from said nozzle and having a downwardly opening recess, a horizontal shaft removably fitting in said recess, a snap spring overlapping said recess for holding said shaft, and wheels carried by said shaft.

1,806,169. ADJUSTABLE LEG FOR SINKS AND THE LIKE. WALTER J. KOHLER, Jr., Kohler, Wis., assignor to Kohler Company, Kohler, Wis., a Corporation of Wisconsin. Filed June 20, 1927. Serial No. 200,145. 5 Claims. (Cl. 45—139.)

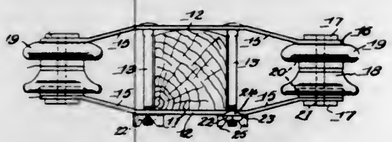
1. An adjustable support for sinks and the like comprising the sink or like member having a deep apron flange forming a roll rim, and a leg member having a

jack-screw threaded therein, said jack-screw engaging the under surface of the rim of the sink and thereby being



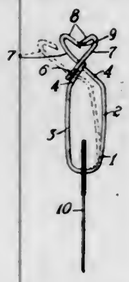
prevented from turning and the upper end of the leg member being hidden behind the apron flange in all the adjustments thereof.

1,806,170. BRACKET AND DEAD-END INSULATOR. STANLEY W. LAW, Mahtomedi, and WILLIAM J. EAMES, St. Paul, Minn. Filed Aug. 22, 1927. Serial No. 214,496. 3 Claims. (Cl. 173—321.)



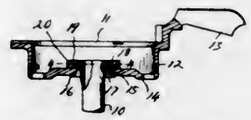
1. In an insulator of the class described, the combination with a bracket adapted to be secured to a support, a pair of rigid arms projecting from said bracket, portions of said arms disposed in spaced relation, means on said portions for engaging an insulator between them and an insulator formed to be supported at its ends by said engaging means and to positively interlock therewith, whereby separation of the arms and insulator is prevented without breakage when in use, said arms being without a connecting member extending through said insulator.

1,806,171. TAG FASTENER. FRANK MAGIDSON, Pittsburgh, Pa., assignor to Pittsburgh Tag Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 5, 1929. Serial No. 404,883. 3 Claims. (Cl. 24—261.)



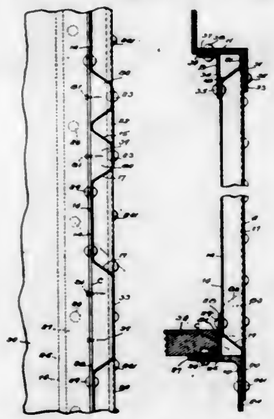
1. A device of the character described consisting of a single piece of wire bent intermediate its ends to form legs of unequal length substantially parallel for the greater part of the extent of the finished fastener, the legs thereafter converging and crossing, the longer leg being bent over the shorter one at the point of crossing and extending back coextensively with and parallel to its own converging portion, thereafter again reversing and following the original direction, thus forming a guiding and limiting loop in which the shorter leg operates, said legs thereupon diverging to a width approximately that of the parallel legs, subsequently curving inwardly and downwardly into contact below a line connecting the highermost points.

1,806,172. STEERING COLUMN CONSTRUCTION. HENRY MARLES, Detroit, Mich., assignor to Gemmer Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed May 7, 1928. Serial No. 275,949. 3 Claims. (Cl. 74—39.)



1. In combination, a control rod having a struck out portion adjacent one end forming a spline, an operating member for said control rod having an opening provided with tapered walls forming a conical seat, a split sleeve surrounding said control rod with the spline of said rod positioned in the slot formed by the opposite longitudinal edges of said sleeve, said sleeve being provided with a tapered portion engaging said conical seat and a threaded portion projecting through said opening, and a nut engageable with the threaded portion of said sleeve and adapted to draw the same longitudinally of said opening for clamping the sleeve to said control rod and for locking the operating member to said sleeve.

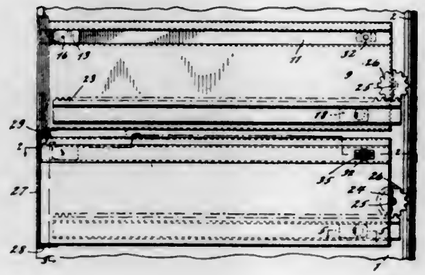
1,806,173. CAR. JOHN P. MCWILLIAMS and FRANK DITCHFIELD, Cleveland, Ohio, assignors to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 9, 1928. Serial No. 276,337. 33 Claims. (Cl. 105—409.)



1. In a wall construction, the combination with a floor-framing element having sections at right angles to each other; of a wall-forming metal sheet having strengthening indentations incorporated therein and provided with a lower flat margin; means securing said margin to one of said sections; and a metal element having one section secured to the other section of said framing element and another section secured at spaced intervals to said sheet in a plane offset from the plane of said flat margin.

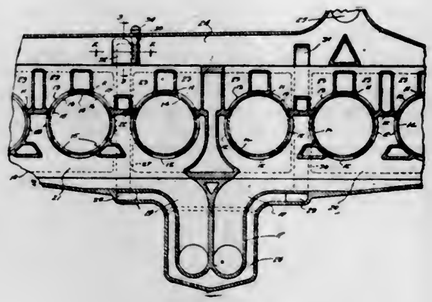
2. In car construction, the combination with a floor-framing element having sections at right angles to each other; of a wall-forming metal sheet having strengthening indentations incorporated therein and provided with a lower flat margin; means securing said margin to one of said sections; and a metal element having one section secured to the other section of said framing element and another section secured to said sheet in a plane offset from the plane of said flat margin, said metal element extending continuously across the sheet.

1,806,174. DRAWER AND SUPPORTING MEANS. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed Mar. 21, 1928. Serial No. 263,407. 11 Claims. (Cl. 45—77.)



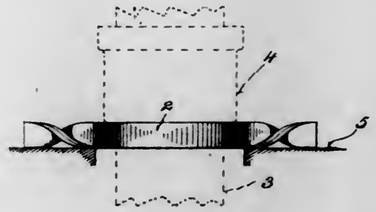
1. In combination, a drawer having a horizontal groove, drawer supporting means comprising a horizontally grooved member, said grooves being on opposite sides of a horizontal plane passing through the center of the drawer, and pivotal shoes in said grooves for transmitting the weight of the drawer to the supporting means.

1,806,175. INTERNAL COMBUSTION ENGINE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Feb. 16, 1928. Serial No. 254,642. 14 Claims. (Cl. 123—122.)



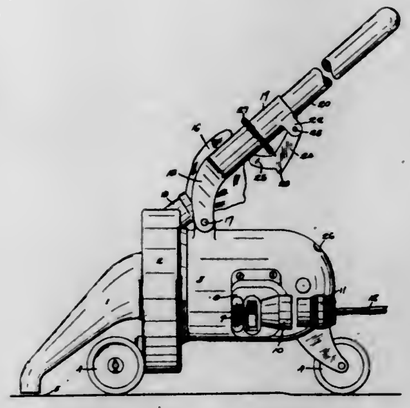
1. In an internal combustion engine, a cylinder block having a plurality of engine cylinders and a cored passage extending transversely therethrough, intake and exhaust manifolds for the engine respectively located on opposite sides of the engine, a heater jacket for the intake manifold, and means by-passing a portion of the exhaust gases from the exhaust manifold through the said passage in the cylinder block to the heater jacket.

1,806,176. PIPE REST. JOHN H. OWENS, Racine, Wis. Filed June 27, 1927. Serial No. 201,627. 2 Claims. (Cl. 248—35.)



1. A pipe rest comprising two members formed of strap metal and having semi-circular body portions and projecting twisted detachably interlocking ends.

1,806,177. SUCTION CLEANER. LLOYD W. PARDEE, Lakewood, Ohio, assignor to The Scott and Fetzer Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 7, 1928. Serial No. 268,144. 6 Claims. (Cl. 15—16.)

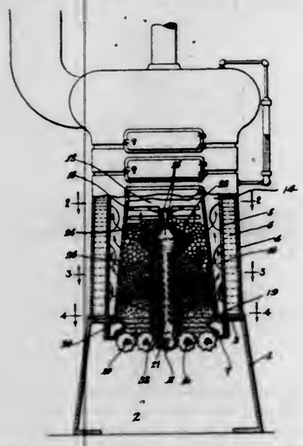


1. In a suction cleaner, a casing having a fan chamber, and a collecting nozzle, a handle device having its forward end pivoted to said casing upon a horizontal axis, the exterior of said handle device having a hand-grip portion and a part of said handle device being hollow for the reception of an extension handle, and means for detachably securing a part of said handle-device to the cleaner casing in rigid relation.

1,806,178. BOILER. JOSEPH J. RATHGEB, Jr., New York, N. Y. Filed Nov. 1, 1928. Serial No. 316,376. 4 Claims. (Cl. 126—163.)

1. In a furnace, a lower grate structure, a heat-absorbing wall, an upwardly extending fire pot within the furnace spaced from said heat-absorbing wall and formed with means of communication between the interior of

said fire pot and the space between said fire pot and wall and radial, vertically arranged flanges extending from



said fire pot to said heat-absorbing wall to provide a plurality of separate combustion chambers between said fire pot and said wall.

1,806,179. JEWEL BEARING MOUNTING. ORWELL C. REEVES, Toledo, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Jan. 24, 1927. Serial No. 163,008. 4 Claims. (Cl. 308—2.)



1. In a device of the class described, in combination, a bearing element having a V-shaped groove therein, and a clip of phenolic condensation product composition moulded around said bearing element having a portion of its surface spherical in form.

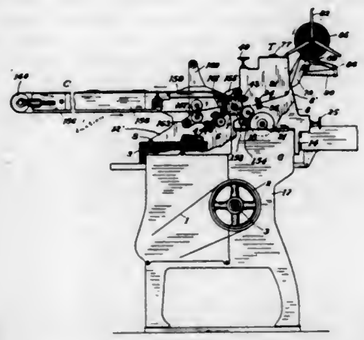
1,806,180. METHOD OF DRYING STORAGE BATTERY PLATES. WILLARD L. REINHARDT, East Cleveland, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Mar. 7, 1927. Serial No. 173,354. 8 Claims. (Cl. 136—33.)



1. The method of drying wet charged negative storage battery plates which comprises feeding them through an externally heated space of such proportions that a substantially inert atmosphere is maintained in said space by the vapor driven off from the plates, the plates entering said atmosphere before the drying is initiated to any material extent, and being substantially dried before emerging from said atmosphere.

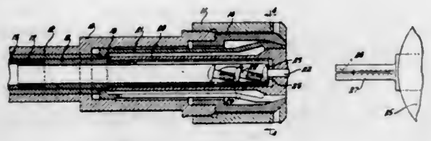
1,806,181. WRAPPER TABBING MECHANISM. ERNEST G. RIDER, Philadelphia, Pa., assignor to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 19, 1927. Serial No. 227,144. 52 Claims. (Cl. 93—36.)

16. Wrapper tabbing and coating mechanism comprising means for coating an individual wrapper with adhesive, and means to apply tabs to the wrapper during said coating thereof.



31. In tabbing mechanism, a movable adhesive-coated member, means to feed the free end of a tab strip into wiping engagement therewith, and means to cut individual tabs from said strip whereupon each tab as cut is drawn by the adhesive coating of said member into engagement therewith.

1,806,182. WORKHOLDER FOR MATERIAL WORKING APPARATUS. WILLIAM SELIGMANN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 15, 1927. Serial No. 240,126. 16 Claims. (Cl. 29—60.)



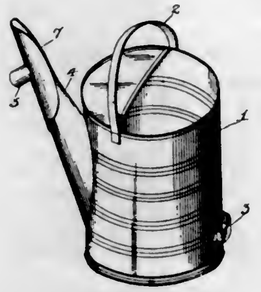
1. In a work holder, means operable to clamp an article moved relatively thereto, and means carried thereby for receiving the article after a portion of the article has been moved through the clamping means and holding it in a predetermined position for a subsequent operation of the first means to clamp the article.

16. In a work holder for article forming apparatus, resilient means for receiving an article, means for clamping the article in position to be worked upon, a slotted article holding member having an article clamping portion and positioned within the clamping means for receiving an article from said resilient means and holding said article in a predetermined position, and means for actuating the clamping means and the slotted article holding member to permit the passage of a portion of the article through the clamping means and into engagement with the article holding member, said clamping means and article holding member being positioned to permit an article in the resilient means to force the article previously worked on out of engagement with the article clamping portion of the article holding member.

1,806,183. SUSPENSION. LEON IRWIN SHAW, Oak Park, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 29, 1928. Serial No. 258,135. 8 Claims. (Cl. 106—36.2.)

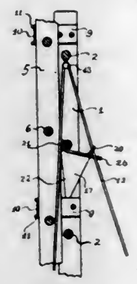
1. In an enameling composition, a fusible glass, and a floating agent comprising a volatile, soluble alginate.

1,806,184. RECEPTACLE ATTACHMENT. ALEXANDER C. SLADKY, Milwaukee, Wis., assignor to National Enameling and Stamping Company, Inc., Milwaukee, Wis. Filed July 19, 1929. Serial No. 379,542. 3 Claims. (Cl. 221—11.)



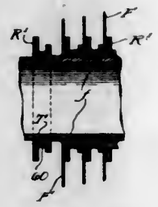
1. In combination with a spout of a receptacle having a lateral extension, of an oval shaped body having a central opening to receive the lateral extension with one end of the body embracing the spout and the other end projecting beyond the lateral extension and in alignment with the spout.

1,806,185. EXTENSION LADDER. HENRY E. SKEELS, Rochester, N. Y., assignor of one-half to William R. Hughes. Filed Aug. 10, 1928. Serial No. 298,703. 1 Claim. (Cl. 228—25.)



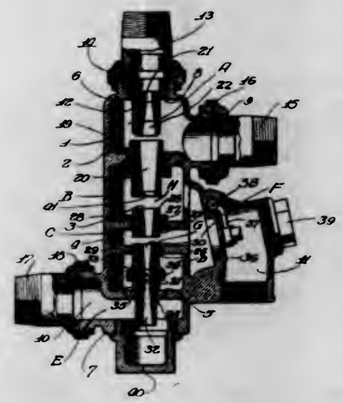
An extension ladder comprising a lower section, a sliding section guided on the lower section and a latch pivotally mounted on the lower section and extending upwardly from its pivotal axis, said latch carrying means cooperating with the rung to limit the swinging movement of the latch in two directions, and a controlling cable for effecting the raising and lowering of the sliding section, slidably connected with the latch to move and hold the latter out of latching position.

1,806,186. RADIATOR. REUBEN N. TRANE, La Crosse, Wis. Original application filed Apr. 23, 1926, Serial No. 104,196. Divided and this application filed May 31, 1928. Serial No. 282,002. 3 Claims. (Cl. 257—262.)



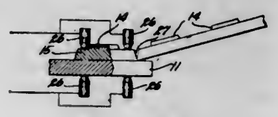
2. In combination a tube, a plurality of heat radiating fins provided with apertures for receiving said tube, flanges on said fins adapted to fit against the tube, rings adapted to space said fins and to reinforce said flanges, and a continuous annular cam portion on said rings whereby said ring pinches said flange against the tube.

1,806,187. JET DEVICE. HOWARD D. YODER, Detroit, Mich., assignor to Penberthy Injector Company, Detroit, Mich., a Corporation of Delaware. Filed July 20, 1929. Serial No. 379,599. 5 Claims. (Cl. 103—275.)



1. A jet device or injector of the automatic open overflow type having a plurality of sliding nozzle sections constituting a delivery tube, said sections defining gaps between the same when separated, said gaps providing spillage areas, one of said sections being responsive to the pressure created by the established jet for moving said tube against another of said sections for varying the gaps.

1,806,188. METHOD OF MANUFACTURING ELECTRICAL SWITCHING APPARATUS. ARTHUR HERMAN ADAMS, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1927. Serial No. 229,557. 12 Claims. (Cl. 219—10.)

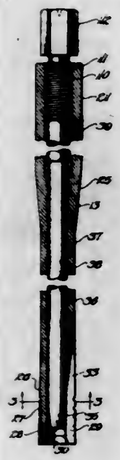


1. The method of producing switching apparatus contact members, which consists in welding a section of a strip of contact metal to a base member, and breaking away the unwelded portion of the strip to determine the strength of the weld.

1,806,189. VALVE SEAT RECONSTRUCTION TOOL. FRANS O. ALBERTSON, Sioux City, Iowa, assignor to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Filed Oct. 5, 1928. Serial No. 310,600. 2 Claims. (Cl. 90—12.5.)

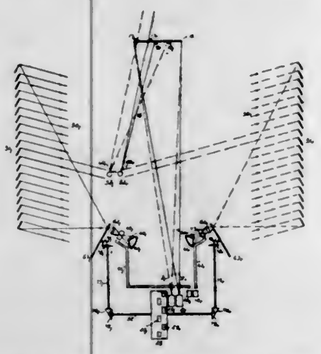
1. A pilot member for valve tools, comprising an elongated body having a bearing surface at its upper end for rotatively receiving and supporting a valve tool holder, said body having a slender integral lower stem adapted to be received and fixedly secured in a valve stem guide in centered position, said body and stem having an axial bore, means for engaging the upper end of a valve stem guide, an expansion rod threaded in said bore and projecting from the upper end thereof, said rod having a camming surface

at its lower end, and said stem being split at its lower end, and camming surfaces formed in said bore on the split ends of said stem to reduce the size of the end of said bore, said rod being adapted to be threaded into said bore to initially expand said split ends into engagement with a



valve stem guide, and said camming surfaces finally acting as abutments on further movement of said rod into said bore, to effect a substantial compression of said rod against corresponding tension in said stem and body, to stiffen said pilot against bending forces.

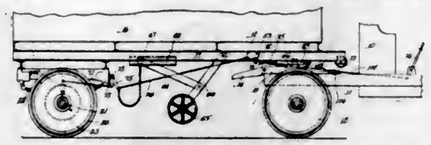
1,806,190. METHOD OF OBTAINING STEREOSCOPIC IMPRESSIONS OF MOVING PICTURE IMAGES. NEWTON ARFSTEN, New York, N. Y. Filed Jan. 6, 1928. Serial No. 244,849. 4 Claims. (Cl. 88—16.6.)



1. The method of producing stereoscopic pictures which comprises producing light of different wave lengths for each eye, so as to bring the eyes into different states of adaptation forming right and left images with sufficient rapidity to produce persistence of vision, and directing into each eye of the observer a beam of light neutralizing the image which that eye should not see.

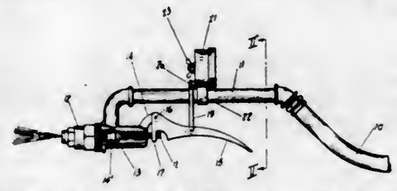
1,806,191. TRAILER VEHICLE. ADDI BENJAMIN CADMAN, Beloit, Wis., assignor to Warner Mfg. Co., South Beloit, Ill., a Corporation of Michigan. Filed July 14, 1927. Serial No. 205,607. 13 Claims. (Cl. 280—33.1.)

2. A combined vehicle of the character described comprising, in combination, a tractor, a trailer, coupling mechanism by which the tractor and trailer may be connected together, a locking element for said coupling mechanism mounted on the trailer, a control device on the tractor adapted to be operated by hand, and means providing a connection between said element and said device for moving said element into unlocking position upon the actua-



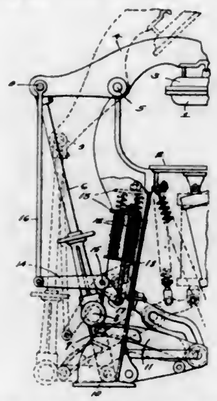
tion of said device, said connecting means including two normally disengaged hooked members, one mounted on the trailer and connected to said element and the other mounted on the tractor and connected to said device, and means operating in the initial movement of said device for causing interengagement of said members.

1,806,192. APPARATUS FOR SPRAYING. CHARLES D. COLLINS, New York, N. Y., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Aug. 21, 1925. Serial No. 51,560. 4 Claims. (Cl. 299—95.)



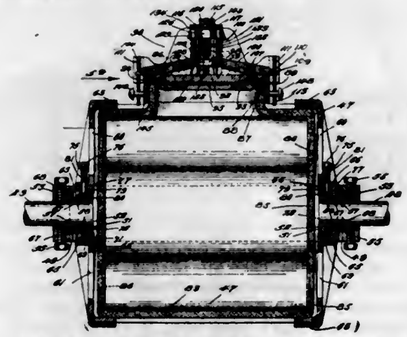
1. Apparatus for spraying which comprises a container for liquid, means for placing pressure thereon, a spray nozzle connected to said container to receive liquid therefrom, means for controlling the flow of liquid through said nozzle, and means actuated by said controlling means for indicating the amount of liquid flowing through said nozzle.

1,806,193. COUNTERBALANCING MECHANISM FOR HEADS OF PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 12, 1927, Serial No. 183,197. Renewed Mar. 14, 1929. 6 Claims. (Cl. 68—9.)



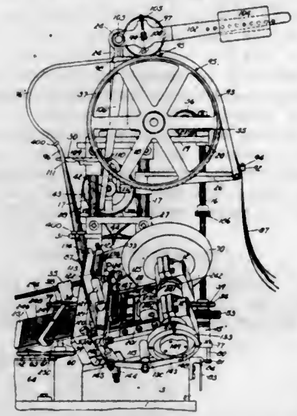
5. In a pressing machine, the combination of cooperating pressing elements, one of which is movable toward and from the other, means for actuating the movable element to close the press, a counter-spring, motion transmitting mechanism connected to the movable element and the spring to open the press and including means for compensating for the tensioning of the spring during the closing of the press whereby the force of the spring tends to remain constant in all positions of the movable element, said compensating means including a lever with arms operatively connected to the counter spring and the movable element, the arms being disposed so that the leverage on the spring will lessen as the movable element of the press closes.

1,806,194. TUMBLING MACHINE. ADOLF ENSSLIN, North Attleboro, Mass. Filed Sept. 29, 1928. Serial No. 309,285. 2 Claims. (Cl. 51—164.)



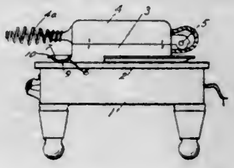
1. In a tumbling machine, a driving shaft, a driven shaft, a carrier comprising a frame fast at one end to the driven shaft, segmental clamping plates rigid with the ends of the frame projecting in one direction, segmental clamping plates disposed oppositely to the first plates, laterally projecting longitudinal shoulders upon the noncurved edges of the second plates provided with holes, clamping screws in the frame passing through the holes projecting above the shoulders, heads upon the screws, springs upon the screws with their ends pressing against the heads and the shoulders, and peripheral retaining flanges upon all the plates, and a container embraced by all the flanges.

1,806,195. GLAZIER'S-POINT MACHINE. CHARLES J. FANCHER, Windsor, Vt., and ROBERT A. JOHNSON, Longmeadow, Mass., assignors, by mesne assignments, to Woodard, Hubbard Company, Hill, N. H., a Corporation of New Hampshire. Filed Jan. 12, 1927. Serial No. 160,639. 18 Claims. (Cl. 10—32.)



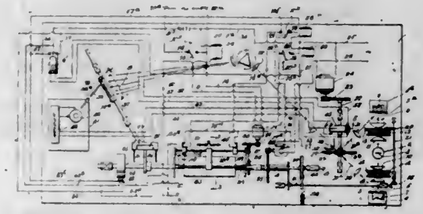
1. The combination, in a glazier's-point machine, with transversely-inclined reciprocating strip-cutting mechanism in a fixed plane, of a vertically grooved guide plate for the strips, and means to support said plate adjacent to the cutting parts of said mechanism, the bottom edge of said plate being inclined to correspond with the inclination of said mechanism.

1,806,196. WAFFLE IRON. BERNARD M. FROMKNECHT, Erie, Pa., assignor to The Griswold Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed July 20, 1929. Serial No. 379,612. 4 Claims. (Cl. 53—10.)



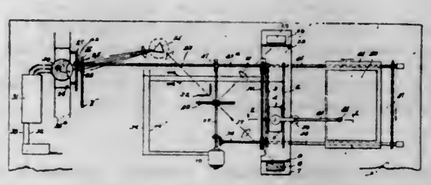
1. The combination of a cooking plate; an annular skirt extending downwardly and outwardly from the plate; and a detachable annular drip catcher fitting the wall of the skirt and forming a closure therewith.

1,806,197. METHOD OF AND APPARATUS FOR COMPARING AND RECORDING RELATIVE INTENSITY OF RADIANT ENERGY. ARTHUR C. HARDY, Wellesley, Mass., and FREDERICK W. CUNNINGHAM, Stamford, Conn., assignors to General Electric Company, a Corporation of New York. Filed June 1, 1927. Serial No. 195,848. 48 Claims. (Cl. 234—5.5.)



1. That method of determining the color characteristics of a test sample which comprises as steps delivering beams of light from said sample and from a standard of comparison, dispersing said beams to form extended spectra, exposing a sensitively responsive device in which an electric current varies in accordance with the luminous energy received by said device alternately to a corresponding part of each spectrum, amplifying the current in said device, rectifying said amplified current by means synchronized with the alternations of exposure of the device to said spectra, and employing the rectified current to cause such exposures of said sensitive device successively to occur at different portions of the spectra.

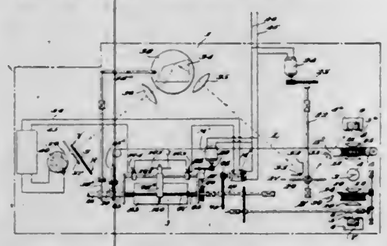
1,806,198. METHOD OF AND APPARATUS FOR COMPARING AND RECORDING RADIANT ENERGY. ARTHUR C. HARDY, Wellesley, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 2, 1928. Serial No. 274,448. 59 Claims. (Cl. 234—5.5.)



1. That method of comparing radiant energy from a test sample with energy from a standard which comprises as steps alternately delivering energy from the sample and standard to a sensitively responsive device in which an electrical current varies in accordance with the amount

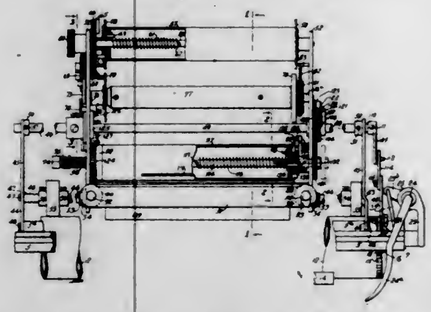
of radiant energy delivered to said device, progressively varying the energy delivered from both of said sources of energy until the current in said device substantially ceases to fluctuate, and automatically recording the point in such progressive variation in energy at which the current in said device substantially ceases to fluctuate.

1,806,199. METHOD AND APPARATUS FOR COMPARING RADIANT ENERGY. ARTHUR C. HARDY, Wellesley, Mass., and FREDERICK W. CUNNINGHAM, Stamford, Conn., assignors to General Electric Company, a Corporation of New York. Filed May 3, 1928. Serial No. 274,729. 53 Claims. (Cl. 234—5.5.)



1. Means for comparing radiant energy from two sources, said means including a reversible electric motor, means for changing the phase relation of the current in the rotor and field respectively of the motor in accordance with reversals in relative intensity of energy from said sources, whereby the motor turns in one direction when one source is more energetic and in the opposite direction when the other source is more energetic and means actuated by said motor for varying the relative intensity of energy delivered by the two sources.

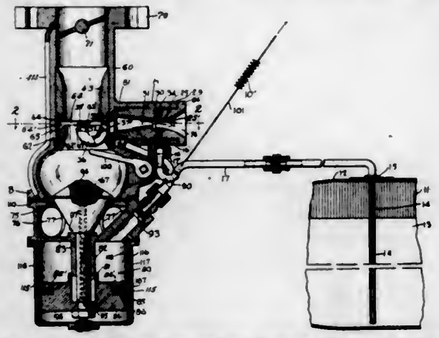
1,806,200. TYPEWRITING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Feb. 19, 1927. Serial No. 169,560. 31 Claims. (Cl. 197—132.)



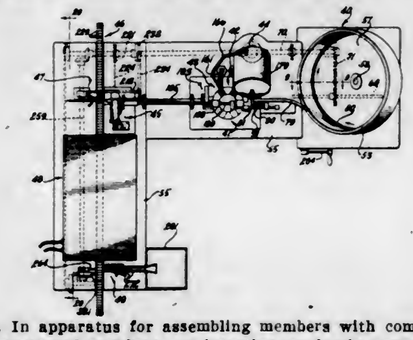
1. In a typewriting machine, the combination of a platen, a rotary material-carrying holder, a stop for limiting turning movements of said holder to rewind the material thereon, a sheet-receiving holder, a spring for turning said last named holder, and means for variably setting said stop and also for tensioning said spring.

1,806,201. CARBURETING SYSTEM. CASPAR E. HORBAUER, New York, N. Y., assignor to Paramount Carburetor Corporation, New York, N. Y., a Corporation of New York. Filed May 2, 1928. Serial No. 274,421. 5 Claims. (Cl. 261—72.)

1. In a fuel feeding system for internal combustion engines operable by the engine induction, a throttle valve for said system, an air valve at all times responsive to variations in suction conditions as may be formed by said throttle valve, a fuel mixing chamber disposed between said throttle valve and said air valve, an annularly formed fuel feeding chamber, means for leading fuel from said annular chamber to said mixing chamber comprising an annular slot, a priming connection from said annular chamber to said mixing chamber, means for feeding a primary mixture to said annular chamber comprising a fuel lifting venturi connected directly to a low level storage chamber, said venturi being open to the atmosphere and being operated by the induction of said engine.

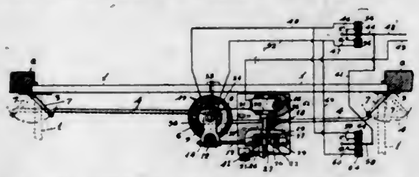


1,806,202. APPARATUS FOR ASSEMBLING MEMBERS. ROBERT HOFSTETTER, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 15, 1927. Serial No. 168,313. 14 Claims. (Cl. 18—1.)



1. In apparatus for assembling members with companion apertured members, an inserting mechanism operable to insert a member within the aperture of a companion member, bonding material supplying means for supplying a charge of material to a predetermined localized area of adjacent portions of members preliminarily assembled by the inserting mechanism, actuating means therefor, and means for heating the bonding material to effect the fusion thereof.

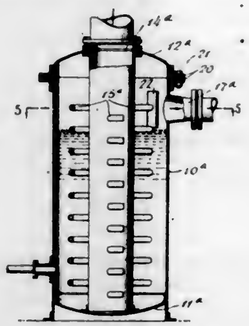
1,806,203. DOOR OPERATING MECHANISM. JACK HUSTON, San Francisco, Calif. Filed Nov. 16, 1929. Serial No. 407,635. 13 Claims. (Cl. 268—63.)



1. A door operating mechanism comprising the combination with a door movable between open and closed

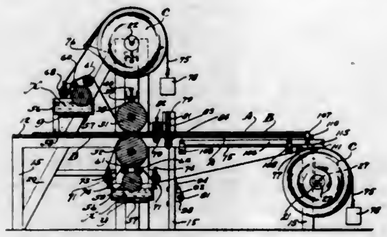
positions, of a door actuating member mounted adjacent the door; door operating means connecting the actuating member and the door; electrically actuated driving means connected to the actuating member; reversing means mounted in connection with the electrically actuated driving means and engaged by the door operating means for automatically reversing the movement of the actuating member when the door is moved to either extreme position; control means mounted remote from the electrically actuated driving means and electrically connected thereto for making and breaking an electric circuit therethrough; and means connected into the electric circuit to automatically break the circuit when the door is moved to either extreme position.

1,806,204. DIRECT CONTACT DESUPERHEATER. SVEND M. JORGENSEN, Elizabeth, N. J., assignor to The Superheater Company, New York, N. Y., a Corporation of Delaware. Filed June 18, 1928. Serial No. 286,366. 13 Claims. (Cl. 122—459.)



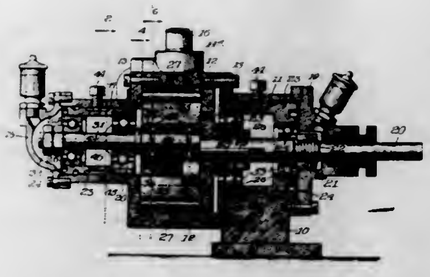
1. The method of desuperheating superheated steam, which consists in continuously injecting a major portion of the superheated steam in a plurality of jets into a body of water at different distances below the surface level thereof while simultaneously passing, in a plurality of jets, a minor portion of such steam in a restricted zone above said surface, to cause it to blend with the desuperheated steam rising from said body of liquid.

1,806,205. MACHINE FOR MAKING PAPER COVERED IRONING BOARDS. JOHN E. KALGREN, Minneapolis, Minn., assignor to The J. R. Clark Co., Minneapolis, Minn., a Corporation of Minnesota. Filed Aug. 10, 1928. Serial No. 298,770. 13 Claims. (Cl. 154—41.)



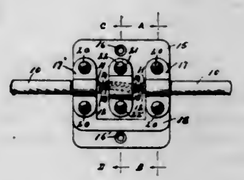
1. A machine of the class described including a board supporting deck, a pair of pressure rolls for successively feeding boards on the deck and applying thereto under pressure an unwound portion of a roll of normally flexible surfacing material, means for applying an adhesive material between the boards and surfacing material to be pressed by the pressure rolls into the boards and surfacing material to connect the same, driving connections including a normally set clutch for operating one of the pressure rolls, a knife for severing the surfacing material connecting two adjacent boards after having passed from between the pressure rolls, a trip arranged to be actuated by successive boards during their movement on the deck for releasing the clutch to stop the movement of the boards on the deck at the time the joint between two adjacent boards is substantially aligned with the knife, and operating means for the knife.

1,806,206. ROTARY PISTON MACHINE. JOHN W. LEES, Chicago, Ill. Filed May 5, 1928. Serial No. 275,483. 10 Claims. (Cl. 103—121.)



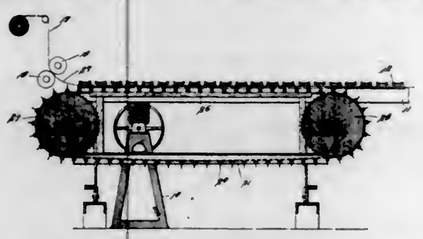
1. In a machine of the character set forth, a stationary cylindrical casing equipped with inlet and outlet ports and provided with a drive-shaft bearing and also with a rotor-shaft bearing, a drive-shaft mounted in said bearing, a sleeve member closed at one end and supported by said drive-shaft, a rotor-shaft mounted in said rotor bearing, a rotor supported by said rotor-shaft eccentrically in said sleeve member and in abutment with the internal surface of said sleeve member, and a vane pivotally connected with said sleeve member and slidable in a slot in said rotor.

1,806,207. SPLICING AND TERMINAL DEVICE FOR FIRE DETECTING CABLES. WILLIAM DALES LINDSEY, South Orange, N. J., assignor to Garrison Fire Detecting System Incorporated, New York, N. Y. Filed June 11, 1927. Serial No. 198,057. 2 Claims. (Cl. 173—263.)



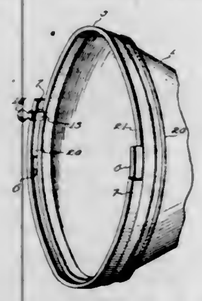
1. The combination with cable ends, each cable comprising an electricity-conducting core and an electricity-conducting sheath normally insulated therefrom, the cores of said cable ends being disposed in alinement in side-by-side relation immediately adjacent each other and the sheaths thereof being disposed in spaced relation, of means for electrically connecting said cores and sheaths independently of each other, said means comprising a supporting member of insulating material, spaced U-shaped clamps contacting, respectively, directly with said sheaths and carried by said supporting member, another clamp contacting directly with said cores and carried by said supporting member, the sheath openings of said spaced clamps being larger in cross-section than the core opening of said other clamp, and means constituting an electrical connection between said spaced clamps.

1,806,208. TENTERING MACHINE. HARR A. MACKNIGHT, Providence, R. I., assignor to Winsor & Jerauld Mfg. Co., a Corporation of Maine. Filed June 23, 1930. Serial No. 463,022. 23 Claims. (Cl. 26—57.)



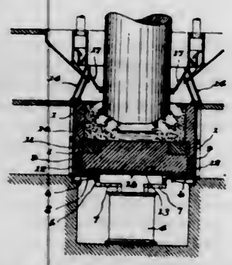
1. In a machine for treating textile webs, traveling edge clamps, a web supply, means intermediate said supply and said clamps for treating said web to shorten it by folding it in the direction of its length prior to engagement with said edge clamps, and means for presenting the edges of said shortened web to said clamps.

1,806,209. ROUNDEL HOLDER. ROSCOE E. MAJOR, Chicago, Ill., assignor to Major Equipment Co., Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 6, 1930. Serial No. 426,297. 5 Claims. (Cl. 240—41.55.)



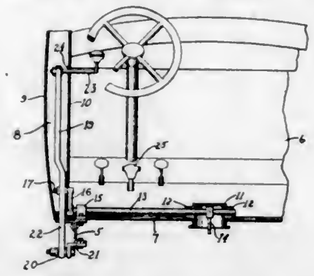
1. A holder of the class described comprising a plurality of normally inseparable annular coaxial members united in mutually rotary relation, each having an inwardly facing segmental arcuate channel formed edgewise thereon, said annular members being mutually nested and the channels thereof being formed to accommodate mutual telescopic adjustment for locking and for release action.

1,806,210. ELECTRIC FURNACE. PAUL LOUIS JOSEPH MIQUET, St.-Julien-de-Maurienne (Savoie), France. Filed Mar. 20, 1929, Serial No. 348,645, and in France June 7, 1928. 7 Claims. (Cl. 266—1.5.)



1. An electric furnace comprising a casing to which current is supplied, a movable electrode in contact with the casing and a conducting furnace bottom insulated from the casing.

1,806,211. GEAR SHIFT CONTROL MECHANISM. ARTHUR H. MUMAUGH, Toledo, Ohio, assignor of one-half to William J. Jacobs, Toledo, Ohio. Filed June 20, 1930. Serial No. 462,482. 1 Claim. (Cl. 74—39.)



In a motor vehicle, the combination of a tonneau having a hollow side wall, a transmission gear case, a gear shift yoke, a slidable rock shaft on which the yoke is secured, said rock shaft extending transversely of the tonneau and contiguous with the floor thereof, a crank arm on said rock shaft extending into the cavity in the side wall, and a hand lever having a universal connection at its lower end to the frame of the vehicle, said lever extending upwardly within said cavity and inwardly through the lining of the side wall to a point in front of and above the driver's seat, said lever having an intermediate operative connection with the crank arm to shift the shaft in the direction of its length.

1,806,212. NONSKID DEVICE FOR BOOTS AND SHOES. JAMES M. NAHON, Madrid, Spain. Filed Aug. 1, 1930, Serial No. 472,248, and in Spain Jan. 17, 1930. 7 Claims. (Cl. 36—66.)



1. An anti-skid device for boots and shoes, comprising a plurality of supporting or securing members fastened to the inner sole of the shoe; and a chain adapted to be removably attached to the supporting members over the sole of the shoe.

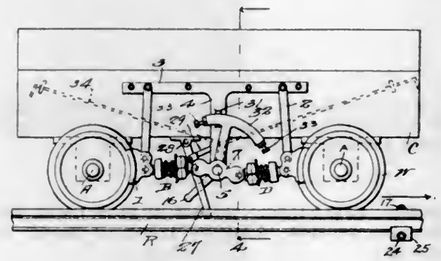
1,806,213. BUCKLE FOR WRIST WATCH STRAPS. NELS T. NELSON, Attleboro, Mass., assignor to J. F. Sturdy's Son Co., Attleboro Falls, Mass., a Corporation of Massachusetts. Filed May 9, 1930. Serial No. 450,967. 1 Claim. (Cl. 24—77.)



A strap buckle comprising a body member having a bottom wall having spaced slots extending transversely with

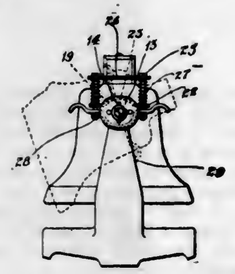
respect to the longitudinal extent of the strap, side walls secured to said bottom wall to extend along the side edges of the strap and having two pairs of oppositely disposed openings in its side walls located in line with said slots, an L-shaped clamp lever provided with trunnions pivotally mounted in one of said pairs of openings and provided with detents adjacent one end of the lever arm to be releasably received in the other pair of openings to hold the lever in clamped position, knobs mounted on said side walls, said lever being provided with side notches to prevent its contact with said knobs, and a plate member adapted to be secured to an end of the strap and provided with notches to receive said knobs and hold said plate and body secured together.

1,806,214. RAILWAY CAR BRAKE. OLLIE P. PERRY, Jackson, Ky. Filed May 19, 1928. Serial No. 279,063. 4 Claims. (Cl. 188—111.)



1. The combination with a pair of brake shoes and a rock shaft of a double brake arm on the shaft and resilient couplings between said arm and shoes, a brake lever on the shaft, a release lever connected with the shaft, a hanger for the shaft and a stop lug thereon, and a control lever on the shaft for co-action with said stop lug.

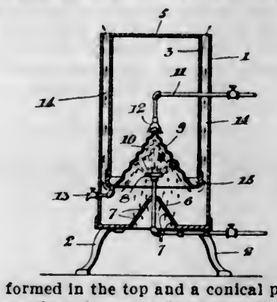
1,806,215. CONTROLLING DEVICE FOR LOCOMOTIVE OR ENGINE BELLS. ORVILLE BOYER PETERS, Winnipeg, Manitoba, Canada. Filed Nov. 5, 1930, Serial No. 493,595, and in Canada Sept. 16, 1930. 11 Claims. (Cl. 116—165.)



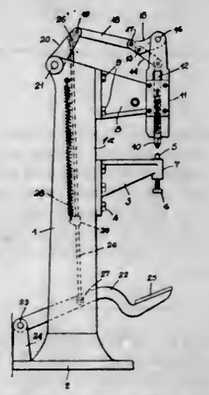
1. A controlling device for bells in combination with a bell oscillatably mounted on a support through trunnions, comprising a control member mounted upon one of the trunnions and adapted to contact with the bell supporting structure at a predetermined point to arrest the motion of the bell.

1,806,216. HEATER. EDGAR PERCY PLUMMER, Regina, Saskatchewan, Canada, assignor of one-half to Paul Fayolle, Regina, Canada. Filed Aug. 20, 1930. Serial No. 476,653. 3 Claims. (Cl. 126—350.)

1. A heater comprising an outer cylinder open at the top and having a conical projection in the bottom, said conical projection having ports formed therein, an inner cylinder of smaller diameter than said outer cylinder having a port formed in the top and a conical projection in the bottom thereof, and means for generating heat extending upwardly into said last mentioned conical projection.

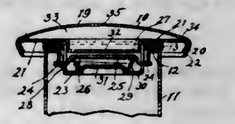


1,806,217. RIVET SETTING AND PUNCHING PRESS. WILLIAM EDWARD REES, Ganahoque, Ontario, Canada. Filed Oct. 16, 1928. Serial No. 312,792. 1 Claim. (Cl. 218—1.)



In a machine of the class described, including a plunger, a pedal for operating the same, a trunk for supporting the plunger and pedal, an arm extending laterally from the top of the trunk, a housing extending above the arm in which the plunger is mounted, a curved lever pivoted at one end to the top of the housing and arranged with its convexity downward, a link connecting the lever to the plunger, an operating lever pivoted to the trunk and to which the pedal is connected, a second link connecting the outer end of the operating lever with the outer end of the curved lever, the pivotal connections of said second link and the curved lever, and the first link connecting the curved lever with the plunger being so arranged that when the curved lever and the second link connecting it with the operating lever are in substantial alinement, the pivotal connection of said second link with the curved lever will be below the pivotal connection of said curved lever and the first link connecting it with the plunger.

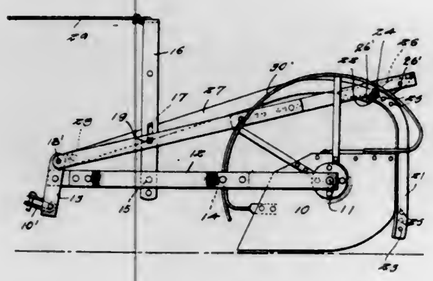
1,806,218. CLOSURE. JAMES S. REID, Cleveland, Ohio, assignor to The Eaton Axle & Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 27, 1929. Serial No. 366,167. 4 Claims. (Cl. 220—40.)



1. A closure having a body portion comprising a top part, and a bottom part, said top part having a depending

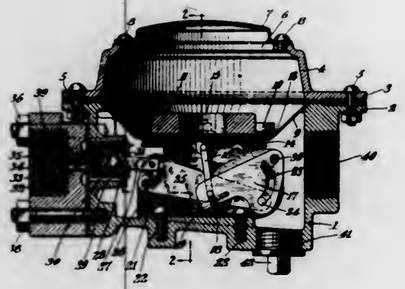
skirt portion, said bottom part having a flange engaged by said skirt portion for holding said parts together, an integral hollow boss formed centrally of said bottom part, a hollow extension member carried by said boss, a substantially rigid locking member disposed in said extension member and having laterally extending fingers, and resilient means for urging said locking member toward said boss.

1,806,219. SCRAPER. HYRUM RICKS, Los Angeles, Calif. Filed Feb. 16, 1927. Serial No. 168,751. 4 Claims. (Cl. 37—140.)



1. In a scraping and leveling device, the combination with a rotary scoop having a stop pin, a movable arm having an end adjacent said stop pin and having a detent engaging with one side of said stop pin for preventing retrograde rotation of said scoop, and a lever having one end pivotally mounted on said arm adjacent said detent and having a nose on said pivoted end engaging the other side of said stop pin.

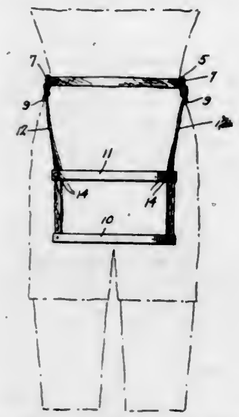
1,806,220. VALVE OPERATING MECHANISM. EDWARD A. ROCKWELL, New York, N. Y. Filed June 8, 1926. Serial No. 114,584. 4 Claims. (Cl. 50—26.)



1. A valve operating mechanism comprising an inlet for fluid pressure, a valve for controlling the same, a leverage mechanism for operating the valve having a low leverage ratio in the open position of the same, and a shipping block for holding the valve in open position.

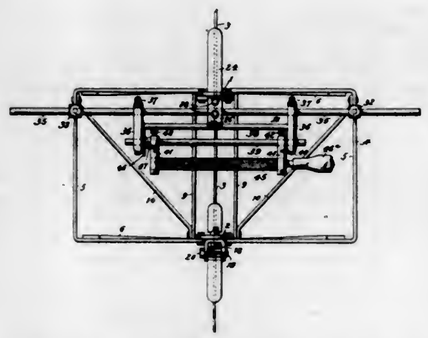
1,806,221. CLOTHING RETAINER. ALFRED G. ROSS, Cincinnati, Ohio. Filed Mar. 4, 1930. Serial No. 433,068. 2 Claims. (Cl. 2—47.)

1. In a device of the class described, a waist encircling member, a pair of flexible strips, means connecting one end of said strips with said waist encircling member, an arcuate flexible member secured at its ends to said strips remote from the first mentioned ends of the strips, and a



second arcuate member having its ends adjustably engaged with said strips intermediate said first mentioned arcuate member and said waist encircling member.

1,806,222. SAW FILER. EDWARD A. ROSS, Gernt, Tenn. Filed Feb. 28, 1925. Serial No. 12,313. 2 Claims. (Cl. 76—31.)

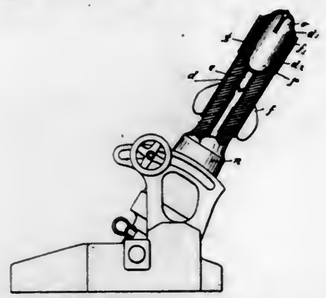


1. A saw filer including a pair of spaced members having slots to receive the saw, a horizontal frame carried by said members, a yieldable arm secured to one of the members, a bracket secured to the other of the members, a yieldable arm suspended from the bracket and connected thereto for swinging movement, said arms extending longitudinally of the edge of the saw and engageable therewith at spaced points, a file, and means for connecting the file to the frame for sliding movement and for engagement with the teeth of the saw.

1,806,223. BOMB FOR USE WITH A SPECIAL BOMB-THROWER, OR WITH FIREARMS ALREADY EXISTING AND HAVING A SMALLER CALIBER THAN THE BOMB. DINO SAMAIA, Milan, Italy. Filed May 6, 1929, Serial No. 360,954, and in Italy May 22, 1928. 6 Claims. (Cl. 89—1.)

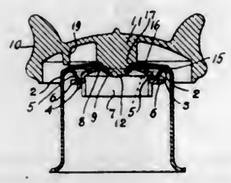
1. A bomb for firearms of smaller caliber than that of the bomb itself, including a bomb body, a ring carried with the body near the outer end thereof, a tube carried by the ring and surrounding the bomb in spaced concentric relation and projecting rearwardly from the body, the space between the body and tube being sufficient to accommodate the barrel of a firearm of proper caliber

in order to allow the gases, on the explosion of the charge and before the inertia of the bomb has been overcome, of exerting their propelling action against the ring so that



the bomb may be acted upon by the gases from the beginning and simultaneously for its entire length, this action being then continued when the bomb body has left the barrel of the firearm within the tube.

1,806,224. RADIATOR CAP. KYLE E. STANT, Connersville, Ind., assignor to The Stant Machine Company, Connersville, Ind., a Corporation of Indiana. Filed Oct. 25, 1928. Serial No. 315,031. 12 Claims. (Cl. 220—40.)



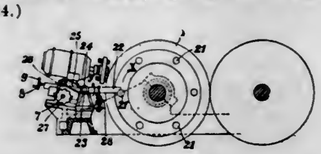
1. In a closure for receptacles, a filler spout having locking members, a radiator cap having a depending, non-rotatable, cooperating locking member and locking fingers thereon, a sealing means for sealing the cap to the filler spout, and yielding means backing the said sealing means in engagement with the filler spout and the radiator cap, said yielding means being rotatably mounted on the radiator cap, and portions of said yielding means being spaced from the cap during rotation of said cap up to its locked position.

1,806,225. CAP. FREDERICK L. VERNON, Newton, Iowa. Filed Apr. 26, 1930. Serial No. 447,625. 2 Claims. (Cl. 2—200.)



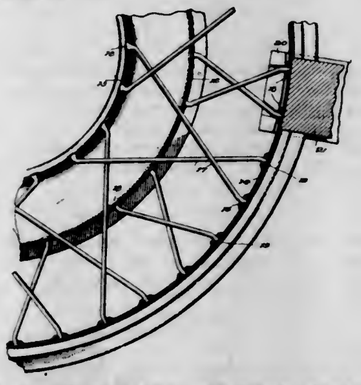
1. A blank for a cap having side panels and adapted to be folded upon a central transverse line, securing flaps at diagonally opposite corner portions of the panels each adapted to be folded across the meeting edges of the panels when they are brought together and secured to the companion panels, the panels having folding lines marked thereon diverging from the central transvrese line to the adjacent end edges of the respective panels whereby a single coupling fold may be formed within the crown of the cap, and the panels being further scored on short lines diverging inwardly from the last-mentioned fold line and on other short lines parallel with the central transverse fold line arranged in pairs and spaced from said diverging scores.

1,806,226. APPARATUS FOR GRINDING THE ROLLS OF ORE CRUSHING OR LIKE MILLS. AUGUST VOEGEL, Magdeburg, Germany, assignor to the Firm Fried. Krupp Grusonwerk Aktiengesellschaft, Magdeburg-Buckau, Germany. Filed Mar. 29, 1929, Serial No. 350,988, and in Germany Apr. 2, 1928. 3 Claims. (Cl. 51—254.)



1. In an apparatus for grinding the rolls of ore crushing and like mills the combination with a rotary grinding tool arranged at right angles to the roll under treatment, so that the front face of said tool is presented to the roll, of means for revolving the latter, spring actuated means for resiliently keeping in contact the grinding tool with the roll under treatment, a screw and nut drive adapted to move the grinding tool along the roll under treatment parallel to its axis and of feeding means cooperatively associated with the roll under treatment and with the screw and nut drive so as to periodically actuate the latter.

1,806,227. METHOD OF MAKING WIRE SPOKED WHEELS. JAMES H. WAGENHORST, Detroit, Mich. Filed Feb. 10, 1930. Serial No. 427,350. 11 Claims. (Cl. 29—174.)

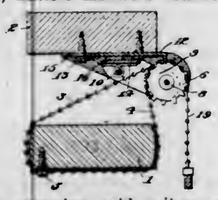


1. The method of making wire-spoked wheels which comprises assembling a hub member within a rim member, inserting spokes through holes formed in said hub and rim members, anchoring said spokes in one of said members with their free ends extending through the holes of the other member, and pressing the metal which bounds the holes in the latter member to contract each hole in order to grasp the spoke end inserted therethrough and also pressing said metal radially outwardly to tension the spoke thus grasped.

1,806,228. VENETIAN BLIND. LAWRENCE THOMAS WARD, Kane, Pa., assignor to Kane Manufacturing Company, Kane, Pa., a Corporation of Pennsylvania. Filed Feb. 9, 1931. Serial No. 514,643. 9 Claims. (Cl. 156—17.)

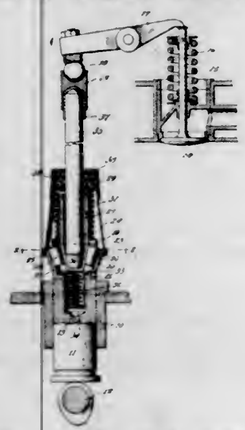
8. In a Venetian blind in combination, a tilt bar, a fixed support adjacent said bar, a pair of rollers mounted on

said support, said rollers being in frictional engagement with each other, flexible members connected to said bar



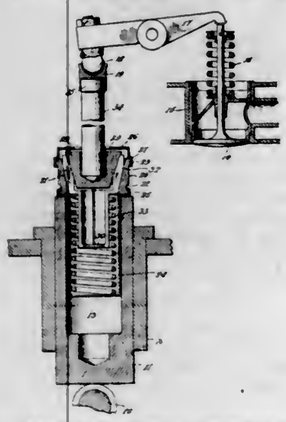
and respectively engaging said rollers, whereby a pull on one of said flexible members is effective to rotate an associated roller and said bar.

1,806,229. VALVE ACTUATING MECHANISM. CALVIN C. WILLIAMS, Philadelphia, Pa. Filed Oct. 26, 1927. Serial No. 228,893. 6 Claims. (Cl. 123—90.)



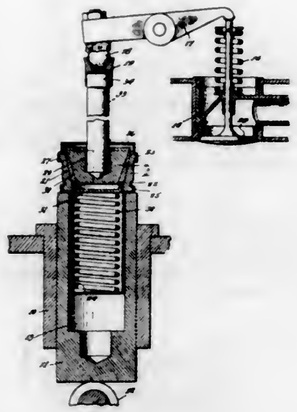
1. An automatic take-up device including relatively movable male and female members, wedging means shiftable for spacing said members, primary yieldable means exerting a lifting action on one of the members and tending to advance said wedging means for lifting said member, and auxiliary yieldable means disposed to exert a lifting action directly on said member for assisting in the spacing of the members.

1,806,230. VALVE ACTUATING MECHANISM. CALVIN C. WILLIAMS, Philadelphia, Pa. Filed Sept. 6, 1928. Serial No. 304,370. 10 Claims. (Cl. 123—90.)



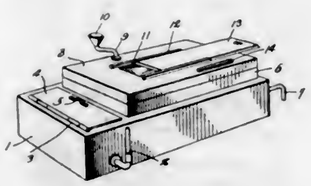
1. An automatic take-up device including nested conical clutch members comprising rigid inner and outer members and a coacting intermediate member movable axially between the inner and outer members, the intermediate clutch member including a plurality of clutch elements having flat contact with the inclined faces of the inner and outer members and shiftable for spacing said inner and outer members.

1,806,231. VALVE ACTUATING MECHANISM. CALVIN C. WILLIAMS, Philadelphia, Pa. Filed Sept. 6, 1928. Serial No. 304,371. 5 Claims. (Cl. 123—90.)



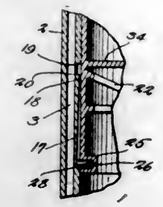
1. An automatic take-up device including nested conical clutch members comprising rigid inner and outer members and a coacting split annular intermediate member shiftable axially between said inner and outer members for spacing said inner and outer members and having flat contact with the inclined faces thereof.

1,806,232. PHOTOGRAPH DEVELOPING DEVICE. SHOTARO ABE, Hongoku, Japan. Filed July 24, 1928, Serial No. 294,962, and in Japan Aug. 22, 1927. 1 Claim. (Cl. 95—90.)



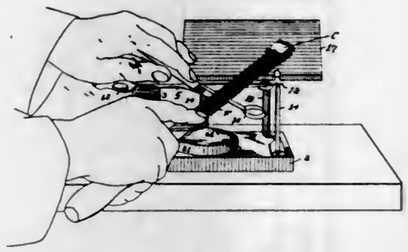
A photograph developing apparatus, comprising an outer casing having a top provided near one end of said casing with an opening and a cover therefor, the top of said outer casing being also provided with a larger opening, an inner casing fitted in said larger opening and arranged with its bottom spaced from that of the outer casing, a cover for the inner casing hermetically fitted thereon and provided with an opening, a colored glass pan in said opening and an opaque closure for said opening arranged above said colored glass pan.

1,806,233. GASOLINE MOTOR. HARRY LEE ADAMS, Elvins, Mo. Filed Apr. 22, 1929. Serial No. 357,232. 2 Claims. (Cl. 123—45.)



2. In an internal combustion engine, a cylinder having a zig-zag groove, the base walls of the constituent members of the groove slanting longitudinally of the cylinder, so that the shallowest part of one member of the guide groove is immediately adjacent to the deepest part of an adjoining member of the guide groove, whereby to form a rigid, integral shoulder, a piston mounted to reciprocate in the cylinder and having a socket, the piston and the cylinder having ports so located as to be capable of registration, a projection slidable in the socket and cooperating with the guide groove, to rotate the piston and cause the ports of the piston and the cylinder to register, and a spring housed in the socket and constituting means for advancing the projection and keeping the projection engaged with the base of the guide groove, the spring constituting means for advancing the projection with respect to the shoulder, thereby to prevent retrograte rotation of the piston.

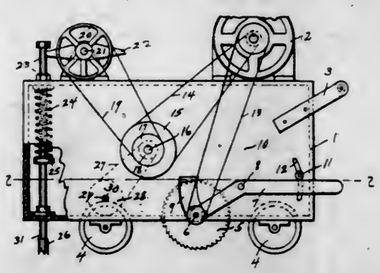
1,806,234. SHEARS SHARPENING DEVICE. LOREN C. BOYD, Warren, Ohio. Filed Dec. 12, 1927. Serial No. 239,607. 1 Claim. (Cl. 76—82.2.)



A shears sharpening device, comprising a base, a clamping holder having an inclined clamping surface, an upright member having a rest surface for the end of the shear blade and a guide table mounted for vertical adjustment rearwardly of said clamping holder and said upright member, the surface of said guide table and the rest surface of said upright member being inclined in opposite directions with respect to said clamping surface of said clamping holder.

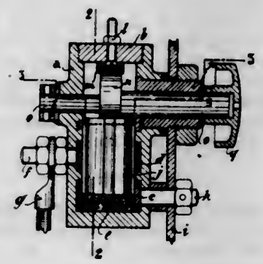
1,806,235. GROOVING MACHINE. ANDREW T. BUTKEY, Youngstown, Ohio, assignor to The Safety Processing Company, a Corporation of Ohio. Filed Oct. 19, 1927. Serial No. 227,320. 1 Claim. (Cl. 144—136.)

In a device of the class described, a body member, wheels carrying said body member, a movable horizontal shaft, a plurality of circular cutter members functioning on said movable horizontal shaft, a plurality of spring tension per-



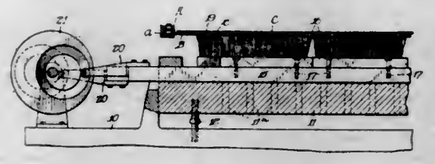
pendicular pickers positioned ahead of said cutters and so spaced apart that each picker is in alignment with each cutter, means for energizing said pickers and cutters.

1,806,236. SAFETY SWITCH. MAURICE CHARLÈS, Courbevoie, France. Filed Aug. 29, 1928, Serial No. 302,681, and in France Sept. 27, 1927. 9 Claims. (Cl. 200—52.)



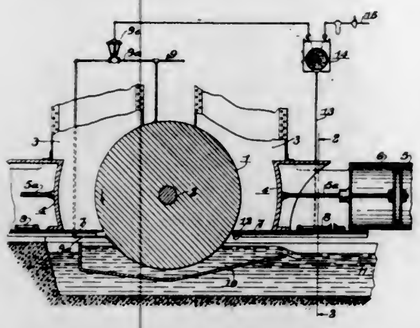
1. In a safety switch of the types described, the combination of a magneto ground terminal, a battery circuit ground terminal, fluid contact means connected in series with said last-mentioned ground terminal and manually operable means for simultaneously disconnecting said magneto ground terminal and closing said fluid contact means, said battery ground terminal being adapted to be disconnected and said magneto ground terminal connected upon inversion of said switch.

1,806,237. CARPET CLEANING MACHINE. STEPHEN CHASE, 4th, GEORGE H. PALM, and RUDOLF S. PFEIFFER, Chicago, and BENJAMIN S. PFEIFFER, Winnetka, Ill., assignors, by direct and mesne assignments, to Chase Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 2, 1925. Serial No. 12,516. 3 Claims. (Cl. 15—40.)



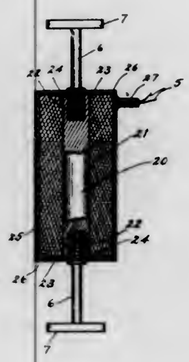
1. In a fabric cleaning machine, in combination, a retaining plate for a sheet of fabric, means for moving fabric progressively on said plate, brushes arranged collaterally below the plate for contact with fabric thereon, means for reciprocating juxtaposed brushes simultaneously in opposite directions and means for adjusting the brushes toward and from the plate.

1,806,238. MEANS FOR CONTROLLING THE OPERATION IN PULP GRINDING. CLAYTON D. DE MERS, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed May 31, 1930. Serial No. 458,030. 4 Claims. (Cl. 83—75.)



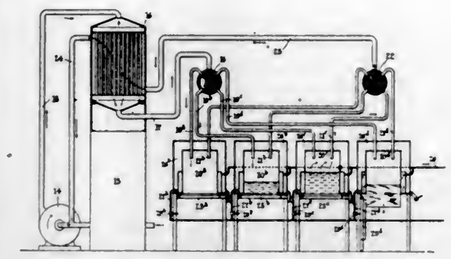
1. In a pulp grinder, the combination with a grinding stone, means for forcing the material to be ground into contact with the stone, means for applying a cooling liquid to the stone, including a receptacle below the stone for maintaining the cooling liquid in flowing contact with the lower portion of the stone and a temperature-sensitive bulb disposed above the level of the liquid in the receptacle in the path of the liquid thrown off from the rotating stone and means controlled by the bulb for controlling the application of the cooling liquid to the stone.

1,806,239. PICKLING APPARATUS. ALBERT DIETZEL, Pittsburgh, Pa. Filed Apr. 8, 1930. Serial No. 442,498. 4 Claims. (Cl. 266—7.)



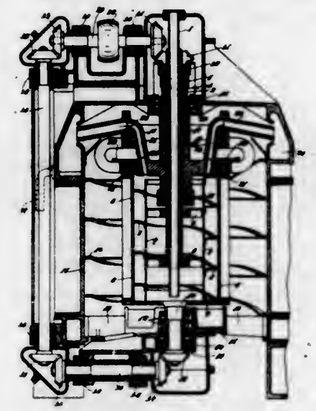
1. In pickling apparatus including a tank containing a bath of acid, the combination of an electro-magnetic device for supporting work in said acid, which device includes an electric coil upon a central body, said central body having an acid-resisting flange at each end, an acid-resisting sleeve covering said coil along its length, which sleeve at each end is burned into liquid-tight engagement with one of said flanges, opposed magnetizable shanks extending one from each end of said coil and projecting from its acid-resisting covering, which shanks at their outer ends are provided each with a work-supporting head, and means for supporting said electro-magnetic device over said bath of acid, which last-named means are revoluble to effect movement of said device from one to another of several operative positions.

1,806,240. PRODUCTION OF CARBON DIOXIDE ICE. JAMES RICHARDSON DONALD, Montreal, Quebec, Canada. Filed Nov. 1, 1928. Serial No. 316,518. 2 Claims. (Cl. 62—121.)



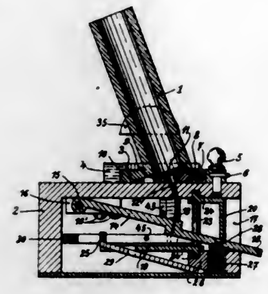
1. A process of producing solid carbon dioxide which comprises compressing and cooling the gas to liquefy it, conveying the liquefied gas to a closed, heat-insulated chamber, simultaneously evaporating the liquefied gas in another previously filled heat-insulated chamber and employing the resulting gas to effect the first mentioned cooling, and simultaneously removing from another heat-insulated chamber a block of solidified carbon dioxide.

1,806,241. CENTRIFUGAL SEPARATOR. FERNAND DUPUIS, Charleroi, Belgium. Filed Mar. 6, 1930, Serial No. 433,740, and in Belgium Mar. 9, 1929. 6 Claims. (Cl. 233—7.)



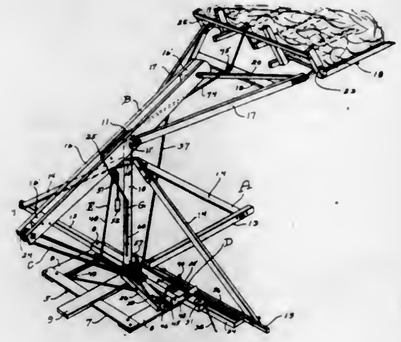
1. A centrifugal separator for separating solids from liquids, comprising a rotary vessel closed at the bottom, a tubular feed element centrally located in said vessel and extending to near the bottom thereof, a rotary worm in said vessel, a cover for the top of said vessel, ports in said cover for the clarified liquid outwardly inclined, conduits in the top part of the covered vessel and arranged outside said ports for the separated solid matter and valves normally closing said conduits, said valves being arranged and guided so as to be deprived from centrifugal action and openable under the influence of the thrust of the said solid matter forced upwards by said worm into said conduits.

1,806,242. SAFETY APPARATUS FOR PROTECTION AND DEFENSE AGAINST BURGLARY AND VIOLATION OF HABITATIONS. FERDINAND ALEXANDRE DUQUESNE, St. Maur des Fosses, France. Filed July 10, 1929, Serial No. 377,268, and in France July 12, 1928. 10 Claims. (Cl. 116—15.)



1. Burglar alarm apparatus comprising a fire alarm including a spring operated hammer, a detent to hold the hammer, a trigger bar to release the detent from the hammer and door actuated operating means for the trigger bar, whereby upon opening of the door the fire arm is discharged.

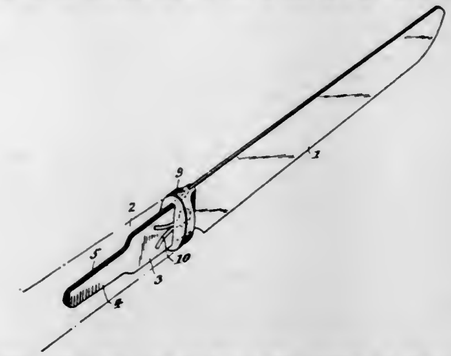
1,806,243. HAYSTACKER. DAVID H. EASTERLY, Detroit, Mich. Filed Jan. 2, 1929. Serial No. 329,843. 8 Claims. (Cl. 214—140.)



1. A hay stacker comprising a supporting structure including a rotatable mast, a control arm rigidly connected at one end to the lower end of the mast, a beam pivotally mounted intermediate its ends upon the upper end of the mast, a rack pivotally mounted forwardly of the mast for vertical swinging movement therewith, a hoist rope connected with the rear end of the beam for imparting vertical swinging movement thereto, latch means engageable with the control arm, means for releasing the latch means upon limited vertical movement of the rack, means for swinging said control arm when released to rotate said mast, and means for automatically tripping said rack at predetermined positions of horizontal swinging movement of the rack.

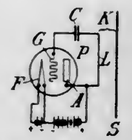
1,806,244. KNIFE TANG. ELCHANAN ECHIKSON, Newark, N. J. Filed Aug. 15, 1930. Serial No. 475,588. 2 Claims. (Cl. 30—9.)

1. In combination with a blade, a tang formed on the rear end thereof and comprising a body portion of uniform thickness, the forward end portion of the body being of greater width than the rear end portion, a bolster mounted on the forward end portion of the tang at its juncture



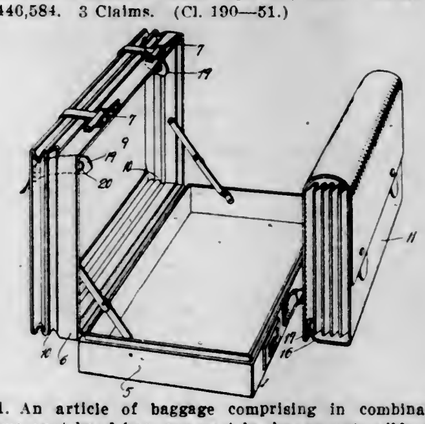
with the blade, the forward end portion of the tang being provided with a cut-out portion for the reception of solder to secure the bolster in a rigid manner.

1,806,245. SHORT WAVE OSCILLATOR. ABRAHAM ESAU, Jena, Germany. Filed Feb. 12, 1927, Serial No. 167,650, and in Germany Feb. 18, 1926. 5 Claims. (Cl. 250—36.)



4. The method of generating and transmitting ultrashort waves, which consists in generating a fundamental short wave, splitting said fundamental wave into a plurality of waves, one at least of which is shorter than the fundamental wave, and transmitting the ultrashort wave so produced.

1,806,246. HAND BAGGAGE. JOSEPH FELDMAN and JACOB LESSEM, New York, N. Y.; said Lessem assignor to said Feldman. Filed Apr. 23, 1930. Serial No. 446,584. 3 Claims. (Cl. 190—51.)



1. An article of baggage comprising in combination, a two part hand bag, one part having an extensible wall, a flange member mounted on and extending along one edge of said extensible wall and having an edge portion spaced therefrom, a portfolio having a portion adapted to be received behind the edge portion of said flange member, and tabs carried by said extensible wall and adapted for engagement with the portfolio to secure the same to the said extensible wall.

1,806,247. PROCESS FOR THE MANUFACTURE OF OXIDATION PRODUCTS OF SICCATIVE OILS. FRITZ FRAUNBERGER and GEORG KNÖFFLER; Premnitz, Germany. Filed July 24, 1925, Serial No. 45,939, and in Germany Aug. 11, 1924. 4 Claims. (Cl. 87—12.)

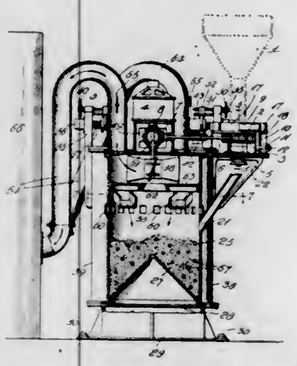
1. A process for the oxidation of siccative oils consisting in finely dispersing the oils in a liquid in which the oils are not soluble and of oxidizing the thus dispersed siccative oils by means of air.

1,806,248. DEVICE FOR USE IN DRESSING THE HAIR. HENRY FREEMAN, Tottenham, London, and HARRY DUNDONALD THURGAR, London, England. Filed Mar. 25, 1930, Serial No. 438,868, and in Great Britain Mar. 26, 1929. 3 Claims. (Cl. 132—48.)



1. A device for use in dressing the hair comprising a base member having teeth, a clip hinged to the base member and having a slot to receive said teeth, said clip coacting with the base member to hold the loose ends of hair against the inner side of the base member while the device is rotated to form the hair into a roll, and an auxiliary clip member hinged to said base member and adapted to engage the first named clip and coact therewith to engage the rear of the roll to maintain the formation thereof.

1,806,249. PULVERIZING OR DISINTEGRATING EQUIPMENT. WARREN C. S. GRAHAM, New Orleans, La. Filed Feb. 23, 1929. Serial No. 342,167. 18 Claims. (Cl. 83—9.)

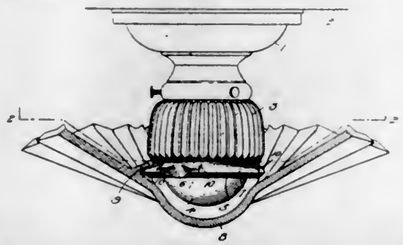


1. In a pulverizing apparatus, a receptacle having a downwardly inclined base, means for depositing material in bulk in said receptacle, means for subjecting said material in bulk to successive bombardment by the gravitational effects of a multiplicity of weights directed upon the material from diametrically opposite directions for reducing the material from bulk to a substantially powdered state and gravitating the reduced material down said inclined base, and means for continuously withdrawing the powdered material by flotation from the remaining bulk.

1,806,250. PRODUCTION OF MATERIAL TO BE USED IN THE FORMATION OF ROADWAYS AND THE LIKE. ERNEST BARTON HACK, East Melbourne, Victoria, Australia, assignor of one-half to Arthur Victor Leggo, Melbourne, Australia. Filed Sept. 8, 1926, Serial No. 134,331, and in Australia Sept. 23, 1925. 3 Claims. (Cl. 106—31.)

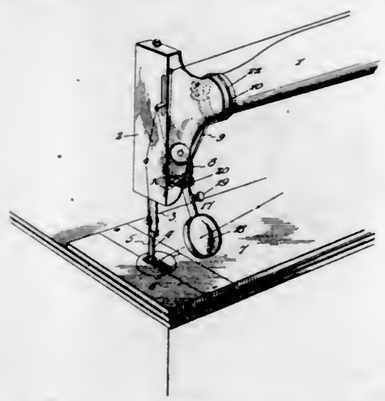
1. A method of treating bitumen for use in the formation of roadways and the like consisting in heating the bitumen and subjecting it to the action of a solution of an emulsifying and foam assisting agent to effect an ebullition of bubbles throughout the whole mass of the bitumen and subsequently agitating or disturbing the mass to substantially increase the volume of the effervescent bitumen, said emulsifying agent consisting of a solution of soap and water having approximately the proportions of 1 oz. of soap to 1 gallon of water.

1,806,251. LIGHTING FIXTURE. REUBEN HALEY, Beaver, Pa. Filed Oct. 18, 1928. Serial No. 313,273. 1 Claim. (Cl. 240—100.)



A two part lighting fixture comprising a lamp enclosing member of substantially cylindrical form, a concave open bowl member of greater diameter than the lamp enclosing member and having a free edge extending substantially midway the height of the lamp enclosing member, and means for securing said lamp enclosing member and said bowl together.

1,806,252. SEWING MACHINE ATTACHMENT. GEORGE C. HOHEIN, Clarendon, Va. Filed Nov. 26, 1928. Serial No. 322,013. 2 Claims. (Cl. 88—39.)

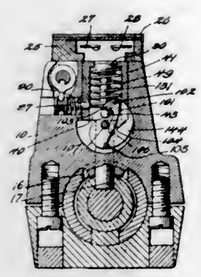


1. An attachment for sewing machines comprising a band conforming to a sewing machine head to lie close to the front and side of the same, a lens carried by the band, a supporting arm rising from the band at the side of the sewing machine head, and a clamp collar at the upper end of said arm to encircle the sewing machine arm and thereby support the entire device.

1,806,253. CAM SNAP LOCK. CHARLES N. FAIRCHILD, New Haven, Conn., assignor to Fairchild Lock Corporation, New York, N. Y., a Corporation of Delaware. Filed June 27, 1927. Serial No. 201,781. 14 Claims. (Cl. 70—127.)

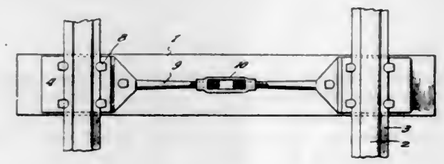
1. In a coincidental lock, a locking bolt, an ignition circuit, a spring for urging said locking bolt to locking

position, means for moving the bolt against the urge of the spring to unlocked position, means carried by the bolt for closing the ignition circuit upon movement



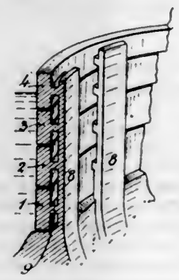
of the bolt in one direction and for opening the ignition circuit upon movement of the bolt in the opposite direction, and means carried by said means for latching the bolt in locked position.

1,806,254. COMBINATION CHAIR PLATE AND RAIL BRACE. FRANK ANTONIO GRAZIANI, Fairmont, W. Va. Filed Oct. 17, 1929. Serial No. 400,330. 1 Claim. (Cl. 238—52.)



A device of the character described including chair plates each thickened from a medial transverse plane toward opposite ends thereof, the plates being provided at their outer end portions with rail seats and at their inner ends with shanks, and means engaging said shanks and connecting the plates to form a rail brace.

1,806,255. ARCH DAM. CHRISTIAN FREDRIK GRÖNER, Oslo, and SIGURD KLOUMANN, Snarogen, near Oslo, Norway. Filed Apr. 17, 1929. Serial No. 355,719½. 3 Claims. (Cl. 61—30.)



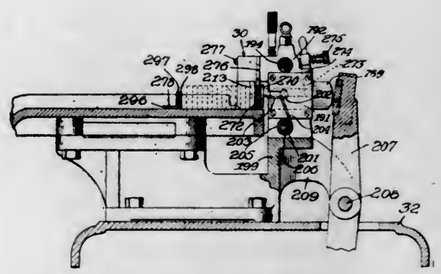
1. In an arch dam a dam vault comprising a number of horizontal continuous and uninterrupted arches, supporting columns for transmitting the weight of said arches to a foundation, said supporting columns being individually connected with each of said arches, so as to support the same independently of each other.

1,806,256. CLOSURE RECEPTACLE FOR BOTTLES AND JARS. JOSÉ LEANDRO MONTALVO GUENARD, Ponce, Porto Rico. Filed Dec. 13, 1928. Serial No. 325,781. 12 Claims. (Cl. 215—7.)



1. In a device of the character described, a receptacle, and means associated therewith for securing thereto a prize token, said means including a crown sealing device having a token receiving chamber associated therewith and removable therefrom, said chamber having projecting prongs adapted to extend through said crown for retaining said chamber in association with said crown.

1,806,257. MACHINE FOR MAKING PRINTERS' LEADS, SLUGS AND RULES. ARTHUR H. HEDLY, Chicago, Ill., assignor to Ludlow Typograph Company, Chicago, Ill., a Corporation of Illinois. Original application filed Mar. 30, 1929, Serial No. 351,369. Divided and this application filed Feb. 21, 1930. Serial No. 430,315. 12 Claims. (Cl. 164—48.)

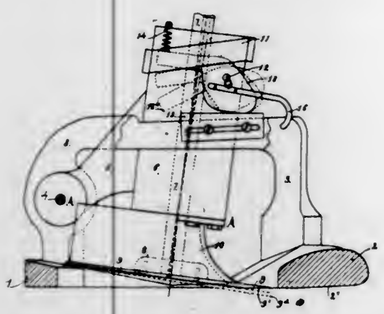


1. In a machine of the character described, the combination of means for intermittently advancing a strip to be cut, means for severing the strip comprising cooperating mechanisms normally out of cooperating relationship and operable into cooperative relationship through the medium of the advancing strip, and means actuated by said first-named means for restoring said mechanism to normally inoperative relationship.

1,806,258. APPARATUS FOR FLESHING HIDES, SKINS OR THE LIKE. LUCIEN NICOLAS HENRY, Soissons, France. Filed Dec. 28, 1927, Serial No. 243,195, and in France Feb. 14, 1927. 5 Claims. (Cl. 149—15.)

1. In an apparatus for fleshing hides, skins and the like, a circular cutting blade, a rotary axle for said

blade, a tool holder carrying the axle, a frame, a pivot for the tool holder upon said frame, wedges provided with an inclined bearing surface secured upon the frame, means for controlling the position of said wedges upon



the frame, cams bearing upon the wedges, pivotal axes for said cams upon the tool holder, a resilient connection between the latter and said cams and means for controlling the rotation of said cams and causing the inclination of the tool holder to vary.

1,806,259. SOFA BED. CHARLES HULTGREN, Chicago, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed June 11, 1926. Serial No. 115,199. 3 Claims. (Cl. 5—22.)



2. In a sofa-bed structure: a main frame; a pair of parallel links near each end of said frame having pivotal supports on the frame at one horizontal plane; a pair of angular levers at each end of the structure having short arms having pivotal supports on the frame at a higher horizontal plane; a rear bed-section mounted on said links; a non-invertible front bed-section having pivotal connections with the long arms of said levers; and links connecting one pair of said levers with said first-mentioned links whereby the rear bed-section is actuated by swinging the front bed-section.

1,806,260. PROCESS FOR THE PRODUCTION OF SOLID ALCOHOLIC IODINE SOLUTIONS IN PENCIL FORM AS A SUBSTITUTE FOR TINCTURE OF IODINE. KARL JUNGMANN, Aussig, and OSWALD KOLBERT, Nestomitz Czechoslovakia. Filed July 11, 1927, Serial No. 205,029, and in Germany Sept. 21, 1926. 5 Claims. (Cl. 167—70.)

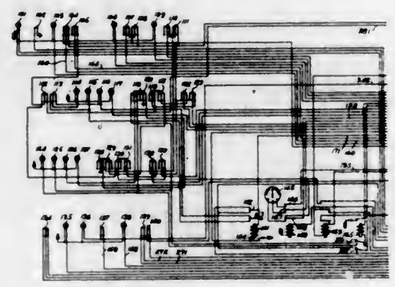
1. Process for making a solid stable alcoholic solution of iodine in pencil form as a substitute for tincture of iodine, said process consisting in melting solidified alcohol by means of heat, adding iodine and a water-soluble iodide to said molten product, the amount of iodide added being sufficient to prevent subsequent liquefaction of the alcoholic solution after it congeals and to produce the desired rubbing consistency when congealed, causing the alcoholic solution to congeal due to reduction of its temperature, the iodine being added to the solution only shortly before it congeals, and forming the congealed product into pencils.

1,806,261. WINDOW POLE. SIMEON C. LAWLOR, Chicago, Ill. Filed Jan. 4, 1929. Serial No. 330,322. 2 Claims. (Cl. 268—134.)



1. A window pole comprising a handle, a brass sleeve riveted over one end of the handle, a rod inserted through holes in the sleeve and handle, one end of the rod forming a straight projection and the other a curved hook, said rod rigidly fastened to the handle.

1,806,262. SUPERVISORY CONTROL SYSTEM. ALBERT L. MOREAU, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 9, 1927. Serial No. 211,682. 12 Claims. (Cl. 177—353.)

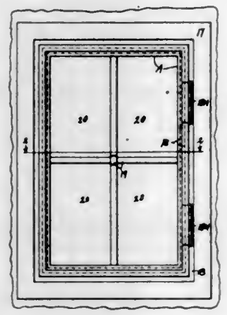


2. In a supervisory control system, a first station, a second station, apparatus units at said second station, synchronous selectors at each of said stations for sequentially associating said apparatus units for operation from said first station, means operative following the selection of one of said apparatus units for operation, for transmitting a code combination of impulses, means for operating said selected apparatus unit in response to said code combination of impulses, means including said synchronous selectors for selecting another of said apparatus units for operation and means automatically responsive to said selection for operating said other apparatus unit only after the transmission of an impulse code for said first mentioned unit.

3. In a signalling system, a first station, a second station, a plurality of groups of relays at each of said stations, means for operating said relays at each of said stations in synchronism, means including a check circuit for transmitting a code of impulses individual to each relay in a group for identifying the relay in said group which is energized, said check circuits being repeated in the succeeding group and means for preventing energization of corresponding relays in non-associated groups simultaneously at each station to control the check circuits.

11. In a supervisory control, a first station, a second station, synchronous selectors at each of said stations, apparatus units at said second station, signalling devices individual to said apparatus units at said first station, a drive line connecting said stations, means for transmitting impulses over said drive line, means responsive to said impulses for operating said selectors in synchronism, means including said selectors at each selecting position for transmitting supervisory signals in accordance with the condition of the apparatus unit associated with the selecting position in the event that the signal device individual to said unit does not agree with the condition of said unit, means responsive to the transmitting of said impulse for momentarily preventing further transmission of said drive line impulses and means responsive to the operation of said signalling device in accordance with the impulse transmitted by said apparatus unit for starting said drive line into operation again.

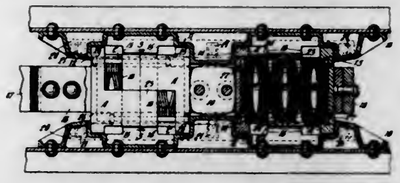
1,806,263. METAL WINDOW SASH AND FRAME. OTTO A. MUNSON, St. Paul, Minn. Filed Oct. 8, 1928. Serial No. 311,053. 1 Claim. (Cl. 189—64.)



In combination, a window sash comprising a quadrangular frame of joined metal bars, a window frame comprising a main frame with inwardly opening channel members and said sash arranged to fit snugly between said channels, said channels comprising for each sash a continuous quadrangular frame with a wide outwardly exposed flange and narrower inwardly exposed flange in spaced relation to said wide flange, said sash frame bars having each an outer ledge and an adjacent glass retaining groove normally engaging the edge part of the wide channel, a ridge formed in each bar inwardly of said groove, muntin bars fixed with their opposite ends in said ridged parts of the sash bars and means for holding panes of glass in the sash with their adjacent edges at the muntin bars in spaced relation and removable auxiliary muntin bars arranged to lie over said adjacent edges of the panes, the outer ends of said auxiliary bars adapted to be removably engaged in the grooved parts of the sash bars.

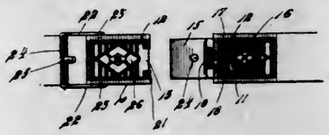
1,806,264. DRAFT GEAR. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,652. 2 Claims. (Cl. 213—30.)

1. In a shock absorbing mechanism, the combination with relatively movable followers, each follower having a pair of inwardly extending arms at diagonally opposite corners thereof, the arms of one follower engaging between the arms of the other follower, each of said opposed arms having a flat interior abutment surface and two angularly extending abutment surfaces at opposite sides of said flat surface; of means for yieldingly opposing relative approach of said followers interposed between the same, said means including a plurality of sets of spring plates, the plates of each of certain of said sets at opposite ends thereof being shaped to fit the abutment surfaces of



the opposed arms of one of said followers to limit movement of the plates toward and from said arms and laterally of said arms.

1,806,265. BRACELET CLASP. WILFRID J. ROY, East Orange, N. J., assignor to Gemex Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 30, 1930. Serial No. 448,562. 13 Claims. (Cl. 24—230.)



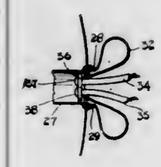
1. In an ornamental chain including terminal shells, each having a top wall ornamented by pierced openings therein, a connecting member having a resilient part located in one of said shells with a portion extending into one of said openings to retain it in position, and cooperating resilient means between the member and other terminal shell for detachable connection therewith.

1,806,266. PUNCHING TOOL. WILLIAM S. SAWLE, Chicago, Ill. Filed Apr. 29, 1929. Serial No. 358,828. 6 Claims. (Cl. 164—32.)



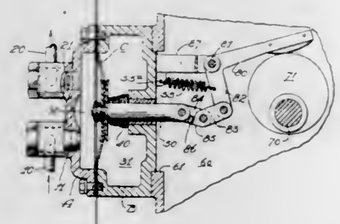
1. A punching tool of the character described, comprising a body provided at one end thereof with a handle and having formed at its other end a circular cutting edge and a longitudinally extending open-ended cylindrical socket, and a wad ejector consisting of a block of elastic material located in the socket, said block being polygonal in cross section and having the corners thereof engaging frictionally the wall of the body that defines the socket.

1,806,267. CONNECTER. JOHN F. SCHMIDT, LOUIS F. ERHART, and OSCAR E. WRIGHT, Cincinnati, Ohio, assignors to The Thos. J. Corcoran Lamp Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 29, 1927. Serial No. 222,890. 4 Claims. (Cl. 173—328.)



1. A connecter in combination with a mounting element, comprising a connecter shell having a flange at its rear end crimped upon the mounting element and arranged for attaching the ends of a spring thereto, a bulb contact in the shell, and a spring having its ends attached to the shell flange and adapted between its ends yieldingly to retain the contact within the shell.

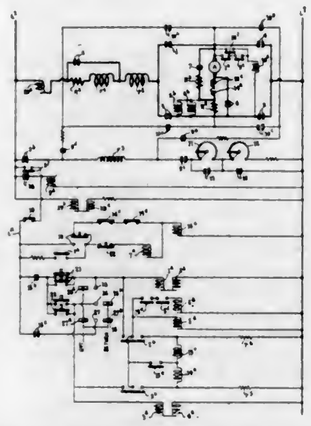
1,806,268. FUEL PUMP. WILLIAM H. SCHULZE, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Mar. 8, 1929. Serial No. 345,396. 3 Claims. (Cl. 103—38.)



1. A pumping device adapted for mounting on an engine casing for protruding thereinto an operating element to be actuated by an engine cam, said pumping device comprising a casing having a pumping chamber and a pumping member therein with an operating stem protruding from the casing at the side thereof arranged for mounting on the engine casing at an aperture in the latter; operating connections for said stem carried by the pump casing on the outer side of said casing within the area registered with the engine casing aperture, said connections comprising a lever fulcrumed on the pump casing and having operating connections with the pumping member stem, said connections consisting of a pair of toggle links pivotally connected respectively to said stem and said lever and pivoted together and having co-operating stops arranged for encounter to stop the relative pivotal movement of the links in the direction for aligning all their pivots, with the pivot-in-common out of such alignment, said links being free for relative pivotal movement in the direction for folding them together.

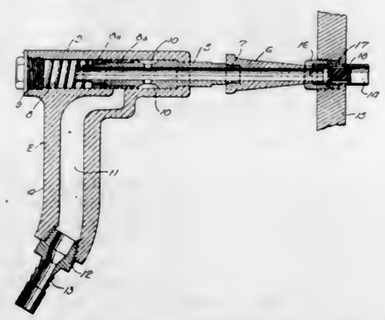
1,806,269. CONTROLLER FOR ELECTRIC MOTORS. CARROLL STANSBURY, Wauwatosa, and NIELS L. MORTENSEN, Milwaukee, Wis., assignors, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Dec. [illegible] 1928. Serial No. 327,347. 9 Claims. (Cl. 172—[illegible])

1. The combination with a reversible driving motor, of means for selectively controlling reverse power connections for said motor for operation thereof in opposite directions between given limits and for plugging thereof at said limits, and means for establishing a dynamic



braking circuit for said motor upon failure of said former means to establish plugging connections for said motor within a given interval at said limits.

1,806,270. APPARATUS FOR CLEANING TUBES. NEIL THOMPSON, Jeannette, Pa., assignor to Elliott Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 19, 1928. Serial No. 293,842. 1 Claim. (Cl. 15—104.06.)



A device for driving slugs through tubes, comprising a hollow casing having a port communicating with a fluid pressure supply pipe, a hollow plunger slidably mounted in said casing carrying a nozzle at its forward end, said plunger normally closing the port in said casing, resilient means to hold said plunger in normal position, said plunger having a port adapted to communicate with the port in said casing when said casing is forced forward on said plunger against said resilient means.

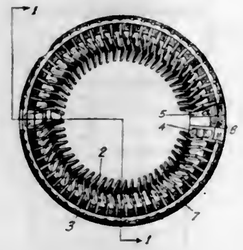
1,806,271. STEEL TRUCK. DANIELS W. VOORHEES, Jr., Peru, Ill. Filed July 10, 1930. Serial No. 466,973. 1 Claim. (Cl. 280—80.)



A steel truck including in combination a steel axle, a circular ring attached to and rigidly braced upon said axle, a steel bolster pivotally related to said axle and means for maintaining the bolster in a suspended and non-

tipping relationship to the axle, irrespective of the angular position of the bolster upon the axle, said means including lugs secured to the bolster and riding at all times upon said ring, and means for detachably connecting the lugs to said bolster.

1,806,272. MACHINE FOR REFINING PAPER AND PULP. LUDWIG H. WESSEL and HOMER N. BOOKER, Lancaster, Ohio, assignors to The Hermann Manufacturing Company, Lancaster, Ohio, a Corporation of Ohio. Filed July 10, 1928. Serial No. 291,626. 4 Claims. (Cl. 92—27.)



1. The method of securing a plurality of knives in such relative position as to form a hollow shell which comprises assembling the knives in a form or jig and bending a portion thereof over a ring clamp.

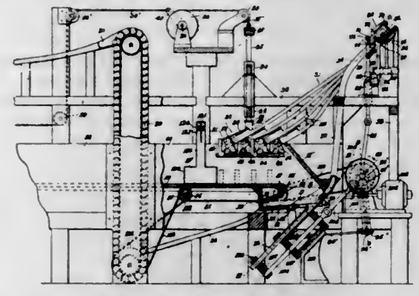
1,806,273. PAPER MANUFACTURE. HARRISON R. WILLIAMS, New York, N. Y. Filed Apr. 3, 1929. Serial No. 352,063. 2 Claims. (Cl. 283—62.)



1. A strip of paper for toilet purposes having a plurality of spaced lines of perforations dividing said strip into readily separable sheets, each line of perforations comprising letters constituting an identification of the product.

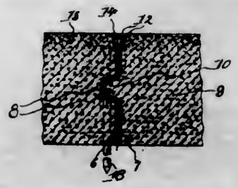
1,806,274. BOWLING ALLEY. RAYMOND A. WILLIAMS, Arlington, Mass. Filed Dec. 29, 1928. Serial No. 329,146. 42 Claims. (Cl. 273—143.)

15. A bowling alley provided with a magazine above the alley and containing a plurality of pins; automatic means for releasing the pins when the magazine is filled; a plate lower than said magazine adapted to be vertically raised and lowered; immovable tubes to receive said pins when released from the magazine; weighted gates pivoted to the lower ends of said tubes; pockets on said plate adapted to receive pins from said tubes; means for simultaneously opening all of said gates; means for retaining the pins in said pockets until said plate approaches its lowest position; and means for actuating said retaining means and releasing said pins from said pockets prior to the return of said plate to its elevated position.



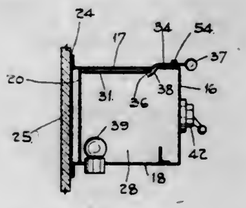
24. A bowling alley provided with a pin magazine; a conduit extending from the bottom of one end of said magazine and adapted to be filled with pins; means at the opposite end of said conduit for inserting another pin into said conduit and simultaneously discharging a pin from the opposite end of said conduit into said magazine; and means for pushing sidewise towards the opposite end of said magazine each pin when inserted into said magazine.

1,806,275. INSERT FOR CONCRETE ROADS AND THE LIKE. ROBERT ADLER, St. Paul, Minn. Filed June 17, 1929. Serial No. 371,451. 2 Claims. (Cl. 94—18.)



1. An insert for dividing concrete or similar roads comprising, a pair of stiff, metal strips normally disposed in face to face contact with each other throughout their length and connected together at their lower edges, said strips being adapted to be imbedded in the road body in substantially upright position and their upper edges being separable upon contraction of said body and registering, longitudinal corrugations in said strips perforated to receive upright supporting means.

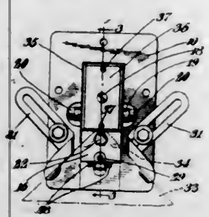
1,806,276. DIRECTION INDICATOR. ALFRED BENJAMIN BAILEY, Verdun, Quebec, Canada. Filed Feb. 25, 1929. Serial No. 342,552. 1 Claim. (Cl. 116—42.)



In a direction indicator, a casing having a slotted top wall and an opaque front containing stencilled openings in the shape of arrow heads indicating right hand and left hand directions separated by a stencilled opening, indicating a mid-direction, partitions separating the casing into compartments, a reflecting plate in each compartment having an offset stem extending through a slot in the top

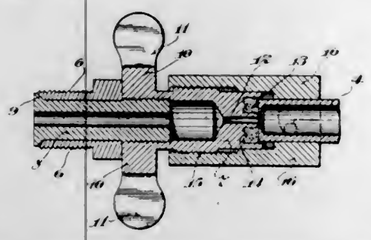
wall of the casing and extending rearwardly therefrom and having a pair of lateral projections resting on the top wall of the casing and forming stops, and spring clips secured to the casing top and releasably holding said stems in position.

1,806,277. METAL BINDING MACHINE. MAURICE M. BALSAM, Brooklyn, N. Y. Filed Mar. 14, 1928. Serial No. 261,483. 13 Claims. (Cl. 153—1.)



3. In a machine for attaching binding clips to the corners of pocketbooks or the like, a bed, a head movable toward and away from said bed, a pressure foot carried by said head, and a resilient member movable with said head and slanting toward said presser foot.

1,806,278. LUBRICATOR COUPLING MEANS. VITUS A. BOKER, Minneapolis, Minn., assignor to Min-A-Max Co., Minneapolis, Minn., a Corporation of Minnesota. Filed May 4, 1929. Serial No. 360,528. 2 Claims. (Cl. 285—176.)



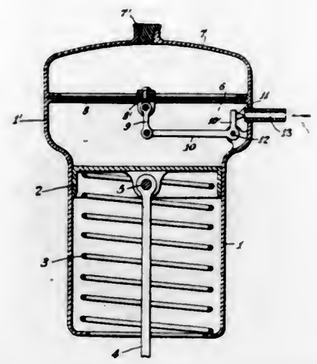
1. The combination with the terminal member of a grease pipe, of a nozzle having a stem swivelled in said termnal member, said nozzle at its extended end having an axial delivery passage and a surrounding inset annular gasket set directly and solidly into said nozzle, and a sleeve-like coupling head having threaded engagement with said nozzle and provided with bayonet slots adapted to engage projecting lugs on a nipple for interlocking engagement therein, whereby rotation of said nozzle will clamp the end of said nipple against the gasket of said nozzle.

1,806,279. ROLLER BEARING. AUGUSTUS D. BOOTH, Columbus, Ohio. Filed Sept. 17, 1928. Serial No. 306,506. 8 Claims. (Cl. 308—217.)



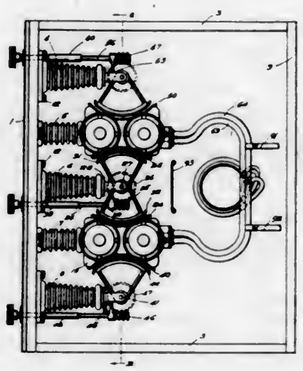
1. A roller bearing comprising a plurality of rollers having annular grooves formed therein, and flat rings having mortices or grooves for interfitting with such annular grooves, the mortices or grooves extending radially and then laterally into said rings and being of such structure that the rollers seat therein with a snap action.

1,806,280. ALTIMETRIC AUTOMATIC CONTROLLING DEVICE FOR CARBURETORS FOR AEROPLANE MOTORS. ANTONIN BOULADE, Lyon, France, assignor to Société du Carburateur Zenith, Lyon, France. Filed Apr. 10, 1924, Serial No. 705,651, and in France Apr. 12, 1923. 7 Claims. (Cl. 137—153.)



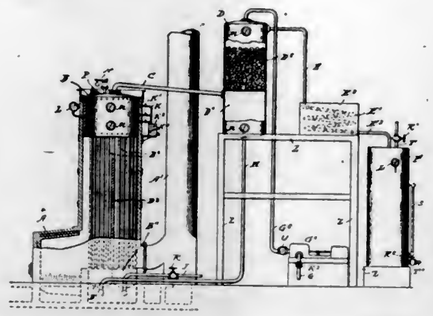
1. Altimetric automatic controlling device for aeroplane motor carburetors, comprising, in combination, a cylinder open at its lower end and terminating at its upper extremity in a chamber, a piston movably mounted in said cylinder, a spring operating to move said piston towards said chamber, a rod connecting said piston to the operating control for the carburetor, means for supplying a fluid medium to said chamber, the pressure of said medium in said chamber compressing the spring according as the external pressure exercised on the lower surface of the piston diminishes, and pressure responsive means in said chamber for controlling the admission of said medium thereto.

1,806,281. AMPLIFIER. ROBERT L. DAVIS, Pittsburgh, Pa., and DONALD G. LITTLE, Long Meadow, Mass., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 3, 1928. Serial No. 258,778. 11 Claims. (Cl. 179—171.)



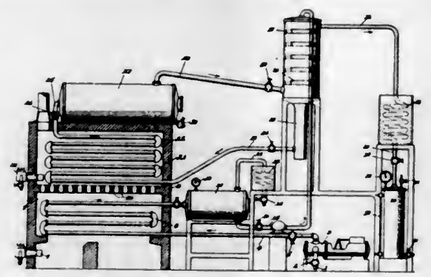
1. In combination, means adapted to support a thermionic device, and movable means electrostatically cooperating therewith to constitute a variable condenser.

1,806,282. APPARATUS FOR TREATING PETROLEUM. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed Jan. 2, 1920, Serial No. 348,789. Divided and this application filed Sept. 6, 1921, Serial No. 498,888. Renewed May 28, 1928. 2 Claims. (Cl. 196—107.)



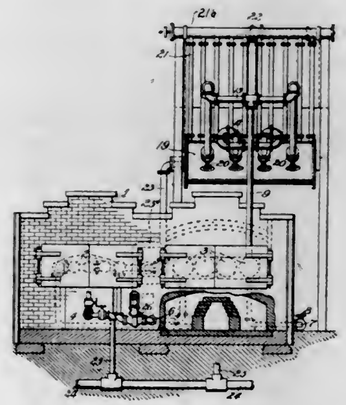
2. In an oil cracking apparatus, the combination with a plurality of vertical tubes arranged in a cylindrical formation between an upper drum and a plurality of lower drums, said tubes extending through a furnace, of a dividing wall in said furnace for directing heating gases longitudinally of the tubes, a vapor outlet connected to said upper drum, and a dephlegmator connected to the vapor outlet pipe from said upper drum, means for introducing raw oil to said dephlegmator, means for passing mixed raw oil and reflux condensate from said dephlegmator to one of said lower drums, means for withdrawing residue from another of said lower drums, condensing and collecting means connected with said dephlegmator, and means for maintaining a regulated pressure on the system.

1,806,283. PROCESS FOR CONVERTING PETROLEUM OIL. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 8, 1922. Serial No. 534,858. 4 Claims. (Cl. 196—48.)



1. A process of oil conversion, consisting in initially passing a stream of charging oil through that portion of a furnace maintained at the lowest temperature, to heat such oil sufficiently to cause vaporization of the lighter constituents and any water contained in the oil, in collecting the heated liquid oil in a body, from which body the vaporized light constituents and water are removed, to be isolated from the process, in simultaneously passing a second stream of oil through that portion of the furnace maintained at the highest temperature, wherein said second stream of oil is raised to a conversion temperature, in passing vapors evolved from oil heated in said second stream to a dephlegmator, in introducing heated liquid oil from said body to said dephlegmator, to act as a dephlegmating medium for the vapors therein, in taking off dephlegmated vapors from said dephlegmator for condensation and collection and in withdrawing unvaporized charging oil and reflux condensate from said dephlegmator, to form the charging oil for said second stream, and in maintaining a superatmospheric pressure on the oil undergoing conversion.

1,806,284. PROCESS OF AND APPARATUS FOR CONVERTING HEAVY INTO LIGHTER HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Continuation of application Serial No. 266,397, filed Dec. 12, 1918. This application filed May 2, 1923, Serial No. 636,103. Renewed May 28, 1928. 2 Claims. (Cl. 196—58.)



1. A continuous process for cracking hydrocarbon oil, consisting in passing the oil in a confined stream through a heating zone wherein the oil is subjected to a conversion temperature, in discharging the heated oil into an elongated vaporizing zone, in discharging vapors progressively from said vaporizing zone as the oil passes therethrough, in combining the progressively withdrawn vapors, in subjecting them to a dephlegmating action, in returning the reflux condensate under a mechanical pressure to the heating zone for re-treatment, in continuously withdrawing unvaporized residual oil from said vaporizing zone to be isolated from the system, in normally maintaining a uniform regulated superatmospheric pressure on the oil throughout the process and in maintaining constant the pressure on the oil in the heating zone in the event of a temporary decrease in pressure on the oil in the remaining zones of the process.

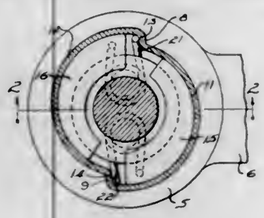
1,806,285. PROCESS OF PREPARING CHLORACETALDEHYDE. OTTO ERNST and HEINRICH LANGE, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 9, 1928, Serial No. 311,412, and in Germany Oct. 22, 1927. 6 Claims. (Cl. 260—138.)

1. In the process of preparing chloracetaldehyde, the step which consists in introducing into water chlorine gas and vaporous vinyl chloride.

1,806,286. JOINT. WILLIAM A. FLUMERFELT, Columbus, Ohio, assignor to The Columbus Auto Parts Company, a Corporation of Ohio. Filed Apr. 26, 1930. Serial No. 447,512. 5 Claims. (Cl. 287—90.)

1. In a ball and socket joint construction, an inner ball member, an outer member comprising two semi-cylin-

drical portions offset with respect to each other in an axial plane, eccentric wedge members circumferentially slidable in said semi-cylindrical portions, said wedge



members having ball sockets in their inner faces for embracing opposite sides of said ball member and means for sliding said wedge members to snugly embrace said inner member.

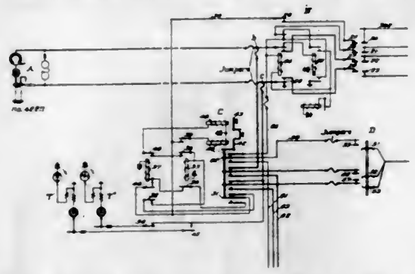
1,806,287. EJECTOR. JOHN HADDOW FORREST, Seattle, Wash., assignor to The Universal Lifting Appliance Co., Seattle, Wash., a Corporation of Washington. Filed Mar. 13, 1929. Serial No. 346,719. 2 Claims. (Cl. 103—262.)



1. An ejector comprising a conically tapered housing with openings at opposite ends and having an inlet for connection with a source of fluid pressure medium at its larger end, the axial line of said inlet intersecting the axial line of the housing near its smaller end, said housing having a coaxially extending discharge pipe mounted in the opening at the smaller end, a supply conduit connected with the housing through the opening at its larger end, a tube mounted in the housing as a continuation of the supply conduit and terminating in spaced relation to the inner end of the discharge tube and producing, with the discharge tube, an ejector passage that is straight and of uniform diameter; the spaced ends of the said tubes being beveled to form an annular, intermediate passage whereby the fluid pressure medium will be delivered in an elongated, conical jet into the discharge tube toward its outer end.

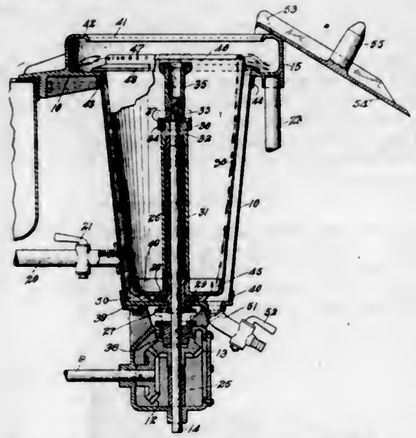
1,806,288. AUTOMATIC TELEPHONE SYSTEM. HERBERT M. FRIENDLY, Chicago, Ill.; Milton S. Friendly and Central Trust Company of Illinois executors of said Herbert M. Friendly, deceased. Filed Feb. 27, 1928. Serial No. 257,480. 56 Claims. (Cl. 179—18.)

8. In an automatic telephone system, automatic switch mechanism, an impulse sending device, means for setting up a stored condition in said device, means for directively operating the switch mechanism responsive to sending a train of series of impulses from said sending device due to said stored condition, automatic means for measuring a minimum space between the respective series of im-



pulses of the train, and means including a relay therefor for measuring a said space having additional minimum length between the last impulse of one series and the first impulse of the next successive series regardless of the number of impulses in the first one of said successive series.

1,806,289. WASHING MACHINE. BENJAMIN E. GETZ, Morton, Ill. Filed July 19, 1929. Serial No. 379,407. 11 Claims. (Cl. 210—67.)



1. In an extractor, a housing, an extracting member, means to rotatably mount the extracting member in the housing which means extends adjacent to the upper end of the housing, a combined drainboard and cover having hinged connection with the housing, and adapted to be swung outwardly of the housing to form a drainboard, or to be moved to overlie the housing to form a cover therefor, and centering means on the board adapted to engage the mounting means when used as a cover, so as to stabilize the member during rotation thereof.

1,806,290. CATTLE FODDER. ROBERT GRIESSBACH and OTTO AMBROS, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 4, 1928, Serial No. 244,553, and in Germany Jan. 8, 1927. 4 Claims. (Cl. 99—11.)

1. A process for the production of feeding matter for animals which comprises degradating micro organisms by autolysis, neutralizing the acids formed with ammonia and cautiously drying the product.

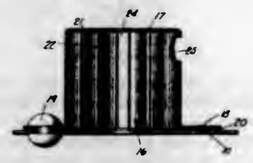
3. A feeding matter for animals comprising a mixture of ammonium salts of the amino acids from the autolysis of micro organisms.

1,806,291. RAILWAY SIGNALING SYSTEM. JAY C. HOFFMAN, Akron, Ohio. Filed Apr. 7, 1930. Serial No. 442,100. 7 Claims. (Cl. 246—41.)



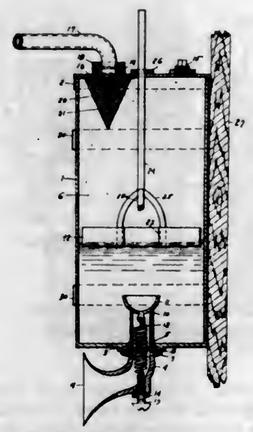
2. In a railway signaling system, a normally-closed track circuit, a source of electric current, means for regulating the amount of current supplied to said circuit, a signaling circuit, a relay in said track circuit for controlling said signaling circuit, a resistance in series with said relay, and automatic means controlled by said relay for short-circuiting said resistance under predetermined settings of said current regulating means.

1,806,292. AIR VENT FOR FUEL TANKS. GEORGE HUNT, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed June 5, 1929. Serial No. 368,648. 7 Claims. (Cl. 220—44.)



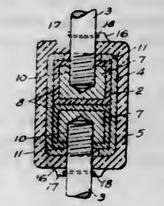
4. In combination with a liquid fuel tank having an opening therein, a cup-shaped casing having an opening in its side wall secured to said tank, and a baffle having its walls substantially parallel with the side wall of said casing and extending the depth thereof mounted therein, the free end of said baffle surrounding the opening in said tank and formed to provide a slot through which air is permitted to pass through the opening in said tank, circulate around said baffle, and escape through the opening in said casing.

1,806,293. HUMIDIFIER FOR GAS ENGINES. KORNEL ISSAR, Detroit, Mich. Filed Apr. 3, 1930. Serial No. 441,203. 3 Claims. (Cl. 261—126.)



1. A humidifier adapted for introducing moisture within the fuel intake manifold of a gas engine and used in combination therewith, comprising a closed liquid tank having means for entering air through the tank bottom, said tank having an outlet port formed through the top thereof, double screen cone filters of different screen mesh mounted over said outlet port within the tank chamber, a float water indicator mounted within said tank chamber, a feed pipe mounted on said tank connecting same with the engine fuel intake manifold through the screened port and filters, valve means mounted within said feed pipe for regulating the flow of moisture therethrough.

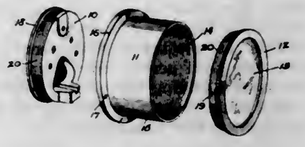
1,806,294. STRAIN INSULATOR. WILLARD H. KEMPTON, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 6, 1927. Serial No. 181,326. 9 Claims. (Cl. 173—366.)



2. A strain insulator comprising rectangular block elements, including rectangular metal core members and rectangular tubular insulating coverings thereon, disposed in adjacent flat-surface relation, means for holding the element to each other and terminal portions projecting from the core members.

7. An insulator including tubular insulating portions disposed in side-by-side relation, a tubular element surrounding said tubular portions in substantially parallel relation thereto and terminal means having anchor portions in said tubular portions and portions extending through said element transversely to the axis thereof.

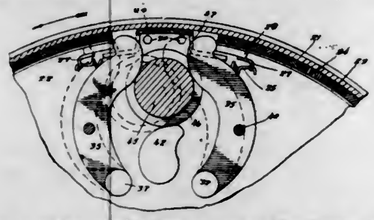
1,806,295. INTERCHANGEABLE INSTRUMENT CASE. ISAAC F. KINNARD, Lynnfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 12, 1929. Serial No. 392,238. 7 Claims. (Cl. 73—151.)



1. In combination, a supporting panel provided with a hole and having a surface for mounting an instrument thereon, an instrument casing having a main body portion adapted to fit in said hole and provided with openings and similar engaging surfaces at its opposite ends and a supporting flange with two shoulders, back and front cover portions each provided with engaging surfaces fitting the engaging surfaces at either end of the main body portion, and means for securing said instrument to said panel so that either shoulder of said flange rests against said panel surface.

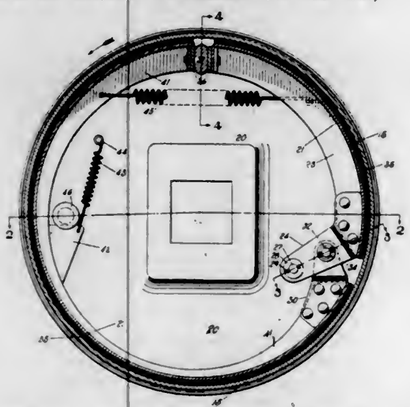
2. An instrument casing having a main body portion provided with openings at its opposite ends and radially extending supporting means at one end, a back cover portion, a front cover portion provided with an observation window, said main body portion having similar engaging surfaces at both ends thereof, and the back and front cover portions having similar engaging surfaces thereon fitting the engaging surfaces on the main body portion whereby said parts may be assembled with the supporting means at the front or rear of the casing.

1,806,296. BRAKE. ROBERT F. KOHR, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed June 28, 1927. Serial No. 200,944. 14 Claims. (Cl. 188—78.)



1. In a brake mechanism, a rotatable drum, braking means movable to engage said drum, a pair of members engageable with said braking means, and an unattached means engaging said members for actuating one or both of said members to move said braking means into engagement with said drum.

1,806,297. BRAKE. ROBERT F. KOHR, South Bend, Ind., assignor to The Studebaker Corporation, South Bend., Ind., a Corporation of New Jersey. Filed Jan. 16, 1928. Serial No. 247,224. 11 Claims. (Cl. 188—78.)



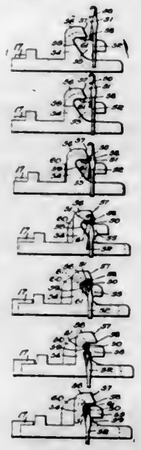
1. In a vehicle brake, a rotatable brake drum, a brake element pivotally supported at one end engageable with said drum comprising rigid end portions integrally connected by a flexible intermediate portion, operating means for moving the free rigid portion into engagement with said drum, and means holding the pivoted portion out of contact with said drum to permit said intermediate portion to flex for allowing said engagement.

1,806,298. SASH VENTILATOR. JOHN F. LEVAN, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 6, 1928. Serial No. 310,766. 5 Claims. (Cl. 98—97.)



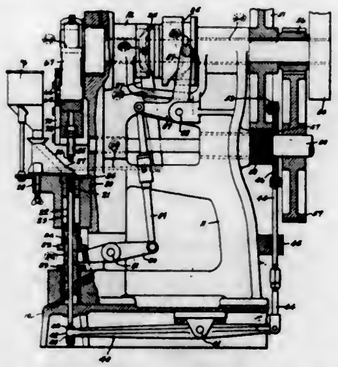
1. In a sash ventilator, a hollow sheet metal sash rail provided with openings in the side walls thereof, a screen plate mounted over the opening in the outer side wall against the exterior face of the latter and provided with a row of air openings, a shutter plate mounted over the opening in the inner side wall against the exterior face of the latter and provided with a row of air openings, a sheet metal frame positioned in the rail about the openings, connecting means between the screen plate and one side of the frame, and other connecting means between the shutter plate and the other side of the frame.

1,806,299. MECHANISM FOR EFFECTING REVERSE PLATING. JOHN LAWSON and ROBERT H. LAWSON, Pawtucket, R. I., assignors to Hemphill Company, Central Falls, R. I., a Corporation of Massachusetts. Original application filed Mar. 8, 1927, Serial No. 172,331. Divided and this application filed Jan. 8, 1929. Serial No. 330,990. 5 Claims. (Cl. 66—108.)



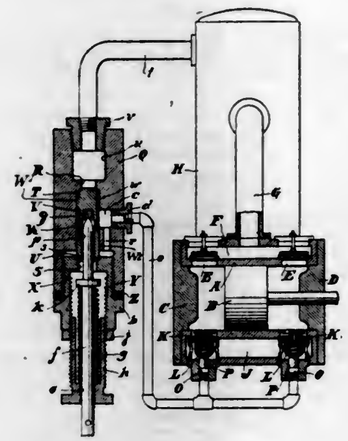
1. Mechanism for effecting plating and reverse plating in a knitted fabric including a series of independent needles, thread engaging instrumentalities for each needle respectively and including special instrumentalities where reverse plating is to be formed, said instrumentalities being movable individually transversely of the needle series, each of said special instrumentalities having an upper nib sloping upwardly and backwardly from its lower edge, said sloping edge being adapted to effect thread engagement in reverse plating during the loop forming operation, each said instrumentality directly below the upper nib having a front edge which extends from the most outward portion of the lower edge of the nib at a downward, inward slope until it merges with the base portion of the instrumentality.

1,806,300. BRIQUETTING MACHINE. JOHN C. LEMMING, Dayton, Ohio, assignor to Moraine Products Company, Dayton, Ohio, a Corporation of Ohio. Filed Feb. 1, 1930. Serial No. 425,290. 8 Claims. (Cl. 18—16.)



1. In a briquetting press, a die mold having a die cavity and a reciprocatable core therein, means for filling said cavity with a loose charge of material to be briquetted, and a briquetting punch for compacting said material in said cavity, said punch having a core forming projection thereon which on its compacting stroke abuts the end of said core and displaces it from the briquetted article.

1,806,301. PRESSURE CONTROLLED VALVE. JOHN LE VALLEY, Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 14, 1928. Serial No. 246,792. 1 Claim. (Cl. 251—118.)



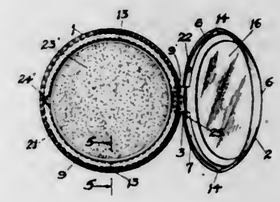
A pressure controlled valve comprising a valve chest having an inlet opening therein, a port in the valve chest for supplying pressure fluid to an element intended to be controlled, a bore in the valve chest having a seat at one end, a hollow plug threaded into the valve chest and having a valve seat arranged coaxially with the bore, an outlet opening in the plug, a valve in the form of a plug movable in said bore and cooperating with the first said seat to prevent the flow of pressure fluid through said bore to the outlet opening, peripheral guiding surfaces adjacent the ends of the valve and cooperating slidably with the bore to maintain the valve in coaxial alignment with the valve seats, spring means for holding said valve in position to close the inlet opening, restricted openings in said valve to convey pressure fluid from said inlet opening to the port, a by-pass passage of large area as compared to said restricted openings and leading from said port to the seat in the plug, and shims between the plug and the valve chest for adjusting the valve seats with respect to each other to vary the travel of the valve an thus also vary the range between pressures at which the valve is actuated.

1,806,302. FOOD PRODUCT. ALEXANDER LEE MAGRILL, Dallas, Tex. Filed Dec. 31, 1928. Serial No. 329,664. 1 Claim. (Cl. 99—11.)

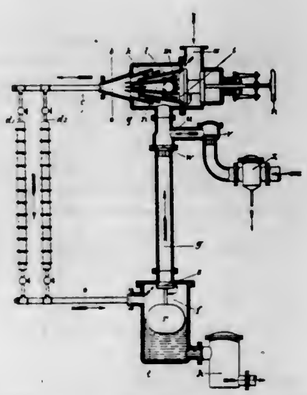
The process of preparing tuber-cheese chips which comprises first cooking the raw chip in hot fat, draining off the excess hot fat from the chip, and while the chip is still hot, sprinkling grated cold cheese thereon, whereby, as a result of the heat contained within the hot chip free of hot fat, the grated cheese fuses and firmly adheres to the chip.

1,806,303. VANITY CASE. JOHN L. MCATEER, Brooklyn, N. Y., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 17, 1928. Serial No. 262,533. 7 Claims. (Cl. 132—83.)

1. In a vanity box, the combination of a body and a cover pivotally associated by a hinge, an inturned peripheral flange on one of the members, a recess in the flange, an inturned peripheral flange on the other member, the faces of said flanges engaging each other when the box is closed, a projection on the other member arranged to enter the recess in one position of the parts, and to be concealed beneath the first named flange in another position of the parts, to lock the parts together, the locking movement being effected by a relative rotation of the body and cover.



1,806,304. STEAM HEATING PLANT. ADOLF MIERSBE, Raderthal, near Cologne-on-the-Rhine, Germany. Filed June 18, 1927, Serial No. 199,839, and in Germany July 24, 1926. 7 Claims. (Cl. 237—67.)

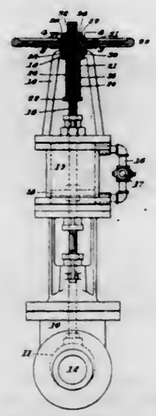


1. A steam heating plant comprising, in combination, a live steam conduit; a mixing device communicating with said conduit; a distributing conduit connected to said mixing device; radiators connected to said distributing conduit; and a collecting conduit receiving the waste steam from said radiators and opening into said mixing device; said mixing device including a double nozzle comprising a fixed outer nozzle shell, and a hollow nozzle core within said shell, the interior of the core and the space between the core and shell being in communication, said live steam conduit being arranged to feed steam into said space and into the interior of said core, and a casing surrounding said shell and communicating with said distributing conduit, said collecting conduit opening into the space between said casing and shell; said nozzle core and shell being movable relatively to each other.

1,806,305. OPERATING MECHANISM FOR VALVES. RICHARD W. MUELLER, Pittsburgh, Pa., assignor to Kerotest Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 24, 1927. Serial No. 242,358. 10 Claims. (Cl. 137—139.)

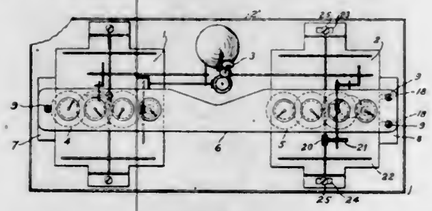
1. A valve structure comprising a valve having a threaded valve stem, a plurality of independently operable means both located outside of the valve structure and operable independently of the fluid pressure in the valve

structure positioned to operate the valve, and a displaceable device comprising a threaded sleeve forming part of



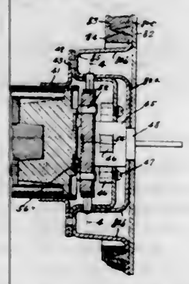
one of said means and cooperating with the stem to enable operation of either means while both means are connected for operation.

1,806,306. MOUNTING CONSTRUCTION FOR METERS. WALTER G. MYLIUS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 24, 1927. Serial No. 201,175. 5 Claims. (Cl. 248—30.)



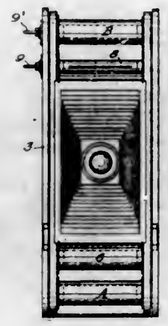
1. In combination, a main base support, a plurality of primary mechanism units independently mounted thereon, secondary mechanism cooperating with said units, a bridge unit support for said secondary mechanism extending between said mechanism units, and means providing adjusting movement of one of said units.

1,806,307. LOCK SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Original application filed Mar. 25, 1926, Serial No. 97,457. Divided and this application filed Jan. 28, 1928. Serial No. 250,104. 10 Claims. (Cl. 200—44.)



1. An electric switch, comprising in combination, a switch case having separable members; means for attaching the members together; cooperating switch contacts within the case; means for rendering the attaching means inaccessible for removal; and key operated devices for controlling the engagement and disengagement of the contacts and for locking the switch case to the means which renders the attaching means inaccessible.

1,806,308. CAMERA. JOHN B. PAUL, Pittsburgh, Pa. Filed Jan. 29, 1920. Serial No. 335,788. 3 Claims. (Cl. 242—71.)

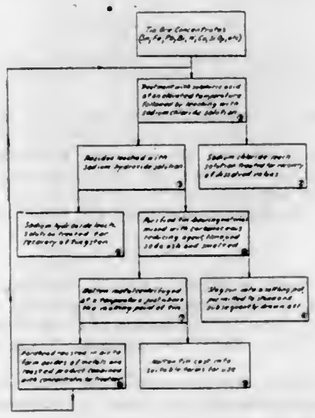


1. A camera of the continuous film type having a flat casing enclosing a middle exposure portion and provided at opposite sides of the exposure portion with plural active and inactive spool mounting devices.

1,806,309. TREATMENT OF PULP AND PRODUCT OF SAME. GEORGE A. RICHTER and MILTON O. SCHUR, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Aug. 5, 1927. Serial No. 210,999. 14 Claims. (Cl. 92—9.)

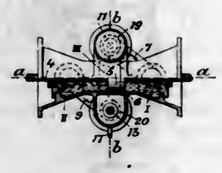
1. A process which comprises deresinifying previously liberated cellulose pulp, and then classifying the deresinified pulp into portion of different fiber lengths.

1,806,310. RECOVERY OF METALS. PRESTON ROBINSON, New York, N. Y., assignor to Guggenheim Brothers, New York, N. Y., a Copartnership. Filed Feb. 16, 1928. Serial No. 254,888. 19 Claims. (Cl. 75—17.)



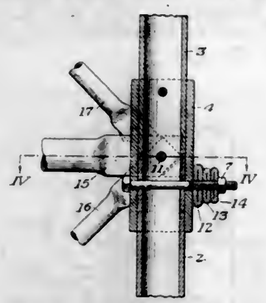
1. The method of recovering tin from tin-bearing material containing tungsten compounds which comprises eliminating substantially all of the tungsten from the material by treatng the material successively with acid and alkaline solutions, and subjecting the material thus substantially freed of tungsten to a reducing operation in which a higher recovery of tin is directly effected as a consequence of the tungsten elimination.

1,806,311. HIGH PRESSURE RECIPROCATING COMPRESSOR. CHARLES SCHAER, Langenthal, Switzerland, assignor to the Firm: Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed Nov. 20, 1928, Serial No. 320,553, and in Switzerland Dec. 12, 1927. 4 Claims. (Cl. 230—49.)



1. Apparatus of the class described comprising a primary cylinder, a primary piston within the primary cylinder, two secondary cylinders, a secondary piston within each secondary cylinder, conduits connecting each end of the primary cylinder with an end of each of the secondary cylinders and the opposite ends of the secondary cylinders with each other, liquid filling the space in the conduits and the primary and the secondary cylinders, and means for reciprocating the primary piston whereby motion is transmitted from the primary piston to the secondary pistons through the liquid.

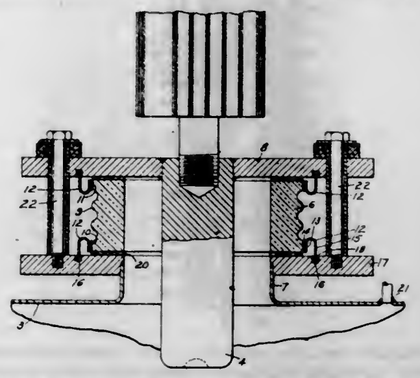
1,806,312. SECTIONAL TUBULAR TOWER. MORGAN B. SCHILLER, Pittsburgh, Pa., assignor to American Tubular Elevator Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 25, 1929. Serial No. 380,818. 7 Claims. (Cl. 189—19.)



1. In a sectional tubular tower, alined leg sections, a sleeve surrounding the adjacent ends of the sections, a bolt passing through the sleeve and one of the leg sections to which a system of bracing for one side of the tower is secured, and a bolt passing through the sleeve between the abutting ends of the leg sections at right angles to the first bolt to which a system of bracing for another side of the tower is fastened.

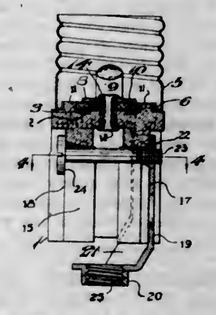
1,806,313. SEAL FOR METAL-TANK RECTIFIERS AND THE LIKE. ERROL B. SHAND and LLOYD SMEDE, Pittsburgh, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1927. Serial No. 209,539. 5 Claims. (Cl. 250—27.5.)

1. A mercury-vapor space-current discharge device comprising an evacuated metal tank having a tubular projection, a tubular ceramic member in alinement with said tubular projection, said ceramic member being susceptible of receiving a metallic glaze, a metallic glaze on that part of its outer surface which adjoins said tubular metal-tank projection, a metal sleeve soldered to said metallic glaze and said metal-tank projection, respectively, thereby providing a vacuum-tight joint, said joint being incapable, however, of withstanding the attacks of mercury, the abutting end surfaces of said ceramic and metal tubular members being smooth, plane surfaces, a compressed fiber washer



therebetween, said washer comprising closely wound spiral fibers tightly compressed in a direction parallel to the axis of the spiral and of a material which is impervious to mercury or mercury vapors, and mechanical clamping means for tightly drawing the parts together to compress said washer, said metal sleeve being so shaped as to admit the necessary motion between the two tubular members.

1,806,314. ELECTRIC LAMP HOLDER OR SOCKET. HAROLD E. SLADE, Glen Ridge and JOHN GEHRING, Jersey City, N. J., assignors to Beaver Machine & Tool Co., Inc., Newark, N. J. Filed Mar. 10, 1927. Serial No. 174,177. 2 Claims. (Cl. 173—358.)



2. An electric socket comprising a lamp holding shell, a plurality of wire terminals, a base, and a supporting member; said base being provided with a transverse slot substantially the length of the base and channels situated either side of said slot; said support member being provided with flanges which slide in said channels; together with means passing thru said slot to maintain in fixed relationship said support to said base.

1,806,315. CHUCK FOR ROCK DRILLS. WILLIAM A. SMITH, Sr., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 25, 1928. Serial No. 315,020. 2 Claims. (Cl. 121—32.)

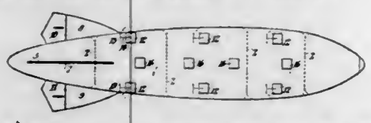
1. In combination with a rock drill cylinder and a front head having a bore therein and an introverted flange at its front end, of a hollow chuck in the bore extending beyond the rear end of the front head into the cylinder and seating with its front end against the flange, an in-

ternal flange in the chuck, a chuck bushing in the chuck and seating against the internal flange, and a chuck



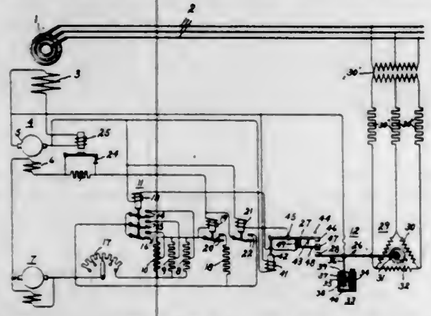
jaw threaded into the front end of the chuck and bearing against the chuck bushing to clamp said chuck bushing fixedly in the chuck.

1,806,316. AIRCRAFT. RUSSELL THAYER, Philadelphia, Pa. Refile of abandoned application Serial No. 749,898, filed Nov. 14, 1924. This application filed Feb. 11, 1929. Serial No. 339,190. 9 Claims. (Cl. 244—6.)



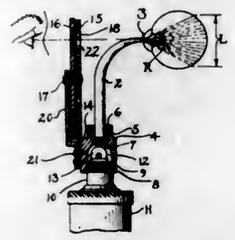
6. In an aircraft, the combination with a rotary propeller, arranged to propel said craft; of means, including a rudder, arranged to change the direction of progression of said craft; and a rotary gyroscopic body arranged to oppose changes in the direction of progression of said craft; said body having means suspending it from said craft, in stable equilibrium, but with its axis of rotation free for limited automatic movement altitudinally; whereby, wind pressure tending to turn the aircraft from a predetermined direction of traverse, may be opposed by the gyroscopic effect of said rotary body, so that such wind pressure may be utilized to propel the aircraft in directions oblique to the direction of the wind pressure.

1,806,317. REGULATING SYSTEM. LOUIS W. THOMPSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 18, 1929. Serial No. 364,183. 10 Claims. (Cl. 171—229.)



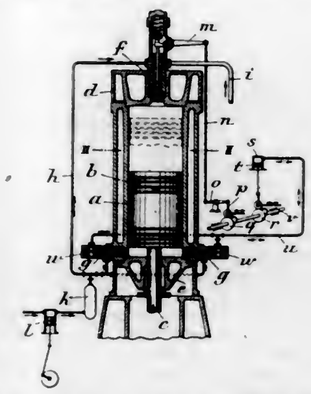
1. The combination with a dynamo-electric machine having a field winding, of a plurality of parallel resistors connected in series with said field winding, an adjustable resistance connected in series relation with said parallel resistors, and a regulator arranged for controlling simultaneously the effective value of a portion only of each of said parallel resistors and said adjustable resistance.

1,806,318. DIAGNOSTIC INSTRUMENT. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed May 2, 1928. Serial No. 274,489. 6 Claims. (Cl. 88—20.)



1. In a device of the character described, a handle, a source of light on the handle, a member attached to the handle and extending over the source of light, said member having a light opening therethrough and a lens seat therein and an extending arm having a sight opening therethrough, an elongated rod lens in the lens seat having a curved tapered upper portion terminating in a small rounded end portion in alignment with the sight opening, the cross section of the lens in alignment with the sight opening being of such a dimension as to permit sight of the eye around the lens.

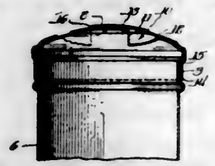
1,806,319. DOUBLE ACTING INTERNAL COMBUSTION ENGINE. MAX TRECHSEL, Winterthur, Switzerland, assignor to the Firm Sulzer Frères Société Anonyme, Winterthur, Switzerland. Filed May 22, 1928, Serial No. 279,693, and in Switzerland June 24, 1927. 3 Claims. (Cl. 123—61.)



1. In a double acting internal combustion engine of the fuel injection type, the combination with a device for injecting fuel with air to the upper combustion chamber of means for injecting fuel without air into the lower end of the cylinder adjacent to the crank.

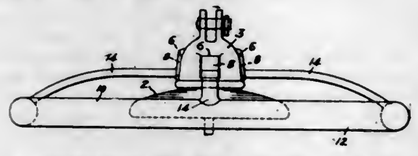
1,806,320. CONTAINER. FRED C. TRUESDALE, Rockford, Ill., assignor to J. L. Clark Manufacturing Co., Rockford, Ill., a Corporation of Illinois. Filed July 23, 1928. Serial No. 294,729. 2 Claims. (Cl. 220—24.)

1. A container for permitting different measured quantities of its contents to be withdrawn by a spoon, said container having a side wall, an end wall having an opening therein large enough to enable a spoon to be inserted therethrough, and a closure plate mounted on said end wall to turn about the center thereof in sliding contact with the wall and also having an opening therein large enough to receive a spoon, said opening being shaped to form an



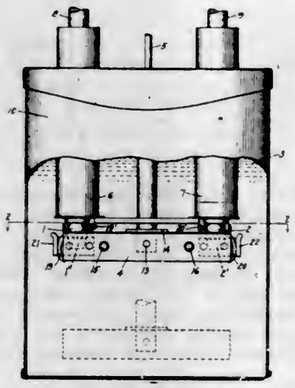
elongated mouth corresponding in shape to the cross-section of the bowl of the spoon when the openings are in register whereby either a level or heaping spoonful of the contents may be withdrawn by the spoon, said mouth being disposed wholly to one side of the axis of said cover whereby the mouth can be completely closed by turning the cover through a partial revolution.

1,806,321. TRANSMISSION LINE DEVICE. NILS A. WAHLBERG, Derry, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1929. Serial No. 337,249. 10 Claims. (Cl. 173—318.)



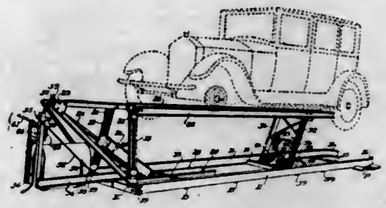
1. A transmission-line device comprising an insulator of the cap-and-pin type and a field-control element, one of said cap and field-control elements having a substantially plug portion and the other a cooperating substantially socket portion for positioning the field element relative to the insulator.

1,806,322. ELECTRIC CIRCUIT BREAKER. LUDVIG S. WALLE, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 21, 1930. Serial No. 454,442. 4 Claims. (Cl. 200—87.)



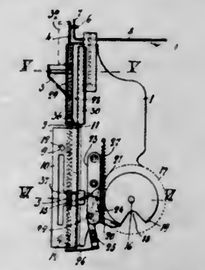
1. A circuit breaker comprising a stationary contact, a pair of movable contact blades adapted to engage opposite sides of said stationary contact, said blades being biased toward each other, an auxiliary contact connected to said stationary contact, and a co-acting auxiliary contact connected to and mounted upon one of said contact blades whereby arcing current during the switch opening movement traverses but one of said contact blades.

1,806,323. LIFTING APPLIANCE. GAILARD E. WEAVER and ALBERT R. SQUYER, Springfield, Ill., assignors to Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed June 9, 1927. Serial No. 197,689. 6 Claims. (Cl. 254—91.)



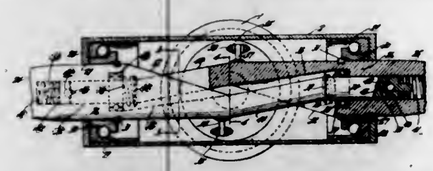
1. In an automobile lifting-appliance, the combination of a main-frame, a load-lifting frame adapted to engage the under side of an automobile and to raise and lower it, a triangular front frame hinged at one angle to said main-frame and hinged at an adjacent angle to said load-lifting frame, a cylinder rockingly mounted at its lower end on said main-frame, a plunger reciprocatory in said cylinder, a plunger-rod connected to said plunger and hinged at its other end to the third angle of said triangular frame, an electric-motor on said main-frame, a pump operated by said motor, a fluid supply-tank, a conduit connecting said tank to said pump, a conduit connecting said pump to said cylinder below said plunger therein, a valve-controlled by-pass connecting said conduits together around said pump, an electric-switch in the circuit of said electric-motor, means to open said electric-switch automatically when said load-lifting frame reaches its uppermost position, a hook on said main-frame arranged to engage said triangular front-frame automatically when said load-lifting frame reaches its uppermost position to prevent unintentional descent of the latter, a rear link longer than the corresponding side of said triangular frame pivotally connected at its back end to said load-lifting frame, a first downwardly forwardly inclined cam-track means terminating in an abutment, roller means at the lower end of said rear link cooperating with said cam-track means, a second upwardly forwardly sloping cam-track means, and roller means on an intermediate portion of said rear link, coacting with said second cam-track means, whereby when the motor is operated the pumped fluid forces said plunger upwardly causing the elevation of the front part of said load-lifting frame at first more rapidly than its rear part, the final elevated position of said load-lifting frame being substantially horizontal.

1,806,324. SAVINGS BOX CLOCK. AAGE GEORG PETER WIINGAARD, Copenhagen, Denmark. Filed June 22, 1928, Serial No. 287,409, and in Germany June 29, 1927. 2 Claims. (Cl. 194—1.)



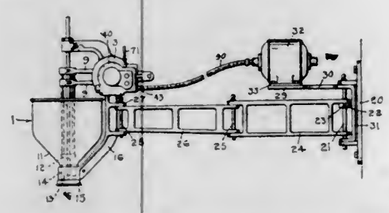
1. A coin chute for a savings box clock having a fixed longitudinal side wall, a movable longitudinal side wall parallelly adjustable relatively to said fixed wall, a movable narrow front wall integral with said movable side wall and a narrow rear wall adjustably secured to said fixed side wall.

1,806,325. ADJUSTABLE AND REVERSIBLE PROPELLER FOR AEROPLANES OR OTHER AIRCRAFT. ROY F. WOODEN, Mount Vernon, Ill. Filed Mar. 12, 1930. Serial No. 435,070. 5 Claims. (Cl. 170—163.)



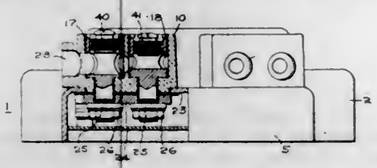
1. In a device of the kind described, a hub, an elongated cylindrical shell transversely mounted on the hub, a pair of propeller blades with rounded inner end portions journaled in the said shell, the said rounded inner end portions having channels in one side and having bores opening out into the said channels, journals on the same ends of the said propeller blades, the journal of each blade being journaled in the bore of the other blade, and means for rotating the blades on their longitudinal axis.

1,806,326. DOUGHNUT MACHINE. WALTER BELSHAW, Seattle, Wash. Filed Oct. 21, 1930. Serial No. 490,175. 8 Claims. (Cl. 107—14.)



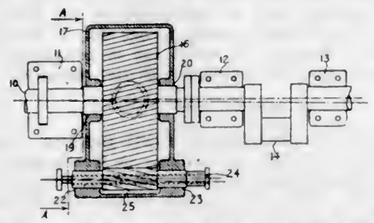
4. In a doughnut machine having a pair of cam-actuated pistons and an outwardly projecting piston cylinder for forming raw doughnuts, and a driving shaft; a motor, a casing secured to said machine and adapted to house said shaft, speed reduction gearing for transmitting motion from said motor to said shaft, comprising a driven shaft journaled in the casing and operatively connected with said motor, a worm mounted on said driven shaft and rotatable therewith, a worm wheel mounted on said driving shaft and rotatable thereon, said wheel meshing with said worm and provided with an opening for a clutch pin, a clutch collar fixedly secured to said driving shaft, a clutch pin disposed in said collar and engageable with said opening, and means associated with said collar and pin for withdrawing said pin from said wheel at a predetermined point and whereby said pistons may be stopped in raised positions above the outer terminal of said cylinder.

1,806,327. METER TERMINAL. WILLIAM BRADSHAW and WALTER G. MYLIUS, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 27, 1925. Serial No. 40,078. 5 Claims. (Cl. 173—259.)



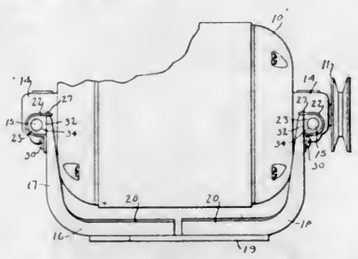
1. The combination with electrical apparatus comprising an insulating body, spaced insulated terminal members embedded therein having contact surfaces longitudinally spaced along, and disposed different distances laterally from, the axis of an opening in the insulating body, said body also having lateral openings therein opposite said contact surfaces, threaded metal sleeves in said lateral openings and binding screws in said sleeves, of a terminal lead comprising a plurality of conductors insulated from each other and with one conductor thereof projecting longitudinally beyond an end of another conductor and along said axis to adapt said conductors for individual cooperation with said contact surfaces.

1,806,328. GEAR POWER TRANSMISSION. ERIC BROWN, Baden, Switzerland. Filed Feb. 16, 1929, Serial No. 340,548, and in Germany Mar. 12, 1928. 4 Claims. (Cl. 74—7.)



1. In means for transmitting power from a plurality of prime movers, a main shaft having one of the prime movers connected directly thereto, a gear attached to said shaft, a pinion gear for driving said first-mentioned gear, said pinion being connected with a second prime mover and having the axis thereof so supported as to be maintained in parallel with the axis of said first-mentioned gear, and means for supporting said pinion in dependence on the position of said shaft.

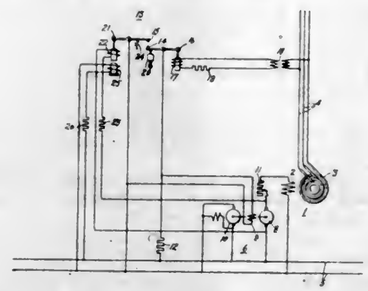
1,806,329. MOTOR MOUNTING. HERBERT L. BAUMP, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 27, 1929. Serial No. 358,654. 7 Claims. (Cl. 248—16.)



1. An electric motor mounting comprising a support embodying upwardly extending end members adapted to lie along opposite ends of a motor, said end members each having a pair of laterally spaced apart holders provided adjacent the upper ends thereof, blocks of yielding material held in said holders, said blocks having openings adapted to receive and enclose motor projections, the blocks being restrained in said holders against movement in both upward and downward directions.

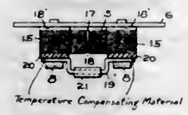
1,806,330. ELECTRICAL REGULATING SYSTEM. FRANK A. BYLES, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 26, 1930. Serial No. 431,594. 5 Claims. (Cl. 171—225.)

1. In an electrical regulating system, a vibratory contact regulator, said regulator including a multi-coil antihunting magnet, means under the control of said magnet for varying an electrical condition to be regulated inversely as the net magneto motive force of said magnet varies, one of said coils being connected across a voltage which is controlled by said regulator and which varies inversely with regulated changes in said regulated



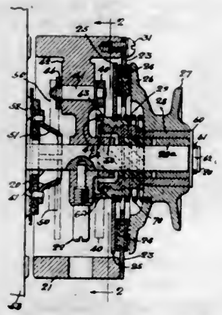
quantity, another of said coils being connected across a voltage which is controlled by said regulator and which varies inversely with regulated changes in said regulated quantity, another of said coils being connected to a substantially constant voltage source of energy so that its magneto motive force is opposite to and greater than that of said first mentioned coil.

1,806,331. INDUCTION METER. ALBERT CALLSEN, Nuremberg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 15, 1928. Serial No. 261,895, and in Germany Apr. 4, 1927. 19 Claims. (Cl. 171—264.)



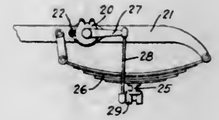
1. An inductance coil provided with a core having an air gap, means including a member of a material having a negative temperature coefficient of permeability shunting said air gap, and a closed-circuit winding encircling said member.

1,806,332. CENTRIFUGAL CLUTCH. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed July 5, 1928. Serial No. 290,417. 14 Claims. (Cl. 192—105.)



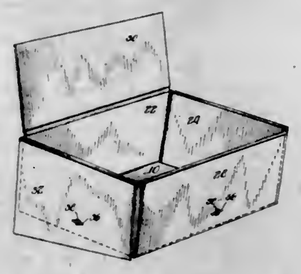
1. A centrifugal clutch comprising, in combination, coaxially rotatable driving and driven members, one having axial movement relative to the other; nut-and-screw provisions connected with the driven member for frictionally engaging the members by threading one part relative to the other; and a speed responsive device connected with the driving member for frictionally connecting one part of the nut-and-screw provisions with the driving member in order to effect relative movement between the nut-and-screw to cause the clutch members to be engaged.

1,806,333. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 4, 1929. Serial No. 337,190. 22 Claims. (Cl. 188—89.)



1. A shock absorber comprising, in combination, a casing providing a cylinder; a piston reciprocable in said cylinder, dividing it into two compartments; a fluid flow controlling means adapted to establish a flow of fluid from one compartment to the other in response to the movement of the piston in one direction only; and a second fluid flow controlling means adapted to establish a flow of fluid from the said other compartment to the first mentioned compartment in response to the movement of the piston in the other direction.

1,806,334. DISPLAY AND SHIPPING CONTAINER. JAMES H. CLARK, Chicago, Ill., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 29, 1929. Serial No. 410,370. 1 Claim. (Cl. 206—44.)

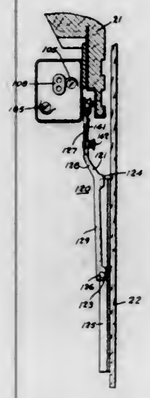


A combined shipping and display container, comprising, in combination, a bottom, vertical walls extending upwardly from the bottom, and flaps secured to the upper edges of the vertical walls of the container to serve in supporting the container in a display position, and a plurality of fasteners carried by the vertical walls and adapted to engage the flaps to maintain them in supporting position.

1,806,335. WINDSHIELD WIPER. ROBERT M. CRITCHFIELD, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 12, 1929. Serial No. 332,112. 5 Claims. (Cl. 15—253.)

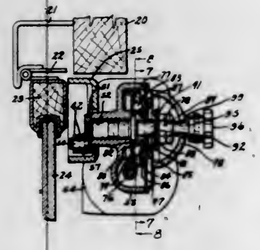
1. In a windshield cleaner, the combination comprising, an operating shaft, means for operating the shaft, a wiper arm connected to the shaft for operation therewith,

yet capable of angular displacement with respect to the said shaft, and means engaging the shaft end and wiper arm tensioning the wiper arm toward the surface to be cleaned said means including a U-shaped spring clip



seated in the shaft end, and having ears engaging the arm to hold it in spaced relation therefrom, and a spring coupled to the clip and a part of the wiper arm remote therefrom.

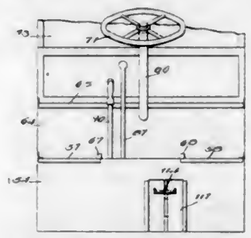
1,806,336. WINDSHIELD CLEANER. ROBERT M. CRITCHFIELD, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed July 27, 1929. Serial No. 381,516. 5 Claims. (Cl. 15—253.)



1. In a windshield cleaner the combination comprising, a motor, means supporting said motor, wiper mechanism adapted for engagement with the windshield also supported by said means and driven by said motor, and a clutch connecting said motor to said wiper mechanism comprising, a crankshaft provided with a recessed driving plate, a worm wheel driven by said motor and providing a circular row of holes coincident with said plate recesses, balls disposed in said holes and a spring retainer acting to maintain said plate, wheel and balls in coupled engagement only when said wheel is driven by said motor, whereby said wiper mechanism will be actuated when said motor is energized and may be actuated without energization of said motor.

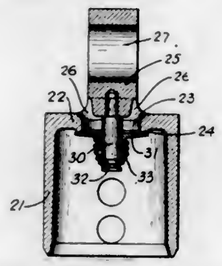
1,806,337. VEHICLE. JAMES E. DUNLAP, Chicago, Ill., assignor to Walker Vehicle Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 14, 1929. Serial No. 385,835. 1 Claim. (Cl. 280—2.)

In a motor delivery vehicle the combination of a body provided with a transverse aisle therethrough forming a passageway for the operator of the vehicle, there being steering and control mechanism at the front of the aisle accessible to the operator standing in the aisle, a front wall for the lower part of the aisle, there being a recess in the front wall for receiving the foot of the



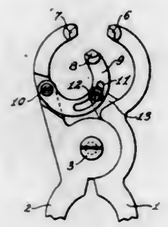
operator and a vehicle controlling a pedal disposed in said recess and accessible for manipulation by the foot of the operator standing in said aisle.

1,806,338. PISTON. GEORGE W. ELSEY, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 21, 1929 Serial No. 348,910. 4 Claims. (Cl. 230—221.)



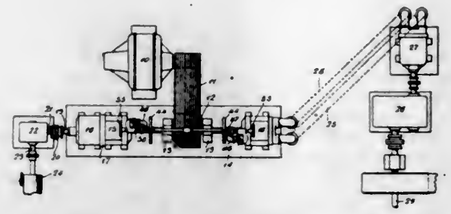
4. A fluid displacement device comprising in combination, a cup-shaped body portion having a cylindrical skirt and an end wall provided with an opening; a mounting lug on said end wall having the narrower side centrally disposed of one plane passing through the axis of the body portion, the axis of the broader side of the lug, however, being offset from the plane passing through the axis of the body portion at right angles to the aforementioned plane; a ridge on the end wall providing a valve-seat about the opening therein; a valve-stem attached to the lug and extending through the opening in the end wall; a valve slidably supported upon the valve-stem; and a spring yieldably urging the valve into engagement with the valve-seat.

1,806,339. EXPANDING DEVICE. WHEATON C. FERRIS, University City, and ROSE M. BRENNAN, St. Louis, Mo. Filed Aug. 7, 1930. Serial No. 473,689. 3 Claims. (Cl. 81—5.1.)



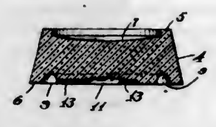
1. An expanding device, comprising a pair of movable arms, a third arm pivoted to one of said arms and movably connected with the other, expanding elements on the ends of said arms, said ends being normally adjacent, and means for moving said arms so as to separate said elements.

1,806,340. ADJUSTING MEANS FOR HYDRAULIC GEAR DRIVES. DANIEL ROBERT FRANCIS, Waterbury, Conn., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Sept. 6, 1929. Serial No. 390,702. 8 Claims. (Cl. 74—7.)



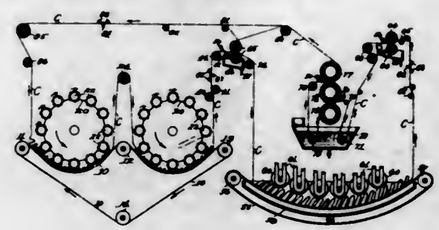
1. In a hydraulic driving gear installation, a plurality of driving gear units each provided with an adjustable control shaft, an individual controlling device for each of said control shafts, a master controlling device, and normally inactive clutch means interposed between said master device and said control shafts and automatically rendered active upon operation of said master device, and means whereby said clutch means is automatically restored to its normal inactive condition when the operation of said master device ceases.

1,806,341. CUSHION. GEORGE V. GAVAZA, Quincy, Mass. Filed Jan. 8, 1929. Serial No. 331,062. 3 Claims. (Cl. 248—16.)



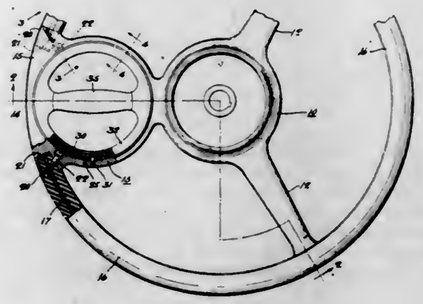
1. A cushion for motor-driven household machines, radio sets and musical instruments comprising a body formed of elastic material having a pocket in its top face in which the leg or caster of the machine is supported and having in its bottom face an annular recess for causing the cushion to grip a supporting surface and a central air-pocket communicating with the recess for absorbing the vibrations of the machine.

1,806,342. FULLING AND WASHING MACHINE. DAVID GESSNER, Worcester, Mass. Filed Apr. 7, 1930. Serial No. 442,088. 20 Claims. (Cl. 26—20.)



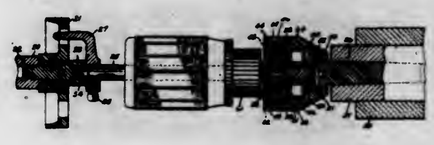
1. In a fulling machine, a movable supporting surface adapted to receive cloth at full width and transversely folded, a plurality of fulling rolls, a carrier in which said rolls are mounted in a circular series, means to rotate said carrier and said rolls with said carrier, said rolls engaging the folds of cloth on said supporting surface and having a rolling movement in engagement therewith.

1,806,343. STEERING WHEEL WITH SWIVEL SPOKE. HARVEY D. GEYER, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 3, 1928. Serial No. 266,936. 2 Claims. (Cl. 74—33.)



2. A steering wheel comprising: a cast metal spider having a relatively large central hub and having integrally cast to the periphery thereof an annular ring portion extending radially outward to the rim circle, a rim fixed to the outer edge of said annular ring, and a hand grip rotatably mounted within said annular ring.

1,806,344. SHAFT CENTERING SUPPORT. LOUIS C. GOAD, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Dec. 29, 1928. Serial No. 329,216. 13 Claims. (Cl. 82—45.)



1. A shaft centering support for a lathe stock, comprising in combination, a bearing outer-race member; a bearing inner-race member; tapered anti-friction members between the race members, the bearing surfaces of said members being so shaped that axial movement of one race member relative to the other tends to align the axes of the race members; means for supporting the outer race member coaxially with the lathe stock; and a cylindrical socket provided coaxially within the bearing track of the inner race member for receiving a cylindrical body, a cylindrical surface of which is to be supported concentric to the axis of the lathe stock.

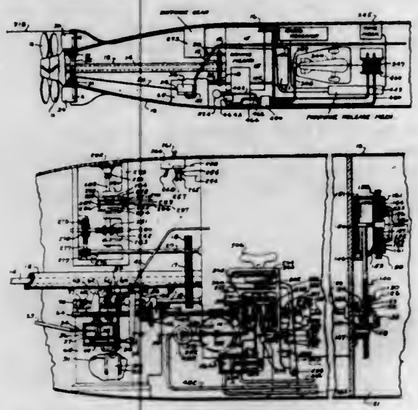
13. A shaft centering support for a lathe tail stock, comprising in combination, a cup-shaped member having a shank adapted to be received by a tail stock; an anti-friction bearing including inner and outer races and intermediate rolling members constructed and arranged to provide lateral and axial support, the outer race being held by the cup-shaped member coaxially with the shank; and the inner race providing an internal conical surface coaxial with the outer race; a split bushing having a central, interrupted, cylindrical recess for receiving a cylindrical body and an exterior, interrupted, conical surface concentric with the recess and engageable with the internal conical surface of the inner race; and means for limiting relative endwise movement between the body and bushing to cause the bushing to engage said internal conical surface of the inner race and to cause the bushing to grip the body in response to relative endwise movement between the body and the bearing.

1,806,345. SCREW PROPELLER. OLE G. HALVORSEN, Chicago, Ill. Filed Mar. 19, 1929. Serial No. 348,253. 8 Claims. (Cl. 170—159.)



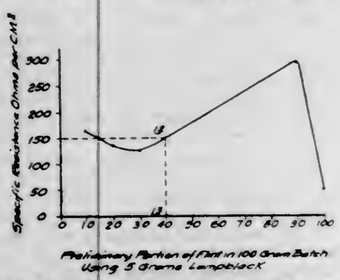
1. In a screw propeller the combination of a propeller blade and a hub, a neutral line on said blade, the portion of the surface of said propeller blade lying inside of said neutral line being curved in a plane perpendicular to the axis of rotation, and the portion of the surface of said propeller blade lying outside of said neutral line being curved in a plane through the axis of rotation.

1,806,346. PARAVANE TORPEDO. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Feb. 8, 1928. Serial No. 252,716. 39 Claims. (Cl. 114—21.)



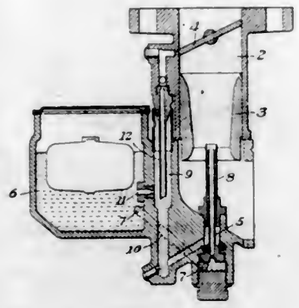
1. In a torpedo a pair of auxiliary members, means for directing said torpedo in response to the influences received by one of said auxiliary members, and means for releasing both of said auxiliary members after said torpedo has been directed in response to influences received by one of the members.

1,806,347. RESISTANCE MATERIAL AND METHOD OF MAKING SAME. EARL J. HAVERSTICK, Oakmont, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 3, 1926. Serial No. 120,457. 8 Claims. (Cl. 201—76.)



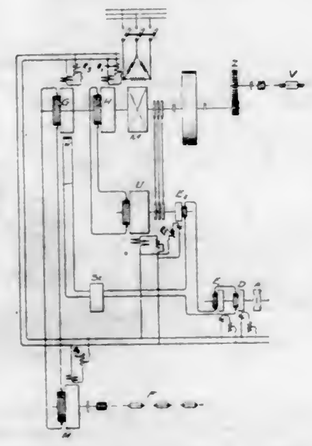
1. A method of manufacturing a resistor consisting of first mixing a portion of flint with a portion of lampblack and water, then adding another portion of flint, mixing, adding a binder, forming and baking.

1,806,348. CARBURETOR. VICTOR R. HEFTLER and HARRY B. NORRIS, Detroit, Mich., assignors to Zenith-Detroit Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 12, 1925. Serial No. 49,726. 4 Claims. (Cl. 261—41.)



1. In a carburetor having a constant level chamber and a carbureting passage, a venturi in said passage, an atmospheric well receiving a restricted amount of fuel from said chamber, a fuel feeding device adapted to deliver only fuel throughout the entire range of operation of the carburetor, a plurality of other fuel feeding devices adapted to separately receive fuel from said well at different levels and separately discharge the same within said venturi, a restriction in said well between the levels at which said last mentioned fuel feeding devices receive fuel therefrom, and an idling feed device positioned in said well and terminating adjacent said restriction, substantially as described.

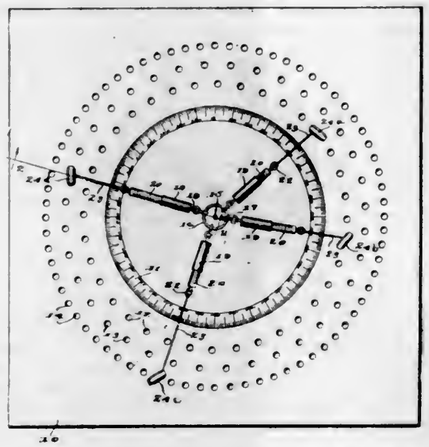
1,806,349. ELECTRIC ROLLING MILL DRIVE WITH LEONARD CONTROL. HUGO HEYMANN, Friedenau, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 5, 1926, Serial No. 139,729, and in Germany Nov. 17, 1925. 1 Claim. (Cl. 172—239.)



In combination in an adjustable speed electric drive for a rolling mill and the like having a plurality of stands,

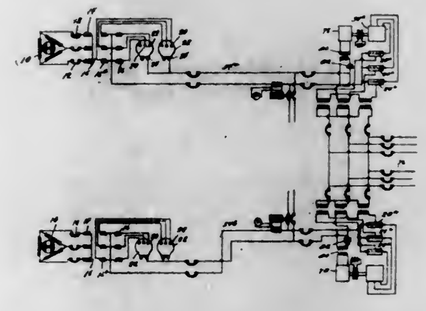
an alternating current motor for driving one of said stands, a Leonard drive for another of said stands comprising a separately excited generator driven by said motor and a separately excited motor connected to said other stand and supplied with armature current from said generator, a Krämer cascade regulating control for said alternating current motor, said control comprising a separately excited converter motor mechanically connected with said alternating current motor and an intermediate converter electrically interconnecting the secondary of said alternating current motor and said converter motor, means for varying the excitation of said converter motor and said generator to adjust the basic speeds of both said stand drive motors, and means for automatically regulating the excitation of said generator to compensate for variations in the slip of said alternating current motor comprising a separately excited exciter driven by said intermediate converter and two independently driven separately excited exciters, the armatures of said exciters being connected in series relation, means for adjusting the excitation of said exciters for different basic speeds of the drive whereby the voltage of said exciter driven by said intermediate converter neutralizes the voltage of one of said separately driven exciters while the slip of said alternating current motor is a predetermined value.

1,806,350. FORCE TABLE. CHARLES HIRE, Murray, Ky. Filed Aug. 28, 1928. Serial No. 302,586. 8 Claims. (Cl. 85—12.)



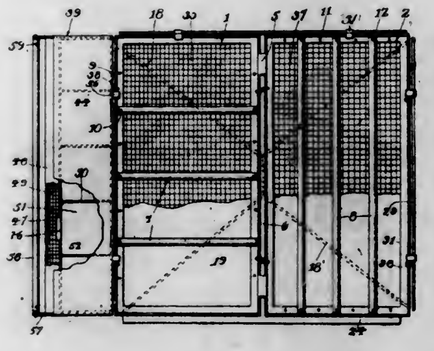
1. In a device of the class described, a base, a circular degree scale centered on said base, a reference member rising from said base at the center of said scale, an annular member loosely encircling said reference member, a plurality of flexible members each attached at one of its ends to said annular member and adapted to be radiated therefrom to intersect graduations on the scale indicative of the length of arc between the angles at which given forces act, graduated scale balances carried by said flexible members and keys for tensioning certain of said flexible members to adjust said balances so that they indicate the forces in the ratios corresponding to the said angles, so that the resultant value shall be zero, each force being the resultant of all others taken in opposite directions, as will be indicated when said annular member is centered relatively to said reference member, said base having a plurality of circular groups of spaced apertures formed in the same at the outer side of said circular scale whereby to be interchangeably engaged by said keys, said aperture groups being arranged concentrically of said circular scale and one with respect to the other.

1,806,351. HIGH TENSION DIRECT CURRENT TRANSMISSION. GUSTAV E. JANSSON, Wolaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed July 15, 1927. Serial No. 206,070. 18 Claims. (Cl. 171—97.)



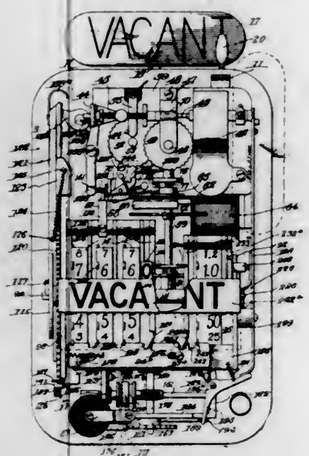
16. A power generating and distributing system including a transmission line extended between remote points, a source of multiphase high tension alternating current connected to said line at one end thereof, rectifying means to convert said high tension alternating current to a high tension direct current having a superimposed alternating current component of small magnitude, and converting means disposed at the remote end of said transmission line to convert said high tension direct current to a low tension alternating current including means influenced by said superimposed alternating current component to control the frequency of said low tension alternating current.

1,806,352. POULTRY ROOST. KRISTOFFER M. JENSEN and CASPER B. HUSCHKE, Morgan, Minn. Filed Mar. 16, 1928. Serial No. 262,218. 7 Claims. (Cl. 119—22.)



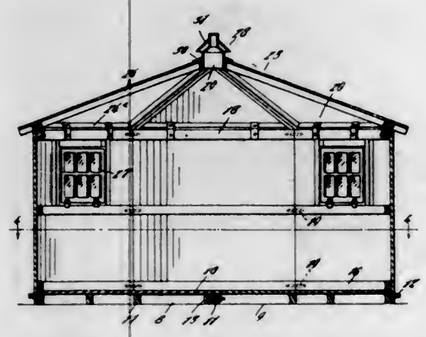
1. A poultry roost comprising an integral skeleton structure providing a pair of spaced, sidewise aligning, horizontally disposed, rectangular frames, said frames having certain of the rails thereof provided with spaced openings below the top edges of the rails, a set of spaced perch poles housed within each frame and mounted on those rails of the frame provided with openings, said perch poles positioned below the top edges of the rails, and spaced depending pins carried by each of said poles and extending through a pair of opposed openings for detachably securing the pole in position to arrest the shifting thereof when arranged in a frame.

1,806,353. REGISTERING MECHANISM. CLARENCE E. JOHNSON and FRED C. KOESTNER, Chicago, Ill. Filed Oct. 6, 1921. Serial No. 505,787. 9 Claims. (Cl. 235—30.)



1. A registering device having registering mechanism, electro-magnetic means to actuate the same including normally spaced contacts, a base, a stub shaft journaled in said base, means carried by the stub shaft abutting the base exteriorly, a disk slidable on the stub shaft and abutting the inner surface of the base, an expansive spring on the stub shaft to maintain the disk in frictional engagement with the base, and means to control the operation of the contacts carried by said disk.

1,806,354. PORTABLE BUILDING. HARRY G. LANOE, St. Elmo, Ill. Filed Oct. 12, 1929. Serial No. 399,258. 3 Claims. (Cl. 20—2.)



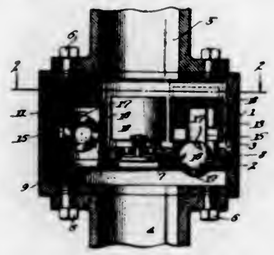
1. The portable building comprising an octagonal floor consisting of a pair of symmetrical half sections disposed in abutting relation, a marginal ledge at the peripheral portion of the floor and projecting outwardly therefrom in a plane below the floor surface, a plurality of separable side walls attached to and rising perpendicularly from said floor to form an octagonal enclosure, and a sectional roof mounted on said side walls, said side walls being provided on their inner faces and adjacent the lower ends with mop boards engaged over the outer edge portions of the floor sections and supporting the side walls with their lower ends seated upon the said ledge.

1,806,355. HAIR WAVING APPLIANCE. CARRIE O. LONG, Chicago, Ill. Filed June 11, 1929. Serial No. 370,127. 6 Claims. (Cl. 132—38.)



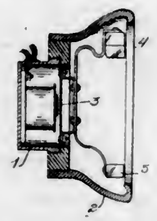
1. A hair waving comb comprising a strip of material shaped to conform to the contour of the head and to extend from one side thereof to the other, said strip of material having a series of obliquely directed teeth formed integral therewith.

1,806,356. METHOD AND APPARATUS FOR TREATING MOTOR FUEL. ROSS M. LYNN and WILLIAM M. MALOUF, Salt Lake City, Utah, assignors to Atomic Power Corporation, Salt Lake City, Utah, a Corporation of Delaware. Filed Oct. 26, 1929. Serial No. 402,760. 12 Claims. (Cl. 48—180.)



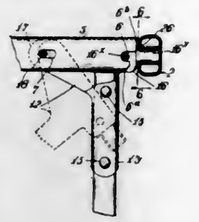
1. In a fuel stream conduit, means for subdividing a fuel stream passing through the conduit into a plurality of sub-streams, rotary means for agitating each of said sub-streams, and means for varying the number of sub-streams in accordance with variations in the volume of the total fuel stream.

1,806,357. APPARATUS FOR AND METHOD OF CULTIVATING AND IMPROVING THE HEARING. JOEL W. MACDONALD, Houston, Tex., assignor to the Tactiphone Company, Houston, Tex., a Corporation of Texas. Filed June 17, 1929. Serial No. 371,557. 7 Claims. (Cl. 179—107.)



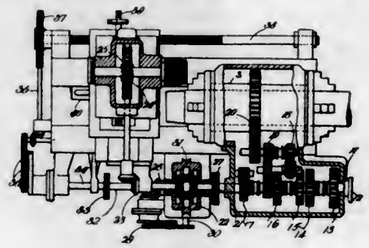
1. A method for improving the hearing which comprises vibration in the air column leading to the inner ear synchronously with vibration positively affecting the mastoid eminence behind the ear.

1,806,358. FOLDING COT. FRED G. MANLY, Chicago, Ill., assignor by mesne assignments, to George I. Goldwyn and Herman Goldwyn, Chicago, Ill., Copartners, doing business as Goldwyn Brothers. Filed Apr. 20, 1925. Serial No. 24,328. 1 Claim. (Cl. 5—117.)



A folding cot comprising horizontally disposed sectional side frame members, each provided at its ends with a longitudinally extending slot and a longitudinally extending notch, crossed leg members supporting said side frame members, a bracket fixed to each leg member and carrying parallel pins, one of said pins extending through one of the slots in the side frame member and the other pin being adapted to engage one of the notches of the side frame member when one of the leg members is in a certain position and moved lengthwise of the side frame member, a sheet connecting the side frame members, and end bars connected to the sheet and bearing against said brackets for holding certain of the pins in said notches.

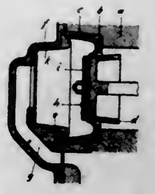
1,806,359. THREAD MILLING MACHINE. ROBERT JAMES MCLEOD, West Drayton, England. Filed Oct. 2, 1928, Serial No. 309,777, and in Great Britain July 18, 1928. 4 Claims. (Cl. 10—154.)



1. In a machine for milling screw threads by hobs of the same pitch as the work in which after the thread has been cut to depth a finished cut multiplies the facets, a main driving shaft, change speed gear on said shaft, a spindle carrying the work, a spindle, the axis of which is parallel to said work spindle, carrying said hob, means by which said change speed gear imparts an equal and relatively slow speed to both of said spindles on cutting to depth and an equal and relatively faster speed to said spindles on the return motion and a differential gear interposed between said change speed gear and said hob spindle by which an additional speed of rotation, of not more than one in 200 revolutions, is imparted to the hob spindle relatively to the work spindle in the final cut in multiplying the facets, a lead screw and means by which the additional rotation is imparted to the said lead screw.

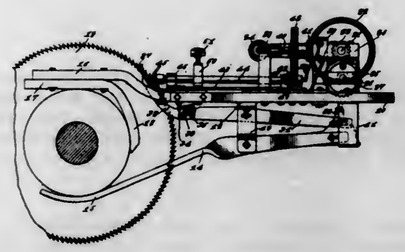
1,806,360. DIAPHRAGM PISTON, IN PARTICULAR FOR CONTROL VALVES FOR AIR BRAKES. ERNST MÖLLER, Karlshorst, Berlin, Germany. Filed Sept. 28, 1929, Serial No. 395,825, and in Germany Aug. 14, 1928. 2 Claims. (Cl. 60—62.6.)

1. In a compressed air brake mechanism, the combination of a casing or housing, a piston reciprocable in said casing, a flexible diaphragm connecting the head of the piston and the peripheral wall of the casing, and a closure for the end of said casing remote from the piston having formed therein a channel, for supplying



air under pressure to the casing, which communicates with the casing at a level above the lower surface of the casing chamber, and a bore for returning to said channel moisture that may collect in the casing adjacent the diaphragm.

1,806,361. SAW FILING MACHINE. JOSEPH JACKSON MOORE, Karnack, Tex. Filed July 24, 1929. Serial No. 380,598. 2 Claims. (Cl. 76—32.)



1. A saw filing machine comprising a frame, means carried by the frame for supporting the saw for rotation, a pair of spaced parallel shafts, filing disks carried by said shafts and arranged slightly in advance of each other for simultaneously filing each tooth of the saw from opposite sides thereof, means including an operating handle for rotating said shaft, means controlled from said handle for intermittently rotating the saw to bring each successive tooth into proper relation with the filing means, means for shifting the said shafts and filing disks to an out of the way position while the saw is being rotated and means for returning said shafts and disks to normal operative position after each rotation of the saw.

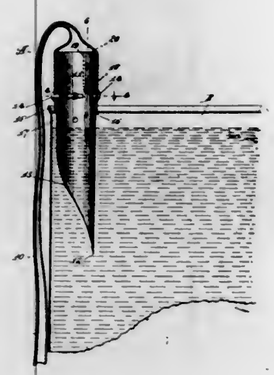
1,806,362. CONCENTRATION OF ORES BY FLOTATION. FREDERICK G. MOSES, New York, RAYMOND W. HESS, Buffalo, and ROBERT L. PERKINS, East Aurora, N. Y., assignors to the Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed May 20, 1927. Serial No. 193,055. 8 Claims. (Cl. 209—166.)

1. In effecting the concentration of minerals by flotation, the process which comprises incorporating with the mineral pulp a mercaptothiazole compound containing a monovalent organic radical as a substituent attached to the thiazole nucleus, and subjecting the resulting mixture to a froth flotation operation.

1,806,363. DISPENSING DEVICE. LAURITZ MARTIN NARBO, Brooklyn, N. Y. Filed June 27, 1929. Serial No. 374,128. 4 Claims. (Cl. 221—23.)

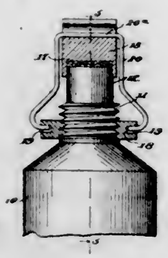
1. A dispensing device including a flexible conduit and a hollow cylindrical member fitted within one end of, secured to said conduit and protruding therefrom, said

protruding end being cut to form a pointed terminal having diverging cutting edges for perforating a wall of, removing therefrom and ejecting into the container a circular portion of the wall to afford an outlet opening, the said cylindrical member being of gradually increasing



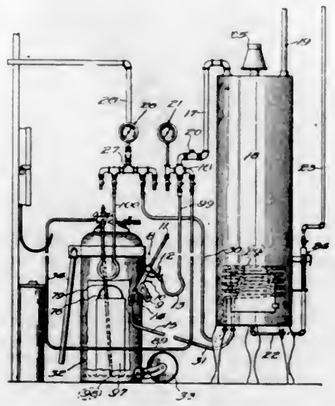
diameters from its pointed terminal to its juncture with the conduit, whereby to snugly fit the outlet opening formed in the container, the attached end of the conduit presenting a shoulder for limiting the insertion of the member into the container.

1,806,364. CLOSURE CAP FOR COLLAPSIBLE AND OTHER CONTAINERS. THOMAS S. NEWMAN, Okmulgee, Okla. Filed Sept. 25, 1929. Serial No. 395,037. 1 Claim. (Cl. 221—60.)



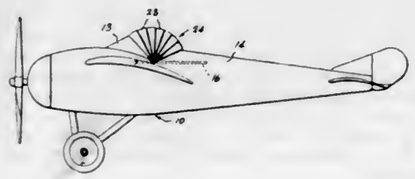
A collapsible tube comprising a body portion and a closure therefor, said body portion terminating in a nozzle having external threads at its base and an upstanding reduced cylindrical unthreaded portion at the outer end thereof, said closure member having a cavity adapted to receive said unthreaded portion, a nut adapted to engage said screw threads, and a U-shaped wire bail connected to both said cap and said nut in loose double pivotal relationship therewith, said cap being disengaged from said unthreaded portion by a slight outward movement of the nut on said screw threads which movement leaves said nut engaged with said threads, and said nut adapted to act through the bail to draw said cap down upon said unthreaded portion when said nut is moved inward on said screw threads.

1,806,365. SYSTEM AND APPARATUS FOR SPRAYING. JENS A. PAASCHE, Wilmette, Ill. Filed May 18, 1925, Serial No. 30,913. Renewed Oct. 13, 1930. 3 Claims. (Cl. 299—84.)



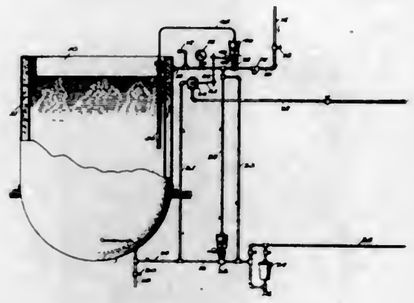
1. Apparatus for the purpose specified comprising in combination a compressed air header, a pressure gauge in conjunction therewith, a water header, a pressure gauge in conjunction therewith, means for supplying compressed air to said compressed air header, means for supplying hot water to the water header, an air tight container, a receptacle for cleaning liquid therein, means for delivering compressed air to the container under control of the operator, a pressure gauge for indicating the pressure within said container, an air gun, couplings for liquid and air thereon, means for preheating air, a connection from the air header thereto, a connection from said preheating means to the air coupling of the air gun, a connection from the receptacle within the compressed air container to the water header for supply of cleansing liquid thereto, means under control of the operator for regulating the pressure of cleansing liquid so supplied to the water header, and a connection from the water header to the liquid coupling of the air gun, substantially as described.

1,806,366. ADJUSTABLE COVER FOR COCKPITS. JOEL L. PIVAK, New York, N. Y. Filed Aug. 11, 1930. Serial No. 474,518. 8 Claims. (244—30.)



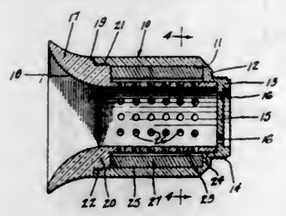
1. A cockpit protector, comprising in combination a collapsible hood, a hood carrier, carrier supporting and guide means, adapted to be secured to the interior of the cockpit of a vehicle, said hood carrier in slidable engagement with said supporting and guide means and adapted to be adjustable relative to the latter.

1,806,367. AUTOMATIC REGULATOR. FRANK C. REEDER, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed July 10, 1929. Serial No. 377,243. 19 Claims. (Cl. 257—4.)



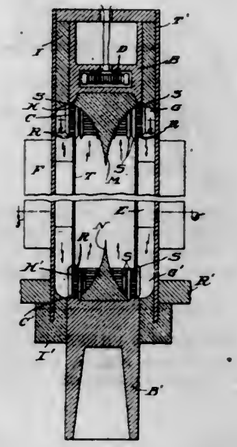
1. In a device of the character described, in combination with a container, a jacket therefor and connections leading to and from said jacket and communicating with sources of heating and cooling medium, a valve controlling the admission of heating medium, a valve controlling the admission of cooling medium, a thermostat for operating said first named valve, and connections including a movable member between said valves whereby said second named valve is opened and said first named valve is closed by the movement of said member.

1,806,368. MOUTHPIECE FOR TELEPHONES OR SPEAKING TUBES AND LIKE INSTRUMENTS. EDWARD W. ROBERTS, Chicago, Ill. Filed Oct. 21, 1929. Serial No. 401,244. 1 Claim. (Cl. 179—185.)



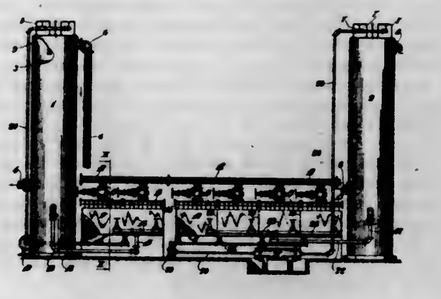
A mouthpiece for telephones or like instruments comprising a tubular member having an outwardly flared lip at one end and a perforated disc at the other end to permit sound vibrations to pass therethrough, said tubular member being perforated from said shoulder to a point adjacent said disc, said tubular member having an annular shoulder on the outer surface thereof adjacent the flared lip, a sleeve threadedly mounted on said tubular member and including an offset portion extended over the perforated area of said tubular member so as to define a chamber above the perforated area of said tubular member so that an antiseptic and absorbent body may be disposed in said chamber whereby the fumes thereof will pass through the perforations in said tubular member.

1,806,369. GAS PUMP. CHARLES G. SMITH, Medford, Mass., assignor, by mesne assignments, to Cambridge Laboratories, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed May 22, 1925. Serial No. 32,023. 14 Claims. (Cl. 230—69.)



1. Apparatus of the character described having a gas passageway, a grid across said passageway, one surface of the grid being a good reflector and an opposite surface being a poor reflector, and a gas in the passageway having a low accommodation coefficient with respect to said good reflector.

1,806,370. GAS PURIFICATION PROCESS. FREDERICK W. SPEAR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Pennsylvania. Filed July 30, 1926. Serial No. 125,836. 3 Claims. (Cl. 23—3.)

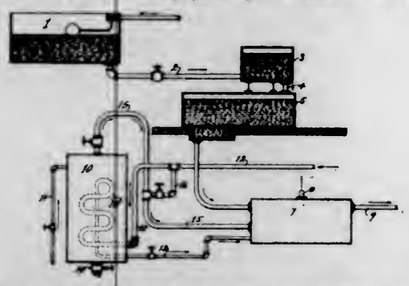


1. The process of purifying gas containing hydrogen cyanide and hydrogen sulphide which comprises purifying said gas to an extent sufficient to remove the hydrogen cyanide and subsequently subjecting the gas to contact with an alkaline solution containing nickel sulphide for the removal of the bulk of the hydrogen sulphide.

1,806,371. BOILER FEED WATER SYSTEM. ARTHUR SPYER, London, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Oct. 19, 1925, Serial No. 63,208, and in Great Britain June 16, 1925. 6 Claims. (Cl. 183—2.5.)

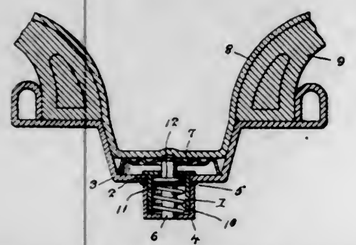
1. The method of treating feed water for a steam boiler of a power plant, which comprises passing condensate

from the exhaust steam of the plant into a deaerating tank, evaporating make-up water by steam out of contact with the make-up water, passing the steam therefrom



and the condensate from such evaporating steam into and mingling them with the condensate in said tank to heat the same, and permitting the air and gases free by such heating to pass out of the deaerating tank.

1,806,372. ADJUSTABLE PRESSURE INDICATOR FOR TIRES. CORSVILLE E. STILLE, Tuckahoe, N. J. Filed Oct. 4, 1929. Serial No. 397,265. 1 Claim. (Cl. 152—11.5.)



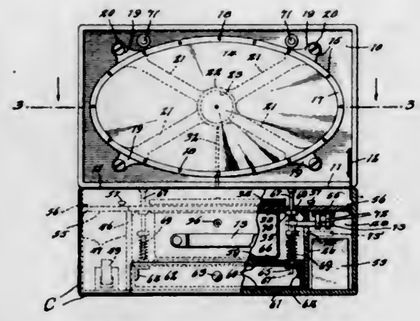
An adjustable pressure indicator for ties comprising a cylindrical shaped body extending through a rim and having one end closed and flanged to engage one face of the rim and provided with a centrally arranged opening in the closed end, a second cylindrical shaped body threaded on the first body and bearing against the opposite face of the rim from that engaged by the flanged end of the first body and having one end closed and provided with a centrally arranged opening aligning with the first opening, a rod slidable in the openings, a diaphragm member secured to one end of the rod and engaging the pneumatic tube of a tire mounted on the rim, a disk fixed to the rod within the bodies, a coil spring to counteract the action of the diaphragm member and mounted on the rod between the disk and the closed end of the second body, and adjusting washers on the rod between the disk and one end of the spring to permit varying of the tension of the spring and consequently vary the movement of the rod by the action of the diaphragm member.

1,806,373. WINDOW SHADE STOP. JACK C. STICH, New York, N. Y. Filed June 10, 1930. Serial No. 460,173. 2 Claims. (Cl. 156—26.)



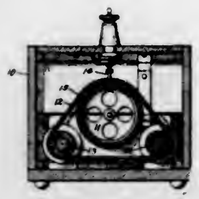
1. A window shade stop comprising a disc like body adapted to be secured to a window casing, and an integral extension portion projecting outwardly from one face of said disc like body and having a slot therein for the passage of one edge of a window shade.

1,806,374. ELECTRIC PHONOGRAPH. ADOLPH A. THOMAS, New York, N. Y. Filed Dec. 4, 1926. Serial No. 152,525. 15 Claims. (Cl. 179—100.41.)



1. An electric phonograph comprising a substantially flat carrying case of rectangular shape, said case having a pivoted lid and a top board provided with a turntable, the shallow space between said topboard and the bottom of the case comprising at least two chambers arranged side by side, one of said chambers containing driving mechanism for the turntable and the other chamber containing electric devices adapted to form a system for transmitting electric impulses, an electric reproducer mounted on said topboard and operatively connected with said devices, a loudspeaking diaphragm secured to the inside of said lid and spaced therefrom, said diaphragm and reproducer being so arranged as to permit closing of the lid, and an electromagnetic driving unit carried by said lid for vibrating said diaphragm, said unit being operatively connected with said devices.

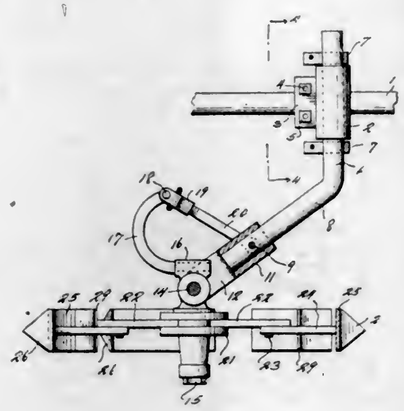
1,806,375. RECORDING METHOD AND APPARATUS. JOHN A. TIEDEMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 3, 1927. Serial No. 172,486. 2 Claims. (Cl. 234—1.)



1. A recording instrument comprising in combination with a photosensitive film, a rotary drum over which such film is moved, and means for timing such film comprising marks of radio active material equally spaced about the periphery of said drum representative of the divisions of a unit of time, and means for rotating said drum one revolution during each such unit of time, the radio active material being of sufficient strength to photographically produce timing records on said film while in contact therewith.

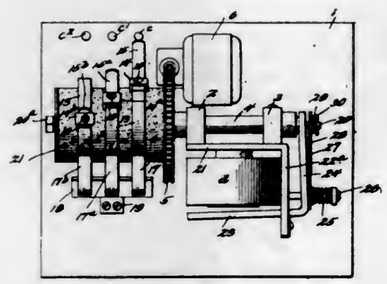
1,806,376. COTTON CHOPPER. FRANK A. VESELKA, Mart, Tex. Filed May 29, 1930. Serial No. 457,402. 4 Claims. (Cl. 97—22.)

1. A cotton chopper comprising a plurality of arms, means for connecting said arms for rotation around a common center, a plate carried by the outer end portion of each of the arms and providing an outstanding cut-



ting blade at one extremity, and an inwardly disposed guard plate carried by said first named plate at the opposite extremity thereof.

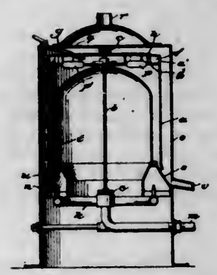
1,806,377. FRICTION SWITCH MECHANISM. GEORGE H. WHITTINGHAM, Baltimore, Md. Filed Apr. 25, 1930. Serial No. 447,317. 14 Claims. (Cl. 200—17.)



1. In an electric slip-switch mechanism, a shaft, means for rotating the shaft, a stationary switch-member, a movable switch member comprising a metal body journaled upon the shaft and having a contact adapted to engage said stationary contact, said movable member being biased to open position, friction disks on opposite sides of said body, said disks secured to the shaft so as to rotate therewith and being relatively movable longitudinally of the shaft, and means for clamping said disks frictionally against said body to cause rotation of the movable member to closed position.

1,806,378. WATER HEATER. WILLI WITZLER and PAUL FRIEDRICH GUSTAV GÜTH, Hamburg, Germany. Filed Apr. 23, 1928, Serial No. 272,208, and in Germany Sept. 13, 1927. 8 Claims. (Cl. 126—355.)

1. A water heater comprising a vertical drum mounted to rotate about the central axis, a water pipe arranged to direct a jet of water against the upper end of the drum whereby the water may run down the walls of the drum,



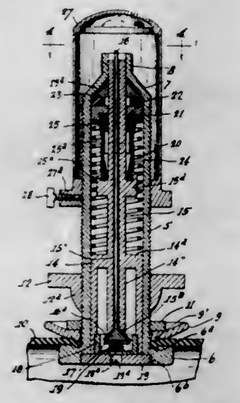
means for producing a heating current of gases to move upwardly along the drum to heat the film of water passing down said drum, and means for collecting the heated water.

1,806,379. WINGS AND OTHER AEROFOILS OF AIRCRAFT. RONALD MCKINNON WOOD, South Farnborough, England, assignor to Handley Page Limited, Cricklewood, Middlesex, England. Filed Jan. 23, 1928, Serial No. 248,920, and in Great Britain Jan. 25, 1927. 9 Claims. (Cl. 244—12.)



1. In association with a main aerofoil adapted to advance through the air at various angles of incidence, brackets projecting forward from such main aerofoil adapted to support pivots, a pilot plane pivoted near its leading edge on such pivots and adapted to rotate under the influence of the air about the axis of said pivots, the trailing edge of such pilot plane being free to pass to either side of the leading edge of said main aerofoil, and means adapted to limit the angular movement of the said pilot plane to such an angle relatively to the said main aerofoil that when restrained by said means the said pilot plane directs a flow of air over that surface of the main aerofoil most remote from the direction of the air flow into which the said main aerofoil is advancing.

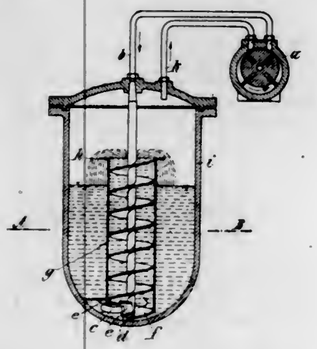
1,806,380. PRESSURE GAUGING TIRE VALVE. FRANK G. ARNOLD, New York, N. Y. Filed Oct. 15, 1929. Serial No. 399,824. 1 Claim. (Cl. 152—11.5.)



In an air valve comprising a holding tube having a slidable plunger, sliding movement of the plunger being re-

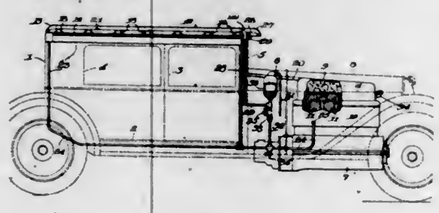
sponsive to air pressure in the tube, a sleeve positioned in the tube and relatively slidably engaging the inner wall of the latter and the periphery of the plunger, said sleeve having an annular recess therein, a shoulder on said plunger and having also a recess therein, a rigid tubular member engaged in said first recess and having a free tapered terminal, a resilient tubular member engaged in said second recess and having also a free tapered terminal, said latter terminal being of greater diameter than said first terminal, whereby on relative sliding movement of said plunger and said holding tube, said resilient terminal is effective to embrace said rigid terminal for sealing the joint between said plunger and said sleeve.

1,806,381. AGITATING DEVICE. WALTER BAENSCH, Berlin, Germany, assignor to Schering-Kahlbaum A.-G., Berlin, Germany. Filed July 11, 1928, Serial No. 291,975, and in Germany July 18, 1927. 2 Claims. (Cl. 259—95.)



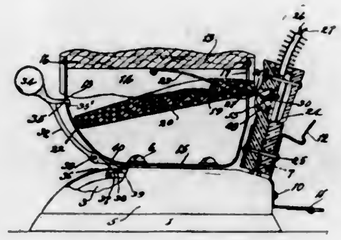
1. An apparatus for mixing gas and liquid, comprising a receptacle having a liquid therein, a rising pipe in said receptacle which is open at the top and at the bottom and extends above the liquid level in said receptacle, a fixed helical conveyor in said rising pipe, a pipe for supplying gas under pressure to the lower end of said rising pipe, and an injector nozzle at the lower end of said conveyor surrounding the lower end of said gas supply pipe and opening into said conveyor.

1,806,382. VAPOR COOLING SYSTEM FOR INTERNAL COMBUSTION ENGINES. LESTER P. BARLOW, Detroit, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed June 27, 1927. Serial No. 201,684. 16 Claims. (Cl. 123—174.)



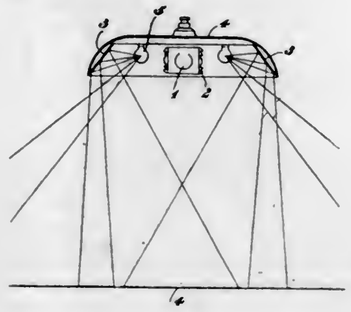
1. In a motor vehicle, a vapor cooling system for the vehicle engine, including the cylinder jacket with a steam dome above the same, a condenser, conduit means connecting the condenser to the jacket and its dome, respectively, for conveying steam from the dome to the condenser and for returning condensate from the condenser to the jacket, and a condensate collecting trap connected with the return conduit between its connections with the condenser and the jacket, said trap extending above and below the normal water level in the jacket and being constantly open to the atmosphere to vent the condenser thereto, said condenser being disposed in a substantially horizontal position at an elevation above the jacket so as to drain condensate thereto by gravity.

1,806,383. ELECTRIC IRON. WALTER E. BELCHER, Winnipeg, Manitoba, Canada. Filed Aug. 10, 1929. Serial No. 384,901. 8 Claims. (Cl. 219—25.)



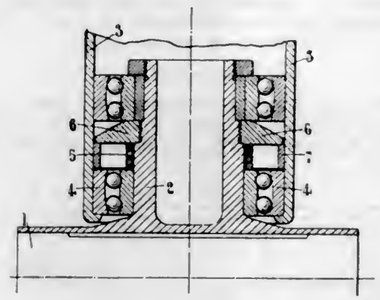
1. The combination with an electrically heated flat iron, of a normally open circuit controlling switch therefor, a spring pressed latch pivotally carried by the iron handle and having operating connections with the switch and arranged in the pressing of the latch towards the handle to close the switch and in the release of the latch to open the switch under the action of the latch spring, gravity operated means for locking the latch against movement in the closed position of the switch and upon the iron being swung into a resting position butt down and means controlled by the rising temperature of the iron for releasing the latter locking means upon a preselected temperature being reached.

1,806,384. SHADOWLESS LIGHTING APPARATUS. HENRI LUGLIEN MARIE JOSEPH BÉNARD, Paris, France, assignor to Anciens Etablissements Barbier, Benard & Turenne, Société Anonyme, Paris, France, a Joint-Stock Company of France. Filed Apr. 19, 1928, Serial No. 271,277, and in France Feb. 10, 1928. 4 Claims. (Cl. 240—78.)



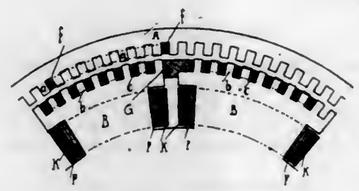
1. In a lighting device, the combination with a principal light source, an optical condensing means adapted to condense light rays emitted by said source, and a system of reflecting mirrors adapted to reflect said rays on to a surface so situated relative to said principal lighting source as to receive shadowless illumination, of emergency light sources completely independent of said principal source and so disposed with respect to said reflecting mirrors as to contribute substantially shadowless illumination to said surface.

1,806,385. VARIABLE PITCH PROPELLER. MOGENS LOUIS BRAMSON, Hendon, London, England. Filed Mar. 25, 1926, Serial No. 97,391, and in Great Britain Mar. 30, 1925. 14 Claims. (Cl. 170—162.)



1. A propeller of the type set forth comprising a boss, a blade, and thrust bearings of different types for taking the centrifugal load upon the blade in two different manners depending upon whether the speed of rotation of the propeller is below or above a certain predetermined value, whereby the pitch of the blades may be varied to any extent at any speed of rotation of the propeller below the predetermined value and at all speeds above the predetermined one the propeller blade and boss form in effect a rigid structure to maintain the pitch of the blades at the set value.

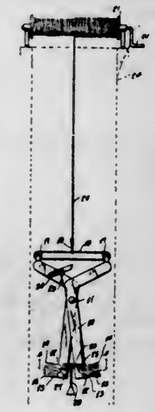
1,806,386. ROTARY FREQUENCY TRANSFORMER. PAUL EMMANUEL BUNET, Versailles, France, assignor of one-half to Société Acieries de Gennevilliers, Gennevilliers, France, a Corporation of France. Filed May 25, 1928, Serial No. 280,583, and in France June 2, 1927. 3 Claims. (Cl. 172—281.)



1. A rotary transformer for obtaining high frequency polyphased current comprising a circumferentially and uniformly slotted stator, a series of field poles rotatable relative to the stator, an inducing winding in said stator, an exciting winding for each of the field poles, slots having the same pitch as the stator slots provided in the face of each of the said field poles, the said slots of the field poles being arranged in sets, the respective slots of the said successive sets of slots of the rotor being staggered with respect to each other by a distance equal to a whole number of pitches increased by a friction equal to the pitch of the slots divided by the number of phases to be obtained, and high frequency windings provided in the slots of each set.

1,806,387. CHIMNEY CLEANER. JAMES J. CARNEY, Bethel, Vt. Filed June 4, 1929. Serial No. 368,243. 4 Claims. (Cl. 15—163.)

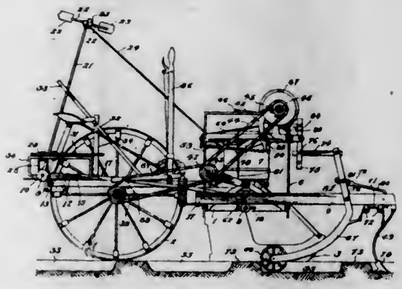
1. A device of the class described comprising two levers generally of L-shape, means pivotally connecting said levers together, said levers at their lower ends having cross arms, cleaning devices carried by said arms, rollers at the upper ends of the levers, an endless loop trained over said rollers, a draw means attached to the loop, a latch carried by one of the levers and engaging the other lever to maintain the cleaning elements against separation as the device is lowered into a chimney, a pendant on said latch to engage the bottom of the chimney to thereby retract the latch, and means to limit the outward movement of the cleaning members.



1,806,388. AQUEOUS RUBBER DISPERSION AND METHOD OF MAKING SAME. RICHARD A. CRAWFORD, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Aug. 6, 1927. Serial No. 211,263. 5 Claims. (Cl. 134—1.)

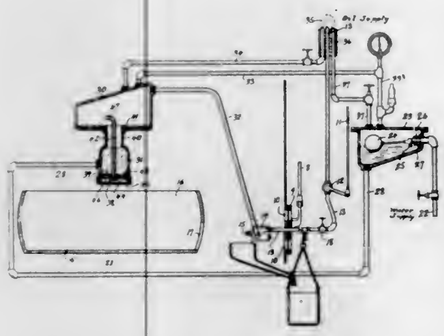
2. The method of preparing an aqueous dispersion of rubber which comprises adding at least four percent of an alkali soap of a liquid higher fatty acid to a rubber composition during mastication, thoroughly masticating the rubber composition, adding slowly thereto while continuing the mastication a water solution of ammonia until the rubber is embodied in the dispersed phase of the batch, then admixing thereinto one percent or more of a nitrogenous protective colloid.

1,806,389. PLANTER. RALPH W. DICKERSON, Roscoe, Ohio. Filed Nov. 14, 1929. Serial No. 407,212. 9 Claims. (Cl. 111—15.)



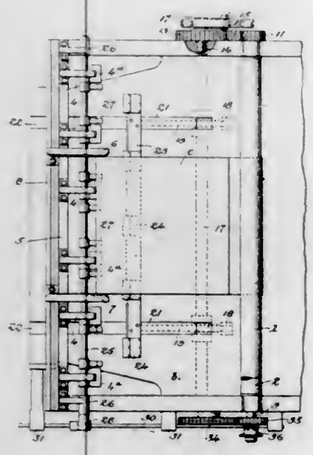
1. In a planter, means for forming a line of trenches separated by knolls, seed-dropping mechanism, a controlling device adapted to run in the line of trenches and over said knolls, means actuated by said device for operating the seed-dropping mechanism, and a clearer arranged to run in a trench in advance of the trench receiving the said controlling device for clearing the first-mentioned trench, said clearing device being operatively connected with the controlling device to be lifted from the trench prior to reaching a knoll at the end of the same.

1,806,390. STEAM GENERATOR. FREDERICK G. FARR, New York, N. Y., and GEORGE H. DIDINGER, Philadelphia, Pa., assignors to Frederick G. Farr, Donald Slingluff, and George H. Dilinger, trustees. Filed Apr. 16, 1927. Serial No. 184,206. 4 Claims. (Cl. 122—40.)



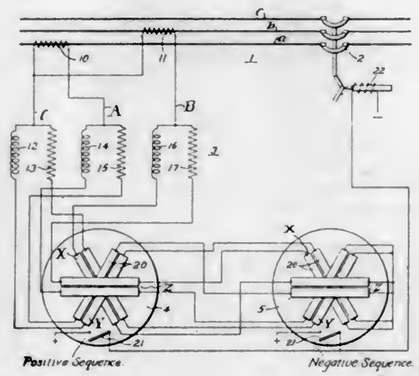
1. A steam generator comprising receptacles mounted one above the other, means connecting together the receptacles by which a predetermined amount of water is maintained in the upper receptacle and by which excess water in the upper receptacle returns to the lower receptacle, a restricted water boiling chamber within the lower receptacle, a tube leading from the chamber to the upper receptacle, said lower receptacle being provided with water inlets leading to the chamber, and a movable disc mounted within the chamber to close the inlets in rapid succession to force the water through the tube into the upper receptacle, and said disc being provided with an aperture through which the tube projects to guide the disc in pulsating movement.

1,806,391. SKIP-FEED ATTACHMENT FOR SLOTTING and CREASING MACHINES. THOMAS S. FITCHETT, Glenarm, Md., assignor to F. X. Hooper Company, Inc., Glenarm, Md., a Corporation of Maryland. Filed May 6, 1929. Serial No. 360,880. 6 Claims. (Cl. 271—44.)



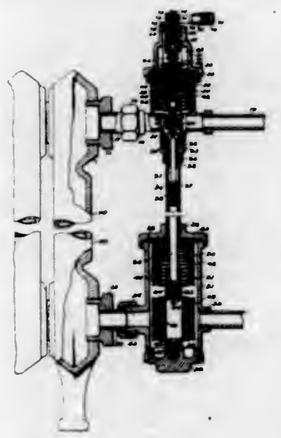
1. In a machine for operating upon cardboard box blanks, the combination with a feed table adapted to support a stack of blanks, a feeding device adapted to feed a blank from the bottom of the stack at each forward movement of said device, and means for operating said device, of means timed to the movements of the feeding device, for alternately changing the relative vertical positions of the rear end of the stack and said device, to cause said device to feed blanks only on its alternate forward movements.

1,806,392. POLYPHASE ELECTRICAL INSTRUMENT. VLADIMIR GENKIN, Marseille, France. Filed Aug. 14, 1926. Serial No. 129,251. 11 Claims. (Cl. 175—294.)



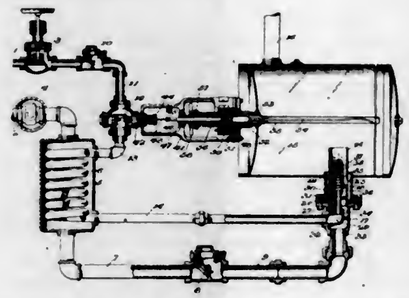
1. In combination with a polyphase circuit, means for segregating the effects of the symmetrical phase-sequence components of an electrical quantity of the circuit including two instruments having polyphase windings so connected as to be energized in accordance with the positive and negative phase-sequence components of the quantity, respectively.

1,806,393. RADIATOR CONTROLLING MECHANISM. JEAN V. GIESLER, Knoxville, Tenn., assignor, by mesne assignments, to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Nov. 27, 1926. Serial No. 151,216. 9 Claims. (Cl. 236—40.)



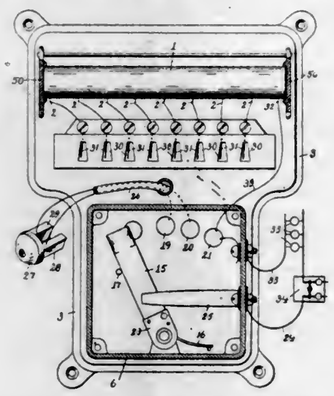
1. In a radiator controlling mechanism, in combination with a radiator having a constantly open outlet, a vapor pressure thermostat controlled by the temperature of the condensate flowing through said outlet, a housing for said thermostat located adjacent to and in open communication with the outlet of said radiator, a throttling valve in the inlet to said radiator, operative connections extending from said inlet valve to said thermostat and manually operable means including said operative connections for varying the pressure on said thermostat.

1,806,394. FLUID MIXER. JEAN V. GIESLER and WILLIAM W. CARSON, Jr., Knoxville, Tenn., assignors to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Feb. 11, 1928. Serial No. 253,779. 42 Claims. (Cl. 261—77.)



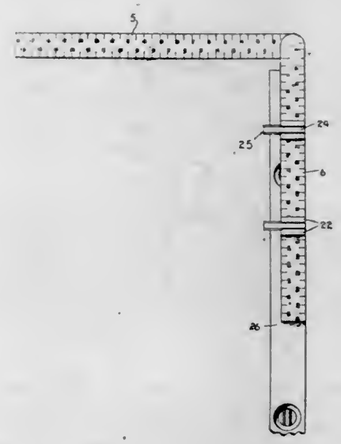
1. In apparatus of the class described, the combination of a stabilizing receptacle, a device for mixing a heating fluid with a liquid to be heated and delivering the mixture to said stabilizing receptacle, said receptacle having a volume which is relatively large as compared with the volumes of the fluid being mixed at any one time, and thermostatic control means subjected to the temperature of the mixture within said stabilizing receptacle to control the supply of said heating fluid.

1,806,395. POULTRY LIGHT CONTROL. JOSEPH B. HARRIMAN, North Reading, Mass. Filed Feb. 11, 1927. Serial No. 167,546. 8 Claims. (Cl. 161—1.)



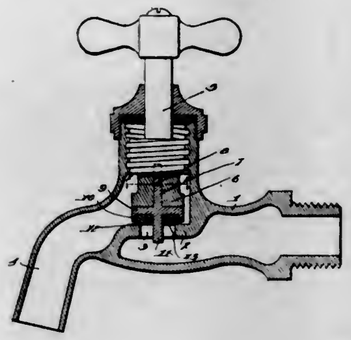
4. A current control comprising a resistance element having several taps, contact connected with a tap at one end and also with one pole of the circuit, a switch arm co-operating with said contact, a plurality of other contacts co-operating with said arm and adapted to be variously connected with the others of said taps, said arm being connected with the other pole of said circuit, and adapted to co-operate with all of said contacts, and time-controlled means for moving said arm from the first contact to each of the others in successive periods of time.

1,806,396. MITER SQUARE. HUBERT HARTWELL, Evanston, Ill. Filed Nov. 12, 1927. Serial No. 232,758. 2 Claims. (Cl. 33—89.)



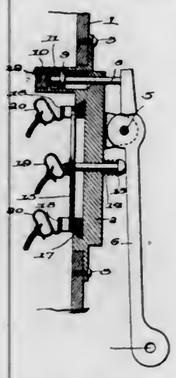
2. A miter square of the class described, comprising two blades pivoted together at one end for adjustment through an angle relative to each other; a stud and nut for securing said blades in adjusted position; a protractor on one of said blades; means on the other blade cooperating with said protractor for indicating the angle between said blades; parallel guides on one of said blades forming a dove tailed channel therebetween; a U-shaped clamping member having one portion thereof slidable in said channel; a wing bolt passing through another portion of said clamping member for securing a lever between said blade and said clamping member.

1,806,397. COMPRESSION VALVE AND FAUCET. ELMER J. HENTSCHEL and SAMUEL E. MILLER, Springfield, Ohio. Filed June 12, 1928. Serial No. 284,739. 1 Claim. (Cl. 251—27.)



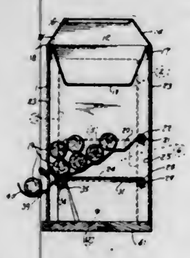
In a faucet, a movable valve member having a head with a bore, a gasket having a hole, a plate engageable by the gasket, a tapering stem extending from the plate receivable by the bore, and a smooth-sided imperforate stud projecting from the plate and through the hole, said stud having the gasket formed thereon and providing means to be gripped for abstracting the stem from the bore.

1,806,398. CIRCUIT CLOSER. FRANCIS MARION JACOB, Columbus, Miss. Original application filed Mar. 22, 1927, Serial No. 177,446. Divided and this application filed Dec. 14, 1927. Serial No. 239,919. 4 Claims. (Cl. 200—163.)



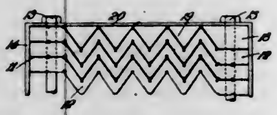
1. A circuit-closer for a device of the character described, including a plate having a sleeve thereon, a lever pivotally mounted on the plate, a pin slidably mounted in the plate and having an end thereof in position to engage and actuate the lever, the opposite end of said pin extending into the sleeve, a spring mounted in the sleeve for normally tending to force said pin outwardly, means for adjusting the tension of said spring, and a switch-arm carried by the plate and operatively connected with the lever for actuation thereby.

1,806,399. COMBINED CIGARETTE DISPENSER, MATCH BOX HOLDER, AND ASH RECEIVER. ADOLPH B. JIPPSON, Cleveland, Ohio. Filed Feb. 24, 1930. Serial No. 430,801. 4 Claims. (Cl. 312—75.)



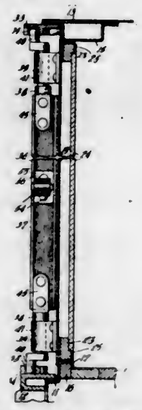
1. An article delivery device comprising a casing forming a holder and having an opening at the front, a pivoted inclined flap forming the bottom of the holder and on which the articles rest, a spring-pressed support under said flap, and means to depress said support and permit the flap to lower, to deliver one of the articles at said opening.

1,806,400. FILTER FOR AIR AND OTHER GASES. EDWARD LIONEL JOSEPH, Westminster, England. Filed Feb. 25, 1930, Serial No. 431,093, and in Great Britain Apr. 24, 1929. 3 Claims. (Cl. 183—21.)



1. A filter for air or like fluids comprising a tank, a series of deformed metal plates arranged in spatial relationship with their general planes vertical, a series of grooved spacer bars corresponding in configuration with the deformation of said plates arranged in alternation with said plates at the upper ends of the latter, and means for clamping together said plates and said spacer bars, said spacer bars and the upper edges of said plates constituting a perforated bottom for said tank, inlets for fluid to be filtered between the lateral edges of said plates at one side of the assemblage and outlets for filtered fluid at the other side of the assemblage.

1,806,401. DOOR CONSTRUCTION FOR RAILWAY CARS. JAMES E. LINDEMAN, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 392,020. 14 Claims. (Cl. 189—46.)



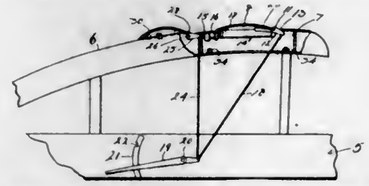
3. In a combined door operating and locking means for railway cars having a swinging door hinged along one edge, the combination with a rotary operating member mounted on the door and extending lengthwise of the free edge of the same; keeper means fixed to the car; keeper-engaging means rigid with the operating member, said operating member being in the form of a beam having a longitudinally extending web and transverse flanges on said web extending lengthwise of the same, said web being disposed in a plane transverse of the door when the operating member is rotated to the limit of its movement in locking the door.

1,806,402. MOP HEAD. HENRY J. LORANG, St. Louis, Mo. Filed Mar. 31, 1930. Serial No. 440,260. 3 Claims. (Cl. 15—229.)



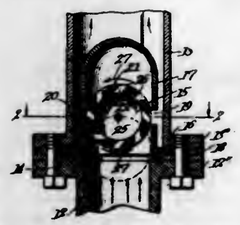
1. A mop head comprising a body of mopping material having a central bound portion adapted to be secured in a holder, a pocket formed on the under side of said bound portion for housing a member of the holder, and yarn strands secured on the under side of said pocket and covering the entire surface thereof.

1,806,403. SAFETY APPLIANCE FOR AIRPLANES. THOMAS B. LYLES, Terre Haute, Ind. Filed July 19, 1930. Serial No. 469,042. 5 Claims. (Cl. 244—21.)



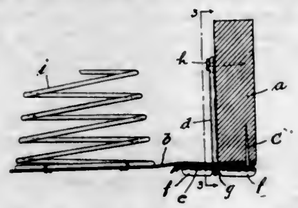
5. In a device of the kind described, an airplane, a main parachute secured to the airplane and adapted to be housed within the wing structure, a pilot parachute connected with the main parachute and adapted to rest upon the wing structure to the rear of the main parachute, means normally covering said parachutes to prevent them from being affected by currents of air and means to hold the covering means normally in closed positions and releasable manually to permit the pilot parachute to be affected by air currents and to permit the main parachute to be withdrawn from its housing by the pilot parachute.

1,806,404. MOTOR FUEL TREATING DEVICE. ROSS M. LYNN and WILLIAM M. MALOUF, Salt Lake City, Utah, assignors to Atomic Power Corporation, a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,913. 7 Claims. (Cl. 48—180.)



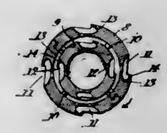
1. A gaseous fuel homogenizing device comprising a housing, adapted to be positioned in a conduit for supplying gaseous fuel to the intake manifold of an internal combustion engine and to permit such fuel to pass therethrough, and a substantially spherical shaped body in said housing, said body being disconnected from the housing to permit free rotation and having a series of abutments thereon facing in a direction opposing the flow of gaseous fuel through the housing and conduit, for the purpose described.

1,806,405. WEBBING FASTENER RETAINER. HARVEY A. MAILLOUX, Haverhill, Mass. Filed Mar. 22, 1930. Serial No. 437,999. 4 Claims. (Cl. 155—179.)



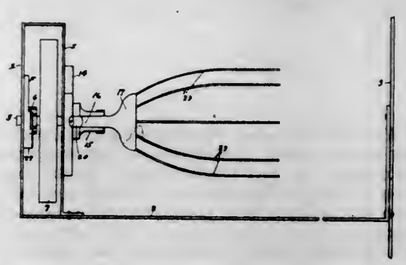
2. In an upholstery construction of the character described, a frame, a seat-supporting webbing strip extending crosswise of the frame and engaged with the normally under side thereof, headed fasteners, extending upwardly through the strip and driven into the frame, to connect the strip thereto, a stiff metal plate having one portion thereof engaged with the strip portion directly beneath the frame and another portion thereof engaged with the adjacent strip portion within the frame, and a hanger device connected to the frame and engaged with the under side of the plate within and adjacent the inner side of the frame, to provide a pivotal support for said plate so arranged that depression of the strip within the frame will tend to press upwardly the plate portion directly beneath the frame.

1,806,406. ATTACHMENT FOR INTERNAL COMBUSTION ENGINES. WILLIAM M. MALOUF, Salt Lake City, Utah, assignor, by direct and mesne assignments, to Atomic Power Corporation, Salt Lake City, Utah, a Corporation of Delaware. Filed Mar. 20, 1928. Serial No. 263,151. 5 Claims. (Cl. 48—180.)



1. A gaseous fuel homogenizing means comprising a conduit adapted to be connected with the intake manifold of an internal combustion engine, and a body of substantially spherical shape within said conduit and free to rotate in any direction therein, said body being provided with means with which the gaseous stream passing through the conduit will co-act to rotate the body, for the purpose described.

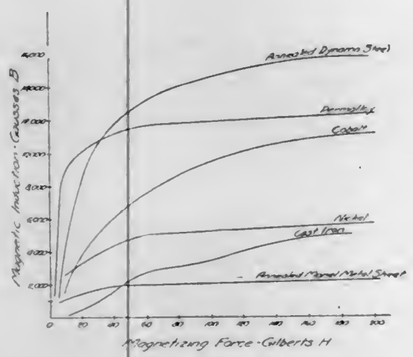
1,806,407. SHOCKING ATTACHMENT FOR GRAIN BINDERS. WYTHE MCCONNELL, El Paso County, Colo. Filed Aug. 20, 1929. Serial No. 387,160. 7 Claims. (Cl. 56—401.)



1. In combination with a grain binder; a horizontally disposed rectangular frame provided with an extension bar attached to the binder main frame; bearings in said rectangular frame; a horizontally disposed axle journalled in said bearings; a gear keyed on said axle; a traction wheel rotatably mounted on said axle; a dog pivoted on said wheel, adapted to engage said gear and provided with a roller; an intermittent cam member slidably mounted in said frame, provided with a lug adapted to engage said gear and a semi-circular cam adapted to engage said roller; a stationary cam rigidly mounted on

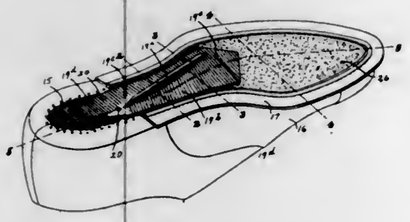
said rectangular frame; a yoke rigidly mounted on said axle; a pair of diverging arms pivoted in each end of said yoke, one arm of each pair cooperating with said stationary cam and the other arm carrying a plurality of tines extending towards said binder.

1,806,408. TRANSFORMER. WILLIAM ALVIN MUDGE, and CLARENCE GEORGE BIEBER, Huntington, W. Va. Filed Oct. 2, 1928. Serial No. 309,843. 1 Claim. (Cl. 175—356.)



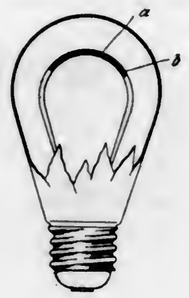
A transformer having a core composed at least in part of Monel metal.

1,806,409. ORTHOPEDIC FOOTWEAR. WILLIAM H. NICKERSON, Newton, Mass. Filed Aug. 7, 1929. Serial No. 384,026. 2 Claims. (Cl. 36—76.)



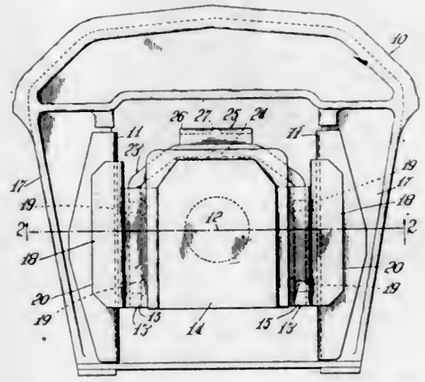
1. An orthopedic shoe comprising an insole, an outsole, and a shank stiffener located between the shank portions of said soles, the foot bearing surface of the insole including a normal fore portion, a normal heel portion, a narrow normal outer edge portion extending between and merging into the normal fore and heel portions, and a raised modified portion underlying the group of keystone bones and the metatarsal arch of the foot, said modified portion being inclined upward crosswise of the insole from the normal outer edge portion to the inner edge of the insole, and inclined upward lengthwise of the insole from the normal fore portion to the normal heel portion, the shank stiffener being formed to support the portions of the insole, which include the narrow normal outer edge portion, and the modified raised portion, said stiffener having a stiffening rib extending obliquely from the inner edge of the stiffener near the heel end, to a point near the outer edge of the forward end, and underlying the group of keystone bones, the forward end of the stiffener being widened to provide an approximately triangular inner wing at one side of the rib.

1,806,410. ELECTRIC INCANDESCENT BODY. WALTER NODDACK and IDA NODDACK, Berlin-Grunewald, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, Near Berlin, Germany, a Corporation of Germany. Filed Mar. 13, 1929, Serial No. 346,766, and in Germany Apr. 12, 1928. 2 Claims. (Cl. 176—132.)



1. An electric incandescent body applicable to electric incandescent lamps, vacuum tubes and similar purposes, consisting of a core of tungsten with a coating containing eka-manganese 75.

1,806,411. PEDESTAL FILLER UNIT. KARL F. NYSTROM, Milwaukee, Wis., assignor to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Nov. 12, 1928. Serial No. 318,709. 13 Claims. (Cl. 105—224.)

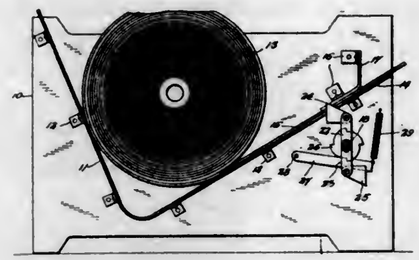


6. A pedestal filler unit adapted to fit over the top of the journal-box of a railroad truck and to extend down opposite sides of the journal-box, said unit comprising a narrow yoke portion and relatively wide metallic plates secured to the ends of the yoke portion, said plates being formed to engage the sides of the pedestal of a car truck and the sides of the journal-box.

1,806,412. PAPER TAPE MACHINE. JOSEPH OLSEN, Portland, Oreg. Filed Dec. 23, 1926. Serial No. 156,743. Renewed Oct. 14, 1930. 4 Claims. (Cl. 164—36.)

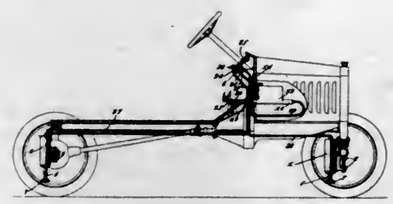
1. In a paper tape machine, a guide member for a strip of paper provided with a plurality of slots, a shaft

disposed opposite the guide member and carrying a plurality of cutter blades, operating means carried by the shaft to selectively project the blades into operating



position through the slots, and means associated with the shaft to maintain the cutter blades in operative position.

1,806,413. LIFTING JACK. ENRIQUE D. PAÉZ, Jr., San Diego, Calif. Filed Feb. 11, 1929. Serial No. 339,131. 1 Claim. (Cl. 138—9.)



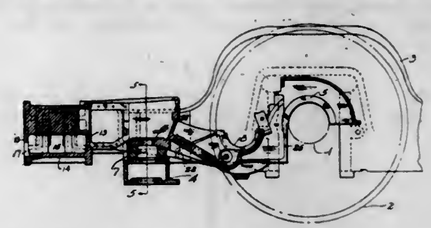
A lifting device for vehicles including hydraulic jacks secured to a vehicle, a control means connected to the jacks, a pump cylinder having one end connected to the control means and the other end internally screw-threaded, a plug threaded in the last named end of the cylinder and secured in an opening of the dash of the vehicle and having a flange portion abutting said dash and the end of the cylinder, a fluid reservoir formed on the cylinder and held against a dash by said cylinder and having communication with the cylinder adjacent the supported end thereof, a piston in the cylinder, a stem on the piston and extending through the plug to be manually actuated, and a tension means bearing against one end of the stem and the plug to normally urge the piston in one direction.

1,806,414. PROCESSES OF POLISHING CHROMIUM. JAMES CLARENCE PATTEN, Indianapolis, Ind., assignor to Metals Protection Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Sept. 9, 1926. Serial No. 134,580. 2 Claims. (Cl. 51—278.)

1. The process of producing lustre on surfaces of chromium which comprises polishing such surfaces with a fine grained product comprising calcined hydrated alumina, the said product having a hardness materially less than that of emery.

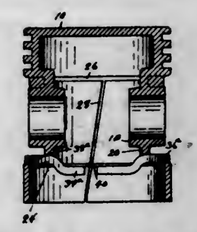
1,806,415. RAILWAY BOOSTER MOTOR. HARRY M. PFLAGER, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Mar. 17, 1927. Serial No. 176,105. 7 Claims. (Cl. 105—115.)

1. A booster engine bed plate construction comprising a substantially horizontally disposed main body, an integrally formed transversely extending wall at the rear end of said main body, the central portion of said wall



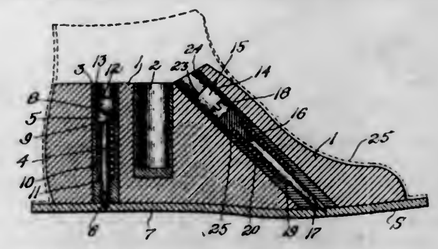
being bulged rearwardly, and a longitudinally extending web extending rearwardly from the ridge of said bulged central portion as an integral continuation therefrom.

1,806,416. PISTON AND SKIRT EXPANDING RING THEREFOR. HAROLD F. PHILLIPS, Belmont, Mass. Filed May 16, 1930. Serial No. 452,936. 19 Claims. (Cl. 74—108.)



1. A piston having a slotted skirt, wrist pin bosses, and other parts essential to the construction thereof, in combination with an expansion ring which is located concentrically within the piston at the skirt thereof and has opposed sections that bear outwardly upon the inner face of and hold said skirt resiliently expanded and other opposed sections that lie between and project circumferentially beyond said first opposed sections and which engage on the top and bottom sides thereof parts of the piston that constitute abutments by which said ring is retained in position against displacement axially of the piston.

1,806,417. LAST. ROSCOE D. POOLE, Danvers, Mass., assignor of one-half to Herbert A. Miller, Danvers, Mass. Filed Feb. 5, 1930. Serial No. 426,120. 3 Claims. (Cl. 12—141.)



1. A last having its forepart made with an obliquely disposed chamber extending from the top of the last forwardly to the bottom thereof and its heel-part made with a vertically disposed chamber extending from the top of the last to the bottom thereof; a sole-engaging spike-member adjustably mounted within said obliquely disposed chamber, and a sole-engaging screw-member adjustably mounted within said vertically disposed chamber, said two members being operable to engage and disengage a sole and when in engagement with the latter serving to hold said sole against displacement in any direction relatively to the last.

1,806,418. SMOKER'S RECEPTACLE. BENJAMIN PUTTERMAN, Brooklyn, N. Y., assignor, by mesne assignments, to Yankee Metal Products Corp., a Corporation of New York. Filed Sept. 7, 1927. Serial No. 217,902. 2 Claims. (Cl. 131—51.)

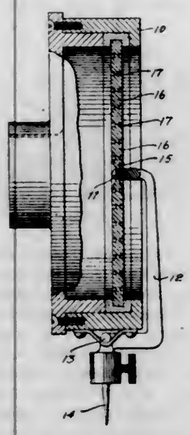


1. In a device of the character described, comprising a smoker's stand having secured to the top portion of the stand a holder for a cigar or other article, said holder being composed of substantially rigid U-shaped body portion, having two spring members securely fastened thereto, said spring members having indentations therein between which the cigar or other article can be wedged and firmly gripped in position on the stand.

1,806,419. PURIFICATION OF ACETYLENE. FRANZ RAHN, Nieder-Ingelheim-on-the-Rhine, Germany, assignor to the Firm C. H. Boehringer Sohn, Chemische Fabrik, Nieder-Ingelheim-on-the-Rhine, Germany, a German Society. Filed Sept. 23, 1925, Serial No. 58,187, and in Germany June 19, 1925. 5 Claims. (Cl. 260—170.)

1. Process which consists in passing through an active adsorption agent an impure acetylene product consisting of acetylene in admixture with gaseous toxic impurities which are detrimental to the use of said product as a therapeutic and narcotic, said operation being conducted in the absence of any oxidizing gases and of other oxidizing materials.

1,806,420. SOUND REPRODUCING DIAPHRAGM. GEORGE G. ROCKWELL and CHARLES L. WALTERS, Danbury, Conn. Filed May 28, 1926, Serial No. 112,391. Renewed Apr. 23, 1930. 12 Claims. (Cl. 181—32.)

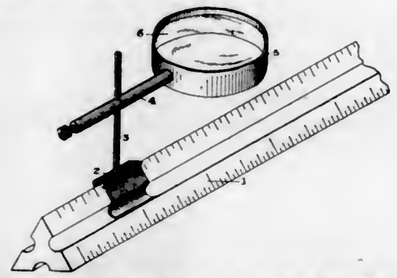


1. A sound reproducing diaphragm comprising a disk made up of a series of radially spaced concentric rings of substantial thickness in an axial direction joined together by intervening web-like rings of a thickness in an axial direction substantially less than that of said first rings.

1,806,421. CELLULOSE DERIVATIVE MANUFACTURE. MILTON O. SCHUR and ROBERT A. WEBBER, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed July 20, 1927. Serial No. 207,314. 7 Claims. (Cl. 260—10.)

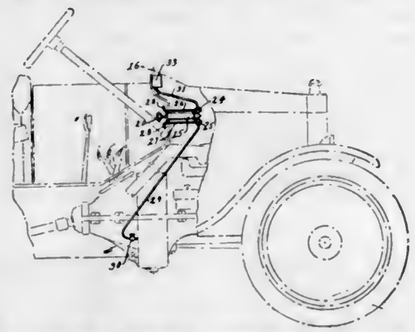
1. A process which comprises separating the finely divided and colloidal cellulose together with associated impurities from the longer fibers in fibrous cellulosic materials, then converting the long fibers into cellulose derivatives.

1,806,422. SCALE READER FOR DRAFTSMEN. ROBERT H. SHAEN, Ambler, Pa. Filed Sept. 5, 1928. Serial No. 304,054. 3 Claims. (Cl. 88—39.)



1. The combination of a scale or rule having grooved portions, a one-piece clamping member having surfaces adapted to engage said grooved portions, a post fixed to and projecting from said clamping member, and a magnifying lens adjustably mounted on said post.

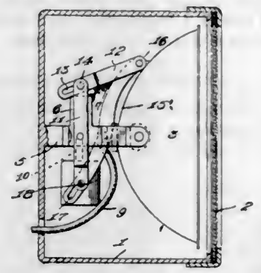
1,806,423. LUBRICATOR INDICATOR. PHILIP SHAPIRO, Los Angeles, Calif. Filed Apr. 13, 1927. Serial No 183,601. 6 Claims. (Cl. 184—6.)



4. A lubricator indicator comprising a pump, a pipe connected to the pump and adapted for connection to the drain cock of a crank case, a second pipe connected to the pump and adapted for connection to an oil display device, and manually operable valves in the pipes by which they may be separately placed in communication with the pump to first draw oil from the crank case and then discharge the oil to the oil display device.

1,806,424. AUTOMOBILE HEADLIGHT. HERBERT SIRY, Newport, Ky. Filed Dec. 28, 1928. Serial No. 329,029. 1 Claim. (Cl. 240—41.6.)

An automobile headlight including a casing rigidly mounted on a vehicle and a reflector carrying an illuminating means, spaced horizontally disposed arms secured to the casing and pivotally supporting the reflector in the casing for movement about a horizontal axis, an upwardly extending yoke formed on said arms, a spring between said yoke and the reflector, a depending weight pivoted to said arms, a lever secured to the pivot of the weight and movable with the latter, a link pivotally and slidably connected to the upper end of the lever and pivoted to the reflector to tilt the reflector downwardly on movement of the weight in one direction caused by the vehicle travelling up hill, and a curved link pivotally and slidably secured to the lower end of the lever and pivoted to the reflector to tilt the reflector downwardly by the movement of the weight in an opposite direction when the vehicle is travelling down hill.

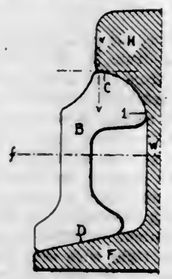


1,806,425. METAL JAR CLOSURE. THOMAS L. TALIAFERRO, Chicago, Ill., assignor to Phoenix-Hermetic Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 8, 1927. Serial No. 159,895. 1 Claim. (Cl. 215—43.)



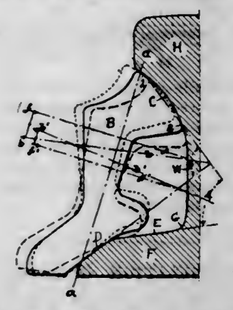
A metal closure for jars comprising a top and a depending flange formed integral therewith, said flange having a thread formed therein adapted to engage a thread on the jar, the upper portion of said depending flange being knurled and the lower portion of the depending flange being curved outwardly and downwardly, thence inwardly to form a strengthening bead, the outer surface of said depending flange being continuous and extending in a downward direction, the extreme inner diameter of said inturned edge portion being greater than the diameter of the threads on the jar, said threads in the depending flange being disposed between the knurled portion and said bead, said bead being of substantially uniform cross section throughout.

1,806,426. RAILWAY RAIL AND RAIL-JOINT. SAMUEL G. THOMSON, Flushing, N. Y. Filed Apr. 18, 1930. Serial No. 445,264. 19 Claims. (Cl. 238—243.)



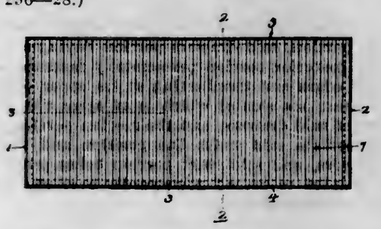
1. A railway rail having an under corner of its head lying nearer to a vertical plane at the outermost portion of its head than to a vertical plane at the innermost face portion of its web, a concave surface adjoining and extending inwardly from said corner, and a splice bar contacting with said surface and with the rail foot outside of a vertical plane at the outer edge of said upper contact.

1,806,427. RAILWAY RAIL AND RAIL JOINT. SAMUEL G. THOMSON, Flushing, N. Y. Filed May 6, 1930. Serial No. 450,112. 18 Claims. (Cl. 238—243.)



1. In a rail-joint, a T-rail having gradually and continuously converging faces extending from the under corner of its head to its web, the width of one of said faces being greater than the distance between horizontal planes at the top of the rail and through said under corners, and a splice bar contacting with a portion of said face, said rail having the top surface of one side of its foot comprising an inner face at its juncture with the rail web and two other faces of substantial width differing from each other in inclination, only one of said faces forming a seat for the splice bar.

1,806,428. METALLIC TRUCK BODY. SIMEON E. TRAVIS, Jr., Hattiesburg, Miss., assignor to The Weldmech Steel Products Co., a Corporation of Mississippi. Filed Jan. 23, 1928. Serial No. 248,839. 4 Claims. (Cl. 296—28.)

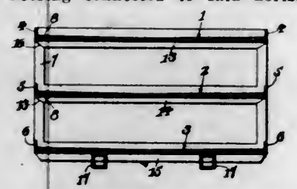


1. A truck body comprising side and end sills, each of said sills being of angle-shaped cross section to provide a vertical and a horizontal leg, said horizontal legs extending inwardly from the lower ends of said vertical legs, a corrugated floor secured to said sills, abutting the upper faces of the horizontal legs and the inner faces of the verical legs, and spaced, parallel brace members secured to the lower faces of the horizontal legs of opposed sills and to the lower bends of said flooring, the lower bends in said flooring provided with spaced drain openings.

1,806,429. UNDERFRAME FOR TRUCK BODIES. SIMEON E. TRAVIS, Jr., Hattiesburg, Miss., assignor to The Weldmech Steel Products Co., a Corporation of Mississippi. Original application filed Jan. 26, 1928, Serial No. 249,693. Divided and this application filed Mar. 5, 1929. Serial No. 344,532. 2 Claims. (Cl. 296—3.)

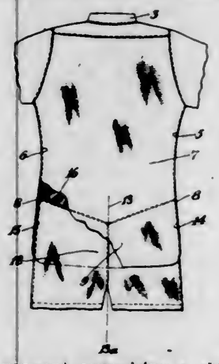
1. A truck body comprising an upper, an intermediate and a lower deck, each of said decks including side and

end rails of angle-shaped cross section to provide vertical and horizontal legs and with the latter extending inwardly from the inner end of the former, corner rails common to the side and end rails of said decks, each of said decks including a flooring connected to said horizontal legs,



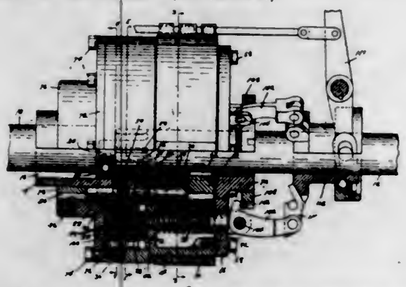
transversely extending, spaced brace members of T-shaped cross section secured to and depending from the lower faces of said floorings, and spaced sub-sills extending longitudinally with respect to the lower face of the flooring of the lowermost of said decks, said sub-sills secured to the heads of the braces which depend from the flooring of the lowermost of said decks.

1,806,430. COMBINATION GARMENT. WILLIAM M. TRAYNOR, Cornwall on the Hudson, N. Y. Filed Mar. 17, 1930. Serial No. 436,267. 2 Claims. (Cl. 2—77.)



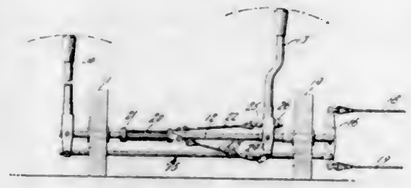
1. A unitary garment comprising a shirt portion and drawers portion, said drawers portion having a relatively inelastic posterior portion permanently fastened along its marginal edges and terminating at its upper edge on the bias at least one side of which is adjacent the waist line position of said drawers, and the median portion of which is intermediate said waist line position and the seat of said drawers, and said shirt portion being provided with a tail adapted to extend downwardly over the lowermost portion of said biased edge.

1,806,431. REVERSING MECHANISM. HENRY A. TUTTLE, deceased, Upton, Mass., by Jennie L. Tuttle, executrix, Upton, Mass. Filed Dec. 28, 1929. Serial No. 417,246. 12 Claims. (Cl. 74—34.)



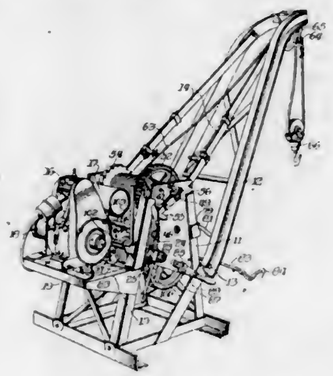
1. Reversing mechanism having the combination of axially aligned driving and driven shafts, a clutch plate carrier having spaced confronting plates one of which is carried by and has a flexible driving connection with said driving shaft, clutch plates located between said carrier plates some of which are connected with said carrier and others of which are connected with said driven shaft, means to effect the engagement of said clutch plates to connect said shafts directly for forward drive, reversing gearing connecting said other plate of said clutch plate carrier and said driven shaft, and means to condition said reversing mechanism for reverse drive.

1,806,432. AIRPLANE CONTROL MECHANISM. RALPH H. UPSON, Red Bank, N. J. Filed Apr. 18, 1929. Serial No. 356,114. 10 Claims. (Cl. 244—29.)



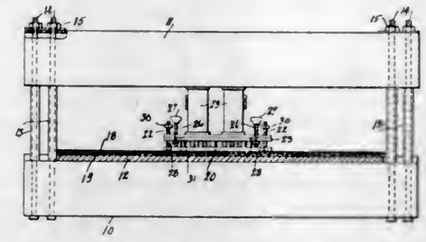
1. A device for neutralizing and counter-balancing a control surface, comprising a pivoted operating lever, a spring means having one end secured to produce initial strain and connected to said lever on opposite sides of the pivot in unequally spaced relation so as to maintain the control surface rigidly at a desired neutral point of operation except when said system is manually actuated.

1,806,433. WRECK CRANE. GAILARD E. WEAVER and ALBERT J. VETTEL, Springfield, Ill., assignors to Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed May 26, 1928. Serial No. 280,811. 4 Claims. (Cl. 254—145.)



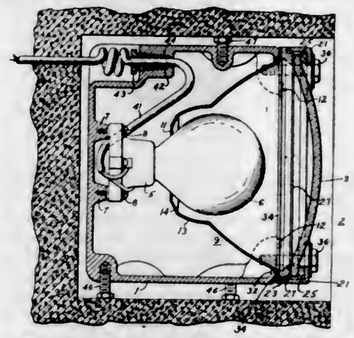
1. In a wreck-crane, the combination of a slotted frame, a revoluble winding-drum, a cable adapted to be wound upon and unwound from said drum, a shaft on which said drum is mounted rockingly supported on said frame near one end of the shaft and occupying said slot near its other end, releasable means to hold said drum from turning to pay out the cable, a gear on said shaft near that one of its ends capable of the greater rocking movement, a drive-pinion with which said gear is adapted to mesh and unmesh by the rocking movement of said shaft, means to revolve said drive-pinion, a slotted handle fastened to said shaft, a fulcrum lug rigid with said frame occupying said handle slot, and means to lock said handle in either of two positions corresponding to the meshed and unmeshed relation of said gear and pinion.

1,806,434. PUNCTURING APPARATUS. LUDWIC A. WILCZEK, New York, N. Y. Filed Dec. 20, 1929. Serial No. 415,402. 2 Claims. (Cl. 164—90.)



1. In a perforating device of the nature described, a perforated die plate, extending posts secured thereto, a second plate slidably mounted on the said posts, piercing pins in the second plate normally extending partway into the perforations of the die plate, a cover plate on the second mentioned plate overlying the piercing pins, and a pair of screws threaded into the pin carrying plate adapted to limit the downward movement of the said plate and also to raise the said plate by screwing same against the die plate after the piercing operation is performed.

1,806,435. LIGHTING UNIT. OSCAR WERNER, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 26, 1929. Serial No. 395,212. 2 Claims. (Cl. 240—26.)



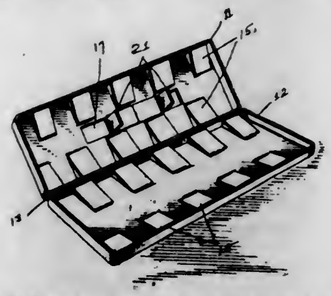
1. In an under-water projector adapted to fit into a recess in the wall, a housing, a lighting unit and reflector therein, means including a lens for closing the case watertight, a plurality of adjustable supporting screws at the bottom of said casing to adjustably mount the casing in said recess, and means on the upper side of the casing for rigidly maintaining the casing in adjusted position.

1,806,436. MANUFACTURE OF BRUSHES. ROBERT MORSE WITHYCOMBE, Sydney, New South Wales, Australia. Filed Dec. 12, 1928, Serial No. 325,573, and in Australia Dec. 23, 1928. 4 Claims. (Cl. 15—194.)



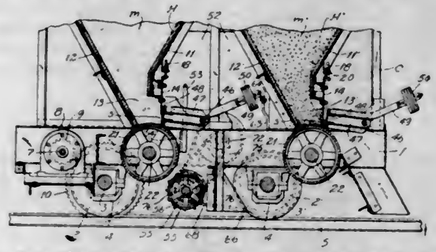
1. A brush comprising a small bundle of fiber; a handle having a socket to removably receive one end of said bundle of fiber; and resilient means surrounding said end and maintaining said bundle under compression and itself held under compression by the wall of said socket for removably retaining said end of said bundle in said socket.

1,806,437. BLADE SHARPENER. WILLIAM B. WOODWARD, Washington, D. C., assignor to Joseph Shapiro, Baltimore, Md. Filed July 9, 1928. Serial No. 291,357. 4 Claims. (Cl. 76—89.2.)



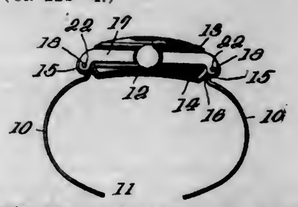
1. A blade sharpener comprising a shallow box like container, sharpening elements formed on the longitudinal edges of the top and bottom of the box, said sharpening elements inclined toward the central portion of said top and bottom members of said box, there being an elongated opening in the top of said box, a recpirocating blade carried slidably secured in said elongated opening, said carrier having means extending through said elongated opening for moving said blade carrier to and fro.

1,806,438. CHARGE CAR FOR SINTERING APPARATUS. THOMAS M. ALEXOVITS, Bayonne, N. J., assignor to John E. Greenawalt, New York, N. Y. Filed Apr. 30, 1929. Serial No. 359,372. 8 Claims. (Cl. 214—18.)



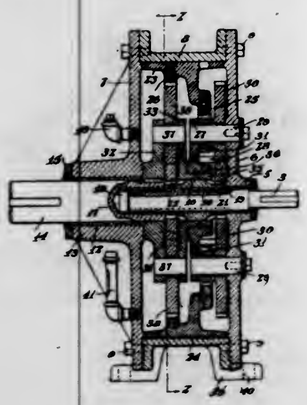
1. In a charge car, a holder for the charge, said holder having an open bottom, a shut-off gate for said open bottom, a feed roller adjacent to the open bottom, means for coupling the feed roller to the running gear of the car for actuating the feed roller and means for opening and closing the shut-off gate at predetermined points in the car's travel.

1,806,439. WRIST WATCH SPRING STRAP. ROBERT B. BARTON, River Forest, Ill., assignor to Elgin National Watch Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1928. Serial No. 304,743. 2 Claims. (Cl. 224—4.)



1. In a wrist strap and watch case assembly, a band having loops formed therein and directed outwardly away from the position of the wearer's arm, sleeves held in said loops by the resiliency of said band, supporting means on the watch case, and means carried by the sleeves and engaging said supporting means to hold the watch case and band together.

1,806,440. SPEED TRANSMISSION MECHANISM. JAMES W. BATCHELDER, Brookline, Mass. Filed Nov. 27, 1929. Serial No. 410,051. 27 Claims. (Cl. 74—34.)



1. Speed reduction mechanism, comprising a casing, a slow speed shaft, a high speed shaft, a pair of pinions rotatable by said high speed shaft, a plurality of opposed compound gears rotatable by one of said pinions, a plurality of opposed simple gears rotatable by the other of said pinions, and a pair of internal gears, one of said internal gears being in mesh with said compound gears and the other of said internal gears being in mesh with said simple gears, whereby an epicyclic movement will be imparted to one of said sets of gears, said casing constituting a support for all of said pinions and said gears, whereby said high speed shaft is relieved of all radial loads and tangential forces.

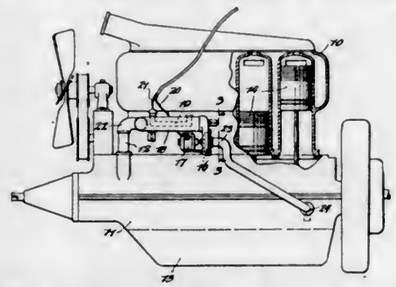
1,806,441. UNIVERSAL KITCHEN TONG. KARL BAUER and EUGEN KADE, Bronx, N. Y. Filed Mar. 27, 1930. Serial No. 439,382. 1 Claim. (Cl. 294—99.)



In a pair of universal kitchen tongs, a pair of parallelled spring shanks of substantial V-shape in cross-section, a knee formed intermediate the ends of said shanks, an integral loop formed with the shanks, and lower gripper-members at the ends of said shanks angularly disposed thereto, each of said members substantially elliptical and bowl-shaped and having an opening in its center to present a seat for an article to be lifted from a boiling pot.

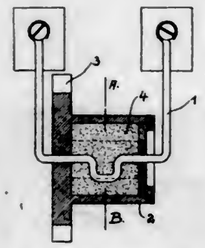
1,806,442. MEANS FOR PRELIMINARILY HEATING INTERNAL COMBUSTION ENGINES. ALONZO C. BELL and THADDEUS R. BELL, Westfield, N. J. Filed Apr. 26, 1929. Serial No. 358,207. 6 Claims. (Cl. 184—104.)

1. In an internal combustion engine having a crankcase associated therewith, and breather pipe opening thereinto: heating means for the engine adapted to be installed at the crankcase and comprising an electric heating unit, an electrically driven fan associated there-



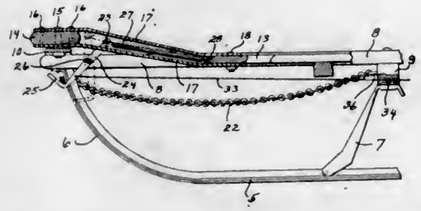
with to direct air over the heating unit into the outer end of the breather pipe, and means for connecting the heating unit and fan to a source of electricity.

1,806,443. THERMAL RELEASE DEVICE. ERNST BESAG, Baden-Baden, Germany, assignor to Schiele & Bruchsaler Industriewerke A. G., Baden-Baden, Germany. Filed Dec. 27, 1928, Serial No. 328,811, and in Germany Dec. 28, 1927. 5 Claims. (Cl. 200—124.)



1. In a thermal release, a resistance wire, a drum directly supported thereon, the resistance wire extending therethrough, fusible material filling said drum, the wire having a radially directed portion, the said material embedding the portion of the wire which is within the drum and also the said radially directed portion thereof, whereby to normally prevent rotation of the drum and whereby the fusing of the said material by heating of the wire upon the passage of an abnormally high current will permit the rotation of the drum.

1,806,444. BRAKE FOR SLEDS. JOHN Z. BOUTIN, Troy, N. Y. Filed Jan. 18, 1928, Serial No. 247,720. Renewed Oct. 11, 1930. 7 Claims. (Cl. 188—8.)

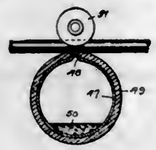


1. The combination with a steerable hand sled comprising a pair of runners and side rails arranged longitudinally above each runner, of a brake for the sled comprising a flexible braking element anchored at opposite ends to the intermediate portion of the sled to extend about the sled runners, a keeper for releasably retaining the braking element in an elevated position at the forward end of the sled embodying arms pivotally connected

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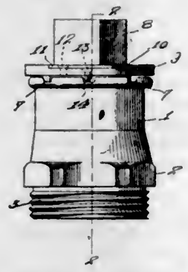
inwardly of each side rail and a rod connecting the upper ends of the arms to extend transversely of the sled, and spring means acting upon the keeper to normally urge the same into a position for operatively engaging the braking element.

1,806,445. METHOD AND APPARATUS FOR USE IN THE MANUFACTURE OF GLASSWARE. LÉON JEAN BROCHE, Verrieres-le-Buisson, France, assignor to Tropenas Company, New York, N. Y., a Corporation of Delaware. Original application filed Sept. 20, 1926, Serial No. 136,632. Divided and this application filed Dec. 27, 1928, Serial No. 328,770. Renewed Oct. 15, 1930. 5 Claims. (Cl. 49—48.)



1. In the manufacture of glass products, the step of severing a continuous product into lengths, which comprises advancing the material while hot upon a movable support and bringing a defined chilled area of said support intermittently into contact with the product to fracture the latter.

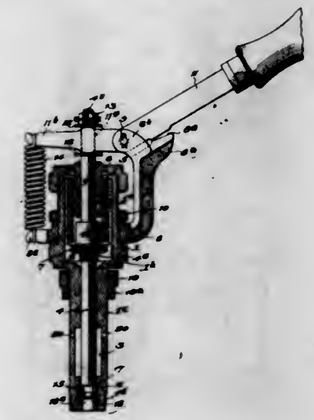
1,806,446. GREASE CUP. ZINA L. CARD, Milwaukee, Wis. Filed Aug. 5, 1927. Serial No. 210,952. 1 Claim. (Cl. 184—48.)



A grease cup comprising a hollow body having a threaded portion, a flange formed with said body and together with the top of the body being provided with radiating grooves, a hollow plug threadedly received in said body, a flange formed with said plug and having opposed recesses in its top, leaf springs arranged in said recesses and having one of their ends secured, headed locking studs slidably mounted through the plug flange with the heads thereof countersunk and being engageable by the free ends of the leaf springs to normally retain the studs in the grooves, a wrench engaging head formed with said plug, projections formed with said body and presenting flat portions, and said springs having flat and rounded sides to conform to the shape of the plug flange and adjacent walls of the plug head respectively.

1,806,447. STEAM VALVE. WILLIAM W. CARSON, Jr., Knoxville, Tenn., assignor, by mesne assignments, to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Sept. 28, 1925. Serial No. 59,219. 9 Claims. (Cl. 251—134.)

1. In a steam valve for pressing machines, in combination, a housing, valve means movably mounted in the housing, a valve seat in the housing composed of material softer than said valve means whereby it will take the wear arising from the cooperation of said valve means and said valve seat, means separate from said valve seat for removably securing said seat in the housing, said seat being removable to permit replacement of said seat without displacing any other part of the valve



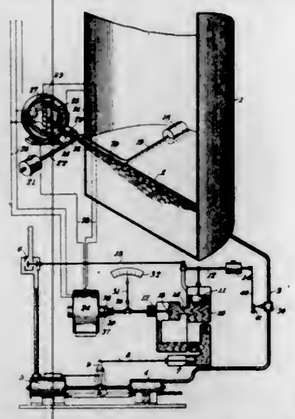
structure, means for opening the valve, and resilient means positioned exteriorly of the housing and engaging said last-named means for normally maintaining the valve in closed position, said resilient means being removable without removal of any other parts of the valve structure.

1,806,448. DISPLAY TOY. HENRY O. COSTELLO, Providence, R. I. Filed Oct. 25, 1929. Serial No. 402,368. 3 Claims. (Cl. 46—14.)



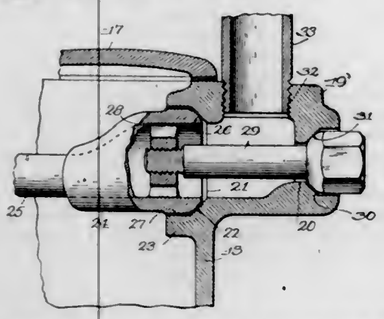
1. An article of manufacture comprising a disk having one side thereof divided into sectors, each of said sectors comprising a plurality of concentric colored bands, the corresponding band of one sector differing in color from that of the same band in one or more of the other sectors, an elastic cord member having one end secured to said disk for supporting the same in a horizontal plane, said cord being capable of being twisted whereby it will impart rotative movement to said disk and cause the colors making up each of the several concentric bands, to blend and produce the effect upon the eye of an observer of uniformly colored concentric bands, and a vane member having a limited portion of its surface engaging said disk and rotatably mounted upon said cord in frictional engagement therewith whereby upon rotation of said disk said vane member will rotate at a different speed than said disk to progressively conceal from view the colors of certain sectors whereby the concentric colored bands are given the appearance of changing color during the rotation of the disk.

1,806,449. FLOAT CONTROLLED PUMPING SYSTEM FOR OIL REFINERIES. LUIS DE FLOREZ, Pomfret, Conn. Substitute for appplication Serial No. 238,017, filed Dec. 6, 1927. This application filed Mar. 17, 1930. Serial No. 436,635. 3 Claims. (Cl. 103—18.)



1. In apparatus of the character disclosed, the combination with a liquid container in which it is desired to maintain a normal liquid level and a pump connected with said container and by which the liquid level in the container is governed, of means for maintaining said liquid level within close limits and for preserving the pump flow substantially continuous, smooth and as nearly even as possible, comprising a power governor for regulating the speed of the pump and having a controller by which operation of said power governor may be accurately determined, an electrical transmitter at the container, a shaft connected for operating said transmitter, a lever arm connected with said shaft and disposed within the container, a float member connected with said lever and by which rising and falling movements of liquid level in the container are imparted to the transmitter, a synchronously operating electrical receiver motor at the power governor and connected to operate the controller of said power governor and electrical connections from the transmitter at the container to the receiver at the power governor, whereby variations in liquid level in the container are instantly translated into accurate control of the power governor for effecting corrective regulation of the pump necessary to keep the liquid level and circulation substantially constant, irrespective of the distance of the power governor from the container.

1,806,450. CASING AND COIL ASSEMBLY FOR HEAT TRANSFER DEVICES. JOHN EDWARD ERCANBRACK, Chicago, Ill. Filed Nov. 8, 1929. Serial No. 405,588. 5 Claims. (Cl. 257—248.)



1. A casing and coil assembly in heat transfer devices comprising a casing provided with a pair of spaced hollow embossments having communication with the compartment within the casing, the casing side of the openings providing such communication being provided with a ground seat surrounded by an annular shoulder, a coil and fittings for the ends thereof, said batten provided with interior spider brackets and ground seats cooperating with the seats in said casing, and provided with cylindric portions entering said annular shoulders, said hollow embossments being bored and provided with ground seats opposite their points of communication with said casing, and bolts the heads whereof have seats co-operating with said last mentioned seats extending into co-operation with said spiders.

1,806,451. PROCESS FOR MOLDING ARTICLES. THEODORE J. FLACK, Brooksville, Fla. Filed Mar. 6, 1929. Serial No. 344,900. 1 Claim. (Cl. 22—190.)



The process of producing molded articles consisting of a base having an outstanding border and overlapping outstanding characters within the border, which process comprises arranging upon the upper face of a mold member of the form of the base and its outstanding border, core elements of the form of certain of the characters to be molded upon the base and superficially connecting said elements with the base, arranging the assemblage within a mold flask to form, in the sand in the flask, and effecting an impression of the mold member of the form of the base, and the core elements, removing the assemblage, separating the said character representing core elements from the face of the said mold member, moistening the sand in the flask, similarly arranging upon the face of the said mold member another core element of the form of another character to be molded upon the face of the base, utilizing the border of the base mold member in symmetrically positioning the last mentioned core element, and effecting a reimpression of the snid mold member and the last mentioned core element.

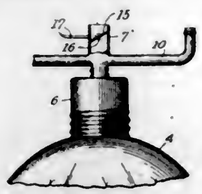
1,806,452. METHOD OF PRODUCING A BACKGROUND FOR MOVING PICTURES. FRED FULGORA, Pittsburgh, Pa. Filed Jan. 31, 1928. Serial No. 250,910. 1 Claim. (Cl. 88—24.)



The method of presenting a moving picture with a background, consisting in projecting with an ordinary moving picture machine a given picture substantially centrally of the screen, using a dissolving lantern slide projector at the same time for projecting different still pictures on said screen around the moving picture without overlapping the moving picture, and simultaneously using a second dissolving lantern for projecting a still picture around the second picture projected whereby the picture on the screen will consist of a moving picture and two projected still pictures.

1,806,453. VAPORIZING DEVICE FOR TREATING ASTHMA. JOSEPH D. GIBSON, Logan, W. Va. Filed Jan. 20, 1930. Serial No. 422,076. 1 Claim. (Cl. 128—198.)

In an inhaling device, a receptacle, a cap, means for detachably connecting the cap with the receptacle, a tubular member, means for detachably connecting the tubular member intermediate its length with the cap, a tube ex-



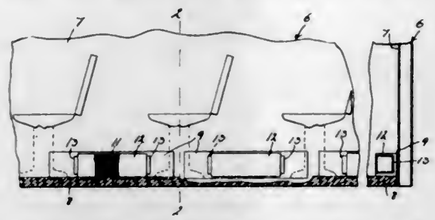
tending laterally from the tubular member in alinement with the cap, a butterfly valve carried in said tube, and means for controlling the position of the butterfly valve.

1,806,454. HOLDING SUPPORT FOR BABY SWINGS. ERIC O. GOUDEAU, Detroit, Mich. Filed Oct. 20, 1928. Serial No. 313,829. 1 Claim. (Cl. 248—43.)



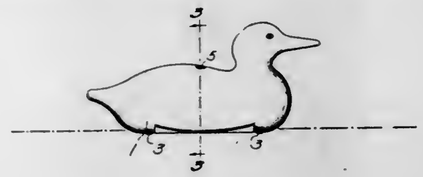
A tripod of the class described comprising a circular supporting block, a plurality of brackets each being provided with an intermediate arcuate portion conforming to the curvature of the block and secured circumferentially to the edge thereof, said brackets having their ends projected radially from the block and in spaced parallel relation to the projected ends of the adjoining bracket, pins connecting the spaced ends of each pair of brackets, legs having one end inserted between the spaced ends of each pair of the brackets and pivotally mounted on said pins and stop pins also connecting the spaced ends of each pair of brackets and engaging the inner edges of the legs to limit outward swinging movement of the free end thereof, said connecting pins and said stop pins combining to secure the ends of the brackets in uniformly spaced relation.

1,806,455. HEAT CONDUIT AND PROTECTOR THEREFOR. ANDREA GRAZIANI, Camden, N. J. Filed Aug. 27, 1930. Serial No. 478,031. 2 Claims. (Cl. 98—40.)



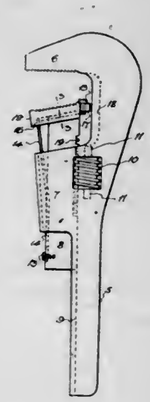
1. In a heat conduit and protector therefor, a panel for disposition across an opening leading from a compartment containing an electric heater, said panel having an opening therethrough, a conduit supported by said panel and having an open portion in communication with the opening in said panel, the ends of said conduit being reduced in size and being open for the exit of heated air, a protector of flexible material including covers to pocket the reduced end of the conduit and temporarily close the same, a connecting strip to which the covers are attached and pliable fastening devices secured to said covers and adapted to be wound about said covers when on the reduced ends of the conduit to hold said protector in place.

1,806,456. DECOY. CLAUDE C. HAIGLER, San Jose, Calif. Filed Aug. 12, 1929. Serial No. 385,175. 3 Claims. (Cl. 43—3.)



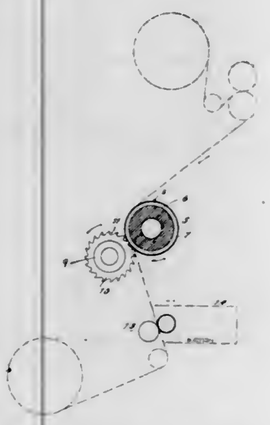
1. A decoy comprising two body sections, annular members hingedly connecting the sections at their lower meeting edges, said members serving for anchor-cord connections, a weight in each section, and a buoyant chamber in each section immediately adjacent the weight therein.

1,806,457. PIPE WRENCH. CHARLES HARTMAN, Waddington Channel, British Columbia, Canada. Filed Nov. 13, 1928. Serial No. 319,036. 3 Claims. (Cl. 81—170.)



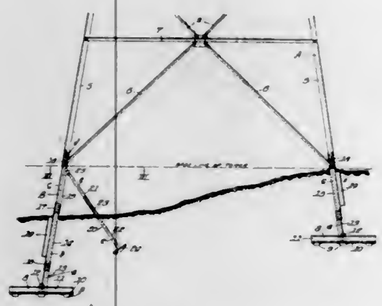
1. In a pipe wrench comprising a lever member having at its extremity a right angular upturned inwardly serrated jaw, a transverse aperture for the reception of a worm, and a longitudinal tubular aperture and slideway for the reception of a slidable rack adapted to engage said worm, the combination of a slidably movable serrated jaw member angularly disposed to and opposing the corresponding serrated portion of the upturned extremity of said lever member, a grooved slideway on the transverse end surface of said slidable rack adapted to engage said movable jaw member, spring means on said slidable rack tending to slide said movable jaw outwardly along said end grooved-slideway and against a removable stop on said movable jaw, all substantially as described herein.

1,806,458. MECHANISM FOR SLITTING FABRIC. ROBERT P. HAYDEN, New Brunswick, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed Apr. 18, 1929. Serial No. 356,081. 6 Claims. (Cl. 164—60.)



1. Mechanism for slitting bandage fabric, comprising, in combination, a platen roll having annular grooves each providing continuous cutting dies, and a circular cutter-carrying roll the periphery of each cutter being equipped with interrupted cutter elements each presenting twin cutting surfaces mounted to track the grooves for co-operation with the continuous cutting dies.

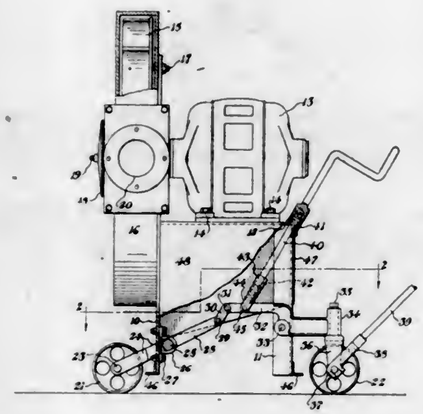
1,806,459. TOWER CONSTRUCTION. HAROLD O. HILL, Aspinwall, Pa., assignor to Riter-Conley Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1929. Serial No. 343,075. 5 Claims. (Cl. 189—21.)



5. The combination with a tower proper comprising a plurality of legs, diagonal brace members for the legs terminating in substantially the plane of the base of the tower, an adjustable anchoring extension at the lower end of one of said legs, and a ground brace extending from the tower, substantially at said base line and in reverse direction to the adjacent diagonal brace member.

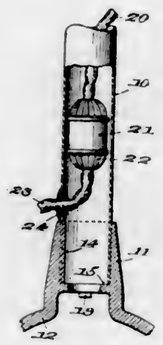
1,806,460. MOBILE BLOWER UNIT. ROBERT C. HOPKINS, Alliance, Ohio. Filed Jan. 28, 1929. Serial No. 333,637. 4 Claims. (Cl. 280—44.)

1. In a motor-blower unit, a support, a rocker shaft journaled upon the support, a pair of spaced rocker arms fixed to the end portions of the shaft, and a pair of rear wheels carried by said arms, a central rocker arm upon the rocker shaft, a lever fulcrumed upon the support, a front wheel carried by one end of the lever, a link



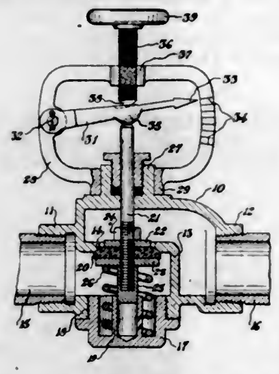
connecting the other end of the lever to the central rocker arm, and a screw operatively connected to said lever between its fulcrum and the link for raising the wheels to permit the support to rest upon the floor.

1,806,461. EQUIPMENT FOR ELECTRIC VACUUM CLEANERS AND THE LIKE. HARRY W. HOLMES, Rahway, N. J., assignor to The Regina Corporation, Rahway, N. J., a Corporation of New Jersey. Filed June 16, 1928. Serial No. 286,043. 3 Claims. (Cl. 247—13.)



1. An attachment for electrical apparatus, comprising a hollow operating handle, a receiving socket therefor, a key secured within the socket, a slot in the handle for cooperation with said key, and a cable concealed within the hollow handle and extending outwardly through said slot above the socket and key.

1,806,462. GAS VALVE. ROBERT C. HOPKINS, Alliance, Ohio. Filed May 31, 1929. Serial No. 367,252. 1 Claim. (Cl. 251—27.)



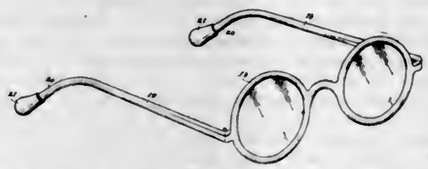
In combination with a valve casing having a seat thereon, a valve stem within the casing, and a valve for sealing against high pressures including a cork disk impregnated with paraffin upon the stem for engagement with the valve seat, and a metal disk fixed upon the stem on each side of the cork disk.

1,806,463. OIL AND GAS FURNACE. ROBERT C. HOPKINS, Alliance, Ohio. Filed Oct. 9, 1930. Serial No. 487,478. 4 Claims. (Cl. 263—43.)



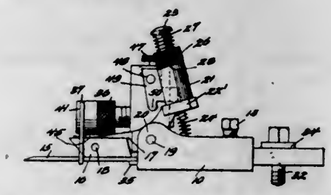
1. In furnace wall and heating chamber construction a plurality of partition walls spaced from the furnace walls to form hot-gas chambers, there being a burner port in the furnace walls communicating with each hot-gas chamber, the axes of the burner ports being offset from one another, there being a flame port in each partition wall communicating between the respective hot-gas chamber and the furnace heating chamber and located in alignment with the adjacent burner port, and there being a hot-gas port in each partition wall communicating between the respective hot-gas chamber and furnace heating chamber and located in alignment with the flame port of another hot-gas chamber.

1,806,464. SPECTACLE PROTECTOR. JOHN HOUSLEY, Elizabeth, N. J. Filed Oct. 2, 1928. Serial No. 309,717. 1 Claim. (Cl. 88—51.)



In a device of the character described the combination with the temple bars of ophthalmic mounting, of enlarged resilient head clamping members removably mounted on the free ends of said bars, each of said members comprising a substantially flat elongated body, one end of said body being rounded, the other end of said body terminating perpendicular to the axis of said body, said body having a bore extending from said perpendicular end and terminating short of said rounded end to slidingly and removably receive therein and surround the extremity of a temple bar, said body having one side formed with frictional projections positioned to engage the head of the person wearing the device.

1,806,465. SIDE REGISTER DEVICE. WILLIAM M. KELLY, Westfield, N. J., assignor to American Type Founders Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 5, 1929. Serial No. 352,822. 14 Claims. (Cl. 271—59.)



1. Sheet registering mechanism comprising, in combination, a bracket mounted to reciprocate in a path transverse to the direction of travel of the sheets, an arm pivoted to the bracket on an axis transverse to said path and having means to press the margins of the sheets against a surface on said bracket, said arm extending from the opposite side of its pivot from said means and having formed therewith an upwardly projecting barrel, a pin screwed in said barrel and projecting from the top thereof, a coiled compression spring acting upwardly against said pin, an adjusting collar on the projecting end of said pin slidable but non-rotatable with respect thereto, and a compression spring between the head of said pin and said collar.

1,806,466. BOOKBINDER. JOHN J. KERNAN, Baltimore, Md., assignor to American Bank Stationery Company, Baltimore, Md., a Corporation of Maryland. Filed Feb. 1, 1930. Serial No. 425,269. 14 Claims. (Cl. 281—25.)

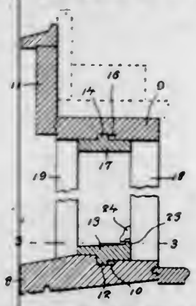


5. A permanent binding including a binding post provided with a head having a locking shoulder, a binding cover, a socket member disposed on the inner face of the cover and provided with means for attaching the socket to the cover, and means in the socket to engage the shoulder and lock permanently with the head upon insertion thereof into the socket.

1,806,467. REVERSIBLE CASEMENT FRAME. GEORGE M. KLEINKNECHT, Fort Lee, N. J. Filed Sept. 13, 1929. Serial No. 392,335. 1 Claim. (Cl. 20—11.)

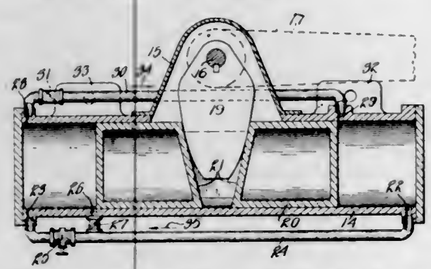
A reversible casement frame comprising a main sill having a groove, top and side jambs associated with the sill and having grooves therein of equal width with the width of the first named groove, an auxiliary sill located on the main sill, a tongue on the auxiliary sill and extending into the first mentioned groove and of a width less than the width of the first mentioned groove, stop strips associated with the top and side jambs, tongues on said strips and of corresponding width with the width of

the first mentioned tongues and extending into the second mentioned grooves, and sashes of different thicknesses



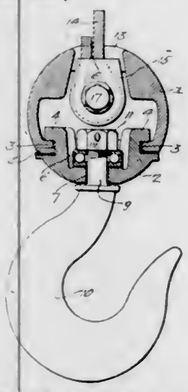
abutting the strips and auxiliary sill and by shifting the strips and auxiliary sill laterally the sashes may be reversed relative to each other.

1,806,468. SHOCK ABSORBER. ASHLEY G. KNIGHT, Jr., Kansas City, Mo. Filed July 2, 1929. Serial No. 375,546. 5 Claims. (Cl. 188—88.)



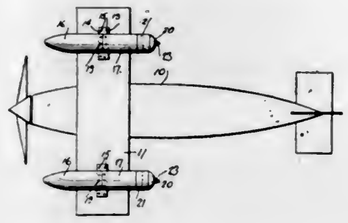
1. The combination with a vehicle of a shock absorbing device connected with the body of the vehicle and the axle thereof, the shock absorbing device having one way fluid passages connecting the ends thereof permitting fluid to flow in opposite directions to permit free movement of the body of the car relative to the axle in either direction, one of said fluid passages being further provided with means to check its return to intermediate position whereby shocks may be absorbed in both directions, substantially as set forth.

1,806,469. SWIVEL HOOK. CHARLES VERNON KOONS, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1930. Serial No. 444,855. 4 Claims. (Cl. 294—82.)



1. In a swivel hook, a housing comprising separable sections, and means for detachably securing said sections together, said housing having an aperture at the top for reception of a cable and another aperture at the bottom, a hook swiveled in the bottom aperture, and means located entirely within the housing for preventing retraction from the latter both of the cable and the hook, said means being detachable to permit said retraction and being accessible for detachment by separation of the housing sections.

1,806,470. GAS CONTAINER FOR AIRCRAFT. VICTOR KOPIKOWSKI, Philadelphia, Pa. Filed July 25, 1930. Serial No. 470,754. 2 Claims. (Cl. 244—5.)



2. The combination with an aeroplane having a pair of wings, of cradles each fixed to the upper surface of a respective wing adjacent its outer end, and thin metal gas containing shells mounted in said cradles and having smooth and unbroken exterior surfaces, each shell including a forward seamless portion formed from thin metal and closed at its forward end by an ogival point, a central cylindrical portion having its forward edge abutting the rear edge of the forward portion, a seam strap in the interior of the shell covering the said abutting edges, means flush with the exterior of said shell portions for securing the same together, a rear hemi-spherical closure having its forward edge abutting the rear edge of the cylindrical portion, a weld strap surrounding the abutting edges of the central and rear portions and rabbeted into said portions to lie flush with the exterior, and a filling valve at the rear end of the rear portion.

1,806,471. METHOD OF FILTERING AND APPARATUS THEREFOR. SIMON P. KRAMER, Cincinnati, Ohio. Filed Feb. 24, 1928. Serial No. 256,823. 2 Claims. (Cl. 210—205.)

1. The method of preparing a filtering diaphragm which comprises calcining magnesium oxide at 1300° C., mixing the calcined mass with a silicious material, and kiln firing the mixture at substantially 900° C., whereby to prepare a solid body but without effecting a chemical combination of the magnesium oxide and silicious material.

1,806,472. HAIR CURLING APPARATUS. PAUL KUNIN and ISAAC E. MCELROY, Minneapolis, Minn.; said McElroy assignor to said Kunin. Filed Aug. 23, 1928. Serial No. 301,546. 7 Claims. (Cl. 132—33.)

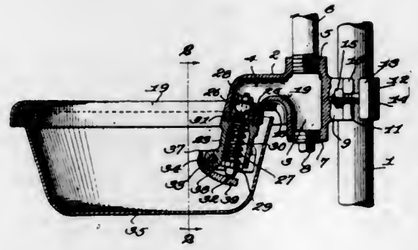
1. In apparatus for curling hair, a clamping shield comprising a pair of clamping sections having ends pivoted together, one of said sections having a slotted portion adapted to accommodate said other section when said sections are swung together, said slotted section having a pawl and said other section having a plurality of locking elements engageable by said pawl to secure said sections together about a lock of hair in a variety of different positions, one of said sections being adapted to carry a curling rod, both of said sections having inner edges extending substantially concentric with said rod for accommodation of a lock of hair and one of said sections having an upstanding flange disposed concentrically of said rod and

spaced therefrom when said sections are secured together to prevent strands of hair from falling flat against the shield and a winding device comprising a spiral tongue



rotatably mounted on said rod and adapted to cooperate with said upstanding flange to engage and wrap the hair about said rod when rotated.

1,806,473. WATERING BOWL. RUDOLPH J. LANGER, Monticello, Iowa, assignor to Franklin Equipment Company, Monticello, Iowa, a Corporation. Filed May 25, 1929. Serial No. 365,972. 5 Claims. (Cl. 119—75.)

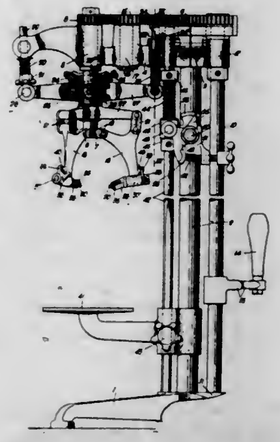


1. A watering device of the character described including a support, a casting connected to the support, a valve housing connected to the casting, a valve operable in the housing, a bowl pivotally connected to the valve housing and adapted to operate the valve, and an inverted U-shaped ring secured to the casting and extending around the upper edge of the bowl with the edge of the bowl within the ring.

1,806,474. PROCESS FOR SIZING PAPER. ERNEST LECOCQ, Brussels, Belgium. Filed May 13, 1929. Serial No. 362,853, and in Belgium June 8, 1928. 9 Claims. (Cl. 92—21.)

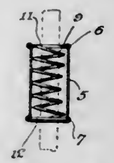
1. In a process for sizing paper by means of an agglutinant constituting a resin soap, treating said resin soap and the paper pulp with bisulfate of an alkaline metal.

1,806,475. MACHINE FOR TRIMMING THE CAPSULES OR SEALING COVERS OF BOTTLES, JARS, AND LIKE CONTAINERS. JOHN EDWARD LEE, Leicester, England, assignor of two-thirds to Alfred Foster Cholerton, and Horace Charles Sydney Tyler, Leicester, England. Filed Nov. 10, 1928, Serial No. 318,349, and in Great Britain Mar. 24, 1928. 16 Claims. (Cl. 164—60.)



1. A machine for trimming a capsule on a bottle, jar or like receptacle, which includes a cutting device adapted to make a circumferential cut through the capsule about the neck of the receptacle, a support for the receptacle, means for effecting relative rotation between the cutting device and the receptacle, and means for effecting relative movement between the cutting device and the receptacle in an axial direction for cutting transversely through the surplus material which is to be removed preliminary to the circumferential cutting.

1,806,476. PENCIL HOLDER. ZILPHA LINDERMAN, Sebastopol, Calif. Filed Feb. 3, 1930. Serial No. 425,598. 2 Claims. (Cl. 24—12.)

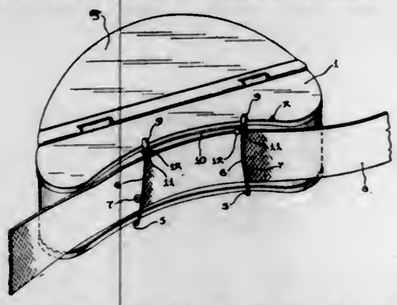


2. In a pencil holder, a tubular member, a spring positioned within said tubular member, said spring having its top and bottom convolutions secured to the opposite ends of said tubular member and having its center portion offset with respect to the axis of the tubular member, and fastening means carried by said tubular member.

1,806,477. ATTACHING DEVICE FOR BAIT BOXES. THOMAS LLOYD and THOMAS W. LLOYD, Ashley, Pa., assignors of one-third to Willard W. Lloyd, Ashley, Pa. Filed July 8, 1929. Serial No. 376,619. 4 Claims. (Cl. 224—5.)

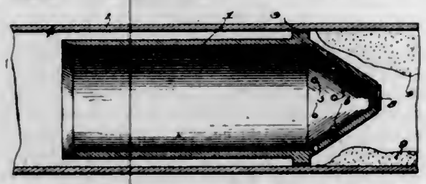
1. An article attaching device, comprising a body portion formed with relatively spaced spring fingers adapted to be disposed substantially transversely of a portion of the article and having loops formed in their intermediate

portions, and an arcuate keeper body secured to a portion of said article in proximity to the free extremities of said spring fingers having keeper members formed upon the opposite extremities thereof and adapted to receive the ex-



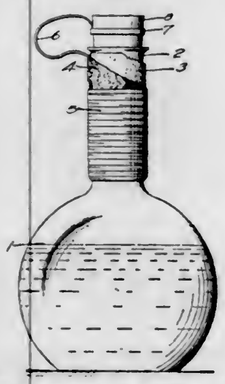
tremities of said spring fingers therein, the length of said keeper body being slightly less than the distance between said spring fingers prior to their engagement in the keeper members.

1,806,478. PIPE CLEANER. FRANK G. LONG, Rockcastle, Ala. Filed Jan. 7, 1929. Serial No. 330,891. 2 Claims. (Cl. 15—104.06.)



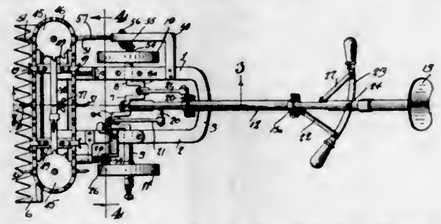
1. A pipe cleaning tool of tubular form and adapted to be propelled through the pipe by the pressure of the fluid in the pipe, said tool being of less external diameter than the interior of the pipe line to be cleaned, said tool comprising a tubular member open at its rear end and spaced at its outer sides from the wall of the pipe line and having a nose at its front end of substantially reduced diameter and conical form having a plurality of series of spray jet bores extending therethrough at different degrees of angularity to the axis of the tool, said bores being arranged in staggered relation.

1,806,479. HEAT INSULATING HAND GRIP. GEORGE O. LORY, Los Angeles, Calif., assignor to O. J. Lafayette Manufacturing Company, a Corporation of California. Filed June 25, 1930. Serial No. 463,690. 2 Claims. (Cl. 215—1.)



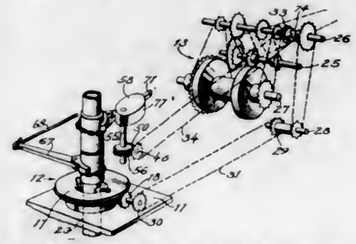
1. An article of manufacture comprising a hot liquid dispensing ceramic container, a hand grip surrounding the same and consisting of a layer of cork in close contact with the ceramic surface, asbestos arranged on the layer of cork, and a layer of binding material around said cork and asbestos.

1,806,480. MOWING MACHINE. JOZSEF MANKÓ, Ozd, Hungary, assignor of one-half to Gabor Kovacs, Warrensville, Ohio. Filed Aug. 22, 1930. Serial No. 477,109. 8 Claims. (Cl. 56—186.)



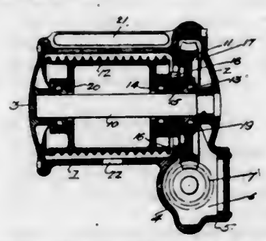
1. In a mowing machine of the character described, a frame, ground wheels, a forwardly positioned horizontal cutter operatively connected with a ground wheel, a horizontally moving endless conveyor above the cutter and operatively connected with the other ground wheel, the operative connections including a crank shaft journalled on the frame and on which the wheels are mounted, and manually operated means for rotating the crank shaft.

1,806,481. TONG OPERATING MECHANISM. ARTHUR E. MARTOIS, Compton, Calif. Filed Nov. 12, 1928. Serial No. 318,716. 2 Claims. (Cl. 255—35.)



1. In combination: a pipe having a joint; means for holding one part of said pipe from rotation; a rotary machine through which said pipe extends; a wrench attached to the other part of said pipe, said wrench having a handle; a frame located adjacent to said pipe and supported by said rotary machine; a shaft carried by said frame; a cam on said shaft, said cam being arranged to directly engage said handle of said wrench and to turn same; and worm gear means for turning said shaft and said cam.

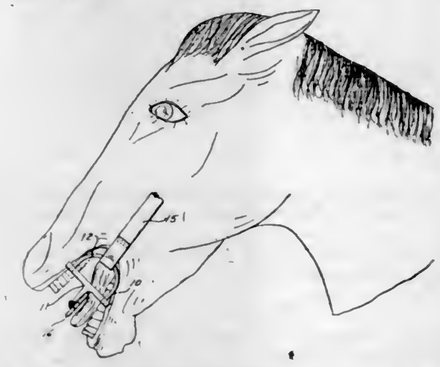
1,806,482. DAVIT WINCH. JAMES AUGUSTINE MELLON, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 5, 1928. Serial No. 304,015. 2 Claims. (Cl. 254—186.)



1. In a winch, the combination with a housing, of a relatively fixed shaft extending longitudinally through

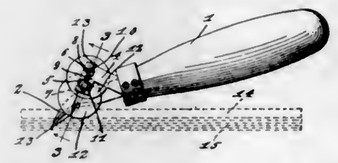
said housing, a drum journaled on said shaft, a worm wheel also journaled on the shaft and operatively connected with the drum, a flange in the interior of the housing intermediate the drum and said wheel, a stuffing box affording a seal between the worm wheel and the shaft, a packing member sealing the space between the worm wheel and said flange, a rotary shaft journaled in the housing and projecting therethrough, and a worm on said shaft meshing with said worm wheel.

1,806,483. HORSE BIT. VICTOR MEYER, Brooklyn, N. Y. Filed Nov. 23, 1929. Serial No. 409,313. 2 Claims. (Cl. 54—8.)



1. In combination with an animal bit having a mouthpiece embodying two loosely jointed sections, a tongue plate, and means for loosely connecting said tongue plate to said mouthpiece at the joint between said bit sections, said means including an arched bracket secured to said plate for the passage of said mouthpiece between said bracket and said plate.

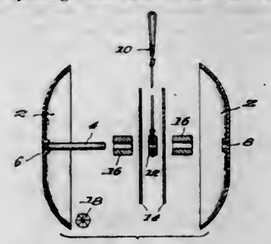
1,806,484. KNIFE FOR CUTTING SHOES. OSCAR MICHAUD, Salem, Mass. Filed May 2, 1930. Serial No. 449,288. 2 Claims. (Cl. 164—83.)



1. A knife for cutting the uppers and linings of shoes, in which a pattern of a determined size is arranged over the strips to be cut, of a frame secured to the ferrule of a knife handle and comprising upwardly inclined sides that merge into rightangular downwardly extended ends, upper and lower removable studs passed through the outer ends of the frame, slotted gage discs supported by the studs, said discs being adapted to be selectively arranged on the lower stud or receiving both studs therethrough, and the discs when on the lower stud being contacted by the upper stud.

1,806,485. MUSICAL TOY. ALFONSO FLORES MIRAFUENTES, Guadalupe, Mexico. Filed May 17, 1930. Serial No. 453,333. 4 Claims. (Cl. 46—14.)

4. In a musical toy, a pair of dished members of resonant material, a pin rigidly secured at one end to one of said dished members and threadedly and removably secured at the other end to the other dished member, the concave faces of said dished members facing and spaced from each other, a pair of parallel discs mounted on said pin between the dished members, a pair of drums mounted on said pin spacing the discs from the dished members,



a drum mounted on said pin between the parallel discs, a string secured to said drum between the parallel discs and passing between said dished members to the outside and a bead entrapped between said dished members.

1,806,486. HAIR CUTTING SCISSORS. ALFONSO FLORES MIRAFUENTES, Guadalupe, Mexico. Filed June 5, 1930. Serial No. 459,269. 3 Claims. (Cl. 30—13.)



1. A scissors comprising crossed blades pivotally connected, handles at one end of the blades for grasping the scissors, a removable comb secured to the outer surface of one of the blades, the teeth of said comb extending beyond the cutting edge of the blade, and a removable knob handle projecting from the inner face of said blade and near the end thereof, said handle projecting substantially at right angles to said inner face of the blade.

1,806,487. CORD ADJUSTER FOR ELECTRIC IRONS. ADOLF MORAWSKI, Springfield, Mass. Filed Oct. 31, 1929. Serial No. 403,855. 1 Claim. (Cl. 24—129.)

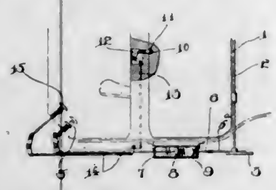


An attachment for the conducting cord of an electric iron comprising a spiral spring, a leather strap slotted at one end to receive the other end to provide a slide loop for the cord and the end of the strap threaded through the loop being engaged with one end of the spring.

1,806,488. DOOR OPENING AND SHUTTING DEVICE FOR AUTOMOBILES. KIKUBO NAGAO, Kamisonocho, Nishiku, Nagoya, Japan. Filed Dec. 14, 1928, Serial No. 326,104, and in Japan Jan. 26, 1928. 3 Claims. (Cl. 268—3.)

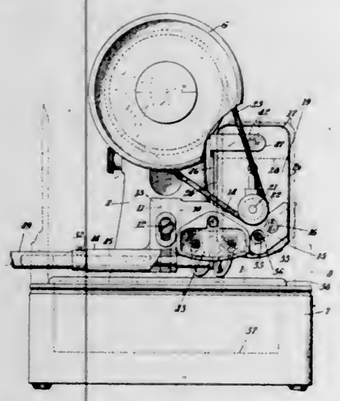
1. An automobile having front and rear seats and a rear hinged door, a bolt for locking the door, said bolt

being mounted in the automobile body so as not to be accessible to an occupant of the rear seat, means for operating the bolt by the operator on the front seat, a toothed sector on the pivot of the door, a second toothed sector adjacent the first sector and meshing therewith, a pedal adjacent the front seat, a hinged rod connected with the said



pedal and eccentrically connected with the second sector, a spring on the rod, and means whereby the spring is put under compression in closing the door and held compressed while the door is closed, thereby permitting the door to be opened by the spring when the locking bolt is retracted.

1,806,489. ELECTRIC SEWING MACHINE. JAMES M. NAUL, Plainfield, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed July 12, 1928. Serial No. 292,166. 9 Claims. (Cl. 172—179.)



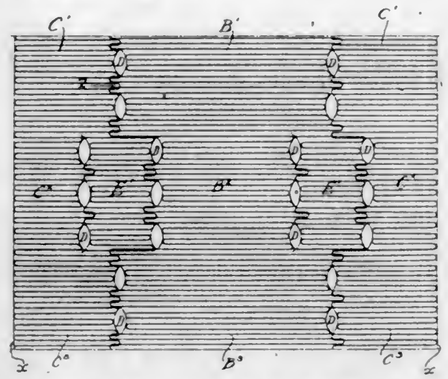
1. A bracket, motor and motor-controller elements mounted on said bracket, a rock-shaft carried by said bracket independently of said motor and motor-controller elements and connected to operate said motor-controller element, and manually controlled means for operating said rock-shaft.

1,806,490. ROTARY COOLING DRUM. HERMANN GUSTAV ROBERT NAUMANN, Nijmegen, Netherlands. Filed Feb. 21, 1929, Serial No. 341,816, and in the Netherlands Nov. 6, 1928. 5 Claims. (Cl. 257—95.)



1. Method for cooling fatty substances in liquid condition comprising the steps that the liquid fats are spread in a thin layer in a substantially liquefied state over a cooling surface, that a normally gaseous but liquefied cooling means is passed along the inner side of the cooling-surface.

1,806,491. METHOD OF FORMING OPEN-WORK DESIGNS IN STOCKINGS. ERNST OSCAR NEBEL, Philadelphia, Pa. Filed June 30, 1928. Serial No. 289,465. 7 Claims. (Cl. 66—180.)



1. A method of producing open-work designs in knitted fabric, comprising the knitting of a fabric in a plurality of separate independent sections each section having selvage edges, and interknitting the selvage edges of adjacent sections at predetermined intervals.

1,806,492. PROCESS OF KNITTING GARTER EXTENSIONS FOR HOSIERY. PAUL R. NESTLER, Green Lane, Pa., assignor of one-half to Earl L. Kotzen, Reading, Pa. Filed May 8, 1930. Serial No. 450,854. 1 Claim. (Cl. 66—173.)

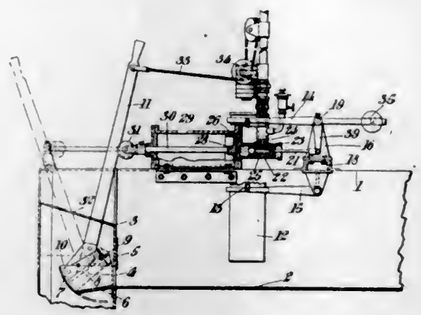


A method of forming garter tabs on the top of a stocking as integral parts of the stocking which consists of producing a plurality of independent strips of fabric on relatively spaced sets of needles of a knitting machine, transferring the first knit course of stitches of each independent strip back onto the said needles, moving the folded tabs thus produced into non-knitting positions on the needles, subsequently knitting a portion of the welt of the stocking on a full complement of needles including said spaced sets thereof, then moving the folded tabs back into knitting position on the needles, and completing the knitting of the stocking welt on said full complement of needles to effect interknitting of the tabs therewith.

1,806,493. COAL WASHER BOX. BERTRAM NORTON, Claverley, England, assignor to Nortons (Tividale) Limited, Tipton, England, a British Company. Filed Mar. 29, 1928, Serial No. 265,734, and in Great Britain Apr. 26, 1927. 7 Claims. (Cl. 209—496.)

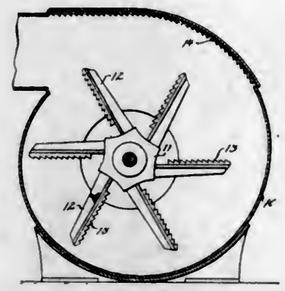
1. A coal washer box having an end discharge aperture, a shelf projecting from the lower edge of the aperture and

away from the box, a gate supported on and swingable about an axis outside the box and spaced from the outer edge of the shelf, mechanism responsive to variations in the



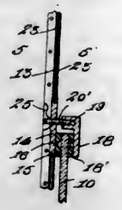
shale level in the box to swing the gate to a position below the upper surface level of the shelf and to a position above said shelf, the gate being shaped to maintain substantial contact with the outer edge of the shelf in all positions.

1,806,494. PROTECTIVE LINING. JAMES D. O'BRIEN, Brooklyn, N. Y. Filed Feb. 23, 1928. Serial No. 256,306. 3 Claims. (Cl. 302—37.)



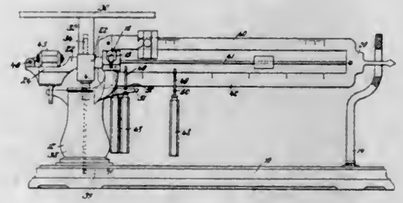
1. An apparatus including a member having a surface subject to wear by the abrasive action of comminuted material impinged thereagainst, said member having contiguous substantially V-shaped parallel grooves in said surface for producing a protective covering consisting of aggregations of said material collected in said grooves.

1,806,495. ROLLING WINDOW SCREEN FOR AUTOMOBILES. WILBUR E. PARKER, Everett, Mass. Filed June 28, 1929. Serial No. 374,454. 2 Claims. (Cl. 292—256.)



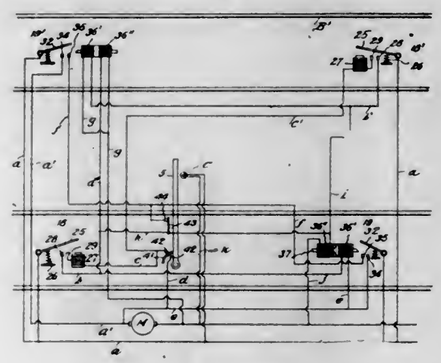
1. In a device of the class described, means for connecting a screen with a window, these means including a pair of clamping elements, one of which is offset laterally toward the other and is provided with a socket portion, an adjustable device entering the socket and passing thru said other clamping element, the latter being slotted for an edge portion of the screen, a cam mounted on the adjustable device and positioned to bear on the clamping element opposite that having the socket, and a plurality of devices on the approaching face portions of the clamping elements and formed with cups from which air is forced under pressure of the cam.

1,806,496. WEIGHING SCALE. ALVARO PEREIRA, New York, N. Y. Filed July 26, 1929. Serial No. 381,255. 5 Claims. (Cl. 265—49.)



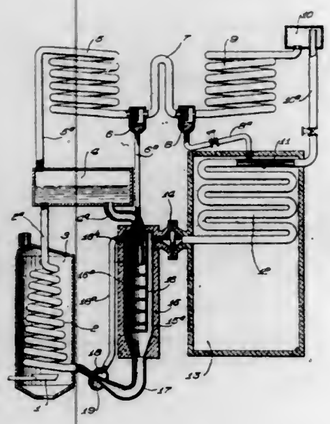
1. A weighing scale having a beam and fulcrum, a weight adapted to be moved along said beam, said weight being non-removable from said beam, and means to support said weight off the beam while it is not in use.

1,806,497. AUTOMATIC CROSSING GATE. GABRIEL POLAK, Forest City, Pa.; Helen Polak, administratrix of said Gabriel Polak, deceased, assignor of thirty-five one-hundredths to John Farkas. Filed Sept. 17, 1930. Serial No. 482,620. 2 Claims. (Cl. 246—127.)



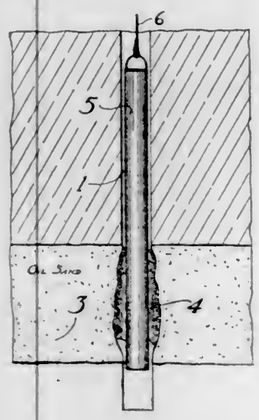
1. The combination with a double track and its crossing, gates for controlling the crossing, a shaft for operating both gates, a motor, means for connecting the motor with the shaft to cause the shaft to lower the gates at one operation of the motor and to raise the gates in another operation of the motor, a circuit for the motor, means operated by a train approaching the crossing on either track for closing the circuit of the motor, means for breaking the circuit when the gates are lowered, train operated means on each track beyond the crossing for closing the circuit to the motor to raise the gates, means for breaking the circuit when the gates are raised and means for preventing the gates being raised by a train on one track when a train on the other track is approaching the crossing.

1,806,498. REFRIGERATING MEANS AND METHOD. BO FOLKE RANDEL, San Diego, Calif., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed May 11, 1927. Serial No. 190,604. 15 Claims. (Cl. 62—119.5.)



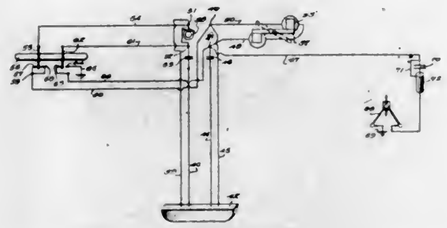
5. The herein described method of refrigeration, consisting in producing a final high pressure in gas by progressive steps of removing gases from a mixture by condensing, thus accumulating all the partial pressures in the remaining gas.

1,806,499. METHOD OF FACILITATING FLOW FROM WELLS. LEO RANNEY, New York, N. Y., and CHARLES O. FAIRBANK, Petrolia, Ontario, Canada, assignors of one-half to Standard Oil Development Company, a Corporation of Delaware. Filed July 21, 1928. Serial No. 294,569. 13 Claims. (Cl. 166—21.)



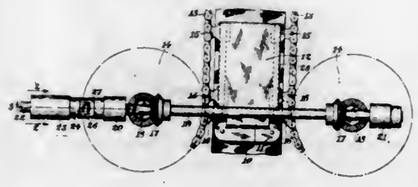
1. In the chemical treatment of wells for facilitating flow therefrom, the improvement which comprises charging into the well an acid and a substance evolving heat and liberating a hydrocarbon gas upon reaction with the acid.

1,806,500. TRAIN CONTROL SYSTEM. PHILIP X. RICE, Danville, Ill., assignor to The Miller Train Control Corporation, Staunton, Va., a Corporation of Virginia. Filed May 3, 1926. Serial No. 106,478. 62 Claims. (Cl. 246—6.3.)



1. In a train control system, a car-carried receiver having a plurality of magnetic paths normally of unequal reluctance, a normally energized primary winding on the receiver urging flux through said paths, a secondary winding included in both of said magnetic paths, a control device in circuit with said secondary winding, and trackway means tending to change the relation of the reluctances of said paths to at least momentarily reduce said flux to substantially zero through said secondary winding.

1,806,501. CONVEYER FOR PACKAGING MACHINES. ALFRED GERMAN ROSE, Gainsborough, England, assignor of one-half to Rose Brothers (Gainsborough) Limited, Gainsborough, England, a British Company. Filed Nov. 11, 1929, Serial No. 406,464, and in Great Britain Nov. 21, 1928. 6 Claims. (Cl. 198—110.)

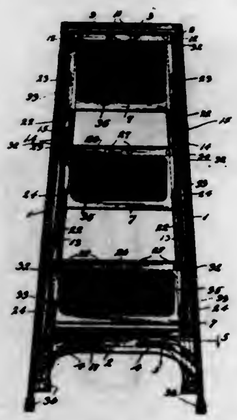


1. The combination of a conveyer of the endless track type having one lap in a horizontal plane, means on said conveyer to engage the articles to be transported, and transfer mechanism comprising two endless bands provided with stripping fingers and located on opposite sides respectively of the conveyer with one lap of each band parallel to the aforesaid lap of the conveyer, and driving means for the stripping fingers, comprising a device for converting rotational movement at constant angular velocity into rotational movement at fluctuating angular velocity, operable about the period when an article approaches the end of the conveyer lap to move the stripping fingers into engagement with the rear end of the article at a linear speed which is substantially the same as that of the conveyer and subsequently ahead of the conveyer at an increased linear speed.

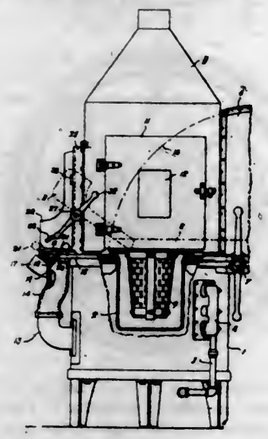
1,806,502. LADDER. HEYMAN ROSENBERG, New York, N. Y. Filed Dec. 31, 1928. Serial No. 329,479. 11 Claims. (Cl. 228—29.)

1. A ladder comprising side bars each consisting of a shape formed up from sheet metal, ladder treads pivoted

to said bars, a brace bar pivoted to one of the side bars to swing free of the treads to and from a position to support one of the treads against pivotal movement, and means for suspending the other treads from the tread supported by the brace.



1,806,503. APPARATUS FOR TREATING METAL WORK. HEYMAN ROSENBERG, New York, N. Y. Filed July 23, 1929. Serial No. 380,350. 7 Claims. (Cl. 263—14.)



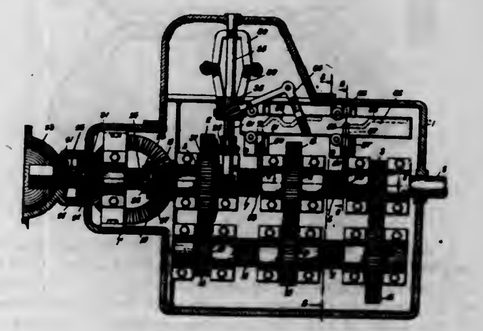
1. In apparatus for molten salts hardening of metal work, the combination, with a furnace and a container for salt located to be heated thereby, of a movably mounted container for work located in the path of discharge of heated products from the same furnace, the container being adapted to be moved from the heating position to a discharging position for directing the work from the container into the salt.

1,806,504. CURTAIN BRACKET. KAROL P. RYBAK, Taylor, Pa. Filed May 1, 1930. Serial No. 448,953. 1 Claim. (Cl. 156—23.)



In a device of the kind described, a body, clamping means carried by the body for securing the body to a fixed object, a channel member carried by the body, a curtain rod bracket carrying plate slidably engaged in said channel member and a spring pressed latch lever pivoted to the body member and provided with a latch lug entering the channel of the channel member, said plate having a lug receiving notch in which said lug engages to hold the plate immovable with respect to said channel member.

1,806,505. TRANSMISSION. AUGUST M. SAARI, Watton, Mich. Filed Aug. 8, 1930. Serial No. 473,978. 4 Claims. (Cl. 74—97.)



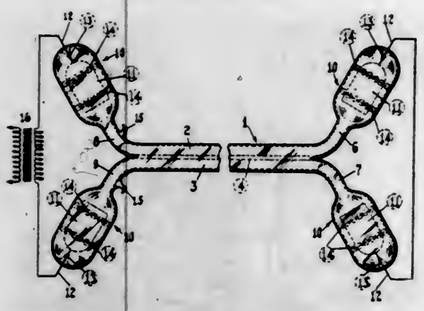
1. Transmission means comprising a driven shaft, a second shaft in alignment therewith, a spiral spring on the adjacent ends of the shaft, a second pair of aligned shafts parallel to the first shafts, a pair of gears connecting each shaft of one pair with a shaft of the other pair, a spiral spring connecting the second pair of shafts together, each spring acting to transmit the movement of a shaft of one pair to the other shaft of the pair and means for holding one of the springs stationary when desired, so as to prevent said spring from transmitting the movement of one shaft to the opposing shaft.

1,806,506. NUT LOCK. WILLIAM G. SAVIDGE, Sunbury, Pa. Filed Nov. 17, 1927. Serial No. 233,795. 1 Claim. (Cl. 151—19.)



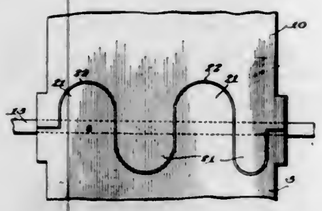
A nut lock comprising a base-nut having at one end an internally threaded frustoconical projection of smaller diameter at its base than the body of the nut and of substantial length, said projection divided radially into a circular series of fingers tapering from the body of the nut to their outer ends, a lock ring having a tapering bore large enough in diameter at one end to afford clearance between said ring and said projection in any locking position of the ring and smaller in diameter at and near the other end than the diameter of the outer end of said projection, whereby when said ring is forced on to said fingers its inner surface will bear upon the outer ends only of the fingers in all locking positions, and a jamb nut adapted to engage the outer face of the ring to force the ring on to the fingers.

1,806,507. DUPLEX VACUUM TUBE LIGHT. ROBERT C. SMALLEY, Arlington, N. J., assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed May 1, 1926. Serial No. 105,892. 6 Claims. (Cl. 176—122.)



1. A duplex vacuum tube comprising two elongated paths enclosed by common internal and external walls, each of said paths terminating in electrode chambers, the walls of the electrode chambers of each path being independent of the walls of the corresponding electrode chambers of the other path.

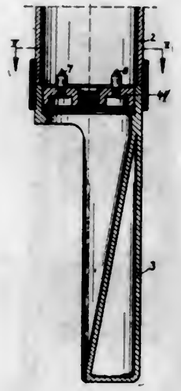
1,806,508. SHIP CONSTRUCTION. RICHARD F. SMITH, Charleston, S. C., assignor, by direct and mesne assignments, of one-fourth to Raymond D. Sullivan, Savannah, Ga., and one-half to Charleston Dry Dock and Machine Company, Charleston, S. C., a Corporation of Delaware. Filed July 20, 1929. Serial No. 379,819. 2 Claims. (Cl. 114—79.)



1. In a ship construction, a supporting beam, plates abutted at a joint line approximately centered along one edge of the beam, said plates having interfitting portions extending in alternating directions and beyond the sides of the beam, and a weld along said interfitting portions and the joint line.

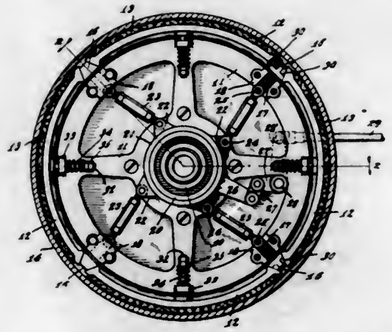
1,806,509. METHOD OF ADJUSTING WELL HOLES. ALPHONS GERARD HUBERT STRAATMAN, The Hague, Netherlands, assignor to Naamlooze Venootschap De Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed Aug. 9, 1930, Serial No. 474,260, and in the Netherlands June 10, 1929. 3 Claims. (Cl. 255—1.)

1. Process for orientating a whipstock in a slanting bore hole to be deflected into a vertical direction, which comprises inserting in the bore hole a series of tubes provided at its lower end with a whipstock, recording the position of the plane of symmetry of the whipstock with regard to the deviation plane of the bore hole by



means of a clinometer device and shifting the position of the whipstock by displacing its tubes by the desired angle in accordance with the record obtained.

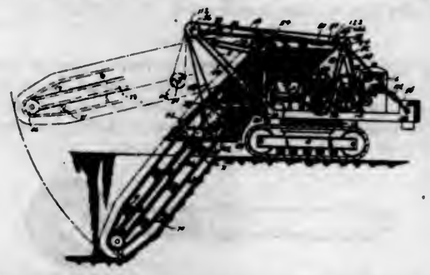
1,806,510. BRAKE. JOHN M. VAWTER, Indianapolis, Ind., assignor to Shadberg Company, Indianapolis, Ind., a Corporation of Indiana. Filed May 5, 1928. Serial No. 275,286. 16 Claims. (Cl. 188—78.)



1. A brake, comprising in combination with a brake drum, a stationary member, a plurality of segmental brake shoes located inside of said brake drum and having inclined end faces, brake-actuating members, guiding means carried by said stationary member for supporting said brake-actuating members for radial sliding movement, each of said brake-actuating members having oppositely inclined working faces arranged to engage respectively the inclined end faces of two adjacent brake shoes, each of said brake shoes being provided at each end with lugs, said brake-actuating members being provided with recesses for the reception of said lugs, a collar rotatably supported on said stationary member within said brake drum, inclined links respectively connecting said brake-actuating members with said collar, and means for rotating said collar to produce inward or outward movement of said brake-actuating members.

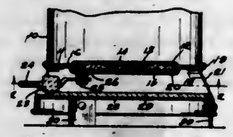
1,806,511. CONVERTIBLE EXCAVATING ATTACHMENT. GEORGE A. VAUGHN, Newton, Iowa, assignor to The Parsons Company, Newton, Iowa, a Corporation of Iowa. Filed Oct. 19, 1929. Serial No. 400,825. 5 Claims. (Cl. 37—90.)

1. In a structure of the class described, the combination of a traction element having a frame and a power plant on the frame, with an excavating attachment having side frame elements detachably pivoted to said first frame at its rear part, longitudinally adjustable rigid



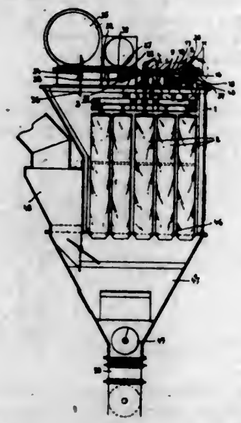
braces connecting the upper parts of the side frame elements with the first frame and an excavating mechanism pivotally carried on said attachment.

1,806,512. ELECTRIC HEATING APPARATUS. EDWIN L. WIEGAND, Pittsburgh, Pa., assignor to Edwin L. Wiegand Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,283. 2 Claims. (Cl. 219—44.)



1. Electrically heated apparatus comprising an element to be heated, an electric resistance heating unit comprising an electric resistance wire submerged in a mass of compacted electrically insulating material, said mass having one face naked and the other face covered by a metallic reinforcement, a second element adjacent to said first element, said first element and second element defining between them a substantially closed recess and said resistance unit located in said recess with its naked face presented to said first element and said metallic reinforcement presented to said second element.

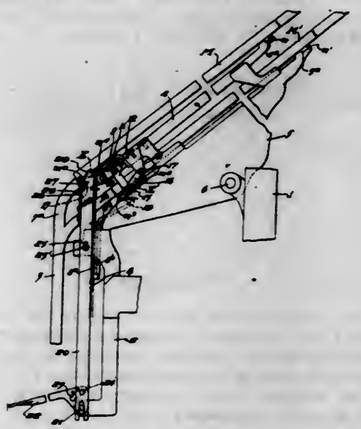
1,806,513. FILTER FOR SEPARATING DUST FROM AIR OR GAS. EDUARD WILHELM VON WALDENBURG STRAUS-SCHARINA, Lubeck, Germany. Filed July 22, 1930, Serial No. 469,801, and in Germany May 28, 1929. 3 Claims. (Cl. 183—54.)



1. A filtering apparatus for air or the like comprising a chamber having an inlet for supplying dust-laden air,

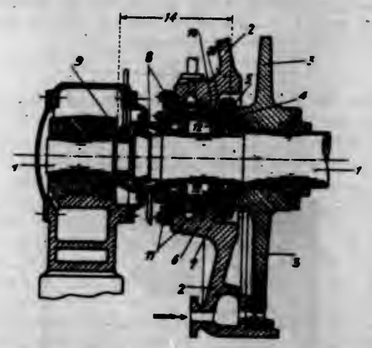
filtering members in the chamber, an outlet passage, an inlet passage for cleansing air, valves for said passages, automatic means for actuating said valves to open either passage and simultaneously to close the other approximately at the same time, and automatic means independent of the valve-actuating means for vibrating the filter members continually while the apparatus is in operation.

1,806,514. TYPOGRAPHICAL MACHINE. LE ROY W. WILLIS, Brooklyn, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 3, 1929, Serial No. 411,325, and in Germany Jan. 9, 1929. 7 Claims. (Cl. 199—19.)



1. In a typographical machine having means for individually supporting a plurality of escapement-carrying matrix magazines in substantially fixed positions therein, the escapement-carrying ends of the magazines being movable relatively to one another, and keyboard operated members for actuating the escapements of the plurality of magazines, means for moving the escapement carrying end of one magazine in a direction to remove its escapements from the range of operation of the actuating members while the escapement-carrying end of another of the magazines is moved in an opposite direction to position its escapement in cooperative relation with said actuating members.

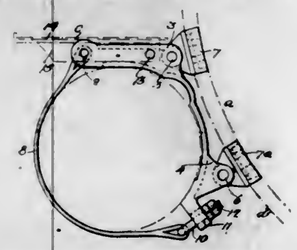
1,806,515. STUFFING BOX FOR ROTATING SHAFTS. HEINRICH ZOELLY, Zurich, Switzerland. Filed Apr. 2, 1928, Serial No. 266,620, and in Switzerland Apr. 9, 1927. 4 Claims. (Cl. 286—10.)



1. A stuffing box for rotatable shafts, comprising in combination, a stuffing box casing, a packing member rotatable with the shaft and partaking in any axial displacement thereof and provided with at least one packing

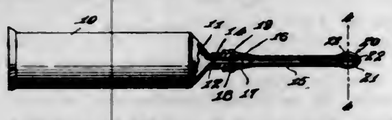
surface, and a non-rotatable packing member in operative connection with the shaft to follow the axial movements of the latter and provided with at least one packing surface cooperating with the packing surface of the rotatable packing member to form at least one throttling gap disposed substantially at right angles to the shaft, said non-rotatable packing member comprising a box-like portion which seats in a bore of said stuffing box casing, the diameter of which bore is less than the outermost diameter and greater than the innermost diameter of the cooperating packing surfaces of the two packing members.

1,806,516. DRUM SUPPORT FOR LOCOMOTIVES. WILLIAM ANDREW BARDSLEY, Oaklyn, N. J. Filed June 1, 1928. Serial No. 282,233. 2 Claims. (Cl. 248—20.)



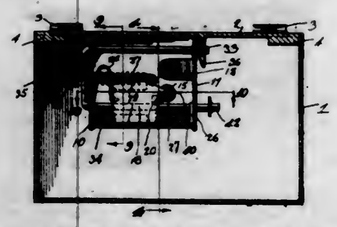
1. The combination in a drum support for locomotives and the like, of a support having two bearing points for a drum; means for attaching the drum to the support, said support having two lugs spaced apart; and blocks pivotally mounted on the support, said blocks being arranged so as to be attached to the boiler.

1,806,517. FOUNTAIN APPLICATOR. EMMA L. BELLOWS, New York, N. Y. Filed Nov. 29, 1929. Serial No. 410,595. 1 Claim. (Cl. 128—232.)



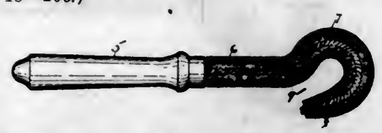
A catheter of tubular formation having an outwardly flared extremity, a coupling for the catheter being shaped for accommodation within the flared extremity of the catheter, the flared extremity being annularly grooved upon the inner surface thereof, a bead extending circumferentially of the coupling about the inclined wall thereof for rotary connection within said groove, the opposed end of the catheter being successively enlarged and reduced closing the longitudinal bore thereof, and the large and reduced portions being longitudinally slotted adjacent the points of connection therefor to facilitate ejection of a medicament therethrough.

1,806,518. BOX LOCK. JOSEPH S. BRYLKA, Du Bois, Pa. Filed Mar. 20, 1930. Serial No. 437,453. 16 Claims. (Cl. 70—14.)



1. In a lock box having a box body and hinged cover, lock mechanism for the cover comprising a key operated sliding bolt on the body and a keeper on the cover, a hasp on the cover and a restraining keeper shackle on the body, and said keeper shackle for said hasp being shiftable to expose a key opening for access to the sliding bolt.

1,806,519. DENTAL PLATE BRUSH. HENRY CAVE, Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 4, 1927. Serial No. 210,500. 2 Claims. (Cl. 15—206.)



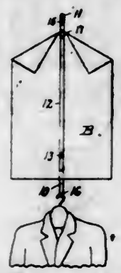
1. A dental plate brush comprising a handle with a brush element projecting therefrom, said element including a core covered with cleaning material of cylindrical shape axially projecting from the handle with the outer end of the brush element reversely bent to form a loop and with the terminal end of the loop directed toward the handle, said terminal end being spaced from the outwardly extending portion of the brush element and defining a restricted space communicating with a larger area within the loop.

1,806,520. BRUSH. HENRY CAVE, Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 17, 1929. Serial No. 355,885. 3 Claims. (Cl. 15—206.)



1. A brush comprising a twisted wire core, bristles of wire secured to and radially projecting from said core, and a tip having the bristles permanently set to surround, project forwardly and envelop the tip.

1,806,521. GARMENT BAG SUPPORT. FRANK A. CINADR, Moulton, Tex. Filed Feb. 21, 1930. Serial No. 430,346. 1 Claim. (Cl. 226—18.)



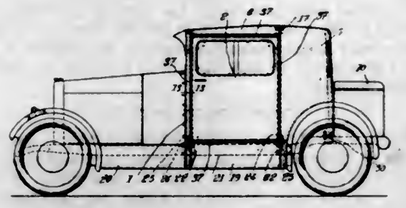
An article of manufacture comprising a laundry bag support, a retaining element relatively long throughout the major portion of its length upon the support for sustaining the bag in an elevated position, and a garment supporting hook carried by the support beneath the bag opening and retaining element to facilitate telescopic association of the garment and bag.

1,806,522. METAL DOWEL FOR WOODEN BEAMS. PAUL JOHAN DE GRUYTER, The Hague, Netherlands. Filed June 17, 1929, Serial No. 371,661, and in the Netherlands June 20, 1928. 1 Claim. (Cl. 85—11.)



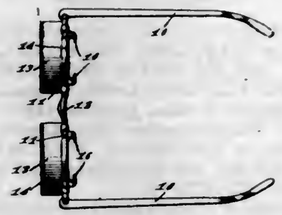
A metal dowel for wooden beams comprising a plate having a plurality of groups of triangular fangs projecting from the plane of the plate, each group being formed by means of radial incisions in the plate in such a way that the triangles of each group have a common apex whereas the base lines form an uninterrupted line, the fangs of each group alternately projecting from each side of the plate.

1,806,523. VEHICLE BODY. JEAN ANTOINE AUGUSTIN DE VIZCAYA, Paris, France. Filed Oct. 31, 1927. Serial No. 229,914, and in France Nov. 6, 1926. 4 Claims. (Cl. 296—28.)



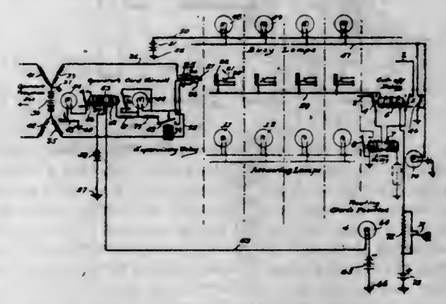
1. A vehicle assembly comprising a chassis, a pair of symmetrical front sections, an intermediate section extending between said front sections, a pair of symmetrical latero-posterior sections forming part of the lateral and part of the rear walls of the body, a pair of rear sections forming part of a rear window frame and extending between the symmetrical latero-posterior sections, a pair of upper and a pair of lower lateral sections extending between the symmetrical front and latero-posterior sections and forming part of a door frame, a roof section, means for rigidly fastening contiguous sections together, a pair of doors hingedly supported by the sectional assembly, and means for detachably supporting all of the foregoing elements on the chassis in the aforementioned relation.

1,806,524. GOGGLES. CHARLES A. DONNELLY, Chicago, Ill. Filed July 6, 1929. Serial No. 376,313. 1 Claim. (Cl. 88—41.)



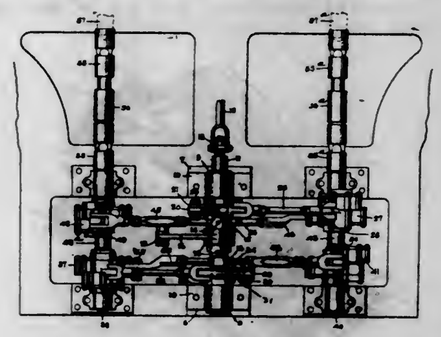
Goggles of the character described comprising semi-circular rims, bows therefor, a nose piece connecting said rims, semi-circular shields for each rim, each shield having one edge rolled upon itself to receive the adjacent rim and thereby support the shield in advance of the latter, a lens of corresponding shape supported by the outer end of each shield, the rolled portion of each shield being slit along spaced parallel lines to provide separated portions bent upon themselves to form hooks, said hooks being arranged in pairs on each rim and projecting rearwardly therefrom to support the goggles on rims of an ordinary pair of spectacles.

1,806,525. CALL DISTRIBUTING SYSTEM. HERBERT W. DRAKE, East Orange, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Nov. 1, 1930. Serial No. 492,849. 10 Claims. (Cl. 178—2.)



1. In a switchboard having a plurality of operators' positions, a routing clerk's position and a plurality of subscribers' lines, a plurality of devices at said routing clerk's position for indicating which of said lines are busy and means at said routing clerk's position for indicating which operator is working on any line indicated as busy.

1,806,526. SET WORKS FOR WOOD CUTTING MACHINES. JAMES E. ECKERSLEY, Aberdeen, Wash., assignor of one-half to Alexander Polson, Hoquiam, Wash. Filed Aug. 19, 1927. Serial No. 214,185. 8 Claims. (Cl. 74—53.)

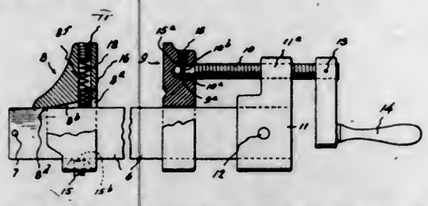


1. In a machine of the character described, a power shaft, a clutch member keyed to said shaft, clutch members revolvably mounted on said shaft and adapted to engage with the said keyed clutch member, bell crank levers connected with said revolvable clutch members, a subshaft on each side of the power shaft, a series of one way clutches mounted on each of said subshafts, and rods connecting the said clutches of the subshafts with the said bell crank levers.

2. In a wood cutting machine of the character described, the combination with feed shafts for operating feed rolls for advancing the wood to a cutter, of a power shaft, a clutch member keyed to said power shaft, clutches revolubly mounted on said power shaft, means to shift the power shaft relatively to the revolubly mounted clutches,

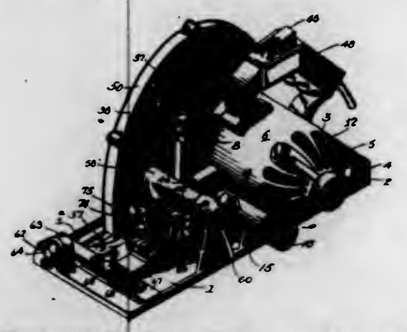
a pair of one-way reversely acting clutches on each of said feed shafts, means connecting each of the said revolubly mounted clutches respectively to one of the clutches of one of the feed shafts and means connecting another of the clutches of one feed shaft with a clutch on the other of said feed shafts.

1,806,527. CLAMPING VISE. PETER EISEMANN, Richmond Hill, N. Y. Filed Nov. 24, 1930. Serial No. 497,881. 4 Claims. (Cl. 144—303.)



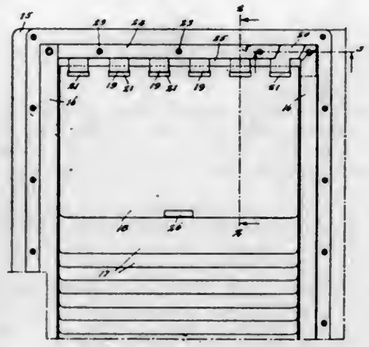
1. In a vise, the combination of a bar, a jaw, screw means for moving said jaw along said bar, and a special jaw for coacting with the first-mentioned jaw; said special jaw having a throat sleeving said bar which includes a roof and a floor, said special jaw above said throat having a rearward projection presenting an undersurface for engaging the top of the bar thereby to hold the clamping face of the special jaw at a predetermined angle to the top of the bar, said roof extending toward the other jaw and upwardly at an angle to the top of the bar, said floor having adjustable therein an upwardly inserted set screw the upper end of which is shaped to provide an upstanding teat circular in cross-section, the top of said teat for jamming against the lower part of the bar at a point forward of the rear end of said roof, said special jaw having above the bar a spring-pressed device tending always to urge said roof toward contact with the top of the bar thereby to throw the special jaw to a loose sliding fit on the bar.

1,806,528. PORTABLE POWER-DRIVEN SAW. THOMAS J. FEGLEY and GEORGE O. LEOPOLD, Philadelphia, Pa., assignors to North Bro's. M'f'g. Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1930. Serial No. 424,370. 6 Claims. (Cl. 143—43.)



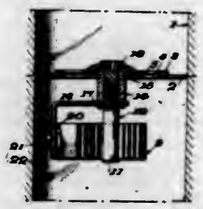
1. The combination in a portable power driven saw, of a base; a frame pivoted to one end of the base; an electric motor mounted on the frame, said motor having a shaft; a saw spindle having its bearings on the frame; gearing between the spindle and the shaft of the motor; a bar pivoted to the base; a projection on the frame encircling the bar; a stop on the bar located below the projection; means for clamping the stop in the position to which it is adjusted, said bar having a notch at its upper end, arranged to engage the encircling projection on the frame when the frame is raised to its full extent; yielding means on the frame tending to force the bar outwardly, so that the notched portion of the bar will engage the encircling member; a handle; a lever at the handle; and means connecting the lever to the bar, so that on the movement of the lever the bar will be moved away from the projection on the frame, which will free the pivoted frame from control of the bar.

1,806,529. VISIBLE LOOSE LEAF DEVICE. CHARLES A. FINLEY, Rutherford, N. J., assignor to Boorum & Pease Company, Brooklyn, N. Y., a Corporation of New York. Filed July 28, 1928. Serial No. 296,017. 5 Claims. (Cl. 129—16.)



4. A visible loose leaf device for superposed sheets, comprising a panel, a covering shield for the sheets and double acting spring hinge means for securing said shield to said panel and adapted to hold the shield in either an open or a closed position.

1,806,530. TEMPERATURE REGULATOR. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Dec. 6, 1928. Serial No. 324,140. 21 Claims. (Cl. 263—93.)

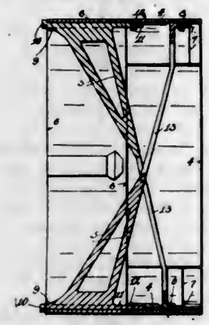


1. A thermostatically controlled valve unit comprising relatively rotatable apertured valve members, a thermostat, means operatively connecting said thermostat to said members to relatively rotate the same, and means causing relative axial displacement of said members on relative rotation thereof.

1,806,531. PRODUCTION OF DEGRADATION PRODUCTS FROM CELLULOSE, CELLULOSE-LIKE SUBSTANCES, AND CELLULOSE CONTAINING MATERIALS. RUDOLF GOGARTEN, Aachen, Germany, and JOHN STANLEY ARTHUR, London, England, assignors to The Commercial Alcohol Company Ltd., London, England, a Corporation of Great Britain. Filed May 23, 1930, Serial No. 455,138, and in Germany Mar. 9, 1929. 2 Claims. (Cl. 127—37.)

1. The method of producing sugar from cellulose containing substances of moisture content from 20% to 50%, comprising the steps of treating the initial material with a volatile acid suitable for the hydrolysis of cellulose, in amounts sufficient to effect the decomposition, the step being carried out at such low temperature that the formation of sugar is prevented, then as a second step, hydrolyzing the decomposed material to form sugar by direct treatment with dry steam at a suitable pressure, to avoid harmful excess of water, and a third step, deacidifying the mixture to purify the product, the expelled volatile acid being used over again in the process.

1,806,532. SECTIONAL AUXILIARY RIM AND BRACKET FOR VEHICLE WHEELS. OSWALD GORDON GREGSON, West Perth, Western Australia, Australia. Filed July 29, 1929, Serial No. 381,875, and in Australia June 4, 1929. 2 Claims. (Cl. 301—38.)

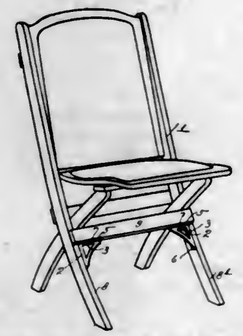


1. In combination, a vehicle wheel having a rim, an auxiliary rim formed in sections secured thereto, segmental brackets, said brackets each having at one of its ends an arc-shaped flange secured to a section of the auxiliary rim, the arms of said brackets being passed through openings formed therefor in the oppositely positioned and companion brackets, each of said arms having at its other end a flange extending transversely of the inner periphery of said vehicle wheel rim and secured to one of said auxiliary rim sections and each of the last named flanges having a snug projecting therefrom and bearing against the free edge of said vehicle wheel rim to prevent outward lateral movement of the auxiliary rim.

1,806,533. CARROTING COMPOSITION. JOHN B. HAKIM, Danbury, Conn. Filed Feb. 14, 1929. Serial No. 340,020. 4 Claims. (Cl. 8—21.)

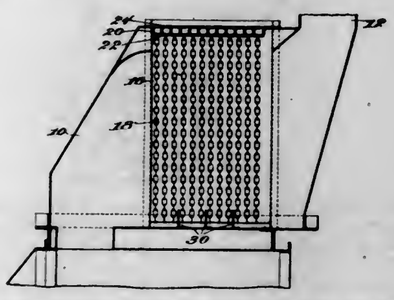
1. An improved carroting composition consisting of the reaction product of a solution of caustic alkali, an alkali silicate and aluminum.

1,806,534. BRACKET. GEORGE H. HAMILTON, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Apr. 29, 1929. Serial No. 358,866. 1 Claim. (Cl. 155—196.)



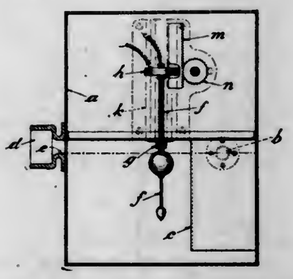
In furniture construction: a pair of furniture members disposed at an angle to each other, the rear surface of one of said members contacting the front surface of the other member; a bracket connecting said members comprising a body portion in the plane of said surfaces, and mounting flanges disposed relatively to each other at the said angle, one of said flanges extending from one side only of the body portion and being secured to one of said members, and the other flange extending from the opposite side only of the body portion and being secured to the other one of said members.

1,806,535. ELIMINATOR. HARRY N. MIDDLETON, Westville, N. J., assignor to B. F. Sturtevant Company, Hyde Park, Mass., a Corporation of Massachusetts. Filed Feb. 6, 1926. Serial No. 86,474. 7 Claims. (Cl. 183—62.)



1. An eliminator comprising an air passage, a plurality of rows of closely spaced depending chains in the passage, and means for supporting the chains to permit separate removal horizontally of any of the rows of chains as a unit and independently of the remainder.

1,806,536. APPARATUS FOR REGULATING THE CONCENTRATION OF SOLUTIONS. JOHN ADAMS BOLTON, Timperley, England. Filed June 6, 1930, Serial No. 459,484, and in Great Britain Apr. 20, 1929. 1 Claim. (Cl. 23—253.)

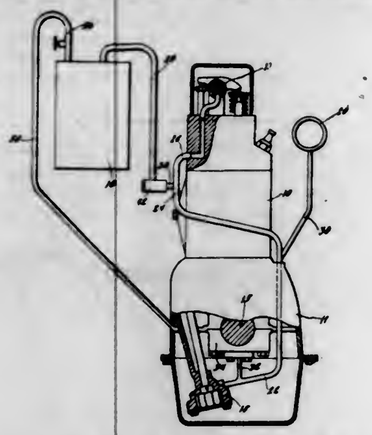


An apparatus for regulating a solution comprising hydrometer means, a tank to receive the solution to be regulated, a hydrometer disposed to be acted upon by the said solution, means for suppplying material to the solution, electrical control means therefor comrising an adjustable member having a guide opening through which the hydrometer passes and guiding and limiting the movement of the hydrometer, a slide carrying the adjustable member, guiding means for the slide, and operating means for manually raising and lowering the slide.

1,806,537. OIL FILTER INSTALLATION. FERDINAND A. BOWER, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 22, 1927. Serial No. 214,716. 3 Claims. (Cl. 184—6.)

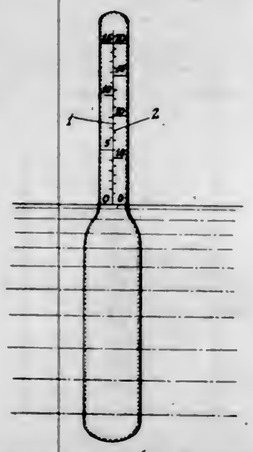
1. In a lubricating system as applied to internal combustion engines, an oil pump and oil filter in said system,

a pipe line leading from the pump to the engine rocker arm shaft, a restriction in said line, a second pipe line leading to the filter and connected to said rocker arm



line, a restriction in said filter line, a spring pressed check valve at said filter line restriction, and means for returning the filtered oil to the pump.

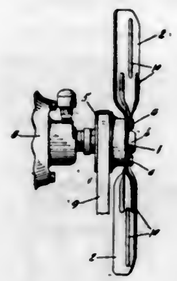
1,806,538. METHOD FOR MEASURING THE AMOUNT OF WATER CONTAINED IN MOIST SAND OR GRAVEL. TAPPAN COLLINS, Dormont, Pa. Filed Jan. 25, 1927. Serial No. 163,344. 1 Claim. (Cl. 23—230.)



The herein described method of determining the quantity of water contained in moist sand or gravel or other insoluble material, which consists in placing a measured representative sample of the moist sand or gravel in a measured similarly equal quantity of an aqueous solution of known concentration and known specific gravity, into which solution the water contained in the sample of insoluble material passes; then by a hydrometer test of the solution determining a factor representative of the amount of water so taken up by the solution from the sample.

1,806,539. FAN. LEROY V. CRAM, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 4, 1926. Serial No. 146,205. 5 Claims. (Cl. 170—159.)

1. In a cooling system for internal combustion engines of motor vehicles and the like, a fan for inducing an air draft through a cooling radiator, including a laminated blade in which the laminations consist of relatively thin gauge sheet metal plates of identical shape and outline



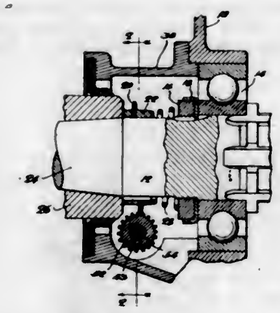
thruout superposed on one another and integrally united in alined relation with one face of one plate in continuous contact from tip to tip with the adjacent face of the other.

1,806,540. COUPLING DEVICE. BENJAMIN L. CUMMINGS and ARTHUR W. HARRIS, Toledo, Ohio, assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 22, 1925. Serial No. 25,139. 7 Claims. (Cl. 279—75.)



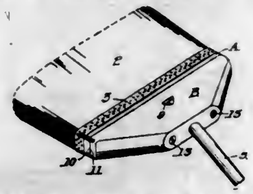
3. The combination of a tool receiving member, a tool, keying means associated with said member and said tool and adapted to positively lock said parts together, a shiftable sleeve surrounding said tool receiving member and adapted to hold said keying means in operative position, and relatively stationary trip means associated with said sleeve for shifting the latter for automatically rendering said keying means inoperative.

1,806,541. SPEEDOMETER DRIVE. EDWIN A. GUSTAFSON, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed May 7, 1927. Serial No. 189,557. 5 Claims. (Cl. 74—7.)



1. An instrument drive comprising, in combination, a flexible shaft, a flexible tube encasing said shaft, a sleeve secured to the end of said tube, said shaft passing through said sleeve, and a gear journalled on the end of said sleeve in concentric relation to said shaft, said gear and said shaft being connected in driving engagement.

1,806,542. BRUSH. FRANKLIN D. JACOBS, Bellevue, Pa., assignor to Pittsburgh Brush Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 31, 1928. Serial No. 250,794. 3 Claims. (Cl. 306—1.)



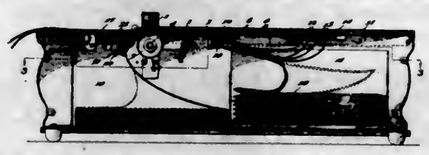
1. In combination, a brush head provided with a pair of holding bolts countersunk inwardly from the bristle side and projecting beyond the other side equally distant each side of its middle, a handle head having registering holes therefor, and securing screws for the outer end of the bolts countersunk in the handle head and tapped into the ends of the bolts.

1,806,543. CRANKCASE VENTILATION. HERBERT G. KAMRATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Jan. 7, 1927. Serial No. 159,602. 1 Claim. (Cl. 123—119.)



An internal combustion engine having a valve compartment, a cover for said compartment and an air cleaner through which air is conducted from said compartment, said cleaner having air directing parts formed integrally with said cover, said air directing parts comprising a series of annularly arranged air directing blades pressed out of the material of the cover.

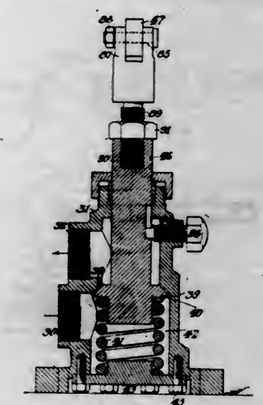
1,806,544. AUTOGRAPHIC REGISTER. MARIE WILLIAM KRAUTH, Hamilton, Ohio, assignor to Krauth & Benninghofen, Hamilton, Ohio. Filed Oct. 20, 1928. Serial No. 313,918. 4 Claims. (Cl. 282—16.)



1. In a machine of the character disclosed, a casing including a writing table for supporting a plurality of record strips in superposed relation, with manifolding paper disposed between the strips, the manifolding paper held stationary and the record strips for dispensing drawn longitudinally over the table across the manifolding paper, a shield marginally covering an edge of the manifolding paper at the approaching side with respect to the direction of strip motion and crosswise thereof, the shield comprising a sheet of pliable material looped to provide a pair of leaves for marginally engaging about an edge of manifolding paper, and a stationary cross rod mounted in said casing engaged between the leaves of said shield hingedly supporting the shield.

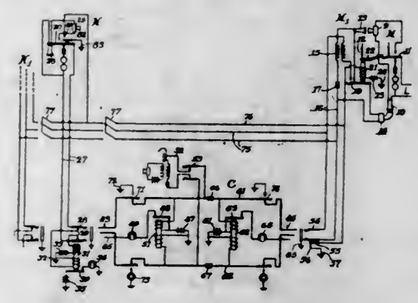
1,806,545. LUBRICATOR. HARLAN M. LUDWICK, Parkesburg, Pa., assignor to Keystone Lubricating Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 26, 1928. Serial No. 288,318. 2 Claims. (Cl. 184—6.)

1. In lubricating apparatus, means adapted to determine the volume and manifest the flow of lubricant dispensed thru a port, including a casing having a lubricant inlet and a lubricant outlet, and a port of fixed area between them, and a tell-tale vent upon one side of said port; axially adjustable screw means adapted to vary



the effective area of said port, and thereby determine the volume of lubricant dispensed; and screw means normally closing said vent, but axially adjustable to open said vent to manifest the flow of lubricant therethru.

1,806,546. TELEPHONE SYSTEM. RUSSELL L. MAURER, Chicago, Ill., assignor of one-fourth to George E. Mueller, Chicago, Ill. Filed May 29, 1929. Serial No. 366,932. 21 Claims. (Cl. 179—42.)

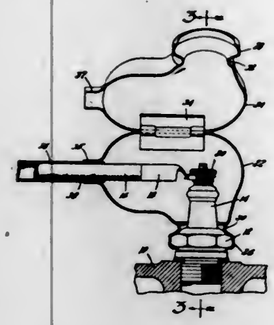


1. An apparatus for mechanically interconnecting separate telephone systems comprising a master telephone having a transmitter and receiver, a connecting telephone having a transmitter and receiver in sound transmitting relation to the receiver and transmitter respectively of the master telephone, an extension telephone electrically connected to the connecting telephone, and means responsive to the movement of the receiver hook of the extension telephone for moving the receiver hook of the master telephone whereby communication is established between the extension and master telephones.

1,806,547. MANUFACTURE OF RUBBER. THOMAS MIDGLEY, JR., CHARLES ALLEN THOMAS, and CARROLL A. HOCHWALT, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 22, 1927. Serial No. 242,009. 9 Claims. (Cl. 18—53.)

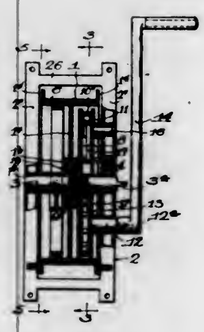
2. The process of producing a rubber product which comprises extracting from a natural rubber the rubber hydrocarbon contained therein, compounding said hydrocarbon with an amino carboxylic acid and vulcanizing agents and vulcanizing the mixture.

1,806,548. SHIELDING MEANS FOR IGNITION APPARATUS. HECTOR RABEZZANA, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 16, 1929. Serial No. 414,445. 6 Claims. (Cl. 123—169.)



1. A device for shielding a spark plug to prevent the radiation of electrical energy therefrom comprising a casing formed of complementary sections, and means for pivotally connecting said sections to each other.

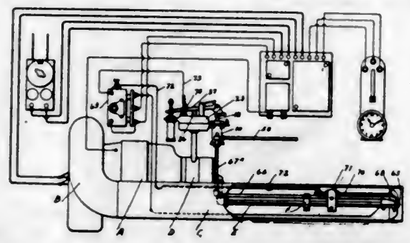
1,806,549. RETRIEVING DEVICE FOR AEROPLANES. JACOB H. WALLACE, San Diego, Calif.; Julia M. Wallace administratrix of said Jacob H. Wallace, deceased. Filed Oct. 1, 1928. Serial No. 309,659. 7 Claims. (Cl. 242—99.)



6. In an apparatus of the character described, the combination of a rotative cable drum, a driven shaft, brake mechanism fixed to said shaft and normally acting to frictionally connect said drum to said shaft when there is less than a predetermined load exerted on said cable, but permitting said drum to revolve during the exertion of more than said predetermined load thereon, and means for holding said shaft against rotation under said load.

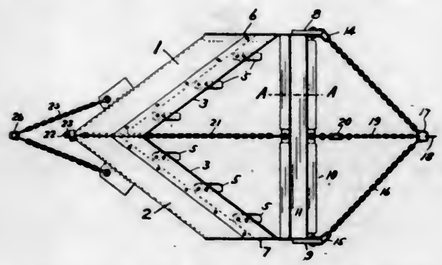
1,806,550. LIQUID FUEL BURNING MECHANISM. WALTER W. WILLIAMS, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Original application filed July 31, 1922, Serial No. 578,618. Divided and this application filed Mar. 12, 1928. Serial No. 277,183. 1 Claim. (Cl. 158—28.)

In a liquid fuel burning mechanism, an air pipe, a burner pipe in said air pipe, a jet on the extremity of said pipe, sparking elements, one of said elements being mounted upon the burner pipe and insulated therefrom, the other of said elements comprising a metal tube leading from an independent gas supply mounted in said air pipe



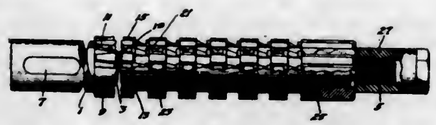
and supported upon the burner pipe, said sparking elements being curved downwardly at their ends, which are adjacent the said jet.

1,806,551. REVERSIBLE DOUBLE DIGGING EDGE SCRAPER. EDWARD C. ADDISON, Camden, N. J., and WARREN H. HILL, Philadelphia, Pa., assignors to R. H. Beaumont Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 3, 1930. Serial No. 441,229. 4 Claims. (Cl. 37—147.)



1. A scraper having divergent arms, a bail connecting said divergent arms at the vertical center of their forward ends, means for towing said scraper means for attaching the towing means for said scraper to the horizontal center of said bail, and a flexible connection between the horizontal center of said bail and the rear of said scraper.

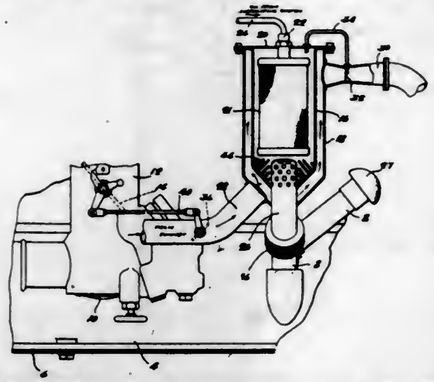
1,806,552. BROACH. JAMES C. ATWOOD, Syracuse, N. Y., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 10, 1926. Serial No. 153,901. 1 Claim. (Cl. 90—33.)



A broach consisting of a shank circular in cross section alternating guides and cutters both having bores circular in cross section and mounted on said shank, the guides having recesses in their end faces and radial splines, the cutters having external teeth, said cutters positioned within adjacent guide recesses and with their teeth engaged between the spline guides.

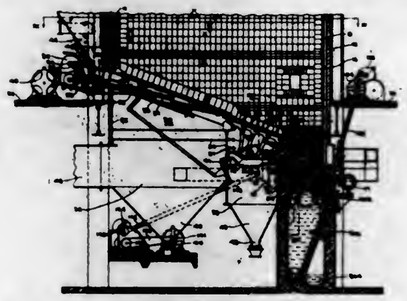
1,806,553. OIL PURIFIER AND DILUTION REMOVER. ABRAHAM M. BABITCH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich. Filed Mar. 28, 1927. Serial No. 179,018. 4 Claims. (Cl. 184—6.)

1. In an engine having a lubricating system including a crank case, the combination of a distillation chamber, means for supplying oil from said system to said chamber, a conduit for returning purified oil from the chamber to the crank case, an oil filter in said chamber and in the path



of flow of the oil, and a suction connection for withdrawing vapors from said still, said conduit being of sufficient size to permit the passage of vapors from the crank case into the chamber.

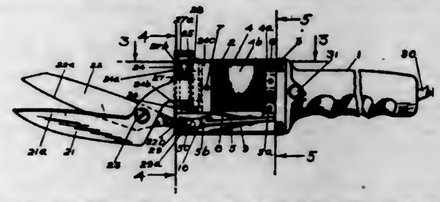
1,806,554. STOKER. ROBERT A. FORESMAN, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1929. Serial No. 337,445. 18 Claims. (Cl. 110—44.)



1. In a stoker whereon the fuel bed moves in a single general direction from the front to the rear, the combination of an underfeed section comprising alternately-disposed retorts and tuyère rows which discharge a fuel bed in a more advanced state of combustion from the rear ends of the tuyère rows and a less advanced state of combustion from the rear ends of the retorts; a movable overfeed section having its forward end continuously disposed to receive the fuel bed discharging from the underfeed section and both sections presenting under all conditions of operation an unbroken fuel-supporting surface; said overfeed section comprising a series of grate members connected in end-to-end relation so as to provide relative angular movement and extending in the general direction of fuel feed; and means providing for movement of some of said grate members both angularly with respect to the fuel-supporting surface and bodily in the general direction of the fuel feed, whereby the burning material received from the overfeed section is fed positively along the overfeed section and agitated during its progress to facilitate combustion.

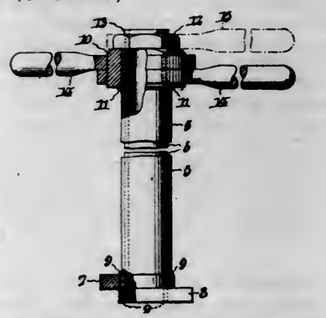
1,806,555. MOTOR OPERATED SHEARS. ROBERT R. GONSETT, Los Angeles, Calif. Filed Dec. 31, 1928. Serial No. 329,142. 13 Claims. (Cl. 30—13.)

1. In a device of the class described, a supporting means, a cutting member mounted thereon, an electromagnet supported by said supporting means, an armature in connection with said electromagnet adapted to be operated thereby, a second cutting member positioned in operative cutting relation with said first cutting member and operatively



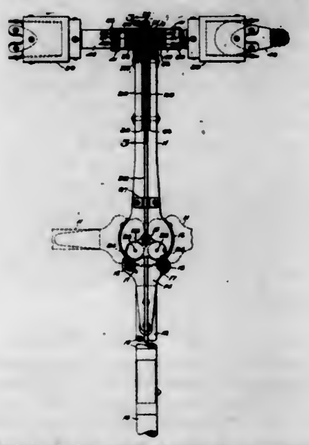
connected with said armature, and adjusting means in connection with said first cutting member for varying the length of the effective cutting stroke between the cutting members.

1,806,556. HYDRANT TOOL. CHARLES B. GREEN, Florence, N. J., assignor to Florence Pipe Foundry & Machine Company, Florence, N. J., a Corporation of New Jersey. Filed Mar. 22, 1930. Serial No. 438,017. 2 Claims. (Cl. 81—72.)



1. A tool for turning hydrant barrels comprising a pair of tubes fitting one within the other and adapted to be eccentrically accommodated within the barrel to be turned, jaws mounted at the lower end of each tube, and means at the upper end of each tube whereby the tubes may be gripped for relative turning to expand the jaws into biting engagement with the barrel.

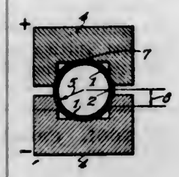
1,806,557. LAMP BULB REMOVING MECHANISM. HAROLD D. GRINNELL, Pittsfield, Mass., assignor to The G. C. A. Manufacturing Company, Pittsfield, Mass., a Corporation of Massachusetts. Filed Feb. 3, 1931. Serial No. 513,154. 7 Claims. (Cl. 294—21.)



1. In a device of the class described, in combination, a rod, a shaft transversely arranged on one end of the rod,

separate lamp bulb clutch mechanisms carried by the shaft and arranged on opposite sides of the rod, and means for rotating the shaft in either of opposite directions.

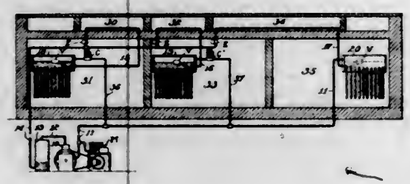
1,806,558. REAR AXLE HOUSING AND THE LIKE AND METHOD OF PRODUCING IT. HENRY S. HOLMES, Brooklyn, N. Y., assignor, by mesne assignments, to Metropolitan Engineering Company, a Corporation of New York. Filed Nov. 10, 1928. Serial No. 318,337. 7 Claims. (Cl. 219—10.)



1. The method of forming articles by the flash welding process which consists in providing segments with lateral indentations, locking them in welding electrodes by means of said indentations, moving the opposed electrodes with the segments so as to establish and maintain an arc between the welding edges, pressing the edges together to make the weld and, after welding, reshaping the product to remove the locking configurations.

7. A segment for the production of hollow articles, the sides of the segment having indentations forming transversely extending external faces whereby they may be locked in engagement with a welding electrode.

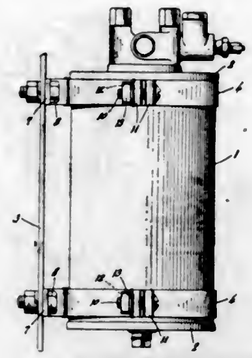
1,806,559. REFRIGERATING SYSTEM. FRANKLIN B. HUNT, Chicago, Ill., assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 15, 1930. Serial No. 475,416. 3 Claims. (Cl. 62—115.)



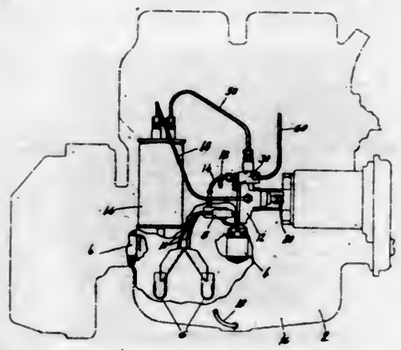
1. A refrigerating system comprising two boilers of the constant liquid-level type, a compressor, connections between the vapor spaces of said boilers and the suction side of the compressor, one of said connections comprising a control valve limiting the suction effect of the compressor on the associated boiler, a refrigerant supply pipe between said boiler and the condenser, means controlled by liquid-level in each boiler for controlling refrigerant flow into said boiler, an expansion valve in each supply pipe, four relatively isolated refrigerating chambers in two of which the boilers are mounted and two of which are respectively traversed by portions of the two supply pipes between their respective expansion valves and boilers, and means dependent upon pressure in boiler vapor space for starting and stopping the compressor.

1,806,560. BRACKET. CHARLES W. MCKINLEY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Oct. 20, 1926. Serial No. 142,975. 2 Claims. (Cl. 248—20.)

1. A supporting bracket including a contractive band adapted to encircle and removably clamp a circular receptacle, a supporting member therefor having a concave arcuate portion in which the band is seated, and an attachment sleeve surrounding the band and arcuate portion against which the receptacle is seated upon contraction of the band.

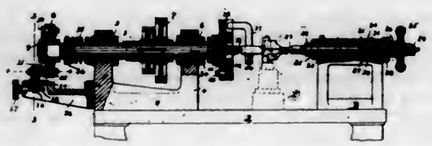


1,806,561. OIL PRESSURE BOOSTER. CHARLES W. MCKINLEY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Jan. 7, 1927. Serial No. 159,604. 10 Claims. (Cl. 184—6.)



2. The combination of a low pressure lubricating system, an invariable restriction for stepping up the pressure in a portion of said system, an oil filter, and means for passing oil from said portion through said filter.

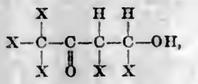
1,806,562. AUTOMATIC TOOL CUTTING MACHINE. JOHN PICHLER, Cleveland, Ohio. Filed Nov. 1, 1928. Serial No. 316,399. 6 Claims. (Cl. 82—19.)



1. An automatic tool cutting machine, comprising a headstock spindle rotatably and axially slidably supported within said headstock, a tailstock, a spindle slidably supported within said tailstock, means on said headstock to axially shift said spindles in one direction when a work piece is inserted between said spindles, and means within said tailstock and actuating upon said tail spindle to yieldingly shift said spindles in the opposite direction.

1,806,563. PROCESS OF PRODUCING 4-SUBSTITUTION PRODUCTS OF THE QUINOLINE SERIES. ALPHONS PRILL, Wiesdorf, and ROBERT WALTER, Dessau, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Mar. 29, 1929, Serial No. 351,109, and in Germany Mar. 22, 1928. 7 Claims. (Cl. 260—38.)

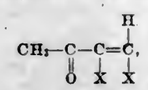
1. Process of producing 4-substitution products of the quinoline series which comprises condensing a primary arylamine with a compound of the general formula



X meaning hydrogen or an alkyl group, in the present of an agent which eliminates water, and of an oxidizing agent.

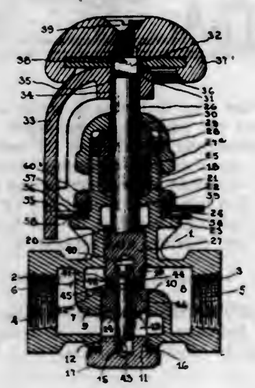
1,806,564. PROCESS OF PRODUCING 4-SUBSTITUTION PRODUCTS OF THE QUINOLINE SERIES. ALPHONS PRILL, Wiesdorf, and ROBERT WALTER, Dessau, Anhalt, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Mar. 29, 1929, Serial No. 351,110, and in Germany Mar. 22, 1928. 5 Claims. (Cl. 260—38.)

1. Process of producing 4-substitution products of the quinoline series which comprises condensing a primary arylamine with a compound of the general formula



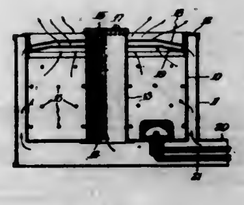
X meaning hydrogen or an alkali group, in the presence of an agent which eliminates water and of an oxidizing agent and isolating the reaction product in the form of its acid salt of hydroferrocyanic acid.

1,806,565. VALVE. PHILIP SHERMAN RUSSEL, Detroit, Mich., assignor to Detroit Lubricator Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 1, 1928. Serial No. 250,972. 11 Claims. (Cl. 251—34.)



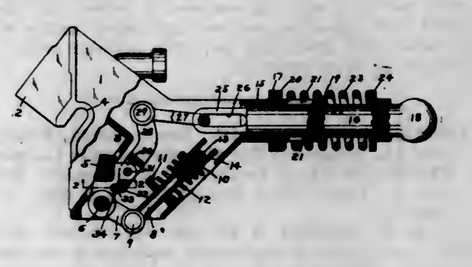
1. A valve comprising a hollow valve body having an inlet and an outlet, a partition in said body between said inlet and said outlet and having an aperture therethrough, a valve member in said aperture having a metering slot with an inclined base for metering the flow through said aperture, and said member having a pilot slot opening into said metering slot.

1,806,566. OIL BURNER. WILLIAM B. STURGIS, Chicago, Ill. Filed Nov. 1, 1928. Serial No. 316,480. 8 Claims. (Cl. 158—92.)



1. In a burner of the character described, the combination of a pot consisting of a continuous side wall and a bottom, means for delivering fuel in fluid form into the pot, a vertically extending tube positioned centrally in the pot to form with the side wall a mixing chamber for the fuel and having the lower end thereof opening through the pot to receive air, means for delivering air into the chamber in such quantity as to effect only aeration of the fuel during normal operation of the burner, a wall extending inwardly from the upper marginal part of the side wall and having its inner edge spaced from the tube to form therearound a restricted outlet for the aerated fuel, and means adjacent the inwardly extending wall for delivering jets of air inwardly against the tube in order to force the aerated fuel to flow inwardly and impinge against the tube as it rises from the chamber and passes upwardly through the outlet, the tube having openings therein above the inwardly extending wall for directing jets of air across the outlet in such quantity as to support combustion of the aerated fuel over said inwardly extending wall and cause the resulting flames to spread outwardly from the top of the pot.

1,806,567. COUPLER UNLATCHING DEVICE. UNCAS A. WHITAKER, Wilmerding, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Sept. 17, 1928. Serial No. 306,445. 7 Claims. (Cl. 285—58.)

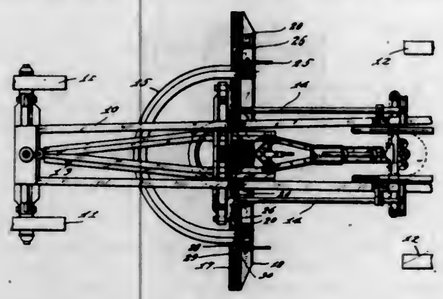


1. A coupling device comprising a coupling head, a latch for locking said head in engagement with a counterpart coupling head, and a lever engaging one fulcrum for initially moving said latch from its locking position and then engaging another fulcrum for further movement of said latch.

1,806,568. ROAD GRADER. ROY E. ADAMS, Indianapolis, Ind., assignor, by mesne assignments, to J. D. Adams Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Dec. 31, 1926. Serial No. 158,307. 8 Claims. (Cl. 37—159.)

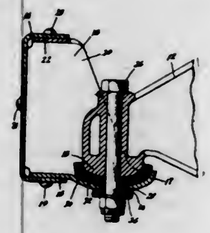
1. In a road grader, the combination of a mold board, a supporting member therefor, means for pivotally at-

taching said mold board to said supporting member on a single axis fixed relatively to said supporting member, said means including mating parts having spherical engaging surfaces, an adjusting link pivotally connected



to said mold board through a universal connection, and means for holding said link in various positions of adjustment relative to said supporting member to vary the inclination of said mold board.

1,806,569. RUBBER MOTOR MOUNTING. BENJAMIN H. ANIBAL, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 27, 1927. Serial No. 208,886. 15 Claims. (Cl. 248—142.)



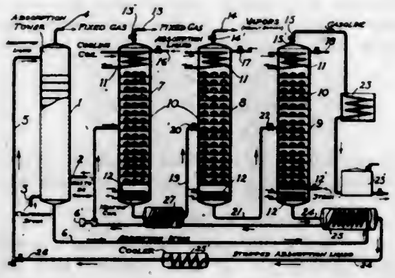
15. In combination with a supporting member and the member to be supported, of a concave part on one of the members, a concavo-convex pad of cushioning material nested in said concave part, a convex part associated with the other member and nested within said concavo-convex cushioning pad, and yieldable means to hold the parts in assembly.

1,806,570. DEWAXING OIL. LEO D. JONES, Philadelphia, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 25, 1928. Serial No. 280,658. 5 Claims. (Cl. 196—19.)

1. In the dewaxing of oil that contains wax which when precipitated by temperature reduction is too amorphous for removal from the oil by common filter pressing with duck filters, the steps comprising diluting the oil with a solvent, reducing the temperature of the resulting mixture and thereby precipitating wax therein, and then filtering the diluted oil through a body of interlaced and unwoven wool fibers and thereby removing precipitated wax therefrom.

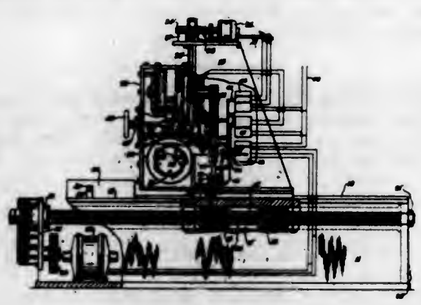
1,806,571. PROCESS FOR RECOVERING GASOLINE FROM GAS. FRANK A. HOWARD, Elizabeth, and NATHANIEL E. LOOMIS, Westfield, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Feb. 20, 1926. Serial No. 89,644. 2 Claims. (Cl. 196—8.)

1. Process of rectifying condensible constituents derived from a hydrocarbon gas, comprising passing relatively non-volatile absorption liquid charged with such constituents downward through a vapor and liquid contact zone, maintaining in such zone a pressure substantially above atmospheric, heating the lower portion of the zone, and cooling the upper portion thereof to prevent desired components from escaping, whereby the con-



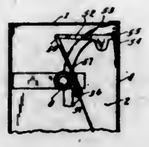
densible constituents are rectified in the presence of the absorption liquid, introducing fresh, cool absorption oil into the upper portion of the contact zone, withdrawing the gases and vapors from the rectification to a point without the system, withdrawing the absorption liquid and subsequently separating the desired constituents therefrom.

1,806,572. CHIPPING MACHINE. GEORGE W. LENTZ, Canton, Ohio, assignor to The Bonnot Company, Canton, Ohio, a Corporation of Ohio. Filed Nov. 26, 1928. Serial No. 321,881. 15 Claims. (Cl. 90—38.)



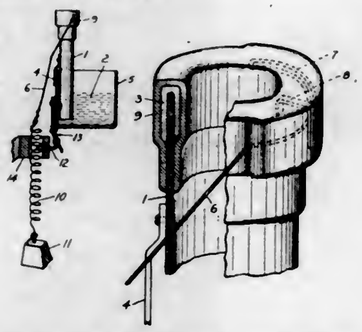
1. A machine tool including a stationary bed, a carriage mounted for translatory movement on the bed, a tooth tool operatively mounted on the carriage for selective rotation about an axis extending transversely of the direction of movement of the carriage, and means whereby the tooth tool is adapted for cutting by selective movement of the carriage, rotation of the tool, or combined movement of the carriage and rotation of the tool.

1,806,573. DISPENSING MACHINE FOR TOILET SEAT COVERS. CHARLES O. YOUNG, Clackamas, Oreg. Filed Nov. 5, 1928. Serial No. 317,437. 1 Claim. (Cl. 194—1.)



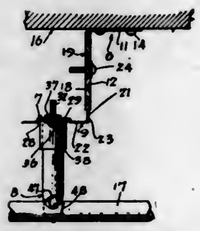
A coin chute having a slot control mechanism comprising a locking link disposed therein and secured to the free end of a counterweighted lever hingedly connected to the coin chute, a supporting spring disposed upon the side of a cabinet, its free end intimately disposed upon the free end of the counterweighted lever, and a link hingedly secured to the oppositely disposed end of the counterweighted lever, said link having disposed at its opposite end an engaging hook adapted for the purposes described.

1,806,574. IGNITION DEVICE. ANTONIO CIRAOLO, Oakland, Calif. Filed July 23, 1927. Serial No. 208,030. 8 Claims. (Cl. 44—36.)



1. Igniting means for a match, comprising an igniter member removably secured to and against the ignition head of the match and arranged to effect the ignition of said head by and upon its removal, and fracturable means operative to releasably and directly secure said match and member together whereby one supports the other prior to the removal of said member.

1,806,575. ADJUSTABLE INSULATOR SUPPORT. FERDINAND A. CIRAOLO and JOHN S. BASHER, Oakland, Calif. Filed Nov. 7, 1927. Serial No. 231,516. 2 Claims. (Cl. 248—30.)

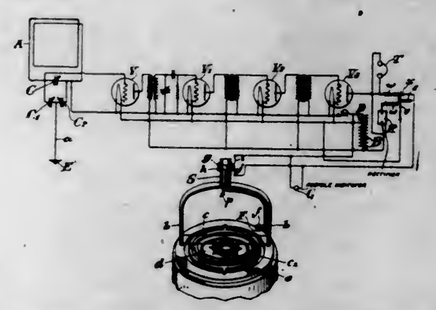


2. In a wall bracket for supporting a luminescent tube, an insulator, an inner one-piece base member of sheet material arranged for mounting on the wall to have an outer portion thereof extending transversely therefrom, an outer one-piece member of sheet material arranged for supportedly engaging the insulator and having an inner extending portion, an intermediate one-piece member of sheet material having angularly related portions for entirely rectilinear adjusted engagement with the respective outer and inner portions of said inner and outer members and entirely in their planes, and clamp bolts extending through contacting portions of the members for releasably securing said members together in mutually adjusted relation.

1,806,576. FOOD PRODUCT. JULIAN S. COHEN, New York, N. Y. Filed Apr. 25, 1928. Serial No. 272,864. 2 Claims. (Cl. 99—11.)

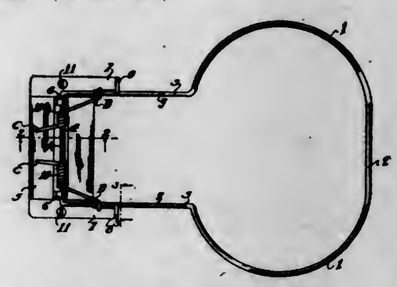
2. A food composition for use in making meringues, comprising egg albumen and a preparation of finely divided seed or kernel of St. John's bread and sugar, said ingredients being in the proportions necessary to form, with the addition of water, a whip of suitable consistency.

1,806,577. DIRECTIONAL RADIO SYSTEM. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed May 22, 1925. Serial No. 32,029. 7 Claims. (Cl. 250—11.)



1. A radio compass comprising an electrical system having a non-uniform directional characteristic, a member comprised in said electrical system movable to positions related to the direction of propagation of the received energy, indicating means, a circuit controlling said indicating means, and means controlled by said electrical system effecting continued closure of said circuit when said movable member is in direction indicating position normal to the direction of propagation of the received energy and effecting rupture of said circuit when said movable member is in a different position.

1,806,578. HATRACK. MARION M. STUDEBAKER, Topeka, Kans. Filed Jan. 25, 1929. Serial No. 334,979. 2 Claims. (Cl. 211—31.)



2. In a hat holder, a plate member and a wire loop element pivoted thereon, said plate member having arm members integrally connected therewith and extending laterally therefrom, the outer portion of the arm members bent at right angles, the bent portions having notches on their inside edges as positioning means for the said wire loop element.

Patents Nos. 1,806,579 to 1,807,579

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Labels	45—No.	39,191 to No.	39,235, inclusive.
Prints	5—No.	13,204 to No.	13,208, inclusive.
Reissues	3—No.	18,080 to No.	18,082, inclusive.
Designs	46—No.	84,225 to No.	84,270, inclusive.
Patents	1,001—No.	1,806,579 to No.	1,807,579, inclusive.
Total	1,345		

Adjudicated Patents

(D. C. R. I.) Roberts and Gibson patent, No. 1,108,098, for basket for centrifugal machines, *Held* valid and infringed. *Western States Mach. Co.* v. *Ferguson*, 47 F.(2d) 775.

(C. C. A. Conn.) Sachs patent, No. 1,292,081, for electric switch, claims 14, 20, and 21 *Held* valid and infringed. *Sachs* v. *Hartford Electric Supply Co.*, 47 F.(2d) 743.

(C. C. A. Conn.) Sachs patent, No. 1,294,176, for electric switch, claims 2, 7, and 11 *Held* not infringed. *Id.*

(C. C. A. Conn.) Sachs patent, No. 1,301,175, for electric service and meter testing system, claims 4, 7, and 10 *Held* valid and infringed. *Id.*

(C. C. A. Mich.) Fowler patent, No. 1,332,550, for padding-bandage, *Held* not infringed. *Fowler* v. *Detroit Bedding Co.*, 47 F.(2d) 752.

(C. C. A. Mo.) Buchanan patent, No. 1,670,235, for variable spray device, *Held* invalid, but, if valid, not infringed. *Buchanan* v. *Wyeth Hardware & Mfg. Co.*, 47 F.(2d) 704.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,362,940, G. B. Harrison and A. L. Rawlings, Gyroscopic compass, decided April 6, 1931, claims 2, 9, 10, 11, 12, 13, 16, 17, 18, 19 and 20.

Pat. 1,671,864, E. B. Higgins, Process involving exchange reactions, decided January 20, 1930, claims 1 and 4.

Pat. 1,680,675, A. S. Gale, Magnetic system to control the stop and levelling of an elevator, decided March 27, 1931, claims 36 and 38.

Pat. 1,787,553. Schaffner, Schaffner and Field, Composition of matter for use in welding copper and steel, decided May 7, 1931, claim 1.

Notices of Cancellation

U. S. Patent Office, *Washington, May 5, 1931.*

Salomon Bros., their assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Charles J. Wouters, of 3120 Harrison Street, Oakland, Calif., to effect the cancellation of the trade-mark registration of Salomon Bros., of 15 Burling Slip, New York, N. Y., No. 103,363, dated March 30, 1915, and the notice of such proceeding sent by registered mail to the said Salomon Bros. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Salomon Bros., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. Patent Office, *Washington, May 11, 1931.*

Quaker Hat Co., Inc., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Hodshon-Berg, Incorporated, Fifth Avenue and 57th Street, New York, N. Y., to effect the cancellation of the trade-mark registration of Quaker Hat Co., Inc., of 64–70 West 36th Street, New York, N. Y., No. 244,585, dated July 24, 1928, and the notice of such proceeding sent by registered mail to the said Quaker Hat Co., Inc., at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Quaker Hat Co., Inc., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business May 9, 1931

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 95,986; Trade-Mark Division, 1,300. Oldest new case, Aug. 13, 1930; oldest amended, Aug. 20, 1930. The dates given are 1930 except where † indicates 1931.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Nov. 22	Dec. 9	760
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Oct. 22	Oct. 27	1,423
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Nov. 17	†Feb. 9	965
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Oct. 24	Nov. 1	886
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Oct. 24	Oct. 30	872
318	6. LEWERS, A. M., Carbon Chemistry	Oct. 6	Oct. 6	2,171
106	7. JARBOE, C. G., Optics; Photography	Sept. 26	Sept. 26	2,111
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Oct. 3	Oct. 9	1,582
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 13	Nov. 14	1,457
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 13	Dec. 5	1,059
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Dec. 4	Dec. 10	833
380	12. HENRY, C. C., Machine Elements	Sept. 25	Oct. 25	1,375
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Nov. 19	Nov. 21	1,144
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Oct. 15	Oct. 23	1,277
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Oct. 1	Oct. 1	2,603
242*	16. SPENCER, C. J., Telegraphy; Telephony	†Jan. 12	†Jan. 13	859
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Sept. 16	Sept. 17	1,545
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Oct. 27	Oct. 28	1,214
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Sept. 12	Sept. 18	2,134
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Oct. 29	Nov. 1	1,027
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Nov. 3	Dec. 30	984
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Nov. 24	Dec. 16	918
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 18	Sept. 13	1,082
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Oct. 2	Oct. 3	957
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Cumminutors.	Oct. 17	Oct. 24	1,510
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Nov. 8	Nov. 18	1,012
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Sept. 18	Sept. 2	1,171
225	28. BENSON, A. R., Internal-Combustion Engines	Oct. 10	Oct. 10	1,850
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Nov. 26	Nov. 18	585
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Nov. 25	†Feb. 4	931
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Aug. 13	Aug. 20	2,592
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Dec. 13	Dec. 13	1,360
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Oct. 17	Oct. 17	2,636
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Jan. 9	†Jan. 10	817
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Feb. 20	Nov. 17	965
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Sept. 18	Sept. 26	2,306
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Oct. 9	Oct. 16	1,648
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Dec. 22	†Jan. 3	595
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Oct. 24	Oct. 24	1,669
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Sept. 25	Oct. 27	3,017
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Nov. 11	Nov. 13	861
223*	42. CUTTING, H. O., Electric Signaling	Oct. 9	Oct. 9	1,454
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Nov. 17	Nov. 17	1,663
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Sept. 11	Sept. 11	2,250
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Sept. 10	Sept. 10	2,326
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Nov. 12	Nov. 15	1,201
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Oct. 21	Oct. 28	2,189
212*	48. ROEPKE, O. B., Electricity, General Applications	Oct. 11	Oct. 13	1,199
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Dec. 15	Dec. 15	1,212
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Sept. 11	Sept. 17	2,528
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Sept. 2	Sept. 3	2,269
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Nov. 18	Nov. 18	1,594
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Jan. 7	†Jan. 16	979
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Sept. 9	Sept. 10	2,653
102	55. BOWEN, S. T. {Bread, Pastry, and Confection Making; Cutlery	†Mar. 30	†Mar. 25	243
	{Designs	†Apr. 15	†Apr. 27	315
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Sept. 27	Sept. 29	1,927
257*	57. NICHOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Oct. 18	Oct. 17	810
270*	58. DOWELL, E. F., Abrading; Typewriting	Sept. 24	Sept. 26	1,494
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Nov. 19	Nov. 20	1,715
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Sept. 11	Sept. 10	2,057
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Sept. 11	Sept. 16	2,176
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Sept. 9	Sept. 9	2,538
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Aug. 28	Sept. 2	2,428
163	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND {Trade-Marks	†Apr. 11	†Apr. 27	1,082
	{Labels and Prints	†Apr. 11	†Apr. 27	218

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

CLUETT, PEABODY & CO., INC., *v.* WRIGHT

No. 2,578. Decided February 11, 1931

1. TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTY—BELTS, COLLARS, CUFFS, AND SHIRTS.

Belts for men's and women's wear *Held* to constitute goods of the same descriptive properties as collars and cuffs and shirts.

2. SAME—MARKS—SIMILARITY—"AIR-O," "ARROW."

The term "Air-O" as applied to men's and women's belts *Held* confusingly similar to the word "Arrow" as applied to goods of the same descriptive properties, since these words are identical in sound, one being the misspelling of the other.

3. SAME—CANCELLATION—LACHES.

A petition for cancellation may be brought at any time and "the mere passage of time would not be a bar to a prior use of a trade-mark being successful in a cancellation proceeding."

APPEAL from the Patent Office. Reversed.

Messrs. Roberts, Cushman & Woodberry, Mr. Charles D. Woodberry, Mr. Richard F. Walker, and *Mr. John J. Darby* for Cluett, Peabody & Co., Inc.

No appearance for appellee.

BLAND, *J.*:

From a decision of the Commissioner of Patents, dismissing a petition for cancellation of the registration of the trade-mark "Air-O," No. 162,625, dated December 19, 1922, issued to Denver M. Wright for belts for men's and women's wear, appellant has appealed to this court.

Petitioner's petition is grounded upon the contention that appellee was not entitled to the use of his mark on the date of his application for registration for the reason that at the time of the making of said application, the petitioner, appellant herein, was the owner and user of the trade-mark "Arrow" which was sometimes used in the printed form with the pictorial representation of an arrow, and sometimes used in the printed form alone, upon various articles of wearing apparel, sold chiefly in men's furnishing stores.

The record shows that said petitioner is a New York corporation engaged in the manufacture and sale of collars and cuffs, outer shirts, including dress, negligee and work shirts, pajamas, nightshirts, undershirts, underdrawers, union suits, handkerchiefs, neckties, fabric bathing belts and other articles of dress and apparel; that its business was established in 1851; that is factories are located at Troy, Waterford, Schenectady, Rochester, Corinth, Nassau, Greenwich, all in New York, and at South Norwalk, Conn., Leominster, Mass., and Kitchener, Canada; that it maintains salesrooms and offices in 23 principal cities in this country; that its trade extends throughout this country and the principal foreign markets of the world, and that it is the largest collar and shirt manufacturer in the world; that the petitioner's said goods are sold and retailed in men's furnishings stores or haberdashery shops, in department stores, and in general clothing stores; that all of petitioner's said products are marketed under a trade-mark consisting of the word "Arrow" or of the pictorial representation of an arrow, or of said word "Arrow" associated with said pictorial representation of an arrow; that said mark has been continuously used by the petitioner and its predecessors in business since 1885 on shirts, collars and cuffs; that its use was extended to handkerchiefs about April, 1909, and to nightshirts, pajamas, undershirts, underdrawers and union suits about July, 1913, and to bathing belts in November, 1926, since which dates said uses have been continuous; that at the time of its expansion of business to fabric bathing belts and continuously since that time, the petitioner's said belts have been made of the regular stock of material from which certain of its collars have long been made and upon its regular machines used for cutting, folding, binding and stitching collars; that the petitioner is the owner of 12 different registered trade-marks which registrations date from 1900 to 1925. The record further shows large expenditures of money for advertising and many other details of petitioner's business which we will not set out here. The petitioner also introduced into the record a long list of trade-mark registrations of various firms showing the line of goods or different articles of men's wearing apparel which were handled by such firms and covered by such registrations.

The earliest date of use claimed by appellee is in the year 1915.

The Commissioner affirmed the decision of the Acting Examiner of Interferences whose decision dismissed the petition for cancellation. The decision of the Commissioner is to the effect that appellant did not use the "Arrow" trade-mark for belts until 1926 and that its right to extend its use of the "Arrow" mark to belts was lost due to laches since "petitioner practically acquiesced in the exclusive use of the mark 'Air-O' on belts from 1915 to 1926", and holds that it would be "inequitable" to now give appellant the exclusive use of the trade-mark "Arrow" on belts, citing *Victor Stove Co.* v. *Hall-Neal Furnace Co.*, 374 O. G. 252, 18 T. M. R. 178; and *France Milling Co.* v. *Washburn-Crosby Co.*, 7 F. (2d) 304.

Appellant contends that the registration of appellee's trade-mark was not warranted in law for the reason that the marks were identical (that is, identical in sound) and the goods of appellee and the goods of appellant at the time of appellee's registration were of the same descriptive properties; that since belts were in the same class, and closely related in their sale and use, with the articles sold by appellant, appellant had the right to extend its business at any time to the sale of belts and use its "Arrow" trade-mark thereon; and that the Com-

missioner erred in holding that appellant had lost such right by laches, inasmuch as the record was barren of any evidence whatever to the effect that appellant had any notice or knowledge of any facts which might be regarded as the basis for laches.

Counsel for appellant stated in argument that appellant first sought to register its "Arrow" trade-mark for cloth belts, which registration was refused on the theory that at that time the appellee owned a registered trade-mark for "Air-O" on men's and women's belts. He further stated that appellant did not appeal from the action of the Patent Office for the reason that appellant's counsel was of the opinion that the issue on such an appeal would involve only the similarity of the trade-marks and the descriptive properties of the goods of the respective parties; but that after registration had been refused, he then proceeded under section 13 of the trade-mark law of 1905 for cancellation in order that appellee's registered mark, when cancelled, would not be a bar to an application for registration of the trade-mark "Arrow" for cloth belts.

We think the Commissioner erred in his finding:

> That the registrant's belt does not have the same descriptive properties as any of the articles to which the petitioner appropriated its mark up to the time the registrant entered the field is evident. One wishing to purchase collars, cuffs, shirts, etc., would never be deceived into purchasing the registrant's belt; nor would one wishing to purchase registrant's belts be deceived into purchasing any one of the petitioner's articles to which it appropriated its mark prior to 1926.

[1, 2] Men's and women's belts are of the same descriptive properties as most, if not all, of the articles of wearing apparel upon which appellant used its "Arrow" trade-mark prior to the earliest use by appellee of its registered mark. *California Packing Corp.* v. *Tillman & Bendel, Inc.*, 17 C. C. P. A. (Patents) 1048, 40 F.(2d) 108, 394 O. G. 789; *B. F. Goodrich Co.* v. *Hockmeyer*, 17 C. C. P. A. (Patents) 1068, 40 F.(2d) 99, 394 O. G. 795; *Cheek-Neal Coffee Co.* v. *Hal Dick Mfg. Co.*, 17 C. C. P. A. (Patents) 1103, 40 F.(2d) 106, 395 O. G. 10. The application for registration of appellee should have been refused since the word "Air-O" and the word "Arrow" are identical in sound, one word being a misspelling of the other. Appellee, at the time of making his application was not the owner of the trade-mark for which registration was sought, since the same had already been appropriated, used and registered for use for goods of the same descriptive properties. In our view it should have been clear to the Commissioner that confusion would result from the concurrent use of the two marks and that the appellee's mark should not have been registered.

Upon this record, we think the Commissioner erred in his holding that on account of laches appellant lost its right to extend the use of its "Arrow" trade-mark to belts. There is no such statement of facts shown herein as was involved in the two cited cases. For instance, in the France Milling Co. case, supra, a circuit court of appeals decision, the reference to laches on the part of Washburn is predicated upon Washburn's "acquiescence of so many years, while France was building up a noncompetitive business", being such conduct as to bar Washburn from the right to an injunction in equity against The France Milling Co. The "acquiescence" referred to in the France Milling Co. case, supra, no doubt contained the element of notice which is absent in the case at bar. See cases cited in *Cluett, Peabody & Co.* v. *Hartogensis*, 17 C. C. P. A. (Patents) 1166, 41 F.(2d) 94, 396 O. G. 707.

[3] In *Cluett, Peabody & Co.* v. *Hartogensis, supra*, this court had substantially the same question under consideration and it was there held that under the provisions of section 13 of the Trade-Mark Act of 1905, the aggrieved party, having the right to bring his action "at any time", the mere passage of time would not be a bar to a prior use of a trade-mark being successful in a cancellation proceeding. We there held:

> We hold that the section provides that the proceeding may be brought at any time for the determination of these questions by one who deems himself injured by the registration of the mark, and that laches upon the part of the applicant is not a bar to the bringing of the proceeding provided for by the section.

However, further along in the decision we find the following:

> We think it appropriate to say in this connection that this opinion should not be construed as implying that affirmative acts of a prior owner and user of a trade-mark, relied upon by a registrant to his injury, would not be a bar to the right of cancellation in a proceeding under said section 13. We go no further than to hold that in view of the express language of the section mere laches is not such a bar, and nothing more than laches is claimed in the case at bar.

We conclude, therefore, that applicant herein is within its statutory rights in bringing the action for cancellation and that the trade-mark "Air-O", No. 162,625, dated December 19, 1922, should be cancelled.

The decision of the Commissioner of Patents is reversed.

Reversed.

GARRETT, *J.*, dissenting.

I am unable to agree with the majority that, under the facts of this case, appellee's "Air-O" trade-mark should be cancelled.

Briefly, the facts are these:

Appellee began the use of his mark on leather belts worn upon the person in 1915, and has continuously so used it since, without complaint or question, so far as this record shows, until the cancellation proceeding was instituted sometime in 1927.

In 1922 appellee, having then used the mark for about seven years, secured its registration under the Trade-Mark Act of 1905, "for use on men's and women's belts".

Prior to 1915 appellant had used the trade-mark "Arrow," combined with a representation of an arrow, on collars, cuffs and outer shirts, and held five registrations of same. Whether these registrations were of the word "Arrow" alone, or of the word combined with the picture, the record does not show. Of 11 exhibits of the mark filed, as those used, nine of them have the word and picture combined. Subsequent to 1915 appellant extended its use of the mark to handkerchiefs, union suits, pajamas, nightshirts, and other articles of wearing apparel. In 1926 it extended its line of goods to bathing belts made of the same kind of fabrics that are used in the manufacture of some of its collars and, perhaps, some of its other goods. Its arrow mark was used upon these belts and in 1927 it sought to register same for belt use. This application was denied on the ground that it conflicted with appellee's mark "Air-O" since the goods of both parties were belts. While its application was still pending, following an early preliminary adverse action by an examiner, appellant instituted the cancellation proceedings. It did not carry its application for registration beyond the Examiner's final or third decision rendered after a second reconsideration.

It thus appears that appellant did not enter the belt field until 11 years after appellee had begun the use of the mark on belts and four years after appellant's registration.

It seems obvious that appellee has strong equities. There is no suggestion of the slightest bad faith upon his part; no contention that he was endeavoring to obtain any benefits from appellant's advertising or appropriate to his advantage any part of appellant's good will. He began and continued the use of his mark in good faith, and registered it. He has evidently built up an extensive business in interstate and foreign commerce. The stipulated record shows:

> • • • in most of the States of the Union and in Canada, Cuba, Hawaii, Holland, Egypt, Japan, and Mexico, from which foreign countries registrant has received orders for belts under the trade name of "Air-O".

His location is at St. Louis, Mo.; the locations of appellant are in the eastern States and one in Canada. They were in no sense competitors and appellant has made no effort to show any actual injury to itself growing out of appellee's use of his mark over a period of many years. No confusion as to origin of the respective goods, or as to anything else, has been shown; no attempt has been made to show any.

It seems to me that the goods at issue in this cancellation proceeding, proper to be considered, are only those which were being dealt in by the respective parties in 1915 when appellee's use of his mark began. These were collars, cuffs and outer shirts (of textile material) on the one hand and belts (of leather) on the other.

If we extend the matter up to the date of appellee's registration, December 1922, we should add to appellant's goods, handkerchiefs, nightshirts, pajamas, undershirts, underdrawers, and union suits.

In the common and ordinary meaning of the phrase "of the same descriptive properties", I think it may be fairly said that they do not apply to the goods in which the respective parties to this case were dealing prior to 1926. There were no complaints by appellant of appellee's use of his mark or of his registration of same, of which latter it had at least constructive notice, until appellant had entered the bathing belt field and sought to register for that field.

But, even if it be conceded that the goods are of the same descriptive properties, by reason of the construction given by this court to the word "class", there remains the difference in the marks themselves.

I do not agree that they are so similar as that the statute should be held to justify or require the cancellation of appellee's mark.

Admittedly they do not have the same appearance. No person looking at them would be at all likely to think of any resemblance between them. Appellant's word—"Arrow"—is most frequently used in connection, or in combination, with a representation of an arrow. It was being wholly so used in and prior to 1915. Indeed, this representation is quite as distinctive as the word itself. Appellee's word, "Air-O," is, according to the record, used alone, unaccompanied by any sign or symbol. Whether appellant's registrations have generally had the representation of the arrow as a part of the drawing does not appear. The registrations were not placed in the record. Why I do not know. As stated above, nine of the 11 exhibits purporting to give the mark as used show the picture or representation of an arrow. Appellee's registration is in the record and consists of the single word "Air-O."

It is only when the words are pronounced that any resemblance is noted and I do not believe that an order of cancellation should, in this case, be based upon sound alone.

The equities of appellee are too great here to admit of their being lightly brushed aside. He is not the newcomer in the belt field against whom doubt should be summarily resolved. He is the prior user of the mark for belts, and, as between the parties, is entitled, as I view it, to have any doubt resolved in his favor. So far as any public interest may be thought to be involved, there has been no confusion in the past and I know of no reason to presume that any will result from a continuance of the status quo.

This court has had occasion to say in several cases, in substance, that it would be useless to admit a mark to registration which a court of equity will not protect. In so saying we but followed what other courts have frequently said. The Supreme Court of the United States itself has declared the principle.

The converse of this proposition, within proper limits, is true, of course, and I think the principle is applicable here. That appellee has acquired property rights in the mark "Air-O," which, upon this record, a court of equity would protect, I do not for a moment doubt. He is, in my opinion, entitled to have his registration stand.

U. S. Court of Customs and Patent Appeals

IN RE LAW

No. 2,617. Decided February 11, 1931

PATENTABILITY—RAILING.

Claims for a railing *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Hauff & Warland and *Mr. William E. Warland* for Law.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

From a decision of the Board of Appeals affirming that of the Examiner, refusing to allow claim 3,

being the only claim in the case, the applicant has appealed to this court. Claim 3 reads as follows:

3. A railing comprising a vertically arranged lower post adapted to be secured to a support and having a threaded end; a cross-fitting provided with a horizontal run and oppositely disposed vertically arranged threaded nipples, one of which is engaged by the threaded end of the lower post, an upper post having on one end a left-hand thread and on the other end a right-hand thread, one end of said upper post adapted to engage the other threaded nipple of said cross-fitting, a T-fitting having a horizontal run and an interiorly threaded nipple adapted to engage the other end of the upper post, a rail in the run of the cross-fitting and a rail in the run of the T-fitting, the ends of said upper post being adapted to impinge upon the respective rails at the same time and lock them firmly in place when said upper post is turned in one direction.

The railing, which is sufficiently described in the claim for the purposes of this decision, is designed to be used as a fence, or for interior use along stairways or other places where railings are necessary.

The references relied on are as follows: Black et al., 339,368, April 6, 1886; Molloy, 824,501, June 26, 1906; Molloy, 824,502, June 26, 1906.

Appellant claims that none of the references discloses his invention and that his railing is a successful and needed improvement over the prior art.

As we view it, appellant's disclosure consists of the main features taken from the three references, the combination of which requires nothing more than mechanical skill.

We agree with the Board of Appeals that the applicant disclosed no patentable invention not disclosed in the prior art and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

SAUQUOIT PAPER CO., INC., *v.* WEISTOCK

No. 2,584. Decided February 3, 1931

1. TRADE-MARKS—OPPOSITIONS—MISSTATEMENT IN THE NOTICE.

The statement in the notice of opposition that opposer's trade-mark had been registered in the Patent Office and a similar statement on the labels filed with the notice created a prima facie case of fraud against the public, but opposer should have been permitted to show mistake if it could and that there was no fraud in fact in its use of the trade-mark.

2. SAME—SAME—SAME.

Where it was testified on behalf of the opposer that when it purchased the assets of a bankrupt predecessor it acquired labels containing a copyright notice and having authorized its attorney to apply for registration it was under the impression that it was necessary that that application be accompanied by a label bearing the words "Trade-mark registered U. S. Patent Office" and that a few labels were printed for this purpose, but that subsequent labels did not bear this notice, *Held* that there was no fraudulent intent in printing the registration notice on the first labels and that the opposition should not have been dismissed on the ground of fraud.

APPEAL from the Patent Office. Reversed.

Mr. Edward T. Fenwick, Mr. Edward G. Fenwick, and *Mr. Charles R. Fenwick* of *Mason Fenwick & Lawrence* for Sauquoit Paper Co., Inc.

Mr. Herbert J. Jacobi and *Mr. William J. Jacobi* for Weistock.

LENROOT, *J.*:

This is an appeal in a trade-mark opposition proceeding from the decision of the Commissioner of Patents reversing the decision of the Acting Examiner of Interferences, the latter having sustained the opposition and adjudged that the applicant, appellee here, is not entitled to the registration for which she has made application.

The appellee, on August 5, 1927, made application for the registration of a trade-mark, the dominant part of which consisted of the words "Purple Cross", used upon toilet paper and wax paper. Appellant, on October 13, 1927, gave notice of opposition to the proposed registration, alleging that it was the prior owner and user of the words "Purple Cross" as a trade-mark upon toilet paper and kindred products, and that the use of said trade-mark by appellee would cause confusion with the mark owned and controlled by appellant, and that appellant would be damaged by the registration of such mark by appellee. This notice of opposition was found by the Commissioner of Patents to be insufficient for the reason, among other things, that it was not accompanied by specimens or facsimiles in duplicate of the mark actually used by the opposer, appellant here. On November 5, 1927, appellant filed a new notice of opposition to meet the objections raised by the Commissioner of Patents, and with this notice filed specimens of its mark, the notice of opposition referring to such specimens in the following language:

Specimens of the mark as used by this opposer are attached hereto.

This notice of opposition was verified by one John M. Ross, who, it appears, was the treasurer of appellant company. The specimens set out its trade-mark, of which the words "Purple Cross" were the dominant part, and at the bottom of the same there appeared the following:

All infringements of this label will be prosecuted
Trade Mark Registered U. S. Patent Office

Appellee, in her answer to the notice of opposition, among other things, denied the right of the opposer to claim the assistance of the Patent Office, on the ground that said opposer was guilty of misbranding and making false representations in printing upon its labels, as shown in the specimens attached to the notice of opposition, the registration notice: "Trade mark registered U. S. Patent Office," alleging the fact to be that said opposer did not possess a certificate of registration of the alleged trade-mark appearing on said specimens, and that therefore, being guilty of unclean hands, it had no standing before the Patent Office in this proceeding. It is a fact that said mark had never been registered by appellant.

Testimony was taken by appellant; no testimony was taken by appellee, nor was she represented when the testimony upon behalf of appellant was taken.

Both tribunals of the Patent Office found that appellant had owned and used the mark pleaded as of a date prior to any claimed by the appellee. The Acting Examiner of Interferences further found that although misrepresentation by appellant existed at the time the notice of opposition was filed, the testimony showed that the use of the words "Trade mark registered U. S. Patent Office" by appellant had ceased and that for that reason such misrepresentation could not be utilized as a basis for the equitable judgment adverse to the opposer that was sought by appellee. The Assistant Commissioner reversed the decision of the Acting Examiner of Interferences upon the last ground, and held that appellant could not avail itself of the discontinuance of the misrepresentation after the filing of the notice of opposition; he further found that appellant was guilty of misrepresentation in that the words "Trade mark registered U. S. Patent Office" constituted an untrue statement because the mark had not in fact been registered by appellant. He therefore held that the opposition should be dismissed.

[1] It is no doubt true that the filing of the mark containing the words "Trade mark registered U. S. Patent Office", and the statement in the verified notice of opposition that the marks filed were specimens of the mark as used by the opposer, created a prima facie case of fraud against the public upon the part of appellant which, standing alone, justified dismissing the opposition.

We think, however, that in such case the party should be permitted to show mistake, if it can, and that there was no fraud in fact in its use of the trade-mark. Neither the decision of the Acting Examiner of Interferences nor that of the Commissioner of Patents makes any reference to the testimony in behalf of appellant purporting to explain the purpose and use of the specimens of the trade-mark filed, and we think both tribunals must have overlooked such testimony.

It appears from the record that the "Purple Cross" label was originated in 1918 by the Seneca Paper Company of Geneva, N. Y., and that said company continued to do business until October, 1925, when it was reorganized and a new company was formed having the same corporate name. This new company continued to do business until 1927, when it went into bankruptcy. On October 7, 1927, appellant purchased from the trustee in bankruptcy of said company all of the labels and printing plates, together with all the right, title and interest of the bankrupt Seneca Paper Company to the brand "Purple Cross" and the good will of its business pertaining thereto, and also a copyright registration of the "Purple Cross" label, dated February 27, 1925; that since said October 7, 1927, appellant has continued to manufacture and sell toilet paper under this brand; that on October 13, 1927, or within one week from the date of appellant's acquiring said trade-mark as heretofore stated, it filed its original notice of opposition herein, and on November 5, or less than one month after so acquiring the trade-mark, it filed its verified notice of opposition as hereinbefore set out. It appears that appellant's predecessor used said label as a trade-mark long prior to February 25, 1925, which is the earliest date that appellee alleged her use of the same.

Said John M. Ross, treasurer of appellant company, was asked the following question and made the answer quoted:

Q. What can you say as to the appearance of the notice, "Trade mark registered U. S. Patent Office," on the specimen labels which you filed in connection with this opposition proceeding?

A. We purchased from the Seneca Paper Company, Inc., as may be seen on the bill of sale, a large quantity of Purple Cross labels. These bore the imprint, "Copyright 1925, Seneca Paper Company, Inc." Having authorized our attorney to apply for a trade-mark registration on this brand, and being under the impression that application for same must be accompanied by specimen labels bearing the imprint, "Trade-mark registered U. S. Patent Office by Sauquoit Paper Co., Inc.," we printed a few labels bearing this imprint, which were forwarded to our attorney. Subsequent printings of this label have borne the imprint, "Copyright 1925, Sauquoit Paper Co., Inc.," and the trade-mark registration notice has not appeared thereon.

It appears from this testimony that sometime between October 7, 1927, and November 5, 1927, the specimens of the trade-mark filed were sent by appellant to its patent attorney; that is to say, within less than one month after it had acquired the right to use the trade-mark. The question is, shall the explanation given by the witness Ross be accepted as satisfactory evidence that there was no fraud upon the part of appellant in the use of its trade-mark, and that the printing and filing of the specimens here in question were under a misapprehension upon the part of appellant company's officers as to the specimens required to be filed. If this explanation is not accepted, the decision of the Commissioner of Patents should be affirmed.

[2] We think the statement must be accepted that appellant secured from the Seneca Paper Company labels bearing the imprint "Copyright 1925, Seneca Paper Co., Inc.," and that such labels were in its possession at the time that it sent the specimens here in question to its attorney. It is fair to conclude that appellant did not use the trade-mark "Purple Cross" upon goods for a greater period of time than one month previous to the filing of the second notice of opposition. If there had been any use of the trade-mark containing the words "Trade mark registered U. S. Patent Office," it could have been for only a short time, and it is to be noted that within one week from the time it secured the rights of its predecessors to the trade-mark, it began this opposition proceeding, namely on October 13, 1927. That is to say, within six days after it acquired the rights of its predecessors to the trade-mark, it began or attempted to begin this proceeding. We think this is a circumstance that is proper to be considered in weighing the testimony of said Ross hereinbefore quoted. It must be assumed that at least some days elapsed between the time that appellant's officers determined to begin this opposition and the date of filing of the first notice of opposition, October 13, 1927. It would seem that, with an opposition proceeding in mind, appellant's officers would not have had printed a trade-mark containing the false statement for use upon its merchandise, thereby jeopardizing the rights that they were seeking to establish. Furthermore, if there was any intention upon the part of appellant's officers to defraud the public, one would hardly have expected them to furnish to the Patent Office evidence of the fraud when they might have filed the copyright label in their possession,

containing the representation of the trade-mark but not containing the words "Trade mark registered U. S. Patent Office".

In view of all of these circumstances, we think that the witness Ross stated the truth when he said that:

• • • Having authorized our attorney to apply for a trade-mark registration on this brand, and being under the impression that application for same must be accompanied by specimen labels bearing the imprint, "Trade mark registered U. S. Patent Office by Sauquoit Paper Co., Inc.," we printed a few labels bearing this imprint, which were forwarded to our attorney. • • •

We think the fair inference from this testimony is that all of such labels were forwarded to appellant's attorney for the purpose stated by the witness, that none of such labels were actually used upon goods of the appellant, and that appellant had no fraudulent intent in printing the words "Trade mark registered U. S. Patent Office" upon the labels, or in sending them to its attorney to be filed in the Patent Office.

The decision of the Commissioner of Patents is reversed, with directions to sustain the opposition of appellant and deny the application of appellee.

Reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,115,866, H. M. Reynolds, Roofing shingle, filed Mar. 10, 1931, D. C., N. D. Ohio (Cleveland), Doc. 3701, *The Patent & Lincensing Corp.* v. *Weaver-Wall Co. et al.*

1,141,402, R. D. Mershon, Electrolytic apparatus employing filmed electrodes; 1,784,674, same, Film formation and operation of electrolytic condensers and other apparatus, filed Feb. 26, 1931, D. C., E. D. N. Y., Doc. 5405, *R. D. Mershon et al.* v. *J. F. O'Neill* (*Radio Service Engineers*).

1,149,495, G. C. Carson, Metallurgical furnace; 1,302,307, same, Construction of the roof of open hearth and reverberatory furnaces, D. C. Nev. (Carson City), Doc. E 126, *Carson Investment Co.* v. *Nevada Consolidated Copper Co.* Dismissed for want of prosecution Feb. 2, 1931.

1,164,720, P. M. Hotchkin, Stand lamp reflector, filed Feb. 26, 1931, D. C., E. D. N. Y., Doc. 5404, *Curtis Lighting Inc., et al.* v. *Mutual Sunset Lamp Mfg. Co.*

1,171,982, L. Rosenman, Garment fastener holder; 1,623,361, same, Fastener strip or fly for garments; 1,612,397, same, Turn-over guide plate for applying concealed fastener tape to garment edges by sewing machine operations, filed Feb. 26, 1931, D. C., E. D. N. Y., Doc. 5403, *Yale Hook & Eye Co.* v. *Waldes Koh-I-Noor, Inc.*

1,197,166. (See 1,428,762.)

1,221,030, H. D. Currier, Telephone system; 1,283,400, same, Trunk circuit; 1,556,761, Currier and Eaton, same; 1,594,877, same, Telephone system; 1,261,492, H. D. Currier et al., same, D. C., W. D. N. Y., Doc. 350, *Kellogg Switchboard & Supply Co.* v. *New York Telephone Co. et al.* Dismissed Feb. 24, 1931.

1,224,253, Wiley & Wiley, Illuminated sign, filed Mar. 14, 1931, D. C., E. D. Wis. (Milwaukee), Doc. 3140, *Flexlume Corp* v. *Metal Products, Inc.*

1,231,099, H. E. Townsend, Closure; 1,381,363, T. L. Taliaferro, Cover for jars, appeal filed Mar. 2, 1931, C. C. A., 8th Cir. (St. Louis), Doc. 9161, *Anchor Cap & Closure Corp.* v. *G. F. Linhardt et al.*

1,261,492. (See 1,221,030.)

1,264,560, A. L. Riker, Sparking means for motor vehicles; 1,287,988, J. A. Heany, Starting and supply mechanism for lighting and ignition current for automobiles; 1,287,989, same, Dynamo electric starting, lighting, and ignition mechanism for automobiles; 1,301,053, 1,305,601, same, Ignition device for motor vehicles, filed Mar. 5, 1931, D. C., N. D. Ohio, W. Div., Doc. E 1142, *The Lecce-Neville Co.* v. *Industrial Research Corp.*

1,283,400. (See 1,221,030.) 1,287,988. (See 1,264,560.)

1,287,989. (See 1,264,560.) 1,301,053. (See 1,264,560.)

1,302,307. (See 1,149,495.) 1,305,601. (See 1,264,560.)

1,316,477. (See 1,428,762.)

1,322,550, T. V. Edmunds, Puncture preventing material for tires, C. C. A., 6th Cir., Doc. 5668, *D. F. Fowler* v. *Detroit Bedding Co. et al.* Claim 2 held not infringed Mar. 6, 1931.

1,358,182. (See 1,428,762.)

1,361,508, J. T. Tice, Calendar rack, D. C., W. D. S. C. (Greenville), Doc. E 222, *J. T. Tice* v. *Mountain City Foundry & Machine Works.* Decree referred to Special Master (notice Feb. 26, 1931).

1,363,333, 1,371,498, N. M. Lower, Locomotive stoker; 1,404,984, same, Gear shifting mechanism, filed Mar. 7, 1931, D. C. Md., Doc. E 1849, *The Standard Stoker Co., Inc.*, v. *Lower Stoker Co. et al.*

1,371,404, R. H. Wappler, High potential electric machine, appeal filed Mar. 4, 1931, C. C. A., 2d Cir., Doc. —, *Wappler Electric Co., Inc.*, v. *The Bronx Hospital & Dispensary.*

1,371,498. (See 1,363,333.) 1,381,363. (See 1,231,099.)

1,404,984. (See 1,363,333.)

1,411,376, R. B. Respess, Process of making a leather substitute, filed Feb. 5, 1931, D. C., E. D. N. Y., Doc. 5399, *Respro, Inc.*, v. *Vulcan Proofing Co.*

1,411,391, J. D. Tucker, Spoke tightener; 1,424,530, Tucker and Tucker, same, D. C., E. D. Okla. (Muskogee), Doc. E 3652, *Tucker Bros. Mfg. Co. et al.* v. *J. E. Babcock et al.* (*Babcock Bros. Auto Supply Co.*). Decree for plaintiff (notice Mar. 10, 1931).

1,424,530. (See 1,411,391.)

1,428,762, 1,316,477, H. D. Currier, Telephone system; 1,438,170, same, Telephone system with flickering recall; 1,197,166, C. S. Winston, Universal cord circuit for telephone systems; 1,358,182, C. Sparks, Trunk circuit; 1,566,622, W. G. Shull, Telephone system, D. C., W. D. N. Y., Doc. 351, *Kellogg Switchboard & Supply Co.* v. *New York Telephone Co. et al.* Dismissed Feb. 24, 1931.

1,432,259. (See Re. 15,129.)

1,436,459, J. Reece, Seat cover, filed Feb. 19, 1931, D. C., E. D. N. Y., Doc. 5402, *Evr-Klean Seat Pad Co.* v. *J. Rotkin* (*Gem Auto Parts Co.*).

1,438,170. (See 1,428,762.)

1,447,090, J. E. Langsdorf, Necktie, D. C., S. D. N. Y., Doc. E 49/296, *Franc-Strohmenger & Cowan, Inc.*, v. *S. Goldenberg et al.* (*American Neckwear Co.*). Consent decree for plaintiff Mar. 4, 1931. Doc. E 49/297, *Franc-Strohmenger & Cowan, Inc.*, v. *S. C. Wolf* (*Kempton Knitting Mills*). Consent decree for plaintiff Mar. 4, 1931.

1,447,193, J. A. Watt, Water closet valve, filed Mar. 5, 1931, D. C., S. D. N. Y., Doc. E 58/240, *American Rubber Products Corp. et al.* v. *Durst Mfg. Co., Inc.*

1,460,716, B. F. Greer, Book form savings bank, D. C., S. D. N. Y., Doc. E 45/376, *Bankers Utilities Co., Inc., et al.* v. *Interstate Trust Co.* Dismissed Mar. 10, 1931.

1,466,701, L. de Forest, Method of and means for controlling electric currents by and in accordance with light variations; 1,693,071, same, Sound recording attachment for motion picture cameras; 1,695,414, same, Talking moving picture machine; 1,607,480, E. E. Ries, Method of reproducing photographic sound records, C. C. A., 3d Cir., Doc. 4461–4462, *General Talking Pictures Corp. et al.* v. *Stanley Co. of America.* Decree to effect that no one of the patents in suit is infringed Mar. 2, 1931.

1,500,348, C. M. Tackabery, Fuel feed for furnace, D. C. Oreg. (Portland), Doc. E 9018, *The Fuel Reduction Co.* v. *Northwest Stove Works, Inc.* Dismissed for lack of prosecution (notice Mar. 2, 1931).

1,512,888, L. Haft, Lighting set, filed Mar. 4, 1931, D. C. Conn. (New Haven), Doc. E 2112, *Noma Electric Corp.* v. *M. Goldman & Co., Inc.*

1,526,982, E. W. Hill, Stencil sheet, D. C., S. D. N. Y., Doc. E 50/17, *A. B. Dick Co.* v. *Theta Dry Stencil Corp.* Doc. E 50/19, *A. B. Dick Co.* v. *Plex Dry Stencil Corp., Inc.* Doc. E 50/20, *A. B. Dick Co.* v. *R. J. Ludlow, jr., et al.* Decree for plaintiff Mar. 5, 1931, in each of above cases. Doc. E 50/56, *A. B. Dick Co.* v. *J. T. Heidenheimer* (*Torotype Stencil Co.*). Decree for plaintiff Mar. 11, 1931.

1,529,316, 1,683,961, T. G. Lovegrove, Magnetic sharpener for razor and other blades, filed Mar. 9, 1931, D. C., S. D. N. Y., Doc. E 58/262, *C. S. Lovegrove* v. *Monroe Specialty Co. et al.*

1,551,515, W. K. Howe, Automatic train control system, D. C. Minn. (St. Paul), Doc. E 811, *General Rwy. Signal Co.* v. *Great Northern Rwy. Co.* Decree of Oct. 6, 1927 set aside; patent held infringed Mar. 4, 1931.

1,552,326, P. J. Lunati, Lifting device for motor vehicles, filed Mar. 4, 1931, D. C., S. D. Calif. (Los Angeles), Doc. T–58–H, *Rotary Lift Co. et al.* v. *H. C. Sommer.* Same, D. C., S. D. Calif. (Los Angeles), Doc. E T–37–M, *Rotary Lift Co. et al.* v. *F. O. Johnson.* Decree for injunction Mar. 4, 1931.

1,556,761. (See 1,221,030.)

1,559,520, T. M. Fairbairn, Putting green and similar playing surface, D. C., W. D. Mich. (Grand Rapids), Doc. 2360, *National Pipe Products Corp. et al.* v. *C. Humphreys.* Decree holding infringement Feb. 24, 1931.

1,562,288, P. Burke, Pull shovel, D. C., E. D. Wis. (Milwaukee), Doc. 2894, *Northwest Engineering Corp.* v. *Harnischfeger Corp.* Decree for plaintiff Mar. 13, 1931.

1,562,521, C. P. Schlegel, Grip strap, D. C., S. D. N. Y., Doc. E 55/194, *The Schlegal Mfg. Co.* v. *Auto Textile Trimming Co., Inc.* Consent decree for plaintiff Mar. 3, 1931.

1,566,622. (See 1,428,762.)

1,570,364, J. Wieder, Sample tab, filed Mar. 11, 1931, D. C., S. D. N. Y., Doc. E 58/328, *Standard Sample Card Co., Inc., et al.* v. *Sample Card Corp. of America.*

1,576,043. (See 1,191,306.)

1,577,150, C. E. Putman, Imitation shake shingle, D. C., W. D. Wash., N. Div., Doc. 721, *C. E. Putman* v. *G. R. Merkley et al.* (*Oxbow Shingle Co.*). Dismissed Feb. 25, 1931.

1,594,877. (See 1,221,030.) 1,607,480. (See 1,466,701.)

1,612,397. (See 1,171,982.)

1,617,148, R. T. Chase, Can opener, D. C., S. D. N. Y., Doc. E 55/286, *R. T. Chase et al.* v. *Lorraine Metal Mfg. Co.* Consent decree for plaintiff (notice Mar. 9, 1931).

1,623,361. (See 1,171,982.)

1,628,591, P. Harris, Wig for dolls, D. C., S. D. N. Y., Doc. E 49/128, *Mutual Hair Goods Co., Inc., et al.* v. *J. Samet et al.* (*Beauty Doll Mfg. Co.*). Consent decree for plaintiff Mar. 3, 1931.

1,651,193, A. R. Chisholm, Vanity case, D. C., S. D. N. Y., Doc. E 46/363, *A. R. Chisholm* v. *C. W. McCutchen & Co., Inc.* Dismissed Mar. 10, 1931.

1,683,981. (See 1,529,316.) 1,693,071. (See 1,466,701.)

1,695,414. (See 1,466,701.)

1,749,734, T. J. Kelly, Netted cord fabric bag, filed Mar. 11, 1931, D. C., N. D. Ga. (Rome), Doc. E 109, *Sothern Brighton Mills* v. *Aragon Mills.*

1,750,271, L. Kasan, Awning, filed Feb. 17, 1931, D. C., E. D. N. Y., Doc. 5401, *L. Kasan* v. *Sunproof Awning Co., Inc., et al.*

1,779,195, A. P. Steckel, Method and apparatus for rolling thin sheetlike material, filed Mar. 7, 1931, D. C., W. D. Pa. (Pittsburgh), Doc. E 2506, *The Cold Metal Process Co.* v. *United Engineering & Foundry Co.*

1,784,674. (See 1,141,402.)

1,794,124, L. Sugerman, Twin section egg carton, filed Mar. 10, 1931, D. C., S. D. Ohio, W. Div., Doc. E 724, *L. Benoit* v. *The F. H. Blome Co.*

Re. 15,129, 1,432,259, J. J. Richards, Reserve provider for fuel tanks, D. C., S. D. N. Y., Doc. E 46/393, *T. A. Kelly* v. *Pierce-Arrow Sales Corp.* Dismissed Mar. 3, 1931.

Des. 70,508, Des. 73,578, E. Pappert, Eyeglass frame, filed Mar. 10, 1931, D. C., S. D. N. Y., Doc. E 58/303, *E. Pappert* v. *Shell-Craft Mfg. Corp.*

Des. 73,578. (See Des. 70,508.)

Des. 74,384, E. E. Nahon, Chair, D. C., S. D. N. Y., Doc. E 47/33, *E. E. Nahon et al.* v. *The Imperial Upholstering Corp.* Consent decree for plaintiff Mar. 7, 1931.

Des. 76,612, A. Von Frankenberg, Lamp, D. C., S. D. N. Y., Doc. E 49/166, *Frankart, Inc.*, v. *L. Glauber.* Consent decree for plaintiff Mar. 6, 1931. Doc. E 49/208, *Frankart, Inc.*, v. *J. Epter.* Decree as above.

Disclaimers

Reissue No. 15,360.—*William F. Cremean*, Toledo, Ohio. RAILWAY CAR. Patent dated May 23, 1922. Disclaimer filed May 6, 1931, by the patentee, assignee, *The Wine Railway Appliance Company*, consenting.

Therefore, enters this disclaimer to claims 4, 5, 6, and 7 in said specification, which are in the following words, to wit:

"4. In combination with a freight car having a drop door, a member secured to the bottom of the door and extending beyond a free edge thereof, a pivotal hook secured to the car body and above the member secured to the car door, an auxiliary ledge formed on said hook to engage the member on said door to support the door in a temporary partly closed position and a main supporting ledge for engaging the member formed on said door when said door is lifted and thereby hold said door in its final closed position.

"5. In combination with a freight car having a drop door, a member secured to the bottom of the door and extending beyond a free edge thereof, a pivotal hook secured to the car body and above the member secured to the car door, an auxiliary ledge formed on said hook to engage the member on said door to support the door in a temporary partly closed position, a main supporting ledge for finally engaging the member formed on said door to tightly hold said door in its closed position, and means for locking the hook in engagement with said member secured to the car door.

"6. In combination with a freight car having a swinging door, a member secured to the bottom of the door and extending beyond a free edge thereof, a pivotal hook secured to the car body and above the member secured to the car door, an auxiliary ledge formed on said hook to engage the member on said door to support the door in a temporary partly closed position, a main supporting ledge for engaging the member formed on said door to support the door in its final closed position, and the contour of the face of the main supporting ledge corresponding with the contour of the face of the member secured to the car door.

"7. In combination with a freight car having a drop bottom door, a member secured to the door and extending beyond a free edge thereof to form a ledge, a bracket secured to the car body, a pivotal hook secured in said bracket and located above the member secured to the car door, an auxiliary ledge formed on said hook to engage the ledge on the car door to support the door in a temporary partly closed position, a main supporting ledge on said hook for finally engaging the ledge on said door to thereby hold the door in its closed position, and means for locking the hook in engagement with the ledge formed on said door."

1,374,352.—*Andrew J. Borst, jr.*, Buffalo, N. Y. VEHICLE. Patent dated April 12, 1921. Disclaimer filed May 8, 1931, by the assignee, *Fruehauf Trailer Company.*

Hereby disclaims:

All tractor-trailer combinations, as claimed in claim 2, except one in which one engaging member has a projecting part which, as the tractor backs into the trailer, enters between spaced portions of the engaging surfaces on the other engaging member to guide and allow fore and aft movement of the engaging members to and from final coupling relation by relative fore and aft tractor-trailer movement only, and in which the engaging members cooperate in an automatic elevation of the front end of the trailer as the tractor backs into it in coupling, and an automatic lowering of the front end of the trailer as the tractor pulls away from it in uncoupling.

1,383,381.—*Andrew J. Borst, jr.*, Buffalo, N. Y. SEMI-TRAILER. Patent dated July 5, 1921. Disclaimer filed May 8, 1931, by the assignee, *Fruehauf Trailer Company*.

Hereby enters this disclaimer:

Petitioner disclaims any and all supporting mechanism specified in claim 2 except such wherein the horizontally slidable means is actuated by a portion of the tractor when backing the rear end of the tractor underneath the front end of the trailer, to move the slidable means rearwardly, thereby causing the movable supporting element to move upwardly into inoperative position.

Disclaims all supporting mechanism specified in claim 3 except such wherein the slidable elements are actuated by the tractor when backing under the front end of the trailer to thereby elevate the supporting element.

Disclaims all trailer structures specified in claim 6 except where the movable elements are automatically actuated by the tractor in backing under the front end of the trailer to automatically move the supporting element from operative to inoperative position.

Disclaims all trailer structures specified in claim 8 except where the actuator slides are automatically moved rearwardly when the tractor is backed underneath the trailer to automatically raise the supporting member to its inoperative position.

Disclaims all supporting mechanism claimed in claims 18, 19, and 22, except that in which the slide members are adapted to be actuated by a portion of the tractor when the same is backed under the forward end of the trailer to thereby move the slide members rearwardly and cause the supporting member to be moved upwardly into inoperative position.

1,466,656.—*Clarence E. Barr* and *Thomas E. Jackson*, Detroit, Mich. ELECTRIC TOASTER. Patent dated September 4, 1923. Disclaimer filed May 11, 1931, by the assignee, *Harry C. Le Vine*.

Hereby enter this disclaimer to that part of the claims in said specification which are in the following words, to wit:

"1. A toaster comprising a base, a top, a series of parallel heating elements extending substantially the length of the toaster, between the base and the top, and casings for the outer heating elements."

"6. A toaster comprising a base, a top, a series of heating elements extending substantially the full length of the toaster between the base and the top, casings for the outer heating elements, means to support the inner heating element, and guard wires extending longitudinally of the toaster across said heating elements."

1,638,131.—*Warren R. Walker*, Great Kills, N. Y. ELECTRIC SWITCH. Patent dated August 9, 1927. Disclaimer filed May 12, 1931, by the assignee, *General Electric Vapor Lamp Company*.

Hereby enters this disclaimer to claims 1, 2, 3, 4, 5, 6, 10, and 11 of said patent which are in the following words:

"1. A mercury switch comprising an envelope of glass, mercury therein, and electrodes, one of which comprises a lead-in sealed into said envelope and a terminal portion of metal of the iron group welded to said lead-in and extending into said mercury.

"2. A mercury switch comprising an envelope of glass, mercury therein, and electrodes, one of which comprises a lead-in of a metal of the tungsten group sealed into said envelope and a terminal portion of metal of the iron group welded to said lead-in and extending into said mercury.

"3. A mercury switch comprising an envelope of glass, a mercury therein, and electrodes, one of which comprises a lead-in of a metal of the tungsten group sealed into said envelope above the level of the mercury and a terminal portion of metal of the iron group welded to said lead-in and extending into said mercury.

"4. A mercury switch comprising a longitudinal envelope of glass having mercury therein, an electrode sealed through the envelope wall and extending into said mercury, an electrode lead-in of tungsten sealed through the envelope wall at one end thereof and a terminal portion of nickel welded to said lead-in and extending into said mercury.

"5. A mercury switch comprising a longitudinal envelope of glass having a wall formed therein, mercury in said envelope, an electrode sealed through the wall of said envelope and extending into said mercury, an electrode lead-in of tungsten sealed through said wall above normal mercury levels and a terminal portion of nickel welded to said lead-in and extending into said cup.

"6. A mercury switch comprising a sealed envelope of glass, mercury therein, and electrodes, one of which comprises a lead-in sealed into said envelope and a terminal portion of metal of the iron group welded to said lead-in and extending into said mercury, and a filling of hydrogen in said envelope."

"10. A mercury switch comprising a sealed envelope of glass, mercury therein, and electrodes one of which comprises a lead of tungsten sealed into the envelope and a terminal thereon of oxygen free nickel.

"11. The method of making an electrode for a mercury device into which it is sealed which comprises welding a nickel terminal portion to a tungsten lead-in portion."

1,676,609.—*Roger D. Hunneman*, Chicago, Ill. ART OF DISTILLING HYDROCARBON OILS. Patent dated July 10, 1928. Disclaimer filed May 8, 1931, by the assignee, *Standard Oil Company*.

Hereby enters this disclaimer to claims 5, 6, and 7 of said patent, which claims are in the following words, to-wit:

"5. The method of distilling hydrocarbon oils comprising passing the oil in a confined stream through a heating zone, discharging the oil into a separating chamber, passing the unvaporized oil in countercurrent to a current of steam, subsequently subjecting said steam with the vapors from the separating chamber to refluxing action, and maintaining sub-atmospheric pressure on the system.

"6. The method of distilling hydrocarbon oils which comprises passing the oil in an externally heated confined stream through a heating zone, discharging the oil into an unheated separating chamber, supplying steam in said chamber so as to pass through the liquid therein, removing separated vapors and steam from said chamber, and subjecting the removed vapors and steam to a controlled refluxing action.

"7. The method of distilling hydrocarbon oils which comprises passing the oil in an externally heated confined stream through a heating zone, discharging the oil into an unheated separating chamber, supplying steam in said chamber so as to pass through the liquid therein, removing separated vapors and steam from said chamber, subjecting the removed vapors and steam to a controlled refluxing action and returning reflux to the separating chamber."

Changes in Classification

Order No. 3,192, May 12, 1931, directs:

In *class 266, Metallurgical Apparatus* (Division 3), abolish the following subclasses, with their definitions:

1.5 **Electric furnaces.**
Electrodes
1.6 Carbon.

The patents formerly contained in these subclasses have been placed for the most part in class 13, Electric Furnaces, established in this order.

Establish, in Division 3, class 13, Electric Furnaces, with the subclasses indicated in the new loose leaf now being published for insertion in the Manual of Classification, and definitions to be printed in Classification Bulletin No. 63, the patents contained in this class having been taken for the most part from class 266, Metallurgical Apparatus, subclasses 1.5, Electric furnaces, and 1.6, Electrodes, Carbon, abolished in this order.

TRADE-MARKS

OFFICIAL GAZETTE, MAY 26, 1931

[VOL. 406. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 308,738. LEHIGH PACKING CO. INC., Allentown, Pa. Filed Dec. 8, 1930.

Cloverhill White

The word "White" is disclaimed apart from the other features of the mark shown on the drawing.

For Rabbits for Breeding Purposes.

Claims use since Aug. 15, 1930.

Ser. No. 312,396. VICTOR OOLITIC STONE COMPANY, Bloomington, Ind. Filed Mar. 21, 1931.

VICTOR TAPESTRY

For Building Stone as It Comes from the Quarry.

Claims use since November, 1930.

Ser. No. 312,716. THE MOORES LIME COMPANY, Durbin, Ohio. Filed Mar. 30, 1931.

MAG-LI-KOTE

Applicant disclaims the word "Kote" apart from the mark as shown on the drawing.

For Material Made Principally from Dolomite or Lime for Coating Molds for Casting Pig Iron.

Claims use since Feb. 6, 1931.

Ser. No. 313,387. GEORGE F. PETTINOS, INCORPORATED, Philadelphia Pa. Filed Apr. 15, 1931.

"SONITTEP"

For Sands.

Claims use since Apr. 2, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 313,285. S. DRESNER & SON, INC., Chicago, Ill. Filed Apr. 13, 1931.

DRESNER ORIGINAL

For Luggage—viz, Gladstone Bags, Club Bags, Coat Cases, and Overnight Cases.

Claims use since January, 1923.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 297,450. MOORE AND BRADFORD, Washington, D. C. Filed Mar. 17, 1930.

CREST

C

For Glass and Metal Cleaning Paste.

Claims use since January, 1930.

Ser. No. 300,323. GUY E. BRIGNALL, doing business as Lite Soap Company, Aurora, Ill. Filed May 12, 1930.

Lite

For Mineral Soap Containing Tri-Sodium Phosphate as an Ingredient.
Claims use since Jan. 1, 1920.

Ser. No. 300,324. GUY E. BRIGNALL, doing business as Crysto Soap Company, Aurora, Ill. Filed May 12, 1930.

CRYSTO

For Mineral Soap Containing Tri-Sodium Phosphate as an Ingredient.
Claims use since Jan. 1, 1917.

Ser. No. 309,809. CHARLES M. DEERING, doing business as Salta Products, Worcester, Mass. Filed Jan. 10, 1931.



SALTA

For Powdered Cleanser for General Household Purposes and for Cleaning Surgical Instruments, Jewelry, Refrigerators, Enameled Gas and Electric Stoves, and Dairy Equipment.
Claim use since February, 1930.

Ser. No. 309,815. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass. Filed Jan. 10, 1931.

Filtex

For Sand-Paper.
Claims use since Dec. 27, 1930.

Ser. No. 311,437. GABILLA, INCORPORATED, New York N. Y. Filed Feb. 25, 1931.

LA VIERGE FOLLE

For Toilet Soap.
Claims use since Oct. 29, 1910.

Ser. No. 312,250. ABRASIVE PRODUCTS, INC., Boston, Mass. Filed Mar. 18, 1931.

JEWEL



For Natural Abrasive of Flint, Emery, and Garnet; Artificial Abrasive of Silicon, Carbide and Aluminum Oxide; and Abrasive Papers and Cloths.
Claims use since May, 1929.

Ser. No. 312,252. ABRASIVE PRODUCTS, INC., ,Boston, Mass. Filed Mar. 18, 1931.

PILGRIM

For Natural Abrasives of Flint, Abrasive Papers and Cloths.
Claims use since May, 1929.

Ser. No. 312,470. BROADUS BAILEY, doing business as Broadus Bailey and Company, Greenville, S. C. Filed Mar. 24, 1931.

BAYSOL

For Cleaning Composition for Bath Tubs, Sinks, Floors, Linoleum, Painted Woodwork, and the Like.
Claims use since June 10, 1927.

Ser. No. 313,136. LOUIS M. KERR, Buffalo, N. Y. Filed Apr. 9, 1931.

PIONEER

For Waterproofing Dressing for Shoes and Like Articles of Leathers.
Claims use since Feb. 13, 1931.

Ser. No. 313,365. FIDELITY MANUFACTURING CO., INC., doing business as Alrite Mfg. Co., Zionsville, Pa. Filed Apr. 15, 1931.



For Auto Top Dressing.
Claims use since Jan. 17, 1931.

CLASS 5

Adhesives

Ser. No. 312,850. LIQUID CEMENT CO., San Diego, Calif. Filed Apr. 2, 1931.

S AND F

For Adhesive Liquid Cement.
Claims use since Feb. 15, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 293,339. P. J. OESTERLING & SON, INC., Butler, Pa. Filed Dec. 6, 1929.

AT Sun Side LAST

"CHIKLOH"

For Tonic for the Treatment of Coccidiosis and White Diarrhoea in Poultry.
Claims use since October, 1924.

Ser. No. 304,292. NEWPORT CHEMICAL WORKS, INCORPORATED, Carrollville, Wis. Filed Aug. 6, 1930.

ROSE BOSPHORE

The word "Rose" is disclaimed apart from the mark as shown in the drawings.
For Synthetic Perfume.
Claims use since July 19, 1930.

Ser. No. 305,801. A/S. APOTHEKERNES LABORATORIUM FOR SPECIALPRÆPARATER, Skoyen near Oslo, Norway. Filed Sept. 18, 1930.

Kollopin

For Bath Perfumery.
Claims use since March, 1927.

Ser. No. 306,287. RADIATOR SPECIALTY COMPANY, Charlotte, N. C. Filed Oct. 1, 1930.



Applicant is the owner of registered Trade-Mark No. 220,740.
For Composition for Cleaning the Interior of Hot Water Circulating Systems.
Claims use since July 28, 1930.

Ser. No. 306,418. JOE. F. SANTEE, doing business as Santarub Chemical Company, Okmulgee, Okla. Filed Oct. 4, 1930.

SANTARUB

For Penetrating Vaporizing Ointment for the Treatment of Flu, Croup, Coughs, Head Colds, Chest Colds, Neuralgia, Sprains, Sore Feet, Boils, Piles, and Inflammation.
Claims use since Jan. 15, 1927.

Ser. No. 306,437. LENA FLAHERTY, doing business as Rhealinzo Co., Portland, Oreg. Filed Oct. 6, 1930.

RHEALINZO

For Medicine for Pyorrhea.
Claims use since June 1, 1929.

Ser. No. 309,032. LOUIS H. MYERS, Atlantic City, N. J. Filed Dec. 16, 1930.

"LACTOPHILUS"

For Acidophilus Culture.
Claims use since Feb. 10, 1925.

Ser. No. 309,033. O. H. D. Co., INC., Wilmington, Del. Filed Dec. 16, 1930.



The words "Cough Syrup" are disclaimed apart from the mark as shown on the drawing.

For Cough Syrup.

Claims use since January, 1927.

Ser. No. 309,086. KISSANA CHEM.-PHARM. LABORATORIUM G. M. B. H., Bad Kissingen, Germany. Filed Dec. 17, 1930.

Kissana

For Adhesive Plasters—Namely, Plasters of a Merely Antiseptic Character, Plasters for Keeping Surgical Dressings in Place, Court Plaster, and Medicated Plasters; Surgical Dressings, Dressings of Iodoform Gauze; Animal and Plant Destroyers—Namely, Insect Powder, Rat Poison, and Preparations for Destroying the Phylloxera; Spring and Bath Salts, Perfumery; Cosmetics—Namely, Preparations for Treating the Skin, Hair, Mouth, Teeth, Nails, Beard, Lip Sticks, Powder, Rouge, and Hair Dyes; and Medicinal Preparations Used in the Treatment of Rheumatism, Nervous Diseases, Gout, Diseases Resulting from Colds, Constipation, Hemorrhoids, Rash, and Medicinal Baths—Namely, Extracts, Either Liquid or in the Nature of Powder or Tablets Which Are Put in the Water, as, for Instance, Sulphur, Salts, Iodine, and Pine Needles.

Claims use since January, 1920.

Ser. No. 309,665. THE ANTE-FERMEN CO., Columbia, S. C. Filed Jan. 7, 1931.

Ante-Fermen

For a Medicinal Preparation for the Treatment of Sour Stomach Due to Hyperacidity, Flatulence Due to Hyperacidity, Wind Colic, and for Use as a Carminative Antacid Intestinal Astringent Stomachic, and for Treating Teething Children.

Claims use since Nov. 7, 1930.

Ser. No. 310,059. LENTHERIC, INCORPORATED, New York, N. Y. Filed Jan. 17, 1931.



Applicant is the owner of registered Trade-Marks Nos. 180,528, 254,198, 275,324, and 276,648.

For Perfumes, Toilet Waters, Eau de Cologne, Face and Scalp Lotions, Face Powders, Dusting Powders, Powder Compacts, Rouges and Refills, Lipsticks and Refills, Cleansing, Vanishing, and Tissue Creams, Hair Tonics, and Bath Salts.

Claims use since October, 1924.

Ser. No. 310,211. CHESEBROUGH MANUFACTURING COMPANY, CONSOLIDATED, New York, N. Y. Filed Jan. 21, 1931.



The lining on the drawing represents a blue colored background upon which in actual use the lettering appears in white. With the exception of the duly registered trade-mark "Vaseline" and the name of the company no claim is made to the exclusive use of the wording appearing on the drawing apart from the mark as shown.

For Petroleum Jelly.

Claims use since 1906.

Ser. No. 310,267. ANNA SPERL, doing business as The Anna Sperl Mfg. Co., New York, N. Y. Filed Jan. 22, 1931.



The portrait and signature appearing on the drawing are those of the applicant.

For Hair Rejuvenating Ointment.

Claims use since July 1, 1930.

Ser. No. 310,325. DONALD MACKAY, Twin Falls, Idaho. Filed Jan. 23, 1931. Under 10-year proviso.



For Liniment for Treating Poisonous Infections Resulting from Scalds, Burns, Cuts, Scratches, Bruises, and Poisonous Insect Bites and for Relieving Pleurisy, Lumbago, Lame Feet, Rheumatism, Earache, Sore Throat, Corns, and Bunions.

Claims use since 1870.

Ser. No. 310,473. WILLIAM COOPER & NEPHEWS, INCORPORATED, Chicago, Ill. Filed Jan. 28, 1931.

DRI-KIL

For Insecticide.

Claims use since Jan. 29, 1930.

Ser. No. 310,939. FRANKLIN SIMON & CO. INC., New York, N. Y. Filed Feb. 11, 1931.

TELISE



For Perfumes and Hygienic Products—Namely Astringents, Skin Tonic, Cleansing Cream, Cold Creams, Face Packs, Face Creams, Vanishing Creams, Skin Creams, Face Powders, and Face and Hand Lotions.

Claims use since Jan. 15, 1931.

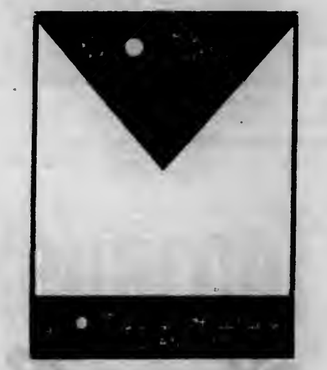
Ser. No. 311,446. RIEDEL-DE HAEN, INC., New York, N. Y. Filed Feb. 25, 1931.

PERNOSTON

For Hypnotic in Ampoules for Intramuscular Injection. Claims use since Nov. 1, 1930.

Ser. No. 311,609. HENRY HENKIN, doing business as El-O-Pathic Laboratories, Los Angeles, Calif. Filed Mar. 2, 1931.

CARNEGIE LIBRARY OF ATLANTA



No claim is made to the word "Los Angeles" apart from the mark shown.

For Absorbent Liniment, Analgesic Tablets, Antiseptic Solution, Asthma Medicine, Astringent Lotion, Balsam Compound, Brilliantine, Cleansing Cream, Cold Tablets, Evacuant, Evacuant Tablets, Eye Lotion, Reconstructive Tonic, Foundation Cream, Fungocide Corn Remover Comprising a Mixture of Ether and Alcohol, Gas Eliminator Comprising the Albuminous Product of Carica Papaya Dissolved in an Alkaline Medium in Combination with Pancreatin, Germ-o-cidal Powder, Germ-o-cidal Ointment, Hair Tonic, Hand Lotion, Inhalant, Neuritis Medicine, Pile Ointment, Rheumatism Medicine, Throat Gargle, Toothache Drops, and Uro-Solvent Comprising Potassium Citrate and Potassium Acetate in Combination with Hyoscyamus.

Claims use since Feb. 3, 1931.

Ser. No. 311,613. A. M. KINGDON, doing business as Nu-Age Laboratories, Omaha, Nebr. Filed Mar. 2, 1931.

NU-AGE

For Preparation for the Treatment of Sour Stomach, Bloating, Heartburn, Sick Headache, Hyperacidity, Gastric Distress, and Constipation.

Claims use since Jan. 1, 1930.

Ser. No. 311,838. INTERSTATE CHEMICAL MFG. CO., Jersey City, N. J. Filed Mar. 6, 1931.

TARGET

The color lining appearing on the Patent Office drawing is for shading purposes only.
For Insecticides.
Claims use since 1905.

Ser. No. 311,850. MAX SATNICK, doing business as Emkins, Brooklyn, N. Y. Filed Mar. 6, 1931.

DE GU-SAI

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixers, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Polishes, Nail Bleaches, Nail Creams, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since 1921.

Ser. No. 311,880. MELATOL LABORATORIES, San Francisco, Calif. Filed Mar. 7, 1931.

MELATOL

For Capsules for the Treatment of Diabetes.
Claims use since October, 1930.

Ser. No. 311,991. WORCESTER SALT COMPANY, New York, N. Y. Filed Mar. 10, 1931.

WORCESTER

IT PAYS THE BEST TO SELL THE BEST

Applicant is the owner of trade-mark registration No. 65,644 for the word "Worcester", registered under the 10 year proviso. No claim is made to the words "It Pays the Best to Sell the Best" apart from the mark shown in the drawing.
For Salt.
Claims use since Nov. 1, 1929.

Ser. No. 311,992. WORCESTER SALT COMPANY, New York, N. Y. Filed Mar. 10, 1931.

WORCESTER

It takes the Best to make the Best

Applicant is the owner of trade-mark registration No. 65,644 for the word "Worcester" registered under the 10-year proviso. No claim is made to the words "It takes the Best to make the Best" apart from the mark shown in the drawing.
For Salt.
Claims use since Nov. 1, 1929.

Ser. No. 312,245. S. C. WELLS & CO., Le Roy, N. Y. Filed Mar. 17, 1931.

B-C-B

For Soothing and Healing Preparation for Burns, Cuts, and Bruises.
Claims use since Mar. 10, 1931.

Ser. No. 312,529. PENATEN, PHARMAZEUTISCHE FABRIK DR. MAX RIESE & CO., Rhondorf-on-the-Rhine, Germany. Filed Mar. 25, 1931.

„Penaten"

For Skin Cream.
Claims use since Nov. 10, 1917.

Ser. No. 312,620. MUNSCH LABORATORIES, INC., New York, N. Y. Filed Mar. 27, 1931.

MUNSCH LABORATORIES, INC. NEW YORK CITY

No claim is made to the words "New York City" appearing on the drawing. The lining on the drawing is for shading purposes only.
For Compound of Plantago Psyllium for the Relief of Intestinal Stasis.
Claims use since Feb. 10, 1931.

Ser. No. 312,643. WILLIAM GOLDWYN, St. Louis, Mo. Filed Mar. 28, 1931.



LADY ELLWYN

The portrait appearing on the drawing is fanciful.
For Certain Cosmetics—Namely, Face Creams, Rouge, Skin Lotions, Face Powder, Bath Salts, Shampoo, Brilliantine, and Wave-Set Liquids.
Claims use since Mar. 23, 1931.

Ser. No. 312,676. BLAIR & CURTIS, INC., New York, N. Y. Filed Mar. 27, 1931.

GELÁKTA

For Medicinal Preparations—Namely, a Nonirritating Acidic Jelly Antiseptic and Prophylactic.
Claims use since Nov. 1, 1929.

Ser. No. 312,677. BLAIR & CURTIS, INC., New York, N. Y. Filed Mar. 27, 1931.

GELAQUIN

For Medicinal Preparations—Namely, an Antiseptic Jelly Used as a Bacteriostat and Prophylactic.
Claims use since Nov. 1, 1929.

Ser. No. 312,718. NEUTRASOL PRODUCTS CORPORATION, New York, N. Y. Filed Mar. 30, 1931.

DYERSOL

For Liquid Soluble Compound Used in Connection with the Dyeing and Finishing of Textile Fabrics.
Claims use since Sept. 21, 1927.

Ser. No. 312,778. G. S. STODDARD & CO., INC., New York, N. Y. Filed Mar. 31, 1931.

LIPORCIN

For Concentrated Lipoidal Extract of Testicular Substance of Bovine Origin for Treating Asthenia, Asexualism, Premature Senility, and Hypo-Gonadism.
Claims use since Apr. 1, 1930.

Ser. No. 312,838. BYK-GULDENWERKE CHEMISCHE FABRIK AKTIENGESELLSCHAFT, Berlin, Germany. Filed Apr. 2, 1931.

Renarcol

For Medicinal Preparations in Solid and Liquid Form for the Treatment of Rectal Narcosis.
Claims use since July 5, 1930.

Ser. No. 312,899. ERICK BOWMAN, doing business as Bowman Laboratory, Owatonna, Minn. Filed Apr. 3, 1931.

BOWMAN'S



The portrait is that of applicant.
For Preparation for Treating Live Stock for Abortion.
Claims use since January, 1929.

Ser. No. 312,937. AMERICAN MULTIGRAPH CO., Wilmington, Del., and Cleveland, Ohio. Filed Apr. 4, 1931.

DRYLITH

For Chemicals for Use in Planographic Printing.
Claims use since Feb. 1, 1931.

Ser. No. 313,038. HENRY JOHN HERZOG, New York, N. Y. Filed Apr. 7, 1931.

WAY-MOR

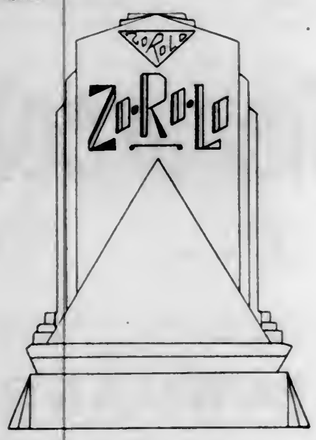
For Tonic in the Form of Tablets, Salts, or Powder to Induce Gaining of Weight.
Claims use since February, 1929.

Ser. No. 313,039. HENRY JOHN HERZOG, New York, N. Y. Filed Apr. 7, 1931.

WAY-LESS

For Tonic in the Form of Tablets, Salts, or Powder for Reducing Weight.
Claims use since February, 1929.

Ser. No. 313,066. ZO-RO-LO, INC., Ada, Ohio. Filed Apr. 7, 1931.



For a Medicine Designed to Assist Nature in the Relief of Arthritis, Rheumatism, Sciatica, Neuritis, Constipation, High Blood Pressure, Fatigue, Indigestion, Bloating, Headaches, Dizziness, Biliousness, Shortness of Breath, Jaundice, Nervousness, Sluggishness, Catarrh, Asthma, Acidosis, Eczema, and Other Ailments Arising from Faulty Elimination.
Claims use since Oct. 28, 1930.

Ser. No. 313,096. JOHN SCHLENSIG, Soldier, Iowa. Filed Apr. 8, 1931.



For Preparation for the Treatment of Skin Diseases of Hogs.
Claims use since Mar. 19, 1931.

Ser. No. 313,126. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Filed Apr. 9, 1931.

Calmox

For Antacid and Neutralizer of Hyperacidity.
Claims use since Mar. 13, 1931.

Ser. No. 313,180. CONSOLIDATED PATENTEES, INC., New York, N. Y. Filed Apr. 10, 1931.

STERILINE

For Antiseptics.
Claims use since Mar. 2, 1931.

Ser. No. 313,283. THE A. G. CLARKE DRUG COMPANY, Denver, Colo. Filed Apr. 13, 1931.

Amberfol

For Skin Lotion.
Claims use since June 1, 1915.

Ser. No. 313,302. MAXIMILIAN P. MATTHIAS, Forest Hills, N. Y. Filed Apr. 13, 1931.

Bois de Boulogne

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Powders, Nail Creams, Nail Polishes, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Mar. 17, 1931.

Ser. No. 313,313. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill. Filed Apr. 13, 1931.

MOTHBAN

For Mothproofing Compound and Insecticide.
Claims use since Mar. 17, 1931.

Ser. No. 313,342. FREDERICK E. ISCHERLAND, Flint, Mich. Filed Apr. 14, 1931.

RED PANTHER

For Hair Tonic.
Claims use since Feb. 2, 1931.

Ser. No. 313,343. FREDERICK E. ISCHERLAND, Flint, Mich. Filed Apr. 14, 1931.



For Hair Tonic.
Claims use since Sept. 23, 1930.

Ser. No. 313,353. TRIPOLI BARBER SUPPLY CO., INC., Philadelphia, Pa. Filed Apr. 14, 1931.

TRIPCO

For Hair Tonics and Toilet Waters.
Claims use since January, 1930.

Ser. No. 313,366. GIBOTONE CO., Savannah, Ga. Filed Apr. 15, 1931.

GIBOTONE

For Alternative Tonic and System Builder.
Claims use since Apr. 7, 1931.

Ser. No. 313,418. THE BLACK FLAG COMPANY, Baltimore, Md. Filed Apr. 16, 1931.



For Insecticides.
Claims use since Jan. 2, 1925.

Ser. No. 313,449. ADOLF ROTH, Phillipsburg, Pa. Filed Apr. 16, 1931.

YERAPA

For a Preparation for Treating Poison Sores, Eczema, Piles, Itching Skin Diseases of All Kinds, and Burns and Scalds.
Claims use since January, 1931.

Ser. No. 313,478. W. CYRIL POOLEY, Mobile, Ala. Filed Apr. 17, 1931.

GOLDRODEEN

For Medicine for the Relief of Hay Fever.
Claims use since Apr. 9, 1931.

Ser. No. 313,540. KENNETH E. GOIT, Minneapolis, Minn. Filed Apr. 20, 1931.

SÎNULIN

For Preparation for the Treatment of Nasal and Sinus Infections.
Claims use since Jan. 1, 1931.

CLASS 11

Inks and Inking Materials

Ser. No. 264,564. CHARLES ZIMMER, doing business as Cooper Stamp Works, New York, N. Y. Filed Apr. 9, 1928.



For Printing, Stamping, and Stenciling Inks.
Claims use since Jan. 1, 1922.

Ser. No. 313,419. THE CARTER'S INK COMPANY, Cambridge, Mass. Filed Apr. 16, 1931.

MIDNIGHT

For Writing Inks, Typewriter Ribbons, and Carbon Paper.
Claims use since Apr. 8, 1931, on writing inks, and since Feb. 28, 1931, on typewriter ribbons and carbon paper.

CLASS 12

Construction Materials

Ser. No. 275,125. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Nov. 10, 1928.

PARCOTHE

For Building Paper, Thermal and Acoustical Insulating Paper, Protective Covering for Wrapping Pipes, Dampcourse, and Roofing, All of Which Comprise a Body of Fibrous material in Sheet Form Which May or May Not be Laminated, and Which May or May Not be Coated and/or Saturated in Whole or in Part with a Bituminous or Asphaltic Compound.
Claims use since Aug. 3, 1928.

Ser. No. 279,924. HUGO JUNKERS, Dessau, Germany. Filed Feb. 26, 1929.



For Metallic Walls, Wall Plates, Wall Brackets, Piers, Roofs, Roofing Plates, Roof Rafters, Purlins, Roof Spars, Roof Sills, Gates, Doors, Roller Blinds, Windows, Roof and Floor Girders, Lining for Walls and Ceilings, Stairs, Railings, Door and Window Frames, Gutters, Rain Pipes, Shafts, Light Wells, Shafts and Frames for Lifts and Hoists, Portable Sheds.
Claims use since May 28, 1924.

Ser. No. 311,088. THE ELECTRO REFRACTORIES CORPORATION, Buffalo, N. Y. Filed Feb. 16, 1931.

KELLUNDUM

For Bricks, Plates, Slabs, and Blocks of Refractory Composition.
Claims use since Jan. 17, 1931.

Ser. No. 311,350. TRUSCON STEEL COMPANY, Youngstown, Ohio. Filed Feb. 21, 1931.

TRUSCON INSULMESH

For Plaster Base.
Claims use since Jan. 2, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 305,953. C. N. HOLTUM, Freeport, Ill. Filed Sept. 22, 1930.



All words shown on the drawing except "Vita" are disclaimed apart from the mark as shown.
For Cast Aluminum Cooking Hollow Ware.
Claims use since Sept. 1, 1929.

Ser. No. 312,214. HILL-SHAW COMPANY, Chicago, Ill. Filed Mar. 14, 1931.

VACULATOR

For Glass Coffee Brewer.
Claims use since Sept. 12, 1930.

CLASS 15

Oils and Greases

Ser. No. 297,918. CHAS. F. KELLOM & CO., INC., Philadelphia, Pa. Filed Mar. 26, 1930.

INVADOL

For Lubricating Oils and Greases.
Claims use since Mar. 1, 1930.

Ser. No. 298,031. CHAS. F. KELLOM & CO., INC., Philadelphia, Pa. Filed Mar. 28, 1930.

INVADEEZ

For Auxiliary Lubricating and Anticarbonizing Material of an Oleaginous Nature for Internal Combustion Engines.
Claims use since Mar. 1, 1930.

Ser. No. 298,684. BEACON OIL COMPANY, by change of name Colonial Beacon Oil Company, Boston, Mass. Filed Apr. 11, 1930.



For Refined, Semi-Refined, and Unrefined Oils and Greases Made from Petroleum, Both With and Without Admixture of Animal, Vegetable, or Mineral Substances, for Illuminating, Burning, Power, Fuel, and Lubricating Purposes, and Lubricating Greases.
Claims use since Feb. 12, 1930.

Ser. No. 312,024. WILSHIRE OIL COMPANY, INC., Vernon, Calif. Filed Mar. 11, 1931.



No claim is made for the word "Gasoline" apart from the mark as shown.
For Gasoline, Kerosene, Distillate, Fuel Oil, both the Distillate and the Fuel Oil Being Intended for Use as Motor Fuel and Furnace Fuel.
Claims use since Feb. 24, 1931.

Ser. No. 312,889. SHELL OIL COMPANY, San Francisco, Calif. Filed Mar. 21, 1931.

SHELL

Applicant is owner of registration No. 74,007, June 8, 1909 (covering the word "Shell" and the representation of a shell).
For Gasoline, Kerosene, Gas Oil, Diesel Oil, Furnace Fuel Oil, Motor Lubricating Oils, and Transmission Oils and Lubricating Greases.
Claims use since Sept. 30, 1912.

Ser. No. 313,009. LOUIS J. SILBERMAN, doing business as Star Gasoline Co., St. Louis, Mo. Filed Apr. 6, 1931.

BLUZOL

For Gasoline.
Claims use since Mar. 15, 1931.

Ser. No. 313,314. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill. Filed Apr. 13, 1931.

STANORUST

For Rust Preventing Oils and Greases.
Claims use since Mar. 17, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 310,660. RÖHM & HAAS COMPANY, Philadelphia, Pa. Filed Feb. 2, 1931.

LUFAX

For Opacifiers Used in Wet and Dry Enameling Processes to Give Opacity to the Enamel Coating.
Claims use since Jan. 15, 1931.

Ser. No. 311,026. CARL V. CHERMENDY, doing business as Everglaze Products Co., Denver, Colo. Filed Feb. 13, 1931.



For Polish for Painted, Varnished, Lacquered Surfaces or Any Similar Finish.
Claims use since Jan. 8, 1931.

Ser. No. 311,637. HENRY T. CARUTHERS, doing business as Zenith Cleaner Products Company, Memphis, Tenn. Filed Feb. 27, 1931.

KUV R GLAZE

The word "Glaze" is hereby disclaimed apart from the mark as shown on the drawing.

For Preservative Preparation in the Nature of Polish for the Finished Surfaces of Furniture and Woodwork and for the Enameled, Painted or Lacquered Surfaces of Metal.

Claims use since Feb. 4, 1931.

Ser. No. 311,923. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis. Filed Mar. 9, 1931.

CEMOWAX

For Liquid Floor Coating, Preservative and Polish for Linoleum, Terrazzo, Tile, and Wood Surfaces.

Claims use since Feb. 11, 1931.

Ser. No. 312,108. JOHN G. MARSHALL, Brooklyn, N. Y. Filed Mar. 13, 1931.

MARSOL

For Preparation for Removing Oil Colors from Photographs.

Claims use since Feb. 4, 1931.

Ser. No. 312,206. CHARLES Z. STEPHENS, doing business as Four in One Products Company, Richmond, Va. Filed Mar. 16, 1931.

4 IN 1

For Polishes for Automobiles, Furniture, and Painted, Varnished, or Lacquered Surfaces.

Claims use since August, 1929.

Ser. No. 312,798. GENERAL PAINT CORPORATION, San Francisco, Calif. Filed Apr. 1, 1931.

BITULUMIN

For Paint Comprising Aluminum Powder and a Suitable Binder or the Component Parts Thereof.

Claims use since Jan. 1, 1924.

Ser. No. 313,045. MCCLOSKEY VARNISH CO., Philadelphia, Pa. Filed Apr. 7, 1931.

NUSEAL

For Oil Varnish.

Claims use since Jan. 1, 1931.

Ser. No. 313,291. GOLD COAST PAINT COMPANY, San Francisco, Calif. Filed Apr. 13, 1931.

GOLD COAST

For Ready Mixed Paint, Floor Enamel, Varnishes.

Claims use since Apr. 7, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 305,496. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn. Filed Sept. 9, 1930.

SCOVILL

For Vehicle Radiator Caps, Filler Caps, Filler Cap Necks, Hub Caps, Crank Hole Covers, Regulator Handles for Windows and Windshields, and Finished Automobile Structural Parts, Excluding Engine, Starter, Generator, Instrument, and Ignition Parts.

Claims use since Nov. 13, 1929.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 298,199. THE NAFZIGER CORPORATION, Kansas City, Mo. Filed Mar. 31, 1930.

IDLESTOP

For Instruments or Independent Unitary Mechanism for Controlling the Ignition Circuit of an Internal Combustion Engine to Stop Operation of the Engine Automatically After a Pre-determined Period of Idling, While Permitting Resumption of Operation at Will.

Claims use since Mar. 3, 1929.

Ser. No. 298,694. FLORENCE STOVE COMPANY, Gardner, Mass. Filed Apr. 11, 1930. Under section 5b as amended Mar. 19, 1920.

FLORENCE

For Electric Cooker.

Claims use since Oct. 1, 1929.

Ser. No. 311,230. CONSOLIDATED ELECTRIC LAMP COMPANY, Danvers, Mass. Filed Feb. 19, 1931.

CHECKER

For Incandescent Electric Lamps and Electron Radio Tubes.

Claims use since Sept. 9, 1924.

Ser. No. 311,954. JAMES T. CARR, Orange, N. J. Filed Mar. 10, 1931.

WONDERLITE

For Incandescent Electric Lamps.

Claims use since Oct. 1, 1927.

Ser. No. 312,752. THE CARBON PRODUCTS COMPANY, Lancaster, Ohio. Filed Mar. 31, 1931.

VICTOR

The diagonal lines shown in the drawing are shading lines and are not intended to indicate a particular color.

For Dry Cells and Batteries.

Claims use since July 30, 1919.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 293,930. JOHN ROLAND MUHN, Auburn, Ind. Filed Dec. 20, 1929.

Silver Moon Toys

No claim being made to the word "Toys" apart from the mark shown.

For Toy Wagons, Carts, and the Like.

Claims use since Jan. 1, 1929.

Ser. No. 306,958. MUNICIPAL SERVICE CORPORATION, Los Angeles, Calif. Filed Oct. 20, 1930.

COLLEGIATE

For Football Game Board.

Claims use since June 18, 1930.

Ser. No. 309,700. ADOLPH F. RIETZEL, Charlestown, R. I. Filed Jan. 7, 1931.

HOOKEM

For Toys, More Particularly Game Boards and the Like Played with Pieces.
Claims use since Nov. 9, 1929.

Ser. No. 310,546. WILLIAM ROBERT CLUFF, doing business as C and A Sales Co., New York, N. Y. Filed Jan. 8, 1931.

DOUBLE CHECK

For Table Games.
Claims use since Dec. 18, 1930.

Ser. No. 310,840. NORMA R. SNELL, doing business as N. R. Snell Lumber Company, Cleveland, Ohio. Filed Feb. 7, 1931.

SNELBILT

For Playground and Game Apparatus Consisting of Tennis Tables and Tops Therefor, Gymnasium Sets, Sand Boxes, Shuffle Boards, Teeter Boards, and Swings.
Claims use since Sept. 15, 1930.

Ser. No. 312,818. A. G. SPALDING & BROS., New York, N. Y. Filed Apr. 1, 1931.

KRO-FLITE TWINS

For Golf Clubs.
Claims use since January, 1931.

Ser. No. 313,514. U. S. GOLF BALL CORPORATION, Chicago, Ill. Filed Apr. 18, 1931.

KLICK
Personalized

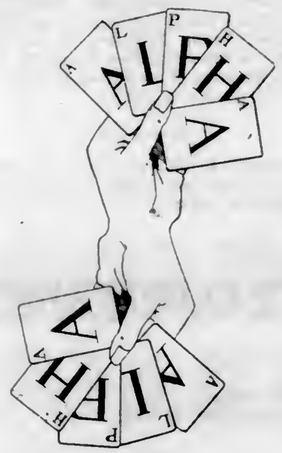
For Golf Balls.
Claims use since Mar. 16, 1931.

Ser. No. 313,515. U. S. GOLF BALL CORPORATION, Chicago, Ill. Filed Apr. 18, 1931.

LIGHTNIN'
Personalized

For Golf Balls.
Claims use since Mar. 16, 1931.

Ser. No. 313,567. HERBERT STELLMACHER, doing business as The Alpha Game Company, Dallas, Tex. Filed Apr. 20, 1931.



For Games Played with Cards.
Claims use since Feb. 1, 1931.

Ser. No. 313,591. WALT DISNEY PRODUCTIONS, LTD., Hollywood, Calif. Filed Apr. 21, 1931.

Minnie Mouse

For Dolls.
Claims use since Feb. 1, 1931.

CLASS 23

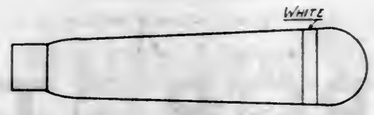
Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 299,867. SNOKO INC., San Francisco, Calif. Filed May 2, 1930.

SNOKO JUNIOR

For Ice Shaving Machines.
Claims use since Jan. 1, 1929.

Ser. No. 303,083. THE A. & J. MANUFACTURING CO., Binghamton, N. Y. Filed July 3, 1930.



The trade-mark consists in a white band around the handles of the goods near the free end thereof as indicated in the drawing and is applied to the handles by dipping, painting, or otherwise placing the band on the handles. The legend "White" and its guide arrow and the representation of the handle are disclaimed.

For Basting Spoons, Batter Spoons, Kitchen Spoons (Plain), Kitchen Spoons (Perforated), Mixing Spoons, Strainer Spoons, Cake Turners (Plain), Cake Turners (Perforated), Forks, Can Openers, Cake Whips, Batter Whips, Spatulas, Potato Mashers, Plate Scrapers, Apple Corers, Ice Picks, Pan Greasers, Scoops, Paring Knives, Stainless Knives, Bread Knives, Grape Fruit Knives, Egg Beaters, Egg Beaters and Covers, Covers and Bowls (Sets), Egg Beaters and Pitcher Sets, Beaters, Rolling Pins, Dough Cutters, Flour Sifters.
Claims use since Dec. 9, 1929.

Ser. No. 303,312. JOSIAH ANSTICE & CO. INC., Rochester, N. Y. Filed July 10, 1930.

STERLING

VICTORIA

Applicant claims ownership of trade-mark registration #280,810 issued Mar. 3, 1931, under the 10-year proviso clause of the act of Feb. 20, 1905. Applicant also claims ownership of trade-mark registration #136,238 issued Oct. 26, 1920.
For Vegetable Peeling Machines and Slicing Machines.
Claims use since June 1, 1929.

Ser. No. 309,262. CHICAGO PNEUMATIC TOOL COMPANY, New York, N. Y. Filed Dec. 23, 1930.

SIMPLATE

For Pumping and Compressing Apparatus,—Namely, Compressors for Air and Other Gases, Vacuum Pumps, Compressor and Vacuum Pump Units Which Include Prime Movers for Operating the Pumps and Compressors, Metallic Valves and Units Containing the Same for Pumping, Compressing and General Purposes, and Parts Thereof.
Claims use since spring of 1921.

Ser. No. 311,241. THE KEYSTONE MFG. CO., Buffalo, N. Y. Filed Feb. 19, 1931.

Whirlwind

For Apparatus for Grinding Cylindrical Surfaces, Such as the Cylinders of Engines, Pumps, Wrist Pin Holes in Pistons, Etc.
Claims use since Jan. 26, 1931.

Ser. No. 311,993. THE BELL PUNCH AND PRINTING COMPANY LIMITED, Middlesex, England. Filed Mar. 11, 1931.

INTERSETTOR

For Rotary Printing Presses.
Claims use since Oct. 20, 1930.

Ser. No. 312,391. L. C. SMITH & CORONA TYPEWRITERS INC., New York, N. Y. Filed Mar. 21, 1931.

Smith — Corona

Applicant claims ownership of trade-mark applications No. 86,343, issued Apr. 30, 1912, and No. 222,784, issued Mar. 1, 1927.
For Typewriting Machines and Parts Thereof.
Claims use since Feb. 6, 1931.

Ser. No. 313,080. FIREMASTER COMPANY, New York, N. Y. Filed Apr. 8, 1931.

FIRE
MASTER

For Portable Hand Fire Extinguishing Apparatus.
Claims use since Aug. 10, 1930.

Ser. No. 313,513. THE SHARPLES SPECIALTY COMPANY, Philadelphia, Pa. Filed Apr. 18, 1931.

WHIZ-ard

For Centrifugal Machines.
Claims use since June 11, 1928.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 307,019. CARL ZEISS, Jena, Germany. Filed Oct. 21, 1930.

Kipro

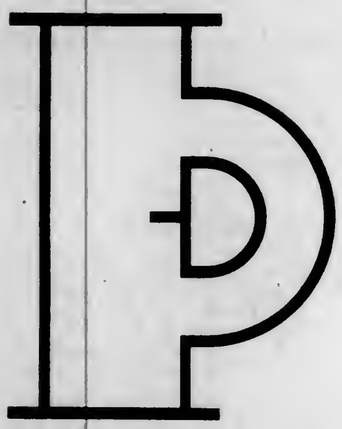
For Objectives.
Claims use since 1929.

Ser. No. 311,573. SEWALL PAINT & VARNISH COMPANY, Kansas City, Mo. Filed Feb. 28, 1931.

Automatcher

For Color Mixing Apparatus Comprising Pedestal, Top for Pedestal, Measuring Graduates, Pour-Top Lids for Containers, Test Plates, Strainers, Basic Colors in Paste or Semi-Paste Form, and Formulæ.
Claims use since Jan. 15, 1931.

Ser. No. 313,280. BUILDERS IRON FOUNDRY, Providence, R. I. Filed Apr. 13, 1931.



For Fluid Meters.
Claims use since Jan. 10, 1931.

Ser. No. 313,305. L. M. PRINCE Co., Cincinnati, Ohio. Filed Apr. 13, 1931.

PANOCULAR

For Optical Lenses.
Claims use since Mar. 23, 1931.

CLASS 27

Horological Instruments

Ser. No. 313,389. HARRY ROTH, New York, N. Y. Filed Apr. 15, 1931.

ROBOT

For Clocks, Wrist Watches, and Platinum, Gold, and Silver Watches.
Claims use since 1925.

Ser. No. 313,401. WESTERN CLOCK COMPANY, Peru, Ill. Filed Apr. 15, 1931.

G.T.I.

For Clocks and Watches.
Claims use since Mar. 18, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 307,223. THE SLAVICK JEWELRY COMPANY, Los Angeles, Calif. Filed Oct. 27, 1930.



For Finger Rings.
Claims use since Apr. 25, 1929.

Ser. No. 312,261. MARATHON COMPANY, Attleboro, Mass. Filed Mar. 18, 1931.

LADYETTE

For Finger Rings, Bracelets, Lockets and Chain, Pendants and Chain, Brooches, Compact Cases, Lavallieres and Neck Chains with Pendant Drops, Bead Necklaces, Bib Holders, Hand Bags of Precious Metal, and Earrings.
Claims use since Mar. 2, 1931.

Ser. No. 312,262. MARATHON COMPANY, Attleboro, Mass. Filed Mar. 18, 1931.

SUB-DEB

For Finger Rings, Bracelets, Lockets and Chain, Pendants and Chain, Brooches, Compact Cases, Lavallieres and Neck Chains with Pendant Drops, Bead Necklaces, Bib Holders, Hand Bags of Precious Metal, and Earrings.
Claims use since Mar. 2, 1931.

Ser. No. 312,799. GOLDMAN-KOLBER CO. INC., New York, N. Y. Filed Apr. 1, 1931.

Cupid's Own

For Finger Rings.
Claims use since June 1, 1920.

Ser. No. 313,011. ERNEST STEFFEN, doing business as Swiss Diamond Palace, San Francisco, Calif. Filed Apr. 6, 1931.



For Diamond and Other Kinds of Finger Rings.
Claims use since Mar. 15, 1930.

Ser. No. 313,306. ROSENFIELD JEWELRY COMPANY, Oklahoma City, Okla. Filed Apr. 13, 1931.

H W R

For Wedding Rings.
Claims use since Mar. 28, 1931.

CLASS 31

Filters and Refrigerators

Ser. No. 282,772. CIR-CUL-AIR REFR'G. CORP., St. Louis, Mo. Filed Apr. 22, 1929.

CIR-CUL-AIR REFRIGERATOR

The word "Refrigerator" is disclaimed apart from the mark as shown in the drawing.
For Display Refrigerators, Air Conditioning and Cooling Devices for Counter Display Show Cases, and Storage Coolers.
Claims use since Nov. 15, 1927.

CLASS 32

Furniture and Upholstery

Ser. No. 311,870. CECIL C. FISHER, doing business as Cyco Manufacturing Co., Des Moines, Iowa. Filed Mar. 7, 1931.

HOME K.D. KRAFT FURNITURE
for Home and Garden
Cyco Manufacturing Co.
DES MOINES, IOWA

No claim is made to the words "Cyco Manufacturing Co.," "Furniture for Home and Garden," "Des Moines, Iowa," "K. D." as apart from the mark as shown in the drawing.
For Tables, Bookcases, Shelving, Racks, Cabinets, Household and Office Chairs, Desks, Tea Carts, Bird Houses, Benches, Trellises, Cradles, and Couch-Hammocks.
Claims use since Oct. 15, 1927.

Ser. No. 313,368. CYCLOFILE CORPORATION, Rochester, N. Y. Filed Apr. 15, 1931.

CYCLOFILE

For Filing Cabinets.
Claims use since Jan. 25, 1931.

CLASS 33

Glassware

Ser. No. 312,912. HEMINGRAY GLASS COMPANY, Muncie, Ind. Filed Apr. 3, 1931.

HB

For Glass Bottles.
Claims use since Feb. 3, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 295,610. ALFRED FIELD, Seattle, Wash. Filed Feb. 5, 1930.

STORMOLITE

For Pyrophoric Cigarette Lighters.
Claims use since Jan. 2, 1930.

Ser. No. 308,229. VOLCANO BURNER CO., INC., Tulsa, Okla. Filed Nov. 22, 1930.

VOLCANO BURNER INC.

For Gas Burner.
Claims use since Apr. 7, 1930.

Ser. No. 311,845. PARKS-CRAMER COMPANY, Fitchburg, Mass. Filed Mar. 6, 1931.

Certified Climate

For Humidifiers and Humidifying Systems Used in Connection with and as a Part of Heating and Ventilating Plant or Systems and for Treatment of Hygroscopic Materials.
Claims used since Jan. 21, 1931.

Ser. No. 312,566. MICHIANA PRODUCTS CORPORATION, Michigan City, Ind. Filed Mar. 26, 1931.

ZORITE

For Heat-Treating Containers—Vis, Cynadie, Lead, and Salt Pots, Annealing and Case-Hardening Boxes; and for Heat-Treating Furnace Parts, Kiln Furnaces, and Oil-Cracking Still Parts.
Claims use since Jan. 1, 1927.

CLASS 36

Musical Instruments and Supplies

Ser. No. 309,266. DREI-S-WERK SCHWABACHER SPINNEREI-NADEL-U. STAHLSPITZEN-WERK FR. REINGRUBER, Schwabach, Bavaria, Germany. Filed Dec. 23, 1930.



The representation of a talking machine is disclaimed apart from the mark shown in the drawing.
For Talking Machine Needles.
Claims use since October, 1930.

CLASS 37

Paper and Stationery

Ser. No. 306,300. MONTROSS & CLARKE COMPANY, INC., New York, N. Y. Filed Oct. 1, 1930.



For Sheet Paper for Printing and Writing.
Claims use since May 31, 1898.

Ser. No. 306,517. THE KLINGSTEDT BROTHERS COMPANY, Canton, Ohio. Filed Oct. 7, 1930.

Panolith

For Checks Such as Bank Checks.
Claims use since Sept. 15, 1930.

Ser. No. 306,518. THE KLINGSTEDT BROTHERS COMPANY, Canton, Ohio. Filed Oct. 7, 1930.

BIZ MARK

For Writing Paper, Letter Heads, Invoices, and Statements.
Claims use since Sept. 15, 1930.

Ser. No. 311,367. THE CONKLIN PEN COMPANY, Toledo, Ohio. Filed Feb. 24, 1931.

NOZAC

For Fountain Pens.
Claims use since Feb. 7, 1931.

Ser. No. 311,368. THE CONKLIN PEN COMPANY, Toledo, Ohio. Filed Feb. 24, 1931.

ENDURA-NOZAC

For Fountain Pens.
Claims use since Feb. 7, 1931.

Ser. No. 311,612. KNIGHTS OF PETER CLAVER, Mobile, Ala. Filed Mar. 2, 1931.



For Writing Paper.
Claims use since Nov. 9, 1909.

Ser. No. 312,927. GLENN S. RALSTON, Rockford, Ill. Filed Apr. 3, 1931.

NATION-WIDE

For Deposit Books for a Savings Plan Involving the Monthly Purchase of Investment Trust Securities Sold to the Trade as Such.
Claims use since Jan. 21, 1931.

Ser. No. 312,942. BEECHER PECK & LEWIS, Detroit, Mich. Filed Apr. 4, 1931.

PEXBEST

For Papers—Namely, Wrapping Papers, Toilet Papers, Towels, and Napkins.
Claims use since January, 1931.

Ser. No. 313,049. MODERN TISSUES CORPORATION, New York, N. Y. Filed Apr. 7, 1931.



The word "Fibre" is disclaimed when used apart from the mark shown in the drawing.
For Toilet Tissue and Facial Tissue.
Claims use since Jan. 1, 1931.

Ser. No. 313,050. MODERN TISSUES CORPORATION, New York, N. Y. Filed Apr. 7, 1931.

TINT-O

For Toilet Tissue and Facial Tissue.
Claims use since May, 1929.

Ser. No. 313,097. SCHWABACHER BROS. & CO., INCORPORATED, Seattle, Wash. Filed Apr. 8, 1931.

Babysoft



The picture of the baby appearing in the drawing is fanciful.
For Bathroom Tissue.
Claims use since Feb. 20, 1931.

Ser. No. 313,152. PORT HURON SULPHITE & PAPER COMPANY, Port Huron, Mich. Filed Apr. 9, 1931.

AMBERETTE

For Sulphite Manilla Papers—Namely, Bristol Board, Document Paper, Cover Paper, and for Envelopes, Tags, Index Cards, and Cylinder Specialty Papers and Printing Papers.
Claims use since Mar. 24, 1931.

Ser. No. 313,341. HOBERG PAPER & FIBRE COMPANY, Green Bay, Wis. Filed Apr. 14, 1931.

WHITE FUR

For Toilet Paper, Paper Towels, and Napkins.
Claims use since Apr. 4, 1929.

CLASS 38

Prints and Publications

Ser. No. 298,416. CARROLL SMITH, Boston, Mass. Filed Apr. 4, 1930.

Print Smith

For Books, Pamphlets, Circulars, Completely Printed Forms, Posters, Etchings, Engravings, Photographic Prints; Prints from Engraved Plates; Prints from Etched Plates, and Prints from Wood Cuts; Advertising Cards, Display Cards, Counter Cards, and Placards.
Claims use since Dec. 6, 1930.

Ser. No. 310,175. KELLY BROTHERS NURSERIES, Dansville, N. Y. Filed Jan. 20, 1931.

New Economy Catalog

For Catalogs Issued from Time to Time Relating to Horticultural or Nursery Products and Including General Information of Interest to Horticulturists.
Claims use since Dec. 16, 1930.

Ser. No. 311,750. GLENN S. RALSTON, Rockford, Ill. Filed Mar. 4, 1931.

NATION-WIDE

For Bulletins and Advertising Copy Issued from Time to Time for a Saving Plan Involving the Monthly Purchase of Investment Trust Securities Sold to the Trade as Such.
Claims use since Jan 21, 1931.

Ser. No. 312,122. ASSOCIATED TOURIST BUREAU OF AMERICA, Baltimore, Md. Filed Mar. 13, 1931.

ASSOCIATED TOURIST BUREAU OF AMERICA

For Maps.
Claims use since Dec. 15, 1930.

Ser. No. 312,320. ZONTA INTERNATIONAL, Chicago, Ill. Filed Mar. 19, 1931.

The ZONTIAN

For Monthly Publication.
Claims use since June, 1920.

Ser. No. 312,784. THE MCNAUGHT SYNDICATE, INC., New York, N. Y. Filed Mar. 31, 1931.

JOE PALOOKA

For Comic Strips Printed and Published Periodically in Various Newspapers.
Claims use since Apr. 15, 1930.

Ser. No. 312,853. NATIONAL ASSOCIATION OF LETTER CARRIERS, Washington, D. C. Filed Apr. 2, 1931.

THE POSTAL RECORD

For Monthly Magazine.
Claims use since 1893.

Ser. No. 312,945. NATHAN DERFLER, New York, N. Y. Filed Apr. 4, 1931.

ROYALTONE TRADE MARK

The words "Trade Mark" are disclaimed apart from the mark as shown in the drawing.
For Photographic Prints.
Claims use since Apr. 1, 1928.

Ser. No. 313,068. AMERICAN MULTIGRAPH CO., Wilmington, Del., and Cleveland, Ohio. Filed Apr. 8, 1931.

DRYLITH

For Planographic Prints.
Claims use since Feb. 1, 1931.

Ser. No. 313,296. JEWELERS PUBLISHING CORPORATION, New York, N. Y. Filed Apr. 13, 1931.

THE OPTICAL JOURNAL AND REVIEW OF OPTOMETRY

For Weekly Magazine.
Claims use since June 9, 1910.

CLASS 39

Clothing

Ser. No. 287,586. NORTHERN JOBBING COMPANY, Chicago, Ill.; New York, N. Y.; and St. Paul, Minn. Filed July 24, 1929.

REPUTATION

For Men's, Boys', Women's, Girls', and Infants' Clothing—Namely, Overcoats, Suits, Including Coats, Vests, and Trousers; Cloaks, Dresses, Smocks, Hats, and Caps Made of Cotton, Wool, Silk, and Rayon, and/or Combinations Thereof; Sweaters and Knit Goods—Namely, Knitted Scarfs, Knitted Mufflers, Knitted Jackets, Knitted Coats, Knitted Dresses, and Knitted Suits; Mufflers, Scarfs, Collars, Neckties, Mufflers; Mittens of Wool, Leather, Cotton, and Imitation Leather, and/or Combinations Thereof; Belts for Outer Wear; Shoes Made of Leather, Rubber, and Fabric and/or Any Combination Thereof; Men's, Women's, and Children's Garters; Children's Socklets, Men's Arm Bands, Rubber Pants for Babies, Cotton Flannel Gloves; Gloves for Men, Women, and Children Made of Leather, Silk, Cotton, or Other Fabric, and/or Combinations Thereof.
Claims use since Jan. 17, 1928.

Ser. No. 301,400. THE B. V. D. COMPANY, INC., Baltimore, Md. Filed May 28, 1930. Under section 5b of the act of 1905 as amended in 1920.

MADE FOR THE B.V.D BEST RETAIL TRADE

For Underwear of Woven and Textile Fabrics—Namely, Shirts, Drawers, and Union Suits; Children's Waist Suits, and Athletic Outer Clothing—Namely, Athletic Shirts and Running Pants, Bathing Suits, and Sweaters.
Claims use since 1893 on underwear; since September, 1926, on athletic shirts and running pants; since Sept. 5, 1927, on children's waist suits; since Mar. 19, 1930, on bathing suits; since Apr. 16, 1930, on sweaters; notation, B. V. D. used since Sept. 1, 1876.

Ser. No. 304,554. GROSS MILLINERY CO., INC., Trenton, N. J. Filed Aug. 13, 1930.

Rockleigh Modish Modes New York Paris

Applicant disclaims the right to the exclusive use of the words "Modish Modes" and of the terms "New York" and "Paris".
For Women's, Misses', and Children's Hats.
Claims use since June, 1920.

Ser. No. 305,902. CHARLES A. GERBER, New York, N. Y. Filed Sept. 20, 1930.

Park Crescent

For Ladies' Hats.
Claims use since May 1, 1929.

Ser. No. 305,984. LEON STRAUSS, doing business as Phoenix Manufacturing Company, Baltimore, Md. Filed Sept. 23, 1930.

DOUBLEALLS

For Combination Work Suits, Overalls, Dungarees, Shirts, Work Trousers, and Breeches for Men and Boys.
Claims use since Aug. 29, 1930.

Ser. No. 309,084. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed Dec. 17, 1930.

LADY FAIR

For Boots and Shoes of Leather, Fabric, and Combinations Thereof.
Claims use since Dec. 8, 1911.

Ser. No. 309,741. EMIL SABATH, doing business as Dorsell Hosiery Co., not Inc., Chicago, Ill. Filed Jan. 8, 1931.

DORSELL HOSIERY
FULL FASHIONED

The applicant makes no claim to the exclusive use of the words "Hosiery" and "Full Fashioned".
For Hosiery.
Claims use since Oct. 15, 1930.

Ser. No. 311,129. DEJA, INC., New York, N. Y. Filed Feb. 17, 1931.

Sirôt

For Articles of Clothing for Women—Namely, Coats, Suits, Hats, Blouses, Girdles, Brassières, Corsets, Sweaters; Shoes Made of Leather, Cloth, and of Combinations of Leather and Cloth; Stockings, Scarfs, Lace Collars, and Fabric Collars; Shawls, Underwear of Knitted and Textile Fabrics, Negligees, Outer Skirts, Underslips, and Wraps.
Claims use since November, 1929.

Ser. No. 311,641. SMILEY-HEIDE, INC., New York, N. Y. Filed Mar. 2, 1931.

Oliverette

For Creepers, Rompers, and Baby Boys' and Baby Girls' Suits and Dresses.
Claims use since July 1, 1930.

Ser. No. 312,046. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Mar. 12, 1931. Under section 5b of the act of 1905 as amended in 1920.

Stein Bloch
Tailors

For Sweaters, Hats, Caps, Neckties; Dress, Negligee, and Undershirts of Knitted and Textile Fabric; Stockings, Socks; Boots and Shoes of Leather, Rubber, and Fabric, and Combinations Thereof; Underwear of Knitted and Textile Fabric; Pajamas, Nightshirts, Bath Robes, Smoking Jackets, and House Gowns for Men and Boys.
Claims use since Mar. 6, 1930.

Ser. No. 312,156. LYONS & COMPANY, New York, N. Y. Filed Mar. 14, 1931.

LYCO

For Sandals, Moccasins, and Play Oxfords of Leather for Men, Women, and Children.
Claims use since Mar. 4, 1931.

Ser. No. 312,174. CO-OPERATIVE CENTRAL EXCHANGE, Superior, Wis. Filed Mar. 16, 1931.

Co-operators' Best

No claim being made to the exclusive use of the word "Best" apart from the mark as shown in the drawing.
For Men's Pants, Boys' Breeches, Work and Dress Shirts for Men, Boys' Shirts, Men's and Boys' Sport Coats, Blazers and Mackinaws, Men's Store Coats, Men's Overcoats, Children's Play Suits, Bloomers for Women and Girls, Overalls for Men and Boys; Underwear for Men, Women, and Children; Men's Socks and Hose, Stockings for Women and Children, Suspenders, Gloves of Fabric or Fabric and Leather, Mittens of Leather or Leather and Fabric, Men's Caps, Sweaters.
Claims use since July, 1930.

Ser. No. 312,295. ETTELBRICK SHOE CO. INC., Greenup, Ill. Filed Mar. 19, 1931.

SOFT-SOLE
STITCH DOWN

All wording appearing on the drawing is disclaimed apart from the other features of the mark shown in said drawing.
For Infants' Shoes of Leather, Fabric, or Combinations of Such Materials.
Claims use since July 1, 1930.

Ser. No. 312,297. JAMES S. FULLER, INC., Kingston, N. Y. Filed Mar. 19, 1931.

Fulco

For Dress and Negligee Shirts.
Claims use since Dec. 1, 1930.

Ser. No. 312,880. AUGUSTA KNITTING CORPORATION, Utica, N. Y. Filed Apr. 1, 1931.

AUGUSTA
SUMMERETTS

For Women's Underwear.
Claims use since Feb. 15, 1931.

Ser. No. 312,973. BEHRENS & KASHINS, INC., New York, N. Y. Filed Apr. 6, 1931.

"CHEVO"

For Men's, Boys', and Women's Bath Robes and Lounge Robes.
Claims use since March, 1930.

Ser. No. 313,015. JOSE P. VILLAR, Brooklyn, N. Y. Filed Apr. 6, 1931.

HAVE A DIP

For Bathing Suits.
Claims use since Jan. 12, 1931.

Ser. No. 313,035. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Apr. 7, 1931.

SAXTOWNE

For Coats, Vests, Pants, and Overcoats for Men and Boys.
Claims use since Jan. 1, 1927.

Ser. No. 313,073. CARSON PIRIE SCOTT & CO., Chicago, Ill. Filed Apr. 8, 1931.

Miss Milwaukee

For Ladies' Underwear.
Claims use since Mar. 20, 1931.

Ser. No. 313,122. COHAN, ROTH & STIFFSON, New York, N. Y. Filed Apr. 9, 1931.

futura

For Neckties, Cravats, and Scarfs.
Claims use since Apr. 8, 1931.

Ser. No. 313,178. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 10, 1931.

CLEONAISE

For Men's, Women's, and Children's Underwear.
Claims use since Apr. 2, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 299,928. B. POMERANZ & SON, New York, N. Y. Filed May 3, 1930.

CAMALYNX

For Fur Trimmings Such as Bandings, Fur Strips, and Unfinished Collars Intended for Use in Finishing Garments.
Claims use since Mar. 31, 1930.

Ser. No. 312,259. HAMMEL, RIGLANDER-PENNANT CORPORATION, New York; N. Y. Filed Mar. 18, 1931.

"Ascot"

For Wrist Bands for Watches.
Claims use since Mar. 12, 1931.

Ser. No. 312,335. DU PONT VISCOLOID COMPANY, New York, N. Y. Filed Mar. 20, 1931.

Bobbie Curlette

For Hair Ornament in the Nature of a Clasp, Which Dresses Bobbed Hair into a Modish Curl.
Claims use since Mar. 9, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 307,721. LISTER & COMPANY, LIMITED, Bradford, England. Filed Nov. 10, 1930.

PELT-O-LIVE

For Woolen and Hair Piece Goods, Silk Piece Goods, Artificial Silk Piece Goods, and Cotton Piece Goods.
Claims use since May, 1930.

Ser. No. 309,440. MOUNT VERNON-WOODBERRY MILLS, INC., Baltimore, Md. Filed Dec. 29, 1930.

DRAPEX

For Cotton Coarse and Fancy Weave Fabrics for Drapery and Upholstery Purposes.
Claims use since Dec. 24, 1930.

Ser. No. 310,217. EGAN COTTON MILLS, Atlanta, Ga. Filed Jan. 21, 1931.

Burbak

For Textile Padding for Laundry Machines and the Like.
Claims use since May, 1930.

Ser. No. 310,979. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Feb. 12, 1931.

Charmelleen

For Woolen Piece Goods.
Claims use since Jan. 5, 1931.

Ser. No. 312,416. COLONIAL MILLS INC., New York, N. Y. Filed Mar. 23, 1931.

AMERICA'S SWEETHEART
PURE DYE
CREPE
FLORAL PRINTS & PASTEL COLORS

The words "Pure Dye," "Crepe," and "Floral Prints & Pastel Colors" are no part of the trade-mark claimed herein apart from the mark shown in the drawing.
For Rayon Piece Goods.
Claims use since Jan. 1, 1931.

Ser. No. 312,662. NEW ENGLAND CURTAIN COMPANY, INC., Fitchburg, Mass. Filed Mar. 28, 1931.

NEW ENGLAND
THE QUALITY LINE
CURTAIN CO.

The descriptive word "Quality" is disclaimed apart from the other features of the mark shown in the drawing.
For Marquisette, Muslin, Scrim, and Drapery Curtains.
Claims use since Jan. 1, 1926.

Ser. No. 312,909. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed Apr. 3, 1931.

Chellita

For Woolen Piece Goods.
Claims use since Mar. 15, 1931.

Ser. No. 313,081. SAMUEL D. FROHLICH, New York, N. Y. Filed Apr. 8, 1931.

ADORNETTE

For Hair Nets.
Claims use since May 16, 1929.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 310,192. L. E. SHUNK LATEX PRODUCTS, INC., Akron, Ohio. Filed Jan. 20, 1931.

TEXIDE

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claim use since May 2, 1929.

Ser. No. 311,217. JULIUS SCHMID, New York, N. Y. Filed Feb. 18, 1931.

PARAGON

For Rubber Nursing Nipples.
Claims use since Nov. 10, 1930.

Ser. No. 311,811. JULIUS SCHMID, New York, N. Y. Filed Mar. 3, 1931.

CADETS

For Prophylactic Rubber and Membraneous Articles for the Prevention of Contagious Diseases.
Claims use since Nov. 1, 1930.

Ser. No. 311,812. JULIUS SCHMID, New York, N. Y. Filed Mar. 3, 1931.

XXXX
FOUREX

For Prophylactic Rubber and Membraneous Articles for the Prevention of Contagious Diseases.
Claims use since Feb. 1, 1903.

Ser. No. 312,867. JOHN B. SNYDER, doing business as The Fem-Pac Company, New York, N. Y. Filed Apr. 2, 1931.

Fem-Pac

For Catamenial Appliances.
Claims use since Mar. 3, 1931.

Ser. No. 312,917. HORN SURGICAL COMPANY, Philadelphia, Pa. Filed Apr. 3, 1931.

Hornscolite

For Elastic Hosiery.
Claims use since Feb. 26, 1931.

Ser. No. 313,551. THE KENDALL COMPANY, Boston, Mass. Filed Apr. 20, 1931.

LISTO

For Absorbent Cotton.
Claims use since Apr. 4, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 299,273. L. M. MARTINI GRAPE PRODUCTS CO., Kingsburg, Calif. Filed Apr. 22, 1930.

FORBIDDEN FRUIT

For Nonalcoholic Grape Syrup Used in Making Soft Drinks.
Claims use since Nov. 30, 1920.

Ser. No. 310,383. LES HERITIERS DE MARIE BRIZARD & ROGER, M. B. GLOTIN, ACHARD & GLOTIN, Bordeaux, France. Filed Jan. 26, 1931.



The wording appearing on the drawing being disclaimed apart from the mark shown with the exception of the words "Marie Brizard."
For Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Sept. 20, 1875.

Ser. No. 311,871. GEO. A. FOX PRODUCTS CO., INC., Kansas City, Mo. Filed Mar. 7, 1931.

HASTY-TASTY

Applicant disclaims the use of the word "Tasty" except in the association shown.
For Chocolate Flavored Syrups and Concentrates Used in the Preparation of Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Jan. 14, 1931.

Ser. No. 312,414. CLICQUOT CLUB COMPANY, Millis, Mass. Filed Mar. 23, 1931.

Clicquot Club
SEC

The drawing is lined for red. Applicant makes no claim to the word "Sec" apart from the mark "Clicquot Club Sec."
For Syrups and Extracts Used in Making the Same.
Claims use since May 15, 1925.

Ser. No. 312,894. ALKALARIS MINERAL WATER COMPANY, doing business as Crystal Rock Water Company, Columbus, Ohio. Filed Apr. 3, 1931.

ALKALARIS

For Mineral Waters and Nonalcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Jan. 1, 1924.

Ser. No. 313,248. THE LOMAX COMPANY, Chicago, Ill. Filed Apr. 11, 1931.



No claim is made to the use of the words "Lime Rickey" apart from the mark as shown in the drawing. The picture of a negro shown in the drawing is fanciful.
For Ginger Ale Blended with Fruit Flavors.
Claims use since Mar. 2, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 279,795. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Filed Feb. 23, 1929. Under 10-year proviso.

AVONDALE

For Canned Fruits and Fruit Preserves—Namely, Apples, Apple Butter, Apple Sauce, Apricots, Apricot Butter, Blackberries, Blackberry Preserves, Blueberries, Royal Anne and Pitted Cherries, Egg Plums, Figs, Grapes, Grapefruit, Grape Marmalade, Gooseberries, Loganberries, Loganberry Preserves, Peaches, Pears, Pineapple, Red Raspberries, Red-Raspberry Preserves, Strawberries, Strawberry Preserves; Canned Vegetables—Namely, Asparagus, Baked Beans, Beets, Celery, Kidney Beans, Lima Beans, Okra, Peas, Pumpkin, String Beans, Succotash, Sweet Corn, Sweet Potatoes, Tomatoes, and Spinach; Canned Sea Food—Namely, Clams, Codfish, Lobster, Oysters, and Shrimp; Canned Chicken; Canned Soups—Namely, Bean, Clam Chowder, and Tomato; Canned Mincemeat and Plum Pudding; Relishes—Namely, Chili Sauce, Green and Ripe Olives, Red Peppers, Sweet Relish Pickles, Tomato Catchup, and Cocktail Catchup; Spices—Namely, African Ginger, Allspice, Black Pepper, Capers, Celery Salt, Cinnamon, Cloves, Curry Powder, Mace, Mustard, Nutmeg, Poultry Seasoning, Prepared Mustard, Paprika, White Pepper, and Sage; Mexican Chilies, Salad Dressing and Vinegar, Coffee and Tea, Citron Peel, Crystallized Ginger; Grapefruit Peel, Lemon Peel, and Orange Peel; Coconut, Walnut Meats, and Peanut Butter; Marshmallow Creme, Maple Syrup and Sugar, and Flour and Cereals—Namely, Barley, Cake Flour, Corn Meal, Dessert Tapioca, Farina, Wheat Breakfast Cereal, Lye Hominy, Granulated Hominy, Pearl Hominy, Pancake Flour, Pearl Tapioca, Pop Corn in its Natural State, Rice, Rice Flour, Self-Rising Buckwheat, Corn, and Wheat Flour, Wheat Bran, Graham Flour, Entire-Wheat Flour, and Gluten Flour.
Claims use since 1885.

Ser. No. 281,765. CAMPBELL HOLTON & CO., Bloomington, Ill. Filed Apr. 3, 1929.

Travelers' Beacon

For Coffee.
Claims use since Mar. 1, 1929.

Ser. No. 298,245. CHARLES M. KING, doing business as Wisconsin Malt Products Co., Racine, Wis. Filed Apr. 1, 1930.

KING'S

For Pure Malt Extract.
Claims use since Mar. 1, 1922.

Ser. No. 298,609. YOUNG'S CANDY PRODUCTS CO., INC., Philadelphia, Pa. Filed Apr. 9, 1930.

PICNIC JIMMY

For Filled Taffy Candy.
Claims use since 1928.

Ser. No. 298,634. LOLA KITTI, Menahga, Minn. Filed Apr. 10, 1930.



The words "Candy Bar" and "5 Cents" are disclaimed separate and apart from the mark as shown in the drawing.
For Candy.
Claims use since Jan. 1, 1930.

Ser. No. 298,645. MINNESOTA VALLEY CANNING COMPANY, Le Sueur, Minn. Filed Apr. 10, 1930.



The representation of the goods is hereby disclaimed apart from the mark as shown in the drawing.
For Canned Peas.
Claims use since July 20, 1926.

Ser. No. 298,646. MINNESOTA VALLEY CANNING COMPANY, Le Sueur, Minn. Filed Apr. 10, 1930.



The representation of the goods is hereby disclaimed apart from the mark as shown in the drawing.
For Canned Peas.
Claims use since July 20, 1926.

Ser. No. 298,647. MINNESOTA VALLEY CANNING COMPANY, Le Sueur, Minn. Filed Apr. 10, 1930.



The representation of the goods is hereby disclaimed apart from the mark as shown in the drawing.
For Canned Peas.
Claims use since July 20, 1926.

Ser. No. 299,139. FRANCIS H. LEGGETT & COMPANY, New York, N. Y. Filed Apr. 19, 1930.

"BACK TO NATURE PACK"

Applicant disclaims the word "Pack" as part of the trade-mark of which registration is sought.
For Canned Peas.
Claims use since Sept. 1, 1929.

Ser. No. 299,282. HENRY SCARAMELLI INC., New York, N. Y. Filed Apr. 22, 1930.

FORUM

For Cheese.
Claims use since Mar. 26, 1930.

Ser. No. 308,556. SCHROEDER BROTHERS, INC., doing business as Albarosa Packing Co., New York, N. Y. Filed Dec. 3, 1930.



For Canned Tomatoes.
Claims use since October, 1930.

Ser. No. 309,534. H. E. SCHEIDT, Lyle, Wash. Filed Dec. 31, 1930.



Manufactured for
H. E. SCHEIDT
Lyle, Washington

All of the reading matter shown on the drawing, including the notation "5¢," except "Tom Thumb" is disclaimed.
For Candy Bar.
Claims use since Dec. 13, 1930.

Ser. No. 310,563. HIGHLAND ORANGE ASSOCIATION, Highland, Calif. Filed Jan. 30, 1931.

PINE CONE

For Fresh Citrus Fruits—Namely, Oranges, Lemons, and Grapefruit.
Claims use since 1898.

Ser. No. 310,839. SENECA FOOD PRODUCTS CORPORATION, Utica, N. Y. Filed Feb. 7, 1931.

Seneca Club

No claim is made to the word "Brand."
For Malt Syrup.
Claims use since July 1, 1920.

Ser. No. 311,556. BRECHET & RICHTER COMPANY, Minneapolis, Minn. Filed Feb. 28, 1931.

E-Z-PY

For Flavored Powdered Preparations for Making Puddings, Custards, and Fillings and Dressings for Cakes and Pastry.
Claims use since Aug. 19, 1930.

Ser. No. 312,273. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Mar. 18, 1931.

TEA HOUSE

For Tea.
Claims use since July 6, 1928.

Ser. No. 312,342. THE HILLS BROTHERS COMPANY, New York, N. Y. Filed Mar. 20, 1931.

PALM GOLD

For Dried Dates in Their Natural State.
Claims use since Mar. 18, 1931.

Ser. No. 312,582. THE WILSON PRODUCTS COMPANY, INC., Tyrone, Pa. Filed Mar. 26, 1931.

BIG TOP

For Candy and Popcorn Confections.
Claims use since Mar. 1, 1931.

Ser. No. 312,583. JULIA WISE, New York, N. Y. Filed Mar. 26, 1931.

MING SAUCE

No claim of exclusive right is made to the word "Sauce."
For Condimental Sauces.
Claims use since February, 1927.

Ser. No. 312,693. CHAPPEL BROS., INC., Rockford, Ill. Filed Mar. 30, 1931.

HIGH STAKES

For Canned Meat and Cereals for Dogs and all Carnivorous Animals.
Claims use since January, 1923.

Ser. No. 312,739. L. E. SILBERMAN, doing business as Colonial Products Company, Des Moines, Iowa. Filed Mar. 30, 1931.



The lining of the drawing is not intended to represent any particular color. The words, "Malt Extract," "Hop Flavor Dark," "Pure Malt Extract, For Food Purposes Only," and "Des Moines, Iowa" are disclaimed as apart from the trade-mark shown.
For Malt Extract.
Claims use since May 1, 1930.

Ser. No. 312,773. RED WING CORPORATION, Dayton, Ohio. Filed Mar. 31, 1931.

"BROWN GIANT"

For Frozen Confections.
Claims use since June 1, 1930.

Ser. No. 312,776. SOUTHERN RICE SALES COMPANY, INC., New York, N. Y. Filed Mar. 31, 1931.

BOVINE

For Rice, Barley, Dried Peas, Beans, and Lentils, Coffee and Spices, Rice Flakes, and Rice Flour.
Claims use since September, 1929.

Ser. No. 312,783. JOFFE BROTHERS, New York and Brooklyn, N. Y. Filed Mar. 31, 1931.

Insist on Joffe's *Beware of Imitators*



The words "Insist On, Beware of Imitators, Fresh Honi-Coconut Popcorn Made from the Finest Corn and Pure Honey, It is a Delicious Health Food" are disclaimed apart from the other features of the mark shown.
For Candied Popcorn.
Claims use since Feb. 4, 1931.

Ser. No. 312,969. THE WOOD GROCERY CO., doing business as Caro-Maid Ice Cream Co., Dillon, S. C. Filed Apr. 4, 1931.

Caro-Maid

For Ice Cream, Sherbets, Ices, and Frozen Confections.
Claims use since Mar. 25, 1931.

Ser. No. 313,063. STROHMEYER & ARPE COMPANY, New York, N. Y. Filed Apr. 7, 1931.

CANARI

For Dried Beans.
Claims use since middle of 1928.

Ser. No. 313,074. J. B. CHAMBERS, doing business as Chambers Candy Co., Griffin, Ga. Filed Apr. 8, 1931.



For Candy.
Claims use since May 1, 1929.

Ser. No. 313,133. RALPH L. HENLY, St. Paul, Minn. Filed Apr. 9, 1931.

Life Sentence

For Candy.
Claims use since Apr. 3, 1931.

Ser. No. 313,171. ALPINA KÄSE A. G., Burgdorf, Switzerland. Filed Apr. 10, 1931.



The figure shown is entirely fanciful and not the likeness of any living individual known to the applicant.
For Cheese.
Claims use since February, 1931.

Ser. No. 313,234. DAIRY CORPORATION OF AMERICA, Chicago, Ill. Filed Apr. 11, 1931.

AIRCO

For Powdered Skim Milk and Powdered Cream.
Claims use since Mar. 5, 1931.

Ser. No. 313,352. SANTA MARIA PRODUCE CO., Guadalupe, Calif. Filed Apr. 14, 1931.

RITE-PAK

For Fresh Vegetables.
Claims use since Mar. 19, 1931.

Ser. No. 313,417. BEATRICE CREAMERY COMPANY, Chicago, Ill. Filed Apr. 16, 1931.

Meadow Gold

For Milk and Cream.
Claims use since Oct. 5, 1922.

Ser. No. 313,460. LOUIS G. DIEKER, doing business as The Duryana Company, Los Angeles, Calif. Filed Apr. 13, 1931.

Duryana

For Health Foods Made from Fruits Preserved in Hermetically Sealed Containers.
Claims use since Mar. 2, 1931.

Ser. No. 313,531. AUTOMATIC CANTEEN COMPANY, Chicago, Ill. Filed Apr. 20, 1931.

CANTEEN

For Candy Bars.
Claims use since Sept. 15, 1929.

CLASS 48

Malt Beverages and Liquors

Ser. No. 310,405. PABST CORPORATION, Milwaukee, Wis. Filed Jan. 26, 1931.



The drawing is lined for blue and red. No claim is made to the representation of the bottle, the labels, or the bottle cap. No claim is made to the wording "The Brew of Quality" and "Milwaukee, U. S. A." except as part of the trade-mark.
For Malt Beverages Containing Less than One-Half of One Per Cent Alcohol by Volume.
Claims use since January, 1898.

Ser. No. 312,486. CHAS. A. KRAUSE MILLING CO., Milwaukee, Wis. Filed Mar. 23, 1931.

JIFFIMALT

For Flaked Corn Product Used in the Manufacture of Non-Alcoholic Malt Beverages.
Claims use since 1924.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 311,204. ROSSVILLE COMMERCIAL ALCOHOL CORPORATION, Lawrenceburg, Ind. Filed Feb. 18, 1931.

"Spirit of the Nation"

ROSSVILLE
•ALCOHOL•

No claim is made to the words "Rossville" and "Alcohol" separately or apart from the mark as shown.
For Ethyl Alcohol.
Claims use since August, 1922.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 301,753. CONTINENTAL TRAFFIC MARKER, INC., Chicago, Ill. Filed May 30, 1930.

EMBEDDED RUBBER
CONTINENTAL
TRAFFIC MARKER
INC.
TRAFFIC GUIDES
REG. U.S. PAT. OFFICE

The words "Embedded Rubber Traffic Guides" are hereby disclaimed apart from the mark as shown.
For Traffic Guides and Road Markers.
Claims use since June 2, 1920.

Ser. No. 303,202. NATIONAL TRAFFIC PRODUCTS, INC., Detroit, Mich. Filed July 7, 1930.

SHUR-SITE

For Traffic Markers.
Claims use since Apr. 1, 1930.

Ser. No. 312,992. H. C. LOUGHRAN, Newark, N. J. Filed Apr. 6, 1931.

SANI-FELT

No claim is made to the word "Felt" apart from the mark shown in the drawing.
For Rug Cushions, Paddings, and Carpet Cushions of Hair Felt.
Claims use since Nov. 1, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MAY 26, 1931

283,299. OINTMENT FOR BURNS, CUTS, SORES, CORNS, AND FOR THE HAIR. THOMAS DAVIES, Conway, Wales.
Filed October 29, 1930. Serial No. 307,311. PUBLISHED FEBRUARY 17, 1931. Class 6.

283,300. MACHINERY-VIBRATION ABSORBER FOR USE BENEATH THE BASE SUPPORTS OF SAID MACHINERY. THE KORFUND COMPANY, INC., New York, N. Y.
Filed October 25, 1930. Serial No. 307,165. PUBLISHED MARCH 10, 1931. Class 23.

283,301. PERIODICAL PUBLICATIONS. THE KORFUND COMPANY, INC., New York, N. Y.
Filed October 25, 1930. Serial No. 307,164. PUBLISHED MARCH 10, 1931. Class 38.

283,302. STRAW BRAIDS OR PLAITS DESIGNED FOR THE MANUFACTURE OF HATS. HENRY POLLAK, INC., New York, N. Y.
Filed October 23, 1930. Serial No. 307,106. PUBLISHED MARCH 10, 1931. Class 40.

283,303. STRAW BRAIDS OR PLAITS DESIGNED FOR THE MANUFACTURE OF HATS. HENRY POLLAK, INC., New York, N. Y.
Filed October 23, 1930. Serial No. 307,105. PUBLISHED MARCH 10, 1931. Class 40.

283,304. ANTISEPTIC DENTIFRICE, MOUTH WASH, AND GARGLE. PHILIP BRUNO, doing business as Westchester Pharmacal Co., Tuckahoe, N. Y.
Filed October 28, 1930. Serial No. 307,090. PUBLISHED DECEMBER 9, 1930. Class 6.

283,305. SHOES MADE OF LEATHER, LEATHER AND FIBRE, LEATHER AND RUBBER, AND LEATHER, FIBRE, AND RUBBER. HUNTINGTON SHOE AND LEATHER CO., Huntington, Ind.
Filed October 22, 1930. Serial No. 307,052. PUBLISHED FEBRUARY 24, 1931. Class 39.

283,306. PERIODICAL TO BE PUBLISHED MONTHLY. WELLS DRORBAUGH, Bronxville, N. Y.
Filed October 15, 1930. Serial No. 306,772. PUBLISHED MARCH 10, 1931. Class 38.

283,307. CONCRETE BUILDING BLOCKS. THE BALTIMORE CONCRETE PRODUCTS CO., Baltimore, Md.
Filed October 8, 1930. Serial No. 306,522. PUBLISHED MARCH 3, 1931. Class 12.

283,308. CIGARS. GENERAL CIGAR CO., INC., New York, N. Y.
Filed October 6, 1930. Serial No. 306,477. PUBLISHED JANUARY 27, 1931. Class 17.

283,309. RAW AND PARTLY-PREPARED ARTIFICIAL TEXTILE FIBERS SUITABLE FOR THE PURPOSE OF SPINNING THEM INTO YARN. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed October 6, 1930. Serial No. 306,445. PUBLISHED MARCH 10, 1931. Class 1.

283,310. PROPHOLACTIC GARGLE AND A PROPHOLACTIC WASH. JOE. F. SANTEE, doing business as Santarub Chemical Company, Okmulgee, Okla.
Filed October 4, 1930. Serial No. 306,419. PUBLISHED MARCH 3, 1931. Class 6.

283,311. STERILE MEDICINAL SOLUTIONS FOR HYPODERMIC USES. THE LOUIS HEISTER COMPANY, Cincinnati, Ohio.
Filed October 4, 1930. Serial No. 306,398. PUBLISHED MARCH 3, 1931. Class 6.

283,312. PERIODICAL PUBLICATION. FORT ATKINSON NEWS, INC., Fort Atkinson, Wis.
Filed October 1, 1930. Serial No. 306,298. PUBLISHED MARCH 3, 1931. Class 38.

283,313. CLEANING SOLVENT PREPARATION HAVING INCIDENTAL DISINFECTANT PROPERTIES. TURCO PRODUCTS INC., also doing business as Turco, Los Angeles, Calif.
Filed September 29, 1930. Serial No. 306,204. PUBLISHED MARCH 10, 1931. Class 4.

283,314. ALLOY METALS CONSISTING PRINCIPALLY OF IRON, STEEL, AND NICKEL; DIAMOND-SUBSTITUTE INSERT METALS. DON D. ANGLE, doing business as Don D. Angle Welders Supply Company, Los Angeles, Calif.
Filed September 29, 1930. Serial No. 306,164. PUBLISHED MARCH 10, 1931. Class 14.

283,315. CLEANING SOLVENT PREPARATION HAVING INCIDENTAL DISINFECTANT PROPERTIES. TURCO PRODUCTS INC., Los Angeles, Calif.
Filed September 17, 1930. Serial No. 305,793. PUBLISHED MARCH 10, 1931. Class 4.

283,316. MEN'S AND BOYS' COATS, JERKINS, VESTS, BLOUSES, AND WINDBREAKERS MADE OF LEATHER, KNITTED, AND WOVEN MATERIALS. NEUSTADTER BROTHERS, San Francisco, Calif.
Filed September 2, 1930. Serial No. 305,238. PUBLISHED MARCH 3, 1931. Class 39.

283,317. CARBONATE OF SODA (Na_2CO_3) COMBINED WITH EITHER SODIUM HYDRATE (NaOH) OR WITH BICARBONATE OF SODA ($NaHCO_3$), DESTINED FOR INDUSTRIAL USE. THOS. J. WILLIAMS, Buenos Aires, Argentina.
Filed August 26, 1930. Serial No. 305,063. PUBLISHED MARCH 3, 1931. Class 6.

283,318. PRESERVATIVE AND FINISH IN THE NATURE OF A PAINT OR VARNISH. INTERNATIONAL CHEMICAL COMPANY, Chicago, Ill.
Filed August 25, 1930. Serial No. 305,006. PUBLISHED NOVEMBER 4, 1930. Class 16.

283,319. COLUMN HEADING. THE CROWELL PUBLISHING COMPANY, New York, N. Y.
Filed December 17, 1930. Serial No. 309,066. PUBLISHED MARCH 3, 1931. Class 38.

283,320. CERTAIN NAMED WEARING APPAREL. COHEN, GOLDMAN & CO. INC., New York, N. Y.
Filed December 19, 1930. Serial No. 309,165. PUBLISHED MARCH 10, 1931. Class 39.

283,321. PRINTED PUBLICATIONS. THE SCHOOL MUSICIAN PUBLISHING CO., Chicago, Ill.
Filed December 19, 1930. Serial No. 309,177. PUBLISHED FEBRUARY 24, 1931. Class 38.

283,322. POP CORN IN ITS NATURAL STATE. THE ALBERT DICKINSON COMPANY, Chicago, Ill.
Filed December 23, 1930. Serial No. 309,265. PUBLISHED MARCH 10, 1931. Class 46.

283,323. DRY FIRE EXTINGUISHER. ADOLF FÜLLEMANN, Goldau, Canton of Schwyz, Switzerland.
Filed December 23, 1930. Serial No. 309,267. PUBLISHED MARCH 3, 1931. Class 6.

283,324. CONDENSATION PRODUCT OF ACETONE AND DIPHENYLAMINE. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed December 23, 1930. Serial No. 309,277. PUBLISHED MARCH 10, 1931. Class 1.

283,325. CONDENSATION PRODUCT OF ACETALDEHYDE AND ANILINE IN AN ACID MEDIUM. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed December 23, 1930. Serial No. 309,280. PUBLISHED MARCH 10, 1931. Class 1.

283,326. CHLORINATED RUBBER VARNISH IN SOLUTION. NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed December 23, 1930. Serial No. 309,283. PUBLISHED MARCH 10, 1931. Class 16.

283,327. COVER PAPERS. KIMBERLY-CLARK CORPORATION, Neenah, Wis.
Filed December 24, 1930. Serial No. 309,312. PUBLISHED MARCH 3, 1931. Class 37.

283,328. CRACKERS AND CAKES. BRIGHT BISCUIT CO., Kansas City, Mo.
Filed December 27, 1930. Serial No. 309,373. PUBLISHED MARCH 10, 1931. Class 46.

283,329. RAW SILK. E. GEBLI & COMPANY, INC., New York, N. Y.
Filed December 27, 1930. Serial No. 309,378. PUBLISHED MARCH 10, 1931. Class 1.

283,330. POLISH FOR AUTOMOBILES AND FURNITURE. JOHN F. MCGARRAHAN, Brookfield, Ill., assignor to National Protex Company, Inc., Brookfield, Ill., a Corporation of Illinois.
Filed December 29, 1930. Serial No. 309,438. PUBLISHED MARCH 3, 1931. Class 16.

283,331. FERTILIZERS. ARUNDEL TRUCKING CO., INC., Baltimore, Md.
Filed December 30, 1930. Serial No. 309,456. PUBLISHED MARCH 10, 1931. Class 10.

283,332. ADSORPTIVE CARBONS AND CARBONACEOUS MATERIALS USED FOR WATER PURIFICATION. DARCO SALES CORPORATION, New York, N. Y.
Filed December 30, 1930. Serial No. 309,462. PUBLISHED MARCH 17, 1931. Class 31.

283,333. FROZEN SHERBETS AND FROZEN FRUIT JUICES. HENDRIX & COMPANY, Hollywood, Fla.
Filed December 30, 1930. Serial No. 309,475. PUBLISHED MARCH 10, 1931. Class 46.

283,334. COUGH MEDICINE. MARSHALL C. ANDREWS, doing business as Andrews Remedy Co., Lakewood, Ohio.
Filed December 31, 1930. Serial No. 309,495. PUBLISHED MARCH 3, 1931. Class 6.

283,335. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed December 31, 1930. Serial No. 309,502. PUBLISHED MARCH 3, 1931. Class 42.

283,336. HOUSE ORGAN ISSUED MONTHLY. CLAY PRODUCTS COMPANY, INC. OF INDIANA, Brazil, Ind.
Filed December 31, 1930. Serial No. 309,512. PUBLISHED MARCH 10, 1931. Class 38.

283,337. MONTHLY PUBLICATIONS. SAMUEL W. GRAFFLIN, White Plains, N. Y.
Filed December 31, 1930. Serial No. 309,519. PUBLISHED MARCH 3, 1931. Class 38.

283,338. MONTHLY MAGAZINE. MACFADDEN PUBLICATIONS, INC., New York, N. Y.
Filed December 31, 1930. Serial No. 309,527. PUBLISHED MARCH 3, 1931. Class 38.

283,339. TICKET-ISSUING MACHINES, TICKET PRINTING AND ISSUING MACHINES, AND TICKET-PUNCHING MACHINES AND PARTS THEREOF. GENERAL REGISTER CORPORATION, Brooklyn, N. Y.
Filed January 15, 1931. Serial No. 309,972. PUBLISHED MARCH 10, 1931. Class 23.

283,340. TICKET-ISSUING MACHINES, TICKET PRINTING AND ISSUING MACHINES, AND TICKET-PUNCHING MACHINES AND PARTS THEREOF. GENERAL REGISTER CORPORATION, Brooklyn, N. Y.
Filed January 15, 1931. Serial No. 309,971. PUBLISHED MARCH 10, 1931. Class 23.

283,341. PREPARATION FOR THE RELIEF OF MENSTRUAL PAIN AND DISCOMFORT. BENDINER & SCHLESINGER, INC., New York, N. Y.
Filed January 15, 1931. Serial No. 309,962. PUBLISHED MARCH 3, 1931. Class 6.

283,342. FEED FOR CATTLE. BALTIC-AMERICAN FEED CORPORATION, New York, N. Y.
Filed January 15, 1931. Serial No. 309,955. PUBLISHED MARCH 10, 1931. Class 46.

283,343. PAPER AND STATIONERY, PARTICULARLY SALES BOOKS, MANIFOLDING BOOKS, AND MANIFOLDING SHEETS. AMERICAN SALES BOOK COMPANY, LIMITED, Toronto, Ontario, Canada, and Niagara Falls and Elmira, N. Y.
Filed January 15, 1931. Serial No. 309,954. PUBLISHED MARCH 3, 1931. Class 37.

283,344. MEDICINAL PREPARATIONS ADAPTED FOR THE TREATMENT OF PIROPLASMOSIS. SANDOZ CHEMICAL WORKS, INC., New York, N. Y.
Filed January 14, 1931. Serial No. 309,943. PUBLISHED MARCH 3, 1931. Class 6.

283,345. MEDICINAL PREPARATIONS ADAPTED FOR THE TREATMENT OF PIROPLASMOSIS. SANDOZ CHEMICAL WORKS, INC., New York, N. Y.
Filed January 14, 1931. Serial No. 309,942. PUBLISHED MARCH 3, 1931. Class 6.

283,346. MEDICINAL PREPARATIONS HAVING ANODYNE PROPERTIES. SANDOZ CHEMICAL WORKS, INC., New York, N. Y.
Filed January 14, 1931. Serial No. 309,940. PUBLISHED MARCH 3, 1931. Class 6.

283,347. SHAMPOO. MARTIN BUCHWALD, New York, N. Y.
Filed January 14, 1931. Serial No. 309,919. PUBLISHED MARCH 3, 1931. Class 6.

283,348. IRON AND STEEL IN THE FORM OF PIGS, INGOTS, BLANKS, BARS, BANDS, BEAMS, BLOCKS, SHEET METAL, WIRE, AND SOLID AND HOLLOW DRILL-STEEL. SANDVIKENS JERNVERKS AKTIEBOLAG, Sandviken, Sweden.
Filed January 13, 1931. Serial No. 309,905. PUBLISHED MARCH 10, 1931. Class 14.

283,349. COTTON GOODS IN PIECE FORM. THE GEORGIA-KINCAID MILLS, Griffin, Ga.
Filed January 13, 1931. Serial No. 309,892. PUBLISHED MARCH 3, 1931. Class 42.

283,350. MODELING CLAY. ETTL STUDIOS, INCORPORATED, New York, N. Y.
Filed January 13, 1931. Serial No. 309,890. PUBLISHED MARCH 10, 1931. Class 1.

283,351. FOOD WRAPPERS FORMED OF PAPER. CONTINENTAL PAPER & BAG CORPORATION, New York, N. Y.
Filed January 13, 1931. Serial No. 309,885. PUBLISHED MARCH 3, 1931. Class 37.

283,352. BABY TEETHING RINGS. LOUIS A. BOETTIGER CO., New York, N. Y.
Filed January 13, 1931. Serial No. 309,881. PUBLISHED MARCH 10, 1931. Class 44.

283,353. NEWSPRINT PAPER. TONAWANDA PAPER COMPANY, INC., North Tonawanda, N. Y., and Wilmington, Del.
Filed January 12, 1931. Serial No. 309,875. PUBLISHED MARCH 3, 1931. Class 37.

283,354. INKWELLS. SENGBUSCH SELF-CLOSING INKSTAND COMPANY, Milwaukee, Wis.
Filed January 12, 1931. Serial No. 309,870. PUBLISHED MARCH 10, 1931. Class 37.

283,355. LADIES' HAND BAGS AND PURSES. THE LOCKTITE CO., INC., Gloversville, N. Y.
Filed January 12, 1931. Serial No. 309,864. PUBLISHED MARCH 10, 1931. Class 3.

283,356. WEEKLY PUBLICATION. LIFE PUBLISHING COMPANY, New York, N. Y.
Filed January 12, 1931. Serial No. 309,863. PUBLISHED MARCH 10, 1931. Class 38.

283,357. PERFUME, TOILET WATER, FACE POWDER, TALCUM POWDER, BATH SALTS, BRILLIANTINE, BANDOLINE, ROUGE, LIP STICKS, DUSTING POWDER, SACHET, COLD CREAMS, LOTION FOR THE SKIN AND HAIR, POWDER AND ROUGE COMPACTS, AND EAU VEGETAL. HOUBIGANT, INC., New York, N. Y.
Filed January 12, 1931. Serial No. 309,856. PUBLISHED MARCH 3, 1931. Class 6.

283,358. PERFUMES, TOILET WATER, FACE POWDER, TALCUM POWDER, BATH SALTS, BRILLIANTINE, BANDOLINE, ROUGE, LIP STICKS, DUSTING POWDER, SACHET, COLD CREAMS, LOTION FOR THE SKIN AND HAIR, POWDER AND ROUGE COMPACTS, AND EAU VEGETAL. HOUBIGANT, INC., New York, N. Y.
Filed January 12, 1931. Serial No. 309,855. PUBLISHED MARCH 3, 1931. Class 6.

283,359. CHEESE. SCHACHTELKÄSEFABRIK FRANZ ZWICK, Kellmunz, Germany.
Filed January 24, 1931. Serial No. 310,361. PUBLISHED MARCH 10, 1931. Class 46.

283,360. CLOCKS, WRIST WATCHES, AND PLATINUM, GOLD, AND SILVER WATCHES. REINER & BERKOW, INC., New York, N. Y.
Filed January 24, 1931. Serial No. 310,350. PUBLISHED MARCH 10, 1931. Class 27.

283,361. CANNED SALMON. FIDALGO ISLAND PACKING COMPANY, Anacortes, Wash.
Filed January 24, 1931. Serial No. 310,335. PUBLISHED MARCH 10, 1931. Class 46.

283,362. CANNED SALMON. FIDALGO ISLAND PACKING COMPANY, Anacortes, Wash.
Filed January 24, 1931. Serial No. 310,334. PUBLISHED MARCH 10, 1931. Class 46.

283,363. CHECK BOOKS, ACCOUNT BOOKS, AND LEDGERS. JOSEPH BERG, New York, N. Y.
Filed January 23, 1931. Serial No. 310,280. PUBLISHED MARCH 3, 1931. Class 37.

283,364. PAPER USED IN THE PRINTING ART. INTERNATIONAL PAPER COMPANY, New York, N. Y.
Filed January 22, 1931. Serial No. 310,256. PUBLISHED MARCH 3, 1931. Class 37.

283,365. PAPER USED IN THE PRINTING ART. INTERNATIONAL PAPER COMPANY, New York, N. Y.
Filed January 22, 1931. Serial No. 310,255. PUBLISHED MARCH 3, 1931. Class 37.

283,366. DIMENSION STOCK AND TURNINGS OF HICKORY, PERSIMMON, DOGWOOD, AND OTHER WOODS. GOLF SHAFT & BLOCK COMPANY, Memphis, Tenn.
Filed January 22, 1931. Serial No. 310,253. PUBLISHED MARCH 10, 1931. Class 1.

283,367. ILLUSTRATED MONTHLY. AMERICAN AUTOMOBILE ASSOCIATION, INC., Washington, D. C.
Filed January 20, 1931. Serial No. 310,198. PUBLISHED MARCH 10, 1931. Class 38.

283,368. CHEMICAL PREPARATIONS FOR USE IN THE COATING AND FILLING OF PAPER. INDUSTRIAL CHEMICAL SALES COMPANY, INC., New York, N. Y.
Filed January 20, 1931. Serial No. 310,169. PUBLISHED MARCH 3, 1931. Class 6.

283,369. PILE FABRICS IN THE PIECE. CAROMOUNT MILLS, INC., Rocky Mount, N. C. and New York, N. Y.
Filed January 20, 1931. Serial No. 310,161. PUBLISHED MARCH 3, 1931. Class 42.

283,370. MONTHLY MAGAZINE. TUBIZE CHATILLON CORPORATION, New York, N. Y.
Filed January 19, 1931. Serial No. 310,145. PUBLISHED MARCH 10, 1931. Class 38.

283,371. PERIODICAL PUBLICATION ISSUED MONTHLY. PUBLISHERS PRINTING COMPANY, New York, N. Y., assignor to Merchants Refrigerating Co., New York, N. Y.
Filed January 17, 1931. Serial No. 310,071. PUBLISHED MARCH 10, 1931. Class 38.

283,372. COATED TEXTILE FABRIC. THE POCONO RUBBER CLOTH CO., Trenton, N. J.
Filed January 17, 1931. Serial No. 310,070. PUBLISHED MARCH 10, 1931. Class 50.

283,373. TOOTHBRUSHES. LAMBERT PHARMACAL COMPANY, Wilmington, Del.
Filed January 17, 1931. Serial No. 310,054. PUBLISHED MARCH 3, 1931. Class 29.

283,374. MECHANICAL RAZOR-BLADE SHARPENERS. GUTH, STERN & CO., INC., New York, N. Y.
Filed January 17, 1931. Serial No. 310,051. PUBLISHED MARCH 10, 1931. Class 23.

283,375. WRITING PAPER. THE EATON PAPER COMPANY, Adams, Mass.
Filed January 17, 1931. Serial No. 310,048. PUBLISHED MARCH 3, 1931. Class 37.

283,376. MEDICINAL COMPOUND FOR TREATMENT OF GONORRHEA. BAGDASAR BABIGIAN, New York, N. Y.
Filed January 17, 1931. Serial No. 310,043. PUBLISHED MARCH 3, 1931. Class 6.

283,377. HOUSEHOLD CHAIRS. VANDER LEY BROS., INC., Grand Rapids, Mich.
Filed January 16, 1931. Serial No. 310,032. PUBLISHED MARCH 10, 1931. Class 32.

283,378. POSTERS, WINDSHIELD STICKERS, AND ADMISSION TICKETS SOLD TO THE TRADE AS SUCH. HOSMER H. COMFORT, doing business as Action Color Poster Co., Stockton, Calif.
Filed January 16, 1931. Serial No. 310,011. PUBLISHED MARCH 10, 1931. Class 38.

283,379. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, SIRUPS AND EXTRACTS FOR MAKING THE SAME. CHARLES ADAMS, New Kensington, Pa.
Filed February 10, 1931. Serial No. 310,906. PUBLISHED MARCH 17, 1931. Class 45.

283,380. EXPLODING AND CHROMATIC DAYLIGHT FIREWORKS. HITT FIREWORKS CO., Seattle, Wash.
Filed February 7, 1931. Serial No. 310,827. PUBLISHED MARCH 17, 1931. Class 9.

283,381. GRAPE JUICE. PHILIP BIANER, doing business as Del Vino Grape Products Co., Brooklyn, N. Y.
Filed February 6, 1931. Serial No. 310,793. PUBLISHED MARCH 17, 1931. Class 45.

283,382. MONTHLY PRINTED PERIODICAL OR TRADE PAPER. FEDERATED BUSINESS PUBLICATIONS, INC., New York, N. Y.
Filed February 2, 1931. Serial No. 310,640. PUBLISHED MARCH 10, 1931. Class 38.

283,383. COAL. THE WEST-CRESCENT FUEL COMPANY, Toledo, Ohio.
Filed January 31, 1931. Serial No. 310,621. PUBLISHED MARCH 10, 1931. Class 1.

283,384. STOCK FOOD—NAMELY, FISH MEAL. WILBUR-ELLIS COMPANY, San Francisco, Calif.
Filed January 30, 1931. Serial No. 310,585. PUBLISHED MARCH 10, 1931. Class 46.

283,385. MONTHLY MAGAZINE. E. C. WATSON, doing business as E. C. Watson Publishing Co., Harlingen, Tex.
Filed January 29, 1931. Serial No. 310,541. PUBLISHED MARCH 10, 1931. Class 38.

283,386. DAIRY FEED. WHITE FEED MILLS, Pine Bluff, Ark.
Filed January 28, 1931. Serial No. 310,500. PUBLISHED MARCH 10, 1931. Class 46.

283,387. TRANSPARENT ELASTIC MATERIAL EMMESHED IN WIRE SCREENING IN SHEET FORM SERVING AS A SUBSTITUTE FOR GLASS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed January 28, 1931. Serial No. 310,490. PUBLISHED MARCH 10, 1931. Class 50.

283,388. WEEKLY PERIODICAL. QUIGLEY PUBLISHING COMPANY, INC., New York, N. Y.
Filed January 28, 1931. Serial No. 310,486. PUBLISHED MARCH 10, 1931. Class 38.

283,389. DAILY PERIODICAL. MOTION PICTURE DAILY, INC., New York, N. Y.
Filed January 28, 1931. Serial No. 310,484. PUBLISHED MARCH 10, 1931. Class 38.

283,390. ICE. OSCAR D. KELLER, Elizabeth, La.
Filed January 28, 1931. Serial No. 310,479. PUBLISHED MARCH 10, 1931. Class 1.

283,391. FERTILIZER. THE GULF FERTILIZER COMPANY, Tampa, Fla.
Filed December 30, 1930. Serial No. 309,474. PUBLISHED MARCH 10, 1931. Class 10.

283,392. WEEKLY PUBLICATION. CONTINENTAL GROCERY CORPORATION, LIMITED, Denver, Colo.
Filed January 27, 1931. Serial No. 310,444. PUBLISHED MARCH 10, 1931. Class 38.

283,393. COAL. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo.
Filed January 27, 1931. Serial No. 310,442. PUBLISHED MARCH 10, 1931. Class 1.

283,394. CANDY, CANDIED CITRUS, JELLIES, ORANGE MARMALADE, GRAPEFRUIT MARMALADE, AND GUAVA JELLY. TROPICAL SWEETS INCORPORATED, Davenport, Fla.
Filed January 26, 1931. Serial No. 310,424. PUBLISHED MARCH 10, 1931. Class 46.

283,395. MONTHLY MAGAZINE. MACFADDEN PUBLICATIONS, INC., New York, N. Y.
Filed January 26, 1931. Serial No. 310,394. PUBLISHED MARCH 10, 1931. Class 38.

283,396. MONTHLY MAGAZINE. MACFADDEN PUBLICATIONS, INC., New York, N. Y.
Filed January 26, 1931. Serial No. 310,393. PUBLISHED MARCH 10, 1931. Class 38.

283,397. CERTAIN NAMED TOILET FURNISHINGS. ELGIN AMERICAN MANUFACTURING CO., Elgin, Ill.
Filed January 26, 1931. Serial No. 310,369. PUBLISHED MARCH 3, 1931. Class 40.

283,398. CHEESE. SCHACHTELKÄSEFABRIK FRANZ ZWICK, Kellmunz, Germany.
Filed January 24, 1931. Serial No. 310,362. PUBLISHED MARCH 10, 1931. Class 46.

283,399. FACE POWDER, TALCUM POWDER, COLD CREAM, WHITENING CREAM, BLEACHING CREAM, VANISHING CREAM, FACE ROUGE, LIP STICK, HAIR POMADE, AND HAIR TONIC. EDWARD A. WELTERS, doing business as Welters Mfg. Co., Jacksonville, Fla.
Filed December 31, 1930. Serial No. 309,541. PUBLISHED MARCH 3, 1931. Class 6.

283,400. BOOKS, MAGAZINES, PAMPHLETS, AND CIRCULARS. AMERICAN FEDERATION OF LABOR, Washington, D. C.
Filed January 3, 1931. Serial No. 309,580. PUBLISHED MARCH 10, 1931. Class 38.

283,401. PREPARATION FOR THE TREATMENT OF COLDS. SMITH DRUG COMPANY, Portsmouth, Ohio.
Filed January 3, 1931. Serial No. 309,596. PUBLISHED MARCH 3, 1931. Class 6.

283,402. INDEXES FOR BOOKS. HALL & MCCHESNEY, INC., Syracuse, N. Y.
Filed January 5, 1931. Serial No. 309,614. PUBLISHED MARCH 3, 1931. Class 37.

283,403. BIMONTHLY PUBLICATION. HUGO GERNSBACK, New York, N. Y.
Filed January 6, 1931. Serial No. 309,639. PUBLISHED FEBRUARY 24, 1931. Class 38.

283,404. HAIRDRESSING. MORRIS MINDLIN, doing business as Vigorin Manufacturing Co., New York, N. Y.
Filed January 6, 1931. Serial No. 309,649. PUBLISHED MARCH 3, 1931. Class 6.

283,405. CHAMOIS. SAM BERNSTEIN & CO., INC., Camden, N. J.
Filed January 5, 1931. Serial No. 309,657. PUBLISHED MARCH 10, 1931. Class 1.

283,406. CAKE. CONTINENTAL BAKING COMPANY, Wilmington, Del., and New York, N. Y.
Filed January 7, 1931. Serial No. 309,677. PUBLISHED MARCH 10, 1931. Class 46.

283,407. TRACING LINEN. RICHARD SCHWICKERT AKTIENGESELLSCHAFT, Freiburg-in-the-Breisgau, Germany.
Filed January 7, 1931. Serial No. 309,702. PUBLISHED MARCH 3, 1931. Class 37.

283,408. CRACKERS, PARTICULARLY CRACKERS HAVING HIGH VITAMINE CONTENT. POLYPHASE CORPORATION, New York, N. Y.
Filed January 7, 1931. Serial No. 309,714. PUBLISHED MARCH 10, 1931. Class 46.

283,409. ICE-CREAM CONFECTION. THOMAS GEORGE, Johnson City, Tenn.
Filed January 8, 1931. Serial No. 309,732. PUBLISHED MARCH 10, 1931. Class 46.

283,410. PLASTER. GRAND RAPIDS PLASTER COMPANY, Grand Rapids, Mich.
Filed January 8, 1931. Serial No. 309,734. PUBLISHED MARCH 3, 1931. Class 12.

283,411. PERIODICALS. THE FRUIT DEALER PUBLISHING COMPANY, Philadelphia, Pa.
Filed January 9, 1931. Serial No. 309,773. PUBLISHED FEBRUARY 24, 1931. Class 38.

283,412. SAUSAGE SEASONING. BADER-VADEN-PARKS COMPANY, Tulsa, Okla.
Filed January 9, 1931. Serial No. 309,795. PUBLISHED MARCH 10, 1931. Class 46.

283,413. PERIODICAL. COTTON TRADE JOURNAL, INC., New Orleans, La.
Filed January 10, 1931. Serial No. 309,806. PUBLISHED FEBRUARY 24, 1931. Class 38.

283,414. NEWSPAPERS. CUYAHOGA NEWSPAPERS INC., Cleveland, Ohio.
Filed January 10, 1931. Serial No. 309,807. PUBLISHED FEBRUARY 24, 1931. Class 38.

283,415. JUTE BAGGING. MENTE & CO., INC., New Orleans, La.
Filed January 10, 1931. Serial No. 309,826. PUBLISHED FEBRUARY 24, 1931. Class 42.

283,416. MAGAZINES PUBLISHED EVERY MONTH. FAWCETT PUBLICATIONS, INC., Minneapolis, Minn.
Filed January 10, 1931. Serial No. 309,835. PUBLISHED FEBRUARY 24, 1931. Class 38.

283,417. SILICIUM CARBIDE, AN ELECTRIC-FURNACE PRODUCT USED FOR ABRASIVE AND POLISHING PURPOSES. A/S ARENDAL SMELTEVERK, Eydehavn, near Arendal, Norway.
Filed January 12, 1931. Serial No. 309,841. PUBLISHED MARCH 10, 1931. Class 4.

283,418. CANDIES, ICE CREAM, AND SALAD DRESSINGS. GANTT, INCORPORATED, Chicago, Ill.
Filed January 12, 1931. Serial No. 309,853. PUBLISHED MARCH 10, 1931. Class 46.

283,419. ALUMINUM. FAIRMONT ALUMINUM COMPANY, Fairmont, W. Va.
Filed August 21, 1930. Serial No. 304,858. PUBLISHED MARCH 10, 1931. Class 14.

283,420. CANNED SOUPS. MILTON H. SCHOENFIELD, doing business as Fields Food Products Co., Pasadena, Calif.
Filed August 18, 1930. Serial No. 304,739. PUBLISHED MARCH 10, 1931. Class 46.

283,421. BIRD FOODS. NU-TRINE CO., Hollywood, Calif.
Filed August 18, 1930. Serial No. 304,734. PUBLISHED MARCH 10, 1931. Class 46.

283,422. PUSH STREET BROOMS. A. STEIERT & SON, Philadelphia, Pa.
Filed August 5, 1930. Serial No. 304,258. PUBLISHED MARCH 10, 1931. Class 29.

283,423. ENCLOSING ENVELOPES FOR HEAT-RESPONSIVE ELEMENTS OF ELECTRICAL PYROMETERS. LEEDS & NORTHRUP COMPANY, Philadelphia, Pa.
Filed August 2, 1930. Serial No. 304,147. PUBLISHED MARCH 10, 1931. Class 26.

283,424. COTTON BATTING. ROCK RIVER COTTON COMPANY, Janesville, Wis.
Filed July 14, 1930. Serial No. 303,492. PUBLISHED MARCH 10, 1931. Class 1.

283,425. COTTON BATTING. ROCK RIVER COTTON COMPANY, Janesville, Wis.
Filed July 14, 1930. Serial No. 303,491. PUBLISHED MARCH 10, 1931. Class 1.

283,426. WRITING, PRINTING, LEDGER, RECORD, ENVELOPE, BOOK, ANNOUNCEMENT, INVITATION, AND COVER PAPERS; CORRESPONDENCE AND MAILING ENVELOPES, CARDBOARDS AND BRISTOL BOARDS, AND TISSUE PAPER. UNITED STATES ENVELOPE COMPANY, Springfield, Mass.
Filed July 7, 1930. Serial No. 303,228. PUBLISHED MARCH 3, 1931. Class 37.

283,427. MALT SYRUP. HOME PRODUCTS CO., Springfield, Mass.
Filed July 7, 1930. Serial No. 303,183. PUBLISHED SEPTEMBER 2, 1930. Class 46.

283,428. MATERIALS FOR CONSTRUCTING MINIATURE GOLF COURSES AND APPARATUS FOR USE IN CONNECTION THEREWITH. GARNET CARTER, doing business as Fairyland Manufacturing Co., Chattanooga, Tenn.
Filed July 3, 1930. Serial No. 303,143. PUBLISHED AUGUST 19, 1930. Class 22.

283,429. COMBINED SOUND AND MOTION-PICTURE FILMS, SOUND-RECORDING APPARATUS, AND SOUND-REPRODUCING APPARATUS. RCA PHOTOPHONE, INC., New York, N. Y.
Filed June 28, 1930. Serial No. 302,968. PUBLISHED MARCH 10, 1931. Class 26.

283,430. AGRICULTURAL LIME. LONGVIEW LIME WORKS, Longview, Ala.
Filed June 24, 1930. Serial No. 302,784. PUBLISHED MARCH 10, 1931. Class 10.

283,431. ETCHINGS, PRINTED ETCHINGS, GREETING CARDS, WATER-COLOR PRINTS, AND GRAVURE ETCHINGS. BROWN & BIGELOW, St. Paul, Minn.
Filed June 21, 1930. Serial No. 302,669. PUBLISHED MARCH 10, 1931. Class 38.

283,432. MONTHLY MAGAZINE. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y.
Filed May 31, 1930. Serial No. 301,903. PUBLISHED MARCH 10, 1931. Class 38.

283,433. MONTHLY MAGAZINE. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y.
Filed May 31, 1930. Serial No. 301,902. PUBLISHED MARCH 10, 1931. Class 38.

283,434. MONTHLY MAGAZINE. GOOD STORY MAGAZINE COMPANY, INC., New York, N. Y.
Filed May 31, 1930. Serial No. 301,901. PUBLISHED MARCH 10, 1931. Class 38.

283,435. BUNS, ASSORTED MIXED AND FANCY CAKES, COFFEE CAKE, GINGERBREAD, DOUGHNUTS, PIES, BREAD, ROLLS, FRENCH PASTRY PRODUCTS. TREASURE CAKE COMPANY, LTD., Los Angeles, Calif.
Filed May 29, 1930. Serial No. 301,736. PUBLISHED MARCH 10, 1931. Class 46.

283,436. PHOTOGRAPHIC PRINTS. JAMES-UNITED, INC., Los Angeles, Calif.
Filed May 26, 1930. Serial No. 301,267. PUBLISHED FEBRUARY 24, 1931. Class 38.

283,437. FRESH APPLES, APPLE SAUCE, AND CANNED CRANBERRIES. OCEAN SPRAY PRESERVING COMPANY, South Hanson, Mass., assignor to Cranberry Canners, Inc., a Corporation of Delaware.
Filed May 24, 1930. Serial No. 301,198. PUBLISHED MARCH 10, 1931. Class 46.

283,438. CANNED CRANBERRIES. OCEAN SPRAY PRESERVING COMPANY, South Hanson, Mass., assignor to Cranberry Canners, Inc., a Corporation of Delaware.
Filed May 24, 1930. Serial No. 301,195. PUBLISHED MARCH 10, 1931. Class 46.

283,439. PREPARATIONS FOR THE CARE OF THE SKIN—NAMELY, BEAUTY LOTIONS AND LOTIONS FOR REMOVING PIMPLES FROM AND FOR CLEARING THE SKIN. VICENZINA SOLIMINE, doing business as V. Solene Co., New York, N. Y.
Filed December 13, 1930. Serial No. 308,962. PUBLISHED MARCH 3, 1931. Class 6.

283,440. FUR TRIMMINGS FOR WEARING APPAREL COMPRISING COLLARS, CUFFS, BORDERS, INSERTS, AND GORES. A. HOROWITZ & SONS, INC., New York, N. Y.
Filed December 13, 1930. Serial No. 308,939. PUBLISHED MARCH 10, 1931. Class 40.

283,441. SIGNS OR DISPLAY CARDS PRINTED OR OTHERWISE AND COLORED CARDS FOR ORNAMENTAL SIGN OR DISPLAY PURPOSES. JOSEPH H. BOHAN, doing business as The Teleframe Company, Chicago, Ill.
Filed December 11, 1930. Serial No. 308,852. PUBLISHED MARCH 10, 1931. Class 38.

283,442. HOSIERY. BERKSHIRE KNITTING MILLS, Wyomissing, Pa.
Filed December 11, 1930. Serial No. 308,849. PUBLISHED MARCH 3, 1931. Class 39.

283,443. WHEAT FLOUR, STOCK FEED, AND SHORTS. THEO. STIVERS MILLING COMPANY, Cleveland, Tenn.
Filed December 10, 1930. Serial No. 308,841. PUBLISHED MARCH 10, 1931. Class 46.

283,444. CANNED CAT FOOD. HUGO STRAUSS PACKING CO. INC., Brooklyn, N. Y.
Filed December 9, 1930. Serial No. 308,800. PUBLISHED MARCH 10, 1931. Class 46.

283,445. MAYONNAISE, SANDWICH SPREAD, THOUSAND ISLAND DRESSING, OLIVE RELISH COMPOSED OF MAYONNAISE AND CHOPPED STUFFED OLIVES, FRENCH DRESSING, AND SALAD DRESSING. FENDER MAYONNAISE COMPANY, Jacksonville, Fla.
Filed December 8, 1930. Serial No. 308,728. PUBLISHED MARCH 10, 1931. Class 46.

283,446. BLEACHED AND ABSORBENT MOPS AND MOP HEADS AND MOP YARN CUT TO LENGTH FOR USE WITH MOPS OR MOP HEADS. J. EDMUND ESTES, Fall River, Mass.
Filed December 6, 1930. Serial No. 308,686. PUBLISHED MARCH 10, 1931. Class 29.

283,447. WRITING PAPER. ROCKWELL-BARNES COMPANY, Chicago, Ill.
Filed December 4, 1930. Serial No. 308,595. PUBLISHED MARCH 3, 1931. Class 37.

283,448. REAL-ESTATE-LISTING SERVICE MAGAZINES PUBLISHED WEEKLY. REALTY EXCHANGE SERVICE COMPANY, Oakland, Calif.
Filed December 3, 1930. Serial No. 308,567. PUBLISHED MARCH 3, 1931. Class 38.

283,449. SHORES, POST CAPS, T-HEADS, L-HEADS, REINFORCING BARS, SUPPORTS AND SPACES FOR REINFORCING BARS, ANCHORS FOR FLOOR SLEEPERS, CONCRETE INSERTS, BEAM WRAPPINGS, AND WALL TIES, ALL FOR USE IN CONCRETE CONSTRUCTION WORK. UNIVERSAL FORM CLAMP CO., Chicago, Ill.
Filed December 3, 1930. Serial No. 308,563. PUBLISHED FEBRUARY 24, 1931. Class 12.

283,450. ADVERTISING DEVICE—NAMELY, A REPLICA OF A FURNACE BOILER. MAY OIL BURNER CORPORATION, Baltimore, Md.
Filed December 3, 1930. Serial No. 308,552. PUBLISHED MARCH 10, 1931. Class 50.

283,451. MALTED MILK. HORLICK'S MALTED MILK CORPORATION, Racine, Wis.
Filed November 28, 1930. Serial No. 308,369. PUBLISHED MARCH 10, 1931. Class 46.

283,452. NONALCOHOLIC, NONCARBONATED, MALTLESS BEVERAGE MADE FROM MILLET SEED, MILK, AND OTHER INGREDIENTS SOLD AS A SOFT DRINK. BRILLAT BROS., Jersey City, N. J.
Filed November 24, 1930. Serial No. 308,239. PUBLISHED MARCH 17, 1931. Class 45.

283,453. BOOK ENDS, STATIONERY RACKS, FRAMED SILHOUETTES, WOOD DOORSTOPS, AND SOFA CUSHIONS. JUNIOR ACHIEVEMENT INCORPORATED, Springfield, Mass.
Filed November 13, 1930. Serial No. 307,849. PUBLISHED MARCH 10, 1931. Class 32.

283,454. HATS FOR MEN. BYER-ROLNICK COMPANY, Dallas, Tex.
Filed November 12, 1930. Serial No. 307,797. PUBLISHED MARCH 10, 1931. Class 39.

283,455. BREAD AND BISCUITS. THE RYVITA COMPANY, LTD., London, England.
Filed November 10, 1930. Serial No. 307,740. PUBLISHED MARCH 10, 1931. Class 46.

283,456. STORAGE-BATTERY ELECTROLYTE COMPOUND. ELLIOTT WORKS, INC., Des Moines, Iowa.
Filed November 10, 1930. Serial No. 307,712. PUBLISHED MARCH 3, 1931. Class 6.

283,457. QUARTERLY PUBLICATION. THE AMERICAN ORTHOPAEDIC ASSOCIATION, Boston, Mass.
Filed November 3, 1930. Serial No. 307,522. PUBLISHED FEBRUARY 24, 1931. Class 38.

283,458. PICKLE RELISH, SALAD OILS, BUTTER, OLEOMARGARINE, AND COOKING COMPOUND. THE BALTIMORE BUTTERINE COMPANY, Baltimore, Md.
Filed November 3, 1930. Serial No. 307,468. PUBLISHED MARCH 10, 1931. Class 46.

283,459. SERIES OF ESSAYS PUBLISHED PERIODICALLY. EVELYN ROTHERT, Cincinnati, Ohio.
Filed December 15, 1930. Serial No. 309,003. PUBLISHED MARCH 3, 1931. Class 38.

283,460. ROUND AND FLAT LEATHER BELTING. THE GENERAL TANNING CORPORATION, Irvington, N. J.
Filed May 1, 1930. Serial No. 299,775. PUBLISHED MARCH 10, 1931. Class 35.

283,461. AQUARIUM CEMENT. HENRY W. VON DAMM, doing business as F. H. Von Damm, Brooklyn, N. Y.
Filed April 30, 1930. Serial No. 299,742. PUBLISHED MARCH 10, 1931. Class 12.

283,462. GRASS SEEDS AND BIRD NESTING. HENRY W. VON DAMM, doing business as F. H. Von Damm, Brooklyn, N. Y.
Filed April 30, 1930. Serial No. 299,741. PUBLISHED MARCH 10, 1931. Class 1.

283,463. MEDICINAL PREPARATIONS, PARTICULARLY THROAT PASTILES OR JELLIES. EDMOND SAMUELS, Darlinghurst, Sydney, Australia.
Filed April 29, 1930. Serial No. 299,625. PUBLISHED MARCH 3, 1931. Class 6.

283,464. ALL-WOOL COATING FABRIC IN THE PIECE. THE ATLANTIC MILLS, Olneyville and Providence, R. I., and Stottville, N. Y.
Filed April 18, 1930. Serial No. 299,038. PUBLISHED DECEMBER 23, 1930. Class 42.

283,465. CERTAIN NAMED WEARING APPAREL. THE LA RESISTA CORSET COMPANY, Bridgeport, Conn.
Filed April 11, 1930. Serial No. 298,707. PUBLISHED OCTOBER 28, 1930. Class 39.

283,466. CANDY. FRED W. AMEND CO., Chicago, Ill.
Filed April 4, 1930. Serial No. 298,367. PUBLISHED MARCH 10, 1931. Class 46.

283,467. FRESH CITRUS FRUITS. DADE CITY PACKING COMPANY, Dade City, Fla.
Filed March 29, 1930. Serial No. 298,082. PUBLISHED MARCH 10, 1931. Class 46.

283,468. INTESTINAL LUBRICANT. IRVING STONE, doing business as Nature's Laboratory Products Company, Chicago, Ill.
Filed March 17, 1930. Serial No. 297,459. PUBLISHED AUGUST 5, 1930. Class 6.

283,469. SNAP FASTENERS. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn.
Filed March 11, 1930. Serial No. 297,152. PUBLISHED JULY 22, 1930. Class 40.

283,470. SNAP FASTENERS. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn.
Filed March 11, 1930. Serial No. 297,151. PUBLISHED JULY 22, 1930. Class 40.

283,471. LEAD AND COPYING PENCILS. GRAFO PENCIL COMPANY, LTD., Ceske Budejovice, Czechoslovakia.
Filed March 10, 1930. Serial No. 297,073. PUBLISHED APRIL 29, 1930. Class 37.

283,472. BACON. OSCAR MAYER & CO. INC., doing business as Oscar Mayer's, Chicago, Ill.
Filed February 19, 1930. Serial No. 296,228. PUBLISHED MARCH 10, 1931. Class 46.

283,473. MACARONI, SPAGHETTI, AND OTHER ALIMENTARY PASTE PRODUCTS. GENEROSO MURO, doing business as Connecticut Macaroni Factory, New Haven, Conn.
Filed February 12, 1930. Serial No. 295,951. PUBLISHED MARCH 10, 1931. Class 46.

283,474. SKIN LOTION. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y.
Filed February 12, 1930. Serial No. 295,935. PUBLISHED APRIL 8, 1930. Class 6.

283,475. GIRDLES, CORSETS, AND BRASSIÈRES. NEVA C. ANDERSON, Jamestown, N. Y.
Filed January 16, 1930. Serial No. 294,839. PUBLISHED MARCH 10, 1931. Class 39.

283,476. BIRDSEEDS, TURTLE FOOD, POULTRY AND STOCK FEEDS, AND PIGEON FEEDS. HENRY W. VON DAMM, doing business as F. H. Von Damm, Brooklyn, N. Y.
Filed December 28, 1929. Serial No. 294,195. PUBLISHED APRIL 8, 1930. Class 46.

283,477. ROSE DISINFECTANT, INSECTICIDES, DISINFECTANTS, ETC. HOYT'S BROTHERS, INC., Newark, N. J.
Filed October 9, 1929. Serial No. 290,837. PUBLISHED DECEMBER 3, 1929. Class 6.

283,478. MEN'S AND BOYS' DRESS, NEGLIGEE, OR WORK SHIRTS AND COLLARS. ROTARY SHIRT CO. INC., New York, N. Y.
Filed September 20, 1929. Serial No. 290,032. PUBLISHED MARCH 3, 1931. Class 39.

283,479. PERFUME, TOILET WATER, FACE POWDER, TALCUM, ROUGE, LIP STICK, FACE CREAM, TOILET CREAMS, AND BATH SALTS. PINAUD INCORPORATED, New York, N. Y.
Filed July 16, 1929. Serial No. 287,201. PUBLISHED OCTOBER 1, 1929. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

283,480. (CLASS 12. CONSTRUCTION MATERIALS.) BECKMAN-DAWSON ROOFING COMPANY, Chicago, Ill. Filed Mar. 19, 1929. Serial No. 280,984.

weather-sealed

For Asphalt and Composition Shingles and Roofing.
Claims use since Dec. 1, 1928.

283,481. (CLASS 12. CONSTRUCTION MATERIALS.) MILWAUKEE CORRUGATING COMPANY, Milwaukee, Wis. assignor to Milcor Steel Company, Milwaukee, Wis. Filed Oct. 3, 1929. Serial No. 290,586.

Ti Lath

For Metal Lathing.
Claims use since Aug. 20, 1929.

283,482. (CLASS 38. PRINTS AND PUBLICATIONS.) ILLUSTRATED NEWS SERVICE, INC., New York, N. Y. Filed Nov. 16, 1929. Serial No. 292,498.

ILLUSTRATED NEWS SERVICE

For Photographs and Photographic Prints.
Claims use since Sept. 3, 1929.

283,483. (CLASS 12. CONSTRUCTION MATERIALS.) THE ATHENS FLOORING COMPANY, Athens, Ohio. Filed Nov. 27, 1929. Serial No. 292,966.

PegStrip

For Wood Flooring.
Claims use since Nov. 18, 1929.

283,484. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CLARKSON, INC., Suffern, N. Y. Filed July 9, 1930. Serial No. 303,275.

CLARKSON

For Astringent for Relaxed Tissues, Bandoline, Bath Salts, Bay Rum, Brilliantine, Camphor Ice, Cocoa Butter, Face Cream, Cold Cream, Massage Cream, Vanishing Cream, Cologne Water, Complexion Balm, Depilatories, Disinfectant, Face Bleach, Face Powder, Foot Powder, Hair Bleach, Hair Dye, Hair Oil, Hair Powder, Hair Tonic, Headache Cologne, Incense, Lip Pencil, Lotions for Use After Shaving, Eye Lotion, Face Lotion, Mouth Lotion, Skin Lotion, Mouth Wash, Nail Polish, Grease Paint, Eyebrow Pencil, Body Perfume, Handkerchief Perfumes, Nonalcoholic Perfumes, Room Perfumes, Perfume Tablets, Pomades, Glove Perfume Powders, Nail Powders, Rice Powders, Theatrical Powders, Rouge, Lip Rouge, Tooth Powder, Sachet Powder, Shampoo, Smelling Salts, Talcum Powder, Toilet Water, Tooth Cream, Tooth Paste, Tooth Wash, Aromatic Vinegar, Nongreasy Shaving Cream for Use After Shaving.
Claims use since Aug. 1, 1929.

283,485. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) GEORGE E. THOMPSON, doing business as Cottonsticks Company, Inman, S. C. Filed Jan. 10, 1931. Serial No. 309,829.

Cottonsticks

For Applicators Used for Applying Medicaments.
Claims use since Mar. 4, 1930.

283,486. (CLASS 37. PAPER AND STATIONERY.) THE HEINN COMPANY, Milwaukee, Wis. Filed Mar. 2, 1931. Serial No. 311,608.

LEVERLOK

For Loose-Leaf-Book Binders.
Claims use since July 9, 1929.

283,487. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE ALDEN SPEARE'S SONS CO., doing business as Eastern Aniline Co., Cambridge, Mass., and New York, N. Y. Filed Mar. 14, 1931. Serial No. 312,132.

SAPPHIRE

For Washing Blue.
Claims use since July, 1924.

283,488. (CLASS 37. PAPER AND STATIONERY.) BUTLER PAPER CORPORATIONS, Chicago, Ill. Filed Mar. 14, 1931. Serial No. 312,138.

NEWMARKET

For Paper—Namely, Book Paper, Cover and Document Paper; Bristol and Cardboard, Bond Paper, Writing Paper, Ledger Papers, and Paper for the Making of Envelopes.
Claims use since June 30, 1916.

283,489. (CLASS 39. CLOTHING.) J. W. CARTER COMPANY, Nashville, Tenn. Filed May 26, 1930. Serial No. 301,243.

FASHION FOUR

For Boots, Shoes, and Slippers of Leather, Fabric, or Combinations Thereof.
Claims use since Jan. 2, 1930.

283,490. (CLASS 2. RECEPTACLES.) SEYMOUR & PECK CO., Chicago, Ill. Filed May 26, 1930. Serial No. 301,304.

Tri-Ply

For Wooden Drums to Contain Loose Material.
Claims use since Apr. 1, 1930.

283,491. (CLASS 12. CONSTRUCTION MATERIALS.) SHUR-HOLD HEADER CO., San Jose, Calif. Filed May 31, 1930. Serial No. 302,054.

"SHUR-HOLD"

For a Header for Door Frames and the Like.
Claims use since Feb. 1, 1930.

283,492. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) STAMETCO BROOM & MFG. CO. INC., St. Paul, Minn. Filed June 18, 1930. Serial No. 302,556.

The "Sir Cedar" Treated

For Brooms.
Claims use since Mar. 25, 1930.

283,493. (CLASS 32. FURNITURE AND UPHOLSTERY.) LENA SHER, doing business as Scranton Show Case Co., Philadelphia, Pa. Filed Feb. 27, 1931. Serial No. 311,541.

"SEAT-FOUR"

For Soda Booths.
Claims use since Feb. 1, 1930.

283,494. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) JOSEPH B. BRANDLER, New York N. Y. Filed July 26, 1930. Serial No. 303,834.

Persian Pelt

For Pile Fabrics.
Claims use since Apr. 15, 1930.

283,495. (CLASS 39. CLOTHING.) STERN BROTHERS, New York, N. Y. Filed Aug. 29, 1930. Serial No. 305,149.

Flar-away

CARNEGIE LIBRARY OF ATLANTA

For Gloves of Leather, Suede, and Fabric and/or Combinations Thereof.
Claims use since Mar. 1, 1930.

283,496. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE UNIT HEATER & COOLER COMPANY, Wausau, Wis. Filed Sept. 5, 1930. Serial No. 305,378.

GRID

For Heating and Cooling Radiators.
Claims use since Aug. 1, 1929.

283,497. (CLASS 30. CROCKERY, EARTHENWARE, AND PORCELAIN.) THE LIMOGES CHINA COMPANY, Sebring, Ohio. Filed Oct. 2, 1930. Serial No. 306,319.

peach-blo

For Porcelain and Semiporcelain Dishes and Tableware.
Claims use since Dec. 1, 1929.

283,498. (CLASS 10. FERTILIZERS.) PLANTERS COTTON OIL & FERTILIZER CO., Rocky Mount, N. C. Filed Oct. 6, 1930. Serial No. 306,460.

Prima

For a Specially-Prepared Fertilizer.
Claims use since Mar. 1, 1930.

283,499. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) C. M. DE LAND, New York, N. Y. Filed Oct. 22, 1930. Serial No. 307,045.

JOHNNIE WALKER

For Woolen Piece Goods (Tweeds).
Claims use since April, 1920.

283,500. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GODISSART'S PARFUM CLASSIQUE FRANCAIS, INC., Hollywood, Calif. Filed Nov. 22, 1930. Serial No. 308,198.

Godissart's

For Face Cream, Brilliantine, Dentrifice, Perfumery, Skin Lotion, Astringent, Toilet Water, Cologne, Base Cream for the Skin, Bay Rum, Talcum Powder, Eye Make-Up Consisting of a Preparation for Applying to the Skin Area Around the Eyes, Bath Oil, Liquid Skin Whitener, and Skin Tint.
Claims use since August, 1925.

283,501. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM T. ROSE, doing business as Rose's Pine Moss Laboratories, Waterloo, Iowa. Filed Nov. 24, 1930. Serial No. 308,267.



For Scalp Packs, Scalp Creams, Hair Tonics, and Shampoo Preparations.
Claims use since July 1, 1929.

283,502. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE NO-SNORE COMPANY, Cincinnati, Ohio. Filed Dec. 30, 1929. Serial No. 294,234.

NO-SNORE

For Preparation for Eliminating Snoring.
Claims use since Nov. 25, 1929.

283,503. (CLASS 39. CLOTHING.) ENID MANUFACTURING CO. INC., New York, N. Y. Filed Feb. 14, 1930. Serial No. 296,004.

leCorsage

For Brassières, Garter Belts, and Girdles.
Claims use since Jan. 1, 1929.

283,504. (CLASS 39. CLOTHING.) J. BLOOMFIELD & CO., INC., New York, N. Y. Filed Mar. 3, 1930. Serial No. 296,726.

Glencoe

For Ladies' Hats.
Claims use since December, 1929.

283,505. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ALFRED L. HELWITH & CO., INC., New York, N. Y. Filed Mar. 4, 1930. Serial No. 296,807.

LUSTRE SHRUNK

For Broadcloth Consisting of Rayon and Cotton in the Piece.
Claims use since Feb. 27, 1930.

283,506. (CLASS 12. CONSTRUCTION MATERIALS.) CHENEY LIME & CEMENT COMPANY, Birmingham, Ala. Filed Mar. 10, 1930. Serial No. 297,062.

BRIXMORTAR

For Masonry Cement.
Claims use since Feb. 18, 1930.

283,507. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOSEPH RUNCI & SONS CO., Boston, Mass. Filed Mar. 14, 1930. Serial No. 297,332.

DR. GRIFFIN'S

OLIVE-RUB

For Scalp Tonic.
Claims use since June 1, 1929.

283,508. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ATKINSON, FENLON CO. INC., New York, N. Y. Filed Mar. 15, 1930. Serial No. 297,350.

CREWELSTITCH

For Cotton, Linen, Chintz, and Cretonne Fabrics.
Claims use since Feb. 1, 1930.

283,509. (CLASS 33. GLASSWARE.) MCKEE GLASS COMPANY, Jeanette, Pa. Filed Mar. 19, 1930. Serial No. 297,537.

RITELITE

For Automobile Lamp Lenses.
Claims use since Mar. 1, 1930.

283,510. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) BRAINARD STEEL CORPORATION, Warren, Ohio. Filed Mar. 25, 1930. Serial No. 297,844.

SAFE-TY
STRAPPING SYSTEM

For Tools for Tightening Metal Binding Strips and for Applying Metal Seals to Such Strips.
Claims use since Nov. 1, 1929.

283,511. (CLASS 27. HOROLOGICAL INSTRUMENTS.) ETNA WATCH COMPANY, New York, N. Y. Filed Apr. 18, 1930. Serial No. 299,053.

CORNELL

For Time Recorders, Clocks, and Watches.
Claims use since Nov. 1, 1929.

283,512. (CLASS 9. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES.) THE CRESCENT FIRE ARMS CO., Norwich, Conn. Filed Apr. 28, 1930. Serial No. 299,558.

SUPER RANGE

For Guns Such as Rifles, Fowling Pieces, Sporting Shotguns, and the Like.
Claims use since Apr. 1, 1930.

283,513. (CLASS 12. CONSTRUCTION MATERIALS.) HARBOR PLYWOOD CORPORATION, Hoquiam, Wash. Filed May 16, 1930. Serial No. 300,628.

HARBORD

For Plywood.
Claims use since February, 1930.

283,514. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROBERT A. BERNHARD, Rochester, N. Y. Filed Nov. 28, 1927. Serial No. 258,107.

SAF-T-TOP

For Liquid Medicines and Tinctures, Sold in Combined Receptacles and Applicators—Namely, Dibrom-Oxymercuri-Fluorescein, Tincture of Iodine, Dibrom-Oxymercuri-Fluorescein Eradicator, Antiseptic Solutions, and Oil of Salt.
Claims use since December, 1924.

TRADE-MARK REGISTRATIONS RENEWED

36,283. SPECIAL TRADE AND PROFESSIONAL MAILING LISTS. Registered April 23, 1901. EDGAR J. WILLIAMS, New York, N. Y. Renewed April 23, 1931.

36,347. SAWS. Registered April 30, 1901. E. C. ATKINS & COMPANY, Indianapolis, Ind.; Memphis, Tenn.; Minneapolis, Minn.; Atlanta, Ga.; and Portland, Oreg. Renewed April 30, 1931, to E. C. Atkins & Company, Indianapolis, Ind., a Corporation of Indiana.

36,511. SHEETINGS AND DRILLS. Registered June 4, 1901. EASLEY COTTON MILLS, Easley and Greenville, S. C., a Corporation of South Carolina. Renewed June 4, 1931.

75,359. COTTON LONG-CLOTH. Registered September 28, 1909. DAYTON DRY GOODS CO. Renewed September 28, 1929, to The Dayton Company, Minneapolis, Minn., a Corporation of Minnesota, by change of name.

81,288. GLOVES AND MITTENS. Registered March 21, 1911. NORTHRUP GLOVE M'FG. CO. Renewed March 21, 1931, to Albert Rosenthal, doing business as Northrup Glove Mfg. Co., Johnstown, N. Y., successor.

81,556. LUBRICATING-OILS. Registered April 18, 1911. STANDARD OIL COMPANY OF NEW YORK, New York, N. Y., a Corporation of New York. Renewed April 18, 1931.

81,624. COTTON CLOTH IN [illegible] AND WOOLEN CLOTH IN [illegible] 25, 1911. PETERS [illegible] Renewed April 25, [illegible] Wollaston, Mass. [illegible]

81,773. A VARNISH-PAINT. Registered May 9, 1911. THE AULT & WIBORG CO. Renewed May 9, 1931, to The Ault & Wiborg Varnish Works, Inc., Cincinnati, Ohio, a Corporation of Ohio, assignee by mesne assignments.

82,034. CANDLES. Registered May 23, 1911. WEST INDIA OIL COMPANY, Bayonne, N. J., a Corporation of New Jersey. Renewed May 23, 1931.

82,035. CANDLES. Registered May 23, 1911. WEST INDIA OIL COMPANY, Bayonne, N. J., a Corporation of New Jersey. Renewed May 23, 1931.

82,036. CANDLES. Registered May 23, 1911. WEST INDIA OIL COMPANY, Bayonne, N. J., a Corporation of New Jersey. Renewed May 23, 1931.

82,037. CANDLES. Registered May 23, 1911. WEST INDIA OIL COMPANY, Bayonne, N. J., a Corporation of New Jersey. Renewed May 23, 1931.

82,378. CERTAIN NAMED BOOKS. Registered June 20, 1911. J. F. TAPLEY COMPANY, New York, N. Y. Renewed June 20, 1931, to J. F. Tapley Company, Long Island City, N. Y., a Corporation of New York.

82,736. CANDLES. Registered July 18, 1911. WEST INDIA OIL COMPANY, Bayonne, N. J., a Corporation of New Jersey. Renewed July 18, 1931.

82,848. CANDLES. Registered July 25, 1911. WEST INDIA OIL COMPANY, Bayonne, N. J., a Corporation of New Jersey. Renewed July 25, 1931.

83,101. OVERALLS. Registered August 15, 1911. STANDARD OVERALL CO. Renewed August 15, 1931, to The Standard Overall Company, Baltimore, Md., a Cor[illegible]ration of Maryland, successor.

83,179. SPICES AND RICE. Registered August 22, 1911. THE QUERBACKER COFFEE COMPANY, Louisville, Ky., a Corporation of Kentucky. Renewed August 22, 1931.

83,223. ORANGES, LEMONS, GRAPE-FRUIT, TANGERINES, AND LIMES. Registered August 29, 1911. CHASE & COMPANY, Jacksonville, Fla. Renewed August 29, 1931, to Chase & Company, Sanford, Fla., a Corporation of Florida, successor.

83,354. A LIQUID POWER-BELT DRESSING COMPOUND. Registered September 5, 1911. THE PLOMO SPECIALTY MFG. CO., Cleveland, Ohio, a Corporation of Ohio. Renewed September 5, 1931.

83,360. CHOCOLATE CANDIES. Registered September 5, 1911. W. F. SCHRAFFT & SONS CORPORATION, Boston, Mass., a Corporation of Massachusetts. Renewed September 5, 1931.

83,405. GRATES. Registered September 12, 1911. THE GORDON HOLLOW BLAST GRATE COMPANY. Renewed September 12, 1931, to R. J. Tower Iron Works, Inc., doing business as The Gordon Hollow Blast Grate Company, Greenville, Mich., a Corporation of Michigan, successor.

83,450. CARTRIDGES. Registered September 12, 1911. UNITED STATES CARTRIDGE COMPANY, Lowell, Mass., a Corporation of Massachusetts. Renewed September 12, 1931.

83,451. CARTRIDGES. Registered September 12, 1911. UNITED STATES CARTRIDGE COMPANY, Lowell, Mass., a Corporation of Massachusetts. Renewed September 12, 1931.

83,465. A CLEANSING PREPARATION FOR PAINTS. Registered September 12, 1911. ZOG, LTD., London, England. Renewed September 12, 1931, to Lever Brothers Company, Cambridge, Mass., a Corporation of Maine, assignee.

83,717. MANILA AND SISAL ROPE. Registered October 10, 1911. COLUMBIAN ROPE COMPANY, Auburn, N. Y., a Corporation of New York. Renewed October 10, 1931.

83,748. A SALVE OR OINTMENT OF WITCH-HAZEL. Registered October 10, 1911. LANMAN & KEMP. Renewed October 10, 1931, to Lanman & Kemp, Inc., New York, N. Y., a Corporation of New York, assignee.

83,792. A MONTHLY PUBLICATION DEVOTED TO THE INTERESTS OF TRADE-MARK OWNERS. Registered October 10, 1911. THE UNITED STATES TRADE MARK ASSOCIATION, New York, N. Y., a Corporation of New York. Renewed October 10, 1931.

83,797. BAG-PATCHES MADE OF JUTE CLOTH. Registered October 10, 1911. YOUNG & METZNER. Renewed October 10, 1931, to Young & Metzner, Inc., Long Island City, N. Y., a Corporation of New York, successor.

83,798. BAG-PATCHES MADE OF JUTE CLOTH. Registered October 10, 1911. YOUNG & METZNER. Renewed October 10, 1931, to Young & Metzner, Inc., Long Island City, N. Y., a Corporation of New York, successor.

LABELS

REGISTERED MAY 26, 1931

39,191.—*Title:* ROLD GOLD. For Spaghetti. AMERICAN CONE & PRETZEL COMPANY, Philadelphia, Pa. Published March 4, 1931.

39,192.—*Title:* JUMP, A GAME OF SOLITAIRE WITH MARBLES. For a Game. AMERICAN NOVELTY WORKS, Herndon, Pa. Published January 27, 1931.

39,193.—*Title:* GOLD MEDAL DAHLIA FLOWERED ZINNIAS. For Zinnia Seeds. BODGER SEEDS, LTD., Los Angeles, Calif. Published December 31, 1930.

39,194.—*Title:* CERA-LAC-WONDER FLOUR. For Flour. THE CERA-LAC COMPANY, Los Angeles, Calif. Published March 2, 1931.

39,195.—*Title:* ZE-MA-LENE. For Ointment. CLEARWATER CHEMICAL CO., Clearwater, Fla. Published February 27, 1931.

39,196.—*Title:* AVIATION BRAND SMOKED FISH. For Smoked Fish. HARRY YALE DISSEN, doing business as Aviation Smoked Fish Co., Chicago, Ill. Published April 1, 1930.

39,197.—*Title:* PAMOL PLAIN. For Medicinal Preparation. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Published April 27, 1931.

39,198.—*Title:* PULVOIDS NO. 467 PITOVACO. For Medicinal Preparation. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Published April 15, 1931.

39,199.—*Title:* PAMOL COMPOUND. For Medicinal Preparation. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Published April 27, 1931.

39,200.—*Title:* PO. NO. 3 CALMOX. For Medicinal Preparation. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Published April 8, 1931.

39,201.—*Title:* E. F. C. A. CASES APPROVED FOR EXPORT. For Fibreboard Shipping Cases. EXPORT FIBREBOARD CASE ASSOCIATION, San Francisco, Calif. Published February 8, 1931.

39,202.—*Title:* A. W. FABER ERASER KIT. For a Container for Holding and Displaying Rubber Erasers. A. W. FABER, INC., Newark, N. J. Published March 15, 1931.

39,203.—*Title:* HOMAX. For Waxes. FEDERAL RESEARCH CORPORATION, Woodland, Ill. Published April 15, 1931.

39,204.—*Title:* FOLGER'S GOLDEN GATE. For Coffee. J. A. FOLGER & CO., San Francisco, Calif. Published April 10, 1931.

39,205.—*Title:* DUNDEE EGG FARMS. For Eggs. F. W. GETCHEL & SON, Burbank, Calif. Published February 14, 1931.

39,206.—*Title:* PIKLSNAPS. For Pickles. GLASER, CRANDELL CO., Chicago, Ill. Published December 18, 1930.

39,207.—*Title:* REED'S. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 15, 1930.

39,208.—*Title:* NORRLAND SWEDISH RYE. For Rye Bread. THE W. E. LONG COMPANY, Chicago, Ill. Published December 31, 1930.

39,209.—*Title:* THE RAMPJACK. For Vehicle Jacks. MARSHALL H. MCCOSH, doing business as The Rampjack Company, Reisterstown, Md. Published April 27, 1931.

39,210.—*Title:* HOT SHOT. For Barbecue Horseradish. MID-AMERICA FOOD PRODUCTS, INC., St. Joseph, Mo. Published March 10, 1931.

39,211.—*Title:* WOODBRITE. For Mops. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Published December 4, 1930.

39,212.—*Title:* EXIT. For Liquid Insecticide. MIDWAY CHEMICAL CO., Chicago, Ill. Published December 24, 1931.

39,213.—*Title:* BARL-E-MALT. For Malt Syrup. MILLER HIGH LIFE COMPANY, Milwaukee, Wis. Published March 1, 1931.

39,214.—*Title:* WISCONSIN MALT. For Malt Syrup. MILLER HIGH LIFE COMPANY, Milwaukee, Wis. Published March 1, 1931.

39,215.—*Title:* WINDSOR ARMS. For Malt Syrup. MILWAUKEE MALT SYRUP COMPANY, Milwaukee, Wis. Published April 24, 1931.

39,216.—*Title:* DATENUT A 5¢ SQUARE-MEAL CONFECTION. For Confection. HARRY W. NEWCOMB, Arlington, Mass. Published March 16, 1931.

39,217.—*Title:* CONCENTRATED LIQUID WHOLE MILK, SMACO PRODUCT NO. 203. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published April 15, 1931.

39,218.—*Title:* LIQUID FAT-FREE MILK DOUBLE PROTEIN, SMACO PRODUCT NO. 202. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published April 15, 1931.

39,219.—*Title:* NON-ALLERGIC WHOLE MILK, SMACO PRODUCT NO. 300. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published April 15, 1931.

39,220.—*Title:* LIQUID PROTEIN MILK, SMACO PRODUCT NO. 201. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published April 15, 1931.

39,221.—*Title:* MALTOSE & DEXTRINS, SMACO PRODUCT NO. 400. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published April 15, 1931.

39,222.—*Title:* CONCENTRATED LIQUID FAT FREE MILK, SMACO PRODUCT NO. 205. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published April 15, 1931.

39,223.—*Title:* POLAR CAKE. For Chocolate Covered Ice Cream. OTTO E. SCHIPPLECK, Fairfax, Minn. Published March 18, 1931.

39,224.—*Title:* ROYAL STRAWBERRY FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published April 3, 1931.

39,225.—*Title:* ROYAL RASPBERRY FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published April 3, 1931.

39,226.—*Title:* ROYAL LIME FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published April 3, 1931.

39,227.—*Title:* ROYAL LEMON FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published April 3, 1931.

39,228.—*Title:* ROYAL CHERRY FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published April 3, 1931.

39,229.—*Title:* ROYAL ORANGE FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published April 3, 1931.

39,230.—*Title:* SUN-RA. For Barbecue Horseradish. SUN-RA PRODUCTS COMPANY, St. Joseph, Mo. Published January 5, 1931.

39,231.—*Title:* SUN-RA. For Flavored Beverage Preparation. SUN-RA PRODUCTS COMPANY, St. Joseph, Mo. Published March 1, 1931.

39,232.—*Title:* TAUTGES CHILE CON CARNE. For Chile Con Carne. J. G. TAUTGES, doing business as Tautges Chile Con Carne Co., Minneapolis, Minn. Published March 26, 1931.

39,233.—*Title:* VANILLA SWEETIES. For Breakfast Foods. UNCLE SAM BREAKFAST FOOD COMPANY, Omaha, Nebr. Published March 30, 1931.

39,234.—*Title:* PARAMOUNT. For Coffee. WHEELING COFFEE & SPICE COMPANY, Wheeling, W. Va. Published March 17, 1931.

39,235.—*Title:* ZO-RO-LO. For Medicine for the Treatment of Rheumatism, High Blood Pressure, Indigestion, Nervousness, Etc. ZO-RO-LO, INC., Ada, Ohio. Published October 28, 1930.

PRINTS

REGISTERED MAY 26, 1931

13,204.—*Title:* CONTINENTAL PIONEER POULTRY FENCE. For Wire Fencing. CONTINENTAL STEEL CORPORATION, Kokomo, Ind. Published March 10, 1931.

13,205.—*Title:* CONTINENTAL PIONEER FARM FENCE. For Wire Fencing. CONTINENTAL STEEL CORPORATION, Kokomo, Ind. Published March 10, 1931.

13,206.—*Title:* CONTINENTAL PIONEER CHICK-PROOF POULTRY FENCE. For Wire Fencing. CONTINENTAL STEEL CORPORATION, Kokomo, Ind. Published March 10, 1931.

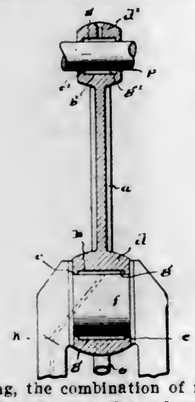
13,207.—*Title:* PAMOL. For Medicinal Emulsion. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Published April 28, 1931.

13,208.—*Title:* JUMBO. For Frozen Chocolate Covered Bars. THE MATHEWS COMPANY, Detroit, Mich. Published December 5, 1930.

REISSUES

MAY 26, 1931

18,080. NEEDLE BEARING. RICHARD GÖTZ, Berlin-Gross-Lichterfelde, Germany. Original No. 1,717,204, dated June 11, 1929, Serial No. 18,179, filed Mar. 25, 1925. Application for reissue filed June 21, 1930. Serial No. 462,918. 9 Claims. (Cl. 308—179.)



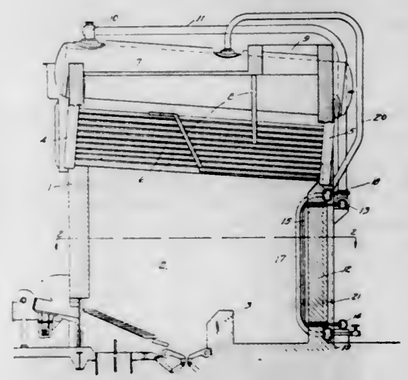
1. In a bearing, the combination of relatively rotatable cylindrical bearing races and a plurality of cylindrical needles interposed therebetween, such needles forming a closed ring or sleeve, which is compelled to revolve as an entirety in the same direction as the driving bearing member, without each single cylindrical needle being constrained to turn around itself.

18,081. HEADGEAR AND METHOD OF MAKING THE SAME. HARRY M. LIPPER, Atlantic City, N. J., assignor to Lipper Manufacturing Company, a Corporation of Pennsylvania. Original No. 1,720,560, dated July 9, 1929, Serial No. 354,191, filed Apr. 11, 1929. Application for reissue filed Feb. 3, 1931. Serial No. 513,238. 5 Claims. (Cl. 2—198.)



1. A head gear formed of generally limp and elastic knitted fabric, including a head-pocket portion adapted to fit snugly over the head of the wearer to form the crown of the assembled head dress and a generally elongated streamer portion at least approximately twice as long as the head-pocket portion and extending from an end thereof, adapted to surround the lower periphery of the head-pocekt portion to form the rim of the assembled head dress; the shape of the head dress, when mounted upon the head of the wearer, being maintained by the contour of the head of the wearer.

18,082. RADIANT SUPERHEATER. BENJAMIN BROIDO, deceased, New York, N. Y., by The Superheater Company, New York, N. Y., assignee. Original No. 1,590,180, dated June 29, 1926, Serial No. 625,418, filed Mar. 15, 1923. Application for reissue filed Mar. 26, 1931. Serial No. 525,628. 5 Claims. (Cl. 122—471.)

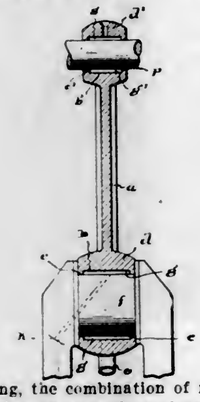


1. In an apparatus of the class described, the combination of a furnace, a radiant type superheater comprising parallel vertical alined superheater tubes adjacent to a wall of said furnace and water tubes parallel to the superheater tubes and in a plane parallel to and in advance of the plane of the superheater tubes, said superheater tubes being so located relatively to the water tubes and to the furnace that they are exposed to direct radiant heat from said furnace.

REISSUES

MAY 26, 1931

18,080. NEEDLE BEARING. RICHARD GÖTZ, Berlin-Gross-Lichterfelde, Germany. Original No. 1,717,204, dated June 11, 1929, Serial No. 18,179, filed Mar. 25, 1925. Application for reissue filed June 21, 1930. Serial No. 462,918. 9 Claims. (Cl. 308—179.)



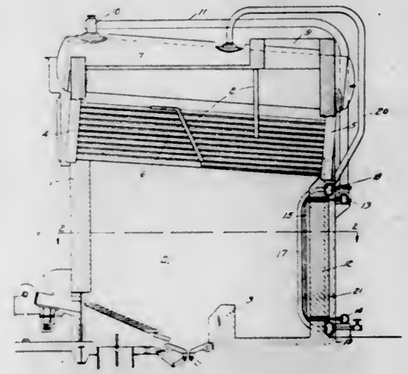
1. In a bearing, the combination of relatively rotatable cylindrical bearing races and a plurality of cylindrical needles interposed therebetween, such needles forming a closed ring or sleeve, which is compelled to revolve as an entirety in the same direction as the driving bearing member, without each single cylindrical needle being constrained to turn around itself.

18,081. HEADGEAR AND METHOD OF MAKING THE SAME. HARRY M. LIPPER, Atlantic City, N. J., assignor to Lipper Manufacturing Company, a Corporation of Pennsylvania. Original No. 1,720,560. dated July 9, 1929, Serial No. 354,191, filed Apr. 11, 1929. Application for reissue filed Feb. 3, 1931. Serial No. 513,238. 5 Claims. (Cl. 2—198.)



1. A head gear formed of generally limp and elastic knitted fabric, including a head-pocket portion adapted to fit snugly over the head of the wearer to form the crown of the assembled head dress and a generally elongated streamer portion at least approximately twice as long as the head-pocket portion and extending from an end thereof, adapted to surround the lower periphery of the head-pocekt portion to form the rim of the assembled head dress; the shape of the head dress, when mounted upon the head of the wearer, being maintained by the contour of the head of the wearer.

18,082. RADIANT SUPERHEATER. BENJAMIN BROIDO, deceased, New York, N. Y., by The Superheater Company, New York, N. Y., assignee. Original No. 1,590,180, dated June 29, 1926, Serial No. 625,418, filed Mar. 15, 1923. Application for reissue filed Mar. 26, 1931. Serial No. 525,628. 5 Claims. (Cl. 122—471.)

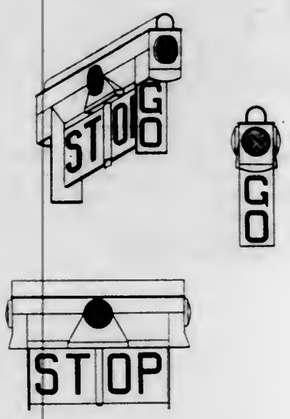


1. In an apparatus of the class described, the combination of a furnace, a radiant type superheater comprising parallel vertical alined superheater tubes adjacent to a wall of said furnace and water tubes parallel to the superheater tubes and in a plane parallel to and in advance of the plane of the superheater tubes, said superheater tubes being so located relatively to the water tubes and to the furnace that they are exposed to direct radiant heat from said furnace.

DESIGNS

MAY 26, 1931

84,225. TRAFFIC SIGNAL. ROCCO BLESSO, Hartford, Conn. Filed Sept. 8, 1930. Serial No. 36,904. Term of patent 14 years.



The ornamental design for a traffic signal as shown.

84,226. THERMOMETER. H. BRAINARD BROWN, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Aug. 1, 1929. Serial No. 32,263. Term of patent 14 years.



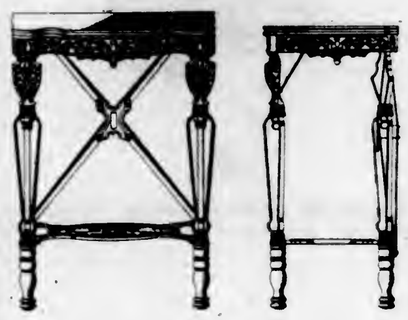
The ornamental design for a thermometer, as shown.

84,227. COMBINATION TRAY AND TABLE. LESLIE H. BURLIN, Oak Park, Ill., assignor to Advance Pattern & Foundry Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 12, 1931. Serial No. 39,042. Term of patent 7 years.



The ornamental design for a combination tray and table as shown and described.

84,228. TABLE. LESLIE H. BURLIN, Oak Park, Ill., assignor to Advance Pattern & Foundry Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 12, 1931. Serial No. 39,044. Term of patent 7 years.



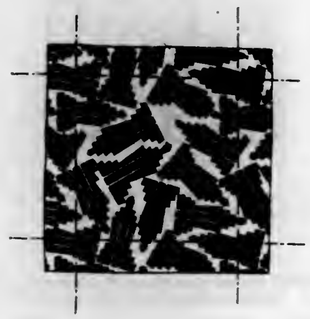
The ornamental design for a table as shown.

84,229. TEXTILE FABRIC. CARL H. DAVIS, New York, N. Y., assignor to Tubize Chatillon Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 23, 1931. Serial No. 38,421. Term of patent 3½ years.



The ornamental design for a textile fabric substantially as shown and described.

84,230. TEXTILE FABRIC. CARL H. DAVIS, New York, N. Y., assignor to Tubize Chatillon Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 23, 1931. Serial No. 38,422. Term of patent 3½ years.



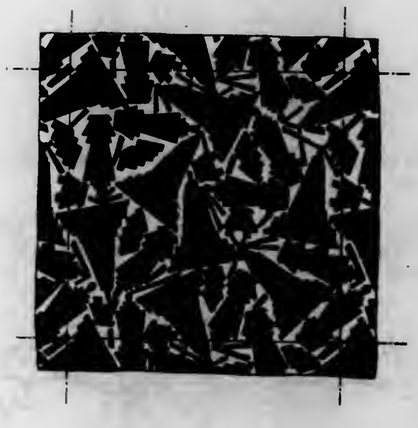
The ornamental design for a textile fabric substantially as shown and described.

84,231. TEXTILE FABRIC. CARL H. DAVIS, New York, N. Y., assignor to Tubize Chatillon Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 23, 1931. Serial No. 38,423. Term of patent 3½ years.



The ornamental design for a textile fabric substantially as shown and described.

84,232. TEXTILE FABRIC. CARL H. DAVIS, New York, N. Y., assignor to Tubize Chatillon Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 23, 1931. Serial No. 38,424. Term of patent 3½ years.



The ornamental design for a textile fabric substantially as shown and described.

84,233. TOY FIGURE. WALTER E. DISNEY, Hollywood, Calif. Filed Mar. 30, 1931. Serial No. 39,302. Term of patent 14 years.



The ornamental design for a toy figure, as shown.

84,234. BOTTLE OR SIMILAR ARTICLE. WILLIAM A. DOLAN, New York, N. Y., assignor to The Wilbert Products Co. Inc., New York, N. Y., a Corporation of New York. Filed Feb. 4, 1931. Serial No. 38,543. Term of patent 7 years.



The ornamental design for a bottle or similar article, as shown.

84,235. EMBROIDERED TEXTILE FABRIC. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Mar. 5, 1931. Serial No. 38,952. Term of patent 3½ years.



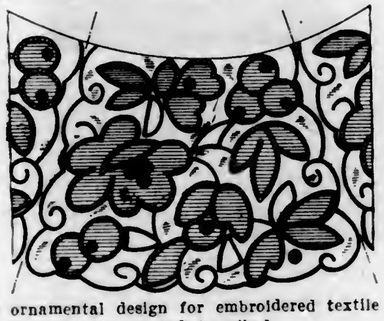
The ornamental design for embroidered textile fabric substantially as shown and described.

84,236. EMBROIDERED LACE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Mar. 5, 1931. Serial No. 38,953. Term of patent 3½ years.



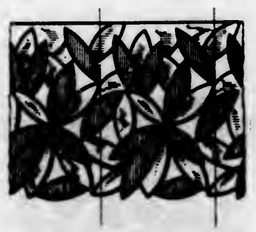
The ornamental design for embroidered lace substantially as shown and described.

84,237. EMBROIDERED TEXTILE FABRIC. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Mar. 5, 1931. Serial No. 38,954. Term of patent 3½ years.



The ornamental design for embroidered textile fabric substantially as shown and described.

84,238. EMBROIDERED TEXTILE FABRIC. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Mar. 5, 1931. Serial No. 38,955. Term of patent 3½ years.



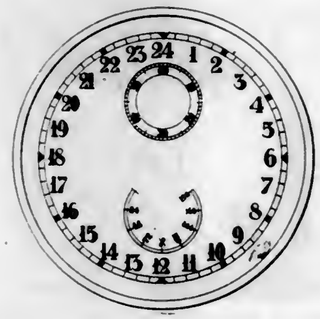
The ornamental design for embroidered textile fabric substantially as shown and described.

84,239. BOTTLE CAP. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 1, 1931. Serial No. 39,318. Term of patent 14 years.



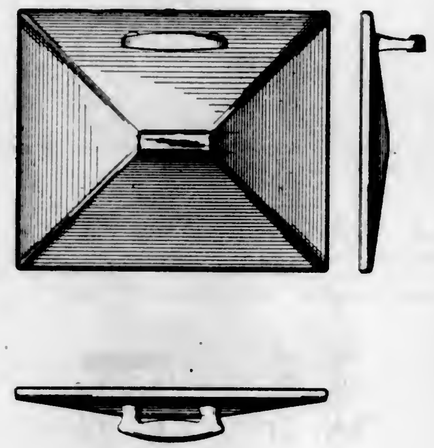
The ornamental design for a bottle cap substantially as shown and described.

84,240. WATCH DIAL OR SIMILAR ARTICLE. JOHN P. V. HEINMULLER, New York, N. Y., assignor to A. Wittnauer Co., New York, N. Y., a Corporation of New York. Filed Sept. 27, 1930. Serial No. 37,082. Term of patent 3½ years.



The ornamental design for a watch dial or similar article, substantially as shown.

84,241. DOOR. CARL H. HOFFSTETTER, Erie, Pa., assignor to Odin Stove Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed May 21, 1930. Serial No. 35,706. Term of patent 14 years.



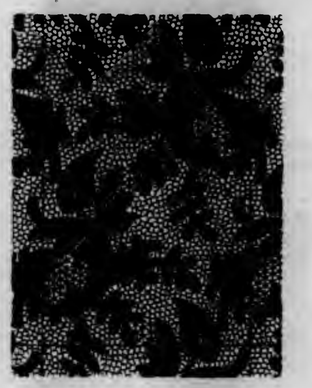
The ornamental design for a door as shown.

84,242. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Mar. 21, 1931. Serial No. 39,182. Term of patent 3½ years.



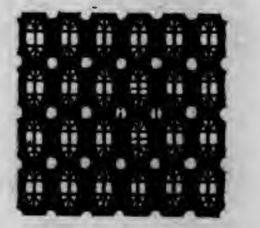
The ornamental design for lace, substantially as shown and described.

84,243. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Mar. 23, 1931. Serial No. 39,200. Term of patent 3½ years.



The ornamental design for lace, substantially as shown and described.

84,244. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Mar. 25, 1931. Serial No. 39,233. Term of patent 3½ years.



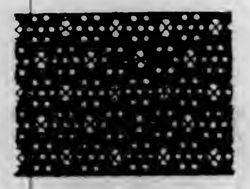
The ornamental design for lace, substantially as shown and described.

84,245. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Mar. 27, 1931. Serial No. 39,268. Term of patent 3½ years.



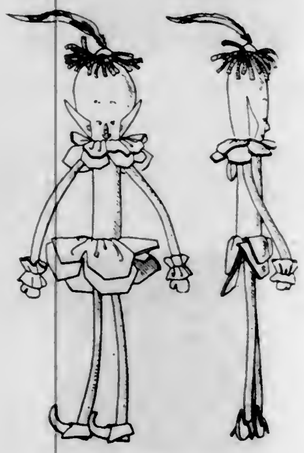
The ornamental design for lace, substantially as shown and described.

84,246. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Mar. 30, 1931. Serial No. 39,297. Term of patent 3½ years.



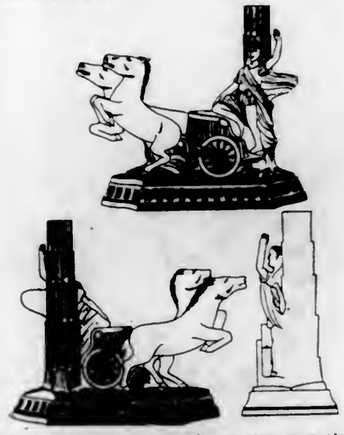
The ornamental design for lace, substantially as shown and described.

84,247. DOLL. BERTA L. KELLEY and LOUISE WINNIFORD, Santa Barbara, Calif. Filed Feb. 21, 1931. Serial No. 38,789. Term of patent 3½ years.



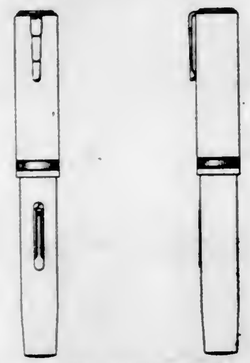
The ornamental design for a doll as shown.

84,248. LAMP BASE OR ARTICLE OF ANALOGOUS NATURE. MICHAEL KIWAD, New York, N. Y., assignor to La Belle Specialty Co., Inc., a Corporation of New York. Filed Apr. 14, 1931. Serial No. 39,474. Term of patent 3½ years.



The ornamental design for a lamp base or article of analogous nature substantially as shown.

84,249. FOUNTAIN PEN OR SIMILAR ARTICLE. GABRIEL LARSEN, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Feb. 3, 1931. Serial No. 38,537. Term of patent 14 years.



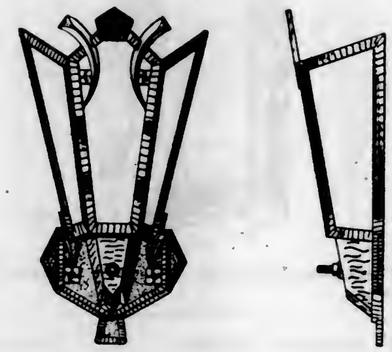
The ornamental design for a fountain pen or similar article substantially as shown.

84,250. COAT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 12, 1931. Serial No. 38,626. Term of patent 3½ years.



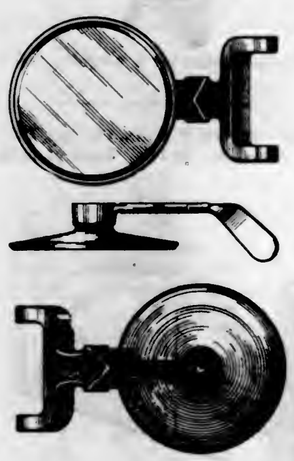
The ornamental design for a coat substantially as shown.

84,251. LIGHTING FIXTURE. JULIUS C. LOWRY, Detroit, Mich. Filed Apr. 2, 1931. Serial No. 39,332. Term of patent 7 years.



The ornamental design for a lighting fixture as shown.

84,252. HINGED MIRROR FOR AUTOMOBILE DOORS. FRANK MABIANI, New York, N. Y., assignor to Best Die Casting and Stamping Company, Incorporated, New York, N. Y. Filed Aug. 13, 1930. Serial No. 36,652. Term of patent 7 years.



The ornamental design for a hinged mirror for automobile doors, as shown.

84,253. LAMP CHIMNEY. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 17, 1931. Serial No. 39,123. Term of patent 3½ years.



The ornamental design for a lamp chimney substantially as shown.

84,254. SHOE. CHARLES MILLER, Long Island, N. Y. Filed Mar. 26, 1931. Serial No. 39,244. Term of patent 3½ years.



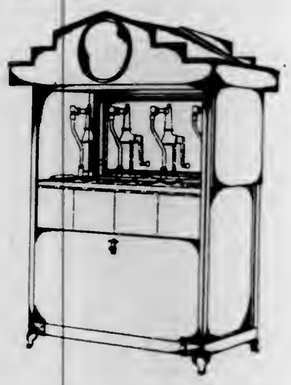
The ornamental design for a shoe, as shown.

84,255. TOY. HERBERT H. MOOR, Rock Island, Ill. Filed Mar. 25, 1931. Serial No. 39,235. Term of patent 7 years.



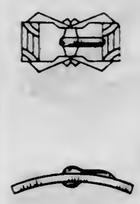
The ornamental design for a toy, substantially as shown and described.

84,256. OIL DISPENSER. HYMAN PHILLIPS, Cincinnati, Ohio. Filed Mar. 21, 1931. Serial No. 39,193. Term of patent 14 years.



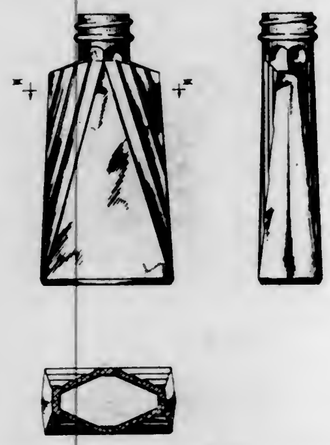
The ornamental design for an oil dispenser as shown.

84,257. SHOE BUCKLE. ORLANDO RICHARD RECCHIA, Cranston, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Mar. 19, 1931. Serial No. 39,155. Term of patent 3½ years.



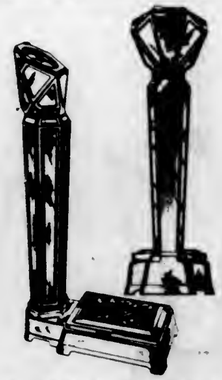
The ornamental design for a shoe buckle as shown.

84,258. BOTTLE. ROBERT P. RICHARDSON, Reidsville, N. C., assignor to The Nu-Shine Company, Reidsville, N. C., a Corporation of North Carolina. Filed Apr. 1, 1931. Serial No. 39,316. Term of patent 14 years.



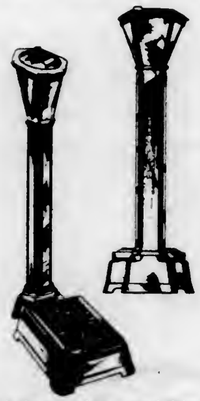
The ornamental design for a bottle substantially as shown.

84,259. WEIGHING MACHINE CASING. BARNETT B. ROCHESTIE, Trenton, N. J. Filed Mar. 24, 1931. Serial No. 39,230. Term of patent 3½ years.



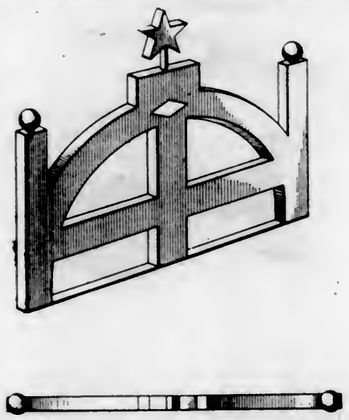
The ornamental design for a weighing machine casing, as shown.

84,260. WEIGHING MACHINE CASING. BARNETT B. ROCHESTIE, Trenton, N. J. Filed Mar. 24, 1931. Serial No. 39,231. Term of patent 3½ years.



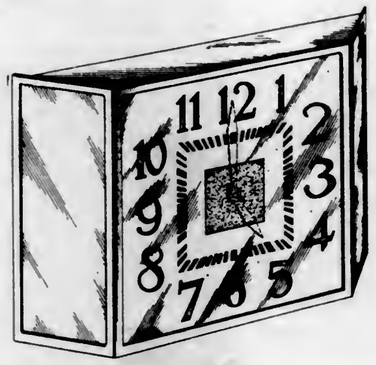
The ornamental design for a weighing machine casing, as shown.

84,261. SIGN. JOSEPH P. RYAN, Chicago, Ill. Filed Mar. 19, 1931. Serial No. 39,148. Term of patent 7 years.



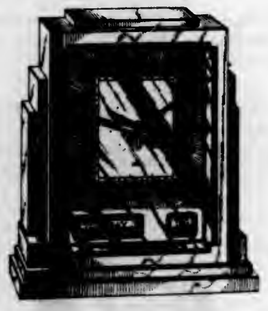
The ornamental design for a sign, as shown.

84,262. CLOCK. ABRAM J. SCHULER, Chicago, Ill. Filed Mar. 11, 1931. Serial No. 39,033. Term of patent 14 years.



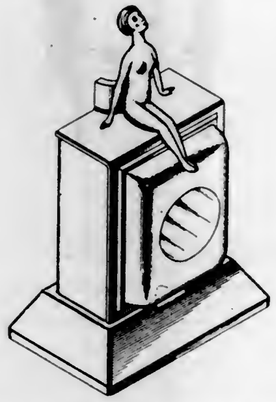
The ornamental design for a clock substantially as shown.

84,263. CLOCK CASE. GEORGE H. STEPHENS, Northbrook, Ill., assignor to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 14, 1931. Serial No. 39,091. Term of patent 14 years.



The ornamental design for a clock case, as shown.

84,264. CIGARETTE BOX OR THE LIKE. HENRY C. STOLL, Bronx, N. Y. Filed Mar. 31, 1930. Serial No. 35,073. Term of patent 3½ years.



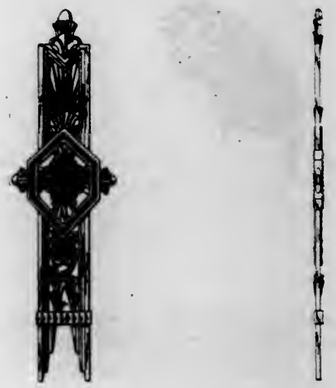
The ornamental design for a cigarette box or the like substantially as shown and described.

84,265. SPOON OR SIMILAR ARTICLE. FRANK S. TRUMBULL, Providence, R. I. Filed Jan. 22, 1931. Serial No. 38,415. Term of patent 3½ years.



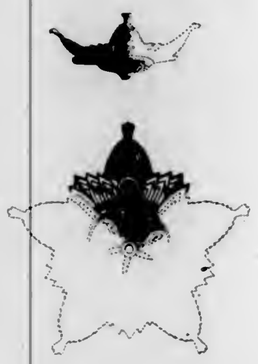
The ornamental design for a spoon or similar article, substantially as shown.

84,266. LIGHTING FIXTURE STRAP OR ARTICLE OF SIMILAR NATURE. GUSTAVE E. VILLARET, Leonia, N. J., assignor to Lighting Appliance Company, Inc., New York, N. Y. Filed Apr. 1, 1931. Serial No. 39,321. Term of patent 3½ years.



The ornamental design for a lighting fixture strap or article of similar nature, as shown.

84,267. LIGHTING FIXTURE MEMBER OR ARTICLE OF SIMILAR NATURE. GUSTAVE E. VILLARET, Leonia, N. J., assignor to Lighting Appliance Company, Inc., New York, N. Y. Filed Apr. 1, 1931. Serial No. 39,323. Term of patent 3½ years.



The ornamental design for a lighting fixture member or article of similar nature, as shown and described.

84,268. LIGHTING FIXTURE MEMBER OR ARTICLE OF SIMILAR NATURE. GUSTAVE E. VILLARET, Leonia, N. J., assignor to Lighting Appliance Company, Inc., New York, N. Y. Filed Apr. 1, 1931. Serial No. 39,324. Term of patent 3½ years.



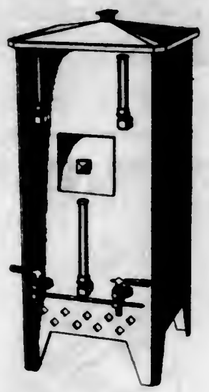
The ornamental design for a lighting fixture member or article of similar nature, as shown and described.

84,269. ASH RECEIVER OR SIMILAR ARTICLE. WILLIAM R. WESTFALL, Kew Gardens, N. Y., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 1, 1931. Serial No. 39,320. Term of patent 3½ years.



The ornamental design for an ash receiver or similar article, as described and shown.

84,270. COFFEE URN. HARRY HARPER, Minneapolis, Minn. Filed Apr. 16, 1931. Serial No. 39,506. Term of patent 14 years.

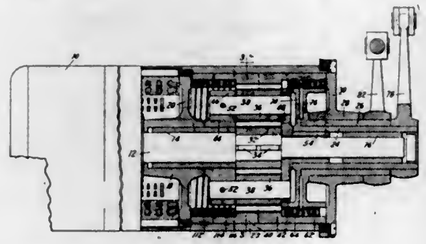


The ornamental design for a coffee urn, as shown.

PATENTS

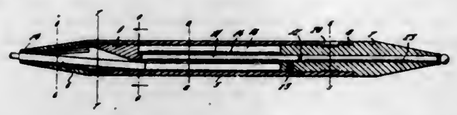
GRANTED MAY 26, 1931

1,806,579. BRAKE MECHANISM. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 11, 1929. Serial No. 331,789. 30 Claims. (Cl. 188—162.)



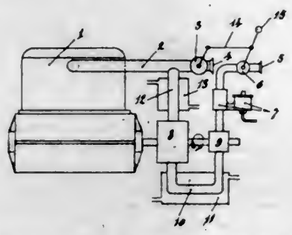
1. Brake mechanism comprising, brakes, a brake operating member, a motor, a clutch driven thereby, connections between the operating member and clutch, clutch-to-brake connections, and means including said connections whereby pedal effort is transmitted to the brakes.

1,806,580. MAGAZINE PENCIL. OSCAR R. BARTH, Detroit, Mich. Filed Jan. 13, 1930. Serial No. 420,467. 5 Claims. (Cl. 120—14.)



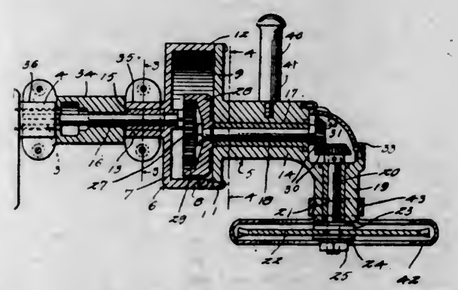
1. A pencil comprising a barrel, a rotatable plug at one end, a rotatable clutch lead guide at its opposite end having an offset feed channel leading from said opposite end to one edge of the inward end, a rod connecting the plug and the guide for rotation as a unit, and a magazine positioned between the plug and the guide clutch and around the rod in the barrel adapted to position a plurality of lead holding tubes, each adapted to be released into the channel of said guide member when any one of said tubes comes into registry with the channel opening at the inner end thereof.

1,806,581. FUEL SUPPLY SYSTEM FOR INTERNAL COMBUSTION ENGINES OF VARIABLE LOAD FOR USING HEAVY FUELS. JOSEPH BETHENOD, Paris, France, assignor to Societe des Moteurs Dugelay, Paris, France, a Limited Company of France. Filed Aug. 29, 1928, Serial No. 302,803, and in Belgium Sept. 27, 1927. 13 Claims. (Cl. 123—119.)



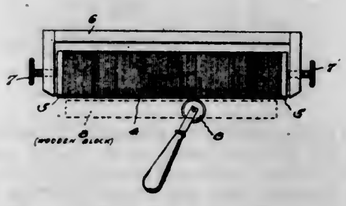
1. In a system for supplying fuel and air for internal combustion engines using heavy fuels, in combination, a carburetor to which liquid fuel is delivered, a main intake manifold, an auxiliary intake, a first auxiliary volumetric pump driven synchronously by the engine, a reservoir, a second auxiliary pump, said auxiliary intake, carburetor, first auxiliary pump, reservoir, and second auxiliary pump, being arranged in the order stated with reference to the direction of flow of the gases, to constitute a means for delivering explosive mixtures to a suitable point in said intake manifold.

1,806,582. PORTABLE ELECTRIC SAW. FRED G. BEUTNER, White Lake, S. Dak. Filed Nov. 7, 1929. Serial No. 405,397. 3 Claims. (Cl. 143—431.)



1. A portable saw, comprising a casing having parallel front and rear walls, means connecting the walls for relative angular adjustment, a front bearing sleeve arranged eccentrically on the front wall and extending forwardly therefrom, a rear bearing sleeve arranged eccentrically on the rear wall and extending rearwardly therefrom, the bearing sleeves being arranged with their axes in radially offset relation and the bearing sleeves being adjustable with the front and rear walls, so that the distance between said axes may be varied, a main shaft journaled in the rear bearing sleeve, a counter-shaft journaled in the front bearing sleeve, a pinion arranged within the casing and secured to the main shaft, a gear arranged within the casing and removably secured to the counter-shaft and meshing with the pinion, an arbor, means rotatably supporting the arbor from the front bearing sleeve, gears connecting the counter-shaft and arbor, and a blade secured to the arbor.

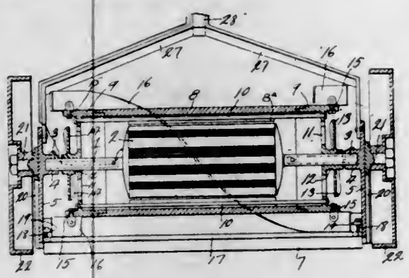
1,806,583. PROCESS OF FINISHING PLAYING CARDS. EDWARD T. BOORMAN, Milltown, N. J., assignor to King Press, Inc., Borough of Carlstadt, N. J., a Corporation of New Jersey. Filed Jan. 14, 1929. Serial No. 332,573. 1 Claim. (Cl. 41—26.)



The process of finishing playing cards which consists in first placing a plurality of decks together to form a

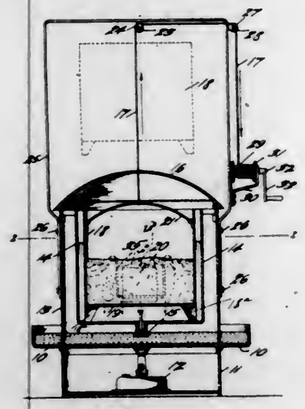
column, straightening and clamping said column into a solid block, sanding the sides and edges of said block from end to end to render the same perfectly smooth, applying thereto a mixture of colored printer's ink and clear varnish, drying the same at room temperature and finally burnishing the sides and edges of the block and when finished releasing and separating the decks therein.

1,806,584. LAWN MOWING MACHINE. WILLIAM JOHN BORER, Genoa, Nebr. Filed Jan. 29, 1926. Serial No. 84,637. 4 Claims. (Cl. 56—26.)



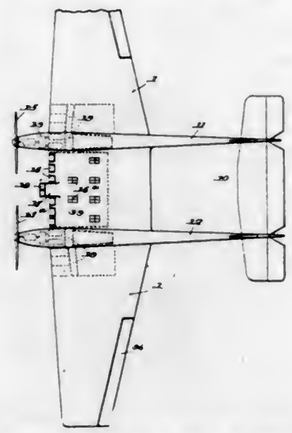
1. A lawn mower comprising a non-rotatable shaft, an electric armature carried by said shaft, a field casing rotatably mounted on said shaft, blades carried by said field casing, vertically disposed plates at opposite ends of the field casing and having arcuate slots therein, rearwardly extending members carried by said plates, a roller connecting said rearwardly extending members together, said stationary shaft being connected to said plates, bars pivoted to the rearwardly extending members adjacent the rollers, bolts carried by said bars and extending through the arcuate slots in the plates and forming means whereby said bars may be adjusted in relation to the ground, wheels rotatably mounted on said bars and a cutter bar adjustably mounted on the plates and disposed below the armature field casing.

1,806,585. GRAIN SOAKING ATTACHMENT FOR WATERING TROUGHS. VIRGIL S. BROWN, Cromwell, Iowa. Filed Apr. 18, 1929. Serial No. 356,124. 4 Claims. (Cl. 119—73.)



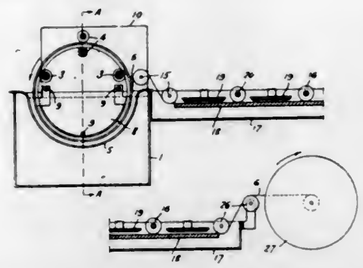
1. In a grain soaking attachment for a watering trough, a tank for supplying water to the trough, a grain receptacle having a perforated bottom, a door in the side of the receptacle, said door having flanges at its edges, means on the receptacle for holding the door approximately horizontally, and means for suspending the receptacle above the water tank.

1,806,586. AEROPLANE. WILLIAM WHITNEY CHRISTMAS, New York, N. Y., assignor, by mesne assignments, to The General Development Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 8, 1929. Serial No. 405,805. 35 Claims. (Cl. 244—14.)



1. An aerofoil comprising a pair of oppositely lifting structures and an intermediate combined lifting and housing structure united in an integral homogeneous symmetrical unit, the portions of such structure adapted solely for lift consisting of cantilever trusses with straight braces and an intermediate portion of said structure being adapted for both lift and housing, consisting of a rectangular frame having as elements cantilever trusses containing passageways through each individual element affording headroom sufficient for the passage of persons, said truss structures including spar trusses extending from end to end and rib trusses spaced apart thereon and intersecting the spar trusses at intervals, with tubular posts at the intersections, common to said spars and said ribs and having pivotal connection with said spars and said ribs at each intersection thereof, adapted to permit free motion of the elements of spars and ribs and to compensate for strains and stresses throughout the wing structure and for distortion due thereto.

1,806,587. MANUFACTURE OF METALLIC SHEET, STRIP, OR WIRE. SHERARD OSBORN COWPER-COLES, Sunbury-on-Thames, England. Filed Jan. 3, 1931, Serial No. 506,469, and in Great Britain May 16, 1929. 5 Claims. (Cl. 204—11.)



3. Apparatus for the production of metallic sheet strip or wire comprising in combination an electrolytic bath, a cathode therein, an anode therein, means for slowly rotating the cathode, a baffle in proximity to the cathode, and means for moving the baffle continuously in a direction parallel to the axis of the cathode.

5. Apparatus for the production of metallic sheet, strip or wire comprising in combination, an electrolytic bath, a cathode therein, an anode therein, means for slowly rotating the cathode, means for stripping the deposited metal from the cathode in the form of a sheet, a second electrolytic bath in proximity to the first bath into which the sheet is passed, an anode therein, electrically non-conducting means for supporting the sheet in said second bath, a series of spindles and a roller freely mounted on each spindle and bearing on the sheet, each roller having an aperture of substantially larger diameter than that of the spindle on which it is mounted, and means for reciprocating said rollers across the sheet.

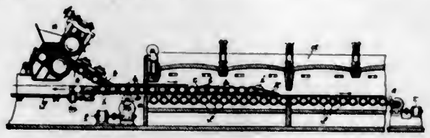
1,806,588. SURFACE TREATMENT OF SYNTHETIC PRECIOUS STONES. HERMANN ESPIG and WOLFGANG TEUBNER, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 7, 1930, Serial No. 426,765, and in Germany Feb. 11, 1929. 2 Claims. (Cl. 125—1.)

1. The process which comprises treating the surface of synthetic precious stones, belonging to the class of corunds and spinels and being mainly composed of alumina, with fused anhydrous sodium tetraborate.

1,806,589. SURFACE TREATMENT OF ARTICLES MADE OF SYNTHETIC CORUNDUM. HERMANN ESPIG and WOLFGANG TEUBNER, Bitterfeld, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed June 12, 1930, Serial No. 460,788, and in Germany Feb. 11, 1929. 4 Claims. (Cl. 125—1.)

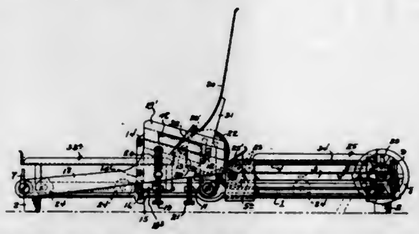
1. A process which comprises treating the surface of an article consisting of synthetic corundum with a fused substance containing a substantial amount of boracic acid.

1,806,590. FEEDING SHEET GLASS TO LEER CONVEYERS. MICHAEL FINCKE, Aix-La-Chapelle, Germany, assignor, by mesne assignments, to The American Bicheroux Company, a Corporation of Delaware. Filed June 3, 1929, Serial No. 368,067, and in Germany Oct. 12, 1928. 13 Claims. (Cl. 49—3.)



12. The combination with an intermittent sheet glass forming machine, of a lehr conveyer, having a feeding speed less than the speed of sheet formation, a take-off table reciprocable in the line of feed of the lehr conveyer and moving over the latter, and receiving glass from the former, the table having means for feeding the glass from off the forward end thereof onto the conveyer.

1,806,591. PRINTING PRESS. PAUL WILLIAM ALLEN, Knoxville, Tenn. Filed Mar. 30, 1928, Serial No. 265,977. Renewed Apr. 15, 1931. 7 Claims. (Cl. 101—250.)



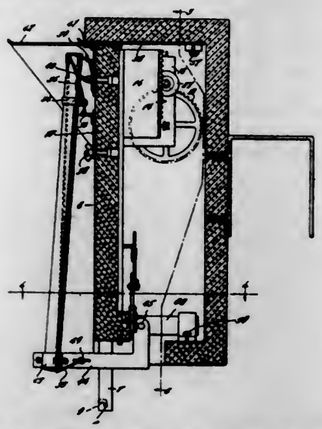
1. A printing press comprising a reciprocable bed, a slotted paper feed platform over its rearward position, an impression roller forward of the platform, foldable fingers carried by the bed to engage the paper through the slotted platform, means on the printing frame for automatically raising the fingers upon rearward movement to lift and feed the paper on the forward movement of the bed, a traverse bar above the bed to lower the fingers on forward movement of the bed, and means for shifting the impression roller into and out of printing position on the forward and back movement of the bed respectively.

1,806,592. DENTAL ELEVATOR. ANTHONY BARONE, Boston, Mass. Filed July 12, 1929. Serial No. 377,792. 9 Claims. (Cl. 32—84.)



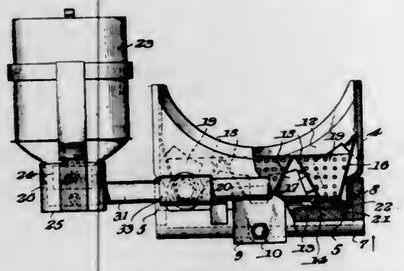
8. In combination with a dental elevator blade for use in loosening roots of teeth from the root socket, said blade being provided with a spindle, a holder which forms a bearing for the said spindle, and means operatively connected with the said spindle for vibrating the elevator blade on its axis.

1,806,593. AUTOMATIC FUSE SETTING APPARATUS. EDWARD H. BOICOURT and ALLAN H. BOICOURT, Rockwell City, Iowa. Filed Jan. 6, 1930. Serial No. 418,859. 2 Claims. (Cl. 200—126.)



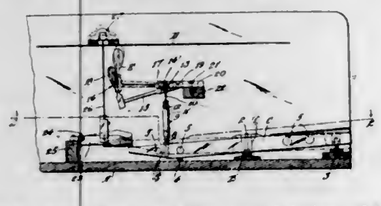
1. In an apparatus of the class described, a casing, a panel hingedly mounted in the casing, a plurality of fuses, supporting means on the panel for the fuses, means for automatically placing the fuses in a circuit one after the other as they burn out, and an escapment mechanism mounted on said panel for controlling said means to provide a predetermined time interval between the burning out of one fuse and the setting of the next fuse in the circuit.

1,806,594. OIL CELLAR FOR DRIVING BOXES. HARRY W. CODDINGTON, Roanoke, Va. Filed Aug. 20, 1923. Serial No. 658,272. 10 Claims. (Cl. 308—83.)



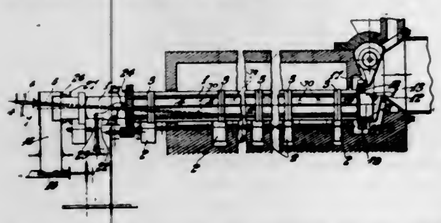
1. In a lubricating device for locomotive driving boxes, the combination with an oil receptacle, of a sponging retaining member removably contained within said receptacle, means for yieldingly supporting said receptacle, means for yieldingly supporting said sponging retaining member, and an oil reservoir supported by said oil receptacle and having means for maintaining the oil at a constant lever therein.

1,806,595. PIANO ACTION. CHARLES EWEN CAMERON, Jr., East Orange, N. J., assignor to Lauterbumana Co., a Corporation of New Jersey. Filed Dec. 23, 1929. Serial No. 415,915. 9 Claims. (Cl. 84—237.)



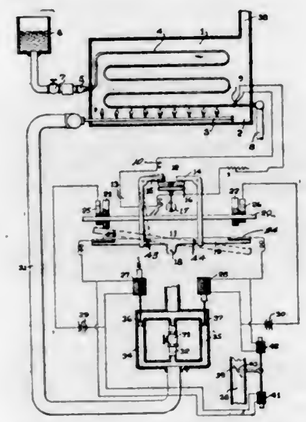
1. In a piano, the combination with a string, of a hammer, a key, a single hammer lifter between said key and said hammer connected for relative movement with one thereof, the distance between the points of engagement of said lifter with said hammer and said key being less than that required to cause the hammer to contact with said string at the end of the string-striking movement of said key without said relative movement, so that upon the string-striking movement of said key movement of said lifter will allow said hammer to be thrown against said string by the energy imparted thereto by actuation of said key and permit said hammer to recoil idly independent of said key, and shock-absorbing means both to limit recoil of the hammer and to restrain rebound of the hammer to the string.

1,806,596. MANUFACTURE OF ZINC. HENRY EDWIN COLEY, London, England. Original appplication filed Aug. 8, 1927, Serial No. 211,293, and in Great Britain Feb. 2, 1927. Divided and this application filed June 10, 1929. Serial No. 369,692. 5 Claims. (Cl. 263—34.)



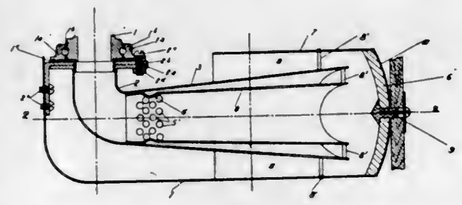
1. Apparatus for use in the reduction of zinc from its ores comprising a tubular reducing chamber, means for introducing ore continuously into one end of said reducing chamber, means at the opposite end of said reducing chamber for continuously removing the gangue therefrom, means for heating the interior of said reducing chamber, artificially cooled conveying means for carrying a hydrocarbon into the reducing chamber, said conveying means extending downwards to a position near the inside wall of the chamber so as to maintain the hydrocarbon in a non-decomposed condition until it reaches the ore, and a vapour outlet situated at the ore inlet end of the reducing chamber for removing from the reducing chamber the vapourous products of the reduction.

1,806,597. METHOD OF TREATMENT OF HYDROCARBONS. LUIS DE FLOREZ, Boston, Mass., assignor, by mesne assignments, to The TEXAS Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 4, 1922. Serial No. 579,603. 8 Claims. (Cl. 196—132.)



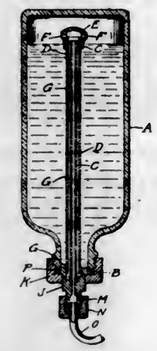
5. The method of treating hydrocarbon oils which comprises passing such oils through a pipe still at a substantially uniform rate of flow, supplying fuel to heat the still, and automatically applying, at predetermined recurrent intervals, corrections to the quantity of fuel supplied to the still to maintain a predetermined temperature at a selected point therein, each of which corrections is proportionate to the extent of the departure of the temperature at the selected point from the predetermined temperature at the time of making that correction.

1,806,598. ACOUSTIC RECEIVER. RENÉ DENOUX, Paris, France. Filed Dec. 19, 1929, Serial No. 415,321, and in France July 6, 1929. 2 Claims. (Cl. 181—27.)



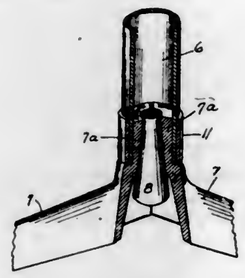
1. An acoustic device of the type described comprising an open housing, a tapered tube having its large end opening into said housing, means at the small end of said tube for connecting a sound producing device thereto, spacing pins for securing the large end of said tube within said housing, a second tapered tube having its small end fitted within the small end of said first tube, and also having a series of perforations adjacent the small end thereof, a plurality of spacing pins for securing the large end of said second tube within the large end of said first tube in spaced relation thereto, and a sound reflector of polished glass disposed in said housing directly in front of said tubes.

1,806,599. DISPENSING MEANS. PAUL N. ELDERKIN, Los Angeles, Calif. Filed Feb. 4, 1929. Serial No. 337,459. 7 Claims. (Cl. 123—196.)



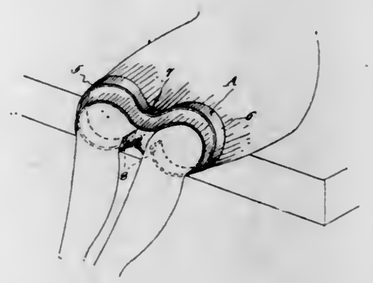
1. A device of the character described comprising a container, means forming within said container a separate chamber, means providing communication between said container and said chamber at vertically spaced points, and a conduit communicating with an upper end portion of said chamber, said container being adapted to contain a fluent substance and said conduit being adapted for connection with a source of variable pressure.

1,806,600. SUPPORT. PAUL N. ELDERKIN, Los Angeles, Calif. Filed Mar. 5, 1929. Serial No. 344,538. 1 Claim. (Cl. 248—41.)



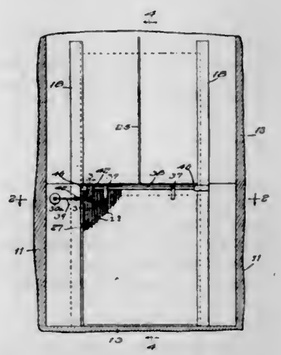
A device of the character described comprising a standard, the lower end portion at least of which is hollow, a plurality of base members each inclusive of an upwardly directed shank portion of segmental cross-section for insertion into the lower end portion of said standard, the inner face of each shank portion being recessed and the recesses of the collective shank portions cooperating to provide an upwardly tapering opening through the collective shank portions when the latter are inserted within said standard, the wall of said upwardly tapering opening being circular and continuous circumferentially and also continuous throughout the length of said shank portions, and a tapered wedge element for insertion into said tapered opening to spread said shank portions against the inner face of said standard.

1,806,601. SKIRT HOLDER. ROBERT E. ALEXANDER, Springfield, Pa. Filed Sept. 20, 1929. Serial No. 394,004. 2 Claims. (Cl. 24—81.)



1. As a new article of manufacture a skirt holder comprising a pair of resilient leg encircling clamps, the terminals of said clamps extending inwardly and upwardly with respect to each other for extending well under the leg of the user when applied.

1,806,602. FLAME BAFFLE PARTITION. RUDOLPH J. ANSCHICKS, Chicago, Ill., assignor to Protectoseal Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 29, 1929. Serial No. 381,979. 10 Claims. (Cl. 262—34.)

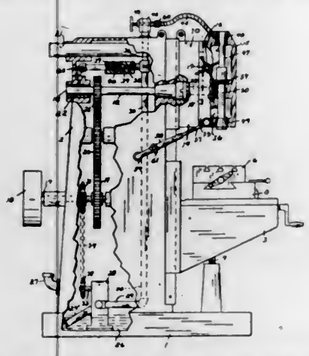


1. In mine equipment a flame and explosive proof partition comprising a plurality of strips of non-combustible material mounted in close spaced apart relation in a frame of non-combustible material, said partition having an opening therethrough, a door for said opening and mechanism operable to hold said door in open position, said mechanism being actuated by the concussive force of air pressure waves, to cause said door to close the opening.

1,806,603. MACHINE TOOL LUBRICATION. JOSEPH B. ARMITAGE, Milwaukee, Wis., assignor to Kearney & Trecker Corporation, West Allis, Wis. Filed Apr. 9, 1924. Serial No. 705,230. 26 Claims. (Cl. 184—6.)

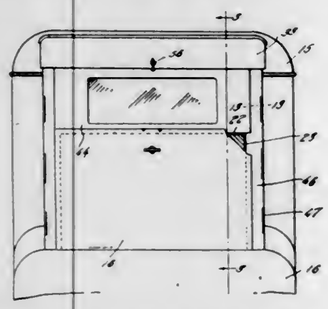
1. In a machine tool, the combination with two relatively movable lubricating systems adjustable to varying relative levels whereby their relative resistance to flow of lubricant is variable, and means for adjusting their relative position, of a resiliently yieldable valve device asso-

ciated with one of said systems and set to yield at pressure in excess of those required for delivery of lubricant to



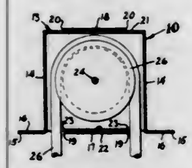
the other of said systems in any relative position thereof and means for regulating lubricant flow through said other system.

1,806,604. COLLAPSIBLE RUMBLE SEAT INCLOSURE. JAMES M. BAKER, Parkersburg, W. Va. Filed Apr. 11, 1930. Serial No. 443,484. 3 Claims. (Cl. 296—45.)



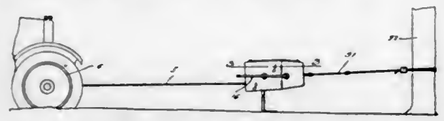
1. A rumble seat inclosure comprising a roof, a rear panel hinged at its upper end to the rear part of the roof, side panels hingedly connected to the roof, a flap hingedly connected to the rear edge of each side panel and said flaps engaging parts of the rear panel and rumble seat back when the inclosure is in operative position.

1,806,605. WINDOW PULLEY. BERT E. BARTHOLOMEW, Santa Ana, Calif., assignor to Consolidated Factories Limited, Santa Ana, Calif., a Corporation of California. Filed Nov. 6, 1929. Serial No. 405,110. 4 Claims. (Cl. 16—211.)



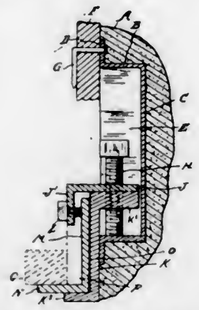
1. In a device of the class described, a case, said case including a back, side members and end members, an aperture in said end members adjacent each side thereof, a cover for said case, said cover including means adapted to allow free passageway through the apertures at one end of said case and means adapted to obstruct the passageway through the end apertures at the opposite end of said case, means to secure said cover to said case, and a pulley rotatably supported in said case.

1,806,606. AUTO TOWING DEVICE. GARRY MOORE BOOTH, Dearborn, Mich. Filed Sept. 25, 1929. Serial No. 395,072. 2 Claims. (Cl. 254—186.)



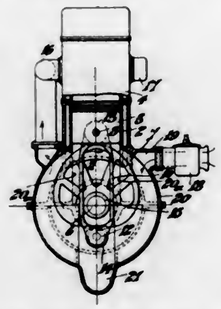
1. An automobile tow of the class described comprising a housing having attaching hooks at one end, a cable winding drum arranged therein having gears carried thereby, a crank shaft journalled in the housing having gears connected with the gears of said drum, a crank arm for said shaft, a support for said housing and a foot rest for the support whereby to enable the operator to hold the housing against movement during the operation thereof.

1,806,607. ADJUSTABLE SUPPORT FOR ANGLE BARS. BASIL E. BROWN, Pontiac, Mich. Filed Feb. 19, 1930. Serial No. 429,535. 7 Claims. (Cl. 72—101.)



1. Means for affording an adjustable structural support for an angle iron upon which finishing courses of brick are designed to be rested along the face of a previously erected structure, comprising a shell adapted to be fixed in position relatively to said previously erected structure during its construction, an adjusting screw rotatably positioned within said shell, and a plurality of angled members operatively connected with said adjusting screw and adapted to cooperatively engage the vertical web portion of an angle bar, the horizontally extending web of which is supported from beneath by a laterally projecting portion of one of said angled members.

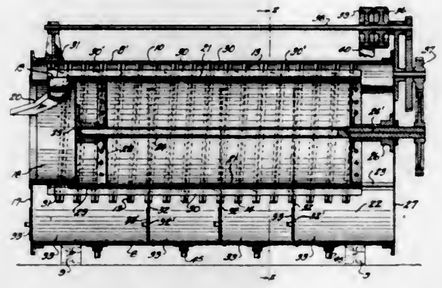
1,806,608. INTERNAL COMBUSTION ENGINE. JOHN BRYANT, Cardiff, Wales. Filed Mar. 5, 1928, Serial No. 259,025, and in Great Britain Apr. 5, 1927. 2 Claims. (Cl. 123—78.)



1. In an internal combustion engine, the combination with a cylinder and crank case, the latter having spaced

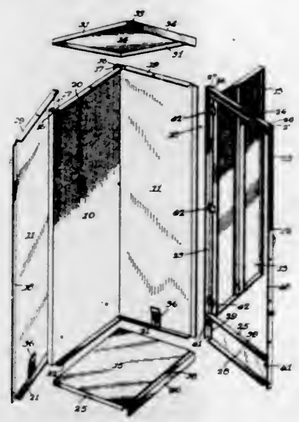
inlet and outlet ports for fuel mixture, of a crank shaft and a cam thereon, a piston adapted to intermittently obstruct passage of fuel mixture between said ports, a cam on the shaft adapted to sweep a fuel charge into the outlet port, and a link connection between said cam and piston.

1,806,609. CONTINUOUS COOKER. FRANK D. CHAPMAN, Berlin, Wis., assignor to Berlin Chapman Company, Berlin, Wis., a Corporation of Wisconsin. Filed Dec. 13, 1926. Serial No. 154,521. 15 Claims. (Cl. 126—272.)



1. A continuous cooker, comprising a horizontally extending tank having inlet and outlet openings and heat zones of various degrees of temperature, a spirally trending member extending through said tank and the heat zones, and a closed drum extending through the spirally trending member for preserving the heat zones, and having means coacting with the spirally trending member for moving cans through the heat zones.

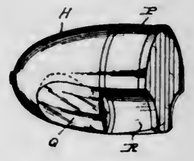
1,806,610. FURNITURE. CARL T. CHRISTENSEN, Aurora, Ill., assignor to All-Steel-Equip Company, a Corporation of Illinois. Filed July 26, 1928. Serial No. 295,457. 5 Claims. (Cl. 312—143.)



3. In metallic furniture, a back and sides, each composed of a single sheet, a top and bottom each composed of a single sheet secured to the sides and the back, the front edges of the top and bottom being offset downwardly and provided with depending flanges, a front frame comprising upper and lower channels receiving the flanges and cooperating with the offset portions, the depending flange of the top resting on the bottom flange of the upper channel.

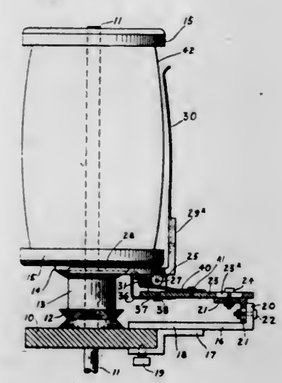
5. A metallic cabinet comprising a back and sides, said back having its vertical edges bent to form flanges extending inwardly in opposite directions and spaced from the plane of said back, side members having their side edges bent to extend laterally inwardly and then forwardly and outwardly for engaging said first-named flanges by a lateral and then a turning movement to form, when at right angles to said back member, a rigid joint between said back and sides.

1,806,611. HEADLIGHT FOR MOTOR VEHICLES. SILAS CORDES, Boise, Idaho. Filed May 2, 1928. Serial No. 274,556. 2 Claims. (Cl. 240—41.35.)



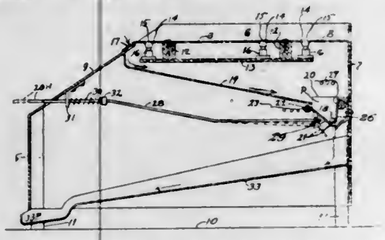
1. A lamp including a body having an inwardly projecting annular shoulder provided with a source of light, lateral ports formed in the body and extending forwardly to said annular shoulder, a lens for each of said ports having curved outer faces flush with and forming a continuation of the outer face of said body, a partition chamber fixed to the front of said body, said partition chamber being curved inwardly at points forward of said lateral ports, and a closure for the front of said partition chamber.

1,806,612. STOPPING MECHANISM FOR SPOOLERS AND THE LIKE. JOHN H. COX, Lowell, N. C., assignor of one-half to Charles Burkley, Gastonia, N. C. Filed Oct. 5, 1929. Serial No. 397,570. 4 Claims. (Cl. 242—39.)



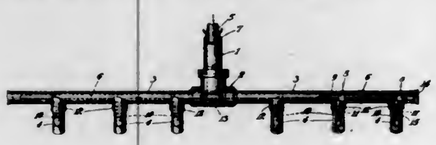
1. In a stopping mechanism for spoolers or like machines, a combination with a winding spindle having a flange adapted to support a spool to rotate the said spool by frictional contact therewith, of a pivoted bell crank lever adapted to be moved through contact with the yarn wound on the spool, a trigger mechanism associated with said bell crank lever, resilient means adapted to normally press the bell crank lever upwardly, said trigger mechanism being adapted to be released when undue pressure is applied on the upper portion of the bell crank lever by the yarn wound on the spool.

1,806,613. BALL GAME. WALTER B. CRAIGHEAD, St. Paul, Minn. Filed Jan. 2, 1930. Serial No. 417,883. 5 Claims. (Cl. 273—88.)



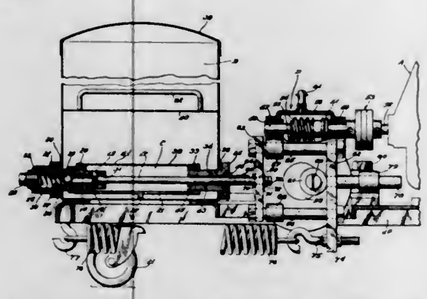
3. The structure specified in claim 1 in which said ball retrieving means comprises an inclined plane in the device directed downwardly from a plane below said circuit closing pockets and terminating in a pocket accessible at the lower front part of the device.

1,806,614. WATER-COOLED AGITATOR. ALBERT L. CULBERTSON, Mount Vernon, Ohio, assignor, by mesne assignments, to The Chapman-Stein Company, Mount Vernon, Ohio, a Corporation of Ohio. Filed July 27, 1926. Serial No. 125,282. 3 Claims. (Cl. 48—85.2.)



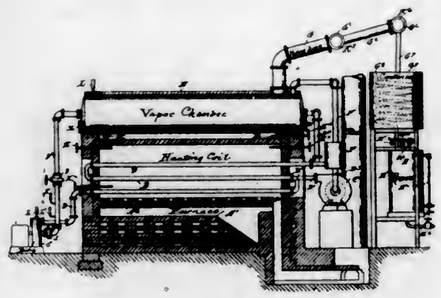
2. A water cooled firebed agitator member comprising an upwardly extending stem, laterally directed arms extending therefrom, said stem having a cooling water pipe passing therethrough and said arms having water conducting tubes therewithin which are connected to said pipe, said arms also having hollow fingers projecting therefrom at points spaced along their lengths, and means for directing serially through the fingers carried by each of said arms, the water which flows through the corresponding tube.

1,806,615. LUBRICANT COMPRESSOR. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 29, 1927. Serial No. 216,129. 20 Claims. (Cl. 221—47.1.)



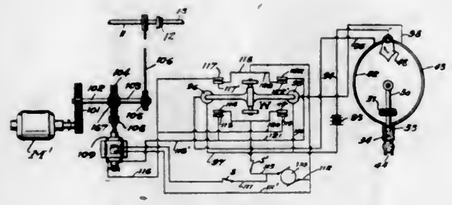
13. In lubricating apparatus of the class described, a source of lubricant supply, a cylinder fed therefrom and adapted to discharge lubricant at high pressure, a piston reciprocable in said cylinder, a yoke connected to said piston, means for reciprocating said yoke, said yoke comprising spaced parallel straps, spaced parallel guiding means connecting said straps, and a third guiding means connected to one of said straps and having a common axis with said piston.

1,806,616. PROCESS FOR PRODUCING LOW BOILING POINT HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed Nov. 4, 1918, Serial No. 260,955. Divided and this application filed Sept. 6, 1921, Serial No. 498,886. Renewed July 16, 1928. 1 Claim. (Cl. 196—59.)



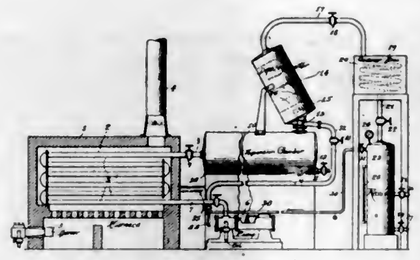
A process of converting heavy into lighter hydrocarbons, consisting in pumping oil first through a heating coil and to a separating chamber, then taking off the vapors from said chamber and passing them to a vapor chamber, passing the unvaporized oil through a second heating coil to the said vapor chamber, taking off vapors from the vapor chamber and condensing them and returning the unvaporized oil from the said vapor chamber to the first coil, the oil being maintained under pressure of the generated vapors during treatment.

1,806,617. SYNCHRONIZED PHOTOGRAPHIC AND SOUND RECORDING AND REPRODUCING MECHANISM. CHARLES W. EBELING, New York, N. Y., assignor to Harrison W. Rogers, Incorporated, a Corporation of Delaware. Filed Dec. 13, 1927. Serial No. 239,676. 7 Claims. (Cl. 172—293.)



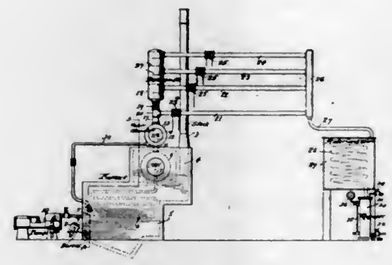
1. In a device of the character described, the combination with two machines, an independent electric motor for each machine, means controlled by one machine for setting in motion the motor of the second machine, and a differential gearing interposed between both motors to be driven simultaneously thereby, of a pole changing switch, a reversible motor controlled by said switch, a second differential gearing interposed between the motor of one machine and the machine operated thereby and under the control of the reversible motor, two pendant switches operated by the first differential gearing and in circuit with the reversible motor, and means for returning said pendant switches to normal position should either one be carried beyond its normal zone.

1,806,618. PROCESS OF CRACKING PETROLEUM OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 10, 1920, Serial No. 429,609. Renewed June 9, 1926. 1 Claim. (Cl. 260—162.)



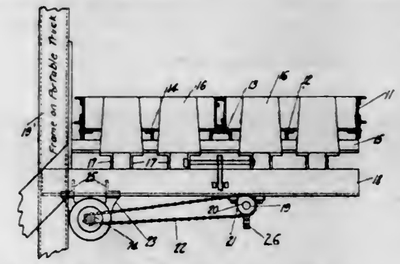
A process of cracking petroleum oil wherein hydrocarbon chlorides are formed consisting in continuously passing a stream of oil through a cracking coil disposed within a furnace, in subjecting said oil while in the furnace to a cracking temperature while maintained under a superatmospheric pressure, in introducing said oil to an expansion chamber where vaporization occurs, in condensing the vapors and collecting the condensate and gases in a receiver, and in continuously admitting to the stream of oil passing to said cracking coil incondensable gases from said receiver mixed with hydrogen chloride for passage through said cracking coil.

1,806,619. APPARATUS FOR TREATING HYDROCARBON OIL. GUSTAV EGLOFF and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Sept. 1, 1920, Serial No. 407,401. Renewed July 2, 1928. 1 Claim. (Cl. 196—99.)



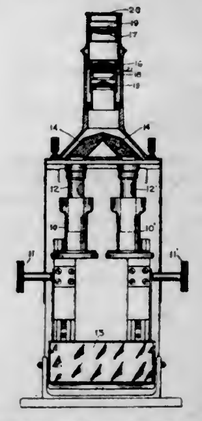
An apparatus for cracking hydrocarbon oil, comprising a furnace, a plurality of parallel tubes disposed within said furnace, a common header connected to the inlet ends of said tubes, an enlarged chamber connected to the outlet of said tubes, a second enlarged chamber disposed outside of said furnace, to which vapors from said first enlarged chamber pass a dephlegmator, means for delivering vapors from said second enlarged chamber to said dephlegmator, said means serving also for returning reflux condensate from said dephlegmator to said second enlarged chamber, means for passing reflux condensate from said second enlarged chamber to said header, and means for taking off vapors from said dephlegmator for condensation and collection.

1,806,620. VIBRATOR MECHANISM. STEPHEN FLAM, Walnut Park, Calif., assignor to Supertile Machinery Corporation, Los Angeles, Calif., a Corporation of California. Filed June 24, 1926. Serial No. 118,268. 6 Claims. (Cl. 259—72.)



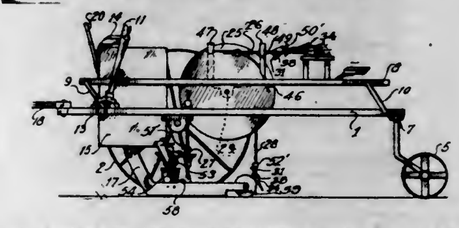
4. In a vibrator mechanism, a supporting structure, a horizontal load sustaining member supported at one end on the structure and having a free end, said means including a source of motion carried by the member.

1,806,621. OPTICAL SYSTEM FOR COLORIMETERS AND THE LIKE. JOHN W. FORREST, Brighton, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 2, 1927. Serial No. 217,253. 4 Claims. (Cl. 88—14.)



1. In a colorimeter, an optical system comprising an ocular, two similar prisms and a biprism disposed between said ocular and said similar prisms, each of said similar prisms having a surface disposed to receive light rays normally thereto, two surfaces for successively reflecting said rays and a surface for refracting said rays.

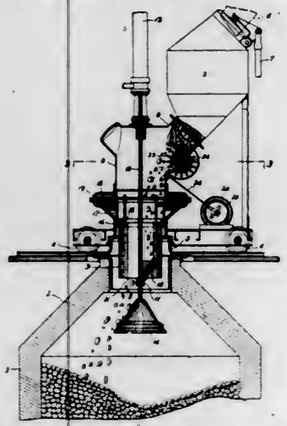
1,806,622. PLANT SETTING MACHINE. GABRIEL J. GIBBENS, Hutchinson, Kans. Filed Sept. 6, 1927. Serial No. 217,576. 5 Claims. (Cl. 111—3.)



1. A plant setting machine comprising a wheeled frame, a furrow opener carried by the frame, a wheel rotatably supported on the frame, a plurality of plant setting devices connected to the wheel in spaced relation, a cam

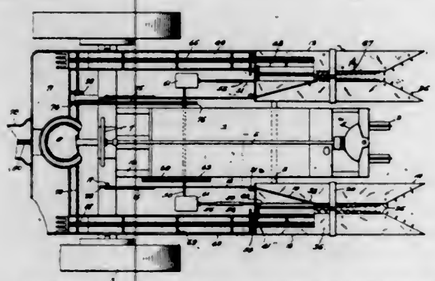
adjacent to the wheel over which the plant setting devices ride to temporarily hold them in horizontal plant receiving positions, each plant setting device consisting of an elongated bar having at one end a rigid clamping jaw and a movable clamping jaw, the rigid clamping jaw having two hopper forming side flanges to which the movable jaw is pivoted, a spring normally urging the movable jaw into clamping position, and means for releasing the movable clamping jaw.

1,806,623. FUEL-CHARGING MECHANISM. JAMES H. GLEASON, Willoughby, Ohio, assignor to The Gas Machinery Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 11, 1927. Serial No. 232,571. 4 Claims. (Cl. 214—37.)



1. Fuel-charging mechanism comprising a fuel-feeding device; means for supplying said device with fuel; a vertically-movable shell member with which said device communicates; means for periodically actuating said device to feed into said shell member; a vertically-reciprocable bell distributer below said shell member; means for periodically raising and lowering said bell, said shell member being supported upon said bell in the upper position of the latter, the bell forming a cone valve for the shell member in such upper position; means for intercepting and supporting the shell member intermediate the upper and lower positions of the bell as the latter is lowered; a discharge chute formed as an integral part of the shell member and interiorly thereof; and means for rotating said shell member from the periodic actuating means of said fuel-feeding device.

1,806,624. TWO ROW CORN PICKER. EARL GLOVER, LOYD GLOVER, and REX GLOVER, Comstock, Nebr. Filed July 26, 1928. Serial No. 295,486. 18 Claims. (Cl. 56—18.)



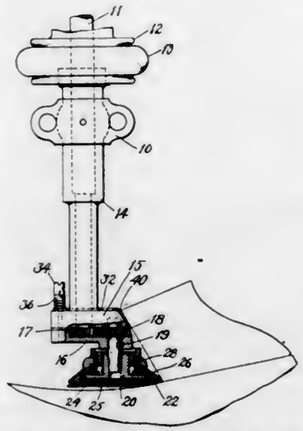
1. A two row corn picker including a tractor, corn pickers pivotally mounted on the tractor at opposite sides thereof and provided with gathering mechanism and having snapping rolls, side conveyors fixed to the tractor at opposite sides of the same and arranged to receive the ears of corn from the corn pickers and extending rearwardly therefrom, the corn pickers being movable upwardly and downwardly independently of the side conveyors, a central longitudinally disposed rear conveyor arranged to discharge at the rear of the machine and means for transferring the ears of corn from the side conveyors to the rear conveyor.

1,806,625. HOLDDOWN SLEEVE FOR EXPANSIVE REAMERS. JOHN GRANT, Los Angeles, Calif. Filed Mar. 7, 1930. Serial No. 434,020. 7 Claims. (Cl. 255—75.)



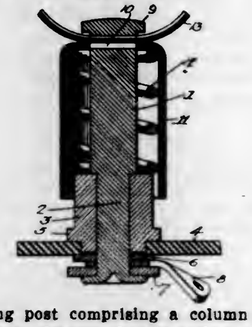
1. In combination with an expansive reamer which embodies an internal cutter expanding mandrel, cutters surrounding the mandrel and movable longitudinally thereon, and a body confining the cutters about the mandrel, the mandrel and cutters being so formed that relative longitudinal movement between them in one direction causes outward expansive movement of the cutters; a removable sleeve fitting around the mandrel and bearing against the cutters longitudinally to prevent longitudinal expansive movement.

1,806,626. MACHINE FOR FINISHING THE SHANKS OF SHOES. EDWARD F. HODGKINS, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 21, 1923. Serial No. 640,490. 5 Claims. (Cl. 51—197.)



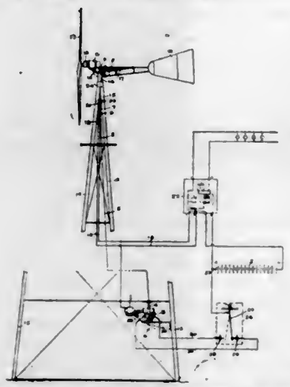
1. A machine for buffing the shanks of shoes having high heels with overhanging breasts, comprising a rotary buffing tool having a radial working face, supporting means for said tool, and driving means for said tool including a shaft extending in a line normal to the plane of rotation of said tool, the shaft of said driving means being offset from the axis of the tool to avoid interference with the overhang of the heel breast when the tool is in operation upon the shank and in proximity to the heel breast, and said tool extending radially beyond said supporting means.

1,806,627. BINDING POST. WALTER E. HOLLAND, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 3, 1929. Serial No. 375,849. 2 Claims. (Cl. 173—259.)



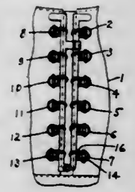
1. A binding post comprising a column of conducting material having a lower reduced portion and at its upper end a passage adapted for reception of a wire conductor, at least one end of said passage terminating in the side of the column, means for mounting the column in a supporting structure including a collar closing embracing the reduced lower portion of the column and adapted at its lower end to engage the said supporting structure, the lower end of said column projecting below the collar and the supporting structure and being adapted to be expanded to thereby secure the column in the structure, a spring surrounding the upper end of the column and seated upon the top of said collar, and a sleeve also surrounding the column and having a part at the top closely embracing the column and forming an abutment for the upper end of the spring whereby the spring is adapted to resiliently retain the sleeve against a wire conductor inserted in said passage to clamp the conductor in the column.

1,806,628. AIR MOTOR ELECTRIC GENERATING AND STORAGE SYSTEM. FRED L. HUNT, Mishawaka, Ind., assignor to Perkins Corporation, South Bend, Ind., a Corporation of Indiana. Filed May 24, 1926. Serial No. 111,226. 1 Claim. (Cl. 200—164.)



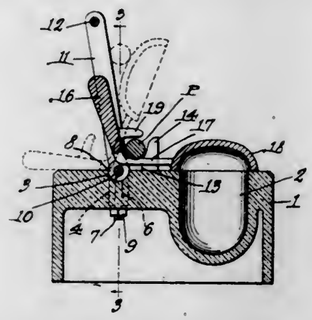
An automatic regulator system in which a small capacity high speed motor has its speed reduced approximately four thousand times for operating the vane of an air motor generating set, which system comprises an inner notched disk rotatable at a slow speed, an open ended casing surrounding the disk, electric contacts for the disk supported by the casing, a cover having a central opening, and an outer disk of substantially the same diameter rotatable with the inner disk the periphery of the outer disk closing the opening in the cover and serving to control the stopping and starting of the air motor generating set.

1,806,629. SHOE CLASP. FRED M. KEIRNAN, Edgewater, N. J. Filed Mar. 12, 1930. Serial No. 435,168. 3 Claims. (Cl. 24—73.)



1. The combination with a shoe provided with two rows of oppositely arranged eyelets and two bars, one end of each being pivoted to the other, of a multiple of looped resilient means formed to engage with and be held in said eyelets, said loops extending through the said eyelets and engaging with the said pivoted bars.

1,806,630. COMBINED INKSTAND AND PENRACK. STEPHEN KELTONIK, Conemaugh, Pa. Filed May 21, 1930. Serial No. 454,325. 4 Claims. (Cl. 120—5.)

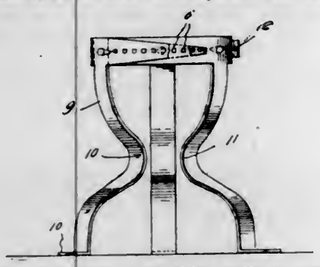


1. An ink stand including a block having a recess, a transverse channel, and grooves communicating with the channel, a structure seated at its lower ends in the grooves and having a portion forming a pen rack, a pivot member seated in the channel and connecting the sides of the structure for holding the lower ends of said structure in the grooves, a lid pivotally connected to said pivot member, a counterbalance carried thereby, and a lifting element extending from the counterbalance for overhanging a pen holder on the rack when the lid is closed.

1,806,631. FRUIT HOLDER. MARTHA LASHER, Miami, Fla. Filed June 23, 1930. Serial No. 463,329. 1 Claim. (Cl. 65—22.)

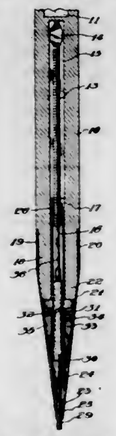
In a fruit holder of the character described, a split band, one end of the said band being tapered to a point, the opposite end portion of the band being formed with a plurality of longitudinally spaced openings into one of which the pointed end portion of the tapered end of the band may be bent for clamping the band to the fruit, prongs pro-

jecting inwardly from the inner face of the band, and leg members constructed of spring material and adapted to support the band at their upper ends, the intermediate



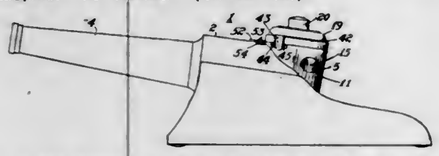
portions of each leg being curved inwardly to provide knees, the lower end portions of each leg being bent outwardly to provide a supporting foot.

1,806,632. PENCIL. JOHN P. LYNN, Chicago, Ill., assignor to Dur-O-Lite Pencil Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1929. Serial No. 379,658. 17 Claims. (Cl. 120—18.)



1. A pencil comprising a body portion and a relatively rotatable tip portion, a lead carrier threadedly mounted on said tip portion and having a limited movement thereon, and lead propelling means co-operating with said body portion and said lead carrier and adapted to be actuated by relative movement between said body and tip portions and to effect said limited movement.

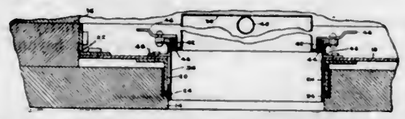
1,806,633. TOY GAS CANNON. JOHN W. MACDONALD, Wilkinsburg, Pa. Filed Jan. 28, 1930. Serial No. 423,939. 14 Claims. (Cl. 42—55.)



1. A gas cannon comprising a chamber in which gas may be exploded, a turnable hollow breech block having a water basin integral therewith, a source of gas liberating material mounted on the turnable breech block, a measuring device for admitting measured quantities of gas liberating material to the water basin, and means for operating the measuring device in response to a turning movement of the turnable chamber.

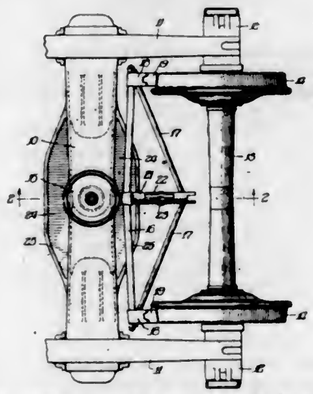
11. As an article of manufacture, a hollow tapered turnable breech block forming a combined water chamber or reservoir and a gas generating chamber.

1,806,634. DISPLAY DEVICE FOR BUILDINGS. GOTTLIEB R. MAGNEY, WILBUR H. TUSLER, and LEON E. ARNAL, Minneapolis, Minn., assignors to W. B. Foshay Co., Minneapolis, Minn. Filed Feb. 1, 1929. Serial No. 336,673. 3 Claims. (Cl. 40—130.)



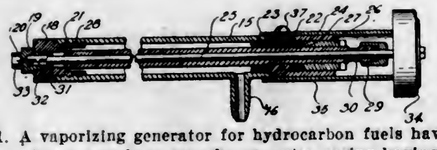
1. A display device for buildings comprising outside walls having openings forming a design, the portion of the wall occupied by said openings being of reduced thickness on the inside to form a surrounding ledge, a plate of sheet metal having openings corresponding to said first openings, outwardly projecting flanges on said plate surrounding said second openings and extending into said first openings, a frame fitting into the space formed by said surrounding ledge and engaging the inside of the margin of said plate, and lights disposed inside the building for illuminating said openings.

1,806,635. BRAKE BEAM SAFETY DEVICE. PAUL J. MCCULLOUGH, St. Louis, Mo., assignor to Scullin Steel Co., St. Louis, Mo., a Corporation of Delaware. Filed May 2, 1929. Serial No. 359,742. 8 Claims. (Cl. 105—230.)



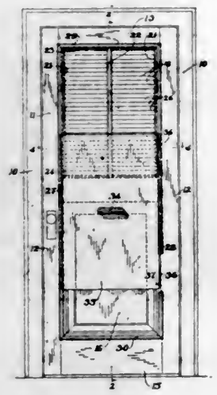
1. A car truck including a bolster and a supported brake beam, and a bracket outwardly extending from the truck bolster and rigid therewith beneath the brake beam and serving as a safety device.

1,806,636. THERMOSTATIC CUT-OFF. JOHN E. MCCUTCHEN, Wichita, Kans., assignor to Coleman Lamp and Stove Co., Wichita, Kans., a Corporation of Kansas. Filed Sept. 6, 1927. Serial No. 217,559. 2 Claims. (Cl. 158—42.4.)



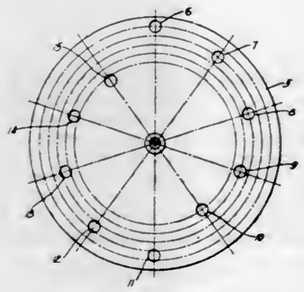
1. A vaporizing generator for hydrocarbon fuels having two primary members, namely, an outer casing having an inlet and an outlet, and a hollow valve stem longitudinally disposed within the outer casing having a valve for closing off the outlet, the primary members differing one from the other in rate of expansion and contraction at varying temperatures so that the valve will close off the outlet at low temperature and open it at high temperature and a manually operable valve stem within the hollow valve stem having a valve at one end to vary the effective port area of a constricted discharge opening in the outer casing.

1,806,637. LOUVER DOOR. ARTHUR MCGAVIC, Kansas City, Mo., assignor to Nathan Paine, Miami Beach, Fla. Filed Apr. 20, 1927. Serial No. 185,233. 4 Claims. (Cl. 20—36.)



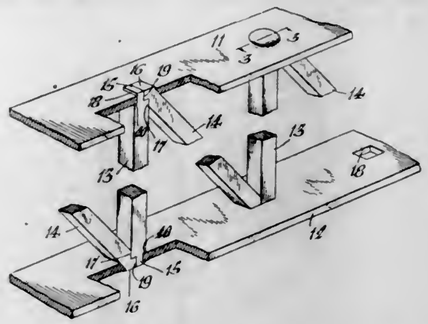
1. A louver door comprising a pair of spaced stiles, top and bottom rails joining said stiles, an intermediate rail joining said stiles and of lesser thickness than the top and bottom rails and having its inner face depressed from the plane of the inner face of the door, the inner marginal edge portions of said stiles and top and bottom rails being rabbeted at the inner face of the door substantially to the plane of the depressed inner face of said intermediate rail, a fixed panel closing the space between said stiles and the intermediate and lower rails, a fixed louver frame occupying the space between said stiles and the upper and intermediate rails, there being upright channels on the inner side of said door adjacent the rabbeted inner edge portions of said stiles, and a panel vertically slidably movable in said channels to close said louver frame when in its upper position and to expose said frame when in a lower position.

1,806,638. TELEVISION. PIERRE MERTZ, Bellerose Manor, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 24, 1928. Serial No. 295,098. 12 Claims. (Cl. 178—6.)



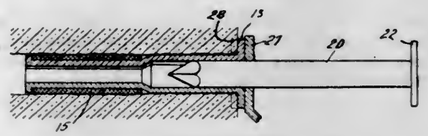
1. The method of scanning to produce image currents which comprises repeatedly scanning the entire area of a field of view and causing each scanning line of the entire path of one complete scanning to partially overlap two scanning lines of a preceding one.

1,806,639. TRUSS. LOUIS B. MOLTZAN, Buffalo, N. Y. Filed Dec. 13, 1929. Serial No. 413,723. 9 Claims. (Cl. 189—37.)



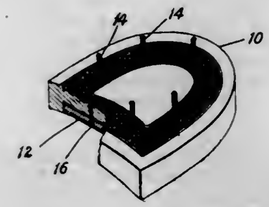
1. A building truss, comprising top and bottom members having openings therein, upright members disposed between said top and bottom members, and diagonal members extending from one upright member to an adjoining one, the ends of said upright members and said diagonal members terminating in attaching shanks jointly engaging the corresponding openings in said top and bottom members and upset at their outer ends against the latter.

1,806,640. EXPANSION SHIELD. RALPH E. OGDEN, Lawrence, N. Y., assignor, by mesne assignments, to J. Edward Ogden Company, New York, N. Y., a Corporation of New Jersey. Substitute for application Serial No. 720,757, filed June 18, 1924. This application filed June 12, 1926. Serial No. 115,494. 24 Claims. (Cl. 85—2.4.)



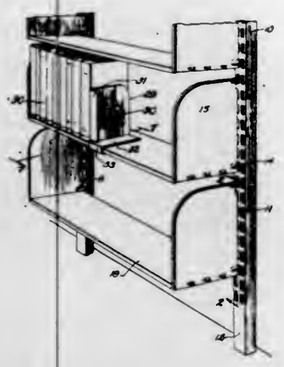
24. In combination, a sheet metal expansion shield, a band of relatively soft metal supported on the expansible portion of said shield by encircling the same, and a hammer driven expander adapted to expand the shield and the metal band.

1,806,641. LOADED RUBBER HEEL. GAYNOR O'GORMAN, Boston, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Dec. 31, 1924, Serial No. 759,093. Divided and this application filed Jan. 10, 1927. Serial No. 160,206. 4 Claims. (Cl. 36—35.)



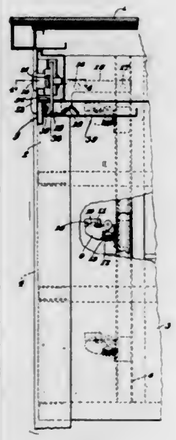
1. A loaded rubber heel having a penetratable nail-anchoring element, the nails with which the heel is loaded penetrating said element and being held thereby rigidly in predetermined relation to each other.

1,806,642. BOOKSTACK. ENOCH OHNSTRAND, Kenmore, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 19, 1927. Serial No. 184,924. 4 Claims. (Cl. 211—136.)



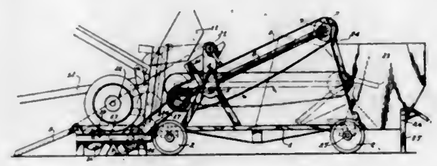
1. In a book stack, a plurality of standards adapted to be secured in substantially vertical position, a plurality of shelf ends secured along one edge to said standards so that said shelf ends lie in a substantially vertical plane, a shelf extending between a pair of adjacent shelf ends, a downwardly extending flange formed at each end of said shelf, said flange being provided with a series of apertures, and a series of offset tongues formed along the bottom edge of each shelf end, said tongues being adapted to enter said apertures and lock said shelf to said shelf ends, said tongues forming the means for securing said shelf to said shelf ends.

1,806,643. DESK DRAWER LOCK. ENOCH OHNSTRAND, Kenmore, N. Y., assignor to Remington Rand Inc., New York, N. Y. Filed Nov. 15, 1927. Serial No. 233,431. 11 Claims. (Cl. 45—94.)



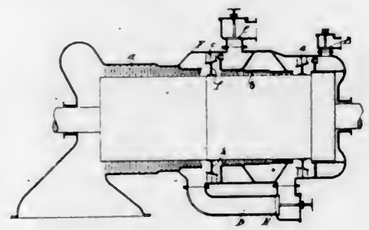
1. In a desk drawer lock, the combination with a desk having a plurality of drawers arranged in a pedestal, and a center drawer adjacent said pedestal, of a locking bar mounted in said pedestal for vertical sliding movement, cooperating means on said pedestal drawers and said locking bar adapted for locking engagement in one position of said bar to lock said pedestal drawers in closed position, an operating member for said locking bar extending under said center drawer, a locking member movably mounted in the center drawer, manually operable means connected to said locking member, and a lock mechanism for retaining said locking member in drawer locking position, said locking member being formed for engagement with a portion of the desk for locking the center drawer, and having a projection for moving said operating member and locking bar into locking position.

1,806,644. PORTABLE MATERIAL RECEIVING MEANS. HUGH P. PARIS, Oakland, Calif. Filed June 22, 1929. Serial No. 372,970. 6 Claims. (Cl. 214—44.)



1. A device of the class described comprising a main body portion affording a vehicle, an elevating conveyer carried thereby, a power receiving unit pivotally connected at one end of the vehicle to support and receive power from the driven wheels of a material transporting vehicle when in material dumping position, a connection between the power unit and the conveyer, a hopper hingedly connected at the opposite end of the vehicle to receive material from said conveyer, said power receiving unit and hopper capable of folding upon the opposite ends of the vehicle when not in use.

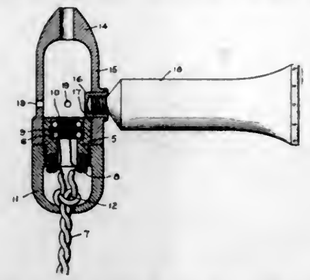
1,806,645. ELASTIC FLUID TURBINE. CHARLES ALGERNON PARSONS, Newcastle-on-Tyne, England, and ERNEST HENRY BUCHANAN ANDERSON, New York, N. Y.; said Anderson assignor to said Parsons. Filed Oct. 12, 1927, Serial No. 225,727, and in Great Britain Nov. 18, 1926. 4 Claims. (Cl. 60—43.)



1. An elastic-fluid turbine unit comprising in combination a rotor; a stator casing surrounding said rotor to provide a continuous annular passage available for flow of motive fluid and disposed in said passage in the sequence set forth, cruising impulse and reaction blading and main impulse and reaction blading; and means for by-passing motive fluid from a point of said passage between said cruising impulse and reaction blading to a point of said passage between said main impulse and reaction blading.

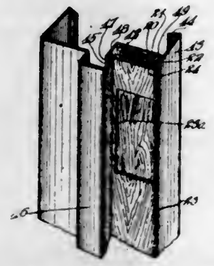
1,806,646. ELECTRICAL VAPORIZER. JOSEPH ROBINSON, New York, N. Y., assignor of one-fourth to Roy M. Wolvin, New York, N. Y. Filed May 25, 1927. Serial No. 194,180. 5 Claims. (Cl. 128—192.)

1. A device for generating vapors for inhalation, comprising in combination, a nozzle through which the vapors pass, said nozzle being provided with a chamber, an electric heating element extending into said chamber, a container having communication with said chamber and containing a compound, and means for delivering from the container to said chamber and into contact with said



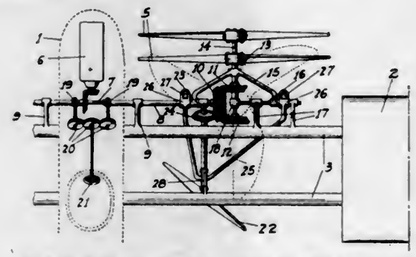
heating element a predetermined amount of said compound, said chamber being provided with vents through which drafts of air enter to carry the vapors of said compound upwardly through said nozzle on inhalation.

1,806,647. METALLIC DOORFRAME. EDWARD E. ROSS, Cicero, Ill. Filed Dec. 4, 1929. Serial No. 411,550. 4 Claims. (Cl. 72—98.)



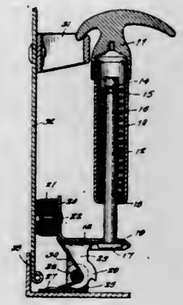
1. A jamb facing comprising a column having sides and a front, an offset portion of the front constituting a door stop, a recessed section extending away from said door stop an defining a pocket having a key, and a facing member lodged in the pocket and locked by the key.

1,806,648. AIRPLANE. HERVEY M. SALISBURY, Walnut Grove, and ARTHUR E. MILLER, Sacramento, Calif. Filed Sept. 14, 1929. Serial No. 392,558. 6 Claims. (Cl. 244—15.)



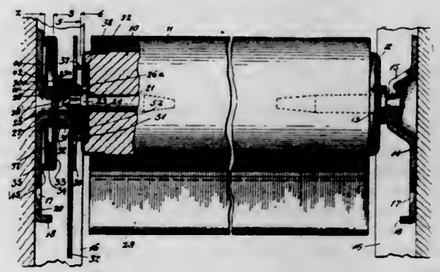
1. An airplane including a fuselage, wings disposed to the sides of the fuselage in transversely spaced relation thereto, tractor propellers mounted in the transverse planes of the spaces between the wings and fuselage, pusher propellers mounted independently of the tractor propellers and disposed in said planes rearwardly of the tractor propellers, means for turning the tractor propeller from horizontal to vertical positions at will, and selectively controlled means for causing the pusher propeller to turn with the tractor propellers or to remain relatively stationary.

1,806,649. HOOD CATCH. FRANK P. SARGENT, Stratford, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 25, 1927 Serial No. 215,291. 1 Claim. (Cl. 292—114.)



In a hood catch, a hold down clamp, a keeper adapted to be engaged by said clamp, a support for said clamp comprising a base and a transverse hinge pin connecting said base and clamp and permitting relative inward and outward movement of said clamp toward and away from the hood, and a spring coiled about said pin bearing upon said clamp and adapted to yieldingly press the same away from the hood in its disengaged relation.

1,806,650. SHADE ROLLER. CHARLES F. SCHMELZ, Bridgeport, Conn., assignor to Stay-Put Shade Roller Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Oct. 4, 1929. Serial No. 397,347. 11 Claims. (Cl. 156—28.)

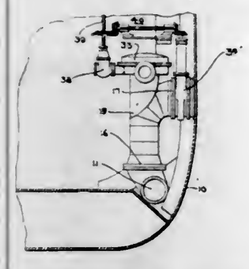


4. In a device of the character described having a shade roller, a shade-raising unit mounted on a support for detachably supporting and operating said roller and including a spool upon which a cord is wound so that the unwinding of the cord causes the shade to be raised by being wound upon the roller, a clutch between said spool and the roller for causing the spool and roller to rotate in unison in both directions, and means for frictionally holding the cord spool and shade roller against a tendency to rotate in a direction which causes lowering of the shade.

1,806,651. MARINE PUMPING SYSTEM. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 29, 1930. Serial No. 440,970. 3 Claims. (Cl. 114—183.)

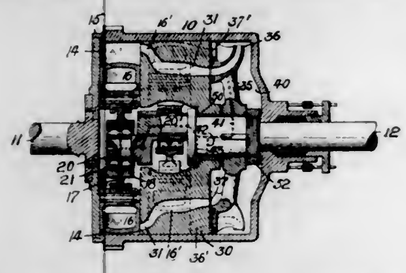
3. The combination with a ship, of emergency apparatus for removing water from the ship to prolong or maintain its buoyancy when in danger of sinking comprising at least one propeller pump including a housing having its

inlet opening into the bottom region of the ship, a shaft arranged coaxially of the housing, and a propeller in the housing and connected to said shaft; a prime mover for



driving the shaft, a support carried by the housing for supporting the prime mover; and a conduit connecting the housing outlet with the exterior of the ship.

1,806,652. AUTOMATIC ACCELERATOR. ELMER A. SPERRY, Brooklyn, N. Y., assignor to Sperry Development Company, Dover, Del., a Corporation of Delaware. Filed July 25, 1925. Serial No. 45,996. 12 Claims. (Cl. 60—54.)

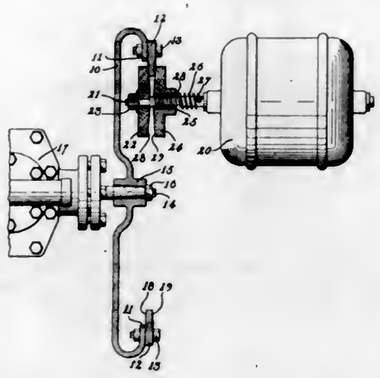


1. In an accelerator for automotive vehicles, in combination, a driving member, a driven member, means whereby said driving member transmits torques directly to said driven member, means for utilizing the action of said driving member on said driven member to generate hydraulic pressures, valve mechanism for said pressure-producing means, there being rubbing surfaces between said mechanism and said pressure-producing means, and means whereby the torques generated by said rubbing surfaces are transmitted to said driven member in the same direction as, and in addition to, the torques transmitted directly thereto by said driving member.

6. In combination, a vehicle having a driving element, a driven element, a straight-through connection between said elements, a connection including an accelerator between said elements, means for automatically shifting from the accelerator connection to the straight-through connection when the speed of the driven element is measurably equal to the speed of the driving element, and means for rendering said first means ineffective when the vehicle is operated in reverse.

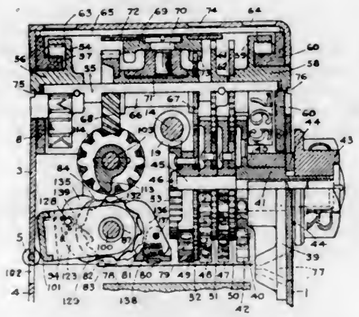
1,806,653. POWER TRANSMITTING DEVICE. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1928. Serial No. 257,301. 3 Claims. (Cl. 74—26.)

1. In a frictional power transmitter a driving member and a driven member having their shafts extending in the same longitudinal direction, one of said members comprising a pulley having cheeks bearing opposedly facing frictional surfaces, a shaft for said pulley, one of said cheeks being axially displaceable with respect to the other, the other of said members including a friction annulus encircling said pulley and attached to the driven member in power transmitting relation, external threads on the pulley shaft, an internally threaded sleeve engaging with said threads and carrying said axially displaceable cheek,



said threads being arranged to advance said cheek into clamping frictional power transmitting engagement with said annulus, and a spring attached to said cheek and said shaft to urge the displacement of said cheek through agency of said threads.

1,806,654. TICKET ISSUING MACHINE. ERNEST CLAYTON TILLY, Montpelier, Bristol, and HENRY MATTINSON, Disley, England. Filed Apr. 5, 1928, Serial No. 267,704, and in Great Britain Apr. 25, 1927. 13 Claims. (Cl. 235—31.)

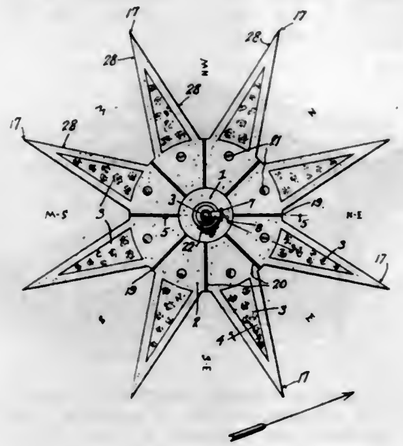


1. A ticket issuing machine comprising setting means for bringing marking elements into position to correctly mark the ticket to be issued, operating means for effecting the actual marking of the ticket, a plurality of counting units, rocking elements actuated by said operating means, pawls mounted on said rocking elements and arranged to actuate said counting units, and cams adapted to coact with the pawls to prevent certain of them from driving the counting units when the rocking element is moved, the cams being moved from the setting means in order to determine which of the pawls shall be prevented from driving.

1,806,655. MOORING MAST. PHILIP C. TRAVER, Lynbrook, N. Y., assignor to Jamaica Sea Airport, Jamaica, N. Y. Filed Jan. 27, 1930. Serial No. 423,832. 7 Claims. (Cl. 244—2.)

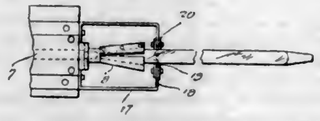
1. A mooring mast of the character described comprising a circular base upon which the mast is centrally

mounted, said base having a series of radiating anchor receiving tunnels opening at its periphery, and radially



extending guide fingers extending from the peripheral wall of the base at opposite sides of the outer ends of the tunnels and adapted to direct an anchor thereinto.

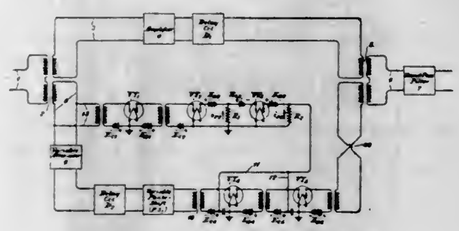
1,806,656. STAKE SHARPENER. NICHOLAS A. WARD, Auburn, Wash. Filed Mar. 10, 1930. Serial No. 434,780. 1 Claim. (Cl. 144—30.)



A rotating stake sharpener of the class described, comprising a hollow conical head having a side opening therein and a cutting blade mounted along one side of said opening and projecting into the hollow, a shank portion at the small end of said head, having a drive shaft receiving recess in its end and an annular bearing flange formed to project at right angles at the end of said shank portion, a driven shaft in said recess, a casing rotatably mounting said drive shaft, a U-shaped bracket forming a work support having inwardly turned flanges bolted to said casing at a point below the shaft, said bracket being so formed as to project outwardly and upwardly to a point where its bight is in alinement with said shaft, a stake receiving notch in the bight portion of said bracket to prevent rotation of the stake, and rectangular stake adjusting plates having longitudinal slots, adjusting bolts passing through said slots and through the bight portion, whereby said slots may be adjusted for various sizes of stakes, said stakes being guided through said notch into said sharpener in axial alinement therewith.

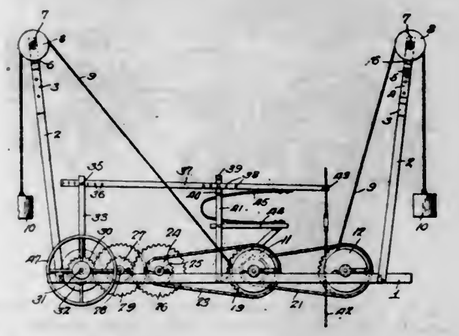
1,806,657. POWER LIMITING APPARATUS. WILLIAM T. WINTRINGHAM, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 14, 1929. Serial No. 363,072. 8 Claims. (Cl. 179—171.)

7. A voltage limiting apparatus comprising two branch circuits having their outputs connected in opposing relation to an outgoing circuit in which the voltage is to be limited, one of said branch circuits including an amplifier having the same gain for waves of all amplitude applied to the system, an amplifier in the second branch, and means associated with said second amplifier and responsive



to applied waves to render the gain of said second amplifier high when the voltage applied thereto is high, and low when the voltage applied thereto is low.

1,806,658. PUMP. WILLIAM H. ZORN, Harrisburg, Nebr. Filed June 23, 1930. Serial No. 463,314. 2 Claims. (Cl. 185—27.)

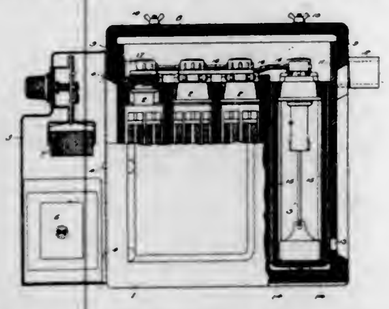


1. In a device of the class described, a frame, first shafts journaled on the frame, a third shaft journaled on the frame, a fourth shaft journaled on the frame between the third shaft and one of the first shafts, a fifth shaft journaled on the frame between the fourth shaft and said one of the first shafts, all of the shafts being arranged in parallel relation, a chain and sprocket connection between the first shafts, a chain and sprocket connection between said one of the first shafts and the fifth shaft, intermeshing gears on the fifth and fourth shafts, intermeshing gears on the fourth and third shafts, drums on the first shafts, flexible elements wound about the drums, weights carried by the flexible elements, means for guiding the flexible elements intermediate their ends, a walking beam, means for fulcruming the walking beam intermediate its ends, a crank on the third shaft, a pitman pivoted to the crank and to one end of the walking beam, and means for connecting the opposite end of the walking beam with machinery to be driven.

1,806,659. POWER UNIT DEVICE. JOHN O. ARCHIBALD, Lancaster, N. Y. Filed Dec. 13, 1926. Serial No. 154,561. 4 Claims. (Cl. 175—315.)

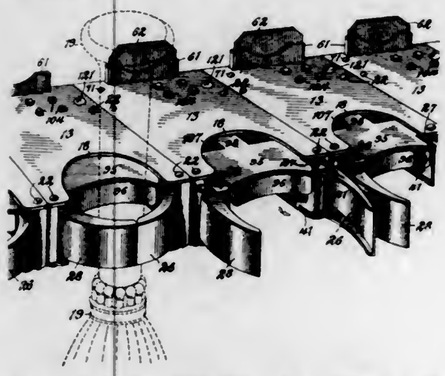
4. In an electrical power assembly including a casing containing apparatus from which gases are evolved

during the operation, the casing being provided with a vent opening in one side near its top and having a



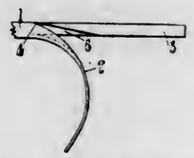
portion of its bottom upwardly offset throughout its length to define a passage, said upwardly offset portion having air inlet openings therein.

1,806,660. UMBRELLA LOCK. JOHN CLAYTON BACKUS, Smethport, Pa. Filed Oct. 28, 1929. Serial No. 402,964. 23 Claims. (Cl. 70—14.)



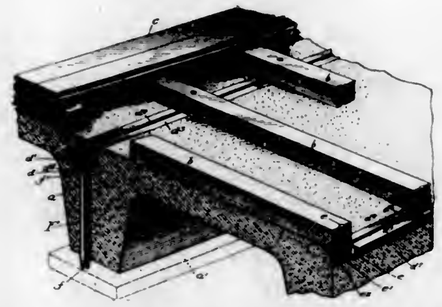
1. In a lock, the combination of a casing, a section movable into and out of the casing, jaws pivoted to the movable section, means for opening the jaws as the movable section is moved out, and means for closing the jaws as the movable section moves in.

1,806,661. METHOD OF AND MEANS FOR PRODUCING SOLES OF OR FOR BOOTS AND SHOES. CHARLES MARTIN BAGSHAW, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Aug. 31, 1927, Serial No. 216,708, and in Great Britain Sept. 16, 1926. Divided and this application filed July 11, 1928. Serial No. 291,880. 24 Claims. (Cl. 21—31.5.)



1. An apparatus for producing an apron on a shoe sole comprising a support for the heel end of the sole, means to deform said heel end, and an apron splitting knife arranged to move in a plane at an angle to the plane of the marginal portions of the sole at and adjacent to the heel breast line.

1,806,662. METALLIC INSERT FOR CONCRETE STRUCTURES. FRANCIS M. BARTON, Chicago, Ill., assignor, by mesne assignments, to Scott-Weiss Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 7, 1928, Serial No. 245,084. Renewed Apr. 3, 1931. 7 Claims. (Cl. 72—101.)



1. An insert for concrete structures formed of sheet metal and comprising a pair of oppositely facing side walls complementally corrugated to form sockets for attaching devices, the crown portions of the sides between the sockets being arranged in abutting relation.

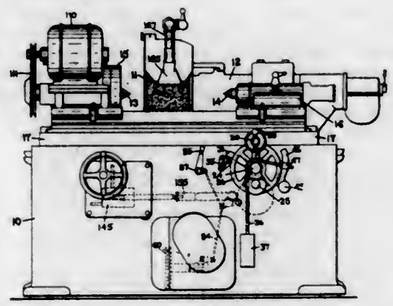
1,806,663. BASE EXCHANGE MATERIAL AND PROCESS OF MAKING SAME. ABRAHAM S. BEHRMAN, Chicago, Ill., assignor, by mesne assignments, to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 21, 1924. Serial No. 700,822. 18 Claims. (Cl. 23—113.)

1. The process of producing a metallo-silicate which comprises mixing a solution of an alkali metal silicate, an acid and a solution of a non-alkaline compound of an amphoteric hydroxide in such volume proportions and concentration as to form a gel embracing substantially the entire volume of the mixture.

13. A process of preparing a high silica base exchange silicate which comprises reacting an alkali metal silicate, an amphoteric metal salt and an acid stronger than silicic acid.

18. The process of improving base exchange materials which comprises reacting the ingredients to form a base exchange material and introducing a sufficient amount of an acid to neutralize substantially all of the free alkali present.

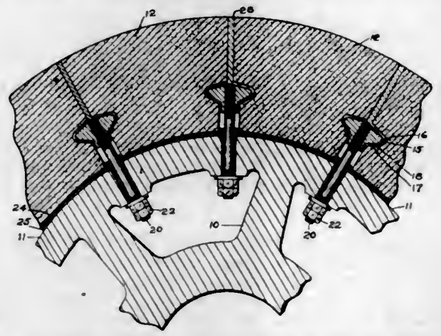
1,806,664. GRINDING MACHINE. ALBERT G. BELDEN and CHARLES G. TREFETHEN, Worcester, Mass., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 19, 1926. Serial No. 89,458. 11 Claims. (Cl. 51—95.)



1. A cylindrical grinding machine comprising a base, a rotatable grinding wheel and a work support which are

movable relatively toward and from each other, a cross feed screw and nut connected to cause such movement, a power actuated mechanism including a cam and a follower operatively connected to rotate the feed screw in both directions through a predetermined angular distance and at a varying rate and means operated in timed relation with said power actuated mechanism to stop the same after the grinding wheel has finished its cutting operation.

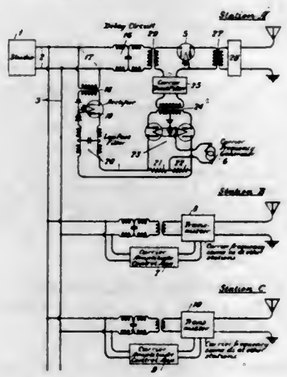
1,806,665. SEGMENTAL GRINDING WHEEL AND METHOD OF MAKING THE SAME. HUGO W. H. BETH, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 21, 1928. Serial No. 327,620. 8 Claims. (Cl. 51—207.)



1. The method of making a grinding wheel having abrasive segments adjustably clamped on a rotatable support comprising the steps of locating the segments in an approximately correct grinding position on the support, providing a layer beneath the segments of a moldable material capable of setting to a hard body, forcing the material into full contact with the adjacent faces of the segment and the support, permitting the moldable material to harden in place and thereafter drawing the segments down firmly onto the support.

5. A grinding wheel comprising a rotatable support, a plurality of abrasive segments thereon, each segment having spaced locating shoes of compressible material thereon and a shoe molded to that portion of the support beneath on which it rests, and means for clamping the segments securely on the support.

1,806,666. RADIO BROADCASTING SYSTEM. RALPH BOWN, Maplewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 11, 1928. Serial No. 325,151. 4 Claims. (Cl. 250—17.)



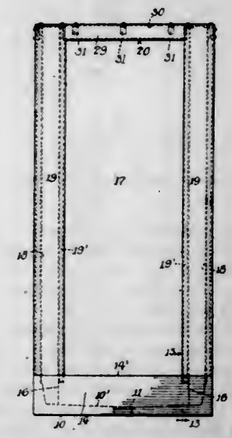
1. In a radio broadcasting system the method of simultaneously transmitting from a plurality of stations each operating on substantially the same carrier frequency a set of signals from a single source, which comprises simultaneously causing the amplitudes of the unmodulated carrier frequency components transmitted from a plurality of said stations to vary with the amplitude of said set of signals, whereby the detected beat note resulting from two slightly different carriers will be the product of two carriers each of abnormally small amplitude when the amplitude of the desired signal is small.

1,806,667. COMBINED ILLUMINATED SIGN AND WREATH SUPPORT. JOHN F. BRESLIN, Jr., Summit Hill, Pa. Filed May 13, 1930. Serial No. 452,014. 2 Claims. (Cl. 40—132.)



1. A combined illuminated sign and support for wreaths and the like, a casing open at its bottom, and including a rear wall, end walls, a front wall, a top wall and a connecting wall rising upwardly and rearwardly from the front wall and merging into said top wall for supporting an object at an inclined position, said front wall having an opening formed therein, a transparent medium normally closing said opening, and having indicia provided thereon.

1,806,668. SHOWER BATH CABINET. WILLIAM BULTHUIS, Chicago, Ill. Filed May 17, 1929. Serial No. 363,815. 14 Claims. (Cl. 72—16.)

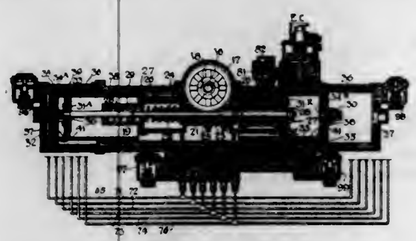


1. In a shower bath cabinet, the combination of a receptor formed with internal corner pilasters, and a sheet metal stall attached at its lower end to said receptor, and formed with internal corner reinforcements resting on said pilasters.

1,806,669. REMOTE CONTROL MECHANISM. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Jan. 29, 1929. Serial No. 335,956. 13 Claims. (Cl. 121—38.)

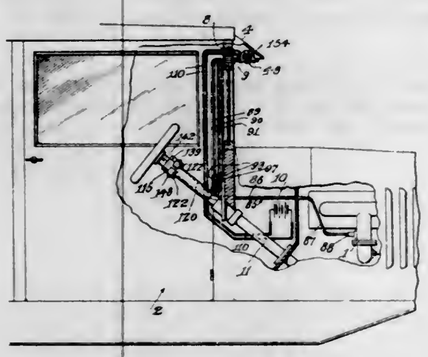
1. Means for actuating a starting gear having a starting position, a running position and a stop position, comprising in combination two expansible chamber motors;

means for connecting said motors with said gear whereby each motor may impart independently an increment of motion thereto; valve means operable selectively to admit pressure fluid to both motors, to admit it to one and exhaust the other and to exhaust both; and an exhaust valve



associated with each motor and having actuating means in the path of flow of pressure fluid to and from the motor, and arranged to be shifted in a valve closing direction by flow toward the motor and in a valve opening direction by flow from the motor.

1,806,670. SIGNALING APPARATUS FOR MOTOR VEHICLES. CARL F. CAPELL, Santa Monica, Calif., assignor of one-fourth to Herbert Cutler Brown, Los Angeles, Calif. Filed Mar. 21, 1929. Serial No. 348,852. 2 Claims. (Cl. 177—329.)

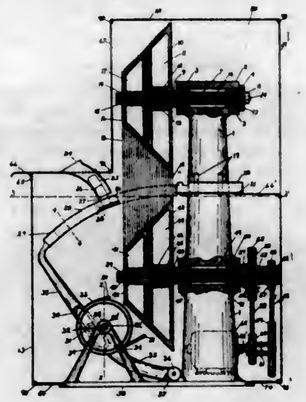


1. A signaling apparatus comprising a housing forming a suction chamber, an illuminable signaling element arranged exteriorly of one end of said chamber, a suction operated, reciprocatory rod for projecting and retracting said element with respect to said end of said chamber, a stationary abutment within the chamber and extending inwardly from said end of the latter and providing for arresting the outward movement of said rod, said rod extending through said abutment, a suction line leading to the other end of said chamber, a normally open circuit forming means for said element including circuit connections and a contact bodily carried with said rod, a contact carried by the inner end of the abutment to be engaged by said other contact to close said circuit, a ported member carried by and insulated from the housing, opening into said chamber, electrically connected to the contact on the abutment and in circuit with an electrical source, and a suction line opening into said ported member.

1,806,671. SUBSTITUTED ARYL ANTIOXIDANT. LUDWIG J. CHRISTMANN, Jersey City, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Oct. 20, 1928. Serial No. 313,972. 3 Claims. (Cl. 18—50.)

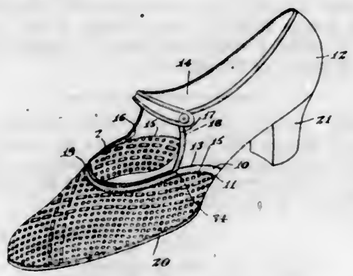
1. A rubber composition containing P-amino-M-cresol.

1,806,672. MULTIPLE-BLADED SLICING MACHINE. HARRY J. CRINER, Davenport, Iowa, assignor of one-half to A. G. Bush, Davenport, Iowa. Filed June 10, 1929. Serial No. 369,680. 7 Claims. (Cl. 146—88.)



1. A cutting or slicing machine of the type described, comprising a base, a frame united thereto, upper and lower bearings secured in the frame, a plurality of concentric drive shafts mounted in one of the bearings and a plurality of concentric idler shafts mounted in the other bearing, a stepped conical pulley secured upon the front end of each of the drive shafts and a corresponding conical pulley secured upon the front end of each of the idler shafts, a plurality of cutting or slicing bands mounted upon the conical pulleys, and means for driving the drive shafts simultaneously but at different relative speeds.

1,806,673. BOOT OR SHOE AND METHOD OF MAKING SAME. CLAUDE H. DANIELS, Newton Center, Mass. Filed Oct. 10, 1930. Serial No. 487,822. 6 Claims. (Cl. 36—3.)

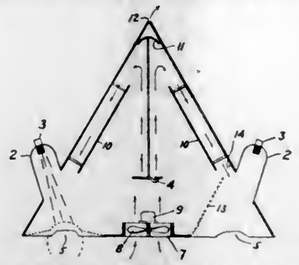


1. The improved process of shoe manufacture, which includes the steps of adhesively uniting a vamp and vamp lining, simultaneously perforating a plurality of apertures completely through both said vamp and said vamp lining, and weaving strips separate from said layers through predetermined apertures of both the vamp and the vamp lining, whereby the latter are positively held together independently of the adhesive.

1,806,674. MEDICAL CABINET FOR LIGHT RAY TREATMENT. JAMES A. DONOHUE, Philadelphia, Pa. Filed May 11, 1929. Serial No. 362,276. 3 Claims. (Cl. 174—177.)

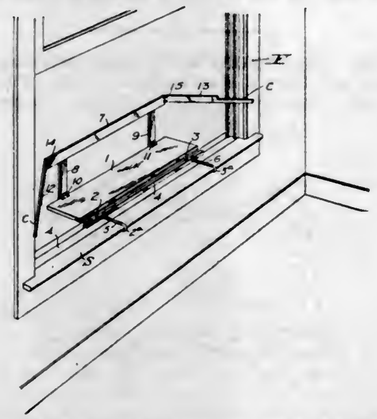
1. Apparatus for the treatment of the scalp including in combination: a cabinet having an opening therein into which a head may be inserted exposing the scalp for treatment and having an air inlet opening therein, a fan

mounted to draw cool air through said opening into said cabinet, means for conducting a steady, uniform stream of air onto the scalp being treated within said cabinet, means for controlling the amount of said air which is conducted to the head being treated, an outlet for air from said cabinet, a separate source of infra-red light located within



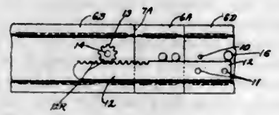
said cabinet so that the infra-red rays are thrown directly on the scalp undergoing treatment, a separate source of ultra-violet light located within said cabinet so that the scalp undergoing treatment is exposed to said ultra-violet rays, and means movable into position for shutting off the scalp undergoing treatment from said ultra-violet rays.

1,806,675. PORTABLE WINDOW SEAT. WILLIAM D. DUNN, Elizabeth, N. J., assignor to August Walter Spilner, Elizabeth, N. J. Filed Feb. 9, 1929. Serial No. 338,850. 4 Claims. (Cl. 304—24.)



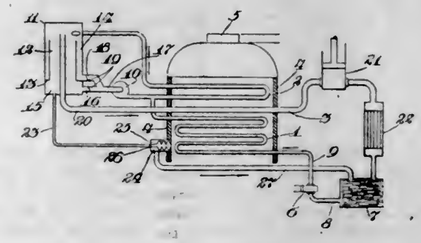
1. A portable window-seat comprising a substantially U-shaped metal frame affording seat-supporting bars each provided with hooked extremities adapted to engage an inner portion of a window frame; a seat member rigidly secured upon said seat-supporting bars; a clamp-bar slidingly fitted upon said supporting bars and adapted to rest upon an outer portion of the window frame to transmit thereto the weight of said seat and seat-supporting bars; and a coil spring surrounding each of said bars and acting upon said clamp-bar to cause it to slide on said supporting bars thereby to grip an outer portion of the window frame.

1,806,676. TIRE RIM. FRANK J. DUSEL, St. Paul, Minn. Filed Feb. 25, 1929. Serial No. 342,508. 2 Claims. (Cl. 301—32.)



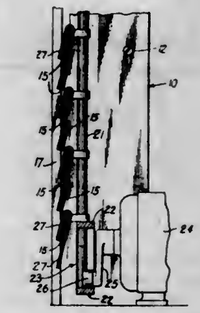
1. A collapsible tire rim comprising a plurality of hingedly connected like metal rim sections and an end section comparatively short, the free end of said short section adapted to abut the free end of the adjacent other end section, a rock bar fixed on said latter section extending past said short section and over the adjacent face of the section hinged to the short section, rotary rack engaging means on said latter section adapted to spread or close the said sections to release the short rim section as described, and means for connecting said abutting parts to each other.

1,806,677. SEMIFLASH BOILER. CHARLES A. FRENCH, Riverside, Ill. Filed Feb. 21, 1930. Serial No. 430,199. 6 Claims. (Cl. 122—235.)



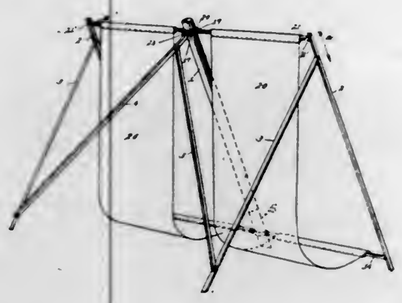
1. In a steam generating system, water storage means, a vaporizing coil communicating with the storage means, means for circulating water from the storage means through the vaporizing coil, and means adapted to automatically remove the major portion of the water from said storage means at a predetermined temperature.

1,806,678. CHANGEABLE EXHIBITOR. EUGENE FARKAS, New York, N. Y. Filed Jan. 30, 1931. Serial No. 512,861. 7 Claims. (Cl. 40—62.)



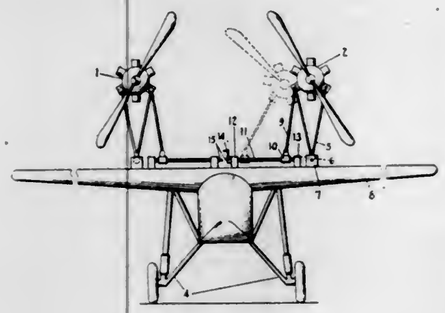
1. In a changeable exhibitor having stationary and relatively slidable display members, the combination with upright frame members having angular extensions, a plurality of stationary display members detachably mounted on said extensions, said display members being positioned relative to each other in series, in parallel planes, in angular relation with the vertical plane, the adjoining ends of any two display members being in the same horizontal plane and presenting the component parts of the display as an unbroken unit, and a plurality of cooperating display members slidable relative to and alternately covering said stationary display members and forming a changeable exhibit.

1,806,679. **BEACH CHAIR.** CARL GILMORE, Oakland, Calif. Filed Sept. 18, 1928. Serial No. 306,647. 8 Claims. (Cl. 155—154.)



1. In a beach chair of the character described, a central support and a pair of side supports disposed in lateral spaced relation, rear supports having their upper ends pivotally secured to upper end portions of said side supports, and diagonal braces connecting the lower end portions of said rear supports and said central support together.

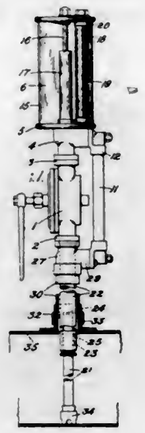
1,806,680. **ADJUSTABLE ENGINE FOR AIRCRAFT.** THOMAS F. HAMILTON, Milwaukee, Wis., assignor to The Hamilton Standard Propeller Corporation, West Homestead, Pa., a Corporation of Pennsylvania. Filed Jan. 5, 1929. Serial No. 330,573. 5 Claims. (Cl. 244—14.)



3. In an aircraft, an engine, means for pivotally supporting said engine in operative position on an axis lengthwise of the craft, and constantly-rigid movable means for rocking said engine about said pivotal support whereby the engine may be moved laterally with reference to the craft without interruption of its operation.

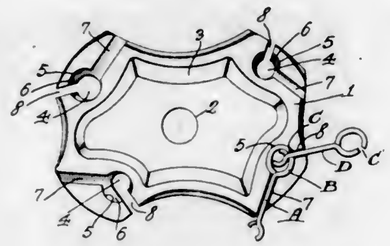
1,806,681. **MEANS FOR CLEANING LIQUID STORAGE TANKS AND THE LIKE.** FRANK HAMMOND, Park Royal, England. Filed July 11, 1929, Serial No. 377,586, and in Great Britain Oct. 15, 1928. 4 Claims. (Cl. 210—207.)

1. For removing impurities from liquid stored in tanks, a self-contained cleaning device comprising pump means, a suction pipe connected to the pump suction and adapted to be inserted into a tank, a separating vessel to separate impurities from the liquid withdrawn from the tank, a connection between the inlet to said vessel and the pump discharge, a return pipe from the outlet from said vessel adapted to be connected to the tank, the suction and return



pipes being arranged one within the other, and sealing means on the outer of said pipes for making a tight connection with the tank to form a completely closed system.

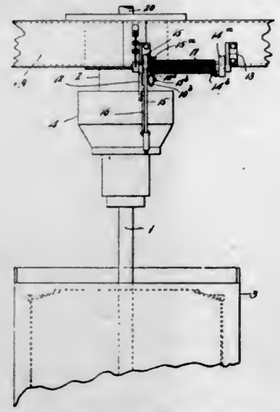
1,806,682. **CHAIN REPAIRING TOOL.** MATTHEW MAYS HEINY and IRVIN R. SMITH, Haxtun, Colo. Filed Aug. 27, 1930. Serial No. 478,238. 4 Claims. (Cl. 59—7.)



1. A tool of the class described including a block having a bore therein provided with a counterbore and a groove in communication with the counterbore, said counterbore and groove being adapted to receive one end portion of a link and support it on edge, there being a slot extending into the block and communicated with the bore and counterbore for receiving a second link when displaced downwardly relative to the first named link.

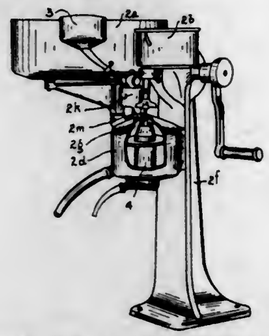
1,806,683. **BRAKE MECHANISM FOR CENTRIFUGAL MACHINES.** EUGENE ROBERTS, New York, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah, a Corporation of Utah. Filed June 15, 1927. Serial No. 199,101. 10 Claims. (Cl. 188—166.)

1. A brake mechanism for a gyratory suspended centrifugal machine spindle, embracing in combination with a brake pulley fast on the gyratory spindle of interiorly disposed pivotal brake shoe members, brake expanding toggle members, a rotatable expanding member also located inside said brake pulley and having connection with the brake shoe members through said toggles, releasable self-acting means for rotating said toggle-expanding member to extend the toggles to brake-setting position before the toggles reach a position of dead centre, said actuating means be-



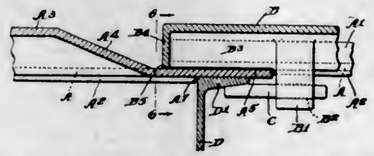
ing provided with adjustment to produce and maintain the desired amount of pressure of the brake shoes against the pulley.

1,806,684. **MIXER.** FERNAND HENRARD, Brussels, Belgium. Filed Oct. 4, 1929. Serial No. 397,281. 5 Claims. (Cl. 259—95.)



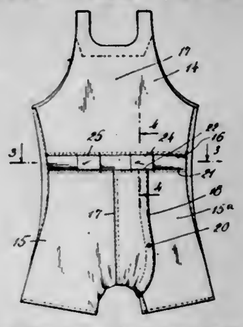
1. In a mixer of the kind described, a support; a fatty substance container thereon; a whey container also carried by the support; a distributor communicating with the containers; a casing below the distributor and having an open top; a mixing sleeve within the casing and having a truncated conical upper open end confronting the open top of said casing; blades within the truncated conical upper end; a spout leading from the distributor to said truncated conical upper end; and means passed through the open top of the casing and connected with the sleeve to rotate the same.

1,806,685. **CAP TILE AND TILE ROOF.** EDWARD HERING, Beverly, N. J., assignor to United States Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Mar. 23, 1929. Serial No. 349,804. 2 Claims. (Cl. 108—10.)



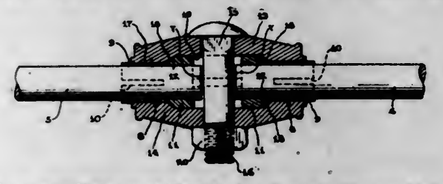
1. A tile roof comprising in combination parallel beams upon which the tiles are supported, tiles having upwardly extending lateral flanges and an upwardly extending centrally located hood arranged in parallel rows with the tiles of each row in staggered relation to those of the other rows with their upper ends resting on the roof beams and their lower ends resting on the upper ends of a lower row of tiles with their hoods extending over the lateral flanges of two adjacent tiles said tiles in each row being spaced from each other, cap tiles extending over the lateral flanges of adjacent tiles of each row and into the hood of tiles in an upper row, said cap tiles having near their lower ends downwardly extending lugs of such length that they extend below the top of the tile supporting beam and means for firmly securing said lugs to the beams.

1,806,686. **GARMENT.** ROBERT E. HEYN, South Orange, N. J., assignor to The B. V. D. Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 8, 1930. Serial No. 479,493. 1 Claim. (Cl. 2—78.)



A garment of the union suit type which comprises a back made up of a top portion and a bottom portion connected by a yieldable insert of knitted elastic fabric in which the wales extend horizontally, said insert extending across the back between the top and bottom portion, said bottom having a crotch opening defined by portions normally overlapping at their edges, said opening terminating at the lower edge of the insert at one side of the median line of the back and substantially in the zone of strain extending from the crotch diagonally to one of the shoulders of the garment, a fabric reinforcement comprising elastic knitted fabric with the wales extending horizontally and having the side edges folded between the reinforcement and the garment, said reinforcement extending in vertical alignment with the end of said crotch opening, stitching connecting the upper edge of the insert and the upper edge of the reinforcement to the top portion of the back and the lower edge of the reinforcement and insert to the bottom portion of the back, affording an additional thickness of material at the place of stitching, and a second fabric reinforcement symmetrically located with respect to said first reinforcement on the other side of said garment and lying substantially in the zone of strain extending diagonally from the crotch to the other shoulder portion of said garment.

1,806,687. **COUPLING.** CHARLES W. HOOVER, Burbank, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed Jan. 6, 1930. Serial No. 418,837. 3 Claims. (Cl. 287—111.)



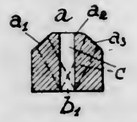
1. A coupling comprising a plurality of one-piece sleeves having substantially cylindrical bores adapted to receive

substantially cylindrical ends of a broken rod, each sleeve being provided with a longitudinal slit of less length than the sleeve to facilitate contraction of the same and also provided with an enlarged portion having a tapered outer surface, clamping half collars adapted to contract the slitted portions of the sleeves to cause them to tightly grip the rod ends, and also provided with complementary tapered inner surfaces engaging the tapered surfaces of the sleeves for contracting the enlarged portions of the sleeves when the rod ends are pulled away from each other, and means for forcing the half collars toward one another.

1,806,688. METHOD OF MAKING ORNAMENTAL RUBBER BALLS. LEONARD R. HOWES, Akron, Ohio, assignor, by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 4, 1928. Serial No. 310,439. 2 Claims. (Cl. 154—16.)

1. The hereindescribed method of making rubber balls having ornamental veneered surfaces, which consists in producing a plurality of sheets of thin and thick stock, respectively, thoroughly cooling the sheets separately, thereafter superposing said sheets one on the other to produce laminated sheets, and forming the balls from said laminated sheets, the balls being formed by joining cupped portions of the laminated sheets.

1,806,689. CURVED MOUTHPIECE FOR MOUTH-ORGANS. RUDOLF JONTOF, Hamburg, Germany. Filed Sept. 11, 1929. Serial No. 391,799. 4 Claims. (Cl. 84—377.)



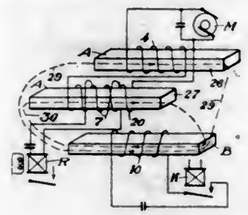
1. A mouthpiece for mouth-organs, in which the blowing channels traverse the mouthpiece from the compartment body of the mouthpiece so that two blowing holes on the surface of the mouthpiece are separated from one another arranged in several rows the lower end of said channels being situated side by side in one row on the lower surface of the mouthpiece so that the tones of the compartment body of the mouthpiece lying close together can be blown separately or in desired chords.

1,806,690. PROCESS FOR THE REGENERATION OF ACTIVE SILICA GEL. GERHARD KRÖNER, Cologne-on-the-Rhine, and FRIEDRICH WILHELM STAUF, Cologne-Deutz, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 6, 1928, Serial No. 290,880, and in Germany July 25, 1927. 3 Claims. (Cl. 23—182.)

2. In the process for the regeneration of active silica gel which is impregnated with decomposed organic substances, the step which comprises treating the silica gel with an oxidizing agent in a liquid phase at a temperature between about 90° and 150° C.

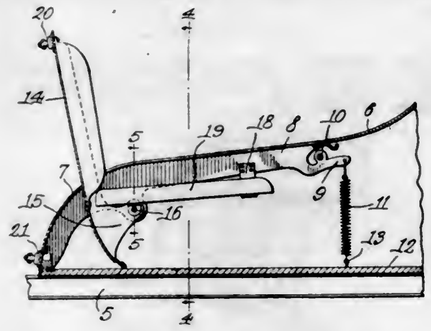
1,806,691. RAILWAY TRAFFIC CONTROLLING APPARATUS. FREDERICK W. LEE, Baltimore, Md., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 30, 1926. Serial No. 145,264. 1 Claim. (Cl. 246—63.)

In combination, a train carried receiver comprising two straight parallel horizontal cores, a winding on one core, a relay connected with the winding, a magnetic circuit including the two cores in series, two sources of magnetomotive force one on each core for sending flux through the magnetic circuit in opposite directions, and a member located in the trackway and arranged when the train



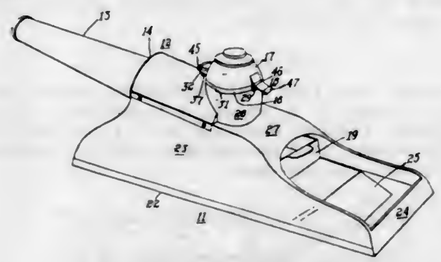
is in a predetermined position to be parallel to and between the two train carried cores, so that flux from each said core is shunted away from the other core by said member.

1,806,692. RUMBLE SEAT CONSTRUCTION. GUY A. LEMON, Chapman, Kans. Filed Aug. 29, 1929. Serial No. 389,230. 1 Claim. (Cl. 296—66.)



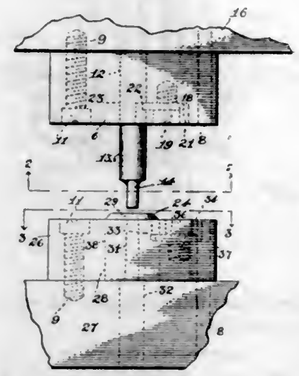
A motor vehicle body construction including a pivoted rear deck having a cut out portion and having lateral downwardly extended flanges, a rod having its ends secured in openings of the flanges, brackets, a seat section mounted on the rod and resting on the brackets, a closure pivotally mounted on the rod and adapted to swing to a vertical position, providing a back for the seat, and said closure adapted to close the cut out portion.

1,806,693. TOY CANNON. JOHN W. MACDONALD, Wilkinsburg, Pa. Filed June 5, 1928. Serial No. 283,009. 43 Claims. (Cl. 42—55.)



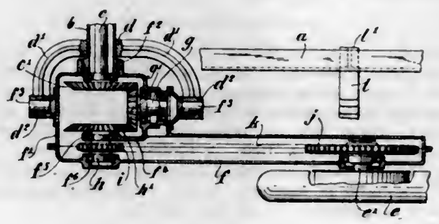
1. A cannon having a stationary explosion chamber and a turnable gas mixture generating chamber, the gas generating chamber being adapted to permit access to the explosion chamber when in one position and to prevent access thereto when in another position.

1,806,694. LOCKING MECHANISM. CLEMENS J. MARKSON, Philadelphia, Pa. Filed Dec. 19, 1929. Serial No. 415,177. 2 Claims. (Cl. 279—77.)



2. A punch-press tool-retainer having axially parallel a tool socket and overrunning recess extending in from its face, and a securing member mounted to oscillate in the recess in a plane parallel with the face of the retainer and having a cam surface for making locking and clamping engagement with a tool within the socket.

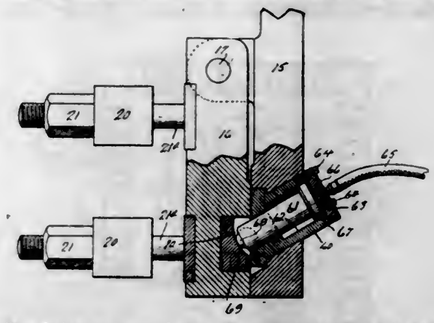
1,806,695. INDIVIDUAL WHEEL MOUNTING. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 19, 1929. Serial No. 372,088. 4 Claims. (Cl. 180—72.)



1. A wheel mounting for a vehicle comprising a frame, a wheel, an axle housing, a housing formed with an offset extension, means to mount the wheel in the last named housing, a web formed in the housing adjacent the extension, means to journal a shaft in the web and an adjacent wall of the housing, trunnions mounted on the extension, bearing arms mounted rotatably on the axle housing, and an elongated aperture in the extension to receive the axle housing.

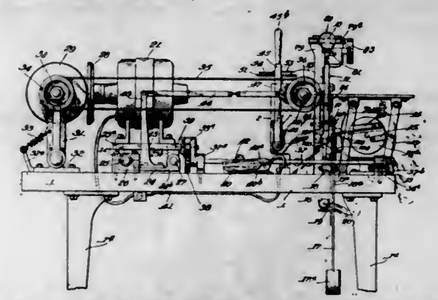
1,806,696. TOOL LIFTER. LOUIS H. MESKER, Shaker Heights, Ohio, assignor to The Cleveland Planer Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 1, 1930. Serial No. 492,717. 12 Claims. (Cl. 90—55.)

1. In a device of the type described, a clapper-box member, a clapper-block member pivoted thereto, a cylinder formed in one of said members, a piston in said cylinder, a rod connected to said cylinder and projecting out of same and engaging said other member, a bearing surface formed on said other member to be contacted by said rod for moving said pivoted member about its pivot point, said



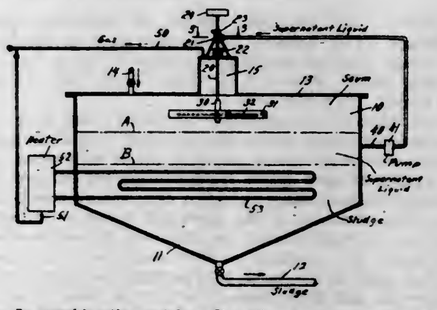
surface being so curved that the axis of said rod is always perpendicular thereto at its point of intersection therewith.

1,806,697. COIL WINDING MACHINE. WILLIAM O. MEISSNER, Chicago, Ill., assignor to The Meissner Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 22, 1929. Serial No. 387,602. 15 Claims. (Cl. 242—10.)



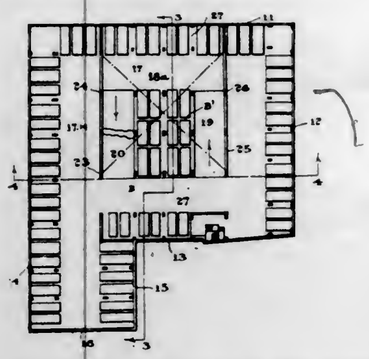
1. In a coil winding machine, the combination of a driven spindle, means for supporting a core for rotation by said spindle, means for guiding wire from a spool onto said core including a reciprocating carriage, and means for introducing sheets of insulating material between successive layers of wire in said coil comprising a shiftable table, a prime-mover operatively connected with said table, and means controlled by said carriage for effecting the actuation of said table to and from said core by said prime-mover at predetermined intervals in the winding operation.

1,806,698. SLUDGE DIGESTION APPARATUS. SAMUEL FISHER MILLER, Bay Head, N. J., assignor to Pacific Flush-Tank Company, New York, N. Y., a Corporation of Illinois. Filed Aug. 2, 1929. Serial No. 382,940. 9 Claims. (Cl. 210—2.)



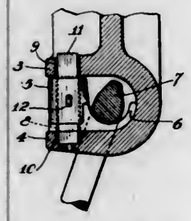
1. In combination with a digestion tank, a rotary member submerged in the upper part of the tank, and means for discharging a liquid across said member into the tank.

1,806,699. STORAGE BUILDING. CHARLES GORDON MITCHELL, Montreal, Quebec, Canada. Filed Apr. 29, 1929. Serial No. 359,069. 9 Claims. (Cl. 20—1.13.)



1. In a storage building, a plurality of main floors positioned at one storey height above another, an intermediate floor between each pair of main floors, parts of the intermediate floor being removed to allow for the storage of trucks on the main floor below and ramps forming a communication between the floors.

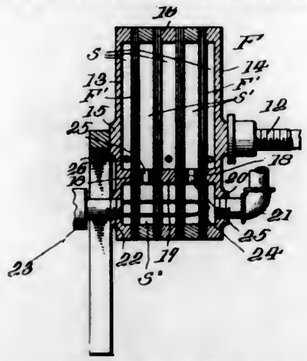
1,806,700. BRAKE HANGER SUPPORT. WILLIAM O. MOODY, La Grange, Ill., assignor to Frederic Schaefer, Pittsburgh, Pa. Filed Dec. 5, 1928. Serial No. 323,870. 4 Claims. (Cl. 188—209.)



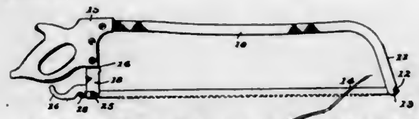
1. The combination with a truck frame for railway cars provided with a bracket having upper and lower walls forming a slot open at its sides and outer end for receiving a brake hanger, of a brake hanger retainer in the outer end of said slot and provided with a wearing shoe for a brake hanger, said retainer and said walls being provided with registering non-circular openings, and a non-circular pin in said openings locking the retainer and its shoe in operative position and against rotary movements on the axis of the pin.

1,806,701. OIL FILTER. HENRY H. MORETON, Santa Monica, Calif., assignor of one-third to O. B. Englisch, Chicago, Ill., and one-third to Charles F. Craig, Los Angeles, Calif. Filed Oct. 8, 1928. Serial No. 311,249. 3 Claims. (Cl. 210—191.)

1. A filter of the character described comprising two spaced apart casing members, a plurality of filter elements independent of the casing members and of each other, and a plurality of open spacer frames interposed between the edges of adjacent filter elements, each spacer frame having spacer members at its upper and lower ends, and a partition member located between said spacer members, said spacer and partition members extending transversely the full width of the frame, said partition members cooperating with said filter elements to provide chambers above the partition members on opposite sides of each filter unit, and to also provide a supply compartment below said partition members, alternate partition members having openings therein so as to establish communication between the supply compartment and the chambers between predetermined pairs of said filter elements, the other chambers having outlet openings.



1,806,702. SAW. JOHN E. O'NEILL, Corning, N. Y. Filed Mar. 19, 1929. Serial No. 348,171. 3 Claims. (Cl. 145—34.)

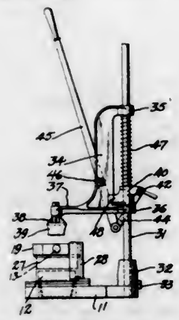


1. A saw frame having a pair of arms, a saw blade having one end removably secured to one of the arms, teeth on the end of the opposite arm, a handle on the toothed arm, a transversely U-shaped socket removably fitted on the toothed arm and adapted for swinging movement toward the handle, teeth on the socket for cooperation with those on the arm for holding the socket in adjusted position on the arm, and means carried by the socket for engagement with the opposite end of the saw blade and holding it in place in the frame.

1,806,703. MANUFACTURE OF CELLULOSE. KARL OTT, Leverkusen-on-the-Rhine, and HERIBERT SCHUESSLER, Cologne-Deutz, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 5, 1930, Serial No. 433,504, and in Germany Mar. 7, 1929. 9 Claims. (Cl. 92—9.)

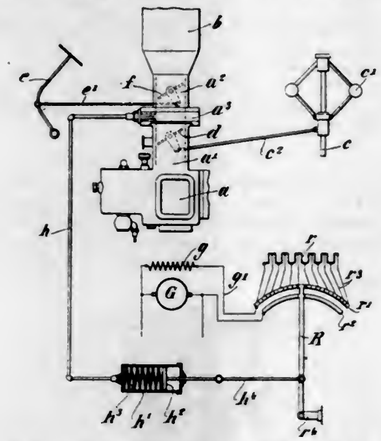
1. Process which comprises reacting with an alcohol upon non-ligneous vegetable matter containing incrusted fibers in the presence of an acid medium.

1,806,704. ICE CREAM CUTTER. CANIO PACE, Coney Island, N. Y. Filed Aug. 5, 1930. Serial No. 473,170. 4 Claims. (Cl. 107—21.)



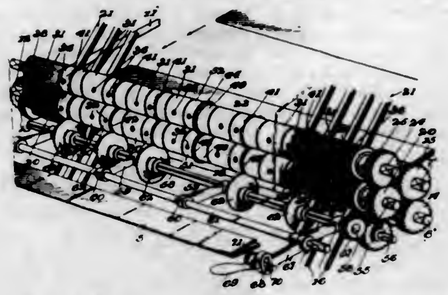
1. An ice cream cutter including a stationary die for receiving a block of ice cream thereon, a removable cutter including a closed frame and blades extending across said frame, a handle whereby the cutter may be placed on the ice cream block, a plurality of stationary guide elements adjacent to the die but spaced therefrom to coact with the frame for guiding the cutter with respect to the die, said die having openings for wholly receiving the blades when the cutter is moved with the blades severing the said block into cakes, said frame being constructed to relatively closely receive the ice cream block when the blades are in said openings, said frame having an opening portion for lateral sliding and removal of the ice cream cakes from the die.

1,806,705. ENGINE SPEED CONTROL BY MANIFOLD DEPRESSION. EDWIN M. POST, Jr., New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed May 14, 1929. Serial No. 363,044. 1 Claim. (Cl. 290—40.)



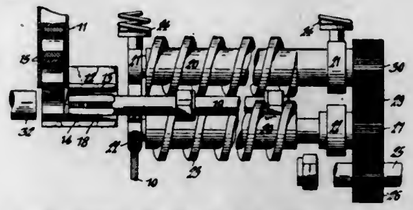
A combination comprising an engine having a manifold, a generator driven by said engine, a field winding on said generator, an engine speed responsive device, a manually operated member and a generator field controlling mechanism, a riser section having a throttle valve therein, means to control the valve by the speed responsive device, a second section between the valve and manifold communicating with the field controlling mechanism, a third section having a throttle valve between the second section and the manifold, and means connecting the throttle valve in the third section to the manually operated member.

1,806,706. FOLDING MACHINE. EARL D. RADER, Bedford, N. Y., assignor to Dexter Folder Company, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1928. Serial No. 313,363. 23 Claims. (Cl. 270—68.)



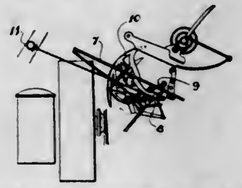
1. In a folding machine, a perforating device, a member having a groove for said perforating device, and a rotary driven element for cleaning said groove.

1,806,707. MACHINE TOOL FOR TAPPING NUT-BLANKS. PAUL C. RAYMOND, Buffalo, N. Y. Filed June 23, 1928. Serial No. 287,763. 2 Claims. (Cl. 10—129.)



1. A nut tapping machine tool, comprising a frame, a tap having a comparatively long stem poriton projecting from one end thereof, a plurality of spirally-fluted feed screws journaled in said frame and in frictional peripheral contact with substantially the overall length of the tap-stem, two of said feed screws being disposed side by side in horizontal alinement and between the upper opposing sides of which the lower side of the tap-stem is supported, the remaining feed screw, being disposed above and centrally between the aforesaid pair of screws and contacting with the upper side of the tap-stem, whereby the latter is supported at three substantially equi-distant points about its axis, and means for yieldingly urging the centrally disposed feed screw into peripheral contact with the tap-stem.

1,806,708. HAND OPERATED BUNDLE TRIP FOR BINDERS. WILLIAM JAMES REX, Holland, Manitoba, Canada. Filed Nov. 5, 1928. Serial No. 317,377. 3 Claims. (Cl. 56—433.)



1. A hand operated mechanism for the weight trip of a binder including a flexible operating member connected thereto and extending beneath the binder deck; said flexible operating member terminating within reach of the binder operator.

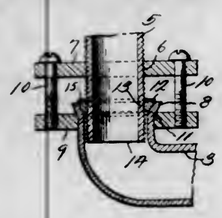
1,806,709. COMBINED WALKING STICK AND CIGAR AND CIGARETTE CARRIER. JOSEPH ROSINSKY, New York, N. Y. Filed Apr. 21, 1930. Serial No. 446,063. 2 Claims. (Cl. 135—47.)



1. The combination, with a hollow walking stick provided with a removable head and shaft, of a spring adapt-

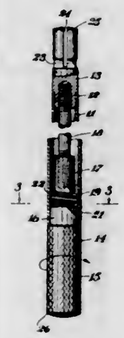
ed to be placed in said walking stick, and a movable plate, one end of said spring being fastened to the tip of said walking stick, the other end of said spring beign fastened to the underside of said plate, a knob connected to the upper side of said plate to said said plate against the tension of said spring.

1,806,710. PIPE JOINT. CHARLES W. ROSS, Jr., New Orleans, La. Filed June 22, 1928. Serial No. 287,421. 4 Claims. (Cl. 285—130.)



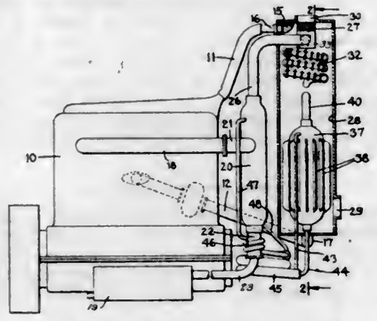
1. The combination with a bath waste pipe, a trap lead fitting having a portion axially related to the waste pipe and into which the waste pipe extends, said waste pipe being threaded, said axial portion of the trap lead fitting having a flange axially movable thereon and provided with a bevelled edge, said axial portion of the trap lead fitting being flared and in the path of the bevelled edge of the axially movable flange, a bevelled ring threaded on the waste pipe and disposed within the flared portion of the trap lead fitting, a flange threaded on the waste pipe above the ring and bolts extending through both of said flanges and forming means whereby the bevelled ring is maintained in water tight engagement within the flared portion of the trap lead fitting.

1,806,711. CURLING ROD. MORRIS SALZMAN, Brooklyn, N. Y., assignor to Universal Permanent Wave Machine Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 6, 1928. Serial No. 304,374. 3 Claims. (Cl. 132—34.)



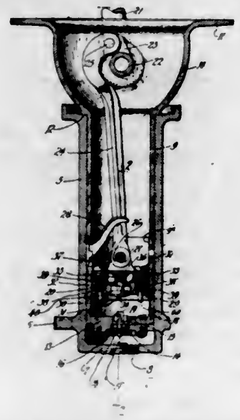
1. A curling rod for use in curling hair in the art of permanent hair waving, comprising an outer tube having an end piece rotatably mounted at one end and a turning head rotatably mounted at the other end, and means within the tube connecting the end piece and head to form a unit mounted for rotary movement relative to the tube, one way clutching means for permitting a rotation of the unit in one direction and restraining such rotation in the opposite direction, said means including a spirally wound spring with its turns having a frictional fit in the tube and having one end secured to the unit.

1,806,712. COOLING SYSTEM FOR ENGINES. JOSEPH SCHULMAN, Brooklyn, N. Y. Filed June 17, 1930. Serial No. 461,684. 9 Claims. (Cl. 123—170.)



1. A cooling system for an internal combustion engine comprising an engine cooling fluid circulating system, a refrigerating system for cooling said fluid of a type adapted to be operated by energy supplied thereto in the form of heat, and means for supplying heat thereto from the waste heat of the engine.

1,806,713. HYDRAULIC RAISING AND LOWERING MECHANISM FOR CHAIR SEATS. ARTHUR R. SCHWARZKOPF, Chicago, Ill., assignor to Theo. A. Kochs Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 1, 1928. Serial No. 309,417. 6 Claims. (Cl. 138—9.)



1. In hydraulic raising and lowering mechanism, the combination of a cylinder closed at its lower end, a cylindrical stem therein closed at its lower end and formed with a valve controlled port in said lower end, a reciprocatory valved pump bucket in said cylindrical stem having cushioned limiting means disposed laterally of the valve of the pump bucket and adapted to impinge against the head of the stem during the final portion of the down stroke of the pump bucket to retard movement of said bucket toward said head and valve controlled port, and means for reciprocating the pump bucket.

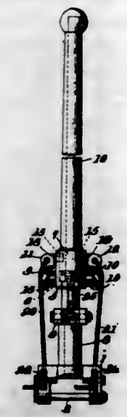
1,806,714. MANUFACTURE OF 2-AMINONAPHTHALENE-3-CARBOXYLIC ACID. HUGO SCHWEITZER, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 5, 1929, Serial No. 352,890, and in Germany Feb. 14, 1927. 14 Claims. (Cl. 260—109.)

1. A process of preparing 2-amino-naphthalene-3-carboxylic acid, which process comprises heating a compound of the group consisting of 2-hydroxynaphthalene-3-carboxylic acid and the zinc salt thereof with ammonium chloride and a compound of the group consisting of zinc oxide and zinc carbonate at a temperature of from about 150 to 250° C. for several hours.

1,806,715. CRYSTALLINE ORGANIC COMPOUNDS. CHRISTIAN J. SCHWINDT, Pittsburgh, Pa., assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed Sept. 27, 1930. Serial No. 484,933. 12 Claims. (Cl. 23—245.)

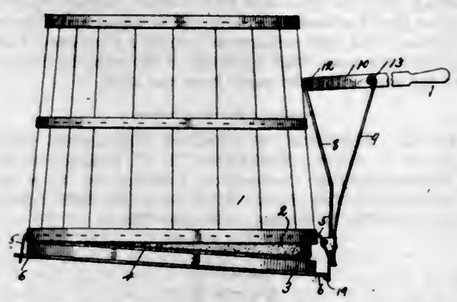
1. As a new chemical product, felted crystalline organic material having consolidated top and bottom surfaces.

1,806,716. DETACHABLE JOY STICK FOR AEROPLANES. CHARLES FRANKLIN SEATON, Elyria, Ohio. Filed Oct. 8, 1928. Serial No. 311,019. 5 Claims. (Cl. 244—29.)



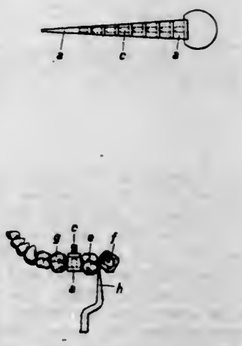
1. A joy stick for aeroplanes formed of two sections, one section having a slidably mounted sleeve to receive the upper section, dogs carried by the sleeve engaging the upper section and cables connected to said dogs for initially moving said dogs out of engagement with the upper section and finally removing said sleeve from over the upper section.

1,806,717. FRUIT BASKET TOP APPLYING TOOL. SAMUEL H. SHELLER, Marion, Pa. Filed Sept. 16, 1929. Serial No. 392,885. 6 Claims. (Cl. 81—3.)



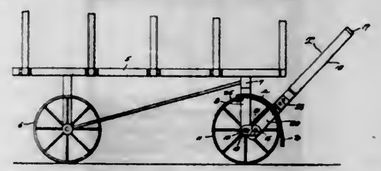
1. A tool for applying the cover to a fruit basket having wire loops or handles on the basket and projections on the cover, comprising a member adapted to exert a closing action on the cover, a second member cooperating therewith adapted to force the wire loops over a projection on the cover, said members being relatively movable and means for relatively shifting said members.

1,806,718. SECTIONAL WEDGE. FRITZ SPANIER, Karlsruhe, Germany. Filed June 28, 1928, Serial No. 288,969, and in Germany Aug. 30, 1927. 2 Claims. (Cl. 82—10.)



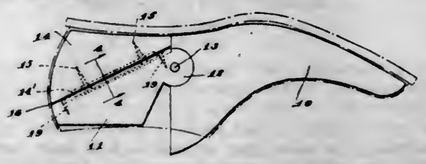
1. A device for drawing teeth by means of an elevator or the like, consisting of a sectional wedge, the thickness of which increases continuously from the narrowest to the greatest width of tooth, the sections of said wedge being adapted to be separated so that after the assembled wedge is inserted with the section of corresponding width into a gap between teeth the sections not needed may be removed.

1,806,719. COMBINATION TONGUE AND BRAKE. EDWARD D. SULLIVAN, Klamath Falls, Oreg. Filed Jan. 4, 1929. Serial No. 330,390. 4 Claims. (Cl. 188—119.)



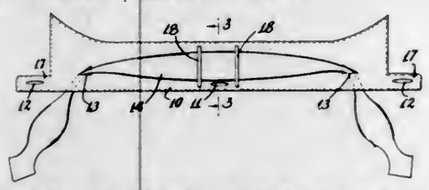
4. In combination with a front wheeled truck including an axle and a pair of wheels, plates arranged on the axle to project forwardly thereof and in two pairs one adjacent each wheel, a pair of arms having extensions formed with slotted extremities, bolts passing through the plates and the extremities, one extremity located between the pair of plates, a tongue on said arm, brackets on said arms, brake segments on said brackets for engaging the wheels when the tongue is in an upwardly and forwardly inclined position with the extremities engaging under the axle and further engage the wheels when the tongue is in the downwardly and forwardly inclined position and the extremities are free from the axle, said segments each including upper relatively large arcuate portions and lower relatively small arcuate portions.

1,806,720. LAST. ROBERT L. STANLEY, Richmond, Me. Filed July 18, 1928. Serial No. 293,666. 4 Claims. (Cl. 12—136.)



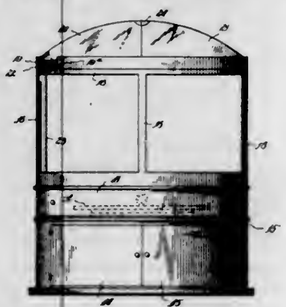
1. In combination with a divided last, a combined shank and toe piece, a back heel piece obliquely and transversely slidable on a central member hinged to said shank and toe piece.

1,806,721. INVISIBLE TIE COLLAR. MAXWELL TAUBEN, Brooklyn, N. Y. Filed Apr. 23, 1930. Serial No. 446,506. 3 Claims. (Cl. 2—137.)



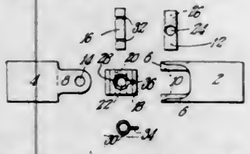
1. A strip of material for being bent around one's neck and formed with a buttonhole at the center for the rear collar button of one's shirt and with buttonholes at the ends for the front collar button of one's shirt and with apertures near the ends for the passage of the ends of a necktie positioned within said collar, and means for holding said necktie within said collar, so as to support the tie below said buttonhole and accommodate ties of various widths and ones relatively wide when compared with the width of said collar, comprising a tubular stiff element attached upon the rear of said collar and extended downwards, a strip extended out from the bottom of said stiff element and detachably secured at its free end near the top edge of said collar.

1,806,722. ADVERTISING DEVICE. ELAINE VON DER LIPPE-LIPSKI, Washington, D. C. Filed Apr. 20, 1929. Serial No. 356,840. 5 Claims. (Cl. 40—76.)



1. An advertising device or changeable sign exhibitor comprising a casing in which the advertisement is displayed, a support at an elevation above the advertisement to leave openings for viewing said advertisement from the sides of the exhibitor, colored glasses rotatably mounted on said support, and means for revolving said glasses.

1,806,723. UNIVERSAL JOINT. EUSEBE TETRAULT, Ludlow, Mass. Filed May 3, 1930. Serial No. 449,443. 3 Claims. (Cl. 64—102.)



1. A universal joint structure comprising, a central block member, forked members having pairs of lugs at opposite sides of said block, a pivot pin for connecting one pair of lugs to said block, a pivot locking pin for connecting the other pair of lugs to said block and for holding the pivot pin against movement, a locking member associated with said pivot locking pin and block which is provided with a telltale portion extending outwardly from one of said lugs whereby the presence of the locking member may be determined.

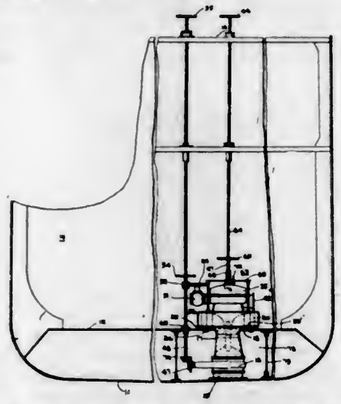
1,806,724. GUN MOUNT FOR AIRCRAFT. WILLIAM WAIT, Jr., Garden City, N. Y., assignor to Chance M. Vought, Great Neck, N. Y. Filed Feb. 25, 1929. Serial No. 342,363. 18 Claims. (Cl. 89—40.)



8. A gun mount including a parallelogram support for moving the gun in the plane of the parallelogram and tension means fastened to the parallelogram and disposed along a diagonal thereof to act in opposition to the weight of the gun.

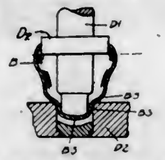
12. A gun mount including a parallelogram support for adjustments in the plane of the support and means for varying the friction of said parallelogram support.

1,806,725. MARINE PUMPING SYSTEM. JOHN Q. WALTON, Washington, D. C., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 28, 1930. Serial No. 439,798. 14 Claims. (Cl. 114—183.)



1. The combination with a ship's structure embodying a shell and an inner plating structure spaced from the shell, of a propeller pump disposed, at least in part, between the inner plating structure and the shell, said pump having its axis of revolution extending transversely of the inner plating structure and the shell and having an inlet connecting with the inner side of the inner plating structure and an outlet extending axially of the pump and disposed adjacent to the shell, and means including a sea chest and a sea valve for connecting the outlet of the pump to the shell and for supporting the pump from the shell.

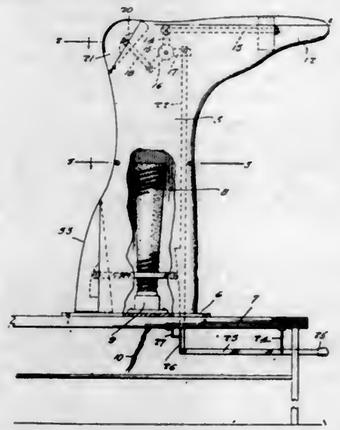
1,806,726. METHOD OF MAKING INSULATOR CAPS. FLOYD D. WENN, Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed Sept. 26, 1928. Serial No. 308,375. 3 Claims. (Cl. 29—155.5.)



1. The process of stamping from a sheet metal blank, a supportable cap of the undercut socket type adapted to

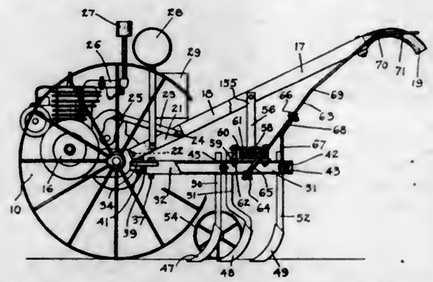
mount on an insulator neck therein, said process including forming said blank into a cup shape comprising a tubular skirt portion of which one end thereof is initially closed by a transverse dome wall portion, and thereupon, further drawing the central region of said dome into a stepped crown plate and during which operation the overall length of said skirt is axially contracted by bending inwardly the dome end thereof to contribute metal for forming up the drawn crown portion.

1,806,727. ELECTRIC DRIER. LILLIE G. WHITE, Boston, Mass, assignor of one-half to Frank W. Ziniti, Boston, Mass. Filed May 10, 1928. Serial No. 276,667. 3 Claims. (Cl. 223—17.)



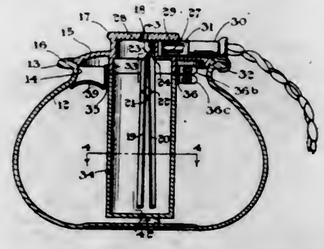
1. In combination, a hollow stocking form, a base for securing the same in inverted position, a heating element arranged within the form, toe, heel and calf sections adjustably carried by the form and means extending through the base operable outwardly thereof and operatively connected to each of said sections for simultaneously adjusting the sections.

1,806,728. DRAWBAR ATTACHMENT. GUY L. WILLITS, Minneapolis, Minn. Filed Nov. 9, 1927. Serial No. 232,045. 18 Claims. (Cl. 97—48.)



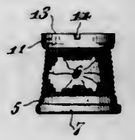
1. In combination with the frame and steering handles of a tractor, a pair of spaced parallel drawbars pivoted to said frame and extending rearwardly thereof, a support secured to said handles and extending downwardly toward said drawbars, a rail formed on said support for cooperation with said drawbars for holding the same in proper elevation relative to said handles, said drawbars being shiftable transversely relative to said rail, a drawbar beam swingably mounted in said drawbars and adapted to be shifted in parallel relation from one side to the other upon the swinging of said drawbars, and means supported from said handles for shifting said drawbar beam from one side to the other.

1,806,729. HUMIDIFIER. ALLAN A. AITKEN, Montreal, Quebec, Canada. Filed Nov. 21, 1929. Serial No. 408,910. 12 Claims. (Cl. 219—40.)



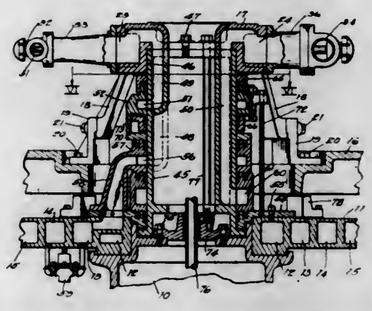
1. A humidifier comprising a water container, a removable cover closing a filling opening formed in said container, electric steam generating means positioned in said container and including suitable terminals carried by the cover, a plug engageable with said terminals for connecting the steam generating means to a suitable source of current, and co-operating elements carried by said cover and plug for engaging the container to prevent removal of the cover when the plug is applied to said terminals.

1,806,730. THIMBLE. MAURICE ALLAND, Atlantic City, N. J. Filed Jan. 20, 1930. Serial No. 421,960. 3 Claims. (Cl. 223—51.)



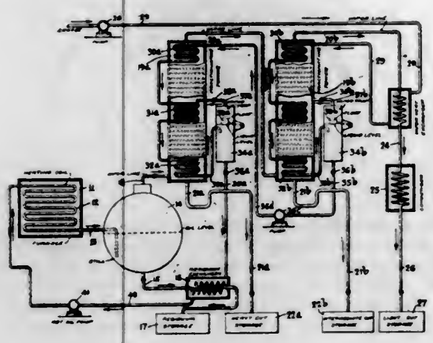
1. A sewing thimble, in combination with an annular ring of magnetizable metal secured thereto and provided with transversely extending reduced portions to define the limits of its magnetic poles.

1,806,731. DISTRIBUTING HEAD FOR GLASSWARE FORMING MACHINES. RUSSELL G. ALLEN, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 30, 1928. Serial No. 296,146. 5 Claims. (Cl. 49—1.)



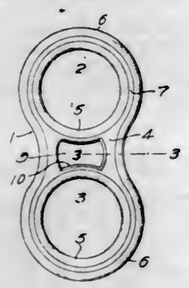
1. A distributing head comprising, in combination, a stationary drum, a distributing ring surrounding the drum and having an annular passageway, said drum having a port opening into said passageway, means for rotating said ring, packing glands above and below said ring, and means for clamping said packing glands to the ring for rotation therewith.

1,806,732. PROCESS OF DISTILLATION. OTTO BEHIMER, Chicago, Ill., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 10, 1928. Serial No. 253,256. 2 Claims. (Cl. 196—134.)



1. The process of distilling hydrocarbon oil which comprises maintaining a body of oil in a still forming a portion of a distillation unit, maintaining the still under conditions of distillation, passing vapors evolved from the still through a fractionating tower, heating the oil charge by exchange of heat from the vapors passing through said fractionating tower but not in direct contact therewith, separating the vapors evolved from the oil charge thus heated and introducing them into the fractionating tower at an intermediate point, and heating the remaining unvaporized portion of the charge to a vaporizing temperature before it is introduced into the still.

1,806,733. LINK. THOMAS W. BELL and THOMAS C. ROGERS, Parkersburg, W. Va., assignors to Acme Fishing Tool Co., Parkersburg, W. Va., a Corporation of West Virginia. Filed June 29, 1928. Serial No. 289,318. 4 Claims. (Cl. 59—84.)



3. A link used in well drilling having an eye at each end thereof, and an elongated bar hand hold between the eyes.

1,806,734. LUBRICATING OIL. HARRY T. BENNETT, LE ROY G. STORY, and HOWARD B. BECKLEY, Tulsa, Okla.; said Story assignor to Josiah Chatfield, Cleveland, Ohio. Filed Mar. 29, 1926. Serial No. 98,380. 4 Claims. (Cl. 87—9.)

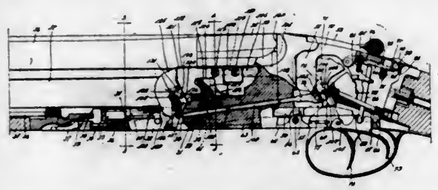
1. A lubricating oil having a pour point less than 20° F. comprising about 95.9 percent 280 Saybolt viscosity at 100° F. mineral lubricating oil; about 4 percent neat's-foot oil, and about .1 percent aluminum stearate.

1,806,735. LUBRICATING OIL AND METHOD OF MAKING THE SAME. HARRY T. BENNETT and LE ROY G. STORY, Tulsa, Okla.; said Story assignor to Josiah Chatfield, Cleveland, Ohio. Filed Oct. 24, 1927. Serial No. 228,487. 16 Claims. (Cl. 87—9.)

13. A stable low pour point wax-containing lubricating oil comprising a mineral lubricating oil, a minute quantity of soap in proportions not less than 0.05% nor more than 0.3% whereby a pour point is obtained lower than possessed by the same mineral lubricating oil without the addition of said soap, and a stabilizer whereby said low pour point is maintained, the quantity of soap being sufficiently small to produce the low pour point without materially affecting the viscosity of the oil.

14. A lubricating composition comprising a mineral lubricating oil having a relatively high pour point combined with aluminum stearate whereby the pour point of the oil is reduced to less than 20° F., the weight of the aluminum stearate being less than .3 percent of the weight of the mass.

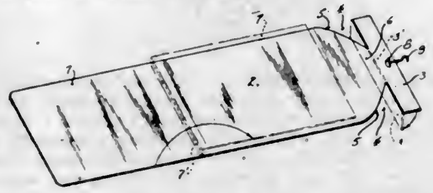
1,806,736. FIREARM. JOHN M. BROWNING, deceased, Ogden, Utah, by John Browning, administrator, Ogden, Utah, assignor to J. M. & M. S. Browning Company, Ogden, Utah, a Corporation of Utah. Filed Feb. 24, 1928. Serial No. 256,754. 26 Claims. (Cl. 42—48.)



1. In a firearm of the over and under type, a receiver, a barrel section pivoted thereto and having over and under barrels, an extractor on said barrel section, firing mechanism on said receiver having a hammer, means for cocking said hammer during the operation of opening the firearm, an actuator for said extractor on said barrel section, a connecting rod on said receiver between said hammer and actuator and frictionally held in all of its positions, and means on said hammer for positively moving said rod into operative relation to said actuator during the operation of cocking the hammer upon breaking the gun.

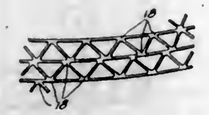
13. In a firearm of the over and under type, a receiver, a barrel section having over and under barrels, an extractor on said barrel section, a piece on said barrel section separate from said extractor, means for actuating said extractor through said piece to eject a shell, and means acting through said piece for moving said actuating means to operative position.

1,806,737. GARMENT BOX. GENEVIEVE BRUER, San Francisco, Calif. Filed Dec. 10, 1928. Serial No. 324,938. 2 Claims. (Cl. 206—7.)



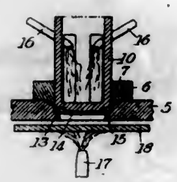
1. A garment holder adapted for free positioning in a box comprising a flat member having notches in its side edges near one end adapted to receive the collar of the garment, the end portion of said member above said notches extending the full width of the box and being turned downwardly to rest upon the bottom thereof.

1,806,738. CHEMICO-THERMAL WELDING PROCESS. BRUCE BURNS and HOWARD B. LEWIS, Los Angeles, and RUSSELL M. OTIS, Alhambra, Calif., assignors to Hughes Development Company, Ltd., Los Angeles, Calif., a Corporation of Delaware. Filed Jan. 2, 1929. Serial No. 329,801. 16 Claims. (Cl. 113—112.)



1. A chemico-thermal vapor process of welding together substantially contacting metallic objects, which comprises: heating said objects in an enclosure containing a compound of a welding metal or metalloid, to such temperature that said compound is vaporized and the vaporized compound is decomposed to deposit its metallic radical upon said objects and free its non-metallic radical, said deposited metallic radical going into solid solution to alloy with said objects and form the weld.

1,806,739. BOTTLE CLOSURE AND ITS MANUFACTURE. HERMAN F. BUSCH, Millvale, Pa., assignor to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 18, 1926. Serial No. 129,944. 9 Claims. (Cl. 113—80.)

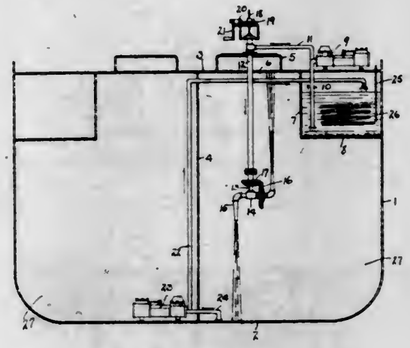


1. A bottle closure comprising a metal cap and a resilient compressed artificial cork liner formed in situ and permanently set therein, the central portion of the liner adapted to register with the opening in a bottle mouth, being more highly compressed than the edge portion adapted to engage the bottle.

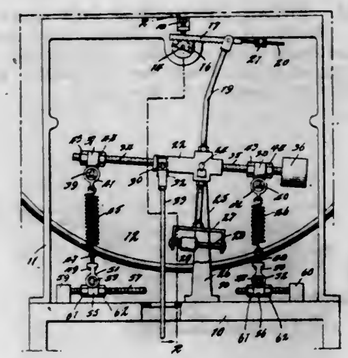
7. The process of lining bottle closures comprising placing in a metal closure cap an artificial cork mix containing cork granules and a glycerine-gelatine formaldehyde-coagulant binder which is capable of rapidly setting under heat, compressing the cork mix in the cap to form a liner therein, and applying heat at a temperature of about 400° Fahrenheit for not over about one minute, whereby a permanently compressed artificial cork liner is quickly formed in situ in the metal cap and cemented thereto by the heat-hardened binder.

1,806,740. METHOD OF CLEANING, SCALING, AND GAS FREEING BULK CARGO TANKS OF TANK VESSELS. ARTHUR B. BUTTERWORTH, Port Arthur, Tex., assignor, by mesne assignments, to Butterworth System, Inc., Wilmington, Del., a Corporation of Delaware. Filed Oct. 11, 1927. Serial No. 225,592. 5 Claims. (Cl. 141—1.)

1. A process of cleaning the interiors of tanks of cargo-vessels and the like comprising heating a cleaning liquid, directing the said liquid in streams with force against the sides and the bottom walls of said tanks, and simultaneously removing the used liquid at a rate to maintain the bottom walls free of liquid and in condition to be cleaned by the same operation.



1,806,741. SPRING SCALE. HUGH M. CAMERON, Woodhaven, N. Y., assignor to John Chatillon & Sons, New York, N. Y., a Corporation of New York. Filed Jan. 16, 1928. Serial No. 247,055. 6 Claims. (Cl. 265—68.)

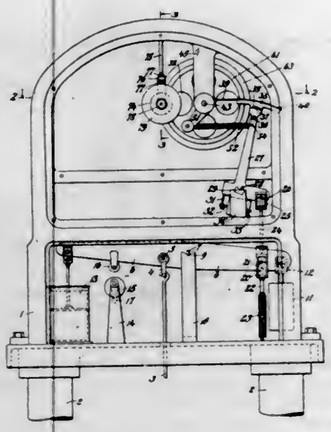


1. A scale mechanism comprising an indicating means, a lever system, means connecting said lever system and indicating means to actuate said indicating means, means for applying a load to the system, a spring attached to said lever system adapted to lengthen upon application of the load, a second spring attached to said lever system adapted to shorten upon application of the load, said second spring being lengthened sufficiently at the no load position by the first spring having been pulled from its normal position against the action of said second spring so that said second spring still has a tendency to shorten at the full load position, and means for shifting said springs toward and from the fulcrum of said lever system.

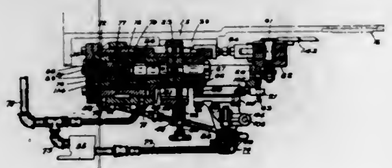
1,806,742. PROJECTING SCALE. HUGH M. CAMERON, Woodhaven, N. Y., assignor to John Chatillon & Sons, New York, N. Y., a Corporation of New York. Filed Aug. 22, 1929. Serial No. 387,605. 6 Claims. (Cl. 265—68.)

1. In a projecting scale, a member adapted to be moved proportionately to the load applied to the scale, a metal

circular dial having weight indicia perforated therein, means for turning said dial, means fastened to said member and adapted to control the turning of said dial, a screen, and means for projecting the weight indicia on the screen.



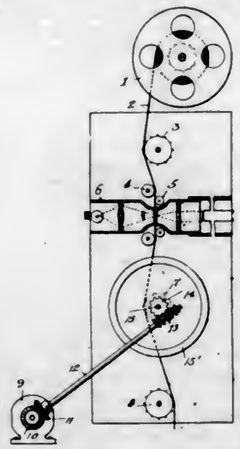
1,806,743. SHEAR MECHANISM FOR GLASS FEEDERS. ALBERT N. CRAMER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 30, 1927. Serial No. 236,653. 10 Claims. (Cl. 49—14.)



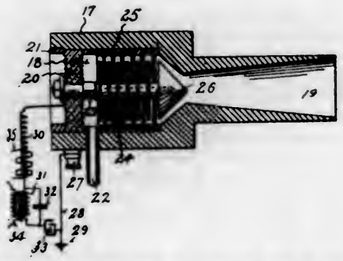
2. A shear mechanism including a supporting frame, an air motor thereon having a reciprocating differential piston therein, a sleeve on the piston extending forwardly through one end of the motor cylinder, shears mounted on one end of the frame, adjustable connection between the shears and the sleeve carried by the piston, means to constantly apply air pressure to one side of the piston, means including a reversing valve for periodically applying air pressure to the opposite side of the piston, and automatic means directly controlled by reciprocation of the piston to reverse said air pressure control valve at regular intervals.

1,806,744. SILENT DRIVE MECHANISM FOR TALKING MOTION PICTURE MACHINES. LEE DE FOREST, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation, a Corporation of Delaware. Filed May 24, 1924. Serial No. 715,499. 3 Claims. (Cl. 88—16.2.)

1. In a sound and motion picture machine employing a film the combination with a phonofilm attachment of a plurality of film feeding sprockets including a feed sprocket for drawing the film through said phonofilm attachment and means for driving the feed sprocket for drawing the film through said phonofilm attachment independently of the other feed sprockets.

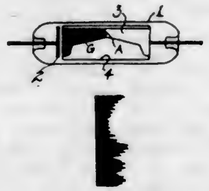


1,806,745. SOUND PRODUCING DEVICE. LEE DE FOREST, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation, a Corporation of Delaware. Filed Dec. 10, 1927. Serial No. 239,018. 3 Claims. (Cl. 179—113.)



2. In a sound reproducing device employing a gas modulated in accordance with voice currents, the combination with separated porous electrodes and means for providing a flow of gas therethrough of means for subjecting the electrodes to electric forces and means for varying the electric forces by and in accordance with the voice currents.

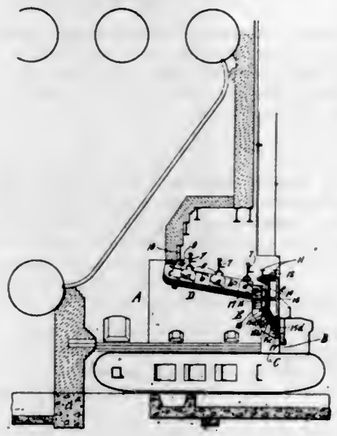
1,806,746. LUMINOUS DISCHARGE DEVICE. LEE DE FOREST, New York, N. Y., assignor to De Forest Phonofilm Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 8, 1928. Serial No. 298,210. 11 Claims. (Cl. 179—100.3.)



10. In the method of making photographic sound records with a luminous gas discharge device connected to the output of an amplifier which itself may produce distortion, the steps of varying the luminous discharge of the device independent of any distortion produced by said elements in a degree either less than or greater than the degree proportional to the varying sound currents causing the variation.

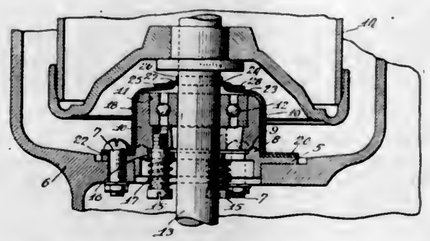
11. A sound recording glow light of the type described comprising an evacuated vessel, an anode and a cathode in said vessel, said cathode varying in width from its center towards both ends.

1,806,747. FURNACE STRUCTURE. BRADLEY DOBIE, Ridgewood, N. J., assignor, by mesne assignments, to American Arch Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 10, 1922. Serial No. 580,856. 8 Claims. (Cl. 110—99.)



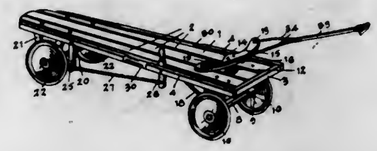
1. An ignition arch structure for furnace chambers including in combination with an arch nose, a plurality of supporting members and a plurality of bricks arranged vertically to form a vertical wall extension, each member supporting an approximately upright tier of vertically alined superimposed bricks and having a plurality of seats, each of which extends between adjacent faces of bricks of the same tier and supports a plurality of the bricks of the tier, means for supporting said supporting members and means for securing the bricks to the respective supporting member as against lateral displacement and in position to shield the supporting members from the furnace heat.

1,806,748. BEARING PROTECTOR, JAMES MCCOSH EDWARDS, Waterloo, Iowa, assignor to Iowa Dairy Separator Company, a Corporation of Iowa. Filed Mar. 24, 1927. Serial No. 177,909. 2 Claims. (Cl. 308—134.)



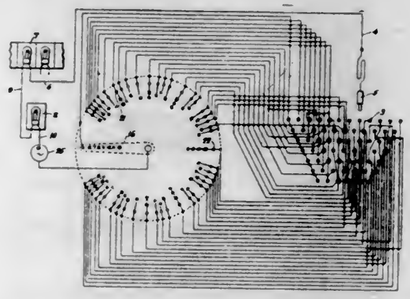
2. A deflector shield formed from an integral piece of sheet metal comprising a vertically disposed annular sleeve portion adapted to be frictionally attached around a vertically rotatable shaft, a radially disposed outwardly extending downwardly inclined central portion surrounding said sleeve portion, and a radially disposed outwardly extending downwardly inclined marginal portion surrounding said central portion, the inclined plane of said marginal portion being offset downwardly and extending substantially parallel with respect to the inclined plane of said central portion.

1,806,749. TOY WAGON. LAURENCE D. ELLIS, Toledo, Ohio. Filed Apr. 20, 1929. Serial No. 356,747. 2 Claims. (Cl. 280—87.5.)



1. In a toy wagon, a pair of trucks, a plurality of elastic strips supported on the trucks and forming the wagon top, the rear truck secured to the rear end of the top, means for pivotally connecting the forward truck to the forward end of the top, a cross bar connected to the forward truck for moving the forward truck for guiding the wagon, a tongue having a Y, the inner ends of the arms of the Y turned inwardly, and a pair of removable elastic split pins for receiving the inturned ends and insertible in the cross bar.

1,806,750. INDICATOR. GEORGE C. FAIRBAIRN, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 15, 1927. Serial No. 233,370. 7 Claims. (Cl. 161—3.)



7. In a device of the class described a plurality of electrical indicators, a plurality of contact elements, a constantly and uniformly movable member co-operating with said contacts to successively provide electrical connections therethrough, a plurality of electrical connection-forming devices arranged in groups, each group having a different number of said devices and the devices of each group being connected respectively with a separate corresponding series of equally spaced contact elements, and means constantly in circuit with said indicators adapted to connect a desired number of said indicators to a selected group having a corresponding number of said devices.

1,806,751. DISHWASHING MACHINE. SYLVANUS W. FISK, Los Angeles, Calif. Filed Mar. 22, 1929. Serial No. 349,011. 3 Claims. (Cl. 299—63.)

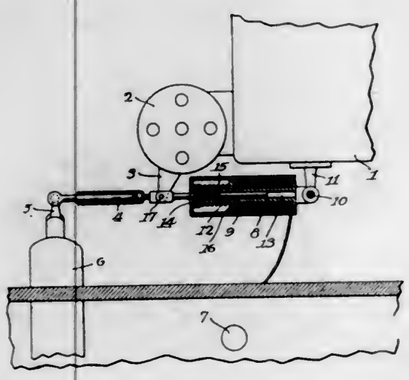
1. A rotator for a dish washing machine including a shaft having its ends journaled in the end walls of the

machine, disks on said shaft, washers on said shaft for spacing the end disks from the end walls, radial arms arranged to space said disks apart, scoops secured to said



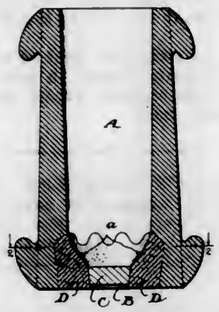
disks so as to pick up charges of liquid from the bottom of said washing machine and move it into position to be thrown by said radial arms when said shaft is rotated, and means for rotating said shaft.

1,806,752. AUTOMATIC SPARK RETARDER. RAY H. FLOYD, Chicago, Ill., assignor of forty-nine per cent to Irvin W. Powell and Irene E. Powell. Filed July 2, 1928. Serial No. 289,674. 2 Claims. (Cl. 123—186.)



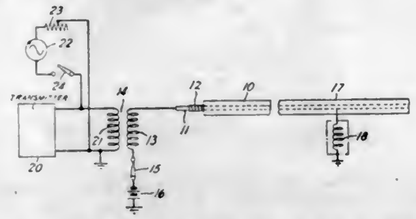
1. In a motor vehicle, the combination of a timer controller member, a timer subject to manual control by said member, a starter member, an electromagnet solenoid having an energizing circuit controlled by said starter member, whereby the electromagnet is automatically energized when the starter is energized, an endwise movable armature core for said magnet, means whereby said electromagnet solenoid and core have pivotal support and controlling connection with said timer, and a helical spring for said armature core, forming with said magnet and core a movably supported unit in which the spring and solenoid and core have a common longitudinal axis, whereby to automatically restore said core to normal position in said magnet, after the engine is started, the energizing of said magnet serving to move the timer to retarding position, and said spring serving automatically to advance the timer after the engine is started.

1,806,753. INGOT MOLD. EMIL GATHMANN, Baltimore, Md. Filed Sept. 15, 1926. Serial No. 135,586. 5 Claims. (Cl. 22—139.)



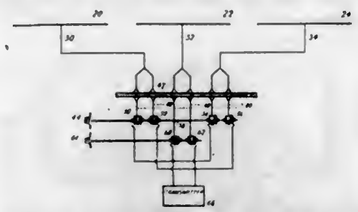
1. An ingot mold having a vertical ingot-forming chamber, the inner chamber side walls of which at the lower portion of the mold are formed of an alloyed metal more heat-resisting than the remaining mold walls to the cutting action of liquid steel.

1,806,754. CABLE SIGNALING SYSTEM. JOHN J. GILBERT, Douglaston, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 25, 1929. Serial No. 365,936. 12 Claims. (Cl. 178—63.)



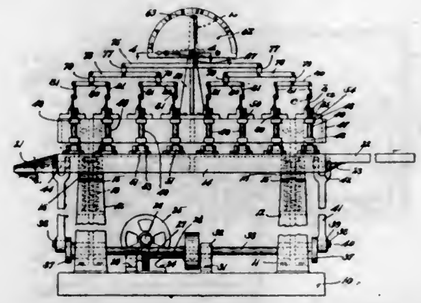
1. A method of transmitting signals over a long cable loaded with a magnetic material which comprises simultaneously impressing upon a terminal section of said cable a series of signals and a unidirectional current to improve the magnetic characteristics of said magnetic material in said section and confining said unidirectional current to said section to limit the voltage necessary to impress said unidirectional current.

1,806,755. ANTENNA. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 28, 1927, Serial No. 229,294. 10 Claims. (Cl. 250—33.)



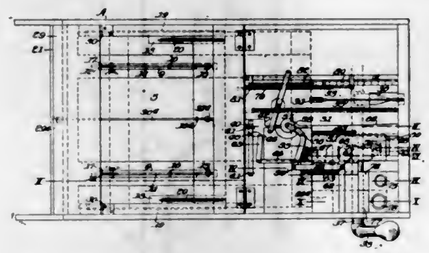
2. A directive antenna comprising a plurality of radiating sections located substantially in line and relatively in broadside, a source of transmission energy, means to feed the sections from the source substantially cophasially, and means to slightly relatively vary the phase relations between the sections in order to warp the directivity of the antenna.

1,806,756. LEATHER GRADING MACHINE. DANA E. HARDING, Arlington, Mass., assignor, by mesne assignments, to Harding-Walcott Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 29, 1924. Serial No. 740,474. 8 Claims. (Cl. 33—147.)



4. An improved grading machine comprising a base, a table yieldingly mounted on said base, a plurality of independently and longitudinally movable shafts mounted above said table, means for moving said table alternately toward and from said shafts, means for causing an appreciable slowing down in the vertical movement of said table at the extreme limits of travel thereof, averaging means associated with said vertically movable shafts for averaging the movement of all of said shafts, and means associated with said averaging means for visually indicating said average movement.

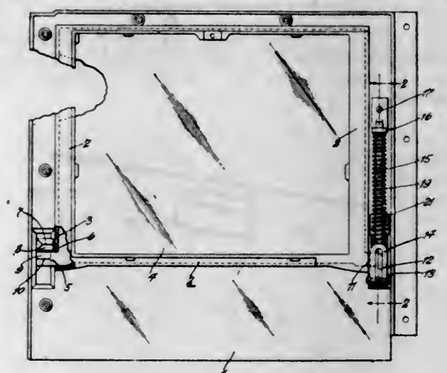
1,806,757. COIN CONTROL MECHANISM FOR VENDING MACHINES OR THE LIKE. JOHN A. HEBB, Hopwood, Pa. Filed Jan. 27, 1930. Serial No. 423,626. 10 Claims. (Cl. 194—69.)



1. In a coin control mechanism of the character described, the combination with commodity shifting means adapted to be actuated by the operator, of an interfering member therefor, a coin control plate movable by the shifting means, a coin slide operatively connected with the interfering member for receiving a predetermined number of coins, one of said coins being adapted to engage the coin control plate to impart a movement to the coin slide for retraction of the interfering member, by a movement of the shifting means, and means for returning the plate and slide to their normal positions by a return movement of the shifting means, whereby the interfering member is returned to interfering position.

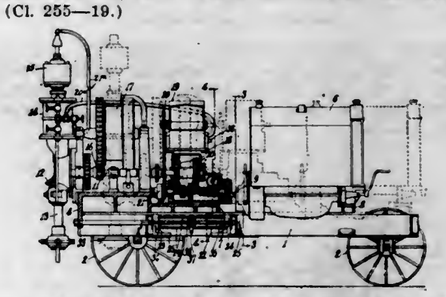
1,806,758. OVEN DOOR CONSTRUCTION. HERMAN HERRENBRUCK, Belleville, Ill., assignor to Orbon Stove Co., Belleville, Ill., a Corporation of Delaware. Original application filed Aug. 3, 1928, Serial No. 297,178. Divided and this application filed Apr. 8, 1929. Serial No. 353,455. 4 Claims. (Cl. 126—191.)

4. In a stove, an oven wall having an opening therethrough, a rigid door frame around said opening and having an opening through one side thereof at one of the lower corners of said frame, a panel for closing said opening and having a thickened portion at its lower end seated against the outer surface of the wall, a fastener extending outwardly through said wall and terminating in and being enclosed



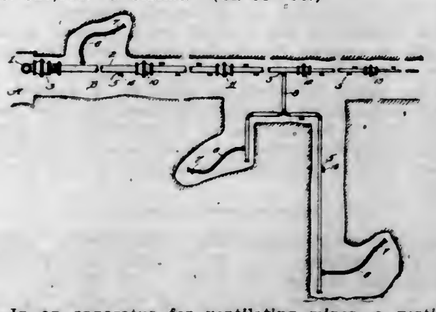
by said thickened portion of said panel and fastening said panel in position, and a projection on the upper end of said panel extending against the inner surface of said wall and cooperating with said fastener to hold said panel rigidly in position.

1,806,759. DRILLING APPARATUS. HARRY C. JOHANSEN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 26, 1927. Serial No. 171,345. 16 Claims. (Cl. 255—19.)



1. In a drilling apparatus, a wheeled truck frame, a frame slidably mounted thereon, a driving engine on said sliding frame, a rotary drill on said sliding frame having drill rod feeding mechanism and driven by said engine, and fluid pressure operated means driven by said engine for shifting said sliding frame relatively to said truck frame.

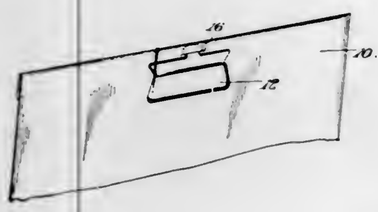
1,806,760. MINE VENTILATING APPARATUS. LOUIS KESSLER, Chicago, Ill. Filed Dec. 21, 1928. Serial No. 327,533. 2 Claims. (Cl. 98—50.)



1. In an apparatus for ventilating mines, a vertical discharge flue, a long lateral collecting pipe connected

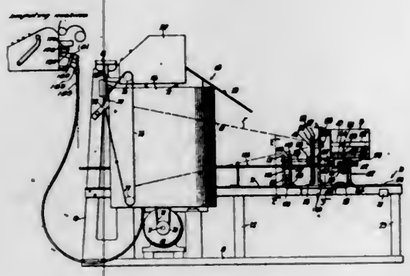
to the flue, said pipe decreasing in size as the distance from the flue increases, and a plurality of blowers arranged in and distributed along said pipe, said blowers decreasing in size as the distance from the flue increases.

1,806,761. CARRY BAG. CHARLES P. KLEEBAUER, Cohoes, and ROBERT M. LACKEY, Waterford, N. Y. Filed July 8, 1927. Serial No. 204,189. 1 Claim. (Cl. 229—68.)



A bag comprising a back portion and a front portion, at least one of said portions being adapted for folding along a line near the edge thereof, said portions having registered openings therethrough, a member projecting from the edge of the foldable portion and adapted to be passed through the registered openings when said portion is folded, and a lug associated with said member and adapted to enter a slot in one of said portions when the member is inserted through the openings, said member having greater width than said openings.

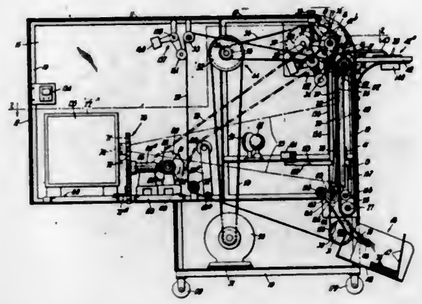
1,806,762. PHOTOGRAPHING APPARATUS. GEORGE LEWIS MCCARTHY, Rye, and ABRAHAM NOVICK, Flushing, N. Y.; said Novick assignor to said McCarthy. Filed June 28, 1926. Serial No. 118,890. 17 Claims. (Cl. 88—24.)



1. The combination of a camera, document feeding means normally at rest, a power drive, a clutch operable at will to connect the feeding means with the power drive to feed the documents into the focal range of the camera, means automatically effective to operate the clutch to disconnect the conveying means from the power drive after a feeding step of substantially the length of one of the documents, and means timed to operate the camera after a predetermined number of such feeding steps.

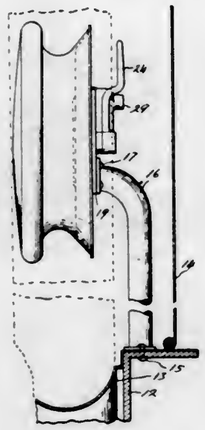
1,806,763. PHOTOGRAPHING APPARATUS. GEORGE LEWIS MCCARTHY, Rye, N. Y. Filed Apr. 30, 1927. Serial No. 187,982. 16 Claims. (Cl. 88—24.)

1. In a document photographing apparatus, the combination with a camera for making a composite photographic record of distinctive business documents, of a document feeder for carrying the documents into the photographic field of the camera, comprising a driven belt traversing the photographic field, endless document gripping thread-like bands having active stretches located in the photographic field between the belt and the



camera in position to be interposed between the camera and the documents and to press the documents against the belt while being photographed and while being fed to and from photographing position, and means for guiding the return or inactive stretches of the bands outside the focal range of the camera.

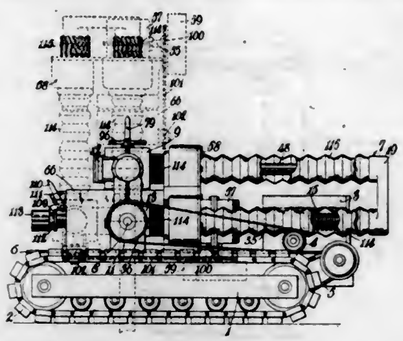
1,806,764. SPARE WHEEL LOCKING DEVICE. BENJAMIN S. MOORE, Detroit, Mich., assignor to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed Feb. 24, 1930. Serial No. 430,494. 11 Claims. (Cl. 70—90.)



1. In a spare wheel lock, the combination of an abutment, latch members slidably mounted on the abutment, means for moving the latch members into engagement with the central portion of a wheel, and a lock for locking said means while in contact with the wheel.

1,806,765. DRILLING MECHANISM. THORE R. E. RUNDQVIST, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 10, 1925. Serial No. 36,261. 31 Claims. (Cl. 225—3.)

1. A drilling mechanism comprising a truck including a power driving element, a guiding frame pivotally mounted thereon, drill bit reciprocating mechanism including a rotatable drive element slidably guided by said guiding frame, means for feeding said drill reciprocating mecha-



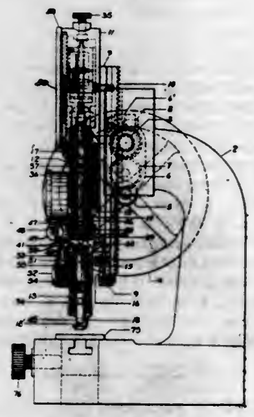
nism relative to said guiding frame, and operative driving connections between said power driving element and said mechanism.

1,806,766. CIRCUIT INTERRUPTER. MILTON H. SHOENBERG and LESTER SCHON, San Francisco, Calif.; said Schon assignor to said Shoenberg. Filed Apr. 13, 1926. Serial No. 101,675. 16 Claims. (Cl. 200—122.)



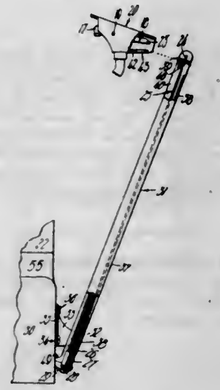
1. A device of the class described comprising a relatively flat button shaped casing, an interrupter element within said casing, and a detachable mounting for said element, said casing forming at least one conductor for said element.

1,806,767. APPARATUS FOR MEASURING THE HARDNESS OF MATERIALS. ALBERT F. SHORE, New York, N. Y. Filed May 23, 1928. Serial No. 279,875. 15 Claims. (Cl. 265—13.)



1. In a hardness measuring device, the combination with a press-frame, means carried by the press-frame, said means being adapted to apply pressure to the hardness measuring device, means for measuring the pressure applied, a longitudinally movable pressure-bar, one end being provided with a superhard indentor-point and the other end being adapted to press against the pressure-measuring means, a member surrounding the pressure-bar and moving parallel with and relatively thereto, one end of said member being adapted to contact with the surface of the test specimen, spring means adapted to press said member downwardly for clamping down the said test specimen, depth-measuring means carried by the pressure-bar, and adjustable means on the surrounding member adapted to actuate the depth-measuring means for setting the same to zero.

1,806,768. COMBINED TYPEWRITING AND COMPUTING MACHINE. ERNEST STEVENSON, West Haven, Conn., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 18, 1925. Serial No. 44,451. 9 Claims. (Cl. 235—60.)



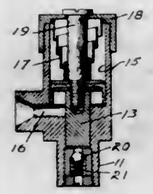
2. In a typewriting and computing machine, a series of denominational jacks, a series of rods connected with the computing mechanism to be operated by the jacks, a bracket fixed to the casing of the computing mechanism near the lower ends of the rods, and a rack mounted parallel with the rods and pivoted to the bracket, effective to locate the upper ends of the rods with reference to the jacks.

1,806,769. ILLUMINATED DISPLAY GLOBE. EDWARD F. STRAW, Pittsburgh, Pa., assignor to Samuel Heer, Pittsburgh, Pa. Filed May 25, 1928. Serial No. 280,472. 6 Claims. (Cl. 40—131.)



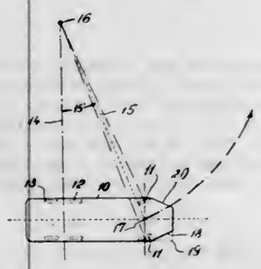
1. In a glass globe structure, an integral glass globe, a continuous shoulder impressed on the wall of said globe, a convex glass face fitted within said continuous shoulder, said face having a greater degree of convexity than the adjoining wall of the globe to provide sufficient space for display matter, a split ring having means resiliently associated therewith to maintain the said glass face in the fitted position on the globe.

1,806,770. DEVICE FOR INJECTING LIQUID UNDER PRESSURE. FRANCISCUS L. VAN WEENEN, Rotterdam, Netherlands, assignor of one-half to Cornelis Franciscus Maria van Berkel, Wassenaar, Netherlands. Filed Dec. 4, 1926, Serial No. 152,713, and in Belgium Dec. 30, 1925. 11 Claims. (Cl. 184—7.)



1. A device for injecting lubricant under pressure comprising a plunger having two pressure faces of different areas, a spring for moving said plunger in one direction toward the smaller end thereof, means for subjecting the larger of said pressure faces to fluid pressure from the lubricant to move said plunger against the force of said spring, and means for supplying lubricant to be acted on by the smaller of said pressure faces.

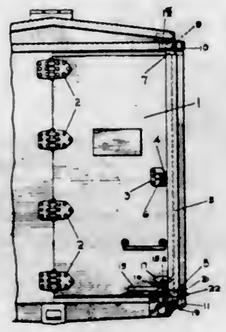
1,806,771. ROAD VEHICLE. OLIVER F. WARHUS, Albany, N. Y., assignor to Versare Corporation, a Corporation of New York. Filed Nov. 17, 1927. Serial No. 233,792. 1 Claim. (Cl. 280—87.)



In a road vehicle, a plurality of pairs of wheels the front pair of which are steerable, a body supported by said wheels and having a projecting front portion, said front portion comprising a front wall and beveled rearwardly extending vertical walls which connect said front wall with the main side walls of the body, the angle of bevel of said beveled walls being such that the bevel portion is substantially parallel to the front wheels when they are turned to their maximum steering angle so that when making a turn substantially the entire area of the vehicle is confined within the arc described by the juncture of the front wall with the outside beveled wall, and a driver's seat in the front part of the body within the beveled portion thereof.

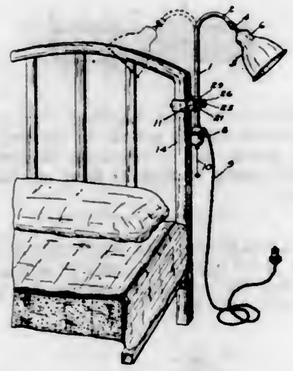
1,806,772. OPENING, CLOSING, AND LATCHING MECHANISM. AXEL WASBERG and KENNETH J. TOBIN, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 27, 1928. Serial No. 308,691. 5 Claims. (Cl. 292—259.)

1. In a house car, a hinged door, keepers above and below said door, a latch bar pivoted upon said door and engageable under said keepers, a hook upon the lower end of said bar and a cam lever having a hooked portion for



engaging said hook for drawing the lower end of the bar in one direction and a cam portion for forcing said bar in the other direction.

1,806,773. LIGHTING FIXTURE. WILLIAM S. WATERS, Lakewood, Ohio. Filed May 2, 1928. Serial No. 274,460. 11 Claims. (Cl. 240—4.)

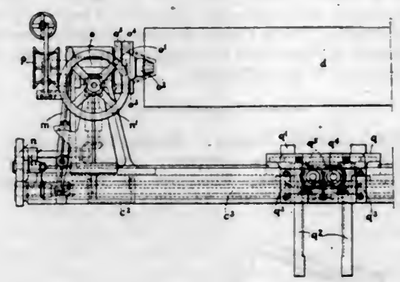


1. In combination with a portable extension cord lamp having a lamp supporting member provided with an elongated straight cylindrical portion and a laterally extending lamp carrying portion at its upper end, and a clamp composed of separable members recessed to receive a bed post between them, releasable fastening means for drawing said members into gripping engagement with the bed post, said clamp having a fixed clamping jaw and a pivoted clamping jaw, said jaws being recessed to receive the straight portion of the lamp suporting member, one of said jaws having a notch at its outer end and the other of said jaws having a bolt pivoted thereto and movable into and out of said notch, said bolt having a nut thereon engageable with the notched jaw to draw the jaws into gripping engagement with the lamp supporting member.

1,806,774. MACHINE FOR REWINDING WEBS OF PAPERS APPLICABLE FOR SIMILAR PURPOSES. CLARENCE HAMMOND WEBSTER, London, England, assignor to R. W. Crabtree & Sons, Limited, Leeds, England, a Joint-Stock Corporation of Great Britain. Filed Aug. 5, 1927, Serial No. 210,957, and in Great Britain Aug. 13, 1926. 12 Claims. (Cl. 242—58.)

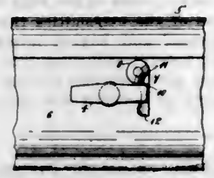
1. Apparatus for re-reeling webs of paper or other materials from remnant reels comprising in combination a pair

or rotatable cones oppositely disposed in line adapted for the support of the remnant reel, pedestals upon which the said cones are respectively mounted, mechanism for



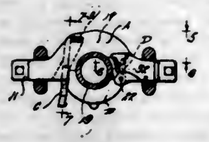
effecting the relative movement of the said pedestals and the bodily movement together of the said pedestals, both movements being effected in the direction of the axis of the said cones, substantially as hereinbefore described.

1,806,775. SAFETY LOCK FOR GAS VALVES. SAMUEL A. WILDE, Taunton, Mass., assignor to Glenwood Range Company, Taunton, Mass., a Corporation of Massachusetts. Filed May 7, 1930. Serial No. 450,421. 3 Claims. (Cl. 126—42.)



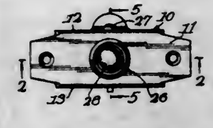
1. The combination with a gas manifold, a valve connecting therewith having a stem, and a handle borne by the stem for turning it and operating the valve, said handle having an open and closed position determinate with the open and closed position of the valve, of a plate through which the valve stem extends and over the face of which plate the handle turns, a gravity actuated manually releasable lock pivotally mounted upon said plate adjacent said handle and normally maintained by gravity in locking position with relation to the handle for preventing the turning thereof when the handle is in a closed position, or be manually released into a disengaging position permitting the turning of the handle for opening said valve, and means whereby the lock may be moved automatically into a disengaging position on the turning of the handle from an open to a closed position.

1,806,776. ELEVATOR. CHARLES E. WILCOX, Long Beach, Calif. Filed May 31, 1930. Serial No. 458,405. 14 Claims. (Cl. 294—90.)



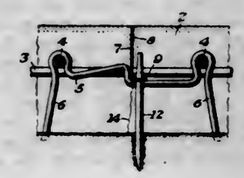
1. An elevator including, two sections adapted to engage around an object, and means operable by a projection on the object to either operate the sections together around the object or to disengage the sections from the object.

1,806,777. ELECTRIC SWITCH. LEE M. WILEY, Marion, Ind., assignor to Delta Electric Company, Marion, Ind., a Corporation of Indiana. Filed Aug. 12, 1929. Serial No. 385,245. 7 Claims. (Cl. 200—16.)



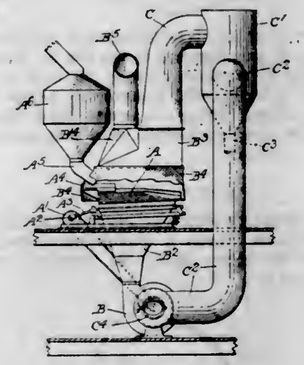
1. In an electric switch in combination, a plurality of contact elements arranged in line, the central element having a rounded face, a bridging plate recessed to receive the rounded face, and a telescopically extensible actuating lever having jointed engagement with the plate, and a spring for extending the lever.

1,806,778. ROAD CONSTRUCTION. FREDERICK R. WILSON, Canonsburg, Pa. Filed Dec. 22, 1927. Serial No. 241,948. 27 Claims. (Cl. 94—18.)



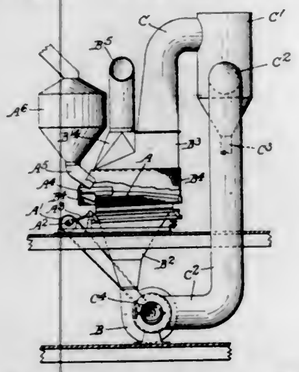
1. In a road construction, a dividing plate adapted to be embedded in the roadbed and comprising an upstanding portion, a continuous base portion extending at an angle thereto, and a supporting chair connected with the base portion.

1,806,779. PROCESS OF CLEANING COAL. RAY W. ARMS, Chicago, Ill., assignor to Roberts and Schaefer Company, Chicago, Ill., a Corporation of Illinois. Original application filed May 23, 1927, Serial No. 193,468. Divided and this application filed Mar. 10, 1928. Serial No. 260,565. 4 Claims. (Cl. 209—502.)



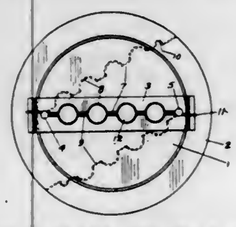
1. The process of cleaning coal by air which consists in forcing a high pressure stream of air through a flowing bed of coal, said stream including a portion of the dust laden air from above the bed together with an additional supply of air, withdrawing the resultant air from above the bed, recirculating part of it through the coal bed and withdrawing the remainder from the system.

1,806,780. DUST COLLECTING SYSTEM FOR COAL CLEANERS. RAY W. ARMS, Chicago, Ill., assignor to Roberts and Schaefer Company, Chicago, Ill., a Corporation of Illinois. Filed May 23, 1927. Serial No. 193,468. 7 Claims. (Cl. 209—502.)



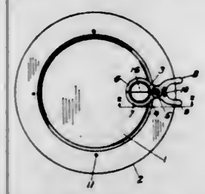
1. In an air cleaning system, a penumatic stratifying table, a blower adapted to discharge air under pressure therethrough, a hood overlying the entire working area of the table, means for withdrawing air from the hood, and discharging it to the intake side of the blower for recirculation through the system, means for withdrawing from the system some of the air from the hood, the system being closed except between the hood and the table whereby air to replace that withdrawn from the system must enter the system inwardly across the sides of the table.

1,806,781. CIGARETTE SNUFFER AND RECEIVER. LEON S. BRACH, East Orange, N. J. Filed Dec. 11, 1929. Serial No. 413,176. 17 Claims. (Cl. 131—51.)



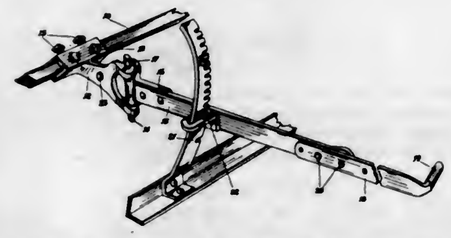
3. In a device of the class described, a receptacle having a rim, a pair of pins fastened to the rim on opposite sides thereof, a pair of members pivoted, one each to said pins and normally lying parallel transversely across the receptacle, said members having complementary socket portions in each to form complete sockets when said members are in socket-closed position.

1,806,782. ARTICLE FOR RECEIVING CIGAR OR CIGARETTE STUBS. LEON S. BRACH, East Orange, N. J. Filed Dec. 11, 1929. Serial No. 413,177. 10 Claims. (Cl. 131—51.)



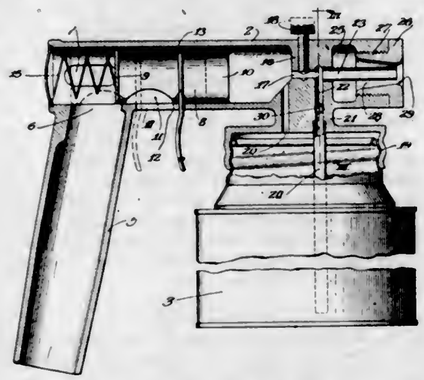
2. A device of the class described, comprising a receptacle, a plurality of pins carried thereby around its outer periphery, a holder adapted to be removably mounted on one of said pins, said holder being composed of two parts pivoted together intermediate their ends, the portions which extend toward the center of the receptacle being shaped to form a closed end socket to receive a cigar or cigarette stub, while the other portions are spaced apart to form a handle, and a spring member positioned between said handle portions and normally acting to force them apart to hold the socket closed.

1,806,783. LEVER. JAMES C. BRAND, Lincoln, Nebr., assignor to Chase Plow Company, Lincoln, Nebr., a Corporation of Nebraska. Filed Oct. 29, 1929. Serial No. 403,200. 2 Claims. (Cl. 74—39.)



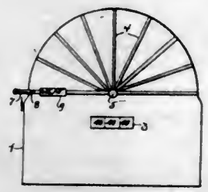
1. A lever for rocking a rock bar of an implement, an eccentric pivotal connection between said lever and the rock bar, the axis of said pivotal connection being perpendicular to the rocking axis of the rock bar, an arcuate rack secured at one of the extremities thereof to a fixed part of the implement and having laterally projecting teeth, and a slotted bracket projecting laterally from said lever and embracing said rack and having means thereon for latching engagement between the teeth of said rack.

1,806,784. SPRAYER. ADAM A. BREUER, Chicago, Ill. Filed Aug. 13, 1928. Serial No. 299,138. 4 Claims. (Cl. 91—45.)



1. A paint sprayer comprising a nozzle, a paint container removably associated therewith, a blower, said nozzle having a partition therein with a restricted passageway therethrough, a valve in said passageway, said nozzle having a passage communicating with said container rearwardly of said valve and another passage communicating with said passageway forwardly of said valve, a valve for regulating flow through said last mentioned passage, and a discharge tube connected to said restricted passageway through which paint is discharged from said second named passage, said valve in said restricted passageway regulating the pressure of air passing through said passageway into the paint stream issuing from said second named passage.

1,806,785. DUPLEX INDICATING DEVICE. SYDNEY ROGER CAVE, New York, N. Y. Filed Jan. 19, 1929. Serial No. 333,627. 3 Claims. (Cl. 40—68.)



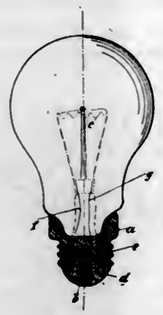
1. A device of the character described comprising a plurality of movable card holders, and a plurality of stationary card holders, a rotatable means for supporting certain of said movable card holders to cause them to correspond with the fixed position of the stationary card holders, said means comprising a sector member and a gear and shaft operated thereby and a drum upon said shaft.

1,806,786. DEVICE FOR LIFTING BODIES SUBMERGED IN WATER. ROLF R. CLAUS, West New York, N. J. Filed Sept. 25, 1930. Serial No. 484,287. 3 Claims. (Cl. 9—19.)



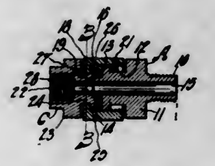
1. A life saving apparatus comprising an inflatable tube adapted to be worn about the neck of a person, a flexible tube connected to said tube, a bi-partite casing to which said flexible tube is connected, a thin rubber body or balloon containing water, in one part of said casing, a carbide supply in the other part of said container, a wire wound about said rubber body, extending out of said casing and a handle at the outer end of said wire to be pulled for tearing said balloon to combine its water with the carbide to develop a gas for inflating said tube, and a valve for controlling the gas supply therefor and preventing the entrance of water into said tube.

1,806,787. INCANDESCENT LAMP. OTTMAR CONRADTY, Nuremberg, Germany. Filed Nov. 3, 1927, Serial No. 230,758, and in Germany June 24, 1927. 2 Claims. (Cl. 176—32.)



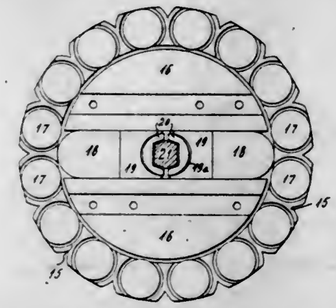
1. An incandescent electric lamp comprising a bulb, and a base having an outer cylindrical current terminal composed of acid proof material and adapted to be inserted in a holder, an inner current terminal composed of acid proof material and mounted concentrically of said outer terminal and an insulating body disposed between said terminals.

1,806,788. COUPLING DEVICE. FRANK H. CROSS, Cleveland, and GEORGE J. RUF, Cleveland Heights, Ohio. Filed Jan. 12, 1928. Serial No. 246,133. 1 Claim. (Cl. 285—143.)



A sidewise coupling and uncoupling device including a base member, a companion member adapted for endwise coupling onto said base member, and a cap threaded onto said base member and engaging said companion member and being partly open sidewise for coupling said members; said base member having a radially open groove therein and said cap having a pin extending into said groove to retain said cap on said base member and being permanently fixed in said cap to prevent removal of said cap; said groove extending all the way around said base member and being of sufficient width to permit the extending part of said pin to be rotated all around on said base member and to move longitudinally of the device according to needs during coupling and uncoupling of said base and companion members.

1,806,789. DIE FOR SWAGING MACHINES. SAMUEL C. CROSS, West Springfield, Mass., assignor to Moore Drop Forging Company, Springfield, Mass., a Corporation of Massachusetts. Original application filed Mar. 28, 1929, Serial No. 350,563. Divided and this application filed Nov. 18, 1929. Serial No. 407,986. 3 Claims. (Cl. 78—21.)

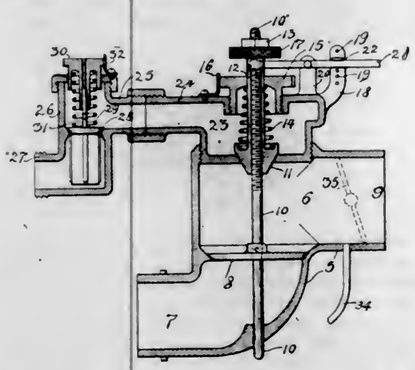


3. The combination with a swaging machine having reciprocating hammer members partaking of a planetary movement around the work to be swaged, of a pair of dies separable from said hammer members, said dies having opposed work engaging faces for shaping a non-round piece of work, said faces being so shaped as to hold the work from rotation relatively to the dies and cylindrical back portions fitted in a bearing of the hammer members, whereby the dies may remain non-rotative relative to the work during the operation of the machine.

1,806,790. GASEOUS FUEL MIXING DEVICE. PERCY J. DASEY, Chicago, Ill. Filed Sept. 22, 1927. Serial No. 221,170. 4 Claims. (Cl. 48—180.)

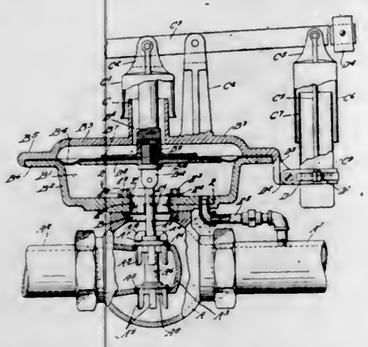
1. In combination, a gaseous fuel mixing device having a casing for connection to the intake manifold of an

internal combustion engine, the casing having a mixing chamber, means forming a gas chamber communicating with the said mixing chamber, an air valve in the casing, a gas valve controlling the communication between the gas chamber and the mixing chamber, means connecting the gas valve and the air valve for conjoint operation, the aforesaid valves being normally closed and being



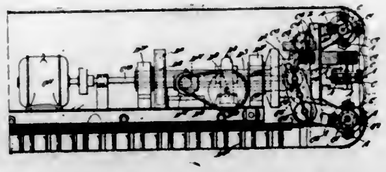
arranged to be opened by a reduction of pressure on one side of the air valve, a gas conduit for the gas chamber adapted to be connected to a gas supply system, and adjustable valve means normally closing the conduit arranged to open only when the first mentioned gas and air valves are open, the said latter valve means being adjusted to be balanced against the pressure of the gas supply system.

1,806,791. VALVE HOUSING. GEORGE C. DAVIS, Chicago, Ill., assignor to G. M. Davis Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 26, 1926. Serial No. 97,510. 3 Claims. (Cl. 137—153.)



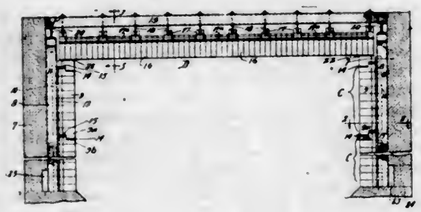
1. In combination with a valve and diaphragm controlling it, a housing for the diaphragm, a valve housing adjacent thereto, a control stem projecting upwardly from the diaphragm, a sleeve projecting upwardly from the diaphragm about said stem and out of contact therewith, a lever, a connection between said control stem and said lever, a bell, associated with said control stem, depending about said sleeve and out of contact therewith, a stem depending downwardly from said diaphragm, a valve associated with said valve stem, in said valve housing, said valve housing being formed with a valve seat in which said valve is in slidable engagement, and flexible packing means, in slidable engagement with said last mentioned downwardly depending stem adjacent the point where it extends from the diaphragm housing into the valve housing.

1,806,792. ROCK ABRADING MACHINE. WILLIAM RUSSELL DEGENHARDT, London, and ALLAN FRED DE FRAINE, Wembley, England, assignors to The Francois Cementation Company, Limited, Doncaster, England, a British Company. Original application filed Jan. 7, 1929, Serial No. 330,900, and in Great Britain Jan. 23, 1928. Divided and this application filed June 13, 1930. Serial No. 460,946. 2 Claims. (Cl. 262—7.)



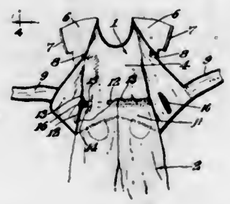
1. A rock abrading machine for use in tunnelling or shaft boring operations, comprising a rotatable frame, a plurality of tool heads rotatably carried by said frame so as to rotate about axes which are tangential to circles having radii of different lengths, the said circles having as their common center the axis of rotation of said frame, and a number of loosely pivoted abrading or chipping tools carried by each of said tool heads, these tools during the rotation of the tool heads moving outwards into their operative positions under the influence of centrifugal force, and the said tools and tool heads being so arranged that the tools cover the whole working face of the tunnel during the rotation of said frame.

1,806,793. COMBUSTION CHAMBER. BRADLEY DOBIE, Chicago, Ill., assignor to American Arch Company, a Corporation of Delaware. Filed May 16, 1924. Serial No. 713,697. 20 Claims. (Cl. 110—1.)



1. In a refractory furnace, a plurality of upright supporting members, and an upright wall adjacent thereto composed of upright tiers of bricks supported by said members and bricks therebetween supported against lateral movement by the first bricks.

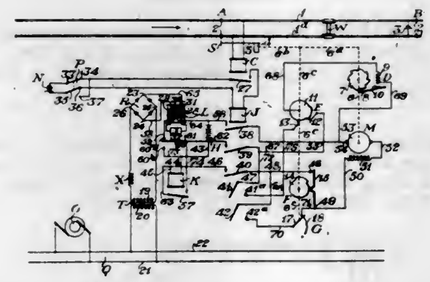
1,806,794. GARMENT. NELL Q. DONNELLY, Kansas City, Mo. Filed Mar. 3, 1930. Serial No. 432,601. 5 Claims. (Cl. 2—83.)



1. A one piece pajama-type garment comprising a blouse portion and a trousers portion permanently connected together, the blouse portion being disconnected from the trousers portion at the rear and being of wrap-around type, said blouse portion being provided with belt members adapted to tie thereabout and said trousers portion being provided with a rear flap portion having resilient means at the waistline thereof, and cooperating fastening means between the flap portion and the blouse portion.

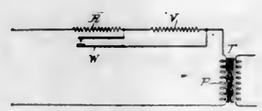
CARNEGIE LIBRARY OF ATLANTA

1,806,795. RAILWAY TRAFFIC CONTROLLING APPARATUS. FREDERICK T. FEREDAY, Anchorage, Ky., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 27, 1930. Serial No. 455,987. 9 Claims. (Cl. 246—21.)



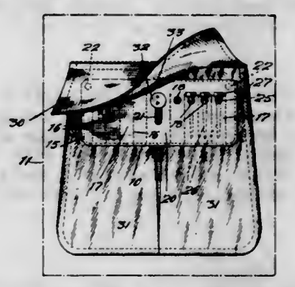
1. In combination, a railway traffic controlling device adapted to be operated by dierct current, a source of direct current, a relay, means for at times supplying said device with current from said source of direct current through the winding of said relay, a source of alternating current, a rectifier, and means controlled by said relay for supplying said device with current from said source of alternating current through said rectifier.

1,806,796. POWER-CIRCUIT CONTROL FOR RADIO RECEIVING SYSTEMS. HOWARD A. GATES, Chicago, Ill., assignor to Zenith Radio Corporation, Chicago, Ill., a Corporation of Illinois. Filed Feb. 13, 1928. Serial No. 254,094. 10 Claims. (Cl. 171—229.)



1. Circuit-controlling means for a power-operated radio receiving system comprising power circuit connections, a transformer having input and output circuits, the input circuit of which is connected with said power circuit connections, a resistance element in the connection of said input circuit with said power circuit connections, a circuit-controlling device thermostatically controlled in operation by said resistance element, and a circuit path connected with said device and acting under the control thereof to control the output of said transformer.

1,806,797. TEE HOLDER. LEO A. GUITERMAN, New York, N. Y. Filed Apr. 19, 1929. Serial No. 356,410. 4 Claims. (Cl. 2—250.)

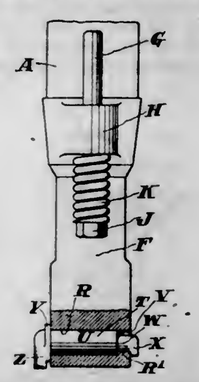


1. In combination with a garment pocket having a button and lapel having a button hole for said button, a golf tee holder having a button hole adapted to receive said button for mounting said holder on said pocket and beneath said lapel.

1,806,798. PROCESS FOR MAKING PHENOLIC COMPOUNDS. WILLIAM J. HALE and EDGAR C. BRITTON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 6, 1928. Serial No. 297,914. 12 Claims. (Cl. 260—154.)

1. In a process for the manufacture of phenolic compounds by the direct hydrolytic action of water in the vapor phase upon a nuclear halogenated aromatic hydrocarbon in the presence of a catalyst, the step which consists in adding the corresponding diaryl oxide to the reacting ingredients.

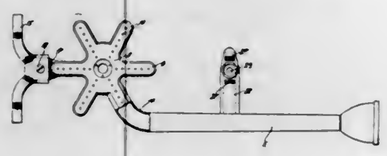
1,806,799. STEEL RETAINER. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 30, 1927. Serial No. 223,040. 2 Claims. (Cl. 121—32.)



1. In a pneumatic tool, the combination of a front head having a longitudinal bore and a transverse bore communicating at a point intermediate its ends with the longitudinal bore, said transverse bore having a reduced portion at one end, a collared working implement in the longitudinal bore, a pin in the transverse bore forming an abutment for the collar of the working implement to maintain the working implement in the front head, a stem on one end of said pin extending into the reduced portion of the transverse bore, a hook on the stem to engage one side of the front head for holding the pin against endwise movement in one direction, a slot in the wall of the reduced portion of the transverse bore to permit the passage of the hook through said bore, the bottom of the slot form-

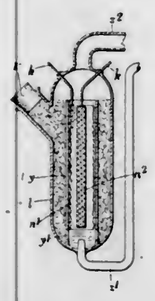
ing a continuation of the transverse bore, and angularly disposed weighted means on the other end of the pin normally maintaining the hook in a position remote from the slot, said hook and said angularly disposed means in body contact with the sides of said front head.

1,806,800. GAS BURNER AND SUPPORT THEREFOR. HERMAN HERASNBUCK, Belleville, Ill., assignor to Orbon Stove Co., Belleville, Ill., a Corporation of Delaware. Original application filed Aug. 8, 1928, Serial No. 297,178. Divided and this application filed Apr. 8, 1929. Serial No. 353,454. 2 Claims. (Cl. 158—99.)



1. In a gas stove, a hollow burner comprising hollow radial arms, in combination with a pipe for conducting gas to said burner, said pipe being of increasing diameter from its outer end to integral connection with one of the arms of said burner at the inner end of said pipe, the inside horizontal diameter of the pipe at its connection with said arm being equal to the inside horizontal diameter of the arm and the vertical diameter of the pipe at its connection with said arm being greater than the vertical diameter of the remaining arms of the burner, the upper wall of the pipe at its connection with said burner arm being slightly below the plane of the upper wall of said burner arm and the lower wall of the pipe inclining downwardly and inwardly throughout nearly the entire length of the burner arm.

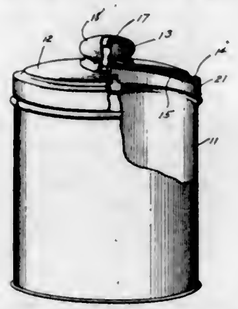
1,806,801. ELECTROLYTIC PRODUCTION OF STERILIZING AGENTS, GERMICIDES, AND THE LIKE. ERIC BERKELEY HIGGINS, London, England, assignor to United Water Softeners Limited, London, England, a British Company. Filed Jan. 16, 1929, Serial No. 332,842, and in Great Britain Feb. 6, 1928. 5 Claims. (Cl. 204—9.)



1. A method of producing chloramine which consists in electrolyzing an alkali chloride in the presence of a soluble ammonium salt.

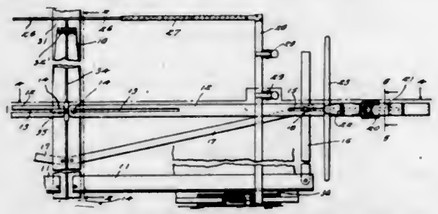
1,806,802. GASKET FOR TALCUM POWDER CANS. EDMUND HOFFMAN, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed May 11, 1928. Serial No. 276,938. 2 Claims. (Cl. 220—42.)

1. In a container for light fine powders a body member open at the top, a washer of sheet material across the top end of the body member into which the presented top end is indented, and having a hole through which material in the body is discharged from the body, said washer having



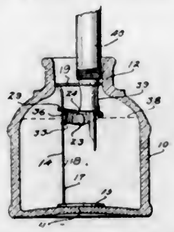
a wide stiff body portion, and a top closure member having an external flange driven and tightly fitting down over the end of the body and permanently pressing the washer thereagainst.

1,806,803. MUSIC LEAF TURNER. THOMAS P. JAKOBSON, Los Angeles, Calif., assignor of one-half to Emelia M. Kling, Los Angeles, Calif. Filed Mar. 25, 1929. Serial No. 349,843. 2 Claims. (Cl. 84—486.)



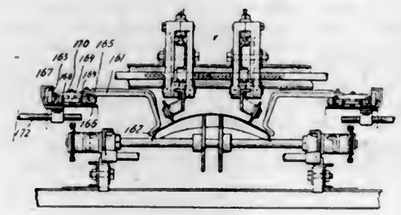
1. A foldable music leaf turning rack including a central member, ledge members pivoted thereto, laterally extending arms slidably and pivotally connected with the central member, brace arms pivotally connected with the central member between the lateral arms and the ledge members, vertical members pivotally mounted on the outer ends of the ledge members and each having a pivot member intermediate its ends engaged in the outer end of a brace arm, each of said lateral arms being slidably engaged with one of said pivots, leaf turning frames supported on said central member, and a gripping jaw slidably adjustable on each of the lateral arms for cooperation with said arm for gripping and holding pages not to be turned.

1,806,804. LIQUID LEVEL INDICATOR AND STOP. HAROLD A. JEWETT, Fredonia, N. Y. Filed Aug. 15, 1928. Serial No. 299,802. 7 Claims. (Cl. 120—71.)



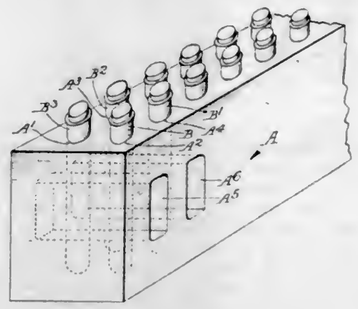
1. A liquid level indicator and stop for filling pens from ink wells comprising a plate seated upon the base of said well, a guide secured to and extending upwardly from said plate, a loop terminating the upper end of said guide adapted to support said indicator within the neck of said well, a floatable member mounted for vertical reciprocation upon said guide, walls defining a pen opening in said floatable member, said opening being remote from said guide and locking means formed upon said floatable member adapted to prevent the downward travel thereof upon said guide when pressure is applied adjacent said pen opening.

1,806,805. APPARATUS FOR TREATING METAL SHEETS. EDWIN R. KNAPP, Summit, N. J., assignor to Copper Plate Sheet & Tube Company, a Corporation of New Jersey. Filed June 16, 1926. Serial No. 116,487. 3 Claims. (Cl. 198—52.)



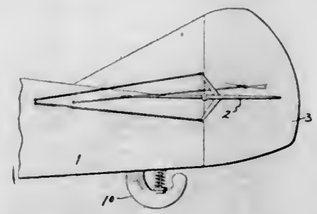
1. A conveyor for carrying metal sheets in arched form, comprising two conveyor sections, each provided with arms extending toward the other section, gripping means at the free end of each arm for engaging an edge of an arched sheet, a track support for each conveyor section, and means for adjusting the positions of the track supports.

1,806,806. APPARATUS AND PROCESS OF DETERMINING THE STRENGTH OF SOLUTIONS. CYRIL KOCOUR, Chicago, Ill. Filed May 1, 1926. Serial No. 106,149. 6 Claims. (Cl. 88—14.)



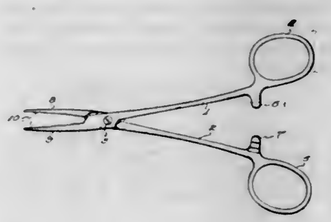
1. The process of determining the strength of solutions the intensity of the color of which bears a direct relation to the strength thereof, which consists in comparing the color of light transmitted thru a body of the unknown and a neutralizing color screen with the color of light transmitted thru a similar color screen and a body of material of the same color as the unknown, the intensity of which in terms of strength of the solution is known.

1,806,807. SHOCK ABSORBING LANDING STRUT FOR AEROPLANES. FRIEDERIKA KUNDERD, Elkhart County, Ind. Filed Sept. 18, 1930. Serial No. 482,753. 6 Claims. (Cl. 244—2.)



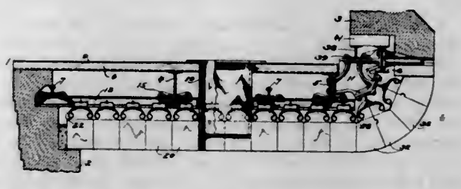
1. In a landing gear for aeroplanes, the combination of a strut, a transverse shaft to which the strut is secured, means for mounting said shaft pivotally in the aeroplane, and springs acting on said shaft for normally urging said strut and shaft in a predetermined direction.

1,806,808. FORCEPS. FRANK H. LAHEY, Boston, Mass., assignor to New England Deaconess Association, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 28, 1928. Serial No. 328,877. 6 Claims. (Cl. 128—322.)



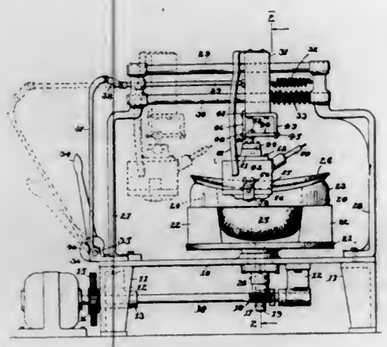
1. A pair of ligaturing forceps the crossed leverage members of which interfit substantially flush with each other at the joint and are formed both in front of and back of the pivoted axis each to overlap the other diagonally of the axis of the instrument and so form acute surface contact angles therewith in the direction of the jaws, whereby the forceps are snag proof in use.

1,806,809. FURNACE CONSTRUCTION. SAMUEL HERBERT LANYON, San Francisco, Calif., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed May 21, 1925. Serial No. 31,737. 24 Claims. (Cl. 110—99.)



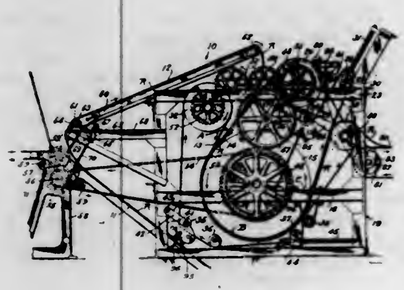
1. In a furnace construction, the combination of a plurality of beams extending transversely across the furnace, a plurality of longitudinally extending tile-supporting bars supported on and beneath the beams, a plurality of spaced nose brackets carried by certain of the beams at the nose end of the furnace, a plurality of transversely extending members carried by the nose brackets and adapted to support the nose tiles, and means carried by the nose brackets for supporting the curtain wall of the furnace.

1,806,810. HAT BRIM FLANGING MACHINE. WILLIAM A. LEONARD, Danbury, Conn., assignor to W. A. Leonard Machine Co. Inc., Danbury, Conn., a Corporation of Connecticut. Filed Dec. 21, 1928. Serial No. 327,652. 3 Claims. (Cl. 223—22.)



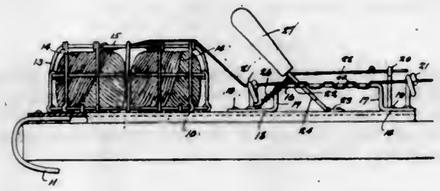
1. In a hat brim flanging machine, a lathe, means for supporting a hat upon the lathe, a carrier, a movable plate carried thereby, an iron, a flexible joint having one member secured to the carrier and another member carried by the iron, means for moving the carrier and iron into and out of working position, means tending to move the carrier in one direction and cushion means to limit the movement of the carrier.

1,806,811. TREAD SHRINKING MACHINE. HECTOR V. LOUGH, Hartford, Conn., assignor to The Hartford Rubber Works Co., Hartford, Conn., a Corporation of Connecticut. Filed Sept. 19, 1928. Serial No. 306,974. 22 Claims. (Cl. 18—2.)



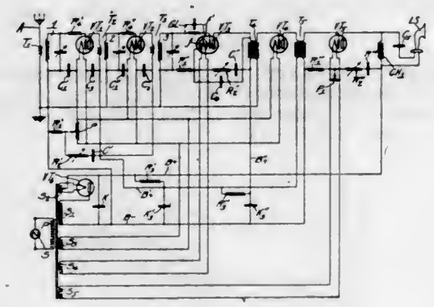
5. A machine for shrinking a continuous stream of unvulcanized rubber stock, comprising a drum, a plurality of endless superposed belts disposed around substantially one half the circumference of said drum, cylinders upon which each of the belts are mounted, idler rollers cooperating with said belts to maintain the same under tension against the surface of said drum, means operated by the belts and coacting with said idler rollers for maintaining said belts in working position, means for rotating the drum, means for rotating the cylinders at surface speeds less than the surface speed of the drum, whereby the belts are stretched for a portion of their length, the rubber stock being entered between and gripped by the stretched portion, said belts being adapted to slip with respect to the drum after the belts have advanced beyond the stretching zone, whereby the rubber stock partakes of shrinkage resulting from contraction of the belts, and means for varying the ratio of speed differences between the drum and the cylinders.

1,806,812. TWINE HOLDING AND DISPENSING DEVICE. GUIDO MALETZ, Baltimore, Md. Filed July 21, 1930. Serial No. 469,338. 2 Claims. (Cl. 242—141.)



1. In a twine holder, a base, a plate supported from the base in spaced relation above the same, a holder for holding a plurality of balls of twine, said plate having slots therein to permit the twine to pass through the plate along a crenellated path, an arm pivoted to said base, a spring normally holding said arm inclined rearwardly towards the holder, and a finger carried by the arm and projecting over the plate, said plate having a groove therein wherewith the finger cooperates to clamp the twine.

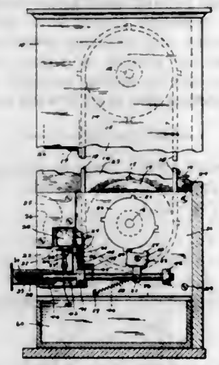
1,806,813. ELECTRON TUBE ENERGIZING METHOD AND APPARATUS. BENJAMIN F. MIESSNER, Short Hills, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Feb. 4, 1928. Serial No. 251,807. 24 Claims. (Cl. 250—27.)



1. In a system including a three electrode vacuum tube having grid, filament and plate electrodes, the combination of a source of current having a fluctuating component, means for energizing the grid electrode of said tube for operation including an energy consuming element through which said current is passed to derive a potential for said electrode, connections for passing said current through said tube by way of said filament and plate electrodes, and reactive-resistive means for diverting a desired portion of the fluctuating component only of said current from the path through said tube.

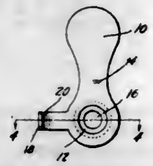
1,806,814. VENDING MACHINE. GEORGE MORRISON Poughkeepsie, N. Y. Filed Mar. 21, 1930. Serial No. 437,657. 2 Claims. (Cl. 194—69.)

1. In a vending machine, a push rod adapted to be reciprocated, a finger member slidably mounted on said push rod, a locking pin engaging said push rod to lock the same against movement, a coin holder adapted to receive a coin, a flanged plate slidably mounted between said finger member and said coin holder and contacting with the coin to raise the locking pin from engagement with the push rod



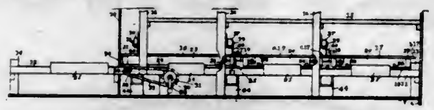
when actuated by the finger, and means carried by said push rod for swinging the coin holder to release the coin therefrom.

1,806,815. CONTACT FOR ELECTRIC CIRCUITS. LORENZ F. MUTHER, Newton Center, Mass. Filed Aug. 2, 1928. Serial No. 296,928. 9 Claims. (Cl. 173—328.)



1. An elongated contact plate of conducting material having a hole formed therein at one end and the material surrounding said hole drawn out to form an eyelet barrel perpendicular to said plate for attaching said contact to sheet material and having a guiding member on one side of said plate adapted for engaging a groove in a raceway.

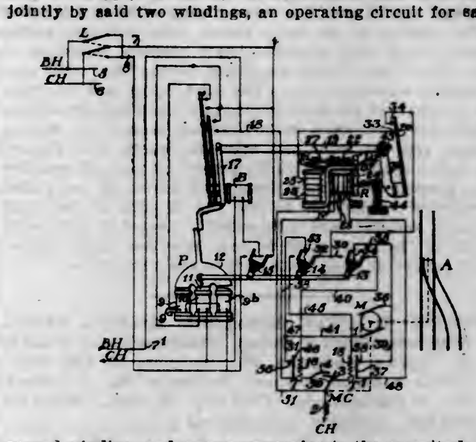
1,806,816. HENHOUSE DROPPING BOARD CLEANER. NIELS P. NIELSEN, Custer, Wash. Filed Mar. 30, 1929. Serial No. 351,167. 6 Claims. (Cl. 119—22.)



1. Hen-house, dropping-board cleaning mechanism consisting of a plurality of connected dropping-board units disposed for abutting end to end and also for spacing apart at definite locations, means to connect said units end to end for said abutting and spacing apart, means to mount said units for reciprocal longitudinal horizontal movements, a scraper mounted for vertical movements only at each of said intervening space locations disposed above and across said dropping board to bear on top of the same as it passes beneath, and means to move all of said dropping board units longitudinally in both directions.

1,806,817. RAILWAY TRAFFIC CONTROLLING APPARATUS. BERNARD E. O'HAGAN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 20, 1930, Serial No. 476,574. Renewed Apr. 9, 1931. 16 Claims. (Cl. 246—242.)

5. In combination with an electric motor, a first winding, a governing circuit for said motor including said first winding, a second winding, a circuit controller for controlling the supply of current to said motor and controlled jointly by said two windings, an operating circuit for said



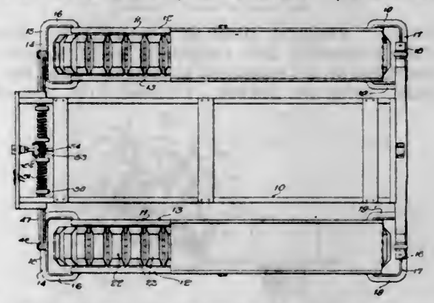
second winding, and means responsive to the magnitude of the current in said governing circuit for controlling the operating circuit for said second winding.

1,806,818. COMBINED MONEY BANK AND ARTICLE HOLDER. VINCENT PAUL PARCHEN, Chicago, Ill., assignor of one-half to Albert H. Kolker, Chicago, Ill. Filed June 10, 1929. Serial No. 369,876. 4 Claims. (Cl. 194—71.)



1. A combined money bank and article holder constructed with a deposit slot, a relatively movable article compartment adapted to support an article, and pivoted locking levers having their ends related in pairs; one pair of ends being presented in the path of money deposited through said slot; the other pair of ends being arranged in dogging relation to said closure, the locking levers having their ends that are presented in the path of the money, deflected each toward the other, and constructed to provide a ratchet to resist return movement of money started through the slot.

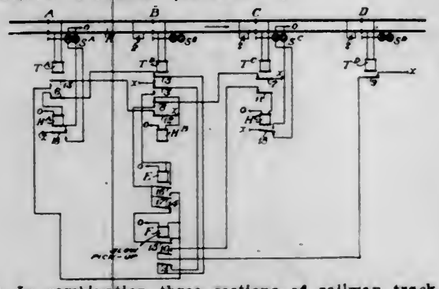
1,806,819. TRACTOR. THOMAS R. PAULSEN, Los Angeles, Calif., assignor to Advance-Rumely Company, La Porte, Ind., a Corporation of Indiana. Filed July 31, 1929. Serial No. 382,401. 9 Claims. (Cl. 305—8.)



3. In a tractor, the combination of a main frame, a truck frame on each side of the main frame, a driving wheel centrally located in each of the truck frames, front

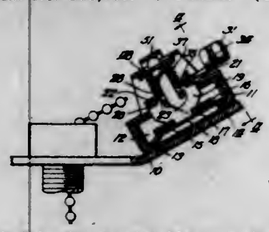
and rear idle wheels journalled in each of said truck frames, one of said idle wheels being slidably journalled with relation to the truck frame, front and rear radius rods having their proximate ends hingedly connected to the axle of the driving wheel, and having their outer ends hingedly connected one to the truck frame and the other to the shaft of the slidably mounted idle wheel, an endless track for each truck frame, carried around the driving wheel and the front and rear idle wheels and adapted to flex in conformity with the ground contour, an equalizer bar pivoted to the main frame and having its outer ends connected respectively to one end of each of the truck frames, and link bars independently pivoted at their outer ends to the other ends of the respective truck frames, and pivoted at their inner ends to the main frame.

1,806,820. RAILWAY SIGNALING. MELVIN A. PENROD, Swissvale, HENRY S. YOUNG, Wilkinsburg, and CHARLES A. BROOKS, Swissvale, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 26, 1930. Serial No. 438,996. 3 Claims. (Cl. 246—41.)



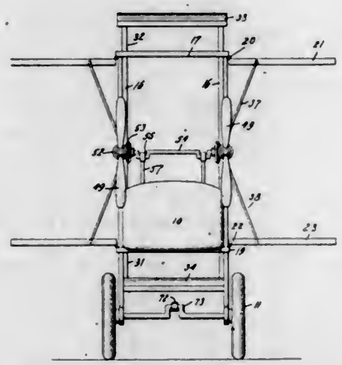
1. In combination three sections of railway track, a track circuit including a track relay for each section, a slow-acting device, a first operating circuit for said device including a back contact of the track relay for the first section and a front contact of the track relay for the second section, a normally open stick relay, a pick-up circuit for said stick relay including a back contact of the track relay for the second section and a contact which is closed only when said slow-acting device is in its initial condition, a stick circuit for said stick relay including a back contact of the track relay for the second section, a stick circuit for said slow-acting device including a contact closed only when the device is in its operated condition and a back contact of said stick relay as well as a back contact of the track relay for the second section, a second operating circuit for said slow-acting device including a front contact of said stick relay and a back contact of the track relay for the second section, a signal for said third section, and a controlling circuit for said signal including a front contact of the track relay for the third section and a contact closed only when said slow-acting device is in its operated condition.

1,806,821. SWITCH OPERATING DEVICE. RUDOLF POPP, Valparaiso, Ind., assignor to McGill Manufacturing Company, a Corporation of Indiana. Filed Mar. 18, 1929. Serial No. 348,009. 7 Claims. (Cl. 200—156.)



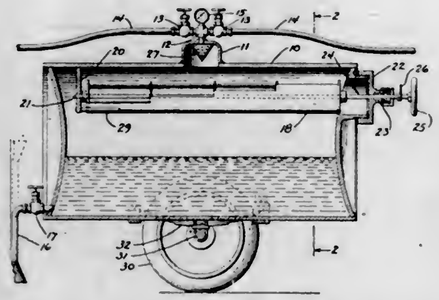
1. In a switch having a rotatable contact carrying member, means for rotating said member comprising a stem having operative connection with said member, a ratchet wheel rotatable with said stem, a pawl pivoted about said stem and slidable toward and away from said ratchet wheel, a spring yieldingly urging said pawl toward said ratchet and toward one limiting position, and a lever arm on said pawl for moving said pawl away from said limiting position, and a spring member extending over said stem and pressing the same toward said contacts.

1,806,822. AEROPLANE. JOSEPH PREATKA, New York, N. Y. Filed Sept. 11, 1930. Serial No. 481,295. 3 Claims. (Cl. 244—13.)



1. An aeroplane comprising a wheeled undercarriage, a tower-like frame rising therefrom, a fuselage mounted on said frame, two pairs of aerofoils hinged to said frame, means for causing the aerofoils of one pair to swing continuously in a direction opposite to those of the other pair, two propellers rotatably mounted on said frame, a motor, a driving connection between said propellers and said motor, a driving connection between said aerofoil actuating means and said motor, and clutches inserted into said connections whereby the said aerofoils and motors may be actuated independently of one another or together, at will.

1,806,823. GAS GENERATOR. JAMES J. REID, San Francisco, Calif. Filed Sept. 21, 1927. Serial No. 220,959. 4 Claims. (Cl. 23—282.)



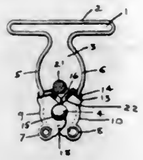
1. In a gas generator of the character described, a sealed tank adapted to contain a liquid, a support within said tank above said liquid, a container journaled to said support adapted to hold segregated quantities of a gas producing agent, and means for tilting said container whereby said segregated quantities of the gas producing agent can be progressively discharged from said container into said liquid to control the generation of gas.

1,806,824. BUTTON LOOP. JESSUP SALISBURY, Hamden, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed Jan. 25, 1930. Serial No. 423,435. 6 Claims. (Cl. 24—224.)



1. A reversible-faced button loop having depending spring arms terminating in relatively free extremities, and toggle-jointed members pivotally mounted upon the extremities, each member being made from sheet metal and folded with parts relatively spaced to enclose the extremities.

1,806,825. BUTTON LOOP. JESSUP SALISBURY, Hamden, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed Jan. 25, 1930. Serial No. 423,436. 6 Claims. (Cl. 24—224.)



6. A button loop having depending spring arms terminating in relatively spaced extremities; a button-shank retaining loop carried by the extremities, and means provided by the retaining loop to permit the shank of a button to be manually moved into and out of the retaining loop along the plane of the loop by contracting the extremities against the spring tension of the arms.

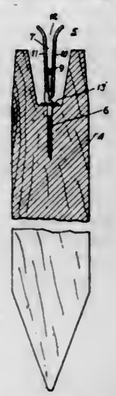
1,806,826. BUTTON LOOP. JESSUP SALISBURY, Hamden, Conn., assignor to The American Buckle Company, West Haven, Conn., a Corporation of Connecticut. Filed Jan. 25, 1930. Serial No. 423,437. 2 Claims. (Cl. 24—224.)



1. An expansible button loop comprising a suspension loop having depending therefrom resilient wire arms bent to provide associated loops in axial alignment and having an intermediate normally closed throat, each arm being looped at the throat and one arm having a looped extremity, and a link inserted between and pivotally connecting the extremity loop of one arm and the loop of the other arm for pivotal movement only in the plane of the loops to complete the button loop.

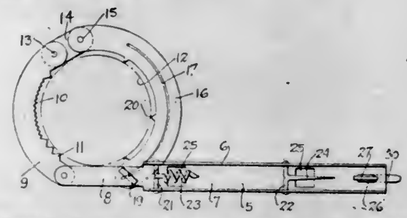
1,806,827. CLOTHES PROP. CONRAD SAUER, Pittsburgh, Pa., assignor of fifty per cent to John G. Doelfel, Pittsburgh, Pa. Filed Mar. 11, 1930. Serial No. 434,901. 3 Claims. (Cl. 68—12.)

1. A line-holding device for clothes props, comprising a wire bent to double-loop form, with the loops disposed in such relative relation as to constitute gripping jaws, and one end of the wire extending in a straight line and



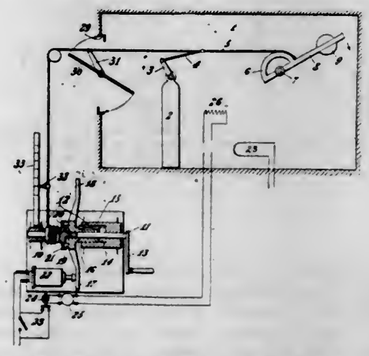
being screw-threaded to permit of it being screwed into a prop, the other end of the wire being around the said straightened end to serve as a stop member.

1,806,828. KITCHEN UTENSIL. JAN SERVAAS, Brooklyn, N. Y. Filed June 19, 1929. Serial No. 372,184. 1 Claim. (Cl. 81—3.1.)



A utensil of the character referred to comprising a channeled handle having an extended unchanneled portion, a jaw pivoted to said extended portion, relatively large and small serrations on one edge of said jaw, a slotted adjustable clamp arm having a plurality of spaced apart tongues constituting teeth on one edge thereof, a relatively short link connecting one end of the clamp arm and one end of the jaw, and an adjusting screw in the extension passing through said slot for securing the clamp arm in any adjusted position.

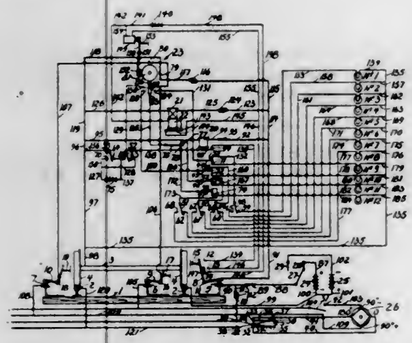
1,806,829. AUTOMATIC FIRE-EXTINGUISHING DEVICE. DANIEL SIEBENMANN, Bern, Switzerland. Filed Oct. 8, 1926, Serial No. 140,258, and in Switzerland Oct. 14, 1925. 4 Claims. (Cl. 254—173.)



1. In a fire-extinguishing device including a container having an extinguishing medium therein and means

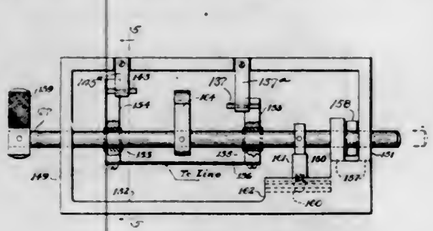
thereon to be operated to release the extinguishing medium, a winch and a rope connecting said winch with said fire-extinguishing device, a release mechanism comprising an axially movable member adapted to normally lock said winch in inoperative position, an electro-magnet, and means operatively associated with said axially movable member and adapted to be actuated by said electro-magnet to move said movable member into unlocking position, permitting said winch to be operated.

1,806,830. AUTOMATIC TRAIN CONTROL. PAUL J. SIMMEN, Eden, N. Y., assignor to Simmen Automatic Railway Signal Company, Eden, N. Y., a Corporation of Arizona. Substitute for application Serial No. 652,691, filed July 20, 1923, and abandoned. This application filed Sept. 5, 1928. Serial No. 304,134. 6 Claims. (Cl. 246—49.)



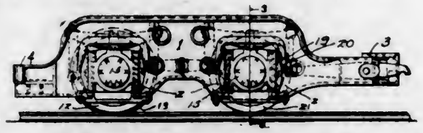
1. In an automatic train control, in combination, a source of direct current, a second source of direct current, a source of alternating current of a plurality of phases, three ramps, connections between one of the ramps and the sources of direct current and between all of the ramps and the source of alternating current, switching means interposed in these connections, a vehicle, train control means on the vehicle, and means on the vehicle connecting at times with the ramps and connected to the vehicle control means whereby more than nine conditions are created in the vehicle control means.

1,806,831. CIRCUIT CONTROL OF TRAIN CONTROL SYSTEMS. PAUL J. SIMMEN, Eden, N. Y. Continuation of application Serial No. 503,235, filed Sept. 26, 1921. This application filed Apr. 23, 1928. Serial No. 272,210. 9 Claims. (Cl. 200—5.)



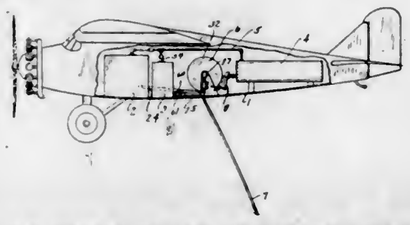
1. In a system of train control a central office switch having three longitudinal positions and including a pair of stationary contacts and arms cooperating therewith and relatively arranged whereby in one longitudinal position both contacts are engaged, in another longitudinal position only one contact is engaged and in a third longitudinal position only the other contact is engaged.

1,806,832. RAILWAY TRUCK. JOHN S. TAWRESEY, East Orange, N. J., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Mar. 25, 1929. Serial No. 349,771. 12 Claims. (Cl. 105—174.)



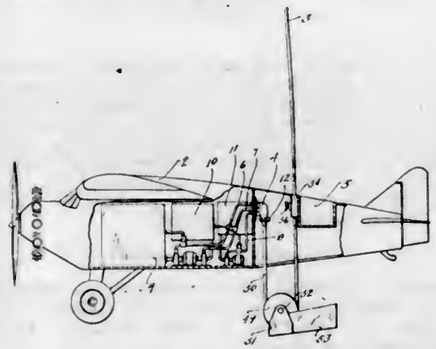
1. In a railway vehicle truck, a plurality of axles, wheels with rail engaging flanges on only one of said axles, wheels with flangeless treads on all of the other of said axles, journal boxes mounted on said axles, a frame carried by said boxes and having a truck pivoting element at one side of said axles, said boxes being interchangeable with each other.

1,806,833. MECHANISM FOR SUPPLYING FLUIDS FROM ONE AIRSHIP TO ANOTHER WHILE IN FLIGHT. JENNIE ULLENDORFF, Portland, Oreg. Filed Jan. 10, 1929. Serial No. 331,680. 10 Claims. (Cl. 244—1.)



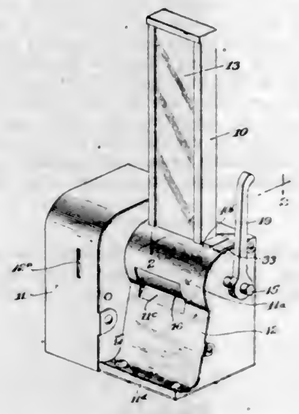
1. In a device of the class described, the combination of a mother ship having fuel and oil reservoirs disposed therein and a receiving ship having fuel and oil reservoirs disposed therein, discharge outlets leading from the reservoirs disposed within the mother ship and inlet pipes leading from a common point to the reservoirs disposed within the receiving ship, a dual passage hose leading from the reservoir outlets from the mother ship, means for detachably attaching the free end of the hose to the common inlet disposed upon the receiving ship and means for maintaining the hose in a relatively taut condition when attached and for automatically reeling the hose when detached from the receiving ship.

1,806,834. MECHANISM FOR SUPPLYING FLUIDS FROM ONE AIRSHIP TO ANOTHER WHILE IN FLIGHT. JENNIE ULLENDORFF, Portland, Oreg. Filed Sept. 25, 1929. Serial No. 395,079. 7 Claims. (Cl. 244—1.)



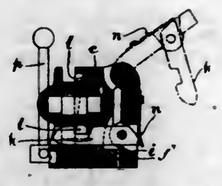
1. In a device of the class described, the combination of a mother ship and a receiving ship, the receiving ship being superposed the mother ship, a hose detachably attachable from one to the other of the ships, means for pumping elements through the hose and means for maintaining the hose in a relatively taut condition during the transfer.

1,806,835. VENDING MACHINE. WILLARD E. ANDREWS, Sycamore, Ill. Filed Feb. 26, 1929. Serial No. 342,849. 4 Claims. (Cl. 194—63.)



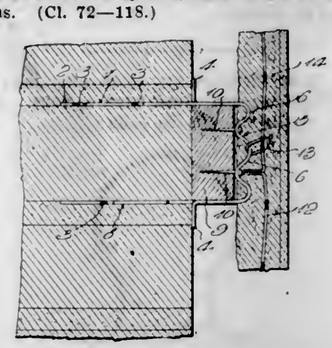
1. A coin control for a vending machine comprising a spindle, a radial arm carried by the latter, a detent recessed to receive and lock said arm against forward and rearward motion, a coin chute movable with said detent, and a radial finger carried by the spindle and adapted to receive the coin between it and the chute, the finger being caused by a movement of the spindle to depress the coin with the effect of moving the chute and separating the detent from the arm, and the recess of the detent having sufficient lateral clearance for the necessary rotary travel of the arm while the finger executes the depressing action aforesaid.

1,806,836. CASE-TIE OR LIKE FASTENING. HERBERT ARMISTEAD, Farnley, Leeds, England, assignor to Armistie Limited, Hunslet, Leeds, England. Filed Dec. 20, 1928, Serial No. 327,384, and in Great Britain Dec. 21, 1927. 5 Claims. (Cl. 81—9.1.)



1. In an apparatus for securing wire ties to packages and the like, the combination of a frame, a fixed clamping member connected to the frame, a slidable clamping member connected to the frame, means for moving said slidable clamping member relative to the fixed clamping member, a stationary die between said clamping members, a movable die hinged to said frame, and coacting with the stationary die for crimping the wire held by said clamping members, an arm pivoted to an intermediate portion of said movable die and having a free end arranged to extend transversely of the frame, and means operatively associated with the said free end on said arm for forcing the movable die toward the stationary die.

1,806,837. FURRING CLIP. ELDRIDGE ROGER BOYLE, Boston, Mass. Filed Apr. 13, 1929. Serial No. 354,884. 4 Claims. (Cl. 72—118.)



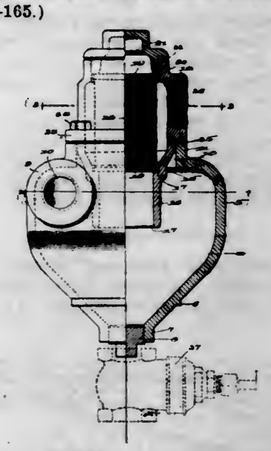
1. A furring clip formed of an integral piece of sheet metal bent to form a central part, spaced parallel ends, shoulders extending transversely from intermediate points of each end, and a filling block between the ends from the shoulders to the central part.

1,806,838. RUBBER TIRE AND ANALOGOUS ARTICLE OF MANUFACTURE. ABRAHAM BRILL, Youngstown, Ohio, assignor to The Republic Rubber Company, Youngstown, Ohio, a Corporation of Ohio. Filed Dec. 28, 1926. Serial No. 157,597. 9 Claims. (Cl. 152—1.)



5. An article of manufacture formed from a plurality of grained rubber sections so disposed that all the grain in one section is disposed in planes nonparallel with the plane of the grain of another section.

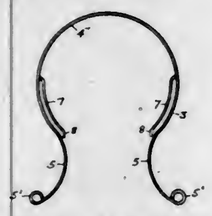
1,806,839. STRAINER. ARTHUR W. BURKS, Decatur, Ill. Filed Mar. 19, 1928. Serial No. 262,932. 2 Claims. (Cl. 210—165.)



2. A strainer comprising a liquid settling chamber having a liquid inlet port, a detachable outlet head mounted on said chamber and having an imperforate tubular portion depending therefrom into said chamber with its lower end arranged in a plane below said inlet port, a strainer element disposed within said head in the path of flow of liquid to said outlet, one end of said strainer being sup-

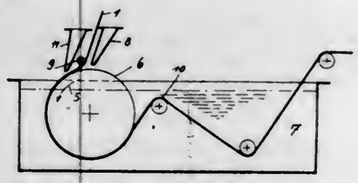
ported upon said tubular portion, and a cap secured to said outlet head and engaging the other end of the strainer to retain it in position.

1,806,840. ANTISKID CHAIN HOLDER. JOHN S. CAMPBELL, Pittsburgh, Pa. Filed May 4, 1929. Serial No. 360,406. 1 Claim. (Cl. 24—259.)



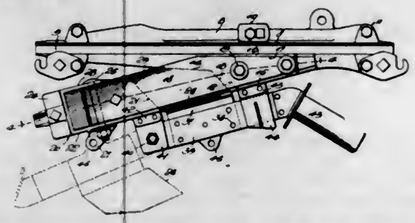
In combination a holder for anti-skid tire chains comprising a substantially U-shaped resilient clamp being adapted for transversely overlapping the tire and tensionally engaging the latter, a pair of fingers being stamped from the clamp side portions and further being disposed on the inner side of and carried by said latter for connecting the tire chain to said clamp, said pair of fingers extending parallel to the respective side portions of said clamp and having their free ends disposed outwardly toward respective side portions.

1,806,841. PROCESS OF MANUFACTURING ARTIFICIAL LEATHER, LEATHER BOARD, WAXED CLOTH AND THE LIKE. EMIL CZAPEK and RICHARD WEINOAND, Bomlitz, Germany. Filed Oct. 2, 1924, Serial No. 741,294, and in Germany June 7, 1923. 3 Claims. (Cl. 91—68.)



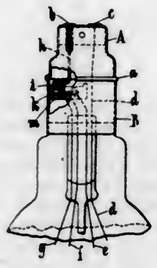
3. The process for manufacturing artificial leather and the like from viscose and similar aqueous cellulose solutions capable of precipitation by acids and salts which consists in wetting a rotating drum with a precipitant, then applying a layer of cellulose solution upon the wetted drum, passing a thin web of fabric in contact with said layer at the same speed as this drum, conducting the web and the layer of cellulose solution together through a precipitating bath by means of the rotating drum and finally washing and drying the coagulated product.

1,806,842. COMBINED TROLLEY FROG AND LINE SECTION SWITCH. KENNETH DAVIS, Pittsburgh, Pa. Filed Apr. 7, 1930. Serial No. 442,362. 3 Claims. (Cl. 191—38.)



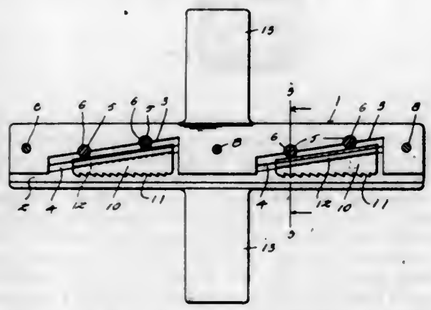
1. A combined trolley frog and line section switch comprising a horizontally elongated main-line plate having wheel ridges along the end portions of its lower side, said plate having a lateral portion at one longitudinal edge and providing a transverse shoulder facing toward one of said ends, a horizontally elongated insulating block having one of its end portions secured upon said lateral portion of said plate, said block projecting beyond said shoulder and diverging from said plate, a fixed horizontal branch-line plate secured against the lower side of said block at the free end of the latter, the inner end of said fixed plate being spaced longitudinally of the block from said shoulder, a movable horizontal branch line plate, received snugly between said shoulder and said inner end of said fixed plate and lying against the lower side of said block, said fixed and movable plates having abutting wheel ridges and abutting wheel guiding flanges, a horizontally swingable switch blade laterally spaced from said block and secured to said movable plate for outwardly moving the latter, and means for mounting said blade and co-acting therewith in conducting current from said main-line plate to said fixed branch-line plate, said main-line plate having wheel guiding flanges co-operable with the above-named flanges.

1,806,843. ELECTRIC LAMP. WILFRED DAWSON, London, England. Filed May 23, 1927, Serial No. 193,586, and in Great Britain May 31, 1926. 3 Claims. (Cl. 173—26.)



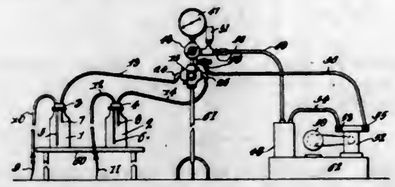
1. An electric lamp of the multiple filament type having a common leading-in wire and other leading-in wires comprising an upper sleeve shaped at its upper end for engagement with a standard socket and formed at its lower end of larger diameter than said standard lamp socket, a lower sleeve of larger diameter than the standard socket rotatably connected to said lower larger diameter end of said upper socket and contact means carried by said lower sleeve for selectively bringing into contact one of said other return wires.

1,806,844. ELECTRICIAN'S TAPE GRIPPER. SAMUEL D. DENNIS, Chillicothe, Mo. Filed June 5, 1930. Serial No. 459,381. 4 Claims. (Cl. 24—136.)



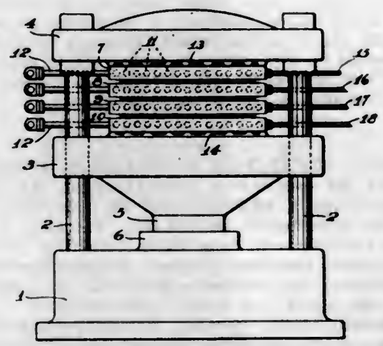
4. A tape puller, comprising an elongated body having a longitudinally extending slot formed therein from one face thereof, a pair of recesses formed in the body from the face through which said slot opens, each of said recesses having a top wall disposed at an angle to the slot and further having the inner wall thereof provided with a longitudinally extending groove parallel with the inclined top wall, a plate adapted to be positioned over the face of the body in which the recesses are formed to cover the same, said plate adjacent each recess having a groove formed therein and disposed parallel with the groove in the wall of the adjacent recess, a gripper block in each recess having a top wall inclined and substantially parallel with the top wall of the recess, a tongue extending longitudinally of each face of each gripper block and slidably positioned in an adjacent groove, and anti-friction elements disposed between the inclined top of each gripper block and the inclined top wall of the recess, said gripper block having the lower face toothed.

1,806,845. INJECTOR AND ASPIRATOR. WILL DWYER, Dallas, Tex. Filed Feb. 18, 1929. Serial No. 340,904. 4 Claims. (Cl. 27—24.)



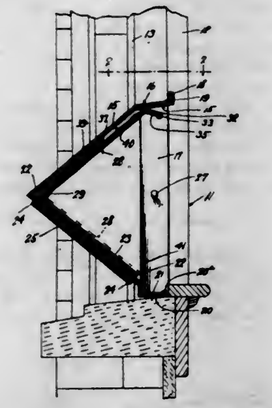
1. An apparatus of the character set forth, comprising a valve casing provided with a pressure port and a suction port, a plug rotatably mounted in the casing and provided with T-shaped passages, the long branches of the passages extending diametrically through the plug and the short passages thereof extending through diametrically opposite sides of the plug, the casing being provided with ports in alinement with the passages in the plug and being provided with passages communicating with said ports, a receptacle communicating with one of the casing passages, a receptacle communicating with the other casing passage, an instrument connected to each receptacle, pressure means connected to the pressure port of the casing, and suction means connected to the suction port of the casing.

1,806,846. PROCESS AND APPARATUS FOR MAKING COMPOSITE GLASS. JOHN H. FOX, Pittsburgh, and HARRY F. HITNER, Oakmont, Pa., assignors to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Oct. 6, 1928. Serial No. 310,808. 7 Claims. (Cl. 18—17.)



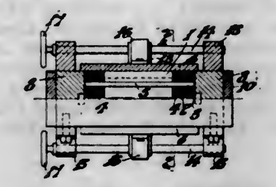
1. A process of applying heat and pressure to a plurality of sheets of glass and reinforcing material which consists in placing the sheets in stacked relation between pressure members, causing such members to approach and apply compressive force to the set of sheets, and supplying high frequency electric current to said members so as to induce molecular vibration in said sheets and heat them to the desired temperature.

1,806,847. WINDOW VENTILATOR. VICTOR W. I. FREDERICK, Brooklyn, N. Y. Filed Aug. 17, 1929. Serial No. 386,709. 2 Claims. (Cl. 98—99.)



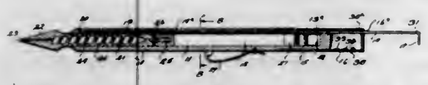
1. A ventilator of the class described comprising a longitudinally extensible casing of V-shaped configuration, including a downwardly and outwardly inclined imperforate top, and an upwardly and outwardly inclined screened bottom, a shutter plate hingedly mounted in the apex portion of the casing for covering said screened bottom, said shutter being composed of extensible sections to permit the shutter to be adjusted commensurate with the length of the casing, spring means associated with the shutter and top of the casing for normally maintaining the shutter in an elevated open position, together with hingedly mounted retaining latches mounted within the bottom portion of the casing and on the ends of said casing for cooperation with the end portions of the shutter for holding the shutter down over the screened bottom while in a closing position.

1,806,848. MEANS FOR CASTING LARGE ACCUMULATOR PLATES. JOHN ALFRED FULLILOVE, Market Harborough, England. Filed July 9, 1929, Serial No. 377,005, and in Great Britain July 23, 1928. 6 Claims. (Cl. 22—153.)



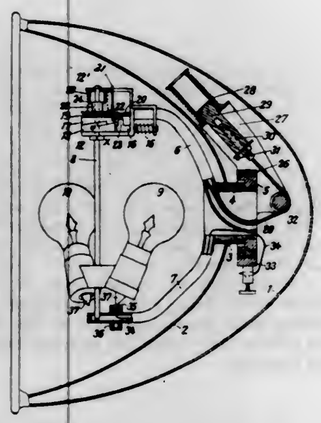
1. A mould for casting large accumulator plates, comprising oppositely disposed sides, means for holding the sides in position to form a mould, a plurality of movable sections and means for moving the sections outwardly relatively to the mould, each of the oppositely disposed sides comprising a number of the movable sections, and the movable means of each section being independently of the others.

1,806,849. COMBINATION PENCIL, RULE, AND COMPASS. AUGUST J. GELARDI, Bronx, N. Y. Filed Jan. 23, 1930. Serial No. 422,864. 2 Claims. (Cl. 120—1.)



2. In combination, a casing having an elongated round opening therethrough whereby to receive a pencil, said casing having an elongated slot therein spaced inwardly from one face thereof, a slidable rule member loosely carried by said casing in said elongated slot, stop means secured to said slidable member at the inner end portion thereof, said casing having a reduced end portion, a cap member adapted to be removably mounted on said restricted end portion, and compass means for said casing, said compass means when in inoperative position being normally positioned within said cap member.

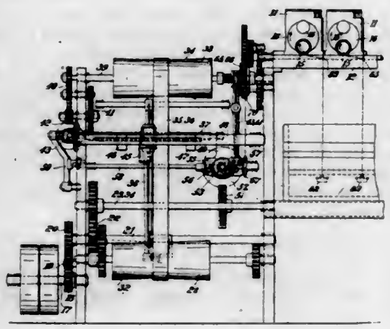
1,806,850. DIMMING DEVICE FOR SEARCHLIGHTS. PAUL GIESE, Leipzig, Germany. Filed May 24, 1929, Serial No. 365,693, and in Germany Oct. 31, 1928. 9 Claims. (Cl. 240—37.1.)



1. A dimming device for use in connection with search lights, comprising in combination with the reflector of the search light, a lamp carrier arranged in the reflector and including a hollow member arranged in the central portion of the reflector; a plurality of different ray projecting lamps mounted on the carrier; means for actuating the carrier to bring any of the lamps in the focus of the reflector, a contact for supplying current to the lamp disposed in the focus of the reflector, and a conductor for supplying current to said contact, said actuating means and conductor extending through said hollow member.

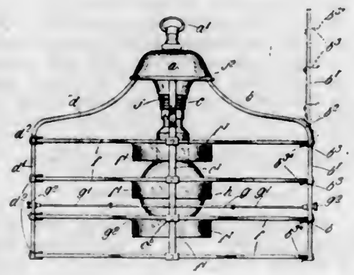
1,806,851. SPINNING MACHINE FOR ARTIFICIAL SILK. HERMANN HAMEL, Dresden-Blasewitz, Germany. Filed Jan. 27, 1928, Serial No. 249,921, and in Germany Feb. 7, 1927. 5 Claims. (Cl. 242—18.)

5. In an artificial silk spinning machine, including alternately rotating spindles, and a reversible spindle carrier to bring the spindles in alternation into rotating position, means to rotate the spindles at a speed gradually decreasing as the yarn is wound thereon, means to reverse the carrier at selected intervals, and means to coordinate the operation of the reversing means and the



speed slowing means, so that an unwound spindle will be in position to be rotated when the rotating means is at its highest speed.

1,806,852. ELECTRIC LAMP SHADE AND/OR FITTING. SIDNEY WILLIAM HAMLYN, London, England. Filed June 20, 1929, Serial No. 372,389, and in Great Britain June 23, 1928. 7 Claims. (Cl. 240—78.)

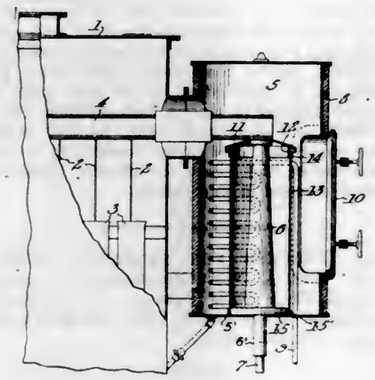


1. An electric lamp fitting comprising a plurality of discs of translucent material, a framework to support the same, one of the legs of said framework being hingedly mounted so that it can be swung out of position to allow easy removal of said discs and a strainer inside said framework to strengthen the same.

1,806,853. UTILIZATION OF PARAFFIN HYDROCARBONS TO CREATE A NONOXIDIZING AND NONSULPHUROUS ATMOSPHERE IN THE TEMPERATURE TREATMENT OF SOLIDS. FREDERICK J. HARLOW and GEORGE R. BENZ, Bartlesville, Okla., assignors to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed May 25, 1928. Serial No. 280,647. 1 Claim. (Cl. 148—17.)

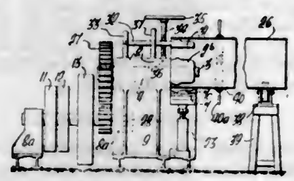
A method of the character described, comprising releasing a super-atmospheric pressure from a liquefied normally gaseous paraffin hydrocarbon fluid having a vapor pressure of not less than 25 pounds per square inch and not greater than 500 pounds per square inch at ordinary temperatures and permitting the same to assume gaseous form, and then utilizing the resulting gas free of any oxidizing agent for maintaining a non-oxidizing and non-sulphurous atmosphere about metal undergoing thermal treatment.

1,806,854. INSULATOR. ROBERT B. HESSON, Middlesex Borough, N. J., assignor to Research Corporation, New York, N. Y., a Corporation of New York. Filed May 17, 1928. Serial No. 278,478. 8 Claims. (Cl. 183—7.)



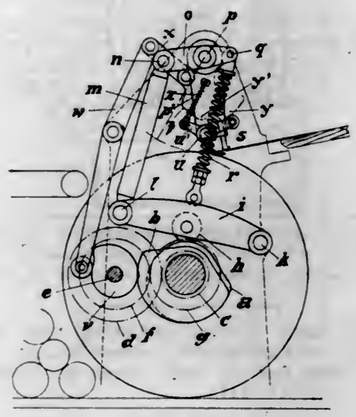
1. The combination with an insulator, disks arranged at the ends of said insulator, and a sheet of insulating material cooperating with said disks and spaced from said insulator to form a substantially air-tight housing for said insulator.

1,806,855. METAL WORKING APPARATUS. WALTER REGINALD HUME, Melbourne, Victoria, Australia, assignor to Hume Steel Limited, Melbourne, Australia. Filed Apr. 8, 1926, Serial No. 100,640, and in Australia May 7, 1925. 5 Claims. (Cl. 153—9.)



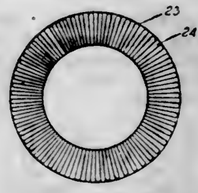
3. An apparatus for forming metal bodies comprising a work support, a forming member mounted for free rotation and bodily movable about a fixed center out of line with its axis of rotation, the bodily movement of the forming member causing it to move into and out of contact with the work on the work support without interference with the free rotation of said member about its axis.

1,806,856. FORE GRIPPER MECHANISM. WILHELM KOLMER and ERHARD WIRSCHINGER, Augsburg, Germany, assignors to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed Jan. 26, 1929, Serial No. 335,176, and in Germany Feb. 3, 1928. 9 Claims. (Cl. 271—53.)



1. In a two-revolution printing press fore-gripper mechanism comprising in combination a two-revolution cam driven by the main shaft of the machine and a one-revolution cam, a lever and a roller journalled in said lever adapted to contact with parts of the circumference of either of said cams.

1,806,857. METHOD OF MAKING SOLID TIRES. RICHARD LIEBAU, Pittsburgh, Pa., assignor to The Republic Rubber Company, Youngstown, Ohio, a Corporation of Ohio. Filed Dec. 1, 1926. Serial No. 151,923. 5 Claims. (Cl. 154—12.)

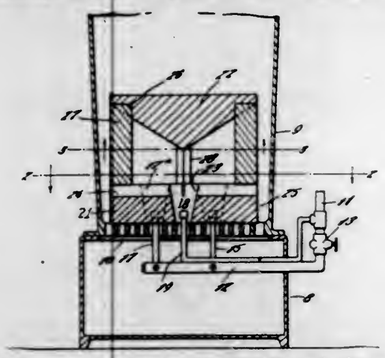


2. The method of producing a tread portion of an elastic vehicle tire which consists in folding a strip of rubber back and forth upon itself to form a compact assembly of contacting folded portions, and then removing the series of turned over edges formed along one edge of the assembly.

1,806,858. GAS BURNER. HARRY W. LIVINGSTON, Lyons, Kans., assignor of one-half to J. M. Blair, Lyons, Kans. Filed Dec. 14, 1929. Serial No. 414,090. 6 Claims. (Cl. 158—7.)

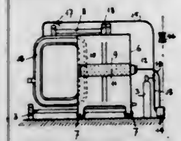
1. In a structure of the class described, in combination, a furnace including a firebox, and a grate in said firebox, a gas burner removably supported on said grate

and comprising a base of disc-like form embodying air and gas mixing means, a spreader plate superposed and



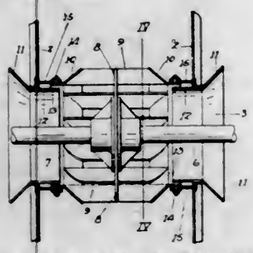
spaced from said base, and a plurality of circumferentially spaced vertically-disposed supports resting on said base and serving to maintain aid spreader in place.

1,806,859. SELF ACTING CLOSURE FOR WATER TIGHT COMPARTMENTS. DIEGO MATTEI, Genoa, Italy. Filed Dec. 26, 1928. Serial No. 328,409. 6 Claims. (Cl. 114—117.)



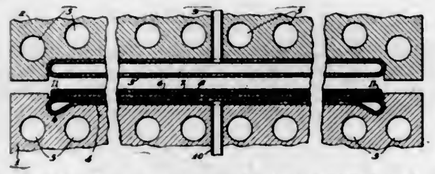
1. A water-tight closure comprising a movable door, a frame for the door, means for closing the door by flooding the compartment in which the door is located, flexible air bags between the frame and door, a source of compressed air, a fluid operated connection between the door and frame, a pipe connecting the fluid connection and source of compressed air, a pipe connecting the bags and said source, a valve controlling the admission of pressure fluid to both pipes, and a valve in the bag connected pipe operable by the door when closing to inflate the bags to effect a water-tight closure between the door and frame when the door is fully closed.

1,806,860. CENTRIFUGAL FAN. WILLIAM J. MONTGOMERY, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed July 11, 1927. Serial No. 204,803. 4 Claims. (Cl. 230—128.)



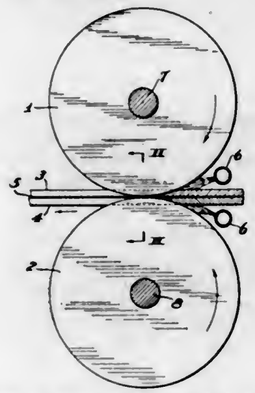
1. In a device of the class described, a casing element, a rotor element in the casing element having a tubular axial inlet member, said casing having a side wall normal to the rotor axis and provided with an inlet opening coaxial with the rotor, a tubular gasket of anti-friction material surrounding said tubular inlet member and axially adjustable thereon to form a sealing contact with the casing side wall marginally of the latter's inlet opening, and removable means securing the gasket to the tubular inlet member.

1,806,861. APPARATUS FOR MAKING COMPOSITE GLASS. WILLIAM OWEN, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed June 1, 1928. Serial No. 282,092. 3 Claims. (Cl. 18—17.)



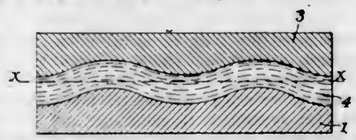
1. Apparatus for applying heat and pressure to a plurality of sheets to be joined together comprising, a pair of opposing platens each provided with an outwardly opening recess having a substantially flat rear wall and edge walls extending transversely of the rear wall to the faces of the platens, rubber containers seated in the recesses and supported at their edges by the edge walls of the recesses and adapted to receive between them the sheets to be joined, said edge walls being rounded outwardly, means for supplying liquid under pressure to the interior of the containers, and means for affecting predetermined temperature changes in said liquids.

1,806,862. PROCESS FOR SEVERING COMPOSITE GLASS. WILLIAM OWEN, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed July 7, 1928. Serial No. 291,072. 3 Claims. (Cl. 125—13.)



1. A process of severing a composite glass plate comprising a pair of glass sheets with an interposed sheet of tough, transparent material, which consists in simultaneously cutting slots completely through the glass sheets in opposition to each other, leaving a part at least of the interposed sheet unsevered, and then separating the interposed material lying between the slots.

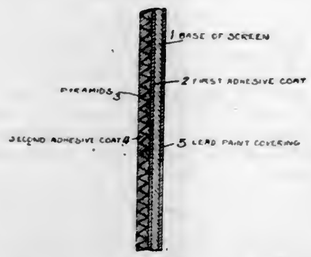
1,806,863. PROCESS FOR PRODUCTION OF SUBSTANCE HAVING A NACREOUS AND CHATOYANT ASPECT. JEAN PAISSEAU, Paris, France. Filed Nov. 19, 1926, Serial No. 149,444, and in France Nov. 21, 1925. 1 Claim. (Cl. 18—47.5.)



Process for the production of sheets of plastic material having a nacreous and chatoyant aspect, the nacreous

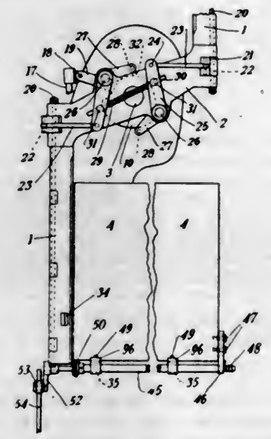
appearance of which presents a predetermined design, which process consists in utilizing elementary sheets of plastic material in which embedded brilliant particles have all been oriented parallel to the surface, in imparting to the brilliant particles of the said sheets a varied orientation by the action of a die applied upon the sheets when they are in a substantially soft condition, the projecting portions of the die corresponding to the design to be obtained and entering the thickness of the sheet, in cutting the sheets thus treated or distorted to make them correspond in size to the cross-sectional area of the chamber of a block-press, in stacking up the pieces or sheets thus cut upon each other in the said press, in uniting them into a compact block in the said press according to standard practice, and in cutting or slicing the block into sheets of the desired thickness.

1,806,864. STEREOSCOPIC CINEMA PROJECTION SCREEN. JULES ERNEST PALLEMAERTS, Stratford, London, England. Filed Oct. 1, 1928, Serial No. 309,382, and in Great Britain Jan. 21, 1928. 3 Claims. (Cl. 88—24.)



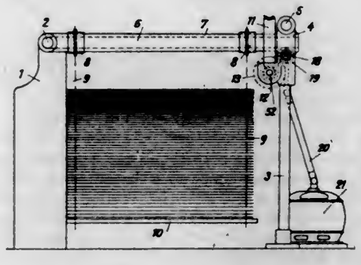
1. A cinematograph and like projection screen comprising a fabric base, a transparent adhesive coating on the front of the fabric base, a plurality of glass pyramids placed on the adhesive coating with their apexes projecting from the base, and a second coating of the transparent adhesive flowed over the front surface of the screen so as completely to embed the pyramids therein.

1,806,865. PLATEN PRINTING PRESS. ARTHUR WILLARD RANGER, London, England. Filed Aug. 2, 1930, Serial No. 472,658, and in Great Britain Jan. 27, 1930. 6 Claims. (Cl. 101—414.)



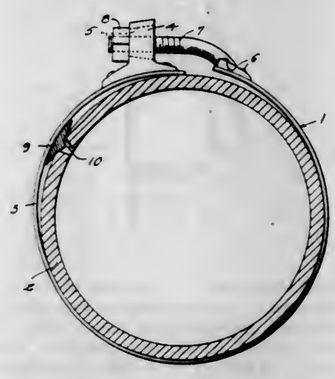
1. In a platen printing press having radial arms provided with grippers and adapted to be partially rotated intermittently in the plane of the swinging platen to bring sheets onto and remove them from the platen, means for releasing each sheet from the grippers momentarily when at the platen and means for registering each sheet when so released including lays adjacent to the side and bottom edges of the platen and means for moving said lays relatively to the platen.

1,806,866. DEVICE FOR ADJUSTMENT OF THE PILE FEED IN SHEET FEEDING MACHINES. GEORG SPIESS, Leipzig, Germany. Filed May 24, 1929, Serial No. 365,606, and in Germany May 21, 1928. 7 Claims. (Cl. 271—62.)



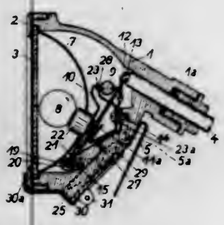
1. In a device for raising the pile table in sheet feeding machines having a motor drive and a hand drive, and wherein raising means arranged at opposite sides of the table are capable of being independently put into and out of action, the combination, with a drive automatically operated by the sheet feeding machine, and a directly operating hand drive, of a cooperating separate hand-controlled motor drive, and coupling means whereby the individual raising means may be separately or conjointly put into or out of operation.

1,806,867. LEAK STOPPING DEVICE FOR PIPES. FRANK WELSH, Granville, Ohio. Filed Apr. 11, 1929. Serial No. 354,359. 1 Claim. (Cl. 24—19.)



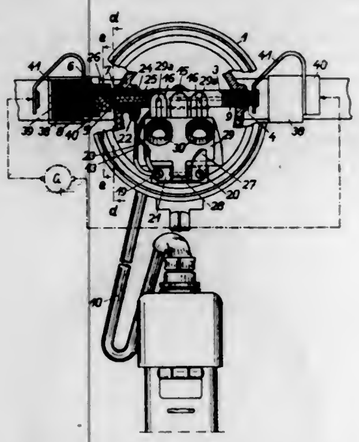
A means for holding a resilient member against an aperture in a pipe whereby to close the aperture comprising a split annular band, an upstanding lug having a base extending outwardly of each side thereof, rivet means for securing the base at one end of said band, said lug having a tapering slotted aperture therethrough, a threaded bolt, rivet means for securing said bolt to the opposite end of said band, said bolt being adapted to extend through said slotted portion of said lug, and a nut threadedly engaging the bolt and bearing against said lug whereby to tighten the band about said pipe upon rotation of the nut in one direction.

1,806,868. MINER'S LAMP. PAUL WOLF, Zwickau, Germany. Filed Apr. 28, 1930. Serial No. 448,061. 12 Claims. (Cl. 240—11.3.)



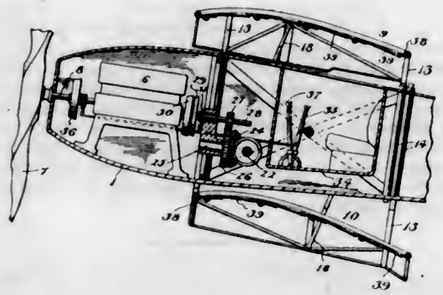
1. An electric lamp adapted to be energized by an accumulator and to be used as a miner's head lamp or for like purposes, comprising a lamp casing, an electric lamp bulb mounted in the casing, current supply conductors entering the lamp casing and adapted to be connected externally to an accumulator, a switch spindle journaled in the casing, means such as a handle for rotating the switch spindle from outside the casing, and means provided on the switch spindle for establishing and interrupting an electric circuit through the lamp bulb and the current supply conductors.

1,806,869. ELECTRIC LAMP CHARGED FROM ACCUMULATORS. PAUL WOLF, Zwickau, Germany. Filed Apr. 28, 1930. Serial No. 448,062. 8 Claims. (Cl. 240—11.3.)



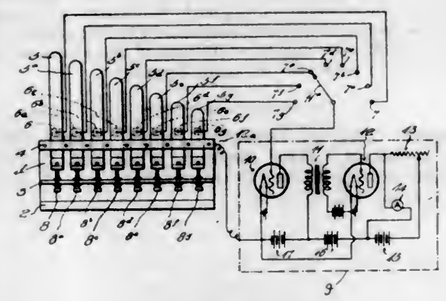
1. An electric lamp, such as a miner's head lamp, adapted to be energised by an accumulator, comprising a lamp casing, a lamp bulb mounted in the lamp casing, conductors for conveying current to the lamp bulb from an accumulator outside the lamp casing, a switch spindle rotatably mounted in the lamp casing, means such as a handle for rotating the switch spindle from outside the lamp casing, means co-operating with the switch spindle for establishing and interrupting an electric circuit through the lamp bulb, the conductors and the accumulator by rotating the switch spindle, and terminals projecting to the outside of the lamp casing and adapted to be coupled to a source of charging current, the conductors, the switch spindle and the means co-operating therewith being adapted to cut off the current from the lamp bulb and to establish a connection in one position of the switch spindle between the outside terminals and the accumulator.

1,806,870. AEROPLANE. WISTER P. BOTT, Homer, La. Filed Nov. 12, 1929. Serial No. 406,653. 1 Claim. (Cl. 244—11.)



In an aeroplane, the combination with a fuselage, of wings mounted thereon, levers fulcrumed between their ends upon the sides of the fuselage and having two alined arms and a third arm extending forwardly from their fulcrums at a right angle to the alined arms, connecting rods pivoted to the opposite ends of the alined arms and to the upper and lower wings respectively, a shaft extending transversely through the fuselage, means for rotating said shaft, cranks on the ends of said shaft, and links connecting said cranks with the forwardly extending arms of the respective levers.

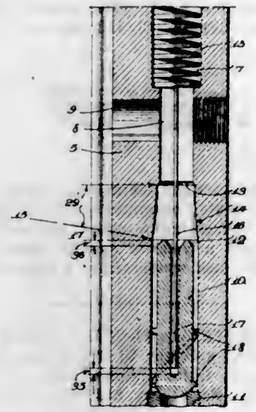
1,806,871. SOUND INTENSITY MEASURING SYSTEM. WARD E. BOWER, Washington, D. C. Filed Jan. 30, 1929. Serial No. 336,221. 11 Claims. (Cl. 181—0.5.)



1. A sound analyzer comprising a mechanical vibration member, a constant frequency electromechanical vibrator carried by said mechanical vibration member, an electrical impulse amplifying system including an electron discharge device, an indicating device associated with the output circuit of said amplifying system, and connections between said constant frequency electromechanical vibrator and said amplifying system for actuating said indicating device according to the operation of said electromechanical vibrator due to sound waves incident upon said mechanical vibration member.

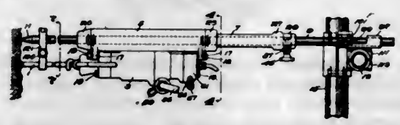
1,806,872. AUTOMATIC WELL FLOWING DEVICE. ALEXANDER BOYNTON, San Antonio, Tex. Filed Nov. 30, 1927. Serial No. 236,765. 16 Claims. (Cl. 137—111.)

15. A valve comprising a body having a plunger chamber with an inlet and an outlet and a seat adjacent to each, a plunger situated in the chamber engaging one of the seats and having a bore, and a spring having an axial



extension fitting in the bore in close proximity with the end of the bore leaving room for a limited unimpeded preliminary movement of the plunger from its seat.

1,806,873. DRILLING MACHINE. GEORGE H. GILMAN, Belmont, Mass., assignor, by mesne assignments, to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed July 21, 1921, Serial No. 486,378. Renewed July 25, 1930. 19 Claims. (Cl. 121—9.)



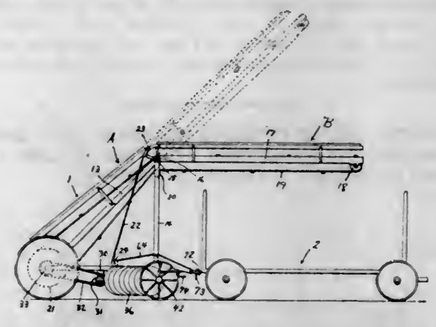
1. In a drilling machine, a longitudinally arranged supporting member, a drill actuator, feeding means for said actuator separate from said member but supported thereby and movable along said member, means for securing said feeding means to said member in different positions of adjustment relative thereto, said actuator supported in lateral offset relation to said feeding means.

1,806,874. DRILLING MACHINE. GEORGE H. GILMAN, Belmont, Mass., assignor, by mesne assignments, to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed June 5, 1920, Serial No. 386,868. Divided and this application filed June 4, 1926. Serial No. 113,672. 18 Claims. (Cl. 121—28.)



6. In a fluid pressure motor, a cylinder, a piston therein, a valve having an internal conduit, admission and exhaust connections for said cylinder, the admission connection comprising said internal conduit, said valve having means to control said connections and being provided with separate surfaces facing in the same direction, means for creating a pressure condition on one of said surfaces to move said valve, and means for creating a pressure condition on the other of said surfaces to lock said valve when so moved.

1,806,875. HAY LOADER. JAMES GRAFMILLER, Forest, Ohio. Filed Mar. 15, 1930. Serial No. 436,116. 1 Claim. (Cl. 214—41.)

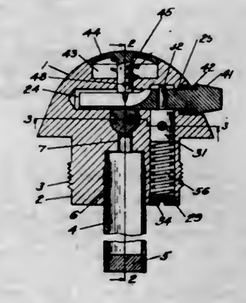


A hay loader of the character described comprising a wheeled mobile frame having an endless conveyor mounted for operation thereon and adapted to deposit hay in a vehicle disposed forwardly of the loader, and means for detachably connecting the loader to the vehicle comprising a cable having one end attached to the loader, a drum mounted for rotation on the loader upon which the cable is windable, a casting having a hook thereon engageable with the vehicle to be loaded, a pulley journaled in the casting over which the cable is trained, an actuating arm depending from the hook and a projection depending forwardly from the loader for engagement with the arm in a manner to shift the hook.

1,806,876. METHOD OF FILTERING AND DECOLORIZING OILS. DENISON W. GRANT, Franklin, Pa. Continuation of application Serial No. 230,691, filed Nov. 2, 1927. This application filed June 23, 1930. Serial No. 463,359. 3 Claims. (Cl. 196—147.)

1. The method of decolorizing oil in a filter which includes the steps of charging a body of fuller's earth into the filter, causing said body of earth to remain stationary, charging such a quantity of oil into said body of earth that, upon subsequently flushing with petroleum spirit all the removed color producing bodies are retained by the earth, causing the oil to seep into the body of fuller's earth and remain therein and in contact therewith for a period of time sufficient to decolorize the oil, then flushing the oil from the earth with petroleum spirit, and then removing the spirit from the oil whereby the oil so produced is of the desired color.

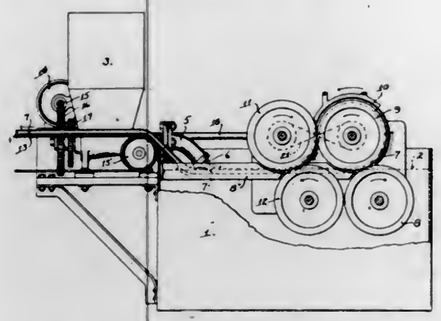
1,806,877. POINT DETONATING FUSE. FRANK B. HALE, Edgewood Arsenal, Md. Filed Oct. 5, 1929. Serial No. 397,682. 9 Claims. (Cl. 102—39.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757)



1. A fuse for a projectile comprising a body, a fixedly positioned primer charge carried in the body, a detonator

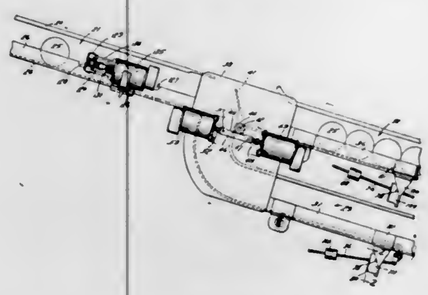
charge carried in a movable bar mounted in the body, means in said body for normally locking said movable bar so that the primer charge is out of line with the detonator charge, set back actuated means for normally maintaining said locking means in locked position, and a firing pin positioned upon the head of said fuse and extending within said body, said firing pin normally resting upon said locking means.

1,806,878. DOUGH COOKING MACHINE. JOHN KAUTTSCHNITT, San Mateo, Calif. Filed May 27, 1930. Serial No. 456,048. 9 Claims. (Cl. 107—4.)



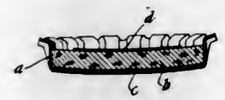
9. A dough cooking machine comprising a tank for containing a cooking liquid; a hopper for containing the dough; a feed screw in the hopper; a spout for reducing the dough to a continuous strip and depositing said strip upon the surface of the cooking liquid at one end of the tank; a system of rotatable rolls at the other end of the tank adapted to impart continuous travel to said strip, turning it half over and reversing its travel direction; switching means associated with said roll system for shifting the strip to lay its reversed course to one side of its outward course; and a traveling conveyer at the feed end of the tank to receive the discharging cooked strip.

1,806,879. RUNWAY SWITCH AND CONTROL THEREFOR. HENRY W. LINDGREN, Waukegan, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 27, 1930. Serial No. 423,712. 8 Claims. (Cl. 193—39.)



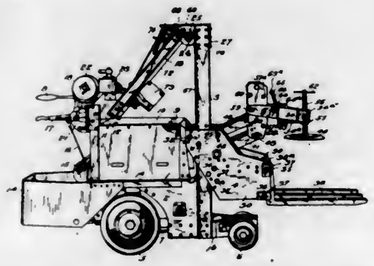
1. In a can runway switch mechanism the combination of an inlet runway section, a plurality of outlet runway sections, a runway switch interposed between said inlet and said outlet sections for selectively directing cans from the former into one of the latter, and means partially located within each of said outlet sections and operable by an accumulation of cans in that section to actuate said switch and thereby divert the cans into the other of said outlet sections.

1,806,880. METHOD OF MAKING BOTTLE CLOSURES. CHARLES E. MCMANUS, New York, N. Y., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed June 27, 1925. Serial No. 40,126. 8 Claims. (Cl. 113—80.)



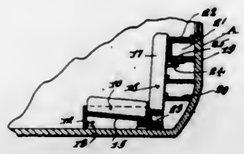
1. The herein described method of making bottle closures including the step of spraying a solution of cementitious material containing a water insoluble, inherently flexible, base, and a volatile solvent upon the exposed face of a cushion disk while within a metal shell.

1,806,881. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 29, 1928. Serial No. 315,790. 12 Claims. (Cl. 214—65.)



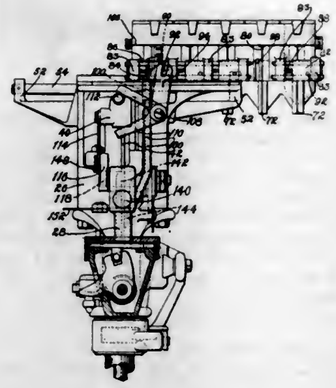
1. In apparatus of the class described, the combination of a wheel mounted frame, an elevating member mounted to move upwardly and downwardly relative to said frame, a clamping mechanism mounted on said elevating member and comprising a member pivotally mounted on said elevating member, a support carried by the outer portion of said pivoted member, a bracket mounted on said support, a clamping device carried by said bracket, and means connected to said pivoted member and arranged to operate said clamping mechanism and raise said elevating member when the latter engages a load.

1,806,882. CLOTHING COMPARTMENT. JOSEPH L. RICHARDSON, Nashville, Ark. Filed June 15, 1929. Serial No. 371,192. 2 Claims. (Cl. 246—37.)



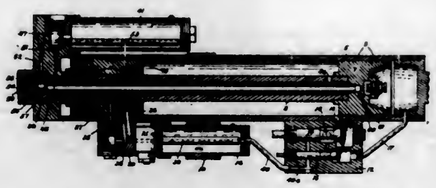
1. The combination with a motor vehicle body including a rear wall, a clothes compartment carried by the rear wall and a plurality of clothes receiving shelves carried by said wall below the compartment, a rear seat frame spaced from the rear wall, a cushion for the frame, a removable back rest for the frame, companion latch members carried respectively by the back rest and clothes compartment, and resilient means carried by the body intermediate the rear wall and seat frame for normally holding the back rest in a raised position and the companion latch members in locked engagement the back rest normally resting against the forward edge of said shelves.

1,806,883. MECHANISM FOR SUPPLYING FASTENINGS. WILLIAM THOMAS BUCKINGHAM ROBERTS, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Nov. 13, 1922, Serial No. 600,497, and in Great Britain Dec. 5, 1921. Divided and this application filed Feb. 17, 1928. Serial No. 255,169. 21 Claims. (Cl. 1—6.)



1. A machine having mechanism for supplying fastenings, comprising a feed raceway, a plurality of parallel delivery raceways, a source of supply of loose fastenings for each delivery raceway, means for supporting the feed raceway and the delivery raceways constructed and arranged to permit any of the delivery raceways to be brought into co-operative relation with the feed raceway, automatically operating means for closing the delivery ends of the delivery raceways during said relative movement, fastening inserting mechanism, and means controlled by said inserting mechanism, for opening the delivery end of the operatively connected delivery raceway.

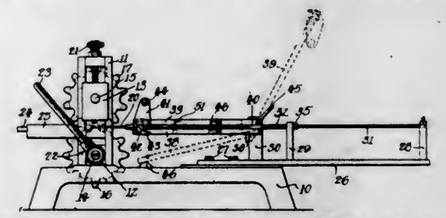
1,806,884. CYLINDER AND PISTON. GLADEON M. BARNES, U. S. Army, Hastings, Mich. Filed Dec. 10, 1930. Serial No. 501,323. 7 Claims. (Cl. 89—43.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



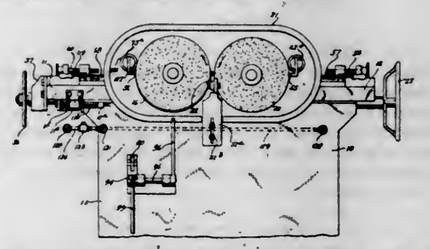
5. A cylinder, means for admitting a gaseous medium to the cylinder, a piston compressing the gaseous medium, a liquid reservoir associated with the cylinder, means for admitting the pressure medium to the reservoir, and means for conducting liquid from the reservoir to bearing surfaces of the cylinder.

1,806,885. FLUTING MACHINE. SERAPHINE F. BAUWENS, Chicago, Ill., assignor to Lewis G. Blessing, Evanston, Ill. Filed Jan. 6, 1927. Serial No. 159,295. 12 Claims. (Cl. 112—175.)

6. A fluting machine having, in combination, a pair of driven toothed rolls, a needle arranged relative thereto for receiving thereon material from said rolls, a support, and a pair of plates pivotally mounted on said support one on each side of said needle, means securing said plates one to the other with said needle therebetween, and a plurality of pointed pins on one plate arranged to straddle said needle at various points along the length thereof, which pins are adapted to engage the material on said needle to hold said needle against bending.

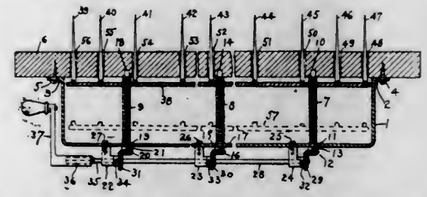


1,806,886. GRINDING MACHINE. CLEMENT BOOTH, Danbury, Conn., assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed June 11, 1926. Serial No. 115,220. 44 Claims. (Cl. 51—103.)



1. In a grinding machine, in combination, a pair of abrasive wheels, means for rotating both of said wheels, means for supporting work therebetween for action thereon by said wheels, and means actuated by fluid pressure for moving one of said wheels toward and into predetermined spaced relation to the other, and then away from the other to respectively grip and release said work.

1,806,887. ADJUSTABLE HOLDING DEVICE. ERNEST BRUNO, New York, N. Y. Filed Sept. 9, 1930. Serial No. 480,799. 3 Claims. (Cl. 164—78.)

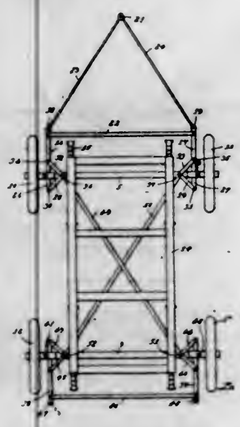


1. In a holding device, a framework attachable to a table, carrying a multiple of screws journalled in said table and framework and rotatably engaging with a plate holding a multiple of pointed pins and means for rotating said screws simultaneously.

1,806,888. METHOD OF SEPARATING ADHERING PARTICLES. GUY H. BUCHANAN, Westfield, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Feb. 8, 1929. Serial No. 338,634. 8 Claims. (Cl. 209—166.)

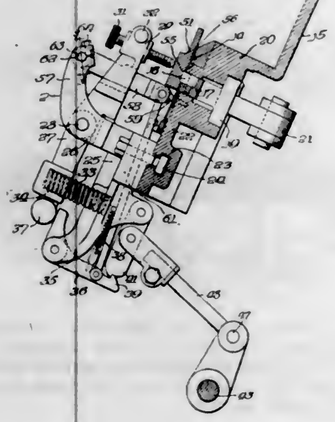
1. A process of recovering elemental carbon from a slurry containing it and other particles adherent thereto, which includes the steps of dissolving the other particles, reprecipitating this material and then separating the carbon by a flotation operation.

1,806,889. TRAILER VEHICLE. CORNELIUS S. BUSINGA, Rockford, Ill. Filed May 16, 1930. Serial No. 452,873. 2 Claims. (Cl. 280—33.5.)



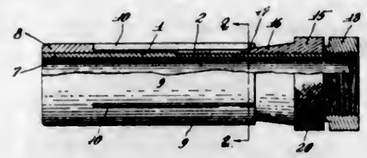
2. The combination in a tractor vehicle having a pair of axles, steering knuckles at each end of the axles and wheels on said steering knuckles, of triangles fixedly attached to each steering knuckle, a pair of reach rods connecting the apex of diagonally opposite steering triangles adapted to steer and draw the trailing wheels, and means for maintaining the wheels attached to each axle in parallelism.

1,806,890. AUTOMATIC STOP MECHANISM. WILLIAM CAMERON, Chicago, Ill., assignor to Cameron Can Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 18, 1928. Serial No. 255,229. 7 Claims. (Cl. 192—126.)



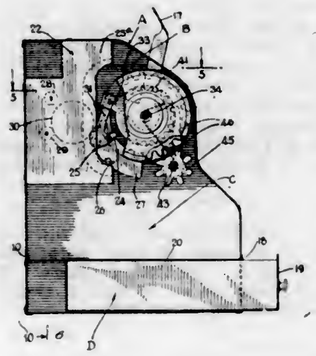
1. In a machine for operating upon blanks the combination of means for feeding blanks edgewise, a detector mounted to swing in an arc about a pivot remote from the path of movement of said blanks, the detector being normally positioned so that a line intersecting said pivot and the point of the detector nearest the path of travel of the blanks will be perpendicular to said path of travel, and means rendered operable by swinging movement of said detector away from normal position under the influence of said advancing blank for stopping said machine.

1,806,891. BUSHING. GEORGE B. CHADWICK, Portsmouth, N. H. Filed Feb. 19, 1929. Serial No. 341,113. 2 Claims. (Cl. 77—75.)



1. A device of the class described comprising a sleeve having an externally threaded end portion, a tube surrounding and fixed to the opposite end of said sleeve, and having integral spring fingers extending about said threaded portions and having free ends, and a nut threaded on said threaded end and having a tapered portion engageable with the inner faces of said free ends to force said free ends outward from the axis of said sleeve to an amount dependent on the axial position of said nut.

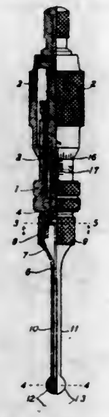
1,806,892. REGISTERING BANK. STANLEY L. CONNELL, Girard, Pa., assignor to The Girard Model Works, Inc., Girard, Pa., a Corporation of Pennsylvania. Filed Mar. 30, 1928. Serial No. 265,889. 15 Claims. (Cl. 235—100.)



1. In a coin registering mechanism, in combination, a registering element, a stationary coin chute adapted to receive a coin and to hold the same in fixed position, an operating element normally disconnected from said registering element, and means movable into engagement with and in riding contact over a coin manually deposited directly in said chute, said means being arranged so as to be actuated by its engagement with said coin for causing said operating element to become operatively connected to said registering element, and said means having a predetermined length of riding contact with said coin for predetermining the degree of movement of said registering element.

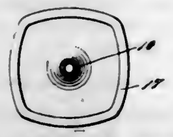
1,806,893. INSIDE MICROMETER CALIPER. HARRY G. CUNNINGHAM, Los Angeles, Calif. Filed Feb. 23, 1929. Serial No. 341,905. 2 Claims. (Cl. 33—164.)

1. In an inside micrometer caliper, in combination, a cylindrical body having an internal screw thread, a rotatable sleeve operative upon said body, a plunger piston within said body and having a screw thread engaging that of the body, the piston being connected at one end with the sleeve and having a circular recess at the other and adapted to receive the flanged head of an expansion element, an expansion element having such head at one end, the other end being wedge shaped, an element having separable measuring legs and adapted to be attached to



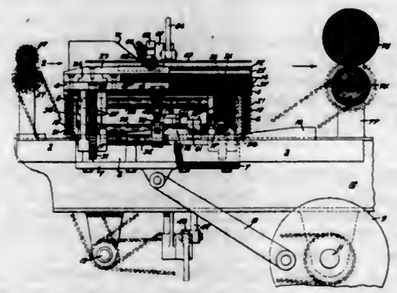
said body, said legs adapted to cooperate with the wedge of said expansion element so as to be separated thereby substantially as described.

1,806,894. COLLAR BUTTON. FRANK P. DAUGHADAY, Providence, R. I. Filed Oct. 27, 1930. Serial No. 491,518. 2 Claims. (Cl. 24—101.)



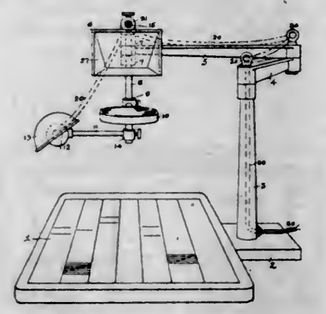
1. The method of forming a one-piece collar button with a non-circular symmetrical base, including the steps of drawing a sheet metal blank into cup shape with a flange on its edge, hammering the cup to provide a thin shank with a hollow head at the closed end, trimming the flange to provide a non-circular shape similar to but different than the desired finished shape, rolling the marginal edge of the flange throughout its peripheral extent inwardly to provide a finished rolled edge with a periphery of a desired non-circular symmetrical shape and a shape different than the shape of the trimmed flange.

1,806,895. FORMING MECHANISM. GEORGE F. FORD, Los Angeles, and WALTER F. PITTMAN, Huntington Park, Calif., assignors to Fibreboard Products Inc., San Francisco, Calif., a Corporation of Delaware. Filed Apr. 25, 1930. Serial No. 447,180. 17 Claims. (Cl. 93—45.)



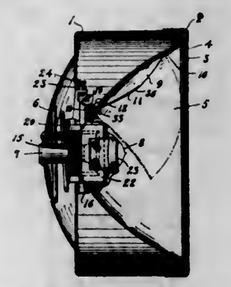
1. A forming mechanism for fiber board structures, comprising a platen and a jaw disposed at one side thereof, means for placing the structure upon the platen with its edge overhanging the platen, means for causing relative movement between the platen and jaw to bend the edge of the structure over the edge of the platen, and means for causing further relative movement between the platen and jaw to squeeze the bent over edge therebetween.

1,806,896. TYPE FORM PROJECTOR. EDMUND J. FREUND, Valparaiso, Ind. Filed Aug. 20, 1928. Serial No. 300,697. 1 Claim. (Cl. 88—1.)



In a device of the character described an optical reverser adaptable for the direct reading from left to right of any portion of a form of type that presents its letters reversed from right to left, which device is always associated with a form of printer's type and it comprises a standard or support positioned adjacent the group of type, a swinging arm comprising a plurality of pivoted members the free end of one member being pivotally connected to the support and the free end of a pivotally connected member being instantly movable above every portion of the type form on a horizontal plane, the reverser supported at the free end of the latter member, and a source of illumination also supported by the free end of said member adapted to illuminate the type.

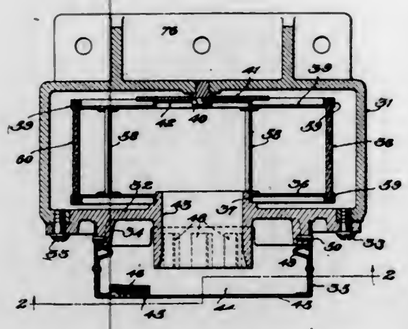
1,806,897. HEADLIGHT FOR AUTOMOBILES. EDITH S. GERRY, Warwick, R. I. Filed May 25, 1929. Serial No. 365,926. 1 Claim. (Cl. 240—45.)



In a headlight, a reflector of substantially parabolic form, a lamp located substantially in the focus of the reflector, a shutter forming part of the reflecting surface of the reflector pivotally mounted above the lamp, and means under the control of the operator for moving said shutter about its pivot comprising an electro-magnet coil, a movable plunger disposed within said coil adapted to be moved upwardly when the coil is energized, means for limiting the stroke of said plunger, a rotatable shaft split at one end thereof mounted on the rear of the reflector for operatively connecting said plunger to said shutter, internal and external threads on the split end of said shaft, a coiled spring on said shaft and connected thereto adjacent the split end thereof, adapted to rotate said shaft to return said plunger to its normal position

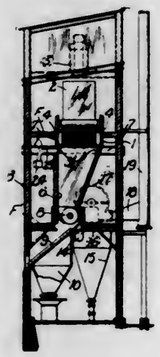
when the coil is de-energized, means on said shaft for adjusting the tension of said coiled spring comprising a collar in screw threaded engagement with said shaft and means for locking said collar on said shaft comprising a tapered screw in screw threaded internal engagement with the split end of said shaft adapted to expand said shaft into locking engagement with said collar.

1,806,898. AUTOMATIC SELF-CLEANING AUTOMOBILE FILTER. ALFRED GOODLOE, Roanoke, Va., assignor, by mesne assignments, to American Air Filter Company, Inc., a Corporation of Delaware. Filed May 7, 1928. Serial No. 275,912. 11 Claims. (Cl. 183—63.)



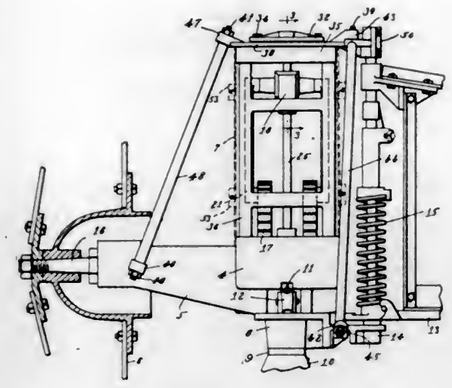
1. An air filter particularly for a compressor or the air intake of the carbureter of an internal combustion engine or the like comprising a housing; a pin mounted on the housing; a filter drum rotatably mounted on the pin, said housing having a bath of oil in the bottom thereof into which the filter projects; a plurality of teeth associated with said filter drum; and a piston and cylinder device cooperating with said teeth and operated by the suction of the associated engine to intermittently rotate the drum to automatically and periodically clean and recoat the filter with oil.

1,806,899. DUST COLLECTOR MECHANISM FOR SINTERING MACHINES. JOHN E. GREENAWALT, New York, N. Y. Filed Apr. 30, 1929. Serial No. 359,373. 2 Claims. (Cl. 266—21.)



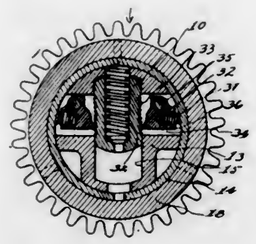
1. In combination with a rotatable sintering pan, a sinter receiving hopper thereunder, means for sealing the adjacent edges of the pan and the hopper from the atmospheric air, said sealing means comprising hinged gates at the ends of the hopper adapted to rest on the ends of the pan, and means for causing a blast of air to traverse the hopper.

1,806,900. WINDMILL. FRANK J. HALLER, Freeport, Ill., assignor to Stover Manufacturing & Engine Co., Freeport, Ill., a Corporation of Illinois. Filed Feb. 6, 1929. Serial No. 337,740. 14 Claims. (Cl. 170—77.)



1. In a windmill head, comprising a substantially vertical guide rod, and a cross-head reciprocable on said guide rod constructed to operate a plunger rod, an extension on said head reaching upwardly about the guide rod, and a top plate removably secured on top of the extension and providing support for the upper end of the guide rod, said top plate serving to cover a hand-hole provided in the top of said extension through which the cross-head is arranged to be removed and replaced.

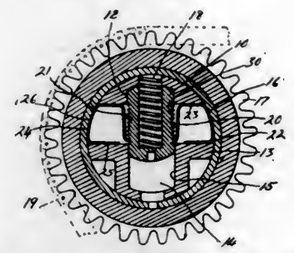
1,806,901. TIGHTENER FOR FLEXIBLE DRIVE CONNECTIONS. FRANK M. HAWLEY, Detroit, Mich., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Dec. 27, 1926. Serial No. 157,401. 12 Claims. (Cl. 64—5.)



1. In an automatic chain tightener, the combination with a support, of a sprocket journalled upon said support, means for automatically effecting a rectilinear movement of said sprocket in one direction relative to said support, and means for automatically holding said sprocket from movement in the opposite direction relative to said support.

1,806,902. AUTOMATIC CHAIN TIGHTENER DEVICE. FRANK M. HAWLEY, Detroit, Mich., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Apr. 16, 1928. Serial No. 270,523. 7 Claims. (Cl. 64—5.)

1. In a tightener for flexible drive connections, the combination of a support, a bearing slidably mounted on said support, a revoluble member on said bearing, means for resiliently urging said bearing in one direction relative to said support, ratchet teeth on said support and a latch carried by said bearing and engageable with said



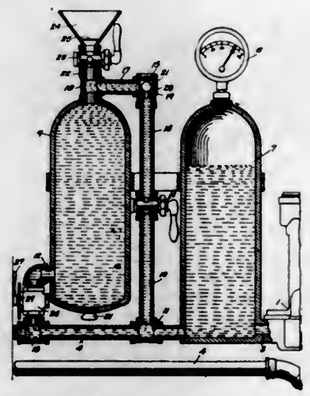
ratchet teeth, said latch comprising a spring metal clip having an arm projecting into engagement with said ratchet teeth.

1,806,903. TRANSMITTER SUSPENSION ARM. HARRY H. IDE, Chicago, Ill., assignor to American Electric Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 17, 1930. Serial No. 436,492. 8 Claims. (Cl. 179—152.)



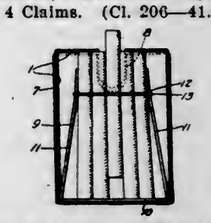
1 In a transmitter suspension arm, a base plate for supporting the same attached to a telephone switchboard, tubular telescoping members supported by said base plate, a square rod inside said tube members, and means cooperating with said square rod for preventing turning movement of said tubular members.

1,806,904. METHOD OF MIXING LIQUIDS. EARL JOHNSON, Kansas City, Mo. Filed Jan. 4, 1929. Serial No. 330,313. 3 Claims. (Cl. 299—84.)



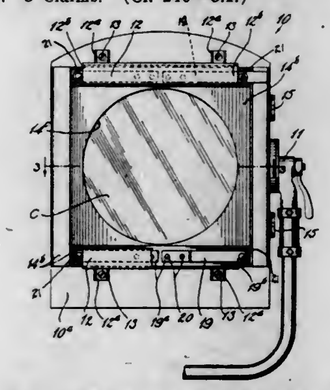
2. The method of adding a secondary spray fluid having lower specific gravity than a primary fluid to a stream of said primary fluid, including confining portions of the primary and secondary fluid to form a body of secondary fluid supported by a body of primary fluid, and by-passing a portion of the stream of primary fluid first through the body of secondary material to pick up secondary fluid and force portions of the same through the body of primary fluid.

1,806,905. CIGARETTE PACKAGE. CHARLES KAMPFMAN, East Hartford, Conn. Filed Sept. 6, 1928. Serial No. 304,324. 4 Claims. (Cl. 206—41.)



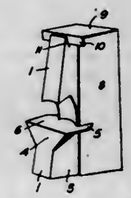
1. A cigarette package comprising a wrapper to enclose a pack of cigarettes; a substantially U-shaped clip within the wrapper comprising a relatively stiff strip bearing against opposite sides of the pack and against one end thereof, said clip being bendable at the corners of the pack; and a rubber band surrounding the pack and the clip adjacent the free ends of the latter and exerting a compression through the clip tending to force the cigarettes laterally toward the center of the package.

1,806,906. SPOT AND FLOOD LIGHT PROJECTOR. JOSEPH LEVY, Brooklyn, N. Y., assignor to Century Lighting Equipment, Inc., New York, N. Y., a Corporation of New York. Filed June 26, 1930. Serial No. 463,852. 3 Claims. (Cl. 240—3.1.)



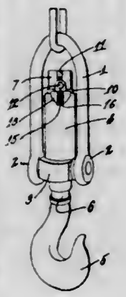
1. In a light modifying accessory adapted to be removably supported between a pair of grooved slides of a conventional light projecting apparatus, flat spring means secured to the accessory, and spaced projecting members carried on said means for engaging with one of said slides.

1,806,907. COMBINED CARD SUPPORT AND DISPLAY STAND. WALTER LINDSEY, Toronto, Ontario, Canada. Filed Mar. 18, 1930. Serial No. 436,837. 3 Claims. (Cl. 211—156.)



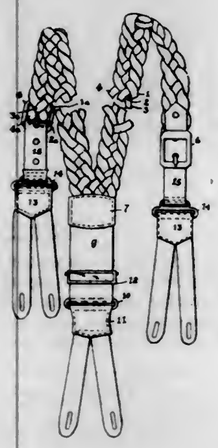
1. In a combined card support and display stand, the combination with a card support member, of a display stand member comprising a back portion, wing portions adapted to be bent at an angle to the back portion, and a top platform portion, the back, wing and platform portions being formed integrally one with the other, and said display stand member being detachably interlocked with the card support member.

1,806,908. LOCKING DEVICE FOR SPRING HOOKS. SPENCER WILLIAM LONG, Redondo Beach, Calif., assignor, by mesne assignments, to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 21, 1930. Serial No. 445,946. 5 Claims. (Cl. 294—82.)



1. In a rotation lock for well casing hook, the combination of a lock bolt, a cap having a longitudinally extending groove formed therein, into which the lock bolt is adapted to be adjusted, means for adjusting the lock bolt in position, and means adapted to engage the latter said means and hold the lock bolt in adjusted position.

1,806,909. SUSPENDERS. CLIFFORD L. MEYER, Bellevue, Pa. Filed Sept. 5, 1930. Serial No. 479,914. 3 Claims. (Cl. 241—12.)



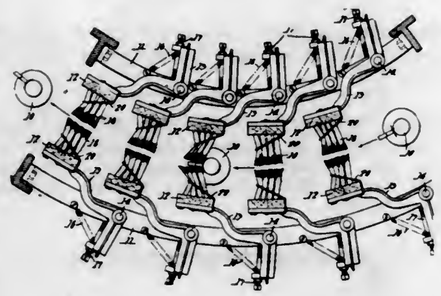
1. In a suspender for supporting garments from the shoulders of the wearer, the combination with the front forks and the rear fork and a bar connected to each of the front forks, of shoulder straps formed of a plurality of lengths of material doubled through said bar and braided together, the rear ends of the shoulder straps being connected to the rear fork.

1,806,910. PROCESS FOR THE PRODUCTION OF SYNTHETIC DRESSING OR TANNING MATERIALS. ALEXANDER MICHAILOWITSCH NASTUKOFF, Moscow, Union of Socialist Soviet Republics. Filed Nov. 1, 1928, Serial No. 316,613, and in the Union of Socialist Soviet Republics June 28, 1927. 7 Claims. (Cl. 260—3.)

5. In the process of producing synthetic tanning material, the step which consists in oxidizing by means of an oxidizing agent formolite obtained by condensing petroleum hydrocarbons with sulfuric acid and formalin, said oxidation being conducted at a super-atmospheric pressure.

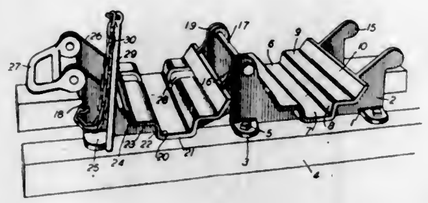
6. A tanning material, consisting of formolite oxidized by an oxidizing agent and dissolved in an alkali solution.

1,806,911. LABEL WIPING DEVICE. CHARLES H. OSLUND and JOHN EMANUEL JOHNSON, Worcester, Mass., assignors to The O & J Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 17, 1928. Serial No. 300,258. 2 Claims. (Cl. 15—168.)



1. As an article of manufacture, a label wiping brush comprising a back with rows of bristles projecting from the front thereof and a wire loop extending at an angle from the front edge of the back to engage the rear bristles at an intermediate point between their ends and hold them forward, the ends of said loop extending around on the back and held thereto.

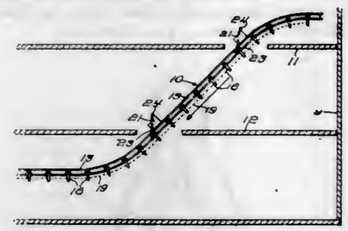
1,806,912. BIT OR LIKE VISE. FRANK M. OWEN, Oklahoma City, Okla., assignor of one-half to American Iron and Machine Works Co., Oklahoma City, Okla., a Corporation of Oklahoma. Filed Apr. 19, 1930. Serial No. 445,733. 3 Claims. (Cl. 81—17.)



1. A bit or like vise including a base having a seat conforming substantially to the contour of one half of a bit, a clamping member having a socket conforming substantially to the contour of the other half of said bit including wings provided with apertures registrable with an aperture in said other half of the bit, and means insertable in said registering apertures for securing the clamping member to said apertured half of the bit.

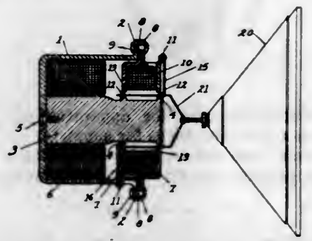
1,806,913. CONVEYER SAFETY DEVICE. CYRIL D. PAQUETTE, Detroit, Mich., assignor to Kurth & Knapp Mfg. Co., Detroit, Mich., a Corporation of Michigan. Filed Mar. 21, 1930. Serial No. 437,805. 16 Claims. (Cl. 104—251.)

1. In a traveling chain conveyer, a safety mechanism comprising a member normally in the path of the conveyer and a stop device normally out of the path thereof and actuated by said member, said member being



adapted to shift said stop device into position to stop the conveyer upon predetermined increase in the speed of travel of the conveyer.

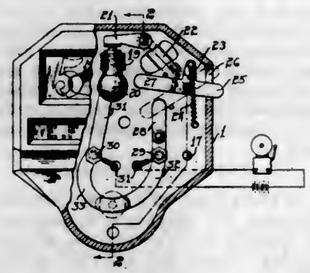
1,806,914. LOUD SPEAKER MOTOR. CHARLES W. PETERSON, Cincinnati, Ohio. Filed Mar. 7, 1930. Serial No. 433,958. 7 Claims. (Cl. 179—115.5.)



4. An armature structure designed for movement axially within two magnetic air gaps of annular shape under influence of an oscillatory flux in the poles about said gap, comprising permeable rings, a frame joining said rings in proper spacing, and means for damping vibrations self-accentuated in the said armature.

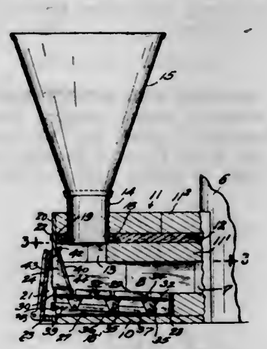
7. In a motor structure for the purpose described, a flanged cup, a cylindrical center pole secured to the base of the cup, a field coil housed in the cup around said center pole, a pair of plates shaped so that when set together a chamber is left between them, said plates having centrally located apertures, the walls of which form outer poles adjacent the cylindrical surface of the center pole, an energizing coil housed in the chamber between the plates, said plates being secured to the flange of the cup and in magnetic relation thereto, an armature comprising spaced rings located in the annular air gaps so established, and guiding elements secured to the armature.

1,806,915. ILLUMINATED SIGN. EUGENE PINKUS, Toledo, Ohio. Filed Jan. 23, 1930. Serial No. 422,939. 4 Claims. (Cl. 40—32.)



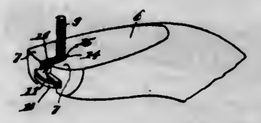
1. In a device of the class described including a bell circuit and source of current supply, a casing having an open inner end, said casing having an opening formed in the front thereof to receive an indicia plate, a mounting plate closing the inner end of said casing, means detachably connecting said mounting plate to said casing, said mounting plate comprising a plurality of layers of insulating material, a lamp bracket of conducting material carried by said mounting plate, a lamp carried by said bracket positioned in rear of said indicia plate, a pair of terminals, leads for said terminals adapted to be connected to said bell circuit, a connection between one of said terminals and said lamp bracket, means connecting the other of said terminals to said lamp bracket including a manually operable switch having a portion projecting through and operable from the outside of said casing, and a connecting strip leading from said switch and disposed between said insulating layers, a pair of normally separated spring contact plates connecting said terminals and a push button operable from the outside of said casing engaging one of said plates, whereby said plates may be moved into contact for energizing the bell circuit.

1,806,916. FURNACE. MARK M. REQUA, Seattle, Wash. Filed Mar. 7, 1928. Serial No. 259,709. 3 Claims. (Cl. 110—29.)



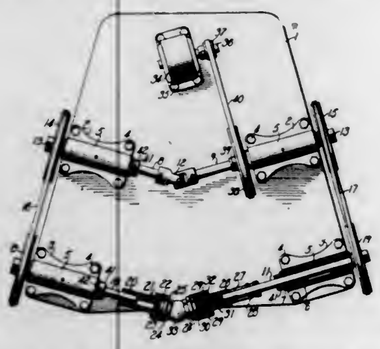
3. A furnace of the character described, comprising a structure having a tunnel extending through its entire length, a door at the front end of the tunnel, a grate arranged for longitudinal movement in the tunnel, a plate pendantly hinged to the tunnel structure disposed above and at the front end of the grate, said plate being adapted to serve as a partition to divide the tunnel into an air space in front of the partition and a combustion chamber to the rear thereof, and a fuel hopper provided with a delivery spout located above the front portion of said combustion chamber.

1,806,917. CLEAT STUD HOLDER. JOHN T. RIDDELL, Evanston, Ill. Original application filed Dec. 29, 1926, Serial No. 157,670. Divided and this application filed Sept. 7, 1928. Serial No. 304,457. 2 Claims. (Cl. 1—19.)



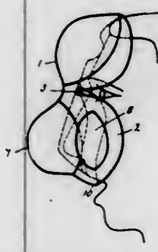
1. A stud support, comprising a horn having a recess adapted to receive the head of a stud, a notch opening laterally from the recess and adapted to accommodate the body of such stud, and a notch of reduced dimensions opening into the first mentioned notch and adapted to accommodate a fillet extending from the head and the body of said stud, and a table adapted to be engaged by the surface of the head of the bolt opposite said body.

1,806,918. VALVE SEAT LAPPING MACHINE. ARTHUR E. RIGGS, Sapulpa, Okla. Filed May 10, 1930. Serial No. 451,955. 6 Claims. (Cl. 51—27.)



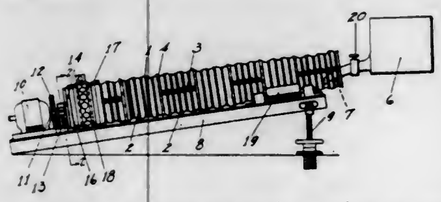
2. In a device of the character described, angularly disposed shafts, means on each shaft for receiving a valve seat collar, means for yieldingly retaining a ball valve between said collars, and means for rotating the shafts in opposite directions.

1,806,919. METHOD AND DEVICE FOR VOICE CULTURE. SEMEN D. ROBEN, Moscow, Union of Socialist Soviet Republics. Filed Oct. 16, 1929, Serial No. 400,137, and in the Union of Socialist Soviet Republics Dec. 28, 1928. 5 Claims. (Cl. 84—466.)



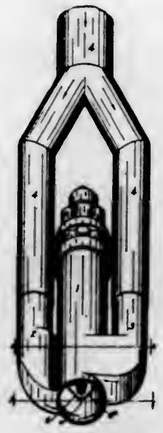
3. A device for training voice, consisting of a mask with cavities and projections conforming to the upper portion of the singer's face, the lower portion of said mask being adapted to support the singer's lip in a raised position.

1,806,920. CORRUGATED CONDUIT. HOWARD SEE, Atlanta, Ga., assignor to The Dixie Culvert & Metal Company, Atlanta, Ga., a Corporation of Georgia. Filed Dec. 27, 1927. Serial No. 242,945. 3 Claims. (Cl. 91—70.)



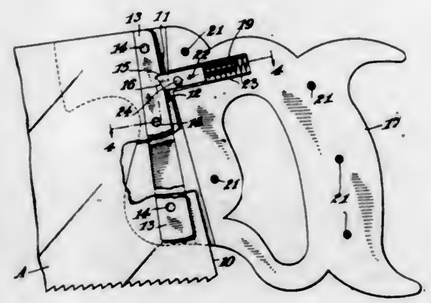
1. A process for providing a smooth interior for corrugated sheet metal conduits, which consists in rotating the conduit while holding the same at a slant, and at the same time pouring heat liquefied bituminous material into the upper end of said conduit, whereby gravity and centrifugal force act simultaneously to provide a smooth interior coating that fills the corrugations.

1,806,921. COMBUSTION TUBE FOR OIL BURNERS. HARRY F. SMENNER, Fort Wayne, Ind., assignor to The Wayne Home Equipment Company, Baltimore, Md., a Corporation of Maryland. Filed Sept. 24, 1928. Serial No. 307,988. 6 Claims. (Cl. 158—1.5.)



1. In a combustion tube for apparatus for burning liquid fuel, non-adjustable means for supplying air through the wall of said tube substantially tangentially thereof and means for dividing the air current so supplied.

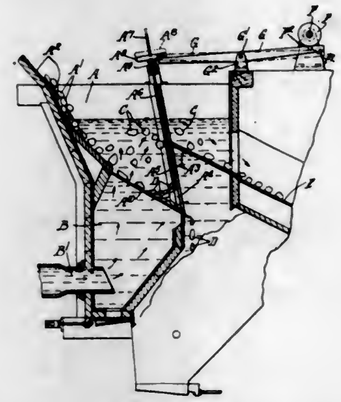
1,806,922. REMOVABLE SAW HANDLE. CESARE STEINHILBER, North Bergen, N. J. Filed Dec. 20, 1930. Serial No. 503,717. 3 Claims. (Cl. 145—108.)



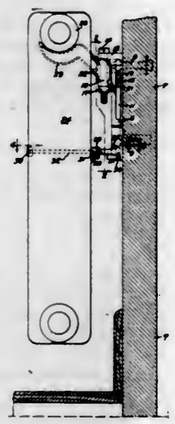
1. In a device of the character described, a saw-blade, having a recess in the butt end portion thereof, a truncated pyramidal clamping member attached to each side of the butt-end portion of said blade and opposite to each other; a recess in the rearward portion of each clamping member; a removable handle having a spaced portion therein through which said blade is slidable and having a passage-way through which said clamping members are slidable; and means capable of insertion within said recesses of said blade and clamping members, preventing the removal of the blade from the handle when said means is thus inserted.

1,806,923. HYDRAULIC CLEANER CONTROL. EARL STUMP, Chicago, Ill., assignor to Roberts and Schaefer Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 13, 1929. Serial No. 413,716. 2 Claims. (Cl. 209—496.)

1. In combination in a hydraulic separator having a stationary separating chamber, means for supplying mixed materials to said chamber and means for forcing a current of water through said chamber, said chamber provided with a discharge for the refuse and a discharge for the cleaned material, a gate member adapted to control the discharge of refuse, axially movable adjustment members for said gate to vary the size of the discharge opening including a handle, and means engaging said handle and operable to impart vibratory movement to said gate.



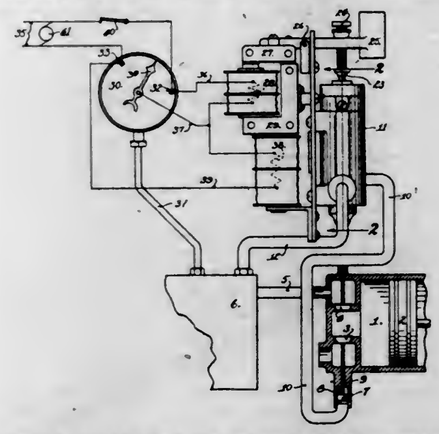
1,806,924. RADIATOR HANGER. FREDRICK A. THING, Oakland, Calif., assignor to Chas. M. Bailey Co., San Francisco, Calif., a Corporation of California. Filed Feb. 9, 1929. Serial No. 338,645. 1 Claim. (Cl. 248—17.)



A radiator hanger comprising a frame adapted for mounting on a wall, a bracket for supporting the radiator adjustably mounted on said frame, a distance post engageable with said frame in fixed relation thereto, a transverse bar on said distance post having a trough-shaped opening in the top thereof and an elongated slot in the side of said trough, a clamp-bar for engaging the radiator, a screw extending thru the clamp-bar and the slot and a nut disposed within the slot and threaded onto the screw.

1,806,925. COMPRESSOR UNLOADING DEVICE. WILLIAM TRAPPER, Sacramento, Calif. Filed May 14, 1928. Serial No. 277,541. 4 Claims. (Cl. 137—139.)

1. An apparatus for controlling fluid operated compressor unloaders, comprising a valve for controlling the admission of fluid to said unloader; and electrical means for controlling said valve comprising an electromagnet, a resistance in series therewith, a source of electric current connected normally with said magnet and said resistance, a switch for short-circuiting either said magnet or said resistance, and pressure actuated means for operating said switch.

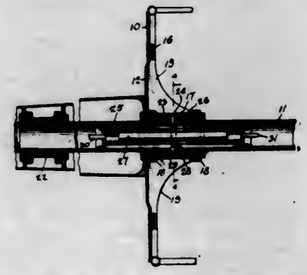


1,806,926. GUARD FINGER AND LEDGER PLATE CONSTRUCTION FOR MOWERS AND REAPERS. ERNEST A. WASHBURN, Los Angeles, Calif. Filed July 12, 1927. Serial No. 205,156. 3 Claims. (Cl. 56—311.)



1. A device as described comprising a flat face and a rear shoulder extending downwardly from said flat face, a recess being formed on the forward end of said face, a lug formed partly on said flat face and partly on said shoulder, a ledger plate formed at its rear end with a depending portion and provided with an opening partly in the rear end thereof and partly in said depending portion, said plate being fitted on said flat face with its forward end fitted in said recess, and its depending rear portion engaging said shoulder, and with said lug fitted in said opening, the forward edge of said lug on said flat face engaging the forward edge of said opening in the plate and the lower edge of said lug on said shoulder engaging the lower edge of said opening in said depending portion.

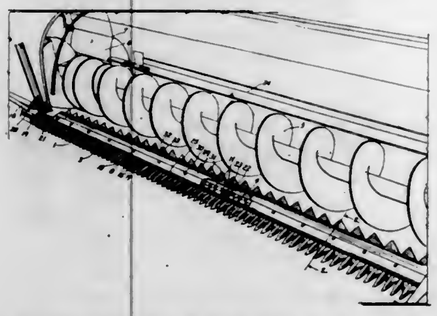
1,806,927. WING CONTROL FOR AIRCRAFT. BENJAMIN F. ALDRICH, Milwaukee, Wis., assignor of one-half to Edward M. Carey, Milwaukee, Wis. Filed May 14, 1930. Serial No. 452,455. 6 Claims. (Cl. 244—12.)



1. Aircraft provided with wings mounted for partial rotation, comprising a fuselage, a transversely extending tu-

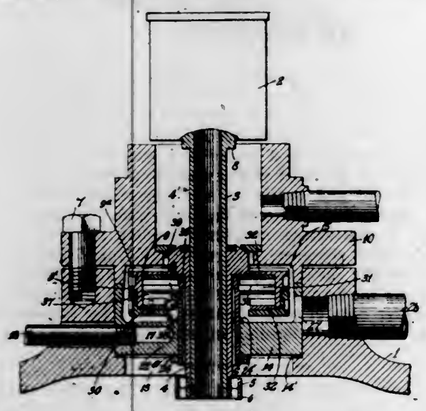
bular shaft supported by the fuselage and forming the support for the wings, and means located within the shaft for rocking the wings about the shaft.

1,806,928. GRAIN CUTTING UNIT. ELMER L. BARTELS, Independence, Mo., assignor to The Gleaner Combine Harvester Corporation, Independence, Mo., a Corporation of Delaware. Filed Jan. 20, 1930. Serial No. 421,888. 10 Claims. (Cl. 56—466.)



1. In combination with a sickle and a screw conveyor associated therewith, a feeder positioned longitudinally of the screw for preventing material cut by the sickle from bridging across the screw conveyor.

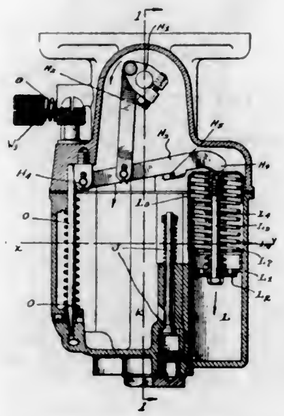
1,806,929. LIQUID SEAL. WILMER H. BATH, West Conshohocken, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 6, 1925. Serial No. 20,981. 15 Claims. (Cl. 286—9.)



1. In a sealing device, a rotating member, a cooperating member, an inwardly opening annular chamber mounted for rotation with said rotating member and adapted to contain sealing liquid, a circular outwardly extending member carried by said cooperating member and having its outer circumferential edge within said chamber, a cooler, means for withdrawing liquid from said chamber to said cooler and supplying liquid from said cooler to said chamber during rotation of said chamber while maintaining the outer surface of said chamber substantially liquid-free.

1,806,930. CARBURETOR. BERT BEARD, Detroit, Mich., assignor to George M. Holley, Detroit, Mich. Filed Feb. 11, 1929. Serial No. 338,934. 3 Claims. (Cl. 261—341.)

1. In a carburetor, a mixing chamber, a constant level fuel supply chamber, a mixture outlet, a throttle valve therein, an air vented fuel nozzle discharging into said mixing chamber comprising a cylindrical chamber, a tube in said chamber forming inner and outer concentric chambers, three horizontal shoulders on said tube engaging with the walls of said outer chamber dividing the outer chamber into three sections, passages connecting each of said sections with the inner chamber, an air connection for the upper section, means for intermittently connecting the middle section with the fuel supply chamber, when the



throttle is opened more than a certain minimum degree, said lower section being in constant communication with said fuel supply chamber, a high speed fuel nozzle discharging into the central chamber at a point slightly below the level in said fuel supply chamber, an unobstructed fuel passage connecting said fuel supply chamber to said nozzle, pump means mechanically operated by the throttle and located in said passage so as to accelerate the flow through said high speed fuel nozzle when the throttle is rapidly opened.

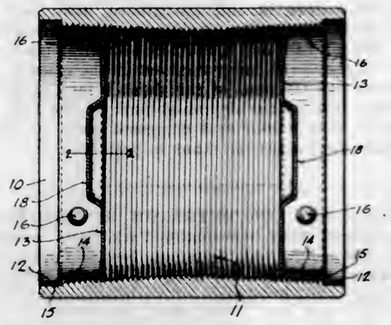
1,806,931. HEADLIGHT INDICATING DEVICE. WILBUR F. BROWN, Toledo, Ohio. Filed June 20, 1929. Serial No. 372,312. 2 Claims. (Cl. 88—1.)



1. A vehicle having a wind shield and a reflecting surface mounted on the vehicle at approximately the height of the windshield, said reflecting surface being mounted at such an angle as to reflect rays coming from a lower point and approximately in line with the direction of movement of the vehicle into a substantially horizontal direction in approximately the same vertical plane as the oncoming rays.

1,806,932. PIPE COUPLING THREAD PROTECTOR. HOWARD J. BURNISH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Sept. 12, 1927. Serial No. 219,021. 6 Claims. (Cl. 137—91.)

1. A thread protector for closing the end of an internally threaded tubular article comprising an annular shell adapted to be entirely inserted within the end of the article and to shield the internal threads thereof, and soft metal

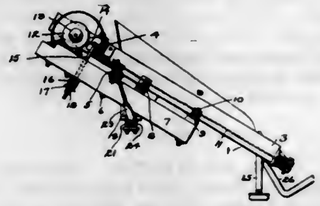


plugs inserted through perforations in said shell and adapted to engage a portion of the treads to retain said shell in position within the article.

1,806,933. CUTTING OIL. ORVILLE E. CUSHMAN and THEODORE W. DOELL, Berkeley, Calif., assignors to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Jan. 21, 1929. Serial No. 334,134. 6 Claims. (Cl. 87—9.)

1. A cutting oil including mineral oil soluble in liquid sulfur dioxide, and sulfur.

1,806,934. SCREEN. EMIL DEISTER, Fort Wayne, Ind. Filed Nov. 19, 1926. Serial No. 149,324. 3 Claims. (Cl. 209—346.)



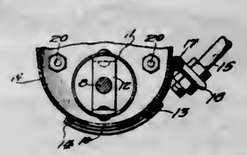
1. The combination of a support, a marginal frame mounted on the support, a screening medium mounted in tension on the frame, a lever resiliently supported beneath the medium and connected at one end to the medium, a vibrating mechanism mounted on the opposite end of the lever to positively vibrate the lever, a resilient transverse member secured at its opposite ends to the opposite sides of the frame and means intermediate the ends of the lever rigidly securing the lever to the central portion of the resilient transverse member.

1,806,935. LIGHT VALVE. PHILO T. FARNSWORTH, Berkeley, Calif., assignor, by mesne assignments, to Television Laboratories, Inc., San Francisco, Calif., a Corporation of California. Original application filed Jan. 7, 1927, Serial No. 159,540. Divided and this application filed Nov. 7, 1927. Serial No. 231,689. 5 Claims. (Cl. 88—61.)



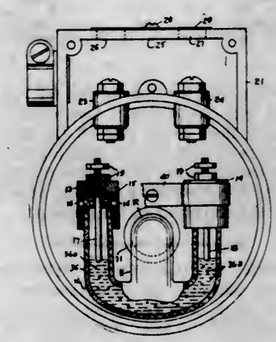
1. A shutter for polarized light comprising gratings positioned transverse the path of the light, a bi-axial crystal interposed between the gratings and positioned so that the refracted rays are along an optical axis, said gratings and crystal having the property and being positioned with respect to the light beam whereby the light is transmitted in accordance with the angle of its plane of polarization.

1,806,936. POWDER DISTRIBUTOR. WALTER S. FINNELL, Hannibal, Mo., assignor to Finnell System, Inc., Hannibal, Mo., a Corporation of Delaware. Filed July 1, 1927. Serial No. 202,908. 4 Claims. (Cl. 275—2.)



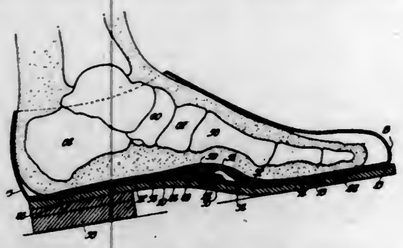
1. In a powder distributor, a container having a bottom portion semi-circular in cross section with a series of centrally located discharge slots along its lowermost part adapted to discharge directly to the floor, a shaft rotatably mounted in and passing through said bottom portion, wheels mounted on the outer ends of said shaft for supporting and moving said container along the floor, and a feeder operated by said shaft as said container is moved along the floor, said feeder comprising oppositely arranged and flat spirally-shaped blades fixed upon said shaft in cylindrical relation thereto, each of said blades having its edge surface adapted to wind toward and pass over said slots successively and in close proximity thereto to positively and uniformly deliver the powder to and through the same in definite quantities as said container is moved along the floor.

1,806,937. ELECTRICAL SWITCH IN OIL BURNING EQUIPMENTS. ORVILLE ALDEN FOGARTY, Montreal, Quebec, Canada, assignor to Vilas Oil Burners Limited, Cowansville, Canada. Filed Jan. 24, 1927. Serial No. 163,136. 1 Claim. (Cl. 200—141.)



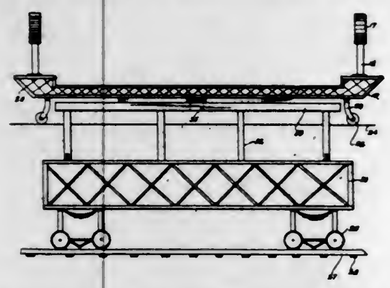
A U-shaped tube having an upwardly projecting extension from the centre thereof, a stack tube secured to said extension, caps closing the ends thereof of said U-shaped tube having lining pads of fibrous material, terminal contacts adjustably screwed through said caps and extending through said pads, a casing enclosing said tube, terminals fixedly secured at the upper end of said casing and adapted to be connected to said terminal contacts, straps securing said tube in a permanent position in relation to said casing terminals, a cover plate closing in said casing terminals, said casing having a tubular rear opening through which said stack tube extends and wires from said casing terminals forming a coil encircling an acetone tube member.

1,806,938. FOOTWEAR. SAMUEL GOODMAN, Chicago, Ill., and WILL N. SECHLER, Fort Scott, Kans. Filed Apr. 15, 1927. Serial No. 184,024. 17 Claims. (Cl. 36—71.)



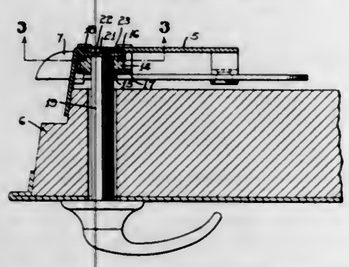
16. In a shoe the combination comprising a metal arch support having a forward part provided with a convex metatarsal arch support lying under the anterior metatarsal arch and behind the heads of the metatarsal bones, a metal rear portion extending toward the heel of the shoe, a hinged connection between said forward and rear parts and constructed and arranged to permit said parts to flex upwardly, and limiting means associated with said hinged connections to limit the downward flexure of said parts so as to provide a support for the longitudinal arch.

1,806,939. STARTING AND LANDING DEVICE FOR AIRSHIPS OF THE LIGHTER THAN AIR TYPE. ALBERT GRAMPP, Corona, N. Y. Filed Sept. 26, 1929. Serial No. 395,342. 4 Claims. (Cl. 244—2.)



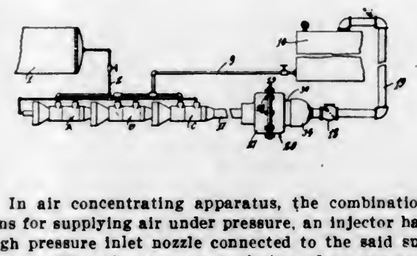
4. In a starting and landing device for airships of the lighter than air type comprising underground tunnels, communicating track slots or grooves in the ground, electrically operated cars in said tunnels running on tracks, posts on said cars extending above the ground through said track slots, and means for preventing a lifting of said cars from their tracks by the buoyancy of the airship.

1,806,940. DOOR LATCH DEVICE. FLETCHER D. GAUND, Weston, Ohio, assignor to The American Swiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 7, 1929. Serial No. 330,850. 2 Claims. (Cl. 292—359.)



1. In combination with a case plate having a depressed portion formed with an opening, a latch bolt slidably associated with the plate, a roll back disposed inwardly of the case plate, means to connect the roll back to the plate, and a handle shank having a peripheral groove and a non-circular head beyond the groove, said head being insertable in the opening of the case plate only when the shank and roll back are in full bolt retracting position, the groove of the shank being received in the opening of the case plate and the head of the shank being engaged with the outer face of the depressed part of the case plate, and lying flush within said depressed part, whereby the case plate itself holds the shank in position.

1,806,941. AIR CONCENTRATOR OR COMPRESSOR. WILLIAM B. HALE, Huntington Park, Calif., assignor to Hale Pneumatic, Ltd., Lovelock, Nev., a Corporation of Nevada. Filed Oct. 27, 1928. Serial No. 315,384. 6 Claims. (Cl. 230—104.)



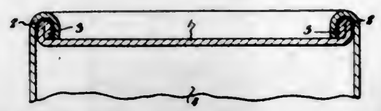
1. In air concentrating apparatus, the combination of means for supplying air under pressure, an injector having a high pressure inlet nozzle connected to the said supply means for liberating a current of air under pressure and having a free-air inlet associated with the high pressure inlet for entraining free air into the liberated air current, said injector having an outlet, a second injector nozzle receiving air from the last named outlet, having an inlet for entraining free air into the air current, an accumulator for air under pressure, means for injecting the air current from the second injector into the said accumulator, and means for admitting air directly into said injectors from said accumulator and for entraining free air into said injectors.

1,806,942. FUEL OIL HEATER. BENJAMIN A. HENDRICKS, Seattle, Wash. Filed Sept. 12, 1927. Serial No. 218,993. 2 Claims. (Cl. 219—38.)



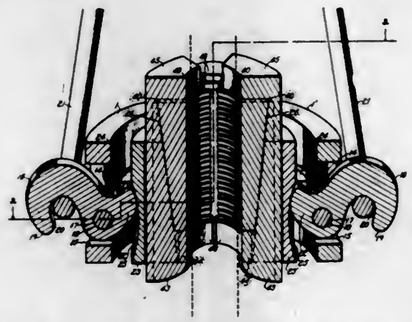
1. An electric oil heater consisting of a horizontally disposed cylindrical casing having its opposite ends centrally apertured, a cylindrical oil receptacle of uniform diameter throughout its length extending through the apertures of the respective ends, said receptacle being of a length exceeding that of the casing to project exteriorly of both ends, oil supply and discharge pipes of less diameter than the receptacle connected to respective extremities and axially of the same, tubular members comprising sheets of electric insulating material disposed concentrically about the outer periphery of the receptacle and in spaced relations, one with another, an electric heating device comprising a coil of resistance wire provided in the space between said tubular members, and a mass of insulating material surrounding the outer of said tubular members, said oil receptacle being unobstructed to permit a free circulation to the oil passing therethrough.

1,806,943. MANUFACTURE OF PAPER CONTAINERS. LYDIA B. KOCH and JOSEPH BUCHINA, New York, N. Y., assignors to The Reinforced Paper Bottle Corporation, New York, N. Y., a Corporation. Filed Nov. 16, 1929. Serial No. 407,718. 1 Claim. (Cl. 93—55.)



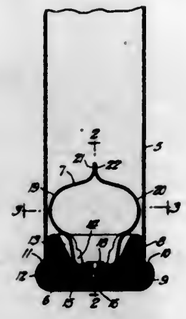
The method of closing and sealing containers in which the top is formed with a vertical circumferential flange, consisting in coating the top with an adhesive of the width of the flange previous to its being formed up, then allowing the adhesive to dry, then forming up the top so that the outer periphery of the flange fits tightly within the top edge of the container, then moistening the flange and then inserting the flanged top into the top of the container so as to cause the adhesive thereon to recede from the bottom edge of the flange of the top towards the top edge of the flange of the top and top edge of the container.

1,806,944. PIPE CLAMP. GEORGE KRELL, Sapulpa, Okla. Filed Oct. 7, 1929. Serial No. 397,901. 11 Claims. (Cl. 294—102.)



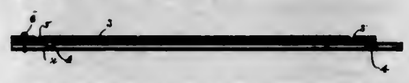
1. A clamp of the character described, including elevating means, slip carriers operably connected with the elevating means for lateral movement in response to initial vertical movement of said means and slips movably mounted in the carriers.

1,806,945. FURNITURE POST END FITTING. FRANK KUSTERLE, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 16, 1929. Serial No. 347,496. 5 Claims. (Cl. 16—42.)



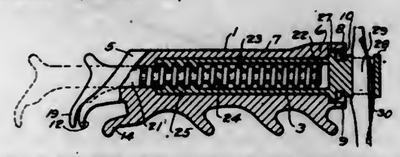
1. In a fitting of the class described, the combination of an end member having a recessed plug portion, a part secured to said end member in said recess and projecting from said plug adapted to yieldingly engage the inside of a hollow post for maintaining said member on the end of said post, the inner end portion of said end member being of a size and shape to snugly fit inside of said hollow post and the outer end portion being enlarged to form a shoulder for receiving the end of the post to position said end member thereon.

1,806,946. INSULATION. FRANK R. LESLIE, White Bear Lake, Minn. Filed Aug. 26, 1929. Serial No. 388,371. 2 Claims. (Cl. 20—4.)



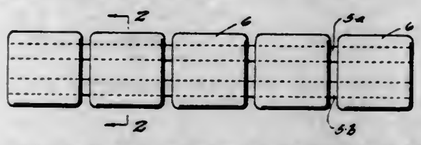
1. An insulation consisting of a plurality of sheets of superimposed board of varying widths and with the edges of the sheets on one side in alinement when positioned together, means for securing the sheets together along the aligning edges, with the sheets unsecured at the opposite edges, and bending lines upon the sheets varying distances apart upon adjacent sheets, whereby the edges of the sheets may be bent into alinement holding the central portions of the sheets separated.

1,806,947. TIRE REMOVING TOOL. INGVALD MJELVA, Seattle, Wash. Filed Aug. 13, 1929. Serial No. 385,568. 3 Claims. (Cl. 157—6.)



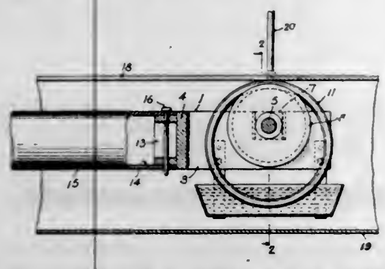
1. In a portable, self-contained tire removing tool, a tubular outer casing forming a handle by which the tool may be held in one hand, a rotatable tubular sleeve extending into the said casing and having threads on the interior of the inner end, a handle extending through the outer end of the said sleeve, a square shank extending through a square opening in the opposite end of the casing and having a downwardly extending curved prong at the outer end thereof, said shank having a screw on the inner portion and screwed into the inner end of the said sleeve, downwardly extending curved prongs at the end of the casing corresponding with and parallel to the prong of the said shank, said casing being relieved behind the said prongs forming a recess to receive a flange at the edge of a rim upon which a tire may be held, a projection at the opposite side of the said recess corresponding with the shape of the prongs, and a plurality of opposed lugs adapted to cooperate with the said projection and prongs to spread a tire and also spaced on the said casing to facilitate gripping.

1,806,948. TILE PANEL STRIP CONSTRUCTION. CARL DAVE NILSEN, Los Angeles, Calif. Filed Nov. 11, 1929. Serial No. 406,290. 1 Claim. (Cl. 72—23.)



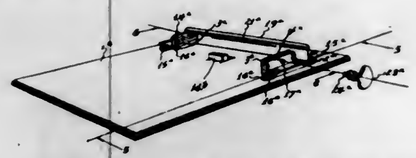
A tile veneer strip comprising a fastening strip adaptable for nailing to a foundation, tiles mounted on said fastening strip and spaced from one another to expose said fastening strip for convenience in nailing, said strip being of substantially less width than said tiles and cementitious material bonding said tiles to said fastening strip.

1,806,949. ARC WELDING CHILL. FREDERICK PALM, Shorewood, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Jan. 6, 1930. Serial No. 418,951. 5 Claims. (Cl. 219—6.)



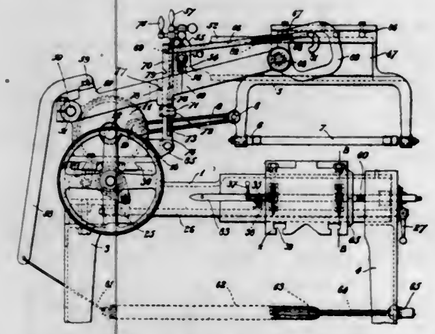
1. An arc welding chill comprising a chill ring, means for rotatably supporting said ring, and means for moving said ring along the seam to be welded.

1,806,950. PAD AND HOLDER THEREFOR. IRWIN E. PRATT, Los Angeles, Calif. Filed Dec. 19, 1927. Serial No. 241,029. 11 Claims. (Cl. 281—15.)



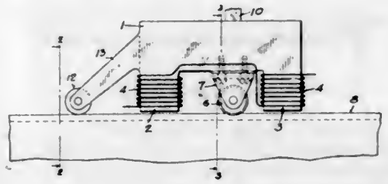
1. A pad holder including a base, a pair of jaws mounted upon said base, and means secured to the base for pressing said jaws toward each other to compress the leaves of a pad edgewise between the inner side faces of said jaws, said jaws being imperforate and having a plurality of fine teeth formed by irregularities confined to the surfaces of the jaws.

1,806,951. MACHINE TOOL FOR METAL WORKING PURPOSES. ROBERT PRICE, Putney, London, England. Filed Sept. 20, 1926, Serial No. 136,435, and in Great Britain Sept. 21, 1925. 3 Claims. (Cl. 29—73.)



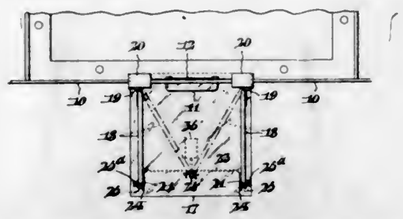
1. A machine tool for metal working purposes comprising a fixed support, an arm pivotally secured to said support, a guide pivotally secured to the free end of said arm, means for adjusting said guide about its pivotal connection to vary its angular relationship to said arm and for fixing said guide in adjusted position, a reciprocating tool holder mounted to slide in said guide, and means on said fixed support for reciprocating said tool holder, the angular relationship between the said arm and said guide being substantially retained throughout the operative movements of said tool holder.

1,806,952. ELECTRODE FOR ELECTRIC WELDING. WALTHER RICHTER, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed May 13, 1929. Serial No. 362,712. 6 Claims. (Cl. 219—4.)



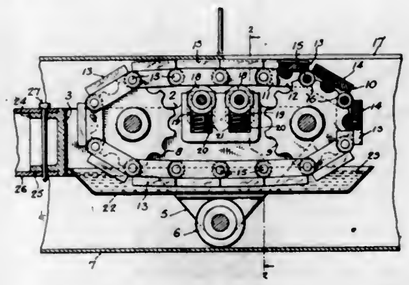
4. In a welding apparatus, a roller electrode adapted to engage the article to be welded and to move progressively therealong, and magnetic means adjacent said electrode to maintain the same in desired electrical contact with the article.

1,806,953. BURGLARY PROTECTION SYSTEM. WALTER SACHS, Lancaster, Pa. Filed Apr. 10, 1928. Serial No. 268,924. 3 Claims. (Cl. 20—1.01.)



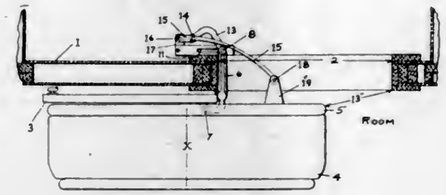
1. The combination in a burglary protection system for banks and the like of opposingly-swingable bullet-proof doors at opposite sides of the front of a teller's enclosure, means tending to swing the doors toward each other, means to normally hold the doors in open position, trip devices controlling the door holding means, an associated trip normally retaining a bullet-proof sash elevated at the inner side of the teller's window, and overhead electric contact means within the teller's enclosure in circuit with the trips aforesaid and operative to release both doors so as to form a triangular trap and concurrently release the sash for gravity closure.

1,806,954. ARC WELDING CHILL. HENRY A. SCHMITZ, Jr., Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Dec. 23, 1929. Serial No. 416,059. 11 Claims. (Cl. 219—6.)



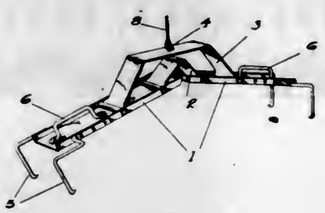
1. In a welding chill, a plurality of chill members, and means for guiding the same successively into contact with the seam being welded.

1,806,955. SHIFTING NARROW DOOR WALL BED. NEIL SINCLAIR, Oakland, Calif., assignor to Rip Van Winkle Wall Bed Company, Inc., Oakland, Calif., a Corporation of California. Filed June 27, 1929. Serial No. 374,040. 5 Claims. (Cl. 5—172.)



4. In a wall bed adapted to swing through a doorway from one side of a wall to the other side of the wall, a pair of vertically spaced supporting brackets fixedly secured in place adjacent one jamb of the doorway, said brackets provided with guides extending along the wall away from the doorway, a pair of arms pivoted at one end each to one of said guides so as to be movable along the guides and pivotal thereon, a bed frame, means pivotally connecting the bed frame with the other ends of said arms for swinging through the doorway from one side of the wall to the other, a controlling lever for each bracket pivoted at one end thereto and at the other end to the bed frame for controlling the path of travel of the same, and a second lever at each bracket pivoted at one end to said controlling lever and at the other end to a point on one of said arms arranged and adapted for shifting said arms along the guides as the bed is swung.

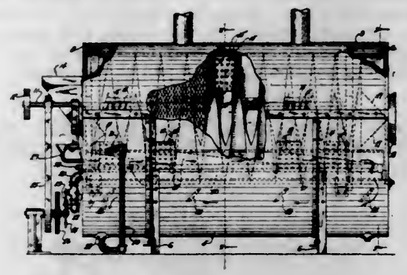
1,806,956. BOX HANDLING TONGS. WALTER SMITH, Malaga, Calif. Filed Aug. 23, 1929, Serial No. 387,941. Renewed Oct. 18, 1930. 6 Claims. (Cl. 294—106.)



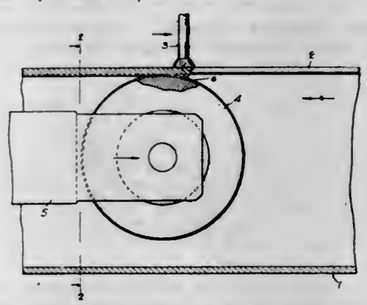
1. A box handling tongs comprising a pair of rigid members longitudinally alined with each other, a rigid arched bail upstanding from the bars and pivoted thereon at points closer to their adjacent than to their outer ends, whereby the bars when lifted normally tilt down toward their outer ends, hooks depending from the outer ends of the bars and facing each other, and means connecting the bars to cause their tilting movement to be equalized relative to each other and to the bail.

1,806,957. APPARATUS FOR WASHING VEGETABLES AND FRUITS. GEORGE E. STOCKING, Rochelle, Wis., assignor of one-fourth to Berlin Chapman Company, Berlin, Wis., a Corporation of Wisconsin. Filed Aug. 8, 1928. Serial No. 298,287. 3 Claims. (Cl. 146—194.)

2. An apparatus for treating food material comprising an outer water holding receptacle, a foraminous drum rotatably mounted in said receptacle and having an opening for receiving food material, spiral means for moving said material through said drum, and perforated lifting members carried by convolutions of said spiral, each of said lifting members in one position being entirely clear of the water in the outer receptacle, and in another position being entirely submerged therein to enable said lifting members to carry the food material in and out of the water as the material is being moved through the drum.

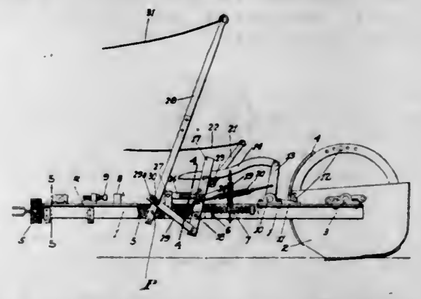


1,806,958. METHOD OF ELECTRIC ARC WELDING. KARL STROBEL, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed June 3, 1929. Serial No. 368,087. 2 Claims. (Cl. 219—6.)



1. In electric are welding the steps which comprise passing an electric arc along juxtaposed metal edges to heat the same to welding temperature and simultaneously therewith passing a chill in contact with the bottom of the metal being welded at a predetermined distance behind the arc and at substantially the same rate of speed as the travel of the arc to control the penetration of the welding heat through the metal.

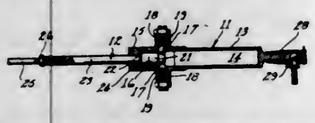
1,806,959. AUTOMATIC REVOLVING SCRAPER. DAMON R. THROOP, Stockton, Calif. Filed July 15, 1929. Serial No. 378,240. 9 Claims. (Cl. 37—140.)



7. A scraper including a rotatable bowl, a frame supporting the bowl in a manner to cause the same, when the frame is drawn forwardly, to assume a scraping

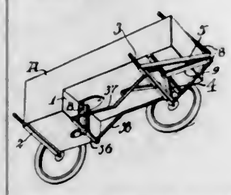
position; a draft tongue forwardly movable relative to the frame, a spring normally resisting such movement of the tongue, connections between the tongue and bowl for turning the latter to a non-scraping position when the resistance of the spring is overcome and the tongue moves forwardly relative to the frame, and means including a forwardly moving lever for restoring the bowl to a scraping position against a pull on the tongue.

1,806,960. SAFETY THROTTLE CONTROL. FRANK VAN VRANKEN, Los Angeles, Calif. Filed May 19, 1928. Serial No. 279,083. 4 Claims. (Cl. 74—81.)



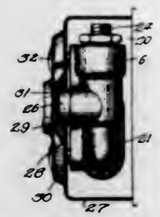
1. The combination with an automobile motor provided with a throttle valve and with an arm to operate said valve, of an accelerator, and a collapsible means connecting the arm and the accelerator, said collapsible means including a tension member yieldingly holding the collapsible means against collapsing, said tension member yielding when pressures above a predetermined amount are applied to the accelerator.

1,806,961. CHILD'S WAGON. CHARLES W. WAAS, St. Paul, Minn. Filed Oct. 17, 1929. Serial No. 400,388. 3 Claims. (Cl. 280—87.5.)



1. In a child's wagon, a steering mechanism comprising a forwardly extending frame connected to the front axle to turn therewith, a squared housing in the forward end of said extension, a rotatable member mounted rearwardly of said front axle and having laterally extending arms connected thereto, said rotatable member having a squared opening therein, link means connecting the laterally extending arms connected to said member to the front axle and a handle member having a squared lower end and an upper portion hingedly connected thereto, said squared lower portion being of a size to fit closely in the squared housing on the forward extension of the front axle and to fit within the squared opening in said rotatable member.

1,806,962. PLUMBING FITTING. EARL G. WATROUS, Chicago, Ill. Filed May 31, 1929. Serial No. 367,381. 6 Claims. (Cl. 137—69.)



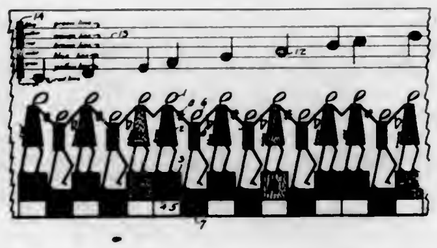
1. A new article of manufacture comprising a combined shut-off valve and faucet support having a plurality of passageways therethrough, and valves for controlling said passageways.

1,806,963. SELF-SUPPORTING HOSE. LEONARD WOODS, St. Louis, Mo. Filed June 6, 1929. Serial No. 368,803. 2 Claims. (Cl. 2—240.)



1. The combination with a hose leg having double wall side portions of the fabric forming V-shaped connected passages diverging from the ankle to the top and having a transverse slit in the inner wall near one end, of a plurality of stiffening strips insertable through said transverse slit into both said passages and hidden by stretching the hose fabric over the projecting end of each strip so that said strips will bear on both ends of the passages and be detachably secured therein, substantially as described.

1,806,964. APPARATUS FOR TEACHING MUSIC. CLARA MIGHELL LEWIS BUNDY, Tacoma, Wash. Filed Dec. 18, 1929. Serial No. 414,961. 6 Claims. (Cl. 84—479.)



2. A chart for teaching music comprising a representation of each key of an octave by a picture representing a clothed human figure, the clothes of the figures representing the keys of the natural scale being colored distinct and different colors, and the clothes of the figures representing the black keys being black.

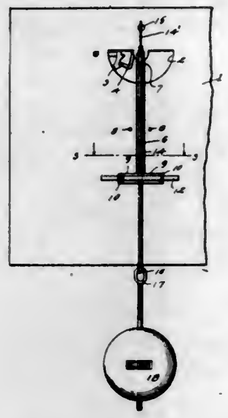
1,806,965. INK FOR CELLULOSE ESTERS. JOHN H. CLEWELL, Arlington, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 12, 1928. Serial No. 269,595. 4 Claims. (Cl. 134—28.)

1. Ink for cellulose ester bodies comprising a cellulose ester solvent having a boiling point substantially between 140° C. and 225° C., a nigrosine base soluble therein, and a thickener.

1,806,966. SELF LEVELING CLOCK ESCAPEMENT VERGE ROD. LE ROY COPELIN, Jacksonville, Fla. Filed Apr. 2, 1929. Serial No. 351,949. 7 Claims. (Cl. 58—134.)

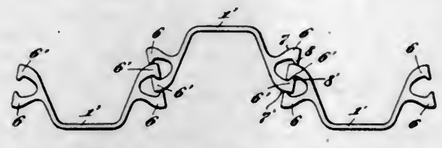
2. A self leveling clock escapement verge rod, comprising a rod body, spaced substantially right angularly

extending arms carried by said body, and a plate shiftably carried by the arms, said plate having an opening



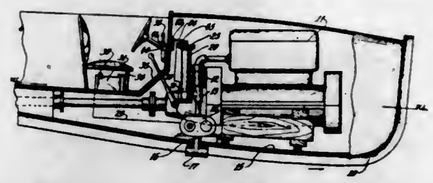
intermediate the ends thereof for receiving a clock pendulum wire, said opening being positioned between said arms.

1,806,967. SHEET PILING. ROBERT S. A. DOUGHERTY and RODERICK J. MCINTOSH, Bethlehem, Pa., assignors to Bethlehem Steel Company. Filed Dec. 29, 1926. Serial No. 157,655. 2 Claims. (Cl. 61—62.)



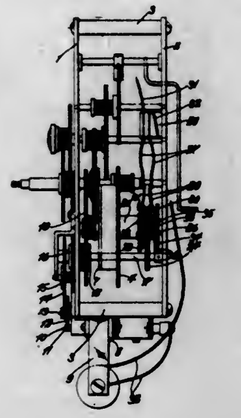
1. A piling section comprising a web provided at each of its vertical edges with two similar hook-like flanges defining a groove, the outer surfaces of each of the flanges having an arcuate formation and the inner part of each of the flanges having an angular hook-like portion.

1,806,968. PUMP PRIMING DEVICE. EMERY H. FAHRNEY, Chicago, Ill. Filed Jan. 26, 1929. Serial No. 335,254. 2 Claims. (Cl. 103—113.)



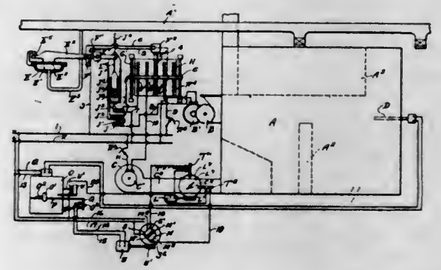
1. In combination, a liquid circulating pump, a supplemental pump for priming the circulating pump, the outlet of the supplemental pump being connected with the inlet of the circulating pump, a closed reservoir having an inlet connected with the communicating passage between the outlet of the supplemental pump and the inlet of the circulating pump, a diaphragm constituting a part of the said reservoir, a motor for operating the said priming pump, a circuit for controlling said motor, and a switch device for controlling the said circuit, said switch device being operable in one direction by the direct action of the diaphragm under the pressure created in the said reservoir by the liquid in the reservoir.

1,806,969. CLOCK WINDING MECHANISM. ARNO W. FOWLER, Highland, Ill. Filed May 23, 1928. Serial No. 279,885. 9 Claims. (Cl. 185—40.)



1. A device of the character described comprising a rotary shaft, a pair of resilient contact members, a metallic disc mounted for rotation about said shaft as an axis and arranged to contact with said members and close the circuit between them, insulating means mounted on said disc for breaking the circuit between said contact members, two independently rotatable concentric members, an element rotative about said shaft for rotating one of said members, a device pivoted on and operated by said one member for moving said disc a distance sufficient to carry said insulating means beyond said contact members, an arm pivoted co-axially with said shaft, and means operated by said shaft for causing said arm to rotate said disc a distance sufficient to interpose said insulating means between said contact members.

1,806,970. COMBUSTION REGULATION. GEORGE H. GIBSON, Upper Montclair, N. J. Filed July 22, 1929. Serial No. 380,121. 22 Claims. (Cl. 236—14.)

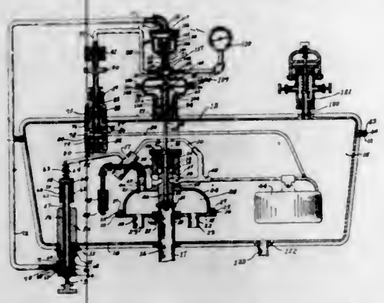


1. The method of operating a furnace which consists in normally exerting a draft changing effect, regularly alternately in direction on any decrease in furnace temperature, until the furnace temperature begins to increase, and thereafter continuously in the same direction.

1,806,971. BOTTLING MACHINE. SAMUEL GREENHOUSE, Brooklyn, N. Y. Filed Jan. 7, 1929. Serial No. 330,869. 11 Claims. (Cl. 226—118.)

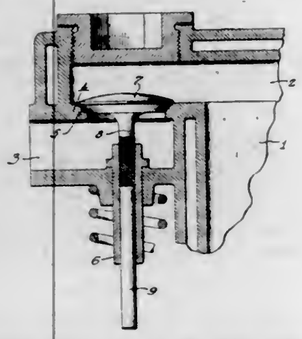
1. In a bottling apparatus of the class described, an enclosed tank, an inlet pipe leading thereto, a delivery pipe leading therefrom, a valve controlling said inlet pipe, a float arranged to operate said valve, additional

means to positively close said valve, said means operable by a fluid pressure, means operable by said float to admit fluid pressure to said additional closing means and fluid



pressure operated means to release the pressure from said additional closing means said releasing means controlled by said float.

1,806,972. VALVE CONSTRUCTION. ADOLPH GREINER and CORNELIUS J. LONG, Milford, Mich. Filed Aug. 6, 1927. Serial No. 211,075. 4 Claims. (Cl. 123—188.)



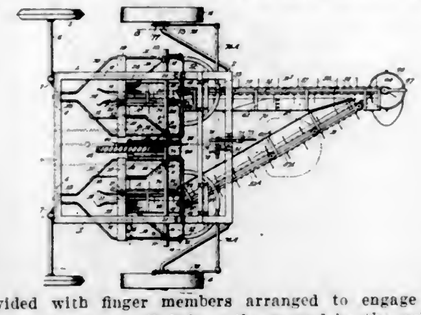
1. A puppet valve having a cast metal head and a cast metal neck extending therefrom, a valve stem guide for said valve, said neck being of such length as to remain at least partially in the valve stem guide at all times during its operation in a motor.

1,806,973. METHOD FOR PRODUCING HIGH GRADE ROSIN. IRVIN W. HUMPHREY, Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 24, 1927. Serial No. 228,501. 11 Claims. (Cl. 87—2.)

1. The method for producing a high grade rosin which includes subjecting impure rosin to treatment with a liquid paraffin hydrocarbon boiling below about 15° C. at atmospheric pressure in sufficient quantity to dissolve substantially pure rosin therefrom, separating the hydrocarbon-rosin solution formed from the undissolved components of the rosin and then separating the hydrocarbon from the rosin dissolved therein.

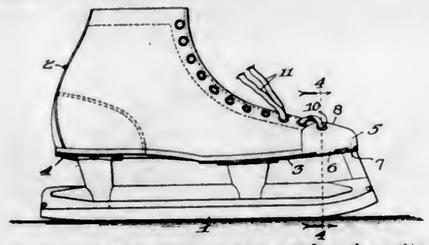
1,806,974. TWO-ROW PULLING AND SIX-ROW PILING APPARATUS FOR HARVESTING SUGAR BEETS. BENJAMIN P. IRVINE, Denver, Colo. Filed Feb. 21, 1930. Serial No. 430,250. 9 Claims. (Cl. 55—108.)

1. In a two row beet puller and a six-row beet piler, the combination with the wheeled frame, of two pairs of beet puller blades straddling each of the two rows of beets and each blade of each pair of beet pullers being inclined inwardly to engage the downward tapering sides of the beets; endless conveyors supported on said frame and arranged to receive the beets from each pair of pullers, each pair of pullers being provided with a conveyor and the two conveyors being arranged to intersect each other at their discharging ends, each conveyor being



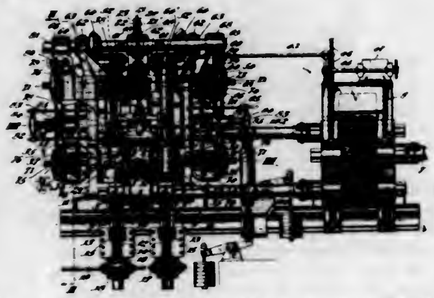
provided with finger members arranged to engage the beets as they are pulled from the ground by the pullers and a chute at the end of the conveyors arranged to discharge the beets in the center of the space between the two inside rows of the six rows.

1,806,975. TOE GUARD FOR ICE SKATES. CHARLES I. JOHNSON, Chicago, Ill., assignor to Nestor Johnson Manufacturing Company, a Corporation of Illinois. Filed May 23, 1929. Serial No. 365,379. 9 Claims. (Cl. 208—183.)



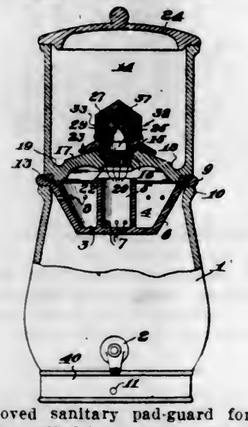
1. The combination with a skate and a shoe attached thereto, of a guard fitting over the toe portion of the shoe to protect the same, said guard being slit so as to fit shoes of different sizes and shapes, and lugs on the guard to engage between the sole of the shoe and the skate.

1,806,976. UNIVERSAL ROLLING MILL. ALBERT T. KELLER, Bethlehem, Pa., assignor to Bethlehem Steel Company. Filed Jan. 21, 1928. Serial No. 248,324. 14 Claims. (Cl. 80—38.)



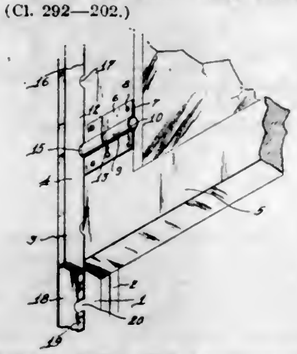
13. In a universal mill, vertical formative rolls, laterally adjustable housings supporting the vertical rolls, an upper horizontal formative roll, backing rolls operatively engaging the upper formative roll, means for positively driving the backing rolls, carriers for said upper horizontal formative roll, guide elements on said carriers slidably engaging guideways on the laterally adjustable housings, blocks slidably mounted in openings in the laterally adjustable housing abutting the guide elements on said carriers, adjustable means for said blocks, whereby the upper horizontal formative roll may be laterally adjusted and held in an adjusted position against lateral movement.

1,806,977. FILTER DEVICE. FRANCIS L. M. KENNEY, Los Angeles, Calif., assignor, by mesne assignments, to Frank L. Manion. Filed Aug. 23, 1928. Serial No. 301,485. 7 Claims. (Cl. 210—105.)



1. An improved sanitary pad-guard for filters, comprising a hollow cylindrical member having a closed top and an open bottom, said pad-guard having a detached, ring base-means positioned beneath the side-walls of said cylindrical member, said side-walls being provided with openings for the ingress of water, and an outwardly extending skirt-flange at the bottom of said side-walls.

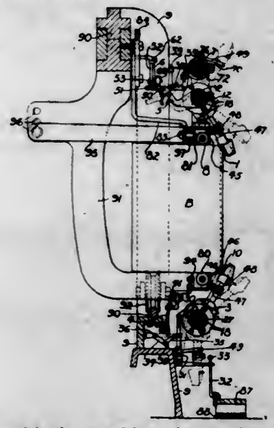
1,806,978. WINDOW LATCH. FRANK KILBERG, Detroit, Mich. Filed Nov. 26, 1928. Serial No. 321,859. 4 Claims. (Cl. 292—202.)



1. In combination with a frame structure and a member slidable therein, said frame structure having a semi-cylindrical notch in one of the sides thereof along which said member slides, a bolt rotatably supported by said member, said bolt having a semi-cylindrical end portion adapted for insertion in and removal from said notch by rotation of said bolt.

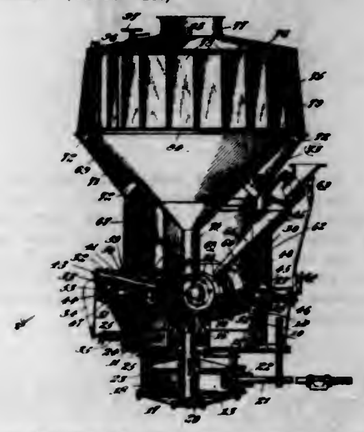
1,806,979. SHINGLE MACHINE ATTACHMENT. MATT W. KOSKI, Hoquiam, Wash. Filed Dec. 29, 1928. Serial No. 329,103. 20 Claims. (Cl. 143—12.)

1. In combination with a shingle machine including a movable carriage, and means for holding a shingle block thereon, a cutter head disposed adjacent the path of movement of the carriage, and located to bevel an edge of the shingle block, and a common means for shifting said block-holding means and cutter head to accommodate blocks of random lengths.



17. In a shingle machine, in combination with a frame, a carriage guided thereon for transverse movement, means including a spur roll and a shiftable supporting block therefor for supporting a shingle block upon said carriage, and a saw positioned at one end of the carriage's travel to cut shingles from such a block, a rotary bevel cutter positioned to act upon a shingle block supported in said carriage as it moves towards the saw, an oscillatable support for said bevel cutter disposed parallel to the direction of movement of the carriage, a telescoping guide tube and plunger disposed generally parallel to the direction of movement of the carriage, one thereof being anchored to the frame and the other supported upon the tiltable spur roll support, and the assembly having mobility in the plane of shifting of the spur roll, said oscillatable support for the bevel cutter being suspended from the anchored member of said assembly, an arm fixed to said oscillatable cutter support, a fixed cam member engageable with said arm by movement of the spur roll support transversely of the normal direction of the carriage's movement, to be depressed thereby, toggle links connecting said arm and said tube and plunger assembly to maintain the arm in depressed position, and two cooperating cam means engageable prior to re-engagement of the shingle block and saw to release said toggle links.

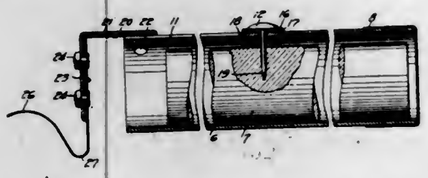
1,806,980. PULVERIZER. OTTO A. KREUTZBERG, Bethlehem, Pa. Filed Nov. 5, 1926. Serial No. 146,321. 8 Claims. (Cl. 83—45.)



1. In a pulverizer, the combination of a rotatable table having a conically dished portion and a flat border

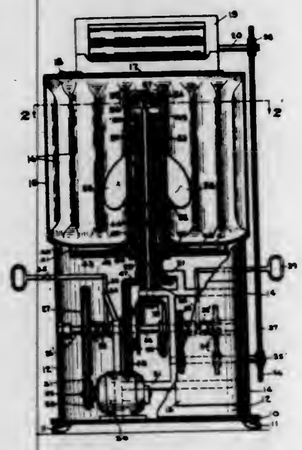
portion, crushing rolls cooperating with the dished portion, means for passing a current of air about the edge of the table, and a deflector member extending inwardly, over, above and substantially parallel with respect to the flat portion of the table for deflecting air inwardly and directly over the latter.

1,806,981. DISPENSER. LEWIS M. MCCORMICK, Palo Alto, Calif. Filed Mar. 5, 1929. Serial No. 344,366. 4 Claims. (Cl. 91—67.4.)



1. A dispensing device for an adhesive in stick form comprising a retainer within which an adhesive stick is movable, and a member joined to said retainer and having a contact surface in spaced relationship to the retainer so that the adhesive stick may be advanced into contact therewith, a portion of said member continuing beyond said surface and being disposed with respect thereto to provide an application surface, said portion continuing to form a lip for receiving and supplying heat to the application surface and to the contact surface.

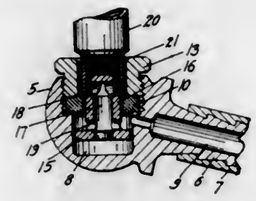
1,806,982. WASHING MACHINE. LEROY R. MCKERCHER, California, Iowa, assignor of one-half to James E. McKercher, Valparaiso, Nebr. Filed Dec. 11, 1929. Serial No. 413,214. 3 Claims. (Cl. 259—99.)



1. In a washing machine comprising operative and supporting means for the machine, a tub, a revolvable water-agitator provided with an upright sleeve within the tub, a drive shaft for the agitator journalled in the bottom of the tub, a revolvable sleeve provided with a dolly carried by the first named sleeve, a dolly-sleeve drive shaft journalled in the first named shaft, and a reversing mechanism for the dolly drive shaft.

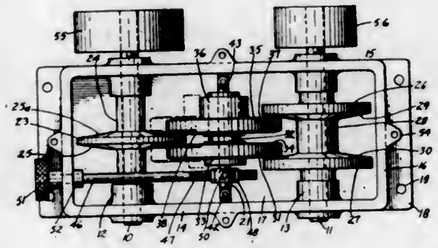
1,806,983. AIR CHUCK. CARL A. NORGREN, Denver, Colo. Filed Feb. 4, 1929. Serial No. 337,498. 4 Claims. (Cl. 284—17.)

1. In an air chuck having a chamber, and means to connect the chamber with a source of air supply, an annular gasket projecting into the chamber and a valve engaging the gasket within the chamber and having a stem projecting through the gasket, the stem having an interior duct and ports at opposite ends thereof, said stem between the ports being of a length greater than the thickness of said gasket whereby to locate the ports



on opposite sides of the gasket when the valve is opened there being a space around the stem through which a nipple may be admitted into the chuck, and means comprising an annular shoulder on the stem below the outer ports, and engageable with the nipple to prevent entrance of foreign matter into the nipple.

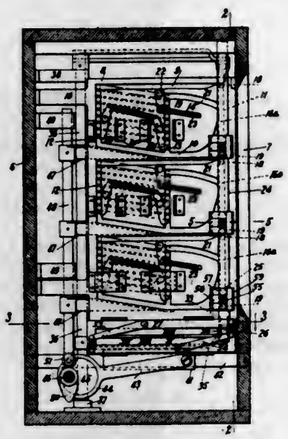
1,806,984. VARIABLE SPEED TRANSMISSION. HERBERT L. PROUT, Villa Park, Ill. Filed Apr. 16, 1930. Serial No. 444,732. 9 Claims. (Cl. 74—24.)



1. In a power transmitting mechanism, a driving shaft, a driven shaft extending substantially parallel thereto, a friction wheel secured to said driving shaft, said wheel having conical friction surfaces formed on its outer faces, a pair of friction wheels secured to said driven shaft and having conical, friction surfaces formed on their inner faces, a pair of idler power transmitting friction wheels mounted in parallel relation between said driving and driven shafts, and having beveled friction surfaces adapted to engage the surfaces of said driving and driven friction wheels, and means for moving said idler wheels over the faces of said driving and driven friction wheels so as to vary the speed ratio between said driving and driven wheels.

1,806,985. DISPLAY MECHANISM. CHARLES ROBERTS, New York, N. Y. Filed July 19, 1928. Serial No. 295,884. 26 Claims. (Cl. 40—36.)

1. In a display mechanism, a movable display frame, means to support said display frame initially in a substantially horizontal position and to guide the same in its movement, means movable in one direction to impart movement to said display frame and to cause the same to assume an upright position, and means movable



in another direction to withdraw said display frame from said upright position and restore the same to a horizontal position.

1,806,986. SHEET METAL BRAKE. GEORGE H. RUCKER, Stockton, Calif., assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed July 20, 1927. Serial No. 207,118. 6 Claims. (Cl. 153—16.)

1. A sheet metal brake comprising a frame, a table horizontally adjustable on said frame, an apron hinged to said table, a leaf hinged to said frame, and fingers on said leaf adapted to cooperate with said table to hold a metal sheet.

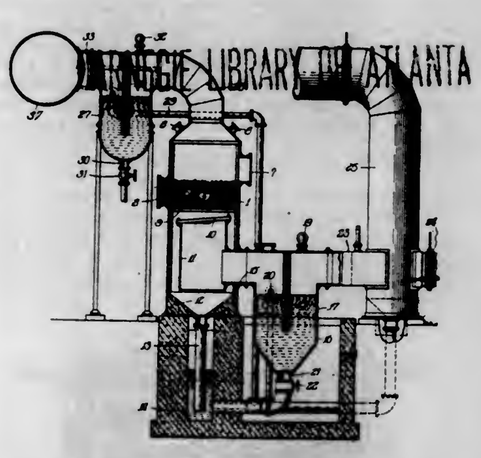
1,806,987. HONEYCOMB AND COMB FOUNDATION. CHARLES F. STRAHAN, Linwood, Nebr. Filed Dec. 30, 1927. Serial No. 243,718. 2 Claims. (Cl. 6—11.)

2. Comb foundation having cell bases with vertical side walls longer comparatively than the diagonal walls.

1,806,988. PROCESS FOR PURIFYING PIGMENT MATERIALS. WILLIAM H. TEST, Redondo Beach, Calif. Filed Nov. 8, 1927. Serial No. 231,995. 5 Claims. (Cl. 23—203.)

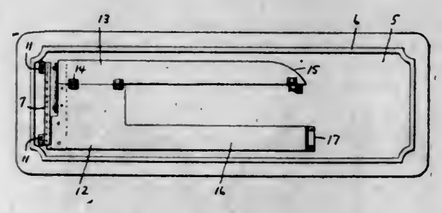
1. The process of purifying a pigment material to eliminate iron oxides including treating the material to reduce the iron oxides to the metallic state and then subjecting it to carbon monoxide under conditions to form iron carbonyl and then removing the iron carbonyl by heat.

1,806,989. GAS DRIER. FRED. WILLE, Chicago, Ill., assignor to H. A. Brassert & Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1929. Serial No. 330,574. 3 Claims. (Cl. 183—40.)


CARNEGIE LIBRARY OF ATLANTA

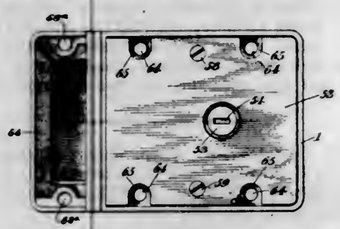
1. In a continuous gas drier, walls forming a pair of vertical passages, water eliminating means comprising a layer of loose material in each of said vertical passages, inlet and outlet passages for the gas connected to each of said vertical passages, means for flushing the loose material in either vertical passages as desired, and means for closing the inlet passage to the vertical passage which is being flushed while the remaining inlet passage and vertical passage are open to the flow of gas.

1,806,990. BODY SUPPORT FOR COFFINS. EDWARD A. BEILER, Dubuque, Iowa. Filed June 19, 1930. Serial No. 462,345. 2 Claims. (Cl. 27—13.)



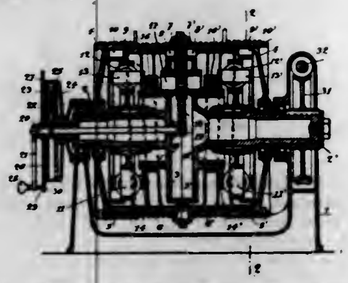
1. A body support for coffins comprising a board hingedly connected to the coffin at one end thereof, a toothed upright on the coffin at the opposite end of the board, means on the board for adjusted engagement with the teeth of the upright, said board comprising a pair of hingedly connected sections, means whereby said sections may be maintained in inclined relation with respect to each other, and comprising a pivotally mounted toothed bar on one of the sections and a pin on the complementary section, with which the toothed bar is engageable.

1,806,991. LOCKING MECHANISM. JOSEPH F. FETYK, New York, N. Y., assignor to Francis Keil & Son, Inc., a Corporation of New York. Filed June 6, 1925. Serial No. 35,275. 21 Claims. (Cl. 70—46.)



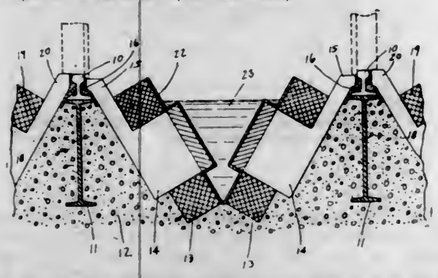
1. A lock having a bolt, a keeper, and means for moving the bolt into the keeper, comprising a plate and a rotary member for moving the same, said rotary member being arranged to cooperate with said plate by moving to a dead center position when the bolt is in final locking position to normally oppose the initial movement of withdrawal of the bolt from locking position by external force applied to the bolt.

1,806,992. DEVICE FOR BRINGING A MOVING BODY TO REST. JEAN FIEUX, Paris, France, assignor of one-half to Schneider & Cie., Paris, France, a Limited Joint Stock Company of France. Filed Nov. 9, 1928, Serial No. 318,203, and in France Jan. 25, 1928. 3 Claims. (Cl. 254—172.)



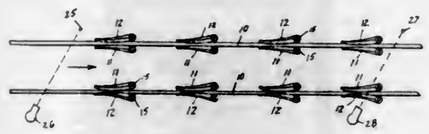
1. In a device for gradually bringing a moving body to rest, the combination of a cable, a drum upon which said cable is wound, a brake acting to check the unwinding action of said drum, and a non-reversible control connected to said brake and moving as an integral unit with the brake during the winding action of the drum.

1,806,993. APPARATUS FOR CONTROLLING VELOCITY OF WHEELED VEHICLES. EMMETT E. FISHER, Indianapolis, Ind. Filed Apr. 2, 1930. Serial No. 440,935. 2 Claims. (Cl. 188—62.)



1. Apparatus for controlling the velocity of wheeled vehicles, including a pair of electromagnets positioned to exert a retarding force upon the opposite wheels of said vehicle, said magnets being positioned with respect to each other to form a substantially V-shaped trough therebetween for the passage of cooling water.

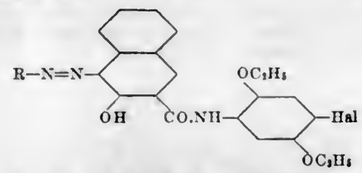
1,806,994. TRACK BRAKE. EMMETT E. FISHER, Indianapolis, Ind. Filed July 21, 1930. Serial No. 469,603. 6 Claims. (Cl. 188—62.)



1. In combination with a rail upon which a wheeled vehicle may travel, a brake shoe adjacent said rail, and an electromagnet, said shoe and rail being adapted to form a closed magnetic circuit for said electromagnet and said shoe being mounted and shaped to permit movement thereof for the entrance of a portion of a wheel of said vehicle between said shoe and rail.

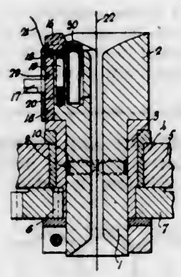
1,806,995. AZO-DYESTUFFS INSOLUBLE IN WATER. WILHELM FITZKY and ERWIN THOMA, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 17, 1930, Serial No. 445,195, and in Germany Feb. 18, 1929. 5 Claims. (Cl. 260—95.)

2. As new compounds, the azo dyestuffs of the following constitution:



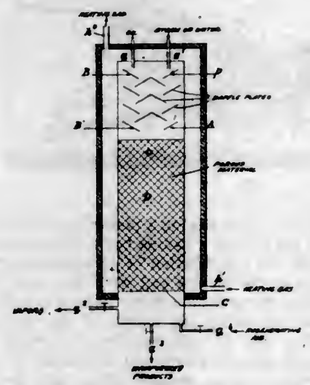
wherein R stands for a phenyl nucleus which is free from any group capable of rendering the dyestuff water-soluble which compounds are when dry colored powders, insoluble in water, yielding when mixed with substrata valuable color lakes and when prepared on the fiber dyeings and printings of very good fasteness properties, especially to light.

1,806,996. CIRCULAR KNITTING MACHINE. THOMAS SCOTT GRIEVE, Leicester, England. Filed June 28, 1928, Serial No. 288,909, and in Great Britain Sept. 2, 1927. 8 Claims. (Cl. 66—144.)



1. The combination with a circular knitting machine of the superposed rotary needle cylinder type, of splicing mechanism comprising a vertically disposed tubular member through which a main yarn passes to the needles, a driven sleeve within which the tubular member is normally held stationary, and means on the tubular member for trapping and severing a splicing yarn, said tubular member being driven by the sleeve, when required, to twist the splicing yarn round the main yarn, so that the latter carries the splicing yarn in with it.

1,806,997. VAPORIZATION OF HEAVY HYDROCARBONS. ALFRED JOSEPH, Enghien, France, assignor to Compagnie Internationale pour la Fabrication des Essences et Petroles, Paris, France, a Limited Joint-Stock Company of France. Filed July 16, 1929, Serial No. 378,788, and in France July 30, 1928. 6 Claims. (Cl. 196—79.)



1. Apparatus for the vaporization of heavy hydrocarbons comprising a vessel having in one portion thereof a series of separated baffle plates and in another portion thereof a mass of porous material, means for heating said vessel externally, means for conducting hydrocarbons to be vaporized to said vessel and for evacuating the same therefrom, said hydrocarbons passing first through said baffle plates and then through said porous material, and means for conducting regenerating gases to said vessel.

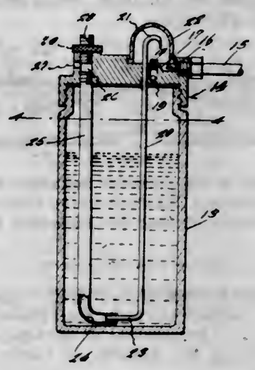
1,806,998. MEANS FOR TREATING AND PROTECTING CORNS. MORRIS P. KAUFMAN, Juneau, Territory of Alaska. Filed Apr. 15, 1929. Serial No. 355,222. 3 Claims. (Cl. 128—153.)



3. A corn protector comprising a soft, slightly compressible member, a fastening strip secured to said member and to a foot for allowing a rolling movement of the member, and a strip secured to the underside of the member for contacting with the foot and preventing a sliding movement between the member and the foot.

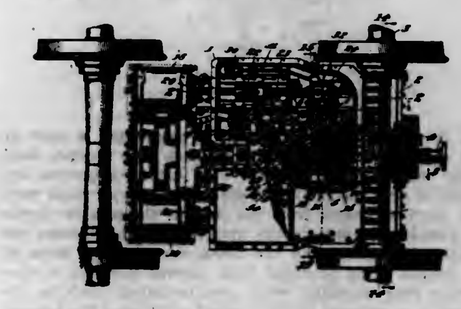
1,806,999. AUTOMATIC VALVE LUBRICATOR. STEPHEN G. LING, Los Angeles, Calif. Filed July 23, 1930. Serial No. 470,046. 6 Claims. (Cl. 261—121.)

1. In a structure of the class described, an oil container, a cover therefor having an air port, a regulating valve for said port, an air pipe connected to and in communication with the port and depending into said container and terminating in a laterally directed discharge end, an oil delivery pipe connected with said cover, an oil elevating pipe extending upwardly through the cover and terminating in a gooseneck dropper in communication



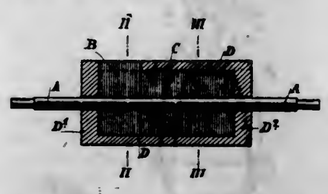
with said delivery pipe, the lower end of said elevating pipe depending into the container and telescoping into the adjacent end of said discharge pipe.

1,807,000. GEARING. RICHARD J. MCCARTY, Jr., Bethlehem, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Aug. 2, 1929. Serial No. 382,930. 32 Claims. (Cl. 74—7.)
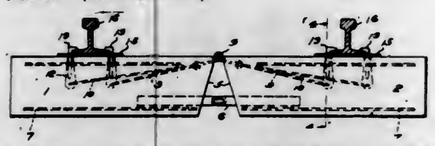


1. In an entrainment mechanism, a driven gear, a driving train including an idler gear which is normally out of engagement with the driven gear, a jack-shaft with fixed axis, and means mounted on said jack-shaft responsive to the operation of the driving train to produce the engagement of said idler and driven gear.

1,807,001. SYNCHRONOUS MOTOR. NICOLAS EMILIEN METHLIN, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Oct. 15, 1927, Serial No. 226,355, and in France Nov. 17, 1926. 5 Claims. (Cl. 172—120.)



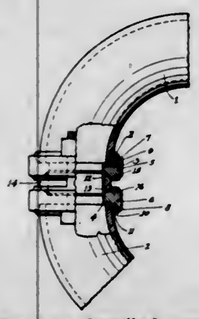
1. In a synchronous motor, a rotor of magnetic material having axially related portions, one portion having substantially circular cross section, and another portion having polar projections formed thereon, and a squirrel cage winding extending substantially the length of said rotor.

1,807,002. ROADBED EQUIPMENT AND METHOD OF USING THE SAME. SVERRE ALFRED MORK, Washington, D. C. Filed Oct. 31, 1929. Serial No. 403,849. 12 Claims. (Cl. 238—115.)



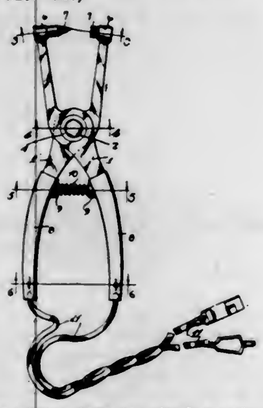
1. In a device of the character described, a molded concrete body, and means imbedded in the body easily fusible under the influence of heat for anchoring fastening elements.

1,807,003. METAL TO METAL JOINT. OLLIE T. NELSON, Bristol, Pa., assignor to Pacific Steel Boiler Corporation, Detroit, Mich., a Corporation of Michigan. Filed Nov. 18, 1927. Serial No. 234,188. 1 Claim. (Cl. 285—137.)



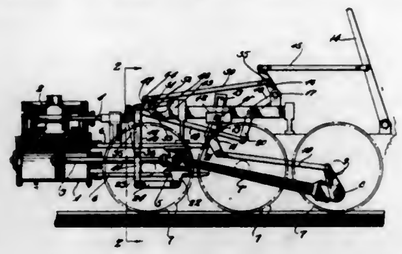
A device of the type described comprising a pair of pipe sections, a flange carried by each pipe section, each flange comprising an annular ring having a portion arranged to abut the end of the pipe and being provided with bead portions spaced from the sides of the pipe for forming annular recesses, means disposed in said recesses for welding said flanges to the pipes, the opposite faces of the flanges being provided with tapered surfaces, a connecting ring provided with arcuate-shaped surfaces arranged to be engaged by the tapered surfaces of the flanges, and bolts carried by the flanges for drawing said flanges toward one another, whereby the ring is pressed tightly against the arcuate surfaces, thus forming a tight joint.

1,807,004. SOLDERING PLIERS. ROY NELSON, Minot, N. Dak. Filed Apr. 25, 1929. Serial No. 358,094. 2 Claims. (Cl. 219—12.)



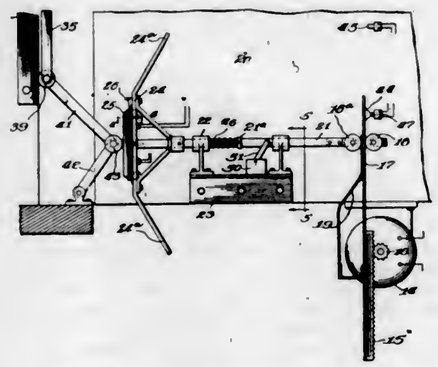
1. In a device of the class described, a pair of pivotally connected pliers, comprising jaws and operating arms, means for supplying electricity to the pivoted arms of the pliers comprising leads connected to the ends of the handles of the pliers, carbon points on the soldering ends of the pliers, insulation hand grips on the handles of the pliers, and a compression spring between the insulation grips normally to separate the carbon points.

1,807,005. STEAM ENGINE VALVE GEAR. JOSEPH OLSON, Houston, Tex. Filed Jan. 12, 1929. Serial No. 332,171. 4 Claims. (Cl. 121—163.)



4. In a steam engine having a piston, a piston cross head connected to the piston, a radius bar and controlling valve and valve rod, the combination of an extendible transmission lever connected at one end with the cross head, the said extendible transmission lever having relatively moving parts for extending the length of the same, a lever connected with one of said relatively movable parts, a slidable member engaging said last mentioned lever, means for sliding said slidable member along said lever to lift and lower said lever to adjust the length of said extendible transmission lever, a lap and lead lever pivoted at one end to the transmission lever at an intermediate point, said radius bar and valve rod being pivotally connected, one to the other end of said lap and lead lever and the other to said lap and lead lever at an intermediate point of said lap and lead lever.

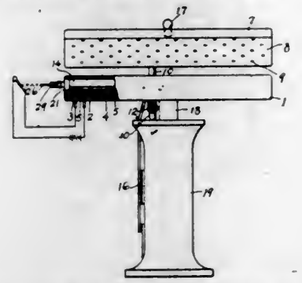
1,807,006. ELEVATOR DOOR CONTROL. THOMAS J. OSINGA, Chicago, Ill. Filed Dec. 5, 1927. Serial No. 237,889. 10 Claims. (Cl. 187—52.)



1. A means for opening an elevator door comprising a set of links breakable to draw the door open, a pusher effective on one of the links, a guide for the pusher, and a set of break links at the base of the pusher and expansible to operate the latter.

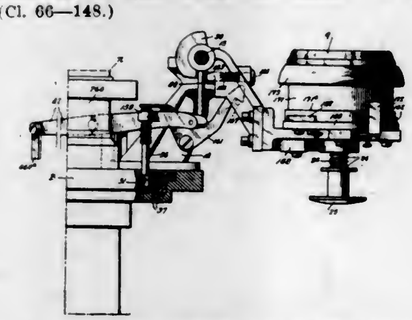
7. An elevator door control comprising a pressure-actuated door-opener installed in proximity to the door, a pressure-imparting element carried by the car and operative upon said door-opener, an actuator for said element energized by the operating control of the car, a de-energizer for said actuator rendered effective when the element has made a partial movement, and a re-energizer for said actuator rendered effective when the element engages said door-opener.

1,807,007. STEAM FINISHING APPARATUS. KANICHI OTSUKA, Uchisaiwai-Cho, Kojimachi-Ku, Tokyo, Japan. Filed Mar. 5, 1930, Serial No. 433,379, and in Japan Apr. 11, 1929. 2 Claims. (Cl. 68—9.)



1. Steam ironing and finishing apparatus of the character described, comprising a steam generator having an upper plate constituting the lower member of an ironing and finishing press, an electric heating unit for heating said generator, a steam box constituting the upper member of an ironing and finishing press, and movable into and out of contact with the lower member, and a flexible pipe connecting said boiler and steam box, said upper member being perforated in its under side for the escape of steam.

1,807,008. TRANSFER MECHANISM FOR CIRCULAR KNITTING MACHINES. ALBERT E. PAGE, Brooklyn, N. Y., assignor to Scott and Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed May 8, 1929. Serial No. 361,418. 12 Claims. (Cl. 66—148.)



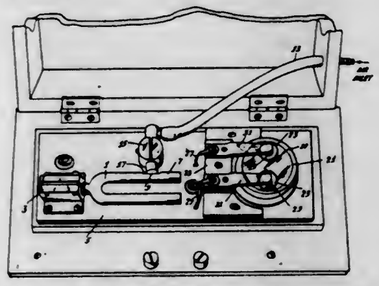
1. A circular knitting machine having a revoluble needle cylinder, stitch transfer mechanism adapted to be moved into and out of operative relation with the cylinder, and a pin to lock the cylinder against rotation, in combination with a spring to press said pin into locking position, a lever to put said spring into operative position and means adapted to hold said spring in said position.

1,807,009. CONVERTIBLE IMPLEMENT. DONATO PINNELLI, Orange, N. J. Filed June 7, 1930. Serial No. 459,783. 2 Claims. (Cl. 107—50.)



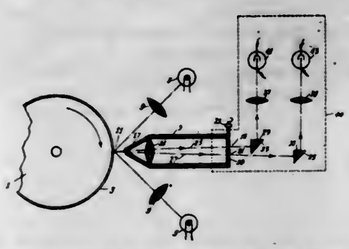
1. A device of the character described comprising an elongated cylinder having at each end a reduced straight cylindrical portion from which axially extends a handle, a pair of concentric rings placed one outside of the other on said reduced portions and confining ball bearings therebetween providing for relative rotation of the outer ring over the inner ring, a sleeve formed with peripheral cutting ribs and having enlarged counter-bores at the ends thereof constituting receses adapted to snugly receive the outer rings, the interior of said sleeve being spaced from the cylinder to provide for free relative rotation of the sleeve over the said cylinder, and a removable roller attachment for disposition over said sleeve comprising a hollow cylinder having an interior flange at one end for abutting one end of the sleeve when the attachment is in place.

1,807,010. QUARTZ TUNING FORK DRIVE. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 3, 1929. Serial No. 360,061. 14 Claims. (Cl. 84—409.)



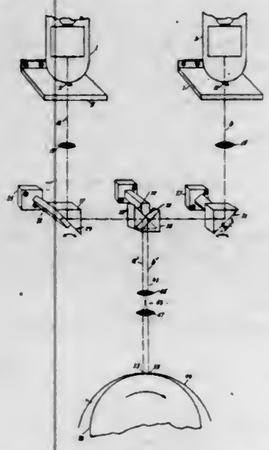
13. The method of producing constant frequency electric impulses from quartz tuning forks rigidly mounted upon a suitable supporting base which comprises projecting air against one tine of the tuning fork, continuously vibrating the fork from said projected air at the natural period of vibration of said fork, transferring the vibrational pulses from the fork to the base member, electromagnetically picking up the vibrational pulses imparted to the base member, and converting the picked up vibrational pulses into electric currents of a frequency corresponding to the fork frequency.

1,807,011. ANALYZING SYSTEM FOR MULTIPLEX FACSIMILE TRANSMISSION. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 3, 1929. Serial No. 360,066. 6 Claims. (Cl. 178—5.)



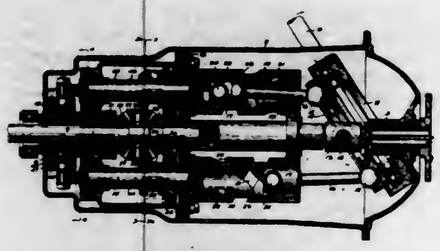
1. A system for analyzing pictures to be transmitted including a record surface, means for illuminating the record surface, means for separating the light beams reflected from the record surface by virtue of said illumination into a plurality of independent and distinct light beams, a plurality of independent photoelectric bodies, and a series of prisms in the path of said reflected light beams for causing each of said reflected light beams to influence said photoelectric bodies in accordance with the intensity of light and shadow on elemental areas of the said surface.

1,807,012. MULTIPLEX REPRODUCING. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 3, 1929. Serial No. 360,068. 5 Claims. (Cl. 178—5.)



1. A system for reproducing pictures in multiplex transmission systems which includes a plurality of glow lamps, means for producing a glow in each of said lamps in accordance with the intensity of light and shadow on elemental areas of a transmitted picture, means for projecting the light issuing from each of said glow lamps along predetermined paths, condensing means for collecting the light beams issuing from each of said sources and confining the said beams to a predetermined illuminated area, and means for projecting each of said light beams at different adjacent points on a received record surface.

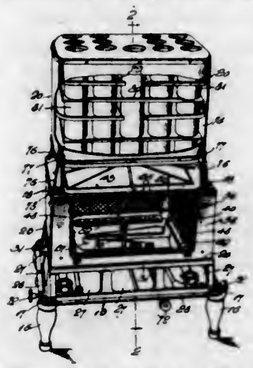
1,807,013. VARIABLE SPEED POWER TRANSMISSION. ELWYN M. RAYBURN, San Francisco, Calif. Refile for abandoned application Serial No. 676,989, filed Nov. 26, 1923. This application filed Jan. 29, 1931. Serial No. 512,185. 6 Claims. (Cl. 74—34.)



1. In a variable speed power transmission, a driving shaft, a plurality of elements adapted to be reciprocated by rotation of said shaft, a counter-shaft associated with each reciprocating element and adapted to be oscillated by the reciprocating movement thereof, a driven shaft, a differential gear associated with the driven shaft, gears on the counter shafts engaging said differential gears and means for securing the gears to the countershafts during rotation thereof in one direction.

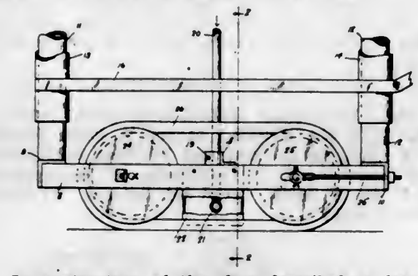
1,807,014. CABINET GAS HEATER. HENRY H. SANFORD, Mansfield, Ohio. Filed June 23, 1930. Serial No. 463,189. 8 Claims. (Cl. 126—90.)

1. A cabinet gas heater comprising a rectangular combustion chamber having a discharge opening for products of combustion, an air heating drum mounted over said combustion chamber and having conducting means for the products of combustion communicating with said opening, an air conducting casing around said combustion



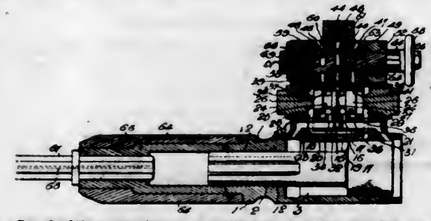
chamber and drum, fire-backs and radiants mounted at the back and sides of said combustion chamber, registering doors in the fronts of said combustion chamber and casing, and gas burners mounted under said radiants.

1,807,015. HIGHWAY MARKER. FERD SCHULTZ and RUEBEN KUNTZ, Juneau, Wis. Filed Apr. 26, 1930. Serial No. 447,653. 3 Claims. (Cl. 91—48.)



1. In a structure of the class described, a frame, a tapered depending shield rigidly mounted between the side bars of the frame and embodying a relatively narrow discharge mouth located in close proximity to the highway surface, a paint delivery pipe, a distributing apertured head carried by the discharge end of the pipe and confined within said shield, and edge confining means on said frame associated with the discharge end of the shield and including two pairs of grooved rollers provided with a belt mounted in the grooves, said belt being of endless form and serving to prevent the flowing paint from spreading beyond predetermined limits, whereby to restrict the width of the mark on the highway surface.

1,807,016. ROCK DRILL. GEORGE W. SMITH, Ottumwa, Iowa, and ALBERT E. DIETERICH, Washington, D. C., assignors to Hardsocg Wonder Drill Co., Ottumwa, Iowa, a Corporation. Filed Dec. 31, 1929. Serial No. 417,770. 4 Claims. (Cl. 121—6.)



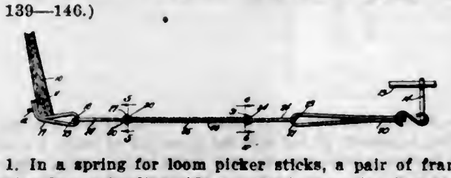
1. In drilling engines, a cylinder having a drill chuck to receive a drill steel having a passage through the same,

a hammer piston in said cylinder, an automatic distributing valve unit associated with said cylinder and having inlet and exhaust ducts in communication with said cylinder and having kicker passages between said cylinder and said distributing valve unit, said distributing valve unit including a live fluid inlet passage, exhaust outlet passages and bleeding ports, combined with a manually controlled valve unit associated with said distributing valve unit and including a valve proper, live fluid exhaust and bleeding passages cooperating with those of said distributing valve unit and having provisions which when the manually controlled valve is in one position said distributing valve will be caused to function normally, and when the same is in another position the said distributing valve will be held inactive, said manually controlled valve serving to by-pass live fluid around said automatic valve from a live fluid source into the fore end of the cylinder while said piston is held inactive for the purposes described.

1,807,017. TREATING GLASS ARTICLES. ROWLAND D. SMITH, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Mar. 5, 1929, Serial No. 344,592. Renewed Apr. 6, 1931. 2 Claims. (Cl. 41—42.)

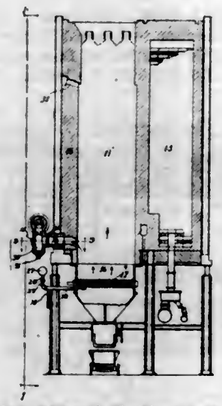
1. The method of treating glass articles which includes washing them in water containing simple aluminum fluoride.

1,807,018. PICKER CHECK FOR LOOMS. FRANK SZCZESNY and ANDREW PRZEKOP, Norwich, Conn. Filed Feb. 6, 1930. Serial No. 426,366. 4 Claims. (Cl. 139—146.)



1. In a spring for loom picker sticks, a pair of frames having legs extending side by side in opposite directions, frame spacers fixed to the legs of respective frames adjacent their ends and having the remaining legs slidable therethrough, and coiled compression springs surrounding said legs between said spacers, said spacers having open notches wherein the legs of one frame are received.

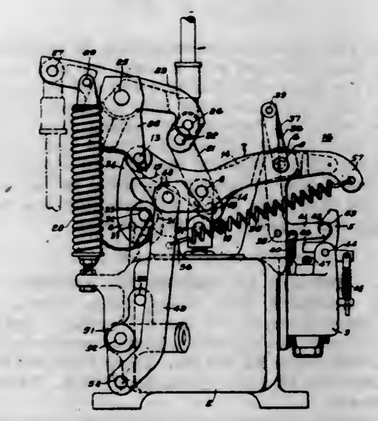
1,807,019. METHOD OF COOLING OF COKING RETORTS AND APPARATUS THEREFOR. JOSEPH VAN ACKEREN, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 12, 1925. Serial No. 1,717. 20 Claims. (Cl. 202—31.)



1. In a continuous vertical retort oven, in combination: a vertical coking chamber each having distillate-gas offtake means communicating therewith for offtake of gases of distillation therefrom and having a coke extractor magazine therebelow and communicating at the top of said magazine with the lower portion of the chamber, said magazine being provided with coke extractor means; means for introducing a fluid cooling medium into said magazine below said coke extractor means; a heat recovery device; an insulated flue communicating with said heat recovery device and communicably connected with the coking chamber at a point above said magazine and below said distillate-gas offtake means of said coking chamber for off-flow of fluid cooling medium from said magazine through said coking chamber separately from and at a lower level than said distillate-gas offtake means to said heat recovery device; a return flue for conveying the fluid medium from the heat recovery device back to the fluid introducing means; said return flue communicating with said fluid introducing means and having a pump whose speed may be regulated; and means for selectively proportioning the relative quantities of spent cooling medium flowed off from the coking chamber through said insulated flue to modify the quality of the gases generated in the coking chamber and drawn off through said distillate-gas offtake means; and means for selectively proportioning the relative quantities of recirculated medium returned to the magazine from the insulated flue.

8. The method of operating a by-product coking plant to regulate the quality of the distillation gases produced thereby and to cool the coke, which comprises: coking a descending mass of solid carbonisable fuel in a retorting space so that completion of coking of the mass increases progressively from top to bottom thereof and thereby producing distillation gases therefrom; discharging finished coke from the bottom of the mass; introducing into the discharging hot coke a fluid cooling medium and thereby cooling the discharging coke; drawing the distillation gases off from said coking mass above the bottom thereof; flowing spent cooling medium off from the discharging coke into the substantially completely coked portion of the coking mass in the bottom of the retorting space; and drawing off spent cooling medium from the substantially completely coked portion of the coking mass separately from and without mixture therein with off-flowing distillation gases concurrently being drawn off above the bottom of the mass.

1,807,020. OPERATING MECHANISM FOR OIL CIRCUIT INTERRUPTERS. ROSWELL C. VAN SICKLE and STANLEY T. SCHOFIELD, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 9, 1927. Serial No. 238,756. 18 Claims. (Cl. 200—89.)



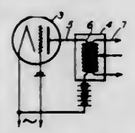
1. In a circuit-closing device, the combination with two pivotally mounted members, of a floating link hingedly

supported at one of its ends to one end of a pivotal member, latching means for each end of the said floating link and a link member for uniting the floating member to the other said pivotal member.

1,807,021. MAGNETIC PRODUCT AND METHOD OF MAKING THE SAME. TAYGVE D. YENSEN, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 29, 1924. Serial No. 702,897. 27 Claims. (Cl. 175—21.)

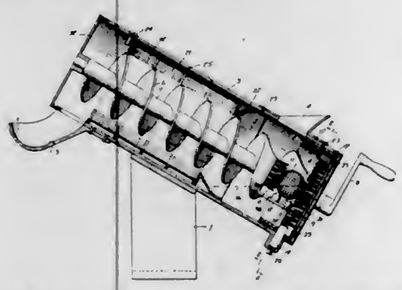
1. A magnetic product of an alloy of nickel and iron in approximately equal proportions, having a maximum permeability greater than 40,000.

1,807,022. RADIO TRANSFORMER. TAYGVE D. YENSEN, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed Mar. 29, 1924, Serial No. 702,897. Divided and this application filed Feb. 15, 1930. Serial No. 428,660. 8 Claims. (Cl. 175—356.)



1. A radio transformer having a core comprising an alloy of iron and nickel in approximately equal proportions, said alloy having a permeability of from 20,000 to 100,000 at magnetizing forces ranging from H=.1 to H=1.

1,807,023. GOLF BALL CLEANER. ANDREW P. YOUNG, Pleasantville, N. Y. Filed Nov. 2, 1929. Serial No. 404,307. 14 Claims. (Cl. 15—21.)



1. A ball cleaning apparatus comprising, in combination, a tubular casing provided with a closed end and an inlet opening in the upper wall near that end and an outlet in the lower wall near the other end, a rotary conveyor mechanism extending through said casing from a point near said inlet toward said outlet, a fixed brush located at and substantially parallel to the end wall adjacent said inlet, another brush operatively connected to the rotary conveyor and facing said first mentioned brush, and means for rotating said conveyor in either direction.

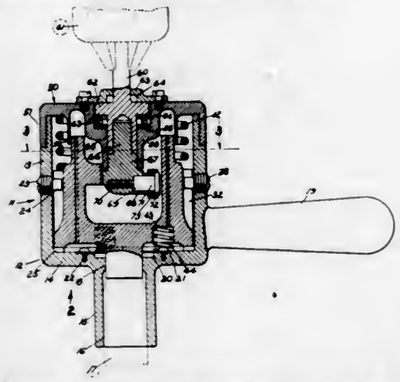
1,807,024. METHOD OF EMBOSSING RUBBER. ROLAND G. ANDERSON, New Haven, Conn., assignor, by mesne assignments, to Wellman Company, Medford, Mass., a Corporation of Maine. Original application filed Mar. 6, 1923, Serial No. 623,141. Divided and this application filed Oct. 18, 1927. Serial No. 227,001. 2 Claims. (Cl. 18—44.)

2. The method of embossing unvulcanized sheet rubber which comprises arranging the sheet rubber on a smooth surfaced support, moving a female embossing die into contact with the surface of the sheet rubber, applying pressure through the die in excess of 400 lbs. per sq. in. to areas



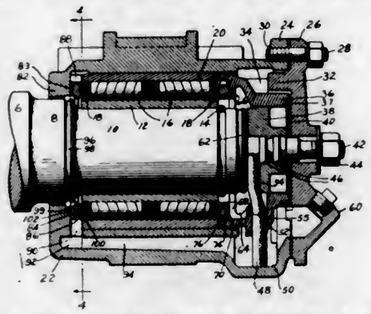
outlining the configuration of the mark to be formed so as to cause the unvulcanized rubber to flow into the recesses of the die and to be stretched beyond its elastic limit.

1,807,025. ROTARY DRIVE TRIP HAMMER. SAMUEL J. BOYD, Los Angeles, Calif. Filed Jan. 11, 1928. Serial No. 246,074. 8 Claims. (Cl. 78—38.)



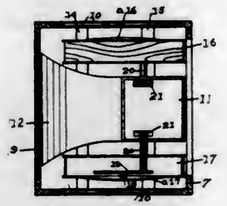
1. A trip hammer comprising in combination a casing having a passage at one side for insertion of tools, a hammer having lateral grooves with studs in the casing engaging said grooves and having a hammer end to strike the tools in said passage, said hammer having a cored-out section with a helically curved cam extending partly thereabouts, a cover having an inwardly extending journal section with a rotary shaft mounted therein, a compression spring between the hammer and the cover, an arm secured to said shaft and having a roller, the roller engaging the said cam, and reacting springs between the hammer and the casing, and a spindle connected to the shaft, extending outwardly beyond the cover and adapted to directly engage a driving device, the hammer having an annular shallow recess in the base with a lower annular edge, the casing having a washer to engage said edge.

1,807,026. JOURNAL BOX. RICHARD J. BRITTAIN, Jr., Newark, N. J., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 21, 1928. Serial No. 263,301. 7 Claims. (Cl. 308—41.)



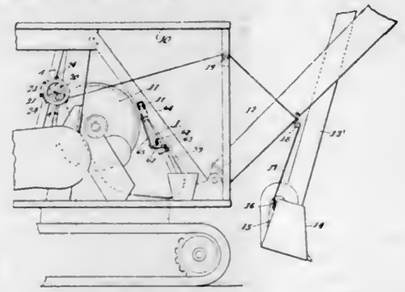
1. In a device of the character described, a shaft, a journal box, an antifriction bearing having a cage between the shaft and the box, an annular abutment member spaced from the cage and having a surface forming a wall of an oil collecting groove, a floating ring interposed between the abutment member and the cage, and the ring having a series of slots for conveying lubricant through the floating ring from the groove; substantially as described.

1,807,027. HORN FOR RADIO SPEAKERS. WILLIAM A. BROCKWAY, Marietta Township, Whatcom County, Wash. Filed Aug. 18, 1930. Serial No. 476,025. 5 Claims. (Cl. 181—27.)



1. A radio loud speaker including a non-resonant horn, and two connected sounding boards one of which is disposed within the horn and the other of which is disposed exterior to the horn.

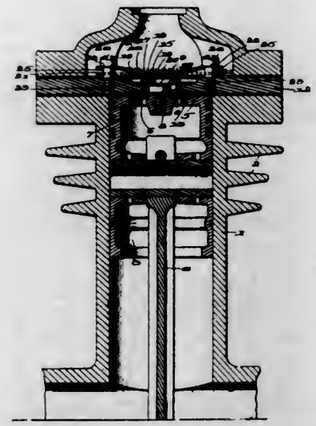
1,807,028. POWER DIPPER DOOR LATCH TRIP. LAGAR R. CULVER, Los Angeles, Calif., assignor of one-half to John W. Prillaman and Elia F. Prillaman, Vista, Calif. Filed July 16, 1929. Serial No. 378,758. 10 Claims. (Cl. 214—146.)



1. In a power dipper door latch releasing device, a shaft, a winding drum secured to said shaft, a cable secured to and adapted to wind unto said drum, which cable is connected to the dipper door latch of the shovel with which the device is associated, a constantly rotating gear wheel mounted for rotation upon said shaft, a friction disc adapted to engage said gear wheel, a supporting arm secured to said shaft, a clutch carried by said supporting arm for engaging the gear wheel and means carried by said friction disc for actuating said clutch, said friction disc, clutch and clutch actuating means providing a slip drive connection between said shaft and gear wheel, whereby said shaft tends to rotate so as to wind the cable on the drum carried thereby and maintain said cable under a tension insufficient to withdraw the latch.

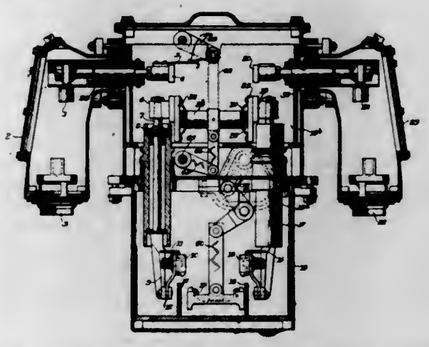
1,807,029. VALVE MECHANISM FOR COMPRESSORS. ELMER D. DUNNING, Stonehurst, Upper Darby, Pa., assignor to Kulair Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed June 19, 1928. Serial No. 286,691. 6 Claims. (Cl. 251—119.)

1. In a valve, the combination with a member provided with a port, of a metallic plate-like valve member for controlling said port, a metallic spring for normally holding said valve member in closed position, a point contact between the intermediate portion of said spring and valve member and means passing through the superimposed ends of the valve member and spring for anchoring



said parts in operative relation in such a manner as to permit a limited reciprocation of the valve member and the flexing of the spring without increasing the bearing contact between the spring and valve.

1,807,030. DISTRIBUTION SWITCH. GEORGE P. EDMONDS, Chicago, Ill., assignor to G. and W. Electric Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed May 11, 1927. Serial No. 190,433. 5 Claims. (Cl. 200—50.)



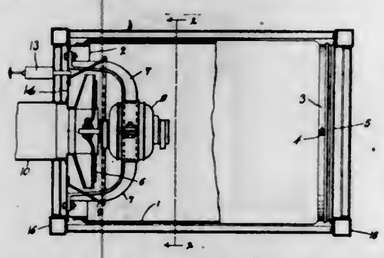
1. In a device of the character described, the combination of inlet and outlet contact means, an isolating switch including fixed contacts and a movable member for electrically connecting said contacts, a slidable switch for electrically connecting said inlet and outlet means each to one of said fixed contacts, and means for successively operating said movable member to break contact with said fixed contacts, and said slidable switch to break contact with the inlet and outlet means comprising independent levers connected to said movable member and said slidable switch, and a rotatable quadrant having shoulders for engagement with the levers.

1,807,031. PROCESS FOR MODIFYING VULCANIZABLE MATERIAL AND PRODUCT. WILLIS A. GIBBONS, Grent Neck, N. Y., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Mar. 11, 1927. Serial No. 174,716. 13 Claims. (Cl. 18—50.)

6. The process of modifying the properties of vulcanizable material which comprises heating normal latex above

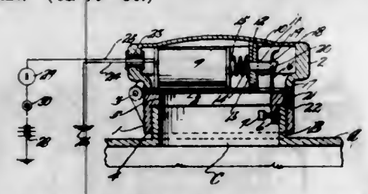
212° F. for 2–3 hrs. without substantial change in its water content, removing part of its water content to form a concentrated latex, and subsequently removing the balance of the water after fabrication of the concentrated latex.

1,807,032. APPARATUS FOR REMOVING POLLEN FROM AIR. GEORGE A. GIESELER, Cleveland, Ohio, assignor, by direct and mesne assignments, to The Pollen Filter Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 5, 1928. Serial No. 267,687. 7 Claims. (Cl. 183—73.)



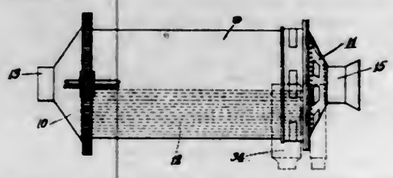
1. Apparatus for removing pollen from air, which comprises a cylindrical air-pervious capillary septum closed at one end, and a motor-driven intake fan mounted internally of the other end of the septum.

1,807,033. CLOSURE LOCK. HARRY J. HANSEN, La Junta, Colo. Filed Aug. 1, 1930. Serial No. 472,228. 3 Claims. (Cl. 70—50.)



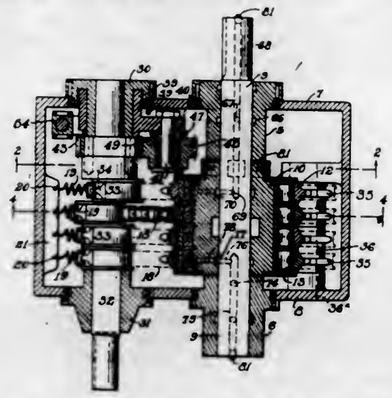
1. In a device of the kind described, in combination with a receptacle having an annulus, an attaching ring adapted to fit over the said annulus, means for securing the attaching ring on the annulus, a catch extended from the attaching ring, a cap hinged to the attaching ring, a lock plunger slidably mounted in the cap and spring set to normally engage the said catch, and electromagnetically operated means for disengaging the said lock plunger from the catch.

1,807,034. UNIVERSAL ROD MILL. HARLOWE HARDINGE, York, Pa., assignor to Hardinge Company, Incorporated, York, Pa., a Corporation of New York. Filed Feb. 25, 1927. Serial No. 170,763. 12 Claims. (Cl. 83—9.)



1. A grinding mill comprising in combination, a grinding compartment having an end wall at its discharge end pierced by a plurality of ports, a main discharge passage in open communication with said grinding compartment through said end wall, and means for controlling the level of discharge from said mill, said means including a plurality of closures for closing certain of said ports at will and removable apertured rings for variously controlling the discharge level through said main passage.

1,807,035. REVERSIBLE VARIABLE SPEED TRANSMISSION MECHANISM. WALLACE C. HERMAN, Oakwood, Ohio. Filed Apr. 12, 1930. Serial No. 443,707. 5 Claims. (Cl. 74—55.)

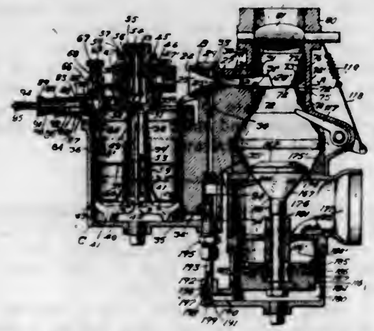


1. In a mechanism of the type described, a driving shaft, a driven shaft, a roller clutch surrounding the latter, an eccentric cam on the driving shaft, a third shaft rotated by the driving shaft, an eccentric cam on the third shaft, followeres for said cams, chains connected between said cam followers and the roller clutch to communicate a reciprocating movement to the latter, and means for adjusting the relation between the eccentric cams to cause a desired movement of the chains when the driving shaft is rotated, for the purpose specified.

1,807,036. TREATMENT OF CELLULOSE SOLUTIONS. CHARLES E. HETZEL, Glenbrook, Conn., assignor to Zeloid Products Corporation, Holyoke, Mass., a Corporation of Delaware. Filed Sept. 24, 1926, Serial No. 137,463. Renewed Apr. 8, 1930. 24 Claims. (Cl. 18—57.)

1. The step in a process of the treatment of cellulosic materials which comprises interaction between a solution of cellulose and another solution containing both a sodium acid salt and glue.

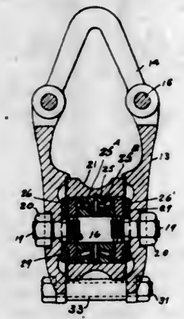
1,807,037. CARBURETOR. CASPAR E. HOFBAUER, New York, N. Y., assignor to Paramount Carburetor Corporation, New York, N. Y., a Corporation of New York. Filed May 2, 1928. Serial No. 274,428. 4 Claims. (Cl. 261—72.)



1. In a fuel feeding and carbureting device, in combination, a primary fuel mixing and evacuating device

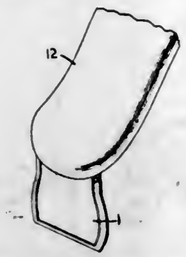
operable by the engine induction, passages thereto, one of which serves to feed fuel from an intermediate fuel storage chamber, the other of which serves to form a diminished pressure head within said chamber whereby fuel from a low level storage tank may be caused to flow into said chamber and a float controlled valve for intermittently shutting off the fuel supply to said chamber, and air valves in said chamber for limiting the diminished pressure head in said chamber within predetermined amounts.

1,807,038. LOGGING BLOCK. JAMES E. HOLDEN, Oswego, Oreg. Filed Oct. 21, 1926. Serial No. 143,029. 7 Claims. (Cl. 254—192.)



1. A logging block having, in combination, a pair of block sides; a shackle joining said sides; a pin projecting through both of said sides, said pin having shouldered flattened ends against the inner faces of said block sides; roller bearings on said pin; a sheave around said bearings; a nut near each end of said pin for adjusting said bearings; and a locking plate on each flattened portion of said pin for preventing the rotation of the adjacent nut after adjustment as long as said sides engage the ends of the flattened portion of said pin.

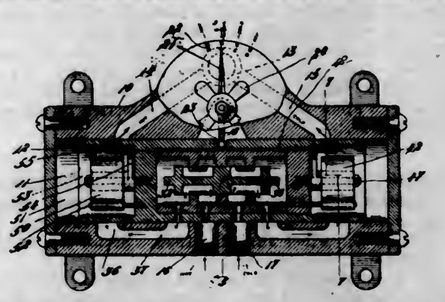
1,807,039. SPLASH GUARD. HAROLD KEIZER, Concord, Mass. Filed Nov. 8, 1929. Serial No. 405,659. 4 Claims. (Cl. 280—152.)



2. A device of the class described comprising a splash guard for vehicles, means supporting the same from the mud guard of a vehicle, and a resilient stop having means engaging the mud guard and splash guard operable to prevent said said splash guard from assuming an ineffective position due to the pressure of air upon the splash guard when the vehicle is in motion.

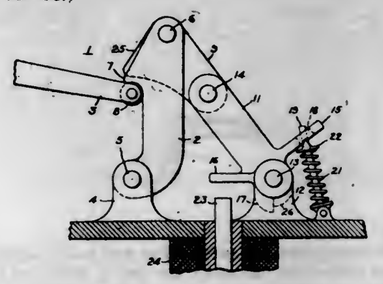
1,807,040. MIXING VALVE. FREDERICK C. LEONARD, Providence, R. I., assignor to Leonard-Rooke Co., Providence, R. I., a Corporation of Rhode Island. Continuation of application Serial No. 157,525, filed Dec. 28, 1926. This application filed Mar. 1, 1928. Serial No. 258,260. 23 Claims. (Cl. 236—12.)

1. In a mixing valve, a casing, a mixing chamber therein, separate conduits in said casing for fluids of different temperatures leading to said chamber, a thermal element positioned to be affected by the temperature of the fluid in one of said conduits before it reaches said



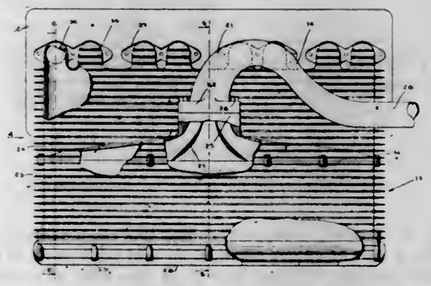
chamber and a valve mechanically actuated by said element for controlling the quantity of flow through its conduit to said chamber.

1,807,041. TOGGLE LATCH. HARRY J. LINGAL, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 12, 1927. Serial No. 190,712. 10 Claims. (Cl. 74—93.)



1. The combination with a latch arm, of a trigger adapted to restrain it, a fixed fulcrum for supporting the trigger, a toggle mechanism for locking the trigger in engaging position and a spring for actuating the toggle mechanism to locked position.

1,807,042. COOLING INTAKE FOR INTERNAL COMBUSTION ENGINES. FRANK S. LOCKHART, Cincinnati, Ohio; Frederick E. Moskovics, administrator of said Frank S. Lockhart, deceased, assignor of one-half to J. R. Burgamy, Cincinnati, Ohio. Filed June 13, 1927. Serial No. 198,676. 9 Claims. (Cl. 123—52.)



1. A cooling intake for an internal combustion engine comprising a U shaped structure having an internal passage, said passage in width being substantially the length of a multi-cylinder engine, in transverse measurements be-

ing materially less than the width, the inner section of the U shaped structure being adapted for location adjacent the cylinders of a multi-cylinder engine but spaced laterally therefrom, having a plurality of fins thereon, the outer section having a plurality of fins, the structure providing a clear, substantially unobstructive air passage between same and an engine, also between the two branches of the U shaped structure, and on the outside thereof, to allow air to flow in the direction of the width of the intake.

1,807,043. PREPARATION OF LIVESTOCK FEEDS. CHARLES R. MABEE, Vittoria, Ontario, Canada, assignor by mesne assignments, to Charles H. Donaldson, Buffalo, N. Y. Filed June 11, 1926. Serial No. 115,233. 11 Claims. (Cl. 99—11.)

10. A composition for use in a process for the fermentative conversion of farm roughage, comprising magnesium hydrate, calcium hydrate, sodium chloride and sulphur.

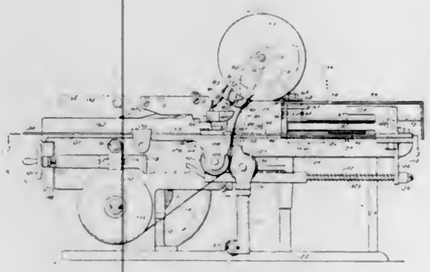
11. In the art of producing an improved livestock feed by the fermentative conversion of farm roughage in a moist condition, the process which comprises subjecting the roughage to fermentative activity in the presence of a medium which beneficially influences the conversion of the roughage, said medium comprising a lime-magnesia component.

1,807,044. FENDER AND GUARD. FLOY C. MERRILIES, Oak Park, Ill. Filed Apr. 21, 1930. Serial No. 445,932. 3 Claims. (Cl. 280—152.)



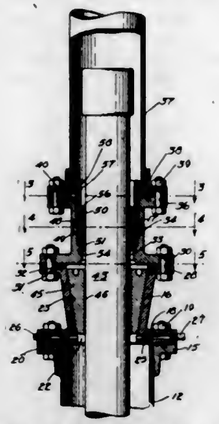
1. A mud guard for automobiles and made entirely of a flexible rubber-like material, the guard comprising upper and lower members connected together with side walls, said members being spaced apart a sufficient distance to provide a relatively large interior air space forming a cushion to retard an impact when said guard comes in contact with an object.

1,807,045. CANDY WRAPPING MACHINE. CLARENCE C. PAGE, Portland, Oreg. Filed Mar. 29, 1926. Serial No. 98,105. 6 Claims. (Cl. 93—2.)



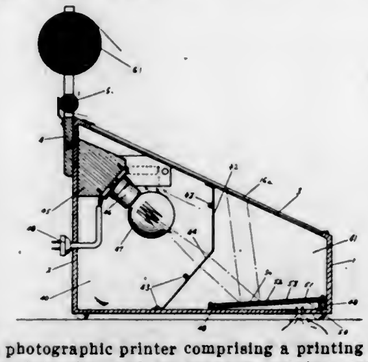
1. In a candy wrapping chute, the combination of a table; a pair of guides mounted on said table, each of said guides having a recess formed in one side, said recess having a sloping undercut roof, said undercut portion having a floor under said sloping roof, said floor having an upturned flanged wall sloping in opposite directions, one of said slopes being parallel with said roof and slightly spaced therefrom.

1,807,046. CASING SUPPORT. CHESTER A. RASMUSSEN and CHARLES R. BUTLER, Long Beach, and WILLIAM A. TROUT, Los Angeles, Calif. Filed Jan. 5, 1927. Serial No. 159,066. 2 Claims. (Cl. 166—14.)



1. In combination: a well casing; an inner casing extending through said well casing; a casing-head body attached to the upper end of said well casing, said inner casing extending through said casing-head body, said casing-head body providing a lower slip receiving chamber, a slip retaining wall above said slip receiving chamber, and an upper packer receiving chamber above said slip receiving chamber; slips in said slip receiving chamber for supporting said inner casing, said slips being retained in place by said slip retaining wall; a packer in said packer receiving chamber for forming a seal around said inner casing; and means for placing said packer under compression.

1,807,047. METHOD AND APPARATUS FOR MAKING PHOTOGRAPHIC PRINTS. JOHN J. RISDON, Binghamton, N. Y., assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Sept. 20, 1927. Serial No. 220,768. 12 Claims. (Cl. 95—75.)

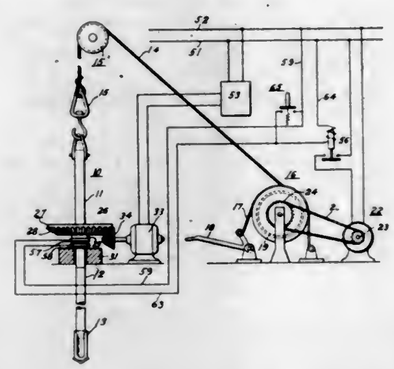


3. A photographic printer comprising a printing light of constant intensity, and an exposure opening, means for reflecting the rays from said light through said opening, and means on said reflecting means for varying the intensity of said reflected rays.

1,807,048. EARTH BORING SYSTEM. JOHN G. RITTER, Norwood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 6, 1928. Serial No. 259,441. 8 Claims. (Cl. 255—19.)

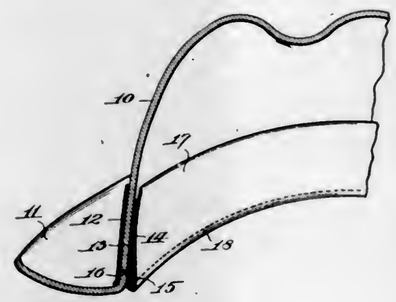
1. In an earth-boring system, in combination, a gravity-feed boring tool, a motor for operating the boring tool,

a drive member connected to the boring tool, a second drive member connected to the motor, said drive members being concentrically related resilient connecting means interposed between the drive members for transmitting power, said drive members being thereby relatively movable, the relative angular movement of the drive members



being a function of the torque transmitted, means for controlling the feeding of the boring tool, means actuated by the drive members for controlling the operation of the feed-control means, said control means being responsive to a predetermined relative angular movement of the drive members, thereby to limit the torque transmitted to the boring tool.

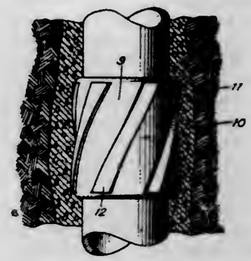
1,807,049. SWEAT BAND. LESTER L. SHERWOOD, Los Angeles, Calif. Filed Oct. 8, 1930. Serial No. 487,167. 9 Claims. (Cl. 2—181.)



1. A sweat band for hats comprising an inner member, composed of thin flexible moisture and oil proof material, the material forming said inner member being folded double to provide an inner wall and an outer wall, the lower portion of the outer wall overlying and extending a short distance below the lower edge of the inner wall, the lower portion of the inner wall of said inner member being folded upwardly so as to lie between the lower portions of said inner and outer walls and an outer member of thin flexible material positioned against the outer face of the outer wall of the inner member and overlying said inner member.

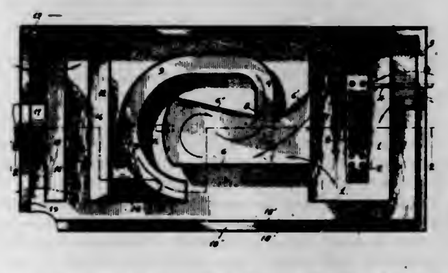
1,807,050. METHOD FOR CEMENTING WELLS. HARRY P. STOLZ, Glendale, Calif. Filed Dec. 26, 1928. Serial No. 328,565. 3 Claims. (Cl. 166—21.)

1. The method of cementing a casing in a deep well, which consists in passing liquid cement down the casing and permitting the same to escape near the bottom of the well, so that the cement flows upwardly outside of the



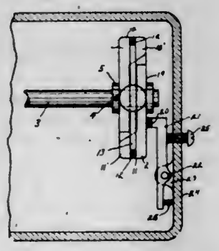
casing, and developing a circumferential movement in the flowing cement successively at different levels as the same flows upwardly.

1,807,051. GAS FURNACE. GEORGE A. TUCK, San Francisco, Calif. Filed May 6, 1930. Serial No. 450,218. 18 Claims. (Cl. 126—116.)



1. A gas furnace comprising a combustion chamber provided with a burner mounted within the bottom thereof; an expansion chamber extending laterally from the combustion chamber and communicating with said combustion chamber through an opening having the greatest dimension vertically disposed in the side of the combustion chamber to translate a normal upward movement of gases of combustion within the combustion chamber to a lateral movement in a plane substantially at right angles to said normal upward movement; and a tortuous passage connected into the expansion chamber to conduct the gases to a stack.

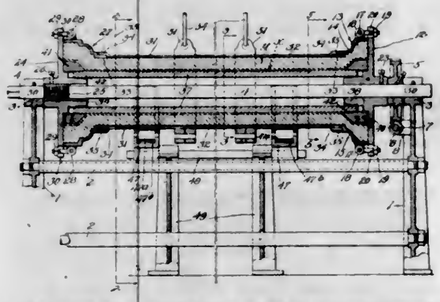
1,807,052. GOVERNOR. FRITZ VAN DER WOUDE, Elyria, Ohio, assignor to The General Industries Company, Elyria, Ohio, a Corporation of Ohio. Filed Aug. 20, 1929, Serial No. 387,143. Renewed Aug. 23, 1930. 10 Claims. (Cl. 188—187.)



1. In a speed governor, in combination with a rotatable shaft of a device to be governed, a pair of plates carried by the shaft, one of said plates being secured to the shaft,

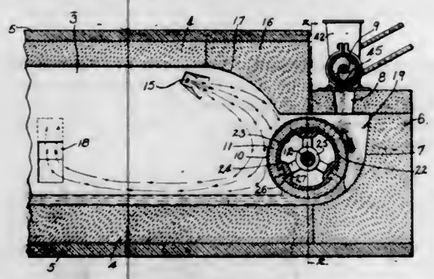
the other plate being adapted to float axially and rotationally within limits relative thereto, a resilient centrifugal element, portions of said plates, said plates having inner faces cooperatively formed for canning inter-engagement, whereby varying relative rotational movements of the plates will effect correspondingly varying relative movements of the plates axially of the shaft against the resilient effort of said centrifugal element, constantly tending to move said plate portions relatively rotationally and relatively axially closer together, and a friction element adapted for engagement with an axially movable outer surface of one of said plates.

1,807,053. MOLDING APPARATUS. JOHN J. VICENZI, Boston, Mass. Filed Dec. 12, 1929. Serial No. 413,457. 4 Claims. (Cl. 25—30.)



1. An apparatus of the character described comprising a collapsible core provided adjacent each end thereof with a removable head; means rotatably supporting said core in a horizontal position; means for rotatively adjusting said core; a flexible apron having one end thereof separably attached to said heads and means yieldingly supporting the opposite rear end portion of said apron in an upwardly extending position so that as said core is rotatively adjusted and a filling of plastic material is deposited between said core and apron the latter is wrapped around said filling.

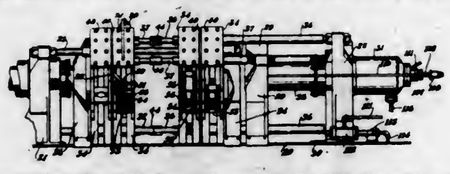
1,807,054. METHODS OF AND APPARATUS FOR MAKING GLASS. HAROLD A. WADMAN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Nov. 17, 1928. Serial No. 320,086. 17 Claims. (Cl. 49—63.)



4. The method of melting glass which comprises maintaining a supply of the batch adjacent a moving element continuously moving the element to move a continuous sheet of glass batch into a melting zone, melting the batch to form glass and delivering the glass into a glass bath.

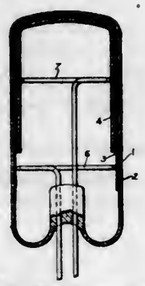
1,807,055. MOLDING PRESS. PARK E. WELTON, Cuyahoga Falls, Ohio. Filed Nov. 4, 1929. Serial No. 404,604. 38 Claims. (Cl. 18—17.)

30. A tire press having a horizontal group of tire-mold sections, fixed and movable platens at opposite ends of the group, a horizontal ram device at one end of the press acting on said movable platen to close the group, horizontal push and pull rods parallel with the group, locks for selectively connecting the mold sections respectively with said push and pull rods, an operating cylinder and piston at the opposite end of the press, a horizontally-movable head



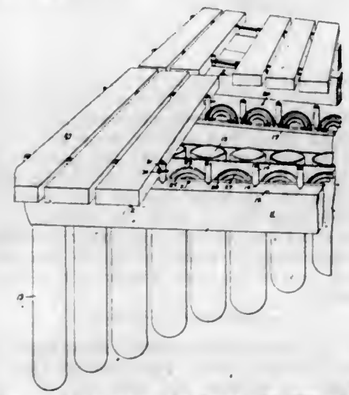
supporting the cylinder and connected with the pull rods, a second horizontally-movable head connected with the piston between said cylinder-supporting head and the fixed platen, and a rod-slacking piston and cylinder having one member connected with the operating cylinder and the other member connected with the second head for drawing said heads together to free said locks.

1,807,056. LIGHT SENSITIVE ELEMENT. VLADIMIR K. ZWORYKIN, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 6, 1928. Serial No. 317,598. 7 Claims. (Cl. 201—63.)



1. A light sensitive device comprising a transparent supporting medium, a metallic film thereon so thin as to transmit a substantial fraction of radiation incident thereon, a translucent film on said metallic film comprising a conductor the resistivity of which varies in response to the intensity of radiation incident thereon, and a reflecting conductor in contact with said translucent film.

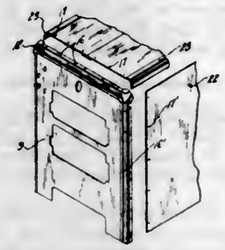
1,807,057. BAR MOUNTING FOR XYLOPHONES OR THE LIKE. HARRY A. BOWERS, Hollywood, Calif. Filed Feb. 12, 1930. Serial No. 427,794. 17 Claims. (Cl. 84—403.)



1. A musical instrument having a plurality of note bars, a plurality of springs supporting each bar and additional springs positioned to engage and support the bar when depressed by a percussion stroke, the said springs permitting vibration of the said bars.

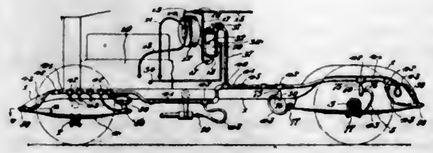
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1,807,058. BOILER COVER. ROBERT F. CARPENTER, Cleveland, Ohio, assignor to The Sanymetal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 15, 1929. Serial No. 363,321. 1 Claim. (Cl. 220—75.)



A boiler cover structure, comprising a cover top member having plain front and rear edge portions and side edge portions curved downwardly as side edge molds and terminating in depending flanges, a cover front end member having its side and top edge portions curved rearwardly as side and top edge molds and terminating in rearwardly extending flanges, a cover rear end member having its side and top edge portions curved forwardly as side and top edge molds and terminating in forwardly extending flanges, cover side members having plain end and top edge portions, and means for securing the cover top, end and side members in assembled relation with the side flanges of the end members overlapping the end edge portions of the side members, with the flanges of the top member overlapping the top edge portions of said side members, and with the top flanges of said end members overlapping the plain and edge portions of said top member, said assembly maintaining means including transverse slots in the flanges of the cover end members and threaded openings registering with said slots in the plain end edge portions of the cover side members and in the plain end edge portions of the cover top member, with bolts extending through said slots and secured in said threaded openings, the arrangement being such that the cover structure is longitudinally adjustable and such that there is an edge mold along the eight edges of the cover structure.

1,807,059. LUBRICATING SYSTEM. YOUEL V. CARPENTER, Essington, Pa., assignor to Ideal Lubricator Company, Philadelphia, Pa., a Corporation of Delaware. Filed Jan. 25, 1929. Serial No. 334,912. 4 Claims. (Cl. 184—7.)

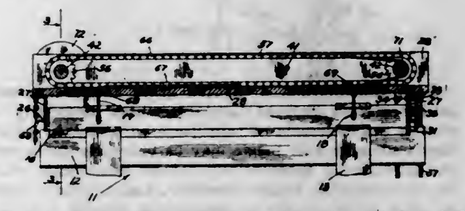


1. A system of lubrication for lubricating the bearings of an automobile or other like vehicle, which automobile or other like vehicle includes means for causing oil to flow continuously from the crank case of the engine thereof through a circulatory system provided in the engine structure and back to the said crank case, the said lubricating system comprising a central container for holding grease, a system of pipes having connection with the said container and also having connection with the bearings to be lubricated, the said pipes including devices for regulating and distributing the grease to the said bearings, a plunger located in the said container, and a pipe connection between the said container and the outlet side of the oil circulatory system of the engine through which oil is conveyed to the said container under pressure during the operation of the said engine and maintained under pressure for causing movement of the plunger within the said container for causing discharge of the grease therefrom into the said system of pipes by which it is conveyed to the said bearings.

1,807,060. CABLE OIL. WALTER CLAYPOOLE, Forest Hills, N. Y., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1929. Serial No. 356,315. 4 Claims. (Cl. 87—9.)
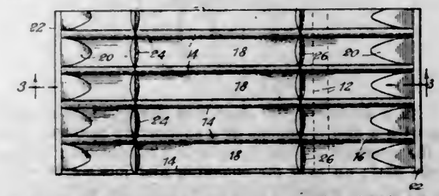
3. A cable oil comprising about 85 to 90% of mineral oil, 10 to 15% of rosin, and 0.5% or less of rubber.

1,807,061. VENETIAN BLIND OPERATING MECHANISM. JOHN W. DUNN, Los Angeles, Calif. Filed Feb. 26, 1930. Serial No. 431,408. 12 Claims. (Cl. 156—17.)



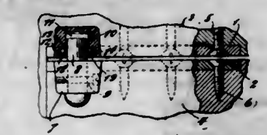
1. A mechanism for operating a Venetian blind including a plurality of horizontally extending slats, said mechanism comprising a horizontally disposed bar, a shaft journalled adjacent each end of said bar, a flexible band passing around both of said shafts, a cord secured adjacent each end of the lowermost of said slats, each cord extending upward and being joined to said band, and means for rotating said shafts.

1,807,062. TIE PLATE. RAYMOND W. FRAWLEY and GEORGE C. BRUNER, Birmingham, Ala. Filed July 1, 1930. Serial No. 465,206. 4 Claims. (Cl. 238—298.)



1. A tie plate comprising a top portion having a rail seat and a rail abutment, a bottom tie engaging portion having a plurality of blunt rounded ribs with shallow arcuate grooves between them and transversely extending pointed ribs bridging said grooves.

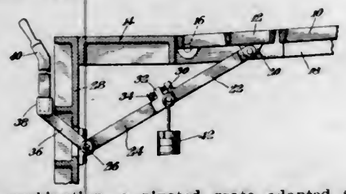
1,807,063. PIVOT HINGE. FORREST C. GARRISON, Evanston, Ill., assignor to The Oscar C. Rixson Company, a Corporation of Illinois. Filed Apr. 3, 1929. Serial No. 352,149. 2 Claims. (Cl. 16—171.)



1. In a hinge of the kind described, a plate adapted to be secured to the underside of a door lintel and having an

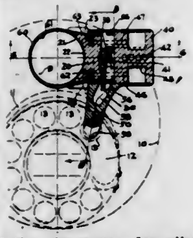
angular portion projecting laterally therefrom, a hollow boss projecting upwardly from the offset portion and opening downwardly through the plate, a second plate similarly offset and adapted to be secured on the top edge of a door, a tubular boss projecting downwardly from the offset of the second plate, a pin extending up through the boss of the second plate and into the first boss and having a head on its lower end, a retaining screw extending diametrically through the second boss and pin, said pin being of less diameter than the opening in the first boss, and a ball bearing in said boss loosely surrounding the pin.

1,807,064. INCINERATOR GRATE. HENRY GINNEL, Scarsdale, N. Y., assignor to Hiler Engineering & Construction Company, Inc., a Corporation of New York. Filed June 15, 1929. Serial No. 371,081. 5 Claims. (Cl. 126—162.)



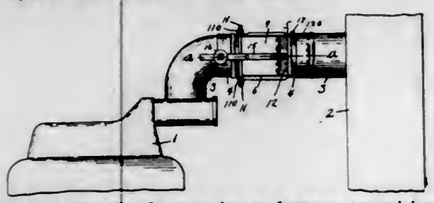
2. In combination, a pivoted grate adapted to swing downwardly, a pair of toggle members diagonally connecting the underside of said grate with a fixed support, means whereby said toggle may be prevented from breaking downwardly substantially beyond dead-center, means for breaking said toggle upwardly, and a weight tending to resist such upward breaking and thereby tending to counterbalance the weight of the grate.

1,807,065. TELEPHONE DIAL LOCK. IRVING GREENBERG, Brooklyn, N. Y. Filed Nov. 30, 1929. Serial No. 410,719. 4 Claims. (Cl. 179—189.)



1. In a device of the character described, the combination with a dial telephone of a supporting member clamped to the pedestal of the telephone and disposed alongside of the dial; an arm for engaging and locking the dial of the telephone mounted rotatably upon the said supporting member and mechanism for locking and unlocking the said rotating arm for the purpose set forth herein.

1,807,066. AUTOMATIC DAMPER. WILLIAM D. LUCE, Haverhill, Mass., assignor of one-half to Joseph E. Dube, Haverhill, Mass. Filed Mar. 17, 1930. Serial No. 436,323. 10 Claims. (Cl. 236—45.)



2. An automatic damper for a furnace comprising a casing having a smoke passage therethru adapted for connection at its inlet end to the furnace and its outlet end to a chimney, and having a side opening to said passage between its ends, a damper plate arranged to swing freely inwardly and outwardly within said side opening and to close said opening and to be approximately balanced against the action of gravity in all positions thereof, and means movable with said plate arranged to close said passage as the plate is swung inwardly and to permit atmospheric pressure on the outer side of the plate to move the same to close the passage when it overbalances the pressure within the passage, and to permit the pressure at the inlet end of the passage to move the plate to open the passage when it overbalances the pressure against the outer side of the plate.

1,807,067. MANUFACTURE OF LIVE STOCK FEED. CHARLES R. MABEE, Buffalo, N. Y., assignor, by mesne assignments, to Charles H. Donaldson, Buffalo, N. Y. Filed June 20, 1925. Serial No. 38,565. 14 Claims. (Cl. 99—11.)

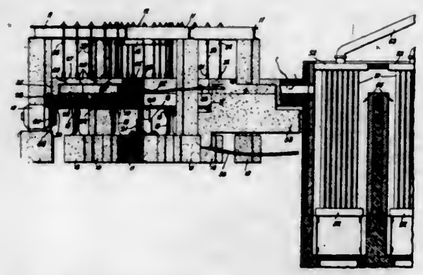
5. In the art of producing an improved live stock feed from farm roughage by subjecting the roughage to fermentative activity, the process which includes admixing calcium hydrate, sodium chloride and calcium acid phosphate with the roughage and thereafter subjecting the roughage to fermentative activity.

6. A composition for use in the processing of farm roughage including calcium hydrate, sodium chloride, sulphur, a phosphate of calcium and malt.

1,807,068. DENTAL ALLOY FOR SWAGED DENTURES. FREDERICK MAULEN, East Orange, N. J., assignor to Baker & Company, Inc., a Corporation of New Jersey. Filed Nov. 18, 1929. Serial No. 408,159. 2 Claims. (Cl. 32—4.)

1. A metal base for a denture formed of an alloy consisting of from ninety-five percent (95%) to ninety-nine percent (99%) palladium and from one percent (1%) to five percent (5%) rhodium, respectively.

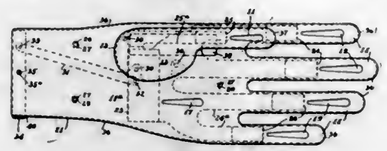
1,807,069. PAN ROTARY KILN. LEVI B. MCDANIEL, Concrete, Wash. Filed Mar. 7, 1930. Serial No. 434,105. 11 Claims. (Cl. 222—7.)



2. A cement kiln comprising a rotatable pan member, a cover for the pan member, means associated with the cover for depositing slurry on the pan, and means for directing flames on the slurry.

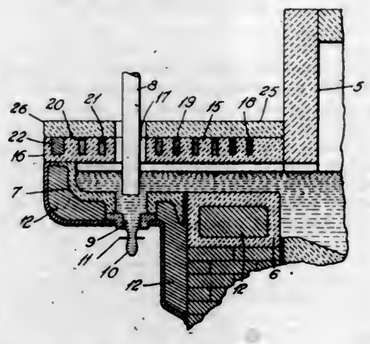
1,807,070. GLOVE STRETCHING DEVICE. ALBERT MERHAN and EDWIN GRAY, New York, N. Y. Filed Jan. 29, 1930. Serial No. 424,195. 10 Claims. (Cl. 223—19.)

1. In a glove stretching device a palm plate, a back plate, finger portions and thumb parts on said plates, an expanding member, enclosed therebetween, inwardly extending elevations on the inner faces of one or more of said plates, said portions and said parts and projections on said member, to cooperate with said elevations to move said plates in opposite directions with relation to each



other and in a direction transversely to the planes thereof, said member with said projections thereon being formed substantially of an integral sheet of material wrought to the required shape.

1,807,071. ELECTRICALLY HEATED CONTAINER FOR MOLTEN GLASS. KARL E. PEILER, West Hartford, Conn., assignor, by mesne assignments, to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 30, 1922. Serial No. 547,991. 11 Claims. (Cl. 49—55.)



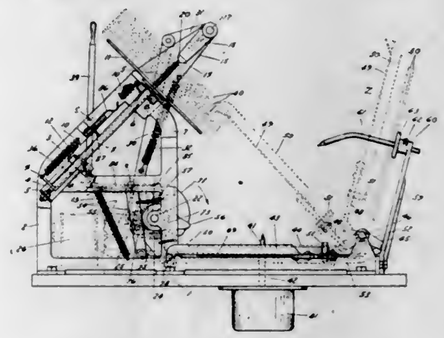
1. Apparatus for feeding molten glass, comprising a container having a discharge outlet, a cover plate for the container, heating means located in said container out of contact with the glass and adjacent to the cover plate, said heating means including refractory members provided with laterally extending channels in their upper surfaces, independently controlled electrical heating elements located in the channels for heating the glass at the discharge outlet, said cover plate being removable to permit access to the heating elements.

1,807,072. READY-MADE CUSP. LOUIS RAYMOND, New York, N. Y., assignor to Baker & Co. Inc., a Corporation of New Jersey. Filed May 22, 1929. Serial No. 365,038. 2 Claims. (Cl. 32—9.)



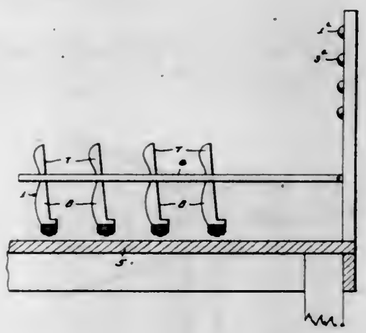
1. As an article of manufacture an artificial tooth cusp comprising a sheet of metal shaped to simulate the occlusal surface of a tooth and having a projection on the lingual side thereof to be imbedded in a plaster mold during the soldering operation in making an artificial tooth to hold said cusp against movement in the plaster and reenforce the edge of the cusp against distortion.

1,807,073. RECORD CHANGING MECHANISM. PAUL H. SCHULZ, Moline, Ill. Filed May 31, 1929. Serial No. 367,848. 5 Claims. (Cl. 274—10.)



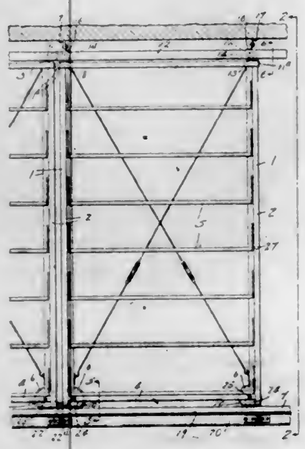
1. In a record changing mechanism, a storage device comprising a fixed rod, a tubular member slidable thereon and provided with a record support at its upper end, means for impelling the tubular member in a given direction, means for holding said tubular member from movement, means for limiting the movement of records on said support, movable to permit the release of one thereof, and means for the momentary release of said means for holding said tubular member, to permit a predetermined movement thereof.

1,807,074. GAME. JAMES H. SHEARS, Oklahoma City, Okla. Filed Mar. 19, 1928. Serial No. 262,910. 2 Claims. (Cl. 273—41)



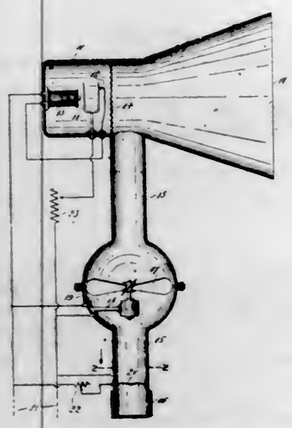
1. A device of the character described, comprising a group of two-part pins transversely of the alley and above the level of the pins arranged in the usual triangular relation common to the game of bowling a bed or alley at one end of which said group of pins is located, the upper portions of said pins being fixed, and the lower portions of said pins being hinged with respect to the upper portions, a group of lights arranged in a substantially vertical plane in juxtaposition to the pins, and corresponding in triangular formation to the formation of the pins, and electrical connections between the pins and the lights of a nature to cause the illumination of the lights when the lower portions of the pins are moved to circuit closing position by the contact of a ball therewith, the connections being so arranged that each pin is connected to that light to which it corresponds, in the triangular disposition of the pins and lights.

1,807,075. STORAGE SYSTEM. JOHN G. L. SKAR, Jamestown, and HAROLD J. SYREN, Buffalo, N. Y., assignors to Art Metal Construction Company, Jamestown, N. Y. Filed Mar. 12, 1929. Serial No. 346,346. 19 Claims. (Cl. 104—121.)



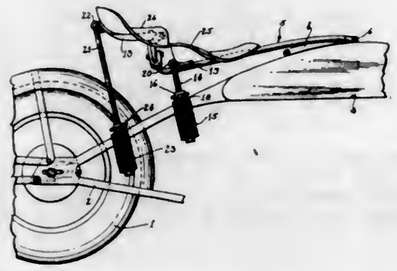
1. In a storage system for articles such as books and the like, a room having parallel trackways along the ceiling and floor, a plurality of carriages arranged side by side closely to one another in rows running crosswise of the tracks, and each mounted on a floor track, and guided by a ceiling track, whereby any carriage may be pulled laterally from its row to make both side faces easily accessible for storage or removal of articles.

1,807,076. INSECT EXTERMINATOR. HENRY N. SWEET, Boston, Mass. Filed Oct. 16, 1930. Serial No. 489,063. 2 Claims. (Cl. 43—139.)



1. The method of exterminating insects which consists in creating and radiating sound waves having a pitch approximating that of the note produced by the vibrating wings of said insects, and pneumatically drawing the insects attracted by such radiated sound waves into a receptacle.

1,807,077. TANDEM SEAT CONSTRUCTION. CARL ALFRED VAN PAPPELENDAM, Keokuk, Iowa. Filed Sept. 20, 1929. Serial No. 393,992. 6 Claims. (Cl. 208—24.)



1. In a vehicle having a frame supported on front and rear wheels, the combination of means for mounting a plurality of seats upon said frame, a hinge connection between the seats, and means cooperating with said hinge connection for rigidly connecting the seats.

1,807,078. INSECTICIDE. HAROLD W. WALKER, Edgewood, Md., and HOWARD S. MCQUAID, Lakewood, Ohio. Filed May 10, 1926. Serial No. 108,110. 6 Claims. (Cl. 167—15.)

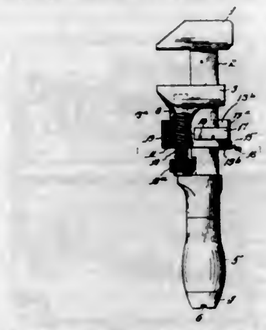
1. As a new insecticide, a very fine powdered material of adsorptive nature containing a small amount of an adsorbed soluble compound of arsenic compound; the proportion of such adsorbed arsenic being insufficient to give solutions of any substantial strength on contact with water.

1,807,079. SMOKER'S STAND. CHRISTOPHER WILMANNS, Indianapolis, Ind., assignor to Liberty Electric Company. Filed Apr. 25, 1928. Serial No. 272,784. 4 Claims. (Cl. 131—51.)



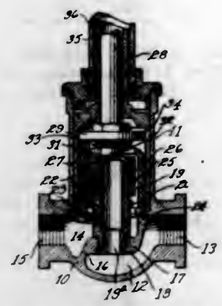
1. A smoker's stand comprising a hollow base, a detachable waste receptacle carried by said base, and means connecting the base and receptacle operable for releasing the receptacle from the base only when the receptacle is supported in a substantially horizontal position, substantially as set forth.

1,807,080. NUT WRENCH. HERBERT A. WOOLEVER, Orange, Pa. Filed Apr. 29, 1929. Serial No. 358,924. 2 Claims. (Cl. 81—156.)



1. A wrench comprising an elongated shank having a handle at one end and a fixed jaw at the other end, a movable jaw slidable on the shank with respect to the fixed jaw, and cooperating threaded members one of which is carried by the shank and the other by the slidable jaw, the member carried by the jaw being movable to and from the companion member for engagement therewith to slide the movable jaw on the shank; together with means for operating the movable threaded member consisting of a metal strap secured thereto and embracing the movable jaw with a connecting portion at the rear ends of the strap beyond the rear end of the movable jaw and the sides of said strap provided with slots, a strap extending around the rear end of the movable jaw to which it is attached and having the ends thereof located in the aforesaid slots to form guides for the strap carrying the movable threaded member, a spring interposed between the connecting portion of the first mentioned strap and rear end of the movable jaw to move the parts to normal position with the threaded members of the wrench in engagement with each other, and a spring catch secured to the movable jaw and engaging the connecting portion of the strap carrying the movable member of the nut to hold said strap in either position to which it is shifted.

1,807,081. VALVE MECHANISM. RALPH E. BLETCHER and ERNEST H. BUCKNELL, Los Angeles, Calif. Filed Oct. 31, 1927. Serial No. 230,035. 15 Claims. (Cl. 277—7.)

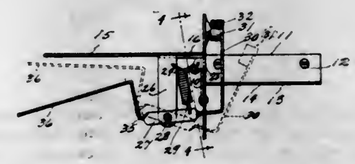


1. Valve mechanism comprising a body having hot and cold water inlet connections, respectively, the said body provided with a plurality of outlet connections, means for opening or closing either or both of the outlet connections, means in communication with the cold water inlet, means in communication with the hot water inlet, a plurality of rotary valves in co-action with the respective second and third named means adapted to be progressively controlled to admit of the discharge of hot or cold water or hot and cold water from either of said outlet connections, and a rotary stem common to all of said valves for rotating the valves together.

1,807,082. METHOD OF DRILLING WELLS. ALEXANDER BOYNTON, San Antonio, Tex. Filed Oct. 19, 1926. Serial No. 142,781. 1 Claim. (Cl. 255—1.)

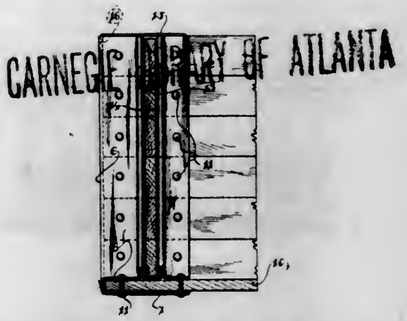
In well drilling operations, the method of protecting producing strata from the undue incursion of mud circulation, which comprises, introducing mud circulation into the well-hole, introducing mica flakes into the mud circulation when a zone of a producing stratum is reached, coating the wall of the well-hole in the zone of the producing stratum with said flaky material through the medium of the mud circulation, and, maintaining said coating in position on said wall at said zone, by the superior pressure of the mud circulation over the pressure of the fluid in the producing stratum.

1,807,083. COMBINATION TUBE AND BRUSH HOLDER. WILLIAM E. BRACEY and LYTUS W. BRAMBLETT, Dallas, Tex. Filed Feb. 18, 1928. Serial No. 255,865. 5 Claims. (Cl. 248—20.)



1. In a tube holder, a bracket having a tube-supporting table and adapted to be rigidly mounted, whereby said table is supported in a horizontal position, automatically closing clamping jaws carried by the bracket in a vertical plane at one end of the table for receiving the neck of a tube mounted on said table, a lever pivotally supported intermediate its ends under the table and having a handle underlying said table, an arm carried by the lever, and a cap mounted on the arm in position for engaging the end of the neck of the tube.

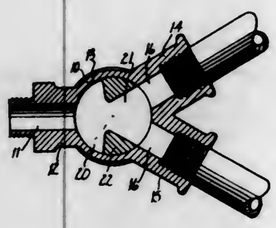
1,807,084. WAGON END GATE MOUNTING. ZOTIQUE CHEVRIER, Mazenod, Saskatchewan, Canada. Filed Apr. 16, 1927. Serial No. 184,318. 1 Claim. (Cl. 296—30.)


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As a new article of manufacture, a single U-shaped plate wagon end gate mounting fitting over the end of the wagon bottom as well as the ends of the wagon upstanding sides and covering both the inner and outer faces of said wagon bottom and upstanding sides; said plate having a pair of full length spaced parallel ribs extending longitudinally of the plate and struck out from the inner face thereof to accommodate the lower edge and the upstanding edges of the wagon end gate insertable and removable vertically; and angular plates adapted

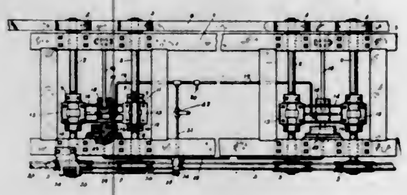
to be mounted on the upper edges of the said wagon upstanding sides at the rear ends thereof and having their downturned angles extended into and held by the first mentioned plate.

1,807,085. TWO-WAY VALVE. CHARLES S. CRICKMER, Dallas, Tex., assignor to Tridex Corporation, Dallas, Tex., a Corporation of Delaware. Filed July 25, 1928. Serial No. 295,207. 1 Claim. (Cl. 251—109.)



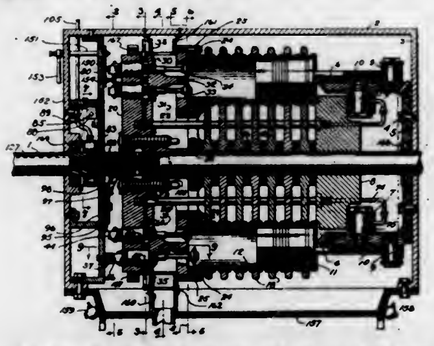
In a two-way valve, a valve casing having a single conductor entering one side and diverging distributors extending from the opposite side of the casing, a rotatable valve plug within the casing having a segmental opening of circumferential area equal to substantially one half of the diameter on the plug and communicating with the single conductor in all positions of the plug and also provided with a divergent opening extending from the segmental opening for spanning both distributors, said plug having webs on each side of the divergent opening separating the divergent and segmental openings and of a circumferential area less than the combined distributor openings, and a hand lever on the plug having a cooperating stop means to limit the travel of the webs to always maintain one distributor opening, in communication with the conductor.

1,807,086. OFFSET FOR LOG CARRIERS. ERVIE A. FERRIS, Westwood, Calif. Filed Mar. 31, 1928. Serial No. 266,250. 5 Claims. (Cl. 143—109.)



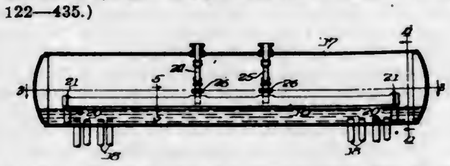
1. A device of the type described comprising a plurality of shafts, wheels supporting said shafts, a carrier mounted on said shafts and having a lateral movement with respect thereto, cylinders carried by said shafts, pistons mounted in said cylinders, and being connected to said carrier, means for maintaining a constant pressure of air upon said pistons, auxiliary cylinders, auxiliary pistons mounted in said cylinders of a larger size than said first named pistons, means controlled by the longitudinal movement of the carrier for directing air into said auxiliary cylinders during a part of the movement of said carrier, whereby said auxiliary pistons will move said carrier laterally upon said shafts.

1,807,087. INTERNAL COMBUSTION ENGINE. HERMAN A. FINKE, St. Louis, Mo. Filed Jan. 12, 1928. Serial No. 246,213. 28 Claims. (Cl. 123—43.)



1. In an internal combustion engine provided with a shaft the combination of a plurality of cylinders mounted for rotation with said shaft; a head for said cylinders; valves for each cylinder carried by said head; and stationary means to actuate all of said valves in predetermined and reversible sequence.

1,807,088. EQUALIZING FEED MEANS FOR WATER TUBE BOILERS. FREDERICK C. GEDGE, Plainfield, Ill. Filed Oct. 5, 1927. Serial No. 224,077. 5 Claims. (Cl. 122—435.)



1. Water supply means for boilers comprising in combination, a feed pan extending longitudinally of the boiler above the normal water line thereof, having slots in the upper side thereof extending substantially the entire length of the feed pan, brackets upon which said feed pan is mounted, and a feed water pipe extending into said feed water pan and terminating adjacent the bottom thereof, the said feed water pipe extending into said feed pan in a vertical direction.

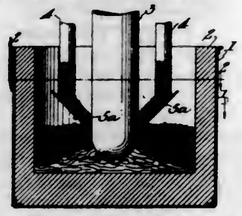
1,807,089. GOLF COURSE MARKER. JAMES B. PARSONS and JOSEPH J. KING, Indiana, Pa. Filed May 6, 1929. Serial No. 360,786. 1 Claim. (Cl. 273—84.)



The herein described construction of golf course markers comprising a pole, outwardly extending right-angularly

arranged bars having their inner ends fixed to the pole, inclined plates having angle upper ends which are fixed to the pole and having their lower ends fixed to the respective bars and having their outer edges extending beyond said bars, and their said outer edges approximately in a line with the bars being provided with semi-cylindrical depressions and a cross sectionally round elastic ring arranged over the inclined plates received in the said depressions.

1,807,090. CHARGING MEANS FOR ELECTRIC FURNACES. GUSTAV PISTOR, Leipzig, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 17, 1928, Serial No. 278,463, and in Germany May 18, 1927. 3 Claims. (Cl. 266—1.5.)



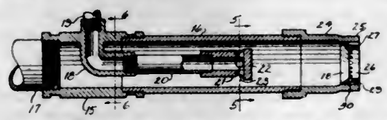
1. An electrical furnace comprising, in combination, an electrode extending into the lower part of the furnace, means for passing the charge towards the electrode, said means comprising at least one distributing surface slantingly protruding towards and into close proximity of the lower part of the electrode, so as to allow the charge after having passed over the distributing surface to descend into the reaction zone in contact with the electrode through the gap, thus formed, and means for withholding the charge from the upper part of the electrode, said means being placed within the furnace at a moderate distance above said distributing surface.

1,807,091. DOLL'S EYES AND MOUNTING THEREFOR. LAZURUS W. POLLOCK, Brooklyn, N. Y. Filed Mar. 16, 1929. Serial No. 347,645. 13 Claims. (Cl. 46—40.)



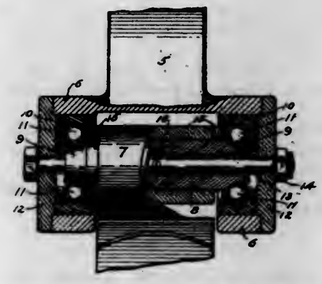
1. In a device of the class described, the combination of a hanger of flexible material arranged to be inserted in a doll's head and having means at its upper end for anchoring in the top portion of the head, and its lower end bent forwardly and enclosing the lower edge of the doll's head, and doll's eyes movably supported from said hanger.

1,807,092. GAS BURNER. WERNER SCHWAN, Dallas, Tex. Filed Aug. 1, 1928. Serial No. 296,775. 7 Claims. (Cl. 158—99.)



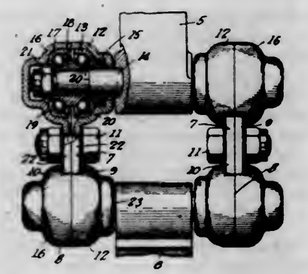
3. In a gas burner, a T having a reduced elbow extending radially and axially thereof, a mixer tube connected to one end of the T, an air supply pipe connected to the opposite end of the T, a deflector within the tube connected with the elbow and disposed laterally to deflect air and gas into contact with the tube and having a single series of radial ports at the inner face of the deflector, and a head mounted on the outer end of the tube and having a reduced tip located remote from said ports to form a mixing chamber beyond the deflector.

1,807,093. ANTIFRICTION SPRING CONNECTION. RAYMOND R. SEARLES, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Jan. 29, 1925, Serial No. 5,623. Renewed Oct. 7, 1930. 18 Claims. (Cl. 267—54.)



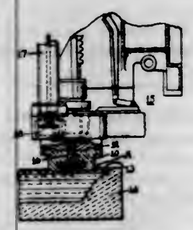
1. In a spring connection, a frame having spaced apart bosses, said bosses having bores therein, pin means to be secured to a spring between said bosses, said pin means having antifriction bearing member raceways at opposite sides of said spring and spaced a single definite minimum distance apart, end caps for closing the outer ends of said bores in said bosses and extending over the outer ends of said pin means, said end caps being in abutting relation to and being spaced a definite minimum distance apart by said bosses, means for rigidly securing said end caps to said bosses so spaced apart, antifriction bearing member raceways in abutting relation to and spaced a definite maximum distance apart by said end caps, and antifriction bearing members interposed between said last mentioned raceways and the complementary raceways of said pin means.

1,807,094. SPRING END CONNECTION. JOHN W. SMITH, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Nov. 3, 1928. Serial No. 316,890. 9 Claims. (Cl. 267—54.)



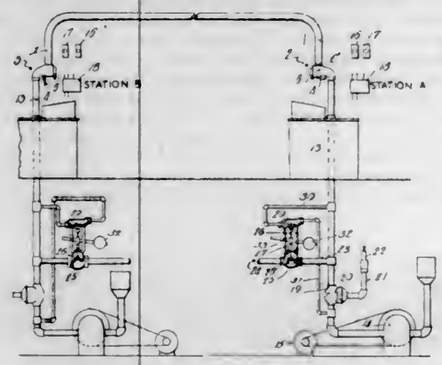
1. In a spring end connection for connecting a frame and spring of a motor vehicle, shackle members independent of each other, each of said shackle members being provided with a bearing housing at opposite ends thereof, said shackle members being divided longitudinally and separable along the longitudinal line of division and means for detachably securing said separable parts of each link together.

1,807,095. GLASSWARE FORMING MACHINE. JESSE H. TREECE, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Jan. 16, 1930. Serial No. 421,143. 11 Claims. (Cl. 49—5.)



9. The method which consists in causing a mold to traverse the surface of a supply body of molten glass, applying suction within the mold to the mold and a portion of the lower end thereof to fill said mold with glass and maintain sealing contact between the supply body of glass and mouth of the mold, lifting the mold out of contact with the supply body while maintaining application of vacuum to the cavity and bottom of the mold, discontinuing application of vacuum after the mold has been lifted and prior to moving beyond said supply body, and severing excess glass from the lower end of the mold.

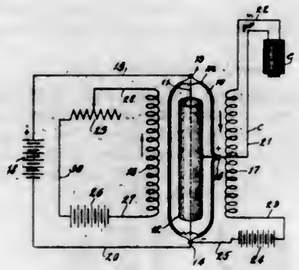
1,807,096. PRESSURE RELIEF MEANS FOR PNEUMATIC TUBE SYSTEMS. ARNOLD A. ZIMMER, Chicago, Ill., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Dec. 28, 1929. Serial No. 417,093. 23 Claims. (Cl. 243—38.)



1. A pneumatic despatch system of the kind having a transmission tube provided with a despatch and a delivery terminal, means for supplying air under pressure to the tube at the despatch end of the latter, means for closing the despatch terminal during transit of a carrier, means for initiating and stopping the supply of air to the transmission tube, and relief means responsive to cessation of the air supply for quickly releasing the pressure within the despatch end of the tube while the despatch terminal remains closed.

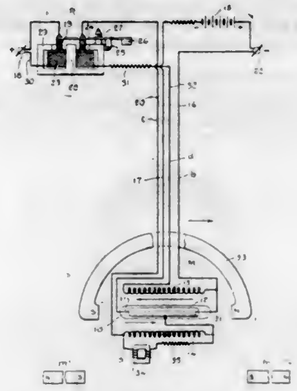
1,807,097. MAGNETRON CIRCUIT CONTROLLING APPARATUS. THEODORE BODDE, Niagara Falls, N. Y., assignor to The Regan Safety Devices Company, Inc., New York, N. Y., a Corporation of New York. Filed July 11, 1923. Serial No. 650,803. 25 Claims. (Cl. 250—27.)

1. In combination, an electron discharge device having a cathode and an anode, a circuit controlled thereby, means producing a magnetic field active on said device and effective for establishing a given condition therein and in said circuit, means in said circuit for producing a magnetic field active in opposition to said first mentioned magnetic field for establishing a different condition in said device and in said circuit, and means active for neutralizing the



effect of said opposing magnetic field so as to render the first mentioned magnetic field effective for producing the first mentioned condition.

1,807,098. MAGNETRON CIRCUIT CONTROLLING APPARATUS. THEODORE BODDE, Niagara Falls, N. Y., assignor to The Regan Safety Devices Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 13, 1924. Serial No. 731,694. 6 Claims. (Cl. 250—27.)

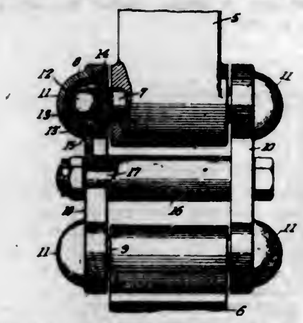


1. In combination, an electron discharge device having cathode and anode electrodes, a circuit connected to the electrodes and controlled by the electron flow therebetween, mechanism for changing the condition of said device to modify the condition of the controlled circuit including a solenoid in said circuit for producing a magnetic field influencing the said device, and a relay having two coils one of which is arranged in circuit with said electrodes.

1,807,099. SPRING END CONNECTION. ELISHA H. COOPER, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Filed Nov. 3, 1928. Serial No. 316,899. 13 Claims. (Cl. 267—54.)

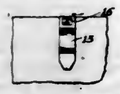
1. In a spring connection for connecting a frame and spring, one of said members having means at opposite sides thereof and provided with cup-shaped bearing recesses, means supported by the other of said members and

having cup-shaped bearing recesses complementary to said first mentioned recesses, and a single ball between the



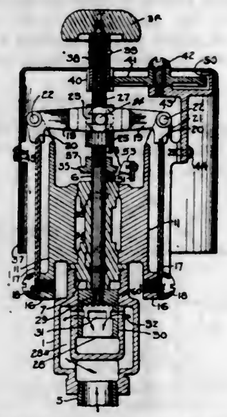
complementary cup-shaped bearing seats at opposite sides of one of said members said seats being of a size to permit a limited rolling of said balls.

1,807,100. SIGNAL DEVICE. GEORGE B. GRAFF, Newton Center, and ROBERT A. STEWART, Watertown, Mass., assignors to George B. Graff Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Aug. 19, 1930. Serial No. 476,290. 3 Claims. (Cl. 40—23.)



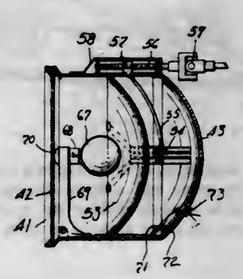
1. A signal device for index systems, comprising a pair of legs of thin resilient material adapted to receive and grip a card therebetween, said legs being connected together at one end of said clip and in contact adjacent their free ends, said device having two longitudinally spaced indentations and each of said indentations adapted to grip a card against the inner face of the opposing leg, said indentations being spaced apart and with one indentation sufficiently close to the free end of said leg to permit the intermediate portion of the device between said indentations to be pinched between the fingers to sufficiently separate the normally contacting free ends of said legs to readily permit the insertion of a card therebetween, the indentation adjacent the free end acting as a fulcrum for such purpose.

1,807,101. AUTOMATIC TEMPERATUE CONTROL. ERNEST J. LEES, Shaker Heights, Ohio. Filed Aug. 9, 1929. Serial No. 384,588. 13 Claims. (Cl. 236—43.)



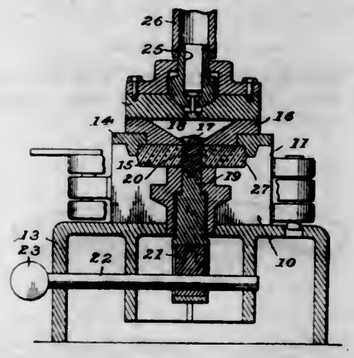
1. A control valve for heating units including thermally responsive means for operating the valve, and a second thermally responsive means for delaying the beginning of movement of the valve in one direction, whereby forces tending to move the valve in said direction may be accumulated and then quickly released to instantaneously move the valve in said one direction.

1,807,102. AUTOMOBILE HEADLIGHT. PAUL I. A. RUNGE, San Francisco, Calif., assignor to William H. Galvin, San Francisco, Calif. Filed Jan. 23, 1929. Serial No. 334,425. 2 Claims. (Cl. 240—41.)



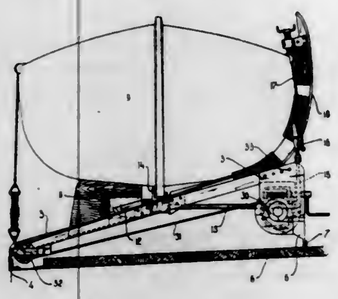
1. An automobile headlight, comprising a casing, a removable glass in the front of said casing, a bracket pivoted to said casing and having an arm projecting to the center of said casing, a lamp socket on said arm projecting toward the back of the casing, a resilient pad on said arm adapted to bear against said glass, and a horizontal arm on said bracket adapted to bear on the wall of the casing to limit the forward movement of the bracket.

1,807,103. METHOD OF AND MEANS FOR MAKING GLASS ARTICLES. WILLIAM HOWARD SAID, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Filed Feb. 21, 1929. Serial No. 341,724. 7 Claims. (Cl. 49—80.)



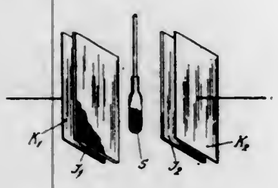
1. The method of making glass articles which includes pressing molten glass in a mold, exerting fluid pressure on the glass in the mold and ejecting excess glass from the mold against the pressure of the fluid.

1,807,104. BOAT CHOCK. ANE PIETER SCHAT, Utrecht, Netherlands. Filed Mar. 17, 1930, Serial No. 436,558, and in the Netherlands May 24, 1929. 6 Claims. (Cl. 9—22.)



1. Boat chock, consisting of an outwardly sloping section iron, which at its outer end only is directly secured to the deck and which is supported at its inner end by an upright section iron likewise secured to deck at one point only.

1,807,105. APPLIANCE FOR DIATHERMIC TREATMENT BY MEANS OF HIGH FREQUENCY. EWIN SCHLIEPHAKE, Jena, Germany. Filed July 18, 1930, Serial No. 468,821, and in Germany July 25, 1929. 1 Claim. (Cl. 174—177.)



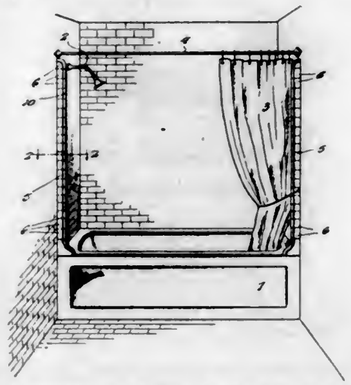
Apparatus for diathermic treatment by means of high frequency of the character described comprising a condenser, two condenser electrodes of larger size and a smaller at least partly metallic body, which is brought close to the point to be treated and by means of which body the condenser field is drawn to the place to be treated.

1,807,106. RIM END CONNECTER. JOHN WILL STARK, Bowling Green, Ky. Filed Nov. 2, 1928. Serial No. 316,830. 11 Claims. (Cl. 301—33.)



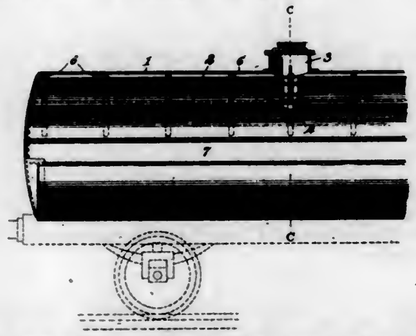
2. The combination of a transplit demountable rim, a narrow shackle member fixed to the rim adjacent the split and extending inwardly from the rim base, a rim-operating lever permanently pivoted on said shackle and confined thereby to pivotal movement, said lever having, in the opposite end thereof, a slot inclined at an angle to the outer edge of said lever, and a member fixed to and projecting inwardly from the opposite rim end and having a pivot removably received in said inclined slot.

1,807,107. SPLASH GUARD AND TILE FOR FORMING THE SAME. LAYMAN M. STERNBERGH, Ocean Grove, N. J. Filed Apr. 9, 1930. Serial No. 442,914. 8 Claims. (Cl. 4—145.)



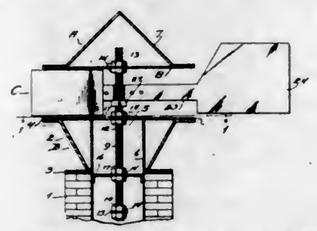
1. The combination with a shower structure including a chamber having a side wall, and a splash curtain, of a vertically extending rib projecting from the wall and being of sufficient depth to overlap a side portion of the curtain and having its outer portion formed with a hand grip.

1,807,108. TANK FOR THE TRANSPORTATION OF VOLATILE LIQUIDS. GEORGE VINCENT TONTET, Buenos Aires, Argentina. Filed June 20, 1929. Serial No. 372,415. 2 Claims. (Cl. 220—85.)



2. In a cylindrical tank for the transportation of liquids, a receptacle having a crescent-shaped cross-section and arranged at the top of the tank and fitting conformably with a slight clearance, said receptacle being adapted to prevent the loss of the liquid from the tank by evaporation.

1,807,109. EXHAUST VENTILATOR. FRED L. WAGAR, Wagar, Ala. Filed Dec. 28, 1928. Serial No. 329,069. 4 Claims. (Cl. 98—71.)



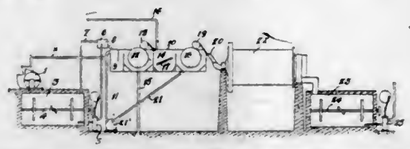
1. The combination in an air exhausting device, of a fixed frusto-conical air deflector having a horizontally disposed cover plate 4 with a central opening, a fixed conical air deflector with a horizontal plate 8, a rotary arrow headed vane air deflector located between the two said plates 4 and 8, said arrow headed vane air deflector comprising an arrow head with its sides 18, 19 obliquely disposed to each other in vertical planes and a shaft extended horizontally beyond the plates 4 and 8, and fixed means with a bearing for the rotary arrow headed vane air deflector.

1,807,110. CARRIER SUPPORT FOR RECIPROCATING CONVEYERS. RAYMOND A. WALTER, New York, N. Y., assignor to Conveyor Sales Company, New York, N. Y., a Corporation of New York. Filed June 11, 1927. Serial No. 198,116. 2 Claims. (Cl. 198—220.)



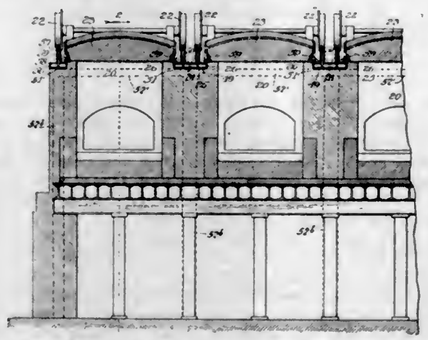
1. A carrier support for the reciprocating conveyer comprising flanged support members having upturned ends, angular bottom ball races mounted on the sides of the upturned ends, ball bearings seated in the bottom races, angular top races on the ball bearings and a flanged support member having upturned ends mounted on the conveyer, the upturned ends being mounted on the angular top races.

1,807,111. PROCESS FOR PRODUCING FIBROUS MATERIAL. SIDNEY D. WELLS, Quincy, Ill., assignor, by mesne assignments, to The Mine & Smelter Supply Company, Denver, Colo., a Corporation of Colorado. Filed Sept. 27, 1927. Serial No. 222,353. 14 Claims. (Cl. 92—20.)



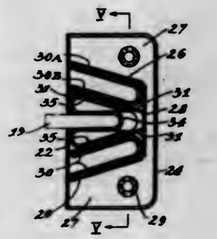
1. The process of producing fibrous material which consists in treating the material to a mild chemical digestion to the point where the bond between the fibers and cells is reduced but not completely removed, subjecting the softened material to a preliminary mechanical disintegration in the presence of water, washing the material, and subjecting the washed material to a final mechanical disintegration.

1,807,112. FURNACE. FRANK J. WERNER, Portage Township, Porter County, Ind. Filed Feb. 21, 1925. Serial No. 10,803. 6 Claims. (Cl. 110—176.)



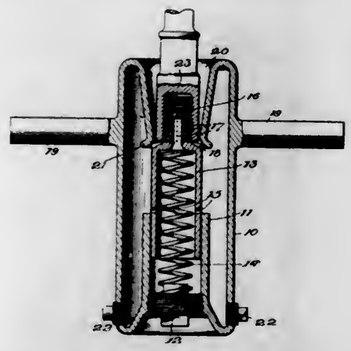
1. In soaking pits, a heat storage chamber, means for supplying heat thereto, a removable cover for the chamber, a hollow rail comprising a rail tread and a base, a pair of such rails being positioned along each of the side walls of the chamber, rolling supporting means for the cover movable on said rails, and means for admitting a cooling agent into the base first and thereafter into the tread portion of the rail.

1,807,113. DOOR BUFFER AND RETAINER. DANIEL M. WINANS, Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed Mar. 20, 1930. Serial No. 437,504. 4 Claims. (Cl. 16—85.)



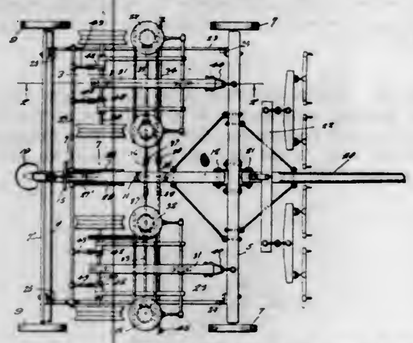
1. In a buffer fixture of the all-metal type, the combination of complementary spaced abutments, a faced inherently resilient clamping member of the metallic leaf-spring type for each of the abutments and which members have their respective faces placed inwardly to cooperatively provide for a laterally expansible wedge-shaped spacing therebetween, wedge-like clip means mounted wholly within said spacing and having oppositely disposed surfaces adapted to be shifted lengthwise of the respective member faces, and means serving to forcibly wedge the clip between said clamping members.

1,807,114. SUCKER ROD BOX CLEANER. ROBERT L. WRIGHT and HUBERT D. COLLINS, Tulsa, Okla., assignors to Gypsy Oil Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Feb. 24, 1930. Serial No. 430,895. 5 Claims. (Cl. 141—1.)



1. In a sucker rod box cleaner, a container for the cleaning fluid, a sleeve projecting into one end of said container, a cylinder of larger diameter than the inner end of said sleeve projecting into the other end of the container, said cylinder being closed at its outer end and communicating with said container, a hollow plunger having one end slidably engaging the interior of said cylinder and its other end normally yieldingly positioned in said sleeve, the end of said plunger in said sleeve being of reduced diameter and having orifices therein.

1,807,115. FOUR ROW CORN PLANTER. WILLIAM C. YOUNG, Atlantic, Iowa. Filed Apr. 5, 1929. Serial No. 352,757. 7 Claims. (Cl. 111—62.)

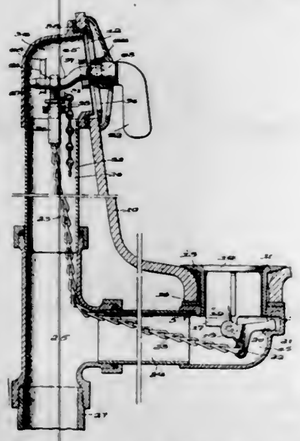


1. In a machine of the class described, a main wheeled frame, a pair of two row corn planters mounted in the frame one to each side thereof, means operatively connecting the planting mechanisms of the two row corn planters, and means for raising the two row corn planters from engagement with the ground, rear wheels for the main frame being dirigibly mounted and means for controlling said rear wheels to steer the main frame.

1,807,116. METHOD OF COMPACTING, FINISHING, AND CURING CONCRETE PAVEMENTS. PERCY A. HIPPLE, Atlanta, Ga. Filed Aug. 26, 1929. Serial No. 388,636. 6 Claims. (Cl. 25—154.)

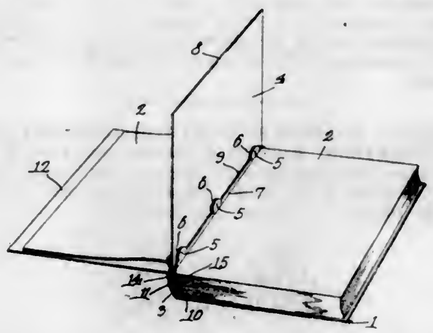
4. The process of indurating concrete which consists in partially compacting the solids in the mass thereby producing a top layer of buoyant water ladened plastic mortar, then impelling solid material through said layer of plastic mortar into the interior of the mass, and then applying to said mass a low pressure blast of pure cement mixed with water to compensate for the reduction of cement ratio in the original concrete mix effected by the injection of said solid particles into said mass.

1,807,117. WASTE AND OVERFLOW FITTING. TOBIAS J. KAUFMAN, Chicago, Ill. Filed Feb. 24, 1930. Serial No. 430,942. 17 Claims. (Cl. 4—203.)



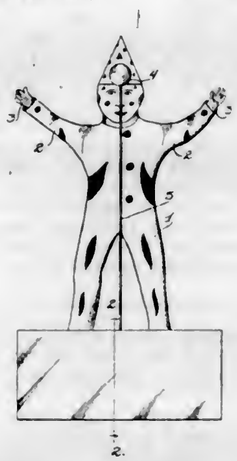
1. The combination with a sanitary fixture, of a waste opening, a waste pipe or chamber communicating with said opening, a plug for closing said opening, a lever pivotally supported by said plug, means for anchoring one end of said lever and means secured to the other end of the lever for operating the lever and plug.

1,807,118. LEAF HOLDER FOR BOOKS. ERNEST M. KENNA, New York, N. Y. Filed Apr. 18, 1928. Serial No. 270,961. 2 Claims. (Cl. 129—15.)



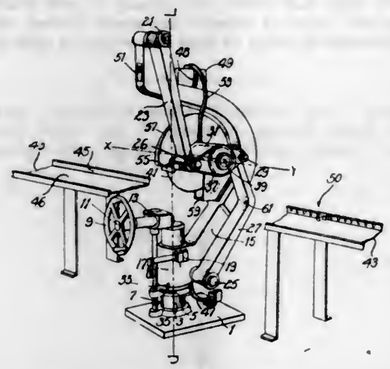
2. In a device of the class described, a book having main leaves and a binding connecting the main leaves, supplemental leaves between divers of the main leaves and having projections, and a flexible element wrapped in a single length around the binding in a plurality of convolutions, the convolutions extending longitudinally of the outer surface of the binding and between the main leaves, the convolutions being engaged with the projections, and the flexible element constituting a one-piece retainer for a plurality of supplemental leaves.

1,807,119. TOY PERFORMER. PETER LAZZARI, Pittsburgh, Pa. Filed Apr. 24, 1928. Serial No. 272,510. 1 Claim. (Cl. 46—40.)



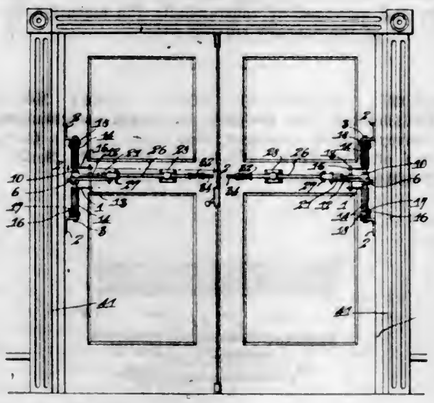
A toy comprising in combination the representation of a figure of an animal having two stationary outstretched arms extending before it, a rod pivoted at a distance below said outstretched arms and near the base of said figure and adapted to oscillate before said figure and at one end of its path of oscillation approaching the end of one of said outstretched arms and at the other end of its path of oscillation approaching the end of the other of said outstretched arms, a body attached to said rod and so positioned on it that oscillation of the rod about its pivot causes said body to move from the positin of one outstretched arm to the other, and means carried by said toy operable to store energy for oscillating said rod and means for bringing about the oscillation of said rod by said stored energy.

1,807,120. SAW. HAROLD LACEY LEWIS, St. Louis, Mo., assignor to Hall & Brown Wood Working Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 11, 1929. Serial No. 346,091. 4 Claims. (Cl. 143—6.)



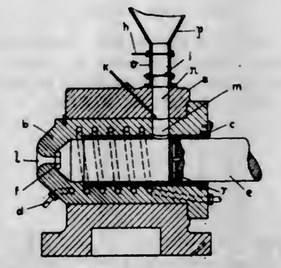
1. A saw mechanism comprising a table, a co-operating C-frame, a pair of swing links pivoted at substantially opposite ends of said frame and extending substantially toward one another, a connecting link pivoted to the juxtaposed ends of said swing links such that a predetermined point thereon moves in a substantially straight line when the swing links are moved, a motor mounted on the connecting link, a circular saw driven by said motor, the center line of the circular saw passing through said point, one end of the C-frame extending beyond the other end thereof, the pivot point of one swing link on said extending portion being spaced beyond the pivot point for the other link, said other link having an elbow shape permitting the saw to swing forward without interference from said table.

1,807,121. DOOR OPENING APPARATUS. JOSEPH M. LOEFFLER, Philadelphia, Pa. Filed Aug. 7, 1930. Serial No. 473,618. 5 Claims. (Cl. 16—80.)



1. In door openers, a rod fixed to the door jamb, an articulated arm freely pivoted to one end of said rod, a sliding connection between said arm and the door, a compound arm pivoted at one end adjacent said rod and having its other end pivoted adjacent said arm between its articulation and its point of connection to the door, and a spring for moving said arm.

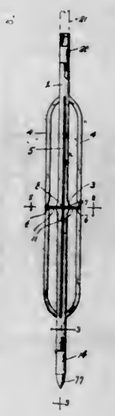
1,807,122. METHOD OF PRODUCING LIQUID HYDROCARBONS AND APPARATUS THEREFOR. JOHANNES MARUHN, Berlin-Friedenau, and LUDWIG TÜBBEN, Berlin-Nicolassee, Germany. Filed Mar. 10, 1930, Serial No. 434,695, and in Germany Dec. 16, 1925. 3 Claims. (Cl. 196—53.)



1. A method of producing lower boiling liquid hydrocarbons by hydrogenating and converting carbonaceous substances selected from a group comprising finely pulverized coal, heavy oils and mixtures of pulverized coal and oil at an increased temperature and under high pressure of hydrogen-containing gas; said method consisting in feeding to a reaction zone a mixture of hydrogen-containing gas, said carboneaceous substances and a catalyst, heating and gradually compressing the mixture in said zone until the maximum reaction pressure is reached, and finally removing the product from said reaction zone.

2. An apparatus for producing liquid hydrocarbons by hydrogenating carbonaceous substances selected from a group comprising finely pulverized coal, heavy oils and mixtures of pulverized coal and oil at an increased temperature and high pressure with hydrogen-containing gas; comprising a heated cylinder acting as a reaction chamber and having an inlet and an outlet, a plunger adapted to reciprocate in the bore of the cylinder, the inlet passage communicating with said bore and adapted to supply said substances and the hydrogen-containing gas into said bore, a gate in the cylinder adapted to regulate the outlet from the cylinder, the relative position between said inlet passage and the plunger being such that the plunger automatically during its reciprocation acts as a valve for closing the inlet passage at the beginning of the stroke.

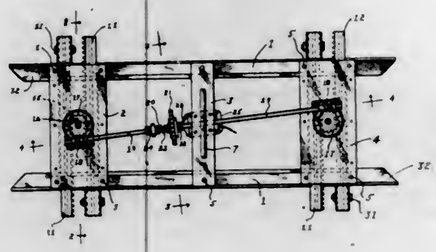
1,807,123. PARAFFIN GOPHER. ROLEY C. MCCARTER, Rising Star, Tex. Filed Oct. 16, 1930. Serial No. 489,195. 5 Claims. (Cl. 166—18.)



1. A tool of the character described comprising an elongated tube, guide runners mounted longitudinally on

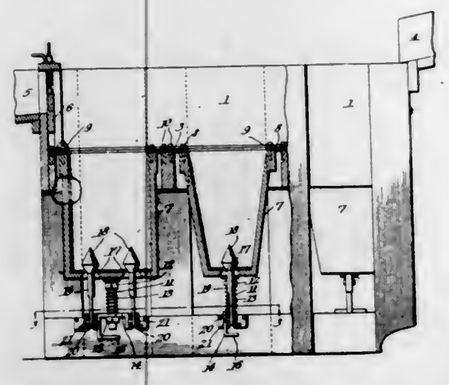
the tube and having intermediate portions disposed in spaced parallelism to the tube, and a pair of scrapers hingedly mounted for swinging movement on the tube within the guide runners and having their scraping edges disposed substantially concentrically with the outer edges of the guide runners.

1,807,124. LIFTING GRAPPLE. FREDERICK H. MEYER, Grand Rapids, Mich., assignor to Leitelt Iron Works, Grand Rapids, Mich., a Corporation of Michigan. Filed July 10, 1929. Serial No. 377,134. 3 Claims. (Cl. 294—67.)



1. In a lifting grapple, a frame member, twin parallel bars mounted adjacent one side of said frame member and another set of twin bars mounted adjacent the opposite side of said frame member, said bars being horizontally arranged, means between each set of twin bars for moving the bars of each set in opposite directions, a pair of work supporting members disposed transversely to said pair of twin bars, each work supporting member being secured to and depending from one twin bar of each pair of twin bars, and common means for simultaneously moving the first-mentioned means.

1,807,125. APPARATUS FOR SETTLING AND CLASSIFYING SAND. JAMES MACDONALD MITCHELL, Flushing, N. Y. Filed Feb. 27, 1929. Serial No. 343,189. 1 Claim. (Cl. 209—208.)



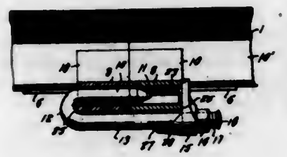
In a sand settling and classifying apparatus, a frame, a receiver for liquid and sand mounted on said frame, a settling pocket communicating with said receiver and slidably mounted in said frame, flexible means connecting said pocket to said receiver, said pocket being provided with a discharge opening, a stationary valve mounted on said frame and seating in said discharge opening, a counter-balance lever pivoted on said frame and contacting at one end with said pocket, and means on said frame engaging said lever to prevent movement thereof until a predetermined quantity of sand has settled in said pocket.

1,807,126. BIT. BYRON F. MORRILL, THOMAS COOKSON, and SCOTT SLOANE, Lebanon, N. H. Filed Mar. 25, 1930. Serial No. 438,840. 6 Claims. (Cl. 145—119.)



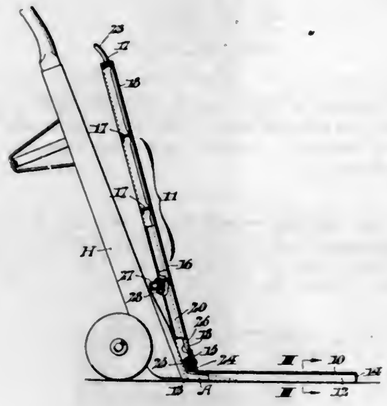
1. A bit for drilling long bores in wood, comprising a tubular body portion provided at its forward end with a blade extending across a portion of a bore of the tubular body portion and affording a passage leading into the tubular body portion, said blade having a concave cutting edge, said blade being inclined longitudinally of the concave cutting edge, and said blade having an edge disposed circumferentially opposite the concaved cutting edge and arranged at substantially the elevation of the low end of the concave cutting edge.

1,807,127. CONNECTER BOLT. ALBION MOULTON, Philadelphia, Pa., assignor, by mesne assignments, to Conveyor Sales Company, New York, N. Y., a Corporation of New York. Filed Aug. 30, 1928. Serial No. 303,014. 8 Claims. (Cl. 198—220.)



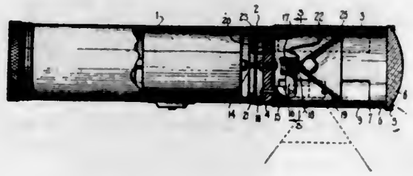
1. A conveyor mechanism comprising a plurality of troughs having eyelets adapted to be aligned secured thereto, and means to connect the troughs comprising a member having relatively slidably aligned parts adapted to engage the eyelets.

1,807,128. RACK FOR HAND TRUCKS. GONZALO C. MUNOZ and RUSSELL H. BOWEN, Philadelphia, Pa., assignors to The American Pulley Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 22, 1928. Serial No. 321,237. 7 Claims. (Cl. 214—65.)



1. A device of the character described comprising a sheet-metal platform with rigidly secured sills having upturned shanks, an all-metal back including upstanding channels with said shanks engaged between their flanges, and means at the rear side of the platform to prevent the device from slipping-off a truck during transportation.

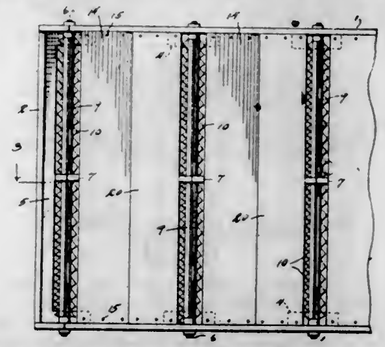
1,807,129. PORTABLE ELECTRIC LAMP. SAMUEL H. NUCKOLLS, Stone Mountain, Ga., assignor to George Francis Willis, Atlanta, Ga. Filed Apr. 26, 1930. Serial No. 447,629. 4 Claims. (Cl. 240—10.67.)



4. A portable lamp including a tubular casing having a tubular extension threaded to its fore end, said extension having a lateral opening therein, a lens carrying cap on the outer end of the extension, a sleeve rotatable on said extension and having an opening adapted to be brought into and out of registry with the opening in the extension, an insulating block in threaded engagement with the outer end of the casing proper, a bracket having a pivoted arm fixed to the outer face of said block, a central terminal stud in said block connected to said bracket, a lamp socket and a reflector fixed to said arm, a switch on the casing, and a conductor between the switch and the lamp socket.

1,807,130. CATTLE GUARD. CLEOTRA OSAKO, Worland, Wyo. Filed July 22, 1930. Serial No. 469,863. 4 Claims. (Cl. 256—14.)

2. A cattle guard comprising a frame adapted to be placed upon the ties of a trackway and having side members, plates supported by and bridging the space between the side members of the frame, said plates being arranged



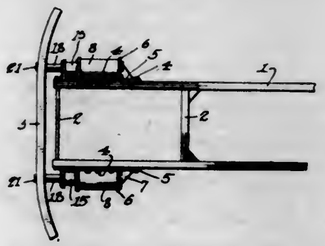
in pairs with the plates of each pair inclined one toward the other, and rotatable sleeves supported by the frame and positioned between adjacent pairs of plates.

1,807,131. IDENTIFYING MEANS FOR ROPES. JOHN A. PALMER, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed Apr. 5, 1927. Serial No. 181,268. 9 Claims. (Cl. 40—1.)



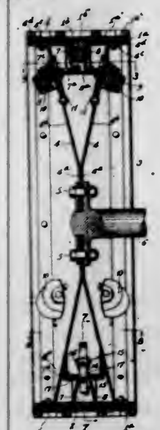
1. An identifying means for fibrous material, including rope, fabrics or similar material, consisting of an element in said material having incorporated therein a substance having characteristics indicative of the origin of the material or rope, said substance being capable of manifesting its presence when subjected to chemical change.

1,807,132. BUMPER SYSTEM FOR TRUCKS AND AUTOMOBILES. PETER PAPPAS and THEODORE PATROU, Webster City, Iowa. Filed Sept. 27, 1930. Serial No. 484,876. 6 Claims. (Cl. 293—55.)



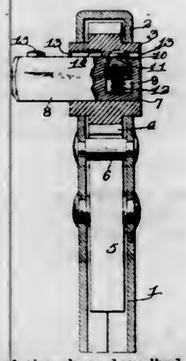
1. In a bumper system, the combination of a bumper bar, pistons affixed to the bumper bar, cylinders in which said pistons are mounted, springs against which said pistons bear, a second and larger set of cylinders, pistons for said larger cylinders and against which the first mentioned springs bear, and a second and larger set of springs in said larger cylinders.

1,807,133. BELT DRIVE MECHANISM. GORDON R. PENNINGTON, Cleveland Heights, Ohio. Filed Feb. 7, 1923, Serial No. 617,431. Renewed Mar. 21, 1929. 7 Claims. (Cl. 74—21.)



2. In a friction drive mechanism, the combination of a notched belt and a wheel over which the belt passes, said wheel comprising parts having tread surfaces to engage the inner side of the belt and lateral surfaces to engage opposite lateral surfaces of the belt, one of said wheel parts with lateral surfaces being mounted to turn circumferentially relative to the body of the wheel and having positive connection with the notches of the belt to move circumferentially therewith, and means operable by the said relative turning movement for causing the wheel parts with lateral surfaces to grip the belt.

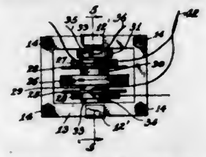
1,807,134. SOCKET WRENCH. EDWARD M. PEAUSER, Milwaukee, Wis., assignor to The Blackhawk Manufacturing Company, Milwaukee, Wis. Filed July 30, 1930. Serial No. 471,710. 3 Claims. (Cl. 81—61.)



1. A wrench of the class described including a ratchet head having an axial opening therethrough, a movable element positioned within the opening, said head having longitudinal grooves extending inwardly from opposite sides thereof at one side of the opening and yieldable members carried by the movable element and positionable within said grooves to provide stops to limit the movement of the movable member axially in either direction.

1,807,135. COUPLING TRANSFORMER. JOHN ALBERT PROCTOR, Lexington, Mass., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Filed Sept. 12, 1928. Serial No. 305,869. 8 Claims. (Cl. 175—361.)

1. A transformer of the character described, including, in combination, a casing, an insulating cover upon the casing, a plurality of terminals on the cover, a transforming unit comprising a closed core member and a demountable core member associated with the closed core member, and a plurality of separately wound and separately removable



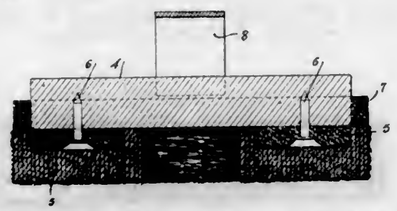
coils arranged in inductive relationship to each other, and assembled upon said demountable core member, and means passing through the closed core member for securing said unit to said cover.

1,807,136. STEEL WOOL PAD. WILLIAM H. ROBBINS, Springfield, Ohio, assignor to The Williams Company, London, Ohio, a Corporation of Ohio. Filed Feb. 7, 1927. Serial No. 166,475. 5 Claims. (Cl. 15—210.)



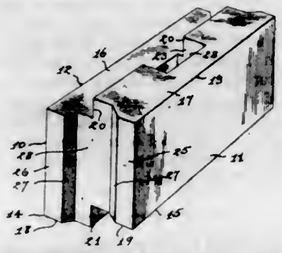
1. In combination a pad having a working face formed of a plurality of alternate laminations of parallel strands of textile material interspersed with layers of steel wool.

1,807,137. STEEL WOOL PAD AND HOLDER. WILLIAM H. ROBBINS, Springfield, Ohio, assignor to The Williams Company, London, Ohio, a Corporation of Ohio. Filed May 23, 1927. Serial No. 193,487. 4 Claims. (Cl. 15—98.)



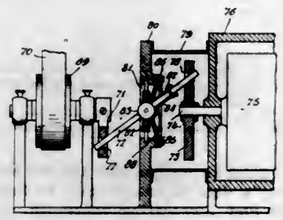
2. In combination, a holder, a plurality of spaced resilient projections and a plurality of cup-shaped steel wool members mounted on said projections.

1,807,138. BUILDING BLOCK. LOUIS L. SPELSHOUSE, Baltimore, Md. Filed July 22, 1929. Serial No. 380,166. 2 Claims. (Cl. 72—39.)



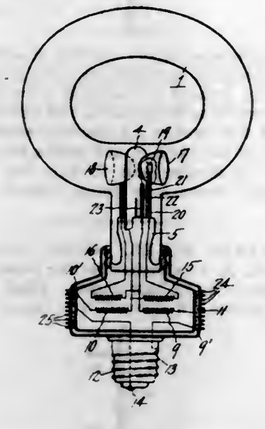
1. A building block having two opposite vertical side faces with a top extending crosswise of the block from one side face to a longitudinal shoulder and another top face extending crosswise of the block from said longitudinal shoulder to the opposite side face whereby said block-top from said shoulder to one side face will be higher than from said shoulder to the opposite side face, the bottom of the said block also having a longitudinal shoulder with a bottom face at one side of the shoulder higher than the bottom face at the opposite side of said shoulder and the top and bottom longitudinal shoulders on said block being of less length than the length of either side face.

1,807,139. FLEXIBLE PACKING. NICHOLAS N. VOLODIMIROV, Richmond Hill, N. Y. Filed Sept. 13, 1926. Serial No. 135,011. 1 Claim. (Cl. 286—29.)



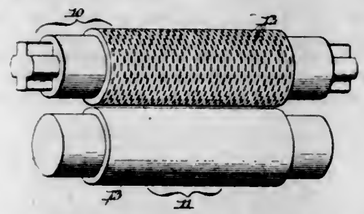
In an apparatus wherein fluid under pressure is utilized, the combination with a stationary element having a securing surface, and a movable rod extending angularly to said surface; of a flexible tube-like packing capable of expansion and contraction in accordance with the movements of said rod, said packing having one end secured directly to said rod and its other end extending angularly from the rod and attached to said surface, said packing snugly fitting said rod between its point of attachment to the latter and the point where the packing extends angularly from the rod.

1,807,140. DISCHARGE TUBE. CARL J. R. H. VON WEDEL, Berlin, Germany, assignor, by mesne assignments, to Electrons, Inc., a Corporation of Delaware. Filed Mar. 7, 1928. Serial No. 259,715. 9 Claims. (Cl. 176—122.)



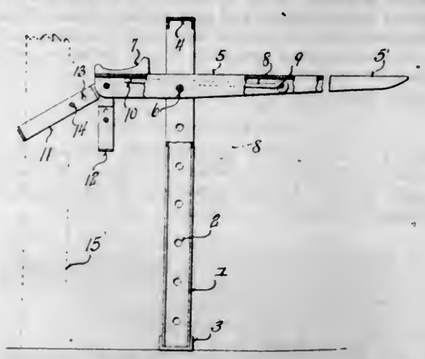
1. A discharge tube having a single stem portion, a stem in said portion, a pair of electrodes erected on said stem, a hollow toroidal envelope mounted upon said stem portion and forming a continuous elongated discharge path extending in two directions from said stem portion, and a discharge preventing shield between said electrodes whereby discharges therebetween are confined to said elongated path.

1,807,141. EMBOSSING METALLIC PLATES. ALAN D. WOOD, Lower Merion Township, Montgomery County, Pa. Filed Sept. 15, 1928. Serial No. 306,108. 9 Claims. (Cl. 80—24.)



4. The method of embossing metallic plate by concurrently subjecting several blank sheets in superimposition to the action of a pair of opposing rotary elements—one of such elements having a plain surface and the other an impression surface—with production of one plate characterized by sharply defined embossments through direct contact with the impression element and others with embossments less distinct; and in the next operation subjecting the latter plates, together with a new blank sheet, to the action of the aforesaid elements in such relation that one of said latter plates in turn receives a sharply defined impression through direct contact with the impression element; and repeating the last procedure in each succeeding operation.

1,807,142. COMBINATION JACK AND POST PULLER. CHARLES ACHENBACH, Manitowoc, Wis. Filed May 31, 1928. Serial No. 281,793. 1 Claim. (Cl. 254—119.)

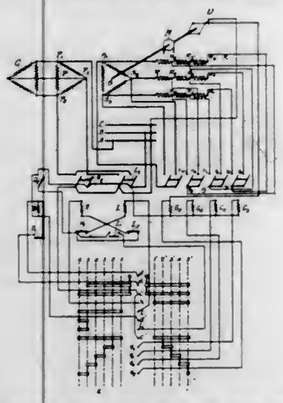


A device of the class described including spaced upright channel irons having their intermediate portions arranged in opposed relation and provided with a plurality of aligned apertures, a channelled lever arranged between the spaced uprights, having aligned apertures in the side portions thereof, a pivot pin adapted to be passed through the apertures in the lever and spaced apertures in the uprights, a bracing horisontal member pivotally connected at one end within the channelled lever, and having a hook at its other end adapted to engage in any one of the apertures in the uprights, said locking bar in its inoperative position being housed within the channel and supported by the removable pivot pin for the lever.

1,807,143. INDUCTION-MOTOR CONTROL SYSTEM. FERDINAND ANGERSTEIN, Mannheim, Germany, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Apr. 14, 1927, Serial No. 183,656, and in Germany Apr. 24, 1926. 2 Claims. (Cl. 172—152.)

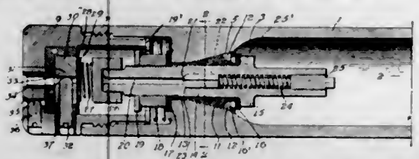
2. In a motor system comprising an induction motor having primary and secondary windings, an alternating-current line, primary switching means for connecting said

line to said primary winding, resistor elements close-circuiting said secondary winding, secondary switching means for short-circuiting said resistor elements, and a load connected to said motor, a control apparatus comprising a control member movable from a datum position at which said motor is disconnected from said line to a short-circuiting position at which said secondary winding is short-circuited and said primary winding is connected to said line to regeneratively brake the movement of said motor, said control apparatus having a plurality of con-



trol steps between said zero position and said short-circuiting position to gradually short-circuit said resistor elements, the return movement of said control member from said short-circuiting position normally causing said resistor elements to be reinserted, and means rendered effective upon movement of said control member to a predetermined position beyond said short-circuiting position for causing opening operation of said primary switching means in response to return movement of said control member from said short-circuiting position.

1,807,144. BLASTING CARTRIDGE. FRANK H. ARMSTRONG, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Apr. 19, 1929. Serial No. 356,360. 8 Claims. (Cl. 102—6.)



1. A blasting cartridge comprising a casing, an electrode projecting axially through an end of said casing and insulated therefrom, a metallic disc secured to said electrode, a second metallic disc carried by said casing and movable axially into and out of contact with the first said disc, spring means tending to establish and maintain contacting relation of said discs and manually operable means for breaking said relation.

1,807,145. ELECTROLYTICALLY FORMED ARTICLE. BLASIUS BART, East Orange, N. J. Filed Mar. 11, 1925. Serial No. 14,645. 12 Claims. (Cl. 204—1.)



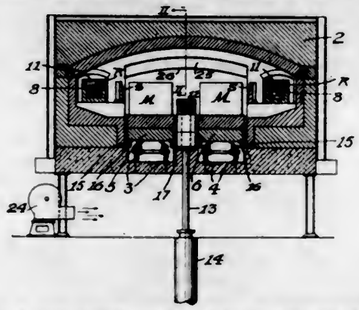
1. In the art of forming hollow metal articles, the method which consists in temporarily securing to opposite sides of a sheet of insulating and acid proof material, the two split parts of a form or model of the article to be formed, one surface of which form is provided with a recess, confining said model within the outlines of the separating sheet, filling said recess with an insulating material, electrolytically depositing on the mold so formed a layer of metal to form a hollow metallic shell on each half of the mold, removing the shells so formed from the separating sheet and assembling the shells to form the desired hollow article.

1,807,146. INDICATOR FOR PASTRIES AND THE LIKE. WILLIAM BROAD, Beaver Falls, Pa., assignor of three-fourths to Harry E. McLain, Pittsburgh, Pa. Filed Dec. 10, 1927. Serial No. 239,246. 3 Claims. (Cl. 146—150.)



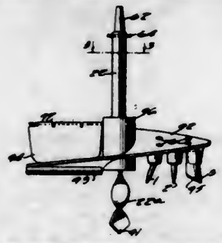
1. In an indicator for pastries and the like, a U-shaped frame having a dial on one leg and an indicator pivoted to the dial and cooperating therewith to indicate desired divisions for cutting a pastry.

1,807,147. FURNACE. FRANK W. BROOKE, Pittsburgh, Pa., assignor to William Swindell & Brothers, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 9, 1928. Serial No. 284,065. 6 Claims. (Cl. 266—15.)



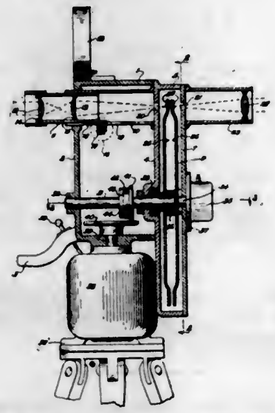
1. In a continuous, direct, electric resistance heating furnace, a plurality of material conveying means arranged in substantially parallel horizontally extending paths, a support mounted between the paths and extending through the bottom of the furnace, an electric resistance heating unit mounted on the support, and means for lowering the support with the heating unit thereon clear of said material conveying means to a point without the furnace.

1,807,148. EARTH AUGER. HUGH STEWART BROWN, Roselle Park, N. J., assignor to The Hubron Company, Inc., a Corporation of New Jersey. Filed Apr. 3, 1926. Serial No. 99,445. 4 Claims. (Cl. 255—70.)



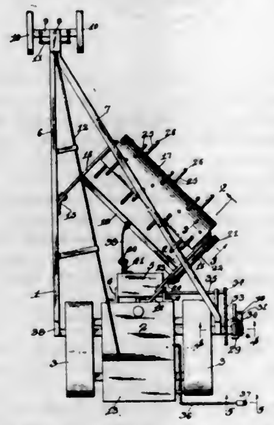
1. An earth auger having in combination, a helical mold-board of at least one helical convolution, a cutting knife mounted on the lower edge of said helical mold-board, and a series of scarifier teeth mounted on the under side of said mold-board and pointing downward to an extent such that they project below the level of the knife edge to points which would lie approximately in the surface of the helical mold-board, if it were extended that far.

1,807,149. STROBOSCOPIC APPARATUS. EDWARD A. BUTLER, Buffalo, and THEODORE R. OLIVE, New York, N. Y., assignors, by mesne assignments, to Robert Donner, Buffalo, N. Y. Filed May 26, 1928. Serial No. 280,805. 4 Claims. (Cl. 88—14.)



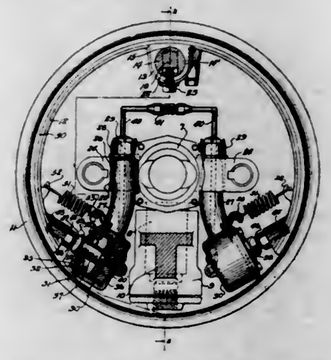
1. A stroboscopic apparatus for examining rapidly moving objects and for indicating the cyclic frequency thereof comprising a pair of movable members disposed in overlapping relation with respect to each other and each having a plurality of openings of different sizes provided therein, said members being adapted to be assembled in different angular positions to selectively cause an opening of a certain size in one of said members to register with an opening of corresponding size in the other of said members at a predetermined point, means for varying the speed of movement of said members, and means for observing the object through the openings in said members at their point of registry.

1,807,150. LAND CLEARING MACHINE. JOHN H. CALDWELL, Milwaukee, Wis. Filed Feb. 5, 1930. Serial No. 426,007. 3 Claims. (Cl. 97—34.)



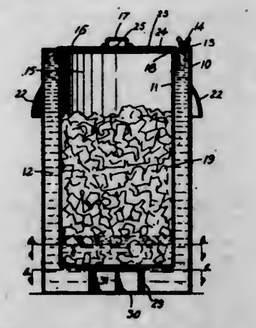
1. A machine of the class described including a frame, a traction element supporting said frame, a drum frame pivotally mounted upon the first frame and disposed at an angle with respect thereto, a rotatable drum carried by the drum frame and extending diagonally across the direction of travel of the traction element, means forming operative connection between the drum and the traction element, a plurality of fingers projecting radially from the drum and arranged spirally thereof, and a digging element supported at one side of the traction element and operatively connected thereto.

1,807,151. BRAKE APPARATUS. NIELS A. CHRISTENSEN, Milwaukee, Wis. Filed June 17, 1925. Serial No. 37,703. 2 Claims. (Cl. 188—152.)



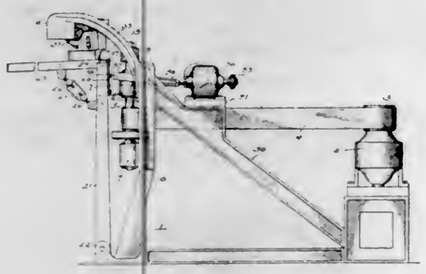
2. In brake mechanism of the character described, the combination with a vehicle wheel and its brake drum, of a support for the wheel provided with laterally extending arms, a brake member engageable with said drum, fluid-pressure-operated motors associated with the ends of said brake member and acting directly thereon, each motor including a brake cylinder and an arm integral therewith and rigidly attached to one of the arms of said wheel support, and release means for said brake member.

1,807,152. REFRIGERATING UNIT. CARR D. CONDON, Des Moines, Iowa. Filed July 2, 1928. Serial No. 289,850. 2 Claims. (Cl. 62—69.)



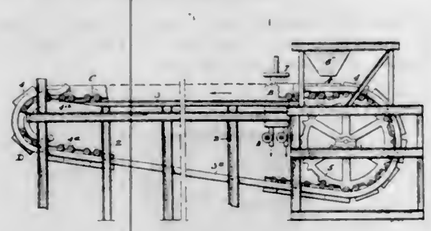
1. A refrigerating unit comprising a double-walled container, whereby a jacket space is provided substantially surrounding an inner compartment, a filling opening for said jacket space, means for tightly closing said filling opening and the jacket space, and a lid for tightly closing the interior compartment, which compartment is capable of being entirely closed to atmospheric air, the jacket space containing a freezing solution and the interior compartment containing a mixture of cracked ice ad salt, said unit being entirely self-contained so that it is capable of being transported from place to place and of being readily removed and replaced relative to a refrigerator.

1,807,153. HEEL BREASTING MACHINE. FRED A. DAY, Columbus, Ohio. Filed Aug. 15, 1928. Serial No. 299,839. 6 Claims. (Cl. 12—47.1.)



4. In a heel breasting machine, a frame, a cutter mounted for rotation in connection with said frame and revoluble about a stationary vertical axis, a pivotally mounted table movable relatively to said frame and cutter, gauge means arranged at one end of said table for determining the position of a heel blank thereon, means for oscillating said table to present the breast surface of a heel blank carried thereby to said cutter, automatic means for clamping the heel blank to said table when the heel blank is engaged by said cutter, and means for positively moving the gauging means to an inactive position during engagement between the heel blank and cutter.

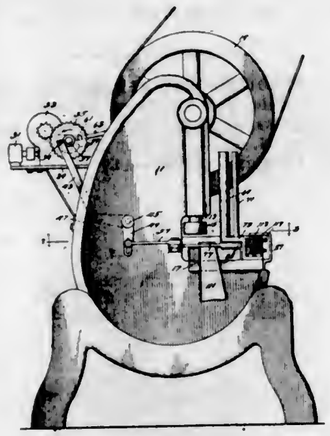
1,807,154. SINTERING MACHINE CAR AND GRATE BAR THEREFOR AND THE LIKE. ERNEST D. EKSTEDT, East St. Louis, Ill., assignor, by mesne assignments, to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 20, 1923, Serial No. 626,269. Renewed July 13, 1928. 14 Claims. (Cl. 266—21.)



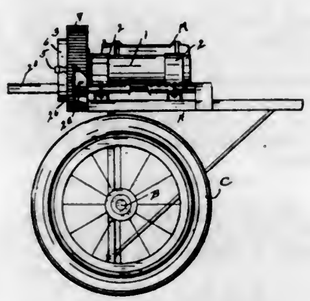
1. In sintering machines, a travelling carrier comprising a frame with spaced apart ribs supporting grate bars, the grate bars extending in the direction of travel of the carrier, securing mechanism for attaching ends of the grate bars to one end of the carrier and a locking bar for securing the opposite ends of the grate bars to the opposite end of the carrier.

1,807,155. MEANS FOR AND METHOD OF MOLDING MATERIALS. LOUIS T. FREDERICK, Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed Mar. 15, 1928. Serial No. 261,759. 20 Claims. (Cl. 18—20.)

1. In a device for molding blocks of plastic material, a forming die, means forming a treating zone, a mold member having a plurality of portions each adapted to cooperate with the forming die to form a closing mold, means for successively moving said portions through said treating zone and for arranging said portions in co-operating position, and means for introducing material to be molded into a said portion before the same is arranged in co-operating position.



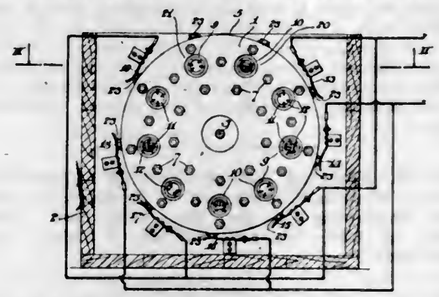
1,807,156. CHUCK. JOSEPH B. GALBRAITH, Kaysville, Utah. Filed Aug. 23, 1927. Serial No. 214,833. 1 Claim. (Cl. 279—114.)



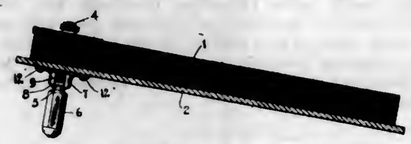
In a device of the class described the combination of a chuck secured to the end of a rotatably mounted cylindrical member; teeth on the outer perimeter of said chuck; a gear to mesh with said teeth; means to drive said gear in either direction; a scroll plate in said chuck having a flange on the back side thereof with radial members integral therewith; and a chuck stop, consisting of a slidable rod, having a handle thereon, mounted in suitable bearings adapted to engage with said radial members on the scroll plate to stop said plate when engaged therewith, to automatically tighten or loosen the jaws of said chuck as desired.

1,807,157. METHOD AND MACHINE FOR ELECTRO-PLATING. JAMES W. HUGHES, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 23, 1926. Serial No. 150,215. 11 Claims. (Cl. 204—5.)

11. A method of combining electro-plating with "stripping" of deposited metal from article carriers, comprising the passage of an odd number of article carriers intermittently through an electrolytic solution, causing filled article carriers to have a negative electrical potential and empty article carriers to have a positive potential while at rest within said solution.

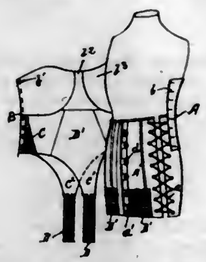


1,807,158. PAD HOLDER. JOHN B. KEMP, Ridgewood, N. J., assignor to Clark Loose Leaf Manufacturing Company, a Corporation of New York. Filed Aug. 9, 1930. Serial No. 474,121. 6 Claims. (Cl. 40—120.)



1. A pad holder including a base, standards associated therewith for supporting the base in inclining position with respect to a supporting surface, a pad carried by the base, a securing screw extending through said pad and threaded means carried by the base independent of the standards for threadedly receiving the screw for retaining the pad on the base, said means being secured to the base by rivets securing therewith the standard to the base.

1,807,159. CORSET. CARL CLIFTON KOFORD, Erie, Pa., assignor to The Nubone Company, Inc., Erie, Pa., a Corporation of Pennsylvania. Filed Apr. 12, 1928. Serial No. 269,571. 9 Claims. (Cl. 2—30.)



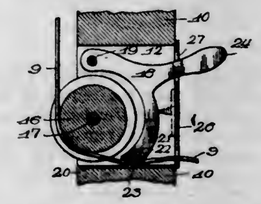
1. In a corset, corset front and back portions extending from the waist downwardly; and a brassière front having a line of detachable fasteners at each end detachably securing the brassière front to the corset at the ends, the brassière front comprising a belt adapted to extend across the waist below the bust and overlapping the corset front and individual bust pockets extending from the belt upwardly.

1,807,160. CONDIMENT HOLDER. GUSTAV F. KRAFT, Kansas City, Mo. Filed June 20, 1928. Serial No. 286,840. 2 Claims. (Cl. 65—45.)

1. A condiment holder comprising a pair of containers, a housing member having a discharge compartment for each of said containers, an extension from said housing member projecting between said containers, and a base member detachably fitted to the lower end of said extension and embracing the lower ends of both containers, the upper portion of said extension being formed with shoulders fitting over the upper inner margins of the containers to prevent sifting of the contents down between the extension and containers.

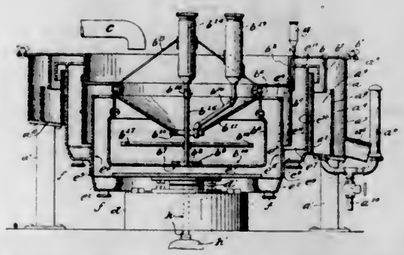


1,807,161. SPRING ROLLER CURTAIN. OTTO E. LOVEN, Forest Park, Ill. Filed Oct. 8, 1927. Serial No. 224,822. 1 Claim. (Cl. 156—10.)



In a device for holding taut the pull-cord of an outside window-shade, a casing mounted in a slot in the bottom bar of a window-screen frame, a pulley journalled in said casing at the outer edge thereof, the aforesaid pull-cord being adapted to pass under the pulley and through the casing so as to be accessible at a point inside of the screen, the bottom wall of said casing at a point inside of the pulley being provided with teeth for gripping the cord, and a lever pivotally mounted in said casing at a point above the pulley and extending inwardly and downwardly to a point where it may cooperate with said grip-teeth on the bottom wall of the casing by gravity, said lever being provided with a handle extending through the inner wall of said casing so as to be accessible inside the window-screen.

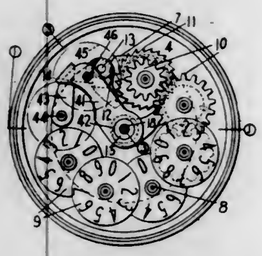
1,807,162. AMALGAMATOR. ROYER LUCKENBACH, Brooklyn, N. Y. Filed Aug. 23, 1928. Serial No. 301,506. 4 Claims. (Cl. 209—199.)



1. A device for separating mineral from ore comprising means to supply ore continuously, a cylindrical chamber having a vertical wall formed with an inwardly projecting flange adjacent the top thereof, means to rotate the cham-

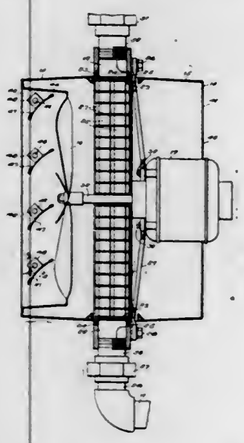
ber, means to introduce the ore into the chamber, said chamber containing a medium for separating the mineral from the ore, means to remove the separated mineral, a cover for the chamber, a depending receptacle carried by the cover within the chamber and formed with an aperture adjacent the axis thereof, a funnel carried by the cover and having its mouth coaxial with the aperture in the receptacle, a spreader disc within the receptacle below the funnel and extending adjacent the internal periphery thereof, and means to supply the ore to the disc.

1,807,163. REGISTERING DEVICE. JOHN B. MILLS, Dayton, Ohio, assignor to Ohmer Fare Register Company, Dayton, Ohio, a Corporation of New York. Filed Sept. 27, 1924. Serial No. 740,166. 7 Claims. (Cl. 235—95.)



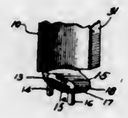
1. In a registering device comprising a supporting member, a stud arranged near the center of said member, a second stud carried by said member and spaced from the first mentioned stud and a registering element carried by the last mentioned stud, a bracket having an apertured portion engaging said central stud and extending substantially radially therefrom and also having a second apertured portion to engage said second stud, and means for mounting an additional registering element on said bracket at a point out of line with said studs.

1,807,164. HEAT EXCHANGE UNIT. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Mar. 25, 1927. Serial No. 178,489. 13 Claims. (Cl. 257—137.)



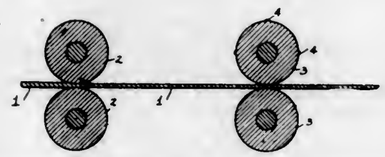
7. In apparatus of the kind described, the combination with a radiator unit comprising spaced tanks, and tubular means extending between the tanks and communicating therewith, of a bracket extending between said tanks and secured thereto, a motor supported by said bracket, the shaft of said motor extending through said radiator unit, a fan mounted on said shaft on the opposite side of said radiator unit from said motor, a housing member disposed around said radiator unit, and adjustable means secured to said housing member for deflecting in any desired direction the air issuing from said air advancing means.

1,807,165. SHUTTER FOR AUTOMOBILE RADIATORS. ADOLF MUELLER, Cheektowaga, N. Y., assignor to Irving Engineering Co., Inc., Sioux City, Iowa. Filed Mar. 20, 1930. Serial No. 437,409. 9 Claims. (Cl. 189—62.)



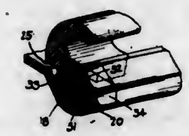
3. A shutter for motor vehicle radiators comprising a frame, a plurality of sheet metal vanes having inturned terminal tongues, a reinforcing member for each tongue having spaced parts projecting therefrom and constituting a pivoting part and an actuating part, said pintle part being engaged in a bearing in the frame, a push rod having bearings pivotally receiving the actuating parts, and means for shifting said push rod to effect a pivoting movement of the vanes.

1,807,166. GROOVED BEARING. JAMES L. MYERS, Cleveland Heights, Ohio, assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed May 9, 1923, Serial No. 637,818. Divided and this application filed Oct. 27, 1924. Serial No. 745,984. 2 Claims. (Cl. 308—237.)



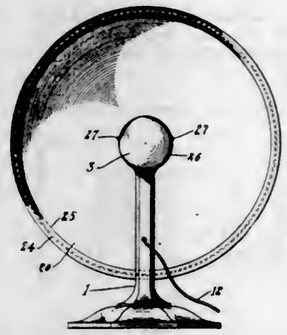
1. A split cylindrical sheet metal bearing having a cold pressed liquid lubricant distributing groove formed in the bearing surface thereof, the area of said groove constituting but a very small fraction of the total area of said bearing, and said groove being spaced at all points a material distance from the ends of said bearing.

1,807,167. VEHICLE WHEEL. EMIL A. NELSON, Abington, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1925. Serial No. 5,419. 1 Claim. (Cl. 152—21.)



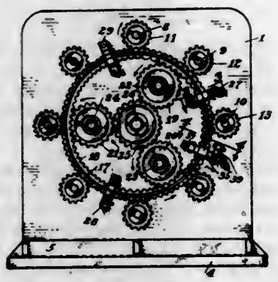
In combination, a vehicle rim having a circumferential depression adjacent one edge thereof and a notch formed in the lateral edge of said rim adjacent the depression, a retaining ring having a main body portion adapted to seat in said depression and an annular radially extending portion integral with said main body adapted to engage a tire securing flange, an axially extending notch in the periphery of said radially extending portion, an L-shaped member secured to said retaining ring and having a portion of one of its arms received within the notch in the retaining ring and another portion of said arm extended laterally beyond the tire securing flange engaging portion of said retaining ring, and an annular tire securing flange having a key-way on its inner circumference adapted to receive the last named portion of said arm, the other arm of said L-shaped member being adapted to be received within the notch in said rim.

1,807,168. LOUD SPEAKER. WEHELI D. PACK, Salt Lake City, Utah, assignor to Utah Radio Products Company, Incorporated, a Corporation of Utah. Filed Dec. 14, 1926. Serial No. 154,716. 4 Claims. (Cl. 181—31.)



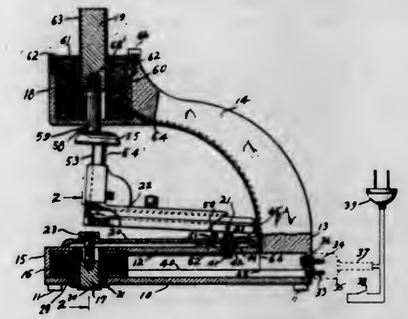
1. An acoustic device of the character herein described comprising a cone-shaped diaphragm, said diaphragm being supported at its apex, and reinforced at its periphery by means of a resilient member and an annular band which prevents the cone from warping, thereby eliminating distortion.

1,807,169. PARTIAL SELF-WINDING MECHANISM. REMIGIO PERSICO, Pittsburgh, Pa. Filed Jan. 21, 1929. Serial No. 334,013. 5 Claims. (Cl. 185—9.)



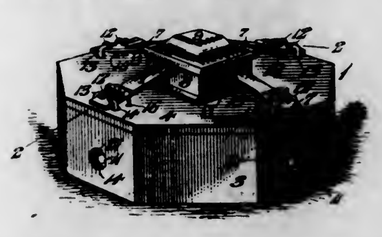
1. In a self-winding mechanism, a planetary gear shaft revolubly mounted in a series of supports, a planetary gear on the front end of said shaft, and a rewinding gear on the opposite end thereof, an actuating coil spring, the inner end of which is secured to the planetary gear shaft, and its outer end attached to one of the vertical supports, a spring clutch for transmitting clockwise motion from the actuating spring to the planetary gear, a rear central gear and shaft revolubly mounted in the series of vertical supports, means for transmitting motion from the planetary gear to the rear central gear, a rear clutch in periodic engagement with the rewinding gear, for transmitting and converting clockwise motion of the rear central gear, by means of the rewinding gear, into anti-clockwise motion in the planetary gear shaft, for partially rewinding the actuating spring, and extending the operating period of the whole mechanism.

1,807,170. STAPLING MACHINE. ROY E. PETERSON, East Norwalk, Conn., assignor to The E. H. Hotchkiss Company, Norwalk, Conn., a Corporation of Connecticut. Filed Oct. 28, 1929. Serial No. 402,817. 12 Claims. (Cl. 1—3.)



1. In a stapling machine, a movable plunger for driving the individual staples, movable anvils adapted to cooperate with the plunger to bend the prongs of the staple against the work, a solenoid, an armature operated by said solenoid having an operative connection with said plunger, a second solenoid, an armature operated by the second solenoid having an operative connection with the anvils, a switch for controlling the second solenoid and controlled by movement of the first armature and plunger, and a manually operated switch for controlling the first solenoid.

1,807,171. ANIMAL TRAP. GUILIO PISANI, Farwell, Pa., assignor of one-half to Santo Paoletti, Renovo, Pa., and one-half to Frank De Leece, Philadelphia, Pa. Substitute for application Serial No. 537,147, filed Feb. 17, 1922. This application filed Oct. 10, 1928. Serial No. 311,654. 2 Claims. (Cl. 43—86.)

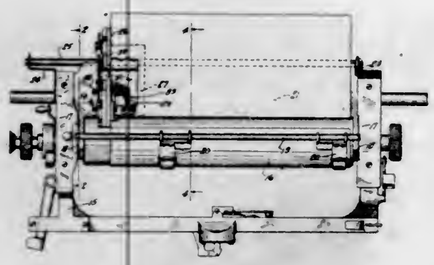


1. An animal trap, comprising a casing having a bait receiving chamber, and an aperture communicating with said chamber, a spring actuated trapping device to move across said aperture to trap the animal, means carried by said trapping device below the same to close said aperture when the trapping device is in its sprung position and means to retain said trap in set condition until released by the animal.

1,807,172. INDICATING DEVICE. CHARLES POKORA, Milwaukee, Wis. Filed Nov. 5, 1928. Serial No. 317,440. 10 Claims. (Cl. 197—189.)

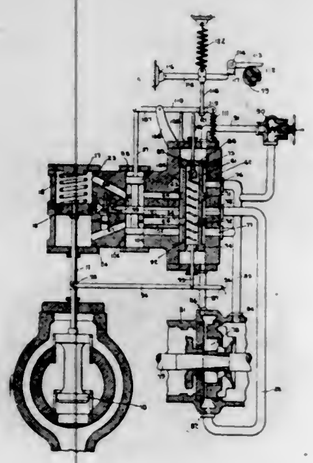
1. An indicating device for a machine having a rotatable paper holding member, comprising a frame, means in

connection with said frame for detecting the passage of the end of a sheet of paper, signalling mechanism mounted on said frame and under the control of said detecting



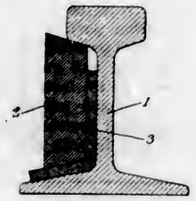
means, and attaching means to which the frame is movably connected having a portion adapted to extend beyond the sides of the machine to permit the frame to be moved to an out of the way position on the machine.

1,807,173. FLUID PRESSURE RELAY MECHANISM. JAMES L. RAY, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 4, 1927. Serial No. 188,807. 8 Claims. (Cl. 121—42.)



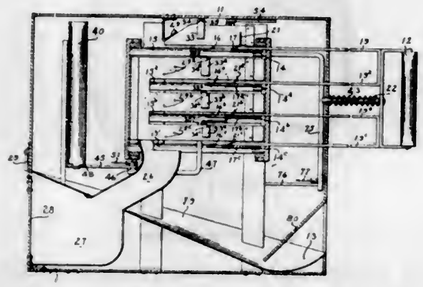
1. The combination with a prime mover having an admission valve and governor mechanism for controlling the valve of relay means for actuating said valve in accordance with the control of said governor mechanism and including a cylinder, an operating piston and a pilot valve for admitting liquid under pressure to said cylinder on each side of said piston and for discharging liquid therefrom, means for applying additional force for closing said valve, means for by-passing fluid from said cylinder on one side of said piston to said cylinder on the opposite side of said piston in a direction permitting said piston to move to close the valve and means for preventing by-passing of fluid through said means in the opposite direction.

1,807,174. RAIL FILLER. HOMER L. ROGERS, Dayton, Ohio, assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed June 4, 1930. Serial No. 459,150. 12 Claims. (Cl. 238—9.)



1. In a rail filler a plurality of plastic members adapted to form a filler between the base and the ball of a rail.

1,807,175. COIN ACTUATED CHANGE MECHANISM. WILLIAM H. RUSSELL, New Haven, Conn. Filed June 30, 1924. Serial No. 723,213. 17 Claims. (Cl. 194—80.)



17. In a change making machine, a plurality of slides having registering slots therein of varying sizes, means providing an opening to direct a coin into said slots, means to retain a deposited coin in one of said slots according to the size thereof, means for engaging a coin when so supported and by pressure thereon to actuate said slides, a plurality of coin stacks, and arms carried on said slides and adapted upon actuation thereof to eject coins from said stacks, certain of said arms being adapted to engage other arms to effect a simultaneous actuation thereof.

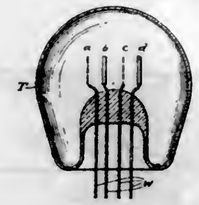
1,807,176. METHOD OF INSULATING HIGH FREQUENCY TRANSFORMERS. KARL SCHMIDT, Berlin-Sudende, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Sept. 2, 1924, Serial No. 735,531, and in Germany Sept. 7, 1923. 3 Claims. (Cl. 175—356.)

1. In a high frequency transformer, an iron core, individual laminæ for said core of a thickness less than .02 m. m. and capable of distortion, the thickness of said individual laminæ being such that said laminæ are distorted by radio frequency currents and an insulating liquid in the interstices between the individual laminæ forming a correspondingly thin insulating layer of uniform thickness throughout whereby hysteresis and eddy current losses are substantially limited.

1,807,177. GAS DISCHARGE TUBE. JOHANNES MICHAEL SCHMIERER, Lichterfelde, near Berlin, Germany, assignor to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 10, 1924, Serial No. 749,037, and in Germany Dec. 31, 1923. 1 Claim. (Cl. 250—27.5.)

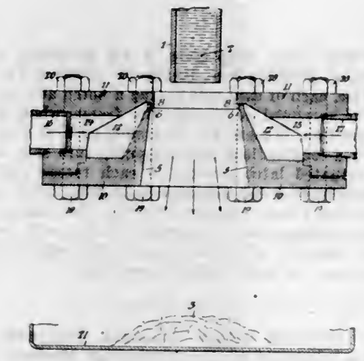
An ionic glow discharge tube containing gas and comprising a non-thermionic cold operating cathode, an anode,

a grid electrode for controlling a glow discharge between said cathode and anode and a control electrode positioned outside the discharge space between said cathode and



anode and on the opposite side of said cathode from said anode to maintain the electric glow discharge between said cathode and anode.

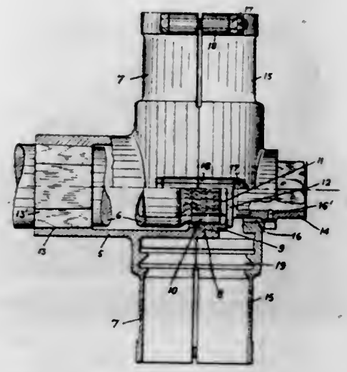
1,807,178. METHOD OF AND MEANS FOR MAKING SYNTHETIC AMPHIBOLIC PRODUCTS. GILBERT E. SEIL, Conshohocken, Pa. Filed Apr. 11, 1930. Serial No. 443,275. 8 Claims. (Cl. 83—91.)



1. The method of making synthetic amphibolic filaments, resembling cotton staple, in form, which consists in progressing a stream of molten liquid calcium and magnesium silicate within and by a tubular stream of compressed gas released to the atmosphere and moving, with accelerated velocity, in coaxial relation with said stream of liquid, and at such greater velocity than said liquid as to create a partial vacuum within said stream of gas, and impart such accelerated velocity to the liquid stream as to immediately shred it into filaments; said stream of liquid being initially in spaced relation with said stream of gas and surrounded by a zone of atmospheric air, serving to heat insulate it from the means for directing said stream of gas, and inducing, by the accelerated velocity of said gas stream, the flow of said atmospheric air around and with said liquid into the region of said partial vacuum, and contemporaneously cooling and discharging said filaments in solid form by the combined action of said streams of compressed gas and atmospheric air.

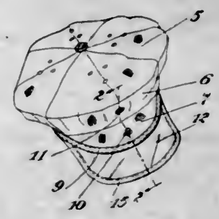
3. Means for effecting the method specified; including a conduit for the liquid; an ejector throat tube at the discharge end of said conduit, longitudinally spaced from said conduit within the range of its vacuum producing effect and in radially spaced relation therewith, affording a passageway for treated gases between said conduit and said tube parallel with the axis thereof; said ejector throat tube being parallel with the axis of said conduit at its end adjoining said conduit and outwardly flared at its end remote from said conduit.

1,807,179. PROPELLER HUB. JOHN W. SMITH, Philadelphia, Pa. Filed July 24, 1928. Serial No. 295,020. 8 Claims. (Cl. 170—173.)



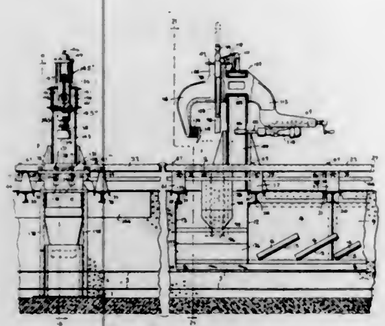
1. A one-piece propeller hub to receive a drive shaft and a pair of complementary members associated with said hub for gripping the inner ends of blade portions, one of said members forming an integral part of said hub, the second member being formed with an opening, and means comprising a wedge collar cooperating with said shaft and hub to prevent relative movement thereof, and said means being accessible through said opening.

1,807,180. CAP. MAURICE SOLOMON, Yonkers, N. Y. Filed Oct. 22, 1929. Serial No. 401,426. 1 Claim. (Cl. 2—195.)



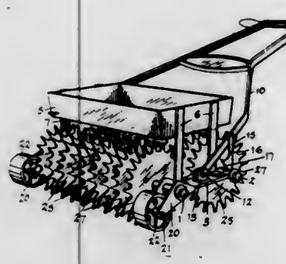
A cap comprising a crown and rim of flexible cloth material, a visor section secured to the front lower edge of the rim and projecting forwardly therefrom, said visor section being relatively rigid and embodying a plurality of opaque cloth laminations, a second visor section of translucent material and of greater area than said first visor section permanently and fixedly secured at its rear edge to the forward edge of the first visor section, said first visor section and the cap rim having coacting fastener elements secured thereto, said rim adapted to be folded downwardly upon said visor section to connect said fastener elements and extending forwardly beyond the front edge thereof and upon the transparent visor section to partially cover the latter.

1,807,181. APPARATUS FOR FREEING CASTINGS FROM SAND AND GATES. WILLIAM C. SPECK and EUGENE BARKER, Columbus, Ohio, assignors to The Buckeye Steel Castings Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 14, 1929. Serial No. 332,344. 11 Claims. (Cl. 22—1.)



1. In an apparatus of the character described which has a carrier for castings and devices located adjacent one point thereon to free the castings from sand, of means for conveying a casting from the carrier to such devices, supporting the same in operative relation therewith and restoring the casting to the carrier.

1,807,182. DISK CULTIVATOR. FRANK H. STONER, Monroe, Mich. Filed Sept. 18, 1930. Serial No. 482,799. 4 Claims. (Cl. 55—11.)

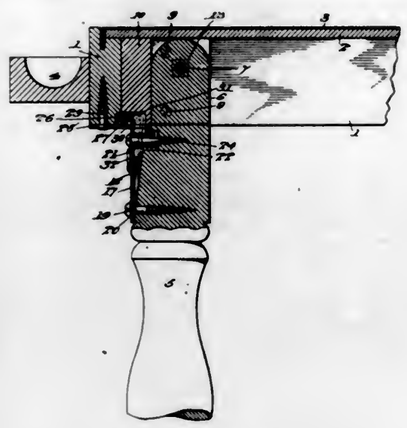


1. In a disk cultivator, a pair of shafts, a pair of end members connected to the ends of the shafts, the end members movable relative to each other, a plurality of disks rotatably supported by the shafts and having teeth projecting from the peripheries of the disks, a part for operating the cultivator connected to the end members.

1,807,183. TREATING OILS. WILLIAM M. STRATFORD, Port Arthur, Tex., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 24, 1924. Serial No. 752,004. 5 Claims. (Cl. 196—147.)

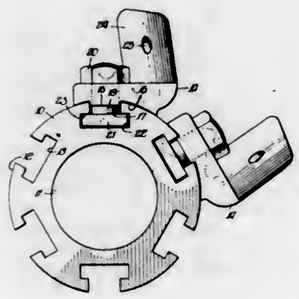
5. The process of treating and purifying hydrocarbon lubricating oil which comprises agitating the oil with sulfuric acid in two portions, the first portion constituting not more than one-third of the total quantity of acid used, coagulating acid and sludge products after each acid treatment by agitating the mixture of acid and oil with a comminuted solid material, and neutralizing the oil after the second acid treatment and coagulation by mixing with an alkaline solution and passing steam into the mixture.

1,807,184. FOLDING TABLE. ANDREW WAGNER, West Hoboken, N. J., assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 3, 1928. Serial No. 258,816. 2 Claims. (Cl. 45—11.)



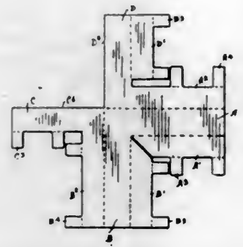
1. A folding table comprising, a top including a depending frame, foldable legs, means for pivoting the legs to said frame, each of said legs having a notch adjacent its pivoted end arranged to engage the frame when in its unfolded position, keepers on the frame, each of said legs also having a longitudinal recess opening into said notch, a spring actuated latch pivoted in each recess and provided with a hooked end disposed in position to overhang the notch and project outwardly from the recess, said legs being arranged to be swung to bring said hooked ends into coaction with the keepers for automatically locking the legs in their unfolded position.

1,807,185. CUTTER HEAD. HARRY S. WALTHERS, Beloit, Wis., assignor to Yates-American Machine Company, Beloit, Wis., a Corporation of Delaware. Filed July 22, 1929. Serial No. 379,961. 3 Claims. (Cl. 144—224.)



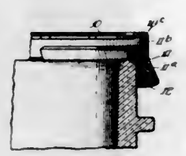
1. A cylindrical cutter head having transverse T slots therein, a plurality of inwardly concave knife carriers of slightly less radius than the head having transverse ribs thereon for arrangement about the head in snug complementary interfitting relation thereto with the ribs positioned in the outer narrow portions of the slots, and headed bolts in the wide portions of the slots projecting outwardly through apertures in the ribs for holding the carriers against radial displacement.

1,807,186. FRAME CONSTRUCTION. JOHN FRAZER WARNER, Muncie, Ind., assignor to Charles R. Wayman, Dayton, Ohio. Filed Feb. 12, 1930. Serial No. 427,863. 3 Claims. (Cl. 20—92.)



2. A jointure device of the kind described, consisting of a metal plate formed to constitute two body sections in right angle relation to each other, and each being provided with opposed flanges having lateral fingers, the flange of the exterior side of each of said body portions having an extension, and the said opposed flanges being bent to confronting status, and the meeting edges of the said exterior flanges and of said extensions being united, the structure thus provided constituting two channels meeting each other at right angles, and exterior stays at the meeting portions of the said channels.

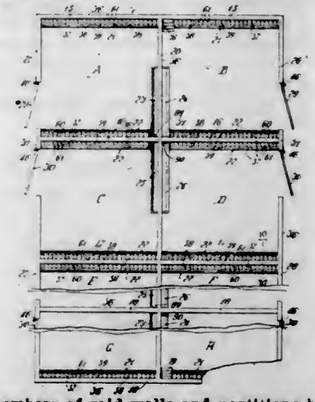
1,807,187. METHOD OF MAKING CLOSURE CAPS. WILLIAM P. WHITE, Chicago, Ill., assignor to White Cap Company, Chicago, Ill., a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,390. 9 Claims. (Cl. 113—80.)



1. A method of making a closure for vessels comprising forming a cap with an annular skirt portion having a holding part and a flaring part terminating at an inturned marginal flange, forming a sleeve gasket of compressible elastic material of greater circumference than said holding part, subjecting the gasket while in substantially cylindrical form to circumferential compression to reduce its size to a circumference less than that of the holding part, inserting the gasket, as thus compressed, within the skirt portion of the cap, releasing the gasket to the constraining retention of the skirt portion, and pressing the lower portion of the gasket upwardly to a position overlying the marginal flange of the cap.

1,807,188. STOCK PEN. WILLIAM S. WITTEN, Pasadena, Calif. Filed Aug. 1, 1928. Serial No. 296,702. 11 Claims. (Cl. 119—30.)

1. A block of pens for confining animals comprising four outer walls, partitions dividing the space between said outer walls into a group of rectangular pens, and posts at the points of juncture of said walls and partitions,



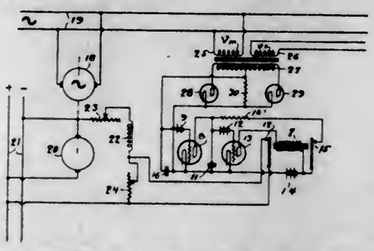
the top members of said walls and partitions being in the form of parallel trusses that extend over and are clamped to said posts.

1,807,189. FOOD PRODUCT AND PROCESS OF MAKING THE SAME. KEN E. BEMIS, Los Angeles, Calif., assignor, by direct and mesne assignments, to Fountain Products Corporation, a Corporation of Illinois. Filed Mar. 16, 1927. Serial No. 175,718. 3 Claims. (Cl. 99—10.)



2. The herein described process of making a food product of the class described, consisting in slitting a bun at its edge to form a pocket closed at its sides and bottom end, assembling a filler of meat or equivalent product and an appetizer and enclosing the filler in a garnish and then inserting the assembled filler into the pocket of the bun.

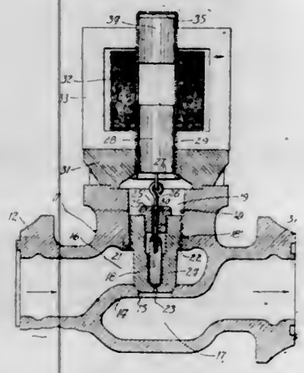
1,807,190. ELECTRIC REGULATION SYSTEM. WALTHER BOCK, Berlin-Steglitz, Germany, and KARL RATH, New York, N. Y., assignors to C. Lorenz, A. G., Berlin-Tempelhof, Germany. Original application filed Mar. 8, 1928, Serial No. 261,095, and in Germany Apr. 1, 1927. Divided and this application filed Mar. 21, 1930. Serial No. 437,901. 13 Claims. (Cl. 171—119.)



1. In a vibration regulator for periodic influencing of a magnitude to be regulated, electrical means for deter-

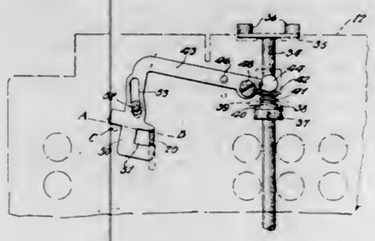
mining the amount of regulation, comprising a relay with contacts, means to periodically operate said contacts for controlling the periodic influencing of said magnitude to be regulated, a condenser, means for charging and discharging said condenser for controlling the ratio of closing to opening period of said relay and further means, dependent on the magnitude to be regulated, to determine the rate of the charging and discharging of said condenser.

1,807,191. ELECTRICALLY OPERATED VALVE. JOHN R. BOYLE, Chicago, Ill. Filed Mar. 24, 1930. Serial No. 438,268. 18 Claims. (Cl. 137—139.)



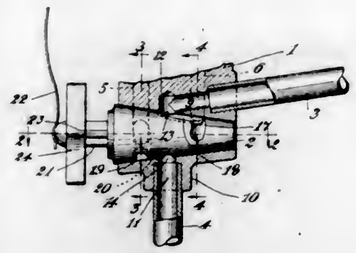
1. A valve device comprising a casing having inlet and outlet passageways, a valve port therebetween, a main valve for closing said port, a chamber communicating with one of said passageways, said main valve being responsive to the pressure condition in said chamber, a by-pass for placing said chamber in communication with the other of said passageways, a by-pass valve controlling said by-pass, electromagnetic means for operating said valve device comprising an armature, and means connecting said armature with said secondary valve and with said main valve whereby said armature is operative to open said by-pass valve and to exert mechanical force on said main valve for moving the latter to open position.

1,807,192. ATTACHMENT FOR CALCULATING MACHINES. EDWIN F. BAITTEN, Jr., Maplewood, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Aug. 15, 1929. Serial No. 386,050. 6 Claims. (Cl. 235—63.)



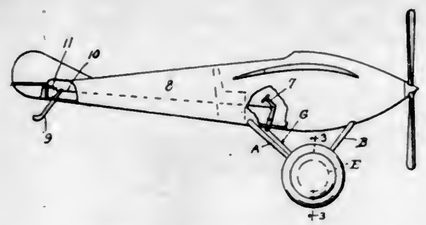
1. In a calculating machine, the combination of calculating mechanism, a transversely movable carriage, means for moving said carriage transversely, a tension device co-operative with said carriage moving means and adapted to retard operation thereof, and means for automatically rendering said tension device effective and ineffective.

1,807,193. VALVE. WILLIAM H. BROOKS, Oconomowoc, Wis., assignor to Carnation Company, Oconomowoc, Wis., a Corporation of Delaware. Filed July 16, 1928. Serial No. 293,169. 5 Claims. (Cl. 251—104.)



1. The combination of a casing having a bore, a valve received in said bore and engaging the inside surface thereof as a seat, said casing having channels on opposite sides of the bore and communicating therewith through ports, said channels being spaced apart along the axis of the valve, said seat also having ports above and below the valve between said channels, conduits leading to said last named ports, the valve having transverse grooves adjacent each of said channels and longitudinal grooves communicating with the transverse grooves to connect said channels and conduits with said ports, the transverse grooves being shaped so as to make the wear of the valve uniform on said seat.

1,807,194. SAFETY BRAKING MECHANISM FOR AEROPLANES. WAYNE BUEHER, Reno, Nev. Filed Aug. 8, 1929. Serial No. 384,296. 2 Claims. (Cl. 244—2.)

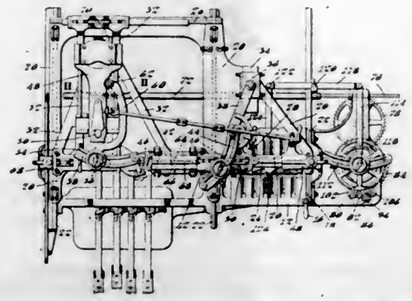


1. In an aeroplane, a landing gear, a braking mechanism associated with the landing gear, means for operating the braking mechanism, means operated from the braking mechanism for releasing the braking means should there be a tendency of the aeroplane to nose, a tail skid pivotally mounted, and means operatively connecting the tail skid with the brake operating means to release said braking means when the tail skid is out of ground engaging contact and to apply the braking mechanism when in ground engaging contact.

1,807,195. PATTERN GRADING MACHINE. ELMER H. BURKE, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 7, 1927, Serial No. 197,116. Renewed Oct. 12, 1928. 17 Claims. (Cl. 33—23.)

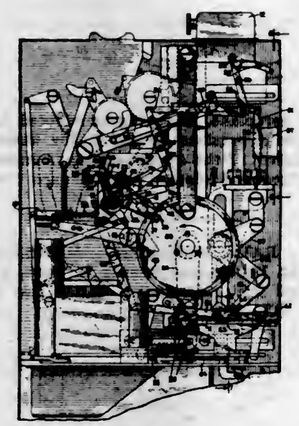
1. In a pattern grading machine, four primary instrumentalities, viz, a model holder, a work holder, a model follower and a tool and grading connections between them arranged to reproduce a plane model held in the model holder in a plane workpiece held in the work holder, and means for shifting one of the said primary instrumentalities in a certain direction parallel to the

plane of the reproduction, said means being operated by relative movement of two of said primary instrumentalities in a direction transverse to said certain direction and comprising a rack bar connected to one of the said two



primary instrumentalities, a pivoted arm, gearing connecting the rack bar to the arm, and means for adjustably connecting the pivoted arm to the primary instrumentality which is to be shifted.

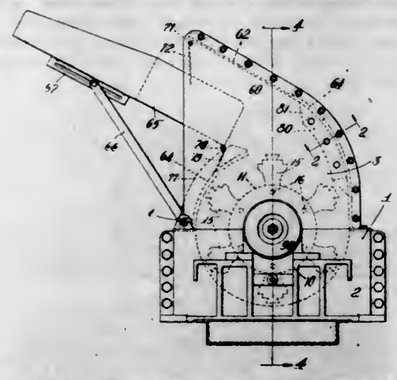
1,807,196. MULTIPLE FARE COLLECTING AND CHANGE MAKING MACHINE. CHARLES E. CHALMERS, New York, N. Y. Filed Mar. 5, 1925. Serial No. 13,384. 6 Claims. (Cl. 235—32.)



1. In a multiple fare collecting machine having a single chute for receiving the deposited coins of different denominations, and means for ejecting a change coin or coins controlled by deposited coins of any denomination in combination with a single means for varying at the will of the operator the fraction returned of any particular coin deposited, and an error means to reset the single means, and means to lock the error means against actuation upon the machine being partially operated.

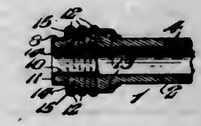
1,807,197. HAMMER MILL. WALTER J. CLEMENT, Utica, N. Y., assignor to The Bossert Corporation, Utica, N. Y., a Corporation of New York. Filed June 5, 1928. Serial No. 282,961. 9 Claims. (Cl. 83—11.)

1. A mechanism of the class described comprising a casing, operative mechanism within said casing, a chute for delivering material to be treated by said mechanism to said casing, the adjacent end of said chute being spaced from a portion of said casing, and an element adjust-



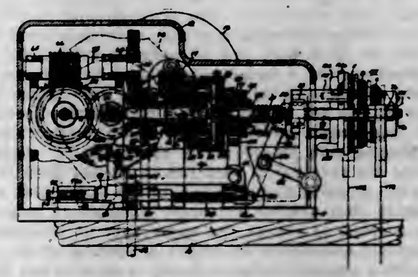
able to and from a position bridging said space and when in bridging position forming a continuation of said chute.

1,807,198. COMBINED INNER METAL SHIELD AND OUTER METAL GRIP FOR BOBBINS AND THE METHOD OF MAKING SAME. CLARENCE E. CUNDEY, Philadelphia, Pa., assignor to James H. Billington Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 19, 1928. Serial No. 293,828. 2 Claims. (Cl. 242—121.)



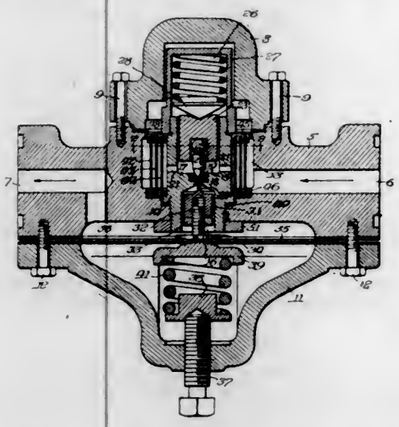
1. In a bobbin of the character stated, an elongated tubular body portion, having an enlarged lower terminal portion, a plurality of spaced individual annular metallic rings on said enlarged terminal portion, an integral inner metallic shield and outer metallic grip cylinder upon said terminal of the bobbin, said inner metallic shield extending into the bore thereof, and said outer portion surrounding said rings and encasing the same snugly, so as to form a plurality of outer, spaced annular, integral metal-encased beads.

1,807,199. WINDING DEVICE. RUSSELL DEAN, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 14, 1928. Serial No. 319,367. 22 Claims. (Cl. 242—87.)



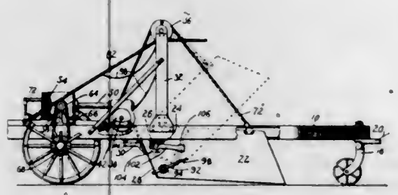
1. A form for winding a plurality of coils, comprising, in combination, a plurality of form sectors, each adapted to have a coil wound thereon, a plurality of arms extending radially from each of said form sectors, and means for simultaneously moving the arms of all of said sectors to permit the removal of the wound coils.

1,807,200. EXPANSION VALVE. FRENCH E. DENNISON and WARD S. IRELAND, Beloit, Wis., assignors to National Refrigeration Corporation, Beloit, Wis., a Corporation of Delaware. Original application filed Jan. 29, 1926, Serial No. 84,573. Divided and this application filed June 18, 1928. Serial No. 286,102. 6 Claims. (Cl. 50—23.)



1. In a valve, the combination of a casing provided with a valve seat, a circular bore extending upwardly from said seat, a polygonal valve guide slidably disposed in said bore and provided at its lower end with a socket, a ball disposed in said socket, and a valve projecting into said socket and engaging said ball, said guide through said ball being adapted to force said valve against its seat.

1,807,201. WHEELED SCRAPER. ELMER E. DORAN, Merced, Calif. Filed Jan. 27, 1930. Serial No. 423,683. 6 Claims. (Cl. 37—131.)

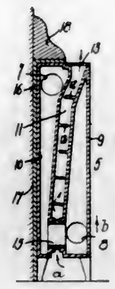


3. In a scraper device, a frame, a scraper pan pivoted thereon, said scraper pan being provided with a swinging gate pivoted at its upper rear end, a spring pressed latch pivoted on the scraper pan for normally holding the gate in closed position, a dumping arm carried by the frame, and a cam on said arm for engaging and releasing the latch when the pan has been raised to a predetermined position.

5. In a scraper device, a scraper pan pivotally mounted, a swinging gate hinged at its upper end for normally closing the rear end of said pan, a bracket fixed to the rear face of said gate and formed with a tapped seat, and a threaded stop member adjustably mounted in said seat and adapted to engage the upper part of the pan for adjustably controlling the extent of opening of the gate.

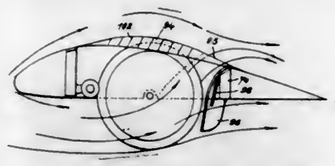
6. In a scraper device, a frame, a scraper pan pivotally mounted thereon, a swinging gate hinged at its upper end for normally closing the rear end of said pan, a slide bearing carried by the frame at the rear of said pan, and a spring pressed pin mounted in said bearing, said gate having a part arranged for engagement with said pin as the pan is lowered, for automatically closing said gate.

1,807,202. BASEBOARD RADIATOR. LOUIS DVILNSKY, Brookline, Mass. Filed Mar. 12, 1930. Serial No. 435,110. 2 Claims. (Cl. 257—133.)



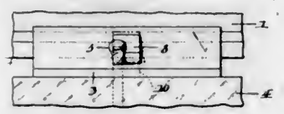
1. A baseboard radiator having, in combination, two hollow sections spaced apart by an air chamber open at the top and bottom, baffle plates in said chamber positioned in staggered relation to each other, and means to conduct heated fluid into and out of said sections.

1,807,203. CONSTRUCTION OF AEROPLANES. VICTOR EHMIG, La Garenne Colombes, France. Filed Sept. 17, 1930, Serial No. 482,441, and in France Sept. 19, 1929. 6 Claims. (Cl. 244—2.)



2. In an aeroplane, landing gear adapted to be raised, curved covering portions formed in the wings to receive the upper halves of the wheels, and flaps mounted on said curved portions and adapted to open upon the top of the wings.

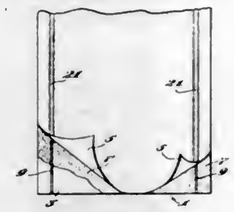
1,807,204. RAIL RETAINING MEMBER. ROBERT FARIES, St. Davids, and ROBERT H. BOYD, Philadelphia, Pa. Filed Jan. 10, 1931. Serial No. 507,823. 5 Claims. (Cl. 238—304.)



1. In combination, a rail, a tie plate having a slot therein and having a rib between said slot and the rail flange, a retaining member passing through said rib to a position above the rail flange, and a spike passing through the slot in said tie plate and adapted to hold said retaining member against lateral displacement, said tie plate having at said slot a surface inclined to the longitudinal axis of the rail.

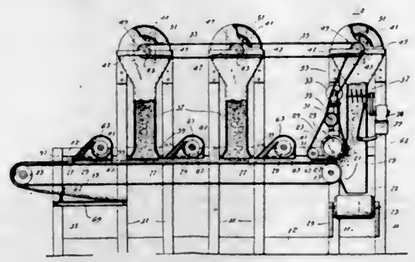
1,807,205. MULCH FOR PROMOTING GROWTH OF PLANTS. WILLIAM M. FLORING, Newton Center, Mass., assignor, by mesne assignments, to The Ruberoid Co., Bound Brook, N. J., a Corporation of New Jersey. Filed Apr. 21, 1928. Serial No. 271,778. 2 Claims. (Cl. 47—9.)

1. A mulch comprising a strip composed of outer layers of strong tough paper and an inner layer of waterproof material, filaments embedded in the inner layer and extending parallel to the longitudinal edges of the strip but



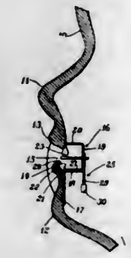
spaced inwardly therefrom to allow trimming the edges of the strip outward of the filaments, said filaments forming visible ridges on the outer paper layers.

1,807,206. MICA LAYING APPARATUS. LOUIS T. FREDERICK, Valparaiso, Ind., assignor, by mesne assignments, to Continental Diamond Fibre Company, Newark, Del., a Corporation of Delaware. Filed June 18, 1928. Serial No. 286,316. 15 Claims. (Cl. 154—2.5.)



1. In a mica laying machine in combination, a mica receiver adapted to carry a layer of mica flakes, means for selecting and depositing a substantially uniform layer of mica flakes in said receiver, said means comprising means forming an enclosed chamber having an opening in its sides, means for creating a cloud of tumbling mica flakes in the chamber, a suction device extending in the opening of the chamber whereby to select the lighter flakes from the cloud therein and a transfer device comprising a foraminous conveyor extending in the opening aforesaid in front of the suction device in position to receive the selected flakes, remove same from the chamber and deposit same as a uniform layer in the receiver and means for snowing a layer of mica flakes into the receiver upon the substantially uniform layer of selected flakes.

1,807,207. DOLL-HEAD AND THE LIKE. ARTHUR FRISCH, Brooklyn, N. Y. Filed Apr. 18, 1929. Serial No. 356,008. 11 Claims. (Cl. 46—40.)

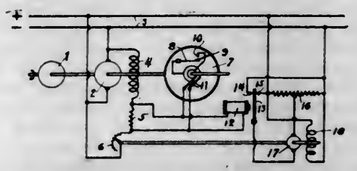


1. In combination with a head for toy figures having a mouth opening, upper and lower teeth at the inner side of the mouth opening, a tongue member, means supporting the tongue member and the teeth at one side of the mouth opening for relative movement, and a common means operable by tilting the head from an upright position for relatively moving said movable teeth and the tongue member.

1,807,208. TREATING TEXTILE MATERIAL WITH CHROMIUM. JOHN LEATHART HANKEY, Sale, Manchester, England. Filed Apr. 4, 1929, Serial No. 352,615, and in Great Britain Apr. 30, 1928. 7 Claims. (Cl. 8—13.)

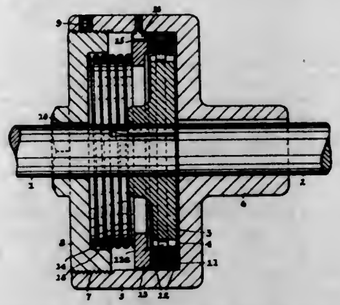
1. The process of fixing chromium on textile fibre which consists in treating such fibre with a mixture consisting of a chromate of an alkali metal and a sulphoxylate of an alkali metal, and ageing.

1,807,209. SPEED REGULATING SYSTEM. ROBERT HERZOG, Berlin, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Apr. 27, 1928, Serial No. 273,807, and in Germany May 4, 1927. 14 Claims. (Cl. 171—229.)



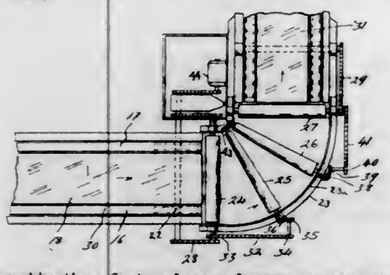
13. In a regulating system, comprising means for periodically imposing on and withdrawing a regulating action from a magnitude to be maintained constant at a normal value, means responsive to deviations of said magnitude from said normal value for varying the ratio of a period of imposed regulating action to a period of withdrawn regulating action, and further means responsive to said last mentioned means for adjusting said first means to maintain said ratio substantially equal to one.

1,807,210. FRICTION COUPLING. FLORENT HINNEKENS, Paterson, N. J., assignor to Van Vlaanderen Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 4, 1926. Serial No. 146,168. 4 Claims. (Cl. 64—106.)



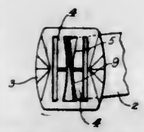
3. In combination, rotary driving and driven coupling members, one member including an annulus surrounding the axis of such member and a body in which said annulus is rotative independently thereof and around said axis, said body having means, exerting slip-friction grip on the annulus, to resist rotation thereof independently of said body, and said annulus and the other member being freely shiftable, one relatively to the other, from a position in which their axes are alined to a position in which said axes are angularly related to each other and having tooth means to positively interlock them for rotation together.

1,807,211. CONVEYER MECHANISM. WALTER V. HOSFEN, Detroit, Mich., assignor to Brown-Hutchinson Iron Works, Detroit, Mich., a Corporation of Michigan. Filed Mar. 26, 1930. Serial No. 439,206. 1 Claim. (Cl. 198—19.)



In combination, first and second conveyers arranged at angles to one another, each of said conveyers including a plurality of endless belts, horizontal curved supports positioned between the discharge end of the first conveyer and the leading end of the second conveyer, a first cylindrical roller journaled in said supports and positioned at the discharge end of the first conveyer, a prime mover arranged adjacent to the inner one of the curved supports, means positioned in close proximity to the inner support for directly driving the belts of the first conveyer and the cylindrical roller, first and second tapered rollers journaled in said supports and tapering toward the inner support, driving means for the first tapered roller connecting the outer end of that roller to the outer end of the cylindrical roller, driving means for the second tapered roller connecting the inner ends of the tapered rollers, a second cylindrical roller positioned at the leading end of the second conveyer, and means at the outer ends of the second tapered roller and second cylindrical roller for driving the second cylindrical roller and the belts of the second conveyer from the second tapered roller.

1,807,212. BUCKLE. GLENN E. HOLMES and MORRIS TREIMAN, St. Louis, Mo., assignors to Mexican American Hat Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 14, 1928. Serial No. 325,976. 5 Claims. (Cl. 24—198.)



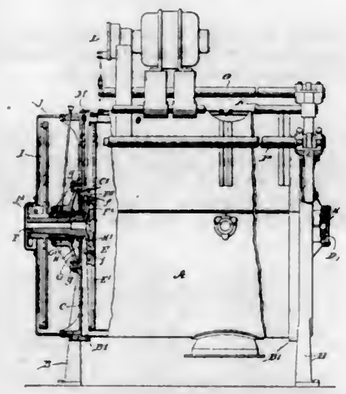
1. A buckle, comprising, an open frame having a pair of band-receiving cross bars provided with curved, band-receiving edges mutually convex toward each other adapted each to receive the pull of the band when doubled thereover in a direction radial to said curve at varying angles of pull.

1,807,213. PRICE TICKET HOLDER. LEO HOPP, New York, N. Y., assignor of one-half to Harriett Gold and one-half to George Hopp, New York, N. Y. Filed June 17, 1929. Serial No. 371,642. 8 Claims. (Cl. 40—5.)



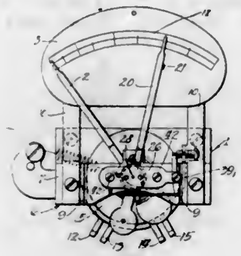
1. A price ticket display device comprising a ticket carrying member, a plurality of eyes projecting rearwardly therefrom, a second ticket carrying element, said second ticket carrying element having means for engagement within said eyes to support the second mentioned ticket carrying element in superimposed relation to the first mentioned ticket holder.

1,807,214. WASHING MACHINE. WILLIAM H. JAXHEIMER, Philadelphia, Pa., assignor to Smith, Drum & Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 2, 1929. Serial No. 359,974. 1 Claim. (Cl. 68—18.)



A washing machine comprising a rotatable cylinder having a stub shaft secured to one end, a driving shaft having a flanged inner end rigidly but detachably secured to its other end by fastening means in combination with a casing having a bearing for the stub shaft secured to one end plate and the other end plate formed with an opening of larger size than the flanged end of the driving shaft, of such conformation as to permit of the passage of the flanged end of the driving shaft therethrough and to afford access to the fastening mechanism by which the flange is secured to the end of the cylinder, a closure for said opening support, a bearing for the driving shaft detachably secured to the outer face of the end plate and a second closure plate detachably secured inside of the first closure plate supporting a stuffing box for the shaft.

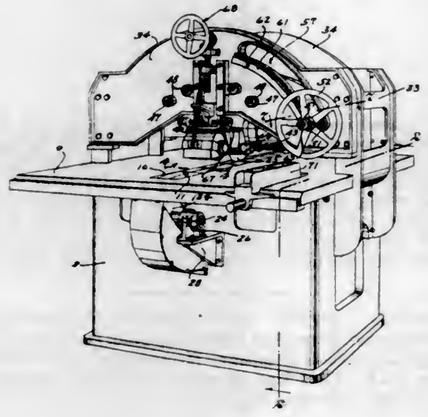
1,807,215. METER. LEWIS DANA JOHNSON, Springfield, Ill., assignor to Lincoln Meter Company, Springfield, Ill., a Corporation of Illinois. Filed Aug. 6, 1930. Serial No. 473,352. 15 Claims. (Cl. 116—129.)



1. In a meter instrument having a freely rotatable indicator, means for holding said member in a given position comprising a friction member movable with said indicator, a second member adapted to frictionally contact

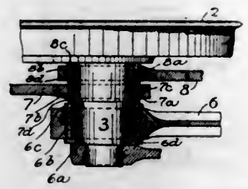
with the circumference of said first member uniformly on both sides thereof, and resilient means for yieldingly maintaining said contact.

1,807,216. MACHINE FOR SAWING MATERIAL AT VARIOUS ANGLES. ROY E. JOHNSON, Minneapolis, Minn. Filed Mar. 26, 1930. Serial No. 439,001. 4 Claims. (Cl. 143—36.)



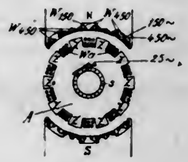
4. In a sawing machine, a work table having a longitudinal slot therein, an endless conveyor working in said slot and projecting slightly above the top of said table, said conveyor having a longitudinal groove therein, laterally spaced frame members extended across the top of said work table transversely to the endless conveyor, opposed arcuate guides carried by said frame members and the axis of said guides being within the conveyor groove, an arcuate slide carried by each of said radial guides, and a circular saw carried by and between said slides above said conveyor, said saw being adapted to work in the conveyor groove, and slidably adjustable with said slides about the axis of the arcuate guides whereby the saw may be tilted into various angles substantially without changing the position of its bottom in respect to the conveyor groove.

1,807,217. LOCOMOTIVE DRIVING ROD CONNECTION. WILLIAM G. KNIGHT, Derby, Me. Filed May 18, 1929. Serial No. 364,138. 9 Claims. (Cl. 105—84.)



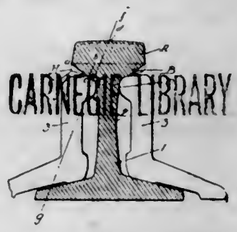
1. In a locomotive engine having a plurality of driving axles, the combination of a main crank pin; a main connecting rod coupled thereto; coupling rods fitted on the main pin, independently of the main connecting rod, and concentric with said main crank pin; and a separate floating bushing for each of the rods mounted directly upon the main crank pin.

1,807,218. ELECTRIC MACHINE. WILHELM LANGEWIESCHE, Berlin-Tempelhof, Germany, assignor to C. Lorenz-Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Apr. 10, 1928, Serial No. 268,938, and in Germany Mar. 18, 1927. 5 Claims. (Cl. 171—252.)



5. A multi-frequency alternating current dynamo electric machine, operating on the variable reluctance principle, comprising a stator, a toothed rotor, at least two generating windings arranged on said stator, the pitch of each of said generating windings being a different fraction of the pitch of the teeth of said rotor.

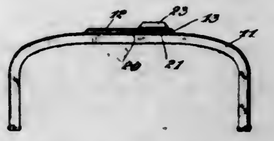
1,807,219. RAIL. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Co. of Illinois, Joliet, Ill., a Corporation of Illinois. Filed June 5, 1930. Serial No. 459,312. 12 Claims. (Cl. 238—125.)



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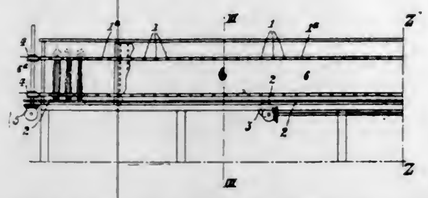
12. A heavy railroad T-rail including a head and a web joined on each side by a fillet, the width of the head at the bottom being less than the width of the head at the top, the under sides of the head providing fishing surfaces each disposed at an angle to the horizontal materially less than the normal fishing angles of standard T-rail.

1,807,220. FASTENING DEVICE FOR BAG FRAMES. HARRY LEBERMAN, New York, N. Y., assignor to Groove Lock Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 29, 1929. Serial No. 335,962. 3 Claims. (Cl. 292—145.)



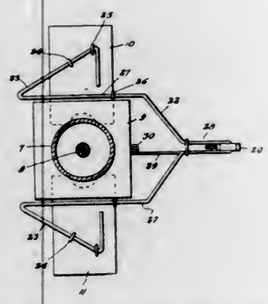
1. Fastening means for the purpose set forth comprising, two frame parts, a solid bar fixed to one part and having therein intermediate the length thereof a transverse keeper opening, a projecting tongue on the second part shaped to be received bodily in the keeper opening and to fit intimately between the walls defining the opposite ends of the keeper opening, and a movable clamping member on the bar arranged to be moved into clamping engagement with said tongue to imprison the latter tightly in the keeper opening, said clamping member being of a dimension to extend entirely across the tongue and engaged with the bar at either end of the tongue when the tongue is imprisoned thereby.

1,807,221. FIBER-PREPARING TREATMENT OF BAST OR VEGETABLE FIBER PLANTS. FREDERICK McCAW, Belfast, Northern Ireland. Filed July 25, 1929, Serial No. 380,944, and in Great Britain Aug. 7, 1928. 11 Claims. (Cl. 19—29.)



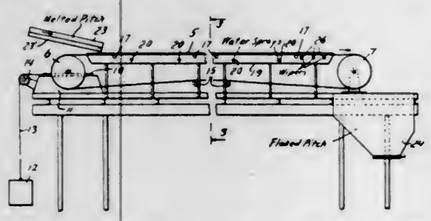
1. Apparatus for the treatment of fibrous material, comprising in combination means for conveying bundles of the material in a substantially vertical position, means for subjecting said bundles to a jigging motion adapted to level the lower ends of the bundles, means for crushing the material, means for spreading the material, and means for decorticating the material including fluted breaking rollers, bladed combing rollers and scutching and stripping rollers.

1,807,222. FLUID SAVING DEVICE. JOSEPH B. McCULLOUGH and EDWARD S. McCOMBS, Baxter Springs, Kans. Filed Sept. 4, 1929. Serial No. 390 349. 1 Claim. (Cl. 137—139.)



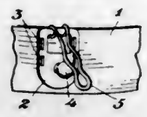
In a structure of the class described, a valve housing, a pair of oppositely disposed valve plates slidable in the guides formed in said housing, a plurality of complemental eyes mounted on the valves plates and housing, a pivotally mounted operating lever, a yoke like operating connection between the lever and valve plates, the arms of said operating connection being formed into substantially triangular actuating cams cooperable with said eyes in a manner to move said valve plates toward and from each other to close and open the valve.

1,807,223. METHOD OF FLAKING PITCH. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 6, 1929. Serial No. 352,990. 1 Claim. (Cl. 83—91.)



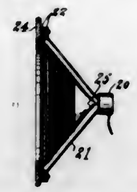
The method of flaking pitch which comprises discharging the pitch in the form of a hot molten stream, forming the said stream into a ribbon-like thin layer, subjecting one side of the layer to a cooling medium until it is sufficiently brittle to be readily broken and then breaking said ribbon-like layer of pitch and causing said resulting fragments to drop whereby they will be broken into flakes as they fall onto the receiving means.

1,807,224. GARTER. JOSÉ MIERES, Buenos Aires, Argentina. Filed Dec. 2, 1929, Serial No. 411,193, and in Spain June 18, 1929. 1 Claim. (Cl. 24—246.)



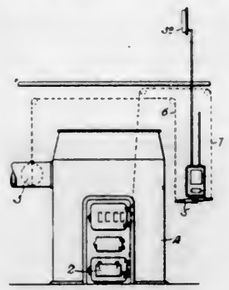
A garter fastener comprising a substantially flat metal plate adapted to be secured to the outer face of the garter, said plate having an opening adjacent one end thereof, said one end of the plate forming a hinge pivot on one side of said opening, a button on the opposite side of said opening, and a substantially U-shaped wire clasp having both ends looped around said hinge pivot, said clasp being adapted to frictionally secure a garment to said button.

1,807,225. SOUND PROPAGATING DIAPHRAGM. WEHRLI D. PACK, Salt Lake City, Utah, assignor to Utah Radio Products Company, Incorporated, a Corporation of Utah. Filed Mar. 9, 1928. Serial No. 260,271. 4 Claims. (Cl. 181—32.)



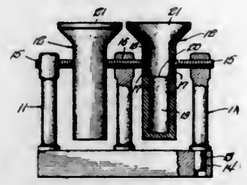
1. In a sound propagating diaphragm comprising a cone of fibrous material provided with helically arranged embossed corrugations.

1,807,226. DRAFT CONTROLLER. LAWRENCE M. PERSONS, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 24, 1928. Serial No. 314,636. 17 Claims. (Cl. 236—16.)



1. The combination with a heater, of an electrically operated controller therefor comprising an expansible and contractible fluid containing member, means actuated thereby and controlling the combustion in said heater, an electric heater acting on the fluid in said member, a thermostat for controlling said electric heater, means for short-circuiting said thermostat to permit said electric heater to act on said fluid in said heater independently of said thermostat, and means preventing the operation of said short-circuiting means while said thermostat is closed.

1,807,227. FOUNTAIN PEN DESK SET. CRAIG R. SHEAFFER, Fort Madison, Iowa, assignor, by mesne assignments, to Pen Desk Set Company, a Corporation of Illinois. Filed Feb. 12, 1926, Serial No. 87,732. Renewed Dec. 19, 1930. 6 Claims. (Cl. 120—108.)



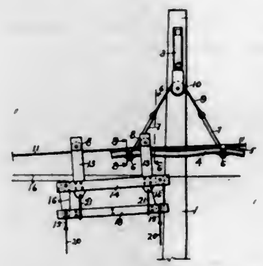
1. A fountain pen desk set comprising a flat base adapted to be placed on top of a desk, a plurality of supporting members secured to said base, a plurality of receptacles disposed between said supporting members, and a screw journalled in each of said supporting members, said screws engaging said receptacles to hold the latter in various positions of angular adjustment in which the ink in the pen flows toward the writing point.

1,807,228. ELECTRIC FUSE. JAMES H. STARR, Oak Park, Ill., assignor to Electrical Engineers Equipment Company, a Corporation of Illinois. Filed Aug. 19, 1929. Serial No. 386,791. 23 Claims. (Cl. 200—113.)



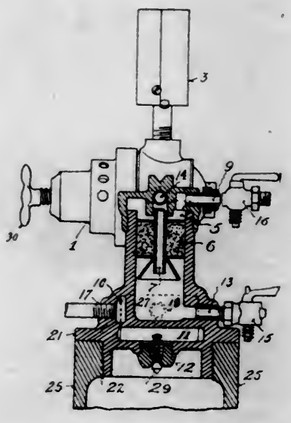
1. A device of the class described comprising relatively movable electric terminals, a knife edge, a fuse strip electrically joining said terminals and passing with accumulated slack over said knife edge, and means for forcibly drawing upon said fuse strip to take up its slack and bring it sharply against said knife edge to sever said strip.

1,807,229. CABLEWAY. LOUIS S. THORNESS, Renton, Wash. Filed Nov. 11, 1929. Serial No. 406,178. 5 Claims. (Cl. 104—112.)



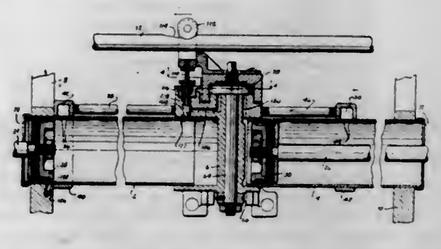
1. In combination, a cableway, an intermediate supporting standard for said cableway, and means for suspending said cableway from said standard, said means comprising a suspended sheave, a triangular sling on said sheave, and a cable carrying rail attached to said sling.

1,807,230. COMBINED PRESSURE CONTROL AND WATER SEPARATOR DEVICE FOR PAINT SPRAYING MACHINES. FRANK ABRAM TITTEMORE, Richmond, Calif., assignor to Hopkins Spray Equipment Company, San Francisco, Calif., a Corporation of Nevada. Filed Mar. 20, 1928. Serial No. 263,020. 4 Claims. (Cl. 91—45.)



2. A combined pressure controlling and water separating unit comprising a casing having a base portion for attachment to a paint pot or container, an air pressure receiving chamber, a sump chamber, an atomizing air pressure passage and a paint feed pressure passage, pressure regulating devices carried by said casing and delivering respectively to said atomizing air pressure passage and said paint feed pressure passage, a water separating device disposed within said casing above said sump chamber, said receiving chamber delivering to said water separator, a pipe connection delivering from the water separator to said pressure reducing devices, and a drain connection delivering from said sump chamber, the air passing through the water separator before reaching the pressure regulating devices.

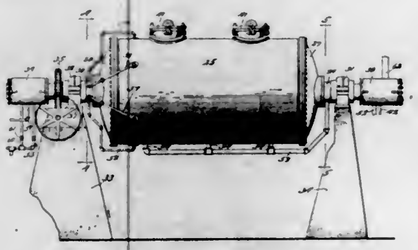
1,807,231. ELEVATOR DOOR OPERATING MECHANISM. WILLIAM WALLACE WEEKS, Brooklyn, N. Y., assignor to Elevator Supplies Company, Inc., a Corporation of New Jersey. Filed Nov. 15, 1923. Serial No. 674,848. 5 Claims. (Cl. 121—44.)



1. In an elevator door operating mechanism, a cylinder, a piston in the cylinder, means for operatively connecting the mechanism to an elevator door, a valve, a passageway in said valve, a passageway connecting said valve with one end of said cylinder, means for operating said valve to control communication of said passageway in said valve with said passageway between said valve and said cylinder, a guide rod, a roller adapted to move on said guide rod, a second valve adapted to open and close communication between the first-named valve and

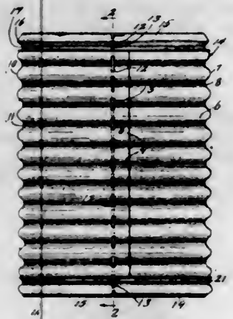
said cylinder, means for adjustably connecting said second valve to said roller, a depression in said guide rod adapted to permit transverse movement of said roller to seat said second valve, whereby communication between said pressure fluid and said cylinder will be cut off in the closed position of said door.

1,807,232. ROTARY EXTRACTOR. OSCAR H. WURSTER and ALBERT M. SMITH, Chicago, Ill., assignors to Wurster & Sanger, Inc., Chicago, Ill., a Corporation of Illinois. Filed Sept. 13, 1928. Serial No. 305,729. 21 Claims. (Cl. 87—6.)



1. In a rotary extractor, a trunnion concentric with the axis of rotation of said extractor secured to one end thereof, a stationary sleeve within which said trunnion rotates, said trunnion having a pair of conduits therein communicating with the interior of said extractor, a liquid line connected to said sleeve, a vapor line connected with said sleeve, and means establishing communication between each of said lines and one of said conduits when said extractor is stationary and during rotation thereof.

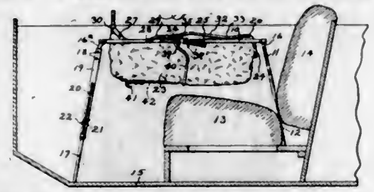
1,807,233. CONTAINER. MARSELIUS T. ASHE, Garden City, N. Y. Filed Apr. 19, 1929. Serial No. 356,337. 2 Claims. (Cl. 220—5.)



1. A container comprising a pair of side members having ridges and furrows, each member overlapping the other member on one side and underlapping it on the other side, the ridges on one member nesting or interfitting with furrows of the other member, a top and bottom having ridges and furrows, said side members and said top and bottom having alined holes in the ridges thereof, and removable means passing through said alined holes for holding said members and top and bottom in fixed rigid position.

1,807,234. BABY HAMMOCK FOR AUTOMOBILES. REINHARDT H. BROWN, La Porte, Ind. Filed Dec. 6, 1924, Serial No. 754,256. Renewed July 12, 1928. 10 Claims. (Cl. 5—94.)

1. In a device of the class described, the combination with a main frame and means of supporting the same, of a generally trough-like flexible body portion attached at the center of two of its sides to said frame, a pair of supplemental frames pivoted to the main frame towards the ends thereof and having the ends of said body portion attached thereto, connections extending from one supplemental frame to the other and connected to the central portion of the main frame which can be adjusted so that



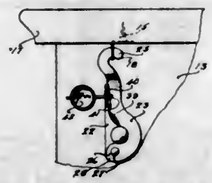
said body portion may assume either a continuous trough-like shape or that of a seat with a back and foot well, said connections including a movable generally U-shaped frame that in the first position permits said trough-like shape and in the second supports the forward end of the seat portion and means to hold said connections in either adjustment.

1,807,235. COLLAPSIBLE CARRIAGE FOR CHILDREN. REINHARDT H. BROWN, La Porte, Ind. Filed Oct. 9, 1926. Serial No. 140,585. 21 Claims. (Cl. 280—41.)



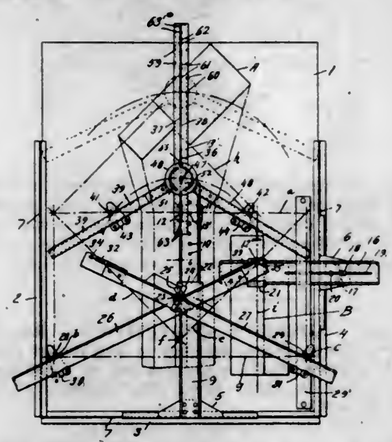
1. In a device of the class described, the combination with a main frame, of a handle frame fulcrumed thereon, a front wheel supporting frame pivoted to the main frame, links connecting the lower ends of the handle frame with the intermediate portions of the front wheel frame, rear wheel supporting members pivoted to the lower ends of the handle frame, and a rear-wheel supporting frame pivoted at its forward end to the forward end of the main frame and near its rear end to the intermediate portions of the rear wheel supporting members.

1,807,236. FASTENING DEVICE. WYCLIFFE L. CLARK, Jamestown, N. Y. Filed Apr. 27, 1928. Serial No. 273,229. 1 Claim. (Cl. 292—104.)



In a fastening device, actuating and hook elements, means pivotally mounting said actuating element through the body portion thereof, a flanged finger terminating one end of said actuating element, means pivotally supporting said hook element upon said actuating element adjacent said actuating element supporting means, a shoulder formed adjacent the pivotal end of said hook element and adapted to engage the pivotal means of said actuating element to prevent any relative movement between said elements and an outwardly extending flange formed midway of said hook element adapted to abut the flange of said actuating element when said fastening device is closed whereby a lock or seal may engage said flanges and prevent the elements from being separated to open the device.

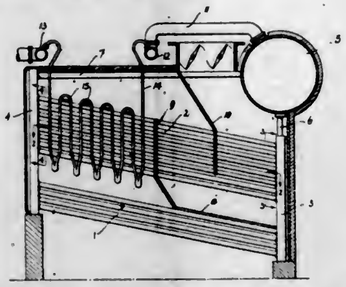
1,807,237. DRAFTING APPLIANCE. THEODORE A. DE POSTELS, New York, N. Y. Filed Dec. 15, 1928. Serial No. 326,260. 12 Claims. (Cl. 33—77.)



1. The combination with a drawing board of a ruler, means fixed thereto for guiding the ruler along one edge of the board, a pivot pin, a directing member engaging said pin, a movable support for said pin, and means for securing said support to said ruler in an adjusted position.

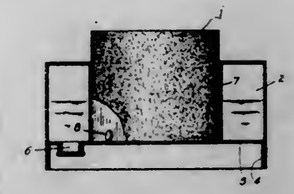
9. The combination of a ruler having a sectorial opening therein, a pivot pin having an angular portion engaging the straight side of said opening and a curved portion engaging the curved side of said opening.

1,807,238. BOILER. CHARLES W. GORDON, Pleasantville, N. Y., assignor to The Superheater Company, New York, N. Y. Filed May 16, 1929. Serial No. 363,487. 11 Claims. (Cl. 122—478.)



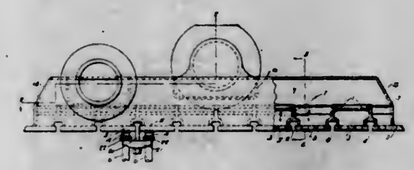
1. A boiler comprising inlet and discharge headers, a bank of steam generating tubes connecting said headers, said tubes being arranged at one end in spaced rows generally parallel to the direction of gas flow and at the other end in staggered relation with respect to the direction of gas flow, and baffling to direct combustion gases across said tubes in a plurality of transverse passes.

1,807,239. SPONGE CUP. HERMAN F. GUENTZLER, Cleveland, Ohio. Filed Mar. 5, 1929. Serial No. 344,270. 1 Claim. (Cl. 91—54.4.)



A sponge holding cup comprising in combination concentric vertical rings of different height, a bottom piece, the inner ring and the portion of the bottom piece defined thereby constituting the immediate sponge-holding elements, a spacer ledge rising within the outer ring, a circular bottom piece resting upon the upper edge of the spacer ledge and supporting the inner vertical ring, a filling orifice and cap on the under side of the bottom piece but of less depth than the spacer ledge, said orifice communicating with the annular space between the concentric rings, an air-tight connection between the tops of said vertical rings, and edges defining an opening through the inner ring adjacent the bottom.

1,807,240. METHOD OF MAUFACTURING SUPERHEATER HEADERS. MALCOLM HARD, Flushing, N. Y., assignor to The Superheater Company, New York, N. Y. Filed July 12, 1928. Serial No. 292,263. 4 Claims. (Cl. 29—157.4.)

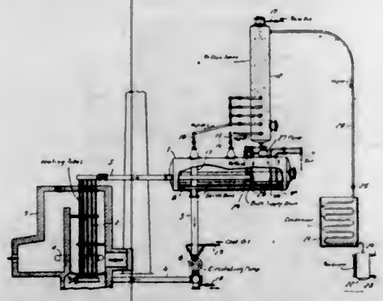


1. The process of making a steel-plate header comprising the steps of welding vertical transverse partitions to a rectangular bottom; forming a longitudinal steel-plate partition with a continuous vertical portion and smaller rectangular portions extending alternately in opposite directions from the lower edge of the first portion, the dimensions and conformation of these parts being such that the second-named partition may be set on the first named partitions with the top edges of the latter butting against the lateral edges of the oppositely extending portions of the former; welding said edges together; welding a front and a back to the bottom and to the outer edges of the first named partitions and of the oppositely extending portions; welding a top to the upper edges of the front and back and of the longitudinal partition; and welding in steel plates to close the ends.

1,807,241. ART OF CRACKING HYDROCARBON OILS. EDWARD W. ISOM, Scarsdale, N. Y., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Sept. 27, 1927. Serial No. 222,257. 13 Claims. (Cl. 196—55.)

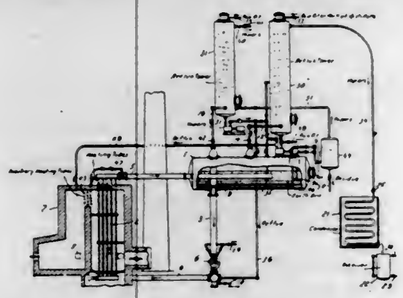
7. An improved method of cracking hydrocarbon oils, which comprises circulating the oil from a bulk supply drum through heating tubes and back to the bulk supply drum, heating the oil to a cracking temperature in the heating tubes, maintaining a bed of finely divided solid material in the bulk supply drum extending entirely across

the path of the circulating oil, taking off vapors from the upper part of the bulk supply drum under pressure, taking off vapors from beneath said bed under a lower pressure, subjecting the vapors so taken off both from



the upper part of the bulk supply drum and from beneath said bed to a refluxing operation, and reintroducing reflux condensate therefrom into the circulating oil beneath said bed.

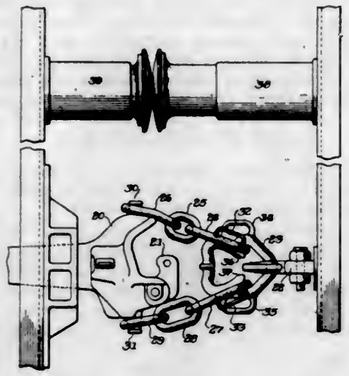
1,807,242. ART OF CRACKING HYDROCARBON OILS. EDWARD W. ISOM, Scarsdale, N. Y., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Original application filed Sept. 27, 1927, Serial No. 222,257. Divided and this application filed Dec. 27, 1929. Serial No. 416,795. 10 Claims. (Cl. 196—55.)



1. An improved method of cracking hydrocarbon oils, which comprises circulating the oil from a bulk supply drum through heating tubes and back to the bulk supply drum, heating the oil to a cracking temperature in the heating tubes, maintaining a bed of finely divided solid material in the bulk supply drum extending entirely across the path of the circulating oil, taking off vapors, from the upper part of the bulk supply drum under pressure and subjecting these vapors to a refluxing operation, and taking off vapors from beneath said bed under a lower pressure and subjecting these vapors to a separate refluxing operation.

1,807,243. COUPLER. FRANK H. KAYLER, Alliance, Ohio, assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Aug. 6, 1928. Serial No. 297,595. 1 Claim. (Cl. 213—112.)

The combination with an automatic car coupler and a hook car coupler, of a transitional coupler device comprising a yoke and a pair of linkages having terminal links loosely interlinked with the yoke and opposite terminal links connected to opposite sides of the automatic coupler head, the yoke being disposed in a substantially horizontal position and receiving the hook of the hook coupler engaged with one end of the yoke, the longitudinal sides of the yoke having inwardly directed lugs aligned transversely of the yoke for pulling engagement with the links which engage the yoke, the hook of the hook coupler lying between the lugs and closing the space therebetween to



prevent disengagement of the links therefrom in the normal pulling position of the yoke, said yoke capable of being turned alternately in opposite directions on the hook to withdraw the luges from the hook far enough to permit disengagement of the links from the lugs.

1,807,244. ADHESIVE COMPOSITION. RALPH W. LANE, Canton, Mass., assignor to The Haines Corporation, Boston, Mass., a Corporation of Massachusetts. Filed July 8, 1929. Serial No. 376,863. 4 Claims. (Cl. 87—17.)

1. An adhesive composition comprising:

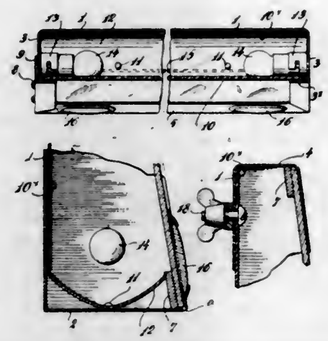
Latex	from about 5 to 15%
Rubber	from about 20 to 52%
Resin	from about 3 to 10%
A filler	from about 6 to 25%
Gum	from about 6 to 25%

1,807,245. PENCIL SHARPENER AND HOLDER. JOHN A. LARSON, Seattle, Wash. Filed July 12, 1930. Serial No. 467,510. 3 Claims. (Cl. 120—84.)



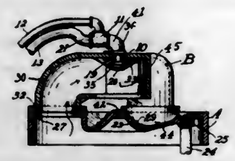
1. In a pencil sharpener and holder of the character described, a cylindrical portion adapted to form a handle and also to fit snugly over a pencil, a comparatively long clip extending from the said cylindrical portion, said clip having an inverted U shaped section therein and said inverted U shaped section having a longitudinal slot therein, and a double edge knife blade positioned in the said slot and held in the ends of the said U shaped section.

1,807,246. WEATHERPROOF LICENSE PLATE HOLDER FOR MOTOR VEHICLES. FRANK J. MAURO, Brooklyn, N. Y. Filed Feb. 17, 1930. Serial No. 428,984. 1 Claim. (Cl. 40—132.)



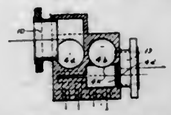
A weatherproof license plate holder comprising a metal sheet bent to form a back, a top, a flange depending from the top, a base, a flange upwardly projecting from the base and of substantially greater width than said top depending flange, and side wings having rearwardly inclined front edges, a flange extending inwardly from one of the side wings, lips carried by the top and bottom plates, and spaced parallel with and adjacent to said flanges, a transparent window adapted to be held against said lips by the flanges of the top and bottom plates and said side wing, means for securing the license plate to the back, including a bolt projecting through the back, a corner member adapted to be secured to the other side wing and to lie over upon the transparent window when the latter is in place so as to secure the same in position, lamps carried by the side wings within the holder and near the base thereof and opposed transparent windows in the flange of the base member, said windows being disposed substantially opposite said lamps.

1,807,247. HYDROCARBON BURNER. RUSSELL L. MERIDITH, East Cleveland, Ohio. Filed July 6, 1925. Serial No. 41,622. 4 Claims. (Cl. 158—91.)



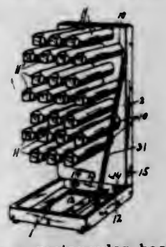
1. A burner of the class described including a hollow body having a cover provided with a central, conical oil-receiving surface and a plurality of apertures thereabout, a detachable composite dome having downwardly-directed pipes for fitting the apertures in said cover, and a central aperture therein, a feed pipe inserted in said dome aperture, and a pressed fire-clay inverted cone on the inner surface of said dome and having a central opening therethrough adapted to receive the said feed pipe, and means for securing said inverted cone in position with its opening in registry with the aperture in the dome.

1,807,248. SUPERHEATER HEADER. HENRY B. OATLEY, Great Neck, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Jan. 15, 1927. Serial No. 161,395. 3 Claims. (Cl. 122—462.)



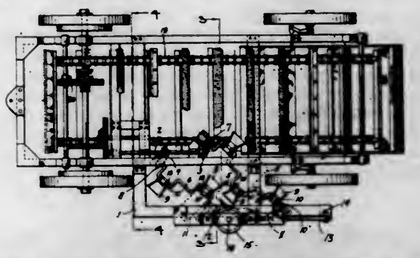
1. A superheater header comprising a unitary forged steel block having two parallel cylindrical chambers, and provided with a series of parallel subsidiary chambers at right angles to said first named chambers and each comprising a large cylindrical portion communicating with one of the first named chambers and a smaller cylindrical portion lying under the second of the first named chambers.

1,807,249. STEAM AND HOT WATER BOILER. ORIMELL B. OLMSTEAD, Pulaski, N. Y. Filed May 15, 1929. Serial No. 363,237. 1 Claim. (Cl. 122—316.)



In a water-heater, a rectangular base frame, a hollow upright water-leg secured to and rising from the rear side of the base frame and provided with water tubes extending forwardly from the front wall thereof over the base frame, said water leg being closed at its upper and lower ends, lugs depending from the water leg and anchored to the inner face of a side of the base frame, and a diagonal brace connecting the upper portion of the water-leg with another side of the base frame.

1,807,250. STREET CLEANER. OTTO J. ORSER, Denver, Colo. Filed Aug. 17, 1929. Serial No. 386,698. 8 Claims. (Cl. 37—41.)

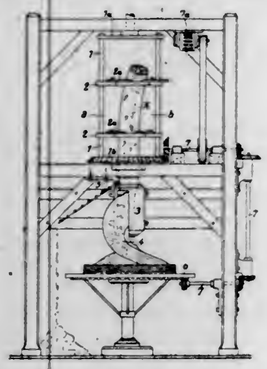


1. In a street cleaner adapted to remove snow from along street curbs, a wheeled frame, a plow carried thereby and vertically adjustable with respect thereto to move material away from the curb toward the longitudinal center of the frame, a multi-throw crankshaft journaled on the frame, shovels mounted upon the cranks of the crankshaft, and means to revolve the crankshaft.

1,807,251. PROCESS OF PRODUCING VENEERS. FRANZ OVENHAUSEN, Steinheim, Germany. Filed Jan. 6, 1928, Serial No. 245,018, and in Germany May 26, 1926. 21 Claims. (Cl. 144—209.)

1. In a process for the production of veneers, the peeling-off of a spiral shaped veneer strip with the aid of a

knife or cutter from a conical work-piece, said knife being inclined across the axis of the work-piece with the length of the generatrix of the full cone to be peeled off



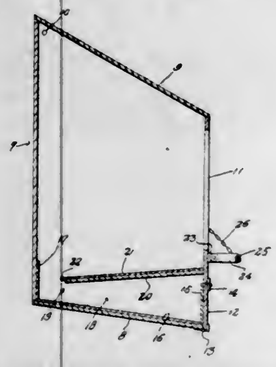
substantially a multiple of the length of the radius of the base of said cone, and relatively moving the work-piece and knife axially.

1,807,252. ARMATURE WINDING. CLEVELAND H. QUACKENBUSH, South Euclid, Ohio. Filed Dec. 28, 1926. Serial No. 157,569. 19 Claims. (Cl. 171—206.)



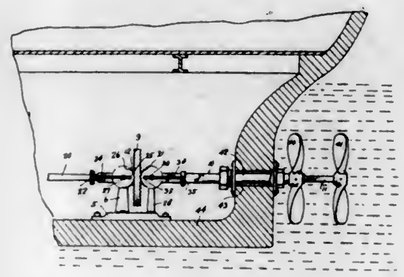
12. An armature winding comprising a plurality of layers of loops successively arranged radially outwardly, each layer being complete within itself about the axis of the winding and comprising a plurality of loops, and the loops of each layer being interwoven with certain of the loops of other layers whereby there is obtained a mechanical and electrical balance about the axis of the winding.

1,807,253. NEST. NELS V. PETERSON, Knox, Ind. Filed Feb. 28, 1930. Serial No. 432,103. 1 Claim. (Cl. 119—48.)



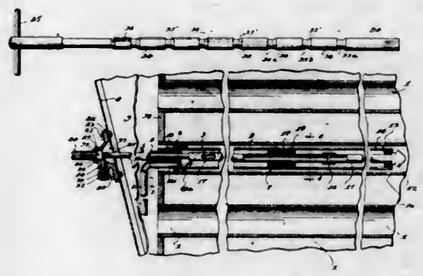
A nest of the character described comprising a body including a front wall having an entrance opening therein, a rear wall, a pair of side walls, a top and a forwardly and downwardly inclined bottom, a rearwardly and downwardly inclined false bottom spaced vertically from the first named bottom and extending from the front wall to a point in spaced relation to the rear wall, a cushioning pad on the first named bottom, a cushioning pad on the lower portion of the rear wall in opposed relation to the rear edge of the false bottom, and a cushioning pad on the false bottom having one marginal portion disposed beyond the rear edge of the false bottom and free of said false bottom.

1,807,254. PROPELLING MECHANISM. JOE PIANO, Chicago, Ill. Filed Aug. 18, 1930. Serial No. 476,126. 1 Claim. (Cl. 115—34.)



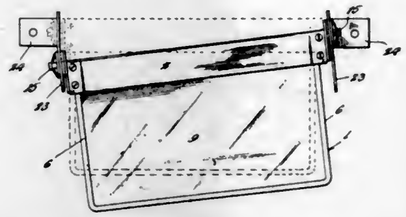
In a propeller mechanism of the class described, an outer shaft, an inner shaft in the outer shaft, means causing the outer shaft and inner shaft to rotate together and permitting the shaft to reciprocate with respect to one another, propellers connected to adjacent ends of the shafts, and means for simultaneously rotating and reciprocating the shafts, said means comprising a crown gear on the outer shaft to rotate therewith and permitting the outer shaft to reciprocate therethrough, a pair of gears in mesh with the double crown gear, said gears being arranged on opposite sides of the crown gear whereby the gears are rotated in opposite directions, each gear having a crank pin thereon, a pitman connecting the pin of one gear with one of the shafts, and a pitman connecting the pin of the other gear with the other shaft.

1,807,255. SOOT BLOWER. GRANT I. RAWSON, Detroit, Mich., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 24, 1922. Serial No. 556,308. 11 Claims. (Cl. 122—391.)



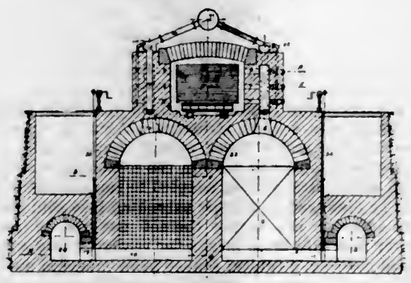
7. In a boiler cleaner, the combination with a reciprocatory and rotatable nozzle within a boiler, of an actuating member for said nozzle projecting exteriorly of the boiler in the retracted position of said nozzle, and means coacting with said member to definitely determine rotative positions of the nozzle spaced in the direction of its reciprocation.

1,807,256. GLARE SHIELD. FOREST C. RYDER, Elgin, Oreg., assignor to Ryder Anti-Glare Shield Co., Elgin, Oreg. Filed Oct. 23, 1928. Serial No. 314,446. 2 Claims. (Cl. 296—97.)



2. A glare shield comprising a pair of brackets formed of resilient sheet metal and each having a horizontal shank bent adjacent one end to form a support engaging side flange and a vertically disposed arm at the other end of the shank extending above and below the shank, the arm being formed with a longitudinally extending slot and the shank with a longitudinally extending slot intersecting the slot of the arm intermediate the ends thereof, a frame between said brackets, a transparent sheet carried by said frame, pivots passed through the slots of said brackets and engaged with upper corner portions of said frame to slidably and pivotally mount the frame, and means to hold the frame in a set position.

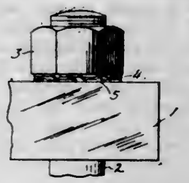
1,807,257. PROCESS FOR HEATING IN A GASEOUS ATMOSPHERE PARTICULARLY IN A REDUCING OR OXIDIZING ATMOSPHERE. HERBERT SCHAEFER, Luxemburg, Luxemburg. Filed Nov. 30, 1927, Serial No. 236,795, and in Luxemburg Oct. 4, 1927. 3 Claims. (Cl. 263—15.)



1. A method of heating bodies and materials which comprises the step of placing the body to be heated in a closed chamber, passing a stream of heating gas through one of a pair of regenerators and through said closed chamber, mixing the outcoming gas from said closed chamber with air, igniting the mixture and passing the ignited mixture through the other of said pair of regenerators to an out-take, the flow of gases through the closed chamber and regenerators being periodically reversed and including the step of passing a burning mixture through a system of channels surrounding said closed chamber.

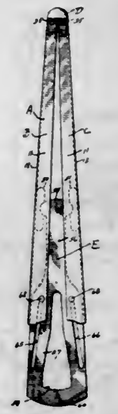
1,807,258. METHOD OF MAKING LOCK WASHERS. FRANK Q. SCHWARTZ, Detroit, Mich. Filed Feb. 25, 1929. Serial No. 342,569. 3 Claims. (Cl. 10—86.)

1. The method of forming lock washers having substantially L-shape tongues including the steps of pressing tongues in one direction from a substantially flat blank, and bending the free end portions of said tongues in the opposite direction so that the tongues extend diagonally through openings formed by the pressing operation



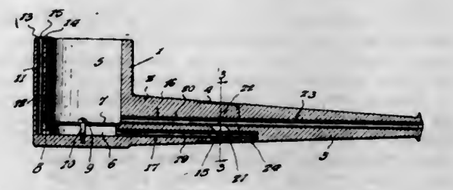
and so that edges of the tongues formed by the pressing operation project laterally beyond the blank for gripping engagement with a suitable surface.

1,807,259. NECKTIE PRESS. RICHARD F. SCHULZKE and DELBERT L. HAMILTON, Portland, Oreg. Filed Oct. 1, 1928. Serial No. 309,371. 4 Claims. (Cl. 223—19.)



1. In a necktie press of the class described the combination of elongated straight pressing arms of substantially channel shaped formation, means pivotally connecting the arms together at similar ends with the arms extending divergent away therefrom and the channels facing each other, elongated slide pieces in said channels, an elongated operating handle, means fulcruming the operating handle to said slide pieces, said operating handle having elongated slots therein for each of the pressing arms, and pins at the free ends of said pressing arms operating in said slots to guide the relation of the operating handle in its movement with respect to the pressing arms.

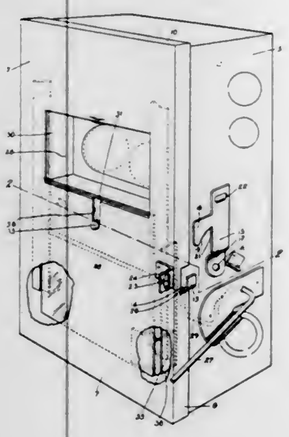
1,807,260. SMOKING PIPE. LEWIS J. THOMAS and AUBREY RIDDLE, Ekron, Ky. Filed Apr. 24, 1929. Serial No. 357,811. 2 Claims. (Cl. 131—12.)



1. A smoking pipe comprising a bowl having a tobacco chamber and a sub-chamber beneath the tobacco chamber,

a stem extending from said bowl and formed with a smoke passage leading from said tobacco chamber and a saliva passage leading from the sub-chamber and communicating with said smoke passage, a mouth piece abuting said stem and formed with a smoke passage registering with the smoke passage of the stem and a socket registering with the saliva passage, a tube extending through the smoke passage of the stem and mouth piece and removable with the mouth piece, and a tube extending through the saliva passage and projecting from the stem to fit into the socket of the mouth piece, said tubes having openings formed therein communicating with each other at the point of communication between the saliva passage and the smoke passage of the stem.

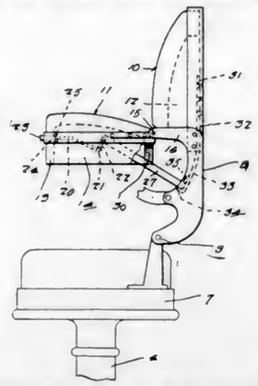
1,807,261. LATCHING AND SEAL RECEIVING STRUCTURE. DAVID T. WADSWORTH, Cold Springs, Ky., assignor to The Wadsworth Electric Manufacturing Company, Covington, Ky., a Corporation of Kentucky. Filed Jan. 13, 1927. Serial No. 160,991. 3 Claims. (Cl. 292—104.)



1. A latch for securing an angularly flanged cover to a side wall received thereby comprising a latch body adapted for pivotal mounting on the exterior facing of the side wall and having an arcuate edged lug movable therewith substantially beyond the face of the cover, the cover flange having an outwardly struck lug providing an open topped way for entry of the latch member and the lug presenting an edge cooperating with the arcuate edge of the lug on the latch member.

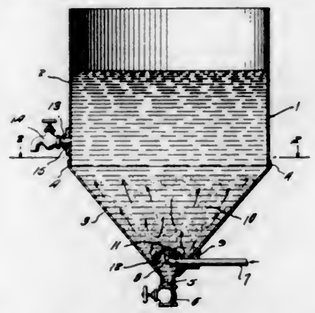
1,807,262. CONVERTIBLE BARBER CHAIR. LAWRENCE L. WAGES, Bessemer, Ala., assignor of one-half to G. H. McClary, Bessemer, Ala. Filed Apr. 23, 1929, Serial No. 357,569. Renewed Feb. 7, 1931. 3 Claims. (Cl. 155—132.)

1. In combination, a chair having a seat and rockable back frame, a pair of cushions secured to the frame, the upper being rigidly secured, the lower cushion pivoted to the frame and having depending flanges about its perimeter to form a cavity, a crank shaft rotatably mounted in the opposite side flanges within said cavity on the lower cushion, a track bar mounted on the frame and provided with a stop lug on its lower end, a pair of arms each rigidly secured to said crank shaft at one end and each detachably engaging said stop lugs at its other end to detachably support said lower cushion at right angles to the upper cushion, and means rotatably mounted on the crank shaft and abutting a flange on the lower cushion for supporting said lower cushion in angular relation to



the upper cushion and at the same time for detaching said arm from said lugs so as to permit the lower cushion to swing into vertical alignment with said upper cushion.

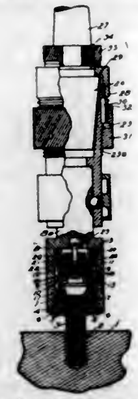
1,807,263. APPARATUS FOR DISSOLVING SOLIDS. GEORGE A. WALTER, Ithaca, N. Y. Filed Dec. 1, 1928. Serial No. 323,175. 1 Claim. (Cl. 23—270.)



An apparatus for forming solutions of soluble salts in water comprising a tank structure having an upper cylindrical section and a lower conical section, said cylindrical section adapted to contain the soluble salts in solution and said conical section adapted to contain the soluble salts to be dissolved, a conduit extending into said conical section adjacent the vertex thereof adapted to convey the water into said tank, means for retaining said conduit in a fixed position, a conical shaped baffle mounted over the outlet of said conduit adapted to distribute the water flowing through the conduit evenly throughout the material to be dissolved and prevent the sludge from clogging the inlet conduit, a conduit extension depending from the vertex of the conical section and adapted to discharge material from said tank, a valve attached to said conduit extension for controlling the flow of material from the lower conical section, a conduit extension in the upper cylindrical section for removing the solution of soluble salts in the water, means for controlling the flow of solution, and means for retaining the last mentioned conduit in a fixed position.

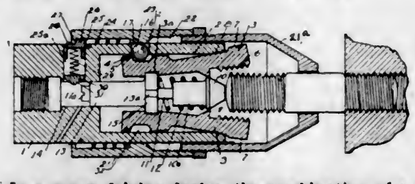
1,807,264. SELF-OPENING TOOL. JOHN V. WALKER, Fairview, Pa., assignor to Titan Tool Company, Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 27, 1929. Serial No. 342,990. 3 Claims. (Cl. 81—53.)

1. In a self-opening tool, the combination of a head having a tapered socket, said socket having a peripheral wall of polygonal form; separable jaws in the socket conforming approximately when closed to the socket walls; a mounting for said jaws slidable in the head to open and close the jaws; and spring-actuated means opening the jaws, comprising a plug having wedging surfaces slidingly



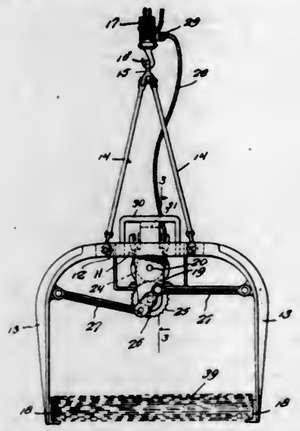
mounted within the jaws said plug forming a bottoming surface with the jaws in closed position, and a spring exerting pressure on the plug.

1,807,265. SCREW DRIVING DEVICE. JOHN V. WALKER, Fairview, Pa., assignor to Titan Tool Company, Erie, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1929. Serial No. 398,547. 9 Claims. (Cl. 81—53.)



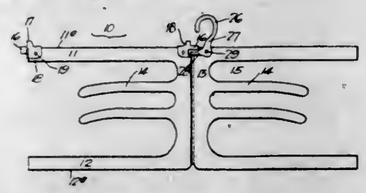
1. In a screw driving device, the combination of a head having a jaw socket; separable jaws axially movable and rotatable in the socket and closed by the walls of the socket as drawn thereinto; a clutch mechanism locking the jaws rotatively with the head; and means actuating the clutch mechanism independently of the movement of the jaws relatively to the head.

1,807,266. GRAB. CARL WAZLAVEK, Massillon, Ohio, assignor of one-fourth to William B. Fischer, Massillon, Ohio. Filed July 14, 1930. Serial No. 467,903. 7 Claims. (Cl. 294—106.)



1. In a lifting device of the character described, spaced pairs of gripping jaws mounted for movement toward and away from each other, motor-actuated means for operating said jaws, and brake mechanism for holding said jaws immovable in gripping relation with the load, and releasing said jaws at a predetermined interval.

1,807,267. DRESS SUSPENDING AND CARRYING DEVICE. ALBERT W. WINSHIP, Utica, N. Y., assignor to Berg-Winship, Inc, Utica, N. Y., a Corporation of New York. Filed Apr. 29, 1929. Serial No. 359,009. 6 Claims. (Cl. 223—61.)



1. A dress suspending and carrying device consisting of a frame having two straight parallel spaced rods and therebetween a pair of oppositely extending shoulder-supporting bars, said frame being foldable transversely of said spaced rods whereby a dress may be hung by its shoulders upon said extended shoulder bars, the frame and dress thereon then folded and then the projecting portion of said dress wrapped bodily successively about both said rods.

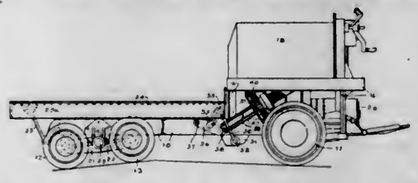
1,807,268. CONTAINER FREIGHT CAR. GRAHAM C. WOODRUFF, Bronxville, N. Y., assignor to The L. C. L. Corporation, a Corporation of Delaware. Filed Apr. 30, 1929. Serial No. 359,392. 15 Claims. (Cl. 105—366.)



1. A container car comprising a body, bulkheads disposed in spaced relation transversely of the body to form a series of container compartments, one of the end compartments of the series terminating a distance inwardly from one end of the car to provide an uninterrupted floor space beyond said bulkhead and between the same and said end of the car, said bulkhead having a passage communicating with said space, whereby the platform of a lifting truck may be inserted through said passage and stowed under a container in the said compartment next adjacent the said floor space.

2. In combination, a car having a platform portion, a plurality of freight containers removably mounted on the car, and a lift truck on said platform portion having its lifting platform stowed beneath one of the containers.

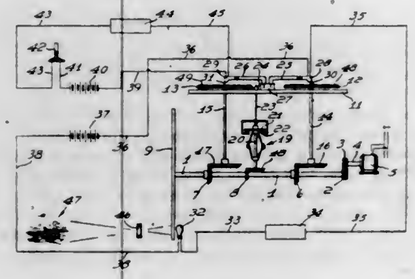
1,807,269. INDUSTRIAL TRUCK. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell-Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Nov. 23, 1925, Serial No. 70,744. Divided and this application filed Jan. 11, 1928. Serial No. 245,979. 7 Claims. (Cl. 254—10.)



1. In an industrial truck, a chassis, a load lifting platform mounted on the chassis, and means for actuating

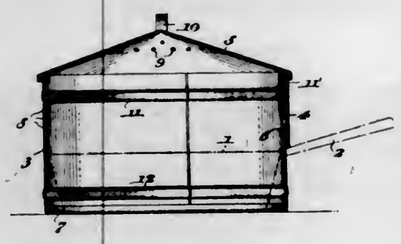
said load lifting platform, said means including a power actuated draw-bar, a pair of toggle links, one of said links being pivoted at one of its ends to the chassis, and at its other end to said power actuated draw-bar, the other of said links being pivoted to the load lifting platform and to the first of said links at a point intermediate the ends of the first of said links.

1,807,270. VISIONOGRAPH RECORD AND METHOD OF MAKING THE SAME. CHARLES EMANUEL ALBERTI, Chicago, Ill. Filed Aug. 13, 1928, Serial No. 299,408. Renewed Oct. 24, 1930. 4 Claims. (Cl. 178—5.)



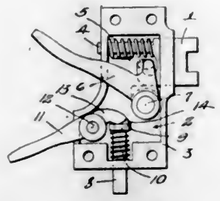
1. A device of the type described comprising a rotatable shaft, a disc secured to the shaft and having a plurality of openings arranged in the form of a spiral, a plurality of shafts operatively connected with said rotatable shaft, a turntable carried by each of said plurality of shafts, a record disposed upon each of the turntables, means for projecting an image of a distant scene upon that portion of the disc having the openings therein, the rays of light from said image passing through the openings in the disc when the latter is rotating in substantially a continuous beam, light-sensitive electrically controlled means adapted to vary electric current in proportion to the light passing through the openings, means associated with said light-sensitive electrically controlled means for forming undulations in one of said records, and sound-sensitive means associated with the other of said records for forming undulations therein.

1,807,271. ATTACHMENT FOR FRYING PANS. MARIAM E. ASADOORIAN, Pasadena, Calif. Filed Mar. 24, 1930. Serial No. 438,469. 3 Claims. (Cl. 53—7.)



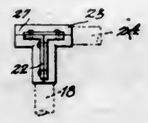
1. An attachment for frying pans comprising a drum adapted for association with a frying pan and provided with an opening in its side extending downwardly from its upper edge and constituting a gap in the said edge adapted to accommodate the handle of the frying pan, and a removable cover for said drum which is adapted for closing the gap at the upper part of said opening.

1,807,272. SASH HOLDER AND STARTER. ROY T. AXE, Syracuse, N. Y., assignor to The O. M. Edwards Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Aug. 11, 1926. Serial No. 128,554. 6 Claims. (Cl. 292—40.)



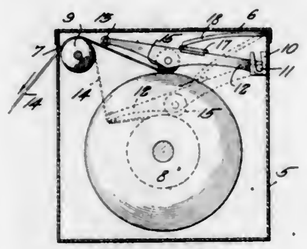
1. A sash holder and starter comprising a detent member and a starter member, handles for operating said members movable in opposite directions toward each other and arranged to be grasped pinch handle fashion.

1,807,273. CAMERA BELLOWS SUPPORT. GEORGE C. BEIDLER, Rochester, N. Y. Filed July 16, 1926. Serial No. 122,911. 1 Claim. (Cl. 95—39.)



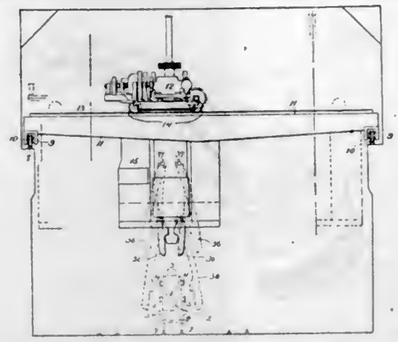
In a photographing apparatus, a base frame having camera supporting rails, standards on said frame, arms extending approximately horizontally from the standards, a lens board supported by the said arms, and a bellows hanger suspended from the said arms and extending under the bellows.

1,807,274. FILM STRAIGHTENING DEVICE. GEORGE C. BEIDLER, Rochester, N. Y. Filed Aug. 9, 1927. Serial No. 211,792. 2 Claims. (Cl. 242—75.)



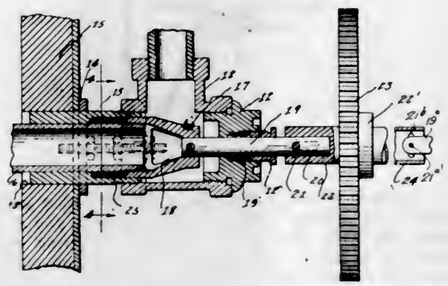
1. A box, a rotatively supported roll of film in the box, bearings in the box at one side of the axis of the roll, a frame having trunnions mounted in the bearings, a roller journaled in the frame between its ends adapted to ride on the surface of film on the roll, a roller at the end of the frame adapted to engage film unwound from the roll and operative to remove excessive curl from the film, and means for forcing the first mentioned roller into engagement with the film.

1,807,275. INGOT STRIPPER. CLINTON L. BIGLER and JOHN KLOOS, Alliance, Ohio, assignors to The Morgan Engineering Company, Alliance, Ohio. Filed Jan. 5, 1929. Serial No. 330,583. 14 Claims. (Cl. 22—95.)



2. In an ingot stripper, means for exerting downward pressure on a mold, means for pulling an ingot away from the mold, and means for placing the pulling strain upon the first mentioned means.

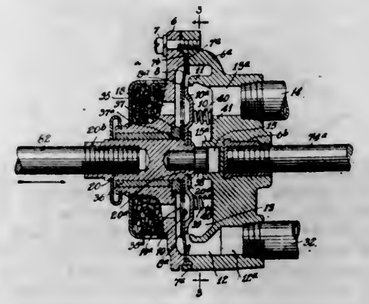
1,807,276. BOILER CLEANER. FRANK BOWERS, Detroit, Mich., assignor, by mesne assignments, to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Mar. 21, 1921. Serial No. 453,872. 16 Claims. (Cl. 122—392.)



1. In a boiler cleaner system, a pair of rotatable blower units mounted upon separate boilers, means for connecting said units to each other so as to permit movement of said units relatively to each other to provide for expansion and contraction of the units independently of each other, and means for rotating said units simultaneously.

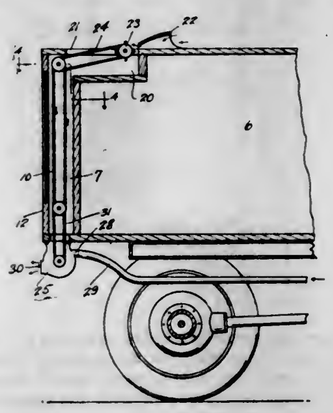
1,807,277. VACUUM BRAKE SYSTEM. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Sept. 12, 1929. Serial No. 392,004. 11 Claims. (Cl. 121—41.)

1. In a valve mechanism of the kind described, the combination with a valve body provided with an annular seat, a diaphragm for engaging said seat provided with inlet apertures for higher fluid pressure, and having marginal portions in sealing engagement with the valve body, said diaphragm when seated dividing the adjacent space within the casing into a central chamber and an annular suction chamber, a disc valve of smaller diameter than the diaphragm, having a seat for engaging the diaphragm and closing communication through said apertures, a valve actuating part movable with respect to the valve body and connected with said diaphragm and disc valve, said valve actuating part and said casing being provided with means for connecting them respectively with a physically operable part and with a part connected



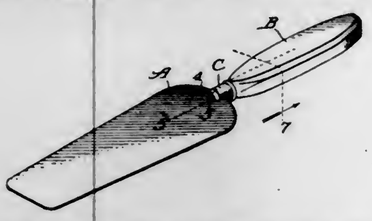
with the vehicle, said valve body being provided with means for connecting said central chamber with a power actuator and for connecting said suction chamber with a source of suction, and yielding resistance means interposed between the valve body and a part connected with the valve actuating part, and normally holding said disc valve seated and the diaphragm unseated.

1,807,278. AUTOMOBILE ADVERTISING APPARATUS. WILLIAM W. BYRNE, Mobile, Ala. Filed May 22, 1930. Serial No. 454,696. 3 Claims. (Cl. 40—38.)



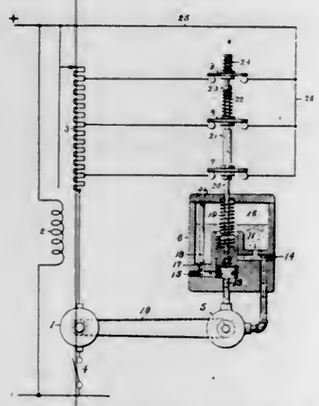
1. The combination with a vehicle of movable advertising matter, a fan, a funnel on the vehicle leading to the fan so that air collected in the funnel by the movement of the vehicle will be discharged on the fan, and means operatively connecting the fan with the movable advertising matter for causing the actuation thereof, an exhaust pipe, an exhaust motor, and means operatively connecting the exhaust motor with the movable advertising matter, said movable advertising matter being in the form of a plurality of endless webs trained about the rollers, said belts and rollers being interconnected by simultaneous operation, the rear of the vehicle being provided with a plurality of compartments one for each web and set of rollers, said compartments surrounding a central opening in the rear of the vehicle, a door hingedly mounted to swing over the compartments to close them, and said door having transparent panels one for each compartment.

1,807,279. SPATULA. EDWARD P. BYRNES, Chicago, Ill., assignor to The Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 2, 1929. Serial No. 396,874. 2 Claims. (Cl. 294—7.)



1. In spatula comprising: a handle having at one end a boss and having a bore extending through said boss into the body of the handle; a ferrule on said boss having an end-wall and a slot through said end-wall and the adjacent portion of the ferrule; and a wide, thin, flexible and resilient spatula-blade having a tang wedged in said bore and having a widened butt-portion entered in said slot and embedded in a kerf in said boss, whereby said blade may be flexed and curved by applying pressure through the medium of said handle without injury to the blade.

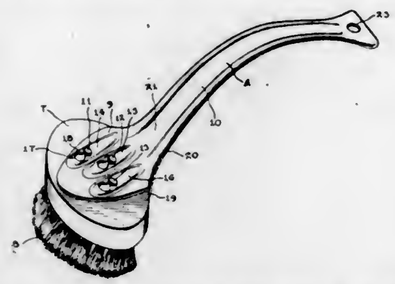
1,807,280. ELECTRIC MOTOR SPEED CONTROLLER. CHARLES E. CARPENTER, Hopewell Junction, N. Y. Filed Apr. 2, 1927, Serial No. 180,599. Renewed Oct. 2, 1930. 17 Claims. (Cl. 171—229.)



1. An electric motor controller comprising a fluid pump driven in accordance with the motor speed, a fluid motor operated by continuous fluid pressure created by said pump, a valve operated in accordance with the pressure created by the pump to control the pressure operating said fluid motor, a switch operated by said fluid motor, and means controlled by said switch for regulating the electric motor to control the speed thereof.

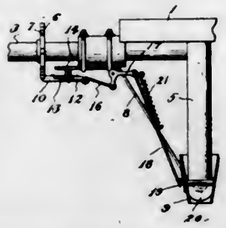
1,807,281. BRUSH. PAUL A. CROSS, Takoma Park, Md. Filed Nov. 20, 1929. Serial No. 408,621. 1 Claim. (Cl. 306—23.)

A brush holder including a substantially spatulate shaped attaching portion and a handle portion, the attaching portion having a series of hollow ribs arranged close together to form intervening narrow brush head gripping portions extending longitudinally of the ribs, each rib being provided with an opening having a wide portion and a narrow portion, the narrow portion of each opening being slightly depressed to form a seat, said openings being adapted to receive headed fastening elements projecting from the upper face of a brush head to permit the heads to pass through the wide portions and slide in the narrow portions of said openings to seat the heads of the headed elements in said seats and thereby detachably secure the holder to a brush head, one of the said ribs being extended inwardly beyond the others and the inner portion of the extended rib constituting a thumb receiving



portion and thereby affording a firm grip on the handle, said handle having inturned side flanges extending longitudinally of the handle and provided with laterally deflected outer terminal portions arranged to fit against one of the side faces of the brush head to coact with said headed elements to prevent twisting of the holder on the brush head.

1,807,282. SEED DISTRIBUTING ATTACHMENT FOR PLANTERS. JESSE C. CROWLEY, Paris, Tex. Filed Sept. 30, 1929. Serial No. 396,372. 2 Claims. (Cl. 111—51.)

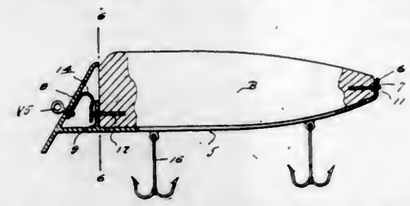


1. A seed distributing attachment for use with a cotton planter, said planter having a frame, wheels, and a rotatable axle, said attachment comprising a driving wheel adapted to be secured on said axle, a bracket adapted to be secured to said frame, a valved seed spout, a deformable bell crank lever pivoted on said bracket and having one arm thereof in a position to be rocked by said driving wheel, the other arm thereof carrying a link connected to an arm of a second bell crank lever, said second bell crank lever being pivoted to said bracket and having operative connections to said valved seed spout, and yieldable means tending to close said valved seed spout, said deformable bell crank lever having means preventing relative angular movement between its arms in one direction, and further having resilient means permitting angular movement between said arms in the other direction, whereby movement imparted by said driving wheel to one of said arms of said deformable bell crank lever in said first direction is transmitted to said other arm and to said valved seed spout, but movement imparted to said first mentioned arm in said other direction is absorbed by said resilient means and is not transmitted to said other arm and said valved seed spout.

1,807,283. MULTIPLE BODY ARTIFICIAL FISH LURE. HOWARD J. DICK, Benton Harbor, Mich. Filed Apr. 8, 1930. Serial No. 442,590. 2 Claims. (Cl. 43—46.)

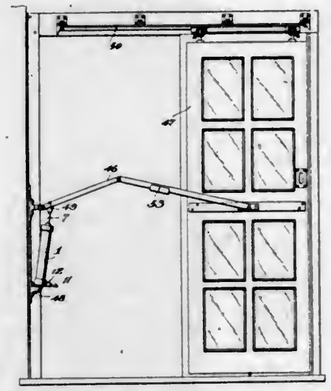
1. A device of the class described including a frame comprised of a bottom plate and a front plate at an angle

to the bottom plate, a body, said bottom plate having a portion extending upwardly at its rear end and formed with an opening, a flange rising from the front portion



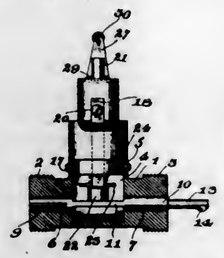
of the bottom plate and having a slot, said body having a pin to extend through the opening and a tongue to extend through the slot.

1,807,284. CHECKING MEANS FOR DOOR OPERATING MECHANISM. ANDREW T. DUPONT, Washington, D. C., assignor to Elevator Supplies Co., Inc., Hoboken, N. J., a Corporation of New Jersey. Filed May 16, 1929. Serial No. 363,674. 16 Claims. (Cl. 188—94.)



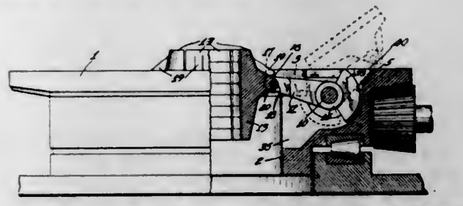
1. In a mechanism for controlling the movements of a door, a door, a member connected to the door, means for varying the rate of movement of said member while the door moves in one direction, and means controlled by said member for impeding the movement of said member while the door moves in the opposite direction.

1,807,285. SIGNAL SWITCH FOR MOTOR VEHICLES. HARRY L. FURR, Washington, D. C., assignor, by direct and mesne assignments, of two per cent to F. J. Ellsworth and five per cent to Herbert W. Steigel, Staunton, Va. Filed Mar. 27, 1928. Serial No. 265,050. 4 Claims. (Cl. 200—59.)



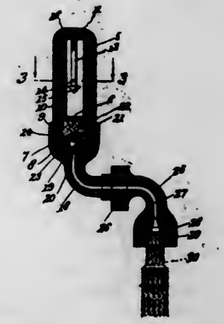
1. A switch mechanism adapted to be interposed between a vehicle transmission casing and the adjacent end of a speedometer shaft comprising a hollow body member, a cam link operable therein forming a continuation of the speedometer shaft, a circuit maker and breaker supported on said body member, and means for moving said circuit maker and breaker into and out of operative association with said cam link.

1,807,286. ROTARY TABLE. HERBERT W. GOETZ, Alhambra, RALPH C. CLARK, Los Angeles, and JOHN J. FERLIN, Huntington Park, Calif. Filed Mar. 26, 1928. Serial No. 264,690. 5 Claims. (Cl. 24—248.)



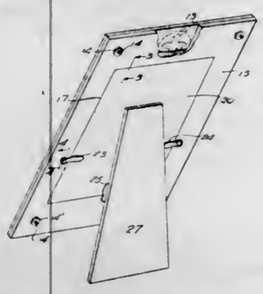
1. In combination, a base provided with a bore adapted to receive a string of well piping and also provided with a recess communicating with said bore, an arm having a pivotal mounting in said recess, and a gripping jaw connected to the swinging end of the arm and adapted to engage the well piping or be swung back to inoperative position above the base by swinging movement of the arm, the said recess having a rear abutment surface so positioned as to permit rearward swinging of the arm to a position whereby substantially the entire gripping jaw is swung rearwardly beyond the vertical dead center of said pivotal mounting for the arm.

1,807,287. COMPRESSION AIR VALVE TESTER. FRANK N. HENKEL, Hammond, La. Filed Feb. 19, 1929, Serial No. 341,096. Renewed Apr. 15, 1931. 3 Claims. (Cl. 73—51.)



2. A compressed air valve tester comprising a flanged base having a conduit therethrough and a valve seat at the mouth of the conduit, a check valve adapted to close against said seat, a perforated cage about the check valve, resilient means acting between said valve and cage for normally retaining the valve closed, a compressible gasket on the base extending about said cage, a transparent tube seated at one end upon said gasket, a gasket also closing the upper end of said tube, a protective jacket extending above and about said glass tube and removably connected with the flange of the base, said jacket having a slotted side wall for observation into said chamber, a body of liquid in said chamber, a small pipe leading through the wall of the protective jacket and gasket, and extending through the upper portion of the chamber confined by the glass tube, thereby having free interior communication both with the upper portion of the chamber and with the external atmosphere, said pipe having a conical head at its lower end and a perforation at its side wall to permit the escape of air from above the body of liquid.

1,807,288. PICTURE SUPPORT. SIGMUND HERBERT, New York, N. Y. Filed June 11, 1929. Serial No. 369,987. 4 Claims. (Cl. 40—148.)



1. A picture support comprising a front glass plate having a central transparent panel through which to view a picture, a backplate of substantially the same size as the glass plate, the backplate having an opening substantially the size of the transparent panel, bolts passing through the plates, a filler plate secured to the backplate and fitting into the opening therein, means to secure the filler plate in place to hold a picture behind the glass plate, and a brace hingedly secured to the filler plate.

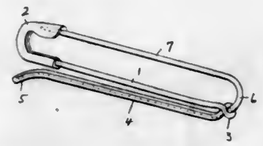
1,807,289. CANOE PADDLE. HORACE BELL HERRING, Memphis, Tenn. Filed Dec. 19, 1930. Serial No. 503,562. 2 Claims. (Cl. 9—24.)



1. In a canoe paddle, a handle having a shouldered shank portion with the blunt end and an exterior recess, a bolt lying in said recess and extending beyond the blunt extremity, a coupling piece having an elongated tapered socket to receive said shank portion and provided with a flat perforated base to receive thereagainst the blunt extremity and to admit therethrough the projecting end of the bolt, said coupling piece having a cut-away portion below the socket base to receive the projecting end of the bolt, a nut lying in such cut-away portion and threaded on the projecting end of said bolt, and a blade carried by the coupling piece.

1,807,290. SHOULDER STRAP RETAINER. ANSEL C. HOOPER, Miami Beach, Fla. Filed Oct. 22, 1930. Serial No. 490,528. 4 Claims. (Cl. 24—86.)

4. A shoulder strap retainer of the character described comprising a metallic rod, a safety catch rigidly mounted on one end portion of the rod, an eye formed integrally with the other end of the rod, a strap engaging arm formed integrally with the eye and having a turned back portion extending through the eye, and a pin formed integrally with the turned back portion of the arm and having a pointed end portion releasably engageable with

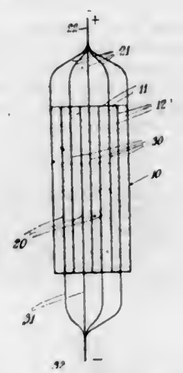


the safety catch in a manner to secure the pin in a garment, the arm extending substantially parallel with the rod in spaced, opposed relation thereto and having a curved free end portion directed away from the safety catch.

1,807,291. PROCESS OF MANUFACTURING SMOOTH SURFACE FLOOR COVERINGS. RALPH G. JACKSON, Woodbury, N. J. Filed June 1, 1927. Serial No. 195,872. 7 Claims. (Cl. 91—68.)

1. A process of making smooth-surfaced floor coverings which process consists in coating a support with a continuous layer of a flowable composition, solidifying the said composition to substantially that stage at which it is free from stickiness when handled and suitable for use as a wear surface of the said floor coverings and its surface is smooth, and then at that stage and before further drying coloring the body of the said substantially finished layer by impregnating it with a coloring agent which decorates and leaves a continuous smooth surface substantially identical with said wear surface and substantially free from any additional surface layer.

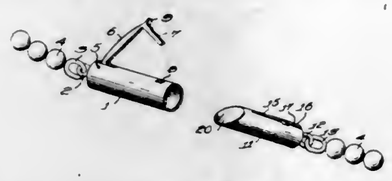
1,807,292. TRANSLATING DEVICE. ABRAHAM JOFFÉ, Leningrad, Union of Socialist Soviet Republics, assignor to Industrial Research Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1927, Serial No. 168,450, and in Germany Aug. 3, 1926. 12 Claims. (Cl. 171—327.)



2. An energy-conversion device comprising a plurality of layers of dielectric material of a thickness of an order of about one micron and intervening layers of metal.

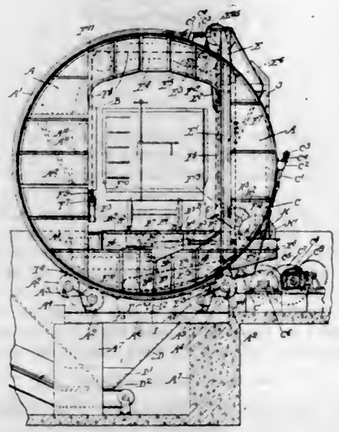
1,807,293. JEWELRY FASTENER. CHARLES BERNARD KELLER, Willow Grove, Pa. Filed Oct. 23, 1929. Serial No. 401,764. 4 Claims. (Cl. 24—230.)

3. A fastening of the character described, consisting of a female member having a pair of registering openings in its walls, a hinged locking element carried by said female member and adapted to engage said openings, a male member adapted to fit within the female member and having a spring catch to engage said female member and also having recesses to register with the openings of said female member to be engaged by said locking element to secure the said members in locked relation, said male



and female members being of cylindrical form, whereby when the male member is placed in the female member, a twist can be given to said male member to cause register of the recesses and openings in the male and female member so as to receive said locking element to lock the members together.

1,807,294. CAR DUMPER. ELWIN H. KIDDER and WILLARD E. ERICKSON, Chicago, Ill., assignors to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 1, 1927. Serial No. 209,664. 6 Claims. (Cl. 214—55.)

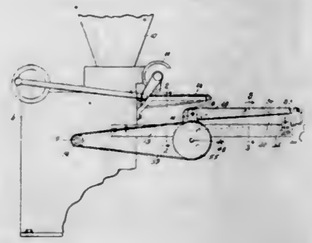


1. In a car dumper, a cradle and means for rotating it, clamps adapted to hold the car in place in the cradle during rotation, a motor for seating the clamps against the car and separate positive independent of gravity means for raising the clamps out of contact with the car.

1,807,295. CONVEYER AND BALLER. WILLIAM G. KIRCHHOFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 3, 1930. Serial No. 493,031. 5 Claims. (Cl. 107—4.)

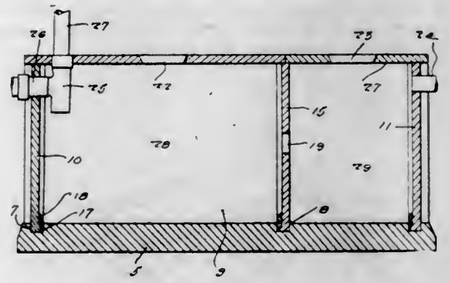
1. The combination with a dough divider, having driving means, of a combined conveyer and baller comprising supporting structure attached to the divider, two pairs of aligned rollers carried by the supporting structure, said pairs being spaced and the rollers of each pair being disposed angularly relative to one another, a pair of endless belts carried by the rollers and forming a trough

V-shaped in cross section, a plate disclosed beneath and against the trough-forming portion of said belts, a gear fixed at one end of each roller of one pair, a shaft carried



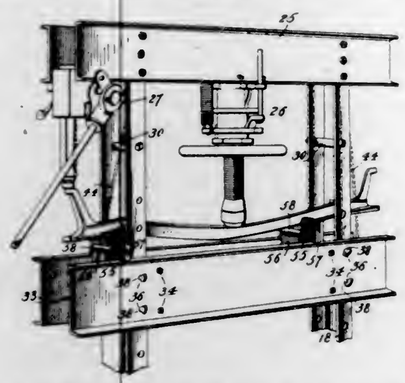
by the supporting structure, a gear fixed upon the shaft and meshing at differing gear ratios with the aforesaid gears, and means for driving said shaft from the driving means of the divider.

1,807,296. SEPTIC TANK. JOHN G. LAUBHEIMER, Nashville, Tenn. Filed July 16, 1928, Serial No. 293,148. Renewed Nov. 1, 1930. 1 Claim. (Cl. 210—6.)



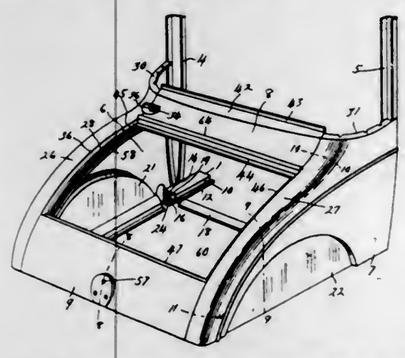
A septic tank of the class described comprising a bottom slab formed with continuous marginal U-shaped grooves, along its sides and ends, a transverse U-shaped groove intermediate its ends, a pair of individual end and side walls having their lower edges disposed in said groove, each of the said side walls being formed with U-shaped marginal grooves at each end, and a transverse groove intermediate its ends, which are in alignment with the grooves at the ends and intermediate groove on the bottom slab, a partition wall seated in the aligned grooves on the bottom slab and sides intermediate their ends to form a sealed partition dividing the interior of the tank into two compartments, said partition having openings therein spaced above the bottom slab and below the scum line and above the line of sedimentation, an outlet conductor extending through one end wall above the openings in the partitions, an inlet conductor extending through the other end wall, a pair of covers resting on the edges of the side, end and partition walls, a T-fitting connected with the inner end of the outlet conductor having one branch extending through and above one cover to vent the one compartment and the other branch extending down into the tank, all of the ends of the walls confined within the grooves flaring outwardly in the margins adjacent the edges on one side to provide anchorage, and oakum and cement joints packed in the groove on said one flare edge side.

1,807,297. PRESS FRAME. ROBERT E. MANLEY, York, Pa., assignor to Manley Manufacturing Company, York, Pa., a Corporation of Delaware. Filed Oct. 15, 1926. Serial No. 141,849. 11 Claims. (Cl. 153—53.)



1. A press frame consisting of a pair of vertical channels, a bar secured to each flange of each channel and extending above the tops of the channels, means connecting the bars above the channels, and a table slidable on said channels and bars.

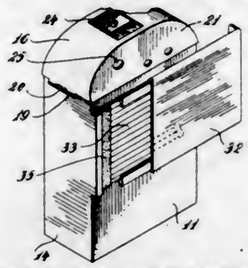
1,807,298. DECK CONSTRUCTION FOR VEHICLE BODIES. WILLIAM MARSHALL, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 13, 1926. Serial No. 154,586. 2 Claims. (Cl. 296—28.)



1. In a vehicle body, the combination with a pair of side sills, a cross bar terminally secured to said sills at the rear ends thereof, rear quarter pillars secured to said sills intermediate their ends, a back panel secured to said rear quarter pillars, side panels extending from said pillars to said cross bar and having inwardly extending lateral portions, said side panels having inturned lateral flanges supporting and secured to said back panel, and a transversely extending panel terminally secured to said inwardly extending portions of said side panels and having a forwardly extending lateral flange supporting and secured to said back panel, said forwardly extending flange being provided with a stiffening flange located in advance of said back panel.

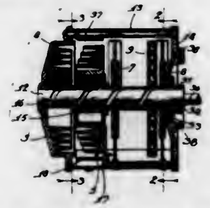
1,807,299. COMBINATION CIGARETTE CONTAINER AND MATCH GUARD.. ADOLF METJE, New York, N. Y. Filed Dec. 16, 1929. Serial No. 414,268. 1 Claim. (Cl. 206—38.)

In a device of the class described, a receptacle for cigarettes, a cap thereon having a roof, said cap being hinged to said receptacle, said roof having an orifice therein adapted to have cigarettes projecting therethrough into said cap, a floor in said cap, said floor and roof forming a secluded compartment, and an aperture in



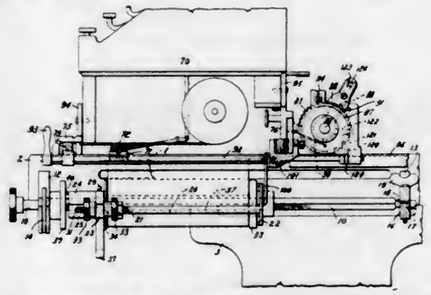
said cap adapted to have ignited matches pass therethrough into said compartments spaced apart ridges on said receptacle, a slide apron, means on said ridges for guiding said apron, and means for retaining a book of matches between said ridges.

1,807,300. RADIOFREQUENCY AMPLIFYING SYSTEM. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 6, 1927. Serial No. 224,323. 9 Claims. (Cl. 179—171.)



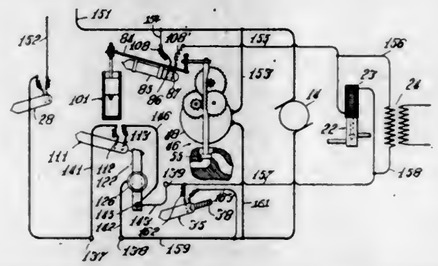
1. In a radio frequency amplifying system, means for coupling the output of one audion tube to the input of another tube, tuning the input circuit of one of the tubes, and equalizing the transfer of energy from tube to tube at all frequencies of the tuning means, said means comprising a movable tuning condenser element, a shaft for actuating said element, and a coil actuated by said shaft and shiftable thereby longitudinally of the axis of the shaft, said coil lying substantially within the confines of a surface defined by a line moved so as to remain parallel to the axis of said shaft and so as to follow the periphery of said movable tuning element.

1,807,301. CARBON CONTROLLER FOR TYPEWRITING MACHINES. EDWARD KIRBY BOTTLE, Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Ontario. Filed Nov. 15, 1926, Serial No. 148,361. Renewed Oct. 22, 1930. 25 Claims. (Cl. 197—126.)



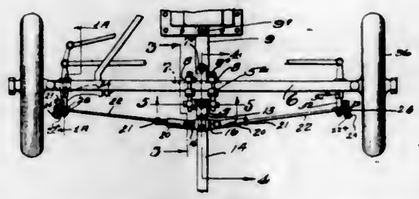
25. In a machine of the character described, in combination, printing mechanism shiftable in line spacing and in letter spacing directions, a platen, a transfer sheet extending across said platen, a transfer sheet supporting frame reciprocally shiftable longitudinally of said platen and relative to said printing mechanism, and means adapted operatively to connect said sheet with said frame at opposite sides of said platen so that said sheet shifts with said frame in each direction while remaining in subtantially flat manifolding condition.

1,807,302. CONTROL SYSTEM FOR BURNERS. MARSHALL H. BRADEN, Rock Island, Ill., assignor to The Nu-Way Corporation, Rock Island, Ill., a Corporation of Illinois. Filed Mar. 30, 1927. Serial No. 179,429. 27 Claims. (Cl. 158—28.)



1. In a control system for burners, the combination with a burner motor, of a main supply circuit therefor, thermally responsive means controlling said supply circuit, an electrically operated control unit adapted to be energized upon the energization of said supply circuit and comprising a moving element, having movement in two directions, an ignition circuit, an ignition switch controlling the energization of said ignition circuit from said supply circuit, said ignition switch normally being in closed position during the nonoperating intervals of the burner, and means for controlling the position of said ignition switch, said means being operated by the movable element in one direction only.

1,807,303. TRAILER HITCH. GEORGE C. BURKETT, Indiahoma, Okla. Filed Oct. 15, 1929. Serial No. 399,802. 1 Claim. (Cl. 280—33.55.)

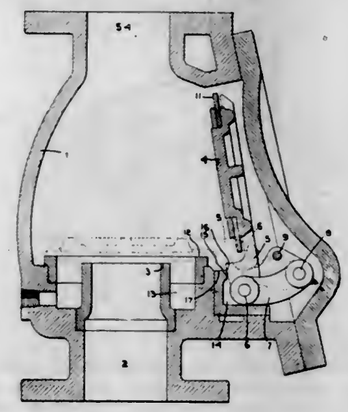


A device of the class described comprising an axle, spindles mounted on the axle, pairs of front and rear clamping members straddling the axle, means for securing said members to the axle, a U-shaped member, a link pivotally connecting said member to the crank case of the vehicle to be towed, said rear clamping members securing the U-shaped member to the axle, and the front clamping members having forwardly extending recessed portions, a vertically swingable block provided with integral extensions journaled in the recessed portions of said front clamping members, a vertically arranged bolt passing through said block and a draft member pivoted thereon for horizontal swinging movement, angle blocks secured to the draft bar, bifurcated members pivotally connected to said angle blocks and having rods adjustably secured thereto and to the axle spindles of the vehicle.

1,807,304. ESTER OF DIETHYLENE GLYCOL. ROBERT CALVERT, Wilmette, Ill., assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill., a Corporation of Illinois. Filed June 25, 1928. Serial No. 288,305. 10 Claims. (Cl. 260—106.)

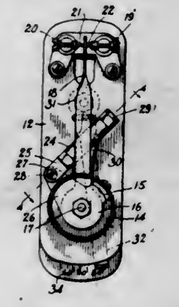
1. A composition of matter comprising an ester of an alcohol containing at least one ether group and originally at least two hydroxyl groups, one of which hydroxyl groups is replaced, in the finished ester, by the radical of an aliphatic acid containing less than five carbon atoms to the molecule, and another hydroxyl group is replaced by the radical of an aliphatic acid containing more than ten carbon atoms to the molecule.

1,807,305. VALVE FOR SPRINKLER SYSTEMS. EZRA E. CLARK, Newtonville, Mass.; Frances Clark executrix of said Ezra E. Clark, deceased. Filed June 8, 1928. Serial No. 283,969. 6 Claims. (Cl. 169—22.)



1. In a valve structure for sprinkler systems, the combination with a valve casing having a valve seat, of a valve therefor, a movable member to which the valve is pivotally connected for swinging movement toward and from the valve seat, said member and valve being arranged to have a gravitational movement after the valve is opened, and means co-operating with said valve and member when in the position to which they gravitate to lock the valve against closing movement.

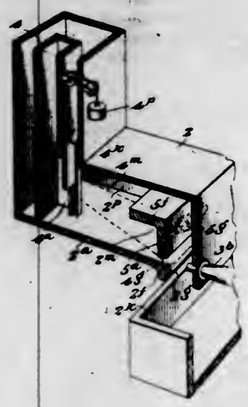
1,807,306. THERMOSTAT. HOWARD D. COLMAN, Rockford, Ill. Filed Jan. 21, 1928. Serial No. 248,348. 4 Claims. (Cl. 297—11.)



1. A control thermostat for a temperature regulating system, comprising, in combination, a thermal element

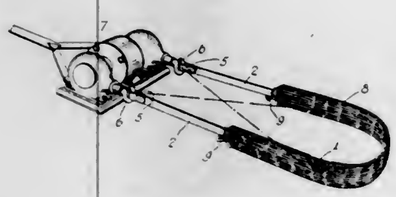
having an adjustable mounting, control means actuated by the movement of said element upon temperature changes in the air to which the element is exposed, a member whose dimensions change upon the absorption and loss of moisture, and means for communicating the dimensional changes of said member to the mounting for said element whereby to change the operative position of the latter.

1,807,307. APPARATUS FOR MELTING FINELY DIVIDED MATERIALS. ADRIEN DAWANS, Brussels, Belgium. Filed July 12, 1928, Serial No. 292,211, and in Belgium July 29, 1927. 6 Claims. (Cl. 263—27.)



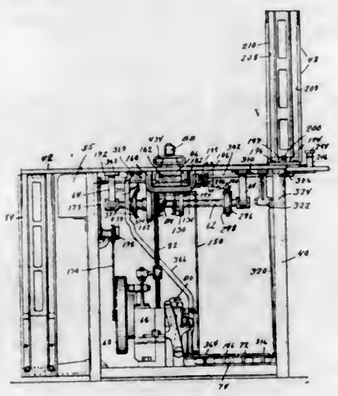
1. Apparatus for melting finely-divided material, comprising a chamber provided with an inclined, fixed bed plate; a vertical duct situated at the upper end of the bed plate and through which the finely-divided material is introduced, said duct having an aperture in its bottom through which the material escapes and forms a pile extending along the bed plate and having its greatest height comprised between the upper edge of said aperture and the bed plate; melting means acting upon a definite portion of material situated at the intersection of the upper inclined surface of the pile and the plane of the bed plate; and a chimney surrounding the duct for discharging the gases of combustion.

1,807,308. MASSAGE BELT. JAY G. DE REMER, Greenwich, Conn., assignor, by mesne assignments, to J. G. De Remer Research Corporation, Jersey City, N. J., a Corporation of New Jersey. Filed June 22, 1928. Serial No. 287,470. 2 Claims. (Cl. 128—63.)



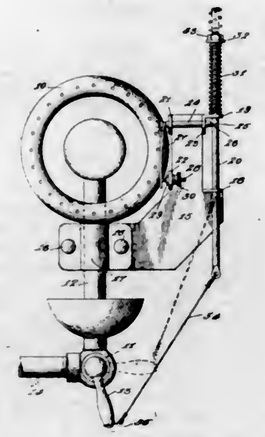
1. A reciprocating massage belt having a relatively stiff body part provided with shoulders and a removable soft fabric casing thereon having shir strings to constrict it upon said shoulders.

1,807,309. ADDRESSING MACHINE. HARMON PARKER ELLIOTT, Watertown, Mass. Filed Jan. 13, 1927. Serial No. 160,872. 101 Claims. (Cl. 101—48.)



1. An addressing machine having a stencil track, a stencil holder, a pile of stencils contained in superimposed order in said holder, said stencils characterized by each having ledger data on one face thereof and an address which is inverted with respect to said ledger data, means to transfer successive stencils to said track and to move them along said track to a receiving position with the face bearing the ledger data uppermost, a platen disposed above said track, a printing roll disposed below said track and platen, means to support an address-receiving article in position under said platen and above said track, means to disable said printing roll and platen for the skipping of a selected stencil, and means under control of the machine-operative to divert the skipped stencil away from the receiving position.

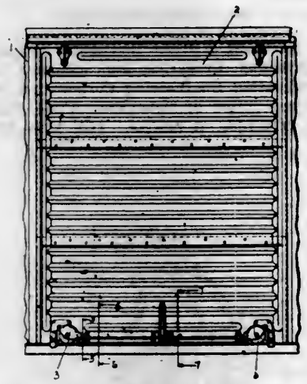
1,807,310. SAFETY DEVICE FOR STOVES. WOLFGANG ELLMAN, Sheboygan, Wis. Filed July 6, 1929. Serial No. 376,466. 1 Claim. (Cl. 158—117.1.)



In combination, a stove burner having a supply pipe extending therefrom and a burner valve in said pipe,

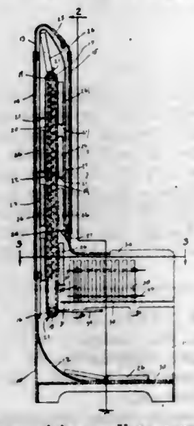
said valve being provided with a handle, a substantially L-shaped plate formed from a single piece of metal and comprising a flat body adapted to have one end secured to the burner supply pipe, spaced parallel ears extending from one edge of the body and having axially aligned openings therein, spaced apertured ears extending upward from the other edge of the body, and an apertured ear extending upward from the first referred to edge in transverse axial alignment with one of the spaced apertured ears mentioned, a rod slidable in the openings of the spaced parallel ears, a spring to yieldingly resist movement of the rod in one direction, means connecting the rod with the valve handle to move the rod against the action of the spring when the valve is opened, means slidable through the transversely aligned apertured ears to engage the rod, and thermostatic means carried by one of the spaced apertured ears and engaging the rod engaging means to control the operation of the latter.

1,807,311. CAR DOOR STRUCTURE. EUGENE J. FEHR and KENNETH J. TOBIN, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 27, 1928. Serial No. 249,824. 8 Claims. (Cl. 16—99.)



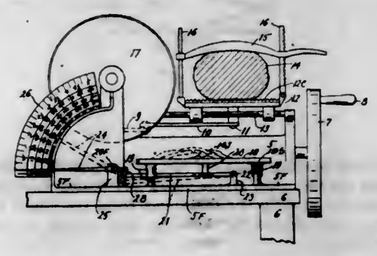
1. In combination, a sliding door, a track member, rollers, retainers for said rollers carried by said door and movable relative to said door, aligned rods cooperating with said retainers, and means for moving said rods apart to transmit a leverage lifting movement to said door about said rollers as fulcrums.

1,807,312. CONTINUOUS REVERSIBLE TOASTER. WILLIAM J. HENLEY, Jr., Rushville, Ind. Filed Jan. 10, 1927. Serial No. 160,147. 13 Claims. (Cl. 126—41.)



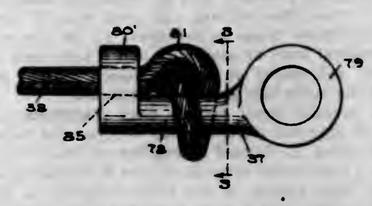
1. A toaster comprising endless conveyor means, heating means adjacent thereto for a portion thereof, and means in juxtaposition to said conveyor means and intermediate the heated portion thereof for receiving an article from the conveyor means, turning said article to present another side to the heating means and delivering the turned article to the conveyor means for heating the last mentioned side of the turned article.

1,807,313. WEIGHING ATTACHMENT FOR MEAT SLICERS. FRANK S. HINES, Northfield, Minn. Filed May 24, 1928. Serial No. 280,211. 1 Claim. (Cl. 265—39.)



The combination of a meat slicing machine of the class described, a scale platform mounted thereon adjacent and under the cutting element of said machines, and indicator means operatively connected with said platform to indicate the weight and value of meat on the platform, said platform mounted in a plane above the forward base part of the slicing machine, downwardly projecting tubular projections integral on the under side of said tray, corresponding posts on said base each arranged to telescopically engage in the bore of one of said platform posts and yieldable means provided within each said tubular projection to resist increasing weight on the platform, a single lever bar fulcrumed to a fixed part of the slicing machine base and its opposite end operatively connected with the hand of the weight indicating device, a pivotal connection between an intermediate part of said bar and a fixed central part of the under side of said platform to depress the bar and operate the indicator hand as described.

1,807,314. CABLE CONNECTER. WALTER G. HUMPHREYS and OMAR R. HUMPHREYS, Omaha, Nebr. Original application filed Sept. 5, 1928, Serial No. 304,128. Divided and this application filed July 15, 1929. Serial No. 378,293. 4 Claims. (Cl. 24—129.)

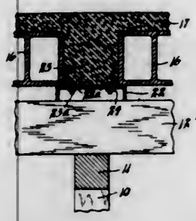


1. In a cable connecter, the combination of a shank member provided with a cable receiving opening, the side walls of said opening being in substantial alinement with and to one side of said shank, a cable wrapped about the shank and extending through said opening, said cable being looped under itself in a manner whereby stresses applied to said cable or said connecter are adapted to cause a binding engagement between said shank and said cable.

1,807,315. CONCRETE FORM FOR FLOORS. THOR KNUTSON, Minneapolis, Minn. Filed Mar. 20, 1926. Serial No. 96,204. 1 Claim. (Cl. 25—131.5.)

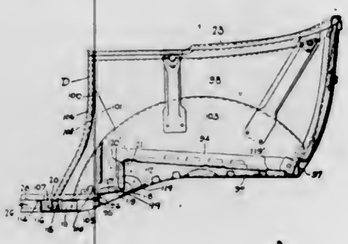
A concrete form structure for floors, comprising spaced supporting means, spaced members extending transverse-

ly of said means having top surfaces, tiles spanning the spaces between said members and resting on the edges thereof, strips carried by said members having faces extending parallel to, within and adjacent the longitudinal



edges of said members against the outer sides of which faces said tiles engage, said strips being adjustable and adapted to be positioned different distances from the edges of said members, and means for holding said strips in stationary position.

1,807,316. PRESSED METAL VEHICLE BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 9, 1925. Serial No. 13,949. 24 Claims. (Cl. 296—28.)

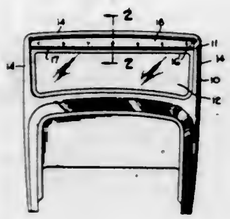


1. A pressed metal automobile body comprising a body side sill of inverted channel cross section, the outer side wall of which is provided with an outturned flange having a down turned edge defining the lower edge of the body, which outturned flange is depressed at its forward end to the general level of said edge, and a body post having its lower end seated on said depressed portion and secured to the outer side wall of said channel.

15. A pressed metal vehicle body comprising a body sidesill of inverted channel cross section, the inner side wall of which is flanged outwardly of the channel to provide a floor board support, a post D bracket generally of angle cross section in the angle of which is disposed said sill section, and a body cross brace of channel cross section presenting upwardly, having one side wall connected with said floor board support flange and the other side wall depressed and connected with the lower branch of the angle of said post D bracket.

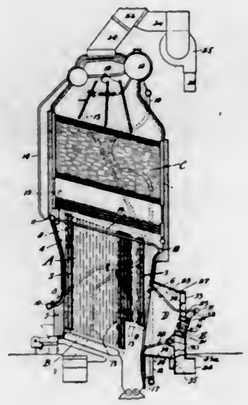
1,807,317. WINDSHIELD MOUNTING. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 26, 1928. Serial No. 280,695. 3 Claims. (Cl. 296—92.)

1. In a windshield mounting, a windshield frame having a reentrant portion ot receive a windshield, said reentrant portion having an upper and rear surface at the top, a mounting strip of channel shape secured with the mouth thereof presenting toward the rear wall of said reentrant portion and having its top side conform to the top wall



of said reentrant portion, means bridging the mouth of the channel and means associated with said bridging means for securing the mounting strip to the rear wall of the reentrant portion.

1,807,318. STOKER FIRED BOILER INSTALLATION. EDWIN LUNDGREN, Frederick, Md., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 5, 1927. Serial No. 210,758. 5 Claims. (Cl. 122—235.)

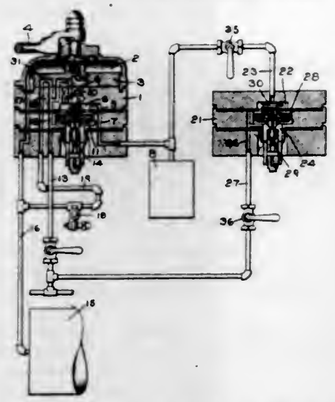


1. A boiler installation including a stoker fired combustion chamber having an extension chamber, spaced water tubes in said extension chamber so located as to provide air chambers in said extension chamber, means for admitting air to said air chambers, and burner means located in said extension chamber for introducing finely divided fuel to be burned in space, the air from said air chambers passing through the spaces between said water tubes for admixture with the finely divided fuel.

1,807,319. BRAKE VALVE DEVICE. JOSEPH C. McCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Feb. 8, 1930. Serial No. 426,892. 3 Claims. (Cl. 303—55.)

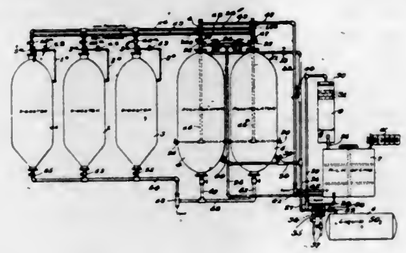
1. In a fluid pressure brake apparatus, the combination with a brake pipe, an equalizing reservoir, and an

equalizing discharge valve mechanism subject to the opposing pressures of the brake pipe and the equalizing reservoir for controlling the venting of fluid from the



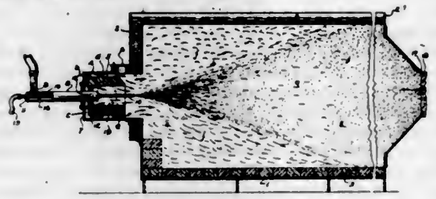
brake pipe, of an additional equalizing discharge valve mechanism subject to the opposing pressures of said brake pipe and said equalizing reservoir for also controlling the venting of fluid from the brake pipe.

1,807,320. DIGESTING AND COOKING LIQUOR PREPARATION SYSTEM. ALBERT DAVIES MERRILL, Watertown, N. Y. Filed June 24, 1930. Serial No. 463,438. 22 Claims. (Cl. 92—11.)



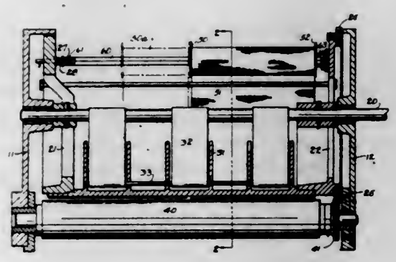
1. A method of the character described, comprising feeding milk of lime to a pressure accumulator, conducting SO_2 to the accumulator, contacting these substances to make acid liquor, and mixing a digester relief fluid with such acid liquor.

1,807,321. PROCESS AND APPARATUS FOR THE PRODUCTION FROM HYDROCARBON OIL OF BLACK PIGMENT CONSISTING OF CARBON. AMOS L. MILLER, Philadelphia, Pa., assignor to The Ault & Wiborg Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 4, 1928. Serial No. 251,808. 8 Claims. (Cl. 134—60.)



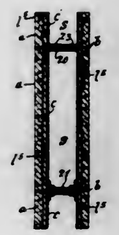
1. A process of producing lamp black from hydrocarbon oil which comprises decomposing a portion of such material in an inner zone protected against substantial combustive exposure, such decomposition being effected by the heat in an outer zone of combustion of another portion of such material enveloping said inner zone, and continually supply additional hydrocarbon oil to be decomposed directly into the decomposition zone while supplying air for the partial combustion thereof solely to the outer or combustion zone.

1,807,322. RIBBON HOLDING AND FEEDING DEVICE FOR PRINTING MACHINES. LAWRENCE H. MORSE, Cleveland, Ohio, assignor, by mesne assignments, to American Multigraph Co., Wilmington, Del., a Corporation of Delaware. Filed Sept. 11, 1929. Serial No. 391,716. 11 Claims. (Cl. 101—244.)



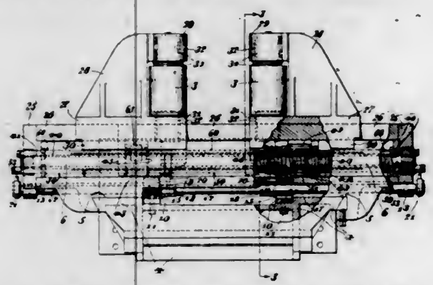
1. The combination of a rotary printing drum, a pair of ribbon spools carried thereby in a manner enabling them to be adjusted into various positions lengthwise of the drum without changing the driving action of the spool, and mechanism for driving one of the spools as the drum rotates.

1,807,323. CONCRETE, MASONRY AND STEEL CONSTRUCTION. JOHN JAMES O'REILLY, New York, N. Y. Filed June 25, 1927. Serial No. 201,573. 2 Claims. (Cl. 72—1.)



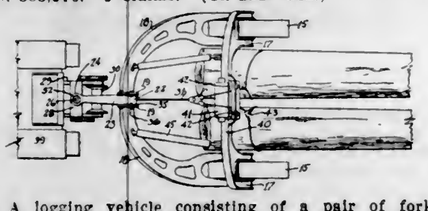
1. A building unit comprising two equally dimensioned parallel slabs in relative spaced alignment each slab having an exposed facing of spaced particles of building material with a cementitious filling moulded solidly in the outer portion of the spaces or joints between said particles and a metal matrix moulded solidly in the inner portion of the spaces between said particles and over the backs thereof forming a solid continuity of metal extending to the side and end edges of the aforesaid slabs, intermediary connecting members fastened to the metal backing of both slabs holding them rigidly in spaced relation, and means in the unit for assembling same together with other similar units in a building structure.

1,807,324. STRAIGHTENING MACHINE. EDWARD T. PETERSON, Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Nov. 4, 1926. Serial No. 146,091. 14 Claims. (Cl. 153—54.)



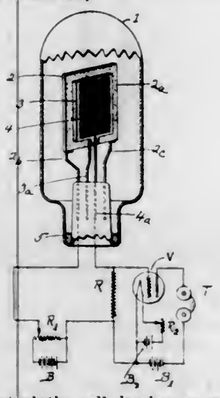
1. In a straightening machine, the combination of tail straightening rolls, and means for adjusting the said rolls toward and from and laterally with respect to the said machine.

1,807,325. LOGGING VEHICLE. HARRY H. RICHMOND, Portland, Oreg., assignor to Electric Steel Foundry Company, Portland, Oreg. Filed Aug. 6, 1929. Serial No. 383,970. 6 Claims. (Cl. 212—142.)



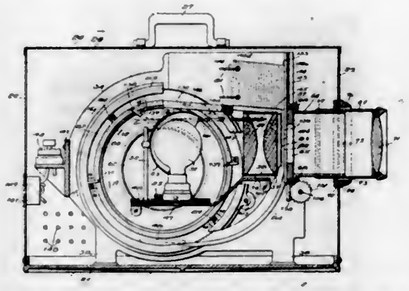
1. A logging vehicle consisting of a pair of forked tongue members sloping upwardly towards the forward end, a neck joining the forward ends of said tongue, an arch spanning said forked ends and hingedly connected thereto, brace means between said arch and tongue and ground engaging elements supporting the opposite sides of said arch.

1,807,326. PHOTO-ELECTRIC CELL. SAMUEL RUBEN, New York, N. Y., assignor, by mesne assignments, to Ruben Tube Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 24, 1928. Serial No. 301,926. 5 Claims. (Cl. 201—63.)



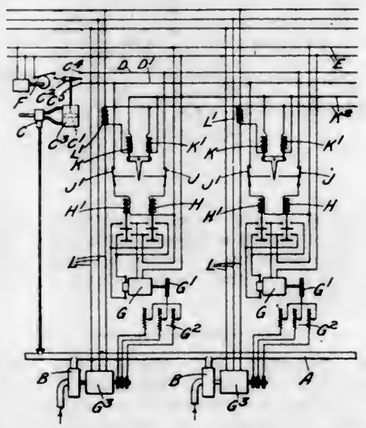
2. A photo-electrolytic cell having a copper electrode plate with a surface layer of cuprous oxide, a cooperating reticular electrode plate and a translucent, electrolytically conductive crystal plate interposed between and in surface contact with the electrodes.

1,807,327. STEREOPTICON. JOHN F. STUBNER, Chicago, Ill., assignor of one-third to Albert Besser and one-third to Max J. Olshansky. Filed May 5, 1927. Serial No. 188,915. 8 Claims. (Cl. 88—28.)



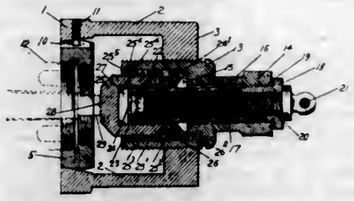
2. In an automatic projecting machine, means for forming a projecting beam of light, a magazine for a plurality of slides above the beam of light, means for moving the foremost slide vertically into the path of the beam, means for moving the next foremost slide into the path of the beam so that its lower edge strikes against the top edge of the first slide to eject said first slide, and means for returning the ejected slide into upright position at the rear of the magazine.

1,807,328. REGULATION OF PUMPS, COMPRESSORS, BLOWERS AND LIKE MACHINES. THOMAS REGINALD WARREN, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, London, England, a Company of Great Britain. Filed Sept. 14, 1929, Serial No. 392,586, and in Great Britain Nov. 16, 1928. 7 Claims. (Cl. 103—11.)



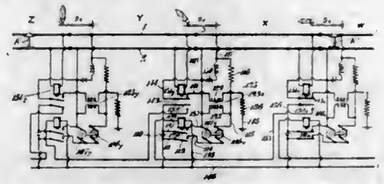
1. In a pressure-regulating arrangement for a group of pumps, compressors, blowers or like machines discharging into a common system, the combination of a reversible electric motor associated with each machine, means whereby such motor acts in accordance with its direction of rotation to raise or lower the speed of operation of the machine, a source of intermittently interrupted electric current, a device responsive to the pressure in the common discharge system, and contacts actuated by the pressure-responsive device controlling the supply of current from the source for determining the direction of rotation of the reversible motors, the arrangement being such that the reversible motors are caused to raise or lower the speed of the machines in accordance with whether the pressure in the system is below or above a predetermined value.

1,807,329. WHEEL DRAWER FOR USE ON MOTOR VEHICLES. FREDERICK BERTRAND WEST and KEVIN JOSEPH PIDCOCK, Kyogle, New South Wales, Australia. Filed Nov. 29, 1929, Serial No. 410,575, and in Australia Sept. 18, 1929. 2 Claims. (Cl. 29—86.)



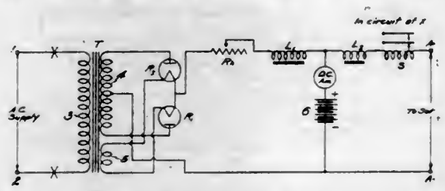
1. A wheel drawer comprising a split ring nut having a tapered outer surface, a spider having a ring with a tapered inner surface which is engaged by the tapered surface of the said nut, in the spider a head and screwed into the said head a cylinder of a fluid ram assembly, within the cylinder a plunger, secured within the cylinder and opening into the bore thereof a smaller cylinder, within the smaller cylinder a plunger and a manually rotatable screwed spindle to reciprocate the said plunger within the smaller cylinder.

1,807,330. TRACK CIRCUIT SYSTEM. ARBA G. WILLIAMSON, Carnegia, Pa., assignor, by mesne assignments, to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 3, 1927. Serial No. 165,603. 26 Claims. (Cl. 246—34.)



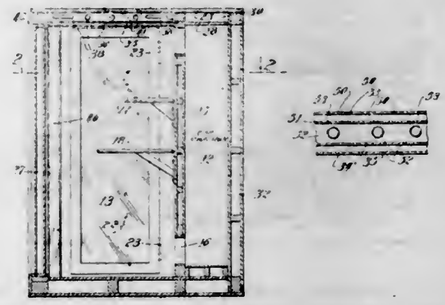
1. A track circuit system comprising: traffic rails divided into blocks, a source of current, a circuit including both rails of a block, a circuit between ground and at least one of said rails, and an interrupter for supplying an interrupted current to said circuits from said current source.

1,807,331. BATTERY CHARGING UNIT. CHARLES A. WRIGHT, Lakewood, Ohio, assignor to National Carbon Company, a Corporation of New York. Filed Nov. 8, 1927. Serial No. 231,933. 1 Claim. (Cl. 175—363.)



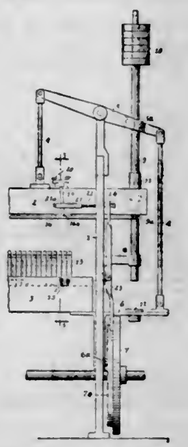
A charging system for a dry cell battery comprising, in combination, a transformer provided with a primary winding adapted to be connected to a source of alternating current and with a secondary winding adapted to furnish a battery-charging potential, a rectifying device connected in circuit with said secondary winding, and means adapted for connecting in the secondary circuit the battery to be charged, said transformer being so designed and proportioned as to operate at or above its saturation point under the intended load conditions, whereby the effects of voltage fluctuations in a supply source connected to said primary winding tend to be reduced or suppressed.

1,807,332. ARTIFICIALLY COOLED DISPLAY CASE. WILLIAM ABRAHAMSON, Chicago, Ill. Filed Nov. 16, 1929. Serial No. 407,642. 1 Claim. (Cl. 312—116.)



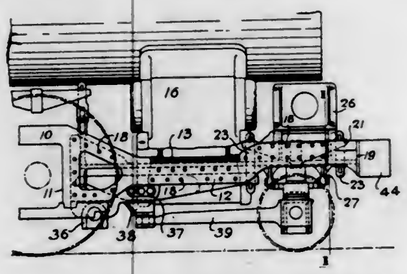
A refrigerated show case, comprising bottom, top, rear and side walls, a multi-layered window closing the front of said case, multi-layered glazed doors for closing the sides of said case, and a multi-layered glass top for said case, a vertical wall disposed adjacent the rear wall and spaced therefrom to form a cooling chamber and a display chamber, the said wall being spaced from the top and bottom walls of the case to provide passages for the circulation of air between said cooling and display chambers, the multi-layered glass top comprising a pair of spaced double plate glass sections between which is formed a compartment adapted to permit the mounting therein of a plurality of incandescent bulbs for illuminating the display chamber, the outer one of said double plate glass sections forming the top wall of the case being provided with a plurality of staggered ventilatng openings for permitting the escape of the heated air from said lamp compartment.

1,807,333. SHUTTLE OPERATING MECHANISM. JOHN E. BARBOUR, Paterson, N. J., assignor to National Net & Twine Co. Inc., Boston, Mass., a Corporation of Delaware. Filed Dec. 4, 1930. Serial No. 499,876. 12 Claims. (Cl. 96—21.)



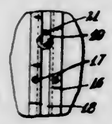
1. A shuttle-motion mechanism comprising, in combination, a frame, an up-and-down-moving system therein including upper and lower lays connected to move together toward and together from each other, a shuttle load and a counterbalance load, and means to impose said loads respectively on the lays on the alternate approaches of the lays toward each other and to impose each load on the relatively opposite lay on the remaining approaches of the lays toward each other.

1,807,334. LOCOMOTIVE STRUCTURE. JAMES G. BLUNT, Schenectady, N. Y. Filed Mar. 1, 1930. Serial No. 432,386. 19 Claims. (Cl. 105—172.)



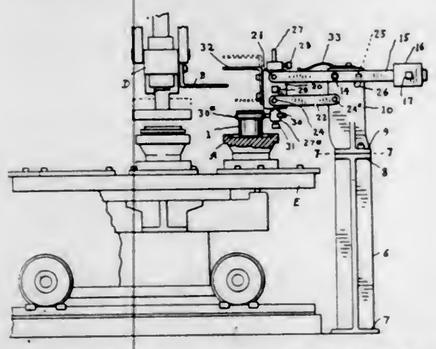
2. In a locomotive structure, the combination of a pair of side front frame members; a cylinder saddle disposed intermediate the length thereof; and a cross-tie member detachable from the front frame members and the saddle and having a portion disposed beneath the saddle, a portion extending rearwardly of the saddle, and a portion extending forwardly of the saddle.

1,807,335. BUILDING WALL. GEORGE CASTELYNS, LEONARD STANS, and ARMAND VINCK, New York, N. Y. Filed July 3, 1929. Serial No. 375,648. 4 Claims. (Cl. 72—46.)



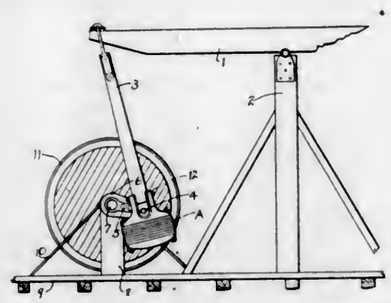
1. In a wall structure, a strip for attachment upon an object and formed with a dove-tailed groove, hooks slidably mounted being provided with tongues engaging in the said groove, and means for locking the hooks in fixed positions along the length of the grooves.

1,807,336. GLASS-GOB DISPOSING MEANS. JEDDIAH B. CLARK, Dunkirk, Ind. Filed Oct. 11, 1928. Serial No. 311,908. 4 Claims. (Cl. 49—14.)



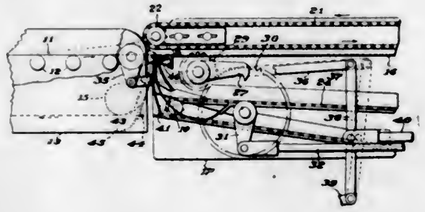
3. In combination with a machine for making articles of pressed ware, having molds arranged in circular serial formation and carried rotatively about a vertical axis, plunger and pressing mechanisms for said molds, and a feeding means for separating mold charges from the source of supply at a distance above the mold, a disposer head having a funnel shaped bore, there being a recess in the bottom of the head communicating with and flaring from the mouth of said bore, a frame disposed at position adjacent to said machine, a vertically reciprocable rocker member on the frame, a cross head swiveled on the forward end of the rocker member so as to operate in vertical alignment, a support rod retained adjustably, vertically and rotatably in said cross head, and having an integral cross head thereon, a yoke member in which the disposer head is removably retained, the said yoke member having an arm to be engaged in the crooss head of said support rod, means to fasten the said arm in the cross head of said support stem, means on the frame to limit the downward stroke of the forward portion of said rocker member, a counter balance weight adjustable on the rearward portion of the rocker member, a spring on the frame to resist the force of the upward stroke of the rocker member, and a catch bar carried by the plunger mechanism of the machine, whereby with the completion of pressing and during the upward movement of the plunger carrier mechanism, the disposer head is raised.

1,807,337. COUNTERBALANCE FOR PUMPING RIGS. FRED GRAHAM, Lufkin, Tex., assignor to Lufkin Foundry & Machine Company, Lufkin, Tex. Filed Feb. 3, 1928. Serial No. 251,505. 4 Claims. (Cl. 74—71.)



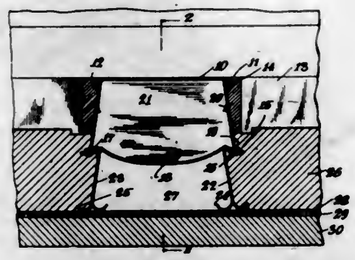
1. In a pumping rig or the like, a rotatable power shaft, a crank arm thereon, a walking beam, a pitman connected with said walking beam and to said crank arm, a yoke secured to the lower end of said pitman, and a plurality of plates secured detachably to said yoke to form a variable weight upon said pitman.

1,807,338. CONFECTION CONVEYING MACHINE. FREDERICK W. GREER, Cambridge, Mass. Filed Mar. 28, 1931. Serial No. 525,913. 7 Claims. (Cl. 197—7.)



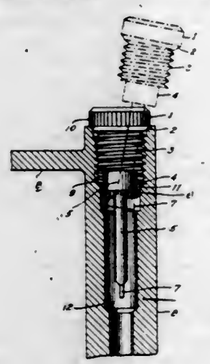
1. In a machine of the class described, mechanism for loading flexible plaques, comprising in combination, a plaque supporting surface, mean for carrying successive plaques upwardly around the edge of said surface and along the surface, a conveyor apron having the end of its upper run positioned close to the end of said surface to deliver article upon a plaque passing upwardly therebetween, and mechanism for momentarily shifting the conveyor apron away from said surface to clear the forward end of a plaque passing upwardly therebetween.

1,807,339. AIR SPACE EXPANSION JOINT. CHARLES LEHNING, Astoria, N. Y. Filed Sept. 30, 1930. Serial No. 485,427. 3 Claims. (Cl. 72—107.)



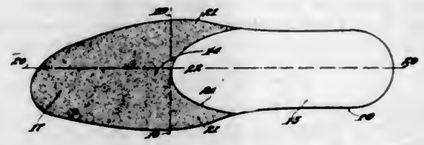
2. An expansion joint of the class described comprising a copper frame, slanting side walls formed therewith having outwardly bent lower ends bent upon themselves in spaced relation, a curved bottom having its end held in the spaces between the bent ends and bolts securing said bottom ends ot aid side wall, legs formed integrally with said side walls, and anchoring feet on said legs.

1,807,340. OILER. JOHN F. MARTIN and FRANK E. WATTS, Springfield, Mass., assignors to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Mar. 3, 1928. Serial No. 258,883. 15 Claims. (Cl. 184—38.)



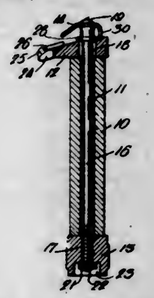
3. The combination with an internally threaded and bored casing, of an oiler comprising a screw having a pilot of reduced cross section and a spatulated stem, and a washer in said bore for preventing removal of said oiler.

1,807,341. CUSHIONING INSOLE FOR BOOTS AND SHOES. MATIE C. MESSLER, Providence, R. I., assignor to Madge Messler, Providence, R. I. Filed Oct. 29, 1927. Serial No. 229,637. 3 Claims. (Cl. 36—28.)



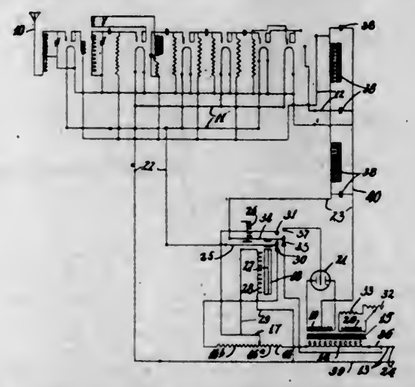
1. A cushioning insole for boots and shoes composed of soft rubber and provided with heel and shank portions of substantial and uniform thickness, a front member of substantial length tapering from the front end of the toe portion to near a transverse plane through the insole at its widest portion, and a ball portion intermediate said tapering front member and said shank portion and having tapering sides extended rearwardly from said transverse plane and a center portion intermediate said tapering sides and of substantially the same thickness as the shank and heel portion, said center portion having on one surface a curved edge or outline at the rear of said transverse plane and formed by said front portion and said tapering sides.

1,807,342. SAFETY RAZOR. FRANK PELOSI, Haverhill, Mass. Filed May 28, 1930. Serial No. 456,425. 4 Claims. (Cl. 30—12.)



1. A safety razor comprising a hollow handle, a guard member mounted at one end of the handle, a stem extending through the handle and guard, a locking plate secured at one end of the stem and cooperating with the guard to hold a blade therebetween, a nut threading on the opposite end of the stem and bearing against the end of the handle to draw the plate toward the guard member and clamp the blade therebetween, and means on the stem engaging the nut to limit outward rotation of the nut.

1,807,343. RADIO RECEIVING APPARATUS. ALEXIS PONCEL, Long Island, N. Y., assignor of forty-nine per cent to Paul Desfosse, New York, N. Y. Filed May 14, 1930. Serial No. 452,186. 6 Claims. (Cl. 250—27.)



1. A radio receiving apparatus arranged to operate universally from a direct as well as an alternating current power supply, comprising a radio receiving system including a filament circuit and a plate circuit, a power circuit in series with a source of direct or alternating current and connected in series with said filament and plate circuits and including the primary of a transformer connected in series with a resistance divided into sections by a tap and an electrically operated switch controlled by the passage of direct current in said power circuit for connecting the entire resistance in said fila-

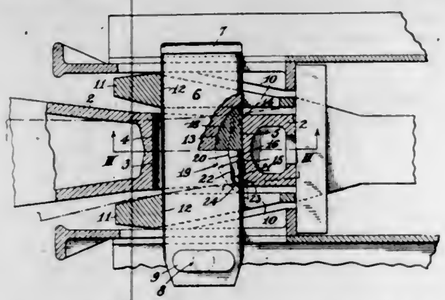
ment circuit and by the passage of alternating current for connecting said tap for connecting part of said resistance in said filament circuit, said transformer having a secondary of two windings, means for changing the resistance of one of said windings for changing the inductance of said primary, said power circuit also including a rectifier, and said electrically operated switch being also controlled by the passage of direct current in said power circuit for disconnecting said rectifier and by the passage of alternating current for connecting the plate circuit with said rectifier.

1,807,344. WARNING DEVICE FOR ELECTRIC PUSH-BUTTONS, ETC. BENJAMIN ROTH, St. Louis, Mo. Filed Oct. 6, 1930. Serial No. 486,522. 5 Claims. (Cl. 40—10.)



1. A warning device comprising a movable shield provided with a supporting arm that is adapted for permanent attachment to an operative electric device, said shield normally hiding the electric device and adapted to be moved to expose said device for operation and to return to its normal position automatically, substantially as described.

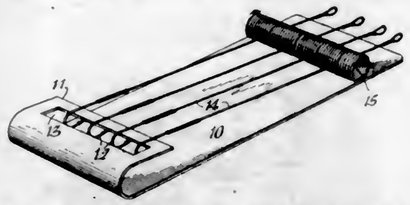
1,807,345. DRAFT KEY FOR CAR COUPLERS. ERNEST H. SCHMIDT, Cleveland Heights, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 6, 1927, Serial No. 224,316. Renewed Apr. 16, 1929. 7 Claims. (Cl. 213—71.)



6. In railway draft rigging, a coupler having a horizontal slot therethrough, said slot having projecting therein a forwardly facing convex protuberance movable with the coupler shank on draft, a yoke having arms with slots therein registering with said first named slot, a draft key passing through all of said slots to connect said shank and yoke, the slot in the shank providing sufficient clearance for said key to enable the same to angle therein, said key having a rearwardly facing concave notch therein seating against and having radial bearing on said protuberance for permitting horizontal angling therebetween.

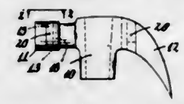
1,807,346. FISHHOOK HOLDER. WALTER A. SCHNEGENBURGER, Buffalo, N. Y. Filed Oct. 3, 1929. Serial No. 397,106. 2 Claims. (Cl. 43—32.)

1. A fish-hook holder, comprising a base plate having an up-turned flange at its front end terminating in a horizontal portion overhanging and spaced from said base plate, said portion containing an opening for detachably receiving a fish-hook, the curved and pointed end



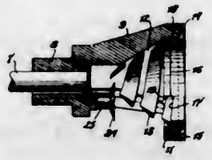
of the hook being disposed in the space between the base plate and the overhanging portion of the flange, and a yieldable retaining device at its other end for frictionally receiving the gut-string of the hook.

1,807,347. INTERCHANGEABLE HAMMER. FREDERICK SCHWEIGERT, New York, N. Y. Filed Apr. 17, 1930. Serial No. 445,109. 2 Claims. (Cl. 145—29.)



1. In combination with a hammer head having a removable striking end and nail puller, a tongue projecting from one of said elements and consisting of an outer portion extending completely from end to end of said element and an inner portion extending from one end to near the other end, and said tongue engaging into a groove in the other of said elements, said groove having an inner portion extending from end to end of said element receiving said outer element of the tongue and an outer portion extending from one end to near the other end leaving a bridge portion on said element for abutting against said inner portion of the tongue, said bridge portion being made of separate sections pivotally supported, means for normally holding the bridge sections across said groove and for allowing pivoting of these sections out of the groove.

1,807,348. DEVICE FOR TRIMMING CORN. HENRY A. SHELDON, Buffalo, N. Y., assignor to Sprague-Sells Corporation, Hoopeston, Ill., a Corporation of Delaware. Filed Apr. 3, 1929. Serial No. 352,288. 15 Claims. (Cl. 130—9.)

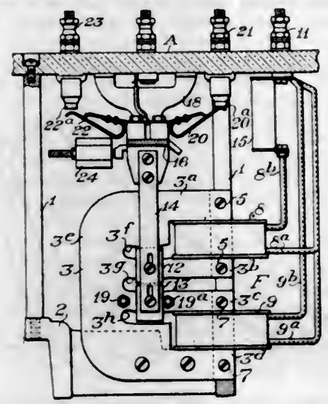


1. A device for tapering the ends of ears of corn, comprising a rotary head, means for rotating said head, and knife means carried by said head, the edge of said knife means projecting toward the axis of said head and being arranged to taper and to cut a transverse substantially flat portion at the end of the ear inserted in said head.

1,807,349. ALTERNATING CURRENT RELAY EMPLOYING A MOTOR ELEMENT. PAUL P. SOSINSKI, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 7, 1930. Serial No. 442,137. 14 Claims. (Cl. 175—338.)

1. A relay comprising a core member having two magnetic paths each including a pair of legs which are

connected at one end by a backstrap and which have an air gap between them adjacent the backstrap, means for creating periodic fluxes in each of said paths, and a



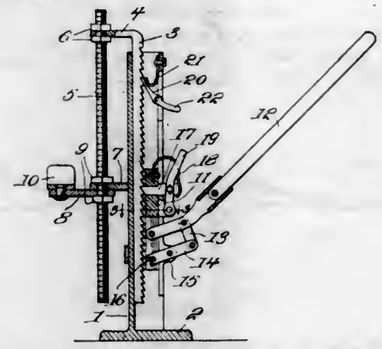
movable armature provided with means reacting with the flux in both of said air gaps to exert a force on the armature.

1,807,350. REFLECTING DEVICE. JONATHAN CASS STIMSON, St. Louis, Mo. Filed Nov. 3, 1928. Serial No. 316,997. 11 Claims. (Cl. 88—1.)



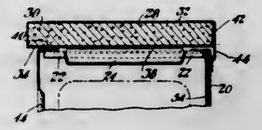
1. A reflecting device of the character described, comprising, a series of reflecting units arranged in contiguous relation and having reflecting surfaces adapted to direct light impinging thereon at varying angles back approximate the light source, and a light coloring screen in front of the reflecting surfaces, the reflector having a transparent front face curved to substantially reduce the uncolored image of the light source.

1,807,351. JACK. MILTON C. SUPAN, Mineral, Calif. Filed Oct. 5, 1927. Serial No. 224,238. 1 Claim. (Cl. 254—133.)



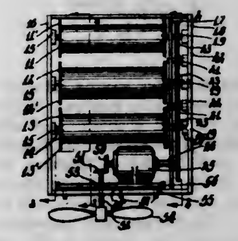
A jack comprising a substantially rectangular body, a rack bar slidably arranged within the body and terminating to provide an offset apertured extremity at its upper end, manually operated means for raising and lowering the rack bar, a threaded rod having its upper end received by the aperture of said offset extremity, nuts arranged above and below the extermity and associated with the rod to support the latter, said rod being arranged exteriorly of the jack body and in spaced parallel relation thereto, a yoke slidably mounted upon the rod and extending in the direction of the jack body, and arranged to straddle the latter, a shoe supporting plate slidable on said rod and projecting in an opposite direction from the yoke, the adjacent ends of said yoke and plate being arranged in superposed relation on said rod, and nuts threaded on said rod above and below the yoke and plate for holding the parts in a given adjusted position.

1,807,352. RADIATOR INCLOSURE. SAMUEL TANGER, Lynbrook, N. Y. Filed Mar. 25, 1930. Serial No. 438,759. 6 Claims. (Cl. 257—138.)



3. In a radiator inclosure, a casing, and cover therefor comprising a composition cork board of substantial thickness and of the size for the cover, the top and edges of which are covered with relatively thin sheet metal which in turn is bent back a short distance on the under side of the front and ends of the cork board, and a sheet metal flange along the back edge of the cover extending down below the under surface of the cover and movably attached to the casing and adapted to direct hot air from a radiator in the enclosure toward the front of the enclosure.

1,807,353. HELICOPTER. RALPH TARSHIS, Brooklyn, N. Y. Refile for abandoned application Serial No. 311,448, filed Oct. 10, 1928. This application filed Jan. 23, 1930. Serial No. 422,969. 6 Claims. (Cl. 244—19.)

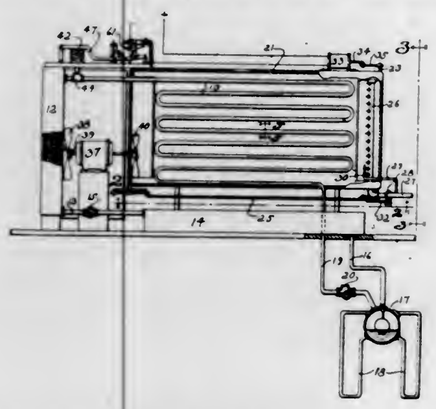


1. A helicopter of the class described, comprising a frame, spaced hollow cylinders rotatively mounted therein, an engine with an exhaust pipe discharging exhaust gas and connected for driving the cylinders in one direction, a pipe connected with the said exhaust pipe, and provided with a plurality of downwardly directed nozzles for forcing the helicopter upwards into the vacuum created by the said cylinders.

1,807,354. REFRIGERATING MECHANISM. CHARLES C. THOMAS, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Jan. 18, 1928. Serial No. 247,683. 18 Claims. (Cl. 62—5.)

1. In a refrigerating system of the class described, a refrigerant transformer, a condenser and an evaporator

connected therewith, heat suppiying means for said transformer, and means for rendering said heat supply-

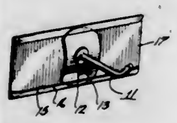


ing means inactive actuated by a predetermined drop in pressure in said system from a maximum cycle pressure therein.

1,807,355. TREATMENT OF RUBBER. WILLIAM P. TER HORST, Packanack Lake, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed May 19, 1930. Serial No. 453,864. 27 Claims. (Cl. 18—50.)

1. A process of treating rubber which comprises incorporating therewith the reaction product of an aliphatic ketone and a secondary aromatic amino compound.

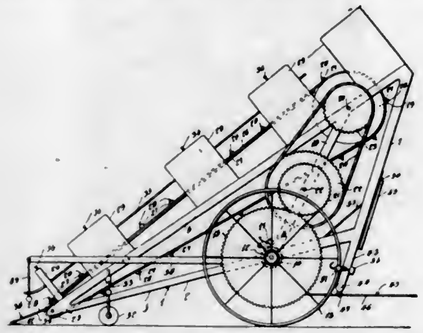
1,807,356. CHECKBOOK. WALTER N. VANCE, Chicago Heights, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Sept. 14, 1928. Serial No. 306,065. 1 Claim. (Cl. 248—22.)



In combination, a holder having inturned flanges at its sides to provide grooves, a resilient relatively flat hook carrying member in said grooves, said member being of substantially disk-shape having diametrically opposite cut away portions, and having a diameter slightly greater than the width of the holder between the grooves, whereby said cut away portions provide for the insertion of the member between the flanges, and subsequent rotation of the member engages the edges of the member in the grooves, thereby bowing the member outwardly in the center to provide for frictional engagement between the member and the holder.

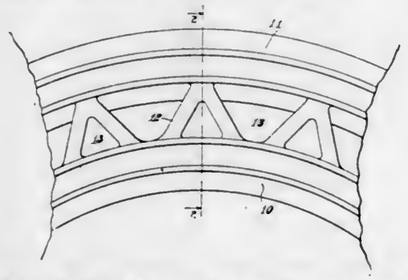
1,807,357. HAY RAKE, GATHERER, LOADER AND BUNCHER. WILLIAM B. VAUGHN, Baker, Oreg. Filed Nov. 14, 1928. Serial No. 319,285. 2 Claims. (Cl. 56—349.)

1. A machine of the class described having connected angularly disposed top bars, rear bars and bottom bars forming spaced triangular frames, an intermediate bar extending from the bottom bar to the top bar and forwardly of the rear bar, ground wheels connected to the bottom bars adjacent the junction of the latter with the intermediate bars, a drum journaled on the top bar adjacent the junction thereof with the intermediate bars, a smaller drum journaled at the junction of the top and bottom bars, a conveyor traversing said drums, gearing partly supported on the intermediate bar, being in driving relation to the ground wheel means and to the first mentioned drum, and a plurality of side members extending



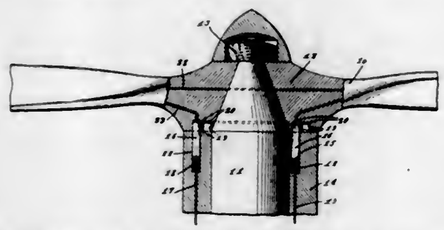
upwardly from the top bars and being of different height progressively in an upward direction, spring means on said side members, and presser bars supported by the spring means in substantial parallelism with the upper run of the conveyor.

1,807,358. DAM CONSTRUCTION. OSCAR WARTEMANN, College Point, New York, N. Y. Filed June 1, 1928. Serial No. 282,060. 1 Claim. (Cl. 61—30.)



A dam comprising a pair of concentric arc-shaped walls disposed with their bulge in the upstream direction, each wall having a cross section tapering from the base towards the top, and V-shaped transverse walls integral at their apices and base ends, respectively, with the opposed faces of the two walls, the arms of the said transverse walls being disposed at an angle to the radii of the curve of the arched walls and having the portions at the apices inclined in the direction of the inner face of the upstream wall.

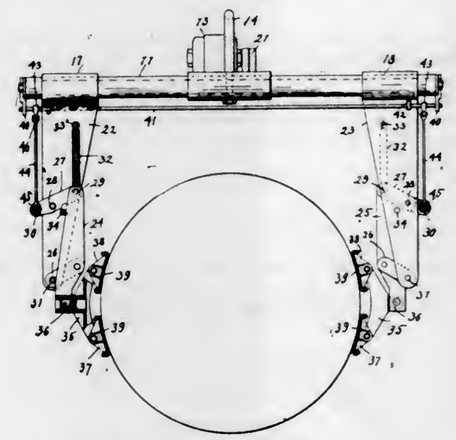
1,807,359. HEATER FOR PROPELLERS. WILLIAM WATERS, Boston, Mass. Filed Oct. 28, 1927. Serial No. 229,444. 1 Claim. (Cl. 170—172.)



In a device of the class described, a shaft, a hub fitted to the shaft and rotatable therewith, blades radiating from the hub, a sleeve in which the shaft is rotatable,

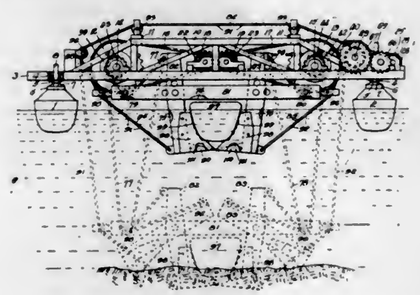
one side of the hub being in engagement with the end of the sleeve, the said side of the hub being provided with annular grooves concentric to each other and to the axis of the hub, a collector ring in each of said grooves, an electrical resistance in each of said blades, a conductor bridging corresponding terminals of the resistances, conductors connecting the other terminals of the resistances, each with a respective one of the rings, the sleeve being provided with sockets at opposite sides of its axis and each in communication at its outer end with a respective one of the grooves, contact brushes slidably mounted in the sockets, current conductors connected with the brushes, and means in the sockets yieldably holding the brushes in contact, at their outer ends, with the respective connector rings.

1,807,360. PAPER ROLL HANDLING MECHANISM. WILLIAM G. WEHR, East Cleveland, Ohio, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio, a Corporation of Ohio. Filed Mar. 17, 1928. Serial No. 262,506. 11 Claims. (Cl. 294—106.)



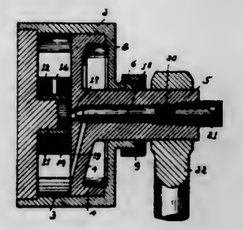
1. A handling mechanism comprising supporting members, members slidably mounted on said supporting members for relative movement toward and away from each other, and work engaging means movable bodily with said last mentioned members and connected thereto for independent relative movement into work supporting position as the work is being lifted.

1,807,361. LIFTING DEVICE. CHRIST G. WEINREICH, St. Louis, Mo. Filed Mar. 17, 1928. Serial No. 262,409. 2 Claims. (Cl. 114—51.)



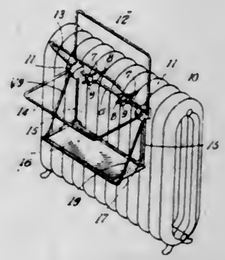
1. In a lifting apparatus, a pair of spaced pontoons, a bridge structure spanning the gap between said pontoons and supported thereby, a lifting member, vessel gripping arms pivotally supported by said lifting member, means for lowering and raising said lifting member including the vessel gripping arms, means whereby the vessel gripping arms are spread apart at their lower ends when lowering the lifting bar including the vessel gripping arms and means whereby the lower ends of the vessel gripping arms are moved toward each other for engagement with the hull of the vessel upon raising movement of the lifting arm to raise a sunken vessel with the lifting member and vessel gripping arms.

1,807,362. HYDRAULIC SHOCK ABSORBER. LE ROY A. WESTMAN and GLENN B. CARMAN, Cleveland, Ohio. Filed Jan. 19, 1929. Serial No. 333,661. 12 Claims. (Cl. 188—89.)



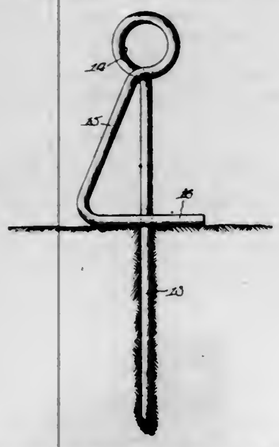
1. A shock absorber, including a liquid chamber, a rotatable disk within said chamber and axially aligned therewith, an eccentric device, and a liquid displacement piston operatively connected with said disk and said eccentric device, said piston having a liquid transfer passage associated with said device to restrain in varying degree the flow of liquid displaced by the piston.

1,807,363. COLLAPSIBLE RACK FOR RADIATORS. VIOLETTE E. WHEATCROFT, West New Brighton, N. Y. Filed Feb. 6, 1929. Serial No. 337,774. 4 Claims. (Cl. 211—86.)



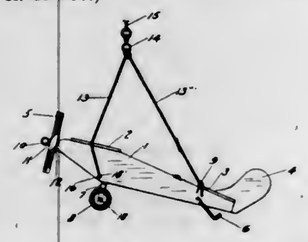
1. In a drying device, a pivot block (having a smooth arcuate outer face, a fixed support rod set axially in said block, a pendant rod fixed in the under side of said block, a plate pivotally connected to said pendant rod, and means to support the free edge of the plate.

1,807,364. DOWEL BAR SUPPORT. WILLIAM E. WHITE, Chicago, Ill., assignor to Kalman Steel Company, Chicago, Ill., a Corporation of Delaware. Filed June 8, 1929. Serial No. 369,437. 3 Claims. (Cl. 94—39.)



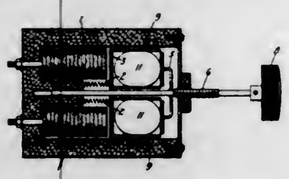
1. A bar support formed from a length of wire rod having a vertical leg adapted to enter the soil, a complete turn of the wire at the top of the leg providing an eye, the rod then extending downward and terminating in a horizontal portion located midway of the height of the leg and acting as a stop.

1,807,365. FLYING TOY. WILLIAM C. WOOD, Davenport, Iowa. Filed Mar. 6, 1929. Serial No. 344,810. 4 Claims. (Cl. 46—50.)



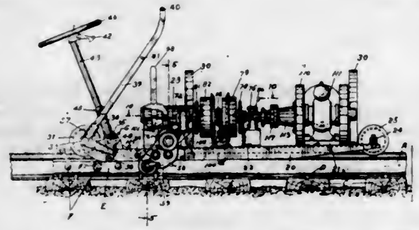
1. A tethered toy aeroplane comprising a longitudinal body, a transverse front wing attached to the upper edge of the body, small openings formed in the front wing near the outer ends thereof, a triple sling comprising a tail line attached to the body near the tail thereof and a loop passing through the wing openings and adjustably secured to the lower part of the body below the front wing, and a tether connected to the sling.

1,807,366. COMPRESSIBLE PILE RHEOSTAT. VIRGIL E. WOODCOCK, Washington, D. C., assignor to General Electric Company, a Corporation of New York. Filed July 27, 1929. Serial No. 381,530. 8 Claims. (Cl. 201—51.)



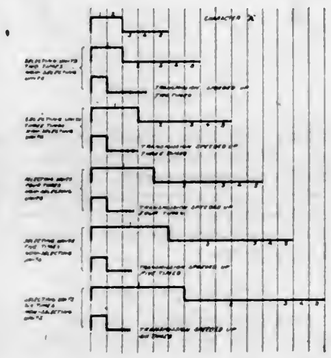
7. A rheostat comprising one or more compressible piles, gas inflated containers therefor formed of material which may be stretched, means for applying pressure on said containers distending the same and thence to said piles, whereby only a fraction of said pressure is transmitted to said piles.

1,807,367. RAILWAY BOLT TIGHTENER. HORACE E. WOOLERY, St. Paul, Minn., assignor to Woolery Machine Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Jan. 30, 1929. Serial No. 336,296. 23 Claims. (Cl. 81—54.)



1. A machine of the character described comprising a frame adapted to be supported and travel on a pair of rails, and with its center of gravity substantially above one of the rails whereby the entire machine may be quickly tumbled off the rails, and longitudinally spaced rockers for supporting the machine when tumbled from the rails.

1,807,368. METHOD OF AND APPARATUS FOR OPERATING CABLE TELEGRAPH SYSTEMS. HERBERT ANGEL and JAMES W. ROBINSON, Brooklyn, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Mar. 30, 1929. Serial No. 351,379. 13 Claims. (Cl. 178—2.)



1. The method of transmitting telegraph code signals over a line or cable from a transmitting station to a receiving station which consists in transmitting the elements of the code characters in such a manner that succeeding selecting or marking elements shall be of opposite polarity, the spacing or nonselecting elements of the same polarity as the preceding selecting element, the selecting elements having a duration of at least one time unit and the spacing elements having a duration less than the selecting elements.

1,807,369. GEAR SHIFT LEVER GRIP FOR MOTOR VEHICLES. CHARLES W. BECK, Toledo, Ohio, assignor, by mesne assignments, to Nellie M. Beck, Toledo, Ohio. Filed Apr. 23, 1928. Serial No. 272,164. 3 Claims. (Cl. 16—121.)

1. A gear shift lever wood grip comprising a plurality of lamina of wood having a central opening through a plurality of the lamina transversely of the grain of the wood of the lamina and short of extending through the grip, and an externally roughened internally threaded

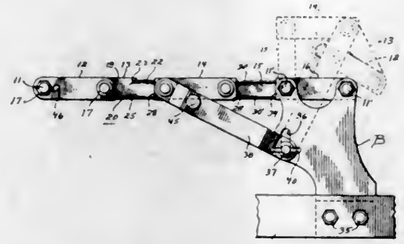


ferrule for mounting the grip, said ferrule being of larger external diameter than said opening and being press-fitted into said opening in supplementally interlocking the lamina of the grip adjacent the ferrule.

1,807,370. PROCESS FOR THE PREPARATION OF VISCOSE. JACQUES MARC BERNARD, Paris, France. Filed May 27, 1927, Serial No. 194,851, and in France June 24, 1926. 5 Claims. (Cl. 260—100.)

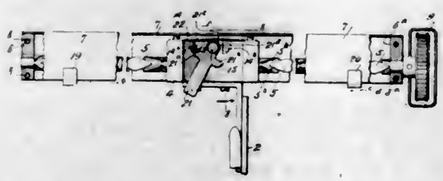
1. A process for the manufacture of liquid viscose which consists in impregnating cellulose with carbon disulphide, adding thereto a solution of caustic soda, allowing the caustic soda to transform the cellulose into liquid xanthate of cellulose, and diluting in an aqueous bath to the viscosity of the viscose to be produced, all these operations being performed at ordinary temperature.

1,807,371. LUGGAGE CARRIER FOR VEHICLES. GERALD L. BINNS, Ypsilanti, Mich. Filed Apr. 25, 1929. Serial No. 358,065. 6 Claims. (Cl. 224—29.)



1. A luggage carrier for vehicles comprising brackets for attachment to the vehicle, a bed frame supported at its inner edge between the brackets and embodying hingedly connected sections capable of being rolled upon one another above the brackets, a brace arm pivotally connected between each bracket and the adjacent end of the frame, and means carried by each brace arm for engagement with one of the frame sections for preventing unrolling of the frame.

1,807,372. CARRIAGE REVERSING MECHANISM FOR WINDSHIELD CLEANERS AND THE LIKE. HOLGER BJORNWALD, New York, N. Y. Refiled for abandoned application Serial No. 539,875, filed Feb. 28, 1922. This application filed June 27, 1930. Serial No. 464,187. 2 Claims. (Cl. 74—14.)



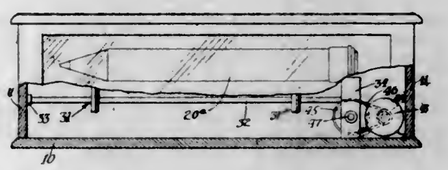
1. Carriage-reversing mechanism for windshield cleaners and the like embodying, in combination, a rotatable screw having oppositely-disposed threads, means for rotating the screw, a carriage mounted to travel on the screw, nuts rotatably mounted in said carriage and having interior threads engaging respectively with the oppositely-disposed screw-threads of the screw and also having exterior projections; a pivoted connecting bar mounted on said carriage and adapted alternately upon pivotal movement to connect with and prevent rotation of either of said nuts, comprising a reversing pawl having arms extending substantially at right angles and pivoted on the pivot of said bar and stops at opposite ends of said screw for swinging said pivotal pawl to engage the pivoted bar and lock the carriage to the nuts.

1,807,373. CONNECTING ROD FOR LOCOMOTIVES. JAMES G. BLUNT, Schenectady, N. Y. Filed Apr. 13, 1925. Serial No. 22,761. 4 Claims. (Cl. 74—17.)



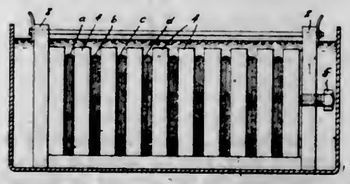
1. In a connecting rod structure for locomotives, the crank-engaging end of the rod being provided with a pivotally mounted bearing member having trunnion members extending transversely of the longitudinal axis of the rod, and the opposite ends of the bearing member having the formation of cylinder segments struck from a common center, whereby the bearing member may rock about the axis of the trunnion members to permit lateral angular movement of the rod with relation to the crank.

1,807,374. REFLECTOR SIGN. FRED W. BOWERMAN, Chicago, Ill. Filed May 16, 1929. Serial No. 363,516. 15 Claims. (Cl. 40—130.)



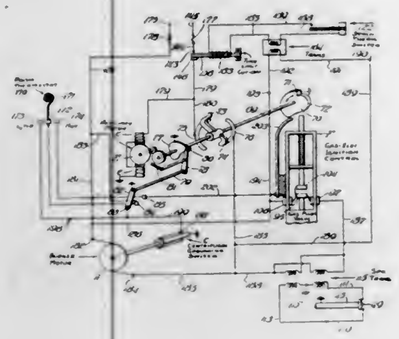
1. In a display sign, the combination of an object-strip, a flexible reflector arranged with respect to the strip so as to produce an image of the latter, means for deflecting the reflector back and forth to cause the reflected image to change in size or shape, and a motor connected to operate said means and effect a continuous and automatic deflection of the reflector.

1,807,375. ELECTRIC CONDENSER AND METHOD OF REMOVING IMPURITIES FROM THE ELEMENTS OF OR FOR SUCH CONDENSERS. SYLVESTER BOYER, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed June 27, 1927. Serial No. 201,766. 4 Claims. (Cl. 175—41.)



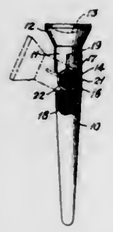
1. The method of removing impurities from the elements of an electric condenser which consists in washing the condenser in a dielectric fluid by compressing and releasing the elements of the condenser in the fluid.

1,807,376. LIQUID FUEL BURNING SYSTEM. MARSHALL H. BRADEN, Rock Island, Ill., assignor to The Nu-Way Corporation, Rock Island, Ill., a Corporation of Illinois. Filed Mar. 9, 1925. Serial No. 14,151. 12 Claims. (Cl. 158—28.)



9. A liquid fuel burning system comprising an electric motor, means actuated thereby for supplying fuel to a combustion chamber, a high voltage circuit for said motor, a switch in said high voltage circuit for controlling the operation of said motor, a room thermostat in said high voltage circuit, electrical means responsive to said thermostat for opening and closing said switch, a circuit breaker in said high voltage circuit, a thermostatic switch operable by the heat generated by the combustion of the fuel, a low voltage circuit connected with said thermostatic switch, means responsive to said low voltage circuit and operatively connected with said circuit breaker whereby said circuit breaker is caused to open should ignition fail or combustion cease, and a transformer having its primary winding connected to the high voltage circuit and its secondary winding connected to said low voltage circuit, said primary winding being connected to said high voltage circuit whereby the operation of said circuit breaker interrupts the operation of said motor and also interrupts the flow of current in said primary winding.

1,807,377. GOLF TEE. DE WITT P. BROKAW, North Plainfield, N. J. Filed May 16, 1930. Serial No. 452,831. 5 Claims. (Cl. 273—33.)



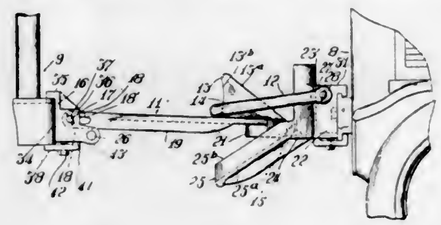
1. A tee comprising a ground penetrating peg portion, and a separate body portion having a tee seat, a pivot element connecting the peg portion to the body portion, and a spring element at the pivot connection adapted to return the body portion to its original vertical driving position after being displaced therefrom when the ball is struck from the tee.

1,807,378. FILTER FOR AIR AND GASES. ELEONORE BUDIL, Born Meixner, Berlin-Tempelhof, Germany. Filed July 28, 1927, Serial No. 209,137, and in Germany July 31, 1926. 8 Claims. (Cl. 183—79.)



1. In a filter for air and gases, filtering-elements of tubes, from the walls of which tubes series of flaps are stamped out, disposed staggered towards each other, said flaps being bent under different angles toward the inside of the said tubes.

1,807,379. DRAFT COUPLING FOR TRACTORS AND TRAILERS. ROBERT J. BURROWS, Buchanan, Mich., assignor to Clark Tructractor Company, Buchanon, Mich., a Corporation of Michigan. Filed Sept. 17, 1926. Serial No. 136,025. 11 Claims. (Cl. 280—33.44.)



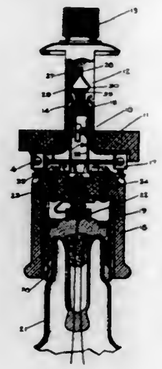
11. A coupling device comprising a relatively short vertically swinging draw bar having a hook on its upper side, a draw head adapted to receive said bar, said bar being adapted to have a limited lateral swinging movement, means on the draw head to guide the draw bar vertically to automatically engage the same with the coupling member, and a coupling member pivotally carried by said draw head and adapted to fall from the force of gravity over said hook.

1,807,380. OAR. GLENN C. BUTLER, Rochester, Mich. Filed July 16, 1930. Serial No. 468,335. 1 Claim. (Cl. 9—24.)



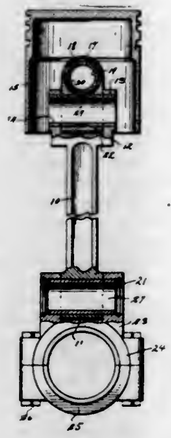
An oar of the class described, comprising: a shaft having one end bifurcated; a metallic paddle strip engageable between the bifurcations of said shaft; a neck on one end of said paddle strip, said neck lying between said bifurcations and being of no greater width than the width of said shaft, said shaft terminating inwardly of the other end of said paddle strip; and means for securing said strip between said bifurcations.

1,807,381. CUT-OUT FOR SERIES INCANDESCENT STREET-LIGHTING CIRCUITS AND THE LIKE. HENRY E. BUTLER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 24, 1929. Serial No. 357,834. 4 Claims. (Cl. 200—87.)



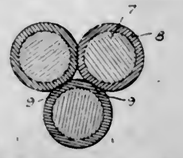
1. The combination with a lamp socket having lamp terminal connections and a pair of contact arms electrically connected to said terminals, of a cutout structure held between said contact arms comprising an insulating means for holding said arms from electrical contact with each other, an electro-magnet having the terminals of its windings connected to said arms, and a conductor which is moved by the electromagnet to connect electrically said contact arms.

1,807,382. UNIVERSAL CONNECTION FOR PISTON RODS. JOHN R. BUTLER, Durango, Colo., assignor of one-half to Jennie C. McLean, Durango, Colo. Filed Jan. 15, 1929. Serial No. 332,583. 4 Claims. (Cl. 74—108.)



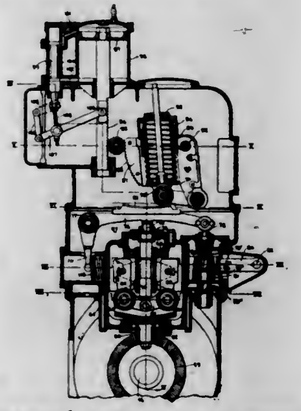
1. A piston rod bifurcated at its upper end to provide two apertured ears, a trunnion block disposed and fitting between said ears and having a transverse passage in one end, the other end of the trunnion block being formed to fit between the inwardly extending bosses of a trunk piston and having a passage disposed at right angles to the first named passage, a pair of tubular pins extending through both of said passages one of said pins having an annular channel at a point spaced inwardly from the opposite ends thereof, the other pin being adapted to rotatably seat in said annular channel whereby to lock said first pin against longitudinal movement, and means engaging the walls of said passages for holding the pins in place.

1,807,383. GRINDING METHOD AND APPARATUS. GEORGE HOLMES CARNAHAN, New York, N. Y., assignor, by mesne assignments, to Rubber Surfacers, Inc., Wilmington, Del., a Corporation of Delaware. Filed Sept. 29, 1928. Serial No. 309,363. 9 Claims. (Cl. 83—9.)



1. The improved method of grinding or disintegrating materials in ball mills or tube mills which comprises subjecting the same to the action of grinding balls having resilient rubber wearing surfaces which flatten under pressure where the balls come into contact with each other, the resilient surfaces of said balls being of substantial thickness and the heavy metal core being of sufficient weight to cause the balls to flatten where they come in contact with each other during the grinding operation, whereby the resilient surfaces have substantial surface areas in contact with each other during the grinding operation.

1,807,384. INTERNAL COMBUSTION ENGINE CONTROL MECHANISM. ALAN ERNEST LEOFRIC CHORLTON, London, England. Filed Feb. 15, 1928. Serial No. 254,346. 6 Claims. (Cl. 123—140.)

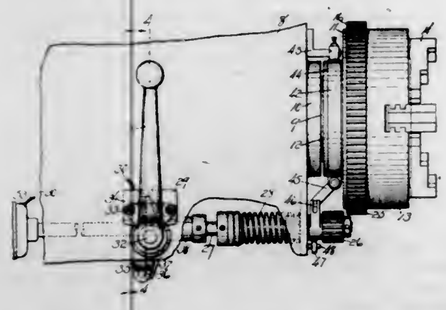


1. The combination with an internal combustion engine provided with a fuel injection device having means for varying the duration of injection and means for varying the timing of injection, of a governor operated by the engine and including centrifugal weights, spring means for opposing the centrifugal effort of the weights, means under control of the weights and of the spring means and connected to the injection duration varying means for controlling the latter in accordance with the load imposed upon the engine, means for varying the effective scale of the spring means so as to obtain various operating speeds of the engine, and means responsive to said speed-varying means for effecting adjustments in the time of fuel injection.

1,807,385. CHUCK. ALBERT E. CHURCH, New Britain, Conn. Filed Jan. 25, 1929. Serial No. 335,182. 16 Claims. (Cl. 279—114.)

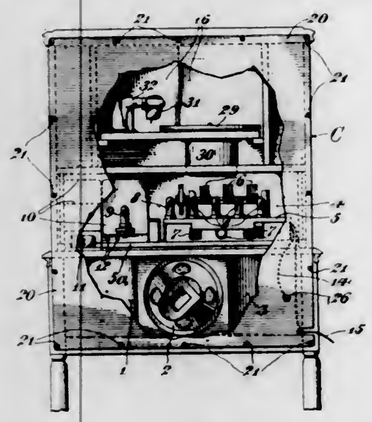
1. A chuck including a chambered body having chuck jaws radially movable thereon and a scroll member en-

gaged with said jaws, an internally toothed member secured to said scroll member, a pinion engaged with said toothed member, an internally and externally toothed jaw actuator rotatably mounted on the exterior of said



body, and a geared connection between said actuator and said pinion, said connection including a gear rotatably mounted on said body and in mesh with the teeth on said actuator.

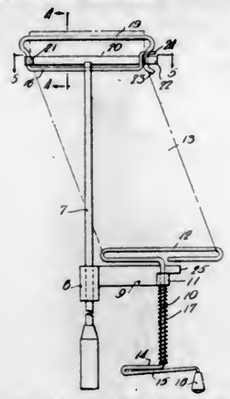
1,807,386. CABINET FOR RADIO RECEIVING APPARATUS. CAROLE A. CLARKE, Moorestown, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Oct. 10, 1928. Serial No. 311,516. 6 Claims. (Cl. 250—14.)



1. The combination with radio apparatus of a casing therefor, the wall structure of the casing including a metallic plate constituting the coupling between said apparatus and an electro-radiant energy transmission medium and acting as a closure member for said casing.

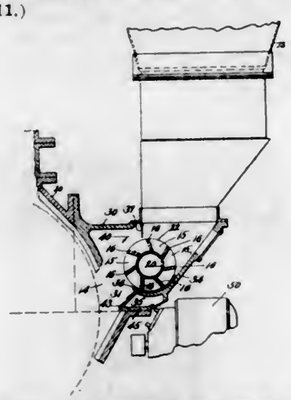
1,807,387. MOP HOLDER AND WRINGER. ANTONY COLANGELO, Revere, Mass. Filed Apr. 29, 1930. Serial No. 448,352. 1 Claim. (Cl. 15—120.)

A mop holder and wringer comprising an elongate handle, means at the lower end of the handle for holding one end of a mop, a sleeve slidable along the handle and having an arm extending transversely thereof, a hub on said arm, a crank shaft rotatable and longitudinally slidable in said hub, the lower end of the shaft having a transverse loop for holding the opposite end of the mop and the other end being bent to form a transverse shoulder and operating lever, and a coiled spring surrounding the shaft between said hub and said shoulder and tending to hold said loop adjacent said arm, the hub being spaced



from the lower edge of the arm so that the loop normally engages the arm and is thereby prevented from rotation when the mop is in use.

1,807,388. APPARATUS FOR FEEDING COAL AND LIKE MATERIAL. CYRUS CORLISS, Boston, Mass. Filed June 29, 1929. Serial No. 374,663. 5 Claims. (Cl. 83—11.)

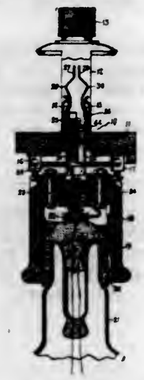


1. In a feeding apparatus of the character described, in combination, a rotatable bucket member provided with axially extended walls spaced a substantial distance apart at both their inner and outer ends to form a plurality of buckets open at their inner and outer ends continuously throughout the length thereof, a closure member cooperating with the inner ends of said buckets to substantially close the same and about which the bucket member is revolved, said closure member being constructed and arranged to maintain said buckets substantially closed at their inner ends from a position in which they are loaded by gravity through their open outer ends into a position wherein they are unloaded by gravity through said open outer ends, said walls co-operating with said closure member to effect bodily movement of the material in the buckets with relation to said closure member while said material is being discharged by gravity from said buckets.

1,807,389. CUTOUT FOR SERIES INCANDESCENT STREET LIGHTING CIRCUITS AND THE LIKE. HARRY R. CRAGO, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 15, 1930. Serial No. 452,790. 3 Claims. (Cl. 200—111.)

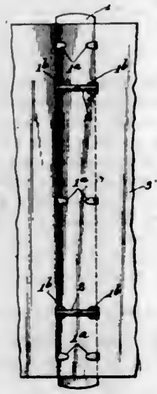
1. The combination with a lamp socket having lamp terminal connections and a pair of contact arms elec-

trically connected to said terminal connections, of a cutout located between said contact arms, comprising an electromagnet mounted on one of said arms and having its winding connected to said arms, a movable plunger for said magnet, a spring contact carried by one of said arms, and a contact carried by the other arm and adapted



to be engaged by said spring contact, said spring contact being normally held from engagement with said other contact by said plunger and being brought into engagement therewith when the electromagnet is energized and the plunger is moved to release the spring contact.

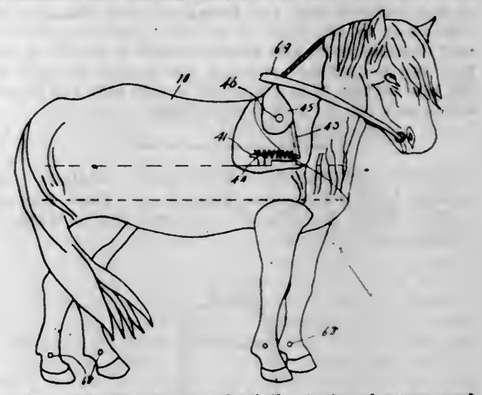
1,807,390. LOOSE LEAF BINDER. GEORGE LOCKE CROSBY, East Orange, N. J. Filed Dec. 14, 1929. Serial No. 413,956. 6 Claims. (Cl. 129—1.)



1. A loose leaf binder comprising a main element having inwardly projecting oppositely located perforated projections, and inwardly extending clamping projections, rings pasaing through the perforations, and a cover clamped to said main element by said clamping projections.

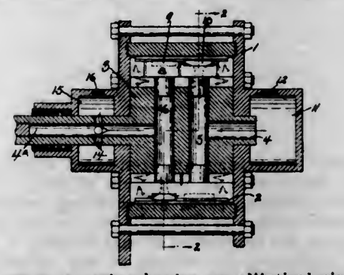
1,807,391. WALKING TOY ANIMAL. JOHN M. DANKO and JOHN KASARDA, Freeland, Pa. Filed Mar. 21, 1930. Serial No. 437,710. 2 Claims. (Cl. 46—40.)

1. A mechanical toy comprising the figure of a four-legged animal, the legs of which are free to swing and be raised and lowered, the head of which is pivoted to the body so as to be swung up and down, a train of gears positioned within the body, a motor for driving said gears, crank discs revolvable by said gears, operating levers pivoted to said crank discs, said levers being so mounted as to receive a four-way motion from the crank discs, leg levers to which said operating levers are pivoted, said leg levers being slidably pivoted so as to follow the motions of the operating levers, a centrifugal gover-



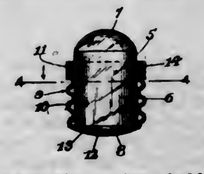
nor for regulating the speed of the train of gears, and means connected with the head of the figure for starting and stopping said train of gears.

1,807,392. CONTINUOUS CIRCULATING PUMP. CLAUD FLEMING DAVIS, Shadyside, Ohio. Filed May 28, 1929. Serial No. 366,610. 8 Claims. (Cl. 103—136.)



2. In a pump, a casing having an elliptical circumferential wall, a cylindrical rotor within the casing having oppositely disposed hollow journals rotatably mounted in the side walls of said casing, said rotor having therein spaced diametrical bores having their opposite ends opening into the interior of the casing, the interior of each journal being in open communication at its inner end with the adjacent bore, centrifugally-responsive members having their inner ends slidably received in the outer ends of each bore, said members having their outer ends seated upon the circumferential wall of the casing and having ports opening outwardly in opposite directions through which communication is had between said bores and the interior of the casing at both the front and rear sides of said members.

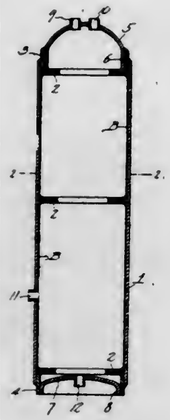
1,807,393. REFLECTING DEVICE. HERMAN FREDERICK DELMANHORST, Louisville, Ky., assignor, by mesne assignments, to Louisville Frog, Switch & Signal Company, Louisville, Ky., a Corporation. Filed May 5, 1928. Serial No. 275,485. 9 Claims. (Cl. 88—1.)



9. In a reflecting device, a lens holder comprising a hollow body open at its outer end and closed at its inner

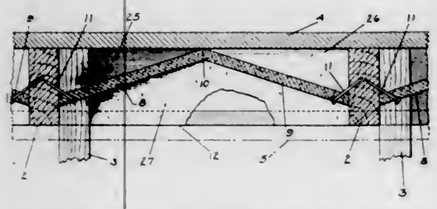
end, said body formed with an inner threaded part and an outer non-threaded part, said non-threaded part offset with respect to the portions of smallest inner diameters of said threaded part and having its outer diameter corresponding to the portions of the largest diameters of said threaded part, said parts coacting to provide a support for a combined securing and sealing medium for the lens adapted to be positioned in said body and further acting as a seal for said threaded part.

1,807,394. INTERIORLY ENAMELED BOILER. ARTHUR L. DUNHAM, New York, N. Y. Filed July 30, 1927, Serial No. 209,627. Renewed Jan. 9, 1931. 1 Claim. (Cl. 220—63.)
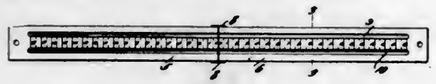


A boiler comprising an open-ended cylinder formed from a single piece of corrodible material, a plurality of spaced stiffening rings, attached and extending from the interior surface of said cylinder, the end rings being spaced from the extremities of said cylinder, a coating of enamel applied to the interior of said cylinder and directly covering the exposed portions of said rings and closure means of non-corrodible material for sealing the ends of said cylinder, and adapted to be attached thereto after the application of the enamel, each of said closure means being partially overlapped by the ends of the cylinder.

1,807,395. BUILDING WALL STRUCTURE. GEORGE H. ELLIS, St. Paul, Minn., assignor to The Insulite Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 12, 1928. Serial No. 318,776. 4 Claims. (Cl. 20—4.)



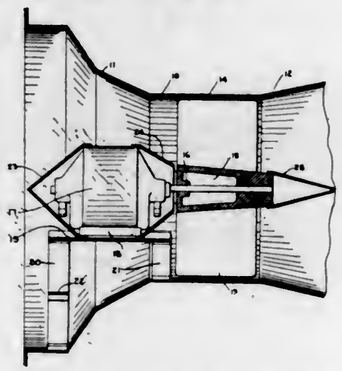
1. In a building wall, the combination with spaced studding having outer and inner wall sections secured to their opposite edges, of insulating panels arranged between adjacent studding and each having one edge secured to one of said studdings, the opposite edges of said boards being beveled and abuttingly engaged with each other, and said beveled edges also engaging one of said wall sections.

1,807,396. MEANS FOR STRINGING BEADS. PERCY G. ELLSWORTH, Burlington, Vt. Filed May 6, 1929. Serial No. 360,933. 2 Claims. (Cl. 33—1.)



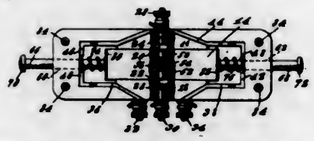
1. In a bead stringing board, elongated elements each having longitudinal grooves on their upper faces adapted to hold beads and a series of graduations parallel to said grooves progressively increased numerically in opposite directions from a central zone, and means for hingedly connecting the elements together.

1,807,397. PROPELLER TYPE PUMP OR FAN. CARL J. FECHHEIMER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1927. Serial No. 192,967. 8 Claims. (Cl. 103—89.)



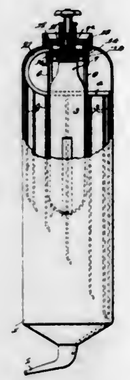
1. A propeller type pump or fan comprising a casing and a bladed propeller having a hub tapered in the direction of flow and mounted within the casing, the blades of the propeller having an increasing axial pitch from their leading to their trailing edges, said blades being also relatively thickened toward their leading edges, whereby the passages between the casing and the hub and the respective blades are divergent in the direction of flow, the angle of divergence of said passages being between 5.5 degrees and 8.0 degrees for efficient conversion of velocity into static head in ducts of similar section.

1,807,398. SWITCH. ROY E. FLEEK, Oil City, Pa. Filed Feb. 13, 1929. Serial No. 339,671. 1 Claim. (Cl. 200—16.)



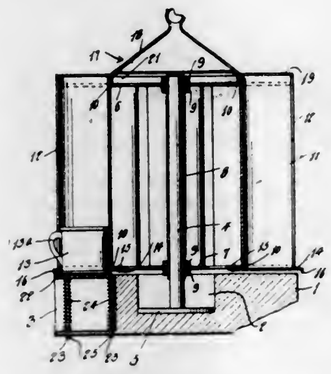
In a switch of the class described, a casing of insulating material, a block of insulating material mounted for sliding movement longitudinally in the casing, means connected with the block whereby it may be adjusted, springs engaging the opposite ends of the block to yieldably hold the same in an intermediate position, fixed contacts upon opposite side walls of the casing intermediate the ends thereof, contacts slidably mounted in the opposite sides of the block, a spring disposed between the last mentioned contacts to hold the same in engagement with the first mentioned contacts when the block is in its normal, intermediate position, a pair of spaced fixed contacts upon each end wall of the casing, a corresponding contact of each pair being in circuit with one of the first mentioned fixed contacts, conductor wire connecting means in circuit with the said one of the fixed contacts, and a conductor wire connecting means in circuit with each of the other contacts of the pairs.

1,807,399. DRY FIRE EXTINGUISHER. WILHELM FRIEDRICH, Berlin-Lichterfelde. Filed Apr. 11, 1928, Serial No. 269,252, and in Austria May 27, 1927. 3 Claims. (Cl. 169—31.)



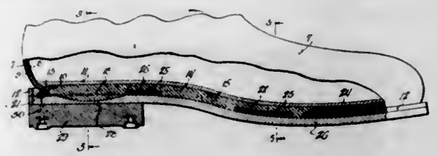
1. In a fire extinguisher having a discharge outlet, a powder container, a gas bottle supported therein having its outlet normally sealed, means for rendering ineffective said sealing means, a closure for the powder container having a chamber therein, means for rendering said chamber fluid tight, means for establishing communication between said gas bottle and said chamber, a conduit arranged within the powder container and having a communication with the chamber in the closure, and a plurality of branch conduits leading from the first named conduit to different points throughout the container and into said discharge outlet.

1,807,400. CUP CONTAINER. ARTHUR J. GALLAGHER, Warren, Ohio. Filed Apr. 2, 1929. Serial No. 351,983. 3 Claims. (Cl. 312—42.)



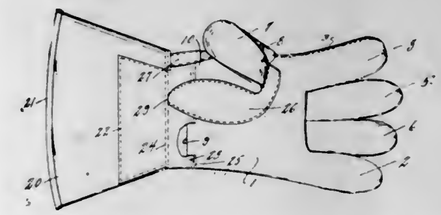
1. A cup container comprising a spring supported plate, a series of cup carrying tubes provided with slots through which the handles of the cups extend, pivoted bars extending across the lower ends of the tubes, and means for rotatably supporting the tubes to permit them to be successively alined with the plate.

1,807,401. SHOE. JAMES F. GILKERSON, Milwaukee, Wis. Filed Feb. 13, 1930. Serial No. 428,045. 5 Claims. (Cl. 36—17.)



5. In a Goodyear welt shoe having a sewed seat, the combination with the inner sole, the welt, the inseam ridge and the outer sole, of a cushion sole interposed between the inner and outer sole comprising a soft rubber member having a filler portion extending under the insole, between the inseam ridges at the heel and shank of the shoe, and secured thereto and having a bottom cavity formed therein beneath the metatarsal bones of the foot and a bottom cavity extending from the heel adjacent its breast outwardly beyond the same, material stiffer than said member filling said cavities, stitching securing the welt and outer sole directly together around the shoe, a heel, and fastening means for said heel secured to the outer sole.

1,807,402. GLOVE. HERMAN GILLIAN, Columbus, Ohio. Filed Jan. 7, 1930. Serial No. 419,119. 2 Claims. (Cl. 2—162.)



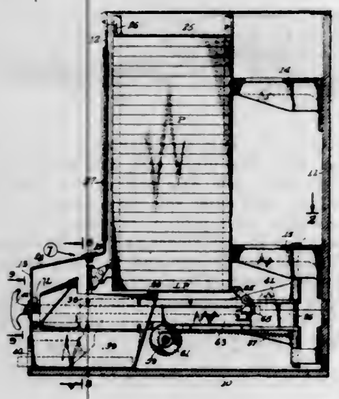
1. A hand covering having a gauntlet, a palm spaced from the gauntlet to provide clearance therebetween, a gauntlet facing bridging said clearance, a thumb, and a facing extending from the thumb crotch over the palm and bridging portion to the gauntlet.

1,807,403. DISPLAY DEVICE. DOUGLAS B. GORDON, Hamilton, Ontario, Canada. Filed Apr. 23, 1928. Serial No. 272,203. 12 Claims. (Cl. 40—130.)



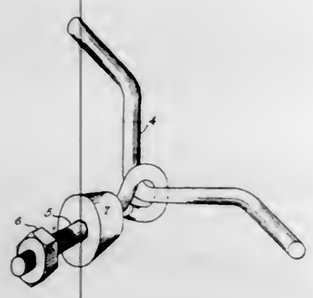
1. In a display device, a frame having spaced end walls provided with inwardly projecting flanges at their top edges, angular strips secured to the end walls and having inwardly extending flanges spaced from the flanges aforesaid and cooperating therewith to form guideways, an inclined wall joining said end walls, a second set of angular strips secured to said end walls adjacent said inclined wall and forming therewith guideways, a sheet of material having a reflecting surface supported upon said inclined wall and secured in said last mentioned guideways, and a transparent sheet of material having symbols applied thereto, secured in said first mentioned guideways.

1,807,404. CIRCULAR VENDING MACHINE. HARRY T. GOSS, Rutherford, N. J., assignor to Pack Shops, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 4, 1926. Serial No. 92,107. 10 Claims. (Cl. 312—67.)



1. In a vending machine, the combination of a plurality of vertically disposed package containing reservoirs radially disposed about an axis, a plurality of mechanism locating spring retainers, one for each reservoir, a single package ejecting mechanism pivotally mounted to be swung about said axis and including an ejecting rod coacting with said spring retainers and adapted to be positioned selectively in operative engagement to eject the lowermost package from any one of the reservoirs.

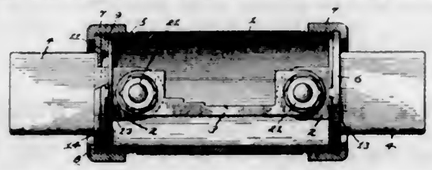
1,807,405. MEANS FOR ATTACHING LINTELS TO CONCRETE SPANDRELS. ARTHUR C. HEITMANN, Oakwood, Ohio. Filed June 10, 1929. Serial No. 369,547. 3 Claims. (Cl. 72—101.)



1. Means for attaching a support to a monolithic member, comprising anchors for embedment in said member, fastening elements to whose inner ends the anchors are secured, said support formed with holes to receive said fastening elements, and a spacing sleeve on each fastening element for embedment in the monolithic member near its face portion for the purpose specified.

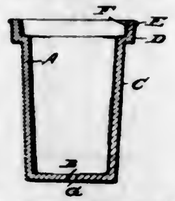
1,807,406. REFILLABLE ELECTRIC FUSE. JOHN H. HICKEY, San Francisco, Calif., assignor to Hickey Fuse & Manufacturing Company, San Francisco, Calif., a Corporation of California. Filed Dec. 19, 1928. Serial No. 327,119. 10 Claims. (Cl. 200—132.)

1. The combination with a casing and terminal member of an electric fuse, of a plate adapted to seat upon an end of the casing and slotted to receive the terminal member; a clamping member mounted adjacent the outer face of the plate and provided with inclined surfaces movable



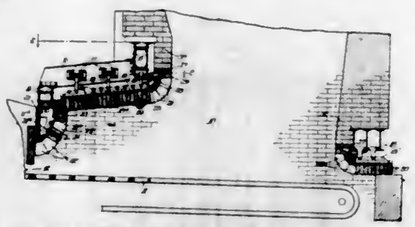
to engage notches formed in the terminal member to clamp the plate and terminal member together; and means for centering the clamping member relative to the plate and terminal member.

1,807,407. PAPER FLOWERPOT. WILLIAM J. HOHNHORST, Auchorville, Mich. Filed Aug. 5, 1927. Serial No. 210,808. 2 Claims. (Cl. 47—34.)



1. In combination with an earthen flower pot provided at its bottom with a drainage hole; a paper container therefor consisting of a smooth uncreased and undivided annular paper shell having a drainage hole at the bottom of the shell registering with the drainage hole of the earthen flower pot, said paper shell near its upper edge having an outwardly projecting horizontal flange with an upwardly directed outer rim complementary to the shape of the earthen pot and terminating in an outwardly rolled beaded reinforcing edge, substantially flush with the upper edge of said earthen flower pot, said beaded reinforcing edge being adapted to guide the entry of the earthen pot into the container.

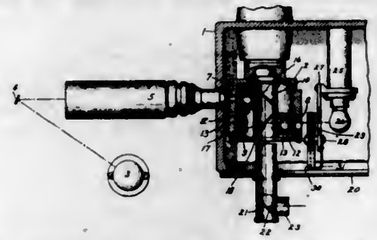
1,807,408. FURNACE CONSTRUCTION. LOUIS H. HOSBEIN, Chicago, Ill., assignor to M. H. Detrick Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1923. Serial No. 649,472. 19 Claims. (Cl. 110—99.)



1. In a travelling grate stoker furnace, an ignition arch comprising frame members, wedge shaped refractories connected at their narrower ends thereto and spaced apart vertically, and other refractories having parallel sides disposed between the wedge shaped refractories and cooperating therewith to form a wall sloping inwardly and upwardly from the fuel inlet.

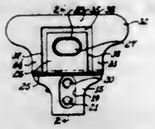
1,807,409. SOUND RECORDING APPARATUS. CHARLES A. HOXIE, Alplaus, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 25, 1929. Serial No. 373,664. 5 Claims. (Cl. 88—23.)

1. Sound recording apparatus comprising a drum adapted to support a sensitive film, a recording lamp arranged to direct a light beam on said film, said drum having an opening therein through which said beam may pass, a tubular member within the drum having an observation opening, means for reflecting the light of said beam after passing through said opening through said



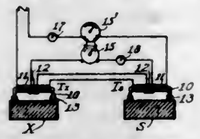
tubular member, a reference lamp, and means in said tubular member for restricting the light observed from one of said lamps to a circular area and the light observed from the other lamp to a ring surrounding said circular area.

1,807,410. SUPPORTING ELEMENT FOR ELECTRICAL DEVICES. FRANK H. HUBBARD, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,157. 7 Claims. (Cl. 247—21.)



1. The combination with an electrical device to be supported in a wall outlet box, of supporting means for said device attached thereto and having projecting lugs to be attached to the outlet box and projecting wall engaging parts to position said device relative to the wall, said lugs and wall engaging parts being coordinated to occupy the same plane and said lugs being bendable out of the plane of said parts to approach the outlet box.

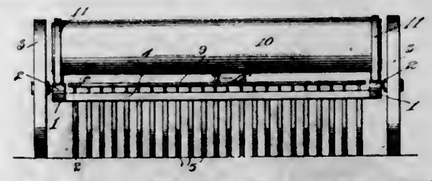
1,807,411. METHOD OF AND APPARATUS FOR TESTING MAGNETIZABLE OBJECTS. ELMER S. IMES, Jersey City, N. J., assignor, by mesne assignments, to Magnetic Analysis Corporation, Long Island City, N. Y., a Corporation of New York. Filed June 4, 1925. Serial No. 34,903. 27 Claims. (Cl. 175—183.)



1. A method of determining the depth of the surface portion of an object having body and surface portions that differ as to certain physical characteristics, which consists in generating a varying magnetic field of such values that the main body of magnetic flux will penetrate a standard to a pre-determined depth, subjecting the surface portion of the object to said flux, and observing the resultant modification of said field.

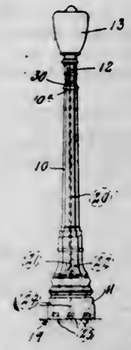
1,807,412. ROAD TREATING APPARATUS. HENRY A. INGALLS, Bakersfield, Calif. Filed Oct. 30, 1928. Serial No. 315,959. 2 Claims. (Cl. 94—39.)

1. Road surface treating equipment comprising a wheeled vehicle having a road traversing member, a plurality of scarifying bars depending substantially vertically therefrom in laterally spaced relation terminating at their lower ends in road way grooving broad edged teeth, a reservoir for holding road treating fluid mounted on said vehicles, and a conduit fixed to each of said bars at its



rear face and depending therewith to a lower terminal discharge point above its lower toothed end, the upper end of each conduit having communication connection with said reservoir.

1,807,413. LAMP POST. GEORGE G. KING, Sheffield, Ala., assignor to King Company, Sheffield, Ala., a Corporation of Ohio. Filed Oct. 22, 1928. Serial No. 314,184. 6 Claims. (Cl. 240—84.)

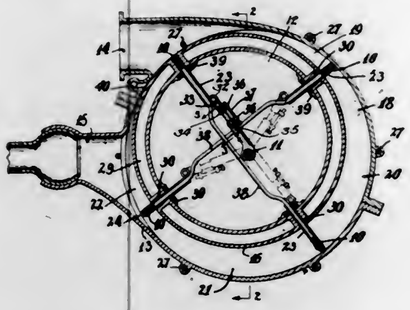


2. In a lamp construction, the combination of a hollow ornamental metallic standard having an enlarged base and an upwardly flanged upper end, a tubular metallic safety member arranged coaxially within said standard and having its lower end terminating short of said base and having its upper end externally threaded and extending above the flanged upper end of said standard, a plurality of resilient steel rods secured to the lower end of said safety member and divergent therefrom, the lower ends of said rods terminating in horizontally disposed perforate feet arranged on a horizontal plane with the lower edge of said base, said feet being spaced from the wall of said base and said rods forming a resilient support for said safety member, a foundation, anchoring bolts embedded in the foundation and projecting upwardly therefrom through said perforate feet, nuts screw-threaded on the upper ends of said bolts and holding said perforate feet anchored, a coupling resting on the upper end of said standard and provided with a central internally threaded opening for engaging the threaded end of said safety member, said coupling having its lower end provided with an annular flange enclosing the flange of said standard, a lamp fixture arranged on the upper end of said coupling, and means for detachably securing said fixture to said coupling independently of said safety member and said standard.

1,807,414. ROTARY ENGINE. JOSEPH KUHAJDA, Mapeth, N. Y. Filed Nov. 20, 1929. Serial No. 408,474. 2 Claims. (Cl. 121—88.)

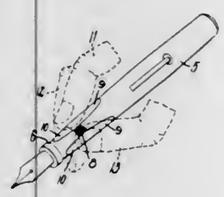
2. In a device of the class described, a casing formed with a circular hollow, an axle coinciding with the axis of the circular hollow and rotatively mounted within said casing, radial arms consisting of telescopic sections mounted on said axle, piston blades pivotally connected to the radial arms and engaging against said casing, and means

for holding the telescopic sections of the said radial arms in various longitudinal positions for constituting an adjustment of the piston blades comprising lugs projecting



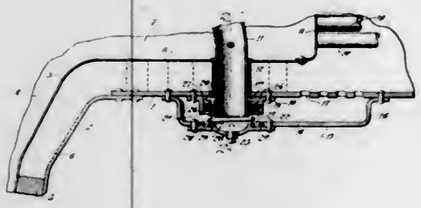
from each of the sections of the radial arms, and a screw having right and left hand threads threadedly engaged through the said lugs so that upon rotation of the sections of the radial arms move together or apart.

1,807,415. FOUNTAIN PEN. DAVID J. LA FRANCE, Cambridge, Mass. Filed May 15, 1930. Serial No. 452,648. 4 Claims. (Cl. 120—42.)



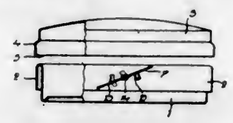
1. A fountain pen having, in combination, a barrel provided on its periphery with flattened portions adjacent its forward end and screw-threaded portions intermediate said flattened portions.

1,807,416. LOCOMOTIVE BOILER. BERT E. LARSON, Park Ridge, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 17, 1929. Serial No. 386,659. 5 Claims. (Cl. 122—68.)



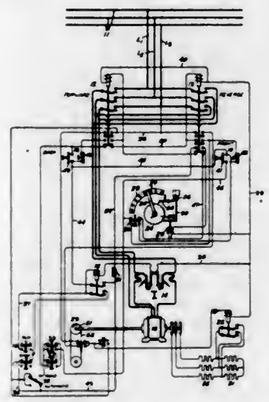
1. A locomotive boiler embodying therein, a boiler shell sheet forming a part of the water space of the boiler, a member secured to said sheet and coacting therewith to form a well, a water circulating element having a tubular end extending through said sheet into said well, a collar fixed on said tubular end, means carried by said sheet and providing an annular shoulder in said well and radially spaced from said tubular end, a packing means surrounding said collar with a normal contracting action thereon and engaged against said shoulder and means disposed between said packing and said member for urging the packing against said shoulder.

1,807,417. CONTAINER. LEOPOLD LECHNER, Mahr-Ostrau, Czechoslovakia. Filed May 10, 1929, Serial No. 361,931, and in Czechoslovakia May 5, 1928. 1 Claim. (Cl. 220—43.)



The combination of a container and a top therefor, said container having an annular depending lip spaced therefrom, said lip having a plurality of bearing slots formed therein, a lid or top opener provided with a plurality of tongues operable in said slots to pivot said opener and to limit the movement thereof, and a spring tensioning member engageable with said tongues to tension the movement of said opener.

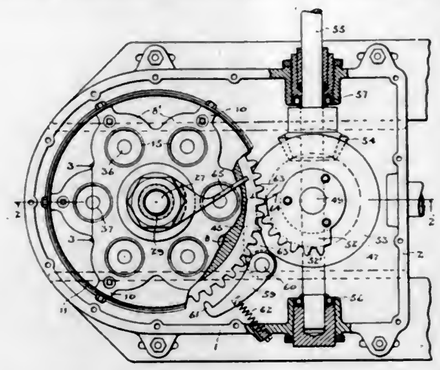
1,807,418. SYSTEM OF MOTOR CONTROL. CHARLES F. LEE, Cincinnati, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Jan. 24, 1929. Serial No. 334,824. 3 Claims. (Cl. 172—240.)



3. A motor control system comprising in combination means including a pair of switches responsive to limited operation of the motor in opposite directions respectively, means including a pair of contactors respectively under the control of said switches for repeatedly reversing the direction of rotation of the motor, a notching relay, provided with a movable member, means including connections controlled by the operations of one of said contactors for actuating said relay to advance said movable member a number of steps proportional to the number of operations of said contactor, and means responsive to a predetermined number of steps of said movable member for rendering said reversing means ineffective after a predetermined number of reversals of the motor.

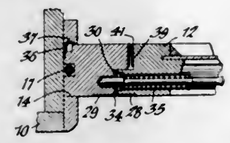
1,807,419. BILLET CASTING MACHINE. JOHN WYCLIFFE LEIGHTON, Port Huron, Mich. Filed Oct. 24, 1929. Serial No. 402,139. 20 Claims. (Cl. 22—77.)

4. A billet casting machine, comprising a mould, a plunger reciprocable in said mould and forming the bottom thereof, a passage encircling the mould, a passage extending transversely through said plunger, and a passage



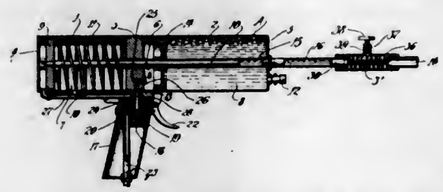
leading from the aforesaid passage and communicating with the passage in the plunger and conducting the fluid lubricant in a continuous flow therethrough.

1,807,420. WINDOW. GEORGE A. LUNZ and JOHN L. FEYL, Buffalo, N. Y. Filed Sept. 17, 1928. Serial No. 306,480. 7 Claims. (Cl. 20—49.)



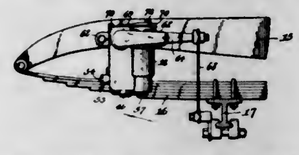
1. A window of the character described, comprising a frame, stiles guided for vertical movement in the opposite sides of said frame, a sash pivotally connected at its lower end to said stiles, coupling elements applied to the adjoining faces of the sash and the stiles and having parts arranged to interfit with each other in the normal closed position of the sash, said parts having alining openings therein, and a locking bolt applied to the sash and arranged to engage said openings for holding the sash in such position.

1,807,421. GREASE GUN OR THE LIKE. BURTON J. MAHONEY, Chicago, Ill., assignor to Hoffmann High Pressure Equipment Company, a Corporation of Illinois. Filed Sept. 19, 1928. Serial No. 306,888. 2 Claims. (Cl. 221—47.3.)



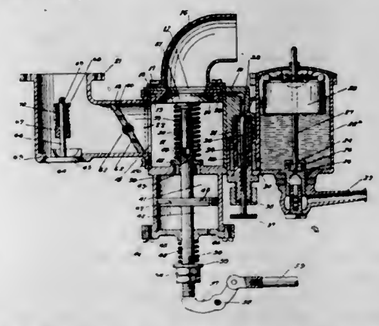
1. In a device of the character described, a barrel containing a chamber for fluids and a second chamber, a piston in said second chamber, a tube extending from a point within the second chamber through the other chamber, a conduit connected to said tube, a plunger connected to said piston and fitting slidably into said tube, a spring to retract the piston and plunger, said tube having a port therein at a point that is beyond the free end of the plunger a distance less than the stroke of the plunger when the latter is retracted, a handle on said device, said handle having a passage for compressed air, a manual valve in said passage, there being branch passages leading from the valve into the second chamber behind the piston and into the chamber for fluids, and an outwardly seated check valve in the passage leading to the chamber for fluids.

1,807,422. SHOCK ABSORBER. ADOLPH W. F. MANZEL, Buffalo, N. Y., assignor to Manzel Bros. Co., Buffalo, N. Y., a Corporation of New York. Filed Feb. 19, 1927. Serial No. 169,535. 12 Claims. (Cl. 267—8.)



11. A shock absorber, comprising a casing having an oil-containing chamber, a cylinder, and a wall separating said chamber from said cylinder and provided with an extension projecting into said oil-containing chamber and serving as a control chamber for controlling the flow of fluid from and to said oil-containing chamber, said control chamber having a longitudinal passage therethrough reduced in diameter along its upper portion and threaded at its lower portion, a valve seat threaded into said threaded lower portion, a transverse passage connecting the larger portion of said longitudinal passage with said cylinder, a relief valve in the smaller portion of said longitudinal passage, a valve seated against said valve seat, a spring tending to hold said valve against said valve seat, and means connecting the larger portion of said longitudinal passage with said oil-containing chamber including a sleeve-like member extending into said oil-containing chamber and opening with one end into said longitudinal passage, said sleeve-like member having slots at diametrically opposite points extending inwardly from the outer end thereof, and an adjustable valve extending from the exterior of said casing into said sleeve-like member and uncovering definitely determined portions of said slots at the inner end thereof to provide restricted oil passages through said sleeve-like member.

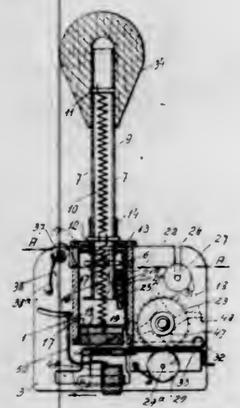
1,807,423. CARBURETOR. JULIUS J. MATSON, Glenwood, Ill. Filed May 4, 1929. Serial No. 360,586. 4 Claims. (Cl. 261—23.)



3. In a carburetor including a mixing chamber, an air inlet and a mixture outlet, a member located at the juncture of the air inlet with the mixing chamber and formed with a valve seat provided with an annular passage and a plurality of radial ports, means for conducting fuel to said annular passage, a valve normally closing said seat and having a stem, a cylinder beneath the mixing chamber having ports communicating therewith, a stem slidable through the cylinder and carrying a piston located therein,

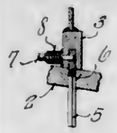
said second named stem slidably receiving said first named stem, a valve surrounding the second named stem and normally closing the ports in the top of the cylinder, and spring means normally holding both of said valves seated.

1,807,424. APPARATUS FOR AFFIXING STAMPS, LABELS, AND THE LIKE. OTTO MATZKA, Vienna, Austria, assignor to the Firm "Electa" Apparatenbau-Gesellschaft m. b. H., Vienna, Austria. Filed July 30, 1929, Serial No. 382,269, and in Austria Aug. 7, 1928. 9 Claims. (Cl. 216—25.)



1. An apparatus for affixing stamps, labels or the like, comprising a vertically movable press-plate adapted to press the object to be affixed against a support, a vertically reciprocating pressure member adapted to move said press-plate downward, feeding means for unwinding the objects to be affixed from a storage strip and for advancing them portion by portion into the path of the said press-plate, a vertically movable knife suspended by means of tension springs and adapted to cut off the said advanced object from its storage strip, a supporting ledge on said knife, and a pawl secured to the said pressure member and adapted to engage the said supporting ledge during the descent of the pressure member to but such an extent as to permit the said knife after having cut off the object to be affixed from the strip to return to its initial position while the press-plate is descending and moving the cut-off object towards the support.

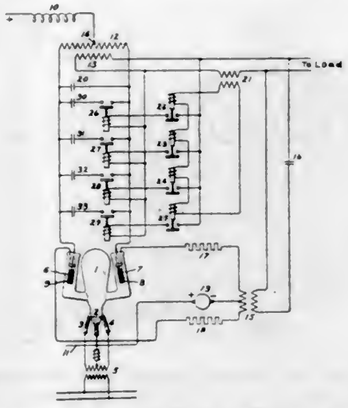
1,807,425. WINDOW SCREEN CONSTRUCTION. CHARLES MCCALMON, Manitowoc, Wis. Filed Nov. 8, 1928. Serial No. 317,985. 1 Claim. (Cl. 156—14.)



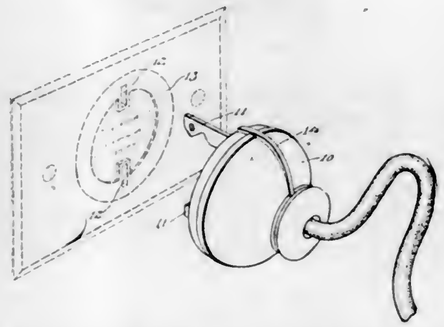
In combination with a sash having a longitudinal groove and a transverse bore communicating with the groove, a casing attached to one side of the sash and a spring-pressed bolt arranged within the casing with one end projecting through the bore and traversing the groove.

1,807,426. SYSTEM OF DISTRIBUTION. ALBERT H. MITTAG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 24, 1925. Serial No. 4,612. 4 Claims. (Cl. 175—363.)

1. The combination in a system of distribution of a source of direct current, a primary winding connected to said source through a plurality of electric valves, a secondary winding inductively associated with said primary winding, a plurality of capacity units adapted to be connected to one of said windings, a load circuit supplied by said secondary winding, and means responsive to an electrical condition in the load circuit for varying the capacity connected to one of said windings.

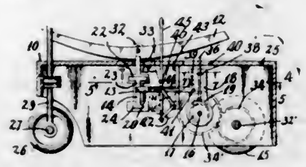


1,807,427. ATTACHMENT PLUG. ALBERT V. MOBLARD, New York, N. Y. Filed May 10, 1928. Serial No. 276,702. 1 Claim. (Cl. 173—361.)



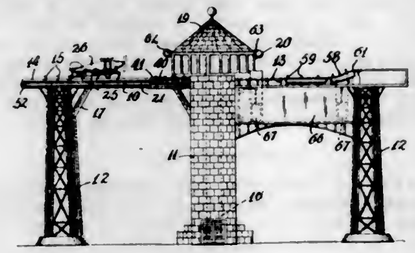
An attachment plug including a body having contact fingers projecting therefrom and longitudinally extending ribs formed on diametrically opposite sides of the body disposed in alignment with the contact fingers to constitute indicating means for facilitating the registry of the contact fingers with the receiving openings in the plug socket.

1,807,428. ROCKING-MOVING VEHICLE TOY. PETER MUEHLFELD and HERMANN DEUBEL, New York, N. Y. Filed May 21, 1930. Serial No. 454,236. 7 Claims. (Cl. 208—42.)



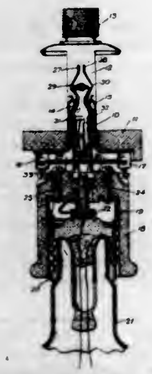
1. A rocking moving vehicle toy, comprising a chassis, a rocker having rocker rails resting on said chassis, arms with I shaped slots depending from said rails for swaying upon operation of the rocker, a gear system connected with the wheels of said chassis and terminating in a shaft carrying a ratchet wheel, a pawl arm free on said shaft, a two-way pawl on said pawl arm for engaging said ratchet wheel, means for causing engagement of the pawl one way or the other for transmitting rotation in one or the other directions to the chassis wheels, a link pivotally mounted on said pawl arm and carrying a pin engaging in said I slot, and manually controlled means for supporting the link so that the pin engages in the horizontal top of the I slot or various positions on the intermediate vertical portion or in the horizontal bottom of the I slot.

1,807,429. AEROPLANE AIR STATION. JOSEPH OLASZY, Linden, N. J., assignor of one-third to Barnett Wiseman, New York, N. Y., and one-third to Burnett Siman, Elizabeth, N. J. Filed Aug. 26, 1930. Serial No. 477,859. 10 Claims. (Cl. 244—2.)



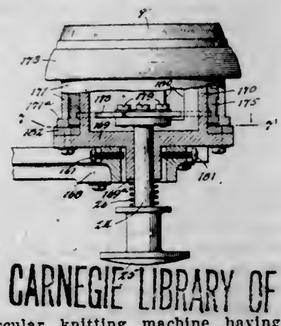
1. In aeroplane air station, comprising a landing bridge supported high up in the air on towers and connected with a starting bridge and comprising a platform movably supported, a plurality of hooks pivoted on said platform, means for holding said hooks in various pivoted positions, a decelerating means for said platform upon forward motion, and means for returning said platform back to its rear position.

1,807,430. CUTOUT FOR SERIES INCANDESCENT STREET LIGHTING CIRCUITS AND THE LIKE. JOSEPH W. OWENS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 26, 1930. Serial No. 439,199. 4 Claims. (Cl. 200—87.)



1. A unitary cutout structure for use with a lamp socket having a pair of contact arms for bridging the socket terminals, comprising a frame adapted to fit between the contact arms and hold them separated, opposite sides of said frame being insulated from each other, an electromagnet carried by the frame and having its winding connected to opposite sides of the frame, and an armature carried by the frame and adapted to be moved to a position wherein it effects the electrical connection of the two sides of the frame to each other when the electromagnet is energized.

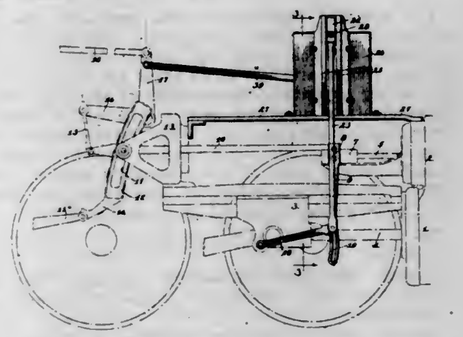
1,807,431. TRANSFER RING FOR CIRCULAR KNITTING MACHINES. ALBERT E. PAGE, Brooklyn, N. Y., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Original application filed May 8, 1929, Serial No. 361,418. Divided and this application filed Mar. 5, 1930. Serial No. 433,378. 6 Claims. (Cl. 66—148.)



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1. A circular knitting machine having a revoluble needle cylinder, stitch transfer mechanism mounted on said machine and adapted to be swung into and out of operative relation with said needle cylinder, said transfer mechanism comprising a non-revoluble pilot, a plurality of keys on said pilot, a revoluble transfer ring on said pilot having keyways complemental to said keys, in combination with means permitting movement of said transfer ring away from said pilot sufficiently to free the keyways from said keys and permit rotation of the transfer ring.

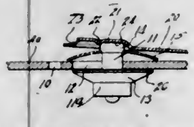
1,807,432. VALVE GEAR. HARRY F. PEARSON, Santa Rita, N. Mex. Filed May 21, 1927. Serial No. 193,228. 2 Claims. (Cl. 121—163.)



1. In a valve gear, the combination with a valve rod, a piston rod, a cross head reciprocated thereby, a depending lever extending at an angle to said valve and piston rods and operatively connected to the valve rod at a point adjacent to its upper end, and a radius rod connected to said end of the lever and movable to operate said valve rod, of an arcuately slotted bearing at the lower end of said lever, a link pivotally supported from the cross head for swinging movement of its end in an arc co-incident with that of said arcuate lever slot, a bar mounted for sliding movement in a direction longitudinally of said arcuate slot, a bearing member slidably seating in said

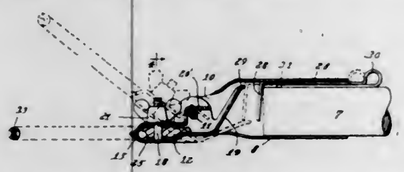
arcuate slot and pivotally interconnecting the swinging end of said link and the lower end of said bar, said member providing a movable fulcrum point for said lever, manually operable connections effective to move said radius rod, determinately intergeared mechanism operatively connected to the other end of said bar and operative to reciprocate the upper end of bar determinately to move said bearing member and fulcrum point, and means for operating said mechanism co-incidently with and through movement of said manually operable connections.

1,807,433. FISHING REEL. CHARLES T. PFLUEGER, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Original application filed June 26, 1924, Serial No. 722,497, now Patent No. 1,583,764. Divided and this application filed Apr. 14, 1926. Serial No. 101,964. 4 Claims. (Cl. 242—84.5.)



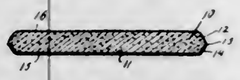
1. In a fishing reel, a frame structure, spool operating and controlling mechanism therein, two operating members cooperating with said mechanism, one being slidably and the other rotatably mounted upon said frame structure, and a single means cooperating with both of said operating members and secured to one thereof for maintaining them in adjusted position.

1,807,434. MOP AND BRUSH HOLDER. MATTHIAS REDLINGER, Freeport, Ill. Filed Aug. 15, 1929. Serial No. 386,132. 2 Claims. (Cl. 15—147.)



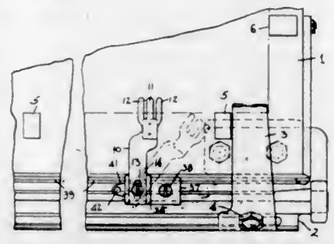
1. A cleaning implement of the character described having a handle, a cleaning tool, and a connector arranged to support said tool upon said handle comprising a supporting member attached at its upper end to said handle and having oppositely disposed ears at its lower end, a holder pivotally supported between said ears to move between limiting positions, said holder being provided with a backwardly and laterally extending tongue arranged to engage opposing sides of said supporting member to determine the limiting position of said holder, and means for attaching said cleaning tool to said holder.

1,807,435. ROOFING ELEMENT. THOMAS ROBINSON, New York, N. Y., assignor to Lancaster Asphalt, Inc., New York, N. Y., a Corporation of Delaware. Filed June 14, 1929. Serial No. 370,974. 8 Claims. (Cl. 108—8.)



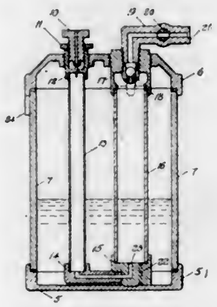
1. A roofing element which comprises a body of hardened plastic material softening under the action of heat and a sheet of fibrous material covering one face only of the body, the sheet having its edges turned toward the body to provide a concavity in which the body lies, said body having an exposed portion projecting beyond the concavity of the sheet.

1,807,436. SHEET REGISTERING DEVICE. CHARLES F. ROOT, Cleveland, Ohio, assignor to The Chandler & Price Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 17, 1928. Serial No. 262,503. 5 Claims. (Cl. 101—414.)



1. The combination with a platen having an end stop and a side stop thereon, of a gripper bar oscillatorily mounted on the lower edge of said platen, a sheet receiving and carrying device, a support to which said device is pivotally attached, means for regulably securing said support along the lower edge of the platen, and means for oscillating the sheet receiving and carrying device, said means being unconnected to said gripper bar but being actuated at least in part thereby.

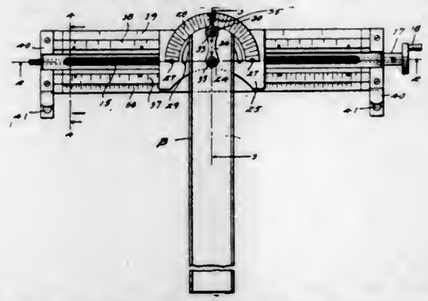
1,807,437. LUBRICATOR FOR INTERNAL COMBUSTION ENGINES. STANLEY D. ROSS and CHARLES F. EDWARDS, Vancouver, British Columbia, Canada. Filed Jan. 18, 1928. Serial No. 247,735. 1 Claim. (Cl. 261—121.)



In a lubricator of the character described, a container for oil, a U-tube within said container, one end of which is in communication with the atmosphere through a restricted passage while the other end of said U-tube is in communication with the interior of said container above the oil level, an outlet from the interior of said container above the oil level adapted for connection with the intake manifold of an engine, and means at the bottom of said U-tube to admit oil into that leg thereof which has its end in communication with the interior of said container, that leg of the U-tube which communicates with the interior of the container being of greater cross-section than the other leg, the passage from one leg to the other being of less cross sectional area than the cross sectional area of either leg.

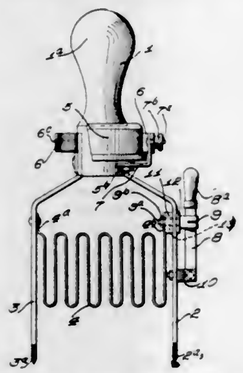
1,807,438. T-SQUARE WITH SLIDING PIVOTED BLADE. WILLIAM ROSS, Anaconda, Mont. Filed Dec. 29, 1928. Serial No. 329,130. 2 Claims. (Cl. 33—101.)

1. A drafting instrument of the T-square type comprising a hollow head provided in its upper face with a longitudinally extending groove, the bottom wall of the groove being provided with a longitudinally extending slot, a screw-threaded shaft rotatably mounted within and extending longitudinally of the head, a nut mounted upon the shaft to travel therealong, a slide mounted within the groove and connected to the nut through the slot, the slide



resting upon the bottom wall of the groove and contacting with the side walls thereof, a plate secured to the slide to move therewith, and a blade carried by said nut and rotatably adjustable relatively to the plate.

1,807,439. PROD TYPE BATTERY CELL TESTER. WILLIAM D. RYAN, San Diego, Calif. Filed Nov. 30, 1928. Serial No. 322,818. 4 Claims. (Cl. 175—183.)



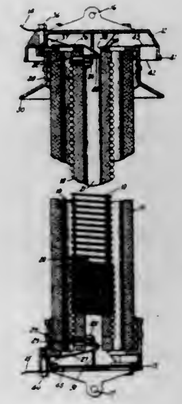
1. In a device of the class described, a pair of prongs, a handle for supporting said prongs at their upper ends, a relatively flexible resistor connected at its one end to one of said prongs and at its other end to a clip secured to and insulated from said second prong, and a knife switch pivotally secured at its one end to said second prong and adapted to engage said clip.

1,807,440. ELASTIC MESH BRACELET. CARL SCHRAYSSHUEN, Providence, and KARL FASSNACHT, Edgewood, R. I., assignors to Speidel Chain Co., Providence, R. I., a Firm composed of Frederic Speidel and Eugen Speidel, Pforzheim, Germany. Filed July 26, 1929. Serial No. 381,378. 2 Claims. (Cl. 63—3.)



1. An elastic bracelet, band or the like, comprising a strip of sheet mesh having interwoven helices, a pair of spaced elastic members extending through the sheet of mesh between the opposite surfaces of the sheet, and means for securing the ends of the elastic members to the opposite ends of the bracelet, band, or the like to contract the helices of the mesh, the coils of said helices being reduced in pitch between said elastic members to closely dispose them together.

1,807,441. RESISTOR. OTTO R. SCHURIG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 28, 1928. Serial No. 328,970. 10 Claims. (Cl. 201—71.)



1. A high voltage current regulating device including an air-cooled resistor, and a tubular ventilating enclosure of insulating material surrounding the resistor and having at one end thereof a metallic collar electrically connected to one end of resistor and extending along the outside of the enclosure with an outwardly flaring portion disposed intermediate the ends of the resistor for shielding the resistor from corona.

1,807,442. ADVERTISING SIGN. SAMUEL SCHWARTZ, Cleveland, Ohio. Filed May 13, 1930. Serial No. 452,024. 1 Claim. (Cl. 40—125.)

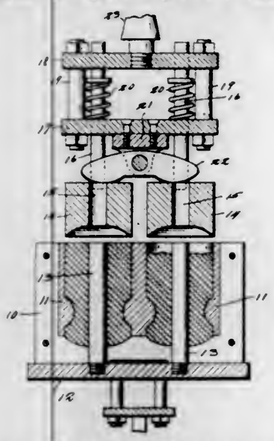


A paper advertising sign comprising a sheet flat on both faces and having comparatively small openings adjacent its periphery and having secured to one face of the sign stickers registering with the openings but materially larger than the openings, said stickers having adhesive on both surfaces thereof, whereby the sticker adheres to the sign panel about the opening and is available through the opening when mounting one face of the sign, the adhesive at the back of the sticker being available for mounting the other face of the sign.

1,807,443. PRESSURE EQUALIZING MECHANISM FOR MULTIPLE DIES. WILLIAM E. SENN, deceased, Sandusky, Ohio, by Vesta M. Senn, administratrix, Sandusky, Ohio, assignor to The Universal Clay Products Co., Sandusky, Ohio, a Corporation of Ohio. Filed Nov. 22, 1928. Serial No. 321,201. 6 Claims. (Cl. 25—83.)

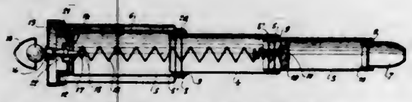
1. A multiple molding die comprising a mold having a pair of dies therein, a plunger having a pair of coacting

dies carried thereon for vertical movement independent of the plunger, and an equalizer pivotally supported at its



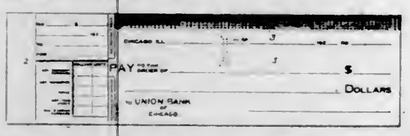
middle upon the plunger and bearing at its ends against the first named dies whereby when one of the dies rises the other die will be relatively forced downward.

1,807,444. COLLAPSIBLE HOUSING FOR WRITING INSTRUMENTS. AARON SHATKIN, Brooklyn, N. Y. Filed Oct. 1, 1929. Serial No. 396,427. 4 Claims. (Cl. 120—9.)



1. In a collapsible housing for writing instruments, a device adapted to lock housing when same is collapsed, comprising a rotatably mounted pronged key associated with one end section of the housing, and a spring coil associated with the other end section of the housing; said pronged key and spring coil being adapted to engage with one another when housing is collapsed.

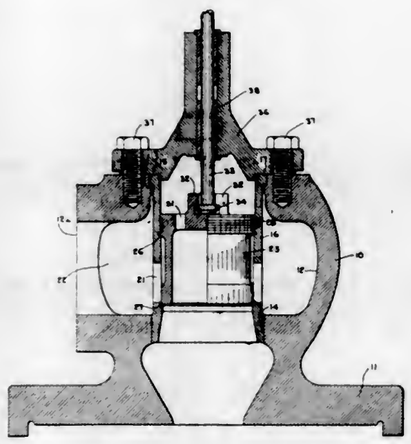
1,807,445. SAFETY BANK CHECK. JAMES W. SHAW, Chicago, Ill. Filed Apr. 6, 1928. Serial No. 267,895. 2 Claims. (Cl. 283—9.)



1. A safety bank check blank having its face inscribed with a plurality of numbers of varying numbers of digits, said numbers being arranged in progressively increasing denominations with their initial digits in columnar form and succeeding digits in corresponding arrangement, said blank directly behind the last digit of each column being formed with a field of contrasting color to the field occupied by said numbers, and an indicator permanently applied to the blank on its face directly in front of the initial digit column to indicate an amount above which the check shall not be negotiable.

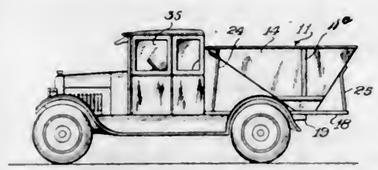
1,807,446. VALVE. JUSTIN G. SMEBY, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 19, 1927. Serial No. 184,966. 1 Claim. (Cl. 251—75.)

In a device for controlling the flow of fluid, the combination of a housing provided with a chamber having inlet and outlet passages; and means for controlling communication between the chamber and the outlet passage including a cylindrical opening adjacent to the chamber and at the inlet end of the outlet passage, a co-axial cylindrical opening of larger diameter than the first opening provided in the wall of said chamber opposite to the first opening, a cylindrical bushing having at its inner end a cylindrical outer surface arranged to fit said first-named opening with a driving fit, and having at its outer end a cylindrical



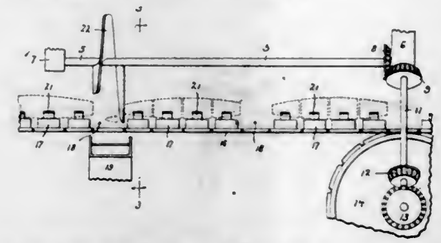
enlargement arranged to fit said larger opening with a driving fit, said bushing having a cylindrical bore, said inlet passage being in communication with the chamber and the latter communicating with the outlet passage by ports provided in the bushing wall, a balanced valve fitting the bore of said bushing and arranged to cover and to uncover said ports, and means for closing the outer end of the bushing and provided with means for actuating said valve.

1,807,447. GRAVEL SPREADER. WILLIAM GEORGE SMITH, Rossburn, Manitoba, Canada. Filed Mar. 2, 1929. Serial No. 343,955. 2 Claims. (Cl. 298—24.)



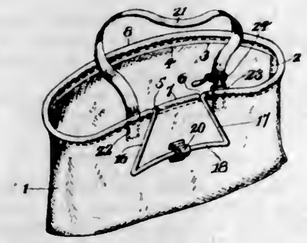
1. A gravel spreader including a tank having a restricted open bottom; means for supporting the ends of the tank on a motor truck chassis; side plates for supporting the sides of the tank on the truck chassis; a slide bottom valve plate operating beneath said side plates and closing said bottom of the tank; means for cooperation with said side plates in supporting and guiding said slide bottom valve plate; an operating rod for said valve plate pivotally connected thereto; a rock shaft; a lateral arm extended from said rock shaft and pivoted to said operating rod to actuate the latter; means for operating said rock shaft; and means connected with said arm and the motor truck chassis to resiliently return the said arm, the rock shaft and the operating rod to normal position to close said valve plate.

1,807,448. FISH CUTTING MACHINE. ERIK A. SODERBERG, Alameda, Calif., assignor of one-half to George Gundersen, Alameda, Calif. Filed Feb. 13, 1929. Serial No. 339,661. 2 Claims. (Cl. 17—4.)



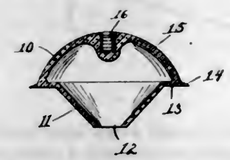
1. In a fish cutting device, a conveyor mechanism having a plurality of blocks positioned thereon and spaced one from another, certain of said blocks being spaced a greater distance than the remainder of said blocks and a rotary knife positioned above said conveyor and rotating about an axis parallel to the conveyor, the rotation of said knife and the movement of said conveyor being timed so that said knife will pass between said blocks on each revolution.

1,807,449. BAG. DANIEL E. SPEICHER, Urbana, Ind. Filed Jan. 23, 1929. Serial No. 334,483. 1 Claim. (Cl. 150—2.)



A harvester bag comprising in combination, a flexible body having an open top providing the mouth of the bag, a rearwardly projecting means secured to the outer face of the rear portion of said body and a bag mouth distending frame portion for permanently distending the mouth of the bag, said frame portion terminating in a bag offsetting member connected to said rearwardly projecting means.

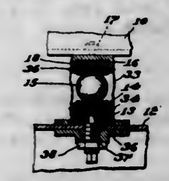
1,807,450. TANK FLOAT STOPPER. FREDERICK W. STARKEY, Logan, Pa. Filed Apr. 25, 1928. Serial No. 272,667. 1 Claim. (Cl. 4—57.)



A tank float stopper comprising a cylindrical tapered guide, an outwardly projecting rim having its outer circumference beveled to produce a feathered edge, and a dome above the rim and having connection with said rim between the outer circumference of said rim and the point of connection with said rim with the guide the complete device being buoyant.

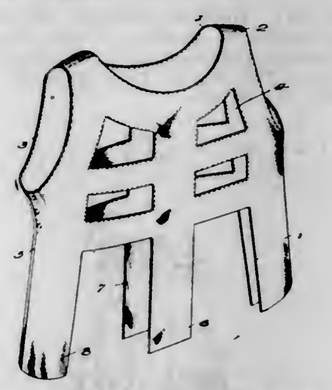
1,807,451. ANTIFRICTION BEARING. ALBERT H. STEBBINS, Los Angeles, Calif. Filed May 24, 1929. Serial No. 365,749. 5 Claims. (Cl. 308—6.)

1. In combination with a supporting casing, a frame, and antifriction means for supporting the frame upon the casing for vibratory movement, comprising bearing cups, antifriction annular members mounted in the cups for rolling movement to support said frame, and a floor of non-



metallic compressible material mounted in a cup of each bearing to form a yielding shock absorbing bearing seat for the annular member.

1,807,452. CHILD'S CLOTHES SUPPORTER. ELIZABETH MAY SWARTZ, Norfolk, Va. Filed June 2, 1930. Serial No. 458,991. 1 Claim. (Cl. 241—12.)



A supporter of the character described comprising a body portion formed of a single piece blank of material cut to form a neck band and arm holes, the adjacent side edges of the piece being connected beneath the arm holes to form a continuous body encircling portion, the front and back parts of the body portion having a plurality of ventilating openings therein, and the lower edge of said body portion being cut back to a point approximately midway to the lowermost line of the arm holes at spaced intervals to form depending tabs at the front, back and opposite sides.

1,807,453. ROLLING MILL PIERCING POINT, PLUG AND GUIDE, AND METHOD OF MAKING SAME. HOMER F. TIELKE, Cleveland, Ohio. Filed Aug. 23, 1929. Serial No. 387,910. 7 Claims. (Cl. 148—31.)



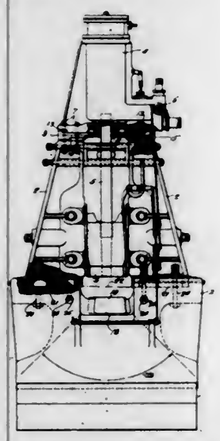
1. A steel alloy containing between about 17% and about 18% of chromium, about 3% of cobalt and between about

.4% and 1.5% of nickel, and having a structure characteristic of such an alloy which has been heated in cast form to about 2250° F. for about five minutes, cooled slowly, reheated to between about 1400° F. and about 1800° F., quenched and reheated at about 1200° F. for several hours.

1,807,454. METHOD OF USING ROLLING MILL PIERCING POINTS. HOMER F. TIELKE, Cleveland, Ohio. Filed Aug. 23, 1929. Serial No. 388,043. 4 Claims. (Cl. 80—62.)

3. The method of using a point in a rolling mill, which includes the steps of preheating the point to a temperature between 900° F. and about 1200° F., placing said point in the pass of a rolling mill and using the thus heated point for several passes until the surface thereof is heated well about 1200° F., and then cooling the point in a slow cooling medium, such as lime, to a temperature below about 1200° F.

1,807,455. FORGING HAMMER. HOWARD TERHUNE, Chambersburg, Pa., assignor to Chambersburg Engineering Company, Chambersburg, Pa., a Corporation of Pennsylvania. Filed Dec. 23, 1926. Serial No. 156,684. 3 Claims. (Cl. 78—36.)

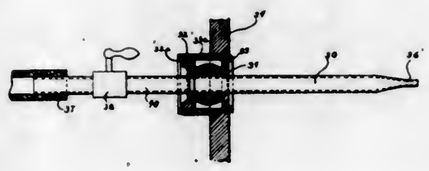


1. An interlocking tie plate for the frames and headpiece of forging hammers, said plate having on its under side and at each end a transverse shoulder adapted for interlocking engagement with oppositely arranged shoulders on the frame for preventing relative movements of the frame and plate in both directions longitudinally of the plate, and having intermediate the side edges thereof depending lugs adapted for cooperative engagement with correspondingly formed recesses in the frame to prevent relative parallel lateral movement in both directions of the tie plate and the frame, said tie plate also having on its upper side shoulders extending both longitudinally and laterally for cooperative engagement with opposed shoulders on the head-piece to prevent relative movement of the head-piece and tie plate laterally and longitudinally of the plate in both directions.

1,807,456. FIRE EXTINGUISHING COMPOSITION. WALTER LIBBY WEDGER, Belmont, and JOHN WILEY EDMANDS, Newton Highlands, Mass., assignors, by mesne assignments, to Central Railway Signal Company, Inc., a Corporation of Massachusetts. Filed Mar. 24, 1930. Serial No. 438,507. 6 Claims. (Cl. 23—8.)

1. A fire extinguishing composition consisting of potassium perchlorate, sulphur, zinc, dust, and parts combined to simultaneously maintain combustion and generating a fire extinguishing gas, for the purpose set forth.

1,807,457. MEANS FOR CLEANING CONDENSERS AND THE LIKE. HENRY T. WEIS, Fairmont, W. Va. Filed Oct. 25, 1927. Serial No. 228,610. 3 Claims. (Cl. 257—43.)

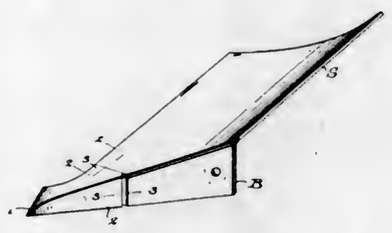


1. In combination, a surface condenser having water tubes and water chambers at the ends of the tubes, a plurality of openings in the end of one of the water chambers, closure devices for the openings, said closure devices each comprising a water tight universal joint and a jet member extending through and permanently sealed in the movable member of the universal joint.

1,807,458. PROCESS OF HANDLING AND WRAPPING MARGARINE. MARTIN E. WELAND, Chicago, Ill. Filed May 11, 1929. Serial No. 362,450. 2 Claims. (Cl. 99—13.)

1. Process for handling and wrapping margarine consisting in shaping a predetermined amount of said food product for wrapping, subjecting said predetermined amount to a temperature sufficiently low to solidify the surfaces only thereof, and then wrapping said predetermined amount while the surfaces are still in their solidified state.

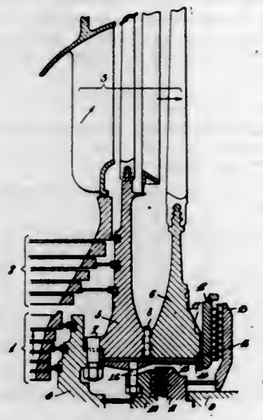
1,807,459. REPAIR NOSE FOR PLOWSHARES. WILLIAM ISIAH WHEELER, Scottville, Ill. Original application filed Aug. 31, 1929, Serial No. 389,832. Divided and this application filed Apr. 17, 1931. Serial No. 530,936. 2 Claims. (Cl. 97—125.)



1. An initially formed repair nose for plow shares comprising a landside portion and a share portion, each of said portions being adapted to be welded in abutting relation to the cut off forward end of a plow share.

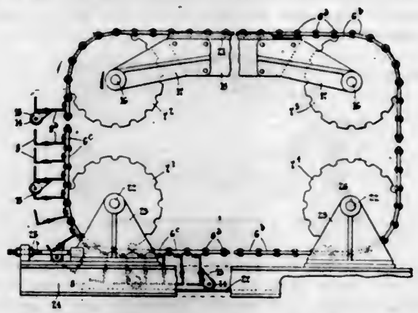
1,807,460. PACKING FOR USE BETWEEN ROTARY AND STATIONARY MACHINE PARTS. OSCAR ANTON WIBERG, Finspong, Sweden. Filed July 14, 1930, Serial No. 467,929, and in Sweden Sept. 14, 1929. 3 Claims. (Cl. 286—10.)

1. In a machine containing a fluid to be prevented from leaking out of the machine, the combination of a rotary disk subjected to forces tending to deform same, a non-rotary disk, packing elements between said disks, means to hold said rotary disk in such relation to a part of the machine rotating synchronously with said disk but not subjected to a similar deformation as to afford both axial



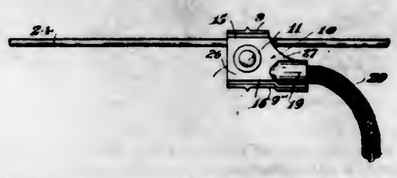
and radial play between said disk and said machine part, and means adapted to be put into operation to limit said play after a slight deformation of the rotary disk.

1,807,461. EXTRACTOR IN PRESSES. HENRY J. WISER, Ottawa, Ontario, Canada, assignor to International Fibreboard, Limited, Gatineau, Quebec, Canada. Filed June 2, 1930. Serial No. 459,000. 7 Claims. (Cl. 92—61.)



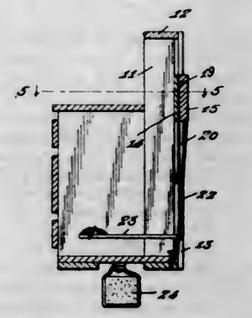
1. In combination with a press having upper and lower pulp-pressing dies, an extractor comprising a pair of endless flexible members arranged one on each of the opposite sides of said dies, and a plurality of transverse members connecting said flexible members and collectively forming a flexible pulp-receiving section extending along a portion of the length of said flexible members.

1,807,462. WIRE CONNECTER. LOUIS RAYMOND ZEHNDER, Louisville, Ky., assignor, by mesne assignments, to Louisville Frog, Switch & Signal Company, Louisville, Ky., a Corporation. Filed Nov. 18, 1927. Serial No. 234,191. 1 Claim. (Cl. 173—273.)



A wire connecter comprising a clamp formed of a separable rear and front part, said rear part consisting of a substantially rectangular body portion formed with a transverse slot and an outwardly directed flange at its top and bottom, said front part consisting of a substantially rectangular body portion provided with an opening having a threaded wall, said body portions opposing each other and with the body portion of the front part overlapped at its top and bottom by said flanges, the inner face of the body portion of the rear part being smooth throughout, the inner face of the body portion of said front part formed with spaced, parallel V-shaped grooves coacting with the smooth inner face of the rear part to provide for a three point contact when clamping wires to said parts, means extending through said slot and engaging with the wall of said opening for securing said parts together in clamping engagement with respect to said wires, and each of said parts provided at the lower portion of one side thereof with an internally grooved lateral offset portion having its outer periphery of semi-circular contour, said grooved offset portions coacting for clamping the insulated portion of one of said wires to said parts, said offset portions having the walls of the grooves thereof provided with means for entering the insulation clamped by said offset portions, and the lateral offset of said rear part having its bottom formed with an outwardly directed flange forming a continuation of the flange at the bottom of the body portion of said rear part.

1,807,463. TRAP. WILL ANDERSON, Minneapolis, Minn. Filed Jan. 24, 1930. Serial No. 423,226. 1 Claim. (Cl. 43—79.)

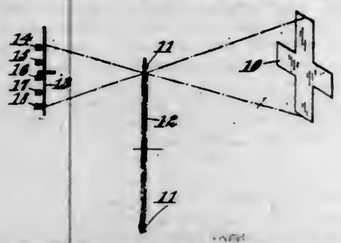


A trap construction comprising a housing having standards arranged adjacent the entrance thereof and extended for appreciable distances thereabove, a bridge piece establishing connection at its ends between the uppermost projecting ends of the standards, flange members connected terminally thereof with the housing and bridge piece and defining guide passages throughout the major portions of their lengths by the spacing of the standards therefrom, a fall of sectional formation having inner and outer sections, the inner section having its extended portions slidably mounted within the passageways, a multiplicity of harpoons, the outer section of the fall maintaining the shanks of the harpoons against the adjacent portions of the longer section of the fall, and a trigger mechanism for the completed fall.

1,807,464. TELEVISION AND LIKE APPARATUS. JOHN LOGIE BAIRD, London, England, assignor to Television Limited, London, England, a British Company. Filed Oct. 7, 1929, Serial No. 397,984, and in Great Britain Oct. 10, 1928. 5 Claims. (Cl. 178—6.)

1. In electro-optical apparatus for use in the production of images, the combination with a plurality of electro-optical elements, of scanning means associated with said elements, said scanning means having a maxi-

mum displacement sufficient to cover an area which is a portion only of a given field of vision as regards any one electro-optical element, said elements being so disposed



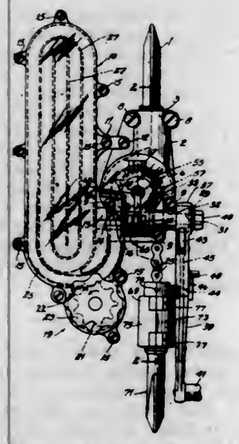
that each is appropriated to a different portion of the field of vision by said scanning means, and means for rendering inoperative all but one of said elements at a given time.

1,807,465. TELEVISION AND LIKE APPARATUS. JOHN LOGIE BAIRD, London, England, assignor to Television Limited, London, England, a British Company. Filed Oct. 7, 1929, Serial No. 397,985, and in Great Britain Oct. 12, 1928. 1 Claim. (Cl. 178—6.)



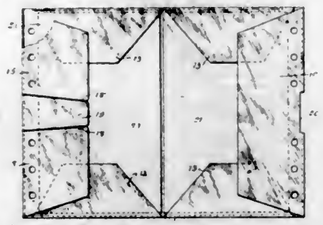
A scanning device for use in television apparatus comprising a source of light, a rotating screen interposed between said source of light and an object to be scanned, said screen having a plurality of series of spirally arranged apertures therein, the apertures in the different series being spaced radially of said screen whereby light rays will be passed from said source across different sections of the object simultaneously, and a plurality of light sensitive devices each positioned to receive light from one of said sections of the object only.

1,807,466. SLACK PULLER. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 24, 1929. Serial No. 402,064. 11 Claims. (Cl. 254—170.)



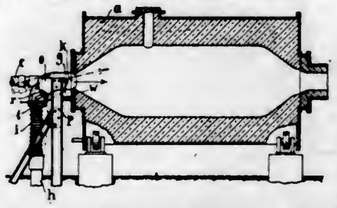
1. A slack puller comprising a worm gear and a coupled sprocket, said worm gear engaging with a worm, means for controlling the movement of said worm, a chain in continuous engagement with said sprocket, an eccentric, said sprocket and worm gear being rotatable on said eccentric and means for moving the eccentric so that said worm gear may be engaged or disengaged with said worm, a second sprocket engaging the chain, and a handle associated with said second sprocket for controlling movement of the chain when the worm and worm gear are not engaged.

1,807,467. CARD HOLDER. JOHN ERIK BONANDER, Calumet, Ill. Filed June 13, 1929. Serial No. 370,703. 5 Claims. (Cl. 129—20.)



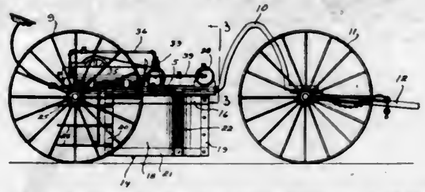
4. A holder of the class described, constructed of a foldable transparent blank to provide two body portions arranged side by side, end and side flaps on each of said body portions overlying the inside thereof, alined apertures in end flaps and related body portions for the purpose of retaining the body portions and flaps in folded relation.

1,807,468. PROCESS AND DEVICE FOR THE PRODUCTION OF IRON-ALLOYS FREE FROM GASES, ESPECIALLY OXYGEN. CARL BRACKELSBERG, Milspe, Germany. Filed Feb. 6, 1929, Serial No. 337,747, and in Germany Feb. 16, 1928. 4 Claims. (Cl. 75—45.)



1. Process for the production of iron alloys substantially free from gases and oxygen, which consists in first melting a charge of iron in a rotary furnace by means of the direct heat of the combustion gases from coal dust, then applying to the surface of the molten metal a thin unbroken layer of slag, and then continuing the heating of the liquid metal by transmission of heat thereto through the walls of the furnace while the metal is protected by the thin interposed layer of slag from direct contact with the furnace gases and the absorption of gases therefrom.

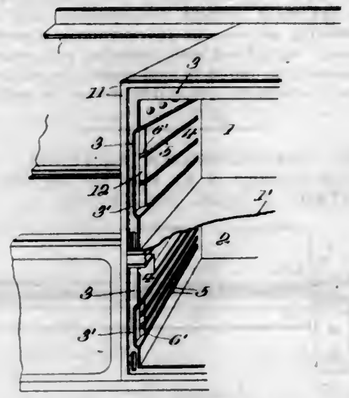
1,807,469. SPRAYING MACHINE. WILLIAM BREHMER, San Antonio, Tex. Filed May 6, 1930. Serial No. 450,259. 11 Claims. (Cl. 299—29.)



1. In a machine of the character described, a wheeled platform, a gathering chute depending from the platform for straddling a row of plants and having a furcated rear end, and spray nozzles arranged at each side of the fur-

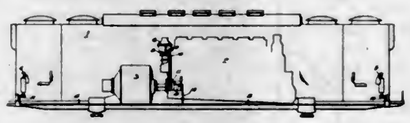
cated rear end of the chute and directed toward one another for discharging through the furciformed end of the chute.

1,807,470. SPECIAL CONSTRUCTION FOR LININGS FOR RANGE OVENS. ISAAC VERNON BRUMBAUGH, St. Louis, Mo., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed Aug. 22, 1929. Serial No. 387,712. 5 Claims. (Cl. 126—339.)



1. A range having a lining, the said vertical walls of the lining provided with a plurality of elongated slots arranged in corresponding horizontal planes, a vertical frame located outside of the said lining and extending in a direction transverse the said lining, said frame provided with slots corresponding with the slots in said lining thereby forming slots with open outer ends, of a substantially flat rack extending into said slots and freely movable into and from said slots and freely adjustable in said slots the rack operating substantially as described.

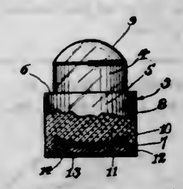
1,807,471. MEANS FOR SIMULTANEOUSLY CONTROLLING THE THROTTLE AND ELECTRIC MOTORS OF LOCOMOTIVES. CONRAD C. C. BURKHARDT, Philadelphia, Pa. Filed July 7, 1928. Serial No. 291,083. 2 Claims. (Cl. 105—62.)



1. The combination in an oil-electric locomotive, of an oil engine; an electric generator driven by said engine; a traction motor; means for supplying current to said motor; a vertical controller at one end of the locomotive for said motor; throttle valve mechanism for the oil engine; a lever for actuating the said throttle valve mechanism; a cylinder; a piston within the cylinder connected to the lever; an arm on the vertical controller; a cylinder at the controller; a piston within the last-mentioned cylinder connected to said arm; and a pipe extending from one cylinder to the other cylinder, so that the throttle will be controlled simultaneously with the electric control of the motor.

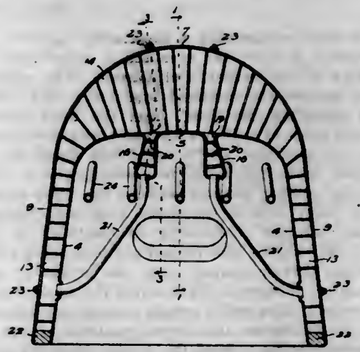
1,807,472. REFLECTING LENS UNIT. CLINTON C. DODGE, Louisville, Ky., assignor of one-half to Herman Frederick Delmanhorst, Louisville, Ky. Filed Oct. 21, 1929. Serial No. 401,333. 5 Claims. (Cl. 88—1.)

1. A reflecting lens unit comprising a lens body having a recess in its inner end, a reflector positioned within said recess at the base of the latter, a protecting member possessing a cushioning characteristic positioned completely within said recess against the rear face of the reflector,



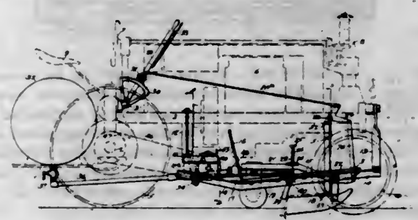
and a backing of cementitious material within said recess snugly engaging the wall of the latter and snugly engaging throughout the rear of said member.

1,807,473. SIPHON GENERATOR AND CIRCULATOR FOR LOCOMOTIVE BOILERS. GEORGE H. EMERSON and WILLIAM B. WHITSITT, Baltimore, Md. Filed Dec. 4, 1930. Serial No. 500,121. 10 Claims. (Cl. 122—68.)



5. The combination with a locomotive boiler including its fire-box, of a steam generating and water circulating receptacle extending longitudinally within the fire-box, said receptacle being arranged beneath and supported solely from the crown sheet and being of substantially uniform depth from end to end thereof and having an outlet at its top opening through the crown sheet into the upper water space of the boiler, and tubes connecting said receptacle with a water space of the boiler at a side thereof and extending on curved lines for free bending or flexing movements of the boiler sheets to which said receptacle and tubes are attached.

1,807,474. TRANSPLANTER. BENJAMIN C. ENGLAND, Pedricktown, N. J. Filed Nov. 16, 1929. Serial No. 407,697. 5 Claims. (Cl. 111—59.)

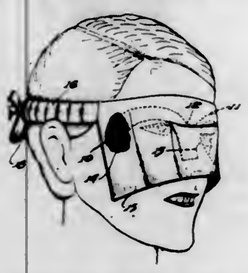


1. The combination in a transplanter, of a tractor having front and rear wheels, a furrow marker and covering wheels; a frame for supporting said furrow marker and the covering wheels; two seat beams, one located on the one side of the tractor and the other on the opposite side of the tractor; two cross-beams, one in the forward end of the tractor and the other in advance of the main trac-

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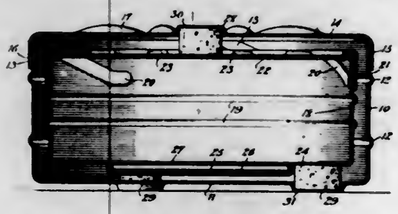
tion wheels of the tractor; means for suspending the seat beams from these two cross-beams; and platforms on each beam and a back rest on each beam, the mechanism being located between the front of the tractor and the rear traction wheels of the tractor.

1,807,475. EYESHIELD. MARY K. GIBSON, Baltimore, Md. Filed Oct. 30, 1929. Serial No. 403,629. 1 Claim. (Cl. 2—15.)



An eyeshield comprising a mask adapted when in lowered position to cover the eyes and a substantial portion of the face of the wearer, and adapted to be raised from the eyes against the forehead by folding back the mask, without removing the same from the head, said mask comprising plies of soft flexible non-transparent material, without eye openings, which completely shade the eyes of the wearer when the mask is lowered, and a semi-stiff reinforcing member secured between the plies and spaced from the upper edge of the shade, and comprising a pair of arched portions conforming substantially to the eye orbits of the wearer, said arched portions being connected by a bridge portion shaped to fit the bridge of the nose of the wearer, and means for securing the mask to the head of the wearer, comprising straps secured substantially at the top of the shade, the arched portions of the stiffening member serving to hold the flexible material in curved position to prevent collapsing against the face of the wearer when the mask is lowered, and together with the bridge portion serving to hold the mask in raised position when folded back against the forehead of the wearer.

1,807,476. RECEPTACLE. ABRAHAM J. GINSBERG, New York, N. Y. Filed Aug. 10, 1929. Serial No. 385,003. 2 Claims. (Cl. 220—15.)



1. In a device of the character described, an outer receptacle, a removable inner receptacle, said inner receptacle including an offset portion defining a depression and an absorbent material carried within said depression within said inner receptacle, and spacing means carried by said outer receptacle co-operating with said offset portion to maintain the inner receptacle centered within the outer receptacle.

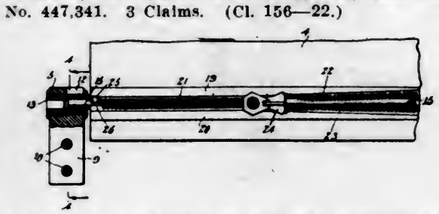
1,807,477. WELDED ARTICLE. WALTER REGINALD HUME, Melbourne, Victoria, Australia. Filed Sept. 6, 1928, Serial No. 304,265, and in Australia Nov. 22, 1927. 2 Claims. (Cl. 219—10.)

1. A frame or like structure comprising a series of metal bars arranged at an angle to and with their ends in abutted contact with other metal bars of the structure, the abutting or intersecting portions of said bars being joined together by means of mold elements which are positioned against the substantially flush faces of said bars, each of said mold elements having an outer edge corresponding



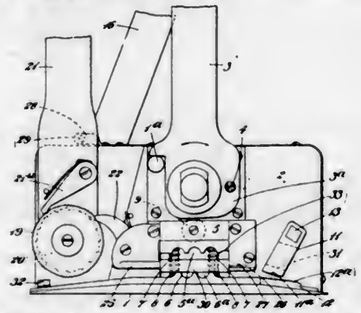
in shape to the marginal form of the joint, and a passage through the mold element encompassing said abutting or intersecting portions of the angularly disposed bars, said passage being filled with deposited weld metal which is homogeneously united to said mold element and forms therewith a composite projection welded to said bars.

1,807,478. DISENGAGEABLE FASTENER. MAX J. ISAACSON, Brooklyn, N. Y. Filed Apr. 25, 1930. Serial No. 447,341. 3 Claims. (Cl. 156—22.)



1. A device of the character described, including a substantially flat article, a zipper fastener structure provided with a pair of encircling flexible strips, and means for connecting one edge of each strip to said article intermediate its length whereby said strips and that part of said article between said strips are adapted to encircle a bar for connecting said article to the bar.

1,807,479. WIRE TIGHTENING DEVICE. EDWIN TAKO JAMES, Tasman, Nelson, New Zealand. Filed Oct. 12, 1929, Serial No. 399,316, and in New Zealand May 21, 1929. 3 Claims. (Cl. 254—73.)



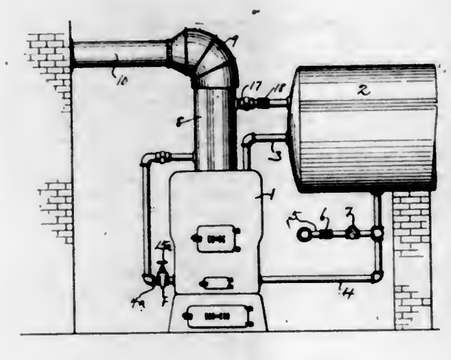
1. In a machine of the character described, the combination with a wire feeding ratchet, a lever, and a pawl carried by said lever to cooperate with said ratchet, of a rocking spindle mounted to rock about a point near one of its ends and upon which the ratchet is journalled and the lever is positioned, a cam lever independently fulcrumed and associated with said spindle to raise and lower the same, and wire gripping means operable to engage the wire during movement of said spindle carrying the wire feeding ratchet.

1,807,480. COMPACT PLATE HOLDING RING. WILLIAM G. KENDALL, Newark, N. J. Filed Feb. 9, 1929. Serial No. 338,728. 5 Claims. (Cl. 132—83.)

1. The combination with a vanity case having a body formed with an in-turned flange, of a compact plate holding ring formed with an annular wall positioned to frictionally engage the inner edge of said flange, said ring having portions extending into said body to a point adjacent the bottom thereof, while said wall acts as means for receiving a lid, said ring being provided with a movable member for disengageably locking the compact plate in position.



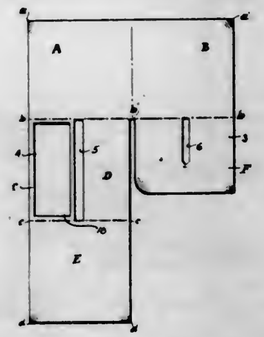
1,807,481. HOT WATER HEATING SYSTEM. ALBERT E. KLEIN, New York, N. Y. Filed Mar. 26, 1930. Serial No. 438,929. 1 Claim. (Cl. 122—20.)



A water heating system comprising a reservoir tank, an inlet pipe connected to said tank, said inlet pipe being also connected to a source of fresh cold water so that said reservoir tank is maintained full, a heater having a first water column which is substantially vertical, said reservoir tank being connected to said first water column by separated pipes at substantially the top and bottom of said first water column, an economizer located above said heater, said economizer having a plurality of substantially vertical pipes through which the waste hot gases from the combustion space of said heater can pass, said economizer being dimensioned to permit a rapid upward flow of said hot gases through the same so that the draft of the heater remains effective, said economizer having a second water column which is substantially vertical, the top of said second water column being connected to said reservoir tank, the bottom of said second water column being connected to said first water column at a point substantially below the top of said first named column.

1,807,482. BILL FOLD OR PURSE. DANIEL W. B. KUBTZ, Jr., Columbia, Mo. Filed May 2, 1928, Serial No. 274,440. Renewed Apr. 21, 1931. 8 Claims. (Cl. 150—38.)

1. A bill fold comprising a piece of flexible material of substantially U-shape, having one leg substantially longer than the other and twice as long as the width of the connecting base part, said long leg folded backward on itself and then backward against the connecting base part, and secured to said base part by seams connecting all the edges except that formed by bending said long leg upon itself, to constitute a pocket, and the short leg folded

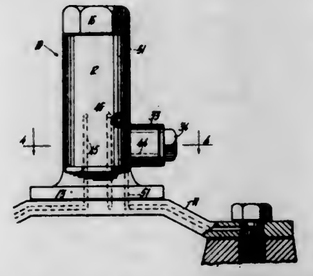


forwardly upon the connecting base part and secured thereto by a seam connecting their adjacent free edges to constitute a pocket open on two sides.

1,807,483. TREATMENT OF ROSIN AND PRODUCT THEREOF. WILLIAM BURNS LOGAN, De Quincy, La., assignor to The Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed Jan. 3, 1929. Serial No. 330,157. 14 Claims. (Cl. 87—2.)

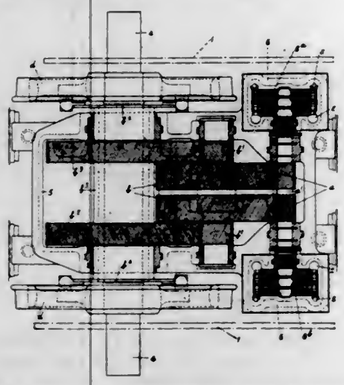
1. The process of improving wood rosin which comprises heating a bleached grade of the same at a temperature below that at which substantial decomposition sets in and without material distillation thereof, until its content of potential color body has been considerably reduced.

1,807,484. OILING DEVICE. JOHN S. LONDON, Philadelphia, and CHARLES B. MCCARTY, Matamoras, Pa., assignors of one-third to David W. Fisher, Hornell, N. Y. Filed May 7, 1928, Serial No. 275,889. Renewed Feb. 10, 1931. 4 Claims. (Cl. 184—35.)



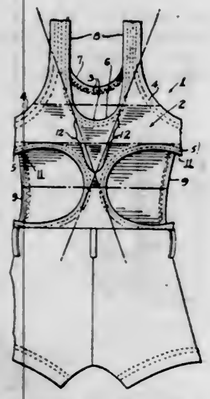
1. In a rotary oiler having an oil reservoir, a valve seat at the bottom thereof, oil receiving ducts opening onto said valve seat, a rotary valve member sealing said ducts from the oil within said oil reservoir, an oil supply groove provided in said seat in communication with the oil in said reservoir, and oil pick-up cavities provided in said rotary valve member for successively registering with said oil supply groove for receiving a charge of oil therefrom and with the respective oil discharge ducts for depositing the same therein upon each revolution of said rotary valve member, means for maintaining a head of compressed air within said oil reservoir to place the oil therein under pressure, and means for imparting intermittent turning movement to said rotary valve member in one direction, said means including a ratchet mechanism associated with said rotary valve member, and a reciprocable piston operatively connected with said ratchet mechanism.

1,807,485. TURBINE DRIVEN LOCOMOTIVE. JAMES MACLEOD, Glasgow, Scotland. Filed June 7, 1930, Serial No. 459,792, and in Great Britain Apr. 29, 1929. 2 Claims. (Cl. 105—38.)



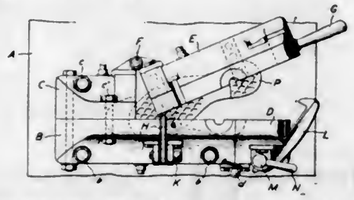
1. In a locomotive, in combination with a wheeled driving axle, a unitary rotary shaft disposed transversely of the locomotive and having overhung ends, an ahead turbine rotor and a reverse turbine rotor mounted on said overhung ends of said shaft, at least one pinion unitary with said shaft, and a set of rotary gears, and flexible transmission means between said pinion and said axle.

1,807,486. BATHING SUIT. CHARLES L. MARTIN, Winston-Salem, N. C., assignor to Indera Mills Company, Winston-Salem, N. C., a Corporation of North Carolina. Filed Oct. 11, 1930. Serial No. 488,099. 3 Claims. (Cl. 2—67.)



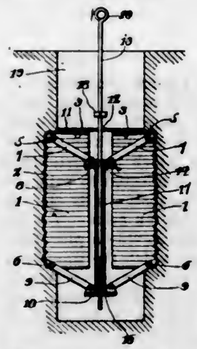
1. Knit bathing suit having shoulder openings shared by the front and rear portions, a neck opening shallower in front than in the back, defining in conjunction with the shoulder openings, shoulder straps, and under-arm openings located substantially entirely on the back portion, extending toward the median line of the back portion at least a sufficient distance to intersect longitudinal lines through the shoulder straps, the front portion from a transverse line in a plane intersecting the shoulder openings below the front part of the neck opening, to a transverse line in a plane intersecting the under-arm openings, defining a brassière area, the transverse edge of the front part of the neck opening preventing spreading of the shoulder straps, thus fixing their points of suspension upon the shoulders of the wearer, the area of the front portion of the bathing suit between the neck opening and the upper boundary of the brassière area and the substantially unindented part below the lower boundary of the brassière area distributing over the entire width of the brassière area, the longitudinal stresses engendered by circumferential distension of the bathing suit, the edges of the under-arm openings being less elastic than the general fabric of the bathing suit and having the upper parts arcing downwardly from an intermediate point of maximum altitude toward the side seams of the bathing suit, whereby when said bathing suit is distended, said downwardly arcing edges rise to coincide with an imaginary line in a transverse plane intersecting approximately the middle portion of said brassière area, said relatively inelastic edges constituting the major portion of said line, whereby the preponderance of circumferential stretching is borne by said brassière area.

1,807,487. MANUFACTURE OF RUBBER-SOLED FOOTWEAR. HENRY MCGHEE, Rushcutters Bay, near Sydney, New South Wales, Australia. Filed Feb. 21, 1929, Serial No. 341,791, and in Australia June 14, 1928. 3 Claims. (Cl. 18—59.)



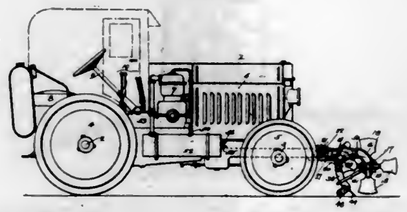
1. The process of manufacture of footwear having leather uppers and rubber soles, which consists in lasting the upper over a rubber cover sole on an undersized last, applying a rubber tread sole piece thereover and vulcanizing the structure in a mould, the whole of which except the sole plate is maintained at a substantially lower temperature than the point at which injury to the leather results.

1,807,488. ANCHORING DEVICE. FRED MICHALICEK, Estacada, Oreg. Filed Nov. 4, 1930. Serial No. 493,391. 8 Claims. (Cl. 189—92.)



1. An anchor device comprising, a plurality of arcuate sections for insertion within an opening, each of said sections being formed at its upper edge with an inward projection, a plurality of links pivotally connected with said sections adjacent the upper edges of the latter, a plurality of links pivotally connected with said sections adjacent the lower edges of the latter, each of said links extending at a downward and inward inclination, a pair of floating plates pivotally connected respectively with said links which are connected with the upper and lower edges of the sections, a rod slidably extending through the uppermost of said floating plates and threadedly engaging the lowermost of said floating plates, a rigid tube encircling the rod in abutment with said floating plates, and stop means carried by said sections and rod for limiting downward movement of the latter relative to the sections.

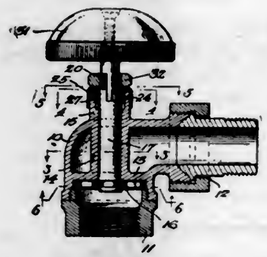
1,807,489. DITCH-FILLING MACHINE. WILLIAM V. MIDDLETON and JOSEPH W. THROPP, Trenton, N. J. Filed Mar. 6, 1930. Serial No. 433,652. 9 Claims. (Cl. 37—144.)



2. The combination in an automotive device, of a conveyer frame pivotally mounted on the end of the said device; a conveyer shaft; means for driving the shaft; conveyer blades on the shaft; a curved scraper located back of the conveyer shaft and arranged to slide in guides on the frame; and rollers supporting the lower end of the said scraper.

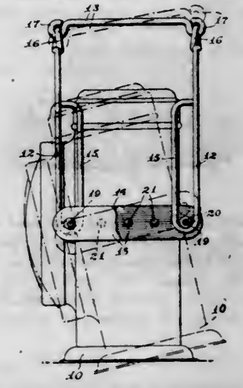
7. The combination in an automotive device having a take-off, of a transversely arranged frame pivoted to one end of the automotive device; a transversely arranged conveyer shaft mounted on the frame; means for driving said shaft from the take-off of the automotive device; a series of reversible blades on the shaft; and means for securing the blades in either of two positions so that the machine can be set to fill a ditch at either side thereof.

1,807,490. VALVE. WILLIAM B. MILNER, Dunkirk, N. Y. Filed Mar. 29, 1929. Serial No. 350,969. 1 Claim. (Cl. 251—84.)



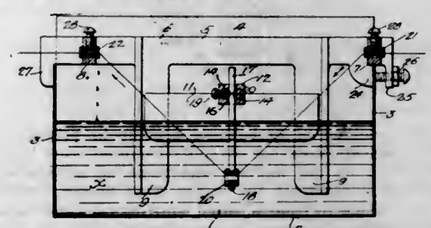
A valve including a casing, a web within the casing forming a valve seat, a tubular stem housing between the casing and one side of the said seat, a stem extending through said housing, a valve disk secured to the stem against the other side of the seat and closing the inner end of said tubular housing, said casing having an upstanding neck portion around the stem and provided with a counterbore and an upstanding lug, packing within the counterbore around the stem, a ring confined to rotation with the stem, said ring seating on the packing and having spaced shoulders engageable with the lug to limit rotative movement of the stem, a cap also confined to rotation with the stem and having a portion depending around said ring and said neck portion of the casing whereby to close the upper end of said neck, and a tension nut threaded on the stem and having bearing upon the cap and through the latter and said ring, upon the packing.

1,807,491. BAIL FOR HAND LANTERNS. ROBERT H. MONTEITH, Lockland, Ohio. Filed Oct. 15, 1930. Serial No. 488,960. 6 Claims. (Cl. 240—52.3.)



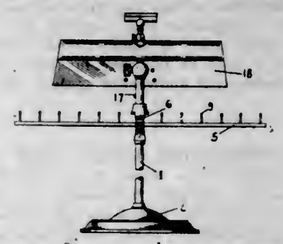
1. A handle comprising attaching means, bail members slidably and pivotally connected with said means, and a grip member extending between said bail members and having its opposite ends pivotally connected respectively with said bail members.

1,807,492. YARN MOISTENING DEVICE. ERNST OSCAR NEBEL, Philadelphia, Pa. Filed Oct. 17, 1928. Serial No. 313,100. 3 Claims. (Cl. 91—46.)



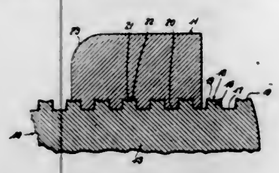
1. In a yarn moistening device, the combination of a container for a moistening fluid, said container being open at its top, a framework resting on the top edges of the walls of the container, guides on said framework extending downwardly into said container, a float positioned intermediate said guides, a thread guide carried by said float below the level of the fluid in the container, and thread guides carried by said frame adjacent oppositely disposed walls of the container.

1,807,493. DISPLAY STAND. HENRY M. PETERS, Chicago, Ill., assignor to Faries Manufacturing Company, Decatur, Ill., a Corporation of Illinois. Filed Apr. 23, 1930. Serial No. 446,521. 5 Claims. (Cl. 211—154.)



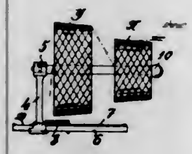
1. In a display rack including a standard, a frame rotatably mounted on said standard, outwardly extending rods secured to said frame, a pin in said standard and a cam on said frame engaging said pin to automatically move said frame into the predetermined position.

1,807,494. LOCKING THREAD CONNECTION. GEORGE P. PROCTOR, Wichita Falls, Tex. Filed Mar. 7, 1930. Serial No. 433,927. 2 Claims. (Cl. 151—22.)



1. In combination, a bolt shank provided with a screw thread, a nut, said nut having a screw thread operable on the first mentioned screw thread, one of said screw threads being peripherally grooved, the wall of the other screw thread between spirals thereof substantially conforming in shape to the aforesaid groove and substantially filling the same.

1,807,495. EXCHANGING THE BOBBINS IN PREPARATORY WEAVING MACHINES. WILHELM REINERS and GUSTAV KAHLISCH, Munich-Gladbach, Germany, assignors to W. Schlafhorst & Co., Munich-Gladbach, Germany, a Corporation of Germany. Filed Dec. 14, 1928, Serial No. 326,119, and in Germany Jan. 4, 1928. 9 Claims. (Cl. 242—131.)

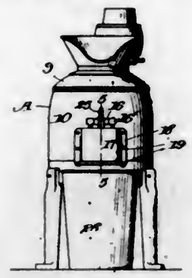


1. The method of exchanging bobbins in preparatory weaving machines having coaxially mounted cross wound bobbins tied on one another and unwound successively, consisting in removing the empty front bobbin, shifting the next bobbin to front position, shifting back the skewer with the bobbin, propping it immediately behind the front bobbin, removing the normal skewer carrier, sliding from the rear one or more full bobbins on the skewer, re-applying the normal skewer carrier, removing the propping means, tying the threads of the front and rear bobbins on one another, and again shifting the whole unit into forward position.

8. In a machine of the class described a creel, a plurality of skewer carriers mounted thereon, a skewer easily detachably mounted on each of said carriers, each of said skewers being adapted to support a front bobbin, said carriers being adapted to be shifted on said creel in the axial direction of their skewers, means for swinging said carriers out of operative position when shifted into a rearward end position on said creel, other skewer carriers mounted on said creel and adapted to temporarily support said skewers behind the front bobbin, said last-named carriers comprising jaws adapted to engage said skewers and said creel, spring-actuated abutments for said jaws, and a pair of tong-like mounted hand levers adapted to release said abutments against the action of their springs.

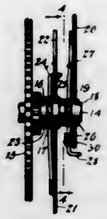
1,807,496. COMBINATION CHUTE AND CLOSURE. HENRY ROBINSON, New York, N. Y. Filed Apr. 26, 1930. Serial No. 447,645. 7 Claims. (Cl. 221—144.)

1. In a machine of the class described, a chamber having a discharge opening, a chute about said opening for engagement by material discharged therethrough to confine the same so that it will fall from the chute, a closure normally covering said opening means mounting said closure for upward movement and against sidewise movement to substantially close the top of the chute to prevent upward escape of material and access to the machine through said opening, and means carried by the closure



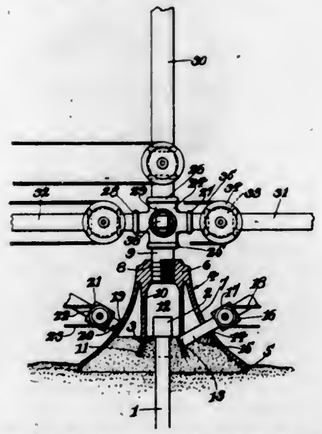
to secure the closure in closed position, and means above the bottom of the chute for fastening engagement with said means.

1,807,497. CLOCK. MICHAEL SPECIALE, New York, N. Y. Filed Oct. 18, 1929. Serial No. 400,631. 1 Claim. (Cl. 58—126.)



In combination, an arbor having a circular groove therein, a hand having a slotted sleeve, said sleeve fitting on said arbor with its slotted portion in registry with said groove, and a spring engageable in said groove through the slotted portion of the sleeve to frictionally retain the hand in position on the arbor.

1,807,498. WELL CAPPING DEVICE. LUE A. TEED, Fullerton, Calif. Filed Feb. 12, 1929. Serial No. 339,395. 1 Claim. (Cl. 166—15.)



A capping device comprising, a cap adapted to be circumferentially disposed with respect to a well casing and having an outlet at the top thereof, a feed line extending through the wall of the cap for the discharge of an adhesive substance into the interior thereof, a tubular member depending from the upper wall of said cap in overlapping relation to said casing, and a feed line extending through

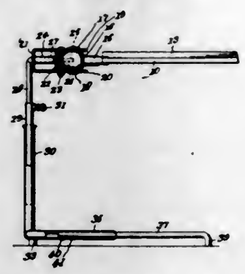
the walls of said cap and tubular member for the discharge of an adhesive substance into the interior of said tubular member.

1,807,499. STAMPING MACHINE. ELNO H. TRUMP, Akron, Ohio. Filed Apr. 3, 1928. Serial No. 267,001. 33 Claims. (Cl. 164—20.)



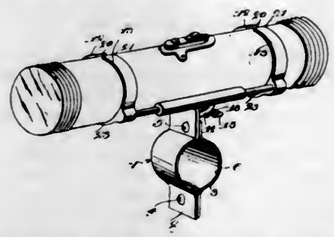
1. In a stamping machine, a horizontal support over which sheet material is fed, pairs of coinciding transversely alined rotatable elements arranged above the support, and a die eccentrically supported adjacent its ends from the coinciding rotatable elements.

1,807,500. READING STAND. HAZAEL ERNEST WEST, Washington, D. C. Filed Apr. 12, 1928. Serial No. 269,530. 1 Claim. (Cl. 45—82.)



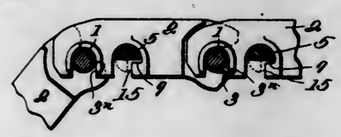
A reading stand, comprising a base portion adapted to rest on a support, a post rising from one end of the base portion and bent horizontally at its upper end to provide a fixed pin overhanging the base portion, a clamping member pivotally mounted on the pin and having socketed clamping jaws spaced from and extending outwardly of the pin, a ball disposed between the sockets of the clamping jaws and having an opening in one side to receive the pin and hold the ball from turning in the vertical plane of the pin, clamping means for binding the jaws against the ball to hold it when adjusted about the axis of said pin, a stem carried by the ball and extending outwardly therefrom on the axis of said pin, and a supporting frame mounted on the outer end of the stem adapted for adjustment with the ball and stem on the axis of said pin.

1,807,501. FLASH LIGHT HOLDER. JOHN R. ALEXANDER, Paris, Tex. Filed Sept. 19, 1929. Serial No. 393,777. 3 Claims. (Cl. 240—52.5.)



1. In an automatic flash light holder, in combination, means for mounting said holder on a support, and means for engaging and disengaging a flash light, comprising extended bearings having slots therein, rock shafts rotatably positioned in said extended bearings and having rocker arms extending through said slots, semi-circular arms non-rotatably mounted on said rock shafts and adapted for engagement with a flash light, and a spring connecting the ends of said rocker arms.

1,807,502. CHAIN GRATE. ALFRED WILLIAM BENNIS, Bolton, England. Filed Jan. 19, 1925, Serial No. 3,404, and in Great Britain Jan. 21, 1924. 9 Claims. (Cl. 110—40.)

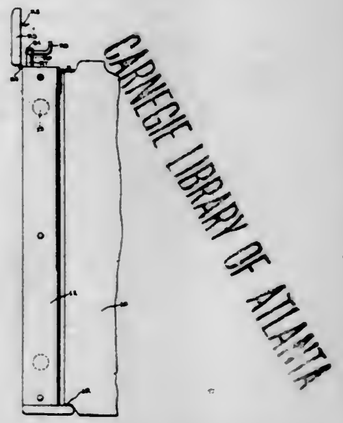


1. A furnace chain grate comprising grate bars including fillers having open notches and arranged in transverse rows and driving links, pivotal interconnecting means between said driving links and engaging in said open notches, and a separate and independent locking bar for engaging the grate bars of each row to secure said fillers upon said pivotal connections, said locking bar being adapted to secure the fillers in position or release them for removal by a bodily endwise movement of said locking bar by a distance less than the transverse width of one of said fillers, and means for holding said locking bar in securing position.

1,807,503. CONDENSATION PRODUCT OF KETONIC ACIDS. HERMAN ALEXANDER BRUSON, Germantown, Pa., assignor to Rohm & Haas Co., Inc., Philadelphia, Pa. Filed May 27, 1930. Serial No. 456,290. 20 Claims. (Cl. 260—8.)

1. The process of preparing a mixed ester which consists in heating to reaction temperature a mixture of an acid derived from a natural fatty glyceride, a polyhydric alcohol, and a benzophenone-dicarboxylic acid.

1,807,504. LOOSE LEAF BINDER CLAMP. AUGUST K. BRIELE and ROBERT H. BRIELE, Baltimore, Md. Filed June 12, 1929. Serial No. 370,401. 6 Claims. (Cl. 129—41.)

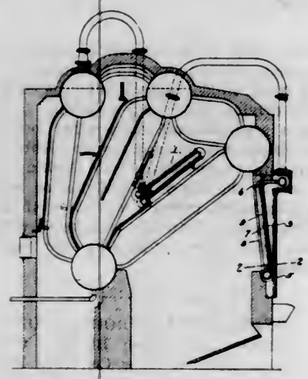


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1. In a loose leaf binder clamp, the combination of a tubular binder-head having openings between its ends, a screw-threaded rod journalled in said tubular binder-head and extending substantially from end to end thereof, con-

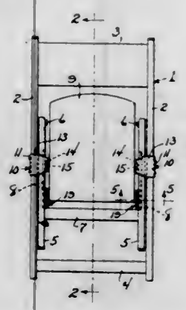
nections threaded on said rod and thereby movable along said tubular binder-head, flexible members connected to said connections and extending through said openings and adapted to be pulled inward by said connections and provided with a leaf-clamping member movable toward the said binder-head for cooperation therewith, and an operating member including a handle and being adjustably secured to said screw-threaded rod so as to be movable from its operating position into such position that said handle is within the said tubular binder-head.

1,807,505. METHOD OF AND APPARATUS FOR GENERATING AND SUPERHEATING STEAM. WALES S. BUELL, Brooklyn, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 25, 1922. Serial No. 556,372. 6 Claims. (Cl. 122—478.)



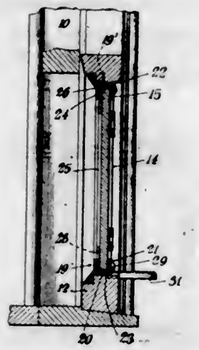
1. The method of generating and superheating steam characterized by the direct absorption by metallic bodies of radiant heat from the combustion chamber of the boiler in which the steam is generated to furnish a portion of the desired superheating effect and by the absorption of such additional heat as is required for the desired total superheating effect wholly or largely from the heating gases leaving said combustion chamber after the latter have been partially cooled by contact with the water heating surfaces of the boiler to thereby maintain a substantially uniform total superheating effect.

1,807,506. FOLDING CHAIR. CALVIN A. BUFFINGTON, Berkshire, N. Y. Filed Nov. 9, 1929. Serial No. 406,046. 1 Claim. (Cl. 155—142.)



In a folding chair, a combined back and front leg unit comprising side members, rear legs pivotally connected at their upper ends to the side members of the said back and front leg unit at the inner sides of the side members, a bracket comprising a side portion secured to the outer side of each side member of said unit, below the pivots for the rear legs, a portion extending from the said side portion and across the forward sides of the respective side members and rear legs, and having a portion extending at right angles to the last mentioned portion of the bracket and pivotally connected with the seat at opposite sides thereof, the last mentioned portion of the bracket spacing the sides of the seat from the rear legs, each of the rear legs being provided in its inner side with a longitudinal groove, and a sheet metal plate pivotally mounted upon each side of the seat, at the rear thereof and having a right angularly extending portion at one margin thereof, slidably fitting in the groove in the respective rear leg.

1,807,507. WINDOW SASH. RALPH CAIAZZO, Brooklyn, N. Y., assignor, by direct and meane assignments, to American New Fashion Silverware Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 21, 1929. Serial No. 394,252. 1 Claim. (Cl. 20—48.)



In a window construction, a casing, sections slidably mounted in said casing a frame of angle metal for each section and being fixedly secured therein, a movable metal frame for each section and cooperating with the fixed frames, the movable metal frames being hingedly secured to the sections, latching means for said movable metal frames and holding the same at various angles with respect to the fixed frames, transparent panels for the movable frames, a gasket for each panel and surrounding the same, clamping plates for holding the gasket against the panels, securing means passing through the movable frames, gaskets and clamping plates respectively for securing the panels to said movable frames, said movable frames being substantially T-shape in cross section to provide webs engageable with the outer edges of the panels and fixed frames respectively, flanges engageable with a side of the panels, restricted flanges formed with the flanges first mentioned and receiving one of the angle portions of the fixed frames when the movable frames are disposed in closed position, and means for fastening the movable frames accordingly.

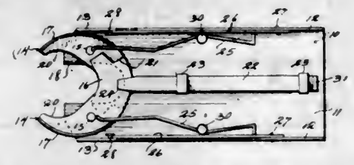
1,807,508. RUNNER STOP FOR STOCKINGS. JAMES J. CAFFREY, Philadelphia, Pa., assignor to Gotham Silk Hosiery Company, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 20, 1928. Serial No. 327,371. 5 Claims. (Cl. 2—240.)

1. The combination with a knitted stocking of a tuck formed in and extending course-wise of the stocking fabric after the knitting thereof for preventing runners which are advancing in a walewise direction from either side of and toward a predetermined line produced by the formation of said tuck from crossing said predetermined line to the opposite side thereof, said tuck forming a band of unstressed fabric at said predetermined line and means bridging said unstressed band and adapted to assume any tension applied to the stocking, whereby said band is at all times relieved of said tension, said bridging



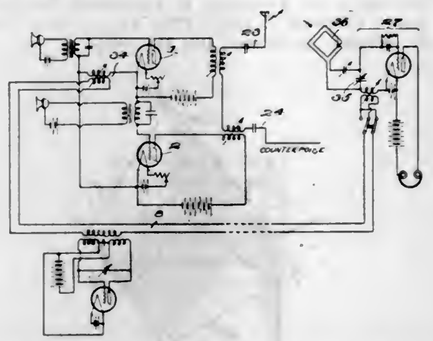
means comprising a supplementary thread looped back and forth across said band and interlocking with the stitches of the stocking fabric at the opposite sides of said band.

1,807,509. VALVE STEM SPLIT LOCK CATCHER. IRA J. CLARK, Fort Morgan, Colo. Filed Mar. 11, 1930. Serial No. 434,972. 6 Claims. (Cl. 81—3.)



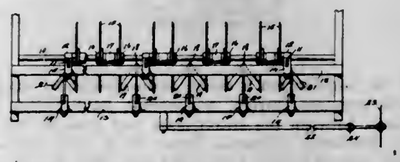
1. A split washer catcher of the character described comprising an elongated trough, and a pair of gate members swingingly mounted on the trough and means for holding the gate members in either closed position about a stem or in open position.

1,807,510. SILENT WAVE RADIO TRANSMISSION SYSTEM. EDWARD E. CLEMENT, Washington, D. C., assignor to Edward F. Colladay, Washington, D. C. Filed Aug. 7, 1926. Serial No. 127,898. 1 Claim. (Cl. 250—9.)



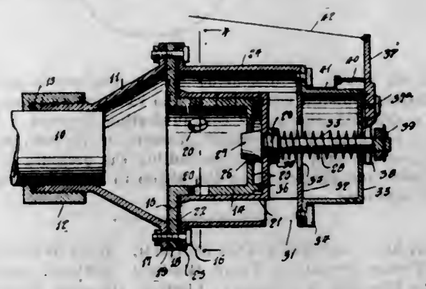
The method of continuous wave multiplex transmission of signals which consists in modulating each of a plurality of high frequency undulatory carrier currents with a different relatively low frequency undulatory signal, transmitting the carriers thus modulated simultaneously in such manner that the sum of the unmodulated portions of said carrier waves will be equal to zero, conveying one or more dephased undulatory carrier currents of the same frequency as the original carrier currents from the point of origination to the receiving point over a separate medium from that utilized for the transmission of the modulated waves, receiving the side bands representing the modulated portions of the carriers upon separate receiving circuits, supplying said dephased undulatory carrier currents to said circuits for homodyne receiving, adjusting the phase of each of said homodyne currents to bring it into exact phase with one of the modulated carrier waves received, combining said current with the received side band, and detecting and rendering audible the signal on the completed modulated carrier thus produced in each receiving circuit.

1,807,511. BEET BLOCKER. JOHN COMER, Windsor, Colo. Filed July 1, 1930. Serial No. 465,212. 3 Claims. (Cl. 97—23.)



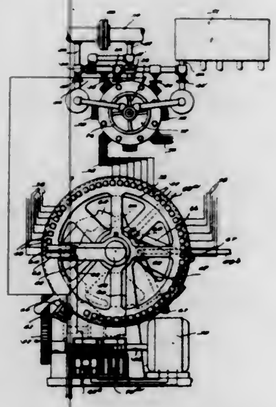
1. A beet blocker attachment for cultivators comprising an axle, means for detachably suppofting the axle upon a cultivator bar, a plurality of pairs of rolling colters mounted upon the axle, each colter being longitudinally movable upon the axle, a spacer disposed between the colters of each pair, collars holding the colters in place against the spacers and engaged with the axle, the pairs of colters being disposed in spaced relation to each other along the axle, a plurality of cutters disposed each between a pair of colters, each cutter having rearwardly divergent blades, the extremities of which are disposed behind and on a level with the lowest portion of the adjacent colters, each cutter having a shank extending upward and adapted to be detachably engaged with the cultivator tool bar.

1,807,512. EXHAUST TRAP CONSTRUCTION. ARTHUR J. CULP, Clanton, Ala. Filed July 11, 1929. Serial No. 377,459. 6 Claims. (Cl. 137—160.)



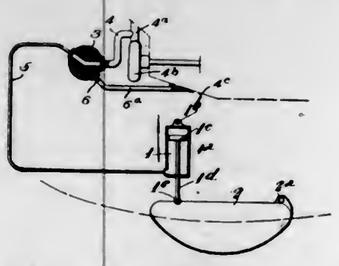
1. A trap of the class described having a cylinder adapted to receive exhaust, said cylinder having an outlet port in its peripheral wall, a valve normally closing said port, said cylinder having an additional port, a portion of said valve occupying said additional port, said portion being engageable by the exhaust to displace the valve in order to uncover the first mentioned port, means providing a seat for the free edge of the valve, and a flange on said cylinder in the path of and adapted to be abutted by said valve.

1,807,513. FURNACE CONTROL. THOMAS W. DELANEY, St. Paul, Minn. Filed Oct. 12. 1929. Serial No. 399,379. 10 Claims. (Cl. 236—26.)



1. In combination a steam main subject to changes of steam pressure therein, a constant fluid pressure, connections between the steam main and consant fluid pressure, including pressure tanks filled with fluids, and means whereby the fluids will establish electrical control circuits when the pressure in the steam main varies from the fluid pressure.

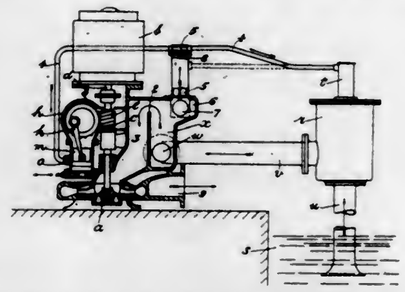
1,807,514. RADIATOR ACTUATING MECHANISM. JULIEN EUGÈNE EMILE DEWOITINE, Chatillon-sous-Bagneux, France. Filed June 13, 1929, Serial No. 370,636, and in France June 29, 1928. 2 Claims. (Cl. 244—31.)



1. In means for displacing on an airplane a pivoted radiator, a piston connected to the radiator and movable in a cylinder, the latter communicating through a pipe with a source of fluid under pressure or vacuum, and a cock on the said pipe for controlling the pressure in the cylinder and for acting on the piston in order to displace the radiator.

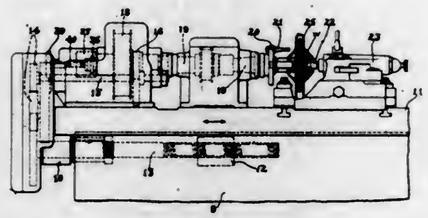
1,807,515. LUBRICATING SYSTEM. JOHN WHITEHEAD WILSON DRYSDALE, Yoker, Glasgow, Scotland, assignor to Drysdale & Company, Limited. Glasgow, Scotland. Filed Oct. 22, 1928, Serial No. 314,296, and in Great Britain Nov. 28, 1927. 2 Claims. (Cl. 184—6.)

1. A lubricating system including a tank for receiving the oil discharged from the lubricated parts, an oil pump for withdrawing the oil from the said tank and delivering it again to the parts to be lubricated, a motor for driving the said pump, a de-aerating apparatus, a pipe connection from the said tank to the said de-aerating apparatus, a pipe connection from the said de-aerating apparatus to the said oil pump, an air pump driven by the said motor, a pipe connection from the said de-aerating apparatus to the said air pump, an oil-receiving chamber in the said oil pump, an air-collecting chamber



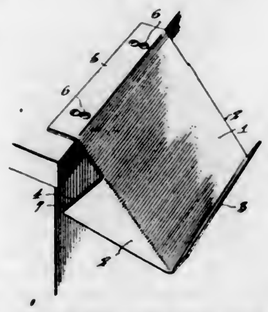
at the top of the said oil-receiving chamber, and a pipe connection from the said air-collecting chamber to the said air pump.

1,807,516. THREAD GRINDING MACHINE. HENRY E. DURKEE, Manchester, Conn., assignor to Pratt & Whitney Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 14, 1929. Serial No. 399,618. 8 Claims. (Cl. 51—95.)



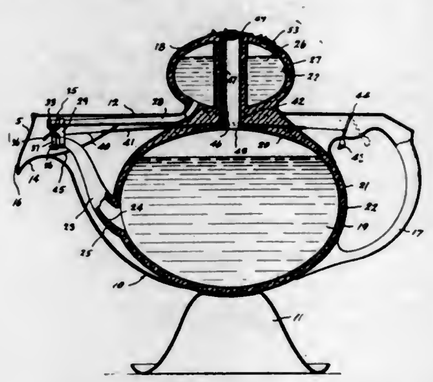
1. A thread grinding machine comprising in combination, a base, an abrasive wheel mounted thereon, a reciprocatory table, a work supporting and rotating spindle on said table, means to rotate said spindle, connections between said means and said table whereby said table is moved past said wheel in timed relation to the rotation of said spindle, and axially movable means within said driving connections to vary the amount of lost motion between said rotating means and said spindle.

1,807,517. ATTACHABLE BRACKET SHELF. JOHN ERLENDSON and VALENTINE G. FAULHABER, Vancouver, British Columbia, Canada. Filed Apr. 9, 1930. Serial No. 442,804. 2 Claims. (Cl. 211—90.)



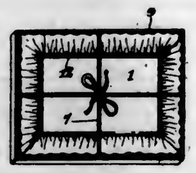
2. A blank for metal bracket shelves comprising a central rectangular portion and side triangular portions extending from the central portion and of less length than the central portion, the ends of the central portion extending beyond the triangular portions being adapted to be bent at angles to the remainder of the central portion to constitute a receiving ledge at one end and an article holding ledge at the other end, said triangular portions being adapted to be bent at right angles to the central portion whereby their extreme points will serve to engage the supporting body to which the bracket shelf may be secured, said central portion at the extremity opposite the article receiving ledge being provided with apertures for the reception of fastening devices.

1,807,518. COMBINATION BEVERAGE DISPENSER. LUCIO FLAMMA, New York, N. Y. Filed May 31, 1930. Serial No. 458,232. 7 Claims. (Cl. 65—13.)



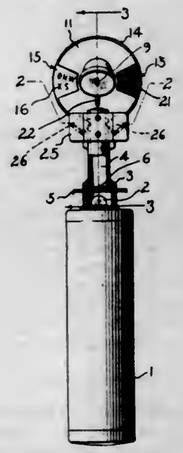
4. A combination beverage dispenser including a hollow casing, a heat insulated double walled container at the lower part of said casing, a second heat insulated double walled container at the upper part of said casing, said casing including a pouring spout and a handle, an outlet conduit leading from said upper container to said spout, a second outlet conduit leading from said lower container to said spout, closure devices to normally seal the outer ends of said conduits, manually operated means to operate said conduit closure devices, a partition plate in said spout at the rear of the open end portions of said conduits, a heat insulated double walled conduit extending through said upper container and to said lower container, said upper container having a filling aperture, and hinged covers for said filling aperture and said last mentioned double walled conduit.

1,807,519. CURTAIN PACKAGE. FREDERICK ARTHUR FLATHER, Lowell, Mass. Filed Dec. 12, 1929. Serial No. 413,626. 7 Claims. (Cl. 206—46.)



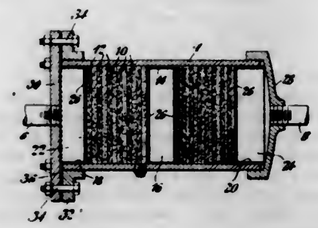
6. A package formed of a pair of curtains, each including a body portion having a ruffle secured to and extending along a side edge and an end edge thereof, each of said body portions being folded longitudinally and transversely, each of said ruffles being folded transversely and projecting from a side and an end of the body portion to which it is secured, said body portions being disposed in superposed relation with the ruffles secured thereto projecting therefrom in opposite directions.

1,807,520. DIAGNOSTIC INSTRUMENT. ELMORE A. FORSHEY, New York, N. Y., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed May 27, 1927. Serial No. 194,825. 8 Claims. (Cl. 88—20.)



1. In a device of the character described, a source of light, a member having a light passage way leading from the source of light and having an opening therethrough on each side of the axis of the light passage way, a reflector support carried by the member having the light passage way, a reflector on the support aligned with the light passage way, test objects on the reflector support on each side of the reflector, and additional reflectors, one in the path of the light rays coming thru each opening thru the light passageway and adapted to reflect said light onto the test characters on their respective sides of the reflector support.

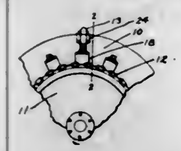
1,807,521. APPARATUS FOR CLEANING GAS. THEODORE M. FOULK, Denver, Colo., assignor to Public Service Company, Colorado, Denver, Colo., a Corporation of Colorado. Filed July 12, 1924. Serial No. 725,701. 2 Claims. (Cl. 183—45.)



1. A gas filter comprising in combination a casing having end closures and a gas inlet at one end and a gas outlet at the opposite end, two hollow cylindrical spacers each contacting one of said end closures and lying in contact with the inner surface of said casing, a third spacer similar to said spacers but arranged between them within the casing, alternate layers of cotton and metal wool arranged within said casing in the path of the gas between said inlet and said outlet, and foraminous supports for

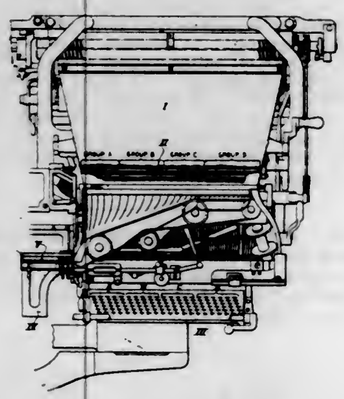
said layers, the edges of said supports engaging with the ends of said spacers in planes removed from said end closures.

1,807,522. TREAD MEMBER FOR TIRE CHAINS. EUGENE GHIA, Bristol, Conn. Filed Jan. 13, 1928. Serial No. 246,500. 4 Claims. (Cl. 152—14.)



1. A spur member for use in an anti-skidding device comprising a spur proper of four-sided pyramidal form, rib-like lugs radiating from the corners of said spur and perforated individually for connecting means, a web-like platform connecting said lugs in pairs at opposite ends of said spur, the bottoms of said lugs, platforms, and spur merging in a continuous contact face for seating on a tire and having the form of fan-like projections at said opposite ends and interrupted at the sides by approximately V-shaped spaces between the lugs on each side, said lugs being of appreciable length relatively to said spur and the perforations being adjacent the ends of said lugs.

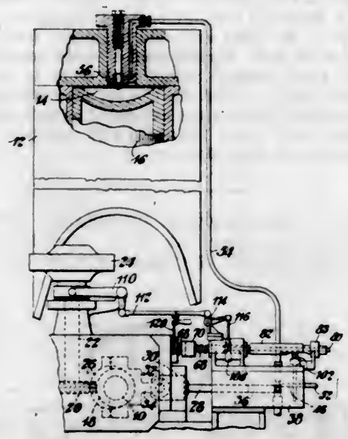
1,807,523. TYPOGRAPHICAL COMPOSING MACHINE. DAVID GOLDBLATT, New York, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Feb. 6, 1930. Serial No. 426,334. 22 Claims. (Cl. 199—18.)



1. A keyboard for typographical machines, comprising a series of finger keys, each bearing an index character representative of a typographical element controlled by the corresponding finger key, the said finger keys being arranged in a plurality of distinct groups or sets, the said index characters of one group comprising each a consonant only, and the said index characters of another group comprising each a consonant and a vowel associated therewith.

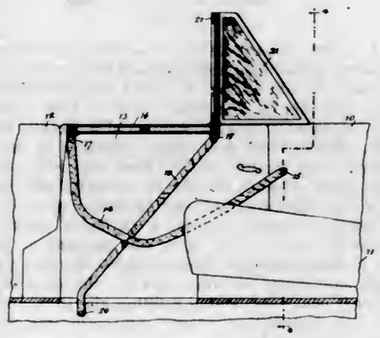
1,807,524. FUEL INJECTION SYSTEM. WINDER E. GOLDSBOROUGH, South Norwalk, Conn., and BERNHARD SCHILLING, New York, N. Y., assignors to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1928. Serial No. 266,781. 17 Claims. (Cl. 123—139.)

1. The combination in an internal combustion engine of a fuel pump having a pressure chamber and a forcing member therein, a relief valve permitting the escape of fluid from said chamber during a portion of the forcing



stroke, and a cam arranged to open said valve and having a speed at the time of opening of the valve greater than that of said forcing member.

1,807,525. VEHICLE CONSTRUCTION. SIDNEY B. GOULD, New York, N. Y. Filed July 6, 1929. Serial No. 376,366. 4 Claims. (Cl. 296—85.)

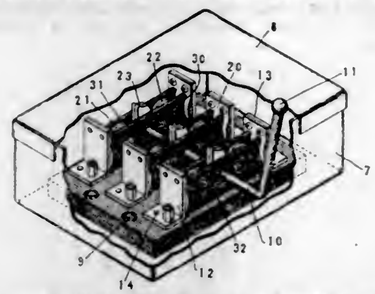


3. The combination with a vehicle, of a rear seat cowl arranged within the confines of the vehicle, a curved supporting member pivotally connected with said cowl on each side thereof, said supporting member having an intermediate portion which is adapted to lie upon and in the plane of the vehicle floor when the cowl is in folded position, and a supporting link pivotally connected with said cowl for preventing downward movement of the rear edge of the cowl when in said position.

1,807,526. ELECTRIC SWITCH. HERMAN J. HAMMERLY, Wallingford, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Sept. 19, 1929. Serial No. 393,695. 4 Claims. (Cl. 200—145.)

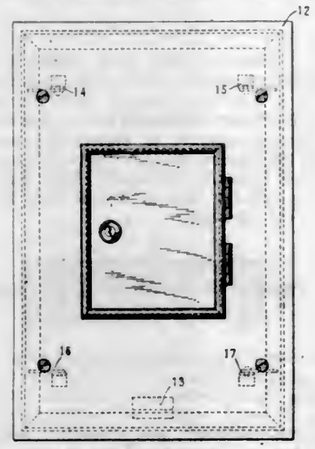
1. A switch construction including a stationary contact, a freely rotatable roller contact for engagement with said stationary contact, a rotarily movable cam member for moving said roller contact towards said stationary contact said cam member having a concave recess to hold said roller contact in closed circuit position and spring

means for moving said roller contact away from said stationary contact, said cam member having an abrupt shoul-



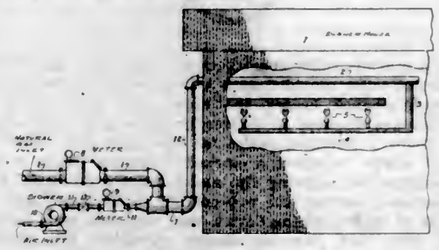
der for imparting an initial extra compression of the spring just before opening the circuit, the spring action tending to rotate the roller when opening the circuit.

1,807,527. PANEL BOARD CABINET CLAMP. CHARLES E. HANNY, Unionville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Jan. 16, 1928. Serial No. 247,102. 3 Claims. (Cl. 292—256.)



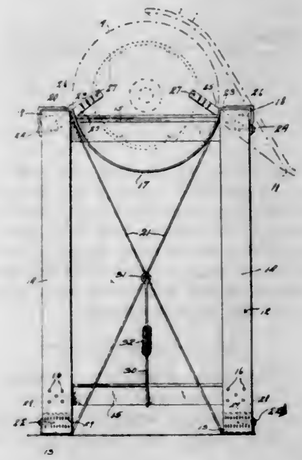
1. A cover plate having clamps arranged at the rear, each clamp comprising a lever pivotally mounted on the plate to swing in a plane substantially at right angles to the plane of said plate, a screw extending through said plate and a nut pivoted to said lever and providing a seat for said screw.

1,807,528. PROCESS OF TREATING SULPHUR BEARING GASES. WILLIAM G. HIATT, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed Nov. 21, 1927. Serial No. 234,872. 6 Claims. (Cl. 23—3.)



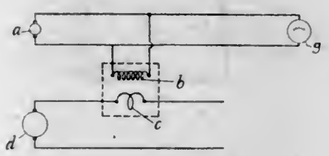
1. A continuous process for the selective complete oxidation of the sulphur bearing compounds (and particularly hydrogen sulfide) in natural gas to prevent decomposition of the sulphur compounds and the attendant formation of sulphur and sulfides which occurs when the gas is heated in the distributing line which comprises adding regulated amounts of air to the gas, passing the gas-air mixture at temperatures above 350° F. through a reaction zone, and maintaining said mixture at temperatures above the condensation point of the water vapor therein until the gas is substantially consumed.

1,807,529. LOADING DECK FOR AUTOMOBILES. SHERMAN HICE, Detroit, Mich. Filed Feb. 18, 1930. Serial No. 429,379. 7 Claims. (Cl. 105—368.)



1. A loading deck for motor vehicles comprising a frame adapted to be mounted on the floor of a freight car, wheel supporting means carried by the frame, and wheel securing means mounted on the frame and engaging the rim bolts whereby to hold the wheel on said wheel supporting means against circumferential movement.

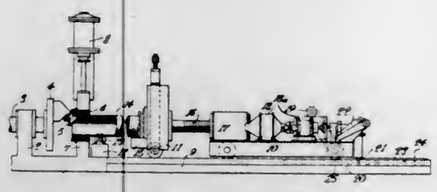
1,807,530. POWER METER. FRANK WOOTTON HIGHFIELD, Coventry, England. Filed July 16, 1928, Serial No. 292,976, and in Great Britain July 22, 1927. 1 Claim. (Cl. 73—187.)



In an apparatus for testing the power developed by internal combustion engines and other prime movers, the combination comprising a wattmeter, a dynamo to be driven by the prime mover being tested, a circuit connected to said dynamo and including the current coil of the wattmeter, a small dynamo to be driven by said prime mover and so constructed that the electromotive force

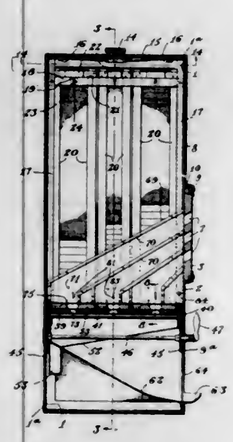
developed thereby will be proportional to the speed of rotation of its armature, and a circuit from said small dynamo including the voltage coil of the wattmefer.

1,807,531. PIPE FLANGING AND UPSETTING MACHINE. ROBERT K. HOPKINS, New York, N. Y., assignor to The M. W. Kellogg Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,081. 5 Claims. (Cl. 78—14.)



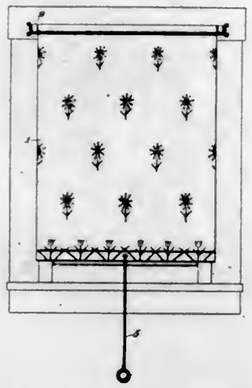
1. In a metal working machine, the combination with a supporting frame of a carriage for moving the work into the working zone, indexing holes in said frame, means on said carriage co-operating with said holes for locking the carriage during the working operation, and means associated with said frame to insure that said locking means will be returned to the same holes when a removal and replacement of said work is effected.

1,807,532. VENDING MACHINE. ROBERT W. HULL, Hingham, and WILLIAM J. MACDONALD, Watertown, Mass.; said MacDonald assignor to said Hull. Filed July 23, 1928. Serial No. 294,634. 34 Claims. (Cl. 194—80.)



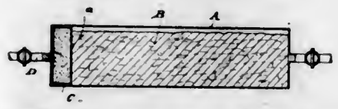
1. In a vending machine, a column of articles, an ejector located at one side of the lowermost article and having a coin receiving recess therein, a portion of said ejector extending under and supporting said column, a tray slidably mounted beneath said ejector and having a coin receiving recess alined with the recess in said ejector, means to move said tray and said ejector transversely of said column, and means operated by ejection of the last article from said column, to prevent reception of a coin in the coin receiving recess of said ejector.

1,807,533. WINDOW SHADE. SAMUEL J. JOHNSON, Cincinnati, Ohio, assignor to The Seinsheimer Paper Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 29, 1930. Serial No. 440,084. 6 Claims. (Cl. 156—10.)



4. A window shade, comprising, a length of paper, provided with minute creasing transverse to the grain of the paper.

1,807,534. PROCESS FOR THE TREATMENT OF A METALLIC, ORGANIC, OR OTHER COMPOUND, OR A GAS, BY A GASEOUS AGENT SERVING TO ENTER INTO REACTION THEREWITH. ALFRED JOSEPH, Paris, France, assignor to Societe Internationale des Procedes Prudhomme Houdry, Paris, France, a Limited Joint-Stock Company of France. Filed July 14, 1927, Serial No. 205,817, and in France July 23, 1926. 4 Claims. (Cl. 23—198.)



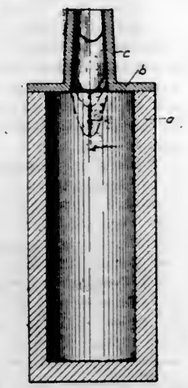
1. A process for the reduction of chemical compounds by means of elemental gaseous reducing agents comprising first passing the reducing agent through filtering means containing a metal capable of readily forming an unstable hydride therewith, and thereafter conducting the gas evolved by the breaking down of said unstable hydride out of the presence of said unstable hydride and causing said gas to act on said chemical compound.

1,807,535. SHADE ROLLER. WILLIAM KAMPAS, Des Moines, Iowa. Filed Apr. 4, 1930. Serial No. 441,621. 1 Claim. (Cl. 156—36.)



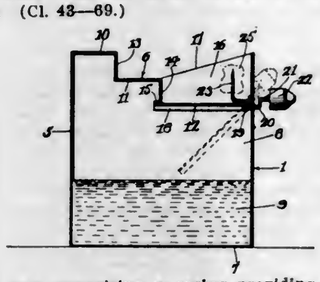
In a shade roller construction of the class described, a tubular roller provided with a longitudinal inwardly bent channel-shaped keeper the upper and lower walls of which are disposed in outwardly converging relationship, a shade, a clamping device for the upper end portion of said shade including a hooked retaining flange and a complemental securing lip, and a flexible retention strip interposed between the web portion of the keeper and the back of said clamping device, said retention strip serving to force said clamping device outwardly into binding and retaining relationship with the upper and lower walls of the keeper in the manner described.

1,807,536. PROCESS FOR CENTRIFUGAL CASTING. ALBERT KEUP, Gelsenkirchen, Germany. Filed Mar. 14, 1929, Serial No. 347,085, and in Germany June 15, 1928. 5 Claims. (Cl. 22—65.)



2. In a process for producing metal ingots by centrifugal casting, the steps of pouring the metal into a vertically-placed mold while the mold is being slowly rotated, gradually increasing the speed of rotation during pouring, and proportioning the rate of pouring and speed of rotation to maintain such a ratio that the metal does not rise along the wall of the mold to form a quickly solidified sheet.

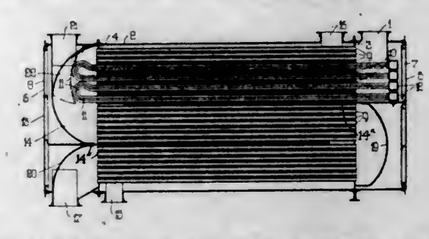
1,807,537. RAT TRAP. HOLLIE B. KIMBRELL, Fayette, Ala. Filed June 25, 1929. Serial No. 373,649. 1 Claim. (Cl. 43—69.)



A rat trap comprising a casing providing a trapping chamber and including a bottom, a pair of side walls, a front wall, a back wall and a top, said top formed with an angle shaped stationary forward part and a flat shiftable rear part, the rear of said stationary part depending below the top of said side walls, said shiftable part positioned below the tops of said sides and back wall and normally abutting the lower terminus of the rear of said stationary part, said parts in connection with the portions of said sides and back wall forming an open top bait compartment in the upper part of the rear of the casing, said compartment gradually increasing in height from its front to its back, said stationary part providing steps leading downwardly to the front of said compartment, said back wall being slotted, a counter-balanced pivoting means fixedly secured to the rear end of said shiftable part, journaled in said side wall and extending through said slot and projecting rearwardly from the back wall, and a bait holder positioned over the rear of said shiftable part and secured to said back wall.

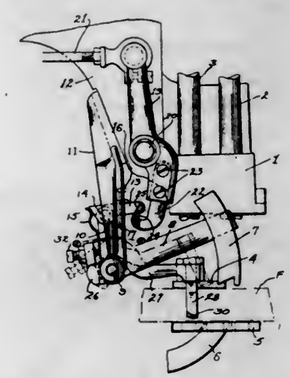
1,807,538. STEAM GENERATING PLANT. ALBERT EDWARD LEEK, Wigan, England. Filed Sept. 1, 1927, Serial No. 216,940, and in Great Britain Sept. 2, 1926. 10 Claims. (Cl. 257—240.)

1. A heat interchanger comprising a plurality of flue gas conduits, a plurality of superheater steam tubes each steam tube passing axially within and parallel to one conduit of a pair and then back axially within and parallel to the other conduit of a pair, means to pass said flue gases axially along boiler feed water tubes after passage
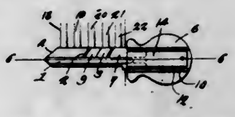


along said steam tubes, and means to pass air simultaneously over the opposite side of said flue gas conduits to that adjacent said steam tubes and water tubes in contraflow to the motion of the flue gas.

1,807,539. CHAIN CUTTER FOR SEWING MACHINES. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Jan. 10, 1929, Serial No. 331,441, and in Germany, Oct. 10, 1928. 2 Claims. (Cl. 112—252.)



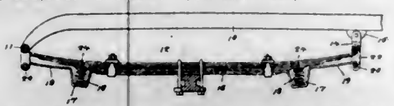
1. In a sewing machine, a presser foot, a feeding mechanism, a stitch forming mechanism including a needle, and chain cutting devices located in rear of the needle and including a cutting blade, an oscillating member supporting said cutting blade, actuating means for said cutting blade, a member mounted for oscillation about the same axis as the cutting blade and adapted to contact with the material passing under the presser foot, and means controlled by said member for connecting and disconnecting the cutting blade with its actuating mechanism.

1,807,540. SEPARABLE KEY. THEODORE A. MAKRANCZY, Los Angeles, Calif. Filed May 27, 1929. Serial No. 366,505. 2 Claims. (Cl. 70—8.)



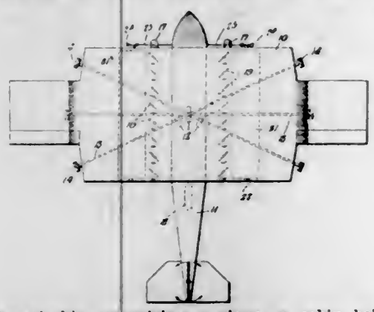
1. A key comprising a body and a handle, the handle having an arm constituting a tumbler-actuator, the arm being removable from the body, along with the handle to permit a lock tumbler to assume a locking position, and a latch mechanism movably mounted on the handle and engaging the body to hold the body and the handle releasably together.

1,807,541. AUTOMOBILE SPRING. GEORGE THURMAN MCCAULEY, Butte, Mont. Filed Dec. 27, 1929. Serial No. 416,886. 1 Claim. (Cl. 267—48.)



A leaf spring attachment comprising an auxiliary leaf having connection with the main leaf adjacent the ends, pivoted links carried by and extended beyond the shackle connections for the main leaf, a bearing sleeve formed in the extended ends of the auxiliary leaf being journaled between the remaining extremities of said links, the auxiliary leaf having pockets, and compression springs carried within said pockets and sprung between the auxiliary leaf and the spring proper to shift the weight of the load and the spring action therefor toward the center.

1,807,542. AIRSHIP. HIRAM P. MINER, Mission Ridge, S. Dak. Filed June 13, 1929, Serial No. 370,576. Renewed Oct. 16, 1930. 3 Claims. (Cl. 244—14.)

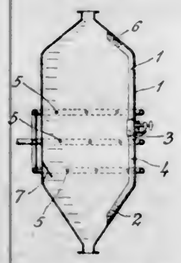


1. An airship comprising a plane, a cabin below the same, propeller shafts radiating from the cabin, individual means to operate the propeller shafts, propellers driven by the shafts and arranged in pairs substantially concentric with the center from which the shafts radiate, and bearings depending from the plane in which said shafts are journaled.

1,807,543. SILICATE REFRACTORY AND PROCESS OF FORMING SAME. JOHN D. MORGAN, Maplewood, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed June 21, 1926. Serial No. 117,609. 10 Claims. (Cl. 106—9.)

1. The method of forming refractory articles comprising heating zircon particles in the presence of less than one and one half percent of insoluble carbonate material.

1,807,544. DIRECTLY HEATED PULP DIGESTER. EINAR MORTERUD, Torderod, near Moss, Norway. Filed Feb. 26, 1929. Serial No. 342,742. 1 Claim. (Cl. 92—7.)

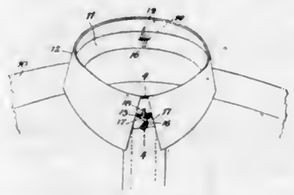


In a directly heated pulp digester the combination with a plurality of steam inlet openings in the middle or cylindrical part of the digester of mechanical means for causing the digester liquor to circulate in an unidirectional current through the digester.

1,807,545. PROCESS OF MAKING PHENOL ALDEHYDE CONDENSATION PRODUCTS. ALFONS OSTERSETZER, Klosterneuburg, and FRANZ RIESENFELD, Vienna, Austria, assignors to Pollopas Limited, Nottingham, England, a Company of England. Filed Mar. 20, 1928, Serial No. 263,206, and in Austria Apr. 6, 1927. 3 Claims. (Cl. 260—4.)

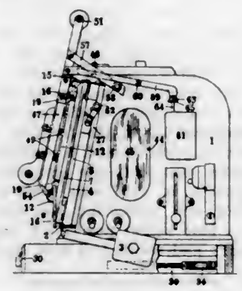
2. In the process of making a resinous condensation product of a phenol and an aldehyde, the herein described improvement which comprises heating a phenol and a reactive aldehyde in the presence of a condensing agent, until the condensation reaction takes place, and adding a protective colloid at a stage not later than such reaction being effected, and keeping the mass hot to allow any unreacted phenol and aldehyde to be dissolved out of the reaction mass, while the latter is in a finely divided condition.

1,807,546. FASTENING DEVICE FOR SHIRTS. FRANK X. PLANTE, Sloatsburg, N. Y. Filed Mar. 26, 1930. Serial No. 439,118. 4 Claims. (Cl. 2—128.)



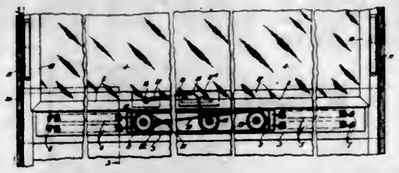
1. For joining the ends of a neckband of a shirt, and also for attaching a detachable collar to said neckband, a fastening device consisting of a securing element made of cord, tape or like material and having three members united to each other, each of two of said members being secured at one end to said neckband to form a loop, and the third member being adapted to be passed through a hole in the neckband and holes in the collar and then be projected into said loop.

1,807,547. MACHINE FOR AUTOMATICALLY PRINTING PHOTOGRAPHIC PROOFS. PIERRE AUGUSTE MARCELLIN PRIOU, Chinon, France. Filed Mar. 10, 1930, Serial No. 434,744, and in France Mar. 11, 1929. 6 Claims. (Cl. 95—73.)



1. An automatic printing machine for photographic proofs, comprising,—a box open on one of its side faces,—lamps adjustable in position within the said box,—a frame hinged by its lower edge on the said box, a ground glass carried by this frame and adapted to serve as support for vignetting-papers and for covering the opening of the box, a latch pivoted on the box for holding the said frame in the raised position,—a plate-carrying framing comprising two frames pivoting, on their lower edge, about the axis of the ground glass frame, and adapted to be superposed and to be raised against the ground glass frame, a transparent glass for the first of these frames, a frame sliding in the second one, springs arranged between these two frames for pushing back the sliding frame towards the transparent glass and resiliently pressing the negative plates previously placed on the sliding frame,—a double clip on the upper side of the second frame for holding the masks in position,—spring latches for locking together the two frames constituting the plate-carrying framing,—a counterweight for holding this framing in printing position,—means carried by the sliding frame for putting out of action the springs acting on the latter and allowing to release the negative plates after printing,—two arms pivoted on the upper part of the box, a pressing plate resiliently suspended between these arms, and adapted to fit in the sliding frame for pressing the photographic paper during printing,—means for locking the pressing plate in printing position,—an exposure-counter secured on the said box,—a lever pivoted on the said box for controlling the starting of the exposure-counter,—means carried by one of the arms supporting the pressing plate and adapted to actuate the said lever at the end of the folding down stroke of the pressing plate and putting in action the exposure-counter,—means carried by the plate-carrying framing and adapted to be actuated by the above mentioned means for opening this framing and unlocking the negative plates after printing.

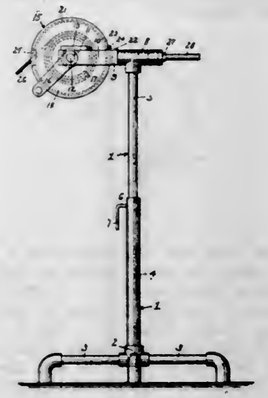
1,807,548. DEVICE FOR CONTROLLING WINDOWS OF THE SLIDING TYPE. WILLIAM QUICK, London, SYDNEY EDWARD THOMAS, Hounslow, and FREDERICK WILLIAM BERWICK, London, England. Filed Apr. 25, 1929, Serial No. 358,047, and in Great Britain May 25, 1928. 2 Claims. (Cl. 16—198.)



1. In a window of the type described, a casing and a sash slidable in said casing, oppositely disposed springs mounted on the sash, each of said springs having one end connected to the sash, pulleys also mounted in the sash to which the other ends of said springs are connected, a cable movable over said pulleys, and having one end connected to the casing and the other end to one of the pulleys for the purpose of tensioning the springs during the travel of the window in one direction.

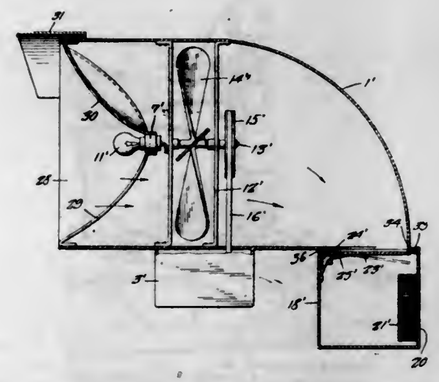
1,807,549. REVOLVING WASTE PIPE OPENING MACHINE. AMEL REBER, San Bernardino, Calif. Filed Nov. 29, 1929. Serial No. 410,632. 1 Claim. (Cl. 242—85.)

A machine of the class described, comprising a base member, a standard comprising a fixed lower section and upper section telescopically fitting the lower section, means carried by one of said sections and coacting with the other section to hold the last mentioned section in different positions of elevation, a T-coupling mounted at the upper end of the second mentioned section of the upright, a shaft rotatably mounted in the T-coupling, a U-shaped frame mounted upon the coupling, a shaft journalled for rotation in the side members of the frame, a drum fixed upon the shaft, a casing surrounding the drum, the drum having heads provided with flanges of annular form rotatably fitting in the opposite sides of the casing, the casing having an opening for the passage



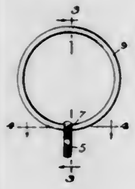
therethrough of a cable to be wound upon the drum, and coacting means upon the casing and the said frame for holding the casing against rotation with the drum.

1,807,550. INSECT TRAP. LOUIS J. L. RECTOR, Amissville, Va. Filed May 2, 1930. Serial No. 449,270. 2 Claims. (Cl. 43—139.)



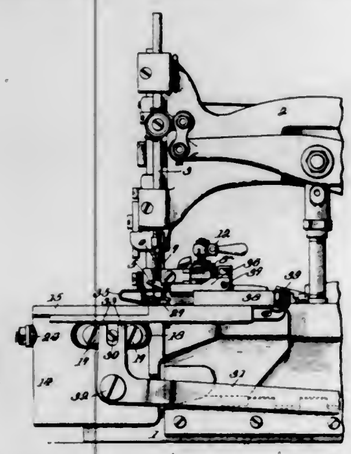
1. An insect trap comprising a casing having an open end and tapered from said end toward its other end, a source of illumination at the first mentioned end of the casing, a suction fan in the casing in rear of the source of illumination to attract insects, a trapping compartment at the last mentioned end of the casing, the source of illumination being spaced inwardly from the open end of the casing, and a reflector assemblage within the casing between the fan and the open end of the casing, the said assemblage comprising two reflectors arranged at opposite sides of the source of illumination, each reflector having the form of a segment of a hollow conoid, the concave sides of the reflectors being presented in the path of rays from the source of illumination and the lower edges being curved downwardly and in opposite directions to provide a space for the entry of insects into the casing, and another reflector also having the form of a segment of a hollow conoid and arranged between the first mentioned reflectors and having its convex side presented in the path of rays from the source of illumination and toward the space between the first mentioned reflectors.

1,807,551. CURTAIN RING AND EYE. HENRY REUBEL, New York, N. Y., assignor to The Kroder Reubel Co., Incorporated, New York, N. Y., a Corporation of New York. Filed June 21, 1929. Serial No. 372,734. 3 Claims. (Cl. 156—21.)



1. A curtain ring and eye, comprising a ring and an eye therefor, said eye being formed of half-round wire with one portion looped to produce an eye structure, the remaining portion looped to produce a clamping portion, said clamping portion being of a size to encircle and clamp part of said ring, said loops being made on the same side of the wire, so that the flat side will engage the ring and will also be positioned interiorly of the eye structure.

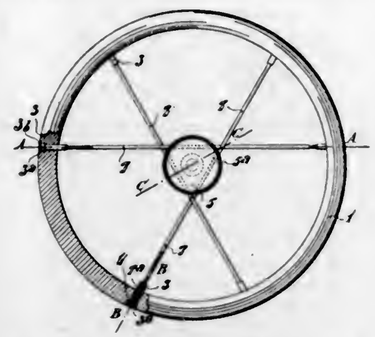
1,807,552. MACHINE FOR TRIMMING AND HEMMING FABRIC SECTIONS. ALBERT S. RIVIERE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1929. Serial No. 372,391. 7 Claims. (Cl. 112—126.)



1. A sewing machine including in combination a stitch forming mechanism, trimming devices including a stationary trimming blade and a movable trimming blade, a guide for guiding the folded portion of a fabric section past the trimming devices and to the needle of the stitching mechanism whereby said needle enters and emerges from the same face of the folded fabric section, and means whereby said trimming devices and guide may be shifted laterally of the line of feed at the will of the operator without stopping the stitching mechanism to permit the passing of a cross seam without deflecting the advancing folded portion of the fabric out of the path of the needle.

1,807,553. STEERING WHEEL. CHARLES HENRI HILAIRE RODANET, Versailles, France, assignor to Société Anonyme Etablissements Ed. Jaeger, Levallois-Perret, France. Filed Nov. 26, 1929, Serial No. 409,914, and in France Dec. 22, 1928. 3 Claims. (Cl. 74—33.)

1. In a steering wheel, a circular rim, rods stretched rectilinearly in one and the same plane between two points of the said rim so as not to pass through the geometrical axis of the said rim, a hub formed by two

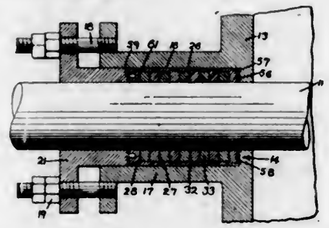


members one of which has rectilinear recesses for the passage of the rods and means for securing the two members of the hub together.

1,807,554. ALLOY FOR TURBINE BLADES AND MACHINE PARTS EXPOSED TO SIMILAR CONDITIONS. WILHELM ROHN, Hanau, Germany. Filed Dec. 16, 1926, Serial No. 155,345, and in Germany Dec. 28, 1925. 1 Claim. (Cl. 253—77.)

A turbine blade which is non-corrodible and non-sensitive by heat treatment to the thermal, mechanical and physical conditions of use, consisting of an alloy comprising 10 to 40% of chromium, 40 to 85% of a nickel-like metal, 10 to 40% of iron, and up to 15% of a toughening metal having the characteristics of tungsten, the alloy being substantially free from carbon.

1,807,555. PACKING. HIRAM C. RUGOLES, Phoenix, Ariz., assignor of one-half to John M. Aitken, Phoenix, Ariz. Filed Jan. 21, 1929. Serial No. 333,953. 5 Claims. (Cl. 286—24.)

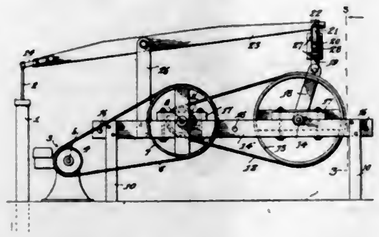


1. In combination with a rod movably mounted within a stuffing-box, a packing comprising a plurality of rings inter-connected to form a rigid assembly receivable within said stuffing-box and encircling said rod, means spacing said rings to define annular recesses therebetween opening into the bore of said assembly, a plurality of arcuate packing blocks slidably disposed in each of said recesses, means urging said blocks radially inwards against said rod, guides on said rings limiting the movement of each of said blocks to radial movement, said guides extending inwards from the outer periphery of said recess and terminating short of the inner periphery thereof, and an extension on each end of each of said blocks extending into engagement with the proximal projection of the adjacent block.

1,807,556. PUMPING DEVICE. EDWARD SANDERS, Blackwell, Tex. Filed Apr. 15, 1930. Serial No. 444,526. 2 Claims. (Cl. 74—71.)

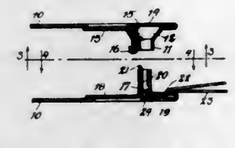
1. A pumping device comprising, a walking beam adapted to be pivotally connected at one end with a sucker rod,

a rotatable shaft, a crank on said shaft, a link having one end pivotally connected to said crank, a bracket having one end secured to said link and further having its opposite end offset and arranged in spaced parallel relation to said link, said walking beam having its opposite end extending between and pivotally connected with the



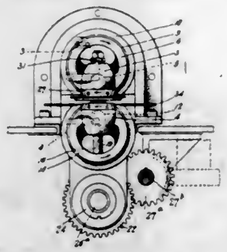
offset end of the bracket and the opposite end of said link, and a counter weight having the end portions of a pair of U-bolts secured thereto, said U-bolts having their central portions extending around said link, said U-bolts being disposed on opposite sides of the connection between the bracket and link.

1,807,557. LOCKING CLASP. JACOB SCHIERER, New York, N. Y. Filed June 3, 1930. Serial No. 459,101. 4 Claims. (Cl. 292—322.)



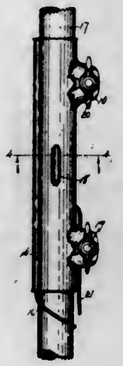
3. In a locking clasp, a strip of metal having a locking tubular member on one end thereof, the said end portion being folded upon itself to present a closing portion for the open base portion of said tubular member, and an obstructing member integral with said strip which projects through said tubular member and which is bent over the entrance end of said tubular member.

1,807,558. MARKER FOR MARKING CONTAINER COVERS. MATHEW M. SEDWICK, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,430. 4 Claims. (Cl. 101—4.)



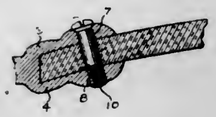
1. A marking device for covers including cooperating marking heads, a shaft on which each head is mounted, a pair of rotatable sleeves, one for each shaft, the shafts being mounted on said sleeves at one side of the center thereof, means for rotating the sleeves, and means for preventing the shafts from rotating in the sleeves whereby the marking heads are maintained in vertical position throughout their bodily movement.

1,807,559. HANDLE COUPLING AND PROCESS OF CONSTRUCTING THE SAME. CURTISS F. SMITH, West Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a Corporation of Connecticut. Filed Nov. 23, 1927. Serial No. 235,302. 7 Claims. (Cl. 287—110.)



1. A coupling for broom handles and similar articles, said coupling being formed from a single blank of sheet material and comprising a longitudinally split tubular member open at opposite ends; and an enlarging element formed independently of the portions forming the split and spaced therefrom circumferentially of said member to be bent to change the size of the coupling.

1,807,560. EYEGLASS MOUNTING. IVAR SUNDSTROM, Rochester, N. Y., assignor to Shuron Optical Company, Inc., a Corporation of New York. Filed Apr. 25, 1929. Serial No. 358,010. 1 Claim. (Cl. 88—42.)

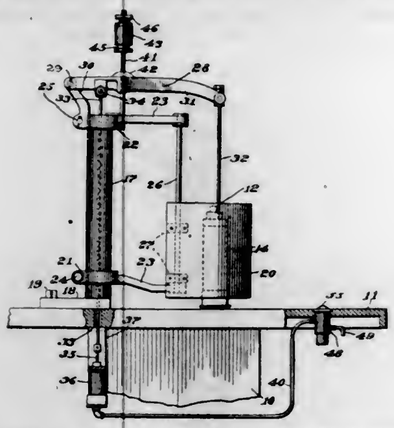


A mount for a curved lens having a screw opening, one end of which is at a greater distance from the edge of the lens than the other, said mount having a shank, an elongated base portion arranged to engage the periphery of the lens and extending in opposite directions from said shank, arms of unequal lengths corresponding to the distances of the ends of the screw opening in the lens from its edge extending directly inwardly from said base portion in contact with the faces of the lens, said arms having their lens-engaging faces substantially parallel to each other and inclined with reference to the inner surface of said base portion, and ears on the inner ends of said arms having openings therein arranged to aline with the opposite ends of said screw opening in the lens.

1,807,561. CUTTER GUARD. ALPHONZO WHITE, Winchendon, Mass., assignor to Baxter D. Whitney & Son, Inc., Winchendon, Mass., a Corporation of Massachusetts. Filed Aug. 29, 1929. Serial No. 389,223. 3 Claims. (Cl. 144—251.)

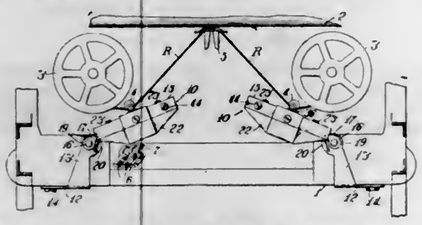
1. In combination with a shaper having a work supporting table, a power driven cutter and a hollow cutter-steadying post; a cutter guard, a frame fastened to said post for supporting the guard for sliding movement to and from the cutter protecting position, a guard operat-

ing lever pivotally supported by said post and connected to the guard, a rod extending upwardly through said post



to operate the lever, a fluid operated piston mounted below the table to actuate the rod, and a valve for controlling the operating fluid supplied to said piston.

1,807,562. INKING DEVICE. WALTER H. YOUNG and EMIL O. ECKLAND, Chicago, Ill.; said Eckland assignor to said Young. Filed Jan. 18, 1926. Serial No. 82,005. 20 Claims. (Cl. 197—171.)



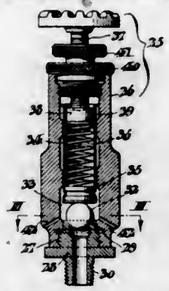
13. In combination with a ribbon printing machine, an ink container mounted on said machine for cooperation with a printing ribbon, means supported by said container for applying fluid from the interior of the container to the surface of the ribbon while the latter is in use, a bracket on which said container is pivotally supported, means for adjusting the position of the bracket with respect to the printing ribbon and means on the bracket for yieldingly forcing the container in direction towards the inking ribbon.

1,807,563. PROCESS OF EMULSIFYING WATER INSOLUBLE SUBSTANCES. HARRY BENNETT, Brooklyn, N. Y. Filed Mar. 30, 1929. Serial No. 351,452. 4 Claims. (Cl. 134—1.)

1. A process of forming an aqueous emulsion comprising adding mono-ethanolamine to linoleic acid and heating the mass at atmospheric pressures; thereafter adding xylidin and agitating the mass; then slowly adding water with continued agitation until the temperature recedes to atmospheric temperature.

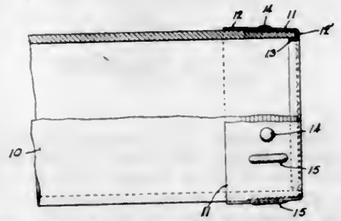
1,807,564. PRESSURE REGULATING VALVE. HARRY M. BLINN, Baltimore, Md., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 18, 1927. Serial No. 234,273. 3 Claims. (Cl. 137—53.)

1. A valve of the character described embodying a casing; a closure ball co-operating with a seat afforded by a removable bushing in one end of the casing; said closure ball occupying a chamber set apart in the casing with provision accommodating bleed exhaust; a hollow cylindric pressure member with an interfitting follower, said member being confined to movement axially of the valve seat and having a closed end in single point rolling contact with the ball whereby the latter is accorded absolute



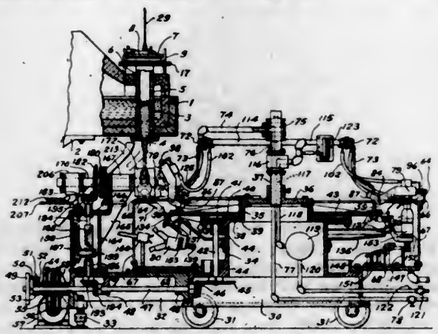
freedom of lateral action in accurately seeking its seat; a resistor spring within the hollow of the pressure member intermediate the closed end and follower serving to constantly resist valve opening; and means having single point bearing contact with the follower for regulating the force exerted by the spring.

1,807,565. PIPE THREAD PROTECTOR. HOWARD J. BURNISH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Sept. 12, 1927. Serial No. 219,022. 10 Claims. (Cl. 137—91.)



1. A thread protector formed as a metal shell with perforations in its wall and adapted to shield the threads to be protected, and means comprising separate soft metal plugs seated in the perforations in the wall of the shell and adapted to engage the threads to detachably secure the shell in protecting position in relation to the threads.

1,807,566. MANUFACTURE OF BLOWN GLASSWARE. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 21, 1927. Serial No. 176,988. 61 Claims. (Cl. 49—5.)



1. Apparatus for making blown glassware comprising a continuously rotatable support for a strip or ribbon of molten glass, said support having a plurality of downwardly opening orifices for the issue of glass from said strip, a plurality of blow molds rotatable with said support and each adapted to close beneath one of said orifices for enclosing glass issuing from said orifice, and means for blowing air through said orifice into the interior of the glass while the glass is enclosed in said mold.

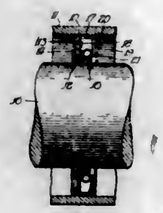
14. Apparatus for shaping hollow glassware comprising a movable carrier, a plurality of glass fabricating units removably mounted on said carrier, each unit including a parison support having an orifice provided therein, a blow head and an associated blow mold, and means for feeding a ribbon of glass upon said supports and in a position extending over a plurality of said orifices.

1,807,567. OIL SEAL. HAROLD A. CLARK, Northbrook, Ill., assignor to Chicago Rawhide Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 25, 1928. Serial No. 288,093. 10 Claims. (Cl. 288—1.)



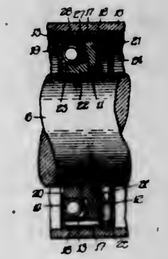
1. In a seal, two axially spaced centrally apertured cage members, one of which is attached to the other, a flexible sheet packing which is shiftable radially within the space enclosed by said cage members and has a radially flanged portion in shiftable fluid-tight association with the inner face of one of said cage members and an axially sleeved portion of smaller inside diameter than the apertures in said cage members for rotatable fluid-tight association with a shaft passing through the same, a spacer member which is positioned about the axially sleeved portion of said packing and is clamped under pressure against the radially flanged portion of said packing by the inner face of the other of said cage members, and a spring member which is positioned under tension within the spacer member about the axially sleeved portion of said packing for constricting the packing on the shaft.

1,807,568. OIL SEAL. HAROLD A. CLARK, Northbrook, Ill., assignor to Chicago Rawhide Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed July 9, 1928. Serial No. 291,165. 2 Claims. (Cl. 288—1.)



1. As an article of manufacture, a self-contained seal for insertion as an assembled unit within a tubular housing in encompassing relation to a centrally located shaft, consisting of a cup-shaped cage, a cup-shaped ring of substantially the same outside diameter as the inside of the cage nested within the cage, a radially flanged packing also of substantially the same outside diameter as the inside of the cage positioned in the cage with the radially extending portion of the packing clamped immovably between the bottom of the cage and the bottom of the ring, and a washer secured between the rim of the cage and the rim of the ring.

1,807,569. OIL RETAINER. HAROLD A. CLARK, Northbrook, Ill,. assignor to Chicago Rawhide Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 7, 1929. Serial No. 344,937. 2 Claims. (Cl. 288—1.)



1. As an article of manufacture, a self-contained seal for insertion as an assembled unit within a cylindrical housing in encompassing relation to a centrally located shaft, consisting of a flat centrally apertured sheet metal cup, an annular packing member positioned in the cup, and a closure member disposed within the rim of the cup; the portion of the periphery of the cup near the bottom of the latter being cylindrical for forced fit engagement with the inner wall of the housing, the portion of the periphery of the cup near the rim of the latter being tapered to interlock axially with the closure member in spaced relation to the inner wall of the housing, and the portion of the periphery of the closure member encircled by the tapered portion of the cup being similarly tapered to interfit therewith.

1,807,570. SELF DEODORIZING SEALING COMPOSITION. BRADLEY DEWEY, Cambridge, Mass., assignor to Dewey and Almy Chemical Company, North Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1928. Serial No. 254,320. 6 Claims. (Cl. 106—8.)

3. A closure sealing composition comprising a body material containing glue and absorbent charcoal.

1,807,571. LINEN SHOE THREAD. WALTER W. EVANS, Longmeadow, Mass., assignor to Ludlow Manufacturing Associates, Ludlow, Mass., a Trust of Massachusetts. Filed Sept. 29, 1930. Serial No. 485,328. 7 Claims. (Cl. 117—53.)

1. A linen shoe thread having a small amount of poisoning or dehydrating disinfectant incorporated therein to preserve the shoe thread against objectionable deterioration by micro-organisms in street dirt and the like.

1,807,572. SHOE. WALTER W. EVANS, Longmeadow, Mass., assignor to Ludlow Manufacturing Associates, Ludlow, Mass., a Trust of Massachusetts. Original application filed Sept. 29, 1930, Serial No. 485,328. Divided and this application filed Apr. 14, 1931. Serial No. 530,154. 6 Claims. (Cl. 117—52.)

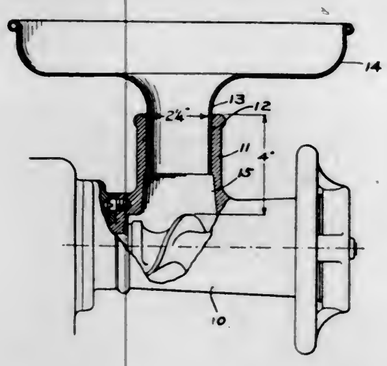
1. A shoe sewed with a linen shoe thread having a small amount of a poisoning or dehydrating disinfectant incorporated therein to preserve the shoe thread against objectionable deterioration by micro-organisms in street dirt and the like.

1,807,573. SNATH. ARTHUR J. GIBBONS, near Indianapolis, Ind., assignor to Louisa D. Gibbons, Camby, Ind. Filed July 5, 1929. Serial No. 376,028. 3 Claims. (Cl. 56—325.)



1. A snath comprising a length of relatively flat bar metal having a scythe attaching end and a handle end, said bar having a twist therein whereby the flat face of said handle end is angularly disposed in relation to the face of said scythe end.

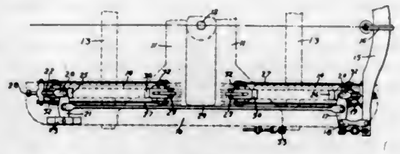
1,807,574. MEAT GRINDER. HERBERT L. JOHNSTON, Troy, Ohio, assignor to The Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed Dec. 26, 1923. Serial No. 682,688. 8 Claims. (Cl. 146—189.)



1. A meat grinder of the character described comprising a chopper cylinder adapted to receive a worm therein, an inlet secured thereto and having a passage therethrough opening into said cylinder and of a length materially in excess of its width, said passage being of such cross-sectional area at a point relatively distant from said worm as to prevent the adult operator extending his fingers into contact with the worm.

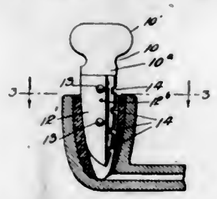
1,807,575. CLASP BRAKE RIGGING. WILLIAM H. MUSSEY, Chicago, Ill., assignor to Pullman Car and Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 9, 1929. Serial No. 361,667. 3 Claims. (Cl. 188—56.)

1. A clasp brake rigging for pivotal car trucks comprising a truck frame and a plurality of pairs of wheels, dead brake levers fulcrumed on shoes applied to the inner sides of adjacent pairs of wheels, live brake levers fulcrumed on shoes applied to the other side of said wheels, tie bars connecting the lower ends of the levers of each



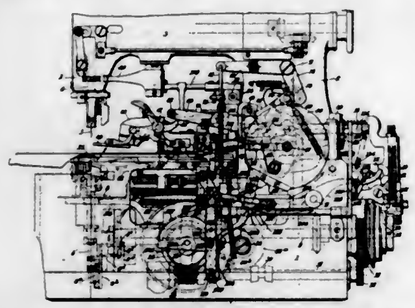
pair, equalizing levers extending inwardly from the truck sides for connection to the upper ends of adjacent live levers, an equalizing radius bar connected to the opposite ends of certain of said equalizing levers, and a pull rod connecting said equalizing bars intermediate their ends.

1,807,576. TOBACCO PIPE REAMER. FREDERICK KREKELER, Woodside, N. Y. Filed May 1, 1928. Serial No. 274,181. 2 Claims. (Cl. 131—13.)



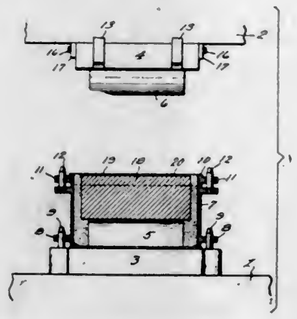
1. A tobacco pipe reamer embodying, in combination, an operating member having a blade portion extensible within the bowl of the pipe and provided with a plurality of slots arranged in parallel relationship, and a cutting element mounted in said parallel slots to have a guided, automatic movement bodily in relation to said blade, said cutting element and blade portion being arranged, upon insertion of the reamer into the pipe, to cause the said cutting element to engage the wall of the pipe adjacent to the outer edge of the bowl and to cause an expansion of the two elements during an inward boring movement of the reamer.

1,807,577. BUTTONHOLE SEWING MACHINE. EDWARD B. ALLEN, Newtown, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 29, 1927. Serial No. 236,402. 11 Claims. (Cl. 112—68.)



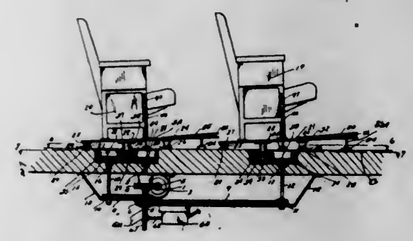
1. In a buttonhole sewing machine, in combination, stitch-forming mechanism, buttonhole cutting mechanism, control means for varying the sequence of operations of said mechanisms, clamp-closing mechanism, clamp-opening mechanism, and means connected with said control means for insuring the invariable opening of the work-clamp subsequent to the stitching and cutting operations.

1,807,578. SAND DISPLACER. DAN J. MCAVOY, Cleveland, Ohio, assignor to The Grabler Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 29, 1928. Serial No. 329,242. 8 Claims. (Cl. 22—25.)



1. In a molding apparatus the combination of co-operating patterns positioned one above the other and movable toward and from each other, a mold flask positioned about the lower pattern, a sand frame in alignment with and removably secured to the upper edge of said mold flask, and sand displacing means in said flask about which sand is run when the mold flask is filled, said means being removable after the mold flask and sand frame are filled, leaving a depression in the sand into which the upper pattern is pressed as the parts are moved toward each other in compressing the sand in said mold flask.

1,807,579. SEAT POSITIONING DEVICE. LEE OTIS THOMPSON, Vancouver, Wash. Filed Dec. 15, 1927. Serial No. 240,274. 12 Claims. (Cl. 155—33.)



2. In a device of the class described, the combination of an endless guideway, a series of seats comprising two rows of seats, each having a downwardly extending spindle adapted to being moved within the guideway, a sprocket disposed upon the spindle, driven chains adapted to engage the sprocket and to impart lateral movement thereto on a part of its travel along the guideway and a gear segment adapted to engage one side of the sprocket on a part of the circumference of the guideway, and selective means for predetermining the direction of travel of the seats of the series.

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[Decisions of the United States Court of Customs and Patent Appeals are indicated by an asterisk (*); and of the Supreme Court of the District of Columbia by the letter (d).]

ERRATA

Page 584—No. 1,689,581—Morgan Robert Day, disclaimer, line 8, for "stablizer" read *stabilized*.

Page 950 of the O. G. June 23, 1931, No. 1,811,033, in heading, name of the inventor, for "Burgess Tollspry" read *Burgess Toll Spry*.

Page xxvi, Alphabetical List of Patentees, O. G. June 23 1931, for "Tollspry, Burgess" read *Spry, Burgess Toll*.

Alphabetical List of Trade-Mark Applicants published for opposition June 2, 1931, page 5, line 4, for "Alibron Products, Inc." read *Calibron Products, Inc.*

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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Adams & Westlake Company, The. (See Curtain Supply Company, The.)

Ajax Hosiery Mills, Phoenixville, Pa. Hosiery. 283,715; June 2; Serial No. 310,147; published Mar. 10, 1931. Class 39.

Allen, Howard F., doing business as Allen Sales Company, and also as Tetrazene Products Co., Hollywood, Calif. Dry-cleaning fluid. 283,626; June 2; Serial No. 303,524; published Mar. 17, 1931. Class 4.

American Forestry Company. (See Borst, Theodore F.)

American Fork & Hoe Company, The, Cleveland, Ohio. Axes, adzes, broadaxes, bush hooks, hatchets, etc. 283,564; June 2; Serial No. 310,276; published Mar. 17, 1931. Class 23.

American News Company, Inc., The, New York, N. Y. Composition books, fountain pens, ink and pencil erasers, etc. 283,548; June 2; Serial No. 307,792; published Mar. 17, 1931. Class 37.

Angle, Don D., doing business as Don D. Angle Welders Supply Company, Los Angeles, Calif. Alloy metals. 283,645; June 2; Serial No. 306,163; published Mar. 17, 1931. Class 14.

Arnold, Frank J., doing business as Wax Refining Company, Chicago, Ill. Printer's ink, ink compound, and/or reducer for color and black inks. 283,532; June 2; Serial No. 310,792; published Mar. 17, 1931. Class 11.

Aromint Corporation, Cincinnati, Ohio. Candy tablets. 283,600; June 2; Serial No. 306,390; published Mar. 17, 1931. Class 46.

Ayers, Lena T., doing business as Teverbaugh Manufacturing Company, Chicago, Ill. Hair-pressing oil. 283,754; June 2. Class 6.

Asher & Roretz, Inc., New York, N. Y. Waterproof and mothproof material. 283,663; June 2; Serial No. 298,970; published Mar. 17, 1931. Class 50.

Associated Merchandising Corporation, The, New York, N. Y. Desks and household chairs. 283,518; June 2; Serial No. 310,156; published Mar. 17, 1931. Class 32.

Badger Specialty Co. (See Smith, Harold E.)

Ballard & Ballard Co., Louisville, Ky. Wheat flour and self-rising flour. 283,579; June 2; Serial No. 310,851; published Mar. 17, 1931. Class 46.

Ballard & Ballard Co., Louisville, Ky. Flour. 283,588; June 2; Serial No. 310,852; published Mar. 17, 1931. Class 46.

Baltimore Butterine Company, The, Baltimore, Md. Mayonnaise, pickle relish, salad oils, salad dressing, etc. 283,651; June 2; Serial No. 307,470; published Mar. 17, 1931. Class 46.

Baltimore Clothes Incorporated, Baltimore, Md. Men's coats, vests, pants, etc. 283,623–4; June 4; Serial No. 307,573–4; published Mar. 10, 1931. Class 39.

Banska-A Hutni Spolecnost, Brunn, Czechoslovakia. Wire; steel wires. 283,547; June 2; Serial No. 301,390; published Mar. 17, 1931. Class 14.

Banska-A Hutni Spolecnost, Brunn Czechoslovakia. Wire, steel wires, zinc, copper, etc. 283,707; June 2; Serial No. 301,389; published Mar. 17, 1931. Class 14.

Bedford Watch Company, Incorporated, New York, N. Y. Time recorders, clocks, watches, and parts thereof. 283,736; June 2. Class 27.

Bellmore Neckwear Co. (See Mandel, Abraham.)

Berg, Charle W., doing business as Charles W. Berg Laboratories, Philadelphia, Pa. Disinfectant. 283,516; June 2; Serial No. 309,328; published Mar. 17, 1931. Class 6.

Berry, James B., Sons' Company of Illinois, Chicago, Ill. Powdered asphalt. 283,629; June 2; Serial No. 308,350; published Mar. 17, 1931. Class 12.

Bobrick Chemical Co., assignor to Bobrick Manufacturing Corporation, Los Angeles, Calif. Cleaning preparation. 82,957; renewed Aug. 8, 1931.

Bobrick Chemical Co., assignor to Bobrick Manufacturing Corporation, Los Angeles, Calif. Fluid soap. 83,214; renewed Aug. 29, 1931.

Borgmann, Herbert, St. Louis, Mo. Safety-razor blades. 283,609; June 2; Serial No. 307,304; published Mar. 17, 1931. Class 23.

Borst, Emil E., doing business as National Fish and Oyster Co., Baltimore, Md. Sea food. 283,517; June 2; Serial No. 309,329; published Mar. 10, 1931. Class 46.

Borst, Theodore F., doing business as American Forestry Company, Framingham Center, Mass. Horticultural growths. 283,550; June 2; Serial No. 303,044; published Mar. 17, 1931. Class 50.

Boulin, Camille H., doing business as C. H. Boulin, New York, N. Y. Laboratory centrifugal apparatus. 283,638; June 2; Serial No. 303,759; published Mar. 17, 1931. Class 26.

Bound Brook Oil-Less Bearing Company, The. (See Graphite Lubricating Company.)

Brewer & Company, Inc., Worcester, Mass. Laxative medicine. 283,581; June 2; Serial No. 310,159; published Mar. 17, 1931. Class 6.

Brown Shoe Company, Inc., St. Louis, Mo. Shoes. 283,618–9; June 2; Serial Nos. 308,973–4; published Mar. 17, 1931. Class 39.

Bruce's Juices Inc., Tampa, Fla. Juices for food purposes. 283,680; June 2; Serial No. 289,500; published Mar. 17, 1931. Class 46.

Brunsviga-Maschinenwerke Grimme, Natalis & Co. Aktiengesellschaft, Brunswick, Germany. Calculating and adding machines and cash registers. 283,586; June 2; Serial No. 309,063; published Mar. 17, 1931. Class 26.

Bureau of Feminine Hygiene Inc., New York, N. Y. Antiseptic tablets and suppositories. 283,535; June 2; Serial No. 310,088; published Mar. 10, 1931. Class 6.

Burrows, Waters F., Sarasota, Fla. Fresh citrus fruits. 283,538; June 2; Serial No. 310,282; published Mar. 17, 1931. Class 46.

Burrows, Waters F., Sarasota, Fla. Fresh citrus fruits. 283,545; June 2; Serial No. 310,752; published Mar. 17, 1931. Class 46.

Burton Brothers & Co. Inc., New York, N. Y. Cotton piece goods. 283,736; June 2. Class 42.

Calphiomin Laboratories, Los Angeles, Calif. Sea kelp prepared for human dietary use. 283,649; June 2; Serial No. 307,385; published Mar. 17, 1931. Class 46.

Campbell, Andrew C., Incorporated, Waterbury, Conn. Braiding machines. 283,656; June 2; Serial No. 295,206; published Mar. 17, 1931. Class 23.

Campbell, O. Clayman, doing business as Untox Company, Philadelphia, Pa. Laxatives. 283,536; June 2; Serial No. 310,091; published Mar. 10, 1931. Class 6.

Canadian Western Lumber Company, Limited, Fraser Mills, British Columbia, Canada. Lumber and lumber products. 283,628; June 2; Serial No. 308,926; published Mar. 17, 1931. Class 12.

Carran, Grace B., doing business as Central Petroleum Company, Cleveland, Ohio. Paint. 283,713; June 2; Serial No. 310,636; published Mar. 17, 1931. Class 16.

Carrier Engineering Corporation, New York, N. Y., and Newark, N. J. Solvents. 283,661; June 2; Serial No. 297,894; published Mar. 17, 1931. Class 4.

Central Petroleum Company. (See Carran, Grace B.)

Chambs, Louis J., doing business as Cho Pop Co., Minneapolis, Minn. Chocolate-flavored pop corn. 283,546; June 2; Serial No. 310,754; published Mar. 17, 1931. Class 46.

Chemisch-Pharmazeutische A. G. Bad Homburg, Werk Frankfurt A/M., Frankfort-on-the-Main, Germany. Preparations of kamillosan-hydrogen peroxyde. 283,632; June 2; Serial No. 306,764; published Mar. 17, 1931. Class 6.

Chemische Fabrik Arthur Jaffe. (See Jaffe, Arthur.)

Cheney Bigelow Wire Works, Springfield, Mass. Fourdrinier screens and the like. 283,515; June 2; Serial No. 309,304; published Mar. 17, 1931. Class 23.

Chicago Flexible Shaft Company, Chicago, Ill. Electric clippers and animal shears. 283,524; June 2; Serial No. 310,911; published Mar. 17, 1931. Class 23.

Chicago Pneumatic Tool Company, New York, N. Y. Earth boring and well-drilling apparatus and parts thereof. 283,743; June 2. Class 23.

Chrysler Corporation. (See Plymouth Motor Corporation, assignor.)

Chrysler Corporation, Highland Park, Mich. Automobiles and their structural parts. 283,544; June 2; Serial No. 310,675; published Mar. 17, 1931. Class 19.

Clifton Manufacturing Company, Waco, Tex. Cotton-pickers' sacks. 283,728; June 2; Serial No. 309,804; published Mar. 17, 1931. Class 2.

Con-Ferro Paint & Varnish Company, St. Louis, Mo. Paints, paint enamels, paste, etc. 283,627; June 2; Serial No. 303,418; published Mar. 17, 1931. Class 16.

Continental Oil Company, Ponca City, Okla. Lubricating oil. 283,566; June 2; Serial No. 310,103; published Mar. 10, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating oil. 283,567–8; June 2; Serial Nos. 310,109–10; published Mar. 10, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating oil. 283,569; June 2; Serial No. 310,112; published Mar. 10, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating grease. 283,570; June 2; Serial No. 310,113; published Mar. 10, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating oil. 283,571; June 2; Serial No. 310,114; published Mar. 10, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating grease. 283,572–3; June 2; Serial Nos. 310,115–16; published Mar. 10, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating oil. 283,574; June 2; Serial No. 310,120; published Mar. 10, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating grease. 283,689; June 2; Serial No. 310,101; published Mar. 10, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating oil. 283,690–3; June 2; Serial Nos. 310,097–100; published Mar. 10, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating oils and greases. 283,697; June 2; Serial No. 309,606; published Mar. 10, 1931. Class 15.

Cranberry Canners, Inc. (See Ocean Spray Preserving Company, assignor.)
Crescent Tool Company, The, Jamestown, N. Y. Hand tools. 283,646; June 2; Serial No. 306,941; published Mar. 17, 1931. Class 23.
Crystal Chemical Company, Inc., The, Bronx, N. Y. Face powder, rouge, lip stick, and lip and cheek rouge. 283,675; June 2; Serial No. 286,925; published Mar. 10, 1931. Class 6.
Curtain Supply Company, The, Newark, N. J., and Chicago, Ill., to The Adams & Westlake Company, Chicago, Ill., successor. Curtain rollers. 81,679; renewed May 2, 1931.
Daner Co. (See Danerhirsch, Joseph.)
Danerhirsch, Joseph, doing business as Daner Co., New York, N. Y. Shirts. 283,639–43; June 2; Serial Nos. 304,490–4; published Nov. 4, 1930. Class 39.
Davenport, Orville A., doing business as Davenport & Company, Portland, Oreg. Cleaning preparation. 283,687; June 2; Serial No. 274,825; published Mar. 10, 1931. Class 4.
Davis, Morten, Co., Dallas, Tex. Dresses. 283,704; June 2; Serial No. 309,553; published Mar. 10, 1931. Class 39.
Dean & Barry Company, The, Columbus, Ohio. Finish for decorating walls and ceilings. 82,581; renewed July 11, 1931.
Dean & Barry Company, The, Columbus, Ohio. Floor finish. 82,766; renewed July 25, 1931.
Delta Electric Company, Marion, Ind. Electric hand lanterns. 283,677; June 2; Serial No. 287,652; published Mar. 10, 1931. Class 21.
Delta Electric Company, Marion, Ind. Portable electric lanterns. 283,678; June 2; Serial No. 287,653; published Mar. 10, 1931. Class 21.
De Soto Chemical Co. (See Ogint, Adam.)
Doree Parfumerie. (See Sendecke, J.)
Doree Products Company. (See Sendecke, J.)
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Dyes. 283,543; June 2; Serial No. 310,625; published Mar. 17, 1931. Class 6.
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Synthetical methanol. 283,616; June 2; Serial No. 306,224; published Mar. 17, 1931. Class 6.
Du Pont, E. I., de Nemours and Company, Wilmington, Del. Wood stains, fillers, dry colors. 283,712; June 2; Serial No. 309,924; published Mar. 17, 1931. Class 16.
Dursar Corporation, The, Newark, N. J., and New York, N. Y. Cast-iron castings. 283,557; June 2; Serial No. 309,633; published Mar. 17 1,931. Class 14.
Edwards & Co. Inc., New York, N. Y. Electrical goods. 81,686–7; renewed May 2, 1931.
Eisenstadt Manufacturing Company, St. Louis, Mo. Purses and handbags. 283,657; June 2; Serial No. 296,910; published Mar. 17, 1931. Class 3.
Electric Storage Battery Company, The, Philadelphia, Pa. Storage battery plates. 82,219; renewed June 13, 1931.
Empire Gum Co. (See Woolsey, Henry S.)
Euclid Crane & Hoist Company, The, Euclid, Ohio. Mobile machinery. 283,610; June 2; Serial No. 307,244; published Mar. 17, 1931. Class 23.
Ever-Youth Co., The. (See Hurwitz, Nathan.)
Ex-Lax Mfg. Co., New York, N. Y. Laxative preparation. 83,823; renewed Oct. 17, 1931.
Fairhurst Lumber Company, Tacoma, Wash. Construction and finishing lumber. 283,589; June 2; Serial No. 309,309; published Mar. 17, 1931. Class 12.
Famise Corporation, The, Newark, N. J. Foundation garments. 283,702; June 2; Serial No. 309,730; published Mar. 17, 1931. Class 39.
Faust & Davis, Inc., New York, N. Y. Dresses. 283,729; June 2. Class 39.
Federal Chemical Company, Incorporated, Indianapolis, Ind. Liquid composition. 283,592; June 2; Serial No. 309,554; published Mar. 17, 1931. Class 6.
Felix, Walter, Reading, Pa. Hosiery. 283,746; June 2. Class 39.
Ferro Engineering Company, The, Cleveland, Ohio. Parting compound. 283,529; June 2; Serial No. 310,511; published Mar. 17, 1931. Class 1.
Ferro Engineering Company, The, Cleveland, Ohio. Hot-top linings of brick or similar heat-insulating materials. 283,631; June 2; Serial No. 307,272; published Mar. 10, 1931. Class 12.
Fick, Edna H., Brooklyn, assignor to George H. Fick, Inc., New York, N. Y. Fine powder for carpet cleaning and a general grease remover. 283,684; June 2; Serial No. 238,646; published Mar. 3, 1931. Class 4.
Formica Insulation Company, The, Cincinnati, Ohio. Gears, gear blanks. 283,654; June 2; Serial No. 293,423; published Mar. 17, 1931. Class 23.
Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 283,751; June 2. Class 42.
Frantz Manufacturing Co., Sterling, Ill. Door equipment 283,724; June 2; Serial No. 310,013; published Mar. 17, 1931. Class 13.
Frederick Disinfectant Company, Atlanta, Ga. Disinfectants. 83,973; renewed Oct. 24, 1931.
Galbani, S. A. Egidio, Milan, Italy. Cheese. 283,753; June 2. Class 46.
Garland Products Company, St. Louis, Mo. Motor-fuel oil. 283,615; June 2; Serial No. 304,553; published Mar. 10, 1931. Class 15.
General Refractories Company, Philadelphia, Pa. Refractory cement. 283,525; June 2; Serial No. 309,376; published Mar. 17, 1931. Class 12.
General Sales, Inc., New York, N. Y. Varicolored liquids for spraying coke and coal. 283,718; June 2; Serial No. 309,776; published Mar. 10, 1931. Class 6.
Glb-As-Tine Company, Logan, W. Va. Compound for treating asthma. 283,720; June 2; Serial No. 309,641; published Mar. 10, 1931. Class 6.
Gilmore, Park M., assignor to The Kenton Pharmacal Company, Covington, Ky. Hair stain. 83,903; renewed Oct. 24, 1931.
Gimbal Brothers, San Francisco, Calif. Marshmallow sheets. 283,676; June 2; Serial No. 287,137; published Mar. 17, 1931. Class 46.
Glatzer, Gustave, New York, N. Y. Rouge, face powder, etc. 283,731; June 2. Class 6.
Gluvtex Manufacturing Corp., New York, N. Y. Garment hangers. 283,556; June 2; Serial No. 309,203; published Mar. 17, 1931. Class 50.
Gold Medal Folding Furniture Co., Racine, Wis. Furniture. 283,659; June 2; Serial No. 297,425; published Mar. 17, 1931. Class 32.
Goodyear Rubber Company, San Francisco, Calif. Rubber hose. 83,732; renewed Oct. 10, 1931.
Gore, J. I., & Co., Philadelphia, Pa. Medicinal tonic. 283,726; June 2; Serial No. 309,894; published Mar. 10, 1931. Class 6.
Grant, Geo. W., St. Petersburg, Fla. Jelly and marmalade. 283,537; June 2; Serial No. 310,125; published Mar. 17, 1931. Class 46.
Graphite Lubricating Company, The, by change of name to Bound Brook Oil-Less Bearing Company, Boundbrook, N. J. Metal and graphite bearings, and bushings. 83,488; renewed Sept. 19, 1931.
Gray, Dorothy, Bloomfield, N. J., and New York, N. Y. Patters for the skin and tissue and reducing chin strap. 283,555; June 2; Serial No. 309,068; published Mar. 17, 1931. Class 44.
Gray, Dorothy, New York, N. Y., and Bloomfield, N. J. Cleansing tissues. 283,587; June 2; Serial No. 309,069; published Mar. 17, 1931. Class 37.
Greenfogel, Max, Inc., New York, N. Y. Dresses and gowns. 283,745; June 2. Class 39.
Griffin, H., & Sons Company, The, New York, N. Y. Artificial metallic leaf for lettering, decorating, and numbering books, etc. 283,644; June 2; Serial No. 304,687; published Mar. 17, 1931. Class 50.
Gristede Bros. Inc., New York, N. Y. Ginger ale. 283,734; June 2. Class 45.
H. & J. Laboratories, Parkersburg, W. Va. Laxative. 283,540; June 2; Serial No. 310,377; published Mar. 10, 1931. Class 6.
Harris, Chas. & Thos., & Co., Limited, assignor to C. & T. Harris (Calne) Limited, Calne, England. Bacon, hams, lard for food, and brawn. 82,324; renewed June 20, 1931.
Helt-Miller-Lau Co., by change of name to Wayne Candies, Inc., Fort Wayne, Ind. Chocolate confections. 83,067; renewed Aug. 15, 1931.
Hendel, Hyman, Brooklyn, N. Y. Neckties. 283,749; June 2. Class 39.
Hills Brothers Company, The, New York, N. Y. Citron and cocoanut. 83,837; renewed Oct. 17, 1931.
Hoffmann-La Roche Chemical Works, The, New York, N. Y., assignor to Hoffmann-La Roche, Inc., Nutley, N. J. Amorphous digitoxin, dissolved in water, (digitoxin soluble cloetta). 83,738; renewed Oct. 10, 1931.
Holeproof Hosiery Co., Milwaukee, Wis. Hosiery. 283,711; June 2; Serial No. 309,976; published Mar. 10, 1931. Class 39.
Holman Soap Company, Chicago, Ill. Face creams, talcum powder, perfumery, toilet water, etc. 283,590; June 2; Serial No. 309,525; published Mar. 17, 1931. Class 6.
Hopson, W. C., Company, doing business as Simplex Brooder Stove Co., Grand Rapids, Mich. Oil-burning brooder stoves. 283,560; June 2; Serial No. 310,140; published Mar. 17, 1931. Class 34.
Hopson, W. C., Company, doing business as Simplex Brooder Stove Co., Grand Rapids, Mich. Oil-burning brooder stoves. 283,561; June 2; Serial No. 310,142; published Mar. 17, 1931. Class 34.
Horton Manufacturing Company, The, Fort Wayne, Ind. Laundry washing machines. 83,253; renewed Aug. 29, 1931.
Houbigant, Inc., New York, N. Y. Perfumes, toilet water, face powder, talcum powder, etc. 283,583; June 2; Serial No. 310,769; published Mar. 17, 1931. Class 6.
How-Glad Manufacturing Co. (See Shapira, David.)
Hubbart, J. E., Seattle, Wash. Salmon eggs for fish-bait. 82,087; renewed May 30, 1931.
Hurwitz, Nathan, doing business as The Ever-Youth Co., New York, N. Y. Hair-color restorer. 283,551; June 2; Serial No. 303,289; published Mar. 3, 1931. Class 6.
Ichthyol-Gesellschaft Cordes, Hermanni & Co., Hamburg, Germany, assignor to The Ichthyol Co., Rahway, N. J. Chemical, pharmaceutical, surgical, etc., products and preparations. 35,548; renewed Dec. 4, 1930.
International Merchandising Syndicate, Inc., New York, N. Y. Cotton piece goods. 283,750; June 2. Class 42.
International Sugar Feed No. Two Company, Memphis, Tenn. Poultry feed. 283,695; June 2; Serial No. 309,780; published Mar. 17, 1931. Class 46.
Irviu, Daniel L., New York, N. Y. Permanently or removably covered sponge-rubber pads. 283,562; June 2; Serial No. 310,173; published Mar. 17, 1931. Class 50.

Jaffe, Arthur, to Arthur Jaffe, doing business as Chemische Fabrik Arthur Jaffe, Berlin, Germany. Hemoglobiniferous preparations. 80,534; renewed Jan. 3, 1931.
Janov-Abeles, I., Shirt Co., New York, N. Y. Shirts 283,732; June 2. Class 39.
Janov-Abeles, I., Shirt Co., New York, N. Y. Shirts and collars. 283,748; June 2. Class 39.
Johnson, Iver, Sporting Goods Company, Boston, Mass. Bicycles. 83,742; Renewed Oct. 10, 1931.
Kassay, Margaret, New York, N. Y. Neckties. 283,701; June 2; Serial No. 309,782; published Mar. 10, 1931. Class 39.
Keenex Razor Sharpener Company, The, Toledo, Ohio. Razor sharpeners. 283,607; June 2; Serial No. 307,552; published Mar. 17, 1931. Class 23.
Kees, F. D., Manufacturing Co., to F. D. Kees Manufacturing Co., Beatrice, Nebr., successor. Hardware. 83,919; renewed Oct. 24, 1931.
Kemp, Claude W., doing business as Rubacold Laboratories, Portland, Oreg. External medicinal preparations. 283,660; June 2; Serial No. 297,438; published Mar. 10, 1931. Class 6.
Kenton Pharmacal Company, The. (See Gilmore, Park M.)
Kernit Incinerator Company, The, Milwaukee, Wis. Incinerators. 283,528; June 2; Serial No. 310,480; published Mar. 17, 1931. Class 34.
Kesselman, Harry, doing business as Prophylactic Soap Corporation, New York, N. Y. Soap and shampoo soap. 283,622; June 2; Serial No. 308,017; published Mar. 17, 1931. Class 4.
Kewpie Dress Co. Inc., New York, N. Y. Dresses. 283,658; June 2; Serial No. 297,139; published Mar. 10, 1931. Class 39.
Kimberly-Clark Corporation, Neenah, Wis. Printing papers. 283,611; June 2; Serial No. 307,207; published Mar. 17, 1931. Class 37.
Kozlowski, Zygmunt, New York, N. Y. Preparation for restoring natural color to gray hair. 283,580; June 2; Serial No. 309,928; published Mar. 17, 1931. Class 6.
Kreamer, A., Inc., Brooklyn, N. Y. Receptacles. 283,595; June 2; Serial No. 308,236; published Mar. 17, 1931. Class 2.
Lafranca, Salvatore, New York, N. Y. Smoking pipes. 283,531; June 2; Serial No. 310,647; published Mar. 17, 1931. Class 8.
Landers, Frary & Clark, New Britain, Conn. Bread knives. 283,520; June 2; Serial No. 310,293; published Mar. 17, 1931. Class 23.
La Vay Products Company, New York, N. Y., and Hackensack, N. J. Milled toilet soap and soap shampoo. 283,634; June 2; Serial No. 302,146; published Sept. 9, 1930. Class 4.
Lawrence, A. C., Leather Company, Peabody, Mass. Leather. 283,575; June 2; Serial No. 310,181; published Mar. 17, 1931. Class 1.
Leadclad Wire Company, Wheeling, W. Va. Wire, steel rods, bars, etc. 283,741; June 2. Class 14.
Leadclad Wire Company, Wheeling, W. Va. Stranded wire cable. 283,742; June 2. Class 7.
Leone, Lorenzo, Bronx, N. Y. Olive oil. 283,563; June 2; Serial No. 310,221; published Mar. 17, 1931. Class 46.
Les Parfums de Molyneux, Inc., New York, N. Y. Perfumes, toilet waters, lotions, etc. 283,752; June 2. Class 6.
Levine, Mervin S., Nem York, N. Y. Suits, topcoats, and tuxedos. 283,648; June 2; Serial No. 307,322; published Dec. 23, 1930. Class 39.
Life Savers, Inc., Port Chester, N. Y. Candy. 283,669; June 2; Serial No. 281,433; published Mar. 17, 1931. Class 46.
Life Savers, Inc., Port Chester, N. Y. Candy. 283,670–2; June 2; Serial Nos. 281,440–2; published Mar. 17, 1931. Class 46.
Life Savers, Inc., Port Chester, N. Y. Candy. 283,673; June 2; Serial No. 281,443; published Mar. 17, 1931. Class 46.
Lovlitone Company. (See Plater, Albert B.)
Lowe, Joe, Corporation, Brooklyn, N. Y. Frozen confections and/or ice cream. 283,681; June 2; Serial No. 289,978; published Dec. 17, 1929. Class 46.
Luntz, Martha, doing business as Vreem Medicine Co., Brooklyn, N. Y. Preparation used for sleeplessness, nervousness, nervous headaches, and irritability. 283,526; June 2; Serial No. 309,454; published Mar. 17, 1931. Class 6.
Lynn, Joseph, doing business as Lynn Bros., Cleveland, Ohio. Dresses and bloomers. 283,625; June 2; Serial No. 303,774; published Mar. 10, 1931. Class 39.
Maiden Form Brassiere Co. Inc., New York, N. Y. Brassières. 283,700; June 2; Serial No. 309,899; published Mar. 17, 1931. Class 39.
Mandel, Abraham, doing business as Bellmore Neckwear Co., New York, N. Y. Ties, cravats, and scarfs. June 2. Class 39.
Mariglow Products Company, South Bend, Ind. Shampoo. 283,584; June 2; Serial No. 310,772; published Mar. 17, 1931. Class 6.
Marlboro Shirt Company, Inc., Baltimore, Md. Shirts. 283,717; June 2; Serial No. 310,056; published Mar. 10, 1931. Class 39.
McKesson & Robbins, Incorporated, Bridgeport and Fairfield, Conn. Rectal suppository. 283,725; June 2; Serial No. 309,983; published Mar. 10, 1931. Class 6.
Mengel Company, The, Louisville, Ky. Mahogany lumber. 283,591; June 2; Serial No. 309,528; published Mar. 10, 1931. Class 12.
Merrell, Wm. S., Company, The, Cincinnati, Ohio. Nontoxic, analgesic, and antispasmodic preparation. 283,606; June 2; Serial No. 304,469; published Mar. 10, 1931. Class 6.
Merrell, Wm. S., Company, The, Cincinnati, Ohio. Medicinal preparation. 283,706; June 2; Serial No. 309,170; published Mar. 10, 1931. Class 6.
Miller, I., & Sons, Incorporated, Long Island City, N. Y. Hand bags and pocketbooks. 283,614; June 2; Serial No. 308,212; published Mar. 17, 1931. Class 3.
Mountain States Brush Manufacturing Corporation, The, Wichita, Kans. Brushes. 283,613; June 2; Serial No. 307,821; published Mar. 17, 1931. Class 29.
Mueller Brass Co., Port Huron, Mich. Metal castings, forgings, and rods. 283,664; June 2; Serial No. 299,213; published Mar. 17, 1931. Class 14.
Muskogee Iron Works, Muskogee, Okla. Trailers. 283,667; June 2; Serial No. 291,015; published Mar. 17, 1931. Class 19.
Naamlooze Vennootschap Chemische Fabriek L. Van Der Grinten, Venlo, Netherlands. Copying apparatus and developing apparatus, sensitized plates, etc. 283,635; June 2; Serial No. 302,253; published Mar. 17, 1931. Class 26.
Naamlooze Vennootschap Kaashandel Betz & Jay, Rotterdam, Netherlands. Cheese. 283,549; June 2; Serial No. 301,192; published Mar. 10, 1931. Class 46.
National Carbon Company, Inc., New York, N. Y. Electric cells and batteries. 283,650; June 2; Serial No. 307,454; published Mar. 17, 1931. Class 21.
National Fish and Oyster Co. (See Borst, Emil E.)
National Milling & Chemical Co., Inc., Manayunk, Philadelphia, Pa. Alkali for general cleansing purposes. 283,620; June 2; Serial No. 308,594; published Mar. 17, 1931. Class 4.
National Milling & Chemical Co., Inc., Manayunk, Philadelphia, Pa. Alkali for general cleansing purposes. 283,621; June 2; Serial No. 308,593; published Mar. 17, 1931. Class 4.
New State Ice Company, Oklahoma City, Okla. Ice cream. 283,636; June 2; Serial No. 302,744; published Mar. 17, 1931. Class 46.
Niblett-Flanders Corporation, New York, N. Y. Golf balls. 283,739; June 2. Class 22.
No-snore Co., The, Cincinnati, Ohio. Preparation for eliminating snoring. 283,744; June 2. Class 23.
Ocean Spray Preserving Company, South Hanson, Mass., assignor to Cranberry Canners, Inc. Cranberries and cranberry syrup. 283,708; June 2; Serial No. 301,196; published Mar. 17, 1931. Class 46.
Ogint, Adam, doing business as DeSoto Chemical Co., Brooklyn, N. Y., and Iloilo, P. I. Toilet preparations. 283,603; June 2; Serial No. 307,732; published Mar. 10, 1931. Class 6.
Old Colony Distributing Company, Boston, Mass. Boxes or chests for holding cigarettes. 283,553; June 2; Serial No. 303,724; published Mar. 10, 1931. Class 28.
Ortega, E. C., Co., Inc., Los Angeles, Calif. Tomato juice. 283,530; June 2; Serial No. 310,572; published Mar. 17, 1931. Class 46.
Ostberg, Ivan, doing business as Ostberg Seed Co. (Not Inc.), Chicago, Ill. Lawn-grass seed. 283,578; June 2; Serial No. 310,654; published Mar. 17, 1931. Class 1.
Pan American Petroleum & Transport Company, Wilmington, Del. Lubricating oils. 283,694; June 2; Serial No. 309,901; published Mar. 10, 1931. Class 15.
Parke, Davis & Company, Detroit, Mich. Toilet articles of various kinds. 283,597; June 2; Serial No. 307,417; published Mar. 10, 1931. Class 6.
Perky, Scott H., doing business as Perky Products, Batavia, N. Y. Cooked potato food. 283,747; June 2. Class 46.
Petersen & Frease, Inc., Valley Stream, N. Y. Automobile polish with incidental cleaning properties. 283,709; June 2; Serial No. 309,903; published Mar. 17, 1931. Class 16.
Phillips Sales Company, Inc., Cambridge, Md. Canned vegetables. 283,647; June 2; Serial No. 307,217; published Mar. 17, 1931. Class 46.
Pierre Oil Company. (See Reo Motor Company of New England.)
Plater, Albert B., doing business as Lovlitone Company, Grosse Pointe Park, Mich. Skin lotion, face powder, deodorant, etc. 283,665; June 2; Serial No. 299,227; published Feb. 3, 1931. Class 6.
Ploetz & Co., Berlin, Germany. Chemical medicinal preparation. 283,617; June 2; Serial No. 304,512; published Mar. 17, 1931. Class 6.
Plymouth Motor Corporation, assignor to Chrysler Corporation, Detroit, Mich. Automobiles and their structural parts. 283,686; June 2; Serial No. 267,603; published Mar. 17, 1931. Class 19.
Polk Sanitary Milk Company, The, Indianapolis, Ind. Dairy products. 283,594; June 2; Serial No. 307,629; published Mar. 17, 1931. Class 46.
Pratt, William E., Chicago, Ill., to William E. Pratt Manufacturing Company, Joliet, Ill., successor. Hog and pig rings and ringers. 83,277; renewed Aug. 29, 1931.
Prophylactic Soap Corporation. (See Kesselman, Harry.)
Puritan Paper Plate & Products Company, Trumbauersville, Pa. Paper tableware. 283,674; June 2; Serial No. 285,789; published Mar. 17, 1931. Class 23.

Ravenel, Daniel, Charleston, S. C. Candy. 283,596; June 2; Serial No. 307,420; published Mar. 17, 1930. Class 46.
Raybestos-Manhattan, Incorporated, Passaic, N. J., and Bridgeport, Conn. Brake lining and clutch facings. 283,519; June 2; Serial No. 310,226; published Mar. 17, 1931. Class 35.
Redlands-Highlands Fruit Exchange, Redlands, Calif. Fruits. 283,662; June 2; Serial No. 298,846; published July 15, 1930. Class 46.
Reisch Brewing Co., Springfield, Ill. Malt extract. 82,361; renewed June 20, 1931.
Reo Motor Company of New England, doing business as Pierre Oil Company, Boston, Mass. Lubricating oils. 283,576; June 2; Serial No. 310,303; published Mar. 10, 1931. Class 15.
Republic Gear Company, Detroit, Mich. Gears and pinions. 283,522; June 2; Serial No. 310,659; published Mar. 17, 1931. Class 23.
Rice-Neuman Co., Milwaukee, Wis. Ladies' hosiery. 283,688; June 2; Serial No. 275,631; published May 13, 1930. Class 39.
Rockola, David C., Chicago, Ill. Weighing scales. 283,558–9; June 2; Serial No. 309,990–1; published Mar. 17, 1931. Class 26.
Rock River Cotton Company, Janesville, Wis. Cotton batting. 283,552; June 2; Serial No. 303,490; published Mar. 17, 1931. Class 1.
Roper, Geo. D., Corporation, Rockford, Ill. Gas stoves and ranges. 283,577; June 2; Serial No. 310,616; published Mar. 17, 1931. Class 34.
Rose, Martin, doing business as The Rose Iron Works, Cleveland, Ohio. Iron or metal railings, metal grills, trellises, etc. 283,630; June 2; Serial No. 308,129; published Mar. 17, 1931. Class 12.
Rosenbaum, Isaac, New York, N. Y. Safety-razor blades. 283,521; June 2; Serial No. 310,304; published Mar. 17, 1931. Class 23.
Rosenweig, Lenny, & Irving Weinberg Dress Co. Inc., New York, N. Y. Dresses. 283,705; June 2; Serial No. 309,213; published Mar. 10, 1931. Class 39.
Rubacoid Laboratories. (See Kemp, Claud W.)
Sandvikens Jernverks Aktiebolag, Sandviken, Sweden. Saws, axes, chisels, hand tools, etc. 283,612; June 2; Serial No. 305,544; published Mar. 17, 1931. Class 23.
San Jose Produce Co., San Jose, Calif. Fresh vegetables. 283,541; June 2; Serial No. 310,577; published Mar. 17, 1931. Class 46.
Schapira, David, doing business as How-Glad Manufacturing Co., New York, N. Y. Soaps and a chemically-treated cloth. 283,703; June 2; Serial No. 309,573; published Mar. 17, 1931. Class 4.
Seaman, Harold L., doing business as Seaman Sea Skiff Works, Long Branch, N. J. Motor boats. 283,719; June 2; Serial No. 309,653; published Mar. 10, 1931. Class 19.
Sendecke, Joseph, doing business as Doree Parfumerie and as Doree Products Company, Chicago, Ill. Rouge, lip stick, creams, face powder, etc. 283,666; June 2; Serial No. 300,985; published Mar. 17, 1931. Class 6.
Senoret Chemical Co., St. Louis, Mo. Poison. 283,605; June 2; Serial No. 305,246; published Mar. 10, 1931. Class 6.
Simplex Brooder Stove Co. (See Hopson, W. C. Company.)
Smith, Harold B., doing business as Badger Specialty Co., Milwaukee, Wis. Humidors. 283,653; June 2; Serial No. 307,608; published Mar. 17, 1931. Class 8.
Smith, Slate Products Company, Pittsburgh, Pa. Slate materials. 283,682; June 2; Serial No. 290,672; published Mar. 17, 1931. Class 12.
Société Anonyme L'Accessoire de Precision, Levallois-Perret, France. Gasoline and kerosene, soldering stoves and lamps. 283,652; June 2; Serial No. 307,512; published Mar. 17, 1931. Class 34.
Société Anonyme M. Naef & Cie., Geneva, Switzerland. Synthetic aromatic base. 283,685; June 2; Serial No. 267,213; published Mar. 10, 1931. Class 6.
Society of Chemical Industry in Basle, Basel, Switzerland. Chemical substance. 283,633; June 2; Serial No. 306,423; published Mar. 10, 1931. Class 6.
Squibb, E. R., & Sons, New York, N. Y. Digitalis preparation. 283,539; June 2; Serial No. 310,308; published Mar. 10, 1931. Class 6.
Sta-Brite Products Corp., The, New Haven, Conn. Base-metal cooking pots, pans, and kettles. 283,590; June 2; Serial No. 306,511; published Mar. 17, 1931. Class 13.
Staley, A. E., Manufacturing Company, Decatur, Ill. Material manufactured for use in the coating of paper. 283,727; June 2; Serial No. 309,871; published Mar. 10, 1931. Class 6.
Stanco Incorporated, Wilmington, Del., and New York, N. Y. Insect-repellent cream. 283,534; June 2; Serial No. 310,074; published Mar. 10, 1931. Class 6.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Roof paint. 283,714; June 2; Serial No. 310,494; published Mar. 17, 1931. Class 16.
Stanton, Clara, Denver, Colo. Suppositories, antifat tablets, and cosmetics, vaginal. 283,738; June 2. Class 6.
Steinman, Ira J., New York, N. Y. Bins, boxes, bags, etc. 283,723; June 2; Serial No. 309,216; published Mar. 17, 1931. Class 2.
Sterling Products Co., Evansville, Ind. Malt syrup. 283,527; June 2; Serial No. 310,422; published Mar. 17, 1931. Class 46.
Stockham Pipe & Fittings Co., Birmingham, Ala. Pipe and pipe fittings of cast iron, steel, etc. 283,696; June 2; Serial No. 309,752; published Mar. 10, 1931. Class 13.
Stone, Saml., doing business as The Stone Malt Company and Zepp Sales Company, Columbus, Ohio. Malt and malt syrups. 283,668; June 2; Serial No. 291,804; published Jan. 7, 1930. Class 46.
Storkline Furniture Corporation, Chicago, Ill. Mattresses. 283,608; June 2; Serial No. 307,514; published Mar. 17, 1931. Class 32.
Stott Stoker Company, The, St. Paul, Minn. Stokers. 283,722; June 2; Serial No. 309,359; published Mar. 17, 1931. Class 34.
Stroschein, J. E., Chemische Fabrik Kommanditgesellschaft, Berlin, Germany. Cod-liver-oil preparations. 283,679; June 2; Serial No. 288,094; published Mar. 17, 1931. Class 6.
Studebaker Corporation, The, South Bend, Ind. Radio receiving sets. 283,655; June 2; Serial No. 294,242; published Mar. 10, 1931. Class 21.
Sun Frost Products Co., Wyandotte, Mich. Skin lotion. 283,585; June 2; Serial No. 310,782; published Mar. 17, 1931. Class 6.
Super Concrete Emulsions, Ltd., Los Angeles, Calif. Compositions for hardening, strengthening and/or waterproofing cement. 283,582; June 2; Serial No. 310,194; published Mar. 17, 1931. Class 12.
Swanson Baking Company, Fitchburg, Mass. Cup cakes. 283,554; June 2; Serial No. 304,300; published Mar. 17, 1931. Class 46.
Tetrazene Products Co. (See Allen, Howard F.)
Teverbaugh Manufacturing Company. (See L. T. Ayers.)
Thomson & Taylor Co., Chicago, Ill. Fruit-juice concentrate with pectin added. 283,533; June 2; Serial No. 310,814; published Mar. 17, 1931. Class 46.
Thorsch, Richard L., Chicago, Ill. Dry-cleaning and washing machines and drying machines. 283,733; June 2. Class 24.
Thum, O. & W., Company, The, Grand Rapids, Mich. Insecticide. 283,683; June 2; Serial No. 290,853; published Mar. 11, 1930. Class 6.
Timken Steel and Tube Company, The, Canton, Ohio. Steel and alloy steel. 283,740; June 2. Class 14.
Trayler Corporation, Reading, Pa. Hosiery. 283,716; June 2; Serial No. 310,077; published Mar. 10, 1931. Class 39.
United Drug Company, Boston, Mass. Medicinal preparation. 283,542; June 2; Serial No. 310,620; published Mar. 17, 1931. Class 6.
United Underwear Mill, Boyertown, Pa. Knit underwear. 283,710; June 2; Serial No. 309,998; published Mar. 10, 1931. Class 39.
Untox Company. (See Campbell, O. Clayton.)
Veribest Co., The, Philadelphia, Pa. Food, birdseed with eggs flake and fruit, etc., Parrot. 283,735; June 2. Class 46.
Victor Manufacturing & Gasket Company, Chicago, Ill. Gaskets. 283,523; June 2; Serial No. 310,783; published Mar. 17, 1931. Class 35.
Vitidine Sea Food & Chemical Co., Inc., doing business as Vitidine Sea Food Company, Port Townsend, Wash. Condiment. 283,637; June 2; Serial No. 303,355; published Mar. 17, 1931. Class 46.
Vreem Medicine Co. (See Luntz, Martha.)
Wax Refining Company. (See Arnold, Frank J.)
Wayne Candies, Inc. (See Heit-Miller-Lau Co.)
Western Plywood Export Company, Tacoma, Wash. Bundles of plywood. 283,593; June 2; Serial No. 309,878; published Mar. 10, 1931. Class 12.
Wil-Du Medicine Co. (See Wilson, Sarah E. L.)
Wilkening Manufacturing Company, Philadelphia, Pa. Piston rings for internal-combustion engines and other machinery. 283,602; June 2; Serial No. 307,751; published Mar. 17, 1931. Class 35.
Wilson, Sarah E. L., doing business as Wil-Du Medicine Co., Pitman, N. J. Rheumatism and gout remedy. 283,604; June 2; Serial No. 307,237; published Mar. 10, 1931. Class 6.
Winterite Chemical Co. Inc., New York, N. Y. Antifreeze solution for motor vehicles. 283,698; June 2; Serial No. 309,304; published Mar. 3, 1931. Class 6.
Woolsey, Henry S., doing business as Empire Gum Co., Kingston, N. Y. Chewing gum. 283,601; June 2; Serial No. 304,228; published Mar. 17, 1931. Class 46.
Worcester Salt Company, New York, N. Y. Salt. 283,721; June 2; Serial No. 309,543; published Mar. 10, 1931. Class 6.
Wubco Battery Corporation, Niagara Falls, N. Y. Storage batteries. 283,699; June 2; Serial No. 309,105; published Mar. 10, 1931. Class 21.
Zenith Guano Company, Salisbury, N. C. Fertilizer material. 283,565; June 2; Serial No. 310,322; published Mar. 17, 1931. Class 10.
Zepp Sales Company. (See Stone, Saml.)
Zorite Manufacturing Co., Oakland, Calif. Deodorants. 283,598; June 2; Serial No. 306,717; published Mar. 17, 1931. Class 6.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Associated Silver Company, Chicago, Ill. Silverseal Tarnish Proof. For Silverware Chests. 39,236; June 2.
Bennett, Earle C., doing business as Kandy Yeast Company, West Springfield, Mass. Chocolate Kandyeast. For Chocolate. 39,237; June 2.
Freihofer, Chas., Baking Co. Inc., Troy, N. Y. Freihofer's Pullman Bread. For Bread. 39,238; June 2.
Hoague-Sprague Corporation, Lynn, Mass. Milady Footwear. For Boxes. 39,239; June 2.
Hoague-Sprague Corporation, Lynn, Mass. Bett Lee. For Boxes. 39,240; June 2.
Kandy Yeast Company. (See Bennett, Earle C.)
Macklanburg-Duncan Company, Oklahoma City, Okla. Nu-Way. For Weather Stripping. 39,241; June 2.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn. For Coffee and Chicory. 39,242; June 2.
Union Bag & Paper Corporation, New York, N. Y. Coffee. For Coffee. 39,243; June 2.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Andrews, O. B. Company, Chattanooga, Tenn. The Cream of the crop. For Canned Vegetables. 13,209; June 2.
Arden, Elizabeth, Inc., doing business as Elizabeth Arden, New York, N. Y. A Women's Dearest Jewels. For Amoretta Cream, Skin Tonic, Poudre de Lilas, Eight Hour Cream, Etc. 13,210; June 2.
Elizabeth Arden Inc., doing business as Elizabeth Arden, New York, N. Y. The Spirit within. For Ardenavelva Cream, Orange Skin Food, Anti-Brown Spot Ointment, Etc. 13,211; June 2.
Elizabeth Arden Inc., doing business as Elizabeth Arden, New York, N. Y. The Importance of Make-Up. For Amoretta Cream, Creme de France, Lille Lotion, Noshine, Etc. 13,212; June 2.
Daggett & Ramsdell, New York, N. Y. Now Vivatone Completes the Shave. For a Skin Tonic and Astringent for Use After Shaving. 13,213; June 2.
Hitt Fireworks Co., Seattle, Wash. New Machine-Gun Pack. For Firecrackers. 13,214; June 2.
Littlefield, Arthur S., Winnetka, Ill. The Game of Flip. For Game Apparatus. 13,215; June 2.
Los Angeles Soap Company, Los Angeles, Calif. We Women Know . . . White King Washes Everything. For Soap. 13,216; June 2.
Mannings, Inc., doing business as Mrs. Marlatt's Bakeries, San Francisco, Calif. Little Marlo The Honey Cookie Boy. For Cookies. 13,217; June 2.
Marlatt's, Mrs., Bakeries. (See Mannings, Inc.)
Pfeifer, Henry, Inc., Newark, N. J. Pfeifer's Tasty Meat Products. For Meat Products. 13,218; June 2.
Seymour Troy & Co., Inc., Brooklyn, N. Y. The Beauty of Seymour Troy Shoes is More Than Skin Deep. For Shoes. 13,222; June 2.
Starret Land Company, Detroit, Mich. Candy to Eat and Stay Thin, Priscilla Alden Sweets That Speak for Themselves and You. For Sweets. 13,219; June 2.
Stearns, Frederick, & Company, Detroit, Mich. Asring-O-Sol. For Mouth Wash. 13,220; June 2.
Sun-Ra Products Company, St. Joseph, Mo. Sun-Ra. For Flavored Beverage Preparation. 13,221; June 2.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. P. W. Paper Company, Inc., Albany, N. Y. Toilet paper. 313,624; June 2. Class 37.
Alco Advertising & Supply Co. (See Cohen, Alex A.)
Alibron Products, Inc., East Orange, N. J. Perspective drawing charts. 313,820; June 2. Class 26.
American Multigraph Co., Wilmington, Del., and Cleveland, Ohio. Planographic plates. 312,938; June 2. Class 50.
Arcturus Radio Tube Company, Newark, N. J. Electron emissive tubes and parts thereof. 312,635; June 2. Class 21.
Argus Radio Tube Co. (See Ceco Manufacturing Company.)
Arrow Head Manufacturing Co. (See Torselins, Arthur.)
B-Y Company, The, Providence, R. I. Washing preparation for silk and rayon fabrics. 306,554; June 2. Class 4.
Bagdigian, Hagop, Highland Park, Mich. Hair tonic. 311,023; June 2. Class 6.
Bagger, Einar G., New York, N. Y. Depilatories. 313,415; June 2. Class 6.
Bauer, W. A., Co., Norristown, Pa. Coffee and canned vegetables. 294,106; June 2. Class 46.
Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic lenses. 313,828; June 2. Class 26.
Best, Richard, Pencil Company, Inc., New York, N. Y. Black lead pencils. 313,627; June 2. Class 37.
Best, Richard, Pencil Company, Inc., New York, N. Y. Black lead and colored pencils. 313,628; June 2. Class 37.
Best, Richard, Pencil Company, Inc., New York, N. Y. Black lead pencils. 313,629; June 2. Class 37.
Best, Richard, Pencil Company, Inc., New York, N. Y. Lead pencils. 313,631–2; June 2. Class 37.
Bettoney, Harry, Boston, Mass., doing business as Cundy-Bettoney Co., Boston, Mass. Flutes, piccolos, etc. 311,589; June 2. Class 36.
Blair Laboratories. (See Morton Manufacturing Corporation.)
Bogart, Karl C., Dayton, Ohio. Coffee. 313,277; June 2. Class 46.
Bradley, Milton, Company, Springfield, Mass. Crayons. 313,767; June 2. Class 37.
British Ropes, Limited, London, England. Steel ropes, cables, and strands. 308,353; June 2. Class 7.
Broadstreets, Inc., New York, N. Y. Men's and boys' dress, negligee, and work shirts. 312,410; June 2. Class 39.
Brook, Helen T., Inc., Brooklyn, N. Y. Candy. 312,792; June 2. Class 46.
Brooks, Gladys E., doing business as Spokane Shopping News, Spokane, Wash. Guide to shoppers, printed weekly. 294,955; June 2. Class 38.
Brown's Beach Jacket Company, Worcester, Mass. Knitted sweaters, coats, vests, etc. 312,837; June 2. Class 39.
Carli & Son, Washington, D. C. Seed. 313,329; June 2. Class 1.
Carson Pirie Scott & Co., Chicago, Ill. Underwear for men. 300,782; June 2. Class 39.
Ceco Manufacturing Company, Inc., doing business as Argus Radio Tube Co., Providence, R. I. Electrical vacuum tubes and valves. 313,646; June 2. Class 21.
Chicago Coil Spring Co., Chicago, Ill. Valve spring. 313,233; June 2. Class 23.
Chicago Electrical Supply Company, Chicago, Ill. Electric lighting fixtures, electric wiring conduits, etc. 274,099; June 2. Class 21.
Cohen, Alex A., Providence, R. I., doing business as Alco Advertising & Supply Co. Non-alcoholic, non-cereal maltless beverages, sold as soft drinks, sirups, etc. 313,769; June 2. Class 45.
Cohen, Goldman & Co. Inc., New York, N. Y. Woven fabric of wool. 312,886; June 2. Class 42.
Colgate-Palmolive-Peet Company, Chicago, Ill. Shaving cream. 312,547; June 2. Class 4.
Colorado Honey Sales Corporation, Montrose, Colo., and Elmhurst, N. Y. Honey. 298,792; June 2. Class 46.
Continental Steel Corporation, Kokomo, and Indianapolis, Ind., and Canton, Ohio. Wire fencing. 313,466; June 2. Class 13.
Continental Tire Corporation, Chicago, Ill. Storage batteries. 313,590; June 2. Class 21.
Cooper, Leo M., New York, N. Y., doing business as Leo M. Cooper Co. Men's uniforms. 307,655; June 2. Class 39.
Crab Orchard Stone Co., Inc., Nashville, Tenn. Quartzite for rubble and building stone, etc. 303,838; June 2. Class 12.
Crystal Shoe Polish Manufacturing Co., The. (See Vassilatos, William T.)
Crystal Soap & Chemical Co., Inc., Philadelphia, Pa. Preparation used as a spreader in conjunction with contact insecticides. 312,364; June 2. Class 6.
Cundy-Bettoney Co. (See Bettoney, Harry.)
Dannemiller Coffee Co., New York, N. Y. Coffee. 313,422; June 2. Class 46.
Dante Candy Company, Chicago, Ill. Candy bars. 307,656; June 2. Class 46.
Davidson, James B., doing business as Exodol Mfg. Co., Newark, N. J. Mouth wash. 297,798; June 2. Class 6.
Davies-Young Soap Company, The, Dayton, Ohio. Liquid wax for floors, etc. 312,701; June 2. Class 16.
Davies-Young Soap Company, The, Dayton, Ohio. Liquid wax for rubber floors, etc. 312,796; June 2. Class 16.
Dayton Company, The, Minneapolis, Minn. Textile rugs. 312,553; June 2. Class 42.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Dayton Scale Company, Dayton, Ohio. Automatic weighing scales. 285,661; June 2. Class 26.
Decker, Jacob E., & Sons, Mason City, Iowa. Bacon. 313,165; June 2. Class 46.
De Forest Radio Company, Passaic, N. J. Electric lamps, glow tubes, and electron and space discharge tubes. 296,731; June 2. Class 21.
Des Moines Steel Tank Company, Des Moines, Iowa. Sheet metal articles. 311,409; June 2. Class 50.
Dorfmann Bros., Corona, N. Y. Thermometers. 284,525; June 2. Class 23.
Douglas, Bernard M., New York, N. Y. Roquefort cheese. 313,730; June 2. Class 46.
Drug Products Co., Inc., The, Long Island City, N. Y. Preparation used in selected cases of amenorrhea, etc. 313,424; June 2. Class 6.
Du Pont-Pathe Film Manufacturing Corporation, New York, N. Y. Photographic film. 313,652; June 2. Class 26.
Eagle Knitting Mills, Milwaukee, Wis. Knitted snow suits and knitted leggins. 312,602; June 2. Class 39.
Earles, Adelaide L. S. T., Hadleigh, England, doing business as Epoch Delivery Co. Garters, suspenders, and collars. 312,044; June 2. Class 39.
Electrovita Company, The, San Francisco, Calif. Semi-organic preparation serving to eliminate toxic matter. 313,592; June 2. Class 6.
Ellis, Lawrence D., Toledo, Ohio, doing business as Ellis Machine and Tool Company. Electrical vibrator and massage machine. 313,775; June 2. Class 44.
El Rey Products Co., Los Angeles, Calif. Composition shingles. 312,947; June 2. Class 12.
Empire Gas Burner Co., The, Easthampton, Mass. Gas burner. 313,337; June 2. Class 34.
Empire Manufacturing Company, New York, N. Y. Drawing boards, triangles, etc. 313,287; June 2. Class 26.
Empire Sales Company, The, Waterbury, Conn. Frozen confections. 312,421; June 2. Class 46.
Emulsified Asphalt and Application Company. (See Lehman, Louis J.)
Endicott Johnson Corporation, Endicott, N. Y. Boots and shoes of leather, rubber or fabric. 312,603; June 2. Class 39.
Epoch Delivery Co. (See Earles, Adelaide L. S. T.)
Estate Stove Company, The, Hamilton, Ohio. Periodical publication. 277,875; June 2. Class 38.
Eusey Co., Ltd., The, Los Angeles, Calif. Bleach and water softener having cleaning, etc., properties. 312,907; June 2. Class 6.
Exodol Mfg. Co. (See Davidson, James B.)
Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, etc. 313,031; June 2. Class 39.
Fear, Fred, & Co., Brooklyn, N. Y. Dyes. 308,620; June 2. Class 6.
Ferrer, Salvador M., New York, N. Y. Advertising material. 313,128; June 2. Class 38.
Floridagold Citrus Corporation, Winter Haven, Fla. Canned grapefruit cut into individual miniature portions. 313,290; June 2. Class 46.
Ford, J. B., Company, The, Wyandotte, Mich. Cleaning, cleansing and detergent materials. 313,655; June 2. Class 4.
Ford, Louisa P., Denver, Colo., doing business as Ford Optical Co. Photographic prints. 312,640; June 2. Class 38.
Ford Optical Co. (See Ford, Louisa P.)
Forselius, Arthur, doing business as Arrow Head Manufacturing Co., Ely, Minn. Artificial bait for fish. 313,845–6; June 2. Class 22.
Frankfort Distillery Inc., The, Louisville, Ky. Whiskey. 306,947; June 2. Class 49.
Franklin Simon & Co. Inc., New York, N. Y. Wearing apparel. 312,866; June 2. Class 39.
Freudenberg, Carl, Inc., Boston, Mass. Leather. 313,657; June 2. Class 3.
Frostilla Company, The. (See Shoemaker, Flora H.)
Gabilla, Incorporated, New York, N. Y. Toilet soap. 311,429; June 2. Class 4.
Gaess & Hollander, Long Island City, N. Y. Table board games, checker men and chess men, toys, etc. 309,970; June 2. Class 22.
Gane's Chemical Works, Inc., New York, N. Y. Medicinal preparation. 312,728; June 2. Class 6.
Grand Rapids Plaster Company, Grand Rapids, Mich. Plaster. 306,530; June 2. Class 12.
Granite City Steel Company, Granite City, Ill., and Wilmington, Del. Copper iron culvert stock. 311,582–3; June 2. Class 14.
Gray, Dorothy, Bloomfield, N. J., and New York, N. Y. Toilet or dressing cases, overnight bags, and fitted hand baggage. 311,375; June 2. Class 3.
Greenville Products Co., Greenville, Ala. Prepared mineral water. 311,097; June 2. Class 6.
Gross Millinery Co. Inc., Trenton, N. J. Women's, misses', and children's hats. 304,555; June 2. Class 39.
Grout & Company, Limited, Norfolk, England. Bandages and abdominal binders or supports. 312,644; June 2. Class 44.
Gysin, Sebastian, doing business as Modern Health Products, Milwaukee, Wis. Laxative. 312,049; June 2. Class 6.
Hawaiian Pineapple Company, Ltd., San Francisco, Calif., and Honolulu, Hawaii. Canned pineapple. 312,910–11; June 2. Class 46.
Haworth, Z. L., Kansas City, Mo. Liquid medical preparation for use in treatment of swine. 312,989; June 2. Class 6.
Health Heat Laboratories. (See Kelsey, Frank E.)
Hedley, Thomas, & Company, Limited, Newcastle-on-Tyne, England. Toilet soap. 313,542; June 2. Class 4.
Hen Houses, Inc., Minneapolis, Minn. Prepared and cooked fowl. 304,101; June 2. Class 46.
Heuer, Ed., & Co. Jules Jürgensen Watch Co., Bienne, Switzerland. Horological instruments. 279,851; June 2. Class 27.
Higginson Manufacturing Company, The, Newburgh, N. Y. Plaster. 298,633; June 2. Class 12.
Houghton, E. F. & Co., Philadelphia, Pa. Compounds for scouring purposes. 312,605; June 2. Class 4.
Imported & Domestic Novelty Co., New York, N. Y. Knitting tool. 313,134; June 2. Class 23.
Indiana Limestone Company, Bedford, Ind., and New York, N. Y. Building stone. 301,453; June 2. Class 1.
Indiana Limestone Company, Bedford, Ind., and New York, N. Y. Building stone. 301,456; June 2. Class 1.
Jinny Ricky Laboratories, Inc., Springfield, Mass. Non-alcoholic, maltless beverages sold as soft drinks. 312,849; June 2. Class 45.
Johnson, Tomlinson F., Atlanta, Ga. Electrical apparatus and supplies. 287,350; June 2. Class 21.
Johnston Electric Automobile Signal Co., Des Moines, Iowa. Electrically illuminated automobile direction signal semaphore. 290,746; June 2. Class 21.
Kellogg Company, Battle Creek, Mich. Coffee. 312,434; June 2. Class 46.
Kellom, Charles F., & Co., Inc., Holmesburg, Philadelphia, Pa. Combined liquid auto polisher and cleaner. 312,520; June 2. Class 16.
Kelsey, Frank E., doing business as Health Heat Laboratories, Battle Creek, Mich. Filters for hot air registers of furnaces. 313,192; June 2. Class 34.
Kendall Company, The, Boston, Mass., and Chicago, Ill. Chemical heaters. 311,547; June 2. Class 44.
Kidde, Walter, & Company, Inc., New York, N. Y. Fire detecting systems. 312,953; June 2. Class 21.
Kilgore Mfg. Company, The, Westerville, Ohio. Paper caps for toy fire arms. 313,298; June 2. Class 9.
Kimberly-Clark Corporation, Neenah, Wis. Wall paper. 313,711; June 2. Class 37.
Knox Hat Company, Inc., New York, N. Y. Hats for men. 307,779; June 2. Class 39.
Kohnstamm, H., & Co., Inc., New York, N. Y. Device for marking and identifying laundry. 294,477; June 2. Class 24.
Kops Bros. Inc., New York, N. Y. Corsets, brassières, and girdles, etc. 313,246; June 2. Class 39.
Langenhaun, Max. Billiard tables, cues, and balls. 313,247; June 2. Class 22.
Lanner Brothers, New York, N. Y. Hosiery. 308,375; June 2. Class 39.
Legg, A. C., Packing Co. Inc., Birmingham, Ala. Seasoning for sausages, meats, and other foods. 311,841; June 2. Class 46.
Lehman, Louis J., doing business as Emulsified Asphalt and Application Company, North Hollywood, Calif. Emulsified asphalt. 306,818; June 2. Class 12.
Levin, Samuel G., New York, N. Y., doing business as Medicinal Health Laboratories. Medicinal preparation for the alleviation of pain. 313,440; June 2. Class 6.
Levy, M. S., & Sons Incorporated, Baltimore, Md. Men's hats. 312,762; June 2. Class 39.
Leyse Aluminum Company, Kewaunee, Wis. Aluminum kitchen and serving utensils. 305,617; June 2. Class 13.
Ludwick, Marion L., Los Angeles, Calif. Safety bathing floats. 311,690; June 2. Class 22.
Makransky, S., and Sons, Inc., Philadelphia, Pa. Men's suits, overcoats, and topcoats. 313,140; June 2. Class 39.
Mammi, Frank, Brooklyn, N. Y. Balls consisting of meat, rice, and eggs, and spices. 310,686; June 2. Class 46.
McCollough, W. A., & Sons, Inc., Webster City, Iowa. Portable poultry and hog feeders and waterers. 312,994; June 2. Class 50.
McLaurin-Jones Co., Brookfield, Mass. Gummed tape. 312,381; June 2. Class 37.
Medicinal Health Laboratories. (See Levin, Samuel G.)
Medomint Co., The, Inc., Lynchburg, Va. Medicine. 312,443; June 2. Class 6.
Melchner, John, New York, N. Y. Meat products. 310,689; June 2. Class 46.
Meterice, Incorporated, Los Angeles, Calif. Automatic coin controlled time registering electric switches. 313,746; June 2. Class 26.
Meyers Publications, Inc., New York, N. Y. Periodicals. 312,995; June 2. Class 38.
Mezögazdasági Termény es Termékforgalmi Intézet, Budapest, Hungary. Lard made from pork fat. 306,740; June 2. Class 46.

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Midvale Company, The, Nicetown, Philadelphia, Pa. Roll shells, grinding rings, shafting rings for reduction gears, etc. 306,501; June 2. Class 23.
Mid-West Wax Paper Company, Fort Madison, Iowa. Wrapping paper. 312,485; June 2. Class 37.
Miller Company, The, Meriden, Conn. Electric lighting fixtures and lamps. 313,382; June 2. Class 21.
Miller Drug Sundry Company, Baltimore, Md. Prophylactic rubber articles. 311,099; June 2. Class 44.
Mizrahi, R. B., doing business as Laboratorium Mizrahi, Mexico City, Mexico. Medicinal cream, liquid powder and cream dentifrice, cold cream, etc. 281,038; June 2. Class 6.
Modern Health Products. (See Gysin, Sebastian.)
Modern Tissues Corporation, New York, N. Y. Toilet tissue and facial tissue. 313,048; June 2. Class 37.
Morton Manufacturing Corporation, also doing business as Blair Laboratories, Lynchburg, Va. Coffee. 313,253; June 2. Class 46.
Müller, Frederick H., doing business as F. H. Muller & Co., Chicago, Ill. Toilet preparation. 312,618; June 2. Class 6.
National Union Radio Corporation, Newark, N. J. Radio electron tubes. 311,194; June 2. Class 21.
Neptune Trading Corporation, New York, N. Y. Bath salts. 313,445; June 2. Class 6.
Nihon Tabi Kabushiki Kaisha, Kurume, Japan. Rubber footwear. 304,086; June 2. Class 39.
North American Refractories Company, Cleveland, Ohio. Plastic fire brick. 309,651; June 2. Class 12.
Nowak Milling Corporation, Hammond, Ind. Compressed food for dog, puppy, fox, etc. 313,091; June 2. Class 46.
Old Ben Coal Corporation, Chicago, Ill. Coal. 313,608; June 2. Class 1.
Optische Werke G. Rodenstock, Munich, Germany. Spectacle-glasses. 312,060; June 2. Class 26.
Palais Royal, Inc., The, Washington, D. C. Children's shoes of leather, rubber and fabric. 312,116; June 2. Class 39.
Panama Glove Company, Los Angeles, Calif. Gloves and mittens of leather and fabric. 313,304; June 2. Class 39.
Pennicuick, Albert E., Hayward, Calif. Slide rules and scales therefor. 312,491; June 2. Class 26.
People's Outfitting Company, Detroit, Mich. Laundry washing machine. 312,959; June 2. Class 24.
Petri Bros., Nashville, Tenn. Ironing board. 295,439; June 2. Class 24.
Philadelphia Quartz Company, Philadelphia, Pa. Cleansing compound. 312,624; June 2. Class 4.
Philadelphia and Reading Coal and Iron Company, The, Philadelphia, Pa. Coal. 312,670; June 2. Class 1.
Pioneer Truck and Transfer Co., El Centro, Calif. Gasoline, lubricating oil, motor fuel oil, etc. 313,054; published June 2 Class 14.
Porter, H. K., Inc., Everett, Mass. Metal working tools and parts thereof. 312,310; June 2. Class 23.
Princeville Canning Co., Princeville, Pa. Canned corn. 313,671–2; June 2. Class 46.
Promenade Hosiery Mills, Inc., New York, N. Y. Hosiery. 311,487; June 2. Class 39.
Pycope Incorporated, Joplin, Mo. Tooth brushes. 313,673; June 2. Class 29.
Reliance Distributing Co. (See Sothen, Albert L.)
Research Laboratories, The, Warren, Pa. Anti-freeze compound. 304,890; June 2. Class 6.
Research Products Corporation, New York, N. Y. Dental alloy. 312,530; June 2. Class 44.
Roberts, J. W., & Son, Tampa, Fla. Cigars. 313,447; June 2. Class 17.
Robinson, Leah H., Duluth, Minn. Fabric lunch bags. 313,155; June 2. Class 2.
Rock of Ages Corporation, Burlington, Vt. Polished blocks or slabs of granite, etc. 313,358; June 2. Class 12.
Sani-Gard Products, Ltd., Los Angeles, Calif. Sanitary belts. 313,676; June 2. Class 44.
Sani-Gard Products, Ltd., Los Angeles, Calif. Sanitary pad-holders. 313,677; June 2. Class 44.
Sano Products Co. Inc., The, Binghamton, N. Y. Medicinal preparation formulated to stimulate the scalp, etc. 312,721; June 2. Class 6.
Saw & Knife Specialty Co., Inc., The, Cleveland, Ohio. Saws, machine knives and files. 312,863; June 2. Class 23.
Schmidt, Theo. A., Lithographing Company, Chicago, Ill. Lithographically printed articles. 307,060; June 2. Class 38.
Schwartz, Walter, Yonkers, N. Y. Liquid preparations used in and beneficial for reducing congestion of the nose. 312,891; June 2. Class 6.
Selig, Samuel A., doing business as Selig Remedy Company, Detroit, Mich. Stomach medicine for indigestion. 311,626; June 2. Class 6.
Shoemaker, Flora H., doing business as The Frostilla Company, Elmira, N. Y. Nonsaponaceous beard softening preparations. 307,432; June 2. Class 4.
Signature Hosiery Company, Inc., Philadelphia, Pa., and New York, N. Y. Hosiery. 311,007; June 2. Class 39.
Silver-Marshall, Inc., Chicago, Ill. Radio receiving sets, kits for radio receiving sets, etc. 312,930; June 2. Class 21.
Sligh, S. J., & Company, Orlando, Fla. Fresh fruits and vegetables. 311,492; June 2. Class 46.
Societe Anonyme Jean Patou, Paris, France. Face, talcum, and sachet powders. 312,630–1; June 2. Class 6.
Societe Champagne Delamotte Pere & Fils, (Societe a Responsabilitee Limitee), Le Mesnil-sur-Oger, France. Wines. 308,559; June 2. Class 47.
Sonoco Products Company, Hartsville, S. C. Paper cones or tubes. 312,536; June 2. Class 2.
Sothen, Albert L., doing business as Reliance Distributing Co., Chicago, Ill. Dancing toe taps, heel plates, etc. 296,780; June 2. Class 13.
South Bend Toy Mfg. Co., South Bend, Ind. Juvenile furniture. 312,204; June 2. Class 32.
Spokane Shopping News. (See Brooks, Glady E.)
Standard Commercial Body Corporation, New York, N. Y. Guards for automobile radiators. 307,434; June 2. Class 19.
Steele-Wedeles Company, Chicago, Ill. Coffee. 313,566; June 2. Class 46.
Swayze, Paul D., Kansas City, Mo., doing business as Utility Design Company. Suspenders. 311,576; June 2. Class 39.
Tanner, Helene, Haddonfield, N. J. Cold cream and skin tonic. 312,819; June 2. Class 6.
Tetley, Joseph, & Co., Inc., New York, N. Y. Tea. 313,159; June 2. Class 46.
Tetlow, Henry, Company, Philadelphia, Pa. Face, talcum, and dusting powders, compacts, etc. 312,870; June 2. Class 6.
Thomas, S. B., Inc., Long Island City, N. Y. Bread. 311,762; June 2. Class 46.
United States Envelope Company, Springfield, Mass. Correspondence paper and envelopes. 313,760; June 2. Class 37.
Universal Atlas Cement Company, Chicago, Ill. Building cement. 305,636–7; June 2. Class 12.
Universal Razor Blade Corporation, New York, N. Y. Razor blades and razors. 312,934; June 2. Class 23.
Urbana Laboratories, The, Urbana, Ill. Solution for testing soils for acidity. 312,820; June 2. Class 6.
Utah Radio Products Company, Chicago, Ill. Radio speakers. 310,356; June 2. Class 21.
Utility Design Company. (See Swayze, Paul D.)
Van Charme Toiletries. (See Van Cleve, Charles C.)
Van Cleve, Charles C., doing business as Van Charme Toiletries, Kansas City, Mo. Perfume, toilet water, face powder, etc. 312,502; June 2. Class 6.
Vassilatos, William T., doing business as The Crystal Shoe Polish Manufacturing Co., Chicago, Ill. Leather dressings and polishes for shoes. 312,780; June 2. Class 4.
Verkaufsstelle des Internationalen Süsstoff-Syndikats Gesellschaft mit beschränkter Haftung, Hamburg, Germany. Artificial sweetings substances and combinations of the same. 308,047; June 2. Class 6.
Vernon, S. E., & M., Inc., New York, N. Y. Blank books and loose leaf binders. 312,464; June 2. Class 37.
Vernon, S. E. & M., Inc., New York, N. Y. Loose leaf binders and blank books. 313,517; June 2. Class 37.
Virginia Dare Extract Company, Inc., Brooklyn, N. Y. Preparation in powder form to be added to other ingredients in the preparation of icings, toppings, and the like. 307,768; June 2. Class 46.
Wagner, John G., San Francisco, Calif. Salve for the treatment of cancer. 312,826; June 2. Class 6.
Washerless Valve Co. Ltd., San Francisco, Calif. Hardware and plumbing supplies. 312,822; June 2. Class 13.
Weidlich Sterling Spoon Co., Fairfield, Conn. Table silverware. 312,823; June 2. Class 28.
Wheatena Corporation, The, Rahway, N. J. Wheat breakfast food. 311,579; June 2. Class 46.
Woodbury Shoe Mfg. Co., Derry, N. H. Men's, women's and children's boots, shoes, sandals, etc. 313,017; June 2. Class 39.
Wrights' Ropes Ltd., Birmingham, England. Wire rope. 313,102; June 2. Class 7.
Zell, James C., & Son, Baltimore, Md. Photo-prints, photostat prints, etc. 313,104; June 2. Class 38.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Compound, parting. Ferro-Engineering Company. 283,529; June 2; Serial No. 310,511; published Mar. 17, 1931.
Cotton batting. Rock River Cotton Company. 283,552; June 2; Serial No. 303,490; published Mar. 17, 1931.
Leather. A. C. Lawrence Leather Company. 283,575; June 2; Serial No. 310,181; published Mar. 17, 1931.
Seed, Lawn grass. I Ostberg. 283,578; June 2; Serial No. 310,654; published Mar. 17, 1931.

CLASS 2

Bins, boxes, bags, etc. I. J. Steinman. 283,723; June 2; Serial No. 309,216; published Mar. 17, 1931.
Receptacles. A. Kreamer. 283,595; June 2; Serial No. 308,236; published Mar. 17, 1931.
Sacks, Cotton-pickers'. Clifton Manufacturing Company. Serial No. 309,804; published Mar. 17, 1931.

CLASS 3

Handbags and pocketbooks. I. Miller & Sons, Incorporated. 283,614; June 2; Serial No. 308,212; published Mar. 17, 1931.
Purses and handbags. Eisenstadt Manufacturing Company. 283,637; June 2; Serial No. 296,910; published Mar. 17, 1931.

CLASS 4

Alkali. National Milling & Chemical Co. 283,621; June 2; Serial No. 308,593; published Mar. 17, 1931.
Alkali for general cleansing purposes. National Milling & Chemical Co. 283,620; June 2; Serial No. 308,594; published Mar. 17, 1931.
Chemical, pharmaceutical, surgical, etc., products and preparations. Ichthyol-Gesellschaft Cordes, Hermanni & Co. 35,548; renewed Dec. 4, 1930.
Cleaning fluid, Dry. H. F. Allen. 283,626; June 2; Serial No. 303,524; published Mar. 17, 1931.
Cleaning preparation. Bobrick Chemical Co. 82,957; renewed Aug. 8, 1931.
Cleaning preparation. O. A. Davenport. 283,687; June 2; Serial No. 274,825; published Mar. 10, 1931.
Powder for carpet cleaning and a general grease remover, Fine. E. H. Fick. 283,684; June 2; Serial No. 238,646; published Mar. 3, 1931.
Soap and shampoo soap. H. Kesselman. 283,622; June 2; Serial No. 308,017; published Mar. 17, 1931.
Soap and soap shampoo, Milled toilet. La Vay Products Company. 283,634; June 2; Serial No. 302,146; published Sept. 9, 1930.
Soap, Fluid. Bobrick Chemical Co. 83,214; renewed Aug. 29, 1931.
Soaps and chemically treated cloth. D. Schapira. 283,703; June 2; Serial No. 309,573; published Mar. 17, 1931.
Solvents and degreasing medicines. Carrier Engineering Corporation. 283,661; June 2; Serial No. 297,894; published Mar. 17, 1931.

CLASS 6

Anti-freeze solution for motor vehicles. Winterite Chemical Co. Inc. 283,698; June 2; Serial No. 309,364; published Mar. 3, 1931.
Antiseptic tablets and suppositories. Bureau of Feminine Hygiene Inc. 283,535; June 2; Serial No. 310,088; published Mar. 10, 1931.
Chemical medicinal preparation. Ploetz & Co. 283,617; June 2; Serial No. 304,512; published Mar. 17, 1931.
Chemical substance. Society of Chemical Industry in Basle. 283,633; June 2; Serial No. 306,423; published Mar. 10, 1931.
Cod liver oil preparations. J. E. Stroschein Chemische Fabrik Kommanditgesellschaft. 283,679; June 2; Serial No. 288,094; published Mar. 17, 1931.
Compound for treating asthma. Gib-As-Tine Company. 283,720; June 2; Serial No. 309,641; published Mar. 10, 1931.
Cream, Insect repellent. Stanco Incorporated. 283,534; June 2; Serial No. 310,074; published Mar. 10, 1931.
Creams, talcum powder, perfumery, toilet water, etc. Holman Soap Company. 283,590; June 2; Serial No. 309,525; published Mar. 17, 1931.
Deodorants. Zorite Manufacturing Co. 283,598; June 2; Serial No. 306,717; published Mar. 17, 1931.
Digitalis preparation. E. R. Squibb & Sons. 283,539; June 2; Serial No. 310,308; published Mar. 10, 1931.
Digitoxin, Amorphous. Hoffmann-La Roche Chemical Works. 83,788; renewed Oct. 10, 1931.
Disinfectant. C. W. Berg. 283,516; June 2; Serial No. 309,328; published Mar. 17, 1931.
Disinfectants. Frederick Disinfectant Company. 83,073; renewed Oct. 24, 1931.
Dyes. E. I. du Pont de Nemours and Company. 283,543; June 2; Serial No. 310,625; published Mar. 17, 1931.
Hair color restorer. N. Hurwitz. 283,551; June 2; Serial No. 303,289; published Mar. 3, 1931.
Hair-pressing oil. L. T. Ayers. 283,754; June 2.
Hair stain. P. M. Gilmore. 83,903; renewed Oct. 24, 1931.
Hemoglobiniferous preparations. A. Jeffe. 80,534; renewed Jan. 3, 1931.

Insecticide. O. & W. Thum Company. 283,683; June 2; Serial No. 290,853; published Mar. 11, 1930.
Laxative. H. & J. Laboratories. 283,540; June 2; Serial No. 310,377; published Mar. 10, 1931.
Laxative preparation. Ex-Lax Mfg. Co. 83,823; renewed Oct. 17, 1931.
Laxatives. O. C. Campbell. 283,536; June 2; Serial No. 310,091; published Mar. 10, 1931.
Liquid composition. Federal Chemical Company. 283,592; June 2; Serial No. 309,554; published Mar. 17, 1931.
Liquids for spraying coke and coal, Varicolored. General Sales, Inc. 283,718; June 2; Serial No. 309,776; published Mar. 10, 1931.
Malt extract. Reisch Brewing Co. 82,361; renewed June 20, 1931.
Material manufactured for use in the coating of paper. A. E. Staley Manufacturing Company. 283,727; June 2; Serial No. 309,871; published Mar. 10, 1931.
Medicinal preparation. Wm. S. Merrell Company. 283,706; June 2; Serial No. 309,170; published Mar. 10, 1931.
Medicinal preparation. United Drug Company. 283,542; June 2; Serial No. 310,620; published Mar. 17, 1931.
Medicinal preparations, External. C. W. Kemp. 283,660; June 2; Serial No. 297,438; published Mar. 10, 1931.
Medicinal tonic. J. I. Gore & Co. 283,726; June 2; Serial No. 309,894; published Mar. 10, 1931.
Medicine, Laxative. Brewer & Company. 283,581; June 2; Serial No. 310,159; published Mar. 17, 1931.
Methanol, Synthetic. E. I. du Pont de Nemours and Company. 283,616; June 2; Serial No. 306,224; published Mar. 17, 1931.
Perfumes, toilet water, face powder, talcum powder, etc. Houbigant, Inc. 283,583; June 2; Serial No. 310,769; published Mar. 17, 1931.
Perfumes, toilet waters, lotions, etc. Les Parfums de Molyneux, Inc. 283,752; June 2.
Poison. Senoret Chemical Co. 283,605; June 2; Serial No. 305,246; published Mar. 10, 1931.
Powder, rouge, lip stick, and lip and cheek rouge, Face. Crystal Chemical Company. 283,675; June 2; Serial No. 286,925; published Mar. 10, 1931.
Preparation for eliminating snoring. No-snore Co. 283,744; June 2.
Preparation for restoring natural color to gray hair. Z. Kozlowski. 283,580; June 2; Serial No. 309,928; published Mar. 17, 1931.
Preparation, Nontoxic, analgesic, and antispasmodic. Wm. S. Merrell Company. 283,606; June 2; Serial No. 304,469; published Mar. 10, 1931.
Preparation of kamillosan-hydrogen peroxyde. Chemisch-Pharmazeutische A. G. Bad Homburg, Werk Frankfurt A. M. 283,632; June 2; Serial No. 306,764; published Mar. 17, 1931.
Preparation used for sleeplessness, nervousness, nervous headaches, and irritability. M. Luntz. 283,526; June 2; Serial No. 309,454; published Mar. 17, 1931.
Remedy, Rheumatism and gout. S. E. L. Wilson. 283,604; June 2; Serial No. 307,237; published Mar. 10, 1931.
Rouge, lip stick, creams, face powder, etc. J. Sendecke. 283,666; June 2; Serial No. 300,985; published Mar. 17, 1931.
Rouge, powder, toilet water, etc. G. Glatzer. 283,731; June 2.
Salt. Worcester Salt Company. 283,721; June 2; Serial No. 309,543; published Mar. 10, 1931.
Shampoo. Mariglow Products Company. 283,584; June 2; Serial No. 310,772; published Mar. 17, 1931.
Skin lotion, face powder, deodorant, etc. A. B. Plater. 283,665; June 2; Serial No. 299,227; published Feb. 3, 1931.
Skin tonic. Sun Frost Products Co. 283,585; June 2; Serial No. 310,782; published Mar. 17, 1931.
Suppositories, antifat tablets, and cosmetics, Vaginal. C. Stanton. 283,738; June 2.
Suppository, Rectal. McKesson & Robbins. 283,725; June 2; Serial No. 309,983; published Mar. 10, 1931.
Synthetic aromatic base. Société Anonyme M. Naef & Cie. 283,685; June 2; Serial No. 267,213; published Mar. 10, 1931.
Toilet articles of various kinds. Parke, Davis & Company. 283,597; June 2; Serial No. 307,417; published Mar. 10, 1931.
Toilet preparations. A. Ogint. 283,603; June 2; Serial No. 307,732; published Mar. 10, 1931.

CLASS 7

Wire cable, Stranded. Leadclad Wire Company. 283,742; June 2.

CLASS 8

Humidors. H. E. Smith. 283,653; June 2; Serial No. 307,608; published Mar. 17, 1931.
Pipes, Smoking. S. Lafranca. 283,531; June 2; Serial No. 310,647; published Mar. 17, 1931.

CLASS 10

Fertilizer material. Zenith Guano Company. 283,565; June 2; Serial No. 310,322; published Mar. 17, 1931.

CLASS 11

Ink, ink compound, and/or reducer for color and black inks, Printer's. F. J. Arnold. 283,532; June 2; Serial No. 310,792; published Mar. 17, 1931.

CLASS 12

Asphalt, Powdered. James B. Berry Sons' Company of Illinois. 283,629; June 2; Serial No. 308,350; published Mar. 17, 1931.
Brick or similar heat insulating materials, Hot top linings of. Ferro Engineering Company. 283,631; June 2; Serial No. 307,272; published Mar. 10, 1931.
Cement, Refractory. General Refractories Company. 283,525; June 2; Serial No. 309,376; published Mar. 17, 1931.
Compositions for hardening, strengthening, and/or waterproofing cement. Super Concrete Emulsions, Ltd. 283,582; June 2; Serial No. 310,194; published Mar. 17, 1931.
Lumber and lumber products. Canadian Western Lumber Company. 283,628; June 2; Serial No. 308,926; published Mar. 17, 1931.
Lumber, Construction and finishing. Fairhurst Lumber Company. 283,589; June 2; Serial No. 309,309; published Mar. 17, 1931.
Lumber, Mahogany. Mengel Company. 283,591; June 2; Serial No. 309,528; published Mar. 10, 1931.
Plywood, Bundles of. Western Plywood Export Company. 283,593; June 2; Serial No. 309,878; published Mar. 10, 1931.
Railings, metal grilles, trellises, etc., Iron or metal. M. Rose. 283,630; June 2; Serial No. 308,129; published Mar. 17, 1931.
Slate materials. Smith Slate Products Company. 283,682; June 2; Serial No. 290,672; published Mar. 17, 1931.

CLASS 13

Door equipment. Frantz Manufacturing Co. 283,724; June 2; Serial No. 310,013; published Mar. 17, 1931.
Hardware. F. D. Kees Manufacturing Co. 83,919; renewed Oct. 24, 1931.
Metal cooking pots, pans, and kettles, Base. Sta-Brite Products Corp. 283,599; June 2; Serial No. 306,511; published Mar. 17, 1931.
Pipe and pipe fittings. Stockham Pipe & Fittings Co. 283,696; June 2; Serial No. 309,752; published Mar. 10, 1931.
Rings and ringers, Hog and pig. W. E. Pratt. 83,277; renewed Aug. 29, 1931.

CLASS 14

Castings, Cast iron. Dursar Corporation. 283,557; June 2; Serial No. 309,633; published Mar. 17, 1931.
Castings, forgings, and rods, Metal. Mueller Brass Co. 283,664; June 2; Serial No. 299,213; published Mar. 17, 1931.
Metals, Alloy. D. D. Angle. 283,645; June 2; Serial No. 306,163; published Mar. 17, 1931.
Steel and steel alloy. Timken Steel and Tube Company. 283,740; June 2.
Wire, steel rods, bars, etc. Leadclad Wire Company. 283,741; June 2.
Wire, steel wires. Banska-A Hutni Spolecnost. 283,547; June 2; Serial No. 301,390; published Mar. 17, 1931.
Wire, steel wires, zinc, copper, etc. Banska-A Hutni Spolcenost. 283,707; June 2; Serial No. 301,389; published Mar. 17, 1931.

CLASS 15

Grease, Lubricating. Continental Oil Company. 283,570; June 2; Serial No. 310,113; published Mar. 10, 1931.
Grease, Lubricating. Continental Oil Company. 283,572–3; June 2; Serial Nos. 310,115–16; published Mar. 10, 1931.
Grease, Lubricating. Continental Oil Company. 283,689; June 2; Serial No. 310,101; published Mar. 10, 1931.
Oil, Lubricating. Continental Oil Company. 283,566; June 2; Serial No. 310,103; published Mar. 10, 1931.
Oil, Lubricating. Continental Oil Company. 283,567–8; June 2; Serial Nos. 310,109–10; published Mar. 10, 1931.
Oil, Lubricating. Continental Oil Company. 283,569; June 2; Serial No. 310,112; published Mar. 10, 1931.
Oil, Lubricating. Continental Oil Company. 283,571; June 2; Serial No. 310,114; published Mar. 10, 1931.
Oil, Lubricating. Continental Oil Company. 283,574; June 2; Serial No. 310,120; published Mar. 10, 1931.
Oil, Lubricating. Continental Oil Company. 283,690–3; June 2; Serial Nos. 310,097–100; published Mar. 10, 1931.
Oil, Motor fuel. Garland Products Company. 283,615; June 2; Serial No. 304,553; published Mar. 10, 1931.
Oils and greases, Lubricating. Continental Oil Company. 283,697; June 2; Serial No. 309,606; published Mar. 10, 1931.
Oils, Lubricating. Pan American Petroleum & Transport Company. 283,694; June 2; Serial No. 309,901; published Mar. 10, 1931.
Oils, Lubricating. Reo Motor Company of New England. 283,576; June 2; Serial No. 310,303; published Mar. 10, 1931.

CLASS 16

Finish, Floor. Dean & Barry Company. 82,766; renewed July 25, 1931.
Finish for decorating walls and ceilings. Dean & Barry Company. 82,581; renewed July 11, 1931.
Paint. G. B. Carran. 283,718; June 2; Serial No. 310,636; published Mar. 17, 1931.
Paint, Roof. Standard Oil Company of California. 283,714; June 2; Serial No. 310,494; published Mar. 17, 1931.
Paints, paint enamels, paste, etc. Con-Ferro Paint & Varnish Company. 283,627; June 2; Serial No. 303,418; published Mar. 17 1931.
Polish, Automobile. Petersen & Frease. 283,709; June 2; Serial No. 309,903; published Mar. 17, 1931.
Stains, fillers, dry colors, Wood. E. I. du Pont De Nemours and Company. 283,712; June 2; Serial No. 309,924; published Mar. 17, 1931.

CLASS 19

Automobiles and their structural parts. Chrysler Corporation. 283,544; June 2; Serial No. 310,675; published Mar. 17, 1931.
Automobiles and their structural parts. Plymouth Motor Corporation. 283,686; June 2; Serial No. 267,603; published Mar. 17, 1931.
Bicycles. Iver Johnson Sporting Goods Company. 83,742; renewed Oct. 10, 1931.
Boats, Motor. H. L. Seaman. 283,719; June 2; Serial No. 309,653; published Mar. 10, 1931.
Trailers. Muskogee Iron Works. 283,667; June 2; Serial No. 291,015; published Mar. 17, 1931.

CLASS 21

Batteries, Storage. Wubco Battery Corporation. 283,699; June 2; Serial No. 309,105; published Mar. 10, 1931.
Battery plates, Storage. Electric Storage Battery Company. 82,219; renewed June 13, 1931.
Electric cells and batteries. National Carbon Company. 283,650; June 2; Serial No. 307,454; published Mar. 17, 1931.
Electric hand lanterns. Delta Electric Company. 283,677; June 2; Serial No. 287,652; published Mar. 10, 1931.
Electric lanterns, Portable. Delta Electric Company. 283,678; June 2; Serial No. 287,653; published Mar. 10, 1931.
Electrical goods. Edwards & Co. Inc. 81,686–7; renewed May 2, 1931.
Radio receiving sets. Studebaker Corporation. 283,655; June 2; Serial No. 294,242; published Mar. 10, 1931.

CLASS 22

Golf balls. Niblett-Flanders Corporation. 283,739; June 2.

CLASS 23

Axes, adzes, broad axes, bush hooks, hatchets, etc. American Fork & Hoe Company. 283,564; June 2; Serial No. 310,276; published Mar. 17, 1931.
Bearings, and bushings, Metal and graphite. Graphite Lubricating Company. 83,488; renewed Sept. 19, 1931.
Braiding machines. Andrew C. Campbell, Incorporated. 283,656; June 2; Serial No. 295,206; published Mar. 17, 1931.
Clippers and animal shears, Electric. Chicago Flexible Shaft Company. 283,524; June 2; Serial No. 310,911; published Mar. 17. 1931.
Earth boring and well-drilling apparatus and parts thereof. Chicago Pnuematic Tool Company. 283,743; June 2.
Gears and pinions. Republic Gear Company. 283,522; June 2; Serial No. 310,659; published Mar. 17, 1931.
Gears, gear blanks. Formica Insulation Company. 283,654; June 2; Serial No. 293,423; published Mar. 17, 1931.
Knives, Bread. Landers, Frary, & Clark. 283,520; June 2; Serial No. 310,293; published Mar. 17, 1931.
Mobile machinery. Euclid Crane & Hoist Company. 283,610; June 2; Serial No. 307,244; published Mar. 17, 1931.
Razor blades, Safety. H. Borgmann. 283,609; June 2; Serial No. 307,304; published Mar. 17, 1931.
Razor blades, Safety. I. Rosenbaum. 283,521; June 2; Serial No. 310,304; published Mar. 17, 1931.
Saws, axes, chisels, etc. Sandvikens Jernverks Aktiebolag. 283,612; June 2; Serial No. 305,544; published Mar. 17, 1931.
Screens and the like, Fourdrinier. Cheney Bigelow Wire Works. 283,515; June 2; Serial No. 309,304; published Mar. 17, 1931.
Sharpeners, Razor. Keenex Razor Sharpener Company, 283,607; June 2; Serial No. 307,552; published Mar. 17, 1931.
Tableware, Paper. Puritan Paper Plate & Products Company. 283,674; June 2; Serial No. 285,789; published Mar. 17, 1931.
Tools, Hand. Crescent Tool Company. 283,646; June 2; Serial No. 306,941; published Mar. 17, 1931.

CLASS 24

Dry-cleaning and washing machines and drying machines. R. L. Thorsch. 283,733; June 2.

Laundry washing machines. Horton Manufacturing Company. 83,253; renewed Aug. 29, 1931.

CLASS 26

Calculating and adding machines, and cash registers. Brunsviga-Maschinenwerke Grimme, Natalis & Co. Aktiengesellschaft. 283,586; June 2; Serial No. 309,063; published Mar. 17, 1931.
Copying and developing apparatus, sensitized plates, etc. Naamlooze Vennootschap Chemische Fabriek L. van der Grinten. 283,635; June 2; Serial No. 302,253; published Mar. 17, 1931.
Laboratory centrifugal apparatus. C. H. Boulin. 283,638; June 2; Serial No. 303,759; published Mar. 17, 1931.
Scales, Weighing. D. C. Rockola. 283,558–9; June 2; Serial Nos. 309,990–1; published Mar. 17, 1931.

CLASS 27

Time recorders, clocks, watches, and parts thereof. Bedford Watch Company. 283,730; June 2.

CLASS 28

Boxes or chests for holding cigarettes. Old Colony Distributing Company. 283,553; June 2; Serial No. 303,724; published Mar. 10, 1931.

CLASS 29

Brushes. Mountain States Brush Manufacturing Corporation. 283,613; June 2; Serial No. 307,821; published Mar. 17, 1931.

CLASS 32

Desks and household chairs. Associated Merchandising Corporation. 283,518; June 2; Serial No. 310,156; published Mar. 17, 1931.
Furniture. Gold Medal Folding Furniture Co. 283,659; June 2; Serial No. 297,425; published Mar. 17, 1931.
Mattresses. Storkline Furniture Corporation. 283,608; June 2; Serial No. 307,514; published Mar. 17, 1931.
Rollers, Curtain. Curtain Supply Company. 81,679; renewed May 2, 1931.

CLASS 34

Incinerators. Kernit Incinerator Company. 283,528; June 2; Serial No. 310,480; published Mar. 17, 1931.
Stokers. Stott Stoker Company. 283,722; June 2; Serial No. 309,359; published Mar. 17, 1931.
Stoves and lamps, gasoline and kerosene, Soldering. Société Anonyme L'Accessoire de Precision. 283,652; June 2; Serial No. 307,512; published Mar. 17, 1931.
Stoves and ranges, Gas. Geo. D. Roper Corporation. 283,577; June 2; Serial No. 310,616; published Mar. 17, 1931.
Stoves, Oil-burning brooder. W. C. Hopson Company. 283,560; June 2; Serial No. 310,140; published Mar. 17, 1931.
Stoves, Oil-burning brooder. W. C. Hopson Company. 283,561; June 2; Serial No. 310,142; published Mar. 17, 1931.

CLASS 35

Gaskets. Victor Manufacturing & Gasket Company. 283,523; June 2; Serial No. 310,783; published Mar. 17, 1931.
Hose, Rubber. Goodyear Rubber Company. 83,732; renewed Oct. 10, 1931.
Lining and clutch facings, Brake. Raybestos-Manhattan. 283,519; June 2; Serial No. 310,226; published Mar. 17, 1931.
Piston rings. Wilkening Manufacturing Company. 283,602; June 2; Serial No. 307,751; published Mar. 17, 1931.

CLASS 37

Books, fountain pens, ink and pencil erasers, etc., Composition. American News Company. 283,548; June 2; Serial No. 307,792; published Mar. 17, 1931.
Papers, Printing. Kimberly-Clark Corporation. 283,611; June 2; Serial No. 307,207; published Mar. 17, 1931.
Tissues, Cleansing. D. Gray. 283,587; June 2; Serial No. 309,069; published Mar. 17, 1931.

CLASS 39

Brassières. Maiden Form Brassiere Co. Inc. 283,700; June 2; Serial No. 309,899; published Mar. 17, 1931.
Coats, vests, pants, overcoats, and topcoats. Baltimore Clothes Incorporated. 283,623–4; June 2; Serial Nos. 307,573–4; published Mar. 10, 1931.
Dresses. Fauer & Davis, Inc. 283,729; June 2.
Dresses. Kewpie Dress Co. Inc. 283,658; June 2; Serial No. 297,139; published Mar. 10, 1931.
Dresses. Lenny Rosenweig & Irving Weinberg Dress Co. Inc. 283,705; June 2; Serial No. 309,213; published Mar. 10, 1931.
Dresses. Morten Davis Co. 283,704; June 2; Serial No. 309,553; published Mar. 10, 1931.
Dresses and bloomers. J. Lynn. 283,625; June 2; Serial No. 303,774; published Mar. 10, 1931.
Dresses and gowns. M. Greenfogel, Inc. 283,745; June 2.
Garments, Foundation. Famise Corporation. 283,702; June 2; Serial No. 309,730; published Mar. 17, 1931.
Hosiery. Ajax Hosiery Mills. 283,715; June 2; Serial No. 310,147; published Mar. 10, 1931.
Hosiery. W. Felix. 283,746; June 2.
Hosiery. Holeproof Hosiery Co. 283,711; June 2; Serial No. 309,976; published Mar. 10, 1931.
Hosiery. Trayler Corporation. 283,716; June 2; Serial No. 310,077; published Mar. 10, 1931.
Hosiery, Ladies'. Rice-Neuman Co. 283,688; June 2; Serial No. 275,631; published May 13, 1930.
Neckties. H. Hendel. 283,749; June 2.
Neckties. M. Kassay. 283,701; June 2; Serial No. 309,782; published Mar. 10, 1931.
Shirts. J. Danerhirsch. 283,639–43; June 2; Serial Nos. 304,490–4; published Nov. 4, 1930.
Shirts. I. Janov-Abeles Shirt Co. 283,732; June 2.
Shirts. Marlboro Shirt Company. 283,717; June 2; Serial No. 310,056; published Mar. 10, 1931.
Shirts and collars. I. Janov-Abeles Shirt Co. 283,748; June 2.
Shoes. Brown Shoe Company. 283,618–9; June 2; Serial Nos. 308,973–4; published Mar. 17, 1931.
Suits, topcoats, and tuxedos. M. S. Levine. 283,648; June 2; Serial No. 307,322; published Dec. 23, 1930.
Ties, cravats, and scarfs. A. Mandel. 283,737; June 2.
Underwear, Knit. United Underwear Mill. 283,710; June 2; Serial No. 309,998; published Mar. 10, 1931.

CLASS 42

Cotton piece goods. Burton Brothers & Co. Inc. 283,736; June 2.
Cotton piece goods. International Merchandising Syndicate, Inc. 283,750; June 2.
Woolen piece goods. Forstmann & Huffmann Company. 283,751; June 2.

CLASS 44

Patters for the skin and tissue and reducing chin strap. D. Gray. 283,555; June 2; Serial No. 309,068; published Mar. 17, 1931.

CLASS 45

Ginger ale. Gristede Bros. Inc. 283,734; June 2.

CLASS 46

Bacon, hams, lard for food, and brawn. Chas. & Thos. Harris & Co. 82,324; renewed June 20, 1931.
Dairy products. Polk Sanitary Milk Company. 283,594; June 2; Serial No. 307,629; published Mar. 17, 1931.
Cakes, Cup. Swanson Baking Company. 283,554; June 2; Serial No. 304,300; published Mar. 17, 1931.
Candy. Life Savers, Inc. 283,669; June 2; Serial No. 281,433; published Mar. 17, 1931.
Candy. Life Savers, Inc. 283,670–2; June 2; Serial Nos. 281,440–2; published Mar. 17, 1931.
Candy. Life Savers, Inc. 283,673; June 2; Serial No. 281,443; published Mar. 17, 1931.
Candy. D. Ravenel. 283,596; June 2; Serial No. 307,420; published Mar. 17, 1931.
Candy tablets. Aromint Corporation. 283,600; June 2; Serial No. 306,390; published Mar. 17, 1931.
Canned vegetables. Phillips Sales Company. 283,647; June 2; Serial No. 307,217; published Mar. 17, 1931.
Cheese. S. A. E. Galbani. 283,753; June 2.
Cheese. Naamlooze Vennootschap Kaaschandel Betz & Jay. 283,549; June 2; Serial No. 301,192; published Mar. 10, 1931.
Chocolate confections. Heit-Miller-Lau Co. 83,067; renewed Aug. 15, 1931.
Citron and cocoanut. Hills Brothers Company. 83,837; renewed Oct. 17, 1931.
Condiment. Vitidine Sea Food & Chemical Co. 283,637; June 2; Serial No. 303,353; published Mar. 17, 1931.
Confections and/or ice cream, Frozen. Joe Lowe Corporation. 283,681; June 2; Serial No. 289,978; published Dec. 17, 1929.
Cranberries and cranberry syrup. Ocean Spray Preserving Company. 283,708; June 2; Serial No. 301,196; published Mar. 17, 1931.
Feed, Poultry. International Sugar Feed No. Two Company. 283,695; June 2; Serial No. 309,780; published Mar. 17, 1931.
Flour. Ballard & Co. 283,579; June 2; Serial No. 310,851; published Mar. 17, 1931.
Flour. Ballard & Ballard Co. 283,588; June 2; Serial No. 310,852; published Mar. 17, 1931.
Food, mixed birdseed, ant eggs for fish, etc., Parrot. Veribest Co. 283,735; June 2.
Fruit juice concentrate with pectin added. Thomson & Taylor Co. 283,533; June 2; Serial No. 310,814; published Mar. 17, 1931.
Fruits. Redlands-Highlands Fruit Exchange. 283,662; June 2; Serial No. 298,846; published July 15, 1930.
Fruits, Citrus. W. F. Burrows. 283,538; June 2; Serial No. 310,282; published Mar. 17, 1931.
Fruits, Citrus. W. F. Burrows. 283,545; June 2; Serial No. 310,752; published Mar. 17, 1931.
Gum, Chewing. H. S. Woolsey. 283,001; June 2; Serial No. 304,228; published Mar. 17, 1931.
Ice cream. New State Ice Company. 283,636; June 2; Serial No. 302,744; published Mar. 17, 1931.
Jelly and marmalade. G. W. Grant. 283,537; June 2; Serial No. 310,125; published Mar. 17, 1931.
Juices for food purposes. Bruce's Juices Inc. 283,680; June 2; Serial No. 289,500; published Mar. 17, 1931.

Malt and malt syrups. S. Stone. 283,668; June 2; Serial No. 291,804; published Jan. 7, 1930.
Marshmallow sheets. Gimbal Brothers. 283,676; June 2; Serial No. 287,137; published Mar. 17, 1931.
Mayonnaise, pickle relish, salad oils, salaid dressing, etc. Baltimore Butterine Company. 283,651; June 2; Serial No. 307,470; published Mar .17, 1931.
Olive oil. L. Leone. 283,563; June 2; Serial No. 310,221; published Mar. 17, 1931.
Pop corn, Chocolate flavored. L. J. Chambs. 283,546; June 2; Serial No. 310,754; published Mar. 17, 1931.
Potato food, Cooked. S. H. Perky. 283,747; June 2.
Salmon eggs. J. E. Hubbart. 82,087; renewed May 30, 1931.
Sea food. E. E. Borst. 283,517; June 2; Serial No. 309,329; published Mar. 10, 1931.
Sea kelp prepared for human dietary use. Calphiomin Laboratories. 283,649; June 2; Serial No. 307,385; published Mar. 17, 1931.
Syrup, Malt. Sterling Products Co. 283,527; June 2; Serial No. 310,422; published Mar. 17, 1931.
Tomato juice. E. C. Ortega Co. 283,530; June 2; Serial No. 310,572; published Mar. 17, 1931.
Vegetables, Fresh. San Jose Produce Co. 283,541; June 2; Serial No. 310,577; published Mar. 17, 1931.

CLASS 50

Hangers, Garment. Gluvtex Manufacturing Corp. 283,556; June 2; Serial No. 309,203; published Mar. 17, 1931.
Horticultural growths. T. F. Borst. 283,550; June 2; Serial No. 303,044; published Mar. 17, 1931.
Metallic leaf for lettering, decorating, and numbering books, etc., Artificial. H. Griffin & Sons Company. 283,644; June 2; Serial No. 304,687; published Mar. 17, 1931.
Pads, Sponge rubber. D. L. Irvin. 283,562; June 2; Serial No. 310,173; published Mar. 17, 1931.
Waterproof and mothproof material. Asher & Boretz, Inc. 283,663; June 2; Serial No. 298,970; published Mar. 17, 1931.

ALPHABETICAL LIST OF LABELS

Bett Lee. For Boxes. Hoague-Sprague Corporation. 39,240; June 2.
Chase & Sanborn. For Coffee and Chicory. Standard Brands Incorporated. 39,242; June 2.
Chocolate Kandyeast. For Chocolates. E. C. Bennett. 39,237; June 2.
Coffee . . . For Coffee. Union Bag & Paper Corporation. 39,243; June 2.
Freihofer's Pullman Bread. For Bread. Chas. Freihofer Baking Co. Inc. 39,238; June 2.
Milady Footwear. For Boxes. Hoague-Sprague Corporation. 39,239; June 2.
Nu-Way. For Weather Stripping. Macklanburg-Duncan Company. 39,241; June 2.
Silverseal Tarnish Proof. For Silverware Chests. Associated Silver Company. 39,236; June 2.

ALPHABETICAL LIST OF PRINTS

Astring-O-Sol. For Mouth Wash. Frederick Stearns & Company. 13,220; June 2.
A Woman's Dearest Jewels. For Amoretta Cream, Skin Tonic, Poudre de Lilas, Eight Hour Cream, Etc. Elizabeth Arden Inc. 13,210; June 2.
Candy to Eat and Stay Thin, Priscilla Alden Sweets That Speak for Themselves and You. For Sweets. Starret Land Company. 13,219; June 2.
Little Marlo The Honey Cookie Boy. For Cookies. Mannings, Inc. 13,217; June 2.
New Machine-Gun Pack. For Firecrackers. Hitt Fireworks Co. 13,214; June 2.
Now Vivatone Completes the Shave. For a Skin Tonic and Astringent for Use After Shaving. Daggett & Ramsdell. 13,213; June 2.
Pfeifer's Tasty Meat Products. For Meat Products. Henry Pfeifer, Inc. 13,218; June 2.
Sun-Ra. For Flavored Beverage Preparation. Sun-Ra Products Company. 13,221; June 2.
The Beauty of Seymour Troy Shoes is More Than Skin Deep. For Shoes. Seymour Troy & Co. 13,222; June 2.
The Cream of the Crop. For Canned Vegetables. O. B. Andrews Company. 13,209; June 2.
The Game of Flip. For Game Apparatus. A. S. Littlefield. 13,215; June 2.
The Importance of Make-Up. For Amoretta Cream, Creme de France, Lille Lotion, Nosbine, Etc. Elizabeth Arden Inc. 13,212; June 2.
The Spirit Within. For Ardenavelva Cream, Orange Skin Food, Anti-Brown Spot Ointment, Etc. Elizabeth Arden Inc. 13,211; June 2.
We Women Know . . . White King Washes Everything. For Soap. Los Angeles Soap Company. 13,216; June 2.
We Women Know . . . White King Washes Everything. For Soap. Los Angeles Soap Company. 13,216; June 2.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 2D DAY OF JUNE, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Kamrath, Herbert G., assignor.)
A C Spark Plug Company. (See Webb, Hartwell W., assignor.)
A C Spark Plug Company. (See Zubaty, Joseph, assignor.)
Abrams, Isidore I., Brooklyn, N. Y. Attachment for screen and the like. 1,808,199; June 2.
Adams, Austin, jr., Brightwaters, and W. L. Richards, Lynnbrook, N. Y., assignors to American Air Filter Company, Louisville, Ky. Cleansing system and device for air filters. 1,807,950; June 2.
Adams, Henry, Plainfield, N. J. Coal loading method and apparatus. 1,808,587; June 2.
Adams, W. L. (See Bird, Len O., assignor.)
Addressograph Company. (See Anderson, Rupert, assignor.)
Addressograph Company. (See Bailey, James A., assignor.)
Addressograph Company. (See Oyen, Elmer A., assignor.)
Addressograph Company. (See Schaefer, George W., assignor.)
Ade Fabrik. Automatischer Schnellivaagen G. m. b. H. (See Fischer, Johann, assignor.)
Adler, Jacob, assignor to Landis Machine Company, St. Louis, Mo. Shoe stapler structure. 1,808,027; June 2.
Aeromarine Plane & Motor Company. (See Chilton, Roland, assignor.)
Agfa Ansco Corporation. (See Goldhammer, Leo, assignor.)
Ahern, William A., Worcester, Mass. Water heater. 1,807,951; June 2.
Ahlberg, Alfred, Indianapolis, Ind. Heating stove or furnace. 1,808,487; June 2.
Air Reduction Sales Company. (See Lütger, Edward, assignor.)
Aktiebolaget Absorbator. (See Rechsing, Friedrich W. H., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Jonas, Julius, assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Meyerhans, August, assignor.)
Albrecht, Karl, assignor to Maschinenfabrik Johannisberg G. m. b. H., Geisenheim-on-the-Rhine, Germany. Bearing for the cylinder of printing machines. 1,808,126; June 2.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alemite Corporation. (See Murphy, Howard J., assignor.)
Allan, James S. (See Pearmain, W. J., and Allan.)
Allen, Charles W., assignor to E. L. Bruce Company, Memphis, Tenn. Wood block. 1,808,623; June 2.
Allen, Howard G., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y. Feeding and spacing device. 1,808,588; June 2.
Allied Laboratories, Incorporated. (See Laird, William R., assignor.)
Allsop, Thomas, assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa. Cooling and conditioning machine. 1,807,580; June 2.
Altgelt, Max A., New Braunfels, Tex. Device for loading explosives in wells. 1,807,819; June 2.
Altvater, Arthur W., St. Louis County, Mo. Cutting, trimming and ornamenting machine. 1,807,952; June 2.
Alvin Corporation, The. (See Woodward, Frederick R., assignor.)
Ambler Asbestos Company. (See Morris, William H., assignor.)
American Air Filter Company. (See Adams, A., jr., and Richards, assignors.)
American Air Filter Company. (See Hegan, Chester P.)
American Air Filter Company. (See Hegan, C. P., and Diecks, assignors.)
American Electric Brake Corporation. (See Shannon, Carson H., assignor.)
American Electric Switch Corporation. (See Lewis, Joseph C., assignor.)
American Encaustic Tiling Company. (See Prouty, T. C. and W. O., assignors.)
American Fork & Hoe Company, The. (See Okey, Perry, assignor.)
American Gypsum Company. (See New, Gustave A., assignor.)
American Hardware Corporation, The. (See Stone, Elmer B., assignor.)
American Lurgi Corporation. (See Conway, Baron von Girsewald, Weidmann, and Roesner, assignors.)
American Optical Company. (See Baker, Nelson M., assignor.)

American Telechronometer Company. (See Babcock, Garrison, assignor.)
American Telephone and Telegraph Company. (See Knandel, George J., assignor.)
American Telephone and Telegraph Company. (See May, Harold F., assignor.)
American Telephone and Telegraph Company. (See Silent, Harold C., assignor.)
Amsden, Ralph D., Lynn, Mass., assignor to General Electric Company. Electrical filter. 1,808,589; June 2.
Andernach, August W., Beuel, Germany. Manufacturing papers, pasteboards, felts, and the like. 1,808,590; June 2.
Anderson, Carl W., New Market, assignor of one-half to William Umont, Dunellen, N. J. Scum removing device. 1,808,279; June 2.
Anderson, Charles P., Scarbro, W. Va. Treating coal. 1,807,817; June 2.
Anderson, D., & Sons Limited. (See Reid, Leslie. K., assignor.)
Anderson, Fritz A., assignor to The Burdick Corporation, Milton, Wis. Portable massage and exercise machine. 1,808,333; June 2.
Anderson, Lloyd. (See North, E. W., and Anderson.)
Anderson, Rexford O., Houston, Tex. Core engaging device. 1,807,953; June 2.
Anderson, Ruperty, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,807,954; June 2.
Anderson, Torval J., Chicago, Ill. Shaper head for wood working machines. 1,808,395; June 2.
Angus, Donald J., Indianapolis, Ind. Volt-ampere meter. 1,808,334; June 2.
Apple Vender Co. (See Claussen, Wells H., assignor.)
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Dynamo electric machine. 1,807,955; June 2.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Progressive solenoid for operating brakes. 1,807,956; June 2.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Control mechanism for motor vehicle electric starting and braking motors. 1,808,095; June 2.
Arco Vacuum Corporation. (See Santini, Randolph, assignor.)
Armington, Arthur P., Willoughby, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio. Tread link. 1,808,445; June 2.
Armington, Arthur P., Willoughby, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio. Endless tread linkage. 1,808,446; June 2.
Armitage, George H., assignor to United Lace & Braid Manufacturing Co., Providence, R. I. Apparatus for tipping laces. 1,807,886; June 2.
Armstrong Cork Company. (See Prentis, Henning W., jr., assignor.)
Armstrong, J. H. (See Woods, David M., assignor.)
Asbern Maschinenfabrik-Aktiengesellschaft, Augsburg-Goeggingen, et al. (See Sachs, Ernst, assignor.)
Ashby Furniture Company, The. (See Lee, Henry D., assignor.)
Ashworth, Fred, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel making machine. 1,807,818; June 2.
Asper, Otto, Horgen, near Zurich, assignor to the Firm Sauser A. G., Soleure, Switzerland. Key control for liquid registers. 1,808,447; June 2.
Associated Manufacturers Corporation of America. (See Day, Ira W., assignor.)
Attenborough, Fred. (See May, E. T., and Sheriff, assignors.)
Aud, William L., Poolesville, Md., assignor, by mesne assignments, to Safety Devices Corporation, Dover, Del. Life saving suit. 1,807,680; June 2.
Auffero, John M., assignor to E. A. Laboratories, Inc., Brooklyn, N. Y. Electrical connecting member. 1,808,335; June 2.
Auld, D. L., Company, The. (See Cochran, Rae E., assignor.)
Auld, D. L. Company, The. (See Hyatt, R. D., and Cochran, assignors.)
Automatic Electric Inc. (See Richardson, Rodney G., assignor.)
Automobile Warning Signal Corporation. (See Del-Prete, Joseph, assignor.)
Avery, Henry A., Groton, assignor to L C Smith & Corona Typewriters Inc., Syracuse, N. Y. Typewriting machine. 1,808,096; June 2.

Avery, Henry A., Groton, assignor to L C Smith & Corona Typewriters Inc., Syracuse, N. Y. Typewriting machine. 1,808,739; June 2.

Awcock, George A. (See Ryley, C. F., and Awcock.)

B. O. T. Mfg. Co. (See Tilden, Bert O., assignor.)

Babb, Edwin, Aultman, Ohio, assignor, by mesne assignments, to National Fireproofing Corporation, Pittsburgh, Pa. Conduit and connecting means therefor. 1,807,647; June 2.

Babcock, Garrison, assignor to American Telechronometer Company, Seattle, Wash. Telephone system. 1,808,280; June 2.

Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)

Bacon, Raymond F., Bronxville, N. Y. Production of elemental sulphur from hydrogen sulphide and sulphur dioxide. 1,807,583; June 2.

Bader, Theodor, Waldshut, Germany. Heating means for casting pots. 1,808,718; June 2.

Bagby, Earle, Kahoka, Mo. Compensating joint. 1,808,624; June 2.

Bailey, James A., Washington, D. C., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,807,887; June 2.

Bailey, James A., Washington, D. C., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,807,888; June 2.

Bailey, James A., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,807,957; June 2.

Bailey, James A., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,807,958; June 2.

Bailey, James A., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,808,515; June 2.

Baily, Thaddeus F., Alliance, Ohio. Continuous annealing apparatus. 1,808,152; June 2.

Baker, Edwin M. (See Leslie, E. H., and Baker.)

Baker, Frederic W., Claymont, Del. Boiler. 1,808,488; June 2.

Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Goggles. 1,807,681; June 2.

Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. 1,808,448; June 2.

Baker, Robert E. (See Carney, S. C., Baker, and Cutting.)

Ballauf, Fritz, F. Muth and A. Schmelzer, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Diazotization of amino carbazole and its derivatives. 1,807,692; June 2.

Balser, Lester W. and E. E. Clark, assignors to Crompton & Knowles Loom Works, Worcester, Mass. Weft replenishing double shuttle loom. 1,807,722; June 2.

Balthazor, Benjamin T., Racine, Wis. Air supply device. 1,808,281; June 2.

Banagan, William H., Quechee, Vt. Weft end remover for automatic looms. 1,808,127; June 2.

Barnes, Gladeon M., Hastings, Mich. Gun. 1,808,097; June 2.

Barnes & Jones, Inc. (See Jones, William T., assignor.)

Barnett, Louis, Brooklyn, assignor to Standard Electric Equipment Corporation, Long Island City, N. Y. Electric fitting. 1,808,011; June 2.

Barnett, Louis, New York, assignor to Standard Electric Equipment Corporation, Long Island City, N. Y. Fixture coupling fitting for outlet boxes. 1,808,012; June 2.

Barney, Edwin E., New Rochelle, assignor to Remington Accounting Machine Corporation, New York, N. Y. Computing machine. 1,807,584; June 2.

Barney, Edwin E., New Rochelle, assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,807,648; June 2.

Barnhart, Job R., Lakewood, assignor to W. M. Scott, Lakewood, and R. E. Tresise, Cleveland Heights, Ohio. Tube tester. 1,808,013; June 2.

Barnhart, Reese D., Uniontown, Pa. Spring spreader. 1,808,625; June 2.

Barrett Company, The. (See Moses, F. G., Hess, and Perkins, assignors.)

Barrows, Donald S., Rochester, assignor to The Gould Coupler Company, New York, N. Y. Car truck. 1,807,683; June 2.

Barrows, Donald S., Rochester, assignor to The Gould Coupler Company, New York, N. Y. Railway truck. 1,807,684; June 2.

Barth, Carl A. (See Cherry, M. J., and Barth.)

Bartram, Thomas W., and D. H. Tompkins, Nitro, W. Va., assignors to The Rubber Service Laboratories Company, Akron, Ohio. Cleaning and preserving of metallic surfaces. 1,808,200; June 2.

Bartsch, Herbert E., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Angle cock holder. 1,808,516; June 2.

Bassett, Cyrus W., Maplewood, assignor to Elevator Supplies Company, Inc., Hoboken, N. J. Elevator dispatching system. 1,807,612; June 2.

Bassi, Adolph, New York, N. Y., assignor to Chameleon Fountain Pen Corp. Fountain pen. 1,808,489; June 2.

Bates, Charles F. W., Cleveland Heights, assignor to The Ohio Instrument Manufacturing Company, Cleveland, Ohio. Electrical contact terminal. 1,807,581; June 2.

Bauer, William J., assignor to Project Holding Corporation, New York, N. Y. Collapsible arm chair. 1,808,201; June 2.

Bauersfeld, Walther, and B. Gerstenberger, assignors to the Firm: Carl Zeiss, Jena, Germany. Apparatus for episcopic projection. 1,807,614; June 2.

Bauersfeld, Walther, and M. Hübschmann, assignor to the Firm Carl Zeiss, Jena, Germany. Microscope tube. 1,807,613; June 2.

Baum, Isaac A., Chicago, Ill. Metal jamb. 1,807,959; June 2.

Baum, Isaac A., Chicago, Ill. Corner connection for metal frames. 1,808,336; June 2.

Baum, Isaac A., Chicago, Ill. Plaster anchor. 1,808,337; June 2.

Baum, Isaac A., Chicago, Ill. Frame for all plaster walls. 1,808,338; June 2.

Baum, Isaac A., Chicago, Ill. Corner connection for frames. 1,808,490; June 2.

Bausch & Lomb Optical Company. (See Patterson, William L., assignor.)

Bayant, Manton B., and W. J. Beatty, Detroit, Mich. Welding. 1,808,205; June 2.

Beaman, George B., Crafton, assignor to Superior Paper Products Company, Carnegie, Pa. Corrugated paper package for burial caskets. 1,807,770; June 2.

Beatty, Walter J. (See Bryant, M. B., and Beatty.)

Bechtel, Gerhard M., Allentown, Pa. Rotary drier. 1,808,626; June 2.

Becker, Julius, Chicago, Ill. Anode. 1,807,585; June 2.

Beckstein, C., Pianofortefabrik A. G. (See Moor, Emanuel, assignor.)

Beckwith Manufacturing Company. (See Clapp, Albert L., assignor.)

Behr, Leo, Ithaca, N. Y. Educational apparatus. 1,807,615; June 2.

Behr, Leo, assignor to Leeds & Northrup Company, Philadelphia, Pa. Conductivity cell. 1,807,821; June 2.

Belin, Edouard, Paris, France. Mechanical movement. 1,807,889; June 2.

Bell Telephone Laboratories, Incorporated. (See Brobst, David R., assignor.)

Bell Telephone Laboratories, Incorporated. (See Carpenter, Warren W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Gabriel, J. C., and Hubbard, assignors.)

Bell Telephone Laboratories, Incorporated. (See Gilbert, John J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Hartley, Ralph V. L., assignor.)

Bell Telephone Laboratories, Incorporated. (See Scudder, Frederick J., assignor.)

Bellantoni, Rocco, Rome, Italy. Speed changing device for motor cars. 1,808,449; June 2.

Beller, Hans. (See Luther, M., and Beller.)

Bellingeri, Mario, Monza, Italy. Creel for warp beams. 1,808,339; June 2.

Bellman, Edward, Rockford, Ill. Burglar alarm and lock therefor. 1,808,491; June 2.

Bemis Bro. Bag Co. (See Pierce, Robert E., assignor.)

Bemis Industries, Incorporated. (See Raynes, Harry C., assignor.)

Bendix Brake Company. (See Apple, Vincent G., assignor.)

Bendix Brake Company. (See Bendix, Vincent, assignor.)

Bendix Brake Company. (See Sanford, Roy S., assignor.)

Bendix, Vincent, assignor to Bendix Brake Company, Chicago, Ill. Brake control. Re18,083; June 2.

Bendix Stromberg Carbureter Company. (See Dienner, John A., assignor.)

Benesh, Matthew E., Cicero, Ill. Thermostat. 1,808,282; June 2.

Benesh, Matthew E., Cicero, Ill. Thermostat. 1,808,283; June 2.

Benoit, Leon. (See Coyle, A. W., assignor.)

Benson, Madison H., Austin, Tex. License plate holder. 1,808,627; June 2.

Berger, Martin, Freital-Deuben, near Dresden, assignor to United Cigarette Machine Company, Aktiengesellschaft, Dresden, Germany. Apparatus for turning cigarettes right side up as they are fed to the packing machine. 1,807,723; June 2.

Berger, Samuel I., Newark, N. J. Skate. 1,807,890; June 2.

Bergmann, Christian N., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa. Elastic band cup dispenser. 1,808,284; June 2.

Bergmann Packaging Machine Company. (See Bergmann, Christian N., assignor.)

Bergner, John C., Lansdowne, Pa., assignor to Doughnut Machine Corporation, New York, N. Y. Cooking apparatus. 1,807,820; June 2.

Bergstein, Samuel, Middletown, assignor to The Interstate Folding Box Company, Middletown, Ohio. Machine for making paper boxes or the like. 1,808,014; June 2.

Berry, Harry L., Atlantic City, N. J. Removable diaphragm for gas meters. 1,807,771; June 2.

Berthold, Rudolf G., assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Metal vapor rectifier. 1,808,517; June 2.

Berthon, Rodolphe, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y. Removal of waterings from goffered films. 1,807,822; June 2.

Berti, Giuseppe. (See Fabrizi, E. M., and Berti.)

Betterdorf Company, The. (See Clasen, Claus J. W., assignor.)

Bettorff, Albert H., St. Joseph, Mo. Combined collector and separator for feed mills. 1,807,891; June 2.

Betts, Everett D., Milan, Mich. Radiator. 1,808,202; June 2.

Biggert, Florence C., jr., Crafton, and J. A. Smitmans, assignors to United Engineering & Foundry Company, Pittsburgh, Pa. Crop end discharging apparatus. 1,808,396; June 2.

Billotte, Louis C., Revere, and E. Lipson, Chelsea, Mass., assignors to Oil Finding Corporation. Method of and apparatus for locating deposits of oil, gas, and other dielectric subterranean bodies. 1,808,397; June 2.

Bird, Len O., Glendale, Calif., assignor to W. L. Adams, Rexburg, Idaho. Earth moving implement. 1,808,733; June 2.

Black, William G., Cleveland, Ohio. Door holding device. 1,808,153; June 2.

Blackford Window Glass Company. (See Boush, John A., assignor.)

Blake, Alfred E., Haverford Township, Delaware County, assignor to The United Gas Improvement Company, Philadelphia, Pa. Apparatus for metering gaseous fluids. 1,808,709; June 2.

Bliss, H. R., Company. (See Allen, Howard G., assignor.)

Board, Fred, Bridgeport, Ohio. Current collector for trolley wires. 1,808,518; June 2.

Bocchino, Ernest, Newark, N. J. Safety fire escape. 1,808,492; June 2.

Boden, James H., Athens, Ohio. Flooring unit. Des. 84,271; June 2.

Boehland, Paul, Milwaukee, Wis. Christmas tree ornament. Des. 84,272; June 2.

Boehm, Carl A. (See Wileman, Bertram T., assignor.)

Boehmer, Morris, Montclair, N. J. Making clear chlorinated rubber solutions. 1,807,616; June 2.

Boenig, Fred, and G. H. Dresser, Jamaica, N. Y. Smoker's mouthpiece. 1,807,617; June 2.

Bogle, George M. (See Leach, C. W., and Bogle.)

Bohlig, Martin, assignor of one-half to P. B. Warner, St. Paul, Minn. Coin controlled mechanism. 1,808,519; June 2.

Bond, Lester W., assignor to The Kroder Reubel Company, New York, N. Y. Rod fastener. 1,808,628; June 2.

Bone, Herbert L., assignor to The Union Switch & Signal Company, Swissvale, Pa. Locking mechanism. 1,807,618; June 2.

Bonge, George A., Hearne, Tex. Lifting jack. 1,808,629; June 2.

Booth, Lionel E., assignor to The General Engineering Company, Salt Lake City, Utah. Flotation. 1,807,823; June 2.

Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Machine for sizing and punching vehicle wheel rims. 1,807,824; June 2.

Borden Company, The. (See Young, J. H., and Frink, assignors.)

Borden Company, The. (See Nonneman, Ira W., assignor.)

Borten, Louis, Philadelphia, Pa. Valve construction. 1,808,203; June 2.

Bosanac, Frank, Schumacher, Ontario, Canada. Shaving kit. 1,807,724; June 2.

Botsch, Roch P., assignor to United Coal and Dock Company, Milwaukee, Wis. Fuel briquette. 1,808,340; June 2.

Boush, John A., assignor to Blackford Window Glass Company, Vincennes, Ind. Floating bulb edge glass trimmer. 1,807,619; June 2.

Bowman-Manifold, Michael. (See Radford, A. S., and Bowman-Manifold.)

Bowman, Truman H., St. Louis, Mo. Automobile. Des. 84,273; June 2.

Boyden, Elias W. Spokane, Wash. Waving hair. Re18,088; June 2.

Boyer, Frederick G. L., Dayton, Ohio. Controlling device. 1,807,825; June 2.

Brackman, Herbert H., Colfax, Ill. Internal combustion engine. 1,807,725; June 2.

Bradley, Freeman J., Ypsilanti, Mich. Brake equalizer and operating device. 1,807,685; June 2.

Brady, Frank, Denver, Colo. Trick pocketbook. 1,807,826; June 2.

Brady, George H., assignor to Improved Fire Detector Corporation, Baltimore, Md. Wire connecter. 1,808,285; June 2.

Brand, Samuel, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,808,398; June 2.

Brickman, Allen E., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Take-up mechanism for looms. 1,807,726; June 2.

Briggs, John F., and C. W. Palmer, Spondon, near Derby, and J. T. Kidd, Eaton, near Norwich, England, assignors to Celanese Corporation of America. Treatment of threads, fabrics, or other materials composed of or containing artificial filaments. 1,808,098; June 2.

Bright, David M., Tellico Plains, Tenn. Combined parasol, vanity case and coin holder. 1,807,868; June 2.

Bright, Hoyt V. (See Phare, Clinton J., assignor.)

Brindle, Robert, jr., West Orange, N. J., assignor to Westinghouse Lamp Company. Grid winding machine. 1,807,892; June 2.

Brinkerhoff, Archibald R., Los Angeles, Calif. Safety lock for firearms. 1,807,727; June 2.

Britton, George G., Anniston, Ala. Roofing joint. 1,808,286; June 2.

Brobst, David R., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Insulated conductor. 1,808,520; June 2.

Brocato, Vincent, Memphis, Tenn. Ventilator. 1,808,128; June 2.

Broder, Reuben, New York, N. Y. Picture hanger. 1,808,521; June 2.

Bronander, Wilhelm B., Montclair, N. J. Fire extinguisher. 1,808,154; June 2.

Brooke, William, assignor to N. Frankel, New York, N. Y. Weighing scale. Des. 84,274; June 2.

Brooks, Charles A. (See Thompson, H. A., and Brooks.)

Broussard, Andre L., assignor of nine-tenths to E. O. Broussard, New Orleans, La. Pneumatic tire. 1,807,728; June 2.

Broussard, E. O. (See Broussard, Andre L., assignor.)

Brown, Carl D., Hopedale, Mass. Warp beam. 1,807,582; June 2.

Brown, Frank S., Herndon, Kans. Deep furrow grain drill. 1,807,827; June 2.

Brown, Frank T., assignor on one-half to S. Dunn, Detroit, Mich. Sign. 1,807,649; June 2.

Brown, Herbert C. (See Capell, Carl F., assignor.)

Brown Instrument Company, The. (See Poole, Foster M., assignor.)

Brown, John H., Minneapolis, Minn., assignor to Keasbey & Mattison Company, Ambler, Pa. Flexible conduit. 1,808,204; June 2.

Brown, Robert N., assignor to Packard Motor Car Company, Detroit, Mich. Core forming mechanism. 1,808,630; June 2.

Brown, William W., Schenectady, N. Y., assignor to General Electric Company. Protective regulating means for alternating current rectifier. 1,808,522; June 2.

Brownell, James L., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Adjustable seat. 1,807,960; June 2.

Bruce, Charles A., assignor to E. L. Bruce Company, Memphis, Tenn. Wood flooring. 1,808,591; June 2.

Bruce, E. L., Company. (See Allen, Charles W., assignor.)

Bruce, E. L., Company. (See Bruce, Charles A., assignor.)

Bruce, E. L., Company. (See Bruce, Robert G., assignor.)

Bruce, E. L., Company. (See Lee, John A., assignor.)

Bruce, Robert G., assignor to E. L. Bruce Company, Memphis, Tenn. Wood block floor. 1,808,592; June 2.

Bruckner, Richard R., New York, N. Y. Curtain support. 1,807,893; June 2.

Brunner, Arnold, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New ω-halogen-methyl derivatives of phenol and its homologues and a new process of preparing the same. 1,807,729; June 2.

Bryant Electric Company, The. (See Erikson, Gust E., assignor.)

Bryce, James W., Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y. Time recorder. 1,807,828; June 2.

Bubblestone Company, The. (See Rice, John A., assignor.)

Buc, Hyym E., Roselle, N. J., assignor to Standard Oil Development Company. Making isopropyl acetate. 1,808,155; June 2.

Buchanan-Wollaston, Hugo J., Pakefield, England. Mechanical toy. 1,808,015; June 2.

Buckenham, Archibald G. (See Burstein, M., and Buckenham.)

Buckeye Iron and Brass Works. (See Rike, F. F., and Huffman, assignors.)

Budd, Edward G., Manufacturing Company. (See Ledwinka, Joseph, assignor.)

Buddy "L" Mfg. Co. (See Lundahl, Frederick A., assignor.)

Buell, James A. (See George, J. R., and Buell.)

Buettner, T., & Co. Inc. (See Dahm, Leonard G., assignor.)

Buffington, George A., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft detector for looms. 1,807,730; June 2.

Bull, Milton M., Eugene, Oreg. Tongs. 1,808,016; June 2.

Bullard Company, The. (See Bullard, Edward P., jr., assignor.)

Bullard, Edward P., jr., Stratford, assignor to The Bullard Company, Bridgeport, Conn. Double angular tool slide. 1,807,829; June 2.

Bullis, Emory G., Fulton, N. Y. Automobile door. 1,808,129; June 2.

Bungeroth, Rudolf, Dusseldorf, Germany. Tube expander. 1,808,631; June 2.

Burda, John L. (See Palmer, R. C., Burda, and Oliver.)

Burden, Harry C., assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Suction roll shell drilling. 1,808,493; June 2.

Burdick Corporation, The. (See Anderson, Fritz A., assignor.)

Burgess, Joseph E., New York, assignor to The United States Printing and Lithographing Company, Brooklyn, N. Y. Display device. 1,808,099; June 2.

Burgess, Samuel P., assignor to Rock Island-Register Company, Rock Island, Ill. Universal shoe or receiving box for furnace work. 1,808,450; June 2.

Burke Stoker & Mfg. Co. (See Ritter, Emil W., assignor.)

Burkert, Daniel G. (See King, T., and Burkert.)
Burnish, Howard J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Electric arc welding. 1,807,961; June 2.
Burns, James E., assignor to The A. J. Donahue Corporation, Milford, Conn. Headdress-retaining device. 1,808,156; June 2.
Burstein, Max, and A. G. Buckenham, New York, N. Y. Tandem check for gates. 1,808,341; June 2.
Burton, Alexander M., Lincoln Place, Pa. Trouser presser. 1,808,523; June 2.
Bushee, Joseph F., Jersey City, N. J. Smoking pipe. 1,808,632; June 2.
Byrnes, Irving F., Schenectady, N. Y., assignor to General Electric Company. Electrical apparatus. 1,808,524; June 2.
Cadden, Charles C., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Strip feeding apparatus. 1,808,525; June 2.
Cahn, Tillman, Elkins Park, Pa., assignor to Pioneer Suspender Company. Garter. Des. 84,275; June 2.
Cain, William E. (See Gotthardt, H. R., and Cain.)
Calverley, John R., Preston, and W. E. Highfield, assignors to The English Electric Company, Limited, London, England. Electric converting apparatus. 1,808,399; June 2.
Campbell, Leggett C., assignor to Newark Wire Cloth Company, Newark, N. J. Wire cloth selvage. 1,808,526; June 2.
Canadian Electro Products Company. (See Reid, H. S., and Maude, assignors.)
Capell, Carl F., Santa Monica, assignor of one-fourth to H. C. Brown, Los Angeles, Calif. Lamp holder. 1,808,400; June 2.
Capps, Frank L., Milford, Conn., and H. A. Summers, Brooklyn, N. Y., assignors to Columbia Phonograph Company, Inc., Bridgeport, Conn. Pickup. Re18,089; June 2.
Carbonaro, Mario, Paris, France. Liquid meter. 1,808,734; June 2.
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carlon, John, assignor of one-half to J. E. Mekota, Crete, Nebr. Golf bag prop. 1,808,724; June 2.
Carlson, Johan A., assignor to L. F. Pratt, Ashland, Mass. Printing machine. 1,808,451; June 2.
Carlston, Peter C., Salt Lake City, Utah. Automatic shut-off device. 1,807,586; June 2.
Carney, Samuel C., Tulsa, R. E. Baker, Drumright, and F. C. Cutting, Tulsa, Okla., assignors to Shell Petroleum Corporation. Refrigerating process. 1,808,494; June 2.
Carpenter, Warren W., Queens Village, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Automatic telephone exchange system. 1,808,527; June 2.
Carroll, John, assignor to The Reeves Manufacturing Company, Dover, Ohio. Frame for coating pails and the like. 1,808,157; June 2.
Carry, William J. (See Hurley, R. T., and Carry.)
Carver, Cotton Gin Company. (See McLean, Robert W., assignor.)
Carver, Edmund C., Burgess Hill, England. Ground anchor and like anchoring device. 1,808,633; June 2.
Casler, Herman, Canastota, and C. P. Grimes, Syracuse, N. Y. Vehicle wheel gauge. 1,808,287; June 2.
Cassiere, Alphonse T., Long Beach, Calif. Marine cage. 1,807,962; June 2.
Casto, Lloyd V. (See Lang, G. E., and Casto.)
Casto, Lloyd V., Detroit, Mich., and G. von Webern, Dayton, Ohio, assignors to Oxford Varnish Corporation, Detroit, Mich. Graining machine. 1,807,963; June 2.
Casto, Lloyd V., and G. E. Lang, assignors to Oxford Varnish Corporation, Detroit, Mich. Surface decorating machine, apparatus, and method. 1,807,894; June 2.
Cattaneo, Giustino, Milan, Italy. Lubricant purifier for connecting rod bearings. 1,807,830; June 2.
Caughey, Reed J., Schenectady, N. Y., assignor to General Electric Company. Elastic fluid turbine. 1,808,528; June 2.
Celanese Corporation of America. (See Briggs, J. F., Palmer, and Kidd, assignors.)
Celanese Corporation of America. (See Palmer, C. W., and Fulton, assignors.)
Celanese Corporation of America. (See Ryley, C. F., and Awcock, assignors.)
Celotex Company, The. (See Munroe, Treadway B., assignor.)
Chaumeau, Jules, Paris, France. Shock-absorber. 1,808,130; June 2.
Chameleon Fountain Pen Corp. (See Bassi, Adolph, assignor.)
Chandler and Price Company, The. (See Tyler, R. S., McGeorge, and Reichart, assignors.)
Chapman, Frank D., Berlin, Wis. Valve for cookers. 1,808,017; June 2.
Chapman, William H., Montclair, and P. H. Hutchinson, East Orange, N. J., assignors to General Motors Corporation, Detroit, Mich. Work holder. 1,808,288; June 2.
Charles, Henry E., Paterson, assignor to The Okonite Company, Passaic, N. J. Lagging for reels. 1,808,018; June 2.
Chase, Theron P., assignor to General Motors Research Corporation, Detroit, Mich. Brake centralizer. 1,808,206; June 2.
Checker Cab Manufacturing Corporation. (See Brownell, James L., assignor.)
Cheffer, Walter J., Chicago, Ill. Spinning top. 1,807,964; June 2.
Cheney, Moses E., La Crosse, Wis., assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y. Thermometer bulb. 1,808,634; June 2.
Cherry, Manley J., and C. A. Barth, Cottage Grove, Oreg. Automatic latching device. 1,808,635; June 2.
Cheshire, Edward, St. Petersburg, Fla. Attachment for cutting machines. 1,807,895; June 2.
Cheshire, Edward, St. Petersburg, Fla. Vise. 1,807,896; June 2.
Chesney, Guy F., Spartanburg, S. C. Cord fastener. 1,808,636; June 2.
Chestenick, Fred, et al. (See Vargo, Michael, assignor.)
Chicago Cardboard Company. (See Ziemmerman, Henry, assignor.)
Chicago Pneumatic Tool Company. (See Davenport, Ransom W., assignor.)
Chicago Spring Hinge Company. (See Keene, William J., assignor.)
Chilton, Roland, assignor, by mesne assignments, to Aeromarine Plane & Motor Company, Inc., Keyport, N. J. Airplane control. 1,808,342; June 2.
Chocolat Tobler Holding Co., Aktiengesellschaft. (See Schäffer, Werner, assignor.)
Christiansen, Christian, assignor to Rotary Machine Company, Lynn, Mass. Folding machine. 1,808,158; June 2.
Chrysler Corporation. (See Lee, Roger K., assignor.)
Chryst, William A. (See Elsey, G. W., and Chryst.)
Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,807,620; June 2.
Chryst, William A., assignor to Delco-Remy Corporation, Dayton, Ohio. Engine starting apparatus. 1,807,772; June 2.
Chryst, William A., and H. C. Walters, Dayton, Ohio, assignors to Delco-Remy Corporation, Anderson, Ind. Ignition timer and fuel pump unit. 1,807,650; June 2.
Cicali, Giovanni, Bologna, Italy. Obtaining substantially pure hydrogen. 1,807,897; June 2.
Ciriacono, Giacomo. (See De Simone, L., and Ciriacono.)
City Machine & Tool Company, The. (See Ireland, George E., assignor.)
Claassen, D. (See Freerksen, John J., assignor.)
Clapp, Albert L., Danvers, assignor to Beckwith Manufacturing Company, Boston, Mass. Shoe stiffener and process of manufacture. 1,807,621; June 2.
Clark, Edgar R., Pittsburgh, Pa., assignor to Milton S. Erlanger, New York, N. Y. Manufacture of flax fiber. 1,808,593; June 2.
Clark, Everett E. (See Balser, L. W., and Clark.)
Clark, Frank, Dolliver, Iowa. Sifter. 1,807,687; June 2.
Clasen, Claus J. W., Davenport, assignor to The Bettendorf Company, Bettendorf, Iowa. Railway truck. 1,808,289; June 2.
Clausing, Louis F., Burlingame, assignor to Royal Metal Works, San Francisco, Calif. Machine for bending corrugations in metal. 1,808,019; June 2.
Claussen, Wells H., assignor to Apple Vender Co., Seattle, Wash. Casing for fruit vending machine. Des. 84,276; June 2.
Clements, Ellert A., Grand Rapids, Mich. Process of and pattern for making underwear. 1,808,290; June 2.
Cleveland Graphite Bronze Company. (See Palm, J. V. O., and Knuth, assignors.)
Cloughley, John J., Oklahoma City, Okla. Tire cover. 1,808,291; June 2.
Cochran, H. E., et al. (See Hulack, E., and Nissrod, assignors.)
Cochran, Rae E. (See Hyatt, R. D., and Cochran.)
Cochran, Rae E., assignor to The D. L. Auld Company, Columbus, Ohio. Hub cap. 1,807,965; June 2.
Colberg, George A., J. D. Harrison, and J. Winterberger, Yale, Mich. Radiator cement. 1,808,637; June 2.
Cole, Raymond A. (See Cook, J., Spence, and Cole.)
Coleman, Roy E., and F. J. Groten, Meriden, assignors, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn. Moldable material and process. 1,808,529; June 2.
Collard, Georges A. L. R., Vienne (Isere), assignor to Comptoir Lyon-Alemand, Paris, France. Separating platinum from the other precious metals. 1,808,594; June 2.
Collinet, John J., assignor to Drying Systems, Inc., Chicago, Ill. Toggle clamp. 1,808,020; June 2.
Collins Supply and Equipment Company. (See Munson, Willard T., assignor.)
Colstad, Charles N., Attleboro, Mass. Motor boat drive. 1,807,622; June 2.
Columbia Phonograph Company. (See Capps, F. L., and Summers, assignors.)
Columbus Auto Brass Company, The. (See Donley, Harold B., assignor.)
Columbus Auto Brass Company, The. (See Frame, Augustus J., assignor.
Columbus Dental Manufacturing Company, The. (See Evans, David E., assignor.)

Campagnie d'Applications Mecaniques. (See Rouanet, Louis, assignor.)
Compagnie pour la Fabrication des Compteurs et Materiel d'Usines a Gaz. (See Loubet, Henri R., assignor.)
Comptoir Lyon-Alemand. (See Collard, Georges A. L. R., assignor.)
Comstock & Wescott, Inc. (See Troland, Leonard T., assignor.)
Cone, Oscar E., Taft, Calif. Fish tail bit. 1,808,159; June 2.
Consolidated Ashcroft Hancock Company. (See Hopkins, Frank H., assignor.)
Continental Stove Corporation. (See Reeves, Herbert M., assignor.)
Converse Rubber Company. (See Paterson, Morton L., assignor.)
Conway, Baron von Girsewald, and H. Weidmann, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y. Conversion of ferro-phosphorous into ferric phosphate ($FePO_4$) by roasting in air or other gases containing oxygen. 1,807,767; June 2.
Conway, Baron von Girsewald, H. Weidmann, and G. Roesner, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y. Production of alkali phosphates from compounds of metal and phosphorus. 1,807,766; June 2.
Cook, John, Syracuse, N. Y., J. C. Spence, and R. A. Cole, assignors to Norton Company, Worcester, Mass. Grinding machine. 1,808,401; June 2.
Cook, Lyman, assignor to The Foxboro Company, Foxboro, Mass. Gauge. 1,808,207; June 2.
Cooke, Norman. (See Warren, T. R., and Cooke.)
Cooley, Herbert E., West Bend, Wis. Cheese container. 1,808,530; June 2.
Cooper, Seleana L., Charlottesville, Va. Fern stand. 1,808,402; June 2.
Cope, Frank T., assignor to The Electric Furnace Company, Salem, Ohio. Quenching tank. 1,808,160; June 2.
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Sharp freezing container for ice cream cabinets. 1,807,587; June 2.
Coppersmith, Daniel S., Brooklyn, N. Y. Marker for plants or flowers. 1,808,292; June 2.
Coppock, Charles, Gold Hill, Oreg. Rake attachment for hoes. 1,808,293; June 2.
Corcoran, Daniel A., Ardmore, Okla., assignor to Visible Oil Merchandising Co., Inc., Dallas, Tex. Visible liquid display device. 1,807,966; June 2.
Cordey, Roger F. (See Seddon, W., and Cordey.)
Cote Brothers Fuse Manufacturing Corporation. (See Cote, Thomas F., assignor.)
Cote, Thomas F., assignor to Cote Brothers Fuse Manufacturing Corporation, Clinton, Iowa. Fuse. 1,807,967; June 2.
Coupard, Christian, assignor to Societe Anonyme "l'Aspiration Scientifique", Paris, France. Secondary fluid current production apparatus. 1,808,638; June 2.
Cousins, George T., New Rochelle, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Holding device. 1,808,452; June 2.
Coyle, Augusta W., London, Ontario, Canada, assignor to Leon Benoit, Chicago, Ill. Egg case filler. 1,808,531; June 2.
Craig, Ellsworth. (See Pfeifer, Ferdinand A., assignor.)
Crane, Ernest E. (See Lerner, Earl A., assignor.)
Crane, Frank G., and J. M. Ward, Detroit, Mich. Apparatus and method of marbling paper. 1,808,021; June 2.
Crane, Raymond E., Kittanning, Pa. Sanitary fixture. 1,808,294; June 2.
Crews, Clarence S. (See Maxam, Leonard L., assignor.)
Cripe, Earnest C., Goshen, Ind. Lightning rod coupler. 1,808,595; June 2.
Crocker, Thomas F., assignor to Reserve Holding Company, Chicago, Ill. Telephone system. 1,807,768; June 2.
Crompton & Knowles Loom Works. (See Balser, L. W., and Clark, assignors.)
Crompton & Knowles Loom Works. (See Bargolinski, Anthony D., assignor.)
Crompton & Knowles Loom Works. (See Brickman, Allen E., assignor.)
Crompton & Knowles Loom Works. (See Buffington, George A., assignor.)
Crompton & Knowles Loom Works. (See Foisy, V. A., and Lindegren, assignors.)
Crompton & Knowles Loom Works. (See Holmes, Elbridge R., assignor.)
Crompton & Knowles Loom Works. (See Lindegren, Carl J., assignor.)
Crompton & Knowles Loom Works. (See Mifflitt, Anthony F., assignor.)
Crompton & Knowles Loom Works. (See Payne, Oscar V., assignor.)
Crompton & Knowles Loom Works. (See Turner, Richard G., assignor.)
Crompton & Knowles Loom Works. (See Wattie, William M., assignor.)
Crumrine, Chester W., assignor to Electromatic Typewriters, Inc., Rochester, N. Y. Fractional line spacer for typewriters. 1,807,969; June 2.
Cupples Company. (See Fleischli, J. A., and Kountzman, assignors.)
Cutler-Hammer, Inc. (See Hunter, R. B. and Pauly, assignors.)
Cutting, Frank C. (See Carney, S. C., Baker, and Cutting.)
Cyclo Corporation. (See Honig, Frank, assignor.)
Daddysman, Alonzo F. (See Daddyman, William J. and A. F.)
Daddysman, William J. and A. F., Charleston, W. Va. Valve. 1,808,495; June 2.
Dahm, Leonard G., assignor to T. Buettner & Co. Inc., Chicago, Ill. Needle. 1,808,532; June 2.
Dainos, Anthony W., New Orleans, La. Greasing, lifting and rocking machine. 1,808,596; June 2.
Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Self-contained mechanical refrigerator. 1,807,831; June 2.
David, Bruce W., Cleveland Heights, assignor to The Moonbeam Manufacturing Company, Cleveland, Ohio. Signal viewing attachment for automobiles. 1,808,208; June 2.
Davidson, John M., Duluth, Minn. Wire clamp. 1,807,898; June 2.
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,807,899; June 2.
Davis and Gant Manufacturing Co., The. (See Davis, Harold G., assignor.)
Davis, Harold G., assignor to The Davis and Gant Manufacturing Co., Denver, Colo. Faucet. 1,807,970; June 2.
Davis, Herbert L. (See Glidden, A. A., Knowland, and Davis.)
Davis, Joseph R., Clarksburg, W. Va. Internal combustion engine. 1,807,832; June 2.
Dawson, Baylis M., Newton, Mass., assignor, by mesne assignments, to F. Ziegler, jr., New York, N. Y. Colloidal mill. 1,807,778; June 2.
Day, Ira W., assignor to Associated Manufacturers Corporation of America, Waterloo, Iowa. Electric welding including the employment of an air current. 1,807,971; June 2.
Dean, Walter C., assignor to Union Steel Products Company, Albion, Mich. Poultry coop or crate. 1,807,972; June 2.
Debus, Sander, Hastings, Nebr. Dough-proofing apparatus. 1,807,688; June 2.
Deere & Company. (See White, Charles H., assignor.)
De Florez, Luis, Pomfret, Conn., assignor to The Texas Company, New York, N. Y. Heating oils. 1,808,343; June 2.
De Francisco, Marshall, New York, N. Y. Screen for motion pictures and the like. 1,808,725; June 2.
De Koning, Athur E., Portland, Oreg. Combination sawing machine. 1,808,453; June 2.
Delco Products Corporation. (See Chryst, William A., assignor.)
Delco Products Corporation. (See Elsey, G. W., and Chryst, assignors.)
Delco-Remy Corporation. (See Chryst, William A., assignor.)
Delco-Remy Corporation. (See Chryst, W. A., and Walters, assignors.)
Delco-Remy Corporation. (See Hittle, Dalphin L., assignor.)
Delco-Remy Corporation. (See Phelps, Alva W., assignor.)
Delmon, Albert G., and V. M. Lastra, Tampa, Fla. Necktie fastener. 1,807,623; June 2.
Del-Prete, Joseph, assignor to Automobile Warning Signal Corporation, Chicago, Ill. Automatic warning signal. 1,808,022; June 2.
De Mattia, Peter, Passaic, N. J., assignor to National Rubber Machinery Company. Collapsible tire building form. 1,808,295; June 2.
Dempster, Burgess, Berkeley, Calif., and J. C. Koons, Evanston, Ill., assignors to The Magnavox Company, Oakland, Calif. Loud speaker. 1,808,297; June 2.
Denmire, Harold A., assignor to The General Tire & Rubber Company, Akron, Ohio. Process and apparatus for covering tire beads. 1,808,710; June 2.
Denmire, Harold A., assignor to The General Tire & Rubber Company, Akron, Ohio. Vulcanizing apparatus. 1,808,711; June 2.
Depue, Michael H., Homer, Ill. Control for airplanes. 1,808,344; June 2.
Deputy, Horace E., Detroit, Mich. Making composite pistons. 1,807,689; June 2.
Deremer, J. G., Research Corporation. (See De Remer, Jay G., asignor.)
De Remer, Jay G., Greenwich, Conn., assignor, by mesne assignments, to J. G. Deremer Research Corporation, Jersey City, N. J. Automatic refrigeration. 1,807,774; June 2.
Derry, Jasper, Medford, assignor to A. Terkelsen, Newton, Mass. Wrapping machine. 1,807,651; June 2.
De Simone, Luigi, and G. Ciriacono, New York, N. Y. Gas flow alarm switch. 1,808,100; June 2.
Detmore, Theodore W., Osceola, Nebr. Wheel scraper. 1,808,639; June 2.
Deutsche Gasglühlicht-Auer-Gesellschaft mit beschrankter Haftung. (See Pütter, Karl E., assignor.)
Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. (See Gorhan, Adolf, assignor.)

Devereaux, William C., Detroit, Mich. Door lock. 1,807,775; June 2.
Devereaux, William C., Detroit, Mich. Door latch. 1,807,776; June 2.
Devereaux, William C., Detroit, Mich. Door latch. 1,807,777; June 2.
Devereaux, William C., Detroit, Mich. Lock construction. 1,807,778; June 2.
De Witt, William J., Auburn, assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,807,973; June 2.
Diecks, Walter B. (See Hegan, C. P., and Diecks.)
Dienner, John A., assignor to Bendix Stromberg Carbureter Company, Chicago, Ill. Liquid level indicator. 1,808,023; June 2.
Dietrich, Ernst, Altenburg, Germany. Turret for multiple punching machines. 1,807,652; June 2.
Dildine, Charles H., et al. (See Vargok, Michael, assignor.)
Dillon, George W., Ware, Mass. Garment. 1,808,496; June 2.
Dina, Augusto, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y. Mechanical movement. 1,808,454; June 2.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Adjustable support for motion picture projection machines. 1,808,497; June 2.
Doane, Leroy C., and G. P. Norton, assignors to The Miller Company, Meriden, Conn. Floor lamp. 1,808,296; June 2.
Donahue, A. J. Corporation, The. (See Burns, James E., assignor.)
Donle, Harold P., Meriden, Conn., assignor, by mesne assignments, to Radio Inventions, Inc. Audio frequency coupling. 1,808,726; June 2.
Donley, Harold B., assignor to The Columbus Auto Brass Company, Columbus, Ohio. Liquid measure. 1,808,024; June 2.
Dougherty, Glenn O., Los Angeles, Calif. Fluid flow control fixture. 1,807,900; June 2.
Doughnut Machine Corporation. (See Bergner, John C., assignor.)
Doughnut Machine Corporation. (See Friedel, Jacob H., assignor.)
Douglas, John G., Leagrave Luton, assignor to George Kent, Limited, Luton, England. Variable velocity ratio mechanism. 1,808,131; June 2.
Dow Chemical Company, The. (See Hale, W. J., and Stoesser, assignors.)
Dow Chemical Company, The. (See Lord, Richard C., assignor.)
Dowling, Philip H., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,808,712; June 2.
Drägerwerk. (See Schroeder, Hans, W. C., assignor.)
Dresser, George H. (See Boenig, F., and Dresser.)
Drew, Clayton L., San Francisco, Calif. Developing, fixing and washing tank. 1,807,901; June 2.
Drew, Harold, Lansing, assignor to General Motors Corporation, Detroit, Mich. Overgear shift mechanism. 1,807,779; June 2.
Driggs, Louis L., jr., New Rochelle, and Henry B. Faber, New York, N. Y. Photographic flash light device. 1,808,640; June 2.
Droz, Jules W., jr., Salt Lake City, Utah. Door retainer. 1,808,641; June 2.
Drying Systems, Inc. (See Collinet, John J., assignor.)
"Dry-Kold" Refrigerator Co., The. (See Whitcher, William C., assignor.)
Dubilier Condenser Corporation. (See Fried, Joseph A., assignor.)
Dudley Research Corporation. (See Levy, Dudley D., assignor.)
Duering, George G., Fort Bliss, Tex. Airship. 1,808,132; June 2.
Duerler, G. A., Manufacturing Company. (See Gebhardt, William, assignor.)
Duffy, Charles H., Miami, Fla. Shield attachment for binoculars. 1,808,642; June 2.
Duncanson, Walter E., assignor to J. G. Wilson Corp., New York, N. Y. Venetian blind. 1,808,455; June 2.
Dunford, Ernest, assignor to Landis Machine Company, St. Louis, Mo. Shoe stapler. 1,808,025; June 2.
Dunford, Ernest, assignor to Landis Machine Company, St. Louis, Mo. Shoe stapler device. 1,808,026; June 2.
Dunn, Solomon. (See Brown, Frank T., assignor.)
Dünnebier, Max. (See Winkler, A., and Dünnebier.)
Du Pont Ammonia Corporation. (See Liljenroth, Frans G., assignor.)
Du Pont, Eleuthere P., Montchanin, Del. Automobile top. 1,808,298; June 2.
Du Pont Viscoloid Company. (See Sherts, James H., assignor.)
Dutchess Tool Company. (See Van Houten, Frank H., assignor.)
Duwe, Friedrich, Mainz-Kastel, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Nuremberg, Germany. Lifting machinery, especially for the ends of pivot bridges. 1,807,780; June 2.
Dwork, Joseph H., Newark, N. J. Mop wringer. 1,808,643; June 2.
Dwyer, Ion E. (See Dwyer, M. L. and I. E.)
Dwyer, Mary L. and I. E., St. Louis, Mo. Illuminated sign. 1,808,456; June 2.
E. A. Laboratories, Inc. (See Anfiero, John M., assignor.)
Eagle Pencil Company. (See Palme, Anton J., assignor.)
Earl, George G., New Orleans, La. Fluid metering system and apparatus. 1,808,209; June 2.
Earl, George G., New Orleans, La. Fluid metering mechanism. 1,808,210; June 2.
Earl, George G., New Orleans, La. Fluid meter. 1,808,211; June 2.
Earl, George G., New Orleans, La. Meter. 1,808,212; June 2.
Earnshaw, Joseph C., assignor to Moss Rose Manufacturing Company, Philadelphia, Pa. Textile fabric. Des. 84,277; June 2.
Eastman, Joseph P., Manitowoc, Wis. Hose clamp. 1,808,101; June 2.
Eaton Spring Corporation. (See Read, Balfour, assignor.)
Ebbesen, Alf C., assignor to Orange-Crush Company, Chicago, Ill. Jar. Des. 84,278; June 2.
Ebensburg Coal Company. (See Fleming, Robert M., assignor.)
Eby, Eugene D., Pittsfield, Mass., assignor to General Electric Company. Cable type condenser. 1,808,533; June 2.
Eckstein, Reuben, New York, N. Y. Electrical socket. 1,807,588; June 2.
Eclipse Machine Company. (See McGrath, William L., assignor.)
Eclipse Machine Company. (See Nowosielski, Edward B., assignor.)
Eclipse Machine Company. (See Whitney, Maurice P., assignor.)
Eddy, Harold C., Los Angeles, Calif., assignor to Petroleum Rectifying Company of California. Insulator. 1,807,781; June 2.
Eddy, Harold C., assignor to Petroleum Rectifying Company of California, Los Angeles, Calif. Filtration process of breaking emulsions. 1,807,833; June 2.
Edel, Walter L. (See Miller, E. B., and Edel.)
Edgar, Jacob F., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,808,028; June 2.
Edmunds, Amasa, Milwaukee, Wis. Container. 1,807,589; June 2.
Edwards, William K., Big Spring, Tex. Lock for rod couplings. 1,808,299; June 2.
Ehemann, Joseph J., and B. F. Singer, Lancaster, Pa. Safety device. 1,807,690; June 2.
Ehricks, Max, assignor to the Firm Rud. Sack, Leipzig-Plagwitz, Germany. Operator for agricultural cultivating implements. 1,807,731; June 2.
Eichenauer, Konrad, Neu-Rossen, near Merseburg, assignor to Rheinische Metallivaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Calculating machine for all species. 1,808,213; June 2.
Eklund, Axel A., Mount Vernon, Wash. Latching means for removable crank case covers. 1,808,403; June 2.
Electric Furnace Company, The. (See Cope, Frank T., assignor.)
Electrolux Servel Corporation. (See Munters, Carl G., assignor.)
Electromatic Typewriters, Inc. (See Crumrine, Chester W., assignor.)
Electro Metallurgical Company. (See Kinzel, Augustus B., assignor.)
Elevator Supplies Company. (See Bassett, Cyrus W., assignor.)
Elliott-Fisher Company. (See Foothorap, Harry A., assignor.)
Elliott-Fisher Company. (See Kupetz, Adolph G., assignor.)
Elsey, George W., and W. A. Chryst, assignors to Delco Products Corporation, Dayton, Ohio. Shock absorber. 1,807,653; June 2.
Elwell, George H., assignor to The Greist Manufacturing Company, New Haven, Conn. Electric switch. 1,808,534; June 2.
Ely, Alonzo B., and E. L. Harmon, Groton, assignors to L. C. Smith & Corona Typewriters Inc., Syracuse, N. Y. Typewriting machine. 1,807,590; June 2.
Emerson, Victor H., assignor to Remsen Corporation, New York, N. Y. Magnetic pick-up device. 1,807,654; June 2.
Emery, Roy, Brooklyn, N. Y. Selective mechanism. 1,808,597; June 2.
Emery, Roy, Brooklyn, N. Y. Selective mechanism. 1,808,598; June 2.
Emsco Derrick & Equipment Company. (See Goeser, Edwin W., assignor.)
Engle, Edgar W., Lake Forest, assignor to Fansteel Products Company, Inc., North Chicago, Ill. Electrolytic filter condenser. 1,808,498; June 2.
English Electric Company, The. (See Calverley, J. E., and Highfield, assignors.)
Engstrom, Birger, assignor to Forster Manufacturing Company, Pittsburgh, Pa. Toy cannon. 1,807,974; June 2.
Erby, Philip, assignor to Samuel Olson & Company, Inc., Chicago, Ill. Pneumatic tube carrier. 1,807,834; June 2.
Erickson, Willard E., assignor to Link-Belt Company, Chicago, Ill. External counterweight device for gondola car dumpers. 1,807,902; June 2.

Erikson, Gust E., Fairfield, assignor to The Bryant Electric Company, Bridgeport, Conn. Stopple. 1,808,644; June 2.
Eriksson, Fredrik L., Gefle, Sweden. Purse. 1,807,655; June 2.
Erlanger, Milton S. (See Clark, Edgar R., assignor.)
Error-No Inc. (See Harper, C. C., and Kitendaugh, assignors.)
Erwin, Lawrence B., Marblehead, Mass. Button fastener. 1,808,535; June 2.
Essex Engine & Machine Corporation. (See Hozack, James, assignor.)
Euclid Crane & Hoist Company, The. (See Armington, Arthur P., assignor.)
Euwer, Robert C., Wheeling, W. Va. Container cover. 1,808,345; June 2.
Evans Auto Loading Co., The. (See Tucker, Max D., assignor.)
Evans, David E., assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio. Dental casting post. 1,808,102; June 2.
Evans, Owen B., assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Making water gas. 1,808,214; June 2.
Eyres, Charles W., Le Mars, Iowa. Built-in grinder and ensilage cutting machine. 1,807,975; June 2.
Faber, Henry B. (See Driggs, L. L., jr., and Faber.)
Fabrizi, Ernani M., and G. Berti, assignors of one-third to V. Giuliano, Detroit, Mich. Carburetor. 1,807,732; June 2.
Faehrmann, Hermann, Brooklyn, N. Y., assignor to J. S. Mundy Hoisting Engine Company, Newark, N. J. Mechanically operated safety brake. 1,808,645; June 2.
Fahnestock, Adam B., Manhasset, assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y. Stoker mechanism. 1,808,300; June 2.
Fairbanks, Morse & Co. (See Mahana, Charles G., assignor.)
Fairbanks, Morse & Co. (See Whitesell, Frederick N., assignor.)
Fansteel Products Company. (See Engle, Edgar W., assignor.)
Fansteel Products Company. (See Stryker, Clinton E., assignor.)
Farmer, Frank T., Detroit, Mich., assignor of one-half to R. E. Farmer, New York, N. Y. Lawn mower. 1,808,646; June 2.
Farmer, Robert E. (See Farmer, Frank T., assignor.)
Farr, Henry V. (See Mallinckrodt, E., jr., Farr, and Hall.)
Fazekas, Fred G., Maywood, Ill. Supporting device. 1,808,647; June 2.
Federal Telegraph Company. (See Kolster, Frederick A., assignor.)
Fellows Gear Shaper Company, The. (See Miller, Edward W., assignor.)
Felten and Guilleaume Carlswerk Actien Gesellschaft. (See Haanen, C. A., and Meurer, assignors.)
Felten & Guilleaume Carlswerk Actien-Gesellschaft. (See Zapf, Georg, assignor.)
Ferguson, John E., and C. A. Nicolai, Bloomfield, N. J., assignors to Westinghouse Lamp Company. Automatic radiotron tube testing machine. 1,808,301; June 2.
Ferro Stamping Manufacturing Company, The. (See Lowe, Charles B., assignor.)
Finch, Willis E. (See Stimpson, W. F., and Finch.)
Finley, Dozier, Berkeley, assignor to The Paraffine Companies, Inc., San Francisco, Calif. Preserving underground piping. 1,807,903; June 2.
Finley, Dozier, Berkeley, assignor to The Paraffine Companies, Inc., San Francisco, Calif. Covering for staved pipes. 1,807,904; June 2.
Finn, Sidney J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Trimming machine. 1,807,835; June 2.
Finney, Charles E., et al. (See Stafford, John E., assignor.)
Finsen, Eyvind, assignor to Gleason Works, Rochester, N. Y. Chuck. 1,808,346; June 2.
Finsen, Eyvind, assignor to Gleason Works, Rochester, N. Y. Chuck. 1,808,347; June 2.
Firman, William W., Detroit, Mich. Potato harvester. 1,808,183; June 2.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Weatherproofing material. 1,807,836; June 2.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Waterproof expansion joint. 1,807,905; June 2.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Constructional material comprising rail filler functioning as an expansion joint. 1,808,302; June 2.
Fischer, Allan W., St. Petersburg, Fla. Storage battery terminal connecter. 1,808,648; June 2.
Fischer, Hans, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany. Plural color printing machine. 1,807,656; June 2.
Fischer, Herman, New York, N. Y. String musical instruments. 1,808,103; June 2.
Fischer, Johann, Berlin-Charlottenburg, assignor to the Firm Ade Fabrik Automatischer Schnellwaagen G. m. b. H., Berlin-Reinickendorf, Germany. Automatic inclination balance. 1,808,457; June 2.
Fisher, Wager, Bryn Mawr, Pa. Making molding sand. 1,808,161; June 2.
Fisk, Ira T., assignor to Stevens & Thompson Paper Company, North Hoosick, N. Y. Imprint device. 1,808,536; June 2.
Fisk Rubber Company, The. (See Lehman, Paul W., assignor.)
Fitzgibbons, Gerald A., St. Louis, Mo. Sodality pin. Des. 84,279; June 2.
Fleischli, John A., Clayton, and J. M. Kountzman, assignors to Cupples Company, St. Louis, Mo. Assembling nuts and bridge washers on valve stems. 1,807,591; June 2.
Fleming, Robert M., assignor to Ebensburg Coal Company, Colver, Pa. Mining machine. 1,808,649; June 2.
Flexible Truck Corporation. (See Selders, Irwin A., assignor.)
Flohr, Edwin, Brooklyn, N. Y. Alarm illuminator clock. 1,807,976; June 2.
Florang, Oscar E., Burlington, Iowa. Wire handle for containers. 1,808,650; June 2.
Flynn, John B., assignor to Ternstadt Manufacturing Company, Detroit, Mich. Door kick-out device. 1,808,458; June 2.
Foisy, Victor A., Worcester, Mass., and C. J. Lindegren, Providence, R. I., assignors to Crompton & Knowles Loom Works, Worcester, Mass. Let-off for looms. 1,807,733; June 2.
Foothorap, Harry A., Harrisburg, Pa., assignor to Elliott-Fisher Company. Combined recording and computing machine. 1,807,906; June 2.
Forster Manufacturing Company. (See Engstrom, Birger, assignor.)
Fortune, James C., New York, N. Y. Well drilling apparatus. 1,807,837; June 2.
Foshay, Arthur, and C. Lovelace, Aberdeen, Wash. Bridge grate. 1,807,907; June 2.
Fox, Arah C., Grand Rapids, Mich. Lubricator. 1,807,691; June 2.
Foxboro Company, The. (See Cook, Lyman, assignor.)
Fox Furnace Company, The. (See Suppes, Max M., assignor.)
Frame, Augustus J., assignor to Columbus Auto Brass Company, Columbus, Ohio. Automobile head lamp visor. Des. 84,280; June 2.
Frame, Augustus J., assignor to The Columbus Auto Brass Company, Columbus, Ohio. Liquid measure. 1,808,029; June 2.
Francis Keil & Son, Inc. (See Hansen, Herman, assignor.)
Frank, David S., Chicago, Ill. Fuel burner. 1,807,977; June 2.
Frankel, Nathan. (See Brooke, William, assignor.)
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frantz, Samuel G., Princeton, N. J. Mining cartridge. 1,808,162; June 2.
Franzkowiak, Nicholaus W., Schaller, Iowa. Corn picker attachment for tractors. 1,808,030; June 2.
Frauenberger, Carl F., Franklin, Mass., assignor to Thomson National Press Co. Inc. Throw-off mechanism for presses. 1,808,499; June 2.
Frazier, Orville Z., assignor of one-half to R. J. St. Louis, River Rouge, Mich. Carburetor. 1,808,537; June 2.
Freed, Rose, San Diego, Calif. Underwear. 1,807,908; June 2.
Freerksen, John J., Steamboat Rock, assignor of one-fourth to D. Claassen, Wellsburg, Iowa. Cushion tire. 1,808,404; June 2.
Frei, John, jr., Chicago, Ill. Wreath. Des. 84,281; June 2.
Frei, John, jr., Chicago, Ill. Wreath. Des. 84,282; June 2.
Freller, Abraham J., Glencoe, assignor to A. Stein & Company, Chicago, Ill. Display device. 1,808,303; June 2.
French, Louis O., Milwaukee, Wis. Two cycle engine. 1,807,838; June 2.
Fricke, Erich, Dortmund, assignor to Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Rail point. 1,807,734; June 2.
Fried, Joseph A., Flushing, assignor to Dubilier Condenser Corporation, New York, N. Y. Electrical condenser. 1,808,031; June 2.
Fried. Krupp Aktiengesellschaft. (See Punga, Franklin, assignor.)
Fried-Krupp Germaniawerft Aktiengesellschaft. (See Runkwitz, Arthur, assignor.)
Friedel, Jacob H., assignor to Doughnut Machine Corporation, New York, N. Y. Turnover for automatic cooking apparatus. 1,808,215; June 2.
Friedman, Joseph G., New York, N. Y. Safety box fastener. 1,808,216; June 2.
Frink, Wilbur G. (See Young, J. H., and Frink.)
Frisch, Francis A. (See Sönnichsen, F., Frisch, and Nicolaysen.)
Frontier Development Company, The. (See Manifold, Richard G., assignor.)
Fuchs, Frederick W., assignor to Turbine Sewer Machine Company, Milwaukee, Wis. Coupling member for conduit rods, pump rods, etc. 1,807,782; June 2.
Fulton, Stephen M. (See Palmer, C. W., and Fulton.)
Fulton Sylphon Company, The. (See Lyhne, William S., assignor.)
Gabriel, John C., New York, and F. A. Hubbard, Lynbrook, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission regulation. 1,808,538; June 2.

Galant, Alex, et al. (See Vargo, Michael, assignor.)
Galeazzi, Roberto, Muggiano, Spezia, Italy. Resistant submarine hull or the like. 1,808,599; June 2.
Galvin, Dennis C., Des Moines, Iowa. Disk sharpener. 1,807,978; June 2.
Gammell, Alexander. (See Hurd, Ephraim L., assignor.)
Gammell, Alexander, Chicago, Ill. Sorting and distributing machine. 1,808,406; June 2.
Gammeter, John R., Akron, Ohio. Pneumatic tire and manufacturing the same. 1,807,909; June 2.
Garbell, Max, assignor to Victor Adding Machine Company, Chicago, Ill. Cover closure. 1,807,910; June 2.
Garbell, Max, assignor to Victor Adding Machine Company, Chicago, Ill. Cover closure. 1,807,911; June 2.
Gargolinski, Anthony D., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Protector mechanism for looms. 1,807,735; June 2.
Garson, Thorvald N., New Brighton, N. Y. Tractor frame. 1,808,217; June 2.
Gartin, Elmer G., Claremont, N. H., assignor to Sullivan Machinery Company. Fluid pressure motor. 1,807,839; June 2.
Gasoline Products Company Inc. (See Widdell, Henry E., assignor.)
Gathmann, Emil, assignor to The Gathmann Engineering Company, Baltimore, Md. Ingot mold tops. Re18,084; June 2.
Gathmann Engineering Company, The. (See Gathmann, Emil, assignor.)
Gatzsche, Richard, Bad Blankenburg, Germany. Reversing mechanism. 1,808,348; June 2.
Gault, Perceval S., New York, N. Y. Textile fabric or similar article. Des. 84,283; June 2.
Gay, Frazer W., Newark, N. J. Steam generating system. 1,807,783; June 2.
Gebers, Friedrich, Vienna, Austria. Out of water propeller. 1,808,032; June 2.
Gebhardt, William, assignor to G. A. Duerler Manufacturing Company, San Antonio, Tex. Nut grading machine. 1,808,104; June 2.
Geffroy, Ralph N., Stockton, Calif. Earth working implement. 1,807,784; June 2.
General Aniline Works, Inc. (See Ballauf, F., Muth, and Schmelzer, assignors.)
General Aniline Works, Inc. (See Brunner, Arnold, assignor.)
General Aniline Works, Inc. (See Kalischer G., Scheyer, and Keller, assignors.)
General Aniline Works, Inc. (See Kunz, M. A., and Koeberle, assignors.)
General Aniline Works, Inc. (See Schmidt, M. P., and Neugebauer, assignors.)
General Bronze Corporation. (See Hurley, R. T., and Carry, assignors.)
General Bronze Corporation. (See Polachek, J., Jepsen, and Peremi, assignors.)
General Chemical Company. (See Swords, Michael D., assignor.)
General Electric Company. (See Amsden, Ralph D., assignor.)
General Electric Company. (See Brown, William W., assignor.)
General Electric Company. (See Byrnes, Irving F., assignor.)
General Electric Company. (See Caughey, Reed J., assignor.)
General Electric Company. (See Eby, Eugene D., assignor.)
General Electric Company. (See Gillette, R. T., and Webster, assignors.)
General Electric Company. (See Gittings, W. N., and Seeley, assignors.)
General Electric Company. (See Griffiths, L., and Morton, assignors.)
General Electric Company. (See Hardman, William H., assignor.)
General Electric Company. (See Heisler, Charles L., assignor.)
General Electric Company. (See Ishimaru, Eikichi, assignor.)
General Electric Company. (See Page, Harry S., assignor.)
General Electric Company. (See Powers, James H., assignor.)
General Electric Company. (See Reist, Henry G., assignor.)
General Electric Company. (See Treanor, Edward D., assignor.)
General Engineering Company. (See Booth, Lionel E., assignor.)
General Goods Corporation. (See Loesch, Hugo G., assignor.)
General Motors Corporation. (See Chapman, W. H., and Hutchinson, assignors.)
General Motors Corporation. (See Drew, Harold, assignor.)
General Motors Corporation. (See Harris, Mark B., assignor.)
General Motors Radio Corporation. (See Marvel, Orin E., assignor.)
General Motors Research Corporation. (See Chase, Theron P., assignor.)
General Tire & Rubber Company, The. (See Denmire, Harold A., assignor.)
George, Jerome R., and J. A. Buell, assignors to Morgan Construction Company, Worcester, Mass. Handling of hot metal stock preparatory to its reduction by rolling. 1,808,033; June 2.
Gerdien, Hans. (See Krell, O., and Gerdien.)
Gerstenberger, Bruno. (See Bauersfeld, W., and Gerstenberger.)
Gessner, Ernst, Worcester, Mass. Speed changing transmission mechanism. 1,808,539; June 2.
Geyer, Harvey D., assignor to Inland Manufacturing Company, Dayton, Ohio. Molded steering wheel. 1,807,657; June 2.
Gibb, Walter B., Chester, and F. B. Martin, Moores, assignors to The Viscose Company, Marcus Hook, Pa. Shipping container. 1,808,651; June 2.
Gibbons, Willis A. (See Hopkinson, E., and Gibbons.)
Gilbert, John J., Douglaston, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,808,540; June 2.
Gilchrist & Company. (See Graham, Walton C., assignor.)
Giles, Roy T., Pittsburgh, Pa. Concrete road lengthwise finishing machine. 1,808,719; June 2.
Gillette, Robert T., Schenectady, and E. S. Webster, Troy, N. Y., assignors to General Electric Company. Welding torch. 1,808,541; June 2.
Gillies, William R., assignor to Union Asbestos and Rubber Company, Chicago, Ill. Sheet insulation. 1,807,785; June 2.
Ginsburg, Henry, New York, N. Y. Threaded bushing for armored cable. 1,808,542; June 2.
Gird, John A., Cedar Lake, Litchfield, N. Y. Mixing device. 1,807,736; June 2.
Gittings, William N., Upper Darby, and H. T. Seeley, Yeadon, Pa., assignors to General Electric Company. Automatic switching system. 1,808,543; June 2.
Giuliano, Vincent. (See Fabrizi, E. M., and Berti, assignors.)
Gleason Works. (See Finsen, Eyvind, assignor.)
Glidden, Alfred A., and T. M. Knowland, Watertown, and H. L. Davis, Walpole, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del. Boot tree. 1,808,544; June 2.
Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)
Godsey, Frank W., jr., assignor of one-third to W. B. Hall. New Haven, Conn. Communication system. 1,807,658; June 2.
Goeser, Edwin W., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. One-piece rotary. 1,808,304; June 2.
Goffatt, William C. (See McLaughlin, Frank, assignor.)
Goldhammer, Leo, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Motion picture projector. 1,807,737; June 2.
Golinick, Paul A., and J. J. Toolan, assignors, by mesne assignments, to Selectograph Company, Chicago, Ill. Cutting mechanism for sheets. 1,807,840; June 2.
Goodman, Edwin E., New York, N. Y. Sleeve form for display purposes. 1,808,459; June 2.
Goodman Manufacturing Company. (See Sloane, William W., assignor.)
Goodman Manufacturing Company. (See Wood, Claude O., assignor.)
Goodrich, B. F., Company, The. (See Cadden, Charles C., assignor.)
Goodrich, B. F., Company. (See Mayne, Robert, assignor.)
Goodrich, B. F., Company, The. (See Semon, Waldo L., assignor.)
Goodrich, B. F., Company, The. (See Taylor, Joseph I., assignor.)
Gorhan, Adolf, Liesing, near Vienna, Austria, assignor, by mesne assignments, to the Firm of Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany. Concentrating volatile aliphatic acids. 1,808,600; June 2.
Gottfried, Charles, New York, N. Y. Automatic flow-controller. 1,808,163; June 2.
Gotthardt, Henry R., Louisville, Ky., and W. E. Cain, Jeffersonville, Ind., assignors to Logan Co., Inc., Louisville, Ky. Selective deflecting switch. 1,808,134; June 2.
Gotthardt, Henry R., Louisville, Ky., and W. E. Cain, Jeffersonville, Ind., assignors to Logan Co., Inc., Louisville, Ky. Automatic vertical elevator. 1,808,135; June 2.
Gottschalk, Paul, assignor to United Cigarette Machine Company Aktiengesellschaft, Dresden, Germany. Apparatus for turning cigarettes and similar rod-shaped articles right-side up when feeding same to packing machines. 1,807,738; June 2.
Gould Coupler Company, The. (See Barrows, Donald S., assignor.)
Gouverneur, Minor F. H., assignor to Locke Insulator Corporation, Baltimore, Md. Insulator cutter and treating insulators. 1,808,105; June 2.
Grace, Richard W., assignor to The Superior Switchboard & Devices Company, Canton, Ohio. Test clip. 1,808,545; June 2.
Graham, Walton C., Denver, Colo., assignor to Gilchrist & Company. Controlling the application of reagents to solutions. 1,808,546; June 2.
Grant, Harry C., jr., assignor to W. Kidde & Company, New York, N. Y. Detection of suspended matter in fluids. 1,807,659; June 2.

Grant, Richard F., et al. (See Wetherbee, Herbert E., assignor.)
Gray, Fred D., Herkimer, N. Y., assignor to Holed-Tite Packing Corporation. Packing for fragile articles. 1,808,136; June 2.
Green, Samuel G., Gray, Ga. Magazine. 1,808,106; June 2.
Greenawalt, William E., Denver, Colo. Copper extraction process. 1,808,547; June 2.
Gregarek, Otto, Philadelphia, Pa. Combined heel and arch support. 1,808,460; June 2.
Gregarek, Otto, Philadelphia, Pa. Combined insole and arch support. 1,808,461; June 2.
Gregory, Frank H., McAllen, Tex. Sack. 1,808,034; June 2.
Greist Manufacturing Company. (See Elwell, George H., assignor.)
Griffin, Clifford W., Lebanon, Tenn. Metal door and window support. 1,808,218; June 2.
Griffiths, Leonard, and C. J. Morton, Coventry, England, assignors to General Electric Company. Induction coil. 1,808,548; June 2.
Grimes, Charles P. (See Casler, H., and Grimes.)
Groetschel, Julius, Mannedorf, Switzerland. Spraying of webs of fabric and the like with different colors. 1,807,979; June 2.
Gross, Edward J., New Rochelle, N. Y. Finger ring or article of similar nature. Des. 84,284; June 2.
Gross, Edward J., New Rochelle, N. Y. Finger ring or article of similar nature. Des. 84,285; June 2.
Gross, Edward J., New Rochelle, N. Y. Finger ring or article of similar nature. Des. 84,286; June 2.
Groten, Frank J. (See Coleman, R. E., and Groten.)
Grotnes, Carl C., Chicago, Ill. Metal working machine. 1,807,980; June 2.
Gruber, William R., New York, N. Y. Portable electric arc lamp. 1,808,164; June 2.
Guenard, José L. M., Ponce, Porto Rico. Tennis racket. 1,808,035; June 2.
Gump, Lias H., New Martinsville, W. Va. Safety device. 1,808,652; June 2.
Gunn, John M., Cuthbert, Ga. Basket. 1,808,653; June 2.
Haanen, Carl A., Cologne-Mulheim, and H. Meurer, Cologne, assignors to Felten and Guilleaume Carlswerk Actien Gesellschaft, Cologne-Mulheim, Germany. Wrapping paper for the insulation of electric cables. 1,808,407; June 2.
Haas, Edward, Brooklyn, N. Y., assignor to Package Machinery Company, Springfield, Mass. Wrapping machine. 1,807,981; June 2.
Hagens, Walter G., near Yoakum, Tex. Poison or powder distributor. 1,808,654; June 2.
Hale, William J., and W. C. Stoesser, assignors to The Dow Chemical Company, Midland, Mich. Preparation of diphenylene oxide. 1,808,349; June 2.
Hall, Bicknell, Quincy, Mass. Latch. 1,808,219; June 2.
Hall, Lawrence P. (See Mallinckrodt, E., jr., Farr, and Hall.)
Hall, Wesley B. (See Godsey, Frank W., jr., assignor.)
Haller, Arnold. (See Kubler, J., and Haller.)
Hamilton Autographic Register Co., The. (See Roosevelt, Marcus S., assignor.)
Hammond Clock Company. (See Michl, Robert, assignor.)
Hanna, Howard M., et al. (See Wetherbee, Herbert E., assignor.)
Hansell, Clarence W., Rocky Point, N. Y., assignor to Radio Corporation of America. Keying. 1,808,220; June 2.
Hansen, Herman, New York, N. Y., assignor to Francis Keil & Con, Inc. Attachment for doors. 1,807,841; June 2.
Hanson, Clifford O., Tiffin, Ohio. Excavator apparatus. 1,808,408; June 2.
Hanson, Clifford O., Tiffin, Ohio. Excavating apparatus. 1,808,409; June 2.
Hanson, William, Trenton Junction, N. J. Incubator. 1,808,107; June 2.
Hansson, Soren, Butler, assignor to Standard Steel Car Corporation, Pittsburgh, Pa. Container. 1,807,912; June 2.
Hardman, William H., Schenectady, N. Y., assignor to General Electric Company. Brush for dynamo electric machines. 1,808,549; June 2.
Harmon, Edwin L. (See Ely, A. B., and Harmon.)
Harper, Clair C., Rochester, and E. F. Kitendaugh, Oneida, assignors to Error-No Inc., Rochester, N. Y. Copyholder. 1,807,982; June 2.
Harper, William D., Wellesley, Mass. Motor vehicle suspension. 1,807,592; June 2.
Harpman, Charles A., Youngstown, Ohio. Heat distributor for cook stoves. 1,808,550; June 2.
Harris, Charles E., Montpelier, Idaho. Automobile turntable and carrier. 1,808,655; June 2.
Harris, Frank W., Great Falls, Mont. Air brake bleeder valve. 1,807,842; June 2.
Harris, Mark B., Birmingham, assignor to General Motors Corporation, Detroit, Mich. Car heater. 1,808,165; June 2.
Harrison, John D. (See Colberg, G. A., Harrison, and Winterberger.)
Harrison, Joseph H., Gomersall, near Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me. Leather stretching machine. 1,807,660; June 2.
Hart, Frederick A., New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Computing machine. 1,807,593; June 2.
Hartford-Empire Company. (See Schroder, John E., assignor.)
Hartford-Empire Company. (See Wadman, Harold A., assignor.)
Hartley, Ralph V. L., South Orange, N. J., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Electrooptical system. 1,808,137; June 2.
Hartman, Anthony A., Niagara Falls, N. Y. Brush for scrubbing machines. 1,808,656; June 2.
Haverhill Shoe Novelty Company. (See Whitmore, Nathaniel M., assignor.)
Hawkins, Charles A. (See Henneuse, C. A., and Hawkins.)
Hawkins, Luty, Mount Vernon, Ill. Poultry feeder. 1,808,657; June 2.
Hawks, Joseph W., Piqua, Ohio. Composition of material for use in panary fermentation. 1,808,108; June 2.
Hayes, Carl I., Providence, R. I. Heat treatment. 1,808,721; June 2.
Hazel-Atlas Glass Co. (See Stenhouse, Thomas and D., assignors.)
Hazel-Atlas Glass Co. (See Williams, John J., assignor.)
Hedler, Georg, Arzberg, Germany. Plate or similar article. Des. 84,287; June 2.
Hegan, Chester P., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Air filter. 1,807,984; June 2.
Hegan, Chester P., and W. B. Diecks, assignors, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky. Air or gas purifier. 1,807,983; June 2.
Heghinian, Garabed G., Baltimore, Md. Molding press. 1,807,661; June 2.
Heintz & Kaufman, Ltd. (See Heintz, Ralph M., assignor.)
Heintz, Ralph M., Palo Alto, assignor to Heintz & Kaufman, Ltd., San Francisco, Calif. Current transformer. 1,807,985; June 2.
Heinze, John O., Detroit, Mich. Motor vehicle. 1,808,109; June 2.
Heise, George W., Bayside, and E. A. Schumacher, Brooklyn, N. Y., assignors to National Carbon Company, Inc. Dry cell and lining therefor. 1,808,410; June 2.
Heisler, Charles L., Schenectady, N. Y., assignor to General Electric Company. Film driving. 1,808,551; June 2.
Heistand, Charles K., Epworth, Mo. Combined coin holder and letter clamp. 1,808,601; June 2.
Heltzig, Frederick F., Fieldon, Ill. Circle divider. 1,808,110; June 2.
Helbling, Clarence W., Black River Falls, Wis. Ratchet wrench. 1,808,350; June 2.
Hele-Shaw, Henry S., assignor to Victaulic Company Limited, London, England. Pipe joint. 1,808,262; June 2.
Hemingray Glass Company. (See Zimmerman, Willard P., assignor.)
Hempel, Albert, Leipzig-Oetzsch, Germany. Manufacture of phenolates. 1,808,722; June 2.
Hendrickson, Victor, assignor to The Orford Soap Company, Inc., Manchester, Conn. Machine for forming composite can bodies. 1,807,843; June 2.
Henneuse, Clarence A., and C. A. Hawkins, Sacramento, Calif., assignors, by mesne assignments, to W. A. Riddell Company, Bucyrus, Ohio. Tractor. 1,808,735; June 2.
Heppes, Otto A. (See Kirschbraum, L., and Heppes.)
Hernke, Albert W., Cudahy, Wis. Dip up. 1,808,736; June 2.
Hescock, Ethan N., Westfield, assignor to Henry B. Newhall Corporation, Garwood, N. J. Cable reel. 1,807,786; June 2.
Hess, Raymond W. (See Moses, F. G., Hess, and Perkins.)
Hickey, John, assignor to The National Pipe Bending Company, New Haven, Conn. Water heater. 1,808,166; June 2.
Hicks, Raymond M., East Orange, N. J. Timing apparatus. 1,808,167; June 2.
Highfield, William E. (See Calverley, J. E., and Highfield.)
Highland Body Manufacturing Company, The. (See Morrison, James, assignor.)
Hild, Frederic W., Denver, Colo. Power transmission system. 1,808,222; June 2.
Hild, Frederic W., and G. T. Pollard, Denver, Colo., said Pollard assignor to said Hild. Drilling machine. 1,808,221; June 2.
Hill, Earl V., Chicago, Ill. Psychrometric device. 1,808,351; June 2.
Hill, N. N. Brass Company, The. (See Hill, Wyman N., assignor.)
Hill, Wyman N., assignor to The N. N. Hill Brass Company, East Hampton, Conn. Toy telephone. 1,808,036; June 2.
Hill, Wyman N., assignor to The N. N. Hill Brass Company, East Hampton, Conn. Toy telephone. 1,808,037; June 2.
Hillpot, William F., Frenchtown, N. J. Incubator egg tray loader. 1,808,552; June 2.

Hillpot, William F., Frenchtown, N. J. Incubator egg tray. 1,808,553; June 2.

Hinkston, Donald R., South Pasadena, Calif. Pipe plug. 1,808,411; June 2.

Hinsch, Walter H., assignor to Locomotive Firebox Company, Chicago, Ill. Locomotive boiler. 1,808,223; June 2.

Hittle, Dalphin L., assignor to Delco-Remy Corporation, Anderson, Ind. Ignition device. 1,807,624; June 2.

Hittle, Dalphin L., assignor to Delco-Remy Corporation, Anderson, Ind. Theft preventive device. 1,807,662; June 2.

Hjorth, Henrick J., Woburn, Mass. Valve wrench. 1,807,625; June 2.

Hodgdon, John W. S., Long Beach, Calif. Dirigible airplane. Des. 84,288; June 2.

Hodge, Ernest W., et al. (See Vargo, Michael, assignor.)

Hoe, R., & Co. (See Morris, Edward T., assignor.)

Hoe, R., & Co. (See White, Bruce C., assignor.)

Hoe, R., & Co. (See Zuckerman, Adolph M., assignor.)

Hoffstadt, Edwin G. and R. W., Jackson, Mich. Blotting device. 1,808,602; June 2.

Hoffstadt, Robert W. (See Hoffstadt, Edwin G. and R. W.)

Hofschneider, Frederic J., Rochester, N. Y. Display apparatus. 1,807,986; June 2.

Hogg, William J., and F. Neumann, assignors to The National Acme Company, Cleveland, Ohio. Collapsible tap. 1,808,138; June 2.

Holed-Tite Packing Corporation. (See Gray, Fred D., assignor.)

Holland Furnace Company. (See Kolla, John P., assignor.)

Holland Furnace Company. (See Murchie, James, assignor.)

Holland Furnace Company. (See Nystrom, Oscar P., assignor.)

Hollands Manufacturing Company. (See Jones, Louis W., assignor.)

Hollen, Henry J., Chicago, Ill. Photographic process. 1,808,352; June 2.

Hollowood, Mathew J., Rochester, N. Y. Hand truck. 1,807,913; June 2.

Holmes, Elbridge R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Protector mechanism for narrow ware looms. 1,807,739; June 2.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,808,224; June 2.

Holny, Michael, Chicago, Ill. Perforating machine. 1,808,500; June 2.

Honig, Frank, Oak Park, assignor to Cyclo Corporation, Chicago, Ill. Take-up method. 1,808,038; June 2.

Hood Rubber Company. (See Glidden, A. A., Knowland, and Davis, assignors.)

Hopkins, Arthur C., assignor to National-Standard Company, Niles, Mich. Lifting jack. 1,807,914; June 2.

Hopkins, Frank H., Arlington, Mass., assignor, by mesne assignments, to Consolidated Ashcroft Hancock Company, Inc., New York, N. Y. Nonvibrating relief valve. 1,807,594; June 2.

Hopkins, Marion B., Elizabeth, N. J., assignor to Standard Oil Development Company. Dehydrogenating hydrocarbons. 1,808,168; June 2.

Hopkinson, Ernest, New York, N. Y. Adhesive composition. 1,808,225; June 2.

Hopkinson, Ernest, New York, and W. A. Gibbons, Little Neck, Long Island, N. Y., assignors to Morgan & Wright, Detroit, Mich. Rubber tube. 1,808,226; June 2.

Horeth, Martin, Brooklyn, N. Y. Hub cap wrench. 1,808,462; June 2.

Horiguchi, Chuji, Higashinari-Ku, Osaka-Shi, assignor to Kabushiki Kaisha Azumi Daiyakuho, Nishi-Yodogana-Ku, Osaka-Shi, Japan. Machine for making paper-covered incense-cord. 1,808,111; June 2.

Horn, Erhard, Leipzig, Germany. Speed indicator with several measuring ranges. 1,808,112; June 2.

Horn, Guido, Weissensee, near Berlin, Germany. Round braiding machine. 1,808,463; June 2.

Hosier, John H., Roanoke, Va. Cigarette dispenser. 1,808,658; June 2.

Hosic, Alexander, Blackhawk, Wis. Door fastener. 1,808,227; June 2.

Houghton, E. F., and Company. (See Schmidt, John G., assignor.)

Howard, Arthur C., Northmead, New South Wales, Australia. Cane harvesting apparatus. 1,808,113; June 2.

Howe Folding Furniture, Inc. (See Howe, Harold, assignor.)

Howe, Harold, assignor to Howe Folding Furniture, Inc., New York, N. Y. Folding device for tables and the like. 1,808,305; June 2.

Howles, Fred, Broughton Park, Manchester, assignor to Royles Limited, Irlam, England. Delivering gases at measured rates. 1,808,412; June 2.

Hozack, James, Belleville, N. J., assignor to Essex Engine & Machine Corporation. Back-filling machine. 1,808,139; June 2.

Hubbard, Frank A. (See Gabriel, J. C., and Hubbard.)

Huber, Hans, Zurich, Switzerland. Counting mechanism for calculating machines and the like. 1,808,720; June 2.

Hübschmann, Max. (See Banersfeld, W., and Hübschmann.)

Huc, Marcel R., Toulouse, France. Moving picture recording and projection apparatus. 1,808,603; June 2.

Huffman, Charles E., Montclair, N. J., assignor to Westinghouse Lamp Company. Adapter. 1,807,844; June 2.

Huffman, William P. (See Rike, F. F., and Huffman.)

Hughes Tool Company. (See Scott, Floyd L., assignor.)

Huiskamp, Gerard L., Keokuk, Iowa. Aeroplane wing. 1,808,464; June 2.

Hulack, Eugene, and J. W. Nissrod, assignors of one-sixth to H. E. Cochran and one-sixth to G. L. Rutherford, Jacksonville, Fla. Attachment for electric drills. 1,808,228; June 2.

Hultgren, Charles R., assignor to S. Karpen & Bros., Chicago, Ill. Reversible seat or chair. 1,808,659; June 2.

Hunt, Andrew M., New York, N. Y., assignor to The Standard Stoker Company, Incorporated. Peripheral bearing. 1,807,845; June 2.

Hunter, Claud E., Peculiar, Mo. Vehicle headlamp adjusting apparatus. 1,808,039; June 2.

Hunter, Richard B., Milwaukee, Wis., and R. C. Pauly, Cincinnati, Ohio, assignors, by mesne assignments, to Cutler-Hammer, Inc. Circuit controlling device. 1,808,229; June 2.

Hurd, Ephraim L., Oklahoma City, Okla., assignor to A. Gammell, Chicago, Ill. Laundry checking and assembling apparatus. 1,808,405; June 2.

Hurley, Roy T., Dobbs Ferry, and W. J. Carry, Brooklyn, assignors to General Bronze Corporation, Long Island City, N. Y. Window frame. 1,808,413; June 2.

Hurley, Roy T., Dobbs Ferry, and W. J. Carry, Brooklyn, assignors to General Bronze Corporation, Long Island City, N. Y. Window construction. 1,808,414; June 2.

Hutchinson, Philip H. (See Chapman, W. H., and Hutchinson.)

Hyatt, Lawrence H., New York, N. Y. Air compressor. 1,808,554; June 2.

Hyatt, Raymond D., and R. E. Cochran, assignors to The D. L. Auld Company, Columbus, Ohio. Name plate. 1,808,040; June 2.

Hydraulic Brake Company. (See Loughead, Malcolm, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Klemenc, A., and Schoeller, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Luther, M., and Beller, assignors.)

Improved Fire Detector Corporation. (See Brady, George H., assignor.)

Ingersoll-Rand Company. (See Cousins, George T., assignor.)

Ingersoll-Rand Company. (See Jimerson, Francis A., assignor.)

Ingersoll-Rand Company. (See Slater, Fred M., assignor.)

Ingersoll-Rand Company. (See Smith, William A., jr., assignor.)

Ingersoll-Rand Company. (See Smith, William A., sr., and W. A., jr.)

Inland Manufacturing Company. (See Geyer, Harvey D., assignor.)

International Business Machines Corporation. (See Peirce, John R., assignor.)

International Paper Box Machine Company, The. (See Labombarde, Harold S., assignor.)

International Projector Corporation. (See Dina, Augusto, assignor.)

International Time Recording Company. (See Bryce, James W., assignor.)

Interstate Folding Box Company, The. (See Bergstein, Samuel, assignor.)

Intertype Corporation. (See Willis, Le Roy W., assignor.)

Iredell, Charles V., East Orange, N. J., assignor to Westinghouse Lamp Company. Pressure forming refractory article. 1,807,915; June 2.

Ireland, George E., assignor to The City Machine & Tool Company, Toledo, Ohio. Forming shells. 1,808,731; June 2.

Ishimaru, Eikichi, Tokyofu, Japan, assignor to General Electric Company. Electric switch. 1,808,555; June 2.

Jackson, William H., Douglaston, N. Y. Agitator. 1,808,353; June 2.

Jacobs Bros. Co., The. (See Walker, George, assignor.)

Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Heat transfer device. 1,808,169; June 2.

Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Slag screen. 1,808,230; June 2.

Javery, Armon J. (See Remington, A. L., and Javery.)

Jeavons, William R., Cleveland Heights, and M. J. Rentschler, Willoughby, Ohio. Treating clay. 1,208,231; June 2.

Jeffrey Manufacturing Company, The. (See Liggett, William K., assignor.)

Jeffrey Manufacturing Company, The. (See McPherson, John W., assignor.)

Jepsen, Julius A. (See Polachek, J., Jepsen, and Peremi.)

Jimerson, Francis A., Athens, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Fluid actuated percussive tool. 1,807,787; June 2.

Johanson, Georg K. V., assignor to Svenska Aktiebolaget Gasaccumulator, Lidingo, Sweden. Apparatus for automatically establishing a pulsating motion of air in two conduits. 1,807,692; June 2.

Johanson, Georg K. W., assignor to Svenska Aktiebolaget Gasaccumulator, Lidingo, Sweden. Apparatus for automatically establishing a pulsating motion of air in two conduits. 1,808,114; June 2.

Johnson, Andrew, jr., Roseau, Minn., and G. F. Worthington, sr., assignors to Vega Separator Corporation of America, Chicago, Ill. Shearing, punching and riveting machines. 1,808,041; June 2.

Johnson Automatic Sealer Co., Ltd. (See Sandberg, Oscar, assignor.)

Johnson, Charles A., Duluth, Minn. Sectional lawn step. Des. 84,289; June 2.

Johnson, James O., Kokomo, Ind. Socket wrench. 1,808,660; June 2.

Johnson, Joseph B. (See Pemberton, U. C., and Johnson.)

Johnson, William C., assignor to Machinery Development Company, Milwaukee, Wis. Setting out board. 1,808,306; June 2.

Jonas, Julius, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Transformer protection device. 1,807,846; June 2.

Jones, Louis W., New York, N. Y., assignor to Hollands Manufacturing Company, Erie, Pa. Pipe vise staud. 1,807,916; June 2.

Jones, Louis W., New York, N. Y., assignor to Hollands Manufacturing Company, Erie, Pa. Chain pipe vise. 1,807,917; June 2.

Jones, Thomas H., Woodthorpe, England. Knitting machine. 1,808,232; June 2.

Jones, William T., Newtonville, Mass., assignor, by mesne assignments, to Barnes & Jones, Inc. Valve. 1,808,550; June 2.

Jorski, Anthony. (See Parker, Warren H., assignor.)

Julià, José, Barcelona, Spain. Twisting machine. 1,808,415; June 2.

Kabushiki Kaisha Azumi Daiyakuho. (See Horiguchi, Chuji, assignor.)

Kalischer, Georg, and H. Scheyer, Frankfort-on-the-Main, and K. Keller, Mainkur, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Introducing an aldehydic group into cyclic compounds. 1,807,698; June 2.

Kalla, Franz, Lagiewniki, Gorny Slask, Szyb Carnall, Poland. Device for mining coal and the like. 1,808,307; June 2.

Kalle & Co. Aktiengesellschaft. (See Sprongerts, Eduard, assignor.)

Kamrath, Albert, St. Louis, Mo. Foot warmer. 1,808,233; June 2.

Kamrath, Herbert G., assignor to A C Spark Plug Company, Flint, Mich. Air cleaner. 1,808,170; June 2.

Karpen, S., & Bros. (See Hultgren, Charles R., assignor.)

Katz & Ogush, Inc. (See Ogush, Ben, assignor.)

Keasbey & Mattison Company. (See Brown, John H., assignor.)

Keene, William J., assignor to Chicago Spring Hinge Company, Chicago, Ill. Adjustable clamp flange for spring hinges and the like. 1,808,308; June 2.

Keller, Karl. (See Kalischer, G., Scheyer, and Keller.)

Kellogg, Homer G., assignor to Motor Products Corporation, Detroit, Mich. Metal working machine. 1,807,847; June 2.

Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)

Kemmann, Gustav, Berlin-Grunewald, Germany. Railway signaling system. 1,808,661; June 2.

Kemp, Paul, Vienna, Austria. Alloy of lead and antimony. 1,807,788; June 2.

Kennedy, Donald S., Andover, England. Traction belt attachment. 1,808,416; June 2.

Kennedy, George C., Waterloo, Iowa. Adjustable luggage carrier. 1,808,042; June 2.

Kenney Manufacturing Company. (See Smith, Walter E., assignor.)

Kensington Steel Company. (See McKee, Walter S., assignor.)

Kent, George, Limited. (See Douglas, John G., assignor.)

Keplinger, Charles W., receiver. (See Lewis, Joseph C., assignor.)

Kershaw, William E., Gwynodd Valley, Pa. Electric storage battery. 1,807,595; June 2.

Kestenman Bros. Mfg. Co. (See Kestenman, Charles H., assignor.)

Kestenman, Charles H., assignor to Kestenman Bros., Mfg. Co., Providence, R. I. Flexible strap, band or linkage. 1,808,140; June 2.

Kester, George I. (See Pieper, A. F., and Kester.)

Kenssler, Otto, and D. Peters, Darmstadt, Germany. Dehydrating alcohol. 1,808,271; June 2.

Kidd, John T. (See Briggs, J. F., Palmer, and Kidd.)

Kidde, Walter, & Company. (See Grant, Harry C., jr., assignor.)

King, C. G., & Co. (See King, Clifford G., assignor.)

King, C. G., & Co. (See Smith, Walter E., assignor.)

King, Clifford G., Barrington, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe ornament. Des. 84,290; June 2.

King, Peter J., Detroit, Mich. Spherical geographical globe. 1,808,354; June 2.

King, Thomson, Pottstown, and D. G. Burkert, Boyertown, assignors to The Peerless Heater Company, Boyertown, Pa. Gas boiler. 1,808,557; June 2.

Kinney, Fay D., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Cementing machine. 1,807,663; June 2.

Kinzel, Augustus B., Beechhurst, N. Y., assignor to Electro Metallurgical Company. Nitrification. 1,808,355; June 2.

Kirschbraun, Lester, Leonia, N. J., and O. A. Heppes, La Grange, Ill., assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Roofing shingle and making same. 1,807,918; June 2.

Kislyn Corporation. (See Berthon, Rodolphe, assignor.)

Kitendaugh, Eugene F. (See Harper, C. C., and Kitendaugh.)

Kleinewefers, Joh., Söhne. (See Kleinewefers, Johannes, assignor.)

Kleinewefers, Johannes, assignor to the Firm: Joh. Kleinewefers Söhne, Krefeld, Germany. Hydraulic leather, fabric, or paper rolling machine. 1,808,356; June 2.

Kleinman, Jacob L., New York, N. Y. Sliding and swinging window. 1,808,043; June 2.

Klemenc, Alfons, and R. Schoeller, Vienna, Austria, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of urea. 1,808,465; June 2.

Kline, Max, New York, N. Y. Atomizer. 1,808,662; June 2.

Knandel, George J., Newark, N. J., assignor to American Telephone and Telegraph Company. Telegraph system. 1,807,740; June 2.

Kneeland, Frank H., assignor to Safety Mining Company, Chicago, Ill. Charging mechanism for blasting cartridges. 1,807,987; June 2.

Kniss, Frank C., and R. N. Vickers, Smackover, Ark. Deep well pump. 1,807,741; June 2.

Knorr-Bremse Aktiengesellschaft. (See Kollinek, Kurt, assignor.)

Knowland, Thomas M. (See Glidden, A. A., Knowland, and Davis.)

Knuth, Edward C. (See Palm, J. V. O., and Knuth.)

Kny-Scheerer Corporation. (See Okun, Joseph H., assignor.)

Kock, Hans R. F., and K. A. R. Quitt, Lubeck, Germany. Boiler and evaporator. 1,808,663; June 2.

Koeberle, Karl. (See Kunz, M. A., and Koeberle.)

Kohn Mathias A., Milwaukee, Wis. Garbage incinerator. 1,808,234; June 2.

Kole, Lessing L., Milwaukee, Wis. Cover lifter for roasters. 1,808,357; June 2.

Kolla, John P., assignor to Holland Furnace Company, Holland, Mich. Smoke baffle for furnaces. 1,807,988; June 2.

Kollinek, Kurt, Karlshorst, Berlin, assignor to Knorr-Bremse Aktiengesellschaft, Lichtenberg, Berlin, Germany. Pressure medium brake and steering device for aircraft. 1,807,848; June 2.

Kolster, Frederick A., Palo Alto, assignor to Federal Telegraph Company, San Francisco, Calif. Radio compass. 1,807,919; June 2.

Kompa, Fred W., Astoria, N. Y. Toilet-paper holder. 1,808,044; June 2.

König, Georg, Berlin-Dahlem, Germany. Pencil sharpening device. 1,808,665; June 2.

Koonz, John C. (See Dempster, B., and Koonz.)

Koscherak Siphon Bottle Works. (See Waltz, Anton F., assignor.)

Koschka, Krank, Brooklyn, N. Y. Internal combustion engine. 1,808,064; June 2.

Kountzman, Joseph M. (See Fleischli, J. A., and Kountzman.)

Krause, Henry, New York, N. Y. Clip structure for fountain-pen caps, pencils and the like. 1,808,045; June 2.

Krebs, Carlos, Boston, Mass. Reproducing machine. 1,807,989; June 2.

Krell, Otto, Berlin-Dahlem, and H. Gerdien, Berlin-Grunewald, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electric arc lamp. 1,808,558; June 2.

Kroder Reubel Company, The. (See Bond, Lester W., assignor.)

Kubler, Johannes, and A. Haller, Baden, Switzerland. Electric system for voltage regulation. 1,808,559; June 2.

Kubon, Clifford W., Minneapolis, Minn. Butter cutter. 1,807,849; June 2.

Küchenmeister, Heinrich, Berlin, Germany. Film of magnetizable material for episcopic projection. 1,808,046; June 2.

Kuenstler, Richard, Washingtonville, N. Y. Change-making device. 1,807,789; June 2.

Kuenzli, Walter A., Evansville, Ind., assignor to Servel Inc., New York, N. Y. Refrigerant composition. 1,808,604; June 2.

Kuhn, Arthur, assignor to the firm Carl Still, Recklinghausen, Germany. Distillation and like column. 1,808,666; June 2.

Kulik, Irving, Brooklyn, N. Y. Dental plate suction cup attaching means. 1,807,850; June 2.

Kunz, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of nitrogenous vat dyestuffs. 1,807,694; June 2.

Kupetz, Adolph G., assignor, by mesne assignments, to Elliot-Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,807,626; June 2.

Kupfer, Theodore W., Rochester, N. Y. Key guard. 1,808,141; June 2.

Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Combined typewriting and card-perforating machine. 1,807,920; June 2.

Kwartin, Bernard, Brooklyn, N. Y. Method of and apparatus for recording and reproducing sound. Re18,090; June 2.

Labombarde, Harold S., assignor to The International Paper Box Machine Company, Nashua, N. H. Feeder for envelope machines. 1,808,142; June 2.

Laffey, William J. (See Moore, Ray K., assignor.)

Laird, William R., Sioux Falls, S. Dak., assignor to Allied Laboratories, Incorporated, Chicago, Ill. Pasteurizing apparatus. 1,807,742; June 2.

Landers, Bert A., Los Angeles, Calif. Display rack. 1,807,990; June 2.

Landis Machine Company. (See Adler, Jacob, assignor.)

Landis Machine Company. (See Dunford, Ernest, assignor.)

Lang, George E. (See Casto, L. V., and Lang.)

Lang, George E., and L. V. Casto, assignors to Oxford Varnish Corporation, Detroit, Mich. Transfer machine. 1,807,921; June 2.

Lang, George E., and L. V. Casto, assignors to Oxford Varnish Corporation, Detroit, Mich. Graining machine. 1,807,991; June 2.

Lang, George E., and L. V. Casto, assignors to Oxford Varnish Corporation, Detroit, Mich. Graining machine. 1,807,992; June 2.

Lang, Niels, Lakewood, Ohio. Holder for reflectors. 1,808,501; June 2.

Lang, Sigismund, St. Paul, Minn. Mail box switch. 1,808,235; June 2.

Langan, Violet I. M., Brisbane, Australia. Cothes peg usable for other purposes. 1,808,417; June 2.

Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Reforming bars. 1,808,466; June 2.

Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Dies for making bars. 1,808,467; June 2.

Langford, George, assignor to McKenna Process Company of Illinois, Joliet, Ill. Making rail joint bars. 1,808,468; June 2.

Larner, Chester W. (See Sanford, Sydney J., assignor.)

Larter, Halsey M., assignor to Larter & Sons, Newark, N. J. Multilead mechanical pencil. 1,808,171; June 2.

Larter & Sons. (See Larter, Halsey M., assignor.)

La Sala, Michael R., and F. Simone, New York, N. Y. Toy pistol. 1,807,922; June 2.

Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Carriage return for punching machines. 1,807,627; June 2.

Lastra, Venancio M. (See Delmon, A. G., and Lastra.)

Leach, Clinton W., Minneapolis, and G. M. Bogie, Glenwood, Minn., assignors of one-third to G. C. Leach, River Falls, Wis. Vehicle jack and support mechanism. 1,808,171; June 2.

Leach, George C. (See Leach, C. W., and Bogie, assignors.)

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Chassis construction. 1,808,502; June 2.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Pressed metal vehicle body. 1,808,560; June 2.

Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Pressed metal vehicle body. 1,808,561; June 2.

Lee, Amund C., Viroqua, Wis. Weed exterminator. 1,807,695; June 2.

Lee, Henry D., assignor to The Ashby Furniture Company, Incorporated, Berkeley, Calif. Chair. Des. 84,291; June 2.

Lee, Henry D., assignor to The Ashby Furniture Company, Incorporated, Berkeley, Calif. Sofa. Des. 84,292; June 2.

Lee, John A., Memphis, Tenn., assignor to E. L. Bruce Company, Wood block. 1,808,667; June 2.

Lee, Roger K., assignor to Chrysler Corporation, Detroit, Mich. Buffer. 1,808,418; June 2.

Leeds & Northrup Company. (See Behr, Leo, assignor.)

Lehman, Paul W., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Apparatus for removing trimmed waste from rubber tubes. 1,807,664; June 2.

Leipert, August H., College Point, assignor to The Rubber Shock Insulating Corporation, New York, N. Y. Yielding cone disk. 1,808,358; June 2.

Lemaignen, Robert. (See Villon, R., and Lemaignen.)

Leo, Albert, Chicago, Ill. Jelly preparation. Re18,085; June 2.

Leotard, Paul M. E., Paris, France. Steam ejector of vacuum brakes. 1,808,668; June 2.

Lerner, Earl A., assignor to himself and E. E. Crane, Chicago, Ill. Sprocket chain. 1,808,236; June 2.

Lesicko, Joseph, Livingston, Ill., assignor to Sullivan Machinery Company. Forging machine. 1,807,696; June 2.

Leslie, Eugene H., and E. M. Baker, Ann Arbor, Mich. Vaporizer and process of vaporization. 1,808,419; June 2.

Leslie, Eugene H., and E. M. Baker, Ann Arbor, Mich. Process of and apparatus for separating desired liquefiable constituents from a gaseous mixture. 1,808,420; June 2.

Levy, Dudley D., assignor to Dudley Research Corporation, New York, N. Y. Vacuum tank. 1,808,143; June 2.

Lewis, Joseph C., assignor to C. W. Keplinger, receiver of the American Electric Switch Corporation, Minerva, Ohio. Entrance switch and service box. 1,808,173; June 2.

Lewis, William E., West Mystic, Conn. Nautical instrument. 1,808,359; June 2.

Libbey-Owens-Ford Glass Company. (See Reece, J. A., and Nobbe, assignors.)

Liberman, Alexander I., Paris, France. Photographic camera. 1,808,669; June 2.

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Portable conveyor. 1,808,237; June 2.

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Loading machine. 1,808,421; June 2.

Liljenroth, Frans G., Stocksund, Sweden, assignor, by mesne assignments, to Du Pont Ammonia Corporation, Wilmington, Del. Producing hydrogen and phopsphoric acid. 1,807,790; June 2.

Lillie, Raymond W. (See Littleton, J. R., jr., and Lillie.)

Lindegren, Carl J. (See Foisy, V. A., and Lindegren.)

Lindegren, Carl J., Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Picker spindle mounting for loom. 1,807,743; June 2.

Lindsay, Hamilton, Shaker Heights, assignor to The Lindsay Wire Weaving Company, Cleveland, Ohio. Making a seam for woven wire belts. 1,807,628; June 2.

Lindsay, James D., assignor to Standard Oil Company, Whiting, Ind. Polish. 1,808,360; June 2.

Lindsay Wire Weaving Company, The. (See Lindsay, Hamilton, assignor.)

Link-Belt Company. (See Erickson, Willard E., assignor.)

Linoleum Manufacturing Company. (See McKissock, Alexander C., assignor.)

Lipson, Edward. (See Billotte, L. C., and Lipson.)

Liquid Carbonic Corporation, The. (See Minor, Henry R., assignor.)

Little, Arthur D., Inc. (See Omansky, Morris, assignor.)

Littleton, Jesse T., jr., Corning, and R. W. Lillie, New Rochelle, N. Y. Making bearings. 1,808,047; June 2.

Livers, Arthur A. (See Miller, C., and Livers.)

Loch, Herman O., J. R. Miller, Washington, D. C., and E. A. Tibbals, Bethesda, Md. Storage battery connecter. 1,808,361; June 2.

Locke Insulator Corporation. (See Gouverneur, Minor F. H., assignor.)

Locke, Karl, and H. Sachs, Leipzig-Wahren, Germany. Diaphragm for sound reproduction. 1,808,238; June 2.

Locomotive Firebox Company. (See Hinsch, Walter H., assignor.)

Loesch, Hugo G., Rochester, assignor, by mesne assignments, to General Foods Corporation, New York, N. Y. Producing citrus fruit products. 1,808,737; June 2.

Logan Co. (See Gotthardt, H. R., and Cain, assignors.)

Logan, George A., New York, N. Y. Combination tool. 1,808,239; June 2.

Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des 84,293; June 2.

Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 84,294; June 2.

Lord, Richard C., Gambier, Ohio, assignor to The Dow Chemical Company, Midland, Mich. Making magnesium chloride and other magnesium salts of high purity. 1,808,362; June 2.

Lothrop, Marcut T., assignor to The Timken Roller Bearing Company, Canton, Ohio. Roller bearing removing process. 1,808,469; June 2.

Loubet, Henri R., Paris, France, assignor to Compagnie pour la Fabrication des Compteurs et Materiel d'Usines a Gaz, Montrouge, France. Transformer. 1,808,670; June 2.

Loughead, Malcolm, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif. Hydraulic brake. 1,807,851; June 2.

Loughridge, Matthew H., Bogota, N. J. Speed control system and apparatus. 1,807,596; June 2.

Lovelace, Cleo. (See Foshay, A., and Lovelace.)

Lowe, Charles B., assignor to The Ferro Stamping Manufacturing Company, Detroit, Mich. Automobile door handle. 1,808,048; June 2.

Lowenstein, Gothard, Brooklyn, N. Y. Traveling turntable equipment for garages. 1,807,597; June 2.

Lundahl, Frederick A., deceased, Rock Island; M. Lundahl, executrix, assignor to Buddy "L" Mfg. Co., East Moline, Ill. Vehicle toy. 1,808,309; June 2.

Lundahl, Frederick A., deceased, M. Lundahl, executrix, assignor to Buddy "L" Mfg. Co., East Moline, Ill. Vehicle toy. 1,808,310; June 2.

Lundahl, Marie, executrix. (See Lundahl, Frederick A.)

Lungstras, Paul, St. Louis, Mo. Measuring and tagging device. 1,808,144; June 2.

Lütgert, Eduard, Sheboygan, Wis., assignor, by mesne assignments, to Air Reduction Sales Company, New York, N. Y. Soldering iron or the like. 1,808,562; June 2.

Luther, Martin, Mannheim, and H. Beller, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of preparations for oiling fibrous materials. 1,808,363; June 2.

Luyckx, Charles, Louvain, Belgium. Rotary distribution valve. 1,808,671; June 2.

Lyden, Ernest S., Duluth, Minn. Arm shield. 1808,049; June 2.

Lyhne, William S., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Portable vender. Des. 84,295; June 2.

Lykken, Henry G., Minneapolis, Minn. Material treating device. 1,807,923; June 2.

Lymn, Arthur H., London, England. Producing mixed water gas and coal gas. 1,808,672; June 2.

Lyon, George A., Allenhurst, N. J. Cover for spare tires of automobiles. 1,807,697; June 2.

Lyon, Roy B. (See McCord, John I., assignor.)

MacDonald, William C., Malden, Mass. Clavicle apparatus. 1,808,422; June 2.

MacGahan, Paul, Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company. Shunt. 1,807,852; June 2.

Machinery Development Company. (See Johnson, William C., assignor.)

Machlet, Adolph W., Elizabeth, N. J. Brass-melting apparatus. 1,808,145; June 2.

Mackenzie, Fred L., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening pulling machine. 1,807,853; June 2.

Macklanburg, Louis A., Oklahoma City, Okla. Weather stripping. 1,808,423; June 2.

Madonna, Harry, deceased, Conowinga, Md.; S. Madonna, administratrix, New York, N. Y. Excavator. 1,808,311; June 2.

Madonna, Sabby, administratrix. (See Madonna, Harry.)

Magill, Paul L., Niagara Falls, assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, New York, N. Y. Rectifying and treating hydrocarbon vapors. 1,807,924; June 2.

Magnavox Company, The. (See Dempster, B., and Koonz, assignors.)

Mahana, Charles G., Three Rivers, Mich., assignor to Fairbanks, Morse & Co., Chicago, Ill. Power transmission means. 1,808,240; June 2.

Mair, John E., Mars, Pa., assignor to National Electric Products Corporation. Switch box. 1,808,050; June 2.

Malleable Iron Fittings Company. (See Williams, Roland G., assignor.)

Mallinckrodt Chemical Works. (See Mallinckrodt, E., jr., Farr, and Hall, assignors.)

Mallinckrodt, Edward, jr., St. Louis, H. V. Farr and L. P. Hall, Ferguson, assignors to Mallinckrodt Chemical Works, St. Louis, Mo. Packaging ether and the product thereof. 1,807,598; June 2.

Mamiya, Fusajiro, Los Angeles, Calif. Vehicle traffic signal. 1,807,629; June 2.

Manges, Beatrice I., Cleveland, Ohio. Pea shucker. 1,808,470; June 2.

Manhattan Electrical Supply Company. (See Smith, Henry, assignor.)

Manifold, Richard G., assignor to The Frontier Development Company, Los Angeles, Calif. Steam purifying apparatus. 1,808,424; June 2.

Mardsden, Jonathan S., Edgerton, Wis. Automatic garage door opening and closing device. 1,808,673; June 2.

Markt, Lloyd, Oregon, Mo. Baling press. 1,808,425; June 2.

Martin, Charles A., Chicago, Ill. System of heat treating. 1,808,241; June 2.

Martin, Frank B. (See Gibb, W. B., and Martin.)

Martin, Perry S., Harrisonburg, Va. Brooder. 1,808,364; June 2.

Martin, Philip J., Elizabeth, N. J. Cable grip. 1,807,993; June 2.

Marvel, Orin E., assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio. Electrical apparatus. 1,807,994; June 2.

Marvel, Orin E., assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio. Electrical apparatus. 1,807,995; June 2.

Marx, Louis, New York, N. Y. Toy. 1,807,791; June 2.

Maschinenfabrik Augsburg-Nurnberg A. G. (See Duwe, Friedrich, assignor.)

Maschinenfabrik Augsburg-Nurnberg, A. G. (See Fischer, Hans, assignor.)

Maschinenfabrik Augsburg-Nurnberg, Aktiengesellschaft et al. (See Sachs, Ernst, assignor.)

Maschinenfabrik Johannisberg G. m. b. H. (See Allbrecht, Karl, assignor.)

Maslewski, Joseph P., Minneapolis, Minn. Drill support. 1,808,051; June 2.

Massie, Carter R., Ironton, Ohio. Coin controlled gasoline vending machine. 1,808,674; June 2.

Masury, Alfred F., New York, N. Y., assignor to The Rubber Shock Insulator Corporation, Wilmington, Del. Strut construction. 1,808,365; June 2.

Mathey, Nicholas W., Boston, Mass. Trimming machine. 1,807,996; June 2.

Maude, Aylmer H. (See Reid, H. S., and Maude.)

Maxam, Leonard L., assignor of one-third to C. S. Crews, San Pedro, Calif. Padded sound reproducing horn. 1,808,174; June 2.

Maxfield, Harold A., Worcester, Mass. Motor starting and control mechanism. 1,807,997; June 2.

Maxmoor Corporation. (See Moore, Arlington, assignor.)

May, Edwin T., Chilwell, and A. Sherriff, assignors to F. Attenborough, Long Eaton, England. Circular knitting machine. 1,808,242; June 2.

May, Harold F., Valley Stream, N. Y., assignor to American Telephone and Telegraph Company. Telegraph system. 1,807,744; June 2.

Maye, Edward, Washington, D. C. Internal combustion engine. 1,808,675; June 2.

Mayne, Robert, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Load-limiting method and apparatus. 1,808,563; June 2.

McCann, George M., New Castle, Del. Gun. 1,808,052; June 2.

McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,808,243; June 2.

McCarthy, Henry J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Attaching handles to trays and the like. 1,808,503; June 2.

McCarthy, John S. (See Price, Osborne I., assignor.)

McCarthy, William J., Chicago, Ill. Waste trap. 1,808,471; June 2.

McConnell, Virgil M., Jamestown, N. Y. Awning. 1,808,564; June 2.

McCord, John I., assignor of one-fourth to R. B. Lyon, Paso Robles, Calif. Reversible self-sharpening chisel. 1,807,998; June 2.

McCormick Brothers Company. (See McCormick, Ora N., assignor.)

McCormick, Ora N., assignor to McCormick Brothers Company, Albany, Ind. Sifter for flour, etc. 1,808,426; June 2.

McCullough, William E., assignor to Simmons Company, Kenosha, Wis. Hydraulic press. 1,808,244; June 2.

McDonald, Charles C., and C. L. Troutman, Elyria, Ohio. Asparagus trimming and canning machine. 1,808,676; June 2.

McFarlin, Gerald H., Rosemead, Calif., assignor to Tudor Potteries, Inc. Fixture tile. 1,807,630; June 2.

McGaffic, Walter C., Buffalo, N. Y. Compartment tank construction. 1,808,427; June 2.

McGeorge, Herbert. (See Tyler, R. S., McGeorge, and Reichart.)

McGrath, William L., assignor to Eclipse Machine Company, Elmira, N. Y. Starter drive. 1,808,115; June 2.

McGuineas, William. (See Parker, Thomas J., assignor.)

McKee, Harry H., and G. Schuler, assignors to Swift and Company, Chicago, Ill. Branding machine. 1,807,631; June 2.

McKee, Walter S., assignor to Kensington Steel Company, Chicago, Ill. Excavating dipper. 1,807,632; June 2.

McKenna Process Company of Illinois. (See Langford, George, assignor.)

McKissock, Alexander C., assignor to Linoleum Manufacturing Company, Limited, London, England. Tile linoleum. 1,808,116; June 2.

McLaughlin, Frank, assignor, by mesne assignments, to W. C. Goffatt, Toronto, Ontario, Canada. Fishing lure. 1,808,565; June 2.

McLean, Robert W., Bridgewater, assignor to Carver Cotton Gin Company, East Bridgewater, Mass. Trimmer for brush bristles. 1,808,812; June 2.

McLellan, James H., Vancouver, British Columbia, Canada. Measuring and circulating device. 1,808,117; June 2.

McMillan Book Company. (See McMillan, John L., assignor.)

McMillan, John L., assignor to McMillan Book Company, Syracuse, N. Y. Loose leaf binder. 1,808,727; June 2.

McMurty, Edward P., Pasadena, Calif. Universally adjustable tool holder. 1,807,999; June 2.

McPherson, John W., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio Coal mining machine. 1,808,053; June 2.

McWane Cast Iron Pipe Company. (See McWane, James R., assignor.)

McWane, James R., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala. Plant for and method of manufacturing cast iron pipe and the like. 1,808,866; June 2.

Mechanical Development Corporation of America. (See Robbins, Azor D., assignor.)

Meehan, Paul A., Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa. Annealing furnace. 1,808,000; June 2.

Meese, Frank, Chicago, Ill. Lead and rule cutter. 1,808,054; June 2.

Mekota, John E. (See Carlon, John, assignor.)

Melin, William, Flint, Mich. Pipe wrench. 1,808,001; June 2.

Meriden Gravure Company, The. (See Robinson, Karl D., assignor.)

Merle, André N., Vincennes, assignor to Pathé Cinéma, Anciens Établissements Pathé Fréres, Paris, France. Pocket view-taking cinematographic camera with spring-motor. 1,808,566; June 2.

Messler, Eugene L., Pittsburgh, Pa. Press for plastic materials. 1,808,367; June 2.
Metzner, Albert W. (See Sherman, J. Q., and Metzner.)
Meurer, Hans. (See Haanen, C. A., and Meurer.)
Meyerhans, August, assignor to Aktiengesellschaft, Brown, Boveri & Cie., Baden, Switzerland. Transformer. 1,807,854; June 2.
Mezger, Charles A., Brooklyn, N. Y. Envelope sealing device. 1,808,567; June 2.
Michl, Robert, Kosice, Czechoslovakia, assignor, by mesne assignments, to The Hammond Clock Company, Chicago, Ill. Fine speed governor for motor engines. 1,807,698; June 2.
Middleton, John R., Boise, Idaho. Antitheft device. 1,808,245; June 2.
Mielke, Herman D., Chicago, Ill. Paper drill. 1,808,472; June 2.
Mifflitt, Anthony F., Rockville, Conn., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Thread cutter. 1,807,745; June 2.
Miller, Charles, Long Island City, and A. A. Livers, New York, N. Y. Shoe. 1,807,792; June 2.
Miller, Charles H., De Witt, Nebr. Chick feeder. 1,807,633; June 2.
Miller Company, The. (See Doane, L. C., and Norton, assignors.)
Miller, Edward W., assignor to The Fellows Gear Shaper Company, Springfield, Vt. Machine and tool for shaving gear teeth. 1,807,665; June 2.
Miller, Edward W., assignor to The Fellows Gear Shaper Company, Springfield, Vt. Formed truing tool for helicoidal abrading wheels. 1,807,666; June 2.
Miller, Ernest B., and W. L. Edel, assignors to The Silica Gel Corporation, Baltimore, Md. Oscillating type refrigeration plant. 1,807,855; June 2.
Miller, H. H., Industries Company, The. (See Miller, Morris E., assignor.)
Miller, H. H., Industries Company, The. (See Pfouts, Leroy S., assignor.)
Miller, Henry C., Waterford, N. Y. Buttonhole machine. 1,807,690; June 2.
Miller, John R. (See Loch, H. O., Miller, and Tibbals.)
Miller, Morris E., assignor to The H. H. Miller Industries Company, Canton, Ohio. Valve. 1,807,856; June 2.
Miller, Sherman, Schenectady, N. Y. Bell. 1,808,313; June 2.
Milleville, Michel, Detroit, Mich. Metal wall construction. 1,807,667; June 2.
Millspaugh, William H., assignor to The Paper & Textile Machinery Co., Sandusky, Ohio. Paper making machine. 1,808,055; June 2.
Minor, Henry R., Ossining, N. Y., assignor, by mesne assignments, to The Liquid Carbonic Corporation. Curing tires and the like. 1,808,428; June 2.
Minor, Henry R., Ossining, N. Y., assignor, by mesne assignments, to The Liquid Carbonic Corporation. Regulating and maintaining heat transfer. 1,808,429; June 2.
Mitchell Engineering Co., The. (See Mitchell, Raymond C., assignor.)
Mitchell, Raymond C., assignor to The Mitchell Engineering Co., Springfield, Ohio. Grinding and polishing lathe. 1,808,728; June 2.
Mitchell, Robert J., Kent, Ohio. Refrigerating system. 1,808,056; June 2.
Monowatt Electric Corporation, The. (See Coleman, R. E. and Groten, assignors.)
Montambault, Wilfred J., Waterbury, Conn. Storage battery terminal clamp. 1,808,368; June 2.
Monteagle, Robert C., San Francisco, Calif. Piston ring. 1,808,057; June 2.
Moonbeam Manufacturing Company, The. (See David, Bruce W., assignor.)
Moor, Emanuel, Mont Pelerin Sur Vevey, Switzerland, assignor of part interest to the firm C. Bechstein, Pianofortefabrik A. G., Berlin, Germany. Stringed musical instrument. 1,807,746; June 2.
Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Manifold for supply of supplemental gases to internal combustion engines. 1,808,713; June 2.
Moore, John C., et al. (See Stafford, John E., assignor.)
Moore, John T., Reading, Pa., assignor, by mesne assignments, to Rex-Watson Corporation, Canastota, N. Y. Link belt. 1,807,925; June 2.
Moore, John T., Reading, Pa., assignor, by mesne assignments, to Rex-Watson Corporation, Canastota, N. Y. Wheel guide for traction chains. 1,807,926; June 2.
Moore, Ray K., Freeport, assignor of one-half to W. J. Laffey, Chicago, Ill. Truck with convertible wheel structure and cooperating jack means. 1,807,793; June 2.
Moorshead, Thomas C., Strand, assignor to The United Glass Bottle Manufacturers Limited, London, England. Glass shaping machine. 1,807,857; June 2.
Morgan Construction Company. (See George, J. R., and Buell, assignors.)
Morgan & Wright. (See Hopkinson, E., and Gibbons, assignors.)
Morris, Edward A., Sacramento, Calif. Certificate holder. 1,808,246; June 2.
Morris, Edward T., London, England, assignor to R. Hoe & Co. Inc., New York, N. Y. Printing and stitching machine. 1,808,504; June 2.
Morris, Edwin M., Galveston, Tex., assignor to Triple "XXX" Company. Front panel for a thirst station. Des. 84,296; June 2.
Morris, Fred C., San Francisco, Calif. Composition bushing and making the same. 1,808,247; June 2.
Morris Motors (1926) Limited. (See Seddon, W., and Cordey, assignors.)
Morris, William H., Philadelphia, Pa., assignor to Ambler Asbestos Company. Coloring plastic material. 1,807,858; June 2.
Morrison, James, Cincinnati, assignor to The Highland Body Manufacturing Company, Elmwood, Ohio. Windshield. 1,808,058; June 2.
Morrison, Montford, Chicago, Ill., assignor, by mesne assignments, to Westinghouse Lamp Company. Mercury vapor lamp. 1,807,927; June 2.
Morrison, Montford, New York, N. Y., assignor, by mesne assignments, to Westinghouse Lamp Company. X-ray tube. 1,808,430; June 2.
Morssen, Charles M., Montreal, Quebec, Canada. Antitheft device. 1,808,248; June 2.
Mortenson, Gustav M., Kane, Pa. Clamp. 1,808,059; June 2.
Morton, Cecil J. (See Griffiths, L., and Morton.)
Moses, Frederick G., New York, R. W. Hess, Buffalo, and R. L. Perkins, East Aurora, assignors to The Barrett Company, New York, N. Y. Concentration of ores. 1,807,859; June 2.
Moses, Frederick G., New York, R. W. Hess, Buffalo, and R. L. Perkins, East Aurora, assignors to The Barrett Company, New York, N. Y. Separation of minerals. 1,807,860; June 2.
Moss Rose Manufacturing Company. (See Earnshaw, Joseph C., assignor.)
Moto Meter Gauge & Equipment Corporation. (See Cheney, Moses E., assignor.)
Motor Products Corporation. (See Kellogg, Homer G., assignor.)
Munday, Horace D., Schenectady, N. Y. Brush and current collector. 1,807,794; June 2.
Munday, J. S., Hoisting Engine Company. (See Faehrmann, Hermann, assignors.)
Municipal Street Sign Co. (See Sprung, Abraham and J., assignors.)
Munroe, Treadway B., assignor, by mesne assignments, to The Celotex Company, Chicago, Ill. Sprocket. 1,808,369; June 2.
Munson, Nyle R., Waterbury, Conn. Apparatus for extruding seamless brass and copper tubes. 1,808,370; June 2.
Munson, Willard T., assignor to Collins Supply and Equipment Company, Scranton, Pa. Ring and traveler for spinning machines. 1,807,861; June 2.
Munters, Carl G., Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,808,723; June 2.
Murchie, James, Traverse City, assignor to Holland Furnace Company, Holland, Mich. Grate shaking and dumping device. 1,808,002; June 2.
Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Charge determining device. 1,807,928; June 2.
Murray, Patrick W., Dubuque, Iowa. Automobile signal device. 1,808,677; June 2.
Murray, Richard, New York, N. Y. Wall construction. 1,808,249; June 2.
Muth, Friedrich. (See Ballauf, F., Muth, and Schmelzer.)
Myers, George H., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,808,505; June 2.
National Acme Company, The. (See Hogg, W. J., and Newmann, assignors.)
National Blank Book Company. (See Schade, John, assignor.)
National Bread Wrapping Machine Company. (See Sevigne, Henri A., assignor.)
National Carbon Company. (See Heise, G. W., and Schumacher, assignors.)
National Cash Register Company, The. (See Brand, Samuel, assignor.)
National Electric Products Corporation. (See Mair, John E., assignor.)
National Fireproofing Corporation. (See Babb, Edwin, assignor.)
National Lock Co. (See North, E. W., and Anderson, assignors.)
National Pipe Bending Company. (See Hickey, John, assignor.)
National Rubber Machinery Company. (See De Mattia, Peter, assignor.)
National-Standard Company. (See Hopkins, Arthur C., assignor.)
Naus, Arthur W., New York, N. Y. Buckle. Des. 84,297; June 2.
Neher, Charles, Chicago, Ill. Support for fabric hangings. 1,808,250; June 2.
Neisler, Oscar L., Chicago, Ill. Spring. 1,808,473; June 2.
Neubeck, William F., Brooklyn, N. Y. Electric switch. 1,808,060; June 2.
Neugebauer, Wilhelm. (See Schmidt, M. P., and Neugebauer.)
New, Gustave A., assignor to American Gypsum Company, Port Clinton, Ohio. Gypsum wallboard. 1,808,003; June 2.

Newark Wire Cloth Company. (See Campbell, Leggett C., assignor.)
Newhall, Henry B., Corporation. (See Hescock, Ethan N., assignor.)
Newhall, Henry B., Corporation. (See Pleister, Henry W., assignor.)
Newmann, Frederick. (See Hogg, W. J., and Newmann.)
Nicolai, Charles A. (See Ferguson, J. E., and Nicolai.)
Nicolaysen, Herman A. (See Sonnichsen, F., Frisch, and Nicolaysen.)
Niles Steel Products Company, The. (See Thomas, David W., assignor.)
Nisbet, George B., assignor to The Otis Steel Company, Cleveland, Ohio. Annealing box. 1,808,314; June 2.
Nisrod, John W. (See Hulack, E., and Nisrod.)
Nobbe, William E. (See Reece, J. A., and Nobbe.)
Nonneman, Ira W., assignor to The Borden Company, Warren, Ohio. Diestock. 1,808,315; June 2.
Norris, Edward O., Greenwich, Conn. Surfacing machine. 1,808,732; June 2.
North, Edwin W., and L. Anderson, assignors to National Lock Co., Rockford, Ill. Latch. 1,807,668; June 2.
Norton, Charles H., Plainville, Conn., assignor to Norton Company, Worcester, Mass. Self adjusting bearing for spindles. 1,807,700; June 2.
Norton, Charles H., Plainville, Conn., assignor to Norton Company, Worcester, Mass. Bearing. 1,807,701; June 2.
Norton Company. (See Cook, J., Spence, and Cole, assignors.)
Norton Company. (See Norton, Charles H., assignor.)
Norton, Guy P. (See Doane, L. C., and Norton.)
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Envelope machine. 1,807,862; June 2.
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Envelope machine. 1,807,863; June 2.
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Envelope making machinery. 1,807,864; June 2.
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Mechanism for feeding sheets or blanks. 1,807,865; June 2.
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Envelope machinery. 1,807,866; June 2.
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Machine for making envelopes. 1,807,867; June 2.
Novick, Abraham, Flushing, assignor to F. L. Smithe Machine Co., Inc., New York, N. Y. Feeding mechanism for envelopes and the like. 1,808,706; June 2.
Nowosielski, Edward B., Bloomfield, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y. Tachometer. 1,807,702; June 2.
Nye, Norman H., assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio. Distributing apparatus for spoolers on wire drawing machines. 1,808,714; June 2.
Nygaard, Oscar, Saugus, Mass. Expansion furnace wall. 1,807,868; June 2.
Nygaard, Oscar, Saugus, Mass. Furnace wall. 1,807,929, June 2.
Nystrom, Oscar P., assignor to Holland Furnace Company, Holland, Mich. Grate shaking and dumping device. 1,808,004; June 2.
O'Donnell, John W., Salem, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me. Machine for operating upon hides, skins and leather. 1,807,669; June 2.
Oertel, Bruno W., Portland, Oreg. Diving hurdle. 1,808,371; June 2.
Ogush, Ben, assignor to Katz & Ogush, Inc., New York, N. Y. Connection device for wrist watches. 1,808,474; June 2.
Ohio Instrument Manufacturing Company, The. (See Bates, Charles F. W., assignor.)
Oil Finding Corporation. (See Billotte, L. C., and Lipson, assignor.)
Okey, Perry, Columbus, Ohio, assignor, by mesne assignments, to The American Fork & Hoe Company. Shaft wrapping machine. 1,807,869; June 2.
Oklahoma Iron Works. (See Wright, William, assignor.)
Okonite Company, The. (See Charles, Henry E., assignor.)
Okun, Joseph H., Brooklyn, assignor to Kny-Scheerer Corporation, New York, N. Y. Bedpan washer. 1,807,634; June 2.
Oliphant, John, Chicago, Ill., assignor to Sullivan Machinery Company. Pumping system. 1,807,747; June 2.
Oliver, Anthony F. (See Palmer, R. C., Burda, and Oliver.)
Olson, Samuel & Company. (See Erby, Philip, assignor.)
Omansky, Morris, Roxbury, Boston, assignor to Arthur D. Little, Inc., Cambridge, Mass. Reclaiming vulcanized rubber. 1,807,930; June 2.
Orange-Crush Company. (See Ebbesen, Alf C., assignor.)
Orford Soap Company, The. (See Hendrickson, Victor, assignor.)
Osborne, Raymond S., Sewickley, Pa. Riveting apparatus. 1,808,431; June 2.
Osgian, James M., Racine, Wis. Signal switch. 1,808,316; June 2.
Osman, Ralph T., Mansfield, Ohio. Dump body. 1,808,251; June 2.
Osthoff, Walter, Barmen, Germany. Method of and apparatus for singeing textile fabrics. 1,807,703; June 2.
Otis Steel Company, The. (See Nisbet, George B., assignor.)
Owen, William E., jr., Cedar Rapids, Iowa. Combination compass protractor and ruler. 1,808,705; June 2.
Owens, Freeman H., New York, N. Y. Film gate. 1,808,252; June 2.
Oxford Varnish Corporation. (See Casto, L. V., and Lang, assignors.)
Oxford Varnish Corporation. (See Casto, L. V., and von Webern, assignors.)
Oxford Varnish Corporation. (See Lang, G. E., and Casto, assignors.)
Oyen, Elmer A., assignor to Addressograph Company, Chicago, Ill. Drawer for printing devices. 1,808,475; June 2.
Package Machinery Company. (See Haas, Edward, assignor.)
Packard Motor Car Company. (See Brown, Robert N., assignor.)
Packard Motor Car Company. (See Edgar, Jacob F., assignor.)
Packard Motor Car Company. (See Tibbetts, Milton, assignor.)
Page, Harry S., Schenectady, N. Y., assignor to General Electric Company. Rotor for dynamo electric machines. 1,808,568; June 2.
Paisseau, Jean, Paris, France. Obtainment of sheets of plastic material which are combined or backed. 1,808,372; June 2.
Palm, John V. O., and E. C. Knuth, assignors to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Bearing alloy. 1,807,670; June 2.
Palme, Anton J., South Orange, N. J., assignor, by mesne assignments, to Eagle Pencil Company, New York, N. Y. Pencil sharpener. Des. 84,298; June 2.
Palmer, Charles W. (See Briggs, J. F., Palmer, and Kidd.)
Palmer, Charles W., and S. M. Fulton, Spondon, near Derby, England, assignors to Celanese Corporation of America. Treatment of threads, fabrics, or other materials composed of or containing artificial filaments. 1,808,061; June 2.
Palmer, Robert C., J. L. Burda, and A. F. Oliver, Pensacola, Fla. Purifying rosin. 1,807,599; June 2.
Paper & Textile Machinery Company, The. (See Burden, Harry C., assignor.)
Paper & Textile Machinery Co., The. (See Millspaugh, William H., assignor.)
Pappadis, Archie, Norfolk, Va. Chewing gum and making the same. 1,807,704; June 2.
Paraffine Companies, The. (See Finley, Dozier, assignor.)
Parker, Arthur H. (See Sebell, Harry, assignor.)
Parker, Thomas J., assignor of one-half to W. McGuineas, Chicago, Ill. Measuring valve. 1,808,062; June 2.
Parker, Warren H., assignor of one-half to A. Jorski, Oakland, Calif. Internal combustion engine. 1,808,146; June 2.
Pate, Joseph W., Birmingham, Ala. Radiator. 1,808,605; June 2.
Patent and Licensing Corporation, The. (See Kirschbraun, L., and Heppes.)
Paterson, Morton L., Boston, assignor to Converse Rubber Company, Malden, Mass. Footwear. 1,808,063; June 2.
Pathé Cinéma, Anciens Établissements Pathé Frères. (See Merle, André N., assignor.)
Patterson, William L., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Microscope. 1,808,317; June 2.
Paul, Andrew, and F. Sturni, Seward, Pa. Toy. 1,808,678; June 2.
Pauly, Robert C. (See Hunter, R. B., and Pauly.)
Pavelka, Frank E., and H. W. Thompson, San Antonio, Tex. Bracket for game tables. Des. 84,299; June 2.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tube frame for Axminster looms. 1,807,705; June 2.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tube frame for Axminster looms. 1,807,748; June 2.
Payne, Oscar V., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Tube frame for Axminster loom. 1,807,749; June 2.
Pearce, Edwin S., Indianapolis, Ind. Apparatus for impregnating fibrous material with liquids. 1,807,600; June 2.
Pearmain, William J., and J. S. Allan, assignors to Rex Accessories Company, Racine, Wis. Valve lifter. 1,808,064; June 2.
Peerless Heater Company, The. (See King, T., and Burkert, assignors.)
Peirce, John R., assignor to International Business Machines Corporation, New York, N. Y. Accounting machine. 1,808,432; June 2.
Pels, Henry, Berlin-Charlottenburg, Germany. Hydraulic safety device for power presses and the like. 1,808,606; June 2.
Pemberton, Uz C. Seffner, and J. B. Johnson, Tampa, Fla. Artificial fish bait. 1,807,870; June 2.
Penfield, Raymond C., New York, N. Y. Lifting device. 1,808,175; June 2.

Eremi, Edmund. (See Polachek, J., Jepsen, and Peremi.)
Perkins, Robert L. (See Moses, F. G., Hess, and Perkins.)
Perry, William R., Columbus, assignor to Reeves Pulley Company, Columbus, Ind. Segregated drive for long conveyers. 1,808,738; June 2.
Peters Cartridge Company, The. (See Quayle, Philip P., assignor.)
Peters, Daniel. (See Von Keussler, O., and Peters.)
Peterson, Adolphe C. Minneapolis, Minn. Photographic recording apparatus. 1,808,118; June 2.
Petroleum Rectifying Company. (See Eddy, Harold C., assignor.)
Pfeifer, Ferdinand A., assignor of forty-nine per cent to E. Craig, Springfield, Ohio. Circuit breaker and closer. Re18,091; June 2.
Pfouts, Leroy S., assignor to The H. H. Miller Industries Company, Canton, Ohio. Freezing cylinder. 1,808,065; June 2.
Phare, Clinton J., assignor to H. V. Bright, Cleveland, Ohio. Shock absorbing means for turnstiles. 1,808,373; June 2.
Phelps, Alva W., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Metal shearing apparatus. 1,807,671; June 2.
Philadelphia Drying Machinery Company, The. (See Allsop, Thomas, assignor.)
Philip Carey Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Phillips, Harry A., Knoxville, Tenn. Refrigerating apparatus. 1,808,374; June 2.
Picard, Sidney L., Detroit, Mich. Carburetor. 1,807,750; June 2.
Piccolini, Héctor C., Buenos Aires, Argentina. Elastic mattress and other device for repose of the body. 1,808,679; June 2.
Pierce, Robert B., assignor to Bemis Bro. Bag Co., St. Louis, Mo. Thread pull up for sewing machines. 1,808,506; June 2.
Pinder, Thomas F., Merion, Pa. Printing. 1,808,476; June 2.
Pioneer Suspender Company. (See Cahn, Tillman, assignor.)
Pieper, Alphonse F., and G. I. Kester, Rochester, N. Y.; said Kester assignor to said Pieper. Stereoscopic view box. 1,808,176; June 2.
Plant, Antoine P., Flint, Mich. Oil burner. 1,808,569; June 2.
Pleister, Henry W., Westfield, assignor to H. B. Newhall Corporation, Garwood, N. J. Bolt anchor and method. 1,808,318; June 2.
Plooster, Neal W., St. Paul, Minn. Shopping bag. 1,808,375; June 2.
Plummer, Sidney G., Oakland, Calif. Swivel joint for pipes. 1,808,066; June 2.
Poirier, Wilfred A., et al. (See Vargo, Michael, assignor.)
Polacek, Egon. (See Polacek, Milton and E.)
Polacek, Milton and E., Cleveland, Ohio. Baby bath appliance. 1,808,376; June 2.
Polachek, John, New York, J. A. Jepsen and E. Peremi, Elmhurst, assignors to General Bronze Corporation, New York, N. Y. Cross rail spring catch for windows. 1,808,607; June 2.
Polachek, John, New York, J. A. Jepsen and E. Peremi, Elmhurst, assignors to General Bronze Corporation, Long Island City, N. Y. Antirattling spring for window sashes. 1,808,608; June 2.
Polachek, John, New York, J. A. Jepsen and E. Peremi, Elmhurst, assignors to General Bronze Corporation, Long Island City, N. Y. Flat spring antirattling device for windows. 1,808,609; June 2.
Pollard, Gurdon T. (See Hild, F. W., and Pollard.)
Poole, Foster M., Kansas City, Mo., assignor to The Brown Instrument Company, Philadelphia, Pa. Pyrometer for metallurgical furnaces. 1,808,507; June 2.
Poorman, John G., Tinley Park, Ill. Feed structure. 1,808,433; June 2.
Pope, Daniel K., Cleveland, Ohio. Spring cover. 1,808,508; June 2.
Pope, Elmer R., Hamilton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Jack-top. 1,807,795; June 2.
Post, Thomas R., Wilmington, N. C. Cotton picker. 1,807,751; June 2.
Poster, Meyer J., New York, N. Y. Automobile tire indicator or gauge. 1,807,752; June 2.
Ponvallsmith Corporation. (See Smith, Grant E., assignor.)
Powell, Herbert S. (See Roberts, Charles F., assignor.)
Powers, James H., Yeadon, Pa., assignor to General Electric Company. Disconnecting device. 1,808,570; June 2.
Pratt, Lucy F. (See Carlson, Johan A., assignor.)
Prentice, G. E., Manufacturing Company. (See Prentice, George E., assignor.)
Prentice, George E., Berlin, assignor to G. E. Prentice Manufacturing Company, New Britain, Conn. Key case. 1,808,434; June 2.
Prentis, Henning W., jr., Lancaster, assignor to Armstrong Cork Company, Pittsburgh, Pa. Ornamenting printed hard surface floor coverings. 1,807,672; June 2.
Price, Osborne I., Frederick, Md., assignor to J. S. McCarthy, Weehawken, N. J. Refrigerating apparatus. 1,807,871; June 2.
Price, Osborne I., Frederick, Md., assignor to J. S. McCarthy, Weehawken, N. J. Refrigeration apparatus. 1,807,872; June 2.
Printz, Oscar A. K., Overum, Sweden. Releasable plow. 1,808,477; June 2.
Printz, Oscar A. K., Overum, Sweden. Releasable plow. 1,808,478; June 2.
Project Holding Corporation. (See Bauer, William J., assignor.)
Prouty, Theodore C., and W. O., Hermosa Beach, Calif., assignor to American Encaustic Tiling Company, Ltd., New York, N. Y. Clay disintergrator. 1,808,509; June 2.
Prouty, Willis O. (See Prouty, T. C., and W. O.)
Punga, Franklin, Eberstadt, near Darmstadt, assignor to Fried Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Controlling system for polyphase alternating current motors. 1,808,435; June 2.
Purdy, Chester A., Oak Park, Ill., assignor to Western Electric Company, Inc., New York, N. Y. Method of and apparatus for preparing compounds. 1,807,931; June 2.
Pütter, Karl E., assignor to Deutsche Gasglühlicht-Auer-Gesellschaft mit beschränkter Haftung, Berlin, Germany. Air purifying appliance. 1,808,177; June 2.
Quall, Kenneth H. (See Shoemaker, Joseph J., assignor.)
Quayle, Philip P., Chevy Chase, Md., assignor to The Peters Cartridge Company, Cincinnati, Ohio. Shot string meter. 1,807,601; June 2.
Quitt, Karl A. R. (See Kock, H. R. F., and Quitt.)
Radford, Arthur S., Southall, and M. Bowman-Manifold, Hayes, England, assignors to Victor Talking Machine Company. Sound reproducing system. 1,807,602; June 2.
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Inventions, Inc. (See Donle, Harold P., assignor.)
Rainwater, Ora A., Marysville, Wash., assignor of one-half to Mrs. W. J. White. Dropping board for use in poultry houses. 1,807,932; June 2.
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Paper and making the same. 1,808,067; June 2.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Manufacture of paper. 1,808,068; June 2.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Manufacture of paper. 1,808,069; June 2.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Producing paper filled with alkaline filler. 1,808,070; June 2.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Producing paper filled with alkaline filler. 1,808,071; June 2.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Improving paper machine operation. 1,808,072; June 2.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Improving paper machine operation. 1,808,073; June 2.
Ramsey, John C., assignor to Ramsey Package Corporation, Suffolk, Va. Barrel forming machine. 1,808,680; June 2.
Ramsey Package Corporation. (See Ramsey, John C., assignor.)
Rayburn, George B., Los Angeles, Calif. Cap. 1,808,081; June 2.
Raynes, Harry C., Portsmouth, N. H., assignor, by mesne assignments, to Bemis Industries, Incorporated, Boston, Mass. Reinforced wall board. 1,808,571; June 2.
Razor Blade Tile, Incorporated. (See Slack, Leon W., assignor.)
Read, Balfour, Detroit, Mich., assignor to Eaton Spring Corporation. Spring shackle. 1,807,635; June 2.
Redmann, Robert G., Bristol, Conn. Cluster mold. 1,807,753; June 2.
Reece, Joseph A., and W. E. Nobbe, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for rolling sheet glass. 1,807,873; June 2.
Reed, William R., Baltimore, Md. Aeroplane. 1,808,005; June 2.
Reehsing, Friedrich W. H., Bremen, Germany, assignor to Aktiebolaget Absorbator, Stockholm, Sweden. Refrigerating apparatus of the absorption type. 1,808,510; June 2.
Reeves, Herbert M., assignor to Continental Stove Corporation, Ironton, Ohio. Stove. Des. 84,300; June 2.
Reeves Manufacturing Company, The. (See Carroll, John, assignor.)
Reeves Pulley Company. (See Perry, William R., assignor.)
Reichart, William M. (See Tyler, R. S., McGeorge, and Reichart.)
Reichenbach, Albert, Pforzheim, Germany. Fountain penholder. 1,808,377; June 2.
Reid, Hugh S., Shawinigan Falls, Quebec, Canada, and A. H. Maude, Nitro, W. Va., assignors to Canadian Electro Products Company, Limited, Montreal, Quebec, Canada. Manufacture of mercury salts. 1,808,253; June 2.

Reid, Leslie K., Ashton-on-Mersey, assignor to D. Anderson & Sons Limited, London, England. Means applicable for use in conveying hot viscous materials such as bitumen, tar, sugar and the like. 1,807,796; June 2.
Reist, Henry G., Schenectady, N. Y., assignor to General Electric Company. Rotor for dynamo electric machines. 1,808,572; June 2.
Remington Accounting Machine Corporation. (See Barney E., assignor.)
Remington Arms Company. (See Werme, Tage F., assignor.)
Remington, Arthur L., and A. J. Javery, assignors to Warp Compressing Machines Company, Worcester, Mass. Machine for forming yarn packages. 1,808,573; June 2.
Remington Rand Inc. (See Lasker, William W., assignor.)
Remington Rand Inc. (See Wolters, Carl F., assignor.)
Remington Typewriter Company. (See Barney, Edwin E., assignor.)
Remington Typewriter Company. (See Hart, Frederick A., assignor.)
Remsen Corporation. (See Emerson, Victor H., assignor.)
Renken, Anton F., Crete, Nebr. Gopher trap. 1,808,006; June 2.
Rentschler, Mahlon J. (See Jeavons, W. R., and Rentschler.)
Reserve Holding Company. (See Crocker, Thomas F., assignor.)
Rex Accessories Company. (See Pearmain, W. J., and Allan, assignors.)
Rex-Watson Corporation. (See Moore, John T., assignor.)
Reynolds, Edward P., Los Angeles, Calif. Sliding valve. 1,808,715; June 2.
Reyrolle, A., & Company Limited. (See Warren, T. R., and Cooke, assignors.)
Rheinische Metallwaaren- und Maschinenfabrik. (See Eichenauer, Konrad, assignor.)
Rheinische Metallwaaren- und Maschinenfabrik. (See Rublemann, Herbert, assignor.)
Rice, John A., Berkeley, Calif., assignor to The Bubblestone Company, Pittsburgh, Pa. Making a foamy body. 1,807,810; June 2.
Rice, Merrit H., Pasadena, Calif. Balanced valve. 1,808,254; June 2.
Richards, Willard F., Depew, assignor to The Symington Company, New York, N. Y. Draft gear. 1,808,378; June 2.
Richards, William L. (See Adams, A., jr., and Richards.)
Richardson, Rodney G., assignor to Automatic Electric Inc., Chicago, Ill. Telephone system. 1,808,574; June 2.
Richey, Lawrence K., Detroit, Mich. Device for saving life from drowning. 1,807,754; June 2.
Riddell, W. A., Company. (See Henneuse, C. A., and Hawkins, assignors.)
Rieke, Irvin H., Auburn, Ind., assignor to Rieke Metal Products Corporation. Seal for bung fixtures of containers. 1808,575; June 2.
Rieke, Irvin H., Auburn, Ind., assignor to Rieke Metal Products Corporation. Bung and sealing means. 1,808,576; June 2.
Rieke Metal Products Corporation. (See Rieke, Irvin H., assignor.)
Rike, Frederick F., and W. P. Huffman, assignors to Buckeye Iron and Brass Works, Dayton, Ohio. Valve. 1,808,074; June 2.
Riker Company, The. See Whitehouse, Herbert G., assignor.)
Rimberg, Alexander, Brooklyn, N. Y. Lamp. Des. 84,301; June 2.
Rinne, Allan, Orr, Minn. Acceleration control. 1,807,706; June 2.
Risser Arthur I., assignor to U. S. Bottlers Machinery Co., Chicago, Ill. Cork feeder. 1,807,673; June 2.
Ritter, Emil W., assignor, by mesne assignments, to Burke Stoker & Mfg. Co., Chicago, Ill. Stoker. 1,808,479; June 2.
Roads Colloidal, Limited. (See Symons, Harry L., assignor.)
Robbins, Azor D., New York, N. Y., assignor, by mesne assignments, to Mechanical Development Corporation of America. Friction disk. 1,808,511; June 2.
Roberts, Charles F., assignor to H. S. Powell, Utica, N. Y. Thread swelling tool. Re18,036; June 2.
Roberts-Gordon Appliance Corporation. (See Roberts, Millard J., assignor.)
Roberts, Millard J., Tonawanda, assignor to Roberts-Gordon Appliance Corporation, Buffalo, N. Y. Burner and transferring heat. 1,808,319; June 2.
Robertson, Lawrence, Detroit, Mich. Overhead valve construction. 1,807,674; June 2.
Robin, Philip T., Erie, Pa. Coupling. 1,807,636; June 2.
Robins, Harold B., White Plains, N. Y. Attachment for washing machines. 1,807,874; June 2.
Robinson, Joseph, New York, N. Y. Automatic train pipe coupling. 1,808,255; June 2.
Robinson, Karl D., New York, N. Y., assignor to The Meriden Gravure Company, Meriden, Conn. Electroplating and product thereof. 1,807,875; June 2.
Rock Island Register Company. (See Burgess, Samuel P., assignor.)
Roe, Ralph C., Englewood, N. J. Pulverized fuel burner. 1,808,682; June 2.
Roehrich, Carl, Berlin, assignor to the firm Silfree Aktiengesellschaft (Silfree Limited) Vaduz, Liechtenstein, Germany. Apparatus for photographic copying purposes. 1,807,933; June 2.
Roesch, Frank P., Chicago, Ill., assignor to The Standard Stoker Company, Incorporated. Locomotive. 1,808,256; June 2.
Roesner, Gerhard. (See Conway, Baron von Girsewald, Weidmann, and Roesner.)
Roessler & Hasslacher Chemical Company, The. (See Magill, Paul L., assignor.)
Rogers, William C., Chicago, Ill. Safety razor blade. 1,808,480; June 2.
Rollins, Le Roy W., Medford, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Stitch-removing machine. 1,807,603; June 2.
Rooney, Laura V., Washington, D. C. Lingerie clasp. 1,808,436; June 2.
Rooney, William T., Los Angeles, Calif. Switch for direction signals. 1,808,683; June 2.
Roosevelt, Marcus S., Detroit, Mich., assignor to The Hamilton Autographic Register Co., Hamilton, Ohio. Continuous stationery apparatus. 1,808,437; June 2.
Rosenblum, Israel, Jackson Heights, N. Y. Resin complex and producing the same. 1,808,716; June 2.
Rosenstein Bros. & Hook. (See Rosenstein, Charles, assignor.)
Rosenstein, Charles, Paterson, N. J., assignor to Rosenstein Bros. & Hook, New York, N. Y. Woven fabric. 1,808,379; June 2.
Ross, Charles B., Greenleaf, Kans. Lawn mower sharpener. 1,807,934; June 2.
Rotary Machine Company. (See Christiansen, Christian, assignor.)
Rothschild, Sidney, New York, N. Y. Cord or rope holding device. 1,808,075; June 2.
Röttke, Hermann A. P., Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y. Ruling device. 1,808,257; June 2.
Rouanet, Louis, Ivry-Port, assignor to Compagnie d'Applications Mecaniques, Ivry-Port, Seine, France. Brake operating device for motor vehicles. 1,807,707; June 2.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Thermosensitive release unit. 1,808,684; June 2.
Roy, Abraham W., Lowell, Mass. Brace mounting. 1,808,010; June 2.
Royal, James M., Villa Park, Ill. Airplane engine. 1,808,380; June 2.
Royal Metal Works. (See Clausing, Louis F., assignor.)
Royles Limited. (See Howles, Fred, assignor.)
Rubber Service Laboratories Company, The. (See Bartram, T. W., and Tompkins, assignors.)
Rubber Service Laboratories Company, The. (See Tompkins, Deal H., assignor.)
Rubber Shock Insulator Corporation, The. (See Leipert, August H., assignor.)
Rubber Shock Insulator Corporation, The. (See Masury, Alfred F., assignor.)
Ruffing, John, sr., Nokomis, Ill. Mine car. 1,808,119; June 2.
Rühlemann, Herbert, Sommerda, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Process of and means for timing electric fuses. 1,807,708; June 2.
Rump, Sigurd, Zurich, Switzerland. Current transformer. 1,807,797; June 2.
Runkwitz, Arthur, Kiel-Elmschenhagen, assignor to Fried-Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Germany. Pulverized fuel furnace. 1,808,120; June 2.
Running, John G., Miami, Fla. Miter box. 1,808,611; June 2.
Rupp, John L., Wilkinsburg, Pa., assignor, by mesne assignments, to Wulico Battery Corporation, Niagara Falls, N. Y. Storage battery spacer. 1,808,147; June 2.
Ruth, Joseph P., jr., Denver, Colo. Flotation apparatus. 1,807,876; June 2.
Rutherford, George L., et al. (See Hulack, E., and Nissrod, assignors.)
Ryan, Matthew W., Sons & Co. (See Ryan, Matthew W., assignor.)
Ryan, Matthew W., Freeport, assignor to Matthew W. Ryan Sons & Co., Inc., New York, N. Y. Textile fabric. Des. 84,302; June 2.
Ryley, Charles F., and G. A. Awcock, Spondon, near Derby, England, assignors to Celanese Corporation of America. Solution, composition or preparation for textile and like purposes and their applications. 1,807,755; June 2.
Sacherman, Jacob, Cleveland, Ohio. Table mat. 1,808,258; June 2.
Sachs, Ernst, Goeggingen, near Augsburg, assignor of one-half to Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft Augsburg, and one-half to Asbern Maschinenfabrik-Aktiengesellschaft, Augsburg-Goeggingen, Goeggingen, near Augsburg, Germany. Form cylinder for rotary intaglio printing machines. 1,807,687; June 2.
Sachs, Hugo. (See Locke, K., and Sachs.)
Sack, Firm Rud. (See Ehricke, Max, assignor.)
Safety Devices Corporation. (See And, William L., assignor.)
Safety Mining Company. (See Kneeland, Frank H., assignor.)
St. Louis, R. J. (See Frazier, Orville Z., assignor.)

Sammeth, Lewis R., Goldsboro, N. C. Tobacco cleaning machine. 1,808,438; June 2.

Sandberg, Oscar, assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Wrapping machine. 1,807,709; June 2.

Sandberg, Oscar, assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Wrapping machine. 1,807,756; June 2.

Sandler, Carl, Milwaukee, Wis. Shoe-heel. 1,807,935; June 2.

Sanford, Roy S., South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill. Brake operating mechanism. 1,808,076; June 2.

Sanford, Sydney J., assignor of one-half to C. W. Larner, Philadelphia, Pa. Motion picture. 1,807,877; June 2.

Santini, Randolph, assignor to Arco Vacuum Corporation, New York, N. Y. Vacuum brush. 1,808,178; June 2.

Saunders, Wilson S., Kalamazoo, Mich. Pocket case or container. 1,807,936; June 2.

Sauser, A. G. (See Asper, Otto, assignor.)

Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Book cover. 1,808,179; June 2.

Schaefer, George W., South Braintree, Mass., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,808,007; June 2.

Schäffer, Werner, Laupen-Bern, assignor, by mesne assignments, to Chocolat Tobler Holding Co., Aktiengesellschaft, Schaffhause, Switzerland. Printing process. 1,808,320; June 2.

Schemmel, Robert C., Union City, Ind. Fender welt and making the same. 1,808,259; June 2.

Scheyer, Heinz. (See Kalischer, G., Scheyer, and Keller.)

Schindler, Emanuel, Salem, Oreg. Poultry house. 1,808,685; June 2.

Schleicher, John C., New York, N. Y. Airship. 1,807,710; June 2.

Schmeiser, Theodore G., Fresno, Calif. Combined wheel fin and weight. 1,807,757; June 2.

Schmelzer, Albert. (See Ballauf, F., Muth, and Schmelzer.)

Schmid, Julius, New York, N. Y. Nursing nipple. 1,808,148; June 2.

Schmidt, John. (See Smith, A., and Schmidt.)

Schmidt, John G., assignor to E. F. Houghton and Company, Philadelphia, Pa. Product and process for preventing the solvent action of sulphuric acid on iron and steel. 1,807,711; June 2.

Schmidt, Maximilian P., and W. Neugebauer, Biebrich-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. New violet vat dyestuffs. 1,808,260; June 2.

Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung. (See Uhde, Robert, assignor.)

Schmithals, Frederick W., Milwaukee, Wis. Automatic brake. 1,808,008; June 2.

Schoeller, Rudolf. (See Klemenc, A., and Schoeller.)

Schoonmaker, William J., New York, N. Y. Sound picture screen. 1,808,077; June 2.

Schoonmanker, William J., New York, N. Y. Non-inflammable sound picture screen. 1,808,078; June 2.

Schrock, Herman L., et al. (See Vargo, Michael, assignor.)

Schroeder, Hans W. C., assignor to Drägerwerk, Lubeck, Germany. Device for dosing compressed gases. 1,808,612; June 2.

Schroder, John E., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for handling glassware. 1,808,180; June 2.

Schuler, Gustave. (See McKee, H. H., and Schuler.)

Schultz, Arnold L., Portland, Oreg. Model aeroplane. 1,808,686; June 2.

Schumacher, Erwin A. (See Heise, G. W., and Schumacher.)

Schwab, Jules, New York, N. Y. Necklace. Des. 84,303; June 2.

Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Core catcher for well drills. 1,808,009; June 2.

Scott, Walter M., et al. (See Barnhart, Job R., assignor.)

Scovill Manufacturing Company. (See McCarthy, Henry J., assignor.)

Scudder, Frederick J., Queens Village, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Automatic telephone exchange system. 1,808,577; June 2.

Seaver, Edward, Needham, Mass. Heat exchange apparatus. 1,807,638; June 2.

Sebell, Harry, Boston, assignor to Arthur H. Parker, Lexington, Mass. Sealed can. 1,808,321; June 2.

Seddon, William, and R. F. Cordey, assignors to Morris Motors (1926) Limited, Cowley, Oxford, England. Automatically adjustable mechanical stop or abutment. 1,808,079; June 2.

Seeley, Harold T. (See Gittings, W. N., and Seeley.)

Segelhorst, August L., and O. Stricklen, Huntington Beach, Calif. Adjustable oil well counterbalance. 1,808,010; June 2.

Seiders, Irwin A., Reading, assignor to Flexible Truck Corporation, Philadelphia, Pa. Motor car truck. 1,808,322; June 2.

Seigle, William, Hinton, Okla. Coil spring metatarsal arch support. 1,807,758; June 2.

Selander, Christian A., Renton, Wash. Combination table and ironing board. 1,807,937; June 2.

Selectograph Company. (See Godnick, P. A., and Toolan, assignors.)

Semon, Waldo L., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,808,578; June 2.

Serriades, Constantine A., Chicago, Ill. Aircraft power generating system. 1,808,439; June 2.

Servel Inc. (See Kuenzli, Walter A., assignor.)

Sessions, Frank L., Lakewood, Ohio. Welding machine. 1,808,261; June 2.

Sévigné, Henri A., Winthrop, assignor to National Bread Wrapping Machine Company, Springfield, Mass. Convertible wrapping machine. 1,808,181; June 2.

Seyler, Carl P., Pittsburgh, Pa. Insulator supporting post. 1,807,878; June 2.

Shaft-Pierce Shoe Company. (See Shaft, Willis S., assignor.)

Shaft, Willis S., assignor to Shaft-Pierce Shoe Company, Faribault, Minn. Apparatus for channeling shoes. 1,808,687; June 2.

Shannon, Carson H., assignor to American Electric Brake Corporation, Los Angeles, Calif. Electrically operated brake for motor vehicles. 1,808,182; June 2.

Shapiro, Lazarus, New York, N. Y. Sound radiating apparatus. 1,808,512; June 2.

Sheerar, Frank B., Omro, Wis. Service window for motor vehicles. 1,808,263; June 2.

Shell Petroleum Corporation. (See Carney, S. C., Baker, and Cutting, assignors.)

Shelton, Harry J., St. Louis, Mo. Crusher and pulverizer. 1,808,264; June 2.

Sherboudy, William E., Shaker Heights, Ohio. Carpet sweeper. 1,808,323; June 2.

Sherman, John Q., and A. W. Metzner, Dayton, Ohio; said Metzner assignor to said Sherman. Manifolding apparatus. 1,807,604; June 2.

Sheriff, Arthur. (See May, E. T., and Sheriff.)

Sherts, James H., Glen Ridge, N. J., assignor to Du Pont Viscoloid Company, Wilmington, Del. Heating apparatus. 1,808,381; June 2.

Shoe Form Co. (See De Witt, William J., assignor.)

Shoemaker, Joseph J., Clawson, assignor of one-third to K. H. Quail, Royal Oak, Mich. Exercising apparatus. 1,807,938; June 2.

Short, Ira, Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company. Coupling. 1,807,798; June 2.

Sickles, Frank W. (See Sickles, Roy F. and F. W.)

Sickles, Roy F. and F. W., Springfield, Mass. Radio coil. 1,807,605; June 2.

Sickles, Roy F. and F. W., Springfield, Mass. Radio coil winding. 1,807,606; June 2.

Siemens-Schuckertwerke Aktiengesellschaft. (See Berthold, Rudolf G., assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Krell, O., and Gerdien, assignors.)

Sikorsky Aviation Corporation. (See Sikorsky, Igor, assignor.)

Sikorsky, Igor, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del. Aircraft, including seat for same. 1,807,939; June 2.

Silent, Harold C., Los Angeles, Calif., assignor to American Telephone and Telegraph Company. Prevention of parasitic oscillations. 1,807,759; June 2.

Silfree Aktiegesellscaft (Silfree Limited) Vaduz. (See Rochrich, Carl, assignor.)

Silica Gel Corporation, The. (See Miller, E. B., and Edel, assignors.)

Simmons Company. (See McCullough, William E., assignor.)

Simon, Arthur R., La Porte, Ind. Adjustable visor. 1,807,879; June 2.

Simone, Frank (See La Sala, M. R., and Simone.)

Singer, Benjamin F. (See Ehemann, J. J., and Singer.)

Siskin, Harry, Los Angeles, Calif. Extension table. 1,807,881; June 2.

Sivian, Leon J., Bloomfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Generation of electric currents. 1,808,579; June 2.

Skvortzoff, Alexander A., Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company. Bushing structure. 1,807,880; June 2.

Slack, Leon W., Trenton, N. J., assignor, by mesne assignments, to Razor Blade Tile, Incorporated. Razor blade discard. 1,808,580; June 2.

Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Steel retainer. 1,807,799; June 2.

Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Pneumatic tool. 1,808,481; June 2.

Sloane, William W., assignor to Goodman Manufacturing Company, Chicago, Ill. Conduit terminal. 1,808,581; June 2.

Smelser, David A., Bristol, Va. Steam trap. 1,807,882; June 2.

Smith, Alexander, Pittsburgh, Pa., and J. Schmidt, New York, N. Y. Aeroplane. 1,808,688; June 2.

Smith, A. O., Corporation. (See Burnish, Howard J., assignor.)

Smith, F. L., Machine Co. (See Novick, Abraham, assignor.)

Smith, George L., assignor to United States Ordnance Company, Washington, D. C. Brake applying mechanism. 1,808,121; June 2.

Smith, Grant E., assignor to Pouvailsmith Corporation, Poughkeepsie, N. Y. Steering wheel and making the same. 1,808,324; June 2.

Smith, Henry, London, England, assignor to Manhattan Electrical Supply Company, Inc., Jersey City, N. J. Doorcheck. 1,807,607; June 2.

Smith, James E., Los Angeles, Calif., assignor to Western Pipe & Steel Company, of California. Steel derrick. 1,808,080; June 2.

Smith, John L., Shreveport, La. Filling station. Des. 84,304; June 2.

Smith, L C, & Corona Typewriters Inc. (See Avery, Henry A., assignor.)

Smith, L C, & Corona Typewriters Inc. (See Ely, A. B., and Harmon, assignors.)

Smith, Louis R., Hawthorne, Nev. Motor vehicle hood locking mechanism. 1,808,265; June 2.

Smith, Morris, Los Angeles, Calif. Electrodynamic speaker. 1,808,149; June 2.

Smith, Ralph C., Los Angeles, Calif. Casing for a golf ball painting machine. Des. 84,305; June 2.

Smith, Walter E., Providence, assignor to Kenney Manufacturing Company, Cranston, R. I. Center ornament for drapery rods or the like. Des. 84,306; June 2.

Smith, Walter E., Providence, assignor to Kenney Manufacturing Company, Cranston, R. I. End ornament for drapery rods or the like. Des. 84,307; June 2.

Smith, Walter E., Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,308; June 2.

Smith, William A., jr. (See Smith, William A., sr., and W. A., jr.)

Smith, William A., jr., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve mechanism for rock drills. 1,808,482; June 2.

Smith, William A., sr., and W. A. Smith, jr., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve for rock drills. 1,807,800; June 2.

Smitans, John A. (See Biggert, F. C., jr., and Smitmans.)

Snelling, Walter O., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Propellant explosive. 1,808,613; June 2.

Snow, Philo Y., Chicago, Ill. Mounting for antiglare devices. 1,807,760; June 2.

Societe Anonyme "L'Aspiration, Scientifigue." (See Coupard, Christian, assignor.)

Sönichsen, Francis, F. A. Frisch, and H. A. Nicolaysen, Oslo, Norway. Manufacture of tubes and pipes. 1,808,122; June 2.

Spaulding, Eugene A., Portland, Me. Humidifier. 1,808,183; June 2.

Spell, Perry W. Roseboro, N. C. Stalk cutter. 1,808,266; June 2.

Spence, John C. (See Cook J., Spence, and Cole.)

Spencer Heater Company. (See Waddell, Joseph A., assignor.)

Spofford, Gordon E., Buzzards Bay, Mass. Bass bomb. 1,807,712; June 2.

Spray, Lester E., Wilkinsburg, assignor to Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,808,325; June 2.

Sprongerts, Eduard, assignor to Kalle & Co., Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Process of improving the resistance of diazo-types to water. 1,807,761; June 2.

Sprung, Abraham, Brooklyn, and J. Sprung, New York, N. Y., assignors to Municipal Street Sign Co. Inc., New York, N. Y. Sign frame and upright. Re18,087; June 2.

Sprung, Joseph. (See Sprung, Abraham, and J.)

Stafford, John E., Lincoln, assignor of one-third to J. C. Moore and one-third to C. E. Finney, San Francisco, Calif. Sound control apparatus. 1,807,940; June 2.

Standard Electric Equipment Corporation. (See Barnett, Louis, assignor.)

Standard Oil Company. (See Lindsay, James D., assignor.)

Standard Oil Development Company. (See Buc, Hyym E., assignor.)

Standard Oil Development Company. (See Hopkins, Marion B., assignor.)

Standard Steel Car Corporation. (See Hansson, Soren, assignor.)

Standard Stoker Company, The. (See Hunt, Andrew M., assignor.)

Standard Stoker Company. (See Roesch, Frank P., assignor.)

Standard Stoker Company Inc., The. (See Fahnestock, Adam B., assignor.)

Stauffer, Paul, Clearfield, Pa. Coupling for hose, pipe, or other conductors. 1,808,382; June 2.

Stein, A., & Company. (See Freiler, Abraham J., assignor.)

Stein, Jacob, Brooklyn, N. Y. Nether garment. 1,808,614; June 2.

Steinour, John E., Los Angeles, Calif. Sharpening tool. 1,808,267; June 2.

Stenger, Albert, Portland, Oreg. Pinning clamp. 1,807,801; June 2.

Stenhouse, David. (See Stenhouse, Thomas and D.)

Stenhouse, Thomas and D., Washington, Pa., assignors to Hazel-Atlas Glass Co., Wheeling, W. Va. Transfer apparatus. 1,808,689; June 2.

Stern, Ernest, Berlin-Charlottenburg, Germany. Preparing a calcium-carbohydrate compound. 1,807,608; June 2.

Stevens & Thompson Paper Company. (See Fiak, Ira T., assignor.)

Stevens, Donald R., Ridgewood, assignor to The Watson Machine Company, Paterson, N. J. Reel crutch. 1,807,802; June 2.

Steves, Vernon, Oleum, Calif. Propagating apparatus for mushroom culture. 1,808,383; June 2.

Stewart, Charles M., Allston, Mass. Wrench. 1,808,268; June 2.

Stewart, James S., Redlands, assignor, by mesne assignments, to G. Voss, San Bernardino, Calif. Agricultural machine. 1,808,690; June 2.

Still, Carl, The Firm. (See Kuhn, Arthur, assignor.)

Still, Carl, The Firm. (See Wessel, Carl, assignor.)

Stimpson, Edwin B., Company. (See Stimpson, Edwin B., assignor.)

Stimpson, Edwin B., and J. F. Suessle, assignors to Edwin B. Stimpson Company, Brooklyn, N. Y. Feeding mechanism for riveting machines. 1,807,941; June 2.

Stimpson, Edwin B., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y. Rivet feed. 1,807,942; June 2.

Stimpson, Edwin B., Company. (See Stimpson, E. B., and J. F. Suessle, assignors.)

Stimpson, Walter F., and W. E. Finch, Louisville, Ky.; said Finch assignor to said Stimpson. Computing scales. 1,808,269; June 2.

Stock, Charles, Baldwin Park, Calif. Trap nest. 1,808,615; June 2.

Stocker, John, Seward, Nebr. Road maintainer. 1,807,639; June 2.

Stoesser, Wesley C. (See Hale, W. J., and Stoesser.)

Stone, Charles F., Upper Darby, Pa. Toy railroad track embankment. 1,807,803; June 2.

Stone, Elmer B., assignor to The American Hardware Corporation, New Britain, Conn. Card holder. 1,807,804; June 2.

Stott, Eugene L., Chattanooga, Tenn. Necktie. 1,808,616; June 2.

Stricklen, Oscar. (See Segelhorst, A. L., and Stricklen.)

Stringer, Hubert L., Rockbeare Hill, near Exeter, England. Winding mechanism for timepieces. 1,808,691; June 2.

Stryker, Clinton E., Highland Park, assignor to Fansteel Products Company, Inc., North Chicago, Ill. Automatic rectifier-regulator. 1,808,717; June 2.

Sturni, Frank. (See Paul, A., and Sturni.)

Sudduth, Earl W., Birmingham, Ala. Highway advertising sign. 1,808,692; June 2.

Suessle, Joseph F. (See Stimpson, E. B., and Suessle.)

Sugden, Bertha, now by marriage Bertha Sugden Tuttle, assignor to Technicolor Motion Picture Corporation, Boston, Mass. Preparation of colored reproductions by imbibition. 1,807,805; June 2.

Sullivan, Francis D., Memphis, Tenn. Acid-proof coating composition. 1,808,081; June 2.

Sullivan Machinery Company. (See Gartin, Elmer G., assignor.)

Sullivan Machinery Company. (See Holmes, Morris P., assignor.)

Sullivan Machinery Company. (See Lesicko, Joseph, assignor.)

Sullivan Machinery Company. (See Oliphant, John, assignor.)

Summers, Harry A. (See Capps, F. L., and Summers.)

Superior Paper Products Company. (See Beaman, George B., assignor.)

Superior Switchboard & Devices Company, The. (See Grace, Richard W., assignor.)

Suppes, Max M., assignor to The Fox Furnace Company, Elyria, Ohio. Hinge. 1,807,675; June 2.

Sutton, Frank M., San Francisco, Calif. Concrete form. 1,807,943; June 2.

Svenska Aktiebolaget Gasaccumulator. (See Johanson, Georg K. V., assignor.)

Swanson, Albert M., Colton, Calif. Halving and pitting device. 1,807,713; June 2.

Swartz, Torrence A., and W. P. Uhler, Tottenville, N. Y., assignors to The S. S. White Dental Manufacturing Company, Philadelphia, Pa. Variable resistance unit. 1,807,806; June 2.

Swift and Company. (See McKee, H. H., and Schuler, assignors.)

Swindell-Dressler Corporation. (See Mecham, Paul A., assignor.)

Swords, Michael D., Chicago, Ill., assignor to General Chemical Company, New York, N. Y. Apparatus for discharging salt cake from Mannheim furnace. 1,807,807; June 2.

Symington Company, The. (See Richards, Willard F., assignor.)

Symons, Harry L., Wimbledon, assignor to Roads Colloidal, Limited, London, England. Emulsion and process therefor. 1,807,808; June 2.

Tabulating Machine Company, The. (See Röttke, Hermann A. P., assignor.)

Taneyhill, John, St. Louis, Mo. Two-cycle engine. 1,808,384; June 2.

Taylor, John L., West View Borough, Pa. Barge. 1,807,714; June 2.

Taylor, Joseph I., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Making window guide channels. 1,808,582; June 2.

Technicolor Motion Picture Corporation. (See Sugden, Bertha, assignor.)
Technicolor Motion Picture Corporation. (See Tuttle, Bertha S., assignor.)
Teichman, Albert F., and J. W. Thee, Cincinnati, Ohio. Water control device. 1,808,385; June 2.
Terkelsen, Andrew. (See Derry, Jasper, assignor.)
Ternstedt Manufacturing Company. (See Flynn, John B., assignor.)
Terry, Charles W., Detroit, Mich. Separator and spacer for storage batteries. 1,807,609; June 2.
Terzoli, Umberto, Rome, Italy. Tent. 1,808,693; June 2.
Tesch, Alexander O., Milwaukee, Wis. Carburetor. 1,808,386; June 2.
Texas Company, The. (See De Florez, Luis, assignor.)
Thee, John W. (See Teichman, A. F., and Thee.)
Thibault, Alphonse J., Harrison, Idaho. Burglar trap. 1,807,944; June 2.
Thies, Fritz, Hellerau, near Dresden, Germany. Mercerization of piece goods. 1,807,762; June 2.
Thomas, Adolph A., New York, N. Y. Automobile bumper. 1,807,640; June 2.
Thomas & Betts Co., The. (See Thomas, George C., jr., assignor.)
Thomas, David W., Youngstown, assignor to The Niles Steel Products Company, Niles, Ohio. Steering wheel. 1,808,440; June 2.
Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Outlet box attachment means. 1,808,326; June 2.
Thompson, Carl A., Harvard, Ill. Scaffold. 1,808,082; June 2.
Thompson, Ernest H., Evanston, Ill. Electric switch for metering devices. 1,808,387; June 2.
Thompson, Gertrude E., assignor to Van Sicklen Corporation, Elgin, Ill. Radiocabinet. Des. 84,309; June 2.
Thompson, Howard A., Edgewood Borough, and C. A. Brooks, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,808,327; June 2.
Thompson, Harold W. (See Pavelka, F. E., and Thompson.)
Thompson, John L., Hayes, England. Electric transformer cooling means. 1,808,617; June 2.
Thomson, Frederick B., Teaneck, N. J. Conduit and pipe clamp. 1,808,328; June 2.
Thomson National Press Co. (See Frauenberger, Carl F., assignor.)
Thurman, Tandy B., Kansas City, Mo. Awning bracket. 1,807,676; June 2.
Tibbals, Edward A. (See Loch, H. O., Miller, and Tibbals.)
Tibbets, Milton, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,808,083; June 2.
Tidd, Frank E., Yerington, Nev. Rotary engine. 1,808,084; June 2.
Tilden, Bert O., assignor to B. O. T. Mfg. Co., Trenton, N. J. Flush valve. 1,808,329; June 2.
Timken Roller Bearing Company, The. (See Lothrop, Marcus T., assignor.)
Tognieri, Charlotte M., Long Island City, N. Y. Infant's belly band. 1,808,694; June 2.
Tompkins, Deal H. (See Bartram, T. W., and Tompkins.)
Tompkins, Deal H., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Cleansing and preserving of metallic surfaces. 1,808,184; June 2.
Tompkins, Deal H., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Cleaning and preserving of metallic surfaces. 1,808,185; June 2.
Tompkins, Deal H., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Cleaning and preserving of metallic surfaces. 1,808,186; June 2.
Tompkins, Deal H., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Cleaning and preserving of metallic surfaces. 1,808,187; June 2.
Tompkins, Deal H., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Pickling metals. 1,808,188; June 2.
Toolan, John J. (See Gollnick, P. A., and Toolan.)
Torson, Martin G., Long Beach, Calif. Dishwashing machine. 1,807,677; June 2.
Townsend, Percival J., Los Angeles, Calif. High frequency amplifier. 1,808,150; June 2.
Treanor, Edward D., Pittsfield, Mass., assignor to General Electric Company. Incased electrical apparatus. 1,808,583; June 2.
Tremont Nail Company. (See Woodruff, William G., assignor.)
Tresise, Raleigh E., et al. (See Barnhart, Job R., assignor.)
Tresise, Sidney T., Rossburgh, South Africa. Storage of volatile liquids. 1,808,618; June 2.
Trinkl, Hans, Augsburg, Germany. Electromagnetic automatic circuit breaker. 1,808,441; June 2.
Triple "XXX" Company. (See Morris, Edwin M., assignor.)
Trojan Powder Company. (See Snelling, Walter O., assignor.)
Troland, Leonard T., Malden, assignor to Comstock & Wescott, Inc., Boston, Mass. Color photography. 1,808,584; June 2.
Troppe, Frederick J., Joliet, Ill. Musical traps. 1,808,085; June 2.
Troutman, Charles L. (See McDonald, C. C., and Troutman.)
Trumble, John T., Detroit, Mich. Shock absorber. 1,807,945; June 2.
Tucker, Max D., assignor to The Evans Auto Loading Co., Inc., Detroit, Mich. Railroad car floor and constructing the same. 1,807,715; June 2.
Tucker, Robert, Jamaica Plain, Mass. Electric lamp. Des. 84,310; June 2.
Tudor Potteries, Inc. (See McFarlin, Gerald H., assignor.)
Turbine Sewer Machine Company. (See Fuchs, Frederick, W., assignor.)
Turner, Estey M. (See Volk, Andrew C., assignor.)
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Bobbin for weft replenishing looms. 1,807,716; June 2.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Handling weft ends of weft carriers. 1,807,717; June 2.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Giveway and thread guiding devices for weft carrier magazines. 1,807,763; June 2.
Turner, Richard G., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft replenishing double shuttle loom. 1,807,764; June 2.
Turner Tanning Machinery Company, The. (See Harrison, Joseph H., assignor.)
Turner Tanning Machinery Company, The. (See O'Donnell, John W., assignor.)
Tuttle, Bertha S. (See Sugden, Bertha.)
Tuttle, Bertha S., assignor to Technicolor Motion Picture Corporation, Boston, Mass. Composition for inhibition printing. 1,807,809; June 2.
Tyler, Ralph S., and H. McGeorge, Cleveland Heights, and W. M. Reichart, Cleveland, assignors to The Chandler and Price Company, Cleveland, Ohio. Gauge lock. 1,808,388; June 2.
U. G. I. Contracting Company, The. (See Evans, Owen B., assignor.)
Uhde, Robert, assignor to Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung, Cassel-Wilhelmshohe, Germany. Heat exchanger. 1,808,619; June 2.
Uher, Edmund, jr., Budapest, Hungary. Producing photographied printing forms. 1,808,123; June 2.
Uhler, Wilmer P. (See Swartz, T. A., and Uhler.)
Uhrmacher, Matthias, Duisburg-Ruhrort, assignor to the Firm: Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Frog for grooved rails. 1,808,389; June 2.
Ulp, Alfred R., Altadena, Calif. Mounting for automobile glare shields. 1,808,086; June 2.
Umont, William. (See Anderson, Carl W., assignor.)
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Elliott Fisher Company. (See Myers, George H., assignor.)
Union Asbestos and Rubber Company. (See Gillies, William R., assignor.)
Union Steel Products Company. (See Dean, Walter C., assignor.)
Union Switch & Signal Company, The. (See Bone, Herbert L., assignor.)
Union Switch & Signal Company, The. (See Dowling, Philip H., assignor.)
Union Switch & Signal Company, The. (See McCann, Ronald A., assignor.)
Union Switch & Signal Company, The. (See Spray, Lester E., assignor.)
Union Switch & Signal Company, The. (See Thompson, H. A., and Brooks, assignors.)
United Cigarette Machine Company Aktiengesellschaft. (See Berger, Martin, assignor.)
United Cigarette Machine Company Aktiengesellschaft. (See Gottschalk, Paul, assignor.)
United Coal and Dock Company. (See Botsch, Roch P., assignor.)
United Dry Docks, Incorporated. (See Wiseman, John T., assignor.)
United Engineering & Foundry Company. (See Biggert, F. C., jr., and Smitmans, assignors.)
United Gas Improvement Company, The. (See Blake, Alfred E., assignor.)
United Glass Bottle Manufacturers Limited, The. (See Moorshead, Thomas C., assignor.)
United Lace & Braid Manufacturing Co. (See Armitage, George H., assignor.)
United Shoe Machinery Corporation. (See Ashworth, Fred, assignor.)
United Shoe Machinery Corporation. (See Finn, Sidney J., assignor.)
United Shoe Machinery Corporation. (See Kinney, Fay D., assignor.)
United Shoe Machinery Corporation. (See Mackenzie, Fred L., assignor.)
United Shoe Machinery Corporation. (See Pope, Elmer R., assignor.)
United Shoe Machinery Corporation. (See Rollins, Le Roy W., assignor.)
United Shoe Machinery Corporation. (See Winkley, Erastus E., assignor.)
U. S. Bottlers Machinery Co. (See Risser, Arthur I., assignor.)

United States Printing and Lithographing Company, The. (See Burgess, Joseph E., assignor.)
United States Ordnance Company. (See Smith, George L., assignor.)
Universal Draft Gear Attachment Co. (See Bartsch, Herbert E., assignor.)
Upson, Ralph H., Detroit, Mich. Airplane and making same. 1,807,946; June 2.
Ureles, Nathan L., New York, N. Y. Lighting fixture. 1,807,641; June 2.
Urquhart, Kenneth M., Marshall, Okla. Apparatus for treating gas. 1,808,087; June 2.
Urquhart, Kenneth M., Marshall, Okla. Apparatus for contacting two or more fluids. 1,808,088; June 2.
Vadasz, Etienne, Ste.-Croix, Switzerland. Phonograph. 1,808,189; June 2.
Vadner, Charles S., Reno, Nev. Recovery of manganese. 1,807,642; June 2.
Van Deventer, John H., Yonkers, N. Y. Walking toy. 1,808,965; June 2.
Van Etten, William V., Bellingham, Wash. Monkey wrench. 1,807,678; June 2.
Van Horne, John S., assignor to Van Horne Tube Company, Franklin, Ohio. Tubulating lamp bulbs. 1,808,729; June 2.
Van Horne Tube Company. (See Van Horne, John S., assignor.)
Van Houten, Frank H., assignor to Dutchess Tool Company, Beacon, N. Y. Dough handling apparatus. 1,808,696; June 2.
Van Osdel, William J., Chicago, Ill. Hair cutter attachment. 1,807,811; June 2.
Van Sicklen Corporation. (See Thompson, Gertrude E., assignor.)
Vargo, Michael, assignor of one-seventh to F. Chestenick, one-seventh to E. W. Hodge, one-seventh to W. A. Poirier, one-seventh to C. H. Dildine, one-seventh to H. L. Schrock, and one-seventh to A. Galant, Detroit, Mich. Cleaning, sanding and polishing machine. 1,807,765; June 2.
Vaughn Machinery Company, The. (See Nye, Norman H., assignor.)
Vega Separator Corporation of America. (See Johnson, A., jr., and G. Worthington, assignors.)
Vereinigte Stahlwerke Aktiengesellschaft. (See Fricke, Erich, assignor.)
Vereinigte Stahlwerke Aktiengesellschaft. (See Uhrmacher, Matthias, assignor.)
Vickers, Richard N. (See Kniss, F. C., and Vickers.)
Victaulic Company Limited. (See Hele-Shaw, Henry S., assignor.)
Victor Adding Machine Company. (See Garbell, Max, assignor.)
Victor Talking Machine Company. (See Radford, A. S., and Bowman-Manifold, assignors.)
Vilion, Raoul, and R. Lemaignen, Paris, France. Dating stamp. 1,808,089; June 2.
Vilter Manufacturing Company, The. (See Wheaton, Robert S., assignor.)
Vining, Archibald H., San Jose, Calif. Adhesive. 1,808,090; June 2.
Viscose Company, The. (See Gibb, W. B., and Martin, assignors.)
Visible Oil Merchandising Co. (See Corcoran, Daniel A., assignor.)
Vlchek, Frank J., assignor to The Vlchek Tool Company, Cleveland, Ohio. Wrench set unit. 1,808,190; June 2.
Vlchek Tool Company, The. (See Vlchek, Frank J., assignor.)
Vogt, Curt, Berlin, Germany. Counting machine. 1,808,270; June 2.
Volk, Andrew C., deceased, Duluth, Minn.; M. A. Volk, executrix, assignor to E. M. Turner, Arcadia, Calif. Golf practising device. 1,808,390; June 2.
Volk, Metta A., executrix. (See Volk, Andrew C.)
Van Bornegg, Carl B., Frankfort-on-the-Main, Germany. Making a stable powder from whole milk. 1,808,730; June 2.
Von Webern, Guido. (See Castok, L. V., and von Webern.)
Von Wilmowsky, Felix F., New York, N. Y. Treating gum hydrocarbons and apparatus used in the said art. 1,808,191; June 2.
Voss, George. (See Stewart, James S., assignor.)
Waber, James W., Chicago, Ill. Pneumatic tire tube. 1,808,091; June 2.
Waddell, Joseph A., assignor to Spencer Heater Company, Williamsport, Pa. Sectional heater. 1,808,391; June 2.
Wadman, Harold A., assignor to Hartford-Empire Company, Hartford, Conn. Drift control for leers. 1,808,192; June 2.
Wagner, Peter J., Haffney, Pa. Aeroplane. 1,807,812; June 2.
Waldrich, Oskar, Siegen, Germany. Apparatus for grinding rolls. 1,808,392; June 2.
Walker, George, assignor to The Jacobs Brothers Co., Inc., Brooklyn, N. Y. Scale. 1,807,643; June 2.
Walker, George, assignor to The Jacobs Brothers Co., Inc., Brooklyn, N. Y. Scale. 1,807,644; June 2.
Walker, George, Brooklyn, assignor to The Jacobs Bros. Co., Inc., New York, N. Y. Scale. 1,807,645; June 2.
Walker, Jeffery, Birmingham, England. Ship log. 1,808,697; June 2.
Wallis, Lonnie A., Joplin, Mo. Terminal clamp. 1,808,698; June 2.
Walters, Herbert C. (See Chryst, W. A., and Walters.)
Waltz, Anton F., Brooklyn, N. Y., assignor to Koscherak Siphon Bottle Works, Hoboken, N. J. Terminal connecter. 1,808,330; June 2.
Ward, Hugh H., Chester, Pa. Metallic receptacle. 1,808,483; June 2.
Ward, Hugh H., Chester, Pa. Metallic receptacle. 1,808,484; June 2.
Ward, Joseph M. (See Crane, F. G., and Ward.)
Ward, William E., Delmar, Iowa. Fence connection. 1,808,272; June 2.
Warner, Pauline B. (See Bohlig, Martin, assignor.)
Warp Compressing Machines Company. (See Remington, A. L., and Javery, assignors.)
Warren, Thomas R., Jesmond, Newcastle-upon-Tyne, and N. Cooke, Sunderland, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England. Electric synchronizing apparatus. 1,808,124; June 2.
Wasylenko, Eugene, Chester, Pa. Apparatus for developing and printing pictures. 1,808,585; June 2.
Watkins, Hugh M., Lake Charles, La. Window glass channel. 1,808,699; June 2.
Watson Machine Company, The. (See Stevens, Donald B., assignor.)
Wattle, William M., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft end control for magazine looms. 1,807,768; June 2.
Webb, Harry N. (See Webb, Harry R. and H. N.)
Webb, Harry R. and H. N., Grantham, England. Device for balancing bodies adapted for rising and falling movement. 1,808,273; June 2.
Webb, Hartwell W., assignor to A C Spark Plug Company, Flint, Mich. Preparation of flexible cables. 1,808,193; June 2.
Webb, Hartwell W., assignor to A C Spark Plug Company, Flint, Mich. Preparation of flexible cables. 1,808,194; June 2.
Webster, Edward S. (See Gillette, R. T., and Webster.)
Webster, Lewis E., assignor to The Wyoming Shovel Works, Wyoming, Pa. Back strap shovel. 1,807,883; June 2.
Webster, Robert A., Santa Monica, Calif. Projection printer. 1,808,274; June 2.
Wecker, Andrew J., Dayton, Ohio. Doorstop. 1,808,393; June 2.
Weide, Rudolph, Berlin, Germany. Manufacturing cylindrical plates of glass or a similar material for use in connection with polygraphic apparatus. 1,808,442; June 2.
Weidmann, Hans. (See Conway, Baron von Girsewald, Weidmann, and Roesner.)
Weingartner, William, Irvington, N. J., assignor to Westinghouse Lamp Company. Filament mounting. 1,807,885; June 2.
Weissfloch, Konran K., Nuremberg, Germany. Device for filling the crank cases of motor vehicles with lubricating oil. 1,808,125; June 2.
Wendell, Evert J., Wayne, Pa. Shock absorber. 1,808,700; June 2.
Werme, Melcher G., Worcester, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y. Grating and frame therefor. 1,807,718; June 2.
Werme, Tage F., Fairfield, Conn., assignor to Remington Arms Company, Inc. Ammunition. 1,808,513; June 2.
Wessel, Carl, Borbeck, near Essen-on-the-Ruhr, Germany, assignor to the Firm: Carl Still, Recklinghausen, Westphalia, Germany. Coke ovens and the like. 1,808,620; June 2.
Western Electric Company. (See Purdy, Chester A., assignor.)
Western Electric Company. (See Sivian, Leon J., assignor.)
Western Pipe & Steel Company. (See Smith, James E., assignor.)
Westinghouse Electric & Manufacturing Company. (See MacGahan, Paul, assignor.)
Westinghouse Electric & Manufacturing Company. (See Short, Ira, assignor.)
Westinghouse Electric & Manufacturing Company. (See Skvortzoff, Alexander A., assignor.)
Westinghouse Electric & Manufacturing Company. (See White, Harold E., assignor.)
Westinghouse Lamp Company. (See Brindle, Robert, jr., assignor.)
Westinghouse Lamp Company. (See Ferguson, J. E., and Nicolai, assignors.)
Westinghouse Lamp Company. (See Huffman, Charles E., assignor.)
Westinghouse Lamp Company. (See Iredell, Charles V., assignor.)
Westinghouse Lamp Company. (See Morrison, Montford, assignor.)
Westinghouse Lamp Company. (See Weingartner, William, assignor.)
Wetherbee, Herbert E., Cleveland Heights, Ohio, assignor of one-third to R. F. Grant, New York, N. Y., and one-third to H. M. Hanna, Cleveland, Ohio. Duplex rear-view mirror. 1,808,740; June 2.
Wetmore, Julian N., Miami, Fla. Sash retaining means. 1,808,621; June 2.
Wheaton, Robert S., assignor to The Vilter Manufacturing Company, Milwaukee, Wis. Evaporator coil. 1,808,331; June 2.

Whitcher, William C., assignor to The "Dry-Kold" Refrigerator Co., Niles, Mich. Refrigerated counter. 1,808,443; June 2.
White, Bruce C., deceased, by M. L. White, executrix, assignor to R. Hoe & Co., Inc., New York, N. Y. Roll changer. 1,807,813; June 2.
White, Charles H., assignor to Deere & Company, Moline, Ill. Planter. 1,807,814; June 2.
White, Harold E., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,807,815; June 2.
White, Marie L., executrix. (See White, Bruce C.)
White, S. S. Dental Manufacturing Company, The. (See Swartz, T. A., and Uhler, assignors.)
White, William J., Mrs. (See Rainwater, Ora A., assignor.)
Whitehouse, Herbert G., Newark, N. J., assignor to The Riker Company. Shoe ornament. Des. 84,311; June 2.
Whitehouse, Milton H., Milwaukee, Wis. Spring cover. 1,808,332; June 2.
Whitemore, Nathaniel M., Cambridge, assignor to Haverhill Shoe Novelty Company, Haverhill, Mass. Fastening means. 1,808,195; June 2.
Whitesell, Frederick N., assignor to Fairbanks, Morse & Co., Chicago, Ill. Safety apparatus. 1,808,275; June 2.
Whitfield-Johnson Motor Company. (See Whitfield, Joseph E., assignor.)
Whitfield, Joseph E., assignor to Whitfield-Johnson Motor Company, Pittsburgh, Pa. Hand wheel. 1,808,485; June 2.
Whitney, Maurice P., assignor to Eclipse Machine Company, Elmira, N. Y. Engine starter. 1,808,622; June 2.
Wickwire Spencer Steel Company. (See Werme, Melcher G., assignor.)
Widdell, Henry E., Kansas City, Mo., assignor to Gasoline Products Company Inc., Wilmington, Del. Bubble tower cap. 1,808,276; June 2.
Wiegand, William B., Sound Beach, Conn. Manufacture of carbon black. 1,807,884; June 2.
Wiggins, Dudley H., Indianapolis, Ind. Smoking tobacco. 1,808,707; June 2.
Wiggins, Earl B. (See Yackey, George F., assignor.)
Wigglesworth, Harry H., Mount Airy, Philadelphia, Pa. Cloth conditioning machine. 1,808,701; June 2.
Wileman, Bertram T., Detroit, Mich., assignor to Carl A. Boehm, Dover, N. J. Guide wire take-up device. 1,807,769; June 2.
Williams, Calvin C., Philadelphia, Pa. Valve actuating mechanism. 1,807,719; June 2.
Williams, John J., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Metallic cap for glass containers. 1,808,702; June 2.
Williams, Joseph H. (See Williams, Samuel H. and J. H.)
Williams, Rolland G., assignor to Malleable Iron Fittings Company, Branford, Conn. State highway guard fence. 1,808,196; June 2.
Williams, Samuel H. and J. H., North Kansas City, Mo. Burial casket. 1,807,610; June 2.
Willis, Le Roy W., assignor to Intertype Corporation, Brooklyn, N. Y. Attachment for breaking type slugs. 1,808,703; June 2.
Wilson, J. G. Corp. (See Duncanson, Walter E., assignor.)
Wimmer, Leopold, Muskegon, Mich. Top relief valve for sulphite digesters. 1,808,092; June 2.
Wingler, August, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Aromatic n-amino-alkyl-amino aldehydes. 1,807,720; June 2.
Winkler, Alfred, and M. Dünnebier, Neuwied, Germany. Apparatus for the withdrawal of sheets or the like. 1,808,586; June 2.
Winkley, Erastus E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Perforating machine. 1,807,679; June 2.
Winterberger, Joseph. (See Colberg, G. A., Harrison, and Winterberger.)
Winthrop Chemical Company. (See Wingler, August, assignor.)
Wiseman, John T., Brooklyn, assignor to United Dry Docks, Incorporated, New York, N. Y. Fabricating contra-propellers. 1,808,151; June 2.
Witt, Jackson F., Dallas, Tex. Paving method. 1,807,947; June 2.
Wolters, Carl F., Marietta, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Monolithic filing cabinets and attachments therefor. 1,807,948; June 2.
Wood, Charles O., Chambersburg, Pa. Molder's flask. 1,808,993; June 2.
Wood, Claude O., assignor to Goodman Manufacturing Company, Chicago, Ill. Mine locomotive. 1,808,277; June 2.
Woodruff, William G., assignor to Tremont Nail Company, Wareham, Mass. Nail. 1,808,197; June 2.
Woods, David M., assignor of one-half to J. H. Armstrong, Sacramento, Calif. Screen door catch. 1,808,394; June 2.
Woodward, Frederick R., Attleboro, Mass., assignor to The Alvin Corporation, Providence, R. I. Spoon or similar article. Des. 84,312; June 2.
Woodworth, Charles B., Port Dickinson, N. Y. Automobile tire. 1,808,278; June 2.
Worthington, George F., sr. (See Johnson, A., jr., and Worthington.)
Wright, Paul M., Omaha, Nebr. Comb cleaner. 1,808,486; June 2.
Wright, William, assignor to Oklahoma Iron Works, Tulsa, Okla. Drill bit. 1,807,646; June 2.
Wulico Battery Corporation. (See Rupp, John L., assignor.)
Wyoming Shovel Works, The. (See Webster, Lewis E., assignor.)
Yackey, George F., Whittier, assignor to E. B. Wiggins, Los Angeles, Calif. Hose connection. 1,808,094; June 2.
Young, John H., and W. G. Frink, Middletown, assignors to The Borden Company, New York, N. Y. Device for stacking sheet metal and the like. 1,807,816; June 2.
Young, Idus G., Lequire, Okla. Engine. 1,807,721; June 2.
Zapart, Andrew, Brooklyn, N. Y. Mail box. 1,807,611; June 2.
Zapf, Georg, Cologne, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Cologne-Mulheim, Germany. Manufacture of wire cables. 1,808,444; June 2.
Zeiss, Carl. (See Bauersfeld, W., and Gerstenbergr, assignors.)
Zeiss, Firm Carl. (See Bauersfeld, W., and Hübschmann, assignors.)
Zerr, Elijah J., Glendale, Calif. Rotary drill stem bushing. 1,807,949; June 2.
Ziegler, Fritz, jr. (See Dawson, Bayliss M., assignor.)
Ziemmerman, Henry, assignor to Chicago Cardboard Company, Chicago, Ill. Stage display device. 1,808,708; June 2.
Zimmerman, Willard P., assignor to Hemingray Glass Company, Muncie, Ind. Bottle or similar article Des. 84,313; June 2.
Zizelman, Etta G., New York, N. Y. Sewing screen. 1,808,704; June 2.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Instrument mechanism bolder. 1,808,198; June 2.
Zuckerman, Adolph M., assignor to R. Hoe & Co., Inc., New York, N. Y. Sheet handling mechanism. 1,808,514, June 2.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 2D DAY OF JUNE, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acceleration control. A. Rinne. 1,807,706; June 2.
Accounting machine. J. R. Peirce. 1,808,432; June 2.
Acid, Producing hydrogen and phosphoric. F. G. Liljenroth. 1,807,790; June 2.
Acid-proof coating composition. F. D. Sullivan. 1,808,081; June 2.
Acids, Concentrating volatile aliphatic. A. Gorhan. 1,808,600; June 2.
Adapter. C. E. Huffman. 1,807,844; June 2.
Adhesive. A. H. Vining. 1,808,090; June 2.
Adhesive composition. E. Hopkinson. 1,808,225; June 2.
Adjustable seat. J. L. Brownell. 1,807,960; June 2.
Aeroplane. W. R. Reed. 1,808,005; June 2.
Aeroplane. A. Smith and J. Schmidt. 1,808,688; June 2.
Aeroplane. P. J. Wagner. 1,807,812; June 2.
Aeroplane, Model. A. L. Schultz. 1,808,686; June 2.
Aeroplane wing. G. L. Huiskamp. 1,808,464; June 2.
Agitator. W. H. Jackson. 1,808,353; June 2.
Agricultural machine J. S. Stewart. 1,808,690; June 2.
Air cleaner. H. G. Kamrath. 1,808,170; June 2.
Aircraft, including seat for same. I. Sikorsky. 1,807,939; June 2.
Aircraft power generating system. C. A. Serriades. 1,808,439; June 2.
Air in two conduits, Apparatus for automatically establishing a pulsating motion of. G. K. V. Johanson. 1,807,692; June 2.
Air in two conduits, Apparatus for automatically establishing a pulsating motion of. G. K. W. Johansson. 1,808,114; June 2.
Air or gas purifier. C. P. Hegan and W. B. Diecks. 1,807,983; June 2.
Airplane and method of making. R. H. Upson. 1,807,946; June 2.
Airplane, Dirigible. J. W. S. Hodgdon. Des. 84,288; June 2.
Air purifying appliance. K. E. Pütter. 1,808,177; June 2.
Airplane engine. J. M. Royal. 1,808,380; June 2.
Airship. G. G. Duering. 1,808,132; June 2.
Airship. J. C. Schleicher. 1,807,710; June 2.
Air supply device. B. T. Balthazor. 1,808,281; June 2.
Alarm and lock therefor, Burglar. E. Bellman. 1,808,491; June 2.
Alarm switch, Gas flow. L. De Simone and G. Ciriacono. 1,808,100; June 2.
Alcohol, Dehydrating. O. Von Keussler and D. Peters. 1,808,271; June 2.
Aldehydic group into cyclic compounds, Introducing an. G. Kalischer, H. Scheyer, and K. Keller. 1,807,693; June 2.
Alkali phosphates from compounds of metal and phosphorus, Production of. B. v. G. Conway, H. Weldmann, and G. Roesner. 1,807,766; June 2.
Alloy, Bearing. J. V. O. Palm and E. C. Knuth. 1,807,670; June 2
Alloys of lead and antimony. P. Kemp. 1,807,788; June 2.
Amino carbazole and its derivatives, Diazotization of. F. Ballauf, F. Muth, and A. Schmelzer. 1,807,682; June 2.
Ammunition. T. F. Werme. 1,808,513; June. 2
Amplifier, High frequency. P. J. Townsend. 1,808,150; June 2.
Annealing apparatus, Continuous. T. F. Baily. 1,808,152; June 2.
Annealing box. G. B. Nisbet. 1,808,314; June 2.
Annealing furnace. P. A. Meehan. 1,808,000; June 2.
Anode. J. Becker. 1,807,585; June 2.
Antitheft device. J. R. Middleton. 1,808,245; June 2.
Antitheft device. C. M. Morssen. 1,808,248; June 2.
Arch support, Coiled spring metatarsal. W. Selgle. 1,807,758; June 2.
Arm chair, Collapsible. W. J. Bauer. 1,808,201; June 2.
Arm shield. E. S. Lyden. 1,808,049; June 2.
Asparagus trimming and canning machine. C. C. McDonald and C. L. Troutman. 1,808,676; June 2.
Atomizer. M. Kline. 1,808,662; June 2.
Audio frequency coupling. H. P. Donle. 1,808,726; June 2.
Automatic brake. F. W. Schmithals. 1,808,008; June 2.
Automatic vertical elevator. H. R. Gotthardt and W. E. Cain. 1,808,135; June 2.
Automobile. T. H. Bowman. Des. 84,273; June 2.
Automobile turntable and carrier. C. E. Harris. 1,808,655; June 2.
Awning. V. M. McConnell. 1,808,564; June 2.
Awning bracket. T. B. Thurman. 1,807,676; June 2.
Back filling machine. J. Hozack. 1,808,139; June 2.
Back strap shovel. L. E. Webster. 1,807,883; June 2.
Bag: *See*—
Shopping bag.
Balance, Automatic inclination. J. Fischer. 1,808,457; June 2.
Baling press. L. Markt. 1,808,425; June 2.
Band, Infant's belly. C. M. Tognieri. 1,808,694; June 2.
Barge. J. L. Taylor. 1,807,714; June 2.
Barrel forming machine. J. C. Ramsey. 1,808,680; June 2.
Bars, Reforming. G. Langford. 1,808,466; June 2.
Basket. J. M. Gunn. 1,808,653; June 2.
Bath appliance, Baby. M. and E. Polacek. 1,808,376; June 2.
Battery: *See*—
Storage battery.
Battery connecter, Storage. H. O. Loch, J. R. Miller, and E. A. Tibbals. 1,808,361; June 2.
Battery spacer, Storage. J. L. Rupp. 1,808,147; June 2.
Battery terminal connecter, Storage. A. W. Fisher. 1,808,648; June 2.
Bearing. C. H. Norton. 1,807,701; June 2.
Bearing for spindles, Self adjusting. C. H. Norton. 1,807,700; June 2.
Bearing for the cylinder of printing machines. K. Albrecht. 1,808,126; June 2.
Bearing, Peripheral. A. M. Hunt. 1,807,845; June 2.
Bearing removing process, Roller. M. T. Lothrop. 1,808,469; June 2.
Bearings, Making. J. T. Littleton, jr. 1,808,047; June 2.
Bedpan washer. J. H. Okun. 1,807,634; June 2.
Bell. S. Miller. 1,808,313; June 2.
Belt, Link. J. T. Moore, 1,807,925; June 2.
Binder, Loose leaf. J. L. McMillan. 1,808,727; June 2.
Bit: *See*—
Drill bit. Fish tail bit.
Blind, Venetian. W. E. Duncanson. 1,808,455; June 2.
Block: *See*—
Wood block.
Blotting device. E. C. and R. W. Hoffstadt. 1,808,602; June 9.
Board: *See*—
Setting out board. Wall board.
Bobbin for weft replenishing looms. R. G. Turner. 1,807,716; June 2.
Bodies adapted for rising and falling movement, Device for balancing. H. R. and H. N. Webb. 1,808,273; June 2.
Boiler: *See*—
Gas boiler. Locomotive boiler.
Boiler. F. W. Baker. 1,808,488; June 2.
Boiler and evaporator. H. R. F. Kock, and K. A. R. Quitt. 1,808,663; June 2.
Bolt anchor and method. H. W. Pleister. 1,808,318; June 2.
Bomb, Bass. G. E. Spofford. 1,807,712; June 2.
Boot tree. A. A. Glidden, T. M. Knowland, and H. L. Davis. 1,808,544; June 2.
Bottle or similar article. W. P. Zimmerman. Des. 84,313; June 2.
Box: *See*—
Annealing box. Stereoscopic view box.
Mail box. Switch and service box.
Miter box. Switch box.
Box attachment means, Outlet. G. C. Thomas, jr. 1,808,326; June 2.
Bracket: *See*—
Awning bracket.
Bracket for game tables. F. E. Pavelka and H. W. Thompson. Des. 84,299; June 2.
Braiding machine, Round. G. Horn. 1,808,463; June 2.
Brake: *See*—
Automatic brake. Safety brake.
Hydraulic brake.
Brake and steering device for aircraft, Pressure medium. K. Kollinek. 1,807,848; June 2.
Brake applying mechanism. G. L. Smith. 1,808,121; June 2.
Brake centralizer. T. P. Chase. 1,808,206; June 2.
Brake control. B. Bendix. Re18,083; June 2.
Brake equalizer and operating device. F. J. Bradley. 1,807,685; June 2.
Brake for motor vehicles, Electrically operated. C. H. Shannon. 1,808,182; June 2.
Brake operating device for motor vehicles. L. Rouanet. 1,807,707; June 2.
Brake operating mechanism. R. S. Sanford. 1,808,076; June 2.
Brakes, Steam ejector of vacuum. P. M. E. Léotard. 1,808,668; June 2.
Branding machine. H. H. McKee and G. Schuler. 1,807,631; June 2.
Brass melting apparatus. A. and G. Schuler Machlet. 1,808,145. June 2.
Bridge grate. A. Foshay and C. Lovelace. 1,807,907; June 2.
Brooder. P. S. Martin. 1,808,364; June 2.

Brush and current collector. H. D. Munday. 1,807,794; June 2.
Brush for dynamo electric machines. W. H. Hardman. 1,808,549; June 2.
Brush for scrubbing machines. A. A. Hartman. 1,808,656; June 2.
Brush, Vacuum. R. Santini. 1,808,178; June 2.
Bubble tower cap. H. E. Widdell. 1,808,276; June 2.
Buckle. A. W. Naus. Des. 84,297; June 2.
Buckle, Shoe. W. E. Smith. Des. 84,308; June 2.
Buffer. R. K. Lee. 1,808,418; June 2.
Bumper, Automobile. A. A. Thomas. 1,807,640; June 2.
Bung for sealing means. I. H. Rieke. 1,808,576. June 2.
Burglar trap. A. J. Thibault. 1,807,944; June 2.
Burner: *See*—
Fuel burner. Oil burner.
Burner and method of transferring heat. M. J. Roberts. 1,808,319; June 2.
Bushing for armored cables, Threaded. H. Ginsburg. 1,808,542; June 2.
Bushing, Rotary drill stem. E. J. Zerr. 1,807,949; June 2.
Bushing structure. A. A. Skvortzoff. 1,807,880; June 2.
Butter cutter. C. W. Kubon. 1,807,849; June 2.
Buttonhole machine. H. C. Miller. 1,807,699; June 2.
Cabinets and attachments therefor, Monolithic filing. C. F. Wolters. 1,807,948; June 2.
Cable grip. P. J. Martin. 1,807,993; June 2.
Cable reel. E. N. Hescock. 1,807,786; June 2.
Cables, Manufacture of wire. G. Zapf. 1,808,444; June 2.
Cables, Preparation of flexible. H. W. Webb. 1,808,193–4; June 2.
Calcium-carbohydrate compound, Preparing. E. Stern. 1,807,608; June 2.
Calculating machine for all species. K. Eichenauer. 1,808,213; June 2.
Camera, Photographic. A. I. Liberman. 1,808,669; June 2.
Cameras with spring motor, Pocket view taking cinematographic. A. N. Merle. 1,808,566; June 2.
Can: *See*—
Sealed can.
Cane harvesting apparatus. A. C. Howard. 1,808,113; June 2.
Cap. G. B. Rayburn. 1,808,681; June 2.
Car heater. M. B. Harris. 1,808,165; June 2.
Car, Mine. J. Ruffing, sr. 1,808,119; June 2.
Carbon black, Manufacture of. W. B. Wiegand. 1,807,884; June 2.
Carburetor. E. M. Fabrizi and G. Berti. 1,807,732; June 2.
Carburetor. O. Z. Frazier. 1,808,537; June 2.
Carburetor. S. L. Picard. 1,807,750; June 2.
Carburetor. A. O. Tesch. 1,808,386; June 2.
Carrier: *See*—
Luggage carrier. Tube carrier.
Cartridge, Mining. S. G. Frantz. 1,808,162; June 2.
Case: *See*—
Key case.
Case filler, Egg. A. W. Coyle. 1,808,531; June 2.
Case or container, Pocket. W. S. Saunders. 1,807,936; June 2.
Cash register. S. Brand. 1,808,398; June 2.
Casing for a golf ball painting machine. R. C. Smith. Des. 84,305; June 2.
Casing for fruit vending machines. W. H. Claussen. Des. 84,276; June 2.
Casket, Burial. S. H. and J. H. Williams. 1,807,610; June 2.
Catch for windows, Cross rail spring. J. Polachek, J. A. Jepsen, and E. Peremi. 1,808,607; June 2.
Catch, Screen door. D. M. Woods. 1,808,394; June 2.
Cement, Radiator. G. A. Colberg, J. D. Harrison, and J. Winterberger. 1,808,637; June 2.
Cementing machine. F. D. Kinney. 1,807,663; June 2.
Chain, Sprocket. E. A. Lerner. 1,808,236; June 2.
Chair: *See*—
Arm chair.
Chair. H. D. Lee. Des. 84,291; June 2.
Change making device. R. Kuenstler. 1,807,789; June 2.
Charge determining device. H. J. Murphy. 1,807,928; June 2.
Charging mechanism for blasting cartridges. F. H. Kneeland. 1,807,987; June 2.
Chassis construction. J. Ledwinka. 1,808,502; June 2.
Check for gates, Tandem. M. Burstein and A. G. Buckenham. 1,808,341; June 2.
Chisel, Reversible self sharpening. J. I. McCord. 1,807,998; June 2.
Chuck. E. Finsen. 1,808,346–7; June 2.
Cigarettes and similar rod shaped articles right-side up when feeding same to packing machines, Apparatus for turning. P. Gottschalk. 1,807,738; June 2.
Cigarettes right side up as they are fed to the packing machine, Apparatus for turning. M. Berger. 1,807,723; June 2.
Circle divider. F. F. Heitzig. 1,808,110; June 2.
Circuit breaker and closer. F. A. Pfeifer. Re18,091; June 2.
Circuit breaker, Electromagnetic automatic. H. Trinkl. 1,808,441; June 2.
Circuit controlling device. R. B. Hunter and R. C. Pauly. 1,808,229; June 2.
Clamp: *See*—
Conduit and pipe clamp. Terminal clamp.
Hose clamp. Toggle clamp.
Pinning clamp. Wire clamp.
Clamp. G. M. Mortenson. 1,808,059; June 2.
Clamp flange for spring hinges and the like, Adjustable. W. J. Keene. 1,808,308; June 2.
Clasp: *See*—
Lingerie clasp.
Clavicle apparatus. W. C. MacDonald. 1,808,422; June 2.
Clay disintegrator. T. C. and W. O. Prouty. 1,808,509; June 2.
Clay, Treating. W. R. Jeavons and M. J. Rentschler. 1,808,231; June 2.
Cleaner: *See*—
Air cleaner. Comb cleaner.
Cleaning and preserving of metallic surfaces. D. H. Tompkins. 1,808,186; June 2.
Cleaning, sanding, and polishing machine. M. Vargo. 1,807,765; June 2.
Cleansing system and device for air filters. A. Adams, jr., and W. L. Richards. 1,807,950; June 2.
Clip: *See*—
Test clip.
Clip structures for fountain-pen caps, pencils and the like. H. Krause. 1,808,045; June 2.
Clock, Alarm illuminator. E. Flohr. 1,807,976; June 2.
Cloth conditioning machine. H. H. Wigglesworth. 1,808,701; June 2.
Clothes peg usable for other purposes. V. I. M. Langan. 1,808,417; June 2.
Cluster mold. R. G. Redmann. 1,807,753; June 2.
Coal and the like, Device for mining. F. Kalla. 1,808,307; June 2.
Coal loading method and apparatus. H. Adams. 1,808,587; June 2.
Coal mining machine. J. W. McPherson. 1,808,053; June 2.
Coal, Treating. C. P. Anderson. 1,807,817; June 2.
Coil, Evaporator. R. S. Wheaton. 1,808,331; June 2.
Coil, Induction. L. Griffiths and C. J. Morton. 1,808,548; June 2.
Coin controlled mechanism. M. Bohlig. 1,808,519; June 2.
Collector and separator for feed mills, Combined. A. H. Bottorff. 1,807,891; June 2.
Colloidal mill. B. M. Dawson. 1,807,773; June 2.
Color printing machine, Plural. H. Fischer. 1,807,656; June 2.
Colored reproduction by imbibition, Preparation of. B. Sugden. 1,807,805; June 2.
Comb cleaner. P. M. Wright. 1,808,486; June 2.
Communication system. F. W. Godsey, jr. 1,807,658; June 2.
Compass protractor and ruler, Combination. W. E. Owen, jr. 1,808,705; June 2.
Compass, Radio. F. A. Kolster. 1,807,919; June 2.
Compensating joint. E. Bagby. 1,808,624; June 2.
Composition bushing and making the same. F. C. Morris. 1,808,247; June 2.
Composition for imbibition printing. B. S. Tuttle. 1,807,809; June 2.
Composition of material for use in panary fermentation. J. W. Hawks. 1,808,108; June 2.
Compounds, Method of and apparatus for preparing. C. A. Purdy. 1,807,931; June 2.
Compressor, Air. L. H. Hyatt. 1,808,554; June 2.
Computing machine. E. E. Barney. 1,807,584; June 2.
Computing machine. F. A. Hart. 1,807,593; June 2.
Concrete form. F. M. Sutton. 1,807,943; June 2.
Concrete road lengthwise finishing machine. R. T. Giles. 1,808,719; June 2.
Condenser, Cable type. E. D. Eby. 1,808,533; June 2.
Condenser, Electrical. J. A. Fried. 1,808,031; June 2.
Condenser, Electrolytic filter. E. W. Engle. 1,808,498; June 2.
Conductivity cell. L. Behr. 1,807,821; June 2.
Conductor, Insulated. D. R. Brobst. 1,808,520; June 2.
Conduit and connecting means therefor. E. Babb. 1,807,647; June 2.
Conduit and pipe clamp. F. B. Thomson. 1,808,328; June 2.
Conduit, Flexible. J. H. Brown. 1,808,204; June 2.
Conduit terminal. W. W. Sloane. 1,808,581; June 2.
Cone disk, Yielding. A. H. Leipert. 1,808,358; June 2.
Connection device for wrist watches. B. Ogush. 1,808,474; June 2.
Connection for metal frames, Corner. I. A. Baum. 1,808,336; June 2.
Constructional material comprising rail filler functioning as an expansion joint. A. C. Fischer. 1,808,302; June 2.
Container. A. Edmunds. 1,807,589; June 2.
Container. S. Hansson. 1,807,912; June 2.
Container, Cheese. H. E. Cooley. 1,808,530; June 2.
Container for ice cream cabinets, Sharp freezing. L. G. Copeman. 1,807,587; June 2.
Container, Shipping. W. B. Gibb and F. B. Martin. 1,808,651; June 2.
Containers, Metallic cap for glass. J. J. Williams. 1,808,702; June 2.

Contra-propellers, Fabricating. J. T. Wiseman. 1,808,151; June 2.
Control airplane. R. Chilton. 1,808,342; June 2.
Control apparatus. H. E. White. 1,807,815; June 2.
Control for airplanes. M. H. Depue. 1,808,344; June 2.
Controlling device. F. G. L. Boyer. 1,807,825; June 2.
Conveyor, Portable. W. K. Liggett. 1,808,237; June 2.
Cooking apparatus. J. C. Bergner. 1,807,820; June 2.
Cooking apparatus, Turnover for automatic. J. H. Friedel. 1,808,215; June 2.
Cooling and conditioning machine. T. Allsop. 1,807,580; June 2.
Cooling means, Electric transformer. J. L. Thompson. 1,808,617; June 2.
Coop or crate, Poultry. W. C. Dean. 1,807,972; June 2.
Copper extraction process. W. E. Greenawalt. 1,808,547; June 2.
Copyholder. C. C. Harper and E. F. Kitendaogh. 1,807,982; June 2.
Cord or rope holding device. S. Rothschild. 1,808,075; June 2.
Core catcher for well drills. F. L. Scott. 1,808,009; June 2.
Core engaging device. R. O. Anderson. 1,807,953; June 2.
Core forming mechanism. R. N. Brown. 1,808,630; June 2.
Cork feeder. A. I. Risser. 1,807,673; June 2.
Cotton picker. T. R. Post. 1,807,751; June 2.
Counter, Refrigerator. W. C. Whitcher. 1,808,443; June 2.
Counting machine. C. Vogt. 1,808,270; June 2.
Counting mechanism for calculating machines and the like. H. Huber. 1,808,720; June 2.
Coupler, Lightning rod. E. C. Cripe. 1,808,595; June 2.
Coupling: *See*—
Train pipe coupling.
Coupling. P. T. Robin. 1,807,636; June 2.
Coupling. I. Short. 1,807,798; June 2.
Coupling for hose, pipe, or other conductors. P. Stauffer. 1,808,382; June 2.
Coupling member for conduit rods, pump rods, etc. F. W. Fuchs. 1,807,782; June 2.
Cover, Book. J. Schade. 1,808,179; June 2.
Cover closure. M. Garbell. 1,807,910–11; June 2.
Cover, Container. R. C. Euwer. 1,808,345; June 2.
Cover for spare tires of automobiles. G. A. Lyon. 1,807,697; June 2.
Cover, Spring. D. K. Pope. 1,808,508; June 2.
Cover, Spring. M. H. Whitehouse. 1,808,332; June 2.
Cover, Tire. J. J. Cloughley. 1,808,291; June 2.
Coverings, Ornamenting printed hard surface floor. H. W. Prentis, jr. 1,807,672; June 2.
Crank cases of motor vehicles with lubricating oil, Device for filling the. K. K. Weissfloch. 1,808,125; June 2.
Creel for winding warp beams. M. Bellingeri. 1,808,339; June 2.
Crop and discharging apparatus. F. C. Biggert, jr., and J. A. Smitmans. 1,808,396; June 2.
Crusher and pulverizer. H. J. Shelton. 1,808,264; June 2.
Current collector for trolley wires. F. Board. 1,808,518; June 2.
Current production apparatus, Secondary fluid. C. Coupard. 1,808,638; June 2.
Current transformer. R. M. Heintz. 1,807,985; June 2.
Current transformer. S. Rump. 1,807,797; June 2.
Currents, Generation of electric. L. J. Sivian. 1,808,579; June 2.
Curtain support. R. R. Bruckner. 1,807,893; June 2.
Cutter: *See*—
Butter cutter. Stalk cutter.
Lead and rule cutter. Thread cutter.
Cutter attachment, Hair. W. J. Van Osdel. 1,807,811; June 2.
Cutting machines, Attachment for. E. Cheshire. 1,807,895; June 2.
Cutting mechanism for sheets. P. A. Golinick and J. J. Toolan. 1,807,840; June 2.
Cutting, trimming, and ornamenting machine. A. W. Altvater. 1,807,952; June 2.
Cylinder for rotary intaglio printing machines, Form. E. Sachs. 1,807,637; June 2.
Cylinder, Freezing. L. S. Pfouts. 1,808,065; June 2.
Decorating machine, apparatus and method, Surface. L. V. and G. E. Lang. 1,807,894; June 2.
Deflecting switch, Selective. H. R. Gotthardt and W. E. Cain. 1,808,134; June 2.
Dental casting post. D. R. Evans. 1,808,102; June 2.
Dental plate suction cap attaching means. I. Kulik. 1,807,850; June 2.
Deposits of oil, gas, and other dielectric subterranean bodies, Method of and apparatus for locating. L. C. Billotte and C. Lipson. 1,808,397; June 2.
Derrick, Steel. J. E. Smith. 1,808,080; June 2.
Developing, fixing, and washing tank. C. L. Drew. 1,807,901; June 2.
Diaphragm for gas meters, Removable. H. L. Berry. 1,807,771; June 2.
Diaphragm for sound reproduction. K. Locke and H. Sachs. 1,808,238; June 2.
Diazo-types to water, Improving the resistance of. E. Sprongerts. 1,807,761; June 2.
Dies for making bars. G. Langford. 1,808,467; June 2.
Diestock. I. W. Nonneman. 1,808,315; June 2.
Dip up. A. W. Hernke. 1,808,736; June 2.
Disconnecting device. J. H. Powers. 1,808,570; June 2.
Dishwashing machine. M. G. Torson. 1,807,677; June 2.
Disk, Friction. A. D. Robbins. 1,808,511; June 2.
Dispenser, Cigarette. J. H. Hosier. 1,808,658; June 2.
Dispenser, Elastic bank cup. C. N. Bergmann. 1,808,284; June 2.
Display apparatus. F. J. Hofschneider. 1,807,986; June 2.
Display device. J. E. Burgess. 1,808,099; June 2.
Display device. A. J. Freiler. 1,808,303; June 2.
Display device, Visible liquid. D. A. Corcoran. 1,807,966; June 2.
Display rack. B. A. Landers. 1,807,990; June 2.
Distillation and like column. A. Kuhn. 1,808,666; June 2.
Door, Automobile. E. G. Bullis. 1,808,129; June 2.
Doorcheck. H. Smith. 1,807,607; June 2.
Door fastener. A. Hosig. 1,808,227; June 2.
Door handle, Automobile. C. B. Lowe. 1,808,048; June 2.
Door holding device. W. G. Black. 1,808,153; June 2.
Door kick-out device. J. B. Flynn. 1,808,458; June 2.
Door lock. W. C. Devereaux. 1,807,775; June 2.
Door retainer. J. W. Droz, jr. 1,808,641; June 2.
Doorstop. A. J. Wecker. 1,808,393; June 2.
Doors, Attachment for. H. Hansen. 1,807,841; June 2.
Dough handling apparatus. F. H. Van Houten. 1,808,696; June 2.
Dough-proofing apparatus. S. Debus. 1,807,688; June 2.
Drawer for printing devices. E. A. Oyen. 1,808,475; June 2.
Dress. D. Long. Des. 84,293–4; June 2.
Drier: *See*—
Rotary drier.
Drill: *See*—
Grain drill. Paper drill.
Drill bit. W. Wright. 1,807,646; June 2.
Drill support. J. P. Maslewski. 1,808,051; June 2.
Drilling machine. F. W. Hild and G. T. Pollard. 1,808,221; June 2.
Drills, Attachment for electric. E. Hulack and J. W. Nissrod. 1,808,228; June 2.
Drive for long conveyers, Segregated. W. R. Perry. 1,808,738; June 2.
Drive, Motor boat. C. N. Colstad. 1,807,622; June 2.
Drive, Starter. W. L. McGrath. 1,808,115; June 2.
Dropping boards for use in poultry houses. O. A. Rainwater. 1,807,932; June 2.
Dry cell and lining therefor. G. W. Heise and E. A. Schumacher. 1,808,410; June 2.
Dump body. R. T. Osman. 1,808,251; June 2.
Dumpers, External counterweight device for gondola car. W. E. Erickson. 1,807,902; June 2.
Dyestuff, New violet vat. M. P. Schmidt and W. Neugebauer. 1,808,260; June 2.
Dyestuffs, Production of nitrogenous vat. M. A. Kunz and K. Koeberle. 1,807,694; June 2.
Dyphenylene oxide, Preparation of. W. J. Hale and W. C. Stoesser. 1,808,349; June 2.
Earth moving implement. L. O. Bird. 1,808,733; June 2.
Earth working implement. R. N. Geffroy. 1,807,784; June 2.
Educational apparatus. L. Behr. 1,807,615; June 2.
Electric converting apparatus. J. E. Calverley and W. E. Highfield. 1,808,399; June 2.
Electric fitting. L. Barnett. 1,808,011; June 2.
Electric machine, Dynamo. V. G. Apple. 1,807,955; June 2.
Electric starting and braking motors, Control mechanism for. V. G. Apple. 1,808,095; June 2.
Electric switch. G. H. Elwell. 1,808,534; June 2.
Electric switch. E. Ishimaru. 1,808,555; June 2.
Electric switch. W. F. Neubeck. 1,808,060; June 2.
Electric synchronizing apparatus. T. R. Warren. 1,808,124; June 2.
Electrical apparatus. I. F. Byrnes. 1,808,524; June 2.
Electrical apparatus. O. E. Marvel. 1,807,994–5; June 2.
Electrical apparatus, Incased. E. D. Treanor. 1,808,583; June 2.
Electrical connecting member. J. M. Auficro. 1,808,335; June 2.
Electrical contact terminal. C. F. W. Bates. 1,807,581; June 2.
Electrical fuses, Timing. H. Ruhlemann. 1,807,708; June 2.
Electrical system for voltage regulation. J. Kubler and A. Haller. 1,808,559; June 2.
Electrodynamic speaker. M. Smith. 1,808,149; June 2.
Electrooptical system. R. V. L. Hartley. 1,808,137; June 2.
Electroplating and product thereof. K. D. Robinson. 1,807,875; June 2.
Elevator: *See*—
Automatic vertical elevator.
Elevator dispatching system. C. W. Bassett. 1,807,612; June 2.
Emulsion and process therefor. H. L. Symons. 1,807,808; June 2.
Endless tread linkage. A. P. Armington. 1,808,446; June 2.
Engine: *See*—
Airplane engine. Rotary engine.
Internal-combustion engine. Two-cycle engine.
Engine. I. G. Young. 1,807,721; June 2.
Envelope machine. A. Novick. 1,807,862–3; June 2.

Envelope machinery. A. Novick. 1,807,866; June 2.
Envelope machines. Feeder for. H. S. Labombarde. 1,808,142; June 2.
Envelope making machinery. A. Novick. 1,807,864; June 2.
Envelope sealing device. C. A. Mezger. 1,808,567; June 2.
Envelopes and the like, Feeding mechanism for. A. Novick. 1,808,706; June 2.
Envelopes, Method of and machine for making. A. Novick. 1,807,867; June 2.
Episcopic projection, Apparatus for. W. Bauersfeld and B. Gerstenberger. 1,807,614; June 2.
Ether and the product thereof, Packaging. E. Mallinckrodt, jr., H. V. Farr, and L. P. Hall. 1,807,598; June 2.
Excavating apparatus. C. O. Hanson. 1,808,409; June 2.
Excavating dipper. W. S. McKee. 1,807,632; June 2.
Excavator. H. Madonna. 1,808,311; June 2.
Excavator apparatus. C. O. Hanson. 1,808,408; June 2.
Exercising apparatus. J. J. Shoemaker. 1,807,938; June 2.
Expansion joint, Waterproof. A. C. Fischer. 1,807,905; June 2.
Explosive. Propellant. W. O. Snelling. 1,808,613; June 2.
Explosives in wells, Device for loading. M. A. Altgelt. 1,807,819; June 2.
Extension table. H. Siskin. 1,807,881; June 2.
Fabric: *See*—
  Woven fabric.
Fastener, Button. L. B. Erwin. 1,808,535; June 2.
Fastener, Cord. G. F. Chesney. 1,808,636; June 2.
Fastener, Necktie. A. G. Delmon and V. M. Lastra. 1,807,623; June 2.
Fastener, Rod. L. W. Bond. 1,808,628; June 2.
Fastener, Safety box. J. G. Friedman. 1,808,216; June 2.
Fastening means. N. M. Whitemore. 1,808,195; June 2.
Fastening pulling machine. F. L. Mackenzie. 1,807,853; June 2.
Faucet. H. G. Davis. 1,807,970; June 2.
Feed structure. J. G. Poorman. 1,808,433; June 2.
Feeder, Chick. C. H. Miller. 1,807,633; June 2.
Feeder, Poultry. L. Hawkins. 1,808,657; June 2.
Feeding and spacing device. H. G. Allen. 1,808,588; June 2.
Fence connection. W. E. Ward. 1,808,272; June 2.
Fence, State highway guard. R. G. Williams. 1,808,196; June 2.
Fender welt and making the same. R. C. Schemmel. 1,808,259; June 2.
Fern stand. S. L. Cooper. 1,808,402; June 2.
Ferro-phosphorous into ferric phosphate ($FePO_4$) by roasting in air or other gases containing oxygen, Conversion of. Conway, B. v. G., and H. Weidmann. 1,807,767; June 2.
Fibrous material with liquids, Apparatus for impregnating. E. S. Pearce. 1,807,600; June 2.
Filament mounting. W. Weingartner. 1,807,885; June 2.
Filling station. J. L. Smith. Des. 84,304; June 2.
Film driving. C. L. Heisler. 1,808,551; June 2.
Film gate. F. H. Owens. 1,808,252; June 2.
Film of magnetizable material for episcopic projection. H. Köchenmeister. 1,808,046; June 2.
Filter, Air. C. P. Hegan. 1,807,984; June 2.
Filter, Electrical. R. D. Amsden. 1,808,589; June 2.
Filtration process for breaking emulsions. H. C. Eddy. 1,807,833; June 2.
Fire escape, Safety. E. Bocchino. 1,808,492; June 2.
Fire extinguisher. W. B. Bronander. 1,808,154; June 2.
Fish bait, Artificial. U. C. Pemberton and J. B. Johnson. 1,807,870; June 2.
Fish tail bit. O. E. Cone. 1,808,159; June 2.
Fishing lure. F. McLaughlin. 1,808,565; June 2.
Fixture coupling fitting for outlet boxes. L. Barnett. 1,808,012; June 2.
Flask: *See*—
  Molder flask.
Flax fiber, Manufacture of. E. R. Clark. 1,808,593; June 2.
Floor and constructing the same, Railroad car. M. D. Tucker. 1,807,715; June 2.
Flooring unit. J. H. Boden. Des. 84,271; June 2.
Flotation. L. E. Booth. 1,807,823; June 2.
Flotation apparatus. J. P. Ruth, jr. 1,807,876; June 2.
Flow control fixture, Fluid. G. O. Dougherty. 1,807,900; June 2.
Flow controller, Automatic. C. Gottfried. 1,808,163; June 2.
Fluid meter. G. G. Earl. 1,808,211; June 2.
Fluid metering mechanism. G. G. Earl. 1,808,210; June 2.
Fluid metering system and apparatus. G. G. Earl. 1,808,209; June 2.
Fluid pressure motor. E. G. Gartin. 1,807,839; June 2.
Fluids, Apparatus for contacting two or more. K. M. Urquhart. 1,808,088; June 2.
Fluids, Apparatus for metering gaseous. A. E. Blake. 1,808,709; June 2.
Fluids, Detection of suspended matter in. H. C. Grant, jr. 1,807,659; June 2.
Foamy body, Making a. J. A. Rice. 1,807,810; June 2.
Folding device for tables and the like. H. Howe. 1,808,305; June 2.
Folding machine. C. Christiansen. 1,808,158; June 2.
Foot warmer. A. Kamrath. 1,808,235; June 2.
Footwear. M. L. Paterson. 1,808,063; June 2.
Forging machine. J. Lesicko. 1,807,696; June 2.
Frame: *See*—
  Tractor frame. Window frame.
Frame and upright, Sign. A. and J. Sprung. Re18,087; June 2.
Frame for all plaster walls. I. A. Baum. 1,808,338; June 2.
Frame for coating pails and the like. J. Carroll. 1,808,157; June 2.
Frames, Corner connection for. I. A. Baum. 1,808,490; June 2.
Frog for grooved rails. M. Ohrmacher. 1,808,389; June 2.
Fruit products, Producing citrus. H. G. Loesch. 1,808,737; June 2.
Fuel briquet. R. P. Botsch. 1,808,340; June 2.
Fuel burner. D. S. Frank. 1,807,977; June 2.
Fuel burner, Pulverized. R. C. Roe. 1,808,682; June 2.
Furnace: *See*—
  Annealing furnace. Pulverized fuel furnace.
Furnace wall. O. Nygaard. 1,807,929; June 2.
Furnace wall, Expansion. O. Nygaard. 1,807,868; June 2.
Furnace work, Universal shoe or receiving box for. S. P. Burgess. 1,808,450; June 2.
Fuse. T. F. Cote. 1,807,967; June 2.
Garment. G. W. Dillon. 1,808,496; June 2.
Garment, Nether. J. Stein. 1,808,614; June 2.
Garter. T. Cahn. Des. 84,275; June 2.
Gas and coal gas, Producing mixed water. A. H. Lymn. 1,808,672; June 2.
Gas boiler. T. King and D. G. Burkert. 1,808,557; June 2.
Gas, Making water. O. B. Evans. 1,808,214; June 2.
Gases at measured rates, Delivering. F. Howles. 1,808,412; June 2.
Gases, Device for dosing compressed. H. W. C. Schroeder. 1,808,612; June 2.
Gate: *See*—
  Film gate.
Gauge: *See*—
  Wheel gauge.
Gauge. L. Cook. 1,808,207; June 2.
Gauge lock. R. S. Tyler, H. McGeorge, and W. M. Reichart. 1,808,388; June 2.
Gear, Draft. W. F. Richards. 1,808,378; June 2.
Geographical globe, Spherical. P. J. King. 1,808,354; June 2.
Glass channel, Window. H. M. Watkins. 1,808,699; June 2.
Glass, Method of and apparatus for rolling sheet. J. A. Reece and W. E. Nobbe. 1,807,873; June 2.
Glass or a similar material for use in connection with polygraphic apparatus, Manufacturing cylindrical plates of. R. Weide. 1,808,442; June 2.
Glass shaping machine. T. C. Moorshead. 1,807,857; June 2.
Glass trimmer, Floating bulb edge. J. A. Boush. 1,807,610; June 2.
Glassware, Apparatus for handling. J. E. Schrader. 1,808,180; June 2.
Goggles. N. M. Baker. 1,807,681; June 2.
Golf practicing device. A. C. Volk. 1,808,390; June 2.
Goods, Mercerization of piece. F. Thies. 1,807,762; June 2.
Gopher trap. A. F. Renken. 1,808,006; June 2.
Governor for motor engines, Fine speed. R. Michl. 1,807,698; June 2.
Grain drill, Deep furrow. F. S. Brown. 1,807,827; June 2.
Graining machine. L. V. Casto and G. Von Webern. 1,807,963; June 2.
Graining machine. G. E. Lang and L. V. Casto. 1,807,991–2; June 2.
Grate shaking and dumping device. J. Murchie. 1,808,002; June 2.
Grate shaking and dumping device. O. P. Nystrom. 1,808,004; June 2.
Grating and frame therefor. M. G. Werme. 1,807,718; June 2.
Greasing, lifting and rocking machine. A. W. Dainos. 1,808,596; June 2.
Grid winding machine. R. Brindle, jr. 1,807,892; June 2.
Grinder and ensilage cutting machine, Built in. C. W. Eyres. 1,807,975; June 2.
Grinding machine. J. Cook, J. C. Spence, and R. A. Cole. 1,808,401; June 2.
Ground anchor and like anchoring device. E. C. Carver. 1,808,633; June 2.
Guide for traction chains, Wheel. J. T. Moore. 1,807,926; June 2.
Gum and making the same, Chewing. A. Pappadis. 1,807,704; June 2.
Gun. G. M. Barnes. 1,808,097; June 2.
Gun. G. M. McCann. 1,808,052; June 2.
Halving and pitting device. A. M. Swanson. 1,807,713; June 2.
Hand wheel. J. E. Whitfield. 1,808,485; June 2.
Handle: *See*—
  Door handle.
Handle for containers, Wire. O. E. Florang. 1,808,650; June 2.

Handles to trays and the like, Attaching. H. J. McCarthy. 1,808,503; June 2.
Hanger: *See*—
  Picture hanger.
Harvester, Potato. W. W. Firman. 1,808,133; June 2.
Headdress retaining device. J. E. Burns. 1,808,156; June 2.
Headlamp adjusting apparatus, Vehicle. C. E. Hunter. 1,808,039; June 2.
Heat distributor for cook stoves. C. A. Harpman. 1,808,550; June 2.
Heat exchange apparatus. E. Seaver. 1,807,638; June 2.
Heat exchanger. R. Uhde. 1,808,619; June 2.
Heat transfer device. D. S. Jacobus. 1,808,169; June 2.
Heat transfer, Regulating and maintaining. H. R. Minor. 1,808,429; June 2.
Heat treating, System of. C. A. Martin. 1,808,241; June 2.
Heat treatment. C. I. Hayes. 1,808,721; June 2.
Heater: *See*—
  Car heater. Water heater.
  Sectional heater.
Heating apparatus. J. H. Sherts. 1,808,381; June 2.
Heating means for casting pots. T. Bader. 1,808,718; June 2.
Heel making machine. F. Ashworth. 1,807,818; June 2.
Heel, Shoe. C. Sandler. 1,807,935; June 2.
Hinge. M. M. Suppes. 1,807,675; June 2.
Hoes, Rake attachment for. C. Coppock. 1,808,293; June 2.
Holder and letter clamp, Combined coin. C. K. Heistand. 1,808,601; June 2.
Holder, Angle cock. H. E. Bartsch. 1,808,516; June 2.
Holder, Card. E. B. Stone. 1,807,804; June 2.
Holder, Certificate. E. A. Morris. 1,808,246; June 2.
Holder for reflectors. N. Lang. 1,808,501; June 2.
Holder, Instrument mechanism. J. Zubaty. 1,808,198; June 2.
Holder, Lamp. C. F. Capell. 1,808,400; June 2.
Holder, License plate. M. H. Benson. 1,808,627; June 2.
Holder, Toilet paper. F. W. Kompa. 1,808,044; June 2.
Holder, Universally adjustable tool. E. P. McMurtry. 1,807,999; June 2.
Holder, Work. W. H. Chapman and P. H. Hutchinson. 1,808,288 June 2.
Holding device. G. T. Cousins. 1,808,452 June 2.
Horn, Padded sound reproducing. L. L. Maxam. 1,808,174; June 2.
Hose clamp. J. P. Eastman. 1,808,101; June 2.
Hose connection. G. F. Yackey. 1,808,094; June 2.
House: *See*—
  Poultry house.
Hub cap. R. E. Cochran. 1,807,965; June 2.
Hub cap wrench. M. Horeth. 1,808,462; June 2.
Humidifier. E. A. Spaulding. 1,808,183; June 2.
Hurdle, Diving. B. W. Oertel. 1,808,371; June 2.
Hydraulic brake. M. Loughead. 1,807,851; June 2.
Hydraulic press. W. E. McCullough. 1,808,244; June 2.
Hydrocarbon vapors, Rectifying and treating. P. L. Magill. 1,807,924; June 2.
Hydrocarbons and in the apparatus used in the said art, Treating the gum. F. F. von Wilmowsky. 1,808,191; June 2.
Hydrocarbons, Dehydrogenating. M. B. Hopkins. 1,808,168; June 2.
Hydrogen, Obtaining substantially pure. G. Cicali. 1,807,897; June 2.
Ignition device. D. L. Hittle. 1,807,624; June 2.
Ignition timer and fuel pump unit. W. A. Chryst and H. C. Walters. 1,807,650; June 2.
Imprint device. I. T. Fisk. 1,808,536; June 2.
Incinerator, Garbage. M. A. Kohn. 1,808,234; June 2.
Incubator. W. Hanson. 1,808,107; June 2.
Indicator: *See*—
  Liquid level indicator.
Indicator or gauge, Automobile tire. M. J. Poster. 1,807,752; June 2.
Indicator with several measuring ranges, Speed. E. Horn. 1,808,112; June 2.
Insulator. H. C. Eddy. 1,807,781; June 2.
Insulator cutter and treating insulators. M. F. H. Gouverneur. 1,808,105; June 2.
Internal combustion engine. H. H. Brackman. 1,807,725; June 2.
Internal combustion engine. J. R. Davis. 1,807,832; June 2.
Internal combustion engine. J. F. Edgar. 1,808,028; June 2.
Internal combustion engine. F. Koschka. 1,808,664; June 2.
Internal combustion engine. E. Maye. 1,808,675; June 2.
Internal combustion engine. M. Tibbetts. 1,808,083; June 2.
Internal combustion engine. W. H. Parker. 1,808,146; June 2.
Iron or the like, Soldering. E. Liitgert. 1,808,562; June 2.
Isopropyl acetate, Making. H. E. Buc. 1,808,155; June 2.
Jack: *See*—
  Lifting jack.
Jack-top. E. R. Pope. 1,807,795; June 2.
Jamb, Metal. I. A. Baum. 1,807,959; June 2.
Jar. A. C. Ebbesen. Des. 84,278; June 2.
Jelly preparation. A. Leo. Re18,085; June 2.
Joint: *See*—
  Compensating joint. Pipe joint.
  Expansion joint. Roofing joint.
Joint for pipes, Swivel. S. G. Plummer. 1,808,066; June 2.
Key case. G. E. Prentice. 1,808,434; June 2.
Key control for liquid registers. O. Asper. 1,808,447; June 2.
Key guard. T. W. Kupfer. 1,808,141; June 2.
Keying. C. W. Hansell. 1,808,220; June 2.
Kit, Shaving. F. Bosanac. 1,807,724; June 2.
Knitting machine. T. H. Jones. 1,808,232; June 2.
Knitting machine, Circular. E. T. May and A. Sherriff. 1,808,242; June 2.
Laces, Process and apparatus for tipping. G. H. Armitage. 1,807,886; June 2.
Lamp. A. Rimberg. Des. 84,301; June 2.
Lamp bulbs, Tubulating. J. S. Van Horne. 1,808,729; June 2.
Lamp, Electric. R. Tucker. Des. 84,310; June 2.
Lamp, Electric arc. O. Krell and H. Gerdien. 1,808,558; June 2.
Lamp, Floor. L. C. Doane and G. P. Norton. 1,808,296; June 2.
Lamp, Mercury vapor. M. Morrison. 1,807,927; June 2.
Lamp, Portable electric arc. W. R. Gruber. 1,808,164; June 2.
Latch. B. Hall. 1,808,219; June 2.
Latch. E. W. North and L. Anderson. 1,807,668; June 2.
Latch, Door. W. C. Devereaux. 1,807,776–7; June 2.
Latching device, Automatic. M. J. Cherry and C. A. Barth. 1,808,635; June 2.
Latching means for removable crank case covers. A. A. Eklund. 1,808,403; June 2.
Lathe, Grinding and polishing. R. C. Mitchell. 1,808,728; June 2.
Laundry checking and assembling apparatus. E. L. Hurd. 1,808,405; June 2.
Lead and rule cutter. F. Meese. 1,808,054; June 2.
Leather, fabric, or paper rolling machine, Hydraulic. J. Kleinewefers. 1,808,356; June 2.
Leather stretching machine. J. H. Harrison. 1,807,660; June 2.
Leers, Drift control for. H. A. Wadman. 1,808,192; June 2.
Life from drowning, Device for saving. L. K. Richey. 1,807,754; June 2.
Lifter: *See*—
  Valve lifter.
Lifter for roasters, Cover. L. L. Kole. 1,808,357; June 2.
Lifting device. R. C. Penfield. 1,808,175; June 2.
Lifting jack. G. A. Bonge. 1,808,629; June 2.
Lifting jack. A. C. Hopkins. 1,807,914; June 2.
Lifting machinery, especially for the ends of pivot bridges. F. Duwe. 1,807,780; June 2.
Lighting fixture. N. L. Ureles. 1,807,641; June 2.
Lingerie clasp. L. V. Rooney. 1,808,436; June 2.
Linoleum, Tile. A. C. McKissock. 1,808,116; June 2.
Liquefiable constituents from a gaseous mixture, Process of and apparatus for separating desired. E. H. Leslie and E. M. Baker. 1,808,420; June 2.
Liquid level indicator. J. A. Dienner. 1,808,023; June 2.
Liquid measure. H. B. Donley. 1,808,024; June 2.
Liquid measure. A. J. Frame. 1,808,029; June 2.
Liquid meter. M. Carbonaro. 1,808,734; June 2.
Liquids, Storage of volatile. S. T. Trezise. 1,808,618; June 2.
Load limiting method and apparatus. R. Mayne. 1,808,563; June 2.
Loader, Incubator egg tray. W. F. Hillpot. 1,808,552; June 2.
Loading machine. W. K. Liggett. 1,808,421; June 2.
Lock: *See*—
  Door lock. Gauge lock.
Lock construction. W. C. Devereaux. 1,807,778; June 2.
Lock for firearms, Safety. A. R. Brinkerhoff. 1,807,727; June 2.
Lock for rod couplings. W. K. Edwards. 1,808,299; June 2.
Locking mechanism. H. L. Bone. 1,807,618; June 2.
Locking mechanism, Motor vehicle hood. L. R. Smith. 1,808,265; June 2.
Locomotive. F. P. Roesch. 1,808,256; June 2.
Locomotive boiler. W. H. Hinsch. 1,808,223; June 2.
Locomotive, Mine. C. O. Wood. 1,808,277; June 2.
Loom, Weft replenishing double shuttle. L. W. Balser and E. E. Clark. 1,807,722; June 2.
Loom, Weft replenishing double shuttle. R. G. Turner. 1,807,764; June 2.
Looms, Let-off for. V. A. Foisy and C. J. Lindegren. 1,807,733; June 2.
Looms, Picker spindle mounting for. C. J. Lindegren. 1,807,743; June 2.
Looms, Protector mechanism for. A. D. Gargolinski. 1,807,735; June 2.
Looms, Protector mechanism for narrow ware. E. R. Holmes. 1,807,739; June 2.

Looms, Take-up mechanism for. A. E. Brickman. 1,807,726; June 2.
Looms, Tube frame for Axminster. O. V. Payne. 1,807,705; June 2.
Looms, Tube frame for Axminster. O. V. Payne. 1,807,748–9; June 2.
Looms, Weft and control for magazine. W. M. Wattie. 1,807,768; June 2.
Looms, Weft and remover for automatic. W. H. Banagan. 1,808,127; June 2.
Looms, Weft detector for. G. A. Buffington. 1,807,730; June 2.
Loud speaker. B. Dempster and J. C. Koonz. 1,808,297; June 2.
Lubricant purifier for connecting rod bearings. G. Cattaneo. 1,807,830; June 2.
Lubricating apparatus. E. W. Davis. 1,807,899; June 2.
Lubricator. A. C. Fox. 1,807,691; June 2.
Luggage carrier, Adjustable. G. C. Kennedy. 1,808,042; June 2.
Machine and tool for shaving gear teeth. E. W. Miller. 1,807,665; June 2.
Machine for bending corrugations in metal. L. F. Clausing. 1,808,019; June 2.
Machine for forming composite can bodies. V. Hendrickson. 1,807,843; June 2.
Machine for forming yarn packages. A. L. Remington and A. J. Javery. 1,808,573; June 2.
Machine for making paper boxes or the like. S. Bergstein. 1,808,014; June 2.
Machine for making paper covered incense cords. C. Horiguchi. 1,808,111; June 2.
Machine for operating upon hides, skins, and leather. J. W. O'Donnell. 1,807,669; June 2.
Machine for sizing and punching vehicle wheel rims. W. N. Booth. 1,807,824; June 2.
Magazine. S. G. Green. 1,808,106; June 2.
Magnesium chloride and other magnesium salts of high purity, Making. R. C. Lord. 1,808,362; June 2.
Magnetic pick-up device. V. H. Emerson. 1,807,654; June 2.
Mail box. A. Zapart. 1,807,611; June 2.
Mail box switch. S. Lang. 1,808,235; June 2.
Manganese, Recovery of. C. S. Vadner. 1,807,642; June 2.
Manifold for supply of supplemental gases to internal combustion engines. A. Moore. 1,808,713; June 2.
Manifolding apparatus. J. Q. Sherman and A. W. Metzner. 1,807,604; June 2.
Marine cage. A. T. Cassiere. 1,807,962; June 2.
Marker for plants or flowers. D. S. Coppersmith. 1,808,292; June 2.
Massage and exercise machine, Portable. F. A. Anderson. 1,808,333; June 2.
Mat: *See*—
  Table mat.
Material and process, Moldable. R. E. Coleman and F. J. Groten. 1,808,529; June 2.
Material treating device. H. G. Lykken. 1,807,923; June 2.
Mattresses and other devices for repose of the body, Elastic. H. C. Piccolini. 1,808,679; June 2.
Measuring and circulating device. J. H. McLellan. 1,808,117; June 2.
Measuring and tagging device. P. Lungstras. 1,808,144; June 2.
Mechanical movement. E. Belin. 1,807,889; June 2.
Mechanical movement. A. Dina. 1,808,454; June 2.
Mercury salts, Manufacture of. H. S. Reid and A. H. Maude. 1,808,253; June 2.
Metal and the like, Device for stacking sheet. J. H. Young and W. G. Frink. 1,807,816; June 2.
Metal shearing apparatus. A. W. Phelps. 1,807,671; June 2.
Metal stock preparatory to its reduction by rolling, Handling of hot. J. R. George and J. A. Buell. 1,808,033; June 2.
Metal vapor rectifier. R. G. Berthold. 1,808,517; June 2.
Metal wall construction. M. Milleville. 1,807,667; June 2.
Metal working machine. C. C. Grotnes. 1,807,980; June 2.
Metal working machine. H. G. Kellogg. 1,807,847; June 2.
Metallic surfaces, Cleaning and preserving of. T. W. Bartram and D. H. Tompkins. 1,808,200; June 2.
Metallic surfaces, Cleaning and preserving of. D. H. Tompkins. 1,808,184–7; June 2.
Metals, Pickling. D. H. Tompkins. 1,808,188; June 2.
Meter: *See*—
  Fluid meter. Volt-ampere meter.
  Shot string meter.
Meter. G. C. Earl. 1,808,212; June 2.
Microscope. W. L. Patterson. 1,808,317; June 2.
Microscope tube. W. Bauersfeld and M. Hübschmann. 1,807,613; June 2.
Mill: *See*—
  Colloidal mill.
Minerals, Preparation of. F. G. Moses, R. W. Hess, and R. L. Perkins. 1,807,860; June 2.
Mining machine. R. M. Fleming. 1,808,649; June 2.
Mining machine. M. P. Holmes. 1,808,224; June 2.
Mirror, Duplex rear view. H. E. Wetherbee. 1,808,740; June 2.
Miter box. J. C. Running. 1,808,612; June 2.
Mixing device. J. A. Gird. 1,807,736; June 2.
Mold: *See*—
  Cluster mold.
Molder's flask. C. O. Wood. 1,808,093; June 2.
Molding press. G. G. Heghinian. 1,807,661; June 2.
Monkey wrench. W. V. Van Etten. 1,807,678; June 2.
Mop wringer. J. H. Dwork. 1,808,643; June 2.
Motor starting and control system. H. A. Maxfield. 1,807,997; June 2.
Motors, Controlling system for polyphase alternating current. F. Punga. 1,808,435; June 2.
Mounting, Brace. A. W. Roy. 1,808,610; June 2.
Mounting for antiglare devices. P. V. Snow. 1,807,760; June 2.
Mounting for automobile glare shields. A. R. Ulp. 1,808,086; June 2.
Mower, Lawn. F. T. Farmer. 1,808,646; June 2.
Mushroom culture, Propagating apparatus for. V. Steves. 1,808,383; June 2.
Musical instrument, String. H. Fischer. 1,808,103; June 2.
Musical instrument, Stringed. E. Moor. 1,807,746; June 2.
Musical traps. F. J. Troppe. 1,808,085; June 2.
Nail. W. G. Woodruff. 1,808,197; June 2.
Name plate. R. D. Hyatt and R. E. Cochran. 1,808,040; June 2.
N-amino-alkyl-aminoaldehydes. Aromatic. A. Wingler. 1,807,720; June 2.
Nautical instrument. W. E. Lewis. 1,808,359; June 2.
Necklace. J. L. Schwab. Des. 84,303; June 2.
Necktie. E. L. Stott. 1,808,616; June 2.
Needle. L. G. Dahm. 1,808,532; June 2.
Nest, Trap. C. Stock. 1,808,615; June 2.
New ω-halogen-methyl derivatives of phenol and its homologues and a new process of preparing the same. A. Brunner. 1,807,729; June 2.
Nipple, Nursing. J. Schmid. 1,808,148; June 2.
Nitrification. A. B. Kinzel. 1,808,355; June 2.
Nut grading machine. W. Gebhardt. 1,808,104; June 2.
Nuts and bridge washers on valve stems, Assembling. J. A. Fleischli and J. M. Kountzman. 1,807,591; June 2.
Oil burner. A. P. Plaut. 1,808,569; June 2.
Oil well counterbalance, Adjustable. A. L. Segelhorst and O. Stricklen. 1,808,010; June 2.
Oils, Heating. L. de Florez. 1,808,343; June 2.
One-piece rotary. E. W. Goeser. 1,808,304; June 2.
Opening and closing device, Automatic garage door. J. S. Marsden. 1,808,673; June 2.
Operator for agricultural cultivating implement. M. Ehricke. 1,807,731; June 2.
Ophthalmic mounting. N. M. Baker. 1,808,448; June 2.
Ores, Concentration of. F. G. Moses, R. W. Hess and R. L. Perkins. 1,807,859; June 2.
Ornament, Christmas tree. P. Boehland. Des. 84,272; June 2.
Ornament for drapery rods, Center. W. E. Smith. Des. 84,306; June 2.
Ornament for drapery rods or the like, End. W. E. Smith. Des. 84,307; June 2.
Ornament, Shoe. C. G. King. Des. 84,290; June 2.
Ornament, Shoe. H. G. Whitehouse. Des. 84,311; June 2.
Oscillations, Prevention of parasitic. H. C. Silent. 1,807,759; June 2.
Oven and the like, Coke. C. Wessel. 1,808,620; June 2.
Overgear shift mechanism. H. Drew. 1,807,779; June 2.
Packing for fragile articles. F. D. Gray. 1,808,136; June 2.
Panel for a thirst station, Front. E. M. Morris. Des. 84,296; June 2.
Paper and making the same. H. R. Rafton. 1,808,067; June 2.
Paper, Apparatus and method of marbling. F. G. Crane and J. M. Ward. 1,808,021; June 2.
Paper drill. H. D. Mielke. 1,808,472; June 2.
Paper filled with alkaline filler, Producing. H. R. Rafton. 1,808,070–1; June 2.
Paper for the insulation of electric cables, Wrapping. C. A. Haanen and H. Meurer. 1,808,407; June 2.
Paper machine operation, Improving. H. R. Rafton. 1,808,072–3; June 2.
Paper making machine. W. H. Millspaugh. 1,808,055; June 2.
Paper, Manufacture of. H. R. Rafton. 1,808,068–9; June 2.
Paper package for burial caskets, Corrugated. G. B. Beaman. 1,807,770; June 2.
Paper, pasteboard, felt and the like, Manufacturing. A. W. Andernach. 1,808,590; June 2.
Parasol, vanity case and coin holder, Combined. D. M. Bright. 1,807,686; June 2.
Pasteurizing apparatus. W. R. Laird. 1,807,742; June 2.
Paving method. J. F. Witt. 1,807,947; June 2.
Pen, Fountain. A. Bassi. 1,808,489; June 2.
Penholder, Fountain. A. Reichenbach. 1,808,377; June 2.
Pencil, Multihead mechanical. H. M. Larter. 1,808,171; June 2.
Perforating machine. M. Holny. 1,808,500; June 2.
Perforating machine. E. E. Winkley. 1,807,679; June 2.
Phenolates, Manufacture of. A. Hempel. 1,808,722; June 2.
Phonograph. E. Vadasz. 1,808,189; June 2.

Photographed printing forms, Producing. E. Uher, jr. 1,808,123; June 2.
Photographic copying purposes, Apparatus for. C. Roehrich. 1,807,933; June 2.
Photographic flash light device. L. L. Driggs and H. B. Faber. 1,808,640; June 2.
Photographic process. H. J. Hollen. 1,808,352; June 2.
Photographic recording apparatus. A. C. Peterson. 1,808,118; June 2.
Photography, Color. L. T. Troland. 1,808,584; June 2.
Picker: *See*—
  Cotton picker.
Pickup. F. L. Capps and H. A. Summers. Re18,089; June 2.
Picture hanger. R. Broder. 1,808,521; June 2.
Picture projector, Motion. L. Goldhammer. 1,807,737; June 2.
Picture recording and projection apparatus, Moving. M. R. Huc. 1,808,603; June 2.
Picture screen, Noninflammable sound. W. J. Schoonmaker. 1,808,078; June 2.
Picture screen, Sound. W. J. Schoonmaker. 1,808,077; June 2.
Pictures, Apparatus for developing and printing. E. Wasylenko. 1,808,585; June 2.
Pictures, Motion. S. J. Sanford. 1,807,877; June 2.
Pinning clamp. A. Stenger. 1,807,801; June 2.
Pipe: *See*—
  Smoking pipe.
Pipe joint. H. S. Hele-Shaw. 1,808,262; June 2.
Pipe vise stand. L. W. Jones. 1,807,916; June 2.
Pipe wrench. W. Melin. 1,808,001; June 2.
Pipes, Covering for staved. D. Finley. 1,807,904; June 2.
Piping, Preserving underground. D. Finley. 1,807,903; June 2.
Piston ring. R. C. Montengle. 1,808,057; June 2.
Pistons, Making composite. H. E. Deputy. 1,807,689; June 2.
Plant for and method of manufacturing cast iron pipe and the like. J. R. McWane. 1,808,366; June 2.
Planter. C. H. White. 1,807,814; June 2.
Plaster anchor. I. A. Baum. 1,808,337; June 2.
Plastic material, Coloring. W. H. Morris. 1,807,858; June 2.
Plate or similar article. G. Hedler. Des. 84,287; June 2.
Platinum from the other precious metals, Separating. G. A. L. R. Collard. 1,808,594; June 2.
Plow, Releasable. O. A. K. Printz. 1,808,477–8; June 2.
Plug, Pipe. D. R. Hinkston. 1,808,411; June 2.
Pneumatic tire tube. J. W. Waber. 1,808,091; June 2.
Pocketbook, Trick. F. Brady. 1,807,826; June 2.
Poison or powder distributor. W. G. Hagens. 1,808,654; June 2.
Polish. J. D. Lindsay. 1,808,360; June 2.
Post: *See*—
  Dental casting post. Supporting post.
Poultry house. E. Schindler. 1,808,685; June 2.
Powder from whole milk, Making a stable. C. B. Von Bornegg. 1,808,730; June 2.
Power transmission means. C. G. Mahana. 1,808,240; June 2.
Power transmission system. F. W. Hild. 1,808,222; June 2.
Preparations for oiling fibrous materials, Production of. M. Luther and H. Beller. 1,808,363; June 2.
Press: *See*—
  Baling press. Molding press.
  Hydraulic press.
Press for plastic materials. E. L. Messler. 1,808,367; June 2.
Presses, Throw off mechanism for. C. F. Fraubenberger. 1,808,499; June 2.
Printing. T. F. Pinder. 1,808,476; June 2.
Printing and stitching machine. E. T. Morris. 1,808,504; June 2.
Printing device. R. Anderson. 1,807,954; June 2.
Printing device. J. A. Bailey. 1,807,887–8; June 2.
Printing device. J. A. Bailey. 1,807,957–8; June 2.
Printing device. J. A. Bailey. 1,808,515; June 2.
Printing device. G. W. Schaefer. 1,808,067; June 2.
Printing machine. J. A. Carlson. 1,808,451; June 2.
Printing process. W. Schaffer. 1,808,320; June 2.
Projection printer. R. A. Webster. 1,808,274; June 2.
Prop, Golf bag. J. Carlon. 1,808,724; June 2.
Propeller, Out of water. F. Gebers. 1,808,032; June 2.
Protective regulating means for alternating current rectifier. W. W. Brown. 1,808,522; June 2.
Psychrometric device. E. V. Hill. 1,808,351; June 2.
Pulverized fuel furnace. A. Runkwitz. 1,808,120; June 2.
Pump, Deep well. F. C. Kniss and R. N. Vickers. 1,807,741; June 2.
Pumping system. J. Oliphant. 1,807,747; June 2.
Punching machines, Carriage return for. W. W. Lasker. 1,807,627; June 2.
Punching machines, Turret for multiple. E. Dietrich. 1,807,652; June 2.
Purse. F. L. Eriksson. 1,807,655; June 2.
Pyrometer for metallurgical furnaces. F. M. Poole. 1,808,507; June 2.
Quenching tank. F. T. Cope. 1,808,160; June 2.
Rack: *See*—
  Display rack.
Radiator. E. D. Betts. 1,808,202; June 2.
Radiator. J. W. Pate. 1,808,605; June 2.
Radiocabinet. G. E. Thompson. Des. 84,309; June 2.
Radio coil. R. F. and F. W. Sickles. 1,807,605; June 2.
Radio coil winding. R. F. and F. W. Sickles. 1,807,606; June 2.
Radiotron tube testing machine, Automatic. J. E. Ferguson and C. A. Nicolai. 1,808,301; June 2.
Rail joint bars, Making. G. Langford. 1,808,468; June 2.
Rail point. E. Fricke. 1,807,734; June 2.
Ratchet wrench. C. W. Helbling. 1,808,350; June 2.
Razor blade discard. L. W. Slack. 1,808,580; June 2.
Razor blade, Safety. W. C. Rogers. 1,808,480; June 2.
Reagents to solutions, Controlling the application of. W. C. Graham. 1,808,546; June 2.
Receptacle, Metallic. H. H. Ward. 1,808,483–4; June 2.
Recorder: *See*—
  Time recorder.
Recording and computing machine, Combined. H. A. Foothorap. 1,807,906; June 2.
Rectifier regulator, Automatic. C. E. Stryker. 1,808,717; June 2.
Reel: *See*—
  Cable reel.
Reel crutch. D. R. Stevens. 1,807,802; June 2.
Reels, Lagging for. H. E. Charles. 1,808,018; June 2.
Refractory article, Pressure forming. C. V. Iredell. 1,807,915; June 2.
Refrigerant composition. W. A. Kuenzli. 1,808,604; June 2.
Refrigerating apparatus. H. A. Phillips. 1,808,374; June 2.
Refrigerating apparatus of the absorption type. F. W. H. Reehsing. 1,808,510; June 2.
Refrigerating process. S. C. Carney, R. E. Baker, and F. C. Cutting. 1,808,494; June 2.
Refrigerating system. R. J. Mitchell. 1,808,056; June 2.
Refrigeration. C. G. Munters. 1,808,723; June 2.
Refrigeration apparatus. O. I. Price. 1,807,871–2; June 2.
Refrigeration, Automatic. J. G. De Remer. 1,807,774; June 2.
Refrigeration plant, Oscillating type. E. B. Miller and W. L. Edel. 1,807,855; June 2.
Refrigerator, Self-contained mechanical. R. W. Davenport. 1,807,831; June 2.
Register: *See*—
  Cash register.
Regulator: *See*—
  Rectifier regulator.
Relay, Electrical. P. H. Dowling. 1,808,712; June 2.
Reproducing machine. C. Krebs. 1,807,989; June 2.
Resin complex and producing the same. I. Rosenblum. 1,808,716; June 2.
Resistance unit, Variable. T. A. Swartz and W. P. Uhler. 1,807,806; June 2.
Reversing mechanism. R. Gatzsche. 1,808,348; June 2.
Ring: *See*—
  Piston ring.
Ring or article of similar nature, Finger. E. J. Gross. Des. 84,284–6; June 2.
Rivet feed. E. B. Stimpson. 1,807,942; June 2.
Riveting apparatus. R. S. Osborne. 1,808,431; June 2.
Riveting machines, Feeding mechanism for. E. B. Stimpson and J. F. Suessle. 1,807,941; June 2.
Road maintainer. J. Stocker. 1,807,639; June 2.
Roll changer. B. C. White. 1,807,813; June 2.
Rolls, Apparatus for grinding. O. Waldrich. 1,808,392; June 2.
Roofing joint. G. G. Britton. 1,808,286; June 2.
Rosin, Purifying. R. C. Palmer, J. L. Burda and A. F. Oliver. 1,807,599; June 2.
Rotary drier. G. M. Bechtel. 1,808,626; June 2.
Rotary engine. F. E. Tidd. 1,808,084; June 2.
Rotor for dynamo electric machines. H. S. Page. 1,808,568; June 2.
Rotor for dynamo electric machines. H. G. Reist. 1,808,572; June 2.
Rubber composition and preserving rubber. W. L. Semon. 1,808,578; June 2.
Rubber, Reclaiming vulcanized. M. Omansky. 1,807,930; June 2.
Rubber solutions, Making clear chlorinated. M. Boehmer. 1,807,616; June 2.
Rubber tube. E. Hopkinson and W. A. Gibbons. 1,808,226; June 2.
Rubber tubes, Apparatus for removing trimmed waste from. P. W. Lehman. 1,807,664; June 2.
Ruling device. H. A. P. Röttke. 1,808,257; June 2.
Sack. F. H. Gregory. 1,808,034; June 2.
Safety apparatus. F. N. Whitesell. 1,808,275; June 2.
Safety brake, Mechanically operated. H. Faehrmann. 1,808,645; June 2.
Safety device. J. J. Ehemann and B. F. Singer. 1,807,690; June 2.
Safety device. L. H. Gump. 1,808,652; June 2.
Safety device for power presses and the like, Hydraulic. H. Pels. 1,808,606; June 2.
Salt cake from Mannheim furnaces, Apparatus for discharging. M. D. Swords. 1,807,807; June 2.
Sand, Making molding. W. Fisher. 1,808,161; June 2.
Sanitary fixture. R. E. Crane. 1,808,294; June 2.
Sash retaining means. J. N. Wetmore. 1,808,621; June 2.
Sawing machine, Combination. A. E. De Koning. 1,808,453; June 2.

Scaffold. C. A. Thompson. 1,808,082; June 2.
Scale. G. Walker. 1,807,643–5; June 2.
Scale, Computing. W. F. Stimpson and W. E. Finch. 1,808,269; June 2.
Scale, Weighing. W. Brooke. Des. 84,274; June 2.
Scraper, Wheel. T. W. Detmore. 1,808,639; June 2.
Screen: *See*—
Picture screen. Slag screen.
Sewing screen.
Screen for motion pictures and the like. M. De Francisco. 1,808,725; June 2.
Screens and the like, Attachment for. I. I. Abrams. 1,808,199; June 2.
Scum removing device. C. W. Anderson. 1,808,279; June 2.
Seal for bung fixtures of containers. I. H. Rieke. 1,808,575; June 2.
Sealed can. H. Sebell. 1,808,321; June 2.
Seat: *See*—
Adjustable seat.
Seat or chair, Reversible. C. R. Hultgren. 1,808,659; June 2.
Sectional heater. J. A. Waddell. 1,808,391; June 2.
Selective mechanism. R. Emery. 1,808,597–8; June 2.
Separator and spacer for storage batteries. C. W. Terry. 1,807,609; June 2.
Setting out board. W. C. Johnson. 1,808,306; June 2.
Sewing machines, Thread pull up for. R. E. Pierce. 1,808,506; June 2.
Sewing screen. E. G. Zizelman. 1,808,704; June 2.
Shaft wrapping machine. P. Okey. 1,807,869; June 2.
Sharpener, Disk. D. C. Galvin. 1,807,978; June 2.
Sharpener, Lawn mower. C. B. Ross. 1,807,934; June 2.
Sharpener, Pencil. A. J. Palme. Des. 84,298; June 2.
Sharpening device, Pencil. G. König. 1,808,665; June 2.
Shearing, punching and riveting machine. A. Johnson, jr., and G. F. Worthington, sr. 1,808,041; June 2.
Sheet handling mechanism. A. M. Zuckerman. 1,808,514; June 2.
Sheet insulation. W. R. Gillies. 1,807,785; June 2.
Sheets of plasic material which are combined or backed, Obtainment of. J. Paisseau. 1,808,372; June 2.
Sheets or blanks, Mechanism for feeding. A. Novick. 1,807,865; June 2.
Sheets or the like, Apparatus for the withdrawal of. A. Winkler and M. Dünnebier. 1,808,586; June 2.
Shell drilling, Suction roll. H. C. Burden. 1,808,493; June 2.
Shells, Forming. G. E. Ireland. 1,808,731; June 2.
Shield attachment for binoculars. C. H. Duffy. 1,808,642; June 2.
Shingle and making same, Roofing. L. Kirschbraun and O. A. Heppes. 1,807,918; June 2.
Ship log. J. Walker. 1,808,697; June 2.
Shock absorber. J. Chalumeau. 1,808,130; June 2.
Shock absorber. W. A. Chryst. 1,807,620; June 2.
Shock absorber. G. W. Elsey and W. A. Chryst. 1,807,653; June 2.
Shock absorber. J. T. Trumble. 1,807,945; June 2.
Shock absorber. E. J. Wendell. 1,808,700; June 2.
Shock absorbing means for turnstiles. C. J. Phare. 1,808,373; June 2.
Shoe. C. Miller and A. A. Livers. 1,807,792; June 2.
Shoe form. W. J. De Witt. 1,807,973; June 2.
Shoe stapler. E. Dunford. 1,808,025; June 2.
Shoe stapler device. E. Dunford. 1,808,026; June 2.
Shoe stapler structure. J. Adler. 1,808,027; June 2.
Shoe stiffener and process of manufacture. A. L. Clapp. 1,807,621; June 2.
Shoes, Apparatus for channeling. W. S. Shaft. 1,808,687; June 2.
Shopping bag. N. W. Plooster. 1,808,375; June 2.
Shovel: *See*—
Back strap shovel.
Shucker, Pea. B. I. Manges. 1,808,470; June 2.
Shunt. P. MacGahan. 1,807,852; June 2.
Shut-off device, Automatic. P. C. Carlston. 1,807,586; June 2.
Sifter. F. Clark. 1,807,587; June 2.
Sifter for flour, etc. O. N. McCormick. 1,808,426; June 2.
Sign. F. T. Brown. 1,807,649; June 2.
Sign, Highway advertising. E. W. Sudduth. 1,808,602; June 2.
Sign, Illuminated. M. L. and I. E. Dwyer. 1,808,456; June 2.
Signal: *See*—
Traffic signal. Warning signal.
Signal device, Automobile. P. W. Murray. 1,808,677; June 2.
Signal switch. J. M. Osgian. 1,808,316; June 2.
Signal viewing attachment for automobiles. B. W. Davis. 1,808,208; June 2.
Signaling system. J. J. Gilbert. 1,808,540; June 2.
Signaling system, Railway. G. Kemmann. 1,808,661; June 2.
Skate. S. I. Berger. 1,807,890; June 2.
Slag screen. D. S. Jacobus. 1,808,230; June 2.
Sleeve form for display purposes. E. E. Goodman. 1,808,459; June 2.
Smoke baffle for furnaces. J. P. Kolla. 1,807,988; June 2.
Smoker's mouthpiece. F. Boenig and G. H. Dresser. 1,807,617; June 2.
Smoking pipe. J. F. Bushbee. 1,808,632; June 2.
Socket, Electrical. R. Eckstein. 1,807,588; June 2.
Socket wrench. J. O. Johnson. 1,808,660; June 2.
Sodality pin. G. A. Fitzgibbons. Des. 84,279; June 2.
Sofa. H. D. Lee. Des. 84,292; June 2.
Solenoid for operating brakes, Progressive. V. G. Apple. 1,807,956; June 2.
Solutions, compositions or preparations for textile and like purposes and their applications. C. F. Ryley and G. A. Awcock. 1,807,755; June 2.
Sorting and distributing machine. A. Gammell. 1,808,406; June 2.
Sound control apparatus. J. E. Stafford. 1,807,940; June 2.
Sound, Method of and apparatus for recording and reproducing. B. Kwartin. Re18,090; June 2.
Sound radiating apparatus. L. Shapiro. 1,808,512; June 2.
Sound reproducing system. A. S. Radford and M. Bowman-Manifold. 1,807,602; June 2.
Speed changing device for motor cars. R. Bellantoni. 1,808,449; June 2.
Speed control system and apparatus. M. H. Loughridge. 1,807,596; June 2.
Spinning machine, Ring and traveler for. W. T. Munson. 1,807,861; June 2.
Spoolers on wire drawing machines, Distributing apparatus for. N. H. Nye. 1,808,714; June 2.
Spoon or similar article. F. R. Woodward. Des. 84,312; June 2.
Spring. O. L. Neisler. 1,808,473; June 2.
Spring antirattling device for windows, Flat. J. Polachek, J. A. Jepsen, and E. Peremi. 1,808,609; June 2.
Spring for window sashes, Antirattling. J. Polachek, J. A. Jepsen, and E. Peremi. 1,808,608; June 2.
Spring shackle. B. Read. 1,807,635; June 2.
Spring spreader. R. D. Barnhart. 1,808,625; June 2.
Sprocket. T. B. Munroe. 1,808,369; June 2.
Stage display device. H. Ziemmerman. 1,808,708; June 2.
Stalk cutter. P. W. Spell. 1,808,266; June 2.
Stamp, Dating. R. Villon and R. Lemaignen. 1,808,089; June 2.
Stand: *See*—
Fern stand. Pipe vise stand.
Starter, Engine. M. P. Whitney. 1,808,622; June 2.
Starting apparatus, Engine. W. A. Chryst. 1,807,772; June 2.
Stationary apparatus, Continuous. M. S. Roosevelt. 1,808,437; June 2.
Steam generating system. F. W. Gay. 1,807,783; June 2.
Steam trap. D. A. Smelser. 1,807,882; June 2.
Steam purifying apparatus. R. G. Manifold. 1,808,424; June 2.
Steel retainer. F. M. Slater. 1,807,799; June 2.
Steering wheel. D. W. Thomas. 1,808,440; June 2.
Steering wheel and making the same. G. E. Smith. 1,808,324; June 2.
Steering wheel, Molded. H. D. Geyer. 1,807,657; June 2.
Step, Sectional lawn. C. A. Johnson. Des. 84,289; June 2.
Stereoscopic view box. A. F. Pieper and G. I. Kester. 1,808,176; June 2.
Stitch removing machine. L. W. Rollins. 1,807,603; June 2.
Stoker. E. W. Ritter. 1,808,479; June 2.
Stoker mechanism. A. B. Fahnestock. 1,808,300; June 2.
Stop or abutment, Automatically adjustable mechanical. W. Seddon and R. F. Cordey. 1,808,079; June 2.
Stopple. G. E. Erickson. 1,808,644; June 2.
Storage battery, Electric. W. E. Kershaw. 1,807,595; June 2.
Stove. H. M. Reeves. Des. 84,300; June 2.
Stove or furnace, Heating. A. Ahlberg. 1,808,487; June 2.
Strap, band, or linkage, Flexible. C. H. Kestenman. 1,808,140; June 2.
String meter, Shot. P. P. Quayle. 1,807,601; June 2.
Strip feeding apparatus. C. C. Cadden. 1,808,525; June 2.
Strut construction. A. F. Masury. 1,808,365; June 2.
Submarine hull or the like, Resistant. R. Galeazzi. 1,808,599; June 2.
Suit, Life saving. W. L. Aud. 1,807,680; June 2.
Sulphur from hydrogen sulphide and sulphur dioxide, Production of elemental. R. F. Bacon. 1,807,583; June 2.
Sulphuric acid on iron and steel, Product and process for preventing the solvent action of. J. G. Schmidt. 1,807,711; June 2.
Support, Combined heel and arch. O. Gregarek. 1,808,460; June 2.
Support, Combined insole and arch. O. Gregarek. 1,808,461; June 2.
Support for fabric hangings. C. Neher. 1,808,250; June 2.
Support for motion picture projection machines, Adjustable. A. Dinal. 1,808,497; June 2.
Support, Metal door and window. C. W. Griffin. 1,808,218; June 2.
Supporting device. F. G. Fazekas. 1,808,647; June 2.
Supporting post, Insulator. C. P. Seyler. 1,807,878; June 2.
Surfacing machine. E. O. Norris. 1,808,732; June 2.

Sweeper, Carpet. W. E. Sherbondy. 1,808,323; June 2.
Switch: *See*—
Alarm switch. Mail box switch.
Deflecting switch. Signal switch.
Electric switch.
Switch and service box, Entrance. J. C. Lewis. 1,808,173; June 2.
Switch box. J. E. Mair. 1,808,050; June 2.
Switch for direction signals. W. T. Rooney. 1,808,683; June 2.
Switch for metering devices, Electric. E. H. Thompson. 1,808,387; June 2.
Switching system, Automatic. W. N. Gittings and H. T. Seeley. 1,808,543; June 2.
Table: *See*—
Extension table.
Table and ironing board, Combination. C. A. Selander. 1,807,937; June 2.
Table mat. J. Sacherman. 1,808,258; June 2.
Tachometer. E. B. Nowosielski. 1,807,702; June 2.
Take-up method. F. Honig. 1,808,038; June 2.
Tank: *See*—
Developing, fixing and Quenching tank.
washing tank. Vacuum tank.
Tank construction, Compartment. W. C. McGaffic. 1,808,427; June 2.
Tap, Collapsible. W. J. Hogg and F. Neumann. 1,808,138; June 2.
Telegraph system. G. J. Knandel. 1,807,740; June 2.
Telegraph system. H. F. May. 1,807,744; June 2.
Telephone exchange system, Automatic. W. W. Carpenter. 1,808,527; June 2.
Telephone exchange system, Automatic. F. J. Scudder. 1,808,577; June 2.
Telephone system. G. Babcock. 1,808,280; June 2.
Telephone system. T. F. Crocker. 1,807,968; June 2.
Telephone system. R. G. Richardson. 1,808,574; June 2.
Tennis racket. J. L. M. Guenard. 1,808,035; June 2.
Tent. U. Terzoli. 1,808,693; June 2.
Terminal clamp. L. A. Wallis. 1,808,698; June 2.
Terminal clamp, Storage battery. W. J. Montambault. 1,808,368; June 2.
Terminal connecter. A. F. Waltz. 1,808,330; June 2.
Test clip. R. W. Grace. 1,808,545; June 2.
Textile fabric. J. C. Earnshaw. Des. 84,277; June 2.
Textile fabric. M. W. Ryan. Des. 84,302; June 2.
Textile fabric or similar article. P. S. Gault. Des. 84,283; June 2.
Textile fabrics, Method of and apparatus for singeing. W. Osthoff. 1,807,703; June 2.
Theft preventive device. D. L. Hittle. 1,807,662; June 2.
Thermometer bulb. M. E. Cheney. 1,808,634; June 2.
Thermostat. M. E. Benesh. 1,808,282–3; June 2.
Thermostatic release unit. A. C. Rowley. 1,808,684; June 2.
Thread cutter. A. F. Mifflitt. 1,807,745; June 2.
Threads, fabrics, or other materials composed of or containing artificial filaments, Treatment of. J. F. Briggs, C. W. Palmer, and J. T. Kidd. 1,808,098; June 2.
Threads, fabrics, or other materials composed of or containing artificial filaments, Treatment of. C. W. Palmer and S. M. Fulton. 1,808,061; June 2.
Tile, Fixture. G. H. McFarlin. 1,807,630; June 2.
Time recorder. J. W. Bryce. 1,807,828; June 2.
Timepieces, Winding mechanism for. H. L. Stringer. 1,808,691; June 2.
Timing apparatus. R. M. Hicks. 1,808,167; June 2.
Tire and manufacturing the same, Pneumatic. J. R. Gammeter. 1,807,909; June 2.
Tire, Automobile. C. B. Woodworth. 1,808,278; June 2.
Tire beads, Process and apparatus for covering. H. A. Denmire. 1,808,710; June 2.
Tire building form, Collapsible. P. de Mattia. 1,808,295; June 2.
Tire, Cushion. J. J. Freerksen. 1,808,404; June 2.
Tire, Pneumatic. A. L. Broussard. 1,807,728; June 2.
Tires and the like, Curing. H. R. Minor. 1,808,428; June 2.
Tobacco cleaning machine. L. R. Sammeth. 1,808,438; June 2.
Tobacco, Smoking. D. H. Wiggins. 1,808,707; June 2.
Toggle clamp. J. J. Collinet. 1,808,020; June 2.
Tong. M. M. Bull. 1,808,016; June 2.
Tool, Combination. G. A. Logan. 1,808,239; June 2.
Tool, Fluid actuated percussive. F. A. Jimerson. 1,807,787; June 2.
Tool for helicoidal abrading wheels, Formed truing. E. W. Miller. 1,807,666; June 2.
Tool, Pneumatic. F. M. Slater. 1,808,481; June 2.
Tool, Sharpening. J. E. Steinour. 1,808,267; June 2.
Tool slide, Double angular. E. P. Bullard, jr. 1,807,829; June 2;
Tool, Thread swelling. C. F. Roberts. Re18,086; June 2.
Top, Automobile. E. P. du Pont. 1,808,298; June 2.
Top, Ingot mold. E. Gathmann. Re18,084; June 2.
Top, Mechanical. H. J. Buchanan-Wollaston. 1,808,015; June 2.
Top, Spinning. W. J. Cheffer. 1,807,964; June 2.
Torch, Welding. R. T. Gillette and E. S. Webster. 1,808,541; June 2.
Toy. L. Marx. 1,807,791; June 2.
Toy. A. Paul and F. Sturni. 1,808,678; June 2.
Toy cannon. B. Engstrom. 1,807,974; June 2.
Toy pistol. M. R. La Sala and F. Simone. 1,807,922; June 2.
Toy railroad track embankment. C. F. Stone. 1,807,803; June 2.
Toy telephone. W. N. Hill. 1,808,036–7; June 2.
Toy, Vehicle. F. A. Lundahl. 1,808,309–10; June 2.
Toy, Walking. J. H. Van Deventer. 1,808,695; June 2.
Traction belt attachment. D. S. Kennedy. 1,808,416; June 2.
Tractor. C. A. Henneuse and C. A. Hawkins. 1,808,735; June 2.
Tractor frame. T. N. Garson. 1,808,217; June 2.
Tractors, Corn picker attachment for. N. W. Franzkowiak. 1,808,030; June 2.
Traffic controlling apparatus, Railway. R. A. McCann. 1,808,243; June 2.
Traffic controlling apparatus, Railway. L. E. Spray. 1,808,325; June 2.
Traffic controlling apparatus, Railway. H. A. Thompson and C. A. Brooks. 1,808,327; June 2.
Traffic signal, Vehicle. F. Mamlya. 1,807,629; June 2.
Train pipe coupling, Automatic. J. Robinson. 1,808,255; June 2.
Transfer apparatus. T. and D. Stenhouse. 1,808,689; June 2.
Transfer machine. G. E. Lang and L. V. Casto. 1,807,921; June 2.
Transformer. H. R. Loubet. 1,808,670; June 2.
Transformer. A. Meyerhans. 1,807,854; June 2.
Transformer protection device. J. Jonas. 1,807,846; June 2.
Transmission mechanism, Speed changing. E. Gessner. 1,808,539; June 2.
Transmission regulation. J. C. Gabriel and F. A. Hubbard. 1,808,538; June 2.
Trap: *See*—
Burglar trap. Steam trap.
Gopher trap. Waste trap.
Musical trap.
Tray, Incubator egg. W. F. Hillpot. 1,808,553; June 2.
Tread link. A. P. Armington. 1,808,445; June 2.
Treating gas, Apparatus for. K. M. Urquhart. 1,808,087; June 2.
Trimmer: *See*—
Glass trimmer.
Trimmer for brush bristles. R. W. McLean. 1,808,312; June 2.
Trimming machine. S. J. Finn. 1,807,835; June 2.
Trimming machine. N. W. Mathey. 1,807,996; June 2.
Trousers presser. A. M. Burton. 1,808,523; June 2.
Truck, Car. D. S. Barrow. 1,807,683; June 2.
Truck, Hand. M. J. Hollowood. 1,807,913; June 2.
Truck, Motor car. I. A. Selders. 1,808,322; June 2.
Truck, Railway. D. S. Barrows. 1,807,684; June 2.
Truck, Railway. C. J. W. Clasen. 1,808,289; June 2.
Truck with convertible wheel structure and cooperating jack means. R. K. Moore. 1,807,793; June 2.
Tube: *See*—
Microscopic tube. Runner tube.
Pneumatic tire tube. X-ray tube.
Tube carrier, Pneumatic. P. Erby. 1,807,834; June 2.
Tube expander. R. Bungeroth. 1,808,631; June 2.
Tube tester. J. R. Barnhart. 1,808,013; June 2.
Tubes and pipes, Manufacture of. F. Sönnichsen, F. A. Frisch, and H. A. Nicolaysen. 1,808,122; June 2.
Tubes, Apparatus for extruding seamless brass and copper. N. R. Munson. 1,808,370; June 2.
Turbine, Elastic fluid. R. J. Caughey. 1,808,528; June 2.
Turntable equipment for garages, Traveling. G. Lowenstein. 1,807,597; June 2.
Twisting machine. J. Julià. 1,808,415; June 2.
Two-cycle engine. L. O. French. 1,807,838; June 2.
Two-cycle engine. J. Taneyhill. 1,808,384; June 2.
Type slugs, Attachment for breaking. L. W. Willis. 1,808,703; June 2.
Typewriters, Fractional line spacer for. C. W. Crumrine. 1,807,969; June 2.
Typewriting and card perforating machine, Combined. A. G. F. Kurowski. 1,807,920; June 2.
Typewriting and computing machine, Combined. A. G. Kupetz. 1,807,626; June 2.
Typewriting machine. H. A. Avery. 1,808,096; June 2.
Typewriting machine. H. A. Avery. 1,808,739; June 2.
Typewriting machine. E. E. Barney. 1,807,648; June 2.
Typewriting machine. A. B. Ely and E. L. Harmon. 1,807,590; June 2.
Typewriting machine. G. H. Myers. 1,808,505; June 2.
Underwear. R. Freed. 1,807,908; June 2.
Underwear, Process of and pattern for making. E. A. Clements. 1,808,290; June 2.
Urea, Production of. A. Klemenc and R. Schoeller. 1,808,465; June 2.
Vacuum tank. D. D. Levy. 1,808,143; June 2.
Valve. W. J. and A. F. Daddysman. 1,808,495; June 2.
Valve. W. T. Jones. 1,808,556; June 2.
Valve. M. E. Miller. 1,807,856; June 2.
Valve. F. F. Rike and W. P. Huffman. 1,808,074; June 2.
Valve actuating mechanism. C. C. Williams. 1,807,719; June 2.
Valve, Air brake bleeder. F. W. Harris. 1,807,842; June 2.
Valve, Balanced. M. H. Rice. 1,808,254; June 2.
Valve construction. L. Borten. 1,808,203; June 2.
Valve construction, Overhead. L. Robertson. 1,807,674; June 2.
Valve, Flush. B. O. Tilden. 1,808,329; June 2.

Valve for cookers. F. D. Chapman. 1,808,017; June 2.
Valve for rock drills. W. A. Smith, sr., and W. A. Smith, jr. 1,807,800; June 2.
Valve for sulphite digesters, Top relief. L. Wimmer. 1,808,092; June 2.
Valve lifter. W. J. Pearmain and J. S. Allan. 1,808,064; June 2.
Valve mechanism for rock drills. W. A. Smith, jr. 1,808,482; June 2.
Valve, Non-vibrating relief. F. H. Hopkins. 1,807,594; June 2.
Valve, Rotary distribution. C. Luyckx. 1,808,671; June 2.
Valve, Sliding. E. P. Reynolds. 1,808,715; June 2.
Valve wrench. H. J. Hjorth. 1,807,625; June 2.
Vaporizer and process of vaporization. E. H. Leslie and E. M. Baker. 1,808,419; June 2.
Vehicle body, Pressed metal. J. Ledwinka. 1,808,560–1; June 2.
Vehicle jack and support mechanism. C. W. Leach and G. M. Bogie. 1,808,172; June 2.
Vehicle, Motor J. O. Heinze. 1,808,109; June 2.
Vehicle suspension, Motor. W. D. Harper. 1,807,592; June 2.
Velocity ratio mechanism, Variable. J. G. Douglas. 1,808,131; June 2.
Vender, Portable. W. S. Lyhne. Des. 84,295; June 2.
Vending machine, Coin controlled gasoline. C. R. Massie. 1,808,674; June 2.
Ventilator. V. Brocato. 1,808,128; June 2.
Viscous materials such as bitumen, tar, sugar and the like, Means applicable for use in conveying hot. L. K. Reid. 1,807,796; June 2.
Vise. E. Cheshire. 1,807,896; June 2.
Vise, Chain pipe. L. W. Jones. 1,807,917; June 2.
Visor, Adjustable. A. R. Simon. 1,807,879; June 2.
Visor, Automobile head lamp. A. J. Frame. Des. 84,280; June 2.
Volt-ampere meter. D. J. Angus. 1,808,334; June 2.
Vulcanizing apparatus. H. A. Denmire. 1,808,711; June 2.
Wallboard, Gypsum. G. A. New. 1,808,003; June 2.
Wall board, Reenforced. H. C. Raynes. 1,808,571; June 2.
Wall construction. R. Murray. 1,808,249; June 2.
Warning signal, Automatic. J. Del-Prete. 1,808,022; June 2.
Warp beam. C. D. Brown. 1,807,582; June 2.
Washer: *See*—
Bedpan washer.
Washing machines, Attachment for. H. B. Robbins. 1,807,874; June 2.
Waste trap. W. J. McCarthy. 1,808,471; June 2.
Water control device. A. F. Teichman and J. W. Thee. 1,808,385; June 2.
Water heater. W. A. Abern. 1,807,951; June 2.
Water heater. J. Hickey. 1,808,166; June 2.
Waterings from goffered films, Removal of. R. Berthon. 1,807,822; June 2.
Waving hair. E. W. Boyden. Re18,088; June 2.
Weatherproofing material. A. C. Fischer. 1,807,836; June 2.
Weather stripping. L. A. Macklanburg. 1,808,423; June 2.
Webs of fabric and the like with different colors, Spraying of. J. Groetschel. 1,807,979; June 2.
Weed exterminator. A. C. Lee. 1,807,695; June 2.
Weft carrier magazines, Giveway and thread guiding device for. R. G. Turner. 1,807,763; June 2.
Weft ends of weft carriers, Handling. R. G. Turner. 1,807,717; June 2.
Welding. M. B. Bayant and W. J. Beatty. 1,808,205; June 2.
Welding, Electric arc. H. J. Burnish. 1,807,961; June 2.
Welding including the employment of an air current, Electric. I. W. Day. 1,807,971; June 2.
Welding machine. F. L. Sessions. 1,808,261; June 2.
Well drilling apparatus. J. C. Fortune. 1,807,837; June 2.
Wheel: *See*—
Hand wheel. Steering wheel.
Wheel fin and weight, Combined. T. G. Schmeiser. 1,807,757; June 2.
Wheel gauge, Vehicle. H. Casler and C. P. Grimes. 1,808,287; June 2.
Window construction. R. T. Hurley and W. J. Carry. 1,808,414; June 2.
Window for motor vehicles, Service. F. B. Sheerar. 1,808,263; June 2.
Window frame. R. T. Hurley and W. J. Carry. 1,808,413; June 2.
Window guide channel, Making. J. I. Taylor. 1,808,582; June 2.
Window, Sliding and swinging. J. L. Kleinman. 1,808,043; June 2.
Windshield. J. Morrison. 1,808,058; June 2.
Wire belts, Making a seam for woven. H. Lindsay. 1,807,628; June 2.
Wire clamp. J. M. Davidson. 1,807,898; June 2.
Wire cloth selvage. L. C. Campbell. 1,808,526; June 2.
Wire connecter. G. H. Brady. 1,808,285; June 2.
Wire take-up device, Guide. B. T. Wileman. 1,807,769; June 2.
Wood block. C. W. Allen. 1,808,623; June 2.
Wood block. J. A. Lee. 1,808,667; June 2.
Wood block floor. R. G. Bruce. 1,808,592; June 2.
Wood flooring. C. A. Bruce. 1,808,591; June 2.
Wood working machines, Shaper head for. T. J. Anderson. 1,808,395; June 2.
Woven fabric. C. Rosenstein. 1,808,379; June 2.
Wrapping machine. J. Derry. 1,807,651; June 2.
Wrapping machine. E. Haas. 1,807,981; June 2.
Wrapping machine. O. Sandberg. 1,807,709; June 2.
Wrapping machine. O. Sandberg. 1,807,756; June 2.
Wrapping machine, Convertible. H. A. Sévigne. 1,808,181; June 2.
Wreath. J. Frei, jr. Des. 84,281–2; June 2.
Wrench: *See*—
Hub cap wrench. Ratchet wrench.
Monkey wrench. Socket wrench.
Pipe wrench. Valve wrench.
Wrench. C. M. Stewart. 1,808,268; June 2.
Wrench set unit. F. J. Vlchek. 1,808,190; June 2.
Wringer: *See*—
Mop wringer.
X-ray tube. M. Morrison. 1,808,430; June 2.

CLASSIFICATION OF PATENTS

ISSUED JUNE 2, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

A. & J. Manufacturing Co., The, Binghamton, N. Y. Kitchen tools and utensils. 283,949–50; June 9; Serial Nos. 309,158–9; published Mar. 31, 1931. Class 23.

Absorene Manufacturing Company, The, St. Louis, Mo. Wall-paper cleaner. 83,707; renewed Oct. 10, 1931. Class 4.

Aero Model Company, Chicago, Ill. Toy aeroplanes. 283,907; June 9; Serial No. 311,078; published Mar. 31, 1931. Class 22.

Aktieselskabet de Forenede Bryggerier, Copenhagen, Denmark. Cereal malt beverages. 283,927; June 9; Serial No. 309,603; published Mar. 31, 1931. Class 48.

Alabama Pipe Company, Anniston, Ala. Soil pipe. 283,896; June 9; Serial No. 309,021; published Mar. 31, 1931. Class 13.

Albers, Kathryn F., Minneapolis, Minn. Liquid preparation for the skin. 283,819; June 9; Serial No. 309,797; published Mar. 31, 1931. Class 6.

American Lead Pencil Company, New York, N. Y. Pencils. 284,021; June 9; Serial No. 308,969; published Mar. 24, 1931. Class 37.

American Lecithin Corporation, Wilmington, Del., and Atlanta, Ga. Lecithin. 283,782; June 9; Serial No. 311,050; published Mar. 31, 1931. Class 6.

American Well & Prospecting Co., The, Corsicana, Tex. Steam-pumps. 83,710; renewed Oct. 10, 1931.

Ames Shovel and Tool Company, North Easton, Mass. Tools and parts thereof. 283,918; June 9; Serial No. 311,213; published Mar. 31, 1931. Class 23.

Anheuser-Busch, Incorporated, St. Louis, Mo. Yeast. 283,985; June 9; Serial No. 309,220; published Mar. 24, 1931. Class 46.

Arden, Elizabeth, Inc., New York, N. Y. Toilet powder. 283,974; June 9; Serial No. 304,268; published Mar. 17, 1931. Class 6.

Armstrong Cork Company, Pittsburgh, to Armstrong Cork Company, Lancaster, Pa. Heat insulating materials. 83,806; renewed Oct. 17, 1931.

Armstrong-Newport Company, Carrollville, Wis. Heat and sound insulating material. 284,025; June 9; Serial No. 306,552; published Mar. 31, 1931. Class 12.

Associated Physicians Laboratories Ltd., San Francisco, Calif. General tonic. 283,851; June 9; Serial No. 309,163; published Mar. 31, 1931. Class 6.

Babbitt, B. T., assignor to B. T. Babbitt, Inc., Jersey City, N. J., and New York, N. Y. Lye or potash. 81,946; renewed May 23, 1931.

Baer, John P. (See Corner, Jas., & Sons.)

Balata, Victor & Textile Belting Co., New York, N. Y. Balata belting. 283,805; June 9; Serial No. 310,619; published Mar. 24, 1931. Class 35.

Balfour, Guthrie & Co., Limited, San Francisco, Calif. Canned fruits, vegetables, fish, etc. 283,986; June 9; Serial No. 309,223; published Mar. 31, 1931. Class 46.

Balfour, Guthrie & Co., Limited, San Francisco, Calif. Canned fruits, vegetables, fish, etc. 283,987–8; June 9; Serial Nos. 309,225–26; published Mar. 31, 931. Class 46.

Bánská- A Hutní Společnost, Brunn, Czechoslovakia, Springs for furniture. 283,951; June 9; Serial No. 309,706; published Mar. 31, 1931. Class 32.

Bánská- A Hutní Společnost, Brunn, Czechoslovakia, Springs for furniture. 283,952; June 9; Serial No. 309,711; published Mar. 31, 1931. Class 32.

Barker Bros. Incorporated, Los Angeles, Calif. Radio receiving sets and parts thereof. 284,038; June 9. Class 21.

Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic mountings. 283,797; June 9; Serial No. 310,242; published Mar. 31, 1931. Class 26.

Bean, John, Mfg. Co., Lansing, Mich. Automotive equipment. 283,772; June 9; Serial No. 295,994; published Mar. 31, 1931. Class 23.

Bernard, Albert, doing business as A. F. Johns Co., New York, N. Y. Shampoo preparation. 283,783; June 9; Serial No. 311,126; published Mar. 31, 1931. Class 6.

Beulah Toy & Novelty Co., Brooklyn, N. Y. Game. 284,002; June 9; Serial No. 294,853; published Mar. 24, 1931. Class 22.

Biondi, Angelo F., doing business as Biondi Chemical Co., Brooklyn, N. Y. Preparation for treatment of diabetes. 283,973; June 9; Serial No. 304,989; published Mar. 24, 1931. Class 6.

Bissell Carpet Sweeper Co., Grand Rapids, Mich. Carpet sweepers. 283,810; June 9; Serial No. 310,968; published Mar. 31, 1931. Class 23.

Blayney-Murphy Company, Denver, Colo. Picnic hams and lard. 283,958; June 9; Serial No. 305,919; published Mar. 24, 1931. Class 46.

Block Candy Company, The, Atlanta, Ga. Candy. 283,961; June 9; Serial No. 304,647; published Mar. 24, 1931. Class 46.

Block, Max, assignor to Max Block & Co. Inc., New York, N. Y. Sardines. 83,913; renewed Oct. 17, 1931.

Bock, L. M., doing business as The Carminia Company, Portland, Oreg. Hair shampoo. 283,873; June 9; Serial No. 302,722; published Mar. 31. Class 6.

Bohn Refrigerator Company, St. Paul, Minn. Refrigerators. 283,929; June 9; Serial No. 310,748; published Mar. 31, 1931. Class 31.

Bon-Dee Golf Ball Co., Detroit, Mich. Golf balls. 283,906; June 9; Serial No. 311,052; published Mar. 31, 1931. Class 22.

Borgfeldt, Geo., & Co., New York, N. Y. Dolls. 283,842–3; June 9; Serial Nos. 310,673–4; published Mar. 31, 1931. Class 22.

Bovinine Company, The, Chicago, Ill. Tonic. 283,835; June 9; Serial No. 310,749; published Mar. 31, 1931. Class 6.

Bowman, Jacob W., doing business as By Gum Co., Philadelphia, Pa. Chewing gum. 283,963; June 9; Serial No. 302,987; published Mar. 31, 1931. Class 46.

Bradentown Citrus Growers Ass'n., Bradentown, Fla. Oranges, lemons, grape-fruit, etc. 83,982; renewed Oct. 31, 1931.

Brooke Bond & Company, Limited, London, England. Teas. 83,984; renewed Oct. 31, 1931.

Brooklyn Standard Bag Co. Inc., Brooklyn, N. Y. Paper bags. 283,899; June 9; Serial No. 310,246; published Mar. 31, 1931. Class 2.

Brown, Henry C. J., doing business as The Kackalay Company, San Diego and Wilmar, Calif. Medicated tablets. 283,970; June 9; Serial No. 307,345; published Mar. 10, 1931. Class 6.

Brown, John, & Co. Limited, Sheffield, England. Certain machinery. 82,755; renewed July 25, 1931.

Buchwald, Martin, New York, N. Y. Hair lotion. 283,793; June 9; Serial No. 309,920; published Mar. 17, 1981. Class 6.

Burlington Drug Co., Burlington, Vt. Preparation for use in the treatment of bronchial asthma and as a reconstructive builder. 283,884; June 9; Serial No. 310,714; published Mar. 31, 1931. Class 6.

Burndy Engineering Company, Inc., New York, N. Y. Electrical connectors for wires, etc. 284,039; June 9. Class 21.

Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y. Preparation for reducing acidity. 283,778; June 9; Serial No. 310,044; published Mar. 24, 1931. Class 6.

By Gum Co. (See Bowman, Jacob W.)

Cabitt, Illington & Co., Boston, Mass. Rheumatic salve, rheumatic tablets, oral antiseptic, etc. 283,820; June 9; Serial No. 309,844; published Mar. 31, 1931. Class 6.

Carlton, A. C., doing business as McKinsey Thompson Co., San Francisco, Calif. Eye lotion. 283,895; June 9; Serial No. 310,934; published Mar. 24, 1931. Class 6.

Carminia Company, The. (See Bock, L. M.)

Carter, William, Company, The. (See Springfield Knitting Co.)

Central Scientific Company, Chicago, Ill. Vacuum pumps. 283,798; June 9; Serial No. 310,285; published Mar. 24, 1931. Class 23.

Chapman & Rodgers, Inc., Philadelphia, Pa. Cough syrup. 283,791; June 9; Serial No. 309,845; published Mar. 10, 1931. Class 6.

Cheatham Chemical Company, Atlanta, Ga. Toilet water, perfumes, bay rum, alcohol rub, hair tonics, etc. 283,756; June 9; Serial No. 248,220; June 28, 1927. Class 6.

Chesebrough Manufacturing Company, Consolidated, New York, N. Y. Petroleum jelly. 283,824; June 9; Serial No. 310,209; published Mar. 24, 1931. Class 6.

Chiviges, Michael, doing business as Gonol Laboratories, assignor to Emily C. Chiviges, Detroit, Mich. Freckle lotion. 283,878; June 9; Serial No. 307,976; published Feb. 10, 1931. Class 6.

Clark, Clarence P., Los Angeles, Calif. Chewing gum. 283,871; June 9; Serial No. 308,418; published Mar. 31, 1931. Class 46.

Cleveland Provision Company, Cleveland, Ohio. Ham, bacon, meat roll, etc. 283,774; June 9; Serial No. 295,656; published Mar. 31, 1931. Class 46.

Cluff Cover Company, Inc., New York, N. Y. Table cover. 284,003; June 9; Serial No. 294,914; published Mar. 31, 1931. Class 50.

Coffin Redington Co. to Coffin-Redington Co., San Francisco, Calif., successor. Toilet cream. 82,574; renewed July 11, 1931.

Co-Lap-So Container Company. (See Filshill, James.)

Cole, Elsie M., Albion, N. Y. Talcum and face powder, rouge, perfumes, etc. 283,785; June 9; Serial No. 309,331; published Mar. 10, 1931. Class 6.

Colgate-Palmolive-Peet Company, Chicago, Ill. Face cream. 283,779–80; June 9; Serial Nos. 310,095–6; published Mar. 24, 1931. Class 6.

Colgate-Palmolive-Peet Company, Chicago, Ill. Talc powder. 283,814; June 9; Serial No. 310,368; published Mar. 24, 1931. Class 6.

Collegiate World Publishing Company, The, Chicago, Ill. Magazines. 283,911; June 9; Serial No. 309,882; published Mar. 24, 1931. Class 38.

Colonial Food Company. (See Karmen, Bernard H.)

Colonial Steel Company, Pittsburgh, Pa. Steel rods. 283,858; June 9; Serial No. 309,676; published Mar. 31, 1931. Class 12.

Columbia Ribbon & Carbon Manufacturing Company, New York, assignor to Columbia Ribbon and Carbon Manufacturing Company, Inc., Glen Cove, N. Y. Carbon-paper and type-writer ribbons. 83,818; renewed Oct. 17, 1931.

Compass Playing Card Company, The, New York, N. Y. Sets of two decks of playing cards. 284,009; June 9; Serial No. 298,273; published Mar. 24, 1931. Class 22.

Condor Manufacturing Co., Inc., Long Island City, N. Y. Golf clubs. 283,852–4; June 9; Serial Nos. 310,971–3; published Mar. 31, 1931. Class 22.

Consolidated Water Power & Paper Company, Wisconsin Rapids, Wis. Monthly magazine. 283,862; June 9; Serial No. 309,336; published Mar. 17, 1931. Class 38.

Consortium Für Elektrochemische Industrie, G. m. b. H., Munich, Germany. Synthetic resins, solutions of synthetic resins, and mixtures obtained by melting synthetic resins with other chemical compounds. 284,031; June 9; Serial No. 307,802; published Mar. 17, 1931. Class 6.

Continental Typefounders Association, Incorporated, New York, N. Y. Printer's type. 283,948; June 9; Serial No. 311,183; published Mar. 31, 1931. Class 14.

Corner, Jas., & Sons, to John P. Baer, doing business as Jas. Corner & Sons, Baltimore, Md., successor. Pine-tar. 83,898; renewed Oct. 24, 1931.

Cotta Transmission Corporation, Rockford, Ill. Coal-burning stokers and parts therefor and transmissions for stokers. 283,901–2; June 9; Serial Nos. 310,794–5; published Mar. 31, 1931. Class 34.

Cott's Beverages, Inc., East Portchester, Conn. Maltless beverages and syrups and extracts used in making the same. 283,915; June 9; Serial No. 311,264; published Mar. 31, 1931. Class 45.

Coty, Inc., Wilmington, Del., and New York, N. Y. Display stands. 283,811; June 9; Serial No. 310,975; published Mar. 31, 1931. Class 32.

Cover, F. P., & Sons. To F. P. Cover & Sons, Inc., Andrews, S. C. Sole-leather. 83,989; renewed Oct. 31, 1931.

Coxie Company, The, doing business as "Coxies", Muncie, Ind. Chocolate-covered candy bars. 283,891; June 9; Serial No. 310,796; published Mar. 31, 1931. Class 46.

"Coxies". (See Coxie Company, The.)

Creamer, John J., doing business as Syno Laboratories, Washington, D. C. Inhalant for head colds, sinus, etc. 283,821; June 9; Serial No. 309,966; published Mar. 24, 1931. Class 6.

Curtiss, Roy, Sharon Springs, N. Y. Mineral water. 284,030; June 9; Serial No. 306,808; published Mar. 24, 1931. Class 45.

Curtius, Dr. Hans, Freiburg Breisgau, Germany. Vaccine and serum. 283,760; June 9; Serial No. 283,724; published Mar. 24, 1931. Class 6.

Dack's Shoes, Inc., Detroit, Mich. Boots and shoes. 284,024; June 9; Serial No. 305,848; published Mar. 24, 1931. Class 39.

Deane Plaster Co., The, Yonkers, N. Y. Oxide-of-zinc adhesive plaster. 283,971; June 9; Serial No. 306,393; published Mar. 10, 1931. Class 6.

De Clevo Company, Cleveland, Ohio. Dry-cleaning and laundry machines. 283,905; June 9; Serial No. 311,027; published Mar. 31, 1931. Class 24.

Dennie, Frank B., doing business as Security Remedy Co. and Security Food Co., Minneapolis, Minn. Antiseptic healing lotion. 81,966; renewed May 23, 1931.

Desnos and Son Inc., Flemington, N. J. Salad dressings. 283,992; June 9; Serial No. 310,164; published Mar. 24, 1931. Class 46.

Diamond Match Company, The, Chicago, Ill. Dishes of paper or fibre. 284,001; June 9; Serial No. 294,210; published Mar. 18, 1930. Class 2.

Diemer, M. E., Madison, Wis. Motion-picture films. 283,803; June 9; Serial No. 310,598; published Mar. 31, 1931. Class 26.

Dilling & Company, Indianapolis, Ind. Chocolates. 81,794; renewed May 9, 1931.

Dilling & Company, Indianapolis, Ind. Cream candy. 82,583; renewed July 11, 1931.

Dilling & Company, Indianapolis, Ind. Candy kisses. 83,993; renewed Oct. 31, 1931.

Dime Publications, Inc., New York, N. Y. Periodical. 283,863; June 9; Serial No. 310,976; published Mar. 24, 1931. Class 38.

Dixon, Joseph, Crucible Company, Jersey City, N. J. Graphite. 37,016–7; renewed Sept. 3, 1931.

Do-Well Agricultural Service, Inc., Champaign, Ill. Farm bulletins published monthly. 284,005; June 9; Serial No. 297,178; published Mar. 24, 1931. Class 38.

Eastman Kodak Company, Rochester, N. Y. Photographic films. 283,796; June 9; Serial No. 310,215; published Mar. 24, 1931. Class 26.

Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens. (See Mülhens, Paul P.)

Economic Machinery Company, assignor to Economic Machinery Company, Worcester, Mass. Labeling machines and parts of labeling machines. 83,968; renewed Oct. 24, 1931.

Elliott, Russell W., Kansas City, Mo. Trap shooting apparatus. 284,018; June 9; Serial No. 306,599; published Mar. 31, 1931. Class 22.

Elmer Candy Company, Incorporated, New Orleans, La. Candy. 283,924; June 9; Serial No. 311,057; published Mar. 31, 1931. Class 46.

Elsmere Cutlery Co. (See Sternberg, Nathan J.)

Emery-Drew, Inc., Cincinnati, Ohio. Edible oils. 283,989; June 9; Serial No. 309,465; published Mar. 31, 1931. Class 46.

Endo Products, Inc. (See Intravenous Products Co. of America, Inc.)

Face Reflector Company. (See McNamara, Sue L.)

Fancourt, Richard E., New York, N. Y. Ointment. 283,980; June 9; Serial No. 310,475; published Mar. 31, 1931. Class 6.

Fear, Fred, & Co., Brooklyn, N. Y. Dyes. 283,968; June 9; Serial No. 308,294; published Mar. 10, 1931. Class 6.

Filshill, James, doing business as Co-Lap-So Container Company, Oakland, Calif. Collapsible boxes. 284,019; June 9; Serial No. 303,887; published Mar. 31, 1931. Class 2.

Fire Out Products, Inc., Wilmington, Del., and Baltimore, Md. Chemical fire extinguishing powder. 283,977; June 9; Serial No. 311,016; published Mar. 31, 1931. Class 6.

Fitch, F. W., Co., The, Des Moines, Iowa. After-shaving lotion and hand lotion. 283,876; June 9; Serial No. 307,807; published Mar. 24, 1931. Class 6.

Franklin Simon & Co. (See Worth, S. A., assignor.)

Fruit Dealer Publishing Company, The, Philadelphia, Pa. Periodicals. 283,855; June 9; Serial No. 309,774; published Mar. 17, 1931. Class 38.

Fruit Dealer Publishing Company, The, Philadelphia, Pa. Periodicals. 283,894; June 9; Serial No. 309,775; published Mar. 24, 1931. Class 38.

Gaby, Inc., Philadelphia, Pa. Cleansing cream. 283,982; June 9; Serial No. 310,643; published Mar. 31, 1931. Class 6.

Georgia-Peanut Co. (See Ray, Homer G.)

Gerli, E., & Company, Inc., New York, N. Y. Raw silk. 283,861; June 9; Serial No. 309,377; published Mar. 17, 1931. Class 1.

Gitman Brothers, Cincinnati, Ohio. Fresh vegetables. 283,919; June 9; Serial No. 311,329; published May 5, 1931. Class 46.

Gladke, Jerome J., doing business as Korjena Medicine Co., Elmira, N. Y. Pharmaceutical preparation for the reduction of excessive fat. 283,817; June 9; Serial No. 309,450; published Mar. 24, 1931. Class 6.

Gland-O-Lac Co., The, Omaha, Nebr. Compound adapted for use in connection with poultry. 283,786; June 9; Serial No. 309,429; published Mar. 17, 1931. Class 6.

Glencoe Lime & Cement Co., St. Louis, Mo. Building and protective paper. 284,026; June 9; Serial No. 307,051; published Mar. 31, 1931. Class 12.

Glendinning, McLeish & Co., Inc., New York, N. Y. Embroidered linen handkerchiefs. 283,768; June 9; Serial No. 310,602; published Mar. 10, 1931. Class 42.

Gonol Laboratories. (See Chiviges, Michael).

Goshen Manufacturing Company, The, Goshen, Ind. Lawn swings. 283,839; June 9; Serial No. 309,342; published Mar. 24, 1931. Class 22.

Granite State Mowing Machine Co., Hinsdale, N. H. Lawn mowers. 283,809; June 9; Serial No. 310,800; published Mar. 24, 1931. Class 23.

Gray, Dorothy, Bloomfield, N. J., and New York, N. Y. Powder puffs, absorbent powder puffs, and eyebrow brushes. 283,935; June 9; Serial No. 309,467; published Mar. 24, 1931. Class 29.

Griscom-Russell Company, The, New York, N. Y. Heat exchangers, water distillers, steam condensers, vapor coolers, etc. 283,998; June 9; Serial No. 306,352; published Mar. 24, 1931. Class 23.

Hadley Company, Inc., The, Providence, R. I. Wrist-watch straps. 283,859–60; June 9; Serial Nos. 309,612–13; published Mar. 24, 1931. Class 40.

Haffner, Carl F., doing business as Haffner Laboratories, Charleston, Ill. Preparation for the relief of asthma. 283,827; June 9; Serial No. 310,515; published Mar. 24, 1931. Class 6.

Hagerling, Fred J., St. Louis, Mo. Radiator cement for motor vehicles. 283,920; June 9; Serial No. 309,561; published Apr. 7, 1931. Class 6.

Halsted, Homer B., doing business as Sports Equipment Company, Detroit, Mich. Golf balls. 283,845–6; June 9; Serial Nos. 310,801–2; published Mar. 31, 1931. Class 22.

Halstead Oil Company, Inc., New York, N. Y. Rust solvent and lubricant and lubricating oils and greases. 284,035; June 9. Class 15.

Hamill, S., Company, Keokuk, Iowa. Foods. 84,002; renewed Oct. 31, 1931.

Hedman Manufacturing Company, The, Chicago, Ill. Signature writing machines. 283,799; June 9; Serial No. 310,379; published Mar. 31, 1931. Class 23.

Hoffman-La Roche, Inc., Nutley, N. J. Medicinal preparation. 283,775; June 9; Serial No. 309,975; published Mar. 17, 1931. Class 6.

Hoge, Lawrence A., Wheeling, W. Va. Pharmaceutical preparation. 283,816; June 9; Serial No. 309,431; published Mar. 24, 1931. Class 6.

Holloway, M. J. & Company, doing business as Holloway's, Chicago, Ill. Candy. 283,921; June 9; Serial No. 310,866; published Mar. 31, 1931. Class 46.

Hough, William B., Company, assignor to Metal Building Materials Company, Chicago, Ill. Metal devices for supporting and spacing concrete-reinforcing members. 81,463; renewed Apr. 11, 1931.

Hudson Motor Car Company, Detroit, Mich. Automobile structural parts. 283,898; June 9; Serial No. 309,526; published Mar. 31, 1931. Class 19.

Hustor, Tom, Peanut Company, doing business as Tom Huston Frozen Foods, Inc., Columbus, Ga. Frozen fruits. 283,956; June 9; Serial No. 306,185; published Mar. 31, 1931. Class 46.

Hyzo Laboratories, Inc., Syracuse, N. Y. Hypochloride solution. 283,836; June 9; Serial No. 310,803; published Mar. 24, 1931. Class 6.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Liver-extract preparation. 283,795; June 9; Serial No. 310,446; published Mar. 31, 1931. Class 6.

Ideal Novelty & Toy Co., Brooklyn and New York, N. Y. Dolls. 283,841; June 9; Serial No. 310,478; published Mar. 24, 1931. Class 22.

Illinois Pacific Coast Co. (See Pacific Coast Glass Co., assignor.)

Interial Extract Co. (See Paul, Milton.)

In-Testo-Lax Natural Food Co. (See Rosenbluth, Abraham.)

Intravenous Products Co. of America, Inc., doing business as Endo Products, Inc., New York, N. Y. Preparation indicated in symptomatic relief and resistance-stimulating therapy. 283,847; June 9; Serial No. 310,339; published Mar. 24, 1931. Class 6.

Italo French Produce Company, Pittsburgh, Pa. Canned peeled tomatoes. 283,922; June 9; Serial No. 310,871; published Mar. 31, 1931. Class 46.

Jacob, Chas. W., & Allison, New York, N. Y. Glycerin substitute. 83,917; renewed Oct. 24, 1931.

Jacobson, Frank W., doing business as Reliable Home Supply Co., Cleveland, Ohio. Malt syrup. 283,916; June 9; Serial No. 311,035; published Apr. 14, 1931. Class 46.

James Manufacturing Company, Fort Atkinson, Wis. Incubator supply trucks. 283,909; June 9; Serial No. 311,277; published Mar. 31, 1931. Class 19.

Jeffrey Manufacturing Company, The, Columbus, Ohio. Mining machines. 84,006; renewed Oct. 31, 1931.

Johns, A. F., Co. (See Bernard, Albert.)

Justice, A. R., Company, to A. R. Justice Company, Philadelphia, Pa., successor. Polishing and cleansing material. 82,799; renewed July 25, 1931.

Kackalay Company, The. (See Brown, Henry, C. J.)

Kanter, R. J., Company, The, New York, N. Y. Lubricating oils and greases. 82,240–1; renewed June 13, 1931.

Karmen, Bernard H., doing business as Colonial Food Company, San Francisco, Calif. Canned baked beans. 283,994; June 9; Serial No. 310,382; published Mar. 31, 1931. Class 46.

Klipstein, E. C., & Sons Company, South Charleston, W. Va., and Newark, N. J. Dye intermediates. 283,969; June 9; Serial No. 307,596; published Mar. 10, 1931. Class 6.

Knoll A.-G. Chemische Fabriken, Ludwigshafen-on-the-Rhine, Germany. Soporific. 284,011; June 9; Serial No. 299,326; published Mar. 17, 1931. Class 6.

Koenig Medicine Company, The, assignor to Koenig Medicine Co., Chicago, Ill. Certain remedies. 81,612; renewed Apr. 25, 1931.

Koh-I-Nor Bleistiftfabrik L. & Co. Hardtmuth, Budweis, Czechoslovakia. Pencils of all kinds. 283,955; June 9. Serial No. 310,805; published Mar. 24, 1931. Class 37.

Koppers Company, The, Pittsburgh, Pa. Coke. 284,028; June 9; Serial No. 304,333; published Mar. 17, 1931. Class 1.

Koppers Products Company, Pittsburgh, Pa. Insecticides and wood preservatives. 284,033; June 9; Serial No. 303,189; published Mar. 24, 1931. Class 6.

Ko jena Medicine Co. (See Gladke, Jerome J.)

Kranish Bros. Inc., New York, N. Y. Razor blades. 284,014; June 9; Serial No. 300,528; published Mar. 31, 1931. Class 23.

Krauss, Herman, Inc., Toledo, Ohio. Malt syrups for foods. 283,872; June 9; Serial No. 308,941; published Mar. 31, 1931. Class 46.

La Grande Distillerie E. Cusenier Fils Aine & Cie., Societe Anonyme, Paris, France. Nonalcoholic cordial. 284,013; June 9; Serial No. 300,207; published Sept. 16, 1930. Class 45.

Lasley, C. A., Inc., Yakima, Wash. Potatoes. 283,990; June 9; Serial No. 309,822; published Mar. 24, 1931. Class 46.

Leadclad Wire Company, Wheeling, W. Va. Wire chain-link fencing, bolts, nuts, and rivets. 284,043; June 9. Class 13.

Lekas and Drivas, New York, N. Y. Olive oil. 82,097; renewed May 30, 1931.

Le Tourneau, R. G., Inc., Stockton, Calif. Scrapers. 283,808; June 9; Serial No. 310,745; published Mar. 31, 1931. Class 23.

Libby, McNeill & Libby, Chicago, Ill. Canned pineapple. 283,995; June 9; Serial No. 310,392; published Mar. 31, 1931. Class 46.

Light Bros., Inc., New York and Brooklyn, N. Y. Mattresses. 283,917; June 9; Serial No. 311,149; published Mar. 31, 1931. Class 32.

Lilly, Eli, and Company, Indianapolis, Ind. Chemical, pharmaceutical, and biological products. 283,972; June 9; Serial No. 305,618; published Nov. 11, 1930. Class 6.

Limited Company formerly The Škoda-Works, Pizeň, Prague-Smichov, Czechoslovakia. Steel castings, all cast steel parts, etc. 283,755; June 9; Serial No. 235,557; published Aug. 5, 1930. Class 14.

Lincoln Oil Refining Company, Robinson, Ill. Pneumatic tires and inner tubes. 283,807; June 9; Serial No. 310,723; published Mar. 31, 1931. Class 35.

Lindlahr's Magazine, Inc., New York, N. Y. Magazines. 283,869; June 9; Serial No. 310,481; published Mar. 24, 1931. Class 38.

Livingston's Fancy Food Products Inc., Los Angeles, Calif. Canned fruits, vegetables, and fish; edible oils, bread, etc. 283,765; June 9; Serial No. 292,585; published Mar. 31, 1931. Class 46.

Los Ramos Cigar Company, The, Sidney, Ohio. Cigars. 283,940; June 9; Serial No. 310,727; published Mar. 31, 1931. Class 17.

Luchs, Joseph, and Staff, Inc., Philadelphia, Pa. Educational literature. 284,027; June 9; Serial No. 307,557; published Mar. 17, 1931. Class 38.

Lunkenheimer Company, The, Cincinnati, Ohio. Water gages. 83,502; renewed Sept. 19, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Lubricators. 83,622; renewed Oct. 3, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Valves. 83,661; renewed Oct. 3, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Oil-cups. 83,663–4; renewed Oct. 3, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Grease-cups. 83,665–6; renewed Oct. 3, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Lubricators. 83,668–9; renewed Oct. 3, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Lubricators. 83,671; renewed Oct. 3, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Oil-pumps. 83,673; renewed Oct. 3, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Oil-cups. 83,675; renewed Oct. 3, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Lubricators. 83,678; renewed Oct. 3, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Pop safety-valves. 83,751; renewed Oct. 10, 1931.

Lunkenheimer Company, The, Cincinnati, Ohio. Gate-valves. 83,752; renewed Oct. 10, 1931.

Luyties, Frederick A., assignor, by mesne assignments, to Luyties Pharmacal Company, St. Louis, Mo. Non-toxic medical antiseptic for internal and external application. 81,614; renewed Apr. 25, 1931.

Lyon, G. S., & Sons Lumber & Mfg. Co., Decatur, Ill. Window frames and sashes. 284,016; June 9; Serial No. 300,880; published Mar. 31, 1931. Class 12.

Macfadden Publications, Inc., New York, N. Y. Magazine. 283,868; June 9; Serial No. 310,650; published Mar. 24, 1931. Class 38.

Maine Manufacturing Company, to The Maine Manufacturing Company, Nashua, N. H., successor. Refrigerators. 83,927; renewed Oct. 24, 1931.

Ma-Lig-No Medicine Co. (See Moreschi, Anselmo.)

Mansfield, James F., doing business as Wiz Auto Clock Co., New York, N. Y. Clocks, automobile clocks, etc. 283,761; June 9; Serial No. 282,046; published Mar. 24, 1931. Class 27.

Marinoff, Edna, doing business as Velvosan Co., Brooklyn, N. Y. Face creams, hand creams, massage creams. 284,007; June 9; Serial No. 297,635; published Mar. 10, 1931. Class 6.

Mattei, Andrew, Fresno, Calif. Wines. 83,755; renewed Oct. 10, 1931.

Mayflower Mills, Fort Wayne, Ind. Boston brown bread flour. 37,148; renewed Oct. 1, 1931.

McKinsey Thompson Co. (See Carlton, A. C.)

McLaughlin Gormley King Co., Minneapolis, Minn. Concentrated extract for use in insecticides. 283,837; June 9; Serial No. 310,807; published Mar. 24, 1931. Class 6.

McMath, John N., Larchmont, N. Y. Talcum powder, rouge, perfume, etc. 283,792; June 9; Serial No. 309,866; published Mar. 10, 1931. Class 6.

McNamara, Sue L., doing business as Face Reflector Company, Dallas, Tex. Preparation for the treatment of the skin. 283,830; June 9; Serial No. 310,565; published Mar. 24, 1931. Class 6.

Meadows, W. R., Inc., Elgin, Ill. Construction materials. 284,010; June 9; Serial No. 299,074; published Mar. 31, 1931. Class 12.

Metal Building Materials Company. (See Hough, William B., Company, assignor.)

Metz, H. A., & Co., assignor to H. A. Metz Laboratories, Inc., New York, N. Y. Remedy for syphilis and similar blood diseases. 83,590–1; renewed Sept. 26, 1931.

Midway Chemical Company, Chicago, Ill. Mops. 283,941; June 9; Serial No. 310,872; published Mar. 24, 1931. Class 29.

Miles, Dr., Medical Company, Elkhart, Ind. Antacid effervescent preparations. 283,831; June 9; Serial No. 310,608; published Mar. 31, 1931. Class 6.

Miller, E. B., & Company, Chicago, Ill. Coffee and tea. 283,975; June 9; Serial No. 306,896; published Mar. 31, 1931. Class 46.

Millrick Products Corporation, Kokomo, Ind. Powder preparation applicable to radiators of automobiles and heating systems. 283,848; June 9; Serial No. 310,398; published Mar. 24, 1931. Class 6.

Minnesota Consolidated Canneries, Inc., Minneapolis, Minn. Canned corn. 283,965; June 9; Serial No. 301,491; published Mar. 31, 1931. Class 46.

Minnesota Consolidated Canneries, Inc., Minneapolis, Minn. Canned corn. 283,966; June 9; Serial No. 301,489; published Mar. 31, 1931. Class 46.

Mizrahi, R. B., Mexico City, Mex. Medicinal cream for skin treatment, liquid, powder, and cream dentifrice, etc. 284,034; June 9. Class 6.

Monroe Bottling Works. (See Szwajkos, John K.)

Moreschi, Anselmo, doing business as Ma-Lig-No Medicine Co., Bates, Ark. Preparation for the treatment of cancer. 283,813; June 9; Serial No. 310,346; published Mar. 31, 1931. Class 6.

Mound City Bottling Co., St. Louis, Mo. Maltless beverages and syrups and extracts. 284,041; June 9. Class 45.

Mueller Brass Co., Port Huron, Mich. Soldering paste. 283,781; June 9; Serial No. 310,257; published Mar. 31, 1931. Class 6.

Mülhens, Paul P., doing business as Eau de Cologne-& Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens, Cologne, Germany. Eau de Cologne water, perfumery, shampoo, etc. 283,978; June 9; Serial No. 311,019; published Mar. 31, 1931. Class 6.

Nation Electric Appliance Corporation, Bridgeport, Conn. Fruit-juice extractors. 283,800; June 9; Serial No. 310,404; published Mar. 31, 1931. Class 23.

National Consumers Paper Corporation, New York, N. Y. Sulphate pulp kraft paper. 283,954; June 9; Serial No. 310,808; published Mar. 24, 1931. Class 37.

National Pipe Products Corporation, Rochester, N. Y. Measuring devices in the nature of displacement meters. 283,887; June 9; Serial No. 303,338; published Mar. 24, 1931. Class 26.

National Retail Credit Association, St. Louis, Mo. Periodical. 283,913; June 9; Serial No. 310,062; published Mar. 24, 1931. Class 38.

National Trade Journals, Inc., New York, N. Y. Publication. 283,806; June 9; Serial No. 310,734; published Mar. 24, 1931. Class 38.

Naugatuck Chemical Company, The, New York, N. Y. Mixture of stearic acid and a condensation product of formaldehyde and ethylamine. 283,784; June 9; Serial No. 309,278; published Mar. 17, 1931. Class 6.

Nectar Malt Company, The. (See Sanford, Franklin.)

Nestlé & Anglo-Swiss Condensed Milk Co., Cham, Switzerland, assignor to Nestles Milk Products, Inc., New York, N. Y. Cocoa with milk and chocolate with milk. 82,462; renewed June 27, 1931.

Nestles Milk Products, Inc. (See Nestlé & Anglo-Swiss Condensed Milk Co.)

Neuralgyline Company, The, Sistersville, to Sterling Products (Incorporated), Wheeling, W. Va., successor. Internal headache remedies in tablet form. 36,717; renewed July 9, 1931.

New York Evening Journal Publishing Company, to New York Evening Journal, Inc., New York, N. Y., successor. Publication. 83,595; renewed Sept. 26, 1931.

New York Hamburger Gummi-Waaren Compagnie, Hamburg, Germany. Combs for the hair. 283,857; June 9; Serial No. 309,695; published Mar. 31, 1931. Class 40.

New York Special Yam-Yam Co., Camden, N. J. Water ice. 283,991; June 9; Serial No. 309,900; published Mar. 24, 1931. Class 46.

New York Times Company, The, New York, N. Y. Newspapers. 83,176; renewed Aug. 22, 1931.

Nice, Eugene E., Philadelphia, Pa. First-coat or priming paints. 81,737; renewed May 2, 1931.

Nickelax Company, Ottawa, Ill. Laxatized chocolate. 283,983; June 9; Serial No. 310,692; published Mar. 31, 1931. Class 6.

Nocout Co., The. (See Sohn & O'Hara.)

Obermeyer & Co., Aktiengesellschaft, Hanau, Germany. Ointment. 283,815; June 9; Serial No. 309,286; published Mar. 31, 1931. Class 6.

O'Neil, Frank M., Muncie, Ind. General medicinal tonic. 284,032; June 9; Serial No. 303,067; published Mar. 24, 1931. Class 6.

Oringer, George, doing business as Oringer Manufacturing Co., Boston, Mass. Maltless beverages and syrups for making the same. 284,029; June 9; Serial No. 304,785; published Mar. 31, 1931. Class 45.

Orlik, Alfred, Inc., New York, N. Y. Pipes, cigarette and cigar holders, etc. 283,934; June 9; Serial No. 309,050; published Mar. 31, 1931. Class 8.

Ortega, E. C., Co., Inc., Los Angeles, Calif. Maltless tomato beverage. 283,928; June 9; Serial No. 310,573; published Mar. 31, 1931. Class 45.

Ozark Chair Company, Ferguson, Mo. Household and lawn chairs. 283,888; June 9; Serial No. 308,749; published Mar. 31, 1931. Class 32.

Pacific Coast Glass Co., assignor to Illinois Pacific Coast Co., San Francisco, Calif. Bottles made of glass. 284,036; June 9. Class 33.

Pantasote Leather Company, The, Passaic, N. J. Waterproof fabrics. 83,853; renewed Oct. 17, 1931.

Parker Brothers, Inc., Salem, Mass. Bats and rackets. 283,766; June 9; Serial No. 295,231; published Mar. 24, 1931. Class 22.

Parker Brothers, Inc., Salem, Mass. Hollow composition and like balls. 283,767; June 9; Serial No. 295,230; published Mar. 24, 1931. Class 22.

Paul, Milton, doing business as International Extract Co., New York, N. Y. True-fruit and imitation flavoring extracts. 283,773; June 9; Serial No. 295,755; published Mar. 24, 1931. Class 45.

Pereles Bros. Inc., Milwaukee, Wis. Goggles. 283,886; June 9; Serial No. 302,831; published Mar. 24, 1931. Class 26.

Peterman, William, Inc., New York, N. Y. Insecticides, deodorizers, and perfumes. 284,008; June 9; Serial No. 297,983; published Mar. 31, 1931. Class 6.

Peterson, Lorena, doing business as Peterson Sales Company, St. Louis, Mo. Radiator cement. 283,828; June 9; Serial No. 310,529; published Mar. 24, 1931. Class 6.

Pickel, Victoria M., Columbus, Ohio. Salve. 81,822; renewed May 9, 1931.

Pilar, Anthony J. and John O., Newark, N. J. Pigment finishes, chemicals, and dyestuffs for leather. 283,832; June 9; Serial No. 310,655; published Mar. 31, 1931. Class 6.

Pollen, Bernard W., College Point, Long Island, N. Y. Medicinal and pharmaceutical preparations. 283,877; June 9; Serial No. 307,950; published Mar. 24, 1931. Class 6.

Poly Chemical Laboratories, Greenville, Jersey City, N. J. Preparation for treating colds and hay fever. 283,967; June 9; Serial No. 308,953; published Mar. 31, 1931. Class 6.

Popsicle Corporation of the United States, The, New York, N. Y. Sticks or handles for suckers. 284,006; June 9; Serial No. 297,326; published Mar. 31, 1931. Class 13.

Powell, John, & Co., Inc., New York, N. Y. Insecticide. 283,787; June 9; Serial No. 309,453; published Mar. 17, 1931. Class 6.

Prokare Laboratory Products Company, Cleveland, Ohio. Preparations for women. 283,984; June 9; Serial No. 310,880; published Mar. 31, 1931. Class 6.

Quigley Publishing Company, Inc., New York, N. Y. Feature published in a periodical. 283,864; June 9; Serial No. 310,924; published Mar. 24, 1931. Class 38.

Ray Corporation, Canton, Ohio. Compounds including dextrin for aiding emulsion of the fillers of frozen pies. 283,962; June 9; Serial No. 304,384; published Mar. 24, 1931. Class 46.

Ray, Homer G., doing business as Georgia-Peanut Co., Donalsonville, Ga. Shelled peanuts. 283,960; June 9; Serial No. 304,668; published Mar. 24, 1931. Class 46.

Reach, A. J., Wright & Ditson Incorporated, New York, N. Y. Golf balls. 283,844; June 9; Serial No. 310,697; published Mar. 31, 1931. Class 22.

Redwood Manufacturers Company, Pittsburg, Calif. Lumber. 284,023; June 9; Serial No. 305,241; published Mar. 31, 1931. Class 12.

Refractory Products Company, Chicago, Ill. Flux to be used for both ferrous and nonferrous metals. 283,825; June 9; Serial No. 310,227; published Mar. 24, 1931. Class 6.

Regis, Annie J., Haverhill, Mass. Medicinal preparation. 283,823; June 9; Serial No. 310,188; published Mar. 31, 1931. Class 6.

Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach creams, etc. 283,838; June 9; Serial No. 310,881; published Mar. 24, 1931. Class 6.

Reilly, Frank C., New York, N. Y. Astringents, refreshing creams, face packs, etc. 284,017; June 9; Serial No. 310,882; published Mar. 24, 1931. Class 6.

Reliable Home Supply Co. (See Jacobson, Frank W.)

Remington Arms Company, Inc., Bridgeport, Conn., and Ilion and New York, N. Y. Ammunition. 283,931; June 9; Serial No. 311,072; published Mar. 24, 1931. Class 9.

Roger & Gallet to Parfumerie Roger et Gallet Societe Anonyme, Paris, France, successor. Toilet preparations for teeth and hair and perfumed soap. 35,737; renewed Jan. 8, 1931.

Rosenberg, Manuel, Cincinnati, Ohio. Periodical. 283,867; June 9; Serial No. 310,696; published Mar. 24, 1931. Class 38.

Rosenbluth, Abraham, doing business as In-Testo-Lax Natural Food Co., Newark, N. J. Preparation for use as a bowel and intestinal regulator. 283,822; June 9; Serial No. 310,002; published Mar. 31, 1931. Class 6.

Rosenstein, Gussie C., doing business as Sandman Food Products Co., Paterson, N. J. Pudding. 283,923; June 9; Serial No. 310,929; published Mar. 31, 1931. Class 46.

Roto- und Dehego-Werke Aktiengesellschaft, Konigslutter, Germany. Mimeographing devices and machines, etc. 284,037; June 9. Class 37.

Royal Baking Powder Company, New York, N. Y. Baking powder. 283,976; June 9; Serial No. 310,922; published Mar. 31, 1931. Class 6.

Royston, F. E., & Co., Aurora, Ill. Foods. 81,631; renewed Apr. 25, 1931.

Runkel Brothers, Inc., New York, N. Y. Candy confections. 283,957; June 9; Serial No. 305,982; published Mar. 24, 1931. Class 46.

Russell Playing Card Company, Jersey City, N. J. Playing cards. 283,904; June 9; Serial No. 310,885; published Mar. 31, 1931. Class 22.

Rutecki, Valeria, Philadelphia, Pa. Liniment. 283,879; June 9; Serial No. 308,494; published Mar. 31, 1931. Class 6.

Safeway Stores, Incorporated, Vernon and Oakland, Calif. Booklets. 283,910; June 9; Serial No. 309,093; published Mar. 24, 1931. Class 38.

St. Clair Rubber Company, Marysville and Detroit, Mich. Underlay for floor coverings. 283,885; June 9; Serial No. 307,747; published Mar. 24, 1931. Class 50.

Saladino, C., & Sons, Chelsea, Mass. Racket strings. 283,840; June 9; Serial No. 309,904; published Mar. 24, 1931. Class 22.

Sandman Food Products Co. (See Rosenstein, Gussie C.)

Sandoz Chemical Works, Inc., New York, N. Y. Medicinal preparations having hypnotic properties. 283,776; June 9; Serial No. 309,941; published Mar. 17, 1931. Class 6.

Sandoz Chemical Works, Inc., New York, N. Y. Medicinal preparation. 283,794; June 9; Serial No. 309,938; published Mar. 17, 1931. Class 6.

Sanford, Franklin, doing business as The Nectar Malt Company, Cincinnati, Ohio. Food powder. 284,015; June 9; Serial No. 300,760; published Mar. 31, 1931. Class 46.

Saville, Allen J., Inc., Richmond, Va. Reinforced concrete roof tile. 284,040; June 9. Class 12.

Saxlehner, Andreas, Budapest, Hungary. Bitter salts. 283,932–3; June 9; Serial Nos. 311,160–1; published Mar. 31, 1931. Class 6.

Schering-Kahlbaum, A. G., Berlin, Germany. Preparation for internal use for the purpose of facilitating the taking of X-ray pictures of internal organs. 283,833; June 9; Serial No. 310,063; published Mar. 31, 1931. Class 6.

Scott and Fetzer Company, The, Cleveland, Ohio. Suction carpet sweepers. 283,804; June 9; Serial No. 310,617; published Mar. 31, 1931. Class 23.

Scott Fruit Company. (See Younghusband, Francis S.)

Scott, Irving G., New York, N. Y. Wrought-iron flower and table stands. 283,997; June 9; Serial No. 304,700; published Mar. 31, 1931. Class 32.

Sears, Roebuck and Co., Chicago, Ill. Leather belting. 283,801; June 9; Serial No. 310,488; published Mar. 31, 1931. Class 35.

Sears, Roebuck and Co., Chicago, Ill. Hot-water automobile heaters. 283,900; June 9; Serial No. 310,489; published Mar. 31, 1931. Class 19.

Security Food Co. (See Dennie, Frank B.)

Security Remedy Co. (See Dennie, Frank B.)

Service Bureau, Inc., Cambridge, Mass. Adhesive paper signals for index sheets or the like. 283,892; June 9; Serial No. 310,778; published Mar. 24, 1931. Class 37.

Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Rolled girders and columns, cast girders and columns, asbestos, etc. 283,757; June 9; Serial No. 255,938; published Mar. 31, 1931. Class 12.

Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Rolled girders and columns, cast girders and columns, asbestos, etc. 283,758; June 9; Serial No. 258,558; published Mar. 31, 1931. Class 12.

Simmons Company, New York, N. Y. Mattresses. 283,763; June 9; Serial No. 289,294; published Mar. 24, 1931. Class 32.

Simpson Drug Company, Smiths Ferry, Pa. Preparation for the treatment of colds and grippe. 283,849; June 9; Serial No. 310,491; published Mar. 24, 1931. Class 6.

Singer Manufacturing Company, The, Elizabeth, N. J. Needles for sewing by machine. 83,015; renewed Aug. 8, 1931.

Skinner, William, Manufacturing Co., Holyoke and Boston, Mass.; New York, N. Y.; Chicago, Ill.; and Philadelphia, Pa., assignee to William Skinner & Sons, Holyoke, Mass., and New York, N. Y. Fabrics of silk and satin. 37,187; renewed Oct. 15, 1931.

Slesinger, Stephen, Inc., New York, N. Y. Wearing apparel. 283,856; June 9; Serial No. 309,751; published Mar. 24, 1931. Class 39.

Smith Brothers, Inc., Poughkeepsie, N. Y. Cough syrup. 283,770; June 9; Serial No. 295,004; published Mar. 10, 1931. Class 6.

Smith, D. B., & Company, Inc., Utica, N. Y. Lawn sprinklers, hose nozzles, etc. 283,908; June 9; Serial No. 311,206; published Mar. 31, 1931. Class 13.

Soapless Foam, Limited, London, England. Apparatus for producing preparations for shampooing the hair. 283,802; June 9; Serial No. 310,492; published Mar. 24, 1931. Class 23.

Società Elettrica Ed Elettrochimica Del Caffaro, Milan, Italy. Chloride of lime. 283,850; June 9; Serial Nos. 309,153–4; published Mar. 31, 1931. Class 6.

Società Elettrica Ed Elettrochimica Del Caffaro, Milan, Italy. Chloride of lime. 283,926; June 9; Serial No. 309,153; published Mar. 31, 1931. Class 6.

Sohn & O'Hara, doing business as The Nocout Co., Baltimore, Md. Cold tablets and cough syrup. 283,759; June 9; Serial No. 271,412; published Dec. 17, 1929. Class 6.

Sontag Chain Stores Co. Ltd., Los Angeles, doing business as Studio Products Co., Hollywood, Calif. Toilet preparations. 283,788; June 9; Serial No. 309,746; published Mar. 31, 1931. Class 6.

Sports Equipment Company. (See Halsted, Homer B.)

Springfield Knitting Co., Springfield, Mass., assignor to The William Carter Company, Needham Heights, Mass. Knit underwear. 82,027; renewed May 23, 1931.

Springfield Knitting Co., Springfield, Mass., assignor to The William Carter Company, Needham Heights, Mass. Knit underwear. 82,182; renewed June 6, 1931.

Springville Canning Corporation, Springville, Utah. Canned fruits and vegetables. 283,870; June 9; Serial No. 308,270; published Mar. 24, 1931. Class 46.

Squibb, E. R., & Sons, New York, N. Y. Hypnotic. 283,812; June 9; Serial No. 310,309; published Mar. 24, 1931. Class 6.

Srere, Oscar N., Los Angeles, Calif. Motion pictures reproduced. 283,996; June 9; Serial No. 304,518; published Mar. 31, 1931. Class 26.

Staley, A. E., M'f'g. Co., Decatur, Ill., and Baltimore, Md., to A. E. Staley Manufacturing Company, Decatur, Ill. Laundry starch. 83,698; renewed Oct. 3, 1931.

Standard Lime and Stone Company, The, Martinsburg, W. Va., and Baltimore, Md. Dry mortar. 284,022; June 9; Serial No. 303,305; published Mar. 31, 1931. Class 12.

Standard Printing Ink Co., The, Cincinnati, Ohio. Printing ink. 37,229; renewed Oct. 22, 1931.

Sterling Products (Incorporated). (See Neuralgyline Company, The.)

Sternberg, Nathan J., doing business as Elsmere Cutlery Co., New York, N. Y. Razor blades. 283,806; June 9; Serial No. 310,664; published Mar. 31, 1931. Class 23.

Stone, F. O., Baking Co., The, Cincinnati, Ohio, assignor to Wonder Bakeries Co., Inc., Buffalo, N. Y. Cake. 83,372; renewed Sept. 5, 1931.

Stowe & Woodward Company, Newton Upper Falls, Mass. Bowling balls. 283,903; June 9; Serial No. 310,842; published Mar. 31, 1931. Class 22.

Stuart Bros. Corporation, Bartow, Fla. Fresh citrus fruits. 283,889; June 9; Serial No. 310,495; published Mar. 24, 1931. Class 46.

Studio Products Co. (See Sontag Chain Stores Co. Ltd.)

Supreme Beverage Co., Chicago, Ill. Beverages. 283,771; June 9; Serial No. 294,933; published Mar. 24, 1931. Class 45.

Surface Combustion Co. Incorporated, The, now by change of name Surface Combustion Corporation, Toledo, Ohio. Gas-burning appliances. 284,020; June 9; Serial No. 304,299; published Mar. 31, 1931. Class 34.

Surpass Chemical Co. Inc., Albany, N. Y. Cleansing and bleaching materials. 283,981; June 9; Serial No. 310,538; published Mar. 31, 1931. Class 6.

Swift and Company, Chicago, Ill. Fertilizers. 283,938; June 9; Serial No. 310,457; published Mar. 31, 1931. Class 10.

Sycamore Coal Company, Huntington, W. Va. Coal. 83,024; renewed Aug. 8, 1931.

Sycamore Coal Company, Vivian, to Sycamore Coal Company, Huntington, W. Va. Coal. 82,922; renewed Aug. 1, 1931.

Syer, Richard H., New York, N. Y. Tablets for the relief of pain. 283,826; June 9; Serial No. 309,043; published Mar. 24, 1931. Class 6.

Syno Laboratories. (See Creamer, John J.)

Szwajkos, John K., doing business as Monroe Bottling Works, Rochester, N. Y. Beverages, sirups, and extracts for making the same. 283,930; June 9; Serial No. 310,928; published Mar. 24, 1931. Class 45.

Tarrant Company, The, New York, N. Y. Remedy for venereal diseases. 82,844; renewed July 25, 1931.

Tee-Top Company, The, St. Petersburg, Fla. Combination bottle cap and golf tee. 283,939; June 9; Serial No. 310,463; published Mar. 24, 1931. Class 50.

Texas Miniature Outdoor Golf Company, Oklahoma City, Okla. Asymmetrical particles in bulk for artificial golf greens. 283,884; June 9; Serial No. 302,087; published Mar. 31, 1931. Class 50.

Theatre Service Corporation, New York, N. Y. Magazine. 283,914; June 9; Serial No. 310,269; published Mar. 24, 1931. Class 38.

Thermoid Rubber Company, Trenton, N. J. Transmission conveying and elevating belts. 283,953; June 9; Serial No. 310,144; published Mar. 24, 1931. Class 35.

Timken Steel and Tube Company, The, Canton, Ohio. Steel. 283,937; June 9; Serial No. 310,354; published Mar. 24, 1931. Class 14.

Tenbild-Syndikat Aktiengesellschaft, Berlin, Germany. Photographic and sound films. 284,012; June 9; Serial No. 299,740; published Mar. 24, 1931. Class 26.

Touraine Company, The, Boston, Mass. Chocolate-covered yeast bars. 283,993; June 9; Serial No. 310,355; published Mar. 24, 1931. Class 46.

Tressler, Harry A., doing business as The Fluko Medicine Company, Dayton, Ohio. Eye bath. 283,829; June 9; Serial No. 310,545; published Mar. 24, 1931. Class 6.

Triple "XXX" Company, Galveston, Tex. Sandwiches and condiment sauce. 283,959; June 9; Serial No. 305,061; published Mar. 24, 1931. Class 46.

Tripoli Foods, Incorporated, Baltimore, Md. Macaroni salad, potato salad, spaghetti and chicken giblets sauce, and chicken and noodles. 283,890; June 9; Serial No. 310,618; published Mar. 31, 1931. Class 46.

Uhlmann, Gustav, Brooklyn, N. Y. Newspaper section. 283,912; June 9; Serial No. 309,909; published Mar. 24, 1931. Class 38.

United Drug Company, Boston, Mass. Antacid powder for gastric acidity, etc. 283,777; June 9; Serial No. 309,951; published Mar. 17, 1931. Class 6.
U. S. Victor Fountain Pen Co. Inc., The, New York, N. Y. Fountain pens and pencils. 283,865; June 9; Serial No. 310,843; published Mar. 24, 1931. Class 37.
Upjohn Company, The, Kalamazoo, Mich. Analgesic tablet. 283,789; June 9; Serial No. 309,756; published Mar. 10, 1931. Class 6.
Upjohn Company, The, Kalamazoo, Mich. Throat wafer. 283,818; June 9; Serial No. 309,757; published Mar. 24, 1931. Class 6.
Upland Citrus Ass'n, to Upland Citrus Association, Upland, Calif., successor. Fresh oranges and grape-fruit. 83,297; renewed Aug. 29, 1931.
Upson-Walton Company, The, Cleveland, Ohio. Waterproof flax, flax duck, and canvas. 283,880–83; June 9; Serial Nos. 301,076–9; published Nov. 18, 1930. Class 50.
Vagge, Mario J., doing business as Vagge's Automotive Research Co., Nashua, N. H. Automobile windshield wiper. 283,897; June 9; Serial No. 309,489; published Mar. 24, 1931. Class 19.
Vanderbilt, R. T. Company, Inc., New York, N. Y. Chemically-prepared deodorants and perfumes. 283,790; June 9; Serial No. 309,763; published Mar. 24, 1931. Class 6.
Veco Manufacturing Co., Brooklyn, N. Y. Hair grower. 283,874; June 9; Serial No. 305,638; published Mar. 31, 1931. Class 6.
Velvosan Co. (See Marinoff, Edna.)
Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Hose pipes, leather driving belts, steam-dome flange rings. 284,004; June 9; Serial No. 296,163; published Mar. 31, 1931. Class 35.
Veterans of Foreign Wars of the United States, Kansas City, Mo. Flags, banners, emblems, etc. 283,936; June 9; Serial No. 309,953; published Mar. 24, 1931. Class 50.
Walker Stetson Co., Boston, Mass. Hosiery. 82,734; renewed June 18, 1931.
Wallace Hatchery, La Fayette, Ind. Baby chicks. 283,964; June 9; Serial No. 301,740; published Mar. 24, 1931. Class 46.
Wampole, Henry K., and Company, Incorporated, Philadelphia, Pa. Antiseptic solution. 283,875; June 9; Serial No. 306,209; published Nov. 11, 1930. Class 6.
Washington Bowling-Billiard Company, Washington, D. C. Games. 284,000; June 9; Serial No. 293,906; published Mar. 24, 1931. Class 22.
Webb Wire Works, The, New Brunswick, N. J. Wire. 83,795; renewed Oct. 10, 1931.
Western Clock Company, Peru, Ill. Clock and Watches. 283,942–7; June 9; Serial Nos. 310,893–8; published Mar. 24, 1931. Class 27.
Western Clock Manufacturing Company, The, assignor to Western Clock Company, Peru, Ill. Clocks and watches. 83,877; renewed Oct. 17, 1931.
Westerner Publishing Company, The, Salt Lake City, Utah. Magazine. 283,769; June 9; Serial No. 295,105; published Apr. 8, 1930. Class 38.
White Tar Company of New Jersey, Inc., The, Kearny, N. J. Naphthalene compounds for moth prevention. 283,979; June 9; Serial No. 311,046; published Mar. 31, 1931. Class 6.
Whitefield Citrus Corporation, Dover, Del.; Fullerton, Calif.; Bradenton, Fla.; and Long Island City, N. Y. Nonalcoholic, maltless, fruit juices. 283,764; June 9; Serial No. 292,345; published Mar. 24, 1931. Class 45.
Williamson Candy Company, Chicago, Ill. Candy. 283,925; June 9; Serial No. 311,077; published Mar. 31, 1931. Class 46.
Wimelbacher & Rice, New York, N. Y. Gloves. 283,893; June 9; Serial No. 310,428; published Mar. 17, 1931. Class 39.
Wiz Auto Clock Co. (See Mansfield, James F.)
Wonder Bakeries Co., Inc. (See Stone, F. O., Baking Co., The, assignor.)
Worth, S. A., Paris, France, assignor to Franklin Simon & Co., New York, N. Y. Perfumes. 283,999; June 9; Serial No. 293,306; published Mar. 17, 1931. Class 6.
Young & Metzner, to Young & Metzner, Inc., Long Island City, N. Y., successor. Jute bags. 83,962; renewed Oct. 24, 1931.
Young & Metzner, to Young & Metzner, Inc., Long Island City, N. Y., successor. Jute bags. 83,964–5; renewed Oct. 24, 1931.
Young & Metzner to Young & Metzner, Inc., Long Island City, N. Y., successor. Jute bags. 84,053; renewed Oct. 31, 1931.
Younghusband, Francis S., doing business as Scott Fruit Company of White City (Fort Pierce), Fla. Fresh citrus fruits. 283,762; June 9; Serial No. 288,152; published Mar. 31, 1931. Class 46.
Zoll, James C., & Son, Baltimore, Md. Photoprints, photostat prints, etc. 284,042; June 9.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Abbott, C. W. & Co., Inc., Baltimore, Md. Abbott's Aromatic Bitters. For Bitters. 39,244; June 9.
All-Fair Incorporated, Churchville, N. Y. Jav-lin. For a Game. 39,245; June 9.
All-Fair Incorporated, Churchville, N. Y. Simba. For a Game. 39,246; June 9.
All-Fair Incorporated, Churchville, N. Y. Bunker Golf. For a Game. 39,247; June 9.
All-Fair Incorporated, Churchville, N. Y. Bow-O-Winks Tiddledy Winks. For a Game. 39,248; June 9.
All-Fair Incorporated, Churchville, N. Y. Bean-Em. For a Game. 39,249; June 9.
All-Fair Incorporated, Churchville, N. Y. Flap Jacks. For a Game. 39,250; June 9.
All-Fair Incorporated, Churchville, N. Y. Sky-Hawks. For Combination Construction Game and Toy. 39,251; June 9.
All-Fair Incorporated, Churchville, N. Y. Watch On De Rind. For a Game. 39,252; June 9.
All-Fair Incorporated, Churchville, N. Y. Battle of Ballots. For a Game. 39,253; June 9.
All-Fair Incorporated, Churchville, N. Y. Glydor. For a Game. 39,254; June 9.
B. B. Oil Company, The, Philadelphia, Pa. Arrow Motor Oil. For Motor Oil. 39,255; June 9.
Bleendes Chemical Co., Brooklyn, N. Y. Odornox. For Chemical Preparation for Deodorizing Purposes. 39,256; June 9.
Brisson, E., & Co., Chippewa Falls, Wis. Brisson's Rheumatic Remedy. For a Medicinal Preparation for Treating Rheumatism. 39,257; June 9.
Bronx Coffee Company, New York, N. Y. Social Coffee Always Fresh. For Coffee. 39,258; June 9.
Buffalo Malt Company, Inc., Buffalo, N. Y. Goldex. For Malt Syrup. 39,259; June 9.
California Bottling Works, Los Angeles, Calif. Colonial Club. For Ginger Ale. 39,260; June 9.
Casteen Co., Inc., Union City, N. J. Invictus. For Foot Cream. 39,261; June 9.
Challenge Cream and Butter Association, Los Angeles, Calif. Challenge Cheese Spread. For Cheese Spreads. 39,262; June 9.
Davidson, Harold G., Columbus, Ohio. The Game of Composers. For a Game. 39,263; June 9.
De Belle Chemical Co. (See Leibel, N.)
Drug Products Co. Inc., The, Long Island City, N. Y. Dalco. For Alcohol for Massage, Bathing and Rubbing. 39,264; June 9.
Elrod Ice Cream Company, Dallas, Tex. Igloo. For Frozen Confections. 39,265; June 9.
Erasm Chemical Corporation of America, Inc., Cincinnati, Ohio. E-Ra-Sm. For Dry Window Cleaning Powder. 39,266; June 9.
Federal Research Corporation, Woodland, Ill. Homax. For Waxes. 39,267; June 9.
Fitts Bros., Inc., Framingham, Mass. Milk Maid Bread. For Bread. 39,268; June 9.
General Mills, Inc., Minneapolis, Minn. Washburn's Buckwheat, Wheat and Corn Pancake Flour. For Pancake Flour. 39,269; June 9.
Ingersoll, Charles J., doing business as New Life Paint Manufacturing Company, Seattle, Wash. A Cloth Preserver For Auto Tops. For Cloth Preserver for Auto Tops. 39,270; June 9.
Inland Motor Products Company, Des Moines, Iowa. Imps for Quality. For Tube Patches. 39,271; June 9.
Juci-Sweet Products Inc., Howey-In-The-Hills, Fla. Juci-Sweet. For Orange Drink. 39,272; June 9.
Juci-Sweet Products Inc., Howey-In-The-Hills, Fla. Juci-Sweet. For Grapefruit Drink. 39,273; June 9.
Leibel, Nathan, doing business as De Belle Chemical Co., Bronx, N. Y. Natcola. For a Hair Restorer. 39,274; June 9.
Maison de Paris. (See Paskin, Ruth.)
Meyer, W. H., & Son, Inc., Brooklyn, N. Y. 'Deluxe' Quality. For Hand Made Hollow Point Snelled Hooks. 39,275; June 9.
New Life Paint Manufacturing Company. (See Ingersoll, C. J.)
Paraffine Companies, Inc., The, San Francisco, Calif. Pabco Roofweld. For Plastic Cement. 39,276; June 9.
Parfumerie Dollup, Inc., New York, N. Y. L'manda. For Toilet Cream. 39,277; June 9.
Paskin, Ruth, doing business as Maison de Paris, New York, N. Y. Poudre A. Jamais. For Face Powder. 39,278; June 9.
Renilo Company, New York, N. Y. Peacock. For Hair Nets. 39,279; June 9.
Royal Bedding Company, Pittsburgh, Pa. American Beauty. For Mattresses. 39,280; June 9.
Shaw, Walter W., Winnepeg, Canada. Official Mickey Mouse Candy Bar 5¢ of the Mickey Mouse Safety Club. For Candy Bars. 39,281; June 9.
Shelby Gum Company, The, Richland, Ohio. Shelby's Menthol Chewing Gum. For Menthol Chewing Gum. 39,282; June 9.

Sherman, A., Mfg. Co. Inc., The, Stamford, Conn. Old Country. For Malt Syrup. 39,283; June 9.
Starr, Frank M., doing business as The Starr Medicine Company, San Francisco, Calif. Dr Hart's Courage—Blood Pills. For Vegetable Medicinal Preparation. 39,284; June 9.
Stevenson, James, and Co., Youngstown, Ohio. Marwood Petroleum Products. For Petroleum Products. 39,285; June 9.
Talmage Gardens Co., Deland, Fla. Sure Blooming. For Narcissus Bulbs. 39,286; June 9.
Taylor System, Incorporated, New York, N. Y. Taylor Color. For Colors. 39,287; June 9.
Tripoli Foods, Inc., Baltimore, Md. Chicken and Egg Noodle Dinner. For Chicken and Egg Noodles. 39,288; June 9.
Vineland Egg Producers, Inc., Vineland, N. J. Vineland Egg Producers, Inc., Vineland, N. J. For Eggs. 39,289; June 9.
Waxide Paper Company, Kansas City, Mo. Handi-Pak Cinnamon Rolls. For Cinnamon Rolls. 39,290; June 9.
Winship, Boit & Co., Wakefield, Mass. Mercde Sunseal Bathing Suits. For Bathing Suits. 39,291; June 9.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Bayuk Cigars Incorporated, Philadelphia, Pa. The Five Sense Cigar. For Cigars. 13,224; June 9.
Elizabeth Arden Inc., doing business as Elizabeth Arden, New York, N. Y. The Triumph of Color in Make-up. For Amoretta Cream, Creme De France, Lille Lotion, Rouge Amorette. 13,223; June 9.
Folds, Milton W., Chicago, Ill. St. Blase Cherry Cough Syrup. For Cough Syrup. 13,225; June 9.
Heinz, H. J. Company, Pittsburgh, Pa. How You'll Enjoy This Flavorful Soup . . With Its Added Goodness of Rich Thick Cream! For Cream of Tomato Soup. 13,226; June 9.
Littlefield, Arthur S., Winnetka, Ill. The Game of Racket. For Game Apparatus. 13,227; June 9.
Littlefield, Arthur S., Winnetka, Ill. The Game of Parichance. For Game Apparatus. 13,228; June 9.
Shelby Gum Company, The, Richland, Ohio. Shelby's Menthol Chewing Gum. For Menthol Chewing Gum. 13,229; June 9.
Stearns, Frederick, & Company, Detroit, Mich. This 4 Ounce Bottle Makes 12 Full Pints of Refreshing Mouth Wash. For Mouth Wash. 13,230; June 9.
Stearns, Frederick, & Company, Detroit, Mich. Nation's Foremost Laboratories Find That Only Astring-O-Sol Has These 5 Essential Properties. For Mouth Wash. 13,231; June 9.
Vosine Co. The, Lynn, Mass. Vosine. For Antiseptic For The Nose, Throat and Mouth. 13,232; June 9.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. S. & L. Cleaning Products Company, Bayonne, N. J. Rug, carpet, and upholstery cleaning compound. 312,588; June 9. Class 4.
Absorene Manufacturing Company, The, St. Louis, Mo. Cleaning compounds. 312,081; June 9. Class 4.
Absosure Products, Inc., Royal Oak, Mich. Antiseptic paste. 313,700; June 9. Class 6.
Adler & Oppenheimer Aktiengesellschaft, Berlin, Germany. Leather. 313,879; June 9. Class 1.
Allied Mills, Inc., Chicago, Ill. Dairy feed. 300,601; June 9. Class 46.
American Crayon Company, The, Sandusky, Ohio. Colored chalk crayons. 313,114; June 9. Class 37.
American Druggists Syndicate, Inc., New York and Long Island City, N. Y. Mineral oils. 308,281; June 9. Class 6.
American Lace Paper Company, Milwaukee, Wis. Cast paper pulp cups. 313,112; June 9. Class 2.
American Pop Corn Company, Sioux City, Iowa. Oil for use in popping corn. 312,749; June 9. Class 46.
Anaconda Wire & Cable Company, New York, N. Y. Copper alloy wire and unfinished copper alloy rods and sheets. 311,355; June 9. Class 14.
Anstice, Josiah & Co., Inc., Rochester, N. Y. Vegetable peeling machines and slicing machines. 303,310; June 9. Class 23.
Aron, J., & Company, Inc., New York, N. Y. Green coffee. 313,824; June 9. Class 46.
Arrow Bottle Cap Corp., Brooklyn, N. Y. Bottle caps. 313,526; June 9. Class 50.
Bacon Banjo Co., Inc., Groton, Conn. Banjo. 313,175; June 9. Class 36.
Bailey-Burruss Manufacturing Company, Atlanta, Ga. Helicoid conveyors, sectional flight conveyors, spiral conveyors, etc. 306,483; June 9. Class 23.
Barndollar, Charles B., Oakland, Calif. Canvas shoes. 307,198; June 9. Class 46.
Beacon Burner Manufacturing Corporation, The, Boston, Mass. Oil burners. 312,689; June 9. Class 34.
Bell, Thomas, doing business as Bell Supply Co., Richmond, Va. Tire patches. 303,990; June 9. Class 35.
Big Indian Oil and Development Company, The, Kansas City, Mo. Periodical. 314,036; June 9. Class 38.
Bon-Air Radiator Corporation, Boston, Mass. Heat radiating systems. 311,361; June 9. Class 34.
Boos, Henry P., doing business as Henry P. Boos Prosthetic Studios, Minneapolis, Minn. Full and partial dentures and bridges. 313,993; June 9. Class 44.
Bradley, Milton, Company, Springfield, Mass. Table board game. 313,325; June 9. Class 22.
Breck, Joseph, & Sons Corporation, Boston, Mass. Lawn seed. 313,462–3; June 9. Class 1.
Builders' Association of Kansas City, Mo., The, Kansas City, Mo. Magazines. 313,902; June 9. Class 38.
Burns, Jabez, & Sons, Inc., New York, N. Y. Temperature indicating devices for roasting machines. 312,900; June 9. Class 26.
Burpee, W. Atlee, Co., Philadelphia, Pa. Garden vegetable seeds. 278,891; June 9. Class 1.
Butler Brothers, Chicago, Ill. Dresses. 310,470; June 9. Class 39.
Carter & Moore Chemical Co., Waycross, Ga. Salve. 313,464; June 9. Class 6.
Celolac Products Company, Minneapolis, Minn. Cleaner for duco, lacquer, etc. 310,433; June 9. Class 4.
Central Surety and Insurance Corporation, Kansas City, Mo. House organs. 313,829; June 9. Class 38.
Challenge Cream & Butter Association, Los Angeles, Calif. Butter. 313,882; June 9. Class 46.
Cheney, Byron M., Chicago, Ill. Railroad track spikes. 298,934; June 9. Class 13.
Chicago Pneumatic Tool Company, New York, N. Y. Flexible fluid conduits. 313,904; June 9. Class 35.
Chromoclast Laboratories. (See Major Bertrand De Jarnette.)
Cleveland City Forge Company, The, Cleveland, Ohio. Hand tools. 311,822; June 9. Class 23.
Close & Company. (See Urban, Frank.)
Cold Snap Incorporated, New York, N. Y. Frozen confection. 313,330; June 9. Class 46.
Columbia Laboratories Inc., New York, N. Y. General tonic. 311,471; June 9. Class 6.
Columbus Washboard Company. (See Martin, Frederic, jr.)
Compression Anchor Company, Inc., New York, N. Y. Shoe laces. 312,125; June 9. Class 40.
Congregational Publishing Society, Boston, Mass. Publication. 313,465; June 9. Class 38.
Curtis, David, doing business as De-Ce Products Co. of New York, New York, N. Y. Anæsthetics, preparations for sterilizing and preserving dental and surgical instruments, eugenol, etc. 313,332; June 9. Class 6.
De-Ce Products Co. of New York. (See Curtis, David.)
Dehler-Signoret Corporation, New York, N. Y. Card sets, spinning machinery, finishing press accessories, and parts thereof. 301,163; June 9. Class 23.
De Rosa, Michele, New York, N. Y. Canned tomatoes. 308,819; June 9. Class 46.
D'Orsay Perfumeries Corporation, New York, N. Y. Soaps. 312,366; June 9. Class 4.
Duplex Printing Press Co., Battle Creek, Mich. Rotary printing presses, rotary folders and stereotype equipment. 302,274; June 9. Class 23.
Du Pont Pathé Film Manufacturing Corporation, New York, N. Y. Photographic film. 313,650–1; June 9. Class 26.
Eastman Kodak Company, Rochester, N. Y. Squeegees and spotting brushes. 313,840; June 9. Class 29.
Electric Boat Company, Bayonne, N. J. Pleasure cruisers. 300,862; June 9. Class 19.
Erasm Chemical Corporation of America, Inc., Cincinnati, Ohio. Dry window cleaning powder and metal polish. 313,030; June 9. Class 4.
Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. 313,183–4; June 9. Class 39.
Ferment Company, The, New York, N. Y. Medicinal preparations. 313,127; June 9. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Fletcher Paper Company, Alpena, Mich. Wrapping paper. 313,427-9; June 9. Class 37.
Florence Stove Company, Boston and Gardner, Mass. Electric cooker. 297,862; June 9. Class 21.
Ford, J. B., Company, The, Wyandotte, Mich. Sterilizing material. 313,656; June 9. Class 6.
Frank, Leland L., doing business as The Settlesit Company, Decatur, Ind. Preparation for clarifying black sooty cistern water. 313,129; June 9. Class 6.
Fried, Samuel, doing business as Golden-Voice Bird Food Products Co., Brooklyn, N. Y. Bird seed food and bird colored pepper food. 313,503; June 9. Class 46.
Garner, Lyle A., doing business as S & S Specialty Co., Long Beach, Calif. Therapeutic devices for holding absorptive pads. 312,000; June 9. Class 44.
Gibson-Homans Company, The, Cleveland, Ohio. Asbestos roof coating and roof paint. 312,283; June 9. Class 16.
Golden-Voice Bird Food Products Co. (See Fried, Samuel.)
Goodier, Elwood J., doing business as Universal Laboratories, Dallas, Tex. Astringents, astringent cerates, bleach creams, beauty creams, etc. 306,265; June 9. Class 6.
Gray, Herbert, Company, Inc., Lincoln, Me. Fur scarfs. 313,367; June 9. Class 39.
Greilich, William, & Sons, Inc., Brooklyn, N. Y. Foot wear. 310,763; June 9. Class 39.
Grey Iron Casting Company, Mount Joy, Pa. Jack stones and jack sets. 314,050; June 9. Class 22.
H. W. Mfg. Co. Inc., Bessemer, Ala. Toilet articles. 301,441; June 9. Class 6.
Hanovia Chemical & Manufacturing Company, Newark, N. J. Ceramic decorating materials, luster colors, etc. 313,186; June 9. Class 16.
Holophane Company, Inc., New York, N. Y. Globes and reflectors. 306,890; June 9. Class 34.
Horn, W. O., & Brother, Inc., New York, N. Y. Neckties and cravats. 313,189; June 9. Class 39.
Huffman & Hulsebus, Harlan, Iowa. Chemical preparation. 313,783; June 9. Class 6.
Huron Milling Company, The, Harbor Beach, Mich. Sizing starch. 313,293; June 9. Class 6.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Wetting-out agents and preservatives. 298,895; June 9. Class 6.
Jimison, Floyd S., Los Angeles, Calif. Game boards. 312,010; June 9. Class 22.
Johnson, Iver, Sporting Goods Co., Boston, Mass. Fire arm cleaners, swabs, and brushes. 314,055; June 9. Class 9.
Jones, Frank H., Boston, Mass. Chemical jelly compound for cleaning metals. 313,135; June 9. Class 4.
Junkers, Hugo, Dessau, Germany. Wire gauze, wire sieves and strainers, sheet metal casings, etc. 279,931; June 9. Class 13.
Kallus, F., Manufacturing Co. Inc., doing business as Trulite Electric Mfg. Co., Hoboken, N. J. Lighting equipment. 311,000; June 9. Class 34.
Kaplan, Thomas, doing business as Midwest Drug Co., Minneapolis, Minn. Prophylactic rubber articles. 312,952; June 9. Class 44.
Karwacki, F. W., doing business as Mighty Midgets Drug Co., Baltimore, Md. Pharmaceutical preparation. 309,031; June 9. Class 6.
Kiwanis International, Chicago, Ill. Decalcomanias. 313,855; June 9. Class 38.
Lamb, Mrs. Eleanor, Norwalk, Ohio. Mayonnaise dressing, Thousand Island dressing, and sandwich spread. 311,548; June 9. Class 46.
Leffingwell Rancho Company, Whittier, Calif. Insecticides, liquid spreader compounds, a compound of emulsified kerosene, lime sulfur. 309,247; June 9. Class 6.
Life Savers, Inc., Port Chester, N. Y. Candy. 281,434–8; June 9. Class 46.
Life Savers, Inc., Port Chester, N. Y. Candy. 282,119; June 9. Class 46.
Löwenthal & Weissberger G. m. b. H., Frankfort-on-the-Main, Germany. Pyrophoric pocket lighters. 314,621; June 9. Class 34.
Ludlum Steel Co., Watervliet, N. Y. Rolled steel bars, steel forgings, and steel castings. 313,347; June 9. Class 14.
Lyons, Arthur C., Brantford, Ontario, Canada. Complexion soap and shaving soap. 299,849; June 9. Class 4.
Major Bertrand De Jarnette, doing business as Chromoclast Laboratories, Nebraska City, Nebr. Spectrum selectors and transformers for the same. 312,944; June 9. Class 26.
Marshall Field & Company, Chicago, Ill. Rubber tires and tubes for automobiles, automobile trucks and trailers. 312,145; June 9. Class 35.
Martin Baking Company. (See Martin, Ronald H.)
Martin, Frederic, jr., doing business as Columbus Washboard Company, Columbus, Ohio. Washboards. 313,742–3; June 9. Class 24.
Martin, Ronald H., doing business as Martin Baking Company, Lubbock, Tex. Bread, crackers, flour, etc. 313,858; June 9. Class 46.
Matzka, Zoya, Rye Hill, Monroe, N. Y. Canned berries and vegetables, canned and preserved fruits, etc. 298,582; June 9. Class 46.
Midvale Company, The, Nicetown, Philadelphia, Pa. Flanges, forgings, steel billets, etc. 306,502; June 9. Class 14.
Midwest Drug Co. (See Kaplan, Thomas.)
Mighty Midgets Drug Co. (See Karwacki, F. W.)
Miller High Life Company, Milwaukee, Wis. Concentrated malt syrup. 313,088; June 9. Class 46.
Monaderb Tea Co. (See Trillo, Rocco.)
Morgan Company, The, Chicago, Ill. Paint enamels. 312,445; June 9. Class 16.
Morsegraph Manufacturing Corporation, New York, N. Y. Telegraph recording instruments. 312,487; June 9. Class 21.
Multisort Company, Boston, Mass. Apparatus for use in arranging papers, cards, and the like for filing or distribution. 312,112; June 9. Class 32.
Muralo Company, Inc., The, New Brighton, N. Y. Powder used as a calcimine or decorative wall coating. 314,026; June 9. Class 16.
National Dieteria Company, Los Angeles, Calif. Liquid malt compound food beverage. 312,026; June 9. Class 46.
Nettleton, A. E., Company, Syracuse, N. Y. Shoes. 313,607; June 9. Class 39.
Newton Balsam Company, Newton, Kans. Balsam used externally. 306,618; June 9. Class 6.
O'Brien, Geo. & Son, Incorporated, Greenville, Ohio. Wheat flour, pastry flour, whole wheat Graham flour, etc. 314,008; June 9. Class 46.
O'Bryan Brothers, Chicago, Ill. Underwear. 312,306; June 9. Class 39.
Oneida Community, Limited, Oneida, N. Y. Silver flatware and hollow ware. 313,257; June 9. Class 28.
Ontario Finance Corporation, Rochester, N. Y. Business history charts and compilations thereof. 299,010; June 9. Class 38.
Orbit Listerated Gum Company, Chicago, Ill. Chewing gum. 314,070; June 9. Class 46.
Pabst Corporation, Milwaukee, Wis. Malt extract used as a tonic. 310,407; June 9. Class 6.
Pacific Commercial Co., New York, N. Y. Gasolene and kerosene. 312,719; June 9. Class 15.
Pacific Egg Producers Cooperative, Inc., New York, N. Y. Eggs and dressed poultry. 312,527; June 9. Class 46.
Paper Clearings Bureau, Inc., New York, N. Y. Periodical. 314,009; June 9. Class 38.
Paraffine Companies, Inc., The, San Francisco, Calif. Paraffine oil and flux oil. 297,769; June 9. Class 15.
Parks, Alfred M., doing business as Parks Equipment Company, Philadelphia, Pa. Device for testing and recording the time of drying. 312,770–1; June 9. Class 26.
Parks Equipment Company. (See Parks, Alfred M.)
Peck, Harry, & Company Limited, London, England. Fish paste. 308,791; June 9. Class 46.
Penlo Cigar Co., Inc., Philadelphia, Pa. Cigars. 313,968; June 9. Class 17.
Pioneer Suspender Company, Philadelphia, Pa. Belts, suspenders, braces, and garters. 313,202–3; June 9. Class 39.
Piver, L. T., Inc., Wilmington, Del., and New York, N. Y. Perfume, toilet water, bath salts, rouge, etc. 313,204; June 9. Class 6.
Progressive Publishing Company Inc., Muscatine, Iowa. Daily evening newspaper. 313,796; June 9. Class 38.
Puritan Chocolate Co., The, Cincinnati, Ohio. Candy. 309,313; June 9. Class 46.
Pyle, Conard, Company, The, West Grove, Pa. Plants treated to preserve them during shipment. 313,270; June 9. Class 1.
Reefer's No-Moth, Inc., New York, N. Y. Preparations for protection against moths. 313,154; June 9. Class 6.
Reo Motor Car Company, Lansing, Mich. Automobiles and structural parts thereof. 307,630; June 9. Class 19.
Research Products Corporation, New York, N. Y. Preparation for treating the skin. 312,815; June 9. Class 6.
Reynolds Printasign Corporation, Chicago, Ill. Machine for printing signs and display cards. 312,496; June 9. Class 23.
Richardson & Holland, Inc., Seattle, Wash. Bakery machinery. 313,935; June 9. Class 23.
Robbins & Myers, Inc., Springfield, Ohio. Seasoning for pop corn. 305,542; June 9. Class 46.
Röhm & Haas Company, Philadelphia, Pa. Enzymic product. 313,800; June 9. Class 6.
Rosenbluth, Abraham, Newark, N. J. Face powders, rouge, lipsticks, face creams, etc. 310,003; June 9. Class 6.
Russell, Frank C., doing business as Russell & Co., New York, N. Y. Coffee. 313,511; June 9. Class 46.
S. & S. Cone Corporation, New York, N. Y. Ice cream sandwich wafers. 311,697; June 9. Class 46.
S & S Specialty Co. (See Garner, Lyle A.)
Salomon, Adolph, & Son, Chicago, Ill. Sole leather. 312,775; June 9. Class 1.
Schilling, A., & Co., San Francisco, Calif. Coffee and tea. 247,342; June 9. Class 46.
Sears, Roebuck and Co., Chicago, Ill. Lawn mowers. 302,487; June 9. Class 23.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Seidman & Cohan, Inc., New York, N. Y. Articles of jewelry. 307,791; June 9. Class 28.
Service Drug Company. (See Whitworth, Charles B.)
Settlesit Company, The. (See Frank, Leland L.)
Sheridan Press, Inc., Sheridan, Wyo. Newspapers. 313,720; June 9. Class 38.
Sherwin-Williams Company, The, Cleveland, Ohio. Paints, varnishes, lacquers, etc. 313,870; June 9. Class 16.
Simons Co., Ths, Inc., New York, N. Y. Hosiery. 313,156; June 9. Class 39.
Slack, Thomas W., Fort Worth, Tex. Cleaning and polishing pads. 311,935; June 9. Class 4.
Smith, Carroll N., Boston, Mass. Books, pamphlets, posters, etc. 301,767; June 9. Class 38.
Society of Chemical Industry in Basle, Basel, Switzerland. Chemical product. 313,679; June 9. Class 6.
Society of Chemical Industry in Basle, Basel, Switzerland. Cardiotonic. 313,680; June 9. Class 6.
Society of Chemical Industry in Basle, Basel, Switzerland. Pharmaceutical product. 313,682; June 9. Class 6.
Sout Fire Appliances Ltd., London, England. Fire extinguishing machines (extincteurs). 309,789; June 9. Class 23.
Soyex Company, Inc. (See Soyolk Company, Inc.)
Soyolk Company, Inc., doing business as Soyex Company, Inc., New York, N. Y. Soya bean flour. 309,624; June 9. Class 46.
Spreckels, J. D. and A. B., Investment Company, doing business as Western Sugar Refinery, San Francisco, Calif. Sugar. 310,701; June 9. Class 46.
Standard Oil Company of New Jersey, Wilmington, Del. Pipe coating enamel. 313,480; June 9. Class 16.
Stearns, Frederick, & Company, Detroit, Mich. Headache medicine. 313,158; June 9. Class 6.
Stengel, Charles W., Philadelphia, Pa. Face and hair lotion. 304,977; June 9. Class 6.
Stern Brothers, New York, N. Y. Underwear and pyjamas. 313,061; June 9. Class 39.
Sunny Farm Products. (See Weinger, Morris.)
Times Publishing Co., Montgomery, Ala. Periodical. 312,242; June 9. Class 38.
Tomango Limited, Mataffin, Eastern Transvaal, Union of South Africa. Maltless beverages and fruit juices for beverage purposes. 299,417; June 9. Class 45.
Traylor Vibrator Company, The, Denver, Colo. Material treating apparatus. 312,724; June 9. Class 23.
Trelles, M., & Company, New Orleans, La. Cigars, cheroots, cigarettes, etc. 313,614; June 9. Class 17.
Trillo, Rocco, doing business as Monaderb Tea Co., Merchantville, N. J. Liquid tonic. 290,439; June 9. Class 6.
Trulite Electric Mfg. Co. (See Kallus, F., Manufacturing Co. Inc.)
Uncle Sam Breakfast Food Company, Omaha, Nebr. Cereal breakfast food. 313,482; June 9. Class 46.
U-Ni-L Health Institute. (See Wright, Alfred C.)
Universal Laboratories. (See Goodier, Elwood J.)
Urban, Frank, doing business as Close & Company, Chicago, Ill. Maltless beverages, and powders, extracts, and concentrates for making the same. 313,616; June 9. Class 45.
Vanderbilt, Lucretia, Inc., Bridgeport, Conn. Depilatory powders, fumigating pastilles, hair tonics, hair oils, etc. 271,445; June 9. Class 6.
Veeco, Incorporated, Chicago, Ill. Concentrated vegetables. 313,455; June 9. Class 46.
Von Bremen, Asche, De Bruyn, Inc., New York, N. Y. Canned mushrooms. 311,499; June 9. Class 46.
Wagner, Marie, San Francisco, Calif. Salad dressing. 312,827; June 9. Class 46.
Wallace-Roberts, Inc., Boston, Mass. Medicinal preparation. 311,989; June 9. Class 6.
Weinger, Morris, doing business as Sunny Farm Products, Chicago, Ill. Butter, eggs, cream, and cheese. 313,572; June 9. Class 46.
Weissbard Bros., Newark, N. J. Face powders. 305,202; June 9. Class 6.
Welco Laboratories. (See Welicka, Frank J.)
Welicka, Frank J., doing business as Welco Laboratories, Jamaica, N. Y. Liniment. 313,400; June 9. Class 6.
Western Sugar Refinery. (See Spreckels, J. D. and A. B., Investment Company.)
White, H. N., Co., The, of New York, New York, N. Y. Saxophones, trumpets, cornets, etc. 312,277; June 9. Class 86.
White Star Refining Company, Detroit, Mich. Storage batteries. 303,932; June 9. Class 21.
Whitworth, Charles B., doing business as Service Drug Company, Nashville, Tenn. Preparation used in the treatment of influenza, colds, chills, etc. 313,402; June 9. Class 6.
Wohl Shoe Company, St. Louis, Mo. Women's and misses' boots, shoes, and slippers, etc. 304,844; June 9. Class 39.
Woodruff, Charles A., doing business as Woodruff's Chemicals, Detroit, Mich. Ointments, salves, and healing solutions. 309,156; June 9. Class 6.
Wright, Alfred C., doing business as U-Ni-L Health Institute, Whittier, Calif. Pure water. 312,031; June 9. Class 45.
Wrigley, Wm., Jr., Company, Chicago, Ill. Chewing gum. 314,090–1; June 9. Class 46.
Young, L. A., Company, The, Detroit, Mich. Golf clubs. 314,185; June 9. Class 22.
Zamarang Laboratories, Van Nuys, Calif. Nerve tonic and blood purifier. 306,473; June 9. Class 6.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Sycamore Coal Company. 82,922; renewed Aug. 1, 1931.
Coal. Sycamore Coal Company. 83,024; renewed Aug. 8, 1931.
Coke. Koppers Company. 284,028; June 9; Serial No. 304,333; published Mar. 17, 1931.
Graphite. Joseph Dixon Crucible Company. 37,016-7; renewed Sept 3, 1931.
Leather. Sole. F. P. Cover & Sons. 83,989; renewed Oct. 31, 1931.
Silk, raw. E. Gerli & Company. 283,861; June 9; Serial No. 309,377; published Mar. 17, 1931.

CLASS 2

Bags, Jute. Young & Metzner. 83,962; renewed Oct. 24, 1931.
Bags, Jute. Young & Metzner. 83,964–5; renewed Oct. 24, 1931.
Bags, Jute. Young & Metzner. 84,053; renewed Oct. 31, 1931.
Bags, Paper. Brooklyn Standard Bag Co. Inc. 283,899; June 9; Serial No. 310,246; published Mar. 31, 1931.
Boxes, Collapsible. J. Filshill. 284,019; June 9; Serial No. 303,887; published Mar. 31, 1931.
Dishes. Diamond Match Co. 284,001; June 9; Serial No. 294,210; published Mar. 18, 1930.

CLASS 4

Cleaner, Wall-paper. Absorene Manufacturing Company. 83,707; renewed Oct. 10, 1931.
Polishing and cleansing material. A. R. Justice Company. 82,799; renewed July 25, 1931.
Toilet preparations for teeth and hair and perfumed soap. Roger & Gallet. 35,737; renewed Jan. 8, 1931.

CLASS 6

Acid and a condensation product of formaldehyde and ethylamine, Mixture of stearic. Naugatuck Chemical Company. 283,784; June 9; Serial No. 309,278; published Mar. 17, 1931.
Analgesic tablet. Upjohn Company. 283,789; June 9; Serial No. 309,756; published Mar. 10, 1931.
Antacid powder for gastric acidity, etc. United Drug Company. 283,777; June 9; Serial No. 309,951; published Mar. 17, 1931.
Anti-acid effervescent preparations. Dr. Miles Medical Company. 283,831; June 9; Serial No. 310,608; published Mar. 31, 1931.
Antiseptic. F. A. Luyties. 81,614; renewed Apr. 25, 1931.
Antiseptic healing-lotion. F. B. Dennie. 81,966; renewed May 23, 1931.
Antiseptic solution. Henry K. Wampole and Company. 283,875; June 9; Serial No. 306,209; published Nov. 11, 1930.
Astringents, astringent cerates, bleach creams, etc. F. C. Reilly. 283,838; June 9; Serial No. 310,881; published Mar. 24, 1931.
Astringents, refreshing creams, face packs, etc. F. C. Reilly. 284,017; June 9; Serial No. 310,882; published Mar. 24, 1931.
Baking powder. Royal Baking Powder Company. 283,976; June 9; Serial No. 310,922; published Mar. 31, 1931.
Cement, Radiator. F. J. Hagerling. 283,920; June 9; Serial No. 309,561; published Apr. 7, 1931.
Chemical fire extinguishing powder. Fire Out Products, Inc. 283,977; June 9; Serial No. 311,016; published Mar. 31, 1931.
Chemical, pharmaceutical, and biological products. Eli Lilly and Company. 283,972; June 9; Serial No. 305,618; published Nov. 11, 1930.
Chemically prepared deodorants and perfumes. R. T. Vanderbilt Company. 283,790; June 9; Serial No. 309,763; published Mar. 24, 1931.
Chloride of lime. Società Elettrica Ed Elettrochimica del Caffaro. 283,850; June 9; Serial No. 309,154; published Mar. 31, 1931.
Chloride of lime. Società Elettrica Ed Elettrochimica del Caffaro. 283,926; June 9; Serial No. 309,153; published Mar. 31, 1931.
Cleansing and bleaching materials. Surpass Chemical Co. Inc. 283,981; June 9; Serial No. 310,538; published Mar. 31, 1931.

Compound adapted for use in connection with poultry. Gland-O-Lac Co. 283,786; June 9; Serial No. 309,429; published Mar. 17, 1931.
Cough syrup. Chapman & Rodgers, Inc. 283,791; June 9; Serial No. 309,845; published Mar. 10, 1931.
Cough syrup. Smith Brothers, Inc. 283,770; June 9; Serial No. 295,004; published Mar. 10, 1931.
Cream, Cleansing. Gaby, Inc. 283,982; June 9; Serial No. 310,643; published Mar. 31, 1931.
Cream, Face. Colgate-Palmolive-Peet Company. 283,779–80; June 9; Serial Nos. 310,095–6; published Mar. 24, 1931.
Cream, Toilet. Coffin Redington Co. 82,574; renewed July 11, 1931.
Creams, Face, hand, and massage. E. Marinoff. 284,007; June 9; Serial No. 297,635; published Mar. 10, 1931.
Dye intermediates. E. C. Klipstein & Sons Company. 283,969; June 9; Serial No. 307,596; published Mar. 10, 1931.
Dyes. Fred Fear & Co. 283,968; June 9; Serial No. 308,294; published Mar. 10, 1931.
Eau de Cologne water, perfumery, shampoo, etc. P. P. Mülhens. 283,978; June 9; Serial No. 311,019; published Mar. 31, 1931.
Extract for use in insecticides, concentrated. McLaughlin Gormley King Co. 283,837; June 9; Serial No. 310,807; published Mar. 24, 1931.
Extract preparation, Liver. I. G. Farbenindustrie Aktiengesellschaft. 283,795; June 9; Serial No. 310,446; published Mar. 31, 1931.
Eye bath. H. A. Tressler. 283,829; June 9; Serial No. 310,545; published Mar. 24, 1931.
Flux to be used for both ferrous and non-ferrous metals. Refractory Products Company. 283,825; June 9; Serial No. 310,227; published Mar. 24, 1931.
Glycerin substitute. Chas. W. Jacob & Allison. 83,917; renewed Oct. 24, 1931.
Hair grower. Veco Manufacturing Co. 283,874; June 9; Serial No. 305,638; published Mar. 31, 1931.
Hypnotic. E. R. Squibb & Sons. 283,812; June 9; Serial No. 310,309; published Mar. 24, 1931.
Hypochloride solution. Hyzo Laboratories, Inc. 283,836; June 9; Serial No. 310,803; published Mar. 24, 1931.
Inhalant for head colds, sinus, etc. J. J. Creamer. 283,821; June 9; Serial No. 309,966; published Mar. 24, 1931.
Insecticide. John Powell & Co. 283,787; June 9; Serial No. 309,453; published Mar. 17, 1931.
Insecticides and wood preservatives. Koppers Products Company. 284,033; June 9; Serial No. 303,189; published Mar. 24, 1931.
Insecticides, deodorizers, and perfumes. William Peterman, Inc. 284,008; June 9; Serial No. 297,983; published Mar. 31, 1931.
Laxatized chocolate. Nickelax Company. 283,983; June 9; Serial No. 310,692; published Mar. 31, 1931.
Lecithin. American Lecithin Corporation. 283,782; June 9; Serial No. 311,050; published Mar. 31, 1931.
Liniment. V. Rutecki. 283,879; June 9; Serial No. 308,494; published Mar. 31, 1931.
Lotion, After shaving and hand. F. W. Fitch Co. 283,876; June 9; Serial No. 307,807; published Mar. 24, 1931.
Lotion, Eye. A. C. Carlton. 283,895; June 9; Serial No. 310,934; published Mar. 24, 1931.
Lotion, Freckle. M. Chiviges. 283,878; June 9; Serial No. 307,976; published Feb. 10, 1931.
Lotion, Hair. M. Buchwald. 283,793; June 9; Serial No. 309,920; published Mar. 17, 1931.
Lye or potash. B. T. Babbitt. 81,946; renewed May 23, 1931.
Medicated tablets. H. C. J. Brown. 283,970; June 9; Serial No. 307,345; published Mar. 10, 1931.
Medicinal and pharmaceutical preparations. B. W. Pollen. 283,877; June 9; Serial No. 307,950; published Mar. 24, 1931.
Medicinal cream for skin treatment; liquid, powder, and cream detrifices, etc. R. B. Mizrahi. 284,034; June 9.
Medicinal preparation. Hoffmann-LaRoche, Inc. 283,775; June 9; Serial No. 309,975; published Mar. 17, 1931.
Medicinal preparation. A. J. Regis. 283,823; June 9; Serial No. 310,188; published Mar. 31, 1931.
Medicinal preparation. Sandoz Chemical Works, Inc. 283,794; June 9; Serial No. 309,938; published Mar. 17, 1931.
Medicinal preparations having hypnotic properties. Sandoz Chemical Works, Inc. 283,776; June 9; Serial No. 309,941; published Mar. 17, 1931.
Medicinal tonic, General. F. M. O'Neil. 284,032; June 9; Serial No. 308,067; published Mar. 24, 1931.
Naphthalene compounds for moth prevention. White Tar Company of New Jersey, Inc. 283,979; June 9; Serial No. 311,046; published Mar. 31, 1931.
Ointment. R. E. Fancourt. 283,980; June 9; Serial No. 310,475; published Mar. 31, 1931.
Ointment. Obermeyer & Co. Aktiengesellschaft. 283,815; June 9; Serial No. 309,286; published Mar. 31, 1931.
Oxide of zinc adhesive plaster. Deane Plaster Co. 283,971; June 9; Serial No. 306,393; published Mar. 10, 1931.
Paste, Soldering. Mueller Brass Co. 283,781; June 9; Serial No. 310,257; published Mar. 31, 1931.
Perfumes. Worth, S. A. 283,999; June 9; Serial No. 203,306; published Mar. 17, 1931.
Petroleum jelly. Chesebrough Manufacturing Company, Consolidated. 283,824; June 9; Serial No. 310,209; published Mar 24, 1931.
Pharmaceutical preparation. L. A. Hoge. 283,816; June 9; Serial No. 309,431; published Mar. 24, 1931.
Pharmaceutical preparation for the reduction of excessive fat. J. J. Gladke. 283,817; June 9; Serial No. 309,450; published Mar. 24, 1931.
Pigment finishes, chemicals, and dyestuffs for leather. Anthony J. and John O. Pilar. 283,832; June 9; Serial No. 310,655; published Mar. 31, 1931.
Pine-tar. Jas. Corner & Sons. 83,898; renewed Oct. 24, 1931.
Powder preparation applicable to radiators of automobiles and heating systems. Milrick Products Corporation 283,848; June 9; Serial No. 310,398; published Mar. 24, 1931.
Powder, rouge, perfume, etc., Talcum. J. N. McMath. 283,792; June 9; Serial No. 309,866; published Mar. 10, 1931.
Powder, rouge, perfumes, etc., Talcum and face. E. M. Cole. 283,785; June 9, Serial No. 309,331; published Mar. 10, 1931.
Powder, Talc. Colgate-Palmolive-Peet Company. 283,814; June 9; Serial No. 310,368; published Mar. 24, 1931.
Powder, Toilet. Elizabeth Arden, Inc. 283,794; June 9; Serial No. 304,268; published Mar. 17, 1931.
Preparation for internal use for the purpose of facilitating the taking of X-ray pictures of internal organs. Schering-Kahlbaum, A. G. 283,833; June 9; Serial No. 310,663; published Mar. 31, 1931.
Preparation for reducing acidity. Burroughs Wellcome & Co. (U. S. A.) 283,778; June 9; Serial No. 310,044; published Mar. 24, 1931.
Preparation for the relief of asthma. C. F. Haffner. 283,827; June 9; Serial No. 310,515; published Mar. 24, 1931.
Preparation for the skin, Liquid. K. F. Albers. 283,819; June 9; Serial No. 309,797; published Mar. 31, 1931.
Preparation for the treatment of cancer. A. Moreschi. 283,813; June 9; Serial No. 310,346; published Mar. 31, 1931.
Preparation for the treatment of colds and grippe. Simpson Drug Company. 283,849; June 9; Serial No. 310,491; published Mar. 24, 1931.
Preparation for the treatment of the skin. S. L. McNamara. 283,830; June 9; Serial No. 310,565; published Mar. 24, 1931.
Preparation for treating colds and hay fever. Poly Chemical Laboratories. 283,967; June 9; Serial No. 308,953; published Mar. 31, 1931.
Preparation for treatment of diabetes. A. F. Biondi. 283,973; June 9; Serial No. 304,989; published Mar. 24, 1931.
Preparation for use as a bowel and intestinal regulator. A. Rosenbluth. 283,822; June 9; Serial No. 310,002; published Mar. 31, 1931.
Preparation for use in the treatment of bronchial asthma and as a reconstructive builder. Burlington Drug Co. 283,834; June 9; Serial No. 310,714; published Mar. 31, 1931.
Preparation indicated in symptomatic relief and resistance-stimulating therapy. Intravenous Products Co. of America, Inc. 283,847 June 9; Serial No. 310,339; published Mar. 24, 1931.
Preparations for women. Prokare Laboratory Products Company. 283,984; June 9; Serial No. 310,880; published Mar. 31, 1931.
Radiator cement. L. Peterson. 283,828; June 9; Serial No. 310,529; published Mar. 24, 1931.
Remedies. Koenig Medicine Company. 81,612; renewed Apr. 25, 1931.
Remedies in tablet form, Internal headache. Neuralgyline Company. 36,717; renewed July 9, 1931.
Remedy for syphilis and similar blood diseases. H. A. Metz & Co. 83,590–1; renewed Sept. 26, 1931.
Remedy for venereal diseases. Tarrant Company. 82,844; renewed July 25, 1931.
Resins, solutions of synthetic resins, and mixtures obtained by melting synthetic resins with other chemical compounds. Consortium für Elektrochemische Industrie, G. m. b. H. 284,031; June 9; Serial No. 307,802; published Mar. 17, 1931.
Salts, Bitter. A. Saxlehner. 283,932–3; June 9; Serial Nos. 311,160–1; published Mar. 31, 1931.
Salve. V. M. Pickel. 81,822; renewed May 9, 1931.
Salve, rheumatic tablets, oral antiseptic, etc., Rheumatic. Cabitt, Illington & Co. 283,820; June 9; Serial No. 309,844; published Mar. 31, 1931.
Shampoo, Hair. L. M. Bock. 283,873; June 9; Serial No. 302,722; published Mar. 31, 1931.
Shampoo preparation. A. Bernard. 283,783; June 9; Serial No. 311,126; published Mar. 31, 1931.
Soporific. Knoll A.-G. Chemische Fabriken. 284,011; June 9; Serial No. 299,326; published Mar. 17, 1931.
Starch, Laundry. A. E. Staley M'f'g. Co. 83,698; renewed Oct. 3, 1931.
Tablets and cough syrup, Cold. Sohn & O'Hara. 283,759; June 9; Serial No. 271,412; published Dec. 17, 1929.
Tablets for the relief of pain. R. H. Syer. 283,826; June 9; Serial No. 309,043; published Mar. 24, 1931.
Throat wafer. Upjohn Company. 283,818; June 9; Serial No. 309,757; published Mar. 24, 1931.

Toilet preparations. Sontag Chain Stores Co. Ltd. 283,788; June 9; Serial No. 309,746; published Mar. 31, 1931.
Toilet water, perfumes, bay rum, alcohol rub, hair tonics, etc. Cheatham Chemical Company. 283,756; June 9; Serial No. 248,220; published June 28, 1927.
Tonic. Bovinine Company. 283,835; June 9; Serial No. 310,749; published Mar. 31, 1931.
Tonic, General. Associated Physicians Laboratories Ltd. 283,851; June 9; Serial No. 309,163; published Mar. 31, 1931.
Vaccine and serum. Dr. H. Curtius. 283,760; June 9; Serial No. 283,724; published Mar. 24, 1931.

CLASS 8

Pipes, cigarette and cigar holders, etc. Alfred Orlik Inc. 283,934; June 9; Serial No. 309,050; published Mar. 31, 1931.

CLASS 9

Ammunition. Remington Arms Company. 283,931; June 9; Serial No. 311,072; published Mar. 24, 1931.

CLASS 10

Fertilizers. Swift and Company. 283,938; June 9; Serial No. 310,457; published Mar. 31, 1931.

CLASS 11

Carbon-paper and type-writer ribbons. Columbia Ribbon & Carbon Manufacturing Company. 83,818; renewed Oct. 17, 1931.
Ink, Printing. Standard Printing Ink Co. 37,229; renewed Oct. 22, 1931.

CLASS 12

Building and protective paper. Glencoe Lime & Cement Co. 284,026; June 9; Serial No. 307,051; published Mar. 31, 1931.
Concrete roof tile, Reinforced. A. J. Saville. 284,040; June 9.
Construction materials. W. R. Meadows, Inc. 284,010; June 9; Serial No. 299,074; published Mar. 31, 1931.
Frames and sashes, Window. G. S. Lyon & Sons Lumber & Mfg. Co. 284,016; June 9; Serial No. 300,880; published Mar. 31, 1931.
Girders and columns, asbestos, etc., Rolled and cast. Siemens-Schuckertwerke Aktiengesellschaft. 283,757; June 9; Serial No. 255,938; published Mar. 31, 1931.
Girders and columns, asbestos, etc., Rolled and cast. Siemens-Schuckertwerke Aktiengesellschaft. 283,758; June 9; Serial No. 258,558; published Mar. 31, 1931.
Insulating material, Heat and sound. Armstrong-Newport Company. 284,025; June 9; Serial No. 306,552; published Mar. 31, 1931.
Insulating materials, Heat. Armstrong Cork Company. 83,806; renewed Oct. 17, 1931.
Lumber. Redwood Manufacturers Company. 284,023; June 9; Serial No. 305,241; published Mar. 31, 1931.
Mortar, Dry. Standard Lime and Stone Company. 284,022; June 9; Serial No. 303,305; published Mar. 31, 1931.
Steel rods. Colonial Steel Company. 283,858; June 9; Serial No. 309,676; published Mar. 31, 1931.
Sticks or handles for suckers. Popsicle Corporation of the United States. 284,006; June 9; Serial No. 297,326; published Mar. 31, 1931.

CLASS 13

Pipe, Soil. Alabama Pipe Company. 283,896; June 9; Serial No. 309,021; published Mar. 31, 1931.
Sprinklers, hose nozzles, etc., Lawn. D. B. Smith & Company. 283,908; June 9; Serial No. 311,206; published Mar. 31, 1931.
Valves. Lunkenheimer Company. 83,661; renewed Oct. 3, 1931.
Valves, Gate. Lunkenheimer Company. 83,752; renewed Oct. 10, 1931.
Valves, Pop safety. Lunkenheimer Company. 83,751; renewed Oct. 10, 1931.
Wire chain-link fencing, bolts, nuts, and rivets. Lead-clad Wire Company. 284,043; June 9.

CLASS 14

Metal devices for supporting and spacing concrete-reinforcing members. W. B. Hough Company. 18,463; renewed Apr. 11, 1931.
Steel. Timken Steel and Tube Company. 283,937; June 9; Serial No. 310,354; published Mar. 24, 1931.
Steel castings, all cast steel parts, etc. Limited Company Formerly The Škoda-Works, Pizeň. 283,755; June 9; Serial No. 235,557; published Aug. 5, 1930.
Type, Printer's. Continental Typefounders Association, Incorporated. 283,948; June 9; Serial No. 311,183; published Mar. 31, 1931.
Wire. Webb Wire Works. 83,795; renewed Oct. 10, 1931.

CLASS 15

Oils and greases, Lubricating. R. J. Kanter Company. 82,240–1; renewed June 13, 1931.
Solvent and lubricant, Rust. Halstead Oil Company. 284,035; June 9.

CLASS 16

Paints, First coat or priming. E. E. Nice. 81,737; renewed May 2, 1931.

CLASS 17

Cigars. Los Ramos Cigar Company. 283,940; June 9; Serial No. 310,727; published Mar. 31, 1931.

CLASS 19

Automobile heaters, Hot water. Sears, Roebuck and Co. 283,900; June 9; Serial No. 310,489; published Mar. 31, 1931.
Automobile structural parts. Hudson Motor Car Company. 283,898; June 9; Serial No. 309,526; published Mar. 31, 1931.
Trucks, Incubator supply. James Manufacturing Company. 283,909; June 9; Serial No. 311,277; published Mar. 31, 1931.
Wiper, Automobile windshield. M. J. Vagge. 283,897, June 9; Serial No. 309,489; published Mar. 24, 1931.

CLASS 21

Electrical connectors for wires, etc. Burndy Engineering Company. 284,039; June 9.
Radio receiving sets and parts thereof. Barker Bros. Incorporated. 284,038; June 9.

CLASS 22

Balls. Parker Brothers, Inc. 283,767; June 9; Serial No. 295,230; published Mar. 24, 1931.
Balls, Bowling. Stowe & Woodward Company. 283,903; June 9; Serial No. 310,842; published Mar. 31, 1931.
Bats and rackets. Parker Brothers, Inc. 283,766; June 9; Serial No. 295,231; published Mar. 24, 1931.
Cards, Playing. Russell Playing Card Company. 283,904; June 9; Serial No. 310,885; published Mar. 31, 1931.
Cards, Sets of two decks or playing. Compass Playing Card Company. 284,009; June 9; Serial No. 298,273; published Mar. 24, 1931.
Dolls. Geo. Borgefeldt & Co. 283,842–3; June 9; Serial Nos. 310,673–4; published Mar. 31, 1931.
Dolls. Ideal Novelty & Toy Co. 283,841; June 9; Serial No. 310,478; published Mar. 24, 1931.
Dolls. Geo. Borgefeldt & Co. 283,842–3; June 9; Serial No. 294,853; published Mar. 24, 1931.
Games. Washington Bowling-Billiard Company. 284,000; June 9; Serial No. 293,906; published Mar. 24, 1931.
Golf balls. Bon-Dee Golf Ball Co. 283,906; June 9; Serial No. 311,052; published Mar. 31, 1931.
Golf balls. H. B. Halsted. 283,845–6; June 9; Serial Nos. 310,801–2; published Mar. 31, 1931.
Golf balls. A. J. Reach, Wright & Ditson, Incorporated. 283,844; June 9; Serial No. 310,697; published Mar. 31, 1931.
Golf clubs. Condor Manufacturing Co. 283,852–4; June 9; Serial Nos. 310,971–3; published Mar. 31, 1931.
Racket strings. C. Saladino & Sons. 283,840; June 9; Serial No. 309,994 published Mar. 24, 1931.
Swings, Lawn. Goshen Manufacturing Company. 283,839; June 9; Serial No. 309,342; published Mar. 24, 1931.
Toy aeroplanes. Aero Model Company. 283,907; June 9; Serial No. 311,078; published Mar. 31, 1931.
Trap shooting apparatus. R. W. Elliott. 284,018; June 9; Serial No. 306,599; published Mar. 31, 1931.

CLASS 23

Apparatus for producing preparations for shampooing the hair. Soapless Foam, Limited. 283,802; June 9; Serial No. 310,492; published Mar. 24, 1931.
Automotive equipment. J. Bean Mfg. Co. 283,772; June 9; Serial No. 295,994; published Mar. 31, 1931.
Blades, Razor. N. J. Sternberg. 283,806; June 9; Serial No. 310,664; published Mar. 31, 1931.
Cups, Grease. Lunkenheimer Company. 83,665–6; renewed Oct. 3, 1931.
Cups, Oil. Lunkenheimer Company. 83,663–4; renewed Oct. 3, 1931.
Cups, Oil. Lunkenheimer Company. 83,675; renewed Oct. 3, 1931.
Extractors, Fruit-juice. National Electric Appliance Corporation. 283,800; June 9; Serial No. 310,404; published Mar. 31, 1931.
Heat exchangers, water distillers, steam condensers, vapor coolers, etc. Griscom-Russell Company. 283,998; June 9; Serial No. 306,352; published Mar. 24, 1931.
Labeling machines and parts of labeling machines. Economic Machinery Company. 83,968; renewed Oct. 24, 1931.
Lubricators. Lunkenheimer Company. 83,622; renewed Oct. 3, 1931.
Lubricators. Lunkenheimer Company. 83,668–9; renewed Oct. 3, 1931.
Lubricators. Lunkenheimer Company. 83,671; renewed Oct. 3, 1931.
Lubricators. Lunkenheimer Company. 83,678; renewed Oct. 3, 1931.
Machinery. J. Brown & Co. Limited. 82,755; renewed July 25, 1931.
Mining machine. Jeffrey Manufacturing Company. 84,006; renewed Oct. 31, 1931.

Mowers, Lawn. Granite State Mowing Machine Co. 283,809; June 9; Serial No. 310,800; published Mar. 24, 1931.
Needles for sewing by machine. Singer Manufacturing Company. 83,015; renewed Aug. 8, 1931.
Pumps, Oil. Lunkenheimer Company. 83,673; renewed Oct. 3, 1931.
Pumps, Steam. American Well & Prospecting Co. 83,710; renewed Oct. 10, 1931.
Pumps, Vacuum. Central Scientific Company. 283,798; June 9; Serial No. 310,285; published Mar. 24, 1931.
Razor blades. Kranish Bros. 284,014; June 9; Serial No. 300,528; published Mar. 31, 1931.
Scrapers. R. G. Le Tourneau, Inc. 283,805; June 9; Serial No. 310,745; published Mar. 31, 1931.
Sweepers, Carpet. Bissell Carpet Sweeper Co. 283,810; June 9; Serial No. 310,968; published Mar. 31, 1931.
Sweepers, Suction carpet. Scott and Fetzer Company. 283,804; June 9; Serial No. 310,617; published Mar. 31, 1931.
Tools and parts thereof. Ames Shovel and Tool Company. 283,918; June 9; Serial No. 311,213; published Mar. 31, 1931.
Tools and utensils, Kitchen. A. & J. Manufacturing Co. 283,949–50; June 9; Serial No. 309,158–9; published Mar. 31, 1931.
Writing machines, Signature. Hedman Manufacturing Company. 283,799; June 9; Serial No. 310,379; published Mar. 31, 1931.

CLASS 24

Cleaning and laundry machines, Dry. De Clevo Company. 283,905; June 9; Serial No. 311,027; published Mar. 31, 1931.

CLASS 26

Films, Motion picture. M. E. Diemer. 283,803; June 9; Serial No. 310,599; published Mar. 31, 1931.
Films, photographic. Eastman Kodak Company. 283,796; June 9; Serial No. 310,215; published Mar. 24, 1931.
Gages, Water. Lunkenheimer Company. 83,502; renewed Sept. 19, 1931.
Goggles, Pereles Bros. Inc. 283,886; June 9; Serial No. 302,831; published Mar. 24, 1931.
Measuring devices in the nature of displacement meters. National Pipe Products Corporation. 283,887; June 9; Serial No. 303,338; published Mar. 24, 1931.
Ophthalmic mountings. Bausch & Lomb Optical Company. 283,797; June 9; Serial No. 310,242; published Mar. 31, 1931.
Photographic and sound films. Tonbild-Syndikat Aktiengesellschaft. 284,012; June 9; Serial No. 299,740; published Mar. 24, 1931.
Pictures reproduced, Motion. O. N. Srere. 283,996; June 9; Serial No. 304,518; published Mar. 31, 1931.

CLASS 27

Clock and watches. Western Clock Company. 283,942–7; June 9; Serial Nos. 310,803–8; published Mar. 24, 1931.
Clocks and watches. Western Clock Manufacturing Company. 83,877; renewed Oct. 17, 1931.
Clocks, automobile clocks, etc. J. F. Mansfield. 283,761; June 9; Serial No. 282,046; published Mar. 24, 1931.

CLASS 29

Mops. Midway Chemical Company. 283,941; June 9; Serial No. 310,872; published Mar. 24, 1931.
Powder puffs, absorbent powder puffs, and eye brow brushes. D. Gray. 283,935; June 9; Serial No. 309,467; published Mar. 24, 1931.

CLASS 31

Refrigerators. Bohn Refrigerator Company. 283,929; June 9; Serial No. 310,748; published Mar. 31, 1931.
Refrigerators. Maine Manufacturing Company. 83,927; renewed Oct. 24, 1931.

CLASS 32

Chairs, Household and lawn. Ozark Chair Company. 283,888; June 9; Serial No. 308,749; published Mar. 31, 1931.
Mattresses. Light Bros., Inc. 283,917; June 9; Serial No. 311,149; published Mar. 31, 1931.
Mattresses. Simmons Company. 283,763; June 9; Serial No. 289,294; published Mar. 24, 1931.
Springs for furniture. Bánská-A Hutní Společnost. 283,950; June 9; Serial No. 309,706; published Mar. 31, 1931.
Springs for furniture. Bánská-A Hutní Společnost. 283,952; June 9; Serial No. 309,711; published Mar. 31, 1931.
Stands, Display. Coty, Inc. 283,811; June 9; Serial No. 310,975; published Mar. 31, 1931.
Stands, Wrought-iron flower and table. I. G. Scott. 283,997; June 9; Serial No. 304,700; published Mar. 31, 1931.

CLASS 33

Bottles made of glass. Pacific Coast Glass Co. 284,036; June 9.

CLASS 34

Gas burning appliances. Surface Combustion Co. Incorporated. 284,020; June 9; Serial No. 304,299; published Mar. 31, 1931.
Stokers and parts therefor and transmissions for stokers. Cotta Transmission Corporation. 283,901–2; June 9; Serial Nos. 310,794–5; published Mar. 31, 1931.

CLASS 35

Belting, Balata. Victor Balata & Textile Belting Co. 283,805; June 9; Serial No. 310,619; published Mar. 24. 1931.
Belting, Leather. Sears, Roebuck and Co. 283,801; June 9; Serial No. 310,488; published Mar. 31, 1931.
Belts, Transmission conveying and elevating. Thermoid Rubber Company. 283,958; June 9; Serial No. 310,144; published Mar. 24, 1931.
Hose pipes, leather driving belts, steam dome flange rings. Vereinigte Stahlwerke Aktiengesellschaft. 284,004; June 9; Serial No. 296,163; published Mar. 31, 1931.
Tires and inner tubes, Pneumatic. Lincoln Oil Refining Company. 283,807; June 9; Serial No. 310,723; published Mar. 31, 1931.

CLASS 37

Adhesive paper signals for index sheets or the like. Service Bureau, Inc. 283,892; June 9; Serial No. 310,778; published Mar. 24, 1931.
Mimeographing devices and machines, etc. Roto- und Debego-Werke Aktiengesellschaft. 284,037; June 9.
Paper, Sulphate pulp kraft. National Consumers Paper Corporation. 283,954; June 9; Serial No. 310,808; published Mar. 24, 1931.
Pencils. American Lead Pencil Company. 284,021; June 9; Serial No. 308,969; published Mar. 24, 1931.
Pencils. Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth. 283,955; June 9; Serial No. 310,805; published Mar. 24, 1931.
Pens and pencils, Fountain. U. S. Victor Fountain Pen Co. Inc. 283,865; June 9; Serial No. 310,843; published Mar. 24, 1931.

CLASS 38

Booklets. Safeway Stores, Incorporated. 283,910; June 9; Serial No. 309,093; published Mar. 24, 1931.
Bulletins published monthly, Farm. Do-Well Agricultural Service, Inc. 284,005; June 9; Serial No. 297,178; published Mar. 24, 1931.
Feature published in a periodical. Quigley Publishing Company. 283,864; June 9; Serial No. 310,924; published Mar. 24, 1931.
Literature, Educational. Joseph Luchs and Staff, Inc. 284,027; June 9; Serial No. 307,557; published Mar. 17, 1931.
Magazine. Consolidated Water Power & Paper Company. 283,862; June 9; Serial No. 309,336; published Mar. 17, 1931.
Magazine. Macfadden Publications, Inc. 283,868; June 9; Serial No. 310,050; published Mar. 24, 1931.
Magazine. Theatre Service Corporation. 283,914; June 9; Serial No. 310,269; published Mar. 24, 1931.
Magazine. Westerner Publishing Company. 283,769; June 9; Serial No. 295,105; published Apr. 8, 1930.
Magazines. Collegiate World Publishing Company. 283,911; June 9; Serial No. 309,882; published Mar. 24, 1931.
Magazines. Lindlahr's Magazine, Inc. 283,867; June 9; Serial No. 310,481; published Mar. 24, 1931.
Newspaper section. G. Uhlmann. 283,912; June 9; Serial No. 309,909; published Mar. 24, 1931.
Newspapers. New York Times Company. 83,176; renewed Aug. 22, 1931.
Periodical. Dime Publications, Inc. 283,863; June 9; Serial No. 310,976; published Mar. 24. 1931.
Periodical. National Retail Credit Association. 283,913; June 9; Serial No. 310,062; published Mar. 24, 1931.
Periodical. M. Rosenberg. 283,867; June 9; Serial No. 310,696; published Mar. 24, 1931.
Periodicals. Fruit Dealer Publishing Company. 283,855; June 9; Serial No. 309,774; published Mar. 17, 1931.
Periodicals. Fruit Dealer Publishing Company. 283,894; June 9; Serial No. 309,775; published Mar. 24, 1931.
Photoprints, photostat prints, etc. James C. Zoll & Son. 284,042; June 9.
Publication. National Trade Jorunals, Inc. 283,806; June 9; Serial No. 310,734; published Mar. 24, 1931.
Publication. New York Evening Journal Publishing Company. 83,595; renewed Sept. 26, 1931.

CLASS 39

Apparel, Wearing. Stephen Slesinger, Inc. 283,856; June 9; Serial No. 309,751; published Mar. 24, 1931.
Boots and shoes. Dack's Shoes, Inc. 284,024; June 9; Serial No. 305,848; published Mar. 24, 1931.
Gloves. Wimelbacher & Rice. 283,893; June 9; Serial No. 310,428; published Mar. 17, 1931.
Hosiery. Walker Stetson Co. 82,734; renewed July 18, 1931.
Underwear, Knit. Springfield Knitting Co. 82,027; renewed May 23, 1931.
Underwear, Knit. Springfield Knitting Co. 82,182; renewed June 6, 1931.

CLASS 40

Combs for the hair. New York Hamburger Gummi-Waaren Compagnie. 283,857; June 9; Serial No. 309,695; published Mar. 31, 1931.
Watch straps, Wrist. Hadley Company. 283,859–60; June 9; Serial Nos. 309,612–3; published Mar. 24, 1931.

CLASS 42

Fabrics of silk and satin. William Skinner Manufacturing Co. 37,187; renewed Oct. 15, 1931.
Handkerchiefs, Embroidered linen. Glendinning, McLeish & Co. 283,768; June 9; Serial No. 310,602; published Mar. 10, 1931.

CLASS 45

Beverage, Maltless tomato. E. C. Ortega Co. 283,928; June 9; Serial No. 310,573; published Mar. 31, 1931.
Beverages. Supreme Beverage Co. 283,771; June 9; Serial No. 294,933; published Mar. 24, 1931.
Beverages and syrups and extracts used in making the same, Maltless. Cott's Beverages, Inc. 283,915; June 9; Serial No. 311,264; published Mar. 31, 1931.
Beverages and syrups and extracts used in making the same, Maltless. Mound City Bottling Co. 284,041; June 9.
Beverages and syrups for making the same, Maltless. G. Oringer. 284,029; June 9; Serial No. 304,785; published Mar. 31, 1931.
Beverages, sirups and extracts for making the same. J. K. Szwajkos. 283,930; June 9; Serial No. 310,928; published Mar. 24, 1931.
Cordial, Nonalcoholic. La Grande Distillerie E. Cusenier Fils Aine & Cie., Societe Anonyme. 284,013; June 9; Serial No. 300,207; published Sept. 16, 1930.
Extracts, True fruit and imitation flavoring. M. Paul. 283,773; June 9; Serial No. 295,755; published Mar. 24, 1931.
Fruit juices, Nonalcoholic maltless. Whitefield Citrus Corporation. 283,764; June 9; Serial No. 292,345; published Mar. 24, 1931.
Water, Mineral. R. Curtiss. 284,030; June 9; Serial No. 306,808; published Mar. 24, 1931.

CLASS 46

Cake. F. O. Stone Baking Co. 83,872; renewed Sept. 5, 1931.
Candy. Block Candy Company. 283,961; June 9; Serial No. 304,647; published Mar. 24, 1931.
Candy. Elmer Candy Company. 283,924; June 9; Serial No. 311,057; published Mar. 31, 1931.
Candy. M. J. Holloway Company. 283,921; June 9; Serial No. 310,866; published Mar. 31, 1931.
Candy. Williamson Candy Company. 283,925; June 9; Serial No. 311,077; published Mar. 31, 1931.
Candy bars, Chocolate covered. Coxie Company. 283,891; June 9; Serial No. 310,796; published Mar. 31, 1931.
Candy confections. Runkel Brothers, Inc. 283,957; June 9; Serial No. 305,982; published Mar. 24, 1931.
Candy, Cream. Dilling & Company. 82,583; renewed July 11, 1931.
Candy kisses. Dilling & Company. 83,093; renewed Oct. 31, 1931.
Canned baked beans. B. H. Karmen. 283,994; June 9; Serial No. 310,382; published Mar. 31, 1931.
Canned corn. Minnesota Consolidated Canneries, Inc. 283,965; June 9; Serial No. 301,491; published Mar. 31, 1931.
Canned corn. Minnesota Consolidated Canneries, Inc. 283,966; June 9; Serial No. 281,489; published Mar. 31, 1931.
Canned fruits and vegetables. Springville Canning Corporation. 283,870; June 9; Serial No. 308,270; published Mar. 24, 1931.
Canned fruits, vegetables and fish, edible oils, bread, etc. Livingston's Fancy Food Products Inc. 283,765; June 9; Serial No. 292,585; published Mar. 31, 1931.
Canned fruits, vegetables, fish. Balfour, Guthrie & Co. 283,986; June 9; Serial No. 309,223; published Mar. 31, 1931.
Canned fruits, vegetables, fish. Balfour, Guthrie & Co. 283,987–8; June 9; Serial Nos. 209,225–6; published Mar. 31, 1931.
Canned peeled tomatoes. Italo French Produce Company. 283,922; June 9; Serial No. 310,871; published Mar. 31, 1931.
Canned pineapple. Libby, McNeill & Libby. 283,995; June 9; Serial No. 310,392; published Mar. 31, 1931.
Chicks, Baby. Wallace Hatchery. 283,964; June 9; Serial No. 301,740; published Mar. 24, 1931.
Chocolates. Dilling & Company. 81,794; renewed May 9, 1931.
Cocoa with milk and chocolate with milk. Nestlé & Anglo-Swiss Condensed Milk Co. 82,462; renewed June 27, 1931.
Coffee and tea. E. B. Millar & Company. 283,975; June 9; Serial No. 306,896; published Mar. 31, 1931.
Compounds for aiding emulsion of the filters of frozen pies. Rav Corporation. 283,962; June 9; Serial No. 304,384; published Mar. 24, 1931.
Flour, Boston brown bread. Mayflower Mills. 37,148, renewed Oct. 1, 1931.
Food powder. F. Sanford. 284,015; June 9; Serial No. 300,760; published Mar. 31, 1931.
Foods. S. Hamill Company. 84,002. renewed Oct. 31, 1931.
Foods. F. E. Royston & Co. 81,631; renewed Apr. 25, 1931.
Fruits, Fresh citrus. Stuart Bros. Corporation. 283,889; June 9; Serial No. 310,495; published Mar. 24, 1931.
Fruits, Fresh citrus. F. S. Youngbusband. 283,762; June 9; Serial No. 288,152; published Mar. 31, 1931.
Fruits, Frozen. Tom Huston Peanut Company. 283,956; June 9; Serial No. 306,185; published Mar. 31, 1931.
Gum, Chewing. J. W. Bowman. 283,963; June 9; Serial No. 302,987, published Mar. 31, 1931.
Gum, Chewing. C. P. Clark. 283,871; June 9; Serial No. 308,418; published Mar. 31, 1931.
Ham, bacon, meat roll, etc. Cleveland Provision Company. 283,774; June 9; Serial No. 295,656; published Mar. 31, 1931.
Hams and lard, Picnic. Blayney-Murphy Company. 283,958; June 9; Serial No. 305,919; published Mar. 24, 1931.
Macaroni salad, potato salad, spaghetti and chicken giblets sauce and chicken and noodles. Tripoli Foods, Incorporated. 283,890; June 9; Serial No. 310,618; published Mar. 31, 1931.
Olive oil. Lekas and Drivas. 82,097; renewed May 31, 1931.
Oils, Edible. Emery-Drew, Inc. 283,989; June 9; Serial No. 309,465; published Mar. 31, 1931.
Oranges and grape-fruit, Fresh. Upland Citrus Ass'n. 83,297; renewed Aug. 29, 1931.
Oranges, lemons, grape-fruit, etc. Bradentown Citrus Growers Ass'n. 83,982; renewed Oct. 31, 1931.
Peanuts, Shelled. H. G. Ray. 283,960; June 9; Serial No. 304,668; published Mar. 24, 1931.
Potatoes. C. A. Lasley, Inc. 283,990; June 9; Serial No. 309,822; published Mar. 24, 1931.
Pudding. G. C. Rosenstein. 283,923; June 9; Serial No. 310,929; published Mar. 31, 1931.
Salad dressings. Desnos and Son Inc. 283,992; June 9; Serial No. 310,164; published Mar. 24, 1931.
Sandwiches and condiment sauce. Triple "XXX" Company. 283,959; June 9; Serial No. 305,061; published Mar. 24, 1931.
Sardines. Max Block & Co. Inc. 83,813; renewed Oct. 17, 1931.
Syrup, Malt. F. W. Jacobson. 283,916; June 9; Serial No. 311,035; published Apr. 14, 1931.
Syrups for foods, Malt. Herman Krauss, Inc. 283,872; June 9; Serial No. 308,941; published Mar. 31, 1931.
Teas. Brooke Bond & Company. 83,984; renewed Oct. 31, 1931.
Vegetables, Fresh. Gitman Brothers. 283,919; June 9; Serial No. 311,329; published May 5, 1931.
Water ice. New York Special Yam-Yam Co. 283,991; June 9; Serial No. 309,900; published Mar. 24, 1931.
Yeast. Anheuser-Busch, Incorporated. 283,985; June 9; Serial No. 309,220; published Mar. 24, 1931.
Yeast bars, Chocolate covered. Tournine Company. 283,993; June 9; Serial No. 310,355; published Mar. 24, 1931.

CLASS 47

Wines. A. Mattei. 83,755; renewed Oct. 10, 1931.

CLASS 48

Malt beverages, Cereal. Aktieselskabet De Forenede Bryggerier. 283,927; June 9; Serial No. 309,603; published Mar. 31, 1931.

CLASS 50

Asymmetrical particles in bulk for artificial golf greens. Texas Miniature Outdoor Golf Company. 283,884; June 9; Serial No. 302,087; published Mar. 31, 1931.
Bottle cap and golf tee, Combination. Tee-Top Company. 283,939; June 9; Serial No. 310,463; published Mar. 24, 1931.
Fabrics, Waterproof. Pantasote Leather Company. 83,853; renewed Oct. 17, 1931.
Flags, banners, emblems, etc. Veterans of Foreign Wars of the United States. 283,936; June 9; Serial No. 309,953; published Mar. 24, 1931.
Table cover. Cluff Cover Company. 284,003; June 9; Serial No. 294,914; published Mar. 31, 1931.
Underlay for floor coverings. St. Clair Rubber Company. 283,885; June 9; Serial No. 307,747; published Mar. 24, 1931.
Waterproof flax, flax duck and canvas. Upson-Walton Company. 283,880–83; June 9; Serial Nos. 301,076–9; published Nov. 18, 1930.

ALPHABETICAL LIST OF LABELS

Abbott's Aromatic Bitters. For Bitters. C. W. Abbott & Co. 39,244; June 9.
A Cloth Preserver for Auto Tops. For Cloth Preserver for Auto Tops. C. J. Ingersoll. 39,270; June 9.
American Beauty. For Mattresses. Royal Bedding Company. 39,280; June 9.
Arrow Motor Oil. For Motor Oil. B. B. Oil Company. 39,255; June 9.
Battle of Ballots. For a Game. All-Fair Incorporated. 39,253; June 9.
Bean-Em. For a Game. All-Fair Incorporated. 39,249; June 9.
Bow-O-Winks Tiddledy Winks. For a Game. All-Fair Incorporated. 39,248; June 9.
Brisson's Rheumatic Remedy. For a Medicinal Preparation for Treating Rheumatism. E. Brisson & Co. 39,257; June 9.
Bunker Golf. For a Game. All-Fair Incorporated. 39,247; June 9.
Challenge Cheese Spread. For Cheese Spreads. Challenge Cream and Butter Association. 39,262; June 9.
Chicken and Egg Noodle Dinner. For Chicken and Egg Noodles. Tripoli Foods, Inc. 39,288; June 9.
Colonial Club. For Ginger Ale. California Bottling Works. 39,260; June 9.
Dalco. For Alcohol for Massage, Bathing and Rubbing. Drug Products Co. Inc. 39,264; June 9.
'Deluxe' Quality. For Hand Made Hollow Point Snelled Hooks. W. H. Meyer & Son, Inc. 39,275; June 9.
Dr Hart's Courage-Blood Pills. For Vegetable Medicinal Preparation. F. M. Starr. 39,284; June 9.
E-Ra-Sm. For Dry Window Cleaning Powder. Erasm Chemical Corporation of America, Inc. 39,266; June 9.
Flap Jacks. For a Game. All-Fair Incorporated. 39,250; June 9.
Glydor. For a Game. All-Fair Incorporated. 39,254; June 9.
Goldex. For Malt Syrup. Buffalo Malt Company. 39,259; June 9.
Handi-Pak Cinnamon Rolls. For Cinnamon Rolls. Waxide Paper Company. 39,290; June 9.
Homax. For Waxes. Federal Research Corporation. 39,267; June 9.
Igloo. For Frozen Confections. Elrod Ice Cream Company. 39,265; June 9.
Imps for Quality. For Tube Patches. Inland Motor Products Company. 39,271; June 9.
Invictus. For Foot Cream. Casteen Co. 39,261; June 9.
Jay-Lin. For a Game. All-Fair Incorporated. 39,245; June 9.
Juci-Sweet. For Grapefruit Drink. Juci-Sweet Products Inc. 39,273; June 9.
Juci-Sweet. For Orange Drink. Juci-Sweet Products Inc. 39,272; June 9.
L'Manda. For Toilet Cream. Parfumerie Dollup, Inc. 39,277; June 9.
Marwood Petroleum Products. For Petroleum Products. James Stevenson and Co. 39,285; June 9.
Merode Sunseal Bathing Suits. For Bathing Suits. Winship, Boit & Co. 39,291; June 9.
Milk Maid Bread. For Bread. Fitts Bros., Inc. 39,268; June 9.
Natcola. For a Hair Restorer. N. Leibel. 39,274; June 9.
Odornox. For Chemical Preparation for Deodorizing Purposes. Bleendes Chemical Co. 39,256; June 9.
Official Mickey Mouse Candy Bar 5¢ of the Mickey Mouse Safety Club. For Candy Bars. W. W. Shaw. 39,281; June 9.
Old Country. For Malt Syrup. A. Sherman Mfg. Co. Inc. 39,283; June 9.
Pabco Roofweld. For Plastic Cement. Paraffine Companies. 39,276; June 9.
Peacock. For Hair Nets. Renilo Company. 39,279; June 9.
Poudre A Jamais. For Face Powder. R. Paskin. 39,278; June 9.
Shelby's Menthol Chewing Gum. For Menthol Chewing Gum. Shelby Gum Company. 39,282; June 9.
Simba. For a Game. All-Fair Incorporated. 39,246; June 9.
Sky-Hawks. For Combination Construction Game and Toy. All-Fair Incorporated. 39,251; June 9.
Social Coffee Always Fresh. For Coffee. Bronx Coffee Company. 39,258; June 9.
Sure Blooming. For Narcissus Bulbs. Talmage Gardens Co. 39,286; June 9.
Taylor Color. For Colors. Taylor System, Incorporated. 39,287; June 9.
The Game of Composers. For a Game. H. G. Davidson. 39,263; June 9.
Vineland Egg Producers, Inc. Vineland, N. J. For Eggs. Vineland Egg Producers, Inc. 39,289; June 9.
Washburn's Buckwheat, Wheat and Corn Pancake Flour. For Pancake Flour. General Mills, Inc. 39,269; June 9.
Watch On De Rind. For a Game. All-Fair Incorporated. 39,252; June 9.

ALPHABETICAL LIST OF PRINTS

How You'll Enjoy This Flavorful Soup . . With Its Added Goodness Of Rich Thick Cream! For Cream of Tomato Soup. H. J. Heinz Company. 13,226; June 9.
Nation's Foremost Laboratories Find That Only Astringo-Sol Has These 5 Essential Properties. For Mouth Wash. Frederick Stears & Company. 13,231; June 9.
St. Blase Cherry Cough Syrup. For Cough Syrup. M. W. Folds. 13,225; June 9.
Shelby's Menthol Chewing Gum. For Menthol Chewing Gum. Shelby Gum Company. 13,229; June 9.
The Five Sense Cigar. For Cigars. Bayuk Cigars Incorporated. 13,224; June 9.
The Game of Parichance. For Game Apparatus. A. S. Littlefield. 13,228; June 9.
The Game of Racket. For Game Apparatus. A. S. Littlefield. 13,227; June 9.
The Triumph of Color in Make-up. For Amoretta Cream, Creme De France, Lille Lotion, Rouge Amorette. Elizabeth Arden Inc. 13,223; June 9.
This 4 Ounce Bottle Makes 12 Full Pints of Refreshing Mouth Wash. For Mouth Wash. Frederick Stearns & Company. 13,230; June 9.
Vosine. For Antiseptic for the Nose, Throat and Mouth. Vosine Co. 13,232; June 9.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 9TH DAY OF JUNE, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

A C Spark Plug Company. (See Eshbaugh, Jesse E., assignor.)
Acetex Safety Glass Limited. (See Johnston, William, assignor.)
Acme Card System Company. (See Powell, Frank D., assignor.)
Acme Steel Company. (See Ott, John E., assignor.)
Acosta, Julian S., assignor of one-third to L. A. Watlington, Arecibo, Porto Rico. Biscuit, cake and pie machine. 1,809,263; June 9.
Adams, Alexander, Philadelphia, Pa. Barber's hair-cutting machine. 1,809,008; June 9.
Adams, Henry, Plainfield, N. J. Coal distributing means. 1,809,261; June 9.
Adams, Ira J. (See Sample, Perry B., assignor.)
Adams, Stephen S., St. Louis, Mo. Sign. 1,808,878; June 9.
Adler, John B. (See O'Connor, J. B., and Adler.)
Aeolian Company, The. (See Dickinson, Joseph H., assignor.)
Aeppler, Carl W., and L. Lawrence, Oconomowoc, Wis. Packaging device. 1,809,396; June 9.
Agnew, George B. (See de Simone, Michele G., assignor.)
Aicher, Gustav A., deceased; O. J. Aicher, executrix, San Francisco, Calif. Shook labeling machine. 1,809,262; June 9.
Aicher, Olga J., executrix. (See Aicher, Gustav A.)
Air Reduction Company. (See Luening, Eugene G., assignor.)
Alaston, James F. (See Taylor, Hal, assignor.)
Albrecht, Karl, assignor to Maschinenfabrik Johannisberg, G. m. b. H., Geisenheim-on-the-Rhine, Germany. Intaglio printing machine. 1,809,466; June 9.
Alex. Friedmann, the Firm. (See Nemetz, Gustav, assignor.)
Alger, John A., Mantua, Ohio. Conveyer. 1,809,662; June 9.
Allen, Alfred C., Washington, D. C. Foldable note pad holder for stenotype operators. 1,808,942; June 9.
Allen, Edward G., Everett, Wash. Trolling spoon. 1,809,663; June 9.
Allen, Frank B., Lower Marion Township, Montgomery County, assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa. Apparatus for handling ashes. 1,809,501; June 9.
Allen-Sherman-Hoff Company, The. (See Allen, Frank B., assignor.)
Allen, Wilbur C., Los Angeles, Calif., assignor, by mesne assignments, to Ralph C. Whitlock Patents, Inc. Adjustable trip for postal machines. 1,809,264; June 9.
Alt, Charles F., Des Moines, Iowa. Vehicle parking structure. 1,808,741; June 9.
Altman, Elmer F., assignor to The Self Kleen Thresher Screen Co., Minneapolis, Minn. Cleaning sieve. 1,808,742; June 9.
Ambrose, John R. W. (See Duncan, E., and Ambrose.)
American Alumalloy Custom Wheel Company. (See Beutke, P. E., and Nelson, assignors.)
American Cable Company. (See Connor, Edward A., assignor.)
American Cable Company. (See Gregson, George C., assignor.)
American Casting and Manufacturing Corporation. (See Dietze, Emil, assignor.)
American Lace Mfg. Co., The. (See Hucknall, Hage W., assignor.)
American Laundry Machinery Company, The. (See Couch, Forrest J., assignor.)
American Optical Company. (See Tillyer, E. D., and Moulton, assignors.)
American Sales Book Company. (See Hagemann, Louis F., assignor.)
American Smelting and Refining Company. (See Austin, J. F., and McIntosh, assignors.)
American Telephone and Telegraph Company. (See Stone, John S., assignor.)
American Tobacco Company, The. (See Powell, James A., assignor.)
Anderson, Arthur R., North Arlington, N. J. Shoe tree. 1,808,828; June 9.
Anderson, Maurice, Edgewood, assignor to Levy Anderson Co. Inc., Providence, R. I. Extension device. 1,809,618; June 9.
Anderson, W. L., et al. (See Martin, James E., assignor.)
Andre, Gustaf E., assignor to Belden Manufacturing Company, Chicago, Ill. Ground connecter. 1,809,009; June 9.
Andres, William J., and C. T., Waffle, assignors to Bendix Brake Company, South Bend, Ind. Operating device. 1,809,541; June 9.
Andrews, Alfred J., trustee. (See Pogue, Charles N., assignor.)
Andrews, Charles W. (See Otto, C., and Andrews.)
Angel, Herbert, Brooklyn, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y. Correcting distortion and interpolating impulses in cable telegraph. 1,809,664; June 9.
Angeles, Monico S., San Leonardo, Mueva Ecya, Philippine Islands. Magazine pencil. 1,809,665; June 9.
Apple, Vincent G., Dayton, Ohio. Electrical starting motor. 1,808,746; June 9.
Apple, Vincent G., Dayton, Ohio. Dynamo electric machine. 1,808,747; June 9.
Apple, Vincent G., Dayton, Ohio. Electric motor automotive axle. 1,808,748; June 9.
Apple, Vincent G., Dayton, Ohio. Bar wound armature. 1,808,749; June 9.
Apple, Vincent G., Dayton, Ohio. Dynamo electric machine with improved cooling system. 1,808,751; June 9.
Apple, Vincent G., and W. M. Doehring, Dayton, Ohio; said Doehring assignor to said Apple. Communicator. 1,808,750; June 9.
Apt Novelty Company Inc. (See Shulman, Charles, assignor.)
Armstrong Cork Company. (See Smith, D. F., Pieper, and Vogt, assignors.)
Armstrong, Harvey C., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Wheel structure. 1,809,795; June 9.
Arnold, Harold D., Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Vacuum tube. 1,809,099; June 9.
Artcraft Optical Co. (See Dechau, Otto W., assignor.)
Asher, William J., Colorado Springs, Colo. Ironing machine. 1,809,467; June 9.
Atwater Kent Manufacturing Company. (See Bradley, Charles S., assignor.)
Austin, George, Kansas City, Mo. Well screen. 1,808,803; June 9.
Austin, Irving M., jr., Rye, N. Y. Gas pilot and burner. 1,809,397; June 9.
Austin, John F., Murray, and D. H. McIntosh, Salt Lake City, Utah, assignors to American Smelting and Refining Company, New York, N. Y. Apparatus for blast furnace control. 1,809,324; June 9.
Austin, John F., Murray, and D. H. McIntosh, Salt Lake City, Utah, assignors to American Smelting and Refining Company, New York, N. Y. Apparatus for automatically withdrawing gas samples. 1,809,325; June 9.
Austin, John F., Murray, and D. H. McIntosh, Salt Lake City, Utah, assignors to American Smelting & Refining Company, New York, N. Y. Controlling blast furnaces. 1,809,326; June 9.
Automobilwerke H. Bussing, Aktiengesellschaft. (See Staniewicz, Willy, assignor.)
Avakian, Arsham G. (See Dorrance, A. A., and Avakian.)
Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Badeley, Gerald J., Brooklyn, N. Y., assignor to Duplex Motion Picture Industries, Inc. Motion picture projector. 1,809,327; June 9.
Baer, Samuel S., Atlantic City, N. J. Adjustable arch support. 1,809,010; June 9.
Bagk, Frederick C. (See Wiken, Olof, assignor.)
Bally, Thaddeus, F., Alliance, Ohio. Metallic resistor element. 1,809,227; June 9.
Bakelite Gesellschaft mit beschraenkter Haftung. (See Seelbach, Fritz, assignor.)
Baker, Arthur J., and E. E. Huntington, assignors to The Willys-Overland Company, Toledo, Ohio. Electric switch for automobiles. 1,809,100; June 9.
Baker Oil Tools, Inc. (See Baker, Reuben C., assignor.)
Baker, Reuben C., Coalinga, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Well pumping unit. 1,809,101; June 9.
Baker, Reuben C., Coalinga, assignor to Baker Oil Tools, Inc., Huntington Park, Calif. Well pumping rig. 1,809,102; June 9.
Baker, Rutland H. (See Bettinger, Louis M., assignor.)
Balachowsky, Dmitry, and P. Caire, Paris, France, assignors to Societe des Brevets Catalex, Geneva, Switzerland. Oil gas apparatus. 1,909,187; June 9.
Baldner, George. (See Baldner, J. and G.)
Baldner, Jacob and G., Xenia, Ohio; said G. Baldner assignor of his entire right to K. S. Clapp, Cleveland, Ohio. Grease dispenser. 1,808,804; June 9.
Ballou, Walter T., Los Angeles, Calif. Commutator mica undercutting tool. 1,809,228; June 9.

Banner, Robert J., Youngstown, Ohio. Edging mill. 1,808,752; June 9.
Barber-Colman Company. (See Edgar, John, assignor.)
Barclay, Howard J., sr., Spring City, Pa. Garment. 1,809,502; June 9.
Bardsley, Harvey H., and W. J. Ehler, Kansasville, Wis. Conveying and gathering mechansm for harvesters and analogous implements. 1,809,542; June 9.
Barkelew, James T., Lamanda Park, Calif., assignor, by mesne assignments, to Paramount Publix Corporation. Method of modifying photographs by printing. 1,808,743; June 9.
Barker, Charles A., Highland Park, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Insulated electrical conductor. 1,809,011; June 9.
Barnes, Cecil E., Los Angeles, Calif. Building. 1,808,829; June 9.
Barnes, John S., assignor to W. F. and John Barnes Company, Rockford, Ill. Horizontal boring and tapping machine. 1,809,188; June 9.
Barnes, W. F. and John, Company. (See Barnes, John S., assignor.)
Baronet-Lorna Co. Inc. (See Bihler, Roger, assignor.)
Barrett, Arthur M., Winnetka, assignor to Barrett-Cravens Company, Chicago, Ill. Shop bench. 1,809,153; June 9.
Barrett-Cravens Company. (See Barrett, Arthur M., assignor.)
Bartlett, Albert C., and J. W. Ryde, Wembley, England. Electric discharge tube. 1,809,229; June 9.
Bates, Adelmer M., Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Sealed package and making the same. 1,809,103; June 9.
Bates, Emile R., Leicester, England. Fabric drying and finishing machines. 1,808,879; June 9.
Baudino, James G., Milford, Utah. Pinion nut sheller. 1,808,744; June 9.
Bauer, Gustav, Hamburg, and C. Schmieske, Bremen, Germany. Supply conduit for steam and gas turbines. 1,809,666; June 9.
Baum, Isaac A., Chicago, Ill. Metal frame and anchor. 1,808,753; June 9.
Baum, Isaac A., Chicago, Ill. Metal corner connection. 1,808,754; June 9.
Bauman, Fritz. (See Mieg, W., and Bauman.)
Bay City Shovels, Inc. (See Kerr, John M., assignor.)
Bay State Optical Company. (See Nerney, George E., assignor.)
Baylis, Walter S., Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California. Treating beeswax. 1,808,755; June 9.
Bean, Charles E., Stafford Springs, Conn. Stop mechanism for cloth drying machines. 1,809,398; June 9.
Beardsley, Elmer O., and W. F. Piper, assignors to The Beardsley & Piper Company, Chicago, Ill. Sand-handling truck. 1,809,796; June 9.
Beardsley & Piper Company, The. (See Beardsley, E. O., and Piper, assignors.)
Beauchamp, George D., Los Angeles, Calif. Stringer musical instrument. 1,808,756; June 9.
Beauchamp, George D., Los Angeles, Calif. Stringer musical instrument. 1,808,757; June 9.
Beaumont, R. H., Company. (See Beaumont, Robert H., assignor.)
Beaumont, Robert H., Radnor, assignor to R. H. Beaumont Company, Philadelphia, Pa. Outlet apparatus for ash bunkers. 1,809,771; June 9.
Beck, John, Ashland, Wis. Refrigerator. 1,809,012; June 9.
Becker, Charles, M., Brooklyn, N. Y. Raised metal plaque. Des. 84,314; June 9.
Becker, Charles M., Brooklyn, N. Y. Lamp. Des. 84,315; June 9.
Becker, Eli, and I. Miller, Cleveland, Ohio. Bottle. Des. 84,317; June 9.
Becker, Emil, assignor to H. Junkers, Dessau, Germany. Riveting. 1,809,154; June 9.
Beguelin, Armand. (See Maire, A., and Beguelin.)
Beistle Company, The. (See Luhrs, Henry E., assignor.)
Belden Manufacturing Company. (See Andre, Gustaf E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Björnson, Björn G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Cruser, Victor I., assignor.)
Bell Telephone Laboratories, Incorporated. (See Flanders, Paul B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Horton, Joseph W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hovland, Henry, assignor.)
Bell Telephone Laboratories, Incorporated. (See Hoyt, Frederick A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Kelsall, George A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Knoop, William A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Mueller, Emil C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Wilson, J. R., and Blackburn, assignors.)
Benda, Jaroslav, Prague, Czechoslovakia. Insole for boots and the like. 1,808,943; June 9.
Bendix Aviation Corporation. (See Perrot, H., and Calvignac, assignors.)
Bendix Brake Company. (See Andres, W. J., and Waffle.)
Bendix Brake Company. (See Sanford, Roy S., assignor.)
Bennett, George W., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Automatic control for cone crushers. 1,808,914; June 9.
Bennett, Morris H., assignor to Scovill Manufacturing Company, Waterbury, Conn. Variable condenser control. 1,809,371; June 9.
Bergé, Julien, assignor to Raffinerie Tirlemontoise Société Anonyme, Tirlemont, Belgium. Preliminary treatment of raw sugar, after products or the like before refining. 1,809,807; June 9.
Bergé, Julien, assignor to Raffinerie Tirlemontoise Société Anonyme, Tirlemont, Belgium. Desugaring syrups and molasses. 1,809,808; June 9.
Bergé, Julien, assignor to Raffinerie Tirlemontoise Société Anonyme, Tirlemont, Belgium. Desugaring syrups and molasses. 1,809,809; June 9.
Berger, Martin, Freital-Deuben, near Dresden, assignor to United Cigarette Machine Company Aktiengesellschaft, Dresden, Germany. Apparatus for turning cigarettes right side up as they are fed to the packing machine. 1,809,189; June 9.
Berger, Morris W., San Francisco, Calif. Barber pole illumination. 1,808,880; June 9.
Berghorn, Olga, Teaneck, N. J. Sheathe for cigarette packages. 1,809,372; June 9.
Berkshire Knitting Mills. (See Hemmerick, Hugo, assignor.)
Berliner, Abraham. (See Bertram, J. P., and Berliner.)
Bertram, Jacob P., and A. Berliner, Rochester, assignors to Shuron Optical Company, Inc., Geneva, N. Y. Display case. 1,809,155; June 9.
Bertram, Jacob P., and A. Berliner, Rochester, assignors to Shuron Optical Company, Inc., Geneva, N. Y. Display case. 1,809,156; June 9.
Besler, William J., Plainfield, N. J. Brake mechanism for motor vehicles. 1,809,328; June 9.
Bethenod, Joseph, Paris, France. Oscillating circuits applied to electrical musical instruments and the like. 1,809,503; June 9.
Bettandorff, George, Oakland, assignor of one-fourth to H. C. Schroeder, Concord, Calif. Pop corn machine. 1,808,758; June 9.
Bettinger, Louis M., assignor of one-fourth to R. H. Baker, Downey, Calif. Fire and blow-out control. 1,809,230; June 9.
Beutke, Paul E., and B. W. Nelson, Los Angeles, Calif., assignors to American Alumalloy Custom Wheel Company, Ltd., Los Vegas, Nev. Nine spoke flat hexagon vehicle. Des. 84,318; June 9.
Beutke, Paul E., and B. W. Nelson, Los Angeles, Calif., assignors to American Alumalloy Custom Wheel Company, Ltd., Los Vegas, Nev. Seven spoke flat octagon vehicle wheel. Des. 84,319; June 9.
Beutke, Paul E., and B. W. Nelson, Los Angeles, Calif., assignors to American Alumalloy Custom Wheel Company, Ltd., Los Vegas, Nev. Nine spoke square vehicle wheel. Des. 84,320; June 9.
Beutke, Paul E., and B. W. Nelson, Los Angeles, Calif., assignors to American Alumalloy Custom Wheel Company, Ltd., Los Vegas, Nev. Nine spoke semisquare vehicle wheel. Des. 84,321; June 9.
Beutke, Paul E., and B. W. Nelson, Los Angeles, Calif., assignors to American Alumalloy Custom Wheel Company, Ltd., Los Vegas, Nev. Seven spoke square vehicle wheel. Des. 84,322; June 9.
Beveridge Paper Company. (See Ross, Harry M., assignor.)
Beynon, Rees, assignor to Dryden Rubber Company, Chicago, Ill. Buffer. 1,808,881; June 9.
Bickerton, George H., Bluesky, Alberta, Canada. Agricultural implement. 1,808,759; June 9.
Bienenstein, Andreas, assignor to The Conklin Pen Company, Toledo, Ohio. Mechanical pencil. Des. 84,323; June 9.
Bihler, Roger, assignor, by mesne assignments, to Baronet-Lorna Co. Inc., College Point, N. Y. Powder puff sewing machine. 1,808,805; June 9.
Billings & Spencer Company, The. (See Kimball, Harry G., assignor.)
Billings, Haskell A. (See Hervey, P. S., and Billings.)
Bills, Charles E., assignor to Mead Johnson & Company, Evansville, Ind. Irradiating apparatus. 1,808,760; June 9.
Bing & Bing, Inc. (See Shaw, John W., assignor.)
Birnbaum, Jack. (See Kraft, M., and Birnbaum.)
Bishop, Benjamin S. T. (See Gifford, A. J., and Bishop.)
Björnson, Björn G., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Repeater circuits. 1,808,915; June 9.
Blackburn, Charles M. (See Wilson, J. R., and Blackburn.)
Blackburn, Jasper, Webster Groves, Mo. Device for preventing the rotation of cables in hanger seats. 1,809,543; June 9.
Blair, George W., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Fastener with lateral clearance. 1,809,667; June 9.
Blaw-Knox Company. (See Venable, William M., assignor.)
Bledsoe, George W., W. S. Lloyd, and C. D. Yencer, El Paso, Tex. Pump. 1,808,745; June 9.

Bletso, Bruce N., East Cleveland, and G. H. Rose, Cleveland Heights, Ohio. Flying shear. 1,809,068; June 9.
Blindalk, Inc. (See Heinzelmann, Alphonse A., assignor.)
Blunt, James G., and H. S. Burnham, Schenectady, N. Y. Locomotive. 1,809,309; June 9.
Boardman, Harry C., Chicago, Ill, assignor to Chicago Bridge & Iron Company. Container. 1,809,013; June 9.
Bohlin, Helge. (See Brund, A., and Bohlin.)
Bond, Joseph E., Appleton, Wis. Method of and apparatus for digesting wood. 1,808,830; June 9.
Bond, Joseph T. (See Wright, W. L., and Bond.)
Bonnette, Perry B., Chicago, Ill. Overload indicator. 1,809,373; June 9.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Vehicle wheel. 1,809,231; June 9.
Borg & Beck Company, The. (See Gamble, David E., assignor.)
Borg, Henry L., Stamford, Conn., assignor to Postum Company, Incorporated, Battle Creek, Mich. Recovering fatty products. 1,808,831; June 9.
Borland, Deloss, assignor of three-fourths to M. Isenberg, Charleston, Miss. Seed harvester. 1,809,544; June 9.
Bornand, Emilien, and H. A. Schlaepfer, Geneva, Switzerland. Electric metal welding. 1,809,468; June 9.
Borromeo, Ruperto G., Samar, Philippine Islands. Sound producing device. 1,809,669; June 9.
Bossi, John B., Allston, and P. A. Mazzuchelli, Newton, assignors to Cambridge Cement Stone Company, Brighton, Mass. Artificial stone and producing the same. 1,809,329; June 9.
Bousfield, Alfred, assignor to E. and T. Fairbanks and Company, Saint Johnsbury, Vt. Antirail spreader for track scales. 1,809,670; June 9.
Bowen, Mortimer W., Jackson Heights, assignor to Vacuum Oil Company, New York, N. Y. Advertising lantern. Des. 84,324; June 9.
Bowes, Thomas D., Cynwyd, Pa. Apparatus for finishing bearings and bushings. 1,809,545; June 9.
Bowie, Augustus J., San Francisco, Calif. Electric switch. 1,809,232; June 9.
Bowman, George W., Seymour, Tex. Hay press. 1,808,832; June 9.
Bowman, Kiel B., assignor to The Ohio Drilling Company, Massillon, Ohio. Cleaning wells. 1,809,546; June 9.
Brack, Allan L., Rochester, N. Y. Adjustable packing case. 1,808,833; June 9.
Bradley, Charles S., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Cabinet for radio receiving apparatus. Des. 84,316; June 9.
Bradshaw, Lou. (See Davis, Donald C.)
Bragg, Caleb S. and V. W. Kliesrath, assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Vacuum brake mechanism. 1,809,014; June 9.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y. Controlling valve mechanism for vacuum brake systems. 1,809,015; June 9.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Brand, Charles F., Wheeling, W. Va. Heating system. 1,808,761; June 9.
Brand, Harry R., New York, N. Y. Registering device and annunciator. 1,809,157; June 9.
Braunstein, Roger, assignor to Société Anonyme des Anciens Etablissements Braunstein Fréres, Paris, France. Machine for interfolding sheets of cigarette papers. 1,809,671; June 9.
Breed, Charles W., Western Springs, and G. R. Burkhardt, Chicago, Ill. Railway joint bar. 1,809,104; June 9.
Brewer-Titchener Corporation, The. (See Winans, Daniel M., assignor.)
Bridgeport City Trust Co., The, executor. (See Lyhne, Anker S.)
Bridgeport Hardware Manufacturing Corporation. (See Platt, Arthur I., assignor.)
Bridgeport Metal Goods Manufacturing Company, The. (See Lyhne, Anker S., assignor.)
Brimer, Robert F., Washington, D. C. Apparatus for handling articles for coating. 1,809,190; June 9.
Briney, Ottis R., Pontiac, Mich. Gauge device. 1,809,547; June 9.
Bristol, Franklin B. (See Bristol, William H. and F. B.)
Bristol, William H. and F. B., assignors, by mesne assignments, to Wm. H. Bristol Talking Picture Corporation, Waterbury, Conn. Cone type loud speaker. 1,809,578; June 9.
Bristol, Wm. H., Talking Picture Corporation. (See Bristol, William H. and F. B., assignors.)
Broadbent, Frederick G. (See Willshaw, H., Norcross, and Broadbent.)
Broadwin, Sampson, Brooklyn, N. Y. Pattern mechanism for crochet knitting machines. 1,808,882; June 9.
Broch, Friedrich, Vienna, Austria, assignor to Tannwalder Baumwollspinnfabrik, Tannwald Czechoslovakia. Driving mechanism for rotating shafts at variable speeds. 1,809,469; June 9.
Brode, Johannes, and C. Wurster, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Anhydrous metal chlorides and hydrogen chloride. 1,809,158; June 9.
Brodie, Ralph N., Company. (See Granberg, Albert J., assignor.)
Brogden, Ernest M., Santa Monica, and M. L. Trowbridge, Palms, Calif., assignors to Brogdex Company, Winter Haven, Fla. Composition for preservative treatment of fresh fruit. 1,809,016; June 9.
Brogdex Company. (See Brogden, E. M., and Trowbridge, assignors.)
Bronn, Jegor L., Berlin-Charlottenburg, and G. Fischer, Oberhausen, Germany; said Fischer assignor to said Bronn. Manufacturing nitrates. 1,809,191; June 9.
Brotz, Anton F., assignor to Kohler Company, Kohler, Wis. Switch box for automatic generating plants. 1,808,883; June 9.
Brown, Carl D., assignor to Draper Corporation, Hopedale, Mass. Cloth splitting attachment for looms. 1,809,619; June 9.
Brown Company. (See Richter, George A., assignor.)
Brown Company. (See Richter, G. A., and Schur, assignors.)
Brown Company. (See Root, Bertwell C., assignor.)
Brown, Ray W., Altadena, Calif., assignor, by mesne assignments, to H. D. Wilson, Pittsburgh, Pa. Tool coupler. 1,808,944; June 9.
Brownlee, Dalmar T., Indianapolis, Ind. Starter device. 1,809,017; June 9.
Brownlee, William K., and M. J. Owens; said Owens assignor to Owens-Illinois Glass Company, Toledo, Ohio. Furnace. 1,809,105; June 9.
Bruce, Elizabeth W., administratrix. (See Gladwin, L. H., and Bruce.)
Bruce, Nigel G. (See Gladwin, L. H., and Bruce.)
Brund, Albert, and H. Bohlin, Harnosand, Sweden. Accelerating the hardening of plastic materials. 1,808,762; June 9.
Bruning, Clarence A., Colfax, Wash. Adjustable bracket. 1,809,018; June 9.
Bryant Electric Company, The. (See Johnson, Richard L., assignor.)
Bryant, Leonard N., Memphis, Tenn., W. W. East, jr., Oxford, Miss., and M. S. Swain, Chicago, Ill. Vehicle jack. 1,809,579; June 9.
Buckland, Earl M., assignor to Rockwell Barnes Company, Chicago, Ill. Loose-leaf folder. 1,808,884; June 9.
Buckley, John J., Chester, Pa. Rotary cutting operations and apparatus therefor. 1,809,019; June 9.
Budd, Edward G., Manufacturing Co. (See Ledwinka, Joseph, assignor.)
Budowski, Isaar, Berlin, assignor to Chemische Fabrik Jacobus, G. m. b. H., Charlottenburg, Germany. Dressing medium for textile matter and the process of manufacturing the same. 1,809,470; June 9.
Bulkeley, Claude A., Kenmore, assignor to Niagara Blower Company, Buffalo, N. Y. Clip. 1,809,400; June 9.
Burdett, Oliver H., St. Catharines, Ontario, Canada. Holder for paper cups and the like. 1,808,768; June 9.
Burdick, Herbert, East Orange, N. J., assignor to Signal Engineering & Manufacturing Company, New York, N. Y. Signal code sending device and system. 1,809,020; June 9.
Burgess, C. F. Laboratories Inc. (See Schorger, Arlie W., assignor.)
Burke, Arthur R., Rochester, Minn. Folding deck stock car. 1,809,772; June 9.
Burkhardt, George R. (See Breed, C. W., and Burkhardt.)
Burkholder, John C., Montclair, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Circuit control system. 1,808,916; June 9.
Burlectas Limited. (See Enock, Arthur G., assignor.)
Burnham, Harry S. (See Blunt, J. G., and Burnham.)
Burroughs Adding Machine Company. (See Pasinski, Walter J., assignor.)
Burrows, Roscoe T., Barre, Vt. Display cabinet. Des. 84,325; June 9.
Burson Knitting Company. (See Parker, William S., assignor.)
Burt, Edwin, Canutillo, Tex. Filter. 1,808,917; June 9.
Busch, Rudolph, sr., Shelltown, Md. Cleaning pad. 1,808,834; June 9.
Butler, Eric W., Bristol, and J. C. Mann, Birmingham, assignors to Robinson Brothers Limited, Birmingham, and Wm. Butler & Company Limited, Bristol, England. Apparatus for mixing liquids. 1,809,672; June 9.
Butler, Faibus M., Seattle, Wash. Accelerator attachment. 1,809,021; June 9.
Butler, Henry E., Scotia, N. Y., assignor to General Electric Company. Electrical protective device. 1,809,673; June 9.
Butler, Ola D., Quantico, Va. Combination automatic boat release and utility hook. 1,808,945; June 9.
Butler, William J., Cranston, R. I., assignor to Henry Lederer & Bro. Inc., Providence, R. I. Pocket lighter. 1,809,548; June 9.
Butler, Wm. & Company et al. (See Butler, E. W., and Mann, assignors.)
Buttolph, Leroy J., East Orange, N. J., assignor to General Electric Vapor Lamp Company. Mercury vapor lamp and apparatus. 1,809,265; June 9.
C-S Engineering Company. (See Schellens, Christopher A., assignor.)
C-S Engineering Company. (See Schellens, E. L., and C. A., assignors.)
Cahill, Robert E., and J. Caterini, Cleveland, Ohio. Hand sewing machine. 1,809,192; June 9.

Cahn, Frank J., Milwaukee, Wis. Production of organic acids by fermentation. 1,809,797; June 9.
Cain, Loyd H., Tyler, Tex. Packless valve. 1,809,773; June 9.
Caire, Philippe. (See Balachowsky, D. and Caire.)
Calvignac, Germain. (See Perrot, H., and Calvignac.)
Cambridge Cement Stone Company. (See Bossi, J. B., and Mazzuchelli, assignors.)
Camel Company. (See Heinen, F. C., Tobin, and Wasberg, assignors.)
Camiré, Joseph, Central Falls, R. I. Hot air furnace. 1,809,233; June 9.
Campbell, Charles A., Watertown, N. Y., assignor to New York Air Brake Company. Support for lubricators. 1,808,835; June 9.
Campbell, James, Jackson, Mich. Auto body and top. 1,809,505; June 9.
Canterbury, Harry H., et al. (See Hilstad, John R., assignor.)
Capezio, Salvatore, East Paterson, N. J. Tap sole. 1,809,107; June 9.
Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Photographic apparatus. 1,808,836; June 9.
Carborundum Company, The. (See Johnson, Boyd M., assignor.)
Carey, Philip, Manufacturing Company. (See Fischer, Albert C., assignor.)
Cargill, William W., assignor to French Battery Company, Madison, Wis. Flashlight. 1,809,506; June 9.
Carlin, James C., Gladwyne, assignor to Lee Rubber & Tire Corporation. Consh hocken, Pa. Tire bead and making same. 1,809,106; June 9.
Carman, Charles W., Washington, Pa., assignor, by mesne assignments, to Stainless Steel Corporation, Youngstown, Ohio. Purifying metals. 1,809,436; June 9.
Carman, Charles W., Washington, Pa., assignor, by mesne assignments, to Stainless Steel Corporation, Youngstown, Ohio. Stainless chromium alloy and producing same. 1,809,437; June 9.
Carter, Clarence W., Minneapolis, Minn. Apparatus for broiling bacon and the like. 1,809,580; June 9.
Carter, Yetabelle P., San Francisco, Calif. Railway signal. 1,809,374; June 9.
Carter, William C. Flint, Mich. Carburetor. 7,809,507; June 9.
Carvel, Richard, New York, N. Y. Building construction. 1,809,504; June 9.
Castro, Manuel, Canton, Ohio. Reel. 1,809,266; June 9.
Caswell, Geo. W., Co. (See Quinn, Joseph F., assignor.)
Caterini, John. (See Cahill, R. E., and Caterini.)
Cattell, Herman C., Alliance, Ohio. Adjustable joiner. 1,809,401; June 9.
Celluloid Corporation. (See Lindsay, William G., assignor.)
Centaur Tractor Corporation. (See Stedman, Charles C., assignor.)
Chandler, Charles E., assignor of one-half to H. Garside, Philadelphia, Pa. Settling and evaporating tank. 1,809,674; June 9.
Chaney, Newcomb K., Lakewood, Ohio, assignor to National Carbon Company, Inc. Dry cell battery. 1,809,471; June 9.
Chapal Donner Corporation, The. (See Plass, Robert H., assignor.)
Chapman, William H., Oakland, Calif. Motor vehicle headlamp. 1,809,022; June 9.
Chase, Francis F., Melrose, Mass. Vaporizer. 1,809,375; June 9.
Chase, Francis F., Melrose, Mass. Vaporizer. 1,809,438; June 9.
Chase, Walter E., Sarasota, Fla. Rub hoe. 1,809,743; June 9.
Chemical Development Co. (See Spohn, John H., jr., assignor.)
Chemische Fabrik Jacobus G. M. B. H. (See Budowski, Issar, assignor.)
Chesnutt, John L., Long Beach, Calif. Carburetor. 1,809,108; June 9.
Chicago Bridge & Iron Company. (See Boardman, Harry C., assignor.)
Chicago Forging & Manufacturing Co. (See Mears, N. A., and Nynes, assignors.)
Chison, John, Elm Grove, W. Va. Safety device for boats. 1,809,675; June 9.
Chladek, Joseph F., Niobrara, Nebr. Hay stacker. 1,809,178; June 9.
Church, Lewis H., assignor to The Thomas & Betts Co., Elizabeth, N. J. Pipe coupler. 1,809,582; June 9.
Churchill, Elias A., Brandon, Manitoba, Canada. Curling iron heater. 1,809,510; June 9.
Chvojka, Joseph, Philadelphia, Pa. Pan greasing machine. 1,809,581; June 9.
Clapp, Kenneth S. (See Baldner, Jacob and G., assignor.)
Clark, Alfonso V., Casey, Ill. Surface rod line pick up. 1,808,885; June 9.
Clark, Andrew B., assignor of one-half to Roscoe Luke, Thomasville, Ga. Doorcheck. 1,808,837; June 9.
Clark, D. L. Company. (See Thoke, Albert, assignor.)
Clark, Earl R., Highland Park, Mich. Safety valve for heaters. 1,809,439; June 9.
Clark, Peter, Great Neck, N. Y., and J. C. Pingle, St. Louis, Mo. Track. 1,809,109; June 9.
Clarke, Tans T., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose ester composition. 1,809,234; June 9.
Clayton Gin Compress Company. (See Mackenzie, Alexander S., assignor.)
Claytor, Edward M., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Adjustable thermal element. 1,809,293; June 9.
Clemens, Ludwig, Berlin, assignor to the firm Wezel & Naumann Aktiengesellschaft, Leipzig, Germany. Pressing corrugated cardboard flat in places. 1,809,472; June 9.
Cleveland Rock Drill Company, The. (See Oldham, Edward L., assignor.)
Clifford, Albert M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Antioxidant or age-resister. 1,809,798; June 9.
Clifford, Albert M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Antioxidant or age resistor. 1,809,799; June 9.
Clum Manufacturing Company. (See Winning, Robert K., assignor.)
Coates, Manley R., Albany, Oreg. Wire clamp. 1,809,774; June 9.
Colbjörusen, Bjarne, Gaddviken, near Stockholm, Sweden. Treating reaction products of phosphates and sulphuric acid. 1,809,473; June 9.
Colby, Willis H., Morehead City, N. C. Child's building block. 1,809,508; June 9.
Coldwell, Harry T., assignor to Philadelphia Lawn Mower Company, Inc., Philadelphia, Pa. Stationary knife for lawn mowers. 1,809,810; June 9.
Cole, Edward S., New York, N. Y. Orifice for flow measuring systems. 1,809,376; June 9.
Cole, Elwyn Z., Philadelphia, Pa. Nut lock. 1,809,620; June 9.
Colman, Howard D. (See Smith, Clarence E., assignor.)
Colonial Tool Company. (See Halborg, Carl J., assignor.)
Colorwater Instrument Works. (See Miner, E. L., and Leatherman, assignors.)
Columbian Enameling & Stamping Company. (See Nelson, A. W., and Topping, assignors.)
Columbus Handle & Tool Corporation. (See Lutman, Frank B., assignor.)
Combustion Utilities Corporation. (See Soule, Roland P., assignor.)
Cone, Frank L., Windsor, Vt. Relieving device for high speed drills. 1,809,402; June 9.
Conklin Pen Company, The. (See Bienenstein, Andreas, assignor.)
Conn, C. G. Ltd. (See Gulick, Edward J., assignor.)
Connor, Edward A., Stratford, Conn., assignor to American Cable Company, Inc. Stranded belt. 1,809,023; June 9.
Container Corporation of America. (See Gallistel, Clarence P., assignor.)
Continental Manufacturing Company. (See Shuman, Leo, assignor.)
Conway, James J., West Haven, assignor to The Seamless Rubber Company, Inc., New Haven, Conn. Rubber or like article. Des. 84,326; June 9.
Cook Electric Company. (See Persons, Lawrence M., assignor.)
Cook, Emma K., St. Louis, Mo. Fan protector. 1,809,583; June 9.
Cooper, Basil P., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for nail sorting. 1,808,806; June 9.
Cooper, Emmet F. (See Sweet, C. H., and Cooper.)
Copeland & Thompson, Incorporated. (See Thompson, Sidney E., assignor.)
Cornell, Carlyle P., and J. E. Slaby, Denver, Colo. Ink agitating appliance for printing presses. 1,809,159; June 9.
Corson, Harry P., Lakewood, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio. Inhibitor. 1,809,621; June 9.
Coste, Costante D., Clayton, Wash. Lamination disintegrator. 1,809,160; June 9.
Cotter, Ernest W., London, assignor to J. Stone & Company Limited, Deptford, England. Sliding window. 1,809,403; June 9.
Couch, Forrest J., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Stripping means for flat work ironers. 1,808,764; June 9.
Courtney, Thomas L., Maryborough, Victoria, Australia. Shock absorbing road wheel of vehicles. 1,803,886; June 9.
Crafts, Leslie C. (See Goudey, E. G., Stevens, and Crafts.)
Cragg, John H. and K. B., Hopkins, Minn. Converter for electric current. 1,809,110; June 9.
Cragg, Kenneth B. (See Cragg, J. H. and K. B.)
Creamery Package Mfg. Company, The. (See Godfrey, Joseph H., assignor.)
Creamery Package Mfg. Company, The. (See Larsen, Olaf, assignor.)
Creamery Package Mfg. Company, The. (See Scovel, John C., jr., assignor.)
Creber, Roy A., Toronto, Ontario, Canada. Vehicle brake. 1,809,111; June 9.
Creek Chub Bait Co., The. (See Davenport, Sam F., assignor.)
Criner, Harry J., Burlington, Iowa. Electric bread toaster. 1,809,112; June 9.

Crocker, Ernest C., Belmont, Mass., assignor, by mesne assignments, to The Lane Company, Inc. Aroma testing of cedar chests. 1,808,838; June 9.
Croessant, George F., Wyomissing, Pa. Conveyer mechanism. 1,808,918; June 9.
Crompton, George. (See Goddard, Robert H., assignor.)
Crossley, Alfred, and L. H. Hansen, assignor to Howard Radio Company, South Haven, Mich. Radio tuning mechanism. 1,809,509; June 9.
Crouse-Hinds Company. (See Pearson, John T., assignor.)
Crowe, Thomas B. (See Mills, L. D., and Crowe.)
Crowley, William J. (See Shinn, E. W., Crowley, and Scott.)
Crum, Roland R. (See Oliver, Guy C., assignor.)
Crumrine, Chester W., assignor to Electromatic Typewriters, Inc., Rochester, N. Y. Paper roller mechanism. 1,809,024; June 9.
Cruser, Victor I., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrical device. 1,809,025; June 9.
Culbertson, E. Estay, Detroit, Mich., assignor to Spicer Manufacturing Corporation. Connection for universal joints or couplings. 1,809,404; June 9.
Culver, Charles A., Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y. Electrical generating system. 1,809,676; June 9.
Cummings, George C., Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telegraph system. 1,809,026; June 9.
Cummings, William G. (See Vaughan, H. H., and Cumming.)
Curle, George L., Minneapolis, Minn. Knife wiper for type casting machines. 1,808,977; June 9.
Curry, John P. (See Foulder, Henry B., assignor.)
Cushing, Benjamin, Norwood, Mass. End cap for tubular packages. 1,809,267; June 9.
Daehlin, Isaac, Freeport, Ill. Combination instrument. 1,809,775; June 9.
Daimler Benz Aktiengesellschaft. (See Eltze, Kurt, assignor.)
Delchau, Joachim. See Gaarz, W., and Dalchau.)
Danielson, Ernest G., San Francisco, Calif. Radio receiving system. 1,809,027; June 9.
Darby, Edwin, Birmingham, England. Apparatus for heating liquids. 1,809,744; June 9.
Davenport, Sam F., Auburn, assignor to The Creek Chub Bait Co., Garrett, Ind. Hook mounting for lures. 1,809,776; June 9.
Davis, Donald C., deceased, Buffalo, by L. Bradshaw, executrix, Buffalo, assignor to The Gould Coupler Company, New York, N. Y. Side bearings. 1,808,839; June 9.
Davis, Helen, assignor to The Helen Davis Cap Co., Topeka, Kans. Meshed head piece. 1,809,511; June 9.
Davis, Helen, Cap Co., The. (See Davis, Helen, assignor.)
Davis, Lewis J., Brooklyn, N. Y. Brake shoe holder. 1,809,745; June 9.
Dayton Steel Foundry Company, The. (See Walther, George, assignor.)
Dean, Fay W., executor. (See Dean, Mark.)
Dean, Mark, Newark, N. J., F. W. Dean, executor of said Mark Dean, deceased. Electrofluid valve. 1,808,765; June 9.
Dechau, Otto W., Rochester, N. Y., assignor to Arteraft Optical Co. Inc. Bridge member for an ophthalmic mounting. Des. 84,327; June 9.
Décobert, Edouard F. M., Paris, France. Container for cigarettes and the like. 1,809,746; June 9.
Deen, Clare, et al. (See Grant, Colin, assignor.)
Deere & Company. (See Paradise, L. A., and Huddle, assignors.)
Defays, Victor J., and P. J. Lefebvre, assignors to la Magneto belge, Societe Anonyme, Brussels, Belgium. Electric motor. 1,809,512; June 9.
De Filippis, Raymond, Brooklyn, N. Y. Vehicle. 1,808,766; June 9.
De Gloria, John, and H. C. Schroeder, Oakland, Calif. Bumper element for safety zones. 1,808,767; June 9.
De Graw, Brown F., Fort Wayne, Ind., assignor to The Western Gas Construction Co. Gas manufacture. 1,808,807; June 9.
Dehuff, Walter F., Glen Rock, Pa. Mixing machine. Re18,096; June 9.
De Laney, Wallace W., assignor to The Seamless Rubber Company, Inc., New Haven, Conn. Rubber sheeting or like article. Des. 84,328; June 9.
Delco Light Company. (See Lee, Ralph L., assignor.)
Demuth, Wm., & Co. (See Hutcheson, Ray R., assignor.)
Dencklau, Karl R., Plainfield, N. J. Carbon pack. 1,808,840; June 9.
De Simone, Michele G., Stapleton, assignor to George B. Agnew, New York, N. Y. Calculating machine. 1,809,811; June 9.
De Yorss, Elvin C., and W. F. Lumsden, Denver, Colo. Glare eliminating device. 1,809,678; June 9.
Dewey, Haywood, G. (See Jones, J. G., and Dewey.)
Diamond Power Specialty Corporation. (See Snow, N. L., and Hirshfeld, assignors.)
Dibble, Claude M., assignor to Moore Brothers Company, Joliet, Ill. Broiler. 1,808,768; June 9.
Dibner, Abraham B., New York, N. Y. T connecter. 1,808,769; June 9.
Dickinson, Joseph H., Larchmont, N. Y., assignor to The Aeolian Company. Music roll magazine. 1,808,808; June 9.
Dietze, Emil, Richmond Hill, assignor to American Casting and Manufacturing Corporation, Brooklyn, N. Y. Seal press. 1,809,235; June 9.
Doehring, Walter M. (See Apple, V. G., and Doehring.)
Doherty Research Company. (See Merley, Sylvan R., assignor.)
Doherty Research Company. (See Morgan, John D., assignor.)
Dolson, Harold K. (See Monroe, F. R., Dolson, and Tuttle.)
Domestic Electric Company. (See Teare, Albert R., assignor.)
Dorrance, Almos A., and A. G. Avakian, assignors of one-third to Joseph G. Williams, Detroit, Mich. Toothbrush. 1,809,330; June 9.
Dorset, William S., assignor to Interstate Cotton Oil Refining Company, Sherman, Tex. Corrugated iron band. 1,809,679; June 9.
Dos Santos, Roal, Honolulu, Territory of Hawaii. Umbrella. 1,809,474; June 9.
Dowler, Ralph B., jr., Memphis, Tenn. Audion tube. 1,809,475; June 9.
Draper Corporation. (See Brown, Carl D., assignor.)
Draper, Isaac S., Sullivan, Ind. Voting booth. 1,808,946; June 9.
Dravo Contracting Company. (See Miller, James S., assignor.)
Dryden Rubber Company. (See Beynon, Rees, assignor.)
Dudgeon, Hector M. (See Rowland, T. C. E., and Dudgeon.)
Dudley Lock Corporation. (See Winning, Robert K., assignor.)
Duensing, Henry J. H., Odell, Nebr. Combined elevator and saw. 1,809,193; June 9.
Du Grenier, Arthur H., Haverhill, Mass. Dispensing mechanism. 1,809,584; June 9.
Dumas, Jean, Chicago, Ill. Easel. 1,809,268; June 9.
Duncan, Charles H., Erie, Pa. Power unit for use on automotive vehicles. 1,809,331; June 9.
Duncan, Erskine, and J. R. W. Ambrose, Toronto, Ontario, Canada. Drain hopper. 1,809,549; June 9.
Dunkley, Benjamin H., Kalamazoo, Mich. Hobby horse. 1,808,887; June 9.
Dunlop Tire and Rubber Corporation. (See Willshaw, H., Norcross, and Broadbent, assignors.)
Dunnigan, Joseph T., Detroit, Mich. Auto sled attachment. 1,809,161; June 9.
Duplex Motion Picture Industries, Inc. (See Badgler, Gerald J., assignor.)
Du Pont Ammonia Corporation. (See Williams, Roger, assignor.)
Du Pont, E. I. de Nemours & Company. (See Barker, Charles A., assignor.)
Durbon, John R., Junction City, Kans. Paint composition. 1,808,841; June 9.
Durkee-Atwood Company. (See Kile, Alfred W., assignor.)
East, Frederick W., assignor to I. T. S. Rubber Company Limited, Petersfield, England. Boot and shoe. 1,809,194; June 9.
East, William W., jr. (See Bryant, L. N., East, jr., and Swain.)
Eastman Kodak Company. (See Clarke, Hans T., assignor.)
Eastman Kodak Company. (See Hopkins, Roy S., assignor.)
Eastman Kodak Company. (See Jones, J. G., and Dewey, assignors.)
Eastman Kodak Company. (See Sheppard, S. E., and McNally, assignors.)
Eastman Kodak Company. (See Stephenson, Paul A., assignor.)
Eckoldt, Erich, Dresden, Germany. Making sodium fluoride. 1,809,476; June 9.
Edeleanu Gesellschaft m. b. H. (See Edeleanu, Lazar, assignor.)
Edeleanu, Lazar, Berlin-Charlottenburg, assignor to Edeleanu Gesellschaft m. b. H., Berlin, Germany. Dewaxing mineral oils. 1,809,777; June 9.
Edgar, John, assignor to Barber-Colman Company, Rockford, Ill. Machine for relieving cutters. 1,809,377; June 9.
Edgerton, Arthur H., Lakewood, assignor to The White Motor Company, Cleveland, Ohio. Brake mechanism. 1,808,947 June 9.
Edison Electric Appliance Company. (See McCormick, Francis H., assignor.)
Edmund C. Morgan, deceased, by O. E. Morgan, executrix, New York, N. Y. Mining machine. 1,808,858; June 9.
Edwards, Charles R., Houston, Tex. Safety cathead. 1,808,770; June 9.
Edwards, Frank W., Chicago, Ill. Terminal valve for force feed lubricators. 1,808,978; June 9.
Edwards, Henry J., assignor to The Willys Overland Company, Toledo, Ohio. Engine valve sleeve. 1,809,585; June 9.
Egan, Mathew M., Fort Worth, Tex. Airship. 1,809,680; June 9.
Egeland, Peter A., St. Paul, Minn. Advertising display mechanism. 1,809,162; June 9.
Egry Register Company, The. (See Rowe, Clement J., assignor.)
Ehler, William J. (See Bardsley, H. H., and Ehler.)

Ehrenfried, Albert, Boston, Mass. Shoe heel. 1,809,405; June 9.
Elder, Donald, Berkeley, Calif. Flush valve. 1,809,440; June 9.
Electric Welding Company. (See Straub, James M., assignor.)
Electromatic Typewriters, Inc. (See Crumrine, Chester W., assignor.)
Ellen, Vern G., Minneapolis, Minn., assignor to The Louden Machinery Company, Fairfield, Iowa. Grappling apparatus. 1,809,622; June 9.
Elliott, William S., Pittsburgh, Pa. Method and apparatus for the treatment of liquids. 1,809,441; June 9.
Ellis, Clifton M. (See Shields, Willie A., assignor.)
Ellis, Edward E., Alhambra, assignor of one-half to O. C. Stratton, Santa Monica, Calif. Automatic film moving device for single exposure. 1,808,919; June 9.
Elmendorf, Armin, Chicago, Ill., assignor to The Flexwood Company. Machine for treating flexible veneered sheets. 1,809,681; June 9.
Elsen, Albert E., East St. Louis, Ill. Airplane automatic control. 1,808,771; June 9.
Eltze, Kurt, Mannheim-Kafertal, assignor to Daimler Benz Aktiengesellschaft, Stuttgart-Unterturkhein, Germany. Internal combustion engine. 1,809,477; June 9.
Emery, Norman A. (See Carman, Charles W., assignor.)
Enderlein, Hans. (See Heuck, C., and Enderlein.)
Enock, Arthur G., Wembley Park, assignor to Burlectas Limited, London, England. Apparatus for automatically measuring and delivering milk or other liquids. 1,809,163; June 9.
Epstein & Harris. (See Urkov, J., and Harris, assignors.)
Eschenbach, Gustavus W., Los Angeles Calif. Interchangeable block billboard. 1,809,378; June 9.
Eshbaugh, Jesse H., assignor to A C Spark Plug Company, Flint, Mich. Instrument clamp and light housing. 1,809,682; June 9.
Esser, Heinrich. (See Kunst, Wilhelm, assignor.)
Ethridge, Albert S., assignor to Hummel & Downing Co., Milwaukee, Wis., Caddy. 1,808,772; June 9.
Evans Case Company. (See Lawrence, Cecil H., assignor.)
Evans, Leonard T., Indianapolis, Ind. Conveyer-separator. 1,809,586; June 9.
Evans, Richard, Highland Park, Ill. Stamp rack. 1,809,195; June 9.
Evans, Theodore C., Terre Haute, Ind. Interlocking control mechanism. 1,809,778; June 9.
Everhard, Harry H., Canton, Ohio. Guide for slidable window screens. 1,809,236; June 9.
Ewing, Dwight T., East Lansing, Mich. Apparatus for plating. 1,808,809; June 9.
Fahlin, Ole, Sioux City, Iowa. Propeller. 1,808,888; June 9.
Fairbanks, E. and T., and Company. (See Bousfield, Alfred, assignor.)
Fairbanks, E. and T., and Company. (See Hadley, Harlan A., assignor.)
Fanarjian, John, Union City, assignor of one-half to P. M. Hammalian, and J. M. Hammalian, Hackensack, N. J. Foldable desk. 1,809,028; June 9.
Farnsworth, Frank S., Derby County, England. Driving and spring suspension of vehicles. 1,809,196; June 9.
Farrar, Kilby, London, Ohio. Hose holder. 1,809,550; June 9.
Federal Telegraph Company. (See Nicolson, Alexander M., assignor.)
Fedor, John P., Newcastle, Ind. Aeroplane wing. 1,808,842; June 9.
Fendrich, William, jr., Upper Montclair, N. J. Production of generator armatures. 1,809,197; June 9.
Ferranti, Limited. (See Tucker, Alfred W. G., assignor.)
Ferris, William D., assignor to Frantz Manufacturing Co., Sterling, Ill. Door catch. 1,809,406; June 9.
Filburn, Edward J., Terre Haute, Ind. Slider rail clamp. 1,809,747; June 9.
Filtrol Company of California. (See Baylis, Walter S., assignor.)
Fink, Colin G., Yonkers, N. Y., Manufacture of metal having high emissivity. 1,808,889; June 9.
Finkbeiner, Daniel T., Beaver, Pa. Constructing culverts. 1,809,513; June 9.
Finn, Sidney J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Positioning apparatus. 1,808,810; June 9.
Firestone Tire & Rubber Company, The. (See Martin, John I., assignor.)
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Making compressible and elastic material. 1,809,800; June 9.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Packing material. 1,809,801; June 9.
Fischer, Georg. (See Bronn, J. I., and Fischer.)
Fischer, Hellmut, Berlin-Friedenau, Germany, assignor by mesne assignments, to Metal & Thermit Corporation, New York, N. Y. Manufacture of metallic beryllium or its alloys. 1,809,442; June 9.
Fitchet, Charles L., Oakland, Calif. Globe support for electric lights. 1,809,379; June 9.
Fitz, Andrew W., Council Bluffs, Iowa. Emergency rim and protector. 1,808,979; June 9.
Fitz Gerald, Alan S., Schenectady, N. Y., assignor to General Electric Company. Frequency responsive apparatus. 1,809,683; June 9.
Fitzgerald Manufacturing Company, The. (See Hettinger, Charles F., assignor.)
Flanders, Paul B., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound recording and reproducing instrument. 1,809,684; June 9.
Flauder, Alfred J., Trumbull, assignor to Weidlich Sterling Spoon Co., Bridgeport, Conn. Spoon or analogous article. Des. 84,329; June 9.
Flaxlinum Insulating Company. (See Wunderlich, Milton S., assignor.)
Flexwood Company, The. (See Elmendorf, Armin, assignor.)
Fluhr, Louis, and A. Verhaar, Brussels, Belgium. Percussive hand tool. 1,808,948; June 9.
Flynn, John C., Mount Vernon, assignor to George W. Helme Company, New York, N. Y. Dipper for snuff or the like. 1,808,949; June 9.
Flynn, John C., Mount Vernon, assignor to George W. Helme Company, New York, N. Y. Dipper for snuff or the like. 1,808,950; June 9.
Forester, Percy M., Berkeley, Calif. Burner tip for torches. 1,809,113; June 9.
Forstner, William, assignor to Forstner Chain Corporation, Irvington, N. J. Flexible metallic strap. 1,808,920, June 9.
Foulder, Henry B., Glenbrook, Conn., assignor of one-half to J. P. Curry, Riverside, Conn. Bottle capping and sealing machine. 1,809,587; June 9.
Fournier, George. (See Lemoine, D., and Fournier, assignors.)
Foval, Lotus, Maplewood, Mo. Anchor for typewriters. 1,809,685; June 9.
Fox, Edgar N., assignor to The Garlock Packing Company, Palmyrn, N. Y. Packing. 1,809,407; June 9.
Fox, Leonard J., Cincinnati, Ohio. Automobile hood. Des. 84,330; June 9.
Fox, Martin, Chicago, Ill., assignor to The Seng Company. Davenport bed. 1,809,812; June 9.
Francis, Daniel R., assignor to The Waterbury Tool Company, Waterbury, Conn. Apparatus for casting copper ingots and other articles. 1,809,623; June 9.
Francis, Earle V., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Trolley conveyer. 1,809,748; June 9.
Francis, Jacob R., Flint, Mich. Carburetor. 1,808,843; June 9.
Fränkl, Mathias, Augsburg, Germany, assignor to P. A. Weydmann, Vienna, Austria. Metallic filling for cold accumulators. 1,808,921; June 9.
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frantz Manufacturing Co. (See Ferris, William D., assignor.)
Frazier, Herbert A., Butler, Pa. Device for applying anti-skin chains. 1,809,443; June 9.
Fredericksen Company. (See Schupp, Arthur A., assignor.)
French Battery Company. (See Cargill, William W., assignor.)
French, George B., Southampton, N. Y. Telephone receiver. 1,809,749; June 9.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric. Des. 84,331; June 9.
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 84,332; June 9.
Frick, Friedrich, Uerdingen, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Purification of wool grease. 1,808,844; June 9.
Fried. Krupp Germaniawerft Aktiengesellschaft. (See Haussmann, Karl, assignor.)
Frigidaire Corporation. (See Summers, Otto M., assignor.)
Froger, Henricus, The Hague, Netherlands. Electrical remote control system. 1,809,686; June 9.
Fromont, Louis, Brussels, Belgium. Roller for window shades and window shade sticks. 1,809,779; June 9.
Fry, Walter L., Scarsdale, assignor, by mesne assignments, to Wil-Fry Corporation, New York, N. Y. Cover for seat side arm. 1,809,292; June 9.
Fuerst, Edwin W., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Jar. Des. 84,333; June 9.
Fulcher, Carlton J., Early, Iowa. Twine container. 1,809,029; June 9.
Gaarz, Wilhelm, Berlin-Charlottenburg, and J. Dalchau, Berlin-Tegel, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Summation meter. 1,809,269; June 9.
Gallistel, Clarence P., assignor to Container Corporation of American, Chicago, Ill. Container. 1,808,922; June 9.
Gamble, David E., Detroit, Mich., assignor to The Borg & Beck Company, Chicago, Ill. Bearing for clutch releases. 1,808,980; June 9.
Gardner-Denver Company. (See Mueller, William G., assignor.)
Gardner-Denver Company. (See Pearson, Gustav C., assignor.)
Garlock Packing Company, The. (See Fox, Edgar N., assignor.)
Garside, Harry. (See Chandler, Charles E., assignor.)

Gavrilloff, Joe, Kent, Ohio. Weed picker. 1,809,687; June 9.
Gay, Samuel, et al. (See Grant, Colin, assignor.)
Gebauer, Charles L., Shaker Heights, assignor to The Ohio Instrument Manufacturing Company, Cleveland, Ohio. Producing metallic articles. 1,809,780; June 9.
Geffert, John A., West Bridgewater, Pa. Combined screw and push electric plug. 1,809,478; June 9.
Geier, P. A., Company, The. (See Lawrence, Charles B., assignor.)
Gellar, Leon W., Hamburg, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Monazo dyes from p-chlorphenylpyrazolones and anilines. 1,809,030; June 9.
General Aniline Works, Inc. (See Hentrich, W. Hardtmann, Hilger, and Knoche, assignors.)
General Aniline Works, Inc. (See Korten, Ernst, assignor.)
General Aniline Works, Inc. (See Mayer, Fritz, assignor.)
General Aniline Works, Inc. (See Mieg, W., and Bauman, assignors.)
General Aniline Works, Inc. (See Spengler, O., and Muller, assignors.)
General Aniline Works, Inc. (See Thiess, K., Meissner, and Zerweck, assignors.)
General Chemical Company. (See Gillett, Lewry, assignor.)
General Electric Company. (See Butler, Henry E., assignor.)
General Electric Company. (See Fitz Gerald, Alan S., assignor.)
General Electric Company. (See Hilliard, John D., assignor.)
General Electric Company. (See Soren, Townsend H., assignor.)
General Electric Company. (See Van Amburg, O. H., and Lieberum, assignors.)
General Electric Company. (See Wagner, P., and Sandelowsky, assignors.)
General Electric Company. (See Wright, Daniel K., assignor.)
General Electric Vapor Lamp Company. (See Buttolph, Leroy J., assignor.)
General Motors Corporation. (See Sanders, Wilbur E., assignor.)
General Motors Corporation. (See Smith, William R., assignor.)
General Motors Corporation. (See Wagner, Robert R., assignor.)
George, Joseph, Wilkes-Barre, Pa. Changeable sign. 1,809,332; June 9.
Germond. Henry S., Bayonne, N. J. Elevating truck. 1,809,551; June 9.
Gesellschaft für Drahtlose Telegraphie m. b. H. (See Meissner, Alexander, assignor.)
Gesellschaft für Drahtlose Telegraphie m. b. H. (See Schapira, Carl, assignor.)
Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches ufer 12/13. (See Tatz, Paul, assignor.)
Giebe, Erich, and A. Scheibe, Charlottenburg near Berlin, Germany, assignor to Radio Corporation of America. Resonator. 1,809,624; June 9.
Gifford, Albert J., and B. S. T. Bishop, Shrewsbury, Mass., assignors to Leland-Gifford Company. Cooling device for motors. 1,808,845; June 9.
Gifford-Wood Company. (See Hallenbeck, Harold E., assignor.)
Gifford-Wood Company. (See Root, Clair M., assignor.)
Gillett, Lowry, Syosset, assignor to General Chemical Company, New York, N. Y. Process and apparatus for catalytic reactions. 1,809,114; June 9.
Gillian, Irving T., Detroit, Mich. Vehicle body construction. 1,809,031; June 9.
Gioiosa, Joseph, Milton, Mass. Fireworks. 1,808,811; June 9.
Girling, Albert H. G., Harlow, England. Braking mechanism. 1,809,479; June 9.
Giusti, Attilio H., Philadelphia, Pa. Ignition indicator. 1,809,750; June 9.
Gladwin, Louis H., and N. G. Bruce, deceased, by E. W. Bruce, administratrix, assignors to The Goodyear Tire & Rubber Company, Akron, Ohio. Method of building conduits. 1,809,802; June 9.
Glardon, Edouard C., Hamburg, Germany. Strap stretching and sealing mechanism. 1,809,480; June 9.
Glascodine, Richard T., London, England. Central buffing and drawgear for railway vehicles. 1,809,198; June 9.
Glasgow, Arthur G., London, England, assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Water gas generator. 1,809,333; June 9.
Glass, Clifton A., Kansas City, Mo. Calculating device. 1,808,981; June 9.
Glass, Perley R., Wayland, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Inking device for marking machines. 1,808,812; June 9.
Gleason, Walter M., Oakland, Calif. Coin-controlled lock. 1,809,334; June 9.
Gleichmann, Hans, Berlin-Siemensstadt, assignor to Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung, Simensstadt, near Berlin, Germany. Steam generator. 1,809,270; June 9.
Globe Brick Company, The. (See Porter, Jacob N., assignor.)
Goddard, Robert H., Worcester, Mass. Apparatus for producing ions. 1,809,115; June 9.
Goddard, Robert H., assignor of one-half to G. Crompton, Worcester, Mass. Propulsion of aircraft. 1,809,271; June 9.
Godfrey, Joseph H., assignor to The Creamery Package Mfg. Company, Chicago, Ill. Milk heater. 1,809,116; June 9.
Goeller, Robert A., Larchmont, N. Y. T-connecter. 1,809,408; June 9.
Going, George G., Glenbrook, Conn., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,809,552; June 9.
Goldberg, Morris, Brooklyn, N. Y. Bed spring guard. 1808846; June 9.
Golden Augustus J., Baltimore, Md. Visible cigar package. 1,809,335; June 9.
Golden, Robert F., South Orange, assignor to National Lock Washer Company, Newark, N. J. Quick release stop for railroad car windows. 1,809,117; June 9.
Goodman, Benson C., Far Rockaway, N. Y. Loom. 1,809,588; June 9.
Goodrich, B. F., Company. (See Wilson, G. F., and Slabaugh, assignors.)
Goodyear Tire & Rubber Company, The. (See Armstrong, Harvey C., assignor.)
Goodyear Tire & Rubber Company, The. (See Clifford, Albert M., assignor.)
Goodyear Tire & Rubber Company. (See Gladwin, L. H., and Bruce, assignors.)
Goodyear Tire & Rubber Company, The. (See Johnson, Ray M., assignor.)
Goodyear Tire & Rubber Company, The. (See Sebrell, Lorin B., assignor.)
Goodyear Tire & Rubber Company, The. (See Teppeman, Jan, assignor.)
Gordon, Charles W., Pleasantville, assignor to The Superheater Company, New York, N. Y. Boiler with superheater. 1,808,951; June 9.
Goss Printing Press Co., The. (See Lang, Hubert, assignor.)
Gotwals, Clayton K. (See Pupp, Max B., assignor.)
Goudey, Enos G., Allston, Mass., D. A. Stevens, Providence, R. I., and L. C. Crafts, Portland, Me. Display sign. 1,809,688; June 9.
Gould Coupler Company, The. (See Davis, Donald C., assignor.)
Gould, Robert D., Detroit, Mich. Stencil. 1,809,199; June 9.
Gould, Roy F. (See Schomaker, G. E., and Gould.)
Graham Brothers. (See Milner, Nugent, assignor.)
Graham, Matthew P. (See Hufferd, G. H., and Graham.)
Graham-Paige Motors Corporation. (See Sanger, H. G., and Kishline, assignors.)
Granberg, Albert J., Berkeley, assignor to Ralph N. Brodie Company, Oakland, Calif. Fluid meter. 1,809,118; June 9.
Granger, Irving J., Waterbury, Conn. Power generating and converting systems. 1,809,409; June 9.
Grant, Colin, assignor of one-third to C. R. Deem, and one-third to S. Gay, Jackson, Mich. Detachable handle. 1,808,890; June 9.
Grasselli Chemical Company, The. (See Corson, Harry P., assignor.)
Graul, Edith P., administratrix. (See Graul, Hermann M.)
Graul, Hermann M., deceased; E. P. Graul, administratrix, Detroit, Mich. Tool holder. 1,809,553; June 9.
Graves, Andrew H., Arkansas City, Kans. Clothespin. 1,809,689; June 9.
Gregory, Harold D., Haddonfield, N. J., assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Dispensing device for stacked articles. 1,809,690; June 9.
Gregory, Harold D., Haddonfield, N. J., assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Dispensing device for stacked articles. 1,809,691; June 9.
Gregson, George C., Belleville, N. J., assignor to American Cable Company. Stranding machine head. 1,809,032; June 9.
Greim, Walther, Berlin, assignor to Siemens-Banunion Gesellschaft mit beschrankter Haftung Kommanditgesellschaft, Berlin-Siemensstadt, Germany. Supporting structure. 1,809,272; June 9.
Greve, Edgar E., Bellevue, assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa. Rotary drilling apparatus. 1,809,444; June 9.
Griffith, George G., et al. (See Hilstad, John R., assignor.)
Griggs, Elmer, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric control circuits. 1,809,625; June 9.
Griggs, Stephen A. (See Higbee, James F., assignor.)
Grimm, George E., assignor to The Willys-Overland Company, Toledo, Ohio. Cowl ventilator. 1,809,589; June 9.
Gritt, Frank, assignor to Gritt, Inc., Indianapolis, Ind. Lamp for producing illuminated motion effects. 1,809,164; June 9.
Gritt, Inc. (See Gritt, Frank, assignor.)
Grondona, Charles A., assignor to Peebles Processes Inc., San Francisco, Calif. Recovery of alkali metal compounds. 1,808,773; June 9.
Gross, Anna L., Philadelphia, Pa. Juice extractor. 1,809,410; June 9.
Gross, Gertrude G., New York, N. Y. Slide box. 1,809,781; June 9.

Growers Service Company. (See Horn, Clarence J., assignor.)
Gruse, William A. (See Livingstone, C. J., and Gruse.)
Guerin, James M. (See Guerin, Joseph A., sr., and J. M.)
Guerin, Joseph A., sr., and J. M., Philadelphia, Pa. Coffee percolator. 1,809,294; June 9.
Guille, Arthur L., Portsmouth, assignor of one-half to H. R. Leonard, Norfolk, Va. Unloading apparatus. 1,809,200; June 9.
Gullet, Albert M., Charlotte, N. C. Interchangeable journal for textile rolls. 1,808,813; June 9.
Guiot, Auguste, Neuilly-sur-Seine, France. Motor fuel pump. 1,809,514; June 9.
Gulf Refining Company. (See Livingstone, C. J., and Gruse, assignors.)
Gulick, Edward J., assignor to C. G. Conn, Ltd., Elkhart, Ind. Clarinet and manufacture thereof. 1,809,380; June 9.
Gulick, Seeley C., Champaign, Ill. Burner supporting means. 1,808,952; June 9.
Gullett Gin Company. (See Wallace, Jeffery J., assignor.)
Gundersen, Carl H. B., Entwistle, Alberta, Canada. Skicaster. 1,809,295; June 9.
Gunn, Earl G., Racine, assignor to The Nash Motors Company, Kenosha, Wis. Brake. 1,809,411; June 9.
Habla, Alois, Rading-Theusing, near Karlsbad, Czechoslovakia. Brick kiln for burning of bricks and similar articles. 1,809,336; June 9.
Hadley, Harlan A., assignor to E. T. Fairbanks and Company, St. Johnsbury, Vt. Scales. 1,809,692; June 9.
Haffke, Charles, Boise, Idaho. Luggage carrier. 1,809,119; June 9.
Hagemann, Louis F., Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada. Billing machine aligner. 1,809,590; June 9.
Habling, Charles, Rochester, N. Y. Bottle vending machine. 1,809,693; June 9.
Halborg, Carl J. assignor to Colonial Tool Company, Detroit, Mich. Breach holder or adapter. 1,809,237; June 9.
Hall, John C., Whiting, Ind. Golf bag. 1,809,120; June 9.
Hall, Hollis B., Newton, Iowa. Automotive vacuum cleaner. 1,809,337; June 9.
Hallenbeck, Harold E., assignor to Gifford-Wood Company, Hudson, N. Y. Hopper gate. 1,808,953; June 9.
Hallenbeck, Harold E., assignor to Gifford-Wood Company, Hudson, N. Y. Guiding means for trolley buckets. 1,808,954; June 9.
Hallenbeck Harold E., assignor to Gifford-Wood Company, Hudson, N. Y. Trolley bucket installation. 1,809,515; June 9.
Hallings, Roy E., New York, N. Y. Scroll cutting machine. 1,809,381; June 9.
Hallings, Roy E., New York, N. Y. Illuminated transparency. 1,809,382; June 9.
Halperin, Herman, and K. W. Miller, Chicago, Ill. Sheath bonding and method. 1,809,591; June 9.
Hamby, Arthur W. (See Lee, A. W., and Hamby.)
Hamilton-Wade Company. (See Howard, Albert L., assignor.)
Hammalian, Jacob M., et al. (See Fanarjian, John, assignor.)
Hammalian, Paul M., et al. (See Fanarjian John, assignor.)
Hamren, Eric O., assignor to Leach Company, Oshkosh, Wis. Pike pole guard. 1,808,891; June 9.
Hamren, Eric O., assignor to Leach Company, Oshkosh, Wis. Pike pole guard. 1,808,892; June 9.
Handley, Arthur H. (See Neale, E. W., and Handley.)
Hansen, Leland H. (See Crossley, A., and Hansen.)
Harding Engineering Company. (See Martin, Giles W. O., assignor.)
Hardtmann, Max. (See Hentrich, W., Hardtmann, Hilger, and Knoche.)
Hardy, James W., Russellville, Ark. Support for cutter bars of mowing machines. 1,809,751; June 9.
Hargreaves, Robert H., assignor of one-third to Duncan Stewart and one-third to A. M. Riesen, San Jose, Calif. Emulsifying apparatus. 1,809,033; June 9.
Harris, Benjamin R. (See Urkov, J., and Harris.)
Harris, Frederick G., Mount Bauple, Queensland, Australia. Tractor drawn disk plow. 1,809,694; June 9.
Harris, Gordon D., assignor to The Industrial Dryer Corporation, Stamford, Conn. Air conditioner. 1,808,982; June 9.
Harrison, Edward S. (See Vieling, F. J., and Jessen, assignors.)
Hart, Edgar E., Lincoln Park, Mich. Window sash and frame. 1,809,121; June 9.
Hart, Harry H., assignor to Hart's Lunch, Inc., Sacramento, Calif. Steak tenderer. 1,809,165; June 9.
Hart, Loren A., Charlevoix, Mich. Automatic air mixing apparatus for internal combustion motors. 1,808,814; June 9.
Hartman, Frederick E., Milwaukee, Wis. Collapsible inclosure for rumble seats. 1,809,034; June 9.
Hart's Lunch, Inc. (See Hart, Harry H., assignor.)
Hatcher, James L., United States Army, Winchester, Va. Belt feed mechanism for machine guns. 1,808,847; June 9.
Hausman, Jack J., Brooklyn, N. Y. Textile fabric. Des. 84,334; June 9.
Haussmann, Karl, Kiel, assignor to Fried, Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Germany. Cam shaft drive for internal combustion engines. 1,809,481; June 9.
Hawkesworth, Alan S., Washington, D. C. Manufacture of nitrocellulose smokeless powder. 1,809,695; June 9.
Hawley, Jesse B., St. Charles, Ill. Sound horn. 1,809,035; June 9.
Hawley, Jesse B., assignor to United Reproducers Patents Corporation, St. Charles, Ill. Electrostatic sound reproducer. 1,809,036; June 9.
Hayden, Arthur C., Brockton, Mass. Panoramic camera attachment. 1,809,338; June 9.
Hayden, Arthur C., Brockton, Mass. Machine for inspecting, splicing, and rewinding motion picture films. 1,809,339; June 9.
Haynes Equipment Corporation. (See Haynes, Jack E., assignor.)
Haynes, Jack E., assignor to Haynes Equipment Corporation, St. Paul, Minn. Tripod. 1,808,848; June 9.
Hazard, Charles S., Flushing, assignor to Neptune Meter Company, New York, N. Y. Meter housing. Des. 84,336; June 9.
Hazard, Charles S., Flushing, assignor to Neptune Meter Company, New York, N. Y. Meter housing. Des. 84,337; June 9.
Hazel-Atlas Glass Company. (See Stenhouse, Thomas, assignor.)
Hazel-Atlas Glass Company. (See Stenhouse, T. and D., assignors.)
Hebeler, Edward S., Buffalo, N. Y. Carrier for spare wheels and tires. 1,808,983; June 9.
Heckert, Leon C., Bristol, assignor to Röhm & Haas Company, Philadelphia, Pa. Insecticide. 1,808,893; June 9.
Heglund, Gust, Constance, Minn. Scoop for potato diggers. 1,809,626; June 9.
Heilwell, Samuel, assignor by direct and mesne assignments, to Jacob Schierer, New York, N. Y. Waterproof bather's case. 1,809,696; June 9.
Heina, William M., Long Island City, N. Y., assignor to Transitone Automobile Radio Corporation, Philadelphia, Pa. Portable radio apparatus. 1,809,296; June 9.
Heinen, Frederick C., R. J. Tobin, and A. Wasberg, assignors to Camel Company, Chicago, Ill. Car door. 1,809,697; June 9.
Heinmiller, Samuel H., New Hampton, Iowa. Toothed drum for quack grass diggers and plows. 1,808,984; June 9.
Heinzelmann, Alphonse A., assignor to Bludalk, Inc., New York, N. Y. Variable speed transmission. 1,809,123; June 9.
Heising, Raymond A., Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric wave translation system. 1,808,894; June 9.
Helme, George W., Company. (See Flynn, John C., assignor.)
Helmling, George A., Pampa, Tex. Pump. 1,808,985; June 9.
Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Fabric cleaning mechanism. 1,809,122; June 9.
Henry, Earl S., Medfort, Okla. Apparatus for automatic water softeners and chemical feeds therefor. 1,809,166; June 9.
Hentrich, Winfrid, M. Hardtmann, Wiesdorf-on-the-Rhine, J. Hilger, Cologne-Mulheim, and R. Knoche, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New polyazo dyestuffs. 1,808,849; June 9.
Herlihy, John J., Glenwood, Pittsburgh, Pa. Radiocabinet. Des. 84,338; June 9.
Hermsen, Edward A., Oakland, Calif. Building structure. Des. 84,339; June 9.
Herring, Doane. (See Pate, Matthew J., assignor.)
Herrold, Russell P., Zanesville, Ohio. Tiling. Des. 84,340; June 9.
Herrold, Russell P., Zanesville, Ohio. Tiling. Des. 84,341; June 9.
Herrold, Russell P., Zanesville, Ohio. Tiling. Des. 84,342; June 9.
Herrold, Russell P., Zanesville, Ohio. Tiling. Des. 84,343; June 9.
Herthel, Eugene C., assignor to Sinclair Refining Company, Chicago, Ill. Operation of pressure stills. 1,809,273; June 9.
Herthel, Eugene C., Flossmoor, Ill., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,809,297; June 9.
Hervey, Paul S., and H. A. Billings, Des Moines, Iowa. Device for inking printing presses. 1,808,815; June 9.
Hessenbruch, Hermann M., Wynnewood, assignor to Philadelphia Lawn Mower Company, Philadelphia, Pa. Lawn mower frame. 1,809,698; June 9.
Hettinger, Charles F., Camden, N. J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Sheet packing. 1,808,774; June 9.
Heuck, Claus and H. Enderlein, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of polymerization product of diolefines. 1,809,445; June 9.
Heyboer, Adrian, Grand Rapids, Mich. Edible product. 1,809,383; June 9.
Heywood, Robert R., jr., Orange, N. J. Display device. 1,809,298; June 9.

Hicks, Irving C., assignor of one-half to H. V. Stevens, Topeka, Kans. Steam boiler. 1,809,446; June 9.
Hicks', William S., Sons. (See Larter, Halsey M., assignor.)
Higbee, James F., assignor of one-half to S. A. Griggs, Detroit, Mich. Dual wheel assembly. 1,809,699; June 9.
Higgins, John H., Amarillo, Tex. Exhaust valve. 1,809,201; June 9.
Hilgenberg, Carl G., Baltimore, Md. Multiple neck gauge for bottles. 1,808,955; June 9.
Hilger, Josef. (See Hentrich, W., Hardtmann, Hilger, and Knoche.)
Hilliard, John D., Schenectady, N. Y., assignor to General Electric Company. Electrical transmission device. 1,809,700; June 9.
Hilstad, John R., assignor of two-thirds to G. G. Griffith and one-third to H. H. Canterbury, Whittier, Calif. Portable power operated hammer. 1,809,340; June 9.
Hines, Gail H., Lansing, Mich. Flexible automatic transmission. 1,809,412; June 9.
Hirshfeld, Clarence F. (See Snow, N. L., and Hirshfeld.)
Hirshstein, Joseph, assignor to The Josam Manufacturing Company, Cleveland, Ohio. Drain. 1,809,413; June 9.
Hirt, Harriet M., executrix. (See Hirt, Jules H.)
Hirt, Jules H., deceased, El Paso, Tex.; H. M. Hirt, executrix, assignor L. J. Hirt, New York, N. Y. Composition for purifying petroleum oils. 1,809,554; June 9.
Hirt, L. J. (See Hirt, Jules H., assignor.)
Hodgkins, Charles H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control device. 1,809,299; June 9.
Hoe, R., & Co. (See Horton, Albert J., assignor.)
Hoe, R., & Co. (See Morris, E. T., and Mills, assignors.)
Hoefling, John W. and P. M., Chico, Calif. Grain cleaning and seed treating apparatus. 1,809,701; June 9.
Hoefling, Philip M. (See Hoefling, John W. and P. M.)
Hoerr, Louis A., assignor to Railway Devices Company, St. Louis, Mo. Angle cock and holder therefor. 1,809,037; June 9.
Hofman, Tenis, Nobleford, Alberta, Canada. Clamp for battery terminal posts. 1,808,775; June 9.
Hoffman, David E., assignor to N. J. Marks and G. Kronidas, Marquette, Mich. Traction shoe. 1,809,782; June 9.
Hogrebe, Frank A., St. Louis, Mo. Apparatus for cooling scalp. 1,809,038; June 9.
Holed-Tite Packing Corporation. (See Mann, Leon, assignor.)
Holtzman, Abraham, New York, N. Y. Display device. 1,808,895; June 9.
Holtzman, John, New York, N. Y. Sewing machine drive. 1,808,776; June 9.
Homewood, Fred A., Roosevelt, Utah. Mining machine. 1,808,850; June 9.
Hookless Fastener Company. (See Sundback, Gideon, assignor.)
Hoover, Charles E., Lancaster, Pa. Electric terminal connecter. 1,809,202; June 9.
Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Platen for photographic printing machines. 1,809,238; June 9.
Horn, Clarence J., assignor to Growers Service Company, Fresno, Calif. Container for packing and shipping fresh fruit. 1,809,702; June 9.
Horton, Albert J., White Plains, assignor to R. Hoe & Co., Inc., New York, N. Y. Printing machine. 1,809,384; June 9.
Horton, Joseph W., Cambridge, Mass., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Synchronizing system. 1,808,923; June 9.
Hotstream Heater Company, The. (See Morrow, Clarence H., assignor.)
Hovland, Henry, Williston Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,809,039; June 9.
Hovland, Henry, Williston Park, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,809,124; June 9.
Hovsepian, Alfred A., Del Rey, Calif. Prime mover. 1,809,203; June 9.
Howard, Albert L., assignor to Hamilton-Wade Company, Brockton, Mass. Beaded welt. 1,809,555; June 9.
Howard, Harold W., assignor to Neon Process, Incorporated, Cleveland, Ohio. Luminous tube. 1,809,447; June 9.
Howard Radio Company. (See Crossley, A., and Hansen, assignors.)
Hoyt, Frederick A., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone set mounting. 1,809,125; June 9.
Huberti, Victor, Berlin, Germany. Re-floating of stranded ships. 1,809,482; June 9.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,344; June 9.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,345; June 9.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,346; June 9.
Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,347; June 9.
Huddle, Edwin F. (See Paradise, L. A., and Huddle.)
Huebner-Bleistein Patents Company. (See Huebner, William C., assignor.)
Huebner, William C., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y. Photographic printing apparatus. 1,809,274; June 9.
Hufferd, Georg H., and M. P. Graham, Detroit, Mich., assignors to Thompson Products, Inc., Cleveland, Ohio. Ball joint connection. 1,809,703; June 9.
Hugentobler, Ernest. (See Wild, S., and Hugentobler.)
Hughes Tool Company. (See Scott, Floyd L., assignor.)
Hume, Horace D., Garfield, Wash. Assembly tool. 1,809,239; June 9.
Hummel & Downing Co. (See Ethridge, Albert S., assignor.)
Hunter, Ralph W., Jacksonville, Fla. Stencil. 1,808,986; June 9.
Huntington, Edward E. (See Baker, A. J., and Huntington.)
Hurt, Frank B., La Grande, Oreg. Stone spreader. 1,809,704; June 9.
Huser, Johann, Polsum, Germany. Grinding machine. 1,809,414; June 9.
Husler, John, Saugus, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Cutting or punching machine. 1,809,040; June 9.
Hutcheson, Ray R., Richmond Hill, N. Y., assignor to Wm. Demuth & Co. Table lighter. Des. 84,335; June 9.
Hutchins Car Roofing Company. (See Thompson, William D., assignor.)
Hynes, Dibrell P. (See Mears, N. A., and Hynes.)
I. G. Farbenindustrie Aktiengesellschaft. (See Brode, J., and Wurster, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Frick, Friedrich, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Heuck, C., and Enderlein, assignors.)
I. T. S. Rubber Company Limited. (See East, Frederick W., assignor.)
Ice Cream Cone Machinery Inc. (See Schroeder, C., and Tatosian, assignors.)
Individual Drinking Cup Company. (See Gregory, Harold D., assignor.)
Industrial Dryer Corporation. (See Harris, Gordon D., assignor.)
Ingersoll-Rand Company. (See Mock, John F., assignor.)
International Combustion Engineering Corporation. (See Wood, Wilfred R., assignor.)
International Insect Destroyer Manufacturing Company. (See Van Kessel, G. C., and Lindgren, assignors.)
Interstate Cotton Oil Refining Company. (See Dorset, William S., assignor.)
Intertype Corporation. (See Sperry, Samuel E., assignor.)
Isenberg, Morris. (See Borland, Deloss, assignor.)
Isles, Frederick W., Bayonne, N. J., assignor to Standard Oil Development Company. Condensing gasoline vapors. 1,809,167; June 9.
Jackson, Corwill, Chicago, Ill. Roadbed working machine. 1,808,896; June 9.
Jacobs, Frances A., assignor to The Sterling Company, Chicago, Ill. Dress. Des. 84,348; June 9.
Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Heat transfer device. 1,809,240; June 9.
Jaeger, Alphons O., Mount Lebanon, and H. J. West, Crafton, assignors to The Selden Company, Pittsburgh, Pa. Production of vacuums. 1,809,627; June 9.
Jaeger, Alphons O., Crafton, assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa. Catalytic oxidation of naphthalene. 1,809,752; June 9.
Jaeger, William H., Trenton, N. J. Developing apparatus. 1,809,705; June 9.
Jamieson, Marcia B., Houston, Tex. Heel cushion for automobiles. 1,809,706; June 9.
Jeffrey Manufacturing Company, The. (See Francis, Earle V., assignor.)
Jencick, Stephen, Chagrin Falls, Ohio. Hydraulic shock absorber. 1,808,924; June 9.
Jenkins, Russell L., J. H. Karrh, and C. R. McCullough, Anniston, Ala., assignors to Swann Research, Inc. Inhibitor. 1,809,041; June 9.
Jennings, Nathan A., Stockton, Calif. Fancy work machine. 1,809,241; June 9.
Jennings, Oliver S., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Circuit breaker. 1,809,275; June 9.
Jensen, Thormod, Brooklyn, N. Y. Automatic container-cap lining machine. 1,809,341; June 9.
Jessen, James. (See Vierling, F. J., and Jessen.)
Johnson, Boyd M., Metuchen, N. J., assignor to The Carborundum Company, Niagara Falls, N. Y. Utilizing the waste gases from furnaces. 1,809,628; June 9.
Johnson, Carl O., Spokane, Wash. Wall inset radiocabinet. Des. 84,349; June 9.
Johnson, Charles G., assignor to Pratt & Whitney Company, Hartford, Conn. Screw thread testing device. 1,808,816; June 9.
Johnson, Elvin H., Winnetka, Ill. Builder's hardware. 1,808,897; June 9.
Johnson, Harry A., Chicago, Ill. Pipe pushing machine. 1,809,342; June 9.
Johnson, Herman W., assignor to Stiles-Herman Manufacturing Company, St. Louis, Mo. Metal-working tool. 1,809,126; June 9.
Johnson, John B. (See Oberdorfer, H. D., and Johnson.)

Johnson, Ray M., assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Machine for manufacturing rubber belts. 1,809,803; June 9.

Johnson, Richard L., Fairfield, assignor to The Bryant Electric Company, Bridgeport, Conn. Multiple lamp socket. 1,809,753; June 9.

Johnson, Wayne R., Southgate, Calif. Coupling and valve. 1,809,127; June 9.

Johnston, W. Wyllie, trustee. (See Ross, Carmen E., assignor.)

Johnston, William, Ashford, assignor to Acetex Safety Glass Limited, London, England. Manufacture of compound sheets of glass and cellulose derivative composition. 1,809,276; June 9

Jolidon, Charles J., Hartford, Conn. Nail trimmer. 1,809,556; June 9.

Jones, George E., jr., and P. S. McCallen, Knoxville, Tenn., assignors to Sanford Investment Company, Wilmington, Del. Mine car. 1,809,707; June 9.

Jones, John G., and H. G. Dewey, assignors to Eastman Kodak Company, Rochester, N. Y. Method and apparatus for making photographic film backing paper with thin edges. 1,809,415; June 9.

Jones, Lester L., Oradell, N. J. Uni-control apparatus. 1,808,777; June 9.

Jones, Lester L., Oradell, N. J. Supporting magnetic structures. 1,808,778; June 9.

Jones, Louis W., New York, N. Y. Stock and die. 1,809,516; June 9.

Jordan, Grover I., Mason City, Iowa. Lamp. Des. 84,350; June 9.

Josam Manufacturing Company, The. (See Hirshstein, Joseph, assignor.)

Junkers, Hugo. (See Becker, Emil, assignor.)

Junkers, Hugo, Dessau, Germany. Tool for upsetting or stretching sheet metal. 1,809,168; June 9.

Kahler, Paul F., and S. S. Wicker, Chicago, Ill. Missile projecting device. 1,809,708; June 9.

Kantor, James, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Sirup valve for bottle fillers. 1,809,813; June 9.

Karrh, John H. (See Jenkins, R. L., Karrh, and McCullough.)

Katrinak, Raymond, Bridgeport, Conn. Pocketbook compact. 1,809,517; June 9.

Kauffmann, Ferdinand E., Rahway, N. J. Machine for surfacing hat bodies. 1,809,709; June 9.

Kaufman, Chris. (See Kaufman, John T. and C.)

Kaufman, John T., Marion, and C. Kaufman, Yankton, S. Dak. Stringed musical instrument. 1,809,710; June 9.

Kellogg, Dwight C., Carthage, Mo. Fluid-operated four wheel braking system for land vehicles. 1,808,987; June 9.

Kelsall, George A., Belleville, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Magnet core. 1,809,042; June 9.

Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)

Kennedy, Homer R., Los Angeles, Calif. Adaptable wheel holder. 1,809,109; June 9.

Kerr, John M., assignor to Bay City Shovels, Inc., Bay City, Mich. Turntable lock. 1,808,898; June 9.

Kestenman Bros Mfg. Co. (See Kestenman, Charles H., assignor.)

Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Flexible strap, band, or linkage. 1,809,277; June 9.

Kestenman, Charles H., assignor to Kestenman Bros. Mfg. Co., Providence, R. I. Clasping device for wrist watch straps, bracelets, and the like. 1,809,278; June 9.

Ketterer, Sigmund G., assignor to Schutte and Koerting Company, Philadelphia, Pa. Apparatus for and method of combining liquids and gases. 1,808,956; June 9.

Kidde, Walter, & Company. (See McLaren, Malcolm W., assignor.)

Kilbourne, Kenneth A., Azusa, Calif., assignor to Owl Fumigating Corporation, New York, N. Y. Fumigating apparatus. 1,809,279; June 9.

Kile, Alfred W., assignor to Durkee-Atwood Company, Minneapolis, Minn. Auxiliary mudguard for automobile fenders. 1,809,711; June 9.

Kimball, Harry G., Bronxville, N. Y., assignor to The Billings & Spencer Company, Hartford, Conn. Board drop hammer. 1,809,300; June 9.

King, George, and R. Threlfall, Birmingham, England. Material for forming coatings, for use as impregnating agents or for like purposes. 1,809,755; June 9.

Kingston, George, assignor to Kinston Products Corporation, Kokomo, Ind. Manifold. 1,809,242; June 9.

Kingston Products Corporation. (See Kingston, George, assignor.)

Kirk, Morris P., Los Angeles, Calif. Illuminated sign. 1,809,243; June 9.

Kishline, Floyd F. (See Sanger, H. G., and Kishline.)

Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)

Knoche, Rudolf. (See Hentrich, W., Hardtmann, Hilger, and Knoche.)

Knoop, William A., Hempstead, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Printing telegraph system. 1,809,043; June 9.

Knowles, Dewey D., Forest Hills Borough, Pa., assignor to Westinghouse Electric & Manufacturing Company. Safety system. 1,809,280; June 9.

Knox, William G., Manhasset, assignor to Western Electric Company, Incorporated, New York, N. Y. Composite conductor. 1,808,925; June 9.

Knuuti, Charles O., Berwyn, Ill. Dovetail measuring device. 1,809,044; June 9.

Koch, John M., Reading, Pa. Automatic repeater for rolling mills. 1,809,128; June 9.

Koehring Company. (See Koehring, Philip A., assignor.)

Koehring, Philip A., assignor to Koehring Company, Milwaukee, Wis. Concrete transporting truck. 1,809,620; June 9.

Kohler Company. (See Brotz, Anton F., assignor.)

Koning, Th de, Brooklyn, N. Y. Meter dial marking. 1,809,784; June 9.

Koning, Theodore de, Brooklyn, N. Y. Instrument calibrating apparatus. 1,809,783; June 9.

Konoff, Alexander. (See Marcus, S., and Konoff.)

Koors, Albert A. (See Koster, P. J., and Koors.)

Kopp Glass, Incorporated. (See Kopp, Nicholas, assignor.)

Kopp, Nicholas, Pittsburgh, assignor to Kopp Glass, Incorporated, Swissvale, Pa. Lighting fixture bowl or similar article. Des. 84,351; June 9.

Koppers Company, The. (See Sell, Gilbert E., assignor.)

Koppers Company, The. (See Sperr, Frederick W., jr., assignor.)

Korten, Ernst Fechenheim, near Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Hydrogenated hydroxy derivative of the diphenyl series and process for making. 1,809,204; June 9.

Koster, Peter J., and A. A. Koors, Pleasant Ridge, Mich. Monorail system. 1,809,448; June 9.

Kowarick, Frederico A. Sao Paolo, Brazil. Valve gear for steam engines. 1,809,712; June 9.

Kraft, Max, Brooklyn, and J. Birnbaum, Bronx, N. Y. Finger ring guard. 1,809,045; June 9.

Kromidas, George, et al. (See Hoffman, David E., assignor.)

Kronheim, Jacob, Cleveland, Ohio. Chair seat and couch bottom. 1,808,926; June 9.

Kruse, Robert, Berlin, assignor to Siems & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, bei Berlin, Germany. Telephone system. 1,809,046; June 9.

Kubatzky, Otto, Tulsa, Okla. Window ventilator. 1,809,518; June 9.

Kühnert, Walter, Vienna, and M. Maurer, Klosterneuburg, Austria. Microphone. 1,809,713; June 9.

Kummerer, Wilhelm, Berlin, assignor to Telefunken Gesellschaft für Drahtlose, Telegraphie m. b. H., Berlin, Germany. Valve transmitter arrangement. 1,809,630; June 9.

Kunst, Wilhelm, Barmen, assignor to H. Esser, Hilden, Germany. Manufacture of seamless tubes. 1,808,957; June 9.

Kuntz, William J., York, Pa. Limekiln. 1,808,851; June 9.

Kyle, William D., Milwaukee, assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis. Expulsion fuse. 1,809,205; June 9.

L. C. L. Corporation, The. (See Woodruff, Graham C., assignor.)

La Chall, Francis X., Los Angeles, Calif. Spring leaf lubricator. 1,809,244; June 9.

Lachman, Arthur, Berkeley, assignor to Richfield Oil Company of California, Los Angeles, Calif. Refining hydrocarbon oils. 1,809,170; June 9.

Lackner Products Corporation. (See Lackner, Rolph J., assignor.)

Lackner, Rolph J., Ozone Park, assignor to Lackner Products Corporation, Brooklyn, N. Y. Combined light globe and traffic signal. 1,809,785; June 9.

Ladd, James B., Ardmore, Pa. Locking cooperating threaded element. 1,809,301; June 9.

Ladd, James B., Ardmore, Pa., assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J. Centrifugal casting machine. 1,809,631; June 9.

La Magneto belge, Societe anonyme. (See Defays, V. J., and Lefebvre, assignors.

Lambert, John A., Spokane, Wash. Railroad spike anchor. 1,809,519; June 9.

La Motte, Ross G. (See Mayer, H. H., and La Motte.)

Lance, Ola, Evanston, assignor of one-fourth to C. F. Schmidt, Uinta County, Wyo, Antiskid device. 1,808,852; June 9.

Lanchester, Frederick W., Moseley, England. Apparatus for the reproduction of music, speech, and the like. 1,809,483; June 9.

Lane, Charles H., and C. H. Reynolds, Houston, Tex. Well screen washer. 1,808,958; June 9.

Lane, Charles H., and C. H. Reynolds, Houston, Tex. Tong. 1,808,959; June 9.

Lane Company, The. (See Crocker, Ernest C., assignor.)

Lang, Hubert, La Grange, assignor to The Goss Printing Press Co., Chicago, Ill. Inking mechanism for printing presses. 1,809,632; June 9.

Lang, Nathan, jr., Charleston, Ill. Barrel rack. 1,808,988; June 9.

Langdon, Jesse D., Los Angeles, Calif. Flush valve. 1,808,989; June 9.

Langdon, Jesse D., Los Angeles, Calif. Automatic coupler valve. 1,808,990; June 9.

Langdon, Jesse D., Los Angeles, Calif. Steering gear for airships. 1,808,991; June 9.

Langdon, Jesse D., Los Angeles, Calif. Combined counter liner and heel cushion. 1,808,992; June 9.

Langdon, Jesse D., Los Angeles, Calif. Automatic coupler valve. 1,809,343; June 9.

Larsen, Gabriel, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y. Fastening clip and attaching the same. 1,808,779; June 9.

Larsen, Olaf, Oak Park, assignor to The Creamery Package Mfg. Company, Chicago, Ill. Hinge for vat covers. 1,809,047; June 9.

Larsen, Olaf, Oak Park, assignor to The Creamery Package Mfg. Company, Chicago, Ill. Sterilizer for milk cans. 1,809,048; June 9.

Larsen, Olaf, Fort Atkinson, Wis., assignor to The Creamery Package Mfg. Company, Chicago, Ill. Mechanism for capping bottles. 1,809,129; June 9.

Larsen, Ole A., Salt Lake City, Utah. Drain plug. 1,809,171; June 9.

Larsh, Everett P., assignor to The Master Electric Company, Dayton, Ohio. Short circuiting device for motor commutators. Re18,093; June 9.

Larter, Halsey M., assignor to William S. Hicks' Sons, Newark, N. J. Combined golf pencil and wrist strap holder. Des. 84,352; June 9.

Larter, Halsey M., assignor to William S. Hicks' Sons, Newark, N. J. Combined golf pencil and holder therefor. Des. 84,353; June 9.

Lavoie, Louis, Quebec, Ontario, Canada. Feeding means for fluid fuels or the like. Re18,094; June 9.

Lawrence, Cecil H., Attleboro, Mass., assignor to Evans Case Company. Pocket lighter. Des. 84,354; June 9.

Lawrence, Charles B., Cleveland Heights, Ohio, assignor to The P. A. Geier Company, Cleveland, Ohio. Floor polishing device. 1,809,302; June 9.

Lawrence, Leslie. (See Aeppler, C. W., and Lawrence.)

Lazich, Branko, Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,809,633; June 9.

Lazich, Branko, Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,809,634; June 9.

Leach Company. (See Hamren, Eric O., assignor.)

Leatherman, Clarence M. (See Miner, E. L., and Leatherman.)

Lebedinsky, Myron, assignor to Société des Téléphones Grammont, Paris, France. Artificial impedance for telephone repeaters. 1,809,484; June 9.

Lederer, Henry, & Bro. Inc. (See Butler, William J., assignor.)

Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Co., Philadelphia, Pa. Pressed metal roadster body. 1,808,899; June 9.

Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Co., Philadelphia, Pa. Vehicle body construction. 1,808,960; June 9.

Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Co., Philadelphia, Pa. Automobile door construction. 1,809,592; June 9.

Lee, Albert W., and A. W. Hamby, Columbia, S. C. Carburetor. 1,809,485; June 9.

Lee, Mildred, Santa Monica, Calif. Toy or similar article. Des. 84,355; June 9.

Lee, Ralph L., assignor to Delco Light Company, Dayton, Ohio. Domestic appliance. 1,808,927; June 9.

Lee Rubber & Tire Corporation. (See Carlin, James C., assignor.)

Lefebvre, Paul J. (See Defays, V. J., and Lefebvre.)

Le Jeune, James N., New Orleans, La. Panel mirror and picture mounting. 1,809,786; June 9.

Leland-Gifford Company. (See Gifford, A. J., and Bishop, assignors.)

Lemoine, David and G. Fournier, Whitinsville, Mass. Bobbin clutch for spindles. 1,809,049; June 9.

Leonard, H. R. (See Guille, Arthur L., assignor.)

Le Sauvage, George R., assignor to Republic Metalware Company, Buffalo, N. Y. Cooking apparatus. 1,809,172; June 9.

Levy, Anderson Co. (See Anderson, Maurice, assignor.)

Liddell, John G., Everett, Mass. Fountain pen. 1,809,416; June 9.

Lieberum, George W. (See Van Amburg, O. H., and Lieberum.)

Lighting Appliance Company. (See Villaret, Gustave E., assignor.)

Lindgren, Maurice E. (See Van Kessel, G. C., and Lindgren.)

Lindsay, William G., Newark, N. J., assignor, by mesne assignments, to Celluloid Corporation. Imitation pearl. 1,809,449; June 9.

Line Material Company. (See Kyle, William D., assignor.)

Link, Johann, Brachback Sieg, Germany. Dirigible headlight. 1,809,173; June 9.

Linn, Holman H., Morris, assignor to The Linn Manufacturing Corporation, Morris, N. Y. Tractor. 1,809,344; June 9.

Linn Manufacturing Corporation, The. (See Linn, Holman H., assignor.)

Lint, Peter H., San Jose, Calif. Fruit gathering machine. 1,808,928; June 9.

Liptak, Michael, St. Paul, Minn. Inspection hole wall structure. 1,809,385; June 9.

Liptak, Michael, St. Paul, Minn. Furnace wall. 1,809,417; June 9.

Liquid Carbonic Corporation, The. (See Kantor, James, assignor.)

Lishon, Lester J., Brookline, Mass. Automobile transporting truck. 1,809,557; June 9.

Little, Arthur D., Brookline, assignor to Arthur D. Little, Incorporated, Cambridge, Mass. Briquetting fuel material. 1,809,245; June 9.

Little, Arthur D., Incorporated. (See Little, Arthur D., assignor.)

Livingstone, Clarence J., Pittsburgh, and W. A. Gruse, Wilkinsburg, assignors to Gulf Refining Company, Pittsburgh, Pa. Lubricating oil and making same. 1,808,853; June 9.

Lloyd, William S. (See Bledsoe, G. W., Lloyd, and Yencer.)

Loeble, Gottlob E., New York, N. Y. Surgical appliance. 1,809,558; June 9.

Logan, Charles W., Kenmore, assignor to Markel Electric Products, Inc., Buffalo, N. Y. Artificial coal unit. 1,808,780; June 9.

Logan, George H., Pittsburgh, Pa. Head for musical instruments. 1,809,050; June 9.

Logan, Judson C. (See Wheeler, W. H., and Logan.)

Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Dress. Des. 84,356; June 9.

Loomis, Nathaniel E., Elizabeth, N. J., assignor to Standard Oil Development Company. Converting hydrocarbons. 1,809,174; June 9.

Loomis, Walter A., Whittier, Calif. Safety oil saver. 1,809,175; June 9.

Loppacker, Albert, Bloomfield, N. J., assignor to Radio Corporation of America, New York, N. Y. Apparatus and process for the manufacture of vacuum tube electrodes. 1,809,206; June 9.

Louden Machinery Company, The. (See Ellen, Vern. G., assignor.)

Luellen, Lawrence W., Mountain Lakes, N. J. Conical drinking cup. 1,809,281; June 9.

Luening, Eugene G., Louisville, Ky., assignor, by mesne assignments, to Air Reduction Company, New York, N. Y. Process and apparatus for storing acetylene. 1,808,900; June 9.

Luhrs, Henry E., assignor to The Beistle Company, Shippensburg, Pa. Folding ornament of expansible tissue. 1,809,593; June 9.

Luhrs, Henry E., Shippensburg, Pa. Mannikin. 1,809,635; June 9.

Luke, Roscoe. (See Clark, Andrew B., assignor.)

Lumsden, William F. (See De Vorse, E. C., and Lumsden.)

Luther, George A., Kansas City, Kans. Rotary engine. 1,809,051; June 9.

Lutman, Frank B., assignor to Columbus Handle & Tool Corporation, Columbus, Ind. Tool handle. 1,808,781; June 9.

Lyhne, Anker S., deceased, The, Bridgeport City Trust Co., executor, assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn. Compact and puff holder for vanity boxes. 1,808,961; June 9.

Lynch, John J., Riverdale, Md. Package tie. 1,809,345; June 9.

Lyon Metal Products, Incorporated. (See O'Connor, J. B., and Adler, assignors.)

MacGregor, Charles M., Chicago, Ill. Selectively controlling ringing circuits of telephones. 1,809,176; June 9.

Mackay, George Jackson, Mich. Machine for routing stair stringers. 1,808,962; June 9.

Mackenzie, Alexander S., assignor to Clayton Gin Compress Company, Houston, Tex. Cotton baling machinery. 1,809,520; June 9.

Mackley, Benjamin, Pittsburgh, Pa. Method of and apparatus for preparing matrices for stereotype plates. 1,809,052; June 9.

Macomber, Lewis H., Kalamazoo, Mich. Apparatus for treating paraffin. 1,809,130; June 9.

Maire, Alfred, St. Imier, and A. Béguelin, Renan, Switzerland. Safety lock. 1,809,486; June 9.

Maison, Edmund R., Mount Clemens, Mich. Propeller. 1,809,131; June 9.

Major Equipment Co. (See Major, Roscoe E., assignor.)

Major, Roscoe E., Chicago, Ill., assignor to Major Equipment Co., Ind. Lamp socket. 1,808,782; June 9.

Malleable Iron Fittings Company. (See Williams, Rolland G., assignor.)

Malone, Joseph E., assignor of forty per cent to D. O'Connell, Worcester, Mass. Carbonating apparatus. 1,808,854; June 9.

Mancini, Ugo, Milan, Italy, assignor to Ruth-Aldo Company, Incorporated, New York, N. Y. Apparatus for spinning artificial threads from solutions of cellulose ethers or esters. 1,809,303; June 9.

Mandeville, John L., Arlington, N. J., assignor to Oxweld Acetylene Company. Acetylene generator. 1,809,521; June 9.

Mann, John C. (See Butler, E. W., and Mann.)

Mann, Leon, Mount Vernon, N. Y., assignor, by mesne assignments, to Holed-Tite Packing Corporation. Packing container for fragile articles. 1,809,559; June 9.

Marcus, Samuel, Brooklyn, and A. Konoff, assignors to Markson Manufacturing Co., Inc., New York, N. Y. Doll eye mounting. 1,809,053; June 9.

Margulis, Peter H., New York, N. Y. Overshoe. 1,809,522; June 9.

Marino, Vincent, Haverhill, Mass. Removable heel lift. 1,808,963; June 9.

Markel Electric Products, Inc. (See Logan, Charles W., assignors.)

Marks, Nicholas J., et al. (See Hoffman, David E., assignor.)

Markson Manufacturing Co. (See Marcus, S., and Konoff, assignor.)

Martin, Giles W. O., Newton Highlands, assignor to Harding Engineering Company, East Boston, Mass. Area measuring by light. 1,809,346; June 9.

Martin, James E., assignor of one-half to A. P. Schroder and one-half to W. L. Anderson, Pico, Calif. Signal window for motor vehicles. 1,809,132; June 9.

Martin, John I., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Tire testing machine. 1,809,347; June 9.

Martin, Kingsley L., Montclair, N. J. Water tube boiler construction. 1,809,133; June 9.

Maschinenfabrik Johannisberg G. m. b. H. (See Albrecht, Karl, assignor.)

Mason, William H., Leesburg, Ohio. Fence fastener tool. 1,809,386; June 9.

Master Electric Company, The. (See Larsh, Everett P., assignor.)

Mathews, Carl R., Claremore, Okla. Heated water hose for filling stations. 1,809,714; June 9.

Matoushek, Frank, Colome, S. Dak. Corn harvester. 1,808,855; June 9.

Matthews, Howard D., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Thermal relay. 1,809,304; June 9.

Matthews, Howard D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Thermostat. 1,809,305; June 9.

Mattison, Carl L., assignor to Mattison Machine Works, Rockford, Ill. Chain feed drive. 1,809,054; June 9.

Mattison Machine Works. (See Mattison, Carl L., assignor.)

Maurer, Andy, Round Mountain, Calif. Reversible plow. 1,809,246; June 9.

Maurer, Max. (See Kuhnert, W., and Maurer.)

Mayer, Fritz, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Condensation product and dyestuffs from thionaphthene-2.3-dicarboxylic acids and process for preparing the same. 1,809,207; June 9.

Mayer, Herbert H., and R. G. La Motte, Helena, Mont. Sulphuric acid fuming and decomposition process for the recovery of zinc. 1,808,929; June 9.

Mazur, Mary. (See Schou, Michel F., assignor.)

Mazzuchelli, Paul A. (See Bossi, J. B., and Mazzuchelli.)

McCallen, Perry S. (See Jones, G. E., jr., and McCallen.)

McCarthy, Charles M., Minneapolis, Minn. Table with dustless structure. 1,809,418; June 9.

McClintock, William, and F. Y. Pearne, assignors to Pacific Clay Products, Los Angeles, Calif. Extrusion machine. 1,808,964; June 9.

McCormick, Francis H., Glen Ellyn, assignor to Edison Electric Appliance Company, Chicago, Ill. Counterbalance for doors. 1,809,715; June 9.

McCullough, Campbell R. (See Jenkins, R. L., Karrh, and McCullough.)

McCune, Joseph W. (See McFarland, Jesse R., assignor.)

McCurrach, James C., Brooklyn, assignor to McCurrach Organization, New York, N. Y. Necktie. 1,809,594; June 9.

McCurrach Organization. (See McCurrach, James C., assignor.)

McDonough, Lawrence E., Chicago, Ill. Plaiting machine. 1,809,716; June 9.

McFarland, Jesse R., assignor of one-half to J. W. McCune, Oak Creek, Colo. Repeating gun for shooting elastic bands. 1,809,208; June 9.

McGerry, James J., Chicago, Ill., and C. H. Whiting, Kalamazoo, Mich., assignors to Rotary Utility Corporation, Chicago, Ill. Rotary automatic control means. 1,808,901; June 9.

McIntosh, Donald H. (See Austin, John F., and McIntosh.)

McKee Glass Company. (See Saller, George D., assignor.)

McKee Glass Company. (See Wood, Arch K., assignor.)

McKee, Philip L., Chicago, Ill. Greenhouse bench. 1,809,055; June 9.

McLaren, Malcolm W., Jackson Heights, assignor, by mesne assignments, to W. Kidde & Company, Inc., New York, N. Y. Nozzle. 1,809,787; June 9.

McLean, Charles E., South Portland, Me. Wrapped coin container. 1,809,523; June 9.

McLimans, John P., Duluth, Minn. Supporting, constructing, and repairing furnace roofs. 1,809,209; June 9.

McLimans, John P., Duluth, Minn. Sectional buckstay. 1,809,210; June 9.

McMaster, Samuel B., Columbia, S. C. Football down signal. 1,809,211; June 9.

McNally, James G. (See Sheppard, S. E. and McNally.)

McNeil, James, Pittsburgh, Pa. Electrically heated scraper. 1,809,718; June 9.

McWade, Stephen, Cobden, Ontario, Canada. Screw driver. 1,809,719; June 9.

McWhorter, Ellis, Algona, Iowa. Tobacco can. 1,809,742; June 9.

Mead Johnson & Company. (See Bills, Charles E., assignor.)

Meaker Company, The. (See Miller, Constantine G., assignor.)

Mears, Norton A., and D. P. Hynes, assignors to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,809,720; June 9.

Mechanical Devices Company. (See Sperry, Frank E., assignor.)

Meissner, Alexander, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Eliminating disturbances in receiving wireless telegraphy and telephony. 1,809,134; June 9.

Meissner, Theodore. (See Thiess, K., Meissner, and Zerweck.)

Melchionna, Frank A., Cincinnati, Ohio. Turn shoe structure. 1,809,247; June 9.

Melkman, Saul E., Montreal, Quebec, Canada, assignor to Thelma Carburator Company, Societe Anonyme, Brussels, Belgium. Carburetor. 1,809,387; June 9.

Mellor, John, Bayhead, N. J. Metallic packing. 1,809,056; June 9.

Merley, Sylvan R., Dover, N. J., assignor to Doherty Research Company, New York, N. Y. Production of alcohol from olefines. 1,809,788; June 9.

Merrick Scale Mfg. Company. (See Messiter, Edwin H., assignor.)

Merrill Company, The. (See Mills, L. D., and Crowe, assignors.)

Messiter, Edwin H., New York, assignor to Merrick Scale Mfg. Company, Passaic, N. J. Weigher. 1,808,930; June 9.

Metal & Thermit Corporation. (See Fischer, Hellmut, assignor.)

Metropolitan Sewing Machine Corporation. (See Weis, John P., assignor.)

Meyer, Felix, Aachen, Germany. Hypodermic syringe for injecting liquids into the body or for taking them therefrom. 1,809,487; June 9.

Meyer, Geo. J., Manufacturing Co. (See Meyer, George J., assignor.)

Meyer, George J., assignor to Geo. J. Meyer Manufacturing Co., Milwaukee, Wis. Milk treating apparatus. 1,809,135; June 9.

Meyer, George U., Elverview, R. I., assignor to Providence Stock Company. Bracelet chain. Des. 84,357; June 9.

Meyer, Walter E., Kansas City, Kans. Combination paste table and case. 1,809,142; June 9.

Michigan Wire Goods Company. (See Smith, Benjamin H., assignor.)

Mieg, Walter, Opladen, and F. Baumann, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New amino-1.1'-anthrimidcarbazols. 1,809,212; June 9.

Mikulka, Aladar. (See Nachtigall, Richard J., assignor.)

Miller, Charles F., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Stoker. 1,809,595; June 9.

Miller, Constantine G., Chicago, Ill., assignor to The Meaker Company. Plating machine automatic work shift. 1,809,136; June 9.

Miller, Constantine G., Chicago, Ill., assignor to The Meaker Company. Automatic conveyer and transfer mechanism. 1,809,137; June 9.

Miller, Constantine G., Chicago, Ill., assignor to The Meaker Co. Automatic chromium plating machine. 1,809,138; June 9.

Miller, Constantine G., Chicago, Ill., assignor to The Meaker Company. Automatic work shift for plating machines. 1,809,139; June 9.

Miller, Fred W., Chicago, Ill. Valve grinder. 1,808,856; June 9.

Miller, George, Chicago, Ill. Wing structure for aircraft and the like. 1,809,721; June 9.

Miller, Herman, Zeeland, Mich. Combined clock case and shelving. Des. 84,358; June 9.

Miller, Isaac. (See Becker, E., and Miller.)

Miller, James S., Pittsburgh, Pa., assignor to Dravo Contracting Company. Dam. 1,809,636; June 9.

Miller, John M., New Brunswick, N. J., assignor to C. Shepard, Rochester, N. Y. Hull. 1,809,306; June 9.

Miller, Kenneth W. (See Halperin, H., and Miller.)

Miller, Max C., Cumberland, R. I. Knitting machine. 1,809,057; June 9.

Mills, Louis D., and T. B. Crowe, Palo Alto, assignors to The Merrill Company, San Francisco, Calif. Cyanide recovery process. 1,809,248; June 9.

Mills, Thomas J. (See Morris, E. T., and Mills.)

Milner, Nugent, assignor to Graham Brothers, Evansville, Ind. Truck body. 1,809,348; June 9.

Milnor, Joseph W., Maplewood, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Artificial line network. 1,809,560; June 9.

Miner, Charles L., Detroit, Mich. Washing machine. 1,809,177; June 9.

Miner, Ernest L., and C. M. Leatherman, assignors to Coldwater Instrument Works, Coldwater, Mich. Topographic mechanism. 1,809,058; June 9.

Minneapolis-Moline Power Implement Co. (See Orelind, John R., assignor.)

Mishawaka Rubber and Woolen Manufacturing Company. (See Blair, George W., assignor.)

Mitchell, Charles G., Montreal, Quebec, Canada. Storage building. 1,809,140; June 9.

Moarles, Julio, Brooklyn, N. Y. Electric lamp. 1,809,790; June 9.

Mobley, Ora L., Cincinnati, Ohio. Vending machine. 1,808,965; June 9.

Mock, John F., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Handle for rock drills. 1,809,141; June 9.

Mohawk Asphalt Heater Company. (See Van Vorst, John, assignor.)

Monroe, Fred R., H. K. Dolson, and B. T. Tuttle, Middletown, N. Y. Static eliminator. 1,809,789; June 9.

Monsees, Carl H., Salisbury, Md. Copy attachment for typewriters. 1,808,857; June 9.

M Ö Och Domsjö Aktiebolag. (See Waenerlund, Torston E., assignor.)

Moore Brothers Company. (See Dibble, Claude M., assignor.)

Moore, Donald L., St. Anthony, Newfoundland. Support for ear phones. 1,809,349; June 9.

Moore, John M., New York, N. Y. Day and night license plate for motor vehicles. 1,809,524; June 9.

Moore, Robert H., New York, N. Y. Bookmark. 1,808,931; June 9.

Moran, William C., Laurel Springs, N. J., assignor to Riehle Bros. Testing Machine Company, Philadelphia, Pa. Indicator mechanism. 1,809,525; June 9.

Morgan, Edmund C., deceased, New York, N. Y.; O. E. Morgan, executrix of the estate. Mining and loading machine. 1,809,282; June 9.

Morgan, Edmund C., deceased, New York, N. Y., by O. E. Morgan, New York, N. Y., executrix. Controlling fluid pressure breaking mechanism for mining machines. 1,809,283; June 9.

Morgan, Edmund C.; O. E. Morgan, executrix, New York, N. Y. Fluid pressure breaking mechanism for mining machines. 1,809,307; June 9.

Morgan, John C., Los Angeles, Calif. Hatband protective means. 1,808,966; June 9.

Morgan John D., Maplewood, N. J., assignor to Doherty Research Company, New York, N. Y. Refractory. 1,809,249; June 9.

Morgan, Olive E., executrix. (See Morgan, Edmund C.)

Morgan, Purley V., Buffalo, assignor, by mesne assignments to Pneumatic Appliances, Inc., Kenmore, N. Y. Tire changer. 1,809,388; June 9.

Morgenstern, Ronald V., Metuchen, and P. E. Teter, Plainfield, N. J., assignors to The Western Union Telegraph Company, New York, N. Y. Superposed telegraph system. 1,809,722; June 9.

Morris, Edward T., and T. J. Mills, London, England, assignors, by mesne assignments, to R. Hoe and Co., Inc., New York, N. Y. Printing machine kicker mechanism. 1,809,389; June 9.

Morrow Clarence H., assignor to The Hotstream Heater Company, Cleveland, Ohio. Adjustable collar. 1,809,059; June 9.

Morrow, Clarence H., assignor to The Hotstream Heater Company, Cleveland, Ohio. Hot water heater. 1,809,143; June 9.

Morrow, Harvey E., New London, Iowa. Window shade trimmer. 1,808,859; June 9.

Moulton, Alfred B., Riverhead, N. Y., assignor to Radio Corporation of America. Indicating device. 1,809,637; June 9.

Moulton, Harold R. (See Tillyer, E. D., and Moulton.)

Moyer, Charles L., assignor to Quality Hardware and Machinery Corporation, Chicago, Ill. Gripper mechanism. 1,808,783; June 9.

Mueller, Emil C., Elizabeth, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone plug 1,808,902; June 9.

Mueller, William G., assignor to Gardner-Denver Company, Denver, Colo. Chuck structure. 1,809,308; June 9.

Muller, Edward, North Bergen, N. J. Valve. 1,809,419; June 9.

Müller, Elisabeth, Brooklyn, N. Y. Foldable garment hanger. 1,809,561; June 9.

Müller, Werner. (See Spengler, O., and Müller.)

Murphy, Walter P., assignor to Union Metal Products Company, Chicago, Ill. Cast metal hopper door for railway cars. 1,809,638; June 9.

Murray, Norris F., Hinsdale, Ill. Patty forming device. 1,808,993; June 9.

Myers Walter, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine work-support. 1,809,390; June 9.

Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines volgens van Berkel's Patent en van andere Werktuigen. (See Van Berkel, C. F. M., and Van Duyn, assignors.)

Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines volgens van Berkel's Patent en van andere Werktuigen. (See Van Duyn, Adriaans, assignor.)

Nachtigall, Richard J., assignor of two-fifths to A. Mikulka, Philadelphia, Pa. Fireplace cabinet. Des. 84,359; June 9.

Nachtigall, Richard J., assignor of two-fifths to A. Mikulka, Philadelphia, Pa. Fireplace cabinet. Des. 84,360; June 9.

Nachtigall, Richard J., assignor of two-fifths to A. Mikulka, Philadelphia, Pa. Fireplace cabinet. Des. 84,361; June 9.

Naddaff, Naseeb A., Boston, Mass. Indicator. 1,809,723; June 9.

Nagel, George E., Columbus, Ohio. Armored reenforced concrete slab. 1,809,756; June 9.

Nagel, George E., Columbus, Ohio. Concrete fence post. 1,809,757; June 9.

Namur, Joseph, Kenosha, Wis., assignor to Specialty Brass Company. Sanitary centrifugal milk pump. 1,809,526; June 9.

Nash Motors Company, The. (See Gunn, Earl G., assignor.)

Nason, Willis R., St. Paul, Minn. Combination canteen and mess kit. 1,809,596; June 9.

National Aniline & Chemical Co. (See Geller, Leon W., assignor.)

National Carbon Company. (See Chaney, Newcomb K. assignor.)

National Lock Washer Company. (See Golden, Robert F., assignor.)

National Rail Joint Corporation. (See Wilbur, Lawrence S., assignor.)

Neale, Edgar W., and A. H. Handley, Birmingham, England. Double spindle molding machine. 1,809,488; June 9.

Nelson, Andrew W., and W. Topping assignors to Columbian Enameling & Stamping Company, Terre Haute, Ind. Handle attachment for cooking utensils. 1,809,060; June 9.

Nelson, Axel H., Turlock, Calif. Concrete stave making machine. 1,808,860; June 9.

Nelson, Bert W. (See Beutke, P. E., and Nelson.)

Nelson, John, Boston, Mass. Sign hook. 1,809,562; June 9.

Nelson, Sven, Hornepayne, Ontario, Canada. Animal trap. 1,808,903; June 9.

Nemetz, Gustav, assignor to the firm Alex. Friedmann, Vienna, Austria. Pump for spinning liquid such as viscose. 1,809,489; June 9.

Neon Process, Incorporated. (See Howard, Harold W., assignor.)

Neptune Meter Company. (See Hazard, Charles S., assignor.)

Nerney, George E., assignor to Bay State Optical Company, Attleboro, Mass. Ophthalmic mounting. Des. 84,362; June 9.

Nerney, George E., assignor to Bay State Optical Company, Attleboro, Mass. Ophthalmic mounting. Des. 84,363; June 9.

Nesměrák, Josef. (See Pokorný, E., and Nesměrák.)

Newkirk, Harland D., Syracuse, N. Y., assignor to Onondaga Steel Company, Inc. Rotary furnace. 1,809,563; June 9.

New York Air Brake Company, The. (See Campbell, Charles A., assignor.)

Niagara Blower Company. (See Bulkeley, Claude A., assignor.)

Nichols, Roscoe W., assignor to Oil Products Appliance Co., Maywood, Ill. Flow indicator for oil display pumps. 1,809,350; June 9.

Nicholson, Alexander M., New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Double recntrant cone loud speaker. 1,809,597; June 9.

Noetzli, Fred A., Los Angeles, Calif. Dam and constructing the same. 1,808,904; June 9.

Noonan, James A., Lowell, assignor to C. G. Sargent's Sons Corporation, Graniteville, Mass. Apparatus for covering rolls with toothed wire. 1,809,144; June 9.

Norberg Manufacturing Company. (See Bennett, George W., assignor.)

Norcross, Thomas. (See Willshaw, H., Norcross, and Broadbent.)

North East Appliance Corporation. (See Tappan, De Witt, assignor.)

Nycz, Louis, Binghamton, N. Y. Nonsinkable aeroplane body. 1,809,061; June 9.

Nylén, Karl R. A., Solleftea, Sweden. Chain for timber in combination with a tightening device and key. 1,809,420; June 9.

Oberdorfer, Henry D., Newcastle, Ind., and J. B. Johnson, Louisville, Ky. Steel bleacher. 1,809,598; June 9.

Ocasek, Edward, assignor to The Undertakers Supply Co., Chicago, Ill. Closure for fluid or aspirating bottles and the like. 1,808,784; June 9.

O'Connell, Daniel. (See Malone, Joseph E., assignor.)

O'Connor, John B., and J. B. Adler, assignors to Lyon Metal Products, Incorporated, Aurora, Ill. Folding table. 1,809,564; June 9.

Oesman, Rudolph A., Brooklyn, N. Y. Cloth handling machine. 1,809,213; June 9.

Ohio Drilling Company, The. (See Bowman, Kiel B., assignor.)

Ohio Instrument Manufacturing Company, The. (See Gebauer, Charles L., assignor.)

Ohio Match Company, The. (See Parker, Lucian E., assignor.)

Oil Products Appliance Co. (See Nichols, Roscoe W., assignor.)

Oil Well Supply Company. (See Greve, Edgar E., assignor.)

Olander, Robert O., Calumet, Mich. Fluid operated tool. 1,809,309; June 9.

Oldham, Edward L., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Rock drill. 1,808,817; June 9.

Oliver, Guy C., Whittier, assignor of one-half to R. R. Crum, Los Neitos, Calif. Drilling bit. 1,809,351; June 9.

O'Meara, Thomas J. (See Shaw, N. C., and O'Meara.)

Onondaga Steel Company. (See Newkirk, Harland D., assignor.)

Opheim, Torgils S., Long Beach, Calif. Locking sheave. 1,809,179; June 9.

Orelind, John R., assignor to Minneapolis-Moline Power Implement Co., Moline, Ill. Cultivator. 1,808,932; June 9.

Oscillating Motors Company. (See Wolff, Louis J., assignor.)

Osnos, Mendel, Berlin, Germany. Method and apparatus for measuring the active components of electric quantities. 1,809,062; June 9.

Ostrak, Joseph, St. Louis, Mo. Electrical heat producing element. 1,809,365; June 9.

Ostromislensky, Iwan, assignor to The Pyridium Corporation, New York, N. Y. Obtaining phenyl-azo-alpha-alpha-diamino-pyridine hydrochlorides. 1,809,332; June 9.

Oswego Falls Corporation. (See Wright, Wilbur L., assignor.)

Oswego Falls Corporation. (See Wright, W. L., and Bond, assignors.)

Ott, John E., assignor to Acme Steel Company, Chicago, Ill. Gripping dog. 1,809,566; June 9.

Ottevaere, Constant, Spokane, Wash. Fluid current motor. 1,809,180; June 9.

Otto, Carl, Hellerup Denmark, and C. W. Andrews, Duluth, Minn. Apparatus and process for producing coke and water gas in vertical chamber ovens. 1,809,421; June 9.

Owens Development Corporation. (See Owens, Freeman H., assignor.)

Owens, Freeman H., New York, N. Y. Talking cartoon motion picture. 1,809,599; June 9.

Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Reproducing photographic sound records. 1,809,310; June 9.

Owens Illinois Glass Company. (See Brownlee, W. K., and Owens, assignors.)

Owens-Illinois Glass Company. (See Fuerst, Edwin W., assignor.)

Owens, Michael J. (See Brownlee, W. K., and Owens.)

Owl Fumigating Corporation. (See Kilbourne, Kenneth A. assignor.)

Oxweld Acetylene Company. (See Mandeville, John L., assignor.)

Pacific Clay Products. (See McClintock, W., and Pearne, assignors.)

Pagaard, Ernest, Ross, Iowa. Wheel cleaner for tractors. 1,808,861; June 9.

Page, Robert R., New York, N. Y. Mute for stringed musical instrument. 1,809,311; June 9.

Pahlow, Fritz, Chicago, Ill. Vegetable cutter. 1,808,933; June 9.

Palmer, Henry W. S., Gerrards Cross, England. Packing sealed container containing milk or other substances. 1,809,600; June 9.

Panzireff, Nicolas K., Moscow, Union of Socialist Soviet Republics. Chain. 1,809,145; June 9.

Paradise, Louis A., and E. F. Huddle, assignors to Deere & Company, Moline, Ill. Thrashing machine. 1,808,785; June 9.

Paramount Publix Corporation. (See Barkelew, James T., assignor.)

Parients de la Cruz, Agustin, Madrid, Spain. Carburetor. 1,809,677; June 9.

Parker, Arthur H. (See Sebell, Harry, assignor.)

Parker, Lucian E. assignor to The Ohio Match Company, Wadsworth, Ohio. Transfer mechanism for book match machines. 1,809,353; June 9.

Parker, William S., assignor to Burson Knitting Company Rockford, Ill. Pattern mechanism for straight knitting machines. 1,809,063; June 9.

Parkes, William N., Brooklyn, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine loop-taker mechanism. 1,809,391; June 9.

Pasinski, Walter J., assignor to Burroughs Adding Machine Company, Detroit, Mich. Calculating machine. 1,808,934; June 9.

Pasman, Abram N., assignor to Scovill Manufacturing Company, Waterbury, Conn. Transfer valve. 1,809,567; June 9.

Passauer Dee R., Lucinda, Pa. Valve. 1,809,724; June 9.

Passek, Friedrich, Hamburg, Germany. Manufacturing solutions of cholestering. 1,809,422; June 9.

Pate, Matthew J., assignor of one-half to Doane Herring, Wilson, N. C. Switch. 1,809,527; June 9.

Patent Novelty Company. (See Reimer, William H., assignor.)

Patten, Lindey H., Rugby, N. Dak. Auto heater. 1,809,528; June 9.

Payne, Frank, Chicago, Ill., assignor to Western Brick Company, Danville, Ill. Building material. 1,808,905; June 9.

Pearne, Frank Y. (See McClintock, W., and Pearne.)

Pearson, Gustav C., assignor to Gardner-Denver Company, Denver, Colo. Slip rotation for rock drills. 1,809,284; June 9.

Pearson, John T., assignor to Crouse-Hinds Company, Syracuse, N. Y. Threadless connecter. 1,809,064; June 9.

Peck, Arthur E., Los Angeles, Calif. Tooth band holder and clamp. 1,809,423; June 9.

Peebles Processes Inc. (See Grondona, Charles A., assignor.)

Pendleton, Charles L., Wewoka, Okla. Tank flange. 1,809,250; June 9.

Pereboom, Andrew C., Los Angeles, Calif. Propeller for driving and stabilizing aircraft. 1,809,424; June 9.

Perrot, Henri, Paris, France, and G. Calvignac, Mannheim, Germany, assignors, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Brake. 1,809,568; June 9.

Persons, Lawrence M., assignor to Cook Electric Company, Chicago, Ill. Flexible packing. 1,808,786; June 9.

Peters, Henry, Clifton, N. J. Stocking. Des. 84,364; June 9.

Peters, Henry, Clifton, N. J. Stocking. Des. 84,365; June 9.

Peters, Henry, Clifton, N. J. Stocking. Des. 84,366; June 9.

Peters, Henry, Clifton, N. J. Stocking. Des. 84,367; June 9.

Peters, Henry, Clifton, N. J. Stocking. Des. 84,368; June 9.

Peters, John F., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electrostatic transformer. 1,809,285; June 9.

Peters, Oscar M., Waynesboro, Pa. Nonskid attachment for vehicle wheels. 1,809,354; June 9.

Peterson, Harry W., Detroit, Mich. Unloading device. 1,808,862; June 9.

Pettibone, Walter G., Wilmington, Calif. Filtering and cooling the smoke of tobacco pipes. 1,809,529; June 9.

Pfeiffer, Paul, Bonn-on-the-Rhine, Germany. Additive compound of diethyl barbituric acid and 4-dimethyl-amino-2.3-dimethyl-1-phenyl-5-pyrazolon. 1,808,994; June 9.

Pfilmlin, Jules, Mulhouse, France. Drawing device for spinning frames and for preparing machinery. 1,809,251; June 9.

Pfilmlin, Jules, Mulhouse, France. Drawing device for spinning frames and for preparing machinery. 1,809,252; June 9.

Phelan, Lawrence T., Philadelphia, Pa. Volume control. 1,809,530; June 9.

Philadelphia Lawn Mower Company. (See Coldwell, Harry T., assignor.)

Philadelphia Lawn Mower Company. (See Hessenbruch, Hermann M., assignor.)

Photostat Corporation. (See Caps, Arthur W., assignor.)

Pieper, Ernest J. (See Smith, D. F., Pieper, and Vogt.)

Pierce, William T., Birtle, Manitoba, Canada. Grain separating machine. 1,808,863; June 9.

Pine, William B., Okmulgee, Okla., J. B. Shaw, State College, and M. C. Shaw, Pittsburgh, Pa., assignors of twenty per cent to said J. B. Shaw, twenty per cent to said M. C. Shaw, and sixty per cent to said Pine. Vitrified argillaceous product. 1,809,214; June 9.

Pine, William B., Okmulgee, Okla., J. B. Shaw, and M. C. Shaw, State College, Pa., assignors of twenty per cent to said J. B. Shaw, twenty per cent to said M. C. Shaw, and sixty per cent to said Pine. Making vitrified argillaceous products. 1,809,215; June 9.

Pingle, Jerry C. (See Clark, P., and Pingle.)

Pinheiro, John B., Oakland, Calif. Collapsible wheeled support for suitcases or like receptacles. 1,808,864; June 9.

Piper, Walter F. (See Beardsley, E. O., and Piper.)

Planert, Emil J. P., Union City, N. J. Humidifier. 1,808,935; June 9.

Plass, Robert H., Montclair, assignor to The Chapal Donner Corporation, Newark, N. J. Pelt dehairing machine. 1,808,787; June 9.

Platt, Arthur L., Fairfield, assignor to The Bridgeport Hardware Manufacturing Corporation, Bridgeport, Conn. Wrench kit holder. 1,809,450; June 9.

Plumley, Stuart, assignor to Smith Welding Equipment Corporation. Minneapolis, Minn. Cutting torch. 1,808,967; June 9.

Plumley, Stuart, assignor to Smith Welding Equipment Corporation. Minneapolis, Minn. Cutting torch. 1,808,968; June 9.

Plympton, Frederic K., Southport, assignor to N. D. Plympton, Fairfield, Conn. Closure for milk bottles and other containers. 1,809,791; June 9.

Plympton, Naomi D. (See Plympton, Frederic K., assignor.)

Pneumatic Appliances, Inc. (See Morgan, Purley V., assignor.)

Poe, Thomas O., Massillon, Ohio. Making and setting tubular well screens. 1,809,569; June 9.

Pogue, Charles N., assignor to A. J. Andrews, trustee, Winnipeg, Manitoba, Canada. Carburetor. 1,809,531; June 9.

Pokorný, Ermín, and J. Nesměrák, Prague, Czechoslovakia. Device for cutting vegetables. 1,809,792; June 9.

Ponten, Jean S., Piedmont, and O. W. Ponten, Berkeley, Calif. Portable stadium seat. 1,809,392; June 9.

Ponten, Olaf W. (See Ponten, Jean S. and O. W.)

Pope, Joseph H., Hamilton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoemaking. 1,809,065; June 9.

Porter, Jacob N., Kenilworth, W. Va., assignor to The Globe Brick Company, East Liverpool, Ohio. Brick machine. 1,809,601; June 9.

Porter, John L., Columbus, Ohio. Meter seal. 1,808,969; June 9.

Porter, John L., Columbus, Ohio. Meter seal. 1,808,970; June 9.

Postum Company. (See Borg, Henry L., assignor.)

Powell, Frank D., assignor to Acme Card System Company, Chicago, Ill. Visible index or record system. 1,809,066; June 9.

Powell, James A., Richmond, Va., assignor to The American Tobacco Company, New York, N. Y. Telescopically collapsible box. 1,809,355; June 9.

Powers, Frank T., Douglaston, N. Y. Etching machine. 1,808,906; June 9.

Pratt & Whitney Company. (See Johnson, Charles G., assignor.)

Proos, Neal, Grand Rapids, Mich. Dough forming apparatus. 1,808,788; June 9.

Providence Stock Company. (See Meyer, George U., assignor.)

Pupp, Max B., assignor of one-half to C. K. Getwals, Souderton, Pa. Aircraft. 1,809,253; June 9.

Pyridium Corporation, The. (See Ostromislensky, Iwan, assignor.)

Quality Hardware and Machinery Corporation. (See Moyer, Charles L., assignor.)

Quandt, Felix H., Rolling Prairie, Wis. Adjustable window box bracket. 1,809,216; June 9.

Quill, Joseph M., Lowell, assignor to Universal Winding Company, Boston, Mass. Bunch-builder for winding machines. 1,809,217; June 9.

Quinn, Joseph F., Burlingame, assignor to G. W. Caswell Co., San Francisco, Calif. Hand opening can. 1,809,451; June 9.

R C A Victor Company. (See Rancorn, J. A., and Worthington, assignors.)

Radio Corporation of America. (See Glebe, E., and Scheibe, assignors.)

Radio Corporation of America. (See Loppacker, Albert, assignor.)

Radio Corporation of America. (See Moulton, Alfred B., assignor.)

Radio Corporation of America. (See Round, Henry J., assignor.)

Radio Corporation of America. (See Van Dyck, Arthur F., assignor.)

Radio Corporation of America. (See Wright, George M., assignor.)

Radio Master Corporation of America. (See Rypkema, William, assignor.)

Raffinerie Tirlemontoise Société Anonyme. (See Bergé, Julien, assignor.)

Railway Devices Company. (See Hoerr, Louis A., assignor.)

Ramsden, Louis A., Manchester, England. Electrical illuminating apparatus. 1,809,181; June 9.

Rancorn, John A., Camden, N. J., and E. Worthington, Chicago, Ill., assignors to R C A Victor Company. Radiocabinet. Des. 84,369; June 9.

Rancorn, John A., Camden, N. J., and E. Worthington, Chicago, Ill., assignors to R C A Victor Company. Radiocabinet. Des. 84,370; June 9.

Rantine, Daniel W., Brooklyn, N. Y. Sound repeater for sound reproducing machines. 1,808,789; June 9.

Raster, Walther, Chicago, Ill. Knockdown sectional rack. 1,809,602; June 9.

Reed, Arthur J., Philadelphia, Pa. Spring support for motors. 1,809,603; June 9.

Reese Engineering Company. (See Reese, Jesse C., assignor.)

Reese, Jesse C., Montchello, Calif., assignor to Reese Engineering Company, Ltd. Bit having tangential blades. 1,809,182; June 9.

Reeve, Howard T., Millburn, N. J., assignor to Western Electric Company, New York, N. Y. Making cathodes. 1,809,067; June 9.

Reimer, William H., assignor to Patent Novelty Company, Fulton, Ill. Magazine mail box. Des. 84,371; June 9.

Reisman, Emil, Brooklyn, assignor to Technidyne Corporation, New York, N. Y. Variable resistance. 1,808,790; June 9.

Remington Rand Inc. (See Wolf, William R., assignor.)

Remington Typewriter Company. (See Going, Georg G., assignor.)

Republic Metalware Company. (See Le Sauvage, George R., assignor.)

Reserve Holding Company. (See Schomaker, G. E., and Gould, assignors.)

Reserve Holding Company. (See Voss, J. H. and Willis, assignors.)

Reynolds, Charles H. (See Lane, C. H., and Reynolds.)

Richardson Ball Bearing Skate Company. (See Whitcomb, Henry F., jr., assignor.)

Richfield Oil Company of California. (See Lachman, Arthur, assignor.)

Richter, George A., assignor to Brown Company, Berlin, N. H. Pulp of high whiteness and strength and producing same. 1,809,286; June 9.

Richter, George A., assignor to Brown Company, Berlin, N. H. White wood pulp for high grade paper manufacture. 1,809,287; June 9.

Richter, George A. and M. O. Schur, assignors to Brown Company, Berlin, N. H. Producing wood pulp of high alpha cellulose content. 1,809,312; June 9.

Riddell, Craig C., Newton, Ontario, Canada. Cigarette grasper. 1,809,218; June 9.

Rider, Granville S., Flushing, assignor to N. Schoenthal, New York, N. Y. Latch operating means for directory boards, etc. 1,809,804; June 9.

Riegel, Samuel S., Scranton, Pa. Lateral motion device for locomotives. 1,808,818; June 9.

Riehle Bros. Testing Machine Company. (See Moran, William C., assignor.)

Riesen, A. M. et al. (See Hargreaves, Robert H., assignor.)

Rigby, Grant W., Pittsburgh, Pa. Vehicle brake. 1,808,819; June 9.

Rippe, Emil W., Ohiowa, Nebr. Wire roller. 1,809,490; June 9.

Ritscher, Arthur, Dresden-Laubegast, assignor to United Cigarette Machine Company, Aktiengesellschaft, Dresden, Germany. Apparatus for use with packing machines for feeding and adjusting cigarettes. 1,809,219; June 9.

Roberts, Edward, Atchison, Kans. Curtain and shade hanger. 1,808,971; June 9.

Roberts-Gordon Appliance Corporation. (See Roberts, Millard J., assignor.)

Roberts, Millard J., Tonawanda, assignor, by mesne assignments, to Roberts-Gordon Appliance Corporation, Buffalo, N. Y. Mixing device for gas burners and the like. 1,809,425; June 9.

Robinson Brothers Limited et al. (See Butler, E. W., and Mann, assignors.)

Robinson, Clarence L., West New Brighton, N. Y., assignor to Standard Oil Development Company. Hydrocarbon oil of good nonsmoking rating. 1,809,183; June 9.

Roche, Lawrence J., Harmony, Minn. Rotary valve. 1,808,936; June 9.

Rockwell-Barnes Company. (See Buckland, Earl M., assignor.)

Rockwell, Byrd C., Camden, Ark. Inlay floor construction. 1,809,393; June 9.

Rodriguez, German Y. R., Manzanillo, Cuba. Loading apparatus. 1,808,995; June 9.

Roe, Joseph H., Market Harborough, England. Brush for cleaning pipes and tubes. 1,809,725; June 9.

Röhm & Haas Company. (See Heckert, Leon C., assignor.)

Rolker, Edwin, assignor to Safeasy Fixture Company, Baltimore, Md. Cord attachment for plugs and sockets. 1,809,532; June 9.

Romane, Georges, St.-Mande, France. Artificial fur. 1,809,356; June 9.

Ronstrom, Thomas A., Chicago, Ill. Water heater. 1,808,820; June 9.

Root, Bertwell C., assignor to Brown Company, Berlin, N. H. Joining conduits. 1,809,313; June 9.

Root, Clair M., Detroit, Mich., assignor to Gifford-Wood Company, Hudson, N. Y. Gate. 1,808,972; June 9.

Rose, George H. (See Bletso, B. N., and Rose.)

Rosenberg, Heyman, New York, N. Y. Fastener. 1,809,758; June 9.

Rosenblatt, Isidor, New York, N. Y. Lighting fixture or article of similar nature. Des. 84,372; June 9.

Rosenblatt, Isidor, New York, N. Y. Lighting fixture or article of similar nature. Des. 84,373; June 9.

Rosenblum, Israel, Jackson Heights, N. Y. Synthetic resinous complex and making same. 1,809,570; June 9.

Ross, Carmen E., assignor to W. W. Johnston, trustee, Vancouver, British Columbia, Canada. Sound amplifying device. 1,809,314; June 9.

Ross, Harry M., assignor of one-half to Beveridge Paper Company, Indianapolis, Ind. Decorating paper. 1,809,146; June 9.

Rotary Utility Corporation. (See McGerry, J. J., and Whiting, assignors.)

Roth, George J., Los Angeles, Calif. Fish tape puller. 1,809,068; June 9.

Roulet, Norman L., Toledo, Ohio. Trophy plaque. Des. 84,374; June 9.

Round, Henry J., London, England, assignor to Radio Corporation of America. Loud speaker. 1,809,571; June 9.

Röver, Albert, assignor to Steinle & Hartung, G. M. B. H., Quedlinburg, Germany. Pressure gauge. 1,809,759; June 9.

Rowe, Clement J., assignor to The Egry Register Company, Dayton, Ohio. Rewinding mechanism. 1,809,147; June 9.

Rowell, Charles V., McMahons Point, near Syndey, New South Wales, Australia. Vacuum brake. 1,809,491; June 9.

Rowland, Thomas C. E., Sparkhill, Birmingham, and H. M. Dudgeon, Perry Barr, Birmingham, England. Current collector for electric tramway and railway vehicles. 1,809,492; June 9.

Royal Railway Improvement Corporation. (See Sauvage, William H., assignor.)

Royle, Herbert S., Philadelphia, Pa. Textile fabric. Des. 84,375; June 9.

Roys, Herman E. (See Zieley, J. D., and Roys.)
Royster, Royall H., Oxford, N. C. Airplane. 1,808,996; June 9.
Rubalcaba, José, Los Angeles, Calif. Alligator wrench. 1,808,821; June 9.
Ruggles, Gilbert W., Youngstown, Ohio. Mechanical stoker. 1,809,315; June 9.
Ruth-Aldo Company. (See Mancini, Ugo, assignor.)
Ryde, John W. (See Bartlett, A. C., and Ryde.)
Rypkema, William, assignor to Radio Master Corporation of America, Bay City, Mich. Radiocabinet. Des. 84,376; June 9.
S. & T. Metal Company. (See Shoemaker, Robert J., assignor.)
Safeasy Fixture Company. (See Rolker, Edwin, assignor.)
Sague, Walter A., Buffalo, N. Y. Halyard cleat. 1,808,791; June 9.
Sailer, George D., assignor to McKee Glass Company, Jeannette, Pa. Vase or analogous article. Des. 84,377; June 9.
St. Regis Paper Company. (See Bates, Adelmer M., assignor.)
Sample, Perry B., New York, N. Y., assignor of one-fourth to Ira J. Adams. Method of and apparatus for controlling mechanical oscillations. 1,809,288; June 9.
Sampson, Felix P. (See Sather, C. O., and Sampson.)
Sandelowsky, Sally. (See Wagner, P., and Sandelowsky.)
Sanders, Oscar, St. Joseph, Mo. Mail box holder. 1,809,726; June 9.
Sanders, Wilbur E., Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich. Rotary valve furnace. 1,809,727; June 9.
Sanford Investment Company. (See Jones, G. E., jr., and McCullen, assignors.)
Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Vehicle having brakes. 1,809,069; June 9.
Sanger, Harry G., and F. F. Kishline, assignors to Graham-Paige Motors Corporation, Detroit, Mich. Lubricating system. 1,809,357; June 9.
Sargents, C. G., Sons Corporation. (See Noonan, James A., assignor.)
Sasnett, Edward C., Washington, D. C., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,809,604; June 9.
Sather, Carl O., and F. P. Sampson, Minneapolis, Minn. Fisherman's line drier. 1,809,728; June 9.
Sauvage, William H., assignor, by mesne assignments, to Royal Railway Improvements Corporation, New York, N. Y. Foundation brake rigging. 1,809,729; June 9.
Sauzedde, Claude, Detroit, Mich. Making wheel rims. 1,809,605; June 9.
Savage, Edward S., Rochester, N. Y. Molding machine. 1,809,358; June 9.
Schaffer, David, Pawtucket, R. I. Battery connector terminal. 1,809,452; June 9.
Schapira, Carl, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Secret transmission of signals. 1,809,070; June 9.
Scharnberg, Herman J. B., Fort Wadsworth, N. Y. Hydraulic piston packing. 1,808,973; June 9.
Scheibe, Adolf. (See Giebe, E., and Scheibe.)
Schellens, Christopher A. (See Schellens, E. L. and C. A.)
Schellens, Christopher A., Marblehead, Mass., assignor to C-S Engineering Company, Jersey City, N. J. Lubricating device. 1,808,792; June 9.
Schellens, Eugene L., Millburn, N. J., and C. A. Schellens, Marblehead, Mass., assignors to C-S Engineering Company, Jersey City, N. J. Feed water heater. 1,809,730; June 9.
Schierer, Jacob. (See Heilweil, Samuel, assignor.)
Schlaepfer, Hans, A. (See Bornand, E., and Schlaepfer.)
Schmidt, C. F. (See Lance, Ola, assignor.)
Schmieske, Carl. (See Bauer, G., and Schmieske.)
Schneider, Leopold C., Hatboro, Pa. Trap. 1,808,907; June 9.
Schoenthal, Nathan. (See Rider, Granville S., assignor.)
Scholl, William M., Chicago, Ill. Arch support. 1,809,731; June 9.
Schomaker, George E., Sydney, New South Wales, Australia, and R. F. Gould, Chicago, Ill., assignors to Reserve Holding Company, Kansas City, Mo. Telephone system. 1,809,071; June 9.
Schoonover, Noah E., assignor of one-half to E. A. Woodburn, Interior, S. D. Ordnance. 1,809,533; June 9.
Schorger, Arlie W., assignor to C. F. Burgess Laboratories Inc., Madison, Wis. Interior wall finish. 1,808,865; June 9.
Schou, Michel F., assignor of one-half to M. Mazur, Kalamazoo, Mich. Grain planter. 1,809,072; June 9.
Schrago, Morris M., Los Angeles, Calif. Sewing machine. 1,809,148; June 9.
Schram, Adolph W., Chicago, Ill. Chair. 1,809,453; June 9.
Schroder, A. P., et al. (See Martin, James E., assignor.)
Schroeder, Charles, and H. Tatosian, assignor to Ice Cream Cone Machinery Inc., Bridgeport, Conn. Stripper for pastry cake baking machines. 1,808,997; June 9.
Schroeder, Harry C. (See Bettandorff, George, assignor.)
Schroeder, Harry C. (See De Gloria, J., and Schroeder.)
Schultte, Johann, Lichterfelde-Ost, near Berlin, Germany. Driving gear for airships of the rigid type. 1,809,220; June 9.
Schultz, Edward, Chicago, Ill. Vending machine. 1,808,937; June 9.
Schultz, Oscar, Hamburg, Germany. Rudder arrangement for ships. 1,809,184; June 9.
Schupp, Arthur A., assignor to Frederickson Company, Saginaw, Mich. Securing antifriction pads to leaf springs. 1,808,822; June 9.
Schur, Milton O. (See Richter, G. A., and Schur.)
Schutt, Theodore H., Cleveland, Ohio. Liquid dispensing pump. 1,809,814; June 9.
Schutte, August E., Northboro, Mass. Waterproofing piles. 1,809,359; June 9.
Schutte, August E., Northboro, Mass. Concrete piles and similar structure. 1,809,360; June 9.
Schutte and Koerting Company. (See Ketterer, Sigmund G., assignor.)
Schweisthal, Fred G., assignor to Stewart-Warner Corporation, Chicago, Ill. Vapor and pressure trapping dome for fuel pumps. 1,809,394; June 9.
Schylander, John F., Chicago, Ill. Spray. 1,809,073; June 9.
Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Drill cutter retaining ring. 1,809,074; June 9.
Scott, Robert H. (See Shinn, E. W., Crowley, and Scott.)
Scott & Williams, Inc. (See Swinglehurst, Harry, assignor.)
Scovel, John C., jr., assignor to The Creamery Package Mfg. Company, Chicago, Ill. Refrigerating apparatus. 1,809,075; June 9.
Scovill Manufacturing Company. (See Bennett, Morris H., assignor.)
Scovill Manufacturing Company. (See Pasman, Abram N., assignor.)
Scovill Manufacturing Company. (See Warner, Frank E., assignor.)
Seamless Rubber Company, The. (See Conway, James J., assignor.)
Seamless Rubber Company, The. (See De Laney, Wallace W., assignor.)
Sebell, Harry, Boston, assignor of one-half to A. H. Parker, Lexington, Mass. Measuring pump. 1,809,395; June 9.
Sebrell, Lorin B., Silver Lake, assignor to the Goodyear Tire & Rubber Company, Akron, Ohio. Aldol condensation products and vulcanization of caoutchouc therewith. 1,809,454; June 9.
Security Investment Company of Whittier. (See Vertson John A., assignor.)
Seebach, Fritz, Erkner-Berlin, assignor to Bakelite Gesellschaft mit beschraenkter Haftung, Berlin-Charlottenburg, Germany. Producing oil soluble phenol-aldehyde condensation products. 1,809,732; June 9.
Seeger Refrigerator Company. (See Swedman, Enoch, assignor.)
Sell, Gilbert E., Newark, N. J., assignor to The Koppers Company, Pittsburgh, Pa. Sulphur sludge treatment. 1,808,938; June 9.
Seltz, Xaver, Emmishofen, Switzerland. Canvas cover for vehicles and the like. 1,809,455; June 9.
Selden Company, The. (See Jaeger, A. O., and West, assignors.)
Selden Company, The. (See West, Herbera J., assignor.)
Selden Research & Engineering Corporation. (See Jaeger, Alphons O., assignor.)
Self Kleen Thresher Screen Co. (See Altman, Elmer F., assignor.)
Seng Company, The. (See Fox, Martin, assignor.)
Shaw, John W., Norwood, N. J., assignor to Bing & Bing, Inc. Awning fixture. 1,808,823; June 9.
Shaw, Joseph B. (See Pine, W. B., and Shaw.)
Shaw, Myril C. (See Pine, W. B., and Shaw.)
Shaw, Noble C., Swissvale, and T. J. O'Meara, Pittsburgh, assignors to The Union Switch & Signal Company, Swissvale, Pa. Holding instruments. 1,809,639; June 9.
Shepard, Charles. (See Miller, John M., assignor.)
Sheppard, Samuel E., and J. G. McNally, assignors to Eastman Kodak Company, Rochester, N. Y. Cellulose film. 1,808,998; June 9.
Shields, Willie A., assignor of one-half to Clifton M. Ellis, Birmingham, Ala. Garment bagging machine. 1,808,824; June 9.
Shinn, Edmund W., W. J. Crowley, and R. H. Scott, Cumberland, Md. Material handling apparatus. 1,809,076; June 9.
Shipley, Thomas, assignor to York Ice Machinery Corporation, York, Pa. Refrigeration. 1,808,999; June 9.
Shoemaker, Robert J., assignor to S. & T. Metal Company, Chicago, Ill. Bearing metal. 1,808,793; June 9.
Showers, Lewis M., jr., Juniata, Pa. Drop bottom container. 1,809,640; June 9.
Shulman, Charles, assignor to Apt Novelty Company Inc., New York N. Y. Table lamp or article of similar nature. Des. 84,378; June 9.
Shuman, Leo, Spokane, Wash., assignor by mesne assignments, to Continental Manufacturing Company. Electric water heater. 1,809,077; June 9.
Shuron Optical Company. (See Bertram, J. P., and Berliner, assignors.)
Siemens-Bauunion Gesellschaft mit beschrankter Haftung, Kommanditgesellschaft. (See Greim, Walter, assignor.)
Siemens & Halske Aktiengesellshaft. (See Gaarz, W., and Dalchau, assignors.)
Siemens & Halske Aktiengesellschaft. (See Kruse, Robert, assignor.)

Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung. (See Gliechmann, Hans, assignor.)
Signal Engineering & Manufacturing Company. (See Burdick, Herbert, assignor.)
Simson, Alexander, Reno, Nev. Display form. 1,809,361; June 9.
Sinclair Refining Company. (See Herthel, Eugene C., assignor.)
Singer Manufacturing Company, The. (See Myers, Walter, assignor.)
Singer Manufacturing Company, The. (See Parkes, William N., assignor.)
Singer Manufacturing Company, The. (See Traub, Emil, assignor.)
Skudre, Arnold M., West Newton, assignor to Submarine Signal Company, Boston, Mass. Compensator switch. 1,809,641; June 9.
Slabaugh, William H. (See Wilson, G. F., and Slabaugh.)
Slaby, Joseph E. (See Cornell, C. P., and Slaby.)
Small, Arthur E., assignor to Union Metal Products Company, Chicago, Ill. Railway car drop door. 1,809,643; June 9.
Small, Arthur E., assignor to Union Metal Products Company, Chicago, Ill. Hopper door for railway hopper cars. 1,809,644; June 9.
Small, Arthur E., assignor to Union Metal Products Company, Chicago, Ill. Railway car drop door. 1,809,645; June 9.
Smith, Benjamin H., assignor to Michigan Wire Goods Company, Niles, Mich. Handle for forks and like implements. 1,809,254; June 9.
Smith, C. P. (See Vroman, John C., assignor.)
Smith, Clarence E., assignor to H. D. Colman, Rockford, Ill. Portable electric fan. Des. 84,379; June 9.
Smith, Clarence E., assignor to H. D. Colman, Rockford, Ill. Portable electric fan. Des. 84,380; June 9.
Smith, Clarence E., assignor to H. D. Colman, Rockford, Ill. Portable electric fan. Des. 84,381; June 9.
Smith, Clarence E., assignor to H. D. Colman, Rockford, Ill. Portable electric fan. Des. 84,382; June 9.
Smith, Dillon F., Pensacola, Fla., E. J. Pieper, and C. C. Vogt, assignors to Armstrong Cork Company, Lancaster, Pa. Water resistant fibrous articles and their manufacture. 1,809,316; June 9.
Smith, Frank L., Columbiana, Ohio. Upholstering edging. 1,809,733; June 9.
Smith, Franklin S., Brooklyn, N. Y. Apparatus for treating articles with x-rays. 1,809,078; June 9.
Smith, Howard F. (See Wilson, Hillsman D., jr., assignor.)
Smith, J. Errol, assignor to The Stone Creek Brick Company, Stonecreek, Ohio. Apparatus and process for texturing brick. 1,809,572; June 9.
Smith, Jacob A., Ankeny, Iowa. Steam pressure cooker. 1,809,079; June 9.
Smith, Leo A., Wimbledon, England. Sound box for talking machines and like devices. 1,809,493; June 9.
Smith, Robert F., Lynn, Mass. Direction indicator. 1,809,362; June 9.
Smith Welding Equipment Corporation. (See Plumley, Stuart, assignor.)
Smith, William R., Toledo, Ohio, assignor to General Motors Corporation, Detroit, Mich. Torque ball retainer and speedometer. 1,809,734; June 9.
Smyth, Thomas J., East Elmhurst, L. I., N. Y. Book support. 1,808,796; June 9.
Snow, Norman L., and C. F. Hirshfeld, assignors to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,809,221; June 9.
Snyder, Daniel O., Muncy, Pa. Article support. 1,809,317; June 9.
Società Italiana Ernesto Breda Per Costruzioni Meccaniche. (See Soncini, Cesare, assignor.)
Société Anonyme des Anciens Etablissements Braunstein Freres. (See Braunstein, Roger, assignor.)
Societe des Brevets Catalex. (See Balachowsky, D., and Caire, assignors.)
Société des Téléphones Grammont. (See Lebedinsky, Myron, assignor.)
Somers, Roy B., Zeeland, Mich. Hygrometer. 1,809,426; June 9.
Soncini, Cesare, Brescia, assignor to Società Italiana Ernesto Breda Per Costruzioni Meccaniche, Milan, Italy. Automatic firearm having a recoiling barrel and an amplifying push lever. 1,809,322; June 9.
Soren, Townsend H., Hartford, Conn., assignor to General Electric Company. Electric switch cell structure. 1,809,735; June 9.
Soule, Roland P., assignor to Combustion Utilities Corporation, New York, N. Y. Germicide and insecticide. 1,809,255; June 9.
Soults, Thomas A., assignor to Sterling Range and Furnace Corporation, Rochester, N. Y. Gas oven construction. 1,808,866; June 9.
Specialty Brass Company. (See Namur, Joseph, assignor.)
Speidel, Robert, Pforzheim, Germany. Washing machine for comestibles. 1,809,736; June 9.
Spengler, Oskar, Berlin-Neubabelsberg, and W. Müller, Leipzig, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacture of sulphur containing dyes and product. 1,809,318; June 9.
Sperr, Frederick W., jr., Pittsburgh, Pa., assignor to The Koppers Company. Apparatus for treating gases. 1,809,640; June 9.
Sperry, Frank E., Batavia, assignor to Mechanical Devices Company, Bloomington, Ill. Pressure actuated electric switch. 1,809,642; June 9.
Sperry, Samuel E., Hollis, assignor to Intertype Corporation, Brooklyn, N. Y. Line casting machine. 1,809,760; June 9.
Spicer Manufacturing Corporation. (See Culbertson, E., Estay, assignor.)
Spohn, John H., jr., assignor to Chemical Development Co. Ltd., San Francisco, Calif. Process and apparatus for manufacturing paper. 1,809,427; June 9.
Sprague, Frank J., New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Dual elevator system and control. Re18,095; June 9.
Squier, George A., Cleveland, Ohio. Mounting for ophthalmic lenses. 1,809,494; June 9.
Stainless Steel Corporation. (See Carman, Charles W., assignor.)
Standard Oil Development Company. (See Isles, Frederick W., assignor.)
Standard Oil Development Company. (See Loomis, Nathaniel E., assignor.)
Standard Oil Development Company. (See Robinson, Clarence I., assignor.)
Standard Oil Development Company. (See Sydnor, Harold, assignor.)
Staniewicz, Willy, assignor to Automobilwerke H. Bussing Aktiengesellschaft, Brunswick, Germany. Driving mechanism for motor vehicles. 1,809,737; June 9.
Stant, Kyle E., assignor to The Stant Machine Company, Connersville, Ind. Radiator cap. 1,809,186; June 9.
Stant Machine Company, The. (See Stant, Kyle E., assignor.)
Stealy, Elza R., Shenandoah, Iowa. Paper folding machine. 1,809,000; June 9.
Stecker, Louis G., Philadelphia, Pa. Casting machine. 1,809,289; June 9.
Stedman, Charles C., Cleveland Heights, assignor to Centaur Tractor Corporation, Greenwich, Ohio. Sulky for plows and the like. 1,809,573; June 9.
Steedle, Joseph J., Scranton, Pa. Electrostatic reproducer. 1,809,754; June 9.
Steinle & Hartung, G. m. b. H. (See Röver, Albert, assignor.)
Steinmann, Frank, Sr., De Soto, Mo. Flying machine. 1,808,908; June 9.
Stelzer, Franz, H. B., assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik J. C. Muller & Co., Dresden, Germany. Spreading cut tobacco. 1,808,794; June 9.
Stelzer, Franz, H. B., assignor to the Firm "Universelle" Cigarettenmaschinen-Fabrik, J. C. Muller & Co., Dresden, Germany. Spreading cut tobacco. 1,808,795; June 9.
Stenhouse, David. (See Stenhouse, T. and D.)
Stenhouse, Thomas, Washington, Pa., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va. Glass feeder. 1,809,794; June 9.
Stenhouse, Thomas and D., Washington, Pa., assignors to Hazel-Atlas Glass Company, Wheeling, W. Va. Glass forming machine. 1,809,793; June 9.
Stephani, Sophie, née Kaus, Zurich, Switzerland. Casing for a massage apparatus with hose and cup attached. Des. 84,383; June 9.
Stephenson, Paul A., assignor to Eastman Kodak Company, Rochester, N. Y. Motor operated motion picture camera. 1,809,256; June 9.
Sterling Company, The. (See Jacobs, Frances A., assignor.)
Sterling Range and Furnace Corporation. (See Soults, Thomas A., assignor.)
Stevens, David A. (See Goudey, E. G., Stevens, and Crafts.)
Stevens, Henry V. (See Hicks, Irving C., assignor.)
Stewart, Duncan, et al. (See Hargreaves, Robert H., assignor.)
Stewart, Patterson O., New York, N. Y. High tension ignition amplifier. Re18,092; June 9.
Stewart-Warner Corporation. (See Schweisthal, Fred G., assignor.)
Stewart-Warner Corporation. (See Van Guilder, Walter, assignor.)
Stickney, Burnham C., Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,808,909; June 9.
Stiles-Herman Manufacturing Company. (See Johnson, Herman W., assignor.)
Still, Firm, Carl. (See Wessel, Carl, assignor.)
Stimson, Jonathan C., St. Louis, Mo. Luminous display or reflector sign. 1,809,761; June 9.
Stone Creek Brick Company, The. (See Smith, J. Erroll, assignor.)
Stone, Everett E., Brookline, Mass. Time controlled switch. 1,809,428; June 9.
Stone, J. & Company Limited. (See Cotter, Ernest W., assignor.)
Stone, John S., San Diego, Calif., assignor to American Telephone and Telegraph Company. Directional antenna array. 1,808,867; June 9.
Stone, John S., San Diego, Calif., assignor to American Telephone and Telegraph Company. Directional antenna array. 1,808,868; June 9.

Stone, John S., San Diego, Calif., assignor to American Telephone and Telegraph Company. Directional antenna array. 1,808,869; June 9.
Strasburg, Samuel S., Akron, Ohio. Flue cleaner. 1,808,870; June 9.
Stratton, Oliver C. (See Ellis, Edward E., assignor.)
Straub, James M., assignor to Electric Welding Company, Pittsburgh, Pa. Reinforced piling. 1,809,574; June 9.
Streeter, Edwin H., Cloquet, Minn. Transfer device. 1,809,456; June 9.
Strömberg, Nils G. A., and G. W. Willund, Stockholm, Sweden. Sheet feeding mechanism. 1,809,495; June 9.
Strong, William P., assignor to The Willys-Overland Company, Toledo, Ohio. Vehicle frame. 1,809,606; June 9.
Stuhlmann, Paul, Cologne-Lindenthal, Germany. Treating resins. 1,809,738; June 9.
Sturgis, William B., Chicago, Ill. Oil filter. 1,809,429; June 9.
Sturgis, William B., Chicago, Ill. Draft regulating system. 1,809,575; June 9.
Submarine Signal Company. (See Skudre, Arnold M., assignor.)
Suess, Eduard, Vienna, Austria. Siphon turbine. 1,809,496; June 9.
Summers, Otto M., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,808,939; June 9.
Sundback, Gideon, assignor to Hookless Fastener Company, Meadville, Pa. Fastening device. 1,809,717; June 9.
Superheater Company, The. (See Gordon, Charles W., assignor.)
Sutton, Walter J., San Francisco, Calif. Receiver sight for army rifles. 1,809,257; June 9.
Swain, Martin S. (See Bryant, L. N., East, and Swain.)
Swann, Henry O., Hattiesburg, Miss. Guard for adzes. 1,809,319; June 9.
Swann Research, Inc. (See Jenkins, R. L., Karrh, and McCullough, assignors.)
Swedman, Enoch, assignor to Seeger Refrigerator Company, St. Paul, Minn. Refrigerator closure. 1,809,150; June 9.
Sweet, Cecil H., Brea, and E. F. Cooper, Long Beach, Calif. Bridging plugs for oil wells. 1,809,080; June 9.
Swigart, Philip J., Akron, Ohio. Device for holding and applying twine. 1,809,607; June 9.
Swinglehurst, Harry, Orange, N. J., assignor to Scott & Williams, Inc., New York, N. Y. Circular knitting machine. 1,809,762; June 9.
Sydnor, Harold, Elizabeth N. J. assignor to Standard Oil Development Company. Process of pyrogenetic decomposition of oils and apparatus therefor. 1,809,185; June 9.
Synthetic A. G. (See Wild, S., and Hugentobler, assignors.)
Szekely, Otto E., Holland, Mich. Driving mechanism for combined washers and wringers. 1,809,149; June 9.
Tannwalder Baumwollspinnfabrik. (See Broch, Friedrich, assignor.)
Tappan, De Witt, assignor, by mesne assignments, to North East Appliance Corporation, Rochester, N. Y. Odometer. 1,809,151; June 9.
Tarrant Manufacturing Company. (See Tarant, William P., assignor.)
Tarrant, William P., assignor to Tarrant Manufacturing Company, Saratoga Springs, N. Y. Pouring pot nozzle. 1,809,763; June 9.
Tashjian, Armen H., Cleveland, Ohio. Combined conduit and molding. 1,809,223; June 9.
Tatosian, Harry. (See Schroeder, C., and Tatosian.)
Tätz, Paul, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches Ufer 12/13, Berlin, S. W. 11, Germany. High frequency telephony system. 1,809,081; June 9.
Taylor, George, Conshohocken, Pa. Wheeled toy rocking figure propelled. 1,809,739; June 9.
Taylor, Hal, Moncure, assignor of two-thirds to J. F. Alaston, Pittsboro, N. C. Cotton chopper. 1,808,871; June 9.
Teare, Albert R., Lakewood, assignor to Domestic Electric Company, Cleveland, Ohio. Material treating machine. 1,809,363; June 9.
Teasdale, George E., Kansas City, Kans. Luminescent tube. 1,808,825; June 9.
Teasdale, George E., Kansas City, Kans. Luminescent tube. 1,808,826; June 9.
Tebieff, Alexander N., Los Angeles, Calif. Child's vehicle. 1,809,740; June 9.
Technidyne Corporation. (See Reisman, Emil, assignor.)
Telefunken Gesellschaft fur Drahtlose, Telegraphie m. b. H. (See Kummerer, Wilhelm, assignor.)
Teppema, Jan, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio. Accelerator of vulcanization. 1,809,457; June 9.
Tetel, Paul E. (See Morgenstern, Ronald V., assignor.)
Thelma Carburator Company, Societe Anonyme. (See Melkman, Saul E., assignor.)
Thiemann, William B., Albert City, Iowa. Combined fan and governor for internal combustion engines. 1,809,152; June 9.
Thiess, Karl, and Theodore Meissner, Frankfort-on-the-Main-Hochst, and W. Zerweck, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs. 1,809,224; June 9.
Thoke, Albert, assignor to D. L. Clark Company, Pittsburgh, Pa. Coin controlled vending machine. 1,809,001; June 9.
Thomas & Betts Co., The. (See Church, Lewis H., assignor.)
Thomas, Charles S., San Diego, Calif. Brace chuck. 1,808,940; June 9.
Thompson, Frederich W., Paddington, New South Wales, Australia. Appliances for trimming grain that is being loaded in bulk. 1,809,497; June 9.
Thompson Products, Inc. (See Hufferd, G. H., and Graham, assignors.)
Thompson, Sidney E., West Englewood, N. J., assignor to Copeland & Thompson, Incorporated, New York, N. Y. Plate or similar article of pottery. Des. 84,384; June 9.
Thompson, Sidney E., West Englewood, N. J., assignor to Copeland & Thompson, Incorporated, New York, N. Y. Covered dish. Des. 84,385; June 9.
Thompson, Theodore F., Fort Dodge, Iowa. Semiautomatic transmission. 1,809,608; June 9.
Thompson, Theodore F., Fort Dodge, Iowa. Transmission. 1,809,647; June 9.
Thompson, William D., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich. Car roof. 1,808,872; June 9.
Thorbinnsson, Ole H., Baltimore, Md. Peel-blade. 1,809,320; June 9.
Threlfall, Richard. (See King, G., and Threlfall.)
Tillyer, Edgar D., Southbridge, and H. R. Moulton, Sturbridge, assignors to American Optical Company, Southbridge, Mass. Glass treatment. 1,809,534; June 9.
Timian, Harold H., assignor to The Wheeler-Schebler Carburetor Co., Indianapolis, Ind. Carburetor. 1,809,618; June 9.
Tobin, Kenneth J. (See Heinen, F. C., Tobin, and Wasberg.)
Topping, Wilbur. (See Melson, A. W., and Topping.)
Torre, Egidio, Genoa, Italy. Feed regulator for steam boilers. 1,809,535; June 9.
Torrey, Lucian L., Los Angeles, Calif. Refrigerating apparatus. 1,809,002; June 9.
Transitone Automobile Radio Corporation. (See Heina, William M., assignor.)
Traub, Emil, Newark, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Lubricating means for bearing surfaces. 1,809,649; June 9.
Trowbridge, Miles L. (See Brogden, E. M., and Trowbridge.)
Trunz, Max, Brooklyn, N. Y. Bias bacon slicer. 1,809,764; June 9.
Tucker, Alfred W. G., assignor to Ferranti, Limited, Hollinwood, Lancaster, England. Electric switch. 1,809,498; June 9.
Tucker Duck & Rubber Co. (See Tucker, H. T., assignor.)
Tucker, Henry T., assignor to Tucker Duck & Rubber Co., Fort Smith, Ark. Golf bag. 1,809,536; June 9.
Turner, Giles M., Milwaukee, Wis. Caster. 1,809,609; June 9.
Tuttle, Bayard T. (See Monroe, F. R., Dolson, and Tuttle.)
Tweedie, Charles, Jefferson City, Mo., assignor to himself as trustee. Making shoes. 1,809,364; June 9.
U. G. I. Contracting Company, The. (See Glasgow, Arthur G., assignor.)
Uhlman, Carl, San Francisco, Calif. Antiskidding device. 1,808,797; June 9.
Undertakers Supply Co., The. (See Ocasek, Edward, assignor.)
Underwood Elliott Fisher Company. (See Stickney, Burnham C., assignor.)
Union Metal Products Company. (See Murphy, Walter P., assignor.)
Union Metal Products Company. (See Small, Arthur E., assignor.)
Union Metal Products Company. (See Van Dorn, William E., assignor.)
Union Switch & Signal Company. (See Lazich, Branko, assignor.)
Union Switch & Signal Company, The. (See Sasnett, Edward C., assignor.)
Union Switch & Signal Company, The. (See Shaw, N. C., and O'Meara, assignors.)
United Cigarette Machine Company Aktiengesellschaft. (See Berger, Martin, assignor.)
United Cigarette Machine Company Aktiengesellschaft. (See Ritscher, Arthur, assignor.)
United Reproducers Patents Corporation. (See Hawley, Jesse B., assignor.)
United Shoe Machinery Corporation. (See Cooper, Basil P., assignor.)
United Shoe Machinery Corporation. (See Finn, Sidney J., assignor.)
United Shoe Machinery Corporation. (See Glass, Perley R., assignor.)
United Shoe Machinery Corporation. (See Husler, John, assignor.)
United Shoe Machinery Corporation. (See Pope, Joseph H., assignor.)
United States Cast Iron Pipe & Foundry Company. (See Ladd, James B., assignor.)
U. S. Slicing Machine Company. (See Van Berkel, Cornelis F., assignor.)
U. S. Slicing Machine Company. (See van Duyn, Adrianus, assignor.)

Universal Winding Company. (See Quill, Joseph M., assignor.)
Universelle Cigarettemaschinen-Fabrik J. C. Muller & Co. (See Steizer, Franz H. B., assignor.)
Urkov, Joseph, and B. R. Harris; said Urkov assignor to Epstein & Harris, Chicago, Ill. Product for treating the skin. 1,809,082; June 9.
Urschel, Bertis H., assignor to Urschel Engineering Company, Bowling Green, Ohio. Universal joint boot. 1,808,798; June 9.
Urschel Engineering Company. (See Urschel, Bertis H., assignor.)
Vaccaro, Donato, Cleveland, Ohio. Window shade bracket. 1,809,650; June 9.
Vacuum Oil Company. (See Bowen, Mortimer W., assignor.)
Van Amburg, Otto H., and G. W. Lieberum, Bridgeport, Conn., assignors to General Electric Company. Combined switch and seat operating means. 1,809,651; June 9.
Van Berkel, Cornelis F. M., Wassenaar, Netherland, assignor to U. S. Slicing Machine Company, La Porte, Ind. Slicing machine. 1,809,610; June 9.
Van Berkel, Cornelis F. M., Wassenaar, and A. Van Duyn, assignors to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines volgens van Berkel's Patent en van andere Werktuigen, Rotterdam, Netherlands. Dashpot brake for scales. 1,809,084; June 9.
Van Dorn, William E., Pasadena, Calif., assignor to Union Metal Products Company, Chicago, Ill. Metal structure for railway cars. 1,809,611; June 9.
Van Dorn, William E., Pasadena, Calif., assignor to Union Metal Products Company, Chicago, Ill. Metallic structure for railway cars. 1,809,612; June 9.
Van Duyn, Adrianus. (See Van Berkel, C. F. M., and Van Duyn.)
Van Duyn, Adrianus, assignor to Naamlooze Vennootschap Maatschappij tot Vervaardiging van Snijmachines volgens van Berkel's Patent en van andere Werktuigen, Rotterdam, Netherlands. Liquid brake or dashpot. 1,809,083; June 9.
Van Duyn, Adrianus, Rotterdam, Holland, assignor to U. S. Slicing Machine Company, La Porte, Ind. Slicing machine. 1,809,430; June 9.
Van Dyck, Arthur F., Yonkers, N. Y., assignor to Radio Corporation of America. Radio system. 1,808,941; June 9.
Van Guilder, Walter, assignor to Steward-Warner Corporation, Chicago, Ill. Windshield cleaner. 1,809,365; June 9.
Van Horn, Robert R., Columbus, Ohio. Theftproof steering wheel. 1,809,765; June 9.
Van Kessel, George C., Opa-Locka, and M. E. Lindgren, Miami, Fla., assignors to International Insect Destroyer Manufacturing Company. Insect catcher. 1,809,766; June 9.
Van Vorst, John, assignor to Mohawk Asphalt Heater Company, Schenectady, N. Y. Trailer wheel lock. 1,809,003; June 9.
Vaughan, Henry H., Montreal, Quebec, and W. G. Cumming, Westmount, Quebec, Canada. Shaft coupling. 1,809,085; June 9.
Venable, William M., assignor to Blaw-Knox Company, Pittsburgh, Pa. Weighing batcher. 1,808,799; June 9.
Venable, William M., assignor to Blaw-Knox Company, Pittsburgh, Pa. Bucket construction. 1,808,800; June 9.
Verderber, Joseph, Cleveland, Ohio. Clamp device. 1,809,576; June 9.
Verhaar, Anthony. (See Fluhr, L., and Verhaar.)
Vertson, John A., Brea, assignor to Security Investment Company of Whittier, Whittier, Calif. Well reamer. 1,809,258; June 9.
Vierling, Frank J., and J. Jessen, assignors to E. S. Harrison, Minneapolis Minn. Machine for baking cakes. 1,809,004; June 9.
Villaret, Gustave E., Leonia, N. J., assignor to Lighting Appliance Company, Inc., New York, N. Y. Lighting fixture shade or article of similar nature. Des. 84,386; June 9.
Vincent, James E., Johnstown, Pa. Blowpipe. 1,809,652; June 9.
Vineyard Mantle, Milligan, Mont. Sweep rake clearer. 1,809,767; June 9.
Vlchek, Frank J., assignor to The Vlchek Tool Company, Cleveland, Ohio. Drop hammer. 1,809,805; June 9.
Vlchek Tool Company, The. (See Vlchek, Frank J., assignor.)
Vogt, Clarence C. (See Smith, D. F., Pieper, and Vogt.)
Von Frommer, Rudolf, Budapest, Hungary. Automatic firearm. 1,809,741; June 9.
Von Winkler Laboratories, Inc., The. (See Winckler, Walter T., assignor.)
Voorhees, Gardner T. Boston, Mass. Refrigerating apparatus. 1,808,910; June 9.
Voss, John H., Berwyn, and B. D. Willis, Oak Park, Ill., assignors to Reserve Holding Company, Kansas City, Mo. Telephone system. 1,809,086; June 9.
Vroman, John C. assignor of one-half to C. P. Smith, Tulsa, Okla. Deep well pump. 1,809,321; June 9.
Waenerlund, Torsten E., assignor to M. O. Och Domsjö Aktiebolag, Ornskoldsvik, Sweden. Manufacturing cellulose according to the sulphite method. 1,809,499; June 9.
Waffle, Charles T. (See Andres, W. J., and Waffle.)
Wagner, Charles P. and W. W., New Orleans, La. Flour saving means for dough brakes. 1,809,225; June 9.
Wagner Electric Corporation. (See Wulfert, Otto, assignor.)
Wagner, Paul, Charlottenburg, and S. Sandelowsky, Berlin-Grunewald, Germany, assignors to General Electric Company. Automatic arc welding machine. 1,809,653; June 9.
Wagner, Robert R., assignor to General Motors Corporation, Detroit, Mich. Vehicle heater. 1,809,654; June 9.
Wagner, Wiltz W. (See Wagner, C. P. and W. W.)
Wahl Clipper Corporation. (See Wahl, Leo J., assignor.)
Wahl, Leo J. assignor to Wahl Clipper Corporation, Sterling, Ill. Hair dryer. 1,809,458; June 9.
Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Hand clipper. 1,809,459; June 9.
Walker, Hervey S., Ardmore, Pa. Accessory for underfloor duct systems. 1,809,613; June 9.
Walker Manufacturing Company. (See Walker, Richard A., assignor.)
Walker, Richard A., assignor to Walker Manufacturing Company, St. Joseph, Mo. Automatic draft regulator. 1,809,005; June 9.
Wallace, Jeffery J., assignor to Gullett Gin Company, Amite, La. End door lift mechanism. 1,809,537; June 9.
Walter, Arthur, Liverpool N. Y. Combination chair and bed. 1,809,226; June 9.
Walter, William H., Cynwyd, Pa. Electrode holder. 1,809,656; June 9.
Walther, George, near Dayton, Ohio, assignor to The Dayton Steel Foundry Company. Metal wheel. 1,809,655; June 9.
Wappler Electric Company. (See Wappler, Frederick H., assignor.)
Wappler, Frederick H., Flushing, L. I., N. Y., assignor to Wappler Electric Company, Inc. High tension switch. 1,809,366; June 9.
Warner, Frank E., assignor to Scovill Manufacturing Company, Waterbury, Conn. Swinging die holder for fastener setting machines. 1,809,322; June 9.
Wasberg, Axel. (See Heinen, F. C., Tobin, and Wasberg.)
Waterbury Tool Company, The. (See Francis, Daniel R., assignor.)
Waterman, L. E., Company. (See Larsen, Gabriel, assignor.)
Watlington, Luis A. (See Acosta, Julian S., assignor.)
Watrous Willis H., Oakland, Calif. Brake testing lever. 1,809,087; June 9.
Watson, Kenneth, San Francisco, Calif. Valve alarm. 1,808,911; June 9.
Weant, Roy C., Ponca City, Okla. Stuffing box. 1,809,657; June 9.
Weaver, Ira A., assignor to Weaver Manufacturing Company, Springfield, Ill. Valve construction. 1,809,431; June 9.
Weaver Manufacturing Company. (See Weaver, Ira A., assignor.)
Webb, Scott E., Santa Rosa, Calif. Delivery valve for liquid delivery trucks. 1,809,432; June 9.
Weeks, Francis H., New York, N. Y. Method and apparatus for transferring cargoes by crane. 1,808,873; June 9.
Weidlich Sterling Spoon Co. (See Flauder, Alfred J., assignor.)
Weil, Sydney S., Baltimore, Md. Volatile liquid container. 1,808,801; June 9.
Weinberg, Alexander, New York, N. Y. Ball game apparatus. 1,808,802; June 9.
Weis, John P., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y. Machine for making multiple seams. 1,809,460; June 9.
Weis, John P., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y. Making multiple seams. 1,809,461; June 9.
Weis, John P., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y. Machine and method for stitching shoe uppers. 1,809,462; June 9.
Weis, John P., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y. Machine and method for forming French-felled seams. 1,809,463; June 9.
Weisshaar, Heinrich, Stuttgart, Germany. Heat utilizer. 1,809,538; June 9.
Wendt, Carl A., Tulsa, Okla. Gas burner. 1,809,658; June 9.
Wessel, Carl, Borbeck, near Essen-on-the-Ruhr, assignor to the Firm Carl Still, Recklinghausen, Germany. Coke oven and operating same. 1,809,659; June 9.
West, Herbert J. (See Jaeger, A. O., and West.)
West, Herbert J., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Production of vacua. 1,809,614; June 9.
Western Brick Company. (See Payne, Frank, assignor.)
Western Electric Company. (See Arnold, Harold D., assignor.)
Western Electric Company. (See Burkholder, John C., assignor.)
Western Electric Company. (See Cummings, George C., assignor.)
Western Electric Company. (See Griggs, Elmer V., assignor.)
Western Electric Company. (See Heising, Raymond A., assignor.)

Western Electric Company. (See Knox, William G., assignor.)
Western Electric Company. (See Reeve, Howard T., assignor.)
Western Gas Construction Co., The. (See De Graw, Brown F., assignor.)
Western Union Telegraph Company. (See Angel, Herbert, assignor.)
Western Union Telegraph Company, The. (See Milnor, Joseph W., assignor.)
Western Union Telegraph Company. (See Morgenstern, R. V., and Teter, assignors.)
Westinghouse Electric & Manufacturing Company. (See Claytor, Edward M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hodgkins, Charles H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Jennings, Oliver S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Knowles, Dewey D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Matthews, Howard D., assignor.)
Westinghouse Electric & Manufacturing Company. (See Miller, Charles F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Peters, John F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sprague, Frank J., assignor.)
Wetzler, Max, New York, N. Y. Clamping device. 1,809,768; June 9.
Wetzler, Max, New York, N. Y. Veneer press. 1,809,769; June 9.
Weydmann, Philipp A. (See Fränkl, Mathias, assignor.)
Wezel & Naumann Aktiengesellschaft, the Firm. (See Clemens, Ludwig, assignor.)
Wheeler-Schebler Carburetor Co., The. (See Timian, Harold H., assignor.)
Wheeler, William H., New York, N. Y., and J. C. Logan, Jersey City, N. J. Anchorage. 1,809,464; June 9.
Wheeler, William H., New York, N. Y., and J. C. Logan, Jersey City, N. J. Anchorage. 1,809,465; June 9.
Whitcomb, Henry E., jr., Milwaukee, Wis., assignor to Richardson Ball Bearing Skate Company, Chicago, Ill. Skate clamp. 1,809,539; June 9.
White, D'Orsay McC., Chicago, Ill. Brake drum and wheel. 1,809,088; June 9.
White Motor Company, The. (See Edgerton, Arthur H., assignor.)
Whiting, Charles H. (See McGerry, J. J., and Whiting.)
Whitlock, Ralph C., Patents, Inc. (See Allen, Wilbur C., assignor.)
Wicker, Stanley S. (See Kahler, P. F., and Wicker.)
Widlund, Georg W. (See Stromberg, N. G. A., and Widlund.)
Wiegand, Edwin L., Pittsburgh, Pa. Producing electrical heating elements. 1,809,089; June 9.
Wiegand, Edwin L., Pittsburgh, Pa. Machine for forming electrical heating elements. 1,809,090; June 9.
Wiegand, William B., Sound Beach, Conn. Manufacture of carbon black. 1,809,290; June 9.
Wiken, Olof, assignor of one-half to F. C. Bagk, Milwaukee, Wis. Bag filler. 1,809,091; June 9.
Wilbur, Lawrence S., Evanston, Ill., assignor to National Rail Joint Corporation. Splice bar or fish plate. 1,809,092; June 9.
Wild, Samuel, and E. Hugentobler, assignors to Synthetic A. G., Basel, Switzerland. Winding apparatus for thread or the like. 1,809,660; June 9.
Wil-Fry Corporation. (See Fry, Walter L., assignor.)
Wilkens, Ferdinand, Meldorf, Hosteing, Germany. Cable laying. 1,808,974; June 9.
Willard, Donald E., Danville, Ill. Supporting means for hangar doors. 1,809,093; June 9.
Willard, John M., Los Angeles, Calif. Art of and means for molding concrete structures. 1,808,912; June 9.
Williams, George A., Decatur, assignor to Williams Sealing Corporation, Decatur, Ill. Tamper-proof seal for containers. 1,809,806; June 9.
Williams, Harrison B., New York, N. Y. Valve bag closure. 1,809,259; June 9.
Williams, Joseph G. (See Dorrance, A. A., and Avakian, assignors.)
Williams, Ormsby P., sr., Southgate, Calif. Ventilating means for foot coverings. 1,809,323; June 9.
Williams, Roger, Wilmington, Del., assignor to Du Pont Ammonia Corporation. Apparatus for effecting synthesis. 1,809,291; June 9.
Williams, Rolland G., assignor to Malleable Iron Fittings Company, Branford, Conn. Pole attachment for electric conductors. 1,809,094; June 9.
Williams Sealing Corporation. (See Williams, George A., assignor.)
Willig, Bruno W., San Angelo, Tex. Lift mechanism for agricultural implements. 1,809,500; June 9.
Willis, Bernard D. (See Voss, J. H., and Willis.)
Willshaw, Harry, Thomas Norcross and F. G. Broadbent, Erdington, England, assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y. Apparatus for vulcanizing tires. 1,809,433; June 9.
Willys-Overland Company, The. (See Baker, A. J., and Huntington, assignors.)
Willys-Overland Company, The. (See Edwards, Henry J., assignor.)
Willys-Overland Company, The. (See Grimm, George E., assignor.)
Willys-Overland Company, The. (See Strong, William P., assignor.)
Wilson, Earle F., Bay Lake, Fla. Wind motor. 1,808,874; June 9.
Wilson, Frank C., Arcade, N. Y. Safety device for hydraulic presses. 1,809,615; June 9.
Wilson, George F., Akron, and W. H. Slabaugh, Cuyahoga Falls, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y. Stripping device and method. 1,809,260; June 9.
Wilson, Henry D. (See Brown, Ray W., assignor.)
Wilson, Hillsman D., jr., assignor to H. F. Smith, Houston, Texas. Holding ring for manufacture of well screens. 1,808,913; June 9.
Wilson, James R., Mountain Lakes, and C. M. Blackburn, East Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Coating thermionic cathodes. 1,809,095; June 9.
Winans, Daniel M., Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y. Control shutter for engine radiator. 1,809,616; June 9.
Winckler, Walter T., assignor to The Von Winkler Laboratories, Inc., Chicago, Ill. Making silver salt of amino sulphonated castor oil. 1,809,770; June 9.
Winning, Robert K., Wauwatosa, Wis., assignor by mesne assignments, to Dudley Lock Corporation, Chicago, Ill. Permutation lock. 1,809,367; June 9.
Winning, Robert K., Wauwatosa, assignor to Clum Manufacturing Company, Milwaukee, Wis. Ignition switch, contact carrier and actuator. 1,809,368; June 9.
Winning, Robert K., assignor to Clum Manufacturing Company, Milwaukee, Wis. Switch barrel and the like and method for its manufacture. 1,809,369; June 9.
Winning, Robert K., assignor to Clum Manufacturing Company, Milwaukee, Wis. Control switch circuit for automobiles. 1,809,434; June 9.
Wired Radio, Inc. (See Culver, Charles A., assignor.)
Wold, Roscoe G., Phoenix, Ariz. Window and flap operator. 1,808,827; June 9.
Wolf, William R., Rochester, assignor, by mesne assignments, to Remington Rand Inc., Buffalo, N. Y. Copyholder. 1,809,096; June 9.
Wolff, Louis J., assignor to Oscillating Motors Company, Omaha, Nebr. Internal combustion engine. 1,809,577; June 9.
Wolters, Carl F., Marietta, Ohio. Combined concentric dial plate, lock dial and handle for safes. Des. 84,387; June 9.
Wood, Arch K., assignor to McKee Glass Company, Jeannette, Pa. Illuminated sign. 1,809,370; June 9.
Wood, Charles O., Chambersburg, Pa. Belt drive. 1,809,435; June 9.
Wood, Wilfred R., London, England, assignor to International Combustion Engineering Corporation, New York, N. Y. Steam generator. 1,809,097; June 9.
Woodburn, Esli A. (See Schoonover, Noah E., assignor.)
Woodroof, Charles T. (See Woodroof, William W. and C. T.)
Woodroof, William W. and C. T., Wilkinsburg, Pa. Teetotum. Des. 84,388; June 9.
Woodruff, Graham C., Bronxville, N. Y., assignor to The L. C. L. Corporation. Sectional freight car. 1,808,875; June 9.
Worthington, Everett. (See Rancorn, J. A., and Worthington.)
Wray, Curtis M., La Fayette, Ind. Lightning arrester. 1,808,876; June 9.
Wright, Daniel K., Cleveland Heights, Ohio, assignor to General Electric Company. Electric lamp. 1,809,661; June 9.
Wright, Geroge M., Great Baddow, Chelmsford, England, assignor to Radio Corporation of America. Facsimile system. 1,809,617; June 9.
Wright, Wilbur L., assignor to Oswego Falls Corporation, Fulton, N. Y. Sheet material container for bulk ice cream and other products. 1,808,975; June 9.
Wright, Wilbur L., Fulton, and J. T. Bond, Phoenix, assignors to Oswego Falls Corporation, Fulton N. Y. Bottoming paper containers. 1,809,006; June 9.
Wulfert, Otto, assignor to Wagner Electric Corporation, St. Louis, Mo. Sheet metal governor weight. 1,809,007; June 9.
Wunderlich, Milton S., assignor to Flaxlinum Insulating Company, St. Paul, Minn. Plaster board. 1,808,976; June 9.
Wurster, Carl. (See Brode, J., and Wurster.)
Yencer, Carl D. (See Bledsoe, G. W., Lloyd, and Yencer.)
York Ice Machinery Corporation. (See Shipley, Thomas, assignor.)
Young, Cecil G., Dover, N. J. Propellant charge for projectiles and forming the same. 1,808,877; June 9.
Young, Charles D., Wayne, Pa. Container handling system and apparatus. 1,809,540; June 9.
Zerweck, Werner. (See Thiess, K., Meissner, and Zerweck.)
Zieley, John D., Belmar, N. J., and H. E. Roys, New York, N. Y., said Roys assignor to said Zieley. Game. 1,809,098; June 9.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 9TH DAY OF JUNE, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Accelerator attachment. F. M. Butler. 1,809,021; June 9.
Accelerator of vulcanization. J. Teppema. 1,809,457; June 9.
Accessories for underfloor duct system. H. S. Walker. 1,809,613; June 9.
Accumulators. Metallic filling for cold. M. Fränkl. 1,808,921; June 9.
Acetylene generator. J. L. Mandeville. 1,809,521; June 9.
Acetylene, Process and apparatus for storing. E. G. Luening. 1,808,900; June 9.
Acid and 4-dimethylamino-2,3-dimethyl-1-phenyl-5-pyrazolon, Additive compound of diethyl barbituric. P. Pfeiffer. 1,808,994; June 9.
Acid fuming and decomposition process for the recovery of zinc, Sulphuric. H. A. Mayer and R. G. La Motte. 1,808,929; June 9.
Acids by fermentation, Production of organic. F. J. Cahn. 1,809,797; June 9.
Adjustable bracket. C. A. Bruning. 1,809,018; June 9.
Advertising display mechanism. P. A. Egeland. 1,809,162; June 9.
Aeroplane body, Nonsinkable. L. Nycz. 1,809,061; June 9.
Aeroplane wing. J. P. Fedor. 1,808,842; June 9.
Agricultural implement. G. H. Bickerton. 1,808,759; June 9.
Air conditioner. G. D. Harris. 1,808,982; June 9.
Aircraft. M. B. Pupp. 1,809,253; June 9.
Aircraft, Propulsion of. R. H. Goddard. 1,809,271; June 9.
Aircrafts and the like, Wing structure for. G. Miller. 1,809,721; June 9.
Air mixing apparatus for internal combustion motors, Automatic. L. A. Hart. 1,808,814; June 9.
Airplane. R. H. Royster. 1,808,996; June 9.
Airplane automatic control. A. E. Elsea. 1,808,771; June 9.
Airship. M. M. Egan. 1,809,680; June 9.
Alarm: *See*—
Valve alarm.
Alcohol from olefines, Production of. S. R. Merley. 1,809,788; June 9.
Aldol condensation products and vulcanization of caoutchouc therewith. L. B. Sebrell. 1,809,454; June 9.
Alligator wrench. J. Rubalcaba. 1,808,821; June 9.
Alloy and producing same, Stainless chromium. C. W. Carman. 1,809,437; June 9.
Amino-1,1'-anthrimidcarbazols, New. W. Mieg, O. and F. Baumann. 1,809,212; June 9.
Anchor for typewriters. L. Foval. 1,809,685; June 9.
Anchorage. W. H. Wheeler and J. C. Logan. 1,809,464–5; June 9.
Animal trap. S. Nelson. 1,808,903; June 9.
Antenna array, Directional. J. S. Stone. 1,808,867–9; June 9.
Antioxidant or age-resistor. A. M. Clifford. 1,809,798–9; June 9.
Antiskid device. O. Lance. 1,808,852; June 9.
Antiskidding device. C. Uhlman. 1,808,797; June 9.
Arch support. W. M. Scholl. 1,809,731; June 9.
Arch support, Adjustable. S. S. Baer. 1,809,010; June 9.
Area measuring by light. G. W. O. Martin. 1,809,346; June 9.
Argillaceous product, Making vitreous. W. B. Pine and J. B. and M. C. Shaw. 1,809,215; June 9.
Argillaceous product, Vitrified. W. B. Pine and J. B. and M. C. Shaw. 1,809,214; June 9.
Armature, Bar wound. V. G. Apple. 1,808,749; June 9.
Aroma testing of cedar chests. E. C. Crocker. 1,808,838; June 9.
Articles for coating, Apparatus for handling. R. F. Brimer. 1,809,190; June 9.
Articles with X-rays, Apparatus for treating. F. S. Smith. 1,809,078; June 9.
Ashes, Apparatus for handling. F. B. Allen. 1,809,501; June 9.
Audion tube. R. B. Dowler, jr. 1,809,475; June 9.
Auto body and top. J. Campbell. 1,809,505; June 9.
Auto heater. L. H. Patten. 1,809,528; June 9.
Automobile hood. L. J. Fox. Des. 84,330; June 9.
Auto sled attachment. J. T. Dunnigan. 1,809,161; June 9.
Awning fixture. J. W. Shaw. 1,808,823; June 9.
Axles, Electric motor automotive. V. G. Apple. 1,808,748; June 9.
Bacon and the like, Apparatus for broiling. C. W. Carter. 1,809,580; June 9.
Bag: *See*—
Golf bag.
Bag filler. O. Wiken. 1,809,091; June 9.
Ball game apparatus. A. Weinberg. 1,808,802; June 9.
Ball joint connection. G. H. Hufferd and M. P. Graham. 1,809,703; June 9.
Bar: *See*—
Joint bar.
Barber pole illumination. M. W. Berger. 1,808,880; June 9.
Barrel rack. N. Lang, jr. 1,808,988; June 9.
Battery: *See*—
Dry cell battery.
Battery connecter terminal. D. Schaffer. 1,809,452; June 9.
Beaded welt. A. L. Howard. 1,809,555; June 9.
Bearing for clutch releases. D. E. Gamble. 1,808,980; June 9.
Bearings and bushings, Apparatus for finishing. T. D. Bowes. 1,809,545; June 9.
Bearings, Side. D. C. Davis. 1,808,839; June 9.
Beeswax, Treating. W. S. Baylis. 1,808,755; June 9.
Belt, Stranded. E. A. Connor. 1,809,023; June 9.
Bench: *See*—
Greenhouse bench. Shop bench.
Beryllium or its alloys, Manufacture of metallic. H. Fischer. 1,809,442; June 9.
Billboard, Interchangeable block. G. W. Eschenbach. 1,809,378; June 9.
Billing machine aligner. L. F. Hagemann. 1,809,590; June 9.
Biscuit, cake and pie machine. J. S. Acosta. 1,809,263; June 9.
Bit: *See*—
Drilling bit.
Bit having tangential blades. 1,809,182; June 9.
Block: *See*—
Building block.
Blowpipe. J. E. Vincent. 1,809,652; June 9.
Board: *See*—
Plaster board.
Boat release and utility hook, Combination automatic. O. D. Butler. 1,809,945; June 9.
Bobbin clutch for spindles. D. Lemcine and G. Fournier. 1,809,049; June 9.
Boiler: *See*—
Steam boiler.
Boiler cleaner. N. L. Snow and C. F. Hirshfeld. 1,809,221; June 9.
Boiler construction, Water tube. K. L. Martin. 1,809,133; June 9.
Boiler with superheater. C. W. Gordon. 1,808,951; June 9.
Bookmark. R. H. Moore. 1,808,931; June 9.
Boot and shoe. F. W. East. 1,809,194; June 9.
Booth, Voting. I. S. Draper. 1,808,946; June 9.
Boring and tapping machine, Horizontal. J. S. Barnes. 1,809,188; June 9.
Bottle. E. Becker and I. Miller. Des. 84,317; June 9.
Bottle capping and sealing machine. H. B. Foulder. 1,809,587; June 9.
Bottles, Mechanism for capping. O. Larsen. 1,809,129; June 9.
Box: *See*—
Collapsible box. Stuffing box.
Slide box.
Brace chuck. C. S. Thomas. 1,808,940; June 9.
Bracket: *See*—
Adjustable bracket. Window box bracket.
Shade bracket.
Brake: *See*—
Vacuum brake. Vehicle brake.
Brake. E. G. Gunn. 1,809,411; June 9.
Brake. H. Perrot and G. Calvignac. 1,809,568; June 9.
Brake drum and wheel. D. M. White. 1,808,088; June 9.
Brake for scales, Dash-pot. C. F. M. van Berkel and A. van Duyn. 1,809,084; June 9.
Brake or dashpot, Liquid. A. van Duyn. 1,809,083; June 9.
Brake mechanism. A. H. Edgerton. 1,808,947; June 9.
Brake mechanism, Vacuum. C. S. Bragg and V. W. Kliesrath. 1,809,014; June 9.
Brake mechanism for motor vehicles. W. J. Besler. 1,809,328; June 9.
Brake rigging, Foundation. W. H. Sauvage. 1,809,729; June 9.
Braking mechanism. A. H. G. Girling. 1,809,479; June 9.
Braking system for land vehicles, Fluid operated four wheel. D. C. Kellogg. 1,808,987; June 9.
Brick, Apparatus and process for texturing. J. E. Smith. 1,809,572; June 9.
Brick machine. J. N. Porter. 1,809,601; June 9.
Broiler. C. N. Dibble. 1,808,768; June 9.

Brush for cleaning pipes and tubes. J. H. Roe. 1,809,725; June 9.
Bucket construction. W. M. Venable. 1,808,800; June 9.
Buckets, Guiding means for trolley. H. E. Hallenbeck. 1,808,954; June 9.
Buckstay, Sectional. J. P. McLimans. 1,809,210; June 9.
Buffer. R. Beynon. 1,808,881; June 9.
Building. C. E. Barnes. 1,808,829; June 9.
Building block, Child's. W. H. Colby. 1,809,508; June 9.
Building construction. R. Carvel. 1,809,504; June 9.
Building material. F. Payne. 1,808,905; June 9.
Building, Storage. C. G. Mitchell. 1,809,140; June 9.
Building structure. E. A. Hermsen. Des. 84,339; June 9.
Bumper element for safety zones. J. De Gloria and H. C. Schroeder. 1,808,767; June 9.
Bunkers, Outlet apparatus for ash. R. H. Beamont. 1,809,771; June 9.
Burner: *See*—
Gas burner.
Burner supporting means. S. C. Gulick. 1,808,952; June 9.
Burner tip for torches. P. M. Forster. 1,809,113; June 9.
Cabinet, Display. R. T. Burrows. Des. 84,325; June 9.
Cabinet, Fireplace. R. J. Nachtigall. Des. 84,359–61; June 9.
Cabinet for radio receiving apparatus. C. S. Bradley. Des. 84,316; June 9.
Cable laying. F. Wilkens. 1,808,974; June 9.
Cables in hanger seats, Device for preventing the rotation of. J. Blackburn. 1,809,543; June 9.
Caddy. A. S. Ethridge. 1,808,772; June 9.
Calculating device. C. A. Glass. 1,808,981; June 9.
Calculating machine. M. G. de Simone. 1,809,811; June 9.
Calculating machine. W. J. Pasinski. 1,808,934; June 9.
Camera attachment, Panoramic. A. C. Hayden. 1,809,338; June 9.
Camera, Motor operated motion picture. P. A. Stephenson. 1,809,256; June 9.
Cameras, Automatic film moving device for single exposure. E. E. Ellis. 1,808,919; June 9.
Can: *See*—
Hand opening can. Tobacco can.
Canteen and mess kit, Combination. W. R. Nason. 1,809,596; June 9.
Car, Folding deck stock. A. R. Burke. 1,809,772; June 9.
Car, Mine. G. E. Jones, jr., and P. S. McCallen. 1,809,707; June 9.
Car, Sectional freight. G. C. Woodruff. 1,808,875; June 9.
Carbon black, Manufacture of. W. B. Wiegand. 1,809,290; June 9.
Carbon pack. K. R. Dencklau. 1,808,840; June 9.
Carbonating apparatus. J. E. Malone. 1,808,854; June 9.
Carburetor. W. C. Carter. 1,809,507; June 9.
Carburetor. J. L. Chesnutt. 1,809,108; June 9.
Carburetor. J. R. Francis. 1,808,843; June 9.
Carburetor. A. W. Lee and A. W. Hamby. 1,809,485; June 9.
Carburetor. S. E. Melkman. 1,809,387; June 9.
Carburetor. A. Pariente de la Cruz. 1,809,677; June 9.
Carburetor. C. N. Pogue. 1,809,531; June 9.
Carburetor. H. H. Timian. 1,809,648; June 9.
Cardboard flat in places, Pressing corrugated. L. Clemens. 1,809,472; June 9.
Cargoes by crane, Method of and apparatus for transferring. F. H. Weeks. 1,808,873; June 9.
Carrier: *See*—
Luggage carrier.
Carrier for spare wheels and tires. E. S. Hebeler. 1,808,983; June 9.
Case: *See*—
Display case. Waterproof bather's case.
Packing case.
Casing for a massage apparatus with hose and cup attached. S. Stephani, née Kaus. Des. 84,383; June 9.
Caster. G. M. Turner. 1,809,609; June 9.
Casting machine. H. G. Stecker. 1,809,289; June 9.
Casting machine, Centrifugal. J. B. Ladd. 1,809,631; June 9.
Casting machine, Line. S. E. Sperry. 1,809,760; June 9.
Catalytic reactions, Process and apparatus for. L. Gillett. 1,809,114; June 9.
Catch, Door. W. D. Ferris. 1,809,406; June 9.
Cathead, Safety. C. R. Edwards. 1,808,770; June 9.
Cathodes, Coating thermionic. J. R. Wilson and C. M. Blackburn. 1,809,095; June 9.
Cathodes, Making. H. T. Reeve. 1,809,067; June 9.
Cellulose according to the sulphite method, Manufacturing. T. E. Waenerlund. 1,809,499; June 9.
Cellulose ester composition. H. T. Clarke. 1,809,234; June 9.
Chain. N. K. Panzireff. 1,809,145; June 9.
Chain, Bracelet. G. U. Meyer. Des. 84,357; June 9.
Chain for timber in combination with a tightening device and key. K. R. A. Nylen. 1,809,420; June 9.
Chains, Device for applying antiskid. H. A. Frazier. 1,809,443; June 9.
Chair. A. W. Schram. 1,809,453; June 9.
Chair and bed, Combination. A. Walter. 1,809,226; June 9.
Charge for projectiles and forming the same, Propellant. C. G. Young. 1,808,877; June 9.
Chopper: *See*—
Cotton chopper.
Chromium plating machine, Automatic. C. G. Miller. 1,809,138; June 9.
Chuck structure. W. G. Mueller. 1,809,308; June 9.
Cigar package, Visible. A. J. Golden. 1,809,335; June 9.
Cigarette grasper. C. C. Riddell. 1,809,218; June 9.
Cigarettes right side up as they are fed to the packing machine, Apparatus for turning. M. Berger. 1,809,189; June 9.
Circuit breaker. O. S. Jennings. 1,809,275; June 9.
Circuit control system. J. C. Burkholder. 1,808,916; June 9.
Circuit, Electric control. E. V. Griggs. 1,809,625; June 9.
Circuit for automobiles, Control switch. R. K. Winning. 1,809,434; June 9.
Circuit, Repeater. B. G. Bjornson. 1,808,915; June 9.
Circuits applied to electrical musical instruments and the like, Oscillating. J. Bethenod. 1,809,503; June 9.
Circuits of telephones, Selectively controlling ringing. C. M. MacGregor. 1,809,176; June 9.
Clamp: *See*—
Skate clamp. Wire clamp.
Slider rail clamp.
Clamp and light housing, Instrument. J. E. Eshbaugh. 1,809,682; June 9.
Clamp device. J. Verderber. 1,809,576; June 9.
Clamp for battery terminal posts. T. Hofman. 1,808,775; June 9.
Clamping device. M. Wetzler. 1,809,768; June 9.
Clarinet and manufacture thereof. E. J. Gulick. 1,809,380; June 9.
Clasping device for wrist watch straps, bracelets, and the like. C. H. Kestenman. 1,809,278; June 9.
Cleaner: *See*—
Boiler cleaner. Vacuum cleaner.
Flue cleaner. Windshield cleaner.
Cleaner for tractors, Wheel. E. Pagaard. 1,808,861; June 9.
Cleaning mechanism, Fabric. H. Hemmerich. 1,809,122; June 9.
Cleaning pad. R. Busch, sr. 1,808,834; June 9.
Cleat, Halyard. W. A. Sague. 1,808,791; June 9.
Clip. C. A. Bulkeley. 1,809,400; June 9.
Clip and attaching the same, Fastening. G. Larsen. 1,808,779; June 9.
Clipper, Hand. L. J. Wahl. 1,809,459; June 9.
Clock case and shelving, Combined. H. Miller. Des. 84,358; June 9.
Closure for fluid or aspirating bottles and the like. E. Ocasek. 1,808,784; June 9.
Closure for milk bottles and other containers. F. K. Plympton. 1,809,791; June 9.
Cloth handling machine. R. A. Oesman. 1,809,213; June 9.
Clothespin. A. H. Graves. 1,809,689; June 9.
Coal distributing means. H. Adams. 1,809,261; June 9.
Coal unit, Artificial. C. W. Logan. 1,808,780; June 9.
Cock and holder therefor, Angle. L. A. Hoerr. 1,809,037; June 9.
Coin controlled lock. W. M. Gleason. 1,809,334; June 9.
Collapsible box, Telescopically. J. A. Powell. 1,809,355; June 9.
Collar, Adjustable. C. H. Morrow. 1,809,059; June 9.
Combination instrument. I. Daehlin. 1,809,775; June 9.
Combined light globe and traffic signal. R. J. Lackner. 1,809,785; June 9.
Commutator. V. G. Apple and W. M. Doehring. 1,808,750; June 9.
Compact, Pocket book. R. Katrinak. 1,809,517; June 9.
Compact and puff holder for vanity boxes. A. S. Lyhne. 1,808,961; June 9.
Compensator switch. A. M. Skudre. 1,809,641; June 9.
Composition for preservative treatment of fresh fruit. E. M. Brogden and M. L. Trowbridge. 1,809,016; June 9.
Composition for purifying petroleum oils. J. H. Hirt. 1,809,554; June 9.
Compressible and elastic material, Making. A. C. Fischer. 1,809,800; June 9.
Concrete fence post. G. E. Nagel. 1,809,757; June 9.
Concrete slab, Armored reenforced. G. E. Nagel. 1,809,756; June 9.
Concrete stave making machine. A. H. Nelson. 1,808,860; June 9.
Concrete structures, Molding. J. M. Willard. 1,808,912; June 9.
Condensation products and dyestuffs from thionaphthene-2.3-dicarboxylic acids and preparing the same. F. Mayer. 1,809,207; June 9.
Condenser control, Variable. M. H. Bennett. 1,809,371; June 9.
Conductor, Composite. W. G. Knox. 1,808,925; June 9.
Conductor, Insulated electrical. C. A. Barker. 1,809,011; June 9.
Conduit and molding, Combined. A. H. Tashjian. 1,809,223; June 9.
Conduit for steam and gas turbines, Supply. G. Bauer and C. Schmieske. 1,809,666; June 9.
Conduits, Building. L. H. Gladwin and N. G. Bruce. 1,809,802; June 9.
Conduits, Joining. B. C. Root. 1,809,313; June 9.
Connecter, Threadless. J. T. Pearson. 1,809,064; June 9.
Connection for universal joints or couplings. E. E. Culbertson. 1,809,404; June 9.
Container. H. C. Boardman. 1,809,013; June 9.
Container. C. P. Gallistel. 1,808,922; June 9.

Container cap lining machine, Automatic. T. Jensen. 1,809,341; June 9.
Container, Drop-bottom. L. M. Showers, jr. 1,809,640; June 9.
Container for bulk ice cream and other products, Sheet material. W. L. Wright. 1,808,975; June 9.
Container for cigarettes and the like. E. F. M. Décobert. 1,809,746; June 9.
Container for fragile articles, Packing. L. Mann. 1,809,559; June 9.
Container for packing and shipping fresh fruit. C. J. Horn. 1,809,702; June 9.
Container handling system and apparatus. C. D. Young. 1,809,540; June 9.
Container, Twine. C. J. Fulcher. 1,809,029; June 9.
Container, Volatile liquid. S. S. Weil. 1,808,801; June 9.
Container, Wrapped coin. C. E. McLean. 1,809,523; June 9.
Containers, Bottoming paper. W. L. Wright and J. T. Bond. 1,809,006; June 9.
Containers containing milk or other substances, Packing sealed. H. W. S. Palmer. 1,809,600; June 9.
Control device. C. H. Hodgkins. 1,809,299; June 9.
Control means, Rotary automatic. J. J. McGerry and C. H. Whiting. 1,808,901; June 9.
Control mechanism, Interlocking. T. C. Evans. 1,809,778; June 9.
Converter for electric current. J. H. and K. B. Cragg. 1,809,110; June 9.
Conveyer. J. A. Alger. 1,809,662; June 9.
Conveyer and transfer mechanism, Automatic. C. G. Miller. 1,809,137; June 9.
Conveyer mechanism. G. F. Croessant. 1,808,918; June 9.
Conveyer-separator. L. T. Evans. 1,809,586; June 9.
Cooker, Steam pressure. J. A. Smith. 1,809,079; June 9.
Cooking apparatus. G. R. Le Saufage. 1,809,172; June 9.
Cooling device for motors. A. J. Gifford and B. S. T. Bishop. 1,808,845; June 9.
Cooling scalp, Apparatus for. F. A. Hogrebe. 1,809,038; June 9.
Copper ingots and other articles, Apparatus for casting. D. R. Francis. 1,809,623; June 9.
Cord attachment for plugs and sockets. E. Rolker. 1,809,532; June 9.
Corner connection, Metal. I. A. Baum. 1,808,754; June 9.
Cotton baling machinery. A. S. Mackenzie. 1,809,520; June 9.
Cotton chopper. H. Taylor. 1,808,871; June 9.
Coupler, Pipe. L. H. Church. 1,809,582; June 9.
Coupling: *See*—
Shaft coupling.
Coupling and valve. W. R. Johnson. 1,809,127; June 9.
Counter liner and heel cushion, Combined. J. D. Langdon. 1,808,992; June 9.
Cover for seat side arms. W. L. Fry. 1,809,292; June 9.
Cover for vehicles and the like, Canvas. X. Seitz. 1,809,455; June 9.
Cowl ventilator. G. E. Grimm. 1,809,589; June 9.
Crushers, Automatic control for cone. G. W. Bennett. 1,808,914; June 9.
Cultivator. J. R. Orelind. 1,808,932; June 9.
Culverts, Constructing. D. T. Finkbeiner. 1,809,513; June 9.
Cup: *See*—
Drinking cup.
Curling iron heater. E. A. Churchill. 1,809,510; June 9.
Current collector for electric tramway and railway vehicles. T. C. E. Rowland and H. M. Dudgeon. 1,809,492; June 9.
Current motor, Fluid. C. Ottevaere. 1,809,180; June 9.
Curtain and shade hanger. E. Roberts. 1,808,971; June 9.
Cutter: *See*—
Vegetable cutter.
Cutter bars of mowing machines, Support for. J. W. Hardy. 1,809,751; June 9.
Cutters, Method of and machine for relieving. J. Edgar. 1,809,377; June 9.
Cutting machine, Scroll. R. E. Hallings. 1,809,381; June 9.
Cutting operations and apparatus therefor, Rotary. J. J. Buckley. 1,809,019; June 9.
Cutting or punching machine. J. Husler. 1,809,040; June 9.
Cutting vegetables, Device for. Pokorný and J. Nesměrák. 1,809,792; June 9.
Cyanide recovery process. L. D. Mills and T. B. Crowe. 1,809,248; June 9.
Dam. J. S. Miller. 1,809,636; June 9.
Dam and constructing the same. F. A. Noetzli. 1,808,904; June 9.
Davenport bed. M. Fox. 1,809,812; June 9.
Desk, Foldable. J. Fanarjian. 1,809,028; June 9.
Detachable handle. C. Grant. 1,808,890; June 9.
Developing apparatus. W. H. Jaeger. 1,809,705; June 9.
Dial plate, lock dial and handle for safes, Combined concentric. C. F. Wolters. Des. 84,387; June 9.
Diggers and plows, Toothed drum for quack grass. S. H. Heinmiller. 1,808,984; June 9.
Dipper for snuff or the like. J. C. Flynn. 1,808,949–50; June 9.
Direction indicator. R. F. Smith. 1,809,362; June 9.
Dish, Covered. S. E. Thompson. Des. 84,385; June 9.
Disintegrator, Lamination. C. D. Coste. 1,809,160; June 9.
Dispenser, Grease. J. and G. Baldner. 1,808,804; June 9.
Dispensing device for stacked articles. H. D. Gregory. 1,809,690–1; June 9.
Dispensing mechanism. A. H. Du Grenier. 1,809,584; June 9.
Display case. J. P. Bertram and A. Berliner. 1,809,155–6; June 9.
Display device. R. R. Heywood, jr. 1,809,298; June 9.
Display device. A. Holtzman. 1,808,895; June 9.
Display form. A. Simson. 1,809,361; June 9.
Doll eye mounting. S. Marcus and A. Konoff. 1,809,053; June 9.
Domestic appliance. R. L. Lee. 1,808,927; June 9.
Door, Car. F. C. Heinen, K. J. Tobin, and A. Wasberg. 1,809,697; June 9.
Door check. A. B. Clark. 1,808,837; June 9.
Door construction, Automobile. J. Ledwinka. 1,809,592; June 9.
Door for railway cars, Cast metal hopper. W. P. Murphy. 1,809,638; June 9.
Door for railway hopper cars, Hopper. A. E. Small. 1,809,644; June 9.
Door, Railway car drop. A. E. Small. 1,809,643; June 9.
Door, Railway car drop. A. E. Small. 1,809,645; June 9.
Doors, Counterbalance for. F. H. McCormick. 1,809,715; June 9.
Dough forming apparatus. N. Proos. 1,808,788; June 9.
Draft regulating system. W. B. Sturgis. 1,809,575; June 9.
Draft regulator, Automatic. R. A. Walker. 1,809,005; June 9.
Drain. J. Hirshstein. 1,809,413; June 9.
Draw gear for railway vehicles, Central buffing and. R. T. Glascodine. 1,809,198; June 9.
Dress. F. A. Jacobs. Des. 84,348; June 9.
Dress. D. Long. Des. 84,356; June 9.
Dressing medium for textile matter and manufacturing the same. I. Budowski. 1,809,470; June 9.
Drier: *See*—
Fisherman's line drier. Hair drier.
Drill: *See*—
Rock drill.
Drilling apparatus, Rotary. E. E. Greve. 1,809,444; June 9.
Drills, Relieving device for high speed. F. L. Cone. 1,809,402; June 9.
Drilling bit. G. C. Oliver. 1,809,351; June 9.
Drinking cup, Conical. L. W. Luellen. 1,809,281; June 9.
Drive, Belt. C. O. Wood. 1,809,435; June 9.
Drive, Chain feed. C. L. Mattison. 1,809,054; June 9.
Drive for internal combustion engines, Cam shaft. K. Haussmann. 1,809,481; June 9.
Drive, Sewing machine. J. Holtzman. 1,808,776; June 9.
Driving and spring suspension of vehicles. F. S. Farnsworth. 1,809,196; June 9.
Driving mechanism for combined washers and wringers. O. E. Szekely. 1,809,149; June 9.
Driving mechanism for motor vehicles. W. Staniewicz. 1,809,737; June 9.
Driving mechanism for rotating shafts at variable speeds. F. Broch. 1,809,469; June 9.
Dry cell battery. N. K. Chaney. 1,809,471; June 9.
Dyes and product, Manufacture of sulphur containing. O. Spengler and W. Muller. 1,809,318; June 9.
Dyes for p-chlorphenylpyrazolones and anilines, Monazo. L. W. Geller. 1,809,030; June 9.
Dyestuff, New polyazo. W. Hentrich, M. Hardtmann, J. Hilger, and R. Knoche. 1,808,849; June 9.
Dyestuff, Vat. K. Thiess and T. Meissner. 1,809,224; June 9.
Easel. J. Dumas. 1,809,268; June 9.
Edging mill. R. J. Banner. 1,808,752; June 9.
Edging, Upholstering. F. L. Smith. 1,809,733; June 9.
Edible product. A. Heyboer. 1,809,383; June 9.
Electric discharge tube. A. C. Bartlett and J. W. Ryde. 1,809,229; June 9.
Electric machine, Dynamo. V. G. Apple. 1,808,747; June 9.
Electric machine with improved cooling system, Dynamo. V. G. Apple. 1,808,751; June 9.
Electric motor. V. J. Defays and P. J. Lefebvre. 1,809,512; June 9.
Electric quantities, Method of and apparatus for measuring the active components of. M. Osnos. 1,809,062; June 9.
Electric switch. A. J. Bowie. 1,809,232; June 9.
Electric switch. A. W. G. Tucker. 1,809,498; June 9.
Electric switch, Pressure actuated. F. E. Sperry. 1,809,642; June 9.
Electric terminal connecter. C. E. Hoover. 1,809,202; June 9.
Electrical device. V. I. Cruser. 1,809,025; June 9.
Electrical generating system. C. A. Culver. 1,809,676; June 9.
Electrical heating elements, Producing. E. L. Wiegand. 1,809,089; June 9.
Electrical illuminating apparatus. L. A. Ramsden. 1,809,181; June 9.
Electrical remote control system. H. Froger. 1,809,686; June 9.
Electrical starting motor. V. G. Apple. 1,808,746; June 9.

Electrodes, Apparatus and process for the manufacture of vacuum tube. A. Loppacker. 1,809,206; June 9.
Electrostatic reproducer. J. J. Steedle. 1,809,754; June 9.
Elevator and saw, Combined. H. J. H. Duensing. 1,809,193; June 9.
Elevator system and control, Dual. F. J. Sprague. Re18,095; June 9.
Emulsifying apparatus. R. H. Hargreaves. 1,809,033; June 9.
End cap for tubular packages. B. Cushing. 1,809,267; June 9.
Engine: *See*—
Internal-combustion engine. Rotary engine.
Etching machine. F. T. Powers. 1,808,906; June 9.
Extension device. M. Anderson. 1,809,618; June 9.
Extractor: *See*—
Juice extractor.
Extrusion machine. W. McClintock and F. Y. Pearne. 1,808,964; June 9.
Fabric drying and finishing machine. E. B. Bates. 1,808,879; June 9.
Facsimile system. G. M. Wright. 1,809,617; June 9.
Fan and governor for internal combustion engines, Combined. W. B. Thiemann. 1,809,152; June 9.
Fan, Portable electric. C. E. Smith. Des. 84,379–82; June 9.
Fancy work machine. N. A. Jennings. 1,809,241; June 9.
Fastener. H. Rosenberg. 1,809,758; June 9.
Fastener setting machines, Swinging die holder for. F. E. Warner. 1,809,322; June 9.
Fastener with lateral clearance. G. W. Blair. 1,809,667; June 9.
Fastening device. G. Sundback. 1,809,717; June 9.
Fatty products, Recovering. H. L. Borg. 1,808,831; June 9.
Feed water heater. E. L. and C. A. Schellens. 1,809,730; June 9.
Fibrous articles and their manufacture, Water resistant. D. F. Smith, E. J. Pieper, and C. C. Vogt. 1,809,316; June 9.
Film, Cellulose. S. E. Sheppard and J. G. McNally. 1,808,998; June 9.
Filter. E. Burt. 1,808,917; June 9.
Filter, Oil. W. B. Sturgis. 1,809,429; June 9.
Finish, Interior wall. A. W. Schorger. 1,808,865; June 9.
Fire and blowout control. L. M. Bettinger. 1,809,230; June 9.
Firearms, Automatic. R. Von Frommer. 1,809,741; June 9.
Firearms having a recoiling barrel and an amplifying push lever, Automatic. C. Soncini. 1,809,222; June 9.
Fireworks. J. Glotosa. 1,808,811; June 9.
Fish tape puller. G. J. Roth. 1,809,068; June 9.
Fisherman's line drier. C. O. Sather and F. P. Sampson. 1,809,728; June 9.
Flashlight. W. W. Cargill. 1,809,506; June 9.
Floor construction, Inlay. B. C. Rockwell. 1,809,393; June 9.
Flour saving means for dough brakes. C. P. and W. W. Wagner. 1,809,225; June 9.
Flue cleaner. S. S. Strasburg. 1,808,870; June 9.
Fluid meter. A. J. Granberg. 1,809,118; June 9.
Fluid pressure breaking mechanism for mining machines. E. C. Morgan. 1,809,307; June 9.
Flying machine. F. Steinmann, sr. 1,808,908; June 9.
Flying shear. B. N. Bletso and G. H. Rose. 1,809,668; June 9.
Folder, Loose leaf. E. M. Buckland. 1,808,884; June 9.
Folding table. J. B. O'Connor and J. B. Adler. 1,809,564; June 9.
Football down signal. S. B. McMaster. 1,809,211; June 9.
Frame: *See*—
Mower frame. Vehicle frame.
Frame and anchor, Metal. I. A. Baum. 1,808,753; June 9.
Frequency responsive apparatus. A. S. Fitz Gerald. 1,809,683; June 9.
Fruit gathering machine. P. H. Lint. 1,808,928; June 9.
Fuel material, Briquetting. A. D. Little. 1,809,245; June 9.
Fuels or the like, Feeding means for fluid. L. Lavoie. Re18,094; June 9.
Fumigating apparatus. K. A. Kilbourne. 1,809,279; June 9.
Fur, Artificial. G. Romane. 1,809,356; June 9.
Furnace: *See*—
Hot air furnace. Rotary valve furnace.
Rotary furnace.
Furnace. W. K. Brownlee and M. J. Owens. 1,809,105; June 9.
Furnace control, Apparatus for blast. J. F. Austin and D. H. McIntosh. 1,809,324; June 9.
Furnace roofs, Supporting, constructing, and repairing. J. P. McLimans. 1,809,209; June 9.
Furnace wall. M. Liptak. 1,809,417; June 9.
Furnaces, Controlling blast. J. F. Austin and D. H. McIntosh. 1,809,326; June 9.
Fuse, Expulsion. W. D. Kyle. 1,809,205; June 9.
Game. J. D. Zieley and H. E. Roys. 1,809,098; June 9.
Garment. H. J. Barclay, sr. 1,809,502; June 9.
Garment-bagging machine. W. A. Shields. 1,808,824; June 9.
Garment hanger, Foldable. E. Müller. 1,809,561; June 9.
Gas burner. C. A. Wendt. 1,809,658; June 9.
Gas generator, Water. A. G. Glasgow. 1,809,333; June 9.
Gas in vertical chamber ovens, Apparatus and process for producing coke and water. C. Otto and C. W. Andrews. 1,809,421; June 9.
Gas manufacture. B. F. De Graw. 1,808,807; June 9.
Gas pilot and burner. I. M. Austin, jr. 1,809,397; June 9.
Gas samples, Apparatus for automatically withdrawing. J. F. Austin and D. H. McIntosh. 1,809,325; June 9.
Gases, Apparatus for treating. F. W. Sperr, jr. 1,809,646; June 9.
Gases from furnaces, Utilizing the waste. B. M. Johnson. 1,809,628; June 9.
Gasoline vapors, Condensing. F. W. Isles. 1,809,167; June 9.
Gate: *See*—
Hopper gate.
Gate. C. M. Root. 1,808,972; June 9.
Gauge: *See*—
Pressure gauge.
Gauge device. O. R. Briney. 1,809,547; June 9.
Gauges for bottles, Multiple neck. C. G. Hilgenberg. 1,808,955; June 9.
Gear for air ships of the rigid type, Driving. J. Schuette. 1,809,220; June 9.
Gear for airships, Steering. J. D. Langdon. 1,808,991; June 9.
Gear for steam engines, Valve. F. A. Kowarick. 1,809,712; June 9.
Generator: *See*—
Acetylene generator. Steam generator.
Gas generator.
Generator armatures, Production of. W. Fendrich, jr. 1,809,197; June 9.
Germicide and insecticide. R. Soule. 1,809,255; June 9.
Glare eliminating device. E. C. De Vorss and W. F. Lumsden. 1,809,678; June 9.
Glass and cellulose derivative composition, Manufacture of compound sheets of. W. Johnston. 1,809,276; June 9.
Glass feeder. T. Stenhouse. 1,809,794; June 9.
Glass forming machine. T. and D. Stenhouse. 1,809,793; June 9.
Glass treatment. E. D. Tillyer and H. R. Moulton. 1,809,534; June 9.
Globe support for electric lights. C. L. Fitchet. 1,809,379; June 9.
Golf bag. J. C. Hall. 1,809,120; June 9.
Golf bag. H. T. Tucker. 1,809,536; June 9.
Grain cleaning and seed treating apparatus. J. W. and P. M. Hoefling. 1,809,701; June 9.
Grain separating machine. W. T. Pierce. 1,808,863; June 9.
Grain that is being loaded in bulk, Appliance for trimming. F. W. Thompson. 1,809,497; June 9.
Grappling apparatus. V. G. Ellen. 1,809,622; June 9.
Greenhouse bench. P. L. McKee. 1,809,055; June 9.
Grinder, Valve. F. W. Miller. 1,808,856; June 9.
Grinding machine. J. Hüser. 1,809,414; June 9.
Gripper mechanism. C. L. Moyer. 1,808,783; June 9.
Gripping dog. J. E. Ott. 1,809,566; June 9.
Ground connecter. G. E. Andre. 1,809,009; June 9.
Guard for adzes. H. O. Swann. 1,809,319; June 9.
Guide for slidable window screens. H. H. Everhard. 1,809,236; June 9.
Gun for shooting elastic bands, Repeating. J. R. McFarland. 1,809,208; June 9.
Guns, Belt feed mechanism for machine. J. I. Hatcher. 1,808,847; June 9.
Hair cutting machine, Barber's. A. Adams. 1,809,008; June 9.
Hair drier. L. J. Wahl. 1,809,458; June 9.
Hammer, Board drop. H. G. Kimball. 1,809,300; June 9.
Hammer, Drop. F. J. Vlchek. 1,809,805; June 9.
Hammer, Portable power operated. J. R. Hilstad. 1,809,340; June 9.
Hand opening can. J. F. Quinn. 1,809,451; June 9.
Handle: *See*—
Detachable handle. Tool handle.
Handle attachment for cooking utensils. A. W. Nelson and W. Topping. 1,809,060; June 9.
Handle for forks and like implements. B. H. Smith. 1,809,254; June 9.
Handle for rock drills. J. F. Mock. 1,809,141; June 9.
Hanger: *See*—
Curtain and shade hanger. Garment hanger.
Hardware, Builder's. E. H. Johnson. 1,808,897; June 9.
Harvester, Corn. F. Matoushek. 1,808,855; June 9.
Harvester, Seed. D. Borland. 1,809,544; June 9.
Harvesters and analogous implements, Conveying and gathering mechanism for. H. H. Bardsley and W. J. Ehler. 1,809,542; June 9.
Hay press. G. W. Bowman. 1,808,832; June 9.
Headlamp, Motor vehicle. W. H. Chapman. 1,809,022; June 9.
Headlight, Dirigible. J. Link. 1,809,173; June 9.
Headpiece, Meshed. H. Davis. 1,809,511; June 9.
Heat producing element, Electrical. J. Ostrak. 1,809,565; June 9.

Heat utilizer. H. Weishaar. 1,809,538; June 9.
Heater: *See*—
Auto heater. Milk heater.
Curling iron heater. Vehicle heater.
Feed water heater. Water heater.
Hot water heater.
Heating system. C. F. Brand. 1,808,761; June 9.
Heel cushion for automobiles. M. B. Jamieson. 1,809,706; June 9.
Heel lift, Removable. V. Marino. 1,808,963; June 9.
Heel, Shoe. A Ehrenfried. 1,809,405; June 9.
High tension switch. F. H. Wappler. 1,809,366; June 9.
Hinge for vat covers. O. Larsen. 1,809,047; June 9.
Hobby horse. B. H. Dunkley. 1,808,887; June 9.
Hoe, Rub. W. E. Chase. 1,809,743; June 9.
Holder, Adaptable wheel. H. R. Kennedy. 1,809,169; June 9.
Holder and clamp, Tooth band. A. E. Pock. 1,809,423; June 9.
Holder, Brake shoe. L. J. Davis. 1,809,745; June 9.
Holder, Copy. W. R. Wolf. 1,809,096; June 9.
Holder, Electrode. W. H. Walter. 1,809,656; June 9.
Holder for paper cups and the like. O. H. Burdett. 1,808,763; June 9.
Holder for stenotype operators, Foldable note pad. A. C. Allen. 1,808,942; June 9.
Holder, Hose. K. Farrar. 1,809,550; June 9.
Holder, Mail box. O. Sanders. 1,809,726; June 9.
Holder or adapter, Broach. C. J. Halborg. 1,809,237; June 9.
Holder, Tool. H. M. Graul. 1,809,553; June 9.
Holder, Wrench kit. A. I. Platt. 1,809,450; June 9.
Holding means for instruments. N. C. Shaw and T. J. O'Meara. 1,809,639; June 9.
Hook: *See*—
Sign hook.
Hopper, Drain. E. Duncan and J. R. W. Ambrose. 1,809,549; June 9.
Hopper gate. H. E. Hallenbeck. 1,808,953; June 9.
Horn, Sound. J. B. Hawley. 1,809,035; June 9.
Hose for filling stations, Heated water. C. R. Mathews. 1,809,714; June 9.
Hot air furnace. J. Camire. 1,809,233; June 9.
Hot water heater. C. H. Morrow. 1,809,143; June 9.
Hull. J. M. Miller. 1,809,306; June 9.
Humidifier. E. J. P. Planert. 1,808,935; June 9.
Hydrocarbons, Converting. N. E. Loomis. 1,809,174; June 9.
Hydrocarbons, Cracking. E. C. Herthel. 1,809,297; June 9.
Hydroxy-derivatives of the diphenyl series and process for making, Hydrogenated. E. Korten. 1,809,204; June 9.
Hygrometer. R. B. Somers. 1,809,426; June 9.
Ignition amplifier, High tension. P. O. Stewart. Re18,092; June 9.
Ignition indicator. A. H. Giusti. 1,809,750; June 9.
Illuminated transparency. R. E. Hallings. 1,809,382; June 9.
Inclosure for rumble seats, Collapsible. F. E. Hartman. 1,809,034; June 9.
Index or record syatem, Visible. F. D. Powell. 1,809,066; June 9.
Indicating device. A. B. Moulton. 1,809,637; June 9.
Indicator: *See*—
Direction indicator. Overload indicator.
Ignition indicator.
Indicator. N. A. Naddaff. 1,809,723; June 9.
Indicator for oil display pumps, Flow. R. W. Nichols. 1,809,350; June 9.
Indicator mechanism. W. C. Moran. 1,809,525; June 9.
Inhibitor. H. P. Corson. 1,809,621; June 9.
Inhibitor. R. L. Jenkins, J. H. Karrh, and C. R. McCullough. 1,809,041; June 9.
Inking device for marking machines. P. R. Glass. 1,808,812; June 9.
Inking mechanism for printing presses. H. Lang. 1,809,632; June 9.
Insect catcher. G. C. Van Kessel and M. E. Lindgren. 1,809,766; June 9.
Insecticide. L. C. Heckert. 1,808,893; June 9.
Insole for boots and the like. J. Benda. 1,808,943; June 9.
Instrument calibrating apparatus. T. de Koning. 1,809,783; June 9.
Intaglio printing machine. K. Albrecht. 1,809,466; June 9.
Internal combustion engine. K. Eltze. 1,809,477; June 9.
Internal combustion engine. L. J. Wolff. 1,809,577; June 9.
Ions, Apparatus for producing. R. H. Goddard. 1,809,115; June 9.
Iron band, Corrugated. W. S. Dorset. 1,809,679; June 9.
Ironers, Stripping means for flat work. F. J. Couch. 1,808,764; June 9.
Ironing machine. W. J. Asher. 1,809,467; June 9.
Irradiating apparatus. C. E. Bills. 1,808,760; June 9.
Jack: *See*—
Vehicle jack.
Jar. E. W. Fuerst. Des. 84,333; June 9.
Joiner, Adjustable. H. C. Cattell. 1,809,401; June 9.
Joint bar, Railway. C. W. Breed and G. R. Burkhardt. 1,809,104; June 9.
Joint boot, Universal. B. H. Urschel. 1,808,798; June 9.
Journal for textile rolls, Interchangeable. A. M. Guillet. 1,808,813; June 9.
Juice extractor. A. L. Gross. 1,809,410; June 9.
Kiln for burning of bricks and similar articles, Brick. A. Habla. 1,809,336; June 9.
Kiln, Lime. W. J. Kuntz. 1,808,851; June 9.
Knife for lawn mowers, Stationary. H. T. Coldwell. 1,809,810; June 9.
Knitting machine. M. C. Miller. 1,809,057; June 9.
Knitting machine, Circular. H. Swinglehurst. 1,809,762; June 9.
Lace. H. W. Hucknall. Des. 84,344–7; June 9.
Lamp. C. M. Becker. Des. 84,315; June 9.
Lamp. G. I. Jordan. Des. 84,350; June 9.
Lamp and apparatus, Mercury vapor. L. J. Buttolph. 1,809,265; June 9.
Lamp, Electric. J. Moarles. 1,809,790; June 9.
Lamp, Electric. D. K. Wright. 1,809,661; June 9.
Lamp for producing illuminated motion effects. F. Gritt. 1,809,164; June 9.
Lamp or article of similar nature, Table. C. Shulman. Des. 84,378; June 9.
Lamp socket, Multiple. R. L. Johnson. 1,809,753; June 9.
Lantern, Advertising. M. W. Bowen. Des. 84,324; June 9.
Latch, Hood. N. A. Mears and D. P. Hynes. 1,809,720; June 9.
Latch operating means for directory boards, etc. G. S. Rider. 1,809,804; June 9.
Lever, Brake testing. W. H. Watrous. 1,809,087; June 9.
License plate for motor vehicles, Day and night. J. M. Moore. 1,809,524; June 9.
Lift mechanism, End door. J. J. Wallace. 1,809,537; June 9.
Lift mechanism for agricultural implements. B. W. Willig. 1,809,500; June 9.
Lighter, Pocket. W. J. Butler. 1,809,548; June 9.
Lighter, Table. R. R. Hutcheson. Des. 84,335; June 9.
Lighting fixture bowl or similar article. N. Kopp. Des. 84,351; June 9.
Lighting fixture or article of similar nature. I. Rosenblatt. Des. 84,372–3; June 9.
Lightning arrester. C. M. Wray. 1,808,876; June 9.
Liquids and gases, Apparatus for and method of combining. S. G. Ketterer. 1,808,956; June 9.
Liquids, Apparatus for heating. E. Darby. 1,809,744; June 9.
Liquids, Apparatus for mixing. E. W. Butler and J. C. Mann. 1,809,672; June 9.
Liquids, Method and Apparatus for the treatment of. W. S. Elliott. 1,809,441; June 9.
Loading apparatus. G. V. R. Rodriguez. 1,808,995; June 9.
Lock: *See*—
Coin controlled lock. Safety lock.
Nut lock. Trailer wheel lock.
Permutation lock. Turntable lock.
Locking cooperating threaded element. J. B. Ladd. 1,809,301; June 9.
Locking sheave. T. S. Opheim. 1,809,179; June 9.
Locomotive. J. G. Blunt and H. S. Burnham. 1,809,399; June 9.
Locomotives, Lateral motion device for. S. S. Riegel. 1,808,818; June 9.
Loom. B. C. Goodman. 1,809,588; June 9.
Looms, Cloth splitting attachment for. C. D. Brown. 1,809,619; June 9.
Loud speaker. H. J. Round. 1,809,571; June 9.
Loud speaker, Cone type. W. H. and F. B. Bristol. 1,809,578; June 9.
Loud speaker, Double reentrant cone. A. M. Nicolson. 1,809,597; June 9.
Lubricating device. C. A. Schellens. 1,808,792; June 9.
Lubricating means for bearing surfaces. E. Traub. 1,809,649; June 9.
Lubricating system. H. G. Sanger. 1,809,357; June 9.
Lubricator: *See*—
Spring leaf lubricator.
Luggage carrier. C. Haffke. 1,809,119; June 9.
Luminescent tube. G. E. Teasdale. 1,808,825; June 9.
Luminous tube. H. W. Howard. 1,809,447; June 9.
Machine and method for forming French felled seams. J. P. Weis. 1,809,463; June 9.
Machine and method for stitching shoe uppers. J. P. Weis. 1,809,462; June 9.
Machine for baking cakes. F. J. Vierling and J. Jessen. 1,809,004; June 9.
Machine for forming electrical heating elements. E. L. Wiegand. 1,809,090; June 9.
Machine for inspecting, splicing, and rewinding motion picture films. A. C. Hayden. 1,809,339; June 9.
Machine for interfolding sheets of cigarette papers. R. Braunstein. 1,809,671; June 9.
Machine for making multiple seams. J. P. Weis. 1,809,460; June 9.
Machine for manufacturing rubber belts. R. M. Johnson. 1,809,803; June 9.
Machine for routing stair stringers. G. Mackay. 1,808,962; June 9.
Machine for surfacing hat bodies. F. E. Kauffmann. 1,809,709; June 9.
Magazine, Music roll. J. H. Dickinson. 1,808,808; June 9.
Magnet core. G. A. Kelsall. 1,809,042; June 9.
Magnetic structures, Supporting. L. L. Jones. 1,808,778; June 9.

Mail box, Magazine. W. H. Reimer. Des. 84,371; June 9.
Manifold. G. Kingston. 1,809,242; June 9.
Manikin. H. E. Luhrs. 1,809,635; June 9.
Material for forming coatings, for use as impregnating agents, or for like purposes. G. King and R. Threlfall. 1,809,755; June 9.
Material handling apparatus. E. W. Shinn, W. J. Crowley and R. H. Scott. 1,809,076; June 9.
Material treating machine. A. R. Teare. 1,809,363; June 9.
Matrices for stereotype plates, Method of and apparatus for preparing. B. Mackley. 1,809,052; June 9.
Measuring and delivering milk or other liquids, Apparatus for automatically. A. G. Enock. 1,809,163; June 9.
Measuring device, Dovetail. C. O. Knuuti. 1,809,044; June 9.
Metal, Bearing. R. J. Shoemaker. 1,808,793; June 9.
Metal chlorides and hydrogen chloride, Anhydrous. J. Brode and C. Wurster. 1,809,158; June 9.
Metal compounds, Recovery of alkali. C. A. Grondona. 1,808,773; June 9.
Metal having high emissivity, Manufacture of. C. G. Fink. 1,808,889; June 9.
Metal structure for railway cars. W. E. Van Dorn. 1,809,611; June 9.
Metal welding, Electric. E. Bornand and H. A. Schlaepfer. 1,809 468; June 9.
Metal wheel. G. Walther. 1,809,655; June 9.
Metals, Purifying. C. W. Carman. 1,809,436; June 9.
Metallic articles, Producing. C. L. Gebauer. 1,809,780; June 9.
Metallic resistor element. T. F. Baily. 1,809,227; June 9.
Metallic strap, Flexible. W. Forstner. 1,808,920; June 9.
Metallic structure for railway cars. W. E. Van Dorn. 1 809,612; June 9.
Meter: *See*—
Fluid meter.
Summation meter.
Meter dial marking. T. Koning. 1,809,784; June 9.
Meter housing. C. S. Hazard. Des. 84,336–7; June 9.
Meter seal. J. L. Porter. 1,808,969–70; June 9.
Microphone. W. Kühnert and M. Maurer. 1,809,713; June 9.
Milk heater. J. H. Godfrey. 1,809,116; June 9.
Milk treating apparatus. G. J. Meyer. 1,809,135; June 9.
Mill: *See*—
Edging mill.
Mills, Automatic repeater for rolling. J. M. Koch. 1,809,128; June 9.
Mineral oil, Dewaxing. L. Edeleanu. 1,809,777; June 9.
Mining and loading machine. E. C. Morgan. 1,809,282; June 9.
Mining machine. F. A. Homewood. 1,808,850; June 9.
Mining machine. E. C. Morgan. 1,808,858; June 9.
Mining machines, Controlling fluid pressure breaking mechanism for. E. C. Morgan. 1,809,283; June 9.
Mirror and picture mounting, Panel. J. N. Le Jeune. 1,809,786; June 9.
Missile projecting device. P. F. Kahler and S. S. Wicker. 1,809,708; June 9.
Mixing device for gas burners and the like. M. J. Roberts. 1,809,425; June 9.
Mixing machine. W. F. Dehuff. Re18,096; June 9.
Molding machine. E. S. Savage. 1,809,358; June 9.
Monorail system. P. J. Koster and A. A. Koors. 1,809,448; June 9.
Motor: *See*—
Current motor.
Electric motor.
Electrical starting motor.
Wind motor.
Mounting for lures, Hook. S. F. Davenport. 1,809,776; June 9.
Mounting for ophthalmic lenses. G. A. Squier. 1,809,494; June 9.
Mounting, Telephone set. F. A. Hoyt. 1,809,125; June 9.
Mower frame, Lawn. H. M. Hessenbruch. 1,809,698; June 9.
Mudguard for automobile fenders, Auxiliary. A. W. Kile. 1,809,711; June 9.
Music, speech, and the like, Apparatus for the reproduction of. F. W. Lanchester. 1,809,483; June 9.
Musical instrument, Stringed. G. D. Beauchamp. 1,808,756–7; June 9.
Musical instrument, Stringed. J. T., M., and C. Kaufman. 1,809,710; June 9.
Musical instruments, Head for. G. H. Logan. 1,809,050; June 9.
Mute for stringed musical instrument. R. R. Page. 1,809,311; June 9.
Nail sorting, Apparatus for. B. P. Cooper. 1,808,806; June 9.
Nail trimmer. C. J. Jolidon. 1,809,556; June 9.
Naphthalene, Catalytic oxidation of. A. O. Jaeger. 1,809,752; June 9.
Necktie. J. C. McCurrach. 1,809,594; June 9.
Network, Artificial line. J. W. Milnor. 1,809,560; June 9.
Nitrates, Manufacturing. J. I. Bronn and G. Fischer. 1,809,191; June 9.
Nitrocellulose smokeless powder, Manufacture of. A. S. Hawkesworth. 1,809,695; June 9.
Nonskid attachment for vehicle wheels. O. M. Peters. 1,809,354; June 9.
Nozzle. M. W. McLaren. 1,809,787; June 9.
Nozzle, Pouring pot. W. P. Tarrant. 1,809,763; June 9.
Nut lock. E. Z. Cole. 1,809,620; June 9.
Nut sheller, Pinon. J. G. Baudino. 1,808,744; June 9.
Odometer. D. Tappan. 1,809,151; June 9.
Oil and making same, Lubricating. C. J. Livingstone and W. A. Gruse. 1,808,853; June 9.
Oil gas apparatus. D. Balachowsky and P. Caire. 1,809,187; June 9.
Oil of good nonsmoke rating, Hydrocarbon. C. I. Robinson. 1,809,183; June 9.
Oil saver, Safety. W. A. Loomis. 1,809,175; June 9.
Oils and apparatus therefor, Pyrogenetic decomposition of. H. Sydnor. 1,809,185; June 9.
Oils, Refining hydrocarbon. A. Iachman. 1,809,170; June 9.
Operating device. W. J. Andres and C. T. Waffle. 1,809,541; June 9.
Ophthalmic mounting. G. E. Nerney. Des. 84,362–3; June 9.
Ophthalmic mounting, Bridge member for an. O. W. Dechau. Des. 84,327; June 9.
Ordnance. N. E. Schoonover. 1,809,533; June 9.
Orifice for flow measuring systems. E. S. Cole. 1,809,376; June 9.
Ornament of expansible tissue, Folding. H. E. Luhrs. 1,809,593; June 9.
Oscillations, Method of and apparatus for controlling mechanical. P. B. Sample. 1,809,288; June 9.
Oven and operating same, Coke. C. Wessel. 1,809,659; June 9.
Oven construction, Gas. T. A. Soults. 1,808,866; June 9.
Overload indicator. P. B. Bonnette. 1,809,373; June 9.
Overshoe. P. H. Margulis. 1,809,522; June 9.
Package and making the same, Sealed. A. M. Bates. 1,809,103; June 9.
Package tie. J. J. Lynch. 1,809,345; June 9.
Packaging device. C. W. Aeppler and L. Lawrence. 1,809,396; June 9.
Packing. E. N. Fox. 1,809,407; June 9.
Packing case, Adjustable. A. L. Brack. 1,808,833; June 9.
Packing, Flexible. L. M. Persons. 1,808,786; June 9.
Packing, Hydraulic piston. H. J. B. Scharnberg. 1,808,973; June 9.
Packing machines for feeding and adjusting cigarettes, Apparatus for use with. A. Ritscher. 1,809,219; June 9.
Packing material. A. C. Fischer. 1,809,801; June 9.
Packing, Metallic. J. Mellar. 1,809,056; June 9.
Packing, Sheet. C. F. Hettinger. 1,808,774; June 9.
Pad: *See*—
Cleaning pad.
Pads to leaf springs, Securing antifriction. A. A. Schupp. 1,808,822; June 9.
Paint composition. J. R. Durbon. 1,808,841; June 9.
Pan greasing machine. J. Chvojka. 1,809,581; June 9.
Paper, Decorating. H. M. Ross. 1,809,146; June 9.
Paper folding machine. E. R. Stealy. 1,809,000; June 9.
Paper, Process and apparatus for manufacturing. J. H. Spohn, jr. 1,809,427; June 9.
Paper roller mechanism. C. W. Crumrine. 1,809,024; June 9.
Paper with thin edges, Method and apparatus for making photographic film backing. J. G. Jones and H. G. Dewey. 1,809,415; June 9.
Paraffin, Apparatus for treating. L. H. Macomber. 1,809,130; June 9.
Pattern mechanism for crochet knitting machines. S. Broadwin. 1,808,882; June 9.
Pattern mechanism for straight knitting machines. W. S. Parker. 1,809,063; June 9.
Patty forming device. N. F. Murray. 1,808,993; June 9.
Pearl, Imitation. W. G. Lindsay. 1 809,449; June 9.
Peel-blade. O. H. Thoreinsson. 1,809,320; June 9.
Pelt dehairing machine. R. H. Plass. 1,808,787; June 9.
Pen, Fountain. J. G. Liddell. 1,809,416; June 9.
Pencil and holder therefor, Combined golf. H. M. Larter. Des. 84,353; June 9.
Pencil and wrist strap holder, Combined golf. H. M. Larter. Des. 84,352; June 9.
Pencil, Magazine. M. S. Angeles. 1,809,665; June 9.
Pencil, Mechanical. A. Blenenstein. Des. 84,323; June 9.
Percolator, Coffee. J. A., sr., and J. M. Guerin. 1,809,294; June 9.
Permutation lock. R. K. Winning. 1,809,367; June 9.
Phenol-aldehyde condensation products, Producing oil soluble. F. Seebach. 1,809,732; June 9.
Phenyl-azo-alpha-alpha-diamino-pyridine hydrochlorides, Obtaining. I. Ostromislensky. 1,809,352; June 9.
Phosphates and sulphuric acid, Treating reaction products of. B. Colbjörnsen. 1,809,473; June 9.
Photographic apparatus. A. W. Caps. 1,808,836; June 9.
Photographic sound records, Reproducing. F. H. Owens. 1,809,310; June 9.
Photographic printing apparatus. W. C. Huebner. 1,809,274; June 9.
Photographs by printing, Modifying. J. T. Barkelew. 1,808,743; June 9.
Picker: *See*—
Weed picker.
Picture projection, Motion. G. J. Badgley. 1,809,327; June 9.
Picture, Talking cartoon motion. F. H. Owens. 1,809,599; June 9.

Pile and similar structure, Concrete. A. E. Schutte. 1,809,360; June 9.
Piles, Waterproofing. A. E. Schutte. 1,809,359; June 9.
Piling, Reenforced. J. M. Straub. 1,809,574; June 9.
Pipe pushing machine. H. A. Johnson. 1,809,342; June 9.
Plaiting machine. L. E. McDonough. 1,809,716; June 9.
Planter, Grain. M. F. Schou. 1,809,072; June 9.
Plaque, Raised metal. C. M. Becker. Des. 84,314; June 9.
Plaque, Trophy. N. L. Roulet. Des. 84,374; June 9.
Plaster board. M. S. Wunderlich. 1,808,976; June 9.
Plastic materials, Accelerating the hardening of. A. Brund and H. Bohlin. 1,808,762; June 9.
Plate or similar article of pottery. S. E. Thompson. Des. 84,384; June 9.
Plating, Apparatus for. D. T. Ewing. 1,808,809; June 9.
Plating machine automatic work shift. C. G. Miller. 1,809,136; June 9.
Plating machines, Automatic work shift for. C. G. Miller. 1,809,139; June 9.
Platon for photographing printing machines. R. S. Hopkins. 1,809,238; June 9.
Plow, Reversible. A. Maurer. 1,809,246; June 9.
Plow, Tractor drawn disk. F. G. Harris. 1,809,694; June 9.
Plug, Combined screw and push electric. J. A. Geffert. 1,809,478; June 9.
Plug, Drain. O. A. Larsen. 1,809,171; June 9.
Plug, Telephone. E. C. Mueller. 1,808,902; June 9.
Plugs for oil wells, Bridging. C. H. Sweet and E. F. Cooper. 1,809,080; June 9.
Pocket lighter. C. H. Lawrence. Des. 84,354; June 9.
Pole attachment for electric conductors. R. G. Williams. 1,809,094; June 9.
Pole guard, Pike. E. O. Hamren. 1,808,891–2; June 9.
Polishing device, Floor. C. B. Lawrence. 1,809,302; June 9.
Polymerization products of diolefines, Production of. C. Heuck and H. Enderlein. 1,809,445; June 9.
Pop corn machines. G. Bettandorff. 1,808,758; June 9.
Positioning apparatus. S. J. Finn. 1,808,810; June 9.
Post: *See*—
Concrete fence post.
Postal machines, Adjustable trip for. W. C. Allen. 1,809,264; June 9.
Power generating and converting systems. I. J. Granger. 1,809,409; June 9.
Power unit for use on automotive vehicles. C. H. Duncan. 1,809,331; June 9.
Press: *See*—
Hay press.
Seal press.
Veneer press.
Pressure gauge. A. Röver. 1,809,759; June 9.
Prime mover. A. A. Hovepian. 1,809,203; June 9.
Printing machine. A. J. Horton. 1,809,384; June 9.
Printing machine kicker mechanism. E. T. Morris and T. J. Mills. 1,809,389; June 9.
Printing presses, Device for inking. P. S. Hervey and H. A. Billings. 1,808,815; June 9.
Printing presses, Ink agitating appliance for. C. P. Cornell and J. E. Slaby. 1,809,159; June 9.
Printing telegraph system. W. A. Knoop. 1,809,043; June 9.
Product for treating the skin. J. Urkov and B. R. Harris. 1,809,082; June 9.
Propeller. O. Fahlin. 1,808,888; June 9.
Propeller. E. R. Maison. 1,809,131; June 9.
Propeller for driving and stabilizing aircraft. A. C. Pereboom. 1,809,424; June 9.
Protective device, Electrical. H. E. Butler. 1,809,673; June 9.
Protective means, Hatband. J. C. Morgan. 1,808,966; June 9.
Protector, Fan. E. K. Cook. 1,809,583; June 9.
Puller: *See*—
Fish tape puller.
Pulp for high grade paper manufacture, White wood. G. A. Richter. 1,809,287; June 9.
Pulp of high alpha cellulose content, Producing wood. G. A. Richter and M. O. Schur. 1,809,312; June 9.
Pulp of high whiteness and strength and producing same. G. A. Richter. 1,809,286; June 9.
Pump, G. W. Bledsoe, W. S. Lloyd, and C. D. Yencer. 1,808,745; June 9.
Pump. G. A. Helmling. 1,808,985; June 9.
Pump, Deep well. J. C. Vroman. 1,809,321; June 9.
Pump for spinning liquid such as viscose. G. Nemetz. 1,809,489; June 9.
Pump, Liquid dispensing. T. H. Schutt. 1,809,814; June 9.
Pump, Measuring. H. Sebell. 1,809,395; June 9.
Pump, Motor fuel. A. Guiot. 1,809,514; June 9.
Pump, Sanitary centrifugal milk. J. Namur. 1,809,526; June 9.
Pumps, Vapor and pressure trapping dome for fuel. F. G. Schweisthal. 1,809,394; June 9.
Rack: *See*—
Barrel rack.
Sectional rack.
Stamp rack.
Radiator cap. K. E. Stant. 1,809,186; June 9.
Radiators, Control shutter for engine. D. M. Winans. 1,809,616; June 9.
Radio apparatus, Portable. W. M. Heina. 1,809,296; June 9.
Radiocabinet. J. J. Herlihy. Des. 84,338; June 9.
Radiocabinet. J. A. Rancorn and E. Worthington. Des. 84,369–70; June 9.
Radiocabinet. W. Rypkema. Des. 84,376; June 9.
Radiocabinet, Wall insert. C. O. Johnson. Des. 84,349; June 9.
Radio receiving system. E. G. Danielson. 1,809,027; June 9.
Radio system. A. F. Van Dyck. 1,808,941; June 9.
Radio tuning mechanism. A. Crossley and L. H. Hanse. 1,809,509; June 9.
Railway signal. V. P. Carter. 1,809,374; June 9.
Rake clearer, Sweep. M. Vineyard. 1,809,767; June 9.
Reel. M. Castro. 1,809,226; June 9.
Refractory. J. D. Morgan. 1,809,249; June 9.
Refrigerating apparatus. J. C. Scovel, jr. 1,809,075; June 9.
Refrigerating apparatus. O. M. Summers. 1,808,939; June 9.
Refrigerating apparatus. L. L. Torrey. 1,809,002; June 9.
Refrigerating apparatus. G. T. Voorhees. 1,808,910; June 9.
Refrigeration. T. Shipley. 1,808,999; June 9.
Refrigerator. J. Beck. 1,809,012; June 9.
Refrigerator closure. E. Swedman. 1,809,150; June 9.
Registering device and annunciator. H. R. Brand. 1,809,157; June 9.
Regulator: *See*—
Draft regulator.
Regulator for steam boiler, Feed. E. Torre. 1,809,535; June 9.
Relay, Electrical. B. Lazich. 1,809,633–4; June 9.
Relay, Thermal. H. D. Matthews. 1,809,304; June 9.
Resinous complex and making same, Synthetic. I. Rosenblum. 1,809,570; June 9.
Resins, Treating. P. Stuhlmann. 1,809,738; June 9.
Resonator. E. Glebe and A. Scheibe. 1,809,624; June 9.
Retaining ring, Drill cutter. F. L. Scott. 1,809,074; June 9.
Rewinding mechanism. C. J. Rowe. 1,809,147; June 9.
Rifles, Receiver sight for army. W. J. Sutton. 1,809,257; June 9.
Rim and protector, Emergency. A. W. Fitz. 1,808,979; June 9.
Ring: *See*—
Retaining ring.
Ring guard, Finger. M. Kraft and J. Birnbaum. 1,809,045; June 9.
Riveting. E. Becker. 1,809,154; June 9.
Roadbed working machine. C. Jackson. 1,808,896; June 9.
Roadster body, Pressed metal. J. Ledwinka. 1,808,899; June 9.
Rock drill. E. L. Oldham. 1,808,817; June 9.
Rock drills, Slip rotation for. G. C. Pearson. 1,809,284; June 9.
Rod line pick up, Surface. A. V. Clark. 1,808,885; June 9.
Roller: *See*—
Wire roller.
Rolls with toothed wire, Apparatus for covering. J. A. Noonan. 1,809,144; June 9.
Roof, Car. W. D. Thompson. 1,808,872; June 9.
Rotary engine. G. A. Luther. 1,809,051; June 9.
Rotary furnace. H. D. Newkirk. 1,809,563; June 9.
Rotary valve furnace. W. E. Sanders. 1,809,727; June 9.
Rubber or like article. J. J. Conway. Des. 84,326; June 9.
Rubber sheeting or like article. W. W. De Laney. Des. 84,328; June 9.
Rudder arrangement for ships. O. Schultz. 1,809,184; June 9.
Safety device for boats. J. Chison. 1,809,675; June 9.
Safety device for hydraulic presses. F. C. Wilson. 1,809,615; June 9.
Safety lock. A. Maire and A. Béguelin. 1,809,486; June 9.
Safety system. D. D. Knowles. 1,809,280; June 9.
Salt of amino sulphonated castor oil, Making silver. W. T. Winckler. 1,809,770; June 9.
Sash and frame, Window. E. E. Hart. 1,809,121; June 9.
Scales. H. A. Hadley. 1,809,692; June 9.
Scales, Antirail spreader for track. A. Bousfield. 1,809,670; June 9.
Scoop for potato diggers. G. Heglund. 1 809,626; June 9.
Scraper, Electrically heated. J. McNeil. 1,809,718; June 9.
Screen: *See*—
Well screen.
Screens, Holding ring for manufacture of well. H. D. Wilson, jr. 1,808,913; June 9.
Screens, Making and selling tubular well. T. O. Poe. 1,809,569; June 9.
Screw driver. S. McWade. 1,809,719; June 9.
Screw thread testing device. C. G. Johnson. 1,808,816; June 9.
Seal for containers, Tamper-proof. G. A. Williams. 1,809,806; June 9.
Seal press. E. Dietze. 1,809,235; June 9.

Seams, Making multiple. J. P. Weis. 1,809,461; June 9.
Seat: *See*—
Stadium seat.
Seat and couch bottom, Chair. J. Kronheim. 1,808,926; June 9.
Sectional rack, Knockdown. W. Raster. 1 809,602; June 9.
Separator: *See*—
Conveyer separator.
Settling and evaporating tank. C. E. Chandler. 1,809,674; June 9.
Sewing machine. M. M. Schrago. 1,809,148; June 9.
Sewing machine, Hand. R. E. Cahill and J. Caterini. 1,809,192; June 9.
Sewing machine loop taker mechanism. W. N. Parkes. 1,809,391; June 9.
Sewing machine, Powder puff. R. Bihler. 1,808,805; June 9.
Sewing machine work support. W. Myers. 1 809,390; June 9.
Shade bracket, Window. D. Vaccaro. 1,809,650; June 9.
Shade or article of similar nature, Lighting fixture. G. E. Villaret. Des. 84,386; June 9.
Shade trimmer, Window. H. E. Morrow. 1,808,859; June 9.
Shades and window shade sticks, Roller for window. L. Fromona. 1,809,770; June 9.
Shaft coupling. H. H. Vaughan and W. G. Cumming. 1,809,085; June 9.
Shears: *See*—
Flying shears.
Sheath bonding and method. H. Halperin and K. W. Miller. 1 809,591; June 9.
Sheath for cigarette packages. O. Berghorn. 1,809,372; June 9.
Sheet feeding mechanism. N. G. A. Stromberg and G. W. Widlund. 1,809,495; June 9.
Sheller: *See*—
Nut sheller.
Ships, Refloating of stranded. V. Huberti. 1,809,482; June 9.
Shock absorber, Hydraulic. S. Jencick. 1,808,924; June 9.
Shoemaking. J. H. Pope. 1,809,065; June 9.
Shoe structure, Turn. F. A. Melchionna. 1,809,247; June 9.
Shoe tree. A. R. Anderson. 1,808 828; June 9.
Shoes, Making. C. Tweedie. 1,809,364; June 9.
Shook labeling machine. G. A. Aicher. 1,809,262; June 9.
Shop bench. A. M. Barrett. 1,809,153; June 9.
Short circuiting device for motor commutators. E. P. Larsh. Re18,093; June 9.
Sieve, Cleaning. E. F. Altman. 1,808,742; June 9.
Sign. S. S. Adams. 1,808,878; June 9.
Sign, Changeable. J. George. 1,809,332; June 9.
Sign, Display. E. G. Goudey, D. A. Stevens, and L. C. Crafts. 1,809,688; June 9.
Sign hook. J. Nelson. 1,809,562; June 9.
Sign, Illuminated. A. K. Wood. 1,809,370; June 9.
Sign, Illumination. M. P. Kirk. 1,809,243; June 9.
Sign, Luminous display or reflector. J. C. Stimson. 1,809,761; June 9.
Signal: *See*—
Football down signal. Railway signal.
Signal code sending device and system. H. Burdick. 1,809,020; June 9.
Signaling, Railway. E. C. Sasnett. 1,809,604; June 9.
Signals, Secret transmission of. C. Schapira. 1,809,070; June 9.
Skate clamp. H. F. Whitcomb, jr. 1,809,539; June 9.
Ski-coaster. C. E. B. Gundersen. 1,809,295; June 9.
Slicer, Bias bacon. M. Trunz. 1,809,764; June 9.
Slicing machine. C. F. M. Van Berkel. 1,809,610; June 9.
Slicing machine. A. van Duyn. 1,809,430; June 9.
Slide box. G. G. Gross. 1,809,781; June 9.
Slider rail clamp. E. J. Filburn. 1,809,747; June 9.
Socket, Lamp. R. E. Major. 1,808,782; June 9.
Sodium fluoride, Making. E. Eckoldt. 1,809,476; June 9.
Sole, Tap. S. Capezio. 1,809,107; June 9.
Solutions of cholesterine, Manufacturing. F. Passek. 1,809,422; June 9.
Sound amplifying device. C. E. Ross. 1,809,314; June 9.
Sound producing device. R. G. Borromeo. 1,809,669; June 9.
Sound recording and reproducing instrument. P. B. Flanders. 1,809,684; June 9.
Sound repeater for sound reproducing machines. D. W. Rantine. 1,808,789; June 9.
Sound reproducer, Electrostatic. J. B. Hawley. 1,809,036; June 9.
Speed transmission, Variable. A. A. Heinzelmann. 1,809,123; June 9.
Spike anchor, Railroad. J. A. Lambert. 1,809,519; June 9.
Spindle molding machine, Double. E. W. Neale and A. H. Handley. 1,809,488; June 9.
Spinning frames and for preparing machinery, Drawing device for. J. Pfilmlin. 1,809,251; June 9.
Spinning frames and for preparatory machinery, Drawing device for. J. Pfilmlin. 1,809,252; June 9.
Splice bar or fish plate. L. S. Wilbur. 1,809,092; June 9.
Spoon or analogous article. A. J. Flauder. Des. 84,329; June 9.
Spoon, Trolling. E. G. Allen. 1,809,663; June 9.
Spray. J. F. Schylander. 1,809,073; June 9.
Spring guard, Bed. M. Goldberg. 1,808,846; June 9.
Spring leaf lubricator. F. X. La Chall. 1,809,244; June 9.
Spring support for motors. A. J. Reed. 1,809,603; June 9.
Stacker, Hay. J. F. Chladek. 1,809,178; June 9.
Stadium seat, Portable. J. S. and O. W. Ponten. 1,809,392; June 9.
Stamp rack. R. Evans. 1,809,195; June 9.
Starter device. D. T. Brownlee. 1,809,017; June 9.
Static eliminator. F. R. Monroe, H. K. Dolson, and B. T. Tuttle. 1,809,789; June 9.
Steak tenderer. H. H. Hart. 1,809,165; June 9.
Steam boiler. I. C. Hicks. 1,809,446; June 9.
Steam generator. H. Gleichmann. 1,809,270; June 9.
Steam generator. W. R. Wood. 1,809,097; June 9.
Steel bleacher. H. D. Oberdorfer and J. B. Johnson. 1,809,598; June 9.
Steering wheel, Theft proof. R. R. Van Horn. 1,809,765; June 9.
Stencil. R. W. Hunter. 1,808,986; June 9.
Stencil. R. D. Gould. 1,809,199; June 9.
Sterilizer for milk cans. O. Larsen. 1,809,048; June 9.
Stills, Operation of pressure. E. C. Herthel. 1,809,273; June 9.
Stock and die. L. W. Jones. 1,809,516; June 9.
Stocking. H. Peters. Des. 84,364–8; June 9.
Stoker. C. F. Miller. 1,809,995; June 9.
Stoker, Mechanical. G. W. Ruggles. 1,809,315; June 9.
Stone and producing the same. Artificial. J. B. Bossi and P. A. Mazzuchelli. 1,809,329; June 9.
Stone spreader. F. B. Hurt. 1,809,704; June 9.
Stop for railroad car windows, Quick release. R. F. Golden. 1,809,117; June 9.
Stop mechanism for cloth drying machines. C. E. Bean. 1,809,398; June 9.
Stranding machine head. G. C. Gregson. 1,809,032; June 9.
Strap: *See*—
Metallic strap.
Strap, band, or linkage, Flexible. C. H. Kestenman. 1,809,277; June 9.
Strap stretching and sealing mechanism. E. C. Glardon. 1,809,480; June 9.
Stripper for pastry cake baking machines. C. Schroeder and H. Tatosian. 1,808,997; June 9.
Stripping device and method. G. F. Wilson and W. H. Sinbaugh. 1,809,260; June 9.
Stuffing box. R. C. Weant. 1,809,657; June 9.
Sugar, after products or the like before refining, Preliminary treatment of raw. J. Bergé. 1,809,807; June 9.
Sulky for plows and the like. C. C. Stedman. 1,809,573; June 9.
Sulphur sludge treatment. G. E. Sell. 1,808,938; June 9.
Summation meter. W. Gaarz and J. Dalchau. 1,809,269; June 9.
Support, Article. D. O. Snyder. 1,809,817; June 9.
Support, Book. T. J. Smyth. 1,808,796; June 9.
Support for ear phones. D. L. Moore. 1,809,349; June 9.
Support for lubricators. C. A. Campbell. 1,808,835; June 9.
Support for suitcases or like receptacles, Collapsible wheeled. J. B. Pinheiro. 1,808,864; June 9.
Supporting means for hanger doors. D. E. Willard. 1,809,093; June 9.
Supporting structure. W. Greim. 1,809,272; June 9.
Surgical appliance. G. E. Loeble. 1,809,558; June 9.
Switch: *See*—
Compensator switch. High tension switch.
Electric switch.
Switch. M. J. Pate. 1,809,527; June 9.
Switch and seat operating means, Combined. O. H. Van Amburg and G. W. Lieberum. 1,809,651; June 9.
Switch barrel and the like and method for its manufacture. R. K. Winning. 1,809,369; June 9.
Switch box for automatic generating plants. A. F. Brotz. 1,808,883; June 9.
Switch cell structure, Electric. T. H. Soren. 1,809,735; June 9.
Switch, contact carrier and actuator, Ignition. R. K. Winning. 1,809,368; June 9.
Switch for automobiles, Electric. A. J. Baker and E. E. Huntington. 1,809,100; June 9.
Synchronizing system. J. W. Horton. 1,808,923; June 9.
Synthesis, Apparatus for effecting. R. Williams. 1,809,291; June 9.
Syringe for injecting liquids into the body or for taking them therefrom, Hypodermic. F. Meyer. 1,809,487; June 9.
Syrups and molasses, Desugaring. J. Bergé. 1,809,808–9; June 9.
Table: *See*—
Folding table.
Table and case, Combination paste. W. E. Meyer. 1,809,142; June 9.
Table with dustless structure. C. M. McCarthy. 1,809,418; June 9.
Talking machines and like devices, Sound box for. L. A. Smith. 1,809,493; June 9.
Tank: *See*—
Settling and evaporating tank.
Tank flange. C. L. Pendleton. 1,809,250; June 9.

T connecter. A. B. Dibner. 1,808,769; June 9.
T-connecter. R. A. Goeller. 1,809,408; June 9.
Teetotum. W. W. and C. T. Woodroof. Des. 84,388; June 9.
Telegraph system. G. C. Cummings. 1,809,026; June 9.
Telegraph system, Superposed. R. V. Morgenstern and P. E. Teter. 1,809,722; June 9.
Telegraphy, Correcting distortion and interpolating impulses in cable. H. Angel. 1,809,664; June 9.
Telephone exchange. system H. Hovland. 1,809,039; June 9.
Telephone exchange system. H. Hovland. 1,809,124; June 9.
Telephone receiver. G. B. French. 1,809,749; June 9.
Telephone repeaters, Artificial impedance for. M. Lebedinsky. 1,809,484; June 9.
Telephone system. R. Kruse. 1,809,046; June 9.
Telephone system. G. E. Schomaker and R. F. Gould. 1,809,071; June 9.
Telephone system. J. H. Voss and B. D. Willis. 1,809,086; June 9.
Telephone system, High frequency. P. Tätz. 1,809,081; June 9.
Textile fabric. J. J. Hausman. Des. 84,334; June 9.
Textile fabric. H. S. Royle. Des. 84,375; June 9.
Textile fabric, Embroidered. E. W. Freudenberg. Des. 84,331; June 9.
Textile fabric or a similar article, Embroidered. E. W. Freudenberg. Des. 84,332; June 9.
Thermal element, Adjustable. E. M. Claytor. 1,809,293; June 9.
Thermostat. H. D. Matthews. 1,809,305; June 9.
Thrashing machine. L. A. Paradise and E. F. Huddle. 1,808,785; June 9.
Threads from solutions of cellulose ethers or esters, Apparatus for spinning artificial. U. Mancini. 1,809,303; June 9.
Tie: *See*—
Package tie.
Tiling. R. P. Herrold. Des. 84,340–3; June 9.
Time controlled switch. E. E. Stone. 1,809,428; June 9.
Tire bead and making same. J. C. Carlin. 1,809,106; June 9.
Tire changer. P. V. Morgan. 1,809,388; June 9.
Tire testing machine. J. I. Martin. 1,809,347; June 9.
Tires, Apparatus for vulcanizing. H. Willshaw, T. Norcross, and F. G. Broadbent. 1,809,433; June 9.
Toaster, Electric bread. H. J. Criner. 1,809,112; June 9.
Tobacco can. E. McWhorter. 1,809,742; June 9.
Tobacco pipes, Filtering and cooling the smoke of. W. G. Pettibone. 1,809,529; June 9.
Tobacco, Spreading cut. F. H. B. Stelzer. 1,808,794–5; June 9.
Tong. C. H. Lane and C. H. Reynolds. 1,808,959; June 9.
Tool, Assembly. H. D. Hume. 1,809,239; June 9.
Tool, Commutator mica undercutting. W. T. Ballou. 1,809,228; June 9.
Tool coupler. R. W. Brown. 1,808,944; June 9.
Tool, Fence fastener. W. H. Mason. 1,809,386; June 9.
Tool, Fluid operated. R. O. Olander. 1,809,309; June 9.
Tool for upsetting or stretching sheet metal. H. Junkers. 1,809,168; June 9.
Tool handle. F. B. Lutman. 1,808,781; June 9.
Tool, Metal working. H. W. Johnson. 1,809,126; June 9.
Tool, Percussive hand. L. Fluhr and A. Verhaar. 1,808,948; June 9.
Toothbrush. A. A. Dorrance and A. G. Avakian. 1,809,330; June 9.
Topographic mechanism. E. L. Miner and C. M. Leatherman. 1,809,055; June 9.
Torch, Cutting. S. Plumley. 1,808,967–8; June 9.
Torque ball retainer and speedometer. W. R. Smith. 1,809,734; June 9.
Toy rocking figure propelled, Wheeled. G. Taylor. 1,809,739; June 9.
Toy or similar article. M. Lee. Des. 84,355; June 9.
Track. P. Clark and J. C. Pingle. 1,809,109; June 9.
Traction shoe. D. E. Hoffman. 1,809,782; June 9.
Tractor. H. H. Linn. 1,809,344; June 9.
Trailer wheel lock. J. Van Vorst. 1,809,003; June 9.
Transfer device. E. H. Streeter. 1,809,456; June 9.
Transfer device, Heat. D. S. Jacobus. 1,809,240; June 9.
Transfer mechanism for book match machines. L. E. Parker. 1,809,353; June 9.
Transformer, Electrostatic. J. F. Peters. 1,809,285; June 9.
Translation system, Electric wave. R. A. Heising. 1,808,894; June 9.
Transmission. T. F. Thompson. 1,809,647; June 9.
Transmission device, Electrical. J. D. Hilliard. 1,809,700; June 9.
Transmission, Flexible automatic. G. H. Hines. 1,809,412; June 9.
Transmission, Semi-automatic. T. F. Thompson. 1,809,608; June 9.
Trap: *See*—
Animal trap.
Trap. L. C. Schneider. 1,808,907; June 9.
Trimmer: *See*—
Nail trimmer. Shade trimmer.
Tripod. J. E. Haynes. 1,808,848; June 9.
Trolley bucket installation. H. E. Hallenbeck. 1,809,515; June 9.
Trolley conveyer. E. V. Francis. 1,809,748; June 9.
Truck, Automobile transporting. L. J. Lishon. 1,809,557; June 9.
Truck body. N. Milner. 1,809,348; June 9.
Truck, Concrete transporting. P. A. Koehring. 1,809,629; June 9.
Truck, Elevating. H. S. Germond. 1,809,551; June 9.
Truck, Sand-handling. E. O. Beardsley and W. F. Piper. 1,809,796; June 9.
Tube: *See*—
Audion tube. Luminous tube.
Electric discharge tube. Vacuum tube.
Luminescent tube.
Tubes, Manufacture of seamless. W. Kunst. 1,808,957; June 9.
Turbine, Siphon. E. Suess. 1,809,496; June 9.
Turntable lock. J. M. Kerr. 1,808,898; June 9.
Twine, Device for holding and applying. P. J. Swigart. 1,809,607; June 9.
Typewriters, Copy attachment for. C. H. Monsees. 1,808,857; June 9.
Typewriting machine. G. G. Going. 1,809,552; June 9.
Typewriting machine. B. C. Stickney. 1,808,909; June 9.
Umbrella. R. dos Santos. 1,809,474; June 9.
Uni-control apparatus. L. L. Jones. 1,808,777; June 9.
Unloading apparatus. A. L. Guille. 1,809,200; June 9.
Unloading device. H. W. Peterson. 1,808,862; June 9.
Vacua, Production of. H. J. West. 1,809,614; June 9.
Vacuum brake. C. V. Rowell. 1,809,491; June 9.
Vacuum cleaner, Automotive. H. B. Hall. 1,809,337; June 9.
Vacuum, Production of. A. O. Jaeger and H. J. West. 1,809,627; June 9.
Vacuum tube. H. D. Arnold. 1,809,099; June 9.
Valve. E. Muller. 1,809,419; June 9.
Valve. D. R. Passauer. 1,809,724; June 9.
Valve alarm. K. Watson. 1,808,911; June 9.
Valve, Automatic coupler. J. D. Langdon. 1,808,990; June 9.
Valve, Automatic coupler. J. D. Langdon. 1,809,343; June 9.
Valve bag closure. H. R. Williams. 1,809,259; June 9.
Valve construction. I. A. Weaver. 1,809,431; June 9.
Valve, Electrofluid. M. Dean. 1,808,765; June 9.
Valve, Exhaust. J. H. Higgins. 1,809,201. June 9.
Valve, Flush. D. Elder. 1,809,440; June 9.
Valve, Flush. J. D. Langdon. 1,808,989; June 9.
Valve for bottle fillers, Sirup. J. Kantor. 1,809,813; June 9.
Valve for force feed lubricators, Terminal. F. W. Edwards. 1,808,978; June 9.
Valve for heaters, Safety. E. R. Clark. 1,809,439; June 9.
Valve for liquid delivery trucks, Delivery. S. E. Webb. 1,809,482; June 9.
Valve mechanism for vacuum brake systems, Controlling C. S. Bragg and V. W. Kliesrath. 1,809,015; June 9.
Valve, Packless. L. H. Cain. 1,809,773; June 9.
Valve, Rotary. L. J. Roche. 1,808,936; June 9.
Valve sleeve, Engine. H. J. Edwards. 1,809,585; June 9.
Valve, Transfer. A. N. Pasman. 1,809,567; June 9.
Valve transmitter arrangement. W. Kummerer. 1,809,630; June 9.
Vaporizer. F. F. Chase. 1,809,375; June 9.
Vaporizer. F. F. Chase. 1,809,438; June 9.
Variable resistance. E. Reisman. 1,808,790; June 9.
Vase or analogous article. G. D. Sailer. Des. 84,377; June 9.
Vegetable cutter. F. Pahlow. 1,808,933; June 9.
Vehicle. R. de Filippis. 1,808,766; June 9.
Vehicle body construction. I. T. Gilliam. 1,809,031; June 9.
Vehicle body construction. J. Ledwinka. 1,808,960; June 9.
Vehicle brake. R. A. Creber. 1,809,111; June 9.
Vehicle brake. G. W. Rigby. 1,808,819; June 9.
Vehicle, Child's. A. N. Tebieff. 1,809,740; June 9.
Vehicle frame. W. P. Strong. 1,809,606; June 9.
Vehicle having brakes. R. S. Sanford. 1,809,069; June 9.
Vehicle heater. R. R. Wagner. 1,809,654; June 9.
Vehicle jack. L. N. Bryant, W. W. East, jr., and M. S. Swain. 1,809,579; June 9.
Vehicle parking structure. C. F. Alt. 1,808,741; June 9.
Vehicle wheel. W. N. Booth. 1,809,231; June 9.
Vehicle wheel, Nine spoke flat hexagon. P. E. Beutke and B. W. Nelson. Des. 84,318; June 9.
Vehicle wheel, Nine spoke semisquare. P. E. Beutke and B. W. Nelson. Des. 84,321; June 9.
Vehicle wheel, Nine spoke square. P. E. Beutke and B. W. Nelson. Des. 84,320; June 9.
Vehicle wheel, Seven spoke flat octagon. P. E. Beutke and B. W. Nelson. Des. 84,319; June 9.
Vehicle wheel, Seven spoke square. P. E. Beutke and B. W. Nelson. Des. 84,322; June 9.
Vending machine. O. L. Mobley. 1,808,965; June 9.
Vending machine. E. Schultz. 1,808,937; June 9.
Vending machine, Bottle. C. Habling. 1,809,693; June 9.
Vending machine, Coin controlled. A. Thoke. 1,809,001; June 9.

Veneer press. M. Wetzler. 1,809,769; June 9.
Veneered sheets, Method of and machine for treating flexible. A. Elmendorf. 1,809,681; June 9.
Ventilating means for foot coverings. O. P. Williams, sr. 1,809,323; June 9.
Ventilator: *See*—
Cowl ventilator. Window ventilator.
Volume control. L. T. Phelan. 1,809,530; June 9.
Wall structure, Inspection hole. M. Liptak. 1,809,385; June 9.
Washer: *See*—
Well screen washer.
Washing machine. C. L. Miller. 1,809,177; June. 9.
Washing machine for comestibles. R. Speidel. 1,809,736; June 9.
Water heater. T. A. Ronstrom. 1,808,820; June 9.
Water heater, Electric. L. Shuman. 1,809,077; June 9.
Waterproof bathers case. S. Heilweil. 1,809,696; June 9.
Water softeners and chemical feeds therefor, Apparatus for automatic. E. S. Henry. 1,809,166; June 9.
Weed picker. J. Gavriloff. 1,809,687; June 9.
Weigher. G. H. Messiter. 1,808,930; June 9.
Weighing batcher. W. M. Venable. 1,808,799; June 9.
Weight, Sheet metal governor. O. Wulfert. 1,809,007; June 9.
Welding machine, Automatic arc. P. Wagner and S. Sandelowsky. 1,809,653; June 9.
Well pumping rig. R. C. Baker. 1,809,102; June 9.
Well pumping unit. R. C. Baker. 1,809,101; June 9.
Well reamer. J. A. Vertson. 1,809,258; June 9.
Well screen. G. Austin. 1,808,803; June 9.
Well screen washer. C. H. Lane and C. H. Reynolds. 1,808,958; June 9.
Wells, Cleaning. K. B. Bowman. 1,809,546; June 9.
Wheel: *See*—
Metal wheel. Vehicle wheel.
Steering wheel.
Wheel assembly, Dual. J. F. Higbee. 1,809,699; June 9
Wheel of vehicles, Shock absorbing road. T. I. Courtney 1,808,886; June 9.
Wheel rims, Making. C. Sauzedde. 1,809,605; June 9.
Wheel structure. H. C. Armstrong. 1,809,795; June 9.
Wind motor. E. F. Wilson. 1,808,874; June 9.
Winding apparatus for thread or the like. S. Wild and E. Hugentobler. 1,809,660; June 9.
Winding machines, Bunch builder for. J. M. Quill. 1,809,217; June 9.
Window and flap operator. R. G. Wold. 1,808,827; June 9.
Window box bracket, Adjustable. F. H. Quandt. 1,809,216; June 9.
Window for motor vehicles, Signal. J. E. Martin. 1,809,132; June 9.
Window, Sliding. E. W. Cotter. 1,809,403; June 9.
Window ventilator. O. Kubatzky. 1,809,518; June 9.
Windshield cleaner. W. Van Guilder. 1,809,365; June 9.
Wiper for type casting machines, Knife. G. L. Curle. 1,808,977; June 9.
Wire clamp. M. R. Coates. 1,809,774; June 9.
Wire roller. E. W. Rippe. 1,809,490; June 9.
Wireless telegraphy and telephony, Eliminating disturbances in receiving. A. Meissner. 1,809,134; June 9.
Wood, Method of and apparatus for digesting. J. E. Bond. 1,808,830; June 9.
Wool grease, Purification of. F. Frick. 1,808,844; June 9.
Wrench: *See*—
Alligator wrench.

CLASSIFICATION OF PATENTS

ISSUED JUNE 9, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Adams Peanut Products, Inc., Columbia, S. C. Salted peanuts. 284,162; June 16; Serial No. 311,903; published Apr. 14, 1931. Class 46.

Agil Schweissverfahren G. m. b. H., Berlin, Germany. Electric and arc welders and parts thereof. 284,182; June 16; Serial No. 304,901; published Mar. 17, 1931. Class 21.

Alco Advertising Supply Co. (See Cohen, Alex A.)

American Air Conditioning Corporation, Quincy, Ill. Heaters, temperature regulators, humidifiers, and furnace fans. 284,210; June 16; Serial No. 309,055; published Apr. 7, 1931. Class 34.

American Chicle Company, Long Island City, N. Y. Chewing gum. 284,158; June 16; Serial No. 311,354; published Apr. 7, 1931. Class 46.

Anchorage Farm Trading Co., Ltd., doing business as Anchorage Farm, San Francisco, Calif. Fresh deciduous and citrus fruits, dried fruits, and nuts. 284,174; June 16; Serial No. 307,465; published Apr. 14, 1931. Class 46.

Argus Knitting Mills, Inc., Brooklyn, N. Y. Artificial-silk knit fabrics. 284,149; June 16; Serial No. 295,454; published Oct. 14, 1930. Class 42.

Associated Merchandising Corporation, The, New York, N. Y. Textile rugs. 284,129; June 16; Serial No. 310,155; published Mar. 24, 1931. Class 42.

Automatic Service Company. (See Bronson, Oscar A.)

Ballard & Ballard Co., Louisville, Ky. Uncooked dough formations. 284,234; June 16. Class 46.

Barth, Chas. W., assignor to Barth Chemical Products, Inc., St. Louis, Mo. Medicinal preparation for indigestion, gastritis, acid stomach, etc. 284,055; June 16; Serial No. 309,408; published Mar. 24, 1931. Class 6.

Belknap Hardware & Manufacturing Company, Louisville, Ky. Paint, painters' wall sizing, brushing lacquer, etc. 284,203; June 16; Serial No. 310,009; published Apr. 7, 1931. Class 16.

Bellman Brook Bleachery Co., Fairview, N. J. Woven fabrics. 284,052; June 16; Serial No. 309,918; published Mar. 17, 1931. Class 42.

Black & Decker Manufacturing Company, The, Towson, Md. Electrical apparatus and machines and accessories. 284,185; June 16; Serial No. 303,684; published Mar. 17, 1931. Class 21.

Blue Blaze Coal Company, Salt Lake City, Utah. Coal. 284,100; June 16; Serial No. 297,407; published Mar. 31, 1931. Class 1.

Blue Ribbon Paint Co., Wheeling, W. Va. Paints, colored paint enamels, and wall sealers. 284,205; June 16; Serial No. 310,329; published Mar. 24, 1931. Class 16.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 284,046; June 16; Serial No. 309,506; published Mar. 24, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 284,050; June 16; Serial No. 309,672; published Mar. 24, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 284,137; June 16; Serial No. 310,712; published Mar. 31, 1931. Class 42.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 284,139; June 16; Serial No. 310,855; published Mar. 31, 1931. Class 42.

Boland Products Co., The. (See Doherty, Leslie P.)

Bond Electric Corporation, Jersey City, N. J. Flash lights. 284,104; June 16; Serial No. 310,203; published Mar. 24, 1931. Class 21.

Bound Brook Oil-Less Bearing Company. (See Franklin Company, The, assignor.)

Bridgeport Machine Company, The, Wichita, Kans. Tubing supports. 284,183; June 16; Serial No. 304,600; published Apr. 14, 1931. Class 13.

Brill, H. C., Co., Inc., New York, N. Y. Cake mix. 284,056; June 16; Serial No. 309,604; published Mar. 24, 1931. Class 46.

Bronson, Oscar A., doing business as Automatic Service Company, Minneapolis, Minn. Electric switches and coin-operated electric switches. 284,186; June 16; Serial No. 301,092; published Mar. 17, 1931. Class 21.

Brooklyn Standard Bag Co. Inc., Brooklyn, N. Y. Paper bags. 284,118; June 16; Serial No. 311,819; published Apr. 14, 1931. Class 2.

Brunswick-Balke-Collender Company, The, Wilmington, Del., and Chicago, Ill. Cleaner and polish. 284,220; June 16; Serial No. 285,327; published May 13, 1930. Class 16.

Budlong & Funchess Motor Products Co., Hanford, Calif. Piston rings. 284,232; June 16. Class 35.

Buka Coal Company, The, Cincinnati, Ohio. Coal. 284,082; June 16; Serial No. 311,127; published Mar. 24, 1931. Class 1.

Camel Lead Color & Chemical Products Mfg. Corp., Brooklyn, N. Y. Paints. 284,164–5; June 16; Serial Nos. 310,595–6; published Mar. 24, 1931. Class 16.

Capital City Woolen Mills, to Sheuerman Brothers Inc., doing business as Capital City Woolen Mills, Des Moines, Iowa, successor. Blankets. 83,138; renewed Aug. 22, 1931.

Carnie-Goudie Manufacturing Co., The, Kansas City, Mo. Portable miniature-golf courses. 284,230; Jan. 16; Serial No. 308,680; published Apr. 14, 1931. Class 22.

Carson Pirie Scott & Co., Chicago, Ill. Linen piece goods and table napkins, tablecloths, towels. 284,216; June 16; Serial No. 267,530; published Dec. 2, 1930. Class 42.

Celfor Tool Company, Chicago, Ill., assignor to Clark Equipment Company, Buchanan, Mich. Tools and machinery. 82,206; renewed June 13, 1931.

Chanel, Inc., New York, N. Y. Perfume. 284,071–3; June 16; Serial Nos. 310,715–17; published Mar. 17, 1931. Class 6.

Chatillon, Mouly, Roussel, Inc., New York, N. Y. Piece goods of silk, rayon, and wool. 284,047; June 16; Serial No. 309,552; published Mar. 24, 1931. Class 42.

Chocolate Products Company, Chicago, Ill. Maltless beverages and syrups, extracts, and concentrates for making the same. 284,111; June 16; Serial No. 311,024; published Apr. 7, 1931. Class 45.

Clark Equipment Company. (See Celfor Tool Company, assignor.)

Clinical Supplies, Incorporated, Pittsburgh, Pa. Atomizers. 284,058; June 16; Serial No. 309,883; published Mar. 24, 1931. Class 44.

Cohen, Alex A., doing business as Alco Advertising Supply Co., Providence, R. I. Maltless beverages, sirups and extracts for making the same. 284,110; June 16; Serial No. 310,912; published Apr. 14, 1931. Class 45.

Cole, H. C., Milling Company, Chester, Ill. Pancake flour. 284,074; June 16; Serial No. 310,758; published Mar. 31, 1931. Class 46.

Coleman & Co. Limited, Norwich, England. Preparation of wine, extract of meat, and malt. 83,323; renewed Sept. 5, 1931.

Colstad, Charles N., Attleboro, Mass. Guiding rods. 284,195; June 16; Serial No. 310,913; published Apr. 7, 1931. Class 19.

Columbus Dental Manufacturing Company, The, Columbus, Ohio. Backings for artificial teeth. 284,123; June 16; Serial No. 304,095; published Mar. 24, 1931. Class 44.

Comfort Manufacturing Company, Chicago, Ill. Saponaceous compounds for cleaning the hands, shaving creams, shaving sticks, etc. 284,080–1; June 16; Serial Nos. 311,083–4; published Mar. 31, 1931. Class 4.

Compañia Ron Bacardi, S. A., Santiago de Cuba, Cuba. Rum. 284,224; June 16; Serial No. 308,880; published Apr. 7, 1931. Class 49.

Compañia Ron Bacardi, S. A., Santiago de Cuba, Cuba. Rum. 284,225–8; June 16; Serial Nos. 308,976–9; published Apr. 7, 1931. Class 49.

Conn, C. G. Ltd., Elkhart, Ind. Cornets, trumpets, trombones, etc. 284,075; June 16; Serial No. 310,760; published Mar. 24, 1931. Class 36.

Continental Oil Company, Ponca City, Okla. Lubricating grease. 284,103; June 16; Serial No. 310,121; published Mar. 24, 1931. Class 15.

Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Nails. 284,189; June 16; Serial No. 311,599; published Apr. 14, 1931. Class 13.

Cook Paint and Varnish Company, North Kansas City, Mo. Paints in ready-mixed form. 284,119; June 16; Serial No. 309,121; published Mar. 3, 1931. Class 16.

Cookson & Company Limited, assignor to The Cookson Lead and Antimony Company Limited, Newcastle-upon-Tyne, England. Antimony. 83,325; renewed Sept. 5, 1931.

Corry Metal Corporation, Corry, Pa. Screens. 284,190; June 16; Serial No. 311,420; published Apr. 7, 1931. Class 13.

Crosby, Edward L., Des Moines, to Dora Crosby Lehr, doing business as Dawn Mfg. Company, Ankeny, Iowa, successor. Medical compounds. 35,747; renewed Jan. 8, 1931.

Czechslovak Musical Instruments Company, New York, N. Y. Violins, violas, cellos, etc. 284,090; June 16; Serial No. 308,533; published Mar. 24, 1931. Class 36.

Dawn Mfg. Company. (See Crosby, Edward L.)

Dennison & Sons, New York, to Dennison & Sons, Long Island City, N. Y., successor. Stationery. 36,189; renewed Apr. 9, 1931.

Doherty, Leslie P., doing business as The Boland Products Co., Jersey City, N. J. Polish. 284,204; June 16; Serial No. 310,046; published Mar. 24, 1931. Class 16.

Ducharne, F., Silk Co. Inc., New York, N. Y. Piece goods. 284,148; June 16; Serial No. 311,087; published Mar. 31, 1931. Class 42.

Dumari Textile Co., Inc., New York, N. Y. Fabrics. 284,140; June 16; Serial No. 310,936; published Mar. 31, 1931. Class 42.

Duplex Wrench Corporation, Lakewood, N. Y. Tool boxes. 284,181; June 16; Serial No. 305,101; published Apr. 7, 1931. Class 2.

Echavarria Incorporated, New York, N. Y. Green and roasted coffee. 284,160; June 16; Serial No. 311,566; published Apr. 14, 1931. Class 46.

Echavarria Incorporated, New York, N. Y. Coffee. 284,163; June 16; Serial No. 311,567; published Apr. 14, 1931. Class 46.

Egyptian Lacquer Manufacturing Company, The, New York, N. Y. Paints, lacquers, varnishes, etc. 284,150; June 16; Serial No. 309,679; published Apr. 7, 1931. Class 16.

Egyptian Lacquer Manufacturing Company, The, New York, N. Y. Ready-mixed paints, lacquers, varnishes, etc. 284,202; June 16; Serial No. 309,969; published Mar. 31, 1931. Class 16.

Eisenstadt Manufacturing Company, St. Louis, Mo. Lavalleres, pin sets, cuff buttons, etc. 284,099; June 16; Serial No. 296,912; published Mar. 17, 1931. Class 28.

El Campo Rice Milling Company, El Campo, Tex. Stock feed. 284,057; June 16; Serial No. 309,608; published Mar. 31, 1931. Class 46.

Electromatic Gas Control Corporation, Cleveland, Ohio. Apparatus for electrically controlling water heating systems. 284,151; June 16; Serial No. 309,727; published Mar. 17, 1931. Class 21.

Elgin National Watch Company, Elgin and Chicago, Ill. Watch movements. 82,972; renewed Aug. 8, 1931.

Elmer Candy Company, Inc., New Orleans, La. Candy. 284,161; June 16; Serial No. 311,651; published Apr. 7, 1931. Class 46.

Fairmont Canning Co., Fairmont, Minn. Canned vegetables. 284,219; June 16; Serial No. 292,799; published Apr. 7, 1931. Class 46.

Farr Alpaca Company, Holyoke, Mass. Piece goods. 284,147; June 16; Serial No. 311,090; published Mar. 31, 1931. Class 42.

Fluegelman, N. & Co., Inc., New York, N. Y. Silk, rayon, wool, cotton, and linen in the piece. 284,049; June 16; Serial No. 309,610; published Mar. 24, 1931. Class 42.

Ford, J. B., Company, The, Wyandotte, Mich. Cleaning, cleansing and detergent materials. 284,097; June 16; Serial No. 295,072; published Mar. 31, 1931. Class 4.

Formfit Company, The, Chicago, Ill. Piece goods. 284,132; June 16; Serial No. 310,476; published Mar. 24, 1931. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 284,048; June 16; Serial No. 309,555; published Mar. 24, 1931. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 284,141–2; June 16; Serial No. 310,983–4; published Mar. 31, 1931. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 284,143; June 16; Serial No. 310,986; published Mar. 31, 1931. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 284,144; June 16; Serial No. 310,988; published Mar. 31, 1931. Class 42.

Forstmann & Huffmann Company, Passaic, N. J. Woolen piece goods. 284,145; June 16; Serial No. 310,990; published Mar. 31, 1931. Class 42.

Foster Mfg. Co., Ltd., Los Angeles, Calif. Lacquers. 284,200; June 16; Serial No. 309,850; published Apr. 7, 1931. Class 16.

Foster Mfg. Co., Ltd., Los Angeles, Calif. Paints, paint enamels, and varnishes. 284,201; June 16; Serial No. 309,851; published Apr. 7, 1931. Class 16.

Foster Wheeler Corporation, New York, N. Y. Fluid-heating apparatus and heat-exchange apparatus. 284,193; June 16; Serial No. 310,642; published Apr. 7, 1931. Class 34.

Frank Grocery Co., Inc., The, doing business as Monogram Coffee Co., Shreveport, La. Roasted coffee. 284,180; June 16; Serial No. 305,273; published Apr. 7, 1931. Class 46.

Franklin Company, The, assignor to Bound Brook Oil-Less Bearing Company, Boundbrook, N. J. Bearings. 84,089; renewed Nov. 7, 1931.

Freeman-Daughaday Company, Providence, R. I. Tie grips and tie holders. 284,059; June 16; Serial No. 309,891; published Mar. 17, 1931. Class 28.

Fremont Kraut Co., The, Pittsburgh, Pa. Canned sauerkraut. 284,153; June 16; Serial No. 310,901; published Apr. 14, 1931. Class 46.

Gem Clothing Co., Inc., New York, N. Y. Pile fabrics. 284,120; June 16; Serial No. 301,025; published Mar. 31, 1931. Class 42.

General Motors Radio Corporation, Dayton, Ohio. Radio receiving sets and parts thereof. 284,106; June 16; Serial No. 310,337; published Mar. 24, 1931. Class 21.

General Paint Corporation, San Francisco, Calif. Paint, varnish, lacquer, etc. 284,176; June 16; Serial No. 306,775; published Apr. 14, 1931. Class 16.

Gies, Harry A., doing business as Havre Bottling Works, Havre, Mont. Beverages and syrups and extracts used in making the same. 284,113; June 16; Serial No. 311,604; June 16; Serial No. 311,604; published Apr. 7, 1931. Class 45.

Godde, Albert, Bedin, Inc., New York, N. Y. Silk piece goods. 284,091; June 16; Serial No. 308,585; published Mar. 24, 1931. Class 42.

Golden State Citrus Products, Inc, Los Angeles, Calif. Beverages, and syrups, compounds, flavors, and concentrates for making the same. 284,114; June 16; Serial No. 311,681; published Apr. 7, 1931. **Class 45.**

Gordon Corporation, Ltd., doing business as Gordon-Allen Ltd., Berkeley, Calif. Soap, washing powder, and other cleaning preparations. 284,102; June 16; Serial No. 308,013; published Mar. 31, 1931. Class 4.

Gray, Dorothy, Bloomfield, N. J., and New York, N. Y. Soap. 284,053; June 16; Serial No. 309,071; published Mar. 24, 1931. Class 4.

Gray Nut Company, Inc., New York, N. Y. Salted nuts. 284,222; June 16; Serial No. 272,807; published Apr. 7, 1931. Class 46.

Graziosi, Antonio, doing business as Antonio Graziosi Laboratories, Philadelphia, Pa. Polish for furniture and all kinds of woodwork. 284,208; June 16; Serial No. 310,513; published Mar. 31, 1931. Class 16.

Gregory, Charles E., Brooklyn, N. Y. Vacuum massage glove. 284,235; June 16. Class 44.

Griswoldville Manufacturing Company, Griswoldville, Mass. Buckram, book cloth, hat nets, and filter cloth in the piece. 284,051; June 16; Serial No. 309,813; published Mar. 24, 1931. Class 42.

Gwaltney, P. D., Jr., & Co., Inc., Smithfield, Va. Cured meats. 284,173; June 16; Serial No. 307,672; published Apr. 14, 1931. Class 46.

Gwaltney, P. D., Jr., & Co., Inc., Smithfield, Va. Cured meats. 284,213; June 16; Serial No. 307,815; published Apr. 14, 1931. Class 46.

Hampton Roads Paper Company, Norfolk, Va. Writing tablets and pads. 83,833; renewed Oct. 17, 1931.

Harvey Paper Products Co., Sturgis, Mich. Paper cups and paper liners for making pans and similar dishes. 284,188; June 16; Serial No. 311,607; published Apr. 14, 1931. Class 2.

Havre Bottling Works. (See Gies, Harry A.)

Hirsch, M. Fred, Co., New York, N. Y. Sterling-silver ornamental ware. 284,054; June 16; Serial No. 309,207; Published Mar. 31, 1931. Class 28.

Hogan Milling Company, The, Junction City, Kans. Wheat flour, poultry and dairy feeds. 284,127; June 16; Serial No. 304,615; published Mar. 24, 1931. Class 46.

Holland & Son, New York, N. Y. Silk, rayon, cotton, etc. in the piece. 284,128; June 16; Serial No. 308,252; published Mar. 24, 1931. Class 42.

Hollins, William, & Company, Limited, London, England. Woolen blankets. 284,138; June 16; Serial No. 310,828; published Mar. 31, 1931. Class 42.

Holliston Mills, Inc., The, Norwood, Mass. Cotton piece goods and for filled and finished cotton piece goods. 284,092; June 16; Serial No. 308,732; published Mar. 24,1931. Class 42.

Holloway, M. J., & Company, Chicago, Ill. Candy. 284,209; June 16; Serial No. 311,728; published Apr. 14, 1931. Class 46.

Houghton, E. F., & Co., Philadelphia, Pa. Gum used in the sizing of textile warps. 284,121; June 16; Serial No. 303,643; published Sept. 2, 1930. Class 6.

Huntington Rubber Mills, Portland, Oreg. Rubber bottle caps. 284,242; June 16. Class 50.

Hurlburt, William H., doing business as H. O. Hurlburt & Sons, Philadelphia, Pa. Finger rings and finger-ring mountings. 284,086; June 16; Serial No. 305,862; published Mar. 17, 1931. Class 28.

Hurlox Manufacturing Co. Inc., Rockaway, N. J. Paints. 284,184; June 16; Serial No. 304,328; published Mar. 31, 1931. Class 16.

International Compositions Company, Incorporated, New York, N. Y. Varnishes, paints, and paint enamels. 284,167; June 16; Serial No. 310,869; published Apr. 7, 1931. Class 16.

International Silver Company, Meriden, Conn. Sterling silver and silver-plated flatware, hollow ware, and toilet ware. 284,067; June 16; Serial No. 310,517; published Mar. 17, 1931. Class 28.

International Silver Company, Meriden, Conn. Sterling silver and silver-plated flatware, hollow ware, and toilet ware. 284,068; June 16; Serial No. 310,607; published Mar. 17, 1931. Class 28.

Internationaler Maratti-Maschinenverkauf-A. G. Berlin, Berlin, Germany. Woven, knitted, and netted piece goods. 284,179; June 16; Serial No. 305,531; published Mar. 24, 1931. Class 42.

Juilliard, A. D., & Co. Inc., New York, N. Y. Velveteen textile fabrics in the piece. 284,095; June 16; Serial No. 285,100; published Mar. 31, 1931. Class 42.

Kaye, Bessie, doing business as Hy-G-Hy Company, New York, N. Y. Sanitary napkins. 284,079; June 16; Serial No. 310,916; published Mar. 24, 1931. Class 44.

King's, Julia, Candy Corporation, Chicago, Ill. Candies. 284,154; June 16; Serial No. 311,064; published Apr. 14, 1931. Class 46.

Kiwanis International, Chicago, Ill. Automobile radiator plates and bronze gongs. 284,117; June 16; Serial No. 311,383; published Apr. 7, 1931. Class 13.

Lake Charles Rice Milling Company of Louisiana, Inc., Lake Charles, La. Rice. 284,069; June 16; Serial No. 310,646; published Mar. 31, 1931. Class 46.

Le Bell, Seymour H., New York, N. Y. Household linens and linen. 284,136; June 16; Serial No. 310,683; published Mar. 31, 1931. Class 42.

Legg, A. M., Shoe Co., Pontiac, Ill. Shoes. 284,241; June 16. Class 39.

Lehr, Dora C. (See Crosby, Edward L.)

Lever Brothers Company, Cambridge, Mass. Soap. 284,062; June 16; Serial No. 310,131; published Mar. 24, 1931. Class 4.

Lever Brothers Company, Cambridge, Mass. Soap. 284,088; June 16; Serial No. 307,407; published Mar. 24, 1931. Class 4.

Lever Brothers Company, Cambridge, Mass. Soap. 284,089; June 16; Serial No. 307,947; published Mar. 31, 1931. Class 4.

Liebel-Flarsheim Co., The, Cincinnati, Ohio. Electrotherapeutic instrument. 284,094; June 16; Serial No. 275,622; published Mar. 24, 1931. Class 44.

Liebmann Breweries, Inc. (See Pleasant Brew Sales Corporation, assignor.)

Limited Company formerly The Skoda-Works, Plzeň, Prague-Smichov, Czechoslovakia. River steamer, steel pontoons, rudders, spoked wheels, etc. 284,215; June 16; Serial No. 235,559; published Aug. 5, 1930. Class 19.

Limited Company formerly The Škoda-Works, Plzeň, Prague-Smichov, Czechoslovakia. Steam accumulators, engines, hammers, etc. 284,223; June 16; Serial No. 225,488; published Aug. 5, 1930. Class 23.

Lindhorst, P., Berlin, Germany. Cotton yarns. 284,130; June 16; Serial No. 310,449; published Mar. 24, 1931. Class 43.

Lindhorst, P., Berlin, Germany. Wool yarns. 284,131; June 16; Serial No. 310,450; published Mar. 24, 1931. Class 43.

L'Onglex Laboratories, Limited, London, England. Manicure preparations. 284,093; June 16; Serial No. 308,739; published Mar. 24, 1931. Class 6.

Longnecker, Fred M., Delta, Ohio. Containers. 284,199; June 16; Serial No. 311,276; published Apr. 7, 1931. Class 2.

Lord Baltimore Bottling Co. (See Schonhoff, J. Z.)

Lowe, Joe, Corporation, Brooklyn, N. Y. Cakes. 284,060; June 16; Serial No. 309,898; published Mar. 24, 1931. Class 46.

Majestic Household Utilities Corporation, Chicago, Ill. Electric refrigerators and parts thereof. 284,178; June 16; Serial No. 305,668; published Apr. 7, 1931. Class 31.

Martin, J. B., Company, Norwich, Conn. Pile fabrics. 284,146; June 16; Serial No. 311,067; published Mar. 31, 1931. Class 42.

Marx and Rawolle Corporation, The, Springdale, Conn. Prepared shellac substitute. 284,243; June 16. Class 16.

Maté, Inc., Philadelphia, Pa. Compounds for cleaning the hands, soap powders, etc. 284,096; June 16; Serial No. 289,637; published Dec. 10, 1929. Class 4.

Mathers, Joseph, Limited, assignor to Mathers' Snowdrop Linens Limited, Belfast, Northern Ireland. Linen and damask goods. 81,616; renewed Apr. 25, 1931.

McNasby, William J., doing business as McNasby Fish & Oyster Company, Akron, Ohio. Fresh fish. 284,177; June 16; Serial No. 306,194; published Apr. 14, 1931. Class 46.

Merco Nordstrom Valve Company, San Francisco, Calif. Plug valves. 284,191–2; June 16; Serial Nos. 310,451–2; published Apr. 14, 1931. Class 13.

Meyer, John, Inc., New Orleans, La. Fresh citrus fruits. 284,157; June 16; Serial No. 311,338; published Apr. 7, 1931. Class 46.

Miller, I. & Sons, Incorporated, Long Island City, N. Y. Silk, woolen, linen, and cotton piece goods. 284,133; June 16; Serial No. 310,523; published Mar. 24, 1931. Class 42.

Milrick Products Corporation, assignor to The Milrick Corporation, Kokomo, Ind. Liquid preparation. 284,065; June 16; Serial No. 310,401; published Mar. 24, 1931. Class 4.

Milwaukee Lubricants Co., Milwaukee, Wis. Cleaning, cleansing, and detergent materials. 284,084; June 16; Serial No. 304,624; published Mar. 31, 1931. Class 4.

Moniz, Raul G., New York, N. Y., and Bahia, Brazil, South America. Phonograph needles. 284,076; June 16; Serial No. 310,833; published Mar. 31, 1931. Class 36.

Monogram Coffee Co. (See Frank Grocery Co., Inc., The.)

Nardi's, A., Sons, Inc., Williamsport, Pa. Fresh citrus fruits, vegetables, nuts, etc. 284,155; June 16; Serial No. 311,068; published Apr. 7, 1931. Class 46.

National Enameling & Stamping Co. Inc., Milwaukee, Wis. Electric hot plates. 284,218; June 16; Serial No. 296,020; published Mar. 31, 1931. Class 21.

Novo Trading Corporation, New York, N. Y. Dyed skins. 284,063; June 16; Serial No. 310,186; published Mar. 24, 1931. Class 1.

Overbeck, Otto G. C. L. J., Deansgate, Grimsby, England. Electromedical set and parts thereof. 284,124; June 16; Serial No. 304,211; published Mar. 24, 1931. Class 44.

Pace Manufacturing Co., Chicago, Ill. Coin-controlled mechanical games of skill. 284,108; June 16; Serial No. 310,574; published Mar. 31, 1931. Class 22.

Pacific Trading Co., Inc., San Francisco, Calif. Canned fruits and fish. 284,221; June 16; Serial No. 273,933; published Apr. 7, 1931. Class 46.

Paint Engineers, Inc., Chicago, Ill. Paint enamels and ready-mixed paint. 284,206; June 16; Serial No. 310,408; published Mar. 31, 1931. Class 16.

Paper Mills' Company, The, Chicago, Ill. Printing paper and envelopes made therefrom. 284,239–40; June 16. Class 37.

Parke, Davis & Company, Detroit, Mich. Shaving creams. 284,077; June 16; Serial No. 310,878; published Mar. 24, 1931. Class 4.

Phi Mu Alpha Sinfonia Fraternity of America, Chicago, Ill. Fraternity badges, lapel buttons, cuff links, etc. 284,078; June 16; Serial No. 310,879; published Mar. 17, 1931. Class 28.

Pierce-Arrow Motor Car Company, The, Buffalo, N. Y. Automotive vehicles. 284,198; June 16; Serial No. 311,245; published Apr. 14, 1931. Class 19.

Plant Rubber & Asbestos Works, San Francisco, Calif. Vent and flue pipes and fittings therefor. 284,194; June 16; Serial No. 310,809; published Apr. 14, 1931. Class 34.

Pleasant Brew Sales Corporation, New York, assignor to Liebmann Breweries, Inc., Brooklyn, N. Y. Malt beverages. 284,109; June 16; Serial No. 310,656; published Apr. 7, 1931. Class 48.

Prosthetic Products, Inc., New York, N. Y. Plastic resin. 284,066; June 16; Serial No. 310,454; published Mar. 31, 1931. Class 44.

Providence Stock Company, Providence, R. I. Jewelry. 284,070; June 16; Serial No. 310,695; published Mar. 17, 1931. Class 28.

Ransom-Barton Co., Philadelphia, Pa. Kitchen equipment. 284,197; June 16; Serial No. 311,158; published Apr. 14, 1931. Class 13.

Rock Springs Fuel Company, Rock Springs, Wyo. Coal. 284,233; June 16. Class 1.

Roddenbery, Walter B., Cairo, Ga. Molasses. 284,122; June 16; Serial No. 304,069; published Mar. 24, 1931. Class 46.

Roessler & Hasslacher Chemical Company, The, New York, N. Y. Liquid preparation. 284,168; June 16; Serial No. 310,884; published Apr. 7, 1931. Class 16.

Ronuk, Limited, Portslade, near Brighton, England. Wood stain. 284,169; June 16; Serial No. 311,201; published Apr. 14, 1931. Class 16.

Rupp, Fred, doing business as Twin Mountain Bottling Co., Port Jervis, N. Y. Beverage and syrups, extracts, and concentrates for making the same. 284,112; June 16; Serial No. 311,045; published Apr. 7, 1931. Class 45.

S. A. Seta Artificiale Varedo, Turin, Italy. Rayon threads and yarns. 284,125–6; June 16; Serial No. 304,287–8; published Mar. 24, 1931. Class 43.

S. O. & C. Co., Ansonia, Conn., and Boston, Mass., to The S O & C Company, Ansonia, Conn. Eyelets and lacing hooks. 83,608; renewed Sept. 26, 1931.

Schmid, Julius, New York, N. Y. Vaginal diaphragms. 284,083; June 16; Serial No. 311,209; published Mar. 31, 1931. Class 44.

Schonhoff, J. Z., doing business as Lord Baltimore Bottling Co., Baltimore, Md. Malt beverages. 284,115–16; June 16; Serial No. 311,698–9; published Apr. 14, 1931. Class 48.

Schrafft, W. F., & Sons Corporation, Boston, Mass. Chocolate candy. 284,159; June 16; Serial No. 311,395; published Apr. 7, 1931. Class 46.

Schwarzenbach Huber Co., The, New York, N. Y. Broad silks and silk mixtures. 284,134–5; June 16; Serial Nos. 310,533–4; published Mar. 31, 1931. Class 42.

Sears, Roebuck and Co., Chicago, Ill. Galvanized, bronze, and copper screen cloth. 284,187; June 16; Serial No. 311,794; published Apr. 14, 1931. Class 14.

Sherwin-Williams Company, The, Cleveland, Ohio. Paints, varnishes, lacquers, etc. 284,170; June 16; Serial No. 311,342; published Mar. 31, 1931. Class 16.

Sheuerman Brothers Inc. (See Capital City Woolen Mills.)

Sibor, S. A. Verreries De Romont, Romont, Switzerland. Preserve glasses, glass cooking utensils, glass kitchen utensils, etc. 284,098; June 16; Serial No. 294,490; published Mar. 24, 1931. Class 33.

Simplex Wire & Cable Company, Boston, Mass. Wires and cables. 284,105; June 16; Serial No. 310,228; published Mar. 17, 1931. Class 21.

Sloan Valve Company, Chicago, Ill. Flush valves. 284,196; June 16; Serial No. 310,925; published Apr. 7, 1931. Class 13.

Sloan Valve Company, Chicago, Ill. Flush valves. 284,211–12; June 16; Serial Nos. 308,557–8; published Apr. 7, 1931. Class 13.

Societe Anonyme Du Chocolat F. Marquis, Paris, France. Candies, chocolates, and teas. 284,214; June 16; Serial No. 308,458; published Apr. 14, 1931. Class 46.

Sohmer, Harry J., doing business as Sohmer & Co., New York, N. Y. Pianos. 284,064; June 16; Serial No. 310,306; published Mar. 17, 1931. Class 36.

Standard Oil Company of New Jersey, Wilmington, Del. Pipe-coating enamel. 284,166; June 16; Serial No. 310,741; published Apr. 7, 1931. Class 16.

Storm, Geo. H., & Co., Inc., assignors to Raymond W. Storm, New York, N. Y. Wooden flooring. 285,061; June 16; Serial No. 309,950; published Mar. 31, 1931. Class 12.

Sweets Company of America, Inc., New York, N. Y. Confectionery. 284,171; June 16; Serial No. 309,704; published Apr. 7, 1931. Class 46.

Triplex Safety Class Company of North America, Clifton, N. J. Laminated or nonshatterable glass. 284,044–5; June 16; Serial Nos. 309,099–100; published Mar. 24, 1931. Class 33.

Trojan Battery Company, doing business as Trojan, Los Angeles, Calif. Wet storage batteries and structural parts thereof. 284,175; June 16; Serial No. 306,977; published Mar. 17, 1931. Class 21.
Twentieth Century Bakery, Inc., Haverhill, Mass. Nut buns, buttered rings, rolls, and doughnuts. 284,101; June 16; Serial No. 300,997; published Mar. 31, 1931. Class 46.
Twin Mountain Bottling Co. (See Rupp, Fred.)
Utacal Oil Company, Cedar City, Utah. Gasoline. 284,217; June 16; Serial No. 296,036; published Mar. 17, 1931. Class 15.
Van Brunt, Elmer W., doing business as Van Brunt's and Fewacres Farm, Southampton, N. Y. Truck-gardening products. 284,172; June 16; Serial No. 310,845; published Apr. 14, 1931. Class 46.
Waggener Paint Company, North Kansas City, Mo. Varnishes, paint enamels, lacquers, etc. 284,207; June 16; Serial No. 310,458; published Mar. 31, 1931. Class 16.
Walton, Oliver H., doing business as Charles Walton & Son, Needham Heights, Mass. Elastic hosiery. 284,236-7 published June 16. Class 44.
Warren Featherbone Company, The, Three Oaks, Mich. Ribbons and elastic. 284,087; June 16; Serial No. 307,190; published Mar. 31, 1931. Class 42.
Welch, M. Edward, doing business as The Robert Welch Company, Freeport, N. Y. Candy. 284,156; June 16; Serial No. 311,208; published Apr. 7, 1931. Class 46.
Wellston Radio Corp., St. Louis, Mo. Radio aerials, tone controls, condensers, etc. 284,107; June 16; Serial No. 310,542; published Mar. 24, 1931. Class 21.
West Bend Equipment Corp., West Bend, Wis. Skid platforms and metallic bench industrial legs. 284,238; June 16. Class 23.
West Disinfecting Company, Long Island City, N. Y. Toilet-bowl cleanser. 284,231; June 16. Class 4.
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Lubricating oil. 284,152; June 16; Serial No. 309,952; published Mar. 17, 1931. Class 15.
Yorkshire Copper Works Limited, The, Leeds, England. Aluminum bronze condenser tubes. 284,229; June 16; Serial No. 308,665; published Apr. 7, 1931. Class 13.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Anderson, Frederick R., doing business as The Anderson Company, Detroit, Mich. U. S. Dry Ginger Ale. For Ginger Ale. 39,292; June 16.
Bachman, A. L. & Co., Montezuma, Iowa. Shave Made E-Z, Use E-Z Shave. For Preparation to be Used in Shaving to Soften the Beard. 39,293; June 16.
Boat House Coffee Company, The, Cincinnati, Ohio. 'Cincy's Favorite Drink'—Boat House Liquid Coffee. For Liquid Coffee. 39,294; June 16.
Bohemian Distributing Co., Ltd., Los Angeles, Calif. Wiesbaden. For Malt Syrup. 39,295; June 16.
Carter's Ink Company, The, Cambridge, Mass. Carter's Midnight. For Carbon Paper. 39,296; June 16.
Container Corporation of America, Chicago, Ill. Creamery Butter. For Creamery Butter. 39,297-8; June 16.
Hoague-Sprague Corporation, Lynn, Mass. Ethel Ettic. For Boxes. 39,299; June 16.
Hoague-Sprague Corporation, Lynn, Mass. Lorelei. For Boxes. 39,300; June 16.
Hoague-Sprague Corporation, Lynn, Mass. Ann Howe. For Boxes. 39,301; June 16.
Hoague-Sprague Corporation, Lynn, Mass. Smart Shoes. For Boxes. 39,302; June 16.
Hoague-Sprague Corporation, Lynn, Mass. Solnit & Shapiro Shoe Co. For Boxes. 39,303; June 16.
Hoague-Sprague Corporation, Lynn, Mass. Lion Shoe Co. For Boxes. 39,304; June 16.
Klaus, Karl, doing business as Karl Klaus Co., El Paso, Tex. Papayle. For Fruit Juice Made from Papayas. 39,305; June 16.
Lamp Studio, The, Utica, N. Y. The Soapy Circus. For Soap. 39,306; June 16.
Lindeman, Gaylen D., Cedar Rapids, Iowa. Lindyman's Choice Malt Syrup. For Malt Syrup. 39,307; June 16.
Martin Varnish Company, Chicago, Ill. Martin's Amber-Lyte Quick Drying Finishes. For Finishes for Walls, Houses, Porches, Floors, Woodwork, Linoleum, Furniture, Etc. 39,308; June 16.
Miller High Life Company, Milwaukee, Wis. Malt Syrup, Hop Flavored. For Malt Syrup. 39,309; June 16.
Phillips Packing Company, Inc., Cambridge, Md. Olympia Beans with Pork. For Canned Beans with Pork. 39,310; June 16.
Phillips Packing Company, Incorporated, Cambridge, Md. Olympia Cooked Spaghetti. For Canned Cooked Spaghetti. 39,311; June 16.
Phillips Packing Company, Inc., Cambridge, Md. Olympia Tomato Soup. For Canned Tomato Soup. 39,312; June 16.
Regal Products Company, Inc., Troy N. Y. Regal Brand Malt Syrup. For Malt Syrup. 39,313; June 16.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. The "Sexauer" System of Standardized Repair Service. For Containers for Plumbing Supplies. 39,314; June 16.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn High Grade Coffee. For Coffee. 39,315; June 16.
Stroehmann Brothers Co., Norristown, Pa. Stroehmann's Milk Bread. For Bread. 39,316; June 16.
Union Bag & Paper Corporation, New York, N. Y. Coffee. For Coffee. 37,317; June 16.
Union Bag & Paper Corporation, New York, N. Y. Tea. For Tea. 39,318; June 16.
Union Bag & Paper Corporation, New York, N. Y. Coffee. For Coffee. 39,319; June 16.
Wright and Wilhelmy Company, Omaha, Nebr. Wright's Peerless. For Radio B Batteries. 39,320; June 16.
Zimmer, Karl R., doing business as Zimmer Paper Products, Indianapolis, Ind. Bread. For Bread. 39,321; June 16.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

B. V. D. Company, Inc., The, New York, N. Y. The New Surf Suits with Evening Gown Backs. For Bathing Suits. 13,233; June 16.
Cream of Wheat Corporation, The, Minneapolis, Minn. Janet Couldn't Seem to Win Her Grandma's Heart. For Wheat Breakfast Food. 13,234; June 16.
Daggett Chocolate Co., Cambridge, Mass. Mother's Day May 10. For Chocolates. 13,235; June 16.
Dunn & McCarthy, Inc., Auburn, N. Y. They Walk Softly and Go Far. For Shoes. 13,236; June 16.
Hills Bros. San Francisco, Calif. Yes Sir! That's Hills Bros. Coffee—Adform 118. For Coffee. 13,237; June 16.
Hills Bros., San Francisco, Calif. Hills Bros. Coffee—Adform 117. For Coffee. 13,238; June 16.
Hills Bros., San Francisco, Calif. Hills Bros. Coffee—Adform 116. For Coffee. 13,239; June 16.
Schlitz Brewing Company, Milwaukee, Wis. Vitalized with Sunshine. For Malt Syrup. 13,240; June 16.
Shoe Form Co. Inc., Auburn, N. Y. Sales Go to Dealers Who Invite Them. For Shoe Forms. 13,241; June 16.
Shoe Form Co. Inc., Auburn, N. Y. A New Toy Motor Boat Line. For Toy Motor Boats. 13,242; June 16.
Tennessee Neon Company, Wilmington, Del., and Memphis, Tenn. Neon Clock Sign. For Outdoor Advertising Clocks. 13,243; June 16.
Wanamaker, John, New York, New York, N. Y. The Low Point Sale. For Furniture. 13,244; June 16.
Wanamaker, John, New York, New York, N. Y. The Low Point Sale. For Silk Crepe. 13,245; June 16.
Wanamaker, John, New York, New York, N. Y. The Low Point Sale. For Carpets. 13,246; June 16.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adam Hat Stores, Inc., New York, N. Y. Men's hats. 313,218; June 16. Class 39.
Adams Bros. Mfg. Co. Inc., Pittsburgh, Pa. Radiant gas heaters and parts thereof. 312,327; June 16. Class 34.
Adamson Bros. Company, New York, N. Y. Yarns. 313,213; June 16. Class 43.
Ajax Hosiery Mills, Phoenixville, Pa. Hosiery. 310,148; June 16. Class 39.
Alberco Corporation, Ltd., Hollywood, Calif. Solvent preparation for removing nicotine stains. 313,273; June 16. Class 4.
Alrite Mfg. Co. (See Fidelity Manufacturing Co. Inc.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aluminum Company of America, Pittsburgh, Pa. Metal cable clamps, devices for preventing vibration of electric cables, etc. 307,875-6; June 16. Class 13.
American Blue Stone Co., New York, N. Y. Flag stones. 411,947; June 16. Class 12.
American Druggists Syndicate, Inc., New York and Long Island City, N. Y. Pastilles for hoarseness, dryness of throat and sore throat. 312,734; June 16. Class 6.
American Hair & Felt Company, Chicago, Ill. Underlining for floor coverings. 310,277; June 16. Class 50.
American Pop Corn Company, Sioux City, Iowa. Oil for use in popping corn and pop corn seasoning. 312,748; June 16. Class 46.
Anderson, Glenn, Galesburg, Ill. Fittings and supplies used in plumbing and heating systems. 312,685; June 16. Class 13.
Andrews, O. B., Company, Chattanooga, Tenn. Canned fruits and vegetables. 310,791; June 16. Class 46.
Appleton Coated Paper Co., The, Appleton, Wis. Book paper coated on two sides, each side different color. 313,528; June 16. Class 37.
Aracoma Laboratories. (See Meadows, C. G.)
Argus Knitting Mills, Inc., Brooklyn, N. Y. Cotton, woolen, silk, etc., piece goods. 311,905; June 16. Class 42.
Argus Knitting Mills, Inc., Brooklyn, N. Y. Cotton woolen, silk, etc., piece goods. 311,907; June 16. Class 42.
Arisman, Frank H., Chicago, Ill. Medicine. 313,219; June 16. Class 6.
Armstrong, Albert, Seattle, Wash. Burned clay brick and tile. 306,991; June 16. Class 12.
Aschmann, C. G., & Co., New York, N. Y. Silk piece goods. 310,464; June 16. Class 42.
Associated Laboratories, Inc., doing business as The Besinol Company, New York, N. Y. Obesity preparation. 313,953; June 16. Class 6.
Ba-Bee-Net Manufacturing Co. (See Bramnick, Jacob M.)
Baldauf, George L., doing business as The Borolatum Company, Milwaukee, Wis. Compound used for medicinal purposes. 313,176; June 16. Class 6.
Bamberger, L., & Co., Newark, N. J. Cellulose sanitary napkins. 313,825; June 16. Class 44.
Belding-Hall Company, Belding, Mich. Refrigerators. 313,275; June 16. Class 31.
Belisario Diaz, Los Angeles, Calif. Insecticide. 312,950; June 16. Class 6.
Benson, Benj. D., & Sons, Inc., New York, N. Y. Writing paper, bank checks, and safety paper. 302,231; June 16. Class 37.
Berkowitz, Joseph, New York, N. Y. Shoe laces. 312,085; June 16. Class 40.
Besinol Company, The. (See Associated Laboratories, Inc.)
Black & Decker Manufacturing Company, The, Towson, Md. Electric laundry washing machines and electric ironing machines or mangles. 313,643; June 16. Class 24.
Black Duck Products, Inc., Whittier, Calif. Enamel paint for motor vehicles and engines, water proofing paint for canvas. 313,177; June 16. Class 16.
Blue Seal Extract Company, Cambridge, Mass. Maltless beverages and extracts therefor. 314,393; June 16. Class 45.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics in the piece. 313,226-9; June 16. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics for the manufacture of jacquettes in the piece. 313,230; June 16. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 313,488-91; June 16. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 313,954; June 16. Class 42.
Borolatum Company, The. (See Baldauf, George L.)
Boston Tea Party, Inc., Troy, Ala. Liquid tea syrup. 311,467; June 16. Class 46.
Botwen, Morris, doing business as Natural Health Products Co., New York, N. Y. Food having laxative properties. 313,323; June 16. Class 6.
Bradley, Milton, Company, Springfield, Mass. Crayons. 313,324; June 16. Class 37.
Bramnick, Jacob M., doing business as Ba-Bee-Net Manufacturing Co., Philadelphia, Pa. Canopies. 311,950; June 16,. Class 42.
Bredemeier, E. W., & Co., Chicago, Ill. Portfolios and pocket-books. 312,790; June 16. Class 3.
Brinly-Hardy Company, Louisville, Ky. Toy walking devices. 313,728; June 16. Class 22.
Brooklands Knitting Industry Limited Altrincham, England. Wool or worsted cloths and stuffs. 312,028; June 16. Class 42.
Brown Shoe Company, Inc., St. Louis, Mo. Shoes. 313,729; June 16. Class 39.
Burnett, Aaron G., doing business as A. G. Burnett Pharmacal Co., Belleville, Ill. Medicinal Preparation. 298,011; June 16. Class 6.
Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y. Medicinal acids, alkalies ammonium compounds, etc. 278,089; June 16. Class 6.
Candy Kitchens, Inc., Chicago, Ill. Candy. 314,360; June 16. Class 46.
Canine Food Company, San Francisco, Calif. Dog food. 314,147; June 16. Class 46.
Cassett, Albert, New York, N. Y. Prophylactic rubber or tissue membraneous articles. 312,598; June 16. Class 44.
Certain-teed Products Cobporation, New York, N. Y. Protective siding for buildings. 311,055; June 16. Class 12.
Chamberlin Metal Weather Strip Company, Detroit, Mich. Weather strips. 312,794; June 16. Class 12.
Chemical Utilities, Inc., New York, N. Y. Metal plating and polishing compound. 313,139; June 16. Class 6.
Chemische Fabrik Helfenberg A. G. vorm. Eugn Ditrich, Helfenberg, near Dresden, Germany. Medicinal preparation. 308,614; Jun 16. Class 6.
Chic-Tone Company, The, Inc., Angola, Ind. Medicine for general colds, croup, pneumonia, etc. 312,835; June 16. Class 6.
Churchill, S. H. & Company, Chicago, Ill. Men's coats, vests, pants, etc. 302,178; June 16; Class 39.
Clifford, H. B., Roofing Company, Detroit, Mich. Composition shingles. 312,696; June 16. Class 12.
Clinton Company, The, Cleveland, Ohio. Coal. 314,323; June 16. Class 1.
Cohen, Goldman & Co., Inc., New York, N. Y. Outer garments, shirts, underwear, etc. 312,887; June 16. Class 39.
Colardo Products Limited, Reading, England. Fireproof paints. 291,606; June 16. Class 16.
Colgate-Palmolive-Peet Company, Chicago, Ill. Toilet soap and shaving cream. 313,832; June 16. Class 4.
Consolidated Products Corporation, Plainfield, N. J. Finishing polish. 314,041; June 16. Class 16.
Consolidated Sewing Machine & Supply Co., New York, N. Y. Furriers' tools, sewing machines and parts thereof and accessories. 305,996; June 16. Class 23.
Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Ornamental and chain link metal fencing. 299,109; June 16. Class 13.
Cortez Cigar Co., Savannah, Ga. Cigars. 312,273; June 16. Class 17.
Craig, S. J., Greenville, S. C. Hooked rugs. 312,332; June 16. Class 42.
Crailo Sweets, Incorporated, Brooklyn, N. Y. Confectionery. 314,274; June 16. Class 46.
Crisp, Michael A., Los Angeles, Calif. Medicine. 310,914; June 16. Class 6.
Danchak, Mrs. Lydia, doing business as Gold-Vein Co., Waco, Tex. Ointment. 312,876; June 16. Class 6.
Delco Products Corporation, Dayton, Ohio. Shock absorbers. 313,125; June 16. Class 19.
Dewey, Seymour B., jr., Cleveland, Ohio. Cold and grippe capsules. 294,714; June 16. Class 6.
Dilling & Company, Indianapolis, Ind. Candles. 314,362; June 16. Class 46.
Donaldson Manufacturing Company, Limited, Glasgow, Scotland. Golf clubs, golf club shafts, golf balls, etc. 314,447; June 16. Class 22.
Donnen-Fuel, Inc., New York, N. Y. Coal. 311,461; June 16. Class 1.
Douglas, Bernard M., New York, N. Y. Roquefort cheese. 313,468; June 16. Class 46.
Dumari Textile Co., Inc., New York, N. Y. Textile fabrics in the piece. 313,334-5; June 16. Class 42.
Eccles, M. B., Omaha, Nebr. Maltless compound for maltless beverages. 313,997; June 16. Class 45.
Eccles, M. B., Omaha, Nebr. Maltless syrups for making soft drinks. 313,998; June 16. Class 45.
Electro-Chemical Society, New York, N. Y. Books or periodicals. 311,713; June 16. Class 38.
Elizabeth Arden, Inc., New York, N. Y. Perfume. 313,321; June 16. Class 6.
Elmer Candy Company, Inc., New Orleans, La. Candy. 314,363; June 16. Class 46.
Esslinger's, Inc., Philadelphia, Pa. Malt beverages. 314,045; June 16. Class 48.
Eureka Fire Hose Manufacturing Company, New York, N. Y. Hose of fabric and rubber. 309,307; June 16. Class 35.
Europa Health Restorer Co. (See Howell, Charlotte E.)
Excelsior Varsity Underwear Corporation, Baltimore, Md. Men's pajamas. 313,594; June 16. Class 39.
Faber, A. W., Inc., Newark, N. J. Pencils, pencil cases, crayons, etc. 301,254; June 16. Class 37.
Fair, The, Chicago, Ill. Linen table cloths, napkins, towels, etc. 313,078; June 16. Class 42.
Fairclough & Gold, Inc., Boston, Mass. Textile fabric curtains. 309,772; June 16. Class 42.
Farrington & Evans, Inc., New York, N. Y. Women's hats. 313,731; June 16. Class 39.
Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. 313,595; June 16. Class 39.
Federal Star Dyers Corporation, New York, N. Y. Dyed furs, skins, pelts, and hides. 313,426; June 16. Class 1.
Fidelity Manufacturing Co., Inc., doing business as Alrite Mfg. Co., Zionsville, Pa. Touch-up enamel, tire paint and polishes. 312,753; June 16. Class 16.
Firetite Products Corporation, Indianapolis, Ind. Refractory cements, plastics, and insulating materials. 312,338; June 16. Class 12.
Flavo Lax Corporation, Brooklyn, N. Y. Physic and laxative for human use. 313,264; June 16. Class 6.
Flexwood Company, The, Chicago, Ill. Fabric backed wood veneer. 313,884; June 16. Class 12.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Florasynth Laboratories, Inc., New York, N. Y. Synthetic organic products for general food flavoring purposes. 276,931; June 16. Class 6.
Fox & Fox, Philadelphia, Pa. Beef, mutton, pork, etc. 277,783; June 16. Class 46.
Friedberg, Adolph, Montreal, Quebec, Canada. Flavoring extracts. 307,351; June 16. Class 46.
Glasser, Jerome F., Cicero, Ill. Ice cream and frozen confections. 309,340; June 16. Class 46.
Gly-Ders Footwear, Inc., Racine, Wis. Slippers and shoes. 313,131; June 16. Class 39.
Golden Glow Shops, Inc., Somerville, Mass. Pop corn. 312,888; June 16. Class 46.
Gold-Vein Co. (See Danchak, Mrs. Lydia.)
Grinnell Washing Machine Corporation, Grinnell, Iowa. Laundry washing machines. 313,242; June 16. Class 24.
Gustafson, Aron, doing business as Johnson & Gustafson, Barre, Vt. Granite monuments and memorials. 313,659; June 16. Class 50.
H. & H. Tobacco Company, Chicago, Ill. Cigarettes and tobacco. 312,800–3; June 16. Class 17.
Hanovia Chemical & Manufacturing Company, Newark, N. J. Metallic decorating paints, lustre colors, etc. 313,187; June 16. Class 16.
Harpoon Paint Products, Inc., Long Island City, N. Y. Paint. 313,541; June 16.
Hayman, Michael, & Co., Inc., Buffalo, N. Y. Cement for jointing water mains. 313,168; June 16. Class 12.
Healoil Laboratories. (See Healy, Dan J.)
Healy, Dan J., doing business as Healoil Laboratories, Detroit, Mich. Shampoo. 313,599; June 16. Class 6.
Hill, W. K., doing business as W. K. Hill & Co., Greer, S. C. Bedspreads. 309,380; June 16. Class 42.
Hoelbinger, Otto W., doing business as O. H. Rubber Company, Folsom, Ridley Township, Delaware County, Pa. Pneumatic tube patches. 312,896; June 16. Class 35.
Hopson, W. C., Company, doing business as Simplex Brooder Stove Co., Grand Rapids, Mich. Oil burning brooder stoves. 310,141; June 16. Class 34.
Hosiery Mills Co., The, Chicago, Ill. Hosiery. 313,852; June 16. Class 39.
Howell, Charlotte E., doing business as Europa Health Restorer Co., Glendale, Calif. Preparation for Purifying the Blood. 313,661; June 16. Class 6.
Hudson River Woolens Mills, New York, N. Y. Woolen overcoatings. 313,433; June 16. Class 42.
Indiana Clipping Service. (See Johnston, Fred G.)
International Corset Company, Aurora, Ill. Corsets and combination corsets and brassières. 311,735; June 16. Class 39.
Jaburg Brothers, Inc., New York, N. Y. Cutlery, machine tools and parts thereof, scoops, shovels, etc. 312,648; June 16. Class 23.
James, Thomas R., Dallas, Tex. Pads used during hair treating or waving operations. 313,546; June 16. Class 44.
Jamieson C. E. & Company, Detroit, Mich. Mineral oil used as an intestinal lubricant. 313,547; June 16. Class 6.
Jamieson, C. E. & Company, Detroit, Mich. Effervescent salt. 313,548; June 16. Class 6.
Jelenko, J. F., & Co., New York, N. Y. Casting golds. 311,528; June 16. Class 44.
Johnson & Gustafson. (See Gustafson, Aaron.)
Johnson, H. A., Company, Boston, Mass. Fruit preserves, pie and pastry fillings. 303,769; June 16. Class 46.
Johnson, Theodore, New York, N. Y. Preparations for cleaning linoleum. 307,206; June 16. Class 4.
Johnston, Fred G., doing business as Indiana Clipping Service, Indianapolis, Ind. Newspapers. 312,809; June 16. Class 38.
Kapsi-Kon Yeast Corporation, Baltimore, Md. Yeast. 313,853; June 16. Class 46.
Karagheusian, A. & M., Inc., New York, N. Y. Textile rugs and carpets. 313,738; June 16. Class 42.
Karagheusian, A. & M., Inc., New York, N. Y. Textile rugs and carpets. 313,854; June 16. Class 42.
Kattermann and Mitchell Company, New York, N. Y. Silk piece goods. 313,371; June 16. Class 42.
Knit Products Corporation, Belmont, N. C. Hosiery. 307,554; June 16. Class 39.
Koehler Bros., Saginaw, Mich. Target backstops. 314,411; June 16. Class 9.
Kohn, Samuel, doing business as Thrift Rubber Company, Newark, N. J. Prophylactic rubber and membraneous articles. 314,204; June 16. Class 44.
Kress, S. H., & Co., New York, N. Y. Hosiery. 313,438; June 16. Class 39.
Landeshuter Leinen- und Gebildweberei F. V. Grünfeld, Berlin, Germany. Textile rugs. 300,209; June 16. Class 42.
Latchford Glass Company, Los Angeles, Calif. Glassware. 313,787; June 16. Class 33.
Lawrence, A. C., Leather Company, Peabody, Mass. Shearlings or wool pelts. 312,608; June 16. Class 1.
Lee, Edwin A., Philadelphia, Pa. Silk hosiery. 308,165; June 16. Class 39.
Lennox Furnace Company, Inc., Syracuse, N. Y. Forced draft device for furnaces. 313,739; June 16. Class 34.
Leocopoulos, George D., Chicopee Falls, Mass. Candy. 313,272; June 16. Class 46.
Levy, Forman & Co., Inc., New York, N. Y. Bath robes, bathing suits, sweaters, etc. 314,061; June 16. Class 39.
Lyons & Company, New York, N. Y. Preparation for polishing, cleaning, and dressing shoes. 313,139; June 16. Class 4.
M. M. A. Chemical Company, Boston, Mass. Paste or semi-liquid in the nature of a dry cleaner. 312,190; June 16. Class 4.
MacGillivray, W. S., San Antonio, Tex. Frozen confection. 312,924; June 16. Class 46.
Mallinger, Samuel, Pittsburgh, Pa. Bottle caps. 313,475; June 16. Class 50.
Marine Steel Corporation, New York, N. Y. Bright alloy steels. 314,290; June 16. Class 14.
Marsellus, John, Casket Company, Syracuse, N. Y. Tubular containers for mortuary records. 313,378; June 16. Class 2.
Marshall, John G., Brooklyn, N. Y. Composition to be mixed with oil paints. 310,343; June 16. Class 16.
Marshall, John G., Brooklyn, N. Y. Preparation in the nature of a waterproof varnish. 312,107; June 16. Class 16.
Mayehoff, Incorporated, Norwalk, Conn. Dresses. 313,444; June 16. Class 39.
Meadows, C. G., doing business as Aracoma Laboratories, Logan, W. Va. Mouth wash and a preparation used in the treatment of dandruff. 313,605; June 16. Class 6.
Meredith Publishing Company, Des Moines, Iowa. Cook books. 311,922; June 16. Class 38.
Mexico Refractories Company, Mexico, Mo. Plastic monolithic fire brick. 312,659; June 16. Class 12.
Minnesota Mining & Manufacturing Company, Wilmington, Del. Polishing waxes and polishes. 290,220; June 16. Class 16.
Minnesota Valley Canning Company, Le Sueur, Minn. Canned peas. 298,644; June 16. Class 46.
Morgan Company, The, Chicago, Ill. Protective ready mixed paint. 312,446; June 16. Class 16.
Nadoolman, Jacob S., South Fallsburg, N. Y. Salve and also a preparation for treatment of dandruff. 313,349; June 16. Class 6.
National Equipment Corporation, Milwaukee, Wis. Machines for pumping cementitious aggregates. 313,864; June 16. Class 23.
Natural Health Products Co. (See Bötwen, Morris.)
New England Brick Company, Boston, Mass. Brick. 313,089; June 16. Class 12.
New Process Painting Co., Greenwich, Conn. Painting machines. 313,580; June 16. Class 23.
Newspaper Nature Features, Inc., Cleveland, Ohio. Periodical. 299,218–19; June 16. Class 38.
Nikol Jell Company, Portland, Oreg. Gelatin desserts. 312,767; June 16. Class 46.
O. H. Rubber Company. (See Hoelbinger, Otto W.)
Pabst Corporation, Milwaukee, Wis. Cheese preparation. 310,406; June 16. Class 46.
Padilla, Longinos, Los Olmos, Santiago de Cuba. Tooth paste and mouth wash. 312,061; June 16. Class 6.
Pauson & Company, San Francisco, Calif. Suits, overcoats, and topcoats. 312,813; June 16. Class 39.
Perlmann, Schal and Stern, Inc., New York, N. Y. Lace doilies, lace runners and bedspreads, lace table cloths. 313,477; June 16. Class 42.
Phillips & Uppercu, New York, N. Y. Table board games of skill. 313,670; June 16. Class 22.
Pitman-Moore Company, Indianapolis, Ind. Ointment for treating acute mammitus. 313,970; June 16. Class 6.
Pitman-Moore Company, Indianapolis, Ind. Medicine for treating necrotic inflammation for the gastro-intestinal tract in swine. 313,972; June 16. Class 6.
Pitman-Moore Company, Indianapolis, Ind. Animal insecticide. 313,973; June 16. Class 6.
Pitman-Moore Company, Indianapolis, Ind. Medicine for treating pulmonary infections and gastro-intestinal fermentation in horses and cattle. 313,988; June 16. Class 6.
Planters Oyster Company, Inc., Port Norris, N. J. Canned oysters. 313,000; June 16. Class 46.
Post-Enquirer Publishing Company, Oakland, Calif. Daily newspaper. 302,015; June 16. Class 38.
Pure Candy Kitchen, Inc., New York, N. Y. Chocolate. 314,296; June 16. Class 46.
Puritan Malt Extract Company, Chicago, Ill. Malt syrup. 313,559; June 16. Class 46.
Puritan Soap Company, Rochester, N. Y. Soap, fabric cleaner, and nickel polish. 311,070; June 16. Class 4.
Pyramiden-Fliegenfängerfabrik Max Dametz m. b. H., Zeitz, Germany. Fly catchers. 312,198; June 16. Class 50.
Quintex Company, Incorporated, Philadelphia, Pa. Sanitary napkins. 313,153; June 16. Class 44.
Rasmussen, Geo., Co., Chicago, Ill. Canned vegetables, fruits, fish, etc. 313,317; June 16. Class 46.
Rauh Supply Co., Lancaster, Pa. Galvanized ridge roll for roofing. 303,299; June 16. Class 12.
Red Band Co., Inc., Johnson City, Tenn. Flour. 314,250; June 16. Class 46.
Reed & Carnrick, Jersey City, N. J. Medicinal preparations. 313,479; June 16. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Reliance Manufacturing Company, Chicago, Ill. Work shirts. 312,199; June 16. Class 39.
Resinous Products & Chemical Company, The, Philadelphia, Pa. Metallic-organic compounds, being brittle resinous materials for use as driers. 312,064; June 16. Class 16.
Rin-O-Cur Company, Chicago, Ill. Nasal cream. 313,675; June 16. Class 6.
Rochester Bread Company, The, Rochester, Minn. Cookies. 313,448; June 16. Class 46.
Röhm & Haas Company, Philadelphia, Pa. Material in powder or liquid form containing enzymes used for treating plant juices and extracts. 313,207; June 16. Class 6.
Romson, Carl, Stockholm, Sweden. Fire escape rope apparatus. 311,074; June 16. Class 50.
Rorer, William H., Inc., Philadelphia, Pa. Medicine in ampul form, etc. 309,879; June 16. Class 6.
Royal Rayon Corporation, Brooklyn, N. Y. Knitted piece goods. 313,006; June 16. Class 42.
Ryles, W. and I., Flint, Mich. Ginger beer. 310,923; June 16. Class 45.
Safety Processing Company, The, Youngstown, Ohio. Filler and binder in plastic form. 313,056; June 16. Class 12.
Salubra S. A., Basel, Switzerland. Wall coverings. 303,657–8; June 16. Class 37.
Samek Brothers, Brno-Brunn, Czechoslovakia. Woolens. 308,317; June 16. Class 42.
Sandfelder Company, The, Chicago, Ill. Elastic reducing garments. 312,314; June 16. Class 44.
Sanovapor Laboratories, Inc., Huntington, W. Va. Preparation for the treatment of diabetes. 313,976; June 16. Class 6.
Sayre & Fisher Brick Company, Sayreville, N. J. Fire brick, brick specialties, etc. 293,933; June 16. Class 12.
Schieffelin & Company, New York, N. Y. Shampoo. 309,004; June 16. Class 6.
Schiller Piano Company, Oregon, Ill. Sled coasters. 313,804; June 16. Class 22.
Schoeneman, J., Incorporated, Baltimore, Md. Coats, vests, trousers, etc. 313,868; June 16. Class 39.
Secrets, Inc., Ottawa, Ill. Cleansing cream, tissue building cream, cold cream, etc. 305,017; June 16. Class 6.
Seneca Coal & Coke Company, The, Tulsa, Okla. Coal. 314,174; June 16. Class 1.
Seymour Troy & Company, Inc., Brooklyn, N. Y. Ladies' shoes. 312,575; June 16. Class 39.
Sherwin-Williams Company, The, Cleveland, Ohio. Paints, varnishes, lacquers, etc. 313,260; June 16. Class 16.
Shineen Products Corporation, Neenah, Wis. Chemically treated polishing cloths. 312,068; June 16. Class 4.
Shipman, Daniel M., doing business as Whipponong Novelty Co., Whippany, N. J. Game played with discs. 313,980; June 16. Class 22.
Shuttleworth Carton Co. Inc., New York, N. Y. Paper boxes and cartons. 313,678; June 16. Class 2.
Siegel, M. S., & Company, Inc., New York, N. Y. Ladies' vests, bloomers, panties, etc. 307,433; June 16. Class 39.
Simonin's, C. F., Sons, Inc., Philadelphia, Pa. Shortenings. 313,261; June 16. Class 46.
Simplex Brooder Stove Co. (See Hopson, W. C., Company.)
Simplex Typewriter Co., Inc., New York, N. Y. Toy typewriters. 314,079; June 16. Class 22.
Slater, S., & Sons, Inc., New York, N. Y. Piece goods of silk, linen, etc. 310,958; June 16. Class 42.
Slote & Klein, Inc., New York, N. Y. Ladies' belts. 313,697; June 16. Class 39.
Sol Hat Co., not Incorporated. (See Ullmann, Sol R.)
Sordillo, Joseph L., doing business as Sordillo Candy Co., Baltimore, Md. Candy. 314,381; June 16. Class 46.
Staminite Corporation, The, New Haven, Conn. Compound for surfacing floors and the like. 312,446; June 16. Class 16.
Standard Brands Incorporated, New York, N. Y. Coffee. 313,757; June 16. Class 46.
Standard Pigment Company, Inc., Schuylerville, N. Y. Printing inks. 313,872; June 16. Class 11.
Standard Wall Covering Company, Inc., Philadelphia, Pa. Wall panels. 312,877; June 16. Class 12.
Stroehmann Brothers Co., Norristown, Pa. Bread. 313,062; June 16. Class 46.
Swamp & Dixie Laboratories, Inc., Fort Smith, Ark. Fever and pain powder. 313,762; June 16. Class 6.
Tabin-Picker and Company, Chicago, Ill. Ladies' frocks. 313,099; June 16. Class 39.
Thrist Rubber Company. (See Kohn, Samuel.)
Tomango Limited, Mataffin, Eastern Transvaal, South Africa. Dried, preserved, candied, and crystallized fruits, vegetables, and peels, chutneys, and sauces. 299,418; June 16. Class 46.
Ullmann, Sol R., doing business as Sol Hat Co., not Incorporated, Chicago, Ill. Caps and spats. 313,210; June 16. Class 39.
Valco Manufacturing Co., Inc., New York, N. Y. Pajamas. 313,315; June 16. Class 39.
Velveray Corporation of America, New York, N. Y. Cotton, silk, woolen, etc., piece goods. 313,456; June 16. Class 42.
Viscose Company, The, Marcus Hook, Pa. Underwear. 299,877; June 16. Class 39.
Vitamin Company of America, The, Orlando, Fla. Fruit juices for making soft drinks. 313,398; June 16. Class 45.
Vuitton & Vuitton, Societe A Responsabilite Limitee, Paris, France. Hat boxes and shoe boxes. 313,984; June 16. Class 3.
W. & W. Chemical Co., Brooklyn, N. Y. Chemicals to insure protection against freezing. 309,758; June 16. Class 6.
Wallerstein Company, Inc., New York, N. Y. Enzymatic preparation used in the treatment of hides and skins. 310,001; June 16. Class 6.
Washington Leather Goods Co. Inc., New York, N. Y. Pocketbooks. 313,943; June 16. Class 3.
Watseka Wholesale Grocery Company, Watseka, Ill. Maltless beverages. 313,166; June 16. Class 45.
Weigand, Otto F., doing business as C. A. Weigand, Philadelphia, Pa. Washable water-proof window shade fabric or material. 306,333; June 16. Class 42.
Whipponong Novelty Co. (See Shipman, Daniel M.)
Williams & Marcus Co., Philadelphia, Pa. Desk pads. 296,039; June 16. Class 37.
Wilson-Jones Company, Chicago, Ill. Ring binders and filler sheets for same. 313,519; June 16. Class 37.
Wright & Ditson, Boston, Mass. Golf clubs. 314,385, June 16. Class 22.
Wyle Hat Company, Chicago, Ill. Women's hats. 307,342; June 16. Class 39.
Wyrstapes, Inc., New York, N. Y. Staples. 313,880; June 16. Class 13.
Young, L. A., Company, The, Detroit, Mich. Golf clubs and bags. 318,403; June 16. Class 22.
Young, L. A., Company, The, Detroit, Mich. Wood and metal golf clubs. 308,404–5; June 16. Class 22.
Young, L. A., Company, The, Detroit, Mich. Wood and metal golf clubs. 308,408–11; June 16. Class 22.
Young, L. A., Company, The, Detroit, Mich. Wood and metal golf clubs. 308,413–14; June 16. Class 22.
Zizine, Pierre, Paris, France. Cod liver oil. 301,223; June 16. Class 6.
Zizine, Pierre, Paris, France. Powder used in diseases of the stomach, etc. 301,224; June 16. Class 6.
Zizine, Pierre, Paris, France. Medicinal preparation. 301,226; June 16. Class 6.
Zizine, Pierre, Paris, France. God liver oil. 301,227; June 16. Class 6.
Zizine, Pierre, Paris, France. Powder and tablets for diseases of the stomach. 301,228; June 16. Class 6.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Blue Blaze Coal Company. 284,100; June 16; Serial No. 297,407; published Mar. 31, 1931.
Coal. Buka Coal Company. 284,082; June 16; Serial No. 311,127; published Mar. 24, 1931.
Coal. Rock Springs Fuel Company. 284,233; June 16.
Skins, Dyed. Novo Trading Corporation. 284,063; June 16; Serial No. 310,186; published Mar. 24, 1931.

CLASS 2

Bags, Paper. Brooklyn Standard Bag Co. Inc. 284,118; June 16; Serial No. 311,819; published Apr. 14, 1931.
Boxes, Tool. Duplex Wrench Corporation. 284,181; June 16; Serial No. 305,101; published Apr. 7, 1931.
Containers, F. M. Longnecker. 284,199; June 16; Serial No. 311,276; published Apr. 7, 1931.
Cups and paper liners for baking pans and similar dishes, Paper. Harvey Paper Products Co. 284,188; June 16; Serial No. 311,607; published Apr. 14, 1931.

CLASS 4

Cleaning, cleansing, and detergent materials. J. B. Ford Company. 284,097; June 16; Serial No. 295,072; published Mar. 31, 1931.
Cleaning, cleansing, and detergent materials. Milwaukee Lubricants Co. 284,084; June 16; Serial No. 304,624; published Mar. 31, 1931.
Cleanser, Toilet-bowl. West Disinfecting Company. 284,231; June 16.
Compounds for cleaning the hands, shaving creams, shaving sticks, etc., Saponaceous. Comfort Manufacturing Company. 284,080–1; June 16; Serial Nos. 311,083–4; published Mar. 31, 1931.

Compounds for cleaning the hands, soap powders, etc. Maté, Inc. 284,096; June 16; Serial No. 289,637; published Dec. 10, 1929.
Creams, Shaving. Parke, Davis & Company. 284,077; June 16; Serial No. 310,878; published Mar. 24, 1931.
Liquid preparation. Milrick Products Corporation. 284,065; June 16; Serial No. 310,401; published Mar. 24, 1931.
Soap. D. Gray. 284,053; June 16; Serial No. 309,071; published Mar. 24, 1931.
Soap. Lever Brothers Company. 284,062; June 16; Serial No. 310,131; published Mar. 24, 1931.
Soap. Lever Brothers Company. 284,088; June 16; Serial No. 307,407; published Mar. 24, 1931.
Soap. Lever Brothers Company. 284,089; June 16; Serial No. 307,947; published Mar. 31, 1931.
Soap, washing powder, and other cleaning preparations. Gordon Corporation, Ltd. 284,102; June 16; Serial No. 308,013; published Mar. 31, 1931.

CLASS 6

Gum used in the sizing of textile warps. E. F. Houghton & Co. 284,121; June 16; Serial No. 303,643; published Sept. 2, 1930.
Manicure preparations. L'Onglex Laboratories, Limited. 284,093; June 16; Serial No. 308,739; published Mar. 24, 1931.
Medical compounds. E. L. Crosby. 35,747; renewed Jan. 8, 1931.
Medicinal preparation for indigestion, gastritis, acid stomach, etc. C. W. Barth. 284,055; June 16; Serial No. 309,408; published Mar. 24, 1931.
Perfume. Chanel, Inc. 284,071–3; June 16 Serial Nos. 310,715–7; published Mar. 17, 1931.
Preparation of wine, extract of meat, and malt. Coleman & Co. 83,323; renewed Sept. 5, 1931.

CLASS 12

Flooring, Wooden. Geo H. Storm & Co. 284,061; June 16; Serial No. 309,950; published Mar. 31, 1931.

CLASS 13

Aluminum bronze condenser tubes. Yorkshire Copper Works Limited. 284,229; June 16; Serial No. 308,665; published Apr. 7, 1931.
Kitchen equipment. Ransom-Barton Co. 284,197; June 16; Serial No. 311,158; published Apr. 14, 1931.
Nails. Continental Steel Corporation. 284,189; June 16; Serial No. 311,599; published Apr. 14, 1931.
Radiator plates and bronze gongs, Automobile. Kiwanis International. 284,117; June 16; Serial No. 311,383; published Apr. 7, 1931.
Screen cloth, Galvanized, bronze, and copper. Sears, Roebuck and Co. 284,187; June 16; Serial No. 311,794; published Apr. 14, 1931.
Screens. Corry Metal Corporation. 284,190; June 16; Serial No. 311,420; published Apr. 7, 1931.
Tubing supports. Bridgeport Machine Company. 284,183; June 16; Serial No. 304,600; published Apr. 14, 1931.
Valves, Flush. Sloan Valve Company. 284,196; June 16; Serial No. 310,925; published Apr. 7, 1931.
Valves, Flush. Sloan Valve Company. 284,211–12; June 16; Serial Nos. 308,537–8; published Apr. 7, 1931.
Valves, Plug. Merco Nordstrom Valve Company. 284,191–2; June 16; Serial Nos. 310,451–2; published Apr. 14, 1931.

CLASS 14

Antimony. Cookson & Company Limited. 83,325; renewed Sept. 5, 1931.

CLASS 15

Gasoline. Utacal Oil Company. 284,217; June 16; Serial No. 296,036; published Mar. 17, 1931.
Grease, Lubricating. Continental Oil Company. 284,103; June 16; Serial No. 310,121; published Mar. 24, 1931.
Oil, Lubricating. Westinghouse Electric & Manufacturing Company. 284,152; June 16; Serial No. 309,952; published Mar. 17, 1931.

CLASS 16

Cleaner and polish. Brunswick-Balke-Collender Company. 284,220; June 16; Serial No. 285,327; published May 13, 1930.
Enamel, Pipe-coating. Standard Oil Company of New Jersey. 284,166; June 16; Serial No. 310,741; published Apr. 7, 1931.
Enamels and ready mixed paint, Paint. Paint Engineers, Inc. 284,206; June 16; Serial No. 310,408; published Mar. 31, 1931.
Lacquers. Foster Mfg. Co. 284,200; June 16; Serial No. 309,850; published Apr. 7, 1931.
Liquid preparation. Roessler & Hasslacher Chemical Company. 284,168; June 16; Serial No. 310,884; published Apr. 7, 1931.
Paint, painters' wall sizing, brushing lacquer, etc. Belknap Hardware & Manufacturing Company. 284,203; June 16; Serial No. 310,009; published Apr. 7, 1931.
Paint, varnish, lacquer, etc. General Paint Corporation. 284,176; June 16; Serial No. 306,775; published Apr. 14, 1931.
Paints. Camel Lead Color & Chemical Products Mfg. Corp. 284,164–5; June 16; Serial Nos. 310,595–6; published Mar. 24, 1931.
Paints. Cook Paint and Varnish Company. 284,119; June 16; Serial No. 309,121; published Mar. 3, 1931.
Paints. Hurlox Manufacturing Co. Inc. 284,184; June 16; Serial No. 304,328; published Mar. 31, 1931.
Paints, colored paint enamels, and wall sealers. Blue Ribbon Paint Co. 284,205; June 16; Serial No. 310,329; published Mar. 24, 1931.
Paints, lacquers, varnishes, etc. Egyptian Lacquer Manufacturing Company. 284,150; June 16; Serial No. 309,679; published Apr. 7, 1931.
Paints, lacquers, varnishes, etc. Egyptian Lacquer Manufacturing Company. 284,202; June 16; Serial No. 309,969; published Mar. 31, 1931.
Paints, paint enamels, and varnishes. Foster Mfg. Co. 284,201; June 16; Serial No. 309,851; published Apr. 7, 1931.
Paints, varnishes, lacquers, etc. Sherwin-Williams Company. 284,170; June 16; Serial No. 311,342; published Mar. 31, 1931.
Polish. L. P. Doherty. 284,204; June 16; Serial No. 310,016; published Mar. 24, 1931.
Polish. A. Graziosi. 284,208; June 16; Serial No. 310,513; published Mar. 31, 1931.
Shellac substitute, Prepared. Marx and Rawolle Corporation. 284,243; June 16.
Stain, Wood. Ronuk, Limited. 284,169; June 16; Serial No. 311,201; published Apr. 14, 1931.
Varnishes, paint enamels, lacquers, etc. Waggener Paint Company. 284,207; June 16; Serial No. 310,458; published Mar. 31, 1931.
Varnishes, paints, and paint enamels. International Compositions Company. 284,167; June 16; Serial No. 310,869; published Apr. 7, 1931.

CLASS 19

Rods, Guiding. C. N. Colstad. 284,195; June 16; Serial No. 310,913; published Apr. 7, 1931.
Steamers, steel pontoons, rudders, spoked wheels, etc., River. Limited Company Formerly The Škoda-Works, Plzeň. 284,215; June 16; Serial No. 235,559; published Aug. 5, 1930.
Vehicles, Automotive. Pierce-Arrow Motor Car Company. 284,198; June 16; Serial No. 311,245; published Apr. 14, 1931.

CLASS 21

Batteries and structural parts thereof, Wet storage. Trojan Battery Company. 284,175; June 16; Serial No. 306,977; published Mar. 17, 1931.
Coin operated electric switches. O. A. Bronson. 284,186; June 16; Serial No. 301,092; published Mar. 17, 1931.
Electric and arcwelders and parts thereof. Agil Schweissverfahren G. m. b. H. 284,182; June 16; Serial No. 304,901; published Mar. 17, 1931.
Electrical apparatus and machines and accessories. Black & Decker Manufacturing Company. 284,185; June 16; Serial No. 303,684; published Mar. 17, 1931.
Electrically controlling water heating systems, Apparatus for. Electromatic Gas Control Corporation. 284,151; June 16; Serial No. 309,727; published Mar. 17, 1931.
Flash lights. Bond Electric Corporation. 284,104; June 16; Serial No. 310,203; published Mar. 24, 1931.
Hot plates, Electric. National Enameling & Stamping Co. Inc. 284,218; June 16; Serial No. 296,020; published Mar. 31, 1931.
Radio aerials, tone controls, condensers, etc. Wellston Radio Corp. 284,107; June 16; Serial No. 310,542; published Mar. 24, 1931.
Radio receiving sets and parts thereof. General Motors Radio Corporation. 284,106; June 16; Serial No. 310,337; published Mar. 24, 1931.
Wires and cables. Simplex Wire & Cable Company. 284,105; June 16; Serial No. 310,228; published Mar. 17, 1931.

CLASS 22

Games of skill, Coin controlled mechanical. Pace Manufacturing Co. 248,108; June 16; Serial No. 310,574; published Mar. 31, 1931.
Golf courses Portable miniature. Carnie-Goudie Manufacturing Co. 284,230; June 16; Serial No. 308,680; published Apr. 14, 1931.

CLASS 23

Bearings. Franklin Company. 84,089; renewed Nov. 7, 1931.
Platforms and metallic industrial bench legs, Skid. West Bend Equipment Corp. 284,238; June 16.
Steam accumulators, engines, hammers, etc. Limited Company Formerly The Škoda-Works, Plzeň. 284,223; June 16; Serial No. 235,488; published Aug. 5, 1930.
Tools and machinery. Celfor Tool Company. 82,206; renewed June 13, 1931.

CLASS 27

Watch movements. Elgin National Watch Company. 82,972; renewed Aug. 8, 1931.

CLASS 28

Badges, lapel buttons, cuff links, etc., Fraternity. Phi Mu Alpha Sinfonia Fraternity of America. 284,078; June 16; Serial No. 310,879; published Mar. 17, 1931.
Flat ware, hollow ware and toilet ware. International Silver Company. 284,067; June 16; Serial No. 310,517; published Mar. 17, 1931.
Flat ware, hollow ware and toilet ware. International Silver Company. 284,068; June 16; Serial No. 310,607; published Mar. 17, 1931.
Jewelry. Providence Stock Company. 284,070; June 16; Serial No. 310,695; published Mar. 17, 1931.
Lavallières, pin sets, cuff buttons, etc. Eisenstadt Manufacturing Company. 284,099; June 16; Serial No. 296,912; published Mar. 17, 1931.
Rings and finger ring mountings, Finger. W. H. Hurlburt. 284,086; June 16; Serial No. 305,862; published Mar. 17, 1931.
Silver ornamental ware, Sterling. M. Fred Hirsch Co. 284,054; June 16; Serial No. 309,207; published Mar. 31, 1931.
Tie grips and tie holders. Freeman-Daughaday Company. 284,059; June 16; Serial No. 309,891; published Mar. 17, 1931.

CLASS 31

Refrigerators and parts thereof, Electric. Majestic Household Utilities Corporation. 284,178; June 16; Serial No. 305,668; published Apr. 7, 1931.

CLASS 33

Glass, Laminated or nonshatterable. Triplex Safety Glass Company of North America. 284,044–5; June 16; Serial Nos. 309,099–100; published Mar. 24, 1931.
Glasses, glass cooking utensils, glass kitchen utensils, etc., Preserve. Sibor, S. A. Verreries De Romont. 284,098; June 16; Serial No. 294,490; published Mar. 24, 1931.

CLASS 34

Heaters, temperature regulators, humidifiers, and furnace fans. American Air Conditioning Corporation. 284,210; June 16; Serial No. 309,055; published Apr. 7, 1931.
Heating apparatus, and heat exchange apparatus, Fluid. Foster Wheeler Corporation. 284,193; June 16; Serial No. 310,642; published Apr. 7, 1931.
Pipes and fittings therefor, Vent and flue. Plant Rubber & Asbestos Works. 284,194; June 16; Serial No. 310,809; published Apr. 14, 1931.

CLASS 35

Rings, Piston. Budlong & Funchess Motor Products Co. 284,232; June 16.

CLASS 36

Cornets, trumpets, trombones, etc. C. G. Conn, Ltd. 284,075; June 16; Serial No. 310,760; published Mar. 24, 1931.
Phonograph needles. R. G. Moniz. 284,076; June 16; Serial No. 310,833; published Mar. 31, 1931.
Pianos. H. J. Sohmer. 284,064; June 16; Serial No. 310,306; published Mar. 17, 1931.
Violins, violas, cellos, etc. Czechslovak Musical Instruments Company. 284,090; June 16; Serial No. 308,533; published Mar. 24, 1931.

CLASS 37

Paper and envelopes made therefrom, Printing. Paper Mills' Company. 284,230–40; June 16.
Paper and pads, Writing. Hampton Roads Paper Company. 83,833; renewed Oct. 17, 1931.
Stationery. Dennison & Sons. 36,189; renewed Apr. 9, 1931.

CLASS 39

Linen piece goods and table napkins, tablecloths, towels. Carson Pirie Scott & Co. 284,216; June 16; Serial No. 267,530; published Dec. 2, 1930.
Shoes. A. M. Legg Shoe Co. 284,241; June 16.

CLASS 40

Eyelets and lacing hooks. S. O. & C. Co. 83,608; renewed Sept. 26, 1931.

CLASS 42

Blankets. Capital City Woolen Mills. 83,138; renewed Aug. 22, 1931.
Blankets, Woolen. W. Hollins & Company, Limited. 284,138; June 16; Serial No. 310,828; published Mar. 31, 1931.
Buckram, book-cloth, hat nets, and filter cloth in the piece. Griswoldville Manufacturing Company. 284,051; June 16; Serial No. 309,813; published Mar. 24, 1931.
Cotton piece goods and for filled and finished cotton piece goods. Holliston Mills, Inc. 284,092; June 16; Serial No. 308,732; published Mar. 24, 1931.
Cotton, wool, rayon, etc., Piece goods made of. Farr Alpaca Company. 284,147; June 16; Serial No. 311,090; published Mar. 31, 1931.
Fabrics. Dumari Textile Co. 284,140; June 16; Serial No. 310,936; published Mar. 31, 1931.
Fabrics, Artificial-silk knit. Argus Knitting Mills, Inc. 284,149; June 16; Serial No. 295,454; published Oct. 14, 1930.
Fabrics in the piece, Pile. Sidney Blumenthal & Co. Inc. 284,046; June 16; Serial No. 309,506; published Mar. 24, 1931.
Fabrics in the piece, Pile. Sidney Blumenthal & Co. Inc. 284,050; June 16; Serial No. 309,672; published Mar. 24, 1931.
Fabrics in the piece, Velveteen textile. A. D. Juilliard & Co. Inc. 284,095; June 16; Serial No. 285,100; published Mar. 31, 1931.
Fabrics, Pile. Sidney Blumenthal & Co. Inc. 284,137; June 16; Serial No. 310,712; published Mar. 31, 1931.
Fabrics, Pile. Sidney Blumenthal & Co. Inc. 284,139; June 16; Serial No. 310,855; published Mar. 31, 1931.
Fabrics, Pile. Gem Clothing Co. Inc. 284,120; June 16; Serial No. 301,025; published Mar. 31, 1931.
Fabrics, Woven. Bellman Brook Bleachery Co. 284,052; June 16; Serial No. 309,918; published Mar. 17, 1931.
Linen and damask goods. Joseph Mathers, Limited. 81,616; renewed Apr. 25, 1931.
Linens and linen piece goods, Household. S. H. Le Bell. 284,136; June 16; Serial No. 310,683; published Mar. 31, 1931.
Piece goods. Formfit Company. 284,132; June 16; Serial No. 310,476; published Mar. 24, 1931.
Piece goods of silk, rayon, and wool. Chatillon, Mouly, Roussel, Inc. 284,047; June 16; Serial No. 309,552; published Mar. 24, 1931.
Piece goods, Woven, knitted, and netted. Internationaler Maratti-Maschinenverkauf-A.-G. Berlin. 284,179; June 16; Serial No. 305,531; published Mar. 24, 1931.
Pile fabrics. J. B. Martin Company. 284,146; June 16; Serial No. 311,067; published Mar. 31, 1931.
Ribbons and elastic. Warren Featherbone Company. 284,087; June 16; Serial No. 307,190; published Mar. 31, 1931.
Rugs, Textile. Associated Merchandising Corporation. 284,129; June 16; Serial No. 310,155; published Mar. 24, 1931.
Silk piece goods. Albert Godde, Bedin, Inc. 284,091; June 16; Serial No. 308,585; published Mar. 24, 1931.
Silk, rayon, cotton, etc. in the piece. Holland & Son. 284,128; June 16; Serial No. 308,252; published Mar. 24, 1931.
Silk, rayon, cotton, etc., piece goods. F. Ducharne Silk Co. Inc. 284,148; June 16; Serial No. 311,087; published Mar. 31, 1931.
Silk, rayon, wool, cotton, and linen in the piece. N. Fluegelman & Co., Inc. 284,049; June 16; Serial No. 309,610; published Mar. 24, 1931.
Silk, woolen, linen, and cotton piece goods. I. Miller & Sons, Incorporated. 284,133; June 16; Serial No. 310,523; published Mar. 24, 1931.
Silks and silk mixtures, Broad. Schwarzenbach Huber Co. 284,134–5; June 16; Serial Nos. 310,533–4; published Mar. 31, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 284,048; June 16; Serial No. 309,555; published Mar. 24, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 284,141–2; June 16; Serial Nos. 310,983–4; published Mar. 31, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 284,143; June 16; Serial No. 310,986; published Mar. 31, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 284,144; June 16; Serial No. 310,988; published Mar. 31, 1931.
Woolen piece goods. Forstmann & Huffmann Company. 284,145; June 16; Serial No. 310,990; published Mar. 31, 1931.

CLASS 43

Threads and yarn, Rayon. S. A. Seta Artificiale Veredo. 284,125–6; June 16; Serial Nos. 304,387–8; published Mar. 24, 1931.
Yarns, Cotton. P. Lindhorst. 284,130; June 16; Serial No. 310,449; published Mar. 24, 1931.
Yarns, Wool. P. Lindhorst. 284,131; June 16; Serial No. 310,450; published Mar. 24, 1931.

CLASS 44

Atomizers. Clinical Supplies, Incorporated. 284,058; June 16; Serial No. 309,883; published Mar. 24, 1931.
Electromedical set. O. G. C. L. J. Overbeck. 284,124; June 16; Serial No. 304,211; published Mar. 24, 1931.
Electrotherapeutic instrument. Liebel-Flarsheim Co. 284,094; June 16; Serial No. 275,622; published Mar. 24, 1931.
Glove, Vacuum massage. C. E. Gregory, 284,235; June 16.
Hosiery, Elastic. O. H. Walton. 284,236–7; June 16.
Resin, Plastic. Prosthetic Products, Inc. 284,066; June 16; Serial No. 310,454; published Mar. 31, 1931.
Sanitary napkins. B. Kaye. 284,079; June 16; Serial No. 310,916; published Mar. 24, 1931.

Teeth, Backings for artificial. Columbus Dental Manufacturing Company. 284,123; June 16; Serial No. 304,095; published Mar. 24, 1931.
Vaginal dinparagms. J. Schmid. 284,083; June 16; Serial No. 311,209; published Mar. 31, 1931.

CLASS 45

Beverage and syrups, extracts, and concentrates for making the same. F. Rupp. 284,112; June 16; Serial No. 311,045; published Apr. 7, 1931.
Beverages, and syrups and extracts used in making the same. H. A. Gies. 284,113; June 16; Serial No. 311,604; published Apr. 7, 1931.
Beverages, and syrups, compounds, flavors, and concentrates for making the same. Golden State Citrus Products, Inc. 284,114; June 16; Serial No. 311,681; published Apr. 7, 1931.
Beverages and syrups, extracts, and concentrates for making the same, Maltless. Chocolate Products Company. 284,111; June 16; Serial No. 311,024; published Apr. 7, 1931.
Beverages, sirups and extracts for making the same, Maltless. A. A. Cohen. 284,110; June 16; Serial No. 310,912; published Apr. 14, 1931.

CLASS 46

Cake mix. H. C. Brill Co. 284,056; June 16; Serial No. 309,604; published Mar. 24, 1931.
Cakes. Joe Lowe Corporation. 284,060; June 16; Serial No. 309,898; published Mar. 24, 1931.
Candies. Julia King's Candy Corporation. 284,154; June 16; Serial No. 311,064; published Apr. 14, 1931.
Candies, chocolates, and teas. Societe Anonyme Du Chocolat F. Marquis. 284,214; June 16; Serial No. 308,458; published Apr. 14, 1931.
Candy. Elmer Candy Company. 284,161; June 16; Serial No. 311,651; published Apr. 7, 1931.
Candy. M. J. Holloway & Company. 284,209; June 16; Serial No. 311,728; published Apr. 14, 1931.
Candy. Sweets Company of America, Inc. 284,171; June 16; Serial No. 309,704; published Apr. 7, 1931.
Candy. M. E. Welch. 284,156; June 16; Serial No. 311,208; published Apr. 7, 1931.
Candy, Chocolate. W. F. Schrafft & Sons Corporation. 284,159; June 16; Serial No. 311,395; published Apr. 7, 1931.
Canned fruits and fish. Pacific Trading Co. 284,221; June 16; Serial No. 273,933; published Apr. 7, 1931.
Canned sauerkraut. Fremont Kraut Co. 284,153; June 16; Serial No. 310,901; published Apr. 14, 1931.
Canned vegetables. Fairmont Canning Co. 284,219; June 16; Serial No. 292,799; published Apr. 7, 1931.
Coffee. Echavarria Incorporated. 284,160; June 16; Serial No. 311,566; published Apr. 14, 1931.
Coffee. Echavarria Incorporated. 284,163; June 16; Serial No. 311,567; published Apr. 14, 1931.
Coffee, Roasted. Frank Grocery Co. 284,180; June 16; Serial No. 305,273; published Apr. 7, 1931.
Dough formations, Uncooked. Ballard & Ballard Co. 284,234; June 16.
Feed, Stock. El Campo Rice Milling Company. 284,057; June 16; Serial No. 309,608; published Mar. 31, 1931.
Fish, Fresh. W. J. McNasby. 284,177; June 16; Serial No. 306,194; published Apr. 14, 1931.
Flour, Pancake. H. C. Cole Milling Company. 284,074; June 16; Serial No. 310,758; published Mar. 31, 1931.
Flour, poultry and dairy feeds, Wheat. Hogan Milling Company. 284,127; June 16; Serial No. 304,615; published Mar. 24, 1931.
Fruits and nuts. Anchorage Farm Trading Co. 284,174; June 16; Serial No. 307,465; published Apr. 14, 1931.
Fruits, Fresh citrus. John Meyer, Inc. 284,157; June 16; Serial No. 311,338; published Apr. 7, 1931.
Fruits, vegetables, nuts, etc., Fresh citrus and deciduous. A. Nardi's Sons, Inc. 284,155; June 16; Serial No. 311,068; published Apr. 7, 1931.
Gum, Chewing. American Chicle Company. 284,158; June 16; Serial No. 311,354; published Apr. 7, 1931.
Meats, Cured. P. D. Gwaltney, Jr. & Co. 284,173; June 16; Serial No. 307,672; published Apr. 14, 1931.
Meats, Cured. P. D. Gwaltney, Jr. & Co. 284,213; June 16; Serial No. 307,815; published Apr. 14, 1931.
Molasses. W. B. Roddenbery. 284,122; June 16; Serial No. 304,069; published Mar. 24, 1931.
Nut buns, buttered rings, rolls, and doughnuts. Twentieth Century Bakery, Inc. 284,101; June 16; Serial No. 300,997; published Mar. 31, 1931.
Nuts, Salted. Gray Nut Company. 284,222; June 16; Serial No. 272,807; published Apr. 7, 1931.
Peanuts, Salted. Adams Peanut Products, Inc. 284,162; June 16; Serial No. 311,903; published Apr. 14, 1931.
Potatoes, strawberries, beans, etc. E. W. Van Brunt. 284,172; June 16; Serial No. 310,845; published Apr. 14, 1931.
Rice. Lake Charles Rice Milling Company of Louisiana, Inc. 284,069; June 16; Serial No. 310,646; published Mar. 31, 1931.

CLASS 48

Malt beverages. Pleasant Brew Sales Corporation. 284,109; June 16; Serial No. 310,656; published Apr. 7, 1931.
Malt beverages. J. Z. Schonhoff. 284,115-16; June 16; Serial Nos. 311,698-9; published Apr. 14, 1931.

CLASS 49

Rum. Compañia Ron Bacardi, S. A. 284,224; June 16; Serial No. 308,880; published Apr. 7, 1931.
Rum. Compañia Ron Bacardi, S. A. 284,225-8; June 16; Serial Nos. 308,976-9; published Apr. 7, 1931.

CLASS 50

Bottle caps, Rubber. Huntington Rubber Mills. 284,242; June 16.

ALPHABETICAL LIST OF LABELS

Ann Howe. For Boxes. Hoague-Sprague Corporation. 39,301; June 16.
Bread. For Bread. K. R. Zimmer. 39,321; June 16.
Carter's Midnight. For Carbon Paper. The Carter's Ink Company. 39,296; June 16.
Chase & Sanborn High Grade Coffee. For Coffee. Standard Brands Incorporated. 39,315; June 16.
'Cincy's Favorite Drink'—Boat House Liquid Coffee. For Liquid Coffee. The Boat House Coffee Company. 39,294; June 16.
Coffee. For Coffee. Union Bag & Paper Corporation. 39,317; June 16.
Coffee. For Coffee. Union Bag & Paper Corporation. 39 319; June 16.
Creamery Butter. For Creamery Butter. Container Corporation of America. 39,297-8; June 16.
Ethel Ettie. For Boxes. Hoague-Sprague Corporation. 39,299; June 16.
Lindyman's Choice Malt Syrup. For Malt Syrup. G. D. Lindeman. 39,307; June 16.
Lion Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,304; June 16.
Lorelei. For Boxes. Hoague-Sprague Corporation. 39,300; June 16.
Malt Syrup, Hop Flavored. For Malt Syrup. Miller High Life Company. 39,309; June 16.
Martin's Amber-Lyte Quick Drying Finishes. For Finishes for Walls Houses, Porches, Floors, Woodwork, Linoleum, Furniture etc. Martin Varnish Company. 39,308; June 16.
Olympia Beans with Pork. For Canned Beans with Pork. Phillips Packing Company, Inc. 39,310; June 16.
Olympia Cooked Spaghetti. For Canned Cooked Spaghetti. Phillips Packing Company, Incorporated. 39,311; June 16.
Olympia Tomato Soup. For Canned Tomato Soup. Phillips Packing Company, Inc. 39,312; June 16.
Papayle. For Fruit Juice Made from Papayas. Karl Klaus. 39,305; June 16.
Regal Brand Malt Syrup. For Malt Syrup. Regal Products Company, Inc. 39,313; June 16.
Shave Made E-Z, Use E-Z Shave. For Preparation to be Used in Shaving to Soften the Beard. A. L. Bachman & Co. 39,293; June 16.
Smart Shoes. For Boxes. Hoague-Sprague Corporation. 39,302; June 16.
Solnit & Shapiro Shoe Co. For Boxes. Hoague-Sprague Corporation. 39,303; June 16.
Stroehmann's Milk Bread. For Bread. Stroehmann Brothers Co. 39,316; June 16.
Tea. For Tea. Union Bag & Paper Corporation. 39,318; June 16.
The "Sexauer" System of Standardized Repair Service. For Containers for Plumbing Supplies. J. A. Sexauer Mfg. Co., Inc. 39,314; June 16.
The Soapy Circuit. For Soap. The Lamp Studio. 39,306; June 16.
U. S. Dry Ginger Ale. For Ginger Ale. F. R. Anderson. 39,292; June 16.
Wiesbaden. For Malt Syrup. Bohemian Distributing Co. Ltd. 39,295; June 16.
Wright's Peerless. For Radio B Batteries. Wright and Wilhelmy Company. 39,320; June 16.

ALPHABETICAL LIST OF PRINTS

Hills Bros. Coffee—Adform 116. For Coffee. Hills Bros. 13,239; June 16.
Hills Bros. Coffee—Adform 117. For Coffee. Hills Bros. 13,238; June 16.
A New Toy Motor Boat Line. For Toy Motor Boats. Shoe Form Co. Inc. 13,242; June 16.
Janet Couldn't Seem to Win Her Grandma's Heart. For Wheat Breakfast Food. Cream of Wheat Corporation. 13,234; June 16.
Mother's Day May 10. For Chocolates. Daggett Chocolate Co. 13,235; June 16.
Neon Clock Sign. For Outdoor Advertising Clocks. Tennessee Neon Company. 13,243; June 16.
Sales Go To Dealers Who Invite Them. For Shoe Forms. Shoe Form Co. Inc. 13,241; June 16.
The Low Point Sale. For Carpets. John Wanamaker New York. 13,246; June 16.
The Low Point Sale. For Furniture. John Wanamaker New York. 13,244; June 16.
The Low Point Sale. For Silk Crepe. John Wanamaker New York. 13,245; June 16.
The New Surf Suits with Evening Gown Backs. For Bathing Suits. The B. V. D. Company. 13,233; June 16.
They Walk Softly and go far. For Shoes. Dunn & McCarthy, Inc. 13,236; June 16.
Vitalized With Sunshine. For Malt Syrup. Schlitz Brewing Company. 13,240; June 16.
Yes Sir! That's Hills Bros. Coffee—Adform 118. For Coffee. Hills Bros. 13,237; June 16.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 16TH DAY OF JUNE, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abramowitz, Joseph, assignor of thirty-five per cent to A. E. King, Madison, Ill. Dust-collector. 1,809,922; June 16.

Adams, John F. (See Allen, T. T., and Adams.)

Adams, John F., assignor to Sentry Safety Control Corporation, Philadelphia, Pa. Safety device for motion picture projecting machines. 1,809,815; June 16.

Adams, John F., and T. T. Allen, assignors to Sentry Safety Control Corporation, Philadelphia, Pa. Centrifugal switch. 1,809,816; June 16.

Adlake Company, The. (See Larson, Carl H., assignor.)

Adler, Jacob, and P. Doerseln, assignor to Silk City Metals Coating Company, Inc., Paterson, N. J. Textile roll. 1,810,636; June 16.

Agatz, Heinz, Berlin-Adlershof, Germany. Electric cigar-lighter. 1,810,065; June 16.

Ahl, Frank Z., Sacramento, Calif. Furnace construction. 1,810,457; June 16.

Air-Securite. (See Bichler, Charles H., assignor.)

Ajax, Erick J., assignor to Dominion Electrical Manufacturing Company, Minneapolis, Minn. Reflector heater. Des. 84,389; June 16.

Aker, Leonard, Atherton, assignor to The Recorder Printing and Publishing Co., San Francisco, Calif. Calendar. 1,810,153; June 16.

Aktiebolaget Formator. (See Rothelius, Carl G. B., assignor.)

Albertson, Luther D., assignor of one-fourth to J. W. Davidson, one-fourth to E. Beanblossom, one-fourth to A. Stover, one-sixteenth to G. C. Simler, three-thirty-seconds to O. W. Hottel, and three-thirty-seconds to C. W. Miles, Corydon, Ind. Grass trimmer. 1,810,587; June 16.

Alcet Electro Products Corporation. (See Beck, Charles W., assignor.)

Alemite Corporation. (See Reader, Allan W., assignor.)

Alfaro, Heraclio, East Cleveland, Ohio. Aeroplane. 1,810,693; June 16.

Alig, Leo, Dayton, Ohio. Mechanical movement. 1,810,154; June 16.

Alldredge, Andrew B., Sweetwater, Tex. Cooling and ventilating apparatus. 1,810,410; June 16.

Allen, Edmund T., assignor to Boeing Airplane Company, Seattle, Wash. Aviator's helmet. 1,810,549; June 16.

Allen, H. F. (See Rice, Kirk, assignor.)

Allen, Howard G., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y. Box with handle. 1,810,743; June 16.

Allen, John M., Toronto, Ontario, Canada, assignor to Scott & Williams Incorporated, New York, N. Y. Seamless hosiery and manufacturing same. 1,810,098; June 16.

Allen, S. L. & Co. (See Mader, Joseph, assignor.)

Allen, Thomas T. (See Adams, J. F., and Allen.)

Allen, Thomas T., and J. F. Adams, assignors to Sentry Safety Control Corporation, Philadelphia, Pa. Safety unit for motion picture projectors. 1,809,817; June 16.

Allen, William H. (See Macdonald, F., Allen, Ritchie, and Manchee.)

Allfree, Edwin H., Ironton, Ohio. Conveyer. 1,810,588; June 16.

Allin, Richard F., New York, N. Y., assignor to Eugene Dietzgen Company, Chicago, Ill. Developing apparatus. 1,809,822; June 16.

Alma Manufacturing Company of Baltimore City. (See Kerngood, Allen H., assignor.)

Alsop, James N., assignor to American Therapeutic Gas Company, Cincinnati, Ohio. Germicidal gas and method of and apparatus for producing the same. 1,810,589; June 16.

Altvater, Arthur W., St. Louis County, Mo. Cutting or ornamenting die. 1,809,823; June 16.

American Anode, Inc. (See Thornton, George G., assignor.)

American Bosch Magneto Corporation. (See Martin, John F., assignor.)

American Brass Company, The. (See Jennison, Herbert C., assignor.)

American Cyanamid Company. (See Fitzgerald, F. A. J., and Kelleher, assignors.)

American Cyanamid Company. (See Mead, Harry L., assignor.)

American Electric Company. (See Stanton, Willard J., assignor.)

American-National Company, The. (See Weber, John, assignor.)

American Ozone Company. (See Daily, James M., assignor.)

American Potash & Chemical Corporation. (See Macdonald, F., Allen, Ritchie, and Manchee, assignors.)

American Seal-Kap Corporation. (See Goodwin, Carl W., assignor.)

American Seating Company. (See Hanson, Walter M., assignor.)

American Smelting and Refining Company. (See Hasche, Rudolph L., assignor.)

American Steel Foundries. (See Hedgcock, William C., assignor.)

American Sterilizer Company. (See Thomas, George H., assignor.)

American Stove Company. (See Moecker, Henry, jr., assignor.)

American Stove Company. (See Moecker, H., jr., and Thompson, assignors.)

American Stove Company. (See Possons, Minard A., assignor.)

American Telephone and Telegraph Company. (See Edwards, William H., assignor.)

American Telephone and Telegraph Company. (See Rea, Wilton T., assignor.)

American Telephone and Telegraph Company. (See Thorp, Vaughn P., assignor.)

American Therapeutic Gas Company. (See Alsop, James N., assignor.)

American Writing Paper Company. (See Lamory, William J., assignor.)

Ames, Edgar. (See Esmond, William G., assignor.)

Anchor Cap & Closure Corporation. (See Hardiman, James S., assignor.)

Anchor Cap & Closure Corporation. (See Scofield, Edgar, assignor.)

Anderson, George, Chicago, Ill. Detachable ventilating shade bracket. 1,810,099; June 16.

Anderson, Gilbert V., assignor to Congoleum-Nairn Inc., Philadelphia, Pa. Machine for making inlaid floor coverings. 1,810,869; June 16.

Anderson, Harley E., assignor to Gustin-Bacon Manufacturing Company, Kansas City, Mo. Railway car hand brake. 1,810,116; June 16.

Anderson, Maurice, Edgewood, assignor to Levy, Anderson Co., Inc., Providence, R. I. Bracelet chain. 1,810,590; June 16.

Andres, Edward M., Phoenix, Ariz., assignor of one-half to R. W. Tallman, Gunnison, Colo. Graphic chart. 1,810,334; June 16.

Angel, Herbert, and J. W. Robinson, Brooklyn, assignors to The Western Union Telegraph Company, New York, N. Y. Synchronous telegraph system. 1,810,809; June 16.

Anstiss, George P. (See Blakeslee, G. S., and Anstiss.)

Anthony, Elliott E., Chicago, Ill. Power converting device. 1,809,884; June 16.

Antrim, William D., Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa. Gas range. 1,810,810; June 16.

Apexeon Company. (See Haskell, Frederick F., assignor.)

Apple Vender Co. (See Claussen, Wells H., assignor.)

Apprich, Robert N., assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des. 84,390; June 16.

Apprich, Robert N., assignor to Berkshire Knitting Mills, Wyomissing, Pa. Stocking. Des. 84,392; June 16.

Aqua Systems Incorporated. (See Beckwith, Charles F., assignor.)

Arnold, John, Los Angeles, assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif. Film marking device. 1,810,002; June 16.

Art Metal Company, The. (See Glatthar, G. E., and Wening, assignors.)

Art Metal Construction Company. (See Ulrich, Charles B., assignor.)

Aske, Irving E., Duluth, Minn. Vaporizing hydrocarbon fuel. 1,810,382; June 16.

Aske, Irving E., Minneapolis, Minn. Vaporizer. 1,810,384; June 16.

Aske, Irving E., W. F., and L. E., Minneapolis, Minn. Vaporizer. 1,810,383; June 16.

Aske, Leonard E. (See Aske, Irving E., W. F., and L. E.)

Aske, William F. (See Aske, Irving E., W. F., and L. E.)

Atlantic Refining Company, The. (See Peterkin, Albert G., jr., assignor.)

Atwater Kent Manufacturing Company. (See Kingsford, R. T., and Davis, assignors.)

Atwood, Winfield A., Lansdowne, Pa., assignor to General Electric Company. Time element device. 1,810,591; June 16.

Aubert, John O. A., New York, N. Y. Press and display rack. 1,810,744; June 16.

Audubert, René, Paris, France, assignor to Societe Anonyme des Procedes R. Audubert, Paris, France. Motor car filter system. 1,810,458; June 16.

Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Condenser. 1,810,385; June 16.

Austin, Dwight E., Los Angeles, Calif. Vehicle. Des. 84,391; June 16.

Austin, Frank E., Hanover, N. H. Educational apparatus. 1,810,745; June 16.

Automotive Distillate Corporation, The. (See Pratt, Clifton J., assignor.)

Automotive Maintenance Machinery Co. (See Zimmerman, Herman W., assignor.)

Avery, W. & T., Limited. (See Timson, William, assignor.)

Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)

Babiarz, Joseph. (See Babiarz, Maciej, and J.)

Babiarz, Maciej and J., Spotswood, N. J. Window construction. 1,810,117; June 16.

Babin, Jules, and A. Pays, Paris, France; said Pays assignor to said Babin. Metal sawing machine with arcuate cut. 1,810,746; June 16.

Bader, Julien, New York, N. Y. Potato-chipper. 1,809,824; June 16.

Baker Perkins Company. (See Savy, R., Lebert, and Guggenheim, assignors.)

Bakken, Andrew H., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Hinged clamp for gas or liquid-proof housings. 1,810,066; June 16.

Baldwin, Ernest W. and G. D., Independence, assignors to The Gleaner Combine Harvester Corporation, Kansas City, Mo. Reel driving mechanism for harvesters. 1,810,037; June 16.

Baldwin, George D. (See Baldwin, Ernest W. and G. D.)

Balze, Paul. (See Mersfelder, F. J., and Balze.)

Banker, Otto, Mankato, Minn. Drain board for wringers. 1,809,885; June 16.

Barager, Irving C. (See Webster, R. B., Fagerlie, and Barager.)

Barkelj, Jean A. H., Los Angeles, Calif. Gas distribution of eight cylinder motors for the straight type. 1,809,923; June 16.

Barnes, Harold S., Allentown, Pa. Safety cracker. 1,809,825; June 16.

Barnhart, George E., Pasadena, Calif. Archer's bow. 1,810,335; June 16.

Bastian, Paul, jr., Stuttgart-Oberturkheim, assignor to the Firm Fortuna-Werke Spezialmaschinenfabrik Aktiengesellschaft, Stuttgart-Cannstatt, Germany. Machine for milling and planing profiled elements of wood, leather, and the like. 1,810,811; June 16.

Bate, John W., assignor to Walker Manufacturing Company, Racine, Wis. Screw jack. 1,810,118; June 16.

Baumann, Karl, Urmston, England, assignor to Westinghouse Electric & Manufacturing Company. Labyrinth gland packing. 1,810,371; June 16.

Baylis, Walter S., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif. Re-activated absorbent and making same. 1,810,155; June 16.

Beach, Harry L., Coshocton, Ohio. Display rack. 1,810,812; June 16.

Beach Manufacturing Company. (See Horton, John O., assignor.)

Beam, Vilynn O. (See Branche, N. T., and Beam.)

Beanblossom, Emmett, et al. (See Albertson, Luther D., assignor.)

Beard, Lawrence O., Lancaster, Pa. Reamer. 1,810,263; June 16.

Beardsley & Piper Company, The. (See Naylor, Walter E., assignor.)

Beaumont, George H., assignor to Sterling Spring Company, Cleveland, Ohio. Spring. 1,809,959; June 16.

Bebinger, Charles E., assignor to Northern Conveyor & Mfg. Co., Janesville, Wis. Material handling machine. 1,810,119; June 16.

Beck, Charles W., Toledo, Ohio, assignor, by mesne assignments, to Alcet Electro Products Corporation, New York, N. Y. Doorcheck. 1,810,003; June 16.

Becker, Frederick W. (See Kattrein, W. J., and Becker.)

Beckert, Carl J. (See Kritchevsky, W., and Beckert.)

Beckwith, Charles F., assignor to Aqua Systems Incorporated, New York, N. Y. Valve. 1,810,067; June 16.

Beers, Henry S., Westport, Conn., assignor to The Turbo-Mixer Corporation, New York, N. Y. Mixing and heat interchange apparatus. 1,810,637; June 16.

Behnke, Guy E., assignor to Reed Roller Bit Company, Houston, Tex. Roller bit. 1,810,120; June 16.

Bell Telephone Laboratories, Incorporated. (See Bjornson, Bjorn G., assignor.)

Bell Telephone Laboratories, Incorporated. (See Broadwell, Howard, assignor.)

Bell Telephone Laboratories, Incorporated. (See Buckley, O. E., and Hartley, assignors.)

Bell Telephone Laboratories, Incorporated. (See Curtis, Austen M., assignor.)

Bell Telephone Laboratories, Incorporated. (See Goff, H. W., and Forsberg, assignors.)

Bell Telephone Laboratories, Incorporated. (See Hogg, John L., assignor.)

Bell Telephone Laboratories, Incorporated. (See Mathes, Robert C., assignor.)

Bell Telephone Laboratories, Incorporated. (See Whittle, Horace, assignor.)

Bellamy, John I., Brookfield, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Telegraph system. 1,810,198; June 16.

Bender, Beatrice M. (See Bender, Elizabeth D., assignor.)

Bender, Elizabeth D., assignor of one-half to Beatrice M. Bender, Clearfield, Iowa. Flowerpot. 1,810,236; June 16.

Bendix Aviation Corporation. (See Semmes, Harry H., assignor.)

Bendix Brake Company. (See Dodge, Adiel Y., assignor.)

Benham, Dallas B. (See Shaw, W. E. V., Benham, and Benham.)

Benham, Roy H. (See Shaw, W. E. V., Benham, and Benham.)

Bennett, Walter J., Hudson, Mass. Universal sandal for footwear. 1,810,514; June 16.

Bennington, Albert, Ridley Park, Pa. Portable blackboard renovator. 1,810,336; June 16.

Benzon, George H., jr., Jenkintown, assignor to William Sellers & Company, Incorporated, Philadelphia, Pa. Differential gear. 1,810,747; June 16.

Berg, Christy L., St. Louis, Mo. Burial vault. Des. 84,393; June 16.

Berger, Kornel C., New York, N. Y. Ornamental guard for automobile radiators. 1,810,748; June 16.

Bergmann, Carl A., Brooklyn, N. Y. Loud speaker. 1,810,337; June 16.

Bergren, Charles G. (See Bergren, John A. and C. G.)

Bergren, John A., and C. G., Lake Park, Minn., assignors to Bergren Manufacturing Company. Potato cutting machine. 1,810,459; June 16.

Bergren Manufacturing Company. (See Bergren, John A. and C. G., assignors.)

Berkshire Knitting Mills. (See Apprich, Robert N., assignor.)

Berry, Charles R., assignor of two-ninths to E. I. Berry, administratrix of the estate of H. N. Berry, deceased, two-ninths to H. A. Gamble, Greenville, Miss., and three-ninths to A. M. Hanauer, Pittsburgh, Pa. Cotton picker. 1,810,411; June 16.

Berry, Edna I., administratrix. (See Berry, Charles R., assignor.)

Berry, Hiram N. (See Berry, Charles R., assignor.)

Berry, Hiram N., assignor to Cotton Harvester Corporation of America, Greenville, Miss. Cotton picker. 1,810,386; June 16.

Bertel, Charles A., New Orleans, La. Method of and apparatus for storing and handling cotton bales. 1,810,100; June 16.

Bertini, Anthony, Bridgeton, N. J. Sport bag. 1,810,813; June 16.

Best & Co. (See Dumont, Ray W., assignor.)

Betke, Herman, Denver, Colo. Steam board. 1,810,338; June 16.

Beveridge Paper Company. (See Ross, Harry M., assignor.)

Bianchi, Alberto E., Milan, and G. Guardabassi, Rho, near Milan, Italy, assignors, by mesne assignments, to Intercarbo Societe Anonyme pour la Carbonisation et la Traitement Catalytique des Combustibles, Paris, France. Cracking, catalyzing and hydrogenation of carbonaceous materials. 1,810,387; June 16.

Bichler, Charles H., assignor to the Firm Air-Securitie, Paris, France. Back fire arrester for combustible gas conduits. 1,810,814; June 16.

Bicknell, George M., and A. A. Hayden, assignors to Carter Carburetor Corporation, St. Louis, Mo. Carburetor. 1,809,886; June 16.

Bienenstein, Andreas, assignor to The Conklin Pen Company, Toledo, Ohio. Fountain pen. Des. 84,394; June 16.

Billstein, John, Little Falls, Minn. Trailer hitch. 1,810,592; June 16.

Binns, George W., assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding. Re18,103; June 16.

Bippus, William F., et al. (See Hott, Ion V. K., assignor.)

Birch, Leland W., assignor to The Ohio Brass Company, Mansfield, Ohio. Trolley system. 1,810,515; June 16.

Birnstock, William W., York, Pa. Bottle crate. 1,810,815; June 16.

Bi-Sleeve Engine Company. (See Coyne, John H., assignor.)

Bjornson, Biron G., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Voice operated relay circuits. 1,810,004; June 16.

Black, John C., Los Angeles, and M. L. Chappell, Watson, Calif. Treating hydrocarbon oils. 1,810,068; June 16.

Black, Lester C., Los Angeles, Calif. Multistage pump plunger. 1,810,121; June 16.

Black, Walter H., Cleveland, Ohio, assignor of one-tenth to A. J. Gilbert, Brooklyn, N. Y. Advertising display sign. 1,810,339; June 16.

Blackman, Albert E., Mount Vernon, N. Y. Radiator cover. 1,810,122; June 16.

Blakeslee, G. S., & Co. (See Blakeslee, G. S., and Anstiss, assignors.)

Blakeslee, George R., executor. (See Blakeslee, G. S., and Anstiss.)

Blakeslee, George S., deceased, by G. R. Blakeslee, executor, and G. P. Anstiss, Oak Park, assignor to G. S. Blakeslee & Co., Cicero, Ill. Dish holding basket. 1,810,199; June 16.

Blamfield, Charles, Boston, Mass. Fire kindler. 1,810,888; June 16.

Bliss, E. W., Company. (See Dieter, William, assignor.)

Bliss, H. R., Company. (See Allen, Howard G., assignor.)

Bliss, Robert H., East Syracuse, N. Y. Window. 1,810,816; June 16.

Blomberg, Martin P. (See Carry, C., Mussey, and Blomberg.)

Bochnak, Andrew, Bobtown, Pa. Aeroplane safety landing device. 1,810,550; June 16.

Bodde, Theodore, Niagara Falls, assignor to The Regan Safety Devices Company, Inc., New York, N. Y. Train control system. 1,810,551; June 16.

Boe Manufacturing Company. (See Henion, Walter R., assignor.)

Boeing Airplane Company. (See Allen, Edmund T., assignor.)

Boettcher, Herman H., Blue Earth, Minn. Scooping machine. 1,810,389; June 16.

Bohlman, Walter S., Atlantic City, N. J., assignor to Chromium Corporation of America, New York, N. Y. Electrodepositing chromium. 1,809,826; June 16.

Bohn Aluminum and Brass Corporation. (See Fiegel, W. J., and Jones, assignors.)

Bohn, Harry. (See Hersh, Lovell A., assignor.)

Bohr, Marcia C., San Francisco, Calif. Combination trouser skirt. 1,810,237; June 16.

Bonitz, Fred W., Charlotte, N. C. Apparatus for audible signboard advertising. 1,810,264; June 16.

Bortel, Howard C., assignor, by mesne assignments, to The Dura Company, Toledo, Ohio. Window regulator. 1,810,390; June 16.

Bosch, Robert, Aktiengesellschaft. (See Mattes, Alfred, assignor.)

Bossert, Walter F. (See Smith, Harry M., assignor.)

Bosworth, William H., Yonkers, assignor to George Haiss Manufacturing Co. Inc., New York, N. Y. Wagon loader. 1,810,069; June 16.

Bower, George D., Columbia Heights, assignor, by mesne assignments, to Minneapolis-Honeywill Regulator Company, Minneapolis, Minn. Motor protection device. 1,809,827; June 16.

Bowers, Thomas A., Boston, Mass., assignor to Pressed Piston Ring Company. Packing ring. Re18,102; June 16.

Bowler, Frederick T., Highland Park, Mich. Dowel. 1,810,749; June 16.

Boyton, Eugene L., Pasadena, Calif. Rotary action bit. 1,810,391; June 16.

Bragg, Gilbert A., Pittsburgh, Pa., assignor to The Koppers Company. Gas purification process and apparatus. 1,809,818; June 16.

Brainard, George C., and J. A. Fitch, assignors to The General Fireproofing Company, Youngstown, Ohio. Base for swivel chair. 1,810,817; June 16.

Braman, Hannah, administratrix. (See Trinks, W. W., and Tucker.)

Branche, Nelson T., and V. O. Beam, assignors to Surface Combustion Corporation, Toledo, Ohio. Fluid-fuel-burner control. 1,810,123; June 16.

Brandenburg, Clyde S., Chicago, Ill. Package wrapping device. 1,810,156; June 16.

Braunstein Schulim, and S. Meerson, Berlin, Germany. Generation of a refrigerant jet for dental operations. 1,810,750; June 16.

Breithaupt, Oscar, Detroit, Mich. Nail holder. 1,810,460; June 16.

Brenek, Hans. (See Rothe, F., and Brenek.)

Bridgeport City Trust Co., executor. (See Lyhne, Anker S.)

Bridgeport Metal Goods Manufacturing Company. (See Lyhne, Anker S., assignor.)

British Cotton Industry Research Association, The. (See Nuttal, T., and Shorter, assignors.)

Broadmeyer, Albert, assignor to The W. O. Hickok Manufacturing Company, Harrisburg, Pa. Sheet feeding mechanism. 1,810,751; June 16.

Broadwell, Howard, Ridgewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Adapter. 1,809,887; June 16.

Brock, John D., Kansas City, Mo. Bridge member for an ophthalmic mounting. Des. 84,395; June 16.

Brooks, Charles A., Swissvale, and H. S. Young, Wilkinsburg, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway switch controlling apparatus. 1,810,124; June 16.

Brooks, Lucius H., Atlanta, Ga. Razor stropper. 1,810,265; June 16.

Brooks, William H., and F. M. Taylor, Birmingham, Ala. Apparatus for aging plastic mixtures. 1,810,125; June 16.

Brophy Automatic Air Dog Corporation. (See Brophy, James M., assignor.)

Brophy, James M., assignor to Brophy Automatic Air Dog Corporation, Hattiesburg, Miss. Combination grab dog and taper. 1,810,752; June 16.

Brosse, Paul, Neuilly, France, assignor, by mesne assignments, to Kialyn Corporation, New York, N. Y. Printing machine for colored films. 1,810,200; June 16.

Brown, Cornelius, Beirut, Okla. Device for removing parts from wells. 1,810,753; June 16.

Brown, Estee T. (See McCoy, Kenneth A., assignor.)

Brown, James M., deceased; J. D. Brown, administratix, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Switch mechanism. 1,810,694; June 16.

Brown, Jane D., administratix. (See Brown, James M.)

Brown, John, Chelmsford, England, assignor to Radio Corporation of America. Wireless telegraph receiving system. 1,810,461; June 16.

Brown, Lee R., East Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Attachment for calculating machines. 1,810,638; June 16.

Brown, Robert E., Olean, N. Y. Axe guard. 1,810,593; June 16.

Brown and Sharpe Manufacturing Company. (See Martin, Harold E., assignor.)

Bruns, Alfred E., Huntington, N. Y., assignor, by mesne assignments, to Johnson & Johnson, New Brunswick, N. J. Dustproof casing for spools or other articles. 1,810,594; June 16.

Bryan, George A., Peru, Ind., assignor to Bryan Steam Corporation. Device for bending tubes. 1,810,340; June 16.

Bryan Steam Corporation. (See Bryan, George A., assignor.)

Bryant Electric Company, The. See McKinley, Benjamin P., assignor.)

Bryant Electric Company, The. (See Ulrich, Emil H. W., assignor.)

Bucey, George M., Englewood, assignor of one-half to J. D. Chansior, Kansas City, Mo. Purifying tank. 1,804,462; June 16.

Bucholz, Hermann, Berlin, Germany, assignor to W. D. Grote. Making molded articles. 1,810,126; June 16.

Buckley, Oliver E., Mapplewood, and R. V. L. Hartley, South Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone transmission. 1,809,828; June 16.

Buddecke, Heinrich, Chemnitz, Germany. Bobbin changing device. 1,810,754; June 16.

Buek, Tycho, Philadelphia, Pa. Shoe and making the same. 1,810,341; June 16.

Buffalo Fire Appliance Corporation. (See Leipold, Hugo, assignor.)

Buffalo Foundry and Machine Company. (See Van Marle, Dirk J., assignor.)

Buffalo Pressed Steel Company. (See Haas, Lucien L., assignor.)

Bulger, Arthur J., Brooklyn, assignor to Pierce Steel Pile Corporation, New York, N. Y. Machine for crimping pipe sleeves. 1,810,342; June 16.

Bullard, Edward W., assignor to Pacific Safety Equipment Company, San Francisco, Calif. Safety hat. 1,810,157; June 16.

Bunce, Earl H., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Preparation of coked agglomerates. 1,810,070; June 16.

Burch, Louis A., Seattle, Wash. Rotary signboard. 1,809,960; June 16.

Burner, William L., Columbus, Ohio, assignor to Western Wheeled Scraper Company, Aurora, Ill. Dump car. 1,810,639; June 16.

Burnish, Howard J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Arc welding. 1,810,005; June 16.

Burson Knitting Company. (See Parker, William S., assignor.)

Butera, John, et al. (See Vilfordi, George L., assignor.)

Byerlein, Arthur A., Detroit, Mich., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio. Press. 1,810,640; June 16.

Byers, Earl L. (See Hatcher O., and Byers.)

California Conserving Company. (See Martin, Foster, assignor.)

California Fruit Growers Exchange. (See Jameson, E., Stewart, and Wilson, assignors.)

Callaway, Clarence R., Long Beach, assignor to Gurney Elevator Company, Inc., New York, N. Y. Elevator guide rail lubricating mechanism. 1,810,695; June 16.

Caller, Raymond E., Scarsdale, N. Y. Waste fuel-making method and apparatus. 1,809,819; June 16.

Calumet Steel Company. (See Carrel, Frank G., assignor.)

Camp, Joseph P., Germantown, Pa. Transporting valuables. 1,810,641; June 16.

Campbell, Jarrett C., Napfor, Ky. Swing construction. 1,810,595; June 16.

Campbell, Lorn, jr., Cleveland, Ohio. Welding torch construction. 1,810,158; June 16.

Campbell, Stewart L., Berkeley, assignor to J. Grant, Los Angeles, Calif. Rotary underreamer. 1,809,820; June 16.

Campbell, Stewart L., Berkeley, assignor to J. Grant, Los Angeles, Calif. Renewable reamer. 1,810,201; June 16.

Campbell, Temple L. (See Schroeder, George R., assignor.)

Caracristi, Virginius Z., Bronxville, N. Y., assignor to Locomotive Pulverized Fuel Company. Furnace. 1,810,343; June 16.

Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)

Carlson, Alexander, and E. W. Erieson, Detroit, Mich., assignors to Dietrich Incorporated. Cover fastener and the like. 1,810,870; June 16.

Carlson, Cecil G., Willmar, Minn. Water heater. 1,810,642; June 16.
Carlson, William R., Prescott, Oreg. Positive regulated oiling apparatus for edger arbors. 1,810,755; June 16.
Carol, James E., assignor of one-third to B. D. Hammons and one-third to W. W. Jones, Los Angeles, Calif. Automatic propeller control. 1,810,159; June 16.
Carpenter, Irving C. (See Moorman, A. R., and Carpenter.)
Carrel, Frank G., Western Springs, Ill., assignor to Calumet Steel Company, Chicago, Ill. Fence post anchor plate. Des. 84,396; June 16.
Carr-Lowrey Glass Co. (See Garwood, Charles B., assignor.)
Carry, Champ, W. H. Mussey, and M. P. Blomberg, assignors to Pullman Car & Manufacturing Corporation, Chicago, Ill. Railway car. 1,810,876; June 16.
Carter, Alva B., Lincoln, Nebr. Decorating glass. 1,810,127; June 16.
Carter Carburetor Corporation. (See Bicknell, G. M., and Hayden, assignors.)
Carter, Lionel A., Webster Groves, assignor to Koken Companies, St. Louis, Mo. Hair curling machine. 1,809,961; June 16.
Carter, William, Islington, London, England. Sign. 1,810,756; June 16.
Cash, A. W., Company. (See Temple, Paul C., assignor.)
Cederleaf, Clarence A. (See Van Valkenburgh, R. M., and Cederleaf.)
Cerro de Pasco Copper Corporation. (See Smith, Walter C., assignor.)
Certain, John D. (See Gray, Albert S., assignor.)
Champion Coated Paper Company, The. (See Milligan, Charles H., assignor.)
Champlin, Franklin J., Dalton, Mass., assignor to General Electric Company. Electrical regulating system. 1,810,596; June 16.
Chanslor, Joseph D. (See Bucey, George M., assignor.)
Chapel, Chauncey C., Simpson, Kans. Decelerator. 1,810,128; June 16.
Chappell, Marvin L. (See Black, J. C., and Chappell.)
Charlton, Cecil F., Birmingham, Mich. Storm sash. 1,809,829; June 16.
Checker Cab Manufacturing Corporation. (See Kuenzel, S H Hunter, assignor.)
Cheetham, Joseph H., Detroit, Mich. Packless valve. 1,810,202; June 16.
Chemical Works formerly Sandoz. (See Müller, Fritz, assignor.)
Cheney, Moses E., Flushing, assignor to Moto Meter Gauge & Equipment Corporation. Long Island City, N. Y. Oil level gauge. 1,810,818; June 16.
Chicago-Cleveland Car Roofing Company. (See Swanson, Earl R., assignor.)
Chicago Flexible Shaft Company. (See Dornseif, Frederic J., assignor.)
Chicago Pneumatic Tool Company. (See Davenport, Ransom W., assignor.)
Chireix, Henri, assignor to Societe Francaise Radio Electrique, Paris, France. Recording apparatus for wire and wireless telegraphy. 1,809,821; June 16.
Christian, George B. (See Wine, W. E., and Christian.)
Christmann, Ludwig J., Jersey City, and D. W. Jayne, jr., Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y. Secondary butyl xanthates. 1,810,552; June 16.
Chromium Corporation of America. (See Bohlman, Walter S., assignor.)
Church, Walter L., Houston, assignor of one-half to W. L. Pearce, Harris County, Tex. Pipe cutter. 1,810,344; June 16.
Cincinnati Grinders Incorporated. (See Binns, George W., assignor.)
Clotta, John, New York, N. Y. Fusible element for electric fixture sockets. 1,810,071; June 16.
Clapp, Charles E., Hingham, Mass. Nonskid device for automobile wheels. 1,810,129; June 16.
Clark, Alexander. (See Toce, C. A., and Clark.)
Clark, Arthur M., Seattle, Wash. Proportional scale. 1,810,392; June 16.
Clark, William F., Baltimore, Md. Method of and apparatus for straightening pipes, tubes and similar articles. 1,810,819; June 16.
Claussen, Wells H., assignor to Apple Vender Co., Seattle, Wash. Casing for fruit vending machine. Des. 84,397; June 16.
Clavel, René, Basel, Switzerland. Loading of silk, or silk-containing textile material. 1,810,238; June 16.
Clow, Samuel C. (See Rothgarn, Andrew E., assignor.)
Cluny, Russell F., Stratford, Conn. Outlet box fixture support. 1,810,553; June 16.
Coal Carbonization Company. (See Hayes, Charles, assignor.)
Cobb, Henry Z., Providence, R. I., assignor to Revere Rubber Company, Chelsea, Mass. Conveyer. 1,809,830; June 16.
Coe, W. H., Manufacturing Company. (See Swallow, Stuart H., assignor.)
Cohen, Rudolph, Rochester, N. Y. Making coats and coat produced by such method. 1,810,160; June 16.
Cohn, Irwin, New York, N. Y. Doll. Des. 84,398; June 16.
Colby, Ora A., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Dental furnace. 1,810,643; June 16.
Collins, Fred C., Akron, Ohio. Tire display stand. 1,810,345; June 16.
Collyer, Emery J., Henryetta, Okla. Engine. 1,810,130; June 16.
Colt, Samuel S., Orange, N. J. Pressure exerting device. 1,809,962; June 16.
Columbia Axle Company, The. (See Weaver, Elverton W., assignor.)
Comes, Emile, Les-Ponts-De-Martel, Switzerland. Composition for dyeing leather, shoes, gloves, and hides. 1,810,266; June 16.
Commercial Iron Works of Los Angeles. (See Rupp, Carl A., assignor.)
Congoleum-Nairn Inc. (See Anderson, Gilbert V., assignor.)
Conklin, Alonzo B., Chicago, Ill. Electrically illuminated advertising device. 1,810,161; June 16.
Conklin Pen Company, The. (See Bienenstein, Andreas, assignor.)
Consolidated Ashcroft Hancock Company. (See Heise, Otto W., assignor.)
Consortium fur Elektrochemische Industrie. (See Herrmann, W. O., Deutsch, and Haehnel, assignors.)
Contact Filtration Company. (See Moorman, A. R., and Carpenter, assignors.)
Conveyor Sales Company. (See Walter, Raymond A., assignor.)
Cook, James H., Tulsa, Okla. Anchor staple for mulching paper. 1,810,463; June 16.
Coors Porcelain Company. (See Huttig, Ernest W., assignor.)
Copeland Products, Inc. (See Mason, George W., assignor.)
Copper Plate Sheet & Tube Company. (See Watkins, William E., assignor.)
Cordes, Oscar C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,809,963; June 16.
Cornell University. (See Sharp, Paul F., assignor.)
Corwin, David S., Greenport, N. Y. Building construction. 1,810,597; June 16.
Costakos, Theodore M., Minneapolis, Minn. Drink mixing device. 1,810,554; June 16.
Cotton Harvester Corporation of America. (See Berry, Hiram N., assignor.)
Cowles, Theodore B., assignor of one-half to C. M. Park, Madison, Wis. Damper control device. 1,810,464; June 16.
Coyne, John H., Buffalo, N. Y., assignor, by mesne assignments, to Bi-Sleeve Engine Company, Chicago, Ill. Semisleeve valve motor. Re18,097; June 16.
Crane, Clifford M., St. Paul, Minn., assignor to Lucius Winchester, Chicago, Ill. Positive water circulator. 1,809,888; June 16.
Crawford, Edward M., Houston, Tex. Moving picture screen. 1,810,346; June 16.
Criger, Claude A., Jefferson City, Mo. Counter top. 1,810,412; June 16.
Croe, Layton E., Kalamazoo, Mich. Spectacle frame. Des. 84,390; June 16.
Croft, Hiram D. (See Perkins, J. L., and Croft.)
Cross Paper Feeder Company. (See Hallstream, Henning, assignor.)
Cross, Walter M., Kansas City, Mo., assignor, by mesne assignments, to Lord Southborough, London, England. Heat treatment of steel. 1,810,696; June 16.
Crossan, Jesse R., Wadsworth, Ohio, assignor to Seiberling Rubber Company. Self sealing tire tube. 1,810,038; June 16.
Cummings, Byron R., Schenectady, N. Y., assignor to General Electric Company. Scanning disk. 1,810,598; June 16.
Cunningham, Alfred E., Trenton, Tenn. Well strainer attachment. 1,810,757; June 16.
Currie, Robert A., Syracuse, assignor to R. E. Dietz Company, New York, N. Y. Lamp. 1,809,831; June 16.
Curtis, Austen M., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Synchronous driving system. 1,809,832; June 16.
Da Costa, Arthur V., assignor to Da Costa Engine Company, Providence, R. I. Valve motion mechanism for internal combustion engines. 1,810,465; June 16.
Da Costa Engine Company. (See Da Costa, Arthur V., assignor.)
Dailey, Ella S., executrix. (See Lees, O. O., and Finn.)
Daily, James M., assignor to American Ozone Company, Chicago, Ill. Device for mixing gases and liquids. 1,810,131; June 16.
Daitch, Eva, Brookline, Mass. Shopping bag. 1,810,347; June 16.
Dallas Engineering Corporation. (See Knight, Harry H., assignor.)
Darco Corporation. (See Davis, R. G., and Sanders, assignor.)
Daughhetee, Dillard. (See Dillon, C., and Doughhetee.)
Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Stabilizing refrigerants. 1,809,833; June 16.
Davenport, Ransom W., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Stabilizing the atmosphere of refrigerating systems. 1,809,834; June 16.
Davey, Joseph, Belle Harbor, N. Y. Resilient tire for wheels. 1,809,889; June 16.

Davidson, John W., et al. (See Albertson, Luther D., assignor.)
Davis Brake Beam Company. (See Haskell, Broderick, assignor.)
Davis, Lewis H. (See Kingsford, R. T., and Davis.)
Davis, Michael J., Brooklyn, N. Y. Alarm signal. 1,810,162; June 16.
Davis, Neville R., Sale, M. J. Marchbanks and J. H. Ludlow, Manchester, England, assignors to Westinghouse Electric and Manufacturing Company. Induction furnace. 1,810,820; June 16.
Davis, Philip W., Cambridge, Mass. Refining lead. 1,809,835; June 16.
Davis, Raymond G., Marshall, Tex., and M. T. Sanders, assignors to Darco Corporation, Wilmington, Del. Activation of carbon. 1,810,871; June 16.
Day, J. H., Company, The. (See Kirchhoff, William G., assignor.)
Dean Hill Pump Company. (See Schleyer, Victor, assignor.)
Dearing, Joseph W., Cleveland, Ohio, assignor, by mesne assignments, to Springfield Lumber Company, Springfield, Ill. Self sealing valve control. 1,810,877; June 16.
De Arman, Newton M., Ventura, Calif. Tank filling apparatus. 1,810,413; June 16.
Deere & Company. (See Neighbour, Leonard B., assignor.)
Deibel, Cyril P., Lakewood, Ohio. Making dry battery structures. 1,809,924; June 16.
Delco-Remy Corporation. (See Dyer, John B., assignor.)
Denmire, Harold A., assignor to The General Tire & Rubber Company, Akron, Ohio. Pneumatic tire and method of and apparatus for building the same. 1,810,072; June 16.
Desamari, Kurt, Leverkusen-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Alkyl-quinolyl-amino-phenyl carboxylic acids. 1,810,267; June 16.
Detroit and Security Trust Company. (See Williams, James H., assignor.)
Detwiler, Forest V., Grand Rapids, Mich. Heat distributor plate for cook stoves. 1,810,132; June 16.
Deutsch, Hans. (See Hermman, W. O., Deutsch, and Haehnel.)
Deutsch, Josef, Vienna, Austria. Device for giving access to cavities of the animal and human body. 1,810,466; June 16.
Devilbiss, Howard R. (See Morse, R. B., and Devilbiss.)
De Wolf, Ernest A., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Winding machine. 1,809,890; June 16.
De Wolf, Roger D., Rochester, N. Y. Furnace and the like. 1,810,203; June 16.
Dibble, Claude M., assignor to Moore Brothers Company, Joliet, Ill. Explosion relief. 1,810,697; June 16.
Dickson, Albert C., St. Louis County, assignor to The Emerson Electric Mfg. Co., St. Louis, Mo. Resilient mounting for driven elements on motor shafts. 1,810,204; June 16.
Dictaphone Corporation. (See Johnson, Arthur A., assignor.)
Diescher, S., & Sons. (See Diescher, Samuel E., assignor.)
Diescher, Samuel E., assignor to S. Diescher & Sons, Pittsburgh, Pa. Apparatus for manufacturing seamless tubes. 1,810,698; June 16.
Diescher, Samuel E., assignor to S. Diescher & Sons, Pittsburgh, Pa. Method of and apparatus for the manufacture of tin plate. 1,810,699; June 16.
Dieter, William, Newark, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y. Lock washer. 1,810,644; June 16.
Dieter, William, Newark, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y. Intermittent feed mechanism. 1,810,645; June 16.
Dieter, William, Newark, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y. Gyroscopic steering mechanism. 1,810,646; June 16.
Dietrich Incorporated. (See Carlson, A., and Ericson, assignors.)
Dietz, R. E., Company. (See Currie, Robert A., assignor.)
Dietzgen, Eugene, Company. (See Allin, Richard F., assignor.)
Dietzgen, Eugene, Company. (See Langsner, Adolph, assignor.)
Dillon, Clarence, and D. Daughhetee, Richland Center, Wis. Violin bow. 1,810,414; June 16.
Dillon, John R. (See Lundelius, O. F., and Dillon.)
Disston, Henry, & Sons, Incorporated. (See Freas, S. T., and Gehr, assignors.)
Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,810,309; June 16.
Dodge, Adiel Y., assignor to Bendix Brake Company, South Bend, Ind. Brake mechanism. 1,810,101; June 16.
Doering, Charles, Chicago, Ill. Advertising amusement device. 1,810,467; June 16.
Doerseln, Paul. (See Adler, J., and Doerseln.)
Dold, Alfred L., Drexel Hill, Pa. Hose coupling. 1,810,268; June 16.
Dominion Electrical Manufacturing Company. (See Ajax, Erick J., assignor.)
Domkee, John H., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Slide buckle. 1,810,647; June 16.
Donnelley, R. R., & Sons, Company. (See Frazier, Philip A., assignor.)
Doolittle, Samuel M., Decker, Ind. Producing fertilizer. 1,810,239; June 16.
Dornseif, Frederic J., assignor to Chicago Flexible Shaft Company, Chicago, Ill. Clock case. Des. 84,400; June 16.
Dornseif, Frederic J., assignor to Chicago Flexible Shaft Company, Chicago, Ill. Clock case. Des. 84,401; June 16.
Dornseif, Frederic J., assignor to Chicago Flexible Shaft Company, Chicago, Ill. Clock case. Des. 84,402; June 16.
Dornseif, Frederic J., assignor to Chicago Flexible Shaft Company, Chicago, Ill. Clock case. Des. 84,403; June 16.
Dornseif, Frederic J., assignor to Chicago Flexible Shaft Company, Chicago, Ill. Clock case. Des. 84,404; June 16.
Doyle, Clarence V., New York, N. Y., assignor to R. J. Sherwood, San Francisco, Calif. Lock. 1,810,468; June 16.
Draper Corporation. (See Rogers, Leonard M., assignor.)
Dremel, Albert J., Racine, Wis. Electric hair clipper. 1,810,469; June 16.
Drescher, Hugh A. E., J. E. G. Harris, B. Wylam, and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Manufacture of derivatives of vat dyestuffs. 1,810,758; June 16.
Dry Quenching Equipment Corporation. (See Moetteli, Arnold, assignor.)
Du Bois, Joseph M., Bellaire, Ohio. Handled tray or similar article. Des. 84,405; June 16.
Dumont, Ray W., assignor to Best & Co., Inc., New York, N. Y. Display head. Des. 84,406; June 16.
Dunbar, Charles J., Kalamazoo, Mich., assignor to Le Febure Corporation, Cedar Rapids, Iowa. Loose leaf binder. 1,810,133; June 16.
Duncan & Miller Glass Company, The. (See Reese, William W., assignor.)
Dunn, Orion C. (See Powell, Dalton U., assignor.)
Dunner, Julius, New York, N. Y. Staggered channeled roller feather plucking device. 1,809,891; June 16.
Du Pont Ammonia Corporation. (See Larson, Alfred T., assignor.)
Dupont, Max B., Vitacolor Corporation. (See Haynes, George, assignor.)
Du Pont, Max B., Vitacolor Corporation. (See Kelley, William V. D., assignor.)
Dura Company, The. (See Bortel, Howard C., assignor.)
Duro Company, The. (See Eisenhauer, Charles P., assignor.)
Duvall, William J., assignor to Smith & Davis Manufacturing Company, St. Louis, Mo. Folding bed. 1,810,516; June 16.
Dwight and Lloyd Metallurgical Company. (See Hyde, Reed W., assignor.)
Dyer, John B., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Engine starting apparatus. 1,810,393; June 16.
Dyhr, Jens, assignor to Schaumbad Gesellschaft mit beschrankter Haftung, Dresden, Germany. Production of foam. 1,810,394; June 16.
Echodon, Inc. (See Hutchison, Miller R., assignor.)
Eck, Richard, assignor of one-half to F. A. R. Gäbel, Dresden, Germany. Electrically operated windlass. 1,810,821; June 16.
Ederer, Lother A. (See Sanner, Hulbert, assignor.)
Edmiston, Maurice O., St. Louis, Mo. Lubricant. 1,810,555; June 16.
Edson, Bert, Pawtucket, R. I., assignor to New England Lace Mills, Inc., New York, N. Y. Lace. Des. 84,407; June 16.
Edwards, Albert, assignor to J. W. Wooldridge, Sacramento, Calif. Wrench. 1,810,006; June 16.
Edwards, William H., Great Neck, N. Y., assignor to American Telephone and Telegraph Company. Variable resistance device. 1,809,925; June 16.
Egli, Arnold, Hamburg, Germany. Intaglio printing machine. 1,810,470; June 16.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for catalytically treating hydrocarbon oil. 1,810,648; June 16.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Apparatus and process for treating hydrocarbons. 1,810,700; June 16.
Einsler, Otto, Leverkusen-on-the-Rhine, and H. Tietz, Cologne-Mulheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Apparatus for condensing condensable vapors. 1,809,926; June 16.
Eisele, Herman. (See Mears, C. W., and Eisele.)
Eisenhauer, Charles P., assignor to The Duro Company, Dayton, Ohio. Water softener valve. Re18,098; June 16.
Electric Controller & Manufacturing Company, The. (See Hall, Jay H., assignor.)
Electric Controller & Manufacturing Company, The. (See Trofimov, Lev A., assignor.)

Ellinger, Frits, assignor to Mijnbouw En Handels-Maatschappij "Wonoh Gedeh", The Hague, Netherlands. Obtaining iodine as iodide from iodine-containing adsorption carbon. 1,810,039; June 16.
Elliott, George S., Wilkinsburg, Pa. Display envelope. 1,810,649; June 16.
Ellis, Harold E., and F. T. Williams, assignors to The Miller Company, Meriden, Conn. Brooder heater. 1,809,892; June 16.
Emanueli, Luigi, Milan, Italy, assignor to Societa Italiana Pirelli, Milan, Italy. Maintaining oil pressure in high tension electric cables. 1,809,927; June 16.
Emerson Electric Mfg. Co., The. (See Dickson, Albert C., assignor.)
Emerson, Merton L., assignor to The Lamson Company, Syracuse, N. Y. Pneumatic dispatch system. 1,810,269; June 16.
Emmert, John R., assignor to E. J. Paldar Co., Chicago, Ill. Chiropodist chair. 1,810,134; June 16.
Endicott, George F., St. Paul, Minn., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,809,836; June 16.
Engle, Edgar W., Lake Forest, assignor to Fansteel Products Company, Inc., North Chicago, Ill. Using electrolytic rectifiers in series. 1,810,395; June 16.
English, Analdo M., Brookline, assignor, by mesne assignments, to Pneumatic Scale Corporation, Limited, Quincy, Mass. Wrapping machine. 1,810,471; June 16.
Englund, Theodore C., Minneapolis, Minn. Animal trap. 1,810,163; June 16.
Enterprise Optical Mfg. Co. (See Spahr, Oral F., assignor.)
Erdmann, Erich, Ihmert, Germany. Frictionless automatic device for raising wire windings on vertical conical winding-up drums. 1,810,270; June 16.
Erickson, John E., East Grand Forks, Minn. Funnel. 1,810,822; June 16.
Ericson, Eric W. (See Carlson, A., and Ericson.)
Erlinder, Peder E. (See Nordell, C. H., and Erlinder.)
Eschenfeld, Hilda. (See Michaelson, Andrew E., assignor.)
Esmond, William G., Stratford, Conn., assignor to E. Ames, New York, N. Y. Bulkhead for steel barges. 1,810,810; June 16.
Evans, Frank T., Cambridge, Mass. Drapery holdback. 1,810,073; June 16.
Ewart, Elliott S., Detroit, Mich., assignor to Morgan & Wright, Detroit, Mich. Tubing machine. 1,809,837; June 16.
Faber, Otto, Kenmore, N. Y., assignor to The G. L. Squier Mfg. Co., Buffalo, N. Y. Bearing housing for cane mills or the like. 1,810,102; June 16.
Fagerlie, Alfred I. (See Webster, R. B., Fagerlie, and Barager.)
Fansteel Products Company. (See Engle, Edgar W., assignor.)
Faragher, Warren F. (See Morrell, J. C., and Faragher.)
Farley, William R., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Tap-changing system. 1,809,964; June 16.
Farmer, Patterson, Detroit, Mich. Refrigerator control. 1,809,928; June 16.
Farmer, Patterson, Detroit, Mich. Cabinet construction. 1,809,929; June 16.
Fassnacht, Karl, assignor to Speidel Chain Co., Providence, R. I. Ornamental chain. 1,810,040; June 16.
Fay, Carl J., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Electric vaporizer. 1,810,650; June 16.
Fay, Owen J., Chicago, H. T. Heimberger, Riverside, and E. Pugh, Downers Grove, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Heating device. 1,810,164; June 16.
Federal Telegraph Company. (See Sokoloff, Boris N., assignor.)
Felton, George W., Hamilton, assignor to Utica Products, Inc., Utica, N. Y. Clutch operating mechanism. 1,809,965; June 16.
Fenton, Frank, Akron, Ohio, assignor, by mesne assignments, to The Miller Rubber Company Inc., Wilmington, Del. Water wings. 1,810,556; June 16.
Ferguson, George K. S., North East, Pa. Packaging fruit and the like. Re18,099; June 16.
Fewkes, Joseph T., assignor to Sentry Safety Control Corporation, Philadelphia, Pa. Dowser control mechanism for motion picture projecting machines. 1,810,348; June 16.
Fiegel, William J., and F. C. Jones, assignors to Bohn Aluminum and Brass Corporation, Detroit, Mich. Manufacturing bearings. 1,809,838; June 16.
Field, Frank E., Somerville, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Transformer and transformer system. 1,809,839; June 16.
Filer & Stowell Company, The. (See Pelton, George M., assignor.)
Filtrol Company of California. (See Baylis, Walter S., assignor.)
Fink, Jacob, deceased; R. J. Fink, administratrix, St. Paul, Minn. Constructing leg covering garments. 1,810,517; June 16.
Fink, Rose J., administratrix. (See Fink, Jacob.)
Finn, Thomas J. (See Lees, O. O., and Finn.)
Fireproof Wall Company. (See Makowski, John F., assignor.)
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Roofing and weatherproofing material. 1,810,880; June 16.
Fischer, Charles W., assignor to T. A. Kochs Company, Chicago, Ill. Adjustable support for headrests. 1,810,651; June 16.
Fischer, Ernst E., Rockledge, Pa. Thread moistening guide. 1,810,007; June 16.
Fisk Rubber Company, The. (See Harvey, Robert P., assignor.)
Fisk Rubber Company, The. (See Lehman, Paul W., assignor.)
Fisk Rubber Company, The. (See Midgley, Thomas, assignor.)
Fitch, Fred W., Des Moines, Iowa. Cream dispenser. 1,810,135; June 16.
Fitch, Jason A. (See Brainard, G. C., and Fitch.)
Fitzgerald, Francis A. J., Niagara Falls, N. Y., and J. Kelleher, Chippawa, Ontario, Canada, assignors to American Cyanamid Company, New York, N. Y. Condenser and operating the same. 1,810,557; June 16.
Flagstad, Cornell, Minneapolis, Minn. Clutch control device. 1,810,103; June 16.
Flammer, Ernst, and C. Kelber, Heilbronn, Germany. Manufacture of soap. 1,810,759; June 16.
Fleischhauer, Richard. (See Kalischer, G., and Fleischhauer.)
Flexlume Corporation. (See Whitman, Channing, assignor.)
Flintermann, Gerhard, West Orange, N. J. Shaving kit. 1,810,652; June 16.
Flynn, Jeremiah, assignor of one-fourth to F. Tirrell, and one-fourth to Jerome Flynn, St. Louis, Mo. Refrigerator. 1,809,893; June 16.
Flynn, Jerome, et al. (See Flynn, Jeremiah, assignor.)
Foerster, Charles J., Newton, Mass. Finger nail polisher. 1,810,701; June 16.
Fogh, Christian P., Oakland, Calif. Awning. 1,809,966; June 16.
Folding Products Corporation. (See Nordell, C. H., and Erlinder, assignors.)
Forbes, Henry C., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Radiant energy receiving system. 1,809,967; June 16.
Ford, Albert G., Aurora, Ill., assignor, by mesne assignments, to Reynolds Gas Regulator Co., Anderson, Ind. Automatic gas governor loader. 1,809,930; June 16.
Ford Motor Company. (See Hicks, Harold A., assignor.)
Ford Motor Company. (See Wharam, John J., assignor.)
Forsberg, Oscar F. (See Goff, H. W., and Forsberg.)
Fortson, Asa L., Melvin, assignor of one-fourth to S. W. Hughes, Brady, Tex. Stalk cutter attachment. 1,810,415; June 16.
Fortuna-Werke Spezialmaschinenfabrik Aktiengesellschaft. (See Bastian, Paul, jr., assignor.)
Fraenkel, Ernst, Berlin, Germany. Injecting and delivering machine for mortar and other materials. 1,810,271; June 16.
Fraizer, Mark, Chester, Okla. Sorghum crops topping tool. 1,809,931; June 16.
Francis, Earle V., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Trolley conveyer. 1,810,416; June 16.
Francis, Earle V., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Trolley conveyer. 1,810,417; June 16.
Francis, Earle V., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Trolley conveyer. 1,810,418; June 16.
Francis, Earle V., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Trolley conveyer. 1,810,419; June 16.
Frank, Olive E., Buffalo, and H. P. Wilder, Kenmore, assignors to O. E. Frank Heater & Engineering Co., Inc., Buffalo, N. Y. Heat interchanger. 1,810,165; June 16.
Frank, O. E., Heater & Engineering Co. (See Frank, O. E., and Wilder, assignors.)
Frankhart, Inc. (See von Frankenberg, Arthur, assignor.)
Franklin, H. H., Manufacturing Company. (See O'Connell, Herbert, assignor.)
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frazier, Philip A., assignor to R. R. Donnelley & Sons Company, Chicago, Ill. Irregular drive motion. 1,810,702; June 16.
Freas, Samuel T., Trenton, N. J., and C. A. Gehr, Wissinoming, Pa., assignor to H. Disston & Sons, Incorporated, Tacony, Pa. Circular saw. 1,810,823; June 16.
Frede, Charles F., St. Louis, Mo., and E. G. Hallquist, Edwardsville, Ill., assignors to General Steel Castings Corporation, Granite City, Ill. Railway vehicle underframe. 1,810,558; June 16.
Frederick, Victor W. L., Brooklyn, N. Y. Air regulator for window ventilators. 1,810,824; June 16.
French, Edward H., Columbus, Ohio. Recovering resinous by-products in the manufacture of wood pulp. 1,810,472; June 16.
French, Nettie B., Worthington, Minn. Cabinet. 1,810,599; June 16.
Frey, Elmer E., Los Angeles, Calif. Camping bed. 1,810,311; June 16.

Friedlander, Hans, New York, N. Y. Lathe ing brush. 1,810,074; June 16.
Friedlund, Albert C., Minneapolis, Minn. Confectionery article. Des. 84,409; June 16.
Friedman, Abraham, Los Angeles, Calif. Table. Des. 84,408; June 16.
Friedman, Jacob, New York, N. Y. Lock. 1,810,760; June 16.
Friel, Patrick, New York, N. Y. Combined safety razor and stropper. 1,810,559; June 16.
Frohring, William O., assignor, by mesne assignments to The Telling Belle Vernon Company, Cleveland, Ohio. Making liquid malted milk. 1,810,518; June 16.
Fry, John W., Struthers, Ohio. Flying machine. 1,810,136; June 16.
Fullman, James M. G., Sewickley, Pa., assignor to National Electric Products Corporation. Outlet box connecter. 1,809,840; June 16.
Furrer, Rudolph, Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Welded pipe joint and making same. 1,810,825; June 16.
Gäbel, Friedrich A. R. (See Eck, Richard, assignor.)
Gaines, Ernest L., Seattle, Wash. Flush tank. 1,810,473; June 16.
Galassi, Pasquale, New York, N. Y. Dividing strips for floors. 1,810,761; June 16.
Gallahan, Walter, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Sound recording system. 1,810,703; June 16.
Gallimore, Keith F., Fond du Lac, Wis., assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass. Adjustable gauge. 1,810,166; June 16.
Gamble, Hugh A., et al. (See Berry, Charles R., assignor.)
Gardner-Denver Company. (See Sheets, Barton R., assignor.)
Garvey, Benjamin S., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Composite product and making the same. 1,810,560; June 16.
Garwood, Charles B., Linthicum Heights, assignors to Carr-Lowrey Glass Co., Baltimore, Md. Closure for bottles, jars, and the like. 1,809,894; June 16.
Gathmann, Emil, Baltimore, Md. Metallic ingot. 1,810,041; June 16.
Gay, Frazer W., Newark, N. J. Protective system for transformers. 1,809,895; June 16.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Adjustable inductance and coupling system. 1,809,932; June 16.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Inductance system. 1,809,938; June 16.
Gedge, Edna R., Los Angeles, Calif., assignor to Peerless Products Co. Cartridge-holding floor polisher. 1,809,968; June 16.
Gee, Albert, Elkins Park, Pa. Yarn carrier control mechanism for flat knitting machines. 1,809,969; June 16.
Gehr, Charles A. (See Freas, S. T., and Gehr.)
Geigy, J. R., S. A., The Firm. (See Mettler, Carl, assignor.)
General American Tank Car Corporation. (See Parks, Ostrander J., assignor.)
General Aniline Works, Inc. (See Haller, Josef, assignor.)
General Aniline Works, Inc. (See Kalischer, G., and Fleischhauer, assignors.)
General Chemical Company. (See Lohmann, William H., assignor.)
General Electric Company. (See Atwood, Winfield A., assignor.)
General Electric Company. (See Champlin, Franklin J., assignor.)
General Electric Company. (See Cummings, Byron R., assignor.)
General Electric Company. (See Halvorson, Cromwell A. B., jr., assignor.)
General Electric Company. (See Hollnagel, Herbert P., assignor.)
General Electric Company. (See Knight, James L., assignor.)
General Electric Company. (See Rankin, William K., assignor.)
General Electric Company. (See Standerwick, Reginald G, assignor.)
General Electric Company. (See Warner, Donald F., assignor.)
General Electric Company. (See Whitaker, Frank P., assignor.)
General Fireproofing Company, The. (See Brainard, G. C., and Fitch, assignors.)
General Fireproofing Company. (See Purnell, Edward A., assignor.)
General Machinery Corporation. (See Byerlein, Arthur A., assignor.)
General Steel Castings Corporation. (See Frede, C. F., and Hallquist, assignors.)
General Tire & Rubber Company, The. (See Denmire, Harold A., assignor.)
Genetry, Henry T., Kalispell, Mont. Screw driver. 1,810,704; June 16.
Gensner, Theodore, Portland, Oreg. Bookrest. 1,810,205; June 16.
George, Jerome R., assignor to Morgan Construction Company, Worcester, Mass. Art of rolling metal. 1,810,167; June 16.
Gerhart, Thomas R., Lawrence, Kans. Combined xylophone and carrying apparatus. 1,810,519; June 16.
Gerth, August, Deuel County, S. Dak. Snow runner, 1,810,042; June 16.
Gerth, August, Deuel County, S. Dak. Traction attachment for vehicle wheels. 1,810,043; June 16.
Gerth, August, Hidewood Township, Deuel County, S. Dak. Lug for wheel chains. 1,810,075; June 16.
Getty, Fred I., Jennings, La. Sealable foot valve. 1,810,420; June 16.
Glermann, Wilhelm A., Onawa, Iowa. Corn harvester. 1,810,600; June 16.
Gifford-Wood Company. (See Hallenbeck, Harold E., assignor.)
Gilbert, Arthur J. (See Black, Walter H., assignor.)
Gillar, Henry, Milltown, N. J. Terminal clamp for storage batteries. 1,810,396; June 16.
Gilley, Lawrence M. (See Hudson, S. J., and Gilley.)
Ginsberg, Harry, New York, assignor, by mesne assignments, to National Container Corporation, Long Island City, N. Y. Composite sheet forming machine. 1,810,561; June 16.
Gish, Daniel B., Worcester, Mass. Aeroplane. 1,810,762; June 16.
Glatthar, George E., and F. Wening, assignors to The Art Metal Company, Cleveland, Ohio. Shade holder. 1,810,520; June 16.
Gleaner Combine Harvester Corporation, The. (See Baldwin, Ernest W. and G. D., assignors.)
Gleason Works. (See Shlesinger, Bernard E., assignor.)
Glennon, James B., Washington, D. C. Indicator. 1,809,834; June 16.
Glidden, Joseph F. (See Kaser, Walter I., assignor.)
Goff, Harold W., Great Neck, and O. F. Forsberg, Yonkers, assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Impulse transmitter. 1,809,841; June 16.
Gold, Harriet, et al. (See Hopp, Leo, assignor.)
Goldbeck, Herman L., Adelaide, Australia. Toilet paper holder. 1,810,272; June 16.
Goldberg, Nathaniel, Brooklyn, N. Y. Mattress retainer. 1,810,601; June 16.
Goldman, Joseph, New York, N. Y. Ring. Des. 84,410; June 16.
Goldman, Joseph, New York, N. Y. Ring. Des. 84,411; June 16.
Goldstein, Louis, assignor to Knight Supper Mfg. Corp., Brooklyn, N. Y. Slipper. Des. 84,412; June 16.
Golomb, Joseph. (See Loving, Harry E., assignor.)
Good, Ray F., Lykens, Pa. Metallic shoe lace tip. 1,810,602; June 16.
Goodrich, B. F., Company, The. (See Garvey, Benjamin S., assignor.)
Goodrich, B. F., Company, The. (See Young, Harvey L., assignor.)
Goodwin, Carl W., Natick, Mass., assignor, by mesne assignments, to American Seal-Kap Corporation, Long Island City, N. Y. Bottle capping mechanism. 1,809,842; June 16.
Gorsuch, Hubert E., Springfield, Ohio. Combined thermometer and paper clamp. Des. 84,413; June 16.
Goss and Deleeuw Machine Company, The. (See Spring, Joseph J., assignor.)
Govett, Ernest, assignor to Govett, Ltd., New York, N. Y. Preparation of colloidal halogens. 1,810,104; June 16.
Govett, Ltd. (See Govett, Ernest, assignor.)
Grant, John. (See Campbell, Stewart L., assignor.)
Gray, Albert S., assignor of one-half to J. D. Certain, Wenatchee, Wash. Tire rim breaking machine. 1,810,881; June 16.
Gray, James A., St. Paul, Minn. Motion picture screen. 1,810,168; June 16.
Gray, James A., St. Paul, Minn. Moving picture screen. 1,810,169; June 16.
Gray, Lell L., Minneapolis, Minn. Grease service rack. 1,810,826; June 16.
Green, James H., Stratford, Conn. Saw stretcher. 1,810,349; June 16.
Greene, Marion, Montclair, N. J. Doll. Des. 84,414; June 16.
Greenlee Bros. & Co. (See Swanson, Edwin C., assignor.)
Greenwood, Robert A., Chelsea, London, England. Sanitary liquid trap. 1,810,240; June 16.
Griscom-Russell Company, The. (See Price, Joseph, assignor.)
Groehn, Otto J., Grosse Pointe Park, assignor to Hudson Motor Car Company, Detroit, Mich. Apparatus for trimming body panels. 1,809,843; June 16.
Groehn, Otto J., Grosse Pointe Park, and L. S. Lamb, Grosse Pointe, assignors to Hudson Motor Car Company, Detroit, Mich. Apparatus for shaping sheet metal. 1,809,844; June 16.
Gross, Miriam, assignor to Miriam Gross Company, Milwaukee, Wis. Knitted fabric. Des. 84,415; June 16.
Grote, W. D. (See Buchholz, Herman, assignor.)
Guardabassi, Galileo. (See Bianchi, A. E., and Guardabassi.)
Gubelmann, Ivan, and C. O. Henke, South Milwaukee, assignors to The Newport Company, Carrollville, Wis. Purifying and decolorizing rosins with resorcinol. 1,810,170; June 16.

Gubelmann, Ivan, H. J. Welland, and O. Stallmann, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation. 4'-sulpho-2-benzoyl-5-nitro-benzoic acid and process for making same. 1,810,008; June 16.

Gubelmann, Ivan, H. J. Welland, and O. Stallmann, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation. 4'-sulpho-2-benzoyl-5-amino-benzoic acid. 1,810,009; June 16.

Gubelmann, Ivan, H. J. Welland, and O. Stallmann, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation. 2-nitro-anthraquinone-7-sulpho-acid and making the same. 1,810,010; June 16.

Gubelmann, Ivan, H. J. Welland, and O. Stallmann, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation. 2-nitro-7-chloro-anthraquinone and making the same. 1,810,011; June 16.

Gubelmann, Ivan, H. J. Welland, and O. Stallmann, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation. 2-amino-7-chloro-anthraquinone and making the same. 1,810,012; June 16.

Gubelmann, Ivan, H. J. Welland and O. Stallmann, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation. Preparing 4'-sulpho-o-benzoyl-benzoic acid. 1,810,013; June 16.

Gudge, Augustus W., Newark, N. J., and E. Wensley, Cicero, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Apparatus for producing articles from sheet material. 1,810,206; June 16.

Guggenheim, Max M. (See Savy, R., Lebert, and Guggenheim.)

Gullett Gin Company. (See Wallace, Jeffrey J., assignor.)

Gurney Elevator Company. (See Callaway, Clarence R., assignor.)

Gustin-Bacon Manufacturing Company. (See Anderson, Harley E., assignor.)

Gutman, Irwin, Pittsburgh, Pa. Septic tank. 1,810,474; June 16.

Guyer, Jean, Zurich, Switzerland. Model for geometry instruction. 1,810,421; June 16.

Gypsy Oil Company. (See Hatcher, O., and Byers, assignors.)

Haas, Edward, Houghton, Mich. Side guard for shoes. 1,809,845; June 16.

Haas, Lucien L., assignor to Buffalo Pressed Steel Company, Inc., Buffalo, N. Y. Air receiving and directing means for rotary fans. 1,809,846; June 16.

Haberfeld, Erwin O. (See Linse, Max, assignor.)

Haehnel, Wolfram. (See Herrmann, W. O., Deutsch, and Haehnel.)

Haiss, George, Manufacturing Co. Inc. (See Bosworth, William H., assignor.)

Hall, Emil E., Groton, Conn. Motor vehicle rear curtain operator. 1,810,422; June 16.

Hall, Jay H., Cleveland Heights, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio. Control system for electric motors. 1,809,847; June 16.

Hallenbeck, Harold E., assignor to Gifford-Wood Company, Hudson, N. Y. Self-reversing trolley bucket. 1,810,603; June 16.

Haller, Josef, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y. New azo dyestuffs. 1,810,273; June 16.

Hallot, Paul, Paris, France. Servo-brake. 1,810,763; June 16.

Hallquist, Einar G. (See Frede, C. F., and Hallquist.)

Hallstream, Henning, Brockton, assignor to Cross Paper Feeder Company, Boston, Mass. Paper feeding machine. 1,810,171; June 16.

Halvorson, Cromwell A. B., jr., Lynn, Mass., assignor to General Electric Company. Light projector. 1,810,604; June 16.

Hamilton, Perry H., Baltimore, Md., assignor to Maintenance Equipment Company, Chicago, Ill. Wheel flange oiler. 1,810,764; June 16.

Hammons, Byron D., et al. (See Carol, James E., assignor.)

Hamwi, Ernest, St. Louis, Mo. Machine for forming pastry cups. 1,809,848; June 16.

Hanauer, Albert M., et al. (See Berry, Charles R., assignor.)

Hannah, Alexander, Paterson, N. J. Shuttle tension. 1,809,849; June 16.

Hänsel, Curt, Forst, Germany. Stiffening fabric for wearing apparel. 1,810,076; June 16.

Hansell, Clarence W., Rocky Point, Long Island, N. Y., assignor to Radio Corporation of America. Receiver. 1,810,475; June 16.

Hansen, Edmund H., New York, N. Y. Thermal sound recording system. 1,810,705; June 16.

Hanson, Edward C. (See McClintock, O. B., Popp, and Hanson.)

Hanson, Walter M., assignor to American Seating Company, Grand Rapids, Mich. Hinge. 1,810,888; June 16.

Hardiman, James S., Ridgewood, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Screw cap. 1,810,706; June 16.

Harkrader, Carl L., East Orange, N. J., assignor to Welin Davit & Boat Corporation, Long Island City, N. Y. Life float. 1,810,397; June 16.

Harmor & Co. Inc. (See Harty, W. A., and Moore, assignors.)

Harnischfeger Corporation. (See Lexa, G. J., and Ljungkull, assignors.)

Harnischfeger Corporation. (See Ljungkull, Rolf, assignor.)

Harris, Frank R., jr., St. Louis, Mo. Screen for windshields. 1,810,044; June 16.

Harris, John E. G. (See Drescher, H. A. E., Harris, Wylam, and Thomas.)

Harrison, Charles P., Wesleyville, assignor to Jarecki Manufacturing Co., Erie, Pa. Chaser and chaser holder. 1,810,241; June 16.

Hart, Earl H., Berkeley, Mich. Curtain rod pilot. 1,810,207; June 16.

Hartford-Empire Company. (See Rowe, George E., assignor.)

Hartford-Empire Company. (See Wadman, Harold A., assignor.)

Hartley, Henry J., Hastings-on-Hudson, and F. B. Schilling, Flushing, assignor to Nichols Copper Company, New York, N. Y. Ore cooling apparatus. 1,810,562; June 16.

Hartley, Ralph V. L. (See Buckley, O. E., and Hartley.)

Hartmann, Otto H., Cassel-Wilhelmshohe, Germany, assignor to The Superheater Company, New York, N. Y. Boiler. 1,809,896; June 16.

Hartsell Mills Company. (See Pharr, William N., assignor.)

Hartson, Earl S., Los Angeles, Calif. Core drill. 1,810,208; June 16.

Hartwig, William G., assignor to Railway Utility Company, Chicago, Ill. Electric fuse. 1,810,653; June 16.

Harty, William A., Buffalo, N. Y., and F. W. Moore, Thorold, Ontario, Canada, assignors to Harmor & Co. Inc., Buffalo, N. Y. Rotary drier. 1,810,476; June 16.

Harvey, Robert P., Longmeadow, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Deflating device. 1,809,897; June 16.

Harvey, Roy S. (See Larson, W. E., and Harvey.)

Hasche, Rudolph L., Elizabeth, N. J., assignor to American Smelting and Refining Company, New York, N. Y. Separating gases. 1,810,312; June 16.

Haskell, Broderick, Franklin, assignor to Davis Brake Beam Company, Johnstown, Pa. Brake beam guard arm. 1,810,707; June 16.

Haskell, Frederick F., Arlington, assignor to Apexeon Company, Jamaica Plain, Mass. Metal window screen. 1,810,274; June 16.

Hatch, Roscoe J., Macy, Ind. Piston. 1,810,423; June 16.

Hatcher, Oscar, and E. L. Byers, assignors to Gypsy Oil Company, Tulsa, Okla. Well cutting sampler. 1,810,827; June 16.

Hanbroe, Werner C. L., Copenhagen, Denmark. Support especially for heavy machine guns or the like. 1,810,654; June 16.

Hawley, Kent A., assignor to Locke Insulator Corporation, Baltimore, Md. Sealing insulators. 1,810,424; June 16.

Hayden, Arthur A. (See Bicknell, G. M., and Hayden.)

Hayes, Anson, Ames, Iowa. System of temperature control. 1,810,172; June 16.

Hayes, Charles, Paris, France, assignor to Coal Carbonization Company. Carbonizing coal. 1,810,828; June 16.

Hayes, Jesse C., Kittanning, Pa. Rope anchor. 1,810,242; June 16.

Haynes, George, Jersey City, N. J., assignor, by mesne assignments, to Max B. Dupont Vitacolor Corporation, Los Angeles, Calif. Film treating machine. 1,810,209; June 16.

Haynes, Jonathan, La Cygne, Kans. Watering fountain. 1,810,829; June 16.

Heald Machine Company, The. (See Gallimore, Keith F., assignor.)

Hedgcock, William C., assignor to American Steel Founderies, Chicago, Ill. Supporting means for brakes. 1,810,210; June 16.

Heimberger, Harry T. (See Fay, O. J., Heimberger, and Pugh.)

Heiniger, John, Cleveland, Ohio. Safety shoe for ladders. 1,810,045; June 16.

Heise, Otto W., Bridgeport, Conn., assignor, by mesne assignments, to Consolidated Ashcroft Hancock Company, New York, N. Y. Controlling apparatus. 1,809,898; June 16.

Held, Max O., Milwaukee, Wis. Casting machine. 1,810,173; June 16.

Hellwig, Carl, Cali, Colombia. Automatic railway car coupling. 1,810,830; June 16.

Hengstler, Heinrich, Oberwinterthur, Switzerland. Clip, clasp, and like fastening for neckties. 1,810,077; June 16.

Henion, Walter R., assignor to Boe Manufacturing Company, Minneapolis, Minn. Spout construction. 1,810,137; June 16.

Henke, Clyde O. (See Gubelmann, I., and Henke.)

Hercules Cement Corporation. (See Kind, Morris, assignor.)

Herdling, Wilhelm, Wehen, Germany. Sand spraying device for motor vehicles, especially motor cars. 1,810,765; June 16.

Herlach, Fritz, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf, Germany. Trigger mechanism for firearms mounted on a carriage and having a pointing handle. 1,810,243; June 16.

Hermanek, Otto R., Minneapolis, Minn. Coin detector for coin controlled machines. 1,810,521; June 16.

Heroy, Herbert, Belmar, N. J. Electrically operated water heater. 1,809,899; June 16.

Herrmann, Willy O., H. Deutsch, and W. Haehnel, assignors to Consortium Fur Elektrochemische Industrie, Munich, Germany. Production of condensation and polymerization products of acetylene. 1,810,174; June 16.

Hersh, Lovell A., assignor to H. Bohn, Dayton, Ohio. Clothes wringer. 1,810,046; June 16.

Hersh, Lovell A., assignor to H. Bohn, Dayton, Ohio. Agitator for clothes washing machines and the like. 1,810,047; June 16.

Hershey, Harry E., Oak Park, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Registering system. 1,810,211; June 16.

Herthel, Eugene C., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Art of cracking hydrocarbons. 1,810,048; June 16.

Herzmark, Abraham M., Kansas City, Mo. Coffee urn bag. 1,809,935; June 16.

Heymann, Hans, and E. Lehr, assignors to the firm: Carl Schenck, Eisengresserei und Maschinenfabrik, Darmstadt, G. m. b. H., Darmstadt, Germany. Conveying of material. 1,810,882; June 16.

Hicken, Elmer E. (See Werst, C. W., and Hicken.)

Hickok, W. O., Manufacturing Company, The. (See Broadmeyer, Albert, assignor.)

Hicks, Harold A., Detroit, assignor to Ford Motor Company, Dearborn, Mich. Airplane. 1,810,244; June 16.

Highland Western Glass Company. (See Paxton, Elisha W., assignor.)

Hilburn, Earl D., Oakland, Calif. Airplane control. 1,809,936; June 16.

Hill, Cora L., Los Angeles, Calif. Lingerie holder. 1,810,014; June 16.

Hill, N. N., Brass Company, The. (See Wood, William C., assignor.)

Hill, Robert. (See Townsend, K., and Hill.)

Hill, Ward R., and V. M. Watt, Indianapolis, Ind. Lubricating means. 1,810,175; June 16.

Hillard, Frederic W., Prince Bay, Staten Island, N. Y., assignor to M. B. Hillard, Middlebury, Conn. Typewriting machine. 1,810,522; June 16.

Hillard, Mary B. (See Hillard, Frederic W., assignor.)

Hilsheimer, Forrest, Chillicothe, Ohio. Inlet for paper making machines. 1,809,937; June 16.

Hinds, Robert L., Toledo, Ohio. Electric tool. 1,810,212; June 16.

Hines, John, Astoria, assignor to Segal Lock & Hardware Co., Inc., New York, N. Y. Actuator. 1,810,750; June 16.

Hines, John, Astoria, assignor to Segal Lock & Hardware Co., Inc., New York, N. Y. Fastening device. 1,810,751; June 16.

Hinman Milking Machine Company. (See Hinman, Ralph L., assignor.)

Hinman, Ralph L., assignor to Hinman Milking Machine Company, Incorporated, Oneida, N. Y. Milking machine. 1,810,477; June 16.

Holden-Sprague Corporation. (See Knowlton, Luther K., assignor.)

Hodgdon, Paul E., Munising, Mich. Method of and apparatus for digesting wood. 1,810,328; June 16.

Hodgkinson, Francis, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company. Labyrinth packing. 1,810,872; June 16.

Hogan, Samuel. (See McNeff, J., and Hogan.)

Hogg, John T., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Voice operated relay circuit. 1,810,016; June 16.

Hohulin, Wilhelm F., Ottawa, Ill. Fluid operated reversing valve. 1,809,938; June 16.

Hohulin, Wilhelm F., Ottawa, Ill. Fluid reversing valve. 1,810,766; June 16.

Holland, David N., North Little Rock, Ark. Lantern. 1,810,767; June 16.

Holland, Irving L., and R. J. Kinsella, Chicago, Ill., assignors to Hohulin assignor to John [illegible]. 1,809,970; June 16.

Hollinger, Merle E., Swampscott, Mass., assignor to General Electric Company. Sound recording. 1,810,605; June 16.

Holmes, Ernest, Company. (See Holmes, Ernest N., assignor.)

Holmes, Ernest N., assignor to Ernest Holmes Company, Chattanooga, Tenn. Automobile jack. 1,809,939; June 16.

Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company, of Minnesota. Rock drilling machine. 1,810,402; June 16.

Holzwarth Gas Turbine Co. (See Holzwarth, Hans, assignor.)

Holzwarth, Hans, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Periodically introducing pulverulent fuels into internal-combustion engines. 1,810,768; June 16.

Hookless Fastener Company. (See Sundback, Gideon, assignor.)

Hopp, George, et al. (See Hopp, Leo, assignor.)

Hopp, Leo, assignor of one-half to G. Hopp, and one-half to Harriet Gold, New York, N. Y. Price ticket holder. 1,810,049; June 16.

Horni, Paul P., Newark, N. J. Interlocking key assembly. 1,810,399; June 16.

Horton, Erwin C. (See Hueber, H., and Horton.)

Horton, John O., assignor to Beach Manufacturing Company, Montrose, Pa. Sewing machine. 1,810,245; June 16.

Hoscelt, William J., assignor to Rodger Ballast Car Company, Chicago, Ill. Latch for dump car doors. 1,809,850; June 16.

Hosking, Richard T., Wilmette, assignor to H. B. Hough Company, Chicago, Ill. Bathing cap. 1,810,655; June 16.

Hotchkiss, E. H., Company, The. (See Peterson, Roy E., assignor.)

Hott, Ion V. K., assignor of one-third to W. F. Bippers, and one-third to J. M. Switzer, Dayton, Ohio. Air motor. 1,810,176; June 16.

Hottel, Oliver W., et al. (See Albertson, Luther D., assignor.)

Houck, Joseph C., Los Angeles, Calif. Advertising device. 1,810,606; June 16.

Hough, H. B., Company. (See Hosking, Richard T., assignor.)

Housman, George S., Norristown, assignor to E. J. Lavino and Company, Philadelphia, Pa. Apparatus for and method of making bricks. 1,810,078; June 16.

Houston, Herbert W., Los Angeles, Calif. Variable stroke cam engine. 1,810,017; June 16.

Howell, James W., assignor to The White Motor Company, Cleveland, Ohio. Mandrel. 1,810,275; June 16.

Howes, Douglas E., Northfield, Vt., assignor to Westinghouse Electric & Manufacturing Company. Cathode ray oscillograph. 1,810,018; June 16.

Hudson Motor Car Company. (See Groehn, Otto J., assignor.)

Hudson Motor Car Company. (See Groehn, O. J., and Lamb, assignors.)

Hudson, Silas J., and L. M. Gilley, Akron, Ohio. Ash tray. Des. 84,416; June 16.

Hueber, Henry, Buffalo, and E. C. Horton, Hamburg, assignors to Trico Products Corporation, Buffalo, N. Y. Horn. 1,810,478; June 16.

Hufferd, George H., Detroit, Mich., assignor to Thompson Products Inc., Cleveland, Ohio. Dust cover for tie rods or the like. 1,809,371; June 16.

Hughes, Frederick T., Los Angeles, Calif. Nonpickable keyhole lock. 1,810,400; June 16.

Hughes, S. W. (See Fortson, Asa L., assignor.)

Humason, Granville A., Houston, assignor of one-half to J. A. Toman, Harris County, Tex. Combination packer and cutting tool. 1,810,852; June 16.

Hutchison, Miller, R., Llewellyn Park, assignor to Edison, Inc., West Orange, N. J. Method of and apparatus for amplifying and projecting sound waves. 1,810,708; June 16.

Hutrig, Ernest W., Denver, assignor to Coors Porcelain Company, Golden, Colo. Ash receptacle. Des. 84,431; June 16.

Hyatt, Samuel W., assignor to Indiana Lamp Corporation, Connersville, Ind. Interlocking new head lamp. 1,810,177; June 16.

Hyde Reed Wire Sumter, N. J., assignor to Dwight and Lloyd Metallic Cloth Company, New York, N. Y. Process of and apparatus for heat treating alkaline earth carbonates and other materials. 1,810,713; June 16.

I. G. Farbenindustrie Aktiengesellschaft. (See Ziegler, I. G. and Ditz, assignors.)

I. G. Farbenindustrie Aktiengesellschaft. (See Lecht, Otto, assignor.)

Ideal Belgian Fur Dressing Company. (See Florin, Erasme, assignor.)

Indiana Lamp Corporation. (See Hyatt, Samuel W., assignor.)

Ingersoll, Howard L., Stamford, Conn., Locomotive. 1,810,709; June 16.

Inman, Ulysses A., Long Beach, Calif. Automobile spring. 1,809,851; June 16.

Institut pour le Carbonisation et le Traitement Catalytique des Combustibles. (See Blanchet, R. E., and Guinot, assignors.)

International Combustion Engineering Corporation. (See Marshall, Leonard S., assignor.)

International Motor Company. (See Leibert, August H., assignor.)

International Motor Company. (See Heller, Bruno, assignor.)

International Precipitation Company. (See Knibbs, Arthur L., assignor.)

Iowa Fiber Box Company, et al. (See Witte, James G., assignor.)

Irons, John H., Saratoga Springs, N. Y. Air-sprayting apparatus. 1,810,007; June 16.

Jacobs, Ernest, Wolfeville, S. Dak. Animal trap. 1,810,608; June 16.

Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam generator. 1,809,972; June 16.

Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Heat transfer device. 1,810,178; June 16.

Jaden, Fred I., Hastings, Nebr. Mail box. 1,810,769; June 16.
Jaenicke, Johannes. (See Müller, G., and Jaenicke.)
Jakobsen, B. F., et al. (See Vogt, Fredrik, assignors.)
James, William S., assignor to The Studebaker Corporation, South Bend, Ind. Brake operating means. 1,809,973; June 16.
Jameson, Eloise, and E. D. Stewart, Corona, and C. P. Wilson, Pomona, assignors to California Fruit Growers Exchange, Los Angeles, Calif. Food product and making the same. 1,810,276; June 16.
Jantz, Gustave H., Wyoming, Ohio. Wringer. 1,810,479; June 16.
Jarecki Manufacturing Co. (See Harrison, Charles P., assignor.)
Jaworsky, Michael, Chicago, Ill. Closure. 1,810,019; June 16.
Jay, William C., assignor to Sanitary Products Corporation of America, Philadelphia, Pa. Suction plate machine. 1,809,852; June 16.
Jayne, David W., jr. (See Christmann, L. J., and Jayne.)
Jeavons, William R., Cleveland Heights, Ohio. Refrigerator. 1,809,900; June 16.
Jeffrey Manufacturing Company, The. (See Francis, Earle V., assignor.)
Jennison, Herbert C., Bridgeport, assignor to The American Brass Company, Waterbury, Conn. Electric conductor. 1,810,079; June 16.
Jewart, John F., Blasdell, N. Y. Ventilating stovepipe. 1,810,831; June 16.
Johansen, Harry C., Michigan City, Ind., assignor to Sullivan Machinery Company. Drilling apparatus. 1,810,106; June 16.
Johanson, Gustav H., assignor to C. Wilhjelm, as trustee, Philadelphia, Pa. Snap switch. 1,810,314; June 16.
Johansson, Carl E., Detroit, Mich. Gauge. 1,810,710; June 16.
Johantgen, Oliver D., Winnetka assignor to Victor Adding Machine Co., Chicago, Ill. Calculating machine. 1,810,213; June 16.
Johnson, Arthur A. (See Johnson, Gustaf A., and A. A.)
Johnson, Arthur A., assignor to Dictaphone Corporation, Bridgeport, Conn. Phonograph. 1,810,883; June 16.
Johnson, Eric W., Newark, N. J. Automatically locked receptacle and container. 1,810,656; June 16.
Johnson, Frank E., assignor to John I. Paulding, Inc., New Bedford, Mass. Switch for electric lamps. 1,810,480; June 16.
Johnson, Gustaf A., assignor to John I. Paulding, Inc., New Bedford, Mass. Electric switch. 1,810,482; June 16.
Johnson, Gustaf A. and A. A., assignors to John I. Paulding, Inc., New Bedford, Mass. Attachment plug receptacle. 1,810,481; June 16.
Johnson, Henry E. (See Meyers, J. A., and Johnson.)
Johnson, Leonard W., Batavia, Ill. Aligning fixture. 1,810,214; June 16.
Johnson & Johnson. (See Bruns, Alfred E., assignor.)
Johnson, Raymond P., Lynbrook, assignor to Standard Oil Company of New York, New York, N. Y. Automatic valve. 1,810,353; June 16.
Johnson, Walfrid, Summit, N. J. Steering gear. 1,810,609; June 16.
Jones, Alfred D., and S. J. Smith, Glasgow, Scotland. Phonograph and the like. 1,809,901; June 16.
Jones, Frederick C. (See Flegel, W. J., and Jones.)
Jones, George, Waxhachie, Tex. Stove. 1,810,711; June 16.
Jones, Paul, A., Jonesville, Mich. Brush. 1,809,974; June 16.
Jones, Philip, Los Angeles, Calif. Steam actuated rotary drilling control. 1,810,246; June 16.
Jones, Philip, Los Angeles, Calif. Steam actuated automatic rotary drill. 1,810,247; June 16.
Jones, Philip, and P. W. Pretzman, Los Angeles, Calif. Power actuated means for feeding rotary drills. 1,810,248; June 16.
Jones, William M., jr., Rochester, N. Y. Television apparatus. 1,810,610; June 16.
Jones, William W., et al. (See Carol, James E., assignor.)
Jordan, Andrew Y., Asher, Okla. Jack. 1,810,425; June 16.
Jordan, James E. (See Thompson, W. G., and Jordan.)
Joy, Charles H., sr. (See Sauer, Louis J., assignor.)
Judy, Frank B., Cynthiana, Ky. Adjustable tail holder. 1,810,832; June 16.
Judy, Frank B., Cynthiana, Ky. Adjustable tail holder. 1,810,833; June 16.
Kadel, Byers W., Baltimore, Md. Railway car. 1,810,611; June 16.
Kallscher, Georg, Frankfort-on-the-Main, and R. Fleischhauer, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs and making same. 1,810,277; June 16.
Karfiol, Edward, Brooklyn, N. Y. Doll. Des. 84,418; June 16.
Karmazin, John, Detroit, Mich. Header construction. 1,810,215; June 16.
Karsten, Peter, Duesseldorf, assignor to Rheinische Metallwaaren und Maschinenfabrik Sommerda Aktiengesellschaft, Sommerda, Germany. Wheel brake. 1,810,354; June 16.
Kaser, Walter I., Clark Township, Holmes County, assignor of one-half to J. F. Glidden, Lakewood, Ohio. Plier cover remover. 1,810,315; June 16.
Katuner, Arthur T., Pittsburgh, Pa. Heat treating metal. 1,810,612; June 16.
Kattrein, William J., and F. W. Becker, assignors to Watervliet Tool Co., Inc., Albany, N. Y. Helical bladed reamer. 1,809,975; June 16.
Katzman, Samuel, Brooklyn, N. Y. Laundry receptacle. 1,810,563; June 16.
Keen, Thomas A., St. Louis, Mo., assignor to H. M. Smith, Chicago, Ill. Starting apparatus. 1,810,179; June 16.
Kegel, George A., Lancaster, Pa. Oyster receptacle. 1,810,080; June 16.
Kelber, Christian. (See Flammer, E., and Kelber.)
Kelemen, George, South Omaha, Nebr. Safety device for ships. 1,810,564; June 16.
Kelleher, James. (See Fitzgerald, F. A. J., and Kelleher.)
Keller, Leo P., Columbus, Ohio. Accessory for vacuum cleaners. 1,810,613; June 16.
Kelley, William V. D., Jersey City, N. J., assignor, by mesne assignments, to Max B. Du Pont Vitacolor Corporation, Los Angeles, Calif. Color photography. 1,810,180; June 16.
Kenely, William J., Elizabeth, N. J. Fish lure and grapple. 1,810,565; June 16.
Keney, Victor, New York, N. Y. Artificial eyelash. 1,810,566; June 16.
Kennedy, Joseph E., New York, N. Y. System of and means for preparing fuel and delivery thereof to a place of combustion. 1,809,902; June 16.
Kenney, William J., Chicago, Ill. Radiator. 1,810,712; June 16.
Kerngood, Allen H., assignor to Alma Manufacturing Company of Baltimore City, Baltimore, Md. Apparel buckle. Des. 84,419; June 16.
Kielsmeier, Edwin H., Sunnyside, Wash. Clean egg nest. 1,810,278; June 16.
Kincannon, Leo T., Scottsdale, Pa., assignor to Marion Machine Foundry & Supply Company, Marion, Ind. Articulated tractor track. 1,810,138; June 16.
Kind, Morris, Bryn Mawr, assignor to Hercules Cement Corporation, Philadelphia, Pa. Car for transporting cement or the like. 1,810,770; June 16.
King, Amanda E. (See Abramowitz Joseph, assignor.)
King, C. G., & Co. (See King, Clifford G., assignor.)
King, C. G., & Co. (See Smith, Walter E., assignor.)
King, Clifford G., Barrington, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,420; June 16.
King, Clifford G., Barrington, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,421; June 16.
King, Harold A., Birmingham, Mich. Valve stem. 1,810,020; June 16.
Kingsford, Russell T., Wyncote, and L. H. Davis, Upper Darby, assignors to Atwater Kent Manufacturing Company, Philadelphia, Pa. Radio tuning indicator. 1,810,355; June 16.
Kinkaid, John H., and S. H. Weston, assignors of one-third to R. D. Pearson, Los Angeles, Calif. Gas burner. 1,810,713; June 16.
Kinney, Justus K., Jamaica Plain, Mass. Clutch. 1,809,976; June 16.
Kirchhof, William G., assignor to The J. H. Day Company, Cincinnati, Ohio. Dough molder. 1,810,139; June 16.
Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to Raybestos-Manhattan, Inc. Making asbestos friction elements. 1,810,714; June 16.
Kislyn Corporation. (See Brosse, Paul, assignor.)
Kissendorfer, Karl, assignor to Mauser-Wodke Aktiengesellschaft, Oberndorf-on-the-Neckar, Germany. Caliper. 1,810,427; June 16.
Kiwad, Michael, New York, N. Y., assignor to La Belle Specialty Co., Inc. Lamp base or article of analogous nature. Des. 84,422; June 16.
Klaus, Roy W. (See Holland, I. J., and Klaus.)
Klein, William C., Allentown, Pa. Roller bearing free wheel drive. 1,810,834; June 16.
Kleine, Charles, Kingston, N. Y. Hair waving apparatus. 1,809,977; June 16.
Kleinschmidt, Edward E., assignor to Teletype Corporation, Chicago, Ill. Storage transmitter. 1,810,107; June 16.
Klempp, Gustave, Glenwood, Iowa. Rolling pin. 1,810,050; June 16.
Knight, Arthur P., Glendale, assignor to International Precipitation Company, Los Angeles, Calif. Apparatus for electrical separation of suspended material from gases. 1,810,614; June 16.
Knight, Harry H., assignor to Dallas Engineering Corporation, Dallas, Tex. Fan. Des. 84,423; June 16.
Knight, James L., Schenectady, N. Y., assignor to General Electric Company. Refrigerator cabinet. 1,809,815; June 16.
Knight Slipper Mfg. Corp. (See Goldstein, Louis, assignor.)
Knowlton, Cutler D., Beverly, assignor to Honque Sprague Corporation, Lynn, Mass. Art of box making. 1,809,853; June 16.
Kochs, Theo. A., Company. (See Fischer, Charles W., assignor.)

Koehler, Edwin H., New York, N. Y. Cosmetic container. 1,810,249; June 16.
Koering, Eustachius W., Vineland, N. J. Apparatus for shaping glass rods. 1,809,854; June 16.
Kohler, John H., Pittsburgh, Pa., assignor to Rees Manufacturing Corporation. Jack. 1,810,657; June 16.
Kohler, John H. (See Larson, W. E., and Kohler.)
Koken Companies. (See Carter, Lionel A., assignor.)
Koppers Company, The. (See Bragg, Gilbert A., assignor.)
Krause, Clarence C., Chattanooga, Tenn. Piston. 1,810,279; June 16.
Krementz & Company. (See Nobbe, Morris O., assignor.)
Kress, Willard C., Kenmore, assignor to J. H. Williams & Co., Buffalo, N. Y. Tools in sets and holder therefor. 1,810,108; June 16.
Kristensson, August. (See Thorssell, T., and Kristensson.)
Kritchevsky, Wolf, assignor to Rit Products Corporation, Chicago, Ill. Decolorizing substance. 1,810,658; June 16.
Kritchevsky, Wolf, and C. J. Beckert, Chicago, Ill. Treating wood. 1,810,659; June 16.
Kritchevsky, Wolf, and E. Morrill, Chicago, Ill., assignors, by mesne assignments to Sparkless Cleaner Company. Method of and composition for increasing the conductivity of hydrocarbons. 1,810,660; June 16.
Kritchevsky, Wolf, Chicago, Ill. Combined dye and stripper. 1,810,661; June 16.
Kritchevsky, Wolf, Chicago, Ill. Combined dye and stripper. 1,810,662; June 16.
Kritchevsky, Wolf, and H. C. Prutsman, assignors to Rit Products Corporation, Chicago, Ill. Stripper for fabrics. 1,810,663; June 16.
Kritchevsky, Wolf, and H. C. Prutsman, assignors to Rit Products Corporation, Chicago, Ill. Dye remover. 1,810,664; June 16.
Kritchevsky, Wolf, and H. C. Prutsman, assignors to Rit Products Corporation, Chicago, Ill. Fabric stripper. 1,810,665; June 16.
Kronmiller, Carl G., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y. Tape dispensing device. 1,809,940; June 16.
Krueger, Henry, Spokane, Wash. Combination shade and shutter with automatic locking means. 1,810,771; June 16.
Krüger, Hugo, Hoboken, N. J. Folding umbrella. 1,810,567; June 16.
Kucha, Charles L., Artesian, S. Dak. Mower guard. 1,810,081; June 16.
Kuenzel, S. H. Hunter, assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Vehicle lamp housing. Des. 84,424; June 16.
Kumli, Charles F., assignor, by mesne assignments, to Selectograph Company, Chicago, Ill. Stencil sheet. 1,810,483; June 16.
Kumli, Charles F., assignor, by mesne assignments, to Selectograph Company, Chicago, Ill. Stencil sheet. 1,810,484; June 16.
Kurtz, Henry F., Rochester, N. Y., assignor to Benneville Lloyd Singley, Meadville, Pa. Vehicle light. 1,810,216; June 16.
LaBelle Specialty Co. (See Kiwad, Michael, assignor.)
La Chapelle, Fred N., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Skiving machine. 1,810,485; June 16.
Lamb, Lawrence S. (See Groehn, O. J., and Lamb.)
Lambert, David N., Brooklyn, N. Y. Back check for gas meters. 1,810,835; June 16.
Lamory, William J., assignor to American Writing Paper Company, Holyoke, Mass. Making deckle edge paper. 1,810,316; June 16.
Lamson Company, The. (See Emerson, Merton L., assignor.)
Lancaster, Raymond D., Akron, Ohio. Rubber mask. 1,810,486; June 16.
Langsner, Adolph, assignor to Eugene Dietzgen Company, Chicago, Ill. Leveling instrument. 1,809,855; June 16.
Larson, Alfred T., assignor to Du Pont Ammonia Corporation, Wilmington, Del. Producing hydrogen. 1,809,978; June 16.
Larson, Carl H., Elkhart, Ind., assignor to The Adlake Company. Lamp mounting. 1,810,666; June 16.
Larson, Walter E., and J. H. Kohler, Pittsburgh, Pa., assignors, by mesne assignments, to Walker Manufacturing Company, Racine, Wis. Jack. 1,810,667; June 16.
Larson, Walter E., and J. H. Kohler, Pittsburgh, Pa., assignors, by mesne assignments, to Walker Manufacturing Company, Racine, Wis. Jack handle. 1,810,715; June 16.
La Rue, E. C., et al. (See Vogt, Fredrik, assignor.)
Lasker, William W., Brooklyn, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Clutch mechanism for card punches. 1,810,317; June 16.
Lassen, Peter, Roanoke, Tex. Bag filling device. 1,810,772; June 16.
Laphenstein, Harry W., Ashland, Pa. Bottle rack. 1,810,836; June 16.
Laukel, John H., Detroit, Mich. Making multiple core boxes. 1,810,523; June 16.
Lavino, E. J., and Company. (See Housman, George S., assignor.)
Lavino, E. J., and Company. (See Soll, Gilbert F., assignor.)
Lawr, Clarence W., Pachuca, Hidalgo, Mexico. Recovery of cyanid from alkalin liquors. 1,810,487; June 16.
Lawrence, Charles L. (See Shoemaker, R. B., and Lawrence.)
Lawson, Clarence A., jr. (See Lawson, Clarence A., sr., and C. A., jr.)
Lawson, Clarence A., sr., and C. A., jr., Alhambra, Calif. Dental cabinet. 1,810,140; June 16.
Lawson, F. H., Company, The. (See Lumley, Maurice, assignor.)
Lazzeri, Nello, Virginia City, Nev. Baby carriage. 1,810,428; June 16.
Lebert, Louis. (See Savy, R., Lebert, and Guggenheim.)
Ledoux, John W., Swarthmore, assignor, by mesne assignments, to Simplex Valve & Meter Company, Philadelphia, Pa. Liquid meter. 1,810,141; June 16.
Lee, Alvin J. (See Moran, J. L., and Lee.)
Lee-Bradner Company, The. (See Schurr, Charles H., assignor.)
Lee, William D. (See Ockenden, Pierce, assignor.)
Le Febure Corporation. (See Dunbar, Charles J., assignor.)
Leipert, August H., College Point, Long Island, assignor to International Motor Company, New York, N. Y. Brake spider. 1,810,356; June 16.
Lees, Obed O., and T. J. Finn, deceased, Columbus, Ohio; said Lees assignor to said Finn; E. S. Dailey, executrix. Railroad crossing gate. 1,810,051; June 16.
Legg, Joseph W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Oscillograph film holder. 1,810,021; June 16.
Lehman, Paul W., Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire mold servicing machine. 1,809,856; June 16.
Lehmann, Albert, Brooklyn, N. Y. Parachute. 1,810,488; June 16.
Lehr, Ernst. (See Heymann, H., and Lehr.)
Leich Electric Co. (See White, Thomas U., assignor.)
Leinbach, Edward L., Chicago, Ill. Lifting jack. 1,809,979; June 16.
Leipold, Hugo, assignor to Buffalo Fire Appliance Corporation, Buffalo, N. Y. Fire extinguisher. 1,810,668; June 16.
Lengsholz, Peter J., Massillon, Ohio. Gas fired kiln. 1,810,616; June 16.
Lenhart, John, Richboro, Pa. Electrically driven lawn mower. 1,810,357; June 16.
Lentz, Charles E., South Bend, Ind., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Wood coloring process. 1,809,980; June 16.
Levering, James H., Los Angeles, Calif. Externally-reenforced construction. Re18,104; June 16.
Levy, Anderson Co. (See Anderson, Maurice, assignor.)
Lewis, Joseph, Winnipeg, Manitoba, Canada. Lavatory closet. 1,810,280; June 16.
Lexa, George J., and R. Ljungkull, Wauwatosa, assignors to Harnischfeger Corporation, Milwaukee, Wis. Electric motor driven excavating machinery. 1,809,981; June 16.
Liebreich, Oscar P., Jackson Heights, N. Y. Loud speaker cabinet. 1,810,568; June 16.
Limpert, Archie, Hicksville, Ohio. Instrument for aligning automobile wheels. 1,810,429; June 16.
Linders, Ralph F., Baldwin, Ill. Grain feeder. 1,810,778; June 16.
Link, Vincent, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Vehicle brake. 1,809,982; June 16.
Link, Vincent, assignor to The Studebaker Corporation, Detroit, Mich. Vehicle brake. 1,810,022; June 16.
Linscott, Leroy N., Thomsonville, Conn. Four-wheel brake equalizer. 1,810,358; June 16.
Linse, Max, Berlin-Biesdorf-Sud, assignor to E. O. Haberfeld, Berlin, Germany. Manufacturing veneered metal surfaces. 1,810,281; June 16.
Liquid Carbonic Corporation, The. (See Osland, Charles H., assignor.)
Ljungkull, Rolf. (See Lexa, G. J., and Ljungkull.)
Ljungkull, Rolf, Wauwatosa, assignor to Harnischfeger Corporation, Milwaukee, Wis. Power transmission mechanism. 1,810,489; June 16.
Ljungström, Fredrik, Ludvigo, Sweden, assignor, by mesne assignments, to Fed, Incorporated. Power transmission. 1,810,282; June 16.
Ljungström, Fredrik, Ludvigo, Sweden, assignor, by mesne assignments, to Fed, Incorporated. Power transmission. 1,810,283; June 16.
Locke Insulator Corporation. (See Hawley, Kent L., assignor.)
Locke Steel Chain Company, The. (See Locke, Sylvanus D., assignor.)
Locke, Sylvanus D., assignor to The Locke Steel Chain Company, Bridgeport, Conn. Apparatus for making chain. 1,810,716; June 16.
Lockwood, Louis S., assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y. Automatic musical instrument. 1,810,359; June 16.
Locomotive Pulverized Fuel Company. (See Caracristi, Virginius Z., assignor.)
Lodge, Joseph B., Maywood, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Material feeding device. 1,809,858; June 16.

Lodge, Joseph E., Maywood, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Feeding device. 1,810,023; June 16.
Loeb, Carl, Chicago, Ill. Spectrum lamp. 1,810,669; June 16.
Loeffelholz Co. (See Taylor, Louis R., assignor.)
Loeffler, Bruno, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Clutch disk construction. 1,810,360; June 16.
Loeffler, Bruno, Plainfield, N. J., assignor to International Motor Company, New York, N. Y. Clutch disk construction. 1,810,361; June 16.
Loehr, Oskar, Uerdingen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of esters of glycols. 1,810,318; June 16.
Logan, J. A. (See Hunnason, Granville A., assignor.)
Lohmann, William H., Wilmington, Del., assignor to General Chemical Company, New York, N. Y. Continuous crystallizer. 1,810,217; June 16.
Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble suit. Des. 84,425; June 16.
Long, Lawrence J. (See Woolley, J. F., jr., and Long.)
Lord, Hugh C., Erie, Pa. Cushion mounting. 1,810,717; June 16.
Lord, Hugh C., Erie, Pa. Car. 1,810,718; June 16.
Lord, Hugh C., Erie, Pa. Friction device. 1,810,872; June 16.
Lounsbury, Harvey J., Glen Ellyn, assignor to W. H. Miner, Inc., Chicago, Ill. Door construction. 1,809,857; June 16.
Lovell Manufacturing Company. (See Schuda, Ernest J., assignor.)
Loving, Harry E., assignor of one-half to J. Golomb, Baltimore, Md. Electrical toy. 1,810,250; June 16.
Lowenthal, Mark, Newark, N. J. Meat tenderer. 1,810,719; June 16.
Lower, Nathan M., Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y. Locomotive stoker. 1,809,903; June 16.
Lower, Nathan M., Pittsburgh, Pa., assignor, by mesne assignments to The Standard Staker Company Inc. New York, N. Y. Stoker mechanism. 1,809,904; June 16.
Lown, Walter J. H. (See Phillips, Ezra A., assignor.)
Ludlow, John H. (See Davis, N. R., Marchbanks, and Ludlow.)
Lumley, Maurice, assignor to The F. H. Lawson Company, Cincinnati, Ohio. Wall cabinet. 1,810,362; June 16.
Lundelius & Eccleston Motors Corporation. (See Lundelius, O. F., and Dillon, assignors.)
Lundelius, Oscar F., and J. R. Dillon, Los Angeles, Calif., assignors to Lundelius & Eccleston Motors Corporation, Las Vegas, Nev. Spring mounting. 1,810,319; June 16.
Lappert Valentine C. Williamsport Pa. Pencil sharpener. 1,810,284; June 16.
Luppert Valentine C. Williamsport Pa. Pencil sharpener. 1,810,285; June 16.
Lutz, Friedrich, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Bed structure for sewing machines. 1,809,941; June 16.
Lyon, Asher S., deceased, The Bridgeport City Trust Co., executor, assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn. Flashlight. 1,810,524; June 16.
M. & B. Manufacturing Co. Inc. (See Meyerfelder, E. J. and Balze, assignors.)
Mable Todd & Co. (See Most, Lucifer J., assignor.)
MacClatchie, John W. (See Raymond, Edward E., assignor.)
MacDonald, Francis W. H., Allen C. Fuelscher, and V. T. Manchee, Trona, Calif., assignors to American Potash & Chemical Corporation, New York, N. Y. Process and apparatus for recovering values from brines. 1,810,181; June 16.
MacElhone, Harry, Binghamton, N. Y. Applying temporary wrappers. 1,810,837; June 16.
Mackley, James H., Denver, Colo. Water heater. 1,810,774; June 16.
MacPhee, Anderson, Meadowbrook, Pa. Heat exchanger. 1,810,286; June 16.
Mader, Joseph, assignor to S. L. Allen & Co., Inc., Philadelphia, Pa. Leaf guard for disk cultivators. 1,810,052; June 16.
Magnavox Company, The. (See Pridham, Edwin S., assignor.)
Mahon, R. C., Company, The. (See Mahon, R. C., and Miller, assignors.)
Mahon, Russell C., and W. D. Miller, assignors to The R. C. Mahon Company, Detroit, Mich. Deck plate clip. 1,810,287; June 16.
Maier, Karl, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Overedge sewing machine. 1,810,617; June 16.
Maignen, Prosper J. A., Philadelphia, Pa. Fractional combustion apparatus. 1,810,670; June 16.
Maisch, Gerald H., Williamsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Surface finishing for molded articles. 1,809,984; June 16.
Maintenance Equipment Company. (See Hamilton, Perry H., assignor.)
Makowski, John F., Oakland, Calif., assignor to Fireproof Wall Company, Reno, Nev. Conduit coupling collar. 1,810,142; June 16.
Malapeta, Vasele N., Terminous, Calif. Undershirt puller. 1,810,363; June 16.
Malcolm, Robert, et al. (See Moran, J. L., and Lee, assignor.)
Malmquist, Adolph K., South Bellingham, Wash. Can sealing machine. 1,809,905; June 16.
Manchee, Vincent T. (See Macdonald, F., Allen, Ritchie, and Manchee.)
Marchand, Adolph, Jackson Heights, New York, N. Y. Mirror. Des. 84,426; June 16.
Marchbanks, Maurice J. (See Davis, N. R., Marchbanks, and Ludlow.)
Marian, Josef, Vienna, Austria. Bottle capping machine. 1,810,838; June 16.
Marion Machine Foundry & Supply Company. (See Kincannon, Leo T., assignor.)
Marker, John N. (See Preston, Frank G., assignor.)
Marshall, Clinton E., Brooklyn, N. Y. Guard for presses. 1,810,364; June 16.
Marshall, Leonard J., Westwood, N. J., assignor to International Combination Engineering Corporation, New York, N. Y. Bent tube boiler. 1,810,365; June 16.
Martin, Felipe, Fairfield, Calif. Self-closing drum filling valve. 1,810,366; June 16.
Martin, Foster, Hayward, assignor to California Conserving Company, Incorporated, San Francisco, Calif. Advertising device. 1,810,525; June 16.
Martin, Harold E., North Providence, R. I., assignor to Brown and Sharpe Manufacturing Company. Machine tool. 1,809,858; June 16.
Martin, John F., assignor to American Bosch Magneto Corporation, Springfield, Mass. Adjusting device for magnetos. 1,810,367; June 16.
Martin, Louis, New London, Conn. Keyhole illuminating means. 1,810,775; June 16.
Marvin, Frederick B., Matamoras, Pa. Rotary explosion engine. 1,810,082; June 16.
Marvin, Walter S., assignor to Metal Ware Corporation, Two Rivers, Wis. Electric percolator. 1,810,490; June 16.
Marzall, John A. (See Holland, I. L., assignor, and Klaus.)
Mason, George W., Detroit, Mich., assignor to Copeland Products, Inc. Refrigeration apparatus. 1,810,569; June 16.
Maszczyk, Alexander M., Chicago, Ill. Work stop. 1,810,430; June 16.
Mateo, Angel, Santiago, Dominican Republic. Aeroplane. 1,810,182; June 16.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Relay circuit. 1,810,024; June 16.
Mathes, Robert C., Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission system. 1,810,025; June 16.
Matheson, Andrew A., Denver, Colo., assignor to Matheson Pneumatic Planters Corporation, Lander, Wyo. Pneumatic planter. 1,810,671; June 16.
Matheson Pneumatic Planters Corporation. (See Matheson, Andrew A., assignor.)
Mathieu, Léon L., Rouen, assignor to Societe Anonyme des Hauts-Fourneaux et Fonderies de Pont-a-Mousson, Pont-a-Mousson, Meurthe-et Moselle, France. Apparatus for ejecting pipes cast in flasks in one piece. 1.8.0.183; June 16.
Mattes, Alfred, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Voltage regulation for electric generators. 1,810,238; June 16.
Mauser-Werke Aktiengesellschaft. (See Kissenkoetter, Karl, assignor.)
McClintock, O. B., Company. (See McClintock, O. B., Popp, and Hanson, assignors.)
McClintock, Oliver B., S. E. Popp, and E. C. Hanson, assignors to O. B. McClintock Company, Minneapolis, Minn. Vault ventilator. 1,810,484; June 16.
McClure, Earl N., Chicago, Ill. Golf ball container. 1,810,491; June 16.
McCoy, Kenneth A., assignor of one-half to E. T. Brown, Fullerton, Calif. Safely swinging finger guard for well drilling derricks. 1,810,720; June 16.
McDermott, George R., Chicago, Ill. Controlling combustion in metallurgical and glass furnaces. 1,810,776; June 16.
McElroy, Robert L. (See Nolen, James G., assignor.)
McEnery, Joseph P., Flushing, N. Y. Combined pencil and clip. 1,810,109; June 16.
McEnery, Joseph P., Flushing, N. Y. Pencil holder. 1,810,110; June 16.
McKee, William J., Los Angeles, Calif. Clamp. 1,810,777; June 16.
McKenzie Company, The. (See Tuerk, Oscar, assignor.)
McKinley, Benjamin P., Brooklyn, N. Y., assignor to The Bryant Electric Company. Combined lamp socket duster and connection plug. 1,810,570; June 16.
McLeod, Bradford L., Frankfort, Ind. Exhaust nozzle. 1,809,942; June 16.
McNeil, John, and S. Hogan, Lyote, Tex. Blow out preventing device and oil saver for drilling rigs. 1,810,431; June 16.

McPhillips, Viola, Memphis, Tenn. Radiator ornament. 1,810,289; June 16.
McQuay Radiator Corporation. (See Willcox, Jay C., assignor.)
McTaggart, Daniel B., Butte, Mont. Automatic air line connecter. 1,810,778; June 16.
Mead, Harry L., Brewster, Fla., assignor to American Cyanamid Company, New York, N. Y. System and method of hydraulic mining. 1,810,571; June 16.
Mears, Charles W., and H. Eisele, Cleveland, Ohio; said Eisele assignor to said Mears. Device for extinguishing and holding cigarettes. 1,810,492; June 16.
Meerson, Semion. (See Braunstein, S., and Meerson.)
Melzer, Otto. (See Wahl, J., and Melzer.)
Merritt, Ericsson H. (See Meyers, Sidney E., assignor.)
Mersfelder, Frederick J., and P. Balze, assignors to M. & B. Manufacturing Co. Inc., Leonia, N. J. Clean out plug. Re18,100; June 16.
Messer, Abraham, New York, assignor to J. Schierer, New York, N. Y. Identification seal. 1,810,493; June 16.
Metal Ware Corporation. (See Marvin, Walter S., assignor.)
Metro-Goldwyn-Mayer Corporation. (See Arnold, John, assignor.)
Mettler, Carl, assignor to the firm of J. R. Geigy S. A., Basel, Switzerland. Manufacture of direct dyeing diazodyestuffs. 1,810,839; June 16.
Meves, Charles W., assignor to Sheboygan Couch Company, Sheboygan, Wis. Bed davenport. 1,809,859; June 16.
Meyers, J. A., and Company. (See Meyers, J. A., and Johnson, assignors.)
Meyers, Joseph A., and H. H. Johnson, assignors to J. A. Meyers and Company, Inc., Los Angeles, Calif. Ring. Des. 84,427; June 16.
Meyers, Sidney E., assignor of one-half to E. H. Merritt, Lockport, N. Y. Consistency responsive device. 1,810,111; June 16.
Michaelson, Andrew E., assignor, by mesne assignments, of forty-nine per cent to H. Eschenfeld, Portland, Oreg. Garage door operator. 1,810,320; June 16.
Michelman, Nathan, Brooklyn, N. Y. Metal door. 1,810,321; June 16.
Midgley, Thomas, Hampden, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire testing machine. 1,809,860; June 16.
Midland Steel Products Company, The. (See Riemenschneider, Ernest, assignor.)
Mijnbouw En Handelsmaatschappij "Wonoh Gedeh." (See Ellinger, Fritz, assignor.)
Milam, William A., Austin, Tex. Gun casting rod. 1,810,779; June 16.
Milbury, Seth R., Irvington, N. J. Checking ring. 1,810,218; June 16.
Miles, Cecil W., et al. (See Albertson, Luther D., assignor.)
Miller, Charles F., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Underfeed stoker construction. 1,809,906; June 16.
Miller Company, The. (See Ellis, H. E., and Williams, assignors.)
Miller, Frederic H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Suspension clamp. 1,810,053; June 16.
Miller Manufacturing Co., The. (See Miller, Robert E., assignor.)
Miller, Robert E., assignor to The Miller Manufacturing Co., Bainbridge, Ga. Bottle unloader. 1,810,432; June 16.
Miller Rubber Company, Inc., The. (See Fenton, Frank, assignor.)
Miller, Taylor L., Silverton, Tex. Carrying handle. 1,810,840; June 16.
Miller, Waldemar, New York, N. Y. Landing gear for aeroplanes. 1,810,054; June 16.
Miller, William G. (See Mahon, R. C., and Miller.)
Miller, William J., Swissvale, Pa. Automatic manufacture of pottery ware. 1,809,861; June 16.
Milligan, Charles H., assignor to The Champion Coated Paper Company, Hamilton, Ohio. Optical apparatus for determining finish on paper. 1,810,433; June 16.
Miner, W. H., Inc. (See Endicott, George F., assignor.)
Miner, W. H., Inc. (See Lounsbury, Harvey J., assignor.)
Miner, W. H., Inc. (See Olander, Roland J., assignor.)
Minneapolis-Honeywill Regulator Company. (See Bower, George D., assignor.)
Minor, Earl O., New York, N. Y. Machine for removing and replacing piston wrist pins. 1,810,884; June 16.
Minrath, William, New York, N. Y. Gas generator. 1,810,672; June 16.
Miriam Gross Company. (See Gross, Miriam, assignor.)
Mock, Hugo, New York, N. Y. Electric refrigerator. 1,810,841; June 16.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Heating apparatus. 1,810,721; June 16.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Moecker, Henry, jr., Flossmoor, Ill., assignor to American Stove Company, St. Louis, Mo. Insulated range. 1,810,842; June 16.
Moecker, Henry, jr., Flossmoor, and T. Thompson, Harvey, Ill., assignors to American Stove Company, St. Louis, Mo. Service drawer for ranges. 1,810,843; June 16.
Moeller Instrument Company. (See Moeller, Max E., assignor.)
Moeller, Max E., New York, N. Y., assignor, by mesne assignments, to Moeller Instrument Company, Inc., Brooklyn, N. Y. Thermometer tube and making the same. Re18,105; June 16.
Möettell, Arnold, Oberwinterthur, Switzerland, assignor to the firm: Dry Quenching Equipment Corporation, New York, N. Y. Apparatus for the dry-cooling of coke. 1,810,322; June 16.
Moller, Emil R., assignor of one-half to G. A. Moller, Chicago, Ill. Snow handling implement. 1,810,026; June 16.
Moller, George A. (See Moller, Emil R., assignor.)
Möller, K. & Th., Gesellschaft mit beschrankter Haftung. (See Sell, Willy, assignor.)
Monroe Calculating Machine Company. (See Brown, Lee R., assignor.)
Moore Brothers Company. (See Dibble, Claude M., assignor.)
Moore Brothers Company. (See Moore, Lewis, assignor.)
Moore, Frank W. (See Harty, W. A., and Moore.)
Moore, Lewis, assignor to Moore Brothers Company, Joliet, Ill. Kitchen heater gas range. Des. 84,428; June 16.
Moore, Robert E., St. Louis, Mo. Combined door and partition. 1,810,780; June 16.
Moore, William L., Jersey City, N. J. Deck of playing cards. Des. 84,429; June 16.
Moorman, Arthur R., Wood River, Ill., and I. C. Carpenter, New Rochelle, N. Y., assignors to Contact Filtration Company, San Francisco, Calif. Refining oils. 1,809,862; June 16.
Moran, John L., and A. J. Lee, Spokane, Wash., assignors of one-fourth to R. Malcom, Chicago, Ill., and one-fourth to F. E. P. Wilder, Spokane, Wash. Strap. 1,810,027; June 16.
Moreau, Maurice F., Epinonze, France. Mechanically driven mowing machine. 1,810,781; June 16.
Morel, Emile, Domene, France. Magneto-electric machine. 1,810,844; June 16.
Morgan & Wright. (See Ewart, Elliott S., assignor.)
Morgan Construction Company. (See George, Jerome R., assignor.)
Morrell, Jacque C., and W. F. Faragher, assignors to Universal Oil Products Company, Chicago, Ill. Hydrocarbon oil conversion. 1,810,673; June 16.
Morrill, Elliott. (See Kritchevsky, W., and Morrill.)
Morris, B Frederick C., El Reno, Okla. Chick feeder. 1,810,782; June 16.
Morris, Clayton M., Los Angeles, Calif. Ironing board construction. 1,810,722; June 16.
Morse, Robert B., Hyattsville, and H. R. Devilbiss, Riverdale, Md. Pipe connection. 1,810,434; June 16.
Morterud, Elnar, Torderod, near Moss, Norway. Top screen for wood pulp digesters or the like. 1,810,845; June 16.
Most, Lucifer J., New York, assignor to Mable Todd & Co., New York County, N. Y. Pen desk set. 1,809,985; June 16.
Moto Meter Gauge & Equipment Corporation. (See Cheney, Moses E., assignor.)
Motor Wheel Corporation. (See Valjean, Ben, assignor.)
Muir, Henry G., Sioux City, Iowa. Roof construction. 1,810,674; June 16.
Müller, Fritz, assignor to Chemical Works formerly Sandoz, Basel, Switzerland. Making dialkyl barbituric acids and 1-phenyl-2,3 Dimethyl-4-dimethylamino-5-pyrazolone. 1,810,846; June 16.
Müller, Georg, Frankfort-on-the-Main, and J. Jaenicke, Cronberg, near Frankfort-on-the-Main, Germany. Reciprocal action between gases and finely subdivided materials. 1,810,055; June 16.
Murdo, William. (See Steiner, G. A., Wasileski, and Murdo.)
Murphy, James J., Washington, D. C. Fraternal badge. Des. 84,430; June 16.
Murray, Howard J., Brooklyn, N. Y., assignor to Sure-Shift Transmission Corporation, East Pittsburgh, Pa. Double cone clutch synchronizer. 1,810,494; June 16.
Mussey, William H. (See Carry, C., Mussey, and Blomberg.)
Musto, Romeo J., assignor to The Quasi-Arc Company, London, England. Electric arc welding plant. 1,810,251; June 16.
Naamlooze Vennootschap Hollandsche Industrieen Handelmaatschappij. (See Schmidt, Leopold, assignor.)
Nachman, Fred A. (See Suekoff, Louis A., assignor.)
Nanfeldt, William, assignor to World Bestos Corporation, Paterson, N. J. Transmission lining. 1,810,723; June 16.
National Container Corporation. (See Ginsberg, Harry, assignor.)
National Electric Products Corporation. (See Fullman, James M. G., assignor.)
Naylor, Walter E., assignor to The Beardsley & Piper Company, Chicago, Ill. Apparatus for handling sand in foundries. Re18,106; June 16.
Neighbour, Leonard B., assignor to Deere & Company, Moline, Ill. Lug for wheels. 1,810,219; June 16.
Nelson, August W., assignor of one-half to V. Sjodin, Spokane, Wash. Shield attachment for eating tables and the like. 1,810,618; June 16.
Nelson, Edward. (See Schoff, A. L., and E. and G. J. Nelson.)

Nelson, George J. (See Schoff, A. L., and E. and G. J. Nelson.)
Nelson, John N., assignor to Universal Optical Corporation, Providence, R. I. Spectacle temple. 1,810,220; June 16.
Neuberth, George E., Newark, N. J. Tapering metal tubes. 1,810,885; June 16.
Neuberth, George E., Newark, N. J. Method of and apparatus for working metal. 1,810,886; June 16.
Newcomb, Frank E., East Cleveland, Ohio. Rubbing or sanding pad. 1,809,907; June 16.
New England Lace Mills, Inc. (See Edson, Bert, assignor.)
New Jersey Zinc Company, The. (See Bunce, Earl H., assignor.)
Newport Chemical Corporation. (See Gubelmann, I., Welland, and Stallmann, assignors.)
Newport Company, The. (See Gubelmann, I., and Henke, assignors.)
Newport Company, The. (See Palmer, Robert C., assignor.)
Nichols Copper Company. (See Hartley, H. J., and Schilling, assignors.)
Nicolai, Arthur F. (See Stevens, E. R., and Nicolai.)
Nobbe, Morris O., assignor to Krementz & Company, Newark, N. J. Collar fastener. Des. 84,431; June 16.
Noble, A. E. (See Noble, William H., assignor.)
Noble, William H., assignor of forty-nine per cent to A. E. Noble, Lepanto, Ark. Steering walking cultivator. 1,810,783; June 16.
Nolen, James G., New York, N. Y., assignor to R. L. McElroy, Charlottesville, Va. Trapped key signal transmitter and valve control means. 1,810,323; June 16.
Noonan, Albert S., Utica, N. Y. Exhaust muffler for internal combustion engines. 1,810,252; June 16.
Nordell, Carl H., and P. E. Erlinder, assignors to Folding Products Corporation, Chicago, Ill. Foldable curtain. 1,810,847; June 16.
Norinder, Ernst H., Uppsala, Sweden. High vacuum molecular pump. 1,810,083; June 16.
Northern Conveyor & Mfg. Co. (See Bebinger, Charles H., assignor.)
Northern Liquite Coal Company. (See Traer, Glenn W., assignor.)
Nuttall, Tom, Farnworth, near Bolton, and S. A. Shorter, Didsbury, Manchester, assignors of one-third to The British Cotton Industry Research Association, Manchester, England. Opening, mixing, blowing room and like machinery used in cotton mills. 1,810,675; June 16.
Nye, Alvin F., Rochester, N. Y. Rolling screen. 1,810,848; June 16.
Nye, Alvin F., Rochester, N. Y. Roller screen mounting. 1,810,849; June 16.
Ober, Katharine H., Baltimore, Md. Baking unit of a waffle mold. Des. 84,432; June 16.
Ockenden, Pierce, assignor of one-half to W. D. Lee, Edmonton, Alberta, Canada. Bookmarker. 1,809,943; June 16.
O'Connell, Herbert, assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y. Striping tool. 1,810,221; June 16.
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Ohio Brass Company, The. (See Birch, Leland W., assignor.)
Ohio Sanitary Engineering Corporation, The. (See Travers, J. T., and Urbain, assignors.)
Okey, Perry, Columbus, Ohio. Apparatus for feeding lines. 1,810,143; June 16.
Olander, Roland J., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,809,908; June 16.
O'Leary, John P., Long Island City, N. Y. Supplemental wheel for motor vehicles. 1,810,290; June 16.
Olson, Carl J., Minneapolis, Minn. Making glass signs. 1,810,526; June 16.
O'Shaughnessy, Clara M. (See Roark, Ernest O., assignor.)
Oslund, Charles H., Worcester, Mass., assignor to The Liquid Carbonic Corporation, Chicago, Ill. Wiping rolls for labeling machines. 1,810,619; June 16.
Otto, Carl, Essen-Ruhr, Germany. Closure for coke oven chambers. 1,810,495; June 16.
Oursler, John S., Munhall, Pa. Sawing apparatus. 1,810,144; June 16.
Overman Cushion Tire Company. (See Schoff, A. L., and Nelson, assignors.)
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Sound reproducing apparatus. 1,810,324; June 16.
Owens, Freeman H., New York, N. Y. Sound shutter. 1,810,527; June 16.
Owens-Illinois Glass Company. (See Soubier, Leonard D., assignor.)
P & M Company, The. (See Preston, Frederick A., assignor.)
Pacific Safety Equipment Company. (See Bullard, Edward W., assignor.)
Paffrath, Ernest H., St. Louis, Mo. Sewer inlet. 1,810,572; June 16.
Paidar, Emil J., Co. (See Emmert, John R., assignor.)
Palmer, Robert C., Pensacola, Fla., assignor to The Newport Company, Carrollville, Wis. Purifying and decolorizing rosin. 1,810,222; June 16.
Papst, Hermann, St. Georgen, Schwarzwald, Germany. Rotor for asynchronous alternating current motors. 1,810,056; June 16.
Park, Charles M. (See Cowles, Theodore B., assignor.)
Parker, Charles, assignor to The Locke Steel Chain Company, Bridgeport, Conn. Chain making machine. 1,810,724; June 16.
Parker, William S., assignor to Burson Knitting Company, Rockford, Ill. Knitted fabric. Des. 84,433; June 16.
Parker, William S., assignor to Burson Knitting Company, Rockford, Ill. Knitted fabric. Des. 84,434; June 16.
Parkes, Duane A., Detroit, Mich. Window shade bracket-fixture. 1,810,676; June 16.
Parks, Ostrander J., River Forest, assignor to General American Tank Car Corporation, Chicago, Ill. Outlet valve mechanism. 1,810,620; June 16.
Parks, Ostrander J., River Forest, assignor to General American Tank Car Corporation, Chicago, Ill. Valve mechanism. 1,810,621; June 16.
Parks & Woolson Machine Company. (See Richardson, Charles G., assignor.)
Pascal, Charles, Montreal, Quebec, Canada. Rail joint. 1,810,622; June 16.
Paszkowski, Paul, Irvington, N. J., assignor to Westinghouse Electric & Manufacturing Company. Induction meter. 1,810,028; June 16.
Paton, Clyde R., assignor to The Studebaker Corporation, South Bend, Ind. Radiator support. 1,809,986; June 16.
Paulding, John I., Inc. (See Johnson, Frank E., assignor.)
Paulding, John I., Inc. (See Johnson, Gustaf A., assignor.)
Paulding, John I., Inc. (See Johnson, Gustaf A. and A. A., assignors.)
Paulding, John I., Inc. (See Wack, Henry K., assignor.)
Paulson, Henry C., assignor to The Proof Machine and Brass Foundry Company, Cleveland, Ohio. Automobile mirror. 1,810,435; June 16.
Pavelka, Edward J., New York, N. Y. Refuse receptacle. 1,810,784; June 16.
Paxton, Elisha W., Washington, assignor to Highland Western Glass Company, Washington, Pa. Apparatus for and method of making wire glass. 1,809,863; June 16.
Pays, Achille. (See Babin, J., and Pays.)
Pearce, W. L. (See Church, Walter L., assignor.)
Pearson, Oscar A., Oak Park, assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Insulating bushing. 1,809,864; June 16.
Pearson, Robert D. (See Kinkaid, J. H., and Weston, assignors.)
Ped, Incorporated. (See Ljungstrom, Fredrik, assignor.)
Peelle Company, The. (See Peelle, Robert S., assignor.)
Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Elevator door. 1,810,496; June 16.
Peerless Products Co. (See Gedge, Edna R., assignor.)
Peerless Pump Company. (See Wintroath, John A., assignor.)
Pelton, George M., assignor to The Filer & Stowell Company, Milwaukee, Wis. Setworks. 1,810,029; June 16.
Pennicott, Roy, Seattle, Wash., assignor to Remington Typewriter Company, Ilion, N. Y. Combined typewriting and computing machine. 1,810,325; June 16.
Perkins, Julian L., West Springfield, and H. D. Croft, Springfield, assignors to Perkins Machine & Gear Company, West Springfield, Mass. Gear construction. 1,810,368; June 16.
Perkins Machine & Gear Company. (See Perkins, J. L., and Croft, assignors.)
Perper, Israel, Bronx, N. Y. Shade roller mounting. 1,810,497; June 16.
Perrine, Emmett B., Los Angeles, Calif. Automatic fishing reel. 1,810,573; June 16.
Peterkin, Albert G., jr., Bryn Mawr, assignor to The Atlantic Refining Company, Philadelphia, Pa. Refining hydrocarbon oils. 1,810,369; June 16.
Peters, Henry, Clifton, N. J. Stocking. Des. 84,435; June 16.
Peters, Henry, Clifton, N. J. Stocking. Des. 84,436; June 16.
Peters, Henry W., assignor to H. W. Peters Co. Inc., Boston, Mass. Article of jewelry. 1,810,291; June 16.
Peters, H. W., Co., Inc. (See Peters, Henry W., assignor.)
Peters, Henry W., Boston, Mass. Finger ring and the like. 1,810,850; June 16.
Petersen, Hugo, Berlin-Steglitz, Germany. Manufacture of sulphuric acid. 1,810,253; June 16.
Peterson, Alfred, Denver, Colo. Apparatus for gluing backs on to books. 1,810,223; June 16.
Peterson, Claus G. (See Wernmark, Carl G., assignor.)
Peterson, Eugene, assignor to Western Electric Company, Incorporated, New York, N. Y. Wave modulation and applications thereof. 1,810,326; June 16.
Peterson, Roy E., East Norwalk, assignor to The E. H. Hotchkiss Company, Norwalk, Conn. Stapling machine. 1,810,528; June 16.
Petit, Raymond, assignor to Société Anonyme Francaise dite: Bricard, Ancienne Maison Sterlin, Paris, France. Rotatable transmission irreversible in both directions. 1,810,851; June 16.

Petroff, Metodi, et al. (See Vilfordi, George L., assignor.)
Pfeiffer, Fred B., Akron, assignor to Seiberling Rubber Company, Barberton, Ohio. Fabric slitting machine. 1,810,677; June 16.
Pharr, William N., assignor of two-thirds to Hartsell Mills Company, Concord, N. C. Soluble tube for dyeing and bleaching. 1,810,057; June 16.
Phelps, John S., Whittier, Calif. Stamping machine for conveyers. 1,810,327; June 16.
Phillips, Ezra A., assignor of one-half to Walter J. H. Lown, Smackover, Ark. Tubing drain. 1,810,436; June 16.
Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Gas range. 1,810,725; June 16.
Pieper, Henri, Brussels, Belgium. Hydraulic motor installation. 1,810,254; June 16.
Pierce, Maurice C., Madison, Wis. Vehicle support. 1,810,726; June 16.
Pierce Steel Pile Corporation. (See Bulger, Arthur J., assignor.)
Pierini, Erasmo, Brooklyn, N. Y., assignor to Ideal Belgian Fur Dyeing Company, Inc. Fur dyeing machine. 1,809,909; June 16.
Platel, Noël, Totowa, N. J. Hair curling device. 1,810,678; June 16.
Pledger, Charles R., Kearney, Nebr. Nonglare headlight. 1,810,623; June 16.
Ploeger, Clyde E., Evansville, Ind., assignor to Servel, Inc., New York, N. Y. Valve. 1,810,498; June 16.
Pneumatic Scale Corporation. (See English, Analdo M., assignor.)
Polson, William F., Buffalo, N. Y. Knife sharpener. 1,810,727; June 16.
Ponarouse, George, San Francisco, Calif. Hair curler. 1,810,785; June 16.
Popp, Silvan R. (See McClintock, O. B., Popp, and Hanson.)
Porte, René, assignor to Societe Hardoll (Etablissements Hariveau & Dolimier, et Rene Porte & Cie. reunis) Levallois Perret, France. Automatic gasoline feeding apparatus. 1,809,944; June 16.
Possons, Minard A., Cleveland, Ohio, assignor to American Stove Company, St. Louis, Mo. Radiant heater. 1,810,852; June 16.
Poulos, Frank, New York, N. Y. Exerciser and body builder. 1,810,255; June 16.
Powell, Dalton U., Woodsfield, assignor of one-half to Orton C. Dunn, Marietta, Ohio. Heating apparatus for liquids. 1,810,185; June 16.
Powell, John, Kokomo, Ind. Feeder conveyer for husking units. 1,810,437; June 16.
Pownall, Raymond, Rochester, N. Y. Luggage carrier. 1,810,786; June 16.
Pratt, Best, Chicago, Ill. Quick release valve. 1,810,292; June 16.
Pratt, Clifton J., St. Louis, Mo., assignor to The Automotive Distillate Corporation, Independence, Kans. Manufacturing high compression automotive distillate. 1,810,574; June 16.
Pressed Piston Ring Company. (See Bowers, Thomas A., assignor.)
Preston, Frank G., Tacoma, assignor of one-half to J. N. Marker, Tacoma, Wash. Marine salvage device. 1,810,084; June 16.
Preston, Frederick A., Lake Forest, assignor to The P & M Company, Chicago, Ill. Rail anchor. 1,809,987; June 16.
Price, Franklin B., Newark, Ohio. Lamp stand. Des. 84,437; June 16.
Price, Joseph, Stapleton, Staten Island, assignor to The Griscom-Russell Company, New York, N. Y. Heat exchanger. 1,809,910; June 16.
Prickett, Clyde W., Santa Monica, Calif. Buck anchor. 1,810,224; June 16.
Pridham, Edwin S., assignor to The Magnavox Company, Oakland, Calif. Sound diaphragm. 1,809,911; June 16.
Proof Machine and Brass Foundry Company, The. (See Paulson, Henry C., assignor.)
Prose-Maco Manufacturing Company. (See Tracy, J. M., and Scherer, assignors.)
Prutsman, Harold C. (See Kritchevsky, W., and Prutsman.)
Prutzman, Paul W. (See Jones, P., and Prutzman.)
Prutzman, Paul W. (See Vogel, Willard L., assignor.)
Puffer-Hubbard Manufacturing Co. (See Thomas, Owen W., assignor.)
Pugh, Emerson. (See Fay, O. J., Heimberger, and Pugh.)
Pugh, Emerson, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method and apparatus for welding. 1,810,225; June 16.
Pullclean Manufacturing Corporation. (See Trinks, W. W., and Tucker, assignors.)
Pullman Car & Manufacturing Corporation. (See Carry, C., Mussey, and Blomberg, assignors.)
Purnell, Edward A., assignor to The General Fireproofing Company, Youngstown, Ohio. Desk. Des. 84,438; June 16.
Purnell, Edward A., assignor to The General Fireproofing Company, Youngstown, Ohio. Table. Des. 84,439; June 16.
Quasi-Arc Company. (See Musto, Romeo J., assignor.)
Quinn, David, Eau Claire, Wis. Mail box. 1,810,058; June 16.
Quiring, Kornelius, Oakland, Calif. Collapsible drawing table. 1,810,575; June 16.
Raab, Andrew, Portland, Oreg. Agricultural implement. 1,810,787; June 16.
Radio Corporation of America. (See Brown, John, assignor.)
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Corporation of America. (See Romp, Johan, assignor.)
Radio Corporation of America. (See Smith, Theodore A., assignor.)
Radio Corporation of America. (See Weinberger, Julius, assignor.)
Radó, Leopold, Halensee, Berlin, Germany. Metal fabric and manufacturing the same. 1,810,438; June 16.
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Manufacture of paper. 1,810,728; June 16.
Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Manufacture of paper. 1,810,729; June 16.
Railway Utility Company. (See Hartwig, William G., assignor.)
Ramos, Juan, Olangapo, P. I. Fountain drawing pen. 1,810,788; June 16.
Rankin, William K., Scotia, N. Y., assignor to General Electric Company. Switch operating and controlling mechanism. 1,810,624; June 16.
Rapellin, René, Los Angeles, Calif. Grease gun. 1,810,426; June 16.
Ray, James L., Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company. Bearing housing seal. 1,810,370; June 16.
Ray, Jesse A. (See Ray, Josiah B. and J. A.)
Ray, Josiah B. and J. A., Decatur, Ind. Christmas tree stand. 1,810,553; June 16.
Raybestos-Manhattan, Inc. (See Kirschbraun, Lester, assignor.)
Raymond, Edward F., Sante Fe Springs, Calif. Underreamer. 1,809,988; June 16.
Raymond, Edward F., Sante Fe Springs, assignors to J. W. MacClatchie, Compton, Calif. Underreamer. 1,810,030; June 16.
Rea, Wilton T., Flushing, N. Y., assignor to American Telephone and Telegraph Company. Control arrangement for carrier apparatus. 1,809,945; June 16.
Reader, Allan W., Ferndale, Mich., assignor to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,809,865; June 16.
Recorder Printing and Publishing Co., The. (See Aker, Leonard, assignor.)
Redirected Light Corporation of America. (See Whalen, Edward J., assignor.)
Reed Roller Bit Company. (See Behnke, Guy E., assignor.)
Rees Manufacturing Corporation. See Kohler, John H., assignor.)
Reese, Alfred, Hamburg, Germany. Door closer. 1,810,293; June 16.
Reese, William W., assignor to The Duncan & Miller Glass Company, Washington, Pa. Glass tumbler or similar article. Des. 84,440; June 16.
Regan Safety Devices Company, The. (See Bodde, Theodore, assignor.)
Reinhardt, George, Pleasant Plains, Staten Island, N. Y. Tire casing. Des. 84,441; June 16.
Reiter, Daniel I., New York, N. Y. Snap fastener element. 1,810,576; June 16.
Remington Accounting Machine Corporation. (See Strother, Robert H., assignor.)
Remington Rand Inc. (See Lasker, William W., assignor.)
Remington Typewriter Company. (See Pennicott, Roy, assignor.)
Republic Steel Corporation. (See Schmitz, Fred A., assignor.)
Reserve Holding Company. (See Bellamy, John I., assignor.)
Reserve Holding Company. (See Hershey, Harry E., assignor.)
Reserve Holding Company. (See Wicks, John, assignor.)
Rettig, Oscar F., and Carl E. West, assignors to Right-Way Brake Tester Company, Watertown, Wis. Brake testing device. 1,810,085; June 16.
Revere Rubber Company. (See Cobb, Henry Z., assignor.)
Reynolds, Carl C., Santa Fe, N. Mex. Liquid purification system. 1,810,789; June 16.
Reynolds Gas Regulator Co. (See Ford, Albert G., assignor.)
Reynolds, Harper A., East Cleveland, Ohio, assignor to The H. N. White Company, Cleveland, Ohio. Balancer. 1,810,086; June 16.
Rheinische Metallwaaren- und Maschinenfabrik. (See Herlach, Fritz, assignor.)
Rheinische Metallwaaren- und Maschinenfabrik Sommerda Aktiengesellschaft. (See Karsten, Peter, assignor.)
Rhenania-Kunheim Verein Chemischer Fabriken Aktiengesellschaft. (See Rothe, F., and Brenek, assignors.)
Rice, Kirk, assignor to H. F. Allen, Oklahoma City, Okla. Electric apparatus for teaching mathematics. 1,810,529; June 16.

Richards, Frederick T., Peoria, assignor to Stover Manufacturing & Engine Co., Freeport, Ill. Doorstop. 1,810,186; June 16.
Richardson, Charles G., assignor to Parks & Woolson Machine Company, Springfield, Vt. Machine for applying transfer stamps. 1,810,294; June 16.
Richardson, Edward A., West Mansfield, Mass. Cleat mounting. 1,810,577; June 16.
Riemenschneider, Ernest, assignor to The Midland Steel Products Company, Cleveland, Ohio. Welding metal tubing. 1,810,112; June 16.
Riesche, Louis H., Chicago, Ill. Collapsible table. 1,809,866; June 16.
Riggle, Leo J., Monroe, Wis. Apparatus for developing photographic negatives. 1,810,790; June 16.
Right-Way Brake Tester Company. (See Rettig, O. F., and West, assignors.)
Rimailho, Emile, Paris, France. Elastic wheel with flexible rim. 1,810,854; June 16.
Rit Products Corporation. (See Kritchevsky, Wolf, assignor.)
Rit Products Corporation. (See Kritchevsky, W., and Prutsman, assignors.)
Ritchie, Charles F. (See Macdonald, F., Allen, Ritchie, and Manchee.)
Rittberger, William H., Granite City, Ill. Sausage and roll heater. 1,809,867; June 16.
Ritter, John H., Charleroi, Pa. Glass furnace charging apparatus. 1,810,730; June 16.
Ritter, John H. and J. J., Seattle, Wash. Electrochemical converter. 1,810,295; June 16.
Ritter, John J. (See Ritter, John H. and J. J.)
Roark, Ernest O., assignor of one-fourth to C. M. O'Shaughnessy, Kansas City, Mo. Drum beater. 1,810,731; June 16.
Robbins & Meyers, Inc. (See Schirmer, Carl E., assignor.)
Roberts, Earl L., Pittsfield, Mass. Boat. Des. 84,442; June 16.
Roberts-Gordon Appliance Corporation. (See Roberts, Millard J., assignor.)
Roberts & Mander Stove Company. (See Antrim, William D., assignor.)
Roberts, Millard J., assignor to Roberts-Gordon Appliance Corporation, Buffalo, N. Y. Gas burner. 1,810,373; June 16.
Robertson, John H., London, England. Centrifugal governor mechanism. 1,810,059; June 16.
Robertson, John H., London, England. Governor. 1,810,401; June 16.
Robinson, James W. (See Angel, H., and Robinson.)
Robinson, Joseph, New York, N. Y. Support for automatic connecters. 1,809,946; June 16.
Rockmore, Jeannette, New York, N. Y. Drain device. 1,810,855; June 16.
Roesler, Joseph F., Lufkin, Tex. Sliding window screen. 1,810,791; June 16.
Roger Ballast Car Company. (See Hoscelt, William J., assignor.)
Rogers, Leonard M., Mendon, assignor to Draper Corporation, Hopedale, Mass. Protective lock for loom reversing mechanism. 1,810,679; June 16.
Rohe, Bernard, Elgin, Ill. Latch. 1,810,087; June 16.
Rollman, Michael A., Mount Joy, Pa. Electric plug. 1,810,439; June 16.
Romp, Johan, Eindhoven, Netherlands, assignor to Radio Corporation of America. Transformer winding wire. 1,810,499; June 16.
Ross, Harry M., assignor of one-half to Beveridge Paper Company, Indianapolis, Ind. Decorating paper. 1,810,145; June 16.
Rothe, Fritz, and H. Brenck, assignors to the firm: Rhenania-Kunheim Verein Chemischer Fabriken Aktiengesellschaft, Berlin, Germany. Obtaining alumina and phosphates. 1,810,402; June 16.
Rothelius, Carl G. B., assignor to Aktiebolaget Formator, Stockholm, Sweden. Machine for stripping tobacco leaves. 1,810,792; June 16.
Rothgarn, Andrew E., assignor to S. C. Clow, Minneapolis, Minn. Pneumatic car puller. 1,810,680; June 16.
Rouse, Jesse B., Dunn, N. C. Accelerator heat protector. 1,810,625; June 16.
Rowe, George E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Leer stacker. 1,809,989; June 16.
Ruben Patents Company. (See Ruben, Samuel, assignor.)
Ruben, Samuel, assignor to Ruben Patents Company, New York, N. Y. Gaseous discharge device. 1,809,912; June 16.
Rubin, Adolph, St. Louis, Mo. Refrigerator latch. 1,810,530; June 16.
Rubin, Adolph, St. Louis, Mo. Refrigerator latch. 1,810,531; June 16.
Rubin, Adolph, St. Louis, Mo. Refrigerator latch. 1,810,532; June 16.
Rubin, Adolph, St. Louis, Mo. Refrigerator latch. 1,810,533; June 16.
Rubin, Adolph, St. Louis, Mo. Spring hinge. 1,810,534; June 16.
Rudd, Frank E., Louisville, Ky. Textile fabric. Des. 84,443; June 16.
Rupp, Carl A., assignor to Commercial Iron Works of Los Angeles, Los Angeles, Calif. Gripper and breaker wheel and bridging spring for web feeding and severing apparatus. 1,810,403; June 16.
Rupp, Carl A., assignor to Commercial Iron Works of Los Angeles, Los Angeles, Calif. Drive and control for printing presses. 1,810,404; June 16.
St. Regis Paper Company. (See Kronmiller, C. G., assignor.)
Sanders, Marshall T. (See Davis, R. G., and Sanders.)
Sanitary Products Corporation. (See Jay, William C., assignor.)
Sanner, Hulbert, assignor to L. A. Ederer, Chicago, Ill. Program machine. 1,810,732; June 16.
Sauer, Louis J., Oak Park, assignor to C. H. Joy, sr., Chicago, Ill. Bearing construction. 1,810,296; June 16.
Savy, Robert, and L. Lebert, Courbevoie-on-the-Seine, France, and M. M. Guggenheim, assignors to Baker Perkins Company, Inc., Saginaw, Mich. Enrobing or confection-coating apparatus. 1,810,681; June 16.
Schaake, William, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Pull-off yoke. 1,810,733; June 16.
Schaefer, Adolph A., North Tonawanda, N. Y. Friction testing machine. 1,810,405; June 16.
Schaumbad Gesellschaft mit beschrankter Haftung. (See Dyhr, Jens, assignor.)
Schenck, Carl, Eisengresserei und Maschinenfabrik Darmstadt G. m. b. H. (See Heymann, H., and Lehr, assignors.)
Scherer, Francis R. (See Tracy, J. M., and Scherer.)
Schierer, Jacob. (See Messer, Abraham, assignor.)
Schilling, Frederick B. (See Hartley, H. J., and Schilling.)
Schirmer, Carl E., assignor to Robbins & Meyers, Inc., Springfield, Ohio. Trolley for hoists. 1,810,578; June 16.
Schleyer, Victor, assignor to Dean Hill Pump Company, Anderson, Ind. Turbo-pump. 1,810,297; June 16.
Schlotzhauer, Walter S., Douglas, Ariz. Wind motor. 1,810,113; June 16.
Schmeller Holding Company. (See Schmeller, John, sr., assignor.)
Schmeller, John, sr., Lakewood, assignor to Schmeller Holding Company, Cleveland, Ohio. Reworking finely divided metal particles. 1,810,535; June 16.
Schmidt, Leopold, assignor to Naamlooze Vennootschap Hollandsche Industrieen Handelmaatschappij, The Hague, Netherlands. Appliance for the automatic determination of the range factors for combating aircraft with guns having two or three axes and mounted on moving platforms. 1,810,298; June 16.
Schmitz, Fred A., Canton, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio. Edge construction for table tops and the like. 1,810,579; June 16.
Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Window casement lock. 1,810,856; June 16.
Schoff, Albert L., Caldwell, and E. N., and G. J. Nelson, Belleville, N. J., assignors to Overman Cushion Tire Company, Inc., New York, N. Y. Making cushion tires. 1,810,406; June 16.
Scholimeyer, William A., Yonkers, N. Y. Curtain and shade fixture. 1,810,146; June 16.
Schrade, George M., Bridgeport, Conn. Pocketknife. 1,810,031; June 16.
Schrader's A., Son, Incorporated. (See Wahl, J., and Melzer, assignors.)
Schroeder, George R., assignor of one-half to T. L. Campbell, Beverly, Kans. Posting tray. 1,810,793; June 16.
Schubert, William J., Bethlehem, Pa., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del. Knitted fabric. 1,810,580; June 16.
Schuda, Ernest J., assignor to Lovell Manufacturing Company, Erie, Pa. Wringer. 1,810,500; June 16.
Schulthess, Ernest, South Orange, N. J. Oil hose. 1,810,032; June 16.
Schulzke, Richard F., Portland, Oreg. Ironing table. 1,810,407; June 16.
Schurr, Charles H., assignor to The Lees-Bradner Company, Cleveland, Ohio. Truing and positioning device for grinding wheels. 1,810,408; June 16.
Schmutz, Julius, Louisville, Ky. Printing plate. 1,810,089; June 16.
Schmutz, Julius, Louisville, Ky. Printing plate mold. 1,810,088; June 16.
Schwartz, Henry, Chicago, Ill. Container. 1,810,626; June 16.
Scism, John N., Hartford, Conn. Drop hammer. 1,810,536; June 16.
Scism, John N., Hartford, Conn. Drop hammer. 1,810,537; June 16.
Scism, John N., Wilkinsburg, Pa. Motor mounting. 1,810,538; June 16.
Scofield, Edgar, New York, assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y. Container. 1,810,734; June 16.
Scott & Williams Incorporated. (See Allen, John M., assignor.)
Scottish Dyes, Limited. (See Drescher, H. A. E., Harris, Wylam, and Thomas, assignors.)
Segal Lock & Hardware Co. (See Hines, John, assignor.)
Seiberling Rubber Company. (See Crossan, Jesse R., assignor.)
Seiberling Rubber Company. (See Pfeiffer, Fred B., assignor.)

Sell, Gilbert E., Conshohocken, assignor to E. J. Lavino and Company, Philadelphia, Pa. Making material for the purification of gaseous mixtures. 1,809,990; June 16.
Selden Company, The. (See Selden, James M., assignor.)
Selden, James M., assignor to The Selden Company, Pittsburgh, Pa. Catalytic apparatus. 1,810,147; June 16.
Selectograph Company. (See Kumli, Charles F., assignor.)
Sell, Willy, Windelsbleiche, near Bielefeld, assignor to the Firm K. & Th. Möller Gesellschaft mit beschrankter Haftung, Brackwede, Westphalia, Germany. Filtering apparatus. 1,810,090; June 16.
Selle, Oliver, St. Louis, Mo. Bracelet and links therefor. 1,810,060; June 16.
Sellers, William, & Company. (See Benzon, George H., jr., assignor.)
Semmes, Harry H., Chevy Chase, Md., assignor to Bendix Aviation Corporation, New York, N. Y. Airfoil. 1,809,913; June 16.
Sentry Safety Control Corporation. (See Adams, John F., assignor.)
Sentry Safety Control Corporation. (See Adams, J. F., and Allen, assignors.)
Sentry Safety Control Corporation. (See Allen, T. T., and Adams, assignors.)
Sentry Safety Control Corporation. (See Fewkes, Joseph T., assignor.)
Séror, Albert, Chicago, Ill. Toy animal. Des. 84,444; June 16.
Séror, Albert, Chicago, Ill. Doll. Des. 84,445; June 16.
Servel, Inc. (See Ploeger, Clyde E., assignor.)
Seydler, Frank K., Urbana, Ill. Lamp. Des. 84,440; June 16.
Seymour, James M., Newark, N. J. Vertical tubular condenser. 1,809,914; June 16.
Shacklett Automatic Card Feeder Company. (See Shacklett, William E., assignor.)
Shacklett, William E., New Albany, Ind., assignor to Shacklett Automatic Card Feeder Company, Louisville, Ky. Printing press attachment. 1,810,256; June 16.
Shaeffer, Edward J. (See Voorhees, V., and Shaeffer.)
Sharp, Paul F., assignor to Cornell University, Ithaca, N. Y. Preparing lactose. 1,810,682; June 16.
Shaw, William E. V., and D. B. and R. H. Benham, Minneapolis, Minn. Butter handling device. 1,810,226; June 16.
Shea, John R., River Forest, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Drive for screw machines and the like. 1,810,227; June 16.
Sheboygan Couch Company. (See Meves, Charles W., assignor.)
Shedd, Hugh F., Minneapolis, Minn. Calendar. 1,810,440; June 16.
Sheets, Barton R., assignor to Gardner-Denver Company, Denver, Colo. Furnace for heating drill steels. 1,810,683; June 16.
Sheller, Samuel H., Marion, Pa. Combined clamp and lifter for fruit packing tubs. 1,810,257; June 16.
Shepard, Oscar F., Cincinnati, Ohio. Motor control. 1,810,441; June 16.
Shepard, Phil, Owosso, Mich. Fence anchor. 1,809,947; June 16.
Sherwood, Richard J. (See Doyle, Clarence V., assignor.)
Shlesinger, Bernard E., Irondequoit, assignor to Gleason Works, Rochester, N. Y. Producing gears. 1,809,948; June 16.
Shlesinger, William H., Brooklyn, N. Y. Lamp. Des. 84,447; June 16.
Shoemaker, Raymond B., and C. L. Lawrence, New York, N. Y. Dishwashing machine. 1,810,374; June 16.
Shorter, Sydney A. (See Nuttall, T., and Shorter.)
Shuey, Philip M., and E. Woodward, Savannah, Ga. Recovery of phosphate fines. 1,810,794; June 16.
Siegle, Jacob C., assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio. Joint for iron and steel pipes and tubes. 1,810,091; June 16.
Silk City Metals Coating Company. (See Adler, J., and Doerseln, assignors.)
Sim, James, assignor to G. & J. Weir, Limited, Glasgow, Scotland. Multistage steam-jet ejector. 1,810,873; June 16.
Simler, George C., et al. (See Albertson, Luther D., assignor.)
Simmons, Oliver G., Lakewood, Ohio. Gear shaped cutter and making same. 1,809,868; June 16.
Simmons, Oliver G., Lakewood, Ohio. Gear shaper cutter and making same. 1,809,869; June 16.
Simplex Valve & Meter Company. (See Ledoux, John W., signor.)
Sims, Angus D., and A. C. Wright, Quitman, Miss. Stalk and weed cutter. 1,810,061; June 16.
Sinclair Refining Company. (See Herthel, Eugene C., assignor.)
Singer Manufacturing Company, The. (See Lentz, Charles E., assignor.)
Singley, Benneville L. (See Kurtz, Henry F., assignor.)
Sjodin, Victor. (See Nelson, August W., assignor.)
Slater, Nelson, assignor to S. Slater & Sons, Inc., Webster, Mass. Making pile fabrics. 1,810,328; June 16.
Slater, S., & Sons, Inc. (See Slater, Nelson, assignor.)
Slepian, Joseph, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Electric apparatus. 1,810,033; June 16.
Smith, A. O., Corporation. (See Burnish, Howard J., assignor.)
Smith, A. O., Corporation. (See Furrer, Rudolph, assignor.)
Smith, Charles T., Cleveland Heights, Ohio. Hose coupling. 1,810,735; June 16.
Smith & Davis Manufacturing Company. (See Duvall, William J., assignor.)
Smith, Edward D., et al. (See Wintroath, John A., assignor.)
Smith, Frank E., Scottdale, Pa. Return roller support. 1,810,148; June 16.
Smith, Hannah M. (See Keen, Thomas A., assignor.)
Smith, Harry M., Elkhart, assignor to Walter F. Bossert, Liberty, Ind. Concrete reenforcement. 1,809,870; June 16.
Smith, John H., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser. 1,809,915; June 16.
Smith, John H., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser. 1,810,375; June 16.
Smith, Raymond D., Pleasantville, N. Y., assignor to Tremont Products Corporation, Boston, Mass. Double acting switch timer. 1,810,187; June 16.
Smith, Stanley J. (See Jones, A. D., and Smith.)
Smith, Theodore A., Ridgewood, N. J., assignor to Radio Corporation of America. Television system. 1,810,188; June 16.
Smith, Walter C., Noyian, Pa., assignor to Cerro de Pasco Copper Corporation, New York, N. Y. Production of bismuth. 1,809,871; June 16.
Smith, Walter E. Warwick Downs, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,448; June 16.
Smitmans, John A., assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Billet manipulator for rolling mills. 1,810,684; June 16.
Smyth, Rodrigo M., San Jose, Costa Rico. Flying machine. 1,810,114; June 16.
Snyder, Joe, Iroquois, S. Dak. Chicken treater. 1,810,228; June 16.
Societa Italiana Pirelli. (See Emanueli, Luigi, assignor.)
Societe Anonyme des Hauts-Fourneaux et Founderies De Pont-A-Mousson. (See Mathieu, Leon L., assignor.)
Societe Anonyme des Procedes R., Audubert. (See Audubert, René, assignor.)
Société Anonyme Francaise dite: Bricard, Ancienne Maison Sterlin. (See Petit, Raymond, assignor.)
Societe Anonyme Manufacture d'Appareils Graisseurs. (See Steurs, Jean M. M. A., assignor.)
Societe Francaise Radio Electrique. (See Chireix, Henri, assignor.)
Societe Hardoll (Etablissements Hariveau & Dolimier, et Rene Porte & Cie. reunis). (See Porte, René, assignor.)
Soderberg, Victor L., Detroit, Mich. Die for die casting and making the same. 1,809,872; June 16.
Soderquist, Arthur R., Idaho Falls, Idaho. Locking key for closure plugs. 1,810,795; June 16.
Sokoloff, Boris N., Rosendale, N. Y., assignor to Federal Telegraph Company, San Francisco, Calif. Method of and apparatus for amplifying weak electric currents. 1,810,539; June 16.
Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass feeder. 1,810,736; June 16.
Southborough, Lord. (See Cross, Walter M., assignor.)
Southern, Joseph H., Redcar, England. Fireproof floor. 1,810,149; June 16.
South West Box Company et al. (See Witte, James G., assignor.)
Spahr, Oral F., assignor to Enterprise Optical Mfg. Co., Chicago, Ill. Arc lamp. 1,810,299; June 16.
Sparkless Cleaner Company. (See Kritchevsky, W., and Morrill, asignors.)
Speidel Chain Co. (See Fassnacht, Karl, assignor.)
Spencer, William F., Muncie, Ind. Blackboard stand and work case. 1,810,501; June 16.
Sperber, Bernhard, Berlin, Germany. Egg-boiling frame. 1,810,258; June 16.
Spiess, Georg, Leipzig-Plagwitz, Germany. Sheet cutting machine. 1,810,442; June 16.
Spire, Sheldon S., assignor to Syracuse Chilled Plow Company, Inc., Syracuse, N. Y. Agricultural implement. 1,810,889; June 16.
Sponar, Aloysius T., assignor to John Wood Manufacturing Company, Conshohocken, Pa. Gas water heater. 1,810,887; June 16.
Spring, Joseph J., assignor to The Goss and Deleeuw Machine Company, New Britain, Conn. Multiple spindle chucking machine. 1,810,300; June 16.
Springfield Lumber Company. (See Dearing, Joseph W., assignor.)
Squier, Geo. L., Mfg. Co., The. (See Faber, Otto, assignor.)
Staggs, Jesse D., Los Angeles, Calif. Sound device. 1,809,916; June 16.
Staley, Harrison L., Martinsville, Ind. Boiler tube cleaner. 1,810,301; June 16.
Stallmann, Otto. (See Gubelmann, I., Weiland, and Stallmann.)
Stallone, Barney A., Tacoma, Wash. Banjo mute. 1,810,259; June 16.
Standard Oil Company. (See Voorhees, V., and Shaeffer, assignors.)

Standard Oil Company of New York. (See Johnson, Raymond P., assignor.)
Standard Stoker Company Inc., The. (See Lower, Nathan M., assignor.)
Standard-Trump Bros. Machine Company. (See Schubert, William J., assignor.)
Standerwick, Reginald G., Marblehead, Mass., assignor to General Electric Company. Constant speed control for prime movers. 1,810,627; June 16.
Stanton, Willard J., assignor, by mesne assignments, to American Electric Company, Inc., Chicago, Ill. Protective device. 1,810,189; June 16.
Stark, David, Arverne, N. Y. Shoe. 1,810,581; June 16.
Steedman, Edwin H., St. Louis, Mo. Shaft sealing device. 1,810,582; June 16.
Steiner, George A., Salt Lake City, Utah, G. Wasileski and W. Murdo, Chicago, Ill., assignors to Steiner Sales Company, Salt Lake City, Utah. Towel cabinet. 1,809,873; June 16.
Steiner Sales Company. (See Steiner, G. A., Wasileski, and Murdo, assignors.)
Sterling Spring Company. (See Beaumont, George H., assignor.)
Steurs, Jean M. M. A., assignor to Societe Anonyme Manufacture d' Appareils Graisseurs, Vilvorde, Belgium. Lubricating pad. 1,810,443; June 16.
Stevens, Edward R., and A. F. Nicolai, Portland, Oreg. Device for time dipping. 1,809,991; June 16.
Stevens, Horace F., Kenilworth, N. J. Controlling means. 1,810,376; June 16.
Stevens, Robert W., Granite City, Ill. Automobile wheel brake. 1,810,628; June 16.
Stewart, Earl D. (See Jameson, E., Stewart, and Wilson.)
Stiles, Frank I., Miami, Fla. Apparatus for photographing the sea bottom. 1,810,302; June 16.
Still, Carl, Recklinghausen, Germany. Coke oven. 1,810,629; June 16.
Stirrup, Frank A., Westfield, N. J. Coupling and mounting member for fixtures and the like. 1,810,229; June 16.
Stokes, John C., Houston, Tex. Supporting sucker rod and pump lines. 1,810,303; June 16.
Stone, Elizabeth M., Rosslyn, Va. Slip. 1,810,796; June 16.
Stone, R. Harry, Irvington, N. J., assignor to Titeflex Metal Hose Co. Hose coupling. 1,809,874; June 16.
Stoner-Ames Brake Company. (See Stoner, George H., assignor.)
Stoner, George H., East Boston, assignor, by mesne assignments, to Stoner-Ames Brake Company, Inc., Boston, Mass. Internal expansion brake. 1,810,092; June 16.
Stover, Albert, et al. (See Albertson, Luther D., assignor.)
Stover Manufacturing & Engine Co. (See Richards, Frederick T., assignor.)
Strauss, Carol L., Bangor, Me. Garment hanger. 1,810,190; June 16.
Strauss, Joseph B., Chicago, Ill. Bridge. 1,810,034; June 16.
Strother, Robert H., Stamford, Conn., assignor to Remington Accounting Machine Corporation, New York, N. Y. Computing machine. 1,810,329; June 16.
Studebaker Corporation, The. (See James, William S., assignor.)
Studebaker Corporation, The. (See Link, Vincent, assignor.)
Studebaker Corporation, The. (See Paton, Clyde R., assignor.)
Stueckle, John A., Spokane, Wash. Non-skid tire chain. 1,810,191; June 16.
Suckoff, Louis A., Wilmette, assignor of one-half to F. A. Nachman, Chicago, Ill. Mattress and cushion. Re18,101; June 16.
Sullivan Machinery Company. (See Holmes, Morris P., assignor.)
Sullivan Machinery Company. (See Johansen, Harry C., assignor.)
Sundback, Gideon, assignor to Hookless Fastener Company, Meadville, Pa. Making separable fastener sliders. 1,810,377; June 16.
Sundback, Gideon, assignor to Hookless Fastener Company, Meadville, Pa. Separable fastener. 1,810,685; June 16.
Sundback, Gideon, assignor to Hookless Fastener Company, Meadville, Pa. Separable fastener. 1,810,686; June 16.
Sundstrand Corporation. (See Sundstrand, Oscar J., assignor.)
Sundstrand, Gustaf D., assignor to Sundstrand Machine Tool Co., Rockford, Ill. Machine tool. 1,809,949; June 16.
Sundstrand Machine Tool Co. (See Sundstrand, Gustaf D., assignor.)
Sundstrand, Oscar J., Rockford, Ill. Fountain pen. 1,809,992; June 16.
Sundstrand, Oscar J., Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del. Cash register. 1,810,737; June 16.
Superheater Company, The. (See Hartmann, Otto H., assignor.)
Sure-Shift Transmission Corporation. (See Murray, Howard J., assignor.)
Surface Combustion Corporation. (See Branche, N. T., and Beam, assignors.)
Sutton Engineering Company. (See Wise, George A., assignor.)
Swallow, Stuart H., assignor to W. H. Coe Manufacturing Company, Providence, R. I. Metallic leaf applying device. 1,809,875; June 16.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,810,444; June 16.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,810,445; June 16.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,810,446; June 16.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,810,447; June 16.
Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,810,448; June 16.
Swanson, Edwin C., assignor to Greenlee Bros. & Co., Rockford, Ill. Circle hole cutter. 1,809,993; June 16.
Swinford, Levi, Comanche, Okla. Well tube cleaner. 1,810,260; June 16.
Switzer, Jesse M., et al. (See Hott, Ion V. K., assignor.)
Symank, John H., Austin, Tex. Shock absorber. 1,810,797; June 16.
Syracuse Chilled Plow Company. (See Spire, Sheldon S., assignor.)
Tahara, Hisakichi, Tokyo, Japan. Movable dam. 1,810,449; June 16.
Tallman, Russell W. (See Andres, Edward M., assignor.)
Tangen, Louis H., Duluth, Minn. Clamp or clothespin. 1,810,304; June 16.
Tapp, Charles E., Barachois, assignor to A. Paradis, Quebec, Canada. Combination container and bottle opener. 1,810,630; June 16.
Taveau, René de M., Elizabeth, N. J., assignor, by mesne assignments, to The Texas Company, New York, N. Y. Preparing alkyl sulphates. 1,810,192; June 16.
Taylor, Elmer R., deceased, East Jordan, Mich.: J. R. Taylor, administratrix. Synchronizing mechanism for combined talking and moving picture machines. 1,810,062; June 16.
Taylor, Francis M. (See Brooks, W. H., and Taylor.)
Taylor, Frank J., San Francisco, Calif. Map folder. 1,809,876; June 16.
Taylor, Jerusha R., administratrix. (See Taylor, Elmer R.)
Taylor, Louis R., assignor to Loeffelholz Co., Milwaukee, Wis. Electrical connecter receptacle. 1,810,687; June 16.
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)
Tellander, Gunnar R., Gottenborg, Sweden. Hot water supply system. 1,810,798; June 16.
Telling Belle Vernon Company, The. (See Frohring, William O., assignor.)
Temple, Paul C., assignor to A. W. Cash Company, Decatur, Ill. Nozzle. 1,810,799; June 16.
Templeton, Karl R., Chicago, Ill. Storage case. 1,809,994; June 16.
Ternstedt Manufacturing Company. (See Schnell, William, assignor.)
Texas Company, The. (See Taveau, René de M., assignor.)
Thomas, Adolph A., New York, N. Y. Automobile bumper. 1,810,502; June 16.
Thomas, Charles A., assignor to Thomas and Hochwalt Laboratories, Inc., Dayton, Ohio. Internal combustion engine. 1,810,193; June 16.
Thomas, Frank B., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Valve controlling device. 1,810,540; June 16.
Thomas, George H., Erie, assignor to American Sterilizer Company, Erie, Pa. Floating reamer holder. 1,810,503; June 16.
Thomas and Hochwalt Laboratories, Inc. (See Thomas, Charles A., assignor.)
Thomas, John. (See Drescher, H. A. E., Harris, Wylam, and Thomas.)
Thomas, Joseph L. M., Morez du Jura, France. Apparatus for reducing to fine powder various materials and products such as enamels. 1,810,800; June 16.
Thomas, Mable M., executrix. (See Thomas, Thomas H.)
Thomas, Owen W., assignor to Puffer-Hubbard Manufacturing Co., Minneapolis, Minn. Box. 1,809,917; June 16.
Thomas, Phillips, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Condenser-bushing voltage control. 1,810,063; June 16.
Thomas, Thomas H., deceased. M. M. Thomas, executrix, Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake release device. 1,810,541; June 16.
Thompson, Charles W., Wallaston, assignor to H. C. Wheeler, Boston, Mass. Towel holder. 1,809,918; June 16.
Thompson Products Inc. (See Hufferd, George H., assignor.)
Thompson, Theodore. (See Moecker, H., jr., and Thompson.)
Thompson, Wilford G., and J. E. Jordan, El Paso, Tex. Cooled development apparatus. 1,810,857; June 16.

Thordarson Electric Manufacturing Company. (See Pearson, Oscar A., assignor.)
Thornton, George G., Erdington, Birmingham, England, assignor to American Anode, Inc., Akron, Ohio. Manufacture of articles from aqueous dispersions of rubber and similar vegetable resins or compounds thereof. 1,810,504; June 16.
Thorp, Vaughn P., River Edge, N. J., assignor to American Telephone and Telegraph Company. Carrier telegraph system. 1,809,950; June 16.
Thorssell, Theodor, and A. Kristensson, Cassel, Germany. Decomposition of crude phosphate. 1,810,858; June 16.
Thumann, Henry F., Redfield, Ark. Poultry feeder. 1,810,230; June 16.
Thurmer, John H., Brooklyn, N. Y. Conveyer. 1,810,859; June 16.
Tietz, Hans. (See Einsler, O., and Tietz.)
Timson, William, assignor to W. & T. Avery Limited, Soho Foundry, Birmingham, England. Ball bearing mounting. 1,810,093; June 16.
Tirrell, Frank, et al. (See Flynn, Jeremiah, assignor.)
Titeflex Metal Hose Co. (See Stone, R. Harry, assignor.)
Toce, Charles A., and A. Clark, Houston, Tex. Triple cam internal combustion motor. 1,810,688; June 16.
Todes, Mollie, Milwaukee, Wis. Garment. 1,810,150; June 16.
Todt, Wilhelm, Lautawerk/Lausitz, Germany. Removing gases from molten leght-metals such as aluminum and its alloys. 1,810,801; June 16.
Townsend, Knowlson, San Francisco, and R. Hill, Oakland, Calif. Oil burner. 1,810,689; June 16.
Townsend, William S., Rochester, Pa., assignor, by mesne assignments, to The Wayne Company, Baltimore, Md. Liquid dispensing apparatus. 1,810,151; June 16.
Tracy, John M., and F. R. Scherer, Rochester, N. Y., assignors to Prose-Mace Manufacturing Company, Kansas City, Mo. Locking device for blackboards. 1,810,305; June 16.
Traer, Glenn W., assignor to Northern Liquite Coal Company, Chicago, Ill. Producing an artificial fuel. 1,810,878; June 16.
Travers, John T., and O. M. Urbain, assignors to The Ohio Sanitary Engineering Corporation, Columbus, Ohio. Granular fertilizer and producing the same. 1,810,802; June 16.
Tremblay, Maria V., Willimantic, Conn. Pot and pan cover. 1,810,860; June 16.
Tremont Products Corporation. (See Smith, Raymond D., assignor.)
Trico Products Corporation. (See Hueber, H., and Horton, assignors.)
Tridex Corporation. (See Wier, Stuart A., assignor.)
Trinks, William W., deceased, Bridgeport; H. Braman, Stratford, Conn., administratrix; and B. W. Tucker, deceased; H. L. Tucker, administratrix, South Orange, N. J.; said W. W. Trinks, and said B. W. Tucker, assignors to Pulilean Manufacturing Corporation, Bridgeport, Conn. Winding machine. 1,810,690; June 16.
Trofimov, Lev A., assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio. Electroresponsive device. 1,810,306; June 16.
Trump, Charles A., Derry, Pa. Poultry leg-band placer and remover. 1,810,631; June 16.
Truplano, Gerome, Brooklyn, N. Y. Safety clothespin. 1,810,542; June 16.
Truplano, Gerome, Brooklyn, N. Y. Protective strainer and cooking pot. 1,810,543; June 16.
Truplano, Gerome, Brooklyn, N. Y. Fountain shaving brush. 1,810,544; June 16.
Truplano, Gerome, Brooklyn, N. Y. Sterilizer. 1,810,545; June 16.
Tucker, Benjamin W. (See Trinks, W. W., and Tucker.)
Tucker, Emmitt M., Medford, Oreg. Power driven snow vehicle. 1,810,505; June 16.
Tucker, Halcyon L., administratrix. (See Trinks, W. W., and Tucker.)
Tuerck, Oscar, Portland, Oreg., assignor to The McKenzie Company. Method and apparatus for making concrete pipe. 1,810,583; June 16.
Turbo-Mixer Corporation, The. (See Beers, Henry S., assignor.)
Turner, Frederick E., Kansas City, Mo. Base frame for elevator machines. 1,810,506; June 16.
Turner, Robert S., Indianapolis, Ind. Power wheel. 1,809,919; June 16.
Uebelmesser, Charles R., and W. Wenderhold, assignors to E. M. Uebelmesser, New York, N. Y. Engine support. 1,810,879; June 16.
Uebelmesser, Elizabeth M. (See Uebelmesser, C. R., and Wenderhold, assignors.)
Ulrich, Emil H. W., New York, N. Y., assignor to The Bryant Electric Company, Bridgeport, Conn. Circuit breaker. 1,810,861; June 16.
Ulrich, Charles B., assignor to Art Metal Construction Company, Jamestown, N. Y. Base for typewriters and other articles. 1,810,378; June 16.
Ulrich, Henry, Mexico, Mexico. Desulphurizing liquid petroleum hydrocarbons or light distillates. 1,810,803; June 16.
Underwood Elliott Fisher Company. (See Dobson, William A., assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Lutz, Friedrich, assignor.)
Union Special Maschinenfabrik, G. m. b. H. (See Maier, Karl, assignor.)
Union Switch & Signal Company, The. (See Brooks, C. A., and Young, assignors.)
Union Switch & Signal Company, The. (See Wallace, Herbert A., assignor.)
United Engineering & Foundry Company. (See Smitmans, John A., assignor.)
United Shoe Machinery Corporation. (See La Chapelle, Fred N., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Oil Products Company. (See Morrell, J. C., and Faragher, assignors.)
Universal Oil Products Company. (See Van Heeden, Arthur P., assignor.)
Universal Optical Corporation. (See Nelson, John N., assignor.)
Universal Winding Company. (See De Wolf, Ernest A., assignor.)
Unverdross, Hermann, Frankfort-on-the-Main, Germany, assignor to Westinghouse Electric & Manufacturing Company. Mechanism for adjusting machine tools. 1,809,995; June 16.
Urbain, Oliver M. (See Travers, J. T., and Urban.)
Urbainati, Mario, Rome, Italy. Current transformer. 1,810,379; June 16.
Utica Products, Inc. (See Felton, George W., assignor.)
Valjean, Ben, assignor to Motor Wheel Corporation, Lansing, Mich. Oil burner pilot. 1,810,035; June 16.
Van Etten, William V., Bellingham, Wash. Roller skate. 1,810,380; June 16.
Van Heeden, Arthur P., assignor to Universal Oil Products Company, Chicago, Ill. Gas producer. 1,810,738; June 16.
Van Marle, Dirk J., assignor to Buffalo Foundry and Machine Company, Buffalo, N. Y. Apparatus for drying sticky materials. 1,810,691; June 16.
Van Valkenburgh, Richard M., and C. A. Cederleaf, Kansas City, Mo., assignors, by mesne assignments, to Wilson-Jones Company, Chicago, Ill. Loose leaf binder. 1,810,231; June 16.
Vedder, Edwin H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Smoke indicator system. 1,810,739; June 16.
Victor Adding Machine Co. (See Johantgen, Oliver D., assignor.)
Vilfordi, George L., assignor of 25% to Metodi Petroff, and 15% to John Butera, Dallas, Tex. Traveling heated and cooled food carrier. 1,809,951; June 16.
Vogel, Willard L., Los Angeles, Calif., assignor of one-tenth to Paul W. Prutzman. Quinolin-benzoic-carboxylic acid. 1,810,261; June 16.
Vogt, Clarence W., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky. Apparatus for continuous production of bricks of ice cream or analogous material. 1,810,740; June 16.
Vogt, Clarence W., assignor to Vogt Instant Freezers, Inc., Louisville, Ky. Density control and delivery of ice cream or the like. 1,810,862; June 16.
Vogt, Clarence W., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky. Apparatus for continuously hardening plastic materials. 1,810,863; June 16.
Vogt, Clarence W., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky. Production of food product bricks. 1,810,864; June 16.
Vogt, Fredrik, Trondhjem, Norway, assignor of one-half to E. C. La Rue, and B. F. Jakobsen, Los Angeles, Calif., doing business as La Rue & Jakobsen. Equalizing stresses in structural elements. 1,810,232; June 16.
Vogt Instant Freezers, Inc. (See Vogt, Clarence W., assignor.)
Volz, Chris L., Detroit, Mich. Electric hair clipper. 1,810,152; June 16.
Von Broembsen, Maxwell L. F., Pretoria, Transvaal, South Africa. Variable speed gear mechanism. 1,810,450; June 16.
Von Frankenberg, Arthur, assignor to Frankart, Inc., New York, N. Y. Ash tray or similar article. Des. 84,449; June 16.
Von Suchorzynski, Anton, Breslau-Bischofswalde, Germany. Diaphragm for sound reproduction. 1,810,307; June 16.
Voorhees, Vanderveer, and E. J. Shaeffer, assignors to Standard Oil Company, Whiting, Ind. Improving pressure distilled oil products. 1,810,632; June 16.
Wack, Henry K., assignor to J. I. Paulding, Inc., New Bedford, Mass. Electric light fixture. 1,810,507; June 16.
Wadman, Harold A., assignor to Hartford-Empire Company, Hartford, Conn. Apparatus and method for annealing glassware. 1,809,996; June 16.
Wadsworth, Frank L. O., Pittsburgh, Pa. Percussion tool. 1,809,952; June 16.
Wagar, Fred L., Wagar, Ala. Trunk and box. 1,810,451; June 16.
Wahl, John, and O. Melzer, Queens, assignors to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Air bag valve coupling. 1,810,115; June 16.
Wahlberg, Nils A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Transmission line device. 1,809,997; June 16.
Wald, George, Belleville, Ill. Receiving apparatus for television. 1,810,692; June 16.

Walden, Lerna D., Kansas City, Kans. Dashpot. 1,810,233; June 16.
Walker Manufacturing Company. (See Bate, John W., assignor.)
Walker Manufacturing Company. (See Larson, W. E., and Harvey, assignors.)
Walker Manufacturing Company. (See Larson, W. E., and Kohler, assignors.)
Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,810,094; June 16.
Wallace, Herbert A., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,810,095; June 16.
Wallace, Herbert A., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,810,096; June 16.
Wallace, Herbert A., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,810,452; June 16.
Wallace, Jeffrey J., assignor to Gullett Gin Company, Amite, La. Cotton press. 1,810,064; June 16.
Walter, B., & Company. (See Walter, Frederick B., assignor.)
Walter, Frederick B., assignor to B. Walter & Company, Inc., Wabash, Ind. Hinge. 1,810,508; June 16.
Walter, Raymond A., assignor to Conveyer Sales Company, New York, N. Y. Trough connection for reciprocating conveyers. 1,810,804; June 16.
Wandeler, Josef, Lucern, Switzerland. Frame for holding boots especially snowshoes. 1,810,308; June 16.
Wander, Frederick, jr., New York, N. Y. Adjustable rotor for aeroplanes and helicopter rotors. 1,810,584; June 16.
Warner, Donald F., Lynn, Mass., assignor to General Electric Company. Emergency governor. 1,810,633; June 16.
Warwick, Harold L., Fort Worth, Tex. Automatic telephone system. 1,810,865; June 16.
Wasileski, George. (See Steiner, G. A., Wasileski, and Murdo.)
Watervliet Tool Co. (See Kattrein, W. J., and Becker, assignors.)
Watkins, William E., assignor to Copper Plate Sheet & Tube Company, New York, N. Y. Plating metals. 1,810,409; June 16.
Watt, Virgil M. (See Hill, W. B., and Watt.)
Wayne Company, The. (See Townsend, William S., assignor.)
Weaver, Elverton W., Cleveland Heights, assignor to The Columbia Axle Company, Cleveland, Ohio. Differential mechanism. 1,810,194; June 16.
Weber, John, assignor, by mesne assignments to The American-National Company, Toledo, Ohio. Wheel for juvenile vehicles. Des. 84,450; June 16.
Weber, Ottomar, Rathen-on-the-Elbe, Germany. Covering cultivated ground. 1,810,262; June 16.
Webster, Raymond B., A. I. Fagerlie, and I. C. Barager, Eau Claire, Wis. Chewing gum confection. 1,810,453; June 16.
Wehrle Company, The. (See Pickup, George E., assignor.)
Weiland, Henry J. (See Gubelmann, I., Weiland, and Stallmann.)
Weinberger, Julius, New York, N. Y., assignor to Radio Corporation of America. System for optically recording phonograph records. 1,810,234; June 16.
Weir, G. & J., Limited. (See Sim, James, assignor.)
Weiss, Abraham, New York, N. Y. Locking device for motor vehicles. 1,810,381; June 16.
Welin Davit & Boat Corporation. (See Harkrader, Carl L., assignor.)
Wells-Lamont Manufacturing Company. (See Wells, William O., assignor.)
Wells, William O., assignor to Wells-Lamont Manufacturing Company, Minneapolis, Minn. Glove. 1,809,877; June 16.
Wenderhold, William. (See Uebelmesser, C. R., and Wenderhold.)
Wening, Frederick. (See Glatthar, G. E., and Wening.)
Wensley, Earl. (See Gudge, A. W., and Wensley.)
Werner, Oscar, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Lamp setting device. 1,810,036; June 16.
Wernmark, Carl G., assignor of one-half to C. G. Peterson, Los Angeles, Calif. Shoe construction. 1,809,998; June 16.
Werst, Charles W., Philadelphia, Pa., and E. E. Hicken, Collingswood, N. J. Tender frame. 1,810,874; June 16.
West, Carl E. (See Rettig, O. F., and West.)
Western Electric Company. (See Fay, O. J., Heimberger, and Pugh, assignors.)
Western Electric Company. (See Field, Frank E., assignor.)
Western Electric Company. (See Lodge, Joseph E., assignor.)
Western Electric Company. (See Peterson, Eugene, assignor.)
Western Electric Company. (See Pugh, Emerson, assignor.)
Western Electric Company. (See Wright, Esmond P. G., assignor.)
Western Electric Company, Incorporated. (See Gudge, A. W., and Wensley, assignors.)
Western Electric Company, Incorporated. (See Lodge, Joseph E., assignor.)
Western Electric Company, Incorporated. (See Shea, John R., assignor.)
Western Union Telegraph Company, The. (See Herbert, A., and Robinson, assignors.)
Western Wheeled Scraper Company. (See Burner, William L., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Frank B., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Thomas H., assignor.)
Westinghouse Air Brake Company, The. (See Woods, John H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bakken, Andrew H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Baumann, Karl, assignor.)
Westinghouse Electric and Manufacturing Company. (See Brown, James M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Colby, Ora A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Cordes, Oscar C., assignor.)
Westinghouse Electric and Manufacturing Company. (See Davis, N. R., Marchbanks, and Ludlow, assignors.)
Westinghouse Electric & Manufacturing Company. (See Farley, William R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Fay, Carl J., assignor.)
Westinghouse Electric & Manufacturing Company. (See Forbes, Henry C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Gallahan, Walter, assignor.)
Westinghouse Electric & Manufacturing Company. (See Hodgkinson, Francis, assignor.)
Westinghouse Electric & Manufacturing Company. (See Howes, Douglas E., assignor.)
Westinghouse Electric & Manufacturing Company. (See Legg, Joseph W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mains, Gerald H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Miller, Charles F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Miller, Frederic H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Paszkowski, Paul, assignor.)
Westinghouse Electric & Manufacturing Company. (See Ray, James L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Schnake, William, assignor.)
Westinghouse Electric & Manufacturing Company. (See Slepian, Joseph, assignor.)
Westinghouse Electric & Manufacturing Company. (See Smith, John H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Thomas, Phillips, assignor.)
Westinghouse Electric & Manufacturing Company. (See Unverdross, Hermann, assignor.)
Westinghouse Electric & Manufacturing Company. (See Vedder, Edwin H., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wahlberg, Nils A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Werner, Oscar, assignor.)
Westinghouse Electric & Manufacturing Company. (See Williams, Clifton S., assignor.)
Weston, Stanton H. (See Kinkaid, J. H., and Weston.)
Whalen, Edward J., assignor to Redirected Light Corporation of America, Syracuse, N. Y. Head lamp construction. 1,810,235; June 16.
Wharam, John J., Detroit, assignor to Ford Motor Company, Fordson, Mich. Spare wheel lock. 1,810,195; June 16.
Wheeler, Edwin B., New London, Conn. Welded ship. 1,810,097; June 16.
Wheeler, Harvey C. (See Thompson, Charles W., assignor.)
Whitaker, Frank P., Rugby, England, assignor to General Electric Company. Mercury arc rectifier. 1,810,634; June 16.
White, H. N., Company, The. (See Reynolds, Harper A., assignor.)
White Motor Company, The. (See Howell, James W., assignor.)
White, Rollin H., Cleveland Heights, Ohio. Supporting and driving means for tractors. 1,810,635; June 16.
White, Thomas U., assignor to Leich Electric Co., Genoa, Ill. Remote supervisory control system. 1,810,546; June 16.
Whitman, Channing, Buffalo, assignor to Flexlume Corporation, Tonawanda, N. Y. Protective shield for incandescent lamps. 1,809,878; June 16.
Whittle, Horace, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Circuit for electromagnetic device. 1,809,879; June 16.
Wicks, John, Oak Park, assignor to Reserve Holding Company, Chicago, Ill. Zone metering system. 1,810,330; June 16.
Wier, Stuart A., assignor to Tridex Corporation, Dallas, Tex. Nozzle. 1,809,999; June 16.
Wiggins, John H., Bartlesville, Okla. Apparatus for storing liquid. 1,810,741; June 16.

Wilder, Francis E. P., et al. (See Moran, J. L., and Lee, assignors.)
Wilder, Herbert P. (See Frank, O. E., and Wilder.)
Wilhjelm, Christian. (See Johanson, Gustav H., assignor.)
Wilhjelm, Christian, assignor, by mesne assignments, to C. Wilhjelm, Philadelphia, Pa., as trustee. Oil valve. 1,810,331; June 16.
Wilhjelm, Christian, trustee. (See Wilhjelm, Christian, assignor.)
Willcox, Jay C., assignor to McQuay Radiator Corporation, Minneapolis, Minn. Adjustable hanger for cabinet radiators. 1,810,196; June 16.
Williams, Clifton S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Induction furnace. 1,810,866; June 16.
Williams, Frank T. (See Ellis, H. E., and Williams.)
Williams, J. H., & Co. (See Kress, Willard C., assignor.)
Williams, James H., Providence, R. I., assignor to Detroit and Security Trust Company, Detroit, Mich. Apparatus for making castings. 1,810,509; June 16.
Wilson, Charles L., Birmingham, Ala. Fuse. 1,810,805; June 16.
Wilson, Clarence P. (See Jameson, E., Stewart, and Wilson.)
Wilson-Jones Company. (See Van Valkenburgh, R. M., and Cederleaf, assignors.)
Wilson, Murray L., Shreveport, La. Graduated envelope or flexible container. 1,810,806; June 16.
Wilson, William, New York, N. Y. Sectional hull structure for house-boats or the like. 1,810,742; June 16.
Winchester, Lucius. (See Crane, Clifford M., assignor.)
Wine Railway Appliance Company. (See Wine, William E., assignor.)
Wine, William E., Toledo, Ohio, and G. B. Christian, Washington, D. C., assignors to Wine Railway Appliance Company, Toledo, Ohio. Railway car. 1,810,454; June 16.
Winkler, Carl, Bern, assignor to Winklor Matera & Stereo A. G., Glarus, Switzerland. Driving gear of machines for casting stereotype plates. 1,810,875; June 16.
Winkler Matera & Stereo A. G. (See Winkler, Carl, assignor.)
Winne, Lansing F., Nyack, N. Y. Automobile door protector. 1,810,510; June 16.
Winterhalter, Martin, Halle-on-the-Saale, Germany. Sliding clasp fastening. 1,810,807; June 16.
Winthrop Chemical Company. (See Desamari, Kurt, assignor.)
Wintroath, John A., assignor to Peerless Pump Company, Los Angeles, Calif. Applying tension on shaft inclosing tubing. 1,810,332; June 16.
Wintroath, John A., Los Angeles, Calif., assignor of one-half to E. D. Smith, Chicago, Ill., and one-half to Wintroath Pumps, Ltd., Alhambra, Calif. High pressure pump head. 1,810,333; June 16.
Wintroath Pumps, Ltd., et al. (See Wintroath, John A., assignor.)
Wire Novelty Manufacturing Company, The. (See Domkee, John H., assignor.)
Wired Radio, Inc. (See Gebhard, L. A., assignor.)
Wise, George A., assignor to Sutton Engineering Company, Pittsburgh, Pa. Method and apparatus for finishing round bars. 1,809,880; June 16.
Witte, James G., Keokuk, assignor of one-half to Iowa Pine Box Company, Keokuk, Iowa, and one-half to South West Box Company, Sand Springs, Okla. Shipping container. 1,809,956; June 16.
Wittenberg, Armin H., Los Angeles, Calif. Stocking. 1,810,197; June 16.
Wolf, Walter M., Chicago, Ill. Cigar lighter. Des. 84,451; June 16.
Wolf, Archie R., Summit, N. J. Gun lock contraction socket. 1,810,455; June 16.
Wolfinger, Joseph, Dundas, Wis. Can washing device. 1,810,511; June 16.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Sectional former. 1,809,954; June 16.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Tail shelf for stereotype plate casting machines. 1,809,955; June 16.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Casting pump operating means. 1,810,867; June 16.
Wood, John, Manufacturing Company. (See Sponar, Aloysius T., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood, William C., assignor to The N. N. Hill Brass Company, East Hampton, Conn. Toy telephone. 1,809,881; June 16.
Woodberry, John H., U. S. Army, Frankford Arsenal, Bridesburg, Pa. Booster. 1,810,000; June 16.
Woods, John H., Hamilton, Ontario, Canada, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake application valve device. 1,810,547; June 16.
Woodstock Typewriter Company. (See Youngberg, Conrad D., assignor.)
Woodward, Daniel C., Lowell, Mass. Oil burner boiler. 1,809,920; June 16.
Woodward, Erwin. (See Shuey, P. M., and Woodward.)
Wooldridge, J. W. (See Edwards, Albert, assignor.)
Woolley, Jedediah F., jr., and L. J. Long, Salt Lake City, Utah. Trolley switch. 1,810,548; June 16.
World Bestos Corporation. (See Nanfeldt, William, assignor.)
Worst, George J., Philadelphia, Pa. Chute. 1,810,512; June 16.
Wrenshall, Charles N., Asheville, N. C. Eyeshield. 1,809,956; June 16.
Wright, Arch C. (See Sims, A. D., and Wright.)
Wright, Esmond P. G., Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone exchange system. 1,809,882; June 16.
Wright, Leonard K., Astoria, Long Island City, N. Y. Compression refrigerating apparatus. 1,809,957; June 16.
Wright, Leonard K., Jackson Heights, Long Island, N. Y. Refrigeration apparatus. 1,809,958; June 16.
Wurlitzer, Rudolph, Manufacturing Company, The. (See Lockwood, Louis S., assignor.)
Wylam, Birkett. (See Drescher, H. A. E., Harris, Wylam, and Thomas.)
Yonekura, Tario, Takaoka, Japan. Suction device of paper-making machines. 1,810,456; June 16.
Yost, Henry, Kenton, Ohio. Roofing fastener. 1,810,808; June 16.
Young, Harvey L., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Tube-making method and apparatus. 1,810,585; June 16.
Young, Harvey L., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Tube-making method and apparatus. 1,810,586; June 16.
Young, Henry S. (See Brooks, C. A., and Young.)
Youngberg, Conrad D., assignor to Woodstock Typewriter Company, Woodstock, Ill. Typewriter. 1,809,883; June 16.
Youngstown Sheet and Tube Company, The. (See Sickle, Jacob C., assignor.)
Yount, Miles F., Beaumont, Tex. Sheave. 1,809,921; June 16.
Zimmerman, Harry C., Washington, D. C. Gun mount. 1,810,001; June 16.
Zimmerman, Herman W., assignor to Automotive Maintenance Machinery Co., Chicago, Ill. Shackle jimmy. 1,810,517; June 16.
Zury, William, Homestead, Pa. Curtain holding device. 1,810,865; June 16.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 16TH DAY OF JUNE, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Absorbent and making same, Reactivated. W. S. Baylis. 1,810,155; June 16.
Acid, Manufacture of sulphuric. H. Petersen. 1,810,253; June 16.
Acid. Quinolin-benzoic-carboxylic. W. L. Vogel. 1,810,261; June 16.
Acids and 1-phenyl-2, 3 dimethyl-4-dimethyl-amino-5-pyrazolone, Making dialkyl barbituric. F. Müller. 1,810,846; June 16.
Actuator. J. Ilines. 1,810,350; June 16.
Adapter. H. Broadwell. 1,809,887; June 16.
Adjustable gauge. K. F. Gallimore. 1,810,166; June 16.
Advertising amusement device. C. Doering. 1,810,467; June 16.
Advertising device. J. C. Houck. 1,810,606; June 16.
Advertising device. F. Martin. 1,810,525; June 16.
Advertising device, Electrically illuminated. A. B. Conklin. 1,810,161; June 16.
Aeroplane. H. Alfaro. 1,810,693; June 16.
Aeroplane. D. B. Gish. 1,810,762; June 16.
Aeroplane. A. Mateo. 1,810,182; June 16.
Aeroplane safety landing device. A. Bochnak. 1,810,550; June 16.
Agglomerates, Preparation of coked. E. H. Bunce. 1,810,070; June 16.
Agitator for clothes washing machines and the like. L. A. Hersh. 1,810,047; June 16.
Agricultural implement. A. Raab. 1,810,787; June 16.
Agricultural implement. S. S. Spire. 1,810,889; June 16.
Air exhausting apparatus. J. H. Irons. 1,810,607; June 16.
Air line connecter, Automatic. D. B. McTaggart. 1,810,778; June 16.
Air motor. I. V. K. Hott. 1,810,176; June 16.
Air receiving and directing means for rotary fans. L. L. Haas. 1,809,846; June 16.
Aircraft with guns having two or three axes and mounted on moving platforms, Appliance for the automatic determination of the range factors for combating. L. Schmidt. 1,810,298; June 16.
Airfoil. H. R. Semmes. 1,809,913; June 16.
Airplane. H. A. Hicks. 1,810,244; June 16.
Airplane control. E. B. Hilburn. 1,809,936; June 16.
Alarm signal. M. J. Davis. 1,810,162; June 16.
Alkyl-quinolyl-amino-phenyl carboxylic acids, K. Desamarb. 1,810,267; June 16.
Alkyl sulphates, Preparing. R. de M. Taveau. 1,810,192; June 16.
Alumina and phosphates, Obtaining. F. Rothe and H. Brenck. 1,810,402; June 16.
Anchor, Buck. C. W. Prickett. 1,810,224; June 16.
Anchor, Fence. P. Shepard. 1,809,947; June 16.
Anchor, Rope. J. C. Hayes. 1,810,242; June 16.
Animal trap. T. C. Englund. 1,810,163; June 16.
Animal trap. E. Jacobs. 1,810,608; June 16.
Apparatus for reducing to fine powder various materials and products such as enamels. J. L. M. Thomas. 1,810,800; June 16.
Articles from aqueous dispersions of rubber and similar vegetable resins or compounds thereof, Manufacture of. G. G. Thornton. 1,810,504; June 16.
Articles from sheet material, Apparatus for producing. A. W. Gudge and E. Wensley. 1,810,206; June 16.
Asbestos friction elements, Making. L. Kirschbraun. 1,810,714; June 16.
Automobile lift. E. W. Holmes. 1,809,939; June 16.
Automobile spring. U. A. Inman. 1,809,851; June 16.
Awning. C. P. Fogh. 1,809,966; June 16.
Axe guard. R. E. Brown. 1,810,593; June 16.
Badge, Fraternal. J. J. Murphy. Des. 84,430; June 16.
Bag: *See*—
Coffee urn bag. Sport bag.
Shopping bag.
Bag filling device. P. Lassen. 1,810,772; June 16.
Balancer. H. A. Reynolds. 1,810,086; June 16.
Banjo mute. B. A. Stallone. 1,810,250; June 16.
Bars, Method and apparatus for finishing round. G. A. Wise. 1,809,880; June 16.
Base for swivel chair. G. C. Brainard and J. A. Fitch. 1,810,817; June 16.
Base for typewriters and other articles. C. B. Ulrich. 1,810,378; June 16.
Basket, Dish holding. G. S. Blakeslee. 1,810,199; June 16.
Battery structures, Making dry. C. P. Deibel. 1,809,924; June 16.
Bearing construction. L. J. Sauer. 1,810,296; June 16.
Bearing free wheel drive, Roller. W. C. Klein. 1,810,834; June 16.
Bearing housing seal. J. L. Ray. 1,810,370; June 16.
Bearings, Manufacturing. W. J. Fiegel and F. C. Jones. 1,809,838; June 16.
Beater, Drum. E. O. Roark. 1,810,731; June 16.
Bed, Camping. E. E. Frey. 1,810,311; June 16.
Bed Davenport. C. W. Meves. 1,809,859; June 16.
Bed, Folding. W. J. Duvall. 1,810,516; June 16.
Bent tube boiler. L. J. Marshall. 1,810,365; June 16.
Binder, Loose leaf. C. J. Dunbar. 1,810,133; June 16.
Binder, Loose leaf. R. M. Van Valkenburgh and C. A. Cederleaf. 1,810,231; June 16.
Bismuth, Production of. W. C. Smith. 1,809,871; June 16.
Bit: *See.*—
Roller bit. Rotary action bit.
Blowout preventing device and oil saver for drilling rigs. J. McNeff and S. Hogan. 1,810,431; June 16.
Board. *See.*—
Steam board.
Boat. E. L. Roberts. Des. 84,442; June 16.
Bobbin changing device. H. Buddecke. 1,810,754; June 16.
Body panels, Apparatus for trimming. O. J. Groehn. 1,809,843; June 16.
Boiler. *See.*—
Bent tube boiler. Steam boiler.
Oil burner boiler.
Boiler. O. H. Hartmann. 1,809,896; June 16.
Boiler tube cleaner. H. L. Staley. 1,810,301; June 16.
Bookrest. T. Gensmer. 1,810,205; June 16.
Books, Apparatus for gluing backs onto. A. Peterson. 1,810,223; June 16.
Booster. J. H. Woodberry. 1,810,000; June 16.
Bottle capping machine. J. Marian. 1,810,838; June 16.
Bottle capping mechanism. C. W. Goodwin. 1,809,842; June 16.
Bottle rack. H. W. Laubenstein. 1,810,836; June 16.
Bow, Archer's. G. E. Barnhart. 1,810,335; June 16.
Bow, Violin. C. Dillon and D. Daughhetee. 1,810,414; June 16.
Box. *See.*—
Mail box.
Box. O. W. Thomas. 1,809,917; June 16.
Box fixture support, Outlet box. R. F. Clung. 1,810,553; June 16.
Box making. C. D. Knowlton. 1,809,833; June 16.
Box with handle. H. G. Allen. 1,810,743; June 16.
Boxes, Making multiple core. J. H. Lauksel. 1,810,523; June 16.
Bracelet and links therefor. O. Selle. 1,810,060; June 16.
Bracelet chain. M. Anderson. 1,810,590; June 16.
Bracket. *See.*—
Shade bracket.
Bracket fixture, Window shade. D. A. Parkes. 1,810,676; June 16.
Brake. *See.*—
Hand brake. Vehicle brake.
Internal expansion brake. Wheel brake.
Servo-brake.
Brake beam guard arm. B. Haskell. 1,810,707; June 16.
Brake equalizer, Four-wheel. L. N. Linscott. 1,810,358; June 16.
Brake mechanism. A. Y. Dodge. 1,810,101; June 16.
Brake operating means. W. S. James. 1,809,973; June 16.
Brake release device. T. H. Thomas. 1,810,541; June 16.
Brake spider. A. H. Leipert. 1,810,856; June 16.
Brake testing device. O. F. Rettig and C. E. West. 1,810,085; June 16.
Brakes, Supporting means for. W. C. Hedgcock. 1,810,210; June 16.
Bricks, Apparatus for and method of making. G. S. Housman. 1,810,078; June 16.
Bridge. J. B. Strauss. 1,810,034; June 16.
Brooder heater. H. E. Ellis and F. T. Williams. 1,809,892; June 16.
Brush. P. A. Jones. 1,809,974; June 16.
Brush, Fountain shaving. G. Trupiano. 1,810,544; June 16.
Brush, Lathering. H. Friedlander. 1,810,074; June 16.
Bucket, Self reversing trolley. H. E. Hallenbeck. 1,810,603; June 16.
Buckle, Apparel. A. H. Kerngood. Des. 84,419; June 16.
Buckle, Shoe. C. G. King. Des. 84,420–1; June 16.
Buckle, Shoe. W. E. Smith. Des. 84,448; June 16.
Buckle, Slide. J. H. Domkee. 1,810,647; June 16.
Building construction. D. S. Corwin. 1,810,597; June 16.

Bulkhead for steel barges. W. G. Esmond. 1,810,310; June 16.
Bumper, Automobile. A. A. Thomas. 1,810,502; June 16.
Burner. *See.*—
Gas burner. Oil burner.
Burner control, Fluid-fuel-. N. T. Branche and V. O. Beam. 1,810,123; June 16.
Burner pilot, Oil. B. Valjean. 1,810,035; June 16.
Butter handling device. W. E. V. Shaw and D. B. and R. H. Benham. 1,810,226; June 16.
Butyl xanthates, Secondary. L. J. Christmann and D. W. Jayne, jr. 1,810,552; June 16.
Cabinet. N. B. French. 1,810,599; June 16.
Cabinet construction. P. Farmer. 1,809,929; June 16.
Cabinet, Dental. C. A. Lawson, sr., and C. A. Lawson, jr. 1,810,140; June 16.
Cabinet, Loud speaker. O. P. Liebreich. 1,810,568; June 16.
Cabinet, Refrigerator. J. L. Knight. 1,810,615; June 16.
Cabinet, Towel. G. A. Steiner, G. Wasileski, and W. Murdo. 1,809,873; June 16.
Cabinet, Wall. M. Lumley. 1,810,362; June 16.
Calculating machine. O. D. Johantgen. 1,810,213; June 16.
Calculating machines, Attachment for. L. R. Brown. 1,810,628; June 16.
Calendar. L. Aker. 1,810,153; June 16.
Calendar. H. F. Shedd. 1,810,440; June 16.
Caliper. K. Kissendorfer. 1,810,427; June 16.
Cam engine, Variable stroke. H. W. Houston. 1,810,017; June 16.
Cam sealing machine. A. K. Malmquist. 1,809,905; June 16.
Cam washing device. J. Wolfinger. 1,810,511; June 16.
Cap, Bathing. R. T. Hosking. 1,810,655; June 16.
Car. H. C. Lord. 1,810,718; June 16.
Car coupling, Automatic railway. C. Hellwig. 1,810,830; June 16.
Car. Dump. W. L. Burner. 1,810,639; June 16.
Car for transporting cement or the like. M. Kind. 1,810,770; June 16.
Car, Railway. C. Carry, W. H. Mussey, and M. P. Blomberg. 1,810,876; June 16.
Car, Railway. B. W. Kadel. 1,810,611; June 16.
Car, Railway. E. R. Swanson. 1,810,044–8; June 16.
Car, Railway. W. E. Wine and G. B. Christian. 1,810,454; June 16.
Carbon, Activation of. R. G. Davis and M. T. Sanders. 1,810,871; June 16.
Carbonaceous materials, Cracking, catalyzing, and hydrogenation of. A. E. Bianchi and G. Quarantabassi. 1,810,307; June 16.
Carburetor. G. M. Bicknell and A. A. Hayden. 1,809,886; June 16.
Cards, Deck of playing. W. L. Moore. Des. 84,429; June 16.
Carriage, Baby. N. Lazzeri. 1,810,428; June 16.
Carrier. *See.*—
Food carrier. Luggage carrier.
Carrying handle. T. L. Miller. 1,810,640; June 16.
Case. *See.*—
Storage case.
Casement lock, Window. W. Schnell. 1,810,856; June 16.
Cash register. O. J. Sundstrand. 1,810,737; June 16.
Casing for fruit vending machine. W. L. Clausen. Des. 84,397; June 16.
Casing for spools or other articles, Dustproof. A. E. Bruns. 1,810,594; June 16.
Casting machine. M. O. Held. 1,810,178; June 16.
Casting machines, Tail shelf for stereotype plate. H. A. W. Webb. 1,809,955; June 16.
Castings, Apparatus for making. J. H. Williams. 1,810,500; June 16.
Catalytic apparatus. J. M. Selden. 1,810,147; June 16.
Cathode ray oscillograph. D. E. Howes. 1,810,018; June 16.
Cavities of the animal and human body, Device for giving access to. J. Deutsch. 1,810,466; June 16.
Centrifugal switch. J. F. Adams and T. T. Allen. 1,809,816; June 16.
Chain, Apparatus for making. S. D. Locke. 1,810,716; June 16.
Chain making machine. C. Parker. 1,810,724; June 16.
Chain, Nonskid tire. J. A. Stueckle. 1,810,191; June 16.
Chain, Ornamental. K. Fassnacht. 1,810,040; June 16.
Chair. *See.*—
Chiropodist chair.
Chart, Graphic. E. M. Andres. 1,810,384; June 16.
Chaser and chaser holder. C. P. Harrison. 1,810,241; June 16.
Checking ring. S. R. Milbury. 1,810,218; June 16.
Chicken treater. J. Snyder. 1,810,228; June 16.
Chiropodist chair. J. R. Emmert. 1,810,134; June 16.
Christmas tree stand. J. B. and J. A. Ray. 1,810,353; June 16.
Chromium, Electrodepositing. W. S. Bohlman. 1,809,820; June 16.
Chute. G. J. Worst. 1,810,512; June 16.
Cigarettes, Device for extinguishing and holding. C. W. Mears and H. Eisele. 1,810,492; June 16.
Circuit breaker. E. H. W. Ulrich. 1,810,861; June 16.
Circuit, Relay. R. C. Mathes. 1,810,624; June 16.
Circuits for electromagnetic device. H. Whittle. 1,809,879; June 16.
Circuits, Voice operated relay. B. G. Bjornson. 1,810,004; June 16.
Circuits, Voice operated relay. J. L. Hogg. 1,810,016; June 16.
Clamp. *See.*—
Suspension clamp.
Clamp. W. J. McKee. 1,810,777; June 16.
Clamp and lifter for fruit packing tubs, Combined. S. H. Sheller. 1,810,257; June 16.
Clamp for gas or liquid-proof housings, Hinged. A. H. Bakken. 1,810,066; June 16.
Clamp for storage batteries, Terminal. H. Gillar. 1,810,396; June 16.
Clamp or clothespin. L. H. Tangen. 1,810,304; June 16.
Clasp fastening, Sliding. M. Winterhalter. 1,810,807; June 16.
Cleaner. *See.*—
Boiler tube cleaner. Well tube cleaner.
Vacuum cleaner.
Cleaner. I. L. Holland and R. W. Klaus. 1,809,970; June 16.
Clip. *See.*—
Desk plate clip.
Clip, clasp, and like fastening for neckties. H. Hengstler. 1,810,077; June 16.
Clipper, Electric hair. A. J. Dremel. 1,810,469; June 16.
Clock case. F. J. Dornseif. Des. 84,400–4; June 16.
Closet. *See.*—
Lavatory closet.
Closure. M. Jaworsky. 1,810,019; June 16.
Closure for bottles, jars, and the like. C. B. Garwood. 1,809,894; June 16.
Closure for coke oven chambers. C. Otto. 1,810,495; June 16.
Clothes wringer. L. A. Hersh. 1,810,046; June 16.
Clothespin, Safety. G. Trupiano. 1,810,542; June 16.
Clutch. J. R. Kinney. 1,809,976; June 16.
Clutch control device. C. Flagstad. 1,810,103; June 16.
Clutch disk construction. B. Loeffler. 1,810,300–1; June 16.
Clutch mechanism for card punches. W. W. Lasker. 1,810,317; June 16.
Clutch operating mechanism. G. W. Felton. 1,809,965; June 16.
Clutch synchronizer, Double cone. H. J. Murray. 1,810,494; June 16.
Coal, Carbonizing. C. Hayes. 1,810,828; June 16.
Coats and coat produced by such method, Making. R. Cohen. 1,810,160; June 16.
Coffee urn bag. A. M. Herzmark. 1,809,935; June 16.
Coke, Apparatus for the dry cooling of. A. Moetteli. 1,810,322; June 16.
Collapsible table. L. H. Riesche. 1,809,866; June 16.
Colloidal halogens, Preparation of. E. Govett. 1,810,104; June 16.
Combustion apparatus, Fractional. P. J. A. Maignen. 1,810,670; June 16.
Combustion in metallurgical and glass furnaces, Controlling. C. R. McDermott. 1,810,776; June 16.
Composite product and making the same. B. S. Garvey. 1,810,560; June 16.
Composite sheet forming machine. H. Gineberg. 1,810,561; June 16.
Composition for dyeing leather, shoes, gloves and hides. E. Comes. 1,810,266; June 16.
Computing machine. R. H. Strother. 1,810,329; June 16.
Concrete pipe, Method and apparatus for making. O. Tuerck. 1,810,583; June 16.
Concrete reenforcement. H. M. Smith. 1,809,870; June 16.
Condensation and polymerization products of acetylene, Production of. W. O. Herrmann, H. Deutsch, and W. Haehnel. 1,810,174; June 16.
Condenser. A. O. Austin. 1,810,888; June 16.
Condenser. J. H. Smith. 1,809,915; June 16.
Condenser. J. H. Smith. 1,810,375; June 16.
Condenser and operating the same. F. A. J. Fitzgerald and J. Kelleher. 1,810,557; June 16.
Condenser bushing voltage control. P. Thomas. 1,810,005; June 16.
Condenser, Vertical tubular. J. M. Seymour. 1,809,914; June 16.
Conductor, Electric. H. C. Jennison. 1,810,079; June 16.
Conduit coupling, collar. J. F. Makowski. 1,810,742; June 16.
Confectionery article. A. C. Freiland. Des. 84,406; June 16.
Connecter, Outlet box. J. M. G. Fullman. 1,809,840; June 16.
Consistency responsive device. S. E. Meeks. 1,810,111; June 16.
Container. H. Schwartz. 1,810,626; June 16.
Container. E. Scofield. 1,810,734; June 16.
Container and bottle opener, Combination. C. E. Tapp. 1,810,630; June 16.
Container, Cosmetic. E. H. Koehler. 1,810,249; June 16.
Container, Golf ball. E. N. McClure. 1,810,491; June 16.
Container, Shipping. J. C. Witte. 1,809,953; June 16.
Control arrangement for cattle apparatus. W. T. Rea. 1,809,945; June 16.
Control system. O. C. Cordes. 1,809,968; June 16.

Control system, Remote supervisory. T. U. White. 1,810,546; June 16.
Controlling apparatus. O. W. Heise. 1,809,898; June 16.
Controlling means. H. F. Stevens. 1,810,376; June 16.
Conveyer. E. H. Allfree. 1,810,588; June 16.
Conveyer. H. Z. Cobb. 1,809,830; June 16.
Conveyer. J. H. Thurmer. 1,810,859; June 16.
Conveyer for husking units, Feeder. J. Powell. 1,810,437; June 16.
Conveyer, Trolley. E. V. Francis. 1,810,416–19; June 16.
Conveyers, Trough connection for reciprocating. R. A. Walter. 1,810,804; June 16.
Conveying of material. H. Heymann and E. Lehr. 1,810,882; June 16.
Cooled development apparatus. W. G. Thompson and J. E. Jordan. 1,810,857; June 16.
Cooling and ventilating apparatus. A. B. Alldredge. 1,810,410; June 16.
Core drill. E. S. Hartson. 1,810,208; June 16.
Cotton bales, Method of and apparatus for storing and handling. C. A. Bertel. 1,810,100; June 16.
Cotton picker. C. R. Berry. 1,810,411; June 16.
Cotton picker. H. N. Berry. 1,810,386; June 16.
Cotton press. J. J. Wallace. 1,810,064; June 16.
Coupling. *See.*—
Car coupling. Valve coupling.
Hose coupling.
Coupling and mounting member for fixtures and the like. F. A. Stirrup. 1,810,229; June 16.
Cover for tie rods or the like, Dust. G. H. Hufferd. 1,809,971; June 16.
Cover, Pot and pan. M. V. Tremblay. 1,810,880; June 16.
Cover, Radiator. A. E. Blackman. 1,810,122; June 16.
Crate, Bottle. W. W. Birnstock. 1,810,815; June 16.
Crossing gate, Railroad. O. O. Lees and T. J. Finn. 1,810,051; June 16.
Crystallizer, Continuous. W. H. Lohmann. 1,810,217; June 16.
Cultivator, Steering walking. W. H. Noble. 1,810,783; June 16.
Cultivators, Leaf guard for disk. J. Mader. 1,810,052; June 16.
Current transformer. M. Urbinati. 1,810,379; June 16.
Currents, Method of and apparatus for amplifying weak electric. B. N. Sokoloff. 1,810,539; June 16.
Curtain and shade fixture. W. A. Schollmeyer. 1,810,146; June 16.
Curtain, Foldable. C. H. Nordell and P. E. Erlinder. 1,810,847; June 16.
Curtain holding device. W. Zury. 1,810,868; June 16.
Curtain operator, Motor vehicle rear. E. E. Hall. 1,810,422; June 16.
Cutter. *See.*—
Hole cutter. Stalk and weed cutter.
Pipe cutter.
Cutter and making same, Gear shaped. O. G. Simmons. 1,809,868; June 16.
Cutter and making same, Gear shaper. O. G. Simmons. 1,809,869; June 16.
Cutter, attachment, Stalk. A. L. Forbord. 1,810,415; June 16.
Cutting, machine, Potato. J. A. and C. G. Bergten. 1,810,459; June 16.
Cutting machine, Sheet. G. Spiess. 1,810,442; June 16.
Cutting or ornamenting die. A. W. Altvater. 1,809,523; June 16.
Cranid from alkaline liquors, Recovering of. C. W. Lawn. 1,810,487; June 16.
Dam, Movable. H. Tahara. 1,810,442; June 16.
Damper control device. M. T. Bundlovich. 1,810,464; June 16.
Dashpot. L. D. Walton. 1,810,233; June 16.
Decelerator. C. C. Chapel. 1,810,126; June 16.
Deck plate clip, R. C. Mahon and W. G. Miller. 1,810,287; June 16.
Decolorizing substance. W. Kritchevsky. 1,810,668; June 16.
Defiating device. R. P. Harvey. 1,809,807; June 16.
Dental furnace. O. A. Colby. 1,810,643; June 16.
Derivatives of vat dyestuffs, Manufacture of. H. A. E. Drescher, E. G. Harris, B. Wylam, and J. Thomas. 1,810,758; June 16.
Derricks, Safety swinging finger board for well drilling. K. A. McCoy. 1,810,720; June 16.
Desk. E. A. Purnell. Des. 84,438; June 16.
Detector for coin controlled machines, Coin. O. R. Hermanek. 1,810,521; June 16.
Developing apparatus. R. R. Allin. 1,809,822; June 16.
Device for time dipping. E. R. Stevens and A. F. Nicolai. 1,809,901; June 16.
Diaphragm for sound reproduction. A. von Sucholzyaski. 1,810,305; June 16.
Die. *See.*—
Cutting or ornamenting die.
Die for die casting and making the same. J. F. Soderberg. 1,809,872; June 16.
Differential mechanism. E. W. Weaver. 1,810,124; June 16.
Dishwashing machine. R. B. Shoemaker and C. L. Lawhead. 1,810,374; June 16.
Disk, Scanning. B. R. Cummings. 1,810,599; June 16.
Dispenser, Cream. H. W. Fitch. 1,810,135; June 16.
Dispensing apparatus, Liquid. W. S. Townsend. 1,810,151; June 16.
Display head. R. W. Dumont. Des. 84,406; June 16.
Display rack. H. L. Beach. 1,810,812; June 16.
Distillate, Manufacturing high compression automotive. C. J. Pratt. 1,810,574; June 16.
Dolly. E. Karfiol. Des. 84,418; June 16.
Doll. I. Cohn. Des. 84,398; June 16.
Doll. M. Greene. Des. 84,414; June 16.
Doll. A. Séror. Des. 84,445; June 16.
Door and partition, Combined. R. E. Moore. 1,810,780; June 16.
Door construction. H. J. Lounsbury. 1,809,857; June 16.
Doorcheck. C. W. Beck. 1,810,003; June 16.
Door closer. A. Reese. 1,810,293; June 16.
Door, Elevator. R. S. Peele. 1,810,496; June 16.
Door, Metal. N. Michelman. 1,810,321; June 16.
Door operator, Garage. A. E. Michaelson. 1,810,320; June 16.
Doorstop. F. T. Richards. 1,810,186; June 16.
Dough molder. W. G. Kirchhoff. 1,810,139; June 16.
Dowel. F. T. Bowler. 1,810,749; June 16.
Drain board for wringers. O. Banker. 1,809,885; June 16.
Drain device. J. Rockmore. 1,810,855; June 16.
Drain, Tubing. E. A. Phillips. 1,810,436; June 16.
Drapery holdback. F. T. Evans. 1,810,073; June 16.
Drawing table, Collapsible. K. Quiring. 1,810,575; June 16.
Drier. *See.*—
Rotary drier.
Drill. *See.*—
Core drill. Rotary drill.
Drilling apparatus. H. C. Johansen. 1,810,106; June 16.
Drilling control, Steam actuated rotary. P. Jones. 1,810,246; June 16.
Drink mixing device. T. M. Costakos. 1,810,554; June 16.
Drive and control for printing presses. C. A. Rupp. 1,810,404; June 16.
Drive for screw machines and the like. J. R. Shea. 1,810,227; June 16.
Drive motion, Irregular. P. A. Frazier. 1,810,702; June 16.
Driving system, Synchronous. A. M. Curtis. 1,809,832; June 16.
Drying sticky material, Apparatus for. D. J. Van Marle. 1,810,691; June 16.
Dust collector. J. Abramowitz. 1,809,922; June 16.
Dye and stripper, Combined. W. Kritchevsky. 1,810,661–2; June 16.
Dye remover. W. Kritchevsky and H. C. Prutzman. 1,810,664; June 16.
Dyestuffs and making the same, New azo. G. Kalischer, and R. Fleischhauer. 1,810,277; June 16.
Dyestuffs, Manufacture of direct dyeing disazo. C. Mettler. 1,810,839; June 16.
Dyestuffs, New azo. J. Haller. 1,810,273; June 16.
Earth carbonates and other materials, Process of and apparatus for heat treating alkaline. R. W. Hyde. 1,810,313; June 16.
Edge construction for table tops and the like. F. A. Schmitz. 1,810,679; June 16.
Educational apparatus. F. E. Austin. 1,810,745; June 16.
Egg boiling frame. B. Sperber. 1,810,258; June 16.
Electric apparatus. J. Slepian. 1,810,033; June 16.
Electric apparatus for teaching mathematics. K. Rice. 1,810,529; June 16.
Electric machine, Magneto. E. Morel. 1,810,844; June 16.
Electric switch. G. A. Johnson. 1,810,482; June 16.
Electrical regulating system. F. J. Champlin. 1,810,596; June 16.
Electrical separation of suspended material from gases, Apparatus for. A. P. Knight. 1,810,614; June 16.
Electrochemical converter. O. H. and C. J. Ritter. 1,810,295; June 16.
Electrolytic rectifiers in series, Using. E. W. Engle. 1,810,805; June 16.
Electromotive device. L. A. Trofimov. 1,810,606; June 16.
Engine. *See.*—
Cam engine. Internal combustion engine.
Explosion engine.
Engine. E. J. Collyer. 1,810,130; June 16.
Envelop or confection coating apparatus. R. Savy, L. Lebert, and M. M. Guggenheim. 1,810,681; June 16.
Envelop, Drying. G. K. Elliott. 1,810,649; June 16.
Envelop or flexible container, Graduated. M. L. Wilson. 1,810,806; June 16.
Esters of glycols, Production of. O. Loehr. 1,810,318; June 16.
Excavating machine, Electric tooth driven. G. J. Lexa and R. Ljungkull. 1,809,981; June 16.
Exerciser and body builder. F. Poulos. 1,810,855; June 16.
Explosion engine, Rotary. F. B. Marvin. 1,810,682; June 16.
Explosion relief. C. M. Dibble. 1,810,607; June 16.
Eyelash, Artificial. V. Keney. 1,810,566; June 16.
Fastener. C. M. Wressell. 1,809,856; June 16.
Fabric. *See.*—
Knitted fabric.
Fabric and manufacturing the same, Metal. L. Rado. 1,810,438; June 16.
Fabric for wearing apparel, Stiffening. C. Hänsel. 1,810,976; June 16.
Fabric, Stripper. W. Kritchevsky and H. C. Prutsman. 1,810,665; June 16.
Fabrics, Making pile. N. Slater. 1,810,328; June 16.
Fan. H. H. Knight. Des. 84,423; June 16.
Fastener and the like, Cover. A. Carlson and E. W. Ericson. 1,810,870; June 16.
Fastener, Collar. M. O. Nobbe. Des. 84,431; June 16.
Fastener, Roofing. H. Yost. 1,810,808; June 16.
Fastener, Separable. G. Sundback. 1,810,685; June 16.
Fastener slides, Making separate. G. Sundback. 1,810,377; June 16.
Fastening device. J. Hines. 1,810,351; June 16.
Feather plucking device, Staggered channeled roller. J. Dunner. 1,809,891; June 16.
Feed mechanism, Intermittent. W. Dieter. 1,810,645; June 16.
Feeder, Chick. B. F. C. Morris. 1,810,782; June 16.
Feeder, Poultry. H. F. Thumann. 1,810,230; June 16.
Feeding device. J. E. Lodge. 1,810,023; June 16.
Fence post anchor plate. F. G. Carrel. Des. 84,396; June 16.
Fertilizer and producing the same, Granular. J. T. Travers and O. M. Uhbain. 1,810,802; June 16.
Fertilizer, Producing. S. M. Doolittle. 1,810,239; June 16.
Film marking device. J. Arnold. 1,810,002; June 16.
Film treating machine. G. Haynes. 1,181,209; June 16.
Filter system, Motor car. R. Audubert. 1,810,458; June 16.
Filtering apparatus. W. Seli. 1,810,090; June 16.
Finishing for molded articles, Surface. G. H. Mains. 1,809,984; June 16.
Fire arrester for combustible gas conduits, Back. C. H. Bichler. 1,810,814; June 16.
Fire extinguisher. H. Leipold. 1,810,668; June 16.
Fire kindler. C. Blamfield. 1,810,388; June 16.
Fish lure and grapple. W. J. Kenely. 1,810,565; June 16.
Fishing reel, Automatic. E. B. Perrine. 1,810,573; June 16.
Fixture, Aligning. L. W. Johnson. 1,810,214; June 16.
Flash light. A. S. Lybne. 1,810,524; June 16.
Float, Life. C. L. Harkrader. 1,810,397; June 16.
Floor, Fireproof. J. H. Southern. 1,810,149; June 16.
Floors, Dividing strips for. P. Galassi. 1,810,761; June 16.
Flowerpot. E. D. Bender. 1,810,236; June 16.
Flush tank. E. L. Gaines. 1,810,473; June 16.
Flying machine. J. W. Fry. 1,810,136; June 16.
Flying machine. R. M. Smyth. 1,810,114; June 16.
Foam, Production of. J. Dyhr. 1,810,394; June 16.
Food carrier, Traveling heated and cooled. G. L. Viffordi. 1,809,951; June 16.
Food product and making the same. E. Jameson, E. D. Stewart, and C. P. Wilson. 1,810,276; June 16.
Food product bricks, Production of. C. W. Vogt. 1,810,864; June 16.
Fountain. *See.*—
Watering fountain.
4'-sulpho-o-benzoyl-benzoic acid, Preparing. I. Gubelmann, H. J. Weiland, and O. Stallmann. 1,810,013; June 16.
4'-sulpho-2-benzoyl-5-amino-benzoic acid. I. Gubelmann, H. J. Weiland, and O. Stallmann. 1,810,009; June 16.
4'-sulpho-2-benzoyl-5-nitro-benzoic acid and making same. I. Gubelmann, H. J. Weiland, and O. Stallmann. 1,810,008; June 16.
Frame. *See.*—
Egg boiling frame. Tender frame.
Frame for elevator machines, Base. F. E. Turner. 1,810,506; June 16.
Frame for holding boots, especially snow shoes. J. Wandeler. 1,810,308; June 16.
Friction device. H. C. Lord. 1,810,872; June 16.
Friction testing machine. A. A. Schaefer. 1,810,405; June 16.
Fruit and the like, Packaging. G. K. S. Ferguson. Re18,099; June 16.
Fuel and delivery thereof to a place of combustion, System of and means for preparing. J. E. Kennedy. 1,809,902; June 16.
Fuel making method and apparatus, Waste. R. E. Caller. 1,809,819; June 16.
Fuel, Producing an artificial. G. W. Traer. 1,810,878; June 16.
Fuel, Vaporizing hydrocarbon. I. E. Aske. 1,810,382; June 16.
Fuels into internal combustion engines, Periodically introducing pulverulent. H. Holzwarth. 1,810,768; June 16.
Funnel. J. E. Erickson. 1,810,822; June 16.
Fur dyeing machine. E. Pierini. 1,809,909; June 16.
Furnace. *See.*—
Dental furnace. Induction furnace.
Furnace. V. Z. Caracristi. 1,810,343; June 16.
Furnace and the like. R. D. De Wolf. 1,810,203; June 16.
Furnace charging apparatus, Glass. J. H. Ritter. 1,810,730; June 16.
Furnace construction. F. Z. Ahl. 1,810,457; June 16.
Furnace for heating drill steels. B. R. Sheets. 1,810,683; June 16.
Fuse. C. L. Wilson. 1,810,805; June 16.
Fuse, Electric. W. G. Hartwig. 1,810,653; June 16.

Fusible element for electric fixture sockets. J. Ciotta. 1,810,071; June 16.
Garment. M. Todes. 1,810,150; June 16.
Garment hanger. C. L. Strauss. 1,810,190; June 16.
Garments, Constructing leg covering. J. Fink. 1,810,517; June 16.
Gas and method of and apparatus for producing the same, Germicidal. J. N. Alsop. 1,810,589; June 16.
Gas burner. J. H. Kinkaid and S. H. Weston. 1,810,713; June 16.
Gas burner. M. J. Roberts. 1,810,373; June 16.
Gas distribution of eight cylinder motors of the straight type. J. A. H. Barkelj. 1,809,923; June 16.
Gas generator. W. Minrath. 1,810,672; June 16.
Gas producer. A. P. Van Heeden. 1,810,738; June 16.
Gas purification process and apparatus. G. A. Bragg. 1,809,818; June 16.
Gases and finely subdivided materials, Reciprocal action between. G. Müller and J Jaenicke. 1,810,055; June 16.
Gases and liquids, Device for mixing. J. M. Daily. 1,810,131; June 16.
Gases from molten light metals such as aluminum and its alloys, Removing. W. Todt. 1,810,801; June 16.
Gases, Separating. R. L. Hasche. 1,810,312; June 16.
Gaseous discharge device. S. Ruben. 1,809,912; June 16.
Gasoline feeding apparatus, Automatic. R. Porte. 1,809,944; June 16.
Gate. *See.*—
Crossing gate.
Gauge. *See.*—
Adjustable gauge. Oil level gauge.
Gauge. C. E. Johansson. 1,810,710; June 16.
Gear construction. J. L. Perkins and H. D. Croft. 1,810,368; June 16.
Gear, Differential. G. H. Benzon, jr. 1,810,747; June 16.
Gear for aeroplanes, Landing. W. Miller. 1,810,054; June 16.
Gear mechanism, Variable speed. M. L. F. von Broembsen. 1,810,450; June 16.
Gear of machines for casting stereotype plates, Driving. C. B. Winkler. 1,810,875; June 16.
Gear, Steering. W. Johnson. 1,810,609; June 16.
Gears, Producing. B. F. Schlesinger. 1,809,948; June 16.
Generator. *See.*—
Gas generator.
Glass, Apparatus for and method of making wire. E. W. Paxton. 1,809,863; June 16.
Glass, Decorating. A. B. Carter. 1,810,127; June 16.
Glass feeder. L. D. Soubier. 1,810,736; June 16.
Glass rods, Apparatus for shaping. E. W. Koering. 1,809,854; June 16.
Glassware, Apparatus and method for annealing. H. A. Wadman. 1,809,996; June 16.
Glove. W. O. Wells. 1,809,877; June 16.
Governor. J. H. Robertson. 1,810,401; June 16.
Governor, Emergency. D. F. Warner. 1,810,633; June 16.
Governor loader, Automatic gas. A. G. Ford. 1,809,930; June 16.
Governor mechanism, Centrifugal. J. H. Robertson. 1,810,059; June 16.
Grab dog and taper, Combination. J. M. Brophy. 1,810,752; June 16.
Grain feeder. R. F. Linders. 1,810,773; June 16.
Grass trimmer. L. D. Albertson. 1,810,587; June 16.
Grease gun. R. Rapellin. 1,810,426; June 16.
Grease service rack. L. L. Gray. 1,810,826; June 16.
Grinding. G. W. Binns. Re18,103; June 16.
Ground, Covering cultivated. O. Weber. 1,810,262; June 16.
Guard for automobile radiators, Ornamental. K. C. Berger. 1,810,748; June 16.
Guard for presses. C. E. Marshall. 1,810,864; June 16.
Gum confection, Chewing. R. B. Webster, A. Fagerlie, and I. C. Barager. 1,810,453; June 16.
Gun casting rod. W. A. Milam. 1,810,779; June 16.
Gun mount. H. C. Zimmerman. 1,810,001; June 16.
Hair clipper, Electric. C. L. Volz. 1,810,152; June 16.
Hair curler. G. Ponarouse. 1,810,785; June 16.
Hair curling device. N. Platel. 1,810,678; June 16.
Hair curling machine. L. A. Carter. 1,809,961; June 16.
Hair waving apparatus. C. Kleine. 1,809,977; June 16.
Hammer, Drop. J. N. Scism. 1,810,536–7; June 16.
Hand brake. G. F. Endicott. 1,809,836; June 16.
Hand brake, Railway car. H. E. Anderson. 1,810,116; June 16.
Handle. *See.*—
Carrying handle. Jack handle.
Hanger. *See.*
Garment hanger.
Hanger for cabinet radiators, Adjustable. J. C. Willcox. 1,810,196; June 16.
Harvester, Corn. W. A. Giermann. 1,810,600; June 16.
Harvesters, Reel driving mechanism for. E. W. and G. D. Baldwin. 1,810,037; June 16.
Hat, Safety. E. W. Bullard. 1,810,157; June 16.
Head lamp, Interior telescoping rim. S. W. Hyatt. 1,810,177; June 16.
Headlight, Nonglare. C. R. Pledger. 1,810,623; June 16.
Header construction. J. Karmazin. 1,810,215; June 16.
Heat distributor plate for cook stoves. F. V. Detwiler. 1,810,132; June 16.
Heat exchanger. A. MacPhee. 1,810,286; June 16.
Heat exchanger. J. Price. 1,809,910; June 16.

Heat interchanger. O. E. Frank and H. P. Wilder. 1,810,165; June 16.
Heat transfer device. D. S. Jacobus. 1,810,178; June 16.
Heat treatment of steel. W. M. Cross. 1,810,696; June 16.
Heater. *See.*—
Brooder heater. Sausage and roll heater.
Radiant heater. Water heater.
Heating apparatus. A. B. Modlue. 1,810,721; June 16.
Heating apparatus for liquids. D. U. Powell. 1,810,185; June 16.
Heating device. O. J. Fay, H. T. Heimberger, and E. Pugh. 1,810,164; June 16.
Helmet, Aviator's. E. T. Allen. 1,810,549; June 16.
Hinge. W. M. Hanson. 1,810,888; June 16.
Hinge. F. B. Walter. 1,810,508; June 16.
Hinge, Spring. A. Rubin. 1,810,534; June 16.
Holder, Adjustable tail. F. B. Judy. 1,810,832–3; June 16.
Holder, Floating reamer. G. H. Thomas. 1,810,503; June 16.
Holder, Lingerie. C. L. Hill. 1,810,014; June 16.
Holder, Nail. O. Breithaupt. 1,810,460; June 16.
Holder, Oscillograph film. J. W. Legg. 1,810,021; June 16.
Holder, Pencil. J. P. McEnery. 1,810,110; June 16.
Holder, Price ticket. L. Hopp. 1,810,049; June 16.
Holder, Shade. G. E. Glatthar and F. Wening. 1,810,520; June 16.
Holder, Toilet paper. H. L. Goldbeck. 1,810,272; June 16.
Holder, Towel. C. W. Thompson. 1,809,918; June 16.
Hole cutter, Circle. E. C. Swanson. 1,809,993; June 16.
Horn. H. Hueber and E. C. Horton. 1,810,478; June 16.
Hose coupling. A. L. Dold. 1,810,268; June 16.
Hose coupling. C. T. Smith. 1,810,735; June 16.
Hose coupling. R. H. Stone. 1,809,874; June 16.
Hose, Oil. E. Schulthess. 1,810,032; June 16.
Hosiery and manufacturing same, Seamless. J. M. Allen. 1,810,098; June 16.
Housing for cane mills or the like, Bearing. O. Faber. 1,810,102; June 16.
Housing, Vehicle lamp. S H H. Kuenzel. Des. 84,424; June 16.
Hull structure for house-boats or the like, Sectional. W. Wilson. 1,810,742; June 16.
Hydrocarbons, Apparatus and process for treating. G. Egloff. 1,810,700; June 16.
Hydrocarbons, Cracking. E. C. Herthel. 1,810,048; June 16.
Hydrocarbons, Method of and composition for increasing the conductivity of. W. Kritchevsky and E. Morrill. 1,810,660; June 16.
Hydrogen, Producing. A. T. Larson. 1,809,978; June 16.
Ice cream or analogous material, Apparatus for continuous production of bricks of. C. W. Vogt. 1,810,740; June 16.
Ice cream or the like, Density control and delivery of. C. W. Vogt. 1,810,862; June 16.
Identification seal. A. Messer. 1,810,493; June 16.
Indicator. *See.*—
Radio tuning indicator.
Indicator. J. B. Glennon. 1,809,934; June 16.
Inductance and coupling system, Adjustable. L. A. Gebhard. 1,809,932; June 16.
Inductance system. L. A. Gebhard. 1,809,933; June 16.
Induction furnace. N. R. Davis, M. J. Marchbanks, and J. H. Ludlow. 1,810,820; June 16.
Induction furnace. C. S. Williams. 1,810,866; June 16.
Induction meter. P. Paszkowski. 1,810,028; June 16.
Ingot, Metallic. E. Gathmann. 1,810,041; June 16.
Injecting and delivering machines for mortar and other materials. E. Fraenkel. 1,810,271; June 16.
Instrument for aligning automobile wheels. A. Limpert. 1,810,429; June 16.
Insulating bushing. O. A. Pearson. 1,809,864; June 16.
Insulators, Sealing. K. A. Hawley. 1,810,424; June 16.
Intaglio printing machine. A. Egli. 1,810,470; June 16.
Internal combustion engine. C. A. Thomas. 1,810,193; June 16.
Internal combustion motor, Triple cam. C. A. Toce and A. Clark. 1,810,688; June 16.
Internal expansion brake. G. H. Stoner. 1,810,092; June 16.
Iodine as iodide from iodine containing adsorption carbon, Obtaining. F. Ellinger. 1,810,039; June 16.
Ironing board construction. C. M. Morris. 1,810,722; June 16.
Ironing table. R. F. Schulzke. 1,810,407; June 16.
Jack. *See.*—
Lifting jack. Screw jack.
Jack. A. V. Jordan. 1,810,425; June 16.
Jack. J. H. Kohler. 1,810,657; June 16.
Jack. W. E. Larson and R. S. Harvey. 1,810,667; June 16.
Jack handle. W. E. Larson and J. H. Kohler. 1,810,715; June 16.
Jewelry, Article of. H. W. Peters. 1,810,291; June 16.
Joint. *See.*—
Rail joint.
Joint for iron and steel pipes and tubes. J. C. Siegle. 1,810,091; June 16.
Key assembly, Interlocking. P. P. Horni. 1,810,399; June 16.
Key for closure plugs, Locking. A. R. Soderquist. 1,810,795; June 16.
Keyhole illuminating means. L. Martin. 1,810,775; June 16.
Keyhole lock, Nonpickable. F. T. Hughes. 1,810,400; June 16.
Kiln, Gas fired. P. J. Lengsholz. 1,810,616; June 16.
Kit, Shaving. G. Flintermann. 1,810,652; June 16.
Knitted fabric. M. Gross. Des. 84,415; June 16.
Knitted fabric. W. S. Parker. Des. 84,433–4; June 16.
Knitted fabric. W. J. Schubert. 1,810,580; June 16.
Knitting machines, Yarn carrier control mechanism for flat. A. Gee. 1,809,969; June 16.
Labeling machine, Wiping rolls for. C. H. Oslund. 1,810,619; June 16.
Lace. B. Edson. Des. 84,407; June 16.
Lactose, Preparing. P. F. Sharp. 1,810,682; June 16.
Lamp. R. A. Currie. 1,809,831; June 16.
Lamp. F. K. Seydler. Des. 84,446; June 16.
Lamp. W. H. Shlesinger. Des. 84,447; June 16.
Lamp, Arc. O. F. Spahr. 1,810,299; June 16.
Lamp base or article of analogous nature. M. Kiwad. Des. 84,422; June 16.
Lamp construction, Head. E. J. Whalen. 1,810,235; June 16.
Lamp setting device. O. Werner. 1,810,036; June 16.
Lamp, Spectrum. C. Loeb. 1,810,669; June 16.
Lamp stand. F. B. Price. Des. 84,437; June 16.
Lantern. D. N. Holland. 1,810,767; June 16.
Latch. B. Rohe. 1,810,087; June 16.
Latch for dump car doors. W. J. Hoscelt. 1,809,850; June 16.
Latch, Refrigerator. A. Rubin. 1,810,530–3; June 16.
Lavatory closet. J. Lewis. 1,810,280; June 16.
Lead, Refining. P. W. Davis. 1,809,835; June 16.
Leer stacker. G. E. Rowe. 1,809,989; June 16.
Leveling instrument. A. Langsner. 1,809,855; June 16.
Lifting jack. E. L. Leinbach. 1,809,979; June 16.
Light. *See.*—
Flash light. Vehicle light.
Light fixture, Electric. H. K. Wack. 1,810,507; June 16.
Light projector. C. A. B. Halvorson, jr. 1,810,604; June 16.
Lighter, Cigar. W. M. Wolf. Des. 84,451; June 16.
Lighter, Electric cigar. H. Agatz. 1,810,065; June 16.
Lines, Apparatus for feeding. P. Okey. 1,810,143; June 16.
Liquid, Apparatus for storing. J. H. Wiggins. 1,810,741; June 16.
Liquid meter. J. W. Ledoux. 1,810,141; June 16.
Liquid purification system. C. C. Reynolds. 1,810,789; June 16.
Liquid trap, Sanitary. R. A. Greenwood. 1,810,240; June 16.
Loader, Wagon. W. H. Bosworth. 1,810,069; June 16.
Lock. *See.*—
Casement lock. Spare wheel lock.
Keyhole lock.
Lock. C. V. Doyle. 1,810,468; June 16.
Lock. J. Friedman. 1,810,760; June 16.
Lock for loom reversing mechanism, Protective. L. M. Rogers. 1,810,679; June 16.
Lock washer. W. Dieter. 1,810,644; June 16.
Locking device for blackboards. J. M. Tracy and F. R. Scherer. 1,810,305; June 16.
Locking device for motor vehicles. A. Weiss. 1,810,381; June 16.
Locomotive. H. L. Ingersoll. 1,810,709; June 16.
Loud speaker. C. A. Bergmann. 1,810,337; June 16.
Lubricant. M. O. Edmiston. 1,810,555; June 16.
Lubricating apparatus. A. W. Reader. 1,809,865; June 16.
Lubricating means. W. B. Hill and V. M. Watt. 1,810,175; June 16.
Lubricating mechanism, Elevator guide rail. C. R. Callaway. 1,810,695; June 16.
Lubricating pad. J. M. M. A. Steurs. 1,810,443; June 16.
Lug for wheel chains. A. Gerth. 1,810,075; June 16.
Lug for wheels. L. B. Neighbour. 1,810,219; June 16.
Luggage carrier. R. Pownall. 1,810,786; June 16.
Machine for applying transfer stamps. C. G. Richardson. 1,810,294; June 16.
Machine for crimping pipe sleeves. A. J. Bulger. 1,810,342; June 16.
Machine for forming pastry cups. E. Hamwi. 1,809,848; June 16.
Machine for making inlaid floor coverings. G. V. Anderson. 1,810,869; June 16.
Machine for milling and planing profiled elements of wood, leather, and the like. P. Bastian, jr. 1,810,811; June 16.
Machine for removing and replacing piston wrist pins. E. O. Minor. 1,810,884; June 16.
Machine for stripping tobacco leaves. C. G. B. Rothelius. 1,810,792; June 16.
Magnetos, Adjusting device for. J. F. Martin. 1,810,367; June 16.
Mail box. F. I. Jaden. 1,810,769; June 16.
Mail box. D. Quinn. 1,810,058; June 16.
Mandrel. J. W. Howell. 1,810,275; June 16.
Map folder. F. J. Taylor. 1,809,876; June 16.
Marine salvage device. F. G. Preston. 1,810,084; June 16.
Marker, Book. P. Ockenden. 1,809,943; June 16.
Mask, Rubber. R. D. Lancaster. 1,810,486; June 16.
Material feeding device. J. E. Lodge. 1,809,983; June 16.
Material for the purification of gaseous mixtures, Making. G. E. Seil. 1,809,990; June 16.
Material handling machine. C. H. Bebinger. 1,810,119; June 16.

Mattress and cushion. L. A. Suckoff. Re18,101; June 16.
Mattress retainer. N. Goldberg. 1,810,601; June 16.
Meat tenderer. M. Lowenthal. 1,810,719; June 16.
Mechanical movement. L. Alig. 1,810,154; June 16.
Metal, Apparatus for shaping sheet. O. J. Groehn and L. S. Lamb. 1,809,944; June 16.
Metal, Heat treating. A. T. Kathner. 1,810,612; June 16.
Metal, Method and apparatus for working. G. E. Neuberth. 1,810,886; June 16.
Metal particles, Reworking finely divided. J. Schmeller, sr. 1,810,535; June 16.
Metal, Rolling. J. R. George. 1,810,167; June 16.
Metal surfaces, Manufacturing veneered metal. M. Linse. 1,810,281; June 16.
Metal tubing, Welding. E. Riemenschneider. 1,810,112; June 16.
Metallic leaf applying device. S. H. Swallow. 1,809,875; June 16.
Metals, Plating. W. E. Watkins. 1,810,409; June 16.
Meter. *See.*—
Induction meter. Liquid meter.
Meters, Back check for gas. D. N. Lambert. 1,810,835; June 16.
Milk, Making liquid malted. W. O. Frohring. 1,810,518; June 16.
Milking machine. R. L. Hinman. 1,810,477; June 16.
Mills, Billet manipulator for rolling. J. A. Smitmans. 1,810,684; June 16.
Mining machine. M. P. Holmes. 1,810,105; June 16.
Mining, System and method of hydraulic. H. L. Mead. 1,810,571; June 16.
Mirror. A. Marchand. Des. 84,426; June 16.
Mirror, Automobile. H. C. Paulson. 1,810,435; June 16.
Mixing and heat interchange apparatus. H. S. Beers. 1,810,637; June 16.
Model for geometry instruction. J. Guyer. 1,810,421; June 16.
Mold. *See.*—
Printing plate mold.
Mold, Baking unit of a waffle. K. H. Ober. Des. 84,432; June 16.
Molded articles, Making. H. Bucholz. 1,810,126; June 16.
Motor. *See.*—
Air motor. Semisleeve valve motor.
Internal combustion motor
Motor control. O. F. Shepard. 1,810,441; June 16.
Motor installation, Hydraulic. H. Pieper. 1,810,254; June 16.
Motor protection device. G. D. Bower. 1,809,827; June 16.
Motors, Control system for electric. J. H. Hall. 1,809,847; June 16.
Mounting, Ball bearing. W. Timson. 1,810,093; June 16.
Mounting, Bridge member for an ophthalmic. J. D. Brock. Des. 84,395; June 16.
Mounting, Cleat. E. A. Richardson. 1,810,577; June 16.
Mounting, Cushion. H. C. Lord. 1,810,717; June 16.
Mounting for driven elements on motor shafts, Resilient. A. C. Dickson. 1,810,204; June 16.
Mounting, Lamp. C. H. Larson. 1,810,666; June 16.
Mounting, Motor. J. N. Scism. 1,810,538; June 16.
Mounting, Roller screen. A. F. Nye. 1,810,849; June 16.
Mounting, Shade roller. I. Perper. 1,810,497; June 16.
Mower, Electrically driven lawn. J. Lenhart. 1,810,357; June 16.
Mower guard. C. L. Kucha. 1,810,081; June 16.
Mowing machine, Mechanically driven. M. F. Moreau. 1,810,781; June 16.
Muffler for internal combustion engines, Exhaust. A. S. Noonan. 1,810,252; June 16.
Musical instrument, Automatic. L. S. Lockwood, 1,810,359; June 16.
Nail polisher, Finger. C. J. Foerster. 1,810,701; June 16.
Nest, Clean egg. E. H. Kielsmeier. 1,810,278; June 16.
Nonskid device for automobile wheels. C. E. Clapp. 1,810,129; June 16.
Nozzle. P. C. Temple. 1,810,799; June 16.
Nozzle. S. A. Wier. 1,809,999; June 16.
Nozzle, Exhaust. B. L. McLeod. 1,809,942; June 16.
Oil, Apparatus for catalytically treating hydrocarbon. G. Egloff. 1,810,648; June 16.
Oil burner. K. Townsend and R. Hill. 1,810,689; June 16.
Oil burner boiler. D. C. Woodward. 1,809,920; June 16.
Oil conversion, Hydrocarbon. J. C. Morrell and W. F. Faragher. 1,810,673; June 16.
Oil level gauge. M. E. Cheney. 1,810,818; June 16.
Oil pressure in high tension electric cables, Maintaining. L. Emanueli. 1,809,927; June 16.
Oil products, Pressure distilled. V. Voorhees and E. J. Shaeffer. 1,810,632; June 16.
Oiler, Wheel flange. P. H. Hamilton. 1,810,764; June 16.
Oiling apparatus for edger arbors, Positive regulated. W. R. Carlson. 1,810,755; June 16.
Oils, Refining. A. R. Moorman and I. C. Carpenter. 1,809,862; June 16.
Oils, Refining hydrocarbon. A. G. Peterkin, jr. 1,810,369; June 16.
Oils, Treating hydrocarbon. J. C. Black and M. L. Chappell. 1,810,068; June 16.
Opening, mixing, and blowing room, and like machinery used in cotton mills. T. Nuttall and S. A. Shorter. 1,810,675; June 16.
Optical apparatus for determining finish on paper. C. H. Milligan. 1,810,433; June 16.
Ore cooling apparatus. H. J. Hartley and F. B. Schilling. 1,810,562; June 16.
Ornament, Radiator. V. McPhillips. 1,810,289; June 16.
Oven, Coke. C. Still. 1,810,629; June 16.
Package wrapping device. C. S. Brandenburg. 1,810,156; June 16.
Packer and setting tool, Combination. G. A. Humason. 1,810,352; June 16.
Packing, Labyrinth. F. Hodgkinson. 1,810,372; June 16.
Packing, Labyrinth gland. K. Baumann. 1,810,371; June 16.
Packing ring. T. A. Bowers. Re18,102; June 16.
Pad. *See.*—
Lubricating pad. Rubbing or sanding pad.
Paper, Decorating. H. M. Ross. 1,810,145; June 16.
Paper feeding machine. H. Hallstream. 1,810,171; June 16.
Paper, Making deckle edge. W. J. Lamory. 1,810,816; June 16.
Paper making machines, Inlet for. F. Hilsheimer. 1,809,937; June 16.
Paper making machines, Suction device of. T. Yonekura. 1,810,456; June 16.
Paper, Manufacture of. H. R. Rafton. 1,810,728–9; June 16.
Parachute. A. Lehmann. 1,810,488; June 16.
Pen desk set. L. J. Most. 1,809,985; June 16.
Pen, Fountain. A. Bienenstein. Des. 84,394; June 16.
Pen, Fountain. O. J. Sundstrand. 1,809,992; June 16.
Pen, Fountain drawing. J. Ramos. 1,810,788; June 16.
Pencil and clip, Combined. J. P. McEnery. 1,810,109; June 16.
Percolator, Electric. W. S. Marvin. 1,810,490; June 16.
Petroleum hydrocarbons or light distillates, Desulphurizing liquid. H. Ulrich. 1,810,803; June 16.
Phonograph. A. A. Johnson. 1,810,883; June 16.
Phonograph and the like. A. D. Jones and S. J. Smith. 1,809,901; June 16.
Phonograph records, System for optically recording. J. Weinberger. 1,810,234; June 16.
Phosphate, Decomposition of crude. T. Thorssell and A. Kristensson. 1,810,858; June 16.
Phosphate fines, Recovery of. P. McG. Shuey and E. Woodward. 1,810,794; June 16.
Photographic negatives, Apparatus for developing. L. J. Riggle. 1,810,790; June 16.
Photography, Color. W. V. D. Kelley. 1,810,180; June 16.
Picker. *See.*—
Cotton picker.
Picture projecting machines, Dowser control mechanism for motion. J. T. Fewkes. 1,810,348; June 16.
Picture screen, Motion. J. A. Gray. 1,810,168; June 16.
Picture screen, Moving. E. M. Crawford. 1,810,346; June 16.
Picture screen, Moving. J. A. Gray. 1,810,169; June 16.
Pilot, Curtain rod. E. H. Hart. 1,810,207; June 16.
Pin. *See.*—
Rolling pin.
Pipe connection. R. B. Morse and H. R. Devilbiss. 1,810,434; June 16.
Pipe cutter. W. L. Church. 1,810,344; June 16.
Pipe joint and making same, Welded. R. Furrer. 1,810,825; June 16.
Pipes cast in flasks in one piece, Apparatus for ejecting. L. L. Mathieu. 1,810,183; June 16.
Pipes, tubes and similar articles, Method of and apparatus for straightening. W. F. Clark. 1,810,819; June 16.
Piston. R. J. Hatch. 1,810,423; June 16.
Piston. C. C. Krause. 1,810,279; June 16.
Planter, Pneumatic. A. A. Matheson. 1,810,671; June 16.
Plastic materials, Apparatus for continuously hardening. C. W. Vogt. 1,810,863; June 16.
Plastic mixtures, Apparatus for aging. W. H. Brooks and F. M. Taylor. 1,810,125; June 16.
Plier cover remover. W. I. Kaser. 1,810,315; June 16.
Plug, Clean-out. F. J. Mersfelder and P. Balze. Re18,100; June 16.
Plug, Electric. M. A. Rollman. 1,810,439; June 16.
Pneumatic car puller. A. E. Rothgarn. 1,810,680; June 16.
Pneumatic dispatch system. M. L. Emerson. 1,810,269; June 16.
Pocketknife. G. M. Schrade. 1,810,031; June 16.
Polisher, Cartridge-holding floor. E. R. Gedge. 1,809,968; June 16.
Potato chipper. J. Bader. 1,809,824; June 16.
Pottery ware, Automatic manufacture of. W. J. Miller. 1,809,861; June 16.
Poultry leg-blank placer and remover. C. A. Trump. 1,810,631; June 16.
Power actuated means for feeding rotary drills. P. Jones and P. W. Prutzman. 1,810,248; June 16.
Power converting device. E. E. Anthony. 1,809,884; June 16.
Power transmission. F. Ljungström. 1,810,282–3; June 16.
Power transmission mechanism. R. Ljungkull. 1,810,489; June 16.

Power wheel. R. S. Turner. 1,809,919; June 16.
Press. *See.*—
Cotton press.
Press. A. A. Byerlein. 1,810,640; June 16.
Press and display rack. J. O. A. Aubert. 1,810,741; June 16.
Pressure exerting device. S. S. Colt. 1,809,962; June 16.
Printing machine for colored films. P. Brosse. 1,810,200; June 16.
Printing plate. J. Schultz. 1,810,089; June 16.
Printing plate mold. J. Schultz. 1,810,088; June 16.
Printing press attachment. W. E. Shacklett. 1,810,256; June 16.
Program machine. H. Sanner. 1,810,732; June 16.
Propeller control, Automatic. J. E. Carol. 1,810,159; June 16.
Protective device. W. J. Stanton. 1,810,189; June 16.
Protective shield for incandescent lamps. C. Whitman. 1,809,878; June 16.
Protective system for transformers. F. W. Gay. 1,809,895; June 16.
Protector, Accelerator heat. J. B. Rouse. 1,810,625; June 16.
Protector, Automobile door. L. F. Winne. 1,810,510; June 16.
Puller. *See.*—
Pneumatic car puller. Undershirt puller.
Pump head, High pressure. J. A. Wintroath. 1,810,333; June 16.
Pump, High vacuum molecular. E. H. Norinder. 1,810,083; June 16.
Pump operating means, Casting. H. A. W. Wood. 1,810,867; June 16.
Pump plunger, Multistage. L. C. Black. 1,810,121; June 16.
Pump, Turbo. V. Schleyer. 1,810,297; June 16.
Purifying tank. G. M. Bucey. 1,810,462; June 16.
Rack. *See.*—
Bottle rack. Grease service rack.
Display rack. Press and display rack.
Radiant energy receiving system. H. C. Forbes. 1,809,967; June 16.
Radiant heater. M. A. Possons. 1,810,852; June 16.
Radiator. W. J. Kenney. 1,810,712; June 16.
Radiator support. C. R. Paton. 1,809,986; June 16.
Radio tuning indicator. R. T. Kingsford and L. H. Davis. 1,810,351; June 16.
Rail anchor. F. A. Preston. 1,809,987; June 16.
Rail joint. C. Pascal. 1,810,622; June 16.
Range, Gas. W. D. Antrim. 1,810,810; June 16.
Range, Gas. G. E. Pickup. 1,810,725; June 16.
Range, Insulated. H. Moecker, jr. 1,810,842; June 16.
Range, Kitchen heater gas. L. Moore. Des. 84,428; June 16.
Ranges, Service drawer for. H. Moecker, jr. 1,810,843; June 16.
Razor and stropper, Combined safety. P. Friel. 1,810,559; June 16.
Reamer. L. O. Beard. 1,810,263; June 16.
Reamer, Helical bladed. W. J. Kattrein and F. W. Becker. 1,809,975; June 16.
Reamer, Renewable. S. L. Campbell. 1,810,201; June 16.
Receiver. C. W. Hansell. 1,810,475; June 16.
Receptacle and container, Automatically locked. E. W. Johnson. 1,810,656; June 16.
Receptacle, Ash. E. W. Huttig. Des. 84,417; June 16.
Receptacle, Attachment plug. G. A. and A. A. Johnson. 1,810,481; June 16.
Receptacle, Electrical connecter. L. R. Taylor. 1,810,687; June 16.
Receptacle, Laundry. S. Katzman. 1,810,563; June 16.
Receptacle, Oyster. G. A. Kegel. 1,810,080; June 16.
Receptacle, Refuse. E. J. Pavelka. 1,810,784; June 16.
Recording apparatus for wire and wireless telegraphy. H. Chireix. 1,809,821; June 16.
Rectifier, Mercury arc. F. P. Whitaker. 1,810,634; June 16.
Reel. *See.*—
Fishing reel.
Reenforced construction, Externally. J. H. Levering. Re18,104; June 16.
Reflector heater. E. J. Ajax. Des. 84,389; June 16.
Refrigerant jet for dental operations, Generation of a. S. Braunstein and S. Meerson. 1,810,750; June 16.
Refrigerants, Stabilizing. R. W. Davenport. 1,809,833; June 16.
Refrigerating apparatus, Compression. L. K. Wright. 1,809,957; June 16.
Refrigerating systems, Stabilizing the atmosphere of. R. W. Davenport. 1,809,834; June 16.
Refrigeration apparatus. G. W. Mason. 1,810,569; June 16.
Refrigeration apparatus. L. K. Wright. 1,809,958; June 16.
Refrigerator. J. Flynn. 1,809,893; June 16.
Refrigerator. W. R. Jeavons. 1,809,900; June 16.
Refrigerator control. P. Farmer. 1,809,928; June 16.
Refrigerator, Electric. H. Mock. 1,810,841; June 16.
Register. *See.*—
Cash register.
Registering system. H. E. Hershey. 1,810,211; June 16.
Regulator. *See.*—
Window regulator.
Regulator for window ventilator, Air. V. W. I. Frederick. 1,810,824; June 16.
Renovator, Portable blackboard. A. Bennington. 1,810,336; June 16.
Resinous by-products in the manufacture of wood pulp, Recovering. E. H. French. 1,810,472; June 16.
Ring. *See.*—
Checking ring. Packing ring.
Ring. J. Goldman. Des. 84,410–11; June 16.
Ring. J. A. Meyers and H. H. Johnson. Des. 84,427; June 16.
Ring and the like, Finger. H. W. Peters. 1,810,850; June 16.
Rod. *See.*—
Gun casting rod.
Roll, Textile. J. Adler and P. Doerseln. 1,810,636; June 16.
Roller bit. G. E. Behnke. 1,810,120; June 16.
Rolling pin. G. Klempp. 1,810,050; June 16.
Rolling screen. A. F. Nye. 1,810,848; June 16.
Roof construction. H. G. Muhr. 1,810,674; June 16.
Roofing and weatherproofing material. A. C. Fischer. 1,810,880; June 16.
Rosin, Purifying and decolorizing. R. C. Palmer. 1,810,222; June 16.
Rosins with resorcinol, Purifying and decolorizing. L. Gubelmann and C. O. Henke. 1,810,170; June 16.
Rotary action bit. E. L. Boynton. 1,810,391; June 16.
Rotary drier. W. A. Harty and F. W. Moore. 1,810,476; June 16.
Rotary drill, Steam actuated automatic. P. Jones. 1,810,247; June 16.
Rotor for aeroplanes and helicopters, Adjustable. F. Wander, jr. 1,810,584; June 16.
Rotor for asynchronous alternating current motor. H. Papst. 1,810,056; June 16.
Rubbing or sanding pad. F. E. Newcomb. 1,809,907; June 16.
Safety cracker. H. S. Barnes. 1,809,825; ; June 16.
Safety device for motion picture projecting machines. J. F. Adams. 1,809,815; June 16.
Safety device for ships. G. Kelemen. 1,810,564; June 16.
Safety unit for motion picture projectors. T. T. Allen and J. F. Adams. 1,809,817; June 16.
Sand in foundries, Apparatus for handling. W. E. Naylor. Re18,106; June 16.
Sand spraying device for motor vehicles, especially motor cars. W. Herdling. 1,810,765; June 16.
Sandal for footwear, Universal. W. J. Bennett. 1,810,514; June 16.
Sash, Storm. C. F. Charlton. 1,809,829; June 16.
Sausage and roll heater. W. H. Rittberger. 1,809,867; June 16.
Saw, Circular. S. T. Freas and C. A. Gehr. 1,810,823; June 16.
Saw stretcher. J. H. Green. 1,810,349; June 16.
Sawing apparatus. J. S. Oursler. 1,810,144; June 16.
Sawing machine. J. O. Horton. 1,810,245; June 16.
Sawing machine with arcuate cut, Metal. J. Babin and A. Pays. 1,810,746; June 16.
Scale, Proportional. A. M. Clark. 1,810,392; June 16.
Scooping machine. H. H. Boettcher. 1,810,389; June 16.
Screen. *See.*—
Picture screen. Window screen.
Rolling screen.
Screen for windshields. F. R. Harris, jr. 1,810,044; June 16.
Screen for wood pulp digesters or the like, Top. E. Morterud. 1,810,845; June 16.
Screw cap. J. S. Hardiman. 1,810,706; June 16.
Screw driver. K. T. Gentry. 1,810,704; June 16.
Screw jack. J. W. Bate. 1,810,118; June 16.
Sea bottom, Apparatus for photographing the. F. I. Stiles. 1,810,302; June 16.
Sectional former. H. A. W. Wood. 1,809,954; June 16.
Semisleeve valve motor. J. H. Coyne. Re18,097; June 16.
Septic tank. I. Gutman. 1,810,474; June 16.
Servo-brake. P. Hallot. 1,810,763; June 16.
Setworks. G. M. Pelton. 1,810,029; June 16.
Sewer inlet. E. H. Paffrath. 1,810,572; Jpne 16.
Sewing machine, Overedge. K. Maier. 1,810,617; June 16.
Sewing machines, Bed structure for. F. Lutz. 1,809,941; June 16.
Shackle jimmy. H. W. Zimmerman. 1,810,513; June 16.
Shade and shutter with automatic locking means, Combination. H. Krueger. 1,810,771; June 16.
Shade bracket, Detachable ventilating. G. Anderson. 1,810,099; June 16.
Shaft sealing device. E. H. Steedman. 1,810,582; June 16.
Sharpener, Knife. W. F. Polson. 1,810,727; June 16.
Sharpener, Pencil. V. C. Luppert. 1,810,284–5; June 16.
Sheave. M. F. Yount. 1,809,921; June 16.
Sheet feeding mechanism. A. Broadmeyer. 1,810,751; June 16.
Ship, Welded. E. B. Wheeler. 1,810,097; June 16.
Shock absorber. J. H. Symank. 1,810,707; June 16.
Shock absorbing mechanism, Friction. R. J. Olander. 1,809,908; June 16.
Shoe. D. Stark. 1,810,581; June 16.
Shoe and making the same. T. Buek. 1,810,341; June 16.
Shoe construction. C. G. Wernmark. 1,809,998; June 16.
Shoe for ladders, Safety. J. Heiniger. 1,810,045; June 16.
Shoe lace tip, Metallic. R. F. Good. 1,810,602; June 16.
Shoes, Side guard for. E. Haas. 1,809,845; June 16.

Shopping bag. E. Daitch. 1,810,347; June 16.
Shuttle tension. A. Hannah. 1,809,849; June 16.
Sign. W. Carter. 1,810,756; June 16.
Sign, Advertising display. W. H. Black. 1,810,339; June 16.
Signs, Making glass. C. J. Olsou. 1,810,526; June 16.
Signal. *See.*—
Alarm signal.
Signal transmitter and valve control means, Trapped key. J. G. Nolen. 1,810,323; June 16.
Signboard advertising, Apparatus for audible. F. W. Bonitz. 1,810,264; June 16.
Signboard, Rotary. L. A. Burch. 1,809,960; June 16.
Silk, or silk containing textile material, Loading of. R. Clavel. 1,810,238; June 16.
Skate, Roller. W. V. Van Etten. 1,810,380; June 16.
Skiving machine. F. N. La Chapelle. 1,810,485; June 16.
Slip. E. M. Stone. 1,810,796; June 16.
Slipper. L. Goldstein. Des. 84,412; June 16.
Slitting machine, Fabric. F. B. Pfeiffer. 1,810,677; June 16.
Smoke indicator system. E. H. Vedder. 1,810,739; June 16.
Snap fastener element. D. I. Reiter. 1,810,576; June 16.
Snap switch. G. H. Johanson. 1,810,314; June 16.
Snow handling implement. E. R. Moller. 1,810,026; June 16.
Snow runner. A. Gerth. 1,810,042; June 16.
Soap, Manufacture of. E. Flämmer and C. Kelber. 1,810,759; June 16.
Socket, Cam lock contraction. A. R. Wolfe. 1,810,455; June 16.
Socket cluster and connection plug, Combined. B. P. McKinley. 1,810,570; June 16.
Sound device. J. D. Staggs. 1,809,916; June 16.
Sound diaphragm. E. S. Pridham. 1,809,911; June 16.
Sound recording. H. P. Hollnagel. 1,810,605; June 16.
Sound recording system. W. Gallahan. 1,810,703; June 16.
Sound recording system, Thermal. E. H. Hansen. 1,810,705; June 16.
Sound reproducing apparatus. F. H. Owens. 1,810,324; June 16.
Sound shutter. F. H. Owens. 1,810,527; June 16.
Sound waves, Method of and apparatus for amplifying and projecting. M. R. Hutchison. 1,810,708; June 16.
Spare wheel lock. J. J. Wharam. 1,810,195; June 16.
Spectacle frame. L. E. Croe. Des. 84,399; June 16.
Spectacle temple. J. N. Nelson. 1,810,220; June 16.
Speed control for prime movers, Constant. R. G. Standerwick. 1,810,627; June 16.
Spindle chucking machine, Multiple. J. J. Spring. 1,810,300; June 16.
Sport bag. A. Bertini. 1,810,813; June 16.
Spout construction. W. R. Henion. 1,810,137; June 16.
Spring. *See.*—
Automobile spring.
Spring. G. H. Beaumont. 1,809,959; June 16.
Spring mounting. O. F. Lundelius and J. R. Dillon. 1,810,319; June 16.
Stalk and weed cutter. A. D. Sims and A. C. Wright. 1,810,061; June 16.
Stamping machine for conveyers. J. S. Phelps. 1,810,327; June 16.
Stand. *See.*—
Christmas tree stand. Tire display stand.
Stand and work case, Blackboard. W. F. Spencer. 1,810,501; June 16.
Staple for mulching paper, Anchor. J. H. Cook. 1,810,463; June 16.
Stapling machine. R. E. Peterson. 1,810,528; June 16.
Starting apparatus. T. A. Keen. 1,810,179; June 16.
Starting apparatus, Engine. J. B. Dyer. 1,810,393; June 16.
Steam board. H. Betke. 1,810,338; June 16.
Steam boiler. D. S. Jacobus. 1,809,972; June 16.
Steam-jet ejector, Multistage. J. Sim. 1,810,873; June 16.
Steering mechanism, Gyroscopic. W. Dieter. 1,810,646; June 16.
Stencil sheet. C. F. Kumli. 1,810,483–4; June 16.
Sterilizer. G. Trupiano. 1,810,545; June 16.
Stocking. R. N. Apprich. Des. 84,390; June 16.
Stocking. R. N. Apprich. Des. 84,392; June 16.
Stocking. H. Peters. Des. 84,435–6; June 16.
Stocking. A. H. Wittenberg. 1,810,197; June 16.
Stoker construction, Underfeed. C. F. Miller. 1,809,906; June 16.
Stoker, Locomotive. N. M. Lower. 1,809,903; June 16.
Stoker mechanism. N. M. Lower. 1,809,904; June 16.
Stop, Work. A. M. Maszczyk. 1,810,430; June 16.
Storage case. K. R. Templeton. 1,809,994; June 16.
Stove. G. Jones. 1,810,711; June 16.
Stovepipe, Ventilating. J. F. Jewart. 1,810,831; June 16.
Strainer and cooking pot, Protective. G. Trupiano. 1,810,543; June 16.
Strainer attachment, Well. A. E. Cunningham. 1,810,757; June 16.
Strap. J. L. Moran and A. J. Lee. 1,810,027; June 16.
Stresses in structural elements, Equalizing. F. Vogt. 1,810,232; June 16.
Stripper for fabrics. W. Kritchevsky and H. C. Prutsman. 1,810,663; June 16.
Stropper, Razor. L. H. Brooks. 1,810,265; June 16.
Suction plate machine. W. C. Jay. 1,809,852; June 16.
Suit, Ensemble. D. Long. Des. 84,425; June 16.
Support, Engine. C. R. Uebelmesser and W. Wenderhold. 1,810,879; June 16.
Support especially for heavy machine guns or the like. W. C. L. Haubroe. 1,810,654; June 16.
Support for automatic connecters. J. Robinson. 1,809,946; June 16.
Support for head rests, Adjustable. C. W. Fischer. 1,810,651; June 16.
Support, Return roller. F. E. Smith. 1,810,148; June 16.
Support, Vehicle. M. C. Pierce. 1,810,726; June 16.
Supporting and driving means for tractors. R. H. White. 1,810,635; June 16.
Supporting sucker rod and pump lines. J. C. Stokes. 1,810,303; June 16.
Suspension clamp. F. H. Miller. 1,810,053; June 16.
Swing construction. J. C. Campbell. 1,810,595; June 16.
Switch. *See.*—
Centrifugal switch. Snap switch.
Electric switch. Trolley switch.
Switch controlling apparatus, Railway. C. A. Brooks and H. S. Young. 1,810,124; June 16.
Switch for electric lamps. F. E. Johnson. 1,810,480; June 16.
Switch mechanism. J. M. Brown. 1,810,694; June 16.
Switch operating and controlling mechanism. W. K. Rankin. 1,810,624; June 16.
Switch timer, Double acting. R. D. Smith. 1,810,187; June 16.
Table. *See.*—
Collapsible table. Ironing table.
Drawing table.
Table. A. Friedman. Des. 84,408; June 16.
Table. E. A. Purnell. Des. 84,439; June 16.
Tables and the like, Shield attachment for eating. A. W. Nelson. 1,810,618; June 16.
Talking and moving picture machines, Synchronizing mechanism for combined. E. R. Taylor. 1,810,062; June 16.
Tank. *See.*—
Flush tank. Septic tank.
Purifying tank.
Tank filling apparatus. N. M. De Arman. 1,810,413; June 16.
Tap changing system. W. R. Farley. 1,809,964; June 16.
Tape dispensing device. C. G. Kronmiller. 1,809,940; June 16.
Telegraph receiving system, Wireless. J. Brown. 1,810,461; June 16.
Telegraph system. J. I. Bellamy. 1,810,198; June 16.
Telegraph system, Carrier. V. P. Thorp. 1,809,950; June 16.
Telegraph system, Synchronous. H. Angel and J. W. Robinson. 1,810,809; June 16.
Telephone exchange system. E. P. G. Wright. 1,809,882; June 16.
Telephone system, Automatic. H. L. Warwick. 1,810,865; June 16.
Telephone transmission. O. E. Buckley and R. V. L. Hartley. 1,809,828; June 16.
Television apparatus. W. M. Jones, jr. 1,810,610; June 16.
Television, Receiving apparatus for. G. Wald. 1,810,692; June 16.
Television system. T. A. Smith. 1,810,188; June 16.
Temperature control, System of. A. Hayes. 1,810,172; June 16.
Tender frame. C. W. Werst and E. E. Hicken. 1,810,874; June 16.
Tension on shaft inclosing tubing, Applying. J. A. Wintroath. 1,810,332; June 16.
Textile fabric. F. E. Rudd. Des. 84,443; June 16.
Thermometer and paper clamp, Combined. H. E. Gorsuch. Des. 84,413; June 16.
Thermometer tube and making the same. M. E. Moeller. Re18,105; June 16.
Thread moistening guide. E. E. Fischer. 1,810,007; June 16.
Time element device. W. A. Atwood. 1,810,591; June 16.
Tin plate, Method of and apparatus for the manufacture of. S. E. Diescher. 1,810,699; June 16.
Tire and method of and apparatus for building the same, Pneumatic. H. A. Denmire. 1,810,072; June 16.
Tire casing. G. Reinhardt. Des. 84,441; June 16.
Tire display stand. F. C. Collins 1,810,345; June 16.
Tire for wheels, Resilient. J. Davey. 1,809,889; June 16.
Tire mold servicing machine. P. W. Lehman. 1,809,856; June 16.
Tire rim breaking machine. A. S. Gray. 1,810,881; June 16.
Tire testing machine. T. Midgley. 1,809,860; June 16.
Tire tube, Self sealing. J. R. Crossan. 1,810,038; June 16.
Tires, Making cushion. A. L. Schoff, C. E. and G. J. Nelson. 1,810,406; June 16.
Tool, Electric. R. L. Hinds. 1,810,212; June 16.
Tool, Machine. H. E. Martin. 1,809,858; June 16.
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Tool, Percussion. F. L. O. Wadsworth. 1,809,952; June 16.
Tool, Sorghum crops topping. M. Fraizer. 1,809,931; June 16.
Tool, Striping. H. O'Connell. 1,810,221; June 16.
Tools in sets and holders therefor. W. C. Kress. 1,810,108; June 16.

Tools, Mechanism for adjusting machine. H. Unverdross. 1,809,995; June 16.
Top, Counter. C. A. Triger. 1,810,412; June 16.
Torch construction, Welding. L. Campbell, jr. 1,810,158; June 16.
Toy animal. A. Séror. Des. 84,444; June 16.
Toy, Electrical. H. E. Loving. 1,810,250; June 16.
Toy telephone. W. C. Wood. 1,809,881; June 16.
Traction attachment for vehicle wheels. A. Gerth. 1,810,043; June 16.
Tractor track, Articulated. L. T. Kincannon. 1,810,138; June 16.
Traffic controlling apparatus, Railway. H. A. Wallace. 1,810,094–6; June 16.
Traffic controlling apparatus, Railway. H. A. Wallace. 1,810,452; June 16.
Trailer hitch. J. Billstein. 1,810,592; June 16.
Train control system. T. Bodde. 1,810,551; June 16.
Transformer and transformer system. F. E. Field. 1,809,839; June 16.
Transmission Irreversible in both directions, Rotatable. R. Petit. 1,810,851; June 16.
Transmission line device. N. A. Wahlberg. 1,809,997; June 16.
Transmission lining. W. Nanfeldt. 1,810,723; June 16.
Transmission system. J. L. Hogg. 1,810,015; June 16.
Transmission system. R. C. Mathes. 1,810,025; June 16.
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Transmitter, Storage. E. E. Kleinschmidt. 1,810,107; June 16.
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Tray, Ash. S. J. Hudson and L. M. Gilley. Des. 84,416; June 16.
Tray or similar article, Ash. A. von Frankenberg. Des. 84,449; June 16.
Tray or similar article, Handled. J. M. Du Bois. Des. 84,405; June 16.
Tray, Posting. G. R. Schroeder. 1,810,793; June 16.
Trigger mechanism for firearms mounted on a carriage and having a pointing handle. F. Herlach. 1,810,243; June 16.
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Trolley for hoists. C. E. Schirmer. 1,810,578; June 16.
Trolley switch. J. F. Woolley, jr., and L. J. Long. 1,810,548; June 16.
Trolley system. L. W. Birch. 1,810,515; June 16.
Trouser skirt, Combination. M. C. Bohr. 1,810,237; June 16.
Truing and positioning device for grinding wheels. C. H. Scharr. 1,810,408; June 16.
Trunk and box. F. L. Wagar. 1,810,451; June 16.
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Tube for dyeing and bleaching, Soluble. W. N. Pharr. 1,810,057; June 16.
Tube making method and apparatus. H. L. Young. 1,810,585–6; June 16.
Tubes, Device for bending. G. A. Bryan. 1,810,340; June 16.
Tubes, Tapering metal. G. E. Neuberth. 1,810,885; June 16.
Tubing, Apparatus for manufacturing vaned seamless. S. E. Diescher. 1,810,698; June 16.
Tubing machine. E. S. Ewart. 1,809,837; June 16.
Tumbler or similar article, Glass. W. W. Reese. Des. 84,440; June 16.
2-nitro-anthraquinone-7-sulpho-acid and making the same. I. Gubelmann, H. J. Weiland, and O. Stallmann. 1,810,010; June 16.
2-nitro-7-chloro-anthraquinone and making the same. I. Gubelmann, H. J. Weiland and O. Stallmann. 1,810,011–12; June 16.
Typewriter. C. D. Youngberg. 1,809,883; June 16.
Typewriting and computing machine, Combined. R. Pennicott. 1,810,325; June 16.
Typewriting machine. W. A. Dobson. 1,810,309; June 16.
Typewriting machine. F. W. Hillard. 1,810,522; June 16.
Umbrella, Folding. H. Krüger. 1,810,567; June 16.
Underreamer. E. F. Raymond. 1,809,988; June 16.
Underreamer. E. F. Raymond. 1,810,030; June 16.
Underreamer, Rotary. S. L. Campbell. 1,809,820; June 16.
Undershirt puller. V. N. Malapeta. 1,810,363; June 16.
Unloader, Bottle. R. E. Miller. 1,810,432; June 16.
Vacuum cleaners, Accessories for. L. P. Keller. 1,810,613; June 16.
Valuables, Transporting. J. P. Camp. 1,810,641; June 16.
Values from brine, Process and apparatus for recovering. F. Macdonald, W. H. Allen, C. F. Ritchie, and V. T. Manchee. 1,810,181; June 16.
Valve. C. F. Beckwith. 1,810,067; June 16.
Valve. C. E. Ploeger. 1,810,498; June 16.
Valve, Automatic. R. P. Johnson. 1,810,353; June 16.
Valve control, Self sealing. J. W. Dearing. 1,810,877; June 16.
Valve controlling device. F. B. Thomas. 1,810,540; June 16.
Valve coupling, Air bag. J. Wahl and O. Melzer. 1,810,115; June 16.
Valve device, Brake application. J. H. Woods. 1,810,547; June 16.
Valve, Fluid operated reversing. W. F. Hohulin. 1,809,938; June 166.
Valve, Fluid reversing. W. F. Hohulin. 1,810,766; June 16.
Valve mechanism. O. J. Parks. 1,810,621; June 16.
Valve mechanism, Outlet. O. J. Parks. 1,810,620; June 16.
Valve motion mechanism for internal combustion engines. A. V. Da Costa. 1,810,465; June 16.
Valve, Oil. C. Wilhjelm. 1,810,331; June 16.
Valve, Packless. J. H. Cheetham. 1,810,202; June 16.
Valve, Quick release. B. Pratt. 1,810,202; June 16.
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Valve, Self-closing drum filling. F. Martin. 1,810,366; June 16.
Valve stem. H. A. King. 1,810,020; June 16.
Valve, Water softener. C. P. Eisenhauer. Re18,098; June 16.
Vaporizer. I. E., W. F., and L. E. Aske. 1,810,383; June 16.
Vaporizer. I. E. Aske 1,810,384; June 16.
Vaporizer, Electric. C. J. Fay. 1,810,650; June 16.
Vapors, Apparatus for condensing condensable. O. Einsler and H. Tietz. 1,809,926; June 16.
Variable resistance device. W. H. Edwards. 1,809,925; June 16.
Vault, Burial. C. L. Berg. Des. 84,393; June 16.
Vault ventilator. O. B. McClintock, S. R. Poppe, and E. C. Hanson. 1,810,184; June 16.
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Vehicle brake. V. Link. 1,809,982; June 16.
Vehicle brake. V. Link. 1,810,022; June 16.
Vehicle light. H. F. Kurtz. 1,810,216; June 16.
Vehicle, Power driven snow. E. M. Tucker. 1,810,505; June 16.
Vehicle underframe, Railway. C. F. Frede and E. G. Hallquist. 1,810,558; June 16.
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Voltage regulation for electric generators. A. Mattes. 1,810,288; June 16.
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Water circulator, Positive. C. M. Crane. 1,809,888; June 16.
Water-heater. C. G. Carlson. 1,810,642; June 16.
Water heater. J. H. Mackley. 1,810,774; June 16.
Water heater, Electrically operated H. Heroy. 1,809,899; June 16.
Water heater, Gas. A. T. Sponar. 1,810,887; June 16.
Water supply system, Hot. G. R. Tellander. 1,810,798; June 16.
Water wings. F. Fenton. 1,810,556; June 16.
Watering fountain. J. Haynes. 1,810,829; June 16.
Wave modulation and applications thereof. E. Peterson. 1,810,326; June 16.
Welding, Arc. H. J. Burnish. 1,810,005; June 16.
Welding, Method and apparatus for. E. Pugh. 1,810,225; June 16.
Welding plant, Electric arc. R. J. Musto. 1,810,251; June 16.
Well cutting sampler. O. Hatcher and E. L. Byers. 1,810,827; June 16.
Well tube cleaner. L. Swinford. 1,810,260; June 16.
Wells, Device for removing parts from. C. Brown. 1,810,753; June 16.
Wheel. *See.*—
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Wheel and bridging spring for web feeding and severing apparatus, Gripper and breaker. C. A. Rupp. 1,810,403; June 16.
Wheel brake. P. Karsten. 1,810,354; June 16.
Wheel brake, Automobile. R. W. Stevens. 1,810,628; June 16.
Wheel for juvenile vehicles. J. Weber. Des. 84,450; June 16.
Wheel for motor vehicles, Supplemental. J. P. O'Leary 1,810,290; June 16.
Wheel with flexible rims. Elastic. E. Rimailho. 1,810,854; June 16.
Wind motor. W. S. Schlotzhauer. 1,810,113; June 16.
Winding machine. E. A. De Wolf. 1,809,890; June 16.
Winding machine. W. W. Trinks. 1,810,690; June 16.
Windlass, Electrically operated. R. Eck. 1,810,821; June 16.
Window. R. H. Bliss. 1,810,816; June 16.
Window construction. M. Babiarz and J. Babiarz. 1,810,117; June 16.
Window regulator. H. C. Bortel. 1,810,390; June 16.
Window screen, Metal. F. F. Haskell. 1,810,274; June 16.
Window screen, Sliding. J. F. Roesler. 1,810,791; June 16.
Wire, Transformer winding. J. Romp. 1,810,499; June 16.

Wire windings on vertical conical winding-up drums, Frictionless automatic device for raising. E. Erdman. 1,810,270; June 16.
Wood coloring process. C. E. Lentz. 1,809,980; June 16.
Wood, Method of and apparatus for digesting. P. E. Hodgdon. 1,810,398; June 16.
Wood, Treating. W. Kritchevsky and C. J. Beckert. 1,810,659; June 16.
Wrappers, Applying temporary. H. Mac Elhone. 1,810,837; June 16.
Wrapping machine. A. M. English. 1,810,471; June 16.
Wrench. A. Edwards. 1,810,006; June 16.
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Clothes wringer.
Wringer. G. H. Jantz. 1,810,479; June 16.
Wringer. E. J. Schuda. 1,810,500; June 16.
Xylophone and carrying apparatus, Combined. T. R. Gerhart. 1,810,519; June 16.
Yoke, Pull-off. W. Schaake. 1,810,733; June 16.
Zone metering system. J. Wicks. 1,810,330; June 16.

CLASSIFICATION OF PATENTS

ISSUED JUNE 16, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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Cheney Brothers, South Manchester, Conn. Cravats. 284,345; June 23; Serial No. 310,970; published Apr. 7, 1931. Class 39.

Cobus Corporation, New York, N. Y. Cocoa-butter substitute. 284,396; June 23; Serial No. 311,470; published Apr. 14, 1931. Class 46.

Cohen, Max, Inc., New York, N. Y. Women's gowns, frocks, suits, etc. 284,373; June 23; Serial No. 308,103; published Apr. 7, 1931. Class 39.

Combine Hosiery Corporation, Wilmington, Del., and New York, N. Y. Hosiery. 284,318; June 23; Serial No. 310,443; published Mar. 31, 1931. Class 39.

Consolidated Ashcroft Hancock Company, New York, N. Y. Pressure gages. 284,361; June 23; Serial No. 311,598; published Apr. 7, 1931. Class 26.

Continental Oil Company, Ponca City, Okla. Lubricating oil. 284,307; June 23; Serial No. 310,102; published Mar. 17, 1931. Class 15.

Continental Oil Company, Ponca City, Okla. Lubricating oil. 284,311; June 23; Serial No. 310,108; published Mar. 17, 1931. Class 15.

Crescent Tool Company, Jamestown, N. Y. Steel. 284,271; June 23; Serial No. 306,940; published Apr. 14, 1931. Class 14.

Dagand & Cie. (See Société Française De Désinfection.)

Daisy Battery Corp., New York, N. Y. Electric batteries. 284,263; June 23; Serial No. 304,651; published Mar. 17, 1931. Class 21.

Darow Manufacturing Co. (See Dash, Ira F.)

Dash, Ira F., doing business as Darow Manufacturing Co., Brooklyn, N. Y. Portable electric-lighting outfits and fittings. 284,325; June 23; Serial No. 309,374; published Mar. 31, 1931. Class 21.

Demuth, Wm., & Co., New York, N. Y. Ash trays. 284,287; June 23; Serial No. 311,520; published Apr. 14, 1931. Class 8.

Diez, Hattie, New Orleans, La. Preparation for exterminating ants. 81,793; renewed May 9, 1931.

Dounveor, John H., doing business as Gov's Coffee Company, Detroit, Mich. Coffees. 284,282; June 23; Serial No. 310,459; published Apr. 14, 1931. Class 46.

Do-X Corporation, Indianapolis, Ind. Electrical appliances and machines for treatment of the human body. 284,290; June 23; Serial No. 309,810; published Apr. 7, 1931. Class 44.

Dugan, Thomas, San Francisco, Calif. Paper dishrags. 284,427; June 23. Class 37.

Eastman Kodak Company, Rochester, N. Y. Electric motors and motor-drive outfits. 284,309; June 23; Serial No. 310,216; published Mar. 31, 1931. Class 21.

Eastman Kodak Company, Rochester, N. Y. Photographic shutters. 284,356; June 23; Serial No. 311,426; published Apr. 7, 1931. Class 26.

"E-Cut" Knitting Mills, The, Royersford, Pa. Rayon underwear for women. 284,312; June 23; Serial No. 310,474; published Mar. 31, 1931. Class 39.

Electrolux, Inc., New York, N. Y. Electrically-operated portable vacuum cleaners and attachments therefor. 284,377–8; June 23; Serial No. 308,416–7; published Mar. 17, 1931. Class 21.

Fair, The, Chicago, Ill. Sheets and pillowcases. 284,418; June 23. Class 42.

Federal Sweets & Wafer Co., Inc., New York, N. Y. Chocolate-covered wafers. 284,385; June 23; Serial No. 309,072; published Apr. 14, 1931. Class 46.

Fifth Avenue Laboratories, Inc., New York, N. Y. Medicinal tablets. 284,421; June 23. Class 6.

Fireside Coffee Co., Inc., Nashville, Tenn. Coffee. 284,367; June 23; Serial No. 307,668; published Apr. 7, 1931. Class 46.

Firestone Battery Company, Akron, Ohio. Spark plugs. 284,346; June 23; Serial No. 311,134; published Mar. 31, 1931. Class 21.

Forchheimer, M., Grocery Co. Inc., Mobile, Ala. Flour. 284,333; June 23; Serial No. 310,373; published Apr. 7, 1931. Class 46.

Franklin Ice Cream Corporation, The, Kansas City, Mo. Ice cream. 284,365; June 23; Serial No. 306,948; published Apr. 14, 1931. Class 46.

Franklin Simon & Co. Inc., New York, N. Y. Men's clothing. 284,344; June 23; Serial No. 310,938; published Mar. 31, 1931. Class 39.

French Maid Cocolat Company, Inc., New York, N. Y. Fudge powders. 284,299; June 23; Serial No. 311,092; published Apr. 14, 1931. Class 46.

Frost, Thomas H., Boston, Mass. Safety-razor blades. 284,403; June 23; Serial No. 311,327; published Apr. 7, 1931. Class 23.

Gantt, Incorporated, Chicago, Ill. Candies, ice cream. 284,278; June 23; Serial No. 309,852; published Apr. 7, 1931. Class 46.

Garland Products Company, St. Louis, Mo. Motor lubricating oil. 284,262; June 23; Serial No. 304,552; published Mar. 17, 1931. Class 15.

General Baking Company, New York, N. Y. Bread. 284,246; June 23; Serial No. 287,639; published Oct. 22, 1929. Class 46.

General Electric X-Ray Corporation, Chicago, Ill. Films for X-ray exposures. 284,340; June 23; Serial No. 311,031; published Apr. 7, 1931. Class 26.

Glicksman, Aaron, doing business as Solflex Co. Not Inc., Chicago, Ill. Leather cement. 284,334; June 23; Serial No. 310,375; published Apr. 14, 1931. Class 5.

Globe Bottling Co. (See Kanner, Abe.)

Gov's Coffee Company. (See Dounveor, John H.)

Gravins, Wm. F., & Co., Inc., Richmond, Va. Butter. 284,379; June 23; Serial No. 308,624; published Apr. 7, 1931. Class 46.

Grimes Canning & Preserving Company, Grimes Iowa, to Grimes Canning Corporation, Des Moines, Iowa, successor. Canned corn, pumpkin, and hominy. 83,247; renewed Aug. 29, 1931.

Guttman, Max M., New York, N. Y. Knit jackets. 284,407; June 23. Class 39.

H & R Sales Company, Cleveland, Ohio. Bird food. 284,388; June 23; Serial No. 309,854; published Apr. 14, 1931. Class 46.

H & R Sales Company, Cleveland, Ohio. Bird food. 284,397; June 23; Serial No. 311,572; published Apr. 14, 1931. Class 46.

Haas-Baruch & Company, Los Angeles, Calif. Canned fish. 284,258; June 23; Serial No. 298,943; published Apr. 14, 1931. Class 46.

Haloid Company, The, Rochester, N. Y. Photographic sensitized paper. 284,341; June 23; Serial No. 311,034; published Apr. 7, 1931. Class 26.

Hampshire Paper Company, South Hadley Falls, Mass. Paper. 284,411; June 23. Class 37.

Hecker-H-O Company, Inc., Buffalo, N. Y. Farina, self-rising flour, buckwheat flour, etc. 284,332; June 23; Serial No. 310,219; published Apr. 7, 1931. Class 46.

Hemmerdinger, J. H., & Son, Inc., Brooklyn, N. Y. Spools of leather belting. 284,362; June 23; Serial No. 311,685; published Apr. 14, 1931. Class 35.

Herskowitz, Max, New York, N. Y. Bread. 284,398; June 23; Serial No. 311,836; published Apr. 14, 1931. Class 46.

Home Supply Co. (See Frank W. Jacobson.)

Hubbard Milling Company, Mankato, Minn. Wheat flour, rye flour, and corn meal. 284,400; June 23; Serial No. 309,896; published Apr. 14, 1931. Class 46.

Hygienol Co, Inc. The, New York, N. Y. Powder puffs. 284,296; June 23; Serial No. 311,527; published Apr. 14, 1931. Class 29.

Iceland Fur Dyeing Corporation, Brooklyn, N. Y. Dyed skins. 284,245; June 23; Serial No. 283,742; published Apr. 7, 1931. Class 1.

Ideal Stitcher & Mfg. Co., Racine, Wis. Machine for wire-stitching signatures, etc. 284,389; June 23; Serial No. 309,857; published Apr. 7, 1931. Class 23.

Iff Products Co. (See Schiff, Sidney.)

Inland Steel Company, Chicago, Ill. Steel sheets. 284,252; June 23; Serial No. 296,275; published Apr. 7, 1931. Class 14.

International Nickel Company, Inc., The, New York, N. Y. Nickel. 284,286; June 23; Serial No. 310,380; published Apr. 7, 1931. Class 14.

Internationaler Maratti-Maschinenverkauf-A.-G. Berlin, Berlin, Germany. Weaving and knitting machines and parts or attachments, and tools. 284,269; June 23; Serial No. 305,931; published Apr. 14, 1931. Class 23.

Jackson-Wheeler Metals Service, Brooklyn, N. Y. Bronze machinery bushings. 284,401; June 23; Serial No. 311,061; published Apr. 7, 1931. Class 23.

Jacobson, Frank W., doing business as Home Supply Co., Cleveland, Ohio. Malt syrup. 284,300; June 23; Serial No. 311,035; published Apr. 14, 1931. Class 46.

Jersey Ice Cream Products Corporation, The, Baltimore, Md. Ice cream. 284,328; June 23; Serial No. 309,345; published Apr. 7, 1931. Class 46.

Jo-Jo Company. (See Ruggieri, Henry A.)

Kanner, Abe, doing business as Globe Bottling Co., Los Angeles, Calif. Food drink. 284,259; June 23; Serial No. 299,325; published Apr. 14, 1931. Class 46.

Kellogg Seed Company, Milwaukee, Wis. Lawn grass seed. 284,354; June 23; Serial No. 311,312; published Apr. 14, 1931. Class 1.

Kellogg Seed Company, Milwaukee, Wis. Seed. 284,395; June 23; Serial No. 311,313; published Apr. 14, 1931. Class 1.

Kelloggs & Miller, assignor to Kelloggs & Miller, Inc., Amsterdam, N. Y. Linseed oil. 81,882; renewed May 16, 1931.

King, Robert C., & Co. (See Ravner, William.)

Knox Hat Company, Inc., New York, N. Y. Neckties. 284,363; June 23; Serial No. 310,682; published Mar. 31, 1931. Class 39.

Krumholz & Lichtblau, New York, N. Y. Undergarments. 284,371; June 23; Serial No. 307,980; published Mar. 17, 1931. Class 39.

Limited Company formerly The Škoda-Works, Plzeň, Prague-Smichov, Czechoslovakia. Electric generators and motors, rotary converters, etc. 284,244; June 23; Serial No. 235,558; published Aug. 5, 1930. Class 21.

Lindsey, Anna K., Morrisonville, Ill. Sick-room or commode chairs. 284,347; June 23; Serial No. 310,724; published Apr. 14, 1931. Class 32.

Luxite Silk Products Co., Milwaukee, Wis. Underwear. 284,310; June 23; Serial No. 310,223; published Mar. 17, 1931. Class 39.

Lynn Umbrella Mfg. Co., Boston, Mass. Umbrellas. 284,364; June 23; Serial No. 310,685; published Apr. 7, 1931. Class 41.

Maclin-Zimmer-McGill Tobacco Co., Inc., Petersburg, Va., assignor to Penn Tobacco Company, Incorporated, Wilkes-Barre, Pa. Tobacco. 284,368; June 23; Serial No. 307,683; published Apr. 14, 1931. Class 17.

Macon Woolen Mills. (See Renfroe, James D.)

Manhattan Paste & Glue Co., Inc., New York, N. Y. Adhesive pastes, glues, gums. 284,382; June 23; Serial No. 308,894; published Apr. 7, 1931. Class 5.

Manko, Louis H., doing business as L. H. Manko & Company and National Summer Clothing Company, Philadelphia, Pa. Suits, coats, vests, and trousers. 284,383; June 23; Serial No. 308,895; published Mar. 31, 1931. Class 39.

Marchioni, Frank A., New York, N. Y. Ice-cream confection or frozen confection. 284,288; June 23; Serial No. 310,687; published Apr. 7, 1931. Class 46.

Maritime Milling Co., Inc., Buffalo, N. Y. Chicken feed. 284,352; June 23; Serial No. 311,066; published Apr. 7, 1931. Class 46.

Mason, John S., Rochester, N. Y. Kites. 284,419; June 23. Class 22.

Mason Mills, Inc., Pauls Valley, Okla. Alfalfa meal. 284,399; June 23; Serial No. 311,879; published Apr. 14, 1931. Class 46.

May & Malone, Incorporated, Chicago, Ill. Wardrobe trunks, hand trunks, and automobile trunks. 284,261; June 23; Serial No. 304,417; published Apr. 7, 1931. Class 3.

Merco Nordstrom Valve Company, San Francisco, Calif. Lubricating-grease compound. 284,374; June 23; Serial No. 308,120; published Mar. 24, 1931. Class 15.

Metal Hose & Tubing Co., Inc., Brooklyn, N. Y. Metal-lined rubber hose. 284,255; June 23; Serial No. 296,489; published Apr. 14, 1931. Class 35.

Milwaukee Lubricants Co., Milwaukee, Wis. Transmission lubricant. 284,412; June 23. Class 15.

Monroe Shirt Co., New York, N. Y. Shirts, blouses, pajamas and underwear. 284,426; June 23. Class 39.

Moster & Feldman, Brooklyn, N. Y. Yarns. 284,313; June 23; Serial No. 310,524; published Apr. 14, 1931. Class 43.

Muench-Kreuzer Candle Co. Inc., Syracuse, N. Y. Candles, tapers, etc. 284,250; June 23; Serial No. 294,852; published Mar. 17, 1931. Class 15.

Muskogee Iron Works, Muskogee, Okla. Truck winches. 284,249; June 23; Serial No. 294,433; published Apr. 14, 1931. Class 23.

National Carbon Company, Inc., New York, N. Y. Electric cells and batteries. 284,376; June 23; Serial No. 308,383; published Mar. 31, 1931. Class 21.

National Oil Products Company, Harrison, N. J. Poultry and stock foods. 284,349–50; June 23; Serial Nos. 310,875–6; published Apr. 7, 1931. Class 46.

National Summer Clothing Company. (See Manko, Louis H.)

Nazalizer Company, Boston, Mass. Medicinal atomizers. 284,289; June 23; Serial No. 310,691; published Apr. 7, 1931. Class 44.

Norwich Knitting Company, New York, N. Y. Union suits, undershirts, drawers, and negligee shirts. 284,408; June 23. Class 39.

Nowak Milling Corporation, Hammond, Ind. Feed. 284,335; June 23; Serial No. 310,403; published Apr. 7, 1931. Class 46.

Oil Well Engineering Company, Ltd., The, New York, N. Y., and London and Stockport, England. Well-boring plants, drilling tools, steel derricks, etc. 284,247; June 23; Serial No. 292,680; published Apr. 7, 1931. Class 23.

Oneida Community, Limited, Oneida, N. Y. Silver flatware and hollow ware. 284,416; June 23. Class 28.

Page, William E., doing business as Tulsa Dressing Co., Tulsa, Okla. Salad dressing. 284,277; June 23; Serial No. 309,591; published Apr. 7, 1931. Class 46.

Penn Tobacco Company, Incorporated. (See Maclin-Zimmer-McGill Tobacco Co., Inc., assignor.)

Pennzoil Company, The, Los Angeles, Calif. Lubricating oils and greases. 284,306; June 23; Serial No. 310,041; published Mar. 31, 1931. Class 15.

Perez, Marcelino, & Co., Tampa, Fla. Cigars. 284,369; June 23; Serial No 307,790; published Apr. 7, 1931. Class 17.

Philadelphia Malt Extract Co., Philadelphia, Pa. Table syrup. 284,291 June 23; Serial No. 310,834; published Apr. 7, 1931. Class 46.

Philippine Tobacco Co., Inc., New York, N. Y. Cigars. 284,384; June 23; Serial No. 308,998; published Apr. 14, 1931. Class 17.

Pittsburgh Coal Company of Wisconsin, Minneapolis, Minn. Coal. 284,357; June 23; Serial No. 311,449; published Apr. 7, 1931. Class 1.

Premier Co. Inc., The, New York, N. Y. Razor blades. 284,274; June 23; Serial No. 310,846; published Apr. 14, 1931. Class 23.

Premier Co., Inc., The, New York, N. Y. Wallets, hand bags, overnight bags, etc. 284,331; June 23; Serial No. 309,787; published Apr. 7, 1931. Class 3.

Price Flavoring Extract Company, Chicago, Ill. Condimental sauce and salad dressing. 284,297–8; June 23; Serial Nos. 311,014–15; published Apr. 14, 1931. Class 46.

Prince, Haig M., doing business as Prince Radio Manufacturing Co., Los Angeles, Calif. Radio receiving sets. 284,315; June 23; Serial No. 310,612; published Mar. 24, 1931. Class 21.

Process Engineering and Equipment Corporation, Attleboro, Mass. Ammeters, voltmeters, wattmeters, etc. 284,372; June 23; Serial No. 308,033; published Apr. 7, 1931. Class 26.

Pyrene Manufacturing Company, Newark, N. J. Fire extinguishers. 284,386; June 23; Serial No. 309,250; published Apr. 7, 1931. Class 23.

Rasmussen, Arnold, Greenwich, Conn. Iron brackets. 284,270; June 23; Serial No. 306,366; published Apr. 7, 1931. Class 50.

Ravner, William, doing business as Robert C. King & Co., New York, N. Y. Underwear for men and boys. 284,317; June 23; Serial No. 309,620; published Mar. 31, 1931. Class 39.

Reed Harvesting Machine Co., Kansas City, Mo. Stooking or grain-shocking machines and grain-shock-loading machines. 284,404; June 23; Serial No. 311,536; published Apr. 14, 1931. Class 23.

Renfroe, James D., doing business as Macon Woolen Mills, Macon, Ga. Work shirts. 284,251; June 23; Serial No. 295,192; published Mar. 17, 1931. Class 39.

Reusch, Henry C., & Co., Inc., Newark, N. J. Shirts, collars, socks, etc. 284,316; June 23; Serial No. 310,613; published Apr. 7, 1931. Class 39.

Rockola, David C., Chicago, Ill. Weighing scales. 284,272; June 23; Serial No. 311,887; published Apr. 14, 1931. Class 26.

Rockola, David C., Chicago, Ill. Scales. 284,329; June 23; Serial No. 309,701; published Apr. 14, 1931. Class 26.

Rogers, M. H., Inc., New York, N. Y. Textile rugs. 284,410; June 23. Class 42.

Röhm & Haas Company, Philadelphia, Pa. Substance having adhesive and/or binding properties. 284,355; June 23; Serial No. 311,447; published Apr. 14, 1931. Class 5.

Rose Bros., New York, N. Y. Topcoats, overcoats, sport coats and suits. 284,422; June 23. Class 39.

Royal Baking Powder Company, New York, N. Y. Pudding and pie filling. 284,284; June 23; Serial No. 310,503; published Apr. 14, 1931. Class 46.

Royal Baking Powder Company, New York, N. Y. Pudding and pie filling. 284,293; June 23; Serial No. 310,502; published Apr. 7, 1931. Class 46.

Ruggieri, Henry A., doing business as Jo-Jo Company, New Haven, Conn. Nonalcoholic maltless syrup. 284,380; June 23; Serial No. 308,642; published Apr. 14, 1931. Class 45.

Ryan, Joseph M., & Co. Inc., Hoboken, N. J. Dyed skins. 284,360; June 23; Serial No. 311,537; published Apr. 14, 1931. Class 1.

Sachs Quality Furniture Inc., New York, N. Y. Furniture. 284,338; June 23; Serial No. 310,576; published Apr. 14, 1931. Class 32.

Salisbury, Everett M., Providence, R. I. Pudding powders. 284,375; June 23; Serial No. 308,222; published Apr. 14, 1931. Class 46.

Salisbury, Everett M., Providence, R. I. Dessert powders. 284,424; June 23. Class 46.

Sanford Manufacturing Company, Chicago, Ill. Glue, Arabic, paste, and mucilage. 82,832; renewed July 25, 1931.

Sattinger, Carl O., doing business as Sattinger's Wholesale Grocery, Los Angeles, Calif. Canned dog food. 284,342; June 23; Serial No. 311,341; published Apr. 7, 1931. Class 46.

Seadron, Louis H., New York, N. Y. Sanitary belts, aprons, bloomers, and napkins. 284,292; June 23; Serial No. 310,837; published Apr. 14, 1931. Class 44.

Schaeffer Bros. & Powell Mfg. Co., St. Louis, Mo. Candles. 83,517–18; renewed Sept. 19, 1931.

Schiff, Sidney, doing business as Iff Products Co., New York, N. Y. Dog food. 284,393; June 23; Serial No. 311,146; published Apr. 14, 1931. Class 46.

Schmid, Julius, Inc., New York, N. Y. Sanitary rubber coated bed sheeting. 284,406; June 23. Class 50.

Scovill Manufacturing Company, Waterbury, Conn. Sheet brass and unfinished forgings. 284,266; June 23; Serial No. 305,497; published Apr. 7, 1931. Class 14.

Sears, Roebuck and Co., Chicago, Ill. Automobile tires. 284,339; June 23; Serial No. 310,948; published Apr. 7, 1931. Class 35.

Seymour, Lloyd P., Dallas, Tex. Prepared sandwiches. 284,394; June 23; Serial No. 311,247; published Apr. 14, 1931. Class 46.

Sherwin, Tillie, Woodmere, N. Y. Candies and chocolates. 284,414; June 23. Class 46.

Shott Manufacturing Company, The, Cincinnati, Ohio. Pyroxylin-coated and similarly-coated fabrics or textiles. 284,283; June 23; Serial No. 310,462; published Apr. 14, 1931. Class 50.

Simplex Wire & Cable Company, Boston, Mass. Wires and cables. 284,321; June 23; Serial No. 310,229; published Mar. 17, 1931. Class 21.

Smidth, F. L., & Co., New York, N. Y. Crushing and grinding mills. 284,273; June 23; Serial No. 311,702; published Apr. 14, 1931. Class 23.

Smoke-Mint Co., South Bend, Ind. Liquid preparation for flavoring cigarettes, pipes, and smoking tobacco. 284,420; June 23. Class 6.

Société Francaise De Désinfection, to Dagand & Cie., Paris, France, a firm, successor. Disinfectants. 37,259; renewed Oct. 29, 1931.

Solfex Co. Not Inc. (See Glicksman, Aaron.)

Sovereign Pocahontas Company, Bluefield, W. Va., and New York, N. Y. Coal. 284,359; June 23; Serial No. 311,493; published Apr. 14, 1931. Class 1.

Specialty Manufacturing Company, The, Cleveland, Ohio. Wire, tampico, and bristle brushes. 284,275; June 23; Serial No. 309,215; published Apr. 7, 1931. Class 29.

Standard Briquette Fuel Company, St. Louis, Mo. Briquettes. 284,428; June 23. Class 1.

Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Petroleum coke. 284,353; June 23; Serial No. 311,290; published Apr. 7, 1931. Class 1.

Standard Rice Company, Inc., Houston, Tex. Corn flakes. 284,390; June 23; Serial No. 310,416; published Apr. 14, 1931. Class 46.

Standard Rice Company, Inc., Houston, Tex. Cereal breakfast food. 284,391; June 23; Serial No. 310,417; published Apr. 14, 1931. Class 46.

Staples, Johnson & Co., Biddeford, Me. Pleasure boats and particularly cruisers. 284,425; June 23. Class 19.

Sterling Products Company, Evansville, Ind. Malt syrup. 284,336; June 23; Serial No. 310,420; published Apr. 14, 1931. Class 46.

Suberit-Fabrik A-G., Mannheim-Rheinau, Germany. Plates and washers, bath mats, corks, etc. 284,268; June 23; Serial No. 305,769; published Apr. 14, 1931. Class 50.

Superior Distributors, Inc., New York, N. Y. Radio receiving sets, batteries, dry cells, etc. 284,257; June 23; Serial No. 298,123; published Mar. 17, 1931. Class 21.

Tagus Importing & Exporting Co. (See Almeida, Manuel A.)

Teletype Corporation, assignor to Teletypesetter Corporation, Chicago, Ill. Electrically-controlled typesetting and typecasting apparatus, etc. 284,366; June 23; Serial No. 307,183; published Mar. 17, 1931. Class 21.

Teletypesetter Corporation. (See Teletype Corporation, assignor.)

Temporator Company, Chicago, Ill. Electrical remote control, visual and audible signaling equipment and parts thereof, etc. 284,370; June 23; Serial No. 307,861; published Mar. 31, 1931. Class 21.

Thermique, Incorporated, New York, N. Y. Permanent-waving machines, heaters for use in connection therewith, curlers, etc. 284,264; June 23; Serial No. 304,885; published Apr. 14, 1931. Class 44.

Tiffin Scenic Studios, Tiffin, Ohio. Device for electrically controlling the operation of theatre stage curtains. 284,324; June 23; Serial No. 309,217; published Mar. 31, 1931. Class 21.

Toy-Pack Corporation, The, New Haven, Conn. Toys. 284,413; June 23. Class 22.

Tulsa Dressing Co. (See Page, William E.)

Tuttle & Bailey Manufacturing Company, Brooklyn, and New York, N. Y. Boxes. 284,351; June 23; Serial No. 311,009; published Apr. 14, 1931. Class 32.

Union Hosiery Corporation, High Point, N. C. Hosiery. 284,314; June 23; Serial No. 310,540; published Mar. 31, 1931. Class 39.

United Conveyor Corporation, Chicago, Ill. Iron-alloy castings. 284,285; June 23; Serial No. 309,538; published Apr. 14, 1931. Class 14.

Universal Steel Company, Bridgeville, Pa. Nickel chrome alloy steel. 284,294; June 23; Serial No. 310,844; published Apr. 14, 1931. Class 14.

Utica Steam & Mohawk Valley Cotton Mills, Utica, N. Y. Sheets, pillowcases, and bolster cases. 284,405; June 23. Class 42.

Van Spanje, Hendrick J., New York, N. Y. Electric direction lamp signal for vehicles. 284,308; June 23; Serial No. 310,196; published Mar. 24, 1931. Class 21.

Verellen Limited, Antwerp, Belgium. Cigars, cigarillos, cigarettes, and tobacco. 284,279; June 23; Serial No. 309,911; published Apr. 7, 1931. Class 17.

Verellen Limited, Antwerp, Belgium. Cigars, cigarillos, cigarettes, and tobacco. 284,280; June 23; Serial No. 309,913; published Apr. 7, 1931. Class 17.

Victor Manufacturing & Gasket Company, Chicago, Ill. Gaskets and parts thereof, washers, shims and strip shim stock, etc. 284,265; June 23; Serial No. 305,460; published Apr. 7, 1931. Class 35.

Vitelli, F. & Son, New York, N. Y. Canned peeled tomatoes and canned tomato paste. 284,295; June 23; Serial No. 311,010; published Apr. 14, 1931. Class 46.

Vogt, F. G., & Sons, Incorporated, Philadelphia, Pa. Luncheon rolls. 284,392; June 23; Serial No. 310,669; published Apr. 14, 1931. Class 46.

Waldorf Manufacturing Company, to Waldorf Manufacturing Company, Inc., Syracuse, N. Y., successor. Dresses, dress and shirt waists, housegowns, and petticoats. 82,733; renewed July 18, 1931.

Wardan Manufacturing Co., St. Louis, Mo. Shirts. 284,326; June 23; Serial No. 309,577; published Mar. 17, 1931. Class 39.

Warner Gear Company, Muncie, Ind. Bevel ring gears, pinions, transmission gears, etc. 284,402; June 23; Serial No. 310,670; published Apr. 7, 1931. Class 23.

Wieboldt Stores, Inc., Chicago, Ill. Radio receiving sets. 284,423; June 23. Class 21.

Windsor Mills, Inc., The, Philadelphia, Pa. Hosiery. 284,327; June 23; Serial No. 309,792; published Apr. 7, 1931. Class 39.

Winget Kickernick Company, Minneapolis, Minn. Bloomers. 284,381; June 23; Serial No. 308,661; published Mar. 31, 1931. Class 39.

Woldert Grocery Company, Tyler, Tex., and Chicago, Ill., by change of name to Alex Woldert Company, Tyler, Tex. Nutcrackers. 83,379; renewed Sept. 5, 1931.

Young, L. A., Company, The, Detroit, Mich. Golf clubs. 284,417; June 23. Class 22.

Zenith Radio Corporation, Chicago, Ill. Radio electron tubes. 284,319–20; June 23; Serial Nos. 310,232–3; published Mar. 31, 1931. Class 21.

Zenith Radio Corporation, Chicago, Ill. Radio receiving sets and parts thereof. 284,322; June 23; Serial No. 310,238; published Mar. 17, 1931. Class 21.

Zenith Radio Corporation, Chicago, Ill. Radio electron tubes. 284,323; June 23; Serial No. 310,429; published Mar. 31, 1931. Class 21.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

Agre, K., & Sons, Philadelphia, Pa. Agre's Special Roll Butter. For Enveloping Butter. 39,322; June 23.

Atlas Food Products Co., Incorporated, Philadelphia, Pa. Atlantic. For Malt Syrup. 39,323; June 23.

Beech-Nut Packing Company, Canajoharie, N. Y. Beech-nut Brand Chewing Gum, Wintergreen. For Chewing Gum. 39,324; June 23.

Bezic, K., Parchment, Mich. China Plated Shelf and Lining Paper. For Shelf and Lining Paper. 39,325; June 23.

Graybiel, Lester A., Kalamazoo, Mich. The Little Michigan Sandwich Shop. For Sandwiches. 39,326; June 23.

Kansas City Wholesale Grocery Company, Kansas City, Mo. Sunrise Coffee. For Coffee. 39,327; June 23.

Orbit Listerated Gum Company, Chicago, Ill. Lucky Penny Chewing Gum. For Chewing Gum. 39,328–9; June 23.

Powell, D. Earle, Tampa, Fla. Arro-Lin. For Penetrating Liniment. 39,330; June 23.

Schoenhut, A., Company, The, Philadelphia, Pa. Schoenhut's Nobby Nobs. For Sets of Toy Construction Blocks. 39,331; June 23.

Schoenhut, A., Company, The, Philadelphia, Pa. Schoenhut's Ring-A-Hub. For Ring Tossing Game. 39,332; June 23.

Tecumseh Petroleum Company Inc., Philadelphia, Pa. Indian Chief. For Petroleum Lubricating Oils. 39,333; June 23.

Triple AAA Tablets, Inc., Buffalo, N. Y. Triple AAA—The Enemy to Pain. For Tablets for the Treatment of Headaches, Colds, Etc. 39,334; June 23.

Union Bag & Paper Corporation, New York, N. Y. Coffee. For Coffee. 39,335; June 23.

Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's Pepsin Chewing Gum. For Chewing Gum. 39,336–7; June 23.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Automatic Canteen Company, Chicago, Ill. Canteen. For Candy Bars. 13,247; June 23.

Capital City Baking Co., Harrisburg, Pa. Capital Bakers. For Bread. 13,248; June 23.

Cream Of Wheat Corporation, The, Minneapolis, Minn. She's The Belle of Amherst. For Wheat Breakfast Food. 13,249; June 23.

Cushman's Sons, Inc., Chicago, Ill. Bake-O-Gram. For Bakery Products. 13,250; June 23.

Orbit Listerated Gum Company, Chicago, Ill. Lucky Penny Chewing Gum. For Chewing Gum. 13,251; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Camel-Lighting Time. For Cigarettes. 13,252; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Let's Go. For Cigarettes. 13,253; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. A Winter's Tale. For Cigarettes. 13,254; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. It Keeps Them So Mild and Fresh. For Cigarettes. 13,255; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Companionship. For Cigarettes. 13,256; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Up Spoke The Duke (In Measure For Measure)—I'll Take A Camel for Maximum Pleasure. For Cigarettes. 13,257; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. 'Twas Camel's Mildness Brought About The Taming Of The Shrew, No Doubt. For Cigarettes. 13,258; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Camels Brought Cheer To Good King Lear. For Cigarettes. 13,259; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. And Cyrano De Bergerac Opened Up Another Pack. For Cigarettes. 13,260; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Camels No Phantom Pleasure, Hamlet Finds. For Cigarettes. 13,261; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Camels Please My Roman Beezer. For Cigarettes. 13,262; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Unhurried Choosing. For Cigarettes. 13,263; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Swing Along. For Cigarettes. 13,264; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. Comrades Of The Sun. For Cigarettes. 13,265; June 23.

Reynolds, R. J., Tobacco Company, Winston-Salem, N. C. It Must Be Spring. For Cigarettes. 13,266; June 23.

Wanamaker, John, New York, New York, N. Y. The Low Point Sale. For Furniture. 13,267; June 23.

Wanamaker, John, New York, New York, N. Y. The Low Point Sale. For Eastern Rugs. 13,268; June 23.

Wanamaker, John, New York, New York, N. Y. The Low Point Sale. For Axminster Rugs. 13,269; June 23.

Wanamaker, John, New York, New York, N. Y. The Low Point Sale. For Lamps. 13,270; June 23.

Wrigley, Wm., Jr., Company, Chicago, Ill. Wrigley's Pepsin Chewing Gum. For Chewing Gum. 13,271; June 23.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Abbott Laboratories, North Chicago, Ill. Liver extract. 314,221; June 23. Class 6.

Agfa Ansco Corporation, Binghamton, N. Y. Photographic cameras. 301,323–4; June 23. Class 26.

Agfa Ansco Corporation, Binghamton, N. Y. Sensitized photographic paper. 301,327; June 23. Class 26.

Alka-Septol, Incorporated, Beacon, N. Y. Antiseptic compound. 314,222; June 23. Class 6.

All-American Mohawk Corporation, Chicago, Ill., and North Tonawanda, N. Y. Refrigerators, refrigerating apparatus, and ice boxes. 314,540; June 23. Class 31.

All Fair Incorporated, Churchville, N. Y. Table games, table board games. 313,524; June 23. Class 22.

American Association of Personal Finance Companies, Washington, D. C. Monthly publication. 314,675; June 23. Class 38.

American Bitumuls Company, Wilmington, Del., and Oakland, Calif. Asphalt, pavement materials, asphaltic binders, etc. 311,945–6; June 23. Class 12.

American Hide and Leather Company, Boston, Mass. Side leather. 314,136; June 23. Class 1.

American Junior Aircraft Company, Portland, Oreg. Toy airplanes and gliders. 311,904; June 23. Class 22.

American Manufacturing Company. (See Smith, Benjamin D.)

Armstrong Cork Company, Lancaster, Pa. Magazine. 313,952; June 23. Class 38.

Augusta Knitting Corporation, Utica, N. Y. Women's underwear. 314,355; June 23. Class 39.

Bamberger, L., & Co., Newark, N. J. Bunting and blankets. 313,826; June 23. Class 42.

Barlow, John W., New York, N. Y. Medicinal treatment for consumption. 313,691; June 23. Class 6.

Bennett, Harold H., Scarsdale, N. Y. Signs. 312,789; June 23. Class 21.

Bernard, Albert, doing business as A. F. Johns Co., New York, N. Y. Hair tonics. 311,125; June 23. Class 6.

Better Bearings Corporation, Salt Lake City, Utah. Castings and alloys. 307,086; June 23. Class 14.

Bilhuber, E., Inc., Jersey City, N. J. Medicinal preparation. 309,302; June 23. Class 6.

Blossom Hat Co. (See Mermelstein, Joseph R.)

Blum Bros., Jersey City, N. J. Olive oil. 297,120; June 23. Class 46.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 314,095–6; June 23. Class 42.

Boardman, George, doing business as Vermel Company, Sioux Falls, S. Dak. Insecticide. 314,228; June 23. Class 6.

Bobrick Manufacturing Corporation, Los Angeles, Calif. Liquid soap dispensers. 308,286; June 23. Class 13.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Bond Electric Corporation, Jersey City, N. J. Anti-freeze products. 314,037; June 23. Class 6.

Boston Knitting Mills, Inc., Newton, Mass. Underwear. 313,279; June 23. Class 39.

Brewer & Company, Inc., Worcester, Mass. Tonic. 314,139; June 23. Class 6.

British Ropes Limited, London, England. Barbed wire fencing and wire netting and fencing. 314,143; June 23. Class 13.

Burke Golf Company, The, Newark, N. J. Golf clubs. 313,622; June 23. Class 22.

Calavo Growers of California, Los Angeles, Calif. Avocado pulp. 306,593; June 23. Class 46.

California Packing Corporation, San Francisco, Calif. Fruit juices and ginger ale. 307,254; June 23. Class 45.

California Packing Corporation, San Francisco, Calif. Fruit juices other than citrus fruit juices. 307,261–2; June 23. Class 45.

Canton Miniature Aircraft Corporation, The, Canton, Ohio. Miniature aircraft. 314,553; June 23. Class 22.

Carborundum Company, The, Niagara Falls, N. Y. Steel center abrasive wheels. 281,074; June 23. Class 4.

Chance Vought Corporation, Hartford, Conn. Aircraft and structural parts thereof. 314,098; June 23. Class 19.

Charlotte-Irving and Company. (See Wener, Irwin P.)

Chicago Mill and Lumber Corporation, Chicago, Ill. Lumber. 309,803; June 23.

Chic-Tone Company, Inc., The, Angola, Ind. Medicine for poultry. 311,718; June 23. Class 6.

Clorox Chemical Co., Oakland, Calif. Bleaching, cleansing, antiseptic and germicidal compound. 309,921; June 23. Class 6.

Colloidal Products Corporation. (See Hercules Glue Company.)

Colorado Fuel and Iron Company, The, Denver, Colo. Nails. 312,697; June 23. Class 13.

Colorado Fuel and Iron Company, The, Denver, Colo. Spikes and bolts. 314,150; June 23. Class 13.

Commander-Larabee Corporation, Minneapolis, Minn. Wheat flour. 313,905; June 23. Class 46.

Consolidated Millinery Company, Chicago, Ill. Hats. 301,248; June 23. Class 39.

Corbett & North, Inc., New York, N. Y. Women's clothing. 313,028; June 23. Class 39.

Coxhead, Ralph C., Corporation, New York, N. Y. Calculating and adding machines. 314,100; June 23. Class 26.

Daily Trade Record Co. of New York, New York, N. Y. Daily newspaper. 313,076; June 23. Class 38.

Davis, Charles M., doing business as Scientific Research Products, Long Beach, Calif. Automobile polishes. 304,041; June 23. Class 16.

Deane Plaster Co., The, Yonkers, N. Y. Non-medicated adhesive bandage dressing. 314,044; June 23. Class 44.

De Gama Chemical Co. (See Gamage, Thomas F.)

Dektol Corporation, Kansas City, Mo. Antiseptic mouth wash. 314,233; June 23. Class 6.

Diamond Shoe Corporation, New York, N. Y. Shoes. 313,649; June 23. Class 39.

Diamond Silver Company, Lambertville, N. J. Silver plated table ware. 313,077; June 23. Class 28.

Divine, Fred D., Company, The, Utica, N. Y. Fishing rods and poles. 314,751; June 23. Class 22.

Donnelly Garment Company, Kansas City, Mo. Dresses, frocks, aprons, etc. 314,278; June 23. Class 39.

Dy-O-La Dye Co., Burlington, Vt. Tints. 312,141; June 23. Class 6.

Eagle Clothes, New York, N. Y. Clothing for men and young men. 313,707; June 23. Class 39.

Eastman Kodak Company, Rochester, N. Y. Slide binders and mounting tape. 313,835; June 23. Class 5.

Eastman Kodak Company, Rochester, N. Y. Ground glass substitute, lantern slide varnish and spotting colors. 313,837; June 23. Class 16.

Eastman Kodak Company, Rochester, N. Y. Rollers, print trimmers, and paddles, etc. 313,839; June 23. Class 23.

Eastman Kodak Company, Rochester, N. Y. Laboratory aprons. 313,841; June 23. Class 39.

Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens. (See Mülhens, Paul P.)

Empire Shield Company. (See Goldsmith, Julius W.)

Essex Foundry, Newark, N. J., and New York, N. Y. Machines for shaking out the cores from cast iron pipe. 292,240; June 23. Class 23.

Fashion Park Associates, Inc., Rochester, N. Y. Coats, vests, pants, and overcoats. 313,999–4,000; June 23. Class 39.

Fauids, T. A. Co., Inc., Boston, Mass. Food product. 313,776; June 23. Class 46.

Fawcett Publications, Inc., Minneapolis, Minn. Magazine. 314,403; June 23. Class 38.

Feroleum Products, Inc., Irvington, N. J. Liquid coating material. 314,053; June 23. Class 6.

Firth-Sterling Steel Company, McKeesport, Pa. Upsetting inserts, punches, mandrels, plugs, etc. 312,371; June 23. Class 23.

Foster Bros. & Chatillon Co., Fulton, N. Y. Knives. 307,591; June 23. Class 23.

Franc-Strohmenger & Cowan, Inc., New York, N. Y. Neckties. 308,159; June 23. Class 39.

Fruehauf Trailer Company, Detroit, Mich. Trailers of all kinds. 313,539; June 23. Class 19.

G L E Candy Corporation of America, Chicago, Ill. Candy. 310,863; June 23. Class 46.

Gabilla, Incorporated, New York, N. Y. Perfume, toilet water, powder, compacts, etc. 311,679; June 23. Class 6.

Gamage, Thomas F., doing business as De Gama Chemical Co., San Francisco, Calif. Soap. 314,157; June 23. Class 4.

Gemsco, Inc., New York, N. Y. Riding equipment and accessories. 313,658; June 23. Class 3.

General Electric Company, Schenectady, N. Y. Laundry machines. 313,130; June 23. Class 24.

General Fireproofing Company, The Youngstown, Ohio. Office, store, hospital, and bank furniture. 314,691; June 23. Class 32.

Gilbert, A. C., Company, The, New Haven, Conn. Humidifiers. 308,196; June 23. Class 21.

Glicksman, Aaron, doing business as A. Glicksman & Co., Chicago, Ill. Leather findings. 310,374; June 23. Class 39.

Goldsmith Bros., New York, N. Y. Writing and typewriting paper. 313,169; June 23. Class 37.

Goldsmith, Julius W., doing business as Empire Shield Company, New York, N. Y. Sanitary step-ins, bloomers, aprons, and belts. 313,596; June 23. Class 44.

Gotham Silk Hosiery Company, Inc., New York, N. Y. Hosiery. 313,693; June 23. Class 39.

Grabosky, Louis B., Philadelphia, Pa. Cigars. 312,372–3; June 23. Class 17.

Greer, J. W., Company, Cambridge, Mass. Coated fabrics. 310,514; June 23. Class 50.

H. B. Co., The, Jersey City, N. J. Cough drops. 314,284; June 23. Class 6.

Hahn Department Stores, Inc., Wilmington, Del. Shoes. 313,292; June 23. Class 39.

Hahn Department Stores, Inc., Wilmington, Del. Sanitary napkins. 313,472; June 23. Class 44.

Hair Research Laboratories. (See Stein, Hermann.)

Harrison-Noyes Chemical Corp., Long Beach, Calif. Attachment or clasp for dental plates and mould boxes for dental inlays or the like. 312,988; June 23. Class 44.

Hatton, Frank, Miami, Fla. Prophylactic rubber articles. 311,332; June 23. Class 44.

Hawkins, Lynn A., doing business as The Silver-Forest Fruit and Stock Farms, Silver Creek and Forestville, N. Y. Fresh milk and live cattle. 311,683; June 23. Class 46.

Hazard Wire Rope Company, Wilkes-Barre, Pa. Wire rope. 314,646; June 23. Class 7.

Headley Emulsified Products Company, Philadelphia, Pa. Asphalt emulsions for waterproofing, etc. 306,649; June 23. Class 6.

Hein, Otto, New York, N. Y. Rubber hosiery protector. 314,238; June 23. Class 39.

Heinrichs, K., Albany, N. Y. Maltless beverages. 297,668; June 23. Class 45.

Hercules Glue Company, doing business as Colloidal Products Corporation, San Francisco, Calif. Chemical spreader for insecticides and the like. 307,490; June 23. Class 6.

Hewitt Bros. Soap Company, The, Dayton, Ohio. Soap. 308,828; June 23. Class 4.

Holland Shoe Company, Holland, Mich. Leather boots and shoes. 306,566; June 23. Class 39.

Hoover Company, The, North Canton, Ohio. Dust filtering and collecting bags. 313,361; June 23. Class 2.

Horton, M. E., Inc., Washington, D. C. Canned vegetables and fruits, spices, tomato catsup, etc. 311,478; June 23. Class 46.

Hungerford Smith, J., Co., Rochester, N. Y. Coating material for ice cream confections. 313,451; June 23. Class 46.

Hurwitz, Aaron A., doing business as A. A. Hurwitz, Boston, Mass. Hat linings. 313,084; June 23. Class 40.

Illinois Moulding Company, The, Chicago, Ill. Refrigerators. 314,566; June 23. Class 31.

International Publications, Inc., New York, N. Y. Publication. 313,190; June 23. Class 38.

International Silver Company, Meriden, Conn. Silver-plated flat-ware and hollow-ware. 313,360; June 23. Class 28.

International Time Recording Company of New York, Endicott, N. Y. Time stamps. 308,070; June 23. Class 26.

Inter-State Grocer Company, The, Joplin, Mo. Raisins, honey, vinegar, etc. 302,824; June 23. Class 46.

Iteco Company, The, Portland, Oreg. Denture polish. 311,784; June 23. Class 4.

Jenkins Television Corporation, Jersey City, N. J. Unitary transmitting and/or receiving apparatus. 303,056; June 23. Class 21.

Johns, A. F., Co. (See Bernard, Albert.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Johnson, Hez K., Chillicothe, Mo. Rock asphalt. 314,410; June 23. Class 12.
Johnson, T. M. E., doing business as Johnson Company, Mulberry, Kans. Polishes and waterproofing finish renewers. 309,434; June 23. Class 4.
Journal for the Piece Goods Buyer, Inc., The, New York, N. Y. Magazine. 314,649; June 23. Class 38.
Joytoys, Incorporated, Chicago, Ill. Toy vehicles. 307,624; June 23. Class 22.
K. D. Chemical Co. (See Webb, J. E.)
Kahn's, E., Sons Company, The, Cincinnati, Ohio. Meats. 260,449; June 23. Class 46.
Kaline Water Company, Inc., Wilmington, Del., and Washington, D. C. Alkaline medicinal water. 314,370; June 23. Class 6.
Kaplan, Meyer L., doing business as Kaplan & Son, Los Angeles, Calif. Dresses, coats, suits, and skirts. 309,692; June 23. Class 39.
Kelco Company, San Diego, Calif. Kelp and kelp preparations. 312,760; June 23. Class 6.
Kepec Company, The, Milwaukee, Wis. Ready mixed paints. 312,301; June 23. Class 16.
Keystone Varnish Company, Brooklyn, N. Y. Paint enamels and varnishes. 314,117; June 23. Class 16.
Kingdom Paint Products Company, Inc., Bronx, N. Y. Paints, varnishes, and paint enamels. 299,915; June 23. Class 16.
Kleenglas (1929) Ltd., London, England. Machine for washing hollow-ware. 312,806; June 23. Class 23.
Kleinert, I. B., Rubber Company, New York, N. Y. Dress shields. 313,041; June 23. Class 40.
Knapp, Fred G., Lakewood, Ohio. Touring maps. 307,340; June 23. Class 38.
Koh-I-Noor Bleistiftfabrik L. & C. Hardtmuth, Budweis, Czechoslovakia. Lead pencils. 278,176; June 23. Class 37.
Kotex Company, Chicago, Ill. Sanitary napkins. 313,299; June 23. Class 44.
Kridos, Thomas A., Brooklyn, N. Y. Preparations for treatment of hair and scalp. 310,460; June 23. Class 6.
Kroydon Company, The, Maplewood, N. J. Golf clubs. 300,353; June 23. Class 22.
Kupfer, Joseph, doing business as J. Kupfer & Co., New York, N. Y. Ladies' outer coats. 314,164; June 23. Class 39.
Lehigh Silk Hosiery Mills, Inc., New York, N. Y. Hosiery. 296,813; June 23. Class 39.
Lehigh Silk Hosiery Mills, Inc., New York, N. Y. Hosiery. 299,663; June 23.
Lexington Worsted Mills, Inc., Central Falls, R. I. Sample lengths of worsted cloth. 313,740; June 23. Class 42.
Lincoln Engineering Company, St. Louis, Mo. Stationary lubricating apparatus. 312,922; June 23. Class 23.
Link-Belt Company, Chicago, Ill. Sewage and water screens, settling tanks, collectors, etc. 311,038; June 23. Class 23.
Los Angeles Brewing Co., Los Angeles, Calif. Maltless beverages and syrups, extracts, and concentrates used in preparing the same. 314,702; June 23. Class 45.
Lyndonville Canning Company, Inc., Lyndonville, N. Y. Canned apple sauce. 312,441; June 23. Class 46.
Macfadden Publications, Inc., New York, N. Y. Magazine. 312,380; June 23. Class 38.
Majestic Leather Goods Co., Inc., New York, N. Y. Traveling bags, luggage. 310,729; June 23. Class 3.
Marks Products Co. Inc., Brooklyn, N. Y. Electrical attachment. 313,195; June 23. Class 21.
Marks Products Co. Inc., Brooklyn, N. Y. Electrical attachment plugs. 313,196; June 23. Class 21.
Marshall Field & Company, Chicago, Ill. Radio receiving sets. 313,369; June 23. Class 21.
Martin, Glenn L., Company, The, Baltimore and Middle River, Baltimore, Md. Compound for sealing the joints of fuel tanks and their accessories. 313,505; June 23. Class 12.
Martin, Glenn L. Motors Company, The, Middle River and Baltimore, Md. Engines. 313,745; June 23. Class 23.
Master Builders Company, The, Cleveland, Ohio. Liquid composition. 314,064; June 23. Class 16.
McKesson & Robbins, Incorporated, Bridgeport, Conn. Hard rubber combs. 303,031; June 23. Class 40.
Media Records, Inc., New York, N. Y. Printed records, bulletins, and reports on business and advertising. 275,905; June 23. Class 38.
Mermelstein, Joseph R., doing business as Blossom Hat Co., New York, N. Y. Hats. 301,277; June 23. Class 39.
Midway Chemical Company, Chicago, Ill. Automobile polish. 305,464; June 23. Class 16.
Miles, Lester H., Los Angeles, Calif. Face creams. 304,664; June 23. Class 6.
Montague Rod and Reel Company, Montague City, Mass. Fishing rods. 308,789; June 23. Class 22.
Movesian, Edgar, Haverhill, Mass. Shoes. 312,385; June 23. Class 39.
Mueller, Philip, Minneapolis, Minn. Tonic. 307,171; June 23. Class 6.
Mülhens, Paul P., doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" gegenüber der Pferdepost von Ferd. Mülhens, Cologne, Germany. Soaps. 311,018; June 23. Class 4.
Mustad, O., & Sön, Oslo, Norway. Fishhooks. 312,264; June 23. Class 22.
Nährmittelfabrik, Julius Penner A.-G. Berlin-Schoneberg, Germany. Medicated bandages, and preservatives for foodstuffs. 311,102; June 23. Class 6.
Nährmittelfabrik Julius Penner A.-G., Berlin-Schoneberg, Germany. Medicated plasters and bandages, animal and vegetable exterminating preparations, etc. 311,103; June 23. Class 6.
National Bellas Hess Company, Inc., New York, N. Y. Golf balls. 311,442; June 23. Class 22.
National Dental Laboratory, Baltimore, Md. Artificial dentures. 312,284; June 23. Class 44.
Negwer, Max, Potsdam, Germany. Wind and water protection devices for ears, sound absorbers for ears, etc. 311,041; June 23. Class 44.
Nelson, Ira I., doing business as The Stack Heater Company, Boston, Mass. Relief valves. 314,422; June 23. Class 13.
Nestle's Milk Products, Inc., New York, N. Y. Evaporated milk. 313,383; June 23. Class 46.
New Idea Infants Wear Co., Inc., New York, N. Y. Hats, caps, hosiery, etc. 313,748; June 23. Class 39.
New Yorkers Company, The. (See Raymer, Paul H.)
Nicholson & Miller, Fort Worth, Tex. Cartoon strips. 314,007; June 23. Class 38.
Norwegian Lutheran Church of America, Minneapolis, Minn. Periodical. 314,654; June 23. Class 38.
Norwich Pharmacal Company, The, Norwich, N. Y. Mineral oil. 313,052; June 23. Class 6.
Omega Chemical Company, The, New York, N. Y. Toilet soap. 312,752; June 23. Class 4.
Orbit Listerated Gum Company, Chicago, Ill. Chewing gum. 314,068; June 23. Class 46.
Outing Manufacturing Company, Elkhart, Ind. Lubricating devices. 314,125; June 23. Class 23.
Pacific Bone Coal & Fertilizing Co., San Francisco, Calif. Glue. 313,967; June 23. Class 5.
Pacific Marine Supply Company, Seattle, Wash. Pack saddles, knapsack tanks, portable pumpers, fixed pumpers. 303,205; June 23. Class 23.
Paint Products Laboratories. (See Sickle, Edward B.)
Palmer Lime & Cement Company, New York, N. Y. Lime. 299,754; June 23. Class 12.
Palmer Lime & Cement Company, New York, N. Y. Limestone. 299,855; June 23. Class 1.
Parker, I. C., Fort Worth, Tex. Ice cream confection. 313,667; June 23. Class 46.
Parker, M. L., Company, Davenport, Iowa. Coats, suits, and dresses. 313,386; June 23. Class 39.
Pastene, P., & Co., Inc., Boston, Mass. Canned fruits, vegetables and milk, canned soups, canned and dried fruits, etc. 308,339; June 23. Class 46.
Peck Shoe Company, Worcester, Mass. Shoes. 312,861; June 23. Class 39.
Penney, J. C., Company, Wilmington, Del., and New York, N. Y. Hosiery. 314,341; June 23. Class 39.
Petrosemolo, Eugene J., New York, N. Y. Canned tomatoes. 299,014; June 23. Class 46.
Pierce, Robert J., Inc., New York, N. Y. Vaginal jelly. 314,294; June 23. Class 6.
Pitman-Moore Company, Indianapolis, Ind. Medicine for fowls. 313,974; June 23. Class 6.
Pratt, John L., New York, N. Y., and Fredericksburg, Va. Fresh apples. 314,295; June 23. Class 46.
Public Service Community Kitchens, Inc., New York, N. Y. Chow mein, chop suey, Chinese rice cakes, etc. 314,676–7; June 23. Class 46.
Radiator Specialty Company, Charlotte, N. C. Composition for stopping leaks in all hot water circulating systems. 313,753; June 23. Class 6.
Raymer, Paul H., doing business as The New Yorkers Company, New York, N. Y. Chewing gum. 266,045; June 23. Class 46.
Real Silk Hosiery Mills, Inc., Indianapolis, Ind. Hosiery. 310,187; June 23. Class 39.
Rex Products & Manufacturing Company, Detroit, Mich. Soap powders. 313,798; June 23. Class 4.
Rheinische Gummi- und Celluloid-Fabrik, Manheim-Neckarau, Germany. Combs. 312,862; June 23. Class 40.
Richmond Radiator Company, New York, N. Y. Radiators for use in steam, hot water, vapor, vacuum, or other heating systems. 313,004; June 23. Class 34.
Rixson, Oscar C., Co., The, Chicago, Ill. Builder's hardware. 313,206; June 23. Class 13.
Roberts Company, Burlingame, Calif. Soil conditioner and snail control. 314,343; June 23. Class 10.
Ronuk, Limited, Portslade, England. Boot polish. 313,801; June 23. Class 4.
Rosenblatt & Hollub, Inc., New York, N. Y. Dresses. 314,018; June 23. Class 39.
Roth, Eugene, Antwerp, Belgium. Keyboard devices for exercising the fingers in teaching music. 313,388; June 23. Class 36.
Rueping, Fred, Leather Co., Fond du Lac, Wis. Leather. 309,788; June 23. Class 1.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Ryan, Scully & Company, Philadelphia, Pa. Granular mixtures. 314,076; June 23. Class 6.
Sabin Machine Company, The, Cleveland, Ohio. Litter gathering implements. 313,755; June 23. Class 23.
Scandia-Jourde Corp., New York, N. Y. Cold creams, skin lotions, astringents, etc. 313,208; June 23. Class 6.
Schallitz, Charles, Milwaukee, Wis. Malt beverages. 312,742; June 23. Class 48.
Schering & Glatz, Inc., Bloomfield, N. J. Urinary antiseptic. 314,214; June 23. Class 6.
Schnefel Bros., Inc., Newark, N. J. Tweezers, scissors, desk sets, etc. 314,466; June 23. Class 23.
Scientific Research Products. (See Davis, Charles M.)
Scripto Manufacturing Company, Atlanta, Ga. Stationery items. 313,563; June 23. Class 37.
Sears, Roebuck and Co., Chicago, Ill. Canvas belting. 309,094; June 23. Class 35.
Selsky, Abraham, Coney Island, N. Y. Glass cutters. 313,696; June 23. Class 23.
Sexauer, J. A., Mfg. Co., Inc., New York, N. Y. Closet bowl cleaner and porcelain cleaner and polish. 310,307; June 23. Class 4.
Shaler Company, The, Waupun, Wis. Golf clubs. 299,803–4; June 23. Class 22.
Sheba Company, The. (See Sunday, W. A., jr.)
Shoe Form Co., Inc., Auburn, Ohio. Shoe forms. 314,202; June 23. Class 50.
Sickle, Edward B., doing business as Paint Products Laboratories, Chicago, Ill. Plastic composition material. 313,634; June 23. Class 12.
Siegel, Jacob, doing business as Jacob Siegel Company, Philadelphia, Pa. Topcoats, overcoats, and suits. 313,756; June 23. Class 39.
Silurian Waukesha Water Distributing Co., Milwaukee, Wis. Nonalcoholic, maltless beverages and syrups and extracts for making same. 314,778; June 23. Class 45.
Silver-Forest Fruit and Stock Farms, The. (See Hawkins, Lynn A.)
Sinaspra Corporation, Columbus, Ohio. Nasal spray. 314,346; June 23. Class 6.
Smith, Benjamin D., doing business as American Manufacturing Company, Utica, N. Y. Preparation for preventing birds and animals from destroying corn. 314,216; June 23. Class 6.
Stack Heater Company, The. (See Nelson, Ira I.)
Standard Brands Incorporated, New York, N. Y. Tea. 312,271; June 23. Class 46.
Stein, Hermann, doing business as Hair Research Laboratories, New York, N. Y. Preparations for treating hair. 314,432; June 23. Class 6.
Strouse-Baer Co., Inc., The, Baltimore, Md. Shorts, runningtrunks, gymnasium shirts, etc. 314,256; June 23. Class 39.
Sunday, W. A., jr., doing business as The Sheba Company, Los Angeles, Calif. Bleach astringent cream. 311,898; June 23. Class 6.
Sun Heat Automatic Oil Burner Corp., New York, N. Y. Automatic oil burners. 313,251; June 23. Class 34.
Superior Produce Distributors, Los Angeles, Calif. Fresh citrus fruits and vegetables. 312,932; June 23. Class 46.
Texas Cotton Co-Operative Association, Dallas, Tex. Periodical. 314,180; June 23. Class 38.
Tide, Inc., New York, N. Y. Publication. 314,472; June 23. Class 38.
Toledo Glove Manufacturing Company, The, Toledo, Ohio. Gloves and gauntlets. 311,578; June 23. Class 39.
Tom Huston Frosted Foods, Inc., Columbus, Ga. Frozen confection. 312,991; June 23. Class 46.
Trippe, Barker & Co., New York, N. Y. Piece goods. 313,942; June 23. Class 42.
Uhlemann Optical Co., Chicago, Ill. Lenses for eyeglasses and spectacles. 313,759; June 23. Class 26.
United Lace & Braid Manufacturing Co., Providence, R. I. Braids. 313,356; June 23. Class 40.
United States Envelope Company, Springfield, Mass. Correspondence paper and envelopes. 314,384; June 23. Class 37.
Van Raalte Company, New York, N. Y. Women's underwear. 314,023; June 23. Class 39.
Veldown Company, Inc., New York, N. Y. Cleansing tissues. 309,999; June 23. Class 37.
Vermel Company. (See Boardman, George.)
Vitaprint Process Company, Chicago, Ill. Prints, show cards, posters, etc. 314,183; June 23. Class 38.
Viviny Perfumers, Inc., New Haven, Conn. Astringents, astringent cerates, bleach creams, etc. 301,534; June 23. Class 6.
Voneiff-Drayer Company, The, Baltimore, Md. Candies and assorted chocolates. 313,874; June 23. Class 46.
Von Holzer, Rudolf, doing business as Firm Rudolf von Holzer, Frankfort-on-the-Main, Germany. Typewriting machines, copying machines, etc. 303,705; June 23. Class 23.
Wahl, Wm. A., St. Louis, Mo. Medicines. 313,896; June 23. Class 6.
Walman Optical Co., The, Minneapolis, Minn. Optical lenses. 314,593; June 23. Class 26.
Warren Featherbone Company, The, Three Oaks, Mich. Bias fold tape, blanket binding braids, collar supports, etc. 307,189; June 23. Class 40.
Webb, J. E., doing business as K. D. Chemical Co., St. Petersburg, Fla., and Philadelphia, Pa. Dental cream. 313,688; June 23. Class 6.
Webb Products Company, Inc., San Bernardino, Calif. Household glue, china and glass cement, waterproof cement, etc. 313,689; June 23. Class 5.
Weill, Raphael, & Company, San Francisco, Calif. Handkerchiefs. 313,944; June 23. Class 42.
Wener, Irwin P., doing business as Charlotte-Irving and Company, New Haven, Conn. Sheet music. 311,406; June 23. Class 38.
Westfield River Paper Company, Inc., Russell, Mass. Embossed paper. 314,310; June 23. Class 37.
Westpfal, Albert, New York, N. Y. Knives, shears, dish scrapers, etc. 313,458; June 23. Class 23.
Wheeler Lumber Bridge & Supply Company, Des Moines, Iowa. Lumber. 313,316; June 23. Class 12.
Wolf Brothers & Co., Red Lion, Pa. Cigars. 313,814; June 23. Class 17.
Wülfing, Johann A., Berlin, Germany. Preparation for internal use. 303,077; June 23. Class 6.
Young, L. A., Company, The, Detroit, Mich. Golf clubs. 308,406; June 23. Class 22.
Zizine, Pierre, Paris, France. Liquid preparation for dyspepsia, etc. 301,225; June 23. Class 6.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Briquettes. Standard Briquette Fuel Company. 284,428; June 23.
Coal. Pittsburgh Coal Company of Wisconsin. 284,357; June 23; Serial No. 311,449; published Apr. 7, 1931.
Coal. Sovereign Pocahontas Company. 284,359; June 23; Serial No. 311,493; published Apr. 14, 1931.
Coke, Petroleum. Standard Oil Company of California. 284,353; June 23; Serial No. 311,290; published Apr. 7, 1931.
Seed. Kellogg Seed Company. 284,395; June 23; Serial No. 311,313; published Apr. 14, 1931.
Seed, Lawn grass. Kellogg Seed Company. 284,354; June 23; Serial No. 311,312; published Apr. 14, 1931.
Skins, Dyed. Iceland Fur Dyeing Corporation. 284,245; June 23; Serial No. 283,742; published Apr. 7, 1931.
Skins, Dyed. Joseph M. Ryan & Co. Inc. 284,360; June 23; Serial No. 311,537; published Apr. 14, 1931.
Straw and horsehair made of cellulose. Imitation. British Enka Artificial Silk Company Limited. 284,387; June 23; Serial No. 309,675; published Apr. 7, 1931.

CLASS 3

Bags and purses, Hand. Charles Burstein & Bro. Inc. 284,358; June 23; Serial No. 311,468; published Apr. 7, 1931.
Trunks. May & Malone, Incorporated. 284,261; June 23; Serial No. 304,417; published Apr. 7, 1931.
Wallets, hand bags, overnight bags, etc. Premier Co. 284,331; June 23; Serial No. 309,787; published Apr. 7, 1931.

CLASS 5

Adhesive pastes, glues, gums. Manhattan Paste & Glue Co. 284,382; June 23; Serial No. 308,894; published Apr. 7, 1931.
Cement, Leather. A. Glicksman. 284,334; June 23; Serial No. 310,375; published Apr. 14, 1931.
Glue, Arabic, paste, and mucilage. Sanford Manufacturing Company. 82,832; renewed July 25, 1931.
Substance having adhesive and/or binding properties. Röhm & Haas Company. 284,355; June 23; Serial No. 311,447; published Apr. 14, 1931.

CLASS 6

Disinfectants. Société Française De Désinfection. 37,259; renewed Oct. 29, 1931.
Liquid preparation. Smoke-Mint Co. 284,420; June 23.
Medicinal tablets. Fifth Avenue Laboratories, Inc. 284,421; June 23.
Preparation for exterminating ants. H. Diez. 81,793; renewed May 9, 1931.
Preparation for use in the treatment of coughs, colds, etc. Mrs. J. H. Anderson. 284,415; June 23.

CLASS 8

Trays, Ash. Wm. Demuth & Co. 284,287; June 23; Serial No. 311,520; published Apr. 14, 1931.

CLASS 14

Brass and unfinished forgings, Sheet. Scovill Manufacturing Company. 284,266; June 23; Serial No. 305,497; published Apr. 7, 1931.
Castings, Iron alloy. United Conveyor Corporation. 284,285; June 23; Serial No. 309,538; published Apr. 14, 1931.
Nickel. International Nickel Company. 284,286; June 23; Serial No. 310,380; published Apr. 7, 1931.
Steel. Crescent Tool Company. 284,271; June 23; Serial No. 306,940; published Apr. 14, 1931.
Steel, Nickel chrome alloy. Universal Steel Company. 284,294; June 23; Serial No. 310,844; published Apr. 14, 1931.
Steel sheets. Inland Steel Company. 284,252; June 23; Serial No. 296,275; published Apr. 7, 1931.
Terne plate. American Tin Plate Co. 36,496–500; renewed May 28, 1931.

CLASS 15

Candles. Schaeffer Bros. & Powell Mfg. Co. 83,517–8; renewed Sept. 19, 1931.
Candles, tapers, dips, etc. Muench-Kreuzer Candle Co. Inc. 284,250; June 23; Serial No. 294,852; published Mar. 17, 1931.
Grease compound, Lubricating. Merco Nordstrom Valve Company. 284,374; June 23; Serial No. 308,120; published Mar. 24, 1931.
Lubricant, Transmission. Milwaukee Lubricants Co. 284,412; June 23.
Oil, Lubricating. Continental Oil Company. 284,307; June 23; Serial No. 310,102; published Mar. 17, 1931.
Oil, Lubricating. Continental Oil Company. 284,311; June 23; Serial No. 310,108; published Mar. 17, 1931.
Oil, Motor lubricating. Garland Products Company. 284,262; June 23; Serial No. 304,552; published Mar. 17, 1931.
Oils and greases, Lubricating. Pennzoil Company. 284,306; June 23; Serial No. 310,041; published Mar. 31, 1931.

CLASS 16

Linseed oil. Kelloggs & Miller. 81,882; renewed May 16, 1931.

CLASS 17

Cigars. Marceling Perez & Co. 284,369; June 23; Serial No. 307,790; published Apr. 7, 1931.
Cigars. Philippine Tobacco Co. 284,384; June 23; Serial No. 308,908; published Apr. 14, 1931.
Cigars, cigarillos, cigarettes, and tobacco. Verellen Limited. 284,279; June 23; Serial No. 309,911; published Apr. 7, 1931.
Cigars, cigarillos, cigarettes, and tobacco. Verellen Limited. 284,280; June 23; Serial No. 309,913; published Apr. 7, 1931.
Tobacco. Macdn-Zimmer-McGill Tobacco Co. 284,368; June 23; Serial No. 307,683; published Apr. 14, 1931.

CLASS 19

Boats and particularly cruisers. Pleasure. Staples, Johnson & Co. 284,425; June 23.

CLASS 21

Batteries, Electric. Daisy Battery Corp. 284,263; June 23; Serial No. 304,651; published Mar. 17, 1931.
Condensers, Electrical. Aerovox Wireless Corporation. 284,256; June 23; Serial No. 296,624; published Mar. 17, 1931.
Electric cells and batteries. National Carbon Company. 284,376; June 23; Serial No. 308,383; published Mar. 31, 1931.
Electric direction lamp signal for vehicles. H. J. van Spanje. 284,308; June 23; Serial No. 310,196; published Mar. 24, 1931.
Electric generators and motors, rotary converters, etc. Limited Company Formerly The Skoda-Works, Pizen. 284,244; June 23; Serial No. 235,558; published Aug. 5, 1930.
Electric lighting outfits and fittings, Portable. I. F. Dash. 284,325; June 23; Serial No. 309,374; published Mar. 31, 1931.
Electric motors and motor drive outfits. Eastman Kodak Company. 284,309; June 23; Serial No. 310,216; published Mar. 31, 1931.
Electrical remote control, visual and audible signaling equipment and parts thereof, etc. Temperator Company. 284,370; June 23; Serial No. 307,861; published Mar. 31, 1931.
Electrically controlled typesetting and typecasting apparatus, etc. Teletype Corporation. 284,366; June 23; Serial No. 307,183; published Mar. 17, 1931.
Electrically controlling the operation of theatre curtains, Device for. Tiffin Scenic Studios. 284,324; June 23; Serial No. 309,217; published Mar. 31, 1931.
Radio electron tubes. Zenith Radio Corporation. 284,319–20; June 23; Serial Nos. 310,232–3; published Mar. 31, 1931.
Radio electron tubes. Zenith Radio Corporation. 284,323; June 23; Serial No. 310,429; published Mar. 31, 1931.
Radio receiving sets. H. M. Prince. 284,315; June 23; Serial No. 310,612; published Mar. 24, 1931.
Radio receiving sets. Wieboldt Stores, Inc. 284,423; June 23.
Radio receiving sets and parts thereof. Zenith Radio Corporation. 284,322; June 23; Serial No. 310,238; published Mar. 17, 1931.
Radio sets, phonographs, combinations and accessories, etc. Superior distributors. 284,257; June 23; Serial No. 298,123; published Mar. 17, 1931.
Spark plugs. Firestone Battery Company. 284,346; June 23; Serial No. 311,134; published Mar. 31, 1931.
Vacuum cleaners and attachments therefor, Electrically operated portable. Electrolux, Inc. 284,377–8; June 23; Serial Nos. 308,416–17; published Mar. 17, 1931.
Wires and cables. Simplex Wire & Cable Company. 284,321; June 23; Serial No. 310,229; published Mar. 17, 1931.

CLASS 22

Golf clubs, Wood and metal. L. A. Young Company. 284,417; June 23.
Kites. J. S. Mason. 284,419; June 23.
Toys. Toy-Pack Corporation. 284,413; June 23.

CLASS 23

Crushing and grinding mills. F. L. Smidth & Co. 284,273; June 23; Serial No. 311,702; published Apr. 14, 1931.
Fire extinguishers, Portable. Pyrene Manufacturing Company. 284,386; June 23; Serial No. 309,250; published Apr. 7, 1931.
Gears, pinions, transmission gears, etc., Bevel ring. Warner Gear Company. 284,402; June 23; Serial No. 310,670; published Apr. 7, 1931.
Lubricating devices and parts of lubricating devices. Robert Bosch Aktiengesellschaft. 284,429; June 23.
Machine for wire stitching signatures, etc. Ideal Stitcher & Mfg. Co. 284,389; June 23; Serial No. 309,857; published Apr. 7, 1931.
Machinery bushings, Bronze. Jackson-Wheeler Metals Service. 284,401; June 23; Serial No. 311,061; published Apr. 7, 1931.
Nutcrackers. Woldert Grocery Company. 83,379; renewed Sept. 5, 1931.
Razor blades. Premier Co. 284,274; June 23; Serial No. 311,846; published Apr. 14, 1931.
Razor blades, Safety. T. H. Frost. 284,403; June 23; Serial No. 311,327; published Apr. 7, 1931.
Stooking or grain-shocking machines and grain-shock-loading machines. Reed Harvesting Machine Co. 284,404; June 23; Serial No. 311,536; published Apr. 14, 1931.
Weaving and knitting machines and parts or attachments and tools. Internationaler Maratti-Maschinenverkauf-A.-G. Berlin. 284,269; June 23; Serial No. 305,931; published Apr. 14, 1931.
Well boring plants, drilling tools, steel derricks, etc. Oil Well Engineering Company. 284,247; June 23; Serial No. 292,680; published Apr. 7, 1931.
Winches, Truck. Muskogee Iron Works. 284,249; June 23; Serial No. 294,433; published Apr. 14, 1931.

CLASS 26

Ammeters, voltmeters, wattmeters, etc. Process Engineering and Equipment Corporation. 284,372; June 23; Serial No. 308,033; published Apr. 7, 1931.
Compasses and dividers. American News Company. 284,348; June 23; Serial No. 310,747; published Apr. 14, 1931.
Films for X-ray exposures. General Electric X-Ray Corporation. 284,340; June 23; Serial No. 311,031; published Apr. 7, 1931.
Gages, Pressure. Consolidated Ashcroft Hancock. 284,361; June 23; Serial No. 311,598; published Apr. 7, 1931.
Photographic shutters. Eastman Kodak Company. 284,356; June 23; Serial No. 311,425; published Apr. 7, 1931.
Scales. D. C. Rockola. 284,329; June 23; Serial No. 309,701; published Apr. 14, 1931.
Scales, Weighing. D. C. Rockola. 284,272; June 23; Serial No. 311,887; published Apr. 14, 1931.
Sensitized paper, Photographic. Haloid Company. 284,341; June 23; Serial No. 311,034; published Apr. 7, 1931.

CLASS 28

Silver flatware and hollow ware. Oneida Community, Limited. 284,416; June 23.

CLASS 29

Brushes. Specialty Manufacturing Company. 284,275; June 23; Serial No. 309,215; published Apr. 7, 1931.
Powder puffs. Hygienol Co. Inc. 284,296; June 23; Serial No. 311,527; published Apr. 14, 1931.

CLASS 31

Freezers, Ice Cream. Acme Freezer Company. 83,120; renewed Aug. 22, 1931.

CLASS 32

Boxes. Tuttle & Bailey Manufacturing Company. 284,351; June 23; Serial No. 311,009; published Apr. 14, 1931.
Chairs, Sick room or commode. A. K. Lindsey. 284,347; June 23; Serial No. 310,724; published Apr. 14, 1931.

Furniture. Sachs Quality Furniture Inc. 284,338; June 23; Serial No. 310,576; published Apr. 14, 1931.

CLASS 35

Belting, Spools of leather. J. H. Hemmerdinger & Son, Inc. 284,362; June 23; Serial No. 311,085; published Apr. 14, 1931.
Gaskets and parts thereof, washers, shims and strip shim stock, etc. Victor Manufacturing & Gasket Company. 284,265; June 23; Serial No. 305,460; published Apr. 7, 1931.
Rubber and fabric composition belt. Atwood Machine Company. 284,260; June 23; Serial No. 299,888; published Apr. 7, 1931.
Rubber hose, Canvas covered metal lined. Metal Hose & Tubing Co. 284,255; June 23; Serial No. 296,489; published Apr. 14, 1931.
Tires, Automobile. Sears, Roebuck and Co. 284,339; June 23; Serial No. 310,948; published Apr. 7, 1931.

CLASS 36

Accordions. Beugeleisen & Jacobson. 284,430–1; June 23.

CLASS 37

Paper. Hampshire Paper Company. 284,411; June 23.
Paper dishrags. T. Dugan. 284,427; June 23.

CLASS 39

Bloomers. Winget Kickernick Company. 284,381; June 23; Serial No. 308,661; published Mar. 31, 1931.
Clothing, Men's. Franklin Simon & Co. 284,344; June 23; Serial No. 310,938; published Mar. 31, 1931.
Collars and shirts. Apollo Shirt Co. 284,305; June 23; Serial No. 310,005; published Mar. 17, 1931.
Cravats. Cheney Brothers. 284,343; June 23; Serial No. 310,910; published Apr. 7, 1931.
Cravats. Cheney Brothers. 284,345; June 23; Serial No. 310,970; published Apr. 7, 1931.
Dresses, dress and shirt wasits, house-gowns, and petticoats. Waldorf Manufacturing Company. 82,733; renewed July 18, 1931.
Gowns, frocks, suits, etc., Women's. Max Cohen, Inc. 284,373; June 23; Serial No. 308,103; published Apr. 7, 1931.
Hosiery. L. Bamberger & Co. 284,303; June 23; Serial No. 309,961; published Mar. 17, 1931.
Hosiery. J. R. Beaton Company. 284,409; June 23.
Hosiery. Brown Durrell Co. 284,253–4; June 23; Serial Nos. 296,477–8; published Mar. 17, 1931.
Hosiery. Chenango Knitting Company. 284,267; June 23; Serial No. 305,656; published Apr. 7, 1931.
Hosiery. Combine Hosiery Corporation. 284,318; June 23; Serial No. 310,443; published Mar. 31, 1931.
Hosiery. Union Hosiery Corporation. 284,314; June 23; Serial No. 310,540; published Mar. 31, 1931.
Hosiery. Windsor Mills, Inc. 284,327; June 23; Serial No. 309,792; published Apr. 7, 1931.
Jackets, Knit. M. M. Guttman. 284,407; June 23.
Neckties. Knox Hat Company. 284,363; June 23; Serial No. 310,682; published Mar. 31, 1931.
Shirts, blouses, pajamas, and underwear. Monroe Shirt Co. 284,426; June 23.
Shirts, collars, socks, etc. Henry C. Reusch & Co. 284,316; June 23; Serial No. 310,613; published Apr. 7, 1931.
Shirts, Work. J. D. Renfroe. 284,251; June 23; Serial No. 295,192; published Mar. 17, 1931.
Shirts, Work and flannel. Wardan Manufacturing Co. 284,326; June 23; Serial No. 309,577; published Mar. 17, 1931.
Suits, coats, vests, and trousers. L. H. Manko. 284,383; June 23; Serial No. 308,895; published Mar. 31, 1931.
Topcoats, overcoats, sport coats, and suits. Rose Bros. 284,422; June 23.
Undergarments. Krumholz & Lichtblau. 284,371; June 23; Serial No. 307,980; published Mar. 17, 1931.
Underwear. Luxite Silk Products Co. 284,310; June 23; Serial No. 310,223; published Mar. 17, 1931.
Underwear for men and boys. W. Rayner. 284,317; June 23; Serial No. 309,620; published Mar. 31, 1931.
Underwear for women. Rayon. "E-Cut" Knitting Mills. 284,312; June 23; Serial No. 310,474; published Mar. 31, 1931.
Underwear (shorts), Men's. L. Bamberger & Co. 284,304; June 23; Serial No. 309,959; published Mar. 31, 1931.
Union suits, undershirts, drawers, and negligee shirts. Norwich Knitting Company. 284,408; June 23.

CLASS 41

Umbrellas. Lynn Umbrella Mfg. Co. 284,364; June 23; Serial No. 310,685; published Apr. 7, 1931.

CLASS 42

Rugs, Textile. M. H. Rogers, Inc. 284,410; June 23.
Sheets and pillowcases. The Fair. 284,418; June 23.
Sheets, pillowcases, and bolster cases. Utica Steam & Mohawk Valley Cotton Mills. 284,405; June 23.

CLASS 43

Yarns. Moster & Feldman. 284,313; June 23; Serial No. 310,524; published Apr. 14, 1931.

CLASS 44

Appliances and machines for treatment of the human body, Electrical. Do-X Corporation. 284,290; June 23; Serial No. 309,810; published Apr. 7, 1931.
Atomizers, Medicinal. Nazalizer Company. 284,289; June 23; Serial No. 310,691; published Apr. 7, 1931.
Permanent waving machines, heaters for use in connection therewith, curlers, etc. Thermique, Incorporated. 284,264; June 23; Serial No. 304,835; published Apr. 14, 1931.
Prophylactic rubber articles. H. L. Ain. 284,276; June 23; Serial No. 309,368; published Apr. 7, 1931.
Prophylactic rubber articles. R. Aurnau. 284,281; June 23; Serial No. 310,157; published Apr. 14, 1931.
Sanitary belts, aprons, bloomers, and napkins. L. H. Scadron. 284,292; June 23; Serial No. 310,837; published Apr. 14, 1931.

CLASS 45

Syrup, Nonalcoholic maltless. H. A. Ruggieri. 284,380; June 23; Serial No. 308,642; published Apr. 14, 1931.

CLASS 46

Alfalfa meal. Mason Mills, Inc. 284,399; June 23; Serial No. 311,879; published Apr. 14, 1931.
Bread. General Baking Company. 284,246; June 23; Serial No. 287,039; published Oct. 22, 1929.
Bread. M. Herskowitz. 284,398; June 23; Serial No. 311,836; published Apr. 14, 1931.
Butter. Wm. F. Gravins & Co. 284,379; June 23; Serial No. 308,624; published Apr. 7, 1931.
Candies and chocolates. T. Sherwin. 284,414; June 23.
Candies, ice cream. Gantt, Incorporated. 284,278; June 23; Serial No. 309,852; published Apr. 7, 1931.
Canned corn, pumpkin, and hominy. Grimes Canning & Preserving Company. 83,247; renewed Aug. 29, 1931.
Canned dog food. C. O Sattinger. 284,342; June 23; Serial No. 311,341; published Apr. 7, 1931.
Canned fish. Haas-Baruch & Company. 284,258; June 23; Serial No. 298,943; published Apr. 14, 1931.
Canned peeled tomatoes and tomato paste. F. Vitelli & Son. 284,295; June 23; Serial No. 311,010; published Apr. 14, 1931.
Cocoa butter substitute. Cohus Corporation. 284,396; June 23; Serial No. 311,470; published Apr. 14, 1931.
Coffee. Fireside Coffee Co. 284,367; June 23; Serial No. 307,668; published Apr. 7, 1931.
Coffees, J. H. Dounvcor. 284,282; June 23; Serial No. 310,459; published Apr. 14, 1931.
Corn flakes. Standard Rice Company. 284,390; June 23; Serial No. 310,416; published Apr. 14, 1931.
Dessert powders. E. M. Salisbury. 284,424; June 23.
Farina, self-raising flour, buckwheat flour, etc. Hecker-H-O Company. 284,332; June 23; Serial No. 310,219; published Apr. 7, 1931.
Feed. Nowak Milling Corporation. 284,335; June 23; Serial No. 310,403; published Apr. 7, 1931.
Feed, Chicken. Maritime Milling Co. 284,352; June 23; Serial No. 311,066; published Apr. 7, 1931.
Flour. M. Forchheimer Grocery Co. Inc. 284,323; June 23; Serial No. 310,373; published Apr. 7, 1931.
Flour and corn meal. Arnold Milling Company. 284,248; June 23; Serial No. 293,257; published Sept. 23, 1930.
Flour and corn meal. Hubbard Milling Company. 284,400; June 23; Serial No. 309,896; published Apr. 14, 1931.
Food, Bird. H & R Sales Company. 284,388; June 23; Serial No. 309,854; published Apr. 14, 1931.
Food, Bird. H & R Sales Company. 284,397; June 23; Serial No. 311,572; published Apr. 14, 1931.
Food, Cereal breakfast. Standard Rice Company. 284,391; June 23; Serial No. 310,417; published Apr. 14, 1931.
Food, Dog. S. Schiff. 284,393; June 23; Serial No. 311,146; published Apr. 14, 1931.
Food drink. A. Kanner. 284,259; June 23; Serial No. 299,325; published Apr. 14, 1931.
Foods, Poultry and stock. National Oil Products Company. 284,349–50; June 23; Serial No. 310,875–6; published Apr. 7, 1931.
Fudge powders. French Maid Cocolat Company. 284,299; June 23; Serial No. 311,092; published Apr. 14, 1931.
Ice cream. Franklin Ice Cream Corporation. 284,365; June 23; Serial No. 306,948; published Apr. 14, 1931.
Ice cream. Jersey Ice Cream Products Corporation. 284,328; June 23; Serial No. 309,345; published Apr. 7, 1931.
Ice cream confection or frozen confection. F. A. Marchioni. 284,288; June 23; Serial No. 310,687; published Apr. 7, 1931.
Oleomargarine, mayonnaise, sandwich spread, and salad dressing. Baltimore Butterine Company. 284,330; June 23; Serial No. 309,721; published Apr. 7, 1931.
Olive oil, Pure. M. A. Almeida. 284,301; June 23; Serial No. 311,122; published Apr. 14, 1931.
Pudding and pie filling. Royal Baking Powder Company. 284,284; June 23; Serial No. 310,503; published Apr. 14, 1931.
Pudding and pie filling. Royal Baking Powder Company. 284,293; June 23; Serial No. 310,502; published Apr. 7, 1931.
Pudding powders. E. M. Salisbury. 284,375; June 23; Serial No. 308,222; published Apr. 14, 1931.

Rolls, Luncheon. F. G. Vogt & Sons, Incorporated. 284,392; June 23; Serial No. 310,669; published Apr. 14, 1931.
Salad dressing. W. E. Page. 284,277; June 23; Serial No. 309,591; published Apr. 7, 1931.
Sandwiches, Prepared. L. P. Seymour. 284,394; June 23; Serial No. 311,247; published Apr. 14, 1931.
Sauce and salad dressing, Condimental. Price Flavoring Extract Company. 284,297-8; June 23; Serial No. 311,014-15; published Apr. 14, 1931.
Syrup, Malt. American Malt Syrup. 284,337; June 23; Serial No. 310,438; published Apr. 14, 1931.
Syrup, Malt. Frank W. Jacobson. 284,300; June 23; Serial No. 311,035; published Apr. 14, 1931.
Syrup, Malt. Sterling Products Company. 284,336; June 23; Serial No. 310,420; published Apr. 14, 1931.
Syrup, Table. Philadelphia Malt Extract Co. 284,291; June 23; Serial No. 310,834; published Apr. 7, 1931.
Wafers, Chocolate covered. Federal Sweets & Wafer Co. 284,385; June 23; Serial No. 309,072; published Apr. 14, 1931.

CLASS 50

Brackets, Iron. A. Rasmussen. 284,270; June 23; Serial No. 306,366; published Apr. 7, 1931.
Cushions, Rug and carpet. Allen Industries, Inc. 284,302; June 23; Serial No. 311,591; published Apr. 14, 1931.
Plates and washers, bath mats, corks, etc. Suberit-Fabrik A-G. 284,268; June 23; Serial No. 305,769; published Apr. 14, 1931.
Pyroxylin coated and similarly coated fabrics or textiles. Shott Manufacturing Company. 284,283; June 23; Serial No. 310,462; published Apr. 14, 1931.
Sanitary rubber coated bed sheeting. Julius Schmid, Inc. 284,406; June 23.

ALPHABETICAL LIST OF LABELS

Agre's Special Roll Butter. For Enveloping Butter. K. Agre & Sons. 39,322; June 23.
Arro-Lin. For Penetrating Liniment. D. E. Powell. 39,330; June 23.
Atlantic. For Malt Syrup. Atlas Food Products Co., Incorporated. 39,323; June 23.
Beech-Nut Brand Chewing Gum, Wintergreen. For Chewing Gum. Beech-Nut Packing Company. 39,324; June 23.
China Plated Shelf and Lining Paper. For Shelf and Lining Paper. K. Bezic. 39,325; June 23.
Coffee. For Coffee. Union Bag & Paper Corporation. 39,335; June 23.
Indian Chief. For Petroleum Lubricating Oils. Tecumseh Petroleum Company Inc. 39,333; June 23.
Lucky Penny Chewing Gum. For Chewing Gum. Orbit Listerated Gum Company. 39,328-9; June 23.
Schoenhut's Nobby Nobs. For Sets of Toy Construction Blocks. A. Schoenhut Company. 39,331; June 23.
Schoenhut's Ring-A-Hub. For Ring Tossing Game. A. Schoenhut Company. 39,332; June 23.
Sunrise Coffee. For Coffee. Kansas City Wholesale Grocery Company. 39,327; June 23.
The Little Michigan Sandwich Shop. For Sandwiches. L. A. Graybiel. 39,326; June 23.
Triple AAA—The Enemy to Pain. For Tablets for the Treatment of Headaches, Colds, Etc. Triple AAA Tablets, Inc. 39,334; June 23.
Wrigley's Pepsin Chewing Gum. For Chewing Gum. Wm. Wrigley Jr. Company. 39,336-7; June 23.

ALPHABETICAL LIST OF PRINTS

A Winter's Tale. For Cigarettes. R. J. Reynolds Tobacco Company. 13,254; June 23.
And Cyrano De Bergerac Opened Up Another Pack. For Cigarettes. R. J. Reynolds Tobacco Company. 13,260; June 23.
Bake-O-Gram. For Bakery Products. Cushman's Sons, Inc. 13,250; June 23.
Camel-Lighting Time. For Cigarettes. R. J. Reynolds Tobacco Company. 13,252; June 23.
Camels Brought Cheer To Good King Lear. For Cigarettes. R. J. Reynolds Tobacco Company. 13,259; June 23.
Camels No Phantom Pleasure, Hamlet Finds. For Cigarettes. R. J. Reynolds Tobacco Company. 13,261; June 23.
Camels Please My Roman Beezer. For Cigarettes. R. J. Reynolds Tobacco Company. 13,262; June 23.
Canteen. For Candy Bars. Automatic Canteen Company. 13,247; June 23.
Capital Bakers. For Bread. Capital City Baking Co. 13,248; June 23.
Companionship. For Cigarettes. R. J. Reynolds Tobacco Company. 13,256; June 23.
Comrades Of The Sun. For Cigarettes. R. J. Reynolds Tobacco Company. 13,265; June 23.
It Keeps Them So Mild and Fresh. For Cigarettes. R. J. Reynolds Tobacco Company. 13,255; June 23.
It Must Be Spring. For Cigarettes. R. J. Reynolds Tobacco Company. 13,266; June 23.
Let's Go. For Cigarettes. R. J. Reynolds Tobacco Company. 13,253; June 23.
Lucky Penny Chewing Gum. For Chewing Gum. Orbit Listerated Gum Company. 13,251; June 23.
She's The Belle Of Amherst. For Wheat Breakfast Food. The Cream Of Wheat Corporation. 13,249; June 23.
Swing Along. For Cigarettes. R. J. Reynolds Tobacco Company. 13,264; June 23.
The Low Point Sale. For Furniture. John Wanamaker New York. 13,267; June 23.
The Low Point Sale. For Eastern Rugs. John Wanamaker New York. 13,268; June 23.
The Low Point Sale. For Axminster Rugs. John Wanamaker New York. 13,269; June 23.
The Low Point Sale. For Lamps. John Wanamaker New York. 13,270; June 23.
Twas Camels' Mildness Brought About The Taming Of The Shrew, No Doubt. For Cigarettes. R. J. Reynolds Tobacco Company. 13,258; June 23.
Unhurried Choosing. For Cigarettes. R. J. Reynolds Tobacco Company. 13,263; June 23.
Up Spoke The Duke (In Measure For Measure)—I'll Take A Camel For Maximum Pleasure. For Cigarettes. R. J. Reynolds Tobacco Company. 13,257; June 23.
Wrigley's Pepsin Chewing Gum. For Chewing Gum. Wm. Wrigley Jr. Company. 13,271; June 23.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 23D DAY OF JUNE, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Abbott Coin Counter Company. (See Janovsky, J., and Lange, assignors.)
Abbott, Gardner, trustee. (See Glaser, Rudolph A., assignor.)
Abood, Michel, Jacksonville, Fla. Refrigerated display case. 1,811,376; June 23.
Ackerly, Donald G., Edgewood borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Manufacture of electrical rectifiers. 1,811,603; June 23.
Ackerman, Albert C., Ballston Spa, N. Y. Glove. 1,811,570; June 23.
Ackerman, Albert C., Ballston Spa, N. Y. Gang die for cutting glove blanks. 1,811,571; June 23.
Ackerman, Emil, Chicago, Ill. Air circulating device for hot air furnaces. 1,811,828; June 23.
Acme Card System Company. (See Powell, Frank D., assignor.)
Acme Shear Company, The. (See Conway, John J., assignor.)
Adams, Ray R., Maplewood, N. J., and E. V. Griggs, White Plains, N. Y., assignors to Western Electric Company, Incorporated, New York, N. Y. Signal transmission by guided and unguided waves. 1,811,102; June 23.
Addressograph Company. (See Anthony, Stanley, assignor.)
Adlake Company, The. (See Hamm, William S., assignor.)
Ailes, Adrian S., Chicago, Ill., assignor, by mesne assignments, to The Lake Erie Chemical Company, Cleveland, Ohio. Gas discharging device. 1,811,572; June 23.
Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)
Akron Standard Mold Company, The. (See Bostwick, Henry C., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Brown, Eric, assignor.)
Albertson & Company. (See Albertson, F. O., and Olsen, assignors.)
Albertson, Frans O., and G. Olsen, assignors to Albertson & Company, Inc., Sioux City, Iowa. Abrasive disk. 1,811,037; June 23.
Albrecht, Eduard. (See Herz, R., Runne, and Albrecht.)
Alcet Electro-Products Corporation. (See Lund, Arthur D., assignor.)
Aldeen, Gedor W., assignor to National Lock Co., Rockford, Ill. Latch. 1,811,449; June 23.
Allen-Drew Co. (See Allen, Earle F., assignor.)
Allen, Earle F., assignor to Allen-Drew Co., Cambridge, Mass. Actuating apparatus for theater curtains and the like. 1,810,890; June 23.
Altgelt, Herman E., South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company. Tractor. 1,811,072; June 23.
Ament, Lucy C., New York, N. Y., now by judicial change of name Lucy C. Thomas. Lighter. 1,811,103; June 23.
American Assembling Machine Company. (See Kleineberg, Paul E., assignor.)
American Can Company. (See Hothersall, John M., assignor.)
American Chemical Paint Company. (See Gravell, James H., assignor.)
American Engineering Company. (See Clerget, Edmund J., assignor.)
American Fluid Motors Company, The. (See Lassman, Benjamin, assignor.)
American Fork & Hoe Company. (See Foss, William A., assignor.)
American Lace Mfg. Co., The. (See Hucknall, Hage W., assignor.)
American Machine & Foundry Company. (See Bronander, Wilhelm B., assignor.)
American Machine & Foundry Company. (See Goerke, Henry E., assignor.)
American Machine & Foundry Company. (See Hawkins, Wilford J., assignor.)
American Machine & Foundry Company. (See Nejedly, Peter M., assignor.)
American Machine & Foundry Company. (See Schmitt, Frank R., assignor.)
American Machine & Foundry Company. (See Stein, John A., assignor.)
American Oak Leather Company, The. (See Mellor, Gilmore M., assignor.)
American Seal-Kap Corporation. (See Baum, Ewald G., assignor.)
American Seating Company. (See Erving B. Morgan, assignor.)
American Seating Company. (See Hanson, Walter M., assignor.)
American Seating Company. (See Merrill, Ralph K., assignor.)
American Solvent Recovery Corporation. (See Barnebey, Oscar L., assignor.)
American Steel Foundries. (See Isaacson, Fred A., assignor.)
American Telephone and Telegraph Company. (See Potter, Ralph K., assignor.)
American Tractor Equipment Co. (See McMillan, Wesley K., assignor.)
American Valve and Meter Company, The. (See Gray, Wallace M., assignor.)
Amidon, Charles S., West Willington, Conn. Controlling mechanism for sawmill carriages. 1,811,038; June 23.
Anaconda Wire and Cable Company. (See Kennedy, Joseph A., assignor.)
Andale Engineering Company. (See McNeal, Daniel R., assignor.)
Anderson, Calvin M., Columbus, Ohio. Fishing rod construction. 1,811,419; June 23.
Anderson, Herman, and R. J. Gannon, assignors to Jas. H. Matthews & Company, Pittsburgh, Pa. Stenciling device. 1,811,167; June 23.
Anderson, Martin E. (See Bancroft, G. J., and Anderson.)
Anderson, Sigurd E., Des Moines, Iowa. Silo door frame and ladder construction. 1,811,486; June 23.
Andrake, Andrew A., assignor to The Glenn L. Martin Company, Cleveland, Ohio. Fuel tank and making the same. 1,811,659; June 23.
Andrews, Charles W., assignor to H. A. Brassert & Company, Chicago, Ill. Furnace charging bell. 1,811,702; June 23.
Andrews, Charles W., and S. P. Kinney, assignors to H. A. Brassert & Company, Chicago, Ill. Rotary disintegrator. 1,811,528; June 23.
Anglada, Joseph A., Jenkintown, Pa. Sleeve valve internal combustion engine. 1,811,450; June 23.
Annin, Douglas H., Glendale, assignor to Neilan, Schumacher & Company, Los Angeles, Calif. Differential regulator for valves. 1,810,937; June 23.
Anthony, Stanley, Boston, Mass., assignor to Addressograph Company, Wilmington, Del. Printing plate. 1,811,815; June 23.
Anton, Frederick A., Topeka, Kans. Lateral arm awning for store fronts. 1,811,104; June 23.
Apex Products Corporation, The. (See Keim, Melville, assignor.)
Appia, Theodore A., New York, N. Y. Educational appliance. 1,811,105; June 23.
Arcturus Radio Tube Company. (See De Puy, C., and Brindle, assignors.)
Art Metal Construction Company. (See Larson, O. J., and Jones, assignors.)
Arzt, Tillie, New York, N. Y. Combination bed and chair. 1,811,680; June 23.
Ashury, Charles W., assignor to The Enterprise Manufacturing Company, Philadelphia, Pa. Meat chopper. 1,811,740; June 23.
Ashton, George, Griselgasteig, near Munich, and G. Frei, assignors to A. Haefeli, Munich, Germany. Carburetor. 1,811,288; June 23.
Atkinson, Wade & Co. (See Fauser, Gustave M., assignor.)
Atlantic Coast Fisheries Company, The. (See Taylor, Harden F., assignor.)
Attenborough, Fred, Harrington Park, Long Eaton, England. Circular knitting machine. 1,811,289; June 23.
Atwater, Karl W., assignor to H. A. Brassert & Company, Chicago, Ill. Bearing. 1,811,703; June 23.
Auburn Automobile Company. (See Leamy, Alan H., assignor.)
Aulbach, Charles J., Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y. Metal container. 1,811,106; June 23.
Austin, Bascum O., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control apparatus. 1,811,451; June 23.
Austin Manufacturing Co. (See Beatty, W. T., Davis, and Wilson, assignors.)
Autogiro Company of America. (See De la Cierva, Juan, assignor.)
Autographic Register Company. (See Johnson, Arthur A., assignor.)
Automatic Electric Inc. (See Nelson, M. L., and Richardson, assignors.)
Automatic Electric Inc. (See Schwartz, Michael, assignor.)
Automotive Fan & Bearing Company. (See Hollerith, Charles, assignor.)
Ayer Company, The. (See Harris, Thomas S., assignor.)

Baash, Lawrence F., Los Angeles, and W. H. Maxwell, Beverly Hills, Calif. Tongs. 1,810,938; June 23.

Babcock & Wilcox Company, The. (See Lucke, Charles E., assignor.)

Bacheldor, William H., and W. E. Wood, Wood River, Ill., assignors to Standard Oil Company, Whiting, Ind. Filter cloth. 1,811,573; June 23.

Badger, Walter L., Ann Arbor, assignor to Swenson Evaporator Company, Harvey, Ill. Polymerization of drying oils. 1,811,290; June 23.

Bakelite Corporation. (See Redman, L. V., Weith, and Brock, assignors.)

Baker, Erle K., Chicago, Ill. Chassis spring control. 1,810,897; June 23.

Balduf, Bruno E., assignor to United States Gypsum Company, Chicago, Ill. Sound-reducing construction. 1,811,250; June 23.

Ball, Albert P., Royal Oak, assignor to Square D Company, Detroit, Mich. Electrical switch. 1,811,251; June 23.

Ball, Albert P., assignor to Square D Company, Detroit, Mich. Unit base construction. 1,811,252; June 23.

Ball, Albert P., assignor to Square D Company, Detroit, Mich. Electrical switch. 1,811,253; June 23.

Ball, Harry V., Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y. Web guiding mechanism for printing machines. 1,811,877; June 23.

Ballard & Ballard Company. (See Willoughby, Lively B., assignor.)

Balton, James L., Baltimore, Md. Ice-cream container. Des. 84,452; June 23.

Bancroft, George J., and M. E. Anderson, Denver, Colo. Lubricating device. 1,811,343; June 23.

Bancroft, William P., Lincoln, Nebr. Garden tool. 1,811,604; June 23.

Banker, Otto, Mankato, Minn. Lock. 1,811,291; June 23.

Banks, Charles G., Glendale, assignor of one-half to C. M. O'Leary, jr., Los Angeles, Calif. High pressure hose. 1,811,226; June 23.

Bannister, Bryant, Pittsburgh, Pa. Air conditioning system. 1,811,378; June 23.

Barhoff, Fred W., assignor to Engineering Products Corporation, Hartford, Conn. Manufacture of storage battery units. 1,811,292; June 23.

Barkwill, William H., Cleveland, Ohio. Tongue cleaner. 1,811,775; June 23.

Barnebey, Oscar L., Columbus, Ohio, assignor to American Solvent Recovery Corporation. Recovering solvents. 1,811,107; June 23.

Barnes Scale Company. (See King, Bert W., assignor.)

Barnes, William O., Worcester, Mass. Apparatus for the reception of radio messages. 1,811,420; June 23.

Barr, Daniel R., Grand Rapids, Ohio, assignor to Taylor Instrument Companies, Rochester, N. Y. Barometer for use in connection with diagnostic work. 1,811,168; June 23.

Barr, Harvey M., New York, N. Y. Salt shaker. Des. 84,453; June 23.

Barr, Harvey M., New York, N. Y. Pepper shaker. Des. 84,454; June 23.

Barrere, Fernand B., Hautaget, France. Power transmission device. 1,811,293; June 23.

Barrett, William E., Flint, Mich. Collapsible bag. 1,811,574; June 23.

Barstow, Welch, and F. J. Day, assignors to Pre-Cooling Car Service Co., Los Angeles, Calif. Portable apparatus for conditioning perishable products. 1,811,529; June 23.

Bauer, Edward C., Cincinnati, Ohio. Glider. 1,810,997; June 23.

Baughman, George W., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,810,939; June 23.

Baughman, George W., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,810,940; June 23.

Baum, Ewald G., Natick, Mass., assignor, by mesne assignments, to American Seal-Kap Corporation, Long Island City, N. Y. Cap feeding mechanism for bottle cappers. 1,811,344; June 23.

Baum, Frank G., San Francisco, Calif., assignor to Westinghouse Electric and Manufacturing Company. Insulating device. 1,811,530; June 23.

Bauman, Joseph J., Chicago, Ill. Cosmetic jar. Des. 84,455; June 23.

Bauroth, Walter J., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Electric switch. 1,811,294; June 23.

Bausher, Harry, Montclair, N. J. Indentifier for toothbrushes and the like. 1,811,660; June 23.

Bayer, Josef, Barmen, Germany. Strap stretching and fastening tool. 1,811,108; June 23.

Bayley, Guy L., Chicago, Ill., assignor to Bevel Gear Grinding Company, Detroit, Mich. Method and apparatus for generating curved surfaces on gear teeth. 1,811,254; June 23.

Bayus, Stephen M., Bakersfield, Calif. Wire connecter or cable clamp. 1,811,704; June 23.

Bean, Barton A., jr., Williamsville, assignor to Trico Products Corporation, Buffalo, N. Y. Windshield cleaner. 1,811,819; June 23.

Bean, Ivan L. (See Bean, Louis A., assignor.)

Bean, Louis A., assignor to Ivan L. Bean, Denver, Colo. Flash light head. Des. 84,456; June 23.

Beatty, Dwight L., Missoula, Mont. Grading and ditching machine. 1,811,662; June 23.

Beatty, William H. (See Kimberlin, William H., assignor.)

Beatty, William T., Flossmoor, F. S. Davis, Homewood, and F. D. Wilson, Harvey, assignors to Austin Manufacturing Co., Chicago, Ill. Leaning wheel road scraper. 1,811,661; June 23.

Behrman, Abraham S., Chicago, Ill., assignor, by mesne assignments, to The Permutit Company, New York, N. Y. Siliceous material and producing the same. 1,811,531; June 23.

Belding, Elmer C., Whittier, assignor to National Tool and Metals, Incorporated, Torrance, Calif. Hard facing alloy. 1,811,487; June 23.

Bell, Arthur W., assignor, by mesne assignments, to Kraft-Phenix Cheese Corporation, Chicago, Ill. Sheet feeding mechanism. 1,810,898; June 23.

Bell, Catherine M., Seattle, Wash. Device for dispensing the equipment necessary for the practice of feminine hygiene. 1,811,345; June 23.

Bell Telephone Laboratories, Incorporated. (See St. John, Everett, assignor.)

Bemis, Albert F., Newton, assignor to Bemis Industries, Inc., Boston, Mass. Building construction. 1,810,891; June 23.

Bemis Industries, Inc. (See Bemis, Albert F., assignor.)

Bemis Industries Inc. (See Litchfield, Isaac W., assignor.)

Bemis Industries, Incorporated. (See Raynes, Harry C., assignor.)

Bendix Brake Company. (See Delahaye, Walter H., assignor.)

Benetatos, Andrew G., New York, N. Y. Skate. 1,811,532; June 23.

Benner, Harry P. (See Morrell, J. C., and Benner.)

Bennett, James C., Detroit, Mich. Soot blower for boilers. 1,811,346; June 23.

Bennison, William E., Wandsworth Borough, England, assignor to R. Hoe & Co., Inc., New York, N. Y. Plate printing machine. 1,811,379; June 23.

Bentley, Elwin S., et al. (See Derby, Thomas N., assignor.)

Benz, Louis, Denver, Colo. Tire rim. 1,811,109; June 23.

Bergé, Julien, assignor to Raffinerie Tirlemontoise Société Anonyme, Tirlemont, Belgium. Decoloring sugar crystals. 1,811,169; June 23.

Berggren, Charles A., Los Angeles, assignor to M. B. Pendleton, San Gabriel, Calif. Liquid sampling device. 1,811,255; June 23.

Bergstrom, Carl P., Millbury, Mass., and C. J. Lindegren, Providence, R. I., assignors to Crompton & Knowles Loom Works, Worcester, Mass. Power loom. 1,811,705; June 23.

Berkshire Knitting Mills. (See Hemmerich, Hugo, assignor.)

Berlinger, Jacob, Brooklyn, N. Y. Finger ring or similar article. Des. 84,457; June 23.

Bernard, Marie, New York, N. Y. Slipper. 1,811,380; June 23.

Bernini, John, Allentown, Pa. Supporting means for loom picker spindles. 1,811,488; June 23.

Bernitz Furnace Appliance Company. (See Thayer, Howard C., assignor.)

Berrigan, John B., Chicago, Ill., assignor to The Press & Drier Co. Filter bag connecter. 1,811,533; June 23.

Berwick, Robert E., Newkirk, Okla. Oil well pumping and flowing apparatus. 1,811,381; June 23.

Bessler Disappearing Stairway Company, The. (See Bessler, Frank E., assignor.)

Bessler, Frank E., assignor to The Bessler Disappearing Stairway Company, Akron, Ohio. Disappearing wall stairway. 1,811,706; June 23.

Bessler, Frank E., assignor to The Bessler Disappearing Stairway Company, Akron, Ohio. Disappearing stairway. 1,811,707; June 23.

Bessler, Frank E., assignor to The Bessler Disappearing Stairway Company, Akron, Ohio. Disappearing stairway. 1,811,708; June 23.

Bessler, Frank E., assignor to The Bessler Disappearing Stairway Company, Akron, Ohio. Disappearing stairway. 1,811,709; June 23.

Bessler, Frank E., assignor to The Bessler Disappearing Stairway Company, Akron, Ohio. Disappearing stairway. 1,811,710; June 23.

Bessler, Frank E., assignor to The Bessler Disappearing Stairway Company, Akron, Ohio. Disappearing stairway. 1,811,820; June 23.

Best, Frank E., and F. H. Harp, assignors to Frank E. Best, Inc., Seattle, Wash. Tubular night latch. 1,811,110; June 23.

Best, Frank E., Inc. (See Best, F. E., and Harp, assignors.)

Betts, Benjamin B. (See Einstein, R. E., and Betts.)

Bevel Gear Grinding Company. (See Bayley, Guy L., assignor.)

Bildstein, Walter, Brooklyn, N. Y. Window and screen securer. 1,811,681; June 23.

Binney Castings Company, The. (See Binney, Ralph L., assignor.)

Binney, Ralph L., assignor to The Binney Castings Company, Toledo, Ohio. Nonferrous alloy. 1,811,682; June 23.

Birdsboro Steel Foundry and Machine Company. (See Peterson, Edward T., assignor.)

Bishop, Benjamin M., assignor to The Terre Haute Paper Company, Terre Haute, Ind. Continuous beater for paper making. 1,811,741; June 23.

Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit. Re18,107; June 23.

Bittinger, Charles, Washington, D. C. Ordnance. 1,811,605; June 23.

Bjella, Asle. (See Gemberling, H. A., and Bjella.)

Bjork, Olof, Taft, British Columbia, Canada. Backstop for motor vehicles. 1,810,998; June 23.

Bjrokstedt, William G. (See Morgan, J. D., Bjorkstedt, and Lowe.)

Blackwell, Thomas E., and L. T. Smith, McKinney, Tex. Automatic railway switch. 1,811,770; June 23.

Blagden, John W., London, assignor of one-half to Howards & Sons Limited, Ilford, Essex, England. Making synthetic menthol. 1,811,711; June 23.

Blagden, John W., London, assignor of one-half to Howards & Sons Limited, Ilford, England. Making synthetic menthol. 1,811,777; June 23.

Blake, George E., assignor to Forsyth Metal Goods Company, Inc., East Aurora, N. Y. Tubular body for heating or the like and making the same. 1,811,816; June 23.

Blakely, Sidney B., assignor to Durkee-Atwood Company, Minneapolis, Minn. Trunk rack. 1,811,489; June 23.

Blalock, James E., Pacific Palisades, Calif. Pipe wrench. 1,811,452; June 23.

Blaw-Knox Company. (See Dryssen, Waldemar, assignor.)

Blomberg, Ulrik I. T., Enskede-Stockholm, Sweden, assignor to Ditto, Incorporated, Chicago, Ill. Storage rack. 1,810,941; June 23.

Bloom, David, assignor to Tidy Products Corporation, New York, N. Y. Robe. 1,811,821; June 23.

Blow, George, Knoxville, Tenn. Air lift pump. 1,811,295; June 23.

Boardman, Edward J. (See Simon, Karl A., assignor.)

Boden, James E., and R. T. Orr, assignors to Silunitkaddi Corporation, La Crosse, Wis. Golf bag. 1,811,296; June 23.

Boehm, Carl N., assignor to Woodweb Shade Manufacturers, Inc., Washington, N. J. Window shade. 1,810,899; June 23.

Bolling, John E., Mountain Lakes, N. J. Supporting and equilibrating lamp shades. 1,811,683; June 23.

Boothman, James W., Providence, R. I. Window screen and frame construction. 1,811,111; June 23.

Bordeaux, Ephriam P., assignor to Perfection Steel Body Company, Galion, Ohio. Dumping truck. 1,811,382; June 23.

Borden, Charles R. C., Brookline, Mass. Sound absorbing ventilating and the like. 1,811,347; June 23.

Bormann, Henry R., and A. Steinhart, assignors to A. O. Smith Corporation, Milwaukee, Wis. Weldrod chuck for electric arc welding. 1,810,900; June 23.

Bormann, Henry R., and A. Steinhart, assignors to A. O. Smith Corporation, Milwaukee, Wis. Weldrod holder for electric arc weldings. 1,810,901; June 23.

Basque, José V., Habana, Cuba. Garment hanger. 1,811,297; June 23.

Boswick, Henry C., Kenmore, assignor to The Akron Standard Mold Company, Akron, Ohio. Apparatus for the manufacture of inner tubes. 1,811,453; June 23.

Boulanger, Charles, assignor to Société Continentale Parker, Clichy, France. Process and product for protecting aluminum, magnesium and their alloys against corrosions. 1,811,298; June 23.

Bowen, Roy, Hoopeston, Ill. Golf score board. 1,811,778; June 23.

Boyce, Harrison H. (See Hebig, Henry C., assignor.)

Boyd, Newton C., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Producing explosives. 1,811,663; June 23.

Boyd, Richard N., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Manufacturing ammonium nitrate. 1,811,712; June 23.

Boyko, John, assignor of one-half to N. Stepankow, Detroit, Mich. Automatic rail switch operating device. 1,810,892; June 23.

Boyle, John, Scribner, Nebr. Grain retarder. 1,811,606; June 23.

Brady, Thomas, East Orange, N. J., assignor to Otis Elevator Company, New York, N. Y. Closure operating mechanism. 1,810,942; June 23.

Brain, George, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa. Water closet bowl. Des. 84,458; June 23.

Brainard, George C., assignor to The General Fireproofing Company, Youngstown, Ohio. Card posting safe. 1,811,421; June 23.

Brand, Samuel, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,811,534; June 23.

Brassert, H. A., & Company. (See Andrews, C. W., and Kinney, assignor.)

Brassert, H. A., & Company. (See Andrews, Charles W., assignor.)

Brassert, H. A., & Company. (See Atwater, Karl W., assignor.)

Brewer, Alice L., East Hartford, Conn. Keyhole guard. 1,811,742; June 23.

Brindle, Robert, jr. (See De Puy, C., and Brindle.)

Bristol, Edgar H., assignor to The Foxboro Company, Foxboro, Mass. Recording instrument. 1,811,417; June 23.

British American Silk Mills Limited. (See Nicely, George W., assignor.)

Britten, Edwin F., jr., Maplewood, assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,811,607; June 23.

Broadwater, Walter F., Orlando, Fla. Device for closing casement windows. 1,811,575; June 23.

Brock, Frank P. (See Redman, L. V., Weith, and Brock.)

Brockhaus, Paul, jr., Oesterau, Westphalia, Germany. Vise. 1,811,299; June 23.

Brodie, Ralph N., Company. (See Granberg, Albert J., assignor.)

Bromberg, August, Wauwatosa, assignor of one-half to Enos L. Dillon, Milwaukee, Wis. Cutter for vegetables and fruits. 1,811,743; June 23.

Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Pan greasing machine. 1,810,943; June 23.

Bronander, Wilhelm B., Montclair, N. J., assignor to American Machine & Foundry Company. Hot and cold cigarette rod sealer. 1,810,944; June 23.

Broome, Frank H., Rutherford, N. J. Fastener. 1,811,713; June 23.

Broslus, Frank C. (See Campbell, Phil I., assignor.)

Brotz, Frank G., assignor to Kohler Company, Kohler, Wis. Lavatory drain. 1,811,170; June 23.

Brotz, Frank G., assignor to Kohler Company, Kohler, Wis. Lavatory hand lift drain. 1,811,827; June 23.

Brown, Cicero C., Hebbronville, Tex. Well head equipment. 1,811,422; June 23.

Brown, Edgar P., Watsonville, Calif. Land grader. 1,811,490; June 23.

Brown, Eric, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Preheating turbines. 1,811,383; June 23.

Brown Instrument Company, The. (See Harrison, Archibald C., assignor.)

Brown, Robert E., Olean, N. Y. Fly open knife. 1,810,999; June 23.

Brown, Roy W., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Mold serving device. 1,811,256; June 23.

Brown, Sidney G., North Acton, London, England. Gyroscopic directional instrument. 1,811,800; June 23.

Brubaek, Theodore M., and De Los E. Hibner, jr., Du Bois, Pa. Planetary pipe-threading tool. 1,811,491; June 23.

Bruce, Alfred W., New York, N. Y. Auxiliary apparatus for steam generators. 1,811,608; June 23.

Brundage, James W., assignor to J. R. Gammeter, Akron, Ohio. Method and apparatus for filling molds. 1,811,423; June 23.

Brüninghaus, Hugo, Barmen-Wichlinghausen, Germany. Method of and apparatus for tying packets. 1,811,744; June 23.

Bryan, Harold W., South Hills, Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,810,945; June 23.

Buc, Hyym E., Roselle, and H. R. Tate, Elizabeth, N. J., assignors to Standard Oil Development Company. Purification of oil soluble sodium sulphonates. 1,811,535; June 23.

Buckner, William A., Fresno, Calif. Oscillating sprinkler. 1,811,171; June 23.

Buffington, Edwin C., Manchester, N. H., assignor, by mesne assignments, to U S Bobbin & Shuttle Company, 1929, Providence, R. I. Bobbin bushing. 1,811,609; June 23.

Bulova Watch Company. (See Scheibel, William, assignor.)

Burdick, Frank, assignor to Shakespeare Company, Kalamazoo, Mich. Spring winding fishing reel. 1,811,073; June 23.

Burgess, C. F., Laboratories, Inc. (See Schnell, Frederick H., assignor.)

Burgoyne, John L., San Mateo, Calif., assignor to Wilson-Jones Company, Chicago, Ill. Loose leaf device. 1,811,348; June 23.

Burnish, Howard J., assignor to A. O. Smith Corporation, Milwaukee, Wis. Electric arc welding of pipe joints. 1,810,902; June 23.

Burnstine, Isaac H., Chicago, Ill. Pool table. Des. 84,459; June 23.

Burton-Dixie Corporation. (See Perlesz, Hugo, assignor.)

Burton, Edward, assignor to National Lock Co., Rockford, Ill. Hinge. Des. 84,460; June 23.

Burton, Edward, assignor to National Lock Co., Rockford, Ill. Latch. Des. 84,461; June 23.

Burton, Harry E., Chicago, Ill. Brake equalizer. 1,811,172; June 23.

Butler, Silas E., Toledo, Ohio. Container. 1,811,074; June 23.

Byer, Clyde, Marion, Ind. Aeroplane propeller. 1,811,000; June 23.

Bystrom, Sigfred O. (See Vandegrift, W. B., and Bystrom.)

Cadoret, Louis A., Pawtucket, R. I. Shuttle threader. 1,811,424; June 23.

Cahill, Daniel R. (See Gasda, S. A., and Cahill.)

Calamari, Peter T., Deep River, Conn. Switch. 1,811,714; June 23.

Calcott, William S., Penns Grove, N. J., and H. W. Walker, Wilmington, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Noncorrosive solutions. 1,810,946; June 23.
Cambridge Paper Box Co., The. (See Seckendorf, Richard P., assignor.)
Campbell, Phil I., assignor of one-fourth to F. C. Brosius, Wichita, Kans. Golf club bag support. 1,810,903; June 23.
Canfield, Robert W., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Method and apparatus for shaping glass. 1,811,075; June 23.
Caps, Arthur W., Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I. Roll holder for photographic apparatus. 1,811,779; June 23.
Cardwell, Thomas, St. Louis, Mo. Journal box jack. 1,810,893; June 23.
Carlile, Frank S., Abington, Pa. Preparing metallic molds for casting metal. 1,811,610; June 23.
Carlisle, Richard W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Field control device. 1,811,454; June 23.
Carlisle, Richard W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Field control device. 1,811,536; June 23.
Carlson, Frank W., Chicago, Ill. Floor drain. 1,811,611; June 23.
Carlson, Hjalmar E., Brooklyn, N. Y., assignor to International Cigar Machinery Company. Rotary tobacco feed for cigar machines. 1,810,904; June 23.
Carpenter, William W. S., Chicago, Ill. Mucilage spreader. 1,811,612; June 23.
Carr, Moses F., Lexington, assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass. Safety pin. 1,811,780; June 23.
Carter, Donald W., Cleveland Heights, Ohio. Lubricating film forming composition. 1,810,905; June 23.
Carter, William E., Anderson, Ind. Golf tee and practice mat. 1,810,906; June 23.
Carton, Aimé, Woodcliffe, N. J. Mud guard for automobiles. 1,811,112; June 23.
Casper, Anthony B., assignor to Houde Engineering Corporation, Buffalo, N. Y. Shock absorber. 1,811,492; June 23.
Cavanagh, John, assignor to Hodshon-Berg, Inc., Norwalk, Conn. Straw hat. 1,811,001; June 23.
Centrifugal Separation Company. (See Mills, Harry L., assignor.)
Chandler and Price Company, The. (See Root, Charles F., assignor.)
Chaney, Newcomb K., Lakewood, Ohio, assignor to National Carbon Company, Inc. Regulator for short circuit amperage on starting arc lights. 1,811,301; June 23.
Chappell, Marvin L., Los Angeles, assignor to Standard Oil Company of California, San Francisco, Calif. Producing motor fuel or gasoline from petroleum oil. 1,811,257; June 23.
Chase Companies. (See Reichenbach, Howard F., assignor.)
Chase, Earle M. (See Johnson, R. A., and Chase.)
Chemical Machinery Corporation. (See Field, Crosby, assignor.)
Chevrette, Augustin J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Combined shuttle feeler and thread cutter. 1,811,425; June 23.
Chevrette, Augustin J., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Weft detector controlling device. 1,811,426; June 23.
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chiles, George S. (See Dreihuss, H. C., and Chiles.)
Church, Maynard D., assignor to Moore Steam Turbine Corporation, Wellsville, N. Y. Elastic fluid turbine power installation. 1,811,302; June 23.
Clapp, Albert L., Danvers, assignor to The Flintkote Company, Boston, Mass. Mottled or colored shingle and producing it. 1,811,613; June 23.
Clark, Harry A., Warren, Ariz. Adapter for molds. 1,811,238; June 23.
Clark, Herbert A., assignor to Taylor Instrument Companies, Rochester, N. Y. Pressure gauge. 1,811,173; June 23.
Clark, William A. (See Dorn, N. L., and Clark.)
Clary, Jan P., Hartford, Conn. Ready dip inkwell. 1,811,745; June 23.
Clavel, René, Basel-Augst, Switzerland. Dyeing of cellulose derivatives. 1,811,576; June 23.
Clement, Hans, New York, N. Y., assignor to General Optical Co., Inc. Ophthalmic trial frame. 1,811,349; June 23.
Clemmons, Herbert D., assignor to Scovill Manufacturing Company, Sturgis, Mich. Handle for flush tanks or the like. Des. 84,462; June 23.
Clerget, Edmund J., Chicago, Ill., assignor to American Engineering Company, Philadelphia, Pa. Stoker. 1,811,746; June 23.
Cleveland Rock Drill Company, The. (See Hafford, Daniel J., assignor.)
Clum Manufacturing Company. (See Winning, Robert K., assignor.)
Coates, Wallace R., et al. (See Steele, Carmi J., assignor.)
Coble, Lucian G., Greensboro, N. C. Dental articulator. 1,811,747; June 23.
Cochran, Morey D., assignor to Industrial Solvents, Inc., Indianapolis, Ind. Liquid container. 1,811,493; June 23.
Coeling, John P., Sheboygan, Wis. Cutting head for shapers. 1,810,947; June 23.
Cohen, Joseph H., Bridgeport, Conn. Cigar lighter. Des. 84,463; June 23.
Cohen, Joseph H., Bridgeport, Conn. Cigar lighter. Des. 84,464; June 23.
Cohen, Samuel H., Malden, and J. Wasserman, Cambridge, Mass. Flashing structure. 1,811,039; June 23.
Coibion, Burdette R., Maywood, Ill. Baseball game board. Des. 84,465; June 23.
Cole, Edward S., New York, N. Y. Pitot tube connection or rod meter. 1,810,907; June 23.
Collier, William J., New York N. Y. Composition for artificial parts for corpses. 1,811,384; June 23.
Columbia Axle Company, The. (See Mooers, Louis P., assignor.)
Columbia Phonograph Company. (See Forse, William T., assignor.)
Columbian Carbon Company. (See Lewis, George C., assignor.)
Commercial Cable Company of New York, The. (See Pupin, Michael I., assignor.)
Compressed Paper Box Corporation, The. (See Wilson, Clarence C., assignor.)
Condit Electrical Manufacturing Corporation. (See Edsall, William S., assignor.)
Continental Can Company. (See Aulbach, Charles J., assignor.)
Continental Can Company. (See O'Brien, Frank J., assignor.)
Continental Can Company. (See Stevenson, Arthur E., assignor.)
Continental Motors Corporation. (See Kreis, Oscar C., assignor.)
Continental Motors Corporation. (See Niven, Archie M., assignor.)
Conway, John J., assignor to The Acme Shear Company, Bridgeport, Conn. Fender protector. 1,811,494; June 23.
Cook, George C., Millington, N. J. Regenerative air preheater. 1,811,455; June 23.
Cooper, Boris, New York, N. Y. Buckle construction. 1,811,684; June 23.
Cooper, Simon, Brooklyn, N. Y. Electrical sostenuto piano. 1,811,076; June 23.
Cooper, Simon, Brooklyn, N. Y. Electrical sostenuto piano. 1,811,077; June 23.
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Dispensing unit embodying mechanical refrigeration. 1,811,456; June 23.
Copper Plate Sheet & Tube Company. (See Watkins, William E., assignor.)
Cortés, Francisco P., Astoria, N. Y. Operating windows. 1,811,174; June 23.
Corticelli Silk Company. (See Furman, Abraham P., assignor.)
Costello, Nelson L. (See Goldberg, P., and Costello.)
Cotler, Abraham, and C. F. W. Forssberg, Brooklyn, N. Y.; said Forssberg, assignor to said Cotler. Combined hand bag and concealed muff. 1,810,894; June 23.
Coutant, Roger G. L. (See Veber, Georges, assignor.)
Couzinet, René A. A., Paris, France. Airplane. 1,811,304; June 23.
Couzinet, René A. A., Levallois-Perret, France. Control members of an airplane. 1,811,305; June 23.
Cover, Harvey S., South Bend, Ind. Binocular optical instrument. 1,811,614; June 23.
Cox, Clarence H., Massillon, Ohio. Steel preservative paint. 1,811,040; June 23.
Cox, Harold N., Glen Ridge, N. J., assignor to Cox Multi-Color Photo Company, Pittsburgh, Pa. Multiple-image camera. 1,811,495; June 23.
Cox Multi-Color Photo Company. (See Cox, Harold N., assignor.)
Craig, Ollison. (See Riley, R. S., and Craig.)
Crawford, Walter N., et al. (See Parris, Ben T., assignor.)
Crompton & Knowles Loom Works. (See Bergstrom, C. P., and Lindegren, assignors.)
Crompton & Knowles Loom Works. (See Chevrette, August J., assignor.)
Crompton & Knowles Loom Works. (See Dacey, Edward J., assignor.)
Crompton & Knowles Loom Works. (See Gargolinski, Anthony D., assignor.)
Crompton & Knowles Loom Works. (See Holmes, Elbridge R., assignor.)
Crompton & Knowles Loom Works. (See Lindegren, Carl J., assignor.)
Crosley Radio Corporation, The. (See Smith, Russell T., assignor.)
Crowe, John M., Covington, Ky., assignor to The Stanley Works, New Britain, Conn. Hand tool. 1,811,577; June 23.
Cummings, Schiller B., assignor, by mesne assignments, to Richard P. Johnson, Long Beach, Calif. Sanitary toilet seat dispenser. 1,811,537; June 23.

Curry, Gordon C., assignor to The Hoover Company, North Canton, Ohio. Adjustable auxiliary nozzle for suction cleaners. 1,811,350; June 23.
Curtis, Arthur R., Cleveland, Ohio. Method and apparatus for forming sheet-metal. 1,811,259; June 23.
Cushing, George H., assignor to Cushing Lamp Incorporated, Washington, D. C. Focusing mechanism. 1,811,715; June 23.
Cushing Lamp Incorporated. (See Cushing, George H., assignor.)
Cushman, David R., Albany, Calif. Electric brake. 1,811,260; June 23.
Cuthbert, John, assignor to Economy Fuse and Manufacturing Company, Chicago, Ill. Electric socket. 1,811,615; June 23.
Dacey, Edward J., Philadelphia, Pa., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Stationary wire Wilton loom. 1,811,427; June 23.
Davenport, James C., et al. (See Parris, Ben T., assignor.)
D'aviero, Emilio. (See Spino, Camillo, assignor.)
Davies, George, Paddington, and A. H. Ridge and G. Royer, Holborn, London, England. Gas lighter. 1,811,306; June 23.
Davis, Anthony E., and J. N. Inman, jr., Philadelphia, Pa. Radiator bracket. 1,811,538; June 23.
Davis, Frank S. (See Beatty, W. T., Davis, and Wilson.)
Day, Fred J. (See Barstow, W., and Day.)
Day, Fred J., assignor to Pre-Cooling Car Service Co., Los Angeles, Calif. Equipment for treating perishable products. 1,811,496; June 23.
Dear, William Y., trustee. (See Trist, Arthur R., assignor.)
Decorative Development, Inc. (See Poschel, Alfred B., assignor.)
Dedouch, Joseph A., Oak Park, Ill. Ceramic furnace. 1,811,307; June 23.
De Forest, Lee, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation. Talking motion pictures and obliterating stipulated portion or portions therefor. Re18,108; June 23.
Degge, Eugene R., Chicago, Ill. Overshoe. 1,811,781; June 23.
De Jeu, Adrian M., Cleveland, Ohio. Alarm time switch. 1,811,261; June 23.
De la Cierva, Juan, Madrid, Spain, assignor, by mesne assignments, to Autogiro Company of America, Philadelphia, Pa. Aircraft with rotative wings. 1,811,303; June 23.
Delahaye, Walter H., Ottawa, Ontario, Canada, assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,811,539; June 23.
Delco-Light Company. (See Lee, Ralph L., assignor.)
Delphos Printing Press Corp. (See Laubach, Howard E., assignor.)
Dempster Mill Manufacturing Company. (See Schlachter, Henry, assignor.)
Dennis, Hugh, New York, N. Y., assignor, by mesne assignments, to M. Dennis. Continuous process for the decorating of a fabric and device for carrying out said process. 1,811,497; June 23.
Dennis, Madeleine. (See Dennis, Hugh, assignor.)
Dennis, Samuel K., Chicago, Ill., assignor to International Harvester Company. Checkrow planter. 1,811,041; June 23.
Deppé, William P., Brightwaters, N. Y. Internal combustion engine. 1,811,540; June 23.
De Puy, Clarence, Newark, and R. Brindle, jr., West Orange, assignors to Arcturus Radio Tube Company, Newark, N. J. Machine for forming bead wires. 1,811,457; June 23.
Derby, Thomas N., Roundlake, N. Y., assignor, by mesne assignments, to said Thomas N. Derby and E. S. Bentley. Cap and pourer. 1,811,113; June 23.
De Sana, Arthur J., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Cowl molding. 1,811,262; June 23.
Desmond, John E., Muskegon Heights, assignor, by mesne assignments, to Desmond Manufacturing Company, Muskegon, Mich. Sprinkling apparatus. 1,811,042; June 23.
Desmond Manufacturing Company. (See Desmond, John E., assignor.)
De Vries, Louis, Streator, Ill. Incubator. 1,811,685; June 23.
De Vry, Q. R. S., Corporation. (See Hogan, Edward F., assignor.)
Dibble, Claude M., assignor to Moore Brothers Company, Joliet, Ill. Room heater. Des. 84,466; June 23.
Dibble, Claude M., assignor to Moore Brothers, Company, Joliet, Ill. Broiler. 1,811,428; June 23.
Dietz, Franklin M., Hutchinson's Mills, Hamilton Township, Mercer County, N. J., assignor, by mesne assignments, to Johns-Manville Corporation, New York, N. Y. Acoustical board. 1,811,385; June 23.
Dillon, Enos L. (See Bromberg, August, assignor.)
Di Tosto, Carlo, Patchogue, N. Y. Necktie. 1,811,748; June 23.
Ditto, Incorporated. (See Blomberg, Ulrik I. T., assignor.)
Dodds, James C. (See Dodds, Redus D., assignor.)
Dodds, Redus D., Pampa, assignor to J. C. Dodds, Houston, Tex. Well drilling apparatus. 1,811,002; June 23.
Doering, Albert L., Germantown, Pa., assignor to J. S. Thorn Company, Philadelphia County, Pa. Metallic window structure. 1,811,664; June 23.
Doherty Research Company. (See Morgan, J. D., Bjorkstedt, and Lowe, assignors.)
Donald, Forrest V., Minneapolis, Minn., assignor to Gilson Manufacturing Company, Port Washington, Wis. Ground cultivating machine. 1,811,175; June 23.
Donaldson, Frank A., St. Paul, Minn. Spark arrester for internal combustion engines. 1,811,043; June 23.
Dorn, Norman L., and W. A. Clark, Long Beach, Calif. Collar, tubing and casing protector. 1,810,948; June 23.
Doyle, Alfred, Hamilton, Ontario, Canada. Hot air furnace. 1,811,616; June 23.
Drake, John L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for producing sheet glass. 1,810,908; June 23.
Drake John L., assignor to Libbey-Owens-Ford glass Company, Toledo, Ohio. Sheet glass surfacing apparatus. 1,811,044; June 23.
Dreisbuss, Harry C., and G. S. Chiles, assignors to Scullin Steel Co., St. Louis, Mo. Truck construction. 1,810,949; June 23.
Dual Aircraft Motors Inc. (See Van Bezel, Frank A., assignor.)
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for producing low boiling point hydrocarbon oils. 1,811,308; June 23.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for producing low boiling point hydrocarbon oils. 1,811,309; June 23.
Dubbs, Carbon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Treating petroleum oil. 1,811,617; June 23.
Du Bois, Alexander D., Minneapolis, Minn. Measuring and recording apparent power. 1,811,541; June 23.
Dudley, Andrew T., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Emergency relief with remote control. 1,811,351; June 23.
Dudley, Edward F., Oak Park, assignor to The Miehle Printing Press & Manufacturing Company, Chicago, Ill. Delivery mechanism. 1,811,618; June 23.
Duncan, Thomas C., Portsmouth, Va. Fire alarm. 1,811,716; June 23.
Duncan, Thomas P., jr., Newport News, Va. Light projector. 1,811,782; June 23.
Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., and Walker, assignors.)
Du Pont, E. I., de Nemours & Company. (See Dykstra, Harry B., assignor.)
Durdin, Augustus C., jr., Chicago, Ill. Electric switch actuating mechanism. 1,811,458; June 23.
Durkee-Atwood Company. (See Blakely, Sidney B., assignor.)
Dwyer, Raymond B., Chicago, Ill. Drapery hanger. 1,811,619; June 23.
Dykstra, Harry B., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating composition containing polymerized divinyl benzene. 1,811,078; June 23.
Dyrssen, Waldemar, Sharpsburg, assignor to Blaw-Knox Company, Blawnox, Pa. Regenerative heating system. 1,811,459; June 23.
Earhart, Albert C., Cleveland Heights, Ohio. Insulator. 1,810,950; June 23.
Easley, Jackson Z. (See McKenney, Fred Y., assignor.)
Eaton, Horace M., Nahant, assignor of one-half to G. L. Preble, Lynn, Mass. Fabric pulling machine. 1,811,460; June 23.
Ebinger, D. A., Sanitary Mfg. Co., The. (See Smith, Aden E., assignor.)
Eclipse Machine Company. (See McGrath, William L., assignor.)
Economy Fuse and Manufacturing Company. (See Cuthbert, John, assignor.)
Edge Moor Iron Company. (See Locke, Walter, assignor.)
Edsall, William S., assignor, by mesne assignments, to Condit Electrical Manufacturing Corporation, Boston, Mass. Electric switch. 1,811,665; June 23.
Edwards, Curtis H., and R. L. Transtrom, Los Angeles, Calif., assignors, by mesne assignments, to Wayne Company, Fort Wayne, Ind. Dispensing apparatus. 1,811,114; June 23.
Eftihios, Kosmos, New Orleans, La. Phonograph attachment. 1,811,003; June 23.
Egry Register Company, The. (See Pfeiffer, Frank E., assignor.)
Ehrhart, William G., Chicago, Ill. Pool table. Des. 84,467; June 23.
Eichengrün, Arthur. (See Klausner, S., Eichengrün, and Röhm.)
Einstein, Robert E., St. Louis, and B. B. Betts, Webster Groves, Mo. Reversible terminal member for switch points. 1,811,620; June 23.
Eisenberg, Nathan, Philadelphia, Pa. Game prompter. 1,810,951; June 23.
Electrolytic Zinc Company of Australasia Limited. (See Hey, H., Evans, Williams, and Newall, assignors.)
Elevator Supplies Company. (See Fear, Harold J., assignor.)
Elgérus, Ernst, Niklasdorf-on-the-Mur, Austria. Making white and bleached wood pulp suitable for the manufacture of paper without addition of cellulose. 1,811,783; June 23.
Ellingson, Elling, San Francisco, Calif. Doorknob locking device. 1,810,909; June 23.

Elliott-Fisher Company. (See Foothorap, Harry A., assignor.)
Elliott, Henry L., Clayville, assignor of one-third to T. W. Henderson, Washington, Pa. Pulverized fuel carburetor. 1,811,461; June 23.
Elliott, Irwin, Bronx, assignor to Universal Oven Company, Inc., New York, N. Y. Baking oven and heating the same. 1,811,822; June 23.
Ellis, Carleton, Montclair, N. J. Resinous composition and making same. 1,811,115; June 23.
Ellixson, William C., Jackson, Mich. Windshield wiper. 1,811,717; June 23.
Endsley, William H., Maud, Okla. Direct pulling pipe spinning winch. 1,811,686; June 23.
Engel, Albert W., Chicago, Ill. Picture mounting device. 1,811,116; June 23.
Engineering Products Corporation. (See Barhoff, Fred W., assignor.)
Enterprise Manufacturing Company, The. (See Asbury, Charles W., assignor.)
Erickson, James M., Glasgow, Mont. Unloading device for buck rakes. 1,811,310; June 23.
Eschholz, Otto H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Gas exchange system. 1,811,462; June 23.
Esmond, Alva R., Union Grove, Wis. Antifrictional means for screws. 1,810,910; June 23.
Essex Rubber Company. (See Oakley, Laurence M., assignor.)
Evans, Arthur F. (See Hey, H., Evans, Williams, and Newall.)
Evans, Israel, San Bernardino, Calif. Hedge trimmer. 1,811,463; June 23.
Fairchild, Oscar H., assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for hydrocarbon oil conversion. 1,811,621; June 23.
Fankboner, Harland, assignor to The Goss Printing Press Co., Chicago, Ill. Producing balanced rolls and the like. 1,811,542; June 23.
Farnell, Herbert, Littleton, Colo. Pocket sluice. 1,811,117; June 23.
Fauser, Gustave M., Ardsley on Hudson, N. Y., assignor to Atkinson, Wade & Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 84,468; June 23.
Fear, Harold J., Montclair, assignor to Elevator Supplies Company, Inc., Hoboken, N. J. Signal system for elevators. 1,811,622; June 23.
Feley, Henry N., East Orange, N. J. Book cover. 1,810,952; June 23.
Ferguson, Berlin S., assignor to The Marion Steam Shovel Company, Marion, Ohio. Self-aligning cable drum. 1,811,623; June 23.
Ferngren, Enoch T., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Glass melting furnace and producing molten glass. 1,810,911; June 23.
Fernstrum, Frank O., assignor to Gray Marine Motor Co., Detroit, Mich. Motor boat layout. 1,810,953; June 23.
Fengill, Walter A. Methuen and J. R. Hosking, North Andover, Mass. Tension faller bar for spinning mules 1,811,352; June 23.
Field, Crosby, Brooklyn, N. Y., assignor to Chemical Machinery Corporation. Heat transfer at high temperatures. 1,810,912; June 23.
Fildes, Frederick K., Altoona, Pa. Safety doorlock. 1,811,311; June 23.
Fildes, Frederick K., Altoona, Pa. Closure for containers. 1,811,312; June 23.
Fildes, Frederick K., Altoona, Pa. Container for the shipment of fractional car lots. 1,811,313; June 23.
Finkhousen, Frank W. (See Fries, G. W., Finkhousen, and Johnson.)
Firestone Steel Products Company. (See Hanson, W. I. and Stelzer, assignors.)
Firestone Tire & Rubber Company, The. (See Brown, Roy W., assignor.)
Firestone Tire and Rubber Company, The. (See Sords, Otto E., assignor.)
Firestone Tire and Rubber Company, The. (See Steens, Horace D., assignor.)
Fischer, Ferdinand, Berlin, Germany. Offset printing machine. 1,811,784; June 23.
Fischer, Oskar, Berlin, Germany. Copyholder for typewriters. 1,8100,118; June 23.
Fisher, Harry C. (See Yungblut, G., and Fisher.)
Fiske, Augustus H., assignor to Rumford Chemical Works, Providence, R. I. Baking powder. 1,811,263; June 23.
Fiske, Augustus H., assignor to Rumford Chemical Works, Providence, R. I. Prepared flour. 1,811,264; June 23.
Fisler, Gottfried. (See Shank, A. E., Fisler, and Linden.)
Flanigan, John J., Oak Park, Ill. Duplicating machine. 1,811,176; June 23.
Fleiter, Andrew J. (See Miller, Theodore A., assignor.)
Flintkote Company, The. (See Clapp, Albert L., assignor.)
Florisson, Charles L., Courbevoie, Becon-Les-Bruyeres, assignor of one-half to Societe de Condensation & d'Applications Mecaniques, Paris, France. Motion transforming mechanism. 1,811,578; June 23.
Flynn, John B., assignor to Ternstedt Manufacturing Company, Detroit, Mich. Coach lock. 1,811,265; June 23.
Folberth, Frederick G. and W. M., Cleveland, Ohio, assignors to Trico Products Corporation, Buffalo, N. Y. Heater attachment for automobiles. 1,811,829; June 23.
Folberth, William M. (See Folberth, Frederick G. and W. M.)
Fontaine, Robert A., Martinsville, Va. Brick stack carrier. 1,811,429; June 23.
Foothorap, Harry A., Harrisburg, Pa., assignor to Elliott-Fisher Company. Key and actuator lock for writing adding machines. 1,811,227; June 23.
Forbes, Edward A., West Palm Beach, Fla. Sea wall. 1,811,005; June 23.
Ford, Hannibal C., Jamaica, assignor to Ford Instrument Company, Inc., Long Island City, N. Y. Intermittent drive. 1,811,624; June 23.
Ford Instrument Company. (See Ford, Hannibal C., assignor.)
Forgrove Machinery Company, The. (See Grover, Frederick, assignor.)
Forrest, Thomas W. W., assignor to Sun-Maid Raisin Growers of California, Fresno, Calif. Prune pitter. 1,810,954; June 23.
Forse, William T., London, England, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Sound reproducing machine. 1,810,955; June 23.
Forssberg, Carl F. W. (See Cotler, A., and Forssberg.)
Forsyth, I. Roy, Spokane, Wash. Saw. 1,811,079; June 23.
Forsyth Metal Goods Company. (See Blake, George E., assignor.)
Foss, William A., assignor to American Fork & Hoe Company, Cleveland, Ohio. Fishing reel. 1,811,266; June 23.
Foster, Walter W., assignor to Hill & Foster Company Incorporated, Wichita Falls, Tex. Automatic power driven pipe wrench. 1, 811,666; June 23.
Fowler, Frank E., Athens, Ga. Adjustable sirup measuring cup. 1,811,785; June 32.
Fowler, John E., Rosslyn, Va. Bottle. Des. 84,469; June 23.
Foxboro Company, The. (See Bristol, Edgar H., assignor.)
Frankenstein, William P., Cincinnati, Ohio. Folding box. 1,810,956; June 23.
Fraser Furnace Company. (See Fraser, Richard E., assignor.)
Fraser, Richard E., assignor to Fraser Furnace Company, Stockton, Calif. Gas ignition means for gas furnace burners. 1,810,957; June 23.
Frei, Elisabeth, Zurich, Switzerland. Stocking for varicose veins. 1,811,786; June 23.
Frei, Elisabeth, Zurich, Switzerland. Foot arch support. 1,811,787; June 23.
Frei, Gottfried. (See Ashton, G., and Frei.)
French, William A., Minneapolis, Minn. Humidifier cabinet. Des. 84,470; June 23.
French, William A., Minneapolis, Minn. Humidifier cabinet. Des. 84,471; June 23.
Frick, Chester A., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind. Stand for bottle dispensing refrigerators. 1,811,228; June 23.
Friden, Carl M. F., Oakland, assignor to Marchant Calculating Machine Company, Emeryville, Calif. Calculating machine. 1,811,353; June 23.
Fries, Gustav W., F. W. Finkhousen, and L. J. Johnson, Fort Wayne, Ind. Tape winding machine. 1,811,229; June 23.
Frigidaire Corporation. (See King, Jesse G., assignor.)
Frigidaire Corporation. (See Quarnstrom, Alfred, assignor.)
Fromert, Marie E., East Rockaway, N. Y. Powder puff or dip. 1,811,749; June 23.
Fullman, James M. G., Sewickley, Pa., assignor to National Electric Products Corporation, New York, N. Y. Armored cable connecter fitting. 1,810,958; June 23.
Furgang, Benjamin, Brooklyn, N. Y. Fur treating device. 1,811,750; June 23.
Furman, Abraham P., New York, N. Y., assignor, by mesne assignments, to Corticelli Silk Company, New London, Conn. Treatment of animal fiber and the product. 1,811,119; June 23.
Furness Corporation. (See Furness, William H., assignor.)
Furness, William H., National Park, N. J., assignor to Furness Corporation, Philadelphia, Pa. Cake spool. 1,811,386; June 23.
G. & W. Electric Specialty Company. (See Rah, Joseph, assignor.)
Gadke, William, Philadelphia, Pa. Removable pouring cover for milk bottles. 1,811,080; June 23.
Galloway Engineering Company Limited. (See Greening, H. B., and Galloway, assignors.)
Galloway, James W. (See Greening, H. B., and Galloway.)
Gammeter, John R. (See Brundage, James W., assignor.)
Gammeter, John R., Akron, Ohio. Mold filling apparatus. 1,811,430; June 23.
Gammeter, John R., Akron, Ohio, assignor to A. G. Spalding & Bros., New York, N. Y. Reducing the size of tennis balls and holding the same while reduced. 1,811,414; June 23.
Gannon, Raymond J. (See Anderson, H., and Gannon.)
Gans, Robert S., assignor of one-half to J. J. Grabfield, Detroit, Mich. Mechanism for controlling brakes. 1,811,006; June 23.

Garber, Harry D., Cuyahoga Falls, assignor to The Van Dorn Iron Works Company, Cleveland, Ohio. Jail door mechanism. 1,811,230; June 23.
Gardner, Roscoe R. (See Thornton, Myron, assignor.)
Gargolinski, Anthony D., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Dobby for looms. 1,811,431; June 23.
Garnett, Henry J. (See Smith, W. S., Garnett, and Randall.)
Gasda, Stephen A., and D. R. Cahill, Bethlehem, Pa. Skein lacing machine. 1,811,120; June 23.
Gastell, Albert, Mainz, Germany. Tracing device. 1,811,121; June 23.
Gavlak, Joseph G., Monongahela City, Pa. Mechanical toy. 1,811,543; June 23.
Gehri, George F., Tacoma, Wash. Warm air register seal. 1,811,231; June 23.
Geisler, Otto, and G. W. Seth, Chicago, Ill. Expansion device for diagonals and bulkhead wires. 1,811,122; June 23.
Geissen, Karl, Berlin-Zehlendorf, and W. Vorbrodt, Spandaun, near Berlin, assignors, by mesne assignments, to Kohlenveredlung Aktiengesellschaft, Berlin, Germany. Retort oven. 1,811,544; June 23.
Geloso, John, New York, assignor, by mesne assignments, to Pilot Radio & Tube Corporation, Brooklyn, N. Y. Socket. 1,811,464; June 23.
Geloso, John, New York, assignor, by mesne assignments, to Pilot Radio & Tube Corporation, Brooklyn, N. Y. Television device. 1,811,465; June 23.
Geloso, John, New York, assignor to Pilot Electric Manufacturing Company, Inc., Brooklyn, N. Y. Switch. 1,811,498; June 23.
Gemberling, Harry A., and Asle Bjella, Epping, N. Dak. Tractor hitch. 1,811,267; June 23.
General Aniline Works, Inc. (See Herz, R., Runne, and Albrecht, assignors.)
General Fireproofing Company, The. (See Brainard, George C., assignor.)
General Optical Co. (See Clement, Hans, assignor.)
General Talking Pictures Corporation. (See De Forest, Lee, assignor.)
Geophysical Research Corporation. (See Rosaire, Esme E., assignor.)
George, Robert B., and H. B. West, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company. Current limiting reactor. 1,811,466; June 23.
Gerdts, Gustav F., Bremen, Germany. Steam trap. 1,811,045; June 23.
Gerling, Fred A., Boise, Idaho. Fluid pressure engine. 1,811,579; June 23.
Gilbert, A. C., Company, The. (See Gilbert, Alfred C., assignor.)
Gilbert, Alfred C., Hamden, assignor to The A. C. Gilbert Company, New Haven, Conn. Mixing apparatus. 1,811,499; June 23.
Gillman, Joseph L., jr., assignor to The W. E. Lamneck Company, Columbus, Ohio. Furnace register shield. 1,811,467; June 23.
Gilmore, Roger J., and L. W. Langford, Boston, Mass.; said Gilmore assignor to said Langford. Record making mechanism. 1,811,387; June 23.
Gilson, Dayton H., Rushville, Ind. Multiple trasher. 1,811,232; June 23.
Gilson Manufacturing Company. (See Donald, Forrest V., assignor.)
Ginn and Company. (See Greeley, William H., assignor.)
Glascock Brothers Manufacturing Company. (See Frick, Chester A., assignor.)
Glaser, Rudolph A., Cleveland, Ohio, assignor, by mesne assignments, to Gardner Abbott, trustee. Copyholder for projection apparatus. 1,811,123; June 23.
Goddard, Charles F., Denver, Colo., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company. Automobile storage. 1,811,545; June 23.
Goerke, Henry E., Floral Park, N. Y., assignor to American Machine & Foundry Company. Marking device for wrapping machines. 1,810,959; June 23.
Goldberg, Philip, and N. L. Costello, Mount Vernon, N. Y. Adjustable outlet box. 1,811,687; June 23.
Goldblatt, Henry J., assignor to Vidrio Products Corporation, Chicago, Ill. Table lighter. Des. 84,472; June 23.
Goldhagen, Harry, New York, N. Y. Emergency pipe cutter. 1,811,046; June 23.
Goldsborough, Lilburn T., Baltimore, Md. Method of and apparatus for making ferrules. 1,811,580; June 23.
Gordon, Hiram. (See Rogge, A. C., and Gordon.)
Goss, John H., assignor to Scovill Manufacturing Company, Waterbury, Conn. Floating trim stud. 1,811,788; June 23.
Goss Printing Press Co., The. (See Fankboner, Harland, assignor.)
Grabfield, John J. (See Gans, Robert S., assignor.)
Graham, Walter F., Richland, assignor to The Ohio Brass Company, Mansfield, Ohio. Trolley shoe. 1,811,888; June 23.
Granberg, Albert J., Berkeley, assignor to Ralph N. Brodie Company, Oakland, Calif. Fluid meter. 1,811,789; June 23.
Grand Rapids Store Equipment Corporation. (See Vanderveld, Anthony, assignor.)
Gravell, James H., Elkins Park, assignor to American Chemical Paint Company, Ambler, Pa. Flux for soldering. 1,811,667; June 23.

Gray, Ellsworth, Houston, Tex. Packer. 1,811,047; June 23.
Gray Marine Motor Co. (See Fernstrum, Frank O., assignor.)
Gray, Percy W., assignor to Vickers Limited, Westminster, London, England. Apparatus for use in the laying of antiaircraft guns. 1,811,688; June 23.
Gray, Wallace M., Cincinnati, Ohio, assignor to The American Valve and Meter Company, Cincinnati, Ohio. Switch stand. 1,811,830; June 23.
Greeley, William H., Newton, assignor to Ginn and Company, Boston, Mass. Bookholder. 1,811,124; June 23.
Greenawalt, William E., Denver, Colo. Copper extraction process. 1,810,895; June 23.
Greening, Herald B., Hamilton, Ontario, Canada, and J. W. Galloway, Detroit, Mich., assignors to Galloway Engineering Company Limited, Hamilton, Ontario, Canada. Two cycle radial engine. 1,811,625; June 23.
Greig, James W., Grosse Pointe, Mich. Automobile window operator. 1,811,790; June 23.
Griggs, Elmer V. (See Adams, R. R., and Griggs.)
Grist, Alpheus C. (See Peek, H. H., and Grist.)
Grove, Jacob R., trustee. (See Grove, Jacob R., assignor.)
Grove, Jacob R., York, assignor to J. R. Grove, trustee, in trust for said J. R. Grove and C. B. Wolf, Mount Wolf, Pa. Vending machine. 1,811,007; June 23.
Grover, Frederick, assignor to The Forgrove Machinery Company Limited, Leeds, England. Machine for wrapping cigars and other elongated bodies. 1,811,751; June 23.
Grubman, Leo J., Belle Harbor, Long Island, assignor to Margon Corporation, New York, N. Y. Assembling the parts of artificial eyes. 1,810,896; June 23.
Gulbranson, Julius O., Richmond, Va. Table. Des. 84,473; June 23.
Gyro Process Company. (See Wagner, Cary R., assignor.)
Haefeli, Arnold. (See Ashton, G., and Frei, assignors.)
Hafford, Daniel J., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Locking device for tool retainers. 1,811,389; June 23.
Haglund, Gustaf, assignor to Patent Aktiebolaget Gröndal-Ramen, Stockholm, Sweden. Preparing a liquor for the production of sulphite cellulose. 1,811,268; June 23.
Haglund, Ture R., Stockholm, Sweden. Refractory material. 1,811,314; June 23.
Halbach, Howard L., Clarksburg, W. Va., assignor to Pittsburgh Plate Glass Company. Apparatus for drawing sheet glass. 1,811,125; June 23.
Hale, Edwin, assignor to Warwick China Company, Wheeling W. Va. Plate. Des. 84,474; June 23.
Hall, Elwood C., Vienna, N. J. Striking clock. 1,811,791; June 23.
Hall, Harry E., Englewood, N. J., assignor to Otis Elevator Company, New York, N. Y. Elevator construction. 1,810,960; June 23.
Hall-Neal Furnace Company. (See Neal, Harry W., assignor.)
Hall, Walter, Worcester, assignor to M. J. Whittall Associates, Worcester, Mass. Cross wire carpet loom. 1,811,008; June 23.
Hamm, William S., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Sash guide. 1,811,048; June 23.
Hands, Henry J., assignor to Spicers Limited, London, England. Manufacture of sheets or films. 1,811,689; June 23.
Hanna Engineering Works. (See Norin, Adolf A., assignor.)
Hansen, Charles C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Pile driver attachment for rock drills. 1,811,626; June 23.
Hansen, Klaus L., Milwaukee, Wis. Dynamo electric machine. 1,811,668; June 23.
Hansen, Klaus L., Milwaukee, Wis. Arc welding apparatus. 1,811,669; June 23.
Hansen, Klaus L., Milwaukee, Wis. Dynamo electric machine. 1,811,670; June 23.
Hansen, Klaus L., Milwaukee, Wis. Dynamo electric machine. 1,811,671; June 23.
Hansen, Klaus L., Milwaukee, Wis. Arc welding apparatus and arc welding. 1,811,672; June 23.
Hanson, Walter I., and O. R. Stelzer, assignors to Firestone Steel Products Company, Akron, Ohio. Steering wheel. 1,811,269; June 23.
Hanson, Walter M., assignor to American Seating Company, Grand Rapids, Mich. Display table. Des. 84,475; June 23.
Harbison, Clarence B., assignor to The Ohio Steel Foundry Company, Lima, Ohio. Tender frame structure. 1,810,961; June 23.
Harbison, Clarence B., assignor to Ohio Steel Foundry Company, Lima, Ohio. Tender frame. 1,810,962; June 23.
Harp, Franklin H. (See Best, Frank E., and Harp.)
Harper, Carl B., Washington, D. C. Aircraft. 1,811,390; June 23.
Harris, Percy E., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y. Liquid controlled gyrocompass. 1,811,415; June 23.
Harris, Robert, London, England, assignor, by mesne assignments, to Lithoprintex Corporation. Duplicating or printing apparatus. 1,811,690; June 23.

Harris, Robert, London, England, assignor, by mesne assignments, to Lithoprintex Corporation. Press-frame for duplicating or printing apparatus. 1,811,691; June 23.

Harris-Seybold-Potter Company, The. (See Valiquette, William L., assignor.)

Harris, Thomas S., assignor to The Ayer Company, Lowell, Mass. Bottle. Des. 84,476; June 23.

Harrison, Archibald C., Birmingham, Ala., assignor to The Brown Instrument Company, Philadelphia, Pa. Automatic analyzing and control system and apparatus therefor. 1,811,233; June 23.

Harrison, Jamison R., Middletown, Conn., assignor to Wired Radio, Inc., New York, N. Y. Balanced magnetostrictive oscillator. 1,811,126; June 23.

Harrison, Jamison R., Middletown, Conn., assignor to Wired Radio, Inc., New York, N. Y. Balanced magnetostrictive oscillator. 1,811,127; June 23.

Harrison, Jamison R., Middletown, Conn., assignor to Wired Radio, Inc., New York, N. Y. Balanced magnetostrictive oscillator. 1,811,128; June 23.

Hartford-Empire Company. (See Canfield, Robert W., assignor.)

Hartford-Empire Company. (See Mayers, Wilbur S., assignor.)

Hartmann, Samuel A., Jackson, Mo. Drainage system. 1,811,009; June 23.

Hartwell, Ralf L., Orange, assignor to Metal Textile Corporation, West Orange, N. J. Composite metallic fabric. 1,811,081; June 23.

Hawkins, Wilford J., Claiborne, Md., assignor to American Machine & Foundry Company. Metal lining crucible. 1,810,913; June 23.

Haws, James C., Houston, Tex. Toy gun. 1,811,010; June 23.

Hazard, George D., Chicago, Ill. Airship. 1,811,196; June 23.

Heather, George B., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Button loop. 1,811,197; June 23.

Heather, George B., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn. Button loop. 1,811,198; June 23.

Hebig, Henry C., Hoffmans, N. J., assignor to H. H. Boyce, Jericho, N. Y. Motor heat indicator. 1,811,468; June 23.

Heid, Jacob, B., assignor to Universal Oil Products Company, Chicago, Ill. Fractionating column. 1,811,627; June 23.

Heiman, Julius, Yonkers, N. Y. Device for hanging curtains. 1,811,082; June 23.

Heine, Martin, Schwelm/Westfalen, Germany. Traffic regulating sign. 1,811,546; June 23.

Heintz, James C., Lakewood, Ohio. Apparatus for retreading tires. 1,810,963; June 23.

Heitger, Frank H., Flint, Mich. Choke operating means for carburetors. 1,811,011; June 23.

Heller, Walther, assignor to J. M. Voith, Heidenheim-on-the-Brenz, Germany. Arrangement of wet presses on paper and board making machinery. 1,810,964; June 23.

Hemmerich, Hugo, assignor to Berkshire Knitting Mills, Wyomissing, Pa. Hosiery turning and inspecting form. 1,811,049; June 23.

Henderson, George C., Detroit, Mich. Monorail track. 1,811,270; June 23.

Henderson, Thomas W. (See Elliott, Henry L., assignor.)

Henderson, Wilbert D., San Francisco, Calif. Partition-stud clamp. 1,811,301; June 23.

Hendrickson, C. W. (See Wysong, Stewart, assignor.)

Hercules Powder Company. (See Boyd, Newton C., assignor.)

Herren, Ella P., administratrix. (See Herren, George C., assignor.)

Herren, George C., deceased; E. P. Herren, administratrix, assignor to E. P. Herren, Atlanta, Ga. Display stand. 1,811,315; June 23.

Herz, Richard, Frankfort-on-the-Main, E. Runne, Frankfort-on-the-Main-Hochst, and E. Albrecht, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Trihalogen arylthioglycolic acids and making same. 1,811,316; June 23.

Hesskew, William R., and J. J. Nulty, San Antonio, Tex. Rail crossing. 1,811,129; June 23.

Hevi Duty Electric Company. (See Smalley, Edwin L., assignor.)

Hey, Harry, A. F. Evans, Melbourne, Victoria, R. T. D. Williams and A. P. Newall, Risdon, Hobart, Tasmania, assignors to Electrolytic Zinc Company of Australasia Limited, Melbourne, Australia. Electrolytic recovery of zinc. 1,811,692; June 23.

Heywood-Wakefield Company. (See Larsen, Lewis, assignor.)

Hibner, De L. E., jr. (See Bruback, T. M., and Hibner.)

Hicks, Frank R., jr., and F. A. Mayes, Shreveport, La. Apparatus for refrigerating and dispensing beverages. 1,811,234; June 23.

Higson, Percy R. (See Larsson, C. A., and Higson.)

Hill & Foster Company Incorporated. (See Foster, Walter W., assignor.)

Hirtenstein, Max M., Jamaica, N. Y. Game board. Des. 84,477; June 23.

Hoague-Sprague Corporation. (See Knowlton, Cutler D., assignor.)

Hodge, James G., East Orange, N. J. Piston packing. 1,811,012; June 23.

Hodshon-Berg, Inc. (See Cavanagh, John, assignor.)

Hoe, R., & Co. (See Ball, Harry V., assignor.)

Hoe, R., & Co. (See Bennison, William E., assignor.)

Hofbauer, Hans, Munich, Germany. Trunk. 1,811,718; June 23.

Hoffman, Dorothy B., et al. (See Smith, Sam R., assignor.)

Hoffman, Edward L., Dayton, Ohio. Parachute skirt delayer. 1,811,050; June 23.

Hoffman, George D., Pasadena, Calif., assignor to Hoffman Specialty Company, Waterbury, Conn. Swivel tube connection. 1,811,392; June 23.

Hoffman, Paul G., et al. (See Smith, Sam R., assignor.)

Hoffman Specialty Company. (See Hoffman, George D., assignor.)

Hofmann, Fritz, and M. Otto, Breslau, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Polymerization of olefines. 1,811,130; June 23.

Hogan, Edward F., assignor to Q. R. S. De Vry Corporation, Chicago, Ill. Insulator and clamp for use in electrical work. 1,811,083; June 23.

Hollerith, Charles, assignor to Automotive Fan & Bearing Company, Jackson, Mich. Belt gearing. 1,811,673; June 23.

Hollerith, Herman, jr., Riverton, N. J., assignor to Victor Talking Machine Company. Casing-cover locking device. 1,811,628; June 23.

Holmes, Elbridge R., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Stopping mechanism for narrow ware loom. 1,811,432; June 23.

Holmes, Henry H. (See Wildt, E., and Holmes.)

Holmes, Henry S., New York, assignor, by mesne assignments, to Metropolitan Engineering Company, Brooklyn, N. Y. Welding segment. 1,811,500; June 23.

Holmes, Henry S., Rockville Center, assignor, by mesne assignments, to Metropolitan Engineering Company, Brooklyn, N. Y. Producing pipe fittings and other hollow articles. 1,811,501; June 23.

Holmes, Thomas E., Glasgow, Scotland. Installation for forcing viscous fluid into containers. 1,811,752; June 23.

Holmqvist, Elira V. (See Holmqvist, Ernst E., assignor.)

Holmqvist, Ernst E., assignor to E. V. Holmqvist, Stockholm, Sweden. Lighting apparatus. 1,811,084; June 23.

Holst, Gilles, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoen, Netherlands. Electron discharge tube. 1,811,051; June 23.

Holstein, Claude W., St. Albans, W. Va. Fountain pen. 1,811,317; June 23.

Hooper, Edward J., Nutley, N. J. Necktie. 1,811,393; June 23.

Hoover Company, The. (See Curry, Gordon C., assignor.)

Hoover, Lillian M., Lansing, Mich. Support for scrotum bowls. 1,811,792; June 23.

Hopkins, Alfred, assignor to Hopkins-Tull Machinery Company, Philadelphia, Pa. Filter. 1,810,965; June 23.

Hopkins, Arthur C., assignor to National-Standard Company, Niles, Mich. Hydraulic jack. 1,811,085; June 23.

Hopkins-Tull Machinery Company. (See Hopkins, Alfred, assignor.)

Hornsby, Harold, Scunthorpe, England. Internally driven power roller. 1,811,394; June 23.

Horstman, Louis, Sterling, Nebr. Signal for turning corners. 1,810,966; June 23.

Horton, Erwin C., Hamburg, assignor to Trico Products Corporation, Buffalo, N. Y. Fender mirror. 1,811,823; June 23.

Hosking, John R. (See Feugill, W. A., and Hosking.)

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Compound lining machine. 1,811,433; June 23.

Hott, Ion V. K., assignor to The Joyce-Cridland Company, Dayton, Ohio. Electrically operated lifting jack. 1,811,629; June 23.

Hott, Ion V. K., assignor to The Joyce-Cridland Company, Dayton, Ohio. Lifting mechanism. 1,811,630; June 23.

Houde Engineering Corporation. (See Casper, Anthony B., assignor.)

Hovland, Ole C., Chicago, Ill., assignor to Reserve Holding Company, Kansas City, Mo. Automatic telephone system. 1,811,753; June 23.

Howards & Sons Limited. (See Blagden, John W., assignor.)

Howcott, Harley A. W., New Orleans, La. Ironing machine. 1,811,793; June 23.

Hoxie, Frederick J., Phenix, R. I., and A. M. Tenney, New Rochelle, assignors of one-half to Wellington, Sears & Company, New York, N. Y., and one-half to Warwick Mills, West Warwick, R. I. Increasing the tensile strength of yarns. 1,811,395; June 23.

Hubbard & Company. (See Peirce, Charles L., jr., assignor.)

Hucknall, Hage W., assignor to The American Lace Mfg. Co., Elyria, Ohio. Lace. Des. 84,478; June 23.

Huebner, William J., Garfield, N. J. Shade controlling apparatus. 1,811,631; June 23.

Hulme, John W., Jackson Heights, N. Y. Zoning and fare collecting system. 1,810,967; June 23.

Hultgren, Axel G. E., Soderfors, Sweden. Electrically heated salt bath furnace. 1,811,754; June 23.

Humason, Granville A., Houson, Tex. Combined casing head and blow-out preventer. 1,811,013; June 23.

Hummel, Louis A., Milwaukee, Wis. Infant's blanket. 1,811,632; June 23.

Hummert, Robert H., assignor to The S. H. Thomson Manufacturing Company, Dayton, Ohio. Spotlamp for vehicles. 1,811,502; June 23.

Hutchings, Le Roi E., Tonawanda, assignor to Remington Rand Inc., New York, N. Y. Visible file case. 1,811,633; June 23.

Hydor G. m. b. H.,-Regenanlagen- und Silo-Bau. (See Oehler, Theodor, assignor.)

Hyman, Julius, and A. F. Schlandt, assignors to The Pure Oil Company, Chicago, Ill. Treating petroleum emulsions. 1,811,177; June 23.

I. G. Farbenindustrie Aktiengesellschaft. (See Hofmann, F., and Otto, assignors.)

Idemitsu, Hiroshi. (See Takimizu, S., and Idemitsu.)

Industrial Solvents, Inc. (See Cochran, Morey D., assignor.)

Ingersoll-Rand Company. (See Hansen, Charles C., assignor.)

Ingersoll-Rand Company. (See Slater, Fred M., assignor.)

Ingham, George R., Ajo, Ariz. Steam shovel safety attachment. 1,811,581; June 23.

Ingram, James W., San Francisco, Calif. Barber's comb. 1,811,271; June 23.

Inman, John N., jr. (See Davis, A. E., and Inman.)

International Cigar Machinery Company. (See Carlson, Hjalmar E., assignor.)

International Combustion Engineering Corporation. (See Wood, Wilfred R., assignor.)

International Harvester Company. (See Dennis, Samuel K., assignor.)

International Harvester Company. (See Johnston, Edward A., assignor.)

International Harvester Company. (See Kipp, R. H., and Thompson, assignors.)

International Harvester Company. (See Kranich, Frank N. G., assignor.)

International Harvester Company. (See Pearson, Charles, assignor.)

International Harvester Company. (See Raney, C. R., and Johnson, assignors.)

International Neon Company. (See Treacy, Cyril S., assignor.)

International Nickel Company, The. (See Merica, P. D., and Kayes, assignors.)

Ireland, George B., assignor to Taylor Instrument Companies, Rochester, N. Y. Mercury pressure gauge. 1,811,178; June 23.

Irving, Samuel C., Berkeley, Calif. Airplane landing brake. 1,811,199; June 23.

Isaacson, Fred A., Topeka, Kans., assignor to American Steel Foundries, Chicago, Ill. Logging car. 1,811,634; June 23.

Isom, Edward W., Winnetka, assignor to Sinclair Refining Company, Chicago, Ill. Cracking of hydrocarbons and treatment of residues. 1,811,272; June 23.

Jack, Butler, jr., Sacramento, Calif. Dirt mover. 1,811,179; June 23.

Jackson, Seward B., Chatham, N. J. Building. Des. 84,479; June 23.

Jackson, Sherman D., Seminole, Okla. Automatic intermitter. 1,811,396; June 23.

Jahn, Raymond F., Brooklyn, N. Y. Printing and stamping machine. 1,811,582; June 23.

Jahn, Raymond F., Brooklyn, N. Y. Printing and stamping machine. 1,811,583; June 23.

Jakosky, John J., assignor to The Radiore Company, Los Angeles, Calif. Method and apparatus for locating unknown conductive bodies. 1,811,547; June 23.

Janovsky, Joseph, New York, and J. J. Lange, Astoria, assignors to Abbott Coin Counter Company, New York, N. Y. Coin counting machine. 1,811,503; June 23.

Jaros, Edward T. (See Jaros, Frank J. and E. T.)

Jaros, Frank J. and E. T., Chicago, Ill. Automobile signaling device. 1,810,968; June 23.

Jeffrey Manufacturing Company, The. (See Bauroth, Walter J., assignor.)

Jenkins Bros. (See Yardley, Farnham, assignor.)

Joeck, Thomas D., Belmar, N. J. Automatic choke for carburetors. 1,811,354; June 23.

Johns-Manville Corporation. (See Dietz, Franklin M., assignor.)

Johns-Manville Corporation. (See Williams, Samuel A., assignor.)

Johnson, Anton A., Loveland, Colo. Safety device for automobiles and the like. 1,811,635; June 23.

Johnson, Arnold E. W. (See Raney, C. R., and Johnson.)

Johnson, Arthur A., Bridgeport, Conn., assignor to Autographic Register Company, Hoboken, N. J. Manifolding machine. 1,811,636; June 23.

Johnson, Francis, Detroit, Mich. Mixing machine. 1,811,719; June 23.

Johnson, Karl G., assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Circuit arrangement for relay switches. 1,811,318; June 23.

Johnson, Linus J. (See Fries, G. W., Finkhousen, and Johnson.)

Johnson, Melvin, Forest City, Iowa. Cultivator sweep. 1,811,584; June 23.

Johnson, Richard P. (See Cummings, Schiller B., assignor.)

Johnson, Robert A., Longmeadow, and E. M. Chase, Springfield, assignors to Porter-McLeod Machine Tool Co., Hatfield, Mass. Roll turning machine. 1,811,504; June 23.

Johnson, Vivion A., assignor to Supreme Instruments Corporation, Greenwood, Miss. Alternating-current direct-current meter. 1,811,319; June 23.

Johnston, Edward A., Chicago, Ill., assignor to International Harvester Company. Unit power plant support for motor vehicles. 1,811,052; June 23.

Johnston, Katheryne L., Chicago, Ill. Article attaching device. 1,810,914; June 23.

Johnston, Virgil S., Huntington Park, Calif. Water filter. 1,811,755; June 23.

Jones, James R. (See Larson, O. J., and Jones.)

Jonsson, Augustinus E., Lidingo, Sweden. Drying apparatus. 1,811,355; June 23.

Jonsson, Augustinus E., Lidingo, Sweden. Drying apparatus. 1,811,356; June 23.

Joyce-Cridland Company, The. (See Hott, Ion V. K., assignor.)

Kalner, Frederick C., Park Ridge, Ill. Split screw coupling. 1,811,200; June 23.

Kalle & Co., Aktiengesellschaft. (See Schmidt, M. P., and Spietschka, assignors.)

Kane, Thomas H., assignor to Truscon Steel Company, Youngstown, Ohio. Wire welding machine. 1,811,585; June 23.

Kappeler, Jean. (See Zehnder, A., and Kappeler.)

Karlson, Alfred F., North Leominster, assignor to Parks-Cramer Company, Boston, Mass. Method and apparatus for humidifying and cooling the air of inclosures. 1,810,915; June 23.

Karplus, Eduard, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Wireless signaling apparatus. 1,811,357; June 23.

Kasch, Henry J., assignor to The Kurz-Kasch Company, Dayton, Ohio. Molding articles produced from plastic materials. 1,811,086; June 23.

Katcb, George, New York, N. Y. Woven silk fabric or similar article. Des. 84,480; June 23.

Kauffman, Albert J., Hollywood, Calif. Advertising exhibiter. 1,811,720; June 23.

Kauffman, Walter L., 2d, Youngstown, Ohio, assignor to Lovell Manufacturing Company, Erie, Pa. Wringer. Des. 84,503; June 23.

Kauffman, Walter L., 2d, Youngstown, Ohio, assignor to Lovell Manufacturing Company, Erie, Pa. Wringer. Des. 84,504; June 23.

Kayes, Augustus E. (See Merica, P. D., and Kayes.)

Keck, Joseph J., and E. E. Kelley, Parsons, Kans. Lateral eliminator. 1,811,721; June 23.

Keim, Melville, assignor to The Apex Products Corporation, Chicago, Ill. Display stand. Des. 84,481; June 23.

Kelleher, Daniel P. (See Ray, Vanney A., assignor.)

Kelley, Ernest E. (See Keck, J. J., and Kelley.)

Kelley, Maude T., Mount Vernon, N. Y. Washing appliance. Des. 84,483; June 23.

Kellogg, Alfred O., Pelham Manor, N. Y. Combined daylight and illuminated sign. 1,811,053; June 23.

Kelly, Jess C., Cambridge, Ohio. Water jug or similar article. Des. 84,482; June 23.

Kempton, Willard H., Wilkinsburg, and T. C. Roantree, East Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Making composite disks. 1,811,469; June 23.

Kennedy, Joseph A., Pawtucket, R. I., assignor to Anaconda Wire and Cable Company, New York, N. Y. Coating apparatus. 1,811,505; June 23.

Kennedye, Charles B., University City, Mo., assignor to The Kennedye Corporation, Wilmington, Del. Reamer blade. 1,811,273; June 23.

Kennedye Corporation, The. (See Kennedye, Charles B., assignor.)

Kern, Maximilian H., Richmond Hill, New York, assignor to Roberts Numbering Machine Company, Brooklyn, N. Y. Dating attachment for packaging machines. 1,811,358; June 23.

Kern, Maximilian H., Richmond Hill, New York, assignor to Roberts Numbering Machine Company, Brooklyn, N. Y. Dating attachment for wrapping machines. 1,811,359; June 23.

Kerr, Russell H., and E. F. Urich, San Antonio, Tex. Advertising device. 1,811,320; June 23.

Kerwin, Henry J., deceased, Phoenixville, Pa., L. A. Kerwin, administratrix. Indicator buoy for sunken ships. 1,811,014; June 23.

Kerwin, Lucille A., administratrix. (See Kerwin, Henry, J.,)

Kex Company. (See Sommerbeck, Adolph G., assignor.)

Kielberg, Henry, Martins Ferry, Ohio, assignor to Wheeling Steel Corporation, Wheeling, W. Va. Sheet metal package. 1,811,506; June 23.

Kielberg, Henry, Martins Ferry, Ohio, assignor to Wheeling Steel Corporation, Wheeling, W. Va. Sheet metal package. 1,811,507; June 23.

Killian, Joseph D., Cheynee, Wyo. Oil valve. 1,811,794; June 23.

Kimberlin, William H., assignor of one-half to W. H. Beatty, Natches, Miss. Ladder. 1,811,722; June 23.

King, Bert W., assignor to Barnes Scale Company, Detroit, Mich. Scale. 1,811,831; June 23.

King, Jesse G., Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation. Refrigerating apparatus. 1,810,916; June 23.

King, Walter E., Houson, Tex. Wall screen. 1,811,235; June 23.

Kinney, Selwyne P. (See Andrews, C. W., and Kinney.)

Kipp, Roy H., and W. H. Thompson, Canton, Ill., assignors to International Harvester Company. Tractor wheel fender. 1,811,054; June 23.

Kirby, Thomas L., Old Hickory, Tenn. Filter for viscose solutions. 1,811,795; June 23.

Kiwull, Wold., Riga, Latvia. Aircraft landing and releasing apparatus. 1,811,321; June 23.

Klages, G. W., & Son, Inc. (See Klages, Norman H., assignor.)

Klages, Norman H., Pittsburgh, Pa., assignor to G. W. Klages & Son, Inc. Reciprocating machine bed. 1,811,508; June 23.

Klausner, Siegfried, Vienna, Austria, A. Eichengrün, Charlottenburg, and R. Röhm, Troisdorf, near Cologne, Germany. Opaque washable playing card and method of manufacturing same. 1,811,322; June 23.

Kleineberg, Paul E., Brewster, assignor to American Assembling Machine Company, New York, N. Y. Book covering machine. 1,811,201; June 23.

Kleinschmidt, Edward E., Long Island City, N. Y., assignor, by mesne assignments, to Teletype Corporation, Chicago, Ill. Selective system and apparatus. 1,811,131; June 23.

Kleinschmidt, Edward E., assignor to Teletype Corporation, Chicago, Ill. Selective system and apparatus therefor. 1,811,132; June 23.

Kleinschmidt, Edward E., Park Ridge, assignor to Teletype Corporation, Chicago, Ill. Printing telegraph. 1,811,133; June 23.

Kleinschmidt, Edward E., assignor to Teletype Corporation, Chicago, Ill. Printing telegraph. 1,811,134; June 23.

Kling, Berdien, Dunn Center, N. Dak. Door operating mechanism. 1,811,015; June 23.

Klopfer, Henriette, Berlin-Wilmersdorf, assignor of one-half to the Firm W. & G. Neumann, Berlin, Germany. Breast holder. 1,811,548; June 23.

Knapp, Charles C., Jersey City, N. J., assignor of one-half to Roswell B. Smith, Brooklyn, N. Y. Saw forming device. 1,811,236; June 23.

Knowlton, Cutler D., Beverly, Mass., assignor to Hoague-Sprague Corporation, Lynn, Mass. Box. 1,811,135; June 23.

Koch, John C. (See Randall, R. W., and Koch.)

Kohlenveredlung Aktiengesellschaft. (See Geissen, K., and Vorbrodt, assignors.)

Kohler Company. (See Brotz, Frank G., assignor.)

Kohler, Gustavus A. E. (See Rust, James E., assignor.)

Kostko, Jaroslaw K., Ferguson, Mo. Synchronous motor. 1,811,136; June 23.

Kraft-Phenix Cheese Corporation. (See Bell, Arthur W., assignor.)

Kranich, Frank N. G., Racine, Wis., assignor to International Harvester Company. Grain tank for harvesters. 1,811,055; June 23.

Kranse, Paul. (See Taylor, Harry, assignor.)

Krant, Samuel B., South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company. Cable terminal. 1,811,470; June 23.

Kreis, Oscar C., assignor to Continental Motors Corporation, Detroit, Mich. Internal combustion engine. 1,810,917; June 23.

Kress, Willard C., Kenmore, assignor to J. H. Williams & Co., Buffalo, N. Y. Socket wrench. 1,811,137; June 23.

Kronenberg, Rudolf, Haus Kronenberg, Germany. Rolling mill. 1,811,586; June 23.

Kuehn, Karl, Cologne, Germany. Driving crank for piston engines. 1,811,796; June 23.

Kuhlman, Arthur L., Bay City, Mich. Caliper rule. 1,811,087; June 23.

Kuhn, Ezekiel D. (See Steadman, E. E., and Kuhn.)

Kumamoto, Jinichi, Tokio, Japan. Sleeper. 1,811,016; June 23.

Kurz-Kasch Company, The. (See Kasch, Henry J., assignor.)

Ladisch, Carl, Meissen-on-Elbe, Germany. Spraying nozzle. 1,811,637; June 23.

Ladshaw, Thomas G., Spartanburg, S. C. Drain device. 1,811,202; June 23.

Lafayette Company, The. (See Watson, Frank, assignor.)

Lake Erie Chemical Company, The. (See Ailes, Adrian S., assignor.)

Lamneck, W. E., Company, The. (See Gillman, Joseph L., Jr., assignor.)

Landers, Clyde W., New York, N. Y. Commutator construction for electric machines. 1,811,180; June 23.

Landis Machine Company. (See Newman, Samuel F., assignor.)

Langdon, Frank E., Vancouver, Wash. Collapsible winding shaft. 1,811,237; June 23.

Lange, Julius J. (See Janovsky, J., and Lange.)

Langer, Eduard, Leipzig, Germany. Rag grinding machine. 1,811,549; June 23.

Langford, Leonard W. (See Gilmore, R. J., and Langford.)

Langford, Leonard W., Boston, Mass. Record making mechanism. 1,811,397; June 23.

Langston, Samuel M., Co. (See Sieg, Karl, assignor.)

Lanza, Frank, Philadelphia, Pa. Ball receiver. 1,811,238; June 23.

Larsen, Lewis, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass. Making combined closely woven and fitch work fabric. 1,810,969; June 23.

Larsen, Lewis, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass. Furniture framing and making the same. 1,810,970; June 23.

Larson, Oscar J., and J. R. Jones, assignors to Art Metal Construction Company, Jamestown, N. Y. Metal furniture and the like. 1,811,471; June 23.

Larsson, Carl A., and P. R. Higson, assignors to Vickers-Armstrong Limited, Westminster, England. Gas operated machine gun and automatic small arms. 1,811,693; June 23.

Larsson, Carl A., and P. R. Higson, assignors to Vickers-Armstrong Limited, Westminster, England. Drum magazine for machine guns and automatic small arms. 1,811,694; June 23.

Lassman, Benjamin, Pittsburgh, assignor to The American Fluid Motors Company, Philadelphia, Pa. Apparatus for pressure testing. 1,811,138; June 23.

Laubach, Howard E., Cincinnati, Ohio, assignor to Delphos Printing Press Corp., Providence, R. I. Bed driving mechanism for bed and cylinder presses. 1,811,139; June 23.

Laughlin, Bessie D., administratrix. (See Laughlin, Elmyr A.)

Laughlin, Elmyr A., deceased, Oregon, assignor of one-half to himself and one-half to J. R. H. Potts, Chicago, Ill.; B. D. Laughlin, administratrix. Treating car wheels. 1,811,203; June 23.

Laughlin, Elmyr A., deceased, Rockvale, assignor of one-half to himself, and one-half to J. R. H. Potts, Chicago, Ill.; B. D. Laughlin, administratrix. Apparatus for treating car wheels. 1,811,204; June 23.

Launderville, Joseph S., Los Angeles, Calif. Upholstery tag-pin. 1,811,088; June 23.

Lauterbur, Edward J. (See Lauterbur, F. X. and E. J.)

Lauterbur, Frank X. and E. J., Sidney, Ohio. Dough mixer. 1,811,472; June 23.

Law, Thomas J., Clear Lake, S. Dak. Visor signal for motor vehicles. 1,811,140; June 23.

Lawrence, John T., Castor, La. Plow. 1,811,089; June 23.

Leamy, Alan H., assignor to Auburn Automobile Company, Auburn, Ind. Automobile. Des. 84,484; June 23.

Lechler, Fritz, Frankfort-on-the-Main, Germany. Production of sulphuric acid and oleum by the contact process. 1,811,797; June 23.

Lee, John H. (See Martin, William C., assignor.)

Lee, Ralph L., assignor to Delco-Light Company, Dayton, Ohio. Adjustable caster. 1,810,971; June 23.

Lee, William R., Rochester, N. Y. Pipe cleaner. 1,811,205; June 23.

Lehman, Tillman H., Berne, Ind. Soap shaver. 1,811,017; June 23.

Lejay, Raymond, Vincennes, France. Static suction apparatus. 1,811,323; June 23.

Lenzkes, Karl, Gladbach-Neuwerk, Germany. Device for stopping electrically driven looms by the weft-guard. 1,811,239; June 23.

Leventhal, Mitchell, Brooklyn, assignor to Sosy, Inc., New York, N. Y. Key escutcheon. 1,811,141; June 23.

Levi, Tullio G., assignor to Società Italiana Pirelli, Milan, Italy. Manufacture of rubber articles from rubber latex. 1,811,695; June 23.

Lewis, George C., New Dorp, assignor to Columbian Carbon Company, New York, N. Y. Manufacture of carbon black. 1,810,918; June 23.

Lewis, Samuel H., Richmond, Va. Fluid pressure operated valve gear shifting mechanism. 1,811,434; June 23.

Libbey-Owens-Ford Glass Company. (See Drake, John L., assignor.)

Libbey-Owens-Ford Glass Company. (See Ferngren, Enoch T., assignor.)

Libbey-Owens-Ford Glass Company. (See Mambourg, Leopold, assignor.)

Libbey-Owens-Ford Glass Company. (See Nobbe, William E., assignor.)

Libbey-Owens-Ford Glass Company. (See Pedersen, Ingvald O., assignor.)

Libbey-Owens-Ford Glass Company. (See Watkins, George B., assignor.)

Lieber, Hugo, assignor to Sonotone Corporation, New York, N. Y. Earphone transmitter. 1,811,638; June 23.

Lieber, Hugo, assignor to Sonotone Corporation, New York, N. Y. Earphone. 1,811,639; June 23.

Lincoln Meter Company, The. (See Paine, Louis A., assignor.)

Lindegren, Carl J. (See Bergstrom, C. P., and Lindegren.)

Lindegren, Carl J., Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Drop shuttle box and connecter therefor. 1,811,435; June 23.

Lindemann, A. J., & Hoverson Company. (See Rutenber, Edwin A., assignor.)

Linden, John M. (See Shank, A. E., Fisler, and Linden.)

Litchfield, Isaac W., assignor to Bemis Industries Inc., Boston, Mass. Concrete form. 1,811,398; June 23.

Lithoprintex Corporation. (See Harris, Robert, assignor.)

Little, William T., Westfield, N. J. Recovery of tin from alkaline stannate solutions. 1,811,142; June 23.

Little, William T., Westfield, N. J. Recovery of tin from stannate. 1,811,360; June 23.

Live more, H. F., Co. (See Newton, Robert C., assignor.)

Livingston, Alan V., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Refrigeration. 1,811,090; June 23.

Locke, Walter, Philadelphia, Pa., assignor to Edge Moor Iron Company, Edge Moor, Del. Bent tube boiler. 1,811,509; June 23.

Lockhard, Arthur E., Grafton, W. Va. Stone spreader. 1,811,324; June 23.

Loening, Grover, New York, N. Y. Handling carriage for stowing airplanes. 1,811,510; June 23.

Loening, Grover, New York, N. Y. Flying boat. 1,811,550; June 23.

Loening, Grover, New York, N. Y. Handling carriage for airplane bodies. 1,811,551; June 23.

Loewer, Alvin C., Parksville, Md. Light effecting devices. 1,811,723; June 23.

Long, Sidney L., Minneapolis, Minn. Toy. 1,811,056; June 23.

Longley, Frederick W., Verdun, Quebec, Canada. Collapsible stepping box. 1,811,674; June 23.

Lord, Hugh C., Erie, Pa. Clevis. 1,810,972; June 23.

Lorenz, C., Aktiengesellschaft. (See Karplus, Eduard, assignor.)

Lotter, Adolph G., assignor to Stationers Loose Leaf Co., Milwaukee, Wis. Loose leaf binder. 1,810,919; June 23.

Louisville Electric Manufacturing Company. (See McFerran, John B., jr., assignor.)

Lovell Manufacturing Company. (See Kauffman, Walter L., 2d, assignor.)

Lovell Manufacturing Company. (See Schuda, Ernest J., assignor.)

Lowe, Russell E. (See Morgan, J. D., Bjorkstedt, and Lowe.)

Lucke, Adam J., Gooding, Idaho. Automobile trailer. 1,811,798; June 23.

Lucke, Charles E., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam cleaning device. 1,811,399; June 23.

Lukens, Hiram S., assignor to Solidon Products, Inc., Philadelphia, Pa. Magnesium oxychloride mixture and making the same. 1,811,799; June 23.

Lukomski, John B., Detroit, Mich. Radiator. 1,810,973; June 23.

Lund, Arthur D., Minneapolis, Minn., assignor to Alcet Electro-Products Corporation, New York, N. Y. Grid casting machine. 1,811,143; June 23.

Luyster, Abraham and C. P., Muskegon Heights, Mich. Snowplow. 1,811,436; June 23.

Luyster, Culver P. (See Luyster, Abraham and C. P.)

MacMillan, Charles W., Denver, Colo. Ink bottle pen filling protector. 1,811,361; June 23.

MacMillan, Daniel J., Brooklyn, N. Y. Pneumatic dispatch carrier. 1,810,974; June 23.

Macrae, James N., Stamford, Conn., assignor to Petroleum Heat and Power Company, New York, N. Y. Ignition mechanism for oil burners. 1,811,274; June 23.

Mafera, Frank J., Revere, Mass. Forming wire fence fabric. 1,811,511; June 23.

Maggio, Salvator, Pittsburgh, Pa. Trolley harp and wheel structure. 1,811,362; June 23.

Magnano Corporation. (See Magnano, Sebastiano, assignor.)

Magnano, Sebastiano, assignor to Magnano Corporation, Lawrence, Mass. Textile apparatus. 1,811,206; June 23.

Magnano, Sebastiano, assignor to Magnano Corporation, Lawrence, Mass. Textile machine. 1,811,675; June 23.

Magnavox Company, The. (See Pridham, Edwin S., assignor.)

Malleable Iron Fittings Company. (See Pickop, George B., assignor.)

Maltby, Arthur T., Chicago, Ill. Process and apparatus for treating sewage or other organic matters. 1,811,181; June 23.

Mambourg, Leopold, Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,810,920; June 23.

Mambourg, Leopold, Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass flowing apparatus. 1,810,921; June 23.

Manley, Joh R., East Liverpool, Ohio. Measuring faucet. 1,811,724; June 23.

Mann, Matthew D., jr., Roselle, N. J., assignor to Standard Oil Development Company. Stable mixture of petroleum hydrocarbons and secondary alcohols. 1,811,552; June 23.

Maradeo, Peter, Nesquehoning, Pa. Separation jig. 1,811,756; June 23.

Marcelle, Isaac J., Buffalo, N. Y. Arch correcting member. 1,811,640; June 23.

Marcelle, Isaac J., Buffalo, N. Y. Arch correcting insert for shoes. 1,811,641; June 23.

Marchant Calculating Machine Company. (See Friden, Carl M. F., assignor.)

Marckworth, Otto S., Columbus, Ohio. Electrical device and making the same. 1,811,725; June 23.

Margon Corporation. (See Grubman, Leo J., assignor.)

Marion Steam Shovel Company, The. (See Ferguson, Berlin S., assignor.)

Marquette Manufacturing Company. (See Nilson, Leonard D., assignor.)

Marsh Stencil Machine Company. (See Marsh, Walt, assignor.)

Marsh, Walt, assignor to Marsh Stencil Machine Company, Belleville, Ill. Fountain brush. 1,811,512; June 23.

Martin, Glenn L., Company, The. (See Andrake, Andrew A., assignor.)

Martin, Joseph, New York, assignor to United States Cabinet Bed Co., Brooklyn, N. Y. Combination couch and bed. 1,811,057; June 23.

Martin, Otto V., Sand Springs, Okla., assignor, by mesne assignments, to Texaco Salt Products Company, New York, N. Y. Apparatus for the production of salts from brines and solutions. 1,811,091; June 23.

Martin, William C., Chicago, assignor to J. H. Lee, Oak Park, Ill. Wheel construction. 1,811,726; June 23.

Martois, Arthur E., Los Angeles, Calif. Rotary draw works having dual rotary machine drive. 1,810,975; June 23.

Mason, Charles D., Des Moines, Iowa. Foam destroyer. 1,811,513; June 23.

Massey, Juan C. M., Adrogue, Argentina. Traction of vehicles. 1,810,018; June 23.

Master Domestic Refrigerating Company. (See Winter, Joseph W., assignor.)

Matakovich, George, Keewatin, Minn. Vehicle spring construction. 1,811,514; June 23.

Matteson, George E., Rockyhill, assignor to The F. B. Shuster Company, New Haven, Conn. Strip straightening and cutting machine. 1,810,976; June 23.

Matthews, Jas. H., & Company. (See Anderson, H., and Gannon, assignors.)

Maxwell, William H. (See Baash, L. F., and Maxwell.)

Mayers, Wilbur S., Fairmont, W. Va., assignor to Hartford-Empire Company, Hartford, Conn. Automatic transfer machine. 1,811,832; June 23.

Mayes, Frank A. (See Hicks, F. R., jr., and Mayes.)

McCargar, Joseph R., Grand Rapids, Mich. Desk. Des. 84,485; June 23.

McClellan, William D., Richmond, Va. Mooring cleat for boats and the like. 1,811,400; June 23.

McCloud, Clifford C., Mayville, Wis. Electric humidifier. 1,811,727; June 23.

McDonald, Guy A. (See Woostock, W. H., and McDonald.)

McElroy, Karl P., Washington, D. C., assignor to The Permutit Company, New York, N. Y. Purifying water. 1,811,587; June 23.

McElyea, Barney E., St. Louis, Mo. Screen. 1,811,553; June 23.

McFerran, John B., jr., assignor to Louisville Electric Manufacturing Company, Louisville, Ky. Pressure lubricating system. 1,811,240; June 23.

McGinty, Anthony C., Los Angeles, Calif. Turbine. 1,811,515; June 23.

McGowan, Joseph. (See Rea, Alfred, assignor.)

McGrath, William L., Elmira, assignor to Eclipse Machine Company, Elmira Heights, N. Y. Engine starting mechanism. 1,811,401; June 23.

McKee, Robert, Philadelphia, Pa. Drainage device for roof gutters and the like. 1,811,728; June 23.

McKenney, Fred Y., assignor of one-half to J. Z. Easley, Chattanooga, Tenn. Hydraulic brake mechanism. 1,811,019; June 23.

McLeod Furniture Company. (See McLeod, Raymond H., assignor.)

McLeod, Raymond H., assignor to McLeod Furniture Company, Laurel, Miss. Veneer cutter and matcher. 1,811,757; June 23.

McLoughlin, Arthur J. Corona, N. Y. Signaling and indicating device for protecting the molds and mold liners of typesetting machines. 1,811,144; June 23.

McMillan, Wesley K., San Francisco, Calif., assignor, by mesne assignments, to American Tractor Equipment Co. Slip tongue for scrapers. 1,811,275; June 23.

McNeal, Daniel R., Abington, assignor to Andale Engineering Company, Philadelphia, Pa. Heater or cooler. 1,811,402; June 23.

Meehan, James L., Ashland, Ky. Amusement device. 1,811,758; June 23.

Mellor, Gilmore M., Oak Park, Ill., assignor to The American Oak Leather Company, Cincinnati, Ohio. Tap for shoes. 1,811,473; June 23.

Mergenthaler Linotype Company. (See Muehleisen, Carl, assignor.)

Merica, Paul D., Westfield, N. J., and A. E. Kayes, Huntington, W. Va., assignors, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y. Carbon-free metal. 1,811,696; June 23.

Merrill, Ralph K., assignor to American Seating Company, Grand Rapids, Mich. Table. Des. 84,486; June 23.

Merrill, Ralph K., assignor to American Seating Company, Grand Rapids, Mich. School desk. Des. 84,487; June 23.

Mesinger, Henry, Mount Vernon, N. Y. Adjusting means for spring cushioning devices. 1,811,403; June 23.

Metal Textile Corporation. (See Hartwell, Ralf L., assignor.)
Metropolitan Device Corporation. (See Rypinski, Albert B., assignor.)
Metropolitan Engineering Company. (See Holmes, Henry S., assignor.)
Metropolitan Engineering Company. (See Murray, Thomas E., jr., assignor.)
Miehle Printing Press & Manufacturing Company, The. (See Dudley, Edward F., assignor.)
Mildenberger, Frederick J., Passaic, N. J. Alarm or signal for boilers. 1,811,800; June 23.
Miller, Carlton E., Redwood City, Calif. High temperature heat insulation material and making the same. 1,811 516; June 23.
Miller, Michael E., Washington, D. C. Valve. 1,811,418; June 23.
Miller, Theodore A., assignor to A. J. Fleiter, Akron, Ohio. Vulcanizer. 1,811,276; June 23.
Mills, Harry L., Harvey, Ill., assignor to Centrifugal Separation Company. Centrifugal separating apparatus. 1,810,922; June 23.
Milwaukee Stamping Company. (See Weltz, Henry F., assignor.)
Mock, James C., Detroit, Mich. Highway crossing signal. 1,810,977; June 23.
Molins, Walter E., Deptford, London, England. Cigarette making machinery. 1,811,759; June 23.
Molkenbur, Henry F., Bellaire, White Bear Lake, Minn. Rotary engine. 1,811,729; June 23.
Monroe Calculating Machine Company. (See Britten, Edwin F., jr., assignor.)
Mooers, Louis P., assignor to The Columbia Axle Company, Cleveland, Ohio. Manufacture of pressed brake shoes. 1,810,923; June 23.
Moore Brothers Company. (See Dibble, Claude M., assignor.)
Moore, George W., Long Beach, Calif. Weidless elevator link. 1,810,978; June 23.
Moore Steam Turbine Corporation. (See Church, Maynard D., assignor.)
Moreau, Jules, La Garenne-Colombes, France. Oil loss preventing device. 1,811,588; June 23.
Morey, William O., Portland, Oreg. Automatic locator and recovery for sunken vessels. 1,811,241; June 23.
Morgan, Erving B., assignor to American Seating Company, Grand Rapids, Mich. Table. Des. 84,488; June 23.
Morgan, John D., Maplewood, N. J., W. G. Bjorkstedt, Jamaica, and R. E. Lowe, New York, assignors to Doherty Research Company, New York, N. Y. Heat conducting high temperature resistant refractory. 1,811,242; June 23.
Morgan, Mathew B., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Worm drive axle. 1,811,058; June 23.
Morgan, Mathew B., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Self-lubricating gear seat. 1,811,059; June 23.
Morgenstern, Ronald V., Irvington, assignor to The Western Union Telegraph Company, New York, N. Y. Vacuum tube repeater and terminal set for superposed telegraph systems. 1,811,824; June 23.
Morrell, Jacque C., and H. P. Benner, assignors to Universal Oil Products Company, Chicago, Ill. Converting hydrocarbon oils. 1,811,642; June 23.
Morris, Benjamin F. C., Oklahoma City, Okla. Calibrated ventilator adjustment for incubators. 1,811,589; June 23.
Morris, Ernest F. (See Stockwell, S. E., Murdock, Winzig, and Morris.)
Morse Chain Company. (See Morse, Frank L., assignor.)
Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Drive chain. 1,811,207; June 23.
Morton, Henry E., Muskegon Heights, Mich. Milling machine. 1,811,363; June 23.
Morton, James, Cramond Bridge, West Lothian, Scotland. Manufacture of fabrics. 1,811,325; June 23.
Mosley, Abraham K., assignor to B. K. Stoll, Troy, N. Y. Pipe connecter. 1,811,277; June 23.
Mossberg, Frank, assignor to Mossberg Pressed Steel Corporation, Attleboro, Mass. Reel. 1,811,517; June 23.
Mossberg Pressed Steel Corporation. (See Mossberg, Frank, assignor.)
Moulet, Jean L. L. A. A., Boulogne-sur-Seine, France, assignor to Stewart-Warner Corporation, Chicago, Ill. Diaphragm fuel pump. Re18,112; June 23.
Muehleisen, Carl, Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Slug-trimming knives for typographical line-casting machines. 1,811,145; June 23.
Müller, Adolf, Zurzach, Switzerland. Pressure gauge. 1,811,326; June 23.
Murdock, Alfred E. (See Stockwell, S. E., Murdock, Winzig, and Morris.)
Murphy, Leonard, Dublin, Ireland. Apparatus for indicating the depth of liquids in tanks or other containers. 1,811,801; June 23.
Murray, Albert L., Auburn, Ind. Rubber soap dish. Des. 84,489; June 23.
Murray, Thomas E., jr., Brooklyn, N. Y., assignor to Metropolitan Engineering Company. Car journal box. 1,811,554; June 23.
Myers, Gus, Fargo, N. Dak. Auto signal. 1,811,555; June 23.
Myre, Nathan, Toledo, Ohio. Amusement device. 1,811,092; June 23.
Nagel, Harry C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Locking device. 1,811,474; June 23.
National Aniline & Chemical Company. (See Thornton, Irving T., assignor.)
National Aniline & Chemical Company. (See Wood, Robert O., and West, assignors.)
National Carbon Company. (See Chaney, Newcomb K., assignor.)
National Cash Register Company, The. (See Brand, Samuel, assignor.)
National Cold Steam Company. (See Shepherd, John E., assignor.)
National Electric Products Corporation. (See Fullman, James M. G., assignor.)
National Lock Co. (See Aldeen, Gedor W., assignor.)
National Lock Co. (See Burton, Edward, assignor.)
National Rail Joint Corporation. (See Wilbur, Lawrence S., assignor.)
National Rubber Machinery Company. (See Shook, Florain J., assignor.)
National-Standard Company. (See Hopkins, Arthur C., assignor.)
National Tool and Metals, Incorporated. (See Belding, Elmer C., assignor.)
National Tool Company, The. (See Simmons, Oliver G., assignor.)
Neal, Chester T., Springfield, Mass. Cartridge clip. 1,811,093; June 23.
Neal, Harry W., assignor to Hall-Neal Furnace Company, Indianapolis, Ind. Furnace. 1,811,182; June 23.
Neevel, Harry L. (See Neevel, Jacob B., assignor.)
Neevel, Jacob B., deceased, Kansas City, Mo.; Mrs. J. B. Neevel, executrix, assignor to H. L. Neevel. Planetarium. 1,811,825; June 23.
Neevel, Jacob B., Mrs., executrix. (See Neevel, Jacob B.)
Nellan, Schumacher & Company. (See Annin, Douglas H., assignor.)
Nejedly, Peter M., Brooklyn, N. Y., assignor to American Machine & Foundry Company. Cigarette cork-tipper. 1,810,979; June 23.
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Spike driving apparatus. 1,811,475; June 23.
Nelson, Herman, Corporation, The. (See Otis, Gerald E., assignor.)
Neubert, Oscar, jr., Long Beach, Calif. Dough molding machine. 1,811,208; June 23.
Neumann, W. & G., the Firm. (See Klopfer, Henriette, assignor.)
Neureuther, Andrew H., assignor to Western Clock Company, Peru, Ill. Electric driving mechanism. 1,811,278; June 23.
Neuwirth, Herman, New York, N. Y. Sundial. 1,811,183; June 23.
Newall, Archibald P. (See Hey, H., Evans, Williams, and Newall.)
New Departure Manufacturing Company, The. (See Stockwell, S. E., Murdock, Winzig, and Morris, assignors.)
Newman, Samuel F., assignor to Landis Machine Company, Waynesboro, Pa. Collapsible tap. 1,811,802; June 23.
Newton, Harry E., Hardy, Iowa. Grapple for storage batteries and the like. 1,811,730; June 23.
Newton, Robert C., Needham, assignor to H. F. Livermore Co., Allston, Mass. Dobby lever. 1,811,209; June 23.
Nicely, George W., Montreal, Quebec, assignor to British American Silk Mills Limited, Montreal, Canada. Feeler motion for automatic silk looms. 1,811,590; June 23.
Nielsen, Harald. (See Patart, G., and Nielsen.)
Nilson, Leonard D., Wayzata, assignor to Marquette Manufacturing Company, St. Paul, Minn. Hydraulic jack structure. 1,811,556; June 23.
Niven, Archie M., assignor to Continental Motors Corporation, Detroit, Mich. Sleeve valve engine. 1,810,924; June 23.
Nobbe, William E., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Method and apparatus for forming sheet glass. 1,810,980; June 23.
Noble, Oliver E., Oklahoma City, Okla. Adjustable screen intake. 1,810,981; June 23.
Nordberg, Bruno V., deceased, by Helena C. Nordberg, executrix, Milwaukee, Wis. Reversible rolling mill engine. 1,811,020; June 23.
Nordberg, Helena C. (See Nordberg, Bruno V.)
Norin, Adolf A., assignor to Hanna Engineering Works, Chicago, Ill. Plate closer. 1,811,643; June 23.
Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Induction electric furnace. 1,811,644; June 23.
Norwood, Harry Y., West Rush, assignor to Taylor Instrument Companies, Rochester, N. Y. Thermometer. 1,811,184; June 23.
Nulty, Joseph J. (See Hesskew, W. R., and Nulty.)
Nunnally, James C., Greer, S. C. Knock-off mechanism for slubbers and roving frames. 1,811,404; June 23.
Oakley, Laurence M., assignor to Essex Rubber Company, Trenton, N. J. Rubber sole and heel for boots and shoes. 1,811,803; June 23.
Obstfeld, Abe I. (See Obstfeld, Lou, assignor.)
Obstfeld, Lou, Brooklyn, N. Y. Attachment for stapling machines. 1,810,982; June 23.

Obstfeld, Lou, assignor, by mesne assignments, to said Lou Obstfeld and Abe I. Obstfeld, Brooklyn, N. Y. Staple clip and fabricating the same. 1,811,060; June 23.
O'Brien, Frank J., assignor to Continental Can Company, Inc., New York, N. Y. Easy opening container. 1,811,147; June 23.
Oehler, Theodor, Berlin-Lichterfelde, assignor to the Firm Hydor G. m. b. H., Regenanlagen- und Silo-Bau, Berlin-Mariendorf, Germany. Periodic jet rotary sprinkler. 1,811,591; June 23.
Oftedahl, Elfrida M. (See Oftedahl, Peter, assignor.)
Oftedahl, Peter, assignor to E. M. Oftedahl, San Francisco, Calif. Can construction. 1,810,925; June 23.
Ohio Brass Company, The. (See Graham, Walter F., assignor.)
Ohio Steel Foundry Company, The. (See Harbison, Clarence B., assignor.)
O'Leary, Chas. M., jr. (See Banks, Charles G., assignor.)
Oliver Farm Equipment Company. (See Altgelt, Herman E., assignor.)
Olmstead, Henry H., Wharton, N. J. Apparatus for and method of loading bombs. 1,811,061; June 23.
Olsen, Gustav. (See Albertson, F. O., and Olsen.)
Olsen, Tinius, assignor to Tinius Olsen Testing Machine Co., Philadelphia, Pa. Lever for testing machine weighing systems. 1,811,210; June 23.
Olsen, Tinius, Testing Machine Co. (See Olsen, Tinius, assignor.)
Olshevsky, Dimitry E., Milford, Conn. Wind tunnel for testing aeroplanes. 1,811,364; June 23.
Ormiston, Gilbert J., Judson, N. Dak. Riding spur. Des. 84,490; June 23.
Orr, Roy T. (See Boden, J. E., and Orr.)
Orr, Thomas C., Willows, Calif. Stock and poultry hook. 1,811,437; June 23.
O'Shaughnessy, James, Tuckahoe, N. Y. Writing implement. 1,810,983; June 23.
Osmer, James H., El Segundo, assignor to Standard Oil Company of California, San Francisco, Calif. Refining hydrocarbon oils with metallic halide. 1,811,243; June 23.
Osterstrom, Rudolph C., assignor to The Pure Oil Company, Chicago, Ill. Decolorizing oils. 1,811,185; June 23.
Otis Elevator Company. (See Brady, Thomas, assignor.)
Otis Elevator Company. (See Hall, Harry E., assignor.)
Otis, Gerald E., assignor to The Herman Nelson Corporation, Moline, Ill. Heating and ventilating apparatus. Re18,109; June 23.
Otto, Michael. (See Hofmann, F., and Otto.)
Ove, Edward N., Dike, Iowa. Double-acting pump. 1,811,557; June 23.
Owens Development Corporation. (See Owens, Freeman H., assignor.)
Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Roller support for traveling films. 1,811,365; June 23.
Paine, Louis A., Toronton, Ontario, Canada, assignor, by mesne assignments, to The Lincoln Meter Company, Inc., Springfield, Ill. Thermal electric meter. 1,811,244; June 23.
Palm, John V. O., Cleveland Heights, Ohio. Thermostatic valve for automobiles. 1,811,366; June 23.
Palmer, George E., Cedar Rapids, Iowa. Clamp. 1,811,518; June 23.
Palson, William C., Manchester, assignor of one-half to A. C. Walworth, Newton, Mass. Skating rink floor. 1,810,926; June 23.
Parco Specialty Co. (See Preble, George L., assignor.)
Parks-Cramer Company. (See Karlson, Alfred F., assignor.)
Parrella, Joseph A., Washington, D. C. Key pouch. 1,811,327; June 23.
Parris, Ben T., Cave Spring, Ga., assignor of one-fourth to J. C. Davenport and one-fourth to W. N. Crawford, Washington, D. C. Advertising apparatus. 1,811,818; June 23.
Patart, Georges, near Paris, France, and H. Nielsen, Bromley, England. Reduction of calcium carbonate for the manufacture of carbides. 1,811,021; June 23.
Patent Aktiebolaget Grondal-Ramen. (See Haglund, Gustaf, assignor.)
Patent Development Co. (See Pecker, Joseph S., assignor.)
Patent Novelty Company. (See Reimer, George H., assignor.)
Pavloff, Stephen, Camas, Wash. Fruit gatherer. 1,811,328; June 23.
Pearson, Charles, Chicago, Ill., assignor to International Harvester Company. Rake. 1,811,062; June 23.
Pearson, Paul E. (See Troyer, N., and Pearson.)
Pecker, Joseph S., Philadelphia, Pa., assignor to Patent Development Co. Machine for repairing knitted fabrics. 1,811,329; June 23.
Pecker, Joseph S., Philadelphia, Pa., assignor to Patent Development Co. Machine and method for repairing knitted fabrics. 1,811,330; June 23.
Pecker, Joseph S., Philadelphia, Pa., assignor to Patent Development Co. Machine for repairing knitted fabrics. 1,811,331; June 23.
Pedersen, Ingvald O., Pittsburgh, Pa., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Sheet glass apparatus. 1,810,927; June 23.
Peek, Horace H., and A. C. Grist, Chattanooga, Tenn., said Grist assignor to said Peek. Circulating duct for boilers. 1,811,592; June 23.
Pehrsson, Johan, Skillingaryd, Sweden. Adjustable wrench. 1,811,148; June 23.
Peirce, Charles L., jr., Pittsburgh, Pa., assignor to Hubbard & Company. Insulator rack. 1,811,211; June 23.
Pendleton, Morris B. (See Berggren, Charles A., assignor.)
Perfection Steel Body Company. (See Bordeaux, Ephriam P., assignor.)
Perks, Walter, London, England, assignor to W. Vicars, Rose Bay, near Sydney, Australia. Deburring machine. 1,811,519; June 23.
Perlesz, Hugo, assignor to Burton-Dixie Corporation, Chicago, Ill. Mattress border. Des. 84,491; June 23.
Permutit Company, The, (See Behrman, Abraham S., assignor.)
Permutit Company, The. (See McElroy, Karl P., assignor.)
Petersen, Arthur G., Brooklyn, N. Y. Steering control for aeroplanes. 1,811,149; June 23.
Peterson, Alfred J. A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit interrupter control system. 1,811,476; June 23.
Peterson, Edward T., Reading, assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa. Plate piling machine. 1,811,593; June 23.
Petroleum Heat and Power Company. (See Macrae, James N., assignor.)
Petrosky, John, Niles, Ohio. Toy. 1,811,022; June 23.
Petty, Vern R., Brooklyn, N. Y. Combined fuel measuring pump and fuel feed valve for internal combustion engines. 1,811,731; June 23.
Peyton, Harold B., Jacksonville, Fla. Fireproof mail bag. 1,811,150; June 23.
Pfeifer, Albert, New York, N. Y. Cabinet. 1,811,732; June 23.
Pfeiffer, Frank E., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,811,676; June 23.
Pfetzer, Jakob, Kehl/Baden, Germany. Safety valve for boiling vessels. 1,811,151; June 23.
Philips' N. V. Gloeilampenfabrieken. (See Holst, Gilles, assignor.)
Photostat Corporation. (See Caps, Arthur W., assignor.)
Pickop, George B., New Haven, assignor to Malleable Iron Fittings Company, Branford, Conn. Clothes hook for lockers. 1,810,928; June 23.
Pilot Electric Manufacturing Company. (See Geloso, John, assignor.)
Pilot Radio & Tube Corporation. (See Geloso, John, assignor.)
Pittsburgh Plate Glass Company. (See Halbach, Howard L., assignor.)
Porter, George, Berlin, N. J. Locator of abnormal sounds and vibrations. 1,811,558; June 23.
Porter-McLeod Machine Tool Co. (See Johnson, R. A., and Chase, assignors.)
Poschel, Alfred B., Brooklyn, N. Y., assignor to Decorative Development, Inc. Decalcomania and decalcomania paper. 1,811,804; June 23.
Potter, Ralph K., New York, N. Y., assignor to American Telephone and Telegraph Company. Photo-electric cell. 1,811,023; June 23.
Potter, Ralph K., New York, N. Y., assignor to American Telephone and Telegraph Company. Photo-electric tube. 1,811,024; June 23.
Potter, Ralph K., New York, N. Y., assignor to American Telephone and Telegraph Company. Regulation of level in brodacast transmission. 1,811,025; June 23.
Potts, Joshua R. H. (See Laughlin, Elmyr A., assignor.)
Powell, Frank D., assignor to Acme Card System Company, Chicago, Ill. Visible record system. 1,811,245; June 23.
Powers Sign Co. (See Powers, William M., assignor.)
Powers, William M., assignor to Powers Sign Co., Inc., Minneapolis, Minn. Street sign. 1,811,594; June 23.
Powers, William M., Minneapolis, Minn., assignor to Powers Sign Co., Inc. Street marker. 1,811,595; June 23.
Preble, George L. (See Eaton, Horace M., assignor.)
Preble, George L., assignor to Parco Specialty Co., Lynn, Mass. Ribbon covering machine. 1,811,477; June 23.
Pre-Cooling Car Service Co. (See Barstow, W., and Day, assignors.)
Pre-Cooling Car Service Co. (See Day, Fred J., assignor.)
Press & Drier Co., The. (See Berrigan, John B., assignor.)
Pressnall, Ellis M., Proctor, Minn. Rerailing railroad equipment. 1,811,332; June 23.
Pricofieff-Seversky, Alexander, New York, N. Y. Landing gear for aircraft. 1,811,152; June 23.
Pridham, Edwin S., assignor to The Magnavox Company, Oakland, Calif. Loud speaker. 1,811,367; June 23.
Prönnecke, Karl, Quedlinburg, Harz, Germany. Machine for making clothes pegs. 1,811,559; June 23.
Pupin, Michael I., Norfolk, Conn., assignor to The Commercial Cable Company of New York, New York, N. Y. Telegraph system. 1,811,368; June 23.
Pure Oil Company, The. (See Hyman, J., and Schlandt, assignors.)
Pure Oil Company, The. (See Osterstrom, Rudolph C., assignor.)
Pure Oil Company, The. (See Watson, Cornelius B., assignor.)

Putterman, Benjamin, Brooklyn, N. Y., assignor to Yankee Metal Products Corp. Radiator guard. Des. 84,492; June 23.

Putterman, Benjamin, Brooklyn, N. Y., assignor to Yankee Metal Products Corp. Radiator guard. Des. 84,493; June 23.

Pyzel, Daniel, Oakland, assignor, by mesne assignments, to Shell Development Company, San Francisco, Calif. Oil-refining system. 1,811,645; June 23.

Pyzel, Daniel, Piedmont, Calif., assignor to Universal Oil Products Company, Chicago, Ill. Hyrocarbon oil treatment. 1,811,646; June 23.

Quarnstrom, Alfred, assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,811,279; June 23.

Quast, Carl A. (See Schwartz, H. L., Quast, and Spitz.)

Radio Corporation of America. (See Round, Henry J., assignor.)

Radiore Company, The. (See Jakosky, John J., assignor.)

Raffinerie Tirlemontoise Société Anonyme. (See Bergé, Julien, assignor.)

Rah, Joseph, assignor to G. & W. Electric Specialty Company, Chicago, Ill. Oil switch. 1,811,805; June 23.

Ramsey Accessories Manufactu ing Corporation. (See Spencer, Elmer A., assignor.)

Randall, Richard W., and J. C. Koch, Stockton, Calif. Rotary tube and pipe cleaner. 1,811,063; June 23.

Randall, Walter F. (See Smith, W. S., Garnett, and Randall.)

Raney, Clemma R., Riverside, and A. E. W. Johnson, Chicago, Ill., assignors to International Harvester Company. Material feeding mechanism. 1,811,064; June 23.

Rankin, John A., Los Angeles, Calif. Machine for slicing fresh meat. 1,811,186; June 23.

Ranney, Leo, New York, N. Y., assignor to Standard Oil Development Company. Method of and apparatus for recovering oil. 1,811,560; June 23.

Ranney, Leo, New York, N. Y., assignor to Standard Oil Development Company. Method and means for working oil sands. 1,811,561; June 23.

Rasmussen, Holger M., Faaborg, Denmark. Illumination. 1,811,333; June 23.

Raw, George, Washington, England. Process and apparatus for the separation of solid materials of different specific gravities. 1,811,026; June 23.

Ray, Vanney A., San Francisco, Calif., assignor of one-third to D. P. Kelleher. Pressing apparatus. 1,810,984; June 23.

Raymond, Fred I., River Forest, Ill. Soda fountain. 1,811,806; June 23.

Raymond, Fred I., River Forest, Ill. Soda fountain. 1,811,807; June 23.

Raynes, Harry C., Portsmouth, N. H., assignor, by mesne assignments, to Bemis Industries, Incorporated, Boston, Mass. Wall board. 1,811,212; June 23.

Rea, Alfred, assignor of one-half to J. McGowan, San Diego, Calif. Power driven shears. 1,811,027; June 23.

Redman, Lawrence V., A. J. Weith, and F. P. Brock, Evanston, Ill., assignors to Bakelite Corporation, New York, N. Y. Phenolic condensation product and p.oducing the same. 1,811,808; June 23.

Reed, Everett H. (See West, P. F., and Reed.)

Reese, David M., Des Moines, Iowa. Garbage incinerator. 1,811,562; June 23.

Reeves, Paul B., assignor to Reeves Pulley Company, Columbus, Ind. Power transmission belt. 1,811,826; June 23.

Reeves Pulley Company. (See Reeves, Paul B., assignor.)

Reichenbach, Howard F., Wolcott, assignor to Chase Companies, Inc., Waterbury, Conn. Gang or multiple-unit variable electric condenser. 1,810,985; June 23.

Reilly, Frank W., Chattanooga, Tenn., assignor to Williamsport Wire Rope Company. Fitting for heavy duty suspension hangers. 1,811,153; June 23.

Reilly, Frank W., Chattanooga, Tenn., assignor to Williamsport Wire Rope Company. Fitting for light duty suspension hangers. 1,811,154; June 23.

Reilly, Frank W., Chattanooga, Tenn., assignor to Williamsport Wire Rope Company. Wire rope. 1,811,697; June 23.

Reimer, George H., assignor to Patent Novelty Company, Fulton, Ill. Mail box. Des. 84,494; June 23.

Remington Rand Inc. (See Hutchings, Le Roi E., assignor.)

Reserve Holding Company. (See Hovland, Ole C., assignor.)

Reserve Holding Company. (See Tharp, Victor S., assignor.)

Rhodes, Charles J., Wakefield, England. Apparatus for attaching the heads of sheet metal receptacles. 1,811,405; June 23.

Rich, William T., Lufkin, Tex. Log trimming machine. 1,811,155; June 23.

Richardson Company, The. (See Yungblut, G., and Fisher, assignors.)

Richardson, Rodney G. (See Nelson, M. L., and Richardson.)

Richardson, Rodney G., Chicago, and M. L. Nelson, Park Ridge, assignors, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Automatic telephone system. 1,811,146; June 23.

Ridge, Alfred H. (See Davies, G., Ridge, and Royer.)

Riley, Robert S., and O. Craig, assignors to Riley Stoker Corporation, Worcester, Mass. Pulverizing apparatus. 1,811,438; June 23.

Riley Stoker Corporation. (See Riley, R. S., and Craig, assignors.)

Risk, Loren, Minneapolis, Minn. Tire charging air pump. 1,811,647; June 23.

Roantree, Thomas C. (See Kempton, W. H., and Roantree.)

Roberti, Dario, Springfield, Mass. Combination lock. 1,811,563; June 23.

Roberts, Charles L., Reno, Nev. Submarine oil well derrick. 1,811,761; June 23.

Roberts, Frederick R., New York, N. Y. Hatband fastener. 1,811,187; June 23.

Roberts Numbering Machine Company. (See Kern, Maximilian H., assignor.)

Rocke, Louis, Brooklyn, N. Y. Separable fastening device. 1,811,677; June 23.

Rodgers, Alfred A., assignor to Scully Bros. Inc., Los Angeles, Calif. Communicating helmet. 1,811,280; June 23.

Roemer, Max, Los Hills, Calif. Stuffing box. 1,811,334; June 23.

Rogge, Albert C., and H. Gordon, Columbus, Ohio. Heel seat trimming machine. 1,811,188; June 23.

Röhm, Richard. (See Klausner, S., Eichengrün, and Röhm.)

Rohn, Wilhelm, Hanau-on-the-Main, Germany. Furnace heated by high frequency coils. 1,811,213; June 23.

Roney, Hugh B., London, England. Hair cutting machine. 1,811,760; June 23.

Roos, Henry W., Cincinnati, Ohio. Shore attachment. 1,811,094; June 23.

Root, Charles F., assignor to The Chandler and Price Company, Cleveland, Ohio. Sheet feeding mechanism for printing presses. 1,810,929; June 23.

Rosaire, Esme E., Fort Worth, Tex., assignor to Geophysical Research Corporation, New York, N. Y. Determining the straightness of drill holes in the earth. 1,811,648; June 23.

Rottum, Charles. (See Stonequist, Lawrence W., assignor.)

Round, Henry J., Muswell Hill, London, England, assignor to Radio Corporation of America, New York, N. Y. Thermionic amplifier and detector. 1,811,095; June 23.

Royer, George. (See Davies, G., Ridge, and Royer.)

Rudolph, Alfred J., Bywood, Pa. Pressure equal'zing means for heating systems. 1,811,406; June 23.

Rumford Chemical Works. (See Fiske, Augustus H., assignor.)

Runne, Ernst. (See Herz, R., Runne, and Albrecht.)

Russell, Edward A., assignor to Vapor Car Heating Company, Inc., Chicago, Ill. Adjustable thrust bearing and sealing means for flexible pipe joints. 1,811,649; June 23.

Rust, James E., assignor to G. A. E. Kohler, Chicago, Ill. Apparatus for supplying paper to printing presses. 1,811,214; June 23.

Rutenber, Edwin A., assignor to A. J. Lindemann & Hoverson Company, Milwaukee, Wis. Convenience outlet for electric appliances. 1,810,986; June 23.

Ryan, Commodore D., Los Angeles, Calif., assignor, by mesne assignments, to Ralph G. Whitlock Patents, Inc Clutch operating mechanism. 1,811,028; June 23.

Rypinski, Albert B., Laurelton, N. Y., assignor to Metropolitan Device Corporation, Brooklyn, N. Y. Fuse and switch box. 1,811,650; June 23.

Sadler, Hubert C., Hamilton, Ohio. Welding handle. 1,811,156; June 23.

Safety Car Heating & Lighting Company, The. (See Livingston, Alan V., assignor.)

St. John, Everett, Westport, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Guard for guys and the like. 1,811,369; June 23.

Saklatwalla, Byramji D., Crafton, assignor to Vanadium Corporation of America, Bridgeville, Pa. Manufacture of vanadium steel. 1,811,698; June 23.

Salisbury, Carl D., assignor to The Winton Engine Company, Cleveland, Ohio. Injection valve means for hydrocarbon motors. 1,811,596; June 23.

Santurello, Peter, Columbus, Ohio. Hood for a hair drier or article of similar nature. Des. 84,495; June 23.

Scheibel, William, assignor to Bulova Watch Company, Inc., New York, N. Y. Watchcase. Des. 84,496; June 23.

Scherz, Emil. (See Scherz, L. and E.)

Scherz, Louis and E., Wilkes-Barre, Pa. Lunch box. 1,811,439; June 23.

Schlachter, Henry, Beatrice, Nebr., assignor to Dempster Mill Manufacturing Company. Primer for impulse pumps. 1,811,651; June 23.

Schlandt, Arthur F. (See Hyman, J., and Schlandt.)

Schless, Maurice J., New York, N. Y. Jewel setting. 1,811,520; June 23.

Schmidt, Maximilian P., and W. Spietschka, assignors to Kalle & Co., Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Preparing light sensitive layers by means of diazo compounds and the products obtainable thereby. 1,811,029; June 23.

Schmitt, Frank R., Queens Village, N. Y., assignor to American Machine & Foundry Company, Knife heater for wrapping machines. 1,810,987; June 23.

Schnell, Frederick H., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis. Exhaust muffler. 1,811,762; June 23.

Schoel, Fred L., Waterloo, Iowa. Adjustable doughnut machine. 1,811,564; June 23.

Schuda, Ernest J., assignor to Lovell Manufacturing Company, Erie, Pa. Wringer. 1,811,096; June 23.

Schuh, Otto H., Denver, Colo. Lifting device. 1,811,652; June 23.

Schwabacher, Sam I., San Francisco, Calif. Wave motor. 1,811,565; June 23.

Schwartz, Henry L., C. A. Quast, and L. Spitz, Milwaukee, Wis. Door spring. 1,811,653; June 23.

Schwartz, Michael, assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill. Multioffice automatic telephone system. Re18,113; June 23.

Schwarzkopf, Kurt, Tempelhof, near Berlin, Germany. Pulverulent preparation for the production of a rinsing liquid for the after treatment of washed animal fibers, woolen or silken fabrics, and especially the hair of the head. 1,811,809; June 23.

Schweiger, John F., Flora, Ind. Fountain pen. 1,811,763; June 23.

Schwerdtfeger, Walter, Rathenow, Germany. Centrifugal apparatus for purifying oil. 1,811,157; June 23.

Scott, Alexander C., Faversham, England. Prevention of caking of crystals, powders and the like. 1,811,699; June 23.

Scott, Herbert G., Whitestone Landing, assignor to Rosamund L. G. Scott, Whitestone Landing, N. Y. Tie form and holder. 1,811,097; June 23.

Scott, James A., Somerville, Mass. Corrugated baking pan liner. 1,811,566; June 23.

Scott, Rosamund L. G. (See Scott, Herbert G., assignor.)

Scovill Manufacturing Company. (See Clemmons, Herbert D., assignor.)

Scovill Manufacturing Company. (See Goss, John H., assignor.)

Scullin Steel Co. (See Dreibuss, H. C., and Chiles, assignors.)

Scully Bros. Inc. (See Rodgers, Alfred A., assignor.)

Seckendorf, Richard P., Somerville, assignor to The Cambridge Paper Box Co., Cambridge, Mass. Box and covering blank therefor. 1,811,478; June 23.

Seitz, Oskar, Baden, Switzerland. Electric current rectifier. 1,811,521; June 23.

Seth, George W. (See Geisler, O., and Seth.)

Shakespeare Company. (See Burdick, Frank, assignor.)

Shank, Arthur E., Cleveland Heights, G. Fisler, Cleveland, and J. M. Linden, East Cleveland, assignors to The Van Dorn Iron Works Company, Cleveland, Ohio. Jail door mechanism. 1,811,246; June 23.

Shapiro, Abraham, assignor to Universal Stamping & Mfg. Co., Chicago, Ill. Casing for a cinematograph. Des. 84,497; June 23.

Shaw, Allan B., assignor to W. C. Shaw, Delaware, Ohio. Excavating and scraping apparatus. 1,811,030; June 23.

Shaw, Wesley C. (See Shaw, Allan B., assignor.)

Shell Development Company. (See Pyzel, Daniel, assignor.)

Shepard, Bernard J., Brooklyn, N. Y. Windshield wiper. 1,811,440; June 23

Shepherd, John E., assignor to National Cold Steam Company, Charlottesville, Va. Internally fired heat or power generator. 1,811,654; June 23.

Sherwood, William M. F., London, England. Massage device. 1,811,764; June 23.

Shook, Florain J., assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio. Vulcanizer. 1,811,567; June 23.

Shover, Barton R., Pittsburgh, Pa., and F. P. Townsend, East Orange, N. J., assignors to Strip Tin Plate Company, Pittsburgh, Pa. Furnace. 1,811,522; June 23.

Shroyer, Perry H., Dayton, Ohio. Adjustable clothesline prop. 1,811,281; June 23.

Shuster, F. B., Company, The. (See Matteson, George F., assignor.)

Sieg, Karl, Brooklawn, assignor to S. M. Langston Co., Camden, N. J. Paper corrugating machine. 1,810,930; June 23.

Silunt-Kaddi Corporation. (See Boden, J. E., and Orr, assignors.)

Simmons, Oliver G., Lakewood, Ohio. Generating gears. 1,811,568; June 23.

Simmons, Oliver G., Lakewood, assignor to The National Tool Company, Cleveland, Ohio. Knife for hullers. 1,811,282; June 23.

Simon, Karl A., assignor of one-half to E. J. Boardman, Jackson, Mich. Capsule toothbrush. 1,811,833; June 23.

Sinclair Refining Company. (See Isom, Edward W., assignor.)

Skelly, Ulysses G., Los Angeles, Calif. Oil casing plug. 1,811,407; June 23.

Slater, Fred M., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Valve mechanism for rock drills. 1,810,988; June 23.

Smalley, Edwin L., Whitefish Bay, assignor to Hevi Duty Electric Company, Milwaukee, Wis. Furnace or heat treatment chamber cooling means. 1,811,158; June 23.

Smalley, Edwin L., Whitefish Bay, assignor to Hevi Duty Electric Company, Milwaukee, Wis. Furnace or heat treatment chamber cooling means. 1,811,159; June 23.

Smiley, Orvall, Indianapolis, Ind. Treating solidified carbon dioxide. 1,810,989; June 23.

Smith, Aden B., assignor to The D. A. Ebinger Sanitary Mfg. Co., Columbus, Ohio. Liquid refrigerating and dispensing apparatus. 1,811,215; June 23.

Smith, A. O., Corporation. (See Bormann, H. R., and Steinhart, assignors.)

Smith, A. O., Corporation. (See Burnish, Howard J., assignor.)

Smith, A. O., Corporation. (See Smith, George M., assignor.)

Smith, Arthur J., Kansas City, Mo., assignor to Smith Engineering Company. Bubble tray. 1,811,247; June 23.

Smith, Charles D. (See Smith, Edward F. and C. D.)

Smith, Clyde L., and C. B. Watson, Chicago, Ill. Oil fractionating apparatus. 1,811,189; June 23.

Smith, Edward F. and C. D., Cincinnati, Ohio. Water wheel. 1,811,031; June 23.

Smith Engineering Company. (See Smith, Arthur J., assignor.)

Smith, Frederick H., San Diego, Calif. Hose coupling. 1,811,283; June 23.

Smith, George M., assignor to A. O. Smith Corporation, Milwaukee, Wis. Making circumferentially corrugated sheet metal pipe. 1,811,678; June 23.

Smith, Leslie T. (See Blackwell, T. E., and Smith.)

Smith, Roswell B. (See Knapp, Charles C., assignor.)

Smith, Russell T., assignor to The Crosley Radio Corporation, Cincinnati, Ohio. Refrigeration unit. 1,811,523; June 23.

Smith, Sam R., assignor of one-fourth to P. G. Hoffman, and one-fourth to D. B. Hoffman, South Bend, Ind. Airplane propulsion device. 1,811,441; June 23.

Smith, Willoughby S., Benchams, Newton Poppleford, H. J. Garnett, Sevenoaks, and W. F. Randall, Ewell, England. Manufacture of magnetic alloy. 1,811,032; June 23.

Smitmans, John A., assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Clutch mechanism. 1,811,655; June 23.

Snelling, Walter O., Allentown, Pa. Thermostat. 1,811,442; June 23.

Snelling, Walter O., Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y. Apparatus and method for testing the effectiveness of protective mediums. 1,811,765; June 23.

Società Italiana Pirelli. (See Levi, Tullio G., assignor.)

Société Continentale Parker. (See Boulanger, Charles, assignor.)

Societe de Condensation & d'Applications Mecaniques. (See Florisson, Charles L., assignor.)

Solá, Casimiro H., Barcelona, Spain. Machine for undulating wire. 1,811,098; June 23.

Solidon Products, Inc. (See Lukens, Hiram S., assignor.)

Somersalo, George A., New York, N. Y. System of selective signaling. 1,811,443; June 23.

Sommerbeck, Adolph G., Chicago, Ill., assignor to Kex Company, Incorporated, St. Louis, Mo. Repairing punctured tires. 1,811,656; June 23.

Sonotone Corporation. (See Lieber, Hugo, assignor.)

Sords, Otto E., Cuyahoga Falls, assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Tire casing spreading machine. 1,811,284; June 23.

Sosy, Inc. (See Leventhal, Mitchell, assignor.)

Soucy, Joseph F., Lowell, Mass. Metal fence. 1,811,370; June 23.

Spahr, Howard A., Milwaukee, Wis. Electric switch. 1,810,931; June 23.

Spalding, A. G., & Bros. (See Gammeter, John R., assignor.)

Spaugh, Charles A., Durham, Okla. Fence wire connection. 1,811,216; June 23.

Spaugh, Charles A., Durham, Okla. Fence post brace. 1,811,217; June 23.

Spaugh, Charles A., Durham, Okla. Fence panel coupling. 1,811,335; June 23.

Spaugh, Charles A., Durham, Okla. Gate. 1,811,810; June 23.

Spencer, Elmer A., assignor to Ramsey Accessories Manufacturing Corporation, St. Louis, Mo. Piston ring clamp. 1,811,248; June 23.

Sperry Gyroscope Company. (See Harris, Percy E., assignor.)

Spicers Limited. (See Hands, Henry J., assignor.)

Spietschka, Walter. (See Schmidt, M. P., and Spietschka.)

Spino, Camillo, Latrobe, assignor of one-half to E. D'Aviero, Clarksville, Pa. Mop head. 1,811,336; June 23.

Spitz, Louis. (See Schwartz, H. L., Quast, and Spitz.)

Square D Company. (See Ball, Albert P., assignor.)

Squire, Harry E., Oakland, assignor of one-half to F. G. White, San Francisco, Calif. Reenforced concrete pile construction. 1,811,479; June 23.

Standard Oil Company. (See Bacheldor, W. H., and Wood, assignors.)

Standard Oil Company of California. (See Chappell, Marvin L., assignor.)

Standard Oil Company of California. (See Osmer, James H., assignor.)

Standard Oil Development Company. (See Buc, H. E., and Tate, assignors.)

Standard Oil Development Company. (See Mann, Matthew D., jr., assignor.)

Standard Oil Development Company. (See Rannery, Leo, assignor.)

Standard Sanitary Manufacturing Company. (See Brain, George, assignor.)
Stanley Works, The. (See Crowe, John M., assignor.)
Stark, John W., Bowling Green, Ky. Dempuntable rim. 1,811,337; June 23.
Stationers Loose Leaf Co. (See Lotter, Adolph G., assignor.)
Steadman, Edwin E., and E. D. Kuhn, North Tonawanda, N. Y., said Kuhn assignor to said Steadman. Advertising screen. 1,811,766; June 23.
Stebbins, Albert H., Los Angeles, Calif. Sluice concentrator. 1,811,408; June 23.
Steele, Carmi J., assignor of one-third to R. C. Troeger and one-third to W. R. Coates, Los Angeles, Calif. Lavatory. Des. 84,498; June 23.
Steele, Carmi J., assignor of one-third to R. C. Troeger and one-third to W. R. Coates, Los Angeles, Calif. Lavatory. Des. 84,499; June 23.
Steele, Carmi J., assignor of one-third to R. C. Troeger and one-third to W. R. Coates, Los Angeles, Calif. Bathtub. Des. 84,500; June 23.
Stein, John A., New York, N. Y., assignor to American Machine & Foundry Company. Cigarette machine drive. 1,810,932; June 23.
Steinbart, Alfred, Pittsburgh, Pa. Apparatus for cleaning gases. 1,811,597; June 23.
Steinhart, Alfons. (See Bormann, H. R., and Steinhart.)
Stelzer, Otto R. (See Hanson, W. L., and Stelzer.)
Stepankow, Nikolas. (See Boyko, John, assignor.)
Stevens, Horace D., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Caster testing device. 1,811,285; June 23.
Stevenson, Arthur E., Chicago, Ill., assignor to Continental Can Company, Inc., New York, N. Y. Container for food products. 1,811,160; June 23.
Stewart-Warner Corporation. (See Moulet, Jean L. L. A. A.)
Stille, Curt, assignor to Telegraphie-Patent-Syndikat G. m. b. H., Berlin, Germany. Duplication of sound records obtained by magnetic means. 1,811,817; June 23.
Stinson, Leslie, Grand Forks, N. Dak. Carbonating apparatus. 1,811,218; June 23.
Stockwell, Sidney E., and A. E. Murdock, Hartford, C. J. Winzig and E. F. Morris, West Hartford, assignors to The New Departure Manufacturing Company, Bristol, Conn. Feeler control gauge. 1,811,480; June 23.
Stoll, Bessie K. (See Mosley, Abraham K., assignor.)
Stone, Morris, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Strobo-rotoscopic device. 1,811,481; June 23.
Stonequist, Lawrence W., assignor of one-half to Charles Rottum, Chicago, Ill. Radio apparatus. 1,811,099; June 23.
Stowe & Woodward Company. (See Woodward, Frederick R., assignor.)
Strip Tin Plate Company. (See Shover, B. R., and Townsend, assignors.)
Stroebel, John S., Milwaukee, Wis. Paint pot holder. 1,811,065; June 23.
Structural Concrete Units Corporation. (See Thomas, Avila O., assignor.)
Sun-Maid Raisin Growers of California. (See Forrest, Thomas W. W., assignor.)
Supreme Instruments Corporation. (See Johnson, Vivion A., assignor.)
Swenson Evaporator Company. (See Badger, Walter L., assignor.)
Takimizu, Satoru, Toyotama Gun, Tokyo Fu., and H. Idemitsu, Susaki Fukuoka, Japan. Oil burner. 1,811,371; June 23.
Tannewitz, Carl E., Grand Rapids, Mich. Sawing machine. 1,811,066; June 23.
Tarbox, Hugh B., Toronto, Ontario, Canada. Lever mechanism. 1,810,990; June 23.
Tate, Howard R. (See Buc, H. E., and Tate.)
Tate, Kenneth L., assignor to Taylor Instrument Companies, Rochester, N. Y. Thermometer. 1,811,190; June 23.
Tayler, Clive O., Victoria, British Columbia, Canada. Electrostatic acoustic amplifying device. 1,811,482; June 23.
Taylor, Harden F., Bronx, assignor to The Atlantic Coast Fisheries Company, New York, N. Y. Smoke generator. 1,811,191; June 23.
Taylor, Harry, assignor of one-half to P. Kranse, West Babylon, N. Y. Stripping tool. 1,811,372; June 23.
Taylor Instrument Companies. (See Barr, Daniel R., assignor.)
Taylor Instrument Companies. (See Clark, Herbert A., assignor.)
Taylor Instrument Companies. (See Ireland, George B., assignor.)
Taylor Instrument Companies. (See Norwood, Harry Y., assignor.)
Taylor Instrument Companies. (See Tate, Kenneth L., assignor.)
Taylor, Joseph H., Athens, Tenn. Tractor plow. 1,811,733; June 23.
Telefonaktiebolaget L. M., Ericsson. (See Johnson, Karl G., assignor.)
Telegraphie-Patent-Syndikat G. m. b. H. (See Stille, Curt, assignor.)
Teletype Corporation. (See Kleinschmidt, Edward E., assignor.)
Temple, Fred W., assignor to Temple, Inc., Chicago, Ill. Amplifying horn. 1,811,598; June 23.
Temple, Inc. (See Temple, Fred W., assignor.)
Templeton, John, Detroit, Mich. Lamp casing. Des. 84,501; June 23.
Tenney, Ashton M. (See Hoxie, F. J., and Tenney.)
Ternstedt Manufacturing Company. (See De Sana, Arthur J., assignor.)
Ternstedt Manufacturing Company. (See Flynn, John B., assignor.)
Terre Haute Paper Company, The. (See Bishop, Benjamin M., assignor.)
Texaco Salt Products Company. (See Martin, Otto V., assignor.)
Texas Company, The. (See Dudley, Andrew T., assignor.)
Tharp, Victor S., Elmhurst, assignor to Reserve Holding Company, Chicago, Ill. Toll service trunking system. 1,811,444; June 23.
Tharp, Victor S., Elmhurst, assignor to Reserve Holding Company, Chicago, Ill. Multioffice telephone system. 1,811,445; June 23.
Thayer, Howard C., Jersey City, N. J., assignor to Bernitz Furnace Appliance Company, Boston, Mass. Furnace wall. 1,811,373; June 23.
Theess, Henry, Los Angeles, Calif. Brush. 1,811,192; June 23.
Thomas, Adolph A., New York, N. Y. Vehicle bumper. 1,811,569; June 23.
Thomas, Avila O., assignor to The Structural Concrete Units Corporation, Detroit, Mich. Unit wall construction. 1,811,161; June 23.
Thomas, Lucy C. (See Ament, Lucy C., assignor.)
Thomas, Thomas L., assignor to The Youngstown Foundry & Machine Company, Youngstown, Ohio. Machine for roller leveling and stretching steel sheets. 1,811,590; June 23.
Thompson, William H. (See Kipp, R. H., and Thompson.)
Thomson, S. H., Manufacturing Company. (See Hummert, Robert H., assignor.)
Thormann, Albert F. W., Pittsburgh, Pa. Electroplating apparatus. 1,811,409; June 23.
Thorn, J. S., Company. (See Doering, Albert L., assignor.)
Thorne, Clayton L., Chicago, Ill. Steam generating apparatus. 1,811,193; June 23.
Thornton, Irving T., Buffalo, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Apparatus for screening pastes. 1,810,933; June 23.
Thornton, Myron, assignor of forty per cent to Roscoe R. Gardner, Glenrock, Wyo. Land leveling implement. 1,811,811; June 23.
Tidy Products Corporation. (See Bloom, David, assignor.)
Timken-Detroit Axle Company, The. (See Morgan, Mathew B., assignor.)
Tollspry, Burgess T., San Dimas, Calif. Smudge pot lifter. 1,811,033; June 23.
Townsend, Frank P. (See Shover, B. R., and Townsend.)
Transtrom, Robert L. (See Edwards, C. H., and Transtrom.)
Treacy, Cyril S., Mount Vernon, assignor to International Neon Company, Incorporated, New York, N. Y. Operation of luminous tubes. 1,811,100; June 23.
Trico Products Corporation. (See Bean, Barton A., jr., assignor.)
Trico Products Corporation. (See Folberth, Frederick G. and W. M., assignors.)
Trico Products Corporation. (See Horton, Erwin C., assignor.)
Trist, Arthur R., London, England, assignor to William Y. Dear, Montclair, N. J., as trustee. Planographic printing plate having mercurialized ink refusing areas for photomechanical printing. 1,811,734; June 23.
Troeger, Roy C., et al. (See Steele, Carmi J., assignor.)
Trojan Powder Company. (See Boyd, Richard N., assignor.)
Trojan Powder Company. (See Snelling, Walter O., assignor.)
Troyer-Fox Manufacturing Co. (See Troyer, N., and Pearson, assignors.)
Troyer, Nelson, and P. E. Pearson, assignors to Troyer-Fox Manufacturing Co., Seattle, Wash. Can end lining machine. 1,811,162; June 23.
Trullinger, Herbert A., Clackamas County, Oreg. Hen's nest. 1,811,338; June 23.
Truscon Steel Company. (See Kane, Thomas H., assignor.)
Turner, Horace W., Phoenix, N. Y. Windshield heater. 1,811,767; June 23.
Tyndall, Jessie C., St. Louis, Mo. Drinking cup. 1,811,286; June 23.
Uber, Bowman B., Youngstown, Ohio. Amusement device. 1,811,812; June 23.
Union Steel Products Company. (See Bitney, Dewey H., assignor.)
Union Switch & Signal Company, The. (See Ackerly, Donald G., assignor.)
United-Carr Fastener Corporation. (See Carr, Moses F., assignor.)
United Engineering & Foundry Company. (See Smitmans, John A., assignor.)
U S Bobbin & Shuttle Company, 1929. (See Buffington, Edwin C., assignor.)
United States Cabinet Bed Co. (See Martin, Joseph, assignor.)

United States Gypsum Company. (See Balduf, Bruno E., assignor.)
Union Switch & Signal Company, The. (See Baughman, George W., assignor.)
Union Switch & Signal Company, The. (See Bryan, Harold W., assignor.)
Universal Form Clamp Co. (See Whitescarver, Charles T., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Fairchild, Oscar H., assignor.)
Universal Oil Products Company. (See Held, Jacob B., assignor.)
Universal Oil Products Company. (See Morrell, J. C., and Benner, assignors.)
Universal Oven Company. (See Elliott, Irwin, assignor.)
Universal Stamping & Mfg. Co. (See Shapiro, Abraham, assignor.)
Updegrave, William M., Johnstown, Pa. Treating and exercising the ocular muscles. 1,811,034; June 23.
Urich, Edward F. (See Kerr, R. G., and Urich.)
Valiquette, William L., assignor to The Harris-Seybold-Potter Company, Dayton, Ohio. Clamp for paper cutters. 1,811,483; June 23.
Vallé, Paul B., New Haven, Conn. Condenser and making same. 1,811,067; June 23.
Vanadium Corporation of America. (See Saklatwalla, Byramji D., assignor.)
Van Bezel, Frank, assignor to Dual Aircraft Motors Inc., Ltd., El Centro, Calif. Packing gland. 1,811,735; June 23.
Van Bezel, Frank, assignor to Dual Aircraft Motors Inc., Ltd., El Centro, Calif. Piston rod coupling. 1,811,736; June 23.
Van Bezel, Frank A., assignor to Dual Aircraft Motors Inc., Ltd., El Centro, Calif. Piston rod connection. 1,811,737; June 23.
Van Bezel, Frank A., assignor to Dual Aircraft Motors Inc., Ltd., El Centro, Calif. Sleeve valve operating shaft. 1,811,768; June 23.
Vandegrift, William B., Minneapolis, and S. O. Bystrom, St. Paul, Minn. Radiator cap ornament. Des. 84,502; June 23.
Van der Does de Bije, Anne J. M. A., The Hague, Netherlands. Furnace. 1,811,339; June 23.
Vanderveld, Anthony, assignor to Grand Rapids Store Equipment Corporation, Grand Rapids, Mich. Binding for linoleum tops. 1,810,991; June 23.
Van Dorn Iron Works Company, The. (See Garber, Harry D., assignor.)
Van Dorn Iron Works Company, The. (See Shank, A. E., Fisler, and Linden, assignors.)
Van Straaten, Louis O., Biggekerke, Netherlands. Producing cliches for two, three or more color prints, lantern slides, and colored windows, and the like. 1,811,600; June 23.
Vapor Car Heating Company. (See Russell, Edward A., assignor.)
Varney, William W. (See Watts, Roy T., assignor.)
Veber, Georges Epinal, assignor to Roger G. L. Coutant, Vincennes, Seine, France. Bevel wheel. 1,811,446; June 23.
Vernet, Sergius, Brooklyn, N. Y. Car heater. Re18,110; June 23.
Vetter, Ignatz G., Buffalo, N. Y. Lens grinding and polishing machine. 1,811,219; June 23.
Vicars, William. (See Perks, Walter, assignor.)
Vickers-Armstrong Limited. (See Larsson, C. A., and Higson, assignors.)
Vickers Limited. (See Gray, Percy W., assignor.)
Victor Chemical Works. (See Woodstock, W. H., and McDonald, assignors.)
Victor Talking Machine Company. (See Hollerith, Herman, jr., assignor.)
Vidrio Products Corporation. (See Goldblatt, Henry J., assignor.)
Vitoux, Marcel, Troyes, France. Needle for repairing knitted articles. 1,811,524; June 23.
Vogt, Charles H., Philadelphia, Pa. Sausage wrapping method and apparatus. 1,811,163; June 23.
Voith, J. M. (See Heller, Walther, assignor.)
Volet, René A. L., La Varenne St. Hilaire, France. Ball and roller bearing. 1,811,679; June 23.
Von Dallwitz-Wegner, Richard, Heidelberg, Germany. Determining the viscosity of liquid substances. 1,810,992; June 23.
Vorbrodt, Werner. (See Geissen, K., and Vorbrodt.)
Wagner, Cary R., Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich. Converting oils in vapor phase. 1,811,194; June 23.
Wagner, Friedrich, Russdorf B/Oberfrohna, Germany. Double-sided warp goods. 1,811,813; June 23.
Walinsky, Ossip J., New York, N. Y. Traveling case. 1,811,035; June 23.
Walker, Charles I., Los Angeles, Calif. Glare shield for eyelenses. 1,811,525; June 23.
Walker, Herbert W. (See Calcott, W. S., and Walker.)
Walter, Richard R., Starnberg, Germany. Alloy. 1,811,068; June 23.
Walworth, Arthur C. (See Palson, William C., assignor.)
Warwick China Company. (See Hale, Edwin, assignor.)
Warwick Mills et al. (See Hoxie, F. J., and Tenney, assignors.)
Wasserman, Jacob. (See Cohen, S. H., and Wasserman.)
Watkins, George B., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for use in the manufacture of laminated glass. 1,810,934; June 23.
Watkins, Harold F., Oakland, assignor to Watkins Intermitting Pump Company, San Francisco, Calif. Oil well pump. 1,811,101; June 23.
Watkins Intermitting Pump Company. (See Watkins, Harold F., assignor.)
Watkins, William E., assignor to Copper Plate Sheet & Tube Company, New York, N. Y. Apparatus for handling sheet metal. 1,811,374; June 23.
Watson, Cornelius B. (See Smith, C. L., and Watson.)
Watson, Cornelius B., assignor to The Pure Oil Company, Chicago, Ill. Treating petroleum oil. 1,811,195; June 23.
Watson, Frank, assignor to The Lafayette Company, Inc., Batlimore, Md. Canned goods container. 1,811,340; June 23.
Watts, Roy T., assignor, by mesne assignments, to W. W. Varney, Baltimore, Md. Phonograph. 1,811,410; June 23.
Wayne Company. (See Edwards, C. H., and Transtrom, assignors.)
Weaver, John P., Anderson, Ind. Telemetric indicating system. 1,811,769; June 23.
Webb, Edward L., West Liberty, Iowa. Grinder. 1,811,069; June 23.
Weissfloch, Konrad K., Nuremberg, Germany. Placard typewriting machine. 1,811,070; June 23.
Weith, Archie J. (See Redman, L. V., Weith, and Brock.)
Welch, William A., Holyoke, Mass. Envelope. 1,811,341; June 23.
Wellington, Sears & Company et al. (See Hoxie, F. J., and Tenney, assignors.)
Weltz, Henry F., St. Louis, Mo., assignor to Milwaukee Stamping Company, Milwaukee, Wis. Manufacturing traveling bags. 1,810 993; June 23.
West, Byron L. (See Wood, R. O., and West.)
West, Homer B. (See George, R. B., and West.)
West, Paul F., and E. H. Reed, Detroit, Mich. Robbery-proof equipment. 1,811,447; June 23.
Western Clock Company. (See Neureuther, Andrew H., assignor.)
Western Electric Company. (See Adams, R. R., and Griggs, assignors.)
Western Union Telegraph Company, The. (See Morgenstern, Ronald V., assignor.)
Western Union Telegraph Company, The. (See Wheeler, Evan R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Austin, Bascum O., assignor.)
Westinghouse Electric and Manufacturing Company. (See Baum, Frank G., assignor.)
Westinghouse Electric & Manufacturing Company. (See Carlisle, Richard W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Eschholz, Otto H., assignor.)
Westinghouse Electric and Manufacturing Company. (See George, R. B., and West, assignors.)
Westinghouse Electric & Manufacturing Company. (See Goddard, Charles F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Kempton, W. H., and Roantree, assignors.)
Westinghouse Electric & Manufacturing Company. (See Kraut, Samuel B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Nagel, Harry C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Peterson, Alfred J. A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Stone, Morris, assignor.)
Westlund, John H., Marshalltown, Iowa. Safety device for automobiles. 1,811,484; June 23.
Wheeler, Evan R., North Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Projecting apparatus. 1,811,770; June 23.
Wheeling Steel Corporation. (See Kielberg, Henry, assignor.)
Whitacre, Donald D., Waynesburg, Ohio. Cutter. 1,811,412; June 23.
Whitacre, Donald D., Waynesburg, and J. C. Wood, Lakewood, Ohio. Wall construction. 1,811,411; June 23.
White, Frank G. (See Squire, Harry E., assignor.)
Whitescarver, Charles T., New York, N. Y., assignor to Universal Form Clamp Co., Chicago, Ill. Form construction for concrete floors. 1,811,249; June 23.
Whitlock, Ralph G., Patents, Inc. (See Ryan, Commodore D., assignor.)
Whittall, M. J., Associates. (See Hall, Walter, assignor.)
Wiemann, William P., Pittsburgh, Pa. Internal combustion engine. 1,811,771; June 23.
Wilbur, Lawrence S., Evanston, Ill., assignor to National Rail Joint Corporation. Splice bar or fish plate. 1,811,342; June 23.
Wildt & Company Limited. (See Wildt, E., and Holmes, assignors.)
Wildt, Edwin, and H. H., Holmes, assignors to Wildt & Company Limited, Leicester, England. Knitting machine. 1,811,700; June 23.
Williams, Calvert B., Santa Cruz, Calif. Musical instrument string securing device. 1,811,738; June 23.
Williams, J. H., & Co. (See Kress, Willard C., assignor.)
Williams, Rowland T. D. (See Hey, H., Evans, Williams, and Newall.)

Williams, Samuel A., Scarsdale, assignor to Johns-Manville Corporation, New York, N. Y. Reenforced insulation fabric. 1,811,416; June 23.
Williamsport Wire Rope Company. (See Reilly, Frank W., assignor.)
Willis, Carter A. (See Willis, Reuben M., C. A., and G. J.)
Willis Drilling Machine and Manufacturing Company, The. (See Willis, Reuben M., C. A., and G. J., assignors.)
Willis, Gordon J. (See Willis, Reuben M., C. A., and G. J.)
Willis, Reuben M., C. A., and G. J., assignors to The Willis Drilling Machine and Manufacturing Company, Chanute, Kans. Attachment for trucks. 1,811,739; June 23.
Willoughby, Lively B., assignor to Ballard & Ballard Company, Louisville, Ky. Packeting dough. 1,811,772; June 23.
Wilson, Alfred E., Kent, England. Jointing of lead or like pipes or sheaths. 1,811,701; June 23.
Wilson, Almira L. H., Virden, Ill. Closure fastener. 1,811,773; June 23.
Wilson, Clarence C., assignor to The Compressed Paper Box Corporation, Bridgeport, Conn. Display box. 1,811,164; June 23.
Wilson, Fred D. (See Beatty, W. T., Davis, and Wilson.)
Wilson-Jones Company. (See Burgoyne, John L., assignor.)
Wilson, Lee M., Los Angeles, Calif. Operating support. 1,811,036; June 23.
Wine, William E., Toledo, Ohio. Railway car. 1,811,448; June 23.
Winning, Robert K., Wauwatosa, assignor to Clum Manufacturing Company, Milwaukee, Wis. Steering column switch. 1,810,994; June 23.
Winter, Joseph W., Penfield, Pa., assignor to Master Domestic Refrigerating Company, Inc., Consbohocken, Pa. Thermostatic snap control. 1,811,287; June 23.
Winton, Alexander, Lakewood, Ohio. Injection valve means. 1,811,601; June 23.
Winton Engine Company, The. (See Salisbury, Carl D., assignor.)
Winzig, Charles J. (See Stockwell, S. E., Murdock, Winzig, and Morris.)
Wire Novelty Manufacturing Company, The. (See Heather, George B., assignor.)
Wired Radio, Inc. (See Harrison, Jamison R., assignor.)
Wiseman, Ray C., Parkersburg, W. Va. Poultry feed trough. 1,811,413; June 23.
Woelk, William H., Crookston, Minn. Woodworker's clamp. 1,810,995; June 23.
Wolf, Charles B. (See Grove, Jacob R.)
Wolf, Frank, New York, N. Y. Holder for collapsible tubes. 1,811,220; June 23.
Wolf, Frank, New York, N. Y. Holder for collapsible tubes. 1,811,221; June 23.
Wolf, Frank, New York, N. Y. Stand or holder for containers. 1,811,222; June 23.
Wolf, Frank, New York, N. Y. Holder for containers or storage vessels. 1,811,223; June 23.
Wolf, Frank, New York, N. Y. Accessory device for collapsible tubes. 1,811,224; June 23.
Wolter, Jonny, Hamburg, Germany. Dustbin. 1,811,165; June 23.
Wood, John C. (See Whitacre, D. D., and Wood.)
Wood, Robert O., and B. L. West, Hamburg, assignors to National Aniline & Chemical Company, Inc., New York, N. Y. Apparatus for screening liquid materials. 1,810,935; June 23.
Wood, Wilfred R., London, England, assignor to International Combustion Engineering Corporation, New York, N. Y. Furnace for burning pulverized fuel. 1,811,657; June 23.
Wood, Wilfred R., London, England, assignor to International Combustion Engineering Corporation, New York, N. Y. Steam generation. 1,811,658; June 23.
Wood, William E. (See Bacheldor, W. H., and Wood.)
Woodstock, Willard H., and G. A. McDonald, Chicago Heights, Ill., assignors to Victor Chemical Works. Manufacutre of phosphorus sulphochloride. 1,811,602; June 23.
Woodward, Frederick R., Newton, assignor to Stowe & Woodward Company, Newton, Upper Falls, Mass. Roll. Re18,111; June 23.
Woodweb Shade Manufacturers, Inc. (See Boehm, Carl N., assignor.)
Worden, Francis G., Brinkley, Ark. Stuffing box. 1,811,814; June 23.
Wright, Alfred R., Essex, Conn. Card table. 1,811,526; June 23.
Wysong, Stewart, assignor of one-half to C. W. Hendrickson, Oakland, Calif. Poultry drinking fountain. 1,811,375; June 23.
Yankee Metal Products Corp. (See Putterman, Benjamin, assignor.)
Yardley, Farnham, West Orange, N. J., assignor to Jenkins Bros., New York, N. Y. Check valve structure. 1,811,166; June 23.
Young, Fred M., Racine, Wis. Multiple unit space heater. 1,811,071; June 23.
Young, Fred M., Racine, Wis. Radiator. 1,811,527; June 23.
Youngstown Foundry & Machine Company, The. (See Thomas, Thomas L., assignor.)
Yungblut, Gibson, Dayton, Ky., and H. C. Fisher, Cincinnati, assignors to The Richardson Company, Lockland, Ohio. Forming metal foils. 1,811,485; June 23.
Zeh, Edmund W., Newark, N. J. Screw power press. 1,810,996; June 23.
Zehnder, Adolf, Birmenstorf, and J. Kappeler, Mellingen, Switzerland. Braiding machine. 1,811,774; June 23.
Zerbee, Alfonso F., New York, N. Y. Savings bank. 1,811,225; June 23.
Zetterlund, Carl, Chicago, Ill. Hoisting apparatus. 1,810,936; June 23.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 23D DAY OF JUNE, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid and oleum by the contact process, Production of sulphuric. F. Lechler. 1,811,797; June 23.
Acids and making same, Trihalogen arylthioglycolic. R. Hers, E. Runne, and E. Albrecht. 1,811,316; June 23.
Acoustic amplifying device, Electrostatic. C. O. Tayler. 1,811,482; June 23.
Acoustical board. F. M. Dietz. 1,811,385; June 23.
Actuating apparatus for theatre curtains and the like. E. F. Allen. 1,810,890; June 23.
Adjustable wrench. J. Pehrsson. 1,811,148; June 23.
Advertising apparatus. B. T. Parris. 1,811,818; June 23.
Advertising device. R. H. Kerr and E. F. Urich. 1,811,820; June 23.
Advertising exhibitor. A. J. Kauffman. 1,811,720; June 23.
Advertising screen. E. E. Steadman and E. D. Kuhn. 1,811,766; June 23.
Aeroplane propeller. C. Byer. 1,811,000; June 23.
Air circulating device for hot air furnaces. E. Ackerman. 1,811,828; June 23.
Air conditioning system. B. Bannister. 1,811,378; June 23.
Aircraft. C. B. Harper. 1,811,390; June 23.
Aircraft landing and releasing apparatus. W. Kiwull. 1,811,321; June 23.
Aircraft with rotative wings. J. de la Cierva. 1,811,303; June 23.
Air of inclosures, Method and apparatus for humidifying and cooling the. A. F. Karlson. 1,810,915; June 23.
Airplane. R. A. A. Couzinet. 1,811,304; June 23.
Airplane bodies, Handling carriage for. G. Loening. 1,811,551; June 23.
Airplane, Control members of an. R. A. A. Couzinet. 1,811,305; June 23.
Airplane landing brake. S. C. Irving. 1,811,199; June 23.
Airplane propulsion device. S. R. Smith. 1,811,441; June 23.
Air preheater, Regenerative. G. C. Cook. 1,811,455; June 23.
Air register seal, Warm. G. F. Gehri. 1,811,231; June 23.
Airship. G. D. Hazard. 1,811,196; June 23.
Alarm: *See*—
Fire alarm.
Alarm or signal for boilers. F. J. Mildenberger. 1,811,800; June 23.
Alarm time switch. A. M. De Jeu. 1,811,281; June 23.
Alloy. R. R. Walter. 1,811,068; June 23.
Alloy, Hard facing. E. C. Belding. 1,811,487; June 23.
Alloy, Manufacture of magnetic. W. S. Smith, H. J. Garnett, Poppleford, and W. F. Randall. 1,811,032; June 23.
Alloy, Nonferrous. R. L. Binney. 1,811,682; June 23.
Aluminum, magnesium and their alloys against corrosion, Process and product for protecting. C. Boulanger. 1,811,298; June 23.
Ammonium nitrate, Manufacturing. R. N. Boyd. 1,811,712; June 23.
Amplifier and detector, Thermionic. H. J. Round. 1,811,095; June 23.
Amusement device. J. L. Meehan. 1,811,758; June 23.
Amusement device. N. Myre. 1,811,092; June 23.
Amusement device. B. R. Uber. 1,811,812; June 23.
Analyzing and control system and apparatus therefor, Automatic. A. C. Harrison. 1,811,233; June 23.
Animal fiber and the product, Treatment of. A. P. Furman. 1,811,119; June 23.
Arch correcting insert for shoes. I. J. Marcelle. 1,811,641; June 23.
Arch correcting member. I. J. Marcelle. 1,811,640; June 23.
Arch support, Foot. E. Frei. 1,811,787; June 23.
Article attaching device. K. L. Johnston. 1,810,914; June 23.
Articles produced from plastic materials, Molding. H. J. Kasch. 1,811,086; June 23.
Autographic register. F. E. Pfeiffer. 1,811,676; June 23.
Automatic intermitter. S. D. Jackson. 1,811,396; June 23.
Automobile. A. H. Leamy. Des. 84,484; June 23.
Automobile storage. C. F. Goddard. 1,811,545; June 23.
Auto signal. G. Myers. 1,811,555; June 23.
Awning for store fronts, Lateral arm. F. A. Anton. 1,811,104; June 23.
Axle, Worm drive. M. B. Morgan. 1,811,058; June 23.
Backstop for motor vehicles. O. Bjork. 1,810,998; June 23.
Bag: *See*—
Collapsible bag. Mail bag.
Golf bag.
Bag and concealed muff, Combined hand. A. Cotler and C. F. W. Forssberg. 1,810,894; June 23.
Bags, Manufacturing traveling. H. F. Weits. 1,810,993; June 23.
Baking powder. A. H. Fiske. 1,811,263; June 23.
Ball receiver. F. Lanza. 1,811,238; June 23.
Balls and holding the same while reduced, Reducing the size of tennis. J. R. Gammeter. 1,811,414; June 23.
Bank, Savings. A. F. Zerbee. 1,811,225; June 23.
Barber's comb. J. W. Ingram. 1,811,271; June 23.
Barometer for use in connection with diagnostic work. D. R. Barr. 1,811,168; June 23.
Bathtub. C. J. Steele. Des. 84,500; June 23.
Battery units, Manufacture of storage. F. W. Barhoff. 1,811,292; June 23.
Bearing. K. W. Atwater. 1,811,703; June 23.
Bearing and sealing means for flexible pipe joints, Adjustable thrust. E. A. Russell. 1,811,649; June 23.
Bearing, Ball and roller. R. A. L. Violet. 1,811,679; June 23.
Beater for paper making, Continuous. B. M. Bishop. 1,811,741; June 23.
Bed and chair, Combination. T. Arts. 1,911,680; June 23.
Bell, Furnace charging. C. W. Andrews. 1,811,702; June 23.
Belt. Power transmission. P. B. Reeves. 1,811,826; June 23.
Bevel wheel. G. Veber. 1,811,446; June 23.
Bin: *See*—
Dust bin.
Binder, Loose leaf. A. G. Lotter. 1,810,919; June 23.
Binding for linoleum tops. A. Vanderveld. 1,810,991; June 23.
Binocular optical instrument. H. S. Cover. 1,811,614; June 23.
Blanket, Infant's. L. A. Hummel. 1,811,632; June 23.
Board: *See*—
Acoustical board. Wall board.
Score board.
Boat, Flying. G. Loening. 1,811,550; June 23.
Bobbin bushing. E. C. Buffington. 1,811,609; June 23.
Boiler: *See*—
Tube boiler.
Boilers, Circulating duct for. H. H. Peek and A. C. Grist. 1,811,592; June 23.
Bombs, Apparatus for and method of loading. H. H. Olmstead. 1,811,061; June 23.
Book covering machine. P. E. Kleineberg. 1,811,201; June 23.
Bookholder. W. H. Greeley. 1,811,124; June 23.
Bottle. J. E. Fowler. Des. 84,469; June 23.
Bottle. T. S. Harris. Des. 84,476; June 23.
Bottle cappers, Cap feeding mechanism for. E. G. Baum. 1,811,344; June 23.
Bowl, Water closet. G. Brain. Des. 84,458; June 23.
Box: *See*—
Car journal box. Lunch box.
Display box. Outlet box.
Folding box. Stepping box.
Fuse and switch box. Stuffing box.
Box. C. D. Knowlton. 1,811,135; June 23.
Box and covering blank therefor. R. P. Seckendorf. 1,811,478; June 23.
Brace: *See*—
Fence post brace.
Bracket: *See*—
Radiator bracket.
Braiding machine. A. Zehnder and J. Kappeler. 1,811,774; June 23.
Brake: *See*—
Airplane landing brake. Electric brake.
Brake. W. H. Delahaye. 1,811,589; June 23.
Brake equalizer. H. E. Burton. 1,811,172; June 23.
Brake mechanism, Hydraulic. F. Y. McKenney. 1,811,019; June 23.
Brake shoes, Manufacture of pressed. L. P. Mooers. 1,810,923; June 23.
Brakes, Mechanism for controlling. R. S. Gans. 1,811,006; June 23.
Brick stack carrier. R. A. Fontaine. 1,811,429; June 23.
Broadcast transmission, Regulation of level in. R. K. Potter. 1,811,025; June 23.
Broiler. C. M. Dibble. 1,811,428; June 23.
Brush. H. Theess. 1,811,192; June 23.
Brush, Fountain. W. Marsh. 1,811,512; June 23.
Buckle construction. B. Cooper. 1,811,684; June 23.
Building. S. B. Jackson. Des. 84,479; June 23.
Building construction. A. F. Bemis. 1,810,891; June 23.
Bumper, Vehicle. A. A. Thomas. 1,811,569; June 23.
Buoy for sunken ships, Indicator. H. J. Kerwin. 1,811,014; June 23.
Burner: *See*—
Oil burner.
Button loop. G. B. Heather. 1,811,197-8; June 23.

Cabinet. A. Pfeifer. 1,811,732; June 23.
Cabinet, Humidifier. W. A. French. 84,470–1; June 23.
Cable connecter fitting, Armored. J. M. G. Fullman. 1,810,958; June 23.
Cable drum, Self aligning. B. S. Ferguson. 1,811,623; June 23.
Cable terminal. S. B. Kraut. 1,811,470; June 23.
Calcium carbonate for the manufacture of carbides, Reduction of. G. Patart and H. Nielsen. 1,811,021; June 23.
Calculating machine. E. F. Britten, jr. 1,811,607; June 23.
Calculating machine. Carl M. F. Friden. 1,811,353; June 23.
Caliper rule. A. L. Kuhlman. 1,811,087; June 23.
Camera, Multiple-image. H. N. Cox. 1,811,495; June 23.
Can construction. P. Offedahl. 1,810,925; June 23.
Can end lining machine. N. Troyer and P. E. Pearson. 1,811,162; June 23.
Cap and pourer. T. N. Derby. 1,811,113; June 23.
Car heater. S. Vernet. Re18,110; June 23.
Car journal box. T. E. Murray, jr. 1,811,554; June 23.
Car, Logging. F. A. Isaacson. 1,811,634; June 23.
Car, Railway. W. E. Wine. 1,811,448; June 23.
Carbon black, Manufacture of. G. C. Lewis. 1,810,918; June 23.
Carbon dioxide, Treating solidified. O. Smiley. 1,810,989; June 23.
Carbonating apparatus. L. Stinson. 1,811,218; June 23.
Carburetor. G. Ashton and G. Frei. 1,811,288; June 23.
Carburetor, Pulverized fuel. H. L. Elliott. 1,811,461; June 23.
Carburetors, Automatic choke for. T. D. Joeck. 1,811,354; June 23.
Card and manufacturing same, Opaque washable playing. S. Klausner, A. Eichengrun, and R. Rohm. 1,811,322; June 23.
Card table. A. R. Wright. 1,811,526; June 23.
Carriage for stowing airplanes, Handling. G. Loening. 1,811,510; June 23.
Carrier: *See*—
Brick stack carrier. Pneumatic dispatch carrier.
Cartridge clip. C. T. Neal. 1,811,093; June 23.
Case: *See*—
Display case. Traveling case.
File case.
Cash register. S. Brand. 1,811,534; June 23.
Casing for a cinematograph. A. Shapiro. Des. 84,497; June 23.
Casing head and bow out preventer, Combined. G. A. Humason. 1,811,013; June 23.
Caster, Adjustable. R. L. Lee. 1,810,971; June 23.
Caster testing device. H. D. Stevens. 1,811,285; June 23.
Cellulose derivatives, Dyeing of. R. Clavel. 1,811,570; June 23.
Centrifugal apparatus for purifying oil. W. Schwerdtfeger. 1,811,157; June 23.
Ceramic furnace. J. A. Dedouch. 1,811,307; June 23.
Chain, Drive. F. L. Morse. 1,811,207; June 23.
Chassis spring control. E. K. Baker. 1,810,897; June 23.
Choke operating means for carburetors. F. H. Heitger. 1,811,011; June 23.
Chopper: *See*—
Meat chopper.
Chuck for electric arc welding, Weldrod. H. R. Bormann and A. Steinhart. 1,810,900; June 23.
Cigar machines, Rotary tobacco feed for. H. E. Carlson. 1,810,904; June 23.
Cigarette cork tipper. P. M. Nejedly. 1,810,979; June 23.
Cigarette making machinery. W. E. Molins. 1,811,759; June 23.
Cigarette rod sealer, Hot and cold. W. B. Bronadner. 1,810,944; June 23.
Circuit arrangement for relay switches. K. G. Johnson. 1,811,318; June 23.
Circuit interrupter control system. A. J. A. Peterson. 1,811,476; June 23.
Clamp: *See*—
Piston ring clamp. Woodworker's clamp.
Stud clamp.
Clamp. G. E. Palmer. 1,811,518; June 23.
Clamp for paper cutters. W. L. Valiquette. 1,811,483; June 23.
Cleaner: *See*—
Pipe cleaner. Tube and pipe cleaner.
Tongue cleaner. Windshield cleaner.
Cleaning device, Steam. C. E. Lucke. 1,811,399; June 23.
Cleat for boats and the like, Mooring. W. D. McClellan. 1,811,400; June 23.
Clevis. H. C. Lord. 1,810,972; June 23.
Clichés for two, three, or more color prints, lantern slides, and colored windows and the like, Producing. L. O. van Straaten. 1,811,600; June 23.
Clip: *See*—
Cartridge clip.
Clock, Striking. E. C. Hall. 1,811,791; June 23.
Closure operating mechanism. T. Brady. 1,810,942; June 23.
Cloth, Filter. W. H. Bacheldor and W. E. Wood. 1,811,573; June 23.
Clutch mechanism. J. A. Smitmans. 1,811,655; June 23.
Clutch operating mechanism. C. D. Ryan. 1,811,028; June 23.
Coach lock. J. B. Flynn. 1,811,265; June 23.
Coating apparatus. J. A. Kennedy. 1,811,505; June 23.
Coating composition containing polymerized divinyl benzene. H. B. Dykstra. 1,811,078; June 23.
Collapsible bag. W. E. Barrett. 1,811,574; June 23.
Comb: *See*—
Barber's comb.
Combination lock. D. Roberti. 1,811,563; June 23.
Commutator construction for electric machines. C. W. Landers. 1,811,180; June 23.
Composition for artificial parts for corpses. W. J. Collier. 1,811,384; June 23.
Compound lining machine. J. M. Hothersall. 1,811,433; June 23.
Concrete form. I. W. Litchfield. 1,811,398; June 23.
Concrete pile construction, Reenforced. H. E. Squire. 1,811,479; June 23.
Condensation product and producing the same, Phenolic. L. V. Redman, A. J. Wieth, and F. P. Brock. 1,811,808; June 23.
Condenser and making same. P. B. Vallé. 1,811,067; June 23.
Condenser, Gang or multiple-unit variable electric. H. F. Reichenbach. 1,810,985; June 23.
Conductive bodies, Method and apparatus for locating unknown. J. J. Jakosky. 1,811,547; June 23.
Connecter or cable clamp, Wire. S. M. Bayus. 1,811,704; June 23.
Container. S. E. Butler. 1,811,074; June 23.
Container, Canned goods. F. Watson. 1,811,340; June 23.
Container, Easy opening. F. J. O'Brien. 1,811,147; June 23.
Container for food products. A. E. Stevenson. 1,811,160; June 23.
Container for the shipment of fractional car lots. F. K. Fildes. 1,811,313; June 23.
Container, Ice-cream. J. L. Balton. Des. 84,452; June 23.
Container, Liquid. M. D. Cochran. 1,811,493; June 23.
Container, Metal. C. J. Aulbach. 1,811,106; June 23.
Containers, Closure for. F. K. Fildes. 1,811,312; June 23.
Control apparatus. B. O. Austin. 1,811,451; June 23.
Controlling mechanism for saw mill carriages. C. S. Amidon. 1,811,038; June 23.
Copper extraction process. W. E. Greenawalt. 1,810,895; June 23.
Copy holder for projection apparatus. R. A. Glaser. 1,811,123; June 23.
Cosmetic jar. J. J. Bauman. Des. 84,455; June 23.
Couch and bed, Combination. J. Martin. 1,811,057; June 23.
Counting machine, Coin. J. Janovsky and J. J. Lange. 1,811,503; June 23.
Coupling: *See*—
Fence panel coupling. Piston rod coupling.
Hose coupling. Screw coupling.
Cover, Book. H. N. Feley. 1,810,952; June 23.
Cover for milk bottles, Removable pouring. W. Gadke. 1,811,080; June 23.
Crank for piston engines, Driving. K. Kuehn. 1,811,796; June 23.
Crossing signal, Highway. J. C. Mock. 1,810,977; June 23.
Crystals, powders, and the like, Prevention of caking of. A. C. Scott. 1,811,699; June 23.
Cultivator sweep. M. Johnson. 1,811,584; June 23.
Cup: *See*—
Drinking cup. Measuring cup.
Current-limiting reactor. R. B. George and H. B. West. 1,811,466; June 23.
Current meter, Alternating-current direct. V. A. Johnson. 1,811,319; June 23.
Cutter: *See*—
Pipe cutter.
Cutter, D. D. Whitacre. 1,811,412; June 23.
Cutter for vegetables and fruits. A. Bromberg. 1,811,743; June 23.
Cutting head for shapers. J. P. Coeling. 1,810,947; June 23.
Deburring machine. W. Perks. 1,811,519; June 23.
Decalcomania and decalcomania paper. A. B. Poschel. 1,811,804; June 23.
Decorating of a fabric and device for carrying out the said process, Continuous process for the. H. Dennis. 1,811,497; June 23.
Delivery mechanism. E. F. Dudley. 1,811,618; June 23.
Dental articulator. L. G. Coble. 1,811,747; June 23.
Derrick, Submarine oil well. C. L. Roberts. 1,811,761; June 23.
Desk. J. R. McCargar. Des. 84,485; June 23.
Desk, School. R. K. Merrill. Des. 84,487; June 23.
Device for hanging curtains. J. Heiman. 1,811,082; June 23.
Die for cutting glove blanks, Gang. A. C. Ackerman. 1,811,571; June 23.
Dirt mover. B. Jack, jr. 1,811,179; June 23.
Dish, Rubber soap. A. L. Murray. Des. 84,489; June 23.
Disintegrator, Rotary. C. W. Andrews and S. P. Kinney. 1,811,528; June 23.
Disk, Abrasive. F. O. Albertson and G. Olsen. 1,811,037; June 23.
Disks, Making composite. W. H. Kempton and T. C. Roantree. 1,811,460; June 23.
Dispenser, Sanitary toilet seat. S. B. Cummings. 1,811,537; June 23.

Dispensing apparatus. C. H. Edwards and R. L. Transtrom. 1,811,114; June 23.
Dispensing the equipment necessary for the practice of feminine hygiene, Device for. C. M. Bell. 1,811,345; June 23.
Dispensing unit embodying mechanical refrigeration. L. G. Copeman. 1,811,456; June 23.
Display box. C. C. Wilson. 1,811,164; June 23.
Display case, Refrigerated. M. Abood. 1,811,376; June 23.
Display stand. G. C. Herren. 1,811,315; June 23.
Display stand. M. Keim. Des. 84,481; June 23.
Display table. W. M. Hansom. Des. 84,475; June 23.
Dobby lever. R. C. Newton. 1,811,209; June 23.
Door lock, Safety. F. K. Fildes. 1,811,311; June 23.
Door mechanism, Jail. H. D. Garber. 1,811,230; June 23.
Door mechanism, Jail. A. E. Shank, G. Fisler, and J. M. Linden. 1,811,246; June 23.
Door operating mechanism. B. Kling. 1,811,015; June 23.
Door spring. H. L. Schwartz, C. A. Quast, and L. Spitz. 1,811,653; June 23.
Dough mixer. F. X. Lauterbur and E. J. Lauterbur. 1,811,472; June 23.
Dough molding machine. O. Neubert, jr. 1,811,208; June 23.
Dough, Packeting. L. R. Willoughby. 1,811,772; June 23.
Doughnut machine, Adjustable. F. L. Schoel. 1,811,564; June 23.
Drain device. T. G. Ladshaw. 1,811,202; June 23.
Drain, Floor. F. W. Carlson. 1,811,611; June 23.
Drain, Lavatory. F. G. Brotz. 1,811,170; June 23.
Drain, Lavatory hand lift. F. G. Brotz. 1,811,827; June 23.
Drainage device for roof gutters and the like. R. McKee. 1,811,728; June 23.
Drainage system. S. A. Hartmann. 1,811,009; June 23.
Drapery hanger. R. B. Dwyer. 1,811,619; June 23.
Draw works having dual rotary machine drive, Rotary. A. E. Martois. 1,810,975; June 23.
Drill holes in the earth, Determining the straightness of. E. E. Rosaire. 1,811,648; June 23.
Drinking cup. J. C. Tyndall. 1,811,286; June 23.
Drinking fountain, Poultry. S. Wysong. 1,811,375; June 23.
Drive, Cigarette machine. J. A. Stein. 1,810,932; June 23.
Drive, Intermittent. H. C. Ford. 1,811,624; June 23.
Driving mechanism, Electric. A. H. Neureuther. 1,811,278; June 23.
Driving mechanism for bed and cylinder presses, Bed. H. E. Laubach. 1,811,139; June 23
Drying apparatus. A. E. Jonsson. 1,811,355–6; June 23.
Duplicating machine. J. J. Flanigan. 1,811,176; June 23.
Duplicating or printing apparatus. R. Harris. 1,811,690; June 23.
Dustbin. J. Wolter. 1,811,165; June 23.
Earphone. H. Lieber. 1,811,639; June 23.
Earphone transmitter. H. Lieber. 1,811,638; June 23.
Educational appliance. T. A. Appia. 1,811,105; June 23.
Electric brake. D. R. Cushman. 1,811,260; June 23.
Electric current rectifier. O. Seitz. 1,811,521; June 23.
Electric furnace, Induction. E. F. Northrup. 1,811,644; June 23.
Electric machine, Dynamo K. L. Hansen. 1,811,668; June 23.
Electric machine, Dynamo. K. L. Hansen. 1,811,670–1; June 23.
Electric meter, Thermal. L. A. Paine. 1,811,244; June 23.
Electric switch. W. J. Bauroth. 1,811,294; June 23.
Electric switch. W. S. Edsall. 1,811,665; June 23.
Electric switch. H. A. Spahr. 1,810,931; June 23.
Electrical device and making the same. O. S. Marckworth. 1,811,723; June 23.
Electrical device and making the same. O. S. Marckworth. 1,811,725; June 23.
Electrical rectifiers, Manufacture of. D. G. Ackerly. 1,811,603; June 23.
Electrical switch. A. P. Ball. 1,811,251; June 23.
Electrical switch. A. P. Ball. 1,811,253; June 23.
Electron discharge tube. G. Holst. 1,811,051; June 23.
Electroplating apparatus. A. F. W. Thorman. 1,811,409; June 23.
Elevator construction. H. E. Hall. 1,810,960; June 23.
Elevator link, Weldless. G. W. Moore. 1,810,978; June 23.
Eliminator, Lateral. J. J. Keck and E. E. Kelley. 1,811,721; June 23.
Emergency relief with remote control. A. T. Dudley. 1,811,351; June 23.
Engine: *See*—
Fluid pressure engine. Rolling mill engine.
Internal combustion engine. Rotary engine.
Radial engine. Sleeve valve engine.
Engines, Spark arrestor for internal combustion. F. A. Donaldson. 1,811,043; June 23.
Envelope. W. A. Welch. 1,811,341; June 23.
Excavating and scraping apparatus. A. B. Shaw. 1,811,030; June 23.
Expansion device for diagonals and bulkhead wires. O. Geisler and G. W. Seth. 1,811,122; June 23.
Explosives, Producing. N. C. Boyd. 1,811,663; June 23.
Eyes, Assembling the parts of artificial. L. J. Grubman. 1,810,896; June 23.
Fabric: *See*—
Fence fabric. Metallic fabric.
Insulation fabric.
Fabric, Making combined closely woven and fitch work. L. Larsen. 1,810,969; June 23.
Fabric or similar article, Textile. G. M. Fauser. Des. 84,468; June 23.
Fabric pulling machine. H. M. Eaton. 1,811,460; June 23.
Fabrics, Manufacture of. J. Morton. 1,811,325; June 23.
Fastener. F. H. Broome. 1,811,713; June 23.
Fastener, Closure. A. L. H. Willson. 1,811,773; June 23.
Fastener, Hatband. F. R. Roberts. 1,811,187; June 23.
Fastening device, Separable. L. Rocke. 1,811,677; June 23.
Faucet, Measuring. J. R. Manley. 1,811,724; June 23.
Feeler control gauge. S. E. Stockwell, E. A. Murdock, C. J. Winzig, and E. F. Morris. 1,811,480; June 23.
Fence fabric, Forming wire. F. J. Mafera. 1,811,511; June 23.
Fence, Metal. J. F. Soucy. 1,811,370; June 23.
Fence panel coupling. C. A. Spaugh. 1,811,335; June 23.
Fence post brace. C. A. Spaugh. 1,811,217; June 23.
Fence wire connection. C. A. Spaugh. 1,811,216; June 23.
Fender protector. J. J. Conway. 1,811,494; June 23.
Fender, Tractor wheel. R. H. Kipp and W. H. Thompson. 1,811,054; June 23.
Ferrules, Method of and apparatus for making. L. T. Goldsborough. 1,811,580; June 23.
Field control device. R. W. Carlisle. 1,811,454; June 23.
Field control device. R. W. Carlisle. 1,811,536; June 23.
File case, Visible. L. E. Hutchings. 1,811,633; June 23.
Films, Roller support for traveling. F. H. Owens. 1,811,365; June 23.
Filter. A. Hopkins. 1,810,965; June 23.
Filter bag connecter. J. B. Berrigan. 1,811,533; June 23.
Filter for viscose solutions. T. L. Kirby. 1,811,795; June 23.
Filter, Water. V. S. Johnston. 1,811,755; June 23.
Fire alarm. T. C. Duncan. 1,811,716; June 23.
Fishing reel. W. A. Foss. 1,811,266; June 23.
Fishing reel, Spring winding. F. Burdick. 1,811,073; June 23.
Fishing rod construction. C. M. Anderson. 1,811,419; June 23.
Fitting for heavy duty suspension hangers. F. W. Reilly. 1,811,153; June 23.
Fitting for heavy duty suspension hangers. F. W. Reilly. 1,811,154; June 23.
Fittings and other hollow articles, Producing pipe. H. S. Holmes. 1,811,501; June 23.
Flash light head. L. A. Bean. Des. 84,456; June 23.
Flashing structure. S. H. Cohen and J. Wasserman. 1,811,039; June 23.
Floor, Skating rink. W. C. Palson. 1,810,926; June 23.
Flour, Prepared. A. H. Fiske. 1,811,264; June 23.
Fluid meter. A. J. Granberg. 1,811,789; June 23.
Fluid pressure engine. F. A. Gerling. 1,811,579; June 23.
Flux for soldering. J. H. Gravell. 1,811,667; June 23.
Foam destroyer. C. D. Mason. 1,811,513; June 23.
Focusing mechanism. G. H. Cushing. 1,811,715; June 23.
Folding box. W. P. Frankenstein. 1,810,956; June 23.
Form construction for concrete floors. C. T. Whitescarver. 1,811,249; June 23.
Form, Hosiery turning and inspecting. H. Hemmerich. 1,811,049; June 23.
Fountain: *See*—
Drinking fountain. Soda fountain.
Fractionating column. J. B. Held. 1,811,627; June 23.
Frame: *See*—
Ophthalmictrial frame. Tender frame.
Frame and ladder construction, Silo door. S. E. Anderson. 1,811,486; June 23.
Fruit gatherer. S. Pavloff. 1,811,328; June 23.
Fuel or gasoline from petroleum oil, Producing motor. M. L. Chappell. 1,811,257; June 23.
Fur treating device. B. Furgang. 1,811,750; June 23.
Furnace: *See*—
Ceramic furnace. Hot air furnace.
Electric furnace. Salt bath furnace.
Furnace. H. W. Neal. 1,811,182; June 23.
Furnace. B. R. Shover. 1,811,522; June 23.
Furnace. A. J. M. A. van der Does de Bije. 1,811,339; June 23.
Furnace and producing molten glass, Glass melting. E. T. Ferngren. 1,810,911; June 23.
Furnace for burning pulverized fuel. W. R. Wood. 1,811,657; June 23.
Furnace heated by high frequency coils. W. Rohn. 1,811,213; June 23.
Furnace or heat treatment chamber cooling means. E. L. Smalley. 1,811,158–9; June 23.
Furnace wall. H. C. Thayer. 1,811,373; June 23.
Furniture and the like, Metal. O. J. Larson and J. R. Jones. 1,811,471; June 23.
Furniture framing and making the same. L. Larsen. 1,810,970; June 23.
Fuse and switch box. A. B. Rypinski. 1,811,650; June 23.
Game board. M. M. Hirtenstein. Des. 84,477; June 23.
Game board, Baseball. B. R. Coibion. Des. 84,465; June 23.
Game prompter. N. Eisenberg. 1,810,951; June 23.

Garment hanger. J. V. Bosque. 1,811,297; June 23.
Gas discharging device. A. S. Alles. 1,811,572; June 23.
Gas exchange apparatus. O. H. Eschholz. 1,811,462; June 23.
Gas ignition means for gas furnace burners. R. E. Fraser. 1,810,957; June 23.
Gases, Apparatus for cleaning. A. Steinbart. 1,811,597; June 23.
Gate. C. A. Spaugh. 1,811,810; June 23.
Gauge: *See*—
Feeler control gauge. Pressure gauge.
Mercury pressure gauge.
Gear for aircraft, Landing. A. Procofieff-Seversky. 1,811,152; June 23.
Gear set, Self-lubricating. M. B. Morgan. 1,811,059; June 23.
Gear teeth, Method and apparatus for generating curved surfaces on. G. L. Bayley. 1,811,254; June 23.
Gearing, Belt. C. Hollerith. 1,811,673; June 23.
Gears, Generating. O. G. Simmons. 1,811,568; June 23.
Generator: *See*—
Smoke generator.
Generators, Auxiliary apparatus for steam. A. W. Bruce. 1,811,608; June 23.
Glass, Apparatus for drawing sheet. H. L. Halbach. 1,811,125; June 23.
Glass, Apparatus for use in the manufacture of laminated. G. B. Watkins. 1,810,934; June 23.
Glass apparatus, Sheet. L. Mambourg. 1,810,920; June 23.
Glass apparatus, Sheet. I. O. Pedersen. 1,810,927; June 23.
Glass flowing apparatus, Sheet. L. Mambourg. 1,810,921; June 23.
Glass, Method and apparatus for forming sheet. W. E. Nobbe. 1,810,980; June 23.
Glass, Method and apparatus for producing sheet. J. L. Drake. 1,810,908; June 23.
Glass, Method and apparatus for shaping. R. W. Canfield. 1,811,075; June 23.
Glass surfacing apparatus, Sheet. J. L. Drake. 1,811,044; June 23.
Glider. E. C. Bauer. 1,810,997; June 23.
Glove. A. C. Ackerman. 1,811,570; June 23.
Golf bag. J. E. Boden and R. T. Orr. 1,811,296; June 23.
Golf tee and practice mat. W. E. Carter. 1,810,906; June 23.
Goods, Double-sided warp. F. Wagner. 1,811,813; June 23
Grader, Land. E. P. Brown. 1,811,490; June 23.
Grading and ditching machine. D. L. Beatty. 1,811,662; June 23.
Grain retarder. J. Boyle. 1,811,606; June 23.
Grapple for storage batteries and the like. H. E. Newton. 1,811,730; June 23.
Grid casting machine. A. D. Lund. 1,811,143; June 23.
Grinder. E. L. Webb. 1,811,069; June 23.
Grinding machine, Rag. E. Langer. 1,811,549; June 23.
Ground cultivating machine. F. V. Donald. 1,811,175; June 23.
Guard for automobiles, Mud. A. Carton. 1,811,112; June 23.
Guard for guys and the like. E. St. John. 1,811,869; June 23.
Gun and automatic small arm, Gas operated machine. C. A. Larsson and P. R. Higson. 1,811,693; June 23.
Guns and automatic small arms, Drum magazine for machine. C. A. Larsson and P. R. Higson. 1,811,694; June 23.
Guns, Apparatus for use in the laying of anti-aircraft. P. W. Gray. 1,811,688; June 23.
Gyrocompass, Liquid controlled. P. E. Harris. 1,811,415; June 23.
Gyroscopic directional instrument. S. G. Brown. 1,811,300; June 23.
Hair cutting machine. H. B. Roney. 1,811,760; June 23.
Handle: *See*—
Welding handle.
Handle for flush tanks or the like. H. D. Clemmons. Des. 84,462; June 23.
Hanger: *See*—
Drapery hanger. Garment hanger.
Hat, Straw. J. Cavanagh. 1,811,001; June 23.
Heat indicator, Motor. H. C. Hebig. 1,811,468; June 23.
Heat or power generator, Internally fired. J. E. Shepherd. 1,811,654; June 23.
Heat transfer at high temperatures. C. Field. 1,810,912; June 23.
Heater: *See*—
Car heater. Windshield heater.
Space heater.
Heater attachment for automobiles. F. G. and W. M. Folberth. 1,811,829; June 23.
Heater for wrapping machines, Knife. F. R. Schmitt. 1,810,987; June 23.
Heater or cooler. D. R. McNeal. 1,811,402; June 23.
Heating and ventilating apparatus. G. E. Otis. Re18,109; June 23.
Heating system, Regenerative. W. Dyrssen. 1,811,459; June 23.
Hedge trimmer. I. Evans. 1,811,463; June 23.
Helmet, Communicating. A. A. Rodgers. 1,811,280; June 23.
Hinge. E. Burton. Des. 84,460; June 23.
Hoisting apparatus. C. Zetterlund. 1,810,936; June 23.
Holder, Breast. H. Klopfer. 1,811,548; June 23.
Holder for collapsible tubes. F. Wolf. 1,811,220–1; June 23.
Holder for containers or storage vessels. F. Wolf. 1,811,223; June 23.
Holder for electric arc welding, Weldrod. H. R. Bormann and A. Steinhart. 1,810,901; June 23.
Holder for photographic apparatus, Roll. A. W. Caps. 1,811,779; June 23.
Holder for typewriters, Copy. O. Fischer. 1,811,118; June 23.
Holder, Paint pot. J. S. Stroebel. 1,811,065; June 23.
Hood for a hair drier or article of similar nature. P. Santurello. Des. 84,495; June 23.
Hook: *See*—
Stock and poultry hook
Hook for lockers, Clothes. G. B. Pickop. 1,810,928; June 23.
Horn, Amplifying. F. W. Temple. 1,811,598; June 23.
Hose coupling. F. H. Smith. 1,811,283; June 23.
Hose, High pressure. C. G. Banks. 1,811,226; June 23.
Hot air furnace. A. Doyle. 1,811,616; June 23.
Humidifier, Electric. C. C. McCloud. 1,811,727; June 23.
Hydraulic jack. A. C. Hopkins. 1,811,085; June 23.
Hydrocarbons and treatment of residues, Cracking of. E. W. Isom. 1,811,272; June 23.
Identifier for toothbrushes and the like. H. Bausher. 1,811,660; June 23.
Ignition mechanism for oil burners. J. N. Macrae. 1,811,274; June 23.
Illumination. H. M. Rasmussen. 1,811,333; June 23.
Incinerator, Garbage. D. M. Reese. 1,811,562; June 23.
Incubator. L. De Vries. 1,811,685; June 23.
Indicator: *See*—
Heat indicator.
Ink bottle pen filing protector. C. W. MacMillan. 1,811,361; June 23.
Inkwell, Ready dip. J. P. Clary. 1,811,745; June 23.
Insulating device. F. G. Baum. 1,811,530; June 23.
Insulation fabric, Reenforced. S. A. Williams. 1,811,416; June 23.
Insulation material and making the same, High temperature heat. C. E. Miller. 1,811,516; June 23.
Insulator. A. C. Earhart. 1,810,950; June 23.
Insulator and clamp for use in electrical work. E. F. Hogan. 1,811,083; June 23.
Insulator rack. C. L. Peirce, jr. 1,811,211; June 23.
Internal combustion engine. W. P. Deppé. 1,811,540; June 23.
Internal combustion engine. O. C. Kreis. 1,810,917; June 23.
Internal combustion engine. W. P. Wiemann. 1,811,771; June 23.
Internal combustion engine, Sleeve valve. J. A. Angiada. 1,811,450; June 23.
Ironing machine. H. A. W. Howcott. 1,811,793; June 23.
Jack: *See*—
Hydraulic jack. Lifting jack.
Journal box jack
Jack structure, Hydraulic. L. D. Nilson. 1,811,556; June 23.
Jewel setting. M. J. Schless. 1,811,520; June 23.
Jig, Separation. P. Maradeo. 1,811,756; June 23.
Journal box jack. T. Cardwell. 1,810,893; June 23.
Jug or similar article, Water. J. C. Kelly. Des. 84,482; June 23.
Key and actuator lock for writing adding machines. H. A. Foothorap. 1,811,227; June 23.
Key escutcheon. M. Leventhal. 1,811,141; June 23.
Keyhole guard. A. L. Brewer. 1,811,742; June 23.
Knife, Fly open. R. E. Brown. 1,810,999; June 23.
Knife for hullers. O. G. Simmons. 1,811,282; June 23.
Knitted articles, Needle for repairing. M. Vitoux. 1,811,524; June 23.
Knitting machine. E. Wildt and H. H. Holmes. 1,811,700; June 23.
Knitting machine, Circular. F. Attenborough. 1,811,289; June 23.
Knives for typographical line-casting machines, Slug-trimming. C. Muehleisen. 1,811,145; June 23.
Knock-off mechanism for slubbers and roving frames. J. C. Nunnally. 1,811,404; June 23.
Lace. H. W. Hucknall. Des. 84,478; June 23.
Ladder. W. H. Kimberlin. 1,811,722; June 23.
Lamp casing. J. Templeton. Des. 84,501; June 23.
Lamp for vehicles, Spot. R. H. Hummert. 1,811,502; June 23.
Land leveling instrument. M. Thornton. 1,811,811; June 23.
Latch. G. W. Aldeen. 1,811,449; June 23.
Latch. E. Burton. Des. 84,461; June 23.
Latch, Tubular night. F. E. Best and F. H. Harp. 1,811,110; June 23.
Lavatory. C. J. Steele. Des. 84,498–9; June 23.
Lens grinding and polishing machine. I. G. Vetter. 1,811,219; June 23.
Lever for testing machine weighing systems. T. Olsen. 1,811,210; June 23.
Lever mechanism. H. B. Tarbox. 1,810,990; June 23.
Lifter: *See*—
Smudge pot lifter.
Lifting device. O. H. Schub. 1,811,652; June 23.

Lifting jack, Electrically operated. I. V. K. Hott. 1,811,629; June 23.
Lifting mechanism. I. V. K. Hott. 1,811,630; June 23.
Light projector. T. P. Duncan, jr. 1,811,782; June 23.
Light-sensitive layers by means of diazo compounds and the products obtainable thereby, Preparing. M. P. Schmidt and W. Spietschka. 1,811,029; June 23.
Lighter. L. C. Ament. 1,811,103; June 23.
Lighter, Cigar. J. H. Cohen. Des. 84,463–4; June 23.
Lighter, Gas. G. Davies, A. H. Ridge, and G. Royer. 1,811,306; June 23.
Lighter, Table. H. J. Goldblatt. Des. 84,472; June 23.
Lighting apparatus. E. E. Holmqvist. 1,811,084; June 23.
Lighting effecting device. A. C. Loewer. 1,811,723; June 23.
Liquid materials, Apparatus for screening. R. O. Wood and B. L. West. 1,810,935; June 23.
Liquid sampling device. C. A. Berggren. 1,811,255; June 23.
Liquid substances, Determining the viscosity of. R. von Dallwitz-Wegner. 1,810,992; June 23.
Liquids in tanks or other containers, Apparatus for indicating the depth of. L. Murphy. 1,811,801; June 23.
Liquor for the production of sulphite cellulose, Preparing a. G. Haglund. 1,811,268; June 23.
Locater and recovery for sunken vessels, Automatic. W. O. Morey. 1,811,241; June 23.
Lock: *See*—
Coach lock. Door lock.
Combination lock.
Lock. O. Banker. 1,811,291; June 23.
Lock assembly for vehicles. J. B. Flyn. 1,811,004; June 23.
Locking device. H. C. Nagel. 1,811,474; June 23.
Locking device, Casing cover. H. Hollerith, jr. 1,811,628; June 23.
Locking device, Doorknob. E. Ellingson. 1,810,909; June 23.
Locking device for tool retainers. D. J. Hafford. 1,811,389; June 23.
Log trimming machine. W. T. Rich. 1,811,155; June 23.
Loom, Cross wire carpet. W. Hall. 1,811,008; June 23.
Loom picker spindles, Supporting means for. J. Bernini. 1,811,488; June 23.
Loom, Power. C. P. Bergstrom and C. J. Lindegren. 1,811,705; June 23.
Loom, Stationary wire Wilton. E. J. Dacey. 1,811,427; June 23.
Looms by the weft guard, Device for stopping electrically driven. K. Lenzkes. 1,811,239; June 23.
Looms, Dobby for. A. D. Gargolinski. 1,811,431; June 23.
Looms, Feeler motions for automatic silk. G. W. Nicely. 1,811,590; June 23.
Looms, Stopping mechanism for narrow ware. E. R. Holmes. 1,811,432; June 23.
Loud speaker. E. S. Pridham. 1,811,367; June 23.
Loose leaf device. J. L. Burgoyne. 1,811,348; June 23.
Lubricating device. G. J. Bancroft. 1,811,343; June 23.
Lubricating film forming composition. D. W. Carter. 1,810,905; June 23.
Lubricating system, Pressure. J. B. McFerran, jr. 1,811,240; June 23.
Lunch box. L. and E. Scherz. 1,811,439; June 23.
Machine and method for repairing knitted fabrics. J. S. Pecker. 1,811,330; June 23.
Machine bed, Reciprocating. N. H. Klages. 1,811,508; June 23.
Machine for forming bead wires. C. De Puy and R. Brindle, jr. 1,811,457; June 23.
Machine for making clothes pegs. K. Prönnecke. 1,811,559; June 23.
Machine for repairing knitted fabrics. J. S. Pecker. 1,811,329; June 23.
Machine for repairing knitted fabrics. J. S. Pecker. 1,811,331; June 23.
Machine for roller leveling and stretching steel sheets. T. L. Thomas. 1,811,599; June 23.
Machine for slicing fresh meat. J. A. Rankin. 1,811,186; June 23.
Machine for undulating wire. C. H. Solá. 1,811,098; June 23.
Machine for wrapping cigars and other elongated bodies. F. Groer. 1,811,751; June 23.
Magnesium oxychloride mixture and making the same. H. S. Lukens. 1,811,799; June 23.
Mail bag, Fireproof. H. B. Peyton. 1,811,150; June 23.
Mail box. G. H. Reimer. Des. 84,494; June 23.
Manifolding machine. A. A. Johnson. 1,811,636; June 23.
Marker, Street. W. M. Powers. 1,811,595; June 23.
Marking device for wrapping machines. H. E. Goerke. 1,810,959; June 23.
Massage device. W. M. F. Sherwood. 1,811,764; June 23.
Material feeding mechanism. C. R. Raney and A. E. W. Johnson. 1,811,064; June 23.
Mattress border. H. Perlesz. Des. 84,491; June 23.
Measuring cup, Adjustable syrup. F. E. Fowler. 1,811,785; June 23.
Meat chopper. C. W. Asbury. 1,811,740; June 23.
Menthol, Making synthetic. J. W. Blagden. 1,811,711; June 23.
Menthol, Making synthetic. J. W. Blagden. 1,811,777; June 23.

Mercury pressure gauge. G. B. Ireland. 1,811,178; June 23.
Metal, Apparatus for handling sheet. W. E. Watkins. 1,811,374; June 23.
Metal, Carbon free. P. D. Merica and A. E. Kayes. 1,811,696; June 23.
Metal foils, Forming. G. Yungblut and H. C. Fisher. 1,811,485; June 23.
Metal lining, Crucible. W. J. Hawkins. 1,810,913; June 23.
Metal, Method and apparatus for forming sheet. A. R. Curtis. 1,811,259; June 23.
Metal package, Sheet. H. Kielberg. 1,811,506–7; June 23.
Metallic fabric, Composite. R. L. Hartwell. 1,811,081; June 23.
Meter: *See*—
Electric meter. Fluid meter.
Mill: *See*—
Rolling mill.
Milling machine. H. E. Morton. 1,811,363; June 23.
Mirror, Fender. E. C. Horton. 1,811,823; June 23.
Mixer: *See*—
Dough mixer.
Mixing apparatus. A. C. Gilbert. 1,811,499; June 23.
Mixing machine. F. Johnson. 1,811,719; June 23.
Mold filling apparatus. J. R. Gammeter. 1,811,430; June 23.
Mold serving device. R. W. Brown. 1,811,256; June 23.
Molding, Cowl. A. J. De Sana. 1,811,262; June 23.
Molds, Adapter for. H. A. Clark. 1,811,258; June 23.
Molds for casting metal, Preparing metallic. F. S. Carlile. 1,811,610; June 23.
Molds, Method and apparatus for filling. J. W. Brundage. 1,811,423; June 23.
Mop head. C. Spino. 1,811,336; June 23.
Motion transforming mechanism. C. L. Florisson. 1,811,578; June 23.
Motor: *See*—
Synchronous motor. Wave motor.
Motor boat layout. F. O. Fernstrum. 1,810,953; June 23.
Mucilage spreader. W. W. S. Carpenter. 1,811,612; June 23.
Muffler, Exhaust. F. H. Schnell. 1,811,762; June 23.
Muscles, Treating and exercising the ocular. W. M. Updegrave. 1,811,034; June 23.
Musical instrument string securing device. C. B. Williams. 1,811,738; June 23.
Necktie. C. Di Tosto. 1,811,748; June 23.
Necktie. E. J. Hooper. 1,811,398; June 23.
Nest, Hen's. H. A. Trullinger. 1,811,388; June 23.
Noncorrosive solution. W. S. Calcott and H. W. Walker. 1,810,946; June 23.
Nozzle for suction cleaners, Adjustable auxiliary. G. C. Curry. 1,811,350; June 23.
Nozzle, Spraying. C. Ladisch. 1,811,637; June 23.
Oil burner. S. Takimizu and H. Idemitsu. 1,811,371; June 23.
Oil conversion, Apparatus for hydrocarbon. O. H. Fairchild. 1,811,621; June 23.
Oil fractionating apparatus. C. L. Smith and C. B. Watson. 1,811,189; June 23.
Oil loss preventing device. J. Moreau. 1,811,588; June 23.
Oil, Method of and apparatus for recovering. L. Ranney. 1,811,560; June 23.
Oil refining system. D. Pyzel. 1,811,645; June 23.
Oil sands, Working. L. Ranney. 1,811,561; June 23.
Oil switch. J. Rah. 1,811,805; June 23.
Oil treatment, Hydrocarbon. D. Pyzel. 1,811,646; June 23.
Oils, Converting hydrocarbon. J. C. Morrell and H. P. Benner. 1,811,642; June 23.
Oils, Decolorizing. R. C. Osterstrom. 1,811,185; June 23.
Oils in vapor phase, Converting. C. E. Wagner. 1,811,194; June 23.
Oils, Polymerization of drying. W. L. Badger. 1,811,290; June 23.
Oils, Process and apparatus for producing low boiling point hydrocarbon. C. P. Dubbs. 1,811,308–9; June 23.
Oils with metallic halide, Refining hydrocarbon. J. H. Osmer. 1,811,243; June 23.
Olefines, Polymerization of. F. Hofmann and M. Otto. 1,811,130; June 23.
Ophthalmic trial frame. H. Clement. 1,811,349; June 23.
Ordnance. C. Bittinger. 1,811,605; June 23.
Ornament, Radiator cap. W. V. Vandegrift and S. O. Bystrom. Des. 84,502; June 23.
Oscillating sprinkler. W. A. Buckner. 1,811,171; June 23.
Oscillator, Balanced magnetostrictive. J. R. Harrison. 1,811,126–8; June 23.
Outlet box, Adjustable. P. Goldberg and N. L. Costello. 1,811,687; June 23.
Outlet for electric appliances, Convenience. E. A. Rutenber. 1,810,986; June 23.
Oven and heating the same, Baking. I. Elliott. 1,811,822; June 23.
Oven, Retort. K. Geissen and W. Vorbrodt. 1,811,544; June 23.
Overshoe. E. R. Degge. 1,811,781; June 23.
Packaging machines, Dating attachment for. M. H. Kern. 1,811,358; June 23.
Packer. E. Gray. 1,811,047; June 23.

Packets, Method of and apparatus for tying. H. Brünlinghaus. 1,811,744; June 23.
Packing gland. F. Van Bezel. 1,811,735; June 23.
Packing, Piston. J. G. Hodge. 1,811,012; June 23.
Paint, Steel preservative. C. H. Cox. 1,811,040; June 23.
Pan greasing machine. W. B. Bronander. 1,810,943; June 23.
Pan liner, Corrugated baking. J. A. Scott. 1,811,566; June 23.
Paper corrugating machine. K. Sieg. 1,810,930; June 23.
Paper to printing presses, Apparatus for supplying. J. E. Rust. 1,811,214; June 23.
Parachute skirt delayer. E. L. Hoffman. 1,811,050; June 23.
Pastes, Apparatus for screening. I. T. Thornton. 1,810,933; June 23.
Pen, Fountain. C. W. Holstein. 1,811,317; June 23.
Pen, Fountain. J. F. Schweiger. 1,811,763; June 23.
Pepper shaker. H. M. Barr. Des. 84,454; June 23.
Perishable products, Equipment for treating. F. J. Day. 1,811,496; June 23.
Perishable products, Portable apparatus for conditioning. W. Barstow and F. J. Day. 1,811,529; June 23.
Petroleum emulsions, Treating. J. Hyman and A. F. Schlandt. 1,811,177; June 23.
Petroleum hydrocarbons and secondary alcohols, Stable mixture of. M. D. Mann, jr. 1,811,552; June 23.
Petroleum oil, Treating. C. P. Dubbs. 1,811,617; June 23.
Petroleum oil, Treating. C. B. Watson. 1,811,195; June 23.
Phonograph. R. T. Watts. 1,811,410; June 23.
Phonograph attachment. K. Efthihios. 1,811,003; June 23.
Phosphorus sulphochloride, Manufacture of. W. H. Woodstock and G. A. McDonald. 1,811,602; June 23.
Photo-electric cell. R. K. Potter. 1,811,023; June 23.
Photo-electric tube. R. K. Potter. 1,811,024; June 23.
Piano, Electrical sostenuto. S. Cooper. 1,811,076–7; June 23.
Picture mounting device. A. W. Engel. 1,811,116; June 23.
Pictures and obliterating stipulated portion or portions therefor, Talking motion. L. de Forest. Re18,108; June 23.
Pile driver attachment for rock drills. C. C. Hansen. 1,811,626; June 23.
Pin: *See*—
Safety pin. Upholstery tag pin.
Pipe cleaner. W. R. Lee. 1,811,205; June 23.
Pipe connecter. A. K. Mosley. 1,811,277; June 23.
Pipe cutter, Emergency. H. Goldhagen. 1,811,046; June 23.
Pipe, Making circumferentially corrugated sheet metal. G. M. Smith. 1,811,678; June 23.
Pipe spinning winch, Direct pulling. W. H. Endsley. 1,811,686; June 23.
Pipe wrench. J. E. Blalock. 1,811,452; June 23.
Pipe wrench, Automatic power driven. W. W. Foster. 1,811,666; June 23.
Pipes or sheaths, Jointing of lead or like. A. E. Wilson. 1,811,701; June 23.
Piston and rod connection. F. A. van Bezel. 1,811,737; June 23.
Piston ring clamp. E. A. Spencer. 1,811,248; June 23.
Piston rod coupling. F. van Bezel. 1,811,736; June 23.
Pitter, Prune. T. W. W. Forrest. 1,810,954; June 23.
Planetarium. J. B. Neevel. 1,811,825; June 23.
Planographic printing plate having mercurialized ink refusing areas for photo mechanical printing. A. R. Trist. 1,811,734; June 23.
Planter, Checkrow. S. K. Dennis. 1,811,041; June 23.
Plate. E. Hale. Des. 84,474; June 23.
Plate closer. A. A. Norin. 1,811,643; June 23.
Plate piling machine. H. T. Peterson. 1,811,593; June 23.
Plate printing machine. W. E. Bennison. 1,811,379; June 23.
Plow. J. T. Lawrence. 1,811,089; June 23.
Plug, Oil casing. U. G. Skelly. 1,811,407; June 23.
Pneumatic dispatch carrier. D. J. MacMillan. 1,810,974; June 23.
Pocket sluice. H. Farnell. 1,811,117; June 23.
Pool table. I. H. Burnstine. Des. 84,459; June 23.
Pool table. W. G. Ehrhart. Des. 84,467; June 23.
Pouch, Key. J. A. Parrella. 1,811,327; June 23.
Powder puff or dip. M. E. Fromert. 1,811,749; June 23.
Power driven shears. A. Rea. 1,811,027; June 23.
Power, Measuring and recording apparent. A. D. Du Bois. 1,811,541; June 23.
Power roller, Internally driven. H. Hornsby. 1,811,394; June 23.
Power transmission device. F. B. Barrere. 1,811,293; June 23.
Press: *See*—
Screw power press.
Press frame for duplicating or printing apparatus. R. Harris. 1,811,691; June 23.
Pressing apparatus. V. A. Ray. 1,810,984; June 23.
Presses on paper and board making machinery, Arrangement of wet. W. Heller. 1,810,964; June 23.
Pressure equalizing means for heating systems. A. J. Rudolph. 1,811,406; June 23.
Pressure gauge. H. A. Clark. 1,811,173; June 23.
Pressure gauge. A. Müller. 1,811,326; June 23.
Pressure testing, Apparatus for. B. Lassman. 1,811,138; June 23.
Primer for impulse pumps. H. Schlachter. 1,811,651; June 23.
Printing and stamping machine. R. F. Jahn. 1,811,582–3; June 23.
Printing machine, Offset. F. Fischer. 1,811,784; June 23.
Printing machines, Web guiding mechanism for. H. V. Ball. 1,811,377; June 23.
Printing plate. S. Anthony. 1,811,815; June 23.
Printing presses, Sheet feeding mechanism for. C. F. Root. 1,810,929; June 23.
Printing telegraph. E. E. Kleinschmidt. 1,811,133–4; June 23.
Projecting apparatus. E. R. Wheeler. 1,811,770; June 23.
Prop, Adjustable clothesline. P. H. Shroyer. 1,811,281; June 23.
Protective mediums, Apparatus and method for testing the effectiveness of. W. O. Snelling. 1,811,765; June 23.
Protector, Collar, tubing and casing. N. L. Dorn and W. A. Clark. 1,810,948; June 23.
Pulp suitable for the manufacture of paper without addition of cellulose, Making white and bleached wood. E. Elgérus. 1,811,783; June 23.
Pulverizing apparatus. R. S. Riley and O. Craig. 1,811,438; June 23.
Pulverulent preparation for the production of a rinsing liquid for the after treatment of washed animal fibers, woolen or silken fabrics, and especially the hair of the head. K. Schwarzkopf. 1,811,809; June 23.
Pump, Air lift. G. Blow. 1,811,295; June 23.
Pump and fuel feed valve for internal combustion engines, Combined fuel measuring. V. R. Petty. 1,811,731; June 23.
Pump, Diaphragm fuel. J. L. L. A. A. Moulet. Re18,112; June 23.
Pump, Double acting. E. N. Ove. 1,811,557; June 23.
Pump, Oil well. H. F. Watkins. 1,811,101; June 23.
Pump, Tire charging air. L. Risk. 1,811,647; June 23.
Pumping and flowing apparatus, Oil well. R. E. Berwick. 1,811,381; June 23.
Rack: *See*—
Insulator rack. Trunk rack.
Storage rack.
Radial engine, Two cycle. H. B. Greening, and J. W. Galloway. 1,811,625; June 23.
Radiator. J. B. Lukomski. 1,810,973; June 23.
Radiator. F. M. Young. 1,811,527; June 23.
Radiator bracket. A. E. Davis. 1,811,538; June 23.
Radiator guard. B. Putterman. Des. 84,492–3; June 23.
Radio apparatus. L. W. Stonequist. 1,811,099; June 23.
Radio messages, Apparatus for the reception of. W. O. Barnes. 1,811,420; June 23.
Rail crossing. W. R. Hesskew. 1,811,129; June 23.
Railroad equipment, Derailing. E. M. Pressnall. 1,811,332; June 23.
Railway switch, Automatic. T. E. Blackwell and L. T. Smith. 1,811,776; June 23.
Rake. C. Pearson. 1,811,062; June 23.
Reamer blade. C. B. Kennedye. 1,811,273; June 23.
Receptacles, Apparatus for attaching the heads of sheet metal. C. J. Rhodes. 1,811,405; June 23.
Record making mechanism. R. J. Gilmore and L. W. Langford. 1,811,387; June 23.
Record making mechanism. L. W. Langford. 1,811,397; June 23.
Record system, Visible. F. D. Powell. 1,811,245; June 23.
Recording instrument. E. H. Bristol. 1,811,417; June 23.
Reel: *See*—
Fishing reel.
Reel. F. Mossberg. 1,811,517; June 23.
Refractory, Heat conducting high temperature. J. D. Morgan, W. G. Bjorkstedt, and R. E. Lowe. 1,811,242; June 23.
Refractory material. T. R. Haglund. 1,811,314; June 23.
Refrigerating and dispensing apparatus, Liquid. A. E. Smith. 1,811,215; June 23.
Refrigerating and dispensing beverages, Apparatus for. F. R. Hicks, jr., and F. A. Mayes. 1,811,234; June 23.
Refrigerating apparatus. J. G. King. 1,810,916; June 23.
Refrigerating apparatus. A. Quarnstrom. 1,811,279; June 23.
Refrigeration. A. V. Livingston. 1,810,090; June 23.
Refrigeration unit. R. T. Smith. 1,811,523; June 23.
Register: *See*—
Autographic register. Cash register.
Regulator for short circuit amperage on starting arc lights. N. K. Chaney. 1,811,301; June 23.
Regulator for valves, Differential. D. H. Annin. 1,810,937; June 23.
Resinous composition and making same. C. Ellis. 1,811,115; June 23.
Ribbon covering machine. G. L. Preble. 1,811,477; June 23.
Rim, Demountable. J. W. Stark. 1,811,837; June 23.
Ring or similar article, Finger. J. Berlinger. Des. 84,457; June 23.
Robberyproof equipment. P. E. West and E. H. Reed. 1,811,447; June 23.
Robe. D. Bloom. 1,811,821; June 23.
Roll. F. R. Woodward. Des. 18,111; June 23.

Roll turning machine. R. A. Johnson and E. M. Chase. 1,811,504; June 23.
Roller: *See*—
Power roller.
Rolling mill. R. Kronenberg. 1,811,586; June 23.
Rolling mill engine, Reversible. B. V. Nordberg. 1,811,020; June 23.
Rolls and the like, Producing balanced. H. Fankboner. 1,811,542; June 23.
Room heater. C. M. Dibble. Des. 84,466; June 23.
Rope, Wire. F. W. Reilly. 1,811,697; June 23.
Rotary engine. H. F. Molkenbur. 1,811,729; June 23.
Rotary sprinkler, Periodic jet. T. Oehler. 1,811,591; June 23.
Rubber articles from latex, Manufacture of. T. G. Levi. 1,811,695; June 23.
Safe, Card posting. G. C. Brainard. 1,811,421; June 23.
Safety device for automobiles. J. H. Westlund. 1,811,484; June 23.
Safety device for automobiles and the like. A. A. Johnson. 1,811,635; June 23.
Safety pin. M. F. Carr. 1,811,780; June 23.
Salt bath furnace, Electrically heated. A. G. E. Hultgren. 1,811,754; June 23.
Salt shaker. H. M. Barr. Des. 84,453; June 23.
Salts from brines and solutions, Apparatus for the production of. O. V. Martin. 1,811,091; June 23.
Sash guide. W. S. Hamm. 1,811,048; June 23.
Sausage wrapping method and apparatus. C. H. Vogt. 1,811,163; June 23.
Saw. I. R. Forsyth. 1,811,079; June 23.
Saw forming device. C. C. Knapp. 1,811,286; June 23.
Sawing machine. C. E. Tannewitz. 1,811,066; June 23.
Scale. B. W. King. 1,811,831; June 23.
Score board, Golf. R. Bowen. 1,811,778; June 23.
Scraper, Leaning wheel road. W. T. Beatty, F. S. Davis, and F. D. Wilson. 1,811,661; June 23.
Scrapers, Slip tongue for. W. K. McMillan. 1,811,275; June 23.
Screen: *See*—
Advertising screen. Well screen.
Screen. B. E. McElyea. 1,811,558; June 23.
Screen and frame construction, Window. J. W. Boothman. 1,811,111; June 23.
Screen intake, Adjustable. O. E. Noble. 1,810,981; June 23.
Screw coupling, Split. F. C. Kainer. 1,811,200; June 23.
Screw power press. E. W. Zeh. 1,810,996; June 23.
Screws, Antifrictional means for. A. R. Esmond. 1,810,910; June 23.
Sea wall. E. A. Forbes. 1,811,005; June 23.
Selective system and apparatus. E. E. Kleinschmidt. 1,811,131; June 23.
Selective system and apparatus therefor. E. E. Kleinschmidt. 1,811,132; June 23.
Separating apparatus, Centrifugal. H. L. Mills. 1,810,922; June 23.
Sewage, or other organic matters, Process and apparatus for treating. A. T. Maltby. 1,811,181; June 23.
Shade controlling apparatus. W. J. Huebner. 1,811,631; June 23.
Shade, Window. C. N. Boehm. 1,810,899; June 23.
Shades, Supporting and equilibrating lamp. J. E. Bolling. 1,811,683; June 23.
Shaft, Collapsible winding. F. E. Langdon. 1,811,237; June 23.
Shears: *See*—
Power driven shears.
Sheet feeding mechanism. A. W. Bell. 1,810,898; June 23.
Sheets or films, Manufacture of. H. J. Hands. 1,811,689; June 23.
Shield for eyelenses, Glare. C. I. Walker. 1,811,525; June 23.
Shield, Furnace register. J. L. Gillman, jr. 1,811,467; June 23.
Shingle and producing it, Mottled or colored. A. L. Clapp. 1,811,613; June 23.
Shock absorber. A. B. Casper. 1,811,492; June 23.
Shore attachment. H. W. Roos. 1,811,094; June 23.
Shovel safety attachment, Steam. G. R. Ingham. 1,811,581; June 23.
Shuttle box and connecter therefor, Drop. C. J. Lindegren. 1,811,435; June 23.
Shuttle feeler and thread cutter, Combined. A. J. Chevrette. 1,811,425; June 23.
Shuttle threader. L. A. Cadoret. 1,811,424; June 23.
Sign, Combined daylight and illuminated. A. O. Kellogg. 1,811,053; June 23.
Sign, Street. W. M. Powers. 1,811,594; June 23.
Sign, Traffic regulating. M. Heine. 1,811,546; June 23.
Signal: *See*—
Auto signal. Crossing signal.
Signal for motor vehicles, Visor. T. J. Law. 1,811,440; June 23.
Signal for turning corners. L. Horstman. 1,810,966; June 23.
Signal system for elevators. H. J. Fear. 1,811,622; June 23.
Signal transmission by guided and unguided waves. R. R. Adams and E. V. Griggs. 1,811,102; June 23.
Signaling device. Automobile. F. J. and E. T. Jaros. 1,810,988; June 23.
Signaling, System of selective. G. A. Somersalo. 1,811,448; June 23.
Siliceous material and producing the same. A. S. Behrman. 1,811,531; June 23.
Silk fabric or, similar article, Woven. G. Kateb. Des. 84,480; June 23.
Skate. A. G. Benetatos. 1,811,532; June 23.
Skein lacing machine. S. A. Gasda and D. E. Cahill. 1,811,120; June 23.
Sleeper. J. Kumamoto. 1,811,016; June 23.
Sleeve valve engine. A. M. Niven. 1,810,924; June 23.
Slipper. M. Bernard. 1,811,880; June 23.
Sluice concentrator. A. H. Stebbins. 1,811,408; June 23.
Smoke generator. H. F. Taylor. 1,811,191; June 23.
Smudge pot lifter. B. T. Tollaspry. 1,811,033; June 23.
Snowplow. A. Luyster and C. P. Luyster. 1,811,436; June 23.
Soap shaver. T. H. Lehman. 1,811,017; June 23.
Socket. J. Geloso. 1,811,464; June 23.
Socket, Electric. J. Cuthbert. 1,811,615; June 23.
Socket wrench. W. C. Kress. 1,811,137; June 23.
Soda fountain. F. I. Raymond. 1,811,806–7; June 23.
Sodium sulphonates, Purification of oil soluble. H. E. Buc and H. R. Tate. 1,811,535; June 23.
Sole and heel for boots and shoes, Rubber. L. M. Oakley. 1,811,803; June 23.
Solid materials of different specific gravities, Process and apparatus for the separation of. G. Raw. 1,811,026; June 23.
Solvents, Recovering. O. L. Barnebey. 1,811,107; June 23.
Soot blower for boilers. J. C. Bennett. 1,811,346; June 23.
Sound absorbing ventilator and the like. C. R. C. Borden. 1,811,347; June 23.
Sound records obtained by magnetic means, Duplication of. C. Stille. 1,811,817; June 23.
Sound reducing construction. B. E. Balduf. 1,811,250; June 23.
Sound reproducing machine. W. T. Forse. 1,810,955; June 23.
Sounds and vibrations, Locator of abnormal. G. Porter. 1,811,558; June 23.
Space heater, Multiple unit. F. M. Young. 1,811,071; June 23.
Spike driving apparatus. G. M. Nell. 1,811,475; June 23.
Splice bar or fish plate. L. S. Wilbur. 1,811,342; June 23.
Spool, Cake. W. H. Furness. 1,811,386; June 23.
Spring: *See*—
Door spring.
Spring cushioning devices, Adjusting means for. H. Mesinger. 1,811,408; June 23.
Sprinkler: *See*—
Oscillating sprinkler. Rotary sprinkler.
Sprinkling apparatus. J. E. Desmond. 1,811,042; June 23.
Spur, Riding. G. J. Ormiston. Des. 84,490; June 23.
Stairway, Disappearing. F. E. Bessler. 1,811,707–10; June 23.
Stairway, Disappearing. F. E. Bessler. 1,811,820; June 23.
Stairway, Disappearing wall. F. E. Bessler. 1,811,706; June 23.
Stand: *See*—
Display stand.
Stand for bottle dispensing refrigerators. C. A. Frick. 1,811,228; June 23.
Stand or holder for containers. F. Wolf. 1,811,222; June 23.
Staple clip and fabricating the same. L. Obstfeld. 1,811,060; June 23.
Stapling machines, Attachment for. L. Obstfeld. 1,810,982; June 23.
Starting mechanism, Engine. W. L. McGrath. 1,811,401; June 23.
Static suction apparatus. R. Lejay. 1,811,823; June 23.
Steam generating apparatus. C. L. Thorne. 1,811,193; June 23.
Steam generation. W. R. Wood. 1,811,658; June 23.
Steam trap. G. F. Gerdts. 1,811,045; June 23.
Steel, Manufacture of vanadium. B. D. Saklatwalla. 1,811,698; June 23.
Steering column switch. R. K. Winning. 1,810,994; June 23.
Steering control for aeroplanes. A. G. Petersen. 1,811,149; June 23.
Steering wheel. W. I. Hanson and O. R. Stelzer. 1,811,269; June 23.
Stenciling device. H. Anderson and R. J. Gannon. 1,811,167; June 23.
Stepping box, Collapsible. F. W. Longley. 1,811,674; June 23.
Stock and poultry hook. T. C. Orr. 1,811,437; June 23.
Stocking for varicose veins. E. Frei. 1,811,786; June 23.
Stoker. E. J. Clerget. 1,811,746; June 23.
Stone spreader. A. E. Lockhard. 1,811,824; June 23.
Storage rack. U. I. T. Blomberg. 1,810,941; June 23.
Strip straightening and cutting machine. G. F. Matteson. 1,810,976; June 23.
Strobo-rotoscopic device. M. Stone. 1,811,481; June 23.
Structural unit. D. H. Bitney. Re18,107; June 23.
Stud clamp, Partition. W. D. Henderson. 1,811,391; June 23.
Stuffing box. M. Roemer. 1,811,334; June 23.
Stuffing box. F. G. Worden. 1,811,814; June 23.
Sugar crystals, Decoloring. J. Bergé. 1,811,169; June 23.
Sundial. H. Neuwirth. 1,811,188; June 23.

Support for scrotum bowls. L. M. Hoover. 1,811,792; June 23.
Support, Golf club bag. P. I. Campbell. 1,810,903; June 23.
Support, Operating. L. M. Wilson. 1,811,036; June 23.
Switch: *See*—
Alarm time switch. Oil switch.
Electric switch. Railway switch.
Electrical switch. Steering column switch.
Switch. P. T. Calamari. 1,811,714; June 23.
Switch. J. Geloso. 1,811,498; June 23.
Switch actuating mechanism, Electric. A. C. Durdin, jr. 1,811,458; June 23.
Switch operating device, Automatic rail. J. Boyko. 1,810,892; June 23.
Switch stand. W. M. Gray. 1,811,830; June 23.
Synchronous motor. J. K. Kostko. 1,811,136; June 23.
Table: *See*—
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Table. J. O. Gulbranson. Des. 84,473; June 23.
Table. R. K. Merrill. Des. 84,486; June 23.
Table. E. B. Morgan. Des. 84,488; June 23.
Tank and making the same, Fuel. A. A. Andrake. 1,811,659; June 23.
Tank for harvesters, Grain. F. N. G. Kranich. 1,811,055; June 23.
Tap, Collapsible. S. F. Newman. 1,811,802; June 23.
Tap for shoes. G. M. Mellor. 1,811,473; June 23.
Tape winding machine. G. W. Fries, F. W. Finkhousen and L. J. Johnson. 1,811,229; June 23.
Telegraph system. M. I. Pupin. 1,811,368; June 23.
Telegraph systems, Vacuum tube repeater and terminal set for superposed. R. V. Morgenstern. 1,811,824; June 23.
Telemetric indicating system. J. P. Weaver. 1,811,769; June 23.
Telephone system, Automatic. O. C. Hovland. 1,811,753; June 23.
Telephone system, Automatic. R. G. Richardson and M. L. Nelson. 1,811,146; June 23.
Telephone system, Multioffice. V. S. Tharp. 1,811,445; June 23.
Telephone system, Multioffice automatic. M. Schwartz. Re18,113; June 23.
Television device. J. Geloso. 1,811,465; June 23.
Tender frame. C. B. Harbison. 1,810,962; June 23.
Tender frame structure. C. B. Harbison. 1,810,961; June 23.
Tension faller bar for spinning mules. W. A. Feugill and J. R. Hosking. 1,811,352; June 23.
Terminal member for switch points, Reversible. R. E. Einstein and B. B. Betts. 1,811,620; June 23.
Textile apparatus. S. Magnano. 1,811,206; June 23.
Textile machine. S. Magnano. 1,811,675; June 23.
Thermometer. H. Y. Norwood. 1,811,184; June 23.
Thermometer. K. L. Tate. 1,811,190; June 23.
Thermostat. W. O. Snelling. 1,811,442; June 23.
Thermostatic snap control. J. W. Winter. 1,811,287; June 23.
Tie form and holder. H. G. Scott. 1,811,097; June 23.
Tin from alkaline stannate solutions, Recovery of. W. T. Little. 1,811,142; June 23.
Tin from stannate solutions, Recovery of. W. T. Little. 1,811,360; June 23.
Tire casing spreading machine. O. E. Sords. 1,811,284; June 23.
Tire rim. L. Benz. 1,811,109; June 23.
Tires, Apparatus for retreading. J. C. Heintz. 1,810,963; June 23.
Tires, Repairing punctured. A. G. Sommerbeck. 1,811,656; June 23.
Toll service trunking system. V. S. Tharp. 1,811,444; June 23.
Tongs. L. F. Baash and W. H. Maxwell. 1,810,938; June 23.
Tongue cleaner. W. H. Barkwill. 1,811,775; June 23.
Tool, Garden. W. P. Bancroft. 1,811,604; June 23.
Tool, Hand. J. M. Crowe. 1,811,577; June 23.
Tool, Planetary pipe threading. T. M. Bruback and D. E. Hibner, jr. 1,811,491; June 23.
Tool, Stippling. H. Taylor. 71,811,372; June 23.
Tool, Strap stretching and fastening. J. Bayer. 1,811,108; June 23.
Toothbrush, Capsule. K. A. Simon. 1,811,833; June 23.
Toy. S. L. Long. 1,811,056; June 23.
Toy. J. Petrosky. 1,811,022; June 23.
Toy gun. J. C. Haws. 1,811,010; June 23.
Toy, Mechanical. J. G. Gavlak. 1,811,543; June 23.
Tracing device. A. Gastell. 1,811,121; June 23.
Track, Monorail. G. C. Henderson. 1,811,270; June 23.
Traction of vehicles. J. C. M. Massey. 1,811,018; June 23.
Tractor. H. E. Altgelt. 1,811,072; June 23.
Tractor hitch. H. A. Gemberling and A. Bjella. 1,811,267; June 23.
Tractor plow. J. H. Taylor. 1,811,733; June 23.
Traffic controlling apparatus, Railway. G. W. Baughman. 1,810,939-40; June 23.
Traffic controlling apparatus, Railway. H. W. Bryan. 1,810,945; June 23.
Trailer, Automobile. A. J. Lucke. 1,811,798; June 23.
Transfer machine, Automatic. W. S. Mayers. 1,811,832; June 23.
Trap: *See*—
Steam trap.
Trasher, Multiple. D. H. Gilson. 1,811,232; June 23.
Traveling case. O. J. Walinsky. 1,811,035; June 23.
Tray, Bubble. A. J. Smith. 1,811,247; June 23.
Trim stud, Floating. J. H. Goss. 1,811,788; June 23.
Trimmer: *See*—
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Trimming machine, Heel seat. A. C. Rogge and H. Gordon. 1,811,188; June 23.
Trolley harp and wheel structure. S. Maggio. 1,811,362; June 23.
Trolley shoe. W. F. Graham. 1,811,388; June 23.
Trough, Poultry feed. R. C. Wiseman. 1,811,413; June 23.
Truck construction. H. C. Dreibuss and G. S. Chiles. 1,810,949; June 23.
Truck, Dumping. E. P. Bordeaux. 1,811,382; June 23.
Trucks, Attachment for. R. M., C. A., and G. J. Willis. 1,811,739; June 23.
Trunk. H. Hofbauer. 1,811,718; June 23.
Trunk rack. S. B. Blakely. 1,811,489; June 23.
Tube: *See*—
Electric discharge tube. Photo-electric tube.
Tube and pipe cleaner, Rotary. R. W. Randall and J. C. Koch. 1,811,063; June 23.
Tube boiler, Bent. W. Locke. 1,811,509; June 23.
Tube connection or rod meter, Pitot. E. S. Cole. 1,810,907; June 23.
Tube connection, Swivel. G. D. Hoffman. 1,811,392; June 23.
Tubes, Accessory device for collapsible. F. Wolf. 1,811,224; June 23.
Tubes, Apparatus for the manufacture of inner. H. C. Bostwick. 1,811,453; June 23.
Tubes, Operation of luminous. C. S. Treacy. 1,811,100; June 23.
Tubular body for heating or the like and making the same. G. E. Blake. 1,811,816; June 23.
Turbine. A. C. McGinty. 1,811,515; June 23.
Turbine power installation, Elastic fluid. M. D. Church. 1,811,302; June 23.
Turbines, Preheating. E. Brown. 1,811,383; June 23.
Typesetting machines, Signaling and indicating device for protecting the molds and mold liners of. A. J. McLoughlin. 1,811,144; June 23.
Typewriting machine, Placard. K. K. Weissfloch. 1,811,070; June 23.
Upholstery tag-pin. J. S. Launderville. 1,811,088; June 23.
Unit base constructional. A. P. Ball. 1,811,252; June 23.
Unloading device for buck rakes. J. M. Erickson. 1,811,310; June 23.
Valve. M. E. Miller. 1,811,418; June 23.
Valve for automobiles, Thermostatic. J. V. O. Palm. 1,811,366; June 23.
Valve for boiling vessels, Safety. J. Pfotzer. 1,811,151; June 23.
Valve gear shifting mechanism, Fluid pressure operated. S. H. Lewis. 1,811,434; June 23.
Valve means for hydrocarbon motors, Injection. C. D. Salisbury. 1,811,596; June 23.
Valve means, Injection. A. Winton. 1,811,601; June 23.
Valve mechanism for rock drills. F. M. Slater. 1,810,988; June 23.
Valve, Oil. J. D. Killian. 1,811,794; June 23.
Valve operating shaft, Sleeve. F. A. Van Besel. 1,811,768; June 23.
Valve structure, Check. F. Yardley. 1,811,166; June 23.
Vehicle spring construction. G. Matakovich. 1,811,514; June 23.
Vehicles, Unit power plant supports for motor. E. A. Johnston. 1,811,052; June 23.
Vending machine. J. R. Grove. 1,811,007; June 23.
Veneer cutter and matcher. R. H. McLeod. 1,811,757; June 23.
Ventilator adjustment for incubators, Calibrated. B. F. C. Morris. 1,811,589; June 23.
Viscous fluid into container, Installation for forcing. T. E. Holmes. 1,811,752; June 23.
Vise. P. Brockhaus, jr. 1,811,299; June 23.
Vulcanizer. T. A. Miller. 1,811,276; June 23.
Vulcanizer. F. J. Shook. 1,811,567; June 23.
Wall board. H. C. Raynes. 1,811,212; June 23.
Wall construction. D. D. Whitacre and J. C. Wood. 1,811,411; June 23.
Wall construction, Unit. A. O. Thomas. 1,811,161; June 23.
Washing appliance. M. T. Kelley. Des. 84,483; June 23.
Watchcase. W. Schelbel. Des. 84,496 June 23.
Water, Purifying. K. P. McElroy. 1,811,587; June 23.
Water wheel. E. F. Smith and C. D. Smith. 1,811,031; June 23.
Wave motor. S. I. Schwabacher. 1,811,565; June 23.
Weft detector controlling device. A. J. Chevrette. 1,811,426; June 23.
Welding apparatus and arc welding, Arc. K. L. Hansen. 1,811,672; June 23.
Welding apparatus, Arc. K. L. Hansen. 1,811,669; June 23.

Welding handle. H. C. Sadler. 1,811,156; June 23.
Welding of pipe joints, Electric arm. H. J. Burnish. 1,810,902; June 23.
Welding segment. H. S. Holmes. 1,811,500; June 23.
Well drilling apparatus. R. D. Dodds. 1,811,002; June 23.
Well head equipment. C. C. Brown. 1,811,422; June 23.
Well screen. W. E. King. 1,811,235; June 23.
Wheel: *See*—
Bevel wheel. Water wheel.
Steering wheel.
Wheel construction. W. C. Martin. 1,811,726; June 23.
Wheels, Apparatus for treating car. E. A. Laughlin. 1,811,204; June 23.
Wheels, Treating car. E. A. Laughlin. 1,811,203; June 23.
Wind tunnel for testing aeroplanes. D. E. Olshevsky. 1,811,364; June 23.
Window and screen securer. W. Bildstein. 1,811,681; June 23.
Window operator, Automobile. J. W. Greig. 1,811,790; June 23.
Window structure, Metallic. A. L. Doering. 1,811,664; June 23.
Windows, Device for closing casement. W. F. Broadwater. 1,811,575; June 23.
Windows, Operating. F. P. Cortés. 1,811,174; June 23.
Windshield cleaner. B. A. Bean, jr. 1,811,819; June 23.
Windshield heater. H. W. Turner. 1,811,767; June 23.
Wiper, Windshield. W. C. Ellixson. 1,811,717; June 23.
Wiper, Windshield. B. J. Shepard. 1,811,440; June 23.
Wire welding machine. T. H. Kane. 1,811,585; June 23.
Wireless signaling apparatus. E. Karplus. 1,811,357; June 23.
Woodworker's clamp. W. H. Woelk. 1,810,995; June 23.
Wrapping machines, Dating attachment for. M. H. Kern. 1,811,359; June 23.
Wrench: *See*—
Adjustable wrench. Socket wrench.
Pipe wrench.
Wringer. W. L. Kauffman, 2d. Des. 84,503-4; June 23.
Wringer. E. J. Schuds. 1,811,096; June 23.
Writing implement. J. O'Shaughnessy. 1,810,983; June 23.
Yarns, Increasing the tensile strength of. F. J. Hoxie and A. M. Tenney. 1,811,395; June 23.
Zinc, Electrolytic recovery of. H. Hey, A. F. Evans, R. T. D. Williams and A. P. Newall. 1,811,692; June 23.
Zoning and fare collecting system. J. W. Hulme. 1,810,867; June 23.

CLASSIFICATION OF PATENTS

ISSUED JUNE 23, 1931

NOTE.—First number=class, second number=subclass, third number=patent number

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ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS

Aluminum Company of America, Pittsburgh, Pa. Shingles. 284,523; June 30. Class 12.

American Automobile Association, Inc., Washington, D. C. Illustrated monthly magazine. 284,443–4; June 30; Serial Nos. 310,152–3; published Mar. 31, 1931. Class 38.

American Show Case & Mfg. Co., Detroit, Mich. Show cases, wall cases, shelving, etc. 284,514; June 30. Class 32.

American Writing Paper Company, Inc., Holyoke, Mass. Writing and printing paper. 284,482; June 30; Serial No. 311,020; published Apr. 14, 1931. Class 37.

Amiesite Asphalt Company of America, Camden, N. J., and Philadelphia, Pa. Paving material. 284,456; June 30; Serial No. 310,711; published Apr. 7, 1931. Class 12.

Andre, Incorporated, Long Island City, N. Y. Shoes. 284,508; June 30; Serial No. 308,002; published Mar. 31, 1931. Class 39.

Barnet Leather Co., Inc., Boston, Mass. Leather. 284,511; June 30. Class 1.

Barrett Company, The, New York, N. Y. Prepared tar, pitch, and asphalt. 284,461; June 30; Serial No. 298,072; published Apr. 14, 1931. Class 12.

Batten, William W., doing business as The Napthite Company, Lakewood, Ohio. Preparation for cleaning and polishing silverware, etc. 284,437; June 30; Serial No. 309,833; published Apr. 7, 1931. Class 4.

Berray Co. Inc., The, New York, N. Y. Hats, caps, tams, and bonnets. 284,521; June 30. Class 39.

Blebel Roofing Company, Belleville, Ill. Asbestos shingles and roofing material. 284,450; June 30; Serial No. 310,328; published Apr. 7, 1931. Class 12.

Binney & Smith Company, New York, N. Y. Crayons, slate pencils, and chalk. 284,485; June 30; Serial No. 311,171; published Mar. 31, 1931. Class 37.

Bowers Envelope & Lithograph Company, Indianapolis, Ind. Paper. 284,489; June 30; Serial No. 311,362; published Mar. 31, 1931. Class 37.

Boxkol Company, The. (See Drew, Jack J.)

Briscoe & Lindberg, Chicago, Ill. Cartoon. 284,462; June 30; Serial No. 298,145; published Mar. 31, 1931. Class 38.

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Brooklyn Daily Times, The, Brooklyn, N. Y. Newspaper column. 284,458; June 30; Serial No. 267,691; published Apr. 14, 1931. Class 38.

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Butler Paper Corporation, Chicago, Ill. Paper. 284,497; June 30; Serial No. 311,772; published Apr. 14, 1931. Class 37.

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Crown Paper Company, Sanford, Fla. Paper end guards for packing fruits and vegetables. 284,469; June 30; Serial No. 303,420; published Apr. 7, 1931. Class 37.

Curtis, Stewart, Packers, Inc., Los Angeles, Calif. Canned and bottled olives. 284,519; June 30. Class 46.

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Deane Plaster Co., The, Yonkers, N. Y. Sanitary napkins. 284,520; June 30. Class 44.

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Drevenstedt, Amy, New York, N. Y. Envelops and sheets of writing paper, wall paper, shelf paper, etc. 284,463; June 30; Serial No. 298,939; published Apr. 14, 1931. Class 37.

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Drew, Jack J., doing business as The Boxkol Company, Pittsburg, Okla. Coal dispensing boxes. 284,530; June 30. Class 2.

Ebinger, D. A., Sanitary Manufacture Company, The, Columbus, Ohio. Toilet partitions of sheet metal. 284,467; June 30; Serial No. 302,374; published Apr. 7, 1931. Class 12.

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Folsom, H & D Arms Co., The, New York, N. Y. Pistol holsters. 284,516; June 30. Class 9.

Gabilla, Incorporated, New York, N. Y. Toilet soap. 284,491; June 30; Serial No. 311,428; published Apr. 7, 1931. Class 4.

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General Insulating & Mfg. Co., Alexandria, Ind. Heat and cold insulation material. 284,434; June 30; Serial No. 309,425; published Apr. 14, 1931. Class 12.

General Paper Company, San Francisco, Calif. Paper and correspondence envelopes. 284,488; June 30; Serial No. 311,238; published Apr. 14, 1931. Class 37.

Graham Paper Company, St. Louis, Mo. Bond paper. 284,476; June 30; Serial No. 307,149; published Apr. 7, 1931. Class 37.

Great Western Shoe Company, Milwaukee, Wis. Shoes. 284,513; June 30. Class 39.

Grieger, William J., Los Angeles, Calif. Neckties, mufflers, hosiery, knit underwear, etc. 284,510; June 30; Serial No. 308,544; published Mar. 31, 1931. Class 39.

Hadley-Dean Glass Company, St. Louis, Mo. Glass tile. 284,479; June 30; Serial No. 310,764; published Apr. 7, 1931. Class 12.

Hahn, Wm., & Company, Washington, D. C. Leather shoes. 284,440; June 30; Serial No. 310,015; published Mar. 31, 1931. Class 39.

Haim, Jack, doing business as Zut Process Company, Detroit, Mich. Glass cleaner. 284,451; June 30; Serial No. 310,378; published Apr. 7, 1931. Class 4.

Hale, Peggie, Incorporated, New York, N. Y. Dresses, hosiery, underwear, etc. 284,525; June 30. Class 39.

Hammermill Paper Company, Erie, Pa. Bond writing paper. 284,439; June 30; Serial No. 309,974; published Apr. 14, 1931. Class 37.

Hart, Schaffner & Marx, Chicago, Ill. Men's furnishings. 284,452; June 30; Serial No. 310,603; published Apr. 7, 1931. Class 39.

Holmes, Henry C., doing business as H. C. Holmes Mfg. Co., Portland, Oreg. Overcoats, trousers, shirts, etc. 284,506; June 30; Serial No. 307,775; published Apr. 7, 1931. Class 39.

Horowitz, William C., New York, N. Y. Watches, clocks, watchcases, etc. 284,531; June 30. Class 27.

Hulsman, J. Dom, doing business as The Vampire Products Company, Crafton, Pa. Cleaning preparation, said preparation having incidental polishing properties. 284,468; June 30; Serial No. 303,184; published Apr. 7, 1931. Class 4.

Hurlbut Paper Company, South Lee, Mass. Paper. 284,493–6; June 30; Serial Nos. 311,729–32; published Apr. 14, 1931. Class 37.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Dresses, suits, blouses, etc. 284,471; June 30; Serial No. 304,956; published Mar. 31, 1931. Class 39.

International Shoe Co., St. Louis, Mo. Boots and shoes. 284,432; June 30; Serial No. 309,085; published Apr. 14, 1931. Class 39.

International Shoe Co., St. Louis, Mo. Boots and shoes. 284,473; June 30; Serial No. 305,960; published Mar. 31, 1931. Class 39.

Interstate Roofing and Supply Company, Chicago, Ill. Roofing material. 284,481; June 30; Serial No. 310,870; published Apr. 7, 1931. Class 12.

Jefferson Shoe Manufacturing Co. Inc., Newton, N. J. Shoes. 284,445; June 30; Serial No. 310,174; published Apr. 7, 1931. Class 39.

Jewelers Publishing Corporation, New York, N. Y. Publication. 284,487; June 30; Serial No. 311,190; published Apr. 14, 1931. Class 38.

Junior Shoe Manufacturing Co., St. Paul, Minn. Shoes. 284,435; June 30; Serial No. 309,565; published Apr. 7, 1931. Class 39.

Keller and Henninger, Cincinnati, Ohio. Hats. 284,505; June 30; Serial No. 307,679; published Apr. 7, 1931. Class 39.

Kirkman & Son, Brooklyn, N. Y. Soap, soap chips, soap powder, and scouring cleaner. 284,474; June 30; Serial No. 306,448; published Apr. 7, 1931. Class 4.

Kitchell, Lucile L., doing business as Lucile Lockwood, Greenwich, Conn. Ladies' hats, coats, dresses, and suits. 284,529; June 30. Class 39.

Leholmen, Chris S., Inwood, Iowa. Medicine. 284,504; June 30; Serial No. 307,555; published Apr. 7, 1931. Class 6.

Little, A. E., Company, Lynn, Mass. Rubbers, rubber boots, overshoes, and shoes. 284,449; June 30; Serial No. 310,297; published Mar. 31, 1931. Class 39.

Little Print of New Rochelle, N. Y., Inc., The, New Rochelle, N. Y. Stationery. 284,500; June 30; Serial No. 308,678; published Apr. 14, 1931. Class 37.

Lockwood, Lucile. (See Kitchell, Lucile L.)

Macklanburg-Duncan Company, Oklahoma City, Okla. Metal and felt weather stripping. 284,457; June 30; Serial No. 310,728; published Apr. 7, 1931. Class 12.

Miller, I., & Sons, Incorporated, Long Island City, N. Y. Shoes and hosiery. 284,509; June 30; Serial No. 308,025; published Mar. 31, 1931. Class 39.
Mutual Auto Map Association, Nevada, Mo. Maps. 284,502; June 30; Serial No. 308,997; published Mar. 31, 1931. Class 38.
Napthite Company, The. (See Batten, William W.)
North American Publication, Ltd., Los Angeles, Calif. Monthly publication. 284,453; June 30; Serial No. 310,610; published Mar. 31, 1931. Class 38.
Nusbaum, Mark E., El Paso, Tex. Magazine and newspaper feature column. 284,448; June 30; Serial No. 310,258; published Apr. 7, 1931. Class 38.
Ohio Chapter of the Wild Flower Preservation Society, The, Cincinnati, Ohio. Publication. 284,455; June 30; Serial No. 310,623; published Apr. 7, 1931. Class 38.
P. M. Wholesale Grocery Company, Hamtramck, Mich. Coffee. 284,512; June 30. Class 46.
Peat Moss Sales Corporation, New York, N. Y. Peat moss. 284,526; June 30. Class 10.
Q. B. Chemical Co., The, Cleveland, Ohio. Suppository. 284,464; June 30; Serial No. 299,222; published Mar. 3, 1931. Class 6.
Rice-O'Neill Shoe Company, St. Louis, Mo. Shoes. 284,454; June 30; Serial No. 310,615; published Apr. 14, 1931. Class 39.
Richmond Glove Corporation, Richmond, Va. Gloves. 284,441; June 30; Serial No. 310,073; published Apr. 14, 1931. Class 39.
Robbins, George L., Inc., New York, N. Y. Apparel belts. 284,480; June 30; Serial No. 310,812; published Apr. 7, 1931. Class 39.
Rosenberg, Myer, Chicago, Ill. Newspaper and magazine columns. 284,484; June 30; Serial No. 311,104; publ'shed Apr. 7, 1931. Class 38.
Rothschild Bros. Hat Company, St. Louis, Mo. Men's hats. 284,436; June 30; Serial No. 309,570; published Mar. 31, 1931. Class 39.
Schlesinger, Harry, doing business as Tivoli Manufacturing Co., Passaic, N. J. Game boards and tables. 284,517; June 30. Class 22.
Schreiber, Paul, and Son, New York, N. Y. Maltless beverages. 284,518; June 30. Class 45.
Scott's Savings Plan, Incorporated, Little Rock, Ark. Saving certificates. 284,478; June 30; Serial No. 310,739; published Apr. 14, 1931. Class 38.
Shakespeare Company, Kalamazoo, Mich. Minnow bucket. 284,527; June 30. Class 22.
Shapleigh Hardware Company, St. Louis, Mo. Axes, adzes, hatchets, wedges, etc. 284,528; June 30. Class 23.
Spear's, Alden, Sons Co., The, Cambridge, Mass. Liquid solvent preparation for removing spots and stains. 284,442; June 30; Serial No. 310,082; published Apr. 7, 1931. Class 4.
Talbot, Herbert R., New York, N. Y. Metallic arch files. 284,503; June 30; Serial No. 307,332; published Apr. 7, 1931. Class 37.
Texas Rock Asphalt Company, The, San Antonio, Tex. Paving materials. 284,483; June 30; Serial No. 311,075; published Apr. 14, 1931. Class 12.
Tissue Company, The, Saugerties, N. Y. Paper handkerchiefs. 284,498; June 30; Serial No. 311,853; published Apr. 14, 1931. Class 37.
Tivoli Manufacturing Co. (See Schlesinger, Harry.)
Truax-Traer Coal Company, Chicago, Ill. Coal. 284,472; June 30; Serial No. 305,547; published Apr. 14, 1931. Class 1.
Utica Steam & Mohawk Valley Cotton Mills, Utica, N. Y. Sheets, pillowcases, bolster cases, etc. 284,515; June 30. Class 42.
V. B. Company. (See Bunker, Vera B.)
Vampire Products Company, The. (See Hulsman, J. Dom.)
Voight, A. L., & Company, Cleveland, Ohio. Bituminous composition. 284,470; June 30; Serial No. 304,841; published Apr. 14, 1931. Class 12.
Warren Featherbone Company, The, Three Oaks, Mich. Girdles, garter belts, hose supporters, and dress linings. 284,477; June 30; Serial No. 307,188; published Mar. 31, 1931. Class 39.
Weeks Aircraft Corporation, Milwaukee, Wis. Manuals of instruction. 284,466; June 30; Serial No. 302,980; published Mar. 31, 1931. Class 38.
Wheeler Paper Corporation, Albany, N. Y. Toilet paper. 284,433; June 30; Serial No. 309,103; published Apr. 14, 1931. Class 37.
White & Wyckoff Mfg. Co., Holyoke, Mass. Paper and mailing envelopes. 284,475; June 30; Serial No. 307,017; published Apr. 7, 1931. Class 37.
Wilson-Western Sporting Goods Company, Chicago, Ill. Golf clubs and golf balls. 284,459; June 30; Serial No. 274,028; published Dec. 18, 1928. Class 22.
Winget Kickernick Company, Minneapolis, Minn. Combination undergarments. 284,499; June 30; Serial No. 308,660; published Apr. 7, 1931. Class 39.
Zut Process Company. (See Halm, Jack.)

ALPHABETICAL LIST OF REGISTRANTS OF LABELS

All-Fair Incorporated, Churchville, N. Y. Busto. For Game. 39,338; June 30.
Allpure Flaxseed Co., Milwaukee, Wis. Allpure Flaxseed. For Flaxseed. 39 339; June 30.
Automatic Canteen Company, Chicago, Ill. The Canteen. For Candy Bars. 39,340; June 30.
Bon Ami Company, The, New York, N. Y. Bon Ami. For Polishing and Cleaning Powder. 39,341; June 30.
Burgess Battery Company, Madison, Wis. Burgess Vacuum Contact. For Vacuum Contacts. 39,342; June 30.
Carney, Carl E., doing business as The Shu-Lac Company, Bradenton, Fla., and Cincinnati, Ohio. Shu-Lac. For Dressing for Refinishing Shoes, Hand Bags, Golf Balls, Leather Goods, etc. 39,343; June 30.
Chapman & Company, Smithfield, Va. Chapman's Genuine Smithfield Razor Back Ham. For Hams. 39,344; June 30.
Chard, John Louis, doing business as Norway Importers, Tacoma, Wash. Chard's Cod Liver Oil Capsules. For Cod Liver Oil Capsules. 30,345; June 30.
Chetta & Purpe, Incorporated, New Orleans, La. Chetta's Italian Style. For Spaghetti Gravy. 39,346; June 30.
Cox, Irving E., Los Angeles, Calif. Passion-O. For Carbonated Beverage. 39,347; June 30.
Deane, William, St. Louis, Mo. Butter No. 668. For Butter. 39,348; June 30.
Dr. Hall's Medicine Co. (See Orloff, Hyman J.)
Dugan Brothers, Inc., Brooklyn, N. Y. Dugan's New Year Cakes. For New Year Cakes. 39 349; June 30.
Fairchild, E. E., Corporation, Rochester, N. Y. 2-in-1 Shinola Home Set. For Home Sets of Shoe Polish. 39,350; June 30.
Fir Balsam Incense Company of Maine, Portland, Me. Hiawatha Appeals To The Great Spirit With Maine Fir Balsam Incense. For Incense. 39,351; June 30.
Foraline Products Inc., Circleville, Ohio. Foraline. For Depilatory Preparation. 39,352; June 30.
Freihofer, Chas., Baking Co. Inc., Troy, N. Y. Freihofer's Han-Dee Loaf. For Bread. 39,353; June 30.
General Mills, Inc., Minneapolis, Minn. Washburn's Pancake Flour. For Pancake Flour. 39,354; June 30.
Gold Dust Corporation, New York, N. Y. Gold Dust Scouring Powder. For Scouring Powder. 39,355; June 30.
Green Parrot Products Company, Inc., The, Johnstown Pa. Golden Dutch. For Malt Syrup. 39,356; June 30.
Harper, James A., Supply Company, The, Kansas City, Mo. Tropical Fruit. For Rolls. 39,357; June 30.
Herzog, Moses, New York, N. Y. Tideelox. For Hair Nets. 39,358; June 30.
Hoague-Sprague Corporation, Lynn, Mass. Sportsgirl Shoes. For Boxes. 39,359; June 30.
Hoague-Sprague Corporation, Lynn, Mass. Boston Shoe Store. For Boxes. 39,360; June 30.
Hoague-Sprague Corporation, Lynn, Mass. Milady Footwear. For Boxes. 39,361; June 30.
Hoague-Sprague Corporation, Lynn, Mass. Sobel Bros. For Boxes. 39,362; June 30.
Hoague-Sprague Corporation, Lynn, Mass. Exquisite Footwear. For Boxes. 39,363; June 30.
Hoague-Sprague Corporation, Lynn, Mass. The Commodore Shoe. For Boxes. 39,364; June 30.
Hoague-Sprague Corporation, Lynn, Mass. The Modern Priscilla. For Boxes. 39,365; June 30.
Hubenthal, Dr. Charles G., doing business as The Lopex Remedies and Products Co., Minneapolis, Minn. Lopex. For Medicinal Preparation for the Relief and Treatment of Gall Stones and Catarrhal Jaundice. 39,366; June 30.
Ingersoll, Charles James, doing business as New Life Paint Manufacturing Company, Seattle, Wash. Composition Cement that Sticks on Greasy Surfaces. For Composition Cement. 39,367; June 30.
Kadane-Brown, Inc., Dallas, Fort Worth, and Houston, Tex. Mistletoe. For Thousand Island Dressing. 39,368; June 30.
Lantz Bros. Baking Co., St. Louis, Mo. Grandma's Cakes. For Cakes. 39,369; June 30.
Lee, Edwin A., Philadelphia, Pa. The Juliette Hosiery Co. For Silk Hosiery. 39,370; June 30.
Lopex Remedies and Products Co., The. (See Hubenthal, Dr. Charles G.)
Maltz, Harry R., Poughkeepsie, N. Y. White Pine. For Cough Drops. 39,371; June 30.
Meyers and Powers Company, Braddock, Pa. Melon Mold. For Ice Cream. 39,372; June 30.
Miller-Fischer Company, Detroit, Mich. Mapleleaf Insecticide. For Insecticide. 39,373; June 30.
Mutual Paper Box Corporation, Chicago, Ill. Dutch Mill Candles. For Candles. 39,374; June 30.
Nation Grocery Company, Jersey City, N. J. Glen Brook. For Butter. 39,376; June 30.
National Carbon Company, Inc., New York, N. Y. Eveready Wallite. For Electric Lamps. 39,375; June 30.
New Life Paint Manufacturing Company. (See Ingersoll, Charles James.)
Norway Importers. (See Chard, John Louis.)
Orloff, Hyman J., doing business as Dr. Hall's Medicine Co., Philadelphia, Pa. Dr. Hall's Improved Digestal For Medicinal Preparation. 39,377; June 30.
Paraffine Companies, The, Inc., San Francisco, Calif. Pabco Roofing. For Roofing. 39,378; June 30.

Rochester Bread Company, The, Rochester, Minn. Kooki Kid. For Cookies. 39,379; June 30.
S. M. A. Corporation, Cleveland, Ohio. Pantry Whipping Cream. For Whipping Cream. 39,380; June 30.
S. M. A. Corporation, Cleveland, Ohio. Pantry Table Cream. For Table Cream. 39,381; June 30.
S. M. A. Corporation, Cleveland, Ohio. Non-allergic Fat Free Milk, Smaco Product No. 303. For Food Product for Infants. 39,382; June 30.
S. M. A. Corporation, Cleveland, Ohio. Fresh Cow's Milk, Smaco Product No. 200. For Food Product for Infants. 39,383; June 30.
Sano Typewriter Pad Company, Wilkes-Barre, Pa. Sano Typewriter Pad. For Cushioning Pads for Supporting Typewriters. 39,384; June 30.
Shu-Lac Company, The. (See Carney, Carl E.)
Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Seal Brand Tea Balls. For Tea Balls. 39,385; June 30.
Standard Brands Incorporated, New York, N. Y. Fleischmann's Pure Dry Yeast. For Dry Yeast. 39,386; June 30.
Standard Brands Incorporated, New York, N. Y. Nassau. For Tea. 39,387; June 30.
Strouse, Charles I., McComb, Ohio. Castration Compound. For Castration Compound. 39,388; June 30.
Try-Me Bottling Co., Washington, D. C. Try-Me Rock. For Ginger Ale. 39,389; June 30.
Turner Nut Company, Inc., Florence, S. C. French-Fried. For Cooked and Salted Peanuts. 39,390; June 30.
Union Bag & Paper Corporation, New York, N. Y. Coffee. For Coffee. 39,391; June 30.
Vi-Cris, Inc., Detroit, Mich. Vi-Cris Antiseptic. For Antiseptic Solution. 39,392; June 30.
Weber, Friedrich & Weil, Inc., Philadelphia, Pa. Aladdin. For Silk Hosiery. 39,393; June 30.
Weber, Friedrich & Weil, Inc., Philadelphia, Pa. Movietone. For Silk Stockings. 39,394; June 30.
Wortendyke Manufacturing Company, Richmond, Va. W. M. C. Tissue. For Toilet Paper. 39,395; June 30.
Zimmerman Bros., Lock Haven, Pa. Phyllis XXXXX. For Malt Syrup. 39,396; June 30.

ALPHABETICAL LIST OF REGISTRANTS OF PRINTS

Andrews, O. B., Company, Chattanooga, Tenn. The Cream Of The Crop. For Canned Foods. 13,272; June 30.
Heinz, H. J., Company, Pittsburgh, Pa. The Two Most Important Things in a Good Salad . . . For Vinegar and Olive Oil. 13,273; June 30.
Heinz, H. J., Company, Pittsburgh, Pa. On Your Next Crowded Day—We Suggest This Delicious Dish! For Cooked Spaghetti in Tomato Sauce with Cheese. 13,274; June 30.
Holeproof Hosiery Co., Milwaukee, Wis. Introducing—The Knit-In Garter. For Hosiery. 13,275; June 30.
Jaques Manufacturing Company, Chicago, Ill. Double Tested . . . Double Action. For Baking Powder. 13,276; June 30.
Jaques Manufacturing Company, Chicago, Ill. Double Tested Double Acting. For Baking Powder. 13,277; June 30.
Jaques Manufacturing Company, Chicago, Ill. Baking Tests Will Prove It Best. For Baking Powder. 13,278; June 30.
Johnson's, Iver Arms & Cycle Works, Fitchburg, Mass. Cocked But Locked. For Rifles. 13,279; June 30.
Lampl, Walter, New York, N. Y. Creators Of The Unusual, As Usual. For Jewelry. 13,280; June 30.
Leggett, Francis H., & Co., New York, N. Y. Bridge spreads. For Meat Sandwich Spreads. 13,281; June 30.
McKessen & Robbins, Incorporated, Fairfield, Conn. Ora. For Liquid Crystal White Deodorant. 13,282; June 30.
Minnehaha Spring Water Company, The, doing business as The Minnehaha Water Co., Cleveland, Ohio. Spring Water Beverages. For Spring Water Beverages. 13,283; June 30.
Pepsodent Co., The, Chicago, Ill. Newly Discovered, (Symbol A-Ads-1). For Antiseptic Mouth Wash. 13,284; June 30.
Postagraph Company, The, Baltimore, Md. Jandho's Post-A-Graph. For Printed Blanks. 13,285; June 30.
Unger Commercial Company, The, Cleveland, Ohio. Gee It's Good. For Bread Bags. 13,286; June 30.
Unger Commercial Company, The, Cleveland, Ohio. Grow With Glasspax. For Transparent Containers for Cookies. 13,287; June 30.

ALPHABETICAL LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aberle, H. C. Company, Incorporated, Philadelphia, Pa. Hosiery. 314,262; June 30. Class 39.
Abilene Flour Mills Company, The, Abilene, Kans. Flour. 310,746; June 30. Class 46.
Acme Brick Company, Danville, Ill. Brick. 314,354; June 30. Class 12.
Acoustone Company, Ltd., Los Angeles, Calif. Sound absorbing and acoustical tile. 310,465; June 30. Class 12.
Agalyn Corporation, The, Pittsburgh, Pa. Dental material. 311,169; June 30. Class 44.
Aktiengesellschaft Chocolat Tobler, Bern, Switzerland. Dietetic food product. 312,591; June 30. Class 46.
Algemeene Kunstzijde Unie N. V., Arnhem, Netherlands. Artificial yarns. 314,888; June 30. Class 43.
All Metal Products Company, Wyandotte, Mich. Popguns, air rifles, toy airplanes, etc. 314,480; June 30. Class 22.
Altorfer Bros. Company, East Peoria, Ill. Electric power units, knives, slicers, etc. 308,807-9; June 30. Class 21.
American Steel and Wire Company of New Jersey, The, Cleveland, Ohio, Chicago, Ill., Pittsburgh, Pa., New York, N. Y., Worcester, Mass., Hoboken, N. J. Wire rope. 314,835; June 30. Class 7.
American Stores Company, Philadelphia, Pa. Butter. 314,786; June 30. Class 46.
Amtorg Trading Corporation, New York, N. Y. Candy. 313,072; June 30. Class 46.
Atlas Mills. (See Goldman, Charles.)
Autobacconist Corporation, The, Glen Cove, N. Y. Cigarette vending machines. 314,225; June 30. Class 23.
Badger Rubber Works, The, Milwaukee, Wis. Inner tubes, tire patches, and boots and sleeves, etc. 292,389; June 30. Class 35.
Baldwin, Ada, Philadelphia, Pa. Cleansing and polishing compounds. 312,688; June 30. Class 4.
Barker, Moore and Mein Co., Philadelphia, Pa. Publication. 312,750; June 30. Class 38.
Barrett Company, The, New York, N. Y. Prepared paint and for priming material and roof coating. 298,266; June 30. Class 16.
Barton & Guestier, Bordeaux, France. Olive oil. 306,229; June 30. Class 46.
Bernstein, Albert, doing business as Cadillac Printing Co., New York, N. Y. Writing paper. 312,595; June 30. Class 37.
Beverly Hall Corporation, doing business as The Philosophical Publishing Company, Quakertown, Pa. Books, magazines, and courses of instruction. 312,976; June 30. Class 38.
Bienstock and Lubelsky, Inc., New York, N. Y. Fur trimmings. 313,640; June 30. Class 40.
Blue Seal Extract Company, Cambridge, Mass. Ginger ale and maltless beverages, and syrups and extracts for making the same. 314,838; June 30. Class 45.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 313,955-6; June 30. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 314,318; June 30. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 314,320; June 30. Class 42.
Booth, F. E., Company, Inc., San Francisco, Calif. Poultry feed. 314,681; June 30. Class 46.
Borchers, Herman H., doing business as The Mel-Rah Products Co., Baltimore, Md. Concentrated food. 313,322; June 30. Class 46.
Bradley, Milton, Company, Springfield, Mass. Artists' water color paints. 314,443; June 30. Class 16.
Budge-It Products. (See Burgess, Bessie B.)
Buffums', Long Beach, Calif. Clothing. 313,106-7; June 30. Class 39.
Burgess, Bessie B., doing business as Budge-It Products, New York, N. Y. Chemical compound used for cleaning. 305,386; June 30. Class 4.
Burton Brothers & Co. Inc., New York, N. Y. Cotton piece goods and mixtures of cotton and silk piece goods. 313,588; June 30. Class 42.
Byrne, Thomas F. Corporation, Phoenixville, Pa. Wash cloths. 300,463; June 30. Class 42.
C-C Manufacturing Company, The, Jersey City, N. J. Jock straps, suspensories, and athletic and ankle and wrist supporters. 305,758; June 30. Class 44.
Cadd, Lowell E., Albert Lea, Minn. Pastry. 312,943; June 30. Class 46.
Cadillac Printing Co. (See Bernstein, A.)
California Packing Corporation, San Francisco, Calif. Canned fruit and vegetables, raisins, mincemeat, etc. 307,257; June 30. Class 46.
California Packing Corporation, San Francisco, Calif. Fish meal. 310,856; June 30. Class 10.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Campbell Company, New York, N. Y. Cotton goods. 313,327; June 30. Class 42.
Candy Kitchens, Inc., Chicago, Ill. Candy. 314,483; June 30. Class 46.
Carleton, Francis B., Boston, Mass. Gasoline blow torch. 314,230; June 30. Class 34.
Cattell, J. McKeen, doing business as The Science Press, New York, N. Y. Magazine. 313,959; June 30. Class 38.
Champion Fibre Company, The, Canton, N. C. Soda pulp. 311,595; June 30. Class 1.
Chapman & Dewey Lumber Co., Marked Tree, Ark. Lumber, lime and brick. 313,830; June 30. Class 12.
Clark and Jackson, Columbia, S. C. Cotton cordage, rope, and twine. 314,788; June 30. Class 7.
Closet Shop, The. (See Herzog, Mrs. George.)
Clyde Cutlery Company, The, Clyde, Ohio. Kitchen ware. 313,494; June 30. Class 23.
Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 314,509; June 30. Class 4.
Colonial Products Company. (See Silberman, L. E.)
Combustion Oil Burner Co. (See Milwaukee Air Power Pump Co.)
Condor Manufacturing Co., Inc., Long Island City, N. Y. Golf clubs. 314,272; June 30. Class 22.
Congoleum-Nairn, Inc., Kearny, N. J. Linoleum and products of a linoleum-like nature. 315,037–8; June 30. Class 20.
Crofut & Knapp Co. The, South Norwalk, Conn. Headwear. 312,550; June 30. Class 39.
Cross, W. W., & Company, Incorporated, Portland, Me. Tacks. 291,326; June 30. Class 13.
Day & Night Water Heater Co., Ltd., Monorovia, Calif. Gas and solar water heaters, water heating units, and range boilers. 310,163; June 30. Class 34.
Detroit Waste Works. (See Gallagher, John C.)
Edwards & Walker Company, Portland, Me. Golf balls. 314,793; June 30. Class 22.
Electric Auto-Lite Company, The, Toledo, Ohio. Storage batteries. 299,652; June 30. Class 21.
Elliott Ralston Corporation, Nashville, Tenn. Business directory and routing booklet. 313,067; June 30. Class 38.
Endicott Johnson Corporation, Endicott, N. Y. Boots, shoes, or slippers. 302,530; June 30. Class 39.
Engl, Morris, doing business as The International At-A-Glance Chart Co., New York, N. Y. Charts. 311,653; June 30. Class 38.
Everfresh Butter Corporation, New York, N. Y. Butter. 314,327; June 30. Class 46.
Fahlbusch, Oscar, Ridgewood, N. Y. Nasal and mouth inhalers. 314,559; June 30. Class 44.
Field, Fred F., Holsteins Dutchland Farms, trustees, Brockton, Mass. Milk, cream, ice cream, butter, and cheese. 297,902; June 30. Class 46.
Flickerette Company, New York, N. Y. Animated picture booklets. 313,034; June 30. Class 38.
Forestal Land, Timber & Railways Company, Limited, The, London, England. Tanning extracts. 311,860; June 30. Class 6.
Fradus, Oscar, doing business as Setex Distributing Company, New York, N. Y. Toilet seat covers. 314,905; June 30. Class 37.
Frankwood Process Company, Portland, Oreg. Safety paper. 314,329; June 30. Class 37.
Gallagher, John C., doing business as Detroit Waste Works, Detroit, Mich. Polishing and dusting cloth. 310,992; June 30. Class 29.
General Baking Company, New York, N. Y. Bread. 314,800–1; June 30. Class 46.
Gimbel Brothers, Inc., New York, N. Y. Bicycles. 299,313; June 30. Class 19.
Goldman, Charles, doing business as Atlas Mills, New York, N. Y. Silk crepe. 313,431; June 30. Class 42.
Goodman, Morris J., doing business as Goodman Cigar Co., Westfield, Mass. Cigars. 314,283; June 30. Class 17.
Grant, W. T., Company, Lynn, Mass., and New York, N. Y. Textile diapers. 313,597; June 30. Class 42.
Gravell, James H., Ambler, Pa. Printed charts. 314,111; June 30. Class 38.
Great Northern Silk Co. Inc., The, New York, N. Y. Textile linings for clothing. 311,638; June 30. Class 42.
Green Oil Soap Company, Chicago, Ill. Shaving cream, paste soap, sweeping powder, etc. 313,913; June 30. Class 4.
Half Size Dress Company, Inc., New York, N. Y. Gowns, frocks, and dresses. 309,270; June 30. Class 39.
Hamblin & Russell Manufacturing Company, Inc., Worcester, Mass. Strainers. 313,850–1; June 30. Class 13.
Hamrah, Alex. J., Co. Inc., New York, N. Y. Art, decorative, and fancy linens. 263,265; June 30. Class 42.
Hamrah, Alex. J., Co. Inc., New York, N. Y. Art, decorative, and fancy linens. 263,267; June 30. Class 42.
Haskins, R. G., Co., Chicago, Ill. Shining compound or polish. 294,113; June 30. Class 16.
Hersog, Mrs. George, doing business as The Closet Shop, New York, N. Y. Built-in household furnishings. 283,332; June 30. Class 32.
Hood, H. P., & Sons, Inc., Boston, Mass. Ice cream. 314,332; June 30. Class 46.
House, Chas. W., & Sons, Unionville, Conn. Wooden bed blankets. 311,272; June 30. Class 42.
Huston, Tom, Frosted Foods, Inc., Columbus, Ga. Frozen confections. 313,243; June 30. Class 46.
International At-A-Glance Chart Co., The. (See Engl, Morris.)
Ippolito, V., & Son, New York, N. Y. Medicinal preparation. 312,399; June 30. Class 6.
Johnson Educator Food Company, Cambridge, Mass. Biscuits. 310,679; June 30. Class 46.
Juci-Sweet Products Inc., Howey-in-the-Hills, Fla. Citrus fruit drinks. 313,436; June 30. Class 45.
Kankakee Tool & Die Works, Kankakee, Ill. Ventilating window locks. 313,964; June 30. Class 25.
Kattermann and Mitchell Company, New York, N. Y. Silk piece goods. 313,372; June 30. Class 42.
Kattermann and Mitchell Company, New York, N. Y. Silk piece goods. 314,160; June 30. Class 42.
King Features Syndicate, Inc., New York, N. Y. Comic strip or cartoon. 313,923; June 30. Class 38.
Kirby, Block & Fischer, Inc., New York, N. Y. Clothing. 314,242; June 30. Class 39.
Knape & Vogt Manufacturing Co., Grand Rapids, Mich. Clothing carriers, show racks, tie racks, etc. 311,098; June 30. Class 13.
Korte, Walter, Company, Cincinnati, Ohio. Foot powder and ointment. 300,726; June 30. Class 6.
Kress, S. H., & Co., New York, N. Y. Playing cards. 314,915; June 30. Class 22.
Kress, S. H., & Co., New York, N. Y. Playing cards. 314,917; June 30. Class 22.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Canned fruits and fruit preserves, canned vegetables, meats, etc. 279,479; June 30. Class 46.
Kroger Grocery & Baking Co., The, Cincinnati, Ohio. Fresh meat and chipped beef. 311,337; June 30. Class 46.
Kroy Wen Publishers, Inc., New York, N. Y. Magazine. 310,626; June 30. Class 38.
La Grande Distillerie E. Cusenier Fils Aine & Cie., Societe Anonyme, Paris, France. Maltless beverages and syrups for making the same. 300,208; June 30. Class 45.
Lash's Products Company, San Francisco, Calif. Maltless beverages. 314,373; June 30. Class 45.
Lenzner, Sol. Corp., Buffalo, N. Y. Chocolate sirup. 314,118; June 30. Class 46.
Lewis Method, Incorporated, Cleveland, Ohio. Pads for permanent waving of hair. 313,663; June 30. Class 44.
Liberty Orchards Company, Cashmere, Wash. Canned fruit. 314,852; June 30. Class 46.
Little War Creek Coal Company, Charleston and Litwar, W. Va. Coal. 311,150; June 30. Class 1.
Lucky Kat Stove Polish Company. (See Palais, Saul.)
Majestic Leather Goods Co., Inc., New York, N. Y. Travelling bags, luggage, etc. 310,730; June 30. Class 3.
Martini, L. M., Grape Products Co., Kingsburg, Calif. Grape syrup. 306,241; June 30. Class 46.
Massey, Robert A., Washington, D. C. Daily scratch sheet. 313,713; June 30. Class 38.
Mel-Rah Products Co., The. (See Borchers, Herman H.)
Mente & Co., Inc., New Orleans, La. Textile bagging material. 312,382; June 30. Class 42.
Michaelson Bros., Inc., Boston, Mass. Sweaters, bathing suits and hosiery, etc. 312,996; June 30. Class 39.
Mid-States Steel & Wire Co., Crawfordsville, Ind. Wire fence and barb wire. 310,566; June 30. Class 13.
Miles, Lester H., doing business as Miles Laboratories, Los Angeles, Calif. Bleaching, cleaning, and softening creams. 306,657; June 30. Class 6.
Milwaukee Air Power Pump Co., doing business as Combustion Oil Burner Co., Milwaukee, Wis. Oil burners. 313,144; June 30. Class 34.
Montgomery Ward & Co., Inc., Chicago, Ill. Paints, enamels, kalsomine, and varnishes. 310,024; June 30. Class 16.
Moore, David P., New York, N. Y. Knitted pile fabrics. 311,101; June 30. Class 42.
Mulhern, John, Company, San Francisco, Calif. Canned and bottled crushed fruits, shelled nuts, jams, etc. 299,588; June 30. Class 46.
Nanty Frocks, Inc., New York, N. Y. Dresses and dance frocks. 312,956; June 30. Class 39.
National Features Inc., Boston, Mass. Candy. 314,814; June 30. Class 46.
National Sugar Refining Company of New Jersey, The, Jersey City, N. J., and New York, N. Y. Sugar. 314,124; June 30. Class 46.
Nekoosa-Edwards Paper Company, Port Edwards, Wis. Kraft paper. 314,625; June 30. Class 37.
Nekoosa-Edwards Paper Company, Port Edwards, Wis. Bleached kraft paper. 314,816; June 30. Class 37.
Neustadter Bros., San Francisco, Calif. Overalls, pants, combination suits, work shirts, etc. 313,888; June 30. Class 39.
New Standard Baking Company, Philadelphia, Pa. Cakes. 314,856–7; June 30. Class 46.
Overfold Company, The, Chardon, Ohio. Manifold forms. 314,655; June 30. Class 37.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Palais, Saul, doing business as Lucky Kat Stove Polish Company, Peabody, Mass. Stove polish. 309,172; June 30. Class 4.
Paraffine Companies, Inc., The, San Francisco, Calif. Paint enamel. 310,693; June 30. Class 16.
Parker Brothers, Inc., Portland, Me., and Salem, Mass. Board game. 314,926; June 30. Class 22.
Pepper, Dr., Company, Dallas and Waco, Tex., and St. Louis, Mo. Tonic beverages and syrups for making the same. 294,417; June 30. Class 45.
Philosophical Publishing Company, The. (See Beverly Hall Corporation.)
Pitman-Moore Company, Indianapolis, Ind. Vermicide and purgative. 313,971; June 30. Class 6.
Price Awnlok Corporation, Buffalo, N. Y. Tents and awnings. 291,176; June 30. Class 50.
Price-Schlesinger Inc., New York, N. Y. Dresses. 314,073; June 30. Class 39.
Putman, Robert, Candy Company, The, Cincinnati, Ohio. Candies, mayonnaise, bread, etc. 299,594; June 30. Class 46.
Rawlplug Company, Inc., The, New York, N. Y. Metal covers or heads for fasteners. 311,751; June 30, Class 13.
Richardson & Boynton Company, New York, N. Y. Gauges. 314,929; June 30. Class 26.
Roberts, F. H., Company, Boston, Mass. Chocolates. 314,299; June 30. Class 46.
Rosenbaum Company, The, Pittsburgh, Pa. Men's topcoats and overcoats. 268,058; June 30. Class 39.
Saltzman & Bromberg, New York, N. Y. Perfumes, toilet waters, lotions, etc. 309,742; June 30. Class 6.
San-Nap-Pak Mfg. Co., Inc., New York, N. Y. Absorbent cotton and gauze, and sanitary napkins. 314,302; June 30. Class 44.
Saxon Paper Products Inc., New York, N. Y. Bond paper. 313,562; June 30. Class 37.
Sayles, J. Willis, Wichita, Kans. Face creams. 313,512; June 30. Class 6.
Schneierson, I., & Sons, Inc., New York, N. Y. Pajamas, princess slips, night gowns, etc. 314,580; June 30. Class 39.
Schorsch, Jacob, New York, N. Y. Necklaces and clasps therefor. 313,937; June 30. Class 28.
Schrauth's, J., Sons, Inc., Poughkeepsie, N. Y. Ice cream, frozen pudding, sherbets, ices. 313,803; June 30. Class 46.
Schweitzer Company, Inc., The, New York, N. Y. Women's undergarments. 312,459; June 30. Class 39.
Science Press, The. (See Cattell, J. McKeen.)
Sears, Roebuck and Co., Chicago, Ill. Lawn mowers. 302,491; June 30. Class 23.
Seneca Food Products Corporation, Utica, N. Y. Malt syrup. 314,131; June 30. Class 46.
Setex Distributing Company. (See Fradus, Oscar.)
Shell Oil Company, San Francisco, Calif. Asphalt. 312,533; June 30. Class 12.
Silberman, L. E., doing business as Colonial Products Company, Des Moines, Iowa. Powder compound used in the place of sugar for aging drinks. 303,926; June 30. Class 45.
Smith, J. Hungerfold, Co., Rochester, N. Y. Ice cream confections. 313,450; June 30. Class 46.
Société Anonyme Jean Patou, Paris, France. Perfumes, toilet water, powder, etc. 314,083; June 30. Class 6.
Stagg, Geo. T., Co., Inc., The, Frankfort, Ky. Whiskey. 314,382; June 30. Class 49.
Tecumseh Petroleum Company, Inc., Philadelphia, Pa. Petroleum lubricating oils. 314,471; June 30. Class 15.
Tunstall Optical Co. Ltd., Croydon, England. Spectacles and eyeglasses. 309,876; June 30. Class 26.
Union Bag & Paper Corporation, New York, N. Y. Paper bags. 314,521; June 30. Class 2.
Union Bag & Paper Corporation, New York, N. Y. Paper bags. 314,727; June 30. Class 2.
United States Gypsum Company, Chicago, Ill. Metallic clips. 305,458; June 30. Class 12.
Universal Pictures Corporation, New York, N. Y. Motion picture films. 314,348; June 30. Class 26.
Veiga, Manuel G., Buenos Aires, Argentina. Green tea. 309,102; June 30. Class 46.
Vitrea Company, Inc., Brooklyn, N. Y. Sheet glass. 304,477; June 30. Class 33.
Vulcan Match Co., Inc., New York, N. Y. Matches. 314,870–7; June 30. Class 9.
Walus, Andrew, Brooklyn, N. Y. Swimming belts. 314,878; June 30. Class 22.
Wehn, Geo., & Co., Pittsburgh, Pa. Textile carpets and rugs. 314,094; June 30. Class 42.
Wise, J. H., Company, Inc., St. Louis, Mo. Steel plates and steel mesh. 314,595; June 30. Class 12.
Wolf, Emile, La Chaux-De-Fonds, Switzerland. Watches, parts of watches, and clocks. 312,740; June 30. Class 27.
Woolen Corporation of America, The, New York, N. Y. Wool, cotton, silk, etc. fabrics. 313,877; June 30. Class 42.
Worumbo Manufacturing Company, Bath, Me. Woolen fabrics. 294,549; June 30. Class 42.
Wurlitzer, Rudolph, Company, The, Cincinnati, Ohio. Refrigerators of all types. 314,884; June 30. Class 31.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Truax-Traer Coal Company. 284,472; June 30; Serial No. 305,547; published Apr. 14, 1931.
Leather. Barnet Leather Co. 284,511; June 30.

CLASS 2

Boxes, Coal dispensing. J. J. Drew. 284,530; June 30.

CLASS 4

Cleaner, Glass. J. Haim. 284,451; June 30; Serial No. 310,378; published Apr. 7, 1931.
Cleaning preparation, said preparation having incidental polishing properties. J. D. Hulsman. 284,468; June 30; Serial No. 303,184; published Apr. 7, 1931.
Cleaning preparation, such preparation having incidental water softening properties, Crystallized. V. B. Bunker. 284,507; June 30; Serial No. 307,840; published Mar. 31, 1931.
Liquid solvent preparation for removing spots and stains. Alden Speare's Sons Co. 284,442; June 30; Serial No. 310,082; published Apr. 7, 1931.
Preparation for cleaning and polishing. W. W. Batten. 284,437; June 30; Serial No. 309,833; published Apr. 7, 1931.
Soap, soap chips, soap powder, and scouring cleaner. Kirkman & Son. 284,474; June 30; Serial No. 306,448; published Apr. 7, 1931.
Soap, Toilet. Gabilla, Incorporated. 284,491; June 30; Serial No. 311,428; published Apr. 7, 1931.
Soap, Toilet. Gabilla, Incorporated. 284,492; June 30; Serial No. 311,431; published Apr. 7, 1931.

CLASS 6

Medicine. C. S. Leholmen. 284,504; June 30; Serial No. 307,555; published Apr. 7, 1931.
Suppository. O. B. Chemical Co. 284,464; June 30; Serial No. 299,222; published Mar. 3, 1931.

CLASS 9

Pistol holsters. H & D Folsom Arms Co. 284,516; June 30.

CLASS 10

Peat moss. Peat Moss Sales Corporation. 284,526; June 30.

CLASS 12

Bituminous composition. A. L. Voight & Company. 284,470; June 30; Serial No. 304,841; published Apr. 14, 1931.
Insulation material, Heat and cold. General Insulating & Mfg. Co. 284,434; June 30; Serial No. 309,425; published Apr. 14, 1931.
Lumber and building materials. Buttrick Lumber Corporation. 284,524; June 30.
Partitions of sheet metal, Toilet. D. A. Ebinger Sanitary Manufacturing Company. 284,467; June 30; Serial No. 302,374; published Apr. 7, 1931.
Paving material. Amiesite Asphalt Company of America. 284,456; June 30; Serial No. 310,711; published Apr. 7, 1931.
Paving materials. Texas Rock Asphalt Company. 284,483; June 30; Serial No. 311,075; published Apr. 14, 1931.
Roofing material. Interstate Roofing and Supply Company. 284,481; June 30; Serial No. 310,870; published Apr. 7, 1931.
Shingles. Aluminum Company of America. 284,523; June 30.
Shingles and roofing material, Asbestos. Biebel Roofing Company. 284,450; June 30; Serial No. 310,328; published Apr. 7, 1931.
Tar, pitch, and asphalt, Prepared. Barrett Company. 284,461; June 30; Serial No. 298,072; published Apr. 14, 1931.
Tile, Glass. Hadley-Dean Glass Company. 284,479; June 30; Serial No. 310,764; published Apr. 7, 1931.
Weather stripping, Metal and felt. Macklanburg-Duncan Company. 284,457; June 30; Serial No. 310,728; published Apr. 7, 1931.

CLASS 13

Metal tubing, Slit flexible. Cleveland Metal Hose Company. 284,522; June 30.

CLASS 22

Game boards and tables. H. Schlesinger. 284,517; June 30.
Golf clubs and golf balls. Wilson-Western Sporting Goods Company. 284,459; June 30; Serial No. 274,028; published Dec. 18, 1928.
Minnow bucket. Shakespeare Company. 284,527; June 30.

CLASS 23

Axes, adzes, hatchets, wedges, etc. Shapleigh Hardware Company. 284,528; June 30.

CLASS 27

Watches, clocks, watchcases, etc. W. C. Horowitz. 284,531; June 30.

CLASS 32

Show cases, wall cases, shelving, etc. American Show Case & Mfg. Co. 284,514; June 30.

CLASS 37

Books, Check. De Luxe Check Printers, Inc. 284,438; June 30; Serial No. 309,914; published Mar. 31, 1931.
Crayons, slate pencils, and chalk. Binney & Smith Company. 284,485; June 30; Serial No. 311,171; published Mar. 31, 1931.
Files, Metallic arch. H. R. Talbot. 284,503; June 30; Serial No. 307,332; published Apr. 7, 1931.
Paper. Bowers Envelope & Lithographing Company. 284,489; June 30; Serial No. 311,362; published Mar. 31, 1931.
Paper. Butler Paper Corporations. 284,497; June 30; Serial No. 311,772; published Apr. 14, 1931.
Paper. Hurlbut Paper Company. 284,493–6; June 30; Serial Nos. 311,729–32; published Apr. 14, 1931.
Paper and correspondence envelopes. General Paper Company. 284,488; June 30; Serial No. 311,238; published Apr. 14, 1931.
Paper and mailing envelopes. White & Wyckoff Mfg. Co. 284,475; June 30; Serial No. 307,017; published Apr. 7, 1931.
Paper, Bond. Graham Paper Company. 284,476; June 30; Serial No. 307,149; published Apr. 7, 1931.
Paper, Bond writing. Hammermill Paper Company. 284,439; June 30; Serial No. 309,974; published Apr. 14, 1931.
Paper end guards. Crown Paper Company. 284,469; June 30; Serial No. 303,420; published Apr. 7, 1931.
Paper handkerchiefs. Tissue Company. 284,498; June 30; Serial No. 311,853; published Apr. 14, 1931.
Paper, Toilet. Wheeler Paper Corporation. 284,433; June 30; Serial No. 309,103; published Apr. 14, 1931.
Paper, wall paper, shelf paper, etc., Envelops and sheets of writing. A. Drevenstedt. 284,463; June 30; Serial No. 298,939; published Apr. 14, 1931.
Paper, Writing and printing. American Writing Paper Company. 284,482; June 30; Serial No. 311,020; published Apr. 14, 1931.
Pens and pencils. Ernall Pen & Pencil Corp. 284,486; June 30; Serial No. 311,186; published Mar. 31, 1931.
Registers and stationery, Autographic. Egry Register Company. 284,501; June 30; Serial No. 308,823; published Apr. 7, 1931.
Stationery. Little Print of New Rochelle, N. Y., Inc. 284,500; June 30; Serial No. 308,673; published Apr. 14, 1931.

CLASS 38

Cards, books, bookplates, etc., Greeting. A. Drevenstedt. 284,465; June 30; Serial No. 301,754; published Mar. 31, 1931.
Cartoon. Briscoe & Lindberg. 284,462; June 30; Serial No. 298,145; published Mar. 31, 1931.
Certificates, Saving. Scott's Savings Plan, Incorporated. 284,478; June 30; Serial No. 310,739; published Apr. 14, 1931.
Magazine. American Automobile Association, Inc. 284,443–4; June 30; Serial Nos. 310,152–3; published Mar. 31, 1931.
Magazine and newspaper feature column. M. E. Nusbaum. 284,448; June 30; Serial No. 310,258; published Apr. 7, 1931.
Manuals of instruction. Weeks Aircraft Corporation. 284,466; June 30; Serial No. 302,980; published Mar. 31, 1931.
Maps. Mutual Auto Map Association. 284,502; June 30; Serial No. 308,997; published Mar. 31, 1931.
Newspaper and magazine columns. M. Rosenberg. 284,484; June 30; Serial No. 311,104; published Apr. 7, 1931.
Newspaper column. Brooklyn Daily Times. 284,458; June 30; Serial No. 267,691; published Apr. 14, 1931.
Newspaper column. Daily Trade Record Co. of New York. 284,490; June 30; Serial No. 311,369; published Apr. 7, 1931.
Publication. Estate Stove Company. 284,460; June 30; Serial No. 277,874; published Apr. 14, 1931.
Publication. Jewelers Publishing Corporation. 284,487; June 30; Serial No. 311,190; published Apr. 14, 1931.
Publication. North American Publication, Ltd. 284,453; June 30; Serial No. 310,610; published Mar. 31, 1931.
Publication. Ohio Chapter of the Wild Flower Preservation Society. 284,455; June 30; Serial No. 310,623; published Apr. 7, 1931.
Publication, Annual. Fiction House, Inc. 284,446; June 30; Serial No. 310,197; published Mar. 31, 1931.

CLASS 39

Belts, Apparel. George L. Robbins, Inc. 284,480; June 30; Serial No. 310,812; published Apr. 7, 1931.
Boots and shoes. International Shoe Co. 284,432; June 30; Serial No. 309,085; published Apr. 14, 1931.
Boots and shoes. International Shoe Co. 284,473; June 30; Serial No. 305,960; published Mar. 31, 1931.
Dresses, hosiery, underwear, etc. Peggie Hale, Incorporated. 284,525; June 30.
Dresses, suits, blouses, etc. I. G. Farbenindustrie Aktiengesellschaft. 284,471; June 30; Serial No. 304,956; published Mar. 31, 1931.
Girdles, garter belt, hose supporters, and dress linings. Warren Featherbone Company. 284,477; June 30; Serial No. 307,188; published Mar. 31, 1931.
Gloves. Richmond Glove Corporation. 284,441; June 30; Serial No. 310,073; published Apr. 14, 1931.
Hats. Keller and Henninger. 284,505; June 30; Serial No. 307,679; published Apr. 7, 1931.
Hats, caps, tams, and bonnets. Berray Co. Inc. 284,521; June 30.
Hats, coats, dresses, etc., Ladies'. L. L. Kitchell. 284,529; June 30.
Hats, Men's. Rothschild Bros. Hat Company. 284,436; June 30; Serial No. 309,570; published Mar. 31, 1931.
Hats, pajamas, sweaters, etc. Hart, Schaffner & Marx. 284,452; June 30; Serial No. 310,603; published Apr. 7, 1931.
Neckties, mufflers, hosiery, knit underwear, etc. W. J. Grieger. 284,510; June 30; Serial No. 308 544; published Mar. 31, 1931.
Overcoats, trousers, shirts, etc. H. C. Holmes. 284,506; June 30; Serial No. 307,775; published Apr. 7, 1931.
Rubbers, rubber boots, overshoes, and shoes. A. E. Little Company. 284,449; June 30; Serial No. 310,297; published Mar. 31, 1931.
Shoes, Andre, Incorporated. 284,508; June 30; Serial No. 308,002; published Mar. 31, 1931.
Shoes. Great Western Shoe Company. 284,513; June 30.
Shoes. Jefferson Shoe Manufacturing Co. Inc. 284,445; June 30; Serial No. 310,174; published Apr. 7, 1931.
Shoes. Junior Shoe Manufacturing Co. 284,435; June 30; Serial No. 309,565; published Apr. 7, 1931.
Shoes. Rice-O'Neill Shoe Company. 284,454; June 30; Serial No. 310,615; published Apr. 14, 1931.
Shoes and hosiery. I. Miller & Sons, Incorporated. 284,509; June 30; Serial No. 308,025; published Mar. 31, 1931.
Shoes, Leather. Wm. Hahn & Company. 284,440; June 30; Serial No. 310,015; published Mar. 31, 1931.
Undergarments, Combination. Winget Kickernick Company. 284,499; June 30; Serial No. 308,660; published Apr. 7, 1931.

CLASS 40

Braid. British Enka Artificial Silk Company Limited. 284 447; June 30; Serial No. 310,207; published Apr. 14, 1931.

CLASS 42

Sheets, pillowcases, bolster cases, etc. Utica Steam & Mohawk Valley Cotton Mills. 284,515; June 30.

CLASS 44

Sanitary napkins. Deane Plaster Co. 284,520; June 30.

CLASS 45

Beverages, Maltless. Paul Schreiber and Son. 284,518; June 30.

CLASS 46

Canned and bottled olives. Stewart Curtis Packers, Inc. 284,519; June 30.
Coffee. P. M. Wholesale Grocery Company. 284,512; June 30.

ALPHABETICAL LIST OF LABELS

Aladdin. For Silk Hosiery. Weber, Friedrich & Weil. 39,393; June 30.
Allpure Flaxseed. For Flaxseed. Allpure Flaxseed Co. 39,339; June 30.
Bon Ami. For Polishing and Cleaning Powder. The Bon Ami Company. 39,341; June 30.
Boston Shoe Store. For Boxes. Hoague-Sprague Corporation. 39,360; June 30.
Burgess Vacuum Contact. For Vacuum Contacts. Burgess Battery Company. 39,342; June 30.
Busto. For Game. All-Fair Incorporated. 30,338; June 30.

Butter No. 668. For Butter. W. Doane. 39,348; June 30.
Castration Compound. For Castration Compound. C. I. Strouse. 39,388; June 30.
Chapman's Genuine Smithfield Razor Back Ham. For Hams. Chapman & Company. 39,344; June 30.
Chard's Cod Liver Oil Capsules. For Cod Liver Oil Capsules. J. L. Chard. 39,345; June 30.
Chase and Sanborn's Seal Brand Tea Balls. For Tea Balls. Standard Brands Incorporated. 39,385; June 30.
Chetta's Italian Style. For Spaghetti Gravy. Chetta & Purpe, Incorporated. 39,346; June 30.
Coffee. For Coffee. Union Bag & Paper Corporation. 39,391; June 30.
Composition Cement that Sticks on Greasy Surfaces. For Composition Cement. C. J. Ingersoll. 39,367; June 30.
Dr. Hall's Improved Digestal. For Medicinal Preparation. H. J. Orloff. 39,373; June 30.
Dugan's New Year Cakes. For New Year Cakes. Dugan Brothers, Inc. 39,349; June 30.
Dutch Mill Candles. For Candles. Mutual Paper Box Corporation. 39,374; June 30.
Everendy Wallite. For Electric Lamps. National Carbon Company. 39,375; June 30.
Exquisite Footwear. For Boxes. Hoague-Sprague Corporation. 39,368; June 30.
Fleischmann's Pure Dry Yeast. For Dry Yeast. Standards Brands Incorporated. 39,386; June 30.
Foraline. For Depliatory Preparation. Foraline Products Inc. 39,352; June 30.
Freihofer's Han-Dee Loaf. For Bread. Chas. Freihofer Baking Co. Inc. 39,353; June 30.
French-Fried. For Cooked and Salted Peanuts. Turner Nut Company. 39,390; June 30.
Fresh Cow's Milk. Smaco Product No. 200. For Food Product for Infants. S. M. A. Corporation. 39,383; June 30.
Glen Brook. For Butter. National Grocery Company. 39,376; June 30.
Gold Dust Scouring Powder. For Scouring Powder. Gold Dust Corporation. 39,355; June 30.
Golden Dutch. For Malt Syrup. Green Parrot Products Company, Inc. 39,356; June 30.
Grandma's Cakes. For Cakes. Lantz Bros. Baking Co. 39,369; June 30.
Hiawatha Appeals To The Great Spirit With Maine Fir Balsam Incense. For Incense. Fir Balsam Incense Company of Maine. 39,351; June 30.
Juliette Hosiery Co., The. For Silk Hosiery. E. A. Lee. 39,370; June 30.
Kook' Kid. For Cookies. Rochester Bread Company. 39,379; June 30.
Lopex. For Medicinal Preparation for the Relief and Treatment of Gall Stones and Catarrhal Jaundice. Dr. C. G. Hubenthal. 39,366; June 30.
Mapleleaf Insecticide. For Insecticide. Miller-Fischer Company. 39,373; June 30.
Melon Mold. For Ice Cream. Meyers and Powers Company. 39,372; June 30.
Milady Footwear. For Boxes. Hoague-Sprague Corporation. 39,361; June 30.
Mistletoe. For Thousand Island Dressing. Kadane-Brown. 39,368; June 30.
Movietone. For Silk Stockings. Weber, Friedrich & Weil. 39,394; June 30.
Nassae. For Tea. Standard Brands Incorporated. 39,387; June 30.
Non-allergic Fat Free Milk, Smaco Product No. 303. For Food Product For Infants. S. M. A. Corporation. 393,82; June 30.
Pabco Roofing. For Roofing. The Paraffine Companies. 39,378; June 30.
Pantry Table Cream. For Table Cream. S. M. A. Corporation. 39,381; June 30.
Pantry Whipping Cream. For Whipping Cream. S. M. A. Corporation. 39,380; June 30.
Passion-O. For Carbonated Beverage. I. E. Cox. 39,347; June 30.
Phyllis XXXXX. For Malt Syrup. Zimmerman Bros. 39,396; June 30.
Sano Typewriter Pad. For Cushioning Pads for Supporting Typewriters. Sano Typewriter Pad Company. 39,384; June 30.
Shu-Lac. For Dressing for Refinishing Shoes, Hand Bags, Golf Bags, Leather Goods, Etc. C. E. Carney. 39,343; June 30.
Sobel Bros. For Boxes. Hoague-Sprague Corporation. 39,362; June 30.
Sportsgirl Shoes. For Boxes. Hoague-Sprague Corporation. 39,359; June 30.
The Canteen. For Candy Bars. Automatic Canteen Company. 39,340; June 30.
The Commodore Shoe. For Boxes. Hoague-Sprague Corporation. 39,364; June 30.
The Modern Priscilla. For Boxes. Hoague-Sprague Corporation. 39,365; June 30.
Tideelox. For Hair Nets. Moses Herzog. 39,358; June 30.
Tropical Fruit. For Rolls. J. A. Harper Supply Company. 39,357; June 30.
Try-Me Rock. for Ginger Ale. Try-Me Bottling Co. 39,389; June 30.
2-in-1 Shinola Home Set. For Home Sets of Shoe Polish. E. E. Fairchild Corporation. 39,350; June 30.
Vi-Cris Antiseptic. For Antiseptic Solution. Vi-Cris, Inc. 39,392; June 30.
W. M. C. Tissue. For Toilet Paper. Wortendyke Manufacturing Company. 39,395; June 30.
Washburn's Pancake Flour. For Pancake Flour. General Mills, Inc. 39,354; June 30.
White Pine. For Cough Drops. H. R. Maltz. 39,371; June 30.

ALPHABETICAL LIST OF PRINTS

Baking Tests Will Prove It Best. For Baking Powder. Jaques Manufacturing Company. 13,278; June 30.
Bridge Spreads. For Meat Sandwich Spreads. Francis H. Leggett & Co. 13,281; June 30.
Cocked But Locked. For Rifles. Iver Johnson's Arms & Cycle Works. 13,279; June 30.
Creators Of The Unusual, As Usual. For Jewelry. Walter Lampl. 13,280; June 30.
Double Tested Double Acting. For Baking Powder. Jaques Manufacturing Company. 13,277; June 30.
Double Tested . . . Double Action. For Baking Powder. Jaques Manufacturing Company. 13,276; June 30.
Gee It's Good. For Bread Bags. Unger Commercial Company, The. 13,286; June 30.
Grow With Glasspax. For Transparent Containers For Cookies. Unger Commercial Company, The. 12,287; June 30.
Introducing—The Knit-In Garter. For Hosiery. Holeproof Hosiery Co. 13,275; June 30.
Jandho's Post-A-Graph. For Printed Blanks. Postagraph Company. 13,285; June 30.
Newly Discovered, (Symbol A-Ads-1). For Antiseptic Mouth Wash. Pepsodent Co. 13,284; June 30.
On Your Next Crowded Day—We Suggest This Delicious Dish! For Cooked Spaghetti in Tomato Sauce with Cheese. H. J. Heinz Company. 13,274; June 30.
Ora. For Liquid Crystal White Deodorant. McKesson & Robbins, Incorporated. 13,282; June 30.
Spring Water Beverages. For Spring Water Beverages. Minnehaha Spring Water Company, The. 13,283; June 30.
The Cream Of The Crop. For Canned Foods. O. B. Andrews Company. 13,272; June 30.
The Two Most Important Things in a Good Salad . . . For Vinegar and Olive Oil. H. J. Heinz Company. 13,273; June 30.

ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 30TH DAY OF JUNE, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Berge, Joseph, assignor.)
A C Spark Plug Company. (See Rabezzana, Hector, assignor.)
Aarts, Hendrikus C. J., Dongen, Netherlands, assignor to The General Carbonalpha Company, Wilmington, Del. Preparing active, elementary carbon from substances such as carbonmonoxide and carbonmonoxide containing gases. 1,812,230; June 30.
Accounting & Tabulating Corporation of Great Britain, Limited. (See Thomas, Arthur, assignor.)
Ackerly, Donald G., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,812,187; June 30.
Ackerman, Arthur, New York, N. Y. Lime kiln. 1,812,672; June 30.
Adams, Joseph H., Brooklyn, assignor, my mesne assignments, to The Texas Company, New York, N. Y. Apparatus for the conversion and transformation of hydrocarbons, liquids and fluids. 1,811,834; June 30.
Adlake Company, The. (See Larson, Carl H., assignor.)
Affel, Herman A., Ridgewood, N. J., and A. Carpe, New York, N. Y., assignors to American Telephone and Telegraph Company. Control cross talk. 1,811,905; June 30.
Agfa Ansco Corporation. (See Goldacker, Paul, assignor.)
Agnew, William P., San Francisco, Calif. Combined gas saving and lubricating means. 1,812,231; June 30.
Ainslie, Donald F., Bishop, Calif. Drawbar. 1,812,733; June 30.
Ainsworth, William A. (See Smith, Harold W., assignor.)
Air Reduction Company. (See Anderson, James L., assignor.)
Albertine, Herman, East Rutherford, N. J., assignor to Rogers Products Company, Inc. Lifting jack. 1,812,577; June 30.
Albertine, Herman, Rutherford, N. J., assignor to Rogers Products Company, Inc. Grease gun control mechanism. 1,812,643; June 30.
Alco Products Incorporated. (See Jacocks, George T., assignor.)
Alden, Herbert W., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Motor vehicle. 1,811,837; June 30.
Alemite Corporation. (See Davis, Ernest W., assignor.)
Alemite Corporation. (See Murphy, Howard J., assignor.)
Algeo, Albert M., Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Jar closure. 1,812,673; June 30.
Allen, Howard G., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y. Fabricated blade anvil. 1,812,188; June 30.
Allen, Howard G., assignor to H. A. Bliss Company, Inc., Niagara Falls, N. Y. Stapling machine for fiber board blanks. 1,812,189; June 30.
Allith-Prouty Company. (See Scott, John E., assignor.)
Allmänna Svenska Elektriska Aktiebolaget. (See Ytterberg, Arle, assignor.)
American Cable Company. (See Burd, Gorman C., assignor.)
American Can Company. (See Boone, Clifford, C., assignor.)
American Can Company. (See Reynolds, Henry T., assignor.)
American Can Company. (See Stollberg, Charles, assignor.)
American Can Company. (See Young, John M., assignor.)
American Chain Company. (See Lamb, Charles M., assignor.)
American Chemical Paint Company. (See Gravell, James H., assignor.)
American Fork & Hoe Company, The. (See Bergmann, William H., assignor.)
American Glanzstoff Corporation. (See Herrmann, Conrad, assignor.)
American Mills Company, The. (See Chisholm, Lester B., assignor.)
American Multigraph Co. (See Pierson, R. N., and Carlson, assignors.)
American Sales Book Company. (See Hagemann, Louis F., assignor.)
American Sheet and Tin Plate Company. (See Bennett, Charles W., assignor.)
American Telephone and Telegraph Company. (See Affel, H. A., and Carpe, assignors.)
American Telephone and Telegraph Company. (See Carpe, Allen, assignor.)
American Telephone and Telegraph Company. (See Mitchell, D., and Silent, assignors.)
American Thermos Bottle Company. (See Wetmore, Miner P., assignor.)
Anderson, David E., St. Paul, Minn. Multi-angular switch point. 1,812,644; June 30.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Portable cutting and welding machine. 1,811,835; June 30.
Andre, Emanuel, Green Bay, Wis. Band saw guard. 1,811,906; June 30.
Andree, Clarence A., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis. Acoustometer. 1,812,030; June 30.
Anheuser-Busch, Inc. (See Rabe, Frederick W., assignor.)
Anthony, Joseph W., Lynn, Mass. Folding machine. 1,811,871; June 30.
Anthony, Stanley, Boston, Mass. Cabinet index. 1,811,838; June 30.
Anton, Frederick A., Topeka, Kans. Assembly support for lateral arm awnings. 1,811,907. June 30.
Apgar, Frank A., East Chicago, Ind., assignor to Sinclair Refining Company, New York, N. Y. Refining hydrocarbons. 1,812,426; June 30.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Combined starting and pumping system for motor vehicles. 1,811,836; June 30.
Appleton Wire Works, Inc. (See Weissenborn, Albert B., assignor.)
Arbuckle, Samuel F. (See Coutler, C. H., and Arbuckle.)
Armitage, Joseph B. (See Kearney, E. J., and Armitage.)
Armour & Company. (See Lusk, W. F., and Potter, assignors.)
Armour & Company. (See Powell, J. R., Sheely, and Smith, assignors.)
Arms, George L., assignor to Roberts and Schaefer Company, Chicago, Ill. Apparatus for distributing and circulating air. 1,812,072; June 30.
Arms, George L., assignor to Roberts and Schaefer Company, Chicago, Ill. Distributing and circulating air for air cleaning tables. 1,812,073; June 30.
Arms, Ray W., assignor to Roberts & Schaefer Company, Chicago, Ill. Apparatus for controlling air in dry separating tables. 1,812,071; June 30.
Armstrong Cork Company. (See Garrett, Raymond R., assignor.)
Armstrong Cork Company. (See Russ, Arthur J., assignor.)
Arnold, Harold D., Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound transmission. 1,811,839; June 30.
Arrow-Hart & Hegeman Electric Company, The. (See Johnson, D. W., and Nero, assignors.)
Art Photogravure Company Limited. (See Astafiev, Michael, assignor.)
Arter Grinding Machine Company. (See Arter, W., and Fraser, assignor.)
Arter, William, Worcester, and W. F. Fraser, Westboro; said Fraser assignor to Arter Grinding Machine Company, Worcester, Mass. Grinding machine. 1,812,313; June 30.
Associated Apparel Industries, Inc. (See Axline, Edward S., assignor.)
Astafiev, Michael, Chelsea, London, assignor, by mesne assignments, to Art Photogravure Company Limited, London, England. Optical system. 1,812,765; June 30.
Astrom, Carl P., East Orange, N. J., assignor to M. H. Treadwell Company, New York, N. Y. Tandem hot metal car. 1,812,814; June 30.
Atack, Frederick W., Kingston, assignor to Industrial Processes Development Limited, Toronto, Ontario, Canada. Emulsion. 1,812,074; June 30.
Atlas Press Company. (See Collins, James G., assignor.)
Atwater Kent Manufacturing Company. (See Lillibridge, Hoxsie W., assignor.)
Auburn Automobile Company. (See Leamy, Alan H., assignor.)
Aurili, Albert, Lake Worth, Fla. Radiocabinet. Des. 84,505; June 30.
Autogen Gasaccumulator Aktiengesellschaft. (See Hentschel, H., and Greggersen, assignors.)
Axline, Edward S., New York, N. Y., assignor to Associated Apparel Industries, Inc., Chicago, Ill. Elastic material. 1,812,279; June 30.

Babcock, Isaac A., and A. W. Reynolds, assignors to The Babcock Manufacturing Company, Leonardville, N. Y. Harrow. 1,812,461; June 30.
Babcock Manufacturing Company, The. (See Babcock, I. A., and Reynolds, assignors.)
Babcock & Wilcox Company, The. (See Trainer, James E., assignor.)
Babcock & Wilcox Company. (See Turkus, George, assignor.)
Bach, Anton M., Palo Alto, Calif. Front wheel position indicator. 1,812,674; June 30.
Baddiley, James, A. Shepherdson, and A. J. Hailwood, Blackley, Manchester, assignors to British Dyestuffs Corporation Limited, Manchester, England. Manufacture of valuable products from lignin sulphonic acid (sulphite cellulose waste). 1,812,675; June 30.
Bailey, Claude B., Wyandotte, assignor to McCord Radiator & Mfg. Co., Detroit, Mich. Gasket. 1,812,578; June 30.
Bailey, William M. (See Proctor, J. A., and Bailey.)
Baker, John H. E., Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone exchange system. 1,812,617; June 30.
Baker Perkins Company. (See Engels, Eugene O., assignor.)
Ball Brothers Company. (See Jewett, Fred E., assignor.)
Ball, Harry V., Concord, Mass., and W. Ogden, Cleveland, Ohio, assignors to R. Hoe & Co., Inc., New York, N. Y. Web roll changer. 1,811,872; June 30.
Barclay, Isabella, Inc. (See Scholle, Eleanor P., assignor.)
Barker, Eros V., assignor to The Bellevue Mfg. Company, Bellevue, Ohio. Combined bumper and trunk carrier. 1,812,075; June 30.
Barnard, Wilfred K. (See Leeds, C. T., and Barnard.)
Barrett Company, The. (See Miller, Stuart P., assignor.)
Barrett, Glenn J., Evanston, assignor to Portable Adding Machine Company, Chicago, Ill. Adding machine. 1,811,840; June 30.
Barrett, Glenn J., Evanston, assignor to Portable Adding Machine Company, Chicago, Ill. Calculating mechanism for adding and listing machines. 1,812,129; June 30.
Barrett, Glenn J., Evanston, assignor to Portable Adding Machine Company, New York, N. Y. Adding and listing machine. 1,812,130; June 30.
Barthelmie, George. (See Flach, H., and Barthelmie.)
Bartlett Hayward Company, The. (See Genter, Albert L., assignor.)
Bartunek, Richard. (See Stockly, J. J., and Bartunek.)
Bäseler, Wolfgang, Munich, Germany. Railway track brake. 1,812,190; June 30.
Bassett, Orin A., assignor to The National Industrial Laboratories Corporation, Oklahoma City, Okla. Treating metallic articles. 1,811,909; June 30.
Bassick Company, The. (See Moore, Raymond G., assignor.)
Bastian-Morley Co. (See Clayton, Mark M., assignor.)
Bates, George G., Kingston, N. Y. Fruit sorter and cleaner. 1,811,991; June 30.
Baumgartner, Henry H., Belleville, N. J., assignor to Drake Non-Clinkering Furnace Block Company, Inc., New York, N. Y. Air cooled furnace wall. 1,812,315; June 30.
Bavan, Lawrence M., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,506; June 30.
Bavan, Lawrence M., assignor to C. G. King & Co., Inc., Providence, R. I. Shoe ornament. Des. 84,507; June 30.
Bead Chain Manufacturing Company, The. (See Gagnon, William J., assignor.)
Beall, John, Caldwell, Idaho. Computing attachment for liquid dispensing devices. 1,812,676; June 30.
Beardsley, Robert O. (See Porter, R. W., and Beardsley.)
Beaver, Rudolph, Watertown, assignor to Gillette Safety Razor Company, Boston, Mass. Twine cutter. 1,812,462; June 30.
Bebout, Guy B., Zanesville, Ohio. Method and apparatus for cleaning gravel or the like. 1,812,280; June 30.
Becker, Arman E., Newark, N. J., assignor to Standard Oil Development Company. Lubricant. 1,812,766; June 30.
Becker, Walter S. (See Johnson, Charles F., assignor.)
Beebe, Alan P., assignor to The Peninsular Grinding Wheel Company, Detroit, Mich. Grinding wheel. 1,812,076; June 30.
Behle, Joseph, and H. Linnartz, assignors to The Murray Company, Dallas, Tex. Press box door counterbalancing device. 1,812,281; June 30.
Belash, Constantine A., Boston, Mass. Card holder. 1,812,077; June 30.
Belden, Albert G., and G. C. Naromore, assignors to Norton Company, Worcester, Mass. Speed control device for grinding machines. 1,811,873; June 30.
Bell, Benjamin R., Bartow, Fla. Fountain pen. 1,811,992; June 30.
Bell Telephone Laboratories, Incorporated. (See Arnold, Harold D., assignor.)
Bell Telephone Laboratories, Incorporated. (See Benjamin, John C., assignor.)
Bell Telephone Laboratories, Inc. (See Blattner, David G., assignor.)
Bell Telephone Laboratories, Incorporated. (See Cummings, George C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Curtis, Austen M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Dixon, Amos F., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gilbert, John J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gray, Frank, assignor.)
Bell Telephone Laboratories, Incorporated. (See Ives, Herbert E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Jones, Warren C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Keith, Clyde R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Knoop, William A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Legg, Victor E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Miller, Ohmer R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Morton, Edmund R., assignor.)
Bell Telephone Laboratories, Incorporated. (See Peterson, Eugene, assignor.)
Bellanca Aircraft Corporation. (See Bellanca, Guiseppe M., assignor.)
Bellanca, Guiseppe M., assignor to Bellanca Aircraft Corporation, New Castle, Del. Exhaust manifold. Re18,115; June 30.
Bellevue Mfg. Company, The. (See Barker, Eros V., assignor.)
Bendix Aviation Corporation. (See Perrot, Henri, assignor.)
Bendix Brake Company. (See Apple, Vincent G., assignor.)
Bendix Brake Company. (See Goepfrich, Rudolph A., assignor.)
Bendix Brake Company. (See Michael, Gus F., assignor.)
Bendix Brake Company. (See Peterson, John W., assignor.)
Bendix Brake Company. (See Sanford, Roy S., assignor.)
Bendix Brake Company. (See Whitworth, Stanley, assignor.)
Benjamin, John C., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound reproducing system. 1,811,841; June 30.
Benner, Harry P. (See Egloff, G., and Benner.)
Bennett, Charles W., assignor to American Sheet and Tin Plate Company, Pittsburgh, Pa. Making sheets and plates. 1,812,508; June 30.
Bennett, Frank. (See Hallowell, H. T., and Bennett.)
Benoit, Leon. (See Kanabay, E. Joseph, assignor.)
Benson, Merrill L., assignor, by mesne assignments, to Super Radiator Corporation, Minneapolis, Minn. Heat exchanger. 1,812,509; June 30.
Berge, Joseph, Montclair, N. J., assignor to A C Spark Plug Company, Flint, Mich. Speedometer drive mechanism. 1,812,510; June 30.
Bergfeld, Karl, Berlin, Germany. Gas washer. 1,812,767; June 30.
Berggren, Charles E., Wilcox, Nebr. Trailer coupling. 1,812,768; June 30.
Bergmann, William H., assignor to The American Fork & Hoe Company, Cleveland, Ohio. Weed killer. 1,812,427; June 30.
Bergquist, Arthur E., Lindstrom, Minn. Game. 1,812,677; June 30.
Bergson, Carl B., Kansas City, Mo. Fabric cutting machine. 1,812,645; June 30.
Berkley, Richard H., Plainville, Mass., assignor to Whiting & Davis Company. Mesh attaching machine. 1,812,078; June 30.
Berl, Ernst, Darmstadt, Germany. Making active charcoal. 1,812,316; June 30.
Berland, Isaac. (See Berland, Joseph, assignor.)
Berland, Joseph, assignor to I. Berland, Cleveland, Ohio. Vending machine. 1,812,232; June 30.
Berman, Adolph. (See Drewes, George, assignor.)
Bernert, George, North Milwaukee, Wis. Conveyer duct. 1,812,678; June 30.
Berry, Edward C., Melrose, Mass., assignor to The Chilton Pen Company, Inc., Long Island City, N. Y. Fountain pen. 1,811,874; June 30.
Berry, George P., assignor to General Motors Research Corporation, Detroit, Mich. Vacuum brake control on pedal. 1,812,463; June 30.
Berry, John V., Johnstown, Pa., assignor to Bethlehem Steel Company. Fastener. 1,811,993; June 30.
Bertolet, Elmer C., assignor to George K. Hale Manufacturing Company, Philadelphia, Pa. Fast-dyeing bone. 1,812,734; June 30.
Bertrand, Frederic E., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel drilling machine. 1,811,875; June 30.
Bethlehem Steel Company. (See Berry, John V., assignor.)
Bethlehem Steel Company. (See Ceavey, Elmer S., assignor.)
Billings, Frederic C., assignor to The Billings & Spencer Company, Hartford, Conn. Drop hammer. 1,812,464; June 30.
Billings & Spencer Company, The. (See Billings, Frederic C., assignor.)
Binger, Delmar M., St. Paul, assignor to Zinsmaster Baking Company, Minneapolis, Minn. Pan loaf bread and making same. 1,812,769; June 30.

Bischoff, Walter E., assignor to Rawlings Manufacturing Company, St. Louis, Mo. Athletic guard. 1,812,579; June 30.
Bishop, Howard B., Summit, N. J. Decomposing salts. 1,812,770; June 30.
Bjorklund, Abner G., St. Paul, Minn. Compensating condyle cord. 1,812,031; June 30.
Black, Frederick O., Jersey City, N. J. Vehicle and tailboard construction. 1,812,580; June 30.
Blackmore, Lloyd, assignor to General Motors Corporation, Detroit, Mich. Radiator cap. 1,812,465; June 30.
Blackmore, Lloyd, assignor to General Motors Corporation, Detroit, Mich. Tire carrier lock. 1,812,466; June 30.
Blackmore, Lloyd, assignor to General Motors Corporation, Detroit, Mich. Tire carrier lock. 1,812,467; June 30.
Blacksher, E. M. (See Thompson, Early G., assignor.)
Blaker, Ernest, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Vulcanizer and method of vulcanizing. 1,812,282; June 30.
Blase, Herman, and K. B. Cowan, New York, N. Y.; said Cowan assignor to said Blase. Folding bed. 1,812,618; June 30.
Blattner, David G., Bogota, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Sound reproduction. 1,812,619; June 30.
Blériot, Louis, Paris, France. Detachable floating compartments for aeroplanes. 1,812,317; June 30.
Bliss, H. R., Company. (See Allen, Howard G., assignor.)
Bloch, Leon, Cleveland Heights, Ohio. Bathroom fixture. Des. 84,508; June 30.
Bloch, Marcel, Paris, France. Timepiece winding mechanism. 1,812,581; June 30.
Blood, Charles R., and H. J. Humbert, Sacramento, Calif. Machine for planing the surfaces of pavements. 1,812,771; June 30.
Bloom, Edward, Paterson, N. J. Slub detector. 1,812,428; June 30.
Bluemmel, Franz. (See Krzikalla, H., and Bluemmel.)
Blunt, James G., Schenectady, N. Y. Locomotive frame. 1,812,582; June 30.
Bock, Wilhelm, Gwynedd, Pa. Humidifying apparatus. 1,812,131; June 30.
Boedecker, Friedrich, Berlin-Dahlem, assignor to the Firm J. D. Riedel Aktiengesellschaft, Berlin-Britz, Germany. Production of vanillin and i-vanillin. 1,812,132; June 30.
Bogaty, Hermann. (See Hurxthal, A. O., and Bogaty.)
Boggild & Jacobsen, Messrs. (See Jensen, J. J., assignor.)
Bone, Herbert L., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway braking apparatus. 1,812,191; June 30.
Bone, Herbert L., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway track circuits. 1,812,192; June 30.
Bone, Herbert L., assignor to The Union Swith & Signal Company, Swissvale, Pa. Railway braking apparatus. 1,812,193; June 30.
Bonham, Guy L., West Hartford, Conn. Game. 1,812,253; June 30.
Boone, Clifford C., Chicago, Ill., assignor to American Can Company, New York, N. Y. Box or similar container. Des. 84,509; June 30.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Machine for riveting spokes of vehicle wire wheels. 1,812,032; June 30.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Tire carrying rim. 1,812,033; June 30.
Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Machine for perforating rim lugs. 1,812,183; June 30.
Bosch, Robert. (See Dorn, Walter, assignor.)
Bosch, Robert. (See Ellwanger, Adolf, assignor.)
Bosch, Robert. (See Rall, M., and Durst, assignors.)
Bossart, Elsie, New York, N. Y. Hair fastener. 1,811,842; June 30.
Boswell, Roscoe C., New Hartford, N. Y. Picture hanger. 1,812,254; June 30.
Boten, David, Chicago, Ill. Shoe. Des. 84,510; June 30.
Boten, David, Chicago, Ill. Shoe. Des. 84,511; June 30.
Boten, David, Chicago, Ill. Shoe. Des. 84,512; June 30.
Boten, David, Chicago, Ill. Shoe. Des. 84,513; June 30.
Bower, William C., Bell, Calif. Display device. 1,812,318; June 30.
Boyce, Harrison H., Jericho, Long Island, N. Y. Thermometer. 1,812,679; June 30.
Boyce, Harrison H., Jericho, Long Island, N. Y. Thermometer. 1,812,680; June 30.
Boyd, Randolph, Galva, Ill. Belt buckle. 1,812,233; June 30.
Braatelien, Edwin H., Phoenix, Ariz. Spray device. 1,812,234; June 30.
Bradley, Harry L., et al. (See Pfeifer, Walter S., assignor.)
Bradley, Lynde, et al. (See Pfeifer, Walter S., assignor.)
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg & Kliesrath Corporation, Long Island, N. Y. Power actuator. 1,811,994; June 30.
Bragg & Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Bragger, William B., Exeter, Me., and V. F. Nekarda, Jersey City, N. J., assignors to Pearl Art, Inc., New York, N. Y. Ornamental material, inserts for and making same. 1,812,134; June 30.
Braitmayer, Otto E., assignor to The Tabulating Machine Company, New York, N. Y. Punching device. 1,812,620; June 30.
Brand, Samuel, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,812,194; June 30.
Brandt, Lewis, assignor to Pittsburg Steel Company, Pittsburgh, Pa. Building structure. 1,811,195; June 30.
Brauer, Walter, Seminole, Okla. Key bushing for rockbit reamer pins. 1,812,681; June 30.
Braun, B., firm. (See Hammer, Fritz, assignor.)
Brazzell, Martha, St. Louis, Mo. Combination undergarment for children. 1,812,255; June 30.
Breyer, Frank G., Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y. Reduction of zinciferous material. 1,811,910; June 30.
Bridgeport Machine Company, The. (See Swan, Fred, assignor.)
British Dyestuffs Corporation Limited. (See Baddiley, J., Shepherdson, and Hailwood, assignors.)
British Dyestuffs Corporation Limited. (See Hailwood, Anthony J., assignor.)
Brogan, Michael F., Lawrence, Mass., assignor to United Shoe Machinery Corporation, Patterson, N. J. Shoe and shank stiffener therefor. 1,811,911; June 30.
Brooke, Arthur O., assignor to General Motors Corporation, Detroit, Mich. Lock washer untangling device. 1,812,468; June 30.
Brooks, Charles A., Swissvale, and J. M. Pelikan, Pittsburgh, assignors to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,812,135; June 30.
Browall, Bert H., assignor to Svenska Aktiebolaget Bromsregulator Mealmo, Sweden. Automatic slack adjuster for brakes. 1,811,913; June 30.
Browall, Bert H., assignor to Svenska Aktiebolaget Bromsregulator, Malmo, Sweden. Automatic slack adjuster for brakes on railway cars and the like. 1,811,914; June 30.
Brown, Arthur. (See Mathewson, M. I., and Brown.)
Brown Company. (See Parker, Howard, assignor.)
Brown Company. (See Richter, George A., assignor.)
Brown Company. (See Schur, M. O., and Cook, assignors.)
Brown, David H., assignor to Century Furniture Company, Grand Rapids, Mich. Chair. Des. 84,514; June 30.
Brown, Henry L., Chattanooga, Tenn. Gate operating means. 1,812,735; June 30.
Brown, John H., Hollywood, Calif., assignor, by mesne assignments, to Instant-Ice Corporation. Pump. 1,812,034; June 30.
Brown, Newton N., assignor to Gold Medal Camp Furniture Mfg. Co., Racine, Wis. Foldable table. 1,812,196; June 30.
Brown & Sharpe Manufacturing Company. (See Graves, Benjamin P., assignor.)
Brumfield, Thomas R., Danville, Va. Nut lock. 1,812,319; June 30.
Brunk, Harold J., assignor, by mesne assignments, to The C. F. Pease Company, Chicago, Ill. Arc lamp. 1,812,469; June 30.
Brunk, Harold J., Chicago, Ill., assignor to C. F. Pease Company. Washing blue prints and other photoprints. 1,812,470; June 30.
Bruno, Leonardo, Waterbury, Conn. Window shade and curtain bracket. 1,812,429; June 30.
Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Printing mechanism for accounting machines. 1,812,838; June 30.
Buckle, Carl H., and G. R. McPhail, Magnolia, Tex. Cotter key puller. 1,812,682; June 30.
Budd, Edward G., Manufacturing Company. (See Eksergian, Carolus L., assignor.)
Budd, Edward G., Manufacturing Company. (See Ledwinka, Joseph, assignor.)
Budd, Edward G., Manufacturing Company. (See Trautvetter, George, assignor.)
Budd Wheel Company. (See Eksergian, Carolus L., assignor.)
Budd Wheel Company. (See Evans, Gordon M., assignor.)
Budd Wheel Company. (See Hughes, James W., assignor.)
Budd Wheel Company. (See Hunt, J. Harold, assignor.)
Bullard Company, The. (See Bullard, Edward J., Jr., assignor.)
Bullard, Edward P., jr., Stratford, assignor, by mesne assignments, to The Bullard Company, Bridgeport, Conn. Vertical spindle machine tool. 1,811,876; June 30.
Bullington Engine Heads. (See Bullington, Frank A., assignor.)
Bullington, Frank A., assignor to Bullington Engine Heads, Kansas City, Mo. Isothermal fuel inlet means for internal combustion engines. 1,812,197; June 30.
Burd, Gorman C., Adrian, Mich., assignor to American Cable Company, Inc. Applying fittings to stranded structures. 1,812,646; June 30.
Burdett, Horace H., assignor to Draper Corporation, Hopedale, Mass. Replenishing shuttle boxes. 1,812,079; June 30.

Burdick, James M., New Britain, Conn. Clamping lever for planes. 1,812,820; June 30.
Burgess, C. F., Laboratories, Inc. (See Andree, Clarence A., assignor.)
Burnham, George A., Saugus, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric current limiting reactor. 1,811,877; June 30.
Burson Knitting Company. (See Hinchliff, Edward C., assignor.)
Burton, Sylvester E. (See Loomis, W. A., and Burton.)
Butler, John H., Columbus, Ohio. Filtering device. 1,812,736; June 30.
Buwert, Hans. (See Nowack, W., and Buwert.)
Cadé, Marcel, Paris, France. Nail polisher. 1,812,772; June 30.
Cadman, Addi B., and A. C. Warner, Beloit, Wis., assignors, by mesne assignments, to Warner Electric Brake Corporation, South Beloit, Ill. Momentum actuated brake. 1,812,683; June 30.
Cahn, Frank J., Whiting, Ind. Citric acid manufacture. 1,812,136; June 30.
Caldwell, William A., Los Angeles, Calif. Two speed power transmission. 1,812,511; June 30.
Caller, Solomon, Chicago, Ill. Movable sign exhibitor. 1,812,621; June 30.
Camco Scale Corporation. (See Chambers, Leverett D., assignor.)
Camel Company. (See Tobin, K. J., and Wasberg, assignors.)
Camp, Percy B., Maywood, Ill., assignor to Universal Draft Gear Attachment Co. Brake slack adjuster for railway cars. 1,812,256; June 30.
Campello Shank Company. (See Lake, J. W., and Finks, assignors.)
Cannon, Hugh H., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif. Tapered tube filter press. 1,812,773; June 30.
Cannon-Prutzman Treating Processes, Ltd. (See Cannon, Hugh H., assignor.)
Cannon-Prutzman Treating Processes, Ltd. (See Gifford, Charles D., assignor.)
Caprio, Amerigo F., Newark, N. J., assignor, by mesne assignments to Celluloid Corporation. Manufacture of colored imitation mother of pearl. 1,812,283; June 30.
Caprio, Amerigo F., Newark, N. J., assignor to Celluloid Corporation. Manufacture of colored imitation mother of pearl. 1,812,284; June 30.
Carballo, Raul J., Buenos Aires, Argentina. Insect trap. 1,812,512; June 30.
Carbide and Carbon Chemicals Corporation. (See Davidson, Joseph G., assignor.)
Carder, Frederick, Corning, N. Y. Article of bric-a-brac. Des. 84,515; June 30.
Cardwell Westinghouse Company. (See Sproul, Donald F., assignor.)
Carlson, Charles H. (See Pierson, R. N., and Carlson.)
Carlson, Oscar F., assignor to Deere & Company, Moline, Ill. Sulky hay rake. 1,812,035; June 30.
Carpe, Allen. (See Affel, H. A., and Carpe.)
Carpe, Allen, New York, N. Y., assignor to American Telephone and Telegraph Company. Control cross talk. 1,811,915; June 30.
Carpenter, Ose F., Brightwood, Va. Feeding and drinking attachment for brooders. 1,812,684; June 30.
Carr, Leland E., Lopez, Wash. Artificial bait. 1,812,235; June 30.
Carrington, Frank G., assignor to Ferris Engineering Company, Anniston, Ala. Annealing. 1,812,320; June 30.
Carroll, Charles E., Newport, Ark. Arrangement of windmills. 1,812,137; June 30.
Carter, Andrew G., Grand Rapids, assignor to Carter Products Company, Inc., Grand Rapids, Mich. Band saw wheel. 1,811,916; June 30.
Carter Products Company. (See Carter, Andrew C., assignor.)
Cater, William H., Chicago, Ill. Guide-bearing. 1,812,471; June 30.
Cavalieri, Silvestro, Chicago, Ill. House drain fitting. 1,812,583; June 30.
Celluloid Corporation. (See Caprio, Amerigo F., assignor.)
Century Furniture Company. (See Brown, David H., assignor.)
Chadburn, Thomas W., Toronto, Ontario, Canada. Domestic laundry equipment. 1,812,430; June 30.
Chamberlain, Alfred J., Milwaukee, Wis. Container closing machine. 1,812,584; June 30.
Chambers, Leverett D., assignor to Camco Scale Corporation, New York, N. Y. Weighing scale casing. Des. 84,516; June 30.
Champion Pneumatic Machinery Company. (See Rayfield, Frederick J., assignor.)
Chapman, Norton W., assignor to The Guilford Manufacturing Company, Guilford, Conn. Manicurist's buffer. 1,812,431; June 30.
Chapman, William B., Jackson Heights, N. Y. Apparatus for burning granulated coal. 1,812,080; June 30.
Chase, Theron P. (See Lee, W. S., and Chase.)
Chaumier, Paul, Dallas, Tex. Hair waving device. 1,812,081; June 30.
Chavand, René, Lyon, France. Process and apparatus for tanning leather. 1,812,257; June 30.
Cheshire, Edward, St. Petersburg, Fla. Composing room machine. 1,812,685; June 30.
Chicago Pneumatic Tool Company. (See Harcourt, George T., assignor.)
Chicago Pneumatic Tool Company. (See Stevens, Edward W., assignor.)
Chilton Pen Company, The. (See Berry, Edward C., assignor.)
Chisholm, Lester B., assignor to The American Mills Company, Waterbury, Conn. Antislip fabric. 1,811,843; June 30.
Chrisman, Charles S., West Chester, assignor to The U. G. I. Contracting Company, Philadelphia, Pa. Vertical fire tube boiler. 1,812,513; June 30.
Chrisman, Harold G. (See Wary, D. L., and Chrisman.)
Christensen, Niels A., Milwaukee, Wis. Vehicle braking apparatus. 1,812,036; June 30.
Christensen, Niels A., Cleveland, Ohio. Brake mechanism. 1,812,037; June 30.
Christian, Kuno, Bed Soden on Taunus, Germany. Varnishing and printing machine for bands. 1,812,514; June 30.
Christie, John A., Akron, Ohio. Golf ball and manufacturing same. 1,812,285; June 30.
Cihak, Frank W. and W. D., Creston, Iowa. Folding harrow evener. 1,812,138; June 30.
Cihak, W. D. (See Cihak, F. W., assignor.)
Clark, Claiborn, Los Angeles, Calif. Railway crossing. 1,812,189; June 30.
Clayton, Mark M., assignor to Bastian-Morley Co., La Porte, Ind. Apparatus for heating or vaporising fluid. 1,812,198; June 30.
Clement, Charles G., assignor to Highway Trailer Company, Edgerton, Wis. Automatic lock for tilting bodies. 1,811,995; June 30.
Clerc, Reinhard. (See Schoeller, W. Jordan, and Clerc.)
Coals and Chemicals, Ltd. (See Ramage, Alexander S., assignor.)
Cobb Connector Company. (See Hermann, Edward O., assignor.)
Cole, James R., Tulsa, Okla. Power unit. 1,812,258; June 30.
Collins, Arnold M., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating composition and article coated therewith. 1,812,544; June 30.
Collins, Arnold M., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Synthetic drying oil and making it. 1,812,849; June 30.
Collins, Arthur E., Cuyahoga Falls, Ohio, assignor, by mesne assignment, to The Miller Rubber Company, Inc., Wilmington, Del. Pressing and trimming tape reenforced seams of sheet rubber articles. 1,812,286; June 30.
Collins, James G., assignor to Atlas Press Company, Kalamazoo, Mich. Engine stand. 1,812,585; June 30.
Collison, William J., Bakersfield, Calif. Water closet valve. 1,812,774; June 30.
Colman, Howard D. (See Stewart, Duncan J., assignor.)
Colorado Iron Works Company. (See Dickson, Thomas A., assignor.)
Columbian Carbon Company. (See Lewis, George C., assignor.)
Columbian Rope Company. (See Metcalf, Harold G., assignor.)
Condit Electrical Manufacturing Corporation. (See Burnham, George A., assignor.)
Condit Electrical Manufacturing Corporation. (See Jansson, Gustav, assignor.)
Consolidated Bolt Company. (See Northey, J. B. and R. V., assignors.)
Continental Can Company. (See Troyer, Nelson, assignor.)
Cook, Ernest P. (See Schur, M. O., and Cook.)
Cooks, Edgar, South Pasadena, Calif., assignor to Los Angeles Wall Bed Company, Los Angeles, Calif. Folding bed. 1,812,082; June 30.
Copeland Products, Incorporated. (See Nelson, Owen F., assignor.)
Corcoran Manufacturing Company, The. (See Corcoran, Nelson T., assignor.)
Corcoran, Nelson T., Cincinnati, assignor to The Corcoran Manufacturing Company, Norwood, Ohio. Automobile radiator core. 1,812,515; June 30.
Costello, Paul S., Phiadelphia, Pa., assignor of one-third to D. B. George and F. E. Mituiski, St. Louis, Mo. Shoe. 1,812,622; June 30.
Cota, Phillip, Kankakee, Ill. Reclining seat back. 1,811,917; June 30.
Cotton, William J. (See Haubrook, R. W., and Cotton.)
Coughlin, James M., Wilkes-Barre, and O. P. Ross, Kingston, assignors to Wilkes-Barre Can Company, Wilkes-Barre, Pa. Vase. 1,812,737; June 30.
Coulter, Guy H., and S. F. Arbuckle, Highland Park, assignors to Monogram Lens Corporation, Detroit, Mich. Headlight socket and mounting same. 1,812,623; June 30.
Cowan, Kenneth B. (See Blase, H., and Cowan.)
Crayssac, Léon, Sete, France. Press for obtaining photographic prints by means of electric light. 1,812,199; June 30.
Creo-Dipt Company Inc. (See Gosch, Harry E., assignor.)
Cribben & Sexton Company. (See Wilkinson, G. D., and Pellegrin, assignors.)
Crocker-Wheeler Electric Manufacturing Company. (See Edmunds, Howard M., assignor.)

Crosby, Harry E., Walnut Park, assignor to Mission Dry Corporation, Ltd., Los Angeles, Calif. Dispenser. Des. 84,517; June 30.
Crowdes, George J., Dorchester, assignor to Simplex Wire and Cable Company, Boston, Mass. Process and apparatus for marking rubber cords and cables. 1,812,686; June 30.
Crowe Name Plate & Manufacturing Co. (See Goodwin, Winslow, assignor.)
Crym, Matt, Wattis, Utah. Rail fastener. 1,812,140; June 30.
Culp, Paul B. (See Jones, Thomas H., assignor.)
Cummings, George C., Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone and telegraph signalling system. 1,812,624; June 30.
Cunningham, Orin D. (See Derby, I. H., and Cunningham.)
Curtain, Andrew F., Medford, Mass. Outlet valve operating mechanism for flushing tanks. 1,811,878; June 30.
Curtis, Austen M., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signal monitoring device. 1,812,625; June 30.
Cutler-Hammer, Inc. (See Meuer, George J., assignor.)
Dahlen, Peter, New York, N. Y. Pipe cleaning device. 1,812,200; June 30.
Dalme, Joseph A. (See Georgevitch, Nicolas, assignor.)
Dain Manufacturing Company of Iowa. (See Rutter, Alvah E., assignor.)
D'Alessandro, Augusto, Lynn, Mass. Making shoes. 1,811,879; June 30.
Dalton, John T., assignor of one-half to R. H. Wright, Durham, N. C. Cam mechanism. 1,812,738; June 30.
Damerell, Mark H., Worcester, Mass. Speed recording mechanism. 1,812,083; June 30.
Danielson, Wilmot A., U. S. Army, Washington, D. C. Fuel mixer and feed. 1,812,775; June 30.
Danner, John J., St. Paul, Minn. Christmas tree support stand. 1,811,018; June 30.
Dardel, Marie P. L., assignor to Société Marcas & Dardel, Paris, France. Pocket perfume sprayer. 1,811,919; June 30.
Davidson, Joseph G., Yonkers, N. Y., assignor to Carbide and Carbon Chemicals Corporation. Finish remover. 1,812,321; June 30.
Davidson, Joseph G., Yonkers, N. Y., assignor to Carbide and Carbon Chemicals Corporation. Finish remover. 1,812,322; June 30.
Davies, W. Sanders, et al. (See Davis, Kenneth, assignor.)
Davies, W. Sanders, et al., trustees. (See Degand, Gust.)
Davis, Ernest W., Oak Park, assignor to Alemite Corporation, Chicago, Ill. Coupling. 1,812,038; June 30.
Davis, Ernest W., Oak Park, assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Pressure lubrication system. 1,812,084; June 30.
Davis, George C., Dallas, Tex., assignor to The B. F. Goodrich Company, New York, N. Y. Conveyer. 1,812,287; June 30.
Davis, Kenneth, assignor to Rembrandt Peale, St. Benedict, Pa., W. Sanders Davies, New York, N. Y., and W. B. Oakes, Rutherford, N. J., as trustees. Automotive machine and distant control therefor. 1,812,085; June 30.
Davis, Robert B. (See Dugan, Thomas, assignor.)
Davis, Simon E. (See Francisco, George H., assignor.)
Davison, Dorsett A., and G. E. Davison, assignors to The Davison Engineering Corporation, Richmond, Va. Internal combustion engine. 1,812,323; June 30.
Davison Engineering Corporation, The. (See Davison, D. A. and G. E., assignors.)
Davison, George E. (See Davison, D. A. and G. E.)
Dayton Scale Company. (See Guilberg, Roy K., assignor.)
Deakins, Grover C., Anaheim, assignor, by mesne assignments, to J. Grant, Los Angeles, Calif. Underreamer. 1,812,039; June 30.
Dean, Charles L. (See Gildersleeve, A. M., and Dean.)
De Back, William, San Leandro, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Combined drainer and siruper. 1,811,908; June 30.
Decker, L. M., Co. (See Wilson, Donald P., assignor.)
Deere & Company. (See Carlson, Oscar F., assignor.)
Deere & Company. (See Sklovsky, Max, assignor.)
De Forest, Lee, assignor to De Forest Phonofilm Corporation, New York, N. Y. Sound-chamber and setframe therefor. 1,812,687; June 30.
De Forest Phonofilm Corporation. (See de Forest, Lee, assignor.)
Degand, Gust, assignor by mesne assignments, to R. Peale, St. Benedict, Pa., W. W. Davies, New York, N. Y., and W. S. Wallace, Philadelphia, Pa., trustees. Material disintegrating and conveying mechanism. 1,812,324; June 30.
De Give, Henry L., executor. (See de Give, Julius L.)
De Give, Julius L., deceased, Atlanta, Ga., H. L. de Give, executor. Releasing device for mail bags. 1,812,688; June 30.
De Groote, Melvin, St. Louis, L. T. Monson, Maplewood, and E. H. Keiser, Clayton, assignors, my mesne assignments, to Tretolite Company, Webster Groves, Mo. Breaking petroleum emulsions. 1,812,393; June 30.
De la Barre de Nanteuil, Christian, Versailles, France. Plant for heating motor vehicles. 1,812,259; June 30.
Delco-Light Company. (See Wendt, Wesley E., assignor.)
Deligianes, Thomas N., Chicago, Ill. Napkin holder. Des. 84,518; June 30.
Del Turco, Louis, Newark, N. J. Method and means for securing treads to steel subtreads. 1,812,504; June 30.
De Mattia, Peter, Passaic, N. J., assignor to National Rubber Machinery Company. Vulcanizing mold for inner tubes and the like. 1,812,821; June 30.
Denner, Peter F., and J. C. Estes, Kalamazoo, Mich. Paper sorting machine. 1,812,201; June 30.
Derby, Ira H., and O. D. Cunningham, assignors to P. C. Reilly, Indianapolis, Ind. Ore flotation process. Re18,116; June 30.
Derby, Ira H., and O. D. Cunningham, assignors to P. C. Reilly, Indianapolis, Ind. Process of flotation. 1,812,839; June 30.
Des Jardins, Benjamin M., West Hartford, Conn. Variable escapement for typewriters. 1,812,394; June 30.
Devon Manufacturing Company. (See Lundgaard, Ivar, assignor.)
Dick, George W. (See Jones, Cliff C., assignor.)
Dickson, Thomas A., assignor to Colorado Iron Works Company, Denver, Colo. Method and apparatus for treating solids. 1,811,920; June 30.
Dieckmann, John. (See Lodde, H., and Dieckmann.)
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Adjusting apparatus for motion picture projection machines. 1,811,880; June 30.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Base for motion picture projection machines. 1,811,881; June 30.
Dinesen, Laurits, Minneapolis, Minn. Milking apparatus. 1,812,086; June 30.
Ditto, Incorporated. (See Duncan, J. K., and Wiede, assignors.)
Dixon, Amos F., Jersey City, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Automatic telephone exchange system. 1,811,844; June 30.
Dohbins, Timothy C., Denver, Colo. Flexible shaft coupling. 1,812,141; June 30.
Doehler Die-Casting Co. (See Morin, Louis H., assignor.)
Doering, Albert L., Germantown, assignor to J. S. Thorn Company, Philadelphia County, Pa. Metallic window structure. 1,812,822; June 30.
Dohner, Donald R. (See Jordan, R. H., Hadley, and Dohner.)
Donnelley, R. R., & Sons, Company. (See Easton, Robert D., assignor.)
Donovan, John F., East Cleveland, and F. J. Malloy, Cleveland, Ohio, assignors to General Electric Company. Bulb shaping device. 1,812,776; June 30.
Dooley, George W., Huntington Park, Calif. Purifying water. 1,812,516; June 30.
Doolittle, Ora M. (See Hewitt, William H., assignor.)
Dorn, Walter, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Battery ignition apparatus. 1,812,517; June 30.
Douglas, Fredric E., assignor to Draper Corporation, Hopedale, Mass. Filling replenishing shuttle. 1,812,087; June 30.
Dowling, Philip H., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical translating apparatus. 1,812,202; June 30.
Downington Manufacturing Company. (See Street, Edward T., assignor.)
Dräger, Otto H., Dr. (See Stelzner, Hermann, assignor.)
Drake Non-Clinkering Furnace Block Company. (See Baumgartner, Henry H., assignor.)
Drapeau, Alexander J., Woodbridge, Conn. Safety catch for windows and the like. 1,812,288; June 30.
Draper Corporation. (See Burdett, Horace H., assignor.)
Draper Corporation. (See Douglas, Frederic E., assignor.)
Drescher, Hugh A. E., W. Smith, and J. Thomas, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Separation of sustituted alpha- and beta-amino-anthraquinones. 1,812,260; June 30.
Dressler, Philip d'H, Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa. Preparing fuel. 1,812,432; June 30.
Drew, Ben., Ivor, Va. Fertilizer distributor. 1,812,739; June 30.
Drewes, George, Jersey City, N. J., assignor of one-half to Adolph Berman, New York, N. Y. Sliding and swinging window. 1,812,325; June 30.
Dreyer, Frank B., Seattle, Wash. Welder's tongs. 1,812,142; June 30.
Driscoll, James, Plainfield, N. J., assignor to Johns-Manville Corporation, New York, N. Y. Friction element and making the same. 1,812,326; June 30.
Droll Patents Corporation. (See Olson, Alex H., assignor.)
Drüppel, Clire, Bottrop, assignor to Bernhard Quendt, Essen-Ruhr, Germany. Guide for the current supply cable of electric irons. 1,812,518; June 30.
Dugan, Thomas, assignor of one-half to R. B. Davis, Wichita, Kans. Airplane. 1,812,143; June 30.
Duncan, James K., and R. Weide, assignors to Ditto, Incorporated, Chicago, Ill. Winding and tightening mechanism. 1,812,433; June 30.

Dunn, Irwin L., and L. C. Mingus, assignors, by mesne assignments, to Dunn & Lewis, Tulsa, Okla. Regulating a gas mixture for internal combustion engines. 1,812,088; June 30.
Dunn & Lewis. (See Dunn, I. L., and Mingus, assignors.)
Duplex Electric Company. (See Williams, John P., assignor.)
Du Pont, E. I., de Nemours & Company. (See Collins, Arnold M., assignor.)
Du Pont, E. I., de Nemours & Company. (See Hahn, Frederick C., assignor.)
Du Pont, E. I., de Nemours & Company. (See Nieuwland, Julius A., assignor.)
Durst, Ernst. (See Rall, M., and Durst.)
Earl, Schuyler, H., assignor to Gleason Works, Rochester, N. Y. Chuck. 1,812,144; June 30.
Easton, Robert D., assignor to R. R. Donnelley & Sons Company, Chicago, Ill. Indexing table. 1,811,882; June 30.
Ebling, Walter E., New York, assignor to E. P. Reed & Co., Rochester, N. Y. Shoe. Des. 84,519; June 30.
Eckhard, John, Cincinnati, Ohio. Fluid or hydraulic shock absorber. 1,812,519; June 30.
Eckstein, Reuben, New York, N. Y. Terminal outlet fitting. 1,812,396; June 30.
Eckstein, Reuben, New York, N. Y. Electric lamp socket. 1,812,434; June 30.
Eclipse Machine Company. (See Marcus, Charles, assignor.)
Edison, Sylvan M., Rockford, Ill. Denture brush 1,812,626; June 30.
Edmunds, Howard M., New York, N. Y., assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J. Change speed gearing. 1,811,921; June 30.
Edwards, Van E., Springfield, Ill. Trihydro dirigible and airplane. 1,812,627; June 30.
Eggert, Joseph, assignor to The Jaeger Machine Company, Columbus, Ohio. Self cleaning mixing drum. 1,812,823; June 30.
Egli, Eduard, and E. Schoch, assignors to Maschinenfabrik Rüti vormals Caspar Honegger, Rüti, Switzerland. Shuttle-guard for looms. 1,812,236; June 30.
Egloff, Gustav, and H. P. Benner, Independence, Kans., assignors to Universal Oil Products Company, Chicago, Ill. Dephlegmating apparatus. 1,812,261; June 30.
Egry Register Company, The. (See Pfeiffer, Frank E., assignor.)
Ehlers, Walther, Berlin-Copenick, Germany, assignor, by mesne assiguments, to General Electric Company. Magnet core. 1,812,740; June 30.
Eisenstadt, David H. (See Johnson, Charles E., assignor.)
Eksergian, Carolus L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Making hubs. 1,811,996; June 30.
Eksergian, Carolus L., Detroit, Mich., assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Method and apparatus for clenching doors. 1,812,395; June 30.
Elder, Donald, Onehunga, New Zealand. Apparatus for controlling the passage of water to sprayers and the like. 1,812,586; June 30.
Ellis, Arthur L., New Rochelle, N. Y., assignor to The Waterbury Tool Company, Waterbury, Conn. Driving mechanism. 1,812,587; June 30.
Ellwanger, Adolf, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Ignition coil. 1,812,520; June 30.
Elston, Rue R., Minneapolis, Minn. Sander for busses and other vehicles. 1,812,521; June 30.
Ely, Hiram B., Philadelphia, Pa. Training operators of sound locating devices. 1,811,997; June 30.
Emard, Fern. (See Gebersky, William W., assignor.)
Emrich, George C., Columbus, Ohio. Supporting hot air rings in furnaces or stoves. 1,811,998; June 30.
Engels, Eugene O., assignor to Baker Perkins Company, Saginaw, Mich. Gas mixing apparatus. 1,812,089; June 30.
Enterprise Manufacturing Company, The. (See Pflueger, Joseph E., assignor.)
Erickson, Willard E., assignor to Link-Belt Company, Chicago, Ill. External counterweight for car dumpers. 1,812,040; June 30.
Ericsson, Arvid, assignor to Union Special Machine Company, Chicago, Ill. Button sewing machine. 1,812,327; June 30.
Erie Malleable Iron Company. (See Walker, Edward E., assignor.)
Esbjornson, Per H., Duluth, Minn. Window. 1,812,041; June 30.
Espinosa, Eduardo J., Santiago, Cuba. Windmill. 1,812,741; June 30.
Essex Specialty Co. (See Wolf, Benedikt, assignor.)
Estes, Job C. (See Denner, P. F., and Estes.)
Eule, Martin, Spandau, near Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Particular construction of tubular boilers. 1,812,472; June 30.
Evans, Franklin J. (See Stanley, C. M., and Evans.)
Evans, Gordon M., New York, N. Y., assignor to Budd Wheel Company, Philadelphia, Pa. Making brake drums. 1,811,999; June 30.
Evans Products Company. (See Snyder, Clifford L., assignor.)
Faber, John P., Dunellen, assignor to Ransome Concrete Machinery Company, Plainfield, N. J. Apparatus for hoisting and distributing loose material. 1,812,328; June 30.
Falk, Morris, Fitchburg, Mass. Key cutting machine. 1,811,922; June 30.
Fallot, Alfred, Plauen in Vogtl.; H. Priester, Berlin, Germany, executor. Raising, changing, and driving the paper web rolls in printing machines, and more particularly in rotary printing machines. 1,812,742; June 30.
Fantz, Fred C., Webster Groves, assignor to Midwest Piping & Supply Co. Inc., St. Louis, Mo. Process of and apparatus for manufacturing metal pipe fittings. 1,812,522; June 30.
Fantz, Fred C., Webster Groves, assignor to Midwest Piping & Supply Co. Inc., St. Louis, Mo. Manufacturing metal pipe fittings with tangential ends. 1,812,523; June 30.
Farrar, Jesse H., Lubbock, Tex. Adjustable road stand. 1,812,689; June 30.
Fay, Alpheus, and J. L. Zehnder, Louisville, Ky. Animal racing-device. 1,812,473; June 30.
Ferguson, Cyrus C., assignor to The Western Union Telegraph Company, New York, N. Y. Telegraph repeater. 1,812,824; June 30.
Ferris Engineering Company. (See Carrington, Frank G., assignor.)
Finkelstein, Hans, Uerdingen Niederrhein, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Cellulose ester lacquer. 1,812,145; June 30.
Finks, William T. (See Lake, J. W., and Finks.)
Finnila, Axel. (See Nygard, R., Finnila, and Lindell.)
Flach, Hermann, and G. Barthelmie, Calumet City, Ill. Circuit maker or breaker. 1,812,329; June 30.
Fleming, Charles A., Pontiac, Mich., assignor to The Willys-Overland Company, Toledo, Ohio. Lubrication system for sleeve valve engines. 1,812,825; June 30.
Flintermann, Gerhard, West Orange, N. J. Flexible support. 1,811,923; June 30.
Folk, Joseph, assignor to U. S. Slicing Machine Company, La Porte, Ind. Deflector for slicing machines. 1,811,845; June 30.
Fontaine, Robert A., Martinsville, Va. Brick handling hoist. 1,811,924; June 30.
Fort Pitt Malleable Iron Company. (See Holmes, Edward H., assignor.)
Forville, Constant., Seraing, Belgium. Rotary-mixing machine. 1,812,146; June 30.
Foster, Arthur L., Middletown, N. J., assignor to Manifold Supplies Company, Brooklyn, N. Y. Ink ribbon winding and measuring mechanism. 1,812,588; June 30.
Foster, Ira L. (See Plaxco, F. R., and Foster.)
Francisco, George H., Los Angeles, assignor of one-half to S. E. Davis, San Francisco, Calif. Fastening loop for buttons or the like. 1,812,330; June 30.
Frascani, Arturo, Rome Italy. Auxiliary keyboard for pianos. 1,812,524; June 30.
Fraser, Warren F. (See Arter, W., and Fraser.)
Frease, Hurxthal F., Canton, Ohio. Arch joist and floor construction. 1,812,690; June 30.
Frechou, Sidney W., New Orleans, La. Combination ice-box and water cooler. 1,712,777; June 30.
Freeman, Horace, Shawinigan Falls, Quebec, assignor to The Suphide Research Corporation Limited, Montreal, Canada. Process of and apparatus for oxidizing metal sulphides and making sulphur dioxide. 1,812,397; June 30.
Freers, George H., assignor to Marmon Motor Car Company, Indianapolis, Ind. Internal combustion engine head. 1,812,474; June 30.
French, Louis O., Milwaukee, Wis. Control switch mechanism. 1,812,647; June 30.
Frick, Chester A., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind. Lock for bottle refrigerators. 1,812,826; June 30.
Friedl, Ralph, Alameda, Calif. Cylinder head for internal combustion motors. 1,812,289; June 30.
Fröhlich, Ernst, Essen, Germany, assignor to The Hannauer Car Retarder Company, Gilson, Inc., Railway car retarder apparatus. 1,812,691; June 30.
Fröhlich, Hans, Zug, Switzerland, assignor to Landis & Gyr, A-G. Induction meter. 1,812,331; June 30.
Fröhlich, Hans, and T. Hausch, assignors to Landis & Gyr, A. G., Zug, Switzerland. Induction meter. 1,812,332; June 30.
Fuller Company. (See Morrow, Joseph H., assignor.)
Fulton, George, Oak Park, Ill., assignor to Mayer China Company, Beaver Falls, Pa. Plate or similar article. Des. 84,520; June 30.
Fulton Sylphon Company, The. (See Price, Lewis C., assignor.)
Funk, Wilbur F., Midland Beach, and E. T. Kruglak, Jackson Heights, Long Island, N. Y. Method and apparatus for synchronism and automatic phase correction. 1,812,778; June 30.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Tubular pin and making same. 1,812,743; June 30.
Galle, Ernst, Ludwigshafen-on-the-Rhine, and H. Zorn, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Conversion of hydrocarbons of high boiling point into others of low boiling point. 1,812,398; June 30.

Gammack, William A., and Donald G. Knox, Long Beach, assignors, by mesne assignments, to Jordan & Taylor, Inc., Los Angeles, Calif. Periodic circuit maker. 1,812,090; June 30.
Gannett, Chauncey W., assignor to The Wellington Machine Company, Wellington, Ohio. Adjustable axle hanger. 1,812,827; June 30.
Garcia, José A., Los Angeles, Calif. Mobile mooring apparatus. 1,812,237; June 30.
Gardella, William, Flushing, Long Island, N. Y., assignor to Oliver United Filters Incorporated, San Francisco, Calif. Filter discharging mechanism. 1,812,648; June 30.
Gardner, Joseph and J. H. S., assignors to L. Gardner & Sons Limited, Patricroft, near Manchester, England. Inlet valve of internal combustion engines. 1,812,262; June 30.
Gardner, Joseph H. S. (See Gardner, Joseph and J. H. S.)
Gardner, L., & Sons Limited. (See Gardner, Joseph and J. H. S., assignors.)
Garrett, Raymond E., Lancaster, assignor to Armstrong Cork Company, Pittsburgh, Pa. Coated fibrous material. 1,811,925; June 30.
Gaskill, Robert J., Fort Wayne, Ind. Support for boxes and the like. 1,812,203; June 30.
Gates, Leroy G., Bakersfield, assignor to Standard Oil Company of California, San Francisco, Calif. Nonkicking brake apparatus. 1,812,091; June 30.
Gaus, Wilhelm, Ludwigshafen-on-the-Rhine, Mittasch, Mannheim and L. Schlecht, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of metal carbonyls. 1,812,399; June 30.
Gawsworth Patents Limited et al. (See Shimwell, Oliver, assignor.)
Geary, Isaac, London, England. Antiglare or antidazzle device for lamps. 1,812,779; June 30.
Gehersky, William W., Riverside, assignor of one-fourth to F. Emard, Los Angeles, Calif. Adjustable splotlight. 1,812,290; June 30.
Geier, P. A., Company, The. (See Martinet, Eugene F., assignor.)
Geiger, Edward F., Binghamton, assignor to International Time Recording Company of New York, Endicott, N. Y. Automatic battery charging system. 1,812,628; June 30.
General Aniline Works, Inc. (See Krzikalla, H., and Bluemmel, assignors.)
General Carbonalpha Company, The. (See Aarts, Hendrikus C. J., assignor.)
General Electric Company. (See Donovan, J. F., and Malloy, assignors.)
General Electric Company. (See Ehlers, Walther, assignor.)
General Electric Company. (See Gordon, Newell T., assignor.)
General Electric Company. (See Hilliard, John D., assignor.)
General Electric Company. (See Kayser, August, assignor.)
General Electric Company. (See Kienle, R. H., and Scheiber, assignors.)
General Electric Company. (See Kjolseth, Ole K., assignor.)
General Electric Company. (See Merrill, George S., assignor.)
General Electric Company. (See Paxton, Robert, assignor.)
General Electric Company. (See Story, William E., jr.)
General Electric Company. (See Strauus, Benno, assignor.)
General Electric Company. (See Weaver, Calus E., assignor.)
General Electric Company. (See Winne, Harry A., assignor.)
General Motors Corporation. (See Blackmore, Lloyd, assignor.)
General Motors Corporation. (See Brooke, Arthur O., assignor.)
General Motors Corporation. (See Klausmeyer, David M., assignor.)
General Motors Radio Corporation. (See Pike, George J., assignor.)
General Motors Research Corporation. (See Berry, George P., assignor.)
General Motors Research Corporation. (See Godley, Charles E., assignor.)
General Motors Research Corporation. (See Lee, C. L., and Van Degrift, assignors.)
General Motors Research Corporation. (See Lee, W. S., and Chase, assignors.)
General Steel Castings Corporation. (See Sheehan, William M., assignor.)
Genter, Albert L., assignor to The Bartlett Hayward Company, Baltimore, Md. Continuous filter. 1,812,042; June 30.
George, D. G., et al. (See Costello, Paul S., assignor.)
Georgevitch, Nicolas, assignor to J. A. Dahme, Paris, France. Centrifugal hammer. 1,812,692; June 30.
Gerdes, Heinrich, Berlin-Schoneberg, assignor to J. Pintsch Aktiengesellschaft, Berlin, Germany. Gas meter. 1,812,333; June 30.
Germek, Andrew, Edwardsville, Pa. Dump car doorlock. 1,812,780; June 30.
Gibbs, Harold B., Bronxville, assignor to Rusling Wood, Inc., New York, N. Y. Collapsible tire stand. 1,812,781; June 30.
Gifford, Charles D., assignor, by mesne assignments, to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif. Treatment of crude petroleum to prevent corrosion. 1,812,629; June 30.
Gilbert, John J., Douglaston, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Cable armoring. 1,812,630; June 30.
Gildersleeve, Arthur M., and C. L. Dean, assignors to The Universal Rotary Bit Company, Denver, Colo. Drilling device. 1,812,475; June 30.
Gillette Safety Razor Company. (See Beaver, Rudolph, assignor.)
Gillette Safety Razor Company. (See Hill, John H., assignor.)
Gillette Safety Razor Company. (See Smith, Theodore L., assignor.)
Gillette Safety Razor Ges. m. b. H. (See Wiese, Franz, assignor.)
Gilley, Arthur C., White, S. Dak. Windmill. 1,812,400; June 30.
Gilmartin, William A.. (See Reilly, John J., and Gilmartin.)
Glascock Brothers Manufacturing Company. (See Frick, Chester A., assignor.)
Gleason Works. (See Earl, Schuyler H., assignor.)
Glenn, Robert S., Cisco, Tex. Drawing board attachment. 1,812,744; June 30.
Glidden Company, The. (See Moore, C. G., and Zucker, assignors.)
Gloekler, John E., Pittsburgh, Pa. Latch construction. 1,812,334; June 30.
Glover, H. B., Company. (See Karberg, Peter K., assignor.)
Gluck, Josef, Cleveland, Ohio. Artificial trolling bait. 1,812,782; June 30.
Gminder, Emil, Reutlingen, Germany. Producing fancy figures on textile material by mercerization. 1,811,846; June 30.
Godley, Charles E., Ypsilanti, assignor to General Motors Research Corporation, Detroit, Mich. Lamp socket mounting. 1,812,476; June 30.
Goepfrich, Rudolph A., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,812,000; June 30.
Goldacker, Paul, Berlin-Treptow, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Photographic roll film spool. 1,811,926; June 30.
Goldberg, Maximilian M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,812,001; June 30.
Goldtinger, Samuel, New York, N. Y. Lamp shade. 1,812,783; June 30.
Gold Medal Camp Furniture Mfg. Co. (See Brown, Newton N., assignor.)
Goodall Worsted Company. (See Nutter, William S., assignor.)
Goodman, Harry S., and C. Roehri, Chicago, Ill. Convertible vehicle. 1,812,002; June 30.
Goodman Manufacturing Company. (See Schroder, Robert E., assignor.)
Goodrich, B. F., Company, The. (See Blaker, Ernest, assignor.)
Goodrich, B. F., Company, The. (See Davis, George C., assignor.)
Goodrich, Norris E., assignor to Sanitarium Equipment Company, Battle Creek, Mich. Therapeutic lamp. 1,811,883; June 30.
Goodwin, Ralph T., Elizabeth, N. J., assignor to Standard Oil Development Company. Carbonaceous product. 1,812,589; June 30.
Goodwin, Winslow, assignor to Crowe Name Plate & Manufacturing Co., Chicago, Ill. Radio tuning mechanism. 1,812,525; June 30.
Gordon, Newell T., Schenectady, N. Y., assignor to General Electric Company. Lamp. 1,812,745; June 30.
Gosch, Harry E., assignor to Creo-Dipt Company Inc., North Tonawanda, N. Y. Apparatus for impregnating bundles of shingles and the like. 1,812,291; June 30.
Goulding, Albanus W., Trenton, N. J., assignor of one-half to C. Reeves, New York, N. Y. Septic tank. 1,812,401; June 30.
Grace, John F., Arlington, N. J., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Precooler for vacuum pumps. 1,812,590; June 30.
Grace, John F., Arlington, N. J., assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Condenser. 1,812,591; June 30.
Grant, John. (See Deakins, Grover C., assignor.)
Grant, John, Los Angeles, Calif. Reamer and underreamer. 1,812,043; June 30.
Grant, John, Los Angeles, Calif. Expanding underreamer. 1,812,044; June 30.
Gratsch, Elmer E. (See Rubel, C. F., and Gratsch.)
Gravell, James H., Elkins Park, assignor to American Chemical Paint Company, Ambler, Pa. Fuel adjunct device for gas engines. 1,812,092; June 30.
Graves, Benjamin P., Cranston, assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Adjusting overhanging arms. 1,812,649; June 30.
Gray, Frank, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electro-optical transmission system. 1,812,402; June 30.

Gray, Frank, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Switch or commutating means. 1,812,828; June 30.
Gredell, Otto N., Kansas City, assignor to Standard Steel Works, North Kansas City, Mo. Truck tank mounting. 1,812,093; June 30.
Green, Charles A., Chicago, Ill., assignor, by mesne assignments, to C. P. Pease Company. Drawing board attachment. 1,812,477; June 30.
Greenlee Bros. & Co. (See Mansfield, J. H., and Penrose, assignors.)
Greenley, Jay H., Buffalo, N. Y. Power hammer. 1,812,650; June 30.
Greggersen, Hans. (See Hentschel H., and Greggersen.)
Groehn, Otto J., Grosse Pointe Park, and L. S. Lamb, Grosse Point, assignors to Hudson Motor Car Company, Detroit, Mich. Apparatus for shaping sheet metal. 1,812,045; June 30.
Groehn, Otto J., Grosse Point Park, assignor to Hudson Motor Car Company, Detroit, Mich. Die press. 1,812,046; June 30.
Gross, Otto, and F. Jost, Sodingen, Germany, assignors, by mesne assignments, to Firm Patentverwertungs A. G., "Alpina," S. A. pour l'Exploitation de Brevets "Alpina," Patents Exploitation Cy. "Alpina," Ltd., Basel, Switzerland. Purifying hydrogen. 1,812,526; June 30.
Gross, Otto, and F. Jost, Sodingen, Germany, assignors, by mesne assignments, to Firm Patentverwertungs A. G. "Alpina," S. A. pour l'Exploitation de Brevets "Alpina," Patents Exploitation Cy. "Alpina," Ltd., Basel, Switzerland. Purifying hydrogen. 1,812,527; June 30.
Grüter, Reinhold, Berlin-Charlottenburg, Germany. Pharmaceutical product. 1,812,528; June 30.
Guild, Waldo J., assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,812,003; June 30.
Guilford Manufacturing Company, The. (See Chapman, Norton W., assignor.)
Gullberg, Roy K., assignor to Dayton Scale Company, Dayton, Ohio. Duplex motor drive assembly for kitchen appliances. 1,812,651; June 30.
Hadley, Donald L. (See Jordan, R. H., Hadley, and Dohner.)
Hagemann, Louis F., Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Autographic register. 1,812,478; June 30.
Hahn, Frederick C., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Coating composition. 1,812,335; June 30.
Hahnemann, Paul R., assignor to Niagara Machine and Tool Works, Buffalo, N. Y. Sheet metal working machine. 1,812,479; June 30.
Hallwood, Anthony J. (See Baddiley, J., Shepherdson, and Hallwood.)
Hallwood, Anthony J., Blackley, Manchester, assignor to British Dyestuffs Corporation Limited, Manchester, England. Manufacture of new derivatives from sulphite cellulose waste. 1,812,693; June 30.
Haiss, Alfred W., assignor to George Haiss Manufacturing Co. Inc., New York, N. Y. Wagon loader and excavator. 1,812,292; June 30.
Haiss, George, Manufacturing Co. Inc. (See Haiss, Alfred W., assignor.)
Hale, George K., Manufacturing Company. (See Bertolet, Elmer C., assignor.)
Hall, Archibald J., Congleton, assignor to The Silver Springs Bleaching & Dyeing Company Limited, Timbersbrook, Congleton, England. Process in which viscose silk is subjected to the action of caustic alkalis. 1,812,204; June 30.
Halleck, Frank A., Michigan City, Ind., assignor to Sullivan Machinery Company. Loading machine. 1,811,927; June 30.
Hallowell, Howard T., and F. Bennett, assignors to Standard Pressed Steel Co., Jenkintown, Pa. Portable desk. 1,812,694; June 30.
Hamilton Manufacturing Company. (See Wachtel, Elmer M., assignor.)
Hamilton, Roy E., Kansas City, Kans., assignor, by mesne assignments, to Wilson-Jones Company, Chicago, Ill. Loose leaf binder. 1,812,435; June 30.
Hamlin, Benjamin M. (See Wheary, G. H., and Hamlin.)
Hammer, Arthur, Berlin, Germany. Ironing machine. 1,812,263; June 30.
Hammer, Fritz, Hessen-Nassau, assignor to the Firm B. Braun, Melsungen, (Hessen-Nassau,) Germany. Preparing compressed iodine in the form of rods, pencils, or the like. 1,812,238; June 30.
Hammer, Samuel, assignor to United Metal Box Co. Inc., Brooklyn, N. Y. Mirror and framing the same. 1,812,403; June 30.
Hammer, Samuel, assignor to United Metal Box Co. Inc., Brooklyn, N. Y. Cabinet. 1,812,404; June 30.
Hannaner Car Retarder Company, The. (See Frölich, Ernst, assignor.)
Harcourt, George T., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Tool retainer. 1,812,652; June 30.
Harding, Alfred L., assignor of one-third to L. Moore, Branson, Mo. Rotary valve for internal combustion engines. 1,811,928; June 30.
Harms, Albert G., Chicago, Ill. Loop aerial. 1,812,695; June 30.
Harney, Francis W., assignor to The Upson Company, Lockport, N.Y. Forming apparatus for plastic materials. 1,812,631; June 30.
Harrington, Albert H., Brighton, Boston, Mass. Fishing apparatus. 1,812,632; June 30.
Harris, Henry, et al. (See Talbot, Frank A., assignor.)
Harris, William W., Brcton, Mass. Mechanical toy. 1,811,929; June 30.
Hart, Robert N. (See Tapp, William C., assignor.)
Hartog, Stephen D., St. Louis, Mo., assignor to H. J. Hater, Cincinnati, Ohio. Piston. 1,812,696; June 30.
Hartung, Louis, jr., Kearny, N. J. Boiler. 1,812,094; June 30.
Hater, Harry J. (See Hartog, Stephen D., assignor.)
Hatfield, Ray, Springfield, Ill. Tire chain fastening means. 1,812,697; June 30.
Haulbrook, Robert W., and W. J. Cotton, Maysville, Ga. Brace. 1,812,529; June 30.
Hausch, Theodor. (See Frohlich, H., and Hausch.)
Hawley, John B., jr., Minneapolis, Minn. Bearing locking device. 1,812,784; June 30.
Hayward, Henry E., Indianapolis, Ind., assignor to Link-Belt Company, Chicago, Ill. Silent chain drive. 1,812,095; June 30.
Haywood, Hubert, Wirksworth, assignor to The Haywood Narrow Fabric Loom Company Limited, The Hague, Broadbottom, Chester, England. Driving gear and narrow fabric looms. 1,812,480; June 30.
Haywood, Hubert, Wirksworth, assignor to The Haywood Narrow Fabric Loom Company Limited, The Hague, Broadbottom, Chester, England. Loom reed motion and mechanism. 1,812,481; June 30.
Haywood Narrow Fabric Loom Company, The. (See Haywood, Hubert, assignor.)
Hazel-Atlas Glass Co. (See Algeo, Albert M., assignor.)
Heald Machine Company, The. (See Guild, Waldo J., assignor.)
Heald Machine Company, The. (See Jellicoe, Richard H., assignor.)
Heald Machine Company, The. (See Page, D. C., and Jellicoe, assignors.)
Healy, John A., Langdon, Minn. Drinking fountain for poultry. 1,812,530; June 30.
Heitz, Frank F., Dayton, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio. Weighing scale. 1,812,633; June 30.
Helin, Elis, Liljeholmen, Stockholm, Sweden. Manufacturing curve threaded nuts and means therefor. 1,812,205; June 30.
Helin, Elis, Stockholm, Sweden. Curve threaded nut. 1,812,785; June 30.
Helin, Elis, assignor to Carl Kindstrom, Stockholm, Sweden. Producing curve-threaded nuts. 1,812,147; June 30.
Hellrich, Oscar, New York, N. Y. Valve controlled life preserver. 1,811,847; June 30.
Helmer, William J., Fort Kameehameha, Hawaii. Panoramic drawing board. 1,812,264; June 30.
Hentschel, Hermann, and H. Greggersen, Hamburg, assignors to the firm Autogen Gasacuumulator Aktiengesellschaft, Berlin, Germany. Method of and machine for cutting holes. 1,812,239; June 30.
Herl, Dragutin, Niagara Falls, N. Y. Railway joint chair. 1,812,786; June 30.
Hermann, Edward O., Mill Valley, assignor to Cobb Connector Company, Los Angeles, Calif. Train pipe coupler. 1,812,047; June 30.
Hermann, Edward O., Mill Valley, assignor to Cobb Connector Company, Los Angeles, Calif. Train pipe couplers support. 1,812,048; June 30.
Herrmann, Conrad, Wuppertal-Elberfeld, Germany, assignor to American Glanzstoff Corporation, New York, N. Y. Stretch-spinning artificial filaments. 1,812,592; June 30.
Hess, Simon B., New York, N. Y. Protective grating. 1,812,293; June 30.
Hevi, Duty Electric Company. (See Smalley, Edwin L., assignor.)
Hewitt, William H., assignor of one-half to Ora M. Doolittle, Cumberland, Md. Braking attachment for vehicle motors. 1,812,787; June 30.
Heys, George H., et al., executors. (See Heys, John J.)
Heys, John J., deceased, by L. A. Heys, and G. H. Heys, executors, Lynn, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Pressing soles. 1,811,884; June 30.
Heys, Lucy A., et al., executors. (See Heys, John J.)
Hickok Manufacturing Company. (See Mix, Edwin S., assignor.)
Hickox, George E. F., Providence, and W. T. Mitchell, Central Falls, R. I. Aeroplane landing gear. 1,812,698; June 30.
Hicks, William W. (See Osborne, J. G., and Hicks.)
Highway Trailer Company. (See Clement, Charles G., assignor.)
Hill, John H., Wollaston, Mass., assignor to Gillette Safety Razor Company, Boston, Mass. Scraping tool. 1,812,482; June 30.
Hill, Rowland F., Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio. Float plug and guide for well casings. 1,811,885; June 30.
Hilliard, John D., Schenectady, N. Y., assignor to General Electric Company. Electric switch. 1,812,746; June 30.

Hilpert, Meier G., Bethlehem, Pa. Turntable or transfer table and truck construction therefor. 1,811,930; June 30.
Hilpert, Meier G., Bethlehem, Pa. Equalizing truck construction. 1,811,931; June 30.
Hinchliff, Edward C., assignor to Burson Knitting Company, Rockford, Ill. Multiple suture yarn control. 1,812,653; June 30.
Hindle, John H. and T., Haslingden, England. Driving and controlling mechanism of looms for weaving. 1,812,206; June 30.
Hindle, Thomas. (See Hindle, John H. and T.)
Hindle, Thomas, Hashington, England. Paper maker's drier felt. 1,812,148; June 30.
Hirschler, Otto. (See Skraup, S., and Hirschler.)
Hodgkins, Albert A., Leonia, N. J., assignor to Universal Gear Shift Corporation, New York, N. Y. Pneumatic gear shift lock. 1,811,932; June 30.
Hoe, R., & Co. (See Ball, H. V., and Ogden, assignors.)
Höfer, Paul, Berlin, Germany. Producing potassium nitrate. 1,812,531; June 30.
Hogan, Ervin F., Beloit, Kans. Combined harvester and thrasher. 1,812,532; June 30.
Hogson, William J., New York, N. Y. Combined anklebrace and arch-support. 1,812,149; June 30.
Hohn, Max P. E., assignor to the firm "Universelle" Cigarettenmaschinenfabrik, J. C. Muller & Co., Dresden, Germany. Dressing cigarettes and the like provided with imprints. 1,812,294; June 30.
Hohnhorst, Ferdinand J., and F. J. Kroeger, Covington, Ky. Mechanism for truing and dressing grinding wheels. 1,811,933; June 30.
Holland, Joseph G., Edgefield, S. C. Steering headlight for automobiles. 1,812,336; June 30.
Holmes, Edward H., assignor to Fort Pitt Malleable Iron Company, McKees Rocks, Pa. Hopper car door. 1,811,848; June 30.
Holmes, Henry S., New York, assignor to T. E. Murray, Brooklyn, N. Y.; J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors of said T. E. Murray, deceased, assignors to Metropolitan Engineering Company. Electric welding apparatus. 1,812,295; June 30.
Holt, John W., Cleveland, Ohio. Vehicle wheel construction. 1,812,337; June 30.
Holt, John W., Cleveland, Ohio. Wheel rim mounting device. 1,812,338; June 30.
Hone, John, Flin Flon, Manitoba, Canada. Pontoon for seaplanes and like bodies. 1,812,265; June 30.
Horne, George H., Glendale, and M. A. Lissman, assignors to International Precipitation Company, Los Angeles, Calif. Apparatus for heat interchanging. 1,812,339; June 30.
Horton, Charles W., assignor, by mesne assignments, to J. E. Strong, Grand Rapids, Mich. Folding table and bench. 1,812,483; June 30.
Hotchner, Joseph, San Francisco, Calif. Neon lamp flasher. 1,812,340; June 30.
Hottmann, David G., Tolstoy, S. Dak. Trailer coupling. 1,812,240; June 30.
Houseman, Harold E., Edge Moor, assignor to Standard-Trump Bros. Machine Company, Wilmington, Del. Knitting plated fabric. 1,811,849; June 30.
Howe, Leon S., assignor to The Stanley Works, New Britain, Conn. Tool for cutting box strapping and the like. 1,812,484; June 30.
Huddle, Carl F., Napoleon, Ohio. Carbureting and lubricating device for internal combustion engines. 1,812,436; June 30.
Hudson Motor Car Company. (See Groehn, Otto J., assignor.)
Hudson Motor Car Company. (See Groehn, O. J., and Lamb, assignors.)
Hudson Motor Car Company. (See Toncray, Millard H., assignor.)
Hudson, Rex L., Jackson, Tenn. Toy. 1,811,934; June 30.
Hue, Marcel H., Bois-Guillaume, France. Manufacturing agglomerated products. 1,811,935; June 30.
Huff, Leslie R., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Centrifugal hydraulic speed governor. 1,811,850; June 30.
Hughes, James W., assignor to Budd Wheel Company, Philadelphia, Pa. Bar stock feed for rolling mills. 1,812,004; June 30.
Humbert, Hubert J. (See Blood, C. R., and Humbert.)
Humble Oil & Refining Company. (See Ransom, George F., assignor.)
Hummel, Frederick E., and J. J. Noeth, Chicago, Ill. Timing mechanism for egg boilers and the like. 1,812,266; June 30.
Hunt, Franklin B. (See Pratt, J. H., and Hunt.)
Hunt, Franklin B., assignor, by mesne assignments, to The Liquid Carbonic Corporation, Chicago, Ill. Soda fountain. 1,811,851; June 30.
Hunt, J. Harold, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Securing means for demountable wheels. 1,812,005; June 30.
Hunt, J Harold, assignor to Budd Wheel Company, Detroit, Mich. Wheel disk. 1,812,487; June 30.
Hunt, Wilson P., assignor to Moline Tool Company, Moline, Ill. Feed mechanism for drilling machines and the like. 1,812,533; June 30.
Hunter, Thomas M., East Orange, N. J. Welding transformer. 1,811,886; June 30.
Hurley, Roy T., Dobbs Ferry, assignor to Hurley-Townsend Corporation, New York, N. Y. Spark plug. 1,812,438; June 30.
Hurley-Townsend Corporation. (See Hurley, Roy T., assignor.)
Hurricane Motor Company. (See Parsons, Ben G., assignor.)
Hursh, Raymond M., Warrensburg, Mo. Cradle. 1,812,690; June 30.
Hurxthal, Alpheus O., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Thermostatic element. 1,812,788; June 30.
Hurxthal, Alpheus O., and H. Bogaty, assignors to Proctor & Schwartz, Incorporated, Philadelphia, Pa. Conveyer for skein or yarn driers. 1,812,789; June 30.
Hutchins, Robert H., Memphis, Tenn. Folding bed. 1,811,936; June 30.
Hutto Engineering Company. (See Hutto, Marsden C., assignor.)
Hutto Engineering Company. (See Kern, Fred M., assignor.)
Hutto, Marsden C., Detroit, Mich., assignor to Hutto Engineering Company, Inc. Casting apparatus. 1,811,937; June 30.
Hydro-Oil Fire Corporation. (See Teale, W., and McLauthlin, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Finkelstein, Hans, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Galle, E., and Zorn, assigonrs.)
I. G. Farbenindustrie Aktiengesellschaft. (See Gaus, W., Mittasch, and Schlecht, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Vierling, Karl, assignor.)
Ilg Electric Ventilating Company. (See Sutcliffe, Arthur G., assignor.)
Illinois Watch Case Company. (See Irelan, Ellison S., assignor.)
Industrial Processes Development, Limited. (See Atack, Frederick W., assignor.)
Ingersoll-Rand Company. (See Huff, Leslie R., assignor.)
Ingersoll-Rand Company. (See Peters, Arthur E., assignor.)
Ingersoll-Rand Company. (See Sherzer, Allen F., assignor.)
Inland Rubber Company. (See La Jone, Nicholas, assignor.)
Instant-Ice Corporation. (See Brown, John H., assignor.)
International Banding Machine Company. (See Malocsay, Francis X., assignor.)
International Chromium Process Corporation. (See Simpson, Kenneth M., assignor.)
International Paper Company. (See Wickware, Walter H., assignor.)
International Precipitation Company. (See Horne, G. H., and Lissman, assignors.)
International Projector Corporation. (See Dina, Augusto, assignor.)
International Time Recording Company of New York. (See Geiger, Edward F., assignor.)
Intertype Corporation. (See Sperry, Samuel E., assignor.)
Irelan, Ellison S., assignor to Illinois Watch Case Company, Elgin, Ill. Making watchcases. 1,812,150; June 30.
Irwin, George H., Chicago, Ill. Boiler. 1,811,938; June 30.
Isom, Edward W., Scarsdale, assignor to Sinclair Refining Company, New York, N. Y. Refining hydrocarbons. 1,812,439; June 30.
Ives, Herbert E., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrooptical transmission system. 1,812,405; June 30.
Jacocks, George T., Brooklyn, assignor, by mesne assignments, to Alco Products Incorporated, New York, N. Y. Welding. 1,812,151; June 30.
Jaeck, Oscar, deceased, Reinach, near Basel, by Wolfgang Jaeck, administrator, and Fritz Schütz, assignors to the firm of Society of Chemical Industry in Basle, Basel, Switzerland. Cellulosic material and making the same. 1,812,790; June 30.
Jaeck, Wolfgang, administrator. (See Jaeck, Oscar, deceased.)
Jaeger, Alphons O., Mount Lebanon, assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa. Catalytic apparatus. 1,812,341; June 30.
Jaeger Machine Company, The. (See Eggert, Joseph, assignor.)
James, Parker H., and H. C. Woodsmall, Indianapolis, Ind. Machine for cutting designs in glass. 1,812,485; June 30.
Jameson, Albert J., Worcester, Mass. Quick acting vise. 1,812,096; June 30.
Jansson, Gustav, Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Insulator. 1,811,887; June 30.
Jarmin, James B., Dallas, Tex. Road machine. 1,812,296; June 30.
Jarmin, James B., Dallas, Tex. Road machine. 1,812,342; June 30.
Jayet, Alois, assignor to Leclanche S. A., Yverdon, Switzerland. Electrical condenser. 1,812,241; June 30.
Jeffries, Mack D., Boston, Mass. Holder for containers. 1,812,440; June 30.
Jellicoe, Richard H. (See Page, D. C., and Jellicoe.)

Jellicoe, Richard H., assignor to The Heald Machine Company, Worcester, Mass. Chuck. 1,812,006; June 30.

Jenkins, Peter, Fort Worth, Tex. Cloth cutting machine. 1,812,406; June 30.

Jensen, Bertel M., Huntington Beach, assignor to W. D. Shaffer, Brea, Calif. Blow out preventer. 1,812,297; June 30.

Jensen, Jens J., assignor to Messrs. Boggild & Jacobsen, Copenhagen, Denmark. Manufacture of hollow articles. 1,812,242; June 30.

Jensen, Milton O., Huntington Park, Calif. Manometer gauge. 1,812,152; June 30.

Jewett, Fred E., assignor to Ball Brothers Company, Muncie, Ind. Method of and apparatus for feeding molten glass. 1,812,534; June 30.

Johansen, Harry C., Michigan City, Ind., assignor to Sullivan Machinery Company. Drilling apparatus. 1,811,939; June 30.

Johns-Manville Corporation. (See Driscoll, James, assignor.)

Johnson, Charles E., Minneapolis, assignor of one-half to D. H. Eisenstadt, Minneapolis, Minn. Partition for railway cars. 1,811,888; June 30.

Johnson, Charles F., St. Johnsville, assignor to W. S. Becker, Little Falls, N. Y. Attachment for knitting machines. 1,812,700; June 30.

Johnson, David W., Newington, and A. H. Nero, West Hartford, assignors to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn. Electrical connecting device. 1,812,343; June 30.

Johnson, Ellsworth W., assignor to Midwest Motor Supply, Hector, Minn. Tractor hitch. 1,812,049; June 30.

Johnson, William H. (See Simonel, G., and Johnson.)

Jones, Cliff C., Los Angeles, Calif., assignor of one-fourth to G. W. Dick, Bournemouth, England. Electrical plug connection. 1,812,153; June 30.

Jones & Lamson Machine Company. (See Perry, George A., assignor.)

Jones & Lamson Machine Company. (See Porter, R. W., and Beardsley, assignors.)

Jones, Thomas H., assignor of two-thirds to P. B. Culp, Roanoke, Va. Eraser holder. 1,812,701; June 30.

Jones, Warren C., Flushing, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound reproducer. 1,812,634; June 30.

Jordan, Hans. (See Schoeller, W., Jordan, and Clerc.)

Jordan, Richard H., Springfield Mass., D. L. Hadley, Mansfield, Ohio, and D. R. Dohner, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Motor driven fan. Des. 84,521; June 30.

Jordan & Taylor, Inc. (See Gammack, W. A., and Knox, assignors.)

Jorgensen, Christian J., Dagmar, Mont. Tongs. 1,812,747; June 30.

Jost, Aloys, The Hague, Netherlands. Thermic container. 1,812,243; June 30.

Jost, Friedrich. (See Gross, O., and Jost.)

Judd, Irving H., Detroit, assignor to Whitehead & Kales Company, River Rouge, Mich. Transporting vehicles and the like. 1,812,097; June 30.

Judell, Julius S., Shorewood, assignor to Milwaukee Flush Valve Company, Milwaukee, Wis. Strainer. 1,811,852; June 30.

Kachline, Morris Y., Bangor, Pa. Method and means for application of paradichloro-benzene to fruit trees. 1,812,535; June 30.

Kall Manufacturing Co. (See Wall, Eugene W., assignor.)

Kanabay, E. Joseph, assignor to Leon Benoit, Chicago, Ill. Egg case filler machine. 1,812,486; June 30.

Käppler, Paul, Dresden, Germany. Parallelogram type pantograph. 1,811,940; June 30.

Karberg, Peter K., assignor to H. B. Glover Company, Dubuque, Iowa. Garment. 1,812,593; June 30.

Katz, Harry, assignor to Moses Wertheimer, Philadelphia, Pa. Child's garment. 1,812,791; June 30.

Kayser, August, Fort Wayne, Ind., assignor to General Electric Company. Dynamo electric machine. 1,812,748; June 30.

Kearney, Edward J., Wauwatosa, and J. B. Armitage, Milwaukee, assignors to Kearney & Trecker Corporation, West Allis, Wis. Machine tool. 1,812,702; June 30.

Kearney & Trecker Corporation. (See Kearney, E. J., and Armitage, assignors.)

Keiser, Edward H. (See De Grotte, M., Monson, and Keiser.)

Keith, Clyde R., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Apparatus for reducing disturbing currents. 1,811,941; June 30.

Keith, Nathan D., Dedham, assignor to The West End Thread Company, Boston, Mass. Sewing machine shuttle. 1,812,098; June 30.

Keller, Charles, Warren, Ind. Atomizer attachment for vacuum cleaners. 1,812,207; June 30.

Kellogg, Homer G., assignor to Motor Products Corporation, Detroit, Mich. Hood hinge. Des. 84,522; June 30.

Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)

Kemmerer, Ralph R., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,812,154; June 30.

Kemper, Charles W. and J. T., Hayward, Calif. Cable clamp. 1,811,942; June 30.

Kemper, John T. (See Kemper, Charles W. and J. T.)

Kensig, Louis D., Western Springs, assignor to National Aluminate Corporation, Chicago, Ill. Apparatus for continuous blow down for boilers. 1,812,050; June 30.

Kern, Fred M., assignor to Hutto Engineering Company, Inc., Detroit, Mich. Adjusting device for cylinder grinders. 1,811,943; June 30.

Kienle, Roy H., Schenectady, and W. J. Scheiber, Troy, N. Y., assignors to General Electric Company. Resinous material and making the same. 1,812,749; June 30.

Kilborn, Karl B., Fairlawn, Ohio, assignor to Seiberling Rubber Company. Vulcanizing apparatus. 1,812,792; June 30.

Kimble, Horace G., Brooklyn, N. Y. Bed. 1,812,298; June 30.

Kindstrom, Carl. (See Helin, Elis, assignor.)

King, C. G., & Co. (See Bayan, Lawrence M., assignor.)

King, C. G., & Co. (See King, Clifford G., assignor.)

King, Clifford G., Barrington, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,523; June 30.

King, Clifford G., Barrington, assignor to C. G. King & Co., Inc., Providence, R. I. Shoe buckle. Des. 84,524; June 30.

Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Mechanism for cutting sheet material. 1,812,654; June 30.

Kitcat, Lewis G., London, England. Removable book cover. 1,812,594; June 30.

Kjolseth, Ole K., Erie Pa., assignor to General Electric Company. Spring suspension system. 1,812,793; June 30.

Klausmeyer, David M., assignor to General Motors Corporation, Detroit, Mich. Automobile body. 1,812,487; June 30.

Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)

Klin, Urban A., Valparaiso, Ind. Gold club head. Des. 84,525; June 30.

Klinkenberg, Adolf, Wittbraucke, near Herdecke, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Structural steel. 1,812,155; June 30.

Kloneck, August J., New York, N. Y. Radio apparatus. 1,812,407; June 30.

Klug, Karl, Brooklyn, N. Y. Street car sign. 1,812,344; June 30.

Knapp, Archer L., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,812,703; June 30.

Knight, James A., Halifax, Nova Scotia, Canada. Shock absorber. 1,812,051; June 30.

Knoop, William A., Hempstead, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,812,635; June 30.

Knox, Donald G. (See Gammack, W. A., and Knox.)

Kohr, Allison A., Maplewood, N. J., assignor to The Koppers Company, Pittsburgh, Pa. Gas purification process and apparatus. 1,812,099; June 30.

Kollstede, George, Providence, R. I. Lighter. Des. 84,526; June 30.

Kopp Glass, Incorporated. (See Kopp, Nicholas, assignor.)

Kopp, Nicholas, Pittsburgh, assignor to Kopp Glass, Incorporated, Swissvale, Pa. Advertising sign. Des. 84,527; June 30.

Koppers Company, The. (See Kohr, Allison A., assignor.)

Kouyoumjian, Haroutium K., Providence, R. I., assignor to Ward Leonard Electric Company. Electric controlling apparatus. 1,812,299; June 30.

Kovacs, Theodor, Berlin, Germany. Clip for securing articles to cloth. 1,812,536; June 30.

Krausz, Arthur F., Boston, Mass. Abrading tool. 1,812,488; June 30.

Krebs, Arnold. (See Meyer, Gottfried, assignor.)

Kreider, Enos H., Lancaster, Pa. Vehicle shock absorber. 1,812,244; June 30.

Krell, Joseph, Berlin-Zehlendorf, Germany. Safety appliance. 1,812,245; June 30.

Kroeger, Ferdinand J. (See Hohnhorst, F. J., and Kroeger.)

Krone, Christian C., assignor of one-half to A. H. Murray, Momence, Ill. Can labeling machine. 1,812,007; June 30.

Krone, Frederick W., San Francisco, Calif. Tube securing means. 1,811,944; June 30.

Kronig, Christian. (See Weis, Franz, assignor.)

Krüger, Albert, Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electron tube. 1,812,489; June 30.

Kruglak, Edward T. (See Funk, W. F., and Kruglak.)

Krzikalla, Hans, Mannheim, and F. Bluemmel, Seckenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Complex chromium compound of azo dyestuffs. 1,812,345; June 30.

Kuenhold, Otto J., Cleveland, Ohio, assignor to H. M. Sheer Company, Quincy, Ill. Thermostatic valve mechanism. 1,812,346; June 30.

Kuhnert, Walter A., Los Angeles, Calif. Purifying borax. 1,812,347; June 30.

Kupetz, Adolph G., New Rochelle, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,812,100; June 30.

Lace, William P., Denver, Colo. Dental impression band. 1,812,008; June 30.

Ladd, John W. B., West Roxbury, Boston, Mass. Dental roll and making the same. 1,812,655; June 30.

La Jone, Nicholas, assignor to Inland Rubber Company, Chicago, Ill. Tire. Des. 84,528; June 30.

Lake, John W., and W. T. Finks, St. Louis, Mo., assignors, by mesne assignments, to Campello Shank Company, Campello, Mass. Sole construction for apparel shoes. 1,812,490; June 30.

Lally, John T., Wilmington, Del. Nozzle. 1,812,794; June 30.

Lamb, Charles M., Pasadena, Calif., assignor to American Chain Company, Inc. Making chains and apparatus therefor. 1,812,052; June 30.

Lamb, Lawrence S. (See Groehn, O. J., and Lamb.)

Lamble, James M. (See Ross, D. W., and Lamble.)

Landis & Gyr, A. G. (See Frohlich, Hans, assignor.)

Landis & Gyr, A. G. (See Frohlich, H., and Hausch, assignors.)

Landis & Gyr, A.-G. (See Pudelko, Riccard, assignor.)

Landman, Gerard, Ozone Park, N. Y. Kettle alarm. 1,811,853; June 30.

Lange, Emil G., Sedalia, Mo. Steel tape reel. 1,811,945; June 30.

Larson, Carl H., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Sash ventilator. 1,812,595; June 30.

La Rue, William D., Maple Shade, N. J., assignor to Victor Talking Machine Company. Stroboscopic testing system and apparatus. 1,812,348; June 30.

Lasier, David R., assignor to Norton-Lasier Company, Chicago, Ill. Fusible type hold open arm. 1,812,408; June 30.

Lazich, Branko, Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway track circuits. 1,812,208; June 30.

Leaf, Earnest R., Portland, Oreg. Artificial Foot. 1,812,156; June 30.

Leahy, Michael J., Muncy, Pa. Sulphur burner. 1,812,795; June 30.

Leamy, Alan H., assignor to Auburn Automobile Company, Auburn, Ind. Automobile body. Des. 84,529; June 30.

Le Bailly, Andrew R., Chicago, Ill. Level indicator. 1,811,946; June 30.

Leckie, Herbert V., assignor to Steel and Tubes, Inc., Cleveland, Ohio. Method and apparatus for preventing adherence of molten metal, etc. 1,812,409; June 30.

Lechlanche, S. A. (See Jayet, Alois, assignor.)

Ledwinka, Joseph, assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Automobile body. 1,812,441; June 30.

Lee, Charles L., Dayton, Ohio, and T. C. Van Degrift, assignors to General Motors Research Corporation, Detroit, Mich. Core for metal casting molds. 1,812,491; June 30.

Lee, George E., Cleveland, assignor, by mesne assignments, to Mahoning Savings and Trust Company, Youngstown, Ohio. Printing press. 1,812,053; June 30.

Lee, George E., Cleveland, assignor, by mesne assignments, to Mahoning Savings and Trust Company, Youngstown, Ohio. Printing press. 1,812,054; June 30.

Lee, William S., and T. P. Chase, assignors to General Motors Research Corporation, Detroit, Mich. Adjustable brake lever. 1,812,492; June 30.

Leeds, Charles T., and W. K. Barnard, Los Angeles, Calif. Concrete block groin or sea wall. 1,812,300; June 30.

Leet, Albert B., assignor to Rockford Machine Tool Co., Rockford, Ill. Feed mechanism for machine tools. 1,812,656; June 30.

Legg, Victor E., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Noise suppressing circuit. 1,811,947; June 30.

Leibe, George, New Orleans, La. Transparent panel unit. 1,812,796; June 30.

Leimbach, Adam, St. Louis, Mo. Fan. 1,812,596; June 30.

Leitzke, Reinhard, Beaver Dam, Wis. Attachable washer. 1,812,657; June 30.

Le Mare, Ernest B., St. Helens, assignor to Pilkington Brothers Limited, Liverpool, England. Production of glass in strip form and apparatus therefor. 1,812,537; June 30.

Lenke, George H., Cicero, Ill. Skylight construction. 1,812,009; June 30.

Leone, Sinibaldo, Paterson, N. J. Saw filing machine. 1,812,636; June 30.

Leone, Sinibaldo, Paterson, N. J. Apparatus for assisting the crew of a sunken submarine. 1,812,637; June 30.

Léopold, Georges, Geneva, Switzerland. Electric switch. 1,812,157; June 30.

Lewis, Charles L., Monrovia, Calif. Display sign. 1,812,209; June 30.

Lewis, Edwin H., Oak Park, Ill. Ash tray. 1,812,158; June 30.

Lewis, George C., New Dorp, assignor to Columbian Carbon Company, New York, N. Y. Manufacture of carbon black. 1,811,854; June 30.

Lewis, George C., New Dorp, assignor to Columbian Carbon Company, New York, N. Y. Manufacture of carbon black. 1,811,889; June 30.

Lewis, Warren K., Newton, Mass., assignor to Standard Oil Development Company. Operating oil and gas wells under reduced pressure. 1,812,267; June 30.

Lewis, Wilbur S., Lakewood, Ohio, assignor to The Nestle-Le Mur Company, Cleveland, Ohio. Waving hair. 1,812,442; June 30.

Libbey-Owens-Ford Glass Company. (See Mambourg, Luke C., assignor.)

Lienzén, David L. (See Nilson, C. E. J., and Lienzén.)

Lillibridge, Hoxsie W., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Coil winding machine. 1,812,349; June 30.

Lincoln Engineering Company. (See Linders, William Z., assignor.)

Lindell, Torsten. (See Nygard, R., Finnila, and Lindell.)

Lindemann, Waldemar, Dusseldorf, Germany. Bundling press. 1,812,797; June 30.

Linders, William Z., Normandy, assignor to Lincoln Engineering Company, St. Louis, Mo. Lubricating apparatus. 1,812,798; June 30.

Lindsay, Lynn G., Minneapolis, Minn., assignor to Trupar Manufacturing Company, Dayton, Ohio. Water softener. 1,811,890; June 30.

Lingwood, Frederick D., assignor to Manufax Limited, London, England. Punching or cutting pliers. 1,812,350; June 30.

Link-Belt Company. (See Erickson, Willard E., assignor.)

Link-Belt Company. (See Hayward, Henry E., assignor.)

Linnartz, Hugo. (See Behle, J., and Linnartz.)

Liquid Carbonic Corporation, The. (See Hunt, Franklin B., assignor.)

Liquid Carbonic Corporation, The. (See Pratt, J. H., and Hunt, assignors.)

Lissman, Marcel A. (See Horne, G. H., and Lissman.)

Lockert, Wilbur H., and P. E. Welton, Cuyahoga Falls, Ohio; said Lockert assignor to said Welton. Rubber mill. 1,812,538; June 30.

Lodde, Herbert, and J. Dieckmann, New York, N. Y. Support for holding spectacles above the line of vision. 1,811,855; June 30.

Loewy, Raymond, New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Radiocabinet. Des. 84,530; June 30.

Long, Maurice B., Glen Ridge, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Switching device for radio and phonograph combinations. 1,811,856; June 30.

Long-Turney Corporation. (See Walker, Jack E., assignor.)

Loomis, Nathaniel E., Elizabeth, N. J., assignor to Standard Oil Development Company. Apparatus for cracking hydrocarbons. 1,812,658; June 30.

Loomis, Walter A., and S. E. Burton, Los Angeles, Calif. Deep well pump and system. 1,811,948; June 30.

Lopez, Francesco, assignor to Società Anonima Industria Ammoniaca, Padova, Italy. Apparatus for eliminating a substance from a gaseous mixture. 1,812,750; June 30.

Los Angeles Wall Bed Company. (See Cocks, Edgar, assignor.)

Louderback, George B., Compton, Calif. Drilling bit. 1,812,210; June 30.

Lounsbury, Harvey J., Glen Ellyn, assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,812,101; June 30.

Ludowici, Wilhelm, Munich, Germany. Self-discharging wagon. 1,812,539; June 30.

Lukas, John G., Bayonne, N. J. Adjustable price indicator. 1,812,159; June 30.

Lund, Thomas, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening feeding system. 1,811,891; June 30.

Lundborg, Bror H., assignor to Svenska Ackumulator Aktiebolaget jungner, Stockholm, Sweden. Fluid filter. Re18,114; June 30.

Lundgaard, Ivar, West Hartford, Conn., assignor, by mesne assignments, to Devon Manufacturing Company, Boston, Mass. Refrigerator. 1,812,102; June 30.

Lusk, Walter F., and W. H. Potter, assignors to Armour & Company, Chicago, Ill. Ball and applying same. 1,812,597; June 30.

Maby, Adelbert C., Richmond Hill, assignor to The Tabulating Machine Company, Endicott, N. Y. Motor driven punch. 1,812,659; June 30.

Macbeth-Evans Glass Company. (See Sloan, Theodore H., assignor.)

MacKenzie, Charles S., Gananoque, Ontario, Canada. Shovel. 1,812,160; June 30.

Macomber, Lynn W., assignor to United Steel & Wire Company, Battle Creek, Mich. Cage or coop. 1,812,598; June 30.

MacRae, Duncan, East Orange, N. J., assignor to Westinghouse Lamp Company. Electron emitting device and making. 1,812,103; June 30.

Maddaford, Francis S., Baltimore, Md. Jar. Des. 84,531; June 30.

Madore, Maurice, Alfort, France. Mechanical preparation of pulverized solid materials. 1,812,799; June 30.

Maher, James H., Montreal, Quebec, Canada. Building construction. 1,812,055; June 30.

Mahoning Savings and Trust Company. (See Lee, George E., assignor.)

Malloy, Frank J. (See Donovan, J. F., and Malloy.)

Malocsay, Francis X., Upper Saddle River, N. J., assignor to International Banding Machine Company. Cigar banding machine. 1,812,704; June 30.

Mambourg, Luke C., Lancaster, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for producing sheet glass. 1,812,599; June 30.
Manifold Supplies Company. (See Foster, Arthur L., assignor.)
Mansfield, Judson H., and C. F. Penrose, assignor to Greenlee Bros. & Co., Rockford, Ill. Thread cutting means for automatic screw machines. 1,812,660; June 30.
Manufax Limited. (See Lingwood, Fredrich D.)
Mapel, Clarence O., assignor to Portable Adding Machine Company, Chicago, Ill. Printing mechanism for calculating machines. 1,812,161; June 30.
Maple, Roy H., Indianapolis, Ind. Thermostatic circuit breaker. 1,812,162; June 30.
Marcus, Charles, New York, assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y. Engine starting apparatus. 1,811,949; June 30.
Marmon Motor Car Company. (See Freers, George H., assignor.)
Marsh, Hallan N., Huntington Park, Calif. Pipe racking device. 1,812,351; June 30.
Martin, Harrison S., Brooklyn, N. Y. Stock quotation indicator. 1,812,600; June 30.
Martinet, Eugene F., assignor to The P. A. Geier Company, Cleveland, Ohio. Suction cleaner attachment. 1,812,493; June 30.
Maschinenfabrik Rüti vormals Caspar Honegger. (See Egli, E., and Schoch, assignors.)
Mason, Fred, Lansdale, Pa. Shaving guide. 1,812,443; June 30.
Mason, Harold L., London, England. Stop valve for steam or other fluids and liquids. 1,812,104; June 30.
Mathewson, Maxwell I., Providence, and A. Brown, Cranston, R. I., assignors to Brown and Sharpe Manufacturing Company. Grinding machine. 1,812,444; June 30.
Matzka, Wincenty, London, England. Apparatus for the sterilization of liquids. 1,812,105; June 30.
Mawha, James K., Maplewood, N. J., assignor to Smoot Engineering Corporation, New York, N. Y. Open hearth furnace control. 1,812,268; June 30.
Maxim Silencer Company, The. (See Reynolds, Kenneth J., assignor.)
Mayer China Company. (See Fulton, George, assignor.)
Mayer, Fred W., Chicago, Ill. Torque controlled gear changing mechanism. 1,812,445; June 30.
McBride, Lewis M., Fort Sill, Okla. Shell construction. 1,812,010; June 30.
McCargar, Joseph R., Grand Rapids, Mich. Desk. Des. 84,532; June 30.
McCauley, Ernest G., Dayton, Ohio. Fluid pressure brake control. 1,812,269; June 30.
McCord Radiator & Mfg. Co. (See Bailey, Claude B., assignor.)
McCrea, George E., San Francisco, Calif. Retractable landing gear for flying machines. 1,812,211; June 30.
McCullough, Ervin W., Indianapolis, Ind. Garbage reducer. 1,812,106; June 30.
McCullough, Ervin W., Indianapolis, Ind. Garbage tankage extraction. 1,812,107; June 30.
McCullough, Ervin W., Indianapolis, Ind. Separator. 1,812,108; June 30.
McCurdy, Alexander C., Towson, Md. Starter attachment for automobiles. 1,812,352; June 30.
McCurdy, Hugh W., Chicago, Ill. Window awning. 1,812,638; June 30.
McCutcheon, Albert B., Middletown, Conn. Spinet lamp support. Des. 84,533; June 30.
McDonough, Francis T., Madison, Wis., and A. F. Moyer, assignors, by mesne assignments, to Precision Balancing Machine Company, Minneapolis, Minn. Balancing machine. 1,812,353; June 30.
McFarland, Curtis, Felicity, Ohio. Spring winding and setting tool. 1,812,494; June 30.
McIntosh, John T., Chicago, Ill. Vehicle spring suspension. 1,812,661; June 30.
McKinney, Harold F. (See Steinmetz, C. R., and McKinney.)
McKinzie, Edward R., Memphis, Tenn. Elevator lubricator. 1,812,540; June 30.
McLauthlin, Herbert F. (See Teale, W., and McLauthlin.)
McPhail, Gus R. (See Buckle, C. H., and McPhail.)
Meacham, William M., Seattle, Wash. Method of and apparatus for pressure concrete molding. 1,811,950; June 30.
Meade, John N., Denver, Colo., assignor to The Rail Joint Company, New York, N. Y. Toeless rail joint bar. 1,811,951; June 30.
Mednikoff, Nicolai, Scarsdale, N. Y. Piano attachment. 1,812,706; June 30.
Melhuish, Laurence E., Glen Ridge, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Railway traffic controlling system. 1,811,857; June 30.
Melling, George, Jackson, Mich. Milling and drilling machine. 1,812,601; June 30.
Mellor Horace, assignor to Sanford Mills, Sanford, Me. Pile fabric and making the same. 1,812,602; June 30.
Mendius, William, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Refining hydrocarbons. 1,812,446; June 30.
Mensman, Charles J., Washington, D. C. Phonograph record. 1,812,751; June 30.
Merrill, Charles S. (See Whitehead, Robert H., assignor.)
Merrill, George S., Shaker Heights, Ohio, assignor to General Electric Company. Variable chart. 1,812,752; June 30.
Merritt, Samuel J., Central City, Ky. Control device for pumping apparatus. 1,811,952; June 30.
Messinger, William, Philadelphia, Pa. Securing eccentric motion. 1,812,109; June 30.
Metallurgica Bresciana Gia Tempini. (See Orlando, Luigi, assignor.)
Metcalf, Harold G., assignor to Columbian Rope Company, Auburn, N. Y. Rope. 1,812,354; June 30.
Methlin, Nicolas E., assignor to Schneider & Cie., Paris, France. Artillery gun more particularly applicable for firing against aircraft. 1,812,800; June 30.
Metropolitan Engineering Company. (See Holmes, Henry S.)
Meuer, George J., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric switch. 1,812,410; June 30.
Meyer, Gottfried, assignor to Arnold Krebs, Zurich, Switzerland. Implements for moving railway wagons. 1,812,603; June 30.
Meyer, William H., St. Louis, Mo. Motion picture projecter. 1,812,212; June 30.
Meyerhoff, Jacob, Chicago, Ill. Educational device. 1,812,110; June 30.
Michael, Gus F., assignor to Bendix Brake Company, South Bend, Ind. Brake operating means, 1,812,011; June 30.
Michaels, Frank L., Covington, Ky. Weather strip apparatus. 1,812,840; June 30.
Michaels, George Z., New York, N. Y. Automobile light controlling system. 1,812,355; June 30.
Midland Steel Products Company, The. (See Neale, Fred, assignor.)
Midwest Motor Supply. (See Johnson, Ellsworth W., assignor.)
Midwest Piping & Supply Co. Inc. (See Fantz, Fred C., assignor.)
Miller, Harvey O., Chicago, Ill. Device for scraping and cleaning the face of a golf club. Des. 84,534; June 30.
Miller, Ohmer R., Floral Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Control system for transmission of signals. 1,811,858; June 30.
Miller Rubber Company, The. (See Collins, Arthur E., assignor.)
Miller, Samuel M. D., Detroit, Mich. Clutch. 1,812,163; June 30.
Miller, Stuart P., Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y. Fuel composition and preparing the same. 1,811,953; June 30.
Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Production of fuel, etc. 1,812,829; June 30.
Mills Alloys Inc. (See Mills, Oscar L., assignor.)
Mills, Bertram M., assignor to The Standard Engineering Works, Pawtucket, R. I. Humidifier. 1,812,356; June 30.
Mills, Chester H., Wichita, Kans. Self computing leveling rod. 1,811,859; June 30.
Mills, Oscar L., assignor to Mills Alloys Inc., Los Angeles, Calif. Manufacturing tungsten carbide. 1,812,357; June 30.
Milwaukee Flush Valve Company. (See Judell, Julius S., assignor.)
Miner, W. H., Inc. (See Lounsbury, Harvey J., assignor.)
Mingus, Leslie C. (See Dunn, I. L., and Mingus.)
Minor, Burt S., San Pedro, Calif. Oil well packing device. 1,812,358; June 30.
Minton, John P., White Plains, assignor to United Reproducers Corporation, Rochester, N. Y. Loud speaker. 1,812,213; June 30.
Mishelevich, Benjamin, Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway track circuits. 1,812,164; June 30.
Mission Dry Corporation. (See Crosby, Harry E., assignor.)
Mitchell Camera Corporation. (See Mitchell, George A., assignor.)
Mitchell, Doren, New York, and H. C. Silent, Larchmont, N. Y., assignors to American Telephone and Telegraph Company. Transmission volume control. 1,811,954; June 30.
Mitchell, Doren, New York, and H. C. Silent, Larchmont, N. Y., assignor to American Telephone and Telegraph Company. Transmission volume control. 1,811,955; June 30.
Mitchell, George A., Los Angeles, Calif., assignor to Mitchell Camera Corporation. Dissolving shutter. 1,812,056; June 30.
Mitchell, William T. (See Hickox, G. E. F., and Mitchell.)
Mittasch, Alwin. (See Gaus, W., Mittasch, and Schlecht.)
Mitulski, F. E., et al. (See Costello, Paul S., assignor.)
Mix, Edwin S., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt for personal wear. 1,812,214; June 30.
Mock, Hugo, New York, N. Y. Key can opener. 1,812,111; June 30.
Moerch, Erik, Paris, France. Projection arrangement for advertising purposes. 1,811,956; June 30.
Moline Tool Company. (See Hunt, Wilson P., assignor.)
Moltrup, James T., Beaver Falls, Pa. Production of drawn metal rods. 1,812,359; June 30.

Monogram Lens Corporation. (See Coulter, Guy H., and Arbuckle, assignors.)
Monson, Louis T. (See De Groote, M., Monson, and Kelser.)
Moore, Charles G., Lakewood, and M. Zucker, assignors to The Glidden Company, Cleveland, Ohio. Synthetic resin compound and preparing the same. 1,812,639; June 30.
Moore, Lee. (See Harding, Alfred L., assignor.)
Moore, Raymond G., assignor to The Bassick Company, Bridgeport, Conn. Automobile hood clamp. 1,812,215; June 30.
Morgan, Horace H., assignor to Palmer-Bee Company, Detroit, Mich. Paint guard for conveyers. 1,812,112; June 30.
Morl, Albert. (See Ruse, John C., assignor.)
Morin, Louis H., New York, N. Y., assignor to Doehler Die-Casting Co. Metal furniture. 1,812,360; June 30.
Morris Paper Mills. (See Walker, Paul, assignor.)
Morrow, Joseph H., assignor to Fuller Company, Catasauqua, Pa. Mixing and blending system. 1,812,604; June 30.
Morton, Edmund R., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulator system. 1,811,860; June 30.
Morton, James, deceased; W. Morton, executor, assignor to R. H. Morton, Wishaw, Scotland, and himself. Device for measuring and depositing measured quantities of liquid, plastic, granular, and other similar substances. 1,811,957; June 30.
Morton, Robert H. (See Morton, James, assignor.)
Morton, William, executor. (See Morton, James.)
Moses, Wade, Cleveland, Ohio. Combined humidor, tamp, and pick. 1,812,753; June 30.
Motor Development Company. (See Schaefer, William D., assignor.)
Motor Products Corporation. (See Kellogg, Homer G., assignor.)
Moyer, Amos F. (See McDonough, F. T., and Moyer.)
Muhs, Henry, Company. (See Rumsey, Herbert, jr., assignor.)
Murphy, Howard J., Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating system. 1,811,958; June 30.
Murray, Alfred H. (See Krone, Christian C., assignor.)
Murray Company, The. (See Behle, J., and Linnartz, assignors.)
Murray, John F., et al., executors. (See Holmes, Henry S., assignor.)
Murray, Joseph B., et al., executors. (See Holmes, Henry S.)
Murray, Thomas E. (See Holmes, Henry S., assignor.)
Murray, Thomas E., jr., et al., executors. (See Holmes, Henry S., assignor.)
Muzzy, William H., Evanston, assignor to Stewart-Warner Corporation, Chicago, Ill. Gasoline reserve signal for automobiles. 1,812,012; June 30.
Muzzy, William H., Evanston, assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Fuel feeding system for internal combustion engines. 1,812,013; June 30.
Muzzy, William H., Evanston, assignor to Stewart-Warner Corporation, Chicago, Ill. Limited suction feed device. 1,812,014; June 30.
Myer, Fred C., Sacramento, Calif. Coin selector. 1,812,165; June 30.
Naab, George F., assignor to The North American Manufacturing Company, Cleveland, Ohio. Proportioning valve. 1,812,015; June 30.
Naamlooze Vennootschap Bakovenbouw voorheen H. P. den Boer. (See Peikman, Johannes H. N., assignor.)
Nagel, George E., Columbus, Ohio. Railway crossing 1,812,707; June 30.
Naromore, Glenn C. (See Belden, A. G., and Naromore.)
Nasmyth, Charles S., Sydney, New South Wales, Australia. Flush valve. 1,812,301; June 30.
Nathanson, Isidore. (See Rodstein, H., and Nathanson.)
National Aluminate Corporation. (See Kensig, Louis D., assignor.)
National Cash Register Company, The. (See Brand, Samuel, assignor.)
National Cash Register Company, The. (See Goldberg, Maximilian M., assignor.)
National Cash Register Company, The. (See Robertson, William H., assignor.)
National Industrial Laboratories Corporation. (See Bassett, Orin A., assignor.)
National Rubber Machinery Company. (See De Mattia, Peter, assignor.)
National Supply Company, The. (See Hill, Rowland F., assignor.)
Neale, Fred, assignor, by mesne assignments, to The Midland Steel Products Company, Cleveland, Ohio. Compressor control apparatus. 1,812,057; June 30.
Nekarda, Victor F. (See Bragger, W. B., and Nekarda.)
Nelson, Owen F., Grosse Pointe, Mich., assignor to Copeland Products, Incorporated. Refrigerating apparatus. 1,812,113; June 30.
Nemcovsky, Louis A., assignor, by mesne assignments, to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,812,447; June 30.
Nero Arvid H. (See Johnson, D. W., and Nero.)
Nestle-Le Mur Company, The. (See Lewis, Wilbur S., assignor.)
Newberger, Herman H. (See Weiner, Samuel E., assignor.)
New Jersey Zinc Company, The. (See Breyer, Frank G., assignor.)
Niagara Machine and Tool Works. (See Hahnemann, Paul R., assignor.)
Nicholson, Alexander W., Dickerson Run, Pa. Feed valve for air brake systems. 1,812,361; June 30.
Nicloud, Charles, Marseille, France. Electrically heated apparatus for drying coffee and the like. 1,812,016; June 30.
Nies, Arnold V., Cincinnati, Ohio. Sanitary knife scabbard. 1,812,302; June 30.
Nieuwland, Julius A., Notre Dame, Ind., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Vinyl derivatives of acetylene and preparing the same. 1,811,959; June 30.
Nieuwland, Julius A., Notre Dame, Ind., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Resinous product and preparing the same. 1,812,541; June 30.
Nieuwland, Julius A., Notre Dame, Ind., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Catalytic process for the preparation of vinyl chloride. 1,812,542; June 30.
Nilson, Carl E. J., assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Electromagnetic relay. 1,812,545; June 30.
Nilson, Carl E. J., and D. L. Lienzén, assignors to Telefon Aktiebolaget L. M. Ericsson, Stockholm, Sweden. Automatic and semiautomatic telephone system. 1,812,546; June 30.
Nisbet, Theodore B., Irvington, N. Y. Tonneau windshield supporting means. 1,812,362; June 30.
Noeth, John J. (See Hummel, F. E., and Noeth.)
Nölke, Ernst, Berlin, Halensee, assignor to Siemens & Halske, Aktiengesellschaft, Wernerwerk Siemensstadt, near Berlin, Germany. Cheek microphone. 1,812,114; June 30.
Norris, Gerald C. (See Stevens, R. H., Norris, and Watson.)
North American Manufacturing Company, The. (See Naab, George F., assignor.)
Northey, John J., and R. V. Northey, Toronto, Ontario, assignors to Consolidated Bolt Company, Limited, Toronto, Canada. Key bolt. 1,812,216; June 30.
Northey, Rodney V. (See Northey, J. P. and R. V.)
Northwest Engineering Corporation. (See Orloff, Arthur, assignor.)
Norton, Charles M., Grand Rapids, Mich. Door latch. 1,812,411; June 30.
Norton Company. (See Belden, A. G., and Naromore, assignors.)
Norton-Lasier Company. (See Lasier, David R., assignor.)
Nowack, Wilhelm, Berlin, and H. Buwert, Berlin-Wilmersdorf, Germany. Advertising device. 1,812,547; June 30.
Nurre Mirror Plate Company, The. (See Simonel, G., and Johnson, assignors.)
Nus, Glen F., Arlington, Iowa. Front wheel drive for automobiles. 1,812,801; June 30.
Nusbaum, Hermien D., Chicago, Ill. Child's dressing stand. Des. 84,535; June 30.
Nutter, William S., assignor to Goodall Worsted Company, Sanford, Me. Pile fabric and making the same. 1,812,640; June 30.
Nye, Oliver, Toledo, Ohio. Kite. Des. 84,536; June 30.
Nygard, Rudolf, Axel Finnila, and Torsten Lindell, Sandwich, Ontario, Canada, Harrow. 1,812,708; June 30.
Nyman, Alexander, Dobbs Ferry, assignor to Radio Patents Corporation, New York, N. Y. Illuminating apparatus. 1,811,861; June 30.
Oakes, W. B., et al. (See Davis, Kenneth, assignor.)
Oberg, William C., Munhall, Pa. Making flanged shapes. 1,812,246; June 30.
Oberg, William C., Munhall, Pa. Roll. 1,812,248; June 30.
Oberg, William C., and A. W. Soderberg, Munhall, Pa. Rolling mill plant and method of operating same. 1,812,247; June 30.
Oberle, Alfred, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for heating petroleum oil. 1,812,217; June 30.
Obermiller, Julius, Munich-Gladbach, Germany. Producing a constant degree of humidity in air or other gases. 1,812,548; June 30.
Oberting, Marie R., Mineral Point, Mo. Lambrequin. Des. 84,537; June 30.
Odce, Ole., and P. P. E. Richards, Batavia, Ill. Ignition mechanism for internal combustion engines. 1,812,709; June 30.
Ogden, Walter. (See Ball, H. V., and Ogden.)
Ohio Electric Manufacturing Co., The. (See Wertz, Roy O., assignor.)
Ohio Truss Company, The. (See Pease, Isaac M., assignor.)
Oliver United Filters Incorporated. (See Gardella, William, assignor.)
Oliver United Filters Inc. (See Stanley, C. M., and Evans, assignors.)
Olson, Alex H., Evanston, assignor to Droll Patents Corporation, Chicago, Ill. Machine for handling fibrous material. 1,812,412; June 30.
O'Neill, Thomas, Brooklyn, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J. Binder for sewing machines. 1,812,830; June 30.

Orlando, Luigi, Milan, assignor, by mesne assignments, to Metallurgica Bresciana Gia Tempini, Fiumegrande, Brescia, Italy. Device for loading firearms. 1,812,363; June 30.

Orloff, Arthur, assignor to Northwest Engineering Corporation, Green Bay, Wis. Excavator. 1,812,662; June 30.

Orr, Melville L., Cincinnati, Ohio. Game. 1,811,960; June 30.

Osborne, John G., Milwaukee, Wis., and W. W. Hicks, Fort Worth, Tex. Wire fastening means. 1,811,892; June 30.

Oursler, George. (See Oursler, James A., assignor.)

Oursler, James A., Steubenville, assignor of one-half to George Oursler, Cincinnati, Ohio. Retaining wall structure. 1,812,364; June 30.

Owen, William H., London, England. Heat exchange apparatus. 1,812,249; June 30.

Owens Development Corporation. (See Owens, Freeman H., assignor.)

Owens, Freeman H., assignor to Owens Development Corporation, New York, N. Y. Sound reproducing means. 1,812,303; June 30.

P & M. Company, The. (See Shepherd, Charles B., assignor.)

Packard Motor Car Company. (See Knapp, Archer L., assignor.)

Page, Dwight C., and R. H. Jellicoe, assignors to The Heald Machine Company, Worcester, Mass. Chuck. 1,812,017; June 30.

Pallone, Frank, Brooklyn, N. Y. Base for lamp or analogous articles. Des. 84,538; June 30.

Palmer-Bee Company. (See Morgan, Horace H., assignor.)

Palmer, John C., Edgewater, Colo. Poultry feeder. 1,812,166; June 30.

Pappas, George H., Baltimore, Md. Tire protector. 1,812,710; June 30.

Paramount Fire Alarm Engineering Company, The. (See Sackman, Charles M., assignor.)

Parker, Howard, assignor to Brown Company, Berlin, N. H. Field threading and squaring machine. 1,811,893; June 30.

Parker, Howard, assignor to Brown Company, Berlin, N. H. Field pointing machine. 1,811,894; June 30.

Parmeter, Floyd S., Los Angeles, Calif. Electric table lamp. Des. 84,539; June 30.

Parrill, Easton E., Edgewood Borough, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,812,167; June 30.

Parsons, Ben G., assignor to Hurricane Motor Company, Houston, Tex. Propeller spinner for aircraft engines. 1,812,831; June 30.

Partin, Albert, Portales, N. Mex. Motor suspension spring means. 1,811,961; June 30.

Patent and Licensing Corporation, The. (See Kirschbraun, Lester, assignor.)

Patent and Licensing Corporation, The. (See Wood, Henry R., assignor.)

Patentverwertungs A. G. "Alpina," S. A. pour l'Exploitation de Brevets "Alpina," Patents Exploitation Cy. "Alpina," Ltd. (See Gross, O., and Jost, assignors.)

Paul, John E., Newark, N. J., assignor to United States Radium Corporation, New York, N. Y. Luminous device. 1,812,058; June 30.

Paxton, Robert, Philadelphia, Pa., assignor to General Electric Company. Control of electroresponsive devices 1,812,754; June 30.

Peace, John D., jr., Flushing, assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Indicating instrument. 1,812,549; June 30.

Peak, Rembrandt, et al., trustees. (See Degand, Gust.)

Peale-Davis Company. (See Peale, Richard, assignor.)

Peale, Rembrandt, et al. (See Davis, Kenneth, assignor.)

Peale, Richard, St. Benedict, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del. Process and mechanism for separating intermixed divided materials. 1,812,365; June 30.

Pearl Art, Inc. (See Bragger, W. B., and Nekarda, assignors.)

Pease, C. F., Company, The. (See Brunk, Harold J., assignor.)

Pease, C. F., Company. (See Green, Charles A., assignor.)

Pease, Isaac M., Cincinnati, Ohio, assignor to The Ohio Truss Company. Abdominal support. 1,812,115; June 30.

Pelikan, John M. (See Brooks, C. A., and Pelikan.)

Pelkman, Johannes H. N., London, England, assignor to Naamlooze Vennootschap Bakovenbouw voorheen H. P. den Boer, Dordrecht, Netherlands. Traveling oven. 1,811,962; June 30.

Pellegrin, Elmer D. (See Wilkinson, G. D. and Pelegrin.)

Peninsular Grinding Wheel Company, The. (See Beebe, Alan P., assignor.)

Penrose, Chester F. (See Mansfield, J. H., and Penrose.)

Penteado, Armando A., Paris, France. Phonograph disk. 1,812,550; June 30.

Perrot, Henri, Paris, France, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Brake mechanism. 1,812,168; June 30.

Perry, George A., assignor to Jones & Lamson Machine Company, Springfield, Vt. Taper turner. 1,812,366; June 30.

Pessione, Luigi, Turin, Italy. Block for pavements and coverings. 1,812,711; June 30.

Peters, Arthur E., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Drill sharpener. 1,812,304; June 30.

Petersen, Christ O., Anthon, Iowa. Antiside slip attachment for corn planters. 1,812,663; June 30.

Peterson, Eugene, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Apparatus for reducing crosstalk currents. 1,811,963; June 30.

Peterson, John W., South Bend, assignor to Bendix Brake Company, South Bend, Ind. Brake adjusting fixture. 1,812,018; June 30.

Pfeifer, Walter S., assignor, by mesne assignments of one-half to L. Bradley and one-half to H. L. Bradley, Milwaukee, Wis. Motor starting switch. 1,812,712; June 30.

Pfeiffer, Frank E., assignor to The Egry Register Company, Dayton, Ohio. Autographic register. 1,812,605; June 30.

Pflasterer, George R. (See Vantassel, H. C., and Pflasterer.)

Pflueger, Joseph E., deceased, Akron, Ohio, by The Enterprise Manufacturing Company, Akron, Ohio, assignee. Combined fishhook and weed guard. Re18,117; June 30.

Pief, John, Oklahoma City, Okla. Article of manufacture for wrist watch crystals. 1,812,367; June 30.

Pierce, Sarah E., Conshohocken, Pa. Lawn mower accessory. 1,811,862; June 30.

Pierson, Roy N., and C. H. Carlson, Minneapolis, Minn., assignors, by mesne assignments, to American Multigraph Co., Wilmington, Del. Letter folding machine. 1,811,964; June 30.

Pigeon, Fred L., et al. (See Snadecki, William J., assignor.)

Pigeon, Roy W., et al. (See Snadecki, William J., assignor.)

Pike, George J., Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio. Radiocabinet or similar article. Des. 84,540; June 30.

Pike, George J., Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio. Radiocabinet or similar article. Des. 84,541; June 30.

Pike, George J., Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio. Radiocabinet or similar article. Des. 84,542; June 30.

Pike, George J., Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio. Radiocabinet or similar article. Des. 84,543; June 30.

Pike, George J., Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio. Radiocabinet or similar article. Des. 84,544; June 30.

Pike, George J., Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio. Radiocabinet or similar article. Des. 84,545; June 30.

Pilkington Brothers Limited. (See Le Mare, Ernest B., assignor.)

Pinaud, Incorporated. (See Schmidt, Charles G. G., assignor.)

Pine Hall Brick & Pipe Co. (See Steele, Flake F., assignor.)

Pintsch, Julius, Aktiengesellschaft. (See Gerdes, Heinrich, assignor.)

Pioneer Instrument Company. (See Peace, John D., jr., assignor.)

Pioneer Instrument Company. (See Titterington, Morris M., assignor.)

Pittsburgh Steel Company. (See Brandt, Lewis, assignor.)

Platt Brothers & Company Limited, et al. (See Shimwell, Oliver, assignor.)

Plaxco, Frederick R., and I. L. Foster, Long Beach, Calif. Iron rest. 1,812,270; June 30.

Popkin, Martin E., New York, N. Y. Cloth matching machine. 1,812,368; June 30.

Portable Adding Machine Company. (See Barrett, Glenn J., assignor.)

Portable Adding Machine Company. (See Mapel, Clarence O., assignor.)

Porter, Kenneth L., New Rochelle, N. Y. Radiator inclosure. 1,812,606; June 30.

Porter, Russell W., and R. O. Beardsley, assignors to Jones & Lamson Machine Company, Springfield, Vt. Projecting mechanism and gear staging device. 1,812,369; June 30.

Potter, Arthur C., North Woodstock, Conn. Match book. Des. 84,546; June 30.

Potter, William H. (See Lusk, W. F., and Potter.)

Poulet, Edouard, Courbevoie, France. Brake for motor vehicles. 1,812,551; June 30.

Powell, Elmer J., assignor to The Powell Pressed Steel Company, Hubbard, Ohio. Lift truck platform. 1,812,218; June 30.

Powell, Grahame H., et al. (See Talbot, Frank A., assignor.)

Powell, Jesse R., M. L. Sheely, and R. Smith, assignors to Armour & Company, Chicago, Ill. Cushion filler. 1,812,019; June 30.

Powell Pressed Steel Company, The. (See Powell, Elmer J., assignor.)

Powell, Winfred T., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Selective program service system. 1,812,169; June 30.

Powell, Winfred T., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Remote control magneto telephone system. 1,812,641; June 30.

Pratt, Hartley B., Barrow-in-Furness, assignor to Vickers-Armstrong Limited, Westminster, England. Submarine mine. 1,812,370; June 30.

Pratt, Jabez H., and F. B. Hunt, assignors, by mesne assignments, to The Liquid Carbonic Corporation, Chicago, Ill. Cooler cabinet. 1,811,863; June 30.

Precision Balancing Machine Company. (See McDonough, F. T., and Moyer, assignors.)

Price, Lewis C., Boston, Mass., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Temperature regulator for hollow rotatable elements. 1,812,802; June 30.

Priess, William H., Montclair, N. J., assignor to Wireless Specialty Apparatus Company, Boston, Mass. Electrical condenser and making it. 1,812,664; June 30.

Priest, Harry R., Loudonville, Ohio. Fountain shaving brush and receptacle. 1,811,965; June 30.

Priester, Harry, executor. (See Fallot, Alfred.)

Proctor, John, A. Lexington, and W. M. Bailey, Lynn, assignors to Wireless Specialty Apparatus Company, Boston, Mass. Electrical condenser. 1,812,713; June 30.

Proctor & Schwartz, Incorporated. (See Hurxthal, Alpheus O., assignor.)

Proctor & Schwartz, Incorporated. (See Hurxthal, A. O., and Bogaty, assignors.)

Proper, John, Seminole, Okla. Bull wheel shaft flange. 1,811,966; June 30.

Propp, Louis, New York, N. Y. Decorative device. 1,812,116; June 30.

Prutzman, Paul W. (See Vogel, Willard L., assignor.)

Pryor, Elmer E., Fullerton, Calif. Combination trip socket for fishing tools. 1,812,059; June 30.

Pudelko, Riccard, Zug, Switzerland, assignor to Landis & Gyr, A.-G. Induction meter. 1,812,371; June 30.

Pugh, James W., Breckenridge, Tex., E. Tauch, and T. E. Warren, Cambridge, Mass., assignors to Standard Oil Development Company. Oxidation of hydrocarbons. 1,812,714; June 30.

Quellhorst, Elwin G., Cleveland, Ohio. Electric hammer. 1,812,271; June 30.

Quendt, Bernhard. (See Drüppel, Cläre, assignor.)

Quigg, Murray T. (See Volf, Christian A., jr., assignor.)

Quillin, Otto I., and C. R. Wright, Colorado Springs, Colo. Advertising device. 1,812,715; June 30.

Quinsler, Frank M., Chicago, Ill. Power driven plane. 1,812,755; June 30.

Rabe, Frederick W., assignor to Anheuser-Busch, Inc., St. Louis, Mo. Refrigerating apparatus. 1,812,170; June 30.

Rabezzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Electrical contact. 1,812,495; June 30.

Rabezzana, Hector, assignor to A C Spark Plug Company, Flint, Mich. Side wire gap wrench for spark plugs. 1,812,496; June 30.

Racine Universal Motor Company. (See Van Bree, Hubert, assignor.)

Radio Corporation of America. (See Ranger, Richard H., assignor.)

Radio Patents Corporation. (See Nyman, Alexander, assignor.)

Raffold Process Corporation. (See Rafton, Harold R., assignor.)

Rafton, Harold R., Lawrence, Mass., assignor to Raffold Process Corporation. Filled pulp and making the same. 1,812,832; June 30.

Ragonese fu Mario Anthony, New London, Conn. Jar wrench. 1,812,705; June 30.

Rail Joint Company, The. (See Meade, John N., assignor.)

Rall, Max, and E. Durst, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Gearing. 1,812,552; June 30.

Ramage, Alexander S., Detroit, Mich., assignor to Coals and Chemicals, Ltd. Obtaining aromatic hydrocarbons. 1,812,372; June 30.

Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Light control system. 1,811,895; June 30.

Ranney, Frederick B., assignor to Ranney Refrigerator Company, Greenville, Mich. Ice rack for refrigerators. 1,812,803; June 30.

Ranney, Leo, Greenwich, Conn., assignor to Standard Development Company. Recovery of oil from the earth by mining operations. 1,812,305; June 30.

Ranney Refrigerator Company. (See Ranney, Frederick B., assignor.)

Ransom, George F., San Angelo, assignor to Humble Oil & Refining Company, Houston, Tex. Recovery of potassium sulphate from polyhalite. 1,812,497; June 30.

Ransome Concrete Machinery Company. (See Faber, John P., assignor.)

Rastetter, Harry O., assignor to The Union Metal Manufacturing Company, Canton, Ohio. Clamp collar. 1,812,117; June 30.

Rawlings Manufacturing Company. (See Bischoff, Walter E., assignor.)

Rayfield, Frederick J., assignor to Champion Pneumatic Machinery Company, Chicago, Ill. Fan structure. 1,812,060; June 30.

Ready, William A., Brookline, Mass. Forming D-handles. 1,812,373; June 30.

Redfield, Casper L. (See Wisner, A. C., and Redfield.)

Redfield, Theodore H., Princeton, N. J. Pipe union. 1,812,553; June 30.

Reed, E. P., & Co. (See Elbing, Walter E., assignor.)

Reed, Lewis I., Berkeley, Calif. Sound reproduction. 1,812,219; June 30.

Reeves, Clifton. (See Goulding, Albanus W., assignor.)

Reilly, John J., Weehawken, N. J., and W. A. Gilmartin, New York, N. Y. Photography. 1,812,448; June 30.

Reilly, Peter C. (See Derby, I. H., and Cunningham, assignor.)

Reynolds, Arthur W. (See Babcock, I. A., and Reynolds.)

Reynolds, Eugene L., Portland, Oreg. Casing for a refrigerating, mixing, and dispensing machine. Des. 84,547; June 30.

Reynolds, Henry T., Lombard, Ill., assignor to American Can Company, New York, N. Y. Container cover. 1,811,967; June 30.

Reynolds, Kenneth J., East Hartford, assignor, by mesne assignments, to The Maxim Silencer Company, Hartford, Conn. Silencer. 1,812,413; June 30.

Rheinische Kampfer-Fabrik G. m. b. H. (See Skraup, S., and Hirschler, assignors.)

Rhenania Verein Chemischer Fabriken Aktien-Gesellschaft. (See Stuer, Bernhard C., assignor.)

Rhodesia Broken Hill Development Company Limited. (See Stevens, R. H., Norris, and Watson, assignors.)

Rice, John L., Dayton, Ohio. Display device. 1,812,171; June 30.

Richard, William E., assignor to Sunbeam Electric Manufacturing Company, Evansville, Ind. Cooling system for internal combustion engines. 1,812,665; June 30.

Richards, Paul P. E. (See Odee, O., and Richards.)

Richter, George A., assignor to Brown Company, Berlin, N. H. Liberating fiber from bagasse or like stalks. 1,811,864; June 30.

Rieck, Wilhelm O. P., Hamburg, Germany. Sealing attachment for machines for applying crown corks to bottles or other containers. 1,812,804; June 30.

Riedel, J. D., Aktiengesellschaft. (See Boedecker, Friedrich, assignor.)

Riesner, Michael, Cincinnati, Ohio, assignor to Worthington Pump and Machinery Corporation, New York, N. Y. Variable capacity compressor. 1,812,607; June 30.

Riggs, Greeley R., Austin, Tex. Adjustable bracket for boxes. 1,812,756; June 30.

Riley, James A., Johnson City, Tenn. Reel. 1,812,805; June 30.

Ripberger, Alexander G., Philo, Ohio. Method of and apparatus for charging electric furnaces. 1,812,118; June 30.

Ripper, Kurt, Berlin, Germany. Molding composition. 1,812,374; June 30.

Roads Colloidal, Limited. (See Symons, Harry L., assignor.)

Roberts and Schaefer Company. (See Arms, George L., assignor.)

Roberts & Schaefer Company. (See Arms, Ray W., assignor.)

Roberts, Arthur S., Hendersonville, N. C. Cross-dyeing fabrics. 1,812,554; June 30.

Roberts, Arthur S., Hendersonville, N. C. Cross-dyeing fabrics. 1,812,555; June 30.

Roberts, Arthur S., Hendersonville, N. C. Cross-dyeing fabrics. 1,812,556; June 30.

Roberts, Arthur S., Hendersonville, N. C. Cross-dyeing fabrics. 1,812,557; June 30.

Roberts, Donald E., Milwaukee, Wis. Electro-surgical instrument and control. 1,812,608; June 30.

Robertson, H. H., Company. (See Young, James H., assignor.)

Robertson, James R., London, England. Vacuum tube device. 1,812,558; June 30.

Robertson, William H., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,812,020; June 30.

Rockford Machine Tool Co. (See Leet, Albert B., assignor.)

Rockwood Sprinkler Company of Massachusetts. (See Russell, Robert H., assignor.)

Rodstein, Harry, and I. Nathanson, Brooklyn, N. Y. Grill for a radiator cabinet or similar article. Des. 84,548; June 30.

Rodzikinas, Wallace R., Hatley, Wis. Bushing puller. 1,811,908; June 30.

Roehrl, Carl. (See Goodman, Harry S., assignor.)

Roesen, Oscar C., Brooklyn, assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Folding unit. 1,812,716; June 30.

Rogers, Albert W., Santo Domingo City, Dominican Republic, West Indies. Securing the heads of hammers, picks, axes and similar tools. 1,812,375; June 30.

Rogers, Frederick W., Beaver Dam, Wis. Separable electric connecter. 1,812,609; June 30.

Rogers, George A., New York, N. Y. Mechanism for use in musical instructon. 1,811,865; June 30.

Rogers, Harrison W., New York, N. Y. Synchronized sound and photography. 1,812,449; June 30.

Rogers Products Company. (See Albertine, Herman, assignor.)

Rohn, Wilhelm, Hanau-on-the-Main, Germany. Production of castings free from pipes and blowholes. 1,812,172; June 30.

Rosenfeld, Joseph P., Newark, N. J. Material spray apparatus. 1,811,969; June 30.

Ross, Chester R., Cambridge, Mass. Splashless dishpan, basin and the like. 1,811,986; June 30.

Ross, Donald W., and J. M. Lambie, Washington, Pa. Refractory heat insulating material. 1,812,376; June 30.
Ross, Oscar P. (See Coughlin, J. M., and Ross.)
Royer, William R., Wyoming, Pa. Auxiliary apparatus for tire valves. 1,812,610; June 30.
Rubel, Charles F., Chicago, Ill., and E. E. Gratsch, St. Louis, Mo., assignors to Union Special Machinery Company, Chicago, Ill. Oil collector for sewing machines. 1,812,377; June 30.
Rudolph, Paul, Grossbiesnitz, near Gorlitz, Germany. Lens system. 1,812,717; June 30.
Rumsey, Herbert, jr., Nutley, assignor to Henry Muhs Company, Passaic, N. J. Method of and implement for closing bags. 1,811,866; June 30.
Runquist, Ernest M., Cicero, and T. M. Yancey, Oak Park, Ill. assignors to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for forming cables. 1,811,897; June 30.
Ruse, John C., assignor of one-half to A. Mori, Hartville, Ohio. Universal ladder. 1,812,119; June 30.
Rusilas, Walter, Paterson, N. J. Pin and needle stand. Des 84,549; June 30.
Rusling Wood, Inc. (See Gibbs, Harold B., assignor.)
Russ, Arthur J., Oakdale, assignor to Armstrong Cork Company, Pittsburgh, Pa. Insulating material. 1,812,306; June 30.
Russell, Robert H., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Thermostat. 1,812,718; June 30.
Russell, William I., Edinburg, Tex. Anticreeper for railroad rails. 1,812,757; June 30.
Rutter, Alvah E., assignor to Dain Manufacturing Company of Iowa, Ottumwa, Iowa. Tucker for hay presses. 1,812,061; June 30.
Ryerson, Eugene H., Worcester, Mass. Kitchen utensil. 1,812,062; June 30.

Sachs, Joseph, West Hartford, Conn. Automatic circuit breaker. 1,811,970; June 30.
Sachs, Joseph, West Hartfordfi Conn. Automatic circuit breaker. 1,812,842; June 30.
Sachs, Joseph, West Hartford, Conn. Automatic circuit breaker. 1,812,843; June 30.
Sachs, Joseph, West Hartford, Conn. Automatic circuit breaker. 1,812,844; June 30.
Sachs, Joseph, West Hartford, Conn. Electroresponsively controlled mechanism. 1,812,845; June 30.
Sachs, Joseph, West Hartford, Conn. Automatic circuit breaker. 1,812,846; June 30.
Sachs, Joseph, West Hartford, Conn. Automatic circuit breaker. 1,812,847; June 30.
Sachs, Joseph, West Hartford, Conn. Automatic circuit breaker. 1,812,848; June 30.
Sackett, A. J., and Sons Company, The. (See Sackett, Augustus J., assignor.)
Sackett, Augustus J., Anne Arundel County, Md., assignor to The A. J. Sackett and Sons Company. Mixer. 1,812,450; June 30.
Sackman, Charles M., assignor, by mesne assignments, to The Paramount Fire Alarm Engineering Company, Cleveland, Ohio. Noninterference signal transmitter. 1,812,173; June 30.
Safe Deposit and Trust Company of Baltimore. (See Stunz, William P., assignor.)
Safe Deposit and Trust Company, of Baltimore, as trustee. (See Stunz, William P., assignor.)
Sampson, Charles R., Cheswold, Del. Railway crossing gate. 1,812,539; June 30.
Sanford Mills (See Mellor, Horace, assignor.)
Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Brake operating connection. 1,812,021; June 30.
Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Brake operating mechanism. 1,812,022; June 30.
Sanitarium Equipment Company. (See Goodrich, Norris E., assignor.)
Santurello, Peter, Columbus, Ohio. Container for liquids or an article of similar nature. Des. 84,550; June 30.
Sauer, Ernst, Schloss Kalbitz, Germany, assignor to The Ernst Sauer Process, Inc. Printing form and preparing the same. 1,811,971; June 30.
Sauer, Ernst, Process, Inc. (See Sauer, Ernst, assignor.)
Saynisch, Yole, New York, N. Y. Corset. 1,812,758; June 30.
Scandura, Anthony J., Malden, Mass. Electrically illuminated ornament. 1,812,378; June 30.
Schaefer, William D., assignor to Motors Development Company, Milwaukee, Wis. Gas engine. 1,812,833; June 30.
Schapel, Karl, North Hollywood, Calif. Safety propeller. 1,812,451; June 30.
Scheiber, William J. (See Kienle, R. H., and Scheiber.)
Schering-Kahlbaum A. G. (See Schoeller, Walter, assignor.)
Schering-Kahlbaum A. G. (See Schoeller, W., Jordan, and Clerc, assignors.)
Schlecht, Leo. (See Gaus, W., Mittasch, and Schlecht.)
Schmidt, Charles G. G., assignor to Pinaud Incorporated, New York, N. Y. Machine for gluing cartons. 1,812,666; June 30.
Schmidt, Fritz, Troisdorf, near Cologne, Germany. Production of artificial horn. 1,811,972; June 30.
Schneider, Adolf, Brooklyn, N. Y. Terminal connection for electric circuit wires. 1,812,307; June 30.
Schneider & Cie. (See Methlin, Nicolas E., assignor.)
Schoch, Edwin. (See Egli, E., and Schoch.)
Schoeller, Walter, Berlin-Westend, assignor to Schering-Kahlbaum A. G., Berlin, Germany. Artificial mineral waters and producing same. 1,812,560; June 30.
Schoeller, Walter, Berlin-Charlottenburg, H. Jordan, Berlin-Steglitz, and R. Clerc, assignors to the Firm Schering-Kahlbaum A. G., Berlin, Germany. Producing thymol. 1,812,561; June 30.
Scholle, Eleanor P., assignor to Isabella Barclay, Inc., New York, N. Y. Radiator inclosure. Des. 84,551; June 30.
Schroder, Robert E., assignor to Goodman Manufacturing Company, Chicago, Ill. Drilling mechanism. 1,712,719; June 30.
Schultz, Joseph, Cleveland, Ohio. Dampening device. 1,812,720; June 30.
Schur, Milton O., and E. P. Cook, assignors to Brown Company, Berlin, N. H. Metering apparatus. 1,811,898; June 30.
Schütz, Fritz. (See Jaeck, O., and Schütz.)
Scott, Clarence N., Houston, Tex. Internal combustion engine-operated locomotive. 1,812,834; June 30.
Scott, John E., assignor to Allith-Prouty Company, Danville, Ill. Door construction. 1,812,120; June 30.
Scott, William, Mount Vernon, Ohio. Check rower. 1,811,973; June 30.
Scottish Dyes, Limited. (See Drescher, H. A. E., Smith, and Thomas, assignors.)
Scottish Dyes, Limited. (See Thomas, John, assignor.)
Searing, Frederick D. W., Newark, N. J. Stabilizing device. 1,812,174; June 30.
Searle, Chester F., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Clutch. 1,811,974; June 30.
Seavey, Elmer S., Bethlehem, Pa., assignor to Bethlehem Steel Company. Punching and upsetting machine. 1,812,023; June 30.
Seguy, Jean D., assignor to Universal Oil Products Company, Chicago, Ill. Treating hydrocarbon oil. 1,812,308; June 30.
Seiberling Rubber Company. (See Kilborn, Karl B., assignor.)
Selden Research & Engineering Corporation, The. (See Jaeger, Alphons O., assignor.)
Sentry Company, The. (See Winter, Murray, assignor.)
Serragli, Giovanni, Florence, Italy. Self rotating air screw for the aerodynamic brakage of aeroplanes and the like. 1,811,867; June 30.
Sexton, Corydon W., Fayetteville, N. C. Aircraft or other brake. 1,812,806; June 30.
Shaffer, W. D. (See Jensen, Bertel M., assignor.)
Shakespeare Company. (See Shakespeare, William, jr., assignor.)
Shakespeare, William, jr., assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel. 1,812,220; June 30.
Shaw, Noble C., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical relay. 1,812,175; June 30.
Shaw, Robert A., Detroit, Mich. Guard device for wood shapers. 1,812,452; June 30.
Sheehan, William M., St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Railway car underframe. 1,811,975; June 30.
Sheehan, William M., St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Car structure. 1,811,976; June 30.
Sheehan, William M., St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill. Railway car draft sill. 1,811,977; June 30.
Sheely, Madison L. (See Powell, J. R., Sheely, and Smith.)
Sheer, H. M., Company. (See Kuenhold, Otto J., assignor.)
Sheldon Machinery Corporation. (See Sheldon, Waldo, assignor.)
Sheldon, Waldo, South Norwalk, Conn., assignor to Sheldon Machinery Corporation, New York, N. Y. Well drilling apparatus. 1,812,721; June 30.
Shepard, Ralph H., Bronxville, N. Y. Structural toy locomotive and the like. 1,812,498; June 30.
Shepherd, Charles B., New York, N. Y., assignor to The P & M Company. Rail anchor. 1,812,414; June 30.
Shepherdson, Arnold. (See Baddiley, J., Shepherdson, and Hallwood.)
Sheridan, Leslie M., Coppercliff, Ontario, Canada. Variable speed mechanism. 1,812,176; June 30.
Sherzer, Allen F., Ann Arbor, Mich., assignor to Ingersoll-Rand Company, Jersey City, N. J. Centrifugal pump. 1,812,309; June 30.
Shimwell, Oliver, Manchester, assignor, by mesne assignments, of one-half to Gawsworth Patents Limited, Manchester, and one-half to Platt Brothers & Company Limited, Oldham, England. Shuttleless loom for weaving. 1,812,562; June 30.
Shine, Henry A., Sausalito, Calif. Hold up protector. 1,811,978; June 30.
Shutt, John E., Stuttgart, Ark. Deep well pump. 1,812,667; June 30.

Siegel, Victor N., Paris, France. Base for a display stand or similar article. Des. 84,552; June 30.
Siemens & Halske Aktiengesellschaft. (See Nölke, Ernst, assignor.)
Siemens & Halske Aktiengesellschaft. (See Stich, Johannes, assignor.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Eule, Martin, assignor.)
Siemens Schuckertwerke Aktiengesellschaft. (See Krüger, Albert, assignor.)
Silent, Harold C. (See Mitchell, D., and Silent.)
Silver Springs Bleaching & Dyeing Company, Limited, The. (See Hall, Archibald J., assignor.)
Simone, Frank, New York, N. Y. Ticket dispensing and registering machine. 1,812,642; June 30.
Simonel, George, Bloomington, and W. H. Johnson, Terre Haute, assignors to The Nurre Mirror Plate Company, Bloomington, Ind. Mirror mitering machine. 1,812,415; June 30.
Simplex Paper Corporation. (See Wood, Arthur H., assignor.)
Simplex Wire and Cable Company. (See Crowds, George J., assignor.)
Simpson, Kenneth M., assignor to International Chromium Process Corporation, New York, N. Y. Metallurgical process. 1,812,563; June 30.
Sinclair Refining Company. (See Apgar, Frank A., assignor.)
Sinclair Refining Company. (See Isom, Edward W., assignor.)
Sinclair Refining Company. (See Mendius, William, assignor.)
Singer Manufacturing Company, The. (See O'Neill, Thomas, assignor.)
Sklovsky, Max, assignor to Deere & Company, Moline, Ill. Method of and apparatus for making castings, and handling and conditioning the molding sand therefor. 1,812,121; June 30.
Skraup, Siegfried, Wurzburg, and O. Hirschler, Dusseldorf-Oberkassel, assignors to Rheinische Kampfer-Fabrik G. m. b. H., Dusseldorf-Oberkassel, Rhineland, Germany. Preparing 1,8-cinecol (eucalyptol). 1,811,868; June 30.
Slinde, Per, Kjeller, Norway. Device for releasing shells in aircraft. 1,812,759; June 30.
Sloan, Theodore H., Charlerol, Pa., assignor to Macbeth-Evans Glass Company. Pressing glassware. 1,812,564; June 30.
Sloan, Theodore H., Charlerol, Pa., assignor to Macbeth-Evans Glass Company. Free-pressing glassware having irregular edges. 1,812,565; June 30.
Smalley, Edwin L., Whitefish Bay, assignor to Hevi Duty Electric Company, Milwaukee, Wis. Furnace or heat treatment chamber cooling means. 1,811,979; June 30.
Smith, A. O., Corporation. (See Stresau, Richard, assignor.)
Smith, Anthony R., Elyriak, assignor to Steel and Tubes, Inc., Cleveland, Ohio. Automobile lock. 1,812,453; June 30.
Smith, Arthur J., assignor to Smith Engineering Company, Kansas City, Mo. Pipe coupling. 1,812,835; June 30.
Smith Engineering Company. (See Smith, Arthur J., assignor.)
Smith, Forrest H., Ayden, N. C. Drying house. 1,811,980; June 30.
Smith, Harold W., Utica, N. Y., assignor of one-half to W. A. Ainsworth. Guard for lawn mower wheels. 1,812,499; June 30.
Smith, John A., Chicago, Ill. Awning support and protector. 1,812,416; June 30.
Smith, Mack, Santa Monica, Calif. Glare eliminator. 1,812,177; June 30.
Smith, Robert. (See Powell, J. R., Sheely, and Smith.)
Smith, Theodore L., Concord, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,812,500; June 30.
Smith, William. (See Drescher, H. A. E., Smith, and Thomas.)
Smoot Engineering Corporation. (See Mawha, James K., assignor.)
Snadecki, William J., Westover, Va., assignor of one-third to F. L. Pigeon and one-third to R. W. Pigeon, Boston, Mass. Speed boat. 1,811,981; June 30.
Snyler, Clifford L., Detroit, Mich., assignor to Evans Products Company. Decking device. 1,812,807; June 30.
Società Anonima Industria Ammoniaca. (See Lopez, Francesco, assignor.)
Société Marcas & Dardel. (See Dardel, Marie P. L., assignor.)
Society of Chemical Industry in Basle. (See Jaeck, O., and Schütz, assignors.)
Soderberg, Andrew W. (See Oberg, W. C., and Soderberg.)
Solomon, Nat L., Brooklyn, N. Y. Hair net. Des. 84,553; June 30.
Soprani, Mario Castelfidardo, Italy. Sound action for accordians, harmonicas, and like instruments. 1,812,760; June 30.
Soustre, Jean A., Cendrieux, France. Knife adapted for multiple uses and comprising a monkey wrench. 1,811,982; June 30.
Spencer, Frederick W., Chicago, Ill. Drill chuck. 1,812,221; June 30.
Spencer, John A., Newtonville, assignor to Spencer Thermostat Company, Cambridge, Mass. Temperature controlled apparatus. 1,812,722; June 30
Spencer, Owen H., Indianapolis, Ind. Engine manifold construction and arrangement. 1,812,063; June 30.
Spencer, Owen H., Indianapolis, Ind. Engine port construction. 1,812,379; June 30.
Spencer, Owen H., Indianapolis, Ind. Engine control and ventilating means. 1,812,566; June 30.
Spencer Thermostat Company. (See Spencer, John A., assignor.)
Sperry, Samuel E., Hollis, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y. Matrix assembling mechanism for typographical machines. 1,812,808; June 30.
Sprague-Sells Corporation. (See de Back, William, assignor.)
Spring, George B., Newtonville, Mass. Reenforcement for poles. 1,811,899; June 30.
Springmann, Adolf, Schramberg, Germany. Fly catcher. 1,812,178; June 30.
Sproul, Donald F., Chicago, Ill., assignor to Cardwell Westinghouse Company. Bolster support. 1,821,723; June 30.
Spurgeon, Dee C., Los Angeles, Calif. Awning. 1,811,900; June 30.
Stackhouse, George A., Oakland, Calif., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Assembling springs. 1,812,611; June 30.
Stamm, John G., East Cleveland, Ohio. Hydraulic suction device. 1,812,724; June 30.
Standard Development Company. (See Rauney, Leo, assignor.)
Standard Engineering Works. (See Mills, Bertram M., assignor.)
Standard Oil Company of California. (See Gates, Leroy G., assignor.)
Standard Oil Development Company. (See Becker, Arman E., assignor.)
Standard Oil Development Company. (See Goodwin, Ralph T., assignor.)
Standard Oil Development Company. (See Lewis, Warren K., assignor.)
Standard Oil Development Company. (See Loomis, Nathaniel E., assignor.)
Standard Oil Development Company. (See Pugh, J. W., Tauch, and Warren, assignors.)
Standard Oil Development Company. (See Van Eaton, Ralph A., assignor.)
Standard Oil Development Company. (See Zick, William J., assignor.)
Standard Pressed Steel Co. (See Hollowell, H. T., and Bennett, assignors.)
Standard Steel Works. (See Gredell, Otto N., assignor.)
Standard-Trump Bros. Machine Company. (See Houseman, Harold E., assignor.)
Stanley, Carroll M., and F. J. Evans, Hazleton, Pa., assignors, by mesne assignments, to Oliver United Filters Inc., San Francisco, Calif. Attaching filter cloth. 1,812,725; June 30.
Stanley Works, The. (See Howe, Leon S., assignor.)
Steel and Tubes, Inc. (See Leckie, Herbert V., assignor.)
Steel and Tubes, Inc. (See Smith, Anthony R., assignor.)
Steele, Flake F., assignor to Pine Hall Brick & Pipe Co., Winston-Salem, N. C. Brick sander and method. 1,812,809; June 30.
Stein, Walter R., Brainerd, Minn. Nozzle holder. 1,812,064; June 30.
Steinmetz, Charles R., Oklahoma City, and H. F. McKinney, Okmulgee, Okla. 1,812,272; June 30.
Stelzner, Hermann, assignor to Dr. O. H. Dräger, Lubeck, Germany. Gas protective mask for animals, particularly for horses. 1,812,380; June 30.
Stevens, Edward W., Detroit, Mich, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Peening apparatus. 1,812,726; June 30.
Stevens, Royale H., G. C. Norris, and W. N. Watson, Broken Hill, Northern Rodesia, South Africa, assignors to Rodesia Broken Hill Development Company Limited, Broken Hill, Northern Rodesia. Removal of phosphorus from metal bearing solutions. 1,812,761; June 30.
Steventon, Seth E., Mt. Carmel, and D. H. Wiggs, Danville, Ill. Safety door catch. 1,812,762; June 30.
Stewart, Duncan J., assignor to H. D. Colman, Rockford, Ill. Heat regulator. 1,812,668; June 30.
Stewart, John I., Houston, Pa. Pedal whirl. 1,812,810; June 30.
Stewart-Warner Corporation. (See Muzzy, William H., assignor.)
Stewart-Warner Corporation. (See Wheeler, Leonard H., assignor.)
Stich, Johannes, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Telephone system. 1,812,222; June 30.
Stockly, Johann J., and R. Bartunek, Teltow, near Berlin, assignors to the Firm Vereinigte Glanzstoff-Fabriken A-G., Elberfeld, Germany. Separation of sodium sulphate from sulphuric acid. 1,812,310; June 30.
Stockton, Jack P., Spring Lake, N. J., assignor to Stromberg-Carlson Telephone Manufacturing Company. Phonograph. 1,812,454; June 30.

Stollberg, Charles, assignor to American Can Company, New York, N. Y. Container closure and opening device. 1,811,983; June 30.

Story, William E., jr., Worcester, Mass., assignor to General Electric Company. Photo-electric device. 1,812,763; June 30.

Story, William E., jr., Worcester, Mass., assignor to General Electric Company. Photo-electric device. 1,812,764; June 30.

Stowell, Byron F., assignor to Van Norman Machine Tool Co., Springfield, Mass. Diaphragm chuck. 1,812,455; June 30.

Strasser, Frederic, New York, N. Y. Solder for aluminum and its alloys. 1,812,567; June 30.

Stratford, Charles W., San Francisco, Calif. Process and apparatus for refining oils. 1,812,612; June 30.

Strauss, Benno, Essen, Germany, assignor, by mesne assignments, to General Electric Company. Sintered hard metal alloy and articles made thereof. 1,812,811; June 30.

Streepy, Milton E., Altoona, Pa. Tire chain. 1,812,568; June 30.

Street, Edward T., assignor to Downingtown Manufacturing Company, Downingtown, Pa. Suction roll. 1,812,812; June 30.

Streine, Frank H., assignor to The Streine Tool and Manufacturing Company, New Bremen, Ohio. Continuous automatic shearing machine. 1,812,122; June 30.

Streine Tool and Manufacturing Company, The. (See Streine, Frank H., assignor.)

Streker, Joseph A., Providence, R. I. Articulator. 1,812,381; June 30.

Stresau, Richard, Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Electrically welding thick metal plates. 1,812,123; June 30.

Strobel, Ferdinand R., Philadelphia, Pa. Pin sorter and dispenser. 1,812,501; June 30.

Stromberg-Carlson Telephone Manufacturing Company, The. (See Powell, Winfred T., assignor.)

Strong, John E. (See Horton, Charles W., assignor.)

Stuart, Homer B., Detroit, Mich. Front wheel drive. 1,812,569; June 30.

Stuer, Bernhard C., Aachen, assignor to the firm Rhenania Verein Chemischer Fabriken Aktien-Gesellschaft, Aachen, Germany. Manufacture of barium hydroxide and strontium hydroxide. 1,812,250; June 30.

Stunz, William P., Lansdowne, Md., assignor to Safe Deposit and Trust Company of Baltimore, as trustee under the will of G. R. Webb. Multiplex transmitter. 1,812,570; June 30.

Stunz, William P., Lansdowne, Md., assignor to Safe Deposit and Trust Company of Baltimore. Telephonic instrument. 1,812,571; June 30.

Sturgis, Carl L., Brockton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Hinge last. 1,811,901; June 30.

Sullivan Machinery Company. (See Halleck, Frank A., assignor.)

Sullivan Machinery Company. (See Johansen, Harry C., assignor.)

Sulphide Research Corporation Limited, The. (See Freeman, Horace, assignor.)

Sunbeam Electric Manufacturing Company. (See Richard, William E., assignor.)

Super Radiator Corporation. (See Benson, Merrill L., assignor.)

Sutcliffe, Arthur G., assignor to Ilg Electric Ventilating Company, Chicago, Ill. Portable ventilating outfit. 1,812,124; June 30.

Svade, Eric, Portland, Oreg. Hose reel. 1,812,065; June 30.

Svenska Ackumulator Aktiebolaget Jungner. (See Lundborg, Bror H., assignor.)

Svenska Aktiebolaget Bromsregulator. (See Browall, Bert H., assignor.)

Swan, Fred, Wichita, assignor to The Bridgeport Machine Company, Wichita, Kans. Tool dressing form. 1,812,025; June 30.

Swanson, Ernest R., Cranston, R. I., assignor to Universal Winding Company, Boston, Mass. Traverse-mechanism for winding machines. 1,812,382; June 30.

Swanson, Peter, Ely, Minn. Switch stand lock. 1,812,179; June 30.

Swedish American Prospecting Corporation. (See Zuschlag, Theodor, assignor.)

Swindell-Dressler Corporation. (See Dressler, Philip d'H. assignor.)

Symons, Harry L., Wimbledon, London, assignor to Roads Colloidal, Limited, London, England. Apparatus for emulsifying liquids and for other purposes. 1,812,727; June 30.

Tabb, Elizabeth M., Mahwah, N. J. Brassière. 1,812,273; June 30.

Taber, George H., Los Angeles, Calif. Brake release device. 1,812,502; June 30.

Tabulating Machine Company, The. (See Braitmayer, Otto E., assignor.)

Tabulating Machine Company, The. (See Bryce, James W., assignor.)

Tabulating Machine Company, The. (See Maby, Adelbert C., assignor.)

Taft, Patrick M., Holyoke, Mass. Jacket for coverings for steam or other pipes. 1,811,984; June 30.

Taggart, Charles R., San Francisco, Calif. Lathe dog. 1,812,180; June 30.

Talbot, Frank A., assignor of forty-four one-hundredths to H. H. Harris, Greenville, S. C., and eleven one-hundredths to G. H. Powell, Washington, D. C. Adjustable combustion chamber control. 1,812,572; June 30.

Tapp, William C., assignor of one-half to R. N. Hart, Louisville, Ky. Internal combustion engine. 1,812,456; June 30.

Tatlow, John V., Beaver, Wash. Shingle. 1,812,223; June 30.

Tauch, Ernest. (See Pugh, J. W., Tauch, and Warren.)

Tavalin, Samuel, Astoria, N. Y. Brush. 1,812,457; June 30.

Teale, Wilbur, and H. F. McLauthlin, Oakland, Calif., assignors to Hydro-Oil Fire Corporation, Tacoma, Wash. Fluid proportioning device. 1,812,728; June 30.

Teeters, Wilson J., Lyons, Nebr. Rotary gasoline motor. 1,812,729; June 30.

Telefonaktiebolaget L. M. Ericsson. (See Nilson, C. E. J., assignor.)

Telefon Aktiebolaget L. M. Ericsson. (See Nilson, C. E. J., and Lienzén, assignors.)

Terman, Frederick E., Stanford University, Calif. Electric detector and frequency changing system. 1,812,066; June 30.

Texas Company, The. (See Adams, Joseph H., assignor.)

Thomas, Adolph A., New York, N. Y. Automobile bumper. 1,812,417; June 30.

Thomas, Arthur, Thornton Heath, assignor to The Accounting & Tabulating Corporation of Great Britain, Limited, London, England. Ribbon feeding mechanism. 1,812,251; June 30.

Thomas, John. (See Drescher, H. A. E., Smith, and Thomas.)

Thomas, John, assignor to Scottish Dyes, Limited, Carlisle, England. Preparing 2-chlor-anthraquinone. 1,812,274; June 30.

Thompson, Beriah M., Cheyenne, Wyo. Cleaning boilers. 1,812,275; June 30.

Thompson, Early G., assignor of forty-nine one-hundredths to E. M. Blacksher, Brewton, Ala. Roller skate. 1,812,383; June 30.

Thompson, Eugene C., Los Angeles, Calif. Shutter locking device for cameras. 1,812,181; June 30.

Thompson, Eugene C., Los Angeles, Calif. Compensating winding gear for cameras. 1,812,182; June 30.

Thompson, Milton W., Atlanta, Ga. Vehicle wheel. 1,812,573; June 30.

Thompson, Wilma F., New York, N. Y. Toy figure. Des. 84,554; June 30.

Thorn, J. S., Company. (See Doering, Albert L., assignor.)

Thornhill, Charles H., Presho, S. Dak. Bill board for stock car doors. 1,812,813; June 30.

Thurmond, George W., sr., Warrenville, S. C. Wheeled device for laying off land. 1,812,574; June 30.

Timken-Detroit Axle Company, The. (See Alden, Herbert W., assignor.)

Timken-Detroit Axle Company, The. (See Trbojevich, Nikola, assignor.)

Titterington, Morris M., assignor, by mesne assignments, to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Inclinometer. 1,812,503; June 30.

Tobin, Kenneth J., and A. Wasberg, assignors to Camel Company, Chicago, Ill. Latching mechanism for hopper doors. 1,811,902; June 30.

Toledo Scale Manufacturing Company. (See Heitz, Frank F., assignor.)

Toncray, Millard H., assignor to Hudson Motor Car Company, Detroit, Mich. Vehicle seat. 1,812,067; June 30.

Trainer, James E., Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Link for chain grate stokers. 1,812,125; June 30.

Trautvetter, George, assignor to E. G. Budd Manufacturing Company, Philadelphia, Pa. Construction and assembly of sheet metal doors. 1,812,024; June 30.

Trbojevich, Nikola, Highland Park, assignor to The Timken-Detroit Axle Company, Detroit, Mich. Generating gears. 1,812,384; June 30.

Treadwell, M. H., Company. (See Astrom, Carl P., assignor.)

Treibmann, Ernst, Leipzig, Germany. Electrode for unipolar high-frequency curative treatment. 1,812,224; June 30.

Tretolite Company. (See De Groote, M., Monson, and Keiser, assignors.)

Troyer, Nelson, Seattle, Wash., assignor to Continental Can Company, Inc., New York, N. Y. Packing for shafts. 1,812,385; June 30.

Trupar Manufacturing Company. (See Lindsay, Lynn G., assignor.)

Turkus, George, London, England, assignor to Babcock & Wilcox Company, New York, N. Y. Air heater. 1,812,458; June 30.

Turner, Alonzo G., McCammon, Idaho. Can perforator. 1,812,386; June 30.

U. G. I. Contracting Company, The. (See Chrisman, Charles S., assignor.)

Uher, Edmond, jr., Budapest, Hungary, assignor to Uhertype Aktiengesellschaft, Glarus, Switzerland. Mechanism for producing linear displacements and in photographical typesetting machines in connection with them. 1,812,276; June 30.

Uhertype Aktiengesellschaft. (See Uher, Edmond, jr., assignor.)

Underwood Elliott Fisher Company. (See Kupetz, Adolph G., assignor.)

Underwood Elliott Fisher Company. (See Nemcovsky, Louis A., assignor.)

Underwood & Underwood, Inc. (See Viken, Antonius J., assignor.)

Underwood, Western, Santa Monica, Calif. Lighting post. Des. 84,555; June 30.

Union Metal Manufacturing Company, The. (See Rastetter, Harry O., assignor.)

Union Special Machine Company. (See Ericsson, Arvid, assignor.)

Union Special Machine Company. (See Rubel, C. F., and Gratsch, assignors.)

Union Switch & Signal Company, The. (See Ackerly, Donald G., assignor.)

Union Switch & Signal Company, The. (See Bone, Herbert L., assignor.)

Union Switch & Signal Company. (See Brooks, C. A., and Pelikan, assignors.)

Union Switch & Signal Company, The. (See Dowling, Philip H., assignor.)

Union Switch & Signal Company, The. (See Kemmerer, Ralph R., assignor.)

Union Switch & Signal Company, The. (See Lazich, Branko, assignor.)

Union Switch & Signal Company, The. (See Mishelevich, Benjamin, assignor.)

Union Switch & Signal Company, The. (See Parrill, Easton E., assignor.)

Union Switch & Signal Company, The. (See Shaw, Noble C., assignor.)

Union Switch & Signal Company, The. (See Vanhorn, James J., assignor.)

Union Switch & Signal Company, The. (See Vantassel, H. C., and Pfiasterer, assignors.)

United Metal Box Co. Inc. (See Hammer, Samuel, assignor.)

United Reproducera Corporation. (See Minton, John P., assignor.)

United Shoe Machinery Corporation. (See Bertrand, Frederic E., assignor.)

United Shoe Machinery Corporation. (See Brogan, Michael F., assignor.)

United Shoe Machinery Corporation. (See Heys, John J., assignor.)

United Shoe Machinery Corporation. (See Lund, Thomas, assignor.)

United Shoe Machinery Corporation. (See Sturgis, Carl L., assignor.)

United Shoe Machinery Corporation. (See White, Melbourne W., assignor.)

United States Radium Corporation. (See Paul, John E., assignor.)

U. S. Slicing Machine Company. (See Folk, Joseph, assignor.)

United Steel & Wire Company. (See Macomber, Lynn W., assignor.)

Universal Draft Gear Attachment Co. (See Camp, Percy B., assignor.)

Universal Gear Shift Corporation. (See Hodgkins, Albert A., assignor.)

Universal Oil Products Company. (See Egloff, G., and Benner, assignors.)

Universal Oil Products Company. (See Oberle, Alfred, assignor.)

Universal Oil Products Company. (See Seguy, Jean D., assignor.)

Universal Rotary Bit Company, The. (See Gildersleeve, A. M., and Dean, assignors.)

Universal Winding Company. (See Searle, Chester F., assignor.)

Universal Winding Company. (See Swanson, Ernest R., assignor.)

"Universelle" Cigarettenmaschinenfabrik J. C. Muller & Co. (See Hohn, Max P. E., assignor.)

Upson Company, The. (See Harney, Francis W., assignor.)

Upton, John H., Dunsmuir, Calif. Cutting implement. 1,812,387; June 30.

V. D. Limited. (See Vigneron, Jean Baptiste J. A., assignor.)

Van Bree, Hubert, assignor to Racine Universal Motor Company, Racine, Wis. Hair clipper. 1,811,903; June 30.

Van Degrift, Thomas C. (See Lee, C. L., and Van Degrift.)

Van Eaton, Ralph A., Corona, N. Y., assignor to Standard Oil Development Company. Internal combustion engine and operating the same. 1,812,841; June 30.

Van Etten, William V., Bellingham, Wash. Dirigible guidelight mounting mechanism for automobiles. 1,812,418; June 30.

Vanhorn, James J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Remote control apparatus. 1,812,225; June 30.

Van Lammeren, Willem P., Voorschoten, Netherlands. Propeller. 1,812,814; June 30.

Van Norman Machine Tool Co. (See Stowell, Byron F., assignor.)

Vantassel, Harry C., Pittsburgh, and G. R. Pfiasterer, assignors to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of highway crossing signals. 1,812,183; June 30.

Vereinigte Glanzstoff-Fabriken A.-G. (See Stockly, J. J., and Bartunek, assignors.)

Vereinigte Stahlwerke Aktiengesellschaft. (See Klinkenberg, Adolf, assignor.)

Vickers-Armstrong Limited. (See Pratt, Hartley B., assignor.)

Victor, Alexander F., New York, N. Y. Footage indicator for motion-picture cameras. 1,812,068; June 30.

Victor Talking Machine Company. (See La Rue, William D., assignor.)

Vielwerth, Peter. (See von Horvath, E., and Vielwerth.)

Vierling, Karl, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Fermentation of tobacco. 1,812,459; June 30.

Vigneron, Jean Baptiste J. A., La Rochelle, France, assignor to V. D. Limited, London, England. Trawling gear. 1,812,613; June 30.

Viken, Antonius J., Jackson Heights, assignor to Underwood & Underwood, Inc., New York, N. Y. Tripod head particularly adapted for use in connection with a portrait camera. 1,812,614; June 30.

Vogel, Willard L., Los Angeles, Calif., assignor of one-tenth to P. W. Prutzman. Monobrom derivative of fluorescein. 1,812,669; June 30.

Vogt, Curt, Berlin, Germany. Coin counting device. 1,812,815; June 30.

Volf, Christian A., jr., Weehawken, N. J., assignor to M. T. Quigg, New York County, N. Y. Sound resonating and amplifying device. 1,811,985; June 30.

Von Horvath, Edmund, and P. Vielwerth, Munich, Germany. Removing the moldy smell and taste of tainted cereals and the like. 1,811,869; June 30.

Wachtel, Elmer M., assignor to Hamilton Manufacturing Company, Two Rivers, Wis. Operating room cabinet or similar article. Des. 84,556; June 30.

Wagnon, Hamilton D., Palouse, Wash. Manufacturing paper pulp. 1,812,575; June 30.

Wahl, William F., Milwaukee, Wis. Automobile vacuum tank funnel. 1,812,670; June 30.

Wales, George F., Buffalo, N. Y. Spring mounting for presses and the like. 1,811,987; June 30.

Walker, Edward E., assignor to Erie Malleable Iron Company, Erie, Pa. Metal wheel. 1,812,226; June 30.

Walker, Edward E., assignor to Erie Malleable Iron Company, Erie, Pa. Wheel. 1,812,227; June 30.

Walker, Jack E., assignor to Long-Turney Corporation, Los Angeles, Calif. Flush valve. 1,812,388; June 30.

Walker, Paul, Chicago, assignor to Morris Paper Mills, Morris, Ill. Liner and divider for cartons. 1,812,126; June 30.

Wall, Eugene W., assignor to Kali Manufacturing Co., Philadelphia, Pa. Sulphonated substances and preparing the same. 1,812,615; June 30.

Wallace, William S., et al, trustees. (See Degand, Gust.)

Walsh, Frank W., Vancouver, British Columbia, Canada. Brake equalizer. 1,812,184; June 30.

Ward Leonard Electric Company. (See Kouyoumjian, Haroutium K., assignor.)

Warner, Albert C. (See Cadman, A. B., and Warner.)

Warner Electric Brake Corporation. (See Cadman, A. B., and Warner, assignors.)

Warner Electric Brake Corporation. (See Whyte, John, assignor.)

Warner, Eva A. (See Warner, Fred W., assignor.)

Warner, Fred W., Denver, Colo., assignor of one-half to E. A. Warner. Toy call box. 1,812,228; June 30.

Warren, Thomas E. (See Pugh, J. W., Tauch, and Warren.)

Wasberg, Axel. (See Tobin, K. J., and Wasberg.)

Waterbury Tool Company, The. (See Ellis, Arthur L., assignor.)

Watson, William M. (See Stevens, R. H., Norris, and Watson.)

Weaver, Calus E., Schenectady, N. Y., assignor to General Electric Company. Power wrench. 1,812,816; June 30.

Webb, George R. (See Stunz, William P., assignor.)

Weide, Rudolph. (See Duncan, J. K., and Weide.)

Weidmann, Albert, Buffalo, N. Y. Captive cap. 1,811,904; June 30.

Weiner, Jacob, Company. (See Weiner, Jacob, assignor.)

Weiner, Jacob, Newark, N. J., assignor to J. Weiner Company, Inc., New York, N. Y. Mail distributing device. 1,812,419; June 30.

Weiner, Samuel E., assignor to H. H. Newberger, Chicago, Ill. Cap. 1,812,420; June 30.

Weissenborn, Albert B., assignor to Appleton Wire Works, Inc., Appleton, Wis. Treating Fourdrinier wire belts. 1,811,870; June 30.

Welikes, Anthony, Rochester, N. Y. Shock absorber. 1,812,817; June 30.

Wellington Machine Company, The. (See Gannett, Chauncey W., assignor.)

Wellton, Otto G., Trollhattan, Sweden. Device for transmitting motion from a rectilinearly reciprocating member to a rotatable member. 1,812,460; June 30.

Wels, Franz, assignor of one-half to C. Kronig, Schloss Harta, near Hohenelbe, Czechoslovakia. Dirigible sledge or sleigh. 1,812,252; June 30.

Welton, Park E. (See Lockert, W. H., and Welton.)

Wendt, Wesley E., assignor to Delco-Light Company, Dayton, Ohio. Electrical apparatus. 1,812,026; June 30.

Wente, Edward C., New York, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated. Acoustic device. 1,812,389; June 30.

Wertheimer, Moses. (See Katz, Harry, assignor.)
Wertz, Roy O., assignor to The Ohio Electric Manufacturing Co., Cleveland, Ohio. Conveying magnetic material. 1,812,505; June 30.
West End Thread Company, The. (See Keith, Nathan D., assignor.)
West, William C., assignor to West Process Pavement Co., Inc., Louisville, Ky. Asphaltic material and preparing same. 1,812,730; June 30.
Western Electric Company. (See Baker, John H. E., assignor.)
Western Electric Company. (See Long, Maurice B., assignor.)
Western Electric Company. (See Melhuish, Laurence E., assignor.)
Western Electric Company. (See Runquist, E. M., and Yancey, assignors.)
Western Electric Company. (See Wente, Edward C., assignor.)
Western Union Telegraph Company, The. (See Ferguson, Cyrus C., assignor.)
Westinghouse Electric and Manufacturing Company. (See Jordan, R. H., Hadley, and Dohner, assignors.)
Westinghouse Electric & Manufacturing Company. (See Loewy, Raymond, assignor.)
Westinghouse Lamp Company. (See MacRae, Duncan, assignor.)
Westling, Carl J., Chicago, Ill. Valve. 1,812,069; June 30.
Westman, Francis C., Toronto, Ontario, Canada. Rotary ice scoring machine. 1,812,731; June 30.
West Process Pavement Co. (See West, William C., assignor.)
Wetmore, Minor P., assignor to The American Thermos Bottle Company, Norwich, Conn. Bottle conveyer. 1,812,390; June 30.
Wheary, George H., and B. M. Hamlin, assignors to Wheary Trunk Company, Racine, Wis. Luggage carrier. 1,812,185; June 30.
Wheary Trunk Company. (See Wheary, G. H., and Hamlin, assignors.)
Wheeler, Leonard H., assignor to Stewart-Warner Corporation, Chicago, Ill. Pumping gasoline gauges. 1,812,027; June 30.
White, Melbourne W., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe and shank stiffener therefor. 1,811,912; June 30.
White, Rollin H., Cleveland Heights, Ohio. Tractor. 1,812,543; June 30.
Whitehead & Kales Company. (See Judd, Irving H., assignor.)
Whitehead, Robert H., assignor of one-tenth to C. S. Merrill, Salt Lake City, Utah. Non-leaking fountain pen. 1,812,229; June 30.
Whitehead, Thomas C., Detroit, Mich. Tray compartment for refrigerating cabinets. 1,812,070; June 30.
Whiting & Davis Company. (See Berkley, Richard H., assignor.)
Whittemore, Rex F., Pomona, Calif. Headlight. 1,811,988; June 30.
Whitworth, Stanley, South Bend, assignor to Bendix Brake Company, South Bend, Ind. Brake shoe. 1,812,028; June 30.
Whyte, John, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Brake. 1,812,671; June 30.
Whyte, John, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill. Brake. 1,812,836; June 30.
Wickware, Walter H., Ottawa, Ontario, Canada, assignor to International Paper Company. Core cap. 1,812,421; June 30.
Wiese, Franz, Berlin-Wilmersdorf, Germany, assignor to the Firm: Gillette Safety Razor Ges. m. b. H., Vienna, Austria. Safety razor. 1,812,422; June 30.
Wiggs, David H. (See Steventon, S. E., and Wiggs.)
Wilkes-Barre Can Company. (See Coughlin, J. M., and Ross, assignors.)
Wilkinson, George D., Oak Park, and E. D. Pellegrin, Des Plaines, Ill., assignors to Cribben & Sexton Company, Chicago, Ill. Range. Des. 84,557; June 30.
Williams, John P., Bayside, assignor to Duplex Electric Company, New York, N. Y. Automatic sound signaling and regulating system for microphones used in electric alarm systems. 1,812,616; June 30.
Willits, Frederick E., Fairport, N. Y. Woven wire fabric machine. 1,812,506; June 30.
Willman, Daniel, Hartford City, Ind. Illuminated license holder. 1,811,989; June 30.
Willys-Overland Company, The. (See Fleming, Charles A., assignor.)
Wilson, Donald P., assignor to L. M. Decker Co., Omaha, Nebr. Washing machine dolly. 1,812,029; June 30.
Wilson-Jones Company. (See Hamilton, Roy E., assignor.)
Winne, Harry A., Schenectady, N. Y., assignor to General Electric Company. Motor control system. 1,812,818; June 30.
Winter, Murray, Wrentham, assignor, by mesne assignments, to The Sentry Company, Taunton, Mass. Heating steel for hardening. 1,812,837; June 30.
Wireless Specialty Apparatus Company. (See Priess, William H., assignor.)
Wireless Specialty Apparatus Company. (See Proctor, J. A., and Bailey, assignors.)
Wirth, Dorsey M., Bucyrus, Ohio. Belt buckle. 1,811,990; June 30.
Wisner, Abram C., Jackson, Mich., and C. L. Redfield, Chicago, Ill. Wheel unit. 1,812,127; June 30.
Wisner, Abram C., Jackson, Mich., and Casper L. Redfield, Chicago, Ill. Wheel unit. 1,812,128; June 30.
Witham, George S., sr., Hudson Falls, N. Y. Paper making machine. 1,812,278; June 30.
Wolf, Benedikt, Newark, assignor to Essex Specialty Co., Inc., Berkeley Heights, N. J. Package for fireworks devices. 1,812,311; June 30.
Wollensak, Arthur C., Milwaukee, Wis. Drive for motor vehicles. 1,812,819; June 30.
Wood, Arthur H., assignor to Simplex Paper Corporation, Adrian, Mich. Basket liner. 1,812,423; June 30.
Wood, Henry R., Sierra Madre, Calif., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Apparatus for producing shingle strips. 1,812,424; June 30.
Wood, Leo E., Cerro Gordo, Iowa. Snowplow. 1,812,186; June 30.
Wood Newspaper Machinery Corporation. (See Roesen, Oscar C., assignor.)
Woodsmall, Harry C. (See James, P. H., and Woodsmall.)
Worthington Pump and Machinery Corporation. (See Grace, John F., assignor.)
Worthington Pump and Machinery Corporation. (See Riesner, Michael, assignor.)
Wosse, Gerd, Chicago, Ill. Eyebrow stencil. 1,812,425; June 30.
Wray, Daniel L., Shorham-by-Sea, and H. G. Chrismas, Cranleigh, England. Apparatus for recording the delivery of measured quantities of liquids. 1,812,576; June 30.
Wright, Claude R. (See Quillin, O. I., and Wright.)
Wright, Richard H. (See Dalton, John T., assignor.)
Yancey, Thornton M. (See Runquist, E. M., and Yancey.)
Yonkese, Joseph G., Brooklyn, N. Y. Apparatus for generating motive fluids. 1,812,277; June 30.
Young, James H., assignor to H. H. Robertson Company, Pittsburgh, Pa. Protected metal article. 1,812,732; June 30.
Young, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Method of and machine for scoring can ends. 1,811,986; June 30.
Young, L. A., Spring & Wire Corporation. (See Stackhouse, George A., assignor.)
Ytterberg, Arle, Hogberget, assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasteras, Sweden. Circuit breaking contacts provided with condensers. 1,812,312; June 30.
Zappulla, Joseph, Bay Shore, Long Island, N. Y. Comb. Des. 84,558; June 30.
Zappulla, Joseph, Bay Shore, Long Island, N. Y. Hand mirror. Des. 84,559; June 30.
Zechlau, Walter, Berlin, Germany. Piston for internal combustion engines. 1,812,391; June 30.
Zehnder, John L. (See Fay, A., and Zehnder.)
Zick, William J., Heathcroft, London, England, assignor to Standard Oil Development Company. Detergent composition. 1,812,507; June 30.
Zinsmaster Baking Company. (See Binger, Delmar M., assignor.)
Zorn, Hermann. (See Galle, E., and Zorn.)
Zucker, Milton. (See Moore, C. G., and Zucker.)
Zuschlag, Theodor, assignor to Swedish American Prospecting Corporation, New York, N. Y. Method of and apparatus for locating terrestrial conducting bodies. 1,812,392; June 30.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 30TH DAY OF JUNE, 1931.

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). **Includes patents, reissues, and designs.**

Acid manufacture, Citric. F. J. Cahn. 1,812,130; June 30.
Acid (sulphite cellulose waste), Manufacture of valuable products from lignin sulphonic. J. Baddiley, A. Shepherdson, and A. J. Hallwood. 1,812,675; June 30.
Acoustic device. E. C. Wente. 1,812,389; June 30.
Acoustometer. C. A. Andree. 1,812,030; June 30.
Adding and listing machine. G. J. Barrett. 1,812,130; June 30.
Adding machine. G. J. Barrett. 1,811,840; June 30.
Advertising device. W. Nowack and H. Buwert. 1,812,547; June 30.
Advertising device. O. I. Quillin and C. R. Wright. 1,812,715; June 30.
Aerial, Loop. A. G. Harms. 1,812,695; June 30.
Agglomerated products, Manufacturing. M. H. Hue. 1,811,935; June 30.
Air, apparatus for distributing and circulating. G. L. Arms. 1,812,072; June 30.
Air cooled furnace wall. H. H. Baumgartner. 1,812,315; June 30.
Air for air cleaning tables, Distributing and circulating. G. L. Arms. 1,812,073; June 30.
Air heater. G. Turkus. 1,812,458; June 30.
Air in dry separating tables, Apparatus for controlling. R. W. Arms. 1,812,071; June 30.
Aircraft or other brake. C. Sexton. 1,812,806; June 30.
Airplane. T. Dugan. 1,812,143; June 30.
Alarm: *See*—
Kettle alarm.
Alloy and articles made thereof, Sintered hard metal. B. Strauss. 1,812,811; June 30.
Alpha- and beta-anthraquinones, Separation of substituted. H. A. E. Drescher, W. Smith, and J. Thomas. 1,812,260; June 30.
Anchor, Rail. C. B. Shepherd. 1,812,414; June 30.
Animal-racing device. A. Fay and J. L. Zehnder. 1,812,473; June 30.
Annealing. F. G. Carrington. 1,812,320; June 30.
Antiglare or antidazzle device for lamps. I. Geary. 1,812,779; June 30.
Antislip fabric. L. B. Chisholm. 1,811,843; June 30.
Anvil, Fabricated blade. H. G. Allen. 1,812,188; June 30.
Arms, Adjusting means for overhanging. B. P. Graves. 1,812,649; June 30.
Articulator. J. A. Streker. 1,812,381; June 30.
Asphaltic material and preparing same. W. C. West. 1,812,730; June 30.
Atomizer attachment for vacuum cleaners. C. Keller. 1,812,207; June 30.
Attachable washer. R. Leitzke. 1,812,657; June 30.
Autographic register. L. F. Hagemann. 1,812,478; June 30.
Autographic register. F. E. Pfeiffer. 1,812,605; June 30.
Automobile body. D. M. Klausmeyer. 1,812,487; June 30.
Automobile body. J. Ledwinka. 1,812,441; June 30.
Automobile body. A. H. Leamy. Des. 84,529; June 30.
Automobile lock. A. R. Smith. 1,812,453; June 30.
Automotive machine and distant control therefor. K. Davis. 1,812,085; June 30.
Awning. D. C. Spurgeon. 1,811,900; June 30.
Awning, Window. H. W. McCurdy. 1,812,638; June 30.
Axle hanger, Adjustable. C. W. Gannett. 1,812,827; June 30.
Bags, Method of and implement for closing. H. Rumsey, jr. 1,811,866; June 30.
Bail and applying same. W. E. Lusk and W. H. Potter. 1,812,597; June 30.
Bait, Artificial. L. E. Carr. 1,812,235; June 30.
Bait, Artificial trolling. J. Gluck. 1,812,782; June 30.
Balancing machine. F. T. McDonough and A. F. Moyer. 1,812,353; June 30.
Band saw wheel. A. G. Carter. 1,811,916; June 30.
Bar: *See*—
Draw bar. Rail joint bar.
Barium hydroxide and strontium hydroxide, Manufacture of. B. C. Stuer. 1,812,250; June 30.
Base for a display stand or similar article. V. N. Siegel. Des. 84,552; June 30.
Base for lamp or analogous articles. F. Pallone. Des. 84,538; June 30.
Base for motion picture projection machines. A. Dina. 1,811,881; June 30.
Basket liner. A. H. Wood. 1,812,423; June 30.
Bathroom fixture. L. Bloch. Des. 84,508; June 30.
Battery charging system, Automatic. E. F. Geiger. 1,812,628; June 30.
Battery ignition apparatus. W. Dorn. 1,812,517; June 30.
Bearing, Guide. W. H. Cater. 1,812,471; June 30.
Bed. H. G. Kimble. 1,812,298; June 30.
Bed, Folding. H. Blase and K. B. Cowan. 1,812,618; June 30.
Bed, Folding. E. Cocks. 1,812,082; June 30.
Bed, Folding. R. H. Hutchins. 1,811,936; June 30.
Belt for personal wear. E. S. Mix. 1,812,214; June 30.
Belts, Treating Fourdrinier wire. A. B. Weissenborn. 1,811,870; June 30.
Binder for sewing machines. T. O'Neill. 1,812,830; June 30.
Binder, Loose leaf. R. E. Hamilton. 1,812,435; June 30.
Bit: *See*—
Drilling bit.
Block for pavements and coverings. L. Pessione. 1,812,711; June 30.
Blow out preventer. B. M. Jensen. 1,812,297; June 30.
Board: *See*—
Drawing board.
Board for stock car doors, Bull. C. H. Thornhill. 1,812,813; June 30.
Boat, Speed. W. J. Snadecki. 1,811,981; June 30.
Boiler: *See*—
Fire tube boiler.
Boiler. L. Hartung, jr. 1,812,094; June 30.
Boiler. G. H. Irwin. 1,811,938; June 30.
Boilers, Apparatus for continuous blow down for. L. D. Kensig. 1,812,050; June 30.
Boilers, Cleaning. B. M. Thompson. 1,812,275; June 30.
Boilers, Particular construction of tubular. M. Eule. 1,812,472; June 30.
Bolster support. D. F. Sproul. 1,812,723; June 30.
Bolt: *See*—
Key bolt.
Bone, Fast dycing. E. C. Bertolet. 1,812,734; June 30.
Borax, Purifying. W. A. Kuhnert. 1,812,347; June 30.
Bottle conveyer. M. P. Wetmore. 1,812,390; June 30.
Box: *See*—
Toy call box.
Box or similar container. C. C. Boone. Des. 84,509; June 30.
Brace. R. W. Haulbrook and W. J. Cotton. 1,812,529; June 30.
Brace and arch support, Combined ankle. W. J. Hoggson. 1,812,149; June 30.
Bracket: *See*—
Shade and curtain bracket.
Bracket for boxes, Adjustable. G. R. Riggs. 1,812,756; June 30.
Brake: *See*—
Aircraft or other brake. Track brake.
Momentum actuated brake.
Brake. R. A. Goepfrich. 1,812,000; June 30.
Brake. J. Whyte. 1,812,672; June 30.
Brake. J. Whyte. 1,812,836; June 30.
Brake adjusting fixture. J. W. Peterson. 1,812,018; June 30.
Brake apparatus, Nonkicking. L. G. Gates. 1,812,091; June 30.
Brake control, Fluid pressure. E. G. McCauley. 1,812,269; June 30.
Brake control on pedal, Vacuum. G. P. Berry. 1,812,463; June 30.
Brake drums, Making. G. M. Evans. 1,811,999; June 30.
Brake equalizer. F. W. Walsh. 1,812,184; June 30.
Brake for motor vehicles. E. Poulet. 1,812,551; June 30.
Brake lever, Adjustable. W. S. Lee and T. P. Chase. 1,812,492; June 30.
Brake mechanism. N. A. Christensen. 1,812,037; June 30.
Brake mechanism. H. Perrot. 1,812,168; June 30.
Brake operating connection. R. S. Sanford. 1,812,021; June 30.
Brake operating means. G. F. Michael. 1,812,011; June 30.
Brake operating mechanism. R. S. Sanford. 1,812,022; June 30.
Brake release device. G. H. Taber. 1,812,502; June 30.
Brake shoe. S. Whitworth. 1,812,028; June 30.
Brake slack adjuster for railway cars. P. B. Camp. 1,812,256; June 30.
Brakes, Automatic slack adjuster for. B. H. Browall. 1,811,913; June 30.
Brakes on railway cars and the like, Automatic slack adjuster for. B. H. Browall. 1,811,914; June 30.
Braking apparatus, Railway. H. L. Bone. 1,812,191; June 30.
Braking apparatus, Railway. H. L. Bone. 1,812,193; June 30.

Braking apparatus, Vehicle. N. A. Christensen. 1,812,036; June 30.
Braking attachment for vehicle motors. W. H. Hewitt. 1,812,787; June 30.
Brassière. E. M. Tabb. 1,812,273; June 30.
Bread and making same, Pan loaf. D. M. Binger. 1,812,769; June 30.
Bric-a-brac, Article of. F. Carder. Des. 84,515; June 30.
Brick sander and method. F. F. Steele. 1,812,809; June 30.
Brooders, Feeding and drinking attachment for. O. F. Carpenter. 1,812,684; June 30.
Brush. S. Tavalin. 1,812,457; June 30.
Brush and receptacle, Fountain shaving. H. R. Priest. 1,811,965; June 30.
Brush, Denture. S. M. Edison. 1,812,826; June 30.
Buckle, Belt. R. Boyd. 1,812,233; June 30.
Buckle, Belt. D. M. Wirth. 1,811,990; June 30.
Buckle, Shoe. L. M. Bayan. Des. 84,506; June 30.
Buckle, Shoe. C. G. King. Des. 84,523–4; June 30.
Buffer, Manicurist's. N. W. Chapman. 1,812,431; June 30.
Building construction. J. H. Maher. 1,812,055; June 30.
Building structure. L. Brandt. 1,812,195; June 30.
Bulb shaping device. J. F. Donovan and F. J. Malloy. 1,812,776; June 30.
Bumper and truck carrier, Combined. E. V. Barker. 1,812,075; June 30.
Bumper, Automobile. A. A. Thomas. 1,812,417; June 30.
Bundling press. W. Lindemann. 1,812,797; June 30.
Burner: *See*—
Sulphur burner.
Bushing puller. W. R. Rodzikinas. 1,811,968; June 30.
Cabinet. S. Hammer. 1,812,404; June 30.
Cabinet or similar article, Operating room. E. Wachtel. Des. 84,556; June 30.
Cabinet, Cooler. J. H. Pratt and F. B. Hunt. 1,811,863; June 30.
Cable armoring. J. J. Gilbert. 1,812,630; June 30.
Cable clamp. C. W. Kemper and J. T. Kemper. 1,811,942; June 30.
Cables, Method of and apparatus for forming. E. M. Rundquist and T. M. Yancey. 1,811,897; June 30.
Cage or coop. L. W. Macomber. 1,812,598; June 30.
Calculating mechanism for adding and listing machines. G. J. Barrett. 1,812,129; June 30.
Cam mechanism. J. T. Dalton. 1,812,738; June 30.
Can ends, Method of and machine for scoring. J. M. Young. 1,811,986; June 30.
Can labeling machine. C. C. Krone. 1,812,007; June 30.
Cap. S. E. Weiner. 1,812,420; June 30.
Cap, Captive. A. Weidmann. 1,811,904; June 30.
Car draft sill, Railway. W. M. Sheehan. 1,811,977; June 30.
Car retarder apparatus, Railway. F. Frölich. 1,812,691; June 30.
Car structure. W. M. Sheehan. 1,811,976; June 30.
Car Tandem hot metal. C. P. Astrom. 1,812,314; June 30.
Car underframe, Railway. W. M. Sheehan. 1,811,975; June 30.
Carbon black, Manufacture of. G. C. Lewis. 1,811,854; June 30.
Carbon black, Manufacture of. G. C. Lewis. 1,811,889; June 30.
Carbon from substances such as carbonmonoxide and carbonmonoxide containing gases, Preparing active elementary. H. C. J. Aarts. 1,812,230; June 30.
Carbonaceous product. R. T. Goodwin. 1,812,589; June 30.
Carrier: *See*—
Luggage carrier.
Cash register. S. Brand. 1,812,194; June 30.
Cash register. M. M. Goldberg. 1,812,001; June 30.
Cash register. W. H. Robertson. 1,812,020; June 30.
Casing for a refrigerating, mixing, and dispensing machine. E. L. Reynolds. Des. 84,547; June 30.
Casing, Weighing scale. L. D. Chambers. Des. 84,516; June 30.
Casting apparatus. M. C. Hutto. 1,811,937; June 30.
Castings, and handling and conditioning the molding sand therefor, Method of and apparatus for making. M. Sklovsky. 1,812,121; June 30.
Castings free from pipes and blow holes, Production of. W. Rohn. 1,812,172; June 30.
Catalytic apparatus. A. O. Jaeger. 1,812,341; June 30.
Catch for windows and the like, Safety. A. J. Drapeau. 1,812,288; June 30.
Catch, Safety door. S. E. Steventon and D. H. Wiggs. 1,812,762; June 30.
Cellulosic material and making the same. O. Jaeck and F. Schütz. 1,812,790; June 30.
Cereals and the like, Removing the moldy smell and taste of tainted. E. von Horvath and P. Vielwerth. 1,811,869; June 30.
Chain fastening means, Tire. R. Hatfield. 1,812,697; June 30.
Chain, Tire. M. E. Streepy. 1,812,568; June 30.
Chains and apparatus therefor, Making. C. M. Lamb. 1,812,052; June 30.
Chair: *See*—
Railway joint chair.
Chair. D. H. Brown. Des. 84,514; June 30.
Charcoal, Making active. E. Berl. 1,812,316; June 30.
Chart, Variable. G. S. Merrill. 1,812,752; June 30.
Check rower. W. Scott. 1,811,973; June 30.
Christmas tree support stand. J. J. Danner. 1,811,918; June 30.
Chromium compound of azo dystuffs, Complex. H. Krzikalla and F. Bluemmel. 1,812,345; June 30.
Chuck. S. H. Earl. 1,812,144; June 30.
Chuck. R. H. Jellicoe. 1,812,006; June 30.
Chuck. D. C. Page and R. H. Jellicoe. 1,812,017; June 30.
Chuck, Diaphragm. B. F. Stowell. 1,812,455; June 30.
Cigar banding machine. F. X. Malocsay. 1,812,704; June 30.
Cigarettes and the like provided with imprints, Dressing. M. P. E. Hohn. 1,812,294; June 30.
Circuit breaker, Automatic. J. Sachs. 1,811,970; June 30.
Circuit breaker, Automatic. J. Sachs. 1,812,842–4; June 30.
Circuit breaker, Automatic. J. Sachs. 1,812,846; June 30.
Circuit breaker, Automatic. J. Sachs. 1,812,847–8; June 30.
Circuit breaker, Thermostatic. R. H. Maple. 1,812,162; June 30.
Circuit maker or breaker. H. Flach and G. Barthelmie. 1,812,329; June 30.
Circuit maker, Periodic. W. A. Gammack and D. G. Knox. 1,812,090; June 30.
Circuit, Noise suppressing. V. E. Legg. 1,811,947; June 30.
Circuit, Railway track. B. Lazich. 1,812,208; June 30.
Circuits, Railway track. H. L. Bone. 1,812,102; June 30.
Circuits, Railway track. B. Mishelevich. 1,812,164; June 30.
Clamp: *See*—
Cable clamp. Hood clamp.
Clamp collar. H. O. Rastetter. 1,812,117; June 30.
Cleaner attachment, Suction. E. F. Martinet. 1,812,493; June 30.
Clip for securing articles to cloth. T. Kovacs. 1,812,536; June 30.
Cloth, Attaching filter. C. M. Stanley and F. J. Evans. 1,812,725; June 30.
Cloth cutting machine. P. Jenkins. 1,812,406; June 30.
Cloth matching machine. M. E. Popkin. 1,812,368; June 30.
Clutch. S. M. D. Miller. 1,812,163; June 30.
Clutch. C. F. Searle. 1,811,974; June 30.
Coal, apparatus for burning granulated. W. B. Chapman. 1,812,080; June 30.
Coating composition. F. C. Hahn. 1,812,335; June 30.
Coating composition and articles coated therewith. A. M. Collins. 1,812,544; June 30.
Coil winding machine. H. W. Lillibridge. 1,812,849; June 30.
Coin counting device. C. Vogt. 1,812,815; June 30.
Coin selector. F. C. Myer. 1,812,165; June 30.
Comb. J. Zappulla. Des. 84,558; June 30.
Combustion chamber control, Adjustable. F. A. Talbot. 1,812,572; June 30.
Compartments for aeroplanes, Detachable floating. L. Blériot. 1,812,317; June 30.
Composing room machine. E. Cheshire. 1,812,685; June 30.
Compressor control apparatus. F. Neale. 1,812,057; June 30.
Compressor, Variable capacity. M. Riesner. 1,812,607; June 30.
Computing attachment for liquid dispensing devices. J. Beall. 1,812,676; June 30.
Concrete block groin or sea wall. C. T. Leeds and W. K. Barnard. 1,812,300; June 30.
Concrete molding, Method of and apparatus for pressure. W. M. Meacham. 1,811,950; June 30.
Condenser. J. F. Grace. 1,812,591; June 30.
Condenser and making it, Electrical. W. H. Priess. 1,812,664; June 30.
Condenser, Electrical. A. Jayet. 1,812,241; June 30.
Condenser, Electrical. J. A. Proctor and W. M. Bailey. 1,812,713; June 30.
Conducting bodies, Method of and apparatus for locating terrestrial. T. Zuschlag. 1,812,392; June 30.
Contacts provided with condensers, Circuit breaking. A. Ytterberg. 1,812,312; June 30.
Container closing machine. A. J. Chamberlain. 1,812,584; June 30.
Container closure and opening device. C. Stollberg. 1,811,983; June 30.
Container for liquids or article of similar nature. P. Santurello. Des. 84,550; June 30.
Container, Thermic. A. Jost. 1,812,243; June 30.
Control cross talk, Means to. H. A. Affel and A. Carpe. 1,811,905; June 30.
Control cross talk, Means to. A. Carpe. 1,811,915; June 30.
Control device for pumping apparatus. S. J. Merritt. 1,811,952; June 30.
Control system for transmission of signals. O. R. Miller. 1,811,858; June 30.
Conveyer. G. C. Davis. 1,812,287; June 30.
Conveyer duct. G. Bernert. 1,812,678; June 30.

Conveyer for skein or yarn driers. A. O. Hurzthal and H. Bogaty. 1,812,789; June 30.
Cooling means, Furnace or heat treatment chamber. E. L. Smalley. 1,811,979; June 30.
Cooling system for internal combustion engines. W. E. Richard. 1,812,665; June 30.
Cord, Compensating condyle. A. G. Bjorklund. 1,812,031; June 30.
Core cap. W. H. Wickware. 1,812,421; June 30.
Core for metal casting molds. C. L. Lee and T. C. Van Degrift. 1,812,491; June 30.
Corset. Y. Saynisch. 1,812,758; June 30.
Cotter key puller. C. H. Buckle and G. R. McPhail. 1,812,682; June 30.
Counterweight for car dumpers, External. W. E. Erickson. 1,812,040; June 30.
Coupling: *See*—
Pipe coupling. Trailer coupling.
Shaft coupling.
Coupling. E. W. Davis. 1,812,038; June 30.
Cover, Container. H. T. Reynolds. 1,811,967; June 30.
Cover, Removable book. L. G. Kitcat. 1,812,594; June 30.
Cradle. R. M. Hursh. 1,812,699; June 30.
Current limiting reactor, Electric. G. A. Burnham. 1,811,877; June 30.
Currents, Apparatus for reducing crosstalk. E. Peterson. 1,811,963; June 30.
Cushion filler. J. R. Powell, M. L. Sheely, and R. Smith. 1,812,019; June 30.
Cutter: *See*—
Twine cutter.
Cutting and welding machine, Portable. J. L. Anderson. 1,811,835; June 30.
Cutting holes, Method of and machine for. H. Hentschel and H. Greggersen. 1,812,239; June 30.
Cutting implement. J. H. Upton. 1,812,387; June 30.
Cylinder head for internal combustion motors. R. Friedl. 1,812,289; June 30.
Dampening device. J. Schultz. 1,812,720; June 30.
Decking device. C. L. Snyder. 1,812,807; June 30.
Decorative device. L. Propp. 1,812,116; June 30.
Deflector for slicing machines. J. Folk. 1,811,845; June 30.
Dental impression band. W. P. Lace. 1,812,008; June 30.
Dephlegmating apparatus. G. Egloff and H. P. Benner. 1,812,261; June 30.
Derivatives from sulphite cellulose waste, Manufacture of new. A. J. Hallwood. 1,812,693; June 30.
Desk. J. R. McCargar. Des. 84,532; June 30.
Desk, Portable. H. T. Hallowell and F. Bennett. 1,812,694; June 30.
Detector and frequency changing system, Electric. F. E. Terman. 1,812,066; June 30.
Detergent composition. W. J. Zick. 1,812,507; June 30.
D-handles, Forming. W. A. Ready. 1,812,373; June 30.
Die press. O. J. Groehn. 1,812,046; June 30.
Dirigible and airplane, Trihydro. V. E. Edwards. 1,812,627; June 30.
Dirigible sledge or sleigh. F. Wels. 1,812,252; June 30.
Dishpan, basin, and the like, Splashless. C. R. Ross. 1,811,896; June 30.
Disintegrating and conveying mechanism, Material. G. Degand. 1,812,324; June 30.
Dispenser. H. E. Crosby. Des. 84,517; June 30.
Display device. W. C. Bower. 1,812,318; June 30.
Display device. J. L. Rice. 1,812,171; June 30.
Disturbing elements, Apparatus for reducing. C. R. Keith. 1,811,941; June 30.
Divided materials, Process and mechanism for separating intermixed. R. Fenis. 1,812,365; June 30.
Door construction. J. E. Scott. 1,182,120; June 30.
Door counterbalancing device, Press box. J. Behle and H. Linnartz. 1,812,281; June 30.
Door, Hopper car. E. H. Holmes. 1,811,848; June 30.
Doorlock, Dump car. A. Germek. 1,812,780; June 30.
Doors, Construction and assembly of sheet metal. G. Trautvetter. 1,812,024; June 30.
Doors, Method and apparatus for clinching. C. L. Eksergian. 1,812,395; June 30.
Draft rigging, Railway. H. J. Lounsbury. 1,812,101; June 30.
Drain fitting, House. S. Cavalieri. 1,812,583; June 30.
Drainer and siruper, Combined. W. de Back. 1,811,908; June 30.
Drawbar. D. F. Ainslie. 1,812,733; June 30.
Drawing board attachment. R. S. Glenn. 1,812,744; June 30.
Drawing board attachment. C. A. Green. 1,812,477; June 30.
Drawing board, Panoramic. W. J. Helmer. 1,812,264; June 30.
Dressing stand, Child's. H. D. Nusbaum. Des. 84,535; June 30.
Drill chuck. F. W. Spencer. 1,812,221; June 30.
Drilling apparatus. H. C. Johansen. 1,811,939; June 30.
Drilling bit. G. B. Louderback. 1,812,210; June 30.
Drilling device. A. M. Gildersleeve and C. L. Dean. 1,812,475; June 30.
Drilling machines and the like, Feed mechanism for. W. P. Hunt. 1,812,533; June 30.
Drilling mechanism. R. E. Schroder. 1,812,719; June 30.
Drive assembly for kitchen appliances, Duplex motor. R. K. Gullberg. 1,812,651; June 30.
Drive for automobiles, Front wheel. G. F. Nus. 1,812,801; June 30.
Drive for motor vehicles. A. C. Wollensak. 1,812,819; June 30.
Drive, Front wheel. H. B. Stuart. 1,812,569; June 30.
Drive mechanism, Speedometer. J. Berge. 1,812,510; June 30.
Drive, Silent chain. H. E. Hayward. 1,812,095; June 30.
Driving mechanism. A. L. Ellis. 1,812,587; June 30.
Drum, Self cleaning mixing. J. Eggert. 1,812,823; June 30.
Drying house. F. H. Smith. 1,811,980; June 30.
Educational device. J. Meyerhoff. 1,812,110; June 30.
Egg case filler machine. E. J. Kanabay. 1,812,486; June 30.
Elastic material. E. S. Axline. 1,812,279; June 30.
Electric connector, Separable. F. W. Rogers. 1,812,609; June 30.
Electric controlling apparatus. H. K. Kouyoumjian. 1,812,299; June 30.
Electric machine, Dynamo. A. Kayser. 1,812,748; June 30.
Electric switch. J. D. Hilliard. 1,812,746; June 30.
Electric switch. G. Léopold. 1,812,157; June 30.
Electric switch. G. J. Meuer. 1,812,410; June 30.
Electrical apparatus. W. E. Wendt. 1,812,026; June 30.
Electrical connecting device. D. W. Johnson and A. H. Nero. 1,812,343; June 30.
Electrical contact. H. Rabezzana. 1,812,495; June 30.
Electrical translating apparatus. P. H. Dowling. 1,812,202; June 30.
Electrically heated apparatus for drying coffee and the like. C. Nielloud. 1,812,016; June 30.
Electrode for unipolar high-frequency curative treatment. E. Treibmann. 1,812,224; June 30.
Electron emitting device and method of making. D. MacRae. 1,812,103; June 30.
Electron tube. A. Krüger. 1,812,489; June 30.
Electrooptical transmission system. F. Gray. 1,812,402; June 30.
Electrooptical transmission system. H. E. Ives. 1,812,405; June 30.
Electroresponsive devices, Control of. R. Paxton. 1,812,754; June 30.
Electroresponsively controlled mechanism. J. Sachs. 1,812,845; June 30.
Electro-surgical instrument and control. D. E. Roberts. 1,812,608; June 30.
Elevator lubricator. E. R. McKinzie. 1,812,540; June 30.
Emulsion. F. W. Atack. 1,812,074; June 30.
Engine: *See*—
Gas engine. Internal-combustion engine.
Engine and operating the same, Internal combustion. R. A. Van Eaton. 1,812,841; June 30.
Engine control and ventilating means. O. H. Spencer. 1,812,566; June 30.
Engine head, Internal combustion. G. H. Freers. 1,812,474; June 30.
Engine manifold construction and arrangement. O. H. Spencer. 1,812,063; June 30.
Engine port construction. O. H. Spencer. 1,812,379; June 30.
Engine stand. J. G. Collins. 1,812,585; June 30.
Engines, Carbureting and lubricating device for internal combustion. C. T. Huddle. 1,812,436; June 30.
Engines, Fuel feeding system for internal combustion. W. H. Muzzy. 1,812,013; June 30.
Engines, Ignition mechanism for internal combustion. O. Odee and P. P. E. Richards. 1,812,700; June 30.
Engines, Isothermal fuel inlet means for internal combustion. F. A. Bullington. 1,812,197; June 30.
Excavator. A. Orloff. 1,812,662; June 30.
Fabric: *See*—
Antislip fabric.
Fabric and making the same, Pile. H. Mellor. 1,812,602; June 30.
Fabric and making the same, Pile. W. S. Nutter. 1,812,640; June 30.
Fabric cutting machines. C. B. Bergson. 1,812,645; June 30.
Fabric, Knitting plated. H. E. Houseman. 1,811,849; June 30.
Fabrics, Cross-dyeing. A. S. Roberts. 1,812,554–7; June 30.
Fan. A. Leimbach. 1,812,596; June 30.
Fan, Motor driven. R. H. Jordan, D. L. Hadley, and D. R. Dohner. Des. 84,521; June 30.
Fan structure. F. J. Rayfield. 1,812,060; June 30.
Fastener. J. V. Berry. 1,811,993; June 30.
Fastener, Hair. E. Bossart. 1,811,842; June 30.
Fastener, Rail. M. Crym. 1,812,140; June 30.
Fastening feeding system. T. Lund. 1,811,891; June 30.
Feeder, Poultry. J. C. Palmer. 1,812,166; June 30.
Felt, Paper maker's drier. T. Hindle. 1,812,148; June 30.
Fertilizer distributor. B. Drew. 1,812,739; June 30.
Fiber from bagasse or like stalks, Liberating. G. A. Richter. 1,811,864; June 30.
Fibrous material, Coated. R. E. Garrett. 1,811,925; June 30.
Field pointing machine. H. Parker. 1,811,894; June 30.
Field threading and squaring machine. H. Parker. 1,811,893; June 30.
Figures on textile material by mercerization, Producing fancy. E. Gminder. 1,811,846; June 30.

Filaments, Stretch-spinning artificial. C. Herrmann. 1,812,592; June 30.
Film spool, Photographic roll. P. Goldacker. 1,811,926; June 30.
Filter, Continuous. A. L. Genter. 1,812,042; June 30.
Filter discharging mechanism. W. Gardella. 1,812,648; June 30.
Filter, Fluid. B. H. Lundborg. Re18,114; June 30.
Filter press, Tapered tube. H. H. Cannon. 1,812,773; June 30.
Filtering device. J. H. Butler. 1,812,736; June 30.
Finish remover. J. G. Davidson. 1,812,321–2; June 30.
Firearms, Device for loading. L. Orlando. 1,812,363; June 30.
Fire tube boiler, Vertical. C. S. Chrisman. 1,812,513; June 30.
Firework devices, Package for. B. Wolf. 1,812,311; June 30.
Fishhook and weed guard, Combined. J. E. Pflueger. Re18,117; June 30.
Fishing apparatus. A. H. Harrington. 1,812,632; June 30.
Fishing reel. W. Shakespeare, jr. 1,812,220; June 30.
Fittings to stranded structures, Applying. G. C. Burd. 1,812,646; June 30.
Flanged shapes, Making. W. C. Oberg. 1,812,246; June 30.
Flasher, Neon lamp. J. Hotchner. 1,812,340; June 30.
Flotation, Process of. I. H. Derby and O. D. Cunningham. 1,812,839; June 30.
Fluid, Apparatus for heating or vaporizing. M. M. Clayton. 1,812,198; June 30.
Fluid proportioning device. W. Teale and H. F. McLauthlin. 1,812,728; June 30.
Fluids, Apparatus for generating motive. J. G. Yonkese. 1,812,277; June 30.
Fly catcher. A. Springmann. 1,812,178; June 30.
Foldable table. N. N. Brown. 1,812,196; June 30.
Folding machine. J. W. Anthony. 1,811,871; June 30.
Folding unit. O. C. Roesen. 1,812,716; June 30.
Foot, Artificial. E. R. Leaf. 1,812,156; June 30.
Form, Tool dressing. F. Swan. 1,812,025; June 30.
Fountain: *See*—
Soda fountain.
Fountain for poultry, Drinking. J. A. Healy. 1,812,530; June 30.
Frame: *See*—
Locomotive frame.
Friction element and making the same. J. Driscoll. 1,812,326; June 30.
Fruit sorter and cleaner. G. G. Bates. 1,811,991; June 30.
Fuel adjunct device for gas engines. J. H. Gravell. 1,812,092; June 30.
Fuel composition and preparing the same. S. P. Miller. 1,811,953; June 30.
Fuel, etc., Production of. S. P. Miller. 1,812,829; June 30.
Fuel, Preparing. P. D. Dressler. 1,812,432; June 30.
Funnel, Automobile vacuum tank. W. F. Wahl. 1,812,670; June 30.
Furnace control, Open hearth. J. K. Mawha. 1,812,268; June 30.
Furnaces, Method of and apparatus for charging electric. A. G. Ripberger. 1,812,118; June 30.
Furnaces or stoves, Supporting hot air rings in. G. C. Emrich. 1,811,998; June 30.
Furniture, Metal. L. H. Morin. 1,812,360; June 30.
Game. A. E. Bergquist. 1,812,677; June 30.
Game. G. L. Bonham. 1,812,253; June 30.
Game. M. L. Orr. 1,811,960; June 30.
Garbage reducer. E. W. McCullough. 1,812,106; June 30.
Garbage tankage extraction. E. W. McCullough. 1,812,107; June 30.
Garment. P. K. Karberg. 1,812,791; June 30.
Garment, Child's. H. Katz. 1,812,791; June 30.
Gas engine. W. D. Schaefer. 1,812,833; June 30.
Gas meter. H. Gerdes. 1,812,333; June 30.
Gas mixing apparatus. E. O. Engels. 1,812,089; June 30.
Gas mixture for internal combustion engines, Regulating a. I. L. Dunn and L. C. Mingus. 1,812,088; June 30.
Gas purification process and apparatus. A. A. Kohr. 1,812,099; June 30.
Gas saving and lubricating means, Combined. W. P. Agnew. 1,812,231; June 30.
Gas washer. K. Bergfeld. 1,812,767; June 30.
Gasket. C. B. Bailey. 1,812,578; June 30.
Gasoline motor, Rotary. W. J. Teeters. 1,812,729; June 30.
Gate: *See*—
Railway crossing gate.
Gate operating means. H. L. Brown. 1,812,735; June 30.
Gauge: *See*—
Manometer gauge.
Gear, Aeroplane landing. G. E. F. Hickox and W. T. Mitchell. 1,812,698; June 30.
Gear changing mechanism, Torque controlled. F. W. Mayer. 1,812,445; June 30.
Gear for cameras, Compensating winding. E. C. Thompson. 1,812,182; June 30.
Gear for flying machines, Retractable landing. G. E. McCrea. 1,812,211; June 30.
Gear of narrow fabric looms, Driving. H. Haywood. 1,812,480; June 30.
Gear shift lock, Pneumatic. A. A. Hodgkins. 1,811,932; June 30.
Gear, Trawling. J. J. A. Vigneron. 1,812,613; June 30.
Gearing. M. Rall and E. Durst. 1,812,552; June 30.
Gearing, Change speed. H. M. Edmunds. 1,811,921; June 30.
Gears, Generating. N. Trbojevich. 1,812,384; June 30.
Glare eliminator. M. Smith. 1,812,177; June 30.
Glass, Apparatus for producing sheet. L. C. Mambourg. 1,812,599; June 30.
Glass in strip form and apparatus therefor, Production of. E. B. Le Mare. 1,812,537; June 30.
Glass, Method and apparatus for feeding molten. F. E. Jewett. 1,812,534; June 30.
Glassware having irregular edges, Free-pressing. T. H. Sloan. 1,812,565; June 30.
Glassware, Pressing. T. H. Sloan. 1,812,564; June 30.
Golf ball and manufacturing same. J. A. Christie. 1,812,285; June 30.
Golf club, Device for scraping and cleaning the face of a. H. O. Miller. Des. 84,534; June 30.
Golf club head. U. A. Klin. Des. 84,525; June 30.
Governor, Centrifugal hydraulic speed. L. R. Huff. 1,811,850; June 30.
Grating, Protective. S. B. Hess. 1,812,293; June 30.
Gravel or the like, Method and apparatus for cleaning. G. B. Bebout. 1,812,280; June 30.
Grease gun control mechanism. H. Albertine. 1,812,643; June 30.
Grill for a radiator cabinet or similar article. H. Rodstein and I. Nathanson. Des. 84,548; June 30.
Grinders, Adjusting device for cylinder. F. M. Kern. 1,811,943; June 30.
Grinding machine. W. Arter and W. F. Fraser. 1,812,313; June 30.
Grinding machine. W. J. Guild. 1,812,003; June 30.
Grinding machine. M. I. Mathewson and A. Brown. 1,812,444; June 30.
Grinding machine, Speed control device for. A. G. Belden and G. C. Naromore. 1,811,873; June 30.
Grinding wheel. A. P. Beebe. 1,812,076; June 30.
Guard, Athletic. W. E. Bischoff. 1,812,579; June 30.
Guard, Band saw. E. Andre. 1,811,906; June 30.
Guard device for wood shapers. R. A. Shaw. 1,812,452; June 30.
Guard for conveyors, Paint. H. H. Morgan. 1,812,112; June 30.
Guard for lawn mower wheels. H. W. Smith. 1,812,499; June 30.
Guide for the current supply cable of electric irons. C. Drüppel. 1,812,518; June 30.
Guide, Shaving. F. Mason. 1,812,443; June 30.
Gun more particularly applicable for firing against aircraft, Artillery. N. E. Methlin. 1,812,800; June 30.
Hair clipper. H. Van Bree. 1,811,903; June 30.
Hair net. N. L. Solomon. Des. 84,553; June 30.
Hair, Waving. W. S. Lewis. 1,812,442; June 30.
Hair waving device. P. Chaumier. 1,812,081; June 30.
Hammer, Centrifugal. N. Georgevitch. 1,812,692; June 30.
Hammer, Drop. F. C. Billings. 1,812,464; June 30.
Hammer, Electric. E. G. Quellhorst. 1,812,271; June 30.
Hammer, Power. J. H. Greenley. 1,812,650; June 30.
Hanger: *See*—
Axle hanger. Picture hanger.
Harrow. I. A. Babcock and A. W. Reynolds. 1,812,461; June 30.
Harrow. R. Nygard, A. Finnila, and T. Lindell. 1,812,708; June 30.
Harrow evener, Folding. F. W. Cihak and W. D. Cihak. 1,812,138; June 30.
Harvester and thrasher, Combined. E. F. Hogan. 1,812,532; June 30.
Hay rake, Sulky. O. F. Carlson. 1,812,035; June 30.
Headlight. R. F. Whittemore. 1,811,988; June 30.
Headlight for automobiles, Steering. J. G. Holland. 1,812,336; June 30.
Heat exchange apparatus. W. H. Owen. 1,812,249; June 30.
Heat exchanger. M. L. Benson. 1,812,509; June 30.
Heat insulating material, Refractory. D. W. Ross and J. M. Lambie. 1,812,376; June 30.
Heat interchanging, Apparatus for. G. H. Horne and M. A. Lissman. 1,812,339; June 30.
Heat regulator. D. J. Stewart. 1,812,668; June 30.
Heater: *See*—
Air heater.
Heel drilling machine. F. E. Bertrand. 1,811,873; June 30.
Hinge, Hood. H. G. Kellogg. Des. 84,522; June 30.
Hoist, Brick handling. R. A. Fontaine. 1,811,924; June 30.
Holder, Card. C. A. Belash. 1,812,077; June 30.
Holder, Eraser. T. H. Jones. 1,812,701; June 30.
Holder for containers. M. D. Jeffries. 1,812,440; June 30.
Holder, Illuminated license. D. Willman, Hartford City, Ind. 1,811,989; June 30.
Holder, Napkin. T. N. Deligianes. Des. 84,518; June 30.
Holder, Nozzle. W. R. Stein. 1,812,064; June 30.
Hood clamp, Automobile. R. G. Moore. 1,812,215; June 30.
Horn, Production of artificial. F. Schmidt. 1,811,972; June 30.

Hose reel. E. Svade. 1,812,065; June 30.
House: *See*—
Drying house.
Hubs, Making. C. L. Eksergian. 1,811,996; June 30.
Humidifier. B. M. Mills. 1,812,356; June 30.
Humidifying apparatus. W. Bock. 1,812,131; June 30.
Humidity in air or other gas, Producing a constant degree of. J. Obermiller. 1,812,548; June 30.
Hydraulic suction device. J. G. Stamm. 1,812,724; June 30.
Hydrocarbons, Apparatus for cracking. N. E. Loomis. 1,812,658; June 30.
Hydro-carbons, liquids and fluids, Apparatus for the conversion and transformation of. J. H. Adams. 1,811,834; June 30.
Hydrocarbons, Obtaining aromatic. A. S. Ramage. 1,812,372; June 30.
Hydrocarbons of high boiling point into others of low boiling point, Conversion of. E. Galle and H. Zorn. 1,812,398; June 30.
Hydrocarbons, Oxidation of. J. W. Pugh, E. Tauch, and T. E. Warren. 1,812,714; June 30.
Hydrocarbons, Refining. F. A. Apgar. 1,812,426; June 30.
Hydrocarbons, Refining. E. W. Isom. 1,812,439; June 30.
Hydrocarbons, Refining. W. Mendius. 1,812,446; June 30.
Hydrogen, Purifying. O. Gross and F. Jost. 1,812,526–7; June 30.
Ice-box and water cooler, Combination. S. W. Frechou. 1,812,777; June 30.
Ice scoring machine, Rotary. F. C. Westman. 1,812,731; June 30.
Ignition coil. A. Ellwanger. 1,812,520; June 30.
Illuminating apparatus. A. Nyman. 1,811,861; June 30.
Inclinometer. M. M. Titterington. 1,812,503; June 30.
Index, Cabinet. S. Anthony. 1,811,838; June 30.
Indexing table. R. D. Easton. 1,811,882; June 30.
Indicating instrument. J. D. Peace, jr. 1,812,549; June 30.
Indicator: *See*—
Level indicator.
Position indicator. Price indicator.
Indicator for motion-picture cameras, Footage. A. F. Victor. 1,812,068; June 30.
Induction meter. H. Fröhlich. 1,812,331; June 30.
Induction meter. H. Fröhlich and T. Hausch. 1,812,332; June 30.
Induction meter. R. Pudelko. 1,812,371; June 30.
Ink ribbon winding and measuring mechanism. A. L. Foster. 1,812,588; June 30.
Insect trap. R. J. Carballo. 1,812,512; June 30.
Insulating material. A. J. Russ. 1,812,306; June 30.
Insulator. G. Jansson. 1,811,887; June 30.
Internal combustion engine D. A. Davison and G. E. Davison. 1,812,323; June 30.
Internal combustion engine. W. C. Tapp. 1,812,456; June 30.
Iodine in the form of rods, pencils, or the like, Preparing compressed. F. Hammer. 1,812,238; June 30.
Iron rest. F. R. Plaxco and I. L. Foster. 1,812,270; June 30.
Ironing machine A. Hammer. 1,812,263; June 30.
Jack: *See*—
Lifting jack.
Jacket for coverings for steam or other pipes. P. M. Taft. 1,811,984; June 30.
Jar. F. S. Maddaford. Des. 84,531; June 30.
Jar closure. A. M. Algeo. 1,812,873; June 30
Jar wrench. A. Ragonese fu Mario. 1,812,705; June 30.
Joist and floor construction, Arch. H. F. Frease. 1,812,690; June 30.
Kettle alarm. G. Landman. 1,811,853; June 30.
Keyboard for pianos, Auxiliary. A. Frascani. 1,812,524; June 30.
Key bolt. J. P. Northey and R. V. Northey. 1,812,216; June 30.
Key bushing for rock-bit reamer pins. W. Brauer. 1,812,681; June 30.
Key can opener. H. Mock. 1,812,111; June 30.
Key cutting machine. M. Falk. 1,811,922; June 30.
Kiln, Lime. A. Ackerman. 1,812,672; June 30.
Kite. O. Nye. Des. 84,536; June 30.
Knife adapted for multiple uses and comprising a monkey wrench. J. A. Soustre. 1,811,982; June 30.
Knitting machines, Attachment for. C. F. Johnson. 1,812,700; June 30.
Lacquer, Cellulose ester. H. Finkelstein. 1,812,145; June 30.
Ladder, Universal. J. C. Ruse. 1,812,119; June 30.
Lambrequin. M. R. Oberting. Des. 84,537; June 30.
Lamp. N. T. Gordon. 1,812,745; June 30.
Lamp, Arc. H. J. Brunk. 1,812,469; June 30.
Lamp, Electric table. F. S. Parmenter. Des. 84,539; June 30.
Lamp, Therapeutic. N. E. Goodrich. 1,811,883; June 30.
Last, Hinge. C. L. Sturgis. 1,811,901; June 30.
Latch construction. J. E. Gloekler. 1,812,334; June 30.
Latch, Door. C. M. Norton. 1,812,411; June 30.
Latching, Mechanism for hopper doors. K. J. Tobin and A. Wasberg. 1,811,902; June 30.
Lathe dog. C. R. Taggart. 1,812,180; June 30.
Laundry equipment, Domestic. T. W. Chadburn. 1,812,430; June 30.
Leather, Process and apparatus for tanning. R. Chavand. 1,812,257; June 30.
Lens system. P. Rudolph. 1,812,717; June 30.
Letter folding machine. R. N. Pierson and C. H. Carlson. 1,811,964; June 30.
Level indicator. A. R. Le Bailly. 1,811,946; June 30.
Leveling rod, Self computing. C. H. Mills. 1,811,859; June 30.
Life preserver, Valve controlled. O. Hellrich. 1,811,847; June 30.
Lifting jack. H. Albertine. 1,812,577; June 30.
Light control system. R. H. Ranger. 1,811,895; June 30.
Light controlling system, Automobile. G. Z. Michaels. 1,812,355; June 30.
Light mounting mechanism for automobiles, Dirigible guide. W. V. Van Etten. 1,812,418; June 30.
Lighter. G. Kollstede. Des. 84,526; June 30.
Lighting post. W. Underwood. Des. 84,555; June 30.
Linear displacements and in photographical typesetting machines in connection with them, Mechanism for producing. E. Uber, jr. 1,812,276; June 30.
Liner and divider for cartons. P. Walker. 1,812,126; June 30.
Link for chain grate stockers. J. E. Trainer. 1,812,125; June 30.
Liquid, plastic, granular, and other similar substances, Device for measuring and depositing measured quantities of. J. Morton. 1,811,957; June 30.
Liquids and for other purposes, Apparatus for emulsifying. H. L. Symons. 1,812,727; June 30.
Liquids, Apparatus for recording the delivery of measured quantities of. D. L. Wray and H. G. Christmas. 1,812,576; June 30.
Liquids, Apparatus for the sterilization of. W. Matzka. 1,812,105; June 30.
Loading machine. F. A. Halleck. 1,811,927; June 30.
Lock: *See*—
Automobile lock. Nut lock.
Door lock. Switch stand lock.
Gear shift lock. Tire carrier lock.
Lock for bottle refrigerators. C. A. Frick. 1,812,826; June 30.
Lock for tilting bodies, Automobile. C. G. Clement. 1,811,995; June 30.
Lock washer untangling device. A. O. Brooke. 1,812,468; June 30.
Locking device, Bearing. J. B. Hawley, jr. 1,812,784; June 30.
Locking device for cameras, Shutter. E. C. Thompson. 1,812,181; June 30.
Locomotive frame. J. G. Blunt. 1,812,582; June 30.
Locomotive, Internal combustion engine-operated. C. N. Scott. 1,812,834; June 30.
Loom for weaving, Shuttleless. O. Shimwell. 1,812,562; June 30.
Loom reed motion and mechanism. H. Haywood. 1,812,481; June 30.
Looms for weaving, Driving and controlling mechanism of. J. H. and T. Hindle. 1,812,206; June 30.
Looms, Shuttle-guard for. E. Egli and E. Schoch. 1,812,236; June 30.
Loop for buttons or the like, Fastening. G. H. Francisco. 1,812,330; June 30.
Loose material, Apparatus for hoisting and distributing. J. P. Faber. 1,812,328; June 30.
Loud speaker. J. P. Minton. 1,812,213; June 30.
Lubricant. A. E. Becker. 1,812,766; June 30.
Lubricating apparatus. W. Z. Linders. 1,812,798; June 30.
Lubricating system. H. J. Murphy. 1,811,958; June 30.
Lubricating system for sleeve valve engines. C. A. Fleming. 1,812,825; June 30.
Lubrication system, Pressure. E. W. Davis. 1,812,084; June 30.
Lubricator: *See*—
Elevator lubricator.
Luggage carrier. G. H. Wheary and B. M. Hamlin. 1,812,185; June 30.
Luminous device. J. E. Paul. 1,812,058; June 30.
Machine and method for assembling springs. G. A. Stackhouse. 1,812,611; June 30.
Machine for cutting designs in glass. P. H. James and H. C. Woodsmall. 1,812,485; June 30.
Machine for gluing cartons. C. G. G. Schmidt. 1,812,666; June 30.
Machine for handling fibrous material. A. H. Olson. 1,812,412; June 30.
Machine for perforating rim lugs. W. N. Booth. 1,812,133; June 30.
Machine for planing the surfaces of pavements. C. R. Blood and H. J. Humbert. 1,812,771; June 30.
Machine for riveting spokes of vehicle wire wheels. W. N. Booth. 1,812,032; June 30.
Machine for the manufacture of hollow articles. J. J. Jensen. 1,812,242; June 30.
Magnet core. W. Ehlers. 1,812,740; June 30.
Magnetic material, Conveying. R. O. Wertz. 1,812,505; June 30.
Mail distributing device. J. Weiner. 1,812,419; June 30.
Manifold, Exhaust. G. M. Bellanca. Re18,115; June 30.
Manometer gauge. M. O. Jensen. 1,812,152; June 30.
Mask for animals, particularly horses, Gas protective. H. Stelzner. 1,812,380; June 30.
Match book. A. C. Potter. Des. 84,546; June 30.

Material spray apparatus. J. P. Rosenfeld. 1,811,969; June 30.
Matrix assembling mechanism for typographical machines. S. E. Sperry. 1,812,808; June 30.
Mesh attaching machine. R. H. Berkley. 1,812,078; June 30.
Metal, Apparatus for shaping sheet. O. J. Groehn and L. S. Lamb. 1,812,045; June 30.
Metal article, Protected. J. H. Young. 1,812,732; June 30.
Metal carbonyls, Production of. W. Gaus, A. Mittasch, and L. Schlecht. 1,812,399; June 30.
Metal, Method and apparatus for preventing adherence of molten. H. V. Leckie. 1,812,409; June 30.
Metal plates, Electrically welding thick. R. Stresau. 1,812,123; June 30.
Metal rods, Production of drawn. J. T. Moltrup. 1,812,359; June 30.
Metal sulphides and making sulphur dioxide, Process of and apparatus for oxidising. H. Freeman. 1,812,397; June 30.
Metal wheel. E. E. Walker. 1,812,226; June 30.
Metal working machine, Sheet. P. R. Hahnemann. 1,812,479; June 30.
Metallic articles, Treating. O. A. Bassett. 1,811,909; June 30.
Metallurgical process. K. M. Simpson. 1,812,563; June 30.
Meter: *See*—
Gas meter. Induction meter.
Metering apparatus. M. O. Schur and E. P. Cook. 1,811,898; June 30.
Microphone, Cheek. E. Nolke. 1,812,114; June 30.
Milking apparatus. L. Dinesen. 1,812,086; June 30.
Mill: *See*—
Rubber mill.
Mill plant and operating same, Rolling. W. C. Oberg and A. W. Soderberg. 1,812,247; June 30.
Milling and drilling machine. G. Meiling. 1,812,601; June 30.
Mineral waters and producing same, Artificial. W. Schoeller. 1,812,560; June 30.
Mirror and framing the same. S. Hammer. 1,812,403; June 30.
Mirror, Hand. J. Zappulla. Des. 84,559; June 30.
Mirror mitering machine. G. Simonel and W. H. Johnson. 1,812,415; June 30.
Mixer. A. J. Sackett. 1,812,450; June 30.
Mixer and feed, Fuel. W. A. Danielson. 1,812,775; June 30.
Mixing and blending system. J. H. Morrow. 1,812,604; June 30.
Mixing machine, Rotary. C. Forville. 1,812,146; June 30.
Mold for inner tubes and the like, Vulcanizing. P. De Mattia. 1,812,821; June 30.
Molding composition. K. Ripper. 1,812,374; June 30.
Momentum actuated brake. A. B. Cadman and A. C. Warner. 1,812,683; June 30.
Monobrom derivative of fluorescein. W. L. Vogel. 1,812,669; June 30.
Mooring apparatus, Mobile. J. A. Garcia. 1,812,237; June 30.
Mother of pearl, Manufacture of colored imitation. A. F. Caprio. 1,812,283–4; June 30.
Motion from a rectilinearly reciprocating member to a rotatable member, Device for transmitting. O. G. Wellton. 1,812,460; June 30.
Motion, Securing eccentric. W. Messinger. 1,812,109; June 30.
Motor: *See*—
Gasolene motor.
Motor control system. H. A. Winne. 1,812,818; June 30.
Mounting, Lamp socket. C. E. Godley. 1,812,476; June 30.
Mounting, Truck tank. O. N. Gredell. 1,812,093; June 30.
Mower accessory, Lawn. S. E. Pierce. 1,811,862; June 30.
Mower, Lawn. C. R. Steinmetz and H. F. McKinney. 1,812,272; June 30.
Musical instruction, Mechanism for use in. G. A. Rogers. 1,811,865; June 30.
Nail polisher. M. Cade. 1,812,772; June 30.
Nozzle. J. T. Lally. 1,812,794; June 30.
Nut, Curve threaded. E. Helin. 1,812,785; June 30.
Nut lock. T. R. Brumfield. 1,812,319; June 30.
Nuts and means therefor, Manufacturing curve threaded. E. Helin. 1,812,205; June 30.
Nuts, Producing curved thread. E. Helin. 1,812,147; June 30.
Oil and gas wells under reduced pressure, Operating. W. K. Lewis. 1,812,267; June 30.
Oil and making it, Synthetic drying. A. M. Collins. 1,812,849; June 30.
Oil from the earth by mining operations, Recovery of. L. Ranney. 1,812,305; June 30.
Oil, Treating hydrocarbon. J. D. Seguy. 1,812,308; June 30.
Oils, Process and apparatus for refining. C. W. Stratford. 1,812,612; June 30.
1,8-cineol (eucalyptol), Preparing. S. Skraup and O. Hirschler. 1,811,868; June 30.
Operators of sound locating devices, Training. H. B. Ely. 1,811,997; June 30.
Optical system. M. Astafiev. 1,812,765; June 30.
Ore flotation process. I. H. Derby and O. D. Cunningham. Re18,116; June 30.
Ornament, Shoe. L. M. Bayan. Des. 84,507; June 30.
Ornaments, Electrically illuminated. A. J. Scandura. 1,812,378; June 30.
Ornamental material, Insert for same and making same. W. B. Bragger and V. F. Nekarda. 1,812,134; June 30.
Outlet fitting, Terminal. R. Eckstein. 1,812,396; June 30.
Oven, Traveling. J. H. N. Pelkman. 1,811,962; June 30.
Packing device, Oil well. B. S. Minor. 1,812,358; June 30.
Packing for shafts. N. Troyer. 1,812,385; June 30.
Panel unit, Transparent. G. Leibe. 1,812,796; June 30.
Paper making machine. G. S. Witham, sr. 1,812,278; June 30.
Paper pulp, Manufacturing. H. D. Wagnon. 1,812,575; June 30.
Paper sorting machine. P. F. Denner and J. C. Estes. 1,812,201; June 30.
Paradichlorobenzene to fruit trees, Application of. M. Y. Kachline. 1,812,535; June 30.
Pantograph, Parallelogram-type. P. Käppler. 1,811,940; June 30.
Partition for railway cars. C. E. Johnson. 1,811,888; June 30.
Pedal whirl. J. I. Stewart. 1,812,810; June 30.
Peening apparatus. E. W. Stevens. 1,812,726; June 30.
Pen, Fountain. B. R. Bell. 1,811,992; June 30.
Pen, Fountain. E. C. Berry. 1,811,874; June 30.
Pen, Non-leaking fountain. R. H. Whitehead. 1,812,229; June 30.
Perforator, Can. A. G. Turner. 1,812,386; June 30.
Petroleum emulsions, Breaking. M. De Groote, L. T. Monson, and E. H. Keiser. 1,812,393; June 30.
Petroleum oil, Process and apparatus for heating. A. Oberle. 1,812,217; June 30.
Petroleum to prevent corrosion, Treatment of crude. C. D. Gifford. 1,812,629; June 30.
Pharmaceutical product. R. Gruter. 1,812,528; June 30.
Phonograph. J. P. Stockton. 1,812,454; June 30.
Phonograph disk. A. A. Penteado. 1,812,550; June 30.
Phonograph record. C. J. Mensman. 1,812,751; June 30.
Phosphorus from metal bearing solutions, Removal of. R. H. Stevens, G. C. Norris, and W. N. Watson. 1,812,761; June 30.
Photo-electric device. W. E. Story, jr. 1,812,763–4; June 30.
Photography. J. J. Reilly and W. A. Gilmartin. 1,812,448; June 30.
Piano attachment. N. Mednikoff. 1,812,706; June 30.
Picture hanger. R. C. Boswell. 1,812,254; June 30.
Picture projection machines, Adjusting apparatus for motion. A. Dina. 1,811,880; June 30.
Picture projector, Motion. W. H. Meyer. 1,812,212; June 30.
Pin and making same, Tubular. W. J. Gagnon. 1,812,743; June 30.
Pin and needle stand. W. Rusilas. Des. 84,549; June 30.
Pin sorter and dispenser. F. R. Strobel. 1,812,501; June 30.
Pipe cleaning device. P. Dahlen. 1,812,200; June 30.
Pipe coupler, Train. E. O. Hermann. 1,812,047; June 30.
Pipe coupling. A. J. Smith. 1,812,835; June 30.
Pipe fittings, Process of and apparatus for manufacturing metal. F. C. Fantz. 1,812,522; June 30.
Pipe fittings with tangential ends, Manufacturing metal. F. C. Fantz. 1,812,523; June 30.
Pipe racking device. H. N. Marsh. 1,812,351; June 30.
Pipe union. T. H. Redfield. 1,812,553; June 30.
Piston. S. D. Hartog. 1,812,696; June 30.
Piston for internal combustion engines. W. Zechlau. 1,812,391; June 30.
Plane, Power driven. F. M. Quinsler. 1,812,755; June 30.
Planes, Clamping lever for. J. M. Burdick. 1,812,820; June 30.
Plant for heating motor vehicles. C. de la Barre de Nanteuil. 1,812,259; June 30.
Planters, Anti-side-slip attachment for corn. C. O. Petersen. 1,812,663; June 30.
Plastic materials, Forming apparatus for. F. W. Harney. 1,812,631; June 30.
Plate or similar article. G. Fulton. Des. 84,520; June 30.
Platform, Lift truck. E. J. Powell. 1,812,218; June 30.
Pliers, Punching or cutting. F. D. Lingwood. 1,812,350; June 30.
Plug and guide for well casings, Float. R. F. Hill. 1,811,885; June 30.
Plug connection, Electrical. C. C. Jones. 1,812,153; June 30.
Poles, Reenforcement for. G. B. Spring. 1,811,800; June 30.
Pontoon for seaplanes and like bodies. J. Hone. 1,812,265; June 30.
Position indicator, Front wheel. A. M. Bach. 1,812,674; June 30.
Potassium nitrate, Producing. P. Höfer. 1,812,531; June 30.
Potassium sulphate from polyhalite, Recovery of. G. F. Ransom. 1,812,497; June 30.
Power actuator. C. S. Bragg and V. W. Kliesrath. 1,811,994; June 30.
Power transmission, Two speed. W. A. Caldwell. 1,812,511; June 30.
Power unit. J. R. Cole. 1,812,258; June 30.
Power wrench. C. E. Weaver. 1,812,816; June 30.

Precooler for vacuum pumps. J. F. Grace. 1,812,590; June 30.
Press: *See*—
Bundling press. Filter press.
Die press. Printing press.
Press for obtaining photographic prints by means of electric light. L. Crayssac. 1,812,199; June 30.
Pressing and trimming tape reenforced seams of sheet rubber articles. A. E. Collins. 1,812,286; June 30.
Price indicator, Adjustable. J. G. Lukas. 1,812,159; June 30.
Printing form and preparing the same. E. Sauer. 1,811,971; June 30.
Printing machines and more particularly in rotary printing machines, Raising, changing, and driving the paper web rolls in. A. Fallot. 1,812,742; June 30.
Printing mechanism for accounting machines. J. W. Bryce. 1,812,838; June 30.
Printing mechanism for calculating machines. C. O. Mapel. 1,812,161; June 30.
Printing press. G. E. Lee. 1,812,053–4; June 30.
Program service system, Selective. W. T. Powell. 1,812,169; June 30.
Projecting mechanism and gear staging device. R. W. Porter and R. O. Beardsley. 1,812,369; June 30.
Projection arrangement for advertising purposes. E. Moerch. 1,811,956; June 30.
Propeller. W. P. van Lammeren. 1,812,814; June 30.
Propeller spinner for aircraft engines. B. G. Parsons. 1,812,831; June 30.
Protector, Hold up. H. A. Shine. 1,811,978; June 30.
Puller: *See*—
Bushing puller. Cotton key puller.
Pulp and making the same, Filled. H. R. Rafton. 1,812,832; June 30.
Pump. J. H. Brown. 1,812,034; June 30.
Pump and system, Deep well. W. A. Loomis and S. E. Burton. 1,811,948; June 30.
Pump, Centrifugal. A. F. Sberzer. 1,812,309; June 30.
Pump, Deep well. J. E. Shutt. 1,812,667; June 30.
Pumping means for gasoline gauges. L. H. Wheeler. 1,812,027; June 30.
Punch, Motor driven. A. C. Maby. 1,812,659; June 30.
Punching and upsetting machine. E. S. Seavey. 1,812,023; June 30.
Punching device. O. E. Braitmayer. 1,812,620; June 30.
Rack for refrigerators, Ice. F. B. Ranney. 1,812,803; June 30.
Radiator cap. L. Blackmore. 1,812,465; June 30.
Radiator core, Automobile. N. T. Corcoran. 1,812,515; June 30.
Radiator inclosure. K. L. Porter. 1,812,606; June 30.
Radiator inclosure. E. P. Scholle. Des. 84,551; June 30.
Radio apparatus. A. J. Kloneck. 1,812,407; June 30.
Radio tuning mechanism. W. Goodwin. 1,812,525; June 30.
Radiocabinet. A. Aurili. Des. 84,505; June 30.
Radiocabinet. R. Loewy. Des. 84,530; June 30.
Radiocabinet or similar article. G. J. Pike. Des. 84,540–5; June 30.
Rail joint bar, Toeless. J. N. Meade. 1,811,951; June 30.
Rails, Anticreeper for railroad. W. I. Russell. 1,812,757; June 30.
Railway crossing. C. Clark. 1,812,139; June 30.
Railway crossing. G. E. Nagel. 1,812,707; June 30.
Railway crossing gate. C. R. Sampson. 1,812,559; June 30.
Railway joint chair. D. Herl. 1,812,786; June 30.
Rake: *See*—
Hay rake.
Range. G. D. Wilkinson and E. D. Pellegrin. Des. 84,557; June 30.
Razor, Safety. T. L. Smith. 1,812,500; June 30.
Razor, Safety. F. Wiese. 1,812,422; June 30.
Reamer and underreamer. J. Grant. 1,812,043; June 30.
Reel: *See*—
Fishing reel. Steel tape reel.
Hose reel.
Reel. J. A. Riley. 1,812,805; June 30.
Refrigerating apparatus. O. F. Nelson. 1,812,113; June 30.
Refrigerating apparatus. F. W. Rabe. 1,812,170; June 30.
Refrigerator. I. Lundgaard. 1,812,102; June 30.
Register: *See*—
Autographic register. Cash register.
Regulator: *See*—
Heat regulator.
Regulator system. E. R. Morton. 1,811,860; June 30.
Relay, Electrical. N. C. Shaw. 1,812,175; June 30.
Relay, Electromagnetic. C. E. J. Nilson. 1,812,545; June 30.
Releasing device for mail bags. J. L. de Give. 1,812,688; June 30.
Remote control apparatus. J. J. Vanhorn. 1,812,225; June 30.
Resin compound and preparing the same, Synthetic. C. G. Moore and M. Zucker. 1,812,639; June 30.
Resinous material and making the same. R. H. Kienle and W. J. Schelber. 1,812,749; June 30.
Resinous product and preparing the same. J. A. Nieuwland. 1,812,541; June 30.
Ribbon feeding mechanism. A. Thomas. 1,812,251; June 30.
Rim mounting device, Wheel. J. W. Holt. 1,812,338; June 30.
Rim, Tire carrying. W. N. Booth. 1,812,033; June 30.
Road machine. J. B. Jarmin. 1,812,296; June 30.
Road machine. J. B. Jarmin. 1,812,342; June 30.
Road stand, Adjustable. J. H. Farrar. 1,812,689; June 30.
Rod: *See*—
Leveling rod.
Roll. W. C. Oberg. 1,812,248; June 30.
Rolls and making the same, Dented. J. W. B. Ladd. 1,812,655; June 30.
Rolling mills, Bar stock feed for. J. W. Hughes. 1,812,004; June 30.
Rope. H. G. Metcalf. 1,812,354; June 30.
Rubber cords and cables, Process and apparatus for marking. G. J. Crowdes. 1,812,686; June 30.
Rubber mill. W. H. Lockert and P. E. Welton. 1,812,528; June 30.
Safety appliance. J. Krell. 1,812,245; June 30.
Safety propeller. K. Schapel. 1,812,451; June 30.
Salts, Decomposing. H. B. Bishop. 1,812,770; June 30.
Sander for busses and other vehicles. R. R. Elston. 1,812,521; June 30.
Sash ventilator. C. H. Larson. 1,812,595; June 30.
Saw filing machine. S. Leone. 1,812,636; June 30.
Scabbard, Sanitary knife. A. V. Nies. 1,812,802; June 30.
Scale, Weighing. F. F. Heltz. 1,812,633; June 30.
Screw for the aerodynamic brakage of aeroplanes and the like, Self rotating air. G. Serragli. 1,811,867; June 30.
Screw machines, Thread cutting means for automatic. J. H. Mansfield and C. F. Penrose. 1,812,660; June 30.
Sealing attachment for machines for applying crown corks to bottles or other containers. W. O. P. Rieck. 1,812,804; June 30.
Seat: *See*—
Vehicle seat.
Seat back, Reclining. P. Cota. 1,811,917; June 30.
Securing the heads of hammers, picks, axes, and similar tools. A. W. Rogers. 1,812,375; June 30.
Separator. E. W. McCullough. 1,812,108; June 30.
Septic tank. A. W. Goulding. 1,812,401; June 30.
Sewing machine, Button. A. Ericsson. 1,812,327; June 30.
Sewing machines, Oil collector for. C. F. Rubel and E. E. Gratsch. 1,812,377; June 30.
Shade and curtain bracket, Window. L. Bruno. 1,812,429; June 30.
Shade, Lamp. S. Goldfinger. 1,812,783; June 30.
Shaft coupling, Flexible. T. C. Dobbins. 1,812,141; June 30.
Shaft flange, Bull wheel. J. Proper. 1,811,966; June 30.
Sharpener, Drill. A. E. Peters. 1,812,304; June 30.
Shearing machine, Continuous automatic. F. H. Streine. 1,812,122; June 30.
Sheet material, Mechanism for cutting. L. Kirschbraun. 1,812,654; June 30.
Sheets and plates, Making. C. W. Bennett. 1,812,508; June 30.
Shell construction. L. M. McBride. 1,812,010; June 30.
Shells in aircraft, Device for releasing. P. Slinde. 1,812,759; June 30.
Shingle. J. V. Tatlow. 1,812,223; June 30.
Shingle strips, Apparatus for producing. H. R. Wood. 1,812,424; June 30.
Shingles and the like, Apparatus for impregnating bundles of. H. E. Gosch. 1,812,291; June 30.
Shock absorber. J. A. Knight. 1,812,051; June 30.
Shock absorber. A. Welikes. 1,812,817; June 30.
Shock absorber, Fluid or hydraulic. J. C. Eckhard. 1,812,519; June 30.
Shock absorber, Vehicle. E. H. Kreider. 1,812,244; June 30.
Shoe. D. Boten. Des. 84,510–13; June 30.
Shoe. P. S. Costello. 1,812,622; June 30.
Shoe. W. E. Ebling. Des. 84,519; June 30.
Shoe and shank stiffener therefor. M. F. Brogan. 1,811,911; June 30.
Shoe and shank stiffener therefor. M. W. White. 1,811,912; June 30.
Shoes, Making. A. D'Alessandro. 1,811,879; June 30.
Shovel. C. S. MacKenzie. 1,812,160; June 30.
Shutter, Dissolving. G. A. Mitchell. 1,812,056; June 30.
Shuttle boxes, Replenishing. H. H. Burdett. 1,812,079; June 30.
Shuttle, Filling replenishing. F. E. Douglas. 1,812,087; June 30.
Shuttle, Sewing machine. N. D. Keith. 1,812,098; June 30.
Sign, Advertising. N. Kopp. Des. 84,527; June 30.
Sign, Display. C. L. Lewis. 1,812,209; June 30.
Sign exhibitor, Movable. S. Caller. 1,812,621; June 30.
Sign, Street car. K. Klug. 1,812,344; June 30.
Signal for automobiles, Gasoline reserve. W. H. Muzzy. 1,812,012; June 30.
Signal monitoring device. A. M. Curtis. 1,812,625; June 30.
Signal transmitter, Non-interference. C. M. Sackman. 1,812,173; June 30.
Signals, Apparatus for the control of highway crossing. H. C. Vantassel and G. R. Pfiasterer. 1,812,183; June 30.
Signaling, Railway. C. A. Brooks and J. M. Pelikan. 1,812,135; June 30.
Signaling, Railway. E. E. Parrill. 1,812,167; June 30.

Signaling system. W. A. Knoop. 1,812,635; June 30.
Signaling system, Telephone and telegraph. G. C. Cummings. 1,812,624; June 30.
Silencer. K. J. Reynolds. 1,812,413; June 30.
Silk is subjected to the action of caustic alkalis, Process in which viscose. A. J. Hall. 1,812,204; June 30.
Skate, Roller. E. G. Thompson. 1,812,383; June 30.
Skylight construction. G. H. Lenke. 1,812,009; June 30.
Slub detector. E. Bloom. 1,812,428; June 30.
Snowplow. L. E. Wood. 1,812,186; June 30.
Socket and mounting same, Headlight. G. H. Coulter and S. F. Arbuckle. 1,812,623; June 30.
Socket, Electric lamp. R. Eckstein. 1,812,434; June 30.
Socket for fishing tools, Combination trip. E. E. Pryor. 1,812,059; June 30.
Soda fountain. F. B. Hunt. 1,811,851; June 30.
Sodium sulphate from sulphuric acid, Separation of. J. J. Stockly and R. Bartunek. 1,812,310; June 30.
Solder for aluminum and its alloys. F. Strasser. 1,812,567; June 30.
Sole construction for apparel shoes. J. W. Lake and W. T. Finks. 1,812,490; June 30.
Soles, Pressing. J. J. Heys. 1,811,884; June 30.
Solid materials, Mechanical preparation of pulverized. M. Madore. 1,812,799; June 30.
Solids, Method and apparatus for treating. T. A. Dickson. 1,811,920; June 30.
Sound action for accordions, harmonicas, and like instruments. M. Soprani. 1,812,760; June 30.
Sound and photography, Synchronized. H. W. Rogers. 1,812,449; June 30.
Sound-chamber and set-frame therefor. L. de Forest. 1,812,687; June 30.
Sound reproducer. W. C. Jones. 1,812,634; June 30.
Sound reproducing means. F. H. Owens. 1,812,303; June 30.
Sound reproducing system. J. C. Benjamin. 1,811,841; June 30.
Sound reproduction. D. G. Blattner. 1,812,619; June 30.
Sound reproduction. L. I. Reed. 1,812,219; June 30.
Sound resonating and amplifying device. C. A. Volf, jr. 1,811,985; June 30.
Sound signaling and regulating system for microphones used in electric alarm systems, Automatic. J. P. Williams. 1,812,616; June 30.
Sound transmission. H. D. Arnold. 1,811,839; June 30.
Spark plug. R. T. Hurley. 1,812,438; June 30.
Speed mechanism, Variable. L. M. Sheridan. 1,812,176; June 30.
Speed recording mechanism. M. H. Damerell. 1,812,083; June 30.
Spotlight, Adjustable. W. W. Gehersky. 1,812,290; June 30.
Spray device. E. H. Braatelien. 1,812,234; June 30.
Sprayer, Pocket perfume. M. P. L. Dardel. 1,811,919; June 30.
Spring means, Motor suspension. A. Partin. 1,811,961; June 30.
Spring mounting for presses and the like. G. F. Wales. 1,811,987; June 30.
Spring suspension system. O. K. Kjolseth. 1,812,793; June 30.
Spring suspension, Vehicle. J. T. McIntosh. 1,812,661; June 30.
Stabilizing device. F. D. W. Searing. 1,812,174; June 30.
Stand: *See*—
Christmas tree support stand. Road stand.
Engine stand. Tire stand.
Stapling machine for fiber board blanks. H. G. Allen. 1,812,189; June 30.
Starter attachment for automobiles. A. C. McCurdy. 1,812,352; June 30.
Starting and pumping systems for motor vehicles, Combined. V. G. Apple. 1,811,836; June 30.
Starting apparatus, Engine. C. Marcus. 1,811,949; June 30.
Starting switch, Motor. W. S. Pfeifer. 1,812,712; June 30.
Steel for hardening, Heating. M. Winter. 1,812,837; June 30.
Steel, Structural. A. Klinkenberg. 1,812,155; June 30.
Steel tape reel. E. G. Lange. 1,811,945; June 30.
Stencil, Eyebrow. G. Wosse. 1,812,425; June 30.
Stock quotation indicator. H. S. Martin. 1,812,600; June 30.
Strainer. J. S. Judell. 1,811,852; June 30.
Submarine, Apparatus for assisting the crew of a sunken. S. Leone. 1,812,637; June 30.
Submarine mine. H. B. Pratt. 1,812,370; June 30.
Substance from a gaseous mixture, Eliminating a. F. Lopez. 1,812,750; June 30.
Suction feed device, Limited. W. H. Muzzy. 1,812,014; June 30.
Suction roll. E. T. Street. 1,812,812; June 30.
Sulphonated substances and preparing the same. E. W. Wall. 1,812,615; June 30.
Sulphur burner. M. J. Leahy. 1,812,795; June 30.
Support, Abdominal. I. M. Pease. 1,812,115; June 30.
Support and protector, Awning. J. A. Smith. 1,812,416; June 30.
Support, Flexible. G. Flintermann. 1,811,923; June 30.
Support for boxes and the like. R. J. Gaskill. 1,812,203; June 30.
Support for holding spectacles above the line of vision. H. Lodde and J. Dieckmann. 1,811,855; June 30.
Support for lateral arm awnings, Assembly. F. A. Anton. 1,811,907; June 30.
Support, Spinet lamp. A. B. McCutcheon. Des. 84,533; June 30.
Support, Train pipe coupler. E. O. Hermann. 1,812,048; June 30.
Switch: *See*—
Electric switch. Starting switch.
Switch mechanism, Control. L. O. French. 1,812,647; June 30.
Switch or commutating means. F. Gray. 1,812,828; June 30.
Switch point, Multi-angular. D. E. Anderson. 1,812,644; June 30.
Switch stand lock. P. Swanson. 1,812,179; June 30.
Switching device for radio and phonograph combinations. M. B. Long. 1,811,856; June 30.
Synchronism and automatic phase correction, Method and apparatus for. W. F. Funk and E. T. Kruglak. 1,812,778; June 30.
Table: *See*—
Foldable table. Indexing table.
Table and bench, Folding. C. W. Horton. 1,812,483; June 30.
Tamp and pick, Combined humidor. W. Moses. 1,812,753; June 30.
Tank: *See*—
Septic tank.
Taper turner. G. A. Perry. 1,812,366; June 30.
Telegraph repeater. C. C. Ferguson. 1,812,824; June 30.
Telephone exchange system. J. H. E. Baker. 1,812,617; June 30.
Telephone exchange system, Automatic. A. F. Dixon. 1,811,844; June 30.
Telephone system. J. Stich. 1,812,222; June 30.
Telephone system, Automatic and semiautomatic. C. E. J. Nilson and D. L. Llenzén. 1,812,516; June 30.
Telephone system, Remote control magneto. W. T. Powell. 1,812,641; June 30.
Telephonic instrument. W. P. Stunz. 1,812,571; June 30.
Temperature controlled apparatus. J. A. Spencer. 1,812,722; June 30.
Temperature regulator for hollow rotatable elements. L. C. Price. 1,812,802; June 30.
Terminal connection for electric circuit wires. A. Schneider. 1,812,307; June 30.
Testing system and apparatus, Stroboscopic. W. D. La Rue. 1,812,348; June 30.
Thermometer. H. H. Boyce. 1,812,679–80; June 30.
Thermostat. R. H. Russell. 1,812,718; June 30.
Thermostatic element. A. O. Hurxthal. 1,812,788; June 30.
Thymol, Producing. W. Schoeller, H. Jordan, and R. Clerc. 1,812,561; June 30.
Ticket dispensing and registering machine. F. Simone. 1,812,642; June 30.
Timepiece winding mechanism. M. Bloch. 1,812,581; June 30.
Timing mechanism for egg boilers and the like. F. E. Hummel and J. J. Noeth. 1,812,266; June 30.
Tire. N. La Jone. Des. 84,528; June 30.
Tire carrier lock. L. Blackmore. 1,812,466–7; June 30.
Tire protector. G. H. Pappas. 1,812,710; June 30.
Tire stand, Collapsible. H. B. Gibbs. 1,812,781; June 30.
Tobacco, Fermentation of. K. Vierling. 1,812,459; June 30.
Tongs. C. J. Jorgensen. 1,812,747; June 30.
Tongs, Welder's. F. B. Dreyer. 1,812,142; June 30.
Tool, Abrading. A. F. Krausz. 1,812,488; June 30.
Tool for cutting box strapping and the like. L. S. Howe 1,812,484; June 30.
Tool, Machine. E. J. Kearney and J. B. Armitage. 1,812,702; June 30.
Tool retainer. G. T. Harcourt. 1,812,652; June 30.
Tool, Scraping. J. H. Hill. 1,812,482; June 30.
Tool, Spring winding and setting. C. McFarland. 1,812,494; June 30.
Tool, Vertical spindle machine. E. P. Bullard, jr. 1,811,876; June 30.
Tools, Feed mechanism for machine. A. B. Leet. 1,812,656; June 30.
Toy. R. L. Hudson. 1,811,934; June 30.
Toy call box. F. W. Warner. 1,812,228; June 30.
Toy figure. W. F. Thompson. Des. 84,554; June 30.
Toy locomotive and the like, Structural. R. H. Shepard 1,812,498; June 30.
Toy, Mechanical. W. W. Harris. 1,811,929; June 30.
Track brake, Railway. W. Bieseler. 1,812,190; June 30.
Tractor. R. H. White. 1,812,543; June 30.
Tractor hitch. E. W. Johnson. 1,812,049; June 30.
Traffic controlling apparatus, Railway. D. C. Ackerly. 1,812,187; June 30.
Traffic controlling apparatus, Railway. R. R. Kemmerer. 1,812,154; June 30.
Traffic controlling system, Railway. L. E. Melhuish. 1,811,857; June 30.
Trailer coupling. C. E. Berggren. 1,812,768; June 30.
Trailer coupling. D. G. Hottmann. 1,812,240; June 30.
Transformer, Welding. T. M. Hunter. 1,811,886; June 30.

Transmission volume control. D. Mitchell and H. C. Silent. 1,811,954–5; June 30.
Transmitter, Multiplex. W. F. Stunz. 1,812,570; June 30.
Trap: *See*—
Insect trap.
Tray, Ash. E. H. Lewis. 1,812,158; June 30.
Tray compartment for refrigerating cabinets. T. C. Whitehead. 1,812,070; June 30.
Treads to steel subtreads, Securing. L. Del Turco. 1,812,504; June 30.
Tripod head particularly adapted for use in connection with a portrait camera. A. J. Viken. 1,812,614; June 30.
Truck construction, Equalizing. M. G. Hilpert. 1,811,931; June 30.
Tube: *See*—
Electron tube.
Tube securing means. F. W. Krone. 1,811,944; June 30.
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Twine cutter. R. Beaver. 1,812,462; June 30.
2-chlor-anthraquinone, Preparing. J. Thomas. 1,812,274; June 30.
Type hold open arm, Fusible. D. R. Lasier. 1,812,408; June 30.
Typewriters, Variable escapement for. B. M. Des Jardins. 1,812,394; June 30.
Typewriting machine. A. G. Kupetz. 1,812,100; June 30.
Typewriting machine. L. A. Nemcovsky. 1,812,447; June 30.
Undergarment for children, Combination. M. Brazzell. 1,812,255; June 30.
Underreamer. G. C. Deakins. 1,812,039; June 30.
Underreamer, Expanding. J. Grant. 1,812,044; June 30.
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Vacuum tube device. J. R. Robertson. 1,812,558; June 30.
Valve. C. J. Westling. 1,812,069; June 30.
Valve, Flush. C. S. Nasmyth. 1,812,301; June 30.
Valve, Flush. J. E. Walker. 1,812,388; June 30.
Valve for air brake systems, Feed. A. W. Nicholson. 1,812,361; June 30.
Valve for internal combustion engines, Inlet. J. and J. H. S. Gardner. 1,812,262; June 30.
Valve for internal combustion engines, Rotary. A. L. Harding. 1,811,928; June 30.
Valve for steam or other fluids and liquids, Stop. H. L. Mason. 1,812,104; June 30.
Valve mechanism, Thermostatic. O. J. Kuenhold. 1,812,346; June 30.
Valve operating mechanism for flushing tanks, Outlet. A. F. Curtain. 1,811,878; June 30.
Valve, Proportioning. G. F. Naab. 1,812,015; June 30.
Valve, Water closet. W. J. Collison. 1,812,774; June 30.
Valves, Auxiliary apparatus for tire. W. R. Royer. 1,812,610; June 30.
Vanillin and l-vanillin, Production of. F. Boedecker. 1,812,132; June 30.
Varnishing and printing machine for bands. K. Christian. 1,812,514; June 30.
Vase. J. M. Caughlin and O. P. Ross. 1,812,737; June 30.
Vehicle and tailboard construction. F. O. Black. 1,812,580; June 30.
Vehicle, Convertible. H. S. Goodman and C. Roehri. 1,812,002; June 30.
Vehicle, Motor. H. W. Alden. 1,811,837; June 30.
Vehicle, Motor. A. L. Knapp. 1,812,703; June 30.
Vehicle seat. M. H. Toncray. 1,812,067; June 30.
Vehicle wheel. M. W. Thompson. 1,812,573; June 30.
Vehicles and the like, Transporting. I. H. Judd. 1,812,097; June 30.
Vending machine. J. Berland. 1,812,232; June 30.
Ventilating outfit, Portable. A. G. Sutcliffe. 1,812,124; June 30.
Ventilator: *See*—
Sash ventilator.
Vinyl chloride, Catalytic process for the preparation of J. A. Nieuwland. 1,812,542; June 30.
Vinyl derivatives of acetylene and preparing the same. J. A. Nieuwland. 1,811,959; June 30.
Vise, Quick acting. A. J. Jameson. 1,812,096; June 30.
Vulcanizer and method of vulcanizing. E. Blaker. 1,812,282; June 30.
Vulcanizing apparatus. K. B. Kilborn. 1,812,792; June 30.
Wagon loader and excavator. A. W. Haiss. 1,812,292; June 30.
Wagon, Self discharging. W. Ludowici. 1,812,539; June 30.
Wagons, Implement for moving railway. G. Meyer. 1,812,603; June 30.
Wall structure, Retaining. J. A. Oursler. 1,812,364; June 30.
Washer: *See*—
Attachable washer. Gas washer.
Washing blue prints and other photoprints. H. J. Brunk. 1,812,470; June 30.
Washing machine dolly. D. P. Wilson. 1,812,029; June 30.
Watchcases, Making. E. S. Irelan. 1,812,150; June 30.
Watch crystals, Article of manufacture for wrist. J. Pief. 1,812,367; June 30.
Water, Purifying. G. W. Dooley. 1,812,516; June 30.
Water softener. L. G. Lindsay. 1,811,890; June 30.
Water to sprayers and the like, Apparatus for controlling the passage of. D. Elder. 1,812,586; June 30.
Weather strip apparatus. F. L. Michaels. 1,812,840; June 30.
Web roll changer. H. V. Ball and W. Ogden. 1,811,872; June 30.
Weed killer. W. H. Bergmann. 1,812,427; June 30.
Welding. G. T. Jacocks. 1,812,151; June 30.
Welding apparatus, Electric. H. S. Holmes. 1,812,295; June 30.
Well drilling apparatus. W. Sheldon. 1,812,721; June 30.
Wheel: *See*—
Band saw wheel. Metal wheel.
Grinding wheel.
Wheel. E. E. Walker. 1,812,227; June 30.
Wheel construction, Vehicle. J. W. Holt. 1,812,337; June 30.
Wheel disk. J. H. Hunt. 1,812,437; June 30.
Wheel unit. A. C. Wisner and C. L. Redfield. 1,812,127–8; June 30.
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Wheels, Mechanism for truing and dressing. F. J. Hohnhorst and F. J. Kroeger. 1,811,933; June 30.
Wheels, Securing means for demountable. J. H. Hunt. 1,812,005; June 30.
Windmill. E. J. Espinosa. 1,812,741; June 30.
Windmill. A. C. Gilley. 1,812,400; June 30.
Windmills, Arrangement of. C. E. Carroll. 1,812,137; June 30.
Windshield supporting means, Tonneau. T. B. Nisbet. 1,812,362; June 30.
Winding and tightening mechanism. J. K. Duncan and R. Weide. 1,812,433; June 30.
Winding machines, Traverse mechanism for. E. R. Swanson. 1,812,382; June 30.
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Window, Sliding and swinging. G. Drewes. 1,812,325; June 30.
Window structure, Metallic. A. L. Doering. 1,812,822; June 30.
Wire fabric machine, Woven. F. E. Willits. 1,812,506; June 30.
Wire fastening means. J. G. Osborne and W. W. Hicks. 1,811,892; June 30.
Wrench: *See*—
Jar wrench. Power wrench.
Wrench for spark plugs, Side wire gap. H. Rabezzana. 1,812,496; June 30.
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CLASSIFICATION OF PATENTS

ISSUED JUNE 30, 1931

NOTE.—First number = class, second number = subclass, third number = patent number

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Reissue Application—Patent Involved in Interference Practice

U. S. Patent Office, *Washington, May 19, 1931.*

(Order No. 3,193)

My attention has been called to the fact that, in some instances, a reissue of a patent has been granted while the patent was involved in an interference.

In *Lattig and Goodrum* v. *Dean*, 111 O. G. 301, 1904 C. D. 255, the Commissioner, with reference to a case in which the claims in issue had been omitted in the reissue, said: "It was irregular and improper to permit such reissue during the progress of the interference."

Hereafter, if an application for reissue of a patent is filed while the patent is involved in interference, that application must be called to the attention of the Commissioner before any action by the Examiner is taken thereon.

THOMAS E. ROBERTSON,
Commissioner.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,542,035, M. R. Cone, Dispersions of bituminous materials and process of making same, decided June 4, 1930, claims 1, 2, 8, 4, 5, 6, 7, 8, 9, 10, 11, 12, 18, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and 27.

Pat. 1,680,840, O. L. Barnebey, Process of separating and recovering gases, decided May 12, 1931, claims 15 and 20.

Pat. 1,750,442, R. T. Todd, Electrical welding machine, decided May 9, 1931, claims 1, 2, 3, 4, 5, 6, 7, and 8.

Pat. 1,779,758, R. Trechcinski, Telephone system, decided May 14, 1931, claim 1.

Adjudicated Patents

(C. C. A. Okla.) Jones patent, No. 1,102,152, for process of pumping oil wells, *Held* invalid. *Jones-McLaughlin* v. *Amerada Petroleum Corporation*, 47 F.(2d) 828.

(D. C. N. Y.) Hyatt patent, No. 1,322,792, for manufacture of tops for bottle stoppers, claim 1 *Held* valid and infringed. *Embossing Co.* v. *L. Mundet & Son*, 47 F.(2d) 938.

(C. C. A. Del.) De Forest patent, No. 1,466,701, for method of and means for controlling electric currents by and in accordance with light variation, *Held* not infringed. *Stanley Co. of America* v. *General Talking Pictures Corporation*, 47 F.(2d) 817.

(D. C. and C. C. A. Pa.) Garlinghouse patent, No. 1,571,544, for measuring device for bulk materials, claims 1 to 7 *Held* valid and infringed, and claim 8 *Held* not infringed. *Blaw-Knox Co.* v. *Erie Steel Const. Co.*, 47 F.(2d) 895 and 899.

(C. C. A. Pa.) Downs patent, No. 1,604,739, for apparatus for promoting catalytic reactions, *Held* valid and infringed. *Selden Co.* v. *Barrett Co.* 47 F.(2d) 867.

(C. C. A. Del.) Ries patent, No. 1,607,480, for method of reproducing photographic sound records, *Held* not infringed. *Stanley Co. of America* v. *General Talking Pictures Corporation*, 47 F.(2d) 817.

(C. C. A. Del.) De Forest patent, No. 1,693,071, for sound-recording attachment for motion picture cameras, *Held* not infringed. *Id.*

(C. C. A. Del.) De Forest patent, No. 1,695,414, for talking moving picture machine, *Held* not infringed. *Id.*

Condition of Applications Under Examination at Close of Business May 16, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 95,377; Trade-Mark Division, 1,266. Oldest new case, Aug. 23, 1930; oldest amended, Aug. 28, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Nov. 24	Dec. 24	744
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Oct. 29	Oct. 30	1,414
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Dec. 3	†Feb. 25	964
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Nov. 4	Nov. 24	865
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Oct. 29	Nov. 3	843
318	6. LEWERS, A. M., Carbon Chemistry	Oct. 15	Oct. 14	2,137
106	7. JARBOE, C. G., Optics; Photography	Oct. 6	Oct. 7	2,074
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Oct. 14	Oct. 9	1,598
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 17	Nov. 24	1,428
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 19	Dec. 15	1,050
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Dec. 6	Dec. 15	824
380	12. HENRY, C. C., Machine Elements	Sept. 29	Nov. 3	1,371
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Nov. 26	Nov. 26	1,148
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Oct. 24	Oct. 29	1,261
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Oct. 13	Oct. 13	2,564
242*	16. SPENCER, C. J., Telegraphy; Telephony	†Jan. 22	†Jan. 27	845
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Sept. 23	Sept. 23	1,545
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Nov. 7	Nov. 12	1,196
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Sept. 17	Sept. 30	2,105
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Nov. 10	Nov. 12	1,004
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Nov. 7	†Jan. 2	987
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Dec. 4	Dec. 20	883
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 24	Sept. 23	1,086
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Oct. 3	Oct. 16	963
202*	25. BLAKELY, O. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Oct. 27	Nov. 3	1,535
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Nov. 19	Nov. 26	987
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Oct. 25	Oct. 22	1,187
225	28. BENSON, A. R., Internal-Combustion Engines	Oct. 22	Oct. 20	1,805
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Oct. 24	Dec. 2	582
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Dec. 2	†Feb. 4	929
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Aug. 23	Aug. 28	2,585
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Dec. 19	Dec. 20	1,353
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Oct. 24	Oct. 23	2,635
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Jan. 17	†Jan. 16	814
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Feb. 25	†Feb. 28	960
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Sept. 29	Sept. 26	2,294
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Oct. 23	Oct. 29	1,628
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Jan. 8	†Jan. 13	589
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Nov. 7	Nov. 8	1,677
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Oct. 4	Nov. 6	2,997
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Nov. 17	Nov. 17	848
223*	42. CUTTING, H. O., Electric Signaling	Oct. 17	Oct. 17	1,444
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Nov. 25	Nov. 25	1,655
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Sept. 20	Sept. 22	2,249
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Sept. 26	Sept. 26	2,300
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Nov. 18	Nov. 23	1,189
284	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Oct. 29	Nov. 5	2,201
212*	48. ROEPKE, O. B., Electricity, General Applications	Oct. 20	Oct. 24	1,196
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Dec. 22	Dec. 22	1,232
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Sept. 25	Sept. 25	2,511
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Sept. 11	Sept. 18	2,229
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Dec. 4	Dec. 4	1,594
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Jan. 22	†Jan. 24	980
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Sept. 16	Sept. 16	2,662
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery	†Apr. 6	†Apr. 6	229
	{Designs	†Apr. 27	†May 4	334
309	56. PORTER, F. J., Electrochemistry: Laminated Fabrics; Paper Making; Substance Preparation	Oct. 4	Oct. 6	1,917
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Oct. 29	Oct. 18	805
270*	58. DOWELL, E. F., Abrading; Typewriting	Oct. 1	Oct. 1	1,49
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Nov. 24	Nov. 26	1,706
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Sept. 22	Sept. 22	2,035
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Sept. 20	Sept. 25	2,148
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers.	Sept. 17	Sept. 19	2,545
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Sept. 9	Sept. 9	2,421
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND, {Trade-Marks	†Apr. 17	†May 4	1,083
	{Labels and Prints	†Apr. 18	†May 4	183

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

Supreme Court of the District of Columbia

DESHELL LABORATORIES, INC., *v.* E. R. SQUIBBS & SONS ET AL. AND THOMAS E. ROBERTSON, COMMISSIONER OF PATENTS

Equity No. 49,053. Decided March 31, 1931

SECTION 4915 Revised Statutes—BILL DOES NOT LIE TO REVIEW DECISION DISSOLVING INTERFERENCE.

Where a bill in equity under the provisions of section 4915 Revised Statutes was filed to review a decision of the Board of Appeals in the Patent Office dissolving an interference *Held* that the bill should be dismissed since the court is without jurisdiction, there having been no final refusal of a patent within the meaning of the section.

Mr. Nelson J. Jewett, Mr. Edward S. Rogers, and *Mr. Henry M. Huxley* for the Plaintiff.

Mr. T. A. Hostetler for the Commissioner of Patents.

BAILEY, *J.*:

I think that the action of the Board of Appeals of the Patent Office in dissolving the interference and holding that the plaintiff cannot make a certain claim was interlocutory only in that the plaintiff had not yet been refused the patent by the Commissioner of Patents within the meaning of section 4915 Revised Statutes. The bill will therefore be dismissed without prejudice to filing a bill in equity in the event that he should finally be refused a patent by the Commissioner.

U. S. Court of Customs and Patent Appeals

IN RE SCHMIDT AND UFER

No. 2,535. Decided January 12, 1931

PATENTABILITY—PROCESS OF MANUFACTURING METHANOL.

Claims for a process of manufacturing methanol using certain specified catalytic substances *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Hauff & Warland and *Mr. William E. Warland* for Schmidt and Ufer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals affirming the decision of the Primary Examiner denying claims 7, 8, 9, 11, 12, and 13 in appellants' application for an alleged invention relating to a process for the manufacture of methanol.

Claims 7, 8, 12, and 13 relate to the use of a catalytic substance substantially free from iron, nickel, and alkali compounds. Claims 9, 11, and 12 relate to the use of a combination catalyst containing copper and substantially free from iron and nickel. Claims 7 and 9 are illustrative, and describe the process in issue. They read:

7. The process of manufacturing methanol by catalytically reducing the oxids of carbon with hydrogen, which consists in passing a mixture of one volume of oxids of carbon and at least one volume of hydrogen at a pressure of at least 30 atmospheres and at a temperature of at least 200 degrees centigrade and no more than about 500 degrees centigrade over a contact mass containing a catalytically acting element and an element selected from a group between the third and eighth groups of the periodic system and the even numbered lines of the large periods, but substantially free from alkali compounds, iron and nickel being present, if at all, only in small amounts together with other catalytically acting metals.

9. The process of manufacturing methanol by catalytically reducing the oxids of carbon with hydrogen, which consists in passing a mixture of one volume of oxids of carbon and at least one volume of hydrogen at a pressure of at least 30 atmospheres and at a temperature of at least 200 degrees centigrade and no more than about 500 degrees centigrade over a contact mass containing copper and an element selected from a group between the third and eighth groups of the periodic system and the even numbered lines of the large periods, iron and nickel being present, if at all, only in small amounts together with other catalytically acting metals.

The references are: Mittasch et al., 1,201,850; Mittasch et al., 1,569,775; Dreyfus, (Br.), 108,855; Patart, (Fr.), 540,543.

The tribunals below held that, as the patents to Patart and Dreyfus did not mention the presence of alkali compounds, they should be considered as disclosing catalytic agents free from such compounds; that, as the patent to Mittasch et al., No. 1,569,775, owned by appellants' assignee, did not disclose the presence of iron or nickel in their catalytic compounds, this reference should be considered as disclosing catalysts free from such substances; and that, therefore, claims 7, 8, 12, and 13 were not patentable over the prior art. In this connection, the Board of Appeals, among other things, said:

* * * The applicants' view would appear to support the procedure of obtaining a patent upon the Patart or Dreyfus process, just as disclosed by such patentees, and merely adding to the claims and the description that an alkali compound was absent, and, afterwards, obtaining another patent for the identical process already patented, and stating in such last patent that iron and nickel were absent, and, still later, obtaining another patent for this same identical process and stating that some other unnecessary element was absent, and so on indefinitely. We deem the prior art supports the holding that there was nothing inventive in using the process as described by these patentees and leaving out such substances as these patentees have not stated should be present. As to the proportions of the parts and the pressures and temperatures employed by the applicants, these are all fairly disclosed in the prior art.

With reference to claims 9, 11, and 12, the Patent Office tribunals concurred in holding that, as the patents to Patart and Dreyfus disclosed the use of copper as a catalyst and, as the patent to Mittasch et al., No. 1,201,850, disclosed the advantages of using certain metals, compounds thereof, and mixtures of two or more of such metals as catalytic agents, there was no invention in simply combining copper, disclosed in Patart and Dreyfus, with some of the metals disclosed in the patent to Mittasch et al., No. 1,201,850.

In this connection, the Examiner said:

* * * no invention is seen to be involved in using in the Patart process copper associated with one of the other catalysts of the type named. It is considered that this would be an obvious thing to try out by those investigating the various catalysts in connection with methanol synthesis in view of Mittasch's use of mixtures.

The Board of Appeals concurred in the views expressed by the Examiner, and said:

* * * To merely select two or more of these materials, which the prior art teaches may be used jointly as the catalytic compound, would involve nothing more than the mere following of the teachings of the prior art.

It is argued by counsel for appellants that, although alkali compounds are not declared to be pres-

ent in the catalysts disclosed in the patents to Patart and Dreyfus, and iron and nickel are not mentioned as being present in the patent to Mittasch et al.,—No. 1,569,775—it does not necessarily follow that these patentees disclosed, or had in mind, the *exclusion* of these substances.

We are unable to accept this view. Regardless of the commercial practice prior to, or after the disclosures in the patents to Patart, Dreyfus, and Mittasch et al.—No. 1,569,775—the failure of Patart and Dreyfus to mention the presence of alkali compounds, and the failure of Mittasch et al., to mention the presence of iron and nickel, ought to have been and was, in our opinion, sufficient to suggest to one skilled in the art that the presence of those substances in catalytic agents was not necessary. Furthermore, it is definitely stated in the patent to Mittasch et al.—No. 1,201,850—that an alkali may or may not be added to the catalytic agents therein disclosed.

With reference to claims 9, 11, and 12, it is argued by counsel that appellants' disclosure of a catalytic compound containing copper is not definitely shown in any of the patents of record; that a new and useful result has been obtained by a new combination of old elements; and that, therefore, these claims are patentable over the references of record.

Patart and Dreyfus each disclosed the use of copper as a catalyst. Mittasch et al.—No. 1,201,850—disclosed the use of catalysts composed of certain metals and mixtures of two or more of them. In view of these disclosures, it would seem to be reasonable to conclude that one skilled in the art would readily deduce that a catalyst composed of copper and some of the metals or mixtures disclosed by Mittasch et al.—No. 1,201,850—might be successfully employed in the manufacture of methanol. Nor are we impressed with the proposition that a combination catalyst, resulting from experiments plainly suggested by the prior art, would be patentable, even though it produced new and useful results.

It appears from the record that about a year after appellants' claims had been finally rejected by the Primary Examiner, counsel proposed to amend appellants' application by incorporating four new claims, Nos. 14 to 17, directed to the exclusion of alkali. The exclusion of iron and nickel from the process was not mentioned therein.

In rejecting the proposed amendment, the Examiner said:

> * * * Because applicant has thought up a new argument to present as to why claims rejected are not considered by him to be anticipated is no reason why the final rejection should be set aside at the last moment for the reconsideration of claims and the entry of new claims. A case could never be closed if such practice is followed.

Due to the fact that the proposed claims had not been considered by the Primary Examiner, the Board of Appeals declined to review them.

It also appears that claims 18 to 21 were not before the Primary Examiner, but were first submitted to the Board of Appeals, and that the board declined to consider them.

It is earnestly urged by counsel for appellants that this court give consideration to all of these claims.

We are of opinion that the Primary Examiner was entirely justified in rejecting the proposed amendment—claims 14 to 17—for the reasons pointed out in his decision. Claims 18 to 21 were not properly before the Board of Appeals. Accordingly, they will not be considered by this court. *In re Schneider*, 17 C. C. P. A. (Patents) 952, 39 F.(2d) 278; *In re Stern*, 17 C. C. P. A. (Patents) 1234, 40 F.(2d) 1000.

The decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BONIDE CHEMICAL COMPANY, INC.

No. 2,575. Decided February 3, 1931

TRADE-MARKS—REGISTRABILITY—"CROW-TOX"—FOR PREPARATION FOR PROTECTING SEEDS AGAINST BIRDS AND ANIMALS.

The term "crow-tox" *Held* equivalent to "crow-poison" and not registrable as a preparation for protecting seeds against birds and animals, whether that preparation be poisonous or not.

APPEAL from the Patent Office. Affirmed.

Mr. Richard R. Martin for Bonide Chemical Company, Inc.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.*:

Appellant, Bonide Chemical Company, Inc., made application in August, 1928, for registration, under the Trade-Mark Act of February 20, 1905, of the compound word Crow-Tox as a trade-mark for use on a "preparation for protecting seed against birds and animals and for invigorating seeds".

Registration was denied by the Examiner and his decision was affirmed by the Commissioner of Patents. Appeal was then taken to this court.

It appears that when the Examiner first came to consider the application, after the formality of publication had been complied with, he reached the conclusion that registration should be denied upon the ground that the word was merely descriptive of the goods on which it was used, being of the impression that the preparation was poisonous in character and thinking "crow-tox" to be the equivalent of "crow-poison". He so held, citing *Larvex Corporation* v. *Walter*, which appears to be 151 MS. Dec. 763, by the Commissioner of Patents, rendered September 7, 1928.

Thereupon appellant amended his original combined petition and statement by inserting therein the word "non-poisonous", so that it read "* * * has adopted and used the trade mark shown in the accompanying drawing for a *non-poisonous* preparation * * *".

Upon consideration of the application as thus amended the Examiner adhered to his former decision, saying:

> It is immaterial whether or not a mark is truly or falsely descriptive. (See *in re National Phonograph Co.*, 128 O. G. 1295, 1907 C. D. 550.)

In affirming the decision of the Examiner, the Commissioner (Assistant Commissioner Moore) said:

> The law * * * specifically provides that no trade-mark which consists "merely in words or devices which are descriptive of the goods with which they are used, or of the character or quality of such goods," shall be registered; and the courts have uniformly held that marks which are deceptive are not entitled to protection as a property right * * *.
>
> The Trade-Mark Act does not forbid registration of descriptive words or devices as trade-marks, but only those which are descriptive of the goods, or the character of quality of the goods, with which they are used. Therefore, in order to determine whether words or devices used as trade-marks are descriptive of the goods or are deceptive, it is necessary to ascertain the probable effect such words or devices, when given their usual meaning, have upon the public mind. The meaning of some descriptive words or devices used as trade-marks is so foreign to the qualities or characteristics of the class of goods with which they are used as to render it unlikely that they would ever be regarded as used descriptively or deceptively. In such cases the marks are arbitrary and fanciful and form proper technical trade-marks. It is where the meaning of the words or devices is descriptive of the qualities or characteristics of the class of goods with which they are used as trade-marks that their registration is prohibited by the Trade-Mark Act.
>
> The applicant's mark is primarily for a preparation for protecting seed against birds and animals. It is common practice to include a poison in preparations of this class. The applicant's trade-mark "Crow-Tox" would therefore suggest to the mind of the public that the goods with which the mark is used is a poison, the word "tox" being defined the same as "toxic" and "toxico" from the Greek "toxicon," poison, a combining form.
>
> It is contended by the applicant, however, that its mark is not descriptive of the goods, as the goods contain no poison for crows. This being true, then the mark is deceptive, as one wishing to purchase a poison for crows would be deceived into purchasing the applicant's non-poisonous preparation.

The contention made before us appears to be, in substance, the same as that recited to have been made before the commissioner. It is very frankly conceded by learned counsel for appellant that "crow-tox" has the same meaning as "crow-poison", and that if the preparation of appellant were, in fact, poisonous, the word would be descriptive of the character and quality of the goods and hence its registration would be barred by the express terms of the statute.

This concession as to the real meaning of "crow-tox" is, we think, correct. There are in common use in the English language many words derived wholly, or in part, from the Greek word "toxicon" which means poison. Examples are "toxic", "toxicant", "toxication", "toxicologist", "toxicomania", "toxiferous", "toxin", and the like. This class of words is related to, and carries to all the suggestion of, poison. This suggestion is, of course, conveyed by the use of the syllable "tox".

In Funk & Wagnalls New Standard Dictionary "tox" as a complete word is not found, but it is given and defined thus:

> tox-[1]. Same as toxico—
>
> tox-[2]. Same as toxo—
>
> tox., toxicol., abbr. Toxicology.

Toxic as a word is there defined: "1. Pertaining to or having the nature of poison; poisonous; as, a *toxic* substance."

In Webster's New International Dictionary "tox" as a complete word is listed as being obsolete. It there appears thus:

> tox, *v. t.* To intoxicate. *obs.*

We think, therefore, that "crow-tox" is in all respects, as regards its meaning, the same as "crow-poison." Hence the effort to register it under appellant's amended application, raises the somewhat novel question whether, under the registration statute, a word may be registered as a trade-mark when it is used upon a preparation which it, in fact, misdescribes. It does not speak the truth. If it did, admittedly, it would not be registrable. Since it speaks falsely, may it be admitted as not descriptive?

It is argued that this proceeding is purely statutory and that the Patent Office and this court are bound by the naked words of the statute; that we have no concern, when descriptiveness is the only issue involved, except to ascertain the bald fact of whether the mark is merely descriptive—that is, whether it is truly descriptive; that the law is so drawn as to encourage registration, and that there is a requirement that no trade-mark shall be refused registration, except in designated cases, which "is just as imperative as the prohibition of the proviso against registration in cases specified", citing *Beckwith* v. *Commissioner of Patents*, 274 O. G. 613, 252 U. S. 538, 1920 C. D. 471.

Fully recognizing the fact that the proceeding is purely statutory, we nevertheless cannot acquiesce in this contention to the extent that appellant's insistence would lead.

By the terms of the statute, *ownership* is an express prerequisite of the right to register. The opening words of the trade mark registration act are "That the *owner* of a trademark * * * may obtain registration * * *". (Italics ours.)

This court, following many decisions of the Court of Appeals of the District of Columbia (our predecessor in this particular line of trade-mark jurisdiction) and of other courts having jurisdiction of trade-mark questions, including the Supreme Court of the United States, has had several occasions to point out that in passing the Trade-Mark Registration Act, Congress added nothing to and took nothing from the common-law principles applying or relating to trade-mark ownership. *B. F. Goodrich Co.* v. *Kenilworth Mfg. Co.*, 17 C. C. P. A. (Patents) 1105, 395 O. G. 6; *Sun-Maid Raisin Growers of California* v. *American Grocer Co.*, 17 C. C. P. A. (Patents) 1034, 1037, 395 O. G. 3, and numerous cases therein cited. *In re Plymouth Motor Corp.*) 18 C. C. P. A. (Patents) ——, 404 O. G. 269.

In the *Sun-Maid Raisin Growers* case, supre, we said:

> Congress, by the enactment of the Trade-Mark Act of 1905 never intended to authorize the registration of a trade-mark the use of which could be prevented by resort to common law. (See *California Packing Corp.* v. *Tillman & Bendel, (Inc.)*, Patent Appeal No. 2341, 17 Ct. Cust. & Pat. Appls. 1048, —— F.(2d) ——, and *B. F. Goodrich Co.* v. *Hockmeyer, (Zip-On Mfg. Co., substituted)*, Patent Appeal No. 2208, 17 Ct. Cust. & Pat. Appls. 1068, —— F.(2d) ——, both decided concurrently herewith. Also see *Yale Electric Co.* v. *Robertson*, 26 F.(2d) 972, and *Levy* v. *Uri*, 31 App. D. C. 441.)

Bearing upon this question also are declarations of *American Steel Foundries* v. *Robertson*, 269 U. S. 372, 342 O. G. 711.

Trade-mark ownership primarily is a matter growing out of adoption and use of a mark, but in order actually to have valid title to a mark which the

courts will protect other elements than these must be present. Use is an indispensable attribute, and it must be a legal use, justified upon sound principles of truth and morality. Such principles are basic in all law.

We are at a loss to understand how one can acquire legal title—an ownership protectable in the courts—of a mark (there being no ownership except when predicated upon use) which it is proposed to apply to a product and by it indicate that the product is of a particular character or quality, when, in fact, it has no such quality, and then secure registration of the mark, on its face descriptive, upon the statement that it is not descriptive because false and misleading. It is inconceivable that Congress ever intended that any such result should be accomplished under the registration statute, notwithstanding the declaration that no mark, save certain excepted ones, should be refused registration.

There is argument by the appellant that as a matter of fact there is no foundation "for the conclusion that any purchaser of a material to keep crows away from seed corn would be misled by the use of the trade mark Crow-Tox on a material non-poisonous". The only reason for this given by appellant is; "No farmer would be anxious to purchase such a material having poisonous qualities by preference". It is also pointed out that there was filed in the hearing in the Patent Office, or with the amended application, "a copy of one of the circulars used in advertising and selling applicant's material upon which there is shown underscored in ink the statements 'Crow-Tox is non-poisonous and will not injure any kind of corn. Neither will it clog any planter or kill birds or animals'."

This argument is beside the issue. It is the word of the mark, not the statement of an advertising circular which appellant seeks to register, and the fact that a farmer might not buy crow poison by preference has no bearing upon the merits of the question. As a matter of fact, basing our conclusion upon common observation and experience in life, we do not doubt but many farmers would, at frequent intervals, much prefer poison for these pestiferous creatures.

There is little direct authority to be found in judicial decisions upon the purely registration feature of such marks. This is probably due to the fact that there have been few instances where attempts have been made to register marks upon their face descriptive, but avowed in the application not to be, for the reason that it was intended to use them upon products that would not conform to the implication or meaning of the marks.

The precedents of the Patent Office tribunals are cited in their decisions, supra.

Worden v. *California Fig Syrup Co.*, 187 U. S. 516, was a proceeding in equity. Defendant there sought an injunction against plaintiff to prevent use by the latter of the words "Syrup of Figs" or "Fig Syrup", or any colorable imitation thereof, on certain products, alleging its (defendant's) right to exclusive use of such mark. In plaintiff's defense it was alleged and proved that defendant's preparation did not, in fact, include any fig syrup. The case reached the Supreme Court of the United States and that tribunal in the course of its opinion said (197 U. S. 528):

> We find, however, more solidity in the contention, on behalf of the appellants, * * *; that where any symbol or label claimed as a trade mark is so constructed or worded as to make or contain a distinct assertion which is false, *no property can be claimed on it*, or, in other words, the right to the exclusive use of it cannot be maintained. (Italics ours.)

Authorities were then cited.

In *Levy* v. *Uri*, 31 App. D. C. 441, 135 O. G. 1363, the Court of Appeals of the District of Columbia reversed a decision of the Commissioner of Patents and denied registration of the word "Brookwood" as a trade-mark for whisky, because it was found that the proposed registrant had, in printed matter accompanying the mark, represented the product to be rye whisky, when as a matter of fact it was a blend, saying (31 App. D. C. 446):

> It is our conclusion that, because of the misleading statements on the labels containing the mark, appellee *can claim no property right therein*, and is not entitled to claim the benefits of the trademark act. (Italics ours.)

The distinction between the Levy case and that at bar is that in the latter it is the mark itself which misleads, and not merely statements accompanying it on the label.

Many authorities bearing upon the issue are cited in this latter decision, and others are *Federal Products Co.* v. *Lewis*, 57 App. D. C. 338, 367 O. G. 3; *Coffin Redington Co.* v. *Turner*, 1917 C. D. 187, 46 App. D. C. 449, 242 O. G. 751.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE NESS

No. 2,588. Decided February 3, 1931

1. PATENTABILITY—INVENTION—SELECTING AND ASSEMBLING PARTS OF PRIOR MECHANISMS.
   "We think it is well settled that there is no patentable invention in selecting and assembling parts of prior mechanisms used in the same art where the result produced is nothing more (though it may be better) than the sum of the results due the individual elements."
2. SAME—BACK-FLASHER ARRESTERS.
   Claims for back-flasher arresters *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Byrnes, Townsend & Brickenstein, and *Mr. C. H. Potter*, *Mr. Warren J. Willis*, and *Mr. Euegen L. Greenewald* for Ness.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

Appellant's claims in this case relate to improvements in back-flash arresters. They are seven in number and all were successively rejected by the Examiner and by the Board of Appeals of the Patent Office. Appeal was then taken to this court.

It will be sufficient to quote numbers 1, 3, and 7:

> 1. A flash arrester comprising a casing adapted to be coupled in a gas supply line and containing a replaceable cartridge comprising finely divided, difficultly fusible, unbonded material of a size that will pass through screening of about 40 to 90 meshes to the inch.
>
> 8. A back flash arrester comprising a casing adapted to be coupled in a gas supply line and containing a confined layer of finely divided unbonded alundum forming a porous high-temperature resistant wall between the outlet and the inlet of said casing.
>
> 7. A flash arrester comprising an internally threaded tubular section having an internal shoulder, screen means bearing against said shoulder, a porous body of finely-divided refractory material disposed against said screen means and against the adjacent inside surface of said tubular section, and perforated means having external threads whereby it may be screwed into said section to hold said material in place and to exert various pressures thereon whereby its thickness and porosity may be varied.

The references cited in the decision of the Board of Appeals are:

Emerson et al., 802,380, October 24, 1905; Ellis, 1,170,055, February 1, 1916; Armstrong, 1,176,017, March 21, 1916; Berry, 1,828,485, January 20, 1920; Fregonara, 1,457,059, May 29, 1923; Schröder, 1,497,197, June 10, 1924; Harmer (Br.), 17,972, of 1913. Thorpe—"Dictionary of Applied Chemistry", page 180, (1921).

Appellant, in his application, concedes the evolvement by others of devices designed for stopping the back flash of flames from blowpipes thus preventing explosion in acetylene gas tanks, but insists that he has succeeded in making improvements, inventive in their nature, over the prior art. His brief says:

> Appellant's principal achievements in the present invention are to provide an improved flash-back arrester which is reliable in its operation; which is adapted to be set for any one of a variety of gas pressures; which will not get out of order; which meets the rigid requirements of the board of fire underwriters; and which is simple to construct and install.
>
> Appellant has discovered that an extremely efficient flash-back arrester is obtained by inserting in the gas conduit a layer of finely divided unbonded refractory material that is non-corrosible and infusible under all the operating conditions to which it is subjected. The material which meets these requirements is finely divided unbonded alundum of a size that will pass through screening of from 40 to 90 meshes per inch.

The apparatus may be briefly described as an arrester comprising a casing having two end sections coupled by an intermediate internally threaded section which latter section contains a layer of granular material (defined in claim 3 as alundum), the material being unbonded, and confined at both sides by screens and disks, the disks being perforated and adjustably threaded into the intermediate section. It is specified that the alundum is of particles of a size which will permit their passage through screening of from 40 to 90 meshes to the inch. This material forms a porous high-temperature resistant wall between the outlet and the inlet of the casing.

In operation the gas from the tank or generator enters the arrester through a passage which leads it to the layer of alundum through which it flows, and by its passage therethrough it is subdivided. It then flows out through another passage to the supply line and gas burner, and the statement of the specification is that—

> Any back flash that gets back into the arrester will be extinguished immediately before it passes therethrough because of the subdivision of the gas by the layer of finely divided material and the screens and perforated discs carrying it.

It appears evident that if appellant has produced a patentable invention, the primary or fundamental element of that invention lies in the disclosure of granular, unbonded alundum divided into particles of a "size that will pass through screening of about 40 to 90 meshes to the inch". The other elements of the claims are, in the main, constituent means by which the use of the alundum, in the form designated is rendered practicable.

The patent to Ellis, supra, relates to a three section explosion arrester, the middle section—

> charged with finely divided granular material of a refractory nature, preferably of poorly conducting material such as crushed fire-brick, clay, pumice, magnesia and the like, the fragments preferably being screened between 15 and 20 mesh or thereabout, so as to afford fairly uniform grains. These are placed in the cylinders in the layers * * *. Between the layers wire screens are placed to form spaces which are charged with copper or aluminium fragments, such as copper tacks or aluminium granules of say about 20 mesh. * * *.

The patent to Armstrong discloses the use as a flame-arrester in an oxygen and acetylene torch, of a—

> mass of porous and non-inflammable material *b*, such as asbestos or any other suitable substance.

This material of Armstrong we understand to be unbonded.

The patent to Berry shows the use of a—

> porous cup or diaphragm 9 consisting of refractory material such as, for example, alundum which is porous enough to allow the passage of gas at ordinary pressure without materially impeding the flow. Any porous clay product will answer the requirements.

In Berry the cup or diaphragm is, as we understand it, a compacted article and not a mass comprised of unbonded granules. Within the cup are leaden pellets designed to be melted by the intense heat of the back flash when the porous cup itself is not sufficient fully to arrest the flame, and the metal—

> may be sufficient to stop the further passage of the flame by melting over and then sealing the top of the tank of metal shot or pellets, etc.

Fregonara discloses the use of "iron chips or any like permeable material", interposed in the spaces between certain discs; Schröder "a sleeve *i* containing a porous fireproof protective disc *k* of magnesium oxide inserted gas-tight therein".

The British patent to Harmer states that the filtering material is preferably coke and further says that patentee is aware that—

> it has already been proposed to employ porous ceramic material, graphite, metal gauze and sponge * * * with blowpipes generally,

and he makes "no claim thereto".

It is thus to be seen that in none of the prior art cited is use disclosed of unbonded granules of alundum, specifically named as alundum. The only use of alundum, specifically calling it by that name, is Berry who uses it in the form of a cup or diaphragm.

Aside from possibly the coke filter of the British patent, Ellis appears to be the only discloser of materials in granular form. He appears to have a layer of material such as "crushed fire-brick, clay, pumice, magnesia and the like" preferably "between 15 and 20 mesh or thereabout" and another layer of "copper tacks or aluminium granules of say about 20 mesh". The exact form of Armstrong's asbestos material is not disclosed.

Appellant's claim 3, supra, is the only one of his claims which specifically names alundum as the high-temperature resistant, and it is there described as "finely divided, unbonded". His claim 1 is the

only claim which attempts to define the size of the material, it being there described as—

of a size that will pass through screening of about 40 to 90 meshes to the inch.

It does not seem to us that claim 1, standing alone, is patentable over the disclosures in the prior art, unless it be so held by reason of the defining of the sizes of the granules into which the resistant material is divided—40 to 90 meshes. Claim 3, standing alone, would not be patentable unless there be held to be invention in substituting alundum in unbonded form (the granular unbonded form being taught by Ellis as to other materials) for the compact alundum cup or diaphragm of Berry.

Claim 7 does not present any matter relating to the material which differentiates it from either numbers 1 or 3, nor do claims 2, 4, or 6.

The prior art teaches the use of materials in granular form, as a *form* adapted to make a successful resistant. It teaches the use of porous alundum as a satisfactory resistant *material*. To put the material with its already disclosed and known attributes into a form or forms also already disclosed and known appears to be rather a matter of mechanical skill than one of invention. It is true that the particular sizes—40 to 90 mesh granules—claimed by appellant are not specifically disclosed in the prior art, but the very fact that so wide a variance in size is allowed himself by claimant strongly indicates that size is not of the essence of the matter but is a factor likewise merely within the power of determination by those skilled in the art. *In re Iwan*, 17 App. D. C. 506, 95 O. G. 441.

In *In re Williams*, 17 C. C. P. A. (Patents) 718, 722, 392 O. G. 737, we said:

There is no invention in changing the size and proportion of a device or machine so long as the construction and mode of operation remain the same.

Numerous authorities were there cited.

Under the view of the case as to the nonpatentability of the alundum feature, there appears to be no necessity of analyzing the other and more truly mechanical elements. Suffice it to say that the modifications of the mechanical prior art disclosed in the references, do not appear to reach the plane of inventiveness.

[1] We think it is well settled that there is no patentable invention in selecting and assembling parts of prior mechanisms used in the same art where the result produced is nothing more (though it may be better) than the sum of the results due the individual elements. *In re Bayer*, 17 C. C. P. A. (Patents) 614, 390 O. G. 4; *in re Appelburg and Gulliver*, 17 C. C. P. A. (Patents) 820, 394 O. G. 7.

[2] We find no error in the decision of the Board of Patent Appeals and the same is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BENNER AND WERKING

No. 2,591. Decided February 3, 1931

PATENTABILITY—STORAGE BATTERIES.

Claims for a storage battery *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Geo. H. Souther, Mr. L. Edward Flaherty, and *Mr. J. E. Hutchinson, jr.*, for Benner and Werking.

Mr. T. A. Hostetler for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the action of the Examiner in rejecting all of the claims of the application of appellants, which claims read as follows:

1. A storage cell or battery assembly for deferred use comprising dry active electrodes and desiccated separators placed between said electrodes.
2. A storage cell or battery assembly for deferred use comprising preformed active electrodes and desiccated, treated, wooden separators placed between said electrodes.
3. A storage battery adapted to be activated by addition of electrolyte and comprising active electrodes assembled with desiccated, treated wooden separators.
4. The invention according to claim 3, in which the battery is hermetically sealed.
5. A storage battery capable of rapid activation and comprising active electrodes assembled with desiccated, treated wooden separators characterized by operative electrical conductivity after about three hours' immersion in electrolyte.

The references relied on are as follows:

Carpenter, 1,468,259, September 18, 1923, 136–176; Holland et al., 1,329,181, January 27, 1920, 136–176; Handler, 1,546,379, July 21, 1925, 136–150*x*; Gasche, 1,478,708, December 25, 1923, 136–176.

The application of appellants relates to a combination consisting of dry positive and negative electrodes and desiccated separators between them, which has been charged, thoroughly dried and sealed before being shipped and stored in the usual manner. The assembly is ineffective in this dry state to function as a battery, but when it is put into service it is only necessary to pour into it the required electrolyte. The separators employed are wooden and are especially adapted to retain their effectiveness when in a thoroughly dry condition.

In its discussion of the references the Board of Appeals said:

The patent to Handler describes a separator made up of wood which is intended to be employed in a dry condition and as particularly pointed out it may be artificially dehydrated. Appellant argues that there is a patentable difference between dehydration and desiccation. We do not consider that this point is well taken. Appellant also argues that it is not clear that the plates are charged in the Handler patent but on page 2, line 17 is found the statement that the battery is ready for use "upon adding the electrolyte" which would indicate that the plates had been previously charged. Appellant also seals up the battery after reducing it to a thoroughly dry condition and Handler does not touch upon this point. It is common, however, to seal up batteries under similar conditions as shown in Carpenter. It is true that Carpenter does not refer to thoroughly drying the battery but it is stated that it is thoroughly drained. It is therefore held that there would be no invention in sealing up the battery of Handler and when this is done it is considered that there is no substantial difference over the battery of Handler in the battery claimed by appellant.

In the specification of the Handler reference there is found the following statement:

It is the object of the present invention to provide a separator which may be stored either by itself or in association with the metal battery element as referred to without the necessity of being kept moist but which may be caused, either by active dehydrating or simply allowing the separator to dry out so as to become dry; that is, its moisture is reduced to the minimum amount consistent with the humidity of the atmosphere in which it is placed. In other words, the condition which is assumed by the body when placed in the atmosphere and without being artificially moistened or wetted.

The specification further states, speaking of the wooden separators:

* * * It is unnecessary, however, to maintain them moist but they may be permitted to dry out or may be artificially dehydrated and then maintained in this dry condition until required for use.

The reason for the drying of the wooden separators, as stated in appellants' specification, is that without such drying they are very likely to become cracked and warped and thereby rendered useless; and also, without such drying, the porosity of the separators due to shrinkage is greatly diminished. Appellants contend that there is a patentable difference between dehydrating the wooden separators and desiccating them, and insists that the process of dehydration will still leave some moisture in the separators, but through the process of desiccation all of the moisture is removed therefrom.

According to Webster's Dictionary, "dehydrate" means:

to deprive, or to be free, of water or the elements of water; to render free from water.

The same authority defines the word "desiccate" as meaning:

to exhaust or remove the moisture from—dry thoroughly, especially to free from moisture with a view to preserving.

Funk & Wagnalls Standard Dictionary defines "dehydrate" as meaning:

I. To deprive of water; anhydrate. II. To suffer loss of water.

while the same authority defines "desiccate" as meaning:

I. To exhaust or remove the moisture from; dry thoroughly; especially, to free from moisture with a view to preserving; as, *desiccated* fish or beef. * * * II. To become dry (*de*, thoroughly, + *siccus*, dry.)

As will be noted from the quotation given, the Board of Appeals found that there was no patentable difference between dehydration and desiccation.

We think that both Handler and appellants had exactly the same thing in mind, namely, the removal of moisture from the wooden separators, and that a process of dehydration, as disclosed by Handler, if carried out completely, will result in the desiccation of the wooden separators claimed by appellant. It is this element of desiccation which appellants contend renders the claims allowable.

Claim 4 contains the additional element of hermetically sealing the battery after the elements set out in appellants' specification have been assembled. The Board of Appeals found that it is common to seal up batteries under similar conditions, as shown in the Carpenter reference. We agree with the board that there would be no invention in sealing up the battery of Handler, and that when this is done there is no substantial difference over the battery of Handler in the battery claimed by appellants.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,080,630. (See Re. 12,437.)

1,092,786, R. J. Troutman, Sanitary toilet seat, filed Nov. 17, 1930, D. C., S. D. Ohio (Dayton), Doc. E 277, *T. L. Beach (Sanitary Seat Cover Co.) v. B. L. True et al.*

1,128,071, N. M. Stanley, Process for making composite metallic and non-metallic stock; 1,583,022, Stanley & Angell, Method of making metal labels; 1,584,914, H. A. Yaffee, Apparatus and method of decorating labels, filed Feb. 12, 1930, D. C., S. D. Ohio (Dayton), Doc. E 258, *The Stanley Mfg. Co. v. The Angell Embossing Co.*

1,128,145, Inwood & Lavenberg, Means for making box blanks, filed Apr. 1, 1930, D. C., S. D. Ohio (Dayton), Doc. E 264, *Wirebounds Patents Co. et al. v. C. A. Gondert et al.*

1,794,752, T. H. Krueger, Moistening device for gummed stickers or labels; 1,567,655, 1,638,815, T. H. Krueger, Tape serving device; 1,782,123, same, Package sealer, filed Mar. 13, 1931, D. C., S. D. Ohio (Dayton), Doc. E 292, *Better Packages, Inc., v. Superior Tape & Sealer Co.*

1,212,840, F. J. Straub, Building block and method of making same, filed Sept. 19, 1930, D. C., S. D. Ohio (Dayton), Doc. E 275, *Crozier-Straub, Inc., v. O. W. Nichols et al.* (*Nichols Concrete Block Co.*).

1,306,116, 1,383,229, W. B. Moses, Ignition apparatus; 1,375,658, C. F. Gilchrist, Dynamo-electric machine and brush-holder device therefor; 1,443,073, 1,520,237, same, Dynamo-electric machine; 1,490,104, same, Brush holder; 1,735,112, same, Switch; 1,482,204, Schwarzmann & Rosner, Timer distributor; 1,517,281, L. B. Ehrlich, Dynamo; 1,676,185, 1,703,319, Gilchrist & Patterson, Combined timer and distributer; 1,669,888, P. F. Wollenweber, Ignition device, filed Mar. 30, 1931, D. C., S. D. N. Y., Doc. E 59/100, *The Electric Auto Lite Co. v. Preferred Electric & Wire Corp. et al.* Doc. E 59/101, *The Electric Auto-Lite Co. v. Brown & Green Ignition Sales Co., Inc., et al.*

1,320,384, Godbold & Fletcher, Drill cutter, filed Feb. 26, 1931, D. C., S. D. Calif. (Los Angeles), Doc. T–54–C, *Hughes Tool Co. v. Abegg & Reinhold Co., Inc.*

1,375,658. (See 1,306,116.) 1,383,229. (See 1,306,116.)

1,443,073. (See 1,306,116.)

1,470,524, H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confection; 1,505,592, F. W. Epperson, same, D. C., S. D. Calif. (Los Angeles), Doc. R–78–C, *National Popsicle Corp. et al. v. F. Myers et al.* (*Sherbo Frozen Products Co.*), *et al.* Patents held valid Feb. 2, 1931.

1,482,204. (See 1,306,116.)

1,486,883, E. P. Halliburton, Method of hydrating cement; 1,500,385, same, Method of and apparatus for mixing materials, D. C., S. D. Calif. (Los Angeles), Doc. E J–110–M, *E. P. Halliburton et al. v. J. M. Owen* (*Star Oil Well Cementing Co.*). Decree for plaintiffs, infringement held Mar. 31, 1931.

1,489,944, M. Kasser, Machine for processing eggs, D. C., N. D. Calif. (San Francisco), Doc. E 2636, *Kasser Egg Process Co. v. MacMarr Stores, Ltd.* Dismissed without prejudice Mar. 16, 1931.

1,490,104. (See 1,306,116.) 1,500,385. (See 1,486,883.)

1,505,592. (See 1,470,524.) 1,517,281. (See 1,306,116.)

1,520,237. (See 1,306,116.)

1,521,621, W. P. Hammond, Combined rear view mirror and time piece, D. C., S. D. N. Y., Doc. E 57/197, *L. L. Hammond et al. v. Cornioley & Co., Inc.* Consent decree for plaintiff Apr. 3, 1931.

1,534,478, W. J. Wiswall, Manifolding book, filed Aug. 11, 1930, D. C., S. D. Ohio (Dayton), Doc. E 274, *American Sales Book Co., Ltd., v. The Reynolds & Reynolds Co.*

1,551,515, W. K. Howe, Automatic train control system, filed Mar. 5, 1931, D. C., E. D. Va. (Richmond), Doc. 225, *General Rwy. Signal Co. v. Sprague Safety Control & Signal Corp.*

1,552,326, P. J. Lunati, Lifting device for motor vehicles, D. C., N. D. Calif. (San Francisco), Doc. E 2795, *Rotary Lift Co. et al. v. Straub Mfg. Co. et al.* Consent decree holding patent valid and infringed as to claims 2, 3, 7, and 8 Apr. 1, 1931.

1,567,655. (See 1,194,752.)

1,580,287, Colle & Colle, Glass substitute, filed Apr. 1, 1931, D. C. Wash. (Seattle), Doc. 817, *Acetol Products, Inc., v. Hardware Specialties Co.*

1,583,022. (See 1,128,071.) 1,584,914. (See 1,128,071.)

1,615,147, R. M. Taylor, Combined muffler and cut out; 1,697,889, J. E. Goerlich, Muffler, D. C., N. D. Ohio, E. Div., Doc. 3346, *R. M. Taylor et al.* v. *The Simmons Mfg. Co.* Dismissed without prejudice (notice Mar. 27, 1931).

1,616,098, B. F. Wells, Meter case, D. C., N. D. Tex. (Fort Worth), Doc. E 584, *B. F. Wells et al.* v. *Southwest Meter Box Co. et al.* Dismissed Mar. 31, 1931.

1,622,994, H. Culp, Steamboat construction, D. C., N. D. Ohio, E. Div., Doc. E 2022, *H. Culp* v. *The Dock & Navigation Co. et al.* Dismissed without prejudice Jan. 7, 1931.

1,638,815. (See 1,194,752.) 1,669,888. (See 1,306,116.)

1,674,579, J. J. Van Hamersveld, Governor controlled fluid pressure tool, filed Apr. 11, 1930, D. C., S. D. Ohio (Dayton), Doc. E 267, *The Rotor Air Tool Co.* v. *The Buckeye Portable Tool Co.*

1,676,185. (See 1,306,116.) 1,697,889. (See 1,615,147.)

1,702,929, J. L. Breese, jr., Process of combustion; 1,743,081, same, Oil burning apparatus, filed Mar. 12, 1931, D. C., E. D. Ill. (East St. Louis), Doc. 4392, *Oil Devices Corp. et al.* v. *Vulcan Oil Burner Co., Inc.*

1,703,319. (See 1,306,116.)

1,704,961, T. Birkenmaier, Disconnecting block; 1,743,942, E. Volkmann, Switch; 1,731,775, W. A. Heinrich, Hanger, D. C., E. D. Mo. (St. Louis), Doc. 9161, *W. N. Matthews Corp.* v. *J. R. Kearney Corp.* Consent decree Apr. 1, 1931.

1,718,997. (See 1,470,524.)

1,725,742, J. A. Singmaster, Artificial silk filament and method of making same, filed Apr. 8, 1931, D. C., S. D. N. Y., Doc. E 59/113, *The New Jersey Zinc Co.* v. *J. A. Singmaster et al.*

1,731,775. (See 1,704,961.) 1,735,112. (See 1,306,116.)

1,739,208, J. L. Chaney, Method of and apparatus for sealing thermometer tubes, filed Apr. 8, 1931, D. C., S. D. Ohio, W. Div., Doc. E 293, *J. L. Chaney* v. *The Chaney Mfg. Co.*

1,743,081. (See 1,702,929.) 1,743,942. (See 1,704,961.)

1,748,863, H. B. Burke, Moisture eliminating ventilator, filed Mar. 14, 1931, D. C., W. D. La. (Shreveport), Doc. E 447, *Moisture Eliminators, Inc.*, v. *Capitol Amusement Co., Inc.*

1,781,478, T. H. Krueger, Package sealer, filed Apr. 1, 1931, D. C., S. D. N. Y., Doc. E 59/105, *The Schlegal Mfg. Co.* v. *H. Rubin.*

1,782,123. (See 1,194,752.)

1,792,422, Des. 80,787, Des. 81,976, J. Granat, Ring, filed Mar. 23, 1931, D. C., N. D. Calif. (San Francisco), Doc. 2814–K, *Granat Bros.* v. *Baker & Co., Inc.*

Re. 12,437, J. M. Truffault, Frictional retarding means for spring vehicles; 1,080,630, E. V. Hartford, Antivibration device for vehicles, D. C., N. D. Ohio, E. Div., Doc. 474, *E. V. Hartford et al.* v. *C. H. Foster (Gabriel Mfg. Co.).* Claim 1 of Re. 12,437 and claims 9 to 13, incl. of 1,080,630 held valid but not infringed (notice Mar. 31, 1931).

Re. 15,293, L. E. La Bombard, Blank feeder, filed Feb. 19, 1931, D. C. Minn. (St. Paul), Doc. E 2181, *Specialty Automatic Machine Co. et al.* v. *E. G. Staude Mfg. Co.*

Re. 16,618, J. B. Kemp, Pad holder, D. C., S. D. N. Y., Doc. E 45/59, *Clark Loose Leaf Mfg. Co.* v. *Keith Clark, Inc.* Decree for plaintiff Mar. 28, 1931.

Re. 16,825, M. H. Greenewalt, Method of and means for associating light and music, appeal filed Aug. 4, 1930, C. C. A., 3d Cir., Doc. 4469, *M. H. Greenewalt* v. *Stanley Co. of America.*

Re. 17,407, A. J. Lane, Vegetable spray, filed Dec. 11, 1930, D. C., S. D. Ohio (Dayton), Doc. E 280, *The Hamilton Mfg. Co.* v. *R. D. Schear.*

Re. 17,950, W. F. Herold, Compensating caster or slide, filed Apr. 1, 1931, D. C. Conn. (New Hoven), Doc. E 2119, *The Bassick Co.* v. *The Sprague Electrical Supply Co.*

Des. 80,787. (See 1,792,422.) Des. 81,976. (See 1,792,422.)

Des. 82,343, J. E. Phillips, Dish, Des. 82,422, W. P. Graham, same, filed Mar. 28, 1931, D. C., S. D. N. Y., Doc. E 59/90, *Graham & Zenger, Inc.*, v. *The Rosenthal China Corp. et al.*

Des. 82,422. (See Des. 82,343.)

Des. 83,080, A. von Frankenberg, Ash tray, filed Mar. 30, 1931, D. C., S. D. N. Y., Doc. E 59/102, *Frankart, Inc.*, v. *Art Novelty Co., Inc., et al.*

Trade-Marks Canceled

86,843. Combination kitchen-boilers and gas water-heaters. Victor Combination Kitchen Boiler Company, Oakland, Calif. Registered June 6, 1912. Canceled May 18, 1931.

138,840. Capsules for certain named ailments. The Morton Chemical Company, Seattle, Wash. Registered January 11, 1911. Canceled May 2, 1931.

154,019. Leathers. Excel Leather Co., Boston, Mass. Registered April 4, 1922. Canceled May 18, 1931.

240,261. Canned sardines. Garneau & De Bruyn, Inc., New York, N. Y. Registered March 20, 1928. Canceled May 15, 1931.

256,950. Radio loud-speakers, telephone receivers, and parts thereof. The Magnavox Company, Oakland, Calif. Registered May 28, 1929. Canceled May 18, 1931.

261,332. Paper towels and paper napkins. Daniels Manufacturing Company, Rhinelander, Wis. Registered September 17, 1929. Canceled May 2, 1931.

268,157. Coffees. Samaha Bros., Washington, D. C. Registered March 11, 1930. Canceled May 18, 1931.

271,136. Piston rings. Alltex Piston Ring Company, Brooklyn, N. Y. Registered May 27, 1930. Canceled May 2, 1931.

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, May 5, 1931.*

Salomon Bros., their assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Charles J. Wouters, of 3120 Harrison Street, Oakland, Calif., to effect the cancellation of the trade-mark registration of Salomon Bros., of 15 Burling Slip, New York, N. Y., No. 103,363, dated March 30, 1915, and the notice of such proceeding sent by registered mail to the said Salomon Bros. at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Salomon Bros., their assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, May 11, 1931.*

Quaker Hat Co., Inc., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Hodshon-Berg, Incorporated, Fifth Avenue and 57th Street, New York, N. Y., to effect the cancellation of the trade-mark registration of Quaker Hat Co., Inc., of 64–70 West 30th Street, New York, N. Y., No. 244,585, dated July 24, 1928, and the notice of such proceeding sent by registered mail to the said Quaker Hat Co., Inc., at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Quaker Hat Co., Inc., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 2, 1931

[VOL. 407. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 301,453. INDIANA LIMESTONE COMPANY, Bedford, Ind., and New York, N. Y. Filed May 28, 1930.

ILCO SAKS RUSTIC BUFF

No claim being made to the exclusive use of the words "Saks Buff," apart from the mark as shown in the drawing. Applicant is the owner of registration No. 281,038.

For Building Stone as it Comes from the Quarry.

Claims use since May, 1926.

Ser. No. 301,456. INDIANA LIMESTONE COMPANY, Bedford, Ind., and New York, N. Y. Filed May 28, 1930.

ILCO SANDERS RUSTIC

No claim being made to the exclusive use of the word "Sanders," apart from the mark as shown in the drawing. Applicant is the owner of registration Number 281,038.

For Building Stone as it Comes from the Quarry.

Claims use since May, 1926.

Ser. No. 312,670. THE PHILADELPHIA AND READING COAL AND IRON COMPANY, Philadelphia, Pa. Filed Mar. 28, 1931.

STŌK-R-KŌL

The exclusive use of the word "Kol" is disclaimed apart from the mark as shown on the drawing.

For Coal.

Claims use since Mar. 20, 1931.

Ser. No. 313,329. CARLL & SON, Washington, D. C. Filed Apr. 14, 1931.



WHITE HOUSE

For Garden, Field, and Flower Seed.

Claims use since 1913.

Ser. No. 313,608. OLD BEN COAL CORPORATION, Chicago, Ill. Filed Apr. 21, 1931.

DIXIANA

For Coal.

Claims use since Apr. 1, 1931.

Ser. No. 313,657. CARL FREUDENBERG, INC., Boston, Mass. Filed Apr. 22, 1931.

Wotan

For Leather.

Claims use since Mar. 31, 1931.

CLASS 2

Receptacles

Ser. No. 312,536. SONOCO PRODUCTS COMPANY, Hartsville, S. C. Filed Mar. 25, 1931.

HYDROTEX
SONOCO

For Paper Cones or Tubes for Winding Threads and Yarns.
Claims use since Feb. 1, 1930.

Ser. No. 313,155. LEAH H. ROBINSON, Duluth, Minn. Filed Apr. 9, 1931.

PARK A BITE

For Fabric Lunch Bags.
Claims use since Apr. 4, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 311,375. DOROTHY GRAY, Bloomfield, N. J., and New York, N. Y. Filed Feb. 24, 1931.

Dorothy Gray

The trade-mark is a facsimile of the signature of applicant's predecessor in business.
For Toilet or Dressing Cases, Overnight Bags, and Fitted Hand Baggage.
Claims use since Mar. 16, 1920.

CLASS 4

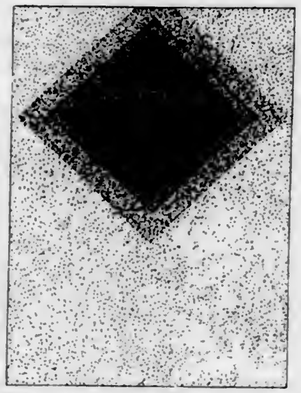
Abrasive, Detergent, and Polishing Materials

Ser. No. 306,554. THE B-Y COMPANY, Providence, R. I. Filed Oct. 9, 1930.



In the drawing the parts lined with vertical parallel lines are red, and the parts lined with crossing vertical and horizontal lines are black. The words "Be-Wise" and the border lines are black.
For Washing Preparation for Silk and Rayon Fabrics and the Like.
Claims use since Aug. 20, 1930.

Ser. No. 307,432. FLORA HOLMES SHOEMAKER, doing business as The Frostilla Company, Elmira, N. Y. Filed Oct. 31, 1930.



The following color scheme is essential: The background is light grey; the area of the smallest diamond is black; the visible area of the middle diamond is dark blue and that of the largest diamond greyish blue. The lettering is in yellow or gold.
For Nonsaponaceous Beard-Softening Preparations Useful as an Aid Both During and After Shaving.
Claims use since Sept. 9, 1930.

Ser. No. 311,429. GABILLA, INCORPORATED, New York, N. Y. Filed Feb. 25, 1931.

MODA

For Toilet Soap.
Claims use since 1920.

Ser. No. 312,547. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Mar. 26, 1931.



Applicant makes no claim herein to the words "Crème à raser" or to the representation of the carton appearing on the drawing. The horizontal lining on the drawing denotes the color blue, the oblique lining denotes the color green and the cross-hatching denotes the color yellow.
For Shaving Cream.
Claims use since September, 1927.

Ser. No. 312,605. E. F. HOUGHTON & CO., Philadelphia, Pa. Filed Mar. 27, 1931.

GOLDEN
WONDER POWDER

No claim is made to the word "Powder" apart from the mark as shown.
For Compounds in Powdered Form for All Scouring Purposes.
Claims use since October, 1929.

Ser. No. 312,624. PHILADELPHIA QUARTZ COMPANY, Philadelphia, Pa. Filed Mar. 27, 1931.

METSO

For Cleansing Compound Containing Silicate of Soda and Especially Useful for Industrial Cleaning of Food Containers, Metals, Glass, Ceramics, Textiles, and the Like.
Claims use since Oct. 10, 1930.

Ser. No. 312,780. WILLIAM T. VASSILATOS, doing business as The Crystal Shoe Polish Manufacturing Co., Chicago, Ill. Filed Mar. 31, 1931.

CRYSTAL
THE CRYSTAL SHOE POLISH AND DRESSING CO.

For Leather Dressings and Polishes for Shoes.
Claims use since Sept. 23, 1929.

Ser. No. 313,542. THOMAS HEDLEY & COMPANY, LIMITED, Newcastle-on-Tyne, England. Filed Apr. 20, 1931.

SUPEROL

For Toilet Soap.
Claims use since November, 1927.

Ser. No. 313,655. THE J. B. FORD COMPANY, Wyandotte, Mich. Filed Apr. 22, 1931.

Wyandotte
H-D-C

For Cleaning, Cleansing, and Detergent Materials Particularly Adapted for Kitchen and Family Use.
Claims use since January, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 281,038. R. B. MIZRAHI, doing business as Laboratorium Mizrahi, Mexico City, Mexico. Filed Mar. 20, 1929.



For Medicinal Cream for Skin Treatment, Liquid, Powder, and Cream Dentifrice; Cold Cream, Vanishing Cream, Eau de Cologne, Toilet Water, Perfume, Brilliantine, Lip Stick, Rouge, Face and Talc Powder.
Claims use since Dec. 1, 1925.

Ser. No. 297,798. JAMES B. DAVIDSON, doing business as Exodol Mfg. Co., Newark, N. J. Filed Mar. 24, 1930.

"Exodol"

For Mouth Wash.
Claims use since 1922.

Ser. No. 304,890. THE RESEARCH LABORATORIES, Warren, Pa. Filed Aug. 21, 1930.



The lining upon the drawing is intended merely for shading and not to indicate any particular color. The words "Warren, Pa.," appearing upon the drawing are hereby disclaimed apart from the mark as here shown.
For Anti-Freeze Compound for Automobile Radiator.
Claims use since Aug. 1, 1930.

Ser. No. 308,047. VERKAUFSSTELLE DES INTERNATIONALEN SÜSSTOFF-SYNDIKATS GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Hamburg, Germany. Filed Nov. 18, 1930.



The lining is used for shading purposes only.
For Artificial Sweetening Substances and Combinations of the Same to be Used as Medicaments for Diabetics and as Substitutes for Sugar.
Claims use since March, 1930.

Ser. No. 308,620. FRED FEAR & CO., Brooklyn, N. Y. Filed Dec. 5, 1930.



For Dyes—Namely, Easter Egg Dyes.
Claims use since Nov. 19, 1930.

Ser. No. 311,023. HAGOP BAGDIGIAN, Highland Park, Mich. Filed Feb. 13, 1931.

EXOTIC GARDEN AID
HAIR GROWER



The exclusive use of the words "Aid Hair Grower" are disclaimed apart from the mark as shown. The portrait is that of the applicant.
For Hair Tonic in Liquid and Ointment Form for Use in Assisting the Growth of Hair.
Claims use since Feb. 3, 1931.

Ser. No. 311,097. GREENVILLE PRODUCTS CO., Greenville, Ala. Filed Feb. 16, 1931.

FERRAC

For Prepared Mineral Water Used as a Medical Preparation.
Claims use since Jan. 3, 1931.

Ser. No. 311,626. SAMUEL A. SELIG, doing business as Selig Remedy Company, Detroit, Mich. Filed Mar. 2, 1931.

NO-CID-OL

For Stomach Medicine for Indigestion.
Claims use since Apr. 1, 1930.

Ser. No. 312,049. SEBASTIAN GYSIN, doing business as Modern Health Products, Milwaukee, Wis. Filed Mar. 12, 1931.



The words "Modern Health Products" are disclaimed apart from the mark as shown.
For a Laxative Compounded from Herbs and Vegetables, for Table Salt, and for a Reducing Tea Compounded From Herbs and Unsprayed Fruits.
Claims use since Jan. 15, 1931.

Ser. No. 312,364. CRYSTAL SOAP & CHEMICAL CO., INC., Philadelphia, Pa. Filed Mar. 21, 1931.

C.P.O.

For Preparation Used as a Spreader in Conjunction with Contact Insecticides.
Claims use since Jan. 1, 1930.

Ser. No. 312,443. THE MEDOMINT CO., INC., Lynchburg, Va. Filed Mar. 23, 1931.

MEDOMINT

Exclusive use of the word "Mint" being disclaimed apart from the mark shown.
For Medicine for Constipation, Indigestion, Dyspepsia, and Other Stomach Troubles.
Claims use since Apr. 7, 1925.

Ser. No. 312,502. CHARLES C. VAN CLEVE, doing business as Van Charme Toiletries, Kansas City, Mo. Filed Mar. 24, 1931.



For Perfume, Toilet Water, Face Powder, Cold Cream, Toilet Powder, Deodorants, Body Dusting Powder, Cleansing Creams, Tissue Creams, Acne Cream, Facial Pack, Bleaching Cream, Skin Lotion, Astringent Lotion, Permanent Wave Oil, Muscle Oil, Manicure Lotions, Nail Enamel, and Rouge, Powder, and Lip Stick Compacts.
Claims use since Mar. 1, 1931.

Ser. No. 312,618. FREDERICK H. MÜLLER, doing business as F. H. Muller & Co., Chicago, Ill. Filed Mar. 27, 1931.



For Toilet Preparation Consisting of a Cream-Like Ointment.
Claims use since Feb. 1, 1898.

Ser. No. 312,630. SOCIETE ANONYME JEAN PATOU, Paris, France. Filed Mar. 27, 1931.

Cocktail de Poudre

Applicant is the owner of registered Trade-Mark No. 258,643. The words "de Poudre" being disclaimed apart from the mark shown on the drawing.
For Face Powder, Talcum Powder, and Sachet Powder.
Claims use since Jan. 30, 1931.

Ser. No. 312,631. SOCIETE ANONYME JEAN PATOU, Paris, France. Filed Mar. 27, 1931.

Powder Cocktail

Applicant is the owner of registered Trade-Mark No. 258,643. The word "Powder" being disclaimed apart from the mark shown on the drawing.
For Face Powder, Talcum Powder, and Sachet Powder.
Claims use since Jan. 30, 1931.

Ser. No. 312,721. THE SANO PRODUCTS CO. INC., Binghamton, N. Y. Filed Mar. 30, 1931.

Car-Ox

For Scientific Medicinal Preparation Formulated to Stimulate and Revitalize the Scalp and to Promote the Growth of Hair.
Claims use since May, 1931.

Ser. No. 312,728. GANE'S CHEMICAL WORKS, INC., New York, N. Y. Filed Mar. 28, 1931.

GUPHEN

For Medicinal Preparation for Treating Diseases of the Upper Respiratory Passages, Such as Bronchitis, Bronchial Pneumonia, Influenzal Colds, and Also in Treating So-Called Rheumatic Conditions.
Claims use since January, 1931.

Ser. No. 312,819. HELENE TANNER, Haddonfield, N. J. Filed Apr. 1, 1931.



The applicant disclaims the words "Helene Tanner" appearing on the drawing of the trade-mark apart from the mark as shown.
For Cold Cream and Skin Tonic.
Claims use since Jan. 1, 1930.

Ser. No. 312,820. THE URBANA LABORATORIES, Urbana, Ill. Filed Apr. 1, 1931.

RICH-OR-POOR

For Solution for Testing Soils for Acidity.
Claims use since February, 1922.

Ser. No. 312,826. JOHN G. WAGNER, San Francisco, Calif. Filed Apr. 1, 1931.



The words "Supreme" and "Salve" are disclaimed apart from the mark "Kan-Rem-Al" as shown.
For Salve for the Treatment of Cancer.
Claims use since Aug. 1, 1930.

Ser. No. 312,870. HENRY TETLOW COMPANY, Philadelphia, Pa. Filed Apr. 2, 1931.

THEME SONG



For Face Powder, Talcum Powder, Dusting Powder, Powder Compacts, Rouge Compacts, Perfumery, Toilet Water, Cold Cream, Vanishing Cream, Cleansing Cream, Tissue Cream, Lip Sticks, Skin Lotions, Astringent, Sachet Powder, and Shampoo.
Claims use since June 1, 1930.

Ser. No. 312,891. WALTER SCHWARTZ, Yonkers, N. Y. Filed Apr. 2, 1931.

EFFESPRAY

For Liquid Preparations Used in and Beneficial for the Reducing of Congestion of the Mucous Membranes of the Nose.
Claims use since December, 1929.

Ser. No. 312,907. THE EUSEY CO., LTD., Los Angeles, Calif. Filed Apr. 3, 1931.

CLOE'S BLEACH

The descriptive word "Bleach" is disclaimed apart from the mark shown on the drawing.
For Bleach and Water Softener Having Cleaning, Deodorizing, and Disinfecting Properties.
Claims use since Feb. 19, 1931.

Ser. No. 312,989. Z. L. HAWORTH, Kansas City, Mo. Filed Apr. 6, 1931.



For Liquid Medical Preparation for Use in Intravenous Treatment of Swine for Swine Fever and Like Conditions.
Claims use since Mar. 28, 1931.

Ser. No. 313,415. EINAR GEORGE BAGGER, New York, N. Y. Filed Apr. 16, 1931.

"SNOW"

For Depilatories in Liquid, Powder, and Paste Forms.
Claims use since Jan. 1, 1931.

Ser. No. 313,424. THE DRUG PRODUCTS CO., INC., Long Island City, N. Y. Filed Apr. 16, 1931.

Pitovaco

For Preparation Used in Selected Cases of Amenorrhea, Dysmenorrhea, and Menopause.
Claims use since Mar. 27, 1931.

Ser. No. 313,440. SAMUEL G. LEVIN, doing business as Medicinal Health Laboratories, New York, N. Y. Filed Apr. 16, 1931.

KRUCIAL

For Medicinal Preparation for the Alleviation of Pain in Liquid, Capsule, Pill, and Powder Forms.
Claims use since Nov. 5, 1931.

Ser. No. 313,445. NEPTUNE TRADING CORPORATION, New York, N. Y. Filed Apr. 16, 1931.

BATHCHARM

For Bath Salts.
Claims use since Mar. 31, 1931.

Ser. No. 313,592. THE ELECTROVITA COMPANY, San Francisco, Calif. Filed Apr. 21, 1931.

"ELECTROVITA"

For Semi-Organic Preparation Serving to Eliminate Toxic Matter from the Human System.
Claims use since September, 1922.

CLASS 7

Cordage

Ser. No. 308,353. BRITISH ROPES, LIMITED, London, England. Filed Nov. 28, 1930.

VALLIUM

For Steel Ropes, Cables, and Strands.
Claims use since Nov. 20, 1929.

Ser. No. 313,102. WRIGHTS' ROPES LTD., Birmingham, England. Filed Apr. 8, 1931.

TRICOR

For Wire Rope.
Claims use since Sept. 3, 1930.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 313,298. THE KILGORE MFG. COMPANY, Westerville, Ohio. Filed Apr. 13, 1931.

Peppy

For Paper Caps for Toy Fire Arms.
Claims use since Oct. 16, 1930.

CLASS 12

Construction Materials

Ser. No. 298,633. THE HIGGINSON MANUFACTURING COMPANY, Newburgh, N. Y. Filed Apr. 10, 1930.



For Plaster.
Claims use since April, 1877.

Ser. No. 303,838. CRAB ORCHARD STONE CO., INC., Nashville, Tenn. Filed July 26, 1930.



No claim is made to the word "Quartzite" apart from the mark as shown.
For Quartzite for Rubble and Building Stone and for Roofing and Side Walls, Floors, Flagging, Benches, and Like Uses Ready for Use.
Claims use since January, 1926.

Ser. No. 305,636. UNIVERSAL ATLAS CEMENT COMPANY, Chicago, Ill. Filed Sept. 12, 1930.



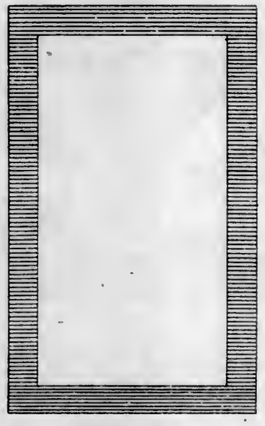
The trade-mark comprises the color combination of brown, blue, and yellow. The drawing is lined for color.
For Building Cement.
Claims use since May 11, 1930.

Ser. No. 305,637. UNIVERSAL ATLAS CEMENT COMPANY, Chicago, Ill. Filed Sept. 12, 1930.



The trade-mark comprises the color combination of brown, blue, and yellow, as shown in the accompanying drawing which is lined for color.
For Building Cement.
Claims use since May 11, 1930.

Ser. No. 306,530. GRAND RAPIDS PLASTER COMPANY, Grand Rapids, Mich. Filed Oct. 8, 1930.



The trade-mark is a blue border on the edge of the sack.
For Plaster.
Claims use since May 13, 1930.

Ser. No. 306,818. LOUIS J. LEHMAN, doing business as Emulsified Asphalt and Application Company, North Hollywood, Calif. Filed Oct. 16, 1930.

EMULS-I-FALT

For Emulsified Asphalt.
Claims use since July 1, 1929.

Ser. No. 309,651. NORTH AMERICAN REFRACTORIES COMPANY, Cleveland, Ohio. Filed Jan. 6, 1931.

Narco
505
FURNACE PATCH

The words "Furnace Patch" are disclaimed apart from the mark shown.
For Plastic Fire Brick Material Used for Patching Furnace Walls and Building of Solid Monolithic Linings.
Claims use since Dec. 17, 1929.

Ser. No. 312,947. EL REY PRODUCTS CO., Los Angeles, Calif. Filed Apr. 4, 1931.

TRI TAB

For Composition Shingles.
Claims use since August, 1928.

Ser. No. 313,358. ROCK OF AGES CORPORATION, Burlington, Vt. Filed Apr. 13, 1931.



For Polished Blocks or Slabs of Granite, and Granite Hewn, Dressed, Pointed, Pitched, Polished, or Otherwise Manufactured and Suitable for Use for Monumental or Building Purposes.
Claims use since May 22, 1924.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 296,780. ALBERT L. SOTHEN, doing business as Reliance Distributing Co., Chicago, Ill. Filed Mar. 3, 1930.

MACKS

For Dancing Toe Taps, Heel Plates, and Toe and Foot Supporters.
Claims use since October, 1919.

Ser. No. 305,617. LEYSE ALUMINUM COMPANY, Kewaunee, Wis. Filed Sept. 12, 1930.

PRISCILLA

For Aluminum Kitchen and Serving Utensils Consisting of Angel Food Cake Pans, Bake Dishes, Bread Pans, Bread Raisers, Cake Pans, Coffee Pots, Colanders, Combination Cookers, Convex Kettles, Convex Sauce Pans, Convex Stock Pots, Cooky Pans, Corn Poppers, Covers, Cups, Dippers, Dish Pans, Double Boilers, Drain Kettles, Drip Pans, French Fryers, Fruit Funnels, Fry Pans, Griddles, Griddle Cake Covers, Ladles, Lipped Preserving Kettles, Lipped Sauce Pans, Mixing Bowls, Muffin Pans, Percolators, Percolator Inserts, Pie Plates, Preserving Kettles, Pudding Pans, Rectangular Trays, Refreshment Sets (Pitcher, Tumblers, Tray), Roasters, Stew Pans, Stock Pots, Strainer and Colander, Strainer Ladles, Strainer Pans, Tea Kettles, Tea Kettle Insets, Tea Pots, Torte Pans, Trays, Tubed Cake Pans, Tumblers, Utility Pans, Wash Basins, Water Pitchers, and for Lawn Sprinklers.
Claims use since June 14, 1915.

Ser. No. 312,822. WASHERLESS VALVE CO. LTD., San Francisco, Calif. Filed Apr. 1, 1931.

CAM-HAR

For Hardware and Plumbing Supplies—Namely, Flushing Valves, Water Faucets, Water Sprinklers, Pet-Cocks, Ball Cocks, Check Valves, and Valves for Tanks and Troughs.
Claims use since September, 1930.

Ser. No. 313,466. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio. Filed Apr. 17, 1931.

CONTINENTAL

For Wire Fencing, Including Farm Fence, Poultry Fence, Industrial Fence, and Ornamental Fence Made of Wire and Iron, and Gates therefor of the Materials, and Barbed Wire and Nails.
Claims use since Mar. 16, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 311,582. GRANITE CITY STEEL COMPANY, Granite City, Ill., and Wilmington, Del. Filed Feb. 26, 1931.

CG
CULVERT COPPER STOCK
IRON
MANUFACTURED BY
GRANITE CITY STEEL CO.
GRANITE CITY, ILL.

All of the wording which appears on the drawing with the exception of the letters "CG" is disclaimed apart from the mark shown.
For Copper Iron Culvert Stock.
Claims use since Jan. 1, 1930.

Ser. No. 311,583. GRANITE CITY STEEL COMPANY, Granite City, Ill., and Wilmington, Del. Filed Feb. 26, 1931.

CG
CULVERT COPPER STOCK
STEEL
MANUFACTURED BY
GRANITE CITY STEEL CO.
GRANITE CITY, ILL.

All wording which appears on the drawing with the exception of the letters "CG" is disclaimed apart from the mark shown.
For Copper Steel Culvert Stock.
Claims use since Jan. 1, 1930.

CLASS 15

Oils and Greases

Ser. No. 313,054. PIONEER TRUCK AND TRANSFER CO., El Centro, Calif. Filed Apr. 7, 1931.

BARBARA WORTH

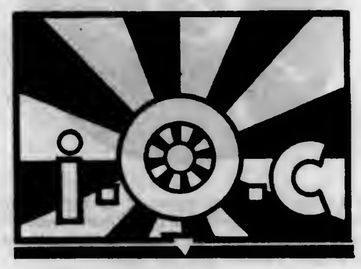


The portrait constituting a part of the drawing is purely fanciful.
For Gasoline, Lubricating Oil, Motor Fuel Oil, and Furnace Fuel Oil.
Claims use since Jan. 15, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 312,520. CHARLES F. KELLOM & CO. INC., Holmesburg, Philadelphia, Pa. Filed Mar. 25, 1931.



For Combined Liquid Auto Polisher and Cleaner; a Furniture Cream for Interior Wood, Furniture, and Enamels; a Liquid Wax for Floors, Linoleum, Woodwork, and Furniture; and a Paste Wax for Automobiles, Furniture, Linoleum, and Floors.
Claims use since November, 1930.

Ser. No. 312,701. THE DAVIES-YOUNG SOAP COMPANY, Dayton, Ohio. Filed Mar. 30, 1931.

BUCKEYE

For Liquid Wax for Floors, Linoleum, Furniture, and Automobiles.
Claims use since Feb. 20, 1931.

Ser. No. 312,796. THE DAVIES-YOUNG SOAP COMPANY, Dayton, Ohio. Filed Apr. 1, 1931.

AQUAWAX

For Liquid Wax for Rubber Floors, Rubber Tile, Asphalt Tile, Mastic Flooring, and All Floor Coverings Using Rubber in Their Composition.
Claims use since Feb. 20, 1931.

CLASS 17

Tobacco Products

Ser. No. 313,447. J. W. ROBERTS & SON, Tampa, Fla. Filed Apr. 16, 1931.

TAMPA ROYAL

For Cigars.
Claims use since 1905.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 307,434. STANDARD COMMERCIAL BODY CORPORATION, New York, N. Y. Filed Oct. 31, 1930.

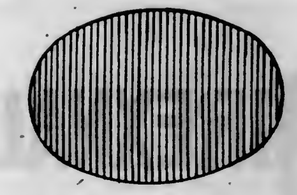
STANGARD

For Guards for Automobile Radiators.
Claims use since June 1, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 274,099. CHICAGO ELECTRICAL SUPPLY COMPANY, Chicago, Ill. Filed Oct. 22, 1928.



The shading in the drawing represents the color red applied to the entire oval figure.
For Electric Lighting Fixtures, Electric Wiring Conduits, Electric Wiring Supplies, Electric Motors.
Claims use since Feb. 1, 1928.

Ser. No. 287,350. TOMLINSON FORT JOHNSON, Atlanta, Ga. Filed July 19, 1929.



For Electrical Apparatus and Supplies Consisting of Transmission Clamps and Parts, Tap Clamps, Grounding Clamps, Live Line Dead End Clamps, Foreign Crossing Clamps, Buss Bar Fittings and Parts, Copper Tube Fittings and Parts, Gang Operated Switches and Parts, Stick Operated Switches and Parts, Skeet Disconnecting Switches, Gang Operated Fuses, Low Voltage Dropout Fuses, High Voltage Dropout Fuses, Repeating Fuses, Swith Lugs, Buss Bar Lugs, Platforms, Special Cross Arms, Cross Arm Braces, Wood and Porcelain Insulators, Skeet Heads, Heavy Duty Stirrups and Hooks, and Special Hardware for Pole Transmission Lines.

Claims use since December, 1923.

Ser. No. 296,731. DE FOREST RADIO COMPANY, Passiac, N. J. Filed Mar. 3, 1930.

—VIS-ION—

Applicant disclaims the word "Ion," also the word "Vision" is hereby disclaimed except in the connection shown.

For Electric Lamps, Glow Tubes, and Electron and Space Discharge Tubes for Use in Television and Picture Transmission; and Unitary Television and Picture Transmitting and Receiving Equipment.

Claims use since Jan. 29, 1930.

Ser. No. 296,746. JOHNSTON ELECTRIC AUTOMOBILE SIGNAL CO., Des Moines, Iowa. Filed Mar. 3, 1930.

DIREXNAL

For Electrically-Illuminated Automobile Direction Signal Semaphore.

Claims use since Oct. 16, 1929.

Ser. No. 310,356. UTAH RADIO PRODUCTS COMPANY, Chicago, Ill. Filed Jan. 24, 1931.

ISODYNE

For Radio Speakers.

Claims use since Jan. 19, 1931.

Ser. No. 311,194. NATIONAL UNION RADIO CORPORATION, Newark, N. J. Filed Feb. 18, 1931.

NATIONAL UNION

For Radio Electron Tubes.

Claims use since Feb. 14, 1931.

Ser. No. 312,635. ARCTURUS RADIO TUBE COMPANY, Newark, N. J. Filed Mar. 28, 1931.



Applicant disclaims, for purposes of registration only, the representation of the Greek letter apart from the mark as shown in the drawing. The cross lining on the drawing merely indicates shadow and not color.

For Electron Emissive Tubes and Parts Thereof.

Claims use since Jan. 5, 1931.

Ser. No. 312,930. SILVER-MARSHALL, INC., Chicago, Ill. Filed Apr. 3, 1931.

SUPERETTE

For Radio Receiving Sets, Kits for Radio Receiving Sets, Electric Pick-Ups for Phonographs, and Accessories and Parts Consisting of Aerials, Battery Eliminators, Binding Posts, Chokes, Coils, Coil Sets, Condensers, Dials, Grid Leaks, Jacks, Loud Speakers, Panel Boards, Potentiometers, Radio Amplifying Units, Radio Rectifying Units, Rheostats, Shields, Transformers, Electron Tubes, Tube Sockets, Tuning Units, Choke Coils, and Wire and Cable for Radio Sets and Apparatus.

Claims use since Feb. 27, 1931.

Ser. No. 312,953. WALTER KIDDE & COMPANY, INC., New York, N. Y. Filed Apr. 4, 1931.

SELEX

For Fire Detecting Systems, Comprising Electrically Actuated Alarm and Indicating Apparatus to Indicate the Presence and Location of Fire Upon the Actuation of a Heat Responsive Mechanism Included in the Electrical System.

Claims use since Jan. 15, 1931.

Ser. No. 313,382. THE MILLER COMPANY, Meriden, Conn. Filed Apr. 15, 1931.

SATURN

For Electric Lighting Fixtures and Lamps.

Claims use since Feb. 25, 1931.

Ser. No. 313,590. CONTINENTAL TIRE CORPORATION, Chicago, Ill. Filed Apr. 21, 1931.

BEST-BET

For Storage Batteries.

Claims use since Mar. 25, 1931.

Ser. No. 313,590. CONTINENTAL TIRE CORPORATION, Chidoing business as Argus Radio Tube Co., Providence, R. I. Filed Apr. 22, 1931.

ARGUS

For Electrical Vacuum Tubes and Valves.

Claims use since Feb. 18, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 309,970. GAESS & HOLLANDER, Long Island City, N. Y. Filed Jan. 14, 1931.

PHENOX PRODUCTS

No claim is made to the word "Products" apart from the mark shown in the drawing.

For Table Board Games Played with Pieces, Checker Men, and Chess Men; Toys—Namely, Dolls, Animals, Figures, Balls, Dice, Made from Composition.

Claims use since Oct. 9, 1930.

Ser. No. 311,690. MARION L. LUDWICK, Los Angeles, Calif. Filed Mar. 3, 1931.

RIDE-A-BUBBLE



For Safety Bathing Floats.

Claims use since June 10, 1930.

Ser. No. 313,247. MAX LANGENHAUN, Arnstadt, Germany. Filed Apr. 11, 1931.

Rola

For Billiard Tables, Cues, and Balls.

Claims use since July, 1930.

Ser. No. 313,845. ARTHUR FORSELIUS, doing business as Arrowhead Manufacturing Co., Ely, Minn. Filed Apr. 27, 1931.

FEROCIOUS FINN

For Artificial Bait for Fish.

Claims use since Feb. 1, 1930.

Ser. No. 313,846. ARTHUR FORSELIUS, doing business as Arrowhead Manufacturing Co., Ely, Minn. Filed Apr. 27, 1931.

ROTEREX

For Artificial Bait for Fish.

Claims use since Mar. 1, 1928.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 306,501. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa. Filed Oct. 7, 1930. Under 10-year proviso.

MIDVALE

For Roll Shells, Grinding Rings, Shafting, Rings for Reduction Gears, Turbine Bucket Wheels, High Pressure Cylinders, Steel Rolls, Crank Shafts, and Forged Cylinders.
Claims use since Mar. 1, 1881.

Ser. No. 312,310. H. K. PORTER, INC., Everett, Mass. Filed Mar. 19, 1931.



The color orange is claimed as a feature of the mark, the drawing being lined to indicate such color, no claim being made to the exclusive use of the representation of the carton per se.
For Portable Two-Hand Cutting-Off Metal-Working Tools and Parts Thereof.
Claims use since Feb. 8, 1931.

Ser. No. 312,863. THE SAW & KNIFE SPECIALTY CO., INC., Cleveland, Ohio. Filed Apr. 2, 1931.

SUPREME

Applicant is owner of trade-mark registration No. 267,911, issued Mar. 4, 1930.
For Saws of All Kinds, Machine Knives of All Kinds, and Files.
Claims use since January, 1920.

Ser. No. 312,934. UNIVERSAL RAZOR BLADE CORPORATION, New York, N. Y. Filed Apr. 3, 1931.

uni-matic

For Razor Blades and Razors.
Claims use since Jan. 27, 1931.

Ser. No. 313,134. IMPORTED & DOMESTIC NOVELTY CO., New York, N. Y. Filed Apr. 9, 1931.

"DAISY"

For Knitting Tool for Individual Use.
Claims use since first week in October, 1930.

Ser. No. 313,233. CHICAGO COIL SPRING CO., Chicago, Ill. Filed Apr. 11, 1931.

Unitest

For Valve Springs for Internal Combustion Engines.
Claims use since Mar. 7, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 294,477. H. KOHNSTAMM & CO., INC., New York, N. Y. Filed Jan. 7, 1930.



No claim is made herein to the registration of the representation of the goods, the names "New York" and "Chicago" and the word "Lock-Bar" apart from the mark shown in the drawing. The drawing is lined for the color red.
For Device for Marking and Identifying Laundry.
Claims use since October, 1929.

Ser. No. 295,439. PETRI BROS., Nashville, Tenn. Filed Jan. 31, 1930.

U-KNEAK

For Ironing Boards.
Claims use since Dec. 15, 1929.

Ser. No. 312,959. PEOPLE'S OUTFITTING COMPANY, Detroit, Mich. Filed Apr. 4, 1931.



The words "More Time for Leisure" are disclaimed apart from the mark as shown.
For Laundry Washing Machines.
Claims use since Mar. 25, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 284,525. DORFMANN BROS., Corona, N. Y. Filed May 23, 1929.



The thermometer feature shown in the drawing is disclaimed as a part of the trade-mark.
For Thermometers.
Claims use since Apr. 1, 1929.

Ser. No. 285,661. DAYTON SCALE COMPANY, Dayton, Ohio. Filed June 17, 1929.

INTERNATIONAL

For Automatic Weighing Scales.
Claims use since August, 1919.

Ser. No. 312,060. OPTISCHE WERKE G. RODENSTOCK, Munich, Germany. Filed Mar. 12, 1931.

Perfa

For Spectacle-Glasses.
Claims use since Feb. 21, 1928.

Ser. No. 312,491. ALBERT E. PENNICUICK, Hayward, Calif. Filed Mar. 24, 1931.

GEARFAX

For Slide-Rules and Scales Therefor.
Claims use since Mar. 7, 1931.

Ser. No. 313,287. EMPIRE MANUFACTURING COMPANY, New York, N. Y. Filed Apr. 13, 1931.

KOM-PACTO

For Drawing Boards, Triangles, and T Squares, Sold in Combination or Separately.
Claims use since Apr. 4, 1931.

Ser. No. 313,652. DU PONT-PATHÉ FILM MANUFACTURING CORPORATION, New York, N. Y. Filed Apr. 22, 1931.

TELEPAN

For Photographic Film.
Claims use since Apr. 18, 1931.

Ser. No. 313,746. METERICE, INCORPORATED, Los Angeles, Calif. Filed Apr. 24, 1931.

METER-ICE

For Automatic Coin Controlled Time Registering Electric Switches.
Claims use since Oct. 10, 1928.

Ser. No. 313,820. CALIBRON PRODUCTS, INC., East Orange, N. J. Filed Apr. 24, 1931.

CALIBRON

For Perspective Drawing Charts.
Claims use since Mar. 20, 1931.

Ser. No. 313,828. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed Apr. 27, 1931.

BALTEX

For Ophthalmic Lenses.
Claims use since Apr. 10, 1931.

CLASS 27

Horological Instruments

Ser. No. 279,851. ED. HEUER & CO. JULES JÜRGENSEN WATCH CO., Bienne, Switzerland. Filed Feb. 25, 1929. Under 10-year proviso.

JULES JURGENSEN

For Horological Instruments, Not Including Watch Springs.
Claims use since 1835.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 312,823. WEIDLICH STERLING SPOON CO., Fairfield, Conn. Filed Apr. 1, 1931.

Fiancée

For Table Silver-Ware—Namely, Hollow-Ware and Flat-Ware.
Claims use since Mar. 2, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 313,673. PYCOPE INCORPORATED, Joplin, Mo. Filed Apr. 22, 1931.

Pycopé

For Tootbbrushes.
Claims use since May 7, 1926.

CLASS 32

Furniture and Upholstery

Ser. No. 312,204. SOUTH BEND TOY MFG. CO., South Bend, Ind. Filed Mar. 16, 1931.

KINDERSET

For Juvenile Furniture—Namely, Chairs and Tables.
Claims use since Jan. 1, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 313,192. FRANK E. KELSEY, doing business as Health Heat Laboratories, Battle Creek, Mich. Filed Apr. 10, 1931.

"DUST VEIL"

For Filters for Hot Air Registers of Furnaces.
Claims use since Mar. 20, 1930.

Ser. No. 313,337. THE EMPIRE GAS BURNER CO., Easthampton, Mass. Filed Apr. 14, 1931.

EMPIRE GAS BURNER CO

For Gas Burners.
Claims use since Feb. 18, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 311,589. HARRY BETTONEY, doing business as Cundy-Bettoney Co., Boston, Mass. Filed Feb. 27, 1931.

MADELON

For Flutes, Piccolos, Clarinets, Saxophones, Oboes and Bassoons in All Sizes and Pitches.
Claims use since May, 1929.

CLASS 37

Paper and Stationery

Ser. No. 312,381. MCLAURIN-JONES CO., Brookfield, Mass. Filed Mar. 21, 1931.



The trade-mark consists of a blue stripe on the back or ungummed surface of the tape. No claim is made to the representation of the tape.
For Gummed Tape.
Claims use since May 19, 1926.

Ser. No. 312,464. S. E. & M. VERNON, INC., New York, N. Y. Filed Mar. 23, 1931.

SCHOOLIFE

For Blank Books and Loose Leaf Binders.
Claims use since Mar. 5, 1931.

Ser. No. 312,485. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Filed Mar. 24, 1931.



Butcher Boy

No claim to the word "Brand" is made apart from the mark as shown.
For Wrapping Paper.
Claims use since Feb. 2, 1931.

Ser. No. 313,048. MODERN TISSUES CORPORATION, New York, N. Y. Filed Apr. 7, 1931.

Antoinette Doré



The picture shown on the drawing is a fanciful one.
For Toilet Tissue and Facial Tissue.
Claims use since May, 1929.

Ser. No. 313,517. S. E. & M. VERNON INC., New York, N. Y. Filed Apr. 18, 1931.

BOOSTER

For Loose Leaf Binders and Blank Books.
Claims use since Mar. 6, 1931:

Ser. No. 313,624. A. P. W. PAPER COMPANY, INC., Albany, N. Y. Filed Apr. 22, 1931.

Viking

For Toilet Paper.
Claims use since November, 1895.

Ser. No. 313,627. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

PIRATE

For Black Lead Pencils.
Claims use since December, 1930.

Ser. No. 313,628. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

NEPTUNE

For Black Lead and Colored Pencils.
Claims use since Mar. 1, 1909.

Ser. No. 313,629. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

RECESS

For Black Lead Pencils.
Claims use since December, 1930.

Ser. No. 313,631. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

PRESS

For Lead Pencils.
Claims use since 1907.

Ser. No. 313,632. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

CONDOR

For Lead Pencils.
Claims use since 1921.

Ser. No. 313,711. KIMBERLY-CLARK CORPORATION, Neenah, Wis. Filed Apr. 23, 1931.

SPIKSPAN

For Wall Paper.
Claims use since Apr. 14, 1931.

Ser. No. 313,760. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed Apr. 24, 1931.

PENGUIN POST

For Correspondence Paper and Envelopes.
Claims use since Apr. 14, 1931.

CLASS 27

Horological Instruments

Ser. No. 279,851. ED. HEUER & CO. JULES JÜRGENSEN WATCH CO., Bienne, Switzerland. Filed Feb. 25, 1929. Under 10-year proviso.

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For Table Silver-Ware—Namely, Hollow-Ware and Flat-Ware.
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Brooms, Brushes, and Dusters

Ser. No. 313,673. PYCOPE INCORPORATED, Joplin, Mo. Filed Apr. 22, 1931.

Pycopé

For Toothbrushes.
Claims use since May 7, 1926.

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Furniture and Upholstery

Ser. No. 312,204. SOUTH BEND TOY MFG. CO., South Bend, Ind. Filed Mar. 16, 1931.

KINDERSET

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Claims use since Jan. 1, 1930.

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Claims use since May 19, 1926.

Ser. No. 312,464. S. E. & M. VERNON, INC., New York, N. Y. Filed Mar. 23, 1931.

SCHOOLIFE

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Ser. No. 312,485. MID-WEST WAX PAPER COMPANY, Fort Madison, Iowa. Filed Mar. 24, 1931.



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Ser. No. 313,048. MODERN TISSUES CORPORATION, New York, N. Y. Filed Apr. 7, 1931.

Antoinette Doré



The picture shown on the drawing is a fanciful one.
For Toilet Tissue and Facial Tissue.
Claims use since May, 1929.

Ser. No. 313,517. S. E. & M. VERNON INC., New York, N. Y. Filed Apr. 18, 1931.

BOOSTER

For Loose Leaf Binders and Blank Books.
Claims use since Mar. 6, 1931.

Ser. No. 313,624. A. P. W. PAPER COMPANY, INC., Albany, N. Y. Filed Apr. 22, 1931.

Viking

For Toilet Paper.
Claims use since November, 1895.

Ser. No. 313,627. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

PIRATE

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Claims use since December, 1930.

Ser. No. 313,628. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

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For Black Lead and Colored Pencils.
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Ser. No. 313,629. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

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Claims use since December, 1930.

Ser. No. 313,631. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

PRESS

For Lead Pencils.
Claims use since 1907.

Ser. No. 313,632. RICHARD BEST PENCIL COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

CONDOR

For Lead Pencils.
Claims use since 1921.

Ser. No. 313,711. KIMBERLY-CLARK CORPORATION, Neenah, Wis. Filed Apr. 23, 1931.

SPIKSPAN

For Wall Paper.
Claims use since Apr. 14, 1931.

Ser. No. 313,760. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed Apr. 24, 1931.

PENGUIN POST

For Correspondence Paper and Envelopes.
Claims use since Apr. 14, 1931.

Ser. No. 313,767. MILTON BRADLEY COMPANY, Springfield, Mass. Filed Apr. 25, 1931.

BRODLYNE

For Crayons.
Claims use since Apr. 2, 1931.

CLASS 38

Prints and Publications

Ser. No. 277,875. THE ESTATE STOVE COMPANY, Hamilton, Ohio. Filed Jan. 12, 1929.

The Estate Retailer

For Periodical Publication.
Claims use since March, 1924.

Ser. No. 294,955. GLADYS E. BROOKS, doing business as Spokane Shopping News, Spokane, Wash. Filed Jan. 20, 1930.

Spokane SHOPPING NEWS

For Guide to Shoppers, Printed Weekly.
Claims use since Nov. 8, 1929.

Ser. No. 307,060. THEO. A. SCHMIDT LITHOGRAPHING COMPANY, Chicago, Ill. Filed Oct. 22, 1930.



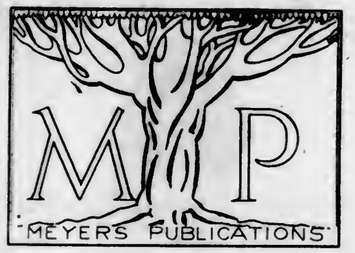
For Lithographically Printed Articles, More Particularly Advertising Pamphlets, Booklets, Folders, Circulars, and Reproductions of Paintings and Pictures.
Claims use since Aug. 20, 1930.

Ser. No. 312,640. LOUISA P. FORD, doing business as Ford Optical Co., Denver, Colo. Filed Mar. 28, 1931.

FORD'S

For Photographic Prints.
Claims use since Jan. 1, 1930.

Ser. No. 312,995. MEYERS PUBLICATIONS, INC., New York, N. Y. Filed Apr. 6, 1931.



The descriptive word "Publications" being disclaimed apart from the mark shown.
For Periodicals.
Claims use since April, 1930.

Ser. No. 313,104. JAMES C. ZOLL & SON, Baltimore, Md. Filed Apr. 8, 1931.

BIG • ZOL • PRINT

No claim is made to the word "Print" apart from the mark as shown in the drawing.
For Photo-Prints, Photostat Prints, Photographs, and Blue Prints.
Claims use since Jan. 2, 1931.

Ser. No. 313,128. SALVADOR MILTON FERRER, New York, N. Y. Filed Apr. 9, 1931.



Ferrer
Spearhead
Advertising

No claim is made to the word "Advertising" except in association with the rest of the mark.
For Advertising Material, Sold as Such, Consisting of Plans, Analyses, Research, Copy Writing, Layouts, Illustrations (Photographs and Art Work), Photoengravings, Booklets, Catalogues, Folders, Circulars, Letters, and Display Cards.
Claims use since Mar. 6, 1931.

CLASS 39

Clothing

Ser. No. 300,782. CARSON PIRIE SCOTT & CO., Chicago, Ill. Filed May 19, 1930.



No exclusive claim is made for the words "For Health & Comfort" apart from the mark shown in the drawing.
For Underwear for Men.
Claims use since Dec. 15, 1929.

Ser. No. 304,086. NIHON TABI KABUSHIKI KAISHA, Kurume, Japan. Filed July 29, 1930.



For Rubber Footwear of All Kinds—Crepe Rubber-Soled Canvas Shoes, Patent Heeled Rubber-Soled Canvas Shoes, Heeled Rubber-Soled Canvas Shoes, Rubber-Soled Canvas Shoes, Rubber-Soled Canvas One Strap Shoes, Rubber-Soled Velveteen One Strap Shoes, Rubber-Soled Canvas Plimsolls Shoes (the Above-Listed Types of Footwear are Manufactured in All Colors).
Claims use since July 1, 1914.

Ser. No. 304,555. GROSS MILLINERY CO. INC., Trenton, N. J. Filed Aug. 13, 1930.

New York
Woodlawn
Fine Millinery
Paris

Applicant disclaims the right to the exclusive use of the words "Fine Millinery" and of the terms "New York" and "Paris".
For Women's, Misses', and Children's Hats.
Claims use since June, 1929.

Ser. No. 307,655. LEO M. COOPER, doing business as Leo M. Cooper Co., New York, N. Y. Filed Nov. 6, 1930.

WHITE SWAN
UNIFORMS

Applicant disclaims the right to the exclusive use of the word "Uniforms."
For Men's Professional and Work Uniforms—Namely, Coats, Smocks, Gowns, Frocks, Caps, Neckties, Vests, and Aprons.
Claims use since May 20, 1930.

Ser. No. 307,779. KNOX HAT COMPANY, INC., New York, N. Y. Filed Nov. 11, 1930.

Continental by KNOX

FIFTH AVENUE NEW YORK

No claim being made in this application to the exclusive right to the use of the address "Fifth Avenue, New York."
For Hats for Men.
Claims use since Aug. 28, 1930.

Ser. No. 308,375. LANNER BROTHERS, New York, N. Y. Filed Nov. 28, 1930.



The word "Valencia" forms a part of the registration sought only in association with the other features of the mark shown in the drawing.
For Hosiery.
Claims use since Apr. 1, 1930.

Ser. No. 311,007. SIGNATURE HOSIERY COMPANY, INC., Philadelphia, Pa., and New York, N. Y. Filed Feb. 12, 1931.

Signature

For Hosiery.
Claims use since Dec. 17, 1930.

Ser. No. 311,487. PROMENADE HOSIERY MILLS, INC., New York, N. Y. Filed Feb. 26, 1931.



For Hosiery.
Claims use since Sept. 4, 1929.

Ser. No. 311,576. PAUL D. SWAYZE, doing business as Utility Design Company, Kansas City, Mo. Filed Feb. 28, 1931.

MADE-RITE

The descriptive words "Made-Rite" are disclaimed apart from the other features of the mark shown in the drawing.
For Suspenders.
Claims use since Mar. 10, 1930.

Ser. No. 312,044. ADELAIDE LOUISA SPEECHLEY THOMAS EARLES, doing business as Epoch Delivery Co., Hadleigh, England. Filed Mar. 12, 1931.

ALTRUIST

For Garters, Suspenders (for Wear), and Collars (for Wear).
Claims use since Oct. 23, 1930.

Ser. No. 312,116. THE PALAIS ROYAL, INC., Washington, D. C. Filed Mar. 13, 1931.



The representation of a boy is fanciful.
For Children's Shoes of Leather, Rubber, and Fabric, and Any Combination of These Materials.
Claims use since Mar. 9, 1931.

Ser. No. 312,410. BROADSTREETS, INC., New York, N. Y. Filed Mar. 23, 1931.

"BROAD-WEAVE"
A Finer Broadcloth exclusive with
Broadstreet's
NEW YORK

No claim is made to the exclusive use of the words, "Broad-Weave," "A Finer Broadcloth Exclusive with," "New York," separate and apart from the mark as shown on the drawing.
For Men's and Boys' Dress, Negligee, and Work Shirts.
Claims use since Mar. 1, 1931.

Ser. No. 312,602. EAGLE KNITTING MILLS, Milwaukee, Wis. Filed Mar. 27, 1931.

SNOW-LARK

For Knitted Snow Suits and Knitted Leggins.
Claims use since Mar. 3, 1931.

Ser. No. 312,603. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed Mar. 27, 1931.

VICTORY 3

For Boots and Shoes of Leather, Rubber, or Fabric or Any Combination Thereof, Having Leather Soles.
Claims use since Mar. 10, 1931.

Ser. No. 312,762. M. S. LEVY & SONS INCORPORATED, Baltimore, Md. Filed Mar. 31, 1931.

FLEET STREET

For Men's Hats.
Claims use since Mar. 2, 1931.

Ser. No. 312,837. BROWN'S BEACH JACKET COMPANY, Worcester, Mass. Filed Apr. 2, 1931.



The mark comprises a likeness of the president of applicant corporation.
For Knitted Sweaters, Coats, Vests, and Jackets.
Claims use since Mar. 23, 1931.

Ser. No. 312,866. FRANKLIN SIMON & CO. INC., New York, N. Y. Filed Apr. 2, 1931.

Jama-Slip

No claim being made to the exclusive use of the word "Slip" apart from the mark as shown in the drawing.
For Wearing Apparel—Namely, Slips and Pajamas.
Claims use since Feb. 11, 1931.

Ser. No. 313,017. WOODBURY SHOE MFG. CO., Derry, N. H. Filed Apr. 6, 1931.

THRIFTY'THREE'

For Men's, Women's, and Children's Boots, Shoes, Sandals, and Slippers Made Wholly or in Part of Leather, Rubber, Canvas, or Textile Material.
Claims use since Mar. 1, 1931.

Ser. No. 313,031. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Apr. 7, 1931.

PARGORA

For Coats, Vests, Pants, and Overcoats for Men and Boys.
Claims use since July 1, 1930.

Ser. No. 313,140. S. MAKRANSKY AND SONS, INC., Philadelphia, Pa. Filed Apr. 9, 1931.

GUANAMAK

For Men's Suits, Overcoats, and Topcoats.
Claims use since Mar. 16, 1931.

Ser. No. 313,246. KOPS BROS. INC., New York, N. Y. Filed Apr. 11, 1931.

Dia-flex

For Corsets, Brassières, and Girdles and Combinations of Same.
Claims use since Mar. 23, 1931.

Ser. No. 313,304. PANAMA GLOVE COMPANY, Los Angeles, Calif. Filed Apr. 13, 1931.

HU-JO

For Gloves and Mittens of Leather and Fabric.
Claims use since Mar. 28, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 312,553. THE DAYTON COMPANY, Minneapolis, Minn. Filed Mar. 26, 1931.

NOKOMIS

For Textile Rugs.
Claims use since Feb. 25, 1931.

Ser. No. 312,886. COHEN, GOLDMAN & CO. INC., New York, N. Y. Filed Apr. 2, 1931.

WEATHER-TEX

For a Woven Fabric Made from Wool.
Claims use since Mar. 14, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 311,099. MILLER DRUG SUNDRY COMPANY, Baltimore, Md. Filed Feb. 16, 1931.

Royal Satin

For Prophylactic Rubber and Membraneous Articles for the Prevention of Contagious Diseases.
Claims use since 1912.

Ser. No. 311,547. THE KENDALL COMPANY, Boston, Mass., and Chicago, Ill. Filed Feb. 28, 1931.

THERMAT

For Chemical Heaters, Used for Therapeutic Purposes.
Claims use since Feb. 3, 1931.

Ser. No. 312,530. RESEARCH PRODUCTS CORPORATION, New York, N. Y. Filed Mar. 25, 1931.

DECOTIZED

For Dental Alloy.
Claims use since Mar. 24, 1931.

Ser. No. 312,644. GROUT & COMPANY, LIMITED, Norfolk, England. Filed Mar. 28, 1931.

NORVIC

For Bandages and Abdominal Binders or Supports (Medical and Surgical).
Claims use since Sept. 20, 1921.

Ser. No. 313,676. SANI-GARD PRODUCTS, LTD., Los Angeles, Calif. Filed Apr. 22, 1931.

SANI-GARD

For Sanitary Belts.
Claims use since Mar. 18, 1931.

Ser. No. 313,677. SANI-GARD PRODUCTS, LTD., Los Angeles, Calif. Filed Apr. 22, 1931.

SANI-GARD

For Sanitary Pad-Holders.
Claims use since Mar. 18, 1931.

Ser. No. 313,775. LAWRENCE D. ELLIS, doing business as Ellis Machine and Tool Company, Toledo, Ohio. Filed Apr. 25, 1931.

Ear-o-tone

For Electrical Vibrator and Massage Machine for the Ears.
Claims use since Mar. 31, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 312,849. JINNY RICKY LABORATORIES, INC., Springfield, Mass. Filed Apr. 2, 1931.



The drawing is lined for shading only. No claim is made to the words "Jinny Ricky," "Made By," and "Springfield, Mass.," except in the association shown in the drawing.
For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Mar. 5, 1931.

Ser. No. 313,769. ALEX A. COHEN, doing business as Alco Advertising & Supply Co., Providence, R. I. Filed Apr. 25, 1931.

LOLYADE

For Non-Alcoholic, Non-Cereal Maltless Beverages Sold as Soft Drinks, Sirups and Extracts for Making the Same.
Claims use since May 10, 1930.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 294,106. W. A. BAUER CO., Norristown, Pa. Filed Dec. 27, 1929.

NOR-MONT

For Coffee and Canned Vegetables.
Claims use since Oct. 27, 1930.

Ser. No. 298,792. COLORADO HONEY SALES CORPORATION, Montrose, Colo., and Elmhurst, N. Y. Filed Apr. 14, 1930.

Mountain Bloom

For Honey.
Claims use since Feb. 1, 1928.

Ser. No. 304,101. HEN HOUSES, INC., Minneapolis, Minn. Filed Aug. 1, 1930.

Hen House

For Prepared and Cooked Fowl.
Claims use since June 25, 1930.

Ser. No. 306,740. MEZŐGAZDASÁGI TERMÉNY ES TERMÉKFORGALMI INTÉZET, Budapest, Hungary. Filed Oct. 14, 1930.

ÁLLAMI ÁRUJEGY
MAGYARORSZÁG
UNGARN HONGRIE
MAGYAR DISZNÓZSIR
UNGARISCHES SCHWEINEFETT
SAINDOUX HONGROIS
STAATLICHE WARENMARKE MARQUE D'ETAT

The cross hatchings are only illustrated for the purpose of differentiating light and dark colouring and are not intended to indicate any particular colours. The descriptive and geographical reading matter on the drawing as follows, Allami Arujegy, Staatliche Warenmaeke, Marque D'Etat, Magyarorszag, Ungarn, Hongrie, Magyar Disznozsir, Ungarisches Schweinefett, Saindoux Hongrois, is disclaimed. The translation into German, French, and English respectively of the Hungarian reading matter appearing on the drawing is as follows: Allami Arujegy—Staatliche Warenmarke—Marque D'Etat—Government trade-mark, Magyarorszag—Ungarn—Hongrie—Hungary, Magyar Disznozsir—Ungarisches Schweinefett—Saindoux Hongrois—Hungarian Lard.

For Lard Made from Pork Fat.
Claims use since Dec. 1, 1929.

Ser. No. 307,656. DANTE CANDY COMPANY, Chicago, Ill. Filed Nov. 8, 1930.

Doctor's Orders

For Candy Bars.
Claims use since Sept. 15, 1930.

Ser. No. 307,768. VIRGINIA DARE EXTRACT COMPANY, INC., Brooklyn, N. Y. Filed Nov. 11, 1930.

Easy Whip

For Preparation in Powder Form to be Added to Other Ingredients in the Preparation of Icings, Toppings, and the Like.
Claims use since Nov. 4, 1930.

Ser. No. 310,686. FRANK MAMMI, Brooklyn, N. Y. Filed Feb. 3, 1931.

COLLEGE FOOD BALLS

Applicant disclaims "Food Balls" apart from the mark shown in the drawing.
For Balls Consisting of Meat, Rice, and Eggs and Spices.
Claims use since Jan. 28, 1931.

Ser. No. 310,689. JOHN MELCHNER, New York, N. Y. Filed Feb. 3, 1931.

GERMAN STYLE TASTY John Melchner PURE PORK PRODUCTS

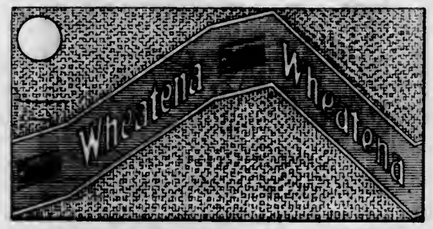
The name "John Melchner" is a facsimile of the signature of the proprietor. The words "German Style Tasty Pure Pork Products" illustrated on the drawing is not claimed separate from the mark as shown.
For Meat Products—Namely, Smoked, Boiled, and Fried Hams; Bratwurst, Braunschweiger Leberwurst, Blutwurst, Mettwurst, Knackwurst, Bauernwurst, Cervelatwurst, Schwartenmagen, Salami, Sulze, and Frankfurter.
Claims use since 1901.

Ser. No. 311,492. S. J. SLIGH & COMPANY, Orlando, Fla. Filed Feb. 26, 1931.



No claim is made to the word "Brand."
For Fresh Fruits and Vegetables.
Claims use since Jan. 31, 1931.

Ser. No. 311,579. THE WHEATENA CORPORATION, Rahway, N. J. Filed Feb. 28, 1931.



The lining on the drawing represents the colors blue and yellow. No claim is made to the representation of a label per se.
For Wheat Breakfast Food.
Claims use since Jan. 1, 1905.

Ser. No. 311,762. S. B. THOMAS, INC., Long Island City, N. Y. Filed Mar. 4, 1931.

SOYO

For Bread.
Claims use since Nov. 29, 1930.

Ser. No. 311,841. A. C. LEGG PACKING CO. INC., Birmingham, Ala. Filed Mar. 6, 1931.

OLD PLANTATION

The trade-mark consists of the words "Old Plantation" displayed in red letters on a yellow panel having a red border, and the drawing illustrating it is lined to indicate the colors red and yellow.
For Seasoning for Sausages, Meats, and Other Foods.
Claims use since Sept. 25, 1927.

Ser. No. 312,421. THE EMPIRE SALES COMPANY, Waterbury, Conn. Filed Mar. 23, 1931.

POLAR DOG

For Frozen Confections.
Claims use since September, 1930.

Ser. No. 312,434. KELLOGG COMPANY, Battle Creek, Mich. Filed Mar. 23, 1931.

SLUMBER COFFEE

No claim being made to the word "Coffee."
For Coffee.
Claims use since Sept. 1, 1930.

Ser. No. 312,792. HELEN T. BROOK, INC., Brooklyn, N. Y. Filed Apr. 1, 1931.

Hélène Thérèse

For Candy.
Claims use since Mar. 10, 1931.

Ser. No. 312,910. HAWAIIAN PINEAPPLE COMPANY, LTD., San Francisco, Calif., and Honolulu, Territory of Hawaii. Filed Apr. 3, 1931.



The pictorial representation of the goods is disclaimed apart from the mark shown in the drawing.
For Canned Pineapple.
Claims use since May, 1909.

Ser. No. 312,911. HAWAIIAN PINEAPPLE COMPANY, LTD., San Francisco, Calif., and Honolulu, Territory of Hawaii. Filed Apr. 3, 1931.



The representation of a pineapple, and the descriptive and geographical words "Finest Quality," "Hawaiian Pineapple," "Brand," "Packed By," "Honolulu, T. H., Hawaiian Islands" are disclaimed apart from the mark shown in the drawing.
For Canned Pineapple.
Claims use since July, 1903.

Ser. No. 313,091. NOWAK MILLING CORPORATION, Hammond, Ind. Filed Apr. 8, 1931.

DOMINO

DOG-ETS

For Compressed Food for Dog, Puppy, Fox, Raccoon, Sable, and All Carnivorous and Fur Bearing Animals.
Claims use since Feb. 2, 1931.

Ser. No. 313,159. JOSEPH TETLEY & CO., INC., New York, N. Y. Filed Apr. 9, 1931.



No claim is made to the words "Just the Tips of the Tea Leaves" apart from the mark shown in the drawing. The drawing is lined for the colors yellow, green, and red. The word "Tea" is disclaimed wherever shown in the drawing. No claim is made to the illustration of the carton as such.
For Tea.
Claims use since Jan. 27, 1931.

Ser. No. 313,165. JACOB E. DECKER & SONS, Mason City, Iowa. Filed Apr. 8, 1931.

FILET-O-LOIN

Applicant disclaims the descriptive words "Loin" and "Filet" apart from the other features of the mark.
For Bacon.
Claims use since Mar. 9, 1931.

Ser. No. 313,253. MORTON MANUFACTURING CORPORATION, also doing business as Blair Laboratories, Lynchburg, Va. Filed Apr. 11, 1931.

NATURAL BRIDGE

For Coffee.
Claims use since November, 1925.

Ser. No. 313,277. KARL C. BOGART, Dayton, Ohio. Filed Apr. 13, 1931.



The drawing is lined vertically to indicate the color red. However, no claim is made to the exclusive use of this lining for color or the representation of the cup of coffee or other parts of the design apart from the name "Bogart's" as shown on the drawing.
For Coffee.
Claims use since Apr. 2, 1931.

Ser. No. 313,290. FLORIDAGOLD CITRUS CORPORATION, Winter Haven, Fla. Filed Apr. 18, 1931.

GOLDETTES

For Canned Grapefruit Cut into Individual Miniature Portions.
Claims use since November, 1929.

Ser. No. 313,422. DANNEMILLER COFFEE CO., New York, N. Y. Filed Apr. 16, 1931.

BIG HIT

For Coffee.
Claims use since 1905.

Ser. No. 313,566. STEELE-WEDELES COMPANY, Chicago, Ill. Filed Apr. 20, 1931.

BONÄSA

For Coffee.
Claims use since Apr. 10, 1931.

Ser. No. 313,671. PRINCEVILLE CANNING CO., Princeville, Pa. Filed Apr. 22, 1931.

PEARLETS

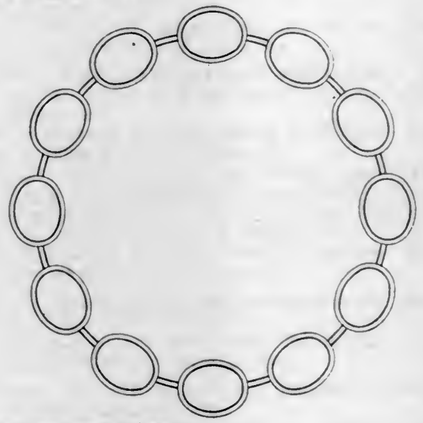
For Canned Corn.
Claims use since Mar. 20, 1931.

Ser. No. 313,672. PRINCEVILLE CANNING CO., Princeville, Pa. Filed Apr. 22, 1931.

PEARLETTES

For Canned Corn.
Claims use since Mar. 20, 1931.

Ser. No. 313,730. BERNARD M. DOUGLAS, New York, N. Y. Filed Apr. 24, 1931.



For Roquefort Cheese.
Claims use since Jan. 1, 1931.

CLASS 47

Wines

Ser. No. 308,559. SOCIETE CHAMPAGNE DELAMOTTE PERE & FILS, (SOCIETE A RESPONSABILITEE LIMITEE), Le Mesnil-Sur-Oger, France. Filed Dec. 3, 1930.



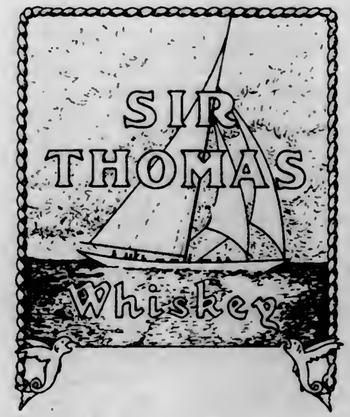


No claim being made to the words "Extra Dry," "Champagne," "Le Mesnil Sur Oger," and "Marne," except in connection with the mark shown.
For Wines.
Claims use since Apr. 30, 1845.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 306,947. THE FRANKFORT DISTILLERY, INC., Louisville, Ky. Filed Oct. 20, 1930.

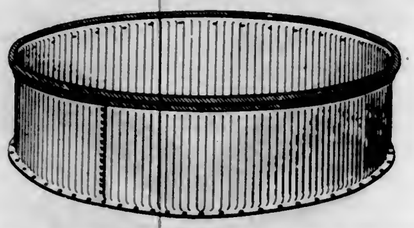


No claim is made to the word "Whiskey" apart from the other features of the mark.
For Whiskey.
Claims use since Oct. 13, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 311,409. DES MOINES STEEL TANK COMPANY, Des Moines, Iowa. Filed Feb. 24, 1931.



The trade-mark consists of a peripheral green colored band about the article located at the upper margin of the article and placed thereon by painting. No claim is made to the representation of the article per se.

For Sheet Metal Articles—Namely, Portable Stock Waterers, Watering Troughs, Stock Feeders, Stock Tanks, Poultry Waterers, Poultry Feeders, and Metal Hens' Nests.

Claims use since Apr. 15, 1929.

Ser. No. 312,938. AMERICAN MULTIGRAPH CO., Wilmington, Del., and Cleveland, Ohio. Filed Apr. 4, 1931.

DRYLITH

For Planographic Plates.

Claims use since Feb. 1, 1931.

Ser. No. 312,994. W. A. MCCOLLOUGH & SONS, INC., Webster City, Iowa. Filed Apr. 6, 1931.

UTILITY

For Portable Poultry Feeders, Portable Poultry Waterers, Portable Hog Feeders, and Portable Hog Waterers.

Claims use since 1923 on poultry feeders and waterers, and since 1925 on hog feeders and waterers.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 2, 1931

283,515. FOURDRINIER SCREENS AND THE LIKE MADE OF WIRE FABRIC. CHENEY BIGELOW WIRE WORKS, Springfield, Mass.
Filed December 24, 1930. Serial No. 309,304. PUBLISHED MARCH 17, 1931. Class 23.

283,516. DISINFECTANT. CHARLES W. BERG, doing business as Charles W. Berg Laboratories, Philadelphia, Pa.
Filed December 26, 1930. Serial No. 309,328. PUBLISHED MARCH 17, 1931. Class 6.

283,517. SEA FOOD. EMIL E. BORST, doing business as National Fish and Oyster Co., Baltimore, Md.
Filed December 26, 1930. Serial No. 309,329. PUBLISHED MARCH 10, 1931. Class 46.

283,518. DESKS AND HOUSEHOLD CHAIRS. THE ASSOCIATED MERCHANDISING CORPORATION, New York, N. Y.
Filed January 20, 1931. Serial No. 310,156. PUBLISHED MARCH 17, 1931. Class 32.

283,519. BRAKE LINING AND CLUTCH FACINGS. RAYBESTOS-MANHATTAN, INCORPORATED, Passaic, N. J., and Bridgeport, Conn.
Filed January 21, 1931. Serial No. 310,226. PUBLISHED MARCH 17, 1931. Class 35.

283,520. BREAD KNIVES. LANDERS, FRARY & CLARK, New Britain, Conn.
Filed January 23, 1931. Serial No. 310,293. PUBLISHED MARCH 17, 1931. Class 23.

283,521. SAFETY-RAZOR BLADES. ISAAC ROSENBAUM, New York, N. Y.
Filed January 23, 1931. Serial No. 310,304. PUBLISHED MARCH 17, 1931. Class 23.

283,522. GEARS AND PINIONS. REPUBLIC GEAR COMPANY, Detroit, Mich.
Filed February 2, 1931. Serial No. 310,659. PUBLISHED MARCH 17, 1931. Class 23.

283,523. GASKETS. VICTOR MANUFACTURING & GASKET COMPANY, Chicago, Ill.
Filed February 5, 1931. Serial No. 310,783. PUBLISHED MARCH 17, 1931. Class 35.

283,524. ELECTRIC CLIPPERS AND ANIMAL SHEARS. CHICAGO FLEXIBLE SHAFT COMPANY, Chicago, Ill.
Filed February 10, 1931. Serial No. 310,911. PUBLISHED MARCH 17, 1931. Class 23.

283,525. HIGH-TEMPERATURE REFRACTORY CEMENT. GENERAL REFRACTORIES COMPANY, Philadelphia, Pa.
Filed December 27, 1930. Serial No. 309,376. PUBLISHED MARCH 17, 1931. Class 12.

283,526. PREPARATION USED FOR SLEEPLESSNESS, NERVOUSNESS, NERVOUS HEADACHES, AND IRRITABILITY. MARTHA LUNTZ, doing business as Vreen Medicine Co., Brooklyn, N. Y.
Filed December 29, 1930. Serial No. 309,454. PUBLISHED MARCH 17, 1931. Class 6.

283,527. MALT SYRUP. STERLING PRODUCTS CO., Evansville, Ind.
Filed January 26, 1931. Serial No. 310,422. PUBLISHED MARCH 17, 1931. Class 46.

283,528. INCINERATORS. THE KERNIT INCINERATOR COMPANY, Milwaukee, Wis.
Filed January 28, 1931. Serial No. 310,480. PUBLISHED MARCH 17, 1931. Class 34.

283,529. PARTING COMPOUND—THAT IS TO SAY, A COATING APPLIED TO CERTAIN HOT TOP SURFACES TO ASSIST WHEN THE HOT TOP IS STRIPPED FROM THE INGOT. THE FERRO ENGINEERING COMPANY, Cleveland, Ohio.
Filed January 29, 1931. Serial No. 310,511. PUBLISHED MARCH 17, 1931. Class 1.

283,530. TOMATO JUICE. E. C. ORTEGA CO., INC., Los Angeles, Calif.
Filed January 30, 1931. Serial No. 310,572. PUBLISHED MARCH 17, 1931. Class 46.

283,531. SMOKING PIPES. SALVATORE LAFRANCA, New York, N. Y.
Filed February 2, 1931. Serial No. 310,647. PUBLISHED MARCH 17, 1931. Class 8.

283,532. PRINTER'S INK, INK COMPOUND, AND/OR REDUCER FOR COLOR AND BLACK INKS. FRANK J. ARNOLD, doing business as Wax Refining Company, Chicago, Ill.
Filed February 6, 1931. Serial No. 310,792. PUBLISHED MARCH 17, 1931. Class 11.

283,533. FRUIT-JUICE CONCENTRATE WITH PECTIN ADDED. THOMSON & TAYLOR CO., Chicago, Ill.
Filed February 6, 1931. Serial No. 310,814. PUBLISHED MARCH 17, 1931. Class 46.

283,534. INSECT-REPELLENT CREAM. STANCO INCORPORATED, Wilmington, Del., and New York, N. Y.
Filed January 17, 1931. Serial No. 310,074. PUBLISHED MARCH 10, 1931. Class 8.

283,535. ANTISEPTIC TABLETS AND SUPPOSITORIES. BUREAU OF FEMININE HYGIENE INC., New York, N. Y.
Filed January 19, 1931. Serial No. 310,088. PUBLISHED MARCH 10, 1931. Class 6.

283,536. LAXATIVES. O. CLAYMAN CAMPBELL, doing business as Untox Company, Philadelphia, Pa.
Filed January 19, 1931. Serial No. 310,091. PUBLISHED MARCH 10, 1931. Class 6.

283,537. JELLY AND MARMALADE. GEO. W. GRANT, St. Petersburg, Fla.
Filed January 19, 1931. Serial No. 310,125. PUBLISHED MARCH 17, 1931. Class 46.

283,538. FRESH CITRUS FRUITS. WATERS F. BURROWS, Sarasota, Fla.
Filed January 23, 1931. Serial No. 310,282. PUBLISHED MARCH 17, 1931. Class 46.

283,539. DIGITALIS PREPARATION. E. R. SQUIBB & SONS, New York, N. Y.
Filed January 23, 1931. Serial No. 310,308. PUBLISHED MARCH 10, 1931. Class 6.

283,540. LAXATIVE. H. & J. LABORATORIES, Parkersburg, W. Va.
Filed January 26, 1931. Serial No. 310,377. PUBLISHED MARCH 10, 1931. Class 6.

283,541. FRESH VEGETABLES. SAN JOSE PRODUCE CO., San Jose, Calif.
Filed January 30, 1931. Serial No. 310,577. PUBLISHED MARCH 17, 1931. Class 46.

283,542. MEDICINAL PREPARATION CONSISTING OF AN ELIXIR OF TRIPLE BROMIDES. UNITED DRUG COMPANY, Boston, Mass.
Filed January 31, 1931. Serial No. 310,620. PUBLISHED MARCH 17, 1931. Class 6.

283,543. DYES WHICH ARE USED IN THE DYEING OF CELLULOSE-ACETATE RAYON. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed January 31, 1931. Serial No. 310,625. PUBLISHED MARCH 17, 1931. Class 6.

283,544. AUTOMOBILES AND THEIR STRUCTURAL PARTS. CHRYSLER CORPORATION, Highland Park, Mich.
Filed February 3, 1931. Serial No. 310,675. PUBLISHED MARCH 17, 1931. Class 19.

283,545. FRESH CITRUS FRUITS. WATERS F. BURROWS, Sarasota, Fla.
Filed February 5, 1931. Serial No. 310,752. PUBLISHED MARCH 17, 1931. Class 46.

283,546. CHOCOLATE-FLAVORED POP CORN. LOUIS J. CHAMES, doing business as Cho Pop Co., Minneapolis, Minn.
Filed February 5, 1931. Serial No. 310,754. PUBLISHED MARCH 17, 1931. Class 46.

283,547. WIRE, DRAWN, UNWROUGHT, AND COATED WITH ANOTHER SUBSTANCE: STEEL WIRES, HARDENED: ZINC, COPPER, GALVANIZED, AND STEEL WIRES. BANSKA- A HUTNI SPOLECNOST, Brunn, Czechoslovakia.
Filed May 28, 1930. Serial No. 301,390. PUBLISHED MARCH 17, 1931. Class 14.

283,548. COMPOSITION BOOKS, FOUNTAIN PENS, NOTEBOOKS, BOOK COVERS, INK AND PENCIL ERASERS, PAPETERIES, THIN LEADS. THE AMERICAN NEWS COMPANY, INC., New York, N. Y.
Filed November 12, 1930. Serial No. 307,792. PUBLISHED MARCH 17, 1931. Class 37.

283,549. CHEESE. NAAMLOOZE VENNOOTSCHAP KAASHANDEL BETZ & JAY, Rotterdam, Netherlands.
Filed May 24, 1930. Serial No. 301,192. PUBLISHED MARCH 10, 1931. Class 46.

283,550. HORTICULTURAL GROWTHS—NAMELY, SHRUBS, VINES, PLANTS, BULBS, PERENNIALS, AND VEGETABLE, GARDEN, AND FIELD SEEDS. THEODORE F. BORST, doing business as American Forestry Company, Framingham Center, Mass.
Filed July 2, 1930. Serial No. 303,044. PUBLISHED MARCH 17, 1931. Class 1.

283,551. HAIR COLOR RESTORER. NATHAN HURWITZ, doing business as The Ever-Youth Co., New York, N. Y.
Filed July 9, 1930. Serial No. 303,289. PUBLISHED MARCH 3, 1931. Class 6.

283,552. COTTON BATTING. ROCK RIVER COTTON COMPANY, Janesville, Wis.
Filed July 14, 1930. Serial No. 303,490. PUBLISHED MARCH 17, 1931. Class 1.

283,553. BOXES OR CHESTS MADE OF PRECIOUS METAL FOR HOLDING CIGARETTES. OLD COLONY DISTRIBUTING COMPANY, Boston, Mass.
Filed July 22, 1930. Serial No. 303,724. PUBLISHED MARCH 10, 1931. Class 28.

283,554. CUP CAKES. SWANSON BAKING COMPANY, Fitchburg, Mass.
Filed August 6, 1930. Serial No. 304,300. PUBLISHED MARCH 17, 1931. Class 46.

283,555. PATTERS FOR THE SKIN AND TISSUE AND REDUCING CHIN STRAP. DOROTHY GRAY, Bloomfield, N. J., and New York, N. Y.
Filed December 17, 1930. Serial No. 309,068. PUBLISHED MARCH 17, 1931. Class 44.

283,556. GARMENT HANGERS. GLUVTEX MANUFACTURING CORP., New York, N. Y.
Filed December 20, 1930. Serial No. 309,203. PUBLISHED MARCH 17, 1931. Class 50.

283,557. UNFINISHED CAST-IRON CASTINGS. THE DURSAR CORPORATION, Newark, N. J., and New York, N. Y.
Filed January 6, 1931. Serial No. 309,633. PUBLISHED MARCH 17, 1931. Class 14.

283,558. WEIGHING SCALES. DAVID C. ROCKOLA, Chicago, Ill.
Filed January 15, 1931. Serial No. 309,990. PUBLISHED MARCH 17, 1931. Class 26.

283,559. WEIGHING SCALES. DAVID C. ROCKOLA, Chicago, Ill.
Filed January 15, 1931. Serial No. 309,991. PUBLISHED MARCH 17, 1931. Class 26.

283,560. OIL-BURNING BROODER. W. C. HOPSON COMPANY, doing business as Simplex Brooder Stove Co., Grand Rapids, Mich.
Filed January 19, 1931. Serial No. 310,140. PUBLISHED MARCH 17, 1931. Class 34.

283,561. OIL-BURNING STOVES. W. C. HOPSON COMPANY, doing business as Simplex Brooder Stove Co., Grand Rapids, Mich.
Filed January 19, 1931. Serial No. 310,142. PUBLISHED MARCH 17, 1931. Class 34.

283,562. PERMANENTLY OR REMOVABLY COVERED SPONGE-RUBBER PADS. DANIEL L. IRVIN, New York, N. Y.
Filed January 20, 1931. Serial No. 310,173. PUBLISHED MARCH 17, 1931. Class 50.

283,563. OLIVE OIL. LORENZO LEONE, Bronx, N. Y.
Filed January 21, 1931. Serial No. 310,221. PUBLISHED MARCH 17, 1931. Class 46.

283,564. AXES, ADZES, BROADAXES, BUSH HOOKS, HATCHETS, NAIL HAMMERS, HAMMERS, HANDLES FOR HAND AGRICULTURAL IMPLEMENTS, SCYTHES, GRUB HOES, MATTOCKS, PICK MATTOCKS, PICKS, GRASS HOOKS, WEED CUTTERS, AND DITCH-BANK BLADES. THE AMERICAN FORK & HOE COMPANY, Cleveland, Ohio.
Filed January 23, 1931. Serial No. 310,276. PUBLISHED MARCH 17, 1931. Class 23.

283,565. FERTILIZER MATERIAL. ZENITH GUANO COMPANY, Salisbury, N. C.
Filed January 23, 1931. Serial No. 310,322. PUBLISHED MARCH 17, 1931. Class 10.

283,566. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,103. PUBLISHED MARCH 10, 1931. Class 15.

283,567. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,109. PUBLISHED MARCH 10, 1931. Class 15.

283,568. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,110. PUBLISHED MARCH 10, 1931. Class 15.

283,569. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,112. PUBLISHED MARCH 10, 1931. Class 15.

283,570. LUBRICATING GREASE. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,113. PUBLISHED MARCH 10, 1931. Class 15.

283,571. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,114. PUBLISHED MARCH 10, 1931. Class 15.

283,572. LUBRICATING GREASE. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,115. PUBLISHED MARCH 10, 1931. Class 15.

283,573. LUBRICATING GREASE. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,116. PUBLISHED MARCH 10, 1931. Class 15.

283,574. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,120. PUBLISHED MARCH 10, 1931. Class 15.

283,575. LEATHER, INCLUDING SHEARLINGS OR WOOL PELTS. A. C. LAWRENCE LEATHER COMPANY, Peabody, Mass.
Filed January 20, 1931. Serial No. 310,181. PUBLISHED MARCH 17, 1931. Class 1.

283,576. LUBRICATING OILS. REO MOTOR COMPANY OF NEW ENGLAND, doing business as Pierre Oil Company, Boston, Mass.
Filed January 23, 1931. Serial No. 310,303. PUBLISHED MARCH 10, 1931. Class 15.

283,577. GAS STOVES AND RANGES. GEO. D. ROPER CORPORATION, Rockford, Ill.
Filed January 31, 1931. Serial No. 310,616. PUBLISHED MARCH 17, 1931. Class 34.

283,578. LAWN-GRASS SEED. IVAN OSTBERG, doing business as Ostberg Seed Co. (not Inc.), Chicago, Ill.
Filed February 2, 1931. Serial No. 310,654. PUBLISHED MARCH 17, 1931. Class 1.

283,579. WHEAT FLOUR AND SELF-RISING FLOUR. BALLARD & BALLARD CO., Louisville, Ky.
Filed February 9, 1931. Serial No. 310,851. PUBLISHED MARCH 17, 1931. Class 46.

283,580. PREPARATION FOR RESTORING NATURAL COLOR TO GRAY HAIR. ZYGMUNT KOZLOWSKI, New York, N. Y.
Filed January 14, 1931. Serial No. 309,928. PUBLISHED MARCH 17, 1931. Class 6.

283,581. LAXATIVE MEDICINE EMPLOYED IN THE TREATMENT OF DIGESTIVE DISORDERS. BREWER & COMPANY, INC., Worcester, Mass.
Filed January 20, 1931. Serial No. 310,159. PUBLISHED MARCH 17, 1931. Class 6.

283,582. COMPOSITIONS FOR HARDENING, STRENGTHENING, AND/OR WATERPROOFING CEMENT. SUPER CONCRETE EMULSIONS, LTD., Los Angeles, Calif.
Filed January 20, 1931. Serial No. 310,194. PUBLISHED MARCH 17, 1931. Class 12.

283,583. PERFUMES, TOILET WATER, FACE POWDER, TALCUM POWDER, BATH SALTS, BRILLIANTINE, BANDOLINE, ROUGE, LIP STICKS, DUSTING POWDER, SACHET, COLD CREAMS, LOTION FOR SKIN AND HAIR, POWDER AND ROUGE COMPACTS, AND EAU VEGETAL. HOUBIGANT, INC., New York, N. Y.
Filed February 5, 1931. Serial No. 310,769. PUBLISHED MARCH 17, 1931. Class 6.

283,584. SHAMPOO. MARIGLOW PRODUCTS COMPANY, South Bend, Ind.
Filed February 5, 1931. Serial No. 310,772. PUBLISHED MARCH 17, 1931. Class 6.

283,585. SKIN LOTION. SUN FROST PRODUCTS CO., Wyandotte, Mich.
Filed February 5, 1931. Serial No. 310,782. PUBLISHED MARCH 17, 1931. Class 6.

283,586. CALCULATING AND ADDING MACHINES AND CASH REGISTERS. BRUNSVIGA-MASCHINENWERKE GRIMME, NATALIS & CO. AKTIENGESELLSCHAFT, Brunswick, Germany.
Filed December 17, 1930. Serial No. 309,063. PUBLISHED MARCH 17, 1931. Class 26.

283,587. CLEANSING TISSUES. DOROTHY GRAY, New York, N. Y., and Bloomfield, N. J.
Filed December 17, 1930. Serial No. 309,069. PUBLISHED MARCH 17, 1931. Class 37.

283,588. WHEAT FLOUR AND SELF-RISING FLOUR. BALLARD & BALLARD CO., Louisville, Ky.
Filed February 9, 1931. Serial No. 310,852. PUBLISHED MARCH 17, 1931. Class 46.

283,589. ALL KINDS OF CONSTRUCTION AND FINISHING LUMBER, SUCH AS TIMBERS, DOOR AND WINDOW FRAMES, DOORS, SASH, MOULDINGS, AND OTHER FINISHED LUMBER. FAIRHURST LUMBER COMPANY, Tacoma, Wash.
Filed December 24, 1930. Serial No. 309,309. PUBLISHED MARCH 17, 1931. Class 12.

283,590. FACE CREAMS, TALCUM POWDER, PERFUMERY, TOILET WATER, BRILLIANTINE, AND FACE POWDER. HOLMAN SOAP COMPANY, Chicago, Ill.
Filed December 31, 1930. Serial No. 309,525. PUBLISHED MARCH 17, 1931. Class 6.

283,591. MAHOGANY LUMBER. THE MENGEL COMPANY, Louisville, Ky.
Filed December 31, 1930. Serial No. 309,528. PUBLISHED MARCH 10, 1931. Class 12.

283,592. LIQUID COMPOSITION FOR APPLICATION TO VARIOUS MATERIALS AS A PREVENTIVE OF MOTH DAMAGE. FEDERAL CHEMICAL COMPANY, INCORPORATED, Indianapolis, Ind.
Filed January 2, 1931. Serial No. 309,554. PUBLISHED MARCH 17, 1931. Class 6.

283,593. BUNDLES OF PLYWOOD. WESTERN PLYWOOD EXPORT COMPANY, Tacoma, Wash.
Filed January 12, 1931. Serial No. 309,878. PUBLISHED MARCH 10, 1931. Class 12.

283,594. DAIRY PRODUCTS—NAMELY, MILK, BUTTERMILK, CHEESE, CREAM, CHOCOLATE MILK, AND CONDENSED BUTTERMILK. THE POLK SANITARY MILK COMPANY, Indianapolis, Ind.
Filed November 7, 1930. Serial No. 307,629. PUBLISHED MARCH 17, 1931. Class 46.

283,595. FOOD AND OTHER RECEPTACLES—NAMELY, WASTEBASKETS, CLOTHES HAMPERS, TEA, COFFEE, FLOUR, AND SUGAR CANISTERS. A. KREAMER, INC., Brooklyn, N. Y.
Filed November 21, 1930. Serial No. 308,236. PUBLISHED MARCH 17, 1931. Class 2.

283,596. CANDY. DANIEL RAVENEL, Charleston, S. C.
Filed October 31, 1930. Serial No. 307,420. PUBLISHED MARCH 17, 1931. Class 46.

283,597. TOILET ARTICLES OF VARIOUS KINDS—NAMELY, TOOTH PASTES, DENTIFRICES, AND FACE CREAMS OF VARIOUS KINDS. PARKE, DAVIS & COMPANY, Detroit, Mich.
Filed October 31, 1930. Serial No. 307,417. PUBLISHED MARCH 10, 1931. Class 6.

283,598. DEODORANTS. ZORITE MANUFACTURING CO., Oakland, Calif.
Filed October 13, 1930. Serial No. 306,717. PUBLISHED MARCH 17, 1931. Class 6.

283,599. BASE METAL COOKING POTS, PANS, AND KETTLES. THE STA-BRITE PRODUCTS CORP., New Haven, Conn.
Filed October 7, 1930. Serial No. 306,511. PUBLISHED MARCH 17, 1931. Class 13.

283,600. CANDY TABLETS. AROMINT CORPORATION, Cincinnati, Ohio.
Filed October 4, 1930. Serial No. 306,390. PUBLISHED MARCH 17, 1931. Class 46.

283,601. CHEWING GUM. HENRY S. WOOLSEY, doing business as Empire Gum Co., Kingston, N. Y.
Filed August 4, 1930. Serial No. 304,228. PUBLISHED MARCH 17, 1931. Class 46.

283,602. PISTON RINGS FOR INTERNAL-COMBUSTION ENGINES AND OTHER MACHINERY. WILKENING MANUFACTURING COMPANY, Philadelphia, Pa.
Filed November 10, 1930. Serial No. 307,751. PUBLISHED MARCH 17, 1931. Class 35.

283,603. TOILET PREPARATIONS. ADAM OGINT, doing business as De Soto Chemical Co., Brooklyn, N. Y., and Hollo, P. I.
Filed November 10, 1930. Serial No. 307,732. PUBLISHED MARCH 10, 1931. Class 6.

283,604. RHEUMATISM AND GOUT REMEDY. SARAH E. L. WILSON, doing business as Wil-Du Medicine Co., Pitman, N. J.
Filed October 27, 1930. Serial No. 307,237. PUBLISHED MARCH 10, 1931. Class 6.

283,605. POISON FOR ANTS, INSECTS, VERMIN, AND RODENTS. SENORET CHEMICAL CO., St. Louis, Mo.
Filed September 2, 1930. Serial No. 305,246. PUBLISHED MARCH 10, 1931. Class 6.

283,606. NONTOXIC, ANALGESIC, AND ANTI-SPASMODIC PREPARATION IN CAPSULE FORM FOR THE RELIEF OF PAIN ACCOMPANYING OVARIAN DYSFUNCTIONS, NEURALGIA, CHRONIC RHEUMATISM. THE WM. S. MERRELL COMPANY, Cincinnati, Ohio.
Filed August 11, 1930. Serial No. 304,469. PUBLISHED MARCH 10, 1931. Class 6.

283,607. MECHANICAL RAZOR SHARPENERS. THE KEENEX RAZOR SHARPENER COMPANY, Toledo, Ohio.
Filed November 5, 1930. Serial No. 307,552. PUBLISHED MARCH 17, 1931. Class 23.

283,608. MATTRESSES. STORKLINE FURNITURE CORPORATION, Chicago, Ill.
Filed November 3, 1930. Serial No. 307,514. PUBLISHED MARCH 17, 1931. Class 32.

283,609. SAFETY-RAZOR BLADES. HERBERT BORGMANN, St. Louis, Mo.
Filed October 29, 1930. Serial No. 307,304. PUBLISHED MARCH 17, 1931. Class 23.

283,610. MOBILE MACHINERY—NAMELY, ROTARY AND WHEELED SCRAPERS AND BULLDOZERS. THE EUCLID CRANE & HOIST COMPANY, Euclid, Ohio.
Filed October 25, 1930. Serial No. 307,244. PUBLISHED MARCH 17, 1931. Class 23.

283,611. PRINTING PAPERS. KIMBERLY-CLARK CORPORATION, Neenah, Wis.
Filed October 27, 1930. Serial No. 307,207. PUBLISHED MARCH 17, 1931. Class 37.

283,612. SAWS, AXES, CHISELS, HAND TOOLS FOR MINING, AND FOR WORKING STONES, ROCK-DRILLING MACHINES, PRESSES, AND PUMPS. SANDVIKENS JERNVERKS AKTIEBOLAG, Sandviken Sweden.
Filed September 10, 1930. Serial No. 305,544. PUBLISHED MARCH 17, 1931. Class 23.

283,613. FLOOR, SCRUBBING, WINDOW, MILL, URN, SPOKE, TOILET, AND CREAMERY BRUSHES. THE MOUNTAIN STATES BRUSH MANUFACTURING CORPORATION, Wichita, Kans.
Filed November 12, 1930. Serial No. 307,821. PUBLISHED MARCH 17, 1931. Class 29.

283,614. LADIES' HAND BAGS AND POCKETBOOKS. I. MILLER & SONS, INCORPORATED, Long Island City, N. Y.
Filed November 22, 1930. Serial No. 308,212. PUBLISHED MARCH 17, 1931. Class 3.

283,615. MOTOR-FUEL OIL. GARLAND PRODUCTS COMPANY, St. Louis, Mo.
Filed August 13, 1930. Serial No. 304,553. PUBLISHED MARCH 10, 1931. Class 15.

283,616. SYNTHETIC METHANOL USED AS AN ANTI-FREEZE AGENT IN AUTOMOTIVE VEHICLES AND HEATING SYSTEMS. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed September 29, 1930. Serial No. 306,224. PUBLISHED MARCH 17, 1931. Class 6.

283,617. CHEMICAL MEDICINAL PREPARATION FOR THE TREATMENT OF HOARSENESS, COUGHS, EXCESSIVE MUCOUS FORMATION, BRONCHITIS, BRONCHIAL ASTHMA, TUBERCULOSIS OF THE LUNGS, LA GRIPPE, INFLUENZA, AND ALL OTHER DISEASES OF THE RESPIRATORY ORGANS. PLOETZ & CO., Berlin, Germany.
Filed August 12, 1930. Serial No. 304,512. PUBLISHED MARCH 17, 1931. Class 6.

283,618. SHOES MADE OF LEATHER, CLOTH, CANVAS, OR COMBINATIONS THEREOF. BROWN SHOE COMPANY, INC., St. Louis, Mo.
Filed December 15, 1930. Serial No. 308,974. PUBLISHED MARCH 17, 1931. Class 39.

283,619. SHOES MADE OF LEATHER, CLOTH, CANVAS, OR COMBINATIONS THEREOF. BROWN SHOE COMPANY, INC., St. Louis, Mo.
Filed December 15, 1930. Serial No. 308,973. PUBLISHED MARCH 17, 1931. Class 39.

283,620. ALKALI FOR GENERAL CLEANSING PURPOSES. NATIONAL MILLING & CHEMICAL CO., INC., Manayunk, Philadelphia, Pa.
Filed December 4, 1930. Serial No. 308,594. PUBLISHED MARCH 17, 1931. Class 4.

283,621. ALKALI FOR GENERAL CLEANSING PURPOSES. NATIONAL MILLING & CHEMICAL CO., INC., Manayunk, Philadelphia, Pa.
Filed December 4, 1930. Serial No. 308,593. PUBLISHED MARCH 17, 1931. Class 4.

283,622. SOAP AND SHAMPOO SOAP. HARRY KESSELMAN, doing business as Prophylactic Soap Corporation, New York, N. Y.
Filed November 18, 1930. Serial No. 308,017. PUBLISHED MARCH 17, 1931. Class 4.

283,623. MEN'S COATS, VESTS, PANTS, OVERCOATS, AND TOPCOATS. BALTIMORE CLOTHES INCORPORATED, Baltimore, Md.
Filed November 6, 1930. Serial No. 307,574. PUBLISHED MARCH 10, 1931. Class 39.

283,624. MEN'S COATS, VESTS, PANTS, OVERCOATS, AND TOPCOATS. BALTIMORE CLOTHES INCORPORATED, Baltimore, Md.
Filed November 6, 1930. Serial No. 307,573. PUBLISHED MARCH 10, 1931. Class 39.

283,625. DRESSES AND BLOOMERS FOR THE USE OF WOMEN, MISSES, AND CHILDREN. JOSEPH LYNN, doing business as Lynn Bros., Cleveland, Ohio.
Filed July 24, 1930. Serial No. 303,774. PUBLISHED MARCH 10, 1931. Class 39.

283,626. DRY-CLEANING FLUID. HOWARD FRANK ALLEN, doing business as Allen Sales Company and also as Tetrazene Products Co., Hollywood, Calif.
Filed July 16, 1930. Serial No. 303,524. PUBLISHED MARCH 17, 1931. Class 4.

283,627. CERTAIN NAMED PAINT PRODUCTS. CONFERRO PAINT & VARNISH COMPANY, St. Louis, Mo.
Filed July 12, 1930. Serial No. 303,418. PUBLISHED MARCH 17, 1931. Class 16.

283,628. LUMBER AND LUMBER PRODUCTS OF DOUGLAS FIR, HEMLOCK, SPRUCE, AND CEDAR—NAMELY, MILLWORK, RED-CEDAR SHINGLES, DOUGLAS-FIR DOORS, DOUGLAS-FIR PLYWOOD, MOULDINGS, FLOORING, SHEATHING, AND WINDOW FRAMES. CANADIAN WESTERN LUMBER COMPANY, LIMITED, Fraser Mills, British Columbia, Canada.
Filed December 13, 1930. Serial No. 308,926. PUBLISHED MARCH 17, 1931. Class 12.

283,629. POWDERED ASPHALT. JAMES B. BERRY SONS' COMPANY OF ILLINOIS, Chicago, Ill.
Filed November 28, 1930. Serial No. 308,350. PUBLISHED MARCH 17, 1931. Class 12.

283,630. ORNAMENTAL IRON OR METAL RAILINGS, METAL GRILLE FOR OFFICE AND BANK CAGES, WINDOW GUARDS, TRELLISES, MARQUISES, PORTABLE METAL STORE FRONTS, AND BALCONIES APPLICABLE TO BUILDING CONSTRUCTION. MARTIN ROSE, doing business as The Rose Iron Works, Cleveland, Ohio.
Filed November 20, 1930. Serial No. 308,129. PUBLISHED MARCH 17, 1931. Class 12.

283,631. HOT-TOP LININGS OF BRICK OR SIMILAR HEAT-INSULATING MATERIAL. THE FERRO ENGINEERING COMPANY, Cleveland, Ohio.
Filed October 28, 1930. Serial No. 307,272. PUBLISHED MARCH 10, 1931. Class 12.

283,632. PREPARATION OF KAMILLOSAN-HYDROGEN PEROXYDE MADE FROM FRESH CAMOMILE PREPARED IN THE FORM OF OINTMENT, LIQUID, POWDER, TABLETS, FOR THE TREATMENT OF WOUNDS, LIQUIDS WHICH ARE INTRODUCED BY IRRIGATORS, RINSING MEANS, AND AS DISINFECTANTS. CHEMISCH-PHARMAZEUTISCHE A. G., BAD HOMBURG, WERK FRANKFURT A/M., Frankfort-on-the-Main, Germany.
Filed October 15, 1930. Serial No. 306,764. PUBLISHED MARCH 17, 1931. Class 6.

283,633. CHEMICAL SUBSTANCE FOR USE AS EMULSIFYING AGENT AND SOLVENT AND FOR FACILITATING THE WETTING OF TEXTILE MATERIALS. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland.
Filed October 4, 1930. Serial No. 306,423. PUBLISHED MARCH 10, 1931. Class 6.

283,634. MILLED TOILET SOAP AND SOAP SHAMPOO. LA VAY PRODUCTS COMPANY, New York, N. Y., and Hackensack, N. J.
Filed June 3, 1930. Serial No. 302,146. PUBLISHED SEPTEMBER 9, 1930. Class 4.

283,635. COPYING APPARATUS AND DEVELOPING APPARATUS, SENSITIZED PLATES, ETC. NAAMLOOZE VENNOOTSCHAP CHEMISCHE FABRIEK L. VAN DER GRINTEN, Venlo, Netherlands.
Filed June 7, 1930. Serial No. 302,253. PUBLISHED MARCH 17, 1931. Class 26.

283,636. ICE CREAM. NEW STATE ICE COMPANY, Oklahoma City, Okla.
Filed June 23, 1930. Serial No. 302,744. PUBLISHED MARCH 17, 1931. Class 46.

283,637. CONDIMENT—NAMELY, A PREPARATION OF DEHYDRATED MARINE ALGÆ FOR USE AS A SEASONING. VITIDINE SEA FOOD & CHEMICAL CO., INC., doing business as Vitidine Sea Food Company, Port Townsend, Wash.
Filed July 10, 1930. Serial No. 303,355. PUBLISHED MARCH 17, 1931. Class 46.

283,638. LABORATORY CENTRIFUGAL APPARATUS GENERALLY KNOWN AS CENTRIFUGES. CAMILLE H. BOULIN, doing business as C. H. Boulin, New York, N. Y.
Filed July 24, 1930. Serial No. 303,759. PUBLISHED MARCH 17, 1931. Class 26.

283,639. MEN'S DRESS AND WORK SHIRTS. JOSEPH DANERHIRSCH, doing business as Daner Co., New York, N. Y.
Filed August 12, 1930. Serial No. 304,490. PUBLISHED NOVEMBER 4, 1930. Class 39.

283,640. MEN'S DRESS AND WORK SHIRTS. JOSEPH DANERHIRSCH, doing business as Daner Co., New York, N. Y.
Filed August 12, 1930. Serial No. 304,491. PUBLISHED NOVEMBER 4, 1930. Class 39.

283,641. MEN'S DRESS AND WORK SHIRTS. JOSEPH DANERHIRSCH, doing business as Daner Co., New York, N. Y.
Filed August 12, 1930. Serial No. 304,492. PUBLISHED NOVEMBER 4, 1930. Class 9.

283,642. MEN'S DRESS AND WORK SHIRTS. JOSEPH DANERHIRSCH, doing business as Daner Co., New York, N. Y.
Filed August 12, 1930. Serial No. 304,493. PUBLISHED NOVEMBER 4, 1930. Class 39.

283,643. MEN'S DRESS AND WORK SHIRTS. JOSEPH DANERHIRSCH, doing business as Daner Co., New York, N. Y.
Filed August 12, 1930. Serial No. 304,494. PUBLISHED NOVEMBER 4, 1930. Class 39.

283,644. ARTIFICIAL METALLIC LEAF FOR LETTERING, DECORATING, AND NUMBERING BOOKS, PAPERS, ETC. THE H. GRIFFIN & SONS COMPANY, New York, N. Y.
Filed August 16, 1930. Serial No. 304,687. PUBLISHED MARCH 17, 1931. Class 50.

283,645. ALLOY METALS CONSISTING PRINCIPALLY OF IRON, STEEL, AND NICKEL; DIAMOND-SUBSTITUTE INSERT METALS. DON D. ANGLE, doing business as Don D. Angle Welders Supply Company, Los Angeles, Calif.
Filed September 29, 1930. Serial No. 306,163. PUBLISHED MARCH 17, 1931. Class 14.

283,646. HAND TOOLS. CRESCENT TOOL COMPANY, Jamestown, N. Y.
Filed October 20, 1930. Serial No. 306,941. PUBLISHED MARCH 17, 1931. Class 23.

283,647. CANNED VEGETABLES. PHILLIPS SALES COMPANY, INC., Cambridge, Md.
Filed October 27, 1930. Serial No. 307,217. PUBLISHED MARCH 17, 1931. Class 46.

283,648. MEN'S SUITS, TOPCOATS, AND TUXEDOS. MERVIN S. LEVINE, New York, N. Y.
Filed October 29, 1930. Serial No. 307,322. PUBLISHED DECEMBER 23, 1930. Class 39.

283,649. ESPECIALLY-PROCESSED (DEHYDRATED) FORM OF THE PACIFIC OCEAN PLANT OR SPECIES OF MARINE ALGÆ KNOWN AS MACROCYSTIS PYRIFERA AND MORE COMMONLY KNOWN AS SEA KELP PREPARED FOR HUMAN DIETARY USE. CALPHIOMIN LABORATORIES, Los Angeles, Calif.
Filed October 31, 1930. Serial No. 307,385. PUBLISHED MARCH 17, 1931. Class 46.

283,650. ELECTRIC CELLS AND BATTERIES. NATIONAL CARBON COMPANY, INC., New York, N. Y.
Filed November 1, 1930. Serial No. 307,454. PUBLISHED MARCH 17, 1931. Class 21.

283,651. MAYONNAISE, PICKLE RELISH, SALAD OILS, SALAD DRESSING, BUTTER, OLEOMARGARINE, AND COOKING COMPOUND. THE BALTIMORE BUTTERINE COMPANY, Baltimore, Md.
Filed November 3, 1930. Serial No. 307,470. PUBLISHED MARCH 17, 1931. Class 46.

283,652. GASOLINE AND KEROSENE SOLDERING STOVES AND LAMPS. SOCIÉTÉ ANONYME L'ACCESSOIRE DE PRECISION, Levallois-Perret, France.
Filed November 3, 1930. Serial No. 307,512. PUBLISHED MARCH 17, 1931. Class 34.

283,653. HUMIDORS. HAROLD E. SMITH, doing business as Badger Specialty Co., Milwaukee, Wis.
Filed November 6, 1930. Serial No. 307,608. PUBLISHED MARCH 17, 1931. Class 8.

283,654. GEARS, GEAR BLANKS. THE FORMICA INSULATION COMPANY, Cincinnati, Ohio.
Filed December 9, 1929. Serial No. 293,423. PUBLISHED MARCH 17, 1931. Class 23.

283,655. RADIO RECEIVING SETS. THE STUDEBAKER CORPORATION, South Bend, Ind.
Filed December 30, 1929. Serial No. 294,242. PUBLISHED MARCH 10, 1931. Class 21.

283,656. BRAIDING MACHINES. ANDREW C. CAMPBELL, INCORPORATED, Waterbury, Conn.
Filed January 25, 1930. Serial No. 295,206. PUBLISHED MARCH 17, 1931. Class 23.

283,657. PURSES AND HAND BAGS. EISENSTADT MANUFACTURING COMPANY, St. Louis, Mo.
Filed March 6, 1930. Serial No. 296,910. PUBLISHED MARCH 17, 1931. Class 3.

283,658. INFANTS' AND CHILDREN'S DRESSES. KEWPIE DRESS CO. INC., New York, N. Y.
Filed March 11, 1930. Serial No. 297,139. PUBLISHED MARCH 10, 1931. Class 39.

283,659. FURNITURE. GOLD MEDAL FOLDING FURNITURE CO., Racine, Wis.
Filed March 17, 1930. Serial No. 297,425. PUBLISHED MARCH 17, 1931. Class 32.

283,660. EXTERNAL MEDICINAL PREPARATIONS FOR TREATING COLDS, CATARRH, BRONCHITIS, COMMON SORE THROAT, SPRAINS, BRUISES, PLEURISY, HEADACHES, SCIATICA, AND RHEUMATISM. CLAUDE W. KEMP, doing business as Rubacold Laboratories, Portland, Oreg.
Filed March 17, 1930. Serial No. 297,438. PUBLISHED MARCH 10, 1931. Class 6.

283,661. SOLVENTS FOR REMOVING OLEAGINOUS SUBSTANCES AND GREASE. CARRIER ENGINEERING CORPORATION, New York, N. Y., and Newark, N. J.
Filed March 26, 1930. Serial No. 297,894. PUBLISHED MARCH 17, 1931. Class 4.

283,662. FRESH CITRUS FRUITS. REDLANDS-HIGHLANDS FRUIT EXCHANGE, Redlands, Calif.
Filed April 14, 1930. Serial No. 298,846. PUBLISHED JULY 15, 1930. Class 46.

283,663. WATERPROOF AND MOTHPROOF MATERIAL COMPOSED OF A COTTON BACK AND COATED WITH A PYROXYLIN LACQUER. ASHER & BORETZ, INC., New York, N. Y.
Filed April 17, 1930. Serial No. 298,970. PUBLISHED MARCH 17, 1931. Class 50.

283,664. NONFERROUS METAL CASTINGS AND FORGINGS AND NONFERROUS METAL RODS NOT FABRICATED INTO FINISHED ARTICLES. MUELLER BRASS CO., Port Huron, Mich.
Filed April 21, 1930. Serial No. 299,213. PUBLISHED MARCH 17, 1931. Class 14.

283,665. SKIN LOTION, FACE POWDER, DEODORANT, BATH SALTS, HAIR TONIC, HAIR DRESSING, SHAMPOO, MOUTH WASH, FACE CREAM, PERFUME, TOILET WATER, TOOTH POWDER, AND FOOT POWDER. ALBERT B. PLATER, doing business as Lovlitone Company, Grosse Pointe Park, Mich.
Filed April 21, 1930. Serial No. 299,227. PUBLISHED FEBRUARY 3, 1931. Class 6.

283,666. ROUGE, LIP STICK, COLD CREAM, VANISHING CREAM, LEMON CREAM, FACE POWDER, BRILLIANTINE, ASTRINGENT, ALMOND LOTION, SKIN BALM, COCONUT-OIL SHAMPOO, WAVING FLUID OR SETTING COMPOUND. JOSEPH SENDECKE, doing business as Doree Parfumerie and as Doree Products Company, Chicago, Ill.
Filed May 21, 1930. Serial No. 300,985. PUBLISHED MARCH 17, 1931. Class 6.

283,667. TRAILERS. MUSKOGEE IRON WORKS, Muskogee, Okla.
Filed October 12, 1929. Serial No. 291,015. PUBLISHED MARCH 17, 1931. Class 19.

283,668. MALT AND MALT SYRUPS. SAML. STONE, doing business as The Stone Malt Company and Zepp Sales Company, Columbus, Ohio.
Filed October 30, 1929. Serial No. 291,804. PUBLISHED JANUARY 7, 1930. Class 46.

283,669. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed March 27, 1929. Serial No. 281,433. PUBLISHED MARCH 17, 1931. Class 46.

283,670. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed March 27, 1929. Serial No. 281,440. PUBLISHED MARCH 17, 1931. Class 46.

283,671. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed March 27, 1929. Serial No. 281,441. PUBLISHED MARCH 17, 1931. Class 46.

283,672. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed March 27, 1929. Serial No. 281,442. PUBLISHED MARCH 17, 1931. Class 46.

283,673. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed March 27, 1929. Serial No. 281,443. PUBLISHED MARCH 17, 1931. Class 46.

283,674. PAPER TABLEWARE—NAMELY, FORKS AND SPOONS. PURITAN PAPER PLATE & PRODUCTS COMPANY, Trumbauersville, Pa.
Filed June 19, 1929. Serial No. 285,789. PUBLISHED MARCH 17, 1931. Class 23.

283,675. FACE POWDER, ROUGE, LIP STICK, AND LIP AND CHEEK ROUGE. THE CRYSTAL CHEMICAL COMPANY, INC., Bronx, N. Y.
Filed July 11, 1929. Serial No. 286,925. PUBLISHED MARCH 10, 1931. Class 6.

283,676. SEMIMANUFACTURED PRODUCT—NAMELY, MARSHMALLOW SHEETS FOR CONFECTIONERY-MANUFACTURING PURPOSES. GIMBAL BROTHERS, San Francisco, Calif.
Filed July 15, 1929. Serial No. 287,137. PUBLISHED MARCH 17, 1931. Class 46.

283,677. ELECTRIC HAND LANTERNS HAVING HANDLES OR BAILS THEREON. DELTA ELECTRIC COMPANY, Marion, Ind.
Filed July 25, 1929. Serial No. 287,652. PUBLISHED MARCH 10, 1931. Class 21.

283,678. PORTABLE ELECTRIC LANTERNS OPERATED BY DRY CELLS. DELTA ELECTRIC COMPANY, Marion, Ind.
Filed July 25, 1929. Serial No. 287,653. PUBLISHED MARCH 10, 1931. Class 21.

283,679. COD-LIVER-OIL PREPARATIONS. J. E. STROSCHEIN CHEMISCHE FABRIK KOMMANDITGESELLSCHAFT, Berlin, Germany.
Filed August 3, 1929. Serial No. 288,094. PUBLISHED MARCH 17, 1931. Class 6.

283,680. FRUIT JUICES FOR FOOD PURPOSES. BRUCE'S JUICES INC., Tampa, Fla.
Filed Sept. 9, 1929. Serial No. 289,500. PUBLISHED MARCH 17, 1931. Class 46.

283,681. FROZEN CONFECTIONS AND/OR ICE CREAM. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed September 19, 1929. Serial No. 289,978. PUBLISHED DECEMBER 17, 1929. Class 46.

283,682. SLATE MATERIALS FOR ROOFS, WALLS, FLOORS, STAIRWAYS, AND PARTITIONS. SMITH SLATE PRODUCTS COMPANY, Pittsburgh, Pa.
Filed October 4, 1929. Serial No. 290,672. PUBLISHED MARCH 17, 1931. Class 12.

283,683. INSECTICIDE. THE O. & W. THUM COMPANY, Grand Rapids, Mich.
Filed October 9, 1929. Serial No. 290,853. PUBLISHED MARCH 11, 1930. Class 6.

283,684. POWDER FOR CARPET CLEANING AND A GENERAL GREASE REMOVER. EDNA H. FICK, Brooklyn, N. Y., assignor to George H. Fick, Inc., New York, N. Y., a Corporation of New York.
Filed October 15, 1926. Serial No. 238,646. PUBLISHED MARCH 3, 1931. Class 4.

283,685. SYNTHETIC AROMATIC BASE USED AS A RAW MATERIAL IN THE MANUFACTURE OF PERFUMERY AND TOILET SOAPS. SOCIÉTÉ ANONYME M. NAEF & CIE., Geneva, Switzerland.
Filed May 29, 1928. Serial No. 267,213. PUBLISHED MARCH 10, 1931. Class 6.

283,686. AUTOMOBILES AND THEIR STRUCTURAL PARTS. PLYMOUTH MOTOR CORPORATION, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware.
Filed June 6, 1928. Serial No. 267,603. PUBLISHED MARCH 17, 1931. Class 19.

283,687. GENERAL HOUSEHOLD CLEANING PREPARATION. ORVILLE A. DAVENPORT, doing business as Davenport & Company, Portland, Oreg.
Filed November 5, 1928. Serial No. 274,825. PUBLISHED MARCH 10, 1931. Class 4.

283,688. LADIES' HOSIERY. RICE-NEUMAN CO., Milwaukee, Wis.
Filed November 21, 1928. Serial No. 275,631. PUBLISHED MAY 13, 1930. Class 39.

283,689. LUBRICATING GREASE. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,101. PUBLISHED MARCH 10, 1931. Class 15.

283,690. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,100. PUBLISHED MARCH 10, 1931. Class 15.

283,691. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,099. PUBLISHED MARCH 10, 1931. Class 15.

283,692. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,098. PUBLISHED MARCH 10, 1931. Class 15.

283,693. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,097. PUBLISHED MARCH 10, 1931. Class 15.

283,694. LUBRICATING OILS. PAN AMERICAN PETROLEUM & TRANSPORT COMPANY, Wilmington, Del.
Filed January 12, 1931. Serial No. 309,901. PUBLISHED MARCH 10, 1931. Class 15.

283,695. POULTRY FEED. INTERNATIONAL SUGAR FEED NO. TWO COMPANY, Memphis, Tenn.
Filed January 9, 1931. Serial No. 309,780. PUBLISHED MARCH 17, 1931. Class 46.

283,696. PIPE AND PIPE FITTINGS OF CAST IRON, MALLEABLE IRON, STEEL, BRASS, OR OTHER METAL. STOCKHAM PIPE FITTINGS CO., Birmingham, Ala.
Filed January 8, 1931. Serial No. 309,752. PUBLISHED MARCH 10, 1931. Class 13.

283,697. LUBRICATING OILS AND GREASES. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 5, 1931. Serial No. 309,606. PUBLISHED MARCH 10, 1931. Class 15.

283,698. ANTIFREEZE SOLUTION FOR MOTOR VEHICLES. WINTERITE CHEMICAL CO. INC., New York, N. Y.
Filed December 26, 1930. Serial No. 309,364. PUBLISHED MARCH 3, 1931. Class 6.

283,699. STORAGE BATTERIES. WUBCO BATTERY CORPORATION, Niagara Falls, N. Y.
Filed December 17, 1930. Serial No. 309,105. PUBLISHED MARCH 10, 1931. Class 21.

283,700. BRASSIÈRES. MAIDEN FORM BRASSIERE CO. INC., New York, N. Y.
Filed January 13, 1931. Serial No. 309,899. PUBLISHED MARCH 17, 1931. Class 39.

283,701. NECKTIES. MARGARET KASSAY, New York, N. Y.
Filed January 9, 1931. Serial No. 309,782. PUBLISHED MARCH 10, 1931. Class 39.

283,702. FOUNDATION GARMENTS—NAMELY, CORSETS, GIRDLES, BRASSIÈRES, SUPPORTING BELTS, AND COMBINATIONS OF THE SAME. THE FAMISE CORPORATION, Newark, N. J.
Filed January 8, 1931. Serial No. 309,730. PUBLISHED MARCH 17, 1931. Class 39.

283,703. SOAPS AND A CHEMICALLY-TREATED CLOTH FOR POLISHING METAL. DAVID SCHAPIRA, doing business as How-Glad Manufacturing Co., New York, N. Y.
Filed January 2, 1931. Serial No. 309,573. PUBLISHED MARCH 17, 1931. Class 4.

283,704. LADIES' AND CHILDREN'S DRESSES. MORTEN DAVIS CO., Dallas, Tex.
Filed January 2, 1931. Serial No. 309,553. PUBLISHED MARCH 10, 1931. Class 39.

283,705. LADIES' DRESSES. LENNY ROSENZWEIG & IRVING WEINBERG DRESS CO. INC., New York, N. Y.
Filed December 20, 1930. Serial No. 309,213. PUBLISHED MARCH 10, 1931. Class 39.

283,706. MEDICINAL PREPARATION FOR THE TREATMENT OF RESPIRATORY DISEASES AND HEADACHES. THE WM. S. MERRELL COMPANY, Cincinnati, Ohio.
Filed December 19, 1930. Serial No. 309,170. PUBLISHED MARCH 10, 1931. Class 6.

283,707. WIRE, DRAWN, UNWROUGHT, AND COATED WITH ANOTHER SUBSTANCE; STEEL WIRES, HARDENED; ZINC, COPPER, GALVANIZED, AND STEEL WIRES. BANSKA- A HUTNI SPOLECNOST, Brunn, Czechoslovakia.
Filed May 28, 1930. Serial No. 301,389. PUBLISHED MARCH 17, 1931. Class 14.

283,708. FRESH CRANBERRIES, CANNED CRANBERRIES, AND CRANBERRY SYRUP. OCEAN SPRAY PRESERVING COMPANY, South Hanson, Mass., assignor to Cranberry Canners, Inc., a Corporation of Delaware.
Filed May 24, 1930. Serial No. 301,196. PUBLISHED MARCH 17, 1931. Class 46.

283,709. AUTOMOBILE POLISH WITH INCIDENTAL CLEANING PROPERTIES. PETERSEN & FRESE, INC., Valley Stream, N. Y.
Filed January 13, 1931. Serial No. 309,903. PUBLISHED MARCH 17, 1931. Class 16.

283,710. KNIT UNDERWEAR FOR MEN, WOMEN, AND CHILDREN. UNITED UNDERWEAR MILL, Boyertown, Pa.
Filed January 15, 1931. Serial No. 309,998. PUBLISHED MARCH 10, 1931. Class 39.

283,711. HOSIERY. HOLEPROOF HOSIERY CO., Milwaukee, Wis.
Filed January 15, 1931. Serial No. 309,976. PUBLISHED MARCH 10, 1931. Class 39.

283,712. CERTAIN NAMED PAINT PRODUCTS. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del.
Filed January 14, 1931. Serial No. 309,924. PUBLISHED MARCH 17, 1931. Class 16.

283,713. PAINTS. GRACE B. CARRAN, doing business as Central Petroleum Company, Cleveland, Ohio.
Filed February 2, 1931. Serial No. 310,636. PUBLISHED MARCH 17, 1931. Class 16.

283,714. ROOF PAINT. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif.
Filed January 28, 1931. Serial No. 310,494. PUBLISHED MARCH 17, 1931. Class 16.

283,715. HOSIERY. AJAX HOSIERY MILLS, Phoenixville, Pa.
Filed January 20, 1931. Serial No. 310,147. PUBLISHED MARCH 10, 1931. Class 39.

283,716. HOSIERY. TRAYLER CORPORATION, Reading, Pa.
Filed January 17, 1931. Serial No. 310,077. PUBLISHED MARCH 10, 1931. Class 39.

283,717. MEN'S DRESS AND WORK SHIRTS. MARLBORO SHIRT COMPANY, INC., Baltimore, Md.
Filed January 17, 1931. Serial No. 310,056. PUBLISHED MARCH 10, 1931. Class 39.

283,718. VARICOLORED LIQUIDS FOR SPRAYING COKE AND COAL IN ORDER TO IDENTIFY THE SOURCE THEREOF AND TO RENDER THE SAME DUSTLESS. GENERAL SALES, INC., New York, N. Y.
Filed January 9, 1931. Serial No. 309,776. PUBLISHED MARCH 10, 1931. Class 6.

283,719. MOTOR BOATS. HAROLD L. SEAMAN, doing business as Seaman Sea Skiff Works, Long Branch, N. J.
Filed January 6, 1931. Serial No. 309,653. PUBLISHED MARCH 10, 1931. Class 19.

283,720. COMPOUND FOR TREATING ASTHMA. GIB-AS-TINE COMPANY, Logan, W. Va.
Filed January 6, 1931. Serial No. 309,641. PUBLISHED MARCH 10, 1931. Class 6.

283,721. SALT. WORCESTER SALT COMPANY, New York, N. Y.
Filed December 31, 1930. Serial No. 309,543. PUBLISHED MARCH 10, 1931. Class 6.

283,722. STOKERS. THE STOTT STOKER COMPANY, St. Paul, Minn.
Filed December 26, 1930. Serial No. 309,359. PUBLISHED MARCH 17, 1931. Class 34.

283,723. BINS, BOXES, BAGS, AND COVERS THEREFOR COMPOSED IN WHOLE OR PART OF FABRIC AND HOLDING, COVERING, AND ENVELOPING FOODSTUFFS AND OTHER PERISHABLE PRODUCTS AND PRESERVING THE SAME. IRA J. STEINMAN, New York, N. Y.
Filed December 20, 1930. Serial No. 309,216. PUBLISHED MARCH 17, 1931. Class 2.

283,724. DOOR EQUIPMENT. FRANTZ MANUFACTURING Co., Sterling, Ill.
Filed January 16, 1931. Serial No. 310,013. PUBLISHED MARCH 17, 1931. Class 13.

283,725. RECTAL SUPPOSITORY. MCKESSON & ROBBINS, INCORPORATED, Bridgeport and Fairfield, Conn.
Filed January 15, 1931. Serial No. 309,983. PUBLISHED MARCH 10, 1931. Class 6.

283,726. GENERAL MEDICINAL TONIC. J. I. GORE & Co., Philadelphia, Pa.
Filed January 13, 1931. Serial No. 309,894. PUBLISHED MARCH 10, 1931. Class 6.

283,727. MATERIAL MANUFACTURED FOR USE IN THE COATING OF PAPER AND WHICH IS COMPOSED OF CASEIN AND OXIDIZED STARCH. A. E. STALEY MANUFACTURING COMPANY, Decatur, Ill.
Filed January 12, 1931. Serial No. 309,871. PUBLISHED MARCH 10, 1931. Class 6.

283,728. COTTON-PICKERS' SACKS. CLIFTON MANUFACTURING COMPANY, Waco, Tex.
Filed January 10, 1931. Serial No. 309,804. PUBLISHED MARCH 17, 1931. Class 2.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

283,729. (CLASS 39. CLOTHING.) FAUST & DAVIS, INC., New York, N. Y. Filed May 22, 1930. Serial No. 301,021.

TRAVELSPORTS FROCKS

For Women's and Misses' Dresses.
Claims use since Jan. 3, 1930.

283,730. (CLASS 27. HOROLOGICAL INSTRUMENTS.) BEDFORD WATCH COMPANY, INCORPORATED, New York, N. Y. Filed July 9, 1930. Serial No. 303,270.

SOTHIN

For Time Recorders, Clocks, Watches, and Parts Thereof.
Claims use since Apr. 1, 1930.

283,731. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GUSTAVE GLATZER, New York, N. Y. Filed July 9, 1930. Serial No. 303,282.

TOUJOURS ROUGE DE TUSCANY

For Lip Rouge, Face Rouge, Face Powder, Talcum Powder, Toilet Water, Perfume, Cold Cream, Vanishing Cream, Skin Sachet, Nail Polish, Face Lotion, Face Creams, and Beauty Clay.
Claims use since Jan. 1, 1929.

283,732. (CLASS 39. CLOTHING.) I. JANOV-ABELES SHIRT CO., New York, N. Y. Filed July 9, 1930. Serial No. 303,290.

THOROSHRUNK

For Men's and Boys' Dress, Negligee, and Work Shirts.
Claims use since Apr. 1, 1930.

283,733. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) RICHARD L. THORSCH, Chicago, Ill. Filed Aug. 6, 1930. Serial No. 304,303.

Kleen-Dry

For Dry-Cleaning and Washing Machines and Drying Machines Used in Laundry and Dry-Cleaning Establishments.
Claims use since Apr. 1, 1930.

283,734. (CLASS 45. BEVERAGES, NONALCOHOLIC.) GRISTEDE BROS. INC., New York, N. Y. Filed Oct. 7, 1930. Serial No. 306,494.

GRISDALE

For Ginger Ale.
Claims use since July, 1928.

283,735. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE VERIBEST CO., Philadelphia, Pa. Filed Oct. 28, 1930. Serial No. 307,293.

Veribest

For Mixed Parrot Food, Mixed Birdseed with Egg Flake and Fruit, Imported Mixed Birdseed, Love Birdseed, Song Food, Honey Pie (Bird Food), Ant Eggs for Fish, Tropical Fish Food, Turtle Food, Natural Fish Food, and Wafer Fish Food.
Claims use since Apr. 1, 1930.

283,736. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BURTON BROTHERS & CO. INC., New York, N. Y. Filed Dec. 22, 1930. Serial No. 309,228.

BURTON'S EVERWEAR POPLIN

For Cotton Piece Goods.
Claims use since 1920.

283,737. (CLASS 39. CLOTHING.) ABRAHAM MANDEL, doing business as Bellmore Neckwear Co., New York, N. Y. Filed Jan. 3, 1931. Serial No. 309,589.

BELLMORE CRAVAT

For Ties, Bow Ties, Cravats, and Scarfs.
Claims use since June 1, 1929.

283,738. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CLARA STANTON, Denver, Colo. Filed Feb. 24, 1931. Serial No. 311,460.

"I am for Women" TRADE MARK

For Vaginal Suppositories, Antifat Tablets, and Cosmetics—Namely, Astringent Lotion and Cold Cream.
Claims use since July 25, 1922.

283,739. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) NIBLETT-FLANDERS CORPORATION, New York, N. Y. Filed Mar. 14, 1931. Serial No. 312,160.

NORTH BRITISH

For Golf Balls.
Claims use since Nov. 19, 1929.

283,740. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THE TIMKEN STEEL AND TUBE COMPANY, Canton, Ohio. Filed Mar. 18, 1931. Serial No. 312,275.

TIMKEN

For Steel and Alloy Steel in Ingot, Billet, Bloom, Bar, Tube, and Other Forms.
Claims use since Mar. 1, 1919.

283,741. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) LEADCLAD WIRE COMPANY, Wheeling, W. Va. Filed Apr. 15, 1931. Serial No. 313,374.

LEADCLAD

For Wire, Smooth, in Bundles or Coils, and Steel Rods, Bars, and Angles.
Claims use since 1921.

283,742. (CLASS 7. CORDAGE.) LEADCLAD WIRE COMPANY, Wheeling, W. Va. Filed Apr. 15, 1931. Serial No. 313,375.

LEADCLAD

For Stranded Wire Cable.
Claims use since 1929.

283,743. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CHICAGO PNEUMATIC TOOL COMPANY, New York, N. Y. Filed Apr. 18, 1931. Serial No. 313,493.

TUCONE BITS

For Earth-Boring and Well-Drilling Apparatus—Namely, Bits for Drilling and Reaming, Cutter Assemblies, Cone and Roller Cutters Therefor, and Parts Thereof.
Claims use since Mar. 31, 1930.

283,744. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE NO-SNORE CO., Cincinnati, Ohio. Filed Feb. 3, 1930. Serial No. 295,533.

SNORE-NO-MORE

For Preparation for Eliminating Snoring.
Claims use since Jan. 22, 1930.

283,745. (CLASS 39. CLOTHING.) MAX GREENFOGEL, INC., New York, N. Y. Filed Mar. 5, 1930. Serial No. 296,865.

"CIRO"

For Ladies' Dresses and Gowns.
Claims use since Feb. 27, 1930.

283,746. (CLASS 39. CLOTHING.) WALTER FELIX, Reading, Pa. Filed Mar. 29, 1930. Serial No. 298,093.

FEEL-FINE HOSIERY

For Men's and Women's Hosiery.
Claims use since Mar. 21, 1930.

283,747. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SCOTT H. PERKY, doing business as Perky Products, Batavia, N. Y. Filed Apr. 16, 1930. Serial No. 298,955.

TATERSTICKS

For Cooked Potato Food.
Claims use since Feb. 19, 1930.

283,748. (CLASS 39. CLOTHING.) I. JANOV-ABELES SHIRT CO., New York, N. Y. Filed Apr. 28, 1930. Serial No. 299,577.

STRAITSET

For Men's Dress Shirts, Negligee Shirts, and Collars.
Claims use since Jan. 1, 1930.

283,749. (CLASS 39. CLOTHING.) HYMAN HENDEL, Brooklyn, N. Y. Filed May 6, 1930. Serial No. 300,023.

Snappee Shape

For Men's and Boys' Neckties.
Claims use since Mar. 20, 1930.

283,750. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) INTERNATIONAL MERCHANDISING SYNDICATE, INC., New York, N. Y. Filed May 10, 1930. Serial No. 300,282.

TROPIC CREPE

For Cotton Piece Goods.
Claims use since June 19, 1929.

283,751. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FORSTMANN & HUFFMANN COMPANY, Passaic, N. J. Filed May 14, 1930. Serial No. 300,512.

BARLETTA

For Woolen Piece Goods.
Claims use since Apr. 15, 1930.

283,752. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LES PARFUMS DE MOLYNEUX, INC., New York, N. Y. Filed Oct. 3, 1929. Serial No. 290,578.

LE PARFUM
CONNU
DE
MOLYNEUX

For Perfumes, Toilet Waters, Lotions for the Treatment of the Skin, Lotions to be Used in the Treatment of the Hair and Setting of Waves, Bath Powders, Talc Powders, Face Powders, Lip Sticks, and Bath Salts.
Claims use since 1927.

283,753. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) S. A. EGIDIO GALBANI, Milan, Italy. Filed Oct. 9, 1928. Serial No. 273,562.

"GALBANI,,

SOC. AN. EGIDIO GALBANI
MILANO

For Cheese.
Claims use since Feb. 16, 1927.

283,754. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LENA TEVERBAUGH AYERS, doing business as Teverbaugh Manufacturing Company, Chicago, Ill. Filed Oct. 10, 1928. Serial No. 273,571.

TEVERBAUGH

For Hair-Pressing Oil.
Claims use since September, 1926.

TRADE-MARK REGISTRATIONS RENEWED

35,548. CERTAIN NAMED CHEMICAL, PHARMACEUTICAL, SURGICAL, DIETETIC AND COSMETIC PRODUCTS AND PREPARATIONS. Registered December 4, 1900. ICHTHYOL-GESELLSCHAFT CORDES, HERMANNI & CO., Hamburg, Germany. Renewed December 4, 1930, to The Ichthyol Co., Rahway, N. J., a Corporation of New Jersey, assignee.

80,534. HEMOGLOBINIFEROUS PREPARATIONS. Registered January 3, 1911. ARTHUR JAFFE. Renewed January 3, 1931, to Arthur Jaffe, doing business as Chemische Fabrik Arthur Jaffe, Berlin, Germany.

81,679. CURTAIN-ROLLERS. Registered May 2, 1911. THE CURTAIN SUPPLY COMPANY, Newark, N. J., and Chicago, Ill. Renewed May 2, 1931, to The Adams & Westlake Company, Chicago, Ill., a Corporation of Illinois, successor.

81,686. CERTAIN ELECTRICAL GOODS. Registered May 2, 1911. EDWARDS & CO. INC., New York, N. Y., a Corporation of New York. Renewed May 2, 1931.

81,687. CERTAIN ELECTRICAL GOODS. Registered May 2, 1911. EDWARDS & CO. INC., New York, N. Y., a Corporation of New York. Renewed May 2, 1931.

82,087. SALMON-EGGS FOR FISH-BAIT. Registered May 30, 1911. J. E. HUBBART, Seattle, Wash. Renewed May 30, 1931.

82,219. STORAGE-BATTERY PLATES. Registered June 13, 1911. THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia, Pa., a Corporation of New Jersey. Renewed June 13, 1931.

82,324. BACON, HAMS, LARD FOR FOOD, AND BRAWN. Registered June 20, 1911. CHAS. & THOS. HARRIS & CO., LIMITED. Renewed June 20, 1931, to C. & T. Harris (Calne) Limited, Calne, England, a Corporation of Great Britain, assignee.

82,361. A MALT EXTRACT. Registered June 20, 1911. REISCH BREWING CO., Springfield, Ill., a Corporation of Illinois. Renewed June 20, 1931.

82,581. A FINISH FOR DECORATING WALLS AND CEILINGS. Registered July 11, 1911. THE DEAN & BARRY COMPANY, Columbus, Ohio, a Corporation of Ohio. Renewed July 11, 1931.

82,766. A FLOOR-FINISH. Registered July 25, 1911. THE DEAN & BARRY COMPANY, Columbus, Ohio, a Corporation of Ohio. Renewed July 25, 1931.

82,957. A CLEANING PREPARATION CONTAINING BENZIN. Registered August 8, 1911. BOBRICK CHEMICAL CO. Renewed August 8, 1931, to Bobrick Manufacturing Corporation, Los Angeles, Calif., a Corporation of Delaware, successor.

83,067. CHOCOLATE CONFECTIONS. Registered August 15, 1911. HEIT-MILLER-LAU CO. Renewed August 15, 1931, to Wayne Candies, Inc., Fort Wayne, Ind., a Corporation of Indiana, by change of name.

83,214. FLUID SOAP. Registered August 29, 1911. BOBRICK CHEMICAL CO. Renewed August 29, 1931, to Bobrick Manufacturing Corporation, Los Angeles, Calif., a Corporation of Delaware, assignee.

83,253. LAUNDRY WASHING-MACHINES. Registered August 29, 1911. THE HORTON MANUFACTURING COMPANY, Fort Wayne, Ind., a Corporation of Indiana. Renewed August 29, 1931.

83,277. HOG AND PIG RINGS AND RINGERS, ESPECIALLY THOSE RELATING TO THE "FISH-HOOK" TYPE OF RING. Registered August 29, 1911. WILLIAM E. PRATT, Chicago, Ill. Renewed August 29, 1931, to William E. Pratt Manufacturing Company, Joliet, Ill., a Corporation of Illinois, successor.

83,488. METAL AND GRAPHITE BEARINGS, AND BUSHINGS. Registered September 19, 1911. THE GRAPHITE LUBRICATING COMPANY, Renewed September 19, 1931, to Bound Brook Oil-Less Bearing Company, Boundbrook, N. J., a Corporation of New Jersey, by change of name.

83,732. RUBBER HOSE. Registered October 10, 1911. GOODYEAR RUBBER COMPANY, San Francisco, Calif., a Corporation of California. Renewed October 10, 1931.

83,738. AMORPHOUS DIGITOXIN, DISSOLVED IN ALCOHOL AND WATER (DIGITOXIN SOLUBLE CLOETTA,) A REMEDY FOR DISEASES OF THE HEART. Registered October 10, 1911. THE HOFFMANN-LA ROCHE CHEMICAL WORKS, New York, N. Y. Renewed October 10, 1931, to Hoffmann-La Roche, Inc., Nutley, N. J., a Corporation of New Jersey, assignee.

83,742. BICYCLES. Registered October 10, 1911. IVER JOHNSON SPORTING GOODS COMPANY, Boston, Mass., a Corporation of Massachusetts. Renewed October 10, 1931.

83,823. A LAXATIVE PREPARATION. Registered October 17, 1911. EX-LAX MFG. CO., New York, N. Y., a Corporation of New York. Renewed October 17, 1931.

83,837. CITRON AND COCOANUT. Registered October 17, 1911. THE HILLS BROTHERS COMPANY, New York, N. Y., a Corporation of New York. Renewed October 17, 1931.

83,903. HAIR-STAIN. Registered October 24, 1911. PARK M. GILMORE. Renewed October 24, 1931, to The Kenton Pharmacal Company, Covington, Ky., a Corporation of Kentucky, assignee.

83,919. CERTAIN HARDWARE. Registered October 24, 1911. F. D. KEES MANUFACTURING CO. Renewed October 24, 1931, to F. D. Kees Manufacturing Co., Beatrice, Nebr., a Corporation of Nebraska, successor.

83,973. DISINFECTANTS. Registered October 24, 1911. FREDERICK DISINFECTANT COMPANY, Atlanta, Ga., a Corporation of Georgia. Renewed October 24, 1931.

LABELS

REGISTERED JUNE 2, 1931

39,236.—*Title:* SILVERSEAL TARNISH PROOF. For Silverware Chests. ASSOCIATED SILVER COMPANY, Chicago, Ill. Published March 2, 1931.

39,237.—*Title:* CHOCOLATE KANDYEAST. For Chocolate. EARLE C. BENNETT, doing business as Kandy Yeast Company, West Springfield, Mass. Published March 19, 1931.

39,238.—*Title:* FREIHOFER'S PULLMAN BREAD. For Bread. CHAS. FREIHOFER BAKING CO. INC., Troy, N. Y. Published October 5, 1929.

39,239.—*Title:* MILADY FOOTWEAR. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 27, 1931.

39,240.—*Title:* BETT LEE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 26, 1931.

39,241.—*Title:* NU-WAY. For Weather Stripping. MACKLANBURG-DUNCAN COMPANY, Oklahoma, Okla. Published March 15, 1931.

39,242.—*Title:* CHASE & SANBORN. For Coffee and Chicory. STANDARD BRANDS INCORPORATED, New York, N. Y. Published December 2, 1930.

39,243.—*Title:* COFFEE. For Coffee. UNION BAG & PAPER CORPORATION, New York, N. Y. Published April 6, 1931.

PRINTS

REGISTERED JUNE 2, 1931

13,209.—*Title:* THE CREAM OF THE CROP. For Canned Vegetables. O. B. ANDREWS COMPANY, Chattanooga, Tenn. Published December 12, 1930.

13,210.—*Title:* A WOMAN'S DEAREST JEWELS. For Amoretta Cream, Skin Tonic, Poudre de Lilas, Eight Hour Cream, Etc. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published February 25, 1931.

13,211.—*Title:* THE SPIRIT WITHIN. For Ardenavelva Cream, Orange Skin Food, Anti-Brown Spot Ointment, Etc. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published February 25, 1931.

13,212.—*Title:* THE IMPORTANCE OF MAKE-UP. For Amoretta Cream, Creme de France, Lille Lotion, Noshine, Etc. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published April 28, 1931.

13,213.—*Title:* NOW VIVATONE COMPLETES THE SHAVE. For a Skin Tonic and Astringent for Use After Shaving. DAGGETT & RAMSDELL, New York, N. Y. Published March 15, 1930.

13,214.—*Title:* NEW MACHINE-GUN PACK. For Firecrackers. HITT FIREWORKS CO., Seattle, Wash. Published March 27, 1931.

13,215.—*Title:* THE GAME OF FLIP. For Game Apparatus. ARTHUR S. LITTLEFIELD, Winnetka, Ill. Published April 15, 1931.

13,216.—*Title:* WE WOMEN KNOW—WHITE KING WASHES EVERYTHING. For Soap. LOS ANGELES SOAP COMPANY, Los Angeles, Calif. Published February 2, 1931.

13,217.—*Title:* LITTLE MARLO THE HONEY COOKIE BOY. For Cookies. MANNINGS, INC., doing business as Mrs. Marlatt's Bakeries, San Francisco, Calif. Published January 11, 1931.

13,218.—*Title:* PFEIFER'S TASTY MEAT PRODUCTS. For Meat Products. HENRY PFEIFER, INC., Newark, N. J. Published December 5, 1930.

13,219.—*Title:* CANDY TO EAT AND STAY THIN, PRISCILLA ALDEN SWEETS THAT SPEAK FOR THEMSELVES AND YOU. For Sweets. STARRET LAND COMPANY, Detroit, Mich. Published February 12, 1931.

13,220.—*Title:* ASTRING-O-SOL. For Mouth Wash. FREDERICK STEARNS & COMPANY, Detroit, Mich. Published March 23, 1931.

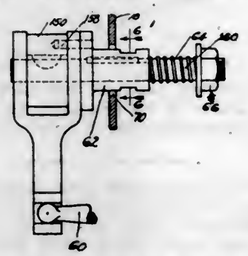
13,221.—*Title:* SUN-RA. For Flavored Beverage Preparation. SUN-RA PRODUCTS COMPANY, St. Joseph, Mo. Published March 1, 1931.

13,222.—*Title:* THE BEAUTY OF SEYMOUR TROY SHOES IS MORE THAN SKIN DEEP. For Shoes. SEYMOUR TROY & CO. INC., Brooklyn, N. Y. Published March 16, 1931.

REISSUES

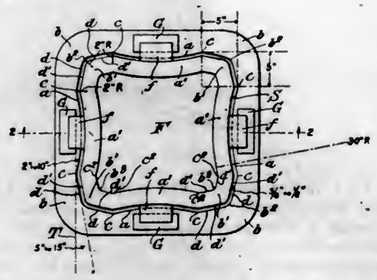
JUNE 2, 1931

18,083. BRAKE CONTROL. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,656,263, dated Jan. 17, 1928, Serial No. 34,147, filed June 1, 1925. Application for reissue filed Apr. 11, 1929. Serial No. 354,430. 43 Claims. (Cl. 188—194.)



1. A vehicle having an axle and a wheel mounted for swivelling movement at the end of the axle, together with retarding means comprising, in combination with said parts, a drum rotating with the wheel, an expansible friction device within the drum having adjacent free ends, a floating member having a cam part between said free ends and having another part movable in applying the brake toward the swivelling axis from an idle position spaced some distance from the swivelling axis, and means engaging the other part of said member for operating the retarding means.

18,084. INGOT MOLD TOP. EMIL GATHMANN, Baltimore, Md., assignor to The Gathmann Engineering Company, Baltimore, Md., a Corporation of Maryland. Original No. 1,621,402, dated Mar. 15, 1927, Serial No. 658,371, filed Aug. 20, 1923. Application for reissue filed Mar. 12, 1929. Serial No. 346,460. 3 Claims. (Cl. 22—147.)

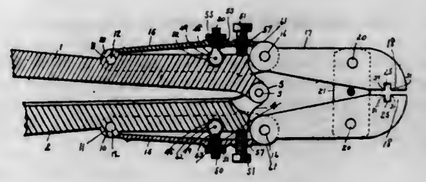


1. A mold top for ingot molds having a chamber provided with four primary side walls of convex contour and four widened corners, each provided with three curved salients intervening between the adjacent primary side walls of the feeder.

18,085. JELLY PREPARATION. ALBERT LEO, Chicago, Ill. Original No. 1,629,716, dated May 24, 1927, Serial No. 60,687, filed Oct. 5, 1925. Application for reissue filed Dec. 24, 1928. Serial No. 328,307. 7 Claims. (Cl. 99—11.)

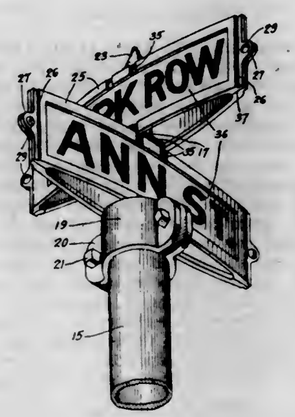
5. A jelly preparation comprising sugar having a coating formed thereon of a pectin containing substance and being in dry, granular form.

18,086. THREAD SWELLING TOOL. CHARLES F. ROBERTS, Utica, N. Y., assignor to Herbert S. Powell, Utica, N. Y. Original No. 1,762,562, dated June 10, 1930, Serial No. 303,089, filed Aug. 30, 1928. Application for reissue filed Mar. 16, 1931. Serial No. 524,418. 6 Claims. (Cl. 81—10.)



1. A thread swelling tool having cooperating jaws and means for actuating the same, said jaws being provided each on its work engaging face with a limited number of teeth materially spaced apart for penetration into the threads of an interposed bolt at spaced points to force the intervening portions of the bolt beyond the normal periphery thereof.

18,087. SIGN FRAME AND UPRIGHT. ABRAHAM SPRUNG, Brooklyn, and JOSEPH SPRUNG, New York, N. Y., assignors to Municipal Street Sign Co. Inc., New York, N. Y., a Corporation of New York. Original No. 1,529,752, dated Mar. 17, 1925, Serial No. 599,969, filed Nov. 10, 1922. Application for reissue filed Feb. 19, 1931. Serial No. 517,084. 10 Claims. (Cl. 40—145.)



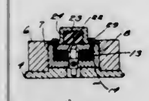
9. A street sign comprising pairs of plates, frames for each pair of plates, said frames being outwardly convexed the central portion of adjacent sides of each pair of frames containing a recess, and an upright suited to enter into the mentioned recesses, said upright having a pair of substantially flat parallel surfaces contacting each pair of said recessed portions.

18,088. METHOD AND MEANS FOR WAVING HAIR. ELIAS WHITNEY BOYDEN, Spokane, Wash. Original No. 1,671,177, dated May 29, 1928, Serial No. 125,466, filed July 28, 1926. Renewed Apr. 4, 1928. Application for reissue filed Dec. 17, 1929. Serial No. 414,833. 8 Claims. (Cl. 132—33.)



8. A hair waving device comprising a generally tubular drier having a bore therethrough and provided on its ends with heat insulating collar guards, a stick heater adapted for insertion in the bore of said drier, said heater having an enlargement limiting insertion of said heater to dispose the free end thereof substantially at the inner edge of the collar guard adjacent thereto.

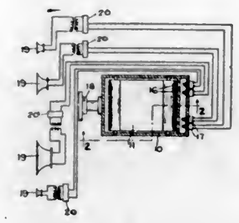
18,089. PICK-UP. FRANK L. CAPPS, Milford, Conn., and HARRY A. SUMMERS, Brooklyn, N. Y., assignors to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Original No. 1,760,114, dated May 27, 1930, Serial No. 354,854, filed Apr. 13, 1929. Application for reissue filed Aug. 6, 1930. Serial No. 473,419. 19 Claims. (Cl. 179—100.41.)



1. In an electric phonograph pick-up, an armature mounted for rocking movement about a pivot, a flexible spring member projecting from said armature and damping means enclosing the end of said spring.

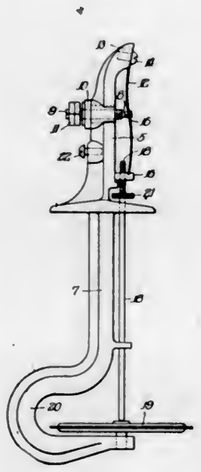
18,090. METHOD OF AND APPARATUS FOR RECORDING AND REPRODUCING SOUND. BERNARD KWARTIN, Brooklyn, N. Y. Original No. 1,781,550, dated Nov. 11, 1930, Serial No. 237,322, filed Dec. 2, 1927. Application for reissue filed Jan. 8, 1931. Serial No. 507,510. 8 Claims. (Cl. 179—1003.)

1. An apparatus for photographically producing upon a photographic film a plurality of individual records of sounds of distinctly different pitch characteristics, said apparatus comprising a casing, means for moving the film through the casing, a light enclosing chamber arranged to one side of and extending transversely of said film, said chamber being provided with a plurality of transversely spaced slots, a plurality of light sources within said chamber respectively located behind said slots for projecting light rays therethrough, said light sources being independently responsive to different electrical variations corresponding to sound vibrations of different pitch for recording the different sounds upon the film, and a plurality of sound responsive devices having dia-



phragms of varying mass and size each selectively responsive to sounds of different pitch for producing said different electrical variations.

18,091. CIRCUIT BREAKER AND CLOSER. FERDINAND A. PFEIFER, Springfield, Ohio, assignor of forty-nine per cent to Ellsworth Craig, Springfield, Ohio. Original No. 1,676,155, dated July 3, 1928, Serial No. 175,684, filed Mar. 16, 1927. Application for reissue filed Jan. 22, 1930. Serial No. 422,666. 20 Claims. (Cl. 200—140.)

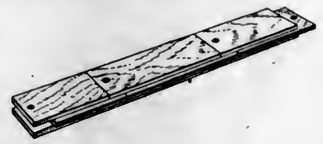


20. In a circuit breaker, the combination of a contact member, a conducting element disposed adjacent thereto and having a contact member thereon adapted to have cooperative relation with said first named contact member, said conducting element being disposed in a compound curved shape, said second named contact member being substantially at the dead center thereof, whereby any movement of said conducting element moves said second named contact member with respect to said first named contact member.

DESIGNS

JUNE 2, 1931

84,271. FLOORING UNIT. JAMES H. BODEN, Athens, Ohio. Filed Feb. 24, 1930. Serial No. 34,628. Term of patent 14 years.



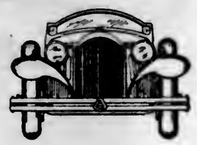
The ornamental design for a flooring unit, as shown.

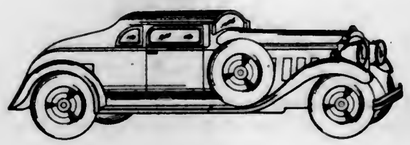
84,272. CHRISTMAS TREE ORNAMENT. PAUL BOEHLAND, Milwaukee, Wis. Filed Mar. 5, 1931. Serial No. 88,951. Term of patent 14 years.



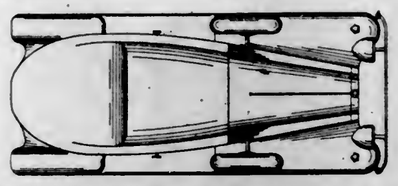
The ornamental design for a Christmas tree ornament as shown.

84,273. AUTOMOBILE. TRUMAN H. BOWMAN, St. Louis, Mo. Filed Oct. 8, 1930. Serial No. 37,183. Term of patent 3½ years.





84,273—Continued.



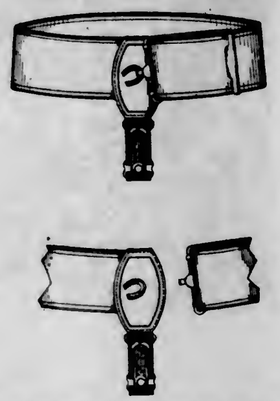
The ornamental design for an automobile, as shown.

84,274. WEIGHING SCALE. WILLIAM BROOKE, New York, N. Y., assignor to Nathan Frankel, New York, N. Y. Filed Oct. 18, 1930. Serial No. 37,312. Term of patent 3½ years.



The ornamental design for a weighing scale, substantially as shown and described.

84,275. GARTER. TILLMAN CAHN, Elkins Park, Pa., assignor to Pioneer Suspender Company, a Corporation of Pennsylvania. Filed Apr. 17, 1931. Serial No. 39,517. Term of patent 14 years.



The ornamental design for a garter as shown and described.

84,276. CASING FOR FRUIT VENDING MACHINE. WELLS H. CLAUSSEN, Seattle, Wash., assignor to Apple Vender Co., Seattle, Wash., a Corporation of Washington. Filed Feb. 24, 1931. Serial No. 38,801. Term of patent 14 years.



The ornamental design for a casing for fruit vending machine, as shown and described.

84,277. TEXTILE FABRIC. JOSEPH C. EARNSHAW, Philadelphia, Pa., assignor to Moss Rose Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 1, 1930. Serial No. 37,853. Term of patent 7 years.



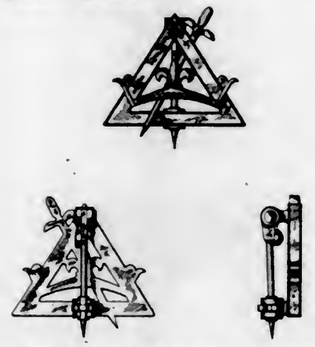
The ornamental design for a textile fabric, substantially as shown

84,278. JAR. ALF C. EBBESEN, Chicago, Ill., assignor to Orange-Crush Company, Chicago, Ill. Filed Feb. 28, 1931. Serial No. 38,884. Term of patent 14 years.



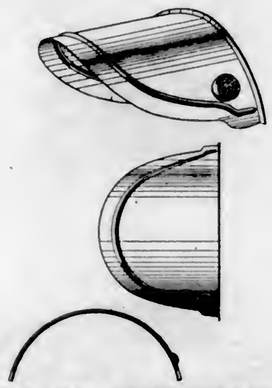
The ornamental design for a jar as shown and described.

84,279. SODALITY PIN. GERALD A. FITZGIBBONS, St. Louis, Mo. Filed Mar. 10, 1931. Serial No. 39,014. Term of patent 3½ years.



The ornamental design for a sodality pin, as shown.

84,280. AUTOMOBILE HEAD LAMP VISOR. AUGUSTUS J. FRAME, Columbus, Ohio, assignor to Columbus Auto Brass Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 1, 1930. Serial No. 37,101. Term of patent 14 years.



The ornamental design for an automobile head lamp visor as shown.

84,281. WREATH. JOHN FREI, Jr., Chicago, Ill. Filed Nov. 20, 1930. Serial No. 37,729. Term of patent 7 years.



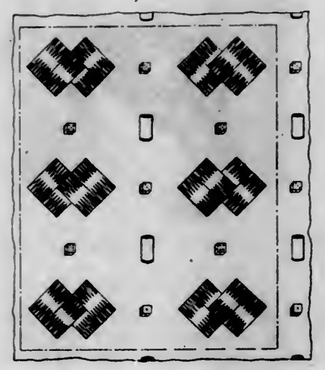
The ornamental design for a wreath as shown.

84,282. WREATH. JOHN FREI, Jr., Chicago, Ill. Filed Nov. 20, 1930. Serial No. 37,730. Term of patent 7 years.



The ornamental design for a wreath as shown.

84,283. TEXTILE FABRIC OR SIMILAR ARTICLE. PERCEVAL S. GAULT, New York, N. Y. Filed Mar. 25, 1931. Serial No. 39,289. Term of patent 7 years.



The ornamental design for a textile fabric or similar article substantially as shown and described.

84,284. FINGER RING OR ARTICLE OF SIMILAR NATURE. EDWARD J. GROSS, New Rochelle, N. Y. Filed Apr. 17, 1931. Serial No. 39,518. Term of patent 7 years.



The ornamental design for a finger ring or article of similar nature, as shown.

84,285. FINGER RING OR ARTICLE OF SIMILAR NATURE. EDWARD J. GROSS, New Rochelle, N. Y. Filed Apr. 17, 1931. Serial No. 39,514. Term of patent 7 years.



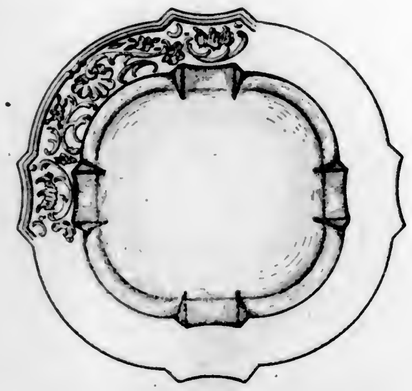
The ornamental design for a finger ring or article of similar nature, as shown.

84,286. FINGER RING OR ARTICLE OF SIMILAR NATURE. EDWARD J. GROSS, New Rochelle, N. Y. Filed Apr. 17, 1931. Serial No. 39,515. Term of patent 7 years.



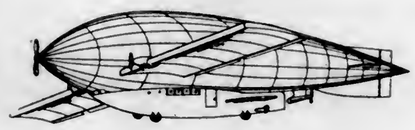
The ornamental design for a finger ring or article of similar nature, as shown.

84,287. PLATE OR SIMILAR ARTICLE. GEORG HEDLER, Arzberg, Germany. Filed Apr. 8, 1931. Serial No. 39,400. Term of patent 7 years.



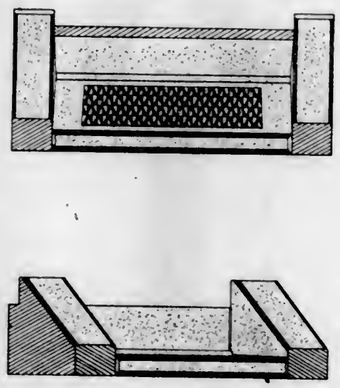
The ornamental design for a plate or similar article as shown and described.

84,288. DIRIGIBLE AIRPLANE. JOHN W. S. HODGDON, Long Beach, Calif. Filed Oct. 14, 1929. Serial No. 33,029. Term of patent 3½ years.



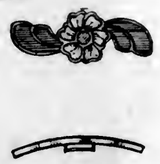
The ornamental design for a dirigible airplane as shown.

84,289. SECTIONAL LAWN STEP. CHARLES A. JOHNSON, Duluth, Minn. Filed Feb. 12, 1931. Serial No. 38,628. Term of patent 14 years.



The ornamental design for a sectional lawn step, as shown.

84,290. SHOE ORNAMENT. CLIFFORD G. KING, Barrington, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 10, 1931. Serial No. 39,421. Term of patent 3½ years.



The ornamental design for a shoe ornament as shown.

84,291. CHAIR. HENRY D. LEE, Berkeley, Calif., assignor to The Ashby Furniture Company, Incorporated, Berkeley, Calif., a Corporation of California. Filed Apr. 4, 1931. Serial No. 39,364. Term of patent 7 years.



The ornamental design for a chair, substantially as shown.

84,292. SOFA. HENRY D. LEE, Berkeley, Calif., assignor to The Ashby Furniture Company, Incorporated, Berkeley, Calif., a Corporation of California. Filed Apr. 4, 1931. Serial No. 39,365. Term of patent 7 years.



The ornamental design for a sofa, substantially as shown.

84,293. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 38,902. Term of patent 8½ years.



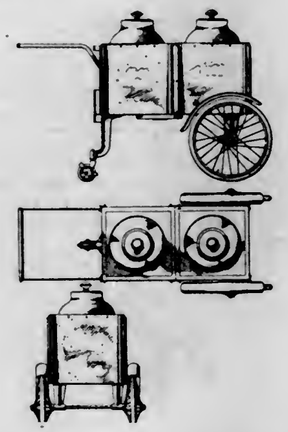
The ornamental design for a dress substantially as shown.

84,294. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 38,904. Term of patent 3½ years.



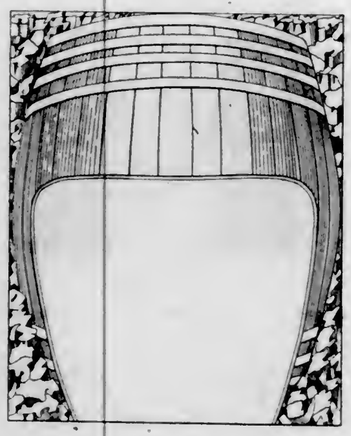
The ornamental design for a dress substantially as shown.

84,295. PORTABLE VENDER. WILLIAM S. LYNN, Knoxville, Tenn., assignor to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Sept. 10, 1930. Serial No. 36,923. Term of patent 14 years.



The ornamental design for a portable vender as shown.

84,296. FRONT PANEL FOR A THIRST STATION. EDWIN MACK MORRIS, Galveston, Tex., assignor to Triple "XXX" Company, a Corporation of Texas. Filed Dec. 17, 1929. Serial No. 33,820. Term of patent 7 years.



The ornamental design for a front panel for a thirst station as shown and described.

84,297. BUCKLE. ARTHUR WILLIAM NAUS, New York, N. Y. Filed Mar. 9, 1931. Serial No. 39,011. Term of patent 14 years.



The ornamental design for a buckle as shown and described.

84,298. PENCIL SHARPENER. ANTON JOSEPH PALME, South Orange, N. J., assignor, by mesne assignments, to Eagle Pencil Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 11, 1930. Serial No. 37,243. Term of patent 14 years.



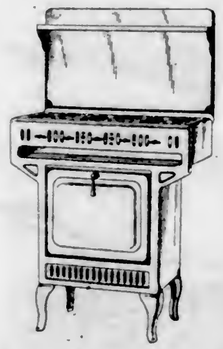
The ornamental design for a pencil sharpener, substantially as shown and described.

84,299. BRACKET FOR GAME TABLES. FRANK E. PAVELKA and HAROLD W. THOMPSON, San Antonio, Tex. Filed Mar. 13, 1931. Serial No. 39,078. Term of patent 14 years.



The ornamental design for a bracket for game tables as shown.

84,300. STOVE. HERBERT M. REEVES, Ironton, Ohio, assignor to Continental Stove Corporation, Ironton, Ohio. Filed Oct. 7, 1930. Serial No. 37,163. Term of patent 7 years.



The ornamental design for a stove, as shown.

84,301. LAMP. ALEXANDER RIMBERG, Brooklyn, N. Y. Filed Mar. 27, 1931. Serial No. 39,265. Term of patent 3½ years.



The ornamental design for a lamp as shown and described.

84,302. TEXTILE FABRIC. MATTHEW W. RYAN, Freeport, N. Y., assignor to Matthew W. Ryan Sons & Co., Inc., New York, N. Y. Filed Jan. 6, 1931. Serial No. 38,209. Term of patent 3½ years.

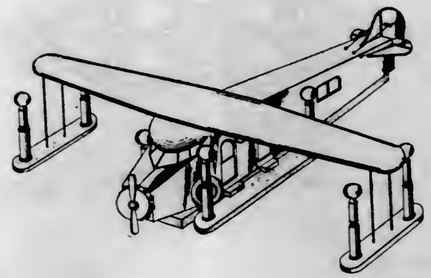
The ornamental design for a textile fabric as shown.

84,303. NECKLACE. JULES SCHWAB, New York, N. Y. Filed Apr. 3, 1931. Serial No. 39,359. Term of patent 3½ years.



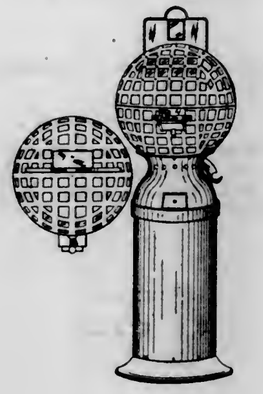
The ornamental design for a necklace, as shown.

84,304. FILLING STATION. JOHN L. SMITH, Shreveport, La. Filed Oct. 7, 1930. Serial No. 37,168. Term of patent 14 years.



The ornamental design for a filling station, as shown.

84,305. CASING FOR A GOLF BALL PAINTING MACHINE. RALPH C. SMITH, Los Angeles, Calif. Filed Feb. 13, 1931. Serial No. 38,638. Term of patent 14 years.



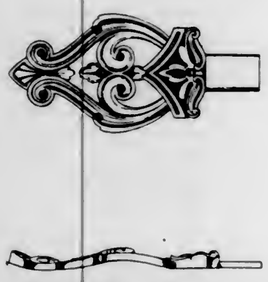
The ornamental design for a casing for a golf ball painting machine substantially as shown.

84,306. CENTER ORNAMENT FOR DRAPERY RODS OR THE LIKE. WALTER EDWARD SMITH, Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed Mar. 25, 1931. Serial No. 39,236. Term of patent 7 years.



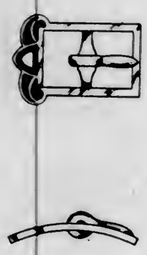
The ornamental design for a center ornament for drapery rods or the like, as shown.

84,307. END ORNAMENT FOR DRAPERY RODS OR THE LIKE. WALTER EDWARD SMITH, Providence, R. I., assignor to Kenney Manufacturing Company, Cranston, R. I., a Corporation of Rhode Island. Filed Mar. 25, 1931. Serial No. 39,237. Term of patent 7 years.



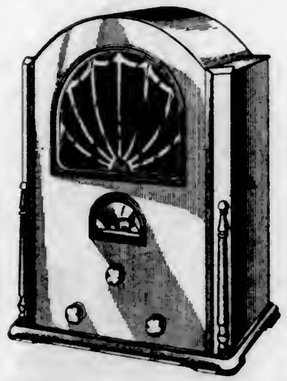
The ornamental design for an end ornament for drapery rods or the like, as shown.

84,308. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 6, 1931. Serial No. 39,383. Term of patent 7 years.



The ornamental design for a shoe buckle as shown.

84,309. RADIOCABINET. GERTRUDE E. THOMPSON, Elgin, Ill., assignor to Van Sicklen Corporation, Elgin, Ill., a Corporation of Delaware. Filed Mar. 26, 1931. Serial No. 39,254. Term of patent 3½ years.



The ornamental design for a radiocabinet substantially as shown and described.

84,310. ELECTRIC LAMP. ROBERT TUCKER, Jamaica Plain, Mass. Filed Apr. 14, 1931. Serial No. 39,473. Term of patent 14 years.



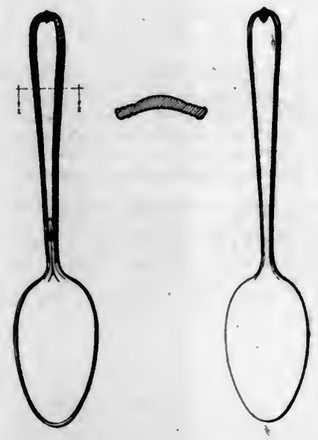
The ornamental design for an electric lamp as shown.

84,311. SHOE ORNAMENT. HERBERT G. WHITEHOUSE, Newark, N. J., assignor to The Riker Company, a Corporation of New Jersey. Filed Mar. 14, 1931. Serial No. 39,096. Term of patent 7 years.



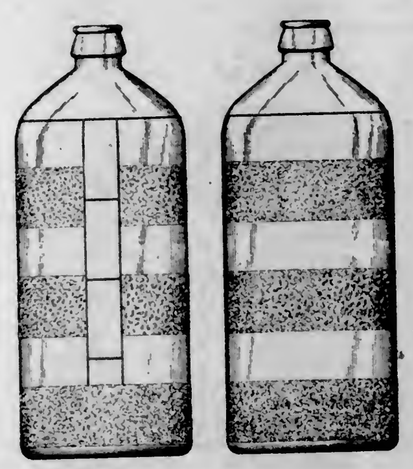
The ornamental design for a shoe ornament, as shown.

84,312. SPOON OR SIMILAR ARTICLE. FREDERICK RUSSELL WOODWARD, Attleboro, Mass., assignor to The Alvin Corporation, Providence, R. I. Filed Feb. 13, 1931. Serial No. 38,650. Term of patent 14 years.



The ornamental design for a spoon or similar article substantially as shown and described.

84,313. BOTTLE OR SIMILAR ARTICLE. WILLARD P. ZIMMERMAN, Muncie, Ind., assignor to Hemingray Glass Company, Muncie, Ind., a Corporation of Kentucky. Filed Mar. 6, 1931. Serial No. 38,979. Term of patent 14 years.

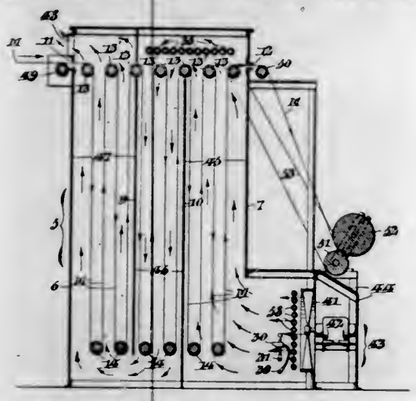


The ornamental design for a bottle or similar article substantially as shown and described.

PATENTS

GRANTED JUNE 2, 1931

1,807,580. COOLING AND CONDITIONING MACHINE. THOMAS ALLSOP, Philadelphia, Pa., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 24, 1929. Serial No. 334,843. 9 Claims. (Cl. 26—46.)

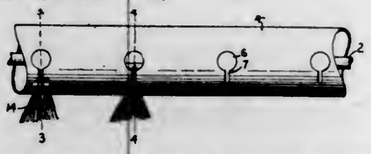


1. In a material cooling and conditioning equipment, the combination of an enclosure subdivided to define a tortuous course for the material treated, means inducing a flow of humidified atmospheric air through said enclosure in a direction alternatingly counter to and following that traveled by the material, heater means in the leading sections of the tortuous course with cooling means at the entrance for atmospheric air, and means automatically controlling the humidity and temperature conditions in the enclosure at a predetermined state irrespective of exterior atmospheric variations.

1,807,581. ELECTRICAL CONTACT TERMINAL. CHARLES FREDERICK WILLIAM BATES, Cleveland Heights, Ohio, assignor to The Ohio Instrument Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 5, 1928. Serial No. 317,491. 13 Claims. (Cl. 75—1.)

1. An electrical contact terminal containing 50% to 95% of metal from the group consisting of tungsten and molybdenum together with both copper and .2% to 5% silicon.

1,807,582. WARP BEAM. CARL D. BROWN, Hopedale, Mass. Filed Oct. 12, 1928. Serial No. 312,045. 8 Claims. (Cl. 242—125.)

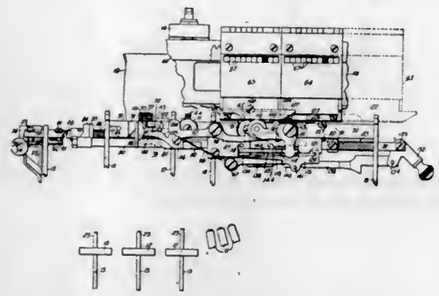


8. A warp beam comprising a cylindrical hollow metal barrel having a longitudinal series of apertures therethrough and a plurality of warp anchors bodily shiftable to cooperate with said apertures and unyieldingly engageable with the barrel in either of two positions and each adapted to have tied thereto a group of warp ends, the point of connection between each warp anchor and its group of warp ends lying outside the barrel periphery when the anchor is in one of the two positions and lying inside when the anchor is in the other position.

1,807,583. PRODUCTION OF ELEMENTAL SULPHUR FROM HYDROGEN SULPHIDE AND SULPHUR DIOXIDE. RAYMOND F. BACON, Bronxville, N. Y. Filed Apr. 13, 1927. Serial No. 183,437. 9 Claims. (Cl. 23—226.)

1. The improvement in the production of elemental sulphur by the reaction between hydrogen sulphide and sulphur dioxide characterized by subjecting the reacting gases to a sufficient pressure to substantially promote the reaction between hydrogen sulphide and sulphur dioxide with the formation of elemental sulphur.

1,807,584. COMPUTING MACHINE. EDWIN E. BARNEY, New Rochelle, N. Y., assignor to Remington Accounting Machine Corporation, New York, N. Y., a Corporation of New York. Filed June 22, 1926. Serial No. 117,720. 18 Claims. (Cl. 235—59.)

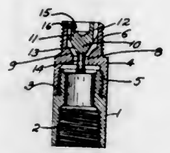


1. In a computing machine, the combination of two totalizers, two actuators for performing like computations on said totalizers simultaneously, numeral keys common to both actuators, a reversing key for reversing the action of both actuators simultaneously in order to effect subtraction from both totalizers, a second key, and means controlled by said second key acting to reverse the action of one of the actuators and to make the other ineffective.

1,807,585. ANODE. JULIUS BECKER, Chicago, Ill. Filed May 13, 1927. Serial No. 191,278. 2 Claims. (Cl. 204—4.)

2. In combination, an electrolyte for the electro-deposition of chromium containing an aqueous solution of chromic acid and an anode comprising steel containing about 0.25% to about 15% of silicon.

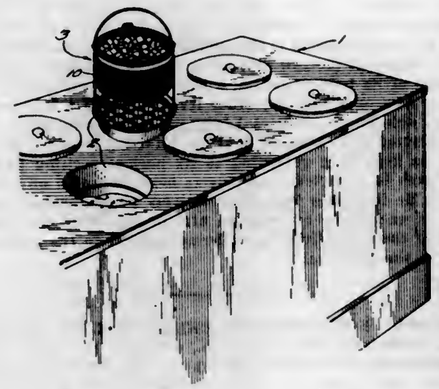
1,807,586. AUTOMATIC SHUT-OFF DEVICE. PETER C. CARLSTON, Salt Lake City, Utah. Filed Sept. 13, 1927. Serial No. 219,324. 1 Claim. (Cl. 284—18.)



An automatic shut-off device, comprising a first hollow body member, internal threads at one end thereof, the other end thereof being of reduced size and externally

threaded, members extending radially across the bore of said other end, a second body member, also substantially cylindrical, internal threads in one end of said second body member adapted to engage the external threads on the first body member, a reduced externally threaded portion at the other end of said second body member, a radially extending wall across the bore of said second body member at the juncture of the two said portions thereof, there being an aperture formed therethrough and a frusto-conical valve seat formed therein, a valve comprising a atem adapted to extend through the said aperture and a frusto-conical portion adapted to contact said valve seat and a longitudinally grooved cylindrical body portion, said body portion of the valve having a slot therein, and a pin extending through the second body portion and into said slot.

1,807,587. SHARP FREEZING CONTAINER FOR ICE CREAM CABINETS. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed July 5, 1929. Serial No. 375,948. 4 Claims. (Cl. 62—111.)



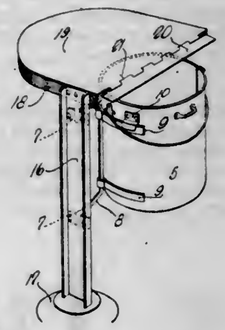
1. A sharp freezing container for ice cream cabinets having vertically positioned receptacles, comprising a unit having a plurality of vertically spaced shelves, a plurality of vertical stays for connecting and positioning the shelves, and one or more ice cube trays positioned on said shelves, said vertical stays being so positioned as to permit horizontal removal of a tray from a shelf as the unit is raised from the ice cream cabinet receptacle.

1,807,588. ELECTRICAL SOCKET. REUBEN ECKSTEIN, New York, N. Y. Filed Aug. 27, 1927. Serial No. 215,821. 2 Claims. (Cl. 173—358.)



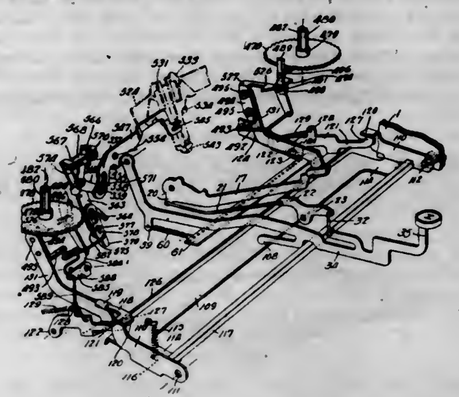
1. In an electric socket, a bushing adapted to receive an electric element, a spring pressed contact for said element in said socket, an insulating disc mounted on said contact, said disc having a metallic film thereon making electrical connection with said contact and a metallic ring on the outer periphery of said disc making electrical contact with said film.

1,807,589. CONTAINER. AMASA EDMUNDS, Milwaukee, Wis. Filed Sept. 29, 1926. Serial No. 138,435. 4 Claims. (Cl. 45—75.)



1. A device of the character described, comprising a support, a table member, a bracket member movably mounted on the support, a pair of superimposed bracket arms carried by said bracket member, a container, and means carried by the container and readily detachably engageable over one of the arms to support the container therefrom whereby the container may be swung under or free of the table member, the table member forming a cover for the container when the container is swung under it.

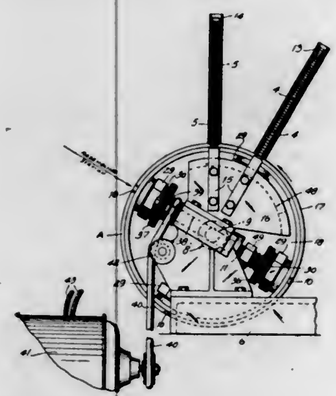
1,807,590. TYPEWRITING MACHINE. ALONZO B. ELY and EDWIN L. HARMON, Groton, N. Y., assignors to L C Smith & Corona Typewriters Inc., Syracuse, N. Y., a Corporation of New York. Original application filed Oct. 31, 1925, Serial No. 66,000. Divided and this application filed Oct. 8, 1927. Serial No. 224,903. 14 Claims. (Cl. 197—151.)



1. In a typewriting machine, a pair of ribbon spool rotating ratchet wheels adjacent opposite sides of the machine, means supporting said ratchet wheels to rotate about vertical axes, a pair of upright ratchet wheel driving pawls arranged to engage said ratchet wheels at their upper ends, means supporting said pawls intermediate their ends to vibrate fore and aft of the machine, an upright U-shaped rocking frame pivotally supported at

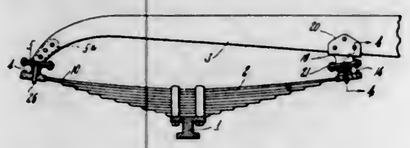
its lower end to vibrate about a horizontal axis extending transversely of the machine, links connected at their rear ends with the upright side arms of said rocking frame and connected at their forward ends with the lower ends of said pawls, said rocking frame having a pair of forwardly extending arms; a universal bar extending transversely of the machine forward of said rocking frame and having side arms extending forwardly therefrom pivotally supported at their forward ends to rock about a horizontal axis extending transversely of the machine, said universal bar arms having laterally extending lugs engaging over the forwardly extending arms of the rocking frame; a spring normally urging the universal bar upwardly; a spring normally urging said rocking frame rearwardly; and key levers arranged to depress said universal bar.

1,807,591. MEANS FOR ASSEMBLING NUTS AND BRIDGE WASHERS ON VALVE STEMS. JOHN A. FLEISCHLI, Clayton, and JOSEPH M. KOUNTZMAN, St. Louis, Mo., assignors to Cupples Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 7, 1929. Serial No. 384,100. 9 Claims. (Cl. 29—84.)



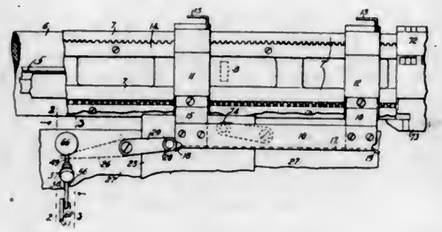
1. In an apparatus for applying nuts and bridge washers to the threaded valve stems of pneumatic tubes, an assembling station where said parts are assembled, delivery stations provided with a holder for the nuts, and a holder for the bridge washers, a carrier whereby the nuts and bridge washers are transferred from said holders to said assembling station, and driving means whereby said nuts are rotated to receive the valve stems at said assembling station.

1,807,592. MOTOR VEHICLE SUSPENSION. WILLIAM D. HARPER, Wellesley, Mass. Filed Jan. 11, 1928. Serial No. 245,924. 8 Claims. (Cl. 267—54.)



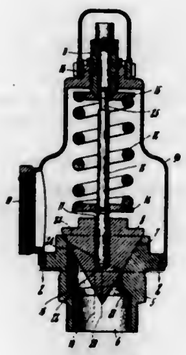
1. In a vehicle, an axle, a leaf spring supported by said axle with its ends extending to front and rear of the axle, a frame member, a coupling between one end of said spring and the frame member including a ball and cups embracing said ball and secured, respectively to the spring and the frame member, said cups being formed to embrace the ball at front and rear closely enough to prevent its rolling in those directions, while having open spaces at the sides of the ball which permit it to roll transversely.

1,807,593. COMPUTING MACHINE. FREDERICK A. HART, New Britain, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed July 14, 1927. Serial No. 205,749. 2 Claims. (Cl. 235—59.)



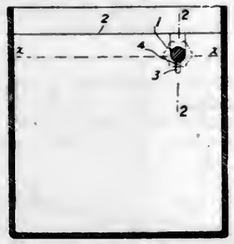
2. In a combined typewriting and calculating machine which includes a platen-carriage and a totalizer-truck connected together, and in which a set of numeral keys is a common feature of both the writing mechanism and the calculating mechanism, and the calculating mechanism of which includes a universal bar which is worked by means set in action by those keys whenever calculating is being done and which is movable on a pivotal axis, the combination of a rail attached to the totalizer-truck, a rail-actuated lever on which the rail acts when it is in a predetermined section of its path of travel, a bar-shifting lever having a power arm on which the other lever acts and a load-arm which acts on the universal bar, and a retaining latch so constructed and arranged that by it the bar-shifting lever may be kept from returning to its normal position until the latch is retracted, these levers being mounted on axes which lie in planes that are relatively perpendicular, one arm of each lever crossing an arm of the other, and the axis of the bar-shifting lever being parallel to the pivotal axis of the universal bar.

1,807,594. NONVIBRATING RELIEF VALVE. FRANK H. HOPKINS, Arlington, Mass., assignor, by mesne assignments, to Consolidated Ashcroft Hancock Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 8, 1927. Serial No. 218,341. 7 Claims. (Cl. 137—53.)



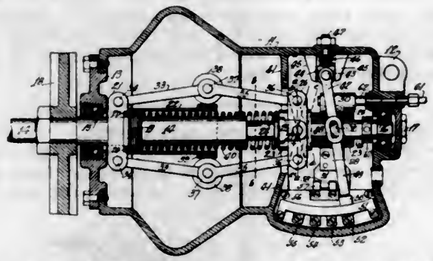
1. A relief valve comprising a fitting having a fluid passage and a tapering valve seat at one end of said passage eccentric thereto by an amount, less than the width thereof, such that the axis of the seat lies within the boundaries of the passage, combined with a loaded valve proper complemental to said seat.

1,807,595. ELECTRIC STORAGE BATTERY. WILLIAM E. KERSHAW, Gwynedd Valley, Pa. Filed Jan. 11, 1928. Serial No. 245,819. 3 Claims. (Cl. 136—162.)



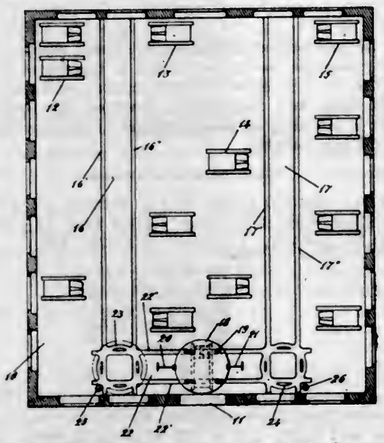
1. A storage battery having cells and an intercell wall and provided below its electrolyte level and between its cells with a channel having an inverted pocket and through which electrolyte may flow and find its level in the different cells and having a single opening for filling electrolyte to the same level in all the cells.

1,807,596. SPEED CONTROL SYSTEM AND APPARATUS. MATTHEW H. LOUGHRIDGE, Bogota, N. J. Filed Apr. 18, 1927. Serial No. 184,778. 29 Claims. (Cl. 246—49.)



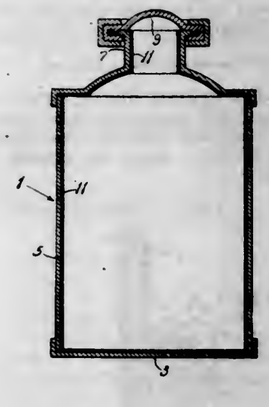
1. A centrifuge as described comprising a rotating shaft with pivotally connected arms, weights supported by said arms, a sliding cross-head on said shaft, said cross-head connected with said weights through a balanced connection and a detector device operated by said cross-head when said connection is unbalanced.

1,807,597. TRAVELING TURNTABLE EQUIPMENT FOR GARAGES. GOTHARD LOWENSTEIN, Brooklyn, N. Y. Filed Dec. 7, 1927. Serial No. 238,406. 4 Claims. (Cl. 104—44.)



1. In a building for the purpose described, the combination with a storage floor, of a carrier comprising a vehicle supporting platform and supporting casters therefor, said supporting casters being adapted to carry said platform along a linear path and being also adapted to follow angular movements of said platform about its vertical axis, and sunken individual tracks in said floor for the supporting casters at each side of said platform, guiding said carrier along a predetermined path of travel, the depth of said tracks substantially corresponding to the vertical distance between the lower surfaces of said casters and the edge of said platform.

1,807,598. METHOD OF PACKAGING ETHER AND THE PRODUCT THEREOF. EDWARD MALLINCKRODT, Jr., St. Louis, and HENRY V. FARR and LAWRENCE P. HALL, Ferguson, Mo., assignors to Mallinckrodt Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 20, 1929. Serial No. 415,440. 16 Claims. (Cl. 23—240.)



1. The package of ether comprising a can having its interior surface substantially covered with aluminum oxide, said can containing ether.

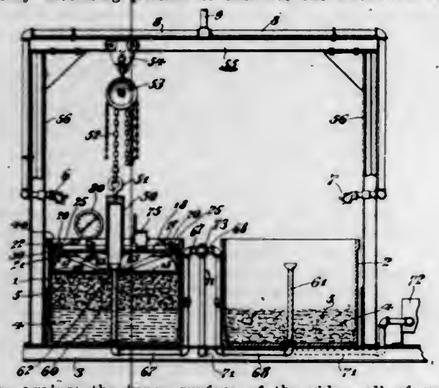
1,807,599. PROCESS OF PURIFYING ROSIN. ROBERT C. PALMER, JOHN L. BURDA, and ANTHONY F. OLIVER, Pensacola, Fla. Filed Dec. 26, 1929. Serial No. 416,750. 12 Claims. (Cl. 87—2.)

7. In the process of pre-purifying wood rosin as obtained in the solvent extraction of resinous wood after evaporation of the bulk of the solvent preliminary to a filtration of the rosin in solution through fuller's earth, the steps which comprise heating such rosin to remove terpenes, dissolving the residual rosin in a petroleum distillate, cooling the rosin solution to effect separation of pitchy matter, removing said pitchy matter, washing the remaining rosin solution with water to effect a further removal of impurities and recovering the pre-purified rosin in solution.

1,807,600. APPARATUS FOR IMPREGNATING FIBROUS MATERIAL WITH LIQUIDS. EDWIN S. PEARCE, Indianapolis, Ind. Filed June 16, 1927. Serial No. 199,229. 8 Claims. (Cl. 91—13.)

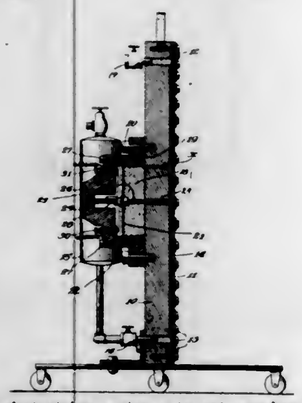
1. In apparatus of the character described, the combination of a receptacle adapted to receive a liquid and fibrous material to be impregnated by the said liquid, a piston which is adapted to operate in the said receptacle, which piston is provided at its outer upper edge with an upwardly extending flexible flange-like portion, means for

exerting lateral outward pressure against the said upwardly extending portion to increase the friction of the



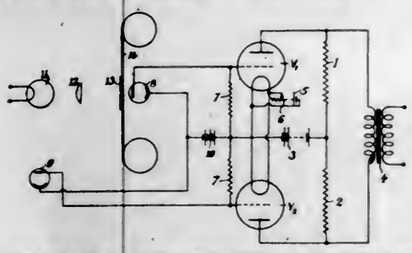
same against the inner surface of the side wall of said receptacle, means for releasing said pressure, and means for effecting evacuation of air from said receptacle.

1,807,601. SHOT STRING METER. PHILIP P. QUAYLE, Chevy Chase, Md., assignor to The Peters Cartridge Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 6, 1927. Serial No. 196,989. 18 Claims. (Cl. 73—51.)



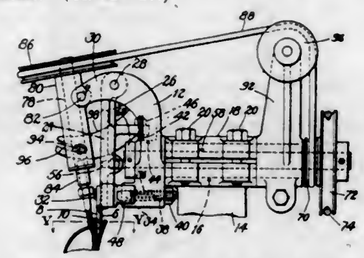
1. In a shot string meter a target member movable by a charge of shot impinging thereon, and means for registering the period of time said target member is so moved.

1,807,602. SOUND REPRODUCING SYSTEM. ARTHUR STANLEY RADFORD, Southall, and MICHAEL BOWMAN-MANIFOLD, Hayes, England, assignors to Victor Talking Machine Company, a Corporation of New Jersey. Filed Aug. 29, 1929, Serial No. 389,280, and in Great Britain Sept. 27, 1928. 8 Claims. (Cl. 179—100.3.)



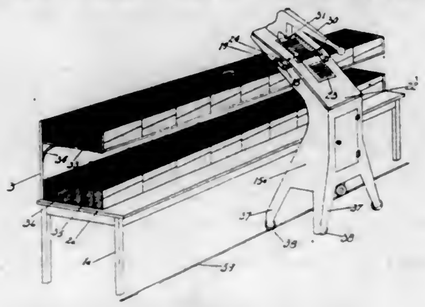
1. In apparatus for the reproduction of recorded sound, the combination of two thermionic valve amplifiers arranged in opposition and having a common output, two light sensitive devices one connected across the input of each amplifier, a common light source for said devices, and means for modulating the light passing from said source to one of said devices only.

1,807,603. STITCH-REMOVING MACHINE. LE ROY W. ROLLINS, Medford, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 2, 1926. Serial No. 152,250. 19 Claims. (Cl. 12—17.)



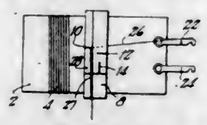
1. In a machine of the class described, in combination, a stitch removing tool adapted to engage the outer face of a welt, means for holding the welt against the tool, said means being constructed and arranged to co-operate with the tool to bend the welt thereby loosening the stitches therein, and means for rotating the tool to pull the stitches from the welt.

1,807,604. MANIFOLDING APPARATUS. JOHN Q. SHERMAN and ALBERT W. METZNER, Dayton, Ohio; said Metzner assignor to said John Q. Sherman. Filed Nov. 23, 1927. Serial No. 235,262. 7 Claims. (Cl. 282—1.)



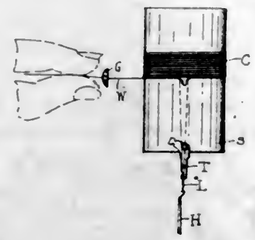
1. In combination with a record system support, a manifolding machine movably mounted to transverse the space occupied by the records on the support, and means associated with said manifolding machine for securing together a plurality of sheets issuing in registry from said manifolding machine.

1,807,605. RADIO COIL. ROY F. SICKLES and FRANK W. SICKLES, Springfield, Mass. Filed Sept. 19, 1929. Serial No. 393,787. 7 Claims. (Cl. 175—359.)



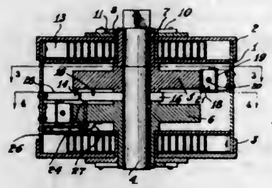
1. An inductance comprising in combination, a support, a spacing tape thereon having an end provided with entrance and outlet slits, a coil winding thereon having its ends extending through said slits and beneath parts of said tape whereby the coil is anchored.

1,807,606. RADIO COIL WINDING. ROY F. SICKLES and FRANK W. SICKLES, Springfield, Mass. Filed Sept. 19, 1929. Serial No. 393,788. 4 Claims. (Cl. 175—359.)



1. A support for a tapped inductance comprising in combination, a supporting tube having an opening in the side wall thereof, said opening being formed by a combined loop-slot and hook opening, said loop-slot having a side extending circumferentially of the tube and the hook opening having sides which extend angularly from said slot and longitudinally of said tube.

1,807,607. DOORCHECK. HENRY SMITH, London, England, assignor to Manhattan Electrical Supply Company, Inc., Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 4, 1927. Serial No. 210,618. 11 Claims. (Cl. 16—65.)



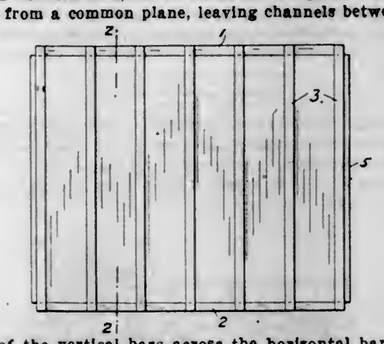
1. In a check for an oscillating body, a shaft rotatable responsive to oscillation of said body, a pair of friction brakes comprising drums associated with said shaft, means mounted on said drums cooperating with means mounted on said shaft for causing one of said brakes to retard rotation of said shaft in only one direction for a given portion of its travel, and means for causing the other of said brakes to retard rotation of said shaft in the opposite direction only for a portion of its rotation.

1,807,608. METHOD OF PREPARING A CALCIUM-CARBOHYDRATE COMPOUND. ERNST STERN, Berlin-Charlottenburg, Germany. Filed Oct. 2, 1926, Serial No. 139,233, and in Germany Oct. 12, 1925. 4 Claims. (Cl. 260—10.)

1. The method of producing a substantially soluble calcium compound of agreeable taste, comprising causing calcium hydroxide to act at a moderate temperature on a carbohydrate in the presence of water, gradually concentrating the mixture, finally drying in vacuo and adding an acid salt for neutralization.

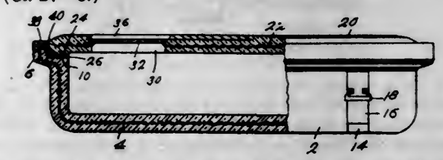
1,807,609. SEPARATOR AND SPACER FOR STORAGE BATTERIES. CHARLES W. TERRY, Detroit, Mich. Filed Oct. 18, 1927. Serial No. 226,855. 1 Claim. (Cl. 136—145.)

A storage battery separator and spacer comprising a grating consisting of horizontal top and bottom bars and spaced vertical bars, the two sets of bars projecting oppositely from a common plane, leaving channels between the



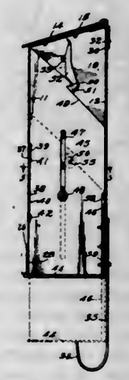
ends of the vertical bars across the horizontal bars, and a panel of porous material lying between the horizontal bars and against the face of the vertical bars.

1,807,610. BURIAL CASKET. SAMUEL H. WILLIAMS and JOSEPH HENRY WILLIAMS, North Kansas City, Mo. Filed June 6, 1927. Serial No. 196,931. 2 Claims. (Cl. 27—8.)



1. A glass gasket consisting of a hollow body having an offset with vertical and horizontal faces of approximately equal dimensions and extending around in the upper portion of said body, said offset being of right-angular configuration in cross section and having a channel extending around in its vertical face, parallel ribs extending around upon the horizontal face of said offset, a lid adapted to fit within the offset and having a vertical margin paralleling the vertical face of said offset, said margin having a channel which registers with the first-mentioned channel when the lid is in place in the offset, and parallel grooves extending around in the underside of said lid and adapted to receive the ribs in the offset, said lid and grooves being of such size as to leave an intervening space of uniform and substantial width between the lid and the faces of the offset for the reception of suitable sealing material.

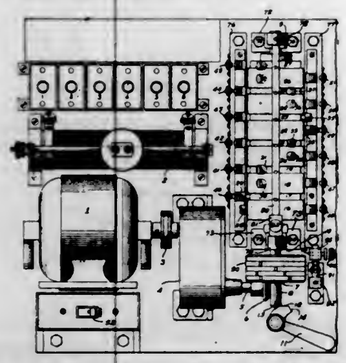
1,807,611. MAIL BOX. ANDREW ZAPART, Brooklyn, N. Y. Filed May 27, 1929. Serial No. 366,203. 5 Claims. (Cl. 232—45.)



1. A mail box comprising an outer receptacle, an inner receptacle, said inner receptacle being adapted for up-

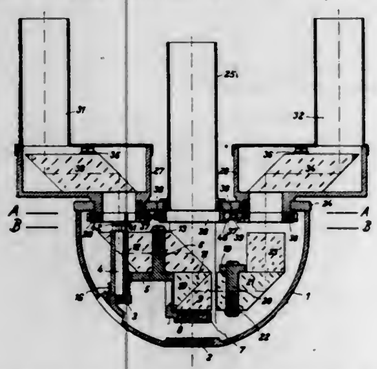
right shifting movement within said outer receptacle, and locking means between said two receptacles automatically operable on upward shifting of said inner receptacle within said outer receptacle for interlocking the two receptacles.

1,807,612. ELEVATOR DISPATCHING SYSTEM. CYRUS WHITE BASSETT, Maplewood, N. J., assignor to Elevator Supplies Company, Inc., Hoboken, N. J., a Corporation of New Jersey. Filed Sept. 9, 1925. Serial No. 55,249. 9 Claims. (Cl. 200—27.)



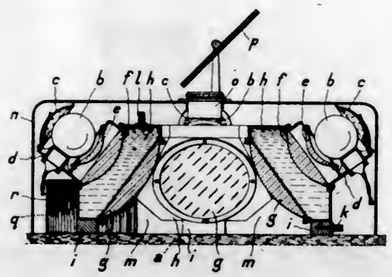
1. In a circuit controller, the combination of a shaft, means to rotate said shaft at different constant speeds, a plurality of discs mounted on said shaft, pins projecting from said discs, contacts arranged to be closed under the control of said pins, and means for regulating the position of said pins relative to said contacts, comprising an index wheel mounted on said shaft and having rows of equally spaced indentations and means whereby adjacent pins may be aligned in a desired position.

1,807,613. MICROSCOPE TUBE. WALTHER BAUERSFELD and MAX HÜBSCHMANN, Jena, Germany, assighors to the Firm: Carl Zeiss, Jena, Germany. Filed June 10, 1929, Serial No. 369,775, and in Germany June 16, 1928. 3 Claims. (Cl. 88—39.)



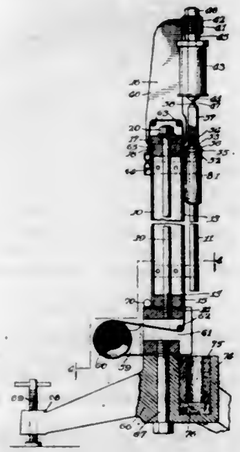
1. A microscope tube containing a housing body having an aperture for the insertion of an objective, one monocular and two binocular eyepiece tubes, of the three eyepiece tubes at least one being rigidly and at least one movably connected with the casing, and a ray dividing system comprising one light entrance surface and two light exit surfaces, the said system being pivotally mounted in the casing to turn out of an operative position into an inoperative one, in the operative position the said light entrance surface being situated behind the said aperture and the said two light exit surfaces in front of the said two binocular eyepiece tubes.

1,807,614. APPARATUS FOR EPISCOPIC PROJECTION. WALTHER BAUERSFELD and BRUNO GERSTENBERGER, Jena, Germany, assignors to the Firm of Carl Zeiss, Jena, Germany. Filed June 28, 1929, Serial No. 374,435, and in Germany June 29, 1928. 4 Claims. (Cl. 88—24.)



1. An apparatus for episcopic projection, containing a projecting objective, a plurality of sources of light arranged in a circle round the said objective, a plurality of condenser systems, the axes of these condenser systems being obliquely directed inward to the spot on which the object to be projected is to be placed, the said condenser systems being adapted to receive the rays emitted by one of the sources of light and to reflect them on the said spot, and, disposed between the sources of light and the said spot, a circular chamber adapted to hold cooling liquid, the said chamber being provided with openings permitting the rays coming from the sources of light to pass on to the said spot.

1,807,615. EDUCATIONAL APPARATUS. LEO BEHR, Ithaca, N. Y. Filed Dec. 23, 1926. Serial No. 156,564. 22 Claims. (Cl. 73—51.)



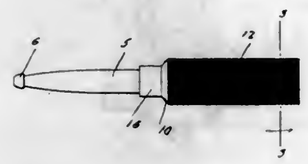
8. In a device of the class described, a pair of spaced vertical conductors, a drop, means to support the drop and release it in a position to fall alongside the conductors, and means for creating a high potential difference between the conductors at equal intervals of time comprising a transformer, means connecting the secondary with the vertical conductors, a condenser, a source of alternating current and means for alternately charging the condenser and discharging it through the primary of the transformer including a synchronous motor, a switch driven by the motor for closing the circuit on the condenser for a short interval adjacent to the peak of the base.

1,807,616. PROCESS OF MAKING CLEAR CHLORINATED RUBBER SOLUTIONS. NORRIS BOEHMER, Montclair, N. J. Filed Apr. 19, 1924. Serial No. 707,580. 7 Claims. (Cl. 134—17.)

1. A process which comprises washing chlorinated rubber to remove some of the water-soluble impurities therein, thereafter dissolving the partly purified chlorinated rubber in a solvent, and treating the solution thereof with quick lime.

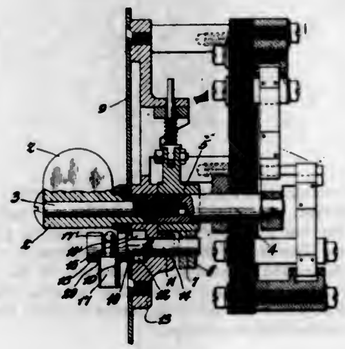
3. A clarified solution of chlorinated rubber in a mixture of about equal parts of aromatic hydrocarbon of the benzol series and acetone.

1,807,617. SMOKER'S MOUTHPIECE. FRED BOENIG and GEORGE H. DRESSER, Jamaica, N. Y. Filed May 13, 1929. Serial No. 362,792. 1 Claim. (Cl. 131—51.)



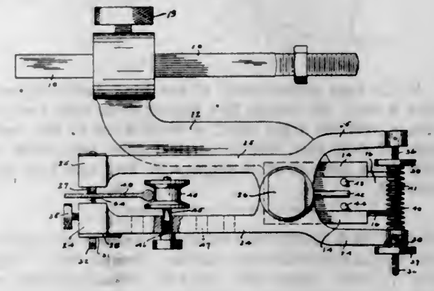
In a cigarette holder, a tubular member having an external annular shoulder between the ends thereof, an outer reticulated tubular guard receiving said annular shoulder and secured to the periphery thereof, an inner reticulated guard within said outer guard and secured on said tubular member in advance of said annular shoulder, a mouth piece detachably threaded into said tubular member and having means for supporting a cigarette, and a band of insulating material secured on said tubular member rearward of said annular shoulder and in contact therewith.

1,807,618. LOCKING MECHANISM. HERBERT L. BONE, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 5, 1930. Serial No. 473,269. 1 Claim. (Cl. 70—128.)



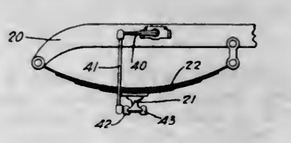
In apparatus for the control of railway traffic governing devices, a control unit comprising a manipulative control member, a pin insertible into said unit for preventing operation of said member, means requiring rotation of said pin to a given position before the latter can be withdrawn from said unit, an element engaged with said pin, means preventing rotation of said pin with respect to said element, and means cooperating with said element for blocking rotation of said pin with said element before said pin reaches the position permitting withdrawal.

1,807,619. FLOATING BULB EDGE GLASS TRIMMER. JOHN A. BOUSH, Vincennes, Ind., assignor to Blackford Window Glass Company, Vincennes, Ind., a Corporation of Indiana. Filed July 26, 1929. Serial No. 381,131. 11 Claims. (Cl. 33—42.)



1. In a device for cutting glass, a cutter, means for holding the cutter, means for yieldingly pressing the cutter against the glass, supporting means, said holding and said pressing means being carried by said supporting means, said holding means being movably carried by the supporting means to permit travel thereof both laterally and normally of the glass, and spring means resisting lateral movement of said holding means away from said glass, and a stop limiting the travel of the holding means.

1,807,620. SHOCK ABSORBER. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 8, 1930. Serial No. 450,714. 12 Claims. (Cl. 188—88.)

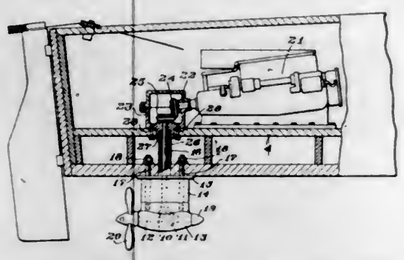


1. A double acting, hydraulic shock absorber comprising, in combination, a casing providing a cylinder; two pistons in said cylinder; a reciprocable piston operating member interposed between said pistons; and two elements connected between the two pistons, each element acting, in turn, as a fluid conduit and as a connecting link between the pistons, in response to movements of the piston operating member in both directions respectively.

1,807,621. SHOE STIFFENER AND PROCESS OF MANUFACTURE. ALBERT L. CLAPP, Danvers, Mass., assignor to Beckwith Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 12, 1923. Serial No. 662,224. 6 Claims. (Cl. 92—21.)

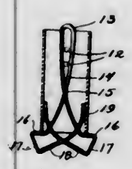
1. A shoe stiffener comprising a felt base including hair of original length, short hair, and insoluble gelatinous material fixed thereto, said base being saturated with thermoplastic material and cut and skived.

1,807,622. MOTOR BOAT DRIVE. CHARLES N. COLSTAD, Attleboro, Mass. Filed Aug. 1, 1930. Serial No. 472,405. 8 Claims. (Cl. 115—34.)



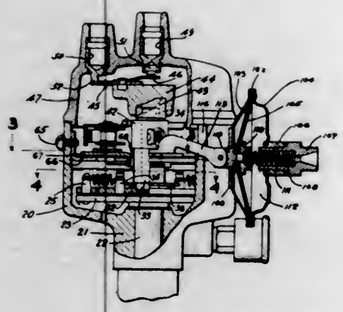
1. Motor boat construction of the kind described, comprising a keel, an engine bed spaced from said keel, an engine, a vertical drive shaft, a strut fixed to the under surface of said keel, and a vertical tube projecting upwardly from said strut through said keel and into said engine bed.

1,807,623. NECKTIE FASTENER. ALBERT G. DELMON and VENANCIO MARTINEZ LASTRA, Tampa, Fla. Filed Nov. 7, 1927, Serial No. 231,574. Renewed Dec. 27, 1930. 4 Claims. (Cl. 24—57.)



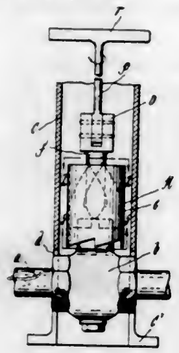
1. In a necktie holder, a tubular body member, adapted to be secured to a necktie, a spring loop having a bight portion engageable with a collar button and projecting above the tubular body, said loop having legs extending into said body and being slidable with respect to the body to project and retract said bight, and finger grips on the lower ends of said legs engageable with the bottom edge of the body upon the loop being retracted whereby to prevent accidental protraction of the loop.

1,807,624. IGNITION DEVICE. DALPHIN L. HITTLE, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 12, 1930. Serial No. 435,079. 10 Claims. (Cl. 123—117.)



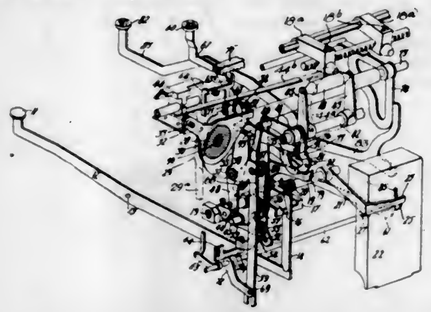
1. An ignition device for an internal combustion engine comprising, in combination, a circuit interrupter; a member for operating said interrupter; a stationary platform; a plate adjustably carried by the platform, said plate supporting the interrupter; ball-bearings interposed between the plate and platform; and fluid pressure controlled means connected to the plate for adjusting it relative to the interrupter operating member.

1,807,625. VALVE WRENCH. HENRICK J. HJORTH, Woburn, Mass. Filed May 28, 1930. Serial No. 456,482. 5 Claims. (Cl. 7—17.)



1. A wrench comprising a shank, separated lugs connected to the end of said shank and projecting beyond said end adapted to embrace the handle of a valve, and a shell surrounding said shank and connected thereto with an intermediate space for passage of granular material when the wrench is forced endwise into such material.

1,807,626. COMBINED TYPEWRITING AND COMPUTING MACHINE. ADOLPH G. KUPETZ, New Rochelle, N. Y., assignor, by mesne assignments, to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 10, 1924. Serial No. 742,735. 8 Claims. (Cl. 235—60.)

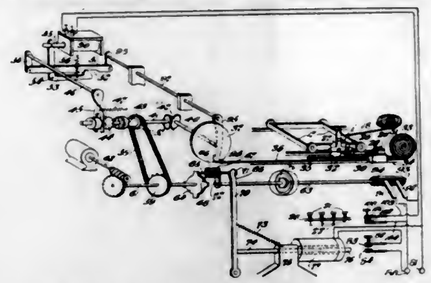


1. The combination of a carriage, a tabulating mechanism therefor, a motor, a computing-zone controller, means to set the zone-controller to a computive position, an eccentric driven by the motor, an actuator reciprocated by the eccentric at every revolution of the motor, and a tabulator controlled connection between zone-controller and actuator to enable the latter to move the zone-controller to ineffective position.

1,807,627. CARRIAGE RETURN FOR PUNCHING MACHINES. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed June 2, 1925. Serial No. 34,393. 20 Claims. (Cl. 164—112.)

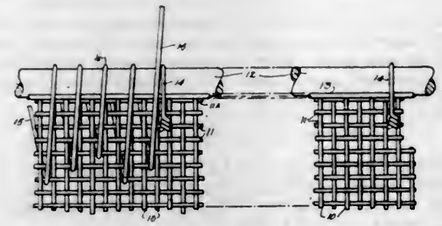
1. In a machine of the character stated, the combination of a card perforating mechanism, a punch set-up unit for said mechanism, a carriage carrying said unit and arranged to move across said perforating mechanism, a shaft controlling said perforating mechanism, means for operating said shaft, a device normally rendering said

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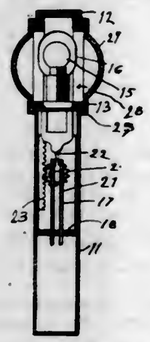
operating means ineffective, contact control means for controlling said device to cause said shaft to function, and means controlled by said shaft for causing said carriage to be returned to its starting point.

1,807,628. METHOD OF MAKING A SEAM FOR WOVEN WIRE BELTS. HAMILTON LINDSAY, Shaker Heights, Ohio, assignor to The Lindsay Wire Weaving Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 29, 1929. Serial No. 403,331. 3 Claims. (Cl. 245—10.)



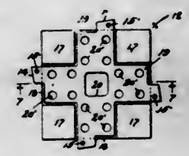
1. A method of making a seam for a woven wire belt, comprising temporarily fastening a mandrel wire to each end of the fabric and across substantially the entire width thereof, passing a stitch-forming wire around each mandrel wire and back into the fabric, withdrawing each mandrel wire whereby loops project from each end of the fabric, bringing the ends together and interfitting the loops, and then passing a connecting wire smaller than the mandrel wire through said passageway.

1,807,629. VEHICLE TRAFFIC SIGNAL. FUSAJIRO MAMIYA, Los Angeles, Calif. Filed Sept. 16, 1929. Serial No. 392,923. 5 Claims. (Cl. 116—54.)



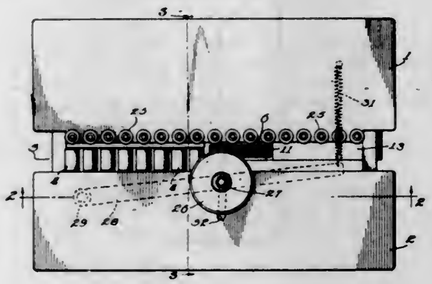
1. In an automobile signal device, a casing disposed at one side of the automobile, a semaphore pivotally mounted relative to the casing, and operative to angular display positions, a lever operatively mounted in the signal housing and having a relatively short arm and a relatively long arm, a link connected to the longer lever arm and to the semaphore, a rack member reciprocably mounted in the signal housing, and in operative engagement with the relatively short lever arm, a pinion engaging with the rack member, and actuating means for the pinion.

1,807,630. FIXTURE TILE. GERALD H. MCFARLIN, Rosemead, Calif., assignor to Tudor Potteries, Inc., a Corporation of California. Filed Oct. 15, 1929. Serial No. 399,818. 2 Claims. (Cl. 72—18.)



1. An article of manufacture comprising a fixture tile having a recessed back surface; a non-frangible apertured plate mounted in said recess; and means, comprising cement, partially covering said plate and extending through the apertures therein for securing said plate to said tile, said plate having projections extending beyond the edges of said tile and adapted to receive mechanical securing means.

1,807,631. BRANDING MACHINE. HARRY H. MCKEE and GUSTAVE SCHULER, Chicago, Ill., assignors to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed May 16, 1930. Serial No. 453,019. 8 Claims. (Cl. 101—5.)

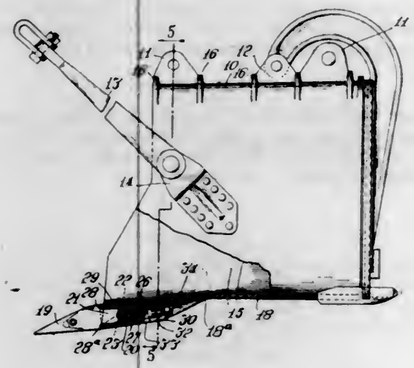


1. In a branding construction a series of horizontally disposed idler rollers for supporting articles which are pushed over the same, a series of vertically disposed guide rollers for guiding articles by engaging the sides thereof, a vertical resiliently mounted roller in position to engage the opposite sides of articles to be operated upon, a branding wheel mounted on a horizontal axis in position to engage the edge of an article passing between said rollers as it leaves the series of horizontally disposed supporting rollers.

1,807,632. EXCAVATING DIPPER. WALTER S. MCKEE, Chicago, Ill., assignor to Kensington Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 3, 1928. Serial No. 251,548. 7 Claims. (Cl. 37—141.)

6. An excavating dipper comprising a unitary front wall made of cast metal and formed with hollow longitudinal reinforcements disposed in spaced relation to each other along the digging edge thereof and providing sockets for the reception of tooth base members, the marginal portion of

the dipper edge intervening between each pair of said sockets being flared outwardly to provide open recesses of



varying depths along the digging edge of the dipper and to provide also reinforcing webs which extend diagonally across the side walls of said hollow socket portions.

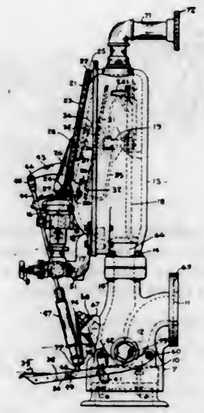
1,807,633. CHICK FEEDER. CHARLES H. MILLER, De Witt, Nebr. Filed Apr. 19, 1930. Serial No. 445,685. 2 Claims. (Cl. 119—52.)



1. A feeder of the character set forth, comprising a hopper, a lid for the hopper arranged thereon in a downwardly and forwardly inclined position, a trough arranged at the front side of the hopper and communicating therewith and provided in its front wall with a feeding opening extending longitudinally of said wall and opening out through the upper edge thereof, and a lid for the trough arranged thereon in a downwardly and forwardly inclined position and extending beyond said wall to provide a guard for said feeding opening.

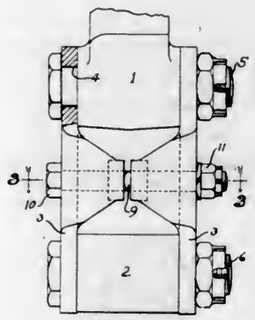
1,807,634. BEDPAN WASHER. JOSEPH H. OKUN, Brooklyn, N. Y., assignor to Kny-Scheerer Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 7, 1929. Serial No. 397,845. 8 Claims. (Cl. 141—1.)

1. In a bedpan washer the combination of a base, an upright hollow body thereon, a pivoted door on said body, a baffle plate independently pivoted in said body and linked at its free end to the inside of said door, means for holding a bedpan on said baffle plate, a pedal pivoted in the lower part of said body and connected to said door, spraying means in said body connected to a source of water supply, means, on the closing of said door, for opening said source of water supply to said spraying means for a



predetermined period of time, a safety means to shut off said supply of water when the said door is opening and turn on said supply when said door is again during said predetermined period closed and drainage means in the lower portion of said body.

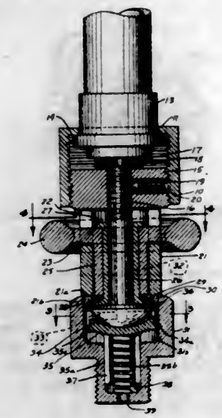
1,807,635. SPRING SHACKLE. BALFOUR READ, Detroit, Mich., assignor to Eaton Spring Corporation, a Corporation of Ohio. Filed Mar. 21, 1929. Serial No. 348,840. 12 Claims. (Cl. 267—54.)



1. A spring shackle, comprising a pair of spaced links having their mid-portions formed with a pair of tongues, each integral with one of said links, bent to terminally form bearings spaced from the links, and a bolt connecting the links and engaging said bearings.

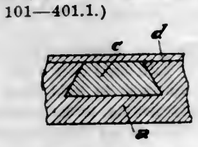
1,807,636. COUPLING. PHILIP T. ROBIN, Erie, Pa. Filed Aug. 11, 1930. Serial No. 474,442. 4 Claims. (Cl. 284—19.)

1. In a pressure coupling, the combination of a fitting having an inwardly opening check valve therein, a detachable coupling member having a head which may be pressed into the fitting to open the valve, said member having a
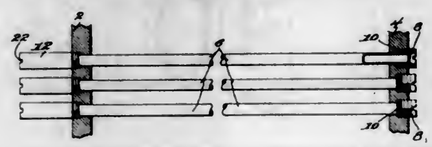


fluid passage through the same, and an expansible sealing ring movable along the member and expanded by the head into sealing contact with the inside of the fitting.

1,807,637. FORM CYLINDER FOR ROTARY INTAGLIO PRINTING MACHINES. ERNST SACHS, Goeggingen, near Augsburg, Germany, assignor of one-half to Maschinenfabrik Augsburg-Nuernberg, Aktiengesellschaft, Augsburg, Germany, and one-half to Asbern Maschinenfabrik-Aktiengesellschaft, Augsburg-Goeggingen, Goeggingen, near Augsburg, Germany. Filed Jan. 18, 1927, Serial No. 161,734, and in Germany Jan. 21, 1926. 5 Claims. (Cl. 101—401.1.)



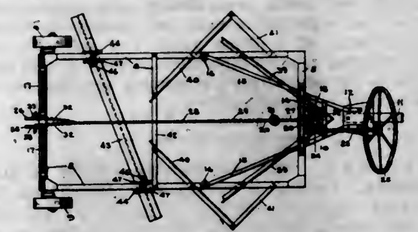
1. A form cylinder for intaglio printing machines provided with a groove opening through the cylindrical surface of the cylinder, said groove being of greater cross sectional width inwardly of the cylindrical surface of the cylinder than at said surface, a metal member disposed in said groove and conforming in cross sectional shape thereto, whereby said member is mechanically interlocked with the cylinder, and a metal coating electrolytically deposited on said cylinder and said member and electrolytically united with the latter.

1,807,638. HEAT EXCHANGE APPARATUS. EDWARD SEAVER, Needham, Mass. Filed Nov. 9, 1928. Serial No. 318,253. 10 Claims. (Cl. 257—248.)



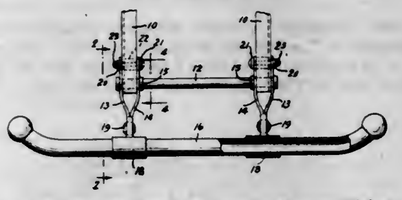
1. Heat exchange apparatus comprising an entrance tube sheet, water tubes secured in the tube sheet, an entrance nozzle for each tube to guide water to the tube and extending outwardly beyond the tube sheet, the nozzle being of sufficient length to confine turbulence, the tube and nozzle being of the same internal diameter and abutting each other, the metal of the tube and nozzle being expanded to form a smooth and continuous inner bore.

1,807,639. ROAD MAINTAINER. JOHN STOCKER, Seward, Nebr. Filed Nov. 30, 1928. Serial No. 322,633. 3 Claims. (Cl. 37—160.)



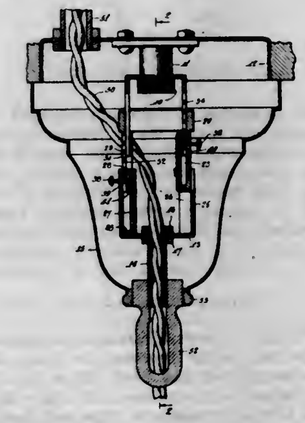
1. In a road maintainer arranged to be drawn by a tractor, a maintainer-frame, scraper-blades below and secured to said frame, an adjusting-frame mounted upon and extending forwardly of the maintainer-frame for a coupling with said tractor, a pair of crank-shafts each provided with a lever and having bearings on the maintainer-frame, wheels on the crank-shafts, a drum having bearings on the adjusting-frame, and a strand mounted on the drum and connected with the levers of the crank-shafts, said drum being rotatable for moving the crank-shafts in a circle's arc for elevating or lowering said maintainer-frame and scraper-blades.

1,807,640. AUTOMOBILE BUMPER. ADOLPH A. THOMAS, New York, N. Y. Filed June 17, 1930. Serial No. 461,687. 6 Claims. (Cl. 293—55.)



1. An automobile bumper structure comprising two bumper bars arranged in vertically spaced relation and mounted so as to be forced apart under the action of an impact, and spring means tensioned in a substantially vertical direction when the bumper bars strike an obstruction.

1,807,641. LIGHTING FIXTURE. NATHAN L. URELES, New York, N. Y. Filed Dec. 3, 1927. Serial No. 237,350. 5 Claims. (Cl. 240—85.)



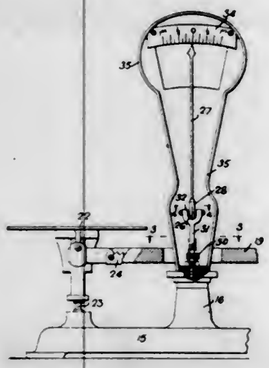
1. In a lighting fixture, a compound extension fitting, comprising an inner mounting yoke having a part adapted

for attachment upon an outlet box, an intermediate yoke having a frame displaceable along the arms of the first yoke and having arms protruding therebeyond, and an outer yoke part having arms slidable with respect to the arms of the intermediate part, and having an element for attachment of a fitting panel, and automatic lock means resisting relative separation of each of said parts relative to its neighbor and permitting approach of said parts to fully collapsed position.

1,807,642. PROCESS FOR RECOVERY OF MANGANESE. CHARLES S. VADNER, Reno, Nev. Filed June 25, 1928. Serial No. 288,292. 4 Claims. (Cl. 23—117.)

2. The process of treating naturally oxidized or sufficiently roasted mineral matter and the like of the nature of complex ores containing manganese which consists in subjecting said finely ground ores to the action of an excess of sulphurous acid gas in the presence of water, separating the insoluble matter from the pregnant manganese solution passing same over additional manganese mineral matter whereby iron, lime, and other deleterious substances and excess of sulphurous fumes are eliminated, separating the precipitated and insoluble matter and recovering the manganese sulphate and manganese dithionate solution, reducing said resulting mixed solution to a dry mass, heating said dry mass gradually to a temperature sufficient to break down the manganese dithionate, converting same to manganese sulphate, passing on the eliminated sulphur dioxide gas for reuse and recovering the manganese sulphate, substantially as described.

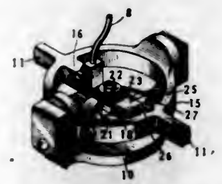
1,807,643. SCALE. GEORGE WALKER, Brooklyn, N. Y., assignor to The Jacobs Brothers Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 17, 1926. Serial No. 88,723. 33 Claims. (Cl. 265—59.)



1. A scale, including a rockingly-mounted beam, a spring adjacent said beam, means connecting said beam and spring and including rigid means fixed with respect to said beam and means providing a friction connection between said rigid means and said spring to cause said beam to tend to assume a neutral position, and a registering mechanism, one of the elements of the same being directly secured to said spring whereby any deflection of said beam beyond said position will be registered.

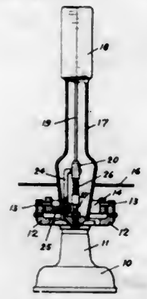
1,807,644. SCALE. GEORGE WALKER, Brooklyn, N. Y., assignor to The Jacobs Brothers Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 14, 1927. Serial No. 233,051. 21 Claims. (Cl. 265—59.)

1. A scale of the even-balance type and including, in combination, a rockingly mounted beam, a base for supporting the same, a spring extending in a horizontal plane, means for connecting one end of said strip with said base means for connecting the opposite end thereof



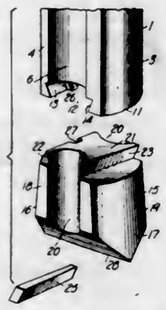
with said beam one of said connecting means including an element having sliding contact with the face of said strip.

1,807,645. SCALE. GEORGE WALKER, Brooklyn, N. Y., assignor to The Jacobs Bros. Co., Inc., New York, N. Y., a Corporation of New York. Original application filed Feb. 17, 1926, Serial No. 88,723. Divided and this application filed Sept. 28, 1928. Serial No. 309,052. 15 Claims. (Cl. 265—59.)



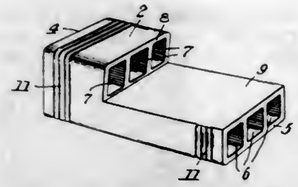
1. A scale including, in combination, a base, a beam rockingly mounted by said base and a coil spring having its opposite ends connected to said base and beam respectively, said spring flexing under movements of said beam to normally maintain the latter in neutral position.

1,807,646. DRILL BIT. WILLIAM WRIGHT, Tulsa, Okla., assignor to Oklahoma Iron Works, Tulsa, Okla., a Corporation of Oklahoma. Filed Dec. 29, 1927. Serial No. 243,263. 1 Claim. (Cl. 287—103.)



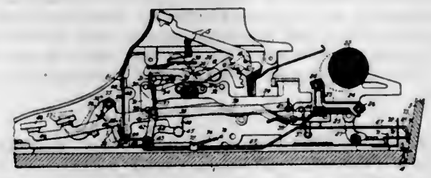
In a drill bit including a body member having a transverse dovetail groove, a head member having a dovetail tongue of less width than said groove, and a wedge movable in the groove in engagement with one side wall thereof to urge the tongue toward the opposite side wall of the groove, a key fixed to said last named side wall of the groove, the tongue being provided with a seat for said key whereby the operation of the wedge may cause the key to engage said seat.

1,807,647. CONDUIT AND CONNECTING MEANS THEREFOR. EDWIN BABB, Aultman, Ohio, assignor, by mesne assignments, to National Fireproofing Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 3, 1928. Serial No. 310,005. 19 Claims. (Cl. 247—32.)



1. As a manufacture, means for connecting a conduit with a plurality of conduits extending therefrom comprising a unitary member having a portion of its wall cut away and at least one cooperating member having a portion adapted to enter the space provided by the cut away portion and abut the wall adjacent thereto.

1,807,648. TYPEWRITING MACHINE. EDWIN E. BARNEY, New Rochelle, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Nov. 20, 1928. Serial No. 320,689. 9 Claims. (Cl. 197—186.)



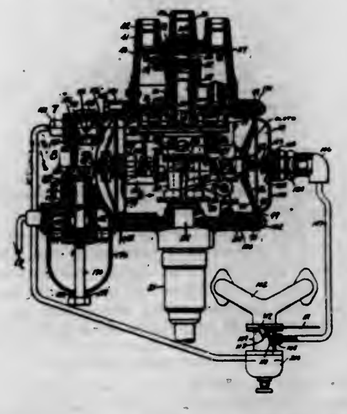
8. The combination of an element mounted to receive a case shifting movement, a case shift lock for locking said element in shifted position, a case shift key, intermediate actuating connections between said case shift key and said element that prevent the return of the latter to normal position when the case shift lock is effective, an enclosing case for the machine, and means controlled by a member of said case for automatically releasing said case shift lock.

1,807,649. SIGN. FRANK T. BROWN, Detroit, Mich., assignor of one-half to Solomon Dunn, Detroit, Mich. Filed Sept. 15, 1928. Serial No. 306,146. 1 Claim. (Cl. 40—32.)



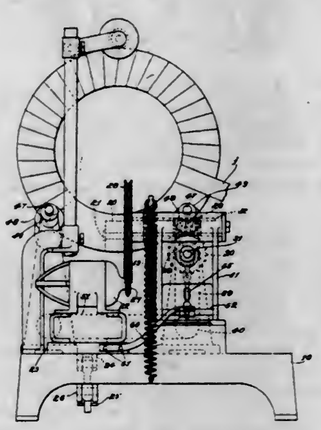
A device of the class described, comprising: a mirror; an endless light transmitting display belt extending around said mirror and bearing indicia adapted to be reflected in said mirror, means for supporting a portion of said belt in a plane on one side of said mirror, a magazine located adjacent said mirror a portion of said belt accumulating in loose folds within said magazine, and means for moving said belt to cause the images of said indicia to move across said mirror.

1,807,650. IGNITION TIMER AND FUEL PUMP UNIT. WILLIAM A. CHRYST and HERBERT C. WALTERS, Dayton, Ohio, assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Feb. 20, 1929. Serial No. 341,468. 14 Claims. (Cl. 123—195.)



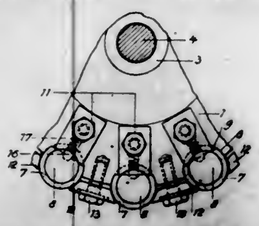
1. An ignition timer and pump unit comprising, in combination, a housing having openings in the walls thereof, an ignition interrupter closing one of the openings, a pump and operating mechanism closing another opening, a suction chamber closing still another opening and having a movable wall and communicating with an engine intake, pump and timer operating mechanism within the housing and including a common operating shaft extending outside the housing, and means associated with the shaft and suction chamber for controlling the timing of the ignition.

1,807,651. WRAPPING MACHINE. JASPER DERBY, Medford, Mass., assignor to Andrew Terkelsen, Newton, Mass. Filed Apr. 30, 1928. Serial No. 273,947. 4 Claims. (Cl. 242—6.)



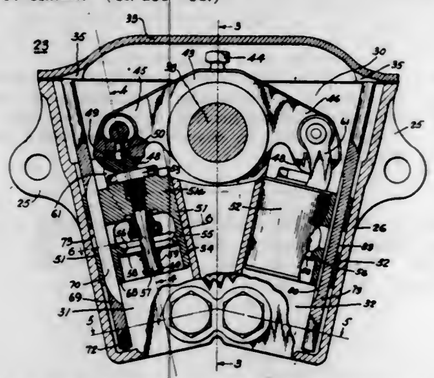
1. In a wrapping machine for annular articles, in combination, a rotatable shuttle, mechanism for rotating the shuttle, a motor for driving said mechanism, means for moving the motor into and out of operative relation to said mechanism, feed rolls for supporting and rotating the work, driving connections between said motor and feed rolls including a clutch, and means operable for actuating said clutch by moving said motor into and out of operative relation to said mechanism.

1,807,652. TURRET FOR MULTIPLE PUNCHING MACHINES. ERNST DIETRICH, Altenburg, Germany. Filed May 28, 1929, Serial No. 366,592, and in Germany June 1, 1928. 2 Claims. (Cl. 164—90.)



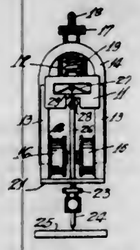
1. In a turret for multiple punching machines having a set of plungers, the combination with recesses in said turret of guiding bushes for said plungers each adapted to be inserted in one of said recesses, a clip adapted to hold said bush in said recess, means for detachably securing said clip to said turret so as to hold said bush, each bush being recessed at its upper end, and a stop on said turret which is adapted to enter said recess.

1,807,653. SHOCK ABSORBER. GEORGE W. ELSEY and WILLIAM A. CHRYST, Dayton, Ohio, assignors to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 29, 1929. Serial No. 351,036. 30 Claims. (Cl. 188—88.)



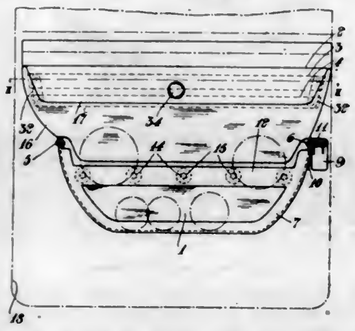
1. A shock absorber comprising in combination, a casing presenting a fluid chamber and a cylinder, an oscillatable lever supported within the fluid chamber, a link attached to the oscillatable lever, a resilient member on link, and a piston in the cylinder, yieldably clamped between the resilient member and the oscillatable lever.

1,807,654. MAGNETIC PICK-UP DEVICE. VICTOR H. EMERSON, New York, N. Y., assignor to Remsen Corporation, New York, N. Y., a Corporation of Delaware. Filed May 6, 1929, Serial No. 360,935. Renewed Oct. 11, 1930. 4 Claims. (Cl. 179—100.41.)



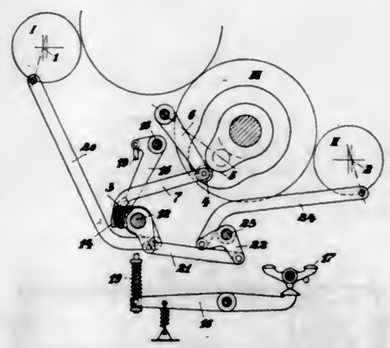
1. In a magnetic pick-up device for phonograph records, the combination, a frame with means for securing to a supporting arm, an armature pivotally mounted on said frame, a stylus secured to said armature engaging the phonograph record, a magnet having poles between which said armature vibrates and means for adjusting the position of said poles relative to the pivotal support of said armature.

1,807,655. PURSE. FREDRIK LEONARD ERIKSSON, Gefle, Sweden. Filed Dec. 3, 1928, Serial No. 323,469, and in Sweden Dec. 10, 1927. 2 Claims. (Cl. 150—37.)



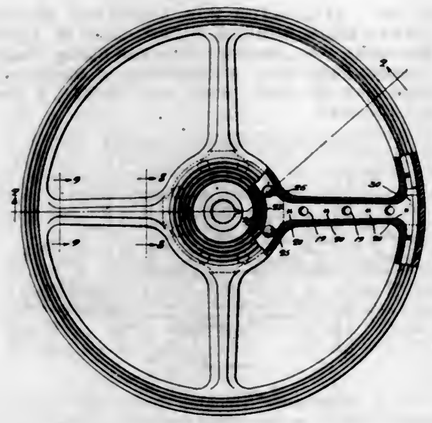
1. A purse having an upper inlet opening adapted to allow the simultaneous introduction of a number of coins of different sizes, a normally closed bottom discharge opening adapted when open to effect the simultaneous discharge of several coins of different sizes contained in the purse above said discharge opening, said bottom discharge opening consisting of two hinged flaps, means for holding said flaps closed, and means for separating said flaps.

1,807,656. PLURAL COLOR PRINTING MACHINE. HANS FISCHER, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a Corporation of Germany. Filed Dec. 8, 1928, Serial No. 324,608, and in Germany Dec. 12, 1927. 5 Claims. (Cl. 101—184.)



1. In a multi-color printing machine, a pair of printing mechanisms each comprising a pair of cooperating printing cylinders one of which is movable toward and from the other, a pair of ratchet members, connections between said ratchet members and said movable cylinders, respectively, whereby movement of each ratchet member in opposite directions effects movement of its related movable cylinder toward and from its companion cylinder, a reciprocal pawl cooperating with said ratchet members, means for reciprocating said pawl, and means whereby reciprocation of said pawl successively operates said ratchet members to successively move said movable cylinders toward their companion cylinders.

1,807,657. MOLDED STEERING WHEEL. HARVEY D. GEYER, Dayton, Ohio, assignor to Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 22, 1928. Serial No. 307,695. 7 Claims. (Cl. 74—33.)



7. A handwheel comprising: four stamped metal quadrants each having two spoke portions, a rim portion, and a hub ring portion, said quadrants mutually overlapping one another and spot welded together along said spoke portions to form a rigid wheel structure.

1,807,658. COMMUNICATION SYSTEM. FRANK W. GODSEY, Jr., New Haven, Conn., assignor of one-third to Wesley B. Hall, New Haven, Conn. Filed Apr. 29, 1929. Serial No. 358,945. 7 Claims. (Cl. 179—1.)



1. In a communication system, a pipe line for a transmitting medium, means at one point in said pipe line for setting up therein a continuous high frequency super-audible sound wave, means for impressing a sound wave of relatively low voice frequency on the high frequency sound wave, and means associated with said pipe line and remote from the means for setting up the high frequency sound wave for demodulating the high frequency sound wave to permit reception of the sound waves of relatively low voice frequency.

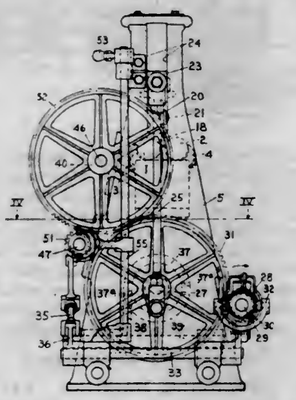
1,807,659. DETECTION OF SUSPENDED MATTER IN FLUIDS. HARRY CAMPBELL GRANT, Jr., New York, N. Y., assignor to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 25, 1928. Serial No. 256,864. 2 Claims. (Cl. 88—14.)

1. The method of detecting suspended matter in a fluid which consists in causing a stream of the fluid to flow into the path of a light beam normally invisible to the observer, observing the illuminated suspended matter from a point out of the path of the light beam, and reflecting from a



point also out of the path of the light beam an image of the illuminated suspended matter, the direct image and the reflected image seen together.

1,807,660. LEATHER STRETCHING MACHINE. JOSEPH H. HARRISON, Gomersall, near Leeds, England, assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed Jan. 31, 1929, Serial No. 336,607, and in Great Britain Feb. 14, 1928. 23 Claims. (Cl. 149—20.)

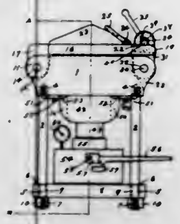


21. In a machine for stretching hides, skins, leather and other similar pieces of work, spaced members for engaging opposite surfaces of a piece of work, means for moving certain of the spaced members relatively to each other to effect folding of the piece of work over the edge of one of the members, a roll upon which the piece of work may be rolled to pull portions thereof past the spaced members to effect stretching operations on said portions, power means for operating the roll, manually operable means for initiating operation of said power means, and means for automatically throwing the power means out of operation.

1,807,661. MOLDING PRESS. GARABED G. HEGHINIAN, Baltimore, Md. Filed Dec. 3, 1928. Serial No. 323,419. 7 Claims. (Cl. 25—84.)

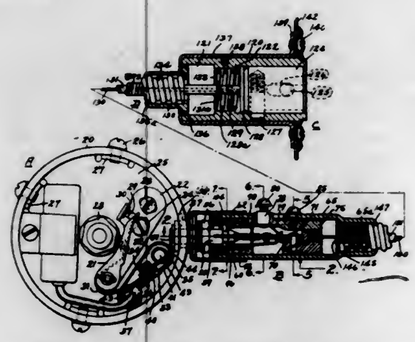
1. A press comprising a die body having a recess, a lower plunger in the said recess that has a central independently

movable part which is normally held above the remainder part when the plunger is at its lowest position, an upper abutment to press the material put into the said die when



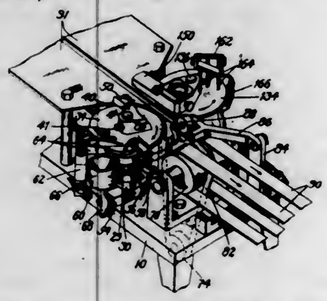
the plunger is forced up and means for successively moving the central part and then moving the surrounding part to compress the edges to a greater degree than the centre.

1,807,662. THEFT PREVENTIVE DEVICE. DALPHIN L. HITTLE, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Feb. 20, 1929. Serial No. 341,422. 18 Claims. (Cl. 200—19.)



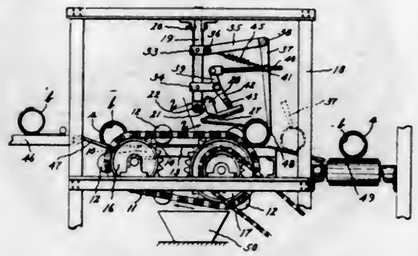
2. In a device of the character described, the combination of locking means, a switch structure comprising a movable switch element, movement of which is adapted to be effected by movement of the said locking means, an armored connector leading from said switch structure to a controller unit, each end of said connector having a non-demountable connection with the controller unit and the switch structure, said switch structure embodying a locking means for non-demountably connecting the said switch structure and connector unit with an ignition element.

1,807,663. CEMENTING MACHINE. FAY D. KINNEY, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 22, 1929. Serial No. 334,254. 19 Claims. (Cl. 91—43.)



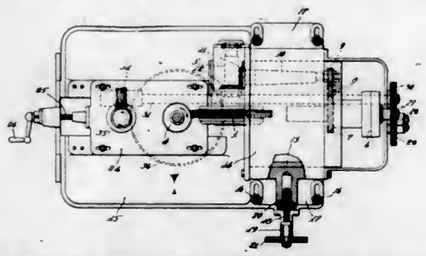
1. A machine for coating a work piece having a longitudinal rib therein, comprising driven work feeding members adjustably spaced from each other and yieldingly held toward each other, and means for maintaining a supply of liquid adhesive located above the work, said means being arranged to feed the adhesive by gravity upon the marginal edges of the work as it is advanced by the feeding members.

1,807,664. APPARATUS FOR REMOVING TRIMMED WASTE FROM RUBBER TUBES. PAUL W. LEHMAN, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Mar. 25, 1929. Serial No. 349,568. 6 Claims. (Cl. 164—38.)



1. In a rubber tube trimming device which includes a conveyor for tube mandrels and means for circumferentially trimming the end of the tube and cutting the waste portion longitudinally from the circumferential cut to the end of the tube, means for removing the waste portion from the mandrel which comprises means positioned to dig into and hold the waste portion of the tube as it is conveyed past the said means and means to strip the waste portion from the holding means after complete removal of the waste from the mandrel.

1,807,665. MACHINE AND TOOL FOR SHAVING GEAR TEETH. EDWARD W. MILLER, Springfield, Vt., assignor to The Fellows Gear Shaper Company, Springfield, Vt., a Corporation of Vermont. Filed July 27, 1928. Serial No. 285,666. 22 Claims. (Cl. 90—2.)



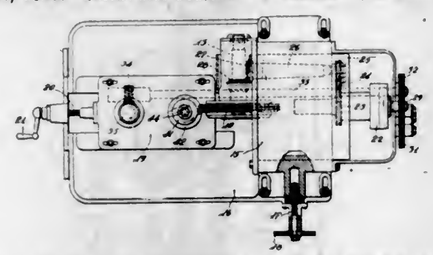
1. A metallic edged cutting tool adapted to generate the face curves of gear teeth, having a helical rib with a continuous cutting edge formed by the intersection of its peripheral surface with one of its side faces, the convolutions of said rib being formed to admit the teeth of a gear between them with engagement of one side of such a tooth with such edge only.

16. The combination with an edged gear finishing cutter having a helical rib with a cutting edge between the circumferential face and a side face thereof, and being otherwise constructed to clear the work entirely, of means for rotating said cutter about the axis of said cutting edge, means for supporting and rotating an unfinished gear wtih its medial plane radial to the cutting edge, means for effecting relative adjustments between the gear and cutter both radially and axially of the cutter, and means for further adjusting the gear angularly about its own axis relatively to the cutter.

20. The method of generating and finishing involute gear teeth having flanks within the base circle, which consists

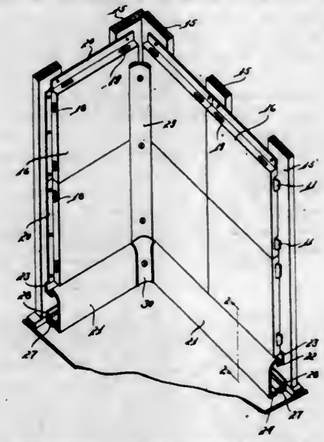
in first generating the involute faces by rotating a metal cutting tool, having a continuous helical cutting edge, about the axis of such helix, locating an unfinished gear in a position where its base circle is tangent to a straight line of action which intersects all the convolutions of said helical edge, and the diameter of the gear perpendicular to said line of action being at one side of all the convolutions of said edge, rotating the gear about its own axis simultaneously with the rotation of the cutter in a direction and at a speed such that its base circle at the tangent point with the line of action travels in unison with the axial displacement of successive points in the cutting edge along the line of action; and finishing the tooth flanks by relatively shifting the cutter and gear so that the cutting edge extends within the base circle of the gear and terminates short of, at, or beyond, said perpendicular diameter according as the tooth flanks are respectively wide, radial, or undercut, and repeating the simultaneous rotation of cutter and gear in the manner first set forth.

1,807,666. FORMED TRUING TOOL FOR HELICOIDAL ABRADING WHEELS. EDWARD W. MILLER, Springfield, Vt., assignor to The Fellows Gear Shaper Company, Springfield, Vt., a Corporation of Vermont. Filed Aug. 31, 1928. Serial No. 303,309. 6 Claims. (Cl. 82—1.)



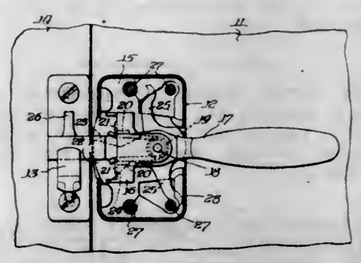
1. A machine for generating a helicoidal surface in an abrading wheel, comprising a tool having cutting points arranged in an involute curve developed from a base circle appropriate to the normal pitch desired to be produced in the helicoidal surface, means for rotating the abrading wheel about its axis, and means for rotating the truing tool about the axis of said base circle at a rate such that the linear travel of the base circle is equal to such normal pitch during the period of one rotation of the abrading wheel.

1,807,667. METAL WALL CONSTRUCTION. MICHEL MILLEVILLE, Detroit, Mich. Filed Feb. 23, 1929. Serial No. 342,075. 2 Claims. (Cl. 189—85.)



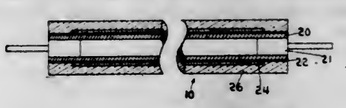
1. In a construction of the class described, a metallic mold board having one of its edges doubled upon itself to provide a structure U shaped in cross section, one of the legs of said U shaped structure being extended and adapted for being secured to a supporting body; a double U shaped construction at the opposite edge of said mold board one of said U shaped formations opening outwardly and the other opening inwardly of said mold board.

1,807,668. LATCH. EDWIN W. NORTH and LLOYD ANDERSON, Rockford, Ill., assignors to National Lock Co., Rockford, Ill., a Corporation of Delaware. Filed May 7, 1928. Serial No. 275,826. 11 Claims. (Cl. 292—332.)



1. In a latch, the combination of a base, a latch bolt pivoted thereon and capable of being moved to one of two opposite off-center positions, and an abutment member pivoted concentrically with respect to said latch bolt capable of being selectively adjusted with respect to the path of movement of the bolt to a position where it may be engaged thereby for holding the same in either of said off-center positions, the abutment member being provided with a pair of oppositely extending arms, either one of which is adapted to be engaged by one of the retaining screws for the latch for anchoring the abutment member.

1,807,669. MACHINE FOR OPERATING UPON HIDES, SKINS AND LEATHER. JOHN W. O'DONNELL, Salem, Mass., assignor to The Turner Tanning Machinery Company, Portland, Me., a Corporation of Maine. Filed Feb. 1, 1929. Serial No. 336,897. 12 Claims. (Cl. 149—12.)



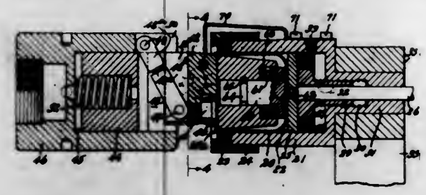
11. In a setting machine, a bed roll comprising a metal core, a soft rubber layer covering all the intermediate portion of the core and extending to within a short distance of each end of the core, and a sleeve or covering of relatively firm vulcanized rubber and wool composition providing a frictional surface for feeding pieces of work, said vulcanized composition being arranged over the soft rubber layer and over portions of the core beyond the soft rubber layer to provide end portions of the bed roll more unyielding than the intermediate portions of the bed roll, in combination with a bladed cylinder for operating upon a piece of work backed by the bed roll, said cylinder having blades helically arranged and extending in opposite directions from points between the ends of the cylinder, and a feed roll for co-operation with the bed roll in feeding the work past the cylinder, the relatively unyielding ends of the bed roll serving to counteract the tendency of the helically arranged blades to displace the work.

1,807,670. BEARING ALLOY. JOHN V. O. PALM and EDWARD C. KNUTH, Cleveland, Ohio, assignors to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 19, 1928. Serial No. 327,132. 1 Claim. (Cl. 75—1.)



A bearing alloy consisting of approximately 82 per cent. lead, 7½ per cent. cadmium, 7½ per cent. antimony, and 3 per cent. of zinc.

1,807,671. METAL SHEARING APPARATUS. ALVA W. PHELPS, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 17, 1928. Serial No. 255,127. 12 Claims. (Cl. 164—69.)



1. Apparatus for cutting a tubular work piece comprising a support for the work piece including an annular shear blade surrounding the work piece, a cutter movable against the interior of the piece to shear the piece against the annular shear blade, means for supporting the cutter, means for rotating one support relative to the other, means for clamping the work piece to the work piece support, and means cooperating with the clamping means for causing the cutter to move toward the annular shear blade during said relative rotary movement.

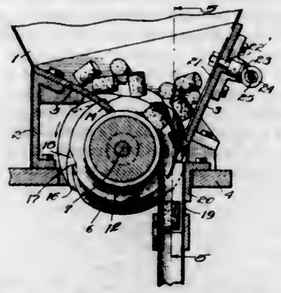
1,807,672. METHOD OF ORNAMENTING PRINTED HARD SURFACE FLOOR COVERINGS. HENNING W. PRENTIS, Jr., Lancaster, Pa., assignor to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1928. Serial No. 311,336. 6 Claims. (Cl. 41—26.)



1. The method of making reversible floor coverings which consists in printing a succession of rug patterns on one surface of a long strip of goods, applying a running all-over pattern to the other surface of the goods without reference to said first patterns, cutting the rugs to length, and thereafter applying border patterns to the non-printed side of the goods.

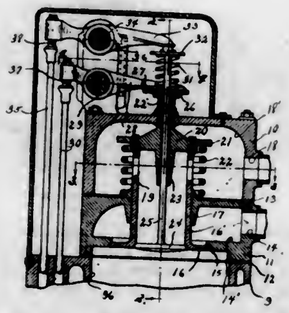
1,807,673. CORK FEEDER. ARTHUR I. RISSER, Chicago, Ill., assignor to U. S. Bottlers Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed May 28, 1928. Serial No. 281,346. 2 Claims. (Cl. 226—92.)

1. In a cork feeder, a hopper having a wall, a drum rotatably mounted in parallel relation with the wall and having a circumferential discharge groove complementing a portion of the wall to form an outlet, a plate in the



hopper in sealing relation with the upper portion of the drum, a bar mounted to swing over the surface of the wall, and yieldable means for reciprocating the bar.

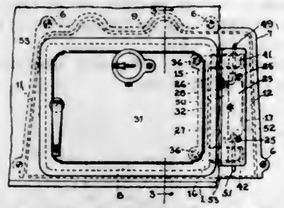
1,807,674. OVERHEAD VALVE CONSTRUCTION. LAWRENCE ROBERTSON, Detroit, Mich. Filed May 19, 1928. Serial No. 278,949. 2 Claims. (Cl. 123—188.)



1. A valve structure of the class described, comprising: a tubular member; a radially projecting valve-forming flange adjacent one end of said tubular member for closing an exhaust port communicating with a cylinder with which used; a head mounted on the opposite end of said tubular member, said tubular member having lateral openings formed therein adjacent said head and communicating with an intake manifold of said engine; a valve stem extended axially of said tubular member and projected through said head; extensions at opposite sides of said head for forming guides for said valve stem, one of said extensions projecting beyond the outer surface of said head; a valve head carried by said stem and engaging one end of said sleeve for controlling communication of said intake manifold with said cylinder; a cap on the upper of said extensions; a peripheral flange on said head; a spring engaging said flange for normally retaining said first mentioned valve in closing position; a spring engaging said cap for normally retaining said second mentioned valve in position; actuating means for moving said first mentioned valve to open position; and actuating means for moving said second mentioned valve to open position.

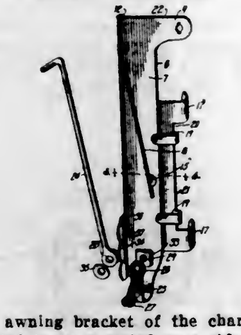
1,807,675. HINGE. MAX M. SUPPES, Elyria, Ohio, assignor to The Fox Furnace Company, Elyria, Ohio, a Corporation of Ohio. Filed Mar. 15, 1929. Serial No. 347,202. 4 Claims. (Cl. 189—46.)

1. In a heating apparatus, a door frame having top, bottom and side frame members, one of said side frame members having substantially horizontal spaced members, an upwardly facing hook member positioned beneath said spaced members, said spaced members having alined bearing apertures therethrough offset horizontally from said hook member, a closure member cooperable with said frame and having a hinge arm rigid therewith, the free end of said arm extending between said spaced members



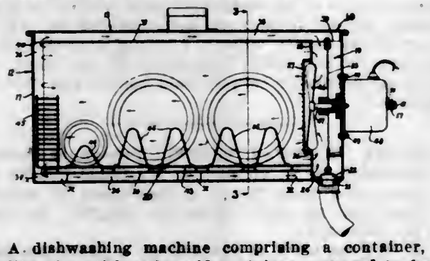
and having an aperture alined with said apertures, a hinge pin longitudinally reciprocable in said apertures and having a lateral arm cooperable with said hook member whereby said pin is held against withdrawal from said apertures.

1,807,676. AWNING BRACKET. TANDY B. THURMAN, Kansas City, Mo. Filed Dec. 13, 1928. Serial No. 325,860. 14 Claims. (Cl. 156—44.)



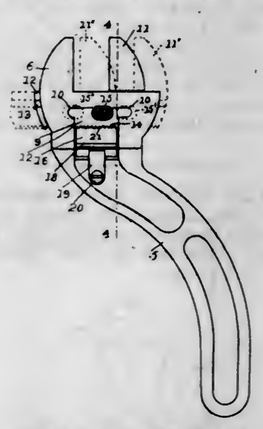
10. In an awning bracket of the character described, a plate adapted to be mounted on a side casing for supporting an awning roller and having an outwardly upwardly turned lower portion provided with a bolt-receiving opening, a recess in the inner face of the plate forming a boss on the outer face thereof and having an opening registering with the opening of the up-turned portion, a nut secured to the plate in said recess, and a bolt adapted to be passed through the opening of the up-turned portion and the end of the bail into the boss and nut for pivotally supporting the bail.

1,807,677. DISHWASHING MACHINE. MARTIN G. TORSON, Long Beach, Calif. Filed Jan. 30, 1929. Serial No. 336,081. 5 Claims. (Cl. 141—9.)



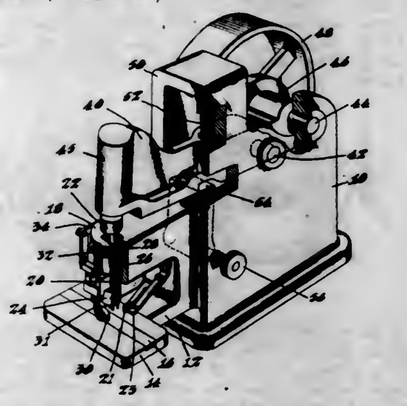
1. A dishwashing machine comprising a container, a plurality of partitions in said container arranged to form a central compartment providing passageways between the compartment and said container on the sides, ends and bottom thereof, said passageways and central compartment all being in communication with each other and means in one of said passageways to force water into said central compartment and to draw the water from the other passageways.

1,807,678. MONKEY WRENCH. WILLIAM V. VAN ETTEN, Bellingham, Wash. Filed July 19, 1928. Serial No. 293,889. 1 Claim. (Cl. 81—137.)



In an adjustable wrench, a fixed jaw fastened to a wrench head, said wrench head having a slideway opening therethrough from edge to edge and a tumbler opening therethrough from side to side thereof intersecting said slideway opening, a loose jaw, an arm fastened to said loose jaw at right angles with the work face thereof, engageable in said slideway for reciprocation and having a beveled outer edge with a toothed rack thereon, a thumb-hold pin fastened in said arm protruding from one side thereof through said intersection of said tumbler opening and said slideway opening, a bearing pin extended through said head across said tumbler opening parallel with said slideway, a tumbler mounted eccentrically on said bearing pin in said tumbler opening for oscillation and having a toothed rack thereon engageable with and disengageable from said arm rack by the oscillation of said tumbler on said bearing pin, a rib on the exposed surface of the tumbler lengthwise thereof adjacent the said thumb-hold pin to provide a thumb hold, a wrench handle fastened to said head, and a flat spring fastened to said handle and bearing on said eccentric tumbler to react and cause the same to return to engagement with said loose jaw arm.

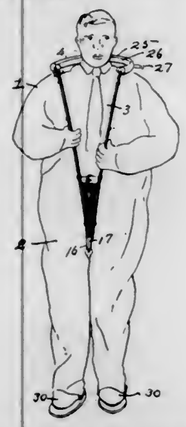
1,807,679. PERFORATING MACHINE. ERASTUS E. WINKLEY, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 16, 1928. Serial No. 285,858. 2 Claims. (Cl. 164—94.)



1. A machine for perforating shoe materials having, in combination, a frame, a work support carried thereby, a

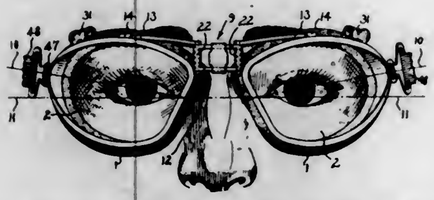
sharp-edged tubular cutting tool guided for vertical reciprocation in the frame, a stop on the tool engaging the frame positively to terminate movement of the tool with its cutting edge in parallel relation to the work support, a spring for moving the tool to space the stop from the frame, and a spring-impelled hammer arranged to be raised and suddenly released to strike a sharp blow upon the tool, movement of the tool by the hammer being limited by engagement of said stop with the frame just as the cutting edge of the tool makes surface contact with a hard anvil.

1,807,680. LIFE SAVING SUIT. WILLIAM LEE AUD, Poolesville, Md., assignor, by mesne assignments, to Safety Devices Corporation, Dover, Del., a Corporation of Delaware. Filed Mar. 26, 1929. Serial No. 350,050. 7 Claims. (Cl. 9—20.)



1. A suit of the character described having an entrance and exit opening, sealing strips extending along the margins of said opening, spring metal clamping strips extending along the margins of the opening and backing the sealing strips, said clamping strips being hinged at their lower ends and normally bowed or curved outwardly and upwardly toward their upper ends, whereby, upon drawing the upper ends of the spring strips together the sealing strips will be brought into sealing engagement and the spring strips put under elastic tension, and a fastening device for connecting the upper ends of said strips and maintaining them under such elastic tension.

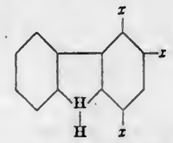
1,807,681. GOGGLES. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 18, 1927. Serial No. 226,900. 14 Claims. (Cl. 2—14.)



1. In an eye protector mounting, an eye cup having orifices on opposite sides thereof, bearing means adjacent one of the orifices, a pair of slidable sleeves in the bearing means having oppositely arranged tapered bores, the smaller cross sections being adjacent, and means to lock the sleeves in position with a fixed space between them, said space opening into the orifice in the eye cup.

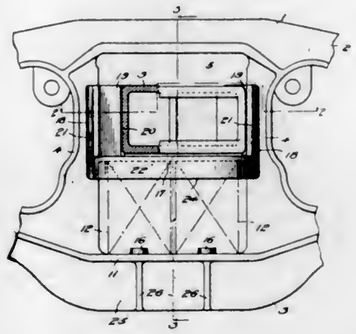
1,807,682. DIAZOTIZATION OF AMINO CARBAZOLE AND ITS DERIVATIVES. FRITZ BALLAUF, FRIEDRICH MUTH, and ALBERT SCHMELZER, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 27, 1928, Serial No. 328,845, and in Germany Jan. 5, 1928. 13 Claims. (Cl. 260—46.)

1. The process which comprises diazotizing a compound of the general formula:



wherein one x stands for an amino group and the other x's stand for hydrogen or any monovalent substituent, and wherein the carbazole nucleus may be further substituted, and subjecting the diazocompound to a reaction customarily employed on diazotized aromatic amines for replacing the diazonium group by a monovalent substituent.

1,807,683. CAR TRUCK. DONALD S. BARROWS, Rochester, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed Oct. 10, 1927. Serial No. 225,237. 16 Claims. (Cl. 105—197.)

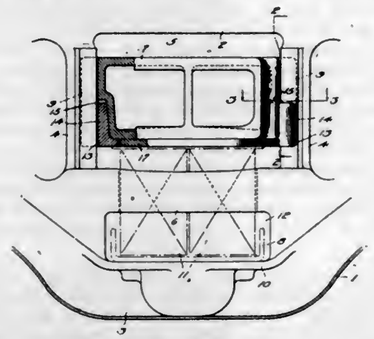


1. In a car truck, in combination, a side frame formed with a compression member, a tension member, struts interposed therebetween and spaced to leave a bolster opening, a bridge wall connecting said struts below the bolster opening, that portion of the tension member on opposite sides of the bridge wall being adapted to support bolster springs, bolster springs supported on said portions of the tension member, a bolster supported on said springs, and detachable front guides for said bolster with portions positioned between said bolster and the outer springs.

1,807,684. RAILWAY TRUCK. DONALD S. BARROWS, Rochester, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed Oct. 10, 1927. Serial No. 225,238. 10 Claims. (Cl. 105—197.)

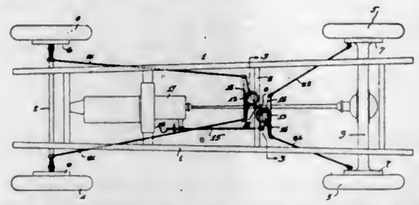
1. In a car truck, in combination, a side frame formed with a compression member, a tension member, struts interposed therebetween and spaced to leave a bolster opening, that portion of the tension member beneath the bolster opening being laterally widened for supporting bolster springs, a bridge member connecting said struts and formed as two laterally spaced portions permitting the reception of a plurality of longitudinally disposed springs therebetween, bolster springs supported on said

portions of the tension member between and on either side of said laterally spaced portions of the bridge member, a spring cap supported on the outer and inner springs



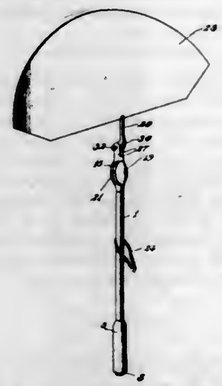
of said bolster springs, a bolster formed with inner guides and notched outwardly of said guides, and upstanding lugs on said spring cap received in said notches and forming removable outer guides for said bolster.

1,807,685. BRAKE EQUALIZER AND OPERATING DEVICE. FREEMAN J. BRADLEY, Ypsilanti, Mich. Filed May 7, 1928. Serial No. 275,660. 188—204.)



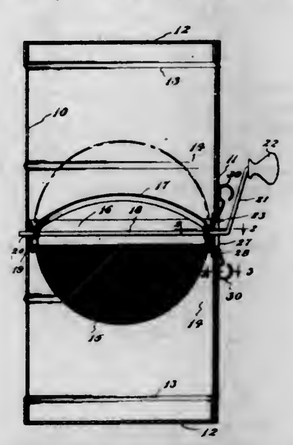
1. In a brake equalizer and operating device, a centrally pivoted member having cups formed on opposite sides of the pivot point thereof, rings rotatably surrounding said cups, arms integral with said rings, brake operating members extending from said arms, and means for swinging said member.

1,807,686. COMBINED PARASOL VANITY CASE AND COIN HOLDER. DAVID M. BRIGHT, Tellico Plains, Tenn. Filed July 13, 1928. Serial No. 292,573. 2 Claims. (Cl. 135—16.)



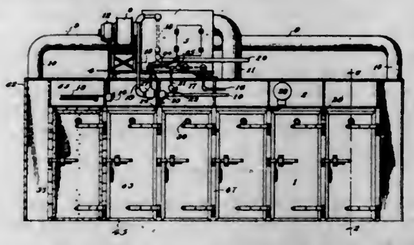
2. A device of the character described comprising a staff, a head in threaded engagement with one end of said staff, a handle having one end in threaded engagement with the other end of said staff and adapted to have threaded engagement with the head when the staff is removed, bearing ears projecting from the outer end of said head, a combined sunshade and fan having a shank provided at its free end with a side extension fitting between said ears, and a set screw passed through the ears and side extension whereby the combined sunshade and fan may be swung to adjusted positions and releasably secured.

1,807,687. SIFTER. FRANK CLARK, Dolliver, Iowa. Filed Sept. 5, 1930. Serial No. 479,949. 1 Claim. (Cl. 209—251.)



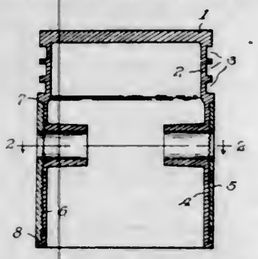
A sifter comprising a cylindrical container formed from a single sheet of metal having the ends crimped to provide a vertical seam, removable covers for the ends of said container, an agitator in the container, a reversible sieve in the container, a swivel latch fixedly secured to said sieve and having a flange journaled in an enlarged opening formed in said container at said seam, and oppositely disposed arms projecting from said flange and terminating in spring loops having recesses to receive said seam and maintain said sieve in either of its reversed positions.

1,807,688. DOUGHPROOFING APPARATUS. SANDER DEBUS, Hastings, Nebr. Filed July 6, 1928. Serial No. 290,769. 2 Claims. (Cl. 126—281.)



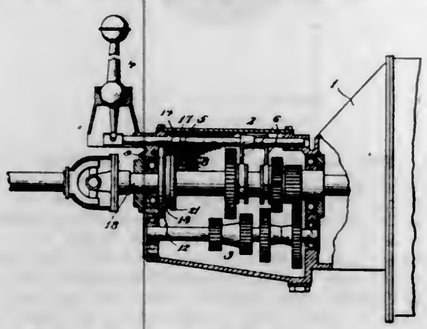
1. A dough-proofing apparatus comprising a housing, said housing having a ceiling and a roof with a chamber between the ceiling and the roof and also having inner and outer end walls, air heating and moistening mechanism mounted on the housing, an air conduit extending from said mechanism between the inner and outer end walls of the housing and provided with a plurality of nozzles discharging through the inner end walls, a return air conduit disposed between the ceiling and the roof of the housing and extending through the roof to the heating and moistening mechanism, and branch pipes extending laterally from said return air conduit and having their ends opening through the ceiling.

1,807,689. METHOD OF MAKING COMPOSITE PISTONS. HORACE B. DEPUTY, Detroit, Mich. Filed Aug. 20, 1928. Serial No. 300,682. 2 Claims. (Cl. 22—204.)



1. The process of making composite pistons consisting of first heating a metallic sleeve to expand same, placing the expanded sleeve in a heated mold, and then flowing molten metal having a higher co-efficient of expansion than the metal of the sleeve into the mold to engage the entire inner periphery of the sleeve.

1,807,690. SAFETY DEVICE. JOSEPH J. EHEMANN and BENJAMIN F. SINOER, Lancaster, Pa. Filed May 4, 1929. Serial No. 360,582. 2 Claims. (Cl. 192—4.)



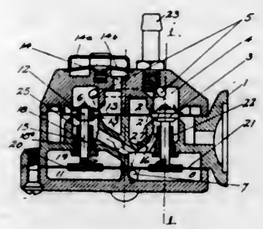
1. In a safety device for reverse gears, the combination of a stationary case, a loose ring mounted concentrically within the case, a cap retaining the ring in the case, a hub rotatable within the ring, a split brake band encircling the ring and normally holding the same against rotation and having its ends provided with abutments, brake elements disposed between the hub and the ring whereby to permit rotation of the hub in one direction and prevent rotation of the hub in the opposite direction, and a cam lever mounted on the cap with its head bearing upon the side of one of said abutments and extending laterally therefrom and shiftable whereby to expand the band and release the ring to permit rotation of the ring with the hub or contract the band about the ring and prevent rotation of the ring.

1,807,691. LUBRICATOR. ARAH CLARE FOX, Grand Rapids, Mich. Filed Dec. 22, 1928. Serial No. 327,942. 13 Claims. (Cl. 184—37.)



11. A lubricator for attachment to an oscillating member comprising a base, a weight slidable therein, a cylinder mounted on said base, a piston in said cylinder, a threaded rod attached to said piston, means for holding said rod against rotation, a nut on said rod and held against sliding in said cylinder, a bushing surrounding said rod and fixed in said cylinder, a ratchet on said bushing, a pair of pawl carriers adjacent said ratchet, pawls on said carriers and engaging said ratchet, connecting means between said carriers and weight for actuating said carriers by movement of said weight in either direction, a collar mounted eccentrically on said bushing, another carrier surrounding said collar and held against rotation, a ratchet carried by said nut, a pawl on said last named carrier and engaging said last named ratchet, a plunger adapted to release said last named pawl from said last named ratchet, and an operating member carried by the free end of said rod and adapted to engage said plunger.

1,807,692. APPARATUS FOR AUTOMATICALLY ESTABLISHING A PULSATING MOTION OF AIR IN TWO CONDUITS. GEORG KARL VILHELM JOHANSON, Lidingo, Sweden, assignor to Svenska Aktiebolaget Gasaccumulator, Lidingo, Sweden. Filed July 6, 1928, Serial No. 290,859, and in Sweden July 18, 1927. 7 Claims. (Cl. 31—62.)



3. In an apparatus for establishing a pulsating motion of air in two conduits, a vacuum duct, a vibratory diaphragm, a two-way valve between the vacuum duct and the two conduits and lying wholly on one side of said diaphragm and a valve spindle connecting said valve to this side of the diaphragm, an atmospheric duct, a second vibratory diaphragm, a second two-way valve between the atmospheric duct and the two conduits and lying wholly on one side of said diaphragm and a valve spindle connecting the second valve to this side of the second diaphragm.

1,807,693. PROCESS FOR INTRODUCING AN ALDEHYDIC GROUP INTO CYCLIC COMPOUNDS. GEORG KALISCHER and HEINZ SCHEYBA, Frankfort-on-the-Main, and KARL KELLER, Mainkur, near Frankfort-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 30, 1928, Serial No. 250,718, and in Germany Feb. 2, 1927. 4 Claims. (Cl. 260—136.)

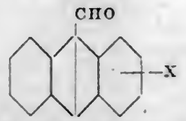
1. Process for introducing an aldehydic group into cyclic compounds which process comprises acting with a formylaminocompound of the general formula:

$$HCO{-}N\begin{matrix}X_1\\X_2\end{matrix}$$

wherein X_1 and X_2 represent hydrogen or aryl or X_1 represents aryl and X_2 represents alkyl in the presence of an acid condensation agent containing chlorine on carbo- and heterocyclic compounds containing a labile hydrogen atom, and in which other hydrogen atoms may be replaced

by halogen or by other monovalent substituents attached to a carbon atom of the ring by means of a carbon-, oxygen- or sulfur-atom.

3. As new compounds aldehydes of the anthracene series corresponding probably to the general formula:

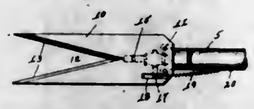


wherein X means hydrogen or a halogen, which are when dry crystalline substances, having a definite melting point, capable of the characteristic reactions of aldehydes.

1,807,694. PRODUCTION OF NITROGENOUS VAT DYESTUFFS. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 22, 1928, Serial No. 314,312, and in Germany Nov. 17, 1927. 8 Claims. (Cl. 260—61.)

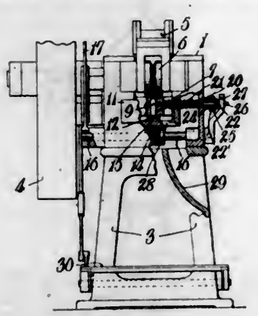
1. A process of producing new vat dyestuffs, which comprises reducing a nitrodibenzanthrone with an amount of a reducing agent insufficient for complete reduction and condensing the resulting mixture of nitro- and aminodibenzanthrone.

1,807,695. WEED EXTERMINATOR. AMUND C. LEE, Viroqua, Wis. Filed Sept. 25, 1929. Serial No. 395,062. 1 Claim. (Cl. 47—49.)



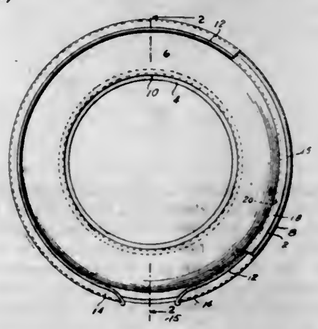
A tool of the character described comprising a tubular handle, a blade connected to the lower end of said handle having a V-shaped slot in its lower edge providing cutting edges and also having a slotted opening in its upper portion, a discharge pipe extending from the lower end of the handle beneath the blade, a valve mounted in said discharge pipe, a lever connected with said valve having one end disposed for engagement with the ground to open said valve and with its opposite end inserted through the slotted opening of the blade to limit the opening and closing movement of the lever, and a spring connected to the inserted end of said lever, for automatically closing said valve.

1,807,696. FORGING MACHINE. JOSEPH LESICKO, Livingston, Ill., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Apr. 17, 1925. Serial No. 23,946. 24 Claims. (Cl. 76—5.)



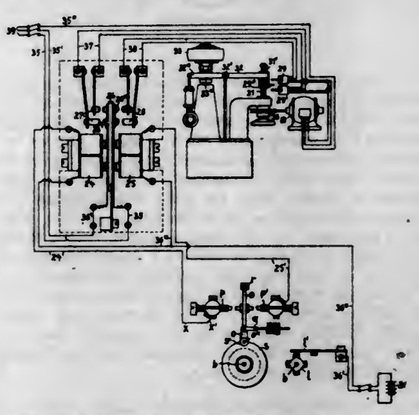
1. A forging machine having a movable die, means for positively feeding a work piece including an operating member, means for ejecting the work piece from the machine independently of movement of said die, and means for interconnecting said feeding and ejecting means to enable said ejecting means to be actuated by said operating member.

1,807,697. COVER FOR SPARE TIRES OF AUTOMOBILES. GEORGE ALBERT LYON, Allenhurst, N. J. Filed Dec. 21, 1928. Serial No. 327,552. 22 Claims. (Cl. 150—54.)



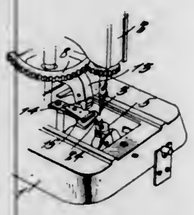
4. A multipart tire cover including a side plate for disposition over a side of the tire, and a substantially circular rim formed to extend about the periphery of the tire and having an inherent resiliency toward and capable of contracting the rim to a diameter less than the normal outer diameter of the tire, said rim and said plate being so proportioned to each other that when the rim is on the tire one side of the rim is in holding engagement with said plate.

1,807,698. FINE SPEED GOVERNOR FOR MOTOR ENGINES. ROBERT MICHL, Kosice, Czechoslovakia, assignor, by mesne assignments, to The Hammond Clock Company, Chicago, Ill., a Corporation of Delaware. Filed May 18, 1925, Serial No. 31,186, and in Germany May 26, 1924. 5 Claims. (Cl. 290—40.)



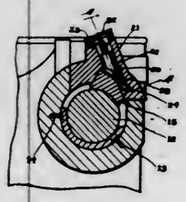
1. The combination with a coarse regulator for a turbo generator set, a distribution system supplied by the generator set, a fine regulating device for exact speed regulation, a motor for operating said device, a control circuit for said motor, a differential gearing including a planet pinion, a synchronous motor in the system for driving one side of the gearing, a standard time piece for driving the other side of said gearing, a contact lever for closing said circuit, a disk associated with the contact lever and controlling the movement thereof, a current interrupter controlled by the synchronous motor for temporarily interrupting said circuit, as and for the purpose set forth.

1,807,699. BUTTONHOLE MACHINE. HENRY C. MILLER, Waterford, N. Y. Original application filed Aug. 25, 1922, Serial No. 584,323, Patent No. 1,640,283, dated Aug. 23, 1927. Divided and this application filed Mar. 24, 1927. Serial No. 178,001. 10 Claims. (Cl. 112—68.)



1. A machine including means to cut a button-hole from a fabric to leave a margin of such fabric within the outline of the button-hole, said machine including stitching mechanism having a needle for sewing the edge of the button-hole, with the needle of the stitching mechanism automatically folding said margin of fabric back onto the fabric beyond the edge of the button-hole in the stitching operation.

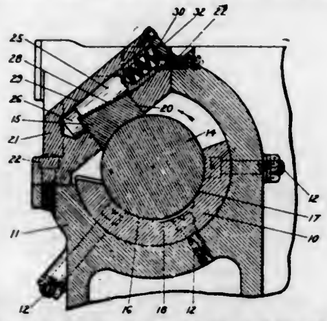
1,807,700. SELF ADJUSTING BEARING FOR SPINDLES. CHARLES H. NORTON, Plainville, Conn., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 1, 1925, Serial No. 53,806. Renewed Mar. 12, 1930. 2 Claims. (Cl. 308—66.)



1. A bearing for a grinding wheel spindle comprising a lower fixed bearing member arranged to serve as the sole bearing support for the spindle, a floating bearing shoe maintained in engagement with a small portion of the upper part of the spindle to steady the same, means to hold the shoe from lateral movement, a locking pin which is mounted in contact with the shoe and is biased towards movement inwardly so as to maintain contact with the shoe, a guideway for said locking pin having a thrust receiving wall arranged at such an angle relative to the surface of the bearing shoe engaging the locking pin that the latter will follow up any inward movement of the shoe and prevent outward movement thereof, and means for manually locking said pin in its operative position and thereby preventing inward movement of the locking pin under the influence of its bias.

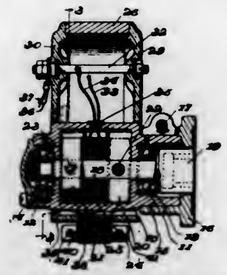
1,807,701. BEARING. CHARLES H. NORTON, Plainville, Conn., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 8, 1930. Serial No. 434,261. 11 Claims. (Cl. 308—66.)

1. A spindle bearing comprising a fixed bearing member constituting the sole locating bearing for a spindle which sustains the radial thrust of the spindle under the normal conditions of usage, a floating bearing shoe serving to hold the spindle properly against the fixed bearing member, means to prevent lateral movement of the shoe, a follow up member contacting with and freely movable towards the floating shoe, and self-adjusting means cooperating with said member to bias it towards movement into firm contact



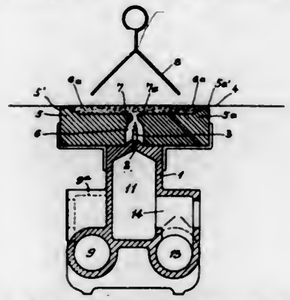
with the shoe, said member and floating shoe being so arranged that the shoe may move only inwardly towards the spindle.

1,807,702. TACHOMETER. EDWARD B. NOWOSIELSKI, Bloomfield, N. J., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Feb. 2, 1929. Serial No. 337,076. 6 Claims. (Cl. 171—209.)



1. In an electrical tachometer, a permanent magnet having spaced pole pieces, magnetic means arranged to bridge the air gap between the pole pieces and disposed at equal distances from both said pole pieces and adjustable toward and away from said pole pieces to vary the reluctance and the number of lines of force traversing said gap, and common means for supporting said magnet and said means in adjusted relation.

1,807,703. METHOD OF AND APPARATUS FOR SINGEING TEXTILE FABRICS. WALTER OSTHOFF, Barmen, Germany. Filed Nov. 19, 1929, Serial No. 408,203, and in Germany Aug. 9, 1929. 5 Claims. (Cl. 26—3.)



1. Method of singeing textile fabric with gaseous or vapourous fuel according to which a rich excess of oxygen is supplied to the fuel with the primary air before the formation of flame and the ignition of the flame is effected on glowing or incandescent walls after which a combustion

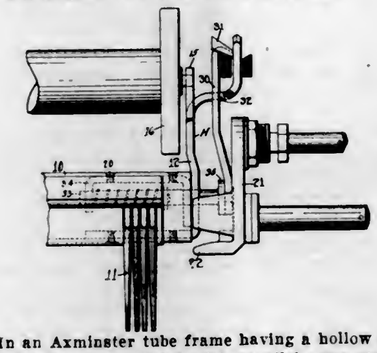
of the textile fibres to be singed with non-luminous flame is effected by the excess oxygen which is heated to a high temperature in the flame.

1,807,704. CHEWING GUM AND METHOD OF MAKING THE SAME. ARCHIE PAPPADIS, Norfolk, Va. Filed Dec. 14, 1927. Serial No. 240,084. 2 Claims. (Cl. 99—16.)

1. A compound for chewing gum consisting of the following ingredients substantially in the proportions specified by percentage, beeswax 6%; sweet pure olive oil 4%; granulated mastic gum 50%; sugar syrup 35%; lemon juice 5%, and a trace of rose oil as a flavoring.

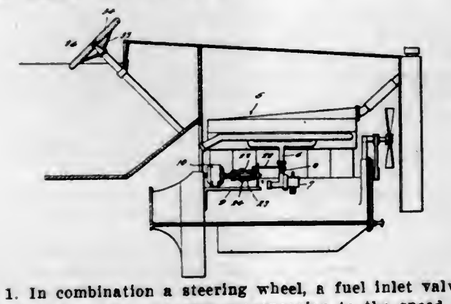
2. A process for producing a chewing gum consisting in first heating beeswax until liquified; mingling sweet pure olive oil until a thorough admixture is obtained, after which granulated mastic gum is added and the mass thoroughly agitated, to which sugar syrup containing lemon juice is added and the mass thoroughly agitated until a homogeneous admixture is obtained and the mass poured on a suitable slab, and adding a trace of rose oil during said pouring.

1,807,705. TUBE FRAME FOR AXMINSTER LOOMS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 21, 1927. Serial No. 234,591. 7 Claims. (Cl. 139—10.)



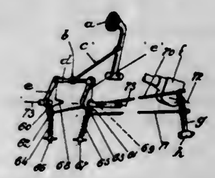
1. In an Axminster tube frame having a hollow tubular bar, and a hanger provided with parallel arms projecting into and secured to the hollow bar, a pair of parallel spaced legs formed on one of the arms located in the tubular bar and extending transversely of the latter, a plunger slidably mounted in said legs, resilient means tending to hold said plunger in normal outward position relatively to the hanger, and a rigid hook member mounted directly on the plunger and moving therewith, said hanger having a slot spaced from the plunger to receive and guide the upper portion of the hook.

1,807,706. ACCELERATION CONTROL. ALLAN RINNE, Orr, Minn. Filed Nov. 14, 1929. Serial No. 407,147. 4 Claims. (Cl. 137—139.)



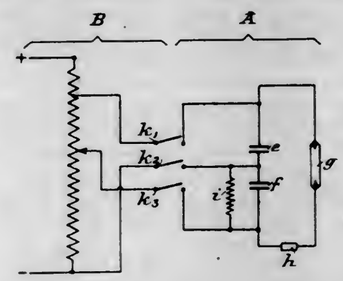
1. In combination a steering wheel, a fuel inlet valve, an electric motor, a governor responsive to the speed of the electric motor, a connection between the governor and the valve, an electric circuit for an electric motor, a rheostat in said circuit and incorporated with the steering wheel, and means on the rim of the steering wheel for operating said rheostat.

1,807,707. BRAKE OPERATING DEVICE FOR MOTOR VEHICLES. LOUIS ROUANET, Ivry-Port, France, assignor to Compagnie d'Applications Mecaniques, Ivry-Port, Seine, France, a French Company. Original application filed Mar. 9, 1925, Serial No. 14,255, and in France Mar. 21, 1924. Divided and this application filed Dec. 14, 1927. Serial No. 240,017. 9 Claims. (Cl. 188—204.)



1. A brake device arrangement comprising means for transmitting braking forces from a main brake operating member to brake shoes operating devices, auxiliary power devices, and means controlled by the steering mechanism to introduce variable actions of the said auxiliary power devices in the transmissions of the said braking forces.

1,807,708. PROCESS OF AND MEANS FOR TIMING ELECTRIC FUSES. HERBERT RÜHLEMANN, Sommerda, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed Dec. 16, 1929, Serial No. 414,499, and in Germany June 14, 1929. 2 Claims. (Cl. 102—38.)

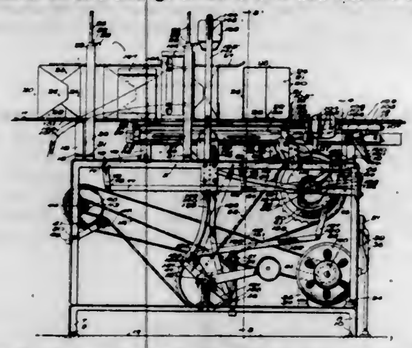


1. An electrical time ignition device comprising an electrical igniting means, a spark gap, two condensers, a circuit connecting said condensers in opposition to one another, and also including, in series therewith, the igniting means and the spark gap, a high resistance shunted across the terminals of one of said condensers, and a source of electricity capable of simultaneously delivering two different voltages, variable with respect to one another, and connections whereby said voltages may be temporarily applied to the respective condensers to charge the same.

1,807,709. WRAPPING MACHINE. OSCAR SANDBERG, Battle Creek, Mich., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich., a Partnership Association Limited of Michigan. Filed Apr. 27, 1929. Serial No. 358,661. 22 Claims. (Cl. 93—2.)

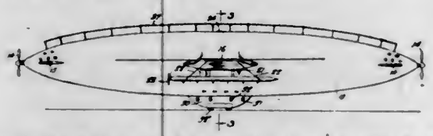
1. In a machine of the character described, means for advancing a package with a wrapper thereon to be folded,

a quadrilateral linkage carried by said means, a folder mounted on said linkage to move with and relative to the



package advancing means, and means for operating the quadrilateral linkage whereby said folder may fold the wrapper on said package.

1,807,710. AIRSHIP. JOHN C. SCHLEICHER, New York, N. Y. Filed Aug. 18, 1928. Serial No. 300,447. 3 Claims. (Cl. 244—6.)

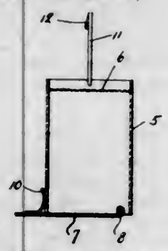


1. In an airship, a rigid buoyant body tapered at each end, propellers at each end of said body, projections extending laterally from opposite sides of and rigid with the body, wings foldably secured to and extending horizontally from the extensions, means to hold the wings extended, resilient plates positioned at opposite edges and upon opposite sides of the wings and having their inner edges secured to said wings and their free edges disposed toward the leading and trailing edges of the wings, and means secured to the free edges of the plates whereby the plates may be independently controlled.

1,807,711. PRODUCT AND PROCESS FOR PREVENTING THE SOLVENT ACTION OF SULPHURIC ACID ON IRON AND STEEL. JOHN G. SCHMIDT, Philadelphia, Pa., assignor to E. F. Houghton and Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 21, 1928, Serial No. 263,594. Renewed Apr. 23, 1930. 10 Claims. (Cl. 148—8.)

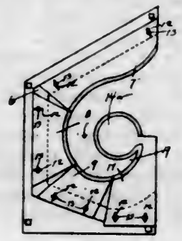
1. The process of pickling iron and steel objects which comprises subjecting said objects to the action of a solution of sulphuric acid to which has been added a reaction product of an aryl thiourea and an aldehyde.

1,807,712. BASS BOMB. GORDON E. SPOFFORD, Buzzards Bay, Mass. Filed Aug. 19, 1930. Serial No. 476,279. 2 Claims. (Cl. 43—4.)
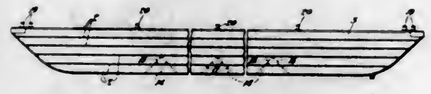


1. A device for the purpose specified, comprising a body adapted to contain live bait, a perforated closure for one end of the body, a normally closed valve for the opposite end of the body, and means to facilitate securing the device to a fish line.

1,807,713. HALVING AND PITTING DEVICE. ALBERT M. SWANSON, Colton, Calif. Filed Feb. 15, 1929. Serial No. 340,128. 3 Claims. (Cl. 146—30.)



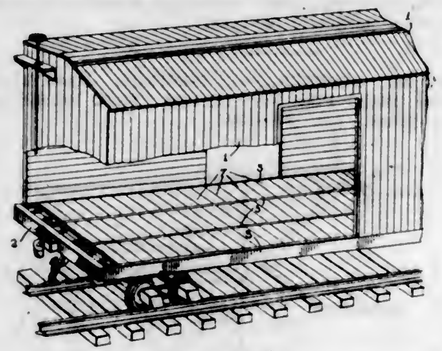
1. In a device of the character described, a blade carrier angular block, means for supporting said block, a plurality of blades secured in spaced relation to the inner portion of said block, means for adjusting said blades to and from a central point, the edge of each of said blades converging into the next of said adjacent blades.

1,807,714. BARGE. JOHN L. TAYLOR, West View Borough, Pa. Filed Nov. 23, 1928. Serial No. 321,382. 7 Claims. (Cl. 114—79.)



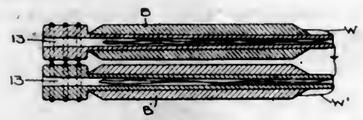
1. A barge having its bottom, end and side walls composed of longitudinally extending tubular supporting ribs, said ribs being spaced transversely, and two series of plates welded to said ribs to form inner and outer spaced air-tight walls, said ribs separating the space between said walls into a series of air chambers.

1,807,715. RAILROAD CAR FLOOR AND METHOD OF CONSTRUCTING THE SAME. MAX D. TUCKER, Detroit, Mich., assignor to The Evans Auto Loading Co., Inc., Detroit, Mich. Filed Dec. 9, 1929. Serial No. 412,889. 8 Claims. (Cl. 105—422.)



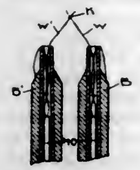
1. In a car floor, sectional cross boards assembled in the floor in a manner to permit forceful breakage of an intermediate or end board for removal with the remaining boards moved into edge contacting relations.

1,807,716. BOBBIN FOR WEFT REPLENISHING LOOMS. RICHARD GREENLEAF TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 7, 1930. Serial No. 473,598. 8 Claims. (Cl. 139—257.)



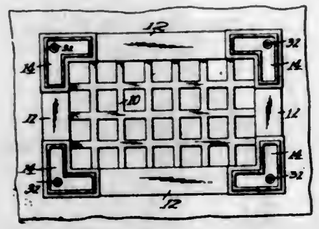
1. In a weft replenishing mechanism, a pair of weft yarn carrying bobbins having their weft ends tied together and a portion of the tied ends inserted internally in one of the bobbins.

1,807,717. METHOD OF HANDLING WEFT ENDS OF WEFT CARRIERS. RICHARD GREENLEAF TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 14, 1930. Serial No. 475,283. 8 Claims. (Cl. 139—257.)



1. The method of controlling weft ends in a weft replenishing mechanism which consists in providing two bobbins having a continuous weft wound thereon, inserting a reserve of weft in one of said bobbins, and transferring one of said bobbins and leaving the other to act as a thread holder for the transferred bobbin.

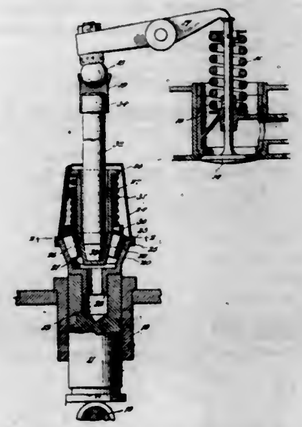
1,807,718. GRATING AND FRAME THEREFOR. MELCHER G. WERME, Worcester, Mass., assignor to Wickwire Spencer Steel Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 4, 1930. Serial No. 472,870. 2 Claims. (Cl. 189—84.)



1. A grating comprising a body of perforated metal of substantial thickness, and an enclosing frame formed of a plurality of strips of sheet metal recessed to receive the edges of said perforated body, each strip having portions thereof partially severed therefrom and projected rearward and bent to embrace portions of said perforated body, thereby securing said strips in position.

1,807,719. VALVE ACTUATING MECHANISM. CALVIN C. WILLIAMS, Philadelphia, Pa. Filed Apr. 7, 1927. Serial No. 181,787. 5 Claims. (Cl. 123—90.)

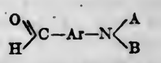
1. An automatic take-up device including a female clutch member, a tubular male clutch member extending therein, clutch elements interposed between said members, a spring acting on the male member and said elements and urging said elements to coact with the members, said male member being closed at its lower end to provide a socket for an element operable to open a valve, and a cap



fixed to said female member and housing the male member, the cap being disposed to limit the male member against displacement out of the female member.

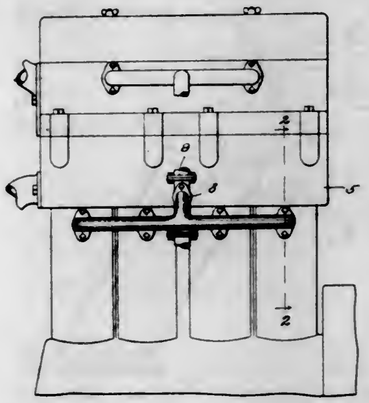
1,807,720. AROMATIC N-AMINO-ALKYL-AMINO ALDEHYDES. AUGUST WINGLER, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 6, 1928, Serial No. 259,604, and in Germany Apr. 16, 1927. 4 Claims. (Cl. 260—136.)

1. As new products the compounds of the general formula



wherein A stands for hydrogen, alkyl or aminoalkyl, B stands for aminoalkyl and Ar stands for an aromatic residue which may be substituted, being generally yellowish colored oils with strong basic properties which can be distilled in vacuo without decomposition and being easily soluble in water in form of their inorganic salts.

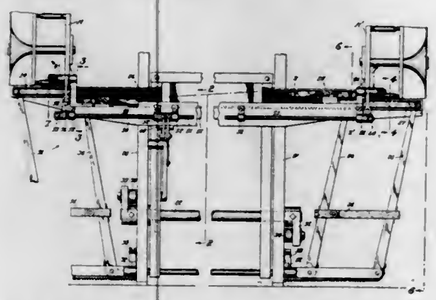
1,807,721. ENGINE. IDUS G. YOUNG, Lequire, Okla. Filed Apr. 2, 1927, Serial No. 180,546. Renewed Apr. 20, 1931. 1 Claim. (Cl. 123—196.)



In an internal combustion engine, cylinders having openings arranged intermediate the ends thereof, an aux-

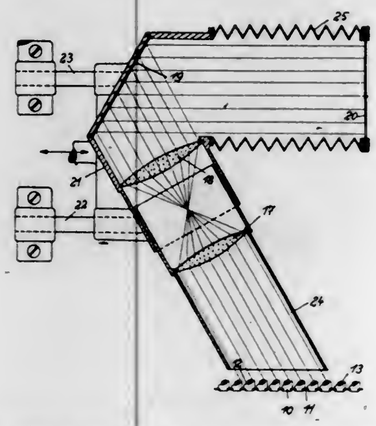
iliary manifold secured adjacent to the openings for receiving material from the openings, pistons operating in the cylinders, said pistons having curved grooves formed in the outer surface thereof, said grooves being substantially narrow at their upper ends and widened throughout their lengths, and said grooves adapted to deliver material to the openings and manifold.

1,807,722. WEFT REPLENISHING DOUBLE SHUTTLE LOOM. LESTER W. BALSER and EVERETT E. CLARK, Worcester, Mass., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1929. Serial No. 342,794. 9 Claims. (Cl. 139—243.)



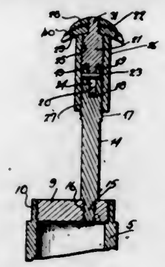
1. A double shuttle loom having, in combination, a pair of shuttles, a magazine for each shuttle, means to transfer weft carriers from said magazines to said shuttles by direct downward movement, and a pair of shuttle boxes for each shuttle located so that the paths of travel of the two shuttles are substantially equal in length but are differently disposed transversely of the loom by an amount not less than the length of a shuttle, each magazine being positioned above a shuttle box which is beyond the path of travel of the other shuttle, whereby transfer to each shuttle may be effected free from interference by the other shuttle.

1,807,723. APPARATUS FOR TURNING CIGARETTES RIGHT SIDE UP AS THEY ARE FED TO THE PACKING MACHINE. MARTIN BERGER, Freital-Deuben, near Dresden, Germany, assignor to United Cigarette Machine Company Aktiengesellschaft, Dresden, Germany. Filed July 1, 1929, Serial No. 375,264, and in Germany May 23, 1928. 6 Claims. (Cl. 226—5)



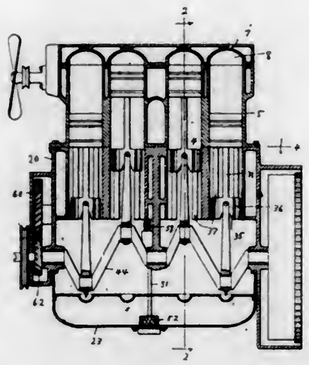
1. A device for enabling the turning of cigarettes on a conveyor as they are fed to a packing machine comprising optical means adapted to throw a stationary image of the moving cigarettes for the purpose of enabling an appliance to be operated to turn any desired cigarette shown in the image; and means for observing the image.

1,807,724. SHAVING KIT. FRANK BOSANAC, Schumacher, Ontario, Canada. Filed May 31, 1930. Serial No. 458,599. 1 Claim. (Cl. 30—12.)



A safety razor shaving kit of the character described, comprising a tubular handle, a screw plug closure for one end thereof, a screw threaded plug in the opposite end of the handle, a stem having one of its ends eccentrically connected to the screw threaded plug, the opposite end of the stem having screw threads and being bifurcated, an extension having a slotted reduced flat portion adapted to be received between the bifurcated end of the stem, a pivot pin passing through the bifurcated end of the stem and through the slot of the flattened reduced portion of the extension, screw threads formed on the extension corresponding to the screw threads on the stem, an internally screw threaded sleeve adapted to be screwed upon the screw threads of the stem and the extension whereby the same may be held in an extended position, and a razor blade holder carried by the outer end of the extension.

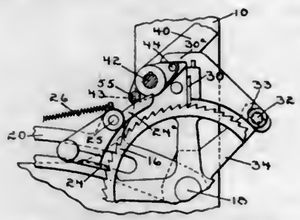
1,807,725. INTERNAL COMBUSTION ENGINE. HERBERT H. BRACKMAN, Colfax, Ill. Filed Nov. 16, 1928. Serial No. 319,908. 1 Claim. (Cl. 74—14.)



An internal combustion engine of the class described comprising a cylinder block having a plurality of vertical bores therein, a plurality of vertically reciprocating pistons mounted in the bores and having depending bars rigidly coupled thereto, a crank case having a horizontal crank shaft journalled therein, a closed vertically disposed casing between the crank case and the cylinder head, said casing formed with vertical chambers in registration with the cylinder bores at their upper ends and the crank case on their lower ends, lateral brackets on

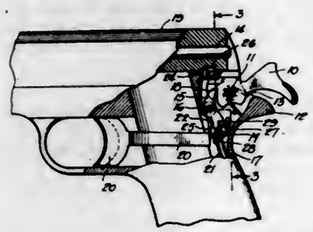
the opposed side walls of the casing within said chambers, vertically disposed guide rods supported on the brackets in spaced relation to the walls of the chambers, cross heads formed on the lower ends of said depending bars provided with vertical grooves slidable on said guide rods, and connecting rods journalled at their opposite ends to the crank shaft and cross head respectively.

1,807,726. TAKE-UP MECHANISM FOR LOOMS. ALLEN E. BRICKMAN, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Oct. 11, 1929. Serial No. 399,056. 4 Claims. (Cl. 139—304.)



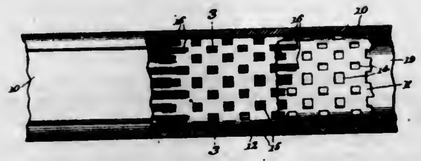
1. A loom take-up mechanism comprising a ratchet, a feed pawl, a holding pawl, a shipper lever, a release lever, and means by which either lever may be rendered effective to disable either pawl.

1,807,727. SAFETY LOCK FOR FIREARMS. ARCHIBALD R. BRINKERHOFF, Los Angeles, Calif. Filed Feb. 12, 1930. Serial No. 427,857. 13 Claims. (Cl. 42—7.)



12. A firearm having a hammer, a sear, and a trigger for releasing the sear from the hammer, and trigger controlled means co-acting with the sear to lock the hammer in cocked position so long as the trigger is held depressed.

1,807,728. PNEUMATIC TIRE. ANDRE L. BROUSSARD, New Orleans, La., assignor of nine-tenths to E. O. Broussard, New Orleans, La. Filed Aug. 23, 1929. Serial No. 387,998. 1 Claim. (Cl. 152—18.)



An improved pneumatic tire comprising a casing, a pair of sheath plates extending circumferentially and transversely of the tread of the tire incorporated in the casing, and having openings therein disposed in transverse rows, the openings of one plate being offset from the openings in the other plate, and cords vulcanized in the casing, each strand of the cords being looped about one edge of the upper plate and secured thereto, said strand being carried down and about the edge of the lower plate in engagement with the lower surface of the lower plate thence through the first opening in the lower plate and the second opening in the upper plate, the strand being brought along the upper surface of the upper plate and passed downwardly through the third openings of the upper and lower plates, the strand being passed beneath the surface of the lower plate and passed upwardly and looped about the other edges of the plates, the strand being carried across the upper surface of the plate, said strand being threaded in the opposite direction through the same openings but in an alternate sense, the strand crossing itself alternately in the openings of the upper and lower plates.

1,807,729. NEW ω-HALOGEN-METHYL DERIVATIVES OF PHENOL AND ITS HOMOLOGUES AND A NEW PROCESS OF PREPARING THE SAME. ARNOLD BRUNNER, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 26, 1930, Serial No. 447,761, and in Germany Feb. 26, 1929. 7 Claims. (Cl. 260—154.)

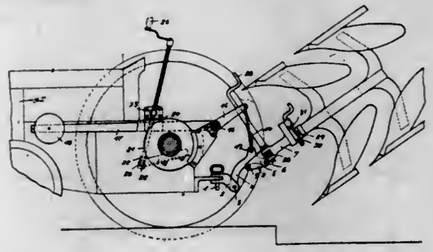
1. The process which comprises reacting upon a member of the group consisting of phenol and its homologues with formaldehyde in the presence of a concentrated hydrogen halide solution.

1,807,730. WEFT DETECTOR FOR LOOMS. GEORGE A. BUFFINGTON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 28, 1929. Serial No. 417,215. 4 Claims. (Cl. 139—287.)



1. In a feeler tip for a loom weft detector arm, a support on the arm, a U-shaped wire slidably mounted on the support and limited as to rearward movement, and a coiled spring around the wire holding the latter yieldingly in rear position and having the coils thereof disposed to engage the weft to be detected.

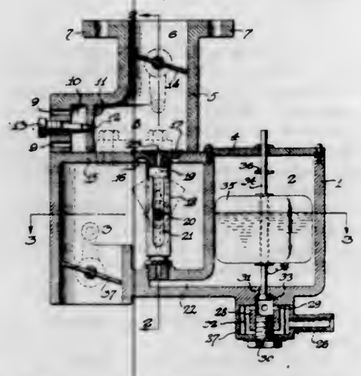
1,807,731. OPERATOR FOR AGRICULTURAL CULTIVATING IMPLEMENTS. MAX EHRICKE, Leipzig-Plagwitz, Germany, assignor to the Firm Rud.Sack, Leipzig-Plagwitz, Germany. Filed May 24, 1926, Serial No. 111,327, and in Germany Feb. 17, 1926. 6 Claims. (Cl. 97—47.)



1. A device to be used in connection with traction engines for agricultural implements serving for the treatment of the soil, said device comprising an agricultural implement, a support mounted rotatably in a vertical plane on a traction engine, means for fixing said agricultural implement to said support so that the total weight

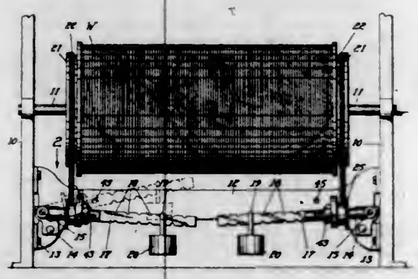
of said implement will be transmitted to said support in raised condition of said implement, and lifting means adapted to act on said support to so adjust the latter that it will carry said implement in freely lifted condition.

1,807,732. CARBURETOR. ERNANI M. FABRIZI and GIUSEPPE BERTI, Detroit, Mich., assignors of one-third to Vincent Giuliano, Detroit, Mich. Filed Aug. 8, 1929. Serial No. 384,261. 2 Claims. (Cl. 261—59.)



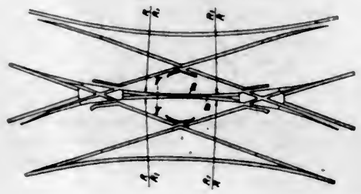
1. In a carburetor, the combination of a casing formed with a float chamber and with an air inlet chamber, means for supplying fuel to the float chamber, means regulating the flow of fuel into the float chamber including a float, a member forming a mixing chamber positioned above the air chamber and communicating with said air chamber through an opening in a wall of the casing, said opening providing an upwardly facing valve seat, an air valve to seat on said seat, a tubular sleeve on the air valve, a post fixed in the casing with its upper end extending through the opening in the casing wall which affords communication between the mixing chamber and the air chamber, said post being formed with a restricted fuel passage extending axially therethrough and opening at its upper end into the mixing chamber and communicating at its lower end with the fuel chamber, and a valvular member extending transversely through said post and interrupting said fuel passage, said valve sleeve being formed with elongated openings in opposite sides thereof through which said valvular member extends.

1,807,733. LET-OFF FOR LOOMS. VICTOR A. FOISY, Worcester, Mass., and CARL J. LINDEGREN, Providence, R. I., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 21, 1928. Serial No. 263,471. 6 Claims. (Cl. 188—83.)



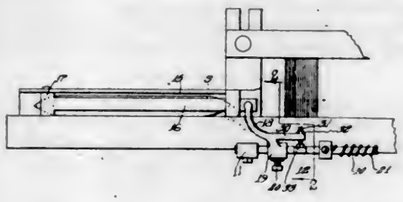
3. In a let-off for a loom having a frame and a warp beam, a lever pivotally mounted with respect to the frame, connections between the lever and the beam whereby the lever acts when in normal position to retard movement of the beam, a plunger mounted in said lever for sliding and angular movement relatively to said lever, said plunger when in a given angular position being restrained against movement toward the frame and said plunger when in another angular position relatively to the lever being movable into holding engagement with respect to the frame of the loom to hold the lever in such a position as to render the same ineffective to retard movement of the beam.

1,807,734. RAIL POINT. ERICH FRICKE, Dortmund, Germany, assignor to Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed July 7, 1930, Serial No. 466,238, and in Germany July 15, 1929. 6 Claims. (Cl. 246—416.)



1. Double slip points with points disposed outside the diamond arrangement of the tracks in which the centre section passed over by rolling stock on both sides consists of two rails in direct contact, which are securely connected together for example by filling pieces and bolts.

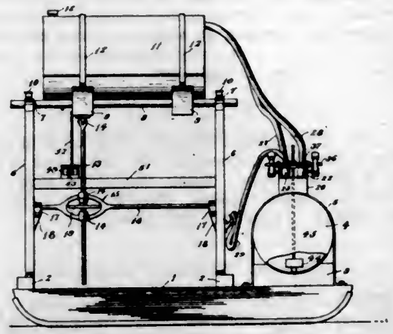
1,807,735. PROTECTOR MECHANISM FOR LOOMS. ANTHONY D. GARGOLINSKI, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 10, 1929. Serial No. 384,933. 3 Claims. (Cl. 139—345.)



1. In a protector mechanism for a loom having a protector rod and a shuttle binder, a protector finger mounted on the rod to engage the binder, a dagger secured to the protector rod and moving therewith, means to prevent longitudinal movement of the finger relatively to the rod, and a connection between the finger and the dagger independent of the said means and communicating an operating force from the finger to the dagger.

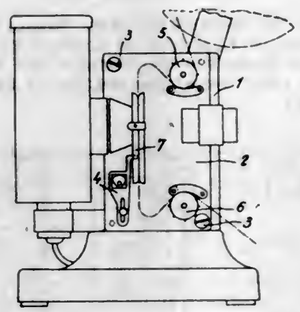
1,807,736. MIXING DEVICE. JOHN A. GIRD, Cedar Lake, Litchfield, N. Y. Filed Nov. 26, 1929. Serial No. 409,985. 7 Claims. (Cl. 137—68.)

1. A device of the class described comprising a mixing tank, stock containers associated with the tank, means for conducting water to the tank, a valve controlling admission of water to the tank, valves controlling the flow of stock



from the containers to the tank, and a float in the tank for opening the valves and closing the valve when the water level rises in the tank.

1,807,737. MOTION PICTURE PROJECTOR. LEO GOLDHAMMER, Munich, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 22, 1929, Serial No. 334,281, and in Germany Jan. 20, 1928. 4 Claims. (Cl. 88—18.)

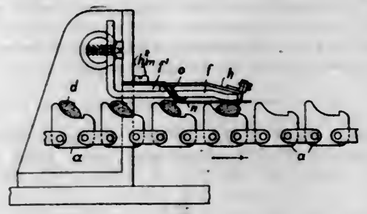


1. For a motion picture projector adapted to exhibit cinematographic films of different dimensions and provided with a driving mechanism, a plurality of plates of exactly the same size, mounted on each of the said plates in operative combination a film gate and means to forward a film band, said elements being of different size to operate with films of different dimensions, and means to secure such a plate easily interchangeable in the projector, and the film driving means in operative engagement with the said driving mechanism.

1,807,738. APPARATUS FOR TURNING CIGARETTES AND SIMILAR ROD-SHAPED ARTICLES RIGHT-SIDE UP WHEN FEEDING SAME TO PACKING MACHINES. PAUL GOTTSCHALK, Dresden, Germany, assignor to United Cigarette Machine Company Aktiengesellschaft, Dresden, Germany. Original application filed July 5, 1929, Serial No. 376,067, and in Germany Mar. 2, 1929. Divided and this application filed Aug. 1, 1930. Serial No. 472,444. 5 Claims. (Cl. 226—5.)

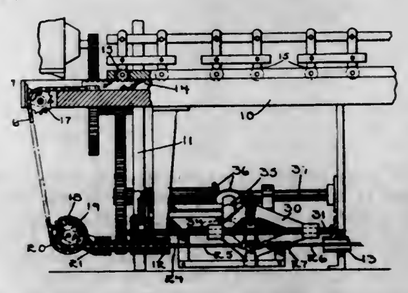
1. Apparatus for turning cigarettes and similar rod-shaped articles right-side up when packing same comprising in combination a conveyor feeding the cigarettes to a packing machine, a member adapted to engage with the seam of the cigarettes lying on the conveyor in the wrong position so as to impart to them a turning movement and a

spring arranged in such a manner that it is raised by the cigarette partly turned by the said member and prevents



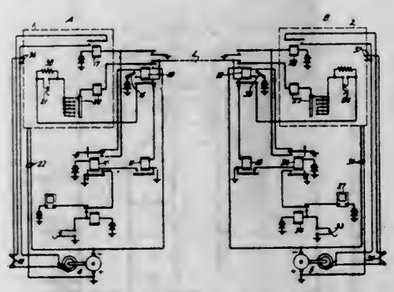
the same from falling back with the result that during the ensuing relative movement between the conveyor and the spring the complete turning of the cigarette is effected.

1,807,739. PROTECTOR MECHANISM FOR NARROW WARE LOOMS. ELBRIDGE R. HOLMES, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed May 17, 1930. Serial No. 453,869. 4 Claims. (Cl. 139—138.)



1. In a narrow ware loom, a driving member for a plurality of shuttles, actuating mechanism for said member, and a giveway connection between said actuating mechanism and said member, said giveway connection comprising a connecting member positioned between portions of said driving member and said actuating mechanism, and said connecting member being bodily displaceable by abnormal actuating pressure thereon.

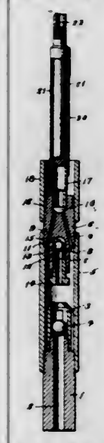
1,807,740. TELEGRAPH SYSTEM. GEORGE J. KNANDEL, Newark, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 9, 1929. Serial No. 406,071. 4 Claims. (Cl. 178—4.1.)



1. In a telegraph system, two stations, a line connecting said stations, a signaling current source at each station having like poles connected to ground, a transmitting and receiving device at each station, means responsive to

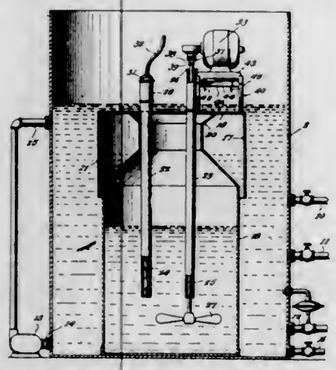
signal transmission from one station for conditioning the receiver at the other station for reception of said signals, means for conditioning the receiver at the call originating station for reception of said signals, and means for causing the current of said transmitted signals to flow through the receivers at both stations in the same direction regardless of which station is the call originating station.

1,807,741. DEEP WELL PUMP. FRANK C. KNISS and RICHARD N. VICKERS, Smackover, Ark. Filed May 28, 1930. Serial No. 456,634. 2 Claims. (Cl. 103—155.)



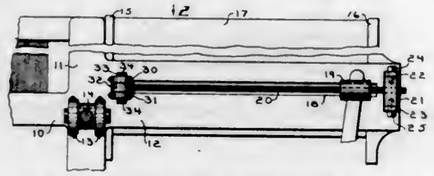
1. A pump comprising a lower standing valve, a sleeve coupled to and extending upwardly from said standing valve, a coupling body in the upper end of said sleeve having upwardly diverging passages leading from a central chamber at its lower end and upwardly converging passages leading to a central chamber at its upper end, the first-mentioned passages communicating with the space above the body and the last-mentioned passages communicating with the space below the body and within the coupling sleeve, a valve within the chamber in the lower end of the coupling body, a casing coupled to the upper end of said body, a cylinder secured in the upper end of said body within said casing and communicating with the upper chamber in the body, and a plunger working closely within said cylinder.

1,807,742. PASTEURIZING APPARATUS. WILLIAM R. LAIRD, Sioux Falls, S. Dak., assignor to Allied Laboratories, Incorporated, Chicago, Ill., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,574. 6 Claims. (Cl. 257—108.)



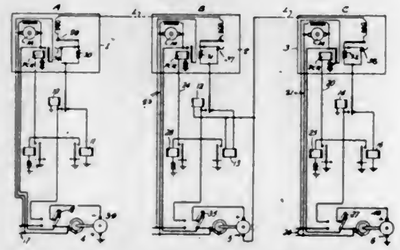
1. A pasteurizing device comprising an open bottom hood adapted to form a cover for a container having a flared mouth and adapted to provide an annular space between the wall of the hood and the wall of the container, said hood and said container being adapted to be submerged whereby the hood is sealed to the container with liquid, a pair of tubes carried by the hood, a thermometer in one of the tubes, an agitator carried by the other tube, and a motor removably mounted on the hood and adapted to actuate said agitator.

1,807,743. PICKER SPINDLE MOUNTING FOR LOOMS. CARL J. LINDEGREN, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed May 17, 1929. Serial No. 363,842. 11 Claims. (Cl. 139—158.)



1. In a loom having a lay movable back and forth in a given path and having a picker to move along the lay to propel a shuttle, a picker spindle along which the picker moves, and means to pivotally connect the lay and spindle, the axis of the pivot being substantially perpendicular to the spindle.

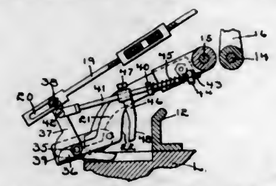
1,807,744. TELEGRAPH SYSTEM. HAROLD F. MAY, Valley Stream, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 9, 1929. Serial No. 406,070. 3 Claims. (Cl. 178—4.1.)



1. In a telegraph system, a plurality of stations, a metallic conductor interconnecting said stations, a signal receiver at each station, means at each station for sending telegraph signals over said conductor to operate the receivers at the other stations, a source of current at each station normally disconnected from said conductor, means at a calling station for connecting its source to said conductor, and means at a called station responsive to the flow of current in said conductor for starting and maintaining the receiver in operation during the sending of telegraph signals over the condnctor, said last means serving to discontinue the operation of the receiver when current ceases to flow in said conductor for a prolonged interval.

1,807,745. THREAD CUTTER. ANTHONY F. MIFFITT, Rockville, Conn., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 2, 1929. Serial No. 410,902. 6 Claims. (Cl. 139—264.)

1. In a weft replenishing loom having a lay and a shuttle feeler movable from normal position to shuttle feeling position prior to transfer and arranged to be engaged by the lay and restored to normal position following the transfer, a combined cutter and clamp pivoted to the shuttle feeler, a rod pivotally connected to the cutter and clamp and guided on the shuttle feeler, an operating finger secured to the rod and depending therefrom to have engagement with the lay, and means to open the clamp and to move the operating finger in a direction to-



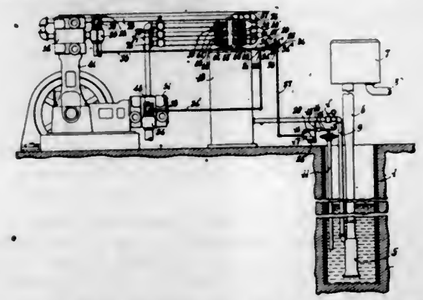
ward the lay as the shuttle feeler is moved toward shuttle feeling position, said lay engaging the finger to operate the cutter and clamp while the shuttle feeler is still in feeling position, the lay and finger being so proportioned as to have operating contact with each other during movement of the shuttle feeler toward normal position to retain the thread clamp in thread holding position.

1,807,746. STRINGED MUSICAL INSTRUMENT. EMANUEL MOOR, Mont Pelerin sur Vevey, Switzerland, assignor of part interest to the Firm of C. Bechstein, Pianofortefabrik A. G., Berlin, Germany. Filed Apr. 10, 1930, Serial No. 443,182, and in Germany Apr. 17, 1929. 6 Claims. (Cl. 84—275.)



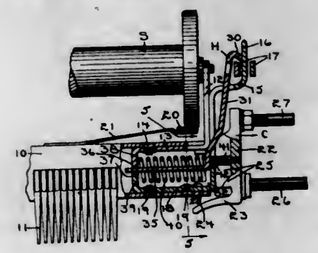
1. Stringed musical instrument comprising a hollow box-shaped resounding body, a sectional top portion on said body comprising two transversely and adjacently disposed substantially similar outwardly convex sections and a uniformly arched bottom section opposite said top portion and side walls connecting the convex sections to the bottom section and conforming to the contour of the edges of said sections.

1,807,747. PUMPING SYSTEM. JOHN OLIPHANT, Chicago, Ill., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed May 16, 1923. Serial No. 639,265. 16 Claims. (Cl. 103—232.)



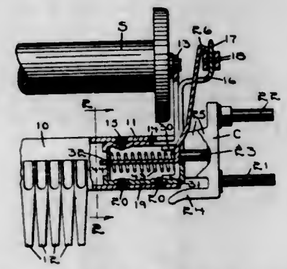
1. In a fluid pumping mechanism, a compressor, a pumping mechanism supplied thereby, unloading means for said compressor and means for controlling the operation of said unloading mechanism including a fluid actuated piston, a valve controlling the supply and exhaust of pressure to and from said piston, means normally causing interruption of the supply of fluid to said piston and the exhaust of fluid therefrom, and means including a diaphragm operative to move said last mentioned means and a down pipe projecting into a chamber from which said pump raises liquid for controlling the operation of said valve by variations in level of the liquid pumped.

1,807,748. TUBE FRAME FOR AXMINSTER LOOMS. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 5, 1929. Serial No. 411,934. 21 Claims. (Cl. 139—10.)



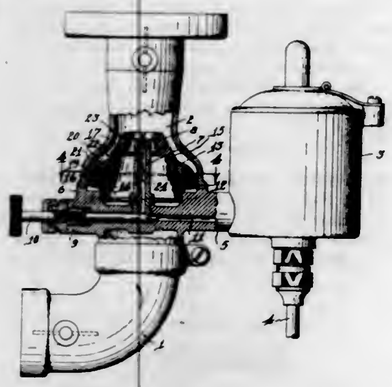
1. In a tube frame for an Axminster loom operating with a transporting chain, a longitudinal bar out of alignment with the chain, a bracket carried by the bar and having a portion to support a spool and also a portion to engage the chain, a pair of spaced parallel arms formed as parts of the bracket, a rigid hook slidably mounted on the tube frame and having an upwardly extending chain engaging hook by which the tube frame is supported on the chain, said hook having at the lower end thereof spaced guide ears to slide between and be guided by the arms, and resilient means to hold the hook normally in chain engaging position.

1,807,749. TUBE FRAME FOR AXMINSTER LOOM. OSCAR V. PAYNE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1930. Serial No. 443,134. 12 Claims. (Cl. 139—10.)



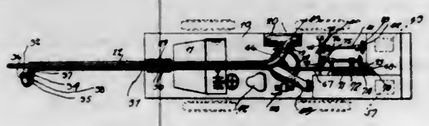
1. In a tube frame for an Axminster loom operating with a transporting chain, a tubular bar, a chain engaging bracket having a pair of substantially parallel arms extending into and secured to the hollow bar, a chain engaging hook having a portion extending between the arms and slidable with respect thereto, a tongue rigid with the hook and lying intermediate the arms, a resilient member around the tongue to urge the hook member normally into chain engaging position, and a removable guide plate for the tongue separate from and positioned by said arms, said plate being normally held in position by the spring.

1,807,750. CARBURETOR. SIDNEY L. PICARD, Detroit, Mich. Filed Dec. 5, 1928. Serial No. 323,989. 5 Claims. (Cl. 261—62.)



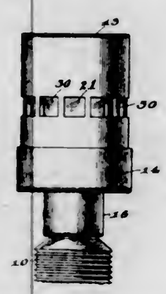
1. In a carburetor, a mixing body, a collar seated in said body and having an inner conical wall, the upper end of said collar being conical exteriorly, and a pair of shutters pivotally connected to said collar and adapted to seat against the conical surfaces of said conical upper end.

1,807,751. COTTON PICKER. THOMAS R. POST, Wilmington, N. C. Substitute for application Serial No. 148,242, filed Nov. 18, 1926. This application filed Feb. 23, 1928. Serial No. 256,457. 17 Claims. (Cl. 56—13.)



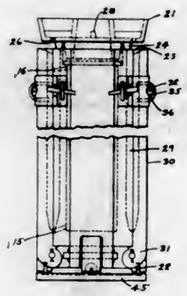
1. In a cotton picker of the pneumatic type, a wheel supported movable platform, a support at the forward end of said platform having a swivel joint at its upper end, a pneumatic tube carried by the joint and projecting in advance of the platform, said tube being mounted for reciprocation on means carried by said joint, and a cotton boll engaging mouth on the forward end of said tube.

1,807,752. AUTOMOBILE TIRE INDICATOR OR GAUGE. MEYER J. POSTER, New York, N. Y. Filed Apr. 8, 1930. Serial No. 442,672. 3 Claims. (Cl. 116—34.)



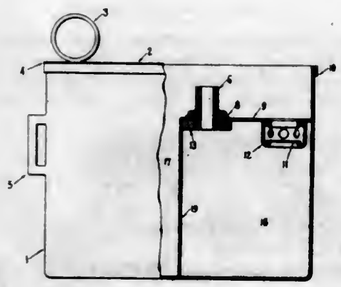
1. An automobile tire pressure gauge or indicator, comprising a casing closed at its outer end and having sight openings intermediate its ends, a base portion connected to the inner end of the casing, said base portion having an inwardly extending threaded part adapted to detachably engage with a valve stem, said base portion having an opening therethrough registering with the valve stem and having a bar adapted to engage the pin of the valve for maintaining the same open when the base portion is in position, a transparent cylinder mounted in the casing and having an opening through its inner end to receive air from the base portion, a piston slidably mounted in the transparent cylinder and having surface portions of different colors adapted to register past the sight openings during the movement of the piston, and a spring carried in the outer end of the cylinder for engaging against the outer end of the piston to urge the latter inwardly against the air pressure.

1,807,753. CLUSTER MOLD. ROBERT G. REDMANN, Bristol, Conn. Filed July 8, 1929. Serial No. 376,820. 6 Claims. (Cl. 22—142.)



1. A cluster mold comprising an elongated column of polygonal form of cross-section, the sides of said column constituting each an individual mold part, a separable mold part cooperating with each of said first named mold parts, and a common pouring cup structure for the different molds surmounting said column.

1,807,754. DEVICE FOR SAVING LIFE FROM DROWNING. LAWRENCE KENNEDY RICHEY, Detroit, Mich. Filed Nov. 1, 1929. Serial No. 404,027. 1 Claim. (Cl. 9—19.)

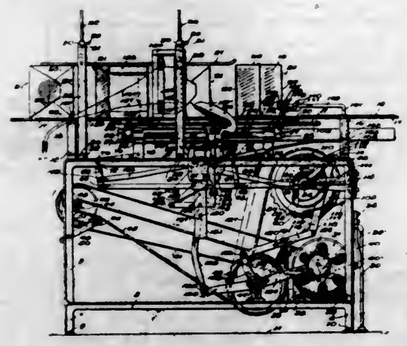


The combination of a water tight metal container of two compartments, a water valve, a gas valve, a rubber lined fabric bag, a cotton bag containing calcium carbide, and container under slight vacuum, and a ring grip for opening same, so arranged as to permit gas formed by a chemical reaction to inflate the bag by a single act of a person whose life is in danger from drowning.

1,807,755. SOLUTIONS, COMPOSITIONS, OR PREPARATIONS FOR TEXTILE AND LIKE PURPOSES AND THEIR APPLICATIONS. CHARLES FIELD RYLEY and GEORGE ALEC AWCOCK, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed July 28, 1924, Serial No. 728,799, and in Great Britain June 27, 1924. 12 Claims. (Cl. 91—68.)

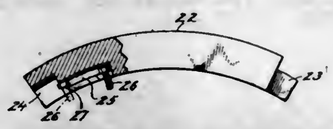
1. Yarns adapted to be subjected to weaving, knitting or other textile operations, said yarn being sized with a composition containing a salt of a resinous acid and a fatty lubricating agent.

1,807,756. WRAPPING MACHINE. OSCAR SANDBERG, Battle Creek, Mich., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich., a Partnership Association Limited of Michigan. Filed Apr. 19, 1929. Serial No. 356,565. 35 Claims. (Cl. 93—2.)



1. In a machine of the character described, package wrapping means, package supporting means extending past the package wrapping means, pivoted means for successively registering packages on the supporting means with respect to said package wrapping means, package advancing devices for moving the registered packages in succession from the registering means along the supporting means and past the wrapping means, and means for moving said package advancing devices along closed paths to engage, advance, and release the successive packages.

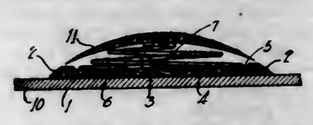
1,807,757. COMBINED WHEEL FIN AND WEIGHT. THEODORE G. SCHMEISER, Fresno, Calif. Filed Feb. 27, 1929. Serial No. 343,027. 2 Claims. (Cl. 301—40.)



1. A fin for tractor wheels, comprising an annular body formed of segmental sections, tongue and groove connections between the ends of the sections, said sections being formed with channels extending circumferentially thereof and inwardly from the groove ends of the sections so that one end of each channel is in communication with the adjacent groove to permit a bolt to be inserted into the channel through the groove and the closing of said end by the tongue of an adjacent section when inserted into the groove.

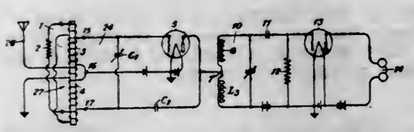
1,807,758. COIL SPRING METATARSAL ARCH SUPPORT. WILLIAM SEIGLE, Hinton, Okla. (Cl. 36—71.) Filed Feb. 3, 1930. Serial No. 425,669. 4 Claims.

1. The combination with a coil spring metatarsal arch support having a conical coil spring for supporting the metatarsal arch of a human foot, of a flat fibrous base adapted to be attached to the top surface of a shoe sole,



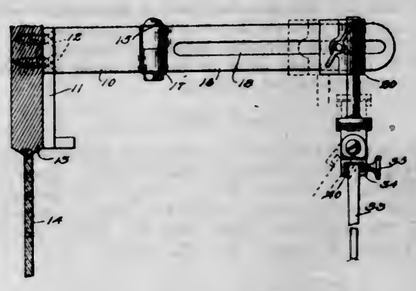
said base having skived edges and having a perforation in its rear central portion for receiving the free end portion of the lower loop of said spring.

1,807,759. PREVENTION OF PARASITIC OSCILLATIONS. HAROLD C. SILENT, Los Angeles, Calif., assignor to American Telephone and Telegraph Company, a Corporation of New York. Original application filed Nov. 9, 1928, Serial No. 318,194. Patent No. 1,785,819, dated Dec. 23, 1930. Divided and this application filed Mar. 27, 1930. Serial No. 439,389. 4 Claims. (Cl. 250—20.)



1. A translating device comprising in combination, a balanced bridge having a secondary transformer winding in each balancing arm, a primary circuit inductively coupling said secondary windings, an auxiliary transformer individual to each said balancing arm with a primary winding in series therewith, a series connection for the secondaries of said auxiliary transformers such that a voltage active in said primary circuit first mentioned induces opposed voltages in said auxiliary secondary windings, whereas a voltage active in the bridging arm of said bridge induces additive voltages in the auxiliary secondary windings.

1,807,760. MOUNTING FOR ANTIGLARE DEVICES. PHILO VERNON SNOW, Chicago, Ill. Filed June 22, 1929. Serial No. 372,945. 2 Claims. (Cl. 296—97.)

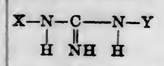


2. In a device of the character described, a bracket arranged for attachment to a fixed support, an arm pivotally connected to the bracket, a carriage mounted for longitudinal movement on the arm, a split sleeve carried by the carriage and provided with a vertically disposed bore, a rod adjustably mounted in said bore in a substantially vertical position, means for securing the carriage and rod in adjusted positions independently of each other, a second bracket mounted upon the rod and swiveled for adjustment coaxially of the rod, and a glare screen pivotally mounted in said bracket and adjustable about an axis transverse to that of the bracket.

1,807,761. PROCESS OF IMPROVING THE RESISTANCE OF DIAZO-TYPES TO WATER. EDUARD SPRÖNGERTS, Wiesbaden-Biebrich, Germany, assignor to Kalle & Co. Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Filed July 19, 1929, Serial No. 379,585, and in Germany July 30, 1928. 5 Claims. (Cl. 95—7.)

1. Process of improving the resistance of diazo-types to water which consists in incorporating into the layers aryl derivatives of guanidine.

2. Process of improving the resistance of diazo-types to water which consists in incorporating into the layers compounds of the following formula:



wherein X stands for aryl residue and Y stands for H the group



or an aryl residue.

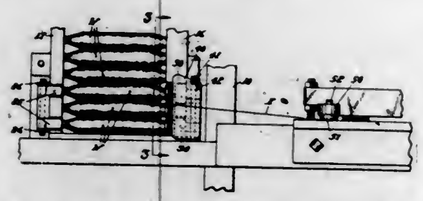
1,807,762. MERCERIZATION OF PIECE GOODS. FRITZ THIES, Hellerau, near Dresden, Germany. Filed Mar. 4, 1927, Serial No. 172,853, and in Germany Mar. 10, 1926. 5 Claims. (Cl. 8—20.)



1. In elastic mercerization apparatus and in combination, impregnation and squeezing mechanism comprising a set of pairs of heavy rollers with guide rollers between the pairs and adapted for giving an up and down zig-zag course to the fabric to be mercerized and a short straight approach of such fabric into the bites of the said rollers, and means for thereafter heating and stretching the fabric, rollers in a heated chamber to which the fabric is passed from such impregnation and squeezing mechanism, these rollers being adapted for entrainment by the moving fabric, and widthwise treatment rollers also adapted for being entrained by the moving fabric substantially as set forth.

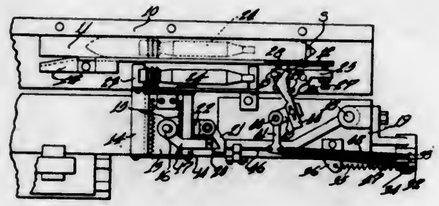
2. A method of obtaining elastic mercerization of woven material comprising the alternate and successive steps of impregnating the material with a mercerizing solution, and applying pressure thereto without impairing the swelling thereof, and thereafter heating the impregnated material to the boiling point of the entrained solution and stretching the heated material.

1,807,763. GIVEWAY AND THREAD GUIDING DEVICE FOR WEFT CARRIER MAGAZINES. RICHARD G. TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 19, 1929. Serial No. 341,158. 5 Claims. (Cl. 139—251.)



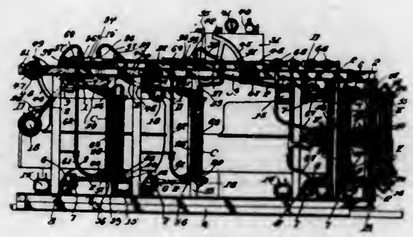
1. In a magazine having vertically disposed weft carrier guideways, a separate giveway device for each end of the lowermost weft carrier in said guideways, an additional separate giveway device for each end of the weft carrier second above said lowermost weft carrier, the intervening weft carrier being held from lateral displacement by the fixed side walls of the magazine guideway and the pair of giveway devices engaging one weft carrier remaining in operative position when the pair of giveway devices engaging the other weft carrier yield to permit removal of said weft carrier from said magazine.

1,807,764. WEFT REPLENISHING DOUBLE SHUTTLE LOOM. RICHARD G. TURNER, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 14, 1930. Serial No. 420,763. 5 Claims. (Cl. 139—242.)



1. In a double shuttle weft replenishing loom, a weft detector controlled member movable from non-indicating to indicating position at weft exhaustion, transfer mechanism, a controller therefor, a regularly moving element to have operative relation with the controller, and a connection between the member and controller to move the latter into engaging position relatively to the element when the member moves to indicating position, the element to thereafter move the controller into operative position relative to the transfer mechanism to initiate transfer, the connection yielding as the controller has the latter movement while the member remains in indicating position.

1,807,765. CLEANING, SANDING AND POLISHING MACHINE. MICHAEL VARGO, Detroit, Mich., assignor of one-seventh to Fred Chestenick, one-seventh to Ernest W. Hodge, one-seventh to Wilfred A. Poirier, one-seventh to Charles H. Dildine, one-seventh to Herman L. Shrock, and one-seventh to Alex Galant, Detroit, Mich. Filed Sept. 27, 1929. Serial No. 395,684. 1 Claim. (Cl. 15—21.)



An apparatus of the class described comprising a frame open at its ends, brush carrying frames hingedly connected with the sides and top of the frame, each brush frame comprising a pair of arms pivotally connected with the main frame, with the pivots of the two arms in alignment, a gear on the pivot of one arm, a motor, a gear on the shaft thereon engaging the before mentioned gear, a shaft journaled in said arm and having a gear thereon meshing with the first mentioned gear, a brush shaft removably arranged in the outer ends of the arms, gearing connecting the shaft in the arm with said brush shaft, a brush having a centrally arranged bore receiving the said brush shaft, spring means connected with the brush frames at the sides of the main frame for pressing the brushes thereof against a body and means associated with the brush frames at the top of the body for adjusting the brushes thereof against the top portions of the body.

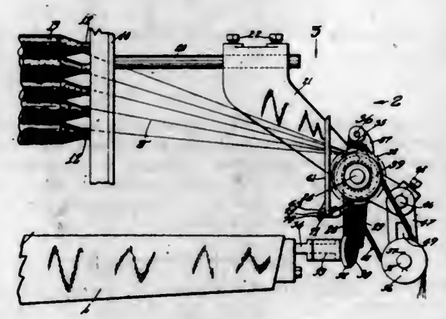
1,807,766. PROCESS FOR THE PRODUCTION OF ALKALI PHOSPHATES FROM COMPOUNDS OF METAL AND PHOSPHORUS. CONWAY, BARON VON GIERSEWALD, HANS WEIDMANN, and GERHARD ROESNER, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed May 5, 1930, Serial No. 450,057, and in Germany May 31, 1929. 9 Claims. (Cl. 23—106.)

1. A process for the production of alkali phosphates, which comprises gradually introducing a metal-phosphorus alloy in divided form into molten alkali sulphate, and extracting the resulting alkali phosphate from the transposition product in known manner.

1,807,767. PROCESS FOR THE CONVERSION OF FERRO-PHOSPHORUS INTO FERRIC PHOSPHATE ($FePO_4$) BY ROASTING IN AIR OR OTHER GASES CONTAINING OXYGEN. CONWAY, BARON VON GIERSWALD, and HANS WEIDMANN, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed May 5, 1930, Serial No. 450,058, and in Germany May 29, 1929. 7 Claims. (Cl. 23—105.)

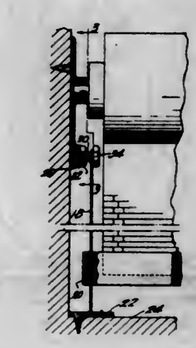
1. A process for the production of ferric phosphate which comprises treating ferro-phosphorus at elevated temperature with oxygen-containing gases in the presence of a substance of the group consisting of alkali and alkaline earth metal compounds.

1,807,768. WEFT END CONTROL FOR MAGAZINE LOOMS. WILLIAM M. WATTIS, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 14, 1929. Serial No. 347,087. 2 Claims. (Cl. 139—247.)



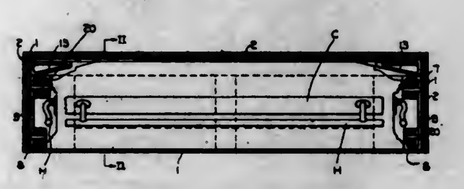
1. In a weft replenishing mechanism for looms having a reserve supply of bobbins from which extend weft ends, an upper roll, a lower roll, an element mounted on the rolls and movable thereby and having a friction surface over which weft ends extend to be supported thereby, and a clearer located between the rolls to clear said element of any weft ends remaining on the friction surface as the element rotates.

1,807,769. GUIDE WIRE TAKE-UP DEVICE. BERTRAM T. WILEMAN, Detroit, Mich., assignor to Carl A. Boehm, Dover, N. J. Filed Jan. 10, 1931. Serial No. 507,787. 1 Claim. (Cl. 156—26.)



In a roller shade bracket, an adjustable screw mounted in said bracket and having an aperture in which the free end of a shade guide wire is inserted, said wire being adapted to be pulled tight by turning said adjusting screw and secured in said tightened position by means of a lock nut on said screw.

1,807,770. CORRUGATED PAPER PACKAGE FOR BURIAL CASKETS. GEORGE B. BEAMAN, Crafton, Pa., assignor to Superior Paper Products Company, Carnegie, Pa., a Corporation of Delaware. Filed Sept. 19, 1929. Serial No. 393,673. 3 Claims. (Cl. 27—1.)

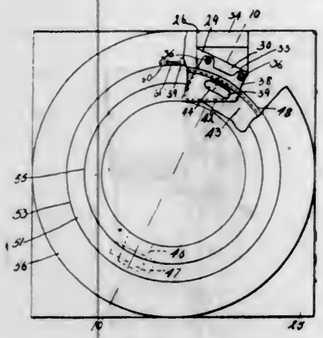


1. A package for burial caskets comprising a box made of cardboard, consisting of two sections adapted to fit one over the other in telescopic fashion to provide double side walls for the box, said box including packing means for protecting the casket from being scratched or otherwise damaged by wall contact, said means consisting of detachable packing members formed of folded corrugated cardboard and having upper and lower yieldable fender sections spaced from each other and adapted to be placed between the walls of the box and the casket to engage the upper and lower edges thereof and hold the casket in place in the box.

1,807,771. REMOVABLE DIAPHRAGM FOR GAS METERS. HARRY L. BERRY, Atlantic City, N. J. Filed May 22, 1928. Serial No. 279,768. 4 Claims. (Cl. 73—1.)

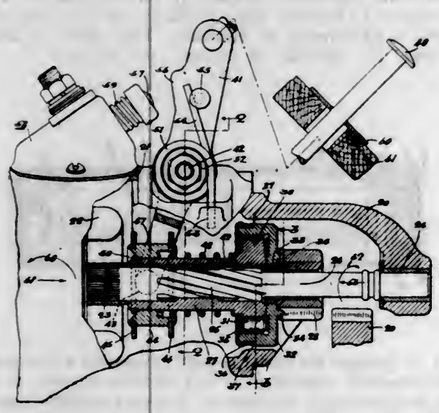
1. A device of the kind described comprising a plate, a pocket section having an aperture and mounted on said plate in substitution for a portion of the original pocket, a diaphragm structure having apertures therein and including a bracket having an aperture, and means to de-

tachably connect the bracket with the substituted pocket section and thereby complete a communication between



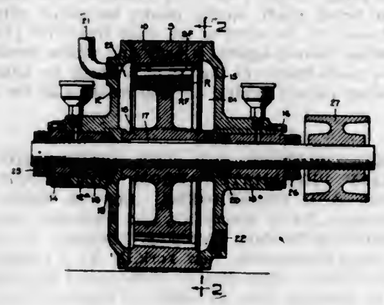
the interior of the diaphragm structure and the pocket through the apertures in the diaphragm, bracket and substituted pocket section.

1,807,772. ENGINE STARTING APPARATUS. WILLIAM A. CHRYST, Dayton, Ohio, assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 13, 1927. Serial No. 213,396. 7 Claims. (Cl. 74—7.)



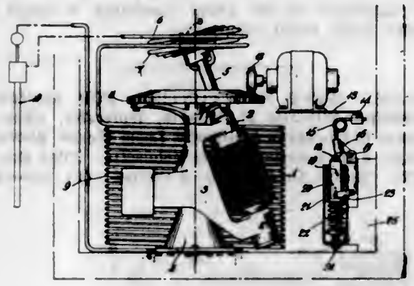
1. Engine starting apparatus comprising in combination, an electric motor, a pinion movable endwise into mesh with the gear of an engine to be started, devices for connecting the pinion and motor including an axially free one-way clutch and a shaft having a helically splined portion and means for slidably connecting the pinion with the splined portion, the direction of the lead of the spline being so related to the direction of rotation of the shaft that operation of the motor will thrust the pinion endwise toward the gear, a motor switch, a manually operable device for operating the motor switch and for moving the pinion into mesh with the gear and including a spring for transmitting motion to the pinion in order to permit closing the motor switch in case the teeth of the pinion abut the engine gear teeth before meshing whereby the turning of the shaft by the motor will produce endthrust upon the pinion to assist the spring in meshing the pinion rapidly with the gear.

1,807,773. COLLOIDAL MILL. BAYLIS M. DAWSON, Newton, Mass., assignor, by mesne assignments, to Fritz Ziegler, jr., New York, N. Y. Filed Mar. 30, 1925. Serial No. 19,281. 5 Claims. (Cl. 83—13.)



1. A colloidal mill for disintegrating and emulsifying materials, comprising relatively movable members having cooperating drum faces between which the materials ot be disintegrated are adapted to flow, the faces of both members being provided with parallelly arranged alternating teeth and channels disposed in a direction generally transverse to the movement of one of said members, the face width of the teeth being less than the width of the channels.

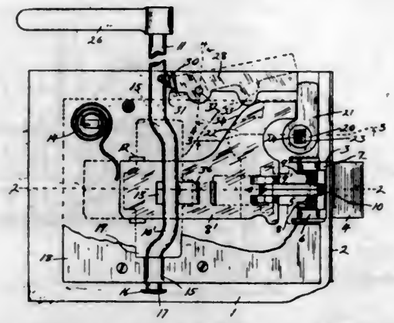
1,807,774. AUTOMATIC REFRIGERATION. JAY G. DE REMER, Greenwich, Conn., assignor, by mesne assignments, to J. G. Deremer Research Corporation, Jersey City, N. J., a Corporation of New Jersey. Filed June 8, 1926. Serial No. 114,440. 3 Claims. (Cl. 62—4.)



1. A refrigerating system comprising in combination an evaporator arranged in heat exchanging relation to the compartment to be cooled, a condenser, a compressor, a motor for driving the same and thermostatic means responsive to conditions outside said compartment for varying the capacity of the compressor.

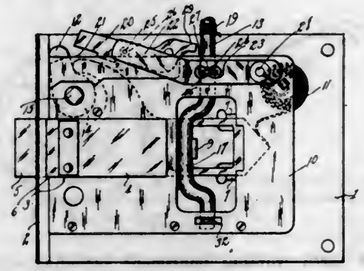
1,807,775. DOOR LOCK. WILLIAM C. DEVEREAUX, Detroit, Mich. Filed Jan. 28, 1924. Serial No. 689,108. 3 Claims. (Cl. 292—224.)

1. In a lock, the combination with a case plate, a locking bolt carried thereby, and a bar slidably mounted upon the case plate and operatively connected to said bolt, said bar having an upstanding arm and a lateral projection, of means for retracting said bolt including a rollback engageable with said arm and an upright member engageable with said lateral projection, and means for rendering said rollback inoperative including a part located between said rollback and upright member and having a cam portion, and an element projecting laterally from the



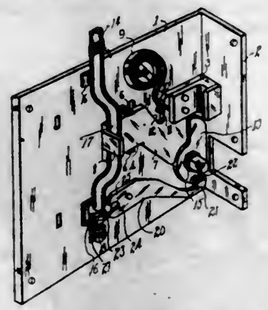
upright member engageable with said cam portion, said part having a projection adapted to be engaged by said arm for rendering said part inoperative.

1,807,776. DOOR LATCH. WILLIAM C. DEVEREAUX, Detroit, Mich. Filed Aug. 11, 1925. Serial No. 49,507. 32 Claims. (Cl. 292—165.)



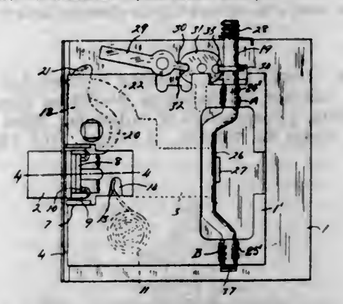
1. In a latch, the combination with a bolt retracting member, of a second bolt retracting member mounted for rectilinear and rotary movement, means for rendering the first member inoperative including a pivoted dog engageable with said first member, and a pivoted arm for actuating said dog controlled and rendered effective by the manipulation of the second mentioned retracting member.

1,807,777. DOOR LATCH. WILLIAM C. DEVEREAUX, Detroit, Mich. Filed Aug. 11, 1925. Serial No. 49,508. 26 Claims. (Cl. 292—165.)



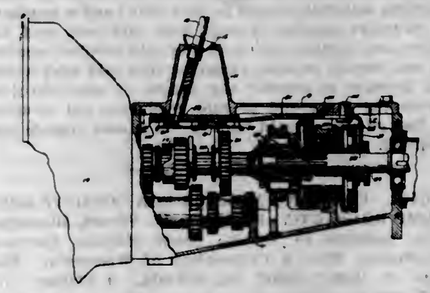
1. In a latch, the combination with a bolt retracting member, of an upright spindle journaled in aligned bearings for rotary movement, and means for dogging the first member rendered effective or ineffective by the manipulation of the spindle.

1,807,778. LOCK CONSTRUCTION. WILLIAM C. DEVEREAUX, Detroit, Mich. Filed May 10, 1926. Serial No. 108,168. 9 Claims. (Cl. 292—224.)



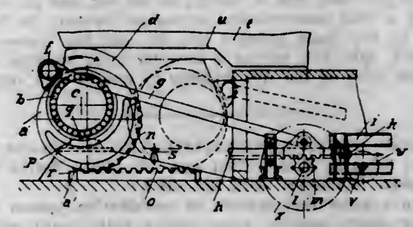
1. In a lock, the combination with a bolt retracting member, of a second bolt retracting member mounted for rectilinear movement, and means for dogging the first member including an element engageable with the first member, and actuating means for said element including a rocker having a slotted connection with said element, and a part carried by the second mentioned retracting member engageable with said rocker.

1,807,779. OVERGEAR SHIFT MECHANISM. HAROLD DREW, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 25, 1927. Serial No. 215,413. 21 Claims. (Cl. 74—89.)



1. Change speed mechanism comprising two shift members positioned in one plane and a third shift member positioned in a parallel plane, means to engage and shift said shift members, said third shift member having an opening through which said means passes to engage one or the other of the two first-mentioned shift members.

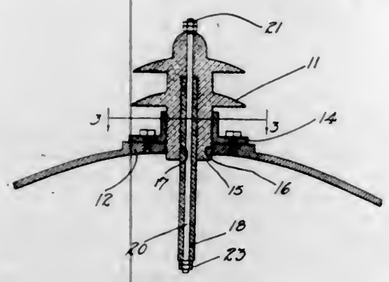
1,807,780. LIFTING MACHINERY, ESPECIALLY FOR THE ENDS OF PIVOT BRIDGES. FRIEDRICH DUWE, Mainz-Kastel, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Nuremberg, Germany, a Corporation of Germany. Filed Aug. 2, 1929, Serial No. 382,946, and in Germany Aug. 13, 1928. 2 Claims. (Cl. 94—35.)



1. In lifting machinery, two parallel tracks, rolling disks movable therealong, means for positively moving

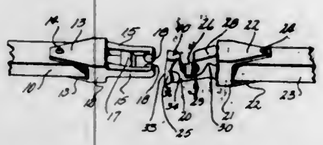
said disks in either direction, a rotatable shaft eccentrically mounted in said disks, and a lifting member carried by said shaft intermediate said disks so as to be moved therewith from a lower to a higher position, and vice versa.

1,807,781. INSULATOR. HAROLD C. EDDY, Los Angeles, Calif., assignor to Petroleum Rectifying Company of California, a Corporation of California. Filed Mar. 22, 1924. Serial No. 701,059. 4 Claims. (Cl. 173—311.)



1. A device for conducting an electric current through a conducting wall of a tank without electrical contact therewith comprising: an organic body of high dielectric and mechanical strength secured in an opening in said wall; a nonorganic member formed of relatively brittle insulating material secured in said body; and a conductor rod structure passing through both said body and said member and holding said body and said member together, said non-organic member extending into said tank a sufficient distance to prevent any danger of short-circuiting between the inner end of said conductor rod structure and that portion of said tank in which said organic body is secured.

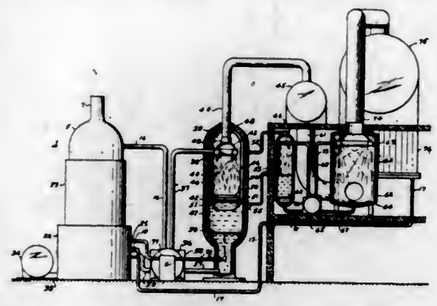
1,807,782. COUPLING MEMBER FOR CONDUIT RODS, PUMP RODS, ETC. FREDERICK W. FUCHS, Milwaukee, Wis., assignor to Turbine Sewer Machine Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 3, 1930. Serial No. 432,604. 9 Claims. (Cl. 287—103.)



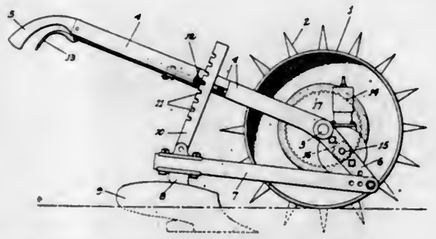
1. A coupling of the described class, comprising the combination with a forked member having inwardly facing end studs and an intermediate hinge pin, of a web member provided with a bearing socket for said pin and having a head piece adapted to engage between the fork arms in the space between the pin and the crown of the fork, said web having a shoulder piece socketed on opposite sides of the web member to receive said studs.

1,807,783. STEAM GENERATING SYSTEM. FRAZER W. GAY, Newark, N. J. Filed Apr. 12, 1929. Serial No. 354,557. 5 Claims. (Cl. 122—31.)

5. In a generating system, in combination, means for heating liquid metallic alloy, and a boiler, said boiler having a lower internal liquid space and an upper internal vapor space, means for spraying the hot metallic alloy supplied from said heating means into said boiler, for evaporating the liquid in said liquid space and for superheating the vapor in said vapor space, and means for protecting the walls of said boiler from the great heat of said hot metal and the superheated vapor.

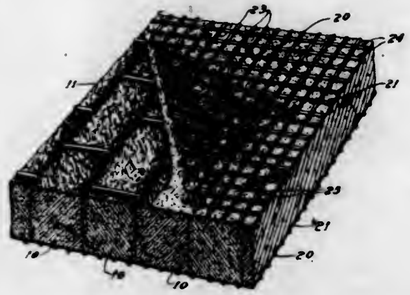


1,807,784. EARTH WORKING IMPLEMENT. RALPH N. GEFFROY, Stockton, Calif. Filed Nov. 18, 1929. Serial No. 407,954. 2 Claims. (Cl. 97—59.)



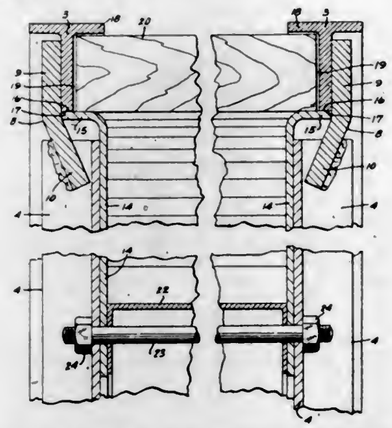
1. An earth working implement including a ground bearing wheel, a bar turnably mounted in connection therewith and projecting rearwardly therefrom, an arm depending from the bar at its forward end at an angle thereto and rigid therewith, a beam pivoted on said arm for both vertical and longitudinal adjustment and extending rearwardly therefrom, a tool depending from the rear end of the beam, an arm upstanding from the tool, and adjustable connection means between the last named arm and bar.

1,807,785. SHEET INSULATION. WILLIAM R. GILLIES, Chicago, Ill., assignor to Union Asbestos and Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 12, 1927, Serial No. 160,697. Renewed July 20, 1929. 6 Claims. (Cl. 139—408.)



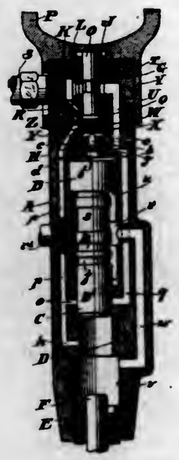
2. An insulating material comprising a plurality of longitudinally spiraled asbestos rovings disposed side by side and constituting the woof strands of a loosely woven fabric, a plurality of asbestos cords disposed transversely of said rovings and looped about the same as warp strands, said cords preserving the individuality of said rovings, but said rovings lying against each other to form a layer of substantially uniform heat insulating quality, and an outer layer comprising a sheet of loosely woven asbestos fabric having intersections of its woof and warp knotted.

1,807,786. CABLE REEL. ETHAN N. HESCOCK, Westfield, N. J., assignor to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed Dec. 18, 1929. Serial No. 414,913. 10 Claims. (Cl. 242—77.)



1 A. new article of manufacture comprising a cable reel having heads formed of structural shapes of metal bent to form substantially circular rims, a hub, spokes, and side plates out of line with the rim and provided with means to compensate for any irregularity in the curvature of the rim, said means being secured to the rim.

1,807,787. FLUID ACTUATED PERCUSSIVE TOOL. FRANCIS A. JIMERSON, Athens, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 11, 1928. Serial No. 311,775. 5 Claims. (Cl. 121—27.)

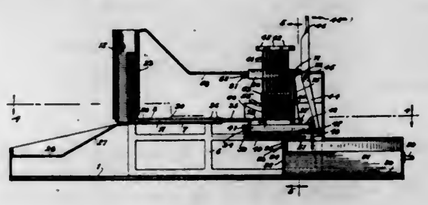


1. In a fluid actuated percussive tool, the combination of a cylinder having a reciprocating piston and an exhaust port located intermediate the ends of the cylinder, a valve chest and a fluid actuated inlet valve having a ring groove around its central portion, a port passing transversely through the valve and communicating at both ends with said ring groove, a longitudinal port communicating with the front end of said valve and with the said transverse port, a passage leading through the wall of the cylinder from an annular groove in said valve chest, said annular groove being adapted to cooperate with the ring groove and the longitudinal passage in said valve for relieving compression from the rearward end of the cylinder, a passage communicating with the valve chest and with the rearward end of said cylinder, a second passage communicating with the valve chest and with the cylinder at a point between the front end of the cylinder and the exhaust port, said first passage being controlled by said valve and admitting pressure fluid to the rear end of the cylinder, said second passage being controlled by the piston and admitting pressure fluid to the front end of the cylinder, a third passage in said cylinder leading from the front end of the cylinder to the rearward end of said valve chest, grooves in said piston providing communication between said second passage and said third passage for carrying pressure fluid to the rear end of said valve chest to throw said valve forwardly to close the passage leading from the valve chest to the rearward end of the cylinder.

1,807,788. ALLOY OF LEAD AND ANTIMONY. PAUL KEMP, Vienna, Austria. Filed Sept. 30, 1929, Serial No. 396,403, and in Austria July 27, 1929. 1 Claim. (Cl. 75—1.)

As a new article of manufacture, a lead-antimony alloy of greater than normal hardness, comprising a maximum of 10% antimony, from approximately 0.2% to approximately 2% arsenic and from approximately 0.1% to approximately 2% tin, the tin content being substantially one fifth to the antimony content.

1,807,789. CHANGE-MAKING DEVICE. RICHARD KUENSTLER, Washingtonville, N. Y. Filed Oct. 4, 1930. Serial No. 486,312. 11 Claims. (Cl. 133—4.)

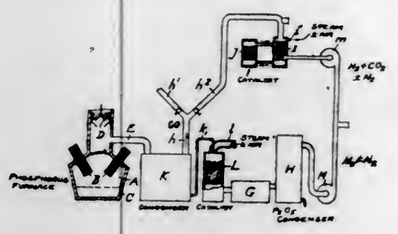


1. A device of the class described comprising coin-stack supports, means for ejecting coins from each of the stacks, said ejection means having normally elevated parts, a slide for moving the coin-ejectors, and means for selecting and depressing the elevated parts on certain of said coin-ejectors to locate said depressed parts in the path of movement of the slide.

1,807,790. METHOD OF PRODUCING HYDROGEN AND PHOSPHORIC ACID. FRANS GEORG LILJENROTH, Stocksund, Sweden, assignor, by mesne assignments, to du Pont Ammonia Corporation, Wilmington, Del., a Corporation of Delaware. Filed May 20, 1924, Serial No. 714,546, and in Sweden Aug. 28, 1922. 1 Claim. (Cl. 23—165.)

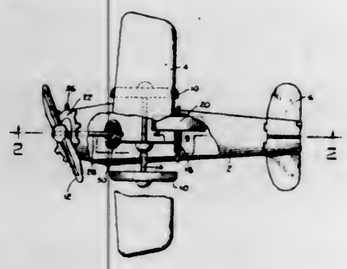
A process of treating phosphates which comprises heating a mixture including phosphate material, a solid reducing agent and a siliceous material, to a temperature incapable of liberating any substantial amount of its phosphorus, by combustion of gas in direct contact therewith, further

heating the charge to a temperature sufficient to drive off substantially all its phosphorus in the elemental condition,



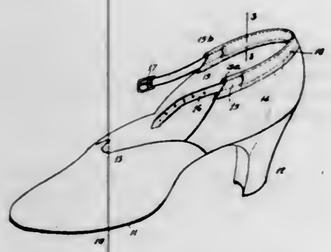
and separating the phosphorus from the fixed gas present, and utilizing a part of said fixed gas, at least, in said first mentioned step.

1,807,791. TOY. LOUIS MARX, New York, N. Y. Filed Feb. 27, 1929. Serial No. 343,030. 14 Claims. (Cl. 46—48.)



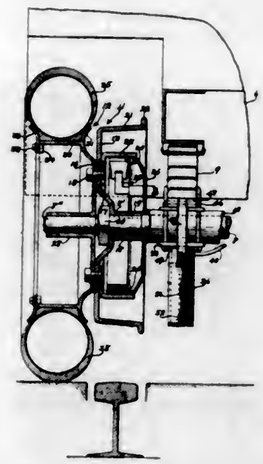
1. In a toy, a momentum motor, means driven thereby, contacting rotatable members for coupling the momentum motor and the driven means, said members being only lightly urged into contact, so that the driven means is automatically uncoupled during the energization of the momentum motor.

1,807,792. SHOE. CHARLES MILLER, Long Island City, and ARTHUR A. LIVERS, New York, N. Y. Filed Nov. 19, 1930. Serial No. 496,624. 2 Claims. (Cl. 36—58.5.)



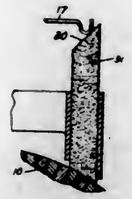
1. A lady's low shoe having heel and sole portions, a vamp portion, a counter portion extending around the heel and forwardly thereof and having its upper portion free of the vamp, said counter portion having at its upper edge strap-receiving means, and an adjustable strap independent of the vamp portion and received in said strap-receiving means, whereby adjustment of said strap tensions the upper portion of said counter to cause this portion to conform to the heel of the wearer.

1,807,793. TRUCK WITH CONVERTIBLE WHEEL STRUCTURE AND COOPERATING JACK MEANS. RAY K. MOORE, Freeport, Ill., assignor of one-half to William J. Laffey, Chicago, Ill. Filed Oct. 13, 1930. Serial No. 488,358. 4 Claims. (Cl. 105—215.)



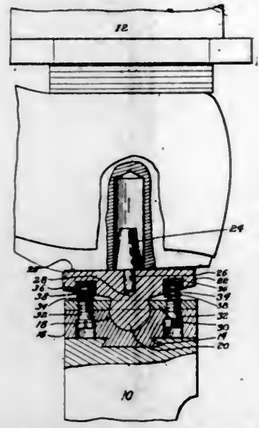
1. A vehicle comprising an axle with an extended end part for receiving my wheel structure, a convertible wheel structure comprising a wheel member having a hub mountable on said axle and providing a substantially complete wheel for travel on the railway, and another wheel member having a hub supportable on the extended shaft part and having resilient tire means for traveling on the highway, said wheel members being readily securable together and the outer wheel member being again readily detachable from the inner one.

1,807,794. BRUSH AND CURRENT COLLECTOR. HORACE D. MUNDAY, Schenectady, N. Y. Filed May 18, 1928. Serial No. 278,749. 6 Claims. (Cl. 171—323.)



1. In a current collecting device designed automatically to eliminate flat spots from a commutator, the combination with said commutator of a brush containing, in excess of 10 per cent, an ingredient having substantially the abrasiveness of emery and a brush holder supporting said brush and pressing the same into contact with the commutator, the brush, brush holder and commutator being so constructed and arranged as to cause said brush to press against low spots of said commutator with substantially less pressure than against high parts of the commutator, whereby during rotation of said commutator the high parts thereof are abraded to the level of the low parts.

1,807,795. JACK-TOP. ELMER R. POPE, Hamilton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 27, 1924. Serial No. 734,477. 8 Claims. (Cl. 1—41.)



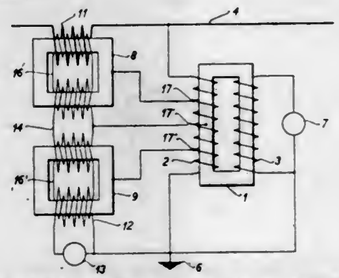
1. In a heeling machine, the combination with a jack-post, of a last-supporting bed-plate mounted thereon for universal angular movement, and means arranged to hold the bed-plate yieldably in a definite normal angle.

1,807,796. MEANS APPLICABLE FOR USE IN CONVEYING HOT VISCOUS MATERIALS, SUCH AS BITUMEN, TAR, SUGAR, AND THE LIKE. LESLIE KIRKPATRICK REID, Ashton-on-Mersey, England, assignor to D. Anderson & Sons Limited, London, England. Filed July 12, 1929, Serial No. 377,773, and in Great Britain Sept. 13, 1928. 3 Claims. (Cl. 137—75.)



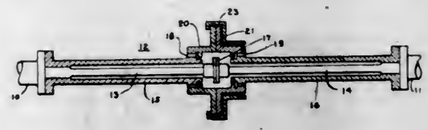
1. A conduit for hot viscous materials comprising in combination a lower half pipe section formed as a single length and an upper half pipe section composed of a plurality of lengths the adjacent ends of which are joined in lapped relation by metal straps applied over the said lapped joints and secured by hinged bolts on the said lower section.

1,807,797. CURRENT TRANSFORMER. SIGURD RUMP, Zurich, Switzerland. Filed June 25, 1930, Serial No. 463,587, and in Germany June 10, 1929. 6 Claims. (Cl. 175—358.)



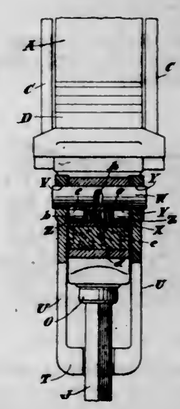
1. In a transformer arrangement, a current transformer having a plurality of cores, a primary winding, a secondary winding and an intermediate winding connecting the cores; and a voltage transformer, the cores and the intermediate winding of said current transformer being connected with said voltage transformer at different points thereof, both of said transformers being grounded.

1,807,798. COUPLING. IRA SHORT, Essington, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 23, 1925. Serial No. 17,712. 7 Claims. (Cl. 64—96.)



1. In a coupling for transmitting torque, the combination of a torsionally flexible member for connecting adjacent shaft sections, a rigid member secured to each section, a flange flexibly connected to each rigid member, clamping means for holding the flanges in sufficient frictional engagement to prevent relative rotational movement during the transmission of a uniform torque but ineffective to prevent such movement upon a pulsation in the torque, means operated by a relative movement of the flanges for permitting fluid under pressure to supplement the holding action of the clamping means, and means for subsequently dissipating the fluid pressure in such manner as to damp the reflexive movement of the flexible member and the return of the rigid members to their normal relative positions.

1,807,899. STEEL RETAINER. FRED M. SLATER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 16, 1929. Serial No. 399,946. 3 Claims. (Cl. 121—32.)

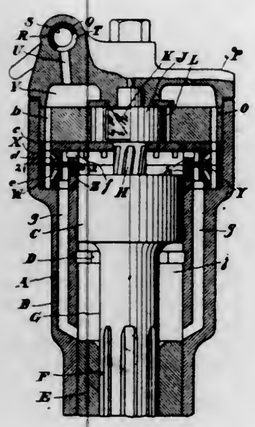


1. In a steel retainer, comprising in combination with a front head and a collared drill steel, an enlargement on the front head having an aperture, a yoke for retaining the drill steel in the front head, side arms on the yoke, a shaft in the aperture forming a pivot for the yoke, a plurality of holding means reciprocable in the aperture, common actuating means acting against the holding means to press said holding means into engagement with the side arms for holding the yoke in the retaining position, and a rubber buffer in the aperture to cushion the yoke.

1,807,800. VALVE FOR ROCK DRILLS. WILLIAM A. SMITH, Sr., and WILLIAM A. SMITH, Jr., Phillipsburg, N. J., assignors to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 7, 1928. Serial No. 304,560. 2 Claims. (Cl. 121—19.)

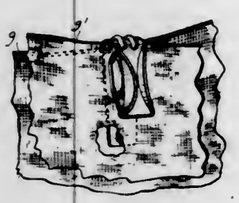
1. In a fluid actuated rock drill, the combination of a cylinder and a piston, an exhaust port for the cylinder

controlled by the piston, a valve chest in the cylinder comprising a pair of ring plates arranged in contacting face to face relationship and having bores to form a continuation of the cylinder, an annular valve chamber in the valve chest, inlet passages leading from the ends of



the valve chamber to the ends of the cylinder, a supply passage leading from a source to constantly supply pressure fluid to both ends of the valve chamber, and an annular plate valve reciprocable in the valve chamber to control communication between the supply and inlet passages.

1,807,801. PINNING CLAMP. ALBERT STENGER, Portland, Oreg. Filed Sept. 16, 1929. Serial No. 392,843. 7 Claims. (Cl. 24—259.)



1. A pinning clamp comprising an elongate, U-shaped body, one leg of said body projecting beyond the other, the other leg having an inturned extension adapted to bear with clamping force on the inner surface of the other leg, thereby to hold the material clamped between the said legs firmly but without tearing or cutting, the extremity of said inturned extension being turned upwardly toward the inner surface of the shorter leg, whereby to prevent the material clamped therebetween from becoming lapped around the said extremity.

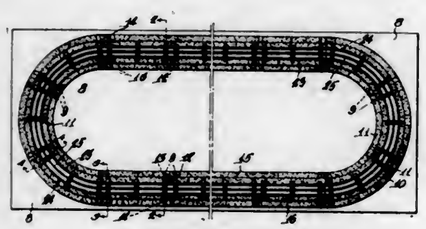
1,807,802. REEL CRUTCH. DONALD R. STEVENS, Ridgewood, N. J., assignor to The Watson Machine Company, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 17, 1927. Serial No. 240,681. 2 Claims. (Cl. 254—94.)

1. A reel crutch including in combination an upright member having at its upper end an arm projecting laterally therefrom, said arm being adapted for entering one end of the hollow hub of a reel, said upright member comprising an upper and lower section telescopically slidable relatively to each other, means for securing said sections in adjusted position, a handle projecting from the upper portion of the device in a direction opposite to



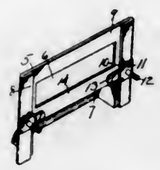
the direction of the projecting arm and a second handle projecting from said device at an angle to said first mentioned handle.

1,807,803. TOY RAILROAD TRACK EMBANKMENT. CHARLES F. STONE, Upper Darby, Pa. Filed Jan. 18, 1930. Serial No. 421,703. 6 Claims. (Cl. 238—10.)



6. In a toy railroad, a simulated ballast material comprising crushed stone and glue.

1,807,804. CARD HOLDER. ELMER B. STONE, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed Aug. 6, 1929. Serial No. 383,937. 3 Claims. (Cl. 40—8.)



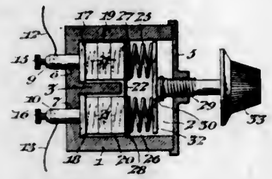
1. A card holder comprising a plate having a display opening and composed of sheet metal having overturned ends resting against said plate and creating a space for a card, said overturned ends being formed to provide recesses between said ends and said plate, and fastening bolts each having a head located in one of said recesses and projecting through said overturned ends to receive a fastening member at the outer end thereof.

1,807,805. PREPARATION OF COLORED REPRODUCTIONS BY IMBIBITION. BERTHA SUGDEN (now by marriage Bertha Sugden Tuttle), Boston, Mass., assignor to Technicolor Motion Picture Corporation, Boston, Mass., a Corporation of Maine. Filed Apr. 30, 1926. Serial No. 105,861. 21 Claims. (Cl. 101—149.)

11. A film or surface coating comprising hardened gelatine containing a hardening agent and an organic acid therein and bearing a surface imprinted image of an acid dye absorbed uniformly into the acid hardened gelatine surface to a depth substantially proportionate to the amount and light density of the respective color portions of the image, said dye comprising a component of high pentrability and a component of low penetrability.

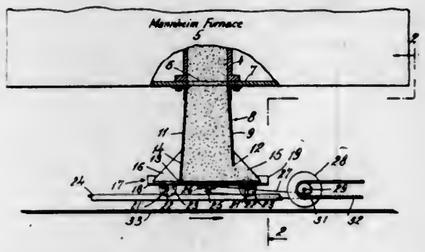
21. The method of imbibition printing gelatinous films which comprises wetting a suitable printing matrix bearing the image to be reproduced in the several degrees of development corresponding to the several contrasts presented therein with a solution containing a gelatine-penetrative dye and a small proportion of a dye having a color substantially without effect upon the first, which restrains diffusion thereof, and contacting the thus wet matrix surface with the film surface.

1,807,806. VARIABLE RESISTANCE UNIT. TORRENCE A. SWARTZ and WILMER P. UHLER, Tottenville, N. Y., assignors to The S. S. White Dental Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 27, 1925. Serial No. 5,015. 5 Claims. (Cl. 201—51.)



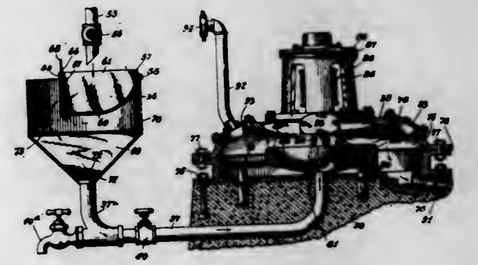
2. A variable resistance unit free from all sliding contacts in the electrical circuit, comprising a casing, two parallel resistance elements adapted to vary in resistance according to the pressure thereon, a bridge bar in electrical contact with adjacent ends of the elements so that said elements and bar are connected electrically in series, an equalizing bar, springs interposed between the ends of said bars, and means to move said equalizing bar to vary the compression of said springs.

1,807,807. APPARATUS FOR DISCHARGING SALT CAKE FROM MANNHEIM FURNACES. MICHAEL D. SWORDS, Chicago, Ill., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Jan. 27, 1928. Serial No. 250,058. 3 Claims. (Cl. 214—18.)



1. The combination comprising a Mannheim furnace, a stationary hopper for receiving salt cake from the furnace, said hopper being positioned substantially vertically and forming a straight unobstructed passageway, a movable discharger positioned beneath said hopper and engaging the lower surface of a column of salt cake in the hopper to seal the hopper against access of air to the furnace, the lower rim of said hopper being spaced a short distance from the discharger on three sides thereof to allow clearance between the hopper and discharger, one side of the hopper in the direction of movement of the discharger being spaced from the surface thereof a sufficient distance to allow salt cake to be removed from the hopper, and means for moving the discharger in contact with the lower portion of the mass of salt cake to remove salt cake from the hopper by frictional contact therewith at a rate not exceeding the rate at which salt cake from the furnace is received by the hopper.

1,807,808. EMULSION AND PROCESS THEREFOR. HARRY L. SYMONS, Wimbledon, London, England, assignor to Roads Colloidal, Limited, London, England. Filed June 25, 1923. Serial No. 647,421. 16 Claims. (Cl. 134—1.)



1. The hereindescribed process of disintegrating matter dispersed in a liquid which consists in subjecting said liquid together with said matter to the mechanical action of a mill to cause the disintegration of said matter while continuously maintaining a head of liquid above said mill to form a liquid seal therefor, and continuously supplying said liquid and said matter to said head to maintain the same at the desired level and to insure a steady flow through said mill, substantially as specified.

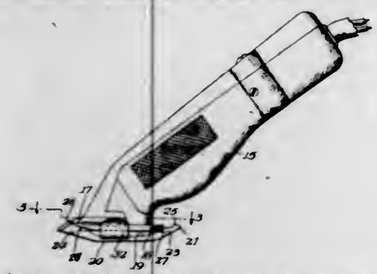
1,807,809. COMPOSITION FOR IMBIBITION PRINTING. BERTHA SUGDEN TUTTLE, Boston, Mass., assignor to Technicolor Motion Picture Corporation, Boston, Mass., a Corporation of Maine. Original application filed Apr. 30, 1926, Serial No. 105,861. Divided and this application filed May 27, 1927. Serial No. 194,853. 8 Claims. (Cl. 8—6.)

4. A liquid composition for imbibition printing of films, comprising a gelatine penetrative dye and a dye characterized by high viscosity.

1,807,810. PROCESS FOR MAKING A FOAMY BODY. JOHN A. RICE, Berkeley, Calif., assignor to The Bubblestone Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 26, 1924. Serial No. 728,279. 6 Claims. (Cl. 252—6.)

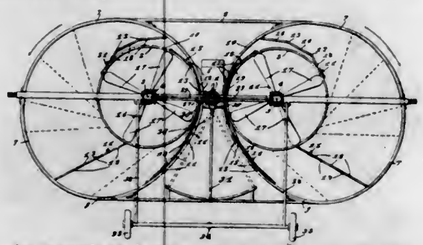
1. The process of producing a foam for cellular concrete which comprises mixing a foaming agent with a stabilizing colloidal solution of a cellulose derivative, and converting the resulting mixture into foam.

1,807,811. HAIR CUTTER ATTACHMENT. WILLIAM J. VAN OSDEL, Chicago, Ill. Filed Jan. 30, 1929. Serial No. 336,116. 9 Claims. (Cl. 30—1.)



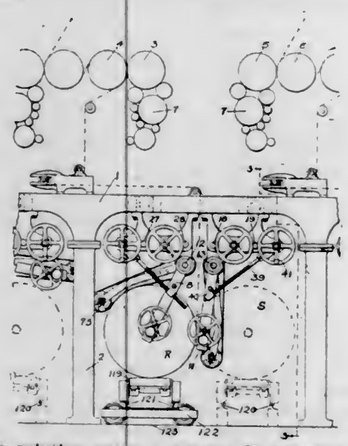
1. As an article of manufacture, a freely attachable and detachable reversible gage or guard plate for hair clippers and comprising a plate proper having toothed portions along its front and rear edges, and means for detachably securing the same to the bottom cutter plate of the clipper in either of its positions with respect thereto.

1,807,812. AEROPLANE. PETER J. WAGNER, Haffey, Pa. Filed Sept. 19, 1930. Serial No. 483,043. 15 Claims. (Cl. 244—13.)



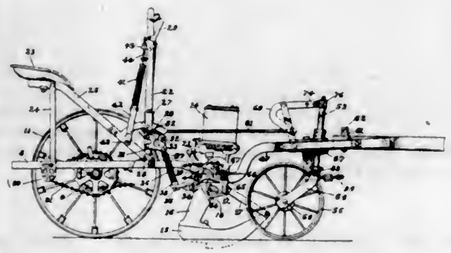
1. An aeroplane having wings made up of relatively rigid sections having fold-permitting connections between them, means for causing the outer edge of the wings to follow a substantially circular path, and means for causing the inner edge of the wings to follow a circular path eccentric to the first mentioned path.

1,807,813. ROLL CHANGER. BRUCE CLARK WHITE, deceased, New York, N. Y., by Marie Louise White, executrix, New York, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed May 6, 1927. Serial No. 189,212. 15 Claims. (Cl. 242—58.)



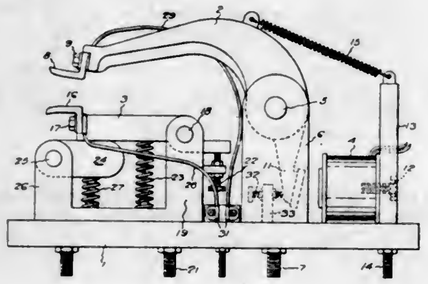
1. In a printing press, a paper roll, a pair of hanging arms pivoted at their upper ends to a supporting frame, means for transporting said roll into position to be loaded in the arms, means for attaching said roll to said arms while said roll is on said transporting means, and means for moving said arms to lift said roll clear of the transporting means.

1,807,814. PLANTER. CHARLES H. WHITE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 29, 1927. Serial No. 216,083. 17 Claims. (Cl. 111—56.)



1. In an agricultural implement, the combination of two frames, each wheel supported, means connecting said frames for relative pivotal movement, a furrow opener supported by one of said frames, and means for raising and lowering said latter frame and said furrow opener through an approximately rectilinear path in adjusting the working depth of the furrow opener.

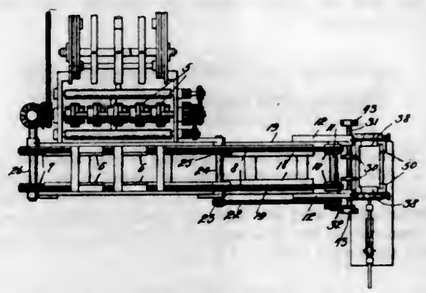
1,807,815. CONTROL APPARATUS. HAROLD E. WHITE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 6, 1927. Serial No. 181,315. 6 Claims. (Cl. 200—87.)



1. In a switch, in combination, a movable contact member, a movable shock-absorbing mass mounted independently of the contact member, and means for maintaining the shock-absorbing mass in position to absorb momentum imparted to the contact member.

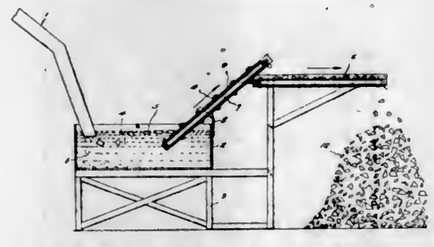
1,807,816. DEVICE FOR STACKING SHEET METAL AND THE LIKE. JOHN H. YOUNG and WILBUR G. FRINK, Middletown, N. Y., assignors to The Borden Company, New York, N. Y., a Corporation of New Jersey. Original application filed Aug. 4, 1926, Serial No. 126,990. Divided and this application filed Aug. 19, 1927. Serial No. 214,131. 4 Claims. (Cl. 271—86.)

1. A sheet stacking device comprising, a hopper consisting of vertically arranged walls providing a receptacle having an open upper end adapted to receive sheets delivered one at a time into the hopper, holding means pivotally mounted in the upper end of the hopper for catching each sheet as it descends in the hopper, and cam



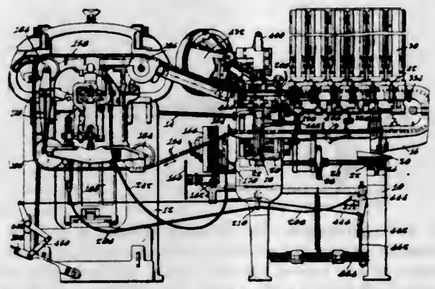
actuated means for turning the holding means to release the sheet held thereby and for returning the holding means into initial position.

1,807,817. PROCESS FOR TREATING COAL. CHARLES P. ANDERSON, Scarbro, W. Va. Filed Jan. 29, 1930. Serial No. 424,314. 4 Claims. (Cl. 209—173.)



1. A method of treating coal comprising immersing screened run of mine coal in an aqueous solution containing a salt of an alkali metal of a specific gravity to cause the pure coal to float, and permit the heavier impurities to sink, permitting the floating coal to remain in the solution until it has mechanically entrained the maximum amount of the solution and thereafter continuously conveying the coal from the receptacle and causing the coal to permanently retain all of the adsorbed salt.

1,807,818. HEEL MAKING MACHINE. FRED ASHWORTH, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 20, 1922. Serial No. 537,946. 45 Claims. (Cl. 12—50.)



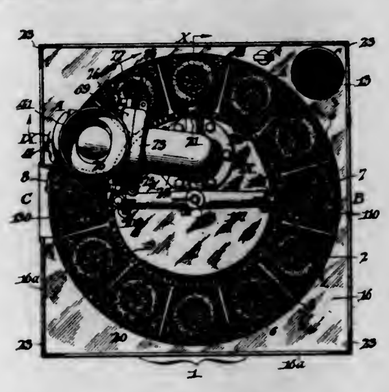
1. A heel building machine comprising an endless chain lift collector, means for delivering lifts to the collector, and mechanism controlled by movement of the endless chain for actuating said means to deliver lifts to the collector.

1,807,819. DEVICE FOR LOADING EXPLOSIVES IN WELLS. MAX A. ALTGELT, New Braunfels, Tex. Filed Apr. 25, 1930. Serial No. 447,247. 4 Claims. (Cl. 102—4.)



1. In a device of the character described, the combination of an elongated tubular container open at one end, separate supporting elements at the open end of the container, and means detachably connecting said elements to normally hold them in position to span said open end and support a body in said container.

1,807,820. COOKING APPARATUS. JOHN C. BERGNER, Lansdowne, Pa., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Continuation of application Serial No. 152,607, filed Dec. 4, 1926. This application filed July 10, 1929. Serial No. 377,536. 24 Claims. (Cl. 53—7.)

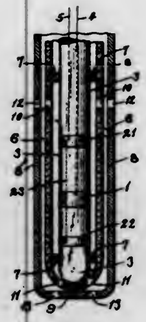


1. In apparatus for cooking articles such as doughnuts with hot liquor, the combination of a circular receptacle to hold the liquor, means for progressing the articles afloat and definitely separated one from another in the liquor over a single circular path, means for introducing the articles at the beginning of the path, means for turning over the articles at an intermediate point in the path, and means for subsequently ejecting the articles from the apparatus.

1,807,821. CONDUCTIVITY CELL. LEO BEHR, Philadelphia, Pa., assignor to Leeds & Northrup Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 9, 1929. Serial No. 331,333. 7 Claims. (Cl. 175—183.)

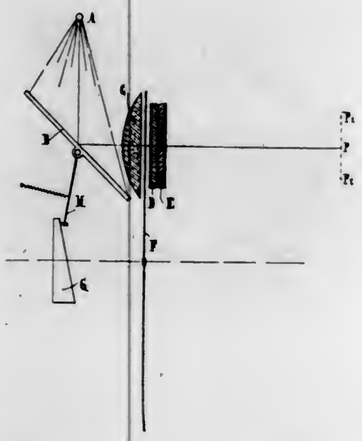
1. A conductivity cell having a single direct inter-electrode path comprising an electrode, a second composite

electrode comprising electrode elements spaced from each other and from said first named electrode, a low resistance connection between said electrode elements, a structure within which said electrodes are disposed having



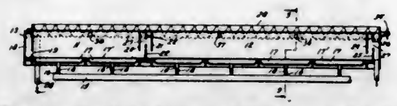
an aperture between which and said first named electrode one of said electrode elements is disposed, and an apertured housing of material capable of producing polarization effects.

1,807,822. REMOVAL OF WATERINGS FROM GOFFERED FILMS. RODOLPHE BERTHON, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y., a Corporation of Delaware. Filed June 4, 1928, Serial No. 282,754, and in France Apr. 23, 1928. 2 Claims. (Cl. 95—75.)



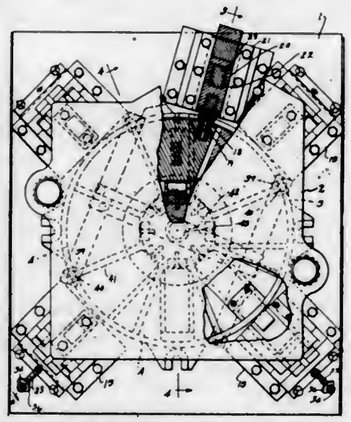
1. A method of copying by contact films having a goffering composed of parallel lines constituting microscopic refracting elements, which consists in arranging the goffered original film and a similarly-goffered blank film in contact; exposing the blank film, through the original film, to the action of a beam of light from a light source; and shifting the image of said source, during the exposure, along a certain definite diameter that is perpendicular to the lenticular elements in a manner to cause said image to occupy all the points of that diameter of the printing aperture of the picture-taking objective.

1,807,823. FLOTATION. LIONEL EARL BOOTH, Salt Lake City, Utah, assignor to The General Engineering Company, Salt Lake City, Utah, a Corporation of Utah. Filed Nov. 24, 1926. Serial No. 150,453. 10 Claims. (Cl. 209—170.)



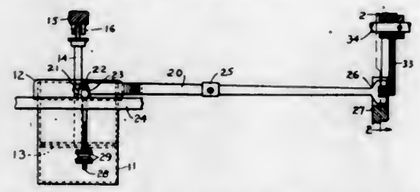
1. Flotation apparatus comprising a pulp chamber having a side wall provided with a plurality of openings therein adjacent the top thereof, a concentrate launder communicating with the interior of said chamber through the openings in the side wall, and concentrate conveying means associated with said launder.

1,807,824. MACHINE FOR SIZING AND PUNCHING VEHICLE WHEEL RIMS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Sept. 16, 1925. Serial No. 56,747. 7 Claims. (Cl. 153—2.)



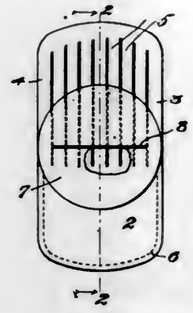
1. In a machine for sizing and punching vehicle wheel rims, the combination with radially movable blocks engageable with a rim to size the same, of punches movable toward the rim in planes diagonal to the path of movement of said blocks for forming apertures in the rim and means for successively operating said blocks and punches.

1,807,825. CONTROLLING DEVICE. FREDERICK G. L. BOYER, Dayton, Ohio. Filed May 26, 1926. Serial No. 111,868. 18 Claims. (Cl. 265—1.)



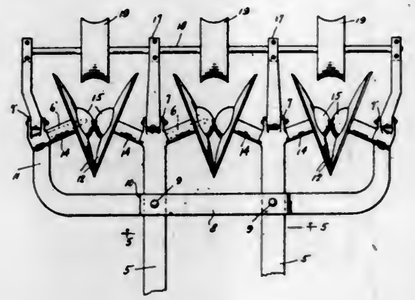
1. In combination: an element having a to and fro movement; a second element; and means for preventing operation of the second element while the first element is moving, comprising a fluid dash pot the piston of which is connected to said first element, a yielding support for said dash pot, a mechanical connection between said dash pot and said second element, so arranged that movement of the first element causes said mechanical connection to prevent operation of the second element.

1,807,826. TRICK POCKETBOOK. FRANK BRADY, Denver, Colo. Filed Oct. 23, 1928. Serial No. 314,368. 3 Claims. (Cl. 150—36.)



1. In a device of the class described, the combination of a back, a front against said back, said front provided with edge ribs and intermediate ribs, a shield against said front and covering some parts of all of the ribs, and stitching part way across the shield, between and across said intermediate ribs and not including the edge ribs for permitting lateral movement of said edge ribs.

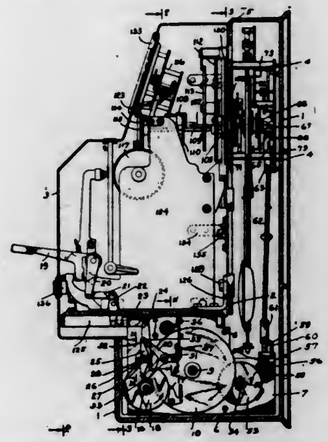
1,807,827. DEEP FURROW GRAIN DRILL. FRANK S. BROWN, Herndon, Kans. Filed Oct. 17, 1930. Serial No. 489,448. 2 Claims. (Cl. 97—225.)



1. In an apparatus of the class described, a pair of beams each having a pair of rearwardly diverging trunnions, a cross frame member attached to the beams and having rearward extensions at the ends thereof provided with rearwardly converging trunnions, disks of concavo-convex formation having sleeves projecting from the concave sides thereof and journalled on the trunnions and having bulged hub portions on the convex sides thereof, said hub portions abutting each other to hold the disks assembled on the trunnions.

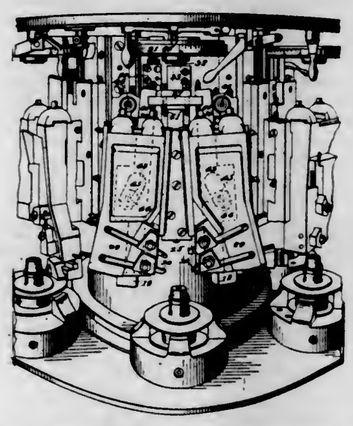
1,807,828. TIME RECORDER. JAMES W. BRYCE, Bloomfield, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Mar. 2, 1925. Serial No. 12,488. 22 Claims. (Cl. 234—43.)

1. In a time recording apparatus having in combination, time type wheels adapted for step by step advance, which advance may be suppressed during the taking of a record from the type wheels, and means for driving the type wheels, connecting devices intermediate the said wheels and the driving means, said connecting devices having provisions for transforming continuous motion from the driving means into an intermittent motion which is applicable to drive the type wheels in variable magnitudes dependent upon the lag of the type wheels with respect to the driving means following an interruption of motion of the type wheels so that the type wheels of the



recorder reassume and preserve their proper relationship to the driving means irrespective of a suppression of an advance of the type wheels.

1,807,829. DOUBLE ANGULAR TOOL SLIDE. EDWARD P. BULLARD, Jr., Stratford, Conn., assignor to The Bullard Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 12, 1928. Serial No. 325,425. 11 Claims. (Cl. 29—38.)

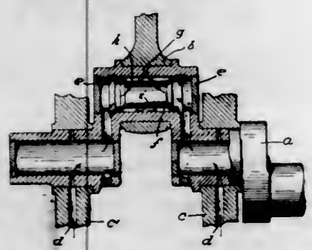


1. In an automatic machine tool, reciprocating feed means, a movable saddle, a relatively movable slide carried by said saddle, a tool head carried by said slide adapted to have movement relatively thereto, cam means carried by said slide and driven by said feed means adapted to impart movement to said tool head relatively to said slide, means whereby said slide is adapted to have movement imparted thereto by said feed means, and means for locking and releasing said saddle with respect to said feed means whereby they are adapted to move as a unit and whereby said feed means has independent movement relative to said saddle.

10. In an automatic machine tool, reciprocating feed means, a movable saddle, a reciprocating slide carried by said saddle, a pair of releasable means for fixedly securing said slide with respect to said saddle, one of said means preventing movement of the slide in one direction, and per-

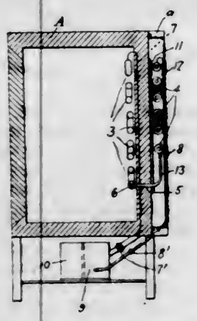
mitting movement in the other direction, the other of said means permitting movement in said one direction and preventing movement in said other direction, a tool head carried by said slide adapted to have movement relatively thereto, a cam slide carried by said slide adapted upon movement relative to said slide to impart transverse movement to said tool head, means for locking and releasing said saddle with respect to said feed means whereby they are adapted to move as a unit and whereby said feed means has independent movement relative to said saddle, means operatively connecting said feed means to said cam slide whereby said independent movement of said feed means imparts relative movement to said tool head, and means operative between the feed means and said releasable means and slide whereby said independent movement of the feed means imparts relative movement to said slide at the completion of the relative movement of said tool head in either direction.

1,807,830. LUBRICANT PURIFIER FOR CONNECTING ROD BEARINGS. GIUSTINO CATTANEO, Milan, Italy. Filed Mar. 22, 1928, Serial No. 263,835, and in Italy May 17, 1927. 1 Claim. (Cl. 184—6.)



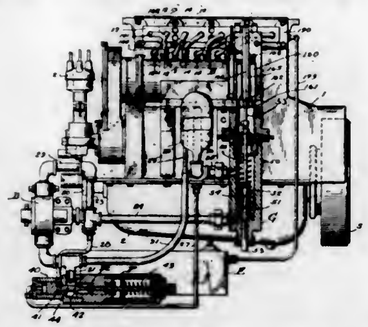
A device for centrifugal epuration of lubricant in internal combustion engines, comprising a hollow crankshaft having a hollow crank pin provided with a hole remote from the axis of said hollow crank shaft, a cylindrical sleeve in internal annular spaced relation within said crank pin having enlarged ends communicating directly with the interior of crank shaft and abutting said crank pin, said sleeve being provided with a second hole diametrically opposite said first mentioned hole in said crank pin.

1,807,831. SELF-CONTAINED MECHANICAL REFRIGERATOR. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 3, 1926. Serial No. 126,781. 3 Claims. (Cl. 62—116.)



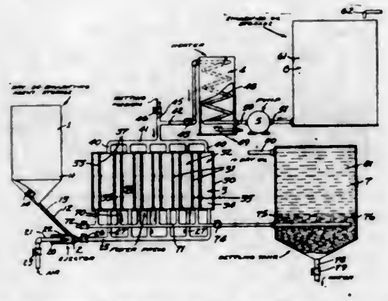
1. A refrigerator cabinet having an insulated wall, an evaporator element upon one side of said wall, a condenser element upon the other side of said wall, and means interposed between said condenser element and said wall for reflecting the heat of said last named element.

1,807,832. INTERNAL COMBUSTION ENGINE. JOSEPH REX DAVIS, Clarksburg, W. Va. Filed Feb. 28, 1927. Serial No. 171,689. 54 Claims. (Cl. 123—90.)



13. An internal combustion engine including a cylinder and admission and exhaust valves, fluid-operated means for operating said valves, means responsive to the speed of the engine for distributing fluid to said fluid-operated means, and means also responsive to the speed of the engine for regulating the pressure of said fluid.

1,807,833. FILTRATION PROCESS FOR BREAKING EMULSIONS. HAROLD C. EDDY, Los Angeles, Calif., assignor to Petroleum Rectifying Company of California, Los Angeles, Calif., a Corporation of California. Filed Dec. 28, 1926. Serial No. 157,528. 6 Claims. (Cl. 196—4.)



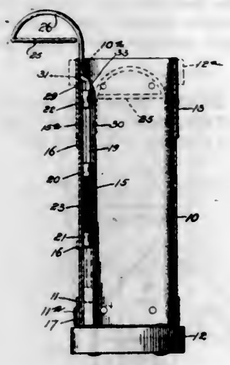
2. A process of separating the phases of an emulsion, which includes the steps of: mixing a powdered de-emulsifying agent and a gas to form a mixture; forcing said mixture into the vicinity of a filter plate having openings too small in size to allow passage of said powdered de-emulsifying agent which agent is deposited on said filter plate while said gas passes therethrough; wetting the coating of de-emulsifying agent thus deposited and before the flow of gas through said filter plate is arrested, said filter plate and said coating thus forming a porous diaphragm; passing said emulsion through said porous diaphragm; and subsequently separating said phases.

1,807,834. PNEUMATIC TUBE CARRIER. PHILIP ERBY, Chicago, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1930. Serial No. 440,892. 11 Claims. (Cl. 243—35.)

1. A carrier of the class described including a tubular body having an open end, a longitudinally movable rotatable stem associated therewith, means for supporting the stem adjacent the inner wall of the body, a spring acting on the stem and tending to move the latter inwardly, a closure element rigidly carried by the outer end of the stem and dimensioned to effectively occupy the internal cross-sectional area of the open end of said body,

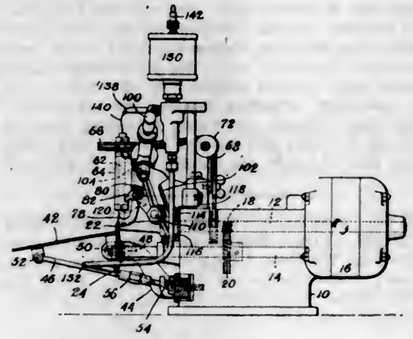
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said closure element being movable longitudinally beyond the end of the body against the reaction of the spring, and then rotatable laterally of said body, and guide means



associated with the stem arranged to force the closure element to move in spaced relation to the end of said tubular body when it rotates into or out of alignment with the interior of said body.

1,807,835. TRIMMING MACHINE. SIDNEY J. FINN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 4, 1927. Serial No. 196,574. 21 Claims. (Cl. 164—63.)



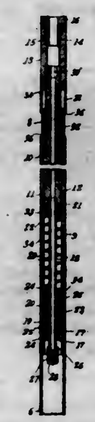
21. A trimming machine comprising a trimming cutter, means for operating said cutter, and means arranged to supply a lubricant to the work-engaging portion of said cutter, an element of the latter said means being tubular and having a peripheral surface arranged to engage an article of work to guide the article to said cutter.

1,807,836. WEATHERPROOFING MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Oct. 16, 1925. Serial No. 62,911. 9 Claims. (Cl. 94—18.)

1. A prepared expansion joint composed of 55% bituminous matter, 35% roofing scrap and 10% corn husks.

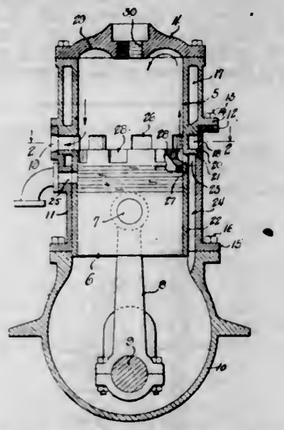
5. The method of increasing the tensile strength of prepared expansion joint by incorporating with bituminous material finely divided fibrous material and adding thereto coarse, wide pieces of vegetable, fibrous matter which will not readily break apart in mixing, combining these three in a mixer and preparing same in sheet form for use as an expansion joint.

1,807,837. WELL DRILLING. JAMES C. FORTUNE, New York, N. Y. Filed June 16, 1928. Serial No. 285,804. 14 Claims. (Cl. 255—28.)



1. In apparatus of the character disclosed, a slide coupling for connection at an intermediate point in a drill string and comprising relatively telescopic tubular members longitudinally keyed together to carry the rotation of the drill string independently of the sliding movements of the members relative to each other, drill string coupling elements at the ends of said telescopically related members, whereby the device may be connected for rotary driving operations at a selected point in the length of the drill string, valve means operative in the relative movements of the two members to control communication between the section of pipe below said drive coupling and the section of pipe above the same, and a check valve operable by superior pressure in the section above the drive coupling to open communication between the two sections of pipe.

1,807,838. TWO CYCLE ENGINE. LOUIS O. FRENCH, Milwaukee, Wis. Filed Apr. 27, 1929. Serial No. 358,587. 3 Claims. (Cl. 123—73.)



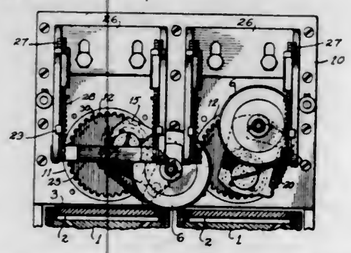
1. In a two cycle internal combustion engine, the combination of a cylinder head, a cylinder, a piston working in said cylinder, said cylinder having exhaust and scavenge ports formed therein successively uncovered by the piston at the end of its inner stroke, said exhaust ports radially arranged and alternating with said scavenge ports, said piston having shallow grooves formed therein registering with said scavenge ports to deflect the scavenging medium upwardly along the wall of the cylinder.

1,807,839. FLUID PRESSURE MOTOR. ELMER G. GARTIN, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 27, 1920. Serial No. 433,388. 5 Claims. (Cl. 121—6.)



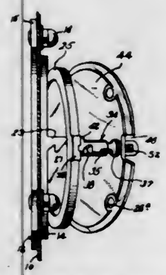
1. A rock drilling apparatus comprising a hollow drill steel, means for causing the same to hammer the rock, means for causing the drill steel to rotate during hammering action, means for supplying cleansing fluid to the drill steel, means for effecting simultaneous initiation of all of said operations, and means for interrupting the rotation and cleansing fluid pressure supply without interrupting the hammering action.

1,807,840. CUTTING MECHANISM FOR SHEETS. PAUL A. GOLLNICK and JOHN J. TOOLAN, Chicago, Ill., assignors, by mesne assignments, to Selectograph Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 1, 1927. Serial No. 209,903. 12 Claims. (Cl. 164—62.)



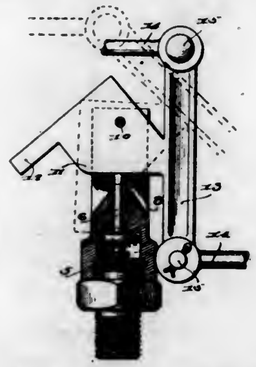
2. The combination with a support for sheets, of a mounting movable through a cyclic path transverse to said support, mechanism for intermittently actuating said mounting, an arm hinged on said mounting, and a knife rotatably supported on said arm, said mounting being arranged to hold said knife in rolling contact with the support when moving in one direction and to lift it clear of the support when moving in the opposite direction.

1,807,841. ATTACHMENT FOR DOORS. HERMAN HANSEN, New York, N. Y., assignor to Francis Keil & Son, Inc., a Corporation of New York. Filed Apr. 3, 1928. Serial No. 266,983. 18 Claims. (Cl. 20—39.)



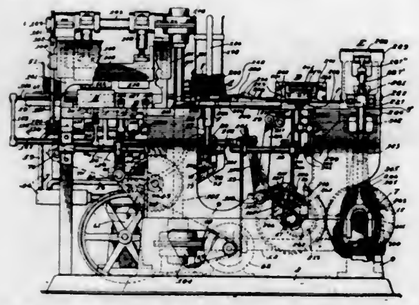
1. In a device of the character described, in combination, a frame member adapted to be secured to a door and to have a portion thereof extend through an aperture in the door, said frame member having an opening therein with means forming a grating extending thereacross and means for closing said opening, said means including a window-carrying member hinged to said frame and adapted to be locked thereto in closed position, an opaque member hinged to said frame and adapted to overlap said window-carrying member, and spring means acting upon said opaque member and through the latter upon said window-carrying member and operative to tend to swing both of said members about their hinges.

1,807,842. AIR BRAKE BLEEDER VALVE. FRANK W. HARRIS, Great Falls, Mont. Filed Feb. 23, 1929. Serial No. 342,246. 5 Claims. (Cl. 303—80.)



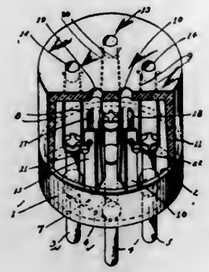
2. The combination with a bleeder valve having a normally closed depressible valve element, of a pivoted valve depressing element supported on the valve casing and normally disposed in a position to permit the valve element to remain seated and having a cam surface which is operable to depress the valve element and hold it in such position, a link attached to the valve depressing element and normally disposed parallel to the longitudinal axis of the bleeder valve, the pivoted valve depressing element being located centrally of the ends of the link and oppositely extending handles pivoted to the ends of the link whereby the valve depressing member may be moved to active and inactive position from either side of the car to which the bleeder valve is attached.

1,807,843. MACHINE FOR FORMING COMPOSITE CAN BODIES. VICTOR HENDRICKSON, Manchester, Conn., assignor to The Orford Soap Company, Inc., Manchester, Conn., a Corporation of Connecticut. Filed June 27, 1925, Serial No. 39,903. Renewed Apr. 18, 1929. 165 Claims. (Cl. 113—11.)



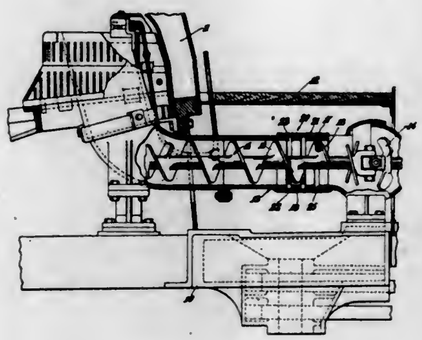
1. An organized machine for forming composite can bodies comprising means for forming a sheet metal seaming strip, means for applying the same to a can body blank, and means for forming the composite blank thus produced into the desired can body shape and for thereupon securing the seaming strip to the formed can body blank to complete the can body, said several means being correlated for harmonious operation.

1,807,844. ADAPTER. CHARLES E. HUFFMAN, Montclair, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed June 25, 1927. Serial No. 201,292. 1 Claim. (Cl. 173—344.)



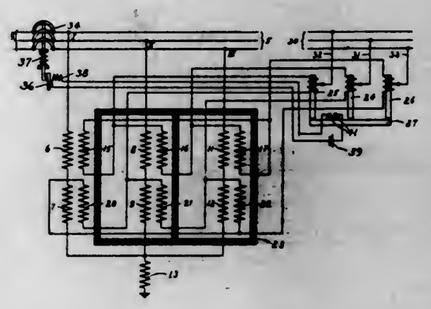
An adapter for enabling a radio tube having an anode, a grid and a cathode designed to be heated by alternating current to be employed in radio receiving apparatus designed for the use of a tube having the cathode heated by direct current, comprising a body composed at least in part of insulating material, terminal prongs on said body, contact members in said body secured to two of said terminal prongs for engagement with the anode and grid prongs of the tube, two other contact members in said body having terminal connections independent of said prongs of the adapter for supplying heating current to said cathode and a fifth contact member for engagement with the cathode prong of the tube adapted to be joined to other of the terminal prongs of the adapter through an external circuit.

1,807,845. PERIPHERAL BEARING. ANDREW M. HUNT, New York, N. Y., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed July 14, 1928. Serial No. 292,611. 8 Claims. (Cl. 198—213.)



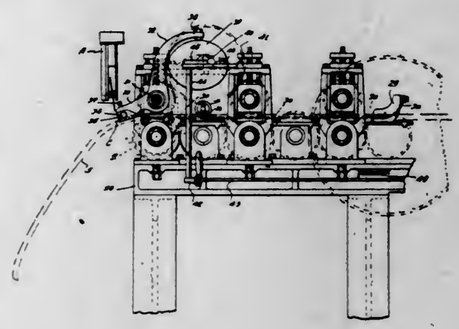
1. In a feed screw device for a stoker, the combination of a screw, a plurality of fins rigid with the screw and disposed in planes at right angles to the screw axis, and parallel stationary seats for said fins.

1,807,846. TRANSFORMER PROTECTIVE DEVICE. JULIUS JONAS, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Feb. 2, 1929, Serial No. 337,067, and in Germany Feb. 6, 1928. 4 Claims. (Cl. 175—294.)



1. In a transformer, a magnetic core, a primary winding, secondary windings, said secondary windings being divided into a plurality of similar delta connected portions, all of said windings being arranged on said core, and means in connection with said secondary windings for disconnecting the transformer upon occurrence of a fault therein.

1,807,847. METAL WORKING MACHINE. HOMER G. KELLOGG, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed June 1, 1926. Serial No. 112,978. 20 Claims. (Cl. 153—2.)

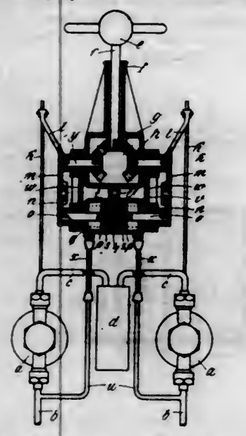


1. In a machine of the character described, the combination with means for fashioning to a predetermined cross-sectional contour and for advancing a predetermined length of molding strip, of means for fashioning said strip to a predetermined variable longitudinal contour.

1,807,848. PRESSURE MEDIUM BRAKE AND STEERING DEVICE FOR AIRCRAFT. KURT KOLLINEK, Karlshorst, Berlin, Germany, assignor to Knorr-Bremse Aktiengesellschaft, Lichtenberg, Berlin, Germany, a Corporation of Germany. Filed Aug. 5, 1930, Serial No. 473,258, and in Germany June 23, 1930. 4 Claims. (Cl. 303—6.)

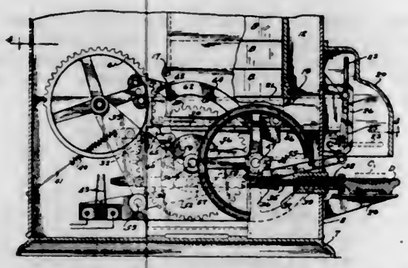
1. In pressure medium brake apparatus for aircraft, a source of pressure medium, pipes to admit said medium to the right and left hand brake cylinders respectively, valves controlling the passage of said medium to and

from the respective pipes, branch connections between said pipes to equalize the pressure therein, differential



gear to operate said valves, a member interposed in said connections and also operable by said gear to obstruct said connections to prevent such equalization.

1,807,849. BUTTER CUTTER. CLIFFORD W. KUBON, Minneapolis, Minn. Filed May 18, 1929. Serial No. 364,208. 10 Claims. (Cl. 31—21.)



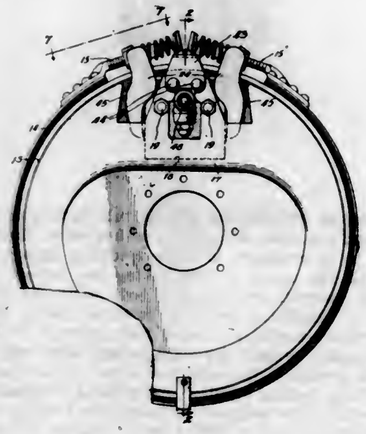
6. A device of the class described comprising a cutter, a feed device for feeding materials to the cutter, manually controlled means including a yieldingly retracted plunger for imparting step by step movement to said feed device, driven connections for operating the cutter, and a source of electrical energy for operating said connections and having a normally open switch, said plunger being arranged to close the switch during its projecting movement, said connections including a member for retaining the plunger projected to hold the switch closed for a predetermined period of time and then release the same, said member being in the form of a wheel having a peripheral notch, said plunger having a part which extends into said notch when the plunger is retracted and which is moved out of the notch when said plunger is projected, said wheel serving as a stop to hold the plunger projected with the switch closed until said notch is again brought into registration with said part.

1,807,850. DENTAL PLATE SUCTION CUP ATTACHING MEANS. IRVING KULIK, Brooklyn, N. Y. Filed Oct. 23, 1926. Serial No. 143,702. 11 Claims. (Cl. 32—4.)



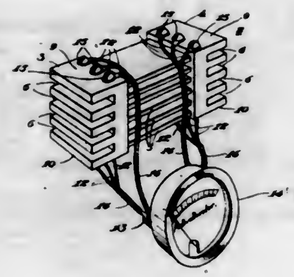
1. A dental plate suction cup attaching means and a rubber cup therefor comprising a flexible rubber cup and a holding element therefor with which said rubber cup is associated, a stem extending from said holding element to retain said holding element in position in moulds during the process of construction of a dental plate or base for a dental plate and a tube into which the said stem of the said holding element fits into.

1,807,851. HYDRAULIC BRAKE. MALCOLM LOUGHEAD, Detroit, Mich., assignor to Hydraulic Brake Company, Los Angeles, Calif., a Corporation of California. Filed Dec. 13, 1923. Serial No. 680,292. 13 Claims. (Cl. 188—152.)



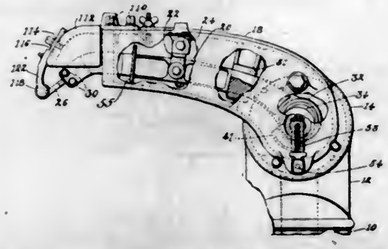
1. In a fluid operated brake system, an axle, a wheel thereon, a brake drum carried by said wheel, a brake member adjacent to the outer periphery of said drum, a cylinder mounted substantially within said brake drum, a piston in said cylinder, and a lever pivotally supported from said axle, one arm of said lever being operatively joined to said brake member, the other arm of said lever being arranged for engagement by said piston.

1,807,852. SHUNT. PAUL MACGAHAN, Orange, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1929. Serial No. 360,209. 10 Claims. (Cl. 171—95.)



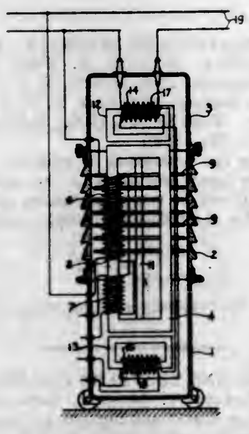
1. A shunt for use in conjunction with instruments of the millivoltmeter type embodying a shunt portion of known resistance, terminal blocks secured to the ends thereof, and a plurality of terminals distributed over the area of each block to respectively receive a plurality of leads from the instrument.

1,807,853. FASTENING-PULLING MACHINE. FRED L. MACKENZIE, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 10, 1924. Serial No. 719,076. 21 Claims. (Cl. 12—16.)



1. In a machine for pulling lasting tacks, arranged in rows in the channeled soles of boots and shoes, an oscillatory fastening-pulling member arranged for movement in the line of the row of tacks, a work guarding and supporting member extending between the pulling member and the work, and a work-guide co-operating with said members having a narrow end extending in front of the pulling member and adapted to be positioned in the channel of a sole substantially in line with the pulling member, said work guide being yieldably mounted to allow tilting of the shoe to facilitate the presentation of tacks to the pulling member.

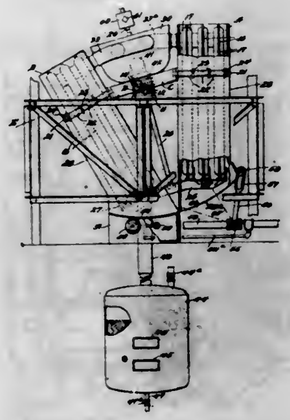
1,807,854. TRANSFORMER. AUGUST MEYERHANS, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed June 16, 1930, Serial No. 461,664, and in Germany June 17, 1929. 5 Claims. (Cl. 175—361.)



1. In a transformer structure, a voltage transformer, rings arranged about the voltage transformer to obtain a uniform potential drop thereover, a current transformer arranged adjacent said voltage transformer, and a tank partially constructed of insulating material for receiving said transformer.

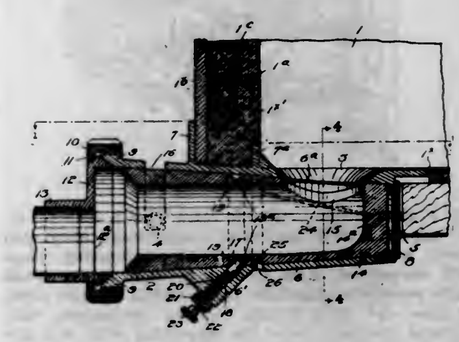
1,807,855. OSCILLATING TYPE REFRIGERATION PLANT. ERNEST B. MILLER and WALTER L. EDEL, Baltimore, Md., assignors to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed Oct. 28, 1925. Serial No. 65,465. 18 Claims. (Cl. 62—118.)

1. Refrigerating apparatus of the character described, including in combination, a support, a unit comprising a pair of adsorbers charged with vapor adsorbing material balanced on said support so that alternate adsorptions and activations causes said unit periodically to tilt, first one way and then the other, an evaporator containing an



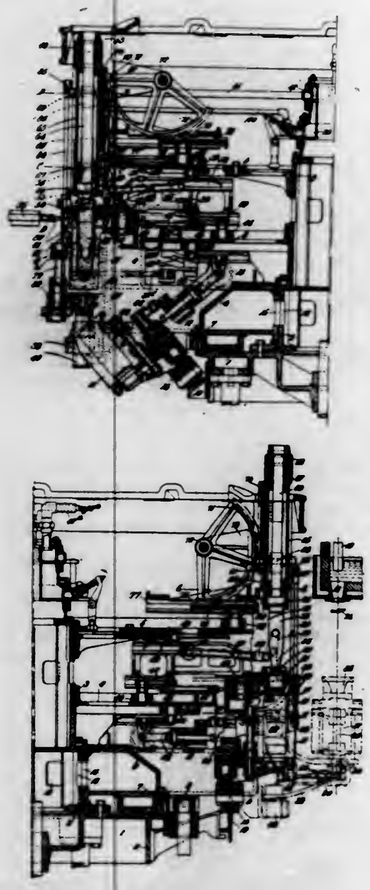
evaporable liquid, means to place said evaporator alternately in communication with said adsorbers, and means controlled by said tilting movement to activate each adsorber when it is disconnected from said evaporator.

1,807,856. VALVE. MORRIS E. MILLER, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Filed Sept. 18, 1928. Serial No. 306,631. 10 Claims. (Cl. 137—21.)



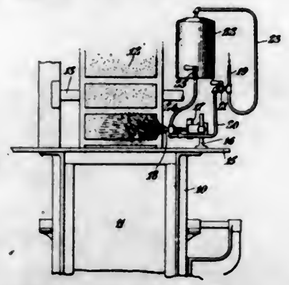
1. In apparatus of the class described, the combination of a container having an outlet in its lower portion, a valve comprising a hollow casing associated with the container walls and formed with an opening in registry with said outlet, one end of said casing being open and serving as the outlet for said valve and provided with means for connecting a discharge conduit to said casing end, and a valve element consisting of a hollow member closed at its inner end and opening into said casing at its other end, said element removably and rotatably fitting within said casing and formed in its side wall with a port adapted to register in one position with said outlet, and a handle connected to the outer portion of said valve element inwardly of the outlet end of said casing.

1,807,857. GLASS SHAPING MACHINE. THOMAS COURTNEY MOORSHEAD, Strand, England, assignor to The United Glass Bottle Manufacturers Limited, London, England, a British Company. Filed Feb. 25, 1927, Serial No. 170,808, and in Great Britain Aug. 31, 1926. 17 Claims. (Cl. 49—9.)



16. A glass shaping machine comprising a central vertical support, a frame carried by and rotatable about said support, means to rotate said frame continuously, blank mould supporting arms pivoted to said frame, blank moulds comprising separable parts carried by said arms, said arms and blank moulds rotating continuously with the frame, means to move the supporting arms with the blank moulds thereon so that at times the moulds are rotating in an outer circle and in an upright position to receive a charge of glass and at other times are rotating in an inner circle, neck moulds carried by the frame so as to move continuously in said inner circle, horizontal pivots carried by said frame, blow moulds mounted for movement about said pivots, means to move said blow moulds upwards about said pivots to bring them into co-operation with the neck moulds, a plurality of vertically movable register heads mounted on said frame, means for raising and lowering said register heads so that at times they serve to ensure proper alignment of the blank moulds with the neck moulds and at other times serve to ensure proper alignment of the blow moulds with the neck moulds, and pairs of locking members adapted to bind the parts of the blank moulds together at the appropriate times by a jamming action.

1,807,858. PROCESS FOR COLORING PLASTIC MATERIAL. WILLIAM H. MORRIS, Philadelphia, Pa., assignor to Ambler Asbestos Company, a Corporation of Pennsylvania. Filed Apr. 4, 1927. Serial No. 180,678. 7 Claims. (Cl. 25—155.)



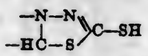
1. The process of coloring articles of plastic material which consists of applying a tapering film of coloring material to one surface thereof while the article is in a plastic condition, thereafter drawing said film of coloring material into the body of said article by means of suction applied to the opposite surface of said article.

1,807,859. CONCENTRATION OF ORES. FREDERICK G. MOSES, New York, RAYMOND W. HESS, Buffalo, and ROBERT L. PERKINS, East Aurora, N. Y., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed May 20, 1927. Serial No. 193,053. 12 Claims. (Cl. 209—166.)

1. In effecting the concentration of minerals by flotation, the process which comprises incorporating with the mineral pulp a thiazyl polysulfide and a thiazyl mercaptan, and subjecting the same to a froth flotation operation.

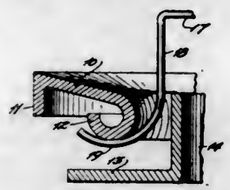
1,807,860. SEPARATION OF MINERALS. FREDERICK G. MOSES, New York, RAYMOND W. HESS, Buffalo, and ROBERT L. PERKINS, East Aurora, N. Y., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed May 20, 1927. Serial No. 193,059. 8 Claims. (Cl. 209—166.)

1. In effecting the separation of minerals, the process which comprises incorporating with the mineral pulp a thiobiazoline sulfhydrate compound which embodies within its composition the following probable grouping:



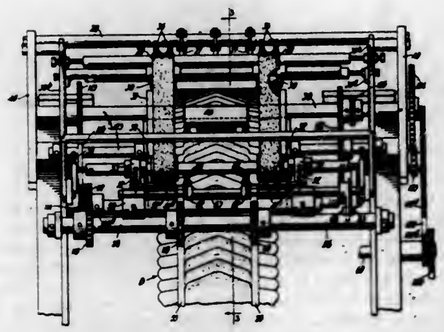
and subjecting the resulting mixture to a froth flotation operation.

1,807,861. RING AND TRAVELER FOR SPINNING MACHINES. WILLARD T. MUNSON, Scranton, Pa., assignor to Collins Supply and Equipment Company, Scranton, Pa., a Copartnership composed of Henry E. Collins and Albert B. Collins. Filed Nov. 15, 1930. Serial No. 495,970. 3 Claims. (Cl. 118—59.)



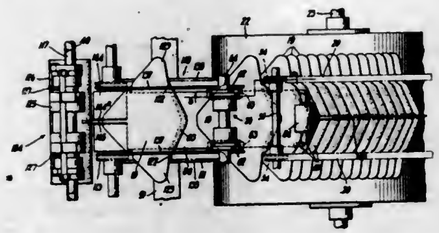
1. The combination of a spinning ring having a depending bead on its inner periphery, a traveler having foot portions adapted to engage beneath the bead and contacting tangentially with said bead, said foot portions being each curved to a radius greater than the bead with the concave side adjacent the bead, and a ring holder provided with an upstanding internal flange concentric with and spaced from the ring a distance less than the lateral extension of each foot portion of the traveler.

1,807,862. ENVELOPE MACHINE. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 21, 1926, Serial No. 156,080. Renewed Aug. 1, 1930. 19 Claims. (Cl. 93—62.)



1. In an envelope making machine, means for removing blanks from a stack and forming them into a band so as to expose the area of a sealing flap to be gummed, means for gumming the said flaps and means for individually conveying the blanks of said band comprising positive means for holding said blanks in spaced relation.

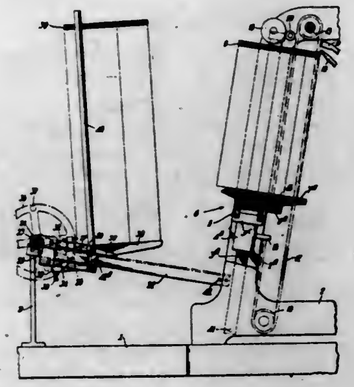
1,807,863. ENVELOPE MACHINE. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 10, 1927, Serial No. 167,077. Renewed Nov. 8, 1930. 14 Claims. (Cl. 93—62.)



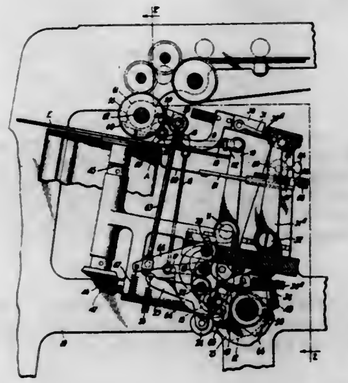
1. In an envelope making machine having means for conveying a band of envelope blanks including positive means for holding the individual blanks in spaced overlapping relation, during which an operation is performed upon them, and means for engaging each blank, releasing it from said holding means and individually conveying it for further operations thereon.

1,807,864. ENVELOPE MAKING MACHINERY. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 10, 1927, Serial No. 232,274. Renewed Sept. 24, 1930. 9 Claims. (Cl. 271—62.)

1. In an envelope-making machine, the combination of envelope-blank feeding means, envelope-blank elevating means, a tiltable platform constructed and arranged to receive a supply of blanks, a track along which said platform is adapted to be moved, and means for moving said platform along said track and into juxtaposition with said elevating means in order to deliver said supply of blanks to said elevating means.

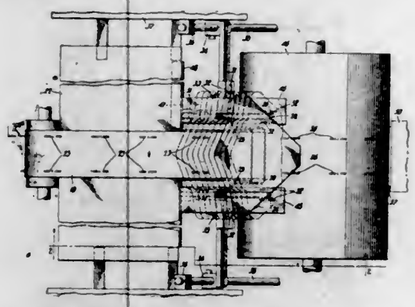


1,807,865. MECHANISM FOR FEEDING SHEETS OR BLANKS. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 6, 1928, Serial No. 244,786. Renewed Sept. 4, 1930. 10 Claims. (Cl. 271—30.)



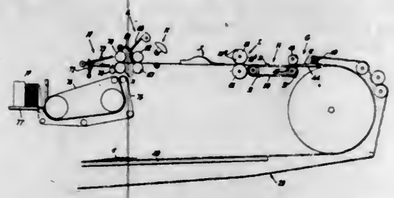
1. In a blank feeding mechanism, having means for separating an edge of an outermost blank, means for gripping a presented blank and conveying it from the stack, comprising a main feed roller and a cooperating auxiliary roller, means for transferring the partially separated sheet to said conveying means comprising a member having a reciprocatory motion adapted to engage between the separated edge of the blank and the stack to move said blank against said main conveyor roller, said member having an edge presenting said blank to the main roller of the approximate contour of said main roller, and means for moving said auxiliary roller to grip said presented blanks against said main roller.

1,807,866. ENVELOPE MACHINERY. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Feb. 25, 1928, Serial No. 256,915. Renewed Oct. 18, 1930. 10 Claims. (Cl. 93—68.)



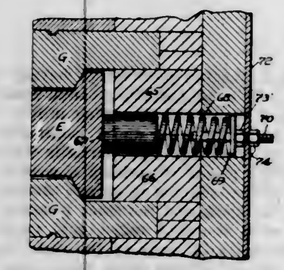
1. In a gumming apparatus, in combination, means for feeding blanks in a fanned out condition, a gummer adapted to operate on fanned out blanks, and collating means for individually aligning the fanned out blanks to render more uniform the exposed gum-receiving margins of the blanks before they reach the gummer.

1,807,867. MACHINE FOR MAKING ENVELOPES. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed June 12, 1928, Serial No. 284,856. Renewed Jan. 17, 1931. 4 Claims. (Cl. 93—62.)



1. In an envelope machine, in combination, means for holding a stack of blanks, means for fanning out said blanks in timed relation to the operating cycle, means for conveying the blanks so fanned out in positively timed relation to the operating cycle, and means timed to operate on each blank at the discharge end of the conveying means to individualize it.

1,807,868. EXPANSION FURNACE WALL. OSCAR NYGAARD, Saugus, Mass. Filed Oct. 30, 1926. Serial No. 145,270. 23 Claims. (Cl. 72—102.)



1. A furnace wall construction comprising a permanent masonry wall having a fire wall at its inner face com-

prised of refractory blocks all of which have the same dimensions at their heads except for certain of said blocks spotted over the wall whose heads are of smaller dimensions, all of the blocks surrounding each block having a smaller head being formed at their outer ends to engage a flange on the outer end of said central smaller headed block and support its head in spaced relation to the heads of said surrounding blocks.

1,807,869. SHAFT WRAPPING MACHINE. PERRY OKEY, Columbus, Ohio, assignor, by mesne assignments, to The American Fork & Hoe Company, a Corporation of Ohio. Filed Feb. 19, 1927. Serial No. 169,617. 26 Claims. (Cl. 242—7.)



1. In a wrapping machine, a stationary frame including longitudinal guides, a carriage mounted for longitudinal travel upon said guides, said carriage embodying a pair of longitudinally spaced heads, spindles rotatably carried by said heads and adapted for the removable and rotatable reception of a shaft section, motor driven means for effecting longitudinal travel of said carriage in an advancing direction with respect to said frame, means for rotating at least one of said spindles upon advance movement of said carriage, a reel mechanism carried by said frame and operable to apply helically a wrapping to the shaft section supported between said spindles upon advance movement on the part of said carriage, means for supplying a predetermined amount of adhesive to the inner side of said wrapping at the time of its application to said shaft section, and means for severing said wrapping after the same has been applied to a predetermined length of said shaft section.

1,807,870. ARTIFICIAL FISH BAIT. UZ C. PEMBERTON, Seffner, and JOSEPH B. JOHNSON, Tampa, Fla. Filed Nov. 4, 1929. Serial No. 404,789. 3 Claims. (Cl. 43—42.)

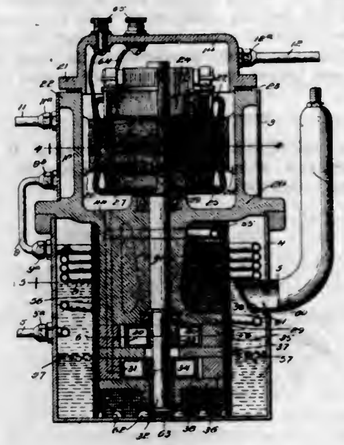


1. A device for attaching a lure to a fish hook comprising a member having an opening therein adapted to receive a shank portion of the hook, a formation on said member for attaching a lure thereto, and another formation on said member for detachably fastening the latter to the hook.

1,807,871. REFRIGERATING APPARATUS. OSBORNE I. PRICE, Frederick, Md., assignor to John S. McCarthy, Weehawken, N. J. Filed Apr. 20, 1925, Serial No. 24,599. Renewed Oct. 28, 1930. 16 Claims. (Cl. 62—115.)

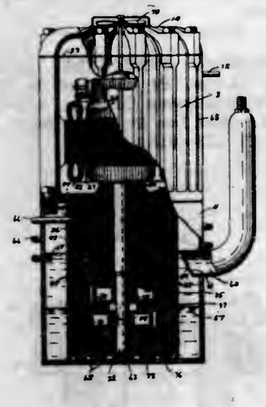
1. A refrigeration apparatus comprising in combination a compressing mechanism, a driving mechanism, a housing enclosing said driving mechanism and having a depending portion thereon supporting said compressing mechanism, said driving mechanism comprising a motor, an extended shaft on said motor journaled in said depending portion and connected with said compressing mechanism, a condensing chamber surrounding said depending

portion, means for cooling said condensing chamber, a port in said depending portion connecting said housing with said compressing mechanism, port means connecting said compressing mechanism with said condensing chamber, means permitting gaseous refrigerant to flow through said



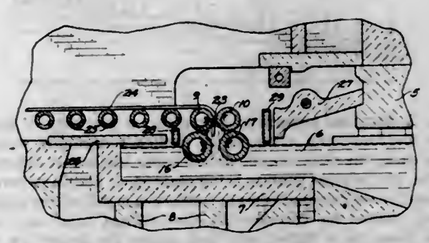
driving mechanism in said housing, whereby said compressing mechanism operates to force said refrigerant, under pressure, into said condensing chamber for liquefying said refrigerant, and means for utilizing said refrigerant for absorbing heat.

1,807,872. REFRIGERATION APPARATUS. OSBORNE I. PRICE, Frederick, Md., assignor to John S. McCarthy, Weehawken, N. J. Original application filed Oct. 20, 1925, Serial No. 24,599. Divided and this application filed Jan. 16, 1931. Serial No. 509,232. 4 Claims. (Cl. 62—115.)



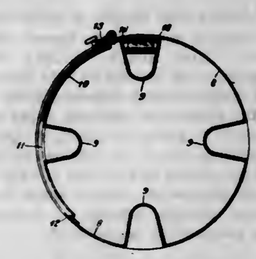
1. In a refrigerating apparatus the combination of a driving mechanism, a compressing mechanism actuated by said driving mechanism, a casing for said compressing mechanism, a cooling coil outside of said casing for receiving compressed medium from the compressing mechanism, a connection from the cooling coil to said casing for discharging cooled compressed medium from said coil into said casing, and discharge means for medium compressed by said compressing mechanism and discharged into said casing from said cooling coil.

1,807,873. METHOD AND APPARATUS FOR ROLLING SHEET GLASS. JOSEPH A. REECE and WILLIAM E. NOBBE, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 4, 1927. Serial No. 230,937. 10 Claims. (Cl. 49—33.)



6. In sheet glass apparatus, a receptacle containing a mass of molten glass, a pair of rotatable sheet forming rolls positioned thereabove and arranged to create a sheet forming pass, and a pair of positively rotatable feeding rolls arranged beneath the forming rolls and disposed within the mass for supplying a relatively large body of glass to said sheet forming pass partly under hydrostatic pressure and partly by a positive feeding action.

1,807,874. ATTACHMENT FOR WASHING MACHINES. HAROLD B. ROBBINS, White Plains, N. Y. Filed May 26, 1930. Serial No. 455,526. 6 Claims. (Cl. 68—18.)



1. A washing machine comprising a rotary mounted receptacle for goods, a plurality of inwardly disposed hollow ribs extending longitudinally of the receptacle, and an auxiliary receptacle for test goods, said auxiliary receptacle having certain of its walls formed from one of said ribs.

1,807,875. METHOD OF ELECTROPLATING AND PRODUCT THEREOF. KARL DAVIS ROBINSON, New York, N. Y., assignor to The Meriden Gravure Company, Meriden, Conn., a Corporation of Connecticut. Filed Oct. 21, 1926. Serial No. 143,303. 9 Claims. (Cl. 204—6.)



3. The method of electroplating on metal articles which consists in coating the metal with gelatin prior to the electroplating step, drying the gelatin, causing the gelatin to swell to the required condition of permeability, then plating on the articles a metal through the gelatin in an electrolytic bath, and drying the gelatin coating.

5. A printing plate having a permeable colloid coating secured thereto by electroplating with a metal through the interstices of the colloid which forms part of the finished plate.

1,807,876. FLOTATION APPARATUS. JOSEPH P. RUTH, Jr., Denver, Colo. Filed Feb. 28, 1928. Serial No. 253,978. 9 Claims. (Cl. 209—169.)



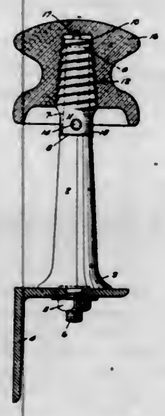
1. A flotation apparatus comprising a plurality of flotation machine cells arranged in groups comprising several cells each, the cells of each group being located at different levels, the several groups being located at different levels, means for delivering the pulp to the lower cell of the higher group, means for transferring the tailings from each cell in a group to a higher cell, and means for delivering the froth from all of the cells of the upper group to the lowermost cell of the next lower group.

1,807,877. MOTION PICTURE. SYDNEY J. SANFORD, Philadelphia, Pa., assignor of one-half to Chester W. Larner, Philadelphia, Pa. Filed May 12, 1926. Serial No. 108,481. 4 Claims. (Cl. 88—16.)



1. A motion picture film having a series of successive picture spaces, each of said picture spaces having a plurality of spaced portions and a plurality of successive independent exposures on groups of said spaced portions each group and corresponding exposure being distributed across the picture space, the portions being so small as to appear to the eye to merge together, successive groups forming a continuous series of motion pictures across each of said picture spaces and groups of said spaced portions across each successive picture space being of one continuous motion picture whereby a relatively short length of motion picture film is provided.

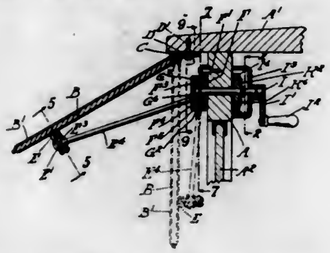
1,807,878. INSULATOR SUPPORTING POST. CARL P. SEYLER, Pittsburgh, Pa. Filed Feb. 16, 1927. Serial No. 168,617. 2 Claims. (Cl. 173—321.)



1. In combination with a supporting arm having an outer enlarged circular terminal collar, an insulator support having a threaded sheet metal arbor consisting of two spaced apart semi-circular threaded portions fixedly mounted on the supporting arm and bearing by their outer circular embracing ends against a substantial portion of said collar with an inner compressible portion.

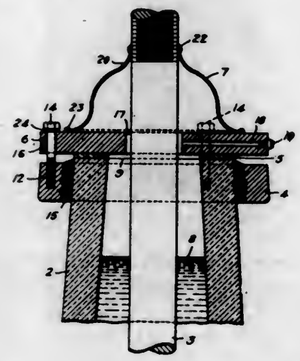
2. In an insulator support, the combination with a supporting post having a terminal collar extending laterally beyond the shank portion and a separable endmost abutment for limiting engagement with an insulator, of a two-part threaded arbor bearing against the collar at its outer end and fixedly connected at its inner end with the post and spaced apart by oppositely located clearahce slots.

1,807,879. ADJUSTABLE VISOR. ARTHUR R. SIMON, La Porte, Ind. Filed May 19, 1926. Serial No. 110,058. 8 Claims. (Cl. 296—95.)



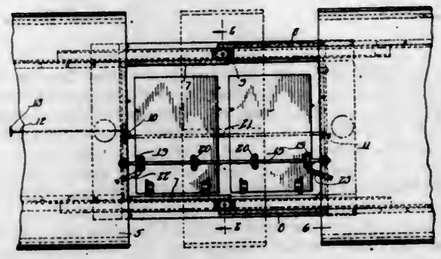
8. In an adjusting mechanism, the combination with a visor hinged along its upper horizontal edge to the upper transverse portion of a vehicle body, and swingable outwardly relative thereto, of a pair of links each operatively connected at its outer end to the inner side of said visor to swing relative thereto, a pair of devices slidably mounted on the upper transverse portion of the body above the line of vision and below the hinge for said visor to move in a plane substantially parallel to the axis on which said visor swings and each pivotally connected at its outer portion to the inner end of the adjacent link, whereby movement of said devices simultaneously outwardly or simultaneously inwardly will effect adjustment of and means mounted on the upper transverse portion of the vehicle body for simultaneously moving said devices.

1,807,880. BUSHING STRUCTURE. ALEXANDER A. SKVORTZOFF, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 14, 1928. Serial No. 326,013. 9 Claims. (Cl. 173—318.)



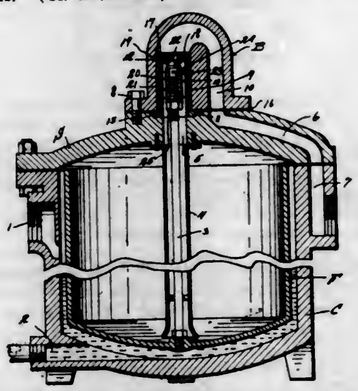
5. A bushing comprising a tubular insulating structure, a ring over an end of said structure, means hermetically sealing said ring to said end, a conductor extending through, and permitted to have movement relative to, said ring, flexible means between, and intimately united to both the conductor and the ring for hermetically sealing the same to each other, and means for securing the tubular structure and the ring to each other.

1,807,881. EXTENSION TABLE. HARRY SISKIN, Los Angeles, Calif. Filed Nov. 21, 1927. Serial No. 234,707. 9 Claims. (Cl. 45—112.)



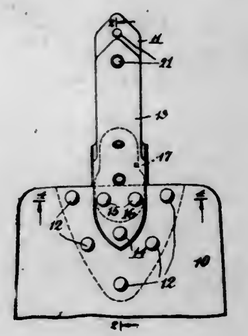
1. An extension table comprising movable top sections and means for moving them oppositely in unison, an extension leaf mounted eccentrically below the top in concealed position and movable laterally for centering it between the top sections in extended position, and means in connection with one of the table top sections for moving the extension leaf to its eccentric position when the top sections are moved apart.

1,807,882. STEAM TRAP. DAVID A. SMELSER, Bristol, Va. Filed Feb. 27, 1930. Serial No. 431,847. 3 Claims. (Cl. 137—103.)



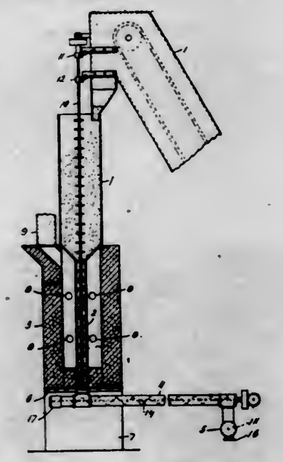
1. A steam trap comprising a casing having an opening in its top, a float within the casing carrying a stem extending out through the opening in the top, a bonnet detachably secured to the top wall of the casing and having a bore in communication with the opening in said top wall, said bonnet and top wall having an outlet leading from the bore of the bonnet, a sleeve snugly engaging within the bore of the bonnet, the outer end of the sleeve having an inturned flange, the inner portion of the sleeve having an outturned flange, the bore of the opening in the top wall of the casing being enlarged to provide a rabbet to receive said flanged end of the sleeve, a valve seat retainer snugly fitting within the sleeve and also engaging with the rabbet, a valve member clamped between the inturned flange of the sleeve and the adjacent end of the valve seat retaining sleeve when the bonnet is in applied position upon the top wall of the casing, and a valve carried by the stem for cosction with the valve seat.

1,807,883. BACK STRAP SHOVEL. LEWIS E. WEBSTER, Wyoming, Pa., assignor to The Wyoming Shovel Works, Wyoming, Pa., a Corporation of Pennsylvania. Filed May 16, 1925. Serial No. 30,844. 5 Claims. (Cl. 306—24.)



1. A shovel comprising a blade portion, a front and back strap each separate from the blade but each secured thereto and receiving therebetween an inserted wooden shank and a curved reinforcing element fitted within said front strap portion and adjacent the wooden shank and extending downwardly and bridging the top of the blade portion to prevent contact by said wooden shank portion to bridge the shoulder formed by the blade at the point where the front strap overlaps the top of the blade.

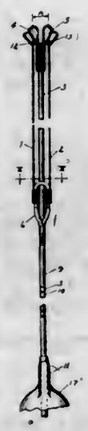
1,807,884. MANUFACTURE OF CARBON BLACK. WILLIAM BRYAN WIEGAND, South Beach, Conn. Filed Feb. 18, 1929. Serial No. 340,983. 10 Claims. (Cl. 134—60.)



1. A method of improving the properties of impingement carbon blacks in vulcanized rubber compounds which comprises calcining the impingement carbon black at a temperature not less than about 1200° F. in a non-oxidizing atmosphere.

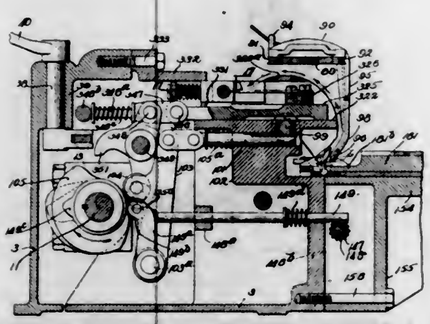
8. An impingement carbon black product produced by calcining impingement carbon black at a temperature not less than about 1200° F. in a non-oxidizing atmosphere.

1,807,885. FILAMENT MOUNTING. WILLIAM WEINGARTNER, Irvington, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Aug. 31, 1929. Serial No. 389,697. 2 Claims. (Cl. 250—27.5.)



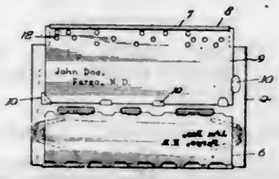
1. In a filament mount employing preformed twin inverted V-shaped filaments in spaced parallel relationship and electrically connected in parallel, means for setting up a substantial strain free parallel spaced relationship and parallel electrical connection with leading in wires of the filament mount which comprises twin inverted U-shaped filament connectors integral with the filament lead wires of said filament mount, said U connectors being spaced in parallel relationship in vertical planes apart substantially a distance equal to the distance apart of the ends of the preformed filament legs, and in a plane at right angles to the plane of said parallel filaments, the outer edges of the legs of said U connector being shaped to present parallel surfaces in the same vertical plane as the apex of said mounted preformed filament.

1,807,886. PROCESS OF AND APPARATUS FOR TIPPING LACES. GEORGE H. ARMITAGE, Providence, R. I., assignor to United Lace & Braid Manufacturing Co., Providence, R. I., a Corporation of Rhode Island. Filed Aug. 23, 1927. Serial No. 214,935. 72 Claims. (Cl. 18—1.)



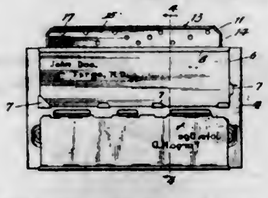
1. That process of tipping laces which comprises as steps measuring off a length of lace material from a supply, severing said length at substantially its middle point, deflecting the severed end portions out of line with the remainder of the material, and applying stiffening material to said deflected portions.

1,807,887. PRINTING DEVICE. JAMES A. BAILEY, Washington, D. C., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,656. 2 Claims. (Cl. 101—369.)



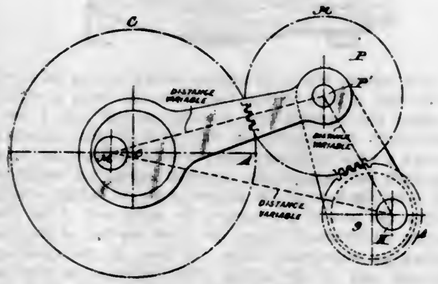
1. A printing device comprising a frame having an integral extension at the top thereof and spaced from the end edges of the frame, said extension being provided with a multiplicity of openings therein for classification or selection purposes and having its upper edge bent over to form a strengthening bead, retaining devices on the frame below said extension, and a card detachably engaged with said bead and retaining devices and covering all the openings in said extension, said card having one or more openings therein registering with corresponding openings in the extension.

1,807,888. PRINTING DEVICE. JAMES A. BAILEY, Washington, D. C., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,657. 3 Claims. (Cl. 101—369.)



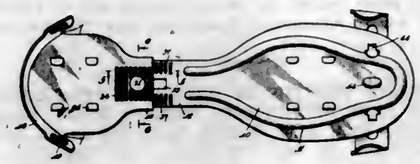
1. A detachable tab for a printing device comprising a tab frame having a plurality of openings therein and means for mounting said frame on a printing device, a card, and retaining means on the tab frame to receive the card, said card having one or more openings registering with corresponding openings in the tab frame.

1,807,889. MECHANICAL MOVEMENT. EDOUARD BELIN, Paris, France. Filed Dec. 17, 1928, Serial No. 326,555. and in France Jan. 26, 1928. 5 Claims. (Cl. 74—41.)



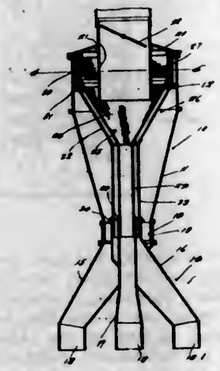
1. A mechanical movement comprising, in combination, a driving shaft, an eccentric pinion on said driving shaft, a driven shaft, an eccentric pinion on said driven shaft, a centrally mounted pinion interconnecting said eccentric pinions, said interconnecting pinion being freely displaceable edgewise in its own plane during the rotation of the driving pinion.

1,807,890. SKATE. SAMUEL I. BERGER, Newark, N. J. Filed Feb. 3, 1928. Serial No. 251,535. 10 Claims. (Cl. 208—175.)



1. A skate chassis comprising a sole piece and a heel piece, said pieces having marginal guide conformations lengthwise thereof for adjustment to the length of the foot, and clamp means for securing the skate in adjusted position.

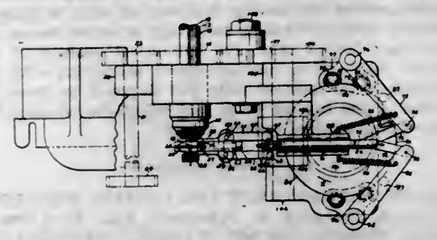
1,807,891. COMBINED COLLECTOR AND SEPARATOR FOR FEED MILLS. ALBERT H. BOTTORFF, St. Joseph, Mo. Filed May 7, 1929. Serial No. 361,159. 1 Claim. (Cl. 209—144.)



A combined collector and separator for feed mills comprising a truncated conical casing for the reception of feed having annular upper and lower portions, the annular upper portion being provided with an inlet opening, a conduit disposed tangentially to the upper portion and communicating therewith through the opening for discharging feed thereinto, a pair of spaced, truncated feed separating screens disposed concentrically in the casing and having cylindrical upper portions disposed in the annular upper portion of the casing, the upper portions of the screens having openings therein adjacent the inlet opening for the passage of the feed, a ledge mounted in the annular portion of the casing beneath the inlet opening and extending therefrom over adjacent portions of the upper ends of the truncated portions of the screens, the innermost screen having the portions of the cylindrical portion thereof which are adjacent the sides of the inlet opening extending outwardly past the adjacent edges of the outermost screen to the casing, and a deflector disposed tangentially in the casing above the ledge and in alignment with the conduit for directing the feed inwardly relative to the periphery of the casing.

1,807,892. GRID WINDING MACHINE. ROBERT BRINDLE, Jr., West Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Feb. 9, 1929. Serial No. 338,661. 10 Claims. (Cl. 140—71.)

1. A machine for making grids comprising means for holding a support wire, means for winding a series of turns of a grid wire around said support wire, means for securing said turns to said support wire; means for terminating the winding operation, means for winding another series



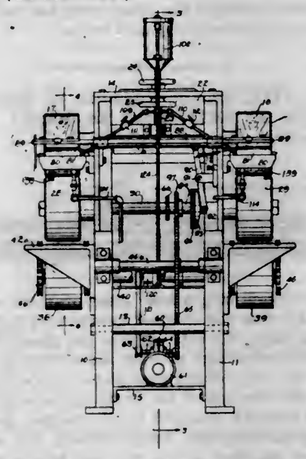
of turns about said support means for actuating said third mentioned means to secure said last mentioned turns to said support wire.

1,807,893. CURTAIN SUPPORT. RICHARD R. BRUCKNER, New York, N. Y. Filed Aug. 26, 1929. Serial No. 388,325. 12 Claims. (Cl. 156—46.)



10. An apparatus of the character described, including an elongated track member, a plurality of curtain supporting brackets, each bracket being provided with a ball adapted to roll on said track member, a motor supported near one end of said track member, pulleys at one end of said track member, operating means between said motor and said pulleys including a worm drive, operating cords connecting said curtain supporting brackets and extending over said pulleys and automatic means for maintaining said cords under tension.

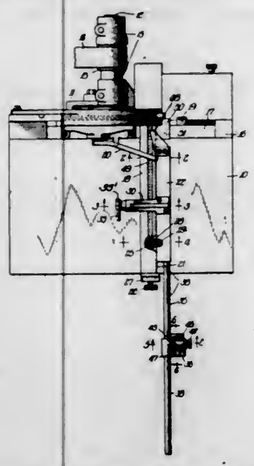
1,807,894. SURFACE DECORATING MACHINE, APPARATUS AND METHOD. LLOYD V. CASTO and GEORGE E. LANG, Detroit, Mich., assignors to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 16, 1926. Serial No. 129,443. 28 Claims. (Cl. 101—154.)



1. In a graining machine, the combination of a machine frame, a metallic pattern roll disposed on each side

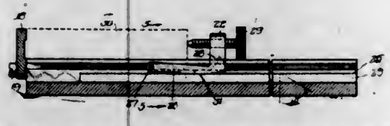
of the frame, a take-off roll disposed beneath each pattern roll and rotatably contacting therewith, a cushion roll spaced from and disposed beneath each take-off roll a common means for driving both sets of rolls, a pigment applying device including positively actuated means for removing pigment from the cylindrical surface of the pattern rolls and a cleaning device contacting with the surfaces of the take-off rolls and disposed to clean the surface of the take-off rolls, said rolls being arranged in overhanging relation to said frame.

1,807,895. ATTACHMENT FOR CUTTING MACHINES. EDWARD CHESHIRE, St. Petersburg, Fla. Filed Feb. 9, 1927. Serial No. 166,869. 5 Claims. (Cl. 29—69.)



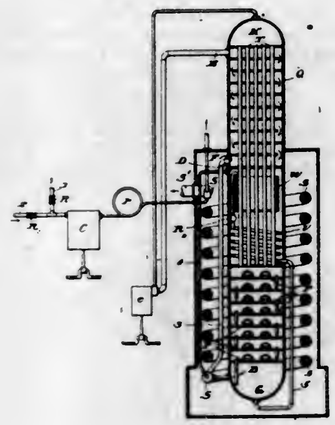
1. In a device of the character described, the combination of an abutment member adapted to be positioned to project in angular relationship to the plane of the cutter of cutting mechanism, said abutment member having a bearing surface and being provided with a screw-threaded shaft, a removable supporting member having means adapted to engage said shaft whereby rotation of said shaft will communicate longitudinal movement to said supporting member, and yieldable means for holding said supporting member in engagement with said bearing surface, said supporting member comprising an elongated member and an abutment member adjustably carried by said elongated member for supporting the extremities of work to be operated upon by said cutter.

1,807,896. VISE. EDWARD CHESHIRE, St. Petersburg, Fla. Filed July 25, 1927. Serial No. 208,077. 3 Claims. (Cl. 90—60.)



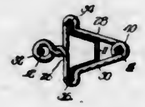
3. A vise comprising a base plate provided at it supper face with an open top channel intersecting opposite edges of the base plate, the side walls of the channel being provided with longitudinal grooves, an upstanding fixed jaw secured to one edge of the base plate and extending transversely across one end of the channel, a movable jaw having a base slidably mounted in the channel and provided with an upstanding arm rising through the open top of the channel, the base of the movable jaw being provided with trunnions slidable in the grooves and upon which the movable jaw may be swung, said movable jaw being insertable and removable through the open end of the channel opposite the fixed jaw, the bottom of the channel having teeth, the bottom of the movable jaw having teeth for selective engagement with the teeth of the channel, and a set screw carried by the upstanding arm of the movable jaw in substantial parallelism with the base plate.

1,807,897. PROCESS OF OBTAINING SUBSTANTIALLY PURE HYDROGEN. GIOVANNI CICALI, Bologna, Italy. Filed June 19, 1925, Serial No. 38,385, and in Italy Feb. 16, 1925. 7 Claims. (Cl. 183—115.)



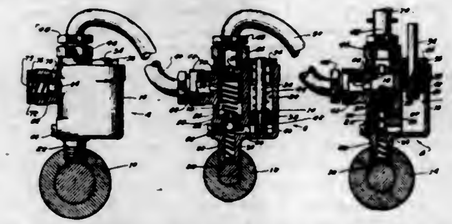
1. The process of recovering hydrogen practically free from carbon monoxide and containing only traces of other gases from a mixture containing hydrogen and carbon monoxide such as water gas or the like, comprising removing a substantial portion of the carbon monoxide from the mixture by preliminary purification, diluting said partially purified mixture with a gas which liquefies at a higher temperature than that of hydrogen and lower temperature than that of carbon monoxide, the amount of said diluent gas being materially greater than the amount of carbon monoxide remaining after the preliminary purification, compressing and cooling said diluted mixture, and separating the hydrogen from said cooled mixture by fractionally condensing the carbon monoxide and diluent gas therefrom while in said compressed condition.

1,807,898. WIRE CLAMP. JOHN M. DAVIDSON, Duluth, Minn. Filed Sept. 19, 1928. Serial No. 307,020. 5 Claims. (Cl. 189—31.5.)



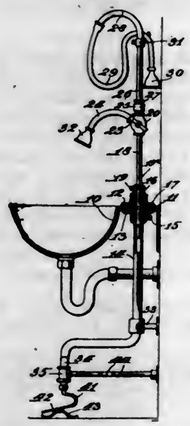
1. An integral wire anchoring clamp of the character described comprising, in combination, a connecting portion formed of resilient material, and a plurality of integral gripping members extending outwardly from opposite ends of the connecting portion, in substantially parallel relation with one another, and adapted by means of the resilient portion to be sprung apart in order to straddle a support, said gripping members being provided with cooperating wire engaging terminal portions.

1,807,899. LUBRICATING APPARATUS. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 11, 1927. Serial No. 232,550. 7 Claims. (Cl. 184—7.)



1. In combination, a plurality of bearings to be lubricated, measuring devices connected in series, one associated with each of said bearings, each of said devices being adapted to eject a measured charge of lubricant and thereafter open a port to the next device of the series, a resilient storage chamber communicating at all times with the discharge port of each of said devices and with its associated bearing, and a check valve interposed between the measuring device and the storage chamber to prevent return flow from the storage chamber to the measuring device.

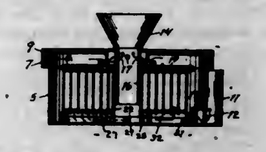
1,807,900. FLUID FLOW CONTROL FIXTURE. GLENN O. DOUGHERTY, Los Angeles, Calif. Filed July 18, 1927. Serial No. 206,510. 11 Claims. (Cl. 4—148.)



7. The combination with a support of a tube having its upper portion mounted for vertical adjustment in said support, a pedally actuated valve for controlling the admission of fluid to the lower end of said tube, a second tube having its lower portion mounted for vertical and rotary adjustment in the upper portion of the first-mentioned tube, a third tube mounted for rotary movement on the upper portion of the second-mentioned tube, a branch tube leading from the upper portion of the second-mentioned tube, a branch tube leading from the upper portion of the third-mentioned tube, and a valve arranged in the upper portion of the second-mentioned tube for directing flow of fluid thru the first-mentioned branch tube or thru the upper one of the three tubes and its branch tube.

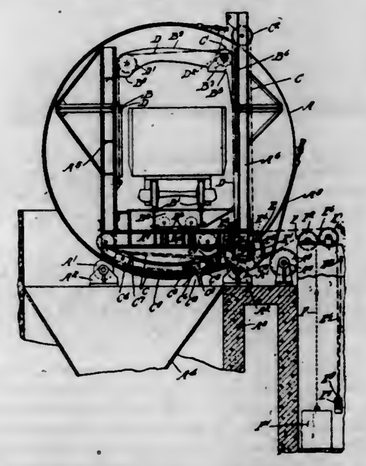
1,807,901. DEVELOPING, FIXING, AND WASHING TANK. CLAYTON L. DREW, San Francisco, Calif. Filed Dec. 7, 1927. Serial No. 238,312. 3 Claims. (Cl. 95—90.5.)

1. In a device of the character described, a tank comprising a cup-shaped portion, a cover adapted to tightly engage the said tank, a tubular member extending through said cover and terminating closely adjacent the bottom of said tank, a reel adapted to be positioned within said tank, said reel comprising a tubular hub portion adapted to surround said tubular member and having a top portion
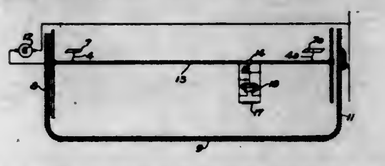


and a bottom portion secured thereto, the adjacent faces of said top portion and said bottom portion each having a spiral groove formed therein, film holding means carried on said hub portion and means for circulating a liquid poured through said tubular member over the surface of the film carried by said grooves.

1,807,902. EXTERNAL COUNTERWEIGHT DEVICE FOR GONDOLA CAR DUMPERS. WILLARD E. ERICKSON, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 19, 1927. Serial No. 240,994. 21 Claims. (Cl. 214—55.)



1. In a car dumper, a cradle adapted to receive a car, a support for the cradle, clamp holding counterweights mounted in the support, and means for lowering the clamps onto the car through the action of gravity at the beginning of the turning movement of the cradle and means operative only after a predetermined movement of the cradle for connecting the holding counterweights to the clamps.

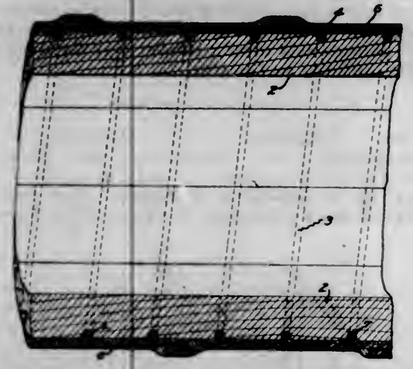
1,807,903. PRESERVING UNDERGROUND PIPING. DOZIER FINLEY, Berkeley, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed May 17, 1926. Serial No. 109,539. 11 Claims. (Cl. 171—316.)



1. A system of pipes in a medium carrying a plurality of currents, insulating covering on said pipes, non-conduc-

tive couplings electrically separating said system of pipes into sections, shunts of determinedly adjusted resistance around said couplings, switches in combination with said shunts for controlling flow of current around the couplings, and a plurality of bleeders electrically connecting portions of said system of pipes to portions of said medium which are at lower electrical potential than the said portions of said system of pipes, whereby the electrolytic corrosion of said system of pipes may be materially reduced.

1,807,904. COVERING FOR STAVED PIPES. DOZIER FINLEY, Berkeley, Calif., assignor to The Paraffine Companies, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Aug. 10, 1927. Serial No. 212,008. 5 Claims. (Cl. 137—75.)

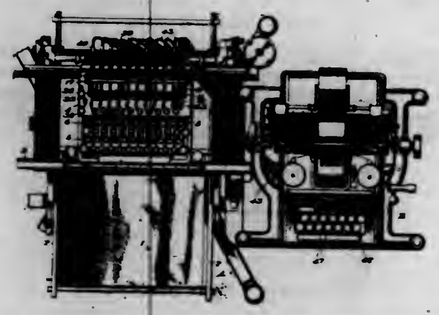


1. A pipe having a recess in the surface thereof and a second preformed recess communicating therewith, binding means seated in the first recess, and means seated in the second recess for clamping said binding means.

1,807,905. WATERPROOF EXPANSION JOINT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Mar. 20, 1924. Serial No. 700,734. 7 Claims. (Cl. 106—31.)

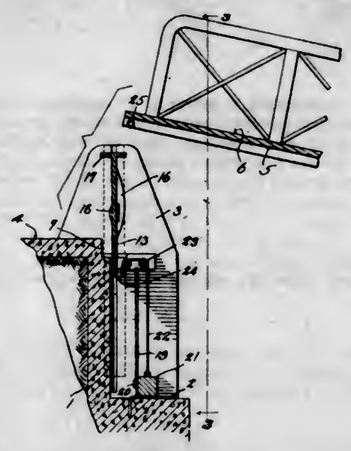
1. The process of making elastic packing material characterized by preparing a quantity of bituminous compound in a fluid condition, treating fibrous material with a substance impervious to the bituminous compound, incorporation the treated fibrous material in the bitmuinous compound, and solidifying the bituminous compound.

1,807,906. COMBINED RECORDING AND COMPUTING MACHINE. HARRY A. FOOTHORAP, Harrisburg, Pa., assignor to Elliott-Fisher Company, a Corporation of Delaware. Filed Apr. 12, 1926. Serial No. 101,500. 12 Claims. (Cl. 235—59.)



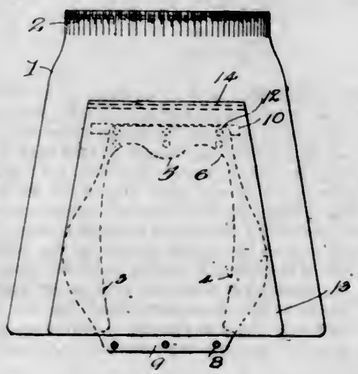
12. The combination with a recording mechanism and a computing mechanism and including a travelling and a stationary set of keys, respectively, of mechanical operating connections between the two sets of keys operative to transmit motion from one set of keys to the other in any position of said travelling set, and means for disconnecting said operating connections from either machine to permit independent operation of either set of keys.

1,807,907. BRIDGE GATE. ARTHUR FOSHAY and CLEO LOVELACE, Aberdeen, Wash. Filed June 29, 1929. Serial No. 374,814. 2 Claims. (Cl. 14—58.)



1. The combination with a pier or abutment and a bridge section mounted to swing upwardly and downwardly relative thereto, of stanchions for receiving the section therebetween, guides in the pier and stanchions, a gate mounted for up and down sliding movement in the guides, yielding means for holding the gate normally elevated between the stanchions to constitute a barrier, and means providing a rolling contact between one end of the bridge section and the top of the gate for depressing the gate as the end of the bridge section moves downwardly between the stanchions.

1,807,908. UNDERWEAR. ROSE FREED, San Diego, Calif. Filed Oct. 23, 1929. Serial No. 401,861. 1 Claim. (Cl. 2—213.)



The combination with a skirt having a divided front and a suspended skirt panel attached to the skirt above said divided front, of a removable bloomer panel, detachable means for fastening the rear end of the bloomer-panel at the inside of the skirt, and means for detachably fastening the front end of the bloomer-panel to the front outside of the skirt beneath the skirt panel.

1,807,909. PNEUMATIC TIRE AND METHOD OF MANUFACTURING THE SAME. JOHN R. GAMMETER, Akron, Ohio. Filed Apr. 5, 1928. Serial No. 267,505. 9 Claims. (Cl. 154—14.)



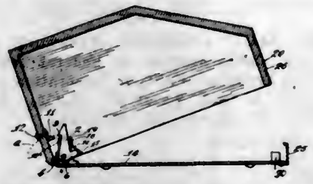
3. The process of constructing a tire by the flat band method consisting in cutting two layers of fabric of a width greater than twice the width of a ply in the finished carcass, wrapping said layers about a drum to form a two ply band, the edges of the layers being offset, applying beads at spaced points on opposite sides of the center line of the band, and folding the wings of the layers over the beads from opposite directions whereby six plies of fabric are obtained at the tread portion of the tire, each layer of fabric having its edges lying at and secured in the beads of the tire.

1,807,910. COVER CLOSURE. MAX GARBELL, Chicago, Ill., assignor to Victor Adding Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1928. Serial No. 251,027. 5 Claims. (Cl. 45—68.2.)



1. In a case for portable typewriters and the like consisting of a cover and a base, means for removably attaching said cover to said base comprising a leaf spring secured to said base and extending substantially vertically from one edge thereof and a member secured to the corresponding side wall of said cover and projecting therefrom to engage said spring.

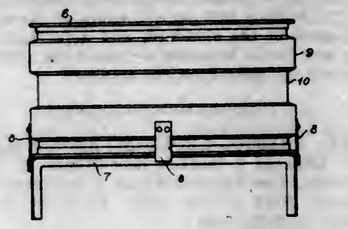
1,807,911. COVER CLOSURE. MAX GARBELL, Chicago, Ill., assignor to Victor Adding Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1928. Serial No. 251,028. 4 Claims. (Cl. 45—68.2.)



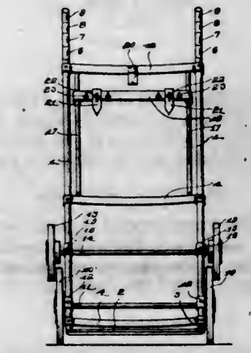
1. In a case for portable typewriters and the like consisting of a base and an inverted boxlike cover therefor, means for removably securing said cover over said base comprising separable parts respectively mounted on the rear portion of said base and on the inner face of the rear wall of said cover, one of said parts comprising a latching member, a mounting member, a pivotal support for said latching member carried by said mounting member, and a separate spring member coacting between said latching member and said mounting member, and the other of said parts comprising a rigidly mounted angle-iron adapted to be engaged by said latching member.

1,807,912. CONTAINER. SOREN HANSSON, Butler, Pa., assignor to Standard Steel Car Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 20, 1929. Serial No. 379,666. 2 Claims. (Cl. 220—12.)

1. A container having a side wall composed of interiorly and exteriorly-disposed channel portions that extend horizontally and have their bottoms substantially flat, the total width of the inner channel portions being substantially equal to the total width of the outer channel portions and being connected thereto by relatively narrow flange-like portions.

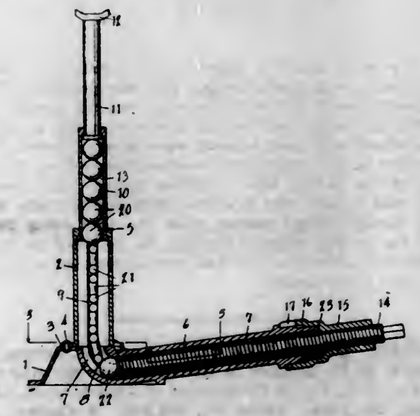


1,807,913. HAND TRUCK. MATHEW J. HOLLOWOOD, Rochester, N. Y. Filed July 9, 1925. Serial No. 42,598. 2 Claims. (Cl. 280—53.)



2. A hand truck comprising a frame, an abutment on the frame, a slide guided on the frame toward and from the abutment and receptacle engaging devices adjustable toward and from each other on the slide.

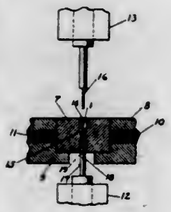
1,807,914. LIFTING JACK. ARTHUR C. HOPKINS, Niles, Mich., assignor to National-Standard Company, Niles, Mich. Filed May 18, 1927. Serial No. 192,267. 16 Claims. (Cl. 254—98.)



11. A standard, a lifting member in the standard and comprising two telescoping parts, a series of thrust members adapted to enter one of the said telescoping parts to

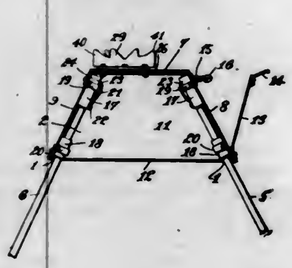
extend the other therefrom, a second series of thrust members in line with the first series and adapted to enter the standard to project the lifting member therefrom, means for holding said second series of thrust members in alignment in the standard, and actuating means for moving said thrust members to extend the lifting member and project the same from the standard.

1,807,915. PRESSURE FORMING REFRACTORY ARTICLE. CHARLES V. IRZDELL, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Dec. 29, 1928. Serial No. 329,090. 13 Claims. (Cl. 25—156.)



1. The step in the method of forming refractory articles from powdered refractory materials which comprises augmenting the cohesive properties of the individual particles thereof prior to forming with a coating of an organic wax.

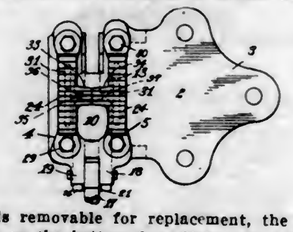
1,807,916. PIPE VISE STAND. LOUIS W. JONES, New York, N. Y., assignor to Hollands Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Oct. 23, 1929. Serial No. 401,936. 1 Claim. (Cl. 312—1.)



In a work stand, a closed casing forming the top of the stand, said casing having one side providde with a normally closed and locked access door, leg sockets fixed within the casing, said casing having openings in its bottom alined with said sockets, each of said sockets being provided with a spring latch releasable only from the interior of the casing, legs extending through said openings into said sockets and provided with notches into which said spring latches engage upon the legs being pushed into the sockets whereby the legs can be fitted to the top without opening the door and can be removed only upon the door being opened.

1,807,917. CHAIN PIPE VISE. LOUIS W. JONES, New York, N. Y., assignor to Hollands Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Oct. 23, 1929. Serial No. 401,937. 4 Claims. (Cl. 81—19.)

1. In a chain pipe vise, base plate and a pair of standards spaced apart on the base, each standard having the upper wall provided with a threaded hole in each end portion and a slot between the holes, and a jaw piece fitting the upper wall of each standard with a bolt hole in each end portion to receive bolts that screw down into said bolt holes in the standards to secure the jaws on



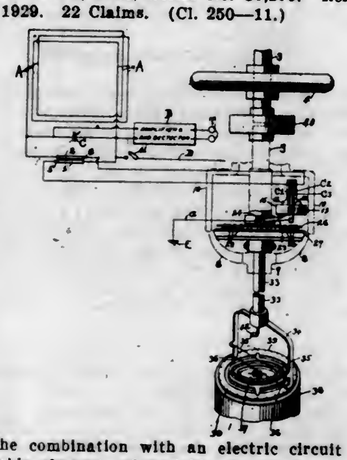
the standards removable for replacement, the jaw piece having a rib on the bottom face fitting the said slot between the holes in the standard upper face, the upper face of each jaw being of angular form with cross teeth to grip the pipe.

1,807,918. ROOFING SHINGLE AND METHOD OF MAKING SAME. LESTER KIRSCHBRAUN, Leonia, N. J., and OTTO A. HEPPES, La Grange, Ill., assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Original application filed Aug. 7, 1925, Serial No. 48,840. Divided and this application filed Nov. 20, 1928. Serial No. 320,682. 7 Claims. (Cl. 91—68.)



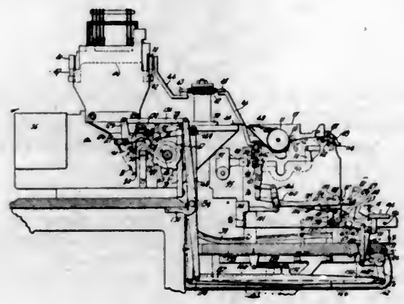
1. In the manufacture of asphalt roofing elements, a process which comprises applying a continuous layer of bituminous coating to a face of a sheet of waterproof fibrous material, said layer extending over the entire widthwise extent of said sheet, embedding grit in said coating, applying a second continuous layer of bituminous coating over said embedded grit, said second layer of coating being narrower than the width of the sheet and having the longitudinal borders thereof spaced inwardly from the marginal edges of the sheet, embedding grit in said second layer of coating, slitting the sheet longitudinally through said second coating layer and severing shingle elements from the sections formed by the slitting.

1,807,919. RADIO COMPASS. FREDERICK A. KOLSTER, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed June 6, 1925, Serial No. 35,295. Renewed Oct. 14, 1929. 22 Claims. (Cl. 250—11.)



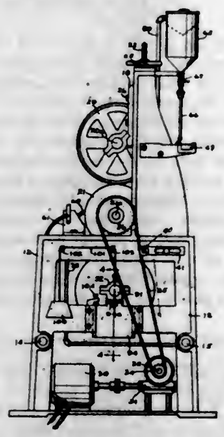
1. The combination with an electric circuit including a movable element, of variable electrical means for determining the degree of symmetry of said circuit with respect to a point therein, and means movable in response to change of position of said movable element to vary said electrical means.

1,807,920. COMBINED TYPEWRITING AND CARD-PERFORATING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed July 1, 1926. Serial No. 119,838. 42 Claims. (Cl. 164—113.)



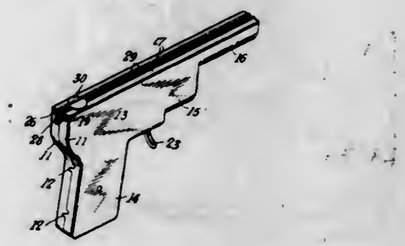
1. In a combined typewriting and card-perforating machine, the combination with perforating mechanism operative through a cycle of operations for which typing operations are preparatory and precedent, of a driver for said mechanism normally disconnected therefrom, coupling means for effecting said connection, a non-typing key remote from said means to control a certain typewriting operation, a train of linkages whereby the operation of said key will cause said coupling means to engage with the driver to actuate the perforating mechanism through said cycle of operations, and means associated with said coupling means to initiate the performance of said typing operation.

1,807,921. TRANSFER MACHINE. GEORGE E. LANG and LLOYD V. CASTO, Detroit, Mich., assignors to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 11, 1926. Serial No. 134,807. 6 Claims. (Cl. 105—154.)



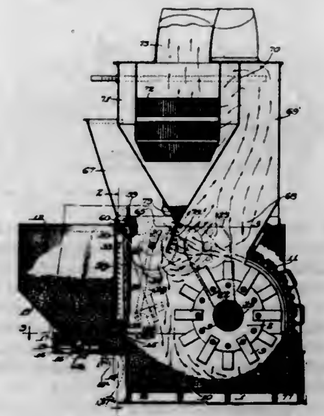
1. In a transfer machine of the character described the combination of an intaglio or engraved roll and shaft, a transfer roll contacting therewith, an ink applying means disposed above the transfer roll and driven by the intaglio roll shaft and a resilient roll operatively spaced out of contact with the transfer roll and arranged to urge the work into contact with the transfer roll, pivotally mounted means for yieldingly rotatably supporting said resilient roll and means for positively driving the transfer roll.

1,807,922. TOY PISTOL. MICHAEL R. LA SALA and FRANK SIMONE, New York, N. Y. Filed Oct. 21, 1929. Serial No. 401,078. 4 Claims. (Cl. 124—14.)



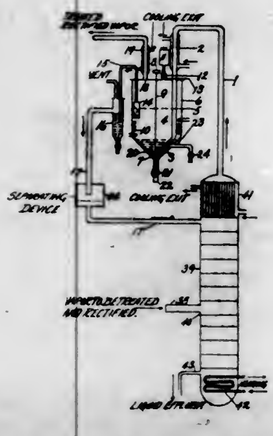
1. A toy pistol comprising a hollow body having a handle, lock and barrel, a spur extending outwardly from the rear of said body, there being openings above the spur at the end of the barrel and lower wall of the lock, a member having a hook extending through the barrel and a flattened loop extending through the opening above said spur, a trigger formed on said member extending through the opening in the lock, and an elastic band engaged by said hook at one end and by said spur at the opposite end, said band being disengageable from said spur by the flattened loop upon drawing the trigger rearwardly.

1,807,923. MATERIAL TREATING DEVICE. HENRY G. LYKKEN, Minneapolis, Minn. Filed Aug. 19, 1927. Serial No. 214,064. 16 Claims. (Cl. 83—11.)



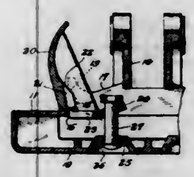
1. In a material reducing device, a reducing chamber, a hopper having a lateral opening communicating with said chamber, a slidably mounted feeder member forming the bottom of said hopper and movable into and out of said opening so as to feed material into said reducing chamber, and feeder control means having an actuator member lying in the path of movement of the material being fed.

1,807,924. PROCESS FOR RECTIFYING AND TREATING HYDROCARBON VAPORS. PAUL LA FRONE MAGILL, Niagara Falls, N. Y., assignor, by mesne assignments, to The Roessler & Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 25, 1927. Serial No. 235,491. 10 Claims. (Cl. 196—28.)



5. The process comprising passing hydrocarbon vapors from a rectifier into contact with a treating medium consisting of alkali metal in liquid hydrocarbon, removing part of the treated hydrocarbons as vapor and part as liquid freed of alkali metal and passing the latter into the upper portion of said rectifier to serve as reflux liquid and removing treatment by-products with the higher-boiling liquid hydrocarbons discharged from said distilling column.

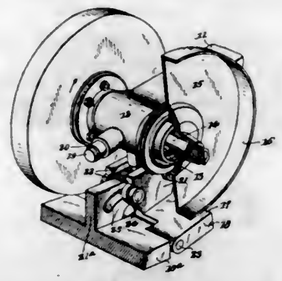
1,807,925. LINK BELT. JOHN TURNER MOORE, Reading, Pa., assignor, by mesne assignments, to Rex-Watson Corporation, Canastota, N. Y., a Corporation of New York. Filed Feb. 26, 1929. Serial No. 342,813. 12 Claims. (Cl. 305—10.)



9. A link for endless track belts having a tread portion and a wheel supporting surface with a recess in the latter, a guide member fulcrumed on said surface, a lateral extension on said guide member projecting into said recess, fastening means engaging said extension to rock the guide member on its fulcrum, and abutments on said link intermediate the fulcrum of the guide and the point at which said fastening means engage said extension.

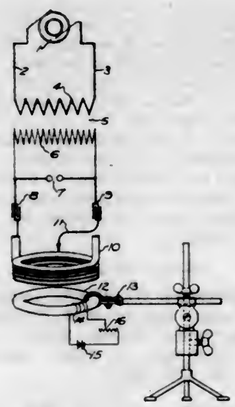
1,807,926. WHEEL GUIDE FOR TRACTION CHAINS. JOHN TURNER MOORE, Reading, Pa., assignor, by mesne assignments to Rex-Watson Corporation, Canastota, N. Y., a Corporation of New York. Filed Apr. 6, 1929. Serial No. 353,182. 2 Claims. (Cl. 305—8.)

1. In an endless track mechanism, the combination of a frame, a pair of axially spaced wheels journaled in said frame, a series of articulated links adapted to travel around said wheels, an upstanding flange on each alternate link in said series, a pair of laterally spaced guide flanges on the other alternate link of said series, and a guide member on said frame located between said wheels adapted to project between the guide flanges of the last



mentioned alternate links and adapted to pass over the upper edges of the flanges on the first mentioned alternate links.

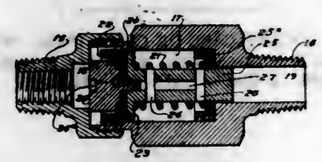
1,807,927. MERCURY VAPOR LAMP. MONTFORD MORRISON, Chicago, Ill., assignor, by mesne assignments, to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Feb. 8, 1929. Serial No. 338,477. 9 Claims. (Cl. 176—124.)



2. In an induction lamp, a source of alternating current of a frequency in excess of 5000 cycles per second, a primary inductance coil electrically associated with said source, a hollow translucent tube formed into an endless hermetically sealed envelope located adjacent said coil, said envelope containing an electrically conductive medium cooperating inductively with said coil, the path of the current in the said medium due to said inductive cooperation having a predetermined electrical self-inductance under operation, whereby the energy in the said medium under operation is partly determined by the electrical reactance of the current in the circuit of the said medium upon the current in the circuit of the aforesaid primary coil and partly by the characteristics of the primary circuit.

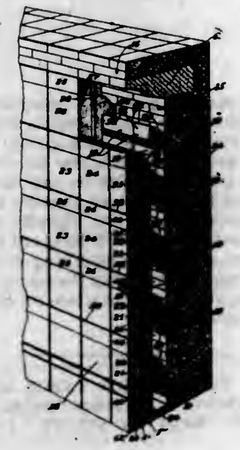
1,807,928. CHARGE DETERMINING DEVICE. HOWARD J. MURPHY, Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Original application filed Jan. 9, 1926, Serial No. 80,244. Divided and this application filed Nov. 25, 1927. Serial No. 235,492. 9 Claims. (Cl. 184—7.)

1. A charge determining lubricant device comprising a lubricant chamber, an inlet therefor, an outlet for said chamber, means movable in said chamber and normally closing said outlet and permitting lubricant to flow into said chamber from said inlet, said means movable first to



prevent inflow of lubricant and second to open said outlet, said means having an appreciable movement between closing said inlet and opening said outlet.

1,807,929. FURNACE WALL. OSCAR NYGAARD, Saugus, Mass. Filed Oct. 19, 1928. Serial No. 313,455. 22 Claims. (Cl. 72—102.)

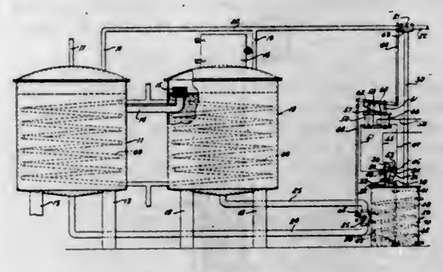


1. In a furnace wall construction a permanent wall, a facing therefor, and means on the permanent wall engaging the top and bottom of the facing, said facing from top to bottom comprising a plurality of sections at least one of which engages the section immediately above it and immediately below it on inclined plane surfaces whereby said adjacent sections may shift relatively on said surfaces to maintain the height of the facing substantially constant during furnace temperature changes.

1,807,930. METHOD OF RECLAIMING VULCANIZED RUBBER. MORRIS OMANSKY, Roxbury, Boston, Mass., assignor to Arthur D. Little, Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 12, 1928. Serial No. 261,192. 13 Claims. (Cl. 18—52.)

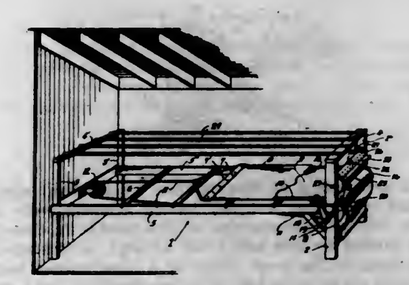
5. A method of reclaiming rubber stock which consists in digesting the stock with an alkali capable of destroying the fabric and plasticising the rubber, washing to remove caustic, then drying the washed stock, and mixing with the dried stock a small percentage of reagent containing the radical SO_4 and having an acid reaction.

1,807,931. METHOD OF AND APPARATUS FOR PREPARING COMPOUNDS. CHESTER ARTHUR PURDY, Oak Park, Ill., assignor to Western Electric Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 29, 1928. Serial No. 258,123. 8 Claims. (Cl. 134—26.)



1. A method of preparing rosin-rosin oil insulating composition, which consists in adding to a container containing a quantity of liquefied material solid ingredients of the material, liquefying the solid ingredients, allowing said liquefied material to flow continuously into a second container from which it flows to another container, automatically interrupting the flow of liquefied material into the last mentioned container, causing the material in said last container to be returned to the original liquefied material while the flow of the material continues from the first to the second container, and withdrawing the material from the second container after liquefaction of the materials.

1,807,932. DROPPING BOARD FOR USE IN POULTRY HOUSES. ORA A. RAINWATER, Marysville, Wash., assignor of one-half to Mrs. William J. White. Filed Sept. 7, 1927. Serial No. 217,959. 2 Claims. (Cl. 119—22.)



1. A device of the character described comprising a frame structure having opposite end sections, a plurality of supporting rollers in the frame, a horizontal shaft revolubly mounted in one of said end sections, a pulley on the other end section, a relatively long and short drum revoluble on the shaft, means for rotating the shaft, an arm fixed to the shaft between the drums, oppositely directed pawls fixed to the arm for engaging the drums, respectively, to rotate them with the shaft, a dropping board composed of a plurality of superimposed, flexible strips of paper, or the like, attached at one end to the larger drum, a cable attached to the other end of the board and extended over said pulley and back to the short drum and adapted to be wound onto said drum to unwind the board from its drum, and to draw it out across said supporting rollers, a scraping plate mounted to engage the top of the board as it is wound onto its drum, and a solution container mounted above the drums, having openings therein from which a solution may be discharged onto the board as it is drawn out.

1,807,933. APPARATUS FOR PHOTOGRAPHIC COPYING PURPOSES. CARL ROEHRICH, Berlin, Germany, assignor to the Firm Silfree Aktiengesellschaft (Silfree Limited) Vaduz, Liechtenstein, Germany. Filed July 6, 1929, Serial No. 376,304, and in Germany July 7, 1928. 4 Claims. (Cl. 240—1.)



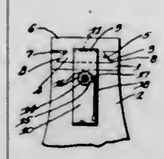
1. A light source for photographic copying purposes, comprising an electric discharge tube wherein discharges are effected through a gaseous atmosphere, magnetic means for deflecting the course of discharge within said tube and means for reflecting the light rays emitted by said tube.

1,807,934. LAWN MOWER SHARPENER. CHARLES B. ROSS, Greenleaf, Kans. Filed July 9, 1928. Serial No. 291,841. 1 Claim. (Cl. 51—263.)



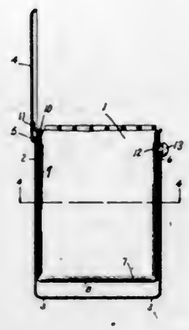
As a new article of manufacture, an abradant supplying unit comprising a brush having comparatively stiff bristles, said brush comprising an elongated body, clamping means carried by said brush and adapted to straddle the upper edges of the cross pieces of a lawn mower handle yoke, bolts for securely fastening said clamps to the yoke of a lawn mower handle and adapted to support the brush in a position to be brought at the will of the operator into and out of engagement with the cutting blades of a lawn mower.

1,807,935. SHOE-HEEL. CARL SANDLER, Milwaukee, Wis. Filed Oct. 24, 1929. Serial No. 402,181. 1 Claim. (Cl. 36—42.)



The combination with a shoe-heel having a lift attached thereto, of a tread removably attached to the lift and provided with a recess, a removable yieldable clamping plate carried by the heel and normally spaced from the heel with one end engaged in the recess, and means for holding said clamping plate in place and adjusting the pressure of said plate against the removable tread.

1,807,936. POCKET CASE OR CONTAINER. WILSON S. SAUNDERS, Kalamazoo, Mich. Filed Apr. 9, 1928. Serial No. 268,490. 2 Claims. (Cl. 206—41.)



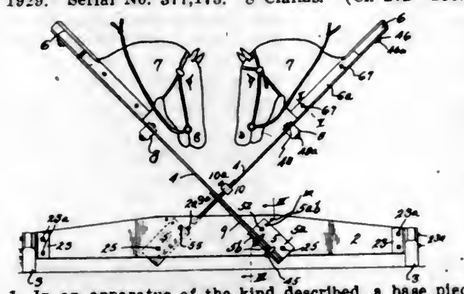
1. A pocket case or container, comprising an outer casing open at the top, a holder slidable within said casing including a bottom and flat spring front and rear vertical arms, the bottom of the holder constituting a support for articles contained within the case, and the vertical arms constituting guides, a cover hingedly secured to the rear of said outer casing, an arm hingedly secured to the top of the rear arm of the inner holder, and fixedly secured within the cover, and means for raising or lowering said holder, thereby opening or closing the cover, the resiliency of the rear spring arm serving to retain the holder in either upon or closed position.

1,807,937. COMBINATION TABLE AND IRONING BOARD. CHRISTIAN A. SELANDER, Renton, Wash. Filed Oct. 22, 1927. Serial No. 227,875. 1 Claim. (Cl. 68—10.)



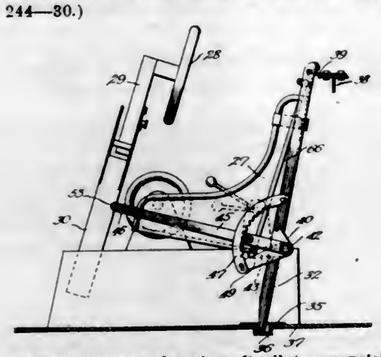
In a table of the character described, a table having a plurality of longitudinal panels forming the top thereof, one of said panels being stationary, means for hinging an intermediate panel to the said stationary panel, a panel at the side opposite the stationary panel forming a rest for material being ironed, and an ironing board on the under side of said intermediate panel, said intermediate panel adapted to raise and rest on said stationary panel.

1,807,938. EXERCISING APPARATUS. JOSEPH J. SHOEMAKER, Clawson, Mich., assignor of one-third to Kenneth H. Quail, Royal Oak, Mich. Filed July 10, 1929. Serial No. 377,173. 8 Claims. (Cl. 272—155.)



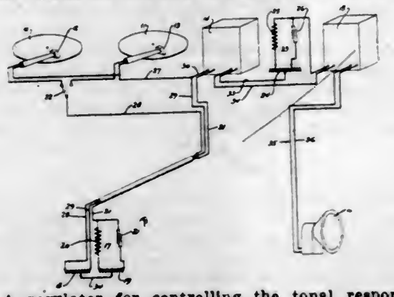
1. In an apparatus of the kind described, a base piece having two vertical sides, bar springs secured at their ends in inclined positions to opposite sides of said base piece midway between the ends of said base piece and extending in opposite directions and a hobby-horse construction on each spring.

1,807,939. AIRCRAFT INCLUDING SEAT FOR SAME. IGOR SIKORSKY, College Point, N. Y., assignor to Sikorsky Aviation Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed Jan. 19, 1929, Serial No. 333,603. Divided and this application filed May 7, 1929. Serial No. 361,177. 9 Claims. (Cl. 244—30.)



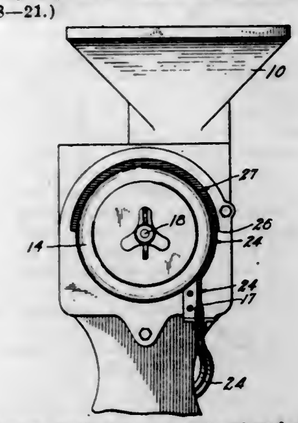
1. An adjustable seat for aircraft pilots comprising the combination of frame members, a seat slidably mounted within said frame members and a lever connected to said seat and to said frame members for sliding said seat in relation to said frame members.

1,807,940. SOUND CONTBOL APPARATUS. JOHN E. STAFFORD, Lincoln, Calif., assignor of one-third to John Calvin Moore, Lincoln, Calif., and one-third to Charles Edward Finney, San Francisco, Calif. Filed Jan. 8, 1930. Serial No. 419,329. 6 Claims. (Cl. 179—1.)



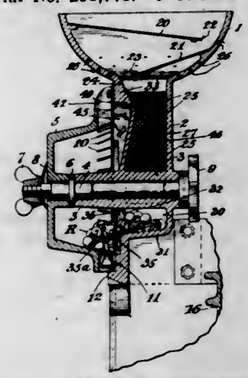
1. A regulator for controlling the tonal response of electrically operated sound reproducing apparatus comprising a source of operating current, an adjustable resistance connected in shunt relation with the source of operating current, an adjustable filter circuit having inductance and capacity connected intermediate the ends of said resistance through a second adjustable resistance, a loud speaker, and connections whereby the magnitude of the high and low frequency current impulses impressed on the loud speaker may be independently controlled by an adjustment of either of said resistances.

1,807,941. FEEDING MECHANISM FOR RIVETING MACHINES. EDWIN B. STIMPSON and JOSEPH F. SUESSLE, Brooklyn, N. Y., assignors to Edwin B. Stimpson Company, Brooklyn, N. Y., a Corporation of New York. Filed July 25, 1923. Serial No. 653,655. 6 Claims. (Cl. 218—21.)



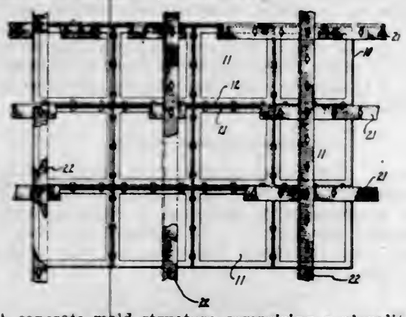
1. In a rivet feeding device, a chambered rivet positioning member rotatable about a horizontal axis, and a vertically positioned expanding channel for delivering rivets into the positioning member.

1,807,942. RIVET FEED. EDWIN B. STIMPSON, Brooklyn, N. Y., assignor to Edwin B. Stimpson Company, Brooklyn, N. Y., a Corporation of New York. Filed July 11, 1928. Serial No. 291,775. 9 Claims. (Cl. 218—2.1.)



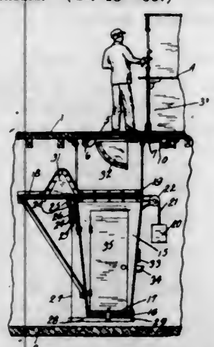
1. Rivet-feeding mechanism comprising a body structure including a hopper and spaced walls therebelow providing a downwardly convergent rivet passage, a shaft, a chambered feed wheel provided with a slotted rim face on one end of the shaft and having its slotted rim face adjacent an outer wall face of the body structure, said wall having a restricted rivet discharge opening below the shaft and leading to the wheel chamber, and a gate pivoted at the top of said rivet discharge opening and swingable toward and from the outer side thereof and regulating rivet discharge.

1,807,943. CONCRETE FORM. FRANK M. SUTTON, San Francisco, Calif. Filed July 28, 1928. Serial No. 295,897. 4 Claims. (Cl. 25—131.)



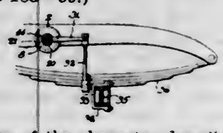
2. A concrete mold structure comprising a plurality of rectangular facing sections each formed with a peripheral flange, said sections being similar in outline and dimensions, the flanges of said sections being formed with key slots at regular intervals adapted to align when the sections are arranged edge to edge, angle iron horizontal stiffeners, one flange of which being adapted to be interposed between contiguous flanges of the sections, said flange being formed with key slots aligning with key slots in the flanges of the sections, vertical stiffeners, said vertical stiffeners and horizontal stiffeners being formed with aligning key slots, means cooperating with the key slots of the various elements to firmly but detachably connect the elements together, and transverse members having key slots at spaced intervals adapted to align with key slots in the vertical stiffeners whereby to connect two facing structures of a mold.

1,807,944. BURGLAR TRAP. ALPHONSE J. THIBAULT, Harrison, Idaho. Filed Apr. 24, 1929. Serial No. 357,678. 3 Claims. (Cl. 43—59.)



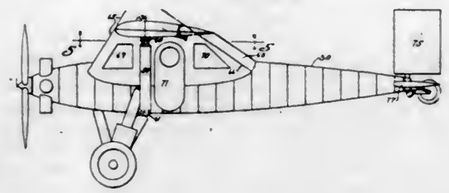
1. In an appliance as described, the combination with a trap having a depressible, false bottom, of a weight operated slide door for the upper open end of the trap, a spring pressed slide bolt for holding the door in open position, a release lever operated by the depressible false bottom, and a pull cable connecting the lever and said bolt.

1,807,945. SHOCK ABSORBER. JOHN T. TRUMBLE, Detroit, Mich. Filed June 8, 1929. Serial No. 369,318. 13 Claims. (Cl. 188—89.)



1. In a device of the character described, the combination of a casing to contain a liquid, a movable member in said casing positioned midway between the ends thereof, and a wall at each side of said movable member for confining liquid within the path of movement of said movable member, one of said walls being arranged to be moved by pressure of liquid in the spaces between said wall and casing end, into contact with said movable member.

1,807,946. AIRPLANE AND METHOD OF MAKING SAME. RALPH H. UPSON, Detroit, Mich. Filed June 16, 1928. Serial No. 285,922. 14 Claims. (Cl. 244—31.)



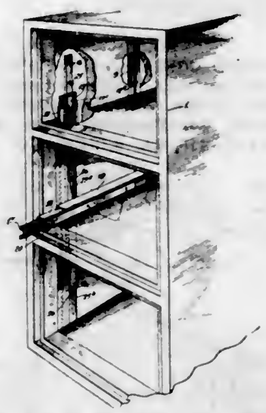
2. An airplane wing comprising, in combination, an internal framework and an upper and a lower sheet metal covering for said framework, said covering at the tip of said wing being formed as surfaces of revolution and secured together at their points of contact.

1,807,947. PAVING METHOD. JACKSON F. WITT, Dallas, Tex. Filed Jan. 30, 1930. Serial No. 424,609. 3 Claims. (Cl. 94—23.)



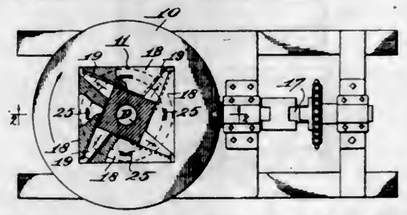
1. The method af paving which consists in applying a prime coat of hot liquid asphalt to the top surface of a soft supporting course, then puncturing said coat and penetrating the underlying surface of the supporting course, and then applying a layer of hot liquid asphalt to the prime coat and flowing the same through the punctures of said coat and into the penetrations in the supporting course to interlock the course.

1,807,948. MONOLITHIC FILING CABINET AND ATTACHMENT THEREFOR. CARL F. WOLTERS, Marietta, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, a Corporation of Delaware. Filed June 16, 1925. Serial No. 37,527. 9 Claims. (Cl. 25—155.)



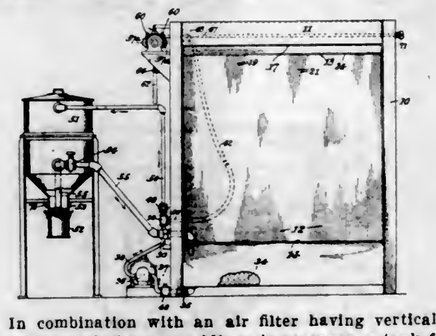
6. The method of making a monolithic body for filing cabinets having a plurality of drawer compartments, which consists in forming a female mold to define the outer side, top and bottom walls of said body, with a front wall portion defining the open ends of the compartments in the body; placing compartment defining core molds in said female mold with an end portion of each slidably interfitting in one of the openings of the front wall portion; applying connecting elements to the opposite ends of said core molds to retain them in aligned relation and at proper spaced intervals; filling said female mold around said core mold with body forming plastic material to form unitary walls with said connecting elements embedded therein and after hardening of said material removing said body from said female mold and said core molds through the openings defined by the front wall portion after detachment of said core molds from said connecting elements.

1,807,949. ROTARY DRILL STEM BUSHING. ELIJAH J. ZERR, Glendale, Calif. Filed Apr. 29, 1929. Serial No. 359,161. 10 Claims. (Cl. 255—23.)



1. A rotary drill stem bushing, comprising a plurality of pairs of members that are wedge-shape in horizontal section and horizontally disposed rib and groove connections between the members of each pair of wedge shaped members.

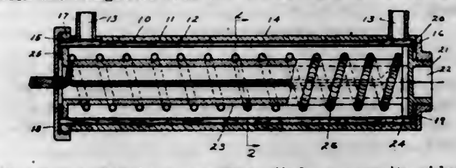
1,807,950. CLEANSING SYSTEM AND DEVICE FOR AIR FILTERS. AUSTIN ADAMS, Jr., Brightwaters, and WILLIAM L. RICHARDS, Lynbrook, N. Y., assignors to American Air Filter Company, Louisville, Ky., a Corporation of Delaware. Filed June 13, 1929. Serial No. 370,549. 7 Claims. (Cl. 183—52.)



1. In combination with an air filter having vertically arranged spaced plates providing air passages, a tank for storing purified oil, a settling reservoir, a receptacle detachably carried thereby, a spraying nozzle movable over the filter; valved pipe connections between the tank and the nozzle and between the tank and the settling reservoir adapted for alternate service, power means for causing oil to flow from said tank through said connections, and means for conveying clarified oil from said reservoir back to said tank.

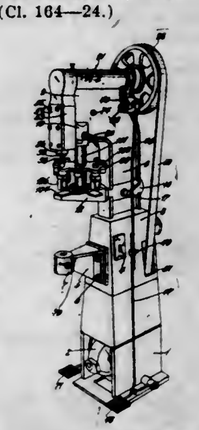
1,807,951. WATER HEATER. WILLIAM ALBERT AHERN, Worcester, Mass. Filed Nov. 21, 1928. Serial No. 320,882. 2 Claims. (Cl. 219—39.)

1. In a water heater, an outer shell, an inner shell spaced therefrom and defining a thin annular water chamber, the shells being provided at their ends with right angularly disposed flanges extending circumferentially inward at one end and circumferentially outward at the other end to permit assembly of the shells one within the other with their flanges in contact, means cooperating with the flanges at each end of the chamber to clamp the



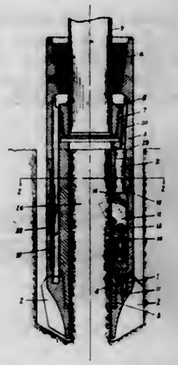
flanges together by pressure applied on opposite sides of each pair of flanges and an insulated cylindrical core carrying an electrical heating element insertible within the inner shell and held in position by said flange clamping means.

1,807,952. CUTTING, TRIMMING AND ORNAMENTING MACHINE. ARTHUR W. ALTVATER, St. Louis, County, Mo. Filed Jan. 25, 1929. Serial No. 334,934. 52 Claims. (Cl. 164—24.)



1. A machine of the character described comprising a rigid support, a series of dies, means for supporting said dies to be selectively positioned over said support and for operation toward and away from said support, a series of die striker plates corresponding respectively to said dies and being movable with said dies to position between said dies and said support, and mechanism for operating said dies toward and away from said striker plates.

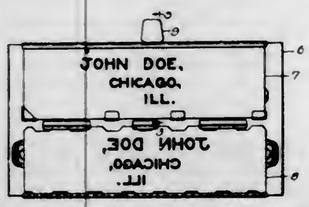
1,807,953. CORE ENGAGING DEVICE. REXFORD O. ANDERSON, Houston, Tex. Filed June 17, 1929. Serial No. 371,348. 7 Claims. (Cl. 255—72.)



5. In a core drill having a tubular head and drill collar thereon, the combination of core engaging dogs mount-

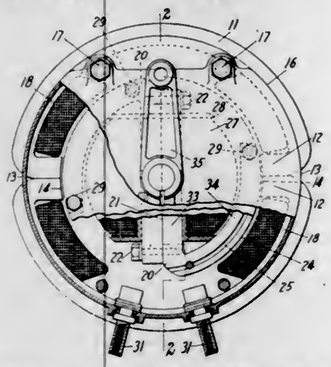
ed for vertical movement relative to said drill, resilient means tending to raise said dogs relative to said drill, means to project said dogs inwardly when they are raised, and hydraulically operated means to hold said dogs depressed.

1,807,954. PRINTING DEVICE. RUPERT ANDERSON, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 8, 1929. Serial No. 353,524. 7 Claims. (Cl. 129—16.8.)



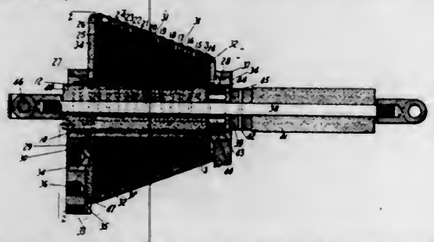
1. A printing device tab having a yielding locking device on one side edge thereof.

1,807,955. DYNAMO ELECTRIC MACHINE. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 13, 1928, Serial No. 285,090. Renewed May 5, 1930. 26 Claims. (Cl. 175—336.)



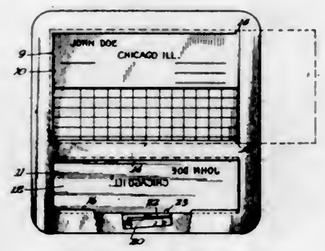
1. A dynamo electric machine field core comprising, two substantially equal magnetizable bars bent to semicircular form with ends turned inwardly and welded together forming poles and having annular grooves formed in their edges to support bearing heads and bearing heads supported within the annular grooves of the core.

1,807,956. PROGRESSIVE SOLENOID FOR OPERATING BRAKES. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 26, 1928, Serial No. 295,580. Renewed May 5, 1930. 31 Claims. (Cl. 175—21.)



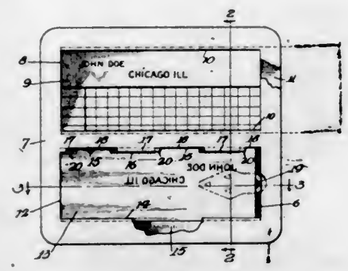
1. A solenoid having a winding divided into a plurality of coils arranged in axially spaced apart relationship, a plurality of commutator sections one arranged within each coil and connected to the coil, a core of magnetic material arranged to be drawn through the plurality of coils and adapted to be drawn into each coil when said coil is electrically energized, and a brush movable by said core through said coils to progressively energize the coil immediately ahead of the core.

1,807,957. PRINTING DEVICE. JAMES A. BAILEY, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 11, 1928. Serial No. 298,972. 8 Claims. (Cl. 101—369.)



1. A printing device comprising a frame and a printing plate, said frame having flanges to engage the marginal edges of the plate at the top and bottom thereof, and yielding means carried by the frame and engaging said plate and holding the plate in yielding engagement with the flanges.

1,807,958. PRINTING DEVICE. JAMES A. BAILEY, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 11, 1928. Serial No. 298,974. 4 Claims. (Cl. 101—369.)



1. A printing device comprising a frame having an opening therein and a printing plate in said opening, and interengaging projections on the frame and plate the corners of the projection on the frame overlapping corners of the projections on the plate.

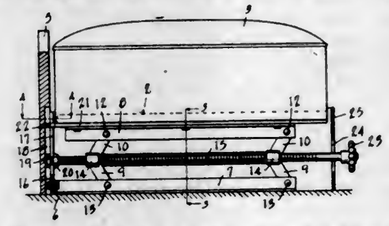
1,807,959. METAL JAMB. ISAAC A. BAUM, Chicago, Ill. Original application filed Sept. 12, 1927, Serial No. 219,096. Divided and this application filed May 17, 1930. Serial No. 453,237. 4 Claims. (Cl. 72—98.)

4. In combination a sheet metal jamb element comprising a face, an off-set portion and a marginal flange projecting angularly outward from the off-set portion and constituting a plaster terminal and ground, and wall-



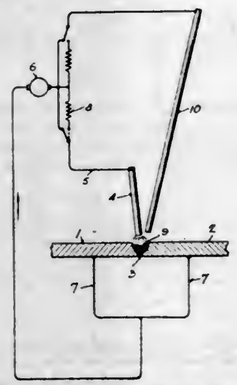
engaging members secured to and lying in a plane parallel to the off-set portion of the jamb, said members having projections struck out of the metal of the members.

1,807,960. ADJUSTABLE SEAT. JAMES L. BROWNELL, Kalamazoo, Mich., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Filed May 19, 1930. Serial No. 453,571. 6 Claims. (Cl. 155—91.)



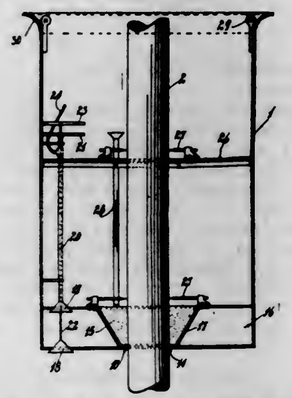
6. The combination with a seat, of front and rear pairs of supporting toggles for said seat, slotted uprights, and adjusting screws for said toggles rotatably and slidably engaged with the slots of said uprights and having threaded engagement with said toggles.

1,807,961. METHOD OF ELECTRIC ARC WELDING. HOWARD J. BURNISH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,478. 2 Claims. (Cl. 219—10.)



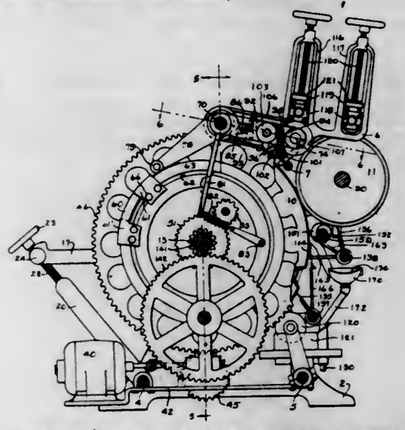
1. The method of electric arc welding which comprises establishing an electric welding arc between one end of a fusible metallic weldrod and the work to be welded, maintaining said welding arc until the metal of said weldrod is substantially fused away and deposited upon the work, inserting the end of another similar weldrod into said welding arc and adjacent the end of said first named weldrod, said weldrods being connected to the same source of electrical energy, inserting a resistance in the circuit of said first named weldrod to decrease the potential of the electric circuit thereof across the arc whereby the arc is transferred without interruption to said second named electrode, withdrawing the first named electrode, and continuing the welding operation with said second named weldrod.

1,807,962. MARINE CAGE. ALPHONSE T. CASSIERE, Long Beach, Calif. Filed Feb. 12, 1929. Serial No. 339,347. 8 Claims. (Cl. 61—54.)



1. A marine cage adapted to be placed around a pile and comprising a housing open at the top, said housing having an opening in the bottom thereof through which the pile extends, a door in the side of said housing, a second door in the bottom of the housing, the cage being adapted to be assembled around the pile through said doors, means to seal the bottom opening of the housing around the pile, and means whereby the water may be removed from within the housing.

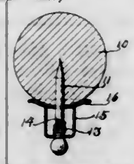
1,807,963. GRAINING MACHINE. LLOYD V. CASTO, Detroit, Mich., and GUIDO VON WEBERN, Dayton, Ohio, assignors to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 17, 1928. Serial No. 278,482. 12 Claims. (Cl. 101—154.)



1. In a machine of the class described, a pattern roll, a transfer roll, and a backing roll, supporting means for

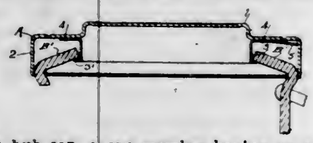
the rolls, a pair of feed rolls in parallel relation to the backing roll, a swinging frame for supporting one of said rolls, said swinging frame being pivoted to said means, a cam connected to the pattern roll for acting on the frame to swing it and separate said feed rolls in timed relation to the rotation of the pattern roll, there being a pair of arms yieldingly pivoted to the frame and forming a bearing for the movable feed roll.

1,807,964. SPINNING TOP. WALTER J. CHEFFER, Chicago, Ill. Filed May 12, 1930. Serial No. 451,600. 3 Claims. (Cl. 46—32.)



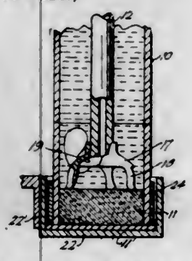
2. A spinning top comprising a ball, a spinning pin having its inner end extending into said ball and securely retained therein, a portion of said pin extending below said ball and being arranged to have a cord secured thereto, a curved band member journaled on said extending portion and being flat on its opposite sides to provide a good finger hold, a shield secured across the top part of said band member to fully overlie the same in every direction and adapted to entirely overlie the fingers and prevent them from contacting with the ball or impeding its rotation, said shield being constructed and arranged to have the ball bear only on its central part to provide ease of rotation thereon, and a head at the lower end of said pin whereby the ball may spin on a smooth surface without marring the same.

1,807,965. HUB CAP. RAE EUGENE COCHRAN, Columbus, Ohio, assignor to The D. L. Auld Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 25, 1928. Serial No. 272,600. 3 Claims. (Cl. 301—108.)



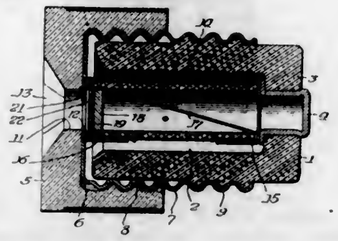
1. In a hub cap, a cap member having an annular flat-faced portion and a cylindrical wall, a locking ring secured in said cap member, said ring having a plurality of centering projections extending therefrom and engaging the cylindrical wall of the cap member to hold the cap member in position on the ring, and means to engage the hub to lock the cap to the hub.

1,807,966. VISIBLE LIQUID DISPLAY DEVICE. DANIEL A. CORCORAN, Ardmore, Okla., assignor to Visible Oil Merchandising Co., Inc., Dallas, Tex., a Corporation of Texas. Filed Dec. 16, 1929. Serial No. 414,364. 6 Claims. (Cl. 40—126.)



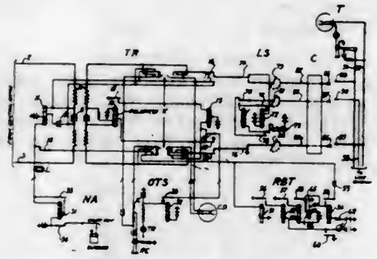
1. A display device comprising a tube of transparent material having liquid therein, an air supply pipe submerged in the liquid of the tube, a pedestal on the lower end of the pipe including a bell and supporting legs depending from the bell, the underside of the bell being truly concaved and of sufficient area to release a large sized bubble, and means for supplying compressed air to the pipe.

1,807,967. FUSE. THOMAS F. COTE, Clinton, Iowa, assignor to Cote Brothers Fuse Manufacturing Corporation, Clinton, Iowa, a Corporation of Delaware. Filed Nov. 12, 1928. Serial No. 318,652. 4 Claims. (Cl. 200—124.)



1. A fuse plug comprising a body provided with an opening and a chamber in communication therewith, spaced contacts at each end of said chamber adapted for connection with corresponding terminals in an electrical circuit, a cartridge in said chamber comprising a hollow member, terminals on opposite ends of said member in electrical contact with said contacts, and a fuse in said member connecting said terminals and having a narrow portion extending diametrically across the outer end of said member, the cartridge being constructed to render said portion visible but sealed from and adjacent to said opening.

1,807,968. TELEPHONE SYSTEM. THOMAS F. CROCKER, Chicago, Ill., assignor to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Original application filed Mar. 14, 1929, Serial No. 346,861. Patent No. 1,776,653. Divided and this application filed Mar. 28, 1930. Serial No. 439,555. 14 Claims. (Cl. 179—84.)

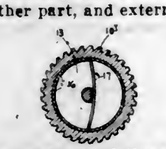


1. In combination, a vibrator, a relay, a circuit for said relay including contacts of said vibrator, and a tone circuit closed by said relay when energized, said tone circuit also including said vibrator contacts.

1,807,969. FRACTIONAL LINE SPACER FOR TYPEWRITERS. CHESTER W. CRUMBINE, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Dec. 13, 1928. Serial No. 325,821. 4 Claims. (Cl. 197—123.)

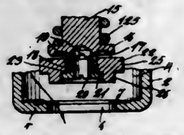
1. In a device of the class described, the combination with a cylindrical member and a ratchet wheel connected thereto for step-by-step rotation, of a clutch for releasably connecting the ratchet wheel to the cylindrical member, said clutch comprising an inner cylindrical surface on one of said parts, a bowed blade spring adapted to engage said

clutch surface frictionally and retained against rotation relatively to the other part, and externally operable means



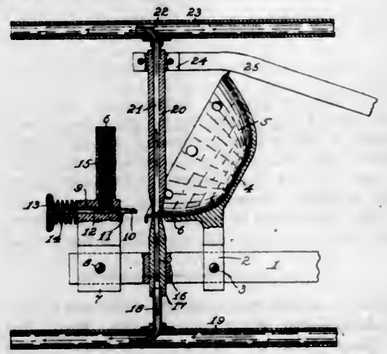
for increasing the curvature of the spring in a direction transversely to the axis of said cylindrical member to relieve its pressure against the clutch surface.

1,807,970. FAUCET. HAROLD G. DAVIS, Denver, Colo., assignor to The Davis and Gant Manufacturing Co., Denver, Colo., a Corporation of Colorado. Filed Dec. 17, 1928. Serial No. 326,445. 1 Claim. (Cl. 277—43.)



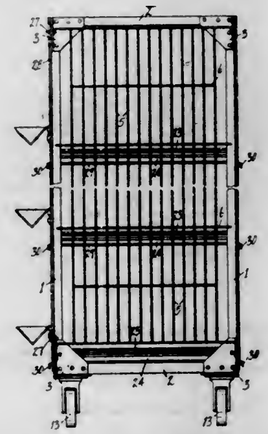
A faucet of the class described, comprising, in combination, an elongated tubular body member (1) having an opening (3) extending longitudinally therethrough, and intersecting a transverse opening at the other end, one end of the transverse opening being partially closed by an inwardly extending flange whose inner edge determines the size of the outlet opening, said flange having a circular, raised valve seat on its inner surface, a plug threadedly connected with the other end of the transverse opening, said plug having a central axial opening, a valve stem in the opening in the plug, means for sealing the opening about the valve stem, the inner end of the valve stem having a circular flange, one side of which has a circular ridge that forms a valve seat, that portion of the stem beyond the flange having a cylindrical projection provided with a threaded opening, a plurality of holes in the wall of the opening, a spring surrounding the valve stem between the flange and the plug, a circular valve member surrounding the cylindrical projection, said valve member having its outer surface formed from two cylindrical surfaces of different diameters, the portion of the smaller diameter being adapted to extend into the outlet opening, the portion of larger diameter being larger than the first mentioned valve seat and adapted to engage the latter to form a seal, the valve member being movable towards and away from the valve seat on the flange of the valve stem.

1,807,971. MEANS FOR ELECTRIC WELDING INCLUDING THE EMPLOYMENT OF AN AIR CURRENT. IRA WALTER DAY, Waterloo, Iowa, assignor to Associated Manufacturers Corporation of America, Waterloo, Iowa, a Corporation. Filed May 22, 1929. Serial No. 365,150. 2 Claims. (Cl. 219—4.)



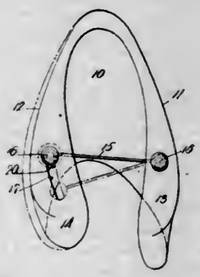
1. A device of the character described, a pair of welding electrodes one movable to and from the other, the movable electrode being hollowed, means for drawing a current of air into and discharging from the hollow of said electrode to create a suction at the welding end of said electrode at the entrance of the hollow, and a movable device for delivering an element to be welded in the path of movement of said welding end to be held to it by said suction.

1,807,972. POULTRY COOP OR CRATE. WALTER CLARK DEAN, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Nov. 14, 1928. Serial No. 319,827. 3 Claims. (Cl. 119—17.)



1. A structure of the class described comprising assembled end units, said end units comprising corner uprights, top and bottom end members and connecting corner irons, said corner irons being adapted to receive top and bottom horizontal frame members, bottom side bars detachably secured to the bottom corner irons, a top unit comprising top bars and connecting end cross pieces and a panel secured thereto, side walls comprising panels having vertical bars provided with bendable extensions, the extension of the upper panel being engageable with the lower bars of the top unit and the bendable extension of the lower panel being engageable with the upper panel, hooked bolts detachably securing said side panels to said corner uprights, and a partition panel provided with projecting bendable members engageable by bending with said central vertical bars of said side wall panels.

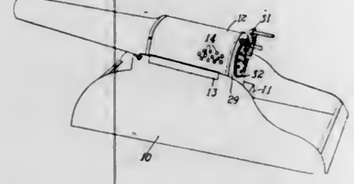
1,807,973. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed Apr. 25, 1929. Serial No. 357,948. 13 Claims. (Cl. 12—128.5.)



1. A shoe form comprising a hollow toe member of resilient material having ball flanges on the side walls

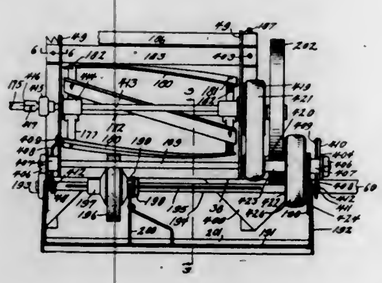
thereof, a cross bar pivoted at one end upon one of said flanges, guiding means on the other of said flanges coacting with said cross bar whereby a sliding engagement is provided between said cross bar and said second named flanges, the pivotal movement of said cross bar causing the toe member to increase or decrease in width, and means frictionally and continuously resisting such pivotal movement.

1,807,974. TOY CANNON. BIRGER ENGSTROM, Pittsburgh, Pa., assignor to Forster Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 23, 1929. Serial No. 342,040. 12 Claims. (Cl. 42—55.)



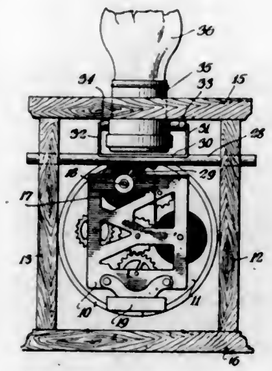
1. In a carbide cannon, a plurality of firing chambers, a gas generating chamber and means for successively connecting each of said firing chambers with said gas generating chamber.

1,807,975. BUILT-IN GRINDER AND ENSILAGE CUTTING MACHINE. CHARLES W. EYRES, Le Mars, Iowa. Filed Aug. 31, 1928. Serial No. 303,335. 4 Claims. (Cl. 146—121.)



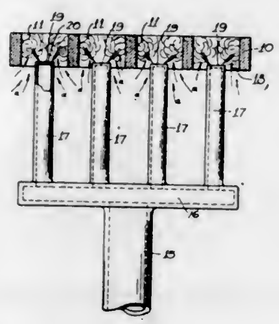
1. In combination with an ensilage cutter having a drive shaft, a cutter cylinder substantially coaxial with said drive shaft, a fly wheel on the shaft of the cutter cylinder, a frame in which the cylinder is journalled, an idler shaft in said frame parallel to the cylinder shaft, a grinder frame hinged upon said idler shaft for swinging movement radially of the cylinder, a wheel shaft journalled in said grinder frame in a position parallel to the cylinder shaft, a grinder wheel slidably and non-rotatably mounted on said wheel shaft, a power transmitting shaft positioned near the cylinder and parallel to the cylinder shaft, means including a universal joint for coupling the drive shaft to either the power transmitting shaft or the cylinder shaft and drive means connecting the power transmitting shaft with the idler shaft and the idler shaft with the wheel shaft respectively, the fly wheel being disposed at the opposite end of the cylinder from the drive shaft connection.

1,807,976. ALARM ILLUMINATOR CLOCK. EDWIN FLOHR, Brooklyn, N. Y. Filed Mar. 11, 1929. Serial No. 345,923. 3 Claims. (Cl. 200—35.)



1. In a device of the class described, a cabinet, an alarm clock mechanism mounted in said cabinet, a push button operated socket in said cabinet, an alarm mechanism shaft, a spindle reciprocal in said cabinet, said spindle having both ends protruding from said cabinet, said spindle engaging said push buttons, a tongue on said spindle, a sleeve loosely mounted on said shaft, a follower arm extending radially from said sleeve and cooperating with said spindle to shift the latter, and means for locking said sleeve to said shaft when said shaft is rotated in a clockwise direction.

1,807,977. FUEL BURNER. DAVID S. FRANK, Chicago, Ill. Filed Feb. 4, 1928. Serial No. 251,773. 1 Claim. (Cl. 158—104.)

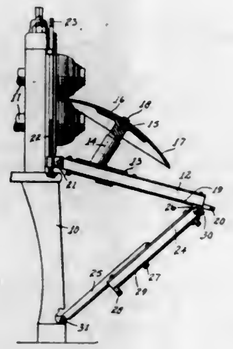


In a fuel burner, the combination with a refractory block, there being a plurality of passages extending therethrough, a fuel conducting header, a fuel conduit in axial unobstructed concentric communication with each of said passages, integral end enclosures for said conduits, there being obliquely disposed spirally arranged apertures in said end enclosures to impart twirling motion to the fuel issuing therefrom against the walls of the passages.

1,807,978. DISK SHARPENER. DENNIS C. GALVIN, Des Moines, Iowa. Filed June 4, 1929. Serial No. 368,272. 1 Claim. (Cl. 76—89.2.)

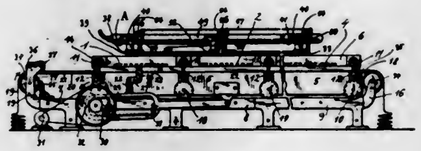
The combination with a disk sharpener having sharpening rolls, of a frame, a disk supporting plate slidably

mounted in the frame, a disk support rotatively mounted in the disk supporting plate, means for forcibly moving the disk supporting plate longitudinally of the frame and fixing it in any position of its adjustment, two brackets pivotally connected to the inner corners of said frame, two adjusting screws mounted in upright positions upon the disk sharpener and on opposite sides of the sharpening rolls, and having threaded connections with said brackets and provided with means whereby they may be independently rotated, to thereby raise or lower the inner end of said frame, or to tilt said inner end of the frame laterally, and an auxiliary frame having its lower end



pivoted to a stationary support and its upper end connected to the outer end of the main frame by means of a hinged joint loosely fitted so that the outer end of the main frame may be tilted slightly in a lateral direction upon the adjustment of said screws in said clips.

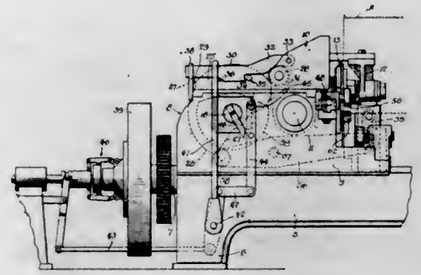
1,807,979. SPRAYING OF WEBS OF FABRIC AND THE LIKE WITH DIFFERENT COLORS. JULIUS GROETSCHEL, Mannedorf, Switzerland. Filed June 27, 1929, Serial No. 374,122, and in Switzerland June 30, 1928. 13 Claims. (Cl. 101—124.)



1. The herein described method of stenciling upon webs of fabric and the like with different colors, which comprises causing stencils to be pressed firmly against the webs of fabric thereafter simultaneously and uniformly moving the web of fabric and stencils in stages and in a forwardly direction during the pressing, subsequently causing the web of fabric when reaching its end point to remain stationary, then raising the stencils from the web of fabric, and returning them to their initial position, and finally lowering the stencils onto a fresh portion of fabric, and being gripped tightly thereto.

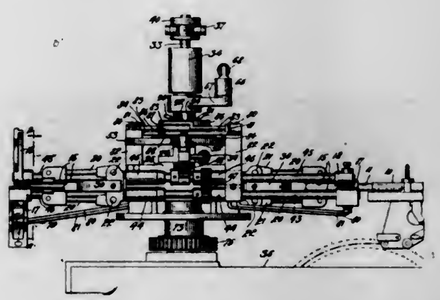
2. A machine of the character described, comprising in combination, a pressure table, stencils in a number equal to that of the colors to be sprayed and movable up and down on the pressure table, means for reciprocating the pressure table with the stencils, means for alternately clamping the web between the pressure table and the stencils during one of said reciprocating movements and then releasing the web at the other of said reciprocating movements, stationary nozzles spraying differently colored liquids, through said stencils onto the web during the movement of the pressure table and the stencil with the web clamped between them.

1,807,980. METAL WORKING MACHINE. CARL C. GROTNES, Chicago, Ill. Filed Aug. 4, 1928. Serial No. 297,469. 24 Claims. (Cl. 153—29.)



1. A metal working machine comprising, in combination, a bed, a pair of heads mounted in longitudinally spaced relation thereon and each having a forming roll rotatable on a fixed axis and a forming roll rotatable on an axis movable toward and from the fixed axis, a cam in each head operable upon the movable roll to move it toward the fixed roll, and means associated with said cam and operable at a predetermined point in the rotation thereof to retract said movable roll rapidly from said fixed roll.

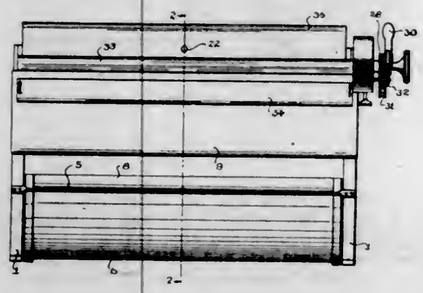
1,807,981. WRAPPING MACHINE. EDWARD HAAS, Brooklyn, N. Y., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Aug. 22, 1928. Serial No. 301,222. 4 Claims. (Cl. 93—5.)



1. A twisting mechanism for wrapping machines comprising, a pair of clamping jaws for holding a wrapped

article with the ends of the wrapper extending from the article, a pair of pivotally mounted twisting fingers arranged to engage the ends of the wrapper, means for rotating the clamping jaws to cause the fingers to twist the ends of the wrapper, a rotatable member mounted to turn on a horizontal plane for supporting the clamping jaws and twisting fingers, a movable cam for controlling the closed and open positions of the twisting fingers, a roll in engagement with the working surface of the cam, connections between the roll and the twisting fingers, and means for imparting a clockwise movement to the cam to cause the fingers to close upon the ends of the wrapper and for returning the cam to its original position after the wrapped article has been discharged.

1,807,982. COPYHOLDER. CLAIR C. HARPER, Rochester, and EUGENE F. RITENDAUGH, Oneida, N. Y., assignors to Error-No Inc., Rochester, N. Y., a Corporation of New York. Filed Sept. 17, 1929. Serial No. 393,304. 17 Claims. (Cl. 120—30.)



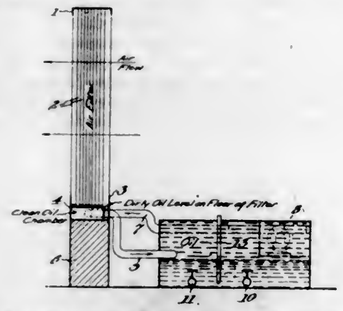
1. In a copyholder, the combination of a frame, sheet feeding means arranged thereon, and an auxiliary support for the frame comprising a sheet supporting device secured to the frame and inclined downwardly and rearwardly to a point in the plane of the base of the frame.

1,807,983. AIR OR GAS PURIFIER. CHESTER P. HEGAN and WALTER B. DIECKS, Louisville, Ky., assignors, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed Mar. 12, 1924. Serial No. 698,745. 9 Claims. (Cl. 183—48.)



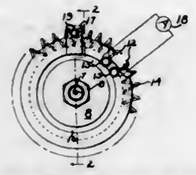
1. In a device for separating solids from a gas, a plurality of rows of deflector elements having imperforate faces directed towards the incoming gas stream, said elements being coated with a viscous adhesive substance, the elements of adjacent rows being staggered with respect to each other and each of said elements comprising a body having a length in the direction of the gas stream which is greater than its width.

1,807,984. AIR FILTER. CHESTER P. HEGAN, Louisville, Ky., assignor, by mesne assignments, to American Air Filter Company, Inc., Louisville, Ky., a Corporation of Delaware. Filed Sept. 15, 1924. Serial No. 737,942. 2 Claims. (Cl. 261—112.)



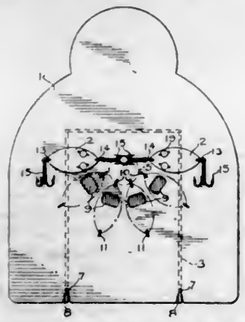
1. In a filter the combination of a hollow upright deflector, means for forcing liquid upwardly through said deflector, and a liquid overflow outlet positioned to restrict the distribution of discharged liquid over a predetermined portion of the outer surface of the deflector.

1,807,985. CURRENT TRANSFORMER. RALPH M. HEINTZ, Palo Alto, Calif., assignor to Heintz & Kaufman, Ltd., San Francisco, Calif., a Corporation of Nevada. Filed Mar. 12, 1930. Serial No. 435,099. 10 Claims. (Cl. 117—119.)



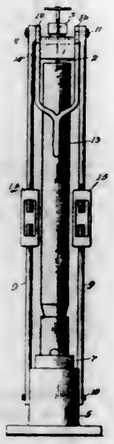
1. A current transformer comprising a conductor forming a primary, an insulating disk mounted on said conductor, and a helical spring forming a secondary stretched in torodial form about said disk.

1,807,986. DISPLAY APPARATUS. FREDERIC J. HOFSCHNEIDER, Rochester, N. Y. Filed May 28, 1930. Serial No. 456,537. 5 Claims. (Cl. 211—156.)



1. A display apparatus comprising a display card having an opening therein, means for securing an article to be displayed on said card over said opening, said article having an opening therein, and a substantially transparent bead seated in the opening and arranged over the opening in the card, and means for supporting said card in a substantially upright position before a source of light.

1,807,987. CHARGING MECHANISM FOR BLASTING CARTRIDGES. FRANK H. KNEELAND, Chicago, Ill., assignor to Safety Mining Company, Chicago, Ill., a Corporation. Filed Aug. 15, 1929. Serial No. 386,213. 2 Claims. (Cl. 226—20.)



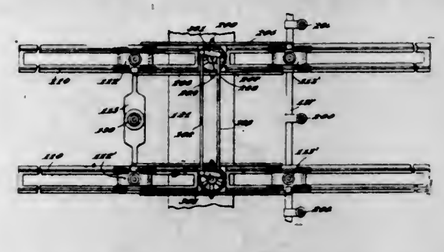
1. In a device of the character described, a relatively fixed charging head having a nozzle extending downwardly therefrom, a relatively fixed cylindrical guide disposed beneath said head, a hollow cylindrical follower disposed within said guide, a coil spring disposed within said follower and adapted to support a cartridge to be charged, a pair of levers pivoted intermediate their ends to said charging head, a pair of links pivotally connected to said levers at points adjacent the pivotal connections of the respective levers with said head, the opposite ends of said links being pivotally connected to said follower and means for operating said levers.

1,807,988. SMOKE BAFFLE FOR FURNACES. JOHN P. KOLLA, Holland, Mich., assignor to Holland Furnace Company, Holland, Mich. Filed Jan. 9, 1930. Serial No. 419,484. 1 Claim. (Cl. 110—173.)



In combination with a combustion chamber and feed section of a hot air furnace, an integral supporting rib disposed within the said feed section, transversely across the top thereof and strengthening the same and having its ends extended downwardly to form attaching ears, a flat perforated baffle plate suspended back of said rib and disposed to contact therewith when in depending position, and screw threaded eye-bolts forming hinge members to support said baffle plate inserted through the said rib with their free ends turned upward and engaging depressions in the said rib for retaining the same securely in place, and screw nuts on the outer ends of said bolts.

1,807,989. REPRODUCING MACHINE. CARLOS KREBS, Boston, Mass. Filed Sept. 14, 1929. Serial No. 392,723. 16 Claims. (Cl. 266—23.)



1. A reproducing machine wherein the movement of the reproducing means is controlled by that of a tracer relative to a template, comprising a tracer, a reproducing tool, a main or base carriage, parallel motion linkage carried by said carriage and adapted to transmit motion from the tracer to the reproducing tool, two rotary members carried by said carriage and each operatively connected to an element of said linkage whereby the members rotate during change of position of said linkage with respect to the carriage, and means operatively connecting said two rotary members for causing them to rotate in unison.

1,807,990. DISPLAY RACK. BERT A. LANDERS, Los Angeles, Calif. Filed Jan. 29, 1930. Serial No. 424,175. 7 Claims. (Cl. 211—166.)

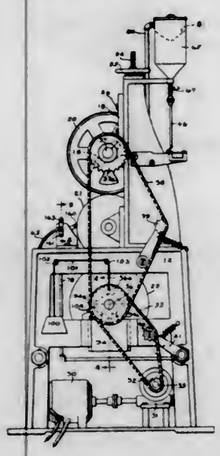


1. A display device comprising: a standard; a head slidably mounted on said standard; radially extending arms mounted upon said head; article clamping means mounted on said arms; and means operable for sliding said head upwardly on the standard to lock said clamping means.

1,807,991. GRAINING MACHINE. GEORGE E. LANG and LLOYD V. CASTO, Detroit, Mich., assignors to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed Sept. 11, 1926, Serial No. 134,807. Divided and this application filed Apr. 20, 1928. Serial No. 271,582. 11 Claims. (Cl. 101—154.)

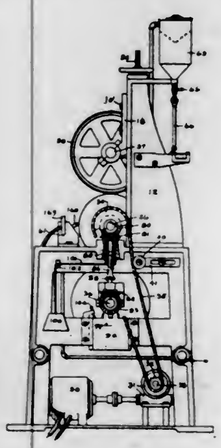
1. In a machine of the class described, a pattern roll, a transfer roll and a backing roll for holding a blank in contact with the transfer roll, individually movable bear-

ings for the backing roll, yielding means for acting on the bearings to force the backing roll to permit the backing roll axis to be angularly displaced relative to the transfer roll yieldingly toward the transfer roll, and a positive driving connection between the pattern roll and



backing roll, said connection comprising a sprocket chain and cooperating sprockets respectively connected to the pattern roll and backing roll, there being an adjustable idler device for the chain arranged to permit relative movement between the axes of said positively connected rolls.

1,807,992. GRAINING MACHINE. GEORGE E. LANG and LLOYD V. CASTO, Detroit, Mich., assignors to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed Sept. 11, 1926, Serial No. 134,807. Divided and this application filed Apr. 20, 1928. Serial No. 271,533. 8 Claims. (Cl. 101—154.)



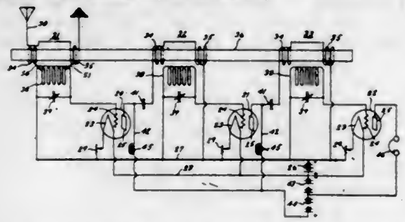
1. In a machine of the class described, a transfer roll and a backing roll, the transfer roll being disposed between the other two rolls and in driving contact with the pattern roll, bearings for the backing roll and guiding means therefor arranged to permit the axis of the backing roll to be displaced either at an angle to or in parallelism with the axis of the transfer roll, and a positive driving connection between the backing roll and one of the other rolls arranged to function irrespective of such displacement of the backing roll.

1,807,993. CABLE GRIP. PHILIP J. MARTIN, Elizabeth, N. J. Filed Oct. 4, 1929. Serial No. 397,218. 3 Claims. (Cl. 24—123.)



1. A cable grip having diagonally interwoven strands separated at one end into a plurality of freely formed loops, and a draft head for said cable grip, said draft head comprising two members one swiveled within the other and one of said members provided with a plurality of apertures through which said loops freely pass.

1,807,994. ELECTRICAL APPARATUS. ORIN E. MARVEL, Dayton, Ohio, assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 30, 1925. Serial No. 19,369. 3 Claims. (Cl. 250—40.)



1. In an apparatus of the character described, several pairs of coupled circuits connected for concurrent operation in cascade, and means for concurrently varying the coupling relation of said pairs of circuits, each of said pairs of coupled circuits having inductively coupled primary and secondary windings, and said means having a single movable member to which a winding of each pair is securely fixed for bodily varying in unison the relative positions of the primary and secondary windings of said pairs.

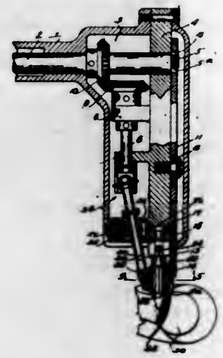
1,807,995. ELECTRICAL APPARATUS. ORIN E. MARVEL, Dayton, Ohio, assignor, by mesne assignments, to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 30, 1925. Serial No. 19,370. 17 Claims. (Cl. 250—40.)



3. An apparatus of the character described comprising a pair of control devices each having a movable element,

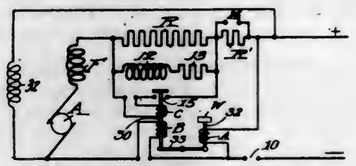
primary means for moving said elements in unison, a secondary means for moving one or said elements independently of the other, and stop means for a rotatable element adapted upon movement of the primary means to a predetermined position to coordinate said movable elements to a definite normal relationship with respect to one another.

1,807,996. TRIMMING MACHINE. NICHOLAS W. MATHEY, Boston, Mass. Filed May 27, 1929. Serial No. 366,206. 40 Claims. (Cl. 12—85.)



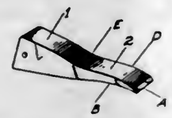
1. Apparatus of the class described comprising a conoidal gage for contact with the surface of the breast covering flap of a shoe heel, and a cutter having a cutting edge adapted to remove surplus material from the breast covering flap of the heel, the gage acting to support the flap adjacent the cutter.

1,807,997. MOTOR STARTING AND CONTROL MECHANISM. HAROLD A. MAXFIELD, Worcester, Mass. Filed Nov. 7, 1928. Serial No. 317,803. 4 Claims. (Cl. 172—288.)



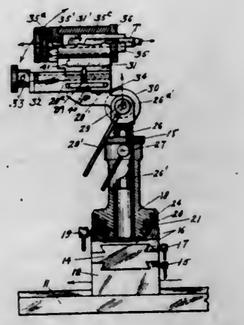
1. A direct current circuit comprising a motor having an armature, a non-inductive resistance in series therewith, an inductive resistance in series with said armature but in parallel with said non-inductive resistance, and means to short circuit said parallel resistances on the occurrence of a predetermined drop in armature current.

1,807,998. REVERSIBLE SELF-SHARPENING CHISEL. JOHN I. MCCORD, Paso Robles, Calif., assignor of one-fourth to Ray B. Lyon, Paso Robles, Calif. Filed Dec. 26, 1929. Serial No. 416,431. 3 Claims. (Cl. 97—125.)



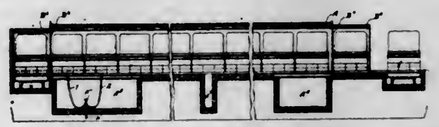
3. A chisel for ground working implements comprising a base portion adapted for attachment to a standard and a point portion having a transversely extending cutting edge; said point portion having its under surface concavely curved from the cutting edge rearwardly a certain distance, and having its upper surface formed with a convex curvature extending rearwardly from the cutting edge, said convex curvature merging into a concave curve disposed entirely below a straight line projected from the cutting edge to the rear end of the base at the top.

1,807,999. UNIVERSALLY ADJUSTABLE TOOL HOLDER. EDWARD P. MCMURTRY, Pasadena, Calif. Filed May 22, 1929. Serial No. 365,221. 10 Claims. (Cl. 51—220.)



10. In a mechanism of the character referred to, a supporting base, a pedestal mechanism revolubly supported thereon, said supporting base having horizontal adjustment in four directions for said pedestal mechanism, tool holding mechanism pivotally supported at the upper end of said pedestal mechanism and adjustable about the vertical axis of said pedestal mechanism and about a horizontal axis, means for locking said pedestal mechanism in adjusted positions, said tool holding mechanism having a part for directly holding a tool and adjustable to extend a tool held thereby axially across the vertical axis of said pedestal mechanism, if extended vertically.

1,808,000. ANNEALING FURNACE. PAUL A. MEEHAN, Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 23, 1928. Serial No. 301,503. 9 Claims. (Cl. 263—28.)

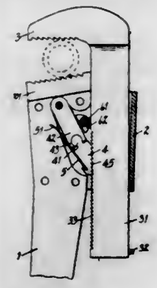


1. A continuous tunnel kiln having a goods passageway therein normally closed at its ends and through which kiln cars carrying goods to be heat treated in an inclosed car chamber are passed, means for moving a plurality of cars simultaneously through said passageway, a fixed source of fluid within the entrance end of the kiln and below said cars and means for maintaining a continuous supply of fluid from said source to said car chambers while said cars are moving through said passageway.

1,808,001. PIPE WRENCH. WILLIAM MELIN, Flint, Mich. Filed Sept. 8, 1928. Serial No. 304,755. 6 Claims. (Cl. 81—189.)

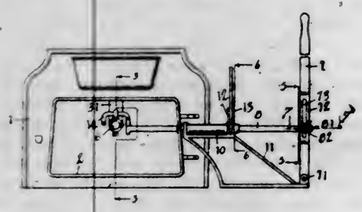
1. A pipe wrench, comprising a handle with fixed jaw at its end, a pivotal adjustable jaw with shank having serrations on its inner edge, a socket shell for said shank secured to said handle, a toggle pawl comprising two mem-

bers pivoted together by a toggle joint, one member pivoted to said handle and the other member serrated to engage the serrations of said shank, a blade spring disposed back of said pawl and secured in a kerf in said handle



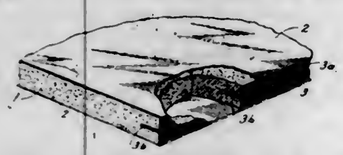
with its free end reacting to hold said serrated pawl member yieldingly in engagement with the shank, a pivoted flat cam in front of said pawl with a trip lever to rock the same to release the pawl to adjust the wrench.

1,808,002. GRATE SHAKING AND DUMPING DEVICE. JAMES MURCHIE, Traverse City, Mich., assignor to Holland Furnace Company, Holland, Mich. Filed Feb. 23, 1929. Serial No. 342,073. 7 Claims. (Cl. 126—169.)



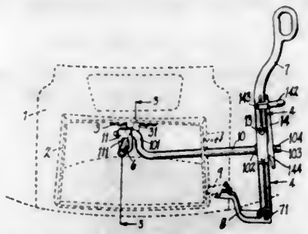
4. In a grate shaking and dumping device, the combination with the ash pit casing, a dumping grate thereon having a shaker arm, of a vertically slotted shaking lever, a reciprocating grate shaker bar to said shaking lever, a swivel block connection for said shaker bar slidably supported in the slots of the said shaking lever, means for adjusting the shaker bar axially to different angles, an offset pivotal connection at the inner end of said shaker bar, a movable connection on said shaker arm for said pivotal connection whereby the grate can be shaken by the shaker bar or can be dumped from the outside by rocking said bar and can be restored and held to operative position, as specified.

1,808,003. GYPSUM WALLBOARD. GUSTAVE A. NEW, Port Clinton, Ohio, assignor to American Gypsum Company, Port Clinton, Ohio, a Corporation of Ohio. Filed May 20, 1929. Serial No. 364,478. 10 Claims. (Cl. 154—2.)



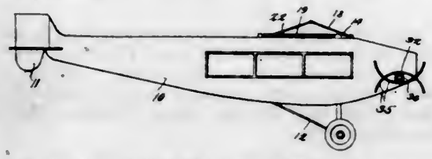
5. A process of reinforcing the edges of wallboard in the course of manufacture, consisting of feeding a strip of reinforcing material toward the edges of the board, folding the advancing strip longitudinally into portions of double thickness arranged in T-form, and guiding the folded strip into the edge of the board.

1,808,004. GRATE SHAKING AND DUMPING DEVICE. OSCAR P. NYSTROM, Holland, Mich., assignor to Holland Furnace Company, Holland, Mich. Filed Jan. 17, 1930. Serial No. 421,384. 4 Claims. (Cl. 126—169.)



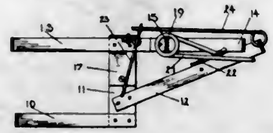
4. In a grate shaking and dumping device, the combination with the ash pit casing, of a dumping grate therein having a shaker arm, a vertically slotted shaker lever, a reciprocating grate shaker bar having a crank arm formed on its inner end disposed to reciprocate through an opening in the side of the ash pit door frame, and means to turn said shaker bar up or down.

1,808,005. AEROPLANE. WILLIAM R. REED, Baltimore, Md. Filed July 15, 1930. Serial No. 468,098. 4 Claims. (Cl. 244—12.)



1. In an aeroplane, a fuselage, a flexible wing extending over the fuselage, a hinge connection between the forward edge of the wing and the fuselage, guides extending longitudinally of the fuselage beneath said wing, a slidable connection between the rear edge of the wing and said guides, and means to move said slidable connection along said guides.

1,808,006. GOPHER TRAP. ANTON F. RENKEN, Crete, Nebr. Filed Oct. 14, 1929. Serial No. 399,605. 3 Claims. (Cl. 43—81.)

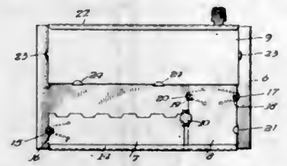


1. An animal trap including a lower jaw member, an arm projecting from said lower jaw member at the rear extremity thereof, a handle member secured to said arm at an intermediate point thereof and positioned angularly with respect to said lower jaw member, an upper jaw and handle member having an arm projecting therefrom at an intermediate point thereof, a pivotal connection between said two arms, a member for holding said jaws in open position, and resilient means for closing said jaws when said holding member is released.

1,808,007. PRINTING DEVICE. GEORGE W. SCHAEFER, South Braintree, Mass., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Original application filed Oct. 1, 1925, Serial No. 59,825. Divided and this application filed May 28, 1928. Serial No. 281,302. 3 Claims. (Cl. 101—369.)

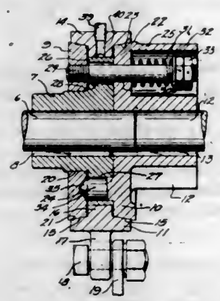
1. A printing device of the character described comprising a sheet metal frame, two printing members ar-

ranged on the frame in adjacent relation, and means integral with the frame intermediate the two printing members for detachably securing said members on the frame,



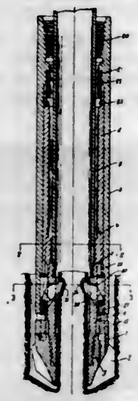
said means comprising a stud struck up from the body of the frame between said members and having portions thereof arranged to engage opposed edges of the members.

1,808,008. AUTOMATIC BRAKE. FREDERICK W. SCHMITHALS, Milwaukee, Wis. Filed June 30, 1930. Serial No. 464,901. 5 Claims. (Cl. 192—12.)



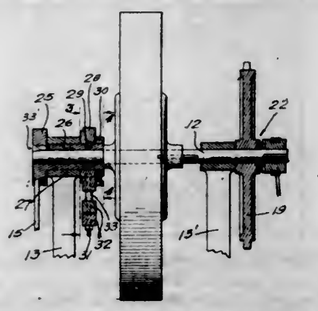
1. In a brake mechanism, the combination of a drive shaft, a driven shaft, a fixed brake element, a pair of movable brake elements engageable with said fixed brake element, means for driving said driven shaft from said drive shaft through said movable brake elements, means for automatically moving said movable brake elements out of engagement with said fixed brake element on the rotation of said drive shaft, and means for tensioning said movable brake elements.

1,808,009. CORE CATCHER FOR WELL DRILLS. FLOYD L. SCOTT, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed June 29, 1929. Serial No. 374,849. 9 Claims. (Cl. 255—72.)



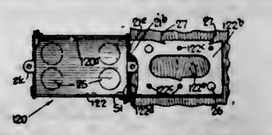
1. A score drill, a sleeve thereon, a drill collar telescoping over said sleeve, means to secure said sleeve and said drill collar together to allow a limited relative longitudinal play between them, a chamber formed between said sleeve and drill collar, a block in said chamber, a core engaging dog pivoted to said block, and means on said block frictionally engaging the walls of said chamber to support said block.

1,808,010. ADJUSTABLE OIL WELL COUNTERBALANCE. AUGUST L. SEGELHORST and OSCAR STRICKLIN, Huntington Beach, Calif. Filed Apr. 15, 1929. Serial No. 355,063. 5 Claims. (Cl. 74—71.)



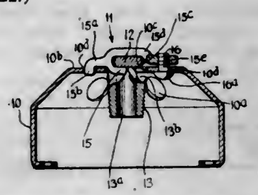
1. For use in combination with a power transmitting organization: a rotatable shaft; a sleeve on said shaft; means for rigidly connecting said sleeve with said shaft; a crank on one end of said sleeve; and a counterbalance on the opposite end of said sleeve in fixed relation with said crank.

1,808,011. ELECTRIC FITTING. LOUIS BARNETT, Brooklyn, N. Y., assignor to Standard Electric Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Jan. 11, 1929. Serial No. 331,863. 4 Claims. (Cl. 247—21.)



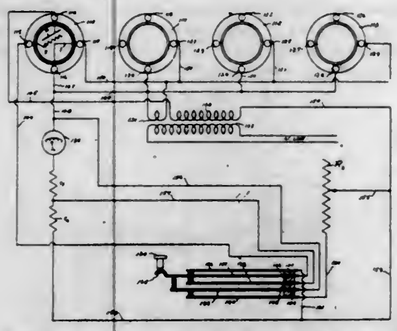
3. A plurality of sheet metal parts interconnected to form a box fitting of the character described, one of said parts forming a wall of said fitting and having an integral extension projecting from one edge thereof adjacent to and abutting an end wall, said extension formed with means in offset, non-parallel relation with respect to said wall part for attaching the fitting to the face of a stud.

1,808,012. FIXTURE COUPLING FITTING FOR OUTLET BOXES. LOUIS BARNETT, New York, N. Y., assignor to Standard Electric Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Sept. 11, 1929. Serial No. 391,755. 12 Claims. (Cl. 247—22.)



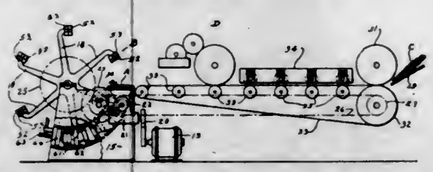
8. In combination with an outlet box, an attachment fitting comprising a coupling member having an axial bore extending into the box and having a lateral passage connecting with said bore to permit drawing conductor wires therethrough, a head piece engaging said box on the exterior side thereof above said member, and a single fastening means for securing the piece to the box adapted to clamp said piece to a mounting bar.

1,808,013. TUBE TESTER. JOB R. BARNHART, Lakewood, Ohio, assignor to Walter M. Scott, Lakewood, Ohio, and Raleigh E. Tresise, Cleveland Heights, Ohio. Filed Jan. 7, 1930. Serial No. 419,031. 19 Claims. (Cl. 250—27.)



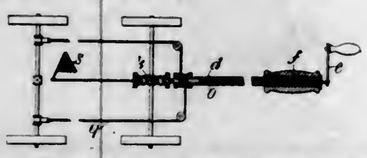
1. A device for measuring the mutual conductance of a tube having a cathode, a grid and a plate, said device including a plate circuit including a resistor and a source of current in series, one terminal of said source being connected to said plate, and means for selectively connecting said grid to the other terminal of said source or to a point intermediate the ends of said resistor, said device including means whereby the resistance of said resistor may be varied but only by substantially proportional values on both sides of said point.

1,808,014. MACHINE FOR MAKING PAPER BOXES OR THE LIKE. SAMUEL BERGSTEIN, Middletown, Ohio, assignor to The Interstate Folding Box Company, Middletown, Ohio. Filed Dec. 4, 1929. Serial No. 411,611. 15 Claims. (Cl. 93—44.)



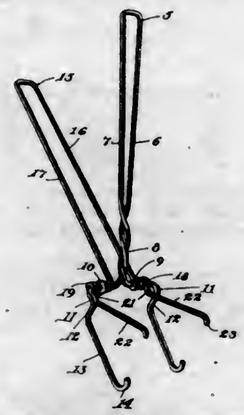
1. A machine for making paper boxes including a die member movable through an arc into operating relation with a relatively stationary die yieldable to the pressure of the movable die when the dies are in said relation to compensate for the arc of movement of the movable die, and means for applying adhesive to box blanks and for positioning the blanks relative to the stationary die, preliminary to forming the boxes by the coaction of said dies.

1,808,015. MECHANICAL TOY. HUGO JOHN BUCHANAN-WOLLASTON, Pakefield, England. Filed June 4, 1928, Serial No. 282,694, and in Great Britain June 27, 1927. 2 Claims. (Cl. 46—48.)



1. A mechanical toy comprising driving means, a flexible shaft for operating same, means held in the hand of the operator for rotating said shaft, a flexible sheath movable longitudinally on said flexible shaft and steering means on the toy operated by longitudinal movement of said sheath relatively to said shaft.

1,808,016. TONGS. MILTON M. BULL, Eugene, Oreg. Filed May 22, 1930. Serial No. 454,717. 3 Claims. (Cl. 294—28.)



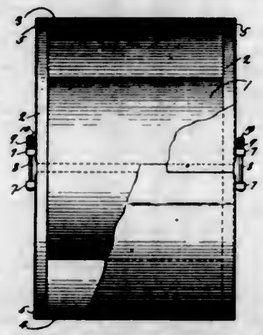
1. Reversible tongs comprising cooperating members each formed from a strip of material fashioned to present handle and jaw portions and pivotally connected together by bending portions of one around parts of another, said jaw portions being formed to present a cradle like gripping surface with inwardly directed hook members in one position and oppositely disposed flat gripping surfaces in reversed position.

1,808,017. VALVE FOR COOKERS. FRANK D. CHAPMAN, Berlin, Wis. Filed Mar. 1, 1930. Serial No. 432,403. 14 Claims. (Cl. 126—272.)



1. A valve for a cooker, comprising a casing for attachment to a cooker drum and having an inlet opening and an outlet opening, a rotary valve member within the casing and having can receiving pockets which register with the openings when the valve member is rotated, yielding packing rings extending around the valve member between the pockets and the ends of the valve, and yieldingly elongatable packing strips positioned between the pockets and extending to the rings, said rings and strips preventing the passage of heat fluid through the valve casing.

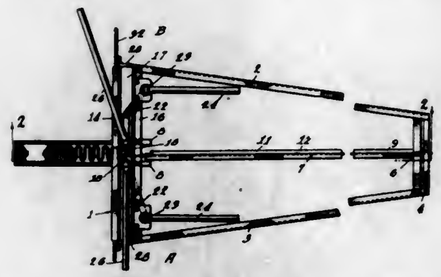
1,808,018. LAGGING FOR REELS. HENRY E. CHARLES, Paterson, N. J., assignor to The Okonite Company, Passaic, N. J., a Corporation of New Jersey. Filed Apr. 1, 1930. Serial No. 440,654. 4 Claims. (Cl. 206—59.)



1. Metal lagging for enclosing a reel for electric cables, said lagging being made in sections adapted to surround

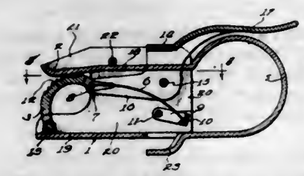
the hub and end flanges of the reel, and means carried wholly by the lagging for securing the sections to each other thereby to retain the lagging in place on the reel, said securing means being located at the outer face of each end flange and below the periphery thereof.

1,808,019. MACHINE FOR BENDING CORRUGATIONS IN METAL. LOUIS F. CLAUSING, Burlingame, Calif., assignor to Royal Metal Works, San Francisco, Calif., a Copartnership consisting of Louis F. Clausing and Max Schwartz. Filed Apr. 15, 1929. Serial No. 355,270. 9 Claims. (Cl. 153—76.)



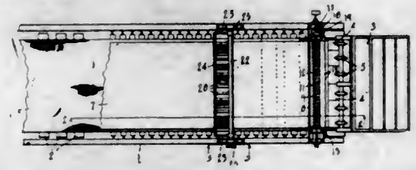
1. A device for corrugating a sheet of metal or the like, comprising means for mounting the sheet and blades pivoted adjacent the sheet on opposite sides thereof for successively bending the sheet in opposite directions when the blades are turned on their pivots.

1,808,020. TOGGLE CLAMP. JOHN J. COLLINET, Chicago, Ill., assignor to Drying Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed Jan. 4, 1930. Serial No. 418,504. 7 Claims. (Cl. 24—250.)



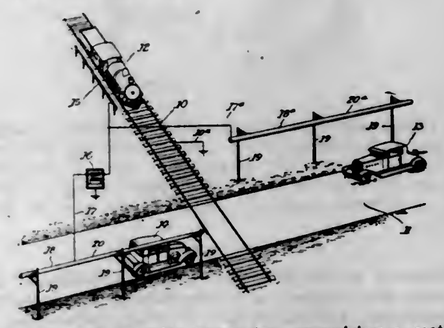
7. A clamp comprising a frame having a fixed jaw, a jaw movably mounted upon said frame for cooperation with said fixed jaw, a handle connected to the frame and the movable jaw for shifting the movable jaw toward and away from the fixed jaw, a toggle spring having one end attached to the movable jaw, and means shiftably mounted upon said frame engaging the opposite end of said spring.

1,808,021. APPARATUS AND METHOD OF MARBLING PAPER. FRANK G. CRANE and JOSEPH M. WARD, Detroit, Mich. Filed July 3, 1929. Serial No. 375,818. 22 Claims. (Cl. 92—40.)



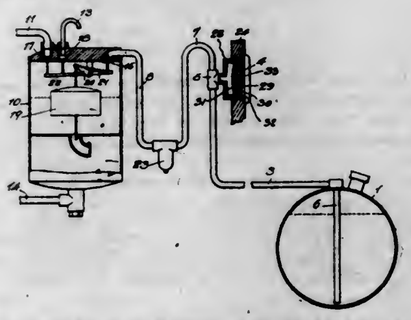
1. The combination with the forming wire and suction box of a paper making machine, of a plurality of color troughs disposed above and transversely of said forming wire in advance of said suction box, feed rolls grooved to provide spiral flat-faced raised portions mounted to rotate in said troughs, distributing blades mounted for longitudinal reciprocation with their inner edges in coacting reciprocation with their inner edges in coacting relation to said feed rolls, said blades having serrated front edges providing a plurality of A-shaped pointed teeth, and means for driving said rolls and reciprocating said blades.

1,808,022. AUTOMATIC WARNING SIGNAL. JOSEPH DEL-PRETE, Chicago, Ill., assignor to Automobile Warning Signal Corporation, Chicago, Ill., a Corporation of Illinois. Filed Feb. 18, 1931. Serial No. 516,528. 4 Claims. (Cl. 246—30.)



1. Automatic warning apparatus, comprising a section of railroad track on either side of a road crossing, a wave generator adapted to generate high frequency waves when a train is on said section of track, means including a semi-elliptical, hollow reflector for releasing said waves over a crossing adjacent to said track, and means on a vehicle within the effective range of said waves for receiving, rectifying and amplifying the same whereby to operate a signal on said vehicle.

1,808,023. LIQUID LEVEL INDICATOR. JOHN A. DIENNER, Chicago, Ill., assignor to Bendix Stromberg Carbureter Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 5, 1923. Serial No. 616,900. 9 Claims. (Cl. 73—54.)

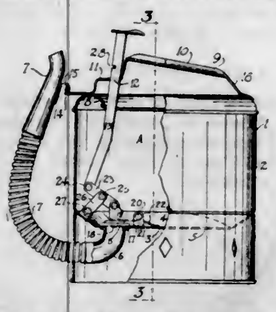


1. In combination, a main tank, a vacuum tank, a suction feed pipe between said tanks, an indicating device sensitive to difference in pressure connected to said pipe and means for holding a solid column of liquid extending from said indicating device to said main tank.

1,808,024. LIQUID MEASURE. HAROLD B. DONLEY, Columbus, Ohio, assignor to The Columbus Auto Brass Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 15, 1929. Serial No. 399,829. 8 Claims. (Cl. 221—16.)

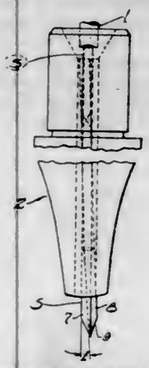
1. In a liquid measure, a substantially cylindrical side wall, a bottom wall arranged within the confines of said

side wall and disposed in a substantially horizontal plane above the lower edge of the side wall, said bottom wall being provided with an opening, a handle having its opposite ends secured to said side wall and extending across the open top of the measure, a valve mechanism



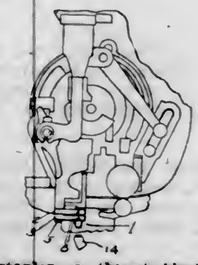
for regulating the outflow of liquid through the opening in said bottom wall, and a movable operating stem for said valve mechanism arranged to project upwardly through the open top of the measure and having its upper portion slidably received in the forward part of said handle.

1,808,025. SHOE STAPLER. ERNEST DUNFORD, St. Louis, Mo., assignor to Landis Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 4, 1929. Serial No. 411,589. 10 Claims. (Cl. 1—20.)



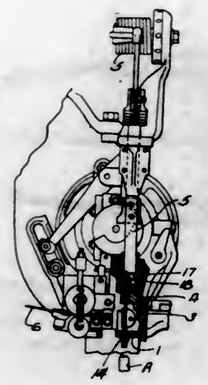
1. In a shoe stapler, a member for driving a staple, means for directing one leg of the staple vertically as it enters the work, and means for directing the other leg of the staple at an angle to the vertical as it enters the work.

1,808,026. SHOE STAPLER DEVICE. ERNEST DUNFORD, St. Louis, Mo., assignor to Landis Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 4, 1929. Serial No. 411,590. 7 Claims. (Cl. 1—20.)



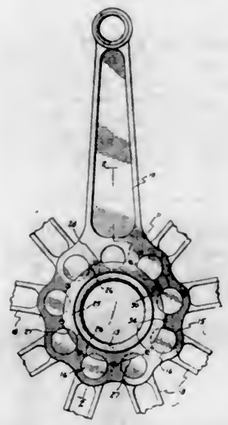
1. In a shoe stapler, a throat block distinct from staple forming mechanism and comprising an upper member for receiving a formed staple, and a separate lower member with a smooth cylindrical hole therethrough for receiving said staple from said upper member and discharging it to the work, the interior diameter of said lower member being smaller than the interior diameter of said upper member.

1,808,027. SHOE-STAPLER STRUCTURE. JACOB ADLER, St. Louis, Mo., assignor to Landis Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 4, 1929. Serial No. 411,596. 8 Claims. (Cl. 1—20.)



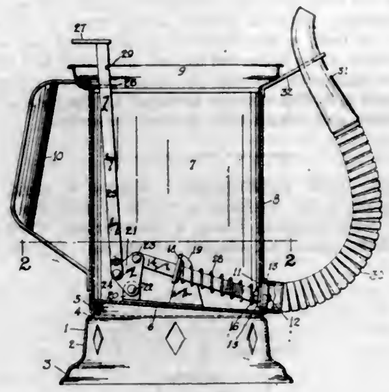
1. In a shoe stapler, staple forming members, and a staple driver, said driver including elements for turning the staple, as formed by said members, about its axis as it is driven.

1,808,028. INTERNAL COMBUSTION ENGINE. JACOB F. EDGAR, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 28, 1930. Serial No. 439,815. 5 Claims. (Cl. 74—17.)



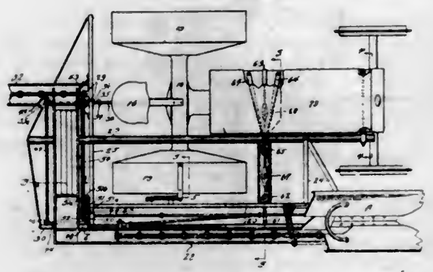
1. In a connecting rod assembly for radial engines, a master rod hub having circularly arranged pin bores therethrough, said hub having a circular recess at one end intersecting the pin bores, a ring seated in the circular recess in the hub end, said ring underlying the hub end intermediate the pin bores, connecting rod knuckle pins in the bores, said pins having a recessed end complementary to the intersecting portions of the ring, and retaining means for the end of the pins opposite the ring.

1,808,029. LIQUID MEASURE. AUGUSTUS J. FRAME, Columbus, Ohio, assignor to The Columbus Auto Brass Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 18, 1930. Serial No. 421,827. 10 Claims. (Cl. 221—16.)



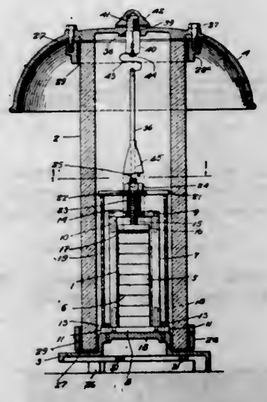
1. In a liquid measure, a base of inverted cup-like formation, a substantially cylindrical body having its lower edge secured to the upper portion of said base, and for which the top of said base constitutes a bottom, said body in conjunction with the upper wall of said base providing a liquid receiving and measuring chamber, an outlet provided in the wall of said body portion contiguous to the bottom of said chamber, a flexible spout connected with and forming a continuation of said outlet, and a manually operated valve mechanism mounted wholly upon said bottom for regulating liquid flow through said outlet.

1,808,030. CORN PICKER ATTACHMENT FOR TRACTORS. NICHOLAUS W. FRANZKOWIAK, Schaller, Iowa. Filed Mar. 3, 1930. Serial No. 432,603. 4 Claims. (Cl. 56—18.)



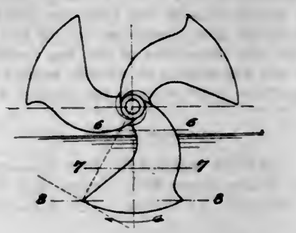
1. A picking attachment for a tractor having a belt pulley shaft housing projecting laterally ahead of a rear wheel, comprising: a sleeve to receive the housing, means attached to the sleeve and attachable to the tractor body, for securing the sleeve on the housing and for supporting the outer end of the sleeve, and a picker frame tiltably supported by the sleeve.

1,808,031. ELECTRICAL CONDENSER. JOSEPH A. FRIED, Flushing, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 22, 1924, Serial No. 745,231. Renewed Mar. 5, 1927. 18 Claims. (Cl. 175—41.)



1. The combination of a housing, a base to which the housing is secured, a condenser in the housing, a clamp affixing the condenser to the base and connected directly to the base, and a cover in the housing for the condenser, the cover being made fast to said clamp.

1,808,032. OUT OF WATER PROPELLER. FRIEDRICH GEBERS, Vienna, Austria. Filed Jan. 12, 1925, Serial No. 1,974, and in Germany Jan. 22, 1924. 3 Claims. (Cl. 170—159.)

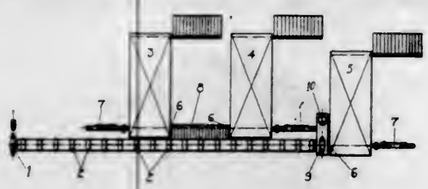


1. An out-of-water propeller designed to operate simultaneously in water and air, consisting in the combination of a hub which is normally above water, blades on said hub with an asymmetrical surface distribution with respect to the radium drawn through the attachment point on the hub, and a point sharpened in the rotation direction as to about 40–60° and essentially extending before the radial part of the propeller causing the gradual immersion from the air into the water at the entering edge of each blade, said entering edge forming with a radius through the utmost point of the blade an acute angle of at least 20°.

1,808,033. HANDLING OF HOT METAL STOCK PREPARATORY TO ITS REDUCTION BY ROLLING. JEROME R. GEORGE and JAMES A. BUELL, Worcester, Mass., assignors to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 5, 1929. Serial No. 376,205. 9 Claims. (Cl. 80—2.)

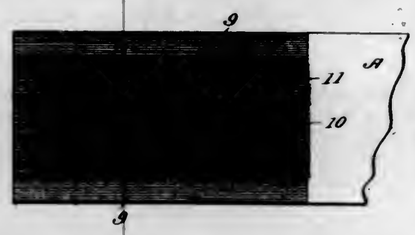
9. In the handling of hot metal stock, supplied from a plurality of heating furnaces to a common feed table for delivery, by the latter, endwise to a rolling mill, the improvement which consists in alining the side discharge

opening of one of said furnaces with said feed table, at the end of the latter remote from said mill, and procuring, selectively, the endwise discharge of stock from said fur-



nace onto said feed table, or the endwise movement of stock from said feed table into said furnace through said opening, for reheating of said last-mentioned stock.

1,808,034. SACK. FRANK H. GREGORY, McAllen, Tex. Filed Apr. 30, 1930. Serial No. 448,663. 1 Claim. (Cl. 150—2.)



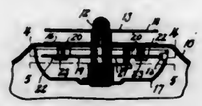
In a cotton picker's bag adapted to be dragged along the ground, that portion of the under side of the bag which in use engages the ground being provided with a gum coat throughout its width, and a rubber ground engaging tread of a width slightly less than the width of the bag vulcanized to the gum coated portion of the bag and extending from the closed end of the bag towards the open end of the bag and ending at a point beyond that portion of the bag which might engage the ground when the bag is in use.

1,808,035. TENNIS RACKET. JOSÉ LEANDRO MONTALVO GUENARD, Ponce, Porto Rico. Filed Nov. 7, 1929. Serial No. 405,441. 11 Claims. (Cl. 273—73.)



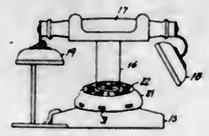
1. A tennis racket, including a handle and an associated frame section, together with a pivoted mesh-securing member adapted for co-operation with said frame to engage a mesh therebetween.

1,808,036. TOY TELEPHONE. WYMAN N. HILL, East Hampton, Conn., assignor to The N. N. Hill Brass Company, East Hampton, Conn., a Corporation. Filed Sept. 25, 1930. Serial No. 484,276. 1 Claim. (Cl. 46—46.)



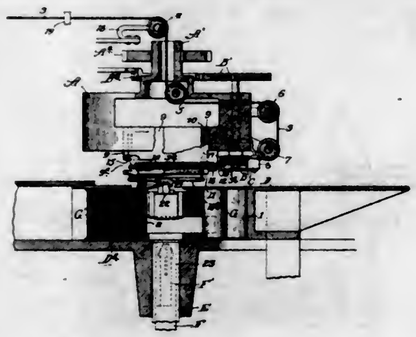
In a toy telephone, the combination with the base of a post rotatably mounted therein, a dial fixed to the outer end of the post, a bell mounted on the inner end of the post and so as to be turned by said dial, said bell formed near its edge with a series of inwardly-extending projections, and a sliding-hammer arranged in the path of said projections and adapted to contact therewith.

1,808,037. TOY TELEPHONE. WYMAN N. HILL, East Hampton, Conn., assignor to The N. N. Hill Brass Company, East Hampton, Conn., a Corporation. Filed Sept. 25, 1930. Serial No. 484,277. 8 Claims. (Cl. 46—46.)



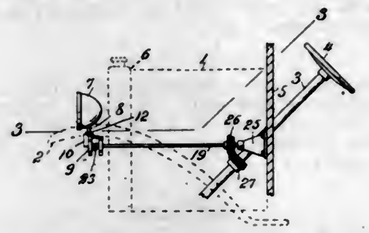
1. A bell for toy telephones having its top provided with a plurality of means for its digital step-by-step rotation in dialing the toy and said bell being provided with a plurality of ringing-projections for engaging a striker when it is so rotated.

1,808,038. TAKE-UP METHOD. FRANK HONIG, Oak Park, Ill., assignor to Cyclo Corporation, Chicago, Ill., a Corporation of Illinois. Original application filed Feb. 16, 1924, Serial No. 693,264. Divided and this application filed Feb. 27, 1924. Serial No. 695,478. 6 Claims. (Cl. 242—79.)



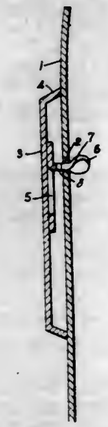
1. In taking up a flexible strand and forming therefrom a plurality of coils, the method which comprises drawing the strand with uninterrupted tension to a convolution-forming zone and forming it into convolutions without depending for tension upon stress transmitted from the convolutions, allowing the convolutions to accumulate in a coil, and successively removing the coils from the coil-forming zone, without interrupting the convolution-forming process.

1,808,039. VEHICLE HEADLAMP ADJUSTING APPARATUS. CLAUD E. HUNTER, Peculiar, Mo. Filed July 10, 1930. Serial No. 466,978. 7 Claims. (Cl. 240—62.)



1. In an apparatus of the kind described, the combination with the fenders of a vehicle, of a horizontal tube having its ends respectively supported on said fenders, a bearing mounted on said tube, a vertical shaft oscillative on its axis in said bearing, a head lamp carried by and oscillative with said shaft, a rack reciprocative in said tube, a pinion fastened to and oscillative with said shaft and meshing with said rack, and means for reciprocating said rack.

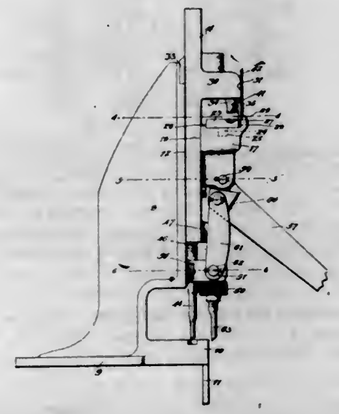
1,808,040. NAME PLATE. RAYMOND D. HYATT and RAE E. COCHRAN, Columbus, Ohio, assignors to The D. L. Auld Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 22, 1928. Serial No. 328,008. 7 Claims. (Cl. 40—20.)



1. In the method of attaching a name plate to a shell, the formation of a lug on said plate, inserting said lug through a slot in said shell of substantially the same dimensions in cross section as the lug and twisting the end of said lug to bring the cross sectional area of the lug across said slot and in engagement with the edges of said slot whereby the name plate is drawn to and held on the shell.

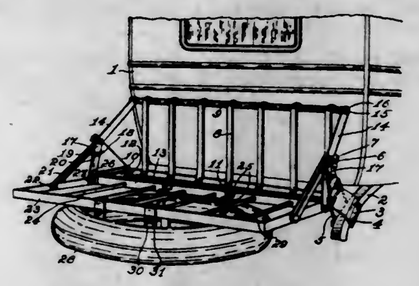
1,808,041. SHEARING, PUNCHING, AND RIVETING MACHINE. ANDREW JOHNSON, Jr., Roseau, Minn., and GEORGE F. WORTHINGTON, Sr., Chicago, Ill., assignors to Vega Separator Corporation of America, Chicago, Ill., a Corporation of Illinois. Filed June 1, 1929. Serial No. 367,815. 11 Claims. (Cl. 29—34.)

1. A machine of the class described comprising a stationary work support, a work-performing member adapted to be advanced step-by-step toward said support, said work-performing member having a thrust shoulder transverse to its line of movement, a thrust member co-operable with said shoulder, means for first moving said thrust member to thrust against said shoulder and advance said work-performing member one step and for then withdrawing said thrust member from said shoulder, and means whereby said shoulder and said thrust member may then be relatively adjusted again into contact with each other in readiness for advancing said work-performing member a second step in the same direction.



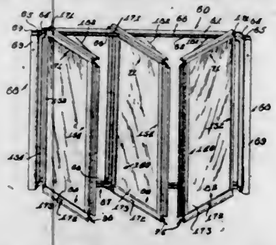
11. A machine for shearing the conventional sections from a sickle bar, comprising a jaw having a channel to receive the rear edge of the sickle bar, said jaw having a ledge at one side of said channel to abut the rear end of one of the sections, a second jaw opposite said channel, said second jaw having one face to abut the front edge of the sickle bar and another face to lie against the inner side of one of the sections, and means for relatively moving said jaws to cause further forcing of the sickle bar into said channel while the section is held by said ledge, thereby shearing the rivets connecting the section and sickle bar.

1,808,042. ADJUSTABLE LUGGAGE CARRIER. GEORGE COLVIN KENNEDY, Waterloo, Iowa. Filed June 17, 1929. Serial No. 371,593. 6 Claims. (Cl. 224—29.)



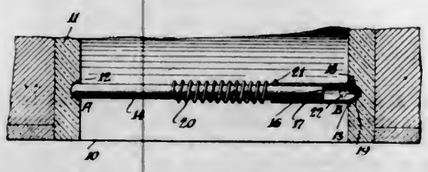
1. A luggage carrier including a fixed section having a horizontal portion, a movable section, means connecting said sections and arranged to permit the movable section to move bodily in a substantially horizontal path toward and from the fixed section while maintaining substantial coplanar relation therewith, said movable section being pivoted to said means to permit swinging of the movable sections into selected angular position relative to the fixed section, and means to secure the movable section in the selected angular position.

1,808,043. SLIDING AND SWINGING WINDOW. JACOB L. KLEINMAN, New York, N. Y. Filed Oct. 2, 1928. Serial No. 309,762. 59 Claims. (Cl. 189—66.)



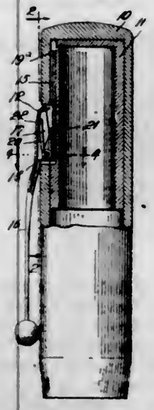
1. A window comprising a casement, frames slidably mounted in said casement, end and intermediate sashes pivotally mounted on said frames, said intermediate sashes formed with cutout portions to permit the swinging of said sashes.

1,808,044. TOILET-PAPER HOLDER. FRED W. KOMPA, Astoria, N. Y. Filed June 14, 1930. Serial No. 461,133. 2 Claims. (Cl. 242—55.2.)



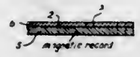
1. A holder for toilet paper rollers comprising in combination with a chamber formed in a bath-room wall and having recesses at directly opposite points of its side walls, a rod engaging with one end one of said recesses, a sleeve formed from a blank, adapted to receive the other end of said rod, a conical end formed with said sleeve adapted to engage the other of said recesses, a spring wound about said rod adapted to firmly press the ends of said rod and sleeve in their respective recess allowing a rotating of the paper roll about the same.

1,808,045. CLIP STRUCTURE FOR FOUNTAIN-PEN CAPS, PENCILS, AND THE LIKE. HENRY KRAUSE, New York, N. Y. Filed Dec. 5, 1929. Serial No. 411,747. 17 Claims. (Cl. 24—11.)



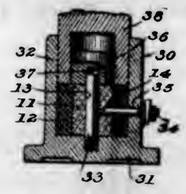
1. The combination with a tubular member containing a longitudinal slot, of a clip structure comprising a clip and an anchor bar extending in the same general direction and pivoted together and of greater width and area than the width and area of the slot, one of them being adapted to be passed through the slot in the tubular member so as to place the clip outside the tubular member and the anchor bar inside the tubular member.

1,808,046. FILM OF MAGNETIZABLE MATERIAL FOR EPISCOPIC PROJECTION. HEINRICH KÜCHENMEISTER, Berlin, Germany. Filed Jan. 30, 1928, Serial No. 250,734, and in Germany Feb. 7, 1927. 11 Claims. (Cl. 88—16.2.)



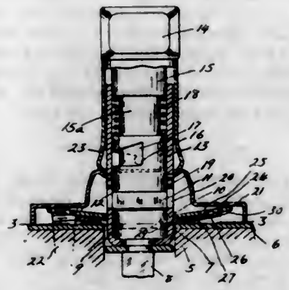
1. A moving picture and sound record band consisting of a metal band having a magnetic sound record, and of a coating extending over the surface of said band, said coating being provided with photographic sound and picture records for episcopic projection, at least one of said last two records overlying said magnetic record.

1,808,047. METHOD OF MAKING BEARINGS. JESSE T. LITTLETON, Jr., Corning, and RAYMOND W. LILLIE, New Rochelle, N. Y. Filed Oct. 15, 1928. Serial No. 312,637. 6 Claims. (Cl. 18—59.)



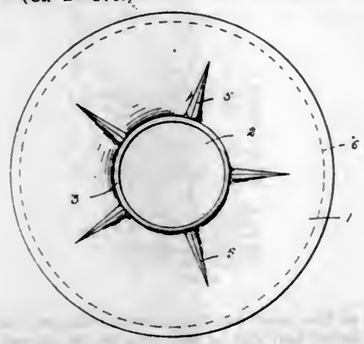
1. The method of making bearings which consists in forming a glass core with a shaft-receiving bore, placing said core in a mold, surrounding the core with finely comminuted material and heating and exerting pressure on the finely comminuted material to form a solid casing around the core, and cooling to cause a contraction of said casing on said core.

1,808,048. AUTOMOBILE DOOR HANDLE. CHARLES B. LOWE, Detroit, Mich., assignor to The Ferro Stamping Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 17, 1928. Serial No. 313,113. 8 Claims. (Cl. 292—356.)



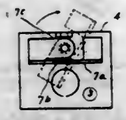
1. The combination with a rotatable door handle and an escutcheon therefor, of means for resisting rotary movement of the door handle comprising a tension plate fixedly engaging the escutcheon and a rotatable tension plate secured upon the door handle to rotate therewith and slidably contacting the fixed tension plate.

1,808,049. ARM SHIELD. ERNEST S. LYDEN, Duluth, Minn. Filed Aug. 14, 1930. Serial No. 475,191. 1 Claim. (Cl. 2—170.)



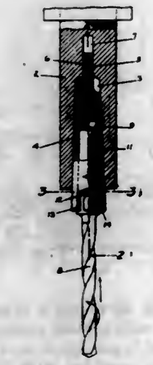
Dished disc-like shield of the character described made of a single piece of flexible material having an axial hole therethrough, an annular enlargement about the hole, a groove within the inner face of the enlargement, reinforcing ribs extending radially from the flange upon the inner face of the shield, and an annular drip flange adjacent its marginal edge, and projecting from the convex surface thereof.

1,808,050. SWITCH BOX. JOHN E. MAIR, Mars, Pa., assignor to National Electric Products Corporation, a Corporation of Delaware. Filed Feb. 7, 1930. Serial No. 426,562. 4 Claims. (Cl. 247—21.)



1. The combination with a switch-box having a cover-attaching lug projecting outwardly from its side wall, of a two-position box-supporting member comprising a tail-piece bearing against and rotatably pivoted to said box wall and an outwardly projecting shelf, an opening in said shelf containing said lug when said member is in one position, and a slot extending from said shelf-opening through said tail-piece adapted to permit said tailpiece to pass said lug upon rotation of said member to its other position.

1,808,051. DRILL SUPPORT. JOSEPH P. MASLEWSKI, Minneapolis, Minn. Filed Jan. 16, 1930. Serial No. 421,193. 2 Claims. (Cl. 279—103.)



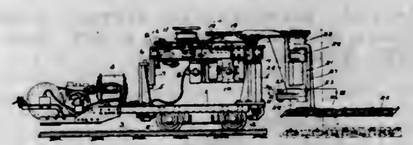
1. A drill supporting sleeve having a tapered socket therein provided with an angular slot in its wall, a tapered shank adapted to be received in said socket, and a pin received in said shank and adapted to be received in said slot to detachably secure the shank in the socket, said slot having an inclined wall adapted to be engaged by said pin, whereby rotation of said sleeve and drill in one direction will cause said shank to be tightly secured to said sleeve.

1,808,052. GUN. GEORGE M. MCCANN, New Castle, Del. Filed Jan. 31, 1931. Serial No. 512,615. 1 Claim. (Cl. 89—16.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



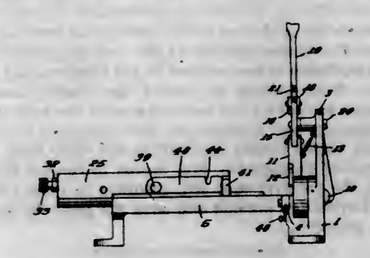
In a gun, an outer tube provided with a slot, a liner within the tube and capable of longitudinal movement with respect thereto, a conduit insertable through the slot in the tube and attached to the liner, the diameter of the conduit being less than the length of the slot in the tube.

1,808,053. COAL MINING MACHINE. JOHN W. MCPHERSON, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Nov. 4, 1922. Serial No. 599,090. 6 Claims. (Cl. 262—28.)



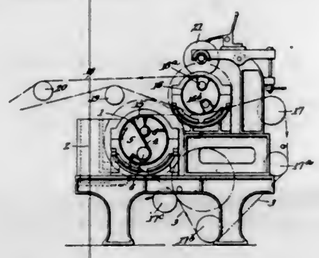
1. In a mining machine, a truck, an overhanging bracket having a bearing mounted for transverse movement across the front of said truck, a vertical shaft mounted in said bracket bearing in front of said truck, a horizontal kerf cutter having a bracket provided with a forked bearing rotatably mounted upon said shaft and resting upon said bearing of said overhanging forked bracket for supporting said kerf cutter, and means for securely fixing said kerf cutter in any one of a plurality of different angular positions about said shaft.

1,808,054. LEAD AND RULE CUTTER. FRANK MEESE, Chicago, Ill. Filed Nov. 23, 1929. Serial No. 409,257. 7 Claims. (Cl. 164—105.)



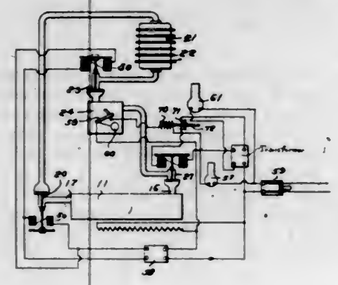
1. In a lead and rule cutter, a frame, a bed detachably secured thereto, a stationary knife carried by said bed, an oscillating knife carried by said frame for cooperation with said stationary knife, a gauge adjustably carried by said bed, and an extension for said gauge pivotally connected thereto and adjustable therewith upon said bed.

1,808,055. PAPER MAKING MACHINE. WILLIAM H. MILLSPAUGH, Sandusky, Ohio, assignor to The Paper & Textile Machinery Co., Sandusky, Ohio, a Corporation of Ohio. Filed July 20, 1926. Serial No. 123,757. 10 Claims. (Cl. 92—39.)



2. In a paper-making machine, a rotating suction roll; a wire traveling thereon; means for feeding pulp solution on the vacuum area of the surface provided by the wire on said suction roll, said vacuum area extending beyond the level of the liquid, so that a sheet is continually formed by vacuum-induced deposit of fibres in close formation as the wire traverses the arc of contact with the liquid and the vacuum action continues on the sheet as it passes from the liquid; and means rapidly moving solution to and fro across the forming surface to promote crisscross deposition of fibres.

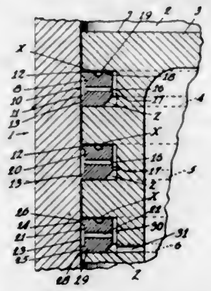
1,808,056. REFRIGERATING SYSTEM. ROBERT J. MITCHELL, Kent, Ohio. Filed May 9, 1929. Serial No. 361,781. 3 Claims. (Cl. 62—5.)



1. A refrigeration system comprising a still-absorber, a condenser and a receiver-evaporator orbitally connected; valves respectively between the still-absorber and condenser; between the condenser and receiver, and between the receiver and still-absorber; a heater for the still-absorber, means responsive to low content in the receiver, and to temperature thereadjacent to control the heater, corresponsive means to control the valves between the still-absorber and condenser, and between the condenser and receiver, to open said valves during distillation and close them during the period of evaporation, and means to control the valve between the receiver and still-absorber to close the same during distillation periods and open the same during evaporation periods.

1,808,057. PISTON RING. ROBERT C. MONTEAGLE, San Francisco, Calif. Filed Mar. 25, 1929. Serial No. 349,837. 4 Claims. (Cl. 74—109.)

1. The combination with a cylinder having a piston slidable therein, said piston having an annular groove, of a ring disposed in said groove, one face of said ring having an annular oil groove for forming a seal between the ring and the adjacent wall of said groove, the inner edge of the opposite face of said ring being beveled for forming a



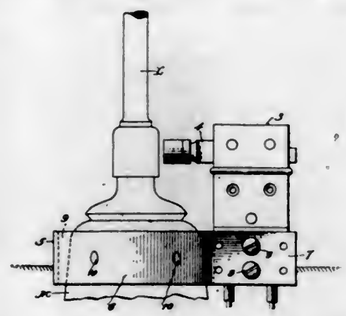
cavity so that gases entering therein from the cylinder will force the oil-seal side of said ring firmly against the wall of the piston groove.

1,808,058. WINDSHIELD. JAMES MORRISON, Cincinnati, Ohio, assignor to The Highland Body Manufacturing Company, Elmwood, Ohio, a Corporation of Ohio. Filed Dec. 14, 1929. Serial No. 414,068. 5 Claims. (Cl. 296—93.)



1. A windshield comprising a rigid frame having flanges extending inwardly and outwardly of the frame, rubber strips providing channels for receiving and gripping said flanges, said strips likewise providing channels opening inwardly of the frame, and a glass sheet receivable along its edges in said inwardly-opening channels and filling the space within the frame.

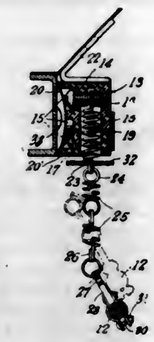
1,808,059. CLAMP. GUSTAV M. MORTENSON, Kane, Pa. Original application filed Apr. 8, 1929, Serial No. 353,537. Divided and this application filed Mar. 13, 1930. Serial No. 435,515. 1 Claim. (Cl. 24—19.)



A clamp adapted to surround a tapered member, said clamp being provided with a thick resilient lining to adapt itself to any degree of taper which said member may possess, said clamp being provided with inwardly projecting studs of a length less than the thickness of the lining, the latter having sockets in which said studs are received.

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1,808,060. ELECTRIC SWITCH. WILLIAM F. NEUBECK, Brooklyn, N. Y. Filed May 13, 1929. Serial No. 362,603. 14 Claims. (Cl. 200—59.)

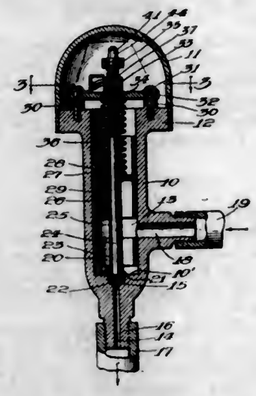


1. In an electric switch for mounting on a stationary part, the combination of a casing having an open face, a pair of contacts within said casing, an extensible switch arm pivoted within the casing to swing between the contacts and extending through the open face thereof, a flexible link operatively connecting said switch arm to a movable part under tension, and a friction element mounted on said switch arm and normally held out of engagement with said casing when said switch arm is under tension, said friction element being adapted to frictionally engage with said casing in the event of a slackening of tension on said switch arm to hold the switch arm in an inoperative position.

1,808,061. TREATMENT OF THREADS, FABRICS, OR OTHER MATERIALS COMPOSED OF OR CONTAINING ARTIFICIAL FILAMENTS. CHARLES WILFRED PALMER and STEPHEN MILLER FULTON, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Nov. 16, 1925, Serial No. 69,526, and in Great Britain May 26, 1925. 10 Claims. (Cl. 8—20.)

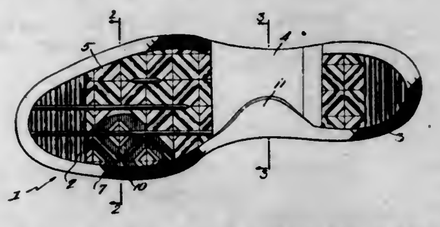
1. In a process of treating a material containing lustrous cellulose acetate filaments with an agent which tends to delustre the material, conducting the treatment in the presence of normal salt of neutral to acid reaction.

1,808,062. MEASURING VALVE. THOMAS J. PARKER, Chicago, Ill., assignor of one-half to William McGuineas, Chicago, Ill. Filed Aug. 18, 1930. Serial No. 476,042. 7 Claims. (Cl. 221—95.)



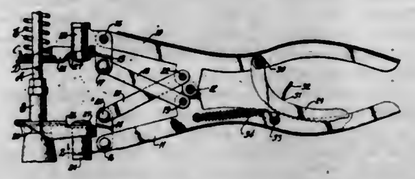
1. A measuring valve comprising a housing forming a fluid receiving chamber, an outlet and an inlet communicating with the chamber, a shaft movably mounted in the housing, inlet and outlet closing means fixed to the shaft, the inlet being normally open and the outlet normally closed, a piston slidably mounted on the shaft, operative connections between the piston and the shaft for moving the shaft longitudinally relative to the piston when the piston has been actuated under influence of fluid pressure in the chamber, means for moving the piston in the opposite direction and means for reversing the direction of the shaft to restore the inlet and outlet closing means to normal position, said operative connections between piston and shaft comprising a head on the shaft, a coiled spring on the shaft between the piston and the head, a pivoted trip lever fixed on the housing, in engagement with the shaft head and having a contact arm adapted for engagement with the piston for releasing the trip lever from the head when the lever is pivotally actuated by said piston.

1,808,063. FOOTWEAR. MORTON L. PATERSON, Boston, Mass., assignor to Converse Rubber Company, Malden, Mass., a Corporation of Massachusetts. Filed July 16, 1929. Serial No. 378,598. 13 Claims. (Cl. 36—32.)



2. A shoe sole comprising a forward part having an irregularly surfaced intermediate portion, a marginal reinforcement extending about the forward part and having a greater depth than that of the intermediate portion, a reinforcing pad integral with the marginal reinforcement and disposed upon the ball portion of the shoe, said marginal reinforcement extending backwardly along the inner side of the shank to the heel, and an extension of said reinforcement providing a pad upon the shank to support the arch portion of the foot.

1,808,064. VALVE LIFTER. WILLIAM J. PEARMAIN and JAMES S. ALLAN, Racine, Wis., assignors to Rex Accessories Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 15, 1929. Serial No. 340,101. 3 Claims. (Cl. 29—86.3.)

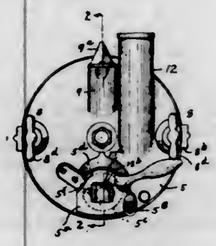


1. A valve-spring-lifting tool comprising two lever members pivotally connected, bell cranks pivotally connected to the ends of said members, means for maintaining said bell cranks substantially in parallelism, and finger members pivotally mounted on said bell cranks.

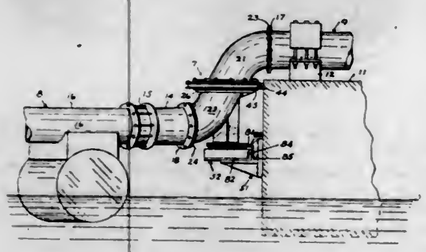
1,808,065. FREEZING CYLINDER. LEROY S. PROUTS, Canton, Ohio, assignor to The H. H. Miller Industries Company, Canton, Ohio, a Corporation of Ohio. Filed July 25, 1927. Serial No. 208,235. 4 Claims. (Cl. 220—24.)

3. A valve mechanism comprising a valve seat, a valve element movable relative to said seat and formed with an

opening adapted to register with said valve seat when said valve element is seated and forming a separate valve seat, a valve element movably mounted on said first mentioned valve element to engage and disengage the last mentioned valve seat, and separate means for operating said valve elements independently.



1,808,066. SWIVEL JOINT FOR PIPES. SIDNEY G. PLUMMER, Oakland, Calif. Filed Sept. 10, 1929. Serial No. 391,559. 5 Claims. (Cl. 37—72.)



1. In a swivel fitting for connecting pipes, a pair of tubular elements having opposed ends thereof providing annular radial flanges engaged in coaxial and abutting relation for relative rotation about a fixed axis, and antifriction means cooperative with one only of said flanges to maintain the same in coaxial alignment with the other flange.

1,808,067. PAPER AND METHOD OF MAKING THE SAME. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Nov. 15, 1928. Serial No. 319,719. 41 Claims. (Cl. 92—21.)

1. The method of incorporating into paper filled with alkaline filler an inorganic alkali metal salt with a pH value greater than 7.0, which is precipitable by material which depresses its hydroxyl ion concentration, comprising mixing fibrous material, said alkali metal salt and a precipitant therefor, and alkaline filler, and adding to the resulting mix a restoring material under conditions favoring the minimizing of the time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,808,068. MANUFACTURE OF PAPER. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Nov. 15, 1928, Serial No. 319,720. Renewed Jan. 21, 1931. 30 Claims. (Cl. 92—21.)

1. The method of incorporating into paper filled with alkaline filler an inorganic alkali metal salt with a pH value greater than 7.0, which is precipitable by material which depresses its hydroxyl ion concentration, comprising mixing fibrous material, alkaline filler, and said alkali metal salt, adding a precipitant therefor under conditions favoring the minimizing of the time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,808,069. MANUFACTURE OF PAPER. HAROLD R. RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Nov. 15, 1928, Serial No. 319,721. Renewed Jan. 21, 1931. 25 Claims. (Cl. 92—21.)

1. The method of incorporating into paper filled with alkaline filler the precipitate of an inorganic alkali metal salt with a pH value greater than 7.0, which is precipitable by material which depresses its hydroxyl ion concentration, and a precipitant therefor, comprising separately mixing said alkali metal salt and said precipitant, adding the resulting product to fibrous material and alkaline filler under conditions favoring the minimizing of time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,808,070. METHOD OF PRODUCING PAPER FILLED WITH ALKALINE FILLER. HAROLD R. RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Nov. 24, 1928. Serial No. 321,753. 31 Claims. (Cl. 92—21.)

1. That step in the method of manufacturing a substantially unsized paper filled with alkaline filler comprising adding alkaline filler, in an amount sufficient to impart a substantial degree of filling to the resulting paper, to fibrous material under conditions favoring the minimizing of the time of contact of the alkaline filler and the fibrous material.

1,808,071. METHOD OF PRODUCING PAPER FILLED WITH ALKALINE FILLER. HAROLD R. RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Nov. 24, 1928, Serial No. 321,754. Renewed Aug. 15, 1930. 33 Claims. (Cl. 92—21.)

1. The method of manufacturing paper filled with alkaline filler comprising adding alkaline filler in an amount sufficient to impart a substantial degree of filling to the resulting paper, and an aluminum salt to fibrous material under conditions favoring the minimizing of time of contact, and thereafter making paper therefrom.

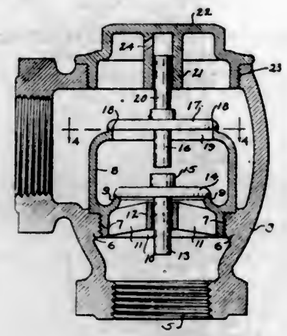
1,808,072. METHOD OF IMPROVING PAPER MACHINE OPERATION. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Dec. 11, 1928, Serial No. 325,407. Renewed Mar. 5, 1931. 24 Claims. (Cl. 92—40.)

1. The method of manufacturing paper filled with alkaline filler and containing casein in its furnish, comprising adding to a fibrous mix comprising fibrous material, casein bearing constituents, and alkaline filler, alum under conditions favoring the minimizing of time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,808,073. METHOD OF IMPROVING PAPER MACHINE OPERATION. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Dec. 11, 1928, Serial No. 325,408. Renewed Mar. 5, 1931. 26 Claims. (Cl. 92—40.)

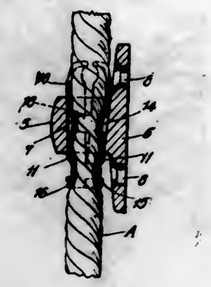
1. The method of manufacturing paper filled with alkaline filler and containing casein in its furnish, comprising adding to a fibrous mix originally comprising fibrous material, casein bearing constituent, and alum, alkaline filler under conditions favoring the minimizing of time of contact of the constituents of the mix, and thereafter making paper therefrom.

1,808,074. VALVE. FREDERICK F. RIKE and WILLIAM P. HUFFMAN, Dayton, Ohio, assignors to Buckeye Iron and Brass Works, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 24, 1927. Serial No. 228,265. 6 Claims. (Cl. 277—42.)



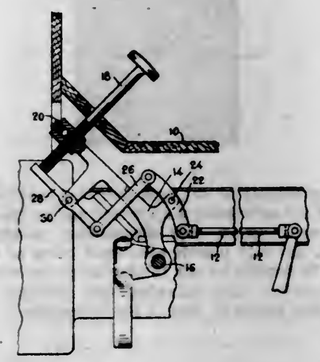
1. In combination, a valve casing having inlet and exit pipes arranged and connected thereto at right angles to one another, a detachable cover in line with one of said pipes, a valve cage detachably mounted in line therewith and poppet valves carried by said cage, and means to guide said valves, said valves being so arranged that the movement of one will move the other while they may move a predetermined distance independently one of the other.

1,808,075. CORD OR ROPE HOLDING DEVICE. SIDNEY ROTHSCHILD, New York, N. Y. Filed May 7, 1930. Serial No. 450,559. 4 Claims. (Cl. 24—136.)



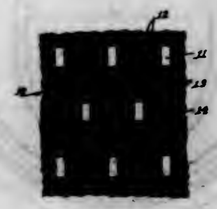
4. A gripping element for cord or rope holders comprising a two part rope embracing means, each of the parts comprising a relatively long member of substantially cross sectional circular form, rope engaging means formed on one end of each of said members, guide means carried by each of said members and overlying the other member, and inwardly projecting rope engaging means intermediate the ends of said members, said last mentioned means being formed from the body of the members.

1,808,076. BRAKE OPERATING MECHANISM. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, Chicago, Ill., a Corporation of Illinois. Original application filed Feb. 28, 1927, Serial No. 171,505. Divided and this application filed Feb. 11, 1928. Serial No. 253,585. 11 Claims. (Cl. 188—196.)



2. Brake operating mechanism comprising a movable brake operating member, a brake connection adjustably coupled therewith to be actuated thereby, a tread portion carried by the member and adjustable thereon to vary the adjustment of the brake operating connection with the member.

1,808,077. SOUND PICTURE SCREEN. WILLIAM J. SCHOONMAKER, New York, N. Y. Filed Nov. 5, 1929. Serial No. 404,882. 8 Claims. (Cl. 88—24.)



1. A sound picture screen, comprising a woven cloth formed with interstices and somewhat larger apertures in the weaving among the threads and having a plastic fluid compound applied thereto, the said plastic compound being of a density suitable for covering the threads of the said cloth in order to make the latter waterproof and washable and of a density sufficient to clog up and entirely close the said interstices, but not of sufficient density to clog up or close the apertures.

1,808,078. NONINFLAMMABLE SOUND PICTURE SCREEN. WILLIAM J. SCHOONMAKER, New York, N. Y. Filed Nov. 12, 1929. Serial No. 406,559. 6 Claims. (Cl. 88—24.)

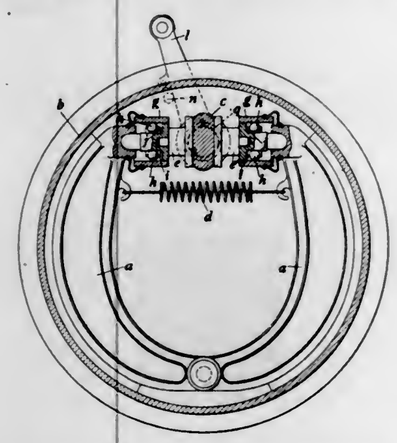
1. A non-inflammable sound picture screen comprising a woven fabric formed with interstices in the weaving

among the threads, the said fabric being submitted to a fireproof solution treatment and having afterwards applied to both sides a plastic non-inflammable and waterproof chemical compound, said plastic compound being of a density suitable for covering the threads of the said fabric, thus acting as a seal in preventing deterioration



of the ingredients of the said fireproof solution from exposure to air or contact with water and at the same time making said screen non-inflammable, waterproof and washable, the said plastic compound being of a sufficient thinness in density as not to clog up or entirely close the said interstices thus allowing the passage of sound through said screen by way of the interstices.

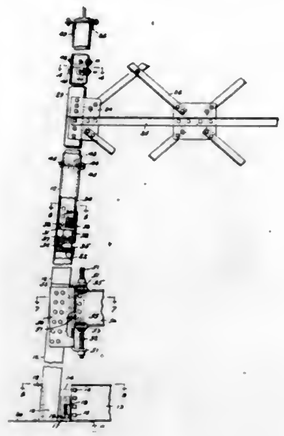
1,808,079. AUTOMATICALLY ADJUSTABLE MECHANICAL STOP OR ABUTMENT. WILLIAM SEDDON and ROGER FREDERICK CORDEY, Cowley, Oxford, England, assignors to Morris Motors (1926) Limited, Cowley, Oxford, England. Filed May 13, 1929, Serial No. 362,786, and in Great Britain Nov. 13, 1928. 2 Claims. (Cl. 188—79.5.)



1. In motor vehicle brakes, the combination comprising a movable brake member, a thrust piece acting on said member, the said piece being formed with a tapered portion, a hollow cylindrical guide surrounding the thrust piece, a plurality of balls, located between the tapered portion of the thrust piece and the guide, a resilient cage for holding the balls, in contact with the guide and a shoulder on the thrust piece for acting in one direction on the cage, substantially as described.

1,808,080. STEEL DERRICK. JAMES E. SMITH, Los Angeles, Calif., assignor to Western Pipe & Steel Company of California, a Corporation of California. Filed Feb. 23, 1928. Serial No. 256,180. 12 Claims. (Cl. 189—18.)

2. A reinforced steel derrick comprising a base plate, a main tower resting on said base plate having a plurality of legs, a reinforced base section on each leg extending a substantial distance above said base plate, a seat on each base section above said base plate, an auxil-

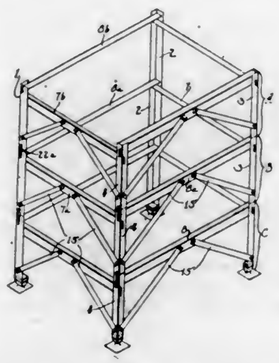


iary tower having a plurality of legs, a foot piece on each leg of the auxiliary tower, and adjustable means on each foot piece engaging the seat on the respective legs of the main tower.

1,808,081. ACID-PROOF COATING COMPOSITION. FRANCIS D. SULLIVAN, Memphis, Tenn. Filed May 23, 1929. Serial No. 365,570. 2 Claims. (Cl. 106—8.)

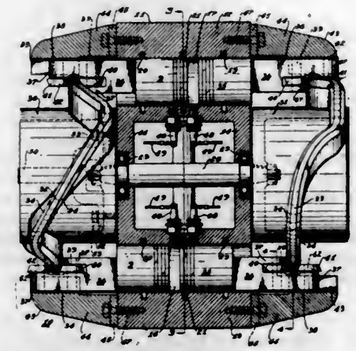
1. A coating composition comprising a mixture of Portland cement, mica, sulphur, and a metallic coloring matter mixed together in the presence of heat.

1,808,082. SCAFFOLD. CARL A. THOMPSON, Harvard, Ill. Filed Dec. 26, 1928. Serial No. 328,378. 3 Claims. (Cl. 304—23.)



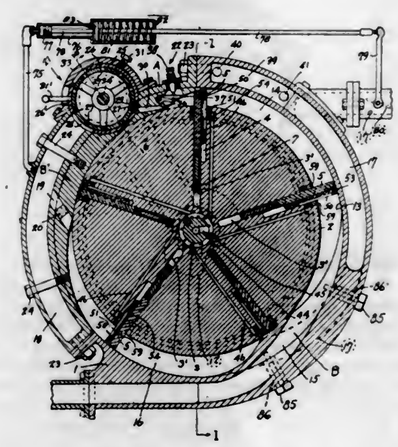
1. A scaffold construction comprising a plurality of sections arranged in superimposed relation, said sections comprising corner posts and detachable members for connecting the same, the upper ends of said posts being provided with a plurality of openings for receiving the end portions of said detachable members, the lower ends of said posts being provided with securing members having openings arranged to be aligned with certain of the openings in the upper ends of the posts when the lower ends are disposed contiguous to the upper ends, certain of said detachable members having recesses for receiving certain portions of said corner posts when the ends of the detachable members are disposed within certain of the openings in said corner posts, the other of said detachable members being provided with recesses arranged for receiving portions of the corner posts and said securing members when the ends of the detachable members are disposed within the other of the openings in said corner posts, and a base section adapted for supporting said sections and connected therewith.

1,808,083. INTERNAL COMBUSTION ENGINE. MILTON TIBBETTS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 31, 1929. Serial No. 367,184. 25 Claims. (Cl. 123—64.)



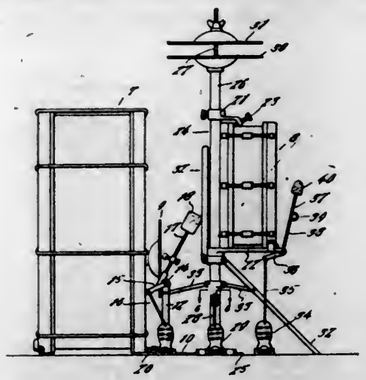
7. In an internal combustion engine, in combination, a cylinder, a pair of pistons movable in the cylinder, the cylinder having a combustion chamber between the pistons, and cam means causing the pistons to move substantially equally in the same direction on two of the strokes in a cycle of the engine.

1,808,084. ROTARY ENGINE. FRANK E. TIDD, Yerington, Nev. Filed Apr. 30, 1928. Serial No. 274,034. 7 Claims. (Cl. 123—16.)



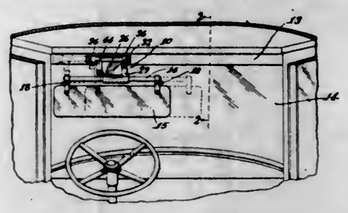
1. In a rotary engine, a combustion chamber, a gas inlet for said chamber, a timed valve for causing said inlet to intermittently deliver a gas to said chamber and spark-controlling means consisting of a stationary terminal and a movable terminal, said movable terminal being controlled by gravity when the compressed gas ceases to flow into said chamber.

1,808,085. MUSICAL TRAPS. FREDERICK J. TROPPE, Joliet, Ill. Filed Aug. 1, 1929. Serial No. 382,641. 9 Claims. (Cl. 84—422.)



6. A structure of the character described comprising a tubular standard, an arm projecting laterally from an intermediate portion of the standard, a clamp mounted on the standard in spaced relation above the arm, said arm and the clamp constituting means for securing a snare drum on the standard, a beater mounted for swinging movement on the free end portion of the arm, a foot pedal operatively connected with the beater, a stationary cymbal on the upper end portion of the standard, a rod disposed for vertical reciprocation in the standard and projecting thereabove, a cymbal mounted on the upper end portion of the rod for movement therewith and engageable with the stationary cymbal, and a foot pedal operatively connected to the lower end portion of the rod for actuating said rod.

1,808,086. MOUNTING FOR AUTOMOBILE GLARE SHIELDS. ALFRED R. ULP, Altadena, Calif.. Filed Aug. 5, 1929. Serial No. 383,698. 3 Claims. (Cl. 296—97.)

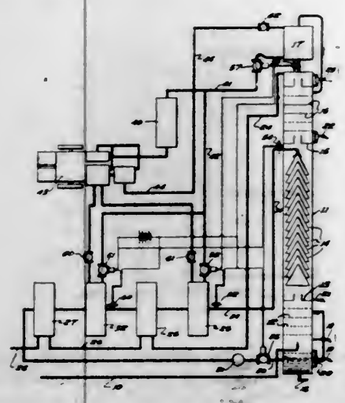


2. A device of the character described comprising a stationary tube adapted to be secured to a fixed support, a bracket having a bore formed therein rotatable and slidable on said tube, a second tube parallel to said stationary tube and rotatable and slidable in a second bore formed in said bracket, adjustable mechanisms carried by said bracket adapted to frictionally engage said stationary tube and said second tube, and a glare shield carried by said second tube.

1,808,087. APPARATUS FOR TREATING GAS. KENNETH M. URQUHART, Marshall, Okla. Filed Jan. 29, 1929. Serial No. 335,801. 8 Claims. (Cl. 62—122.)

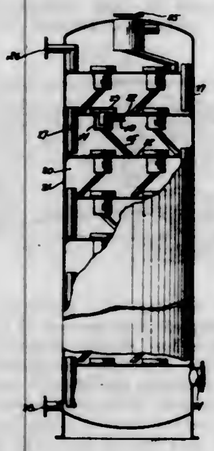
1. An apparatus for the removal of condensable substance from a gas which comprises a tower having a gas inlet near the base thereof, liquid outlets below said gas inlet, one of said liquid outlets leading to an impeller which drives the liquid removed through chilling devices, a liquid inlet at a point above the gaseous inlet where the

chilled liquid is allowed to flow counter to the upward flowing gas within the tower, baffles between the gas inlet and the liquid inlet, a plate above said liquid inlet preventing substantial down flow of liquid but permitting up flow of gas, bubble plates above said plate, a reflux



condenser above said bubble plates and a gaseous outlet in the upper portion of said tower from which a pipe leads the gas through two heat exchangers in series, where the liquid before mentioned is consequently chilled by the out flowing gas, and a cooler operated by a refrigerant interposed between said two heat exchangers.

1,808,088. APPARATUS FOR CONTACTING TWO OR MORE FLUIDS. KENNETH M. URQUHART, Marshall, Okla. Filed Jan. 29, 1929. Serial No. 335,802. 3 Claims. (Cl. 261—114.)



1. A contacting tower having a plurality of plates preventing the free fall of the heavy fluid used in said contracting tower, means above said plates to mix the lighter fluid coming up through said plates with the heavy fluid upon said plates and means below each plate and depending therefrom to separate the heavy and light fluid from the next lower plate, said last named means comprising a centrifugal separator having a tangential inlet below said plate, an outlet through said plate for the lighter fluid and an outlet downwardly going to a point below the surface of the heavier fluid on a plate below.

1,808,089. DATING STAMP. RAOUL VILLON and ROBERT LEMAIGNEN, Paris, France. Filed Oct. 22, 1928, Serial No. 314,276, and in France Oct. 28, 1927. 3 Claims. (Cl. 101—110.)



1. In a dating stamp, the combination of a handle, a case secured to the said handle, a shaft crossing the said case, an operating knob secured to the said shaft at the outside of the said case, a first toothed number wheel mounted on the said shaft, several other number wheels mounted loosely on the said shaft, means for transmitting in an intermittent manner the rotation of the first number wheel to the other number wheels for causing these wheels to turn one tooth at each revolution of the first number wheel, pawls, the noses of which engage respectively the teeth of each number wheel and guide the said pawls between the adjacent number wheels, a sliding bolt crossing the said case above the noses of the said pawls and provided with grooves which allow the said pawls to disengage the said number wheels, and a spring adapted to bring back automatically the said bolt in the catching position.

1,808,090. ADHESIVE. ARCHIBALD H. VINING, San Jose, Calif. Filed Jan. 30, 1930. Serial No. 424,725. 4 Claims. (Cl. 87—17.)

1. An adhesive composition for masks consisting of beeswax, lanolin, and a turpentine having the consistency of Venice turpentine.

1,808,091. PNEUMATIC TIRE TUBE. JAMES W. WABER, Chicago, Ill. Filed Aug. 9, 1930. Serial No. 474,147. 7 Claims. (Cl. 154—15.)

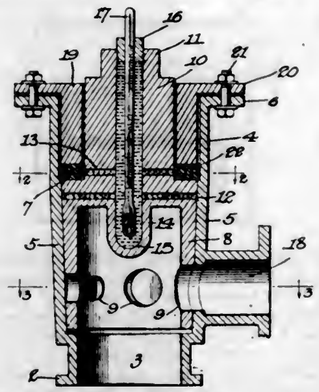


1. The method of constructing an inner tube for pneumatic tires which consists in forming an endless tube of vulcanizable rubber, expanding said tube by internal pressure, attaching to the outer circumference of said tube while inflated, a layer of plastic sealing compound, covering the compound with a vulcanizable rubber sheet which extends beyond the edges of the compound and contacts with the endless tube for adhesion thereto and curing the entire tube structure to produce a full molded tube.

1,808,092. TOP RELIEF VALVE FOR SULPHITE DIGESTERS. LEOPOLD WIMMER, Muskegon, Mich. Filed July 21, 1930. Serial No. 469,537. 3 Claims. (Cl. 92—7.)

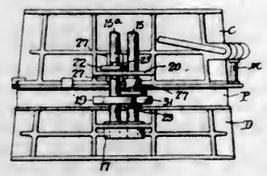
1. In a device of the class described, the combination of a valve casing having a frusto-conical lower portion and

having an end opening and a lateral opening, a revoluble valve seated in the casing, said valve having a series of alined openings of different sizes adapted to be brought into communication with the lateral opening of the valve



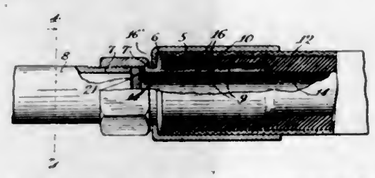
casing, a valve plug integral with the valve and having a shouldered portion, radiating oil passages in said valve plug, a packing positioned above the shoulder of the plug, and a packing gland adapted to be fastened to the casing and seating on the packing.

1,808,093. MOLDER'S FLASK. CHARLES O. WOOD, Chambersburg, Pa. Filed July 18, 1930. Serial No. 468,943. 6 Claims. (Cl. 22—96.)



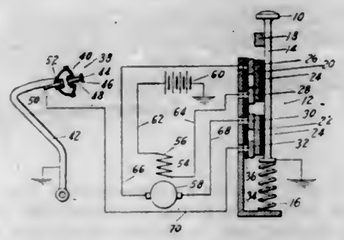
1. A molder's flask comprising a drag and a plurality of superposed flask members successively removable from the drag, in combination with a plurality of guide pins at each end of the flask, each removable flask member being guided by different pins of said plurality of pins.

1,808,094. HOSE CONNECTION. GEORGE F. YACKEY, Whittier, Calif., assignor to Earl B. Wiggins, Los Angeles, Calif. Filed Mar. 30, 1929. Serial No. 351,134. 2 Claims. (Cl. 285—84.)



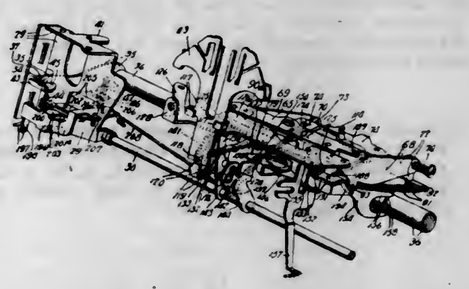
1. In combination, a hose coupling comprising a tubular member having an internal and an external shoulder intermediate the ends thereof, a series of external wedge shaped projections on one end of said coupling against which a hose section is adapted to be held with one end thereof abutting against the external shoulder, the opposite end of said coupling being internally threaded for cooperating with an externally threaded pipe section, a protecting lining for said coupling, one end of said lining being adapted to be clamped between the internal shoulder of the coupling and end of the pipe section.

1,808,095. CONTROL MECHANISM FOR MOTOR VEHICLE ELECTRIC STARTING AND BRAKING MOTORS. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 30, 1929. Serial No. 336,299. 13 Claims. (Cl. 172—179.)



1. Mechanism of the character described comprising, in combination, a reversible electric motor, a switch for said motor operable to one position to complete at any time all connections for running the motor in one direction, and operable to another position to only partially complete the connections for operating the motor in the reverse direction, and a second switch separately operable to complete the said connections to operate the motor in said reverse direction.

1,808,096. TYPEWRITING MACHINE. HENRY ALLEN AVERY, Groton, N. Y., assignor to L C Smith & Corona Typewriters Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 20, 1928. Serial No. 271,499. 30 Claims. (Cl. 197—151.)

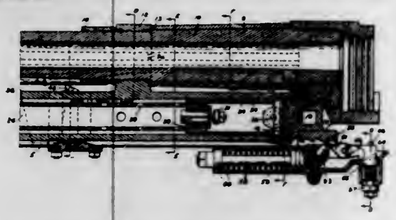


17. In a typewriting machine, the combination of a vibratory ribbon guide, a bell-crank having a forwardly extending arm connected with the ribbon guide and a pendent arm and mounted to rock about an axis extending transversely of the machine, a key actuated tappet lever mounted to rock about and up and down extending axis, an upstanding motion transmitting lever interposed directly between the tappet lever and bell-crank, a pivot support parallel with the bell-crank axis upon which the upstanding lever is mounted to rock fore and aft and slide transversely of the machine, and means for sliding the upstanding lever along said support while in operative relation with said tappet lever into either of three positions, in one of which it is operatively disconnected from the pendent bellcrank arm and in the other two of which it is operatively connectd with the pendent bellcrank arm different distances from the axis of the bellcrank.

1,808,097. GUN. GLADEON M. BARNES, Hastings, Mich. Filed Dec. 10, 1929. Serial No. 413,117. 17 Claims. (Cl. 89—43.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

7. In a reciprocating gun, a recoil mechanism utilizing the compressive action and reaction of the gases of

discharge to check recoil and restore the gun to battery and a counter recoil buffer mechanism employing the elements of the recoil mechanism and gases from the recoil mechanism.



17. In a gun structure a channel-shaped cradle having guideways on its side plates, a gun slidably supported in the guideways and a cylinder underneath the gun having hangers embracing the gun and slidably supported in the guideways.

1,808,098. TREATMENT OF THREADS, FABRICS, OR OTHER MATERIALS COMPOSED OF OR CONTAINING ARTIFICIAL FILAMENTS. JOHN FREDERICK BRIGGS and CHARLES WILFRED PALMER, Spondon, near Derby, and JOHN THOMAS KIDD, Eaton, near Norwich, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Nov. 16, 1925, Serial No. 69,524, and in Great Britain May 26, 1925. 11 Claims. (Cl. 8—20.)

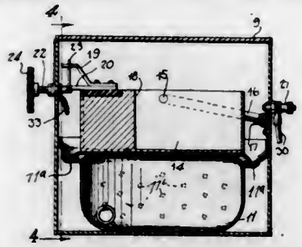
1. A process for imparting lustre to delustred cellulose acetate filaments in materials containing the same which comprises treating said material with a liquid comprising water and a swelling substance for cellulose acetate, and afterwards, without material reduction of the ratio of swelling substance to water in the liquid retained by the filaments, treating the material for the removal of water by evaporation.

1,808,099. DISPLAY DEVICE. JOSEPH EDWIN BURGESS, New York, N. Y., assignor to The United States Printing and Lithographing Company, Brooklyn, N. Y., a Corporation of Ohio. Filed July 2, 1928. Serial No. 289,703. 12 Claims. (Cl. 40—7.)



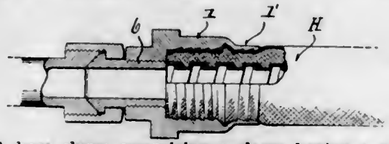
1. A device of sheet material of the class described for association with a container or the like including a display panel, a section extending therefrom and adapted when folded out of the plane of the panel to embrace a container, and an element foldable out of the plane of the panel for engagement with the first mentioned section to retain said panel and section in predetermined relative positions.

1,808,100. GAS FLOW ALARM SWITCH. LUIGI DE SIMONE and GIACOMO CIRIACONO, New York, N. Y. Filed Sept. 5, 1928. Serial No. 304,008. 5 Claims. (Cl. 200—83.)



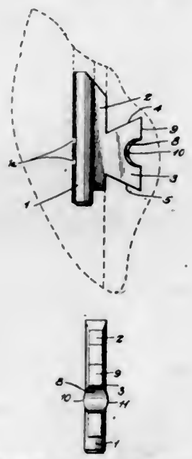
1. In a pressure operated circuit controller for gas flow alarms, a casing, an expansible chamber through which gas flows mounted in the bottom of the casing and having inlet and outlet ports for connection in a gas supply line, a weighted support mounted on the top of the expansible chamber and carrying a pair of vertically spaced contacts electrically connected together, and a manually vertically adjustable contact finger mounted in the casing in the path of and between said pair of contacts.

1,808,101. HOSE CLAMP. JOSEPH PETER EASTMAN, Manitowoc, Wis. Filed Dec. 12, 1927. Serial No. 239,459. 7 Claims. (Cl. 285—72.)



1. A hose clamp comprising a sleeve having a portion internally threaded with a right hand thread, and another portion internally threaded with a left hand thread, both of such portions being adapted to engage around the hose, and one of said portions being thinner than the remaining portion of the sleeve to provide for ready contraction on to the hose.

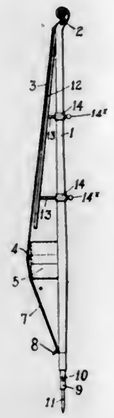
1,808,102. DENTAL CASTING POST. DAVID E. EVANS, Columbus, Ohio, assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio, a Corporation. Filed May 7, 1929. Serial No. 361,022. 2 Claims. (Cl. 32—9.)



1. As a new article of manufacture, a casting post for the backing for an artificial tooth, comprising a post,

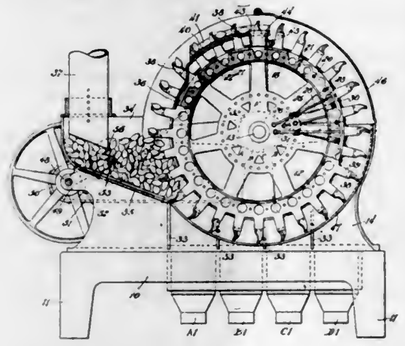
a web, and a retention member having a recess in its rear edge and protuberances from two side walls thereof, all formed integrally.

1,808,103. STRING MUSICAL INSTRUMENT. HERMANN FISCHER, New York, N. Y. Filed Dec. 14, 1928. Serial No. 326,016. 5 Claims. (Cl. 84—173.)



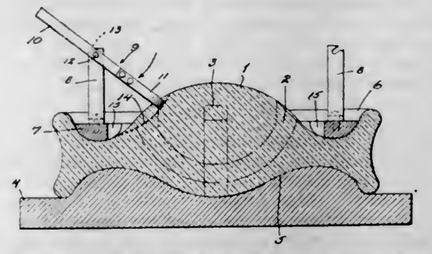
1. A string musical instrument comprising a shaft, a finger board removably attached to the shaft, and a sound box carried by the shaft below the finger board, the top surface of the finger board being formed at an acute angle toward the bow side of the string, as and for the purpose set forth.

1,808,104. NUT GRADING MACHINE. WILLIAM GEBHARDT, San Antonio, Tex., assignor to G. A. Duerler Manufacturing Company, San Antonio, Tex., a Corporation of Texas. Filed Dec. 17, 1928. Serial No. 326,630. 12 Claims. (Cl. 209—89.)



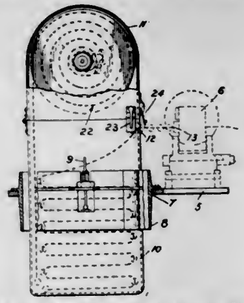
1. A machine for grading pecans and the like according to their lengths comprising, in combination, a rotary carrier movable over a series of chutes in succession; spring-urged nut gripping devices arranged in staggered relation on opposite sides of the carrier and having pockets to receive the nuts lengthwise therein; means to supply nuts, one at a time to the pockets; means to hold the grippers open while the nuts are being supplied; and cam means cooperating with the grippers to release the nuts successively according to their grade sizes so that they will fall into the respective chutes.

1,808,105. INSULATOR CUTTER AND METHOD OF TREATING INSULATORS. MINOR F. H. GOUVERNEUR, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Jan. 7, 1927. Serial No. 159,630. 8 Claims. (Cl. 25—105.)



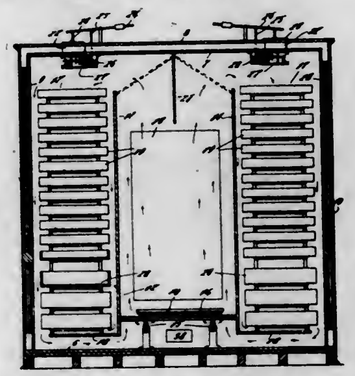
1. A device of the character described comprising a supporting member adapted to be mounted upon the top of an insulator, bracket members on said support, and a cutter pivotally mounted on said bracket members and having a substantially U-shaped blade adapted to cut through the material of the insulator along an arcuate path for scooping out the material at one side at a relatively small area.

1,808,106. MAGAZINE. SAMUEL G. GREEN, Gray, Ga. Filed Apr. 17, 1929. Serial No. 355,907. 3 Claims. (Cl. 89—33.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



3. In a magazine for a belt of ammunition, a portion for receiving folded layers of the loaded belt and a portion for revolvably supporting a part of the loaded belt.

1,808,107. INCUBATOR. WILLIAM HANSON, Trenton Junction, N. J. Filed Dec. 21, 1928. Serial No. 327,656. 2 Claims. (Cl. 119—37.)



1. An incubator cabinet comprising an enclosure provided with longitudinally extending spaced parallel par-

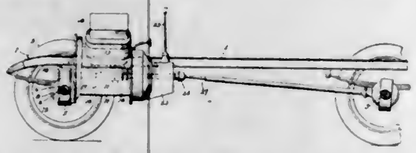
titions defining a central air circulating shaft through which air passes upwardly, and a pair of side compartments, said partitions having their upper and lower edges spaced respectively from the floor and ceiling of the enclosure, a horizontal register supported between the lower portions of said partitions, and the heating means located beneath said register, together with a swingably mounted valve plate suspended from the ceiling and located centrally over said air shaft and adapted to be swung against either partition to shunt the circulating air in a desired direction.

1,808,108. COMPOSITION OF MATERIAL FOR USE IN PANARY FERMENTATION. JOSEPH W. HAWKS, Piqua, Ohio. Filed Dec. 17, 1927. Serial No. 240,934. 20 Claims. (Cl. 99—10.)

8. A composition for use in panary fermentation, comprising two parts of edible gelatin, one-half to one part of monobasic acid phosphate, and a filler.

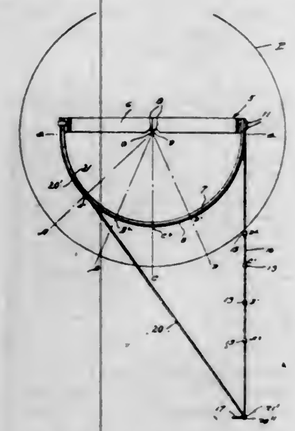
20. The process of making a composition for panary fermentation which comprises adding edible gelatine acidulated with monobasic acid phosphate, to the dough and other usual ingredients in proportion to the degree of hydration desired in the mass.

1,808,109. MOTOR VEHICLE. JOHN O. HEINZE, Detroit, Mich. Filed Oct. 24, 1928. Serial No. 314,561. 7 Claims. (Cl. 180—44.)



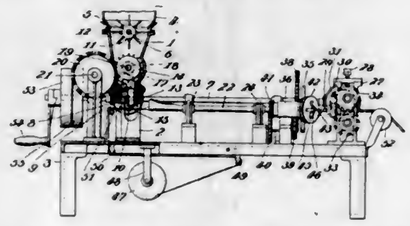
1. In a motor vehicle, the combination of a reciprocating piston engine having a tubular crank shaft provided with a crank member and a connecting member operated by piston reciprocation to rotate said shaft, a change speed power transmitting mechanism at one end of said engine, and a power-shaft extending through and projecting beyond the ends of said tubular crank shaft for transmitting motion from said change speed mechanism to the end of the engine opposite that at which said mechanism is located.

1,808,110. CIRCLE DIVIDER. FREDERICK F. HEITZIG, Fieldon, Ill. Filed June 3, 1929. Serial No. 368,046. 7 Claims. (Cl. 33—1.)



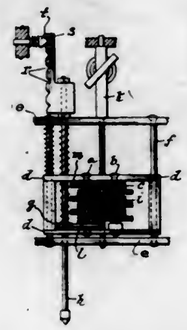
1. In a circle divider, an elongated flat bar, said bar being formed intermediate its ends to provide a center point, and a flexible strap formed of spring material having one end anchored to one end of said bar, and said strap adapted to be disposed in a semi-circular position, means for securing the free end of said strap to the opposite end of said bar, said strap being provided with a graduated scale, and detachable marker members for the strap adapted to be disposed in alignment with the graduations thereon.

1,808,111. MACHINE FOR MAKING PAPER-COVERED INCENSE CORDS. CHÛJI HORIGUCHI, Higashinari-Ku, Osaka-Shi, Japan, assignor to Kabushiki Kaisha Azumi Daiyakuho, Nishi-Yodogawa-Ku, Osaka-Shi, Japan. Filed Jan. 6, 1930, Serial No. 418,905, and in Japan Jan. 21, 1929. 6 Claims. (Cl. 117—41.)



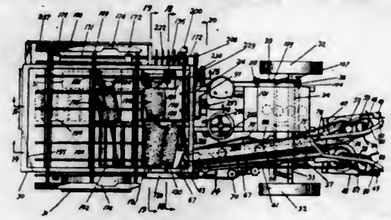
1. In a machine for making incense cords, having the incense material tubed in rice-paper-tape, and externally wrapped in inflammable paper tape, a feeder-box having a discharge spout therein, for feeding powdered incense, an agitator in the feed-box, a feed-control wheel in the lower end of the feeder-box, a trimming wheel in proximate position to, and in cooperating relation with the feed-control-wheel for smoothly disposing the incense in its passage through the feeder-box delivery spout, a forming conduit for tubing the incense material in the rice-paper-tape, and means for wrapping the rice paper covered material in inflammable paper tape to produce the finished product.

1,808,112. SPEED INDICATOR WITH SEVERAL MEASURING RANGES. ERHARD HORN, Leipzig, Germany. Filed Feb. 26, 1929, Serial No. 342,817, and in Germany Nov. 1, 1928. 1 Claim. (Cl. 74—58.)



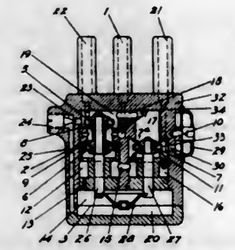
A multiple wheel gearing for hand speed indicators, including a frame, a rotatable driven shaft, a pinion on said shaft, a movable carrier in said frame, intermediate shafts supported in said carrier, pairs of intermeshing gear wheels journalled on said shafts, certain of said gear wheels being movable with the carrier into mesh with the driven shaft pinion, an axially movable shaft mounted in said frame, and a pinion on said axially movable shaft selectively engageable with certain of the gear wheels.

1,808,113. CANE HARVESTING APPARATUS. ARTHUR CLIFFORD HOWARD, Northmead, New South Wales, Australia. Filed Apr. 17, 1929, Serial No. 355,854, and in Australia Apr. 23, 1928. 9 Claims. (Cl. 56—17.)



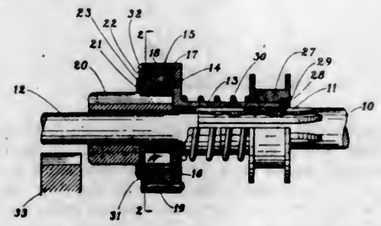
1. Cane harvesting apparatus comprising a wheeled structure provided with power drive and with steering means and also with means whereby cane stalks can be gathered and cut and firmly gripped at their butt ends by conveyor means and conveyed thereby in upstanding position rearwardly of the apparatus, fender means associated with the structure and below which such conveyor means passes, and an abutment on the structure in the path of such conveyor means adapted to allow bending of the upstanding cane stalks carried by such conveyor means to enable such stalks to be fed by such conveyor means in butt first position thereof to mechanism on the apparatus for further treatment.

1,808,114. APPARATUS FOR AUTOMATICALLY ESTABLISHING A PULSATING MOTION OF AIR IN TWO CONDUITS. GEORG KARL WILHELM JOHANSSON, Lidingo, Sweden, assignor to Svenska Aktiebolaget Gasaccumulator, Lidingo, Sweden. Filed Nov. 21, 1929, Serial No. 408,858, and in Sweden Dec. 8, 1928. 6 Claims. (Cl. 31—62.)



2. In an apparatus for automatically establishing a pulsating motion of air in two conduits, a vacuum chamber and an atmospheric chamber, each provided with two valves mounted on a common spindle, a diaphragm and a flexible member for connecting the one side of the diaphragm with the spindles of said valves.

1,808,115. STARTER DRIVE. WILLIAM L. MCGRATH, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Sept. 10, 1929. Serial No. 391,641. 13 Claims. (Cl. 74—7.)



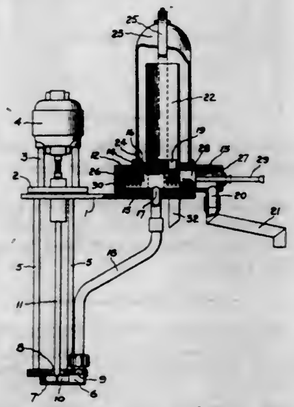
1. A starter drive for internal combustion engines including a member adapted to engage and rotate an element of the engine to be started, a power member and unidirectional driving means connecting the power member to the engine engaging member including an annular element connected to one of said members, an eccentric fixed to the other member and an intermediate transmission member mounted on said eccentric and having means adapted to interlock with the annular element in one direction of rotation.

1,808,116. TILE LINOLEUM. ALEXANDER CATHIE MCKISSOCK, London, England, assignor to Linoleum Manufacturing Company, Limited, London, England. Filed June 3, 1929, Serial No. 367,927, and in Great Britain Apr. 19, 1929. 1 Claim. (Cl. 154—26.)



The method of producing an enriched tile pattern linoleum which consists in stripping a patterned linoleum from its backing, cutting the stripped linoleum into tesseræ each containing a pattern, cutting tesseræ to be enriched by the first mentioned tesseræ from other linoleum, and in combining the first and second tesseræ in substantially checkered relation on a backing and into the final product.

1,808,117. MEASURING AND CIRCULATING DEVICE. JAMES HOWARD MCLELLAN, Vancouver, British Columbia, Canada. Filed June 8, 1929. Serial No. 369,465. 2 Claims. (Cl. 221—100.)

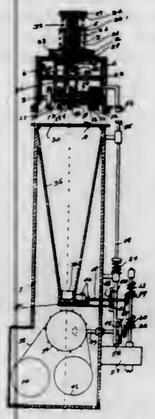


1. A measuring and circulating device comprising a pump, a measuring cup, a valve communicating therebetween, and means of return communication between the cup and the pump, said valve having alternate setting in which one setting enables liquid to flow from the pump to the cup and the other enables the liquid pumped into the cup to flow to discharge through the valve, said means of return communication comprising a transparent vessel enclosing the measuring cup whereby the liquid overflowed from the measuring cup is displayed prior to its return to the pump.

1,808,118. PHOTOGRAPHIC RECORDING APPARATUS. ADOLPHE C. PETERSON, Minneapolis, Minn. Filed Nov. 11, 1927. Serial No. 232,614. 13 Claims. (Cl. 88—24.)

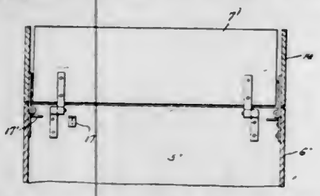
1. In a record means, means whereby documents are serially exposed to a photographing means and a nu-

meral imprinting means, and means whereby the numeral imprinting means and the photographic means are coordinated so that the numeral imprinting means prints



numbers serially on the documents as exposed and the photographic means successively photographs the documents with numbers like the imprinted numbers on the documents on a photographically sensitive film.

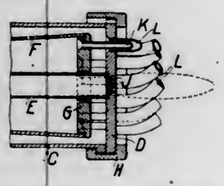
1,808,119. MINE CAR. JOHN RUFFING, Sr., Nokomis, Ill. Filed Dec. 9, 1930. Serial No. 501,137. 5 Claims. (Cl. 105—379.)



1. In a mine car including side walls and end walls, panels mounted above the walls by means of flat like straps.

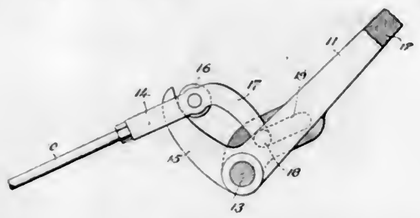
2. In a mine car including side walls and end walls, panels mounted above the walls by means of flat like straps, said flat like straps being formed in sections hingedly connected together.

1,808,120. PULVERIZED FUEL FURNACE. ARTHUR RUNKWITZ, Kiel-Elmschenhagen, Germany, assignor to Fried. Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Germany. Filed July 28, 1930, Serial No. 471,288, and in Germany Aug. 9, 1929. 3 Claims. (Cl. 110—28.)



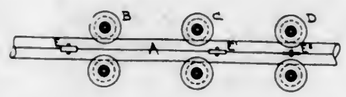
1. A pulverized fuel burner comprising a burner plate, a plurality of individual laterally bent burner pipes circularly arranged on this plate, larger pipes each surrounding one of said burner pipes and bent correspondingly, a tube adapted to supply pulverized fuel-air mixture and communicating with all of said burner pipes, and another tube adapted to supply additional air of combustion and communicating with all of said larger pipes.

1,808,121. BRAKE APPLYING MECHANISM. GEORGE L. SMITH, Washington, D. C., assignor to United States Ordnance Company, Washington, D. C., a Corporation of Virginia. Filed Sept. 28, 1928. Serial No. 309,057. 8 Claims. (Cl. 74—81.)



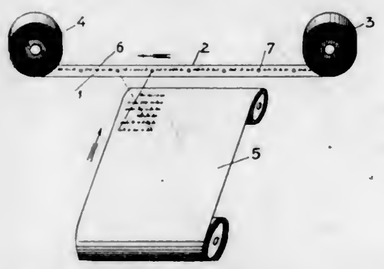
1. In a brake applying mechanism, a brake, a lever, connections between the brake and lever including a pull rod having a shiftable connection with the lever for movement along the latter toward and away from its pivot, a second lever, and means operable by the second lever to shift said connection along the first named lever..

1,808,122. MANUFACTURE OF TUBES AND PIPES. FRANCIS SÖNNICHSEN, FRANCIS ADOLF FRISCH, and HERMAN ARTHUR NICOLAYSEN, Oslo, Norway. Filed Sept. 18, 1928, Serial No. 306,741, and in Norway Aug. 11, 1928. 6 Claims. (Cl. 219—6.)



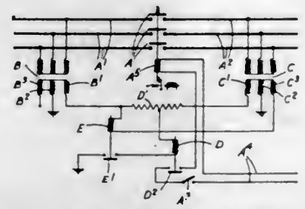
1. Apparatus for welding by a continuous operation tube blanks formed out of a folded up strip of metal, comprising means to pass the tube blank, electrically insulated from the feeding mechanism, into successive contact with a series of electrodes forming the terminals of a polyphase current system, said electrodes having a contact surface with the tube blank covering both sides of the slit to be welded, the contact surface of successive electrodes being narrower than that of preceding electrodes.

1,808,123. METHOD OF PRODUCING PHOTOGRAPHED PRINTING FORMS. EDMUND UHER, Jr., Budapest, Hungary. Filed Mar. 29, 1929, Serial No. 351,010, and in Germany July 29, 1927. 4 Claims. (Cl. 95—4.5.)



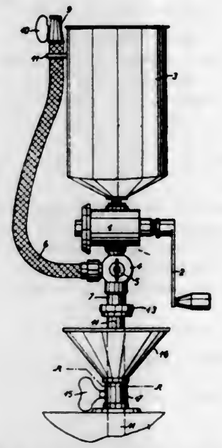
1. The method of producing photographed printing forms from lines, which consists in first composing the lines by photographic means on a non-elastic film band in succession and in continuous alignment with the first line thereon, so as to form an intermediate model print and thereafter photographing the lines individually in the desired order, from the intermediate model print on to a sensitized form.

1,808,124. ELECTRIC SYNCHRONIZING APPARATUS. THOMAS REGINALD WARREN, Jesmond, Newcastle-upon-Tyne, and NORMAN COOKE, Sunderland, England, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Company of Great Britain. Filed Apr. 21, 1928, Serial No. 271,825, and in Great Britain May 3, 1927. 17 Claims. (Cl. 171—118.)



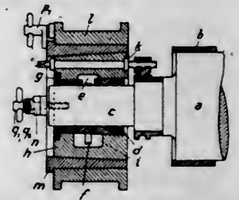
1. In electric synchronizing apparatus for polyphase synchronous machines, the combination with an incoming machine and a running machine, of a circuit-breaker controlling the connection of the incoming machine into circuit with the running machine, and means for controlling the closing of the circuit-breaker comprising two potential transformers whose primaries are respectively connected to the two machines, an earth connection to corresponding points of the secondaries of the two potential transformers, a resistance connected between other corresponding points of the secondaries of the two potential transformers, a synchronizing relay connected between earth and the mid-point of such resistance and acting when operated to allow the circuit-breaker to close, and means whereby the operation of the circuit-breaker is rendered dependent upon the direction of relative rotation of the two machines.

1,808,125. DEVICE FOR FILLING THE CRANK CASES OF MOTOR VEHICLES WITH LUBRICATING OIL. KONRAD KARL WEISSFLOCH, Nuremberg, Germany. Filed Dec. 16, 1929, Serial No. 414,524, and in Germany Dec. 7, 1928. 2 Claims. (Cl. 221—99.)



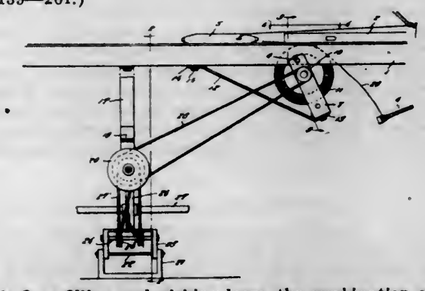
1. A portable liquid withdrawing and dispensing device including a liquid container, a reversible liquid pump having ports therein, one of the ports communicating with the bottom of the container, branched conduits connected with the other port of the pump, one of said branches being adapated for immersion in a body of liquid during the filling of the container during rotation of the pump in one direction and the other branch being adapted to conduct liquid to a desired point of delivery during operation of the pump in the opposite direction, and means for connecting the second mentioned port of the pump alternately with the first and second mentioned branches.

1,808,126. BEARING FOR THE CYLINDERS OF PRINTING MACHINES. KARL ALBRECHT, Geisenheim-on-the-Rhine, Germany, assignor to Maschinenfabrik Johannisberg, G. m. b. H., Geisenheim-on-the-Rhine, Germany. Filed Aug. 7, 1928, Serial No. 298,015, and in Germany Aug. 10, 1927. 7 Claims. (Cl. 308—70.)



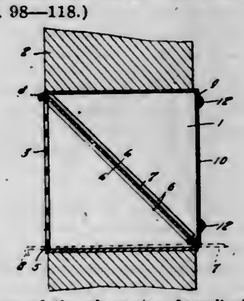
1. A bearing for the cylinder of printing machines, comprising in combination, a journal, a bushing on the journal provided with a conical outer surface, a sleeve having its outer as well as its inner surface conical, a fixed casing having a cylindrical bore, and a slotted conical pressure-ring interposed intermediate said sleeve and said fixed casing for releasably holding the conical parts in position and capable of independent withdrawal.

1,808,127. WEFT END REMOVER FOR AUTOMATIC LOOMS. WILLIAM H. BANAGAN, Quechee, Vt. Filed Nov. 7, 1930. Serial No. 494,136. 8 Claims. (Cl. 139—261.)



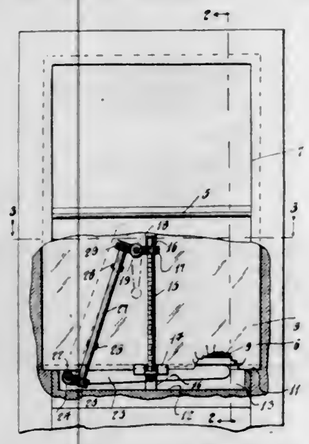
1. In a filling replenishing loom, the combination of the lay having a shuttle box and provided with an opening for the passage of a bobbin when it is ejected from the shuttle, a rotary brush mounted on the lay having its axis at right angles to the longitudinal axis of the lay, said brush being operable in the opening in the lay to catch and hold the filling between an ejected bobbin and the shuttle box and prevent the filling end from being carried into the shed by the shuttle.

1,808,128. VENTILATOR. VINCENT BROCATO, Memphis, Tenn. Filed June 20, 1930. Serial No. 462,604. 5 Claims. (Cl. 98—118.)



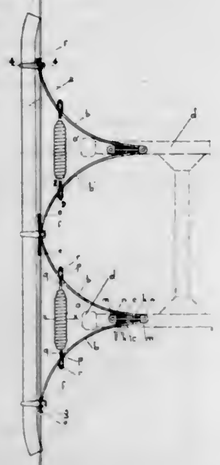
1. A ventilator of the character described comprising a casing open at its front and rear, a grid in the front portion of the casing, and a closure plate removably mounted for diagonal sliding movement in the casing intermediate the grid and the screen.

1,808,129. AUTOMOBILE DOOR. EMORY G. BULLIS, Fulton, N. Y. Filed Dec. 22, 1927. Serial No. 241,996. 3 Claims. (Cl. 268—133.)



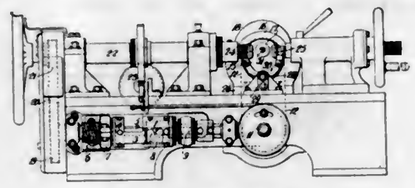
3. An automobile door having a window opening formed in the upper half thereof and a casing in the lower half thereof, a glass panel and a screen panel adapted to be housed in said casing or to be projected therefrom to an elevated position within said window opening, a driven means connected to each of said panels, a single driving means, and means for causing the motion of the driving means to be transmitted to either of said driven means independently of the other, all these elements being concealed within the door casing.

1,808,130. SHOCK-ABSORBER. JULES CHALUMEAU, Paris, France. Filed Aug. 18, 1930, Serial No. 476,100, and in France Aug. 23, 1929. 2 Claims. (Cl. 293—55.)



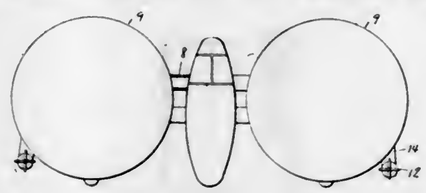
1. In a shock-absorber, a plurality of springs fixed at one end to one of the parts between which shock is to be absorbed and adapted to slide freely along the other part, and a plurality of tensile spring attached at their ends to two of the former springs.

1,808,131. VARIABLE VELOCITY RATIO MECHANISM. JOHN GEORGE DOUGLAS, Leagrave, Luton, England, assignor to George Kent, Limited, Luton, England. Filed July 26, 1930, Serial No. 470,093, and in Great Britain June 26, 1929. 8 Claims. (Cl. 90—15.)



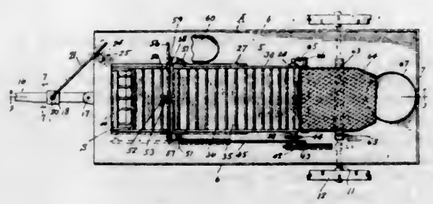
2. In a machine for cutting a worm or cam, the combination of a rotatable blank carrier, a rotatable tool carrier adapted to receive a tool at a point displaced with respect to the axis of rotation of the tool carrier, and means for rotating the tool carrier at a rate variable with respect to the rotation of the blank carrier comprising a driving member rotatable in timed relationship with the blank carrier, a driven member in driving connection with the tool carrier, and means mounting one of said members operating during rotation in a single direction to rotate the member about its axis relatively to the other member in opposite directions, one of the members having a portion parallel to its axis engaged in a cutaway portion of the other members, said portions having coacting surfaces for automatically transmitting through the said mounting means the drive from the driving to the driven member and for converting the axial movement into relative rotational movement between the members to an extent determined by the shape of the said surface.

1,808,132. AIRSHIP. GEORGE GERARD DUERING, Fort Bliss, Tex. Filed Sept. 12, 1930. Serial No. 481,484. 3 Claims. (Cl. 244—6.)



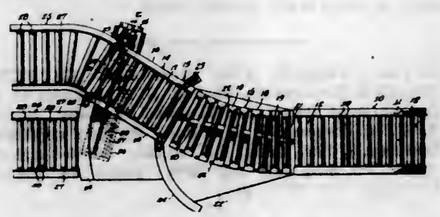
1. In an airship of the class described, a cabinet, a pair of lihgter than air gas containing bodies one to each side of the cabinet and means connecting the bodies to the cabinet, said means being in the form of hollow tubes to provide means for entering the bodies from the cabinet and vice versa.

1,808,133. POTATO HARVESTER. WILLIAM W. FIRMAN, Detroit, Mich. Filed Dec. 6, 1929. Serial No. 412,099. 4 Claims (Cl. 55—109.)



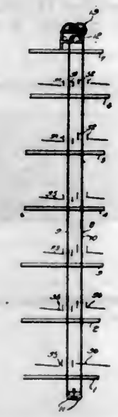
1. In a potato harvester of the class described, a wheeled frame, an elevator mechanism mounted in the frame, means for raising and lowering the elevator mechanism, a scoop on the lower end of the elevator mechanism, a beater in the scoop, a shaker screen at the rear end of the elevator, means for rockably mounting the shaker screen, means operatively connecting the elevator with the wheels of the wheel frame, means operatively connecting the elevator with the beater and means operatively connecting the elevator with the shaker screen, said beater being rotated in a direction opposite to that of the ground wheels for separating the potatoes from the dirt and throwing them onto the elevator.

1,808,134. SELECTIVE DEFLECTING SWITCH. HENRY R. GOTTHARDT, Louisville, Ky., and WILLIAM E. CAIN, Jeffersonville, Ind., assignors to Logan Co., Inc., Louisville, Ky., a Corporation of Kentucky. Filed Sept. 25, 1929. Serial No. 395,167. 19 Claims. (Cl. 186—20.)



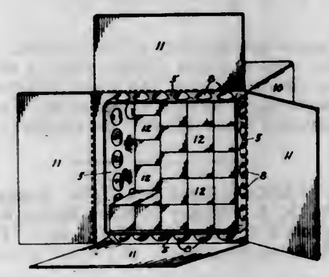
1. Apparatus of the character described comprising a main conveyor, a pair of branch conveyors, a switch section connected at one end to said main conveyor and at its opposite end to one of said branch conveyors, a source of electrical power adapted to move the last named end of said switch section to a position in alinement with the other of said branch conveyors, circuit means for said source including a pair of contacts, and an article carrier movable over said contacts, and key means detachably supported by the carrier for completing a circuit across said contacts.

1,808,135. AUTOMATIC VERTICAL ELEVATOR. HENRY R. GOTTHARDT, Louisville, Ky., and WILLIAM E. CAIN, Jeffersonville, Ind., assignors to Logan Co., Inc., Louisville, Ky., a Corporation of Kentucky. Filed Nov. 20, 1929. Serial No. 408,516. 35 Claims. (Cl. 198—38.)



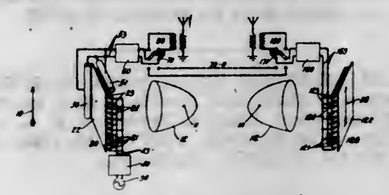
1. An elevating conveyor comprising endless chain conveying means including a carrier movable therewith, a plurality of loading and unloading stations each including a station member movable from an inoperative position out of the vertical plane of the conveying means to an operative position in the vertical plane of the conveying means, means controlled by the carrier when moving upwardly for automatically moving the next station member to operative position provided there is an article at such station to be picked up by the carrier, and means operative by an article on the carrier for rendering said last named means inoperative.

1,808,136. PACKING FOR FRAGILE ARTICLES. FRED D. GRAY, Herkimer, N. Y., assignor to Holed-Tite Packing Corporation, a Corporation of New York. Filed May 9, 1929. Serial No. 361,626. 3 Claims. (Cl. 229—14.)



1. A resilient lining member for packing containers comprising a sheet of yieldable material, the major portion of said sheet having flat uninterrupted faces, one of said faces having its flat area centrally of the sheet and constituting the major portion of the face, said face having a bordering row of protuberances bulged from the sheet, the flat area of such face being greater than the bulged area thereof whereby the sheet may flex at the region within said bordering row.

1,808,137. ELECTROOPTICAL SYSTEM. RALPH V. L. HARTLEY, South Orange, N. J., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 28, 1928. Serial No. 302,448. 14 Claims. (Cl. 178—6.)

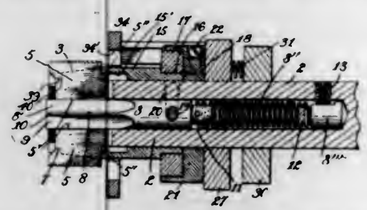


1. The method of producing an image electro-optically which comprises simultaneously producing a plurality of trains of light waves equal in number to the elemental areas of a field of view, an image of which is to be produced, each of said trains being modulated in accordance with the light tone values of the corresponding elemental area of the field of view and having a distinctive super-audio frequency characteristic.

1,808,138. COLLAPSIBLE TAP. WILLIAM J. HOGG and FREDERICK NEUMANN, Cleveland, Ohio, assignors to The National Acme Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 19, 1928. Serial No. 247,770. 24 Claims. (Cl. 10—144.)

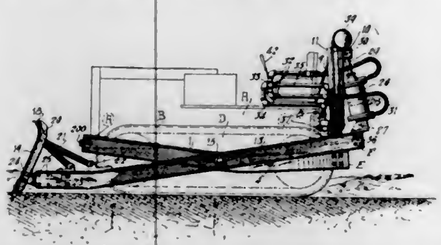
1. A collapsible tap comprising a bored and radially slotted body having a bored shank, a plurality of radially shiftable cutters located in the slots of said body, rotatable means for supporting the under faces of the cutters and positively expanding them, positively acting

means connected with said expanding means for supporting outer faces of the cutters to prevent the tipping thereof and effective to positively retract the cutters, means within the shank bore for automatically rotating said ex-



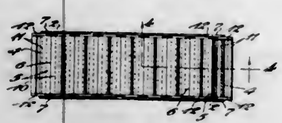
panding means thereby to shift the retracting means to retract the cutters, means forming part of the tap for locking the retracting means, and means for releasing said locking means on the forward movement of the tap whereby the expanding means will shift the retracting means.

1,808,139. BACK-FILLING MACHINE. JAMES HOZACK, Belleville, N. J., assignor to Essex Engine & Machine Corporation, a Corporation of New Jersey. Filed June 25, 1928. Serial No. 288,001. 50 Claims. (Cl. 37—144.)



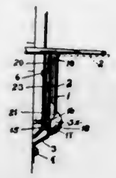
48. A machine of the character described comprising a tractor, a sub-frame fixedly mounted thereon and extending across the rear of the tractor, a pusher frame pivoted to swing upon a horizontal axis and having a pusher at the front of the tractor, and means connected to said subframe and pusher frame for swinging the latter.

1,808,140. FLEXIBLE STRAP, BAND, OR LINKAGE. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Oct. 23, 1928. Serial No. 314,486. 3 Claims. (Cl. 59—80.)



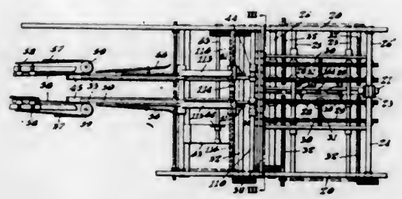
1. A flexible strap, band or linkage comprising a plurality of outer box-like link-elements having top, side, bottom and end walls, the end walls being spaced away from the ends of the side and bottom walls to provide openings therebetween at both ends of the link; and inner connecting-links having transverse bars connected by end strips occupying planes at right-angles to the plane of said transverse bars; the inner links being straddled across the adjacent side walls of adjoining outer box-links between the top and bottom walls thereof with their end strips disposed within the openings between the ends of the side and bottom walls and the end walls of the outer box-link and covered by the top wall thereof, whereby the connecting-links are completely concealed from view on the top and sides of the linkage.

1,808,141. KEY GUARD. THEODORE W. KUPFER, Rochester, N. Y. Filed Feb. 6, 1931. Serial No. 513,914. 5 Claims. (Cl. 70—7.)



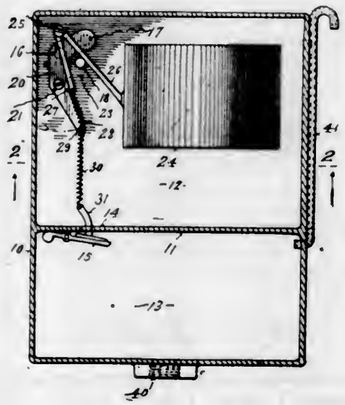
2. A keyguard comprising a vertical bracket, a spring operated locking plate mounted on said bracket, combined anchoring and locating means for anchoring and locating said bracket to the escutcheon with relation to the key hole therein, and fastening means for fastening said bracket in place below the escutcheon.

1,808,142. FEEDER FOR ENVELOPE MACHINES. HAROLD S. LABOMBARDE, Nashua, N. H., assignor to The International Paper Box Machine Company, Nashua, N. H., a Corporation of Maine. Original application filed Nov. 3, 1927, Serial No. 230,746. Divided and this application filed July 30, 1928. Serial No. 296,186. 6 Claims. (Cl. 271—49.)



1. A feeder for delivering blanks to blank-treating mechanism in accurate alinement, said feeder including four pin carriers and means for laterally adjusting said carriers relatively to each other.

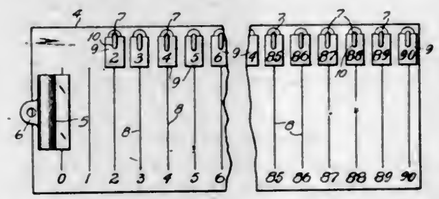
1,808,143. VACUUM TANK. DUDLEY D. LEVY, New York, N. Y., assignor to Dudley Research Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 29, 1927. Serial No. 243,363. 8 Claims. (Cl. 103—236.)



1. In a liquid supplying tank, a partition to divide said tank into a liquid receiving chamber and a liquid

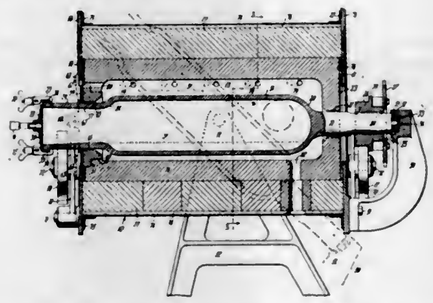
storing chamber, a valve in said partition for maintaining a constant liquid supply in said storing chamber, said receiving chamber having an air port, a suction port and a liquid supply port extending through the walls of said chamber and a valve in said receiving chamber to cover and uncover said ports for intermittently replenishing the liquid in said tank.

1,808,144. MEASURING AND TAGGING DEVICE. PAUL LUNGSTRAS, St. Louis, Mo. Filed Mar. 16, 1929. Serial No. 347,487. 1 Claim. (Cl. 33—127.)



A device of the character described comprising a board having a spring clamp secured thereto at one end and parallel lines formed thereon equi-distant from each other and from the zero designation under said spring clamp, said lines being designated by numerals indicating the distance of the line that they represent from the zero designation under the spring clamp, hooks secured to said board on said lines, co-operative tags having perforations therein secured to said hooks, the tags on a hook having the same numerical designation imprinted thereon as the line on which the hook is secured.

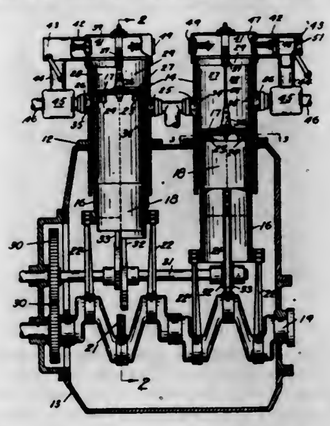
1,808,145. BRASS-MELTING APPARATUS. ADOLPH W. MACHLET, Elizabeth, N. J. Filed July 10, 1929. Serial No. 377,105. 16 Claims. (Cl. 263—34.)



9. A brass-melting one-piece crucible in the form of a cast bottle formed of an alloy of iron, chromium and nickel, not amalgamating with melted brass, nor scaling off when exposed to heat sufficient to melt brass, the melting point of the crucible being about 2400°, the proportions being substantially 65% iron, 27% chromium and 8% nickel, said bottle having means for supporting it by its ends for revolution in cumbent position, and for decanting, one end of the bottle having a discharge neck and a shoulder to confine the melted work in the revolving cumbent bottle.

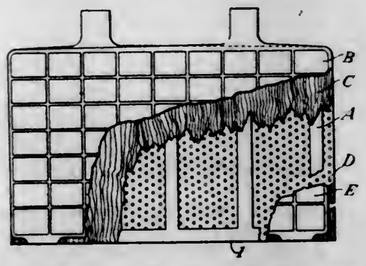
1,808,146. INTERNAL COMBUSTION ENGINE. WARREN H. PARKER, Oakland, Calif., assignor of one-half to Anthony Jorski, Oakland, Calif. Filed July 2, 1928. Serial No. 289,870. 3 Claims. (Cl. 123—50.)

1. In an internal combustion engine, a block having a bore open at one end, a cylinder having a head and arranged to reciprocate in said bore, a conduit communicating with the open end of said bore and having two air intake openings and a discharge opening, a two way



valve for closing either intake opening and a check valve for the discharge opening arranged to open on the up stroke of said cylinder.

1,808,147. STORAGE BATTERY SPACER. JOHN L. RUPP, Wilkinsburg, Pa., assignor, by mesne assignments, to Wubco Battery Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Feb. 23, 1928. Serial No. 256,074. 1 Claim. (Cl. 136—145.)



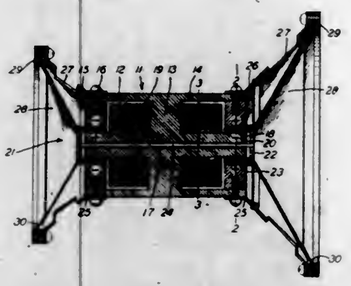
In combination, positive and negative storage battery plates, a spacer comprising a flat apertured non-conducting member interposed between said plates, a flat perforated non-conducting sheet between said spacer and the positive plate, and a porous separator between said spacer and the negative plate.

1,808,148. NURSING NIPPLE. JULIUS SCHMID, New York, N. Y. Filed Oct. 20, 1930. Serial No. 489,703. 2 Claims. (Cl. 40—2.2.)



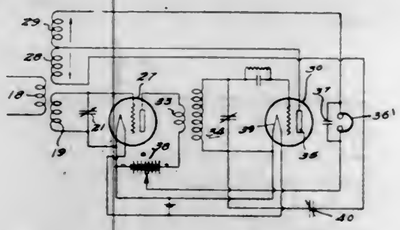
1. A rubber nipple comprised of a body, and a neck portion, said neck portion being transparent, a reinforcing neck band vulcanized with the neck portion of the nipple and carrying thereon indicia printed in ingredients which are insulated both exteriorly and interiorly of the nipple, said indicia being exposed to view through said transparent portion.

1,808,149. ELECTRODYNAMIC SPEAKER. MORRIS SMITH, Los Angeles, Calif. Filed Apr. 3, 1929. Serial No. 352,215. 15 Claims. (Cl. 179—115.5.)



2. A device as described comprising in combination a magnet having a core with a plurality of poles, a vibrating coil mounted adjacent each of the poles, said magnet forming a plurality of magnetic circuits through each of the poles intersecting the said coils, rigid means connecting the coils and a sound reproducing device connected to said rigid means.

1,808,150. HIGH FREQUENCY AMPLIFIER. PERCIVAL J. TOWNSEND, Los Angeles, Calif. Filed Nov. 1, 1927. Serial No. 230,311. 5 Claims. (Cl. 179—171.)



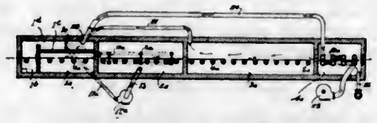
1. In combination, one or more electronic emission devices having a plurality of electrodes, an input circuit connected to some of the electrodes, an output circuit connected to some of the electrodes, and means for feeding back energy from the output circuit to the input circuit, comprising a pair of inductances and a capacity connected in series and between the input and output circuits, the inductances being inductively coupled to the input circuit, said output circuit including a translating device in series with one only of said inductances.

1,808,151. METHOD OF FABRICATING CONTRA-PROPELLERS. JOHN T. WISHMAN, Brooklyn, N. Y., assignor to United Dry Docks, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 15, 1930. Serial No. 488,760. 9 Claims. (Cl. 29—84.)



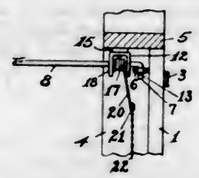
1. The method of fabricating contra-propellers for vessels comprising erecting a dummy rudder post, cutting the propeller parts to fit said post, securing certain parts to one another on but one side of the propeller while fitted about the post, transferring the resultant structure to the vessel's rudder post and securing the remaining parts to said structure and to the rudder post.

1,808,152. CONTINUOUS ANNEALING APPARATUS. THADDEUS F. BAILY, Alliance, Ohio. Filed Aug. 6, 1925. Serial No. 48,541. 5 Claims. (Cl. 263—6.)



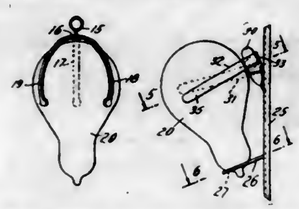
1. A furnace for annealing sheets and the like including a heating chamber in which fuel is burned for heating, a cooling chamber, hollow rolls in the cooling chamber connected in series through which air for combustion in the heating chamber is heated, a pipe leading from said rolls to the heating chamber and means for passing material through the heating chamber and between said rolls.

1,808,153. DOOR HOLDING DEVICE. WILLIAM G. BLACK, Cleveland, Ohio. Filed Jan. 25, 1928. Serial No. 249,297. 5 Claims. (Cl. 292—275.)



1. In a door holder, the combination of a rod, a coil spring adapted to normally grip the rod, one end of the coil spring being fixed, and the other end of the coil spring extending at an obtuse angle therefrom for providing a lever arm for manually operating said coil spring and causing it to release said rod.

1,808,154. FIRE EXTINGUISHER. WILHELM B. BRONANDER, Montclair, N. J. Filed Mar. 7, 1928. Serial No. 259,762. 10 Claims. (Cl. 169—26.)

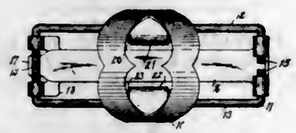


1. A grenade support comprising a supporting element, and grenade engaging and holding means carried by said element and including a strip formed of thermostatic metal adapted to swing away from and release the grenade under the action of heat thereon.

1,808,155. PROCESS OF MAKING ISOPROPYL ACETATE. HYYM E. BUC, Roselle, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 24, 1926. Serial No. 150,625. 2 Claims. (Cl. 260—106.)

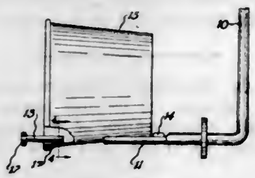
1. Process of making isopropyl acetate, comprising distilling a mixture containing isopropyl alcohol, acetic acid and water, rectifying the distilled vapors, holding the finally rectified vapors at a temperature not exceeding 76° C., taking off and condensing the isopropyl acetate formed from the reaction of isopropyl alcohol and acetic acid, together with substances associated with the isopropyl acetate, and separating the isopropyl acetate.

1,808,156. HEADDRESS-RETAINING DEVICE. JAMES E. BURNS, Milford, Conn., assignor to The A. J. Donahue Corporation, Milford, Conn., a Corporation. Filed Nov. 8, 1930. Serial No. 494,223. 1 Claim. (Cl. 132—47.)



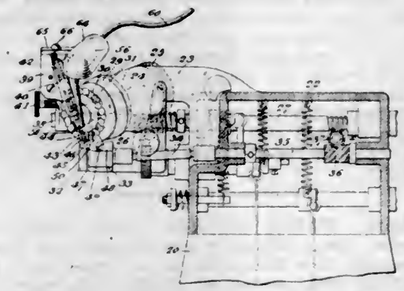
A headdress-retaining device comprising a clasp, said clasp comprising top- and bottom-bars having inset portions, a tongue pivotally connected with one end of said clasp and extending into engagement with the other end of the clasp and lying in a plane of said offsets, when so engaged, a locking-lever pivotally connected with one end of the clasp and adapted to be folded over the free end of said tongue, and a yoke hingedly connected with one inset portion and formed at its opposite end with a hook adapted to engage with the other inset portion whereby the yoke is locked in its closed position by the said tongue.

1,808,157. FRAME FOR COATING PAILS AND THE LIKE. JOHN CARROLL, Dover, Ohio, assignor to The Reeves Manufacturing Company, Dover, Ohio, a Corporation of Ohio. Original application filed Nov. 2, 1928, Serial No. 316,754. Divided and this application filed Sept. 21, 1929. Serial No. 394,322. 7 Claims. (Cl. 91—60.)



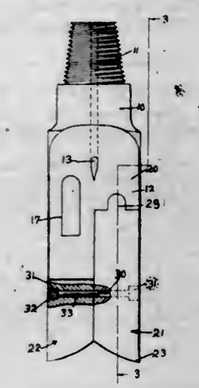
1. In an apparatus for coating pails and the like, a frame adapted to carry a pail and the like, and including a pair of substantially horizontally disposed, diverging arms for supporting the pail in horizontal position and a finger carried by the outer end portions of the arms and adapted to project inside of the pail.

1,808,158. FOLDING MACHINE. CHRISTIAN CHRISTIANSEN, Lynn, Mass., assignor to Rotary Machine Company, Lynn, Mass., a Corporation of Massachusetts. Filed Oct. 30, 1929. Serial No. 403,497. 6 Claims. (Cl. 12—55.)



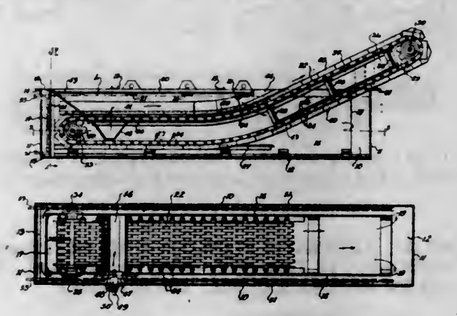
1. In a folding machine for folding a binding strip cemented at one side and stitched to the edge of a material, the combination of means for folding the strip, and heat conducting means in advance of said folding means in contact with said strip at the cemented side thereof.

1,808,159. FISH TAIL BIT. OSCAR E. CONE, Taft, Calif. Filed Aug. 8, 1928. Serial No. 298,209. 6 Claims. (Cl. 55—61.)



6. A fish tail bit comprising a body having upwardly and rearwardly extending apertures formed therein, blades adapted to be mounted upon the body having portions receivable in the apertures, and means connecting the blades to each other to lock them against removal from the body.

1,808,160. QUENCHING TANK. FRANK T. COPE, Salem, Ohio, assignor to The Electric Furnace Company, Salem, Ohio, a Corporation of Ohio. Filed Feb. 6, 1930. Serial No. 426,310. 7 Claims. (Cl. 266—6.)

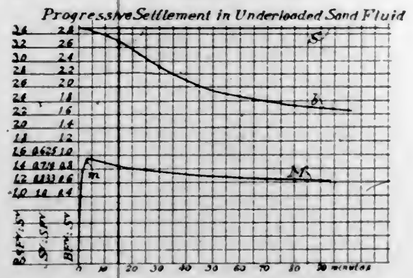


3. Quenching apparatus including a tank, a substantially U-shaped baffle wall within the tank spaced from the walls thereof, the open end of the U terminating at a point spaced from the discharge end of the tank, means for passing articles to be quenched through the tank between the baffle walls, a transverse trough extending between the baffle walls at the entrance end of the tank below the path of the articles, there being an opening in one baffle wall communicating with the adjacent end of the trough, means for changing the temperature of the quenching liquid and means for then circulating the liquid through said opening and into the trough.

7. Quenching apparatus including walls forming an outer tank having an inlet end and a discharge end, walls forming an inner tank open at the discharge end and within the outer tank, the walls of the inner tank being spaced from the walls of the outer tank to form a circulating passage for a quenching liquid between the tanks, the side walls of the inner tank terminating at a point spaced from the discharge end of the outer tank, and means for passing articles to be quenched through the inner tank, walls forming a transverse trough within the inner tank at its entrance end below the path of the articles, there being an opening formed in one inner tank side wall com-

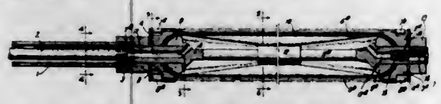
municating with the adjacent end of the trough, means adjacent the opening for circulating quenching liquid from the circulating passage through the trough into the inner tank, and means in the circulating passage for controlling the temperature of the quenching liquid.

1,808,161. PROCESS FOR MAKING MOLDING SAND. WAGER FISHER, Bryn Mawr, Pa. Filed Aug. 24, 1927. Serial No. 215,049. 14 Claims. (Cl. 22—217.)



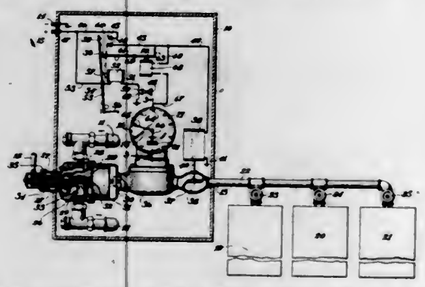
1. In the manufacture of molding sand the method which consists in forming a mixture of sand in binder fluid having a sand content suited to form a cloud settlement range of sand, in making the percentage of binder in the fluid high enough so as to form a synthesis range for settlement underlying the sand in the cloud settlement range and in settling the sand through both ranges.

1,808,162. MINING CARTRIDGE. SAMUEL G. FRANTZ, Princeton, N. J. Filed Aug. 31, 1927. Serial No. 216,698. 15 Claims. (Cl. 262—12.)



1. In a mining cartridge, the combination of a resilient container and an articulated armored covering therefor.

1,808,163. AUTOMATIC FLOW-CONTROLLER. CHARLES GOTTFRIED, New York, N. Y. Filed Nov. 22, 1928. Serial No. 321,260. 2 Claims. (Cl. 221—101.)



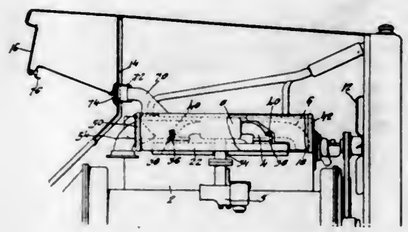
2. In combination with a fluid meter having a pointer and having in its outlet a normally closed electrically-operable valve, a main electric circuit including said valve and a normally open master switch, an electric circuit shunt connected to the main circuit and including a push button and electromagnetically actuated devices operable therefrom for closing said master switch, retaining means for the switch, and switch-releasing means including an electric circuit connected to said main circuit and having said pointer as a movable contact member and also including a co-acting contact element located in the path of said pointer, whereby, when contact is established between said pointer and element, said master switch is freed from retention and permitted to resume its normally open condition at the completion of a desired flow of liquid through the meter.

1,808,164. PORTABLE ELECTRIC ARC LAMP. WILLIAM R. GRUBER, New York, N. Y. Filed Mar. 18, 1930. Serial No. 436,691. 9 Claims. (Cl. 176—103.)



1. An arc lamp comprising a dielectric casing, a carbon mounted axially therein, a second carbon, means for holding said second carbon in register with the first carbon said means being foldable alongside said casing, and means for controlling current to said carbons.

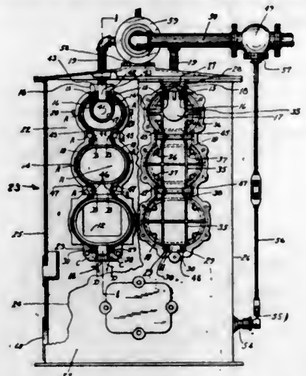
1,808,165. CAR HEATER. MARK B. HARRIS, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 7, 1925. Serial No. 61,153. 10 Claims. (Cl. 123—171.)



1. The combination of an engine having an intake manifold, an exhaust manifold and the usual cooling fan, of a casing for said manifolds, means for discharging air from said casing into the atmosphere or to a desired point as desired, said casing being arranged to receive air from the fan and being provided with means to direct air alternatively over the exhaust manifold or over the intake manifold so that air heated by contact with the exhaust manifold may be supplied to a desired point or a cooling stream of air may be passed over the intake manifold.

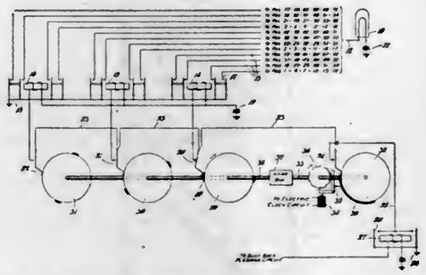
1,808,166. WATER HEATER. JOHN HICKEY, New Haven, Conn., assignor to The National Pipe Bending Company, New Haven, Conn., a Corporation. Filed Apr. 30, 1930. Serial No. 448,536. 12 Claims. (Cl. 257—53.)

1. In a water-heater, the combination with a substantially-vertical water-apron; of means for supplying water to the upper edge of the said apron for downward flow by gravity over one side thereof; means for supplying steam to the opposite side of the said water-apron for heating the said apron and hence the water; and one or more steam-ports extending laterally through the said



water-apron from the steam-side thereof to the water-side thereof for insuring the direct contact of the steam with the water.

1,808,167. TIMING APPARATUS. RAYMOND M. HICKS, East Orange, N. J. Filed Oct. 29, 1928. Serial No. 315,720. 4 Claims. (Cl. 161—2.)

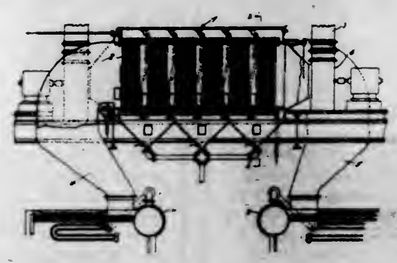


4. In apparatus of the class described for use in connection with a series of switchboard operators' positions, an indicator lamp at each of said positions, means to flash said lamps in predetermined sequences, pluralities of the lamps respectively at separated positions being flashed concurrently, said means comprising a clock controlled circuit, a rotatable element controlled thereby, a plurality of rotatable switch devices, means operatively connecting said rotating element to rotate said switch devices as a group at a rate slower than the rotation of said element, a flashing circuit, and multi-contact relay means operating under the control of said flashing circuit and through said switch devices whereby each of said pluralities of lamps is flashed in succession once during each cycle of movement of said switch devices.

1,808,168. DEHYDROGENATING HYDROCARBONS. MARION B. HOPKINS, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 31, 1923. Serial No. 654,947. 7 Claims. (Cl. 260—170.)

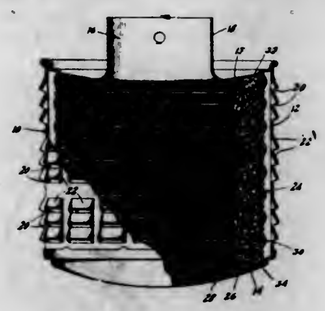
1. A process for partially dehydrogenating hydrocarbons, comprising causing the hydrocarbons as vapors to traverse an elongated path in admixture with free oxygen, heating the admixture of hydrocarbon vapors and oxygen to a temperature between 250° C. and 470° C., the quantity of oxygen being so limited as to partially dehydrogenate the hydrocarbons, thereby forming unsaturated compounds without substantial quantities of compounds containing the three elements, carbon, hydrogen and oxygen, and withdrawing the unsaturated product.

1,808,169. HEAT TRANSFER DEVICE. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed Sept. 4, 1918, Serial No. 252,550. Divided and this application filed June 20, 1929. Serial No. 372,269. 8 Claims. (Cl. 257—251.)



1. In a heat transfer device, a gas pass, a plurality of headers on each side of the pass and connected by tubes extending thereacross, the headers on one side of the pass being disposed in groups spaced apart, with the headers in each group closely adjacent each other, and with some of the tubes bent at their ends to bring them opposite the space between said groups.

1,808,170. AIR CLEANER. HERBERT G. KAMRATH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Mar. 22, 1928. Serial No. 263,931. 3 Claims. (Cl. 183—73.)



1. An air cleaner comprising a casing including a substantially cylindrical side wall member and end wall members rigidly secured to the side wall member, one of said end members being provided with an axial clean air outlet, a hollow cylinder of oil-wetted filtering material lining the interior of the cylindrical member, a rigid foraminous member within the cylinder of filtering material, said filtering material and foraminous member extending from end to end of the casing and being tightly confined between the end members, said cylindrical side wall member being provided with a plurality of parallel horizontally extending radially and axially spaced slots, the material of the casing at the upper sides of the slots being pressed outwardly to form louvers integrally united at their top and side edges to the casing wall.

1,808,171. MULTILEAD MECHANICAL PENCIL. HALSEY MONROE LARTER, Newark, N. J., assignor to Larter & Sons, Newark, N. J. Filed Nov. 7, 1929. Serial No. 405,318. 10 Claims. (Cl. 120—14.)

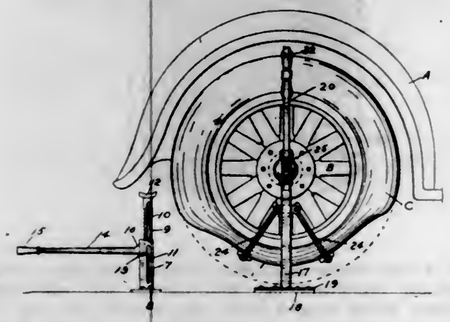
1. A multi-lead mechanical pencil comprising a casing including two relatively slidable and rotatable sections

one having an opening at one end, a plurality of lead-carriers mounted in said section of the casing to move one at a time through said opening, and means in the other casing section to selectively engage said lead-carriers upon relative rotation of said casing sections and to



project them outwardly through said opening and retract them into said casing upon relative sliding movement of the casing sections in opposite directions respectively, and means for locking all said lead-carriers except the one to be projected against longitudinal movement.

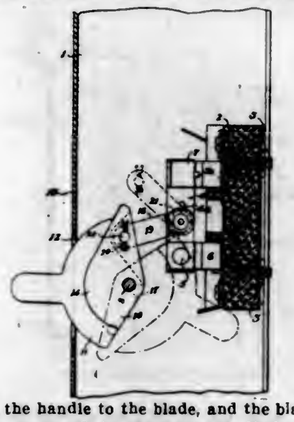
1,808,172. VEHICLE JACK AND SUPPORT MECHANISM. CLINTON W. LEACH, Minneapolis, and GEORGE M. BOGIE, Glenwood, Minn., assignors of one-third to George C. Leach, River Falls, Wis. Filed Aug. 5, 1929. Serial No. 383,606. 10 Claims. (Cl. 254—134.)



1. A jack comprising a standard, a member vertically movable in the standard, a pair of lifting hooks pivotally secured to the member for engagement under a wheel, and means at the upper end of the member for abutting engagement with the upper outer part of the wheel.

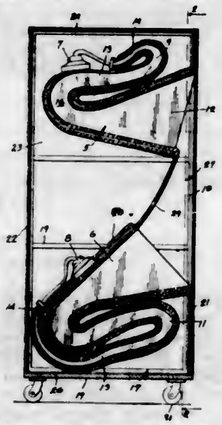
1,808,173. ENTRANCE SWITCH AND SERVICE BOX. JOSEPH C. LEWIS, Minerva, Ohio, assignor to Charles W. Keplinger, receiver of The American Electric Switch Corporation, Minerva, Ohio, a Corporation of Delaware. Filed April 28, 1927. Serial No. 187,209. 7 Claims. (Cl. 200—168.)

6. A sheet metal switch box, a door for the box provided with a slot, a switch block within the box, a switch blade pivotally mounted on the switch block, spring jaws on the switch block for receiving said blade, a rod located through the box and supported in the side walls thereof, an operating handle for the blade pivotally mounted upon the rod and located through the slot, a rigid link pivotally



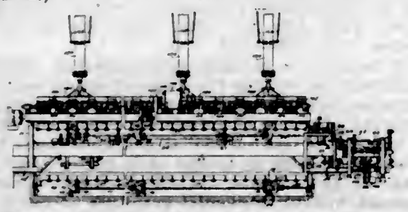
connecting the handle to the blade, and the blade, link and jaws being arranged to cooperate to limit the opening and closing movements of the blade.

1,808,174. PADDED SOUND REPRODUCING HORN. LEONARD L. MAXAM, San Pedro, Calif., assignor of one-third to Clarence S. Crews, San Pedro, Calif. Filed June 19, 1929. Serial No. 371,995. 7 Claims. (Cl. 181—27.)



1. A loud speaker comprising a frame, a sound reproducer mounted thereon and including a sound amplifier, and a covering of vibration dampening material carried by said frame and completely enclosing said reproducer with the exception of an opening therein in register with said amplifier.

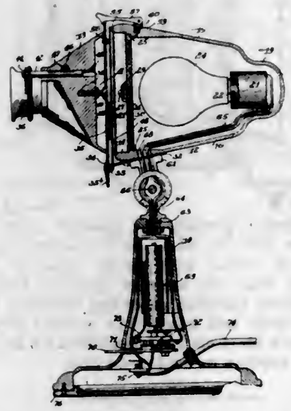
1,808,175. LIFTING DEVICE. RAYMOND C. PENFIELD, New York, N. Y. Original application filed May 5, 1926, Serial No. 106,875. Divided and this application filed Nov. 1, 1928. Serial No. 316,546. 7 Claims. (Cl. 214—1.)



1. In an automatic brick backing machine the combination of a vertically movable lift, a plurality of parallelly

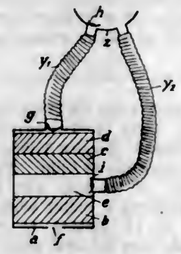
arranged rollers thereon forming a track, means for rotating said rollers in one direction when the lift is in its uppermost position and for rotating said rollers in the opposite direction when the lift is in its lowermost position.

1,808,176. STEREOSCOPIC VIEW BOX. ALPHONSE F. PIEPER and GEORGE I. KESTER, Rochester, N. Y.; said Kester assignor to said Pieper. Filed Oct. 24, 1927. Serial No. 228,260. 27 Claims. (Cl. 88—29.)



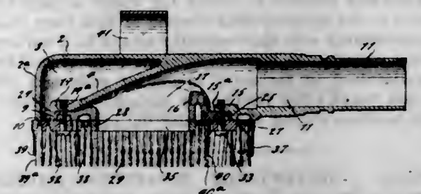
1. In a device of the class described, a lamp housing, stereoscopic lens means adjacent thereto, means intermediate said housing and lens means for holding films or the like, and means providing for relative aligning movement between said lens means and said film holding means one in a plane substantially parallel to the other and about an axis while each remains in its normal plane of operation whereby to simultaneously align the optical axes with corresponding points on the films.

1,808,177. AIR PURIFYING APPLIANCE. KARL EDUARD PÜTTER, Berlin, Germany, assignor to Deutsche Gasglühlicht-Auer-Gesellschaft mit beschränkter Haftung, Berlin, Germany, a Corporation of Germany. Filed May 20, 1927, Serial No. 193,034, and in Germany May 20, 1926. 4 Claims. (Cl. 128—140.)



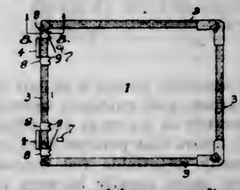
1. A respirator having an opening adapted to serve alternately as an inlet and as an outlet, a chamber arranged to receive both the air to be inhaled and the exhaled air, a purifying chamber interposed between said receiving chamber and said opening, a mask, a conduit to lead the exhaled air from said mask to said receiving chamber, a connection, separate from said conduit, for leading air for inhalation from said receiving chamber to said mask, and an air-purifying element in said connection.

1,808,178. VACUUM BRUSH. RANDOLPH SANTINI, New York, N. Y., assignor to Arco Vacuum Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 18, 1926. Serial No. 142,249. 10 Claims. (Cl. 15—158.)



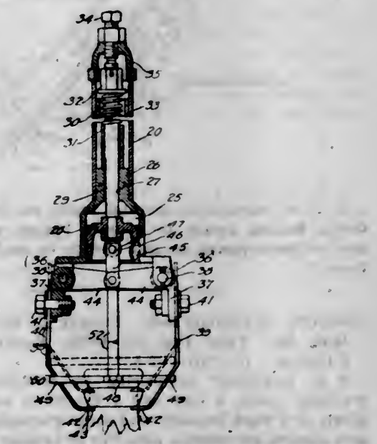
4. In a brush of the class described, a back member having a chamber therein, said chamber having an open side, said back member having an exhaust port for said chamber, an insert member mounted in said chamber with a side wall thereof spaced from a wall of said chamber to form a suction slot, support means on said back member providing a slot alined with said suction slot, and tuft means carried by said support means adjacent said suction slot.

1,808,179. BOOK COVER. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Corporation of Massachusetts. Filed April 3, 1930. Serial No. 441,218. 2 Claims. (Cl. 281—37.)



2. A book cover comprising a cardboard body, plates having rearwardly extending prongs and hinge eye, and a single forwardly extending prong, the plates being applied over the cardboard adjacent one edge thereof, the rear prongs being clinched around the edge, and the forward prong being clinched through the board.

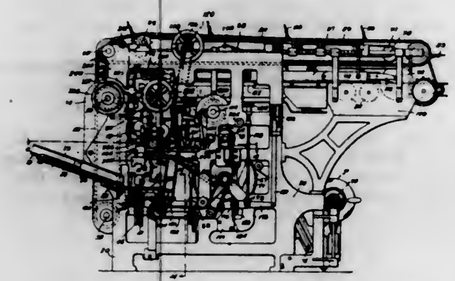
1,808,180. APPARATUS FOR HANDLING GLASSWARE. JOHN E. SCHRODER, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 3, 1927. Serial No. 217,489. 6 Claims. (Cl. 214—1.)



1. Apparatus for handling glassware comprising an arm mounted for movement between a ware-receiving station

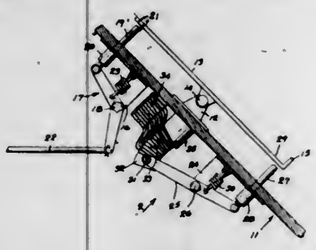
and a ware-delivery station, a holder and tongs actuating means carried by said arm, tongs members mounted for vertical sliding movement with respect to said actuating means, means carried by the tongs for engagement with the ware and adapted to adjust the height of said tongs relative to the tong-engaging portion of said ware, means for maintaining said ware-engaging means in a horizontal position whereby the ware-engaging portions of said tongs are maintained in horizontal alignment with each other, and said tongs being frictionally maintained in their adjusted position during the transferring operation.

1,808,181. CONVERTIBLE WRAPPING MACHINE. HENRI A. SÉVIGNÉ, Winthrop, Mass., assignor to National Bread Wrapping Machine Company, Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 27, 1929. Serial No. 395,608. 17 Claims. (Cl. 93—2.)



1. A wrapping machine having a supply guideway for articles to be wrapped, said guideway having a fixed rail at one side, a plurality of levers at the other side, a rail connected to said levers and parallel with the fixed rail, and a longitudinally adjustable rod connected to said levers to vary the space equally between the two rails throughout their lengths.

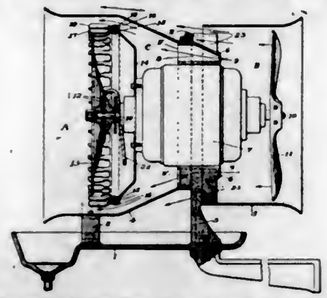
1,808,182. ELECTRICALLY OPERATED BRAKE FOR MOTOR VEHICLES. CARSON H. SHANNON, Los Angeles, Calif., assignor to American Electric Brake Corporation, Los Angeles, Calif., a Corporation of Delaware. Filed Oct. 24, 1928. Serial No. 314,597. 36 Claims. (Cl. 188—158.)



1. In an electrically operated brake, an electro-magnetic device having means to operate brakes, and a control mechanism actuated by said device to control the power thereof.

1,808,183. HUMIDIFIER. EUGENE A. SPAULDING, Portland, Me. Filed Dec. 10, 1928. Serial No. 325,096. 5 Claims. (Cl. 261—90.)

1. A humidifier comprising in combination with a revoluble shaft, a disc and a fan-wheel secured to said shaft, of a fixed impeditive element surrounding said disc, said element including a plurality of annular grids disposed in transverse alignment, relatively, each grid having a plurality of blades respectively disposed obliquely to a radial line, a cylindrical casing concentrically disposed around said impeditive element and spaced therefrom to provide an annular space, a frusto-conical portion on the rearward end of said casing, a frame adapted to support said casing and said frusto-conical portion thereof, an annular aperture through said frame, another cylindrical casing, said second casing adapted to surround said fan-wheel and extend forwardly to provide, between it and



said frusto-conical portion, an annular outlet for air projected from said fan-wheel on to the exterior of said first mentioned casing, said outlet being of relatively greater width than the annular aperture through said frame, an interior partition extending inwardly from said impeditive element and adapted to prevent impingement of the projected air from said fan-wheel on to said disc, and means to conduct water to said disc.

1,808,184. CLEANING AND PRESERVING OF METALLIC SURFACES. DEAL H. TOMPKINS, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed June 30, 1930. Serial No. 465,070. 20 Claims. (Cl. 148—8.)

1. A process of pickling iron and steel products which comprises subjecting the metal to be pickled to the action of a sulfuric acid solution containing a small proportion of a sulfuric acid derivative of a reaction product of sulfur dioxide and an aldehyde-amine product.

1,808,185. CLEANING AND PRESERVING OF METALLIC SURFACES. DEAL H. TOMPKINS, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 9, 1930. Serial No. 487,506. 20 Claims. (Cl. 148—8.)

1. A process of pickling a metal which comprises subjecting the metal to be pickled to the action of a substantially non-oxidizing mineral acid solution containing a small proportion of a hydrochloric acid derivative of a reaction product of sulfur dioxide and an aldehyde-amine product.

1,808,186. CLEANING AND PRESERVING OF METALLIC SURFACES. DEAL H. TOMPKINS, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 11, 1930. Serial No. 488,196. 20 Claims. (Cl. 148—8.)

1. A process of pickling a metal which comprises subjecting the metal to be pickled to the action of a substantially non-oxidizing mineral acid solution containing a small proportion of a phosphoric acid derivative of a reaction product of sulfur dioxide and an aldehyde-amine product.

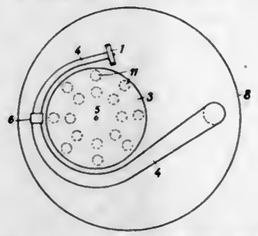
1,808,187. CLEANING AND PRESERVING OF METALLIC SURFACES. DEAL H. TOMPKINS, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 16, 1930. Serial No. 489,240. 20 Claims. (Cl. 148—8.)

1. A process of pickling iron and steel products which comprises subjecting the metal to be pickled to the action of a sulfuric acid solution containing a small proportion of a chromic acid derivative of a reaction product of sulfur dioxide and an aldehyde-amine product.

1,808,188. PROCESS OF PICKLING METALS. DEAL H. TOMPKINS, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 13, 1930. Serial No. 495,519. 24 Claims. (Cl. 148—8.)

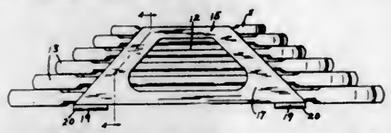
1. A process of pickling a metal which comprises subjecting the metal to be pickled to the action of a substantially non-oxidizing mineral acid solution containing a small proportion of an organic acid derivative of a reaction product of sulfur dioxide and an aldehyde-amine product.

1,808,189. PHONOGRAPH. ETIENNE VADASZ, Ste.-Croix, Switzerland. Filed Mar. 29, 1929, Serial No. 350,904, and in Germany Aug. 3, 1928. 3 Claims. (Cl. 274—23.)



1. A phonograph comprising a casing including a sound chamber, a rotatable turntable mounted in said casing for receiving the record disks, a sound arm connected at one end with said sound chamber, said sound arm being of gradually increasing cross-sectional diameter toward its connection with said sound chamber and being of circular form disposed concentrically to a portion of the periphery of said turntable, and a sound box carried by said sound arm at its outer end, one-half of the developed length of said sound arm being greater than the distance between its point of connection with the sound box and its connection with the sound chamber.

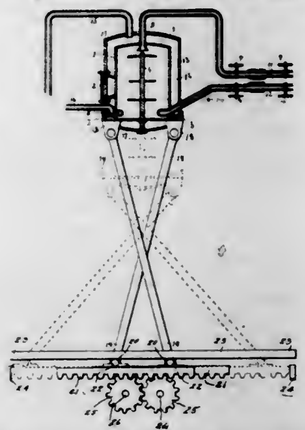
1,808,190. WRENCH SET UNIT. FRANK J. VLCHEK, Cleveland, Ohio, assignor to The Vlchek Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 10, 1927. Serial No. 239,233. 17 Claims. (Cl. 206—16.)



1. A wrench set unit, comprising: a plurality of wrenches assembled side by side; and binder means extending about said wrenches; said binder means and said wrenches having interabutting means for preventing any substantial relative longitudinal movement in either direction between said binder means and said wrenches; whereby said wrenches are held both against separation and against shifting.

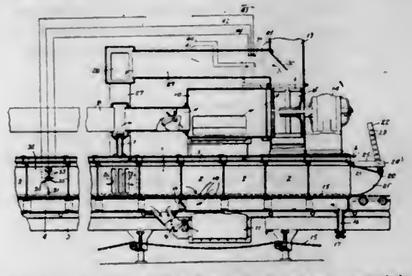
1,808,191. ART OF TREATING GUM HYDROCARBONS AND APPARATUS USED IN THE SAID ART. FELIX F. VON WILMOWSKY, New York, N. Y. Continuation of application Serial No. 701,217, filed Mar. 22, 1924. This application filed Feb. 8, 1930. Serial No. 427,069. 15 Claims. (Cl. 18—49.)

4. A process of dividing gum hydrocarbons into distinct grades or lots of hydrocarbons having different physical properties such as different degrees of tenacity, which consists in differentiating the aggregate state or physical condition of some portion of such hydrocarbons from the aggregate state or physical condition of another portion of the hydrocarbons by means of employing suitable physical factors which govern the changes of the aggregate states



or physical conditions of the gum hydrocarbons and differently affect the aggregate states or physical conditions of distinct portions of the same such as running time, gradually changing temperature, gradually changing pressure; and then separating the differentiated portion and the other portion of the gum hydrocarbons from each other.

1,808,192. DRIFT CONTROL FOR LEERS. HAROLD A. WADMAN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Aug. 29, 1929. Serial No. 389,118. 23 Claims. (Cl. 49—47.)



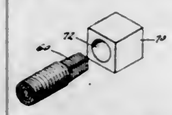
21. Apparatus for annealing glassware comprising a tunnel through which gaseous fluid may flow, means in said passage adapted to be acted upon by a flow of gaseous fluid through said passage in one direction or the other, detecting means responsive to the first named means, and means responsive to said detecting means for effecting a mechanical movement.

1,808,193. PREPARATION OF FLEXIBLE CABLES. HARTWELL W. WEBB, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Nov. 21, 1927. Serial No. 234,759. 14 Claims. (Cl. 219—10.)



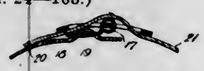
1. A new article of manufacture, a length of multi-strand flexible cable or shafting having welded squared ends.

1,808,194. PREPARATION OF FLEXIBLE CABLES. HARTWELL W. WEBB, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Jan. 5, 1928. Serial No. 244,606. 29 Claims. (Cl. 219—10.)



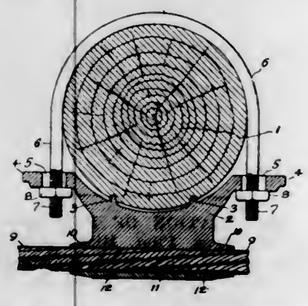
1. The method of preparing multistrand cable or shafting consisting of electrically heating a section of said cable or shafting until it oxidizes, annealing the section, and then cutting at the heated section while it is in the heated state.

1,808,195. FASTENING MEANS. NATHANIEL M. WHITMORE, Cambridge, Mass., assignor to Haverhill Shoe Novelty Company, Haverhill, Mass., a Corporation of Massachusetts. Filed July 2, 1929. Serial No. 375,538. 2 Claims. (Cl. 24—163.)



1. In a buckle for use on straps fixedly secured at their ends to opposite sides of the closure slit of an article for centering the buckle, a main buckle frame comprising side and end members, the main buckle frame having strap-receiving openings adjacent the end members so that a strap may be passed through these openings and under each of the end members, means for releasably securing a strap in the main buckle frame, a concavo-convex auxiliary buckle of approximately half the length of the main buckle frame, the auxiliary buckle being mounted to pivot on the main buckle frame about an axis disposed transversely of this frame and approximately midway between the ends thereof so that the auxiliary buckle may swing with its concave side adjacent the main buckle frame to a position wherein the free end of the auxiliary buckle is disposed adjacent an end of the main buckle frame, the auxiliary buckle having transverse slots for receiving and frictionally holding a strap.

1,808,196. STATE HIGHWAY GUARD FENCE. ROLLAND G. WILLIAMS, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed Mar. 27, 1929. Serial No. 350,390. 1 Claim. (Cl. 248—31.)



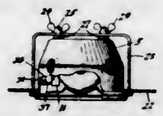
A device for attaching cables to supports composed of a fixture of substantially I-beam form having its front and rear connected by horizontal webs and having its front face concaved throughout its width to receive a cable and having the concavity of straight formation throughout, an elongated clamping member having its rear face formed with a concavity extending throughout its length to receive the cable, and also having its said concavity of straight formation throughout so as to permit the cable to slide between said face of the fixture and the clamping member upon the cable being subjected to lateral strains thereby to relieve the fixture and support of shock a pair of straps engaged about and substantially embedded in the clamping member and having threaded bolts connected to their ends, said front face of the fixture having openings above and below the cavity thereof and through which said threaded bolts extend, and nuts on the bolts engaged with the rear of the said front face of the fixture and disposed between said front face and the rear of the fixture so as to be protected thereby.

1,808,197. NAIL. WILLIAM G. WOODRUFF, Wareham, Mass., assignor to Tremont Nail Company, Wareham, Mass., a Corporation of Massachusetts. Filed July 19, 1928. Serial No. 293,890. 2 Claims. (Cl. 85—21.)



1. A cut nail having a body formed with flat sides meeting in relatively sharp longitudinal edges, with one side provided with indentations forming triangularly-shaped spurs having lateral shoulders extending across the side of the body at substantially right-angles to the edges thereof and with said shoulders terminating at one edge of the body in sharp points projecting laterally outward beyond the normal plane of its indented side and beyond its longitudinal edge.

1,808,198. INSTRUMENT MECHANISM HOLDER. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Nov. 28, 1927. Serial No. 236,314. 1 Claim. (Cl. 235—96.)



In an instrument mounting, an instrument carrying frame, a casing, means including plates secured to and within said casing and having inwardly directed resilient arms, said frame having cooperating projections, and means securing said projection to said resilient arms.

1,808,199. ATTACHMENT FOR SCREENS AND THE LIKE. ISIDORE I. ABRAMS, Brooklyn, N. Y. Filed Aug. 19, 1929. Serial No. 387,039. 4 Claims. (Cl. 156—38.)



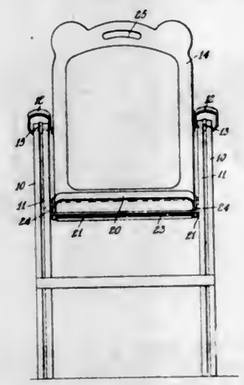
2. The combination with a screen frame composed of two sections each having upper, lower and outer end members, the sections being arranged to slide past one another, of a loop secured on the adjacent ends of each upper and lower member, said loops being adapted to slidably

receive the upper and lower members of the other section, cam means on one pair of said loops to engage the members of the section slidable therein, said cam means being on the outer side of the frame, and means to exert resilient pressure on said sections to move them outwardly.

1,808,200. CLEANING AND PRESERVING OF METALLIC SURFACES. THOMAS W. BARTRAM and DEAL H. TOMPKINS, Nitro, W. Va., assignors to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 20, 1930, Serial No. 437,597. Renewed Dec. 4, 1930. 16 Claims. (Cl. 148—8.)

1. A process of pickling iron and steel products which comprises subjecting the metal to be pickled to the action of a sulfuric acid solution containing a small proportion of a sulfonated aldehyde-amine reaction product.

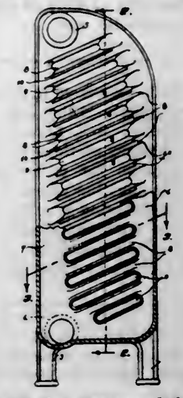
1,808,201. COLLAPSIBLE ARM CHAIR. WILLIAM J. BAUER, New York, N. Y., assignor to Project Holding Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 5, 1928. Serial No. 310,520. 7 Claims. (Cl. 155—139.)



1. A collapsible chair, comprising a pair of front legs, a pair of rear legs secured at their respective upper ends to corresponding upper ends of the pair of front legs, a pair of arm members pivotally connected to the respective upper ends of said cooperating legs, a seat member pivotally and slidably connected to the rear pair of legs, means to pivotally support the seat member to the front pair of legs, and a back member pivotally secured to the inner ends of the respective arm members and pivotally and slidably connected to the respective rear legs.

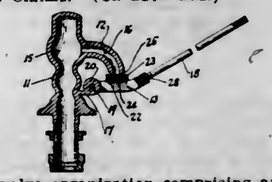
1,808,202. RADIATOR. EVERETT D. BETTS, Milan, Mich. Filed Nov. 13, 1929. Serial No. 406,779. 5 Claims. (Cl. 257—151.)

2. A radiator unit formed with openings surrounded by bosses extending in opposite directions laterally from said unit to space units apart when a number thereof are assembled into a radiator structure and form inlet and outlet passages at the upper and lower ends of said structure, said unit being also formed with vertical hollow edge members forming passages at the front and rear edges of the unit and also formed with passages at the upper and lower ends of said unit connecting said passages of said edge members, said passages of said edge members being of lesser cross-sectional area at one end than at the other, said passage at the upper and lower ends of said unit being in open communication with said inlet and outlet passages, and with transverse tubular passages connecting said vertical edge passages and



spaced apart, said tubular passages being inclined in the direction of their length forwardly and upwardly of said unit.

1,808,203. VALVE CONSTRUCTION. LOUIS BORTEN, Philadelphia, Pa. Filed Mar. 30, 1929. Serial No. 351,252. 6 Claims. (Cl. 137—104.)



1. A float valve organization comprising an upstanding inlet pipe, a pipe extending laterally from the standing pipe and curved downwardly, a hinge below the lateral, an arm pivoted to the hinge and extending beneath the end of the lateral, a closing member carried by the arm in position for contact with the end of the lateral and a buoy carried at the end of the arm.

1,808,204. FLEXIBLE CONDUIT. JOHN H. BROWN, Minneapolis, Minn., assignor to Keasbey & Mattison Company, Ambler, Pa., a Corporation of Pennsylvania. Filed Mar. 7, 1929. Serial No. 345,042. 3 Claims. (Cl. 247—39.)



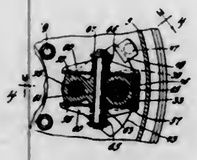
1. A flexible conduit comprising a tubular core of spirally curled strip metal; and a covering including a

wound on thickness of comparatively heavy thermo-insulate cordage, with an outer retaining jacket, also of thermo-insulate material, both capable of adapting themselves to the flexing of the metallic core.

1,808,205. WELDING. MANTON B. BRYANT and WALTER J. BEATTY, Detroit, Mich. Filed Jan. 10, 1928. Serial No. 245,807. 3 Claims. (Cl. 113—112.)

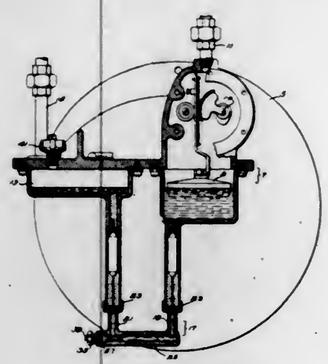
1. The method of welding sections of sheet steel containing nickel and chromium for carbonizing boxes, which comprises welding the abutting edges by fusing therewith a welding material containing a relatively large amount of nickel as compared with the amount of nickel in the sections whereby the welded sections are adapted to withstand temperatures as high as 1700° F.

1,808,206. BRAKE CENTRALIZER. THERON P. CHASE, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 17, 1929. Serial No. 378,958. 10 Claims. (Cl. 188—78.)



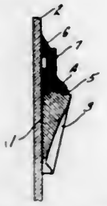
1. In a centralizer for brakes, a brake actuating shaft, a swinging journal carrying said shaft, said journal having opposite faces, said shaft being rotatably supported in said journal, a fixed plate having oppositely disposed edges normally in alinement with said faces, oppositely located spring seats, resilient means holding said spring seats against said edges and faces and said faces and edges in alinement.

1,808,207. GAUGE. LYMAN COOK, Foxboro, Mass., assignor to The Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed Aug. 27, 1927. Serial No. 215,921. 8 Claims. (Cl. 73—31.)



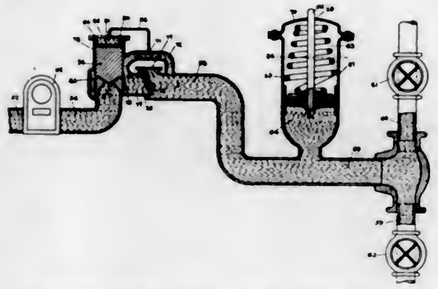
1. A gauge of the U tube type having a pair of legs and a tubular connection between them extending past one of the same and terminating in an open end, a threaded plug in said open end, a member rotatively supported therein having a segmental portion opposing the junction of the adjacent leg and being exposed exteriorly to provide for rotative adjustment of the same.

1,808,208. SIGNAL VIEWING ATTACHMENT FOR AUTOMOBILES. BRUCE W. DAVID, Cleveland Heights, Ohio, assignor to The Moonbeam Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 12, 1928. Serial No. 318,764. 11 Claims. (Cl. 88—1.)



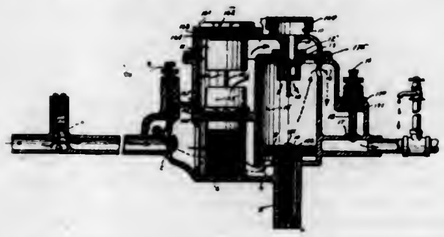
7. In a device of the class described, the combination of a lens having an integral projection, and a one-piece rubber member having a portion in direct engagement with said projection and having an integral suction cup adapted for direct attachment to a glass window.

1,808,209. FLUID METERING SYSTEM AND APPARATUS. GEORGE GOODELL EARL, New Orleans, La. Filed Dec. 21, 1923. Serial No. 682,040. 30 Claims. (Cl. 73—167.)



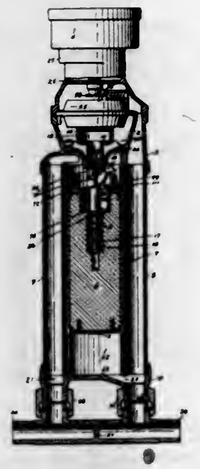
1. In a fluid conduit system a fluid system valve having a movable member, the valve being normally biased toward closure by a given force, means for opening and holding open said valve at all rates of flow above a given rate of flow therethrough, and for closing said valve at any lower rate of flow, comprising means for conducting the fluid discharging through said valve through a restriction and means for communicating the pressure at the approach of said restriction to the movable member to cause it to tend to open the valve and means for communicating the reduced pressure effected by the restriction from the restriction to said movable member in opposition to the first named pressure.

1,808,210. FLUID METERING MECHANISM. GEORGE GOODELL EARL, New Orleans, La. Filed May 31, 1927. Serial No. 195,275. 35 Claims. (Cl. 73—167.)



1. In a hydraulic system, in combination a container for liquid, a wall for said container movable inwardly and outwardly upon movement of liquid into and from the container, means to continuously communicate pressure of liquid from a source to the exterior side of said wall, means to continuously effect a predetermined pressure of constant value upon the wall to oppose the pressure of liquid effective on its exterior side, a valve operable to admit liquid from the source to the interior of said container, said valve and said wall being normally, entirely, operatively disassociated, means responsive to a definite predetermined outward movement of the wall to operate the valve, and a duct for discharge of liquid from the container.

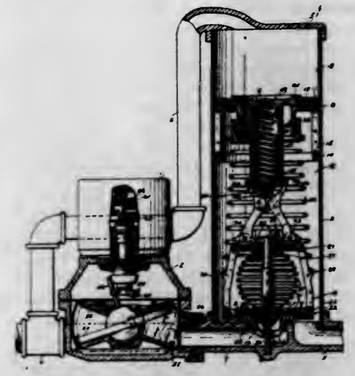
1,808,211. FLUID METER. GEORGE GOODELL EARL, New Orleans, La. Filed Mar. 1, 1928, Serial No. 258,339. Renewed Apr. 13, 1931. 14 Claims. (Cl. 73—167.)



1. In combination, a casing having a passage therethrough adapted to conduct a flow of fluid, a register, a register actuator and a valve, said valve controlling the flow through the passage, said actuator adapted to effect operation of the register at a rate corresponding to the rate of flow through the passage, means operable to effect opening of said valve responsive to an excess of pressure at the inlet end of the passage over that at the outlet end thereof, and other means dominated by the rate of flow through the passage responsive to an initial opening of the valve, adapted to effect continuous opening of the valve, substantially only for such a period as a predetermined rate of flow through the passage is exceeded, and separate means operated coincidental with any substantial movement of the actuator, adapted to instantly indicate the fact of and continuance of flow through the passage.

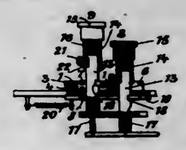
1,808,212. METER. GEORGE GOODELL EARL, New Orleans, La. Filed May 25, 1928, Serial No. 280,483. Renewed Oct. 16, 1930. 19 Claims. (Cl. 73—167.)

7. In combination with a fluid conduit, a valve mechanism therefor comprising a valve adapted when in closed position to substantially prevent flow through the conduit, the valve being movable to open in the direction of flow through the valve opening, a fluid storage chamber communicating with the conduit on the discharge side of the valve, the chamber having a movable wall, means to communicate the pressure of fluid on the approach side of the valve to an exterior side of the said wall, means effective to accumulatively store energy upon a movement of said wall in a direction effective to reduce the volumetric content of the chamber, means operable to effect a relatively sudden communication of the force of the stored energy to the valve to effect a positive opening of



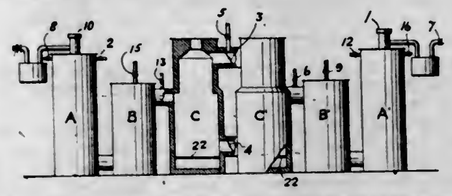
the valve upon such movement of said wall as accomplishes a predetermined reduction of content of the chamber.

1,808,213. CALCULATING MACHINE FOR ALL SPECIES. KONRAD EICHENAUER, Neu-Rossen, near Merseburg, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Original application filed July 21, 1927, Serial No. 207,426, and in Germany Nov. 18, 1926. Divided and this application filed Apr. 19, 1928. Serial No. 271,315. 2 Claims. (Cl. 235—145.)



1. In a calculating machine for all species of calculations wherein the keys remain depressed upon operation thereof, the combination of normally open contacts in an electric circuit, setting keys arranged to close said contacts simultaneously with the setting up of numeral values thereby in said machine, each of said keys consisting of two parts movable with respect to each other, one of said parts controlling the opening and closing of said contacts, means for limiting the amount of relative movement of the two parts, and a spring interposed between the two parts of the key adapted to be compressed by setting up a numeral value in the machine for the purpose of allowing the contact to be closed and to be expanded after release of pressure upon said key, and means for retaining one part of said key in the depressed position.

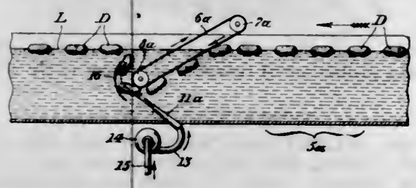
1,808,214. METHOD OF MAKING WATER GAS. OWEN B. EVANS, Philadelphia, Pa., assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 3, 1924. Serial No. 703,893. 2 Claims. (Cl. 48—208.)



1. In the process of manufacture of water gas by alternate air and steam blasting periods; the improvement

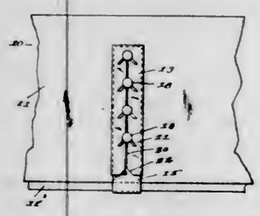
which consists in providing two separate fuel beds of bituminous fuel in two intercommunicating water gas generators, hot air blasting from the top part of the fuel bed in one generator to the top portion of the other fuel bed in the second generator and from the bottom part of the fuel bed in the first generator to the bottom part of the fuel bed in the second generator thereby evolving volatile matter in the fuel bed in the first generator, and introducing secondary air between the fuel beds to burn the volatile matter and thereby facilitate the carbonization of raw fuel and to store heat in the fuel bed in the second generator, and then generating water gas by steam blasting the heated fuel beds.

1,808,215. TURNOVER FOR AUTOMATIC COOKING APPARATUS. JACOB H. FRIEDEL, New York, N. Y., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed June 21, 1930. Serial No. 462,723. 7 Claims. (Cl. 53—7.)



1. Turnover means useful with automatic apparatus for cooking articles such as doughnuts afloat in hot liquor, comprising means for temporarily depressing the articles against their buoyancy in the liquor incident to progression in the apparatus; and means for setting up an upward current in the liquor locally at the point of release of the articles by the depressing means to turn the articles over.

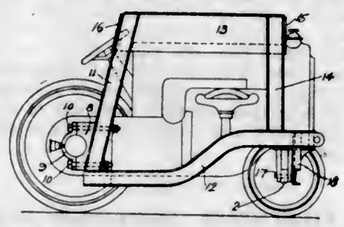
1,808,216. SAFETY BOX FASTENER. JOSEPH G. FRIEDMAN, New York, N. Y. Filed May 4, 1929. Serial No. 360,561. 3 Claims. (Cl. 292—307.)



1. A fastener for a box including outer and inner telescopic members, said fastener comprising two slidable parts adapted to be secured to said outer and inner members respectively, one of said parts being sheath-like and having a longitudinal slit and an angular slot in communication therewith, said slot being wider than said slit, the other part having headed projections presenting neck portions larger than the width of said slit and adapted for forceful entry into said slit and into the slot to secure the parts in non-releasable engagement.

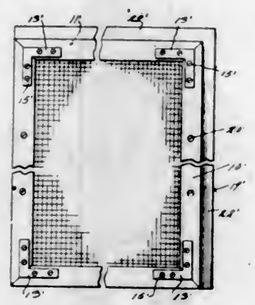
1,808,217. TRACTOR FRAME. THORVALD N. GARSON, New Brighton, N. Y. Filed June 21, 1928. Serial No. 287,066. 1 Claim. (Cl. 180—1.)

In a tractor comprising a frame and front and rear axles secured thereto, of front and rear wheels connected to said axles, and means including the rear axle for driving the rear wheels, of lateral projecting annular hub extensions for the rear wheels, a supplemental tractor frame comprising front and rear upwardly projecting frame members and interconnecting members therefor, means connecting the rear frame members to the hub extensions of the rear wheels whereby said wheels serve as the entire



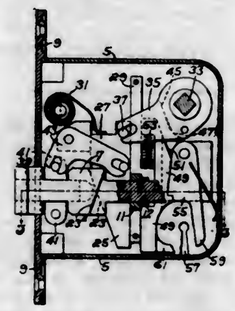
support for the rear of the supplemental frame, and means connecting the supplemental frame at its front to the front axle.

1,808,218. METAL DOOR AND WINDOW SUPPORT. CLIFORD W. GRIFFIN, Lebanon, Tenn. Filed Apr. 10, 1930. Serial No. 443,229. 1 Claim. (Cl. 156—14.)



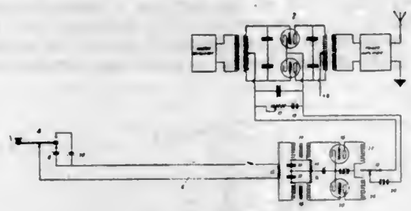
In combination with a screen frame, an L-shaped bracing member, means for securing said bracing member on one face of the frame and across the corner thereof a protecting supporting shield positioned on the opposite face of the frame and overlying the screen, said supporting shield comprising an elongated metallic strip covering the face of the frame and reinforcing the frame whereby to prevent bending or warping thereof, the outer edge of said supporting strip extending outwardly of the frame whereby to provide an outwardly extending flange for engagement with the outer face of a sash structure.

1,808,219. LATCH. BICKNELL HALL, Quincy, Mass. Filed Dec. 31, 1927, Serial No. 243,838. Renewed Apr. 9, 1930. 12 Claims. (Cl. 70—29.)



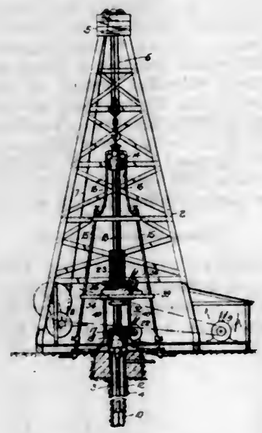
4. In a latch a double beveled bolt, an abutment thereon and a member movable across said abutment as the bolt is projected and serving to maintain the bolt in any projected position within its range.

1,808,220. KEYING. CLARENCE W. HANSELL, Rocky Point, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 2, 1927. Serial No. 230,439. 8 Claims. (Cl. 178—2.)



1. The method of keying a remote transmitter having amplifier tubes which includes putting plus and minus direct control current on a line, and at the terminal of the line utilizing induced potentials resulting from the rate of change of the control current for applying blocking potential to the grid of an amplifier tube in the transmitter.

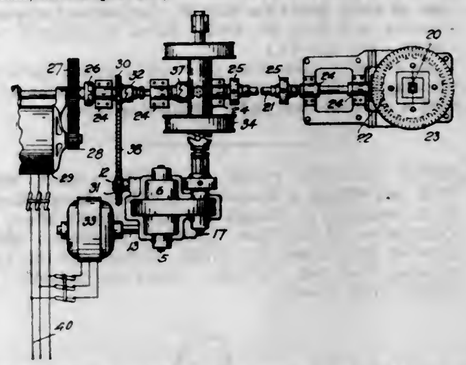
1,808,221. DRILLING MACHINE. FREDERIC W. HILD and GURDON T. POLLARD, Denver, Colo.; said Pollard assignor to said Hild. Filed Dec. 15, 1920. Serial No. 430,940. 7 Claims. (Cl. 255—22.)



1. In a drilling machine, the combination of a drill tool, an element for its rotation including a motor, a rotary nut having a screw connection with the drill tool, a second motor for rotation of the nut, and means for varying the relative velocities of said motors by and proportionate to variations in a resistance to the movement of the tool.

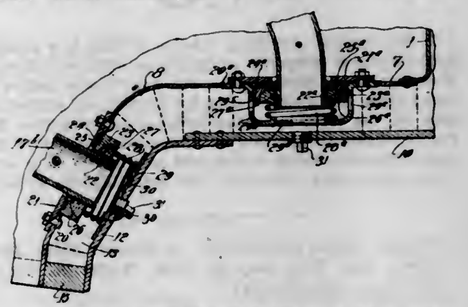
1,808,222. POWER TRANSMISSION SYSTEM. FREDERICK W. HILD, Denver, Colo. Filed Mar. 22, 1921, Serial No. 454,451. Renewed May 7, 1924. 8 Claims. (Cl. 255—19.)

1. Earth-boring apparatus comprising a drill stem, means for freely suspending a portion of the weight of said drill stem, driven means for effecting rotation of said drill stem, and a plurality of motor devices and a differential



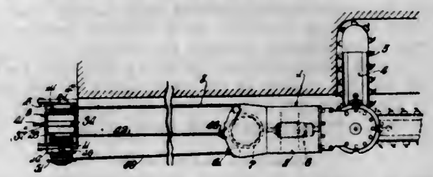
mechanism for operating said means, one of said motor devices having a positive driving connection with said driven means.

1,808,223. LOCOMOTIVE BOILER. WALTER H. HINSCH, Chicago, Ill., assignor to Locomotive Firebox Company, Chicago, Ill., a Corporation of Delaware. Filed Aug. 17, 1929. Serial No. 386,665. 4 Claims. (Cl. 122—68.)



1. A locomotive boiler having a firebox, a water steaming and circulating member disposed in the firebox and having a tubular inlet end opening through one of the sheets thereof so as to communicate with the water space of the boiler and means associated with said sheet and including a packing surrounding said inlet end and providing a connection for said inlet end which permits of both a longitudinal and a lateral movement of said neck without leakage about the same.

1,808,224. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed May 22, 1929. Serial No. 365,168. 32 Claims. (Cl. 262—8.)

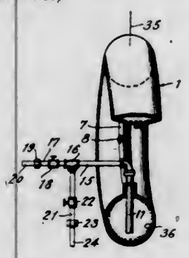


1. The combination with a mining machine adapted to operate on a steeply inclined coal face and having feeding means for feeding the machine upwardly along the coal face, of a safety device operated by the machine feeding means and complementing the latter in the feeding of the machine up the inclined and operative upon failure of the machine feeding means to prevent automatically uncontrolled movement of the machine down the incline.

1,808,225. ADHESIVE COMPOSITION. ERNEST HOPKINSON, New York, N. Y. Original application filed Aug. 18, 1923, Serial No. 658,184. Divided and this application filed Sept. 28, 1927. Serial No. 222,689. 4 Claims. (Cl. 87—17.)

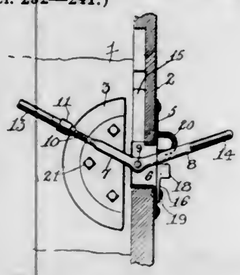
1. An adhesive composition for bonding porous material comprising an aqueous dispersion of rubber, an organic colloid, a colloidal clay, and a vulcanizing agent.

1,808,226. RUBBER TUBE. ERNEST HOPKINSON, New York, and WILLIS A. GIBBONS, Little Neck, Long Island, N. Y., assignors to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Original application filed June 23, 1925, Serial No. 38,966. Divided and this application filed Oct. 10, 1928. Serial No. 311,462. 3 Claims. (Cl. 18—58.)



1. The method of making tubular articles in a complete annulus which comprises supplying an aqueous dispersion of rubber to the interior of a water permeable hollow annular form, depositing suspended solids from said dispersion on the form by withdrawing aqueous matter from the dispersion though said form, dying the deposit, a pressure differential being maintained on opposite sides of the form during said operations, and removing the article.

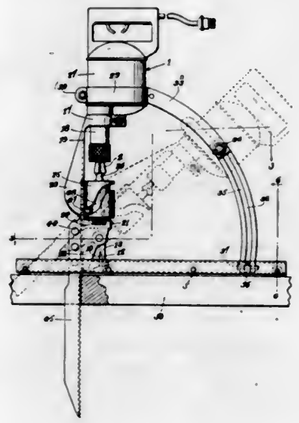
1,808,227. DOOR FASTENER. ALEXANDER HOSIG, Blackhawk, Wis. Filed May 13, 1929. Serial No. 362,764. 3 Claims. (Cl. 292—241.)



1. A device of the class described including a stationary arcuate cam plate, having an angularly disposed engaging face, angularly positioned arms having their inner ends pivotally mounted on a movable member and adapted to be disposed adjacent the straight edge of the plate, a hook member carried by one of said arms for engaging the cam surface of the plate, and a handle member at the outer ends of both arms for engaging and disengaging the hook member with the cam plate.

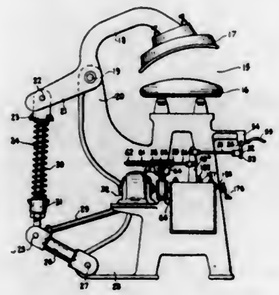
1,808,228. ATTACHMENT FOR ELECTRIC DRILLS. EUGENE HULACK and JOHN W. NISSROD, Jacksonville, Fla., assignors of one-sixth to H. E. Cochran and one-sixth to George L. Rutherford, Jacksonville, Fla. Filed Apr. 25, 1930. Serial No. 447,298. 7 Claims. (Cl. 143—68.)

1. In an attachment for connection with the rotatable chuck of an electric hand drill, a cam roller having a shank for engagement by the chuck, said cam roller having its peripheral face formed with a diagonally disposed groove, a guide element adjacent the cam roller, a tool connecting element slidably mounted in the guide element, a roller carried by the tool connecting element and extending into said groove, a travelling carriage for engagement with an object to be operated upon, a vertically disposed plate extending transversely of the carriage, a supporting member having its lower end pivotally connected with said plate to swing on an axis longitudinally of the carriage, said guide element having a projecting portion pivot-



ally connected with the upper end of said supporting member to swing on an axis disposed transversely of the carriage, and adjustable means for preventing movement of the guide element relative to said supporting member, said adjustable means including a clamp secured to the drill, an arcuate extension formed on the clamp, an arcuate bracket having its lower end pivotally connected to the carriage to swing on an axis longitudinally of the carriage, said bracket being formed with an elongated slot and having an upper end portion thereof disposed in overlapping relation to said extension, and a bolt carried by said extension and extending through said elongated slot.

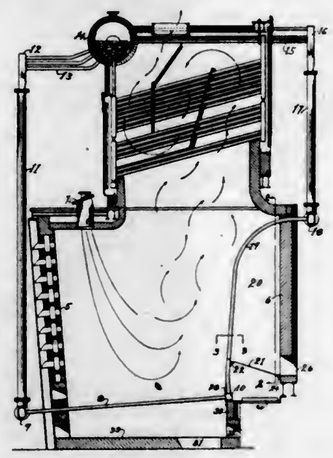
1,808,229. CIRCUIT CONTROLLING DEVICE. RICHARD B. HUNTER, Milwaukee, Wis., and ROBERT C. PAULY, Cincinnati, Ohio, assignors, by mesne assignments, to Cutler-Hammer, Inc., a Corporation of Delaware. Filed June 23, 1928. Serial No. 287,844. 12 Claims. (Cl. 68—9.)



1. In an electric switch, in combination, a stationary contact, a pivoted contactor movable into and out of engagement with said stationary contact, a lever pivoted eccentrically with respect to said contactor, spring means interposed between the free end of said lever and said contactor and adapted upon movement of said lever in opposite directions respectively to effect corresponding movement of said contactor with a snap action, means for effecting such movement of said lever comprising another pivoted lever having a toggle connection with said first lever, said toggle connection being adapted upon movement of said second lever to a given intermediate position to effect movement of said first lever in one direction, and said toggle connection being also adapted upon movement of said second lever in either direction from said intermediate position to effect movement of said first lever in its opposite direction.

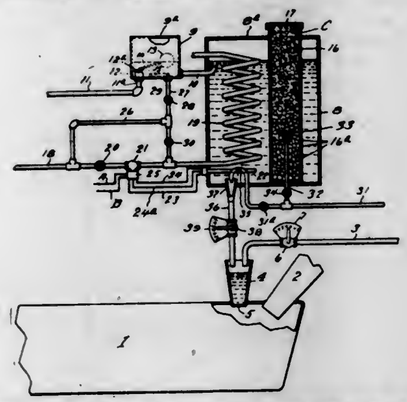
12. In a controller for the driving motion of a garment press or the like wherein one member of the press is movable alternately toward and away from the other member thereof under conditions of unidirectional operation of the driving motor, the combination with a switch movable with a snap action to closed or open position to complete or interrupt the energizing circuit of said motor, manual and automatic operating means for said switch comprising a pivoted lever movable to a given intermediate position to open said switch, said lever being also movable in either direction from said intermediate position to close said switch, manually operable means comprising a crank and a normally disengaged clutch for effecting movement of said movable member of the press independently of the driving motor, and a cam and lever associated with said last mentioned means for insuring intermediate positioning of said first mentioned lever to open said switch prior to engagement of said clutch.

1,808,230. SLAG SCREEN. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 3, 1925. Serial No. 66,628. 7 Claims. (Cl. 122—235.)



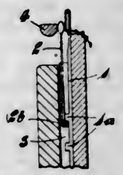
1. In combination, a boiler, a combustion chamber disposed beneath the boiler and having means for burning a slag-producing fuel therein, a vertically extending wall disposed in a position to be subjected to the action of slag in the burning fuel, means spaced inwardly from the wall forming a cooling zone in front thereof to protect it from the action of said slag, and means for the collection and removal of ashes from the space between said means and the wall.

1,808,231. PROCESS OF TREATING CLAY. WILLIAM R. JEAVONS, Cleveland Heights, and MAHLON J. RENTSCHLER, Willoughby, Ohio. Filed May 11, 1928. Serial No. 277,029. 17 Claims. (Cl. 106—11.)



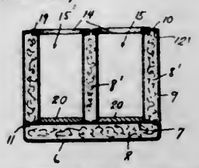
1. The herein described process of treating clay which consists in dissolving barium hydrate in water free from carbon dioxide and pugging a definite proportion of such solution into the clay.

1,808,232. KNITTING MACHINE. THOMAS HENRY JONES, Woodthorpe, England. Filed May 9, 1929, Serial No. 361,776, and in Great Britain May 21, 1928. 7 Claims. (Cl. 66—102.)



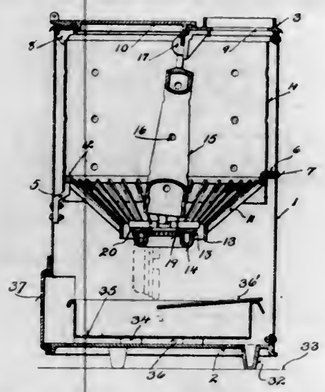
6. In a knitting machine, bearded needles, presser members for the beards of the needles, and means for moving the presser means and the needles longitudinally in unison during the pressing period, and other means operating while the said parts are moving in unison to move the presser means laterally to cross the beards of the needles.

1,808,233. FOOT WARMER. ALBERT KAMRATH, St. Louis, Mo. Filed Mar. 13, 1930. Serial No. 435,504. 1 Claim. (Cl. 2—69.)



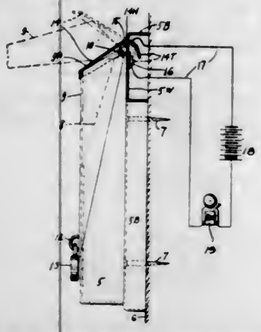
A foot warmer comprising a casing including a bottom wall, a top wall, and a peripheral wall connecting said top and bottom walls, said bottom wall comprising spaced inner and outer layers of fabric, a filling material arranged in the space between said inner and outer layers of fabric, said top wall being provided with a pair of leg accommodating openings, a pair of separable boots arranged in said casing and supported on said inner layer of fabric, said boots at their upper ends registering with said leg accommodating openings, means for securing the upper edges of said boots to said top wall at the edge of the respective leg accommodating openings, and filling material arranged between said boots, and between the boots and peripheral wall of the casing for substantially enveloping the boots.

1,808,234. GARBAGE INCINERATOR. MATHIAS ANTON KOHN, Milwaukee, Wis. Filed Feb. 23, 1928. Serial No. 256,319. 2 Claims. (Cl. 110—18.)



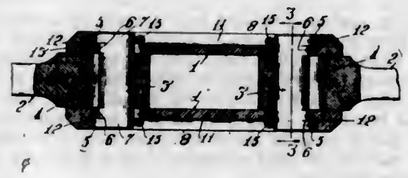
1. A garbage incinerator comprising an outer shell, a perforated colander positioned within and spaced from said outer shell, spaced lugs carried by the shell and having their inner ends extending through notches in the lower end of the colander for supporting said colander within the shell, means for normally spacing the colander from the shell, a conical grate formed with a plurality of inwardly converging slanting bars and having an open central portion, a ring connecting the bars at their upper ends and resting on the lugs which support the colander, a second ring connecting the lower ends of said bars around the open central portion, a tilting burner within said second ring for closing the lower portion of the grate, a plate upon the upper side of the burner with its edges overhanging the same, a plurality of radial ribs upon the upper face of the plate with their upper edges extending above the upper edge of said second ring and a hollow, perforated flame distributor located above said grate.

1,808,235. MAIL BOX SWITCH. SIGISMUND LANG, St. Paul, Minn. Filed Mar. 6, 1929. Serial No. 344,697. 1 Claim. (Cl. 200—57.)



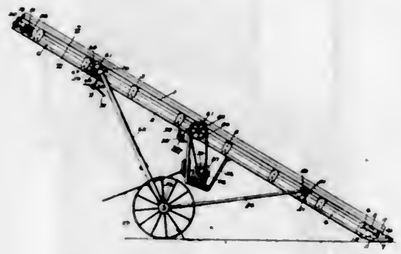
In a mail box comprising an elongated upright receptacle provided with a mail receiving aperture at its upper end, a hinged lid normally closing said aperture, the receptacle comprising further a large closure hinged below the hinge means of the said lid, the upper end of said large closure formed to provide the mail inserting opening and said lid normally resting thereon, an electric switch within the receptacle comprising a stationary contact fixed in proximity to said hinge means, a hinge circuit closing member comprising a tongue integral of the hinged part of said lid and normally with its free end in spaced relation to the fixed contact and arranged to close circuit by upward movement of the said lid, and said lid arranged to also be raised by opening of the large closure.

1,808,236. SPROCKET CHAIN. EARL A. LERNER, Chicago, Ill., assignor to himself and Ernest E. Crane, Chicago, Ill. Filed June 16, 1928. Serial No. 286,000. 4 Claims. (Cl. 74—32.)



1. An articulate structure of the type specified comprising a series of links disposed in overlapping relation to each other and presenting overlapped and overlapping end portions, each overlapped end portion being provided with a substantially elliptical opening semi-cylindrical at one end, each overlapping end portion having an opening of the same length and width as said elliptical opening and having a straight wall at one end, and pins for coupling said links, each of said pins comprising a cylindrical middle portion engaging in one of said elliptical openings, a head at at least one end corresponding substantially in shape and size with and adapted to pass through said elliptical openings and through the opening in the overlapping portion of a link, and a flat shoulder between said head and said middle portion overhung by said head and engaging the straight wall portion of the opening in the overlapping link portion, said respective openings being offset from each other and said overhanging portion of said head engaging the outer face of the overlapping link end, and a transverse retaining pin mounted in the latter and bridging the other end of the opening therein for retaining said head in the last-mentioned position.

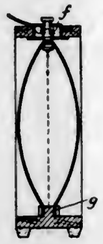
1,808,237. PORTABLE CONVEYER. WILLIAM K. LIGGETT, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 15, 1922. Serial No. 543,984. 17 Claims. (Cl. 198—233.)



1. In a machine of the class described, the combination with an elongated frame and an endless belt mounted therein, of transverse cleats attached at spaced intervals to the belt, each cleat being made of yielding material having one longitudinal edge secured to the belt and the other longitudinal edge extending outwardly from the belt.

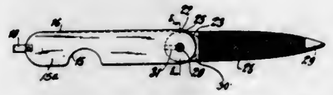
17. In a machine of the class described, the combination with an elongated conveyer frame, of an axle positioned beneath the frame substantially midway its length, struts extending in opposite directions from said axle, one of said struts being pivotally connected to said frame, the other strut having a pivotal and sliding connection with said frame and said pivotal connections of said struts with the frame being arranged at substantially equal distances from opposite ends thereof at all times regardless of the inclination of the frame and struts.

1,808,238. DIAPHRAGM FOR SOUND REPRODUCTION. KARL LOCKE and HUGO SACHS, Leipzig-Wahren, Germany. Filed Aug. 28, 1928, Serial No. 302,466, and in Austria Feb. 2, 1928. 5 Claims. (Cl. 181—31.)



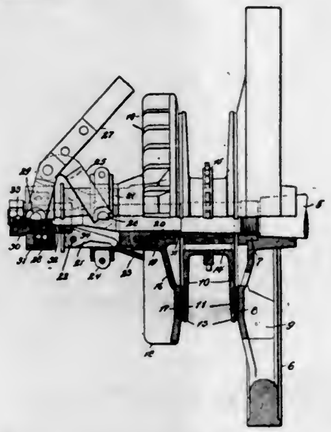
1. In a sound reproducing device, an open sided rectangular box frame, a straight-bordered curved diaphragm within said box frame and secured by one straight border to one side thereof, and means mounted on said box frame for vibrating the opposite straight border of said diaphragm in the direction of the chord of the curvature of said diaphragm.

1,808,239. COMBINATION TOOL. GEORGE A. LOGAN, New York, N. Y. Filed Dec. 31, 1927. Serial No. 243,819. 3 Claims. (Cl. 30—10.)



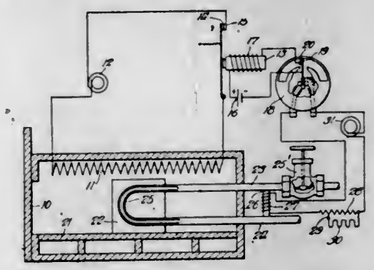
1. In a combination tool, a handle, a hub in the handle for engaging a tool means, said hub consisting of a single sheet of material comprising a plurality of cheek plates interconnected by a web, another oppositely positioned split web, and pivot means passing through the cheek plates and mounting the hub on the handle, one of said webs coacting with the handle as a stop.

1,808,240. POWER TRANSMISSION MEANS. CHARLES G. MAHANA, Three Rivers, Mich., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 14, 1925. Serial No. 56,265. 3 Claims. (Cl. 192—68.)



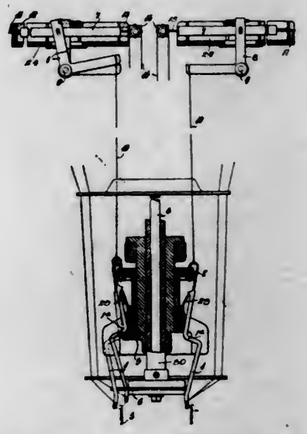
1. In a power transmitting mechanism in combination, an engine shaft, a fly wheel mounted thereon, having a plane frictional driving surface on one side thereof and radiating cooling fins on its opposite side, a driven member rotatably mounted on said shaft and having power transmitting means rigidly connected therewith and having plane frictional driving surfaces at each end thereof, a driving member slidably mounted on said shaft and having a plane frictional surface on one side thereof to engage said driven member and having radiating cooling fins on its opposite side, said slidable driving member having a hub provided with a socket on its side adjacent said driven member, a spring in said socket and a collar on said shaft said spring engaging said collar and tending to separate said slidable member from said driven member, mechanism mounted entirely on said shaft for moving said slidable driving member to clamp said driven member between it and said fly wheel.

1,808,241. SYSTEM OF HEAT TREATING. CHARLES A. MARTIN, Chicago, Ill. Filed Oct. 3, 1925. Serial No. 60,316. 5 Claims. (Cl. 263—2.)



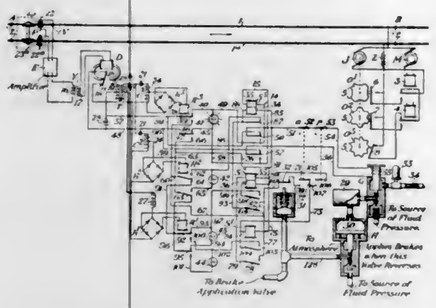
1. A system of heat treating a magnetic substance comprising means responsive to a change in the magnet permeability of the substance, means for cooling said permeability responsive means, and means controlled by said permeability responsive means for indicating the changes in said means due to a change in the permeability.

1,808,242. CIRCULAR KNITTING MACHINE. EDWIN TEMPLAR MAY, Chilwell, and ARTHUR SHERRIFF, Long Eaton, England, assignors to Fred Attenborough, Long Eaton, England. Filed Apr. 10, 1928, Serial No. 268,973, and in Great Britain Apr. 23, 1927. 7 Claims. (Cl. 66—135.)



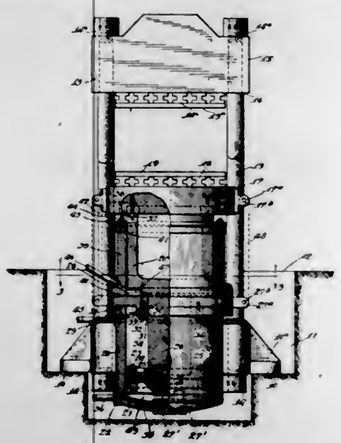
1. In a circular knitting machine a plurality of displaceable thread guides, a rotary cam device operating to displace said guides and jacquard mechanism functioning selectively to move said thread guides into a position in which they are unaffected by said cam device.

1,808,243. RAILWAY TRAFFIC CONTROLLING APPARATUS. RONALD A. MCCANN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 28, 1928, Serial No. 322,421. Renewed Nov. 6, 1930. 4 Claims. (Cl. 246—63.)



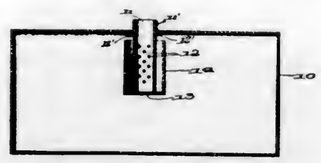
1. Railway traffic controlling apparatus comprising a train carried differential relay having two opposed windings, means located partly in the trackway for energizing one winding of said relay under certain traffic conditions, means operating upon a change to certain other traffic conditions to energize the second winding to open said relay, means under the control of the engineman and effective under said other traffic conditions to energize said second winding to close the relay, a signal arranged to be operated when said relay is open, and governing means on the train set into operation at the expiration of a fixed interval of time after said relay is opened.

1,808,244. HYDRAULIC PRESS. WILLIAM E. MCCULLOUGH, Kenosha, Wis., assignor to Simmons Company, Kenosha, Wis., a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,590. 4 Claims. (Cl. 138—17.)



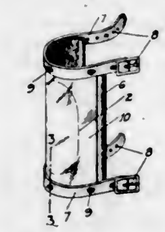
1. In an hydraulic press, two casings, a partition between said casings, a ram extending through one of said casings and into the other passing through a suitable opening in said partition, a pressure-receiving piston at the end of said ram within the second casing, said piston being in sliding contact with the walls of said casing and making a water-tight seal therewith, a main pressure-chamber at the end of said second chamber being confined by the end thereof and by the said piston, an annular water-space between said second casing and said ram being confined by the opposite side of said piston and the walls of the casing and the partition, said ram being enlarged to substantially the size of the first casing for a distance substantially equal to the length of said first casing but forming therewith an annular pressure-chamber bounded by said enlarged portions the partition and the walls of the first casing, and means for admitting water to said main pressure-chamber and said annular pressure-chamber and said water-space.

1,808,245. ANTITHEFT DEVICE. JOHN R. MIDDLETON, Boise, Idaho. Filed Nov. 12, 1928. Serial No. 318,945. 9 Claims. (Cl. 220—86.)



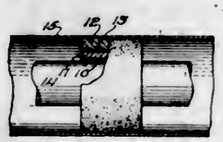
1. The combination with a liquid fuel tank having a top filling opening, of a downwardly projecting tubular member set in said opening, the lower portion of said member being provided with perforations, and an imperforate cup-like member surrounding said lower portion, the side walls of said cup-like member extending above the perforate portion of said tubular member in spaced relation thereto.

1,808,246. CERTIFICATE HOLDER. EDWARD A. MORRIS, Sacramento, Calif. Filed Nov. 5, 1928. Serial No. 317,218. 9 Claims. (Cl. 40—10.)



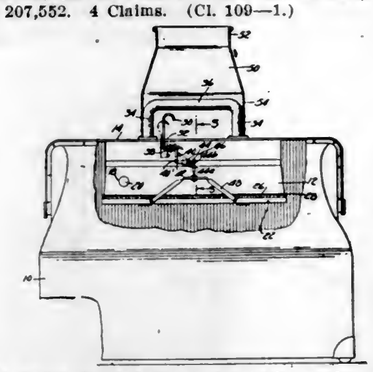
1 A certificate holder including a body element having an opening therein through which to view the certificate, flaps flexibly mounted on the back of the body to form, with said body, retaining means for a certificate, and straps for engagement with a steering post rigidly secured to the front face of the body across the top and bottom thereof.

1,808,247. COMPOSITION BUSHING AND PROCESS OF MAKING THE SAME. FRED C. MORRIS, San Francisco, Calif. Filed Apr. 22, 1929. Serial No. 357,157. 17 Claims. (Cl. 308—240.)



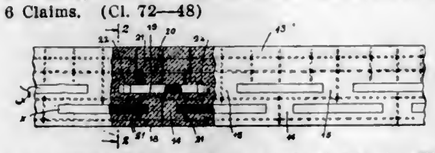
1 A bushing comprising a tubular member of fibrous material impregnated with a dry lubricant, a cooperating rigid tubular member of non-metallic vulcanizable material integrally joined thereto, and a cushioning member for supporting both of said tubular members.

1,808,248. ANTITHEFT DEVICE. CHARLES M. MORSSEN, Montreal, Quebec, Canada. Filed July 21, 1927. Serial No. 207,552. 4 Claims. (Cl. 109—1.)



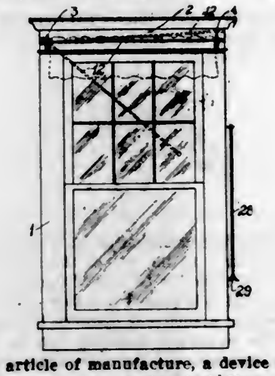
1. A device for defacing and marking stolen valuable papers and the like to render same unsalable and non-transferable, comprising a chamber for receiving said valuables, a fluid container suspended within said chamber over said valuables, a closure at the lower side of said container adapted to open for emptying same, and means extending through the wall of said chamber for controlling said closure and operable from without said chamber for instantaneously discharging the contents of said fluid container upon the valuables within said chamber.

1,808,249. WALL CONSTRUCTION. RICHARD MURRAY, New York, N. Y. Filed Oct. 20, 1928. Serial No. 313,801. 6 Claims. (Cl. 72—48)



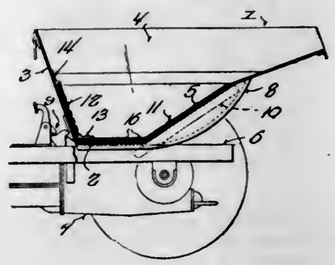
1 A concrete wall construction involving a plurality of intercommunicating chambers extending vertically through the wall structure, means involving core members for forming the chambers in the wall structure, said chambers being arranged in two different planes with respect to the thickness of the wall structure, the members forming one plane being in staggered relation to those in the other plane, and said core members being composed of inexpensive material and being placed one directly upon the other in forming the wall structure to form vertically continuous chambers in said wall structure.

1,808,250. SUPPORT FOR FABRIC HANGINGS. CHARLES NEHER, Chicago, Ill. Filed Aug. 17, 1929. Serial No. 386,510. 6 Claims. (Cl. 156—22.)



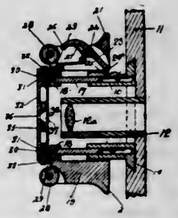
1. As an article of manufacture, a device for supporting window hangings, said device including a curtain rod loosely pivoted adjacent one end thereof to permit both horizontal and vertical movement of the rod, a drapery rod adjacent said curtain rod and mounted in similar manner, and means for freely supporting the free ends of said rods.

1,808,251. DUMP BODY. RALPH T. OSMAN. Mansfield, Ohio. Filed Nov. 8, 1928. Serial No. 317,962. 1 Claim. (Cl. 298—1.)



In combination with a dump body having side walls and a bottom provided with an upwardly inclined portion, said side walls being restricted at their lower ends, a metallic apron normally resting upon said bottom and conforming to the same, means for spacing said apron from the bottom of said body, and a chain connecting the rear end of said apron to the rear wall of said body at a point intermediate its top and bottom.

1,808,252. FILM GATE. FREEMAN H. OWENS, New York, N. Y. Filed July 13, 1927. Serial No. 205,447. 8 Claims. (Cl. 179—100.3.)

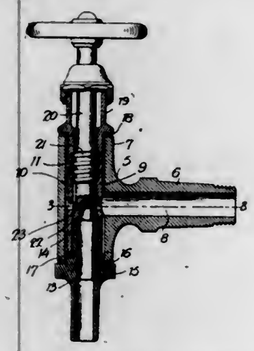


5. In combination, a slit member, a film movable past the same, a support, a film gate having a base slidable laterally in said support and readily removable therefrom, a shell slidable on said base and having a spring pressed pad thereon, and means for moving said pad into or out of engagement with said film opposite said slit member.

1,808,253. MANUFACTUURE OF MERCURY SALTS. HUGH S. REID, Shawinigan Falls, Quebec, Canada, and AYLMER H. MAUDE, Nitro, W. Va., assignors to Canadian Electro Products Company, Limited, Montreal, Canada. Original application filed Apr. 18, 1921, Serial No. 462,347, now Patent No. 1,721,188, and in Canada Apr. 16, 1921. Divided and this application filed July 12, 1929. Serial No. 377,910. 6 Claims. (Cl. 23—117.)

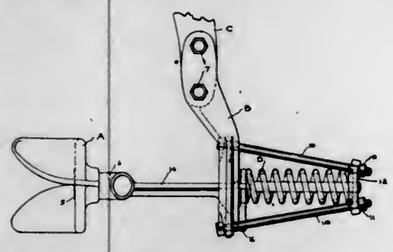
1. A process of making salts of mercury, which comprises bringing together metallic mercury and a strong non-oxidizing mineral acid of less than 60% concentration in presence of nitric acid.

1,808,254. BALANCED VALVE. MERRIT H. RICE, Pasadena, Calif. Filed Aug. 2, 1930. Serial No. 472,657. 10 Claims. (Cl. 251—156.)



2. A balanced valve comprising a casing, an apertured sleeve within the casing, providing inner and outer communicating chambers, said chambers having portions disposed equal distances on opposite sides of the valve inlet passageway; and a valve and valve seat located within said inner chamber, substantially as set forth.

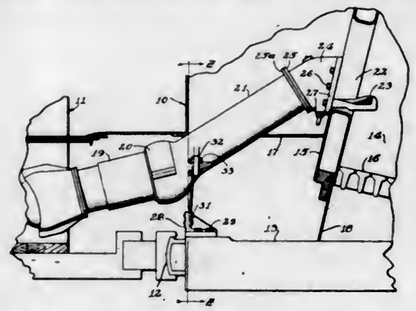
1,808,255. AUTOMATIC TRAIN PIPE COUPLING. JOSEPH ROBINSON, New York, N. Y. Filed Feb. 2, 1923, Serial No. 616,593. Renewed Apr. 13, 1929. 5 Claims. (Cl. 285—58.)



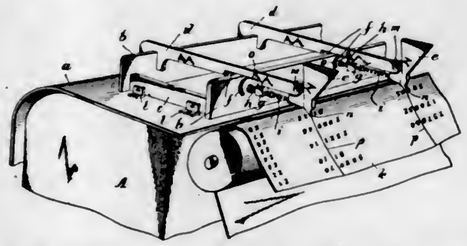
1. In an automatic train pipe connector the combination of a coupling head, a bracket having an opening in its lower end, an abutment arranged rearwardly of and spaced from said bracket, a member secured to said head and extending rearwardly through said opening and engaging said abutment and universally movable relatively thereto, a coiled spring surrounding said member and bearing at one end agains said abutment and at the other end against said member and serving to normally force said member forwardly, said opening in the bracket being substantially larger than the body of said member, a web on each side of said member extending laterally thereof and a web extending downwardly therefrom, the front edge of each of said webs being inclined to contact with said bracket, whereby said member will be centered in said opening when the same is moved forwardly under the action of said spring, the portion of said opening above said member being substantially unoccupied whereby free upward movement of said member is permitted at all times.

1,808,256. LOCOMOTIVE. FRANK P. ROESCH, Chicago, Ill., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed Nov. 16, 1929. Serial No. 407,650. 4 Claims. (Cl. 110—101.)

1. In a locomotive having a frame, a fire-box and backhead construction flexibly mounted thereon, and a fuel feed conduit section for delivering fuel to said firebox being at its forward end fixedly attached to said backhead and having its rearward end remote therefrom, the improvement which comprises an upstanding plate rigidly secured at one end to the rearward portion of said frame and rigidly secured at the other end of the rearward portion of said conduit section, said plate supporting the conduit section, said plate supporting the conduit section in a vertical direction and being flexible to permit movement of the feed conduit with the firebox in a horizontal direction.

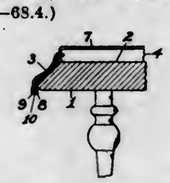


1,808,257. RULING DEVICE. HERMANN A. P. RÖTTKE, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Oct. 9, 1926, Serial No. 140,669, and in Germany Dec. 12, 1925. 2 Claims. (Cl. 33—34.)



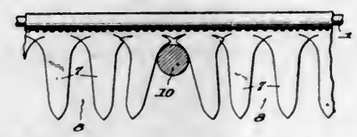
1. In combination with a writing machine, a platen upon which a strip of paper is adapted to be mounted, a plurality of markers, means for supporting said markers in cooperative relation with said platen for tracing a plurality of parallel lines upon a strip of paper mounted on said platen, a reservoir for supplying ink to said markers, said markers being movably mounted upon the machine to adjust the distance between them, and means for individually maintaining and adjusting the pressure of each marker upon the paper.

1,808,258. TABLE MAT. JACOB SACHERMAN, Cleveland, Ohio. Filed Mar. 21, 1927. Serial No. 176,917. 1 Claim. (Cl. 45—68.4.)



In a table mat, the combination of a filler, a sheet of flexible material fixed to the top of the filler, a sheet of flexible material fixed to the bottom of the filler, the sheets of flexible material being fixed together centrally of the filler and extending a sufficient distance beyond the outer edges of the filler to provide a flexible flap for falling over the edges of a table top, and the outer edges of the flexible material being fixed together.

1,808,259. FENDER WELT AND METHOD OF MAKING THE SAME. ROBERT C. SCHEMMEL, Union City, Ind. Filed Sept. 18, 1930. Serial No. 482,816. 6 Claims. (Cl. 154—45.5.)

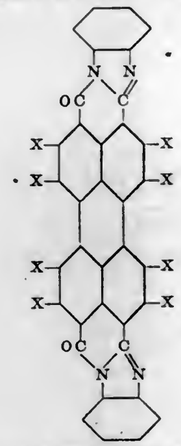


1. The method of making a fender welt which comprises enclosing a pair of fillers in spaced relation in a strip of covering material, sewing the material along lines closely adjacent each of the fillers, severing the blank thus formed along an irregular line of cut to form two welts each having a bead and a tongued flange, and slitting each of said tongues inwardly close to said line of stitching to provide a weakened flexing connection.

4. The method of making fender welts which comprises associating with a covering strip a pair of spaced fillers, folding each margin of the covering strip over one of the fillers, disposing the edges of the strip in meeting relation along a line adjacent one of the fillers, securing said edges together in a joint along said line, and then severing the blank thus formed along an irregular line of cut to form two complementary welts each having a bead and a flange provided with a plurality of multi-ply tongues, each ply of each tongue comprising a single continuous piece of the covering material.

1,808,260. NEW VIOLET VAT DYESTUFFS. MAXIMILIAN PAUL SCHMIDT and WILHELM NEUGEBAUER, Biebrich-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 23, 1926, Serial No. 90,206. Renewed Oct. 10, 1927. 3 Claims. (Cl. 260—29.)

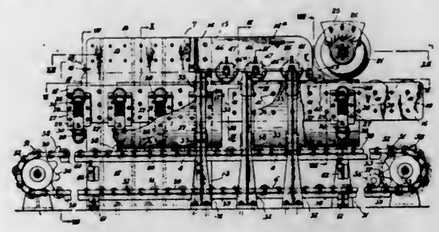
1. As new products the vat dyestuffs being obtainable by condensing a perylene-tetra-carboxylic acid, containing at the most three halogen atoms, with a phenylene-diamine and corresponding most probably to the general formula:



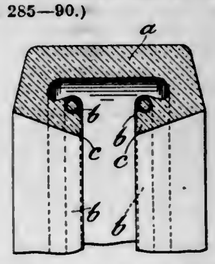
wherein at the most 3 X's represent halogen atoms, the other X's hydrogen, and wherein the penylene nuclei may be substituted.

1,808,261. WELDING MACHINE. FRANK L. SESSIONS, Lakewood, Ohio. Filed Jan. 5, 1927. Serial No. 159,218. 14 Claims. (Cl. 219—6.)

2. In apparatus of the class described, a support, a work positioning and guiding plate secured to said support and extending therefrom into the path of movement of the work, a work supporting bar secured to said plate and extending therefrom longitudinally in the path of movement of the work, seam guiding means secured to said bar in alignment with said plate adapted to engage and guide the edges of the open longitudinal seam of a metal shell that has been positioned by said plate, and means for traversing a metal shell longitudinally past said plate and along said supporting bar past said seam guiding means.

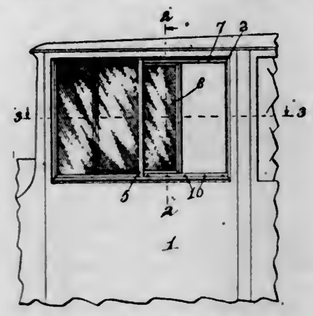


1,808,262. PIPE JOINT. HENRY SELBY HELE-SHAW, London, England, assignor to Victaulic Company Limited, London, England. Filed June 5, 1930, Serial No. 459,374, and in Great Britain Nov. 30, 1929. 5 Claims. (Cl. 285—90.)



1. A pipe joint comprising a ring of flexible material having inturned flanges adapted to embrace the pipe ends and be subjected to the pressure within the pipes and springs capable of elongation but incapable of shortening applied to the flanges of the joint.

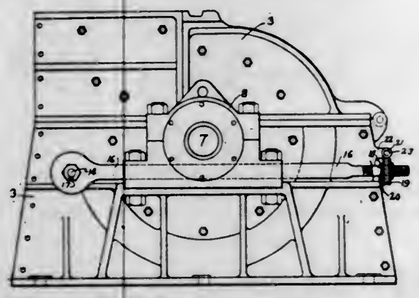
1,808,263. SERVICE WINDOW FOR MOTOR VEHICLES. FRANK B. SHEERAR, Omro, Wis. Filed Feb. 11, 1929. Serial No. 339,167. 1 Claim. (Cl. 296—44.)



In a motor vehicle body having a window opening, a movable member normally closing the opening, one side of the opening having a longitudinal groove in the wall, a frame member having a longitudinal groove in one side thereof, a tongue projecting from the other side of the frame to be received in the groove of the window opening, said movable member engaging the groove in the opposite side of the frame to retain the frame against lateral movement relative to the opening, a stationary and a movable

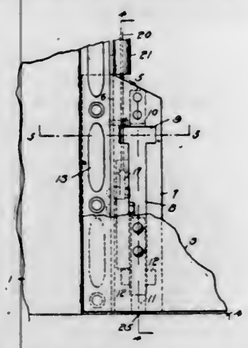
sash within said frame, stops carried by the frame for retaining the sash against lateral movement and one of said stops being formed with a plurality of openings to provide means for drainage.

1,808,264. CRUSHER AND PULVERIZER. HARRY J. SHELTON, St. Louis, Mo. Filed Mar. 26, 1927. Serial No. 178,660. 2 Claims. (Cl. 83—11.)



1. A crusher and pulverizer comprising a housing having a pulverizing chamber with a crushing element mounted therein, a breaker plate pivotally mounted at one side thereof to form part of the wall of said pulverizing chamber, a rod extending outwardly from each end of said breaker plate and fixed thereto, the side members of said housing having arcuate shaped slots therein through which said rod extends at each end of said plate, the axis of said arcuate slots being at the axis of the pivotal movement of said plate whereby said rod may be moved to adjust the position of said plate in relation to said crushing element, and bars engaging said rod outside of said housing for controlling the movement of said plate.

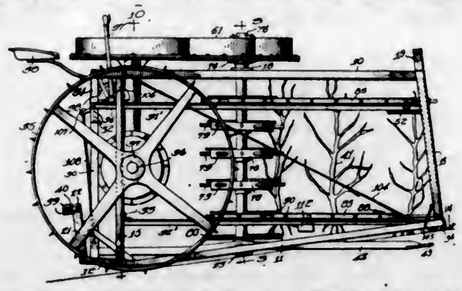
1,808,265. MOTOR VEHICLE HOOD LOCKING MECHANISM. LOUIS R. SMITH, Hawthorne, Nev. Filed Sept. 9, 1929. Serial No. 391,415. 4 Claims. (Cl. 292—304.)



1. In combination with a motor vehicle hood and body, a guide member provided with a vertical slot fixed to the body and having a stop member positioned at the upper edge of the slot, a lug carried by the hood and adapted to be passed through the slot adjacent the stop member to prevent outward displacement of the hood, and means for normally preventing upward displacement of the hood.

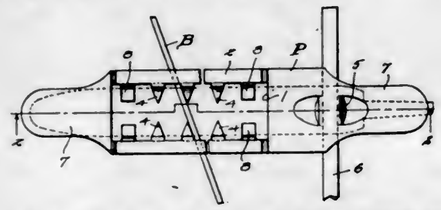
1,808,266. STALK CUTTER. PERRY W. SPELL, Roseboro, N. C. Filed June 22, 1929. Serial No. 372,893. 7 Claims. (Cl. 55—62.)

1. A stalk cutter comprising a frame, supporting wheels carried by said frame, pivoted stalk lifting means carried by said frame, stalk cutting means also carried by said frame, means for conveying stalks from said lifting means



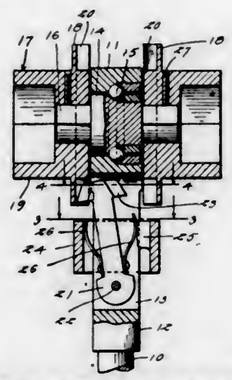
to said cutting means, and means operable from a common control for simultaneously raising the forward end of said frame and said lifting means.

1,808,267. SHARPENING TOOL. JOHN E. STEINOUR, Los Angeles, Calif. Filed Nov. 21, 1929. Serial No. 408,877. 5 Claims. (Cl. 76—82.1.)



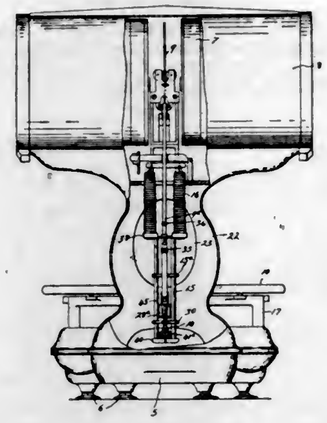
1. A device of the class described and in combination comprising a plate having an intermediate opening and offset side members refining said opening, guiding means carried by the plate, blade engaging fingers carried by the plate at opposite sides of the opening therein and extending inwardly of said opening, and a sharpening element supported by the plate between the side members.

1,808,268. WRENCH. CHARLES M. STEWART, Allston, Mass. Filed Oct. 4, 1930. Serial No. 486,423. 3 Claims. (Cl. 81—61.)



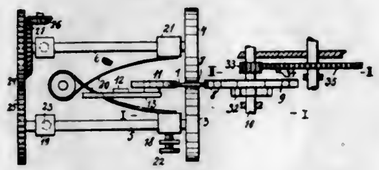
1. A wrench of the character described comprising a handle, an annulus mounted on the outer end of the handle, a spindle rotatably mounted in the annulus, a ratchet mounted on each end of the spindle, a reversible pawl member pivotally carried by the handle, a socket element mounted on the spindle and extending outwardly of the ratchet member, and an eccentric ring carried by the handle and engaging said pawl whereby to swing said pawl into engagement with a selected ratchet member.

1,808,269. COMPUTING SCALE. WALTER F. STIMPSON and WILLIS E. FINCH, Louisville, Ky.; said Finch assignor to said Stimpson. Filed Dec. 15, 1927. Serial No. 240,102. 19 Claims. (Cl. 265—37.)



1. In a weighing scale having a lever and counterbalance springs connected thereto, of adjustable means movable into contact with the lever for swinging the lever independently of a weighing operation to extend the springs and maintain both of said members in their adjusted positions as long as desired.

1,808,270. COUNTING MACHINE. CURT VOGT, Berlin, Germany. Filed Jan. 27, 1927, Serial No. 163,975, and in Germany Oct. 29, 1926. 4 Claims. (Cl. 133—8.)

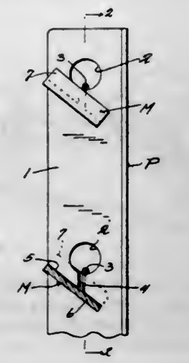


1. In coin feeding means for coin counting machines of that type employing a peripherally spaced counting disc and guide rolls forming between them a passage for the coins, a pair of feed rollers arranged to form a vertical passage and to engage opposite sides of the coins and to feed the same through said passage, intergeared shafts carrying said feed rollers, one of said shafts being pivotally mounted for adjustment toward and from the other shaft, adjusting means for action on said pivotally mounted shaft to move the roller carried thereby toward the other roller, and resilient pressure means acting constantly on said shaft to move the roller carried thereby away from the other roller in opposition ot said adjusting means.

1,808,271. PROCESS FOR DEHYDRATING ALCOHOL. OTTO VON KEUSSLER and DANIEL PETERS, Darmstadt, Germany. Filed Apr. 10, 1928, Serial No. 269,020, and in Germany May 6, 1927. 6 Claims. (Cl. 202—57.)

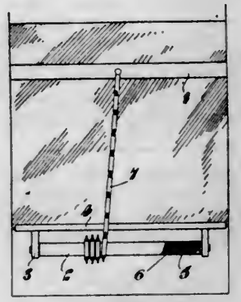
1. Process for dehydrating aqueous alcohol which consists in heating the aqueous alcohol with quicklime, distilling off the formed anhydrous alcohol and recuperating the last part of the waterfree alcohol retained by the hardened quicklime by subjecting the quicklime to a vacuum distillation.

1,808,272. FENCE CONNECTION. WILLIAM E. WARD, Delmar, Iowa. Filed Jan. 10, 1931. Serial No. 507,975. 3 Claims. (Cl. 256—56.)



1. A fence post having a flange provided with an opening adapted to receive a wire strand or the like, said flange having a depending slot in communication with said opening, the lower end portion of said slot being continued by an upwardly and inwardly inclined slot open at its outer end, and a retaining member sliding downwardly by gravity within the second slot to maintain closed the depending slot.

1,808,273. DEVICE FOR BALANCING BODIES ADAPTED FOR RISING AND FALLING MOVEMENTS. HARRY RILEY WEBB and HARRY NEWTON WEBB, Grantham, England. Filed June 8, 1929, Serial No. 369,477, and in Great Britain Feb. 5, 1929. 7 Claims. (Cl. 16—198.)

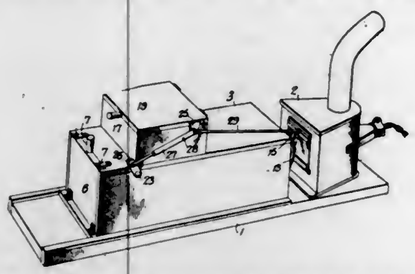


1. A device for balancing bodies adapted for a rising and falling movement, by means of an inconstant balancing moment, comprising means exerting a balancing force, a chain extending over a smooth circular element, means for applying the opposing forces to the extremities of said chain and the angular disposition taken up by the links of such chain around said circular element during traverse of the body to be balanced causing cyclic variations in the moments of the forces applied by such body to the balancing force.

1,808,274. PROJECTION PRINTER. ROBERT A. WEBSTER, Santa Monica, Calif. Filed Sept. 8, 1927. Serial No. 218,295. 13 Claims. (Cl. 88—24.)

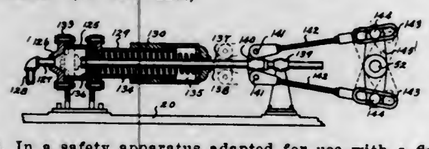
1. A projection printer comprising a casing having a light aperture, means for holding an image in line with said aperture for the projection of light therethrough and into the casing, means for holding a light sensitive material in the path of the light passing through the image, a lens in the casing in the path of the light and between the

image and sensitive material, a focusing screen, a shutter for covering and uncovering the screen, a reflector movable into and out of the light path at a point between the



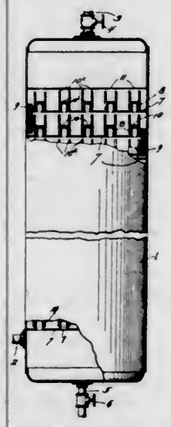
lens and sensitive material and upon which the image may be viewed through the screen when the reflector is in the first-named position, and means for simultaneously operating the shutter and reflector.

1,808,275. SAFETY APPARATUS. FREDERICK N. WHITESELL, Chicago, Ill., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Original applications filed Nov. 6, 1926, Serial No. 146,720, and in Feb. 10, 1928, Serial No. 253,412. Divided and this application filed Aug. 30, 1928. Serial No. 302,979. 16 Claims. (Cl. 192—129.)



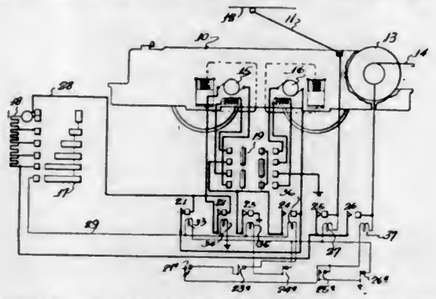
5. In a safety apparatus adapted for use with a fluid-pressure controlled mechanism, a control shaft, associated with the mechanism, a lever connected to said shaft, a slotted member operatively engaging said lever, actuating means for said member, coacting therewith for moving said shaft to a neutral position and preventing further movement thereof, responsively to a predetermined low fluid pressure, and fluid pressure means adapted normally to keep the slotted portion of said member in a position to permit a movement of said lever relative thereto.

1,808,276. BUBBLE TOWER CAP. HENRY E. WIDDELL, Kansas City, Mo., assignor to Gasoline Products Company Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 21, 1923. Serial No. 681,970. 7 Claims. (Cl. 261—109.)



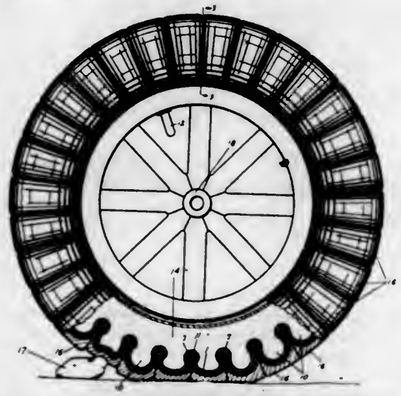
1. Caps for vapor risers for use in towers of the bubble type having trays spaced apart sufficiently to permit vertical movement of the caps on the risers, comprising cap units having serrated lower edges, vapor risers upon which the caps are mounted, means on the caps for automatically limiting the upward movement of the caps and enlargement of the vapor passage.

1,808,277. MINE LOCOMOTIVE. CLAUDE O. WOOD, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 6, 1929. Serial No. 344,631. 9 Claims. (Cl. 191—3.)



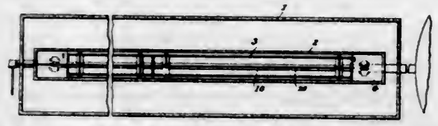
1. In a locomotive having a plurality of driving motors and trolley and reel inlets for power supply to said motors, automatic devices for connecting the locomotive motors in series or parallel circuits, depending upon whether the trolley or reel inlet is utilized for connection to a power source.

1,808,278. AUTOMOBILE TIRE. CHARLES B. WOODWORTH, Port Dickinson, N. Y. Filed Mar. 8, 1927. Serial No. 173,727. 4 Claims. (Cl. 152—13.)



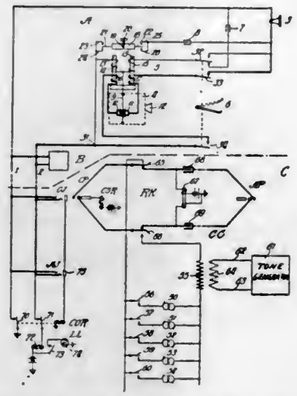
3. A pneumatic tire comprising a circular casing provided with a series of compressible air pockets in circumferential succession, a relatively large air chamber in such casing permanently communicating with such pockets, and an inflatable inner tube lining the inner walls of said casing and pockets.

1,808,279. SCUM REMOVING DEVICE. CARL W. ANDERSON, New Market, N. J., assignor of one-half to William Umont, Dunellen, N. J. Filed Oct. 17, 1929. Serial No. 400,355. 13 Claims. (Cl. 210—51.)



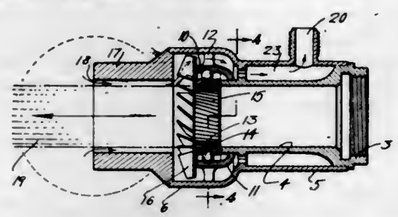
1. In combination with a liquid receiving tank, a skimmer trough arranged within the tank, a scum and foam discharge pipe having communication with the bottom of the trough, and means operable adjacent the exterior of the trough for delivering scum and foam into the same, and transversely disposed breaker rods extending from the lower portion of the trough for disposition within the tank.

1,808,280. TELEPHONE SYSTEM. GARRISON BABCOCK, Seattle, Wash., assignor to American Telechronometer Company, Seattle, Wash., a Corporation of Washington. Filed July 29, 1929. Serial No. 381,731. 11 Claims. (Cl. 179—34.)



1. The method of signaling the subscribers on a party line in a telephone system which comprises impressing a low frequency alternating current on the line to select the party to be signaled, and simultaneously applying a higher frequency tone superimposed on the low frequency current to signal the selected station.

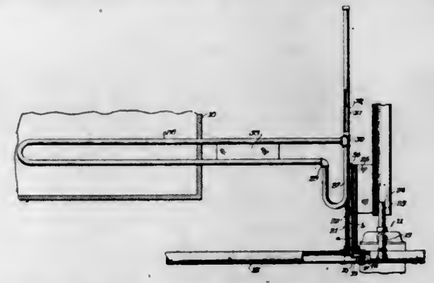
1,808,281. AIR SUPPLY DEVICE. BENJAMIN T. BALTHAZOR, Racine, Wis. Filed Feb. 10, 1930. Serial No. 427,282. 5 Claims. (Cl. 299—109.)



2. In an air supply device of the character described, a nozzle, a sleeve encircling the nozzle in spaced relation thereto in a manner to provide an air chamber therebetween, said air chamber open at its forward end, a ring mounted on the nozzle and extending forwardly therefrom and disposed within the sleeve, an annulus mounted for rotation within the ring, said annulus being substantially longitudinally aligned with the nozzle adjacent the discharge end thereof and having means thereon engageable with the water discharged from the nozzle for rotating said annulus, a fan fixed on the annulus for rotation therewith and adapted to normally blow air away from the chamber, and suction tubes connecting with the chamber rearwardly of the rotary fan to draw air from said chamber.

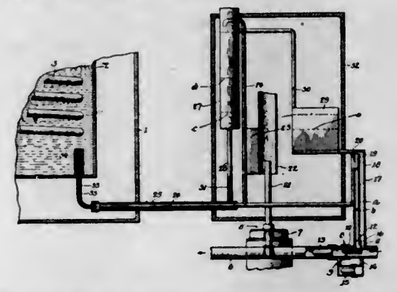
1,808,282. THERMOSTAT. MATTHEW E. BENESH, Cicero, Ill. Filed Dec. 11, 1926. Serial No. 154,052. 8 Claims. (Cl. 236—68.)

1. A thermostat having, in combination, a thermostatic element adapted to control the temperature of a body, means for transmitting heat to said element, and means subject to said temperature for dissipating heat in said element, the effectiveness of said last mentioned means



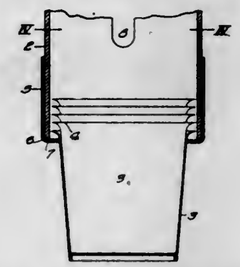
in dissipating said heat varying over a wide range to actuate said element when said temperature passes through a relatively small predetermined range.

1,808,283. THERMOSTAT. MATTHEW E. BENESH, Cicero, Ill. Filed Dec. 22, 1927. Serial No. 241,755. 6 Claims. (Cl. 236—68.)



1. A thermostat having, in combination, a fluid line for supplying fluid to control the temperature of a body, a valve in said line, a thermostatic element connected to said valve, a source of heat, said source being constantly available regardless of variations in the flow of fluid through said line, and means for carrying heat by convection from said source to said element, said means being subject to said temperature and being effective when said temperature passes through a relatively small predetermined range to vary the flow of heat to said element over a relatively wide range so as to actuate said element.

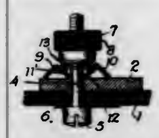
1,808,284. ELASTIC BAND CUP DISPENSER. CHRISTIAN N. BERGMANN, Pittsburgh, Pa., assignor to Bergmann Packaging Machine Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 9, 1928. Serial No. 311,362. 4 Claims. (Cl. 312—43.)



1. In combination with a receptacle holding and delivery tube, an elastic band having an upper stretched

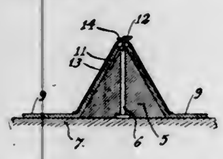
portion gripping the tube and capable of being shifted thereon whereby to expand or contract the terminal opening of the lower portion of the band across the end of the delivery tube to adapt it to resilient engagement with varying size receptacles.

1,808,285. WIRE CONNECTER. GEORGE H. BRADY, Baltimore, Md., assignor to Improved Fire Detector Corporation, Baltimore, Md. Filed Mar. 26, 1929. Serial No. 350,025. 6 Claims. (Cl. 173—259.)



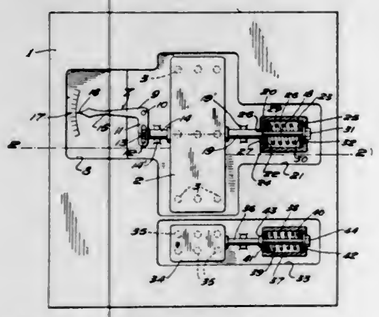
1. A wire connecter comprising a binding screw, a resilient washer having an outer expansible and contractible wall and an inner expansible and contractible wall, through which latter said screw extends, and a nut for engagement with the screw and for clamping a conductor within and against the said inner wall.

1,808,286. ROOFING JOINT. GEORGE G. BRITTON, Anniston, Ala. Filed Jan. 8, 1930. Serial No. 419,347. 3 Claims. (Cl. 108—20.)



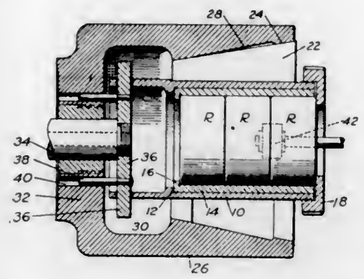
1. A roofing joint comprising a roof deck, a triangular strip secured to the roof deck, a lock plate mounted upon the triangular strip, roofing strips laid upon the roof deck parallel to and on opposite sides of the triangular strip and having their adjacent edges interposed between the triangular strip and the lock plate, a split nail having its split end projecting upwardly from the apex of the triangular strip and adapted to pierce and engage the lock plate to clamp the adjacent edges of the roofing material in place, and means to prevent the nail from changing its position in the triangular strip during the piercing operation.

1,808,287. VEHICLE WHEEL GAUGE. HERMAN CASLER, Canastota, and CHARLES P. GRIMES, Syracuse, N. Y. Filed Oct. 11, 1928. Serial No. 311,887. 3 Claims. (Cl. 33—203.)



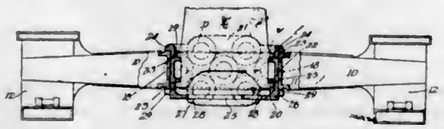
3. A vehicle wheel testing device comprising a movable element adapted to be placed in the path of travel of the vehicle wheel, and laterally shiftable to right or left of its normal mid-position with reference to said path by the action of a misalined vehicle wheel passing thereover, and an auxiliary movable member positioned directly adjacent and in advance of said movable element for preventing movement of said movable element due to tire distortion built up prior to engagement of the wheel with the movable member.

1,808,288. WORK HOLDER. WILLIAM H. CHAPMAN, Montclair, and PHILIP H. HUTCHINSON, East Orange, N. J., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 24, 1925. Serial No. 25,617. 13 Claims. (Cl. 279—1.)



1. In a device of the character described, a rotary head having a centering face, a holder detachable from the head for loading and having means for engaging said centering face, means carried by the holder for clamping a work piece thereon when the holder is detached from the head, means for moving said holder endwise, said means being permanently supported by the head, and a quick detachable connection between said holder and said moving means for allowing removal of the holder from the head while the moving means remains supported by the head; substantially as described.

1,808,289. RAILWAY TRUCK. CLAUS J. W. CLASEN, Davenport, Iowa, assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Apr. 13, 1925. Serial No. 22,597. 28 Claims. (Cl. 105—197.)

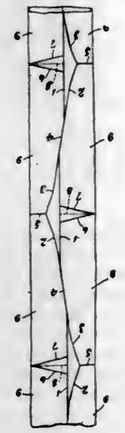


10. The combination with a bolster, having an end portion; and means detachably interlocked with the end of said bolster, said means having elements adapted for co-operation with column guides of a side frame, certain of said elements being detachable.

1,808,290. PROCESS OF AND PATTERN FOR MAKING UNDERWEAR. EILERT A. CLEMENTS, Grand Rapids, Mich. Filed Dec. 26, 1929. Serial No. 416,474. 3 Claims. (Cl. 2—224.)

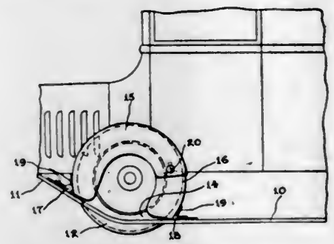
1. The process of manufacturing an underwear garment which consists in providing an elongated length of tubular fabric laid flat and cutting therefrom at spaced apart points substantially triangular spaced inserts in the body of and between the side edges of the tubular fabric, also cutting from the end of one insert to the adjacent end

of the next insert and further cutting from one edge of the flat tubular fabric transversely inward to the nearest angle of the inserts, and further cutting from the upper layer of tubular fabric directly opposite said transverse cut a triangular shaped gusset in the shape of an isosceles triangle the apex of which is at the opposite side edge of the flat tubular fabric and the base of which is coincident with one side of the upper of the inserts, next cutting the under layer of fabric from the side edge of the



tube transversely across to said inserts and repeating the operation for as many times as the length of tubular fabric will permit, thus forming a series of units, i. e., two leg portions, two inserts, and one gusset, then seaming together the back edges of the two leg portions a distance from their upper end portions, next connecting the gusset between the diverging leg portions and finally connecting an insert between the gusset and the front edges of the leg portions.

1,808,291. TIRE COVER. JOHN JAMES CLOUGHLEY, Oklahoma City, Okla. Filed Apr. 29, 1930. Serial No. 448,259. 2 Claims. (Cl. 280—152.)



1. In combination with a motor vehicle having its fender and adjacent portion of the running-board dished to provide a seat for a spare tire, cross-sectionally arcuate cover sections hinged to the running board and fender respectively on opposite sides of said seat, and springs impelling said sections toward a tire mounted in said seat.

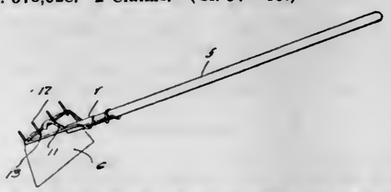
1,808,292. MARKER FOR PLANTS OR FLOWERS. DANIEL S. COPPERSMITH, Brooklyn, N. Y. Filed Nov. 26, 1929. Serial No. 409,972. 6 Claims. (Cl. 40—10.)

1. A marker for use with plants or flowers comprising an elongated tubular member adapted to be inserted into the article to be marked, an indicia displaying means, and a member connected to said means and adjustable within said tubular member for supporting said means at a convenient point above the article, said second named mem-



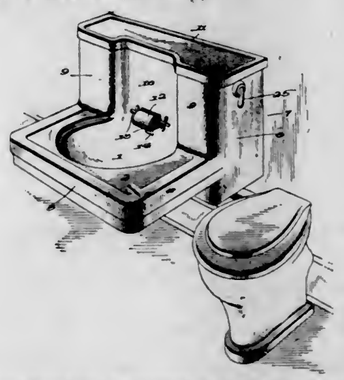
ber being enlarged at a point adjacent said means to bind within said tubular member whereby said members may be frictionally retained in collapsed relation.

1,808,293. RAKE ATTACHMENT FOR HOES. CHARLES COPPOCK, Gold Hill, Oreg. Filed June 25, 1929. Serial No. 373,528. 2 Claims. (Cl. 97—65.)



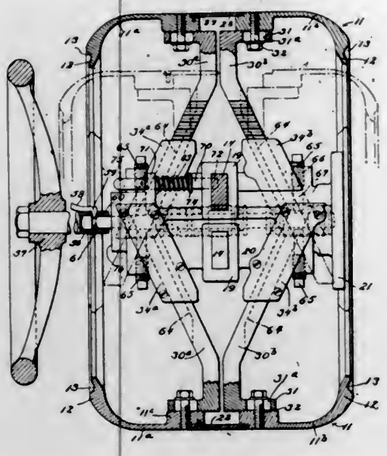
1. An attachment for garden tools of the type having a handle and a blade, said attachment comprising a rake frame formed of a continuous strip of material, teeth carried at one end thereof and having their butt ends engaging the blade of the tool to secure the teeth against displacement during the raking action, a handle saddle arranged at the opposite end of the frame and a fastening device coacting with the frame whereby to embrace said handle.

1,808,294. SANITARY FIXTURE. RAYMOND E. CRANE, Kittanning, Pa. Filed Jan. 26, 1931. Serial No. 511,386. 7 Claims. (Cl. 4—3.)



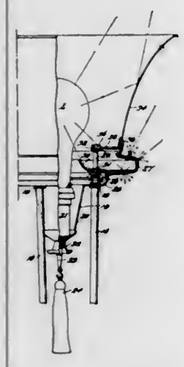
1. A sanitary fixture comprising a flush tank for closets and the like, having combined therewith and supported thereby a lavatory basin, a discharge outlet for said tank and a separate and independent discharge outlet for said basin.

1,808,295. COLLAPSIBLE TIRE BUILDING FORM. PETER DE MATTIA, Passaic, N. J., assignor to National Rubber Machinery Company, a Corporation of Ohio. Filed Mar. 13, 1930. Serial No. 435,387. 16 Claims. (Cl. 154—9.)



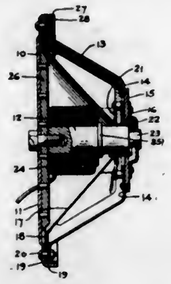
4. In a collapsible core, a segmental section comprising two circumferentially parted members, and means for moving said members obliquely in opposite directions with reference to the plane of operative continuity of the core.

1,808,296. FLOOR LAMP. LEROY C. DOANE and GUY P. NORTON, Meriden, Conn., assignors to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed June 19, 1928. Serial No. 286,585. 7 Claims. (Cl. 240—81.)



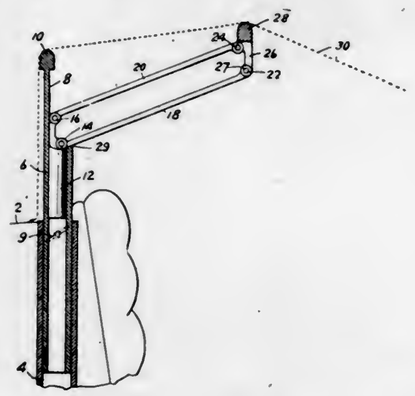
5. A floor lamp comprising, a base, a standard having a plurality of upwardly extending members, an upwardly opening socket cover supported by the members and disposed between the members, an upwardly opening lamp socket in the socket cover, a lamp in the socket, threaded means for securing the socket cover in place on the members, an annular ring of diffusing glass of U-shaped cross section supported on the upper edge of the socket cover, rods extending upwardly from the securing means, the upper ends of the rods being threaded, and an outwardly and upwardly flaring deflector supported above the diffusing ring in a position to be illuminated by light therefrom, the deflector being adjustably supported in the rods.

1,808,297. LOUD SPEAKER. BURGESS DEMPSTER, Berkeley, Calif., and JOHN C. KOONZ, Evanston, Ill., assignors to The Magnavox Company, Oakland, Calif., a Corporation of Arizona. Filed May 6, 1930. Serial No. 450,128. 7 Claims. (Cl. 179—115.5.)



1. In a loud speaker of the moving coil type the combination of, a pair of cooperating frame members of magnetic material, a conical diaphragm supported by said frame members, a central pole upon one of said frame members projecting into said diaphragm and through an opening at its apex, a second pole upon the other of said frame members disposed about the end of said central pole piece, a current carrying coil secured to said diaphragm at its apex, and an energizing coil upon said central pole disposed within said conical diaphragm, whereby a magnetic field completely surrounding said conical diaphragm will be established.

1,808,298. AUTOMOBILE TOP. ELEUTHERE PAUL DU PONT, Montchanin, Del. Filed Dec. 4, 1928. Serial No. 323,654. 4 Claims. (Cl. 296—107.)

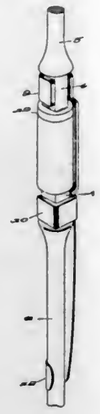


4. In an automobile, a plurality of tubular guideways, tubular upright frame members slidably mounted in said guideways, a cross member connecting the tops of said upright frame members, a plunger mounted in each of said upright frame members, and a collapsible frame pivoted to the plunger and adapted to extend horizontally, said frame being at least partially receivable within the tubular upright frame members.

1,808,299. LOCK FOR ROD COUPLINGS. WILLIAM K. EDWARDS, Big Spring, Tex. Filed Dec. 30, 1929, Serial No. 417,460. Renewed Apr. 20, 1931. 4 Claims. (Cl. 287—125.)

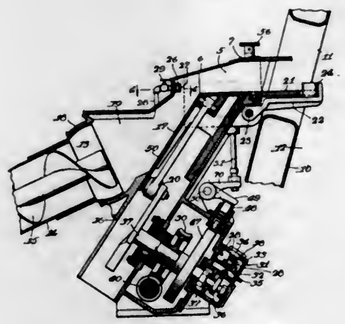
1. A lock for rod couplings comprising a longitudinal portion having at spaced points thereon oppositely facing,

non-circular socket members to embrace similarly shaped cross sectional portions of a rod coupling, and a resilient



arm extending from one of said members and provided with a hook to engage the rod at a point removed from the coupling.

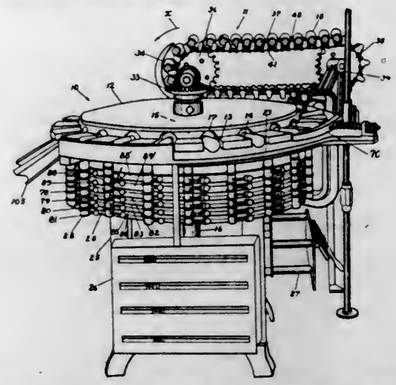
1,808,300. STOKER MECHANISM. ADAM B. FAHNESTOCK, Manhasset, N. Y., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed July 26, 1926. Serial No. 124,873. 16 Claims. (Cl. 110—101.)



16. The combination, with a furnace, of apparatus for delivering fuel to the fuel-bed of the furnace including a plurality of blast means each arranged to throw the fuel in a given direction and each having means to vary the force of the blast therefrom, and independently controlled means to deflect the fuel thrown by the respective blast means.

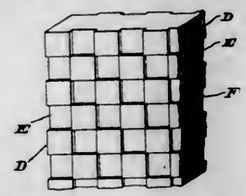
1,808,301. AUTOMATIC RADIOTRON TUBE TESTING MACHINE. JOHN E. FERGUSON and CHARLES A. NICOLAI, Bloomfield, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 18, 1928. Serial No. 313,221. 10 Claims. (Cl. 209—81.)

1. A machine for testing radio tubes comprising a testing circuit, a plurality of contacts electrically connected with said circuit, a carrier, a plurality of contact members on the carrier, tube receiving means adjacent to said contact members, means for positioning a radio tube



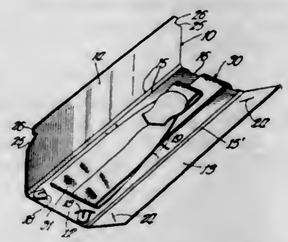
in said tube receiving means and means for adjusting said tube to engage predetermined contact elements thereof with predetermined contact members on said carrier.

1,808,302. CONSTRUCTIONAL MATERIAL COMPRISING RAIL FILLER FUNCTIONING AS AN EXPANSION JOINT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Dec. 5, 1927. Serial No. 237,833. 14 Claims. (Cl. 238—9.)



14. In a preformed construction material comprising a flexible, boardlike strip embodying in its structure separate mats of fibers and a bituminous material bonding said mats together.

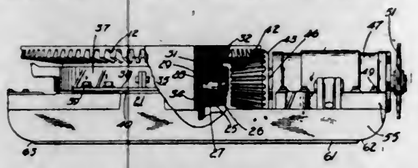
1,808,303. DISPLAY DEVICE. ABRAHAM J. FREILER, Glencoe, Ill., assignor to A. Stein & Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 28, 1930. Serial No. 439,557. 3 Claims. (Cl. 206—79.)



1. A display package made from a blank and provided with parallel weakened fold lines dividing the blank into a main central panel and opposite side panels foldable on the fold lines to overlap across the back of the main panel, the corner portions of one of the side panels functioning as a holding means, the other side panel having slits disposed in such position as to receive the said corner portions of the first mentioned side panel to hold the side panels in folded condition, and a pair of suspenders housed and retained in place between said central panel

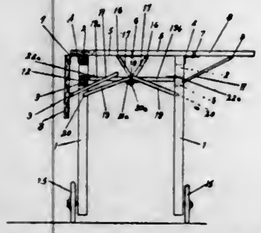
and the overlapped side panels with the suspender ends folded over one end of said main panel, extending longitudinally along the exterior of the main panel and held in position thereon.

1,808,304. ONE-PIECE ROTARY. EDWIN W. GOESER, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Nov. 9, 1926, Serial No. 147,235. Renewed Dec. 14, 1929. 3 Claims. (Cl. 255—33.)



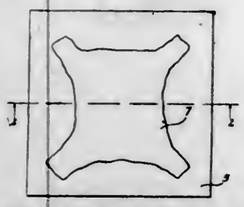
1. In a rotary machine, the combination of: an integral base structure having a horizontal plate, and pairs of depending longitudinal ribs extended along opposite sides of said plate, said longitudinal ribs reinforcing said plate and serving as skids; sole plates attached to the lower ends of said longitudinal ribs, said sole plates reinforcing said longitudinal ribs and providing bearing faces therefor; a rotary table journaled on said base; and mechanism supported by said base for driving said rotary table.

1,808,305. FOLDING DEVICE FOR TABLES AND THE LIKE. HAROLD HOWE, New York, N. Y., assignor to Howe Folding Furniture, Inc., New York, N. Y. Filed Dec. 11, 1929. Serial No. 413,231. 10 Claims. (Cl. 45—116.)



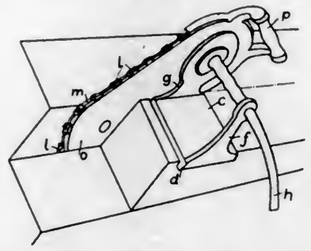
3. A folding table comprising parallel side frames constituting supporting legs, a top section hinged to the upper edge of each frame and hinged together between and parallel with said frames, a link pivoted at one end to each frame and each top section, and a common pivot for the opposite end of all of said links, said common pivot being disposed centrally between said frames and free to swing upwardly and downwardly during folding and unfolding of the table, said links being disposed at each end of said table.

1,808,306. SETTING OUT BOARD. WILLIAM C. JOHNSON, Milwaukee, Wis., assignor to Machinery Development Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 15, 1928. Serial No. 306,247. 2 Claims. (Cl. 149—20.)



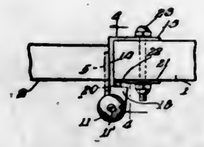
1. A setting-out board for leather comprising a sheet metal body portion, a facing of fibrous material attached to said body portion over the working surface thereof, the said fibrous material having a smooth surface and being coated with an impervious coating of varnish or lacquer.

1,808,307. DEVICE FOR MINING COAL AND THE LIKE. FRANZ KALLA, Lagiewniki, Gorny Slask, Szyb Carnall, Poland. Filed June 22, 1929, Serial No. 373,030, and in Germany Apr. 16, 1928. 1 Claim. (Cl. 262—28.)



A device for cutting coal and the like comprising a base plate having a down-turned guide edge, a pair of brackets on said plate, a sleeve bridging said brackets and forming a handle, a driving shaft arranged rotatably in said sleeve, a pair of plates arranged to swing about said shaft, a pair of sprocket wheels mounted between said plates, one of said sprocket wheels mounted on the shaft, an endless toothed chain mounted on said sprocket wheels and guided on said plates, and a handle connected to said plates at right angles to said sleeve.

1,808,308. ADJUSTABLE CLAMP FLANGE FOR SPRING HINGES AND THE LIKE. WILLIAM J. KEENE, Chicago, Ill., assignor to Chicago Spring Hinge Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 17, 1928. Serial No. 326,436. 4 Claims. (Cl. 16—187.)

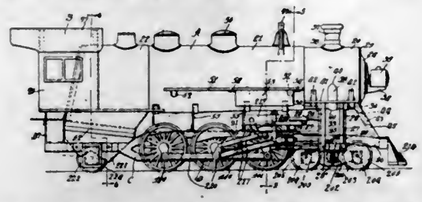


1. In a door fixture of the class described, the combination of a part adapted to engage the door, and an adjustable means for mounting the fixture on a partition or the like, said means including a web adapted to be positioned against the edge of the partition, a pair of normally parallel, oppositely disposed flanges, extending laterally from said web adjacent opposite edges thereof, said flanges being adapted to embrace a portion of said partition, one of said flanges being rigid with said web and the other flange being independent thereof so as to be adjustable towards or from said rigid flange, a bracket part carried by said web, extending laterally therefrom and overlapping a part of said adjustable flange, and means for adjustably connecting said adjustable flange and bracket part comprising a tongue projecting from one of said parts towards the other, the other part being provided with an opening for adjustably receiving said tongue.

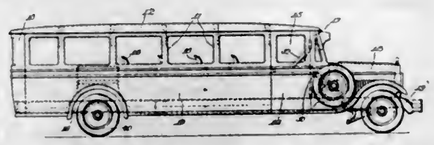
1,808,309. VEHICLE TOY. FREDERICK A. LUNDAHL, Rock Island, Ill.; Marie Lundahl, Executrix of said Frederick A. Lundahl, Deceased, assignor to Buddy "L" Mfg. Co., East Moline, Ill., a Corporation of Illinois. Filed May 1, 1926. Serial No. 105,906. 20 Claims. (Cl. 46—48.)

1. The herein described process of making a locomotive toy super-structure, comprising a plurality of hollow

boiler sections of sheet metal, each section being of a size as to exclude the entrance of a workman thereinto having attached thereto its appurtenances corresponding to those of a commercial locomotive, which consists in first making up each section as an independent welding unit and applying thereto its respective appurtenances, then manually manipulating said sections to telescopically assemble the front and next sections and permanently welding said two sections together at the edges thereof by insection of welding tools through the open end of one of said sections, then manually telescopically assembling the next rearward section with the rear end of said second section, and welding the two latter sections together in a like manner at the adjacent edges thereof.

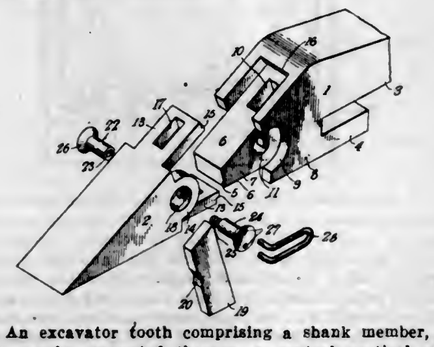


1,808,310. VEHICLE TOY. FREDERICK A. LUNDAHL, East Moline, Ill.; Marie Lundahl, executrix of said Frederick A. Lundahl, deceased, assignor to Buddy "L" Mfg. Co., East Moline, Ill., a Corporation of Illinois. Filed Apr. 22, 1927. Serial No. 185,865. 8 Claims. (Cl. 280—87.5.)



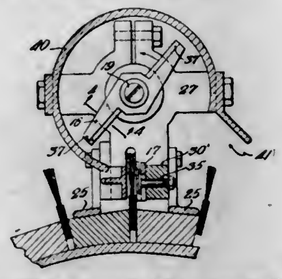
1. In a toy of the character described, the combination with a wheeled vehicle made up of sheet metal fabricated to provide great strength and predetermined size, and having a closed body provided with a top adapted to support an individual in recumbent position thereon; a steering wheel arranged inside of said closed body portion; spare equipment carried on said vehicle exteriorly of the closed body portion thereof within reach of an individual while resting upon the top of said vehicle; and means connecting said equipment with the front wheels of the vehicle whereby manipulation of said spare equipment effects steering of the vehicle.

1,808,311. EXCAVATOR. HARRY MADONNA, deceased, Conowingo, Md., by Sabby Madonna, administratrix, New York, N. Y. Filed Sept. 11, 1929. Serial No. 391,746. 4 Claims. (Cl. 37—142.)



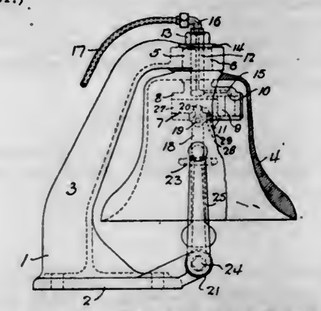
4. An excavator tooth comprising a shank member, a point member mounted thereon, a central vertical pin passing through the members, and a transverse spool passing through the members and engaged with the pin, said spool comprising a male and female portion coupled together at their inner ends.

1,808,312. TRIMMER FOR BRUSH BRISTLES. ROBERT W. MCLEAN, Bridgewater, Mass., assignor to Carver Cotton Gin Company, East Bridgewater, Mass., a Corporation of Massachusetts. Filed Feb. 4, 1930. Serial No. 425,850. 18 Claims. (Cl. 300—17.)



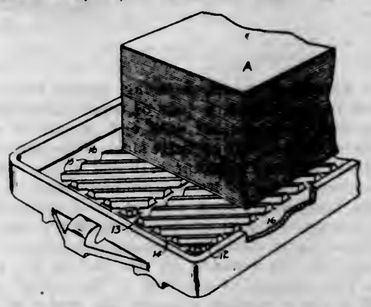
1. A brush trimmer comprising cooperating cutting blades, base members spaced to receive a row of bristles therebetween, and a guide adapted to engage the side of a row of bristles for positioning the blades in cutting relation thereto.

1,808,313. BELL. SHERMAN MILLER, Schenectady, N. Y. Filed Oct. 15, 1930. Serial No. 488,718. 9 Claims. (Cl. 116—151.)



1. The combination of a stationary bell having a clapper, motor means for actuating said clapper, and manually operated means disposed below and extending upwardly into said bell for actuating the said clapper independently of said motor means.

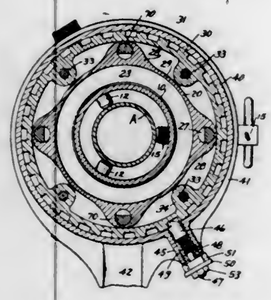
1,808,314. ANNEALING BOX. GEORGE B. NISBET, Cleveland, Ohio, assignor to The Otis Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 24, 1929. Serial No. 365,614. 1 Claim. (Cl. 263—49.)



A bottom for an annealing box comprising a horizontal member having integral parallel ribs extending upward-

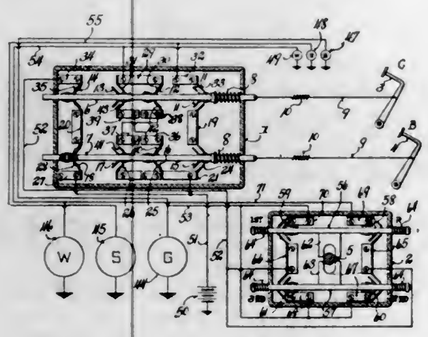
ly from the bottom of the box, said ribs extending diagonally in a plurality of sets separated by an aisle space providing a longitudinal flue for gases.

1,808,315. DIESTOCK. IRA W. NONNEMAN, Warren, Ohio, assignor to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed Jan. 13, 1930. Serial No. 420,362. 3 Claims. (Cl. 10—120.5.)



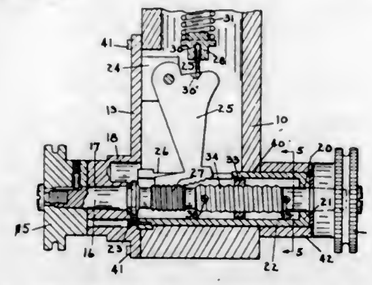
1. In a die stock, the combination of a chaser-carrying-frame, chasers carried thereby, a set of pins occupying openings in the chaser frame and forming abutments for the chasers, the chaser frame having outward bosses occupied by said pins, a ring having outwardly facing teeth surrounding the set of outward bosses, said ring having inward bosses respectively positioned between proximate outward bosses, means for clamping the inward bosses of the ring to the chaser carrying frame, and a handle frame having a pawl coacting with the teeth of the toothed ring.

1,808,316. SIGNAL SWITCH. JAMES M. OSGIAN, Racine, Wis. Filed Dec. 16, 1926. Serial No. 155,244. 1 Claim. (Cl. 200—16.)



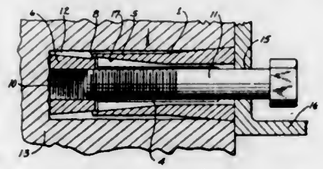
In a signalling system, a casing, spaced rods movably mounted in the casing, a pair of separate contacts carried by each rod adjacent each end, a pair of separate contacts on each rod at opposite sides of its center, a pair of separate contacts adjacent each end of the casing and upon opposite sides of its longitudinal center, a pair of separate contacts at each side of the longitudinal and of the transverse center of the casing at the central portion thereof, and means for imparting movement to the rods whereby the contacts on one end of the rod will engage the contacts at one end of the casing, and one pair of separate contacts adjacent the center of the rod will engage one pair of the contacts adjacent the central portion of the casing.

1,808,317. MICROSCOPE. WILLIAM L. PATTERSON, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,990. 4 Claims. (Cl. 88—39.)



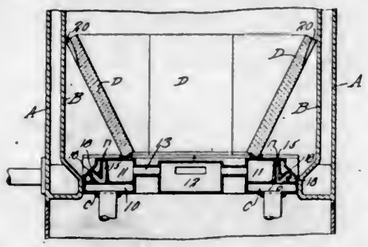
1. A miscroscope having in combination a stand, an adjustable body tube mounted on said stand, a bushing detachably secured to said stand, a member carried by said bushing, means for adjusting said body tube in opposite directions embodying a rotatable shaft, said shaft having its bearings in said bushing and said member.

1,808,318. BOLT ANCHOR AND METHOD. HENRY W. PLEISTER, Westfield, N. J., assignor to Henry B. Newhall Corporation, Garwood, N. J., a Corporation of New Jersey. Filed Oct. 31, 1929. Serial No. 403,874. 12 Claims. (Cl. 85—2.4.)



3. A new article of manufacture comprising an integral rigid cast bolt anchor formed of a plurality of expanding and expansible movable parts rigidly held together by breakable means.

1,808,319. BURNER AND METHOD OF TRANSFERRING HEAT. MILLARD J. ROBERTS, Tonawanda, N. Y., assignor to Roberts-Gordon Appliance Corporation, Buffalo, N. Y. Filed Oct. 26, 1929. Serial No. 402,681. 5 Claims. (Cl. 122—156.)



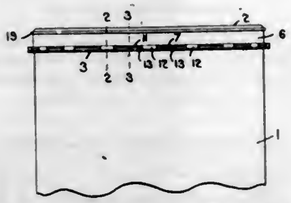
4. A method of heating a heat exchange member, including deflecting a flame at an angle against said member to scrub the dead air film therefrom, providing another flame adjacent to said first flame and deflecting said second flame toward said member by means of an inclined baffle to cause heat from the second flame to be deflected to said heat exchange member, and to ignite unburnt gases from said first flame, and heating said inclined baffle by said second flame to radiate heat therefrom to said heat exchange member.

1,808,320. PRINTING PROCESS. WERNER SCHÄFFER, Laupen-Bern, Switzerland, assignor, by mesne assignments, to Chocolat Tobler Holding Co., Aktiengesellschaft, Schaffhausen, Switzerland. Filed Dec. 4, 1922, Serial No. 604,772, and in Germany Dec. 12, 1921. 13 Claims. (Cl. 95—5.)



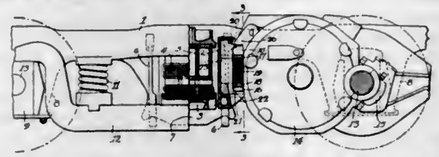
1. In a process for producing a reproducing medium to be used in a photomechanical reproducing process for printing purposes, forming a line of characters on a strip by means of a typewriting machine, cutting the strip between words, arranging the words in the line on laterally-displaceable members, and justifying the line by changing the space relations of the words in the line by inserting interchangeable spacers between each two laterally-displaceable members.

1,808,321. SEALED CAN. HARRY SEBELL, Boston, Mass., assignor to Arthur H. Parker, Lexington, Mass. Filed June 4, 1929. Serial No. 368,247. 2 Claims. (Cl. 220—59.)



1. A can comprising a can body having an outwardly-directed flange, a can cover having a mating flange, one of said flanges being a multi-ply flange and having at certain portions thereof fewer portions than at other portions, the reduction in the number of plies being on the face of said flange adjacent the other flange whereby pockets are formed between the flanges for the reception of an implement to be used to pry the flanges apart.

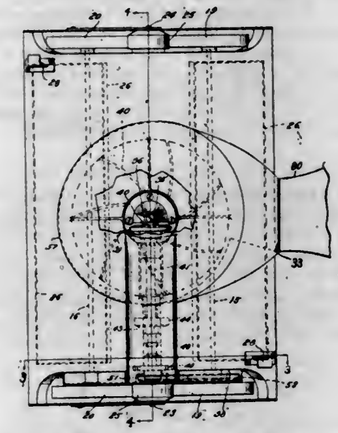
1,808,322. MOTOR CAR TRUCK. IRWIN A. SEIDERS, Reading, Pa., assignor to Flexible Truck Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 12, 1928. Serial No. 325,444. 17 Claims. (Cl. 105—139.)



1. In a car truck, the combination with a wheel axle and a transverse truck member, of a driving motor having a frame or casing swiveled on the wheel axle, and interengaging supporting parts carried by and projecting from the adjacent portions of the transverse truck member and the motor frame for holding the latter in position, said supporting parts including a spring unit, safety lugs and certain other parts that are laterally adjustable to permit the unobstructed vertical swinging movement of the motor frame in opposite directions from a normal position, substantially as described.

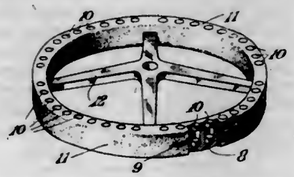
1,808,323. CARPET SWEEPER. WILLIAM E. SHERBONDY, Shaker Heights, Ohio. Filed Dec. 14, 1923, Serial No. 680,753. Renewed Mar. 29, 1930. 9 Claims. (Cl. 15—8.)

1. In combination, a carpet sweeper casing, a brush carried thereby, said casing having an opening above the brush, a housing carried by the casing and projecting through the opening into the casing, said housing having a bottom inlet opening in close proximity to the top of the brush, a vertically extending shaft enclosed within the



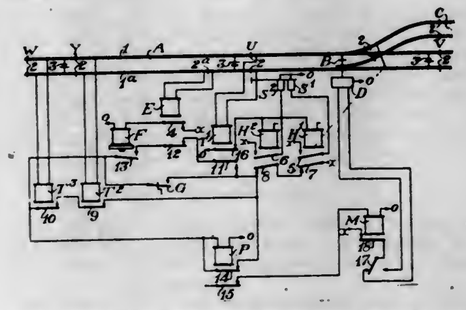
housing, a fan mounted on said shaft, traction wheels carried by the casing, and means drivingly connecting at least one of the traction wheels with said shaft above the fan.

1,808,324. STEERING WHEEL AND METHOD OF MAKING THE SAME. GRANT E. SMITH, Poughkeepsie, N. Y., assignor to Pouvailsmith Corporation, Poughkeepsie, N. Y., a Corporation of New York. Filed Dec. 2, 1926. Serial No. 152,108. 9 Claims. (Cl. 74—33.)



1. A steering wheel comprising a wooden rim having recesses and weight increasing material inclosed within said recesses together with a wooden plug sealing said recesses and enclosing the weight increasing material.

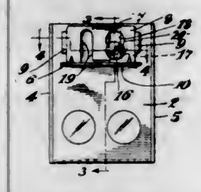
1,808,325. RAILWAY TRAFFIC CONTROLLING APPARATUS. LESTER E. SPRAY, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 17, 1930. Serial No. 453,364. 3 Claims. (Cl. 246—160.)



1. In combination, a main section of railway track containing a switch, a track circuit including a track relay

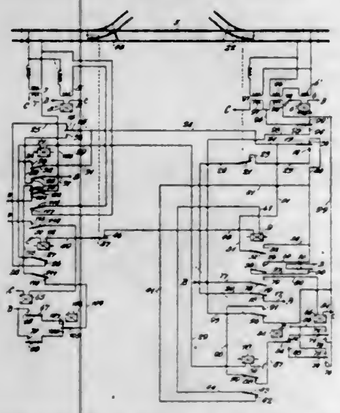
for said section, an approach section provided with an insulated joint in one track rail, a track circuit for said approach section including a source of current connected across the rails at the exit end and an auxiliary relay connected around said joint, a slow-releasing relay controlled by a back contact of said auxiliary relay, an approach locking relay, means for preventing operation of said switch unless said approach locking relay is energized, and a pick-up circuit for said approach locking relay including in series a back contact of said main section track relay and a front contact of said auxiliary relay as well as a front contact of said slow-releasing relay.

1,808,326. OUTLET BOX ATTACHMENT MEANS. GEORGE C. THOMAS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Original application filed Apr. 4, 1924, Serial No. 704,101, Patent No. 1,683,742, dated Sept. 11, 1928. Divided and this application filed Feb. 7, 1925, Serial No. 7,450. Renewed Apr. 10, 1931. 5 Claims. (Cl. 247—21.)



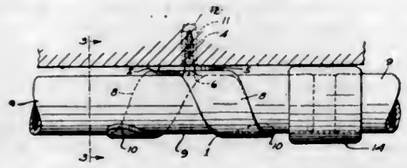
1. In outlet box construction, in combination, a box including a wall having an aperture and a slot narrower than said aperture and extending therefrom to an edge of said wall, a switch supporting element having a boss wider than said slot and engageable in said aperture, and a screw passing through said wall and engaging said boss, the head of said screw being wider than said aperture and the shank of said screw being narrower than said slot, whereby when said screw is tightened said boss is drawn into said aperture to prevent removal of said element from said box wall, and when said screw is loosened said element may be removed from and may be mounted on said box wall without removing said screw from said boss.

1,808,327. RAILWAY TRAFFIC CONTROLLING APPARATUS. HOWARD A. THOMPSON, Edgewood Borough, and CHARLES A. BROOKS, Swissvale, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 23, 1929. Serial No. 394,402. 8 Claims. (Cl. 246—34.)



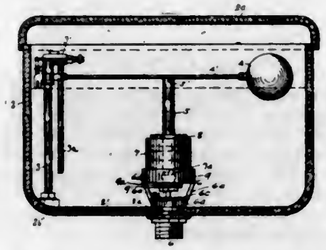
1. In combination, a section of railway track, devices corresponding respectively to directions of movement of traffic in said section and means comprising relays having different releasing characteristics for bringing one of said devices into action upon traffic movement in one direction in said section and for bringing another of said devices into action upon traffic movement in said section in the opposite direction.

1,808,328. CONDUIT AND PIPE CLAMP. FREDERICK B. THOMSON, Teaneck, N. J. Filed June 14, 1929. Serial No. 370,944. 1 Claim. (Cl. 248—31.)



A new article of manufacture, comprising a conduit or pipe clamp having a base, spring tension members, adapted to be sprung over the crown of the conduit or pipe, the ends of said spring tension members being dished to form side gripping edges to positively grip a conduit or pipe.

1,808,329. FLUSH VALVE. BERT O. TILDEN, Trenton, N. J., assignor to B. O. T. Mfg. Co., Trenton, N. J., a Corporation of New Jersey. Filed Aug. 27, 1930. Serial No. 478,108. 6 Claims. (Cl. 4—58.)



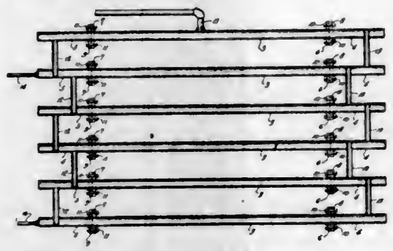
1. A flushing apparatus in combination with a tank having inlet and outlet openings, a valve body in register with the outlet, having a seat disposed substantially in the plane of the tank bottom, a cylinder mounted concentrically in said body, a float loosely disposed in said cylinder, an annular valve, an over-flow pipe passing axially through said cylinder, said valve and said float, and being rigidly secured to both of said latter parts, adapted when raised, to enable the contents of the tank to discharge through said outlet, and means for raising said pipe, said cylinder having a closed bottom formed with an opening of greater diameter than that of the pipe whereby water may drain therethrough, and said float being of less diameter than that of the cylinder, whereby water may enter the cylinder.

1,808,330. TERMINAL CONNECTER. ANTON F. WALTZ, Brooklyn, N. Y., assignor to Koscherak Siphon Bottle Works, Hoboken, N. J., a Corporation of New Jersey. Filed June 29, 1925. Serial No. 40,438. 6 Claims. (Cl. 173—259.)



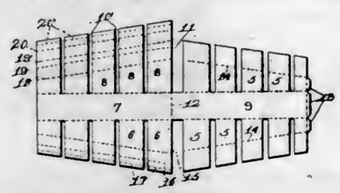
1. A heavy duty terminal connecter as described comprising a pair of clamping jaws made from moulded non-corrosive metal and having perforations to receive a clamping bolt and a spring band formed to the contour of said jaws embedded in said jaws having perforations aligning with but of larger diameter than the perforations in said jaws and having their edges covered by said moulded metal.

1,808,331. EVAPORATOR COIL. ROBERT S. WHEATON, Milwaukee, Wis., assignor to The Vilter Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 26, 1930. Serial No. 455,730. 4 Claims. (Cl. 62—126.)



1. A refrigerating coil, comprising a plurality of spaced, superimposed tubes having closed ends, short tubular connections between one set of end portions of said superimposed tubes, each of said tubular connections extending from the bottom portion of a tube above through and terminating slightly above the lower inner portion of a tube below and adjacent tubular connections being offset one from another, short tubular connections between the other set of end portions of said superimposed tubes, each of said last mentioned tubular connections extending from an upper portion of a tube below through and terminating slightly below the upper inner portion of a tube above and each of said last mentioned tubular connections being offset from an adjacent tubular connection, a fluid inlet pipe entering one of said tubes, and a fluid outlet pipe extending from one of said tubes.

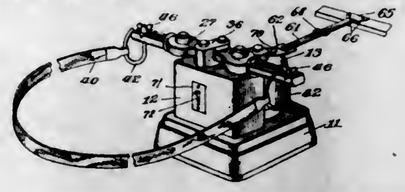
1,808,332. SPRING COVER. MILTON H. WHITEHOUSE, Milwaukee, Wis. Filed Feb. 25, 1930. Serial No. 431,126. 10 Claims. (Cl. 267—37.)



7. A spring cover adapted to snugly embrace a spring and formed from a single blank of sheet metal folded upon itself to provide a double thickness of metal, each thickness having transverse slots extending from opposite sides of the longitudinal center through the outer edges to compensate for flexure of the spring, and means whereby to secure the outer edges of the outermost layer of metal together along one side of the spring.

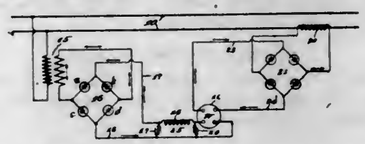
1,808,333. PORTABLE MASSAGE AND EXERCISE MACHINE. FRITZ A. ANDERSON, Milton, Wis., assignor to The Burdick Corporation, Milton, Wis., a Corporation of Delaware. Filed Nov. 20, 1928. Serial No. 320,664. 6 Claims. (Cl. 128—63.)

3. In an exercising and massaging machine, an applicator, a rocker arm for actuating the applicator, a link pivotally attached to the rocker arm intermediate its length, a pin for pivotally securing the opposite end of the link a bearing carried by the rocker arm, and an



eccentric element journalled in the bearing and a rotatable shaft mounted to rotate on a fixed axis and secured to said eccentric element for producing a combined translating and oscillating movement of the rocker arm.

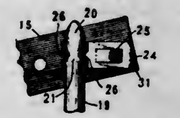
1,808,334. VOLT-AMPERE METER. DONALD J. ANGUS, Indianapolis, Ind. Filed Nov. 4, 1927. Serial No. 230,949. 19 Claims. (Cl. 171—34.)



14. The method of measuring the volt-amperes in an alternating-current circuit which comprises rectifying a quantity proportional to volts, rectifying a quantity proportional to amperes, and energizing the current and voltage windings, respectively, of a direct-current watthour meter by said rectified quantities.

18. A system for measuring the volt-amperes of an alternating-current circuit comprising means, including a copper-oxide rectifier, in circuit relation with a circuit traversed by a current proportional to the voltage of said circuit, means, including a copper-oxide rectifier, in circuit relation with a circuit traversed by a current proportional to the current traversing said circuit, and a direct-current watthour meter having current and voltage coils energized, respectively, by the currents traversing said copper-oxide rectifiers.

1,808,335. ELECTRICAL CONNECTING MEMBER. JOHN M. AUFIERO, Brooklyn, N. Y., assignor to E. A. Laboratories, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 18, 1927. Serial No. 234,062. 1 Claim. (Cl. 173—328.)

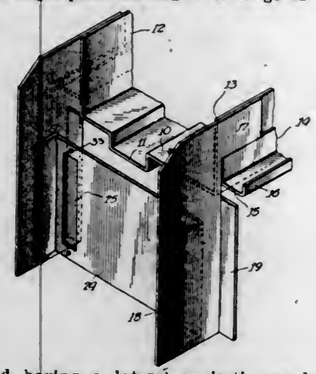


A connecting member including a strip of conducting material having portions of its surface bulged inwardly and said strip being bent adjacent such portions to provide complementary and substantially semi-circular plug-enclosing parts, the said inwardly bulged portions providing flanges for yieldingly engaging a reduced portion of a plug and said strip extending to have its free end present a surface for securing to a mounting member.

1,808,336. CORNER CONNECTION FOR METAL FRAMES. ISAAC A. BAUM, Chicago, Ill. Filed Feb. 21, 1929, Serial No. 341,740. Renewed June 12, 1930. 4 Claims. (Cl. 189—46A.)

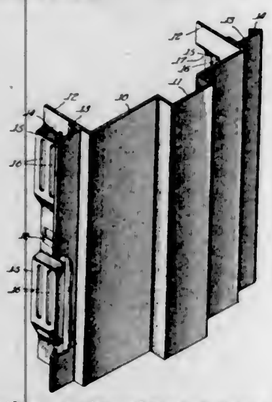
1. In a door frame, the combination of head and side frame members of channel shape in cross section with the flanges projecting away from the door opening, a

continuous angular member constituting a plaster terminal and ground secured to the face of the flange of the channel, an angle plate secured to a flange of one frame



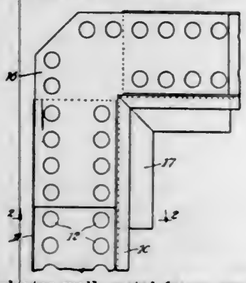
member and having a lateral projection and a socket member secured to the inside of the plaster terminal for engagement by said projection.

1,808,337. PLASTER ANCHOR. ISAAC A. BAUM, Chicago, Ill. Filed July 22, 1929. Serial No. 380,207. 1 Claim. (Cl. 72—98.)



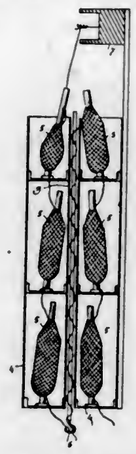
In combination, a channel-shaped frame member, a flange of which has spaced, laterally deflected portions adapted to act as plaster anchors, and an angle strip secured to said flange at a point closely adjacent to said deflected portions, a perpendicular portion of said strip having a rebent margin that partially overlies said deflected portions and acts as a plaster anchor, terminal and ground.

1,808,338. FRAME FOR ALL PLASTER WALLS. ISAAC A. BAUM, Chicago, Ill. Filed July 22, 1929. Serial No. 380,211. 4 Claims. (Cl. 72—98.)



1. In an all plaster wall, metal frame construction comprising a channel shaped buck member and a continuous flanged wall stiffener, a flange of which is rigidly secured to the back of said channel shaped buck and positioned to extend a substantial distance rearwardly into the plaster of the wall.

1,808,339. CREEL FOR WINDING WARP BEAMS. MARIO BELLINGERI, Monza, Italy. Filed Jan. 24, 1927, Serial No. 163,174, and in Italy Jan. 28, 1926. 2 Claims. (Cl. 242—131.)

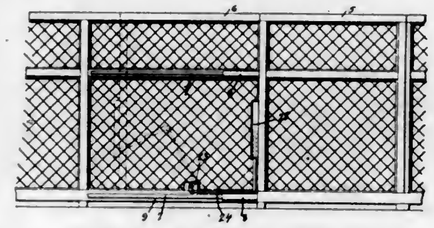


1. A creel comprising a plurality of compartmental columns, removable trays in the columns, a plurality of thread bobbins in each tray, a distributor for each column adapted to space the threads from the bobbins and consisting of vertical bars, horizontal bars pivoted to the vertical bars so that they may be moved in parallel relationship, and thread guiding pins on the horizontal bars.

1,808,340. FUEL BRIQUETTE. ROCH P. BOTSCH, Milwaukee, Wis., assignor to United Coal and Dock Company, Milwaukee, Wis. Filed Oct. 26, 1929. Serial No. 402,800. 2 Claims. (Cl. 44—20.)

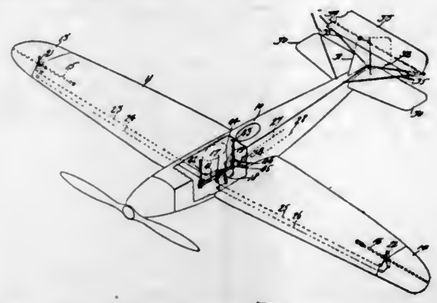
1. A fuel briquette consisting of pulverized coal molded to size and held by a waterproof binder having an asphalt base, lightly coated with a mineral oil having an affinity for the binder.

1,808,341. TANDEM CHECK FOR GATES. MAX BURSTEIN and ARCHIBALD G. BUCKENHAM, New York, N. Y. Filed Nov. 19, 1929. Serial No. 408,192. 1 Claim. (Cl. 16—70.)



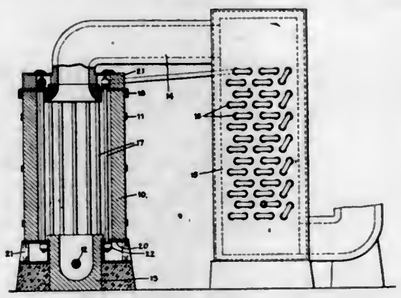
In combination with a partition having a hollow base rail, a gate for the partition mounted to slide on said rail, a check for the gate housed in said rail, a rack in the rail movable with the check, a gear in the rail for actuating the rack and a right angle lever having one end thereof keyed to the gear and the other end in slidable engagement with the gate so that one arm of the lever is parallel to the rail in the closed position of the gate.

1,808,342. AIRPLANE CONTROL. ROLAND CHILTON, Keyport, N. J., assignor, by mesne assignments, to Aeromarine Plane & Motor Company, Inc., Keyport, N. J., a Corporation of New York. Filed May 13, 1929. Serial No. 362,652. 8 Claims. (Cl. 244—20.)



1. The combination with normally horizontal control surfaces spaced laterally and longitudinally of an airplane on hinges, lateral thereto, of a control member movable laterally and longitudinally, and means connecting said pivotally floating surfaces to said control member for simultaneous antomatic movement of all in the same direction and for opposite movement of the laterally separated surfaces in response to lateral movement of the control member and for opposite movement of the longitudinally separated surfaces in response to longitudinal movement of the control.

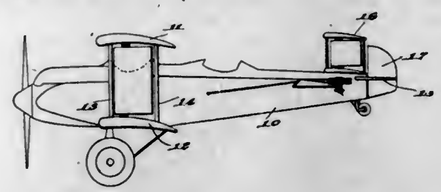
1,808,343. METHOD OF HEATING OILS. LUIS DE FLOREZ, Pomfret, Conn., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Original application filed July 2, 1926, Serial No. 120,067. Divided and this application filed Apr. 17, 1929. Serial No. 355,754. 2 Claims. (Cl. 196—116.)



2. The method of heating a medium to a desired temperature, which comprises burning a fuel to create a flame as a source of intensive radiant heat and impelling the flame and the products of combustion in a vertical unobstructed path, and passing the medium in radiative relation to the flame and the hot combustion products serially through vertical paths which are parallel to the path of the flame and products of combustion and substantially equidistant therefrom, to quickly absorb radiant heat and reduce the temperature of the products of combustion, while maintaining the products of combustion in substantially non-convective relation to said paths.

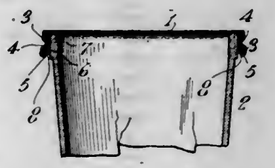
1,808,344. CONTROL FOR AIRPLANES. MICHAEL HENRY DEPUE, Homer, Ill. Filed Dec. 5. 1929. Serial No. 411,914. 4 Claims. (Cl. 244—12.)

1. In an airplane, a wing, buffers mounted on the wing and disposed in vertical planes, means for moving the buffers simultaneously at angles to the line of travel of the airplane, said buffers being normally in parallel rela-



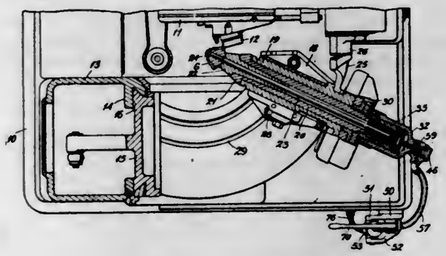
tion, means for moving one series of buffers at an angle to the other buffers, and a clutch for causing a reversal of movement of one series of buffers.

1,808,345. CONTAINER COVER. ROBERT C. EUWER, Wheeling, W. Va. Filed Apr. 12, 1929. Serial No. 354,505. 9 Claims. (Cl. 215—40.)



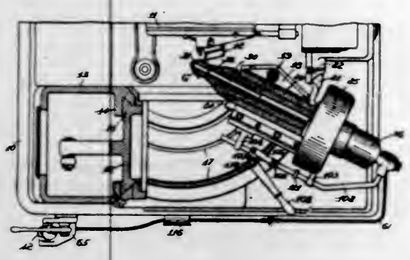
5. A new article of manufacture, a cover for a container comprising a stiff cap with a raised side, said side being substantially parallel to the enclosed portion of a container, a flat circular resilient ring fitting within said raised side, the inner diameter of the lower edge of the resilient ring being greater than the inner diameter of its upper edge and an abutment on its inner side extending around its side wall, said abutment being adapted to bear against said resilient ring when the cover is positioned on a container, to force a portion of said ring above and below said abutment whereby a seal is formed between said side wall and the enclosed portion of said container both above and below said abutment.

1,808,346. CHUCK. EYVIND FINSEN, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Sept. 26, 1928. Serial No. 308,537. 13 Claims. (Cl. 90—1.)



1. The combination with a chuck provided with means for actuating it into chucking position, of fluid pressure operated means for releasing it comprising a piston connected to said chuck, a cylinder in which said piston is movable, a pump, piping connecting said pump with said cylinder, said cylinder, piping and pump constituting a substantially closed system adapted to contain a substantially constant volume of fluid, and means for actuating the pump to force the fluid out of the pump chamber into the first named cylinder to move the chuck to released position.

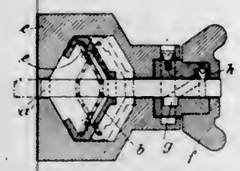
1,808,347. CHUCK. EYVIND FINSEN, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed June 3, 1929. Serial No. 368,033. 18 Claims. (Cl. 90—1.)



1. The combination with a cylinder, a piston movable therein and means for moving said piston in one direction in said cylinder, of a pump and piping connecting the pump with the opposite end of the piston, said pump, piping and cylinder forming a closed hydraulic system such that when the pump is actuated, a column of liquid is forced from the pump chamber into the cylinder to move the piston in the direction opposite to that first mentioned, and when the pump is released, the first named means moves the piston in the first named direction in the cylinder forcing the liquid from said cylinder back into the pump chamber, and means for automatically connecting said system during the last named movement with a source of liquid supply to allow liquid to flow in either direction between the system and the source of supply depending on the amount of liquid in the system.

15. The combination with a spindle, of a chucking attachment therefor comprising a draw rod reciprocable in the spindle, a cylinder mounted on the spindle, a piston secured to the draw rod and reciprocable in the cylinder, means constantly urging the piston in one direction in the cylinder, a plunger pump, piping connecting the pump with the cylinder at one end of the piston, said cylinder, piping and pump constituting in operation a closed hydraulic system whereby when the plunger is depressed in the pump the piston is moved in the cylinder against the resistance of the first named means, a valve communicating with the system adapted to be closed on depression of the pump, means connecting the valve with the plunger for opening the valve when the plunger is raised in the pump, and means for positively raising the plunger when released.

1,808,348. REVERSING MECHANISM. RICHARD GATZSCHE, Bad Blankenburg, Germany. Filed Apr. 5, 1929, Serial No. 352,734, and in Germany Apr. 12, 1928. 4 Claims. (Cl. 74—14.)



1. In a reversing mechanism, the combination of two movable control elements, a spring member arranged between said control elements, said spring member adapted to move beyond its dead position with one of said control elements and to thereby effect the movement of the other control element in the opposit direction, one of said control elements being in the form of a frame in which said spring member is housed and means for moving the one of said control elements with said spring member.

1,808,349. PREPARATION OF DIPHENYLENE OXIDE. WILLIAM J. HALE and WESLEY C. STOESSER, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 17, 1929. Serial No. 386,735. 7 Claims. (Cl. 260—54.)

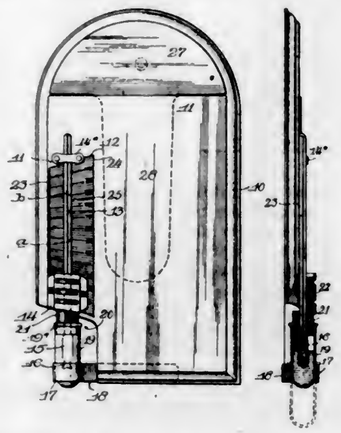
1. The method of making diphenylene oxide which comprises heating the vapors of ortho-phenyl phenol at a temperature between 300° and 800° C.

1,808,350. RATCHET WRENCH. CLARENCE W. HELBLING, Black River Falls, Wis. Filed Mar. 23, 1928. Serial No. 264,198. 6 Claims. (Cl. 81—61.)



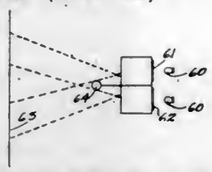
1. A wrench of the character described including a casing, a sleeve journaled in said casing and having a ratchet wheel secured thereto, means for rotating the ratchet wheel and sleeve, and a pin for securing the sleeve and ratchet wheel together and extending into the open center portion thereof for receiving an attachment which extends at an angle to the wrench.

1,808,351. PSYCHROMETRIC DEVICE. EARL VERNON HILL, Chicago, Ill. Filed May 31, 1927. Serial No. 195,393. 1 Claim. (Cl. 73—24.)



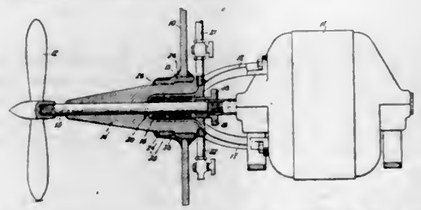
A psychrometric instrument comprising a base, a thermometer with a bulb at its bottom end mounted on said base, a scale associated therewith, means providing a stopper fixed to said thermometer above said bulb, a wick on the bulb of said thermometer, a water containing cup enclosing said wick-covered bulb and normally held in closed relation with respect to said bulb by its engagement with said stopper, and a supporting device carried by the base below said bulb, said supporting device and cup having parts adapted to interengage to support said cup when said cup is depressed below said stopper to expose said wick to the surrounding air.

1,808,352. PHOTOGRAPHIC PROCESS. HENRY JOHN HOLLEN, Chicago, Ill. Filed Nov. 9, 1925. Serial No. 67,965. 2 Claims. (Cl. 88—24.)



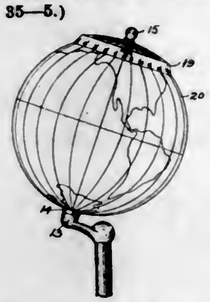
2. The herein described process of projecting blended images from photographic pictures taken from different positions, which consists in projecting light simultaneously through two or more positives or negatives upon an image-receiving surface, certain portions of the light projected through one negative or positive overlapping that projected through another adjacent negative and positive and simultaneously causing a decrease of the intensity of light from the outer edges of the overlapped area to the center thereof.

1,808,353. AGITATOR. WILLIAM H. JACKSON, Douglaston, N. Y. Filed June 21, 1927. Serial No. 200,483. 10 Claims. (Cl. 308—134.)



4. In an agitator installation, an elongated shaft bearing projecting through a wall of the tank and secured thereto; a spun metallic shield surrounding the bearing and presenting a sharp feather edge adapted to conform to and be clamped against the inside of the tank wall to seal the joint, and a packing gland at the outer end of said bearing, and an electric motor positioned outside of said tank, said motor having a shaft in alignment with and rigidly connected to the outer end of the agitator shaft.

1,808,354. SPHERICAL GEOGRAPHICAL GLOBE. PETER J. KING, Detroit, Mich. Original application filed Dec. 12, 1930, Serial No. 501,815. Divided and this application filed Apr. 23, 1928. Serial No. 272,015. 2 Claims. (Cl. 35—5.)

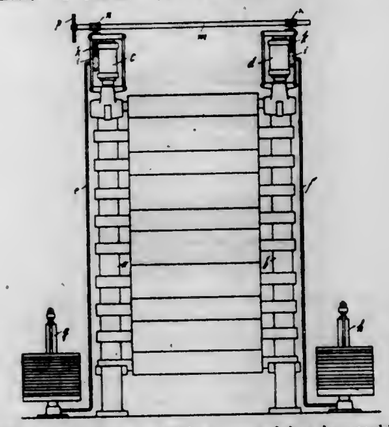


1. The combination with a globe and a post extending therethrough, of a time dial rotatably mounted on and secured to said post having an annular margin disposed angularly at a considerable angle to the surface of said globe.

1,808,355. METHOD OF NITRIFICATION. AUGUSTUS B. KINZEL, Beechhurst, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed May 11, 1929. Serial No. 362,447. 9 Claims. (Cl. 148—16.)

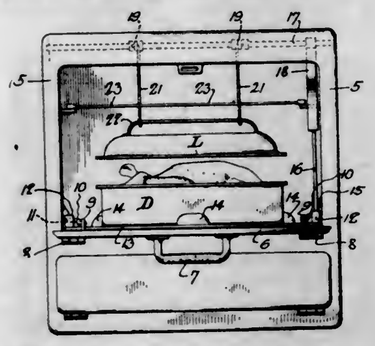
1. The method of producing nitrogen-containing coatings on an alloy article which comprises embedding the article in a closed container in porous inert non-metallic material, passing into the container a gaseous substance which will give up nitrogen to the article, and heating.

1,808,356. HYDRAULIC LEATHER, FABRIC, OR PAPER ROLLING MACHINE. JOHANNES KLEINEWEFERS, Krefeld, Germany, assignor to the Firm: Joh. Kleinewefers Söhne, Krefeld, Germany, a Firm of Germany. Filed June 10, 1929, Serial No. 369,900, and in Germany Dec. 22, 1927. 1 Claim. (Cl. 149—23.)



A hydraulic rolling machine, comprising in combination a machine frame, pressure cylinders movably guided on said machine frame in the direction of pressure, a nut on the outer side of each pressure cylinder, a vertical screw spindle in each nut, a common horizontal shaft having two worms one for each screw spindle, a worn wheel on the top of each screw spindle meshing with the corresponding worm, and means for rotating said horizontal shaft.

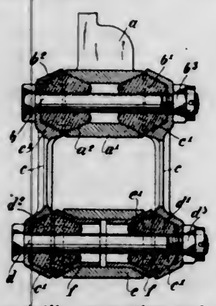
1,808,357. COVER LIFTER FOR ROASTERS. LESSING L. KOLE, Milwaukee, Wis. Filed Sept. 7, 1929. Serial No. 391,000. 5 Claims. (Cl. 126—340.)



1. In apparatus of the class described, the combination with a hinged oven door of a slidable grate having means

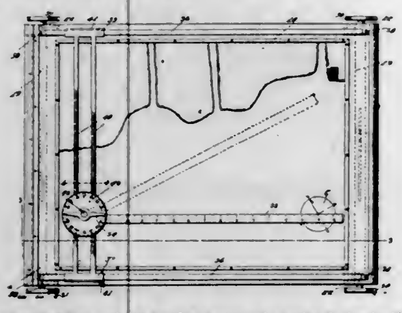
for releasably holding a roasting pan in a pre-determined place on the grate, means operatively connecting the grate with the upper portion of the oven door to cause the grate to move forward onto the oven door when the latter is swung to a nearly horizontal position, a rod having a fixed relation to the grate and moving with same, said rod extending upwardly and rearwardly, a rod rotatably mounted to the rear portion of the oven, said rod having a bar aligned with the rod that moves with the grate and adapted to be operated by same when the grate is moved outwardly onto the oven door, and bars connected to said rod, and means connecting the cover of the roasting pan with said bars whereby when the oven door is open and the grate carrying the roasting pan is moved outward the cover of the roasting pan will be lifted.

1,808,358. YIELDING CONE DISK. AUGUST H. LEIPERT, College Point, N. Y., assignor to The Rubber Shock Insulator Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 23, 1928. Serial No. 264,108. 1 Claim. (Cl. 267—54.)



A wholly non-metallic connection and support between two metallic parts of a motor vehicle, one of which parts is to be connected to and supported by the other of said parts, comprising cup-shaped recesses carried by each of the respective parts having axially inclined bearing surfaces, independent blocks of yielding material spaced from one another and engaged along separate surfaces with the respective parts and having axial openings extending therethrough presenting extended bearing surfaces, and means extending through the openings in the blocks to secure the parts together, the first-named engaging surfaces of said blocks being relatively inclined to one another, and certain of the engaging surfaces of each of the respective blocks being relatively inclined with respect to each other and to the surfaces within the axial openings to engage the inclined bearing surfaces of the cup-shaped recesses.

1,808,359. NAUTICAL INSTRUMENT. WILLIAM E. LEWIS, West Mystic, Conn. Filed Mar. 23, 1928. Serial No. 264,196. 1 Claim. (Cl. 33—80.)

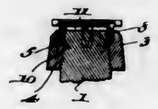


An apparatus of the character described including a base, a carriage slidably mounted on the base, a plate longitudinally adjustable on the carriage, a tubular member extending through the plate and rotatably supported thereby, a compass-rose revoluble with one end of the tubular member and having a depending circular flange surrounding said end, a protractor arm carried by the opposite end of the tubular member, split collars extending from each face of the plate respectively, one of said collars embracing the tubular member and the other of said collars embracing said circular flange, and means co-operating with each of the collars for causing the same to frictionally engage the tubular member and flange respectively.

1,808,360. POLISH. JAMES D. LINDSAY, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Apr. 16, 1927. Serial No. 184,433. 4 Claims. (Cl. 134—24.)

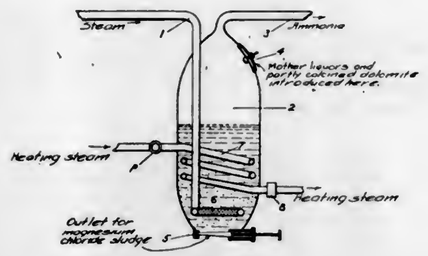
1. A polish comprising water, mineral oil, wilkinite, abrasive earth, oxalic acid and tartaric acid in such proportions as to adapt it for use on automobile and other highly polished surfaces.

1,808,361. STORAGE BATTERY CONNECTER. HERMAN OTTO LOCH and JOHN ROSS MILLER, Washington, D. C., and EDWARD ALDEN TIBBALS, Bethesda, Md. Filed May 27, 1926. Serial No. 112,000. 4 Claims. (Cl. 173—259.)



4. In a storage battery connector, a ring provided with means for connection to a conductor, said ring being adapted to be placed around the battery post, and a locking cap adapted to overlie the end of the battery post and having an integral elongated downwardly projecting prong adapted to be driven, by blows applied to the cap, between the ring and the battery post after the ring has been thus placed, for the purpose of locking said ring and post together.

1,808,362. PROCESS FOR MAKING MAGNESIUM CHLORIDE AND OTHER MAGNESIUM SALTS OF HIGH PURITY. RICHARD C. LORD, Gambier, Ohio, assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 23, 1924. Serial No. 694,778. 9 Claims. (Cl. 23—91.)

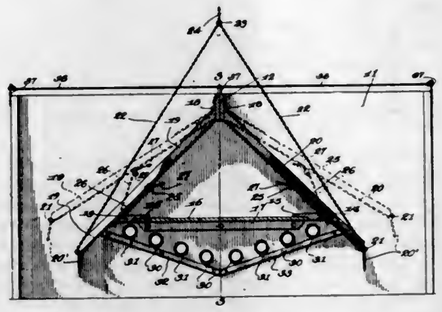


1. The process of preparing dolomitic limestones as for use in reclaiming ammonia from the mother liquors produced in the amonia-soda process which consists in calcining the same at temperatures below those customarily employed in the burning of lime while maintaining thereon during the calcination a partial pressure of carbon dioxide at least not substantially less than atmospheric pressure.

1,808,363. PRODUCTION OF PREPARATIONS FOR OILING FIBROUS MATERIALS. MARTIN LUTHER, Mannheim, and HANS BELLER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 8, 1929, Serial No. 376,850, and in Germany Aug. 6, 1928. 12 Claims. (Cl. 19—66.)

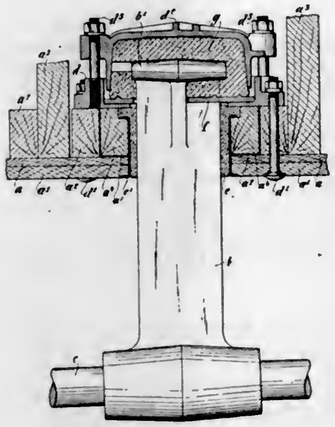
1. A preparation for oiling fibrous materials comprising a mixture of unsaturated carboxylic acids obtained by splitting off water from an oxidation product of high molecular organic compounds, and an alkaline agent.

1,808,364. BROODER. PERRY S. MARTIN, Harrisonburg, Va. Filed Jan. 21, 1927, Serial No. 162,528. Renewed Sept. 30, 1930. 18 Claims. (Cl. 119—31.)



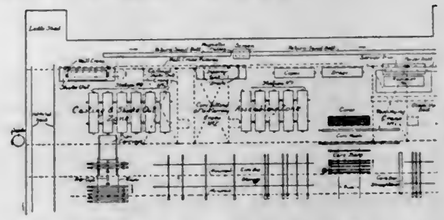
1. A brooder comprising a pair of adjustable hover tops hingedly carried at their upper edges and arranged to form an inverted V-shaped hover, said hover tops being arranged for movement which increases the size of the brooding chamber as the area for escape of heated air is increased, and a heating element arranged under said hover tops.

1,808,365. STRUT CONSTRUCTION. ALFRED F. MASURY, New York, N. Y., assignor to The Rubber Shock Insulator Corporation, Wilmington, Del., a Corporation of Delaware. Original application filed July 14, 1926, Serial No. 122,528. Divided and this application filed Jan. 6, 1928. Serial No. 244,790. 2 Claims. (Cl. 308—28.)



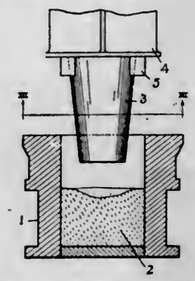
1. The combination with the hull of a vessel formed with an opening and a propeller shaft, of a strut formed with a bearing for the propeller shaft and an enlarged end, the shank of the strut passing through the opening in the hull, yielding non-metallic material surrounding and engaging the shank within the opening to resist gyratory movements, and means to secure the end of the strut within yielding non-metallic material under compression within the hull.

1,808,366. PLANT FOR AND METHOD OF MANUFACTURING CAST IRON PIPE AND THE LIKE. JAMES R. MCWANE, Birmingham, Ala., assignor to McWane Cast Iron Pipe Company, Birmingham, Ala., a Corporation of Alabama. Filed Sept. 20, 1927. Serial No. 220,731. 35 Claims. (Cl. 22—64.)



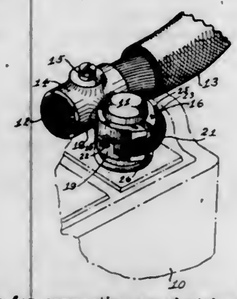
15. A plant for the manufacture of cast iron pipe and the like horizontally comprising, in combination, a bay having an assembling zone; a sand handling zone on one side of the assembling zone; and a pipe and core bar handling zone on the other side of the assembling zone; conveying means in the assembling zone for the core bars and flasks; a ramming machine at one end of the assembling zone; a core making machine placed in the assembling zone adjacent the pipe and core bar handling zone and open to both zones so as to take core bars from the latter and deliver finished cores into the former; said core making machine being near the ramming machine and between said machine and the assembling zone; and means for conveying the core bars, after casting, by a route which does not conflict with the movement of other parts, to the core machine.

1,808,367. PRESS FOR PLASTIC MATERIALS. EUGENE L. MESSLER, Pittsburgh, Pa. Filed May 9, 1929. Serial No. 361,619. 3 Claims. (Cl. 25—27.)



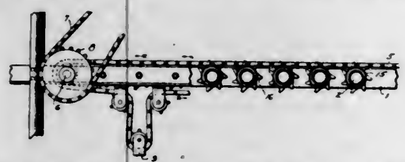
1. In a die structure for use in pressing plastic substances to form ingot mold hot tops the combination of a female die, a plunger head, a male die proper on said head arranged to forme a centrally disposed indentation in plastic material lying in a female die, and auxiliary male die means rigidly mounted on said head and spaced from the male die proper; said auxiliary die means being arranged to cooperate with the female die to form an external shoulder in the material lying between the male die proper and the interior surface of the female die, and the auxiliary die means being so formed that the indentation produced thereby is of slight depth relatively to the depth of the indentation produced by the male die proper, there being an inclination in at least one of the opposed surfaces of the male die proper and the auxiliary male die means of no less than five degrees.

1,808,368. STORAGE BATTERY TERMINAL CLAMP. WILFRED J. MONTAMBAULT, Waterbury, Conn. Filed Feb. 11, 1930. Serial No. 427,523. 3 Claims. (Cl. 173—259.)



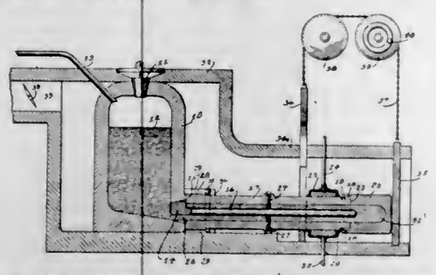
1. In a clamp for connecting an electric cable to a battery terminal post, a tubular body member for fitting about said cable, means for locking said body member to said cable, said body member having a stationary jaw, a movable jaw hinged to said stationary jaw, and a coiled spring for resiliently connecting said jaws, said jaws having hooks for attachment to the ends of said spring.

1,808,369. SPROCKET. TREADWAY B. MUNROE, Chicago, Ill., assignor, by mesne assignments, to The Celotex Company, Chicago, Ill., a Corporation of Delaware. Filed June 21, 1926. Serial No. 117,644. 17 Claims. (Cl. 74—31.)



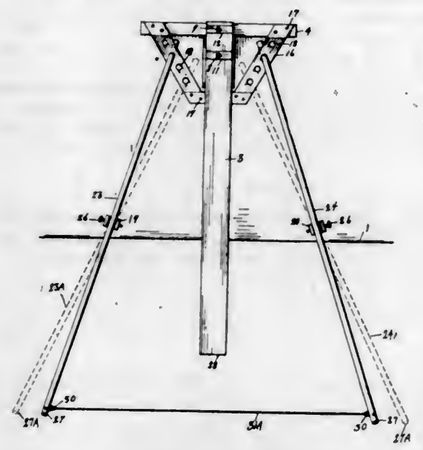
1. In a sprocket the combination of a plurality of teeth whose pitch is less than the pitch of the chain coacting therewith said teeth having a working face outwardly and backwardly inclined; a pocket formed by each tooth adapted to receive and hold a pintle of said chain; and means adapted to direct said pintle into said pocket.

1,808,370. APPARATUS FOR EXTRUDING SEAMLESS BRASS AND COPPER TUBES. NYLE R. MUNSON, Waterbury, Conn. Filed Jan. 17, 1930. Serial No. 421,344. 9 Claims. (Cl. 207—2.)



1. In an apparatus for continuously casting a metal tube, a vessel containing a supply of molten metal, a casing connected with said vessel, a mandrel within said casing, a water jacket on the outer section of said casing to cause the metal to congeal in the outer end thereof, whereby a solid tube may be continuously drawn from said casing, said vessel and casing being enclosed by a furnace for maintaining the temperature of said metal above the melting point, and a sliding door in said casing adapted to cut off said water jacket and the outer section of said casing from the hot gases of said furnace.

1,808,371. DIVING HURDLE. BRUNO W. OERTEL, Portland, Oreg. Filed Sept. 5, 1929. Serial No. 390,524. 6 Claims. (Cl. 272—59.)

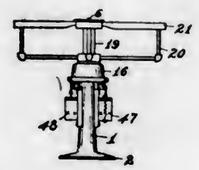


1. A pair of upright members, said upright members each having a bifurcated upper end to provide a cradle, the bifurcated portion of each upright being provided with a plurality of vertically spaced inclined pin holes, an inclined spar carried within each cradle, a pin extending through one of the aforesaid inclined holes supporting said spar, and a flexible member extending in a substantially horizontal manner between the upper ends of said spars.

1,808,372. PROCESS FOR THE OBTAINMENT OF SHEETS OF PLASTIC MATERIAL WHICH ARE COMBINED OR BACKED. JEAN PAISSEAU, Paris, France. Filed May 25, 1928, Serial No. 280,648, and in France July 5, 1927. 5 Claims. (Cl. 154—2.)

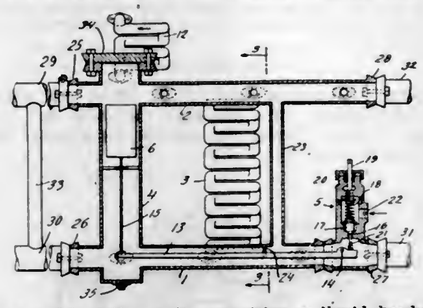
1. Process for the manufacture of sheets of plastic material which are combined or backed, consisting in applying, on a sheet of plastic material, a layer of a mixture adapted to attack but superficially the said sheet of plastic material and composed of a plastic material similar to that of the said sheet dissolved in a volatile compound comprising a mixture of a solvent of the said material and of a volatile liquid unable to dissolve the said material.

1,808,373. SHOCK ABSORBING MEANS FOR TURNSTILES. CLINTON J. PHARE, Cleveland, Ohio, assignor to Hoyt V. Bright, Cleveland, Ohio. Filed Apr. 26, 1928. Serial No. 272,919. 12 Claims. (Cl. 39—3.)



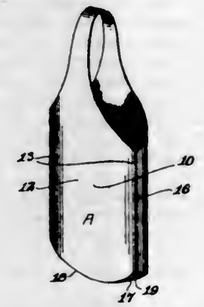
5. In a turnstile, the combination of a pedestal, a casing rotatably supported by the pedestal, arms carried by the casing, a ring-gear fixed to the casing, a pinion in mesh with the ring-gear, means for supporting the pinion, means for causing automatic rotation of the pinion after initial manual movement thereof and for stopping the rotation of said pinion at a predetermined point, and pneumatic means for cushioning the movement of said pinion prior to the stopping thereof.

1,808,374. REFRIGERATING APPARATUS. HARRY ALEXANDER PHILLIPS, Knoxville, Tenn. Filed Nov. 26, 1928. Serial No. 321,777. 18 Claims. (Cl. 62—126.)



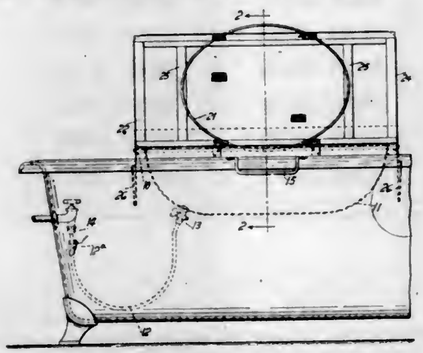
1. A refrigeration unit comprising a liquid header, a gas header, a refrigerating coil communicating with said headers, a float chamber communicating with said headers, a valve for admitting liquid refrigerant directly into said liquid header, and a float in said chamber for controlling said valve.

1,808,375. SHOPPING BAG. NEAL W. PLOOSTER, St. Paul, Minn. Filed Aug. 26, 1929. Serial No. 388,481. 1 Claim. (Cl. 150—1.7.)



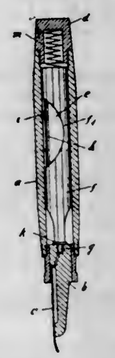
A collapsible shopping bag including a pair of side members secured together along their vertical edges, an integral strap handle member, and an elliptical bottom member secured to said side members, creased along its longitudinal center to allow the bottom member to fold together and the entire bag to lie substantially flat.

1,808,376. BABY BATH APPLIANCE. MILTON POLACEK and EGON POLACEK, Cleveland Ohio. Filed Apr. 25, 1929. Serial No. 357,953. 5 Claims. (Cl. 4—177.)



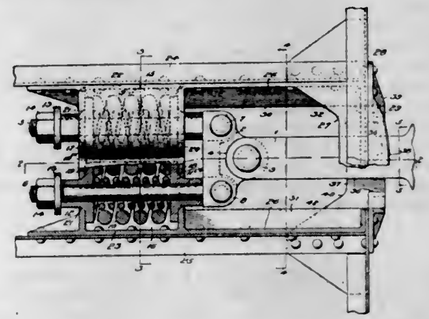
1. A baby bath appliance comprising a container including a frame, a second frame associated therewith and supporting a pad for receiving a baby for drying and dressing, said second frame being movable off the container frame to a nonobstructive position when said container is in use and being rotatable substantially about its geometrical axis on the container frame when moved onto the container frame for use.

1,808,377. FOUNTAIN PENHOLDER. ALBERT REICHENBACH, Pforzheim, Germany. Filed Aug. 29, 1930, Serial No. 478,694, and in Germany Mar. 31, 1930. 4 Claims. (Cl. 120—42.)



1. A fountain penholder, comprising in combination with the casing, an ink duct piece in the front end of said casing, a closing head screwed into the rear end of said casing, a metal sleeve tapered at the front end removably mounted in said casing, a rubber bag in said metal sleeve, and an outflow tube in the open end of said rubber bag and in the tapered end of said metal sleeve.

1,808,378. DRAFT GEAR. WILLARD F. RICHARDS, Depew, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed July 27, 1926. Serial No. 125,268. 8 Claims. (Cl. 213—49.)

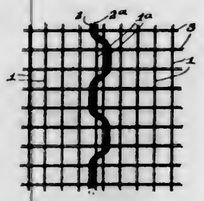


1. In a draft and buffing mechanism, the combination with center and end sills of a housing connected thereto having at one end portions adapted to reinforce the end sill and at the other end partitions forming compartments adapted to receive yielding means of said draft and buffing mechanism, said partitions being connected intermediate the ends by a longitudinally extending web.

1,808,379. WOVEN FABRIC. CHARLES ROSENSTEIN, Paterson, N. J., assignor to Rosenstein Bros. & Hook, New York, N. Y., a Corporation of New Jersey. Filed Feb. 23, 1929. Serial No. 342,226. 4 Claims. (Cl. 139—417.)

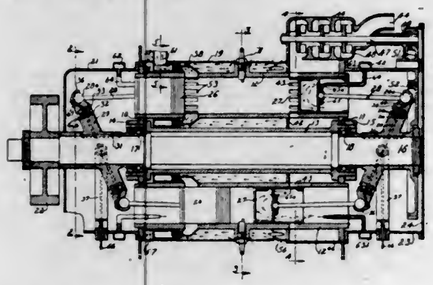
1. An open mesh fabric having a weft of artificial horsehair and a warp composed of artificial horsehair ground

threads and fiber threads arranged at intervals in said horse-hair warp over one or more intermediate threads, the fiber threads being crossed alternately from one side to



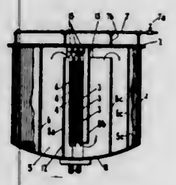
the other of the intermediate threads, forming parallel lines or stripes having a wavy appearance between adjacent bands of artificial horsehair fabric.

1,808,380. AIRPLANE ENGINE. JAMES M. ROYAL, Villa Park, Ill. Filed Feb. 6, 1929. Serial No. 338,014. 15 Claims. (Cl. 123—58.)



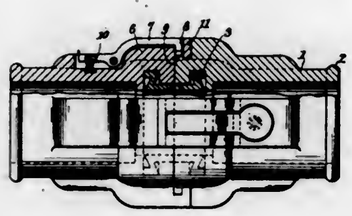
7. In an internal combustion motor a plurality of radially disposed longitudinally aligned cylinders, an assembly plate supporting the cylinders at each end, a centrally disposed shaft, a pair of mutually coacting pistons, in each cylinder means for transferring the movement of the pistons to the shaft, an auxiliary separating plate between the assembly plates with its plane parallel to the planes of said assembly plates, and a housing band disposed about the auxiliary plate and one assembly plate, the space so confined serving as an intake passageway for supplying combustible mixture under pressure to the cylinders, a central casing enclosing the greater portion of the cylinders, and means for moving a band of air through said casing in contact with the cylinders to cool the same, and deflectors on the inside of the casing, one between each pair of cylinders, for confining the moving air to increase its contact with the outer cylinder walls.

1,808,381. HEATING APPARATUS. JAMES H. SHEATS, Glen Ridge, N, J., assignor to Du Pont Viscoloid Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,440. 7 Claims. (Cl. 18—17.)



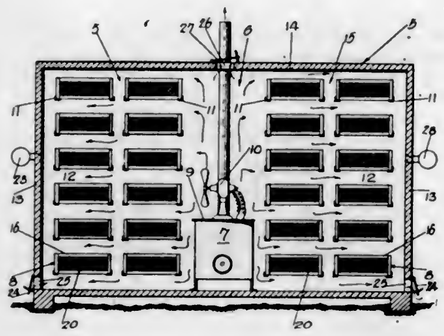
6. In an apparatus of the character described, in combination, a fluid container having a removable top, a plurality of holders for the reception of articles to be treated in said container, said holders having a size and contour adapting them for substantially vertical side-by-side reception in said container and for insertion and withdrawal from the container by way of the top opening thereof, and means for circulating temperature-pressure fluid in vertical flow and counter flow in and out of said container and about said holders.

1,808,382. COUPLING FOR HOSE, PIPE, OR OTHER CONDUCTORS. PAUL STAUFFER, Clearfield, Pa. Filed June 7, 1928. Serial No. 283,530. 4 Claims. (Cl. 285—67.)



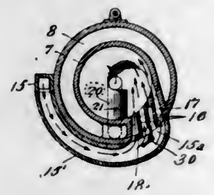
1. In a coupling, a pair of complementary identical coupling members, each being provided with an annular recess in the inner face thereof adjacent its free end, a flexible valve forming ring for disposition against the inner surface of each coupling member adjacent the outer end, an outwardly extending flange formed on the inner edge portion of each ring like member for disposition within the respective recess and normally abutting against one side of the said recess, the outer edge portion of each ring-like member projecting beyond the adjacent end of the respective coupling member, and a laterally disposed extension formed on the outer edge of the flange for engagement with the inner wall of the respective recess, the inner opposed edges of the ring-like members being disposed in abutting relation, the flange portion being shifted to a position diagonally within the respective recesses and bearing against the inner wall of the recess when the coupling members are secured together, as and for the purposes described.

1,808,383. PROPAGATING APPARATUS FOR MUSHROOM CULTURE. VERNON STEVES, Oleum, Calif. Filed Aug. 20, 1929. Serial No. 387,127. 2 Claims. (Cl. 47—17.)



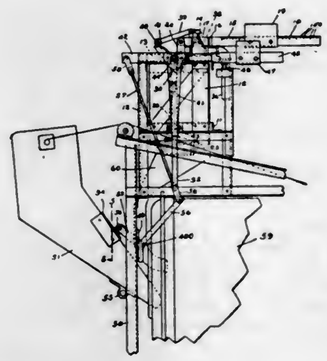
1. An apparatus for growing mushrooms comprising a darkened closed propagating room, means for admitting air to said room, means in said room for maintaining a predetermined desired temperature therein, humidifiers associated therewith for supplying a predetermined degree of humidity therein, ventilating means therefor, a plurality of racks in pairs in said room, said racks being spaced on all sides from each other and from the walls of the room to provide ventilating passages, propagating trays arranged in and slidably supported by said racks, the walls of said trays having ventilating spaces therein, and means for continuously circulating the humidified air through the propagating trays.

1,808,384. TWO-CYCLE ENGINE. JOHN TANEYHILL, St. Louis, Mo. Filed June 19, 1929. Serial No. 372,045. 3 Claims. (Cl. 123—73.)



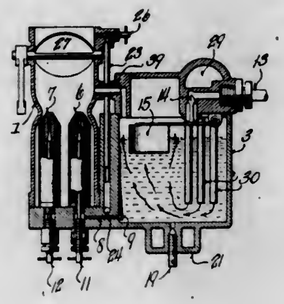
3. An internal combustion engine comprising a vertical cylinder having an exhaust valve at the top and a tangential air inlet port near the bottom at one portion of its wall for admitting air mixture, and having a fuel inlet port near the bottom for admitting a richer fuel mixture, and a piston operatively mounted in said cylinder and having a top formed in a rising spiral about the central axis, the bottom of said spiral at the bottom of the stroke communicating with said tangential air inlet port, and the upper portion of said spiral having a tubular radial passage extending from its inlet end in the cylindrical side of the piston towards the axis and curved upward at its central outlet, and its inlet end at the bottom of the stroke communicating with said fuel inlet port to deliver a richer fuel mixture in the center of the cylinder and in the vortex of the whirling air mixture, substantially as described.

1,808,385. WATER CONTROL DEVICE. ALBERT F. TEICHMAN and JOHN W. THEE, Cincinnati, Ohio. Filed Mar. 2, 1928. Serial No. 258,662. 8 Claims. (Cl. 249—58.)



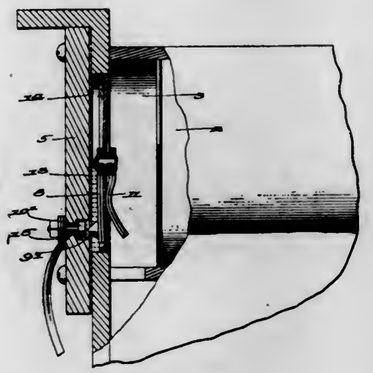
1. In a water measuring device, the combination of a bracket, a beam structure tiltably mounted thereon, a tank suspended from the beam upon one side of the bracket, a counterweight on the beam on the other side of the bracket, a rod journalled in the tank, a valve controlling discharge from the tank and a water supply pipe providing water under pressure operable by rotatable movement of the rod, a cam on said rod, and a lever actuated quick flow water supply valve directly controlling said supply pipe and fixedly mounted above the tank and adapted to be opened by said cam.

1,808,386. CARBURETOR. ALEXANDER O. TESCH, Milwaukee, Wis. Filed Oct. 25, 1928. Serial No. 314,961. 2 Claims. (Cl. 261—15.)



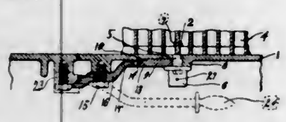
1. A carburetor comprising a fuel reservoir, a water reservoir, a heating jacket adjacent said reservoirs and adapted to receive exhaust gases, a fuel and a water nozzle connected to the respective reservoirs, electric heaters surrounding said nozzles, an electric heater within said fuel reservoir, and a mixing chamber within which said nozzles are located.

1,808,387. ELECTRIC SWITCH FOR METERING DEVICES. ERNEST H. THOMPSON, Evanston, Ill. Filed Dec. 3, 1928. Serial No. 323,541. 16 Claims. (Cl. 200—82.)



1. In an electrical switch, the combination with a stationary contact, of a movable contact, a member for moving said movable contact into engagement with the stationary contact, and a common mounting for said movable contact and member, the free ends of said movable contact and member respectively, being eccentrically disposed with respect to said mounting.

1,808,388. GAUGE LOCK. RALPH S. TYLER and HERBERT MCGEORGE, Cleveland Heights, and WILLIAM M. REICHART, Cleveland, Ohio, assignors to The Chandler and Price Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 13, 1927. Serial No. 225,953. 5 Claims. (Cl. 164—59.)



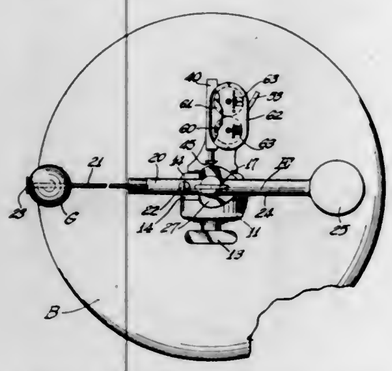
2. In a work-holding table, a bed, a slot in said bed, a back gauge having a tongue depending therefrom and extending through said slot, means engaging said tongue for adjusting said gauge longitudinally of said bed, and separate means laterally engaging said tongue for locking said gauge in adjusted position.

1,808,389. FROG FOR GROOVED RAILS. MATTHIAS UHRMACHER, Duisburg-Ruhrort, Germany, assignor to the Firm: Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Apr. 3, 1928, Serial No. 267,044, and in Germany Nov. 4, 1927. 4 Claims. (Cl. 246—460.)



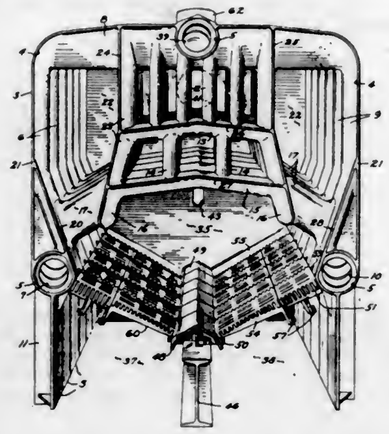
1. A wear-resisting crossing, comprising in combination a thick web grooved continuous rail, thick web grooved intersecting rails, a wear-resisting continuous insert of manganese steel in the thread of each intersecting rail bridging said continuous rail, and a wear-resisting interrupted insert in said continuous rail bearing with its joint faces against the inserts of said intersecting rails.

1,808,390. GOLF PRACTICING DEVICE. ANDREW C. VOLK, Duluth, Minn.; Metta A. Volk, executrix of said Andrew C. Volk, deceased, assignor to Estey M. Turner, Arcadia, Calif. Filed Nov. 9, 1927. Serial No. 232,060. 13 Claims. (Cl. 265—20.)



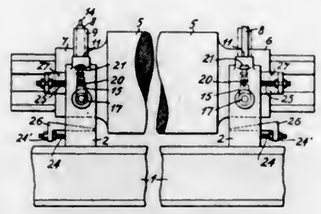
12. A device of the character described comprising means for supporting a golf ball, means for mounting the first means for rotary movement in response to striking of the ball, and an indicator for registering movement of the first means comprising a rotatable dial, means for urging the dial to rotate in one direction, an actuator mounted for movement, means operable in response to movement of the first means for operating the actuator, means operatively associated with the dial and actuator and operable by the latter, to rotate the dial in a direction opposed to its urged direction, and releasable means for latching the dial against movement in its urged direction.

1,808,391. SECTIONAL HEATER. JOSEPH A. WADDELL, Williamsport, Pa., assignor to Spencer Heater Company, Williamsport, Pa., a Corporation of Pennsylvania. Filed Aug. 6, 1930. Serial No. 473,431. 8 Claims. (Cl. 122—212.)



5. A water heater comprising front, back and intermediate sections, with double grates, independent ash pits, single combustion chamber, and water-jacketed fuel magazines separated by connected flues, the water-jacket on one side of each magazine extended downwardly to form a water leg supporting one end of each grate.

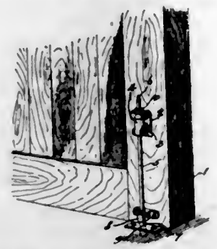
1,808,392. APPARATUS FOR GRINDING ROLLS. OSKAR WALDRICH, Siegen, Germany. Filed Mar. 2, 1927, Serial No. 172,143, and in Germany July 7, 1926. 2 Claims. (Cl. 51—49.)



1. Apparatus for setting rolls including a bearing, a pair of bearing blocks mounted in said bearing and adjustable in such mounting along lines of direction angularly disposed one to the other, gauging means including an arm rotatably mounted on said bearing, a gauge bolt extensibly mounted on said arm, and a second gauge bolt mounted on said bearing and extensible along a line which is transverse with respect to the line of extension of the bolt first named.

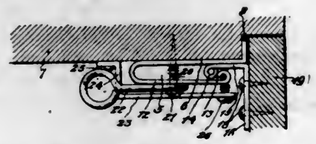
1,808,393. DOORSTOP. ANDREW J. WECKER, Dayton, Ohio. Filed Aug. 6, 1928. Serial No. 297,704. 11 Claims. (Cl. 292—338.)

1. In a door stop of the character described, a reciprocatory rod, a guide sleeve in which the rod is mounted for sliding motion, a bracket in which the guide sleeve is mounted for swinging motion about a transverse axis, a head upon the rod limiting its reciprocatory movement relative to said sleeve, said guide sleeve being counterbored, a bearing collar loosely surrounding the rod within the bore of said guide sleeve and movable to and fro



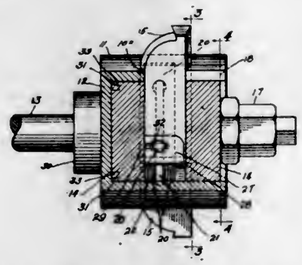
therein, stop means preventing the escape of the collar from the guide sleeve, said guide sleeve being reversible upon its pivotal bearing upon the retraction of the rod, to present said rod in an inclined position, and a stop shoulder upon the bracket upon which the end of the rod abuts when in such inclined position.

1,808,394. SCREEN DOOR CATCH. DAVID M. WOODS, Sacramento, Calif., assignor of one-half to J. H. Armstrong, Sacramento, Calif. Filed Apr. 28, 1930. Serial No. 448,018. 2 Claims. (Cl. 292—70.)



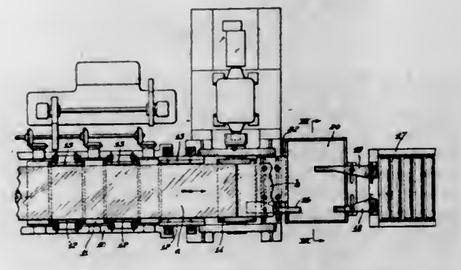
1. A door catch comprising a one-piece spring metal strip bent upon itself between its ends to provide a U-shaped spring socket to receive a door-carried tongue, one arm of said U-shaped socket being adapted to lie against a door jamb, and the other arm thereof being inwardly curved at its free end to engage the tongue, said arms having alined openings between their ends, a wood screw passing through said openings and adapted for driving into the door jamb to attach said socket, and a locking arm pivoted on said screw between the head of the latter and said other arm of the socket, said locking arm being swingable to a position at which it prevents springing of said other arm away from said one arm, tightening of said screw serving to force said locking arm and said other arm of said U-shaped socket further inward to compensate for wear.

1,808,395. SHAPER HEAD FOR WOOD WORKING MACHINES. TORVAL J. ANDERSON, Chicago, Ill. Filed Feb. 18, 1929. Serial No. 340,895. 7 Claims. (Cl. 144—230.)



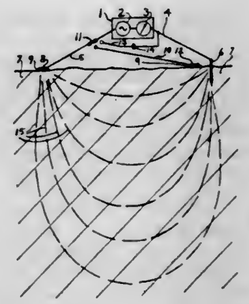
1. In a shaper head, the combination of opposed clamping members adapted to be mounted on a spindle shaft; a frame provided with longitudinal slots connected to one of said clamping members; traveling blocks slidably mounted in said slots; cutting knives provided with an opening near their inner ends mounted between said clamping members, said blocks provided with pins that register with the opening in said knives.

1,808,396. CROP END DISCHARGING APPARATUS. FLORENCE C. BIGGERT, Jr., Crafton, and JOHN A. SMITMANS, Pittsburgh, Pa., assignors to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,327. 4 Claims. (Cl. 164—68.)



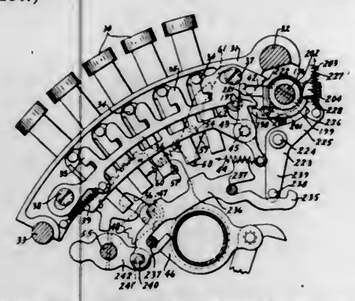
1. The combination with a device for cutting strip material in motion, of a member for receiving and supporting one edge portion of the advancing end of the material, said member being spaced from said device, and means associated with said device for supporting the opposite edge portion only of said material as it issues from said device, whereby relatively long pieces of material will pass onto said receiving member but relatively short pieces will drop down at one edge portion so as to pass beneath the same.

1,808,397. METHOD OF AND APPARATUS FOR LOCATING DEPOSITS OF OIL, GAS AND OTHER DIELECTRIC SUBTERRANEAN BODIES. LOUIS C. BILLOTTE, Revere, and EDWARD LIPSON, Chelsea, Mass., assignors to Oil Finding Corporation, a Corporation of Delaware. Filed Dec. 2, 1927. Serial No. 237,133. 14 Claims. (Cl. 175—182.)



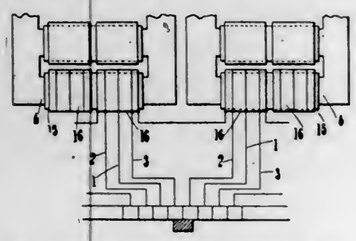
1. The method of detecting the presence of oil or other dielectric deposits below the surface of the earth, which comprises applying high frequency alternating current electrostatically to the surface of the earth between points close to each other, applying said current between points more remote from each other, the short and long current paths thus formed being substantially in line and observing any difference between said currents, as an indication of the presence of such deposits, substantially as set forth.

1,808,398. CASH REGISTER. SAMUEL BRAND, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed May 22, 1929. Serial No. 365,176. 20 Claims. (Cl. 235—130.)



1. In a machine of the class described; the combination with a group of manipulative keys; and a normally restrained release shaft adapted to be rocked to release the machine for operation; of a lock for the release shaft; key-operated means to disable the lock and free the release shaft for operation; a manipulatively controlled detent to lock the keys either in depressed position or undepressed position; and means positioned by the release shaft as the shaft moves from normal position to restrain the detent against movement to unlocking position after the release shaft returns to normal.

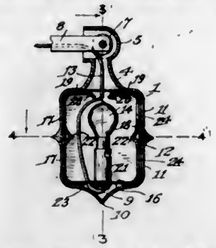
1,808,399. ELECTRIC CONVERTING APPARATUS. JOHN EARNSHAW CALVERLEY, Preston, and WILLIAM EDEN HIGHFIELD, London, England, assignors to The English Electric Company Limited, London, England, a Company of Great Britain. Filed Feb. 2, 1927, Serial No. 165,484, and in Great Britain Feb. 27, 1926. 1 Claim. (Cl. 171—123.)



Electric converting apparatus comprising in combination a plurality of static transformers, windings on said transformers in the form of a polyphase electrically symmetrical closed ring, tappings from said windings an equal number of turns apart and located so that some of the turns at the adjacent ends of each phase winding lie between two consecutive tappings, a stationary commutator, and connections from consecutive tappings to consecutive sections of said commutator respectively.

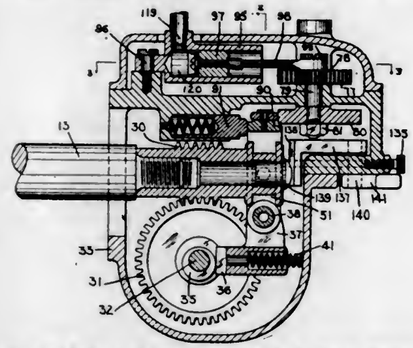
1,808,400. LAMP HOLDER. CARL F. CAPELL, Santa Monica, Calif., assignor of one-fourth to Herbert Gutler Brown, Los Angeles, Calif. Filed Apr. 4, 1929. Serial No. 352,520. 2 Claims. (Cl. 177—329.)

2. In a lamp holder, the combination of a casing having an entrance opening at its top for the passage therein of circuit connections, said casing being formed in its bottom with a recess, a resilient holder element conforming in contour to, positioned within and snugly engaging the top, bottom and one side of said casing, the bottom of said element extending across said recess and provided with an opening, the top of said element being formed with a pair of oppositely extending, spaced flanges, the space between said flanges registering with the inner end of said passage, and a vertical lamp socket integral with and depending below the bottom of said element and arranged adjacent said opening, the space between said flanges and said opening providing for the passage of said circuit connections into said recess and into the bottom



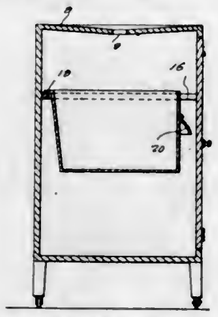
of said lamp socket, each of said flanges having an inturned inner end disposed at an inclination, said inturned ends extending at opposite inclinations with respect to each other.

1,808,401. GRINDING MACHINE. JOHN COOK, Syracuse, N. Y., and JOHN C. SPENCE and RAYMOND A. COLE, Worcester, Mass., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1928. Serial No. 246,237. 18 Claims. (Cl. 51—34.)



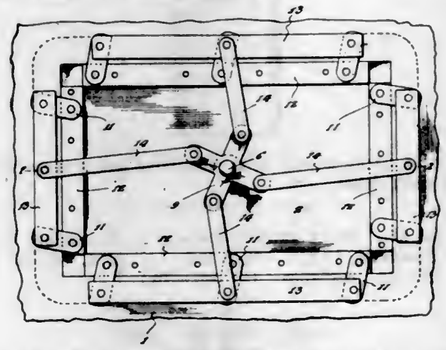
1. A grinding machine comprising a work support, a wheel slide mounted for feeding movement towards the work, a grinding wheel thereon, a rotatable, axially movable spindle to support said grinding wheel, manually operable means to move said spindle axially to locate the grinding wheel in a predetermined grinding position, and automatically operated mechanism to move said spindle axially in the opposite direction to remove the grinding wheel from said grinding position.

1,808,402. FERN STAND. SELEANA L. COOPER, Charlottesville, Va. Filed May 15, 1930. Serial No. 452,694. 1 Claim. (Cl. 47—39.)



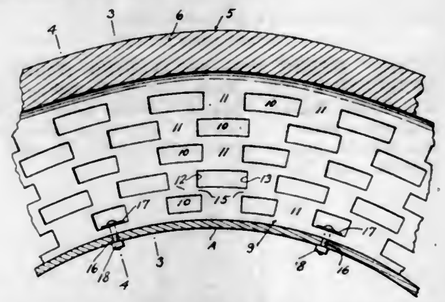
A device of the class described comprising a cabinet, hinge doors for the cabinet, ribs in the cabinet, a drain pan having flanges restable on said ribs, the top of the cabinet having an opening, said top of the cabinet inclining downwardly and inwardly toward its center and the opening being formed in said center.

1,808,403. LATCHING MEANS FOR REMOVABLE CRANK CASE COVERS. AXEL A. EKLUND, Mount Vernon, Wash. Filed Apr. 19, 1928. Serial No. 271,285. 2 Claims. (Cl. 292—48.)



1. A readily removable and replaceable crank case cover having an opening and an integral boss and guard upon opposite sides in line with the opening, the edge of the guard being provided with a plurality of notches, a spindle mounted in the boss and extending through the guard and formed with an opening to receive a cotter pin which is engageable with selected notches of the guard to secure the spindle in an adjusted position, and latch means on the cover connected with the spindle to be operated thereby.

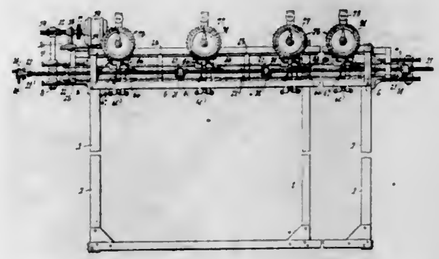
1,808,404. CUSHION TIRE. JOHN J. FREERKSEN, Steamboat Rock, Iowa, assignor of one-fourth to D. Claassen, Wellsburg, Iowa. Filed May 13, 1929. Serial No. 362,524. 1 Claim. (Cl. 152—5.)



A cushion tire composed of a ring of compressible elastic material provided with a series of radially alined openings elongated circumferentially of the ring and extending transversely of the tire from side to side with the openings of adjacent series in staggered and overlapping relation, alternate series of radially alined openings being shortest at the inner circumference of the tire and progressively increasing in elongation as they approach the "tread" of the tire and the intermediate series of radially alined openings being substantially of the same length.

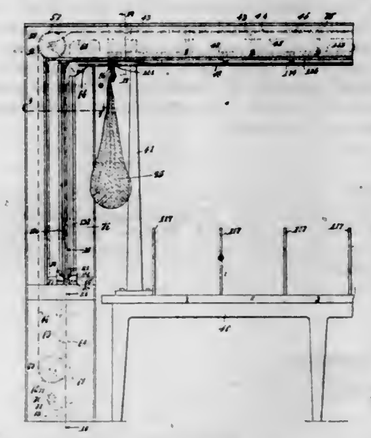
1,808,405. LAUNDRY CHECKING AND ASSEMBLING APPARATUS. EPHRAIM L. HURD, Oklahoma City, Okla., assignor to Alexander Gammell, Chicago, Ill. Filed Sept. 1, 1927. Serial No. 216,914. 14 Claims. (Cl. 209—80.)

1. Apparatus of the character described comprising carriers, means to mount laundry pieces on the carriers, receiving racks, and means to deposit complementary laundry pieces onto certain racks, said racks each comprising a fixed portion, a movable portion normally out of position but movable into position at the proper time to receive a laundry piece from a certain carrier, and means



to release the laundry piece from the certain carrier and move the said movable rack portion into position to receive it, and key positioned means carried by the carrier to actuate said releasing and moving means for the purposes specified.

1,808,406. SORTING AND DISTRIBUTING MACHINE. ALEXANDER GAMMELL, Chicago, Ill. Filed Apr. 12, 1928. Serial No. 269,384. 25 Claims. (Cl. 209—80.)

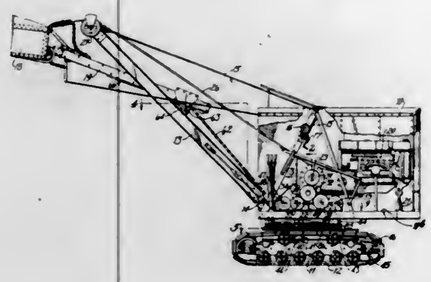


1. A sorting machine comprising, in combination, a conveyor, a plurality of carrier members secured to and adapted to be conveyed by said conveyor, a plurality of distributing stations, a tripping device for each distributing station, a plurality of article identification and attaching members bearing group indicia and station indicia, a plurality of group keys, and loading means adapted to engage one of said group keys, each group key adapted to permit engagement only of article attaching members of a corresponding group.

1,808,407. WRAPPING PAPER FOR THE INSULATION OF ELECTRIC CABLES. CARL AUGUST HAANEN, Cologne-Mulheim, and HANS MEURER, Cologne, Germany, assignors to Felten and Guilleaume Carlswerk Actien Gesellschaft, Cologne-Mulheim, Germany. Filed July 7, 1925, Serial No. 42,104, and in Germany Dec. 27, 1924. 1 Claim. (Cl. 92—68.)

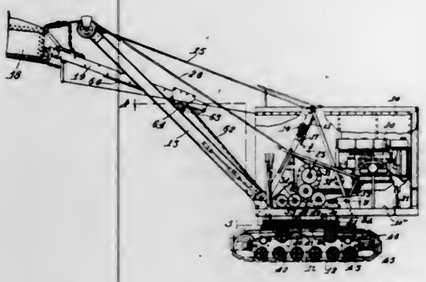
A method of increasing the resistance to puncture of wrapping paper for insulating electric cables which consists in subjecting the paper to a pressure which increases the density of the paper above .90 and still retains the necessary tensile strength for wrapping the conductor.

1,808,408. EXCAVATOR APPARATUS. CLIFFORD O. HANSON, Tiffin, Ohio. Filed Dec. 21, 1927. Serial No. 241,567. 7 Claims. (Cl. 214—135.)



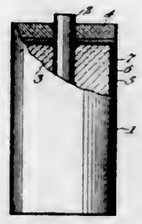
1. An excavator of the character described comprising; a chassis mounted on traction members; a platform rotatably mounted on the chassis; a boom pivotally connected to the platform; a dipper suspended from the end of the boom by a rope; a handle on the dipper with a rack bar; a crowd pinion on the boom engaging the rack bar on the dipper handle; an internal combustion motor power unit mounted on the platform having its longitudinal axis disposed in the same general direction as the boom and with a transverse drive shaft; said drive shaft being located at the end of said power unit nearest said boom a winch on one end of said drive shaft carrying the dipper rope; and drive connections from the other end of said drive shaft to move the traction members to propel the excavator, to operate the crowd pinion, and to rotate the platform on the chassis.

1,808,409. EXCAVATING APPARATUS. CLIFFORD O. HANSON, Tiffin, Ohio. Original application filed Dec. 21, 1927, Serial No. 241,567. Divided and this application filed Nov. 4, 1929. Serial No. 404,674. 1 Claim. (Cl. 180—92.)



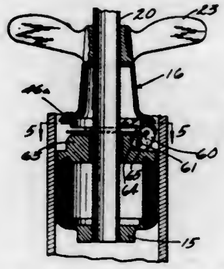
In an excavator of the character described; a chassis mounted on traction members, a platform rotatably mounted on the chassis; a motor mounted on the platform; disengageable drive connections between the motor and traction members on both sides of the chassis, including clutches normally in engagement; a cross-shaft slidably mounted on the chassis; connections between said cross-shaft and the clutches whereby shifting to either side will disengage the corresponding clutch; means for rotating the platform on the chassis; and means for shifting the cross-shaft by rotating the platform, said means including a part on the shaft and a part on the platform, said parts adapted to be moved so they will engage upon rotation of the platform.

1,808,410. DRY CELL AND LINING THEREFOR. GEORGE W. HEISE, Bayside, and ERWIN A. SCHUMACHER, Brooklyn, N. Y., assignors to National Carbon Company, Inc., a Corporation of New York. Filed June 11, 1924. Serial No. 719,416. 6 Claims. (Cl. 136—131.)



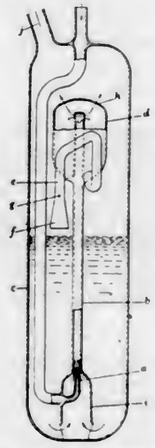
3. A lining for dry cells comprising one or more layers of kraft paper.

1,808,411. PIPE PLUG. DONALD R. HINKSTON, South Pasadena, Calif. Filed May 14, 1928. Serial No. 277,454. 6 Claims. (Cl. 137—76.)



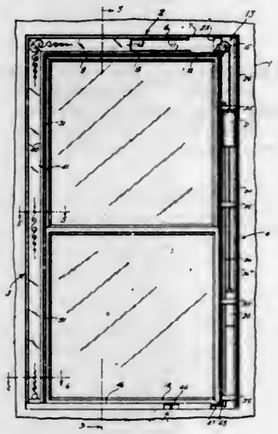
1. In a pipe plug the combination of: a base member; a plurality of jaws pivotally mounted on said base member and movable into engagement with said pipe; a sealing means adjacent said base member; and clamping means for simultaneously moving said jaws and said sealing means into engagement with said pipe.

1,808,412. MEANS FOR DELIVERING GASES AT MEASURED RATES. FRED HOWLES, Broughton Park, Manchester, England, assignor to Royles Limited, Irlam, England, a British Company. Filed Aug. 1, 1929, Serial No. 382,823, and in Great Britain Sept. 13, 1928. 6 Claims. (Cl. 73—167.)



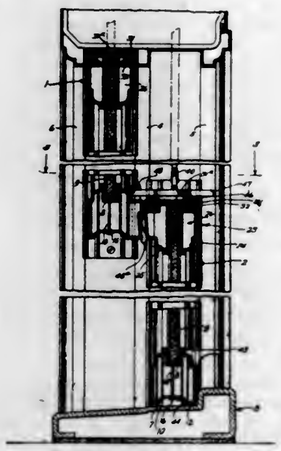
2. An apparatus for delivering a gas at a measured rate, comprising the combination with a tube up which liquid is raised by the gas which is delivered into the liquid in said tube, of a vessel receiving the raised liquid from said tube, a siphon upon said vessel to draw off the liquid when it attains a predetermined height, and means receiving the gas used in raising the liquid and which separates from the latter.

1,808,413. WINDOW FRAME. ROY T. HURLEY, Dobbs Ferry, and WILLIAM J. CAREY, Brooklyn, N. Y., assignors to General Bronze Corporation, Long Island City, N. Y., a Corporation of New York. Filed Dec. 8, 1930. Serial No. 500,908. 12 Claims. (Cl. 189—75.)



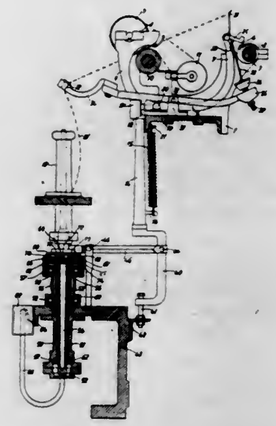
1. In a window frame, in combination, a hollow sheet metal jamb and a weight guide frame insertable as a unit in the jamb and welded thereto.

1,808,414. WINDOW CONSTRUCTION. ROY T. HURLEY, Dobbs Ferry, and WILLIAM J. CAREY, Brooklyn, N. Y., assignors to General Bronze Corporation, Long Island City, N. Y., a Corporation of New York. Filed Dec. 8, 1930. Serial No. 500,909. 13 Claims. (Cl. 189—76.)



1. A one piece sheet metal stile or rail tubing for windows, having a pane seat at one side thereof, and having a longitudinal, channel-shaped depression formed in the opposite side, the longitudinal edges of the sheet being brought together in said depression, and a weld seam uniting said edges.

1,808,415. TWISTING MACHINE. José JULIÁ, Barcelona, Spain. Filed Jan. 5, 1929, Serial No. 330,582, and in Spain Oct. 10, 1928. 7 Claims. (Cl. 118—40.)



1. A driving mechanism for the spindles of twisting machines for twisting threads, permitting freedom of lateral inclination to the said spindle, comprising a supporting sleeve for the said spindle, a driving element rotatably mounted upon the said supporting sleeve, a bearing sleeve in which the spindle is rotatably mounted, said bearing sleeve being capable of lateral inclination in the said supporting sleeve, and a coupling between the said spindle and the said driving element comprising coupling plates partly carried by said spindle and partly engaged by said driving element, the said engagement permitting inclination of the axis of the spindle relatively to the axis of the driving element, substantially as hereinbefore described.

1,808,416. TRACTION BELT ATTACHMENT. DONALD STUART KENNEDY, Andover, England. Filed Dec. 2, 1929, Serial No. 411,115, and in Great Britain Mar. 8, 1929. 2 Claims. (Cl. 305—10.)



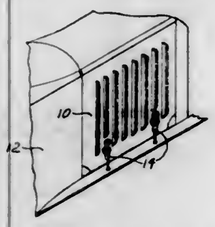
2. In a traction belt attachment for road vehicle wheels and of the kind in which transverse shoes are spaced from adjacent shoes by pivoted connecting links, a composite shoe comprising a central flexible section and two lateral rigid sections, said sections overlapping and being secured together at their adjacent edges, said lateral sections including outer members having means for pivoting the said connecting links thereto, and inner members extending between said outer members and said central flexible section, said inner members being convex towards the tire on which said shoe engages, the ends of said inner and outer members remote from the said central section being secured together and flared outwardly, and said flexible section extending into the space between the other ends of said inner and outer members.

1,808,417. CLOTHES PEG USABLE FOR OTHER PURPOSES. VIOLET ISABELLA MAY LANGAN, Brisbane, Australia. Filed Oct. 1, 1930. Serial No. 485,756. 3 Claims. (Cl. 24—137.)



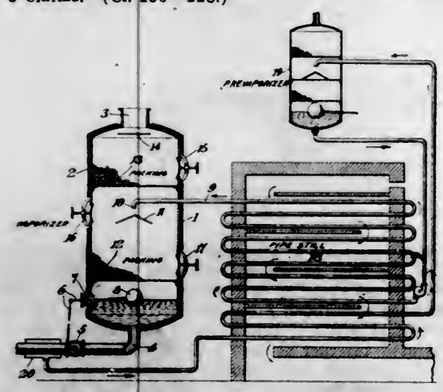
3. An improved clothes peg usable for other purposes consisting of wire formed into double joined coils spaced at the bottom, and an inverted U-shaped grip placed between said coils and having its free ends of its arms wrapped about the bottoms of the coils, as and for the purposes herein set forth.

1,808,418. BUFFER. ROGER K. LEE, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 11, 1928. Serial No. 298,941. 10 Claims. (Cl. 180—69.)



1. A corner buffer comprising a body portion having tongues extending upwardly therefrom, rubber moulded around the entire surfaces of said body portion and its tongues, and an inwardly extending flange on at least two edges of said buffer adapted to form a recess for the reception of a part to be protected.

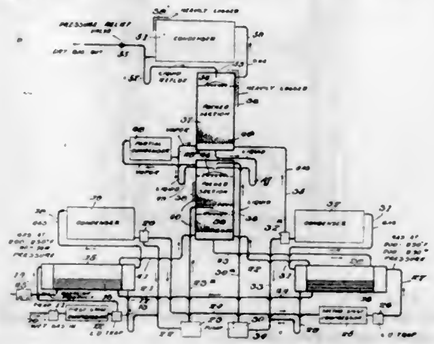
1,808,419. VAPORIZER AND PROCESS OF VAPORIZATION. EUGENE H. LESLIE and EDWIN M. BAKER, Ann Arbor, Mich. Filed Mar. 20, 1923. Serial No. 626,273. 6 Claims. (Cl. 196—128.)



1. In apparatus for the treatment of mineral oils the combination of heating means, a vaporizing chamber into which said heating means is arranged to deliver heated oil, a mass of packing material arranged below the liquid inlet in said chamber and providing extensive filming surfaces for rapidly attaining equilibrium between said liquid and the vapor flashed therefrom, said chamber being provided with outlets for exit of vapors and liquid, and means cooperating with said heating means for removing components more volatile than gasoline before the main body of oil is delivered into said vaporizing chamber.

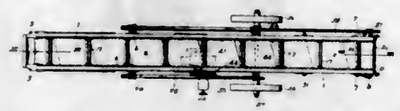
4. The process of obtaining valuable products from a petroleum oil, which comprises initially heating a petroleum oil to substantially eliminate therefrom components more volatile than gasoline, superheating the residual oil in a pipe still to a temperature insufficient to cause cracking, discharging the superheated oil upon a mass of packing affording extensive filming surface and also providing a large percentage of its volume as free space for vapor, whereby relatively volatile constituents of said oil are flashed off and equilibrium between the resultant vapors and liquid is rapidly established, and separately conducting away said vapors and liquids.

1,808,420. PROCESS OF AND APPARATUS FOR SEPARATING DESIRED LIQUEFIABLE CONSTITUENTS FROM A GASEOUS MIXTURE. EUGENE H. LESLIE and EDWIN M. BAKER, Ann Arbor, Mich. Filed Nov. 22, 1924. Serial No. 751,572. 15 Claims. (Cl. 196—7.)



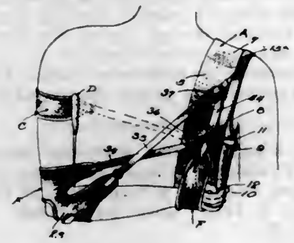
1. The process of obtaining a valuable liquid product from gaseous mixtures containing components of such liquid product, which comprises subjecting successive quantities of such a gaseous mixture to compression in a continuous operation, thereby obtaining a hot compressed gaseous mixture and a liquid compression condensate, said compression condensate comprising components of the original gaseous mixture which are normally liquid together with undesirable volatile components, bringing said hot compressed gaseous mixture into heat-transferring relation with an intermediate liquid product more nearly approximating in composition the desired final liquid product than does the aforesaid compression condensate, whereby to volatilize a portion of said intermediate liquid product, countercurrently contacting the resultant hot vapors with the aforesaid compression condensate to reduce its content of relatively highly volatile components and to obtain said intermediate liquid product, and leading away the unvaporized portion of said intermediate product as a product of the process.

1,808,421. LOADING MACHINE. WILLIAM K. LIGGETT, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 8, 1924. Serial No. 730,950. 22 Claims. (Cl. 198—204.)



1. In a machine of the class described, the combination with a supporting frame consisting of two parallel spaced apart vertically rigid side members joined by a series of smooth flat plates of rhomboidal form and constituting a trough, the inclined edges of said rhomboidal plates being arranged transversely of said trough, and means carried by said frame to propel material along said trough.

1,808,422. CLAVICLE APPARATUS. WILLIAM C. MACDONALD, Malden, Mass. Filed Jan. 5, 1928. Serial No. 244,686. 7 Claims. (Cl. 128—94.)



1. In a clavicle apparatus, the combination with a half-vest adapted for application to the side of the patient opposite the broken clavicle, said half-vest including front and rear side portions and a connecting shoulder portion, and adjustable straps connecting said front and rear side portions along the lower portions of their edges at the outer side to form an arm opening, an inverted U-shaped metal bow attached to the half-vest and positioned over the patient's shoulder and engaging the body of the patient at front and back with its free ends to relieve the half-vest fitted shoulder of support pull, means for retaining the half-vest against movement while in position, and means engaging the arm of the patient on the injured side and adjustably connected at fixed points to the half-vest for supporting and retaining the injured shoulder in a plane higher than the other shoulder.

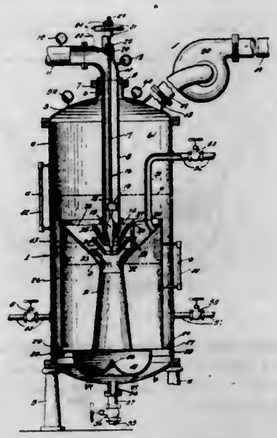
1,808,423. WEATHER STRIPPING. LOUIS A. MACKLANBURG, Oklahoma City, Okla. Filed Apr. 17, 1930. Serial No. 445,003. 6 Claims. (Cl. 20—69.)



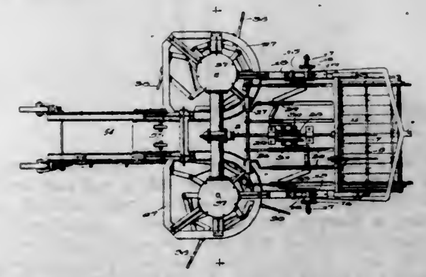
1. A flexible weather strip comprising in combination a packing strip and a reenforcement strip, the reenforcement strip engaging one face of the packing strip and provided with teeth bent around one edge of the packing strip and engaging its other face.

1,808,424. STEAM PURIFYING APPARATUS. RICHARD G. MANIFOLD, Los Angeles, Calif., assignor to The Frontier Development Company, Los Angeles, Calif., a Corporation of Nevada. Filed June 27, 1928. Serial No. 288,708. 4 Claims. (Cl. 122—459.)

1. A steam-purifying apparatus comprising a receptacle adapted for receiving and condensing steam therein; means for supplying water to the receptacle; means providing a water circuit within said receptacle; means for leading steam into the receptacle and for injecting the steam into the water circuit so that the steam is absorbed and condensed by the water; flow restraining means within the circuit enabling the steam to build up a superior pressure on the steam inlet side of said restraining means, whereby the water on said inlet side may be raised to a temperature approximating that of the incoming steam, and whereby said heated water in part flashes into steam on passing said restraining means; means for leading said last mentioned steam from the receptacle; means for collecting and for maintaining under pressure in the receptacle and separately from the incoming and the purified steam such non-condensable gases as are carried into the water circuit; and means for leading the non-condensable gases from the receptacle.



1,808,425. BALING PRESS. LLOYD MARKT, Oregon, Mo. Filed July 7, 1930. Serial No. 466,285. 5 Claims. (Cl. 100—25.)

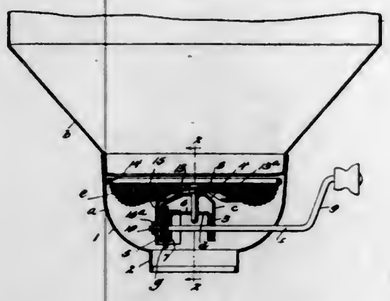


4. A baling press comprising in combination, means for receiving material to be baled and means for compressing such material, said compressing means comprising a plurality of rotary elements, each provided with a plurality of pressing plates, said plates being mounted axially of the elements and being dually connected to the axis, the dual connection of the plates including a radial rod and an arm connecting the same to the plate adapted to exert a thrust thereon and including also a toggle connection between the plate and another radial connection whereby to effect a sweeping movement of the first plate in a direction substantially normal to the cam track during its compressing stroke while permitting an angular withdrawal of the plate upon the completion of that stroke.

1,808,426. SIFTER FOR FLOUR, ETC. ORA N. MCCORMICK, Albany, Ind., assignor to McCormick Brothers Company, Albany, Ind., a Corporation of Indiana. Filed Oct. 30, 1930. Serial No. 492,822. 4 Claims. (Cl. 209—275.)

1. In a sifter, a casing, a support therein having two spaced vertically arranged parts at one side of the vertical axis of the casing, a horizontally arranged shaft

having a threaded end extending through said parts, a star wheel between said parts and threaded on to said shaft, a sifter basket having a central depending pin journaled in said support, and a tappet member depending



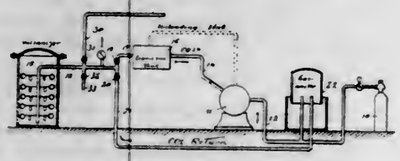
from the basket and having a transverse slot into which the end of the shaft extends and having also flanges at opposite sides of the shaft adapted to be engaged by the points on the star wheel.

1,808,427. COMPARTMENT TANK CONSTRUCTION. WALTER C. MCGAFFIC, Buffalo, N. Y. Filed Dec. 7, 1929. Serial No. 412,458. 6 Claims. (Cl. 220—20.)



1. In a compartment tank, in combination, two or more tubular members arranged end to end and forming walls of tank compartments, and a single bulkhead plate forming a common wall for adjacent compartments, a peripheral portion of said plate being interposed between adjacent ends of two tubular members and permanently fastened and sealed to each of said members, whereby any leakage occurring through the joint between either tubular member and the bulkhead plate will pass to the outside of the tank.

1,808,428. PROCESS OF CURING TIRES AND THE LIKE. HENRY R. MINOR, Ossining, N. Y., assignor, by mesne assignments, to The Liquid Carbonic Corporation, a Corporation of Delaware. Filed June 24, 1927. Serial No. 201,037. 6 Claims. (Cl. 18—53.)

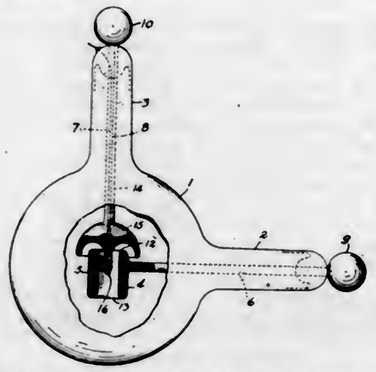


2. The method of curing rubber articles which comprises placing an expansible bag adjacent said articles, then filling said bag with carbon dioxide to produce initial pressure and backing up said initial pressure by steam.

1,808,429. METHOD OF REGULATING AND MAINTAINING HEAT TRANSFER. HENRY R. MINOR, Ossining, N. Y., assignor, by mesne assignments, to The Liquid Carbonic Corporation, a Corporation of Delaware. Filed Feb. 7, 1928. Serial No. 252,676. 30 Claims. (Cl. 18—53.)

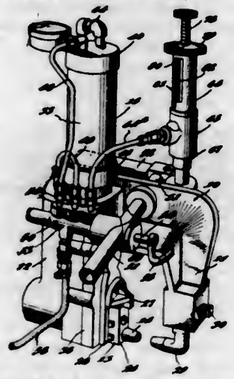
3. The method of establishing a heated medium for heat transfer which comprises supplying a fluid to an enclosed receptacle and supplying a heated fluid at a higher pressure to said receptacle, shutting off the supply of said fluid and maintaining the supply of heated fluid whereby the pressure of the heater fluid and the pressure of the first fluid together with the pressure resulting from the expansion of the first fluid through contact with the heated fluid equals the maximum pressure supplied to the receptacle, and preascertaining the pressure of the first fluid to obtain the desired temperature within the receptacle.

1,808,430. X-RAY TUBE. MONTFORD MORRISON, New York, N. Y., assignor, by mesne assignments, to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 9, 1922. Serial No. 559,569. 16 Claims. (Cl. 250—35.)



11. An electrical discharge device comprising an envelope having a gas pressure therein greater than .6 of a micron, electrodes comprising a thermionic electron-emitting cathode consisting of a refractory metal wire and an anode within said envelope, the electrodes being spaced apart a distance less than the electrode distance at which a detrimental amount of positive ionization will occur with a given gas pressure and applied voltage, the positive ions playing no essential role in the operation of the device.

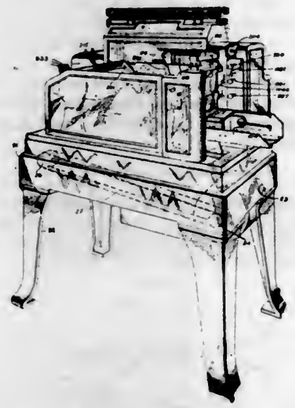
1,808,431. RIVETING APPARATUS. RAYMOND S. OSBORNE, Sewickley, Pa. Filed Oct. 18, 1928. Serial No. 313,348. 8 Claims. (Cl. 78—36.)



3. A device of the class described, comprising, a body providing a pair of jaws, a stationary die in one of said

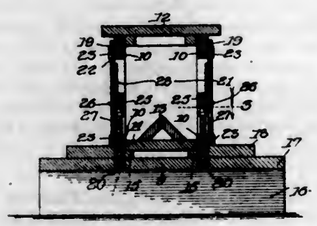
jaws, a screw plunger in the other jaw carrying a movable die, a nut engaging said plunger, a gear formed on said nut, a train of gears having one end gear meshing with the gear on the nut, a rack engaging the other end of the train, an air cylinder, a piston therein in connection with said rack, a throttle valve for alternately connecting a main air line with the drive and reverse ends of the cylinder, said throttle valve having a control pressure chamber therein, and an unloader valve in connection with the driving side of the main air cylinder and with the pressure chamber in the throttle valve, whereby the throttle valve is moved for a reversing of the main driving piston as the unloader valve acts under a predetermined pressure in the driving side of the cylinder.

1,808,432. ACCOUNTING MACHINE. JOHN ROYDEN PEIRCE, New York, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 24, 1923. Serial No. 682,865. 99 Claims. (Cl. 235—58.)



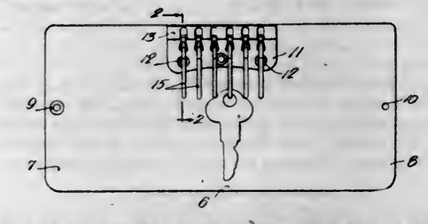
75. In a card controlled tabulating machine, in combination, means for automatically successively feeding record cards through the machine, means controlled by the cards thus fed for analyzing the cards for determining whether numbers represented in a field of a card shall be accumulated or their complements accumulated, and means for accumulating the numbers or their complements.

1,808,433. FEED STRUCTURE. JOHN G. POORMAN, Tinley Park, Ill. Filed Dec. 2, 1929. Serial No. 411,127. 14 Claims. (Cl. 119—61.)



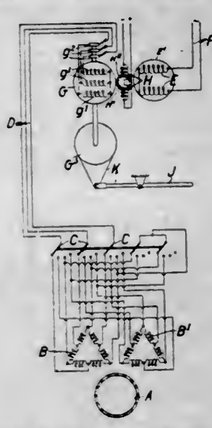
1. In combination with a feed receptacle, a barrier structure comprising elements arranged to present openings through which the heads of chickens may be projected into the feed receptacle, said elements being relatively adjustable individually to vary the size of said openings.

1,808,434. KEY CASE. GEORGE E. PRENTICE, Berlin, Conn., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Aug. 1, 1930. Serial No. 472,284. 2 Claims. (Cl. 150—40.)



1. In a key case, an anchor member consisting of a split metal rivet having its legs shaped to enclose an eye opening for the reception of a key hanger.

1,808,435. CONTROLLING SYSTEM FOR POLYPHASE ALTERNATING CURRENT MOTORS. FRANKLIN PUNGA, Eberstadt, near Darmstadt, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Apr. 20, 1927, Serial No. 185,840, and in Germany May 10, 1926. 3 Claims. (Cl. 172—274.)



1. A controlling system for polyphase alternating current motors comprising a polyphase alternating current motor, a source of single phase alternating current and a frequency-changer interposed between the motor and the source of alternating current, said frequency-changer consisting of a primary element carrying a winding connected to said source of alternating current, a secondary element carrying a polyphase winding connected to said polyphase motor, one of said elements being rotatable relatively to the other, an auxiliary rotor concentrically arranged relatively to said primary and secondary element and carrying a short-circuited winding and an exciting one, and means interposed between the primary and secondary element for controlling at will the relative angular speed of said elements between zero and the speed of synchronism.

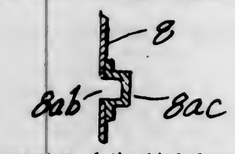
1,808,436. LINGERIE CLASP. LAURA V. ROONEY, Washington, D. C. Filed Mar. 3, 1931. Serial No. 519,856. 3 Claims. (Cl. 24—73.)



3. The hereindescribed lingerie clasp, consisting of a flexible body member, a pin having at one end a loop into

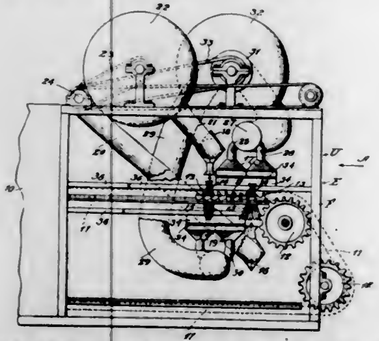
which an end of the flexible body member is linked, a member including a head having an opening and provided with a loop into which the other end of the body member is linked, and also including a sleeve projecting from the outer end of the head and provided with a flange at its free end, means carried by said flange and movable into and out of holding engagement with the pin adjacent the pointed end, a barrel slidably mounted relatively to said means and having one end adapted to exert pressure on the same to thereby force said means into holding engagement with the pin, and a tensioning spring mounted upon the sleeve and between said flange and the other end of the barrel, for holding said barrel normally in the position in which it exerts pressure on said pin engaging means.

1,808,437. CONTINUOUS-STATIONERY APPARATUS. MARCUS S. ROOSEVELT, Detroit, Mich., assignor to The Hamilton Autographic Register Co., Hamilton, Ohio, a Corporation of Ohio. Filed July 22, 1929. Serial No. 379,921. 5 Claims. (Cl. 197—133.)



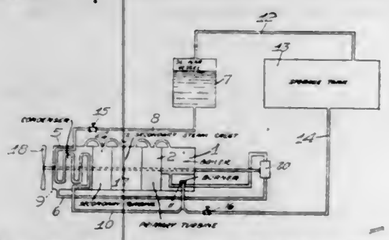
1. In an apparatus of the kind described, means for automatically preventing retraction of the strips and means dependent upon the integrity of a strip for preventing the operation of said automatic means.

1,808,438. TOBACCO CLEANING MACHINE. LEWIS R. SAMMETH, Goldsboro, N. C. Filed Oct. 16, 1930. Serial No. 489,150. 8 Claims. (Cl. 131—60.)



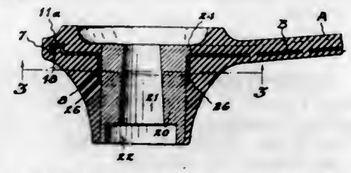
7. In a method of treating tobacco hands, the step of directing a blast of air endwise into the leafy ends of the hands to separate the leaves and blow out dust.

1,808,439. AIRCRAFT POWER GENERATING SYSTEM. CONSTANTINE A. SERRIADES, Chicago, Ill. Filed Sept. 19, 1927. Serial No. 220,576. 2 Claims. (Cl. 60—95.)



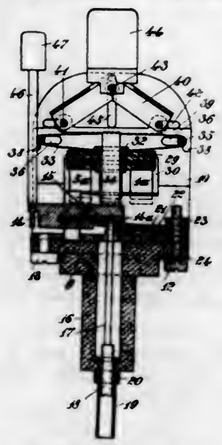
1. A power generating system for aircraft comprising a motor, a boiler for vaporizing liquid to drive the motor, a condenser for condensing the exhaust vapor from the motor, a source of liquid hydrogen, means within the condenser for subjecting the liquid hydrogen to the heat of the exhaust vapor, whereby the hydrogen is vaporized and the exhaust vapor is condensed to liquid form, and means for conveying the vaporized hydrogen to the burner.

1,808,440. STEERING WHEEL. DAVID W. THOMAS, Youngstown, Ohio, assignor to The Niles Steel Products Company, Niles, Ohio, a Corporation of Ohio. Filed May 13, 1929. Serial No. 362,675. 5 Claims. (Cl. 74—33.)



1. In a steering wheel, a spider comprising integrally united rim, spokes and hub annulus, a depending polygonal flange integral with said hub annulus and defining the central opening thereof, and a separately formed polygonal hub member tightly telescoped with said flange, the intersecting faces of said hub member being rounded for a portion of their length to form overlying portions, said overlying portions having engagement with said hub annulus to insure axial alignment of said hub member with said spider.

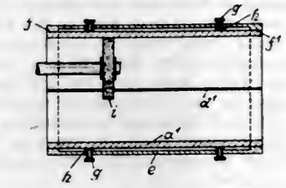
1,808,441. ELECTROMAGNETIC AUTOMATIC CIRCUIT BREAKER. HANS TRINKL, Augsburg, Germany. Filed Aug. 19, 1929, Serial No. 387,072, and in Germany Sept. 7, 1928. 14 Claims. (Cl. 200—88.)



1. An automatic circuit breaker of the type described comprising an electro-magnetic trip device and a breaking mechanism adapted to be actuated thereby, said trip device comprising a coil and an armature, said coil being formed by a plurality of contacts of said trip device which are interconnected when the circuit breaker is in closing position.

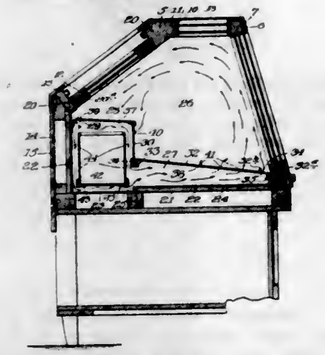
1,808,442. METHOD OF MANUFACTURING CYLINDRICAL PLATES OF GLASS OR A SIMILAR MATERIAL FOR USE IN CONNECTION WITH POLYGRAPHIC APPARATUS. RUDOLPH WEIDE, Berlin, Germany. Filed Sept. 11, 1929, Serial No. 391,922, and in Germany Mar. 6, 1928. 5 Claims. (Cl. 51—278.)

1. The method of manufacturing cylindrical plates of glass or a similar material for use in connection with polygraphic apparatus, consisting in cementing the circularly curved plate to a cylindrical drum; grinding it preliminarily on its outer circumferential surface; introducing the plate into a cylinder, the internal diameter of



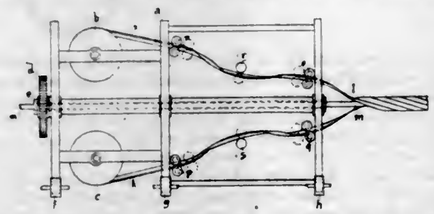
which corresponds to the curvature of the plate; grinding the inner surface of the said plate to the accurate measure; attaching the plate to a drum; grinding facettes on its frontal ends, and finally grinding also the outer surface of the said plate to the accurate measure.

1,808,443. REFRIGERATED COUNTER. WILLIAM C. WHITCHER, Niles, Mich., assignor to The "Dry-Kold" Refrigerator Co., Niles, Mich., a Corporation of Michigan. Filed Dec. 5, 1927. Serial No. 237,730. 13 Claims. (Cl. 62—37.2.)



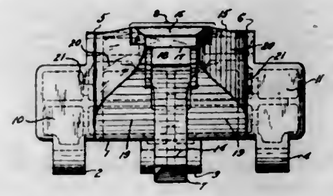
1. A refrigerator structure comprising a compartment for the articles to be refrigerated, a second compartment extending along the underside of said first-named compartment with its forward portion vertically constructed, a refrigerating medium located in the rear portion of said second compartment below said first-named compartment and spaced from walls of said compartment, the top of said second compartment being apertured at its front and rear portions to afford communication between said compartments.

1,808,444. MANUFACTURE OF WIRE CABLES. GEORG ZAPF, Cologne, Germany, assignor to Felten & Guilleaume Carlswerk Actien-Gesellschaft, Koln-Mulheim, Germany. Filed Dec. 8, 1927, Serial No. 238,690, and in Germany Dec. 13, 1926. 2 Claims. (Cl. 117—20.)



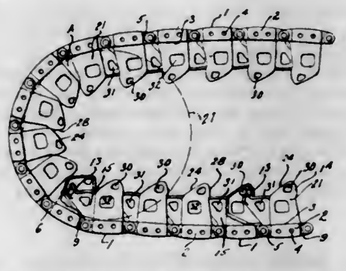
1. A laying machine for the manufacture of wire cables from wires of non-circular section comprising in combination a rotatable bobbin frame, a plurality of bobbins journalled therein, means for guiding the wires from said bobbins to the laying point comprising two pairs of rollers mounted in the bobbin frame so as to lie along the path of each wire coming from a bobbin and to revolve with said frame for twisting the wires about their axes, means on said frame interposed between the bobbins and the laying point for bending the wires, and means for adjusting the said pairs of rollers with respect to one another, as and for the purposes set forth.

1,808,445. TREAD LINK. ARTHUR P. ARMINGTON, Willoughby, Ohio, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed Sept. 21, 1928. Serial No. 307,358. 3 Claims. (Cl. 305—10.)



1. A tread link for the purpose described and having a ground-engaging shoe portion and a pair of integral beam-forming members upstanding therefrom, one of said beam-forming members being arched and arranged in straddling relation with a base portion of the other beam-forming member.

1,808,446. ENDLESS TREAD LINKAGE. ARTHUR P. ARMINGTON, Willoughby, Ohio, assignor to The Euclid Crane & Hoist Company, Euclid, Ohio, a Corporation of Ohio. Filed July 1, 1929. Serial No. 375,103. 2 Claims. (Cl. 305—10.)

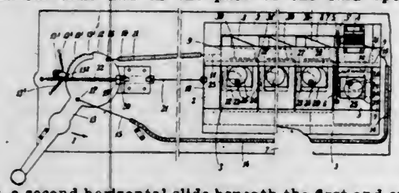


1. In a tread link of the class described and having a ground-engaging shoe portion with hinge lugs extending from its ends, and beam-forming portions extending upwardly and comprising hook and arch members, whereby an endless tread may be formed of a number of said links connected by hinge pins, said tread having bends and beam-forming stretches, the hook and arch members of said link having longitudinal side walls, the walls of the hook member being offset from those of the arch member whereby the hook of each link of said tread may extend between the side walls of the arch of the adjacent link, the side walls of the hook member extending within the arch member and to the hinge-pin-receiving lugs upon the opposite end of the shoe.

1,808,447. KEY CONTROL FOR LIQUID REGISTERS. OTTO ASPER, Horgen, near Zurich, Switzerland, assignor to the Firm Sauser A. G., Soleure, Switzerland, a Corporation of Switzerland. Filed Nov. 22, 1929, Serial No. 409,103, and in Switzerland and Germany Nov. 28, 1928. 3 Claims. (Cl. 235—94.)

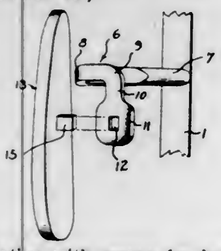
1. In the key-board of a controlling device for retailing liquids from a measuring apparatus provided with individual counters and keys for a plurality of buyers, in combination, a framing, a plurality of counters mounted there-

on, operating arms projecting from said counters into said framing, a horizontal slide guided in said framing and adapted to engage the operating arms of the counters, vertical slides slidably arranged in the frame above the horizontal slide and in the path of the said operating



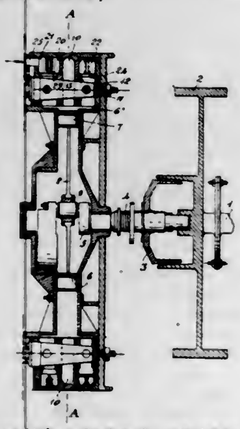
arms, a second horizontal slide beneath the first and capable of serving as locking member of the vertical slide, locks mounted on the frame and intermediate operating members associated with the locks and the slides as means for moving said locking member.

1,808,448. OPHTHALMIC MOUNTING. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed May 23, 1930. Serial No. 454,994. 5 Claims. (Cl. 88—49.)



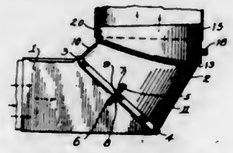
1. In combination with means for holding a pair of lenses before the eyes, an arm portion secured to each lens holding member, substantially at the horizontal meridian thereof, and extending rearwardly to a looped portion in said horizontal meridian and terminating in a downwardly extending end having an opening therein, anchor means in the opening and a nose pad secured by the anchor means to the arm portion, the securing point of said pad and arm portion being in a different plane from the said securing point of the arm portion to the lens holding means.

1,808,449. SPEED CHANGING DEVICE FOR MOTOR CARS. ROCCO BELLANTONI, Rome, Italy. Filed July 27, 1929, Serial No. 381,634, and in Italy July 27, 1928. 1 Claim. (Cl. 103—174.)



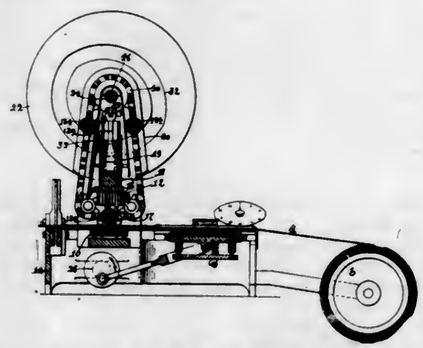
A power transmitting device for variable speed mechanisms including a plurality of compressing cylinders, pistons movable in said cylinders, a shaft, a collar on the shaft, radially disposed rods connecting the collar with the pistons, circumferential conduits arranged in parallel relation, and three-way plugs arranged in said conduits permitting the passage of fluid from one conduit to the other to permit the free circulation of fluid or the compression thereof, there being three separate circumferential channels in communication with the cylinders through the plugs, the plugs having three ports and the intermediate port corresponding to the middle circumferential conduit, the two other ports of the plugs corresponding with the other two circumferential channels, the first mentioned port being disposed perpendicularly with relation to the second mentioned ports.

1,808,450. UNIVERSAL SHOE OR RECEIVING BOX FOR FURNACE WORK. SAMUEL PAUL BURGESS, Rock Island, Ill., assignor to Rock Island Register Company, Rock Island, Ill. Filed Jan. 19, 1928. Serial No. 247,974. 1 Claim. (Cl. 285—97.)



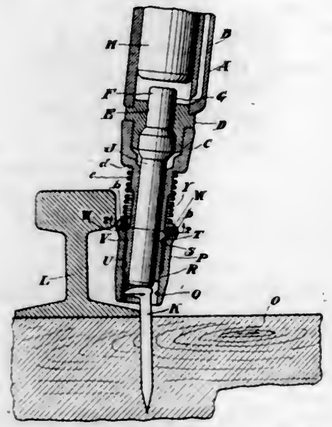
An adjustable elbow for pipes comprising an intermediate section and end sections, one end of said intermediate section and the adjacent end of one end section being rectangular and provided, the one with a flange removably telescoping upon a similar flange of the other, whereby the flanged ends may be relatively reversed, said intermediate section and said flanged end section having disassembleable adjusting means by which the telescopic flanges may be drawn together or the adjusting means disassembled for reversing the relation of said sections.

1,808,451. PRINTING MACHINE. JOHAN A. CARLSON, Ashland, Mass., assignor to Lucy F. Pratt, Ashland, Mass. Filed Nov. 20, 1929. Serial No. 408,446. 5 Claims. (Cl. 101—294.)



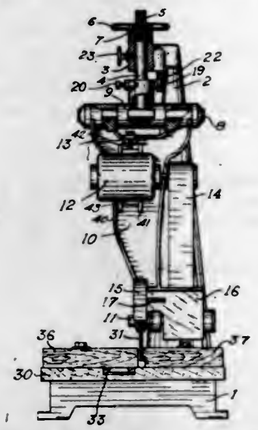
1. In a machine of the character described, in combination, co-operating printing members, one of which reciprocates with respect to the other, an inking device, an endless carrier upon which the inking device is mounted, a metal supporting member over which the inking device and carrier travel, an ink-distributing disk rotatably mounted upon the outer side of the supporting member in a position to contact with the inking device as the latter is moved thereover by the carrier, a ratchet-wheel connected to the ink-distributing disk and mounted upon the underside of the supporting member, a pawl co-operating with the ratchet-wheel, and means operatively connected with the reciprocatory printing member for actuating the pawl.

1,808,452. HOLDING DEVICE. GEORGE T. COUSINS, New Rochelle, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 17, 1928. Serial No. 313,096. 4 Claims. (Cl. 1—46.1.)



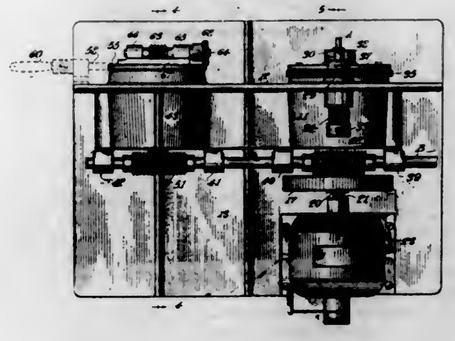
1. In a holding device for hammer tools, the combination of a cylinder and a hammer piston, a front head for the cylinder, an anvil block in the front head projecting beyond the forward end thereof to bear against an element intended to be driven for transmitting the blows of the hammer piston to such element, and a sleeve supported by the front head in position to extend over an end portion only of such element for maintaining the tool in operative striking relation with respect to such element, said operative striking relation being either coaxial or oblique.

1,808,453. COMBINATION SAWING MACHINE. ARTHUR E. DE KONING, Portland, Oreg. Filed June 10, 1929. Serial No. 369,737. 7 Claims. (Cl. 143—6.)



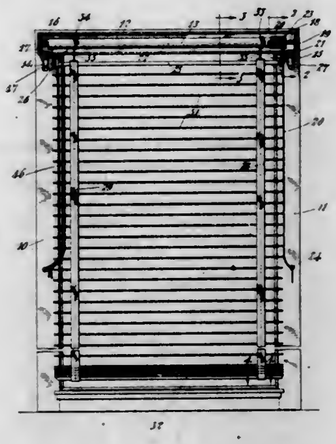
4. A combination sawing machine comprising, a standard secured to a base fitted with a table, a saw carriage attached to said standard by a universal joint comprising two perpendicularly disposed shafts and cooperating journals one of which shafts is vertical and adjustable axially through its journal formed in said standard by means of a hand-wheel engaging a thread thereon and bearing upon said standard, a pair of contacts rigidly attached to said vertical shaft adapted to engage a stop secured to said standard to limit the rotation of said saw carriage about its vertical axis to approximately ninety degrees wherein the vertical axis of said universal joint is disposed in the same plane as the saw blade.

1,808,454. MECHANICAL MOVEMENT. AUGUSTO DINA, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,811. 13 Claims. (Cl. 74—7.)



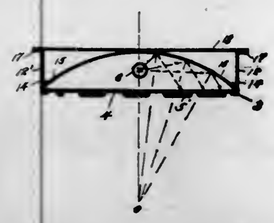
1. A mechanical movement comprising a pair of rotatable casings, a load shaft supported on one of said casings in line with the axis of rotation thereof, a connection between the casings whereby the movement of one will move the other correspondingly, a second load shaft, means on the first casing connected to the second load shaft to drive the same, and means on the second casing engaging the second load shaft to control the movement of the second load shaft as the casings are moved.

1,808,455. VENETIAN BLIND. WALTER E. DUNCANSON, New York, N. Y., assignor to J. G. Wilson Corp., New York, N. Y., a Corporation of Virginia. Filed Mar. 30, 1928. Serial No. 265,855. 2 Claims. (Cl. 156—17.)



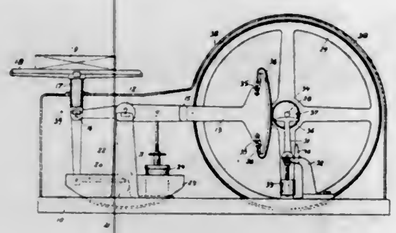
1. In a Venetian blind construction, having a rotatable traverse roller lifting means secured in a box, the box arranged to detachably support on brackets fastened to the window opening, a blind in assembled formation, a tilting bar for tilting the slats, tiltably secured to the underside of the box, and means secured to the tilting bar for supporting and tilting the slats, in combination with a cord depending from the rotatable, longitudinally moving lifting mechanism in the box to a position alongside of the slats for raising and lowering the slats.

1,808,456. ILLUMINATED SIGN. MARY L. DWYER and ION E. DWYER, St. Louis, Mo. Filed Jan. 20, 1930. Serial No. 422,067. 2 Claims. (Cl. 40—132.)



1. A device of the character described comprising a box having top and bottom and end walls with front flanges on each and a translucent front wall, contrasting designating characters secured on the outside of the front wall, an elongated lamp bulb centrally located in said box and having electric connections, and a vertically disposed cylindrical reflector curved from the rear of said lamp to the front wall,—said end walls having portions cut and bent inward behind the reflector and cooperating with said front flanges to secure said reflector and front wall in place and providing ventilating openings, substantially as described.

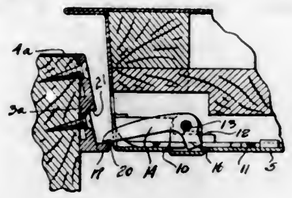
1,808,457. AUTOMATIC INCLINATION BALANCE. JOHANN FISCHER, Berlin-Charlottenburg, Germany, assignor to the Firm Ade Fabrik Automatischer Schnellwaagen G. m. b. H., Berlin-Reinickendorf, Germany. Filed Feb. 9, 1929, Serial No. 338,849, and in Germany Feb. 14, 1928. 9 Claims. (Cl. 265—37.)



1. An automatic inclination balance comprising a weigh-beam, a support for the goods to be weighed carried by the one arm of said beam, a segment attached to the other arm thereof, a counterweight suspending from said beam, a rotatable drum having a uniform scale on the face thereof, an eccentric fixed on the axle of said drum in engagement with said segment to be rotated thereby, the radius of said segment being so dimensioned in excess to the length of said arm carrying it that the distance of the axis of said drum from the axis of oscillation of said weigh-beam remains unaffected by oscillations of said weigh-beam regardless of the turns of said eccentric whereby to and fro horizontal motion of the axle of the drum is substantially eliminated and whereby the drum is turned to equal successive angles in response to successive equal increases of weights deposited upon the aforesaid support for goods.

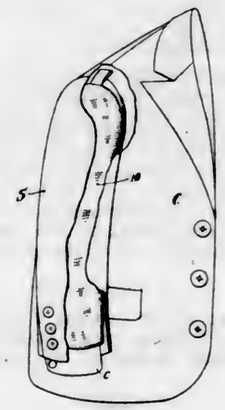
1,808,458. DOOR KICK-OUT DEVICE. JOHN B. FLYNN, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed June 22, 1929. Serial No. 372,856. 9 Claims. (Cl. 292—167.)

1. The combination with a vehicle door or the like, of a bolt having spaced lugs for holding the door closed, of means for moving said bolt to a position to permit opening of the door, and of a trigger having a portion projecting between said lugs and having a lost play connection with



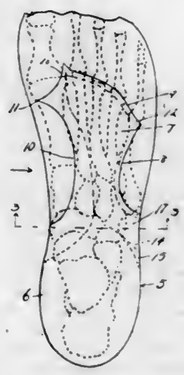
said bolt lugs whereby the bolt is moved to a position to permit opening of the door before said trigger is engaged by one of said lugs to throw out the door.

1,808,459. SLEEVE FORM FOR DISPLAY PURPOSES. EDWIN E. GOODMAN, New York, N. Y. Filed Mar. 18, 1930. Serial No. 436,675. 4 Claims. (Cl. 223—18.3.)



1. In a sleeve form, an outer fabric, a series of layers of wadding having a stiffening of haircloth between said layers, and an inner fabric of cambric having pleats therein and on opposite sides thereon.

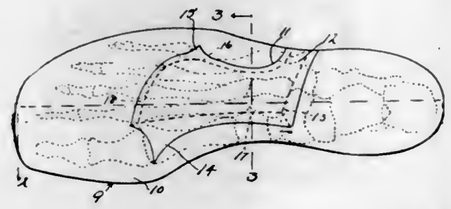
1,808,460. COMBINED HEEL AND ARCH SUPPORT. OTTO GREGAREK, Philadelphia, Pa. Filed Apr. 21, 1930. Serial No. 445,847. 2 Claims. (Cl. 36—71.)



1. A device of the kind described consisting of a heel element, an arch supporting element formed integral with

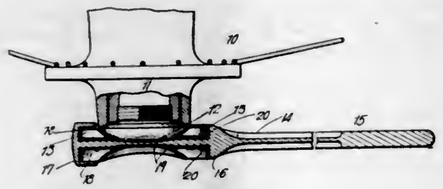
the heel element and fashioned to provide concaved side edges and a convex forward edge, an extension projecting from the forward part of the exterior edge to underlie the fifth metatarsal bone, another extension projecting from the interior side adjacent the forward end to underlie the first metatarsal bone, all of said edges and the extensions being skived to form inwardly and upwardly inclined surfaces, and a ridge formed by the meeting of the forward and interior skivings, said ridge adapted to lie between the great and second toe.

1,808,461. COMBINED INSOLE AND ARCH SUPPORT. OTTO GREGAREK, Philadelphia, Pa. Filed Apr. 21, 1930. Serial No. 445,848. 2 Claims. (Cl. 36—71.)



1. A device of the kind described comprising an integral structure consisting of an insole, an arch support on the under side of the insole, said support having an extension projecting toward the exterial side of the insole at the rear end of the support, another extension near the forward end projecting on the interior side of the support and the forward end of said support being curved convexly and all the edges except the outer end of the first mentioned extension being skived to provide inclined surfaces projecting inwardly and upwardly, said inclined surfaces being contiguous the under surface of the insole so that when in use said insole will be inclined toward its edges.

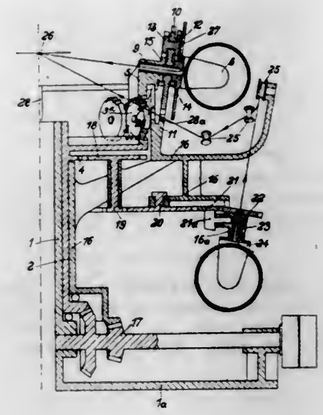
1,808,462. HUB CAP WRENCH. MARTIN HORETH, Brooklyn, N. Y. Filed July 27, 1929. Serial No. 381,552. 4 Claims. (Cl. 81—121.)



1. A hub cap wrench comprising a handle, a flat head extending longitudinally at one end of said handle and having a cavity in the side thereof, a closed socket communicating with the cavity and an open socket provided in said head communicating with the cavity and open on its outer side, the open and closed sockets being diametrically opposed to receive the opposite lugs of a hub cap, said open socket extending into the handle.

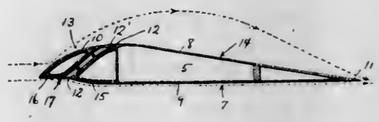
1,808,463. ROUND BRAIDING MACHINE. GUIDO HORN, Weissensee, near Berlin, Germany. Filed Dec. 28, 1928, Serial No. 329,042, and in Germany Dec. 29, 1927. 17 Claims. (Cl. 96—7.)

1. In a round braiding machine, a carrier, adapted to rotate round an axis and to travel in a circular path about the centre of the machine, a gear-wheel concentric to the axis of rotation of the carrier and means, adapted to give the gear-wheel, during a revolution of the carrier about



the centre of the machine, a single rotation in such a direction as to neutralize the twist resulting from the rotation of the carrier about the center of the machine.

1,808,464. AEROPLANE WING. GERARD L. HUISKAMP, Keokuk, Iowa. Filed July 16, 1929. Serial No. 378,703. 7 Claims. (Cl. 244—12.)



1. An aeroplane wing having one or a plurality of passages formed therein and extending therethrough from the top to the bottom surface thereof, said wing having a notch formed in the undersurface thereof, the notch extending rearwardly from the leading edge of the wing and communicating with said passages rearwardly of the leading edge of the wing.

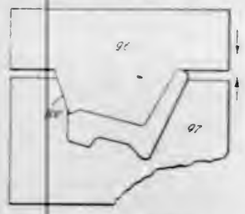
1,808,465. PRODUCTION OF UREA. ALFONS KLEMENC and RUDOLF SCHOELLER, Vienna, Austria, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 22, 1929, Serial No. 365,224, and in Austria Aug. 6, 1926. 2 Claims. (Cl. 260—125.)

1. The process of producing urea which comprises bringing together carbon oxysulphide and ammonia, in the absence of water, with at least part of at least one of the said components in a liquefied state, and then heating the mass under pressure to between about 80 and about 120° C.

1,808,466. METHOD OF REFORMING BARS. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Original application filed July 16, 1926, Serial No. 122,864. Divided and this application filed Mar. 20, 1929. Serial No. 348,389. 1 Claim. (Cl. 29—169.)

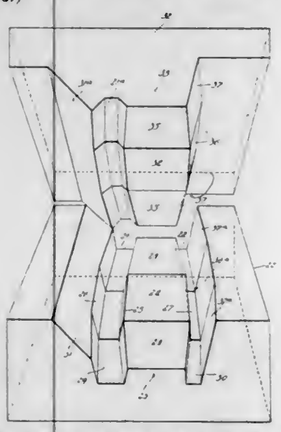
The method of reforming the flange fishing surface of an angle-type rail joint bar consisting in first applying

pressure to the bar is one direction and then applying a supplementary pressure in another direction during the



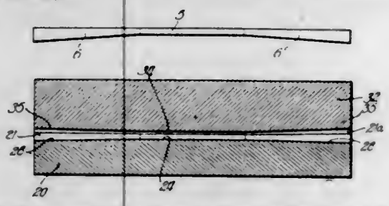
continuance of said initial pressure to the upper outer surface of the flange of the bar thereby to exert a lateral thrust thereon for reforming the flange fishing surface.

1,808,467. DIES FOR MAKING BARS. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Filed Apr. 10, 1929. Serial No. 354,142. 7 Claims. (Cl. 78—76.)



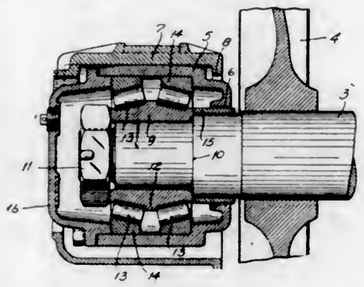
1. A die for reforming worn rail joint bars including a pair of opposing die members having cooperating die cavities defining a space generally corresponding to the rail joint shape, including intercommunicating spaces for the metal of the bar head, web and foot, certain of the longitudinal walls of said cavities being longitudinally convexed and the zenith of said convexities being in proximal relation to the most worn portions of the bar whereby to initially forge said bar at such points to flow the metal thereof into said worn portions prior to the complete closing of the dies on substantially the whole bar.

1,808,468. METHOD OF MAKING RAIL JOINT BARS. GEORGE LANGFORD, Joliet, Ill., assignor to McKenna Process Company of Illinois, Joliet, Ill., a Corporation of Illinois. Original application filed Apr. 10, 1929, Serial No. 354,142. Divided and this application filed Mar. 24, 1930. Serial No. 438,276. 8 Claims. (Cl. 29—169.)



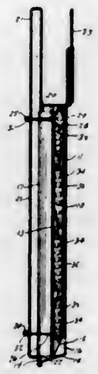
1. The method of reforming worn rail joint bars which consists first in heating the bar to a working temperature, and then subjecting it to a forming pressure, the forming pressure being first concentrated at the central portion of the bar to effect a greater displacement of metal at such portion, and then progressively diminishing toward the ends of the bar.

1,808,469. ROLLER BEARING REMOVING PROCESS. MARCUS T. LOTHROP, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Dec. 15, 1927. Serial No. 240,139. 2 Claims. (Cl. 29—84.)



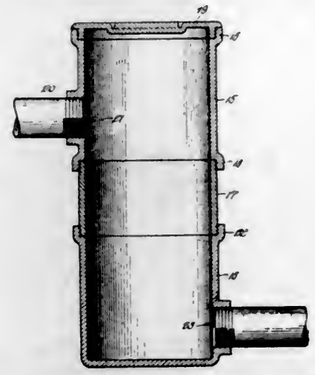
2. The process of removing a roller bearing from a roller bearing axle construction wherein the end portion of said axle is enclosed within a housing having a removable closure cap at its outer end and an axle receiving opening at its inner end, said bearing being interposed between said axle and said housing with its inner raceway member press-fitted on said axle, a wheel being mounted on said axle adjacent to the inner end of said housing, which consists in providing said construction with a sleeve mounted on said axle in abutting relation to the inner end of said inner raceway member and extending inwardly beyond the inner face of said housing, removing the closure cap from said housing, and then causing relative endwise movement between said axle and said wheel by moving one of these members longitudinally while holding the other member against such movement, whereby the pressure on one member is transmitted through said sleeve to the other member without the wheel and the housing coming in contact with each other.

1,808,470. PEA SHUCKER. BEATRICE I. MANGES, Cleveland, Ohio. Filed May 15, 1930. Serial No. 452,659. 6 Claims. (Cl. 130—30.)



1. A pea shucker comprising a frame having guides at the sides, a set of slotted tubes fixed to the frame, a slitter extending across the tubes and movable along said guides and having points projecting through the slots into the tubes to split pods therein, and a discharger extending across the tubes and movable along the guides and having fingers projecting through the slots to discharge peas from the split pods.

1,808,471. WASTE TRAP. WILLIAM J. MCCARTHY, Chicago, Ill. Filed Nov. 14, 1925. Serial No. 68,941. 3 Claims. (Cl. 182—7.)



1. A waste trap construction comprising a chamber having an inlet, a second chamber in communication with said first chamber having an outlet in its side and an opening at each end, and means whereby either end opening of said second chamber may be alternatively placed in communication with said first chamber, said side outlet being nearer one end of said end openings than it is to the other, whereby when the connection is reversed the level of said outlet will be changed.

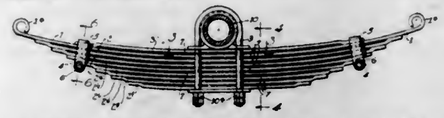
1,808,472. PAPER DRILL. HERMAN D. MIELKE, Chicago, Ill. Filed Sept. 3, 1929. Serial No. 389,906. 2 Claims. (Cl. 164—124.)



1. A drill comprising a shank and a drill integral with and extending downwardly from the lower end of the shank, said drill and shank having axially alined longitudinal openings therethrough, said shank having a recess through one side thereof a short distance above the upper end of the drill communicating with the opening through said shank and drill, and a rod secured in the opening in said shank having the lower end thereof cut in a plane located at an acute angle to the axis of the rod to form a deflecting edge inclined upwardly and outwardly toward the open side of said recess, and said rod at its lower end at each side of said deflecting edge having parts cut away on downwardly and inwardly inclined planes meeting substantially at the lowermost point of said rod.

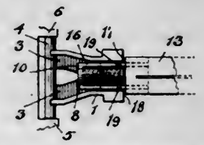
CARNEGIE LIBRARY OF ATLANTA

1,808,473. SPRING. OSCAR LINUS NEISLER, Chicago, Ill. Filed Dec. 27, 1924. Serial No. 758,370. 10 Claims. (Cl. 267—47.)



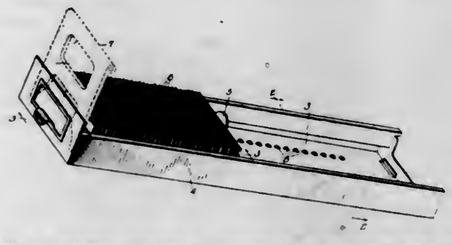
1. A spring comprising a series of spring leaves having their ends bent out of alignment with relation to the body portion of the leaf and projecting in the same general direction as the leaf, the bent ends having flat engaging faces, the flat engaging face of one spring leaf engaging the faces of the associated spring leaf so as to separate said spring leaves throughout their length between the bent ends, the leaves being substantially uniform in thickness and the bent ends being integral and the same thickness as the remaining portions but out of alignment therewith.

1,808,474. CONNECTION DEVICE FOR WRIST WATCHES. BEN OGUSH, New York, N. Y., assignor to Katz & Ogush, Inc., New York, N. Y., a Corporation of New York. Filed June 5, 1929. Serial No. 368,469. 1 Claim. (Cl. 63—5.)



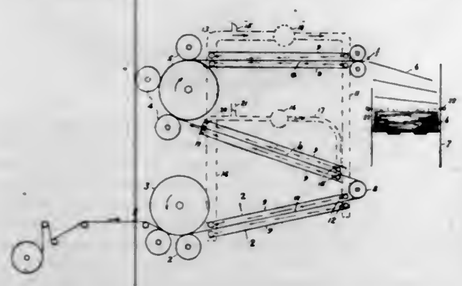
A device of the class described comprising a connection member having an open-sided casing provided with a pair of side walls, means on said casing for attachment to a wrist watch, a tubular spring-container provided on said connection member and exposed at the open side of the casing, a wrist band, a yoke thereon provided with side arms which lie between the side walls of the casing and the spring-container, a cross-bar on said yoke, a pair of slots in the side walls of the spring-container in which said cross bar is movable, a spring within the spring-container exerting pressure on the cross bar, and guide means extending across the open side of the casing between the spring-container and walls of the casing for guiding the side arms of the yoke during their sliding movement.

1,808,475. DRAWER FOR PRINTING DEVICES. ELMER A. OYEN, Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 14, 1929. Serial No. 339,947. 3 Claims. (Cl. 129—16.)



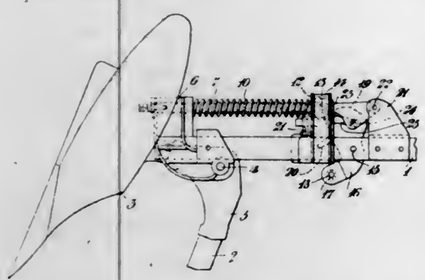
3. A drawer having a bottom for supporting a plurality of printing devices on edge, said bottom having its supporting surface flat, and a row of protuberances on said supporting surface extending longitudinally of the drawer, said protuberances being rounded and spaced apart and alternating with flat sections of the supporting surface to permit printing devices to be slid bodily thereover but to prevent accidental slippage of the printing devices along the supporting surface.

1,808,476. PRINTING. THOMAS F. PINDER, Merion, Pa. Filed Jan. 12, 1929. Serial No. 332,082. 9 Claims. (Cl. 101—416.)



1. A method of preventing offset at the freshly printed sides of a paper web traveling between plate and packing cylinders and of delivering the paper of proper moisture content, which consists in first superficially oxidising the ink on the first freshly printed side of the web by contacting the web with a current of hot air and then with a current of cold air, second superficially oxidizing the ink on the second freshly printed side of the web by contacting the web with a current of hot air, and thirdly subjecting the superficially oxidized ink and dried paper in sheet form to contact with a mist or spray of water.

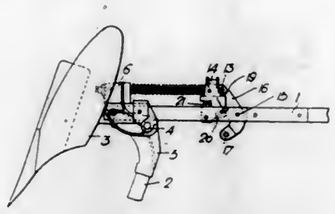
1,808,477. RELEASABLE PLOW. OSCAR ADOLF KRISTIAN PRINTZ, Overum, Sweden. Filed Sept. 11, 1930, Serial No. 481,296, and in Sweden Apr. 22, 1930. 7 Claims. (Cl. 97—184.)



1. In a plow the combination with the plow frame of a plow beam pivotally connected thereto, a plow base carried by said beam, a lever pivotally mounted in the plow frame to be engaged by the free end of the plow beam to hold the plow base in working position, a spring arranged to act on said lever without being mechanically connected thereto to maintain said engagement and to be compressed to allow the lever to release the plow beam, when the plow base is forced out of working position due to a resistance in the ground, and a stop member to relieve the lever from the action of the spring when compressed and maintain the spring in compressed state.

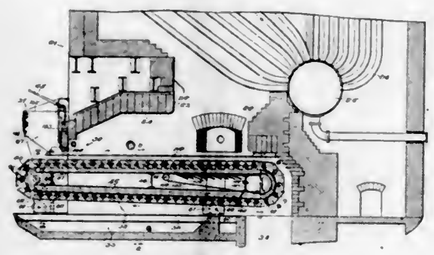
4. In a plow the combination with the plow frame of a plow beam pivotally connected thereto, a plow base carried by said beam, a lever pivotally mounted in the plow frame to be engaged by the free end of said beam to hold the plow base in working position when in normal position, a spring arranged to act on said lever without being mechanically connected thereto to maintain said engagement, said lever being so shaped as to compress the spring during a first turning from its normal position and be capable of continued turning independently of the spring to enable releasing of the plow beam, another lever pivotally connected to a bracket on the plow frame, and a connection between said first-mentioned lever and said other lever so arranged as to hold said other lever out of engagement with the spring in the normal position of said first mentioned lever and bring it to a position in which it maintains the spring in compressed state after the firstmentioned lever has been turned to compress the spring.

1,808,478. RELEASABLE PLOW. OSCAR ADOLF KRISTIAN PRINTZ, Overum, Sweden. Filed Feb. 26, 1929, Serial No. 342,830, and in Sweden Apr. 13, 1928. 6 Claims. (Cl. 97—184.)



1. In a plow, the combination with the plow frame, of a plow beam pivotally connected thereto, a plow base carried by said beam, a lever mounted in the plow frame to be engaged by the plow beam in the operative position of said plow base, sliding means in frictional engagement with said lever, a spring acting on said sliding means to press same against the lever to maintain said first mentioned engagement, and means to release the lever from the torque of the spring after a slight compression of the spring in order to permit the use of a powerful spring capable of securing a steady motion of the plow base irrespective of varying resistance in the ground.

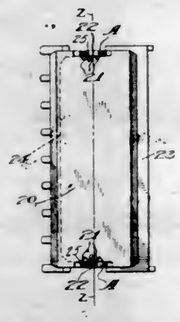
1,808,479. STOKER. EMIL W. RITTER, Chicago, Ill., assignor, by mesne assignments, to Burke Stoker & Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 28, 1925. Serial No. 58,995. 15 Claims. (Cl. 110—40.)



1. In combination, in a grate, a link having an angular depression in its top portion, rollers associated with the said link, an angle bar mounted in the said angular depression and secured to the said link by a bolt mounted within the said link, and a grate bar having a pair of opposite angular slots for receiving the ends of the legs of the said angle bar when it is slid thereon.

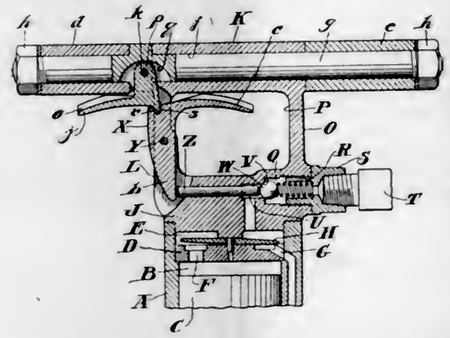
1,808,480. SAFETY RAZOR BLADE. WILLIAM C. ROGERS, Chicago, Ill. Filed Mar. 5, 1929. Serial No. 344,391. 2 Claims. (Cl. 30—12.)

1. A safety razor comprising a blade, a holder therefor, a blade positioning means comprising a plurality of notches in each end of the blade, all of which notches are eccentric with relation to the longitudinal center line of the blade, the opposed notches on said ends being in



alignment, projections, one at each end of the holder, said projections adapted to be received into any two opposed aligned notches on said blade.

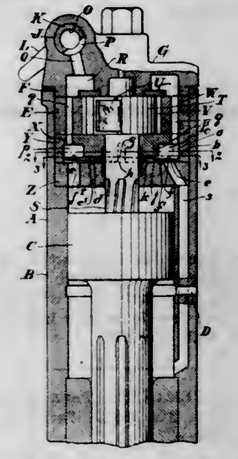
1,808,481. PNEUMATIC TOOL. FRED M. SLATER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 4, 1929. Serial No. 411,494. 5 Claims. (Cl. 121—35.)



1. In a pneumatic tool, the combination of a cylinder and a back head having a handle whereby the tool may be held to the work, a throttle valve in the back head, a throttle lever pivoted on the handle and movable by manual pressure applied directly thereto to actuate the throttle valve when the tool is being held by the handle, a pair of grip members forming an alternative means of holding the tool, means for securing the grip members to the handle, and an actuating lever adjacent one grip member and engaging the throttle lever for transmitting the movement of the actuating lever through the throttle lever to the throttle valve, said actuating lever being movable by manual pressure applied directly thereto when the tool is being held by the grip members.

1,808,482. VALVE MECHANISM FOR ROCK DRILLS. WILLIAM A. SMITH, Jr., Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 22, 1928. Serial No. 321,133. 3 Claims. (Cl. 121—19.)

1. In a fluid actuated rock drill, the combination of a cylinder and a reciprocatory piston, a valve chest comprising a pair of plates one of which plates is recessed to form a cylindrical valve chamber, a valve seat on one of the plates, a rib on the other plate extending across the valve chamber to form an intermediate restricted portion in the valve chamber, said rib having an enlarged center portion and reduced neck portions thereon defining the curved inner edges of a pair of arcuate slots separated at their terminal ends by the neck portions of the rib to form separate pressure chambers, inlet passages leading from the pressure chambers to the cylinders, an oscillatory disc distributing valve in the valve chamber



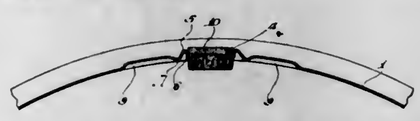
controlling the inlet passages and having the major portion of its periphery spaced from the peripheral bounding surface of the valve chamber to permit the passage of pressure fluid to the inlet passages, said valve having an apex at each end to bear on the valve seat and the rib for preventing the flow of pressure fluid from one pressure chamber to the other through the restricted portion.

1,808,483. METALLIC RECEPTACLE. HUGH H. WARD, Chester, Pa. Filed June 18, 1928. Serial No. 286,150. 1 Claim. (Cl. 206—24.)



A cask-like receptacle having a bung-hole in a curved wall thereof and surrounded by an annular ridge bent outwardly from said wall and having an inturned grooved lip for the engagement of a driven bung and a reenforcing plate conforming to the contour of and fixed to the inner surface of said wall and having thereon an outwardly turned collar housed between the members of said ridge and reenforcing said lip.

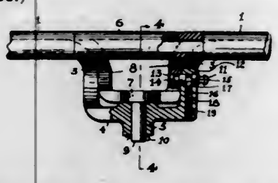
1,808,484. METALLIC RECEPTACLE. HUGH H. WARD, Chester, Pa. Filed June 18, 1928. Serial No. 286,151. 1 Claim. (Cl. 220—24.)



A container comprising a cylindrical sheet metal body having annular rolling and reenforcing hoops bent outwardly therefrom, said body having a bung hole formed in the curved wall thereof between said hoops and being pressed outwardly into a convex ridge surrounding said bung hole and comprising a resilient lip with a projecting tongue thereon, a section of the middle of the body surrounding the bung hole having outwardly projecting ribs pressed therefrom with their outer ends adjacent to said hoops and their inner ends adjacent to the annular

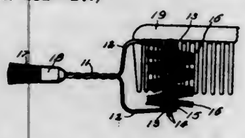
ridge, said ribs extending radially and being of different lengths, and a wooden bung engaged by the tongue of said resilient lip.

1,808,485. HAND WHEEL. JOSEPH E. WHITFIELD, Pittsburgh, Pa., assignor to Whitfield-Johnson Motor Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,118. 8 Claims. (Cl. 74—33.)



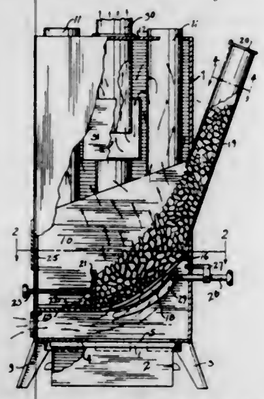
1. In a hand wheel, the combination of a rim having an interrupting gap, and a movable rim section mounted so as to be swung in a path lying within the same plane as that of the first mentioned rim into and out of completing relation with the rim.

1,808,486. COMB CLEANER. PAUL M. WRIGHT, Omaha, Nebr. Filed Feb. 12, 1931. Serial No. 515,285. 4 Claims. (Cl. 132—27.)



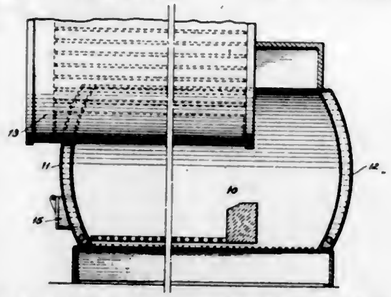
1. A comb cleaner, comprising a shank having a laterally enlarged fork at one end and a loop at its other end, a shaft rotatably mounted across the ends of the fork, a spiral row of radiating bristles mounted on the shaft, a bunch of bristles overturned and secured intermediate their ends through said loop of the shank, and a ferrule slidably mounted on the shank and having an enlarged open end for passage over the loop and the overturned portion of the bunch of bristles.

1,808,487. HEATING STOVE OR FURNACE. ALFRED AHLBERG, Indianapolis, Ind. Filed Aug. 20, 1929. Serial No. 387,187. 9 Claims. (Cl. 126—73.)



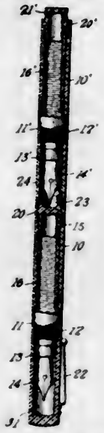
1. In a stove or furnace, a housing, a fire box bottom therein comprising a flat portion and a grate bar portion curved upwardly from the flat portion, a fuel magazine discharging by gravity at the top of the curved portion, and a baffle plate on the flat portion to arrest the fuel, said plate being separate from and adjustable toward and from the curved portion.

1,808,488. BOILER. FREDERIC W. BAKER, Claymont, Del. Filed Sept. 10, 1928. Serial No. 304,852. 4 Claims. (Cl. 122—106.)



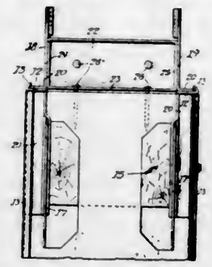
1. In a jacket structure for a boiler furnace, a wall concavo-convex in vertical cross-section and comprising substantially vertically disposed spaced curved plates having substantially parallel upper and lower edges and cooperating to form a fluid section.

1,808,489. FOUNTAIN PEN. ADOLPH BASSI, New York, N. Y., assignor to Chameleon Fountain Pen Corp., a Corporation of Illinois. Filed June 18, 1929. Serial No. 371,938. 3 Claims. (Cl. 120—42.)



1. The combination with two independent fountain pens provided with screw threads on their front and rear ends, of a connecting sleeve having screw threads adapted to engage selectively with the front or rear ends of either fountain pen whereby both fountain pens may be rigidly joined together to produce a duplex writing implement.

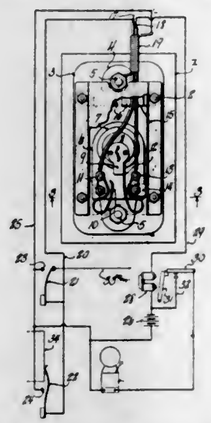
1,808,490. CORNER CONNECTION FOR FRAMES. ISAAC A. BAUM, Chicago, Ill. Filed Oct. 14, 1929. Serial No. 399,620. 7 Claims. (Cl. 189—46.)



1. In combination, side and head frame members of generally channel shape in cross section, wood blocks

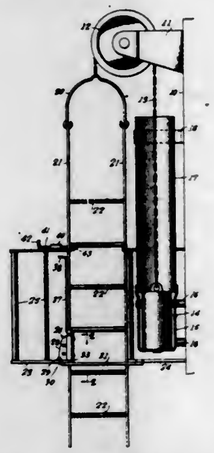
carried by the respective members near their ends, a pair of angle plates, a web joining and spacing the plates, means providing sliding interlocking engagement between the legs of the angle plates and the respective frame members, and fastening devices extending through the web into the wood blocks.

1,808,491. BURGLAR ALARM AND LOCK THEREFOR. EDWARD BELLMAN, Rockford, Ill. Filed Nov. 26, 1928. Serial No. 321,930. 5 Claims. (Cl. 200—42.)



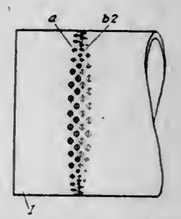
1. In an alarm system having three conductors, a lock comprising an outer plate, a pair of contact members connected to two of said conductors, one of said two conductors being connected to said metal plate, a cam member controlled by said lock for operating said contact members, and means connected to the third conductor and adapted to contact with a portion of the lock connected to one of said two conductors, when the lock is pried loose.

1,808,492. SAFETY FIRE ESCAPE. ERNEST BOCCHINO, Newark, N. J. Filed Mar. 3, 1928. Serial No. 258,771. 7 Claims. (Cl. 227—51.)



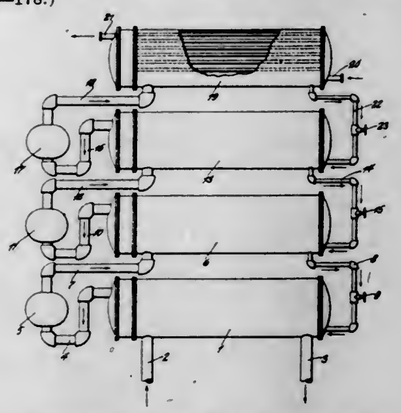
1. In a fire escape for buildings having a platform, a ladder serving the platform movable vertically with respect thereto, a partial counter-poise for the ladder, a clamp adjustable on the ladder, said clamp having a roll, and a strip on the platform engaging said roll and over which it may be passed to release the ladder.

1,808,493. SUCTION ROLL SHELL DRILLING. HARRY C. BURDEN, Sandusky, Ohio, assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Filed Nov. 23, 1928. Serial No. 321,405. 14 Claims. (Cl. 92—53.)



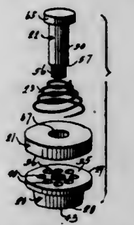
4. A suction roll shell provided with perforations disposed in an ellipse.

1,808,494. REFRIGERATING PROCESS. SAMUEL C. CARNEY, Tulsa, ROBERT E. BAKER, Drumright, and FRANK C. CUTTING, Tulsa, Okla., assignors to Shell Petroleum Corporation, a Corporation of Virginia. Filed Feb. 15, 1926. Serial No. 88,489. 8 Claims. (Cl. 62—178.)



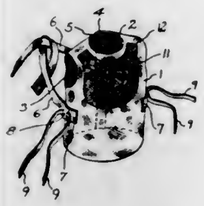
1. A refrigeration system which consists in expanding a series of refrigerants of different boiling points, subjecting the vapor of the expanded refrigerant of the lower boiling point to the cooling action of the refrigerant of higher boiling point, the last of said series of refrigerants condensing at substantially atmospheric pressure, and subjecting a fluid to be cooled to the cooling action of the low boiling point refrigerant.

1,808,495. VALVE. WILLIAM J. DADDYSMAN and ALONZO F. DADDYSMAN, Charleston, W. Va. Filed Apr. 19, 1927. Serial No. 184,960. 6 Claims. (Cl. 251—158.)



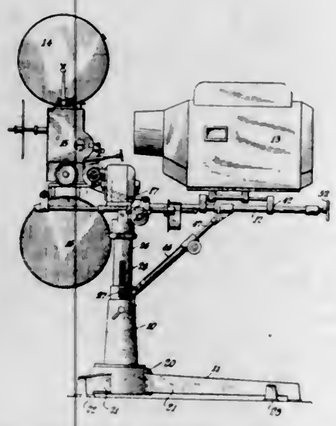
1. An acid and alkali carbon resisting valve construction comprising a valve seat composed of graphite and coke, a valve member composed of graphite and coke, a guide stem of graphite and coke rigid with the seat for guiding the opening or closing relation of the valve member with respect to the seat.

1,808,496. GARMENT. GEORGE W. DILLON, Ware, Mass. Filed Dec. 21, 1928. Serial No. 327,558. 3 Claims. (Cl. 2—111.)



1. A jacket garment having neck and arm openings, a back tie strap secured to each side of the jacket intermediate its top and bottom and extending sufficiently away therefrom to be tied around the jacket to secure it to the body of the wearer, a loop in each tie strap adjacent its connection to the jacket and a detachable securing strap extending through each loop, said securing strap being removable to permit the use of the garment either with or without the securing strap.

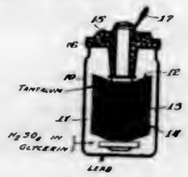
1,808,497. ADJUSTABLE SUPPORT FOR MOTION PICTURE PROJECTION MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 18, 1927. Serial No. 213,715. 5 Claims. (Cl. 248—47.)



1. In a motion picture projecting apparatus having a lamp house, projection head and film magazines, a supporting pedestal therefor and a frame pivotally mounted on said pedestal and supporting said apparatus, means for controlling the angular position of said frame, comprising a diagonal strut, said strut being extensible for obtaining a coarse adjustment of the angularity of said frame, and means for varying the point of support of said strut for securing a fine adjustment thereof.

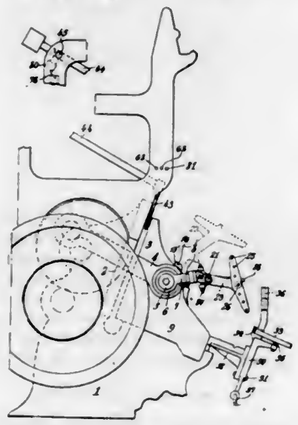
1,808,498. ELECTROLYTIC FILTER CONDENSER. EDGAR W. ENGLE, Lake Forest, Ill., assignor to Fansteel Products Company, Inc., North Chicago, Ill., a Corporation of New York. Filed Mar. 22, 1928. Serial No. 263,772. 8 Claims. (Cl. 175—315.)

1. In a filter circuit, a rectifier, an inductance unit, an electrolytic condenser bridged across the circuit between the inductance and the rectifier characterized by a filmed electrode immersed in substantially dry glycerin solution of an electrolyte and adapted to act as a safety valve at high voltages whereby the rectifier and inductance unit are protected.



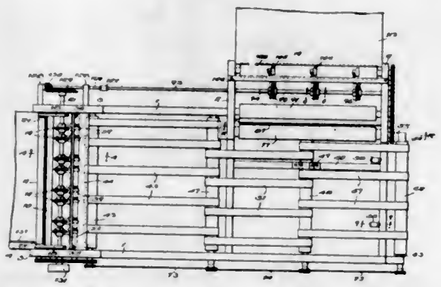
2. An electrolytic filter condenser comprising a tantalum electrode and a substantially anhydrous glycerin solution of sulphuric acid.

1,808,499. THROW-OFF MECHANISM FOR PRESSES. CARL F. FRAUENBERGER, Franklin, Mass., assignor to Thomson National Press Co. Inc., a Corporation of Delaware. Filed May 8, 1928. Serial No. 276,086. 3 Claims. (Cl. 101—299.)



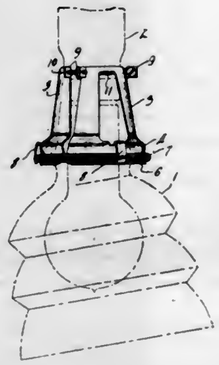
1. In a platen press, means to adjust the impression of the platen, a shaft to unlock the adjusting means to throw off the impression, two levers on said shaft, a tripping lever adapted to be moved into the path of either one of said levers to actuate the said shaft and means for operating said tripping lever.

1,808,500. PERFORATING MACHINE. MICHAEL HOLNY, Chicago, Ill. Filed Oct. 22, 1927. Serial No. 228,031. 14 Claims. (Cl. 164—99.)



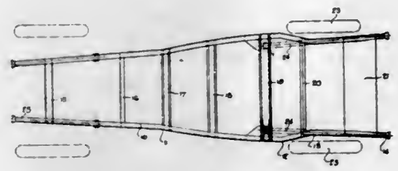
7. In a perforating machine, means for perforating a sheet of material in a plurality of directions comprising means for perforating said sheet of material in one direction and delivering same to a stop, and means for perforating said sheet of material at a right angle thereto including revolving means to receive a side edge of said material, a second stop adjacent said revolving means in the path of said side edge, a second revolving means opposite said first revolving means and on the opposite side of said sheet, means for moving said revolving means relatively toward each other when said sheet of material engages said first-mentioned stop, and means cooperating with said last-mentioned means for removing said second stop.

1,808,501. HOLDER FOR REFLECTORS. NIELS LANG, Lakewood, Ohio. Filed Dec. 8, 1928. Serial No. 325,134. 15 Claims. (Cl. 240—134.)



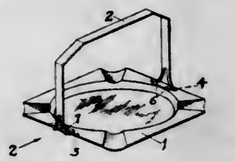
1. A reflector holder comprising rigid means for effecting engagement of the one end thereof with a support, rigid means at the other end thereof for engaging a reflector, and means whereby engagement of the holder with the reflector will tend to render said other engaging means ineffective uniformly thereabout, thereby facilitating positioning of the holder preparatory to effecting engagement of the holder with a support.

1,808,502. CHASSIS CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 29, 1928. Serial No. 289,138. 4 Claims. (Cl. 280—106.)



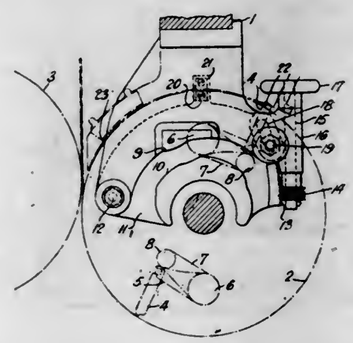
1. A vehicle chassis construction having side sills bodily bulged-outwardly of the chassis intermediate the front and rear wheels to substantially the plane of the wheels and offset inwardly in their rear portions, whereby to receive the inner portions of the wheels within said offset portions, and springs suspending the rear wheels from the chassis having their rear ends secured to the rear ends of said offset portions of the sills and their forward ends secured to the chassis in said bulged-out region through a direct cross connection joining the bulged-out portions of said sills.

1,808,503. MEANS FOR ATTACHING HANDLES TO TRAYS AND THE LIKE. HENRY J. MCCARTHY, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Mar. 24, 1928. Serial No. 264,508. 2 Claims. (Cl. 220—94.)



1. A receptacle having a finished surface, strips of deformable metal secured beneath the surface of the receptacle before it is finished and spaced therefrom, and a handle having inwardly turned extensions fitting under the strips and held in place by pinching the strips down on the extensions.

1,808,504. PRINTING AND STITCHING MACHINE. EDWARD THOMAS MORRIS, London, England, assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed July 24, 1926, Serial No. 124,786, and in Great Britain Sept. 7, 1925. 8 Claims. (Cl. 1—7.)

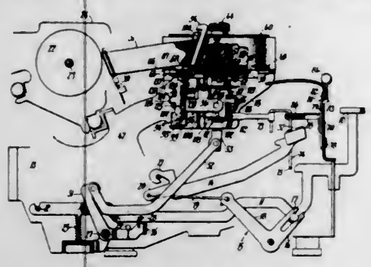


8. In a stitching machine, the combination of a frame, a pair of cylinders mounted thereon, means for rotating said cylinders, a staple forming plunger mounted on one of said cylinders, a cam pivotally mounted on said frame and adapted to operate said plunger, means for moving said cam into and out of operative position, means for limiting the movement of said cam, and means for locking said cam in position.

1,808,505. TYPEWRITING MACHINE. GEORGE H. MYERS, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed June 2, 1928. Serial No. 282,303. 12 Claims. (Cl. 197—151.)

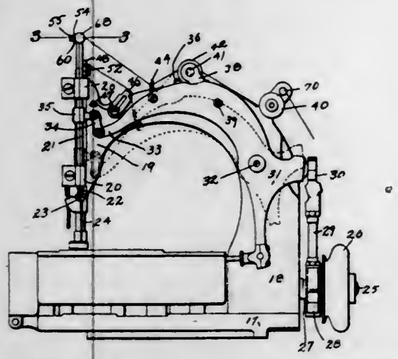
1. In a typewriting machine, the combination of a horizontal ribbon-spool at each side of the machine, instrumentalities for rotating each of said spools to wind the ribbon on either spool, including for each spool a coaxial ratchet-wheel, a drive pawl, a detent-pawl and a member operatively connected to said drive-pawl and oscillated at each type-glow, devices for disabling the rotating instrumentalities for either spool, including a cam-member coaxial with each spool for controlling the pawls thereof, a

connection between said cams, whereby, when the pawls of one spool are made effective, the pawls of the other spool are made ineffective, a normally-ineffective pivoted device operatively connected to each pawl-driving oscillating member to oscillate therewith for operating the associated



cam, and mechanism operated by movement of the ribbon when it is substantially unwound from one spool to make the associated pivoted and oscillatable device effective for operating said cams whereby to effect a change in the direction of rotation of said spools.

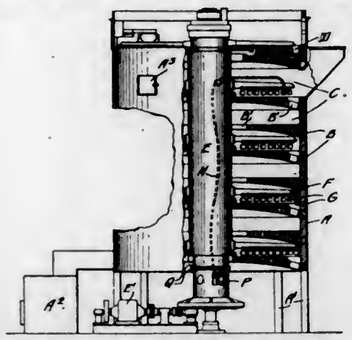
1,808,506. THREAD PULL UP FOR SEWING MACHINES. ROBERT E. PIERCE, St. Louis, Mo., assignor to Bemis Bro. Bag Co., St. Louis, Mo., a Corporation of Missouri. Filed Oct. 7, 1925. Serial No. 61,024. 4 Claims. (Cl. 112—241.)



1. A device of the class described comprising a sewing machine having an arm, a head integrally carried thereby, a needle bar mounted in said head, a needle bar lever mounted on said arm for operating said needle bar, a needle carried by said bar, a slotted adjustable arm mounted on the sewing machine arm, an adjustable arm carried by the head, means carried by the needle bar lever and the needle bar and co-acting with the arms carried by the head and the sewing machine arm for imparting a pull-up on the needle thread during the last portion of the needle descent, and means carried by the sewing machine arm for clamping and arresting the feed of needle thread from a source of supply while the pull-up is applied.

1,808,507. PYROMETER FOR METALLURGICAL FURNACES. FOSTER M. POOLE, Kansas City, Mo., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 16, 1929. Serial No. 332,894. 3 Claims. (Cl. 263—26.)

1. The combination, with a furnace having at least one hearth and at least one rabble carrying arm sweeping over the hearth, and a rotatably driven shaft carrying said arm, of a thermo-responsive element supported by said arm in a position to contact with the surface layer of material on the hearth and to be protected by a rabble from direct erosive action by the material, a temperature



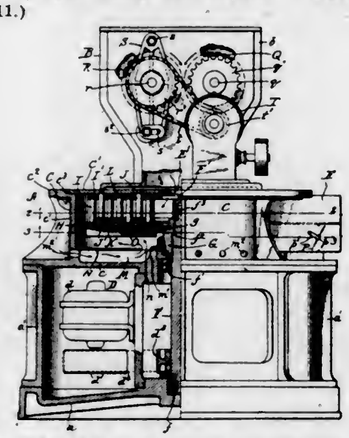
exhibiting instrument mounted on said shaft, and means directly connecting the element and instrument for transmitting the temperature responsive effect therebetween.

1,808,508. SPRING COVER. DANIEL K. POPE, Cleveland, Ohio. Filed July 7, 1928. Serial No. 291,026. 5 Claims. (Cl. 267—37.)



1. In a cover for leaf springs composed of flexible material and of a shape to wrap about a spring with opposite edges adjoining longitudinally of the spring, a fastening device comprising a bendable sheet metal tongue having a flat inner end secured upon the outer face of the cover adjacent an edge of the cover, an eye formed to receive said tongue, said eye being alined with the tongue and attached to the opposite edge of the cover, whereby said tongue may be passed through said eye to draw said edges together and tighten the cover on the spring and be bent back upon itself to secure the same against separation, and means for clamping the bent back end of the tongue against the flat inner end thereof.

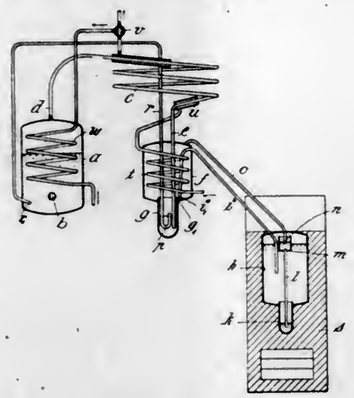
1,808,509. CLAY DISINTEGRATOR. THEODORE C. PROUTY and WILLIS O. PROUTY, Hermosa Beach, Calif., assignors to American Encaustic Tiling Company, Ltd., New York, N. Y., a Corporation of New York. Filed June 20, 1928. Serial No. 286,736. 7 Claims. (Cl. 83—11.)



1. In a disintegrator, a chamber provided with an axial inlet for material, a rotary member therein, concentric

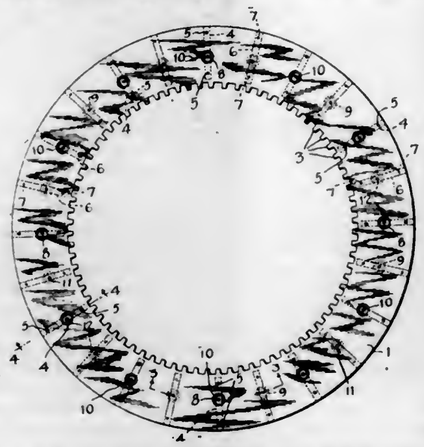
rows of stationary pins, other concentric rows of rotary pins carried by said rotary member, and inclined baffles in the intervals between pins of the stationary series and of the rotary series.

1,808,510. REFRIGERATING APPARATUS OF THE ABSORPTION TYPE. FRIEDRICH WILHELM HEINRICH REEHSING, Bremen, Germany, assignor to Aktiebolaget Absorbator, Stockholm, Sweden, a Limited Company. Filed Jan. 23, 1928, Serial No. 248,790, and in Sweden July 1, 1927. 6 Claims. (Cl. 62—120.5.)



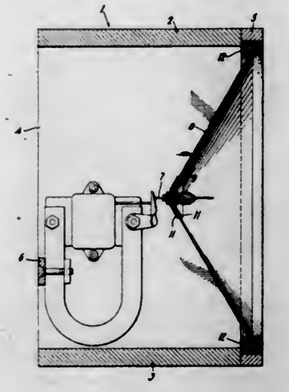
1. A refrigerating apparatus of the absorption type, characterized by a closed circulation system, comprising a boiler, a condenser, a condensate collector and an evaporator, a water collector communicating with the interior of said condensate collector positioned at a lower level with respect thereto and a condenser conduit extending from said condenser into the lower portion of said water collector.

1,808,511. FRICTION DISK. AZOR D. ROBBINS, New York, N. Y., assignor, by mesne assignments, to Mechanical Development Corporation of America, a Corporation of Delaware. Filed July 14, 1928. Serial No. 292,726. 2 Claims. (Cl. 192—113.)



1. A new article of manufacture comprising a plurality of rings each having openings therein arranged circularly thereof and equidistantly apart, and bars for securing the rings together face to face and capable of holding them apart and each crossing an opening and adapted to permit fluid circulation through the openings and around said bars.

1,808,512. SOUND RADIATING APPARATUS. LAZARUS SHAPIRO, New York, N. Y. Filed June 16, 1928. Serial No. 285,796. 3 Claims. (Cl. 181—31.)

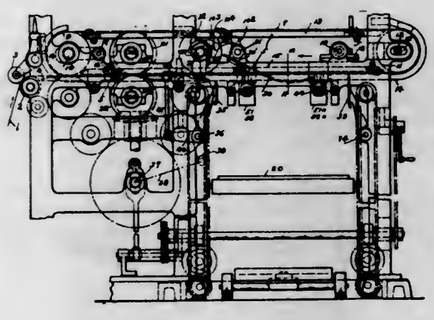


1. In a sound radiator, in combination a vibrating member, driving means therefor, a baffle surrounding said member, and a ring of soft, compressible, non-vibratory material sealing the space between the member and the baffle and having its inner diameter a little less than the maximum diameter of the member, the peripheral edge of said member engaging the inner circumferential face of the ring.

1,808,513. AMMUNITION. TAGE F. WERME, Fairfield, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Nov. 19, 1927. Serial No. 234,553. 4 Claims. (Cl. 52—6.)

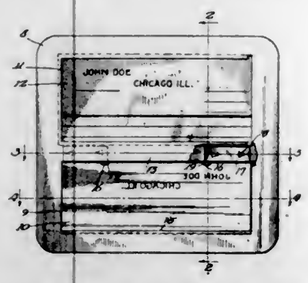
3. A small-arms cartridge containing a propellent powder in which lead dust is intermixed in a quantity sufficient to form a corrosion preventing coating in the bore of the gun in which the cartridge is fired.

1,808,514. SHEET HANDLING MECHANISM. ADOLPH M. ZUCKERMAN, New York, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 5, 1925. Serial No. 48,227. 11 Claims. (Cl. 271—79.)



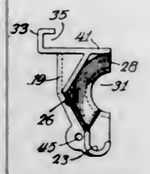
1. In a delivery, the combination of means for forwarding a web, from which a sheet is to be cut, sheet forwarding grippers arranged to take the web by its side edges, means for adjusting the grippers widthwise of the sheet path to take sheets of different widths, a receiver to which the cut sheet is forwarded by the grippers, and means for clearing the tail of a sheet from the head of a succeeding sheet.

1,808,515. PRINTING DEVICE. JAMES A. BAILEY, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 11, 1928. Serial No. 298,973. 3 Claims. (Cl. 101—369.)



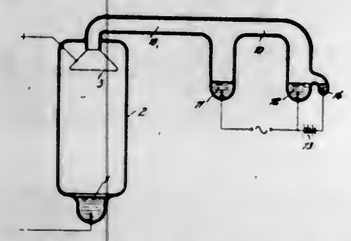
1. A printing device comprising a frame and a printing plate, said frame having a back and a mat thereon and an opening in said mat to receive said plate, a flange at one edge of said opening to receive an edge of the plate, and a hook clamp projecting from the opposite edge of said opening to engage the opposite edge of said plate.

1,808,516. ANGLE COCK HOLDER. HERBERT E. BARTSCH, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed May 31, 1930. Serial No. 458,101. 4 Claims. (Cl. 248—31.)



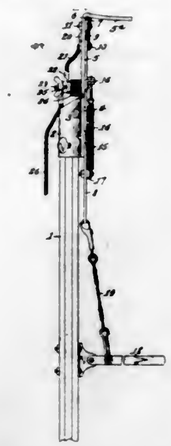
1. In an angle cock holder, a body portion divided into two sections, means for hinging said sections together, said sections having opposed channels at their upper ends for embracing a support, said sections being provided with cooperating recesses to form an opening transversely through said body portion, a U-bolt extending upwardly through vertical apertures in said sections, the curved portion of said bolt extending into said opening, and means for preventing the accidental removal of said U-bolt.

1,808,517. METAL VAPOR RECTIFIER. RUDOLF G. BERTHOLD, Berlin-Siemensstadt, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed July 11, 1928, Serial No. 291,819, and in Germany July 15, 1927. 5 Claims. (Cl. 175—354.)



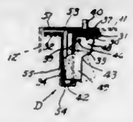
1. In a metal vapor rectifier in combination, a sieve-like anode, and means for producing a stream of vapor passing through the perforations of the anode sieve and directed away from the active anode face.

1,808,518. CURRENT COLLECTOR FOR TROLLEY WIRES. FRED BOARD, Bridgeport, Ohio. Filed Dec. 4, 1929. Serial No. 411,487. 1 Claim. (Cl. 173—273.)



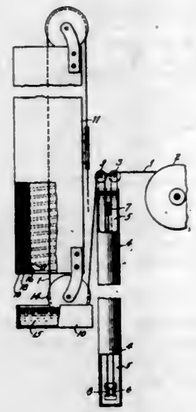
A current collector of the character described comprising a pole, an upright plate carried in rigid relation to said pole, upright arms carried by said plate, said arms having angularly disposed parallel terminals for occupying overlying seated relation to an electric wire, a vertically slidable bar having its upper end disposed between said arms, brackets carried by said plate constituting guides for said bar, a contact member carried by said bar, said member having a length materially exceeding the width of said bar and being adapted to seat upon a substantial length of the underside of the wire between said terminals, retractile coil springs having their upper ends attached to one of said guide brackets and their lower ends connected to said bar whereby the latter is normally held in elevated position presenting said member in underlying engagement with the wire, and means for manually retracting said bar, said means including a lever pivoted on said pole and a connection between said lever and said bar.

1,808,519. COIN CONTROLLED MECHANISM. MARTIN BOHLIG, St. Paul, Minn., assignor of one-half to Pauline Bohlig Warner, St. Paul, Minn. Filed Aug. 2, 1928. Serial No. 297,018. 11 Claims. (Cl. 194—71.)



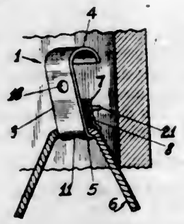
1. The combination with a reversible actuator for operating an associated device upon either stroke of the actuator, of a coin controlled mechanism for said actuator including a cage embodying two spaced walls forming a coin slide, a group of tumblers hinged to the cage, the bodies thereof being adapted to swing into and out of the coin slide, each tumbler having individual means for yieldingly holding the same with the body thereof in position within the coin slide, a dual coin embracing yoke connected with said actuator and comprising two end fingers and intermediate finger, all movable in said slide, the intermediate finger and one end finger being adapted closely to embrace the group of tumbler bodies within the coin slide, a guide for directing a tumbler retracting coin into the coin slide between the tumblers and the opposing wall, said tumblers, when retracted by a coin overreaching the group thereof, offering no obstruction to the intermediate finger, but acting progressively to enter behind said finger within the coin slide.

1,808,520. INSULATED CONDUCTOR. DAVID R. BAOBST, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 10, 1925. Serial No. 68,058. 1 Claim. (Cl. 204—1.)



The method of treating an insulated conductor which comprises immersing the conductor in a bath of cellulose acetate, causing a flow of electric current through the conductor and the bath, and subsequently in succession passing the conductor through a bath of cellulose acetate and through a drying chamber.

1,808,521. PICTURE HANGER. REUBEN BRODER, New York, N. Y. Filed Mar. 20, 1930. Serial No. 437,532. 6 Claims. (Cl. 40—145.1.)

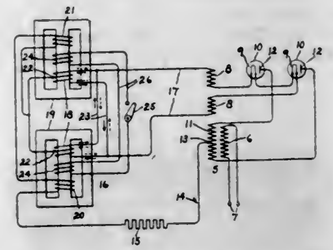


1. A picture hanger comprising a body having an upper supporting hook curved downwardly to engage a wall molding, a lower cord-supporting hook curved upwardly, the upper and lower hooks being located on the same side of the body, the said cord-supporting hook being inwardly bent and adapted to embrace and clamp a picture cord therein, and being also provided with a straight end portion having a nail-receiving aperture therein.

3. In combination, a picture hanger having an upper hook curved to engage a molding head bead, a device for covering said hanger provided with a projecting fastening element and adapted to enter an aperture in the body of said hanger, said element projecting therefrom and resting below the head bead so as to prevent accidental disengagement of the hanger from the molding.

1,808,522. PROTECTIVE REGULATING MEANS FOR ALTERNATING CURRENT RECTIFIER. WILLIAM W. BROWN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 29, 1928. Serial No. 302,779. 11 Claims. (Cl. 175—363.)

1. In an electrical apparatus, the combination with a hot cathode rectifier, of a reactance winding connected in the cathode circuit thereof and means inductively coupled with said winding for regulating the cathode excitation in response to changes in load current from said rectifier, said means being operative to render the load current stable within a certain range of loads and unstable at other loads.



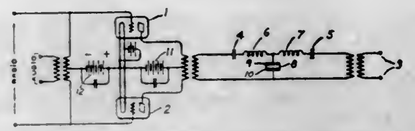
2. The combination of rectifying means provided with cathode heating and anode circuits, means for controlling the impedance of said cathode heating circuit in accordance with the current in said anode circuit, and starting means operable to control said impedance independently of said anode current.

1,808,523. TROUSERS PRESSER. ALEXANDER M. BURTON, Lincoln Place, Pa. Filed June 5, 1929. Serial No. 368,487. 1 Claim. (Cl. 100—57.)



A device comprising a pair of resilient plates of relatively stiff sheet-metal, said plates being mutually hinged along one edge and adapted to receive between them a pair of trousers which are arranged for pressing, each of said plates being provided along the edge thereof which is opposite to its said hinged edge with means for interlocking the plates, one of said plates being deflected along its extent to provide an area which is inclined from the body of the plate toward said hinged edge, and one of said plates being deflected along its extent to provide an area which is inclined from the body of the plate toward its said interlocking means; the above-mentioned characteristics of said sheet-metal being such, and the inclined areas of said plates being so disposed, that in service the two plates assume, with the exception of said inclined areas, substantially a position of parallelism, and exert flattening pressure upon the trousers throughout their width, and exert a pinching effect along the creases of said trousers.

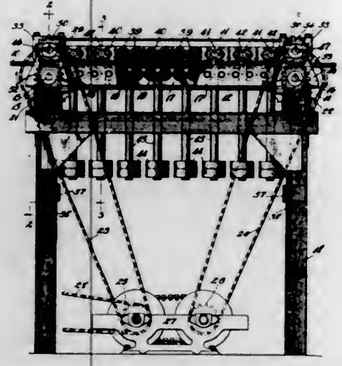
1,808,524. ELECTRICAL APPARATUS. IRVING F. BYRNES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 19, 1927. Serial No. 206,968. 3 Claims. (Cl. 178—44.)



2. The combination of a circuit, a pair of inductances connected in series with said circuit and a piezo electric

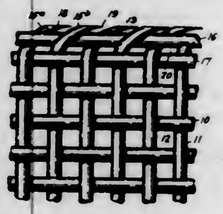
element connected in shunt to said circuit at a point intermediate said inductances, said element having a free vibration period corresponding to the frequencies of the currents which are to be excluded from said circuit.

1,808,525. STRIP-FEEDING APPARATUS. CHARLES C. CADDEN, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Sept. 11, 1928. Serial No. 305,168. 3 Claims. (Cl. 18—2.)



3. Strip-feeding apparatus comprising an elastic belt adapted to convey a strip longitudinally disposed thereon, means for driving the belt at a relatively fast speed at its strip-receiving position, means for driving it at a relatively slow speed at its strip-delivering position, and means operative between the two said positions for resisting the forward movement of the belt to cause it to retain a part of its stretch while it moves a substantial distance from its strip-receiving position.

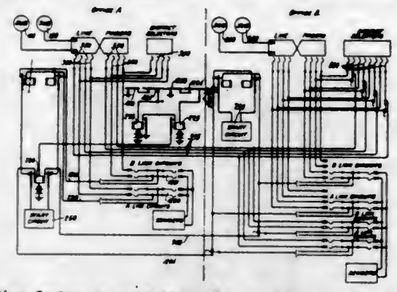
1,808,526. WIRE CLOTH SELVAGE. LEGGETT C. CAMPBELL, Newark, N. J., assignor to Newark Wire Cloth Company, Newark, N. J., a Corporation of New Jersey. Filed Sept. 21, 1929. Serial No. 394,324. 16 Claims. (Cl. 245—10.)



14. A selvage for a woven wire cloth fabric comprising a series of substantially parallel wires and free end portions on said wires each bent along a line of single curvature substantially in the plane of the face of the cloth through a angle of approximately 90° and terminating at the extreme edge of the cloth to form said edge.

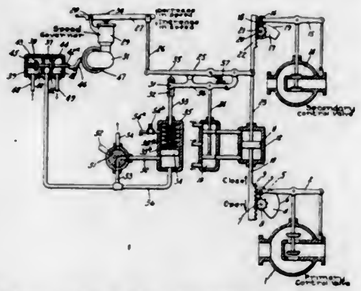
1,808,527. AUTOMATIC TELEPHONE EXCHANGE SYSTEM. WARREN W. CARPENTER, Queens Village, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 6, 1930. Serial No. 418,878. 11 Claims. (Cl. 179—18.)

1. A telephone exchange system comprising a plurality of offices, line finder-district selector trunks at each of said offices, auxiliary line finders at one office, means at another of said offices for disassociating certain district selectors thereat from their associated line finders and for associating said district selectors with the auxil-



iary line finders of said first office, and means at said first office for rendering said auxiliary line finders effective only when the line finder links thereat are all engaged.

1,808,528. ELASTIC FLUID TURBINE. REED J. CAUGHEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 19, 1928. Serial No. 279,149. 14 Claims. (Cl. 137—158.)

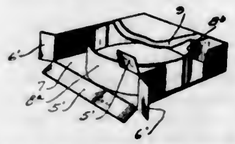


1. The combination with an elastic fluid turbine having primary and secondary valve means, a governor, and mechanism through which the governor effects the positioning of said valve means, of means for locking said mechanism whereby the governor is prevented from effecting opening of said secondary valve means.

1,808,529. MOLDABLE MATERIAL AND PROCESS. ROY E. COLEMAN and FRANK J. GROTEN, Meriden, Conn., assignors, by mesne assignments, to The Monowatt Electric Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed June 28, 1928. Serial No. 289,073. 15 Claims. (Cl. 18—55.)

13. The process of preparing a molded article which comprises mixing a filler with a binder comprising a liquid drying oil and oil varnish ingredients miscible therewith, heating said mixture under oxidizing conditions to cause said binder to be converted to a non-fusible state and comminuting said product, mixing a heat convertible phenolic resin therewith, and molding said mixture.

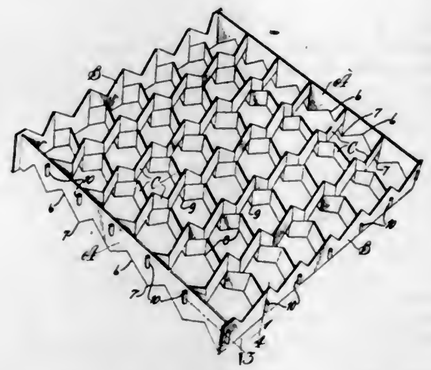
1,808,530. CHEESE CONTAINER. HERBERT E. COOLEY, West Bend, Wis. Filed Apr. 15, 1929. Serial No. 355,085. 3 Claims. (Cl. 206—1.)



1. A container for drum cheese comprising an outer fiber carton having a rectangular top and bottom and

vertical sides and ends connected to each other and to the top and bottom, a rectangular bottom plate of thin sheet-like wood co-extensive with the bottom of the carton and lying flatly thereon, a ribbon of thin sheet-like wood vertically disposed within the carton with its lower edge engaging the bottom plate, said ribbon being of curved form and adapted to approximately parallel and surround the periphery of a drum of cheese set in the container and resting on said bottom plate, the upper edge of the ribbon being located above the top of the drum of cheese, and a top plate of thin sheet-like wood co-extensive with the top of the container and set on the upper edge of the ribbon and supported thereby and engaged with the underside of the top of the carton.

1,808,531. EGG CASE FILLER. AUGUSTA W. COYLE, London, Ontario, Canada, assignor to Leon Benoit, Chicago, Ill. Filed June 15, 1928. Serial No. 285,523. 10 Claims. (Cl. 217—30.)



8. An egg case filler comprising a plurality of intersecting walls each having alternate recesses and projections on its upper and lower edges, said recesses and projections being complementary in shape and size, said intersecting walls being so arranged that the apexes of the alternate recesses of intersecting walls are in point to point contact.

1,808,532. NEEDLE. LEONARD G. DAHM, Chicago, Ill., assignor to T. Buettner & Co. Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1929. Serial No. 388,020. 1 Claim. (Cl. 223—33.)



A needle of the kind described, relatively flat and flexible in one direction only, and provided adjacent one end with transversely spaced unconnected eyes for receiving and drawing a multiplicity of threads between the threads of a fabric without twisting of the drawn threads.

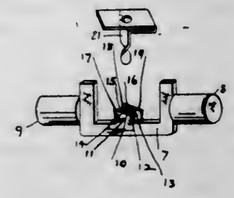
1,808,533. CABLE TYPE CONDENSER. EUGENE D. EBY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 18, 1930. Serial No. 421,830. 4 Claims. (Cl. 175—358.)

1. A combined condenser and current transformer including an insulating bushing, a cable having a conductor and a metal sheath surrounding and insulated from the conductor, said cable being in the form of a loop with its two ends extending into said bushing, the two ends of said sheath being sealed to one end of said bushing, a pair of terminals near the other end of said bushing,



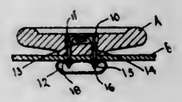
said cable conductor being connected between said terminals, and a current transformer surrounding the looped part of said cable.

1,808,534. ELECTRIC SWITCH. GEORGE HENRY ELWELL, New Haven, Conn., assignor to The Greist Manufacturing Company, New Haven, Conn., a Corporation of Connecticut. Filed Oct. 10, 1927. Serial No. 225,198. 5 Claims. (Cl. 173—355.)



1. An electric switch comprising a movable member mounted upon a supporting base, a conductive spring fixed to the base and having an extremity adapted for an intermediate at-rest position and for a forced arc of movement in both directions obliquely across the path of the movable member, and conductive and non-conductive means carried by the movable member and engaged by the spring extremity to move the extremity into and out of contact with the conductive means.

1,808,535. BUTTON FASTENER. LAWRENCE B. ERWIN, Marblehead, Mass. Filed Sept. 26, 1930. Serial No. 484,613. 6 Claims. (Cl. 24—90.)



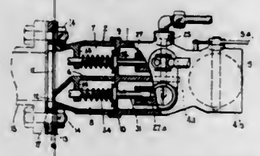
1. A button fastener comprising in combination an element having pointed extensions adapted to pass through the perforations of a button and to yield axially, and provided near the ends of such extensions with enlarged portions forming shoulders; a holding element having openings in axial agreement with the pointed extensions; means adapted to yield under axial pressure, to permit passage of the shoulders through the openings to engage the holder and to resist separation of the elements.

1,808,536. IMPRINT DEVICE. IRA T. FISK, North Hoosick, N. Y., assignor to Stevens & Thompson Paper Company, North Hoosick, N. Y., a Corporation of New York. Filed Jan. 19, 1929. Serial No. 333,679. 18 Claims. (Cl. 92—48.)



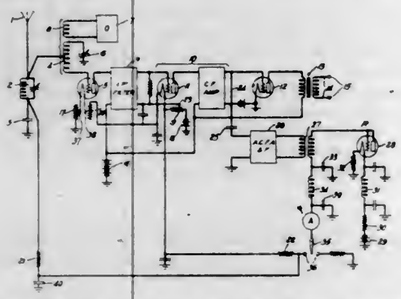
1. In a paper making machine, the combination with a marking roll, of means for heating said roll, a platen roll, and a dryer felt running between said rolls adapted to convey the paper into contact with the marking roll.

1,808,537. CARBURETOR. ORVILLE Z. FRAZIER, River Rouge, Mich., assignor of one-half to R. J. St. Louis, River Rouge, Mich. Filed Apr. 17, 1926. Serial No. 102,632. 1 Claim. (Cl. 261—41.)



A carburetor having dual mixture passages, differentially restricted, means for delivering a mixture to said passages, means in each of said passages automatically regulating the flow therethrough, a flat plate secured to said carburetor having an opening through which said passages discharge, and a flat plate pivoted in said opening in back of the first mentioned plate and successively movable across said passages to open and close the same.

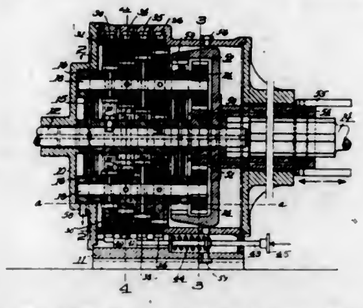
1,808,538. TRANSMISSION REGULATION. JOHN C. GABRIEL, New York, and FRANK A. HUBBARD, Lynbrook, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 11, 1929. Serial No. 345,987. 5 Claims. (Cl. 250—20.)



1. In combination a space discharge device including a hot electrode and at least one cold electrode, a circuit through which heating current is supplied to said hot electrode, means for deriving from said heating circuit a normally fixed potential and applying it to said cold electrode, means in the heating circuit for changing the potential difference between said hot and cold electrodes while maintaining constant said normally fixed potential and means actuated by the output current of said space discharge device for varying said normally fixed potential.

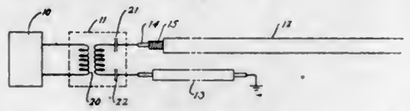
1,808,539. SPEED CHANGING TRANSMISSION MECHANISM. ERNST GESSNER, Worcester, Mass. Filed Jan. 31, 1930. Serial No. 424,963. 10 Claims. (Cl. 74—34.)

1. Speed changing transmission mechanism comprising a driving shaft, a driven shaft, a bearing frame rotatable with said driving shaft, a plurality of short shafts mounted in bearings in said frame and freely rotatable therein, a series of gears fixed on each short shaft, ring gears



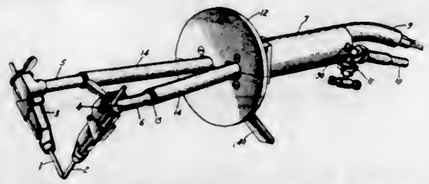
meshing therewith, gear connections from said short shafts to said driven shaft, and means to positively rotate a selected ring gear as said driving shaft is rotated.

1,808,540. SIGNALING SYSTEM. JOHN J. GILBERT, Douglaston, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 31, 1929. Serial No. 367,489. 4 Claims. (Cl. 178—63.)



1. A continuously loaded signaling conductor having a magnetic loading with a desired magnetic property which is impaired by disturbing current impulses in said conductor excessively strong as compared with signaling current impulses and a network associated with a terminal of said cable for passing signaling current impulses and having a high impedance to disturbing current impulses of frequencies below those of the signaling current impulses said impedance being high enough to prevent the impairment of said magnetic property by said distorting impulses.

1,808,541. WELDING TORCH. ROBERT T. GILLETTE, Schenectady, and EDWARD S. WEBSTER, Troy, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Sept. 12, 1927. Serial No. 218,893. 6 Claims. (Cl. 219—8.)

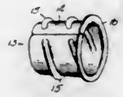


1. A welding torch comprising a plurality of electrode holders, a spring member for independently supporting each of said electrode holders, and means movable relatively to and acting on each of said spring members for deflecting them relatively to one another to move said electrode holders relative to one another.

1,808,542. THREADED BUSHING FOR ARMORED CABLE. HENRY GINSBURG, New York, N. Y. Filed Apr. 5, 1929. Serial No. 352,639. 1 Claim. (Cl. 247—43.)

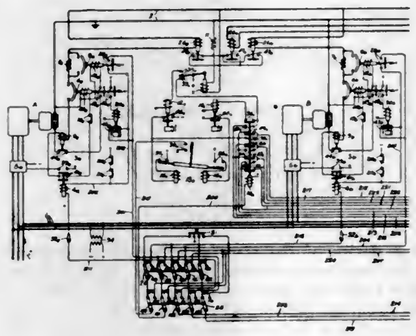
In combination, an armored electric cable comprising insulated conductors and a spirally wound protective

metal covering, the latter being formed of a metal strip which is substantially concave in transverse section on its face adjacent the insulated conductors, whereby the winding of the strip forms a spiral interior thread in the covering, and a threaded bushing to screw into the said interior thread of the covering between the latter and



the insulated conductors, said bushing comprising a longitudinally divided slightly tapered cylindrical member having an exterior spiral thread to engage the spiral thread in the covering and a flanged end to abut the end of the covering and form a protection for the insulation of the conductors.

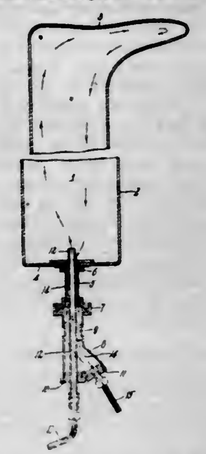
1,808,543. AUTOMATIC SWITCHING SYSTEM. WILLIAM N. GITTINGS, Upper Darby, and HAROLD T. SEELEY, Yeadon, Pa., assignors to General Electric Company, a Corporation of New York. Filed Mar. 6, 1930. Serial No. 433,836. 16 Claims. (Cl. 171—118.)



2. In combination, a multiple unit station, automatic switching means associated with each unit for placing it in operation, starting means associated with each automatic switching means for effecting the operation thereof, a plurality of master elements, timing means associated with each master element for effecting the operation of a starting means after the associated master element has remained in a predetermined position for a predetermined time, said timing means being normally associated respectively with different starting means so that each master element normally controls a different starting means, means responsive to a predetermined abnormal condition of said station for effecting independently of the positions of said master elements the shutting down of all the units in operation, and means for effecting, when said abnormal condition is restored to normal, the immediate operation of the automatic switching means associated with all of the units which were shut down in response to said predetermined abnormal condition to effect the operation of the associated units.

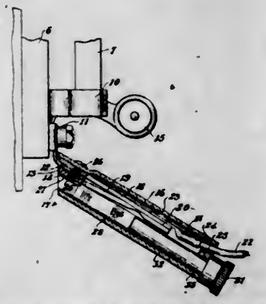
1,808,544. BOOT TREE. ALFRED A. GLIDDEN and THOMAS M. KNOWLAND, Watertown, and HERBERT L. DAVIS, Walpole, Mass., assignors, by mesne assignments, to Hood Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Aug. 22, 1927. Serial No. 214,622. 1 Claim. (Cl. 18—46.)

A hollow boot tree comprising a wall comprising rubber and constituting substantially the entire work-receiving portion of the tree, the said wall alone being of such stiffness as to sustain the shape of the tree against the force



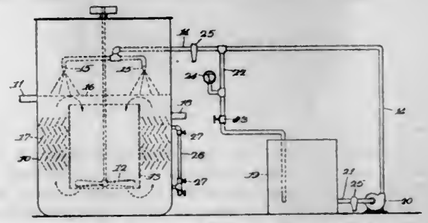
of the operations of building a boot thereon but of such stretchability as to serve as an expansible core in molding the boot under internal fluid pressure.

1,808,545. TEST CLIP. RICHARD W. GRACE, Canton, Ohio, assignor to The Superior Switchboard & Devices Company, Canton, Ohio, a Corporation of Ohio. Filed July 18, 1928. Serial No. 293,547. 3 Claims. (Cl. 173—273.)



1. A test clip including a tubular casing, a pair of normally open clamping jaws within one end portion of the casing for receiving a test ear, and a manually operable plunger slidable within the casing and protruding from the other end thereof and engaging the casing and one of the jaws for clamping them upon a test ear.

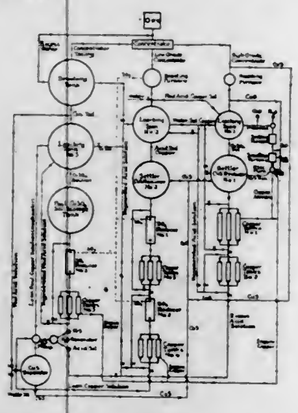
1,808,546. PROCESS AND MEANS FOR CONTROLLING THE APPLICATION OF REAGENTS TO SOLUTIONS. WALTON C. GRAHAM, Denver, Colo., assignor to Gilchrist & Company, a Corporation of Delaware. Filed July 2, 1925. Serial No. 41,222. 3 Claims. (Cl. 127—47.)



2. A method of treating a liquid with a reagent comprising recirculating a body of the liquid continuously,

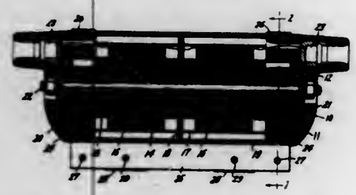
adding fresh liquid to and withdrawing treated liquid from said body continuously, spraying the reagent continuously onto a large surface of said body always at the same points in the cycle or recirculation, continuously segregating average samples of the liquid under treatment and conducting them past a point of observation and returning them thereafter to the main body of the liquid, continuously pumping a quantity of reagent from a reagent source and spraying a portion of it onto said surface, regulating the pressure of the reagent between the pump and the spray and hence varying the amount sprayed by varying a restricted return flow of the reagent from the delivery side of the pump back to said source, the amount of said pressure being varied in accordance with a characteristic of the liquid flowing past said point of observation and simultaneously maintaining the speed of recirculation of the main body of juice to aid the upbuilding of the flocs and prevent deflocculation by too rapid agitation.

1,808,547. COPPER EXTRACTION PROCESS. WILLIAM E. GREENAWALT, Denver, Colo. Filed Jan. 7, 1927, Serial No. 159,671. Renewed Oct. 28, 1930. 23 Claims. (Cl. 204—15.)



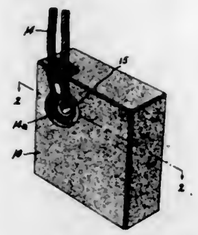
6. A process comprising, treating copper ore containing rare or precious metals to separate a high grade and a low grade concentrate, separately roasting and leaching the high grade and the low grade concentrate, and concentrating the residual metal values in the high grade concentrate residue by fusion.

1,808,548. INDUCTION COIL. LEONARD GRIFFITHS and CECIL J. MORTON, Coventry, England, assignors to General Electric Company, a Corporation of New York. Filed Apr. 15, 1930, Serial No. 444,570, and in Great Britain Nov. 29, 1929. 4 Claims. (Cl. 171—242.)



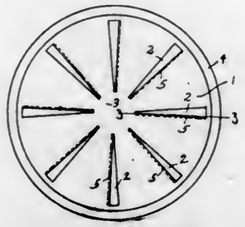
1. An induction coil having a U-shaped magnetic core, primary and secondary windings arranged between the arms of said U-shaped core, and a magnetic core member extending across the arms of said U-shaped core and adjustable about the axis of said windings to vary the time constant thereof.

1,808,549. BRUSH FOR DYNAMO-ELECTRIC MACHINES. WILLIAM H. HARDMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 15, 1927. Serial No. 226,473. 4 Claims. (Cl. 171—326.)



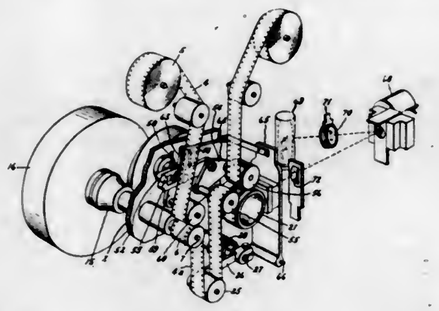
1. In combination, a brush having an opening therein, a flexible conductor, and means extending through said opening for securing said conductor to said brush including a tubular rivet and a spring on said rivet.

1,808,550. HEAT DISTRIBUTOR FOR COOK STOVES. CHARLES A. HARPMAN, Youngstown, Ohio. Filed Apr. 18, 1930. Serial No. 445,489. 1 Claim. (Cl. 126—215.)



In a device of the class described, a body member, a base for said body member, said body member having the form of a concave disk, a plurality of radial openings, said radial openings starting at a point adjacent to a central portion of said body member and enlarging as they extend to points adjacent to an outer circumference of said body member, a depended deflecting fin formed from material cut out from said openings, a detachable reducing ring functioning with said body member, a detachable pad positioned above said detachable reducing ring.

1,808,551. FILM DRIVING. CHARLES L. HEISLER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 11, 1927. Serial No. 212,349. 9 Claims. (Cl. 271—2.3.)



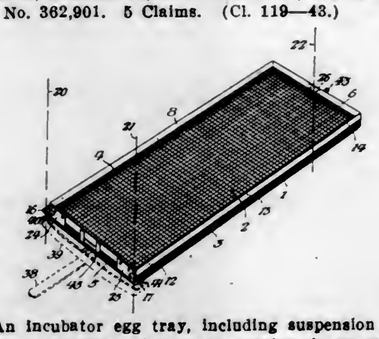
1. The method of moving the film in a sound recording or in a sound reproducing apparatus having a common driving member and a sprocket drive and a belt-type drive connected therewith and arranged in successive engagement with the film which comprises operating the sprocket drive at the same angular speed as the driving member independent of the load and varying the connection of the driving member with the belt-type drive in accordance with the length of film between the two drives.

1,808,552. INCUBATOR EGG TRAY LOADER. WILLIAM FINNEY HILLPOT, Frenchtown, N. J. Filed Mar. 24, 1928. Serial No. 264,321. 5 Claims. (Cl. 119—35.)



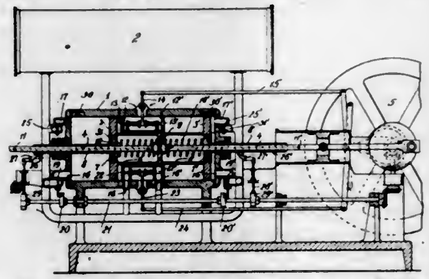
1. An incubator egg tray loader, including suspension means affording respective points of suspension, in spaced relation, adapted to detachably fit in openings in respective flexible suspension connectors; and means arranged to rectilinearly limit the movement of a tray upon said loader, including a guide rail; whereby said loader is adapted to temporarily support a tray while guiding it to and from engagement with said suspension connectors.

1,808,553. INCUBATOR EGG TRAY. WILLIAM FINNEY HILLPOT, Frenchtown, N. J. Filed May 14, 1929. Serial No. 362,901. 5 Claims. (Cl. 119—43.)



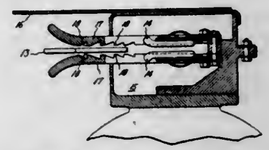
1. An incubator egg tray, including suspension means affording respective points of suspension, in spaced relation, adapted to detachably fit in openings in respective flexible suspension connectors; and guiding means on said tray arranged to limit to rectilinear reciprocation the movement of said tray upon a loader guide rail; whereby said tray is adapted to be temporarily supported and guided, upon a loader, to and from engagement with said suspension connectors.

1,808,554. AIR COMPRESSOR. LAWRENCE H. HYATT, New York, N. Y. Filed Aug. 23, 1927. Serial No. 214,801. 7 Claims. (Cl. 230—46.)



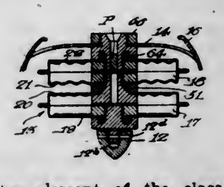
1. An air compressor comprising the combination of a tank, a compression cylinder, a piston in the cylinder, an intake valve, a discharge valve leading to the tank and means for introducing air at tank pressure into the cylinder at the termination of the intake stroke.

1,808,555. ELECTRIC SWITCH. EIKICHI ISHIMARU, Tokyofu, Japan, assignor to General Electric Company, a Corporation of New York. Filed Aug. 8, 1927, Serial No. 211,399, and in Japan Oct. 26, 1926. 5 Claims. (Cl. 200—166.)



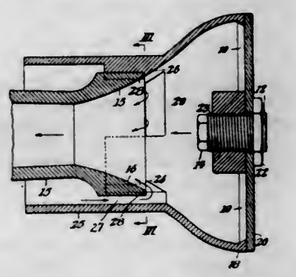
1. A switch comprising a movable contact, a cooperating fixed contact, and means for removing ice and the like from said movable contact on movement thereof to the switch closed position comprising spaced members having opposed faces provided with projections between which the movable contact is movable before engaging the fixed contact, the outer ends of said members diverging to form a guide for said movable contact.

1,808,556. VALVE. WILLIAM T. JONES, Newtonville, Mass., assignor, by mesne assignments, to Barnes & Jones, Inc., a Corporation of Massachusetts. Filed Jan. 26, 1928. Serial No. 249,599. 8 Claims. (Cl. 297—9.)



1. An actuator element of the class described, said actuator element having an expansible cell comprising at least one flexible metallic annulus and a central hub member, said hub member having parts which clamp the inner portion of the annulus between them, at least one of said hub parts having a chamber in which the edge of the annulus is disposed, and packing material disposed in said chamber to prevent leakage of fluid.

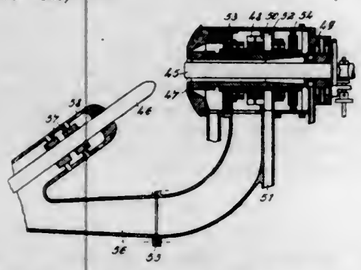
1,808,557. GAS BOILER. THOMSON KING, Pottstown, and DANIEL G. BURKERT, Boyertown, Pa., assignors to The Peerless Heater Company, Boyertown, Pa., a Corporation of Pennsylvania. Filed May 21, 1928. Serial No. 279,532. 6 Claims. (Cl. 158—118.)



1. In a gaseous fuel mixer; the combination with a burner; of a combustion chamber, secluding said burner from the outer atmosphere; a gas orifice nozzle arranged to direct gas in a stream; a mixer casing inclosing said

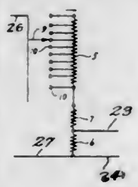
nozzle and forming a mixing chamber having an outlet for said mixture; and means for forming an air passage, arranged to introduce primary air to said mixing chamber in a direction opposite to said gas stream, and between said stream and outlet; whereby mixture of said gas and air is effected before reaching said outlet; wherein said mixer casing is located outside of said combustion chamber, but the primary air is drawn therein solely from said combustion chamber.

1,808,558. ELECTRIC ARC LAMP. OTTO KAELL, Berlin-Dahlem, and HANS GERDIEN, Berlin-Grunewald, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Aug. 17, 1927, Serial No. 213,602, and in Germany July 6, 1926. 9 Claims. (Cl. 176—66.)



2. In an arc lamp in combination two electrodes and holders therefor, circuits for connecting said electrodes to a current source, a motor, a tube spaced around the positive electrode and forming the rotor shaft for said motor, and means for supplying cooling liquid into the space between said positive electrode and said tube.

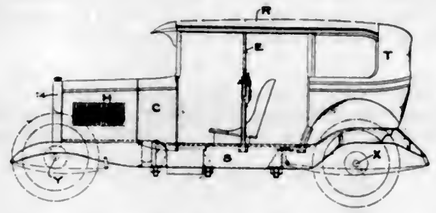
1,808,559. ELECTRICAL SYSTEM FOR VOLTAGE REGULATION. JOHANNES KUBLER and ARNOLD HALLER, Baden, Switzerland. Filed Feb. 16, 1929, Serial No. 340,442, and in Germany Jan. 27, 1928. 3 Claims. (Cl. 171—119.)



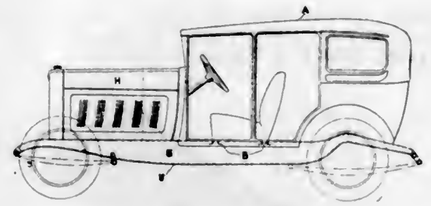
1. In an electrical system of the character described, electrical-supply leads, leads for connection to a load, transformer apparatus comprising primary windings normally connected in series relation with respect to each other across said supply leads and a secondary winding connected permanently across said load leads independently of said primary windings, one of said primary windings being variable, and connections for connection and disconnection in a predetermined sequence in said system to reverse the connection of the variable primary winding in said system while maintaining an electrical circuit between said supply leads through one of said primary windings.

1,808,560. PRESSED METAL VEHICLE BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 3, 1927. Serial No. 158,487. 39 Claims. (Cl. 296—28.)

1. A pressed metal underframe for an automotive vehicle comprising main side sills interconnected by cross braces, which sills have their rear ends deflected inwardly and are adapted in their inward positions to have vehicle wheels directly sprung therefrom, and means projected inwardly of the side sills and secured thereto to support the forward ends of the springs, whereby the springs may be arranged in vertical planes parallel to the longitudinal axis of the underframe.

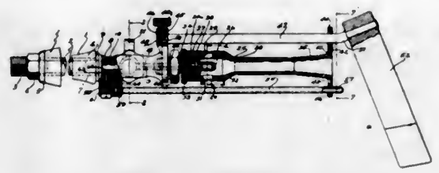


1,808,561. PRESSED METAL VEHICLE BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 8, 1927. Serial No. 159,827. 37 Claims. (Cl. 296—28.)



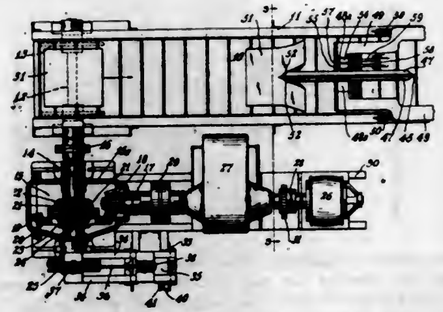
1. A vehicle body wall unit comprising a sheet metal stamping forming body paneling and having a closure opening within the margins thereof, the edges of said stamping surrounding the opening being flanged inwardly to a depth sufficient to form an endless framing for said closure opening including vertical and horizontal portions of the main body framing.

1,808,562. SOLDERING IRON OR THE LIKE. EDUARD LÜTGERT, Sheboygan, Wis., assignor, by mesne assignments, to Air Reduction Sales Company, New York, N. Y., a Corporation of Delaware. Filed May 14, 1928. Serial No. 277,410. 9 Claims. (Cl. 158—26.)



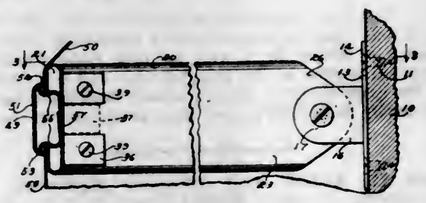
1. A device of the character described comprising a valve casing having an internally threaded outlet opening formed with a socket at its inner end, a nipple having a head at its inner end fitting in said socket, a coupling sleeve loosely mounted on the nipple, abutting the head and threadedly connected with the outer opening of the valve casing, said nipple having its outer end threaded, a gas injector tip threadedly connected to the nipple and a mixing chamber receiving and threadedly connected to the gas injector tip.

1,808,563. LOAD-LIMITING METHOD AND APPARATUS. ROBERT MAYNE, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Oct. 9, 1928. Serial No. 311,406. 14 Claims. (Cl. 192—125.)



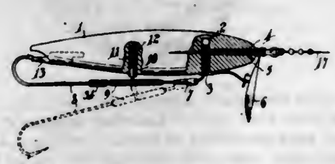
1. The method of limiting the load imposed upon a driving mechanism by a driven mechanism which comprises interposing in a system of forces including the force of the driving mechanism and the resistance of the driven mechanism, a normally statical resistance of such magnitude as to be overcome by the force of the driving mechanism when the resistance of the driven mechanism attains a determinate magnitude, the said statical resistance being so interposed in the system as to fulcrum the force of the driving mechanism for driving the driven mechanism by leverage of the third order.

1,808,564. AWNING. VIRGIL M. MCCONNELL, Jamestown, N. Y. Filed Oct. 18, 1929. Serial No. 400,559. 6 Claims. (Cl. 156—42.)



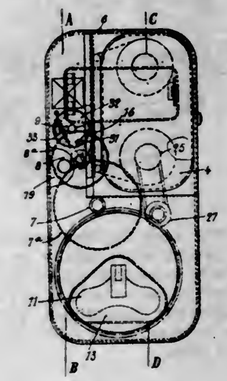
4. In an awning, a frame having front and side rails, inturned flanges defining a longitudinal opening in each of said rails, means on said front rail engaging said side rails, awning cloth mounted on and covering the openings in said rails, clips, spring flanges defining the longitudinal edges of said clips, said clip flanges being adapted to engage said rail flanges whereby to secure said cloth between said rail and clip flanges.

1,808,565. FISHING LURE. FRANK MCLAUGHLIN, Toronto, Ontario, Canada, assignor, by mesne assignments, to William Crawford Goffatt, Toronto, Ontario, Canada. Filed Apr. 11, 1929. Serial No. 354,235. 8 Claims. (Cl. 43—35.)



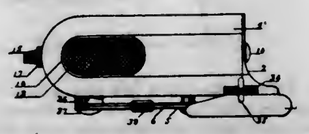
1. In a fishing bait, the combination of a body; a hook having its shank swingably and rotatably mounted relative to the body whereby on the hook rotating about the axis of its shank the point of the hook may occupy a position shielded by the body or a position spaced from the body; and means for normally retaining the hook with its point in the shielded position, the hook and body being relatively displaceable to release the hook for rotation.

1,808,566. POCKET VIEW-TAKING CINEMATOGRAPHIC CAMERA WITH SPRING-MOTOR. ANDRÉ NOËL MERLE, Vincennes, France, assignor to Pathé Cinéma, Anciens Établissements Pathé Frères, Paris, France. Filed Apr. 25, 1929, Serial No. 357,892, and in France May 7, 1928. 3 Claims. (Cl. 88—17.)



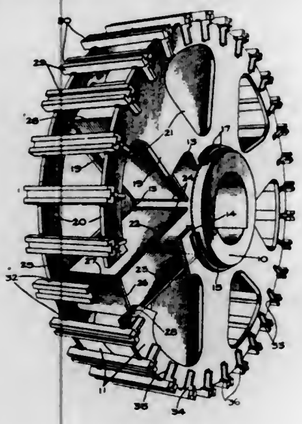
3. In a cinematographic camera, in combination a spring motor, a film case containing a winding reel and an unwinding reel, said spring motor and said reels being placed edge to edge and substantially in line relatively to each other, two main plates disposed on either side of said spring motor and film case and adapted to support said two members, a box only slightly wider than one of said two members and adapted to contain said plates with said members, and, disposed between said main plates: a shutter mechanism, a claw mechanism and an objective lens.

1,808,567. ENVELOPE SEALING DEVICE. CHARLES A. MEZGER, Brooklyn, N. Y. Filed June 10, 1930. Serial No. 460,146. 5 Claims. (Cl. 120—6.)



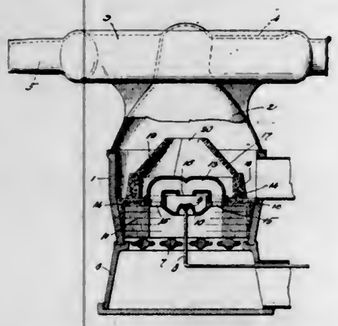
1. A device for moistening and sealing envelopes comprising a casing enclosing a collapsible reservoir having inlet and exhaust valves, the reservoir adapted to be filled with a moistening liquid by alternately compressing and releasing the sides of the same through apertures in the casing, a moistening member connected to and adapted to be supplied with liquid from the reservoir, the said member having a groove depressed in a surface of same forming a shallow basin for maintaining a supply of liquid from the reservoir, a control member having a tensional contact with the surface surrounding the grooved outlet adapted to form a normal seal for same, means for regulating the tension of the contacting surfaces, and a closing member adapted to press the moistened flap into sealed contact with the envelope.

1,808,568. ROTOR FOR DYNAMO ELECTRIC MACHINES. HARRY S. PAGE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 12, 1929. Serial No. 370,200. 4 Claims. (Cl. 171—252.)



1. A fabricated rotor for dynamo-electric machines including disks spaced apart axially of the rotor, means including radially extending spaced plates for securing said disks together, one of said plates having a portion extending peripherally of said disks and attached to the other plate for reinforcing the rotor, and a core structure carried by said disks.

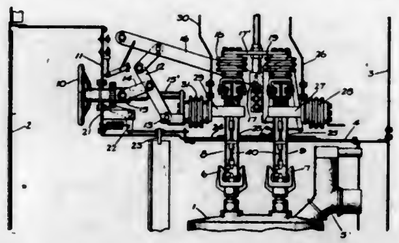
1,808,569. OIL BURNER. ANTOINE P. PLAUT, Flint, Mich. Filed Jan. 12, 1925. Serial No. 1,756. 2 Claims. (Cl. 158—4.)



1. In a furnace having a fire box, a hearth therein, a combustion chamber on said hearth forming a flame enclosure having a base of substantial area, said enclosure extending upwardly from said base and narrowing to an outlet directed towards the upper part of said furnace, a mixing device open to said chamber and substantially closing the bottom of the chamber, oil supply means entering said mixing device, an air inlet device open to said mixing device and closed to said chamber, whereby air other than that directed from the mixing device into said combustion chamber is excluded from the combustion chamber.

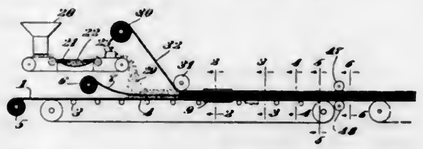
1,808,570. DISCONNECTING DEVICE. JAMES H. POWERS, Yeadon, Pa., assignor to General Electric Company, a Corporation of New York. Filed Mar. 26, 1930. Serial No. 439,195. 7 Claims. (Cl. 200—163.)

1. A disconnecting device comprising operating means, a movable contact adapted to be moved into closed and open circuit positions thereby, said movable contact having a lost-motion connection with said operating means, cam structure fixed with respect to said operating means, and a stationary contact for coacting with said movable contact, said operating means being movable through said



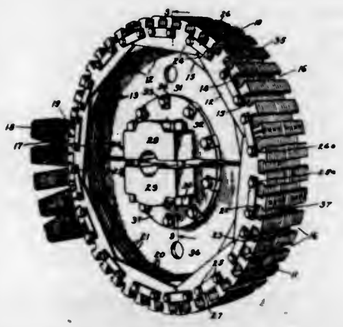
lost-motion connection with respect to the movable contact for causing the cam structure to force the movable contact into firm contacting engagement with the fixed contact prior to opening and closing movement of the movable contact.

1,808,571. REENFORCED WALL BOARD. HARRY C. RAYNES, Portsmouth, N. H., assignor, by mesne assignments, to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Filed Nov. 1, 1926. Serial No. 145,484. 4 Claims. (Cl. 154—45.9.)



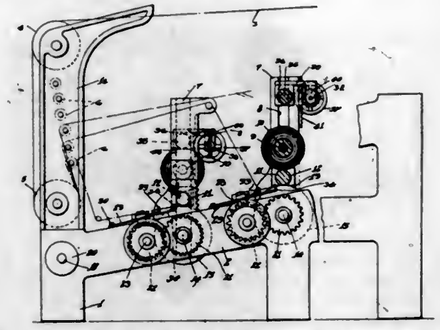
1. Wall board comprising a frangible slab, cover sheets of fibrous material thereon, and a reinforcing strip comprising a fibrous sheet with an edge embedded in the marginal portion of the frangible slab and lying parallel to the cover sheets, a portion of said strip being inclined outwardly to lie near a cover sheet at the edge of the slab.

1,808,572. ROTOR FOR DYNAMO ELECTRIC MACHINES. HENRY G. REIST, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 22, 1928. Serial No. 327,817. 5 Claims. (Cl. 171—252.)



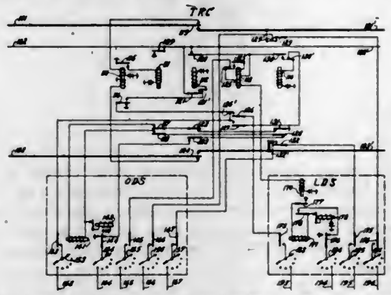
1. A rotor for dynamo-electric machines comprising separable sectors, each sector including staggered plates interleaved with the plates of the adjacent sector to form a joint therewith, means for securing said plates together, a hub member having parts corresponding to said sectors, means for securing said sectors to their respective parts of said hub member, and pole pieces carried by said sectors.

1,808,573. MACHINE FOR FORMING YARN PACKAGES. ARTHUR L. REMINGTON and ARMON J. JAVERY, Worcester, Mass., assignors to Warp Compressing Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 21, 1928. Serial No. 307,365. 7 Claims. (Cl. 242—17.)



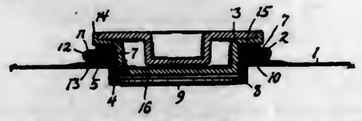
1. In a machine of the class described, the combination with a rotatable shaft adapted for vertical movement, a rotatably driven roll supported only at its ends, with its upper surface supporting said shaft, means for conducting yarn around the free under surface of said roll to the surface of said shaft, and means for imparting a traverse to said yarn, whereby the pressure between said shaft and said roll serves to hold the yarn at the point at which it is laid by said traversing means, the upward movement of said shaft as the yarn package wound thereon increases in diameter, being independent of said roll and of said traversing means.

1,808,574. TELEPHONE SYSTEM. RODNEY G. RICHARDSON, Chicago, Ill., assignor to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 10, 1926, Serial No. 147,418. Renewed Aug. 11, 1930. 50 Claims. (Cl. 179—18.)



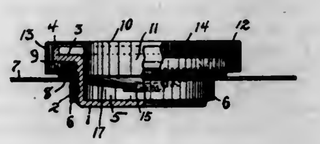
1. In a telephone system, two offices, two register senders in one of the offices, and means for utilizing both said register senders to control the establishment of a single connection between a calling line in one office and a called line in other office.

1,808,575. SEAL FOR BUNG FIXTURES OF CONTAINERS. IRVIN H. RIEKE, Auburn, Ind., assignor to Rieke Metal Products Corporation, a Corporation of Indiana. Filed Oct. 30, 1929. Serial No. 403,519. 6 Claims. (Cl. 220—39.)



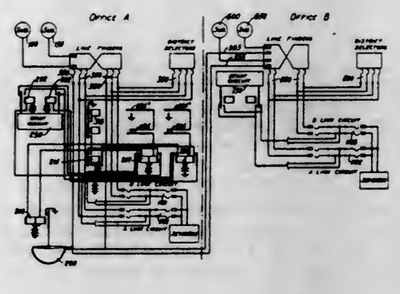
1. In an appliance of the class described, an assemblage, consisting of a bung ring having an external flange at one end, a gasket disposed on the flanged end of the ring, and a seal in the form of a cup into which the end of the ring opposite its flange extends and is closed thereby, said cup having a flange at its top provided with an annular pocket into which the outer marginal portions of the flange of the ring and the gasket extend and by which the assembled parts are initially held together.

1,808,576. BUNG AND SEALING MEANS. IRVIN H. RIEKE, Auburn, Ind., assignor to Rieke Metal Products Corporation, a Corporation of Indiana. Filed Mar. 31, 1930. Serial No. 440,257. 5 Claims. (Cl. 220—39.)



1. In a bung for a container and sealing means therefor, the combination of a cup shaped bung having a wrenchhead and a circular chamber opening through said wrenchhead, and a sealing means comprising a fragile shell having a cup shaped to fit telescopically in said chamber and provided with a cowl at its top for encasing said wrenchhead when the sealing means is applied to said bung, and an anchor attached to the bottom of the shell cup having jaws that engage the wall of the bung cup and lock the sealing means in place.

1,808,577. AUTOMATIC TELEPHONE EXCHANGE SYSTEM. FREDERICK J. SCUDDER, Queens Village, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 11, 1930. Serial No. 420,072. 14 Claims. (Cl. 179—18.)

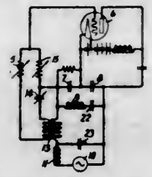


1. A telephone exchange system comprising a plurality of offices, call distributing and call extending equipment at each office, an overflow office common to said offices, interoffice trunks appearing as calling lines at said overflow office and terminating in call distributing equipment at said other offices, and means at each of said other offices for diverting calls originating thereat over said line finders and trunks to said overflow office.

1,808,578. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. WALDO L. SEMON, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 17, 1930. Serial No. 421,597. 17 Claims. (Cl. 18—50.)

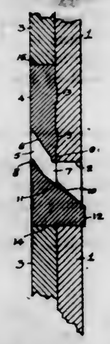
1. The method of preserving rubber which comprises treating rubber with a halogen substituted diarylamine.

1,808,579. GENERATION OF ELECTRIC CURRENTS. LEON J. SIVIAN, Bloomfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 29, 1926. Serial No. 105,400. 16 Claims. (Cl. 250—36.)



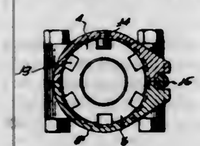
1. In a band frequency oscillation generator, an oscillation circuit for determining the frequency of the current produced by said generator, said circuit including an inductance having a fixed magnetic circuit comprising solid magnetic material, and means for continuously varying the permeability of said material so as to cause the frequency of said generator current to correspondingly continuously vary.

1,808,580. RAZOR BLADE DISCARD. LEON W. SLACK, Trenton, N. J., assignor, by mesne assignments, to Razor Blade Tile, Incorporated. Filed Nov. 5, 1928. Serial No. 317,239. 4 Claims. (Cl. 72—18.)



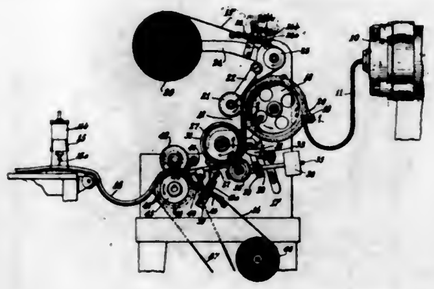
1. A tile adapted to receive discarded razor blades comprising a beveled rearwardly extending foot, beveled faces extending across and below an opening formed through the tiling, and an inclined bevel leading from the opening onto the rearwardly extending foot.

1,808,581. CONDUIT TERMINAL. WILLIAM W. SLOANE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 6, 1929. Serial No. 344,646. 4 Claims. (Cl. 247—25.)



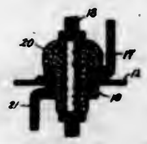
1. In a device of the character described, the combination with an apertured part, of a packing device associated with the aperture of said part including a packing member screwthreaded into said aperture and provided with an exterior annular flange provided with a peripheral opening, a collar adapted to be secured on a conduit, means on said collar and engaging said flange for axially fixing said collar and packing member, means on said collar and engaging said peripheral opening for angularly fixing said collar and packing member, and an engagement between said collar and said apertured part angularly fixing the same.

1,808,582. METHOD OF MAKING WINDOW GUIDE CHANNELS. JOSEPH I. TAYLOR, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Feb. 29, 1928. Serial No. 257,941. 4 Claims. (Cl. 154—2.)



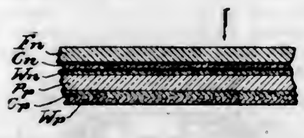
1. The method of making channeled strip material which comprises forming a channel-strip of unvulcanized rubber of widely open but complex cross-sectional shape, applying cover-material to said strip by progression lengthwise of the strip while it is in such shape, and thereafter shaping the covered strip to its ultimate form by progression lengthwise of the strip.

1,808,583. INCASED ELECTRICAL APPARATUS. EDWARD D. TREANOR, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 4, 1930. Serial No. 433,168. 5 Claims. (Cl. 173—318.)



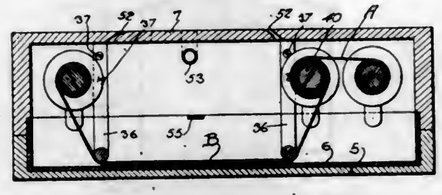
2. Electrical apparatus enclosed in a casing of magnetic material, a pair of outside terminals, and a pair of conductors extending from said apparatus through an opening in said casing to said terminals, one of said conductors being in contact with the casing structure and connected to ground.

1,808,584. COLOR PHOTOGRAPHY. LEONARD T. TROLAND, Malden, Mass., assignor to Comstock & Wescott, Inc., Boston, Mass., a Corporation of Massachusetts. Filed Sept. 9, 1921. Serial No. 499,425. 234 Claims. (Cl. 95—2.)



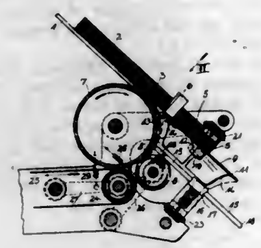
1. A sensitized element for use in color photography comprising an emulsion which is sensitive to complemental colors at different depths respectively.

1,808,585. APPARATUS FOR DEVELOPING AND PRINTING PICTURES. EUGENE WASYLENKO, Chester, Pa. Filed Sept. 26, 1929. Serial No. 395,441. 6 Claims. (Cl. 95—90.5.)



1. In a device for preparing and printing films, comprising a container adapted for holding a developing fluid, a cover for the receptacle having transverse openings in its upper wall, and means for directing a film negative into close engagement with the bottom of the receptacle or through the transverse openings in the cover.

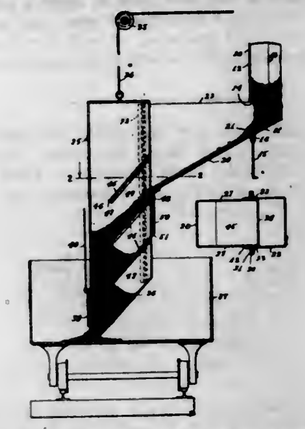
1,808,586. APPARATUS FOR THE WITHDRAWAL OF SHEETS OR THE LIKE. ALFRED WINKLER and MAX DÜNNEBIER, Neuwied, Germany. Filed Aug. 31, 1929, Serial No. 389,730, and in Germany Sept. 1, 1928. 6 Claims. (Cl. 271—23.)



1. Apparatus whereby the lowermost sheet is withdrawn in a diagonal direction from a stock of single or folded sheets or the like, comprising means for supporting the stack in an inclined position with one corner of the stack at the foot of the incline, means for forming a recess between the lowermost sheet and the one next thereto, a tongue adapted to penetrate said recess to bend down the lowermost sheet at the said corner of the stack, a relatively large main roller mounted beneath the stack, a relatively small counter-roller cooperating therewith and recessed centrally of its length to receive the corner of the sheet, and a rotary bell-shaped member carrying said tongue and mounted on an axis substantially parallel to the perpendicular axis of the stack and having a curved peripheral surface adapted to lie close to and in concentric relation to the peripheral surface of the main roller to bring the sheet into close and uniform contact with the main roller and to insert the corner of the sheet into the said recess in the counter-roller.

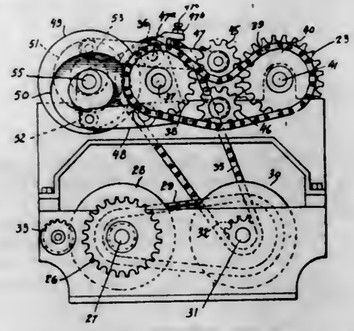
1,808,587. COAL LOADING METHOD AND APPARATUS. HENRY ADAMS, Plainfield, N. J. Filed Jan. 19, 1927. Serial No. 162,134. 24 Claims. (Cl. 193—32.)

1. In combination, a delivery means and an upright chute associated with, and relatively adjustable to, each other; said chute including means entirely fixedly mounted thereon admitting material from said delivery means



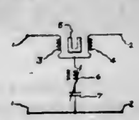
into the chute at various positions of adjustment and preventing any material from flowing out of said chute intermediately thereof.

1,808,588. FEEDING AND SPACING DEVICE. HOWARD G. ALLEN, Niagara Falls, N. Y., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Aug. 2, 1928. Serial No. 296,889. 16 Claims. (Cl. 1—11.)



1. The combination with a wire stitching machine, of means having normally a uniform movement for feeding articles to be stitched past the stitching mechanism, and means acting in unison with the stitching mechanism and acting upon the feeding means so as to translate the feeding movement into an intermittent movement with periods of rest in the movement, the stitching machine and the said means acting in unison therewith being so timed that the stitching mechanism actuates during the periods of rest of the intermittent movement.

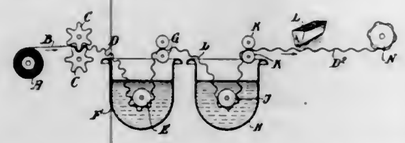
1,808,589. ELECTRICAL FILTER. RALPH D. AMSDEN, Lynn, Mass., assignor to General Electrical Company, a Corporation of New York. Filed Dec. 30, 1927. Serial No. 243,706. 3 Claims. (Cl. 178—44.)



3. An inductive filter for electrical circuits adapted to be inserted between a source of current and a load circuit and including a pair of inductively coupled coils, a common

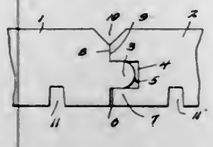
core of said coils, circuit leads connecting said coils in series relation, a coil and a condenser arranged to provide a shunt connection with said leads to apply a neutralizing voltage to one of said first named coils, and means connected in shunt with the other of said first named coils for rendering said filter insensitive to load current variations.

1,808,590. METHOD OF MANUFACTURING PAPER, PASTEBOARD, FELT AND THE LIKE. AUGUST WILHELM ANDERNACH, Beuel, Germany. Filed Dec. 5, 1929, Serial No. 411,778, and in Germany Sept. 3, 1928. 6 Claims. (Cl. 154—2.)



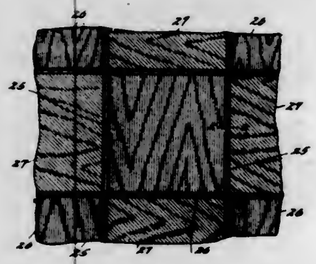
1. The method of producing a material of the character specified, which consists in undulating sheet pasteboard material, impregnating it with a substance rendering it water proof, and subsequently at least partly removing the undulations therefrom.

1,808,591. WOOD FLOORING. CHARLES ARTHUR BRUCE, Memphis, Tenn., assignor to E. L. Bruce Company, Memphis, Tenn., a Corporation of Delaware. Filed Apr. 10, 1929. Serial No. 354,124. 3 Claims. (Cl. 20—8.)



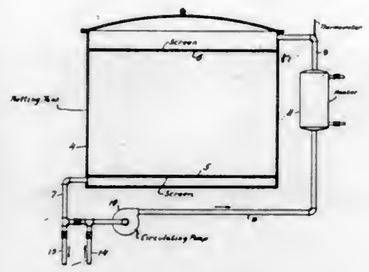
1. A floor formed of strips of wood united along their edges by a tongue and groove joint, the edges of the strips being in abutting relationship for only a part of the distance between the said tongue and groove and the front face of the strips and spaced apart for the remaining distance whereby the strips can expand edgeways above and below the said abutting edges without compressing the wood at such points.

1,808,592. WOOD BLOCK FLOOR. ROBERT G. BAUCE, Memphis, Tenn., assignor to E. L. Bruce Company, Memphis, Tenn., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,338. 4 Claims. (Cl. 20—8.)



1. A panel formed of wood blocks having their sides in abutting relationship, the grain of the wood of adjacent blocks being at an angle to each other and running in the same plane as the face of the block, open grooves surrounding the faces of the blocks, the said grain and grooves bringing into relief the outline of each block.

1,808,593. MANUFACTURE OF FLAX FIBER. EDGAR RAYMOND CLARK, Pittsburgh, Pa., assignor to Milton S. Erlanger, New York, N. Y. Filed Aug. 17, 1927. Serial No. 213,511. 15 Claims. (Cl. 92—5.)

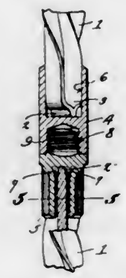


1. In retting flax, the improvement which comprises placing the flax in a tank, rinsing the flax in the tank by circulating cold water therethrough and, after draining off the rinsing water, supplying fresh water to the tank and maintaining it at a uniform elevated temperature by circulating it from the tank through an external circuit back to the tank and heating it while passing through the external circuit.

1,808,594. PROCESS FOR SEPARATING PLATINUM FROM THE OTHER PRECIOUS METALS. GEORGES AUGUSTE LOUIS ROBERT COLLARD, Vienne, (Isere), France, assignor to Comptoir Lyon-Alemand, Paris, France, a Joint-Stock Company of France. Filed Jan. 28, 1928, Serial No. 250,342, and in France Feb. 4, 1927. 8 Claims. (Cl. 75—17.)

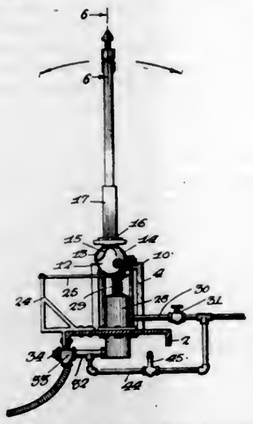
1. A process for separating platinum from gold and silver which consists in forming a mixture of goldsmith's ash, lead oxide, matte, slags of silica, iron oxide and calcium compounds, thio-oxidizing agents and metallurgical coke; adding copper to said mixture sufficiently in excess of the amount affected by the thio-oxidizing agents in order to fractionally separate the platinum; fusing the mass obtained; and cooling said mass.

1,808,595. LIGHTNING ROD COUPLER. EARNEST C. CRIPE, Goshen, Ind. Filed July 10, 1929. Serial No. 377,303. 3 Claims. (Cl. 173—31.)



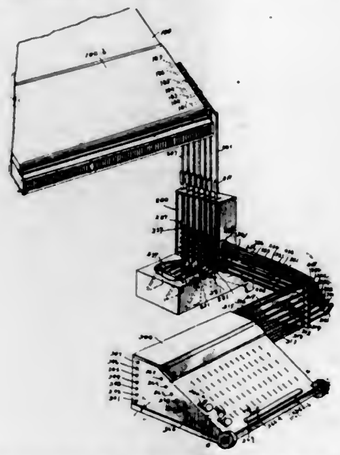
1. The combination with a rod having longitudinal ribs and means at the ends of the rod for closing the ends of the spaces between the ribs, thereby to form pockets, of coupling members having recesses into which the respective ends of the rod project, the walls of the recesses being pressed into the pockets to hold the rod against withdrawal from the recesses, and means carried by the coupling members for joining them to other elements.

1,808,596. GREASING, LIFTING AND ROCKING MACHINE. ANTHONY W. DAINOS, New Orleans, La. Filed July 21, 1928, Serial No. 294,421. Renewed Feb. 18, 1931. 7 Claims. (Cl. 184—1.)



1. In a lubricating machine for automobiles, means engageable with the body of an automobile to raise the same to open the leaves of the springs thereof, means for imparting a rocking motion to the automobile when so raised, a lubricant pump and means operated by the rocking means for actuating the pump.

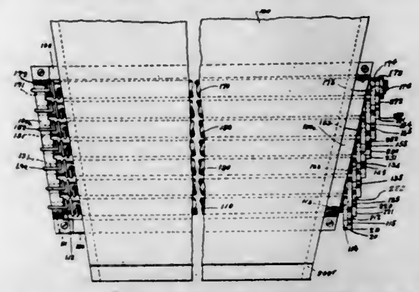
1,808,597. SELECTIVE MECHANISM. ROY EMERY, Brooklyn, N. Y. Filed June 23, 1925. Serial No. 39,155. 33 Claims. (Cl. 199—18.)



1. In a typographical machine having a selective mechanism adapted to be actuated by a keyboard mechanism, a plurality of keys, a lever for each of the keys, a weight movably held and adapted to be moved by each key lever, a plurality of extensions on each weight; a plurality of parallel blade elements movably held adjacent to the weights, and so formed that each of the weights will engage a selective number of the blade elements when moved by the keys; means for transmitting the movement to a corresponding number of selective elements of the selective mechanism to be actuated by the keyboard.

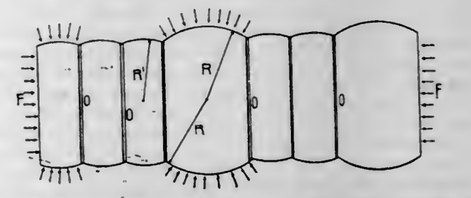
1,808,598. SELECTIVE MECHANISM. ROY EMERY, Brooklyn, N. Y. Filed Nov. 4, 1926. Serial No. 146,270. 19 Claims. (Cl. 199—18.)

1. Typographical escapement operating mechanism including, a releasing pawl of the character described, a releasing bar adapted to longitudinal movement for actuating said pawl, spring means for actuating the releasing bar; engaging elements of the said releasing bar, for engaging other engaging elements arranged in combination



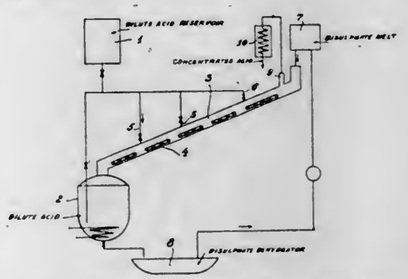
series upon a plurality of combination rods; means for moving said rods whereby the engaging elements on one or more of the rods will disengage the engaging elements upon the releasing bar; and timing means regulating the restoration of the releasing bar to its normal position.

1,808,599. RESISTANT SUBMARINE HULL OR THE LIKE. ROBERTO GALEAZZI, Muggiano, Spezia, Italy. Filed Sept. 22, 1927, Serial No. 221,275, and in Italy Oct. 25, 1926. 4 Claims. (Cl. 114—16.)



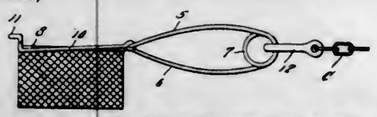
1. A rigid circumferentially corrugated container of circular cross section, comprising a shell made of adjacent nonresilient spherical undivided sections, the centers of said sections lying on the longitudinal axis of the container, and circular cross frames stiffening said spherical sections at the points where they unite.

1,808,600. PROCESS FOR CONCENTRATING VOLATILE ALIPHATIC ACIDS. ADOLF GORHAN, Liesing, near Vienna, Austria, assignor, by mesne assignments, to the Firm of Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 26, 1928, Serial No. 280,909, and in Germany June 16, 1927. 16 Claims. (Cl. 260—122.)



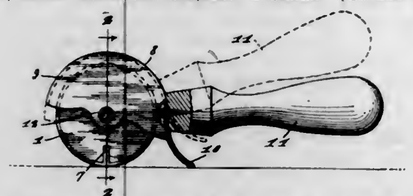
1. A process for the concentration of dilute acetic acid and its volatile higher homologous acids, which consists in converting the dilute acids into vapor, and then treating the resulting acid vapor and water vapor mixture with water absorbing material comprising sodium bisulfate in the liquid molten state.

1,808,601. COMBINED COIN HOLDER AND LETTER CLAMP. CHARLES K. HEISTAND, Epworth, Mo. Filed May 13, 1930. Serial No. 451,982. 4 Claims. (Cl. 232—33.)



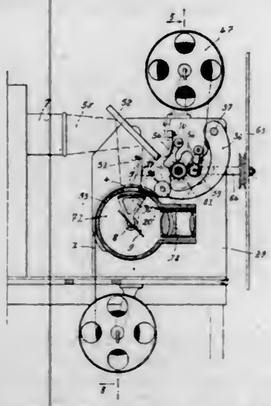
4. In a device of the character described, a pair of complemental jaws, means normally urging said jaws into clamping relation with respect to one another, and a receptable mounted on one of said jaws and having an open side adapted to be closed by the article clamped between said jaws.

1,808,602. BLOTTING DEVICE. EDWIN G. HOFFSTADT and ROBERT W. HOFFSTADT, Jackson, Mich. Filed Feb. 17, 1930. Serial No. 429,135. 1 Claim. (Cl. 120—26.)



A blotting device comprising a handle carrying hood, that has its sides, at diametrically opposite points, depressed outwardly to provide concaved bearings, a blotter carrying roller having a fixed trunnion projecting from one of its ends and a spring influenced trunnion at its second end, said movable trunnion having an inner headed portion, a sleeve having an outer closed end in the roller and receiving the headed end of the trunnion therein, both of said trunnions designed to be received in the bearings in the roller and the said roller being susceptible to removal from the hood when a pressure is exerted against the end thereof carrying the fixed trunnion to depress the movable spring influenced trunnion to permit of the roller being drawn out of the support and said trunnions having outer rounded ends whereby when the movable trunnion is depressed both of the trunnions are brought against the inner sides of the hood and the roller may be moved in the hood to again bring its trunnions in the bearings.

1,808,603. MOVING PICTURE RECORDING AND PROJECTION APPARATUS. MARCEL REMY HUC, Toulouse, France. Filed Mar. 19, 1927, Serial No. 176,742, and in Belgium Mar. 23, 1926. 7 Claims. (Cl. 88—16.8.)

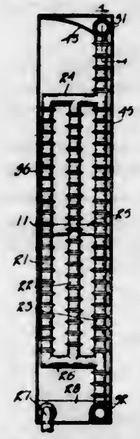


1. A film manipulating apparatus comprising in combination a fixed cylindrical film guiding surface having an aperture formed therethrough, a film storage reel, a film windup reel, a rotatable shaft located intermediate said reels, a cam mounted on said shaft, a toothed drum mounted on said shaft, framing means adapted to isolate a picture unit of the film passing in front of the aperture of the film guiding surface, a reflecting surface positioned so as to intercept light coming from said aperture, and means operable by rotation of the cam for oscillating said framing means and said reflecting means about a common axis at different angular velocities.

1,808,604. REFRIGERANT COMPOSITION. WALTER A. KUENZLI, Evansville, Ind., assignor to Servel Inc., New York, N. Y., a Corporation of Delaware. Filed June 18, 1930. Serial No. 462,152. 9 Claims. (Cl. 23—5.)

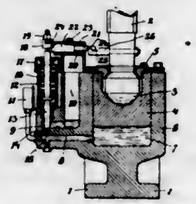
9. A refrigerant of the liquid gas phase type containing acrolein.

1,808,605. RADIATOR. JOSEPH W. PATE, Birmingham, Ala. Filed June 16, 1930. Serial No. 461,577. 2 Claims. (Cl. 257—151.)



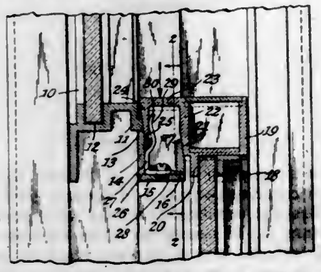
2. A radiator comprising end and intermediate sections secured together, each section having a vertically extending pipe, pipes parallel with, spaced from, and having the ends thereof connected with said vertical pipe intermediate the ends thereof, plates secured to the front and back of said sections having their edges in alignment and contacting thereby forming a front and a back wall for said radiator, said front wall terminating at the ends of said second pipes thereby forming a draft flue adapted to circulate air through the radiator to absorb heat therefrom, and deflecting plates extending horizontally from the upper ends of said vertically extending pipes to the front edge of said radiator serving to deflect the heated air, substantially as set forth.

1,808,606. HYDRAULIC SAFETY DEVICE FOR POWER PRESSES AND THE LIKE. HENRY PELS, Berlin-Charlottenburg, Germany. Filed July 5, 1929, Serial No. 376,261, and in Germany Sept. 4, 1928. 6 Claims. (Cl. 74—48.)



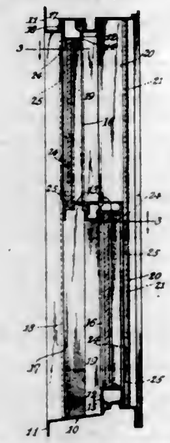
1. In a press comprising a reciprocating tool carrier and a ram for reciprocating said carrier, means for compensating for excessive resistance offered to the working stroke of said carrier, said means comprising a fluid-confaining cylinder formed in said carrier, a piston connected to the ram and working in said cylinder, a chamber carried by said carrier, a conduit connecting said cylinder and chamber, a valve normally closing said conduit and opened by the pressure of the fluid in said cylinder and conduit when such pressure is caused by relative movement of said carrier and ram, during the working stroke of the ram, to exceed a predetermined degree, and means operative during the return stroke of the ram to hold said valve in open position until the ram has completed its working stroke and operable to permit the valve to close as the ram approaches the end of its return stroke.

1,808,607. CROSS RAIL SPRING CATCH FOR WINDOWS. JOHN POLACHEK, New York, and JULIUS A. JEPSEN and EDMUND PEREMI, Elmhurst, N. Y., assignors to General Bronze Corporation, New York, N. Y., a Corporation of New York. Filed May 24, 1929. Serial No. 365,609. 7 Claims. (Cl. 189—65.)



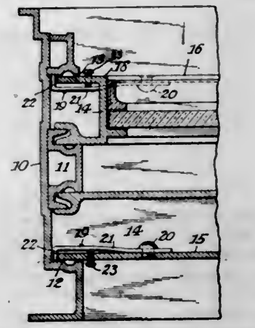
1. In a window construction a plurality of sliding sashes with meeting rails embodying contact web portions, a spring device secured to one of said rails and being adapted to engage a web of the other rail when the sashes are substantially in their closing position for drawing said sashes towards one another, said spring device being in the form of a curved leaf spring spaced from the contacting surface of the rail to which it is secured so as to receive the web of the other rail in the space so formed.

1,808,608. ANTIRATTLING SPRING FOR WINDOW SASHES. JOHN POLACHEK, New York, and JULIUS A. JEPSEN and EDMUND PEREMI, Elmhurst, N. Y., assignors to General Bronze Corporation, Long Island City, N. Y., a Corporation of New York. Filed May 24, 1929. Serial No. 365,610. 9 Claims. (Cl. 189—72.)



1. In a window embodying a frame having inner and outer guides and parting strips between which the stiles of the window sashes are operated, resilient elements comprising rods having their ends bent at an angle to the shank and arranged between the outer faces of the said stiles and said inner and outer guides of the frame, for the purpose set forth.

1,808,609. FLAT SPRING ANTIRATTLING DEVICE FOR WINDOWS. JOHN POLACHEK, New York, and JULIUS A. JEPSEN and EDMUND PEREMI, Elmhurst, N. Y., assignors to General Bronze Corporation, Long Island City, N. Y., a Corporation of New York. Filed May 24, 1929. Serial No. 365,611. 16 Claims. (Cl. 189—72.)



1. In a window embodying a frame having outer and inner guides, a centrally positioned parting strip, and sashes having upper, lower and meeting rails and side stiles, resilient elements arranged horizontally within the said rails of the window and having thrust engagement with the inner facea of said guides to move the sashes into intimate contact with said parting strip.

1,808,610. BRACE MOUNTING. ABRAHAM WILLIAM ROY, Lowell, Mass. Filed Feb. 7, 1930. Serial No. 426,661. 1 Claim. (Cl. 135—28.)

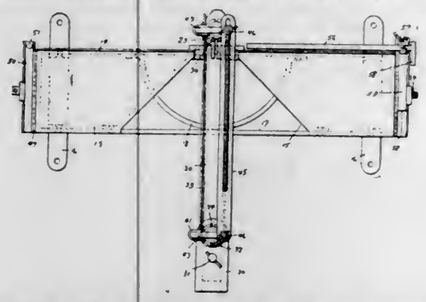


An umbrella brace mounting comprising a sleeve slidably mounted upon the umbrella staff, a sleeve member telescopically associated for sliding motion upon the sleeve, the sleeve member having slots arranged upon diametrically opposed sides and adjacent the outer end thereof, ears carried by and outwardly projecting from the adjacent end of the sleeve for selective reception within said slots and for frictional engagement with the mentioned end of the sleeve member, and flanges carried by and oppositely disposed upon the sleeve and sleeve member to provide a journal housing therebetween for the ends of said brace.

1,808,611. MITER BOX. JOHN GERHARD RUNNING, Miami, Fla. Filed May 24, 1930. Serial No. 455,360. 2 Claims. (Cl. 143—89.)

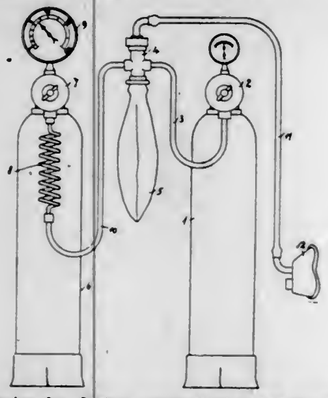
2. In a structure of the class described, in combination, a work supporting base, a horizontal rail pivotally mount-

ed on said base and swingable in a limited arc, a rigid upstanding tube on the pivoted end of said rail, a longitudinally slidable shoe on the rail movable toward and from the base, an upstanding tube carried by said shoe, retaining means for holding said shoe in different adjusted positions on the rail, vertically extensible standards mounted for adjustment in said tube, retaining means between the tubes and standards for holding the standards in a stationary elevated position said standards and tubes



adapted to slidably carry a saw movable in conjunction with the rail and shoe assembly, a rack on said base, a spring pressed latch carried by said rail and co-operable with said rack, together with stops carried by said tubes, and adjusting screws mounted on said tubes and co-operable with said stops for limiting the depth of cut of the saw said adjusting screws having cranks on their upper ends, and a connecting rod between said cranks for simultaneously and equally adjusting the screws.

1,808,612. DEVICE FOR DOSING COMPRESSED GASES. HANS WILHELM CHRISTIAN SCHROEDER, Lubeck, Germany, assignor to Drägerwerk, Lubeck, Germany. Filed Mar. 22, 1928, Serial No. 263,800, and in Germany May 24, 1927. 5 Claims. (Cl. 128—203.)



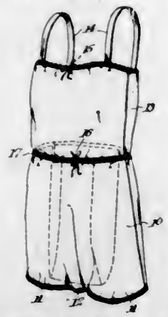
1. A device for dosing compressed gases in regulatable amounts comprising an outlet communicating with a source of gas under pressure, a pressure reducing valve in said outlet, a capillary tube having a length of at least 20 centimeters connected to the outlet, and a pressure gauge connected to said outlet at a point between the capillary tube and the source of gas, the gas being adapted to flow past the pressure reducing valve before entering the capillary tube.

1,808,613. PROPELLANT EXPLOSIVE. WALTER O. SNELLING, Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y., a Corporation of New York. Filed Feb. 19, 1926. Serial No. 89,418. 10 Claims. (Cl. 52—13.)

2. A smokeless and flashless powder comprising desensitized nitrostarch and a temperature-reducing agent, the latter being an addition product of an amine and nitric acid.

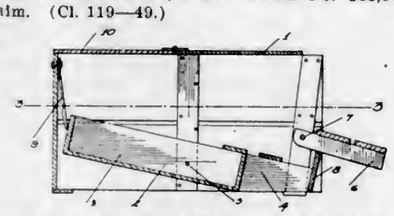
10. The process of rendering nitrostarch smokeless and flashless, which comprises thoroughly mixing nitrostarch granules with a material selected from the following group,— guanidine nitrate, ammonium nitrate, urea nitrate, nitroguanidine,—and thereafter bringing about surface colloidization of the nitrostarch granules and compressing the mass into "grains" of the desired form.

1,808,614. NETHER GARMENT. JACOB STEIN, Brooklyn, N. Y. Filed Oct. 15, 1928. Serial No. 312,612. 2 Claims. (Cl. 128—288.)



2. A nether-garment having a bodice supporting a lower trunk covering portion, said garment having a series of circumferential openings about the waist portion thereof, a sanitary shield consisting of an elongated strip of impervious material having its ends detachably secured respectively to the front and back waist portions of the garment, the ends of said shield having a series of transverse openings therein, a draw-string threaded through the openings of the waist in the garment and through the openings in said sanitary shield whereby the garment may be contracted about the waist and said shield may be detachably secured in position and rendered vertically adjustable.

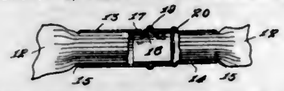
1,808,615. TRAP NEST. CHARLES STOCK, Baldwin Park, Calif. Filed Mar. 20, 1929. Serial No. 348,544. 1 Claim. (Cl. 119—49.)



A nest of the class described comprising a casing having its front open, a door member pivotally connected with the casing and moving to an open position under the action of gravity, a nest in the casing and having its sides extended forwardly, cross pieces on the extended sides forming a platform, means for pivotally supporting the nest in the casing an appreciable distance from its front end, an upright piece connected with the ends of the extensions and engaging the door to raise the same to closed position when the nest is occupied, the pivoted end of the door member engaging a part of the platform to limit the upward movement of the front end of the nest and to hold the same in a forwardly tilted position while the door is closed.

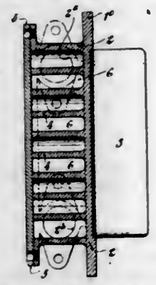
1,808,616. NECKTIE. EUGENE L. STOTT, Chattanooga, Tenn. Filed May 31, 1930. Serial No. 458,169. 2 Claims. (Cl. 2—157.)

1. As a new article of manufacture, a neck tie having the neck band portion thereof severed at an appropriate point in its length, a detachable connection of sectional formation, the sections of the connection carried upon the ends of the neck band being telescopically associated at their adjacent ends, one of these sections having an an-



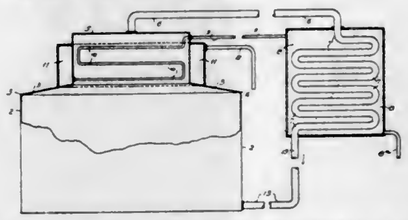
nular groove adjacent to and within the telescoping end thereof, and a yieldably mounted projection carried upon the other section and disposed within the groove establishing swivel connection between the sections.

1,808,617. ELECTRIC TRANSFORMER COOLING MEANS. JOHN LINDLEY THOMPSON, Hayes, England. Filed Oct. 3, 1929, Serial No. 397,022, and in Great Britain Oct. 13, 1928. 6 Claims. (Cl. 257—191.)



4. A cooling device for use with a transformer oil tank, said cooling device comprising a plate member adapted to be secured at its marginal portion in a fluid tight manner to the outer side of a transformer tank over an opening therein, said plate member having at one side thereof, within said marginal portion, a plurality of vertically arranged heat absorbing fins extending laterally beyond the plane of said marginal portion and adapted to extend through said opening, and at the opposite side a tortuous passage through which cooling fluid can be caused to flow.

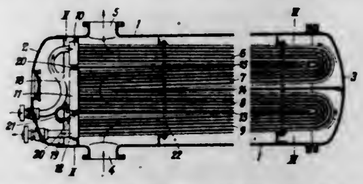
1,808,618. STORAGE OF VOLATILE LIQUIDS. SIDNEY THOMAS TREZISE, Rossburgh, South Africa. Filed Nov. 2, 1929, Serial No. 404,435, and in the Union of South Africa Sept. 19, 1929. 3 Claims. (Cl. 62—1.)



1. A storage tank for volatile liquids having means connected thereto for collecting and condensing the vapour arising from the surface of the liquid, means for returning the condensate to the tank, a refrigerator coil situated in that portion of the tank enclosed by the cover, a refrigerator jacket surrounding said cover and means for maintaining said coil and jacket at a low temperature.

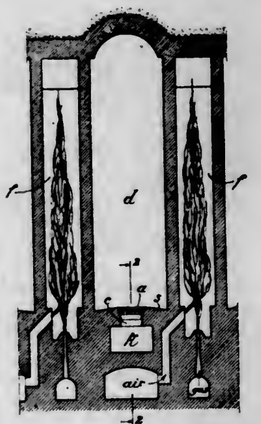
1,808,619. HEAT EXCHANGER. ROBERT UHDE, Cassel-Wilhelmshohe, Germany, assignor to Schmidt'sche Heissdampf-Gesellschaft mit beschränkter Haftung, Cassel-Wilhelmshohe, Germany, a Corporation of Germany. Filed Feb. 20, 1929, Serial No. 341,505, and in Germany Mar. 3, 1928. 6 Claims. (Cl. 257—240.)

1. In a heat exchanger the combination of a closed container provided with an inlet connection and an outlet connection for the medium to be heated and with an inlet connection and an outlet connection for the heating medium, with a plurality of series connected groups of parallel connected heating tubes disposed within said container, said groups of heating tubes communicating with a plu-



rality of headers movable with respect to the container, one of the end headers being connected to the inlet and the other end header being connected to the outlet of the heating medium, one of said two end headers being fixed and the other end header being freely movable in relation to the container.

1,808,620. COKE OVEN AND THE LIKE. CARL WESSEL, Borbeck, near Essen-on-the-Ruhr, Germany, assignor to the Firm: Carl Still, Reckinghausen, Westphalia, Germany. Filed July 6, 1926, Serial No. 120,731, and in Germany July 17, 1925. 5 Claims. (Cl. 202—257.)

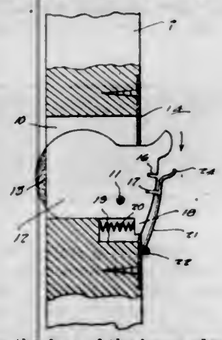


1. In a horizontal coke oven chamber provided with a gas offtake for said chamber comprising a series of openings or passages arranged in the base thereof and spaced away from the side walls, exchangeable grate frames seated in said openings with the tops of said frames flush with the top surface of the chamber base, the bars of said frames extending in a direction parallel to said chamber, and a channel extending longitudinally of said chamber and communicating with the chamber through said openings for receiving the volatile products of distillation.

1,808,621. SASH RETAINING MEANS. JULIAN N. WETMORE, Miami, Fla. Filed Aug. 6, 1929. Serial No. 383,906. 1 Claim. (Cl. 292—210.)

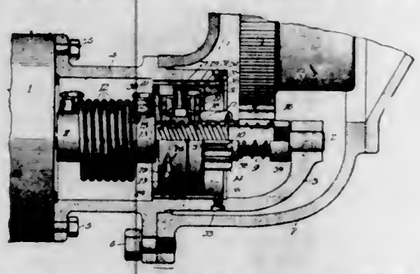
In a structure of the class described, a sash frame bar having an opening, a cam like retainer of the general outline of a mutilated circle having eccentric pivotal mounting in said opening, the lower part of said opening having a notch and said retainer having a depending extension, and an expanding coiled spring arranged in said notch and cooperable with said extension at a point below the pivotal mounting of the retainer, to urge said retainer in frictional and supporting engagement with the frame, one end of said retainer projecting through a corresponding end of the opening, and adapted to engage the window frame,

the opposite end projectible through and beyond the adjacent end of the opening and formed with a finger grip, a hingedly upwardly swinging latch having a detent ar-



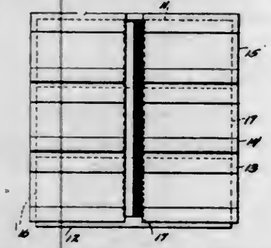
ranged to engage the face of the inner edge of the retainer, and said retainer having keeper seats with which said detent is selectively engageable.

1,808,622. ENGINE STARTER. MAURICE P. WHITNEY, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Dec. 5, 1923. Serial No. 678,733. 39 Claims. (Cl. 74—7.)



1. An engine starter including a member of the engine to be started, a drive adapted to engage and drive such engine member, means surrounding such drive for preventing cranking engagement with the engine member upon backward rotation of the latter.

1,808,623. WOOD BLOCK. CHARLES W. ALLEN, Memphis, Tenn., assignor to E. L. Bruce Company, Memphis, Tenn., a Corporation of Delaware. Continuation of application Serial No. 198,085, filed June 11, 1927. This application filed Mar. 30, 1929. Serial No. 351,435. 5 Claims. (Cl. 20—8.)



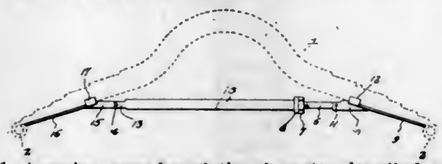
5. A structural unit comprising a plurality of strips of wood united along their edges by a tongue and groove joint, an open groove with parallel sides cut transversely of the grain of the strips, a stiff metallic tie in the said groove and in forced tight contact with the wood and in cooperation with the said tongues and grooves, preventing movement of the strips in all directions relative to each other.

1,808,624. COMPENSATING JOINT. EARLE BAGBY, Kahoka, Mo. Filed Feb. 27, 1930. Serial No. 431,815. 2 Claims. (Cl. 112—221.)



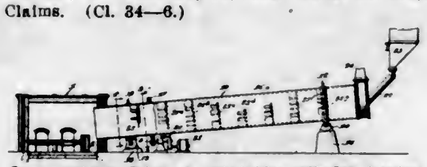
1. In a sewing machine of the character described, a needle bar, a driving lever for the needle bar, a wear compensating connection between one end of the driving lever and said needle bar, said compensating connection comprising a rigid barrel on the driving lever, a pair of bars disposed within said barrel and being normally spaced apart, resilient means interposed between said bars for maintaining the same spread apart, a head on one of said bars and a pivotal connection between said head and said needle bar.

1,808,625. SPRING SPREADER. REESE D. BARNHART, Uniontown, Pa. Filed Oct. 23, 1929. Serial No. 401,736. 5 Claims. (Cl. 29—87.1.)



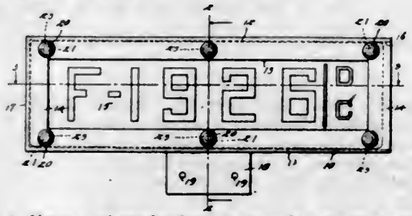
1. A spring spreader of the character described comprising a tubular sleeve, a screw shaft extending longitudinally into said sleeve and projecting from one end thereof, means on the shaft engageable with the sleeve for shifting said shaft longitudinally therein and a pair of spring engaging feet on the free end of the shaft and the opposite end of the sleeve for engaging and spreading the opposite end portions of said spring, said feet disposed at an obtuse angle with respect to the shaft and sleeve in a manner to parallel the opposite end portions of the spring.

1,808,626. ROTARY DRIER. GERHARD MORRIS BECHTEL, Allentown, Pa. Filed May 13, 1929. Serial No. 362,683. 5 Claims. (Cl. 34—6.)



1. In a rotary drier, a rotatable cylinder having an inlet and an outlet, a baffle extending radially from one wall of the cylinder for a portion of the diameter thereof, said baffle being composed of a plurality of adjustably connected sections to provide for the expansion and contraction and having means to prevent the passage of air between the sections.

1,808,627. LICENSE PLATE HOLDER. MADISON H. BENSON, Austin, Tex. Filed Dec. 31, 1930. Serial No. 505,912. 4 Claims. (Cl. 40—125.)



1. A license plate holder of the character described, comprising a frame structure having a longitudinally disposed channel therein, said frame having a plurality of recesses in one face thereof, said recesses being adapted to receive pressed out portions of a license plate.

1,808,628. ROD FASTENER. LESTER W. BOND, New York, N. Y., assignor to The Kroder Reubel Company, New York, N. Y., a Corporation of New York. Filed Sept. 27, 1929. Serial No. 395,692. 3 Claims. (Cl. 156—22.)



1. The combination with a curtain rod of a plurality of fasteners therefor, each fastener comprising a body and a pair of oppositely extending rod gripping portions and securing means extending through the body of each fastener, said fasteners being spaced apart for holding a rod rigidly in position.

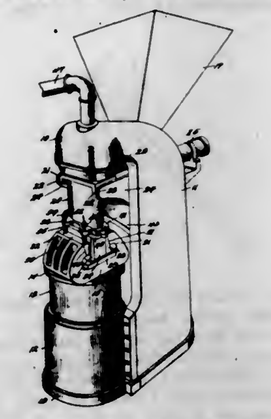
1,808,629. LIFTING JACK. GEORGE A. BONGE, Hearne, Tex. Filed Feb. 1, 1930. Serial No. 425,283. 3 Claims. (Cl. 254—145.)



1. A device for the purpose set forth comprising a pair of oppositely disposed flanged supports, said supports being connected together at their lower ends and spaced from each other from their connected lower ends, means for connecting the upper ends of said supports together, each support providing a casing having depending therefrom a carrier for the casing, a shaft journaled in and extending through said casings and having fixed thereto a pair of spaced gears, each gear being arranged in a casing, a sprocket pinion fixed to said shaft between said gears, a lifting chain travelling over and operated by said pinion and having its stretches projecting from the front and rear of said supports, a supporting standard, means for connecting said supports to the standard, and means mounted on said casings for rotating said gears.

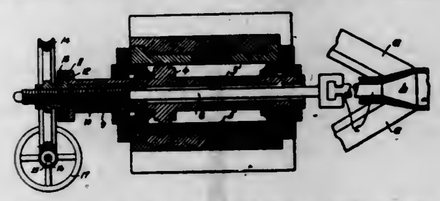
1,808,630. CORE FORMING MECHANISM. ROBERT N. BROWN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 27, 1930. Serial No. 431,935. 12 Claims. (Cl. 22—10.)

1. A core forming machine including, in combination, a vertically movable core box support, a yoke thereon to receive the parts of the collapsible core box between its arms, a sand transfer member laterally movable over the core box when the support is lowered, and a wedge device on said member to pass between the core box and one of
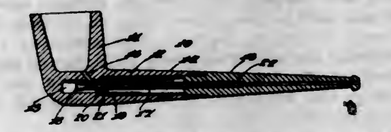


the yoke arms to clamp the core box parts together when the support is elevated to bring the core box in engagement with the transfer member.

1,808,631. TUBE EXPANDER. RUDOLF BUNGEROTH, Dusseldorf, Germany. Original application filed July 23, 1927, Serial No. 208,013, and in Germany Dec. 29, 1925. Divided and this application filed Dec. 17, 1927. Serial No. 240,884. 4 Claims. (Cl. 80—13.)



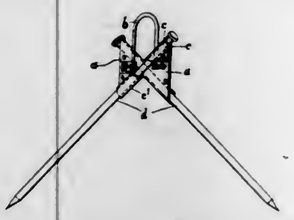
4. In apparatus for expanding metal tubes, a fluid cylinder mounted at the inlet side of the apparatus, a piston reciprocable therein, a mandrel shaft, a mandrel carried by the mandrel shaft, means connecting said piston and mandrel shaft, and means for regulating fluid pressure in the cylinder on both sides of the piston for giving rough adjustment to said mandrel, and other means associated with the piston and mandrel shaft for giving fine adjustment to the mandrel.

1,808,632. SMOKING PIPE. JOSEPH F. BUSHEE, Jersey City, N. J. Filed Aug. 27, 1928. Serial No. 302,376. 2 Claims. (Cl. 131—12.)



1. A smoking pipe comprising a bowl having a duct therein, a stem for said bowl having an enlarged bore therein, said bore providing a cooling chamber, said stem being also provided with a recess, which latter communicates with said bore and with said duct, a mouthpiece attached to said enlarged bore, and an inner tube terminally engaged in said mouthpiece and also terminally engaged in said recess, the medial portion of said tube disposed in said enlarged bore in spaced relation with the wall of the stem, said medial portion adapted to cool air passing therethrough and carrying smoke from the bowl of the pipe.

1,808,633. GROUND ANCHOR AND LIKE ANCHORING DEVICE. EDMUND CLIFTON CARVER, Burgess Hill, England. Filed Dec. 17, 1929, Serial No. 414,803, and in Great Britain Dec. 17, 1928. 1 Claim. (Cl. 189—90.)



A ground anchor of the character described comprising a vertical ground body consisting of a plurality of radiating wings, each having two separate guides disposed at opposite sides and at the upper and at the lower corner of the wing respectively, and stakes driven through said guides, each stake being held by an upper guide of one of the wings and by a lower guide of an adjacent opposite wing, whereby said stakes radiate obliquely from the vertical ground body.

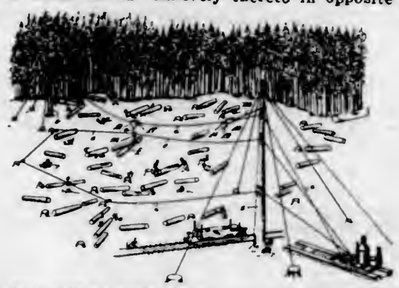
1,808,634. THERMOMETER BULB. MOSES E. CHENEY, La Crosse, Wis., assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Mar. 24, 1928. Serial No. 264,499. 7 Claims. (Cl. 297—3.)



2. In an instrument of the character described, a metallic thermometer bulb having one end formed with a reduced neck portion, with enlarged portions above and below said neck portion; there being an opening through said neck portion, a capillary tube extending through said opening and supported by the walls thereof and being soldered thereto, the solder being placed in the pocket formed by the inner wall of the outer enlarged portion and said capillary.

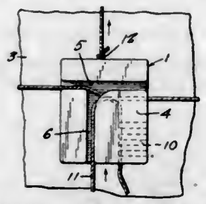
1,808,635. AUTOMATIC LATCHING DEVICE. MANLEY J. CHERRY and CARL A. BARTH, Cottage Grove, Oreg. Filed Nov. 25, 1929. Serial No. 409,705. 4 Claims. (Cl. 212—98.)

1. A latch device comprising a casing open at its lower side, a latch member pivotally mounted at one end within said casing and having its other end projecting forwardly of the open portion thereof, actuating means depending from said latch member and extending outwardly from the open side of said casing, a keeper adapted to automatically engage with and disengage from said latch member when moved relatively thereto in opposite direc-



tions, and means movable in one direction with said keeper for causing said actuating means to move said latch member to released position.

1,808,636. CORD FASTENER. GUY F. CHESNEY, Spartanburg, S. C. Filed Dec. 22, 1930. Serial No. 504,172. 3 Claims. (Cl. 24—18.)

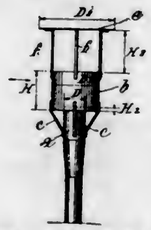


3. A cord fastener comprising a body having grooves in one face and arranged at right angles to each other and in communication with each other, said body having a chamber communicating with one of the grooves, a wrapping cord secured at one end to the body and passed about a package several times and extended through the grooves with the free end disposed in the chamber and projecting beyond one edge of the body, and staggered arranged ribs formed in said chamber to receive and grip the cord adjacent the free end.

1,808,637. RADIATOR CEMENT. GEORGE AUGUSTUS COLBERG, JOHN DANIEL HARRISON, and JOSEPH WINTERBERGER, Yale, Mich. Filed Feb. 12, 1929. Serial No. 339,486. 3 Claims. (Cl. 134—17.5.)

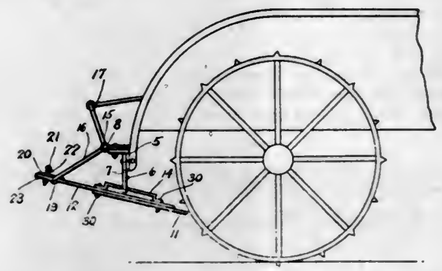
1. A cementing compound comprising fibre starch, plaster of Paris, yellow ochre, red pepper, ground pulp wood, Venetian red, powdered rosin, denatured alcohol and gelatine glue, the whole being mixed and added to sufficient quantity of water to form a liquid solution, substantially as set forth.

1,808,638. SECONDARY FLUID CURRENT PRODUCTION APPARATUS. CHRISTIAN COUPARD, Paris, France, assignor to Societe Anonyme "L'Aspiration Scientifique," Paris, France. Filed Mar. 9, 1928, Serial No. 260,412, and in Belgium Aug. 6, 1927. 4 Claims. (Cl. 98—66.)



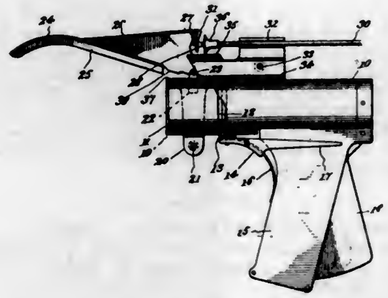
1. A device of the class described comprising a pipe having an extremity of diameter D, a cylindrical element having a diameter D_1 and a length H mounted on one end of said pipe so as to present an overlapping portion of a length H_1, and a cap of diameter D_2 mounted at a distance H_2 from said cylindrical element, said dimensions D, D_1, D_2, H, H_1, H_2 satisfying the relations: $2D_1$ is greater than 3D and is less than 5D, $10H_1$ is greater than H and is less than 3H, 2H is greater than D and is less than 2D, $2D_2$ is greater than 3D and is less than 6D, $4H_2$ is greater than 3D and is less than 6D.

1,808,639. WHEEL SCRAPER. THEODORE W. DETAMORE, Osceola, Nebr. Filed July 24, 1930. Serial No. 470,446. 4 Claims. (Cl. 280—158.)



1. In an apparatus of the class described, a blade, an elongated plate, an inverted U-shaped bracket, means for securing the bracket, the plate and the blade together, a supporting plate having an elongated opening through which the bracket extends, and means for moving the plate attached to the blade for positioning the blade in wheel engaging position and to disengaged position.

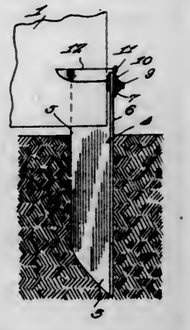
1,808,640. PHOTOGRAPHIC FLASH LIGHT DEVICE. LOUIS L. DRIGGS, Jr., New Rochelle, and HENRY B. FABER, New York, N. Y. Filed Nov. 12, 1929. Serial No. 407,072. 6 Claims. (Cl. 67—29.)



4. A photographic flashlight device comprising a pistol for producing a flash of light, a collar removably mounted on said pistol, a curved vane disposed along the muzzle of said pistol, reinforcing webs on said vane and having stop means cooperating with said collar, said webs being pivoted on the collar, a plate carried by said webs, clamp jaws also carried by said collar, and a camera shutter release mechanism held in said clamp jaws in operative relation to said plate.

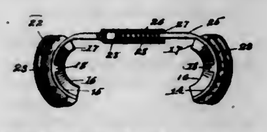
1,808,641. DOOR RETAINER. JULES W. DROZ, Jr., Salt Lake City, Utah. Filed May 27, 1929. Serial No. 366,415. 3 Claims. (Cl. 292—238.)

1. A combined abutment and latch for outwardly swinging doors, comprising a rightangular stake designed to be partly driven into the ground and to have one flange thereof contacted by a door when the latter is swung to open position, and a hinged catch on the upper



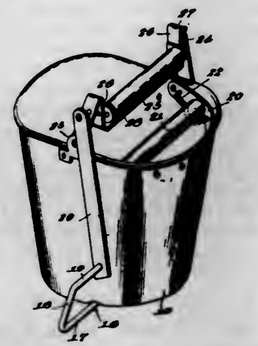
face of its second flange swingable and designed to rest on the said upper end of the second flange for engaging with the face of the door.

1,808,642. SHIELD ATTACHMENT FOR BINOCULARS. CHARLES HUGH DUFFY, Miami, Fla. Filed Mar. 2, 1928. Serial No. 258,618. 1 Claim. (Cl. 88—34.)



A readily detachable eye-shield attachment for binoculars, including a pair of arcuate frame members shaped to directly engage the rotatable eye-pieces of binoculars, eye-shields mounted on said frame members, each of said arcuate frame members including an outwardly inclined portion and a lug, between which outwardly inclined portion and lug a rotatable eye-piece of the binoculars is received, means for connecting the arcuate frame members together, said means including an extensible and contractable mechanism for resiliently drawing the frame members into operative engagement with the rotatable eye-pieces of the binoculars.

1,808,643. MOP WRINGER. JOSEPH H. DWORK, Newark, N. J. Filed Oct. 11, 1930. Serial No. 488,072. 4 Claims. (Cl. 15—262.)



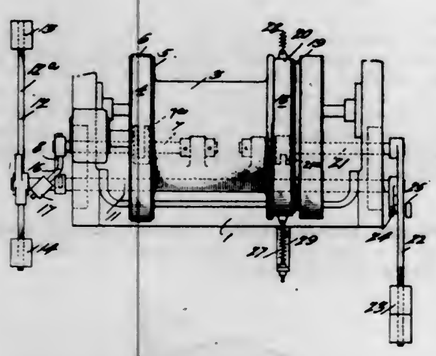
1. In a mop wringer, a receptacle having a bottom transversely dished, a bearing mounted therein, a treadle member oscillatably mounted in said bearing, and said treadle member extending laterally upon opposite sides of said receptacle to provide a support for said receptacle.

1,808,644. STOPPLE. GUST R. ERIKSON, Fairfield, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Oct. 12, 1929. Serial No. 399,289. 1 Claim. (Cl. 150—8.)



A stopple for hot water bottles comprising a screw threaded portion for engagement with a socket in the neck of the bottle, a washer at the lower end of said screw threaded portion for engagement with a flange at the inner end of the socket, and an end projection on the stopple having an enlarged head retaining the washer, said head being convexly curved and of sufficient size to engage the edges of the flange to shape same for proper seating of the washer thereon when said flange is deformed.

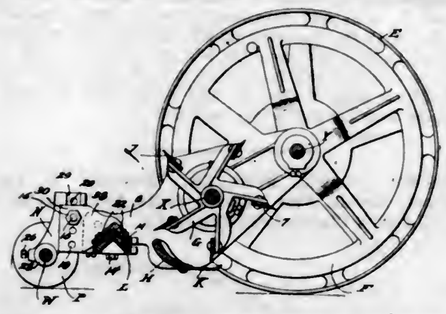
1,808,645. MECHANICALLY OPERATED SAFETY BRAKE. HERMANN FAEHRMANN, Brooklyn, N. Y., assignor to J. S. Mundy Hoisting Engine Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 19, 1930. Serial No. 476,365. 20 Claims. (Cl. 188—174.)



3. In combination with a shaft, means for manually applying a braking force to said shaft, and means for automatically applying a braking force to said shaft upon release of said first-mentioned means, said second-mentioned means including a weighted lever, means associated with said weighted lever and said first-mentioned means whereby the said weighted lever is maintained in an inoperative position during the manual operation of the first-mentioned means.

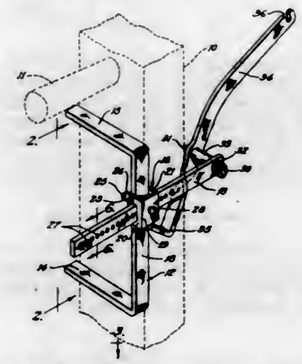
1,808,646. LAWN MOWER. FRANK T. FARMER, Detroit, Mich., assignor of one-half to Robert E. Farmer, New York, N. Y. Continuation of application Serial No. 28,143, filed May 5, 1925. This application filed Mar. 21, 1928. Serial No. 263,256. 16 Claims. (Cl. 56—249.)

9. In a lawn mower of the type provided with drive wheels, end frames supported by the drive wheels and a ground roller during the cutting operation, a rotary reel provided with knives and carried by the end frames and



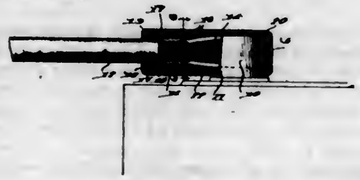
rotating on an axis intermediate the axis of the drive wheels and the ground roller, the improvement consisting in providing a three point support for the mower frame.

1,808,647. SUPPORTING DEVICE. FRED G. FAZEKAS, Maywood, Ill. Filed Nov. 3, 1930. Serial No. 493,139. 5 Claims. (Cl. 248—22.)



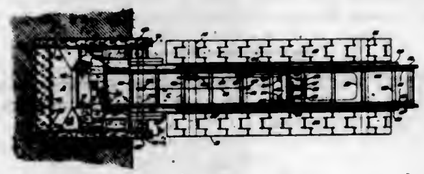
1. A device for supporting articles from either horizontal or vertical supports comprising a pivotally mounted arm including a jaw adapted to grip a support, a member pivotally connected to said arm, a clamp through which said member is slidable, and a bracket pivotally connected to said clamp so as to be movable in a plane at right-angles to the direction of movement of said member through said bracket.

1,808,648. STORAGE BATTERY TERMINAL CONNECTER. ALLAN WILLIAMS FISHER, St. Petersburg, Fla. Filed Nov. 1, 1929. Serial No. 404,154. 1 Claim. (Cl. 173—259.)



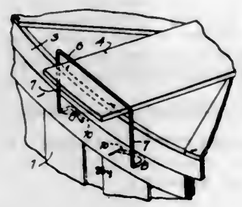
A storage battery connector comprising a split resilient ring provided with parallel transversely bowed clamping arms extending from the ends of said ring and adapted to receive a conductor terminal therebetween, the clamping arms being externally threaded, an internally threaded sleeve screwed on the clamping arms and serving to hold the split ring in clamped engagement with a battery binding post and to hold the arms in clamped engagement with the battery terminal, the outer wall of the sleeve tapering inwardly from the outer end and a housing formed of yieldable rubber surrounding and snugly fitting the split ring and the internally threaded sleeve, said housing having an opening located in registration with the split ring, the walls of the opening being adapted to yieldably grip a battery binding post to effect a liquid seal around the same, the portion of the housing surrounding the sleeve having the inner walls thereof tapered in an opposite direction to the tapering of the sleeve so that when the sleeve is screwed into place the outer walls of the sleeve will form a tight fit with the inner contacting walls of that portion of the housing which embraces the sleeve.

1,808,649. MINING MACHINE. ROBERT M. FLEMING, Colver, Pa., assignor to Ebensburg Coal Company, Colver, Pa., a Corporation of Pennsylvania. Filed June 3, 1927. Serial No. 196,344. 9 Claims. (Cl. 262—5.)



1. The combination in a mining machine, of a mining section; endless chain cutters located at each side of said mining section; and transverse upper and lower cylindrical cutter bars located between the endless chain cutters and between which the operative sections of the endless chain cutters extend substantially vertically.

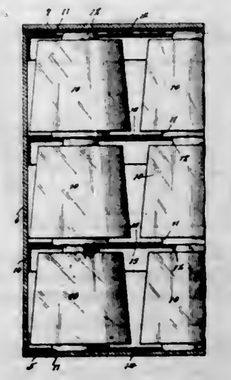
1,808,650. WIRE HANDLE FOR CONTAINERS. OSCAR E. FLORANG, Burlington, Iowa. Filed July 18, 1930. Serial No. 468,810. 5 Claims. (Cl. 217—125.)



1. In combination, a container, a wire loop having fastener members integral therewith, passing loosely transversely through the wall of said container, said fastener members including a clincher arm disposed close to the inner wall of the container, said loop bendable into different positions relative to said fastener members, and said clincher arm lying substantially parallel to the axis of bending between said loop and said fastener members.

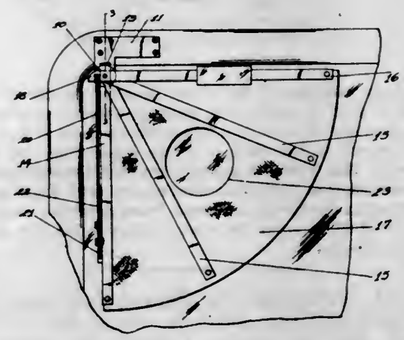
1,808,651. SHIPPING CONTAINER. WALTER BEATH GIBB, Chester, and FRANK BUCHA MARTIN, Moores, Pa., assignors to The Viscose Company, Marcus Hook, Pa., a Corporation of Pennsylvania. Filed June 4, 1930. Serial No. 459,168. 2 Claims. (Cl. 206—46.)

1. A yarn package, comprising a container, and rows of yarn cones therein in combination with partitions consisting of two layers of corrugated cardboard between each two rows of cones, the upper partition layer having holes



to receive the larger ends of the cones of the upper row while the lower partition layer has openings to receive the smaller ends of the cones of that row.

1,808,652. SAFETY DEVICE. LIAS H. GUMP, New Martinsville, W. Va. Filed Apr. 19, 1929. Serial No. 356,463. 1 Claim. (Cl. 296—97.)

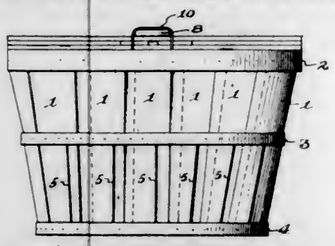


A glare shield comprising a fixed arm, a plurality of blades pivotally connected therewith, a movable arm swingably mounted upon the fixed arm to occupy a position at rightangles thereto, foldable material of substantial fan shape having connection at the side edges thereof with the fixed and movable arms and at intervals therebetween to said blades, said material having a right opening between said blades, an extension projecting from the mounted end of the movoble arm, a connecting arm having connection with said extension, and an operating lever mounted upon the fixed arm having eccentric operative connection with the connecting arm to facilitate coincision and right-angular disposition of said arms respectively.

1,808,653. BASKET. JOHN MCKENZIE GUNN, Cuthbert, Ga. Filed Apr. 28, 1930. Serial No. 448,043. 3 Claims. (Cl. 217—122.)

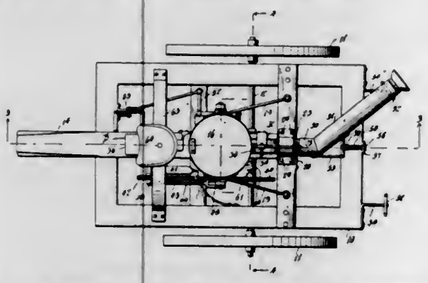
1. A container or basket of the class described, comprising a side wall formed of staves and a top, the staves contacting to form an imperforate, surrounding wall in the upper side portion of the basket or container, said wall having in its lower portion ventilating slots extending up from near the bottom of the basket not farther than

approximately the middle of the basket, the top of the basket or container being also constructed of open work to allow the air to pass through the slots in the lower portion



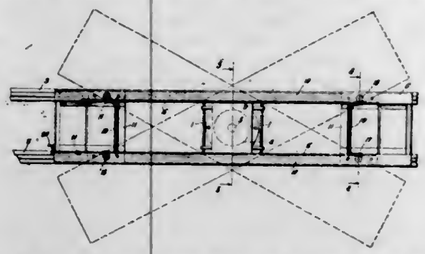
of the sides of the basket and be drawn up by the draft created by said imperforated upper portion, through the contents and out through the open work at its top.

1,808,654. POISON OR POWDER DISTRIBUTOR. WALTER G. HAGENS, near Yoakum, Tex. Filed Mar. 20, 1930. Serial No. 437,494. 2 Claims. (Cl. 43—148.)



1. In a machine of the class described, a distributing nozzle, a duct to supply the material thereto, said nozzle being swiveled on said duct and having a portion deflected with respect to the duct, a frame supporting the duct, means on the frame at spaced locations for engagement by said deflected portion, a bracket on said duct, and a pin engaging the bracket and said frame arranged coaxially with the duct to serve as a pivot upon which the nozzle may be swung.

1,808,655. AUTOMOBILE TURNTABLE AND CARRIER. CHARLES E. HARRIS, Montpelier, Idaho. Filed Oct. 18, 1929. Serial No. 400,573. 2 Claims. (Cl. 104—44.)



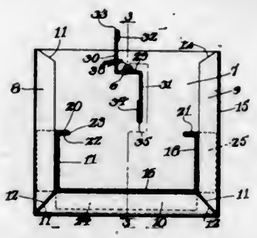
1. A device of the class described comprising a wheel supported turntable, an elongated frame supported at its center on the turntable, a second frame supported by the first frame, vertically arranged screw shafts having their upper ends connected with the second frame, nut members carried by the first frame and engaging the screw shafts, a worm gear associated with each nut member, a pair of longitudinally extending shafts in the first frame, worms on said shafts engaging the before mentioned worm gears, chain and sprocket means for connecting the two shafts together and a handle for rotating one of the shafts for raising and lowering the second frame.

1,808,656. BRUSH FOR SCRUBBING MACHINES. ANTHONY A. HARTMAN, Niagara Falls, N. Y. Filed Mar. 25, 1929. Serial No. 349,757. 1 Claim. (Cl. 15—50.)



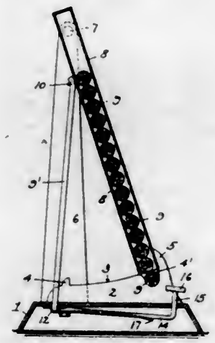
A brush for scrubbing machines comprising a circular-shaped head having a centrally arranged offset portion projecting from one face of said head to provide a gear seat and a journal to be engaged by a support, said head having a centrally arranged fluid receiving chamber extending into the offset portion and opening through the opposite face of the head from said offset portion, a removable closure plate overlying the chamber and radially extending passages in the head in communication with the chamber and opening outwardly through the last named face of the head at a plurality of points between the peripheries of the head and plate, and tufts of bristles secured to the head between said peripheries of the plate and head.

1,808,657. POULTRY FEEDER. LUTY HAWKINS, Mount Vernon, Ill. Filed May 20, 1929. Serial No. 364,612. 4 Claims. (Cl. 119—61.)



1. In a poultry feeder a pair of end members provided with inwardly extending folds at the sides and bottoms to oppose, in spaced relation, the inner faces thereof, a channel-shaped body member having depending flanges at its bottom and laterally disposed, outwardly directed flanges at its sides, said flanges extending between said folds and inner faces of the body of said end members for connecting said body member to and between said end members, said body member seating on the top edges of the folds at the bottoms of said end members.

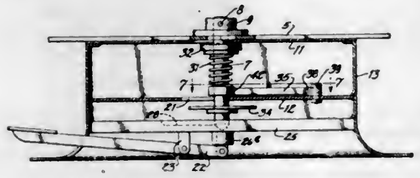
1,808,658. CIGARETTE DISPENSER. JOHN H. HOSIER, Roanoke, Va. Filed Feb. 6, 1930. Serial No. 426,354. 2 Claims. (Cl. 312—77.)



1. A base having uprights thereon, a container for cigarettes having an open bottom pivotally secured to the base

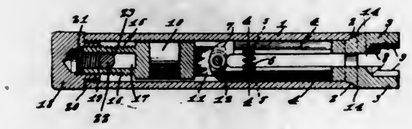
and which cigarettes are arranged one over another, guides having arcuate faces on which the open bottom of the container rests and having their outer inclined portions provided with depressions affording pockets and means for swinging the container to bring the same over the pockets, said means including a rod which is loosely connected to the rear of the container, having an offset end which is pivotally secured to the base and having an extension that merges into an upright portion that is provided with a head.

1,808,659. REVERSIBLE SEAT OR CHAIR. CHARLES R. HULTGREN, Chicago, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed Dec. 10, 1928. Serial No. 324,933. 10 Claims. (Cl. 155—96.)



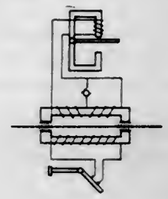
10. In a chair of the character described comprising a base, a seat structure mounted upon the base, and connecting means between said base and said seat structure; means for shifting said seat structure upon the base from a normal central position to a limiting lateral position and back to said central position during a half revolution of said seat structure, said shifting means comprising a throw-arm adapted to move simultaneously with said connecting means, a member secured to the base, said member being provided with a guide slot axial with the line of lateral movement and a cam slot positioned adjacent one end of said guide slot, and a guide-member extending from the free end of said throw-arm into said cam slot.

1,808,660. SOCKET WRENCH. JAMES OSCOE JOHNSON, Kokomo, Ind. Filed May 21, 1929. Serial No. 364,846. 2 Claims. (Cl. 81—113.)



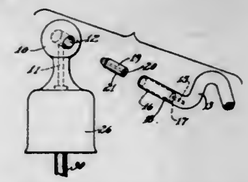
1. In a wrench, a barrel made in one piece from its forward end to its rear end, the barrel having an internal beveled mouth at its forward end, the barrel being of polygonal cross section externally and being of a common cross section externally from end to end, the barrel being of polygonal cross section internally and being of a common cross section internally from end to end, excepting the mouth, a foot bearing directly against the rear end of the said one-piece barrel, a slide mounted to reciprocate in the barrel and having threaded connection with the foot, jaws having shanks pivoted to the slide, the shanks being so shaped in cross section as to correspond with the internal polygonal cross section of said barrel, said jaws bearing directly against the forward end of said one-piece barrel, the jaws being inclined to fit in the beveled mouth of the barrel and having cooperating work-receiving recesses on their inner surfaces, the jaws being of such length that the recesses will be disposed externally of the barrel when the jaws are in parallelism, the joints of engagement between the jaws and the forward end of the said one-piece barrel being close to the rear ends of the recesses.

1,808,661. RAILWAY SIGNALING SYSTEM. GUSTAV KEMMANN, Berlin-Grunewald, Germany. Filed May 18, 1928, Serial No. 278,827, and in Germany May 20, 1927. 4 Claims. (Cl. 246—63.)



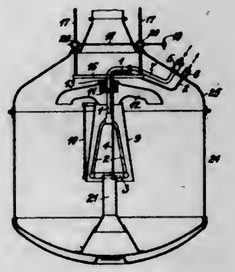
1. A railway signaling system comprising in combination on the locomotive or other vehicle a magnet with windings, a relay connected to said windings and governing the train influencing device, and on the track several so called track magnetizable cores with windings connected through a signaling switch to relays governing the blocking operations, said locomotive magnet and said track magnets being so arranged that when juxtaposed to each other by the running train the locomotive magnet influences the track magnet and is mutually influenced by the same track magnet according to the position of said signaling switch.

1,808,662. ATOMIZER. MAX KLINE, New York, N. Y. Filed Apr. 20, 1928. Serial No. 271,598. 3 Claims. (Cl. 299—88.)



3. An atomizer head including an air tube extending therethrough having the terminal portion of its bore enlarged to provide an internal shoulder, said tube having a liquid port communicating with the enlarged portion of the bore and with a liquid passage extending inwardly from one end of the head and a nozzle snugly fitting in the enlarged portion of the bore with its inner end impinged against the shoulder, said nozzle having a substantially concentric air passage communicating with the air tube bore and a longitudinally extending groove registering with the liquid port.

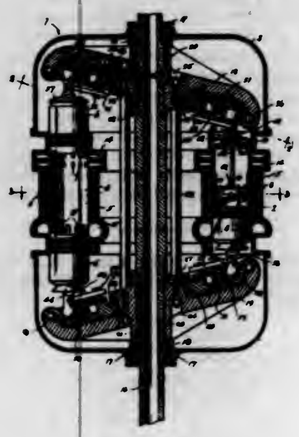
1,808,663. BOILER AND EVAPORATOR. HANS RUDOLPH FRIEDRICH KOCK and KARL ALFRED RUDOLF QUITT, Lubeck, Germany. Filed June 4, 1928, Serial No. 282,802, and in Austria June 27, 1927. 16 Claims. (Cl. 257—220.)



1. A boiling and evaporating device for boiling vessels specially for brewer's coppers, comprising in combination

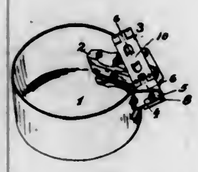
with the vessel proper, a rising pipe communicating with the lower portion of said vessel and a heating element in and closed against said rising pipe, means for admitting steam to the heating element, the upper end of said rising pipe communicating with the upper portion of said boiling vessel, and means for conveying the water of condensation of the steam in the heating element away from said element.

1,808,664. INTERNAL COMBUSTION ENGINE. FRANK KOSCHKA, Brooklyn, N. Y. Filed Mar. 19, 1930. Serial No. 437,167. 3 Claims. (Cl. 123—58.)



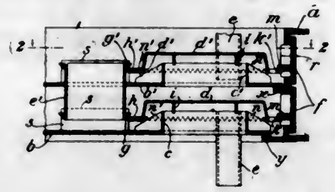
1. In an engine of the class described, a plurality of cylinders symmetrically arranged about a common axis, a pair of pistons working in each cylinder, each cylinder having a port for admitting an explosive mixture between the pistons to effect reciprocation thereof in opposite directions, a shaft mounted concentric to the cylinders, oppositely inclined cam disks fixed upon the shaft at the opposite ends of the cylinders, an annular thrust disk rotatable with respect to each cam disk, operative connection between each piston and the respective thrust disk, and bracing rods arranged about the shaft and secured at their ends to the cam disks.

1,808,665. PENCIL SHARPENING DEVICE. GEORG KÖNIG, Berlin-Dahlem, Germany. Filed Nov. 1, 1928, Serial No. 316,459, and in Germany Nov. 12, 1927. 11 Claims. (Cl. 120—85.)



1. A pencil sharpener consisting of a base portion, a frame pivoted on the base portion, and a sharpening device suspended from the frame to swing relatively thereto.

1,808,666. DISTILLATION AND LIKE COLUMN. ARTHUR KUHN, Recklinghausen, Germany, assignor to the Firm: Carl Still, Recklinghausen, Germany. Filed Feb. 1, 1926, Serial No. 151,998, and in Germany July 16, 1926. 6 Claims. (Cl. 261—114.)



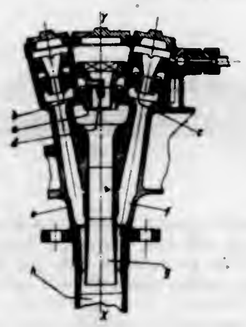
1. In a column for distillation and like purposes, a tray bearing an overflow element and a vapor collar, a hood arranged in position over the collar, and means, a part of which is on said element, for holding the hood in position.

1,808,667. WOOD BLOCK. JOHN A. LEE, Memphis, Tenn., assignor to E. L. Bruce Company, Memphis, Tenn., a Corporation of Delaware. Filed Oct. 4, 1930. Serial No. 486,458. 2 Claims. (Cl. 20—8.)



2. A block having a transverse groove in its underside, a longitudinal groove along the edge of the block, the transverse groove being relatively shallow adjacent the underside of the longitudinal groove to avoid weakening the under lip of the longitudinal groove.

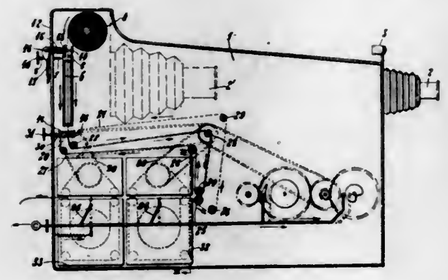
1,808,668. STEAM EJECTOR OF VACUUM BRAKES. PAUL MARIE EUGÈNE LÉOTARD, Paris, France. Filed Dec. 18, 1928, Serial No. 326,837, and in Germany Jan. 7, 1928. 3 Claims. (Cl. 303—12.)



1. A combined ejector for automatic vacuum brakes, comprising a main ejector, a continuously operating small ejector and a small auxiliary ejector wherein the small ejectors are symmetrically disposed with relation to the main ejector and form with the latter a very small angle.

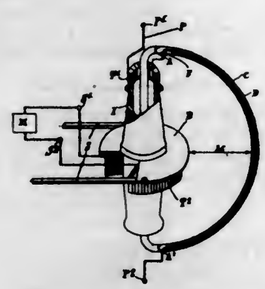
1,808,669. PHOTOGRAPHIC CAMERA. ALEXANDER IEZEKIL LIBERMAN, Paris, France. Filed June 29, 1929, Serial No. 374,647, and in France July 26, 1928. 3 Claims. (Cl. 95—14.)

1. In an automatic photographic camera capable of taking positive or negative pictures or both simultaneously, the combination of two photographing chambers, two developing chambers for developing, respectively, the negative and positive pictures, a displaceable slide member including two pairs of arms adapted to grip between them the two films to be photographed, means including two cams for selectively operating said arms to grip or



release the films, said slide member when displaced progressing gripped film through said photographing chambers, a knife common to both said photographing chambers for severing portions of film, independently acting means for feeding film to said developing chambers, and means for selectively operating said means for feeding film to the developing chambers.

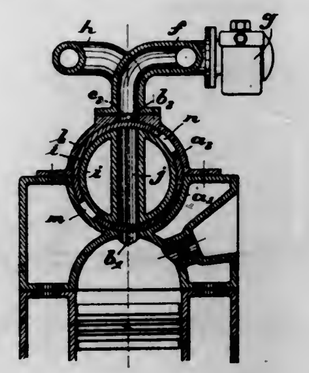
1,808,670. TRANSFORMER. HENRI RENÉ LOUBET, Paris, France, assignor to Compagnie pour la Fabrication des Compteurs et Materiel d'Usines a Gaz, Montrouge France, a Joint-Stock Company of France. Filed Mar. 14, 1930, Serial No. 435,855, and in France Mar. 20, 1929. 3 Claims. (Cl. 175—358.)



1. In a device for feeding current to electrical measuring apparatus, the combination of a transformer designed to take a high current, an electric circuit, a bushing insulator passing through said transformer, an auxiliary transformer supported by said bushing insulator and including a primary fed by the current flowing in said circuit, a secondary to said auxiliary transformer forming the primary of said first transformer and stepping up the current to the high value for which said first transformer is designed, and a secondary to said first transformer adapted to step down the current to a low value commensurate with that taken by the electrical measuring apparatus.

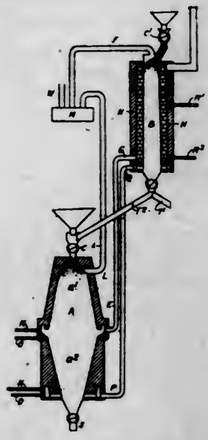
1,808,671. ROTARY DISTRIBUTION VALVE. CHARLES LUYCKX, Louvain, Belgium. Filed July 29, 1927, Serial No. 209,320, and in Belgium Aug. 4, 1926. 3 Claims. (Cl. 123—80.)

1. In an internal combustion engine, a valve casing having a cross-sectionally cylindrical chamber provided with an inlet port and an exhaust port for each engine cylinder, a tubular valve element fitted in said chamber and having diametrical inlet and exhaust ports for each engine cylinder, and a central core element in said valve element



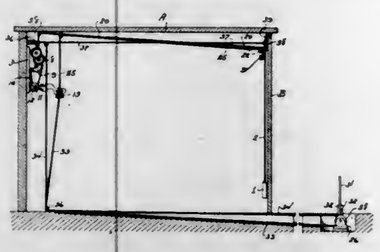
and having diametrical conduits corresponding with said inlet and exhaust ports, said core element being arranged for relative angular movement with said valve casing.

1,808,672. PROCESS OF PRODUCING MIXED WATER GAS AND COAL GAS. ARTHUR HENRY LYMN, London, England. Filed Feb. 23, 1927, Serial No. 170,365, and in Great Britain Feb. 23, 1926. 2 Claims. (Cl. 48—202.)



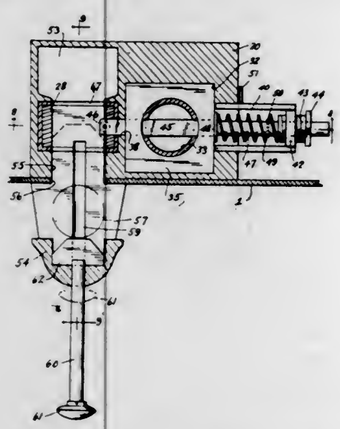
2. A process for producing a mixture of water gas and coal gas of uniform quality from bituminous fuel in a plant comprising an "up" and "down" steam run shaft gas generator with a water gas generating zone and superimposed coal distillation zone, and a coal carbonization retort in a detached shell; said process consisting in passing an air-blow upwardly through the water gas generating zone of said generator, passing the resulting air-blow gases directly from said water gas generating zone into external heating relation to said retort, then alternately passing steam up and down through the gasification zone to generate water gas, enriching both the "up-run" and the "down-run" water gases from said gasification zone by passing the "up-run" water gases through the fuel distillation zone in the shaft of said generator and simultaneously adding superheated steam at the base of the distillation zone, then passing the "down-run" water gases through said externally heated carbonization retort, and mixing the thus enriched "up-run" gases with the thus enriched "down-run" gases to produce a rich combustible gas mixture.

1,808,673. AUTOMATIC GARAGE DOOR OPENING AND CLOSING DEVICE. JONATHAN S. MARSDEN, Edgerton, Wis. Filed Dec. 21, 1929. Serial No. 415,815. 4 Claims. (Cl. 268—35.)



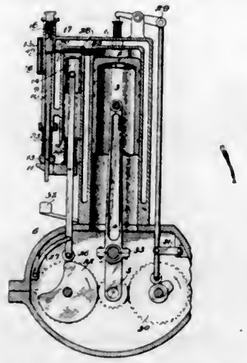
1. In combination with a garage and a door, means for normally holding the door in closed position, motor driven means for opening the door, including a drum and clutch means therefor and a switch in the motor circuit, means operated by a vehicle approaching the door for closing the switch to cause the motor to open the door, means for opening the switch when the door reaches open position, manually operated means for releasing the clutch means to permit the door to close and means operated by a vehicle leaving the garage, including the means operated by a vehicle approaching the garage and the manually operated means for moving the clutch to inoperative position whereby the doors will close after the vehicle passes from the garage and means operated by the closing of the door for returning the clutch to operative position.

1,808,674. COIN CONTROLLED GASOLINE VENDING MACHINE. CARTER R. MASSIE, Ironton, Ohio. Filed Mar. 14, 1930. Serial No. 435,853. 3 Claims. (Cl. 194—69.)



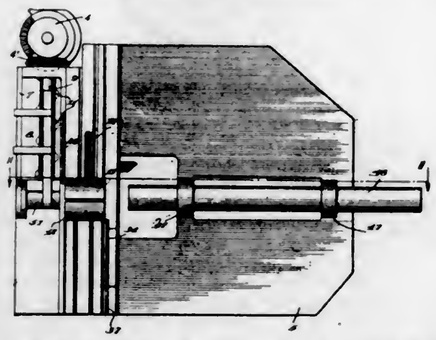
1. A coin controlled gasoline vending machine of the character described comprising a casing, a tank mounted thereon, means for discharging gasoline into the tank, a vertically shiftable member disposed in the casing, a discharge pipe mounted on the upper end of the member and extending for vertical sliding movement into the tank, an abutment on the vertically shiftable member, a threaded tubular rod mounted in the casing in spaced parallel relation to the vertical member, a series of stop bars adjustably mounted in longitudinally spaced relation on the threaded bar and engageable with the member in a manner to retain the same against downward movement and coin controlled manually operable means for disengaging said stop bars from said member.

1,808,675. INTERNAL COMBUSTION ENGINE. EDWARD MAYE, Washington, D. C. Filed Dec. 27, 1927. Serial No. 242,859. 2 Claims. (Cl. 123—33.)



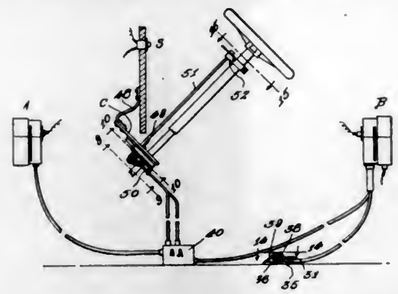
1. In an internal combustion engine, in combination with a working cylinder and piston, a air compresaig cylinder and piston for compressing air to inject fuel into the working cylinder, an air pipe extending from an opening in the wall of the upper end of said air compressing cylinder into the upper end of said working cylinder, a cylinder and piston for pumping fuel into contact with the compressed air from the air compressing cylinder, à fuel injector tube extending from an outlet opening in the wall of the upper portion of the pump cylinder through and across the upper end of the air compressor cylinder and through its walls and the wall of the working cylinder and within said air pipe to a point adjacent the mouth of said air pipe and within the working cylinder, a fuel inlet to said pump cylinder, means for operating the air compressing piston, a finger on the compressor piston rod having an opening through which the fuel pump piston rod extends, and a collar fixed to said pump piston rod adapted to be engaged by said finger to move the pump piston by the compressor piston on the compression stroke.

1,808,676. ASPARAGUS TRIMMING AND CANNING MACHINE. CHARLES C. MCDONALD and CHARLES L. TROUTMAN, Elyria, Ohio. Filed Apr. 28, 1928. Serial No. 273,676. 8 Claims. (Cl. 226—101.)



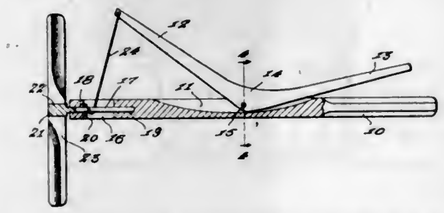
1. In an automatic stalk canning and trimming machine, a base, fixed and movable coacting jaws mounted thereon for retaining stalks in bunched relation, a sliding door normally closing one end of the jaws to retain the stalks therein, a cutter operable across the other end of said jaws to sever projecting ends of the stalks, a reciprocating ejector for ejecting the stalks into a can placed in registration with the jaws when in operative position, and a common mechanism for actuating the cutter, door, ejector and movable jaw to operative and inoperative positions in timed relation.

1,808,677. AUTOMOBILE SIGNAL DEVICE. PATRICK WILLIAM MURRAY, Dubuque, Iowa. Filed July 17, 1929. Serial No. 379,035. 3 Claims. (Cl. 116—36.)



1. An automobile signal device including pivotally mounted signal arms having signalling and non-signalling positions and a supporting casing, shafts journaled in the casing, studs on the shafts, flexible means connecting the studs to the signal arms, operating means connected to the shafts for rotating the latter in one direction to move the signal arms into their signalling position, and tension means connected to the shafts and casing to rotate the shafts in an opposite direction when released by the operating means to permit the signal arms to assume non-signalling position.

1,808,678. TOY. ANDREW PAUL and FRANK STURNI, Seward, Pa. Filed Oct. 7, 1930. Serial No. 487,064. 2 Claims. (Cl. 46—14.)



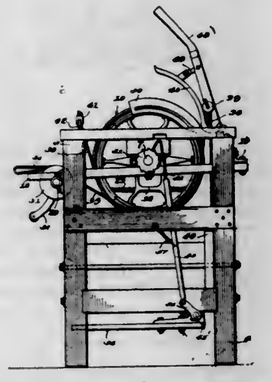
1. A whirligig toy comprising a body having a pocket within one side thereof, a lever structure embodying oppositely diverging arms pivotally mounted for rocking motion at the point of intersection thereof within said pocket, the body having a slot extending at right angles thereto and adjacent one end, a mandrel journaled within the body and exposed through said slot, a flexible connection established between the lever and exposed portion of the mandrel, and a whirling object carried upon the outermost projecting end of the mandrel.

1,808,679. ELASTIC MATTRESS AND OTHER DEVICE FOR REPOSE OF THE BODY. HÉCTOR CÓRSICO PICCOLINI, Buenos Aires, Argentina. Filed Mar. 29, 1929. Serial No. 351,100. 1 Claim. (Cl. 5—239.)



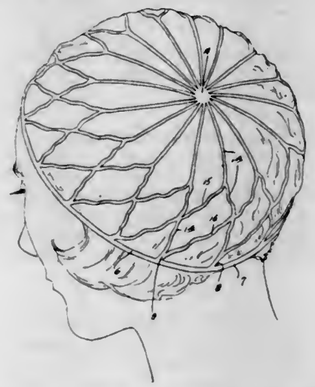
An elastic bed bottom comprising a frame having side and end members, horizontal grooves disposed in said end members, bottom slats for said frame, flexible supporting rods having their ends secured in said grooves, said rods having spaced apertures therein, supporting members having projections extending upwardly into said apertures, rubber washers disposed about said projections below said apertures, disk portions upon said supporting members having downwardly directed grooves therein, said slats being provided with grooves aligned with said last mentioned grooves, said supporting members having downwardly directed guiding elements and spiral springs seated in said slat grooves and said downwardly directed grooves upon said supporting members and being guided by said guiding elements.

1,808,680. BARREL FORMING MACHINE. JOHN C. RAMSEY, Suffolk, Va., assignor to Ramsey Package Corporation, Suffolk, Va., a Corporation of Virginia. Filed Oct. 18, 1927. Serial No. 226,949. 1 Claim. (Cl. 147—1.)



In a barrel forming machine, a support, a collapsible mandrel supported thereon, a plurality of flexible elements underlying the mandrel, pulleys supported to one side of the mandrel and over which one end of the flexible elements are trained, weights attached to the depending ends of such flexible elements, upstanding plates attached to the support at the opposite side of the mandrel, and a channel-shaped securing member carried by the opposite end of each of the flexible elements and removably engaged with one of the upstanding plates whereby the flexible elements take a substantial U-shaped form to constitute cradle-like temporary supports for staves placed on the mandrel, and means for securing the ends of the staves to the mandrel until hoops have been secured on such staves.

1,808,681. CAP. GEORGE B. RAYBURN, Los Angeles, Calif. Filed Oct. 13, 1930. Serial No. 488,527. 5 Claims. (Cl. 132—49.)



1. An elastic rubber cap of the type described comprising a one piece circular flat body comprising a center

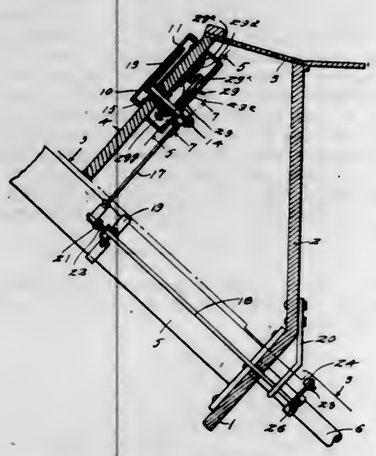
portion, and a plurality of curved strips projected from the center portion formed by slitting the said body, and a plurality of oppositely curved and similarly formed strips projected toward the center portion and defining a circumferential border, and joined to said curved strips to form a mesh.

1,808,682. PULVERIZED FUEL BURNER. RALPH C. ROE, Englewood, N. J. Filed Jan. 9, 1928. Serial No. 245,425. 17 Claims. (Cl. 110—104.)



1. A fuel burner comprising, fuel and primary air mixture outlet means designed to project a stream of fuel and primary air mixture continuously, secondary air outlet means closely adjacent said first mentioned means and designed to project secondary air against the stream of fuel and primary air mixture, and power drivable control mechanism designed to alternately increase and decrease the volume of air from different parts of said secondary air outlet means.

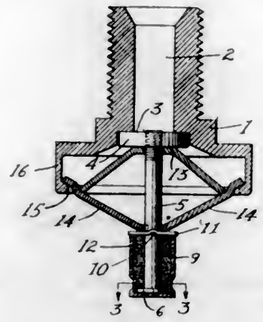
1,808,683. SWITCH FOR DIRECTION SIGNALS. WILLIAM T. ROONEY, Los Angeles, Calif. Filed June 7, 1924. Serial No. 718,514. 2 Claims. (Cl. 200—166.)



1. A device of the class described comprising a mounting member, a shaft journaled therein, a U-shaped arm having one leg longer than the other, said shaft passing through said legs with the shorter leg in contact with the mounting member, means to secure the arm in said position on the shaft, said arm having a contact on its longer leg so that the same will function as a switch arm.

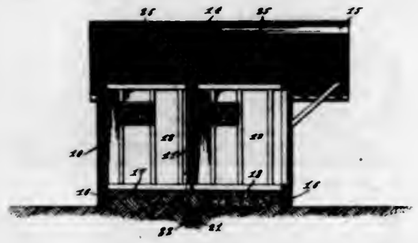
1,808,684. THERMOSENSITIVE RELEASE UNIT. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 3, 1928. Serial No. 317,105. 6 Claims. (Cl. 137—161.)

1. In a thermosensitive release unit, a relatively fixed member, a second member comprising elements spaced apart and relatively adjustable to vary the distance therebetween one of said elements comprising a fusible compound, and a system of struts and levers confined between said elements and reacting with said relatively fixed



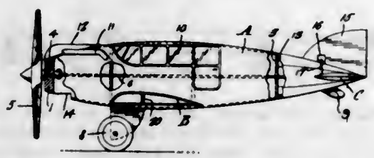
member to support said second member in the latter, said system being releasable by fusion of said fusible compound to permit displacement of said second member from the relatively fixed member.

1,808,685. POULTRY HOUSE. EMANUEL SCHINDLER, Salem, Oreg. Filed Dec. 17, 1928. Serial No. 326,559. 1 Claim. (Cl. 119—21.)



A poultry house having a partition subdividing same into multiple compartments, the entrance compartment having a pit filled to the level of the earth floor within the adjacent compartment with a suitable dust, a wall of earth of U-shape formation insulating the contents of the pit from the house foundation, and the partition wall and a wall of the poultry house immediately adjacent the pit compartment having entrances whereby the poultry may cleanse themselves with the dust before entering the other compartment.

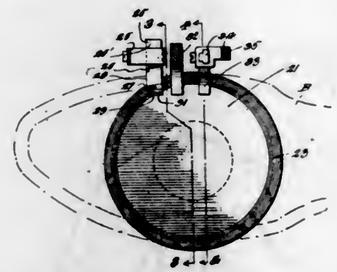
1,808,686. MODEL AEROPLANE. ARNOLD LOUIS SCHULTZ. Portland, Oreg. Filed Aug. 7, 1928. Serial No. 298,075. 2 Claims. (Cl. 46—50.)



1. A toy aeroplane comprising a fuselage, wings secured to the fuselage, propelling means carried by the fuselage, a shaft journalled in the rear end of the fuselage and extending from opposite sides of the latter, elevators

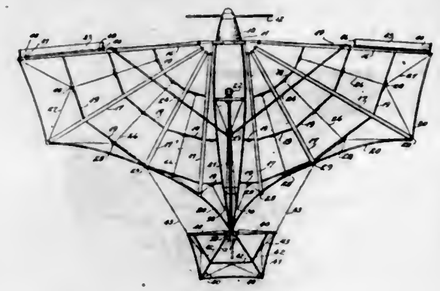
secured to the ends of the shaft, a rudder carried by the rear end of the fuselage and having a notch, and an arcuate shaped member connecting the elevators and extending across the fuselage and through the notch and capable of varying the angles of the elevators by the positioning of different sizes of blocks between the arcuate shaped member and the fuselage.

1,808,687. APPARATUS FOR CHANNELING SHOES. WILLIS S. SHAFT, Faribault, Minn., assignor to Shaft-Pierce Shoe Company, Faribault, Minn. Original application filed Jan. 25, 1927, Serial No. 163,492. Divided and this application filed Apr. 15, 1927. Serial No. 184,143. 4 Claims. (Cl. 12—27.)



1. An apparatus for channeling combination inner and middle soles comprising a work disk having its upper face provided at the margin thereof with an inwardly beveled surface, a presser foot for holding the sole stock against the bevel face, and a reciprocatory knife arranged at one side of the diametric center of the disc and substantially parallel therewith movable toward said foot.

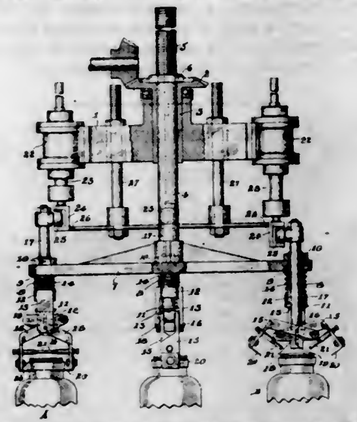
1,808,688. AEROPLANE. ALEXANDER SMITH, Pittsburgh, Pa., and JOHN SCHMIDT, New York, N. Y. Filed Mar. 18, 1930. Serial No. 436,871. 18 Claims. (Cl. 244—12.)



1. In an aeroplane, a fuselage, wings attached to said fuselage, each including a series of ribs pivoted to the fuselage to be divergently arranged when spread, folding struts between adjacent spars of said wings, and means to spread said wings, simultaneously.

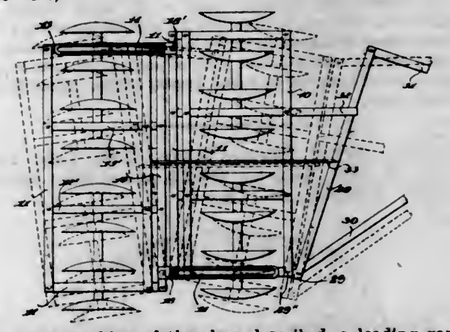
1,808,689. TRANSFER APPARATUS. THOMAS STENHOUSE and DAVID STENHOUSE, Washington, Pa., assignors to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed July 24, 1925. Serial No. 45,891. 21 Claims. (Cl. 214—1B.)

1. A transfer apparatus including a continuously rotating arm, a gripper unit carried by the arm, and means for operating the grippers during the continued rotation of said arm, said means including a vertically movable shoe



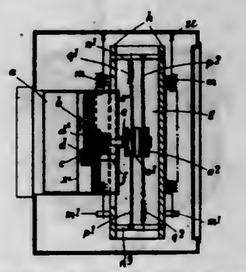
and a roller adapted to be brought into cooperative relation therewith, said shoe being of sufficient length to permit operation of the grippers during their continued travel.

1,808,690. AGRICULTURAL MACHINE. JAMES S. STEWART, Redlands, Calif., assignor, by mesne assignments to George Voss, San Bernardino, Calif. Filed Aug. 26, 1927. Serial No. 215,700. 7 Claims. (Cl. 55—83.)



1. In a machine of the class described, a leading gang frame, a trailing gang frame, extensible coupling means extending between both ends of said gang frames, and means for effecting longitudinal adjustment of said coupling means one independently of the other, to dispose said gang frames at various relative angular positions.

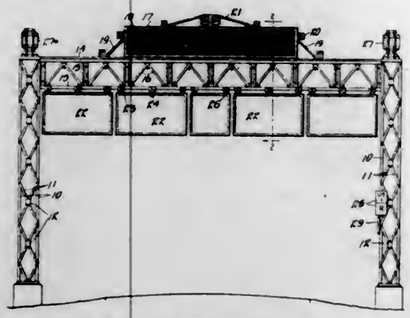
1,808,691. WINDING MECHANISM FOR TIMEPIECES. HUBERT LESLIE STRINGER, Rockbeare Hill, near Exeter, England. Filed Mar. 14, 1929, Serial No. 347,024, and in Great Britain Mar. 22, 1928. 4 Claims. (Cl. 185—39.)



1. Means for winding a clockwork mechanism comprising the combination of a weight mounted to oscillate in re-

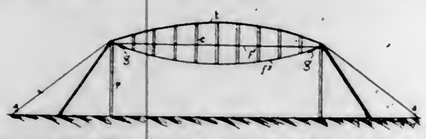
sponse to vibration and unidirectional device consisting of a pulley in driving connection with the spring of the clockwork mechanism, a flexible member encircling said pulley and having both of its ends anchored so as to move with said weight, and a spring inserted in the length of said flexible member to apply tension thereto.

1,808,692. HIGHWAY ADVERTISING SIGN. EARL W. SUDDUTH, Birmingham, Ala. Filed July 18, 1930. Serial No. 468,834. 2 Claims. (Cl. 40—125.)



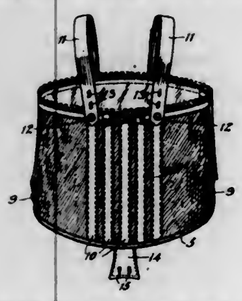
1. A highway display device comprising posts positioned at opposite sides of the highway said posts being made up of a plurality of angle beams secured together and reenforced by a network of connecting straps to form a light but rigid post, a beam connecting the tops of said posts across the highway said beam being formed of angle irons connected together by supporting straps the whole being V-shaped in cross section, and a plurality of plates hinged to the lower side of said cross beams said plates being adapted to carry display signs, substantially as set forth.

1,808,693. TENT. UMBERTO TERZOLI, Rome, Italy. Filed Apr. 16, 1929, Serial No. 355,556, and in Italy Apr. 25, 1928. 5 Claims. (Cl. 135—1.)



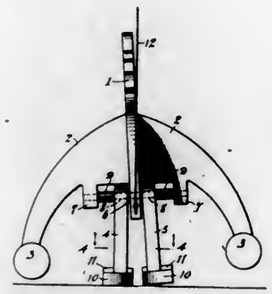
1. A supporting structure for flexible coverings, comprising an elongated flexible member, a covering arranged above said member, and rigid struts arranged between said member and said covering for transferring substantially the entire load of the covering to the member.

1,808,694. INFANT'S BELLY BAND. CHARLOTTE M. TOGNIERI, Long Island City, N. Y. Filed Aug. 8, 1929. Serial No. 384,320. 2 Claims. (Cl. 2—111.)



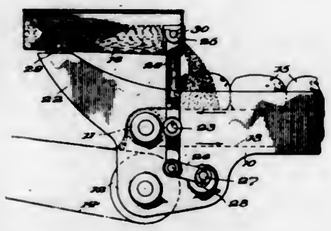
1. A belly band for infants including front and rear sections, the front section being constructed of a heat retaining material and of a size to extend from the crotch upwardly to a point below the arms and from a point slightly to the rear of one side to a point slightly to the rear of the other side and formed with a fullness at the medial portion for conforming to the shape of the infant's belly, said medial portion merging into a gathered part at each side edge for causing the front section to conform to the shape of the region which it covers so that the marginal edges intimately contact with said region and means on said front section for resisting the tendency of the same to wrinkle horizontally without unduly stiffening the same.

1,808,695. WALKING TOY. JOHN H. VAN DEVENTER, Yonkers, N. Y. Filed Nov. 2, 1929. Serial No. 404,339. 5 Claims. (Cl. 46—40.)



1. A walking toy, comprising a pair of independently swinging legs, feet at the lower ends of the legs having bottoms consisting of plane surfaces inclined transversely and heavier at their rear portions than at their front portions, a body pivotally connected to the axis of the legs, and weighted arms rigidly connected to the body.

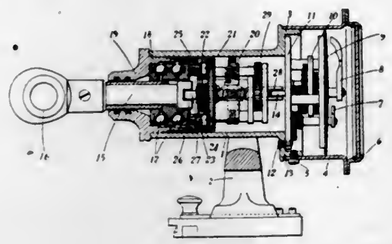
1,808,696. DOUGH HANDLING APPARATUS. FRANK H. VAN HOUTEN, Beacon, N. Y., assignor to Dutchess Tool Company, Beacon, N. Y., a Corporation of New York. Filed July 31, 1930. Serial No. 472,091. 6 Claims. (Cl. 107—7.)



5. In dough handling apparatus, the combination of a support, a receptacle movable with respect to said support, said receptacle having a foraminous surface therein, a rock shaft, arms on said shaft, trunnions on said receptacle supported on said arms, and means for rocking said shaft.

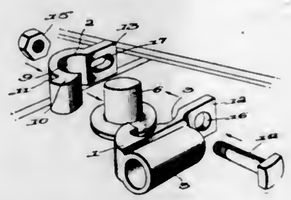
1,808,697. SHIP LOG. JEFFERY WALKER, Birmingham, England. Filed Jan. 7, 1929, Serial No. 330,880, and in Great Britain Nov. 8, 1928. 5 Claims. (Cl. 73—122.)

1. A ship log comprising an elongated open ended casing, a log indicator mechanism secured bodily to one end of the casing and having its driving spindle extended within the casing, a primary log spindle and reduction gearing operated thereby, means supporting said primary log spindle and reducing gearing and received bodily there-



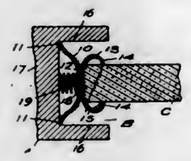
with within the casing through the other end of the latter, said gearing having means detachably engaging the extended portion of the driving spindle of the log indicating mechanism for operating the same.

1,808,698. TERMINAL CLAMP. LONNIE A. WALLIS, Joplin, Mo. Filed Dec. 7, 1927. Serial No. 238,360. 2 Claims. (Cl. 173—259.)



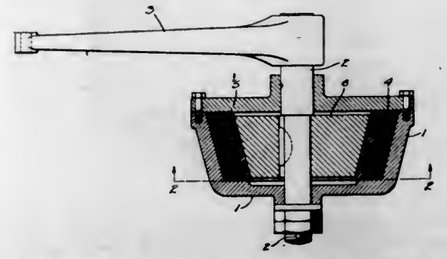
1. A battery terminal comprising two members adapted to enclose between them a battery post, one of said members having a wire receiving socket open at both ends and being provided at one side of the wire running socket with an arc shaped recess extending from its upper to its lower face and terminating in a retaining shoulder extending towards the battery post, and the other member having at one end a head adapted to fit the arc shaped recess of the other member and terminating in a shoulder adapted to engage the retaining shoulder thereof the head being movable into and out of the arc shaped recess by a sliding movement and in a direction parallel with the battery post, and means for drawing the free ends of said members together.

1,808,699. WINDOW GLASS CHANNEL. HUGH MOSS WATKINS, Lake Charles, La. Filed June 19, 1930. Serial No. 462,350. 7 Claims. (Cl. 296—445.)



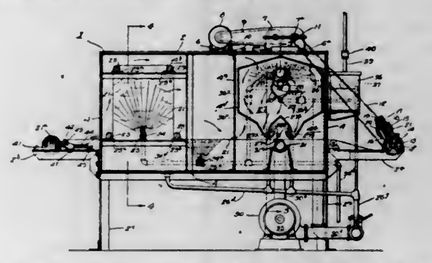
1. A mounting of the kind described, comprising a convexed resilient supporting strip adapted to be frictionally locked within a window panel or glass guide channel, and a resilient gripping strip formed with the supporting strip to grasp the edge of a panel or glass when introduced into the last named strip and through impact with the median of the latter.

1,808,700. SHOCK ABSORBER. EVERT J. WENDELL, Wayne, Pa. Filed Apr. 9, 1928. Serial No. 268,628. 14 Claims. (Cl. 188—130.)



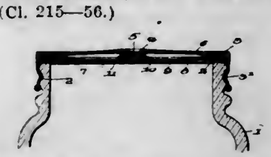
1. In a shock absorber, the combination with spaced members adapted for angularly convergent movement, of a resilient rubber element occupying the space between said members to predeterminedly regulate said movement.

1,808,701. CLOTH CONDITIONING MACHINE. HARRY H. WIGGLESWORTH, Mount Airy, Pa. Filed Feb. 19, 1930. Serial No. 429,715. 20 Claims. (Cl. 26—47.)



1. In a cloth conditioning machine including a housing having a tempering compartment and a humidifying compartment, means in the tempering compartment for subjecting the cloth to a steam bath by means of sprays, the humidifying compartment having a trap controlled outlet for the humidity therein and under which the cloth passes, and means including a suction pipe for drawing the humidity through the cloth.

1,808,702. METALLIC CAP FOR GLASS CONTAINERS. JOHN J. WILLIAMS, Wheeling, W. Va., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed June 27, 1927. Serial No. 201,709. 7 Claims. (Cl. 215—56.)

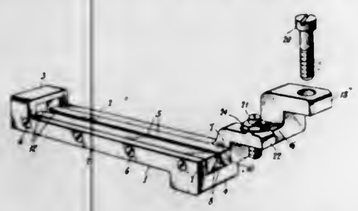


1. A closure for glass containers, including a cap, screw threads on the cap for positively securing the cap to the container, sealing means between the cap and the upper edge of the container, said cap having an opening therein, a disc adapted to be gripped between the cap and the container and provided with an opening therein, and means carried by said disc for normally sealing the opening in the cap.

1,808,703. ATTACHMENT FOR BREAKING TYPE SLUGS. LE ROY W. WILLIS, Brooklyn, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed June 18, 1929, Serial No. 371,924. 7 Claims. (Cl. 199—1.)

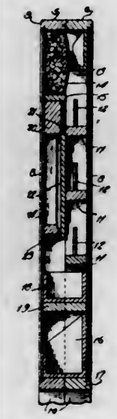
1. A device for detaching the gate from the oppositely-grooved type-bearing portion of a type slug, comprising

opposed relatively fixed jaws spaced to receive the type-bearing portion of such slug and shaped to fit into the



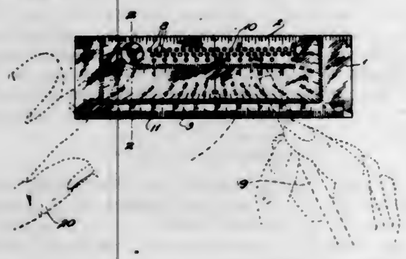
grooves therein and to expose the gate of the slug for angular displacement relatively to the type-bearing portion thereof.

1,808,704. SEWING SCREEN. ETTA G. ZIZELMAN, New York, N. Y. Filed Mar. 4, 1930. Serial No. 433,129. 2 Claims. (Cl. 223—53.)



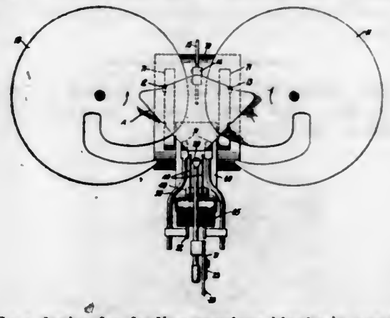
1. A screen structure comprising frame members hingedly connected at one edge, said frame members having compartments opening at their inner sides, a bar located in one frame member and disposed across the compartment thereof, a pad located in said frame member and mounted upon said bar and having a portion projecting beyond the plane of the edges of said frame member, a ledge member located in the other frame member opposite said pad and adapted to be engaged by the projecting portion of the pad when the frame members are closed with relation to each other.

1,808,705. COMBINATION COMPASS PROTRACTOR AND RULER. WILLIAM E. OWEN, Jr., Cedar Rapids, Iowa. Filed May 8, 1928. Serial No. 276,124. 1 Claim. (Cl. 33—27.)



A device of the character described comprising a transparent body portion formed with relatively parallel straight edge sides having graduated markings indicative of linear measurements upon its face side and adjacent to said straight edge sides, a portion of said body in parallel proximity to one straight edge side having a plurality of relatively parallel rows of spaced openings formed therein, the various openings of said rows being staggered with respect to the openings of the adjacent row, a centering eyelet mounted in said body portion adjacent one end of the parallel rows of spaced openings and in substantially longitudinal alinement with one row and said face side of the body portion having linear markings thereupon adjacent one edge, all of said last mentioned markings converging toward a common center adjacent the opposite edge.

1,808,706. FEEDING MECHANISM FOR ENVELOPES AND THE LIKE. ABRAHAM NOVICK, Flushing, N. Y., assignor to F. L. Smithe Machine Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 15, 1928. Serial No. 319,501. 19 Claims. (Cl. 271—29.)

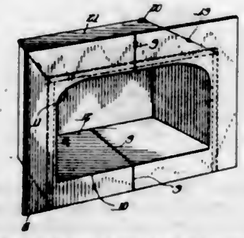


1. In a device for feeding envelope blanks in overlapped relation, in combination, a support for holding a stack of blanks, means for initiating the separation of the outside blank, a conveyor, means for bringing the separated portions of the blank against said conveyor comprising a pair of deflector members; means for constraining said separator portions against said conveyor comprising a pair of rollers having a to and fro movement, said deflector members being straddled by said roller members, the conveyor presenting a more or less flat surface and being more or less parallel to the plane of a blank in the stack.

1,808,707. SMOKING TOBACCO. DUDLEY HOWARD WIGGINS, Indianapolis, Ind. Filed Jan. 7, 1929. Serial No. 330,965. 2 Claims. (Cl. 131—31.)

1. A smoker's mixture comprising smoking tobacco and silica gel in powdered form intermingled with the tobacco.

1,808,708. STAGE DISPLAY DEVICE. HENRY ZIEMMERMAN, Chicago, Ill., assignor to Chicago Cardboard Company, Chicago, Ill. Filed Mar. 19, 1928. Serial No. 262,872. 2 Claims. (Cl. 46—37.)



1. A foldable miniature stage display comprising a front member with a central rear score line adapting the front sides to fold forwardly face to face, a rear member attached at its ends to the sides of the front and having

vertical fold lines to form two sides and a back for the stage, one only of the sides being scored vertically to fold inwardly upon itself so that the outer portions thereof are face to face in their folded relation, the other side and the back portion of the rear member being of sufficient length to extend around the scored end of the front member when the structure is folded and having a fold line in alignment with the central fold line of the front member, thereby substantially enclosing the front member and protecting it in its compact folded form.

1,808,709. APPARATUS FOR METERING GASEOUS FLUIDS. ALFRED E. BLAKE, Haverford Township, Delaware County, Pa., assignor to The United Gas Improvement Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1928. Serial No. 313,218. 4 Claims. (Cl. 73—167.)

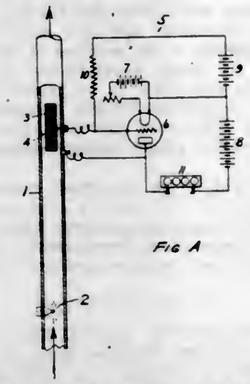
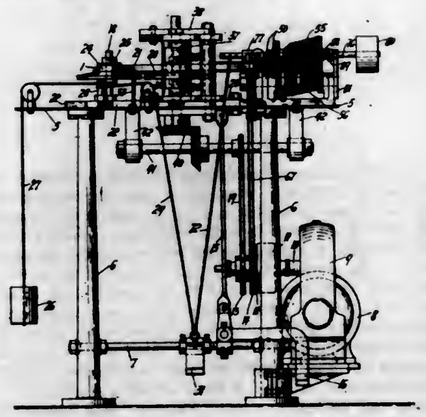


FIG A

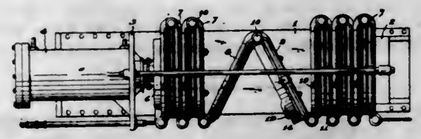
1. A gas meter including an element of radio-active material, a tube through which gas to be measured is adapted to flow, an element within said tube and electrically insulated therefrom, said tube and element forming a pair of spaced electrodes one of which is electrically insulated from said radio-active element, said electrodes being located relative to said radio-active element so as to be sensitive to the ionization of gas ionized by the radio-active element upon a flow of gas past the radio-active element.

1,808,710. PROCESS AND APPARATUS FOR COVERING TIRE BEADS. HAROLD A. DENMIRE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed June 19, 1925. Serial No. 38,228. 5 Claims. (Cl. 154—9.)



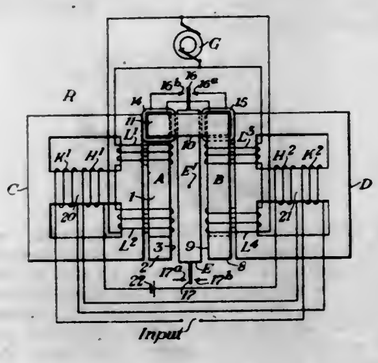
1. In an apparatus for covering tire beads, a plurality of rollers to support the bead, a support for certain of said rollers which bear against the inner circumference of the bead, and means to move said support toward the center of the bead to permit removal thereof.

1,808,711. VULCANIZING APPARATUS. HAROLD A. DENMIRE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed Nov. 9, 1927, Serial No. 233,597. Divided and this application filed Jan. 20, 1930. Serial No. 422,074. 16 Claims. (Cl. 18—17.)



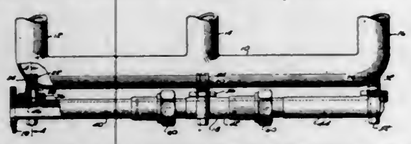
15. A vulcanizing heater comprising a supporting platform, a fixed standard at one end of the platform, a head mounted at the opposite end of the platform for movement toward and away from the fixed standard, a mold section connected by a vertical hinge to said standard, a mold section connected by a vertical hinge to said head, intermediate mold sections pivoted to the first mentioned mold sections and to each other by vertical hinges, said sections having recesses forming mold chambers, successive hinge connections being on opposite sides of said intermediate sections whereby said sections may be folded into a pack, means for separately heating the mold sections, means for selectively locking adjacent mold sections against separation, and means for selectively supplying fluid under pressure to the mold chambers.

1,808,712. ELECTRICAL RELAY. PHILIP H. DOWLING, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 30, 1930. Serial No. 464,763. 24 Claims. (Cl. 175—337.)



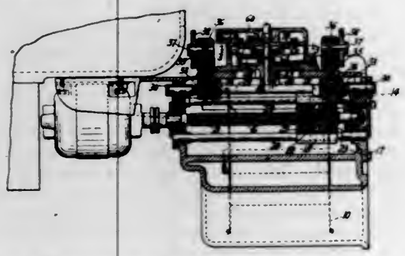
1. An electrical relay comprising a first core, means for at times supplying flux to said core, a movable armature controlled by the flux in said core, a second core for shunting flux away from said first core, and a winding on said second core operating when supplied with current to vary the shunting effect of said second core.

1,808,713. MANIFOLD FOR SUPPLY OF SUPPLEMENTAL GASES TO INTERNAL COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 21, 1927. Serial No. 169,826. 10 Claims. (Cl. 123—52.)



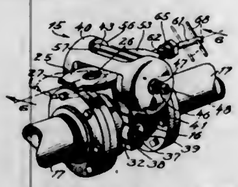
1. A secondary manifold made in telescoping sections, and means for locking the sections together in position adjusted for manifolds of different makes, each section provided with means for connecting to a principal manifold.

1,808,714. DISTRIBUTING APPARATUS FOR SPOOLERS ON WIRE DRAWING MACHINES. NORMAN H. NYE, Cuyahoga Falls, Ohio, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio, a Corporation of Ohio. Filed July 9, 1929. Serial No. 376,968. 13 Claims. (Cl. 242—158.)



1. In an apparatus of the character described, a spool and a distributor including a guide movable to and fro parallel to the spool axis, a screw shaft to move the guide, a reversible motor connected to the shaft, a reversing switch, and means operable by the guide at the limit of its movement to snap the switch and thereby reverse the direction of the motor.

1,808,715. SLIDING VALVE. EDWARD P. REYNOLDS, Los Angeles, Calif. Filed Feb. 27, 1929. Serial No. 342,977. 12 Claims. (Cl. 137—75.)



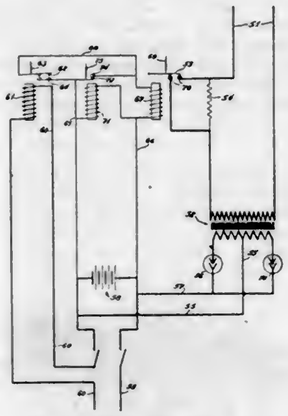
1. A valve comprising a body provided with a passage for fluid therethrough and with a channel transverse to the fluid passage; a valve member mounted in the channel so as to be adapted to slide to and from a position for obstructing the flow of fluid through the passage and to be seated when it is in its flow-obstructing position; a valve member rotatably mounted in the valve body and provided with an opening so as to allow the slidable valve member to pass therethrough to and from its flow-obstructing position in the channel when the rotatable valve member is in its open position; a housing adapted to receive the slidable valve member therein and secured to the rotatable valve member so that the housing registers with the opening in the rotatable valve member and that thus the housing may be swung with the rotatable valve member to the open position of the rotatable valve member, thereby allowing the slidable valve member to be slid from the housing to its flow-obstructing position in the channel or to be slid from the flow-obstructing position into the housing, or that the housing may be swung with the rotatable valve member to the closed position of the rotatable valve member, thereby allowing the slidable valve member to be inserted into the housing from the outside of the valve body or to be removed from the valve body, which is formed so as to allow the rotative movement of the rotatable valve member with the housing thereon; and means for effecting the sliding movements of the slidable valve member.

1,808,716. RESIN COMPLEX AND METHOD OF PRODUCING THE SAME. ISRAEL ROSENBLUM, Jackson Heights, N. Y. Filed June 14, 1929. Serial No. 371,066. 37 Claims. (Cl. 260—4.)

1. The method which comprises reacting a phenol, an aldehyde and an organic salt of a metal selected from the group consisting of the members of the alkali metal group and of the second group of the periodic system, lead, manganese and cobalt, in the presence of a natural resin, adding a polyhydric alcohol in quantity sufficient to form partial esters with such resin, and further heating the mass until a soluble resinous reaction product is obtained.

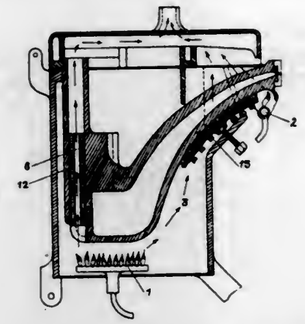
36. The method which comprises condensing phenol and formaldehyde in the presence of an organic salt of zinc in an amount up to approximately 7.5%, calculated as oxide, of the amount of the phenol until a soluble phenol-formaldehyde-zinc salt reaction product is obtained.

1,808,717. AUTOMATIC RECTIFIER REGULATOR. CLINTON E. STRYKER, Highland Park, Ill., assignor to Fansteel Products Company, Inc., North Chicago, Ill., a Corporation of New York. Filed June 18, 1927. Serial No. 199,701. 1 Claim. (Cl. 171—314.)



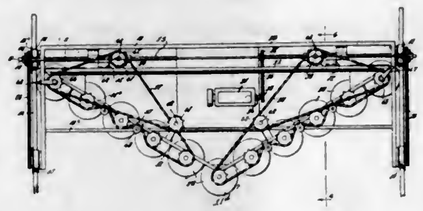
In combination, a transformer having a primary winding and a secondary winding, a storage battery and a load connected therewith, a rectifier means for connecting said storage battery to said secondary winding through said rectifier, a voltage relay coil connected across said battery and a current relay coil connected in series with said load, switches adapted to be opened and closed by said relay coils, a third relay coil, connections whereby the coil of the third relay is energized when either of the first-named switches is closed, a third switch, and means operated by the closure of said last-named switch for increasing the voltage of said secondary winding to increase the charging current through said battery upon decrease of the voltage across said battery and upon increasing the load current.

1,808,718. HEATING MEANS FOR CASTING POTS. THEODOR BADER, Waldshut, Germany. Filed Mar. 29, 1928, Serial No. 265,668, and in Germany Feb. 27, 1928. 11 Claims. (Cl. 263—11.)



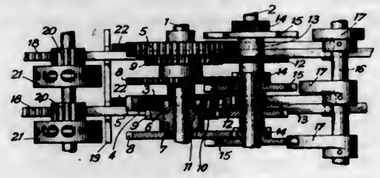
1. The combination with a melting pot for typographic machines; of both gas heating means and electric heating means for the pot, and control mechanism common to both of said heating means to automatically render one of said means operative when the other fails.

1,808,719. CONCRETE ROAD LENGTHWISE FINISHING MACHINE. ROY T. GILES, Pittsburgh, Pa. Filed Oct. 28, 1927. Serial No. 229,434. 8 Claims. (Cl. 94—39.)



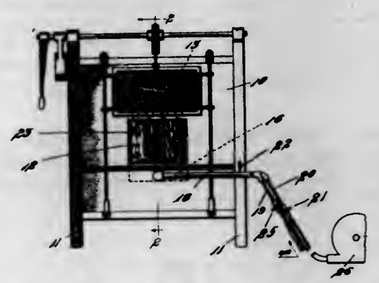
4. A road machine for gradually changing a crowned surface with no oscillating side thrust to a flat surface, comprising a plurality of juxtaposed drums, a supporting frame therefor, said drums being arranged in rearwardly and outwardly converging relation to each other from the center line of the machine, and each drum overlapping the path of the next drum thereto.

1,808,720. COUNTING MECHANISM FOR CALCULATING MACHINES AND THE LIKE. HANS HUBER, Zurich, Switzerland. Filed Mar. 17, 1926, Serial No. 95,341, and in Switzerland Mar. 25, 1925. 4 Claims. (Cl. 235—60.)



2. A device of the type described, comprising in combination, a plurality of individual driving gears for the different denominations, a differential gear interposed between the driving gears of adjacent denominations for the transfer of the tens, individual indicating means for each denomination, means adapted to bring said indicating means into operative engagement with said driving gears, a star-wheel for each denomination and driven by the driving gear of the latter, and angularly staggered segments cooperating with said star wheels and adapted to return the latter consecutively, beginning with the star-wheel for the lowest denomination, into their zero position and to set thereby the indicating means to show the result.

1,808,721. METHOD FOR HEAT TREATMENT. CARL I. HAYES, Providence, R. I. Filed May 25, 1929. Serial No. 365,975. 9 Claims. (Cl. 148—16.)

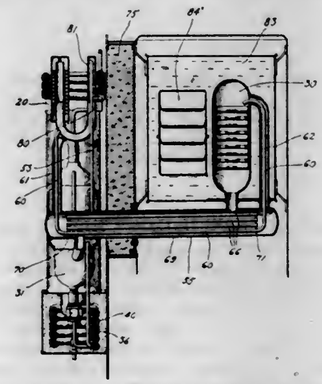


1. A method of heat treating comprising mixing combustible and oxygen bearing substances in predetermined proportions, combusting the mixture in a combustion chamber and utilizing the gaseous products of said combustion in a heat treating chamber as an enveloping atmosphere for the material to be heat treated.

1,808,722. MANUFACTURE OF PHENOLATES. ALBERT HEMPEL, Leipzig-Oetzsch, Germany. Filed July 7, 1930, Serial No. 466,034, and in Germany Apr. 9, 1929. 4 Claims. (Cl. 260—154.)

1. The method which comprises fusing an aryl sulfonate with an alkali whereby there is obtained a mixture containing an alkali metal phenate corresponding to the aryl sulfonate, alkali sulfite and unreacted alkali, neutralizing the unreacted alkali by the addition of a phenol corresponding to the alkali metal phenate and subsequently allowing the phenate to stratify into a distinct separable layer and finally isolating the stratified phenate.

1,808,723. REFRIGERATION. CARL GEORG MUNTERS, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 28, 1926, Serial No. 132,160, and in Germany July 26, 1926. 28 Claims. (Cl. 62—119.5.)



1. Those steps in refrigerating through the agency of an absorption system which consist in generating vapor

of a refrigerant, condensing the refrigerant vapor, passing the condensed refrigerant into heat exchange relation with the generated vapor, evaporating condensed refrigerant in said heat exchange relation, recondensing the refrigerant so evaporated, conducting the condensed refrigerant to an evaporating space, providing a pool of liquid in said heat exchange relation and maintaining said pool of liquid due to the supply of condensed refrigerant to said evaporating space.

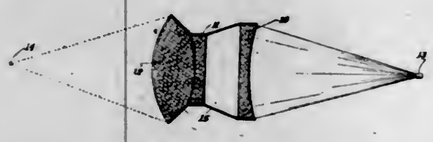
10. In a device of the character described, a generator, a vertically extending separator comprising a first path and a second path, an upwardly extending conduit from said generator to said separator connected with said first path, a condenser connected to said first path to receive vapor therefrom and connected to said second path to deliver liquid thereto, and means to conduct liquid from said second path outside said generator.

1,808,724. GOLF BAG PROP. JOHN CARLON, Crete, Nebr., assignor of one-half to John E. Mekota, Crete, Nebr. Filed Dec. 7, 1928. Serial No. 324,400. 3 Claims. (Cl. 150—1.5.)



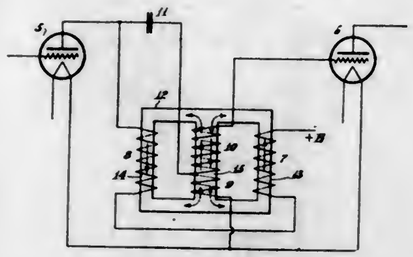
1. In a device of the character described, a pair of longitudinally extending guide sleeves adapted to be secured in alignment on a golf bag, a rod freely slidable through said guide sleeves and adapted to be projected at its lower extremity into the ground when the bag is disposed upright upon the ground, and means on the upper of said guide sleeves for securing said rod in inoperative position when the lower end thereof is withdrawn from the ground.

1,808,725. SCREEN FOR MOTION PICTURES AND THE LIKE. MARSHALL DE FRANCISCO, New York, N. Y. Filed Apr. 9, 1927. Serial No. 182,218. 8 Claims. (Cl. 88—24.)



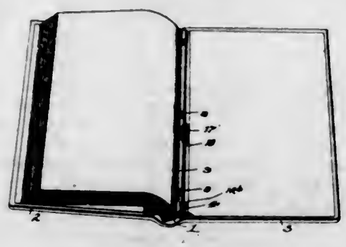
1. A screen for photographic reproduction comprising a glass element having a curved exterior face, a second glass element in the path of light rays passing to the first element, said second glass element having a finely ground surface on which the image is first projected and acting as a screen, and a third glass element between the first and cseond element, said third element having a regularly curved face to produce refraction without substantial distortion, the light rays passing directly through said elements, said screen being adapted to reproduce a projected image such as to be viewed by an audience.

1,808,726. AUDIO FREQUENCY COUPLING. HAROLD P. DONLE, Meriden, Conn., assignor, by mesne assignments, to Radio Inventions, Inc., a Corporation of New York. Filed May 9, 1928. Serial No. 276,346. 7 Claims. (Cl. 179—171.)



1. An audio frequency coupling device having capacitative and inductive elements for a vacuum tube amplifier, the latter consisting of a closed iron core having a central leg and two outer legs, windings upon said outer legs connected in series, said windings being so directioned as to cause their magnetic paths to include substantially only the periphery of the core and serving to feed plate potential to the plate of the previous tube and a step-up auto transformer having windings carried by said central leg the input to said auto transformer being through said capacity element and having its output connected to the succeeding vacuum tube.

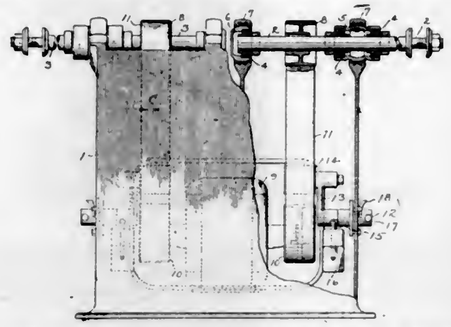
1,808,727. LOOSE LEAF BINDER. JOHN L. MCMILLAN, Syracuse, N. Y., assignor to McMillan Book Company, Syracuse, N. Y., a Corporation of New York. Filed Dec. 24, 1925, Serial No. 77,564. Renewed Dec. 7, 1929. 10 Claims. (Cl. 129—24.)



8. In a device of the class described, a back member, a housing having an open end secured to the back member, a pintle-carrying slide slidably mounted in the housing, a removable member engaging the end of the slide to restrain the latter from movement, and means on the member interlockingly engaged with the housing for locking said member in position.

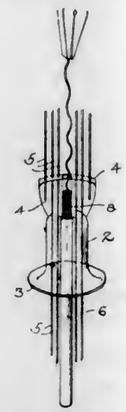
1,808,728. GRINDING AND POLISHING LATHE. RAYMOND C. MITCHELL, Springfield, Ohio, assignor to The Mitchell Engineering Co., Springfield, Ohio, a Corporation of Ohio. Filed May 9, 1924. Serial No. 711,987. 5 Claims. (Cl. 51—166.)

1. In a construction of the character described a hollow supporting pedestal, a shelf mounted in the lower portion of said pedestal for oscillatory movement in a vertical direction, means for securing said oscillatory shelf in different positions of swinging adjustment, a motor mounted upon said shelf within the hollow pedestal, a spindle located at the top of said pedestal, drive and driven pulleys carried by the motor and spindle respectively, a belt having therein excessive slack connecting said driving and driven pulleys, automatic belt tightener means for taking up the slack of said belt, an operating lever located exteriorly



of the pedestal and connected with the belt tightener means for retracting said belt tightener and relaxing the driving tension of the belt and a detent extending into the path of movement of said lever for engaging and holding said lever in retracted position.

1,808,729. MEANS AND METHOD OF TUBULATING LAMP BULBS. JOHN S. VAN HORNE, Franklin, Ohio, assignor to Van Horne Tube Company, Franklin, Ohio, a Corporation of Ohio. Filed Aug. 6, 1925. Serial No. 48,493. 31 Claims. (Cl. 176—7.)

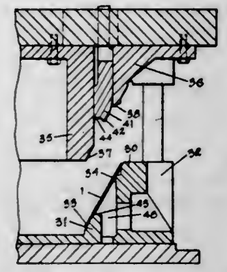


25. The combination with a lamp bulb or the like, and a mount connected therewith, and having lead wires extending through said mount, a tubulating stem sealed within said mount and a resilient bushing within the tube at the region where it is so sealed to prevent the collapse thereof and to maintain communication with the interior of the bulb.

1,808,730. METHOD FOR MAKING A STABLE POWDER FROM WHOLE MILK. CARL BÖHM VON BÖRNEGG, Frankfort-on-the-Main, Germany. Filed Aug. 13, 1927, Serial No. 212,848, and in Germany May 6, 1926. 1 Claim. (Cl. 99—5.)

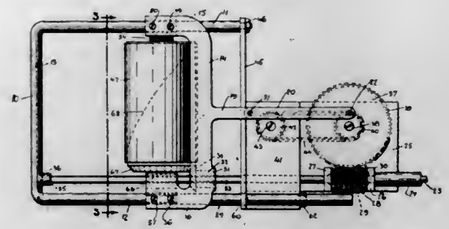
A method for making stable whole milk powders which consists in skimming whole milk, desiccating the cream and the skimmed milk by separate atomizers in the same atmosphere and regulating the feeding of the cream and the skimmed milk in such a manner that a mixture of the desiccated cream powder and the desiccated skimmed milk powder is obtained, which corresponds to the natural composition of the whole milk.

1,808,731. METHOD OF FORMING SHELLS. GEORGE E. IRELAND, Toledo, Ohio, assignor to The City Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 25, 1930. Serial No. 447,380. 20 Claims. (Cl. 113—51.)



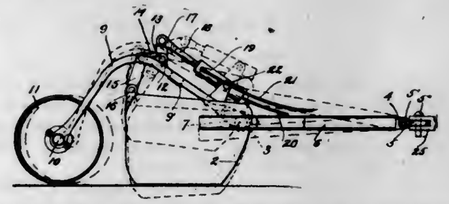
1. The process of forming a radiator shell which consists in shaping sheet metal parts, welding edge portions of the parts to produce a continuous flaring band roughly conforming to the shape of the shell, gripping opposite edges of the flaring band and stretching the portions intermediate the opposite edges of the flaring band by projecting such portions into space.

1,808,732. SURFACING MACHINE. EDWARD O. NORRIS, Greenwich, Conn. Filed Dec. 22, 1928. Serial No. 327,801. 1 Claim. (Cl. 51—176.)



In a surfacing machine, a surfacing element having a gear on one side of same, a shaft, a supporting member for said element, a spur gear connected to said shaft and meshing with said gear on the element, a worm gear on the shaft, a large pinion meshing with said worm gear, a small pinion attached to said large pinion, a second pinion set off from the small pinion, a link chain traveling on the last two mentioned pinions, a link revolvably attached to said supporting member, a pin in the free end of said link, said pin being set in one of the links of said chain and adapted to travel with said chain for causing forward or backward movement of said element.

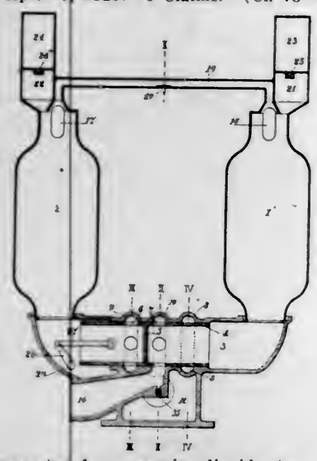
1,808,733. EARTH MOVING IMPLEMENT. LEN O. BIRD, Glendale, Calif., assignor to W. L. Adams, Rexburg, Idaho. Filed Apr. 1, 1930. Serial No. 440,814. 6 Claims. (Cl. 37—169.)



6. An implement of the class described comprising a scraper member, a bar carried thereby, a tongue secured to said bar and arranged for pivotal connection with a tractor, a wheeled frame having an upwardly bowed portion

extending over and above the top edge of said scraper member and the forward end of which is hingedly connected to said bar, a shaft, arms secured to said shaft, links pivotally connecting said arms with the top of the scraper member, and means on the frame to oscillate said shaft and thereby lift or lower said scraper member.

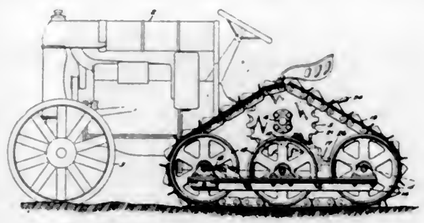
1,808,734. LIQUID METER. MARIO CARBONARO, Paris, France. Filed Mar. 15, 1926, Serial No. 94,935, and in France Apr. 10, 1925. 6 Claims. (Cl. 73—38.)



1. In apparatus for measuring liquids, two receptacles each of definite capacity having inlet and outlet conduits, the former communicating with a source of liquid under pressure, distributing valve mechanism controlling said conduits for allowing the alternate filling of said receptacles by the liquid under pressure and the discharging of said liquid from said receptacles, said mechanism including a pressure actuated distributing valve, movable responsively to liquid pressure in the one or the other of said receptacles upon the complete filling thereof a venting conduit for discharging atmosphere displaced by the incoming liquid, liquid level responsive means for closing said conduit, means associated with each receptacle for receiving a body of air during the filling of the respective receptacle, means forming a compression chamber associated with the air trapping receiving means and wherein the received air is displaced and compressed by the rising liquid after the closing of said vent by said liquid level responsive means, a valve controlling the displacement of said received air, said valve being closed when reached by said rising liquid, the closing of said valve by preventing further movement of the liquid column from said source to said receptacle suddenly building up in the latter the pressure to the value at which the distributing valve moves, the initial movement of said distributing valve in response to said pressure value being continued past the point of closure of said conduits by expansion of the compressed fluid in said compression chamber, the pressure of said expansion carrying said distributing valve to a position in which the discharge conduit for the filled receptacle and the inlet conduit for the other receptacle are simultaneously opened.

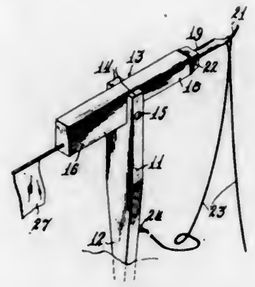
1,808,735. TRACTOR. CLARENCE A. HENNEUSE and CHARLES A. HAWKINS, Sacramento, Calif., assignors, by mesne assignments, to W. A. Riddell Company, Bucyrus, Ohio, a Corporation of Ohio. Filed Dec. 1, 1923. Serial No. 677,962. 9 Claims. (Cl. 305—3.)

5. The combination with a tractor having a driving axle and a housing enclosing said axle, of a bracket secured to said housing, a pivot pin carried by said bracket below and in the vertical plane of the axis of the axle, a driving sprocket secured to said axle, an endless flexible track passing over the driving sprocket, three spaced rollers under which the track passes, the centers of said rollers being below the driving axle, a frame on which said rollers



are mounted and a bracket secured to the frame and carrying the axle of the central roller mounted on said pivot pin, said pin being disposed above the centers of said rollers.

1,808,736. DIP UP. ALBERT WILLIAM HERNKE, Cudahy, Wis. Filed May 22, 1929. Serial No. 365,210. 3 Claims. (Cl. 43—17.)



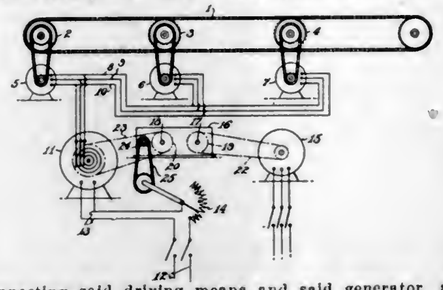
1. An article of the class described comprising, in combination, a vertical support; a cross member pivotally balanced on the upper end of said support; an indicator on one end of the cross member and a hook on the other end to detachably receive a line thereover, said cross member having a longitudinal bore therein for receiving a plurality of spherical weights adapted to have free movement therein to overbalance said cross member whereby it may assume and be retained either horizontally or vertically.

1,808,737. METHOD OF PRODUCING CITRUS FRUIT PRODUCTS. HUGO G. LOESCH, Rochester, N. Y., assignor, by mesne assignments, to General Foods Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 29, 1925. Serial No. 78,235. 13 Claims. (Cl. 99—11.)

7. The method of producing pectin and citric acid from lemons comprising processing the fruit, separating the resulting solution from the insoluble matter, clarifying the solution with a starch solution, concentrating the clarified solution and then precipitating the pectin in the concentrate with alcohol and recovering the citric acid in the motor liquor as citrate of lime.

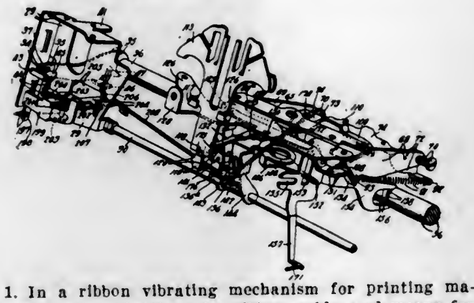
1,808,738. SEGREGATED DRIVE FOR LONG CONVEYERS. WILLIAM R. PERRY, Columbus, Ind., assignor to Reeves Pulley Company, Columbus, Ind., a Corporation of Indiana. Filed June 4, 1928. Serial No. 282,528. 1 Claim. (Cl. 172—293.)

The combination with a plurality of driven elements, of a plurality of electric motors one for each of said elements, a generator for supplying current to all of said motors, means operating at a constant speed for driving said generator, means for controlling the current supplied to the field of said generator, a variable speed transmission for



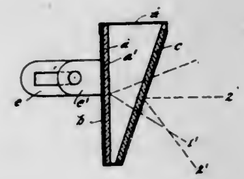
connecting said driving means and said generator, and connecting means between said variable speed transmission and said controller.

1,808,739. TYPEWRITING MACHINE. HENRY ALLEN AVERY, Groton, N. Y., assignor to L C Smith & Corona Typewriters Inc., Syracuse, N. Y., a Corporation of New York. Filed Apr. 23, 1928. Serial No. 272,121. 13 Claims. (Cl. 197—151.)



1. In a ribbon vibrating mechanism for printing machines, the combination of a ribbon guide, and means for vibrating said guide to cause a ribbon to cover and uncover a printing point, said means comprising two members swinging in different directions about different parallel axes, one of said members being movable by the other to a position in which the guide is positioned to cover the printing point with a ribbon and each member has two opposed contacts with the other member at two points at one side of its axis located different distances from its axis.

1,808,740. DUPLEX REAR-VIEW MIRROR. HERBERT E. WETHERBEE, Cleveland Heights, Ohio, assignor of one-third to Richard F. Grant, New York, N. Y., and one-third to Howard M. Hanna, Cleveland, Ohio. Filed Oct. 9, 1928. Serial No. 311,380. 3 Claims. (Cl. 88—1.)



1. In a device of the class described, the combination with a high intensity reflector member, of a clear glass member positioned at an acute angle therewith, and an adjustable mounting for said associated members, whereby an acute angle adjustment of the device permits a high intensity reflection from the one member in the day time and a low intensity reflection from the clear glass member in the night time.

THE

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Reissues	5—No.	18,092 to No.	18,096, inclusive.
Designs	75—No.	84,314 to No.	84,388, inclusive.
Patents	1,074—No.	1,808,741 to No.	1,809,814, inclusive.
Total	1,577		

Reissue Application—Patent Involved in Interference Practice

U. S. Patent Office, *Washington, May 19, 1931.*

(Order No. 3,193)

My attention has been called to the fact that, in some instances, a reissue of a patent has been granted while the patent was involved in an interference.

In *Lattig and Goodrum* v. *Dean*, 111 O. G. 301, 1904 C. D. 255, the Commissioner, with reference to a case in which the claims in issue had been omitted in the reissue, said: "It was irregular and improper to permit such reissue during the progress of the interference."

Hereafter, if an application for reissue of a patent is filed while the patent is involved in interference, that application must be called to the attention of the Commissioner before any action by the Examiner is taken thereon.

THOMAS E. ROBERTSON,
Commissioner.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,656,364, W. B. Rulon, Method for forming reconstructed carbonaceous fuel, decided May 22, 1931, claims 3 and 4.

Pat. 1,692,762, C. W. Peterson, Loud speaker, decided April 2, 1931, claim 3.

Pat. 1,714,173, J. M. Kessler and O. B. Helfrich, Ether-alcohol esters of polycarboxylic acids, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, and 16.

Pat. 1,732,946, I. E. O'Brien, Hose supporter, decided April 23, 1931, claim 6.

Pat. 1,738,807, George Walker, Direction indicator and recorder for ships, etc., decided May 9, 1931, claim 8.

Pat. 1,753,408, L. A. Gebhard, Inductance system, decided May 16, 1931, claims 1, 2, 3, 4, 5, 6, 7, and 8.

Pat. 1,764,402, W. F. Hamilton, Disc cultivator, decided May 19, 1931, claims 1, 2, and 8.

Service of Papers in Contested Cases

Attention is called to Rule 153 (*a*), which requires that "every paper" filed in a contested case in the Patent Office must be served upon the other parties.

This includes all appeals in such cases.

Notice of Cancellation

U. S. Patent Office, *Washington, May 11, 1931.*

Quaker Hat Co., Inc., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of Hodshon-Berg, Incorporated, Fifth Avenue and 57th Street, New York, N. Y., to effect the cancellation of the trade-mark registration of Quaker Hat Co., Inc., of 64–70 West 36th Street, New York, N. Y., No. 244,585, dated July 24, 1928, and the notice of such proceeding sent by registered mail to the said Quaker Hat Co., Inc., at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Quaker Hat Co., Inc., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business May 23, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 95,062; Trade-Mark Division, 1,238. Oldest new case, Sept. 2, 1930; oldest amended, Sept. 3, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Dec. 2	†Jan. 2	765
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Nov. 12	Nov. 12	1,421
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Dec. 5	†Mar. 10	948
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Nov. 18	Dec. 3	829
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Nov. 10	Nov. 14	828
318	6. LEWERS, A. M., Carbon Chemistry	Oct. 23	Oct. 28	2,125
106	7. JARBOE, C. G., Optics; Photography	Oct. 16	Oct. 16	2,054
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Oct. 22	Oct. 23	1,611
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 24	Nov. 29	1,427
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 24	Dec. 20	1,023
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Dec. 24	Dec. 29	814
380	12. HENRY, C. C., Machine Elements	Oct. 2	Nov. 10	1,367
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Nov. 28	Nov. 28	1,156
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Nov. 3	Nov. 24	1,245
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Oct. 22	Oct. 21	2,559
242*	16. SPENCER, C. J., Telegraphy; Telephony	†Jan. 24	†Feb. 5	851
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Oct. 1	Oct. 1	1,538
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Nov. 13	Nov. 21	1,196
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Oct. 3	Oct. 3	2,072
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Nov. 28	Nov. 24	1,008
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Nov. 14	†Jan. 2	988
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Dec. 11	†Jan. 2	867
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 26	Sept. 29	1,084
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Oct. 24	Oct. 29	947
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 8	Nov. 10	1,535
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Dec. 2	Dec. 10	980
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Nov. 10	Nov. 10	1,182
225	28. BENSON, A. R., Internal-Combustion Engines	Oct. 28	Oct. 27	1,788
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Dec. 10	Dec. 6	569
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Dec. 5	†Feb. 11	925
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Sept. 2	Sept. 3	2,576
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Dec. 27	Dec. 29	1,362
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Nov. 5	Nov. 8	2,617
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Jan. 23	†Jan. 27	821
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Mar. 5	†Mar. 5	960
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Sept. 29	Oct. 4	2,289
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Oct. 29	Nov. 6	1,616
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Jan. 25	†Jan. 25	576
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Nov. 17	Nov. 15	1,680
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Oct. 13	Nov. 17	2,988
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Nov. 29	Nov. 24	827
223*	42. CUTTING, H. O., Electric Signaling	Oct. 28	Oct. 18	1,444
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 9	Dec. 9	1,656
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Sept. 24	Sept. 26	2,248
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Oct. 8	Oct. 8	2,285
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Dec. 1	Dec. 2	1,182
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Nov. 15	Nov. 15	2,205
212*	48. ROEPKE, O. B., Electricity, General Applications	Nov. 3	Nov. 1	1,209
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Dec. 29	†Jan. 5	1,252
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 2	Oct. 2	2,540
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Sept. 23	Sept. 23	2,215
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Dec. 11	Dec. 11	1,589
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Jan. 29	†Jan. 29	965
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Sept. 23	Sept. 23	2,680
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery / Designs	†Apr. 13 / †May 1	†Apr. 11 / †May 9	214 / 357
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Oct. 11	Oct. 15	1,921
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Nov. 28	Nov. 12	801
270*	58. DOWELL, E. F., Abrading; Typewriting	Oct. 10	Oct. 10	1,489
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Dec. 2	Dec. 4	1,698
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Sept. 29	Sept. 29	2,021
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time Controlling Apparatus.	Sept. 23	Sept. 26	2,129
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Sept. 23	Sept. 23	2,531
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Sept. 25	Sept. 25	2,417
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND. {Trade-Marks / Labels and Prints	†Apr. 24 / †Apr. 27	†May 11 / †May 11	1,076 / 162

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE SWAN

No. 2,593. Decided February 11, 1931

PATENTABILITY—MANIFOLDING A FOUR CYLINDER ENGINE.

Claims for an improvement in manifolding four-cylinder engines *Held* noninventively different from the claims of applicant's own patent.

APPEAL from the Patent Office. Affirmed.

Mr. Joseph H. Milans and *Mr. Calvin T. Milans* for Swan.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.:*

The appellant has filed a divisional application for a claimed improvement in manifolding four-cylinder internal-combustion engines. He was allowed, as we are advised, claims 1 to 8, inclusive, while claims 9, 10, 11, and 12 were rejected by the Examiner and by the Board of Appeals. In this court the appellant has abandoned all of his claims except rejected claim 9, which is as follows:

9. The combination with a four-cylinder engine having suitable inlet ports, of a manifold having a main manifold duct level throughout its length, a straight or substantially straight riser duct adapted to connect the carbureter with the central portion of the main duct and being at right angles, or substantially at right angles thereto, the interior of the connection of the riser to the main duct being at substantially right angles throughout the connection, secondary ducts operatively associated with the cylinder inlet ports to supply fuel mixture to the cylinders through their said ports in keeping with the induction cycles of the four cylinders, said secondary ducts being at right angles, or substantially right angles to the main duct, a distributing zone being formed at the junction of the main duct and riser, the secondary ducts being parallel, or substantially parallel to each other and perpendicular or substantially perpendicular to the main duct and on the interior making right angle connections with the main duct.

Claim 9 was rejected on reference to a patent taken out by appellant on April 28, 1925, being Patent Office No. 1,836,044. Appellant's device is as fully set forth in claim 9 as is necessary for the purposes of this case. On reference to the former patent to appellant, we find Figure 7 of the drawings picturing a four-cylinder engine with a manifold constructed in substantially the same way as appellant's manifold in the case at bar. The specification filed in the patent is also broad enough to include such four-cylinder construction.

Twenty-three claims were filed and allowed in connection with said patent, many of which, notably claims 1 to 8 and 11 to 13, are broad enough to include an engine of any number of cylinders, including four. We quote the first and fourth claims of said patent as illustrative:

1. A method of distributing a fuel mixture to an engine which consists in moving the mixture in a straight line to a zone from which it is distributed to a plurality of engine cylinders, and modifying said movement by forces which tend to distribute the mixture uniformly in all directions in a plane transverse to said movement.

4. A method of distributing a fuel mixture to an engine which consists in moving the mixture in straight line to a zone from which it is distributed to a plurality of engine cylinders, directing said movement by forces which tend to distribute the mixture uniformly in all directions in a plane transverse to said movement, and further directing the movement of the mixture by forces tending to move it successively in a plurality of directions transverse to the original direction, to the cylinders.

It will be observed that these claims are broad enough to include the application of the principle which appellant has invented, to a four-cylinder engine. If appellant is to be allowed claim 9 of this application, it must be upon the theory that there is a patentable distinction between his former patent and this further and more specific claim, and that he further points out in this claim for a new patent some particular application of his general idea to the specific mechanism, namely, a four-cylinder engine.

We are unable to see wherein the appellant has done this in the case at bar. There is nothing in rejected claim 9 which is not substantially covered by claims 1 and 4 of the reference patent. It is not sufficient for appellant to recite that he uses his combination with a four-cylinder engine, and expect to get a specific patent upon this device used with such type of engine, unless he shows further wherein his claim is limited to this type of engine. This has been pointed out, and properly so, by the tribunals of the Patent Office. The appellant has been allowed eight claims in this application, which were framed in such a way as to recite the precise structure which he employed in fitting his manifold to a four-cylinder engine. The rejection of claim 9 by the Patent Office was not based upon the idea that there might not be a patentable distinction between the application of appellant's manifold to a six-cylinder engine and a four-cylinder engine, but upon the general grounds that claim 9 was not different, in substance, from the patent already granted to the appellant. Appellant may not extend his monopoly in this way. This is the doctrine of *In re Isherwood*, 46 App. D. C. 507; *In re Woodsome*, 56 App. D. C. 138, and *In re Hutter*, 55 App. D. C. 210.

We are in harmony with the conclusion reached by the Examiner and by the Board of Appeals, and the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

MYERS *v.* SPENCER

No. 2,607. Decided February 11, 1931

INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIMS.

Record reviewed and *Held* that priority should have been awarded to M. on the ground that S., the senior party, cannot make the claims in issue.

APPEAL from the Patent Office. Reversed.

Mr. Elliott J. Stoddard, Messrs. Milans & Milans, and *Mr. Charles Howson* for Myers.

Mr. Bonifant Hamilton, Mr. Delos G. Haynes, Mr. Robert L. Kahn, and *Mr. Samuel L. Ostrolenk* for Spencer.

HATFIELD, *J.:*

This is an appeal in an interference proceeding from the decision of the Board of Appeals affirm-

ing the decision of the Examiner of Interferences awarding priority of invention to appellee.

The invention in issue relates to automatically regulated electric flatirons.

Appellant's application, filed January 8, 1925, matured into patent, No. 1,634,431, July 5, 1927.

Appellee's application, No. 565,256, was filed June 1, 1922.

The counts of the interference were copied by appellee from appellant's patent and an interference was declared November 2, 1927.

The counts in issue read:

1. In an apparatus of the kind described, the combination of a heating element, and a thermostatic regulator therefor, *united together to form an integral structure adapted to be removed and replaced as a unit.*

2. In an apparatus of the kind described, the combination of a heating element, and a thermostatic regulator therefor, *having a constituent element in common so constructed and united as to form an integral structure that can be removed and replaced as a unit.*

7. In an electric iron, a heating unit and a temperature regulator therefor *employing a structural element in common aside from their mutual electrical connections.*

8. In an electric iron, a heating unit and a tempreature regulator therefor so combined as to be *structurally interdependent* and *to form a unitary structure removable as a whole* whereby less parts are required were each of said elements to be functionally complete when detached from the other. (Italics ours.)

Appellant moved to dissolve the interference on the ground that appellee could not make the claims in issue.

The Law Examiner overruled the motion in so far as it applied to the involved counts.

The Examiner of Interferences held that, as the date alleged in appellant's preliminary statement for conception of the invention was subsequent to the filing date of appellee and, as appellant had failed to show cause why judgment on the record should not be entered against him, appellee was entitled to an award of priority.

The Board of Appeals affirmed the decision of the Examiner of Interferences.

It is conceded by counsel for appellant that, if appellee is entitled to make the counts in issue, he is entitled to an award of priority.

It is claimed by counsel for appellant, however, that appellant disclosed and claimed an electric flatiron having a heating unit and a thermostatic regulator therefor "structurally interdependent"; that is to say, appellant's heating unit and thermostatic regulator have parts in common and are so constructed and combined that they may not be separated without destroying the functions of each; that they are so constructed and united as to form an integral structure adapted to be removed and replaced as a unit; that the counts in issue are expressly limited to the structure disclosed by appellant; that appellee's disclosure relates entirely to a thermostatic regulator; that it was intended to be used for "controlling electric circuits as well as valves and switches of various types," and, therefore, was not intended to be so united with a heating element as to make the two elements "structurally interdependent"; and that, while appellee's heating element and the thermostatic contol may be united in an electric iron, they have no parts in common, and, when detached, each remains a separate and complete unit; and that, therefore, they are not structurally interdependent within the plain meaning of the counts in issue.

The Board of Appeals held that appellee disclosed a heating unit and thermostatic control so united that they might be removed and replaced as a unit; and that, when combined, they formed an integral structure within the meaning of the counts in issue.

We are not in accord with these views. It is evident from appellee's disclosure that he had in mind a thermostatic control for use with other entirely distinct and separate units.

In his decision the Law Examiner said:

Spencer shows a part "36" which at two points *is connected to the heating element and which holds part of the regulator device.* (Italics ours.)

While it is true that part "36" in appellee's disclosure, referred to in the Law Examiner's decision, may be the element that connects the two independent and separate units for use in an electric flatiron, it does not follow that those units when so attached are "structurally interdependent." In other words, while they are joined for operative purposes, each performs its separate function as an independent unit. Furthermore, when detached, each retains its essential characteristics and functions.

Counsel for appellee concedes that "the heating element and the thermostatic apparatus remain units when detached from each other." It is argued, however, that, when joined for operative purposes, they are "structurally interdependent."

It is true, as argued by counsel for appellee, that count 1 is broader in scope than counts 2, 7, and 8, and that it refers to a heating element and a thermostatic regulator united together to form an integral structure adapted to be removed and replaced as a unit. However, we are unable to find anything in appellee's disclosure to indicate that a heating element and thermostatic regulator were intended to be so united as to form an integral structure adapted to be removed or replaced as a unit. On the contrary, we think it is clear that the heating element and thermostatic regulator, as disclosed by appellee, were designed to be removed and replaced as separate and distinct units.

It will be observed that the involved counts are expressly limited to the precise structure disclosed by appellant. Accordingly, giving them the broadest interpretation which they will reasonably support, we are, nevertheless, of the opinion that, due to the limitations therein expressly contained, appelee is not entitled to make them.

For the reasons stated, the decision of the Board of Appeals is reversed.

Reversed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,086,527. (See 1,109,950.)

1,104,589. Ward & Taylor, Gear grinding machine; 1,155,532, F. A. Ward, Machine for grinding splined shafts; 1,271,495, same, Method of grinding splined shafts and other interrupted cylindrical bodies; 1,273,016, same, Splined shaft filed Mar. 10, 1931, D. C., S. D. Ind. (Indianapolis), Doc. 1302, *The Gear Grinding Machine Co.* v. *Warner Gear Co.*

1,109,950, A. Andren, Signaling apparatus; 1,666,589, C. W. Bassett, Elevator signaling system; 1,086,527, Hamilton & Timmons, Street indicator for cars, C. C. A., 3d Cir., Doc. 4480, *Graham & Norton Co.* v. *Elevator Supplies Co.* Decree affirmed Apr. 9, 1931.

1,131,525, Kelly & Wood, Locomotive curtain, filed Apr. 9, 1931, D. C. Minn., 4th Div., Doc. 1994, *C. Kelly et al.* v. *Northern Pacific Rwy. Co.*

1,155,532. (See 1,104,589.)

1,173,141, W. Bartholomae, Sounding toy, filed Apr. 10, 1931, D. C., S. D. N. Y., Doc. E 59/173, *Bar-Zim Toy Mfg. Co., Inc.*, v. *Riemann Seabrey Co., Inc., et al.*

1,183,161, F. N. Bierce, Guard for guys, filed Apr. 9, 1931, D. C., S. D. Ohio, W. Div., Doc. E 730, *The Specialty Device Co. et al.* v. *South East Joslyn Co.*

1,209,460, G. F. Lowe, Recovery means for machine construction devices, filed Sept. 23, 1930, D. C. R. I., Doc. 353, *G. F. Lowe* v. *National Collapsible Tube Co.* Dismissed Feb. 13, 1931.

1,212,161, F. E. Getts, Switch; 1,515,116, E. H. Jacobs, same, D. C., W. D. N. Y., Doc. 811–D, *Electrical Engineers Equipment Co.* v. *The Champion Switch Co.* Decree for plaintiff Apr. 8, 1931.

1,212,840, F. J. Straub, Building block and method of making same, D. C., M. D. Pa., Doc. E 693, *Crozier-Straub, Inc., et al.* v. *Scranton Tile & Supply Co.* Injunction granted Apr. 7, 1931.

1,237,778, G. C. Harter, Mustard beater, D. C., E. D. Wash. (Spokane), Doc. E 4377 (L–4510), *G. C. Harter* v. *W. T. Cormand.* Dismissed for want of prosecution Apr. 7, 1931. Doc. E 4378 (L–4511), *G. C. Harter* v. *C. Pease.* Decree as above.

1,242,872, 1,357,521, 1,437,554, C. Saunders, Self-serving store; 1,297,405, same, Price tagging means, filed Apr. 10, 1931, D. C., N. D. Okla. (Tulsa), Doc. E 628, *Piggly Wiggly Corp.* v. *J. A. Strauss et al* (*Strauss & Futterman*).

1,271,495. (See 1,104,589.) 1,273,016. (See 1,104,589.)

1,297,405. (See 1,242,872.)

1,299,282, H. Rosenberg, Art of fastening sheets together; 1,411,184, same, Sheet metal structure and fastening therefor; 1,465,148, same, Screw, appeal filed Apr. 6, 1931, C. C. A., 2d Cir., Doc. 11455, *H. Rosenberg et al.* v. *Carr Fastener Co.*

1,303,161, J. F. Cavanagh, Electric switch, filed Dec. 25, 1928, D. C. Conn. (New Haven), Doc. E 1879, *B. A. Fones* v. *The American Specialty Co.*

1,320,354, J. H. Adams, Oil-converting apparatus; 1,320,727, same, Apparatus for the conversion of liquids, fluids and oils; 1,327,263, same, Process for the conversion of liquids, fluids and oils, D. C., N. D. Okla. (Tulsa), Doc. E 251, *The Texas Co.* v. *Producers & Refiners Corp.* Dismissed Apr. 7, 1931.

1,320,727. (See 1,320,354.) 1,327,263. (See 1,320,354.)

1,349,041, 1,518,245, J. H. Boye, Curtain fixture, D. C., W. D. Mich. (Grand Rapids), Doc. E 2848, *J. H. Boyce Mfg. Co.* v. *Kirsch Co.* Decree for plaintiff Apr. 8, 1931.

1,357,521. (See 1,242,872.)

1,383,035, C. R. Short, Bearing shim, D. C., S. D. N. Y., Doc. E 45/145, *General Motors Corp. et al.* v. *Lehr Auto Supply Co., Inc.* Consent decree for plaintiff Apr. 7, 1931.

1,411,184. (See 1,299,282.)

1,428,226, A. J. Ganz, Display device, D. C., S. D. N. Y., Doc. E 57/350, *Einson-Freeman Co., Inc.* v. *Singer Bros Co., Inc.* Decree pro confesso for plaintiff Apr. 8, 1931.

1,437,554. (See 1,242,872.) 1,465,148. (See 1,299,232.)

1,469,344, W. Ware, Roller, filed Apr. 11, 1931, D. C., W. D. Mich. (Grand Rapids), Doc. 2486, *W. Ware et al.* v. *Montgomery Ward & Co.*

1,485,552, E. F. Colby, Fan and pulley therefor, D. C. Minn. (St. Paul), Doc. E 1144, *E. F. Colby* v. *Ford Motor Co.* Dismissed for want of equity Jan. 22, 1931.

1,515,116. (See 1,212,161.) 1,518,245. (See 1,349,041.)

1,526,982, E. W. Hill, Stencil sheet, D. C., N. D. Ga. (Atlanta), Doc. E 595, *A. B. Dick Co.* v. *The Shallcross Co., Inc., et al.* Dismissed without prejudice (notice Apr. 9, 1931).

1,528,345, H. W. Russ, Heel and method of making, filed Apr. 9, 1931, D. C., S. D. Ohio, W. Div., Doc. E 729, *United Shoe Machinery Corp.* v. *Vulcan Corp.*

1,532,144, H. C. Link, Shipping basket, D. C., S. D. Ind. (Indianapolis), Doc. (E 90), 1275, *H. C. Link* v. *Evansville Basket & Crate Co. et al.* Patent held valid but not infringed Feb. 21, 1931.

1,534,289, E. Teppet, Process of and composition of matter for killing plants, appeal filed Mar. 2, 1931, C. C. A., 3d Cir., Doc. 4578, *A. Chorpillos et al.* v. *Reade Mfg. Co.*

1,580,287, Colle & Colle, Glass substitute, D. C. Wash. (Seattle), Doc. 817, *Acetol Products, Inc.* v. *Hardware Specialties Co.* Patent held valid Apr. 9, 1931.

1,635,115, Deutsch & Pfeifer, Apparatus for cleaning containers, C. C. A., 6th Cir., Doc. 5419, *Merit Oil Equipment Co.* v. *Fry Equipment Corp. et al.* Claims 7, 8, 9, 13, 14, 15, 16, and 19 held not infringed, claim 19 held valid and infringed Apr. 10, 1931.

1,636,416, L. G. Handy, Track for toy electric trains, C. C. A., 2d Cir., Doc. 11291, *L. G. Handy et al.* v. *American Flyer Mfg. Co.* Decree affirmed (notice Apr. 6, 1931).

1,652,561, A. O. Dady, Ironing machine; 1,656,656, Anderson & Janda, same; 1,762,605, same, Table structure, D. C., N. D. Ohio, E. Div., Doc. 3622, *Conlon Corp.* v. *The Apex Electrical Mfg. Co.* Claims 8, 10, and 14 of 1,652,561, claims 1 to 6, inclusive, of 1,656,656, claims 7 and 11 of 1,762,605 held valid and infringed Apr. 8, 1931.

1,656,656. (See 1,652,561.)

1,656,656. (See 1,652,561.) 1,666,589. (See 1,109,950.)

1,660,882, E. Conti, Tube forming machine, appeal filed Apr. 3, 1931, C. C. A., 2d Cir., Doc. 11,445, *Hers Straw Co., Inc.*, v. *S. Smith et al.*

1,661,141. (See 1,664,271.)

1,664,271, J. Steinberg, Head gear and method of making; 1,661,141, C. Lipper, Bandeaux, appeal filed Apr. 2, 1931, C. C. A., 2d Cir., Doc. 11444, *Lipper Mfg. Co., Inc.*, v. *American Band Trimming, Inc.*

1,683,806, J. W. Richards, jr., Shoe for transmission clutch drum lug, filed Mar. 12, 1931, D. C. Minn. (St. Paul), Doc. E 2184, *J. W. Richards, jr.*, v. *Ford Motor Co.*

1,697,654, F. Jantzen, Towel stand; 1,783,149, same, Towel cabinet, filed Apr. 10, 1931, D. C., S. D. N. Y., Doc. E 59/172, *F. Jantzen et al.* v. *S. D. Hoffman (Terminal Supply Co.) et al.*

1,756,919, Becker & Munson, Special container; 1,780,142, same, Method of packaging articles, filed Apr. 4, 1931, D. C., E. D. Mich., S. Div., Doc. 4723, *The Dobeckmun Co.* v. *Tegge-Jackman Cigar Co.*

1,762,605. (See 1,652,561.) 1,780,142. (See 1,756,919.)

1,783,149. (See 1,697,654.)

1,783,337, E. W. Little, Attachment for welding machines, filed Apr. 8, 1931, D. C., S. D. Ind. (Indianapolis), Doc. 1305, *E. W. Little* v. *Indianapolis Cage Corp. et al.*

1,787,035, C. R. Davis, Shield for automobile radiators, filed Apr. 10, 1931, D. C., E. D. Mich., S. Div., Doc. 4739, *Davis Tool & Engineering Co.* v. *Sears, Roebuck & Co.* Dismissed without prejudice Apr. 30, 1931.

1,787,610, A. Blustein, Counter and method of making, filed Apr. 9, 1931, D. C. Mass., Doc. E 3415, *H. Brown et al.* v. *S. Merker et al.* Doc. E. 3414, *H. Brown et al.* v. *Bay State Counter Co.*

1,789,949, A. Georgiev, Electrolytic cell, filed Apr. 11, 1931, D. C., S. D. N. Y., Doc. E 59/174, *Aerovox Wireless Corp* v. *Mayo Laboratories, Inc.*

1,790,156, J. L. Kleinman, Tennis racket, filed Apr. 6, 1931, D. C. Mass., Doc. E 3413, *J. L. Kleinman* v. *R. E. Kent et al.*

Re. 16,518, R. A. Gorsuch, Shipping box for chicks, filed Apr. 11, 1931, D. C., N. D. Ohio, E. Div., Doc. E 3731, *The Congor Mfg. Co.* v. *R. H. Vaughn et al.*

Re. 17,393, J. Mayer, Hair waving appliance and method, filed Apr. 6, 1931, D. C., N. D. Ohio, E. Div., Doc. E 3728, *The Philad Co.* v. *A. L. Greenfield et al. (Dealers Supply Co.).*

Des. 70,209, J. Berlinger, Wedding ring, C. C. A., 2d Cir., Doc. 11309, *J. Berlinger* v. *Busch Jewelry Co. Inc* Decree reversed (notice Apr. 13, 1931).

Des. 83,693, J. Moosberr, Lace, filed Apr. 11, 1931, D. C., S. D. N. Y., Doc. E 59/175, *Liverty Lace & Netting Works* v. *Acme Textiles, Inc., et al.*

T. M. 87,202, General Roofing Mfg. Co., Roofing; T. M. 103,781, same, Certain named construction material, C. C. A., 3d Cir., Doc. 4432, *Certain-Teed Products Corp.* v. *Philadelphia & Suburban Mortgage & Guarantee Co.* Decree affirmed Apr. 6, 1931.

T. M. 103,781. (See T. M. 87,202.)

International Convention Revised at The Hague

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA,

A PROCLAMATION.

Whereas, a Convention revising the convention for the protection of industrial property signed at Paris on March 20, 1883, revised at Brussels on December 14, 1900, and at Washington on June 2, 1911, was signed at The Hague on November 6, 1925, by the respective Plenipotentiaries for the United States of America, Germany, Australia, Austria, Belgium, the United States of Brazil, Canada, Cuba, Denmark, the Free City of Danzig, the Dominican Republic, Spain, Estonia, Finland, France, Great Britain and Northern Ireland, Hungary, the Irish Free State, Italy, Japan, Morocco, the United Mexican States, Norway, the Netherlands, Poland, Portugal, the Kingdom of the Serbs, Croats and Slovenes, Sweden, the Swiss Confederation, Syria and the Lebanon, Czechoslovakia, Tunis and Turkey, which Convention, in the French language, is word for word as follows:

[Translation]

CONVENTION OF UNION OF PARIS OF MARCH 20, 1883, FOR THE PROTECTION OF INDUSTRIAL PROPERTY

REVISED AT BRUSSELS DECEMBER 14, 1900, AT WASHINGTON JUNE 2, 1911, AND AT THE HAGUE NOVEMBER 6, 1925

The President of the German Reich; the President of the Republic of Austria; His Majesty the King of the Belgians; the President of the United States of Brazil; the President of the Republic of Cuba; His Majesty the King of Denmark; the President of the Dominican Republic; His Majesty the King of Spain; the President of the Republic of Estonia; the President of the United States of America; the President of the Republic of Finland; the President of the French Republic; His Majesty the King of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, Emperor of India; His Serene Highness the Governor of Hungary; His Majesty the King of Italy; His Majesty the Emperor of Japan; His Majesty the Sultan of Morocco; the President of the United Mexican States; His Majesty the King of Norway; Her Majesty the Queen of the Netherlands; the President of the Polish Republic, in the name of Poland and the Free City of Danzig; the President of the Portuguese Republic; His Majesty the King of the Serbs, Croats and Slovenes; His Majesty the King of Sweden; the Federal Council of the Swiss Confederation; the States of Syria and Greater Lebanon; the President of the Czechoslovak Republic; His Highness the Bey of Tunis; the President of the Turkish Republic,

Having deemed it expedient to make certain modifications and additions in the international convention of March 20, 1883, for the creation of an international union for the protection of industrial property, revised at Brussels on December 14, 1900, and at Washington on June 2, 1911, have appointed as their plenipotentiaries, to wit: [Names omitted.]

Who, having communicated to each other their respective full power, which were found to be in good and due form, have agreed upon the following articles:

ARTICLE 1

The contracting countries constitute themselves into a union for the protection of industrial property.

The scope of the protection of industrial property includes patents, utility models, industrial designs and models, trade-marks, commercial names and indications of origin, or appellations of origin, as well as the repression of unfair competition.

Industrial property is to be understood in the broadest meaning and is to be applied not only to industry and commerce as such, but likewise to agricultural industries (wines, grain, tobacco leaves, fruit, cattle, etc.) and extractive industries (minerals, mineral waters, etc.).

The term "patents" includes the various types of industrial patents granted by the laws of the contracting countries, such as patents of importation, improvement patents, patents and certificates of addition, etc.

ARTICLE 2

Nationals of each of the contracting countries shall, in all other countries of the Union, as regards the protection of industrial property, enjoy the advantages that their respective laws now grant, or may hereafter grant, to their own nationals, without any prejudice of the rights specially provided by the present convention. Consequently they shall have the same protection as the latter, and the same legal remedy against any infringement of their rights, provided they observe the conditions and formalities imposed on subjects or citizens.

Nevertheless no condition as to the possession of a domicile or establishment in the country where protection is claimed can be required of those who enjoy the benefits of the Union for the enjoyment of any industrial-property rights.

The provisions of the legislation of each of the contracting countries relative to judicial and administrative proceedings and to competent authority, as well as to the choice of domicile or the appointment of an authorized agent, which may be required by the laws on industrial property are expressly reserved.

ARTICLE 3

Nationals of countries not forming part of the Union who are domiciled or who have real and effective industrial or commercial establishments in the territory of any of the countries of the Union, shall be assimilated to the nationals of the contracting countries.

ARTICLE 4

(*a*) Any person who has duly applied for a patent, the registration of a utility model, industrial design or model, or trade-mark in one of the contracting countries, or his legal representative or assignee, shall enjoy, subject to the rights of third parties, for the purposes of registration in other countries, a right of priority during the periods hereinafter stated.

(*b*) Consequently, subsequent filing in any of the other countries of the Union before the expiration of these periods shall not be invalidated through any acts accomplished in the interval, either particularly, by another filing, by publication of the invention, or by the working of it, by the sale of copies of the design or model, or by use of the trade-mark.

(*c*) The above-mentioned periods of priority shall be twelve months for patents and utility models, and six months for industrial designs and models and trade-marks.

These periods shall start from the date of filing of the first application in a country of the Union; the day of filing is not counted in this period.

If the last day of the period is a *dies non* in the country where protection is claimed, the period shall be extended until the next working day.

(*d*) Any person desiring to take advantage of the priority of a previous application must make a declaration giving particulars as to the date of such application and the country in which it was made. Each country will determine for itself the latest date at which such declaration must be made.

The particulars referred to shall be stated in the publications issued by the competent authority, and in particular in the patents issued and the specifications relating thereto.

The contracting countries may require any person making a declaration of priority to produce a copy of the application (with the specification, drawings, etc.) previously made. The copy, certified as correct by the authority receiving this demand, shall not require any legal authentication, and in any circumstances can be filed at any time within the period of three months from the lodging of the last application. They may also require that the declaration shall be accompanied by a certificate by the proper authority showing the date of application, and also by a translation.

No other formalities may be required for the declaration of priority at the time of application. Each of the contracting countries shall decide for itself what consequences shall follow the omission of the formalities prescribed by the present article, but such consequence shall in no case be more serious than the loss of the right of priority.

At later stages, further proof in support of the application may be required.

(*e*) Where an application is filed in a country for the registration of an industrial design or model by virtue of a right of priority based on the registration of a utility model, the period of priority shall not exceed that fixed for industrial designs and models.

Furthermore, it is allowable to deposit in a country a utility model by virtue of rights of priority based on a patent application, and vice versa.

(*f*) If an application for a patent contains claims for multiple priority, or if examination discloses that the application contains more than one invention, the competent authorities must at least allow the applicant to divide it, subject to the conditions of internal legislation, reserving as date of each divisional application the date of the initial application and, if there is occasion for it, the benefits of the right of priority.

ARTICLE 4 BIS

Patents applied for in the various contracting countries by nationals of the Union shall be independent of the patents obtained for the same invention in other countries, whether such countries be or be not parties to the Union.

This stipulation must receive a strict interpretation; in particular, it shall be understood to mean that patents applied for during the period of priority are independent, both as regards the grounds for refusal and for revocation, and also as regards their normal duration.

This stipulation shall apply to all patents already existing at the time when it shall come into effect.

The same stipulation shall apply, in the case of the accession of new countries, to patents in existence, either on one side or the other, at the time of accession.

ARTICLE 5

The introduction by the patentee into the country where the patent has been granted of objects manufactured in any of the countries of the Union shall not entail forfeiture.

Nevertheless, each of the contracting countries shall have the right to take the necessary legislative measures to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent; for example, failure to use.

These measures will only provide for the revocation of the patent if the granting of compulsory licenses shall not suffice to prevent such abuses.

In all cases the patent will not be subject to such measures before the expiration of at least three years from the date of its grant and if the patentee produces just excuses.

The protection of designs and industrial models cannot be liable to cancellation by reason of the introduction of objects corresponding to those protected.

Articles shall not be required to bear any indication of registration for recognition of this right.

If in a country the use of a registered trade-mark is compulsory, the registration cannot be canceled until after a reasonable period, and only then if those interested cannot justify the causes of their inaction.

ARTICLE 5 BIS

A period of grace of at least three months will be granted for the payment of taxes prescribed for the maintenance of industrial-property rights, together with a surcharge if the internal legislation of a country so provides.

For patents of invention the contracting countries undertake moreover either to prolong that extended period to six months at least, or to provide for the restoration of a patent which has lapsed owing to the nonpayment of fees, it being understood that these provisions are subject to the conditions prescribed by internal legislation.

ARTICLE 5 TER

In each of the contracting countries the following shall not be considered as infringing the rights of the patentee:

(1) The use on board ships of other countries of the Union of anything the subject matter of his patent in the body of the ship, in the machinery, tackle, apparatus, and other accessories when such ships enter temporarily or accidentally the waters of the country, provided that such thing is employed there exclusively for the needs of the vessel.

(2) The use of anything the subject matter of the patent in the construction of or functioning of the engines of locomotion for air or land of the other countries of the Union, or of the accessories of these engines, when these enter the country temporarily or accidentally.

ARTICLE 6

Every trade-mark duly registered in the country of origin shall be admitted for registration and protected in the form originally registered in the other countries of the Union.

Nevertheless, the following marks may be refused or canceled:

(1) Those which are of such a nature as to prejudice rights acquired by third parties in the country in which protection is applied for.

(2) Those which have no distinctive character, or which consist exclusively of signs or indications which serve in trade to designate the kind, quality, quantity, destination, value, place of origin, or date of production, or which have become customary in the current language, or in the *bona fide* and unquestioned usages of the trade of the country in which protection is sought.

In arriving at a decision as to the distinctiveness of the character of a mark, all the circumstances of the case must be taken into account, and in particular the length of time that such a mark has been in use.

(3) Those which are contrary to morality or public order.

It is to be understood that a mark cannot be considered as contrary to public order for the sole reason that it does not conform to some legislative requirement concerning trade-marks, except in circumstances where this requirement itself relates to public order.

The following shall be deemed the country of origin:

The country of the Union where the applicant has an actual and genuine industrial or commercial establishment; and if he has not such an establishment, the country of the Union where he has his domicile; and if he has not a domicile in the Union, the country of his nationality in the case where he is under the jurisdiction of a country of the Union.

In no case shall the renewal of the registration of a trade-mark in the country of origin involve the obligation of renewal of the registration of the mark in other countries of the Union in which the mark has been registered.

The benefits of priority shall subsist in trade-mark applications filed in the period allowed by article 4, even when the registration in the country of origin is only completed after the expiration of such period.

The provisions of paragraph 1 do not preclude the right of requiring from an applicant a certificate, in due form, as to the registration of his mark, issued by the competent authority of the country of origin, but no legal authentication of such certificate shall be required.

ARTICLE 6 BIS

The contracting countries undertake to refuse or invalidate, either administratively if their legislation so permits, or at the request of an interested party, the registration of a trade-mark which constitutes a reproduction or imitation liable to create confusion with a trade-mark considered by the competent authority of the country of registration to be well known there as being already a mark of a national of another contracting country and used for products of the same or a similar kind.

A period of at least three years must be granted in order to claim the cancellation of these marks. The period shall start from the date of registration of the mark.

No period shall be established to claim the cancellation of fraudulently registered marks.

ARTICLE 6 TER

The contracting countries undertake to refuse or invalidate registration, and to prohibit by appropriate means the use, failing authorization from the competent authority, whether as trade-mark or as components of such, of all coats of arms, flags, and other state emblems of contracting countries, official control and guarantee signs and stamps adopted by them, and all imitation from an heraldic point of view.

The prohibition of official control and guarantee signs and stamps shall apply only in cases where marks which comprise them are intended to be used on merchandise of the same or a similar nature.

For the application of these provisions the contracting countries agree to communicate reciprocally, through the intermediary of the International Bureau of Berne, the list of State emblems and official control and guarantee signs and stamps which they desire, or will desire, to place, wholly or with certain reservations, under the protection of the present article, as well as all subsequent modifications added to the list. Each contracting country shall place the communicated list at the disposal of the public in due course.

Each contracting country may, within a period of twelve months from the receipt of the notification, and through the intermediary of the International Bureau of Berne, transmit its possible objections to any other country concerned.

For State emblems which are well known the provisions of paragraph 1 shall be applicable only to marks registered after the signature of this convention.

For State emblems which are not well known, and for official signs and stamps, these provisions shall be applicable only to marks registered more than two months after the receipt of the notification provided for in paragraph 3.

In the case of bad faith, countries shall have the right to cancel even the marks registered before the signature of the present convention and embodying State emblems, signs, and stamps.

Nationals of each country who are authorized to make use of State emblems, and signs and stamps of their country, may use them even if there be a similarity with those of another country.

The contracting countries undertake to prohibit the unauthorized use in trade of State coats of arms of other contracting countries when such use would be liable to cause confusion as to the origin of the product.

The preceding provisions will not prevent the countries' exercising the right to refuse or to invalidate, by

the application of No. 3 of paragraph 2 of article 6, marks containing without authority coats of arms, flags, decorations, and other State emblems or official signs and stamps adopted by a country of the Union.

ARTICLE 7

The nature of the goods on which the trade-mark is to be used can in no case form an obstacle to the registration of the trade-mark.

ARTICLE 7 BIS

The contracting countries undertake to allow the filing of, and to protect, trade-marks belonging to associations the existence of which is not contrary to the law of the country of origin, even if such associations do not possess an industrial or commercial establishment.

Nevertheless, each country shall be the sole judge of the particular conditions on which an association may be allowed to obtain protection for its marks.

ARTICLE 8

A trade name shall be protected in all the countries of the Union without the obligation of filing or registration, whether or not it form part of a trade-mark.

ARTICLE 9

All goods illegally bearing a trade-mark or trade name shall be seized on importation into those countries of the Union where this mark or name has a right to legal protection.

Seizure shall be effected equally in the country where the mark or name was illegally applied, or in the country to which the article bearing it has been imported.

The seizure shall take place at the request either of the proper Government department or of any other competent authority, or of any interested party or actual or legal person, in conformity with the domestic law of each country.

The authorities are not bound to effect the seizure in transit.

If the law of a country does not admit of seizure on importation, such seizure shall be replaced by prohibition of importation or by seizure within such country.

If the law of any country does not admit either of seizure upon importation, or of prohibition of importation, or of seizure within the country, and until such time as this legislation shall be accordingly modified, these measures will be replaced by the remedies assured in such cases to nationals by the law of such country.

ARTICLE 10

The stipulations of the preceding article shall be applicable to every product which may falsely bear as indication of origin the name of a specified locality or country when such indication shall be joined to a trade name of a fictitious character or used with the intent to defraud.

Any producer, manufacturer, or trader engaged in the production, manufacture, or trade of such goods and established either in the locality falsely designated as the place of origin, or in the district where the locality is situated, or in the country falsely designated, shall be deemed in all cases a party concerned, whether such person be actual or legal.

ARTICLE 10 BIS

The contracting countries are bound to assure to nationals of the Union an effective protection against unfair competition.

Every act of competition contrary to honest practice in industrial or commercial matters constitutes an act of unfair competition.

The following particularly are to be forbidden:

(1) All acts whatsoever of a nature to create confusion by no matter what means with the goods of a competitor.

(2) False allegations, in the course of trade, of a nature to discredit the goods of a competitor.

ARTICLE 10 TER

The contracting countries undertake to assure to the nationals of other countries of the Union appropriate legal remedies to repress effectively all acts set forth in articles 9, 10, and 10 *bis*.

They undertake, moreover, to provide measures to permit syndicates and associations representing the industry or the trade interested, and of which the existence is not contrary to the laws of their country, to take action in justice or before the administrative authorities, in view of the repression of the acts set forth in articles 9, 10, and 10 *bis*, so far as the law of the country in which protection is claimed permits it to the syndicates and associations of that country.

ARTICLE 11

The contracting countries shall, in conformity with the legislation of each country, accord temporary protection to patentable inventions, to utility models, and to industrial designs or models, as well as to trade-marks in respect of products which shall be exhibited at official, or officially recognized, international exhibitions held in the territory of one of them.

This temporary protection shall not prolong the periods provided by article 4. If later the right of priority is sought, the competent authority of each country may date the period from the date of the introduction of the product into the exhibition.

Each country may require, as proof of the identity of the object exhibited, and of the date of the introduction, such proofs as it may consider necessary.

ARTICLE 12

Each of the contracting countries agrees to establish a special Government service for industrial property, and a central office for communication to the public of patents, utility models, industrial designs or models, and trade-marks.

This service shall publish an official periodical paper.

ARTICLE 13

The international office, established at Berne under the name of International Bureau for the Protection of Industrial Property, is placed under the high authority of the Government of the Swiss Confederation, which is to regulate its organization and supervise its working.

The official language of the International Bureau is French.

The International Bureau centralizes information of every kind relating to the protection of industrial property and collates and publishes it. It interests itself in all matters of common utility to the Union and edits, with the help of documents supplied to it by the various Administrations, a periodical paper in the French language, dealing with questions regarding the object of the Union.

The numbers of this paper, as well as the documents published by the International Bureau, are circulated among the Administrations of the countries of the Union in the proportion of the number of contributing units as mentioned below. Such further copies as may be desired, either by the said Administrations or by societies or private persons, will be paid for separately.

The International Bureau shall at all times hold itself at the service of members of the Union, in order to supply them with any special information they may need on questions relating to the international system of industrial property. The Director of the International Bureau will furnish an annular report on its working, which shall be communicated to all the members of the Union.

The expenses of the International Bureau will be borne by the contracting countries in common. Unless fresh sanction is given, they must not exceed the sum of 120,000 Swiss francs per annum. This sum may be increased in cases of necessity by a unanimous decision of one of the conferences provided for by article 14.

To determine the part which each country should contribute to this total of expenses the contracting countries and those which may afterwards join the Union shall be divided into six classes, each contributing in the proportion of a certain number of units, namely:

	Units
First class	25
Second class	20
Third class	15
Fourth class	10
Fifth class	5
Sixth class	3

These coefficients will be multiplied by the number of countries in each class, and the sum of the result thus obtained will supply the number of units by which the total expense has to be divided. The quotient will give the amount of the unit of expense.

Each of the contracting countries will designate, at the time of its accession, the class in which it wishes to be placed.

The Government of the Swiss Confederation is to superintend the expenses of the International Bureau, to advance the necessary funds and to render an annual account which will be communicated to all the other Administrations.

ARTICLE 14

The present convention shall be submitted to periodical revisions with a view to the introduction of amendments calculated to improve the system of the Union.

For this purpose, conferences shall be held successively in one of the contracting countries between the delegates of the said countries.

The Administration of the country in which the conference is to be held will make preparation for the transaction of that conference, with the assistance of the International Bureau.

The Director of the International Bureau will be present at the meetings of the conferences, and will take part in the discussions, but without the privilege of voting.

ARTICLE 15

It is agreed that the contracting countries respectively reserve to themselves the right to make separately, as between themselves, special arrangements for the protection of industrial property, in so far as such arrangements do not contravene the provisions of the present convention.

ARTICLE 16

The countries which have not taken part in the present convention shall be permitted to adhere to it upon their request.

The accession shall be notified through the diplomatic channel to the Government of the Swiss Confederation, and by the latter to all the other Governments.

It shall entail, as a matter of right, accession to all the classes, as well as admission to all the advantages stipulated in the present convention, and shall take effect one month after the dispatch of the notification by the Government of the Swiss Confederation to the other countries of the Union, unless a subsequent date has been indicated by the acceding country.

ARTICLE 16 BIS

The contracting countries have the right of acceding to the present convention at any time on behalf of their colonies, possessions, dependencies, and protectorates, or territories administered by virtue of a mandate from the League of Nations, or any of them.

For this purpose they may either make a general declaration, including all their colonies, possessions, dependencies, and protectorates, and the territories referred to in paragraph 1, in the accession, or may expressly name those included, or may confine themselves to indicating those which are excluded therefrom.

This declaration shall be notified in writing to the Government of the Swiss Confederation and by the latter to all the other Governments.

Under the same conditions, the contracting countries may denounce the convention on behalf of their colonies, possessions, dependencies, and protectorates, or for the territories referred to in paragraph 1, or for any of them.

ARTICLE 17

The execution of the reciprocal engagements contained in the present convention is subordinated, in so far as necessary, to the observance of the formalities and rules established by the constitutional laws of those of the contracting countries which are bound to procure the application of the same, which they engage to do with as little delay as possible.

ARTICLE 17 BIS

The convention shall remain in force for an unlimited time, till the expiration of one year from the date of its denunciation.

This denunciation shall be addressed to the Government of the Swiss Confederation. It shall affect only the denouncing country, the convention remaining in operation as regards the other contracting countries.

ARTICLE 18

The present act shall be ratified and the ratifications deposited at The Hague not later than the 1st of May, 1928. It shall come into force, between the countries which will have ratified it, one month after such date. However, if before May 1, 1928, it should be ratified by at least six countries, it will come into force between those countries one month after the Government of the Swiss Confederation has notified them of the filing of the sixth ratification, and for the countries which should subsequently ratify, one month after the notification of each of these ratifications.

This act shall replace, as regards relations between the countries which ratify it, the convention of the Union of Paris of 1883, revised at Washington June 2, 1911, and its final protocol, which shall remain in force as regards relations with countries which have not ratified the present act.

ARTICLE 19

The present act shall be signed in a single copy, which shall be deposited in the archives of the Government of the Netherlands. A certified copy shall be forwarded by the latter to each of the Governments of the contracting countries.

In witness whereof, the respective plenipotentiaries have signed the present act.

Done at The Hague, in a single copy, the 6th day of November, 1925.

And whereas, the said Convention has been duly ratified on the part of the United States of America, and the instrument of ratification by the United States of America was deposited with the Government of the Swiss Confederation on January 22, 1931;

And whereas, notification of the said deposit was given by the Government of the Swiss Confederation to all other contracting parties on February 6, 1931;

And whereas, in accordance with the terms of the said Convention, the Convention will come into force in respect of the United States of America, one month from the date of such notification, namely, on March 6, 1931;

And whereas, the said Convention is now in force in respect of the Governments of Austria, Belgium, the United States of Brasil, Canada, France, Morocco (French and Spanish Zones), Germany, Great Britain and Northern Ireland, Hungary, Italy, the United Mexican States, the Netherlands, Portugal, Spain, the Swiss Confederation, Syria and the Lebanon, Trinidad and Tobago, Tunis, Turkey and Yugoslavia, whose instruments of ratification have been deposited, or whose notifications of adherence have been given, in conformity with the requirements of the said Convention;

Now, therefore, be it known that I, Herbert Hoover, President of the United States of America, have caused the said Convention to be made public to the end that the same and every article and clause thereof may be observed and fulfilled with good faith by the United States of America and the citizens thereof.

In testimony whereof, I have hereunto set my hand and caused the seal of the United States of America to be affixed.

Done at the city of Washington this sixth day of March in the year of our Lord one thousand nine hundred and thirty-one, and of the Independence of the United States of America the one hundred and fifty-fifth.

[SEAL.] HERBERT HOOVER.

By the President:
HENRY L. STIMSON,
Secretary of State.

General Inter-American Convention for Trade Mark and Commercial Protection

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

Whereas, a General Inter-American Convention for Trade Mark and Commercial Protection was signed by the respective plenipotentiaries of the United States of America, Peru, Bolivia, Paraguay, Ecuador, Uruguay, Dominican Republic, Chile, Panama, Venezuela, Costa Rica, Cuba, Guatemala, Haiti, Colombia, Brazil, Mexico, Nicaragua and Honduras, at Washington on the twentieth day of February, one thousand nine hundred and twenty-nine, and a Protocol on the Inter-American Registration of Trade Marks was signed on the same day by plenipotentiaries of the said countries except Uruguay, Chile and Guatemala, which Convention and Protocol are word for word as follows: [For text of convention See 380 O. G. 245.]

And whereas the said Convention and the said Protocol have been duly ratified on the part of the United States of America and the instrument of ratification by the United States of America was deposited with the Pan American Union on February 17, 1931;

And whereas the said Convention and Protocol have been ratified by the Government of Cuba, whose instrument of ratification thereof was deposited with the Pan American Union on April 2, 1930; and the said Convention has been ratified by the Government of Guatemala, whose instrument of ratification thereof was deposited with the Pan American Union on December 30, 1929;

Now, therefore, be it known that I, Herbert Hoover, President of the United States of America, have caused the said Convention and the said Protocol to be made public to the end that the same and every article and clause thereof may be observed and fulfilled with good faith by the United States of America and the citizens thereof.

In testimony whereof, I have hereunto set my hand and caused the seal of the United States of America to be affixed.

Done at the city of Washington this twenty-seventh day of February in the year of our Lord one thousand nine hundred and thirty-one, and of the Independence of the United States of America the one hundred and fifty-fifth.

[SEAL.] HERBERT HOOVER.

By the President:
HENRY L. STIMSON,
Secretary of State.

Disclaimers

1,653,065.—*Frederick N. Rose*, Pontiac, Mich. BUTTON-ATTACHING MACHINE. Patent dated December 20, 1927. Disclaimer filed May 13, 1931, by the assignee, *The Button Attaching Machine Co.*

Therefore enters this disclaimer to claims 20 and 21 of said patent which are in the following words, to wit:

"20. In a button attaching machine, the combination of means for attaching a tack and button to a piece of fabric, means for injecting one of said members to said attaching means, feeding means, and means carried by said injecting means for detaching one of the members being fed from the feeding means and positively injecting the same to the injecting means.

"21. In a button attaching machine, the combination of means for attaching a tack and button to a piece of fabric, means for injecting one of said members into said attaching means, feeding means, and means carried by said injecting means for detaching one of the members being fed from the feeding means and positively injecting the same to the injecting means at a point remote from the said attaching means."

1,670,893.—*Samuel P. Levenberg*, New York, N. Y. ELECTRICAL SYSTEM. Patent dated May 22, 1928. Disclaimer filed May 18, 1931, by the assignee, *Radio Corporation of America.*

Hereby enters this disclaimer to claim 1 in the said specification which is in the following words, to wit:

"A radio system adapted for use from power mains comprising in combination a plate circuit, a filament circuit and means for by-passing audio frequency oscillations between the terminals of the filament circuit comprising a large capacity condenser connected across the filament terminals."

1,703,321.—*Herman H. Rubin*, New York, N. Y. ASSIST GRIP. Patent dated February 26, 1929. Disclaimer filed May 18, 1931, by the patentee.

Hereby enters this disclaimer to that part of the claim in said specification and patent, which is in the following words, to wit:

"1. An assist grip comprising a body portion of coiled flexible material, attaching means at one end thereof, a grip at the other end thereof, and a resilient member positioned within the coils of said body portion and free to move longitudinally with respect thereto.

"2. An assist grip comprising a flexible body portion, attaching means at one end thereof, a grip at the other end thereof, and a spring within said flexible member and with its respective ends free to move longitudinally with respect to said attaching means and said grip.

"3. An assist grip comprising a plurality of twisted cords forming a body portion, attaching means at one end thereof, a grip at the other end thereof, and a spring concealed and surrounded by said twisted cords and capable of endwise movement relatively thereto."

1,733,016.—*Elmer E. Hicken*, Collingswood, N. J. LOCOMOTIVE TENDER. Patent dated October 22, 1929. Disclaimer filed May 13, 1931, by the patentee.

Hereby enters this disclaimer of that particular part of the claim in said specification which constitutes claim 1 thereof and which is in the following words; to wit:

"The combination in a locomotive tender, having a base; a body portion; and partition plates separating the fuel section of the tender from the water section thereof, the fuel section being designed to receive stoker mechanism, the forward end of the tender having a compartment at one side of the fuel section for the engine of the stoker mechanism."

1,747,224.—*Warren W. Carpenter*, Queens Village, N. Y. TELEPHONE-EXCHANGE SYSTEM. Patent dated February 18, 1930. Disclaimer filed May 15, 1931, by the assignee, *Bell Telephone Laboratories, Incorporated.*

Hereby enters this disclaimer to the said claims of said Letters Patent which are in the following words to wit:

"1. In a telephone exchange system, a first office, other offices, a sender at said first office having registers for registering the office code and numerical designations of wanted lines for controlling selector mechanism, selector mechanism operable in accordance with the office code designation of a wanted line for extending a connection to either of said other offices, and selector mechanism individual to each of said other offices and selector mechanism common to said other offices operable in accordance with the numerical designation of a wanted line for completing a connection to a wanted line in either of said other offices.

"2. In a telephone exchange system, a first office, other offices, a sender at said first office having registers for registering the office code and numerical designations of wanted lines for controlling selector mechanism, selector mechanism operable in accordance with the office code designation of a wanted line for extending a connection to either of said other offices, and selector mechanism individual to each of said other offices and selector mechanism common to said other offices operable in accordance with the numerical designation of a wanted line for completing a connection to a wanted line in either of said other offices, said common selector mechanism being also operable in accordance with said code designation.

"3. In a telephone exchange system, a first office, other offices, a trunk line for connecting said first office to any of said other offices, a sender at said first office having registers for registering the office code and numerical designations of wanted lines for controlling selector mechanism, selector mechanism operable in accordance with the office code designation of a wanted line in any of said other offices to extend a connection over said trunk line, and selector mechanism individual to each of said other offices, and selector mechanism common to said other offices operable in accordance with the numerical designation of a wanted line for completing a connection to a wanted line in any of said offices.

"4. In a telephone exchange system, a first office, other offices, a sender at said first office having registers for registering the office and numerical designations of wanted lines for controlling selector mechanism, selector mechanism operable in accordance with the office code designation of a wanted line for extending a connection to any of said other offices, selector mechanism individual to each of said other offices and selector mechanism common to said other offices operable in accordance with the numerical designation of a wanted line in any of said other offices, and means for controlling said common selector mechanism in accordance with the office code designation of a wanted line to select the selector mechanism which is individual to the desired line.

"5. In a telephone exchange system, a first office, other offices, a sender at said first office having registers for registering the office and numerical designations of wanted lines for controlling selector mechanism, selector mechanism operable in accordance with the office code designation of a wanted line for extending a connection to any of said other offices, an incoming selector common to said other offices, final selectors individual to each of said other offices, said incoming selectors having access to final selectors in all of said other offices, and means controlled by said sender jointly in accordance with the office and numerical designation of a wanted line to extend said connection to a wanted line in any of said offices."

"7. In a telephone exchange system, a first office, other offices, a sender at said first office having registers for registering the office code and numerical designations of wanted lines for controlling selector mechanism, selector mechanism operable in accordance with the office code designation of a wanted line for extending a connection to either of said other offices, selector mechanism individual to said other offices and selector mechanism common to said other offices operable in accordance with the numerical designation of a wanted line for completing a connection to a wanted line in either of said other offices, and means in said sender operable in accordance with the registered office code to determine whether said last selector mechanism shall extend a connection to selector mechanism in one or another of said other offices."

1,759,877.—*Thomas N. Wynne*, Indianapolis, Ind. COAL SPREADER. Patent dated May 27, 1930. Disclaimer filed May 20, 1931, by the patentee.

Hereby disclaim that part of the thing patented which is covered by said claim 3, which claim 3 reads as follows:

"3. In combination with an automatic stoker having a hopper, a swinging coal-feeding chute for feeding coal into and distributing it along said hopper, a member movable along said hopper, said member being connected to said chute, a rotatable shaft, driving means for rotating said shaft constantly in one direction, and periodically reversible power-transmission mechanism operatively interconnecting said shaft and said member to cause reciprocation of said member and chute along the hopper."

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 9, 1931

[VOL. 407. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

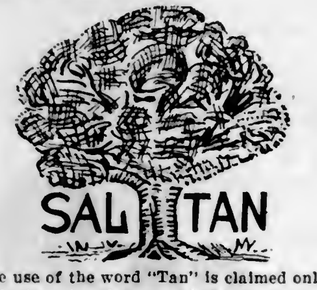
Raw or Partly-Prepared Materials.

Ser. No. 278,891. W. ATLEE BURPEE CO., Philadelphia, Pa. Filed Feb. 5, 1929.

Goldinhart

For Garden Vegetable Seeds.
Claims use since Dec. 20, 1928.

Ser. No. 312,775. ADOLPH SALOMON & SON, Chicago, Ill. Filed Mar. 31, 1931.



Exclusive use of the word "Tan" is claimed only in association with the other features of the mark.
For Sole Leather.
Claims use since Oct. 9, 1929.

Ser. No. 313,270. THE CONARD PYLE COMPANY, West Grove, Pa. Filed Apr. 11, 1931.

PROTECT O KOTE

For Plants Treated to Preserve Them During Their Dormant State and Shipments.
Claims use since Apr. 7, 1931.

Ser. No. 313,462. JOSEPH BRECK & SONS CORPORATION, Boston, Mass. Filed Apr. 17, 1931.

SETAB

For Lawn Seed.
Claims use since Mar. 1, 1928.

Ser. No. 313,463. JOSEPH BRECK & SONS CORPORATION, Boston, Mass. Filed Apr. 17, 1931.

Velturf

For Lawn Seed.
Claims use since Apr. 6, 1931.

Ser. No. 313,879. ADLER & OPPENHEIMER AKTIENGESELLSCHAFT, Berlin, Germany. Filed Apr. 23, 1931.

„Adlero"

For Leather, Leather Dressed by the Chromic Process, Leather Dressed by the Hole Process, Patent Leather.
Claims use since about 1900.

CLASS 2

Receptacles

Ser. No. 313,112. AMERICAN LACE PAPER COMPANY, Milwaukee, Wis. Filed Apr. 8, 1931.



The words "Milwaukee, U. S. A." are disclaimed apart from the mark as shown.
For Cast Paper Pulp Cups.
Claims use since Mar. 26, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 299,849. ARTHUR CALDER LYONS, Brantford, Ontario, Canada. Filed May 2, 1930.

'YEASTINE'

For Complexion Soap and Shaving Soap.
Claims use since Feb. 3, 1930.

Ser. No. 310,433. CELOLAC PRODUCTS COMPANY, Minneapolis, Minn. Filed Jan. 26, 1931.

CELOKLENZ

For Cleaner for Duco, Lacquer, Paint, Enamel, Glass, Porcelain, and Metal Finishes.
Claims use since Sept. 10, 1930.

Ser. No. 311,935. THOMAS W. SLACK, Fort Worth, Tex. Filed Mar. 9, 1931.

Aluminators Illuminate Aluminum

The word "Aluminum" is claimed only as associated with the mark shown in the drawings.
For Cleaning and Polishing Pads for Aluminum, Tinware, Brass, and All Kitchen Utensils.
Claims use since June 1, 1929.

Ser. No. 312,081. THE ABSORENE MANUFACTURING COMPANY, St. Louis, Mo. Filed Mar. 13, 1931.

ABSO

For Cleaning Compounds Having Water Softening Properties.
Claims use since Feb. 23, 1931.

Ser. No. 312,366. D'ORSAY PERFUMERIES CORPORATION, New York, N. Y. Filed Mar. 21, 1931.

DUO D'ORSAY

The word "D'Orsay" is disclaimed apart from the mark as shown in the drawing.
For Soaps.
Claims use since Nov. 6, 1930.

Ser. No. 312,588. A. S. & L. CLEANING PRODUCTS COMPANY, Bayonne, N. J. Filed Mar. 24, 1931.

KLEENS E-Z RUG CLEANER

The exclusive use of the word "Kleens" when expressing the sense of "clean" is disclaimed in itself, but with a reservation of whatever common-law rights may be possessed therein. The words "Rug Cleaner" are disclaimed apart from the other features of the mark shown in the drawing.
For Rug, Carpet, and Upholstery Cleaning Compound.
Claims use since Feb. 1, 1930.

Ser. No. 313,030. ERASM CHEMICAL CORPORATION OF AMERICA, INC., Cincinnati, Ohio. Filed Apr. 7, 1931.

E-RA-SM

For Dry Window Cleaning Powder and Metal Polish.
Claims use since Mar. 25, 1931.

Ser. No. 313,135. FRANK H. JONES, Boston, Mass. Filed Apr. 9, 1931.

BRITE-LITE

For Chemical Jelly Compound for Cleaning, Scouring, and Polishing Metals.
Claims use since Oct. 1, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 271,445. LUCRETIA VANDERBILT, INC., Bridgeport, Conn. Filed Aug. 23, 1928.



For Depilatory Powders, Fumigating Pastilles, Hair Tonics, Hair Oils, Eye Drops, Eye Brow Pencils, Eyebrow and Eyelash Grower, Nail Polishes, Nail Bleaches, Astringents; Hair, Bath, Face, and Hand Lotions; Incense, Smelling Salts, Brilliantines, Bandolines, Beauty Packs.
Claims use since Dec. 1, 1927.

Ser. No. 290,439. ROCCO TRILLO, doing business as Monaderb Tea Co., Merchantville, N. J. Filed Sept. 30, 1929.

Monaderb

Applicant is the owner of registered Trade-Mark #251,077.
For Liquid Tonic Made from Herbs, Including Those Used as a Stomachic and Having a Mild Laxative Action, for Occasional Constipation and Containing Alcohol.
Claims use since Sept. 25, 1929.

Ser. No. 298,895. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Apr. 15, 1930.

Preventol

For Wetting-Out Agents and Preservatives for Animal and Vegetable Glues, Technical Albuminous Substances, Hides, Fabrics, Dressing Mediums, and Other Organic Technical Materials Liable to Decomposition by Micro Organisms.
Claims use since April, 1929.

Ser. No. 301,441. H. W. MFG. CO. INC., Bessemer, Ala. Filed May 28, 1930.

Flossy

For Toilet Articles, to-wit, Hair Dressing, Cold Cream, Vanishing Cream, Massage Cream, Shampoo, Hair Tonic, Hair Grower, Perfume, Face Powder, and Talcum Powder.
Claims use since Aug. 1, 1929.

Ser. No. 304,977. CHARLES W. STENGEL, Philadelphia, Pa. Filed Aug. 23, 1930.

-RICI- FACE AND HAIR LOTION

No claim is made to the words "Face and Hair Lotion."
For Face and Hair Lotion.
Claims use since July 21, 1930.

Ser. No. 305,202. WEISSBARD BROS., Newark, N. J. Filed Aug. 30, 1930.

Marie Duval

For Face Powder.
Claims use since May 15, 1930.

Ser. No. 306,265. ELWOOD J. GOODIER, doing business as Universal Laboratories, Dallas, Tex. Filed Oct. 1, 1930.



For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes and Toilet Waters.
Claims use since Sept. 16, 1930.

Ser. No. 306,473. ZAMARANG LABORATORIES, Van Nuys, Calif. Filed Oct. 6, 1930.

DR. JOEL K. JOEL'S
ZAMARANG

For Nerve Tonic and Blood Purifier.
Claims use since Sept. 1, 1930.

Ser. No. 306,618. NEWTON BALSAM COMPANY, Newton, Kans. Filed Oct. 10, 1930.



E. W. LASSELL'S
BLUE STEM BALSAM

Lassell

The surname Lassell is a facsimile of the signature of J. F. Lassell, a member of the applicant firm. The words "Kansas Blue Stem" and "Blue Stem Balsam" are disclaimed apart from the other features of the mark as shown in the drawings.
For Balsam Used Externally for the Relief of Backache, Neuralgia, Insect Bites and Stings.
Claims use since Sept. 1, 1930.

Ser. No. 308,281. AMERICAN DRUGGISTS SYNDICATE, INC., New York and Long Island City, N. Y. Filed Nov. 25, 1930.

ADS RUSS-OIL

Applicant disclaims the use of the trade-mark "Russ-Oil" apart from the mark as shown.
For Mineral Oils for Medicinal Purposes.
Claims use since Nov. 12, 1930.

Ser. No. 309,031. F. W. KARWACKI, doing business as Mighty Midgets Drug Co., Baltimore, Md. Filed Dec. 16, 1930.

MIGHTY MIDGETS

MIGHTY MIDGETS DRUG CO.

For Pharmaceutical Preparations in Capsules Intended to Relieve Head Colds.
Claims use since Oct. 23, 1930.

Ser. No. 309,156. CHARLES A. WOODRUFF, doing business as Woodruff's Chemicals, Detroit, Mich. Filed Dec. 18, 1930.

CAMPH-FIX

For Ointments, Salves, and Healing Solutions for Use on the Skin or Mucous Membranes as a Local Application for Relief of Colds, Irritations, and Itching.
Claims use since Nov. 1, 1930.

Ser. No. 309,247. LEFFINGWELL RANCHO COMPANY, Whittier, Calif. Filed Dec. 22, 1930.

XXX
TRIPLEX TRIPLEX TRIPLEX

For Insecticides, Liquid Spreader Compounds, a Compound of Emulsified Kerosene Used as a Disinfectant and Having Incidental Detergent Properties, Lime Sulfur.
Claims use since on or about Jan. 1, 1923.

Ser. No. 310,003. ABRAHAM ROSENBLUTH, Newark, N. J. Filed Jan. 14, 1931.



The applicant disclaims from the trade-mark, the terms "Paris" and "New York."
For Face Powders, Rouge, Lip Sticks, Face Creams, Hand Lotions, and Hair Lotions.
Claims use since Sept. 1, 1929.

Ser. No. 310,407. PABST CORPORATION, Milwaukee, Wis. Filed Jan. 26, 1931.



No claim is made to the representation of the bottles, label, or bottle cap, or to the wording other than the name "Pabst" and the name "Pabst Corporation."
For Malt Extract Used as a Tonic.
Claims use since June, 1889.

Ser. No. 311,471. COLUMBIA LABORATORIES INC., New York, N. Y. Filed Feb. 26, 1931.

I·A·S

For General Tonic.
Claims use since July 1, 1930.

Ser. No. 311,989. WALLACE-ROBERTS, INC., Boston, Mass. Filed Mar. 10, 1931.



For Medicinal Preparation for Relief of Alcoholic Excesses.
Claims use since Feb. 28, 1931.

Ser. No. 312,815. RESEARCH PRODUCTS CORPORATION, New York, N. Y. Filed Apr. 1, 1931.

DERMITE

For Preparation for Treating the Skin.
Claims use since Mar. 30, 1931.

Ser. No. 313,127. THE FERMENT COMPANY, New York, N. Y. Filed Apr. 9, 1931.



For Medicinal Preparations in Tablet and Liquid Form for the Treatment of Intestinal Putrefaction.
Claims use since Mar. 1, 1908.

Ser. No. 313,129. LELAND L. FRANK, doing business as The Settlesit Company, Decatur, Ind. Filed Apr. 9, 1931.

SETTLESIT BAG

The descriptive term "Bag" is hereby disclaimed for the purpose of this registration only.
For Preparation for Clarifying Black Sooty Cistern Water.
Claims use since February, 1928.

Ser. No. 313,154. REEFER'S NO-MOTH, INC., New York, N. Y. Filed Apr. 9, 1931.

CEDARAIRE

For Preparations for Protection Against Moths.
Claims use since Jan. 2, 1931.

Ser. No. 313,158. FREDERICK STEARNS & COMPANY, Detroit, Mich. Filed Apr. 9, 1931.

ESTERIN

For Headache Medicine.
Claims use since Apr. 2, 1931.

Ser. No. 313,204. L. T. PIVER, INC., Wilmington, Del., and New York, N. Y. Filed Apr. 10, 1931.

UN PARFUM D'AVENTURE

The word "Parfum" appearing on the drawing being disclaimed apart from the mark shown. The lining in the drawing designates shading only and is not intended to indicate color.

For Perfume, Toilet Water, Face Powder, Talcum Powder, Bath Salts, Brilliantine, Bandoline, Rouge, Lipstick, Dusting Powder, Sachet, Cold Creams, Lotion for the Skin and Hair, Powder and Rouge Compacts, and Vegetal.
Claims use since Mar. 30, 1931.

Ser. No. 313,295. THE HURON MILLING COMPANY, Harbor Beach, Mich. Filed Apr. 13, 1931.

WHEATEX

For Sizing Starch.
Claims use since Sept. 19, 1925.

Ser. No. 313,332. DAVID CURTIS, doing business as De-Ce Products Co. of New York, New York, N. Y. Filed Apr. 14, 1931.

DE-CE PRODUCTS CO.

For Local Anæsthetics, Surface Anæsthetics, Preparations for Sterilizing and Preserving Dental and Surgical Instruments, an Antiseptic Compound, Chlora-Percha Solution, a Formo-Cresol Compound Used for the Treatment of Putrescent Pulps and Abscesses, Eugenol, Sodium Salicylate Solution, a Preparation for the Relief of Tooth Ache, Solution for Prevention of Ivy Poisoning.

Claims use with respect to surface and local anæsthetics since about Sept. 20, 1922; to preparations for sterilizing and preserving dental and surgical instruments since about Jan. 1, 1926; to an antiseptic compound, chlora-percha solution, a formo-cresol compound, and eugenol since about May 1, 1926; to sodium salicylate solution since about Nov. 1, 1929; to a preparation for the relief of toothache since about Nov. 1, 1925; and to solution for the prevention of ivy poisoning since about Sept. 1, 1927.

Ser. No. 313,400. FRANK J. WELICKA, doing business as Welco Laboratories, Jamaica, N. Y. Filed Apr. 15, 1931.

NIM

For Liniment for General Use.
Claims use since Mar. 31, 1931.

Ser. No. 313,402. CHARLES B. WHITWORTH, doing business as Service Drug Company, Nashville, Tenn. Filed Apr. 15, 1931.

LIND-E-CAPS

For Preparation Used in the Treatment of Influenza, Colds, Headache, Chills, Fever, and All Other Pains, Put Up in Tablet Form.
Claims use since November, 1927.

Ser. No. 313,464. CARTER & MOORE CHEMICAL CO., Waycross, Ga. Filed Apr. 17, 1931.

GAN-SO

For Salve for Treating Ringworm, Tetter, Fire and Sun Burn, Summer Sores, Cuts, Chapped Hands, and Any Affected Part of the Skin in Humans, and for Treating Sore Head and Scaly Leg in Poultry.
Claims use since Mar. 24, 1931.

Ser. No. 313,656. THE J. B. FORD COMPANY, Wyandotte, Mich. Filed Apr. 22, 1931.

Wyandotte
STERILIZER

No claim is made to the word "Sterilizer" separate and apart from the remainder of the mark.
For Sterilizing Material.
Claims use since January, 1931.

Ser. No. 313,679. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Apr. 22, 1931.

ALBATEX

For Chemical Product for Use as an Auxiliary Agent in the Textile Industry.
Claims use since Jan. 21, 1931.

Ser. No. 313,680. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Apr. 22, 1931.

DIGIRAMIN

For Cardiotonic.
Claims use since Jan. 30, 1931.

Ser. No. 313,682. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Apr. 22, 1931.

RESYL

For Pharmaceutical Product for the Treatment of Affections of the Respiratory Organs.
Claims use since Oct. 13, 1930.

Ser. No. 313,700. ANSOSURE PRODUCTS, INC., Royal Oak, Mich. Filed Apr. 23, 1931.

Absosure

For Antiseptic Paste.
Claims use since December, 1929.

Ser. No. 313,783. HUFFMAN & HULSEBUS, Harlan, Iowa. Filed Apr. 25, 1931.

KOR

For Chemical Preparation Used in the Treatment of Trees and Shrubs to Prevent Chewing by Rabbits, and an Insecticide.
Claims use since June 1, 1919.

Ser. No. 313,800. RÖHM & HAAS COMPANY, Philadelphia, Pa. Filed Apr. 25, 1931.

DEGOMMA

For Enzymic Product Used in Treating Fabrics.
Claims use since June 1, 1919.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 314,055. IVER JOHNSON SPORTING GOODS CO., Boston, Mass. Filed May 1, 1931.

3 IN 1

For Firearm Cleaners, Swabs, and Brushes.
Claims use since Sept. 1, 1930.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 279,931. HUGO JUNKERS, Dessau, Germany. Filed Feb. 26, 1929.



For Wire Gauze, Wire Sieves and Strainers, Wire Springs for General Use, Sheet Metal Casings, Bathing Tubs and Fittings, Water-Closets, Metal Water Pipes and Drains.
Claims use since May 28, 1924.

Ser. No. 298,934. BYRON M. CHENEY, Chicago, Ill. Filed Apr. 16, 1930.

IDEAL

For Railroad Track Spikes.
Claims use since Dec. 1, 1927.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 306,502. THE MIDVALE COMPANY, Nicetown, Philadelphia, Pa. Filed Oct. 7, 1930. Under 10-year proviso.

MIDVALE

For Flanges, Forgings of Open Hearth and Electric Furnace Steel, Armor Plates, Locomotive Forgings, Iron Forgings, Stainless Steel Forgings, Corrosion resisting Steel, Special Heat Treated Steel, Steel Billets, Steel Ingots, Iron Ingots, Carbon Tool Steel in Bars, High Speed Steel in Bars, Mining Drill Steel in Bars, Alloy Steel in Bars, Stainless Steel in Bars, Stainless Iron in Bars, Gun Forgings, and Iron and Steel Castings.
Claims use since Mar. 1, 1881.

Ser. No. 311,355. ANACONDA WIRE & CABLE COMPANY, New York, N. Y. Filed Feb. 24, 1931.

CALSUN BRONZE

No claim is made herein to the registration of the word "Bronze" apart from the mark shown in the drawing.
For Copper Alloy Wire and Unfinished Copper Alloy Rods and Sheets.
Claims use since Aug. 14, 1926.

Ser. No. 313,347. LUDLUM STEEL CO., Watervliet, N. Y. Filed Apr. 14, 1931. Under 10-year proviso.

POMPTON

For Rolled Steel Bars, Steel Forgings, and Steel Castings.
Claims use since Jan. 1, 1885.

CLASS 15

Oils and Greases

Ser. No. 297,769. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Mar. 22, 1930.

PABCO

For Paraffine Oil and Flux Oil—Namely, a Lubricating Oil and a Skid Oil, Respectively.
Claims use since June 30, 1923.

Ser. No. 312,719. PACIFIC COMMERCIAL CO., New York, N. Y. Filed Mar. 30, 1931.

Silver Reef

For Gasolene and Kerosene.
Claims use since Nov. 15, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 312,283. THE GIBSON-HOMANS COMPANY, Cleveland, Ohio. Filed Mar. 18, 1931.

BLACK-JACK

For Asbestos Roof Coating in the Nature of Paint and Roof Paint.
Claims use since Mar. 3, 1931.

Ser. No. 312,445. THE MORGAN COMPANY, Chicago, Ill. Filed Mar. 23, 1931.

FLEETWAY

For Industrial Paint Enamels.
Claims use since May 15, 1930.

Ser. No. 313,186. HANOVIA CHEMICAL & MANUFACTURING COMPANY, Newark, N. J. Filed Apr. 10, 1931.

HANOVIA
CHEMICAL & MFG. CO.
NEWARK, N.J., U.S.A.

The term "Newark, N. J., U. S. A." is disclaimed apart from the mark as shown on the drawing.
For Ceramic Decorating Materials—Namely, Gold, Platinum, Silver, and Other Precious Metal Colors in Liquid, Dry, or Paste Form; Luster Colors, Overglaze and Underglaze Colors.
Claims use since Apr. 1, 1910.

Ser. No. 313,480. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Apr. 17, 1931.

ENNJAY

For Pipe Coating Enamel of the Nature of Paint.
Claims use since Mar. 20, 1931.

Ser. No. 313,870. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Apr. 27, 1931.

BOROL

For Paints in Paste, Semi-Liquid, or Ready-Mixed Form; Varnishes, Lacquers, Paint Enamels, and Clear Varnishes.
Claims use since Apr. 15, 1931.

Ser. No. 314,026. THE MURALO COMPANY, INC., New Brighton, N. Y. Filed Apr. 29, 1931.

VICTOR

For Dry Powder to be Mixed with Water and Used as a Calcimine or Decorative Wall Coating.
Claims use since Feb. 26, 1931.

CLASS 17

Tobacco Products

Ser. No. 313,614. M. TRELLES & COMPANY, New Orleans, La. Filed Apr. 21, 1931.

MAX-SELLER
MTB

For Cigars, Cheroots, Cigarettes, and Little Cigars.
Claims use since 1908.

Ser. No. 313,968. PENLO CIGAR CO., INC., Philadelphia, Pa. Filed Apr. 29, 1931.



The drawing is lined for the colors gold, red, yellow, and black. However, no limitation of the mark to these particular colors is made thereby, the applicant reserving the right to use any color or any combination of colors in the said mark.
For Cigars.
Claims use since Oct. 8, 1928.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 300,862. ELECTRIC BOAT COMPANY, Bayonne, N. J. Filed May 20, 1930.

Marinette

For Pleasure Cruisers.
Claims use since Mar. 1, 1930.

Ser. No. 307,630. REO MOTOR CAR COMPANY, Lansing, Mich. Filed Nov. 7, 1930.

Reo-Royale

For Automobiles and Structural Parts Thereof.
Claims use since Sept. 12, 1930.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 297,862. FLORENCE STOVE COMPANY, Boston and Gardner, Mass. Filed Mar. 25, 1930.

ELECTRICOOK

No claim is made for the words "Electric" and "Cook" apart from the mark shown.
For Electric Cooker.
Claims use since Mar. 21, 1930.

Ser. No. 303,932. WHITE STAR REFINING COMPANY, Detroit, Mich. Filed July 28, 1930.

WHITE STAR

For Storage Batteries.
Claims use since Apr. 10, 1930.

Ser. No. 312,487. MORSEGRAPH MANUFACTURING CORPORATION, New York, N. Y. Filed Mar. 24, 1931.

MORS-O-GRAF

For Telegraph Recording Instruments.
Claims use since September, 1926.

CLASS 22

Games, Toys, and Sporting Goods

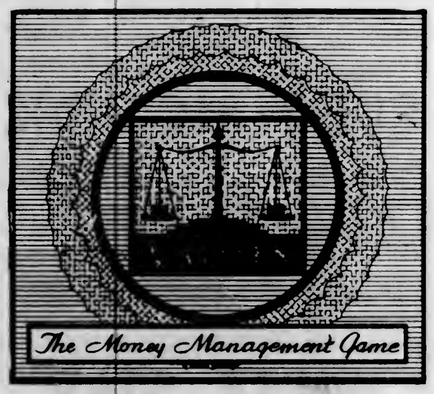
Ser. No. 312,010. FLOYD S. JIMISON, Los Angeles, Calif. Filed Mar. 11, 1931.

TRIO
ARMY AND NAVY
GAME



No claim is made to the word "Game" and the representation of the game, appearing on the drawing, apart from the mark as shown. The drawing is lined for the colors red and blue.
For Game Boards.
Claims use since Dec. 15, 1927.

Ser. No. 313,325. MILTON BRADLEY COMPANY, Springfield, Mass. Filed Apr. 14, 1931.



The drawing is lined for blue, orange, and yellow. No claim is made to the word "Game" apart from the mark as shown.

For Table Board Game Played with Pieces.

Claims use since Feb. 9, 1931.

Ser. No. 314,050. GREY IRON CASTING COMPANY, Mount Joy, Pa. Filed May 1, 1931.

KOLORJAX

For Jack Stones and Jack Sets.

Claims use since Apr. 21, 1931.

Ser. No. 314,185. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed May 4, 1931.

THE IRON MAN

For Golf Clubs.

Claims use since April, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 301,163. DEHLER-SIGNORET CORPORATION, New York, N. Y. Filed May 24, 1930.



For Card Sets for Carding and Spinning Wools and Cotton and Silk Waste, Condensers to be Attached to Woolen Cotton Waste and Silk Waste Card Sets; Spinning Machinery—Namely, Self-Acting Mules, Ring-Spinning Frames, Pot-Spinning Frames, Wool and Cotton Waste Opening Machines, Skein Dyeing Machines, Package Dyeing Machines, Cloth Decortizing Machines, Shearing Machines, Tigering Machines, Raising Machines, Finishing Machines; Finishing Press Accessories—Namely, Pirns, Caps, Tubes, Bobbins, Shuttles, Shuttle Spindles, Cones, Shuttle Tensioners, and Loom Pickers, and Parts Thereof.

Claims use since May 1, 1930.

Ser. No. 302,274. DUPLEX PRINTING PRESS CO., Battle Creek, Mich. Filed June 9, 1930.

DUPLEX TUBULAR

The word "Tubular" alone is not claimed herein.

For Rotary Printing Presses, Rotary Folders, and Stereotype Equipment—Namely, Matrix Rollers, Mat Rollers, Casting Boxes, Plate Finishers, Plate Trimmers, Plate Shavers, Plate Borers, Scorchers, Melting Pots, Metal Pumps, Chases, Form Tables, Chipping Blocks, and Routers.

Claims use since 1910.

Ser. No. 302,487. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed June 16, 1930.

CRUSADER

For Lawn Mowers.

Claims use since Feb. 10, 1930.

Ser. No. 303,310. JOSIAH ANSTICE & CO., INC., Rochester, N. Y. Filed July 10, 1930.

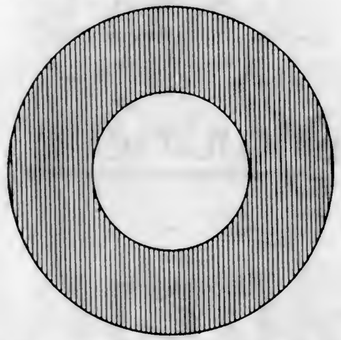
VICTORIA

Applicant claims ownership of trade-mark in registration #136,238 issued Oct. 26, 1920.

For Vegetable Peeling Machines and Slicing Machines.

Claims use since Jan. 1, 1905.

Ser. No. 306,483. BAILEY-BURRUSS MANUFACTURING COMPANY, Atlanta, Ga. Filed Oct. 7, 1930.



The mark consists of a circular red band applied to the transverse end of a conveyor shaft. The cross-hatching or lining in the drawing indicates the color red.

For Helicord Conveyors, Sectional Flight Conveyors, and All Types of Spiral Conveyors and Screw Conveyors, for Conveying Materials in Chutes.

Claims use since Dec. 30, 1929.

Ser. No. 309,789. SOUT FIRE APPLIANCES LTD., London, England. Filed Jan. 9, 1931.



For Fire Extinguishing Machines (Extincteurs).

Claims use since July, 1930.

Ser. No. 311,822. THE CLEVELAND CITY FORGE COMPANY, Cleveland, Ohio. Filed Mar. 6, 1931.

CF

For Hand Tools, Particularly Blacksmiths' Sledges, Wood Choppers' Wedges, Mauls, Drilling Hammers, Hammer Heads, Turnbuckles and Clevices.

Claims use since 1915.

Ser. No. 312,496. REYNOLDS PRINTASIGN CORPORATION, Chicago, Ill. Filed Mar. 24, 1931.

PRINTASIGN

No claim is made herein to the name "Printasign" apart from the mark shown in the drawing.

For Machine for Printing Signs and Display Cards.

Claims use since April, 1917.

Ser. No. 312,724. THE TRAYLOR VIBRATOR COMPANY, Denver, Colo. Filed Mar. 30, 1931.

TRAYCO

For Material Treating Apparatus—Namely, Material Screening Apparatus, Material Conveyors, Parts Thereof, and Electric Vibrating Mechanisms for Use Therewith.

Claims use since Jan. 26, 1931, on screening apparatus; Feb. 26, 1931, on conveyor parts; Mar. 4, 1931, on conveyors.

Ser. No. 313,935. RICHARDSON & HOLLAND, INC., Seattle, Wash. Filed Apr. 28, 1931.

MARVEL

For Bakery Machinery—Namely, Cup and Layer Cake Dough Dropper.

Claims use since Jan. 4, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 313,742. FREDERIC MARTIN, Jr., doing business as Columbus Washboard Company, Columbus, Ohio. Filed Apr. 24, 1931.

RUB-LITE

For Washboards.

Claims use since Feb. 20, 1931.

Ser. No. 313,743. FREDERIC MARTIN, Jr., doing business as Columbus Washboard Company, Columbus, Ohio. Filed Apr. 24, 1931.

TIME SAVER

For Washboards.

Claims use since Feb. 20, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 312,770. ALFRED M. PARKS, doing business as Parks Equipment Company, Philadelphia, Pa. Filed Mar. 31, 1931.

DRY-O-GRAPH

For a Device for Testing and Recording the Time of Drying, Said Device Comprising a Roller and a Clock Mechanism and Used in Connection with Inks, Varnishes, and the Like.
Claims use since Jan. 12, 1931.

Ser. No. 312,771. ALFRED M. PARKS, doing business as Parks Equipment Company, Philadelphia, Pa. Filed Mar. 31, 1931.

FILM-O-GRAPH

For a Device for Testing and Recording the Time of Drying, Said Device Comprising a Roller and a Clock Mechanism and Used in Connection with Inks, Varnishes, and the Like.
Claims use since Mar. 2, 1931.

Ser. No. 312,900. JABEZ BURNS & SONS, INC., New York, N. Y. Filed Apr. 3, 1931.

THERMOMATON

For Temperature Indicating Devices for Roasting Machines.
Claims use since Dec. 19, 1930.

Ser. No. 312,944. MAJOR BERTRAND DE JARNETTE, doing business as Chromoclast Laboratories, Nebraska City, Nebr. Filed Apr. 4, 1931.

CHROMOCLAST

For Co-Axial Disc Spectrum Selectors and Transformers for the Same.
Claims use since Dec. 1, 1930.

Ser. No. 313,650. DU PONT PATHÉ FILM MANUFACTURING CORPORATION, New York, N. Y. Filed Apr. 22, 1931.

TELECHROME

For Photographic Film.
Claims use since Apr. 18, 1931.

Ser. No. 313,651. DU PONT PATHÉ FILM MANUFACTURING CORPORATION, New York, N. Y. Filed Apr. 22, 1931.

TELEFILM

For Photographic Film.
Claims use since Apr. 18, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 307,791. SEIDMAN & COHAN, INC., New York, N. Y. Filed Nov. 11, 1930.

SEICO

For Articles of Jewelry Comprising Bracelets, Finger Rings, Pendants, Necklaces, Earrings, Watch Fobs and Watch and Neck Chains, Made of Gold, White Gold, and Platinum.
Claims use since June 5, 1930.

Ser. No. 313,257. ONEIDA COMMUNITY, LIMITED, Oneida, N. Y. Filed Apr. 11, 1931.

BARBARA

For Silver Flatware and Hollow-Ware for Table Use.
Claims use since Feb. 14, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 313,840. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Apr. 27, 1931. Under section 5b of the act of 1905, as amended in 1920.

Eastman

For Squeegees and Spotting Brushes.
Claims use since 1886 on squeegees; since 1910 on spotting brushes.

CLASS 32

Furniture and Upholstery

Ser. No. 312,112. MULTISORT COMPANY, Boston, Mass. Filed Mar. 13, 1931.

MULTISORT

For Apparatus for Use in Arranging Papers, Cards, and the Like for Filing or Distribution.
Claims use since Dec. 15, 1930.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 304,621. LÖWENTHAL & WEISSBERGER G. M. B. H., Frankfort-on-the-Main, Germany. Filed Aug. 14, 1930.

Colibri

For Pyrophoric Pocket Lighters.
Claims use since May 18, 1927.

Ser. No. 306,890. HOLOPHANE COMPANY, INC., New York, N. Y. Filed Oct. 18, 1930.

WIDE-SPRED

For Metal and Combination Glass and Metal Globes and Reflectors.
Claims use since Sept. 30, 1930.

Ser. No. 311,000. F. KALLUS MANUFACTURING CO. INC., doing business as Trulite Electric Mfg. Co., Hoboken, N. J. Filed Feb. 12, 1931.

TRULITE

For Lighting Equipment—Namely, Shades and Reflectors.
Claims use since Nov. 15, 1930.

Ser. No. 311,361. BON-AIR RADIATOR CORPORATION, Boston, Mass. Filed Feb. 24, 1931.

BON AIR

For Heat Radiating Systems—Namely, Radiators, Humidifying Apparatus Operable by Heat Delivered from the Radiators, and Means for Controlling the Supply of Water to the Humidifying Apparatus.
Claims use since January, 1930.

Ser. No. 312,689. THE BEACON BURNER MANUFACTURING CORPORATION, Boston, Mass. Filed Mar. 30, 1931.

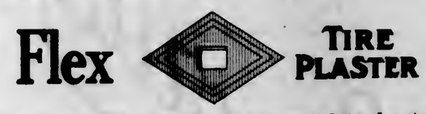


For Oil Burners.
Claims use since Mar. 1, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 303,990. THOMAS BELL, doing business as Bell Supply Co., Richmond, Va. Filed July 30, 1930.



The lines on the drawing are intended to denote the color red. Exclusive use of the words "Tire Plaster" and the representation of the goods is not claimed except in association with the other features of the mark.
For Tire Patches.
Claims use since July 19, 1929.

Ser. No. 312,145. MARSHALL FIELD & COMPANY, Chicago, Ill. Filed Mar. 14, 1931.

Town & Country

For Rubber Tires and Tubes for Automobiles, Automobile Trucks and Trailers.
Claims use since Jan. 20, 1931.

Ser. No. 313,904. CHICAGO PNEUMATIC TOOL COMPANY, New York, N. Y. Filed Apr. 28, 1931.

C. P.

For Flexible Fluid Conduits, Particularly Hose, Wholly or in Part of Rubber or Rubber Compound; High Pressure Hose of Rubber Reinforced with Fabric or Cord; Hose Made of Rubber Combined with Cotton with the Interior Lining of Rubber Heavier Than Ordinary Hose; Braided Fabric Hose, Duck Hose, Armored or Wire Wound Hose, and High Pressure Hose Made of Rubber Combined with Fibrous Material Such as Fabric or Cord with an Interior Lining of Rubber Made Heavier Than Ordinary Hose and the Exterior Wrapped with Wire.
Claims use since January, 1921.

CLASS 36

Musical Instruments and Supplies

Ser. No. 312,277. THE H. N. WHITE CO. OF NEW YORK, New York, N. Y. Filed Mar. 18, 1931.

Tom Brown

The trade-mark of the application is the autographic signature of Tom Brown.
For Saxophones, Trumpets, Cornets, French Horns, Circular Altos, Upright Altos, Mellophones, Trombones, Baritones, Upright Basses, Sousaphone Basses, Flutes, Piccolos, Oboes, Drums, Cymbals, Folding Stands, Megaphones, Metronomes, Bugles; Reeds for Saxophones, Oboes, and Similar Wind Musical Instruments, and Strings for Violins and Similar String Instruments.
Claims use since Apr. 16, 1930.

Ser. No. 313,175. THE BACON BANJO CO., INC., Groton, Conn. Filed Apr. 10, 1931.

Senorita

For Banjo.
Claims use since Aug. 26, 1930.

CLASS 37

Paper and Stationery

Ser. No. 313,114. THE AMERICAN CRAYON COMPANY, Sandusky, Ohio. Filed Apr. 9, 1931.

Excello Squares

Applicant makes no claim to the exclusive use of the word "Squares" apart from the mark as shown.
For Colored Chalk Crayons.
Claims use since Jan. 1, 1913.

Ser. No. 313,427. FLETCHER PAPER COMPANY, Alpena, Mich. Filed Apr. 16, 1931.



The drawing is lined for shading purposes only. No claim under the statute is made to the words "Alpena, Mich." appearing on the drawing.
For Wrapping Paper.
Claims use since Jan. 1, 1931.

Ser. No. 313,428. FLETCHER PAPER COMPANY, Alpena, Mich. Filed Apr. 16, 1931.



The drawing is lined for shading purposes only. No claim under the statute is made to the words "Alpena Mich." appearing on the drawing.
For Wrapping Paper.
Claims use since Jan. 1, 1931.

Ser. No. 313,429. FLETCHER PAPER COMPANY, Alpena, Mich. Filed Apr. 16, 1931.



The drawing is lined for shading purposes only. No claim under the statute is made to the words "Alpena Mich." appearing on the drawing.
For Wrapping Paper.
Claims use since Jan. 1, 1931.

CLASS 38

Prints and Publications

Ser. No. 299,010. ONTARIO FINANCE CORPORATION, Rochester, N. Y. Filed Apr. 17, 1930.

INVESTOGRAPH

For Business History Charts and Compilations Thereof.
Claims use since Apr. 7, 1930.

Ser. No. 301,767. CARROLL N. SMITH, Boston, Mass. Filed May 30, 1930.



For Books, Pamphlets, Circulars, Completely Printed Forms, Posters, Etchings, Engravings, Photographic Prints; Prints from Engraved Plates, Prints from Etched Plates, and Prints from Woodcuts; Advertising Cards, Display Cards, Counter Cards; and Placards; Sold to the Trade as Such.
Claims use since May 20, 1930.

Ser. No. 312,242. TIMES PUBLISHING CO., Montgomery, Ala. Filed Mar. 17, 1931.

SOUTHERN FARMER

For Periodical.
Claims use since July 1, 1930.

Ser. No. 313,465. CONGREGATIONAL PUBLISHING SOCIETY, Boston, Mass. Filed Apr. 17, 1931.

RELIGION

For Publication Issued Monthly.
Claims use since Mar. 16, 1931.

Ser. No. 313,720. SHERIDAN PRESS, INC., Sheridan, Wyo. Filed Apr. 23, 1931.



For Newspapers.
Claims use since Apr. 1, 1931.

Ser. No. 313,796. THE PROGRESSIVE PUBLISHING COMPANY INC., Muscatine, Iowa. Filed Apr. 25, 1931.

MID-WEST
FREE PRESS

For Daily Evening Newspaper.
Claims use since Dec. 19, 1930.

Ser. No. 313,829. CENTRAL SURETY AND INSURANCE CORPORATION, Kansas City, Mo. Filed Apr. 27. 1931.

The Centralizer

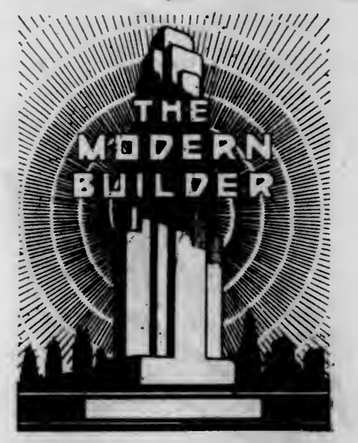
For House Organs.
Claims use since Sept. 12, 1928.

Ser. No. 313,855. KIWANIS INTERNATIONAL, Chicago, Ill. Filed Apr. 27, 1931.



For Decalcomanias.
Claims use since Oct. 26, 1926.

Ser. No. 313,902. THE BUILDERS' ASSOCIATION OF KANSAS CITY, MO., Kansas City, Mo. Filed Apr. 28, 1931.



For Monthly Magazines.
Claims use since January, 1931.

Ser. No. 314,009. PAPER CLEARINGS BUREAU, INC., New York, N. Y. Filed Apr. 30, 1931.

Paper Clearings

For Periodical.
Claims use since Apr. 6, 1931.

Ser. No. 314,036. THE BIG INDIAN OIL AND DEVELOPMENT COMPANY, Kansas City, Mo. Filed May 1, 1931.

BIG INDIAN OIL DEVELOPMENT COMPANY

For Periodical Devoted to the Oil Industry.
Claims use since June 1, 1920.

CLASS 39

Clothing

Ser. No. 304,844. WOHL SHOE COMPANY, St. Louis, Mo. Filed Aug. 20, 1930.

Brentmoor

For Women's and Misses' Shoes, Boots, Overshoes, and Felt House Slippers Made of Plain and Fancy Leathers, Satins, Velvets, Straws, Rubber, Felt, and Metal Cloths for Street and Dress Wear.
Claims use since July 26, 1930.

Ser. No. 307,198. CHARLES B. BARNDOLLAR, Oakland, Calif. Filed Oct. 27, 1930.

SOLED SOX

For Canvas Shoes Having Rubber Soles and Leather Straps.
Claims use since Oct. 1, 1927.

Ser. No. 310,470. BUTLER BROTHERS, Chicago, Ill. Filed Jan. 28, 1931.

Smile O'Day

For Women's and Children's Dresses.
Claims use since Jan. 5, 1931.

Ser. No. 310,763. WILLIAM GREILICH & SONS, INC., Brooklyn, N. Y. Filed Feb. 5, 1931.

SUNSANDL

For Foot Wear, Consisting of Rubber, Leather, and/or Fabric Sandals, Shoes, and Slippers.
Claims use since Jan. 5, 1931.

Ser. No. 312,306. O'BRYAN BROTHERS, Chicago, Ill. Filed Mar. 19, 1931.

DAWN O'RAY

For Ladies' and Children's Underwear.
Claims use since Feb. 1, 1930.

Ser. No. 313,061. STERN BROTHERS, New York, N. Y. Filed Apr. 7, 1931.

Ray-Lisle

No claim is made to the word "Lisle" apart from the mark shown in the drawing.
For Men's, Women's, and Children's Underwear and Pyjamas Made of Knitted, Netted, and/or Textile Fabrics.
Claims use since Feb. 24, 1931.

Ser. No. 313,156. THE SIMONS CO., INC., New York, N. Y. Filed Apr. 9, 1931.

Superval

For Hosiery.
Claims use since Feb. 11, 1931.

Ser. No. 313,183. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Apr. 10, 1931.

SUNNYDEW

For Coats, Vests, Pants, and Overcoats for Men and Boys.
Claims use since Oct. 1, 1929.

Ser. No. 313,184. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Apr. 10, 1931.

ANGORRAN

For Coats, Vests, Pants, and Overcoats, for Men and Boys.
Claims use since Mar. 15, 1931.

Ser. No. 313,189. W. O. HORN & BROTHER, INC., New York, N. Y. Filed Apr. 10, 1931.

VIZZ-A-BILT

For Men's Necktles and Cravats.
Claims use since June 1, 1929.

Ser. No. 313,202. PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Filed Apr. 10, 1931.

Tab-Flex-Ends

For the purpose of registration only no claim is made to the word "Tab" apart from the mark as shown, but common law rights in said mark or any element thereof are hereby not waived. No claim is made to the representation of a label, per se. The lining on the drawing is to indicate the color gold.
For Apparel Belts, Suspenders, Braces, and Garters.
Claims use since Jan. 2, 1931.

Ser. No. 313,203. PIONEER SUSPENDER COMPANY, Philadelphia, Pa. Filed Apr. 10, 1931.

The Exeter

The lining on the drawing is to indicate the color red. No claim is made to the name "Exeter" apart from the mark as shown.
For Apparel Belts, Suspenders, Braces, and Garters.
Claims use since Jan. 2, 1931.

Ser. No. 313,367. HERBERT GRAY COMPANY, INC., Lincoln, Me. Filed Apr. 15, 1931.



For Fur Scarfs.
Claims use since Mar. 23, 1931.

Ser. No. 313,607. A. E. NETTLETON COMPANY, Syracuse, N. Y. Filed Apr. 21, 1931.

ALGONQUIN

For Men's and Boys' Shoes.
Claims use since Sept. 1, 1930.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 312,125. COMPRESSION ANCHOR COMPANY, INC., New York, N. Y. Filed Mar. 13, 1931.

Lacelastic

No claim is made to the right of the exclusive use of the pictorial representations of the anchoring devices which appear on the drawing.
For Shoe Laces.
Claims use since Jan. 2, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 312,000. LYLE A. GARNER, doing business as S & S Specialty Co., Long Beach, Calif. Filed Mar. 11, 1931.

NICKERS

For Therapeutic Devices for Holding Absorptive Pads Used in the Treatment of Geno-Urinary Diseases.
Claims use since Mar. 1, 1931.

Ser. No. 312,952. THOMAS KAPLAN, doing business as Midwest Drug Co., Minneapolis, Minn. Filed Apr. 4, 1931.



For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since January, 1930.

Ser. No. 313,993. HENRY P. BOOS, doing business as Henry P. Boos Prosthetic Studios, Minneapolis, Minn. Filed Apr. 30, 1931.

TECNECRAFT

For Full Dentures, Partial Dentures, and Bridges.
Claims use since Feb. 1, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 299,417. TOMANGO LIMITED, Mataffin, Eastern Transvaal, Union of South Africa. Filed Apr. 24, 1930.



With the exception of the words "Tomango" and "Tomango Ltd.", all the words appearing on the label are disclaimed apart from the mark as shown.
For Nonalcoholic Maltless Beverages Sold as Soft Drinks and Fruit Juices for Beverage Purposes.
Claims use since June, 1924.

Ser. No. 312,031. ALFRED C. WRIGHT, doing business as U-NI-L Health Institute, Whittier, Calif. Filed Mar. 11, 1931.

U-NI-L

For Pure Water.
Claims use since May 14, 1930.

Ser. No. 313,616. FRANK URBAN, doing business as Close & Company, Chicago, Ill. Filed Apr. 21, 1931.

Quik-Ade

For Non-Alcoholic, Non-Cereal, Maltless Beverages Sold as Soft Drinks, and Powders, Extracts, and Concentrates for Making the Same.
Claims use since Feb. 3, 1931.

CLASS 46

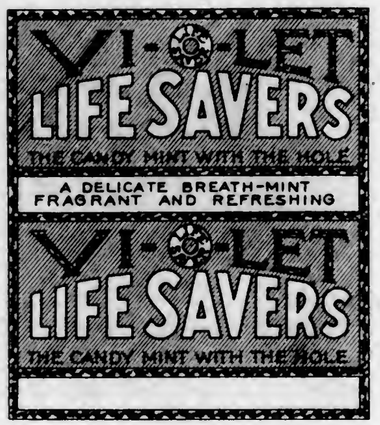
Foods and Ingredients of Foods

Ser. No. 247,342. A. SCHILLING & CO., San Francisco, Calif. Filed Apr. 12, 1927.



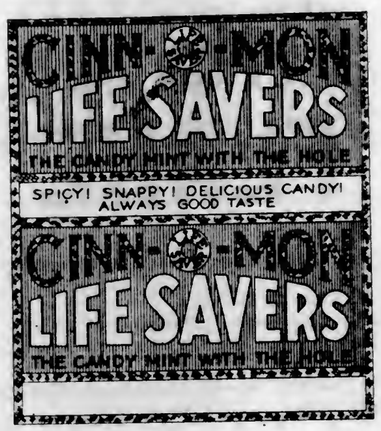
The drawing has been lined to denote the colors red and black, no claim being made to the outline of a can body blank shown in the drawing as bearing the mark.
For Coffee and Tea.
Claims use since Jan. 1, 1927.

Ser. No. 281,434. LIFE SAVERS, INC., Port Chester, N. Y. Filed Mar. 27, 1929.



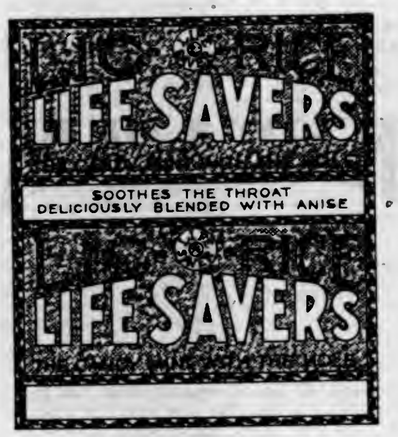
The drawing is lined to indicate body panels of violet and the border and the letters "Vi" and "Let" are lined to indicate yellow or gold. No right of registration is claimed for the wording appearing on the drawing except the words "Life Saver" and "Life Savers". The word "Vi-O-let" is claimed as shown in the drawing.
For Candy.
Claims use since July, 1925.

Ser. No. 281,435. LIFE SAVERS, INC., Port Chester, N. Y. Filed Mar. 27, 1929.



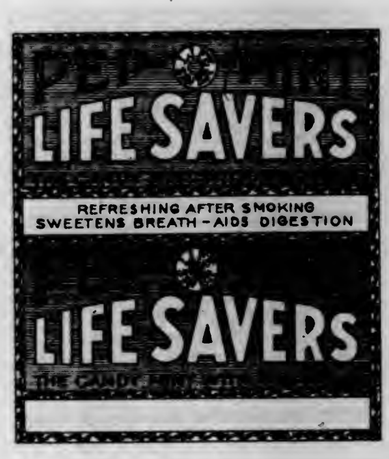
The drawing is lined to indicate body panels of red and the border and the letters "Cinn" and "Mon" are lined to indicate yellow or gold. No right of registration is claimed for the wording appearing on the drawing except the words "Life Saver" and "Life Savers". The word "Cinn-O-Mon" is claimed as shown in the drawing.
For Candy.
Claims use since July, 1920.

Ser. No. 281,436. LIFE SAVERS, INC., Port Chester, N. Y. Filed Mar. 27, 1929.



The drawing is lined to indicate body panels of orange and the border and the letters "Lic" and "Rice" are lined to indicate yellow or gold. No right of registration is claimed for the wording appearing on the drawing except the words "Life Saver" and "Life Savers". The word "Lic-O-Rice" is claimed as shown in the drawing.
For Candy.
Claims use since February, 1919.

Ser. No. 281,437. LIFE SAVERS, INC., Port Chester, N. Y. Filed Mar. 27, 1929.



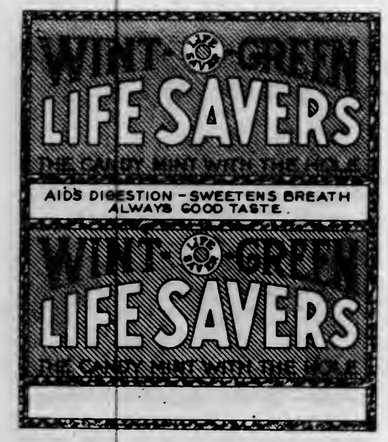
The drawing is lined to indicate body panels of dark blue and the border and the letters "Pep" and "Mint" are lined to indicate yellow or gold. No right of registration is claimed for the wording appearing on the drawing except the words "Life Saver" and "Life Savers". The word "Pep-O-Mint" is claimed as shown in the drawing.
For Candy.
Claims use since June, 1914.

Ser. No. 281,438. LIFE SAVERS, INC., Port Chester, N. Y. Filed Mar. 27, 1929.



The drawing is lined to indicate body panels of brown and the border and the letters "Cl" and "Ve" are lined to indicate yellow or gold. No right of registration is claimed for the wording appearing on the drawing except the words "Life Saver" and "Life Savers". The word "Cl-O-Ve" is claimed as shown in the drawing.
For Candy.
Claims use since May, 1915.

Ser. No. 282,119. LIFE SAVERS, INC., Port Chester, N. Y. Filed Apr. 9, 1929.



The drawing is lined to indicate body panels of green and the border and the words "Wint" and "Green" are lined to indicate yellow or gold. No right of registration is claimed for the wording appearing on the drawing except the words "Life Saver" and "Life Savers". The word "Wint-O-Green" is claimed as shown in the drawing.

For Candy.

Claims use since 1914.

Ser. No. 298,582. ZOYA MATZKA, Rye Hill, Monroe, N. Y. Filed Apr. 9, 1930.

Zoya's Farm Products

The words "Farm Products" appearing upon the drawing are disclaimed apart from the mark shown.

For Canned Berries, Canned Vegetables, Canned and Preserved Fruits, Canned Soup, Canned Milk, Egg Preserves, Bottled and Canned Vegetables, Jams, Jellies, Candy, and Pastries.

Claims use since Mar. 14, 1930.

Ser. No. 300,601. ALLIED MILLS, INC., Chicago, Ill. Filed May 16, 1930.

Soyco

For Dairy Feed.

Claims use since on or about Aug. 12, 1929.

Ser. No. 305,542. ROBBINS & MYERS, INC., Springfield, Ohio. Filed Sept. 10, 1930.

FRENCH FLAKE

No claim is made to the word "French" apart from the mark as shown.

For Seasoning for Pop Corn.

Claims use since Aug. 1, 1929.

Ser. No. 308,791. HARRY PECK & COMPANY LIMITED, London, England. Filed Dec. 9, 1930.

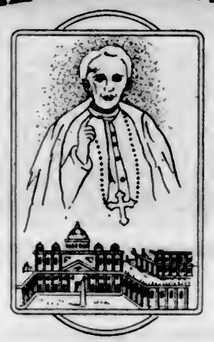
Kippavette

For Fish Paste.

Claims use since May 1, 1928.

Ser. No. 308,819. MICHELE DE ROSA, New York, N. Y. Filed Dec. 10, 1930.

MARCA PAPA



No claim is made to the word "Marca" except in connection with the mark as shown. The trade-mark represents the fanciful portrait of a pope.

For Canned Tomatoes.

Claims use since Sept. 1, 1929.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 309,313. THE PURITAN CHOCOLATE CO., Cincinnati, Ohio. Filed Dec. 24, 1930.

CHERRY COBBLER

No claim is made to the word "Cherry" apart from the mark as shown.

For Candy.

Claims use since May, 1915.

Ser. No. 309,624. SOYOLK COMPANY, INC., doing business as Soyex Company, Inc., New York, N. Y. Filed Jan. 5, 1931.

SOYEX

For Soya Bean Flour.

Claims use since Dec. 23, 1930.

Ser. No. 310,701. J. D. AND A. B. SPRECKELS INVESTMENT COMPANY, doing business as Western Sugar Refinery, San Francisco, Calif. Filed Feb. 3, 1931.



No claim is made to the word "Sugar" apart from the drawing as shown.

For Sugar.

Claims use since Jan. 20, 1931.

Ser. No. 311,499. VON BREMEN, ASCHE, DE BRUYN, INC., New York, N. Y. Filed Feb. 26, 1931.

FOREST INN

For Canned Mushrooms.

Claims use since Jan. 29, 1931.

Ser. No. 311,548. MRS. ELEANOR LAMB, Norwalk, Ohio. Filed Feb. 28, 1931.



The lining on the drawing indicates shading only. The words "Home Made" and "Norwalk, Ohio" are disclaimed apart from the trade-mark as shown. The trade-mark consists of a shield outline having a silver border and a silver lettering on a blue background, the background being indicated on the drawing by shading.

For Mayonnaise Dressing, Thousand Island Dressing, and Sandwich Spread.

Claims use since Nov. 17, 1930.

Ser. No. 311,697. S. & S. CONE CORPORATION, New York, N. Y. Filed Mar. 3, 1931.

Milk-e-pak

The word "Milk" apart from the trade-mark as shown in the drawing, is disclaimed.

For Ice Cream Sandwich Wafers.

Claims use since Apr. 15, 1930.

Ser. No. 312,026. NATIONAL DIETERIA COMPANY, Los Angeles, Calif. Filed Mar. 9, 1931.

MaltoTep

For Liquid Malt Compound Food Beverage.

Claims use since Nov. 21, 1930.

Ser. No. 312,527. PACIFIC EGG PRODUCERS COOPERATIVE, INC., New York, N. Y. Filed Mar. 25, 1931.

PEP

For Eggs and Dressed Poultry.
Claims use since May 1, 1925.

Ser. No. 312,749. AMERICAN POP CORN COMPANY, Sioux City, Iowa. Filed Mar. 31, 1931.

JOLLY TIME

For Oil for Use in Popping Corn and Popcorn Seasoning.
Claims use since June 1, 1924, on oil for use in popping corn; since Dec. 1, 1930, on popcorn seasoning.

Ser. No. 312,827. MARIE WAGNER, San Francisco, Calif. Filed Apr. 1, 1931.

SUPREME
SALUDRES
DRESSING

The words "Supreme" and "Dressing" are disclaimed apart from the mark as shown.
For Salad Dressing.
Claims use since Aug. 1, 1930.

Ser. No. 313,088. MILLER HIGH LIFE COMPANY, Milwaukee, Wis. Filed Apr. 8, 1931.



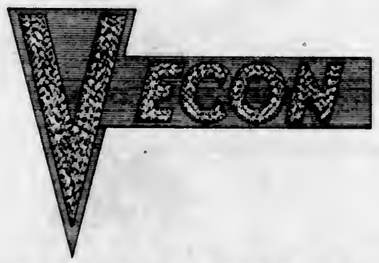
The word "Wisconsin" is disclaimed apart from the mark shown on the drawing. The portrait shown in the drawing is purely fanciful. The representation of the map of Wisconsin is disclaimed apart from the mark as shown.
For Concentrated Malt Syrup as a Food Product.
Claims use since Apr. 1, 1931.

Ser. No. 313,330. COLD SNAP INCORPORATED, New York, N. Y. Filed Apr. 14, 1931.



For Frozen Confection.
Claims use since Mar. 26, 1930.

Ser. No. 313,455. VECON, INCORPORATED, Chicago, Ill. Filed Apr. 16, 1931.



The drawing is lined to indicate gold and blue colors.
For Concentrated Vegetables in General—Namely, Dry or Dehydrated Vegetables; Desiccated Vegetables, Whole or Pulverized, in Bulk, Capsule, or Tablet Form, to be Used as Reducing Food, Nerve Food, Tonic Food, Stomach Food, and Laxative Food.
Claims use since Sept. 3, 1930.

Ser. No. 313,482. UNCLE SAM BREAKFAST FOOD COMPANY, Omaha, Nebr. Filed Apr. 17, 1931.



No claim is made to the word "Vanilla" except in connection with the mark as shown.
For Cereal Breakfast Food.
Claims use since Mar. 30, 1931.

Ser. No. 313,503. SAMUEL FRIED, doing business as Golden-Voice Bird Food Products Co., Brooklyn, N. Y. Filed Apr. 18, 1931.



Applicant disclaims the words "Song Restorer" apart from the trade-mark shown. The drawing is lined for the colors blue and gold by the horizontal and vertical lines respectively.
For Bird Seed Food and Bird Colored Pepper Food.
Claims use since Mar. 9, 1931.

Ser. No. 313,511. FRANK C. RUSSELL, doing business as Russell & Co., New York, N. Y. Filed Apr. 18, 1931.



EL RUIZ
MEDELLIN
EXCELSO

No claim is made herein to the words "Medellin" and "Excelso" apart from the mark shown in the drawing.
For Coffee.
Claims use since January, 1927.

Ser. No. 313,572. MORRIS WEINGER, doing business as Sunny Farm Products, Chicago, Ill. Filed Apr. 20, 1931.

SUNNY FARM

For Butter, Eggs, Cream and Cheese.
Claims use since May 15, 1929.

Ser. No. 313,824. J. ARON & COMPANY, INC., New York, N. Y. Filed Apr. 27, 1931.

THE FLOWER
OF THE CROP

For Green Coffee.
Claims use since February, 1929.

Ser. No. 313,858. RONALD HILTON MARTIN, doing business as Martin Baking Company, Lubbock, Tex. Filed Apr. 27, 1931.

HETHO-FLAKE

For Bread, Crackers, Flour, and Material for Making Bread and Crackers.
Claims use since Mar. 25, 1931.

Ser. No. 313,882. CHALLENGE CREAM & BUTTER ASSOCIATION, Los Angeles, Calif. Filed Apr. 27, 1931.

CHALLENGE

The trade-mark as here shown in the drawing consists of the word "Challenge" formed of block letters of equal height with the word extending obliquely; the letters being formed in yellow on a red background as indicated by the lining on the drawing, and which colors are claimed as a feature of the mark.
For Butter.
Claims use since June 1, 1929.

Ser. No. 314,008. GEO. O'BRIEN & SON, INCORPORATED, Greenville, Ohio. Filed Apr. 30, 1931.

O'BRIEN'S
O

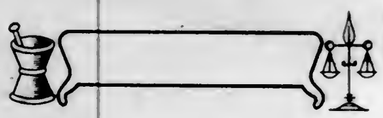
For Wheat Flour, Pastry Flour, Whole Wheat Graham Flour, Buckwheat Flour, Pancake Flour, Biscuit Flour, Corn Meal, Poultry and Stock Feeds.
Claims use since May, 1928.

Ser. No. 314,070. ORBIT LISTERATED GUM COMPANY, Chicago, Ill. Filed May 1, 1931.



For Chewing Gum.
Claims use since Apr. 22, 1931.

Ser. No. 314,090. WM. WRIGLEY, JR. COMPANY, Chicago, Ill. Filed May 1, 1931.



For Chewing Gum.
Claims use since Apr. 22, 1931.

Ser. No. 314,091. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Filed May 1, 1931.

PEPSIN

The word "Pepsin" is disclaimed as a part of the trade-mark. The drawing is shaded to indicate the color red.
For Chewing Gum.
Claims use since Apr. 22, 1931.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 313,526. ARROW BOTTLE CAP CORP., Brooklyn, N. Y. Filed Apr. 20, 1931.



The lining on the drawing indicates the color orange. No claim is made to the exclusive use of all of the wording which appears on the drawing, together with the representation of a bottle cap, apart from the mark as shown on the drawing.
For Bottle Caps.
Claims use since Nov. 1, 1930.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 9, 1931

283,755. STEEL CASTINGS. LIMITED COMPANY FORMERLY THE ŠKODA-WORKS, PLZEŇ, Prague-Smichov, Czechoslovakia.
Filed August 4, 1926. Serial No. 235,557. PUBLISHED AUGUST 5, 1930. Class 14.

283,756. TOILET WATER, PERFUMES, BAY RUM, ALCOHOL-RUB, HAIR TONICS. FACE LOTIONS, COLD CREAMS, VANISHING CREAMS. POMADES, TALCUM POWDERS, AND FACE POWDERS. CHEATHAM CHEMICAL COMPANY, Atlanta, Ga.
Filed April 30, 1927. Serial No. 248,220. PUBLISHED JUNE 28, 1927. Class 6.

283,757. ROLLED GIRDERS, ROLLED COLUMNS, CAST GIRDERS, CAST COLUMNS, AND ASBESTOS IN THE FORM OF STAMPED OR PRESSED SHEETS AND DISKS FOR THERMAL INSULATION, AND KIESELGUHR COMBINED WITH ROSIN OR OTHER SUITABLE BINDING MEDIUM FOR THERMAL INSULATION IN COOKING AND HEATING APPARATUS. SIEMENS-SCHUCKERTWERKE AKTIENGESELLSCHAFT, Berlin-Siemensstadt, Germany.
Filed October 11, 1927. Serial No. 255,938. PUBLISHED MARCH 31, 1931. Class 12.

283,758. ROLLED GIRDERS, ROLLED COLUMNS, CAST GIRDERS, CAST COLUMNS, AND ASBESTOS IN THE FORM OF STAMPED OR PRESSED SHEETS AND DISKS FOR THERMAL INSULATION, AND KIESELGUHR COMBINED WITH ROSIN OR OTHER SUITABLE BINDING MEDIUM FOR THERMAL INSULATION IN COOKING AND HEATING APPARATUS. SIEMENS-SCHUCKERTWERKE AKTIENGESELLSCHAFT, Berlin-Siemensstadt, Germany.
Filed December 6, 1927. Serial No. 258,558. PUBLISHED MARCH 31, 1931. Class 12.

283,759. COLD TABLETS AND COUGH SYRUP. SOHN & O'HARA, doing business as The Nocout Co., Baltimore, Md.
Filed August 22, 1928. Serial No. 271,412. PUBLISHED DECEMBER 17, 1929. Class 6.

283,760. VACCINE AND SERUM FOR PREVENTING AND TREATING TUBERCULOSIS. DR. HANS CURTIUS, Freiburg, Breisgau, Germany.
Filed May 9, 1929. Serial No. 283,724. PUBLISHED MARCH 24, 1931. Class 6.

283,761. CLOCKS, AUTOMOBILE CLOCKS, WATCHES, AND CHRONOLOGICAL INSTRUMENTS. JAMES F. MANSFIELD, doing business as Wiz Auto Clock Co., New York, N. Y.
Filed April 8, 1929. Serial No. 282,046. PUBLISHED MARCH 24, 1931. Class 27.

283,762. FRESH CITRUS FRUITS. FRANCIS S. YOUNG-HUSBAND, doing business as Scott Fruit Company, White City (Fort Pierce), Fla.
Filed August 5, 1929. Serial No. 288,152. PUBLISHED MARCH 31, 1931. Class 46.

283,763. MATTRESSES. SIMMONS COMPANY, New York, N. Y.
Filed September 3, 1929. Serial No. 289,294. PUBLISHED MARCH 24, 1931. Class 32.

283,764. NONALCOHOLIC, MALTLESS FRUIT JUICES FOR BEVERAGE PURPOSES. WHITEFIELD CITRUS CORPORATION, Dover, Del.; Fullerton, Calif.; Bradenton, Fla.; and Long Island City, N. Y.
Filed November 12, 1929. Serial No. 292,345. PUBLISHED MARCH 24, 1931. Class 45.

283,765. CANNED FRUITS, VEGETABLES, AND FISH; EDIBLE OILS, BREAD, ETC. LIVINGSTON'S FANCY FOOD PRODUCTS INC., Los Angeles, Calif.
Filed November 19, 1929. Serial No. 292,585. PUBLISHED MARCH 31, 1931. Class 46.

283,766. BATS AND RACKETS OF THE TENNIS TYPE FOR GAMES. PARKER BROTHERS, INC., Salem, Mass.
Filed January 25, 1930. Serial No. 295,231. PUBLISHED MARCH 24, 1931. Class 22.

283,767. HOLLOW COMPOSITION AND LIKE BALLS FOR INDOOR BAT OR RACKET GAMES, TABLE GAMES, TENNIS-TYPE GAMES, AND THE LIKE. PARKER BROTHERS, INC., Salem, Mass.
Filed January 25, 1930. Serial No. 295,230. PUBLISHED MARCH 24, 1931. Class 22.

283,768. EMBROIDERED LINEN HANDKERCHIEFS. GLENDINNING, MCLEISH & CO., INC., New York, N. Y.
Filed January 31, 1931. Serial No. 310,602. PUBLISHED MARCH 10, 1931. Class 42.

283,769. MAGAZINE PUBLISHED PERIODICALLY. THE WESTERNER PUBLISHING COMPANY, Salt Lake City, Utah.
Filed January 22, 1930. Serial No. 295,105. PUBLISHED APRIL 8, 1930. Class 38.

283,770. COUGH SYRUP. SMITH BROTHERS, INC., Poughkeepsie, N. Y.
Filed January 21, 1930. Serial No. 295,004. PUBLISHED MARCH 10, 1931. Class 6.

283,771. MALTLESS, NONALCOHOLIC, AND NONCEREAL CARBONATED BEVERAGES SOLD AS SOFT DRINKS. SUPREME BEVERAGE CO., Chicago, Ill.
Filed January 18, 1930. Serial No. 294,933. PUBLISHED MARCH 24, 1931. Class 45.

283,772. AUTOMOTIVE EQUIPMENT. JOHN BEAN MFG. CO., Lansing, Mich.
Filed February 14, 1930. Serial No. 295,994. PUBLISHED MARCH 31, 1931. Class 23.

283,773. TRUE FRUIT AND IMITATION FLAVORING EXTRACTS FOR FLAVORING NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES. MILTON PAUL, doing business as International Extract Co., New York, N. Y.
Filed February 7, 1930. Serial No. 295,755. PUBLISHED MARCH 24, 1931. Class 45.

283,774. HAM, BACON, SAUSAGE, MEAT ROLL, MEAT LOAF, DRIED BEEF, AND SOUSE. THE CLEVELAND PROVISION COMPANY, Cleveland, Ohio.
Filed February 6, 1930. Serial No. 295,656. PUBLISHED MARCH 31, 1931. Class 46.

283,775. MEDICINAL PREPARATION USED AS A LOCAL ANÆSTHETIC FOR TOPICAL APPLICATION AND FOR INJECTION. HOFFMANN-LA ROCHE, INC., Nutley, N. J.
Filed January 15, 1931. Serial No. 309,975. PUBLISHED MARCH 17, 1931. Class 6.

283,776. MEDICINAL PREPARATIONS HAVING HYPNOTIC PROPERTIES. SANDOZ CHEMICAL WORKS, INC., New York, N. Y.
Filed January 14, 1931. Serial No. 309,941. PUBLISHED MARCH 17, 1931. Class 6.

283,777. ANTACID POWDER FOR GASTRIC ACIDITY, SOUR STOMACH, ACID DYSPEPSIA, HEARTBURN, FLATULENCE, AND BELCHING. UNITED DRUG COMPANY, Boston, Mass.
Filed January 14, 1931. Serial No. 309,951. PUBLISHED MARCH 17, 1931. Class 6.

283,778. PREPARATION FOR REDUCING ACIDITY. BURROUGHS WELLCOME & Co. (U. S. A.) INC., New York, N. Y.
Filed January 17, 1931. Serial No. 310,044. PUBLISHED MARCH 24, 1931. Class 6.

283,779. FACE CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed January 19, 1931. Serial No. 310,095. PUBLISHED MARCH 24, 1931. Class 6.

283,780. FACE CREAM. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed January 19, 1931. Serial No. 310,096. PUBLISHED MARCH 24, 1931. Class 6.

283,781. SOLDERING PASTE. MUELLER BRASS Co., Port Huron, Mich.
Filed January 22, 1931. Serial No. 310,257. PUBLISHED MARCH 31, 1931. Class 6.

283,782. LECITHIN IN A PARTLY-PURIFIED CONDITION AND IN VARIOUS GRADES AND STAGES OF PURITY. AMERICAN LECITHIN CORPORATION, Wilmington, Del., and Atlanta, Ga.
Filed February 14, 1931. Serial No. 311,050. PUBLISHED MARCH 31, 1931. Class 6.

283,783. SHAMPOO PREPARATION FOR CLEANSING THE SCALP AND HAIR. ALBERT BERNARD, doing business as A. F. Johns Co., New York, N. Y.
Filed February 17, 1931. Serial No. 311,126. PUBLISHED MARCH 31, 1931. Class 6.

283,784. MIXTURE OF STEARIC ACID AND A CONDENSATION PRODUCT OF FORMALDEHYDE AND ETHYLAMINE USEFUL AS AN ACCELERATOR IN THE VULCANIZING OF RUBBER. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed December 23, 1930. Serial No. 309,278. PUBLISHED MARCH 17, 1931. Class 6.

283,785. TALCUM POWDER, FACE POWDER, FACE CREAMS, ROUGE, LIP STICKS, PERFUMES, OINTMENT IN THE FORM OF CREAM FOR TREATMENT OF SKIN DISORDERS, ASTRINGENTS, LINIMENT IN THE FORM OF A LIQUID APPLICABLE EXTERNALLY TO THE BODY FOR THE PURPOSE OF RELIEVING SORENESS AND PAINS, WRINKLE ERADICATOR IN THE FORM OF A CREAM USED FOR THE PURPOSE OF ELIMINATING WRINKLES IN THE FACE AND NECK, FACE PACK, EYEBROW PENCIL. ELSIE M. COLE, Albion, N. Y.
Filed December 26, 1930. Serial No. 309,331. PUBLISHED MARCH 10, 1931. Class 6.

283,786. COMPOUND ADAPTED FOR USE IN CONNECTION WITH POULTRY. THE GLAND-O-LAC Co., Omaha, Nebr.
Filed December 29, 1930. Serial No. 309,429. PUBLISHED MARCH 17, 1931. Class 6.

283,787. INSECTICIDE DERIVED OR PREPARED FROM PYRETHRUM OR OTHER VEGETABLE MATTER OR PRODUCTS COMBINED OR NOT COMBINED WITH A PETROLEUM LIQUID AND SOAP, SULPHONATED OILS, OR OTHER DILUENT OR SPREADER. JOHN POWELL & Co., INC., New York, N. Y.
Filed December 27, 1930. Serial No. 309,453. PUBLISHED MARCH 17, 1931. Class 6.

283,788. TOILET PREPARATIONS—NAMELY, DEODORANTS. SONTAG CHAIN STORES CO. LTD. Los Angeles, Calif., doing business as Studio Products Co., Hollywood, Calif.
Filed January 8, 1931. Serial No. 309,746. PUBLISHED MARCH 31, 1931. Class 6.

283,789. ANALGESIC TABLET. THE UPJOHN COMPANY, Kalamazoo, Mich.
Filed January 8, 1931. Serial No. 309,756. PUBLISHED MARCH 10, 1931. Class 6.

283,790. CHEMICALLY-PREPARED DEODORANTS AND PERFUMES USED IN THE MANUFACTURE OF RUBBER PRODUCTS. R. T. VANDERBILT COMPANY, INC., New York, N. Y.
Filed January 8, 1931. Serial No. 309,763. PUBLISHED MARCH 24, 1931. Class 6.

283,791. COUGH SYRUP. CHAPMAN & ROGERS, INC., Philadelphia, Pa.
Filed January 12, 1931. Serial No. 309,845. PUBLISHED MARCH 10, 1931. Class 6.

283,792. TALCUM POWDER, ROUGE, PERFUME, LIP STICK, FACE POWDER, EYEBROW PENCILS, HAIR TONIC. JOHN N. MCMATH, Larchmont, N. Y.
Filed January 12, 1931. Serial No. 309,866. PUBLISHED MARCH 10, 1931. Class 6.

283,793. HAIR LOTION. MARTIN BUCHWALD, New York, N. Y.
Filed January 14, 1931. Serial No. 309,920. PUBLISHED MARCH 17, 1931. Class 6.

283,794. MEDICINAL PREPARATIONS HAVING ANALGESIC AND ANTISPASMODIC PROPERTIES. SANDOZ CHEMICAL WORKS, INC., New York, N. Y.
Filed January 14, 1931. Serial No. 309,938. PUBLISHED MARCH 17, 1931. Class 6.

283,795. LIVER-EXTRACT PREPARATION. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed January 27, 1931. Serial No. 310,446. PUBLISHED MARCH 31, 1931. Class 6.

283,796. PHOTOGRAPHIC FILMS. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed January 21, 1931. Serial No. 310,215. PUBLISHED MARCH 24, 1931. Class 26.

283,797. OPHTHALMIC MOUNTINGS. BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y.
Filed January 22, 1931. Serial No. 310,242. PUBLISHED MARCH 31, 1931. Class 26.

283,798. VACUUM PUMPS. CENTRAL SCIENTIFIC COMPANY, Chicago, Ill.
Filed January 23, 1931. Serial No. 310,285. PUBLISHED MARCH 24, 1931. Class 23.

283,799. SIGNATURE-WRITING MACHINES. THE HEDMAN MANUFACTURING COMPANY, Chicago, Ill.
Filed January 26, 1931. Serial No. 310,379. PUBLISHED MARCH 31, 1931. Class 23.

283,800. FRUIT-JUICE EXTRACTORS. NATIONAL ELECTRIC APPLIANCE COAPORATION, Bridgeport, Conn.
Filed January 26, 1931. Serial No. 310,404. PUBLISHED MARCH 31, 1931. Class 23.

283,801. LEATHER BELTING. SEARS, ROEBUCK AND Co., Chicago, Ill.
Filed January 28, 1931. Serial No. 310,488. PUBLISHED MARCH 31, 1931. Class 35.

283,802. APPARATUS FOR PRODUCING PREPARATIONS FOR SHAMPOOING THE HAIR. SOAPLESS FOAM, LIMITED, London, England.
Filed January 28, 1931. Serial No. 310,492. PUBLISHED MARCH 24, 1931. Class 23.

283,803. MOTION-PICTURE FILMS. M. E. DIEMER, Madison, Wis.
Filed January 31, 1931. Serial No. 310,598. PUBLISHED MARCH 31, 1931. Class 26.

283,804. SUCTION CARPET SWEEPERS. THE SCOTT AND FETZER COMPANY, Cleveland, Ohio.
Filed January 31, 1931. Serial No. 310,617. PUBLISHED MARCH 31, 1931. Class 23.

283,805. BALATA BELTING. VICTOR BALATA & TEXTILE BELTING Co., New York, N. Y.
Filed January 31, 1931. Serial No. 310,619. PUBLISHED MARCH 24, 1931. Class 35.

283,806. RAZOR BLADES. NATHAN J. STERNBERG, doing business at Elsmere Cutlery Co., New York, N. Y.
Filed February 2, 1931. Serial No. 310,664. PUBLISHED MARCH 31, 1931. Class 23.

283,807. PNEUMATIC TIRES AND INNER TUBES. LINCOLN OIL REFINING COMPANY, Robinson, Ill.
Filed February 4, 1931. Serial No. 310,723. PUBLISHED MARCH 31, 1931. Class 35.

283,808. GRADING AND EARTH-WORKING EQUIPMENT,—NAMELY, SCRAPERS. R. G. LE TOURNEAU, INC., Stockton, Calif.
Filed February 4, 1931. Serial No. 310,745. PUBLISHED MARCH 31, 1931. Class 23.

283,809. LAWN MOWERS. GRANITE STATE MOWING MACHINE Co., Hinsdale, N. H.
Filed February 6, 1931. Serial No. 310,800. PUBLISHED MARCH 24, 1931. Class 23.

283,810. CARPET SWEEPERS. BISSELL CARPET SWEEPER Co., Grand Rapids, Mich.
Filed February 12, 1931. Serial No. 310,968. PUBLISHED MARCH 31, 1931. Class 23.

283,811. DISPLAY STANDS. COTY, INC., Wilmington, Del., and New York, N. Y.
Filed February 12, 1931. Serial No. 310,975. PUBLISHED MARCH 31, 1931. Class 32.

283,812. A HYPNOTIC. E. R. SQUIBBS & SONS, New York, N. Y.
Filed January 23, 1931. Serial No. 310,309. PUBLISHED MARCH 24, 1931. Class 6.

283,813. PREPARATION FOR THE TREATMENT OF CANCER. ANSELMO MORESCHI, doing business as Ma-Lig-No Medicine Co., Bates, Ark.
Filed January 24, 1931. Serial No. 310,346. PUBLISHED MARCH 31, 1931. Class 6.

283,814. TALC POWDER. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed January 26, 1931. Serial No. 310,368. PUBLISHED MARCH 24, 1931. Class 6.

283,815. OINTMENT FOR THE TREATMENT OF INJURIES TO THE SKIN BY RADIATION. OBERMEYER & Co., AKTIENGESELLSCHAFT, Hanau, Germany.
Filed December 23, 1930. Serial No. 309,286. PUBLISHED MARCH 31, 1931. Class 6.

283,816. PHARMACEUTICAL PREPARATION—NAMELY, A DEODORANT INTENDED FOR LOCAL EXTERNAL APPLICATION. LAWRENCE A. HOGE, Wheeling, W. Va.
Filed December 29, 1930. Serial No. 309,431. PUBLISHED MARCH 24, 1931. Class 6.

283,817. PHARMACEUTICAL PREPARATION FOR THE REDUCTION OF EXCESSIVE FAT. JEROME J. GLADKE, doing business as Korjena Medicine Co., Elmira, N. Y.
Filed December 27, 1930. Serial No. 309,450. PUBLISHED MARCH 24, 1931. Class 6.

283,818. THROAT WAFER. THE UPJOHN COMPANY, Kalamazoo, Mich.
Filed January 8, 1931. Serial No. 309,757. PUBLISHED MARCH 24, 1931. Class 6.

283,819. LIQUID PREPARATION FOR THE SKIN TO STIMULATE AND STRENGTHEN TISSUES AND CONSEQUENTLY TO BANISH SKIN DISORDERS, PRICKLY HEAT, CHAFING, AND TO PREVENT WRINKLES, AND FOR USE AS A SHAVING LOTION, AND FOR TIRED AND ACHING FEET. KATHRYN F. ALBERS, Minneapolis, Minn.
Filed January 10, 1931. Serial No. 309,797. PUBLISHED MARCH 31, 1931. Class 6.

283,820. RHEUMATIC SALVE, RHEUMATIC TABLETS, ORAL ANTISEPTIC, ETC. CABBITT, ILLINGTON & Co., Boston, Mass.
Filed January 12, 1931. Serial No. 309,844. PUBLISHED MARCH 31, 1931. Class 6.

283,821. INHALANT FOR HEAD COLDS, SINUS, ASTHMA, AND HAY FEVER. JOHN JOSEPH CREAMER, doing business as Syno Laboratories, Washington, D. C.
Filed January 15, 1931. Serial No. 309,966. PUBLISHED MARCH 24, 1931. Class 6.

283,822. PREPARATION FOR USE AS A BOWEL AND INTESTINAL REGULATOR. ABRAHAM ROSENBLUTH, doing business as In-Testo-Lax Natural Food Co., Newark, N. J.
Filed January 14, 1931. Serial No. 310,002. PUBLISHED MARCH 31, 1931. Class 6.

283,823. MEDICINAL PREPARATION FOR THE TREATMENT OF DISEASES OF THE STOMACH, LIVER, AND BLOOD. ANNIE J. REGIS, Haverhill, Mass.
Filed January 20, 1931. Serial No. 310,188. PUBLISHED MARCH 31, 1931. Class 6.

283,824. PETROLEUM JELLY. CHESEBROUGH MANUFACTURING COMPANY, CONSOLIDATED, New York, N. Y.
Filed January 21, 1931. Serial No. 310,209. PUBLISHED MARCH 24, 1931. Class 6.

283,825. FLUX TO BE USED FOR BOTH FERROUS AND NONFERROUS METALS. REFRACTORY PRODUCTS COMPANY, Chicago, Ill.
Filed January 21, 1931. Serial No. 310,227. PUBLISHED MARCH 24, 1931. Class 6.

283,826. TABLETS FOR THE RELIEF OF PAIN. RICHARD H. SYER, New York, N. Y.
Filed December 16, 1930. Serial No. 309,043. PUBLISHED MARCH 24, 1931. Class 6.

283,827. PREPARATION FOR THE RELIEF OF ASTHMA. CARL F. HAFFNER, doing business as Haffner Laboratories, Charleston, Ill.
Filed January 29, 1931. Serial No. 310,515. PUBLISHED MARCH 24, 1931. Class 6.

283,828. RADIATOR CEMENT. LORENA PETERSON, doing business as Peterson Sales Company, St. Louis, Mo.
Filed January 29, 1931. Serial No. 310,529. PUBLISHED MARCH 24, 1931. Class 6.

283,829. EYE BATH (A MEDICATED LIQUID FOR APPLYING TO THE EYES WHICH CONTAINS SOOTHING AND ANALGESIC PROPERTIES). HARRY A. TRESSLER, doing business as The Flu-Ko Medicine Company, Dayton, Ohio.
Filed January 29, 1931. Serial No. 310,545. PUBLISHED MARCH 24, 1931. Class 6.

283,830. PREPARATION FOR THE TREATMENT OF THE SKIN. SUE LEE MCNAMARA, doing business as Face Reflector Company, Dallas, Tex.
Filed January 30, 1931. Serial No. 310,565. PUBLISHED MARCH 24, 1931. Class 6.

283,831. ANTI-ACID EFFERVESCENT PREPARATIONS. DR. MILES MEDICAL COMPANY, Elkhart, Ind.
Filed January 31, 1931. Serial No. 310,608. PUBLISHED MARCH 31, 1931. Class 6.

283,832. PIGMENT FINISHES, CHEMICALS, AND DYESTUFFS FOR LEATHER. ANTHONY J. AND JOHN O. PILAR, Newark, N. J.
Filed February 2, 1931. Serial No. 310,655. PUBLISHED MARCH 31, 1931. Class 6.

283,833. PREPARATION FOR INTERNAL USE FOR THE PURPOSE OF FACILITATING THE TAKING OF X-RAY PICTURES OF INTERNAL ORGANS. SCHERING-KAHLBAUM A. G., Berlin, Germany.
Filed February 2, 1931. Serial No. 310,663. PUBLISHED MARCH 31, 1931. Class 6.

283,834. PREPARATION FOR USE IN THE TREATMENT OF BRONCHIAL ASTHMA AND AS A RECONSTRUCTIVE BUILDER FOLLOWING WASTING DISEASES. BURLINGTON DRUG Co., Burlington, Vt.
Filed February 4, 1931. Serial No. 310,714. PUBLISHED MARCH 31, 1931. Class 6.

283,835. TONIC FOR ANEMIC CONDITIONS, MARASMUS, DIETARY DEFICIENCIES, AND MALNUTRITION. THE BOVININE COMPANY, Chicago, Ill.
Filed February 5, 1931. Serial No. 310,749. PUBLISHED MARCH 31, 1931. Class 6.

283,836. HYPOCHLORIDE SOLUTION COMBINED WITH OTHER CHEMICALS. HYZO LABORATORIES, INC., Syracuse, N. Y.
Filed February 6, 1931. Serial No. 310,803. PUBLISHED MARCH 24, 1931. Class 6.

283,837. CONCENTRATED EXTRACT FOR USE IN INSECTICIDES. MCLAUGHLIN GORMLEY KING CO., Minneapolis, Minn.
Filed February 6, 1931. Serial No. 310,807. PUBLISHED MARCH 24, 1931. Class 6.

283,838. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. FRANK C. REILLY, New York, N. Y.
Filed February 9, 1931. Serial No. 310,881. PUBLISHED MARCH 24, 1931. Class 6.

283,839. LAWN SWINGS. THE GOSHEN MANUFACTURING COMPANY, Goshen, Ind.
Filed December 26, 1930. Serial No. 309,342. PUBLISHED MARCH 24, 1931. Class 22.

283,840. RACKET STRINGS. C. SALADINO & SONS, Chelsea, Mass.
Filed January 15, 1931. Serial No. 309,994. PUBLISHED MARCH 24, 1931. Class 22.

283,841. DOLLS. IDEAL NOVELTY & TOY CO., Brooklyn and New York, N. Y.
Filed January 28, 1931. Serial No. 310,478. PUBLISHED MARCH 24, 1931. Class 22.

283,842. DOLLS. GEO. BORGFELDT & CO., New York, N. Y.
Filed February 3, 1931. Serial No. 310,673. PUBLISHED MARCH 31, 1931. Class 22.

283,843. DOLLS. GEO. BORGFELDT & CO., New York, N. Y.
Filed February 3, 1931. Serial No. 310,674. PUBLISHED MARCH 31, 1931. Class 22.

283,844. GOLF BALLS. A. J. REACH, WRIGHT & DITSON INCORPORATED, New York, N. Y.
Filed February 3, 1931. Serial No. 310,697. PUBLISHED MARCH 31, 1931. Class 22.

283,845. GOLF BALLS. HOMER B. HALSTED, doing business as Sports Equipment Company, Detroit, Mich.
Filed February 6, 1931. Serial No. 310,801. PUBLISHED MARCH 31, 1931. Class 22.

283,846. GOLF BALLS. HOMER B. HALSTED, doing business as Sports Equipment Company, Detroit, Mich.
Filed February 6, 1931. Serial No. 310,802. PUBLISHED MARCH 31, 1931. Class 22.

283,847. PREPARATION INDICATED IN SYMPTOMATIC RELIEF AND RESISTANCE-STIMULATING THERAPY IN ACUTE AND CHRONIC ARTHRITIS, GONORRHEA AND ITS COMPLICATIONS, AND GASTRODUODENAL ULCER. INTRAVENOUS PRODUCTS CO. OF AMERICA, INC., doing business as Endo Products, Inc., New York, N. Y.
Filed January 24, 1931. Serial No. 310,339. PUBLISHED MARCH 24, 1931. Class 6.

283,848. POWDER PREPARATION APPLICABLE TO RADIATORS OF AUTOMOBILE AND HEATING SYSTEMS FOR STOPPING LEAKS THEREIN. MILRICK PRODUCTS CORPORATION, Kokomo, Ind., assignor to The Milrick Corporation, Kokomo, Ind., a Corporation of Indiana.
Filed January 26, 1931. Serial No. 310,398. PUBLISHED MARCH 24, 1931. Class 6.

283,849. PREPARATION FOR THE TREATMENT OF COLDS AND GRIPPE. SIMPSON DRUG COMPANY, Smiths Ferry, Pa.
Filed January 28, 1931. Serial No. 310,491. PUBLISHED MARCH 24, 1931. Class 6.

283,850. CHLORIDE OF LIME. SOCIETÀ ELETTRICA ED ELETTROCHIMICA DEL CAFFARO, Milan, Italy.
Filed December 18, 1930. Serial No. 309,154. PUBLISHED MARCH 31, 1931. Class 6.

283,851. GENERAL TONIC. ASSOCIATED PHYSICIANS LABORATORIES LTD., San Francisco, Calif.
Filed December 19, 1930. Serial No. 309,163. PUBLISHED MARCH 31, 1931. Class 6.

283,852. GOLF CLUBS. CONDOR MANUFACTURING CO., INC., Long Island City, N. Y.
Filed February 12, 1931. Serial No. 310,972. PUBLISHED MARCH 31, 1931. Class 22.

283,853. GOLF CLUBS. CONDOR MANUFACTURING CO., INC., Long Island City, N. Y.
Filed February 12, 1931. Serial No. 310,971. PUBLISHED MARCH 31, 1931. Class 22.

283,854. GOLF CLUBS. CONDOR MANUFACTURING CO., INC., Long Island City, N. Y.
Filed February 12, 1931. Serial No. 310,973. PUBLISHED MARCH 31, 1931. Class 22.

283,855. PERIODICALS. THE FRUIT DEALER PUBLISHING COMPANY, Philadelphia, Pa.
Filed January 9, 1931. Serial No. 309,774. PUBLISHED MARCH 17, 1931. Class 38.

283,856. CERTAIN NAMED WEARING APPAREL. STEPHEN SLESINGER, INC., New York, N. Y.
Filed January 8, 1931. Serial No. 309,751. PUBLISHED MARCH 24, 1931. Class 39.

283,857. COMBS FOR THE HAIR, EXCEPT COMBS OF PRECIOUS MATERIAL. NEW YORK HAMBURGER GUMMI-WAAREN COMPAGNIE, Hamburg, Germany.
Filed January 7, 1931. Serial No. 309,695. PUBLISHED MARCH 31, 1931. Class 40.

283,858. STEEL RODS FOR USE FOR STRUCTURAL PURPOSES. COLONIAL STEEL COMPANY, Pittsburgh, Pa.
Filed January 7, 1931. Serial No. 309,676. PUBLISHED MARCH 31, 1931. Class 12.

283,859. WRIST-WATCH STRAPS. THE HADLEY COMPANY, INC., Providence, R. I.
Filed January 5, 1931. Serial No. 309,613. PUBLISHED MARCH 24, 1931. Class 40.

283,860. WRIST-WATCH STRAPS. THE HADLEY COMPANY, INC., Providence, R. I.
Filed January 5, 1931. Serial No. 309,612. PUBLISHED MARCH 24, 1931. Class 40.

283,861. RAW SILK. E. GERLI & COMPANY, INC., New York, N. Y.
Filed December 27, 1930. Serial No. 309,377. PUBLISHED MARCH 17, 1931. Class 1.

283,862. MONTHLY MAGAZINE. CONSOLIDATED WATER POWER & PAPER COMPANY, Wisconsin Rapids, Wis.
Filed December 26, 1930. Serial No. 309,336. PUBLISHED MARCH 17, 1931. Class 38.

283,863. PERIODICAL. DIME PUBLICATIONS, INC., New York, N. Y.
Filed February 12, 1931. Serial No. 310,976. PUBLISHED MARCH 24, 1931. Class 38.

283,864. FEATURE PUBLISHED IN A PERIODICAL. QUIGLEY PUBLISHING COMPANY, INC., New York, N. Y.
Filed February 10, 1931. Serial No. 310,924. PUBLISHED MARCH 24, 1931. Class 38.

283,865. FOUNTAIN PENS AND PENCILS. THE U. S. VICTOR FOUNTAIN PEN CO. INC., New York, N. Y.
Filed February 7, 1931. Serial No. 310,843. PUBLISHED MARCH 24, 1931. Class 37.

283,866. SEMIANNUAL PUBLICATION. NATIONAL TRADE JOURNALS, INC., New York, N. Y.
Filed February 4, 1931. Serial No. 310,734. PUBLISHED MARCH 24, 1931. Class 38.

283,867. PERIODICAL. MANUEL ROSENBERG, Cincinnati, Ohio.
Filed February 3, 1931. Serial No. 310,696. PUBLISHED MARCH 24, 1931. Class 38.

283,868. MONTHLY MAGAZINE. MACFADDEN PUBLICATIONS, INC., New York, N. Y.
Filed February 2, 1931. Serial No. 310,650. PUBLISHED MARCH 24, 1931. Class 38.

283,869. MAGAZINE, THE SAME BEING A PUBLICATION ISSUED MONTHLY. LINDLAHR'S MAGAZINE, INC., New York, N. Y.
Filed January 28, 1931. Serial No. 310,481. PUBLISHED MARCH 24, 1931. Class 38.

283,870. CANNED FRUITS AND VEGETABLES. SPRINGVILLE CANNING CORPORATION, Springville, Utah.
Filed November 24, 1930. Serial No. 308,270. PUBLISHED MARCH 24, 1931. Class 46.

283,871. CHEWING GUM. CLARENCE P. CLARK, Los Angeles, Calif.
Filed November 28, 1930. Serial No. 308,418. PUBLISHED MARCH 31, 1931. Class 46.

283,872. MALT SYRUPS FOR FOODS. HERMAN KRAUSS, INC., Toledo, Ohio.
Filed December 13, 1930. Serial No. 308,941. PUBLISHED MARCH 31, 1931. Class 46.

283,873. HAIR SHAMPOO. L. M. BOCK, doing business as The Carminia Company, Portland Oreg.
Filed June 23, 1930. Serial No. 302,722. PUBLISHED MARCH 31, 1931. Class 6.

283,874. HAIR GROWER. VECO MANUFACTURING CO., Brooklyn, N. Y.
Filed September 12, 1930. Serial No. 305,638. PUBLISHED MARCH 31, 1931. Class 6.

283,875. ANTISEPTIC SOLUTION FOR USE AS A MOUTH WASH, GARGLE, LOTION, SPRAY, AND DOUCHE. HENRY K. WAMPOLE AND COMPANY, INCORPORATED, Philadelphia, Pa.
Filed September 29, 1930. Serial No. 306,209. PUBLISHED NOVEMBER 11, 1930. Class 6.

283,876. AFTER-SHAVING LOTION AND HAND LOTION. THE F. W. FITCH CO., Des Moines, Iowa.
Filed November 12, 1930. Serial No. 307,807. PUBLISHED MARCH 24, 1931. Class 6.

283,877. MEDICINAL AND PHARMACEUTICAL PREPARATIONS FOR THE RELIEF OF COLDS AND GRIPPES, MIGRAINE AND NEURALGIA PAINS, MUSCULAR PAINS, HEADACHES. BERNARD WILLIAM POLLEN, College Point, N. Y.
Filed November 15, 1930. Serial No. 307,950. PUBLISHED MARCH 24, 1931. Class 6.

283,878. FRECKLE LOTION. MICHAEL CHIVIGES, doing business as Gonol Laboratories, Detroit, Mich., assignor to Emily C. Chiviges, Detroit, Mich.
Filed November 17, 1930. Serial No. 307,976. PUBLISHED FEBRUARY 10, 1931. Class 6.

283,879. LINIMENT FOR EXTERNAL USE IN THE TREATMENT OF RHEUMATISM, ASTHMA, INFLUENZA, GRIPPE, PNEUMONIA, BRONCHITIS, POOR EYESIGHT, AND BALDNESS. VALERIA RUTECKI, Philadelphia, Pa.
Filed December 1, 1930. Serial No. 308,494. PUBLISHED MARCH 31, 1931. Class 6.

283,880. WATERPROOF FLAX, WATERPROOFED FLAX DUCK, AND WATERPROOFED FLAX CANVAS. THE UPSON-WALTON COMPANY, Cleveland, Ohio.
Filed May 22, 1930. Serial No. 301,076. PUBLISHED NOVEMBER 18, 1930. Class 50.

283,881. WATERPROOF FLAX, WATERPROOFED FLAX DUCK, AND WATERPROOFED FLAX CANVAS. THE UPSON-WALTON COMPANY, Cleveland, Ohio.
Filed May 22, 1930. Serial No. 301,077. PUBLISHED NOVEMBER 18, 1930. Class 50.

283,882. WATERPROOF FLAX, WATERPROOFED FLAX DUCK, AND WATERPROOFED FLAX CANVAS. THE UPSON-WALTON COMPANY, Cleveland, Ohio.
Filed May 22, 1930. Serial No. 301,078. PUBLISHED NOVEMBER 18, 1930. Class 50.

283,883. WATERPROOF FLAX, WATERPROOFED FLAX DUCK, AND WATERPROOFED FLAX CANVAS. THE UPSON-WALTON COMPANY, Cleveland, Ohio.
Filed May 22, 1930. Serial No. 301,079. PUBLISHED NOVEMBER 18, 1930. Class 50.

283,884. HETEROGENEOUS CONGLOMERATION OF ASYMMETRICAL PARTICLES IN BULK AND TREATED OF A SUITABLE FLEXIBLE YIELDING FIBROUS AND PORTABLE MATERIAL SUCH AS SAWDUST OR MINUTE SPLINTERS MADE FROM CYPRESS OR OTHER OSIER VEGETATION FOR ARTIFICIAL GOLF GREENS. TEXAS MINIATURE OUTDOOR GOLF COMPANY, Oklahoma City, Okla.
Filed May 31, 1930. Serial No. 302,087. PUBLISHED MARCH 31, 1931. Class 50.

283,885. UNDERLAY FOR FLOOR COVERINGS. ST. CLAIR RUBBER COMPANY, Marysville and Detroit, Mich.
Filed November 10, 1930. Serial No. 307,747. PUBLISHED MARCH 24, 1931. Class 50.

283,886. GOGGLES, EITHER USED ALONE OR ON HELMETS. PERELES BROS. INC., Milwaukee, Wis.
Filed June 25, 1930. Serial No. 302,831. PUBLISHED MARCH 24, 1931. Class 26.

283,887. MEASURING DEVICES IN THE NATURE OF DISPLACEMENT METERS FOR USE WITH DISPENSING AND STORAGE FACILITIES FOR HANDLING GASOLINE, OIL, WATER, ILLUMINATING GAS, AND THE LIKE. NATIONAL PIPE PRODUCTS CORPORATION, Rochester, N. Y.
Filed July 10, 1930. Serial No. 303,338. PUBLISHED MARCH 24, 1931. Class 26.

283,888. HOUSEHOLD AND LAWN CHAIRS. OZARK CHAIR COMPANY, Ferguson, Mo.
Filed December 8, 1930. Serial No. 308,749. PUBLISHED MARCH 31, 1931. Class 32.

283,889. FRESH CITRUS FRUITS. STUART BROS. CORPORATION, Bartow, Fla.
Filed January 28, 1931. Serial No. 310,495. PUBLISHED MARCH 24, 1931. Class 46.

283,890. MACARONI SALAD, POTATO SALAD, SPAGHETTI AND CHICKEN-GIBLETS SAUCE, AND CHICKEN AND NOODLES. TRIPOLI FOODS, INCORPORATED, Baltimore, Md.
Filed January 31, 1931. Serial No. 310,618. PUBLISHED MARCH 31, 1931. Class 46.

283,891. CHOCOLATE-COVERED CANDY BARS. THE COXIE COMPANY, doing business as "Coxies," Muncie, Ind.
Filed February 6, 1931. Serial No. 310,796. PUBLISHED MARCH 31, 1931. Class 46.

283,892. ADHESIVE PAPER SIGNALS FOR INDEX SHEETS OR THE LIKE. SERVICE BUREAU, INC., Cambridge, Mass.
Filed February 5, 1931. Serial No. 310,778. PUBLISHED MARCH 24, 1931. Class 37.

283,893. LEATHER AND FABRIC GLOVES. WIMELBACHER & RICE, New York, N. Y.
Filed January 26, 1931. Serial No. 310,428. PUBLISHED MARCH 17, 1931. Class 39.

283,894. PERIODICALS. THE FRUIT DEALER PUBLISHING COMPANY, Philadelphia, Pa.
Filed January 9, 1931. Serial No. 309,775. PUBLISHED MARCH 17, 1931. Class 38.

283,895. EYE LOTION. A. C. CARLTON, doing business as McKinsey Thompson Co., San Francisco, Calif.
Filed February 11, 1931. Serial No. 310,934. PUBLISHED MARCH 24, 1931. Class 6.

283,896. CAST IRON SOIL PIPE. ALABAMA PIPE COMPANY, Anniston, Ala.
Filed December 16, 1930. Serial No. 309,021. PUBLISHED MARCH 31, 1931. Class 13.

283,897. AUTOMOBILE WINDSHIELD WIPER. MARIO J. VAGGE, doing business as Vagge's Automotive Research Co., Nashua, N. H.
Filed December 30, 1930. Serial No. 309,489. PUBLISHED MARCH 24, 1931. Class 19.

283,898. AUTOMOBILE STRUCTURAL PARTS. HUDSON MOTOR CAR COMPANY, Detroit, Mich.
Filed December 31, 1930. Serial No. 309,526. PUBLISHED MARCH 31, 1931. Class 19.

283,899. PAPER BAGS. BROOKLYN STANDARD BAG CO. INC., Brooklyn, N. Y.
Filed January 22, 1931. Serial No. 310,246. PUBLISHED MARCH 31, 1931. Class 2.

283,900. HOT-WATER AUTOMOBILE HEATERS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed January 28, 1931. Serial No. 310,489. PUBLISHED MARCH 31, 1931. Class 19.

283,901. COAL-BURNING STOKERS AND PARTS THEREFOR AND TRANSMISSIONS FOR STOKERS. COTTA TRANSMISSION CORPORATION, Rockford, Ill.
Filed February 6, 1931. Serial No. 310,794. PUBLISHED MARCH 31, 1931. Class 34.

283,902. COAL-BURNING STOKERS AND PARTS THEREFOR AND TRANSMISSIONS FOR STOKERS. COTTA TRANSMISSION CORPORATION, Rockford, Ill.
Filed February 6, 1931. Serial No. 310,795. PUBLISHED MARCH 24, 1931. Class 34.

283,903. BOWLING BALLS. STOWE & WOODWARD COMPANY, Newton Upper Falls, Mass.
Filed February 7, 1931. Serial No. 310,842. PUBLISHED MARCH 31, 1931. Class 22.

283,904. PLAYING CARDS. RUSSELL PLAYING CARD COMPANY, Jersey City, N. J.
Filed February 9, 1931. Serial No. 310,885. PUBLISHED MARCH 31, 1931. Class 22.

283,905. DRY-CLEANING AND LAUNDRY MACHINES COMPRISING A COMBINED CLOTHES WASHER AND BOILER. DE CLEVO COMPANY, Cleveland, Ohio.
Filed February 13, 1931. Serial No. 311,027. PUBLISHED MARCH 31, 1931. Class 24.

283,906. GOLF BALLS. BON-DEE GOLF BALL CO., Detroit, Mich.
Filed February 14, 1931. Serial No. 311,052. PUBLISHED MARCH 31, 1931. Class 22.

283,907. TOY AEROPLANES HAVING WINGS AND BODIES SIMULATING CERTAIN BIRDS. AERO MODEL COMPANY, Chicago, Ill.
Filed February 16, 1931. Serial No. 311,078. PUBLISHED MARCH 31, 1931. Class 22.

283,908. LAWN SPRINKLERS, HOSE NOZZLES, HOTHOUSE SPRINKLERS, GARDEN SPRINKLERS, AND FLORISTS' SPRINKLERS. D. B. SMITH & COMPANY, INC., Utica, N. Y.
Filed February 18, 1931. Serial No. 311,206. PUBLISHED MARCH 31, 1931. Class 13.

283,909. INCUBATOR SUPPLY TRUCKS. JAMES MANUFACTURING COMPANY, Fort Atkinson, Wis.
Filed February 20, 1931. Serial No. 311,277. PUBLISHED MARCH 31, 1931. Class 19

283,910. BOOKLETS. SAFEWAY STORES, INCORPORATED, Vernon and Oakland Calif.
Filed December 17, 1930. Serial No. 309,093. PUBLISHED MARCH 24, 1931. Class 38.

283,911. MAGAZINES. THE COLLEGIATE WORLD PUBLISHING COMPANY, Chicago, Ill.
Filed January 13, 1931. Serial No. 309,882. PUBLISHED MARCH 24, 1931. Class 38.

283,912. NEWSPAPER SECTION. GUSTAV UHLMANN, Brooklyn, N. Y.
Filed January 13, 1931. Serial No. 309,909. PUBLISHED MARCH 24, 1931. Class 38.

283,913. PERIODICAL. NATIONAL RETAIL CREDIT ASSOCIATION, St. Louis, Mo.
Filed January 17, 1931. Serial No. 310,062. PUBLISHED MARCH 24, 1931. Class 38.

283,914. MAGAZINE PUBLISHED WEEKLY. THEATRE SERVICE CORPORATION, New York, N. Y.
Filed January 22, 1931. Serial No. 310,269. PUBLISHED MARCH 24, 1931. Class 38.

283,915. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND FOR SYRUPS AND EXTRACTS USED IN MAKING THE SAME. COTT'S BEVERAGES, INC., East Portchester, Conn.
Filed February 20, 1931. Serial No. 311,264. PUBLISHED MARCH 31, 1931. Class 45.

283,916. SENSITIZED PHOTOGRAPHIC PAPER. THE HALOID COMPANY, Rochester, N. Y.
Filed February 13, 1931. Serial No. 311,033. PUBLISHED MARCH 31, 1931. Class 26.

283,917. MATTRESSES. LIGHT BROS., INC., New York and Brooklyn, N. Y.
Filed February 17, 1931. Serial No. 311,149. PUBLISHED MARCH 31, 1931. Class 32.

283,918. TOOLS AND PARTS THEREOF—NAMELY, SHOVELS, SPADES, SCOOPS, ICE CHOPPERS, AND SNOW PUSHERS. AMES SHOVEL AND TOOL COMPANY, North Easton, Mass.
Filed February 18, 1931. Serial No. 311,213. PUBLISHED MARCH 31, 1931. Class 23.

283,919. AMMETERS, PRESSURE GAUGES, LIQUID-LEVEL-INDICATING INSTRUMENTS, AND THERMOMETERS. GENERAL INSTRUMENT COMPANY, La Crosse, Wis.
Filed February 21, 1931. Serial No. 311,328. PUBLISHED MARCH 31, 1931. Class 26.

283,920. FRESH VEGETABLES. ALBERT S. GARGUILO, Brawley, Calif.
Filed January 30, 1931. Serial No. 310,561. PUBLISHED MARCH 31, 1931. Class 46.

283,921. CANDY. M. J. HOLLOWAY & COMPANY, doing business as Holloway's, Chicago, Ill.
Filed February 9, 1931. Serial No. 310,866. PUBLISHED MARCH 31, 1931. Class 46.

283,922. CANNED PEELED TOMATOES. ITALO FRENCH PRODUCE COMPANY, Pittsburgh, Pa.
Filed February 9, 1931. Serial No. 310,871. PUBLISHED MARCH 31, 1931. Class 46.

283,923. PUDDING. GUSSIE C. ROSENSTEIN, doing business as Sandman Food Products Co., Paterson, N. J.
Filed February 9, 1931. Serial No. 310,929. PUBLISHED MARCH 31, 1931. Class 46.

283,924. CANDY. ELMER CANDY COMPANY, INCORPORATED, New Orleans, La.
Filed February 14, 1931. Serial No. 311,057. PUBLISHED MARCH 31, 1931. Class 46.

283,925. CANDY. WILLIAMSON CANDY COMPANY, Chicago, Ill.
Filed February 14, 1931. Serial No. 311,077. PUBLISHED MARCH 31, 1931. Class 46.

283,926. CHLORIDE OF LIME. SOCIETÀ ELETTRICA ED ELETTROCHIMICA DEL CAFFARO, Milan, Italy.
Filed December 18, 1930. Serial No. 309,153. PUBLISHED MARCH 31, 1931. Class 6.

283,927. CEREAL MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. AKTIESELSKABET DE FORENEDE BRYGGERIER, Copenhagen, Denmark.
Filed January 5, 1931. Serial No. 309,603. PUBLISHED MARCH 31, 1931. Class 48.

283,928. NONALCOHOLIC, MALTLESS TOMATO BEVERAGE SOLD AS A SOFT DRINK. E. C. ORTEGA CO., INC., Los Angeles, Calif.
Filed January 30, 1931. Serial No. 310,573. PUBLISHED MARCH 31, 1931. Class 45.

283,929. REFRIGERATORS. BOHN REFRIGERATOR COMPANY, St. Paul, Minn.
Filed February 5, 1931. Serial No. 310,748. PUBLISHED MARCH 31, 1931. Class 31.

283,930. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, SIRUPS AND EXTRACTS FOR MAKING THE SAME. JOHN KAZIMER SZWAJKOS, doing business as Monroe Bottling Works, Rochester, N. Y.
Filed February 10, 1931. Serial No. 310,928. PUBLISHED MARCH 24, 1931. Class 45.

283,931. AMMUNITION. REMINGTON ARMS COMPANY, INC., Bridgeport, Conn., Ilion and New York, N. Y.
Filed February 14, 1931. Serial No. 311,072. PUBLISHED MARCH 24, 1931. Class 9.

283,932. BITTER SALTS OBTAINED FROM MINERAL WATER. ANDREAS SAXLEHNER, Budapest, Hungary.
Filed February 17, 1931. Serial No. 311,160. PUBLISHED MARCH 31, 1931. Class 6.

283,933. BITTER SALTS OBTAINED FROM MINERAL WATER. ANDREAS SAXLEHNER, Budapest, Hungary.
Filed February 17, 1931. Serial No. 311,161. PUBLISHED MARCH 31, 1931. Class 6.

283,934. PIPES, CIGARETTE AND CIGAR HOLDERS, PAPER CIGARETTE AND CIGAR HOLDERS, AND TOBACCO POUCHES. ALFRED ORLIK INC., New York, N. Y.
Filed December 16, 1930. Serial No. 309,050. PUBLISHED MARCH 31, 1931. Class 8.

283,935. POWDER PUFFS, ABSORBENT POWDER PUFFS, AND EYEBROW BRUSHES. DOROTHY GRAY, Bloomfield, N. J., and New York, N. Y.
Filed December 30, 1930. Serial No. 309,467. PUBLISHED MARCH 24, 1931. Class 29.

283,936. FLAGS, BANNERS, GRAVE-MARKERS, EMBLEMS, BADGES, AND PRINTING CUTS. VETERANS OF FOREIGN WARS OF THE UNITED STATES, Kansas City, Mo.
Filed January 7, 1931. Serial No. 309,953. PUBLISHED MARCH 24, 1931. Class 50.

283,937. STEEL. THE TIMKEN STEEL AND TUBE COMPANY, Canton, Ohio.
Filed January 24, 1931. Serial No. 310,354. PUBLISHED MARCH 24, 1931. Class 14.

283,938. FERTILIZERS. SWIFT AND COMPANY, Chicago, Ill.
Filed January 27, 1931. Serial No. 310,457. PUBLISHED MARCH 31, 1931. Class 10.

283,939. COMBINATION BOTTLE CAP AND GOLF TEE. THE TEE-TOP COMPANY, St. Petersburg, Fla.
Filed January 27, 1931. Serial No. 310,463. PUBLISHED MARCH 24, 1931. Class 50.

283,940. CIGARS. THE LOS RAMOS CIGAR COMPANY, Sidney, Ohio.
Filed February 4, 1931. Serial No. 310,727. PUBLISHED MARCH 31, 1931. Class 17.

283,941. MOPS. MIDWAY CHEMICAL COMPANY, Chicago, Ill.
Filed February 9, 1931. Serial No. 310,872. PUBLISHED MARCH 24, 1931. Class 29.

283,942. CLOCKS AND WATCHES. WESTERN CLOCK COMPANY, Peru, Ill.
Filed February 9, 1931. Serial No. 310,893. PUBLISHED MARCH 24, 1931. Class 27.

283,943. CLOCKS. WESTERN CLOCK COMPANY, Peru, Ill.
Filed February 9, 1931. Serial No. 310,894. PUBLISHED MARCH 24, 1931. Class 27.

283,944. CLOCKS AND WATCHES. WESTERN CLOCK COMPANY, Peru, Ill.
Filed February 9, 1931. Serial No. 310,895. PUBLISHED MARCH 24, 1931. Class 27.

283,945. CLOCKS AND WATCHES. WESTERN CLOCK COMPANY, Peru, Ill.
Filed February 9, 1931. Serial No. 310,896. PUBLISHED MARCH 24, 1931. Class 27.

283,946. CLOCKS AND WATCHES. WESTERN CLOCK COMPANY, Peru, Ill.
Filed February 9, 1931. Serial No. 310,897. PUBLISHED MARCH 24, 1931. Class 27.

283,947. CLOCKS AND WATCHES. WESTERN CLOCK COMPANY, Peru, Ill.
Filed February 9, 1931. Serial No. 310,898. PUBLISHED MARCH 24, 1931. Class 27.

283,948. PRINTER'S TYPE. CONTINENTAL TYPEFOUNDERS ASSOCIATION, INCORPORATED, New York, N. Y.
Filed February 18, 1931. Serial No. 311,183. PUBLISHED MARCH 31, 1931. Class 14.

283,949. KITCHEN TOOLS AND UTENSILS. THE A. & J. MANUFACTURING CO., Binghamton, N. Y.
Filed December 19, 1930. Serial No. 309,158. PUBLISHED MARCH 31, 1931. Class 23.

283,950. KITCHEN TOOLS AND UTENSILS. THE A. & J. MANUFACTURING CO., Binghamton, N. Y.
Filed December 19, 1930. Serial No. 309,159. PUBLISHED MARCH 31, 1931. Class 23.

283,951. SPRINGS FOR FURNITURE. BÁNSKÁ- A HUTNÍ SPOLEČNOST, Brunn, Czechoslovakia.
Filed January 7, 1931. Serial No. 309,706. PUBLISHED MARCH 31, 1931. Class 32.

283,952. SPRINGS FOR FURNITURE. BÁNSKÁ- A HUTNÍ SPOLEČNOST, Brunn, Czechoslovakia.
Filed January 7, 1931. Serial No. 309,711. PUBLISHED MARCH 31, 1931. Class 32.

283,953. TRANSMISSION CONVEYING AND ELEVATING BELTS MADE OF COTTON FABRIC IMPREGNATED WITH A RUBBER COMPOUND AND CURED. THERMOID RUBBER COMPANY, Trenton, N. J.
Filed January 19, 1931. Serial No. 310,144. PUBLISHED MARCH 24, 1931. Class 35.

283,954. SULPHATE-PULP KRAFT PAPER. NATIONAL CONSUMERS PAPER CORPORATION, New York, N. Y.
Filed February 6, 1931. Serial No. 310,808. PUBLISHED MARCH 24, 1931. Class 37.

283,955. PENCILS OF ALL KINDS. KOH-I-NOOR BLEISTIFTFABRIK L. & C. HARDTMUTH, Budweis, Czechoslovakia.
Filed February 6, 1931. Serial No. 310,805. PUBLISHED MARCH 24, 1931. Class 37.

283,956. FROZEN FRUITS. TOM HUSTON PEANUT COMPANY, doing business as Tom Huston Frozen Foods, Inc., Columbus, Ga.
Filed September 29, 1930. Serial No. 306,185. PUBLISHED MARCH 31, 1931. Class 46.

283,957. CANDY CONFECTIONS. RUNKEL BROTHERS, INC., New York, N. Y.
Filed September 23, 1930. Serial No. 305,982. PUBLISHED MARCH 24, 1931. Class 46.

283,958. PICNIC HAMS AND LARD. BLAYNEY-MURPHY COMPANY, Denver, Colo.
Filed September 22, 1930. Serial No. 305,919. PUBLISHED MARCH 24, 1931. Class 46.

283,959. SANDWICHES AND CONDIMENT SAUCE SUITABLE FOR USE IN SANDWICHES. TRIPLE "XXX" COMPANY, Galveston, Tex.
Filed August 26, 1930. Serial No. 305,061. PUBLISHED MARCH 24, 1931. Class 46.

283,960. SHELLED PEANUTS. HOMER G. RAY, doing business as Georgia-Peanut Co., Donalsonville, Ga.
Filed August 15, 1930. Serial No. 304,668. PUBLISHED MARCH 24, 1931. Class 46.

283,961. CANDY. THE BLOCK CANDY COMPANY, Atlanta, Ga.
Filed August 15, 1930. Serial No. 304,647. PUBLISHED MARCH 24, 1931. Class 46.

283,962. COMPOUNDS INCLUDING DEXTRIN FOR AIDING EMULSION OF THE FILLERS OF FROZEN PIES, THE PIES INCLUDING A FROZEN CRUST AND FILLER. RAY CORPORATION, Canton, Ohio.
Filed August 8, 1930. Serial No. 304,384. PUBLISHED MARCH 24, 1931. Class 46.

283,963. CHEWING GUM. JACOB WARREN BOWMAN, doing business as By Gum Co., Philadelphia, Pa.
Filed June 30, 1930. Serial No. 302,987. PUBLISHED MARCH 31, 1931. Class 46.

283,964. BABY CHICKS. WALLACE HATCHERY, La Fayette, Ind.
Filed May 29, 1930. Serial No. 301,740. PUBLISHED MARCH 24, 1931. Class 46.

283,965. CANNED CORN. MINNESOTA CONSOLIDATED CANNERIES, INC., Minneapolis, Minn.
Filed May 28, 1930. Serial No. 301,491. PUBLISHED MARCH 31, 1931. Class 46.

283,966. CANNED CORN. MINNESOTA CONSOLIDATED CANNERIES, INC., Minneapolis, Minn.
Filed May 28, 1930. Serial No. 301,489. PUBLISHED MARCH 31, 1931. Class 46.

283,967. PREPARATION FOR TREATING COLDS AND HAY FEVER. POLY CHEMICAL LABORATORIES, Greenville, Jersey City, N. J.
Filed December 13, 1930. Serial No. 308,953. PUBLISHED MARCH 31, 1931. Class 6.

283,968. DYES, PARTICULARLY EASTER-EGG DYES. FRED FEAR & CO., Brooklyn, N. Y.
Filed November 25, 1930. Serial No. 308,294. PUBLISHED MARCH 10, 1931. Class 6.

283,969. DYE INTERMEDIATES. E. C. KLIPSTEIN & SONS COMPANY, South Charleston, W. Va., and Newark, N. J.
Filed November 6, 1930. Serial No. 307,596. PUBLISHED MARCH 10, 1931. Class 6.

283,970. MEDICATED TABLETS USED AS A POULTRY FOOD TONIC. HENRY CLAY J. BROWN, doing business as The Kackalay Company, San Diego and Wilmar, Calif.
Filed October 30, 1930. Serial No. 307,345. PUBLISHED MARCH 10, 1931. Class 6.

283,971. OXIDE OF ZINC ADHESIVE PLASTER. THE DEANE PLASTER CO., Yonkers, N. Y.
Filed October 4, 1930. Serial No. 306,393. PUBLISHED MARCH 10, 1931. Class 6.

283,972. CHEMICAL, PHARMACEUTICAL, AND BIOLOGICAL PRODUCTS LISTED HEREINBELOW.

Goods	*Date of first use*
Agar, Laxative, Lilly	Feb. 28, 1930
Agar, Plain (Granular)	Feb. 28, 1930
Agar, Prepared, Lilly	Feb. 28, 1930
Alkaline Aromatic, Pink (in Tablets)	Mar. 5, 1930
Alkaline Aromatic, White (in Tablets)	Mar. 12, 1930
Alum Compound (Ointment)	Sept. 28, 1929
Ammoniated Mercury, Ointment (5 Per Cent).	Nov. 1, 1929
Ammoniated Mercury, Ointment, U. S. P. (10 Per Cent).	Sept. 28, 1929
Amytal (Isoamylethylbarbituric Acid)	Dec. 9, 1929
Analgesic Balm, Lilly	June 4, 1929
Antimeningococcic Serum Polyvalent, Refined and Concentrated (in Vials).	Jan. 9, 1930
Antistreptococcic Serum (Polyvalent) (in Syringe Container).	July 16, 1929
Antistreptococcic Serum, Concentrated Polyvalent, Purified, Refined (Globulin) (in Syringe Container).	July 16, 1929
Antistreptococcic Serum (Erysipelas) Concentrated (in Syringe Container).	Apr. 4, 1930
Antistreptococcic Serum (Puerperal Fever) (Polyvalent) (in Syringe Container).	July 16, 1929
Antistreptococcic Serum (Scarlet Fever), Concentrated (in Syringe Container).	Feb. 10, 1930
Ariphon (in Pulvules or Capsules)	June 21, 1929
Azudine	July 8, 1929
Belladonna, Ointment, U. S. P.	Apr. 18, 1930
Boric Acid, Ointment, U. S. P.	Jan. 7, 1930
Bromo-Solanum, Lilly	Mar. 28, 1930
Calcium Gluconate	Apr. 14, 1930
Calomel, Ointment (5 Per Cent)	Apr. 18, 1930
Camphor and Menthol, Ointment	July 8, 1929
Cas-Cathartic, Lilly	Mar. 12, 1930
Catarrhal Vaccine Combined (Respiratory) (in Aseptic Syringes).	July 16, 1929
Cholera Vaccine, Prophylactic (in Vials)	Nov. 14, 1929
Coal Tar, Ointment, Purified	Dec. 9, 1929
Coco-Santal Compound, Lilly	Apr. 11, 1929
Digiglusin (in Ampoules)	June 9, 1928
Ephedrine Compound, Ointment	July 8, 1929
Ephedrine Hydrochloride	Mar. 2, 1930
Ephedrine Hydrocloride, Syrup	Jan. 12, 1930
Ephedrine with Merthiolate, Solution	Apr. 14, 1930
Ephedrine Sulphate, Lilly	Feb. 11, 1930
Erysipelas Streptococcus Antitoxin Purified, Concentrated (Globulin) (in Syringe Container).	July 16, 1929
Gluco-Calcium, Lilly	Jan. 24, 1930
Glycero-Tonic Compound	Feb. 10, 1930
Gonococcus Mixed Vaccine (in Aseptic Syringes).	July 16, 1929
Hamamelis Compound, Ointment	July 8, 1929
Hemagulen	Dec. 10, 1929
Hexalithia, Effervescent (in Tablets)	Mar. 12, 1930
Ichthyol, Ointment (10 Per Cent)	July 8, 1929
Ichthyol, Ointment (20 Per Cent)	Jan. 7, 1930

The applicant makes no claim to any trade-mark rights to the name "Ichthyol"; and recognizes the trade-mark rights of The Ichthyol Co. to that word, under Trade-Mark Registrations Nos. 61,010 and 61,011, issued February 26, 1907. The applicant, by and with the consent of The Ichthyol Co., uses in its Ichthyol Ointment included in the above list Ichthyol purchased from The Ichthyol Co.

Influenza Mixed Vaccine (in Aseptic Syringes).	July 16, 1929
Kaomin	June 13, 1929
Kissingen, Artificial Effervescent (in Tablets).	Mar. 12, 1930
Lithium Citrate, Effervescent (in Tablets).	Mar. 5, 1930
Lubricating Jelly	June 4, 1929
Merthiolate, Solution (Sodium Ethyl Mercurithiosalicylate).	Oct. 1, 1929
Pertussis Mixed Vaccine (in Aseptic Syringes.)	July 18, 1929
Pituitary Extract, Lilly's Obstetrical (in Ampoules).	Nov. 12, 1929
Plague Vaccine, Prophylactic (in Vials)	Nov. 14, 1929
Psyllium Seed	Feb. 28, 1930
Rabies Vaccine (Harris) (in Syringe Containers).	May 15, 1929
Resorcinol Compound N. F., Ointment	Apr. 21, 1930
Scarlet Red, Ointment (5 Per Cent)	Apr. 18, 1930
Scarlet Fever, Ricinoleated Antigen (in Vials).	Aug. 19, 1929
Scarlet Fever Streptococcus Antitoxin Purified, Concentrated (Globulin) (in Syringe Container).	July 16, 1929
Sinapsolin	July 8, 1929
Stramonium, Ointment (N. F. Strength)	Dec. 24, 1929
Streptococcus-Staphylococcus Vaccine (in Aseptic Syringes).	July 16, 1929
Sulphur Compound, Ointment (N. F. Strength).	Apr. 18, 1930
Tetanus Antitoxin (in Vials)	Sept. 24, 1929
Typhoid Vaccine (in Vials)	Jan. 4, 1930
Typhoid Vaccine (Prophylactic and Therapeutic) (in Aseptic Syringes).	Jan. 9, 1930
Typhoid Mixed Vaccine (in Vials)	Nov. 19, 1929
Typhoid Mixed Vaccine (Prophylactic and Therapeutic) (in Aseptic Syringes).	Jan. 4, 1930
Typhoid Mixed Vaccine (T. A. B.), (in Vials).	Nov. 14, 1929
Urodiuretic	Feb. 28, 1930
Urodiuretic (Nonalcoholic)	Feb. 28, 1930
Vichy, Artificial Effervescent (in Tablets)	Mar. 12, 1930
Whitfield Modified, Ointment	July 8, 1929
Zinc Oxide, Ointment, Lilly	Nov. 4, 1929
Zinc Oxide and Ephedrine Compound, Ointment.	July 8, 1929

ELI LILLY AND COMPANY, Indianapolis, Ind.
Filed September 12, 1930. Serial No. 305,618. PUBLISHED NOVEMBER 11, 1930. Class 6.

283,973. PREPARATION FOR THE TREATMENT OF DIABETES. ANGELO F. BIONDI, doing business as Biondi Chemical Co., Brooklyn, N. Y.
Filed August 25, 1930. Serial No. 304,989. PUBLISHED MARCH 24, 1931. Class 6.

283,974. TOILET POWDER. ELIZABETH ARDEN, INC., New York, N. Y.
Filed August 6, 1930. Serial No. 304,268. PUBLISHED MARCH 17, 1931. Class 6.

283,975. COFFEE AND TEA. E. B. MILLAR & COMPANY, Chicago, Ill.
Filed October 18, 1930. Serial No. 306,896. PUBLISHED MARCH 31, 1931. Class 46.

283,976. BAKING POWDER. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed February 10, 1931. Serial No. 310,922. PUBLISHED MARCH 31, 1931. Class 6.

283,977. DRY CHEMICAL FIRE-EXTINGUISHING POWDER. FIRE OUT PRODUCTS, INC., Wilmington, Del., and Baltimore, Md.
Filed February 11, 1931. Serial No. 311,016. PUBLISHED MARCH 31, 1931. Class 6.

283,978. EAU DE COLOGNE WATER, PERFUMERY, SHAMPOO, ETC. PAUL PETER MÜLHENS, doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" Gegenüber der Pferdepost von Ferd. Mülhens, Cologne, Germany.
Filed February 12, 1931. Serial No. 311,019. PUBLISHED MARCH 31, 1931. Class 6.

283,979. NAPHTHALENE COMPOUNDS FOR MOTH PREVENTION. THE WHITE TAR COMPANY OF NEW JERSEY, INC., Kearny, N. J.
Filed February 13, 1931. Serial No. 311,046. PUBLISHED MARCH 31, 1931. Class 6.

283,980. OINTMENT FOR THE TREATMENT OF PSORIASIS, ECZEMA, AND OTHER SKIN COMPLAINTS. RICHARD E. FANCOURT, New York, N. Y.
Filed January 28, 1931. Serial No. 310,475. PUBLISHED MARCH 31, 1931. Class 6.

283,981. CLEANSING AND BLEACHING MATERIALS FOR TEXTILE FIBERS. SURPASS CHEMICAL CO. INC., Albany, N. Y.
Filed January 29, 1931. Serial No. 310,538. PUBLISHED MARCH 31, 1931. Class 6.

283,982. CLEANSING CREAM. GABY, INC., Philadelphia, Pa.
Filed February 2, 1931. Serial No. 310,643. PUBLISHED MARCH 31, 1931. Class 6.

283,983. LAXATIZED CHOCOLATE. NICKELAX COMPANY, Ottawa, Ill.
Filed February 3, 1931. Serial No. 310,692. PUBLISHED MARCH 31, 1931. Class 6.

283,984. PREPARATIONS FOR CONDITIONS PECULIAR TO WOMEN. PROKARE LABORATORY PRODUCTS COMPANY, Cleveland, Ohio.
Filed February 9, 1931. Serial No. 310,880. PUBLISHED MARCH 31, 1931. Class 6.

283,985. YEAST. ANHEUSER-BUSCH, INCORPORATED, St. Louis, Mo.
Filed December 22, 1930. Serial No. 309,220. PUBLISHED MARCH 24, 1931. Class 46.

283,986. CANNED FRUITS, CANNED VEGETABLES, CANNED FISH, FRESH DECIDUOUS FRUITS, DRIED FRUITS, FRESH VEGETABLES, FRESH GRAPES. BALFOUR, GUTHRIE & CO., LIMITED, San Francisco, Calif.
Filed December 22, 1930. Serial No. 309,223. PUBLISHED MARCH 31, 1931. Class 46.

283,987. CANNED FRUITS, CANNED VEGETABLES, CANNED FISH, FRESH DECIDUOUS FRUITS, DRIED FRUITS, FRESH VEGETABLES, FRESH GRAPES. BALFOUR, GUTHRIE & CO., LIMITED, San Francisco, Calif.
Filed December 22, 1930. Serial No. 309,225. PUBLISHED MARCH 31, 1931. Class 46.

283,988. CANNED FRUITS, CANNED VEGETABLES, CANNED FISH, FRESH DECIDUOUS FRUITS, DRIED FRUITS, FRESH VEGETABLES, FRESH GRAPES. BALFOUR, GUTHRIE & CO., LIMITED, San Francisco, Calif.
Filed December 22, 1930. Serial No. 309,226. PUBLISHED MARCH 31, 1931. Class 46.

283,989. EDIBLE OILS. EMERY-DREW, INC., Cincinnati, Ohio.
Filed December 30, 1930. Serial No. 309,465. PUBLISHED MARCH 31, 1931. Class 46.

283,990. POTATOES IN THEIR NATURAL STATE. C. A. LASLEY, INC., Yakima, Wash.
Filed January 10, 1931. Serial No. 309,822. PUBLISHED MARCH 24, 1931. Class 46.

283,991. WATER ICE. NEW YORK SPECIAL YAM-YAM CO., Camden, N. J.
Filed January 13, 1931. Serial No. 309,900. PUBLISHED MARCH 24, 1931. Class 46.

283,992. SALAD DRESSINGS. DESNOS AND SON INC., Flemington, N. J.
Filed January 20, 1931. Serial No. 310,164. PUBLISHED MARCH 24, 1931. Class 46.

283,993. CHOCOLATE-COVERED YEAST BARS. THE TOURAINE COMPANY, Boston, Mass.
Filed January 24, 1931. Serial No. 310,355. PUBLISHED MARCH 24, 1931. Class 46.

283,994. CANNED BAKED BEANS. BERNARD H. KARMEN, doing business as Colonial Food Company, San Francisco, Calif.
Filed January 26, 1931. Serial No. 310,382. PUBLISHED MARCH 31, 1931. Class 46.

283,995. CANNED PINEAPPLE. LIBBY, MCNEILL & LIBBY, Chicago, Ill.,
Filed January 26, 1931. Serial No. 310,392. PUBLISHED MARCH 31, 1931. Class 46.

283,996. MOTION PICTURES REPRODUCED IN COPIES FOR SALE. OSCAR N. SERRE, Los Angeles, Calif.
Filed August 12, 1930. Serial No. 304,518. PUBLISHED MARCH 31, 1931. Class 26.

283,997. WROUGHT-IRON FLOWER STANDS AND TABLE STANDS. IRVING GEORGE SCOTT, New York, N. Y.
Filed August 16, 1930. Serial No. 304,700. PUBLISHED MARCH 31, 1931. Class 32.

283,998. WATER DISTILLERS, STEAM CONDENSERS, VAPOR COOLERS, ETC. THE GRISCOM-RUSSELL COMPANY, New York, N. Y.
Filed October 3, 1930. Serial No. 306,352. PUBLISHED MARCH 24, 1931. Class 23.

283,999. PERFUMES. WORTH, S. A., Paris, France, assignor to Franklin Simon & Co., New York, N. Y., a Corporation of New York.
Filed December 5, 1929. Serial No. 293,306. PUBLISHED MARCH 17, 1931. Class 6.

284,000. GAME PLAYED WITH CUES, BALLS, AND PINS. WASHINGTON BOWLING-BILLIARD COMPANY, Washington, D. C.
Filed December 19, 1929. Serial No. 293,906. PUBLISHED MARCH 24, 1931. Class 22.

284,001. DISHES OF PAPER OR FIBRE. THE DIAMOND MATCH COMPANY, Chicago, Ill., assignor to The Diamond Match Company, Baltimore, Md., a Corporation of Maryland.
Filed December 30, 1929. Serial No. 294,210. PUBLISHED MARCH 18, 1930. Class 2.

284,002. GAME CONSISTING OF CARDS ON WHICH MARKERS ARE PLACED AS IN THE GAME OF LOTTO. BEULAH TOY & NOVELTY CO., Brooklyn, N. Y.
Filed January 16, 1930. Serial No. 294,853. PUBLISHED MARCH 24, 1931. Class 22.

284,003. TABLE COVER MADE OF LEATHER, IMITATION LEATHER, AND WATERPROOF FABRIC. CLUFF COVER COMPANY, INC., New York, N. Y.
Filed January 18, 1930. Serial No. 294,914. PUBLISHED MARCH 31, 1931. Class 50.

284,004. HOSE PIPES OF RUBBER AND FABRIC, LEATHER DRIVING BELTS, STEAM-DOME FLANGE RINGS. VEREINIGTE STAHLWERKE AKTIENGESELLSCHAFT, Dusseldorf, Germany.
Filed February 17, 1930. Serial No. 296,163. PUBLISHED MARCH 31, 1931. Class 35.

284,005. FARM BULLETINS PUBLISHED MONTHLY. DO-WELL AGRICULTURAL SERVICE, INC., Champaign, Ill.
Filed March 12, 1930. Serial No. 297,178. PUBLISHED MARCH 24, 1931. Class 38.

284,006. STICKS OR HANDLES FOR SUCKERS. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y.
Filed March 14, 1930. Serial No. 297,326. PUBLISHED MARCH 31, 1931. Class 13.

284,007. FACE CREAMS, HAND CREAMS, AND MASSAGE CREAMS. EDNA MARINOFF, doing business as Velvosan Co., Brooklyn, N. Y.
Filed March 20, 1930. Serial No. 297,635. PUBLISHED MARCH 10, 1931. Class 6.

284,008. INSECTICIDES, DEODORIZERS, AND PERFUMES. WILLIAM PETERMAN, INC., New York, N. Y.
Filed March 27, 1930. Serial No. 297,983. PUBLISHED MARCH 31, 1931. Class 6.

284,009. SETS OF TWO DECKS OF PLAYING CARDS. THE COMPASS PLAYING CARD COMPANY, New York, N. Y.
Filed April 2, 1930. Serial No. 298,273. PUBLISHED MARCH 24, 1931. Class 22.

284,010. CONSTRUCTION MATERIALS. W. R. MEADOWS, INC., Elgin, Ill.
Filed April 18, 1930. Serial No. 299,074. PUBLISHED MARCH 31, 1931. Class 12.

284,011. A SOPORIFIC CONSISTING OF AN α-ISOPROPYL α-BROM-BUTYRAMIDE. KNOLL A.-G. CHEMISCHE FABRIKEN, Ludwigshafen-on-the-Rhine, Germany.
Filed April 23, 1930. Serial No. 299,326. PUBLISHED MARCH 17, 1931. Class 6.

284,012. PHOTOGRAPHIC AND SOUND FILMS. TONBILD-SYNDIKAT AKTIENGESELLSCHAFT, Berlin, Germany.
Filed April 30, 1930. Serial No. 299,740. PUBLISHED MARCH 24, 1931. Class 26.

284,013. NONALCOHOLIC CORDIAL. LA GRANDE DISTILLERIE E. CUSENIER FILS AINE & CIE., SOCIETE ANONYME, Paris, France.
Filed May 9, 1930. Serial No. 300,207. PUBLISHED SEPTEMBER 16, 1930. Class 45.

284,014. RAZOR BLADES. KRANISH BROS. INC., New York, N. Y.
Filed May 14, 1930. Serial No. 300,528. PUBLISHED MARCH 31, 1931. Class 23.

284,015. FOOD POWDER WHICH MAY BE UTILIZED IN MAKING CANDY, FOOD BEVERAGES, AND OTHER FOOD PRODUCTS. FRANKLIN SANFORD, doing business as The Nectar Malt Company, Cincinnati, Ohio.
Filed May 17, 1930. Serial No. 300,760. PUBLISHED MARCH 31, 1931. Class 46.

284,016. WINDOW FRAMES AND SASHES. G. S. LYON & SONS LUMBER & MFG. CO., Decatur, Ill.
Filed May 20, 1930. Serial No. 300,880. PUBLISHED MARCH 31, 1931. Class 12.

284,017. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. FRANK C. REILLY, New York, N. Y.
Filed February 9, 1931. Serial No. 310,882. PUBLISHED MARCH 24, 1931. Class 6.

284,018. TRAP-SHOOTING APPARATUS INCLUDING TRAPS ARRANGED FOR DISCHARGING CLAY PIGEONS OR LIKE INANIMATE TARGETS. RUSSELL W. ELLIOTT, Kansas City, Mo.
Filed October 9, 1930. Serial No. 306,599. PUBLISHED MARCH 31, 1931. Class 22.

284,019. COLLAPSIBLE BOXES OF WOOD AND METAL CONSTRUCTION. JAMES FILSHILL, doing business as Co-Lap-So Container Company, Oakland, Calif.
Filed July 28, 1930. Serial No. 303,887. PUBLISHED MARCH 31, 1931. Class 2.

284,020. GAS-BURNING APPLIANCES ADAPTED FOR CONVERTING HOUSE-HEATING FURNACES ORIGINALLY DESIGNED FOR BURNING SOLID FUEL INTO GAS-FIRED FURNACES BY REMOVING THE FUEL GRATES. THE SURFACE COMBUSTION CO. INCORPORATED, Toledo, Ohio, now by change of name Surface Combustion Corporation.
Filed August 6, 1930. Serial No. 304,299. PUBLISHED MARCH 31, 1931. Class 34.

284,021. PENCILS. AMERICAN LEAD PENCIL COMPANY, New York, N. Y.
Filed December 15, 1930. Serial No. 308,969. PUBLISHED MARCH 24, 1931. Class 37.

284,022. DRY MORTAR. THE STANDARD LIME AND STONE COMPANY, Martinsburg, W. Va., and Baltimore, Md.
Filed July 9, 1930. Serial No. 303,305. PUBLISHED MARCH 31, 1931. Class 12.

284,023. LUMBER. REDWOOD MANUFACTURERS COMPANY, Pittsburg, Calif.
Filed September 2, 1930. Serial No. 305,241. PUBLISHED MARCH 31, 1931. Class 12.

284,024. LEATHER, RUBBER, FABRIC, AND COMBINATION OF LEATHER, RUBBER, AND FABRIC BOOTS AND SHOES. DACK'S SHOES, INC., Detroit, Mich.
Filed September 19, 1930. Serial No. 305,848. PUBLISHED MARCH 24, 1931. Class 39.

284,025. HEAT AND SOUND INSULATION MATERIAL. ARMSTRONG-NEWPORT COMPANY, Carrollville, Wis.
Filed October 9, 1930. Serial No. 306,552. PUBLISHED MARCH 31, 1931. Class 12.

284,026. BUILDING AND PROTECTIVE PAPER. GLENCOE LIME & CEMENT CO., St. Louis, Mo.
Filed October 22, 1930. Serial No. 307,051. PUBLISHED MARCH 31, 1931. Class 12.

284,027. EDUCATIONAL LITERATURE IN THE FORM OF PRINTED SHEETS, CARDS, POSTERS, OR PAMPHLETS SOLD TO THE TRADE AS SUCH. JOSEPH LUCHS AND STAFF, INC., Philadelphia, Pa.
Filed November 5, 1930. Serial No. 307,557. PUBLISHED MARCH 17, 1931. Class 38.

284,028. COKE. THE KOPPERS COMPANY, Pittsburgh, Pa.
Filed August 7, 1930. Serial No. 304,333. PUBLISHED MARCH 17, 1931. Class 1.

284,029. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS FOR MAKING THE SAME. GEORGE ORINGER, doing business as Oringer Manufacturing Co., Boston, Mass.
Filed August 19, 1930. Serial No. 304,785. PUBLISHED MARCH 31, 1931. Class 45.

284,030. MINERAL WATER FOR TABLE AND OTHER USE AS A DRINKING WATER. ROY CURTISS, Sharon Springs, N. Y.
Filed October 16, 1930. Serial No. 306,808. PUBLISHED MARCH 24, 1931. Class 45.

284,031. SYNTHETIC RESINS, SOLUTIONS OF SYNTHETIC RESINS, AND MIXTURES OBTAINED BY MELTING SYNTHETIC RESINS WITH OTHER CHEMICAL COMPOUNDS. CONSORTIUM FÜR ELEKTROCHEMISCHE INDUSTRIE, G. M. B. H., Munich, Germany.
Filed November 12, 1930. Serial No. 307,802. PUBLISHED MARCH 17, 1931. Class 6.

284,032. GENERAL MEDICINAL TONIC MADE OF EXTRACTS, OF ROOTS, HERBS, AND BARKS. FRANK M. O'NEIL, Muncie, Ind.
Filed July 2, 1930. Serial No. 303,067. PUBLISHED MARCH 24, 1931. Class 6.

284,033. INSECTICIDES AND WOOD PRESERVATIVES. KOPPERS PRODUCTS COMPANY, Pittsburgh, Pa.
Filed July 7, 1930. Serial No. 303,189. PUBLISHED MARCH 24, 1931. Class 6.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

284,034. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) R. B. MIZRAHI, Mexico City, Mexico. Filed Mar. 20, 1929. Serial No. 281,037.

MIZRAHI

For Medicinal Cream for Skin Treatment; Liquid, Powder, and Cream Dentifrice; Cold Cream, Vanishing Cream, Eau de Cologne, Toilet Water, Perfume, Brilliantine, Lip Stick, Rouge, Face and Talc Powder.
Claims use since Dec. 1, 1925.

284,035. (CLASS 15. OILS AND GREASES.) HALSTEAD OIL COMPANY, INC., New York, N. Y. Filed Aug. 10, 1929. Serial No. 288,377.

SPRINGEEZ

For a Preparation for Use as a Rust Solvent and Lubricant and Lubricating Oils and Greases.
Claims use since Nov. 10, 1919.

284,036. (CLASS 33. GLASSWARE.) PACIFIC COAST GLASS CO., San Francisco, Calif., assignor to Illinois Pacific Coast Co., San Francisco, Calif., a Corporation of Delaware. Filed Apr. 14, 1930. Serial No. 298,842.

BIG BOT'L

For Empty Bottles Made of Glass.
Claims use since Jan. 20, 1930.

284,037. (CLASS 37. PAPER AND STATIONERY.) ROTO- UND DEBEGO-WERKE AKTIENGESELLSCHAFT, Konigslutter, Germany. Filed May 5, 1930. Serial No. 299,996.

ROTO

For Mimeographing Devices and Machines, Autographic Registers, and Parts Thereof, Copying Presses, Pencils and Hand Pencil-Sharpening Devices, Letter Files, and Hand Perforating Devices.
Claims use since Feb. 21, 1913.

284,038. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) BARKER BROS. INCORPORATED, Los Angeles, Calif. Filed Sept. 17, 1930. Serial No. 305,777.

TUSCANY

For Radio Receiving Sets and Parts Thereof.
Claims use since Apr. 15, 1930.

284,039. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) BURNDY ENGINEERING COMPANY, INC., New York, N. Y. Filed Feb. 16, 1931. Serial No. 311,082.

HOTTAP

For Electrical Connectors for Wires, Tube, Rod, and the Like.
Claims use since Mar. 1, 1930.

284,040. (CLASS 12. CONSTRUCTION MATERIALS.) ALLEN J. SAVILLE, INC., Richmond, Va. Filed Feb. 27, 1931. Serial No. 311,539.

English Split Stone

For Reinforced Concrete Roof Tile.
Claims use since August, 1927.

284,041. (CLASS 45. BEVERAGES, NONALCOHOLIC.) MOUND CITY BOTTLING CO., St. Louis, Mo. Filed Mar. 31, 1931. Serial No. 312,765.

'DRY WHITE'

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts Used in Making the Same.
Claims use since Feb. 2, 1930.

284,042. (CLASS 38. PRINTS AND PUBLICATIONS.) JAMES C. ZOLL & SON, Baltimore, Md. Filed Apr. 8, 1931. Serial No. 313,103.

AI · ZOLL SERVICE

For Photoprints, Photostat Prints, Photographs, and Blue Prints.

Claims use since Mar. 3, 1930.

284,043. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) LEADCLAD WIRE COMPANY, Wheeling, W. Va. Filed Apr. 15, 1931. Serial No. 313,376.

LEADCLAD

For Wire Chain-Link Fencing, Wire Hex-Mesh Fencing, Wire Poultry Fencing, Steel Gates, Bolts, Nuts, and Rivets.

Claims use since 1922.

TRADE-MARK REGISTRATIONS RENEWED

35,737. TOILET PREPARATIONS FOR TEETH AND HAIR AND PERFUMED SOAP. Registered January 8, 1901. ROGER & GALLET. Renewed January 8, 1931, to Parfumérie Roger Et Gallet, Societe Anonyme, Paris, France, a Corporation of France, successor.

36,717. INTERNAL HEADACHE REMEDIES IN TABLET FORM. Registered July 9, 1901. THE NEURALGYLINE COMPANY, Sistersville, W. Va. Renewed July 9, 1931, to Sterling Products (Incorporated), Wheeling, W. Va., a Corporation of West Virginia, successor.

37,016. GRAPHITE. Registered September 3, 1901. JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J., a Corporation of New Jersey. Renewed September 3, 1931.

37,017. GRAPHITE. Registered September 3, 1901. JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J., a Corporation of New Jersey. Renewed September 3, 1931.

37,148. BOSTON BROWN BREAD FLOUR. Registered October 1, 1901. MAYFLOWER MILLS, Fort Wayne, Ind., a Corporation of Indiana. Renewed October 1, 1931.

37,187. FABRICS OF SILK AND SATIN. Registered October 15, 1901. WILLIAM SKINNER MANUFACTURING CO., Holyoke and Boston, Mass.; New York, N. Y.; Chicago, Ill.; and Philadelphia, Pa. Renewed October 15, 1931, to William Skinner & Sons, of Holyoke, Mass., and New York, N. Y., an Association of Massachusetts, assignee.

37,229. PRINTING INK. Registered October 22, 1901. THE STANDARD PRINTING INK CO., Cincinnati, Ohio, a Corporation of Ohio. Renewed October 22, 1931.

81,463. METAL DEVICES FOR SUPPORTING AND SPACING CONCRETE-REINFORCING MEMBERS. Registered April 11, 1911. WILLIAM B. HOUGH COMPANY. Renewed April 11, 1931, to Metal Building Materials Company, Chicago, Ill., a Corporation of Maine, assignee.

81,612. CERTAIN REMEDIES. Registered April 25, 1911. THE KOENIG MEDICINE COMPANY. Renewed April 25, 1931, to Koenig Medicine Company, Chicago, Ill., a Corporation of Illinois, assignee.

81,614. A NON-TOXIC MEDICAL ANTISEPTIC FOR INTERNAL AND EXTERNAL APPLICATION. Registered April 25, 1911. FREDERICK AUGUST LUYTIES. Renewed April 25, 1931, to Luyties Pharmacal Company, St. Louis, Mo., a Corporation of Missouri, assignee by mesne assignments.

81,631. CERTAIN FOODS. Registered April 25, 1911. F. E. ROYSTON & CO., Aurora, Ill., a Corporation of Illinois. Renewed April 25, 1931.

81,737. FIRST-COAT OR PRIMING PAINTS. Registered May 2, 1911. EUGENE E. NICE, Philadelphia, Pa. Renewed May 2, 1931.

81,794. CHOCOLATES. Registered May 9, 1911. DILLING & COMPANY, Indianapolis, Ind., a Corporation of Indiana. Renewed May 9, 1931.

81,822. SALVE. Registered May 9, 1911. VICTORIA M. PICKEL, Columbus, Ohio. Renewed May 9, 1931.

81,946. LYE OR POTASH. Registered May 23, 1911. B. T. BABBITT. Renewed May 23, 1931, to B. T. Babbitt, Inc., Jersey City, N. J., and New York, N. Y., a Corporation of New York, assignee.

81,966. AN ANTISEPTIC HEALING-LOTION. Registered May 23, 1911. FRANK B. DENNIE, doing business as Security Remedy Co. and Security Food Co., Minneapolis, Minn. Renewed May 23, 1931.

82,027. KNIT UNDERWEAR. Registered May 23, 1911, SPRINGFIELD KNITTING CO., Springfield, Mass. Renewed May 23, 1931, to The William Carter Company, Needham Heights, Mass., a Corporation of Massachusetts, assignee.

82,097. OLIVE-OIL. Registered May 30, 1911. LEKAS AND DRIVAS, New York, N. Y., a Corporation of New York. Renewed May 30, 1931.

82,182. KNIT UNDERWEAR. Registered June 6, 1911. SPRINGFIELD KNITTING CO., Springfield, Mass. Renewed June 6, 1931, to The William Carter Company, Needham Heights, Mass., a Corporation of Massachusetts, assignee.

82,240. LUBRICATING OILS AND GREASES. Registered June 13, 1911. The R. J. KANTER COMPANY, New York, N. Y., a Corporation of New York. Renewed June 13, 1931.

82,241. LUBRICATING OILS AND GREASES. Registered June 13, 1911. The R. J. KANTER COMPANY, New York, N. Y., a Corporation of New York. Renewed June 13, 1931.

82,462. COCOA WITH MILK AND CHOCOLATE WITH MILK. Registered June 27, 1911. NESTLÉ & ANGLO-SWISS CONDENSED MILK CO., Cham, Switzerland. Renewed June 27, 1931, to Nestle's Milk Products, Inc., New York, N. Y., a Corporation of New York, assignee.

82,574. TOILET CREAM. Registered July 11, 1911. COFFIN REDINGTON CO. Renewed July 11, 1931, to Coffin-Redington Co., San Francisco, Calif., a Corporation of California, successor.

82,583. CREAM CANDY. Registered July 11, 1911. DILLING & COMPANY, Indianapolis, Ind., a Corporation of Indiana. Renewed July 11, 1931.

82,734. HOSIERY. Registered July 18, 1911. WALKER STETSON CO., Boston, Mass., a Corporation of Massachusetts. Renewed July 18, 1931.

82,755. CERTAIN MACHINERY. Registered July 25, 1911. JOHN BROWN & CO. LIMITED, Sheffield, England, a Corporation of Great Britain. Renewed July 25 1931.

82,799. A POLISHING AND CLEANSING MATERIAL FOR METAL AND CUT GLASS. Registered July 25, 1911. A. R. JUSTICE COMPANY. Renewed July 25, 1931, to A. R. Justice Company, Philadelphia, Pa., a Corporation of Pennsylvania, successor.

82,844. A REMEDY FOR VENEREAL DISEASES. Registered July 25, 1911. THE TARRANT COMPANY, New York, N. Y., a Corporation of New York. Renewed July 25, 1931.

82,922. COAL. Registered August 1, 1911. SYCAMORE COAL COMPANY, Vivian, W. Va. Renewed August 1, 1931, to Sycamore Coal Company, Huntington, W. Va., a Corporation of West Virginia.

83,015. NEEDLES FOR SEWING BY MACHINE. Registered August 8, 1911. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., a Corporation of New Jersey. Renewed August 8, 1931.

83,024. COAL. Registered August 8, 1911. SYCAMORE COAL COMPANY, Huntington, W. Va., a Corporation of West Virginia. Renewed August 8, 1931.

83,176. NEWSPAPERS. Registered August 22, 1911. THE NEW YORK TIMES COMPANY, New York, N. Y., a Corporation of New York. Renewed August 22, 1931.

83,297. FRESH ORANGES AND GRAPE-FRUIT. Registered August 29, 1911. UPLAND CITRUS ASS'N. Renewed August 29, 1931, to Upland Citrus Association, Upland; Calif., a Corporation of California, successor.

83,372. CAKE. Registered September 5, 1911. THE F. O. STONE BAKING CO., Cincinnati, Ohio. Renewed September 5, 1931, to Wonder Bakeries Co., Inc., Buffalo, N. Y., a Corporation of New York, assignee.

83,502. WATER-GAGES. Registered September 19, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed September 19, 1931.

83,595. A PERIODICAL PUBLICATION. Registered September 26, 1911. NEW YORK EVENING JOURNAL PUBLISHING COMPANY. Renewed September 26, 1931, to New York Evening Journal, Inc., New York, N. Y., a Corporation of New York, successor.

83,590. A REMEDY FOR SYPHILIS AND SIMILAR BLOOD DISEASES. Registered September 26, 1911. H. A. METZ & Co. Rewned September 26, 1931, to H. A. Metz Laboratories, Inc., New York, N. Y., a Corporation of New York, assignee.

83,591. A REMEDY FOR SYPHILIS AND SIMILAR BLOOD DISEASES. Registered September 26, 1911. H. A. METZ & Co. Renewed September 26, 1931, to H. A. Metz Laboratories, Inc., New York, N. Y., a Corporation of New York, assignee.

83,661. VALVES. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,662. LUBRICATORS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,663. OIL-CUPS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,664. OIL-CUPS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,665. GREASE-CUPS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,666. GREASE-CUPS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,668. LUBRICATORS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,669. LUBRICATORS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,671. LUBRICATORS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,673. OIL-PUMPS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,675. OIL-CUPS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,678. LUBRICATORS. Registered October 3, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 3, 1931.

83,698. LAUNDRY STARCH. Registered October 3, 1911. A. E. STALEY M'F'G. CO., Decatur, Ill., and Baltimore, Md. Renewed October 3, 1931, to A. E. Staley Manufacturing Company, Decatur, Ill., a Corporation of Delaware.

83,707. WALL-PAPER CLEANER. Registered October 10, 1911. THE ABSORENE MANUFACTURING COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed October 10, 1931.

83,710. STEAM-PUMPS. Registered October 10, 1911. THE AMERICAN WELL & PROSPECTING CO., Corsicana, Tex., a Corporation of Oklahoma. Renewed October 10, 1931.

83,751. POP SAFETY-VALVES. Registered October 10, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 10, 1931.

83,752. GATE-VALVES. Registered October 10, 1911. THE LUNKENHEIMER COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed October 10, 1931.

83,755. WINES. Registered October 10, 1911. ANDREW MATTEI, Fresno, Calif. Renewed October 10, 1931.

83,795. WIRE. Registered October 10, 1911. THE WEBB WIRE WORKS, New Brunswick, N. J., a Corporation of New Jersey. Renewed October 10, 1931.

83,806. HEAT-INSULATING MATERIALS. Registered October 17, 1911. ARMSTRONG CORK COMPANY, Pittsburgh, Pa. Renewed October 17, 1931, to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania.

83,813. SARDINES. Registered October 17, 1911. MAX BLOCK. Renewed October 17, 1931, to Max Block & Co. Inc., New York, N. Y., a Corporation of New York, assignee.

83,818. CARBON-PAPER AND TYPE-WRITER RIBBONS. Registered October 17, 1911. COLUMBIA RIBBON & CARBON MANUFACTURING COMPANY, New York, N. Y. Renewed October 17, 1931, to Columbia Ribbon and Carbon Manufacturing Company, Inc., Glen Cove, N. Y., a Corporation of New York, assignee.

83,853. WATERPROOF FABRICS. Registered October 17, 1911. THE PANTASOTE LEATHER COMPANY, Passaic, N. J., a Corporation of New Jersey. Renewed October 17, 1931.

83,877. CLOCKS AND WATCHES. Registered October 17, 1911. THE WESTERN CLOCK MANUFACTURING COMPANY. Renewed October 17, 1931, to Western Clock Company, Peru, Ill., a Corporation of Illinois, assignee.

83,898. PINE-TAR. Registered October 24, 1911. JAS. CORNER & SONS. Renewed October 24, 1931, to John P. Baer, doing business as Jas. Corner & Sons, Baltimore, Md., successor.

83,917. A GLYCERIN SUBSTITUTE. Registered October 24, 1911. CHAS. W. JACOB & ALLISON, New York, N. Y. Renewed October 24, 1931.

83,927. REFRIGERATORS. Registered October 24, 1911. MAINE MANUFACTURING COMPANY. Renewed October 24, 1931, to The Maine Manufacturing Company, Nashua, N. H., a Corporation of New Hampshire, successor.

83,962. JUTE BAGS. Registered October 24, 1911. YOUNG & METZNER. Renewed October 24, 1931, to Young & Metzner, Inc., Long Island City, N. Y., a Corporation of New York, successor.

83,964. JUTE BAGS. Registered October 24, 1911. YOUNG & METZNER. Renewed October 24, 1931, to Young & Metzner, Inc., Long Island City, N. Y., a Corporation of New York, successor.

83,965. JUTE BAGS. Registered October 24, 1911. YOUNG & METZNER. Renewed October 24, 1931, to Young & Metzner, Inc., Long Island City, N. Y., a Corporation of New York, successor.

83,968. LABELING-MACHINES AND PARTS OF LABELING-MACHINES. Registered October 24, 1911. ECONOMIC MACHINERY COMPANY. Renewed October 24, 1931, to Economic Machinery Company, Worcester, Mass., a Corporation of Massachusetts, assignee.

83,982. ORANGES, LEMONS, GRAPE-FRUIT, LIMES, AND TANGERINES. Registered October 31, 1911. BRADENTOWN CITRUS GROWERS ASS'N, Bradentown, Fla. a Corporation of Florida. Renewed October 31, 1931.

83,984. TEAS. Registered October 31, 1911. BROOKE BOND & COMPANY, LIMITED, London, England, a Corporation of Great Britain. Renewed October 31, 1931.

83,989. SOLE-LEATHER. Registered October 31, 1911. F. P. COVER & SONS. Renewed October 31, 1931, to F. P. Cover & Sons, Inc., Andrews, N. C., a Corporation of North Carolina, successor.

83,993. CANDY KISSES. Registered October 31, 1911. DILLING & COMPANY, Indianapolis, Ind., a Corporation of Indiana. Renewed October 31, 1931.

84,002. CERTAIN FOODS. Registered October 31, 1911. S. HAMILL COMPANY, Keokuk, Iowa, a Corporation of Iowa. Renewed October 31, 1931.

84,006. MINING-MACHINES. Registered October 31, 1911. THE JEFFREY MANUFACTURING COMPANY, Columbus, Ohio, a Corporation of Ohio. Renewed October 31, 1931.

84,053. JUTE BAGS. Registered October 31, 1911. YOUNG & METZNER. Renewed October 31, 1931, to Young & Metzner, Inc., Long Island City, N. Y., a Corporation of New York, successor.

LABELS

REGISTERED JUNE 9, 1931

39,244.—*Title:* ABBOTT'S AROMATIC BITTERS. For Bitters. C. W. ABBOTT & CO., INC., Baltimore, Md. Published February 10, 1931.

39,245.—*Title:* JAY-LIN. For a Game. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,246.—*Title:* SIMBA. For a Game. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,247.—*Title:* BUNKER GOLF. For a Game. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,248.—*Title:* ROW-O-WINKS TIDDLEDY WINKS. For a Game. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,249.—*Title:* BEAN-EM. For a Game. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,250.—*Title:* FLAP JACKS. For a Game. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,251.—*Title:* SKY-HAWKS. For Combination Construction Game and Toy. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,252.—*Title:* WATCH ON DE RIND. For a Game. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,253.—*Title:* BATTLE OF BALLOTS. For a Game. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,254.—*Title:* GLYDOR. For a Game. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,255.—*Title:* ARROW MOTOR OIL. For Motor Oil. THE B. B. OIL COMPANY, Philadelphia, Pa. Published April 10, 1931.

39,256.—*Title:* ODORNOX. For Chemical Preparation for Deodorizing Purposes. BLEENDES CHEMICAL CO., Brooklyn, N. Y. Published April 6, 1931.

39,257.—*Title:* BRISSON'S RHEUMATIC REMEDY. For a Medicinal Preparation for Treating Rheumatism. E. BRISSON & CO., Chippewa Falls, Wis. Published February 1, 1931.

39,258.—*Title:* SOCIAL COFFEE ALWAYS FRESH. For Coffee. BRONX COFFEE COMPANY, New York, N. Y. Published February 26, 1931.

39,259.—*Title:* GOLDEX. For Malt Syrup. BUFFALO MALT COMPANY, INC., Buffalo, N. Y. Published December 31, 1930.

39,260.—*Title:* COLONIAL CLUB. For Ginger Ale. CALIFORNIA BOTTLING WORKS, Los Angeles, Calif. Published March 1, 1931.

39,261.—*Title:* INVICTUS. For Foot Cream. CASTEEN CO., INC., Union City, N. J. Published March 1, 1931.

39,262.—*Title:* CHALLENGE CHEESE SPREAD. For Cheese Spreads. CHALLENGE CREAM AND BUTTER ASSOCIATION, Los Angeles, Calif. Published January 3, 1931.

39,263.—*Title:* THE GAME OF COMPOSERS. For a Game. HAROLD G. DAVIDSON, Columbus, Ohio. Published April 28, 1931.

39,264.—*Title:* DALCO. For Alcohol for Massage, Bathing, and Rubbing. THE DRUG PRODUCTS CO. INC., Long Island City, N. Y. Published March 6, 1931.

39,265.—*Title:* IGLOO. For Frozen Confections. ELROD ICE CREAM COMPANY, Dallas, Tex. Published March 19, 1931.

39,266.—*Title:* E-RA-SM. For Dry Window Cleaning Powder. ERASM CHEMICAL CORPORATION OF AMERICA, INC., Cincinnati, Ohio. Published March 25, 1931.

39,267.—*Title:* HOMAX. For waxes. FEDERAL RESEARCH CORPORATION, Woodland, Ill. Published April 15, 1931.

39,268.—*Title:* MILK MAID BREAD. For Bread. FITTS BROS., INC., Framingham, Mass. Published February 17, 1931.

39,269.—*Title:* WASHBURN'S BUCKWHEAT, WHEAT AND CORN PANCAKE FLOUR. For Pancake Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published November 22, 1930.

39,270.—*Title:* A CLOTH PRESERVER FOR AUTO TOPS. For Cloth Preserver for Auto Tops. CHARLES JAMES INGERSOLL, doing business as New Life Paint Manufacturing Company, Seattle, Wash. Published March 31, 1931.

39,271.—*Title:* IMPS FOR QUALITY. For Tube Patches. INLAND MOTOR PRODUCTS COMPANY, Des Moines, Iowa. Published March 14, 1931.

39,272.—*Title:* JUCI-SWEET. For Orange Drink. JUCI-SWEET PRODUCTS INC., Howey-in-the-Hills, Fla. Published February 20, 1931.

39,273.—*Title:* JUCI-SWEET. For Grapefruit Drink. JUCI-SWEET PRODUCTS INC., Howey-in-the-Hills, Fla. Published February 20, 1931.

39,274.—*Title:* NATCOLA. For a Hair Restorer. NATHAN LEIBEL, doing business as the De Belle Chemical Co., Bronx, N. Y. Published March 17, 1931.

39,275.—*Title:* 'DELUXE' QUALITY. For Hand Made Hollow Point Snelled Hooks. W. H. MEYER & SON, INC., Brooklyn, N. Y. Published October 2, 1930.

39,276.—*Title:* PABCO ROOFWELD. For Plastic Cement. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Published April 2, 1931.

39,277.—*Title:* L'MANDA. For Toilet Cream. PARAFUMERIE DOLLUP, INC., New York, N. Y. Published April 25, 1931.

39,278.—*Title:* POUDRE A JAMAIS. For Face Powder. RUTH PASKIN, doing business as Maison de Paris, New York, N. Y. Published July 1, 1930.

39,279.—*Title:* PEACOCK. For Hair Nets. RENILO COMPANY, New York, N. Y. Published June 6, 1923.

39,280.—*Title:* AMERICAN BEAUTY. For Mattresses. ROYAL BEDDING COMPANY, Pittsburgh, Pa. Published April 7, 1931.

39,281.—*Title:* OFFICIAL MICKEY MOUSE CANDY BAR 5¢ OF THE MICKEY MOUSE SAFETY CLUB. For Candy Bars. WALTER W. SHAW, Winnipeg, Canada. Published November 3, 1930.

39,282.—*Title:* SHELBY'S MENTHOL CHEWING GUM. For Menthol Chewing Gum. THE SHELBY GUM COMPANY, Richland, Ohio. Published April 6, 1931.

39,283.—*Title:* OLD COUNTRY. For Malt Syrup. THE A. SHERMAN MFG. CO. INC., Stamford, Conn. Published December 1, 1929.

39,284.—*Title:* DR. HART'S COURAGE—BLOOD PILLS. For Vegetable Medicinal Preparation. FRANK M. STARR, doing business as The Starr Medicine Company, San Francisco, Calif. Published May 1, 1931.

39,285.—*Title:* MARWOOD PETROLEUM PRODUCTS. For Petroleum Products. JAMES STEVENSON AND CO., Youngstown, Ohio. Published March 12, 1931.

39,286.—*Title:* SURE BLOOMING. For Narcissus Bulbs. TALMAGE GARDENS CO., De Land, Fla. Published September 1, 1930.

39,287.—*Title:* TAYLOR COLOR. For Colors. TAYLOR SYSTEM, INCORPORATED, New York, N. Y. Published January 31, 1931.

39,288.—*Title:* CHICKEN AND EGG NOODLE DINNER. For Chicken and Egg Noodles. TRIPOLI FOODS, INC., Baltimore, Md. Published April 6, 1931.

39,289.—*Title:* VINELAND EGG PRODUCERS, INC., VINELAND, N. J. For Eggs. VINELAND EGG PRODUCERS, INC., Vineland, N. J. Published April 24, 1931.

39,290.—*Title:* HANDI-PAK CINNAMON ROLLS. For Cinnamon Rolls. WAXIDE PAPER COMPANY, Kansas City, Mo. Published March 30, 1931.

39,291.—*Title:* MERODE SUNSEAL BATHING SUITS. For Bathing Suits. WINSHIP, BOIT & CO., Wakefield, Mass. Published April 14, 1931.

PRINTS

REGISTERED JUNE 9, 1931

13,223.—*Title:* THE TRIUMPH OF COLOR IN MAKE-UP. For Amoretta Cream, Crème de France, Lilie Lotion, Rouge Amorette. ELIZABETH ARDEN INC., doing business as Elizabeth Arden, New York, N. Y. Published May 5, 1931.

13,224.—*Title:* THE FIVE SENSE CIGAR. For Cigars. BAYUK CIGARS INCORPORATED, Philadelphia, Pa. Published March 13, 1931.

13,225.—*Title:* ST. BLASE CHERRY COUGH SYRUP. For Cough Syrup. MILTON W. FOLDS, Chicago, Ill. Published January 10, 1931.

13,226.—*Title:* HOW YOU'LL ENJOY THIS FLAVORFUL SOUP . . WITH ITS ADDED GOODNESS OF RICH, THICK CREAM! For Cream of Tomato Soup. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published May 2, 1931.

13,227.—*Title:* THE GAME OF RACKET. For Game Apparatus. ARTHUR S. LITTLEFIELD, Winnetka, Ill. Published February 18, 1931.

13,228.—*Title:* THE GAME OF PARICHANCE. For Game Apparatus. ARTHUR S. LITTLEFIELD, Winnetka, Ill. Published February 18, 1931.

13,229.—*Title:* SHELBY'S MENTHOL CHEWING GUM. For Menthol Chewing Gum. THE SHELBY GUM COMPANY, Richland, Ohio. Published April 6, 1931.

13,230.—*Title:* THIS 4 OUNCE BOTTLE MAKES 12 FULL PINTS OF REFRESHING MOUTH WASH. For Mouth Wash. FREDERICK STEARNS & COMPANY, Detroit, Mich. Published March 23, 1931.

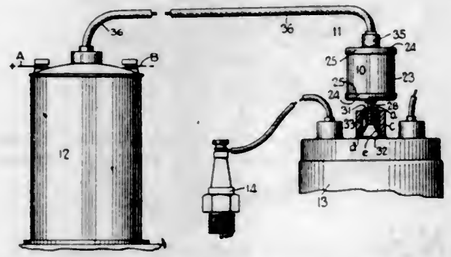
13,231.—*Title:* NATION'S FOREMOST LABORATORIES FIND THAT ONLY ASTRING-O-SOL HAS THESE 5 ESSENTIAL PROPERTIES. For Mouth Wash. FREDERICK STEARNS & COMPANY, Detroit, Mich. Published March 23, 1931.

13,232.—*Title:* VOSINE. For Antiseptic for the Nose, Throat and Mouth. THE VOSINE CO., Lynn, Mass. Published March 3, 1931.

REISSUES

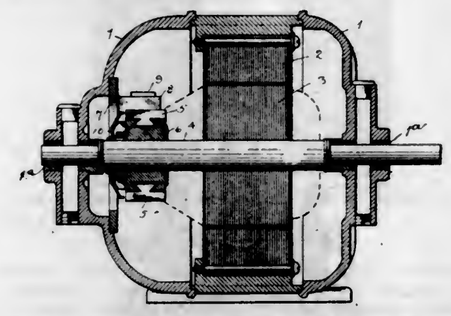
JUNE 9, 1931

18,092. HIGH TENSION IGNITION AMPLIFIER. PATTERSON O. STEWART, New York, N. Y. Original No. 1,774,339, dated Aug. 26, 1930, Serial No. 448,986, filed May 1, 1930. Application for reissue filed Jan. 16, 1931. Serial No. 509,245. 20 Claims. (Cl. 123—148.)



1. In a device for the ignition system of gas engines, an insulating casing, elongated floating electrodes mounted for relative vibrative conducting movements within said casing, and conductive elements coordinating with the electrodes for the purpose specified.

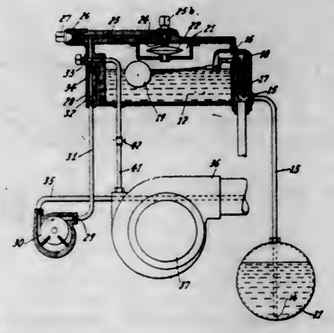
18,093. SHORT CIRCUITING DEVICE FOR MOTOR COMMUTATORS. EVERETT P. LARSH, Dayton, Ohio, assignor to The Master Electric Company, Dayton, Ohio, a Corporation of Ohio. Original No. 1,678,517, dated July 24, 1928, Serial No. 363,402, filed Mar. 5, 1920. Application for reissue filed May 11, 1929. Serial No. 362,425. 42 Claims. (Cl. 172—279.)



26. In a short circuiting device for electric motors, a series of commutator bars to be electrically interconnected, an annular series of centrifugally actuated contact members located in juxtaposition to the lateral face of the commutator, and an annular contractile spring means concentrically arranged exteriorly of the contact members, against the tension of which said members are radially slidable upon the commutator bars to afford wiping engagement therewith under the action of centrifugal influence.

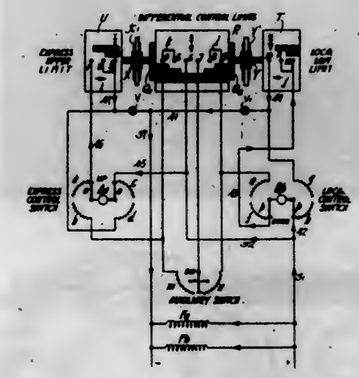
18,094. FEEDING MEANS FOR FLUID FUELS OR THE LIKE. LOUIS LAVOIE, Quebec, Quebec, Canada. Original No. 1,774,714, dated Sept. 2, 1930, Serial No. 180,472, filed Apr. 2, 1927. Application for reissue filed Jan. 6, 1931. Serial No. 507,010. 6 Claims. (Cl. 158—36.1.)

6. A fuel feeding apparatus of the character described comprising a fuel feeding tank, a main suction line, means for maintaining a relatively low grade of vacuum in one section of said line and a relatively high grade of vacuum in another section of said line, said means being adjustable to vary the vacuum in both sections of the line without affecting the ratio therebetween, means connecting the low vacuum section of the line to the feed tank to



maintain in said tank a constant degree of vacuum sufficient to feed fuel thereto from a lower level and a fuel feed channel having its lower end positioned below the fuel level in said tank and its upper end communicating with the high vacuum section of said suction line at a point above the fuel level.

18,095. DUAL ELEVATOR SYSTEM AND CONTROL. FRANK J. SPRAGUE, New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original No. 1,763,198, dated June 10, 1930, Serial No. 158,244, filed Dec. 31, 1926. Application for reissue filed Mar. 13, 1931. Serial No. 522,417. 27 Claims. (Cl. 187—16.)

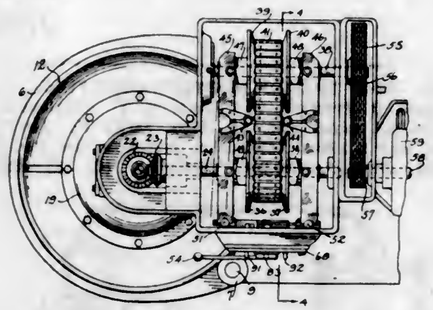


1. In a control system for two independent reversible motors, the combination of manually operated controllers for each of the motors and a supplemental automatically operated controller for one only of the two direction controlling circuits of each of the motors, said controller comprising a reversible floating member controlling said circuits by means of a revolvable spider having gears mounted

so as to freely rotate about its radial axes, and gears on each side of and engaging the spider gears independently driven by the two motors.

18,096. MIXING MACHINE. WALTER F. DEHUFF, Glen Rock, Pa. Original No. 1,781,321, dated Nov. 11, 1930, Serial No. 360,577, filed May 4, 1929. Application for reissue filed Jan. 15, 1931. Serial No. 509,043. 11 Claims. (Cl. 64—8.)

1. In a variable speed gear, the combination with a casing, two parallel shafts mounted therein, a spline on each shaft, a pair of cone-shaped driving elements held on each shaft by the spline and adapted to slide toward and away from each other, a belt operably passing between the driving elements of said pairs, levers pivoted between said parallel shafts and operably connected each to one driving element of each pair, means for simultaneously oscillating both of said levers to cause the driving elements of one pair to approach while the driving elements of the other pair recede from one another, said means comprising a stub shaft, an operating handle at one end for rotating said shaft, a gear at the other end, fixed slides extending radially of the axis of said shaft, at

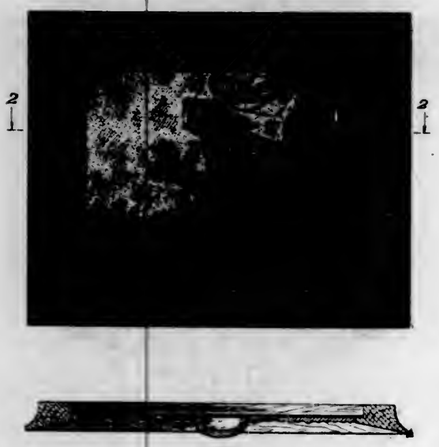


diametrically opposite points, guides slidable of said slides, and rack bars engaging said gear and connected to said slides.

DESIGNS

JUNE 9, 1931

84,314. RAISED METAL PLAQUE. CHARLES M. BECKER, Brooklyn, N. Y. Filed Jan. 20, 1931. Serial No. 38,402. Term of patent 3½ years.



The ornametnal design for a raised metal plaque as shown and described.

84,315. LAMP. CHARLES M. BECKER, Brooklyn, N. Y. Filed Apr. 15, 1931. Serial No. 39,484. Term of patent 3½ years.



The ornamental design for a lamp as shown.

84,316. CABINET FOR RADIO RECEIVING APPARATUS. CHARLES S. BRADLEY, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 17, 1931. Serial No. 38,693. Term of patent 7 years.



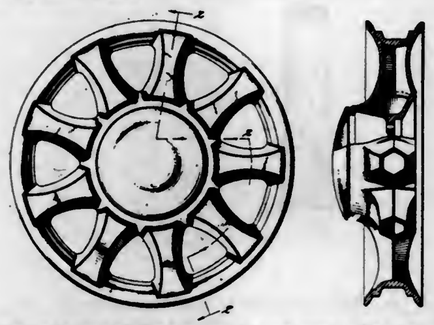
The ornamental design for a cabinet for radio receiving apparatus, as shown and described.

84,317. BOTTLE. ELI BECKER and ISAAC MILLER, Cleveland, Ohio. Filed Apr. 11, 1931. Serial No. 39,456. Term of patent 14 years.



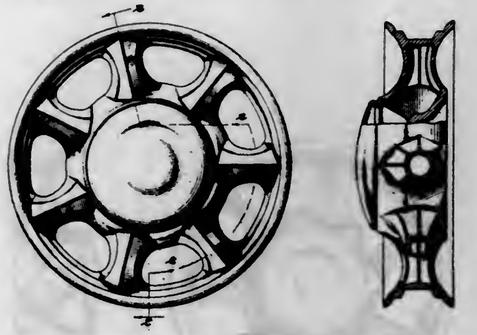
The ornamental design for a bottle substantially as shown.

84,318. NINE SPOKE FLAT HEXAGON VEHICLE WHEEL. PAUL E. BEUTKE and BERT W. NELSON, Los Angeles, Calif., assignors to American Alumalloy Custom Wheel Company, Ltd., Las Vegas, Nev., a Corporation of Nevada. Filed Apr. 8, 1931. Serial No. 39,403. Term of patent 7 years.



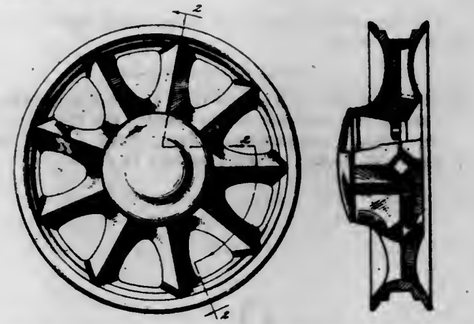
The ornamental design for a nine spoke flat hexagon vehicle wheel, as shown.

84,319. SEVEN SPOKE FLAT OCTAGON VEHICLE WHEEL. PAUL E. BEUTKE and BERT W. NELSON, Los Angeles, Calif., assignors to American Alumalloy Custom Wheel Company, Ltd., Las Vegas, Nev., a Corporation of Nevada. Filed Apr. 8, 1931. Serial No. 39,404. Term of patent 7 years.



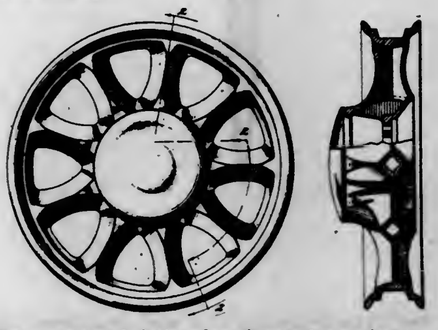
The ornamental design for seven spoke flat octagon vehicle wheel, as shown.

84,320. NINE SPOKE SQUARE VEHICLE WHEEL. PAUL E. BEUTKE and BERT W. NELSON, Los Angeles, Calif., assignors to American Alumalloy Custom Wheel Company, Ltd., Las Vegas, Nev., a Corporation of Nevada. Filed Apr. 8, 1931. Serial No. 39,405. Term of patent 7 years.



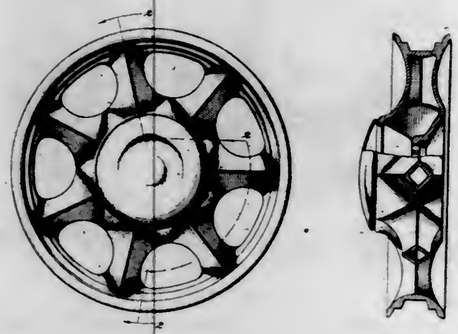
The ornamental design for nine spoke square vehicle wheel, as shown.

84,321. NINE SPOKE SEMISQUARE VEHICLE WHEEL. PAUL E. BEUTKE and BERT W. NELSON, Los Angeles, Calif., assignors to American Alumalloy Custom Wheel Company, Ltd., Las Vegas, Nev., a Corporation of Nevada. Filed Apr. 8, 1931. Serial No. 39,406. Term of patent 14 years.



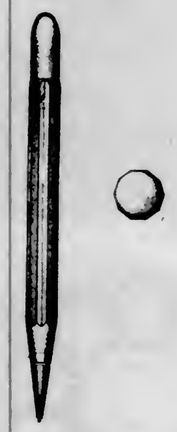
The ornamental design for nine spoke semisquare vehicle wheel, as shown.

84,322. SEVEN SPOKE SQUARE VEHICLE WHEEL. PAUL E. BEUTKE and BERT W. NELSON, Los Angeles, Calif., assignors to American Alumalloy Custom Wheel Company, Ltd., Las Vegas, Nev., a Corporation of Nevada. Filed Apr. 8, 1931. Serial No. 39,407. Term of patent 7 years.



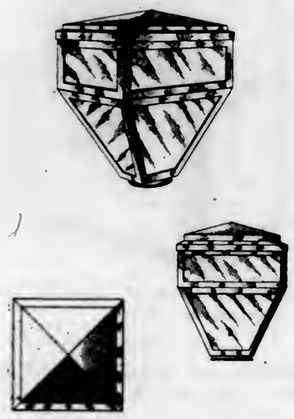
The ornamental design for seven spoke square vehicle wheel, as shown.

84,323. MECHANICAL PENCIL. ANDREAS BIENENSTEIN, Toledo, Ohio, assignor to The Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 16, 1931. Serial No. 38,322. Term of patent 14 years.



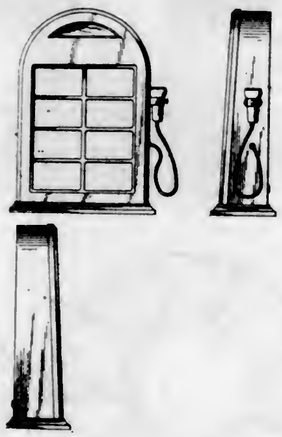
The ornamental design for a mechanical pencil substantially as shown and described.

84,324. ADVERTISING LANTERN. MORTIMER W. BOWEN, Jackson Heights, N. Y., assignor to Vacuum Oil Company, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1931. Serial No. 39,423. Term of patent 14 years.



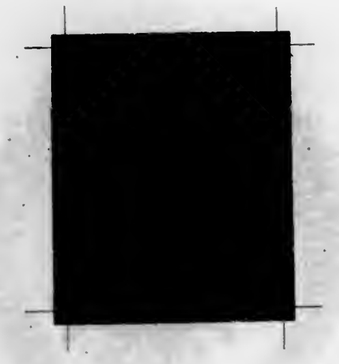
The ornamental design for an advertising lantern, as shown.

84,325. DISPLAY CABINET. ROSCOE TRACY BURROWS, Barre, Vt. Filed Mar. 2, 1931. Serial No. 38,909. Term of patent 14 years.



The ornamental design for display cabinet, as shown.

84,326. RUBBER OR LIKE ARTICLE. JAMES J. CONWAY, West Haven, Conn., assignor to The Seamless Rubber Company, Inc., New Haven, Conn., a Corporation of Massachusetts. Filed Feb. 7, 1931. Serial No. 38,581. Term of patent 14 years.



The ornamental design for rubber or like article substantially as shown.

84,327. BRIDGE MEMBER FOR AN OPHTHALMIC MOUNTING. OTTO W. DECHAU, Rochester, N. Y., assignor to Artcraft Optical Co. Inc., a Corporation of New York. Filed Mar. 30, 1931. Serial No. 39,303. Term of patent 7 years.



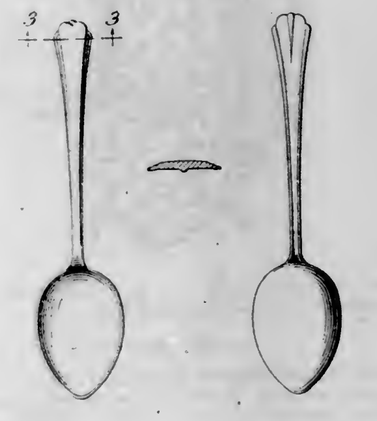
The ornamental design for a bridge member for an ophthalmic mounting, as shown.

84,328. RUBBER SHEETING OR LIKE ARTICLE. WALLACE W. DE LANEY, New Haven, Conn., assignor to The Seamless Rubber Company, Inc., New Haven, Conn., a Corporation of Massachusetts. Filed Jan. 29, 1931. Serial No. 38,475. Term of patent 14 years.



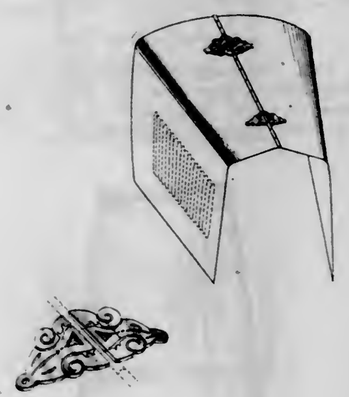
The ornamental design for rubber sheeting or like article substantially as shown.

84,329. SPOON OR ANALOGOUS ARTICLE. ALFRED J. FLAUDER, Trumbull, Conn., assignor to Weidlich Sterling Spoon Co., Bridgeport, Conn., a Partnership consisting of Louis Weidlich, Stratford, Conn., Frank B. Weidlich, New York, N. Y., and William Weidlich, Bridgeport, Conn. Filed Mar. 26, 1931. Serial No. 39,248. Term of patent 7 years.



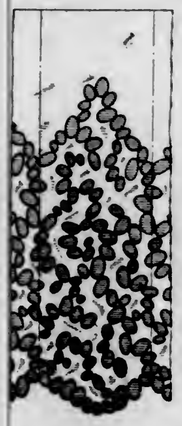
The ornamental design for a spoon or analogous article substantially as shown.

84,330. AUTOMOBILE HOOD. LEONARD J. FOX, Cincinnati, Ohio. Filed Apr. 2, 1930. Serial No. 35,105. Term of patent 14 years.



The ornamental design for an automobile hood as shown.

84,331. EMBROIDERED TEXTILE FABRIC. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Mar. 5, 1931. Serial No. 38,956. Term of patent 3½ years.



The ornamental design for embroidered textile fabric substantially as shown and described.

84,332. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Apr. 4, 1931. Serial No. 39,372. Term of patent 3½ years.

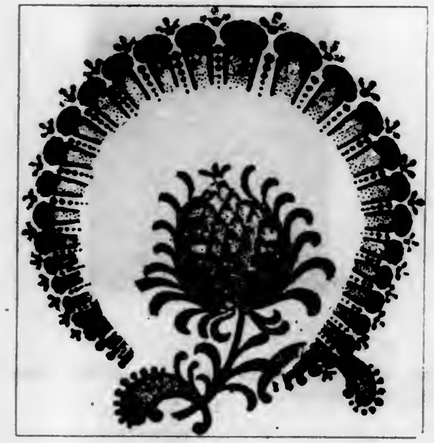
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

84,333. JAR. EDWIN W. FUERST, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 9, 1931. Serial No. 39,412. Term of patent 14 years.



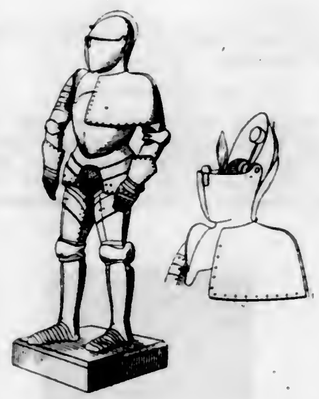
The ornamental design for a jar substantially as shown.

84,334. TEXTILE FABRIC. JACK J. HAUSMAN, Brooklyn, N. Y. Filed Feb. 17, 1931. Serial No. 38,707. Term of patent 3½ years.



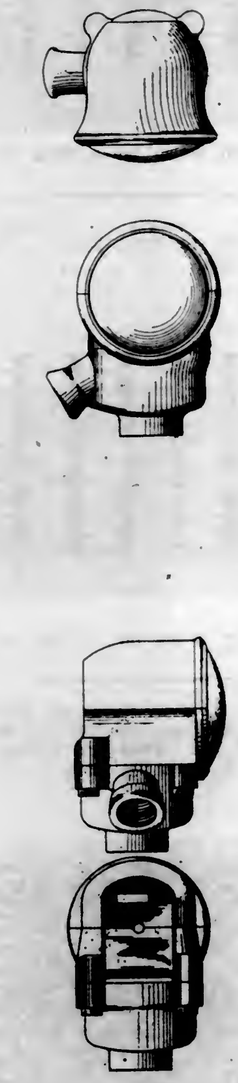
The ornamental design for textile fabric, as shown.

84,335. TABLE LIGHTER. RAY R. HUTCHESON, Richmond Hill, N. Y., assignor to Wm. Demuth & Co., a Corporation of New York. Filed Mar. 6, 1931. Serial No. 38,977. Term of patent 7 years.



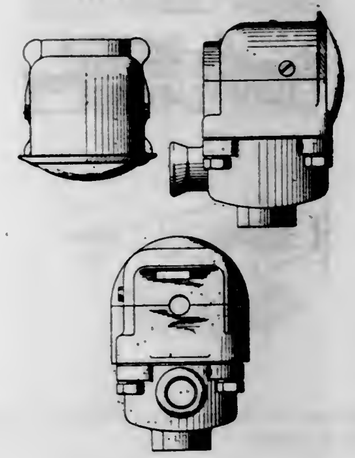
The ornamental design for a table lighter substantially as shown and described.

84,336. METER HOUSING. CHARLES S. HAZARD, Flushing, New York, N. Y., assignor to Neptune Meter Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 11, 1930. Serial No. 36,933. Term of patent 7 years.



The ornamental design for a meter housing, as shown.

84,337. METER HOUSING. CHARLES S. HAZARD, Flushing, New York, N. Y., assignor to Neptune Meter Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 11, 1930. Serial No. 36,934. Term of patent 7 years.



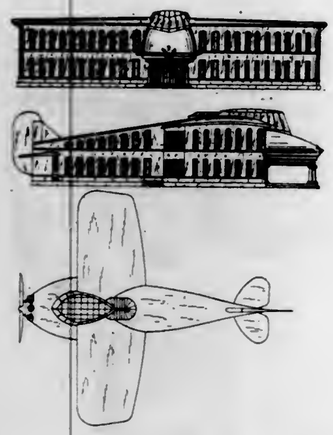
The ornamental design for a meter housing, as shown.

84,338. RADIOCABINET. JOHN J. HEELIHY, Glenwood, Pittsburgh, Pa. Filed May 7, 1930. Serial No. 35,518. Term of patent 14 years.



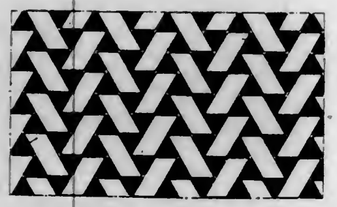
The ornamental design for a radio cabinet, substantially as shown.

84,339. BUILDING STRUCTURE. EDWARD A. HERMSEN, Oakland, Calif. Filed July 29, 1929. Serial No. 32,235. Term of patent 14 years.



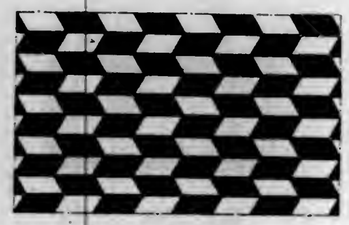
The ornamental design for a building structure substantially as shown.

84,340. TILING. RUSSELL P. HERROLD, Zanesville, Ohio. Filed July 16, 1930. Serial No. 36,369. Term of patent 14 years.



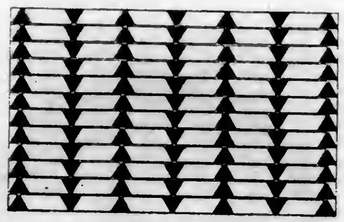
The ornamental design for a tiling, as shown and described.

84,341. TILING. RUSSELL P. HERROLD, Zanesville, Ohio. Filed July 16, 1930. Serial No. 36,370. Term of patent 14 years.



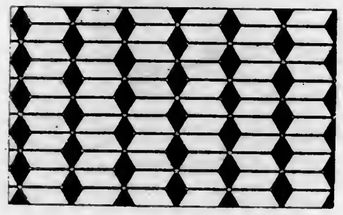
The ornamental design for a tiling, as shown and described.

84,342. TILING. RUSSELL P. HERROLD, Zanesville, Ohio. Filed July 16, 1930. Serial No. 36,371. Term of patent 14 years.



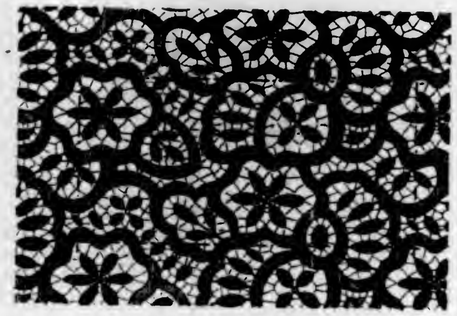
The ornamental design for a tiling, as shown and described.

84,343. TILING. RUSSELL P. HERROLD, Zanesville, Ohio. Filed July 16, 1930. Serial No. 36,372. Term of patent 14 years.



The ornamental design for a tiling, as shown and described.

84,344. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Apr. 1, 1931. Serial No. 39,325. Term of patent 3½ years.



The ornamental design for lace, substantially as shown and described.

84,345. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Apr. 9, 1931. Serial No. 39,416. Term of patent 3½ years.



The ornamental design for lace, substantially as shown and described.

84,346. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Apr. 13, 1931. Serial No. 39,466. Term of patent 3½ years.



The ornamental design for lace, substantially as shown and described.

84,347. LACE. HAGE W. HUCKNALL, Elyria, Ohio., assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Apr. 16, 1931. Serial No. 39,504. Term of patent 3½ years.



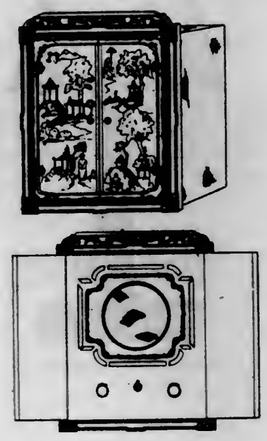
The ornamental design for lace, substantially as shown and described.

84,348. DRESS. FRANCES A. JACOBS, Chicago, Ill., assignor to The Sterling Company, Chicago, Ill., a Corporation of West Virginia. Filed Mar. 26, 1931. Serial No. 39,246. Term of patent 7 years.



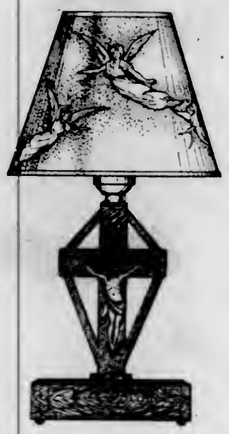
The ornamental design for a dress as shown.

84,349. WALL INSET RADIOCABINET. CARL OSCAR JOHNSON, Spokane, Wash. Filed Apr. 15, 1931. Serial No. 39,493. Term of patent 7 years.



The ornamental design for a radio cabinet, as shown.

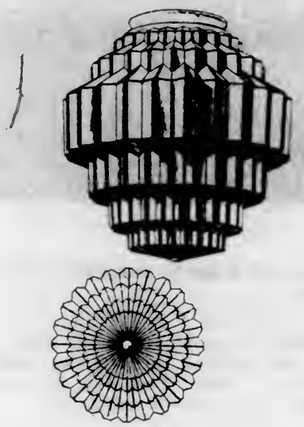
84,350. LAMP. GROVER I. JORDAN, Mason City, Iowa. Filed Nov. 17, 1930. Serial No. 37,689. Term of patent 14 years.





The ornamental design for a lamp as shown.

84,351. LIGHTING FIXTURE BOWL OR SIMILAR ARTICLE. NICHOLAS KOPP, Pittsburgh, Pa., assignor to Kopp Glass, Incorporated, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1931. Serial No. 39,340. Term of patent 7 years.



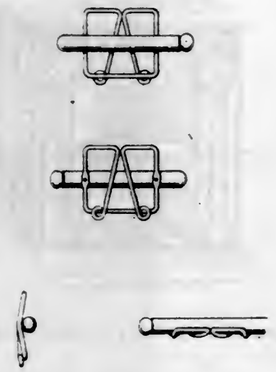
The ornamental design for a lighting fixture bowl or similar article, as shown.

84,352. COMBINED GOLF PENCIL AND WRIST STRAP HOLDER. HALSEY MONROE LARTER, Newark, N. J., assignor to William S. Hicks' Sons, Newark, N. J. Filed Aug. 29, 1930. Serial No. 36,824. Term of patent 3½ years.



The ornamental design for a combined golf pencil and wrist strap holder, as shown.

84,353. COMBINED GOLF PENCIL AND HOLDER THEREFOR. HALSEY MONROE LARTER, Newark, N. J., assignor to William S. Hicks' Sons, Newark, N. J. Filed Aug. 29, 1930. Serial No. 36,825. Term of patent 3½ years.



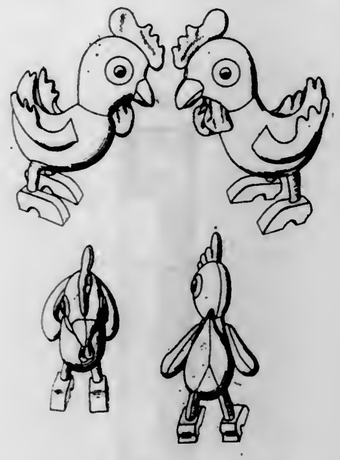
The ornamental design for a combined golf pencil and holder therefor, as shown.

84,354. POCKET LIGHTER. CECIL H. LAWRENCE, Attleboro, Mass., assignor to Evans Case Company, a Corporation of Massachusetts. Filed Sept. 17, 1930. Serial No. 37,003. Term of patent 7 years.



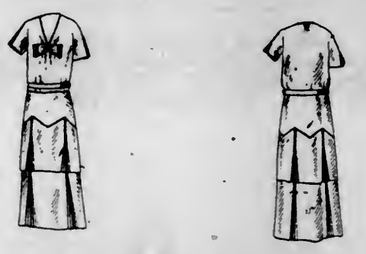
The ornamental design for a pocket lighter substantially as shown.

84,355. TOY OR SIMILAR ARTICLE. MILDRED LEE, Santa Monica, Calif. Filed Mar. 10, 1931. Serial No. 39,020. Term of patent 3½ years.



The ornamental design for a toy or similar article, as shown.

84,356. DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 38,905. Term of patent 3½ years.



The ornamental design for a dress substantially as shown.

84,357. BRACELET CHAIN. GEORGE U. MEYER, Riverview, R. I., assignor to Providence Stock Company, a Corporation of Rhode Island. Filed Mar. 19, 1931. Serial No. 39,150. Term of patent 3½ years.



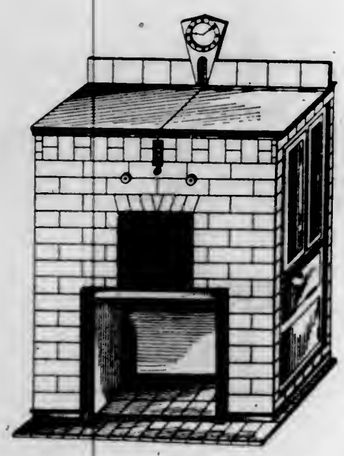
The ornamental design for a bracelet chain, substantially as shown.

84,358. COMBINED CLOCK CASE AND SHELVING. HERMAN MILLER, Zeeland, Mich. Filed Mar. 23, 1931. Serial No. 39,205. Term of patent 3½ years.



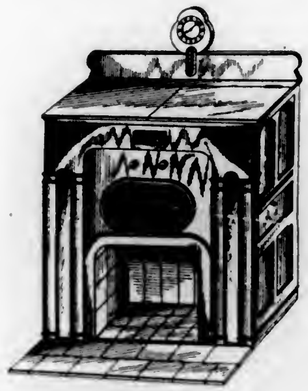
The ornamental design for a combined clock case and shelving as shown.

84,359. FIREPLACE CABINET. RICHARD J. NACHTIGALL, Philadelphia, Pa., assignor of two-fifths to Aladar Mikulka, Philadelphia, Pa. Filed Jan. 29, 1931. Serial No. 38,472. Term of patent 14 years.



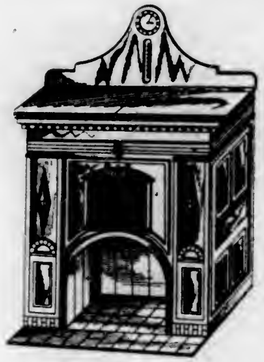
The ornamental design for a fireplace cabinet as shown and described.

84,360. FIREPLACE CABINET. RICHARD J. NACHTIGALL, Philadelphia, Pa., assignor of two-fifths to Aladar Mikulka, Philadelphia, Pa. Filed Jan. 29, 1931. Serial No. 38,473. Term of patent 14 years.



The ornamental design for a fireplace cabinet as shown and described.

84,361. FIREPLACE CABINET. RICHARD J. NACHTIGALL, Philadelphia, Pa., assignor of two-fifths to Aladar Mikulka, Philadelphia, Pa. Filed Jan. 29, 1931. Serial No. 38,474. Term of patent 14 years.



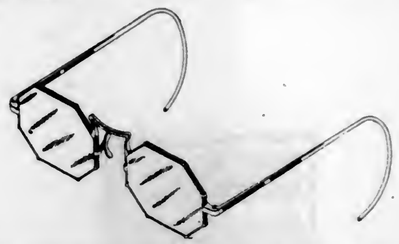
The ornamental design for a fireplace cabinet as shown and described.

84,362. OPHTHALMIC MOUNTING. GEORGE E. NERNEY, Attleboro, Mass., assignor to Bay State Optical Company, Attleboro, Mass., a Corporation of Maine. Filed Oct. 10, 1930. Serial No. 37,213. Term of patent 7 years.



The ornamental design for an ophthalmic mounting as shown.

84,363. OPHTHALMIC MOUNTING. GEORGE E. NERNEY, Attleboro, Mass., assignor to Bay State Optical Company, Attleboro, Mass., a Corporation of Maine. Filed Oct. 10, 1930. Serial No. 37,214. Term of patent 7 years.



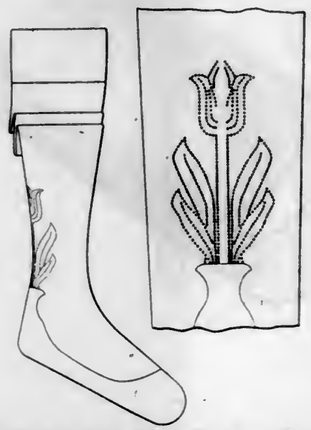
The ornamental design for an ophthalmic mounting as shown.

84,364. STOCKING. HENRY PETERS, Clifton, N. J. Filed Nov. 21, 1930. Serial No. 37,741. Term of patent 3½ years.



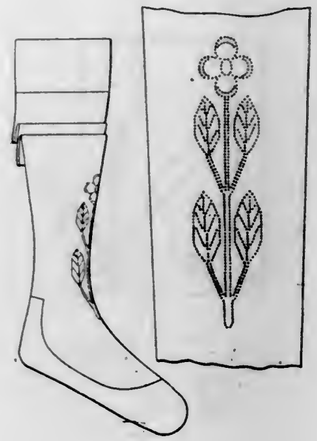
The ornamental design for a stocking as shown and described.

84,365. STOCKING. HENRY PETERS, Clifton, N. J. Filed Nov. 21, 1930. Serial No. 37,742. Term of patent 3½ years.



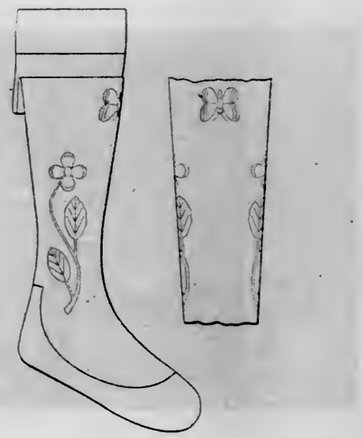
The ornamental design for a stocking as shown.

84,366. STOCKING. HENRY PETERS, Clifton, N. J. Filed Nov. 21, 1930. Serial No. 37,743. Term of patent 3½ years.



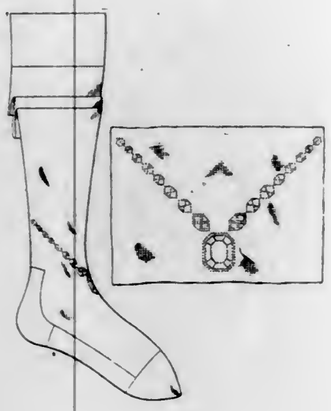
The ornamental design for a stocking as shown.

84,367. STOCKING. HENRY PETERS, Clifton, N. J. Filed Nov. 21, 1930. Serial No. 37,744. Term of patent 14 years.



The ornamental design for a stocking as shown.

84,368. STOCKING. HENRY PETERS, Clifton, N. J. Filed Nov. 21, 1930. Serial No. 37,745. Term of patent 14 years.



The ornamental design for a stocking as shown.

84,369. RADIOCABINET. JOHN A. RANCORN, Camden, N. J., and EVERETT WORTHINGTON, Chicago, Ill., assignors to R C A Victor Company, a Corporation of Maryland. Filed Apr. 10, 1931. Serial No. 39,432. Term of patent 3½ years.



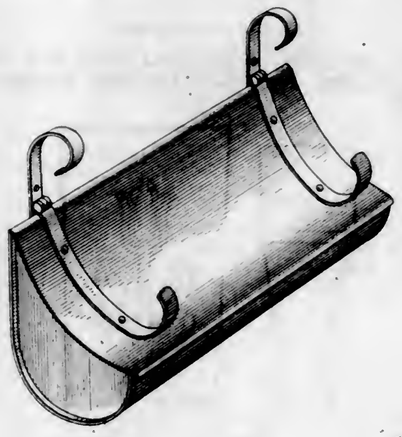
The ornamental design for a radio cabinet substantially as shown.

84,370. RADIOCABINET. JOHN A. RANCORN, Camden, N. J., and EVERETT WORTHINGTON, Chicago, Ill., assignors to R C A Victor Company, a Corporation of Maryland. Filed Apr. 10, 1931. Serial No. 39,433. Term of patent 3½ years.



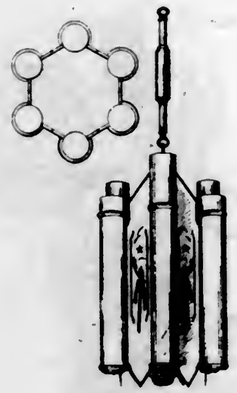
The ornamental design for a radio cabinet substantially as shown.

84,371. MAGAZINE MAIL BOX. WILLIAM H. REIMER, Fulton, Ill., assignor to Patent Novelty Company, Fulton, Ill., a Corporation of Illinois. Filed Feb. 16, 1931. Serial No. 38,672. Term of patent 14 years.



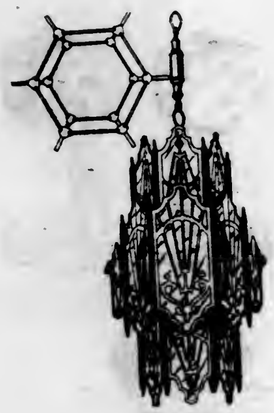
The ornamental design for a magazine mail box, as shown and described.

84,372. LIGHTING FIXTURE OR ARTICLE OF SIMILAR NATURE. ISIDOR ROSENBLATT, New York, N. Y. Filed Feb. 12, 1930. Serial No. 34,495. Term of patent 3½ years.



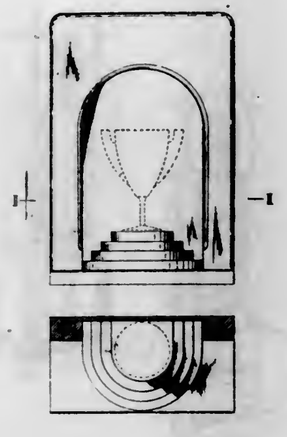
The ornamental design for a lighting fixture, or article of similar nature, as shown and described.

84,373. LIGHTING FIXTURE OR ARTICLE OF SIMILAR NATURE. ISIDOR ROSENBLATT, New York, N. Y. Filed Feb. 26, 1930. Serial No. 34,668. Term of patent 3½ years.



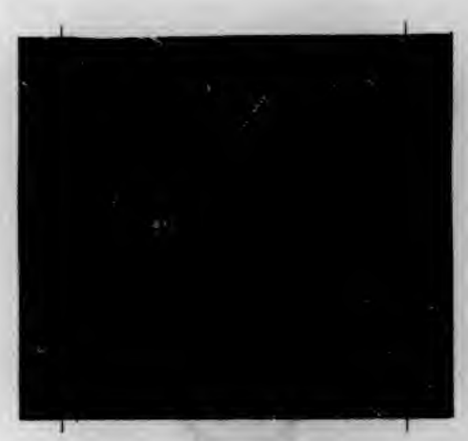
The ornamental design for a lighting fixture, or article of similar nature, as shown.

84,374. TROPHY PLAQUE. NORMAN L. ROULET, Toledo, Ohio. Filed Feb. 14, 1931. Serial No. 38,661. Term of patent 14 years.



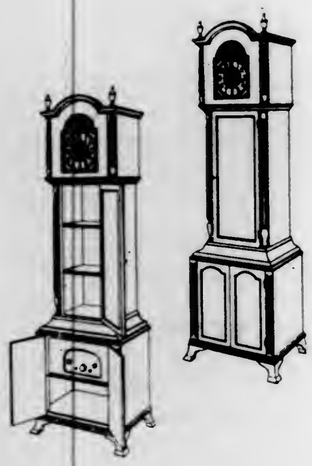
The ornamental design for a trophy plaque as shown.

84,375. TEXTILE FABRIC. HERBERT S. ROYLE, Philadelphia, Pa. Filed Aug. 16, 1930. Serial No. 36,685. Term of patent 3½ years.



The ornamental design for textile fabric as shown and described.

84,376. RADIOCABINET. WILLIAM RYPKEMA, Bay City, Mich., assignor to Radio Master Corporation of America, Bay City, Mich., a Corporation of Michigan. Filed Mar. 30, 1931. Serial No. 39,296. Term of patent 3½ years.



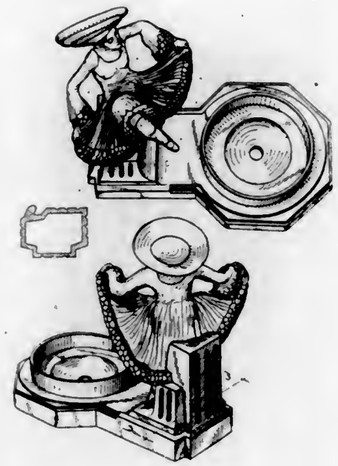
The ornamental design for a radiocabinet, as shown.

84,377. VASE OR ANALOGOUS ARTICLE. GEORGE D. SAILER, Jeannette, Pa., assignor to McKee Glass Company, Jeannette, Pa., a Corporation of Pennsylvania. Filed Apr. 6, 1931. Serial No. 39,382. Term of patent 7 years.



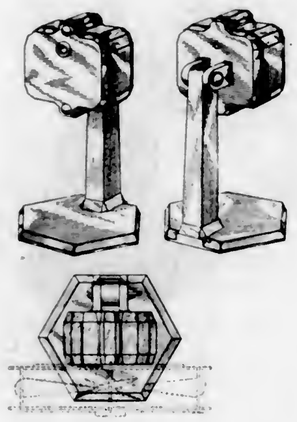
The ornamental design for a vase or analogous article, as shown.

84,378. TABLE LAMP OR ARTICLE OF SIMILAR NATURE. CHARLES SHULMAN, New York, N. Y., assignor to Apt Novelty Company Inc., New York, N. Y. Filed Apr. 7, 1931. Serial No. 39,390. Term of patent 3½ years.



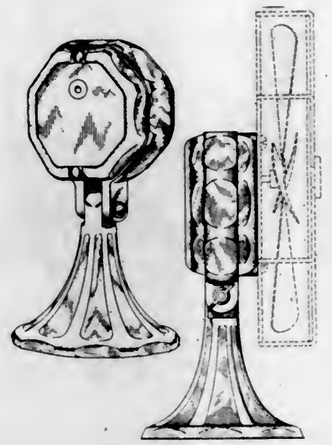
The ornamental design for a table lamp or article of similar nature, as shown.

84,379. PORTABLE ELECTRIC FAN. CLARENCE E. SMITH, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Mar. 28, 1931. Serial No. 39,282. Term of patent 7 years.



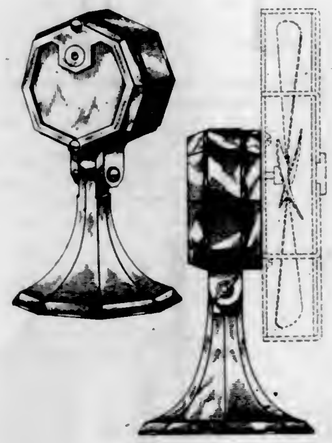
The ornamental design for a portable electric fan, substantially as shown.

84,380. PORTABLE ELECTRIC FAN. CLARENCE E. SMITH, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Mar. 28, 1931. Serial No. 39,283. Term of patent 7 years.



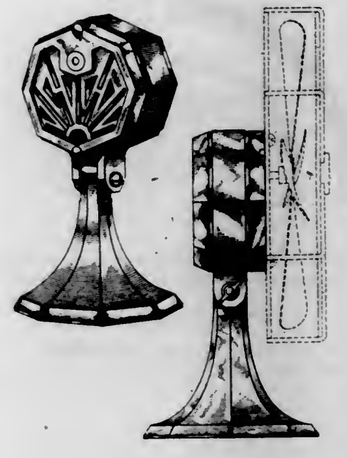
The ornamental design for a portable electric fan, substantially as shown.

84,381. PORTABLE ELECTRIC FAN. CLARENCE E. SMITH, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Mar. 28, 1931. Serial No. 39,284. Term of patent 7 years.



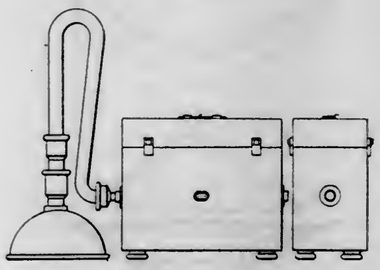
The ornamental design for a portable electric fan, substantially as shown.

84,382. PORTABLE ELECTRIC FAN. CLARENCE E. SMITH, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Mar. 28, 1931. Serial No. 39,285. Term of patent 7 years.



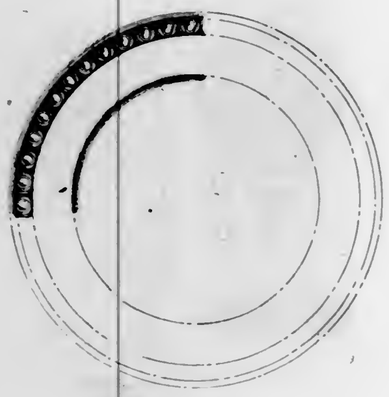
The ornamental design for a portable electric fan, substantially as shown.

84,383. CASING FOR A MASSAGE APPARATUS WITH HOSE AND CUP ATTACHED. SOPHIE STEPHANI, née Kaus, Zurich, Switzerland. Filed Dec. 13, 1928. Serial No. 29,249. Term of patent 7 years.



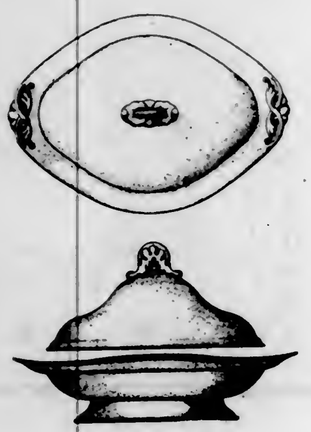
The ornamental design for a casing for a massage apparatus, with hose and cup attached, as shown.

84,384. PLATE OR SIMILAR ARTICLE OF POTTERY. SIDNEY E. THOMPSON, West Englewood, N. J., assignor to Copeland & Thompson, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 12, 1931. Serial No. 39,053. Term of patent 14 years.



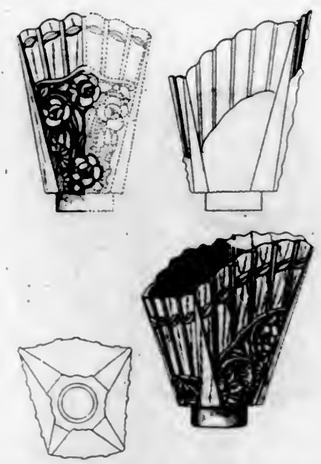
The ornamental design for a plate or similar article of pottery as shown and described.

84,385. COVERED DISH. SIDNEY E. THOMPSON, West Englewood, N. J., assignor to Copeland & Thompson, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 12, 1931. Serial No. 39,054. Term of patent 14 years.



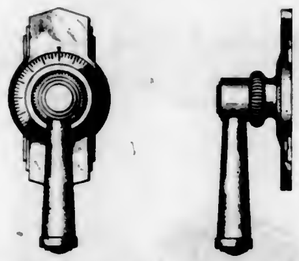
The ornamental design for a covered dish, as shown and described.

84,386. LIGHTING FIXTURE SHADE OR ARTICLE OF SIMILAR NATURE. GUSTAVE E. VILLARET, Leonia, N. J., assignor to Lighting Appliance Company, Inc., New York, N. Y. Filed Apr. 1, 1931. Serial No. 39,822. Term of patent 3½ years.



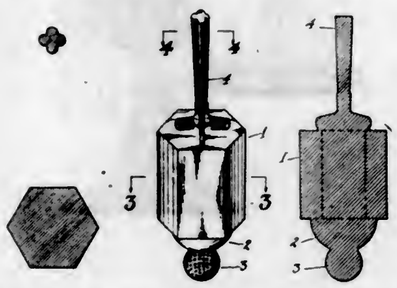
The ornamental design for a lighting fixture shade or article of similar nature, as shown and described.

84,387. COMBINED CONCENTRIC DIAL PLATE, LOCK DIAL AND HANDLE FOR SAFES. CARL F. WOLTERS, Marietta, Ohio. Filed Apr. 20, 1931. Serial No. 39,555. Term of patent 7 years.



The ornamental design for a combined concentric dial plate, lock dial and handle for safes, as shown.

84,388. TEETOTUM. WILLIAM W. WOODROOF and CHARLES T. WOODROOF, Wilkinsburg, Pa. Filed Oct. 10, 1930. Serial No. 37,222. Term of patent 3½ years.



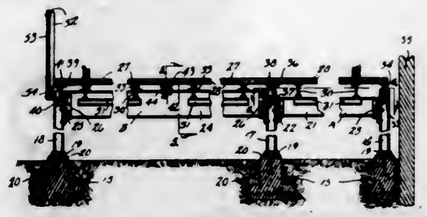
The ornamental design for a teetotum, as shown and described.

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PATENTS

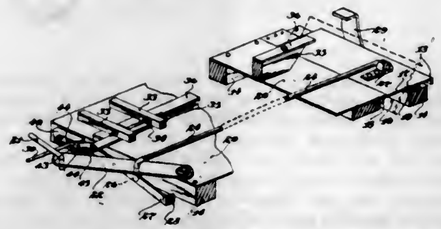
GRANTED JUNE 9, 1931

1,808,741. VEHICLE PARKING STRUCTURE. CHARLES F. ALT, Des Moines, Iowa. Filed May 7, 1929. Serial No. 361,155. 8 Claims. (Cl. 20—1.13.)



1. A vehicle parking structure comprising posts, beams removably connecting said posts longitudinally and transversely in pairs, and reinforced concrete slabs supported loosely on said beams to form an upper level parking floor and also to provide a covering for a lower level.

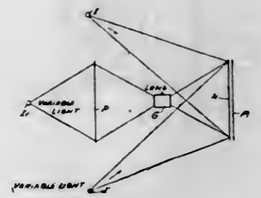
1,808,742. CLEANING SIEVE. ELMER F. ALTMAN, Minneapolis, Minn., assignor to The Self Kleen Thresher Screen Co., Minneapolis, Minn., a Corporation of Minnesota. Filed July 23, 1928. Serial No. 294,716. 4 Claims. (Cl. 209—256.)



1. A device of the class described comprising a sieve, a deck underlying the sieve and having a discharge passage near its delivery end, a gate hinged in respect to the deck and arranged to open and close the discharge passage, said gate when open projecting above the deck and affording a stop plate for directing the materials through the discharge passage, operating connections for the gate including a lever fulcrumed on the frame of the device rearward of the receiving end of the sieve and a longitudinally extended rod, the front end of which is attached to the gate and the other end of which is attached to the lever intermediate of its ends, and a spring on said frame rearward of the receiving end of the sieve and under strain to move the rod forward to close the gate, said lever when the gate is open being arranged to hold the rod against the action of the spring.

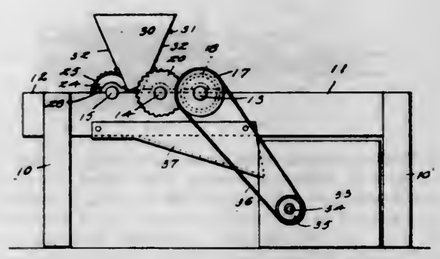
1,808,743. METHOD OF MODIFYING PHOTOGRAPHS BY PRINTING. JAMES T. BARKELEW, Lamanda Park, Calif., assignor, by mesne assignments, to Paramount Publix Corporation, a Corporation of New York. Filed July 6, 1926. Serial No. 120,561. 2 Claims. (Cl. 88—24.)

1. The method of printing a modified positive from a negative, that includes placing an actinic film in printing relationship to the negative, illuminating the negative from one source of illumination, illuminating the negative independently from another source of illumination, and modifying the illumination from one of the sources by interposing a transparent positive of the negative between the source of illumination and the negative and



in registration with the negative so that the light rays from the latter source pass through the positive to print the negative.

1,808,744. PINON NUT SHELLER. JAMES G. BAUDINO, Milford, Utah. Filed May 24, 1928. Serial No. 280,262. 1 Claim. (Cl. 146—11.)

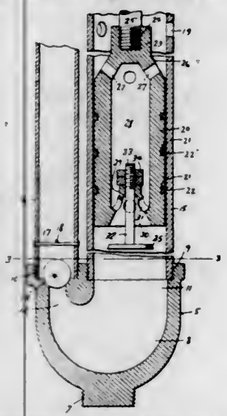


In a nut sheller for pinon nuts and the like, a pair of rolls, a removable covering for the rolls providing the rolls with a burred periphery, the rolls having their adjacent faces spaced, a shaft upon which one of the rolls is mounted, bearings for said shaft, the shaft within one of the bearings having a circumferential series of spaced sockets, a screw adjustable through the cap of the said one of the bearings for selective engagement in said sockets to hold said shaft against rotation and means for rotating the other of the rolls.

1,808,745. PUMP. GEORGE WASHINGTON BLEDSOE, WILLIAM S. LLOYD, and CARL DON YENCER, El Paso, Tex. Filed Jan. 9, 1930. Serial No. 419,632. 1 Claim. (Cl. 103—178.)

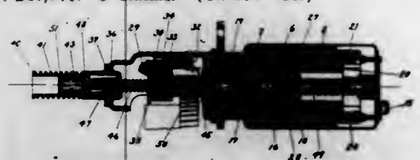
A pump of the character described comprising an elongated, vertically disposed casing, a hollow piston mounted for reciprocation in the casing, an integral tapered projection extending upwardly in the piston from the lower end thereof and terminating in a flat upper end, the upper end portion of the projection having a centrally disposed opening extending therethrough, said projection providing a substantially conical recess in the lower portion of the piston, the recess constituting a valve seat, the projection being still further provided with a plurality of circumferentially spaced passages in intermediate portions establishing communication between the conical recess and the interior of the piston, a reciprocating check valve engageable on the seat to control the passage of

fluid from the casing into the piston through the recess and passages, a threaded stem on the valve extending slidably through the opening in the projection, a nut



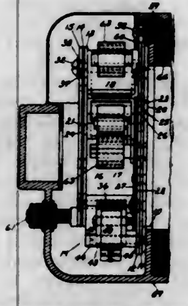
threaded for adjustment on the stem and engageable on the upper end of the projection for limiting the opening movement of the valve, the piston being provided with fluid outlet openings in its upper portion.

1,808,746. ELECTRICAL STARTING MOTOR. VINCENT G. APPLE, Dayton, Ohio. Filed Dec. 22, 1927. Serial No. 241,970. 9 Claims. (Cl. 290—38.)



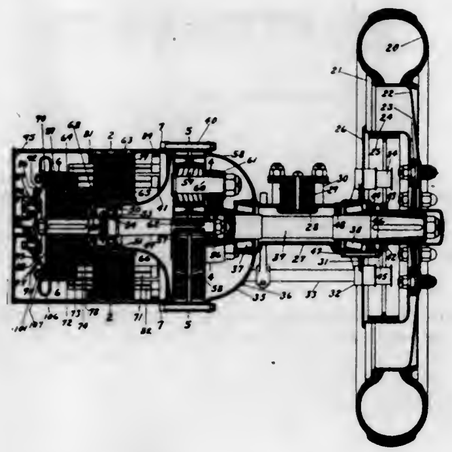
1. Engine starting apparatus comprising: a gear, secured to said engine to revolve said engine, an electric motor, a shaft for said motor axially movable therein, a pinion secured to said shaft normally out of engagement with said gear but adapted to engage said gear when moved axially by said shaft, electric circuit closing means for said motor normally open but operable to be closed by endwise movement of said shaft from its normal non-operating position, means within manual control to apply energy to urge said shaft to move axially, means to release said energy to operate said shaft, and means beyond manual control after said release to operate said shaft to engage and disengage said pinion and to quickly open and close said circuit closing means.

1,808,747. DYNAMO ELECTRIC MACHINE. VINCENT G. APPLE, Dayton, Ohio. Filed June 14, 1928. Serial No. 285,364. 8 Claims. (Cl. 171—324.)



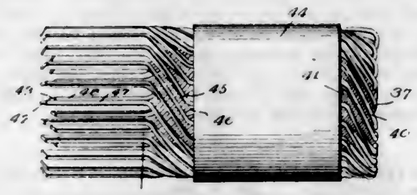
1. In a dynamo operating at variable current output, a self-contained unit comprising a positive brush, a negative brush, a regulating brush and a cutout, all mounted on a somewhat circular ring, said ring being mounted on the dynamo frame and revolvable about the dynamo axis, and contact members positioned on the dynamo frame to convey current to and from said ring and adapted to convey said current equally at any position to which said ring may be revolved.

1,808,748. ELECTRIC MOTOR AUTOMOTIVE AXLE. VINCENT G. APPLE, Dayton, Ohio. Filed June 14, 1928. Serial No. 285,375. 7 Claims. (Cl. 180—60.)



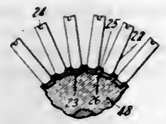
1. The combination of an electric motor automotive axle, of a relatively low speed axle shaft, a relatively high speed motor and reduction gearing, the axle shaft being driven thru the reduction gearing by the shaft of the high speed motor, a housing surrounding said motor, said gearing and said axle shaft, said housing being partitioned into two separate compartments, said gearing and bearings for said shafts being in the one compartment, and said motor being in the other compartment, the shaft of the high speed motor extending into the motor compartment to support the rotative element of the motor but having no rotative support in said motor compartment.

1,808,749. BAR WOUND ARMATURE. VINCENT G. APPLE, Dayton, Ohio. Filed Nov. 9, 1928. Serial No. 318,224. 5 Claims. (Cl. 171—206.)



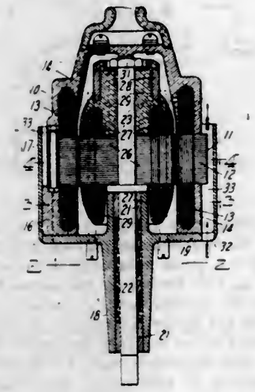
3. In a bar wound armature, a core having a plurality of closed winding apertures near its periphery, a plurality of integral winding loops extending thru and beyond said apertures, the portion adjacent the core being bent to form helical leads and the open ends being displaced radially inward to axially parallel positions relatively near the axis and bound together to compose a commutator.

1,808,750. COMMUTATOR. VINCENT G. APPLE and WALTER M. DOEHRING, Dayton, Ohio; said Doehring assignor to said Apple. Filed Oct. 16, 1929. Serial No. 400,121. 4 Claims. (Cl. 171—321.)



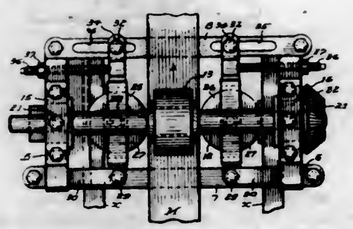
1. A commutator cylinder comprising a plurality of circumferentially spaced apart segments connected by integral bridges each bridge extending radially outward from one segment then circumferentially across one of the spaces, then radially inward to the next segment.

1,808,751. DYNAMO ELECTRIC MACHINE WITH IMPROVED COOLING SYSTEM. VINCENT G. APPLE, Dayton, Ohio. Filed Apr. 7, 1930. Serial No. 442,394. 3 Claims. (Cl. 172—36.)



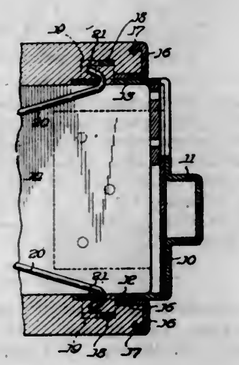
1. The combination in a dynamo electric machine of a magnetizable core, coils on said core, a mass of cementitious insulation of high heat conductivity penetrating and surrounding said coils cementing them to said core and forming a hollow housing open at one end, and a cup shaped member somewhat larger than said housing having a bottom perforated near its periphery, said bottom being secured to the open end of said housing so as to close said open end, the sides of said cup shaped member surrounding said core at some distance therefrom.

1,808,752. EDGING MILL. ROBERT J. BANNER, Youngstown, Ohio. Filed May 5, 1928. Serial No. 275,332. 6 Claims. (Cl. 80—34.)



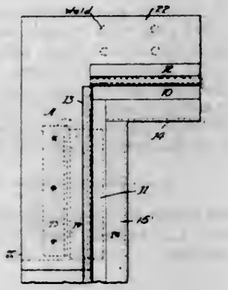
6. In a mill of the class described, a pair of horizontal pinch rolls, housings disposed upon opposite sides of the rolls and forming journals therefor, said housing being respectively vertically separable substantially in the plane of the axis of the lower roll to permit removal thereof and also comprising means to permit removal of the upper roll whereby said rolls may be readily interchanged when required, a pair of transversely extending horizontal rails disposed on opposite sides of said rolls, a pair of frames respectively disposed adjacent the opposite ends of said rolls, an edging roll rotatably mounted adjacent the center of each frame, means for pivotally securing one end of each frame to the adjacent rail, adjustable means for operatively securing the other end of each frame to the other rail, and means for adjustably limiting the outward pivotal movement of each frame.

1,808,753. METAL FRAME AND ANCHOR. ISAAC A. BAUM, Chicago, Ill. Filed Oct. 3, 1928. Serial No. 310,046. 3 Claims. (Cl. 72—98.)



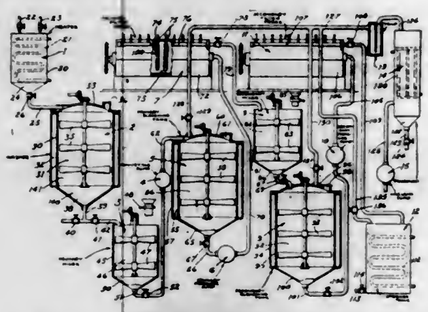
1. In combination a metal frame member of generally channel shape in cross section, the flanges of the channel being adapted to fit against the sides of a masonry wall, plaster anchors struck out of the flanges and projecting laterally outside of the plane of the faces of the flanges, and wall anchors having hooks adapted to engage in the openings formed by striking out the plaster anchors.

1,808,754. METAL CORNER CONNECTION. ISAAC A. BAUM, Chicago, Ill. Filed Oct. 14, 1929. Serial No. 399,619. 5 Claims. (Cl. 189—46.)



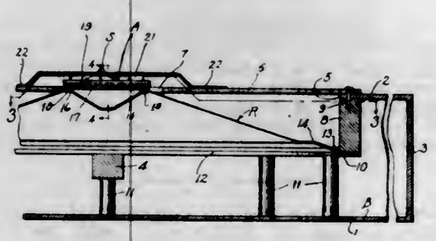
1. In frame construction, the combination of vertical and horizontal intersecting channel-shaped frame members, one of said members having tongues cut out of its flanges and bent inwardly into the plane of the web of said member, a pair of angle plates secured to the other frame member, a member joining the free portions of said plates, said member positioned to lie alongside of said tongues, and a length of bendable metal carried by the first mentioned frame member and adapted to be bent over the plate-joining member when the parts are in final position.

1,808,755. PROCESS OF TREATING BEESWAX. WALTER S. BAYLIS, Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California, a Corporation of California. Filed May 11, 1926. Serial No. 108,269. 2 Claims. (Cl. 87—19.)



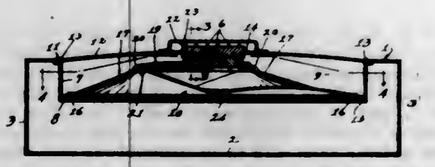
1. A process of bleaching beeswax comprising: melting the beeswax; agitating said beeswax with dilute sulphuric acid; settling out said dilute acid; treating under vacuum said liquefied beeswax with a decolorizing agent comprising an acid-activated colloidal clay at a temperature approximating 300 degrees F.; and separating said decolorizing agent from said beeswax at a temperature approximating 300 degrees F.

1,808,756. STRINGED MUSICAL INSTRUMENT. GEORGE D. BEAUCHAMP, Los Angeles, Calif. Filed Mar. 11, 1929. Serial No. 346,009. 13 Claims. (Cl. 84—296.)



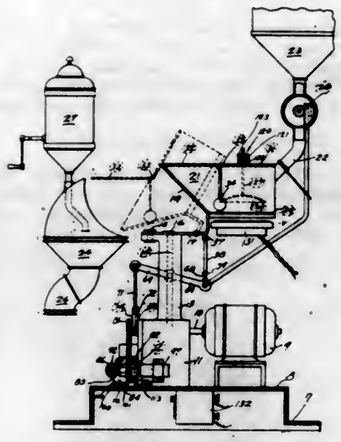
1. A guitar comprising a hollow body having an opening in the top thereof, an annular ring depending from the top and below said opening, a conical metallic resonator supported within said ring with its base downwardly, a neck piece extending longitudinally from said body, strings attached to said neck piece and stretched over said body, and a circular bridge engaging the upper portion of said resonator at its inner side and said strings for holding the strings and the resonator in tension, whereby vibrations may be transmitted from the strings to the resonator.

1,808,757. STRINGED MUSICAL INSTRUMENT. GEORGE D. BEAUCHAMP, Los Angeles, Calif. Filed Jan. 21, 1930. Serial No. 422,337. 10 Claims. (Cl. 84—296.)



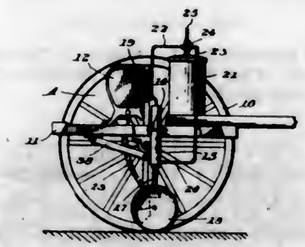
1. A stringed musical instrument including a body with strings held in tension thereon, a single metallic diaphragm mounted in said body, and having a plurality of portions at central points arranged to support said strings, for the purpose described.

1,808,758. POP CORN MACHINE. GEORGE BETTANDORFF, Oakland, Calif., assignor of one-fourth to Harry C. Schroeder, Concord, Calif. Filed July 7, 1928. Serial No. 291,098. 8 Claims. (Cl. 53—4.)



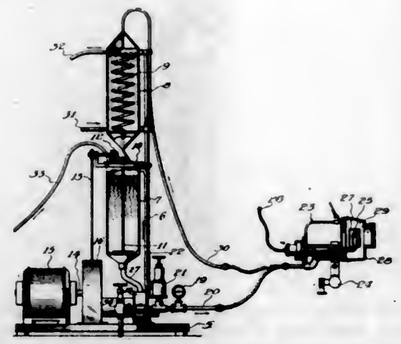
1. In a machine for popping corn or other grain, a motor and a heating element connected with a source of electric energy; a grain receptacle mounted so that the grain therein may be heated by the element when the receptacle is in its normal position, means connecting the receptacle with the motor for causing a tilting movement of the receptacle so as to eject the grain therefrom, and for swinging the receptacle back to its normal position after the ejection of the grain; and electro-responsive means adapted to be connected to a source of electric energy by the accumulated popped grain in the receptacle for rendering said connecting means active.

1,808,759. AGRICULTURAL IMPLEMENT. GEORGE HERBERT BICKERTON, Bluesky, Alberta, Canada. Filed Nov. 9, 1929. Serial No. 406,103. 9 Claims. (Cl. 97—50.)



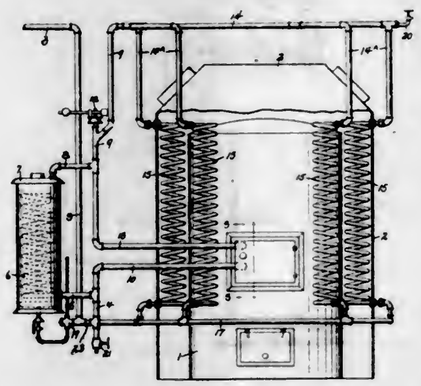
2. An agricultural implement comprising a travelling framework, a plurality of pistons mounted on the framework, standards in the form of piston rods extending from the pistons, carrying cutting members adapted to contact with the ground, and pneumatic means in connection with the pistons controlled from the driver's seat for raising and lowering said cutting members into and from contact with the ground.

1,808,760. IRRADIATING APPARATUS. CHARLES EVERETT BILLS, Evansville, Ind., assignor to Mead Johnson & Company, Evansville, Ind., a Corporation of Indiana. Filed June 10, 1929. Serial No. 369,556. 10 Claims. (Cl. 99—2.)



1. Irradiating apparatus comprising a reservoir for the fluid to be treated, a quartz burner lamp having a casing, a burner, a chamber between the burner and the lamp casing, and inlet and outlet conduits between the lamp chamber and the reservoir, and means for repeatedly circulating the fluid through the lamp chamber.

1,808,761. HEATING SYSTEM. CHARLES F. BRAND, Wheeling, W. Va. Filed May 15, 1929. Serial No. 363,269. 5 Claims. (Cl. 126—101.)

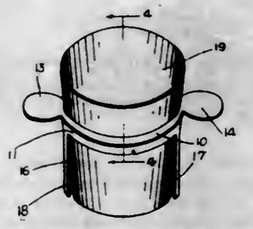


3. In combination with a furnace embodying a combustion chamber and a hot air chamber, the latter in encircling relation to the former, and a gas heater having a water coil therein, water coils in the air chamber, and water connections between the water coil of the gas heater and the water coils in the furnace.

1,808,762. METHOD OF ACCELERATING THE HARDENING OF PLASTIC MATERIALS. ALBERT BRUND and HELGE BOHLIN, Harnosand, Sweden. Filed Apr. 16, 1930, Serial No. 444,868, and in Germany Apr. 5, 1928. 1 Claim. (Cl. 25—154.)

The method of accelerating the hardening of a plastic mass having water therein which consists in passing an electric alternating current therethrough.

1,808,763. HOLDER FOR PAPER CUPS AND THE LIKE. OLIVER HARRY BURDETT, St. Catharines, Ontario, Canada. Filed Mar. 15, 1930. Serial No. 436,082. 3 Claims. (Cl. 65—61.)



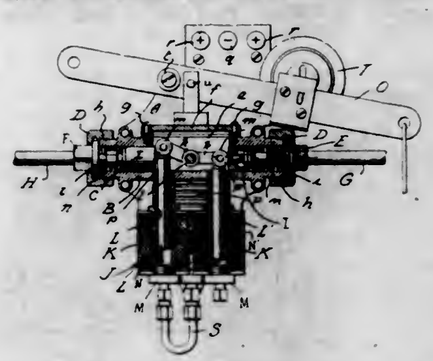
2. A paper cup holder comprising a fibre flanged ring having lug members integral therewith and leg members adjacent to the lug members.

1,808,764. STRIPPING MEANS FOR FLAT WORK IRONERS. FORREST J. COUCH, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 21, 1929, Serial No. 401,143. Renewed Dec. 24, 1930. 5 Claims. (Cl. 68—9.)



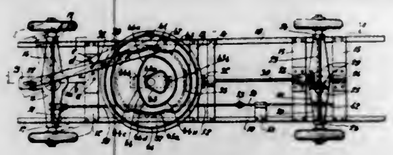
1. In an ironing machine of the type having an ironing chest and a padded ironing roll cooperating therewith and between which chest and roll the work is passed for the ironing operation, and means for stripping the work being ironed from said roll and comprising a tape adapted to be passed through the machine with the work, being interposed between the work and the ironing roll, said tape having a middle body portion of substantially uniform thickness and longitudinal edge portions of a thickness gradually decreasing toward the outer edges thereof.

1,808,765. ELECTROFLUID VALVE. MARK DEAN, Newark, N. J.; Fay Walter Dean executor of said Mark Dean, deceased. Filed Jan. 28, 1929. Serial No. 335,438. 1 Claim. (Cl. 137—139.)



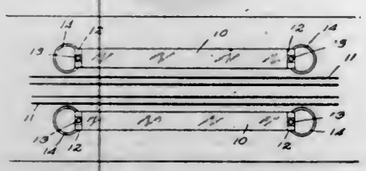
An electro-fluid valve provided with a slidable valve-rod adapted to ply between the inlet and outlet openings of said valve, and a pair of rocker-arms located in the hollow chamber of said casing, adapted to impart reciprocation-movements to said rod,—said rod being provided with two sets of coiled springs at each end, the inner spring being approximately twice as strong as the outer spring and adapted to serve as a compensating spring for the buffer action of the outer spring.

1,808,766. VEHICLE. RAYMOND DE FILIPPIS, Brooklyn, N. Y. Filed Jan. 29, 1930. Serial No. 424,157. 12 Claims. (Cl. 46—48.)



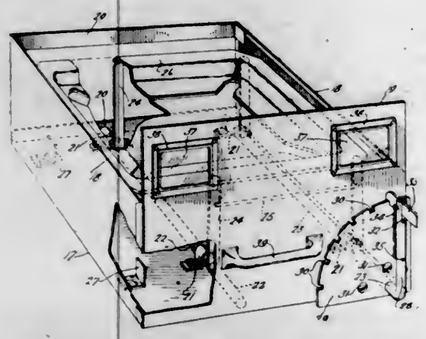
1. In a vehicle, a wheeled body, means mounting said wheels to permit relative vertical movement therebetween for uniformly contacting an uneven roadway, steering means for the vehicle, and actuating means carried by the vehicle operated by the steering means to cause the wheels to move as aforesaid for shifting the center of gravity of the vehicle to increase the stability thereof in turning, the actuating means being in inoperative position in the straight-away driving position of the vehicle, the actuating means including a unitary cam means having upward and downward extending portions for the relative vertical movement of the wheels, and an intermediate connecting portion of reduced size.

1,808,767. BUMPER ELEMENT FOR SAFETY ZONES. JOHN DE GLORIA and HARRY C. SCHROEDER, Oakland, Calif. Filed Apr. 4, 1929. Serial No. 352,374. 3 Claims. (Cl. 256—1.)



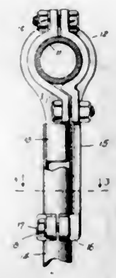
1. An approach for passenger loading platforms, in combination with a standard; a U shaped metal member adapted to slidably engage the sides of said standard, said U shaped member being filled with resilient material.

1,808,768. BROILER. CLAUDE M. DIBBLE, Joliet, Ill., assignor to Moore Brothers Company, Joliet, Ill., a Corporation of Illinois. Filed May 2, 1927. Serial No. 188,078. 5 Claims. (Cl. 126—41.)



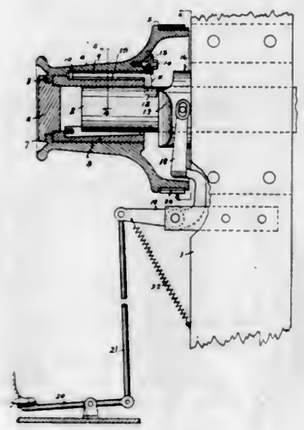
1. The combination with a stove having a broiler compartment and front opening therefor, a drawer slidable in the opening, a broiler tray fitting loosely in the drawer, means engaging the under side of the tray operable from the front of the drawer for raising and holding the tray at different elevations, and sight windows at the front of the drawer above the level to which the tray is raised.

1,808,769. T CONNECTOR. ABRAHAM BERNARD DIBNER, New York, N. Y. Filed Mar. 5, 1926. Serial No. 92,502. 5 Claims. (Cl. 173—273.)



1. An electric T connector for main and branch conductors, comprising a divided head portion adapted to embrace the main conductor, one section of the head being provided with a shank to fit into the branch conductor, and means integral with the other section of the head and projecting beyond the termination of the shank for clamping said branch conductor.

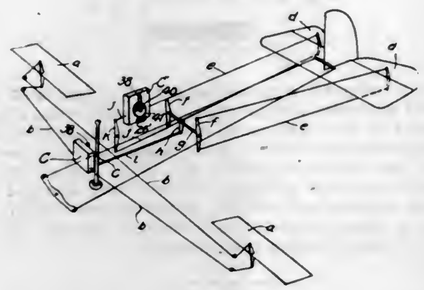
1,808,770. SAFETY CATHEAD. CHARLES R. EDWARDS, Houston, Tex. Filed Aug. 21, 1925. Serial No. 51,693. 4 Claims. (Cl. 254—176.)



1. In a safety device, a cathead, means adapted to support and to drive said cathead, said cathead being adapted to receive and drive a line by friction while said line is manually held in contact with said cathead, engaging means whereby said cathead may be driven in only one direction, means through which said engaging means may be held in engaging position by the operator while manipulating the line, and means preventing a reverse rotation of said cathead.

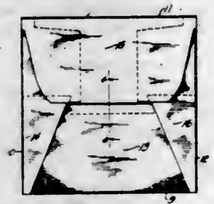
1,808,771. AIRPLANE AUTOMATIC CONTROL. ALBERT E. ELSEA, East St. Louis, Ill. Filed Sept. 20, 1929. Serial No. 393,950. 1 Claim. (Cl. 244—29.)

An aircraft control comprising a casing adapted to be fixed in the aircraft, a shaft mounted in said casing, a pendant lever loosely mounted on said shaft, means for coupling the lever to the shaft, an indicator fixed to the shaft, said indicator being readable in connection with suitable markings on the casing, a manually operable lever fixed to



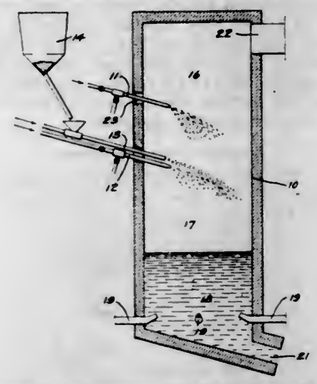
said shaft, and connecting mechanism operable by said shaft and adapted to be connected to the aircraft stabilizing devices.

1,808,772. CADDY. ALBERT S. ETHRIDGE, Milwaukee, Wis., assignor to Hummel & Downing Co., Milwaukee, Wis., a Corporation of Wisconsin. Original application filed June 7, 1926, Serial No. 114,156. Divided and this application filed June 25, 1928. Serial No. 288,270. 2 Claims. (Cl. 229—39.)



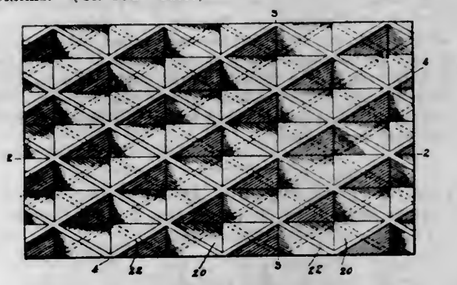
1. A caddy comprising a sheet of material cut and scored to form four sides permanently interconnectible to form a continuous wall structure, each side having a bottom portion foldably associated therewith, one of said bottom portions having a dovetail recess in the edge thereof remote from its supporting side, the two opposed bottom portions directly adjacent to said recessed bottom portion being foldable over the latter and having side edge portions which when folded, are spaced apart a distance at least equal to the width of the dovetail recess, and also having other portions extending inwardly toward each other beyond said first edge portions to form shoulders adjacent to and in substantial parallelism with the bottom of said recess to thereby form a slot disposed between said shoulders and the bottom of said recess, and the remaining bottom portion being foldable over the shoulders of said two opposed bottom portions and having a dovetail projection freely insertable in and removable from said slot when inward pressure is exerted thereon and while the sides of the caddy are in fully assembled and permanently connected condition.

1,808,773. RECOVERY OF ALKALI METAL COMPOUNDS. CHARLES A. GRONDONA, San Francisco, Calif., assignor to Peebles Processes Inc., San Francisco, Calif., a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,593. 5 Claims. (Cl. 23—48.)



1. In a method of recovery of a salt of an alkali forming metal from black liquor, the step comprising maintaining a high temperature zone of combustion in the furnace by the introduction of black liquor, and introducing additional black liquor and salt cake into the furnace between said zone and the lower portion of the furnace.

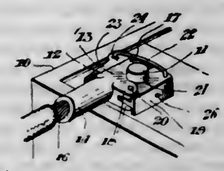
1,808,774. SHEET PACKING. CHARLES F. HETTINGER, Camden, N. J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed Aug. 12, 1930. Serial No. 474,783. 16 Claims. (Cl. 154—45.5.)



3. A sheet packing having intersecting ridges on its opposite sides forming cavities, the cavities having downwardly converging walls and being disposed with the point of convergence on one side opposite the intersecting point of the ridges on the other side.

15. A sheet packing having similar sides with interspersed cavities formed therein with the apices of said cavities projected to form openings through the opposite sides of the sheet, and yielding material in said cavities.

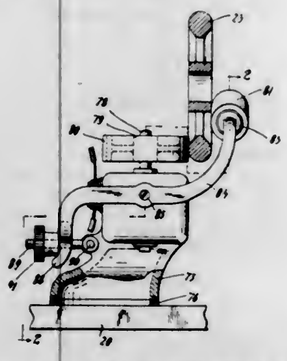
1,808,775. CLAMP FOR BATTERY TERMINAL POSTS. TENIS HOFMAN, Nobleford, Alberta, Canada. Filed Aug. 12, 1929. Serial No. 385,414. 1 Claim. (Cl. 173—259.1.)



A clamp for battery terminal posts comprising a body portion formed with means for receiving the end of a

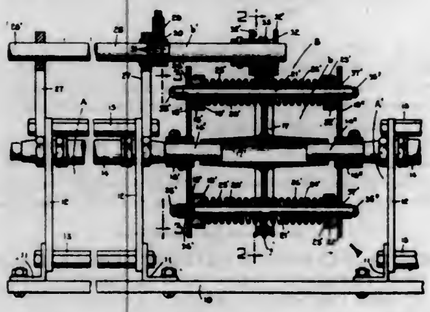
cable and with a half jaw, a second half jaw portion hingedly connected at one end thereof to one end of the first half jaw portion, said half jaw portions when in closed position forming therebetween a post receiving opening, an elongated loop swingably connected to the free end of one of the jaw portions and adapted to swing over the other jaw portion, and a cam lever pivotally connected to the free end of said loop, one of the jaw portions formed with a recess adapted to receive said cam lever when the jaws are in closed position, and a spicular projection carried by one of the jaw portions and forming a projection extending into the post receiving opening.

1,808,776. SEWING MACHINE DRIVE. JOHN HOLTZMAN, New York, N. Y. Filed Jan. 23, 1924. Serial No. 688,042. 7 Claims. (Cl. 74—26.)



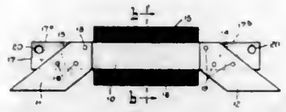
1. A driving device for a machine having a hand-wheel, comprising a bracket, a motor mounted in the bracket, a friction wheel fixed on the shaft of said motor, said wheel engaging one side of the hand-wheel, a frame pivoted to said bracket, said frame having a pair of forks disposed in radial relation to the axis of the hand-wheel on the side opposite said friction wheel, rolls revoluble on said forks, and means for adjusting said frame to cause said rolls to grip said hand-wheel.

1,808,777. UNI-CONTROL APPARATUS. LESTER L. JONES, Oradell, N. J. Filed Oct. 2, 1926. Serial No. 139,086. 12 Claims. (Cl. 74—7.)



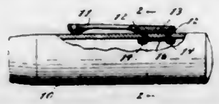
1. A uni-control radio apparatus comprising, in combination, a plurality of independently adjustable tuning units, an operating means therefor mechanically connectible to the plurality of adjustable units for operating the same in unison and mechanically disconnectible from one of said adjustable units for independently operating the other of the adjustable units, and a single control shaft connected to the operating means for moving the same, the said control shaft being axially shiftable to effect the said connection of the operating means with and disconnection of the same from the said adjustable units.

1,808,778. MEANS FOR SUPPORTING MAGNETIC STRUCTURES. LESTER L. JONES, Oradell, N. J. Filed Feb. 11, 1927. Serial No. 167,572. 5 Claims. (Cl. 175—21.)



1. A magnetic structure comprising a laminated body and a supporting element therefor, said supporting element having an area sufficient to give rise to the generation of appreciable eddy currents if the element be cut by lines of flux, the laminations of said body being divided into two sections and said supporting element being arranged in a plane between said sections of laminations whereby the flux or leakage paths of said laminated body do not cut or link with the supporting element.

1,808,779. FASTENING CLIP AND MEANS FOR ATTACHING THE SAME. GABRIEL LARSEN, Springfield, N. J., assignor to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Oct. 22, 1929. Serial No. 401,410. 4 Claims. (Cl. 24—11.)



1. In a device of the character described, a tubular member the wall of which is provided with two spaced openings, a fastening clip the base of which comprises two lugs extending through said openings, and a bar provided with openings located within said tubular member and spanning said openings and extending beyond the same, the ends of said lugs passing through said openings and being bent upwardly and outwardly to secure said bar in position against the inner wall of said tubular member.

1,808,780. ARTIFICIAL COAL UNIT. CHARLES W. LOGAN, Kenmore, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Mar. 10, 1928. Serial No. 260,785. 6 Claims. (Cl. 272—8.)

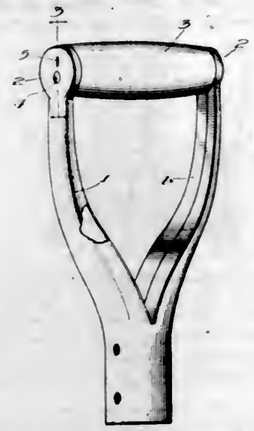


1. A unit adapted to give a vari-colored effect when illuminated comprising a colored translucent base and varicolored pieces of partly blackened glass uniformly distributed throughout its surface and secured thereto in positions such that the exposed surfaces of the glass pieces include the blackened surfaces of said pieces.

1,808,781. TOOL HANDLE. FRANK B. LUTMAN, Columbus, Ind., assignor to Columbus Handle & Tool Corporation, Columbus, Ind., a Corporation of Indiana. Filed Sept. 22, 1930. Serial No. 483,589. 3 Claims. (Cl. 294—57.)

1. In a handle of the type described including a bifurcated sheet metal member formed with terminal opposed

grip-sockets, a transverse wooden grip and a bolt extending longitudinally through said grip arranged to secure said grip between said sockets, means for locking said grip in said grip-sockets comprising a pair of rectangular



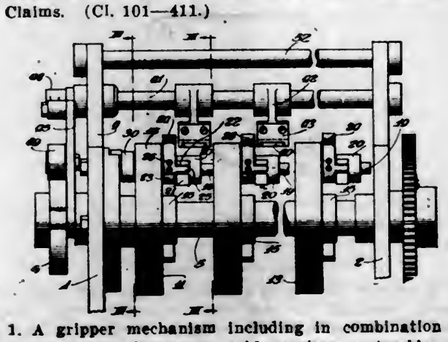
spurs struck inwardly from said sockets and imbedded in the adjacent end of the wooden grip, said spurs being cut upon parallel side lines and a transverse intermediate line defining the ends of the spurs.

1,808,782. LAMP SOCKET. ROSCOE E. MAJOR, Chicago, Ill., assignor to Major Equipment Co., Inc., a Corporation of Illinois. Filed Apr. 30, 1930. Serial No. 448,708. 4 Claims. (Cl. 240—143.)



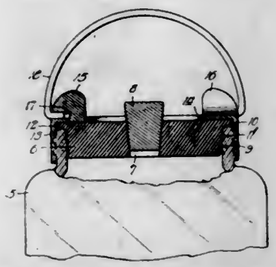
1. An electrical outlet comprising a lamp receptacle, a base plate having an outlet aperture, and having large and small perforations arranged about said aperture, a reflector having an outlet aperture and having round and key hole perforations arranged about said aperture, a pair of plate attaching screws in said receptacle coacting with the small perforations in said base plate, and a pair of reflector attaching screws coacting with the key hole perforations in said reflector, and said round reflector perforations registering with the heads of the plate attaching screws.

1,808,783. GRIPPER MECHANISM. CHARLES L. MOYER, Chicago, Ill., assignor to Quality Hardware and Machinery Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 29, 1929. Serial No. 389,113. 10 Claims. (Cl. 101—411.)



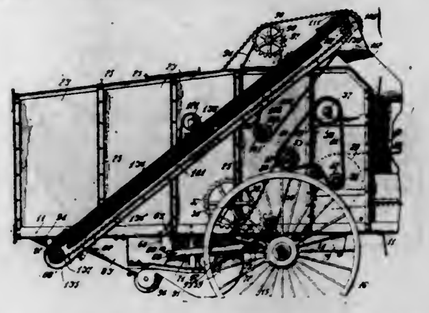
1. A gripper mechanism including in combination rotary carriers, grippers on said carriers, a tumbler for actuating said grippers, and curved flanges spaced circumferentially and radially from each other for tilting said tumbler in opposite directions.

1,808,784. CLOSURE FOR FLUID OR ASPIRATING BOTTLES AND THE LIKE. EDWARD OCASEK, Chicago, Ill., assignor to The Undertakers Supply Co., Chicago, Ill., a Corporation of Illinois. Filed July 20, 1929. Serial No. 379,731. 3 Claims. (Cl. 215—97.)



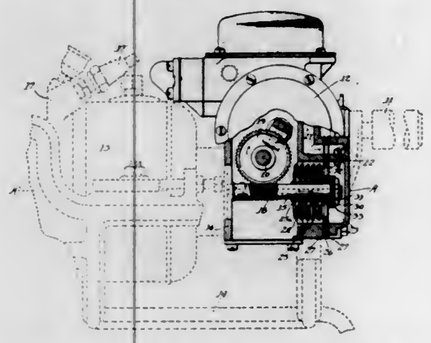
1. A closure device for bottles and the like comprising a resilient stopper having a portion for fitting tightly in a bottle mouth and an annular flange for engaging the top of the bottle whereby to form an additional seal therefor, and a cap for holding said stopper in place having an annular rim for fitting down over the top of the bottle and a flange extending inwardly from said rim to engage the top of said stopper, said rim having means cooperating with the bottle mouth to clamp said cap tightly thereon, said cap having upwardly extending ears thereon adjacent the periphery thereof to aid in attaching or removing the same, and a bail-like handle pivotally mounted in said ears for carrying the bottle.

1,808,785. THRASHING MACHINE. LOUIS A. PARADISE and EDWIN FREDERICK HUDDLE, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 21, 1927. Serial No. 193,128. 2 Claims. (Cl. 130—27.)



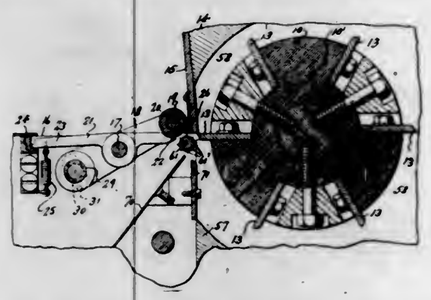
1. In a combined harvesting and thrashing machine, the combination of a thrashing cylinder, a conveyor for feeding the harvested grain to said thrashing cylinder, a straw walker receiving the straw from said cylinder, an oscillatory grain feeding pan disposed below said thrashing cylinder and said straw walker, a first cleaning shoe receiving the grain from said feeding pan, a second oscillatory grain feeding pan disposed below said straw walker and adapted to feed grain to said first cleaning shoe, a grain auger and a separate tailings auger for said first shoe, a second cleaning shoe disposed above said straw walker, an elevator for conveying the grain from said grain auger up to said second shoe, a tailings auger for said second shoe and a tailings elevator receiving the tailings from both of said tailings augers at different points and discharging the same to said feeding conveyor.

1,808,786. FLEXIBLE PACKING. LAWRENCE M. PERSONS, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 8, 1927. Serial No. 238,504. 6 Claims. (Cl. 103—57.)



1. In combination, a motor having its shaft provided with an axial passage therein, a pump, a housing having a chamber into which liquid is delivered by said pump and into which one end of said motor shaft extends, said motor shaft receiving the fluid in said chamber through said axial passage for delivery to an outlet at the opposite end, and means for supporting said end of the motor shaft in one wall of said chamber including a relatively rotatable sleeve and collar on said shaft, both having cooperating bearing surfaces, and a resilient packing fixed between said housing and one end of said sleeve, said packing tending to urge said sleeve to engage against said collar whereby to maintain said bearing surfaces in close contact and to thereby retain a lubricant film therebetween and prevent leakage of fluid between said surfaces.

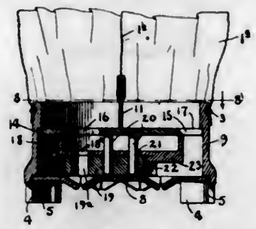
1,808,787. PELT DEHAIRING MACHINE. ROBERT H. PLASS, Montclair, N. J., assignor to The Chapal Donner Corporation, Newark, N. J., a Corporation of New Jersey. Filed Dec. 13, 1929. Serial No. 413,836. 16 Claims. (Cl. 19—2.)



1. In a machine of the kind described, a cutting mechanism, means to feed pelts to said cutting mechanism, and a movable comb means adjacent the cutting mechanism operative to sweep outwardly and away from the cutting mechanism and a pelt fed thereto hair or fur filaments severed from the latter.

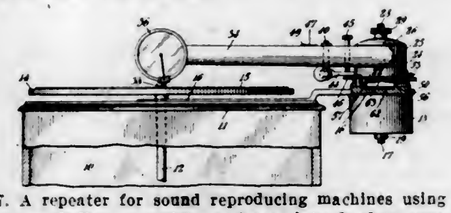
1,808,788. DOUGH FORMING APPARATUS. NEAL PROOS, Grand Rapids, Mich. Filed May 17, 1927. Serial No. 191,995. 7 Claims. (Cl. 107—1.)

6. A dough forming apparatus comprising, a divided container having a shoulder, a removable dividing plate in the container bearing against said shoulder and having openings communicating with opposite sides of the container, means for positioning the dividing plate relative to the container, a separable directing means engaging said dividing plate and having passages to direct dough from one opening of the dividing plate to certain openings of a die plate and from the other opening of the dividing plate to certain other openings of the die plate, means for positioning the directing means relative to the



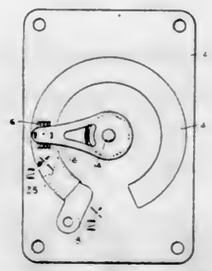
dividing plate, a die plate having a plurality of openings detachably secured to the container and bearing against the directing means to hold it in engagement with the dividing plate and to hold the dividing plate against said shoulder, means for positioning the die plate relative to the container, and means for ejecting dough from the container.

1,808,789. SOUND REPEATER FOR SOUND REPRODUCING MACHINES. DANIEL WILLIAM RANTINE, Brooklyn, N. Y. Filed Aug. 24, 1928. Serial No. 301,815. 12 Claims. (Cl. 274—15.)



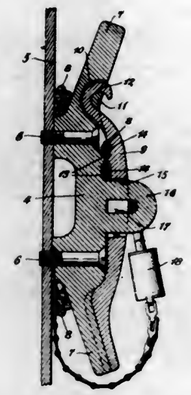
7. A repeater for sound reproducing machines using a flat record disc, comprising a base plate fixed to extend from the machine, a laterally rockable and axially rotatable base ring mounted on said plates, a series of rings interengaged at their edges, a cover thereover, means for clamping said series of rings as a unit, hinge connections between said base ring and unit, a pair of opposed reproducer carrying arms attached to two adjacent relatively rotatable rings of said series, said reproducers having styli to engage the grooves of a record, means for adjusting the distance apart of said reproducers, means for raising and lowering the styli upon said hinge, and means for rocking said rings and associated parts in timed alternate relation.

1,808,790. VARIABLE RESISTANCE. EMIL REISMAN, Brooklyn, N. Y., assignor to Technidyne Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 28, 1929. Serial No. 350,478. 10 Claims. (Cl. 201—55.)



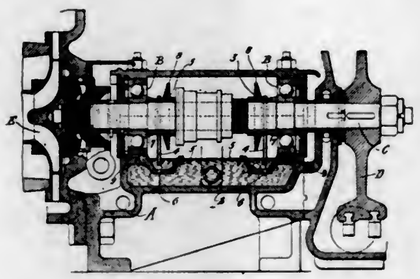
3. A resistor comprising a resistance film, and a painted metallic terminal therefor, said resistance film being placed in contact with the metallic terminal by being coated thereover.

1,808,791. HALYARD CLEAT. WALTER A. SAGUE, Buffalo, N. Y. Filed Mar. 27, 1930. Serial No. 439,339. 7 Claims. (Cl. 24—132.)



5. In a halyard cleat, the combination with a member about which the free end of a halyard may be wound and which is provided with means permitting the strands of the halyard, after being wound about said member to the extent desired, to be drawn across its face, of a member pivotally mounted upon said first mentioned member for engaging said strands and means for locking said pivoted member against said strands.

1,808,792. LUBRICATING DEVICE. CHRISTOPHER A. SCHELLENS, Marblehead, Mass., assignor to C-S Engineering Company, Jersey City, N. J., a Corporation of Delaware. Filed Dec. 28, 1926. Serial No. 157,526. 3 Claims. (Cl. 308—138.)

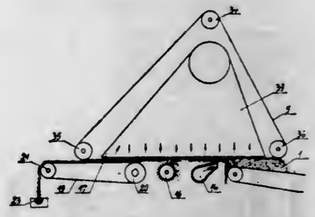


1. In combination with a shaft and its bearing, of means for lubricating the bearing including an oil reservoir, an oil ring for picking up oil from said reservoir, and an oil directing member on which the oil ring deposits oil, said member having a cone-like portion for leading oil to the bearing, and a flanged portion for spraying oil over the bearing in the form of fog.

1,808,793. BEARING METAL. ROBERT JAY SHOEMAKER, Chicago, Ill., assignor to S. & T. Metal Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 2, 1928. Serial No. 297,119. 6 Claims. (Cl. 75—1.)

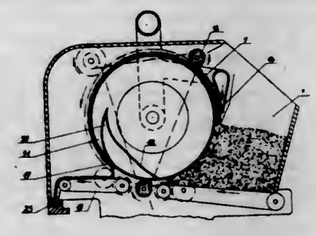
6. Metallic compound consisting of the following substances in proportions by weight approximately as follows: tin 1.0%; calcium 0.5%; mercury 0.25%; magnesium 0.075%; aluminum 0.05%; and lead to make up 100%.

1,808,794. MEANS FOR SPREADING CUT TOBACCO. FRANZ HEINRICH BENNO STELZER, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmachinen-Fabrik J. C. Muller & Co., Dresden, Germany. Filed July 8, 1929, Serial No. 376,703, and in Germany July 5, 1928. 5 Claims. (Cl. 131—39.)



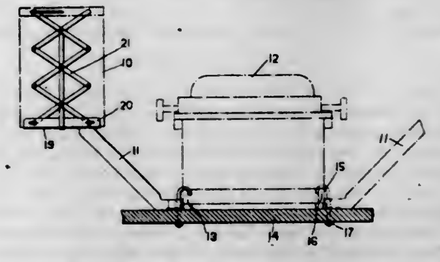
1. Means for spreading cut tobacco comprising in combination with a sieve band subjected to suction action and serving to form a tobacco fleece, an impervious feed band disposed adjacent the delivery point of the sieve band, said impervious band interrupting the suction action adjacent the delivery point of said sieve band, and serving to carry the tobacco fleece out of the range of the suction action exerted on the sieve band.

1,808,795. MEANS FOR SPREADING CUT TOBACCO. FRANZ HEINRICH BENNO STELZER, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmachinen-Fabrik, J. C. Muller & Co., Dresden, Germany. Filed Aug. 1, 1929, Serial No. 382,612, and in Germany July 5, 1928. 6 Claims. (Cl. 131—39.)



1. Means for spreading cut tobacco comprising a moving sieve band for carrying a tobacco fleece, a suction chamber closed by said band and means for gradually reducing the suction action exerted on said sieve band towards one end whereby the fleece may be delivered from the sieve band.

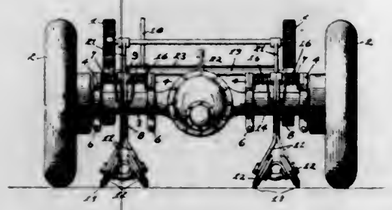
1,808,796. BOOK SUPPORT. THOMAS J. SMYTH, East Elmhurst, Long Island, N. Y. Filed May 5, 1927. Serial No. 188,896. 6 Claims. (Cl. 120—28.)



1. A book rack comprising a base, an extensible back carried thereby and including a plurality of pairs of crossed

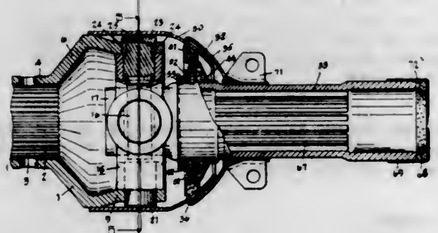
levers, the levers of each pair being pivoted to each other at their mid-point and at their ends to the ends of the levers of adjacent pairs, a toggle extending between the mid-points of pairs of levers to maintain the back in extended position, and a pivot carried by the base for reception in a bearing on an arm.

1,808,797. ANTISKIDDING DEVICE. CARL UHLMAN, San Francisco, Calif. Filed May 11, 1929. Serial No. 362,303. 8 Claims. (Cl. 188—5.)



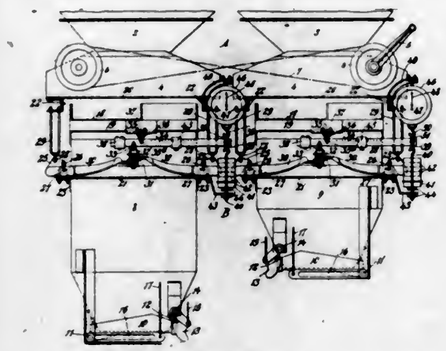
1. An anti-skid device for automobiles comprising a pair of arms pivotally and slidably mounted adjacent the rear wheels of an automobile; a pair of rollers mounted upon each arm, the rollers of each pair being inclined in opposite directions and diverging toward their lower edges; means for normally holding the arms and rollers in an inoperative position; means for resiliently resisting transverse sliding movement of the arms; and means for moving the arms to an operative position with the rollers engaging the surface of the roadway between the rear wheels of the automobile to resist skidding movement of said wheels.

1,808,798. UNIVERSAL JOINT BOOT. BERTIS H. URSCHEL, Bowling Green, Ohio, assignor to Urschel Engineering Company, Bowling Green, Ohio, a Corporation of Ohio. Filed Mar. 7, 1928. Serial No. 259,800. 5 Claims. (Cl. 64—89.)



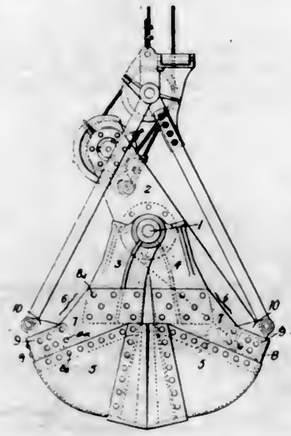
1. In a universal joint, a shell, a cap for closing one end of the shell, the shell having flattened portions and forming bearings for a pin of the universal joint, a key for keying the said pin to the shell, a shaft, a sleeve fitting the end of the shell having the cap and covering the key and the ends of the pin to prevent displacement of the key and the pin, one end of the sleeve having a substantially spherical portion centered in the center of the universal joint and having an opening for receiving a section of the shaft, a closure plate and a gasket connected to the section of the shaft for closing the opening of the sleeve.

1,808,799. WEIGHING BATCHER. WILLIAM MAYO VENABLE, Pittsburgh, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 17, 1928. Serial No. 326,585. 6 Claims. (Cl. 265—27.)



1. A weighing batcher including, in combination, a hopper, a fixed superjacent material supply means, connections therebetween including levers, and a scale beam connected to a lever and fulcrumed on the hopper.

1,808,800. BUCKET CONSTRUCTION. WILLIAM MAYO VENABLE, Pittsburgh, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 21, 1928. Serial No. 327,635. 7 Claims. (Cl. 37—184.)

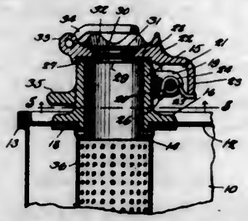


1. The combination of a bucket hinge member, a scoop, a scoop corner bracket, and a separately formed adapter member to which all of said parts are secured, said hinge member being capable of use with a scoop of a different size by changing the adapter member.

1,808,801. VOLATILE LIQUID CONTAINER. SYDNEY S. WEIL, Baltimore, Md. Filed Apr. 18, 1928. Serial No. 271,087. 3 Claims. (Cl. 220—88.)

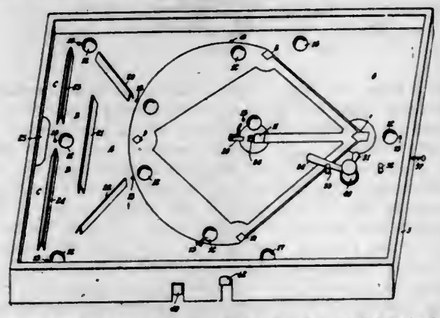
1. In a volatile liquid container, a receptacle having a delivery opening, a closure for said opening having an opening communicating with the delivery opening, said closure having hinge connection with the receptacle at one side of the delivery opening, a fusible member cooperating with the closure to hold the latter closed over the opening, a disk normally closing the closure opening and adapted automatically to free the closure opening under

abnormal heat conditions, and a foraminous tube extending downwardly from around said delivery opening and



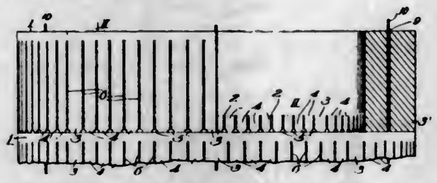
having a closed bottom, the sum of the cross sectional areas of the foramina in the tube being greater than the cross sectional area of the delivery opening.

1,808,802. BALL GAME APPARATUS. ALEXANDER WEINBERG, New York, N. Y. Filed Apr. 3, 1929. Serial No. 352,064. 12 Claims. (Cl. 273—89.)



1. In a ball game apparatus, a ball, a playing field having a pitcher's box and a home plate, a ball-impelling member for delivering the ball from the pitcher's box to the home plate, and means for supporting the ball in front of said impelling member and for shifting the relative positions of the ball and impelling member whereby the impelling member may be applied to the ball at different points to effect its delivery along selected lines of travel from the pitcher's box to the home plate.

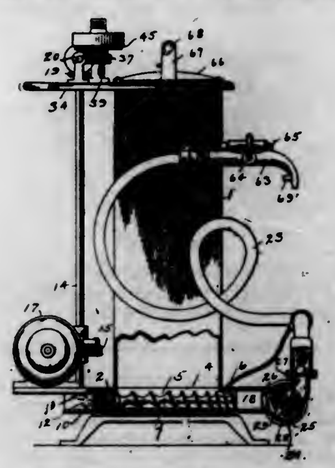
1,808,803. WELL SCREEN. GEORGE AUSTIN, Kansas City, Mo. Filed Apr. 15, 1929. Serial No. 355,275. 3 Claims. (Cl. 165—5.)



1. A well screen comprising a plurality of superimposed ring members, each provided with radial slots or passages in their lower ends, the slots or passages having upward extensions in the form of grooves in the exterior surface of the member; the lower end of the member being formed with spaced recesses individual to and communicating with and increasing the width of the lower ends of the respective slots or passages.

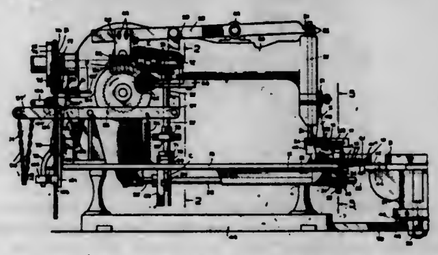
1,808,804. GREASE DISPENSER. JACOB BALDNER and GEORGE BALDNER, Xenia, Ohio; said George Baldner assignor of his entire right to Kenneth S. Clapp, Cleveland, Ohio. Filed May 15, 1922, Serial No. 561,080. Renewed Dec. 3, 1930. 19 Claims. (Cl. 221—101.)

1. In a dispensing apparatus of the character described, a reservoir, motor actuated ejector means, a discharge conduit, and a motor control switch located in proximity to the discharge end of said conduit for initiating the operation of the motor with means for maintaining



the motor in operation independent of the said switch until a predetermined quantity of commodity is discharged through said conduit.

1,808,805. POWDER PUFF SEWING MACHINE. ROGER BIHLER, College Point, New York, N. Y., assignor, by mesne assignments, to Baronet-Lorna Co. Inc., College Point, N. Y., a Corporation of New York. Filed Aug. 12, 1926. Serial No. 128,885. 33 Claims. (Cl. 112—2.)

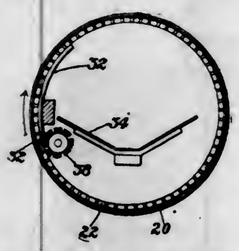


2. In a machine for sewing circular multiply articles, a machine head including an operating shaft, a rotatable work-feeding work table for receiving assembled plies of material and for stitch-feeding the same to the machine needle, a supporting plate for said work table slidably mounted for adjustment on said machine head, gearing supported on said plate and connecting the work table with said operating shaft, a pressure plate movable into and out of engagement with the multi-ply assembly for holding the plies of material together and in engagement with the work table to be rotated thereby, and means for intermittently operating the shaft to actuate the work table in unison with the stitching operations of the needle.

1,808,806. APPARATUS FOR NAIL SORTING. BASIL POMEROY COOPER, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 11, 1927, Serial No. 225,519, and in Great Britain Nov. 9, 1926. 4 Claims. (Cl. 209—95.)

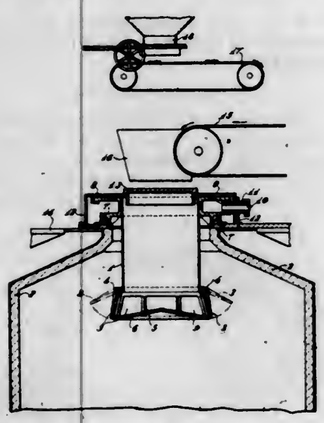
1. A machine for sorting metallic fastenings having, in combination, a rotary drum provided with a plurality of shallow, circular pockets of a diameter to receive only those fastenings that are not longer than the desired length, means for removing from the vicinity of the pockets, as the pockets move up during the rotation of the drum, all

fastenings other than those completely within a pocket, a retaining plate to prevent the escape of such of the fastenings as are completely received within the pockets



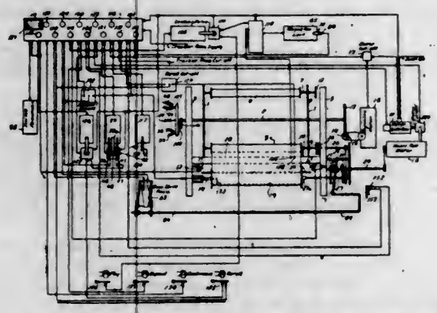
as they continue to move up during the rotation of the drum, and a receptacle arranged to receive the fastenings as they pass beyond the retaining plate.

1,808,807. GAS MANUFACTURE. BROWN F. DE GRAW, Fort Wayne, Ind., assignor to The Western Gas Construction Co., a Corporation of Indiana. Filed Apr. 15, 1929. Serial No. 355,054. 7 Claims. (Cl. 214—18.)



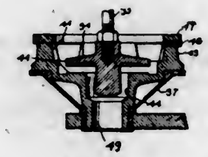
1. A charging device for gas producers comprising a rotatable hopper for receiving fuel, doors for said hopper that are normally closed, and means for rotating said hopper to cause said doors to open and to distribute the fuel contents of said hopper.

1,808,808. MUSIC ROLL MAGAZINE. JOSEPH HUNTER DICKINSON, Larchmont, N. Y., assignor to The Aeolian Company, a Corporation of Connecticut. Filed Oct. 15, 1928. Serial No. 312,599. 24 Claims. (Cl. 84—120.)



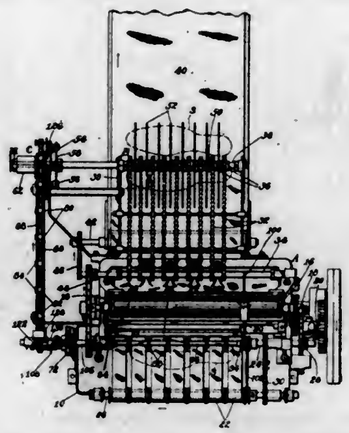
1. In combination, a magazine for operatively supporting a plurality of music-rolls; a tractor bar; a take-up spool; drive means for said magazine; a pneumatically operated magazine-lock; a ported valve operated by said magazine-lock and operatively connected with said drive means, said lock when in locked and unlocked positions respectively operating said valved port to stop and to start the magazine drive; and selective means for operating said lock to stop the magazine with any selected roll in operative position relatively to the tracker bar; said means comprising a valved port operatively connected to the magazine-lock pneumatic.

1,808,809. APPARATUS FOR PLATING. DWIGHT T. EWING, East Lansing, Mich. Filed Oct. 5, 1927. Serial No. 224,046. 1 Claim. (Cl. 204—5.)



In a work holder for plating the inside of a cup-shaped differential gear casing, said casing having a plurality of differential spider notches therein which are required to be left unplated, a cup-shaped support into which said casing is received, a ring adapted to rest upon the rim of the casing, said ring having a plurality of ribs extending therefrom into the notches in the casing, an anode disposed in said casing and shaped so as to follow the internal contour thereof, whereby the anode will be spaced a uniform distance from the inside walls of the casing, and means for lowering said work holder and casing and ring from said anode whereby the casing may be conveniently removed from the work holder, said ring and notches effectively preventing the depositing of metal on the abutting casing surfaces.

1,808,810. POSITIONING APPARATUS. SIDNEY J. FINN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Refiled for abandoned application Serial No. 191,806, filed May 16, 1927. This application filed Nov. 23, 1929. Serial No. 409,409. 30 Claims. (Cl. 91—51.)



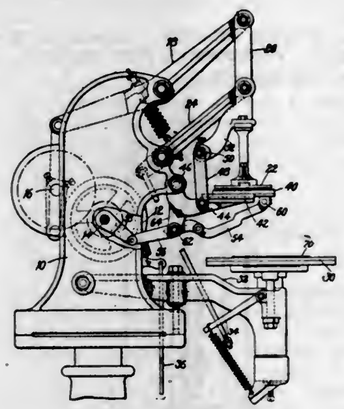
1. The combination with movable work-positioning means, of means including an element governed by the work during the travel of said work past the element toward the positioning means for controlling the movement of the positioning means.

1,808,811. FIREWORKS. JOSEPH GIOIOSA, Milton, Mass. Filed Sept. 9, 1930. Serial No. 480,658. 1 Claim. (Cl. 102—20.)



A firework having, in combination, a frame, a clamp fast thereto and embodying a pair of oppositely disposed spring arms adapted to clamp a firework display unit therebetween, and a prong projecting from one of said arms toward the other.

1,808,812. INKING DEVICE FOR MARKING MACHINES. PERLEY R. GLASS, Wayland, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 10, 1927, Serial No. 225,211. Renewed May 1, 1930. 14 Claims. (Cl. 101—335.)



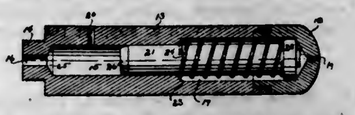
1. In a marking machine having a marking device and a platen which are relatively movable to bring the marking device into contact with a piece of work supported on the platen a pad for applying ink to the marking device, a support for said pad, and means for sliding said pad on the support and at the same time swinging the support to bring the pad into contact with the marking device when the latter is separated from the platen.

1,808,813. INTERCHANGEABLE JOURNAL FOR TEXTILE ROLLS. ALBERT M. GUILLET, Charlotte, N. C. Filed July 11, 1929. Serial No. 377,398. 7 Claims. (Cl. 19—141.)



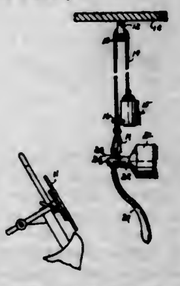
1. A roll for textile machinery comprising an extended bore in each end of the roll, a smaller bore in the central portion of the first named bore, and extending further into the roll, the smaller bore being threaded, a sloping portion between the smaller and larger bores and a journal member adapted to fit into the large and small bores, the end of the journal member being threaded to threadably engage the threads in the smaller bore, said journal having a tapered portion adapted to fit against the sloping portion joining the larger and smaller bores.

1,808,814. AUTOMATIC AIR MIXING APPARATUS FOR INTERNAL COMBUSTION MOTORS. LOREN A. HART, Charlevoix, Mich. Filed June 21, 1928. Serial No. 287,310. 5 Claims. (Cl. 137—153.)



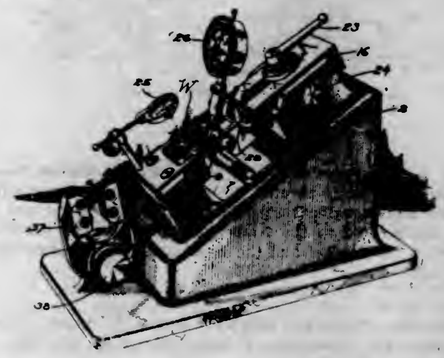
1. In a device of the class described, a body member designed to be screwed into the intake manifold of an internal combustion motor, a bore in said body member communicating with the inside of said manifold, a second bore in the rear portion of said body member communicating with the first mentioned bore, a shoulder in said last mentioned bore, a passageway in said body member communicating with the outside atmosphere and the first mentioned bore, a piston slidably mounted in said bores, a head formed on the rear end of said piston, and a coil spring embracing said piston and engaging said head and said shoulder.

1,808,815. DEVICE FOR INKING PRINTING PRESSES. PAUL S. HERVEY and HASKELL A. BILLINGS, Des Moines, Iowa. Filed Dec. 23, 1929. Serial No. 415,932. 7 Claims. (Cl. 101—341.)



1. In a device of the class described, a receptacle designed to hold ink to be used on a printing press, a base member on said receptacle, a rounded end on said base member, a passageway in said base member having one end communicating with the inside of said receptacle and its other end communicating with said rounded end, and a means for forcing desired amounts of ink from said receptacle through said passageway to said press.

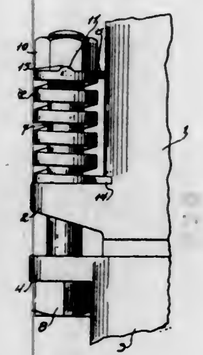
1,808,816. SCREW THREAD TESTING DEVICE. CHARLES G. JOHNSON, Hartford, Conn., assignor to Pratt & Whitney Company, Hartford, Conn., a Corporation of New Jersey. Filed June 30, 1924. Serial No. 728,122. 21 Claims. (Cl. 33—199.)



19. A screw holding cradle comprising the combination of a pair of coaxial and relatively spaced annular members,

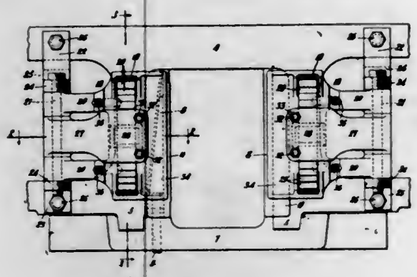
the peripheries of the members being V-shaped in cross section to engage a screw between adjacent threads thereof, means holding one of the members against movement axially, the other member being movable axially, and a pair of rollers located in opposed relation to the members in a manner cooperating therewith to support the screw.

1,808,817. ROCK DRILL. EDWARD L. OLDHAM, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Filed Mar. 8, 1928. Serial No. 260,192. 1 Claim. (Cl. 285—130.)



In a rock drill, an apertured flange, a bolt extended therethrough, a nut on the bolt and a helical spring disposed on the bolt between said flange and said nut, the ends of said spring being extended tangentially to abut against said drill in such a manner that any torque on said spring is taken in end thrust by said extended ends, and interlocking means on said spring and nut.

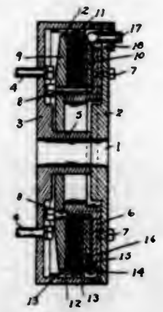
1,808,818. LATERAL MOTION DEVICE FOR LOCOMOTIVES. SAMUEL S. RIEGEL, Scranton, Pa. Filed Mar. 17, 1928. Serial No. 262,478. 21 Claims. (Cl. 105—80.)



6. A lateral motion device for locomotive driving boxes including a lever pivoted at one end to the locomotive frame and engaging the box structure at its other end, a bracket secured to the frame and spring means reacting between the bracket and the lever at a point intermediate its ends.

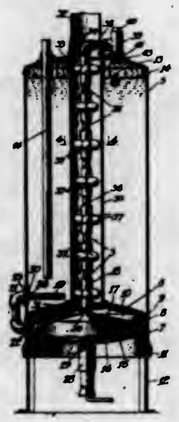
1,808,819. VEHICLE BRAKE. GRANT W. RIGBY, Pittsburgh, Pa. Filed Aug. 9, 1930. Serial No. 474,092. 6 Claims. (Cl. 188—72.)

2. In a disk brake comprising a drum and a disk arranged to rotate with the drum, the combination of a backing member and a slidable disk having co-operating inclined surfaces, a contractile member lying against said



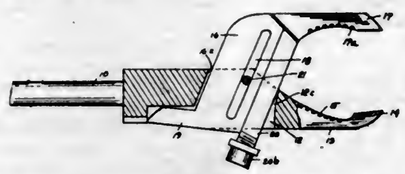
inclined surfaces, and means for contracting said member to cause the same to exert a wedging action between the backing member and the slidable disk.

1,808,820. WATER HEATER. THOMAS A. RONSTROM, Chicago, Ill. Filed June 13, 1927. Serial No. 198,565. 1 Claim. (Cl. 122—16.)



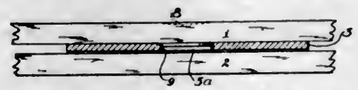
A water heater comprising a tank and a combustion chamber therennder; a flue extending from said combustion chamber vertically through said tank; a heating drum in said combustion chamber, the top of said drum being adjacent and substantially parallel to the bottom of said tank; a circulating pipe connected with the upper part of said drum, extending upwardly through said flue and connected at its upper end to the upper portion of said tank; radiating hollow arms on said pipe at various levels, the arms at each level being staggered with respect to the arms at adjacent levels; a pipe connecting one side of said drum with the lower portion of said tank; said last mentioned pipe extending radially outwardly through the side wall of said combustion chamber and then upwardly and radially inwardly into the lower portion of said tank to a position adjacent the side of said flue; a vertical partition in said drum starting at a point opposite said last mentioned pipe and extending thence in both directions substantially parallel to the periphery of said drum thereby causing the incoming water to separate into two separate streams; and a burner below said drum, said burner being positioned closely adjacent the bottom of said drum and provided with radial openings projecting flame substantially parallel to the bottom of said drum.

1,808,821. ALLIGATOR WRENCH. JOSÉ RUBALCABA, Los Angeles, Calif. Filed Dec. 16, 1929. Serial No. 414,354. 1 Claim. (Cl. 81—151.)



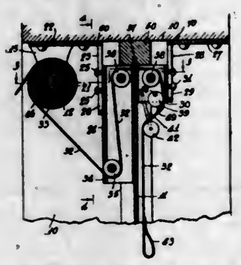
In a tool, in combination a handle carrying a fixed shank terminating in a forward curved serrated jaw, and having a central vertical slot, said slot having a forward curved edge and a rearward inclined edge, a movable shank projecting slidably in said slot and rocking adjustably against said curved edge, a serrated curved jaw carried at the forward end of the movable shank, the fixed shank and the movable shank having interengageable stops to shoulder the movable shank rigidly when its jaw engages work against the fixed jaw, means locking the movable shank in adjusted position in said slot, and means carried by said movable shank and engageable with the fixed shank to prevent the accidental removal of the movable shank from the fixed shank.

1,808,822. MEANS FOR SECURING ANTIFRICTION PADS TO LEAF SPRINGS. ARTHUR A. SCHUPP, Saginaw, Mich., assignor to Fredericksen Company, Saginaw, Mich., a Corporation of Michigan. Filed Dec. 5, 1928. Serial No. 323,836. 4 Claims. (Cl. 267—47.)



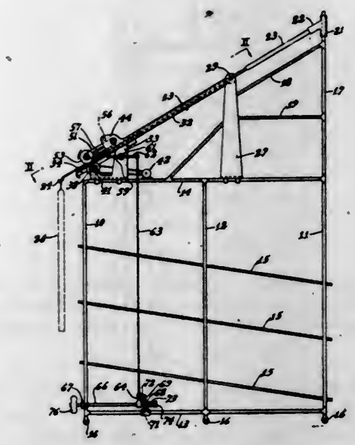
1. In a leaf spring whose leaves are separated near their free ends by intervening pads of anti-friction material, means for fastening a pad to a leaf comprising a boss struck from the material of the spring and projecting from a face thereof, said boss disc-shaped with abrupt peripheral edges at its disk face and likewise at the junction of the boss with the face of the spring, and a centrally apertured pad of anti-friction material which is of greater thickness than the boss and is received thereon in force-fitting relation thereto.

1,808,823. AWNING FIXTURE. JOHN W. SHAW, Norwood, N. J., assignor to Bing & Bing, Inc., a Corporation of New York. Filed May 24, 1928. Serial No. 280,150. 21 Claims. (Cl. 156—44.)



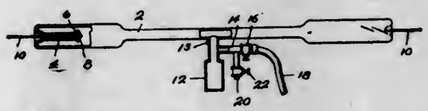
4. Operating mechanism for a spring roller type awning mounted exteriorly of a sash, including an operating tape therefore having its handle end disposed interiorly of the sash, of tape checking means disposed interiorly of the sash and preventing the tape from being drawn outwardly by the roller, and means acting automatically to normally urge the tape toward proper position to be retained by the check means.

1,808,824. GARMENT BAGGING MACHINE. WILLIE A. SHIELDS, Birmingham, Ala., assignor of one-half to Clifton M. Ellis, Birmingham, Ala. Filed Dec. 18, 1929. Serial No. 414,971. 9 Claims. (Cl. 226—18.)



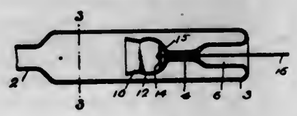
1. In a garment bagging machine, a fixedly secured pole for slidably supporting an empty bag and disposed at an angle to the horizontal, means for mounting a garment to be bagged at the lower end thereof, a slide extending in substantial parallelism with the pole positioned below the pole for supporting the sides of the bag, said slide being pivotally mounted below the pole, and means for raising the lower end of the slide up level with the pole.

1,808,825. LUMINESCENT TUBE. GEORGE E. TEASDALE, Kansas City, Kans. Filed May 4, 1929. Serial No. 360,446. 1 Claim. (Cl. 176—126.)



In combination, a glass tube closed at each end, a solid stem formed integral with each end of said tube and extending into the latter, each stem having a convex terminal, a concavo-convex electrode fixed to the inner end of each stem, and a conductor connected to each electrode.

1,808,826. LUMINESCENT TUBE. GEORGE E. TEASDALE, Kansas City, Kans. Filed July 12, 1929. Serial No. 377,703. 1 Claim. (Cl. 176—126.)



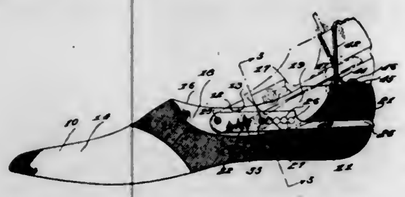
In combination, a transparent tube of the character described, stems extending inwardly from the outer ends of said tube, bell-shaped shields formed integral with the inner ends of said stems and provided with flaring mouths, disk electrodes located at the closed ends of said shields, and conductors connected to said disks.

1,808,827. WINDOW AND FLAP OPERATOR. ROSCOE G. WOLD, Phoenix, Ariz. Filed Jan. 12, 1929. Serial No. 332,124. 4 Claims. (Cl. 268—109.)



1. An operator for a hinged window comprising a guide for attachment to the window, said guide having an abutment, a lever slidably engaged with said guide and having means to engage said abutment to hold the lever normally against sliding with respect to the guide, a fulcrum for said lever adapted for mounting on the window frame, and a second lever fulcrumed at one side of the first named lever, the two levers being provided with hand grip portions adapted to be moved toward each other to move said levers in scissors-like manner, said second lever being adapted upon such movement to thrust against a portion of said guide and cause movement of the first named lever from engagement with said abutment.

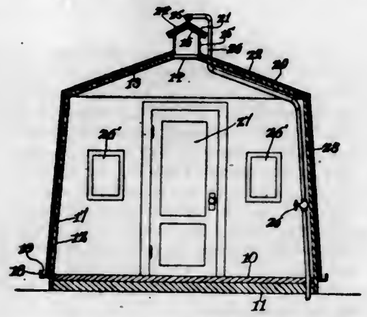
1,808,828. SHOE TREE. ARTHUR R. ANDERSON, North Arlington, N. J. Filed Nov. 14, 1929. Serial No. 407,224. 3 Claims. (Cl. 12—128.1.)



1. A shoe tree comprising co-operating toe and heel sections; said sections provided jointly with a longitudinal slit substantially centrally thereof; said heel section provided with a longitudinal guide opening in the plane of said slit; a link having one end thereof disposed in said slit and pivotally secured to said toe section; the opposite end of said link movably disposed in said guide opening; spring latching means in said heel section; said link provided with means for co-operation with said latching means for effecting longitudinal adjustment between said sections; and reinforcing means detachably secured to said heel section and entering same on either side of said guide opening.

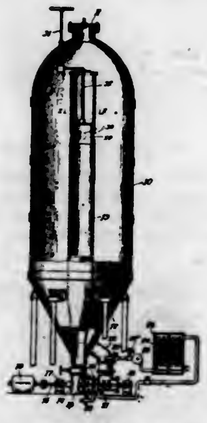
1,808,829. BUILDING. CECIL E. BARNES, Los Angeles, Calif. Filed Nov. 25, 1929. Serial No. 409,658. 1 Claim. (Cl. 62—90.)

A building comprising a floor, oppositely sloping roof frames, an impervious sloping closure coextensive with and secured upon the upper face of each frame, a water conducting element possessing an absorbent characteristic coextensive with and secured upon the outer face of said closure, oppositely sloping outer wall frames connected at their upper ends to the outer ends of said roof frames and extending to said floor, an impervious, sloping outer wall forming member secured against the outer face of each wall frame and extending from the top of the latter to a point opposing said flooring, each of said members having an outwardly directed angle-



shaped portion at its lower end to provide a water collecting trough, a water conducting element possessing an absorbent characteristic secured to the outer face of each of said members and extending from the top of the latter to within said trough, a water supply pipe arranged within the building adjacent a wall and a roof frame, extending up through the latter and positioned to discharge water upon said conducting elements on the said closures upon the roof frames, and said pipe including means positioned in the building for controlling the water discharge.

1,808,830. METHOD OF AND APPARATUS FOR DIGESTING WOOD. JOSEPH E. BOND, Appleton, Wis. Filed May 27, 1929. Serial No. 366,295. 9 Claims. (Cl. 92—7.)



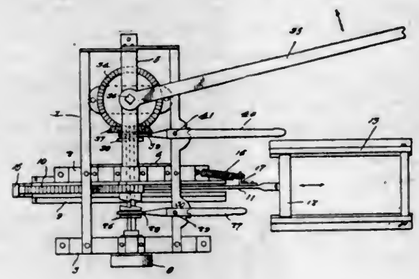
1. The method of operating a digester having a vertical open top tube therein which consists in charging chips into the digester and tube then delivering hot acid to the bottom of the tube and causing it to rise and overflow over the top of the chips in the space around the tube then continuously pumping acid and chips from the bottom of the space around the tube and discharging said acid and chips upwardly through said tube, withdrawing cooled acid from the digester, indirectly heating the same at a point exterior of the digester and returning the heated acid to the moving body of material.

7. The combination of a digester having a vertical open top tube therein, a pump having its inlet connected to the bottom of the space surrounding the tube and its outlet connected to said tube, means for continuously withdrawing cooled acid from the lower portion of the digester, means for indirectly heating the withdrawn acid, and means for returning the heated acid to the moving body of chips and acid passing through the pump.

1,808,831. PROCESS FOR RECOVERING FATTY PRODUCTS. HENRY L. BORG, Stamford, Conn., assignor to Postum Company, Incorporated, Battle Creek, Mich., a Corporation of Delaware. Filed Jan. 21, 1928. Serial No. 248,573. 5 Claims. (Cl. 87—6.)

5. In a process for treating a finely divided cacao bean mass which contains not less than approximately 30% of cocoa butter, whereby said butter may be removed from the solid constituents of the mass, which includes the step of slowly agitating the mass in the presence of approximately 12% by weight of water while maintaining the mass at a temperature of approximately 100° C.

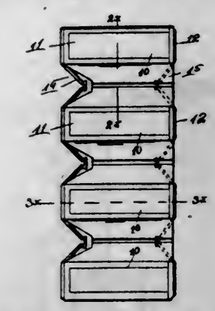
1,808,832. HAY PRESS. GEORGE W. BOWMAN, Seymour, Tex. Filed Oct. 29, 1928. Serial No. 315,795. 1 Claim. (Cl. 100—5.)



In a hay press having a press chamber and a plunger slidable therein, means for actuating the plunger comprising a rack bar connected to the plunger, a pair of alined shafts disposed transversely above the rack bar, one of said shafts being of polygonal cross-section and having an end portion of circular cross-section, the other of the shafts being of circular cross-section and having an end portion of polygonal cross-section in opposed relation to the circular end portion of the first named shaft, means for independently rotating said shafts, a segmental pinion supported on the polygonal end of the circular shaft and having a bore including a polygonal portion for the reception of the polygonal end of the circular shaft for causing the pinion to rotate therewith and a circular portion for receiving the circular end of the polygonal shaft for permitting independent rotation therebetween, a clutch element on the segmental pinions, a clutch element mounted for longitudinal sliding movement on the polygonal shaft for engagement with the first named clutch element for effecting the rotation of said pinion with said polygonal shaft when the operating means for the circular shaft is in inoperative position, said pinion cooperating with the rack bar to move the plunger carried thereby forwardly into the press chamber.

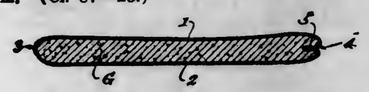
1,808,833. ADJUSTABLE PACKING CASE. ALLAN L. BRACK, Rochester, N. Y. Filed May 4, 1928. Serial No. 275,160. 2 Claims. (Cl. 229—16.)

1. A packing case having panels arranged in rings and columns with a plurality of panels in each column, the panels in each ring being connected by scores and the panels in each column being connected by flutes all formed of a single sheet of paper products, said case being com-



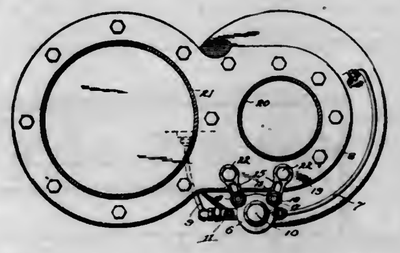
pressible lengthwise by moving the panels toward each other and bending the flutes between them, the flutes being bent inwardly against the article contained in the package.

1,808,834. CLEANING PAD. RUDOLPH BUSCH, Sr., Shelltown, Md. Filed Mar. 6, 1929. Serial No. 344,840. 1 Claim. (Cl. 87—23.)



In a cleaning pad, a fabric container stitched together on all sides and containing a powdered cleaning compound comprising approximately 90% calcium carbonate, approximately 8% sodium carbonate and approximately 2% sodium chlorid.

1,808,835. SUPPORT FOR LUBRICATORS. CHARLES ALBERT CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Nov. 27, 1926. Serial No. 151,228. 4 Claims. (Cl. 184—105.)

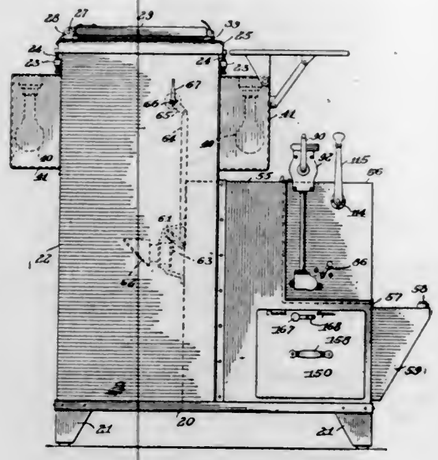


4. The combination of a lubricator body, a pump structure having a plurality of spaced threaded connectors which hold parts of the pump structure in assembled relation; a pair of arms each supported by a corresponding one of said threaded connectors and each underlying a portion of the lubricator body; pins projecting upward from said arms through a portion of said lubricator body said pins being parallel with each other and with the axes of said threaded connectors; and removable means on said pins for retaining said body.

1,808,836. PHOTOGRAPHIC APPARATUS. ARTHUR W. CAPE, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 1, 1929. Serial No. 343,653. 23 Claims. (Cl. 95—34.)

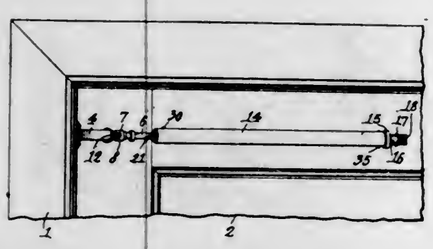
1. In a photographic apparatus, the combination with a camera, of a receptacle into which exposed prints from

said camera are fed, said receptacle having an opening for passage of said prints, flanges adjacent the edges of



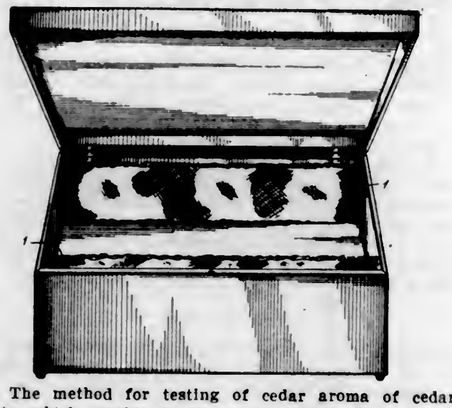
said opening, and a trough-shaped member movable into cooperation with said flanges to seal said opening and to prevent passage of light therethrough into said receptacle.

1,808,837. DOORCHECK. ANDREW B. CLARK, Thomasville, Ga., assignor of one-half to Roscoe Luke, Thomasville, Ga. Filed May 27, 1929. Serial No. 366,416. 2 Claims. (Cl. 16—49.)



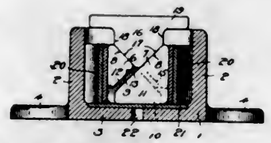
1. In a check for swinging doors, cooperating members comprising a holder and a screw, means for mounting said cooperating members for swinging movement and for holding one of them against rotation, and a free nut threaded on the screw and having threaded movement with respect to one of said cooperating members longitudinally of the screw, said cooperating members having relative right line movement in one direction to bring the nut into end engagement with one of said cooperating members for rotation therewith and for threaded movement along the screw when the door is opened, said cooperating members having relative right line movement in an opposite direction, when the door is closed, to effect an end spacing of the nut and that one of the said cooperating members with which the nut is brought into engagement as aforesaid.

1,808,838. METHOD OF AROMA TESTING OF CEDAR CHESTS. ERNEST C. CROCKER, Belmont, Mass., assignor, by mesne assignments, to The Lane Company, Inc., a Corporation of Virginia. Filed July 18, 1930. Serial No. 468,980. 7 Claims. (Cl. 23—230.)



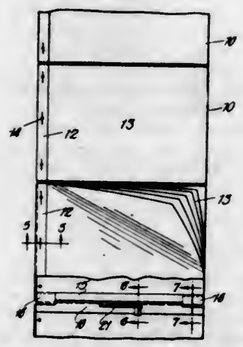
7. The method for testing of cedar aroma of cedar chests, which consists in using cheese cloth sheets, coating said sheets with about 5% of their weight with rosin, suspending the sheets within the chest, weighing the fabric, closing the chest, and noting from time to time how rapidly said sheets pick up cedar aroma.

1,808,839. SIDE-BEARINGS. DONALD C. DAVIS, deceased, Buffalo, N. Y., by Lou Bradshaw, executrix, Buffalo, N. Y., assignor to The Gould Coupler Company, New York, N. Y., a Corporation of Maryland. Filed Apr. 18, 1929. Serial No. 356,051. 5 Claims. (Cl. 308—138.)



1. A side bearing for railway cars involving a housing, a plurality of wedge shoes slidably mounted in said housing, a wedge block for actuating said shoes, and resilient means for opposing movement of said shoes, the latter having portions normally disposed on opposite sides of the apex of said wedge block.

1,808,840. CARBON PACK. KARL R. DENCKLAU, Plainfield, N. J. Filed May 28, 1930. Serial No. 456,557. 13 Claims. (Cl. 282—3.)



1. The combination of a plurality of carbon pack units, and releasable means for connecting said carbon pack units in continuous strip formation.

1,808,841. PAINT COMPOSITION. JOHN R. DURBON, Junction City, Kans. Filed June 14, 1926. Serial No. 115,962. 1 Claim. (Cl. 134—16.)

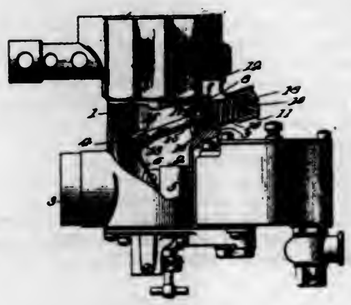
A composition for dressing automobile tops and the like consisting of an equal amount of linseed oil, Japan drier and a paint, the paint consisting of 12 5/10 percent pigment and 87 5/10 percent vehicle, the pigment consisting of carbon 16 percent, calcium phosphate 77 percent, calcium carbonate 3 percent, silicate 2 percent, water 2 percent and the vehicle consisting of rosin 14 8/10 percent, fixed fatty oils 31 9/10 percent, ash 2 percent, and mineral spirits 51 3/10 percent.

1,808,842. AEROPLANE WING. JOHN PAUL FEDOR, New Castle, Ind. Filed Aug. 18, 1930. Serial No. 476,101. 6 Claims. (Cl. 244—31.)



1. In all metal airfoils, a top covering having its leading edge turned under, a bottom covering having its leading edge secured to the turned under part of the leading edge of the top covering, a set of spaced I-beams paralleling the longitudinal center line of the wing and located between said top and bottom coverings, and a zigzag bracing sheet extending alternately over and under successive I-beams from the leading to the trailing edge of the wing and located between said top and bottom coverings, and means permanently securing the aforesaid parts together as an integral structure.

1,808,843. CARBURETOR. JACOB RICHARD FRANCIS, Flint, Mich. Filed June 15, 1921, Serial No. 477,768. Renewed Sept. 8, 1930. 4 Claims. (Cl. 261—63.)

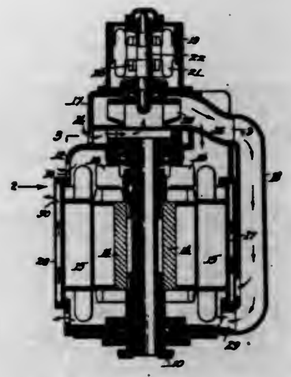


1. A carburetor having a mixing chamber provided with a fuel nozzle and a pivoted air valve, a rod pivotally connected to said air valve extending transversely across said mixing chamber and an adjusting screw mounted within the wall of said mixing chamber carrying a coil spring having a connection with said rod.

1,808,844. PURIFICATION OF WOOL GREASE. FRIEDRICH FAICK, Uerdingen, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 27, 1928, Serial No. 265,231, and in Germany Apr. 13, 1927. 3 Claims. (Cl. 87—12.)

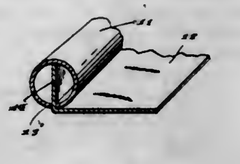
1. A process of preparing pure bleached wool grease free of water and dirt from emulsions of wool grease rich in water which consists in heating the emulsion together with an inorganic reducing bleaching agent under conditions of high temperatures and super-atmospheric pressure.

1,808,845. COOLING DEVICE FOR MOTORS. ALBERT J. GIFFORD and BENJAMIN S. T. BISHOP, Shrewsbury, Mass., assignors to Leland-Gifford Company, a Corporation of Massachusetts. Filed Oct. 8, 1929. Serial No. 398,207. 2 Claims. (Cl. 172—36.)



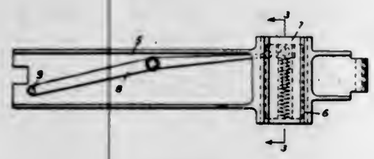
1. The combination with a main motor, of a fan motor, a fan on the fan motor shaft, a casing around said fan, means for delivering the air from the fan into the main motor at a plurality of levels, a casing surrounding the main motor and having an annular air space around the stator of the main motor and means for introducing the air currents from the fan into said space and into the space around the exposed parts of the windings of the stator.

1,808,846. BEDSPRING GUARD. MORRIS GOLDBERG, Brooklyn, N. Y. Filed Mar. 18, 1929. Serial No. 347,917. 1 Claim. (Cl. 5—193.)



A side guard member for a bed spring comprising a tubular member split longitudinally at its base and an angle iron presenting horizontal and vertical legs, said vertical leg being clamped within the split of said tubular member and having its upper edge abutting the upper peripheral wall thereof, said horizontal leg being adapted for attachment to a bed spring.

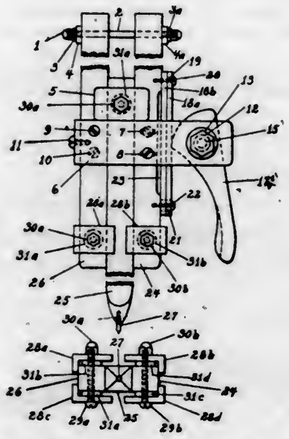
1,808,847. BELT FEED MECHANISM FOR MACHINE GUNS. JAMES L. HATCHER, U. S. Army, Winchester, Va. Filed Jan. 24, 1931. Serial No. 511,071. 5 Claims. (Cl. 89—33.) (Granted under the act of Mar 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



5. In a machine gun, a member having a transverse feedway, a slide mounted in the feedway, a spring opposing movement of the slide, and recoil operated means for moving the slide to energize the spring.

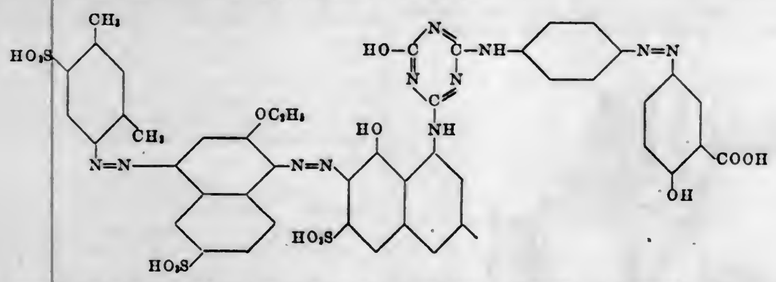
1,808,848. TRIPOD. JACK ELLIS HAYNES, St. Paul, Minn., assignor to Haynes Equipment Corporation, St. Paul, Minn., a Corporation of Minnesota. Original application filed Apr. 3, 1928, Serial No. 267,108. Divided and this application filed Dec. 30, 1929. Serial No. 417,544. 2 Claims. (Cl. 248—43.)

1. A tripod leg assembly comprising a pair of leg members spaced apart, an intermediate leg member slidably arranged between the lower end portions of the first named leg member for longitudinal movement and provided on opposite sides with plates which bear on said spaced leg members, a U-shaped yoke extending across and enclosing said leg members and secured to one of the first named leg members for movement relative thereto in a direction transverse thereof, a cam pressure plate assembly on the outer side of one of said first named leg members, a manually operable cam pivotally mounted in said yoke and bearing against said cam pressure plate assembly, and leg guides secured to the outside leg members.

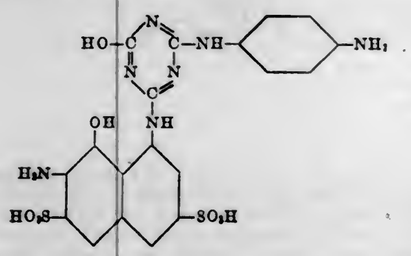


1,808,849. NEW POLYAZO DYESTUFFS. WINFRID HENTRICH and MAX HARDTMANN, Wiesdorf-on-the-Rhine, JOSEF HILGER, Cologne-Mulheim, and RUDOLF KNOCHE, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 16, 1928, Serial No. 320,002, and in Germany Nov. 22, 1927. 3 Claims. (Cl. 260—27.)

3. As a new product the polyazo dyestuff of the probable formula:

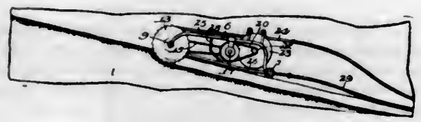


dyeing cotton from a Glabuer salt-sodium carbonate bath brilliant green shades of very good fastness to light and yielding upon reduction with stannous chloride and hydrochloric acid one molecule of 1-3-dimethyl-4-aminobenzene-6-sulfonic acid, one molecule of 1.4-diamino-2-ethoxy-naphthalene-6-sulfonic acid, one molecule of the compound of the following formula:



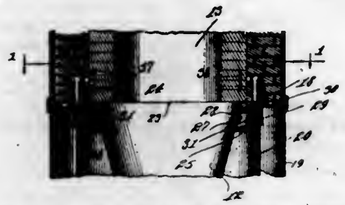
and one molecule of 1-amino-4-hydroxy-benzene-3-carboxylic acid.

1,808,850. MINING MACHINE. FRED A. HOMEWOOD, Roosevelt, Utah. Filed June 30, 1928. Serial No. 289,406. 3 Claims. (Cl. 262—19.)



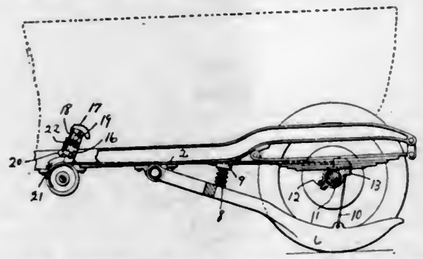
1. A machine for mining ore of the character set forth, comprising a frame, a rotary air engine mounted in the frame, means for supplying air to the engine, a saw mounted in the frame, means for driving the saw from the engine, an exhaust pipe leading from the engine to a point adjacent to the saw, a conductor pipe for carrying away the cuttings and a jet from the exhaust to the conductor pipe for forcing air rearwardly through said conductor pipe.

1,808,851. LIMEKILN. WILLIAM J. KUNTZ, York, Pa. Filed July 9, 1927. Serial No. 204,562. 2 Claims. (Cl. 222—8.)



1. A device of the character described comprising a kiln having a combustion furnace, a cooler to receive burned lime from the kiln, a water jacket formed of metal and secured to the cooler adjacent the combustion furnace of the kiln, means for supplying the jacket with water, and means for conducting the steam from the jackets to the combustion furnace.

1,808,852. ANTISKID DEVICE. OLA LANCE, Evanston, Wyo., assignor of one-fourth to C. F. Schmidt, Uinta County, Wyo. Filed Mar. 25, 1927. Serial No. 178,323. 2 Claims. (Cl. 188—5.)



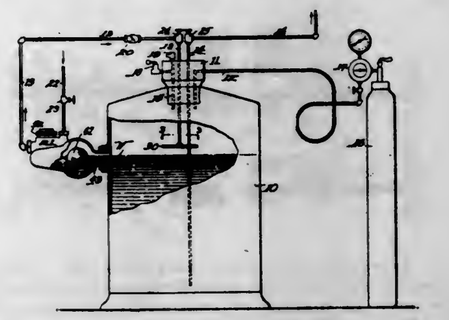
1. In an anti-skid device for vehicles, the combination of a cross member, means for mounting said cross member on the supporting frame of the vehicle, a pair of rearwardly extending diverging arms provided with bearings at one end rockably mounted on said cross member, brace arms connecting said first mentioned arms together, said brace arms being rockably connected with said cross member, and said first mentioned arms terminating at their free ends in downwardly disposed longitudinally extending offset portions, said offset portions being of convex form in vertical cross section, spring members operatively associated with the frame of the vehicle and with said first mentioned arms for normally urging the offset portions of the first mentioned arms in contact with the surface of the ground, said offset portions being adapted to constitute anti-skid elements, and means for raising and lowering the first mentioned arms with respect to the ground.

1,808,853. LUBRICATING OIL AND PROCESS OF MAKING SAME. CLARENCE JAMES LIVINGSTONE, Pittsburgh, and WILLIAM A. GRUSE, Wilkinsburg, Pa., assignors to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed May 18, 1928. Serial No. 278,908. 8 Claims. (Cl. 87—9.)

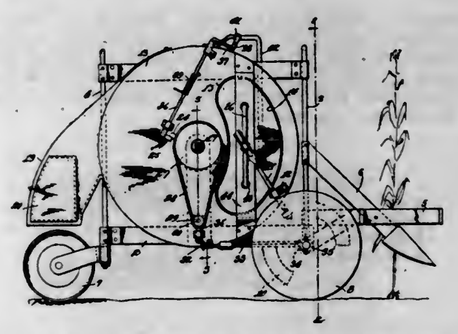
1. A liquid lubricant consisting of petroleum oil as its principal constituent, minimal amounts of soap and a miscible thinning agent of lower viscosity than said petroleum oil.

1,808,854. CARBONATING APPARATUS. JOSEPH E. MALONE, Worcester, Mass., assignor of forty per cent to Daniel O'Connell, Worcester, Mass. Filed July 20, 1928. Serial No. 294,142. 9 Claims. (Cl. 261—70.)

1. Carbonating apparatus comprising a closed mixing tank, an inlet thereto for gas under pressure, a normally closed outlet for carbonated water, means to regulate the admission of water so as to automatically maintain a substantially constant water level in said tank, and below the top thereof, thereby to leave a space for gas and a spray device in said tank connected to said water supply and positioned above the constant water level, and in the path of gas entering said space.

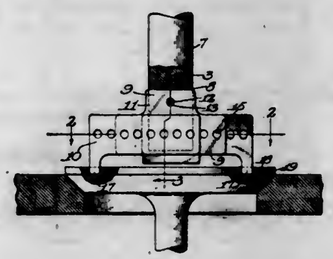


1,808,855. CORN HARVESTER. FRANK MATOUSHEK, Colome, S. Dak. Filed Apr. 30, 1930. Serial No. 448,625. 11 Claims. (Cl. 56—103.)



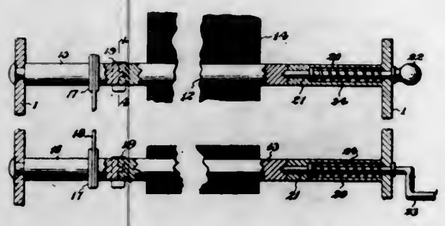
1. In a corn harvester for detaching the ears from the standing stalks, an ear stripper, and a plunger for deflecting the stalks laterally into the path of the ear stripper.

1,808,856. VALVE GRINDER. FRED W. MILLER, Chicago, Ill. Filed Nov. 19, 1928. Serial No. 320,416. 4 Claims. (Cl. 51—29.)



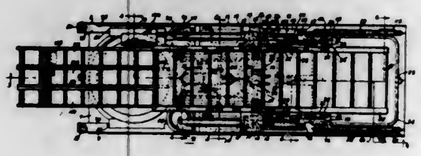
1. A valve grinder comprising a brace having a slot in the shank thereof, a central bit having a series of longitudinally arranged holes therein, means for securing said bit in the slot, and side bits having series of longitudinal projections adapted to engage with said holes, said side bits being held in engagement with the center bit by the sides of the slot.

1,808,857. COPY ATTACHMENT FOR TYPEWRITERS. CARL H. MONSEES, Salisbury, Md. Filed Dec. 10, 1927. Serial No. 239,065. 1 Claim. (Cl. 197—133.)



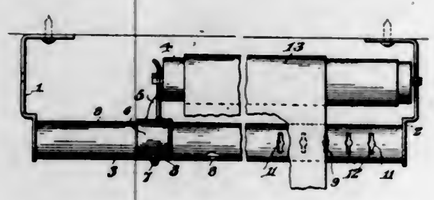
A typewriter attachment comprising side members, clamps at the lower ends thereof, stub shafts journaled to the upper end of one of the side members, grooved pulleys fast to the stub shafts, a drive belt connecting the grooved pulleys, barrels projecting inwardly from the upper end of the other side member in line with the respective stub shafts, and spring actuated pins in the barrels and projecting beyond the ends thereof and having gripping elements at their outer ends, the inner ends of the stub shafts and pins being adapted to engage rollers therebetween to support and effect rotation of the rollers as and for the purpose specified.

1,808,858. MINING MACHINE. EDMUND C. MORGAN, deceased, New York, N. Y., by Olive Eugenie Morgan, executrix, New York, N. Y. Original application filed June 7, 1920, Serial No. 387,137. Divided and this application filed Sept. 28, 1927. Serial No. 222,479. 19 Claims. (Cl. 262—9.)



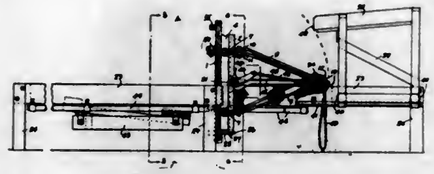
2. In a mining machine, the combination with a supporting frame, of an upright kerf-cutter mounted thereon, means for supporting said kerf-cutter in folded relation to said frame, a fluid pressure breaker on said kerf-cutter, and means for operating said breaker when said kerf-cutter is in upright position.

1,808,859. WINDOW SHADE TRIMMER. HARVEY E. MORROW, New London, Iowa. Filed June 20, 1930. Serial No. 462,661. 5 Claims. (Cl. 164—36.)



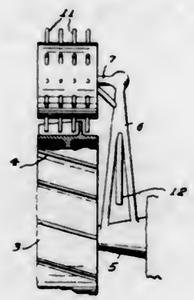
1. A trimmer comprising a tubular rod having a plurality of openings in the length thereof and extending through opposite sides, said rod having transverse slots in one side intersecting the openings, and a blade formed with a shank adapted to pass through selected openings in the sides of the rod, the transverse slots accommodating the blade.

1,808,860. CONCRETE STAVE MAKING MACHINE. AXEL H. NELSON, Turlock, Calif. Filed Dec. 14, 1927. Serial No. 239,992. 5 Claims. (Cl. 25—42.)



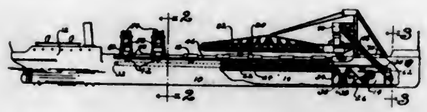
1. A concrete stave-making machine comprising a collapsible form, means for holding said form in a vertical position, the top end of said form being open for receiving the self-hardening mixture whereby the mixture may be tamped in the form while being poured thereinto.

1,808,861. WHEEL CLEANER FOR TRACTORS. ERNEST PAGAARD, Ross, Iowa. Filed Feb. 27, 1929. Serial No. 343,186. 1 Claim. (Cl. 280—158.)



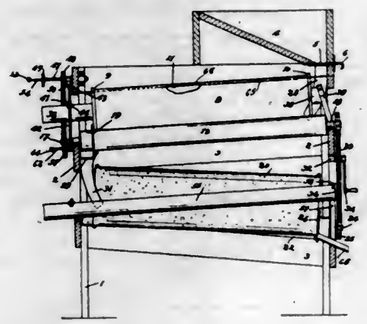
In a wheel cleaner for tractors provided with wheels having obliquely disposed peripheral lugs, a standard supported upon the vehicle axle housing and comprising an integral laterally extending arm, a cleaner wheel freely supported upon said arm, and teeth for said wheel extending outwardly from the periphery thereof into immediate proximity to the periphery of the tractor wheel and its peripheral lugs for contact with and removal of such extraneous matter as may be lodged thereupon, said teeth being arranged in parallel rows extending transversely of the wheel circumference, such contact serving as the sole means for rotating said cleaner wheel upon its support.

1,808,862. UNLOADING DEVICE. HARRY W. PETERSON, Detroit, Mich. Filed Mar. 7, 1929. Serial No. 344,943. 2 Claims. (Cl. 214—15.)



1. In a freight boat including a hull having a deck substantially inclosing the top thereof, a plurality of longitudinally spaced filling hatches located at the central portions of said deck, a longitudinally extending substantially horizontal platform in said hull having outer edge portions supported by the side thereof, supporting structure depending from said deck for supporting the inner edge portions of said platform independently of the floor of said hull, a longitudinal conveyor mounted on said platform extending substantially from one end to the other end of said hull, a plurality of aligned small hatches extending through said deck, each located in related proximity to one of said filling hatches and in registration with said conveyor, means for removing material from said filling hatches and discharging the same through said small hatches upon said conveyor; and elevating conveying mechanism at the discharge end of said conveyor for receiving material therefrom.

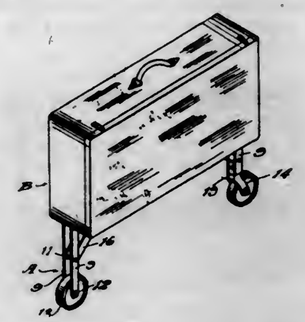
1,808,863. GRAIN SEPARATING MACHINE. WILLIAM THOMAS PIERCE, Birtle, Manitoba, Canada. Filed Aug. 17, 1928, Serial No. 300,354, and in Canada May 5, 1928. 1 Claim. (Cl. 209—78.)



In a grain separating machine, a supporting frame, a pair of upper similarly inclined cylindrical drums rotatably supported from the frame and arranged side by side and both having a lining presenting considerable nap, a hopper overlying the upper ends of the drums, feed chutes leading from the hopper into the ends of the drums, a centrally located rotatably mounted oppositely inclining drum underlying the former drums and rotatably carried by the frame, said latter drum having a lining presenting considerable nap, means for collecting grain discharging from the lower ends of the upper drums and delivering the same into the upper end of the lower drum, means for simultaneously rotating the drums, similar grain collecting and discharge chutes extending longitudinally of the drums, means supporting the rear ends of the upper chutes and the front end of the lower chute from the frame for oscillatory movement, a vertical spindle rotatably mounted centrally on the rear end of the frame between the adjacent projecting ends of the upper chutes, a horizontally disposed cross arm secured to the spindle and having the extending ends thereof overlying and swivelly attached to the adjacent ends of the chutes, a further vertically disposed spindle rotatably carried by the rear end of the frame and located to the side of the adjacent projecting end of the lower chute, a crank arm extending from the latter spindle and overlying and pivotally attached to the latter end of the latter chute, cranks secured to the adjacent ends of the spindles, a link pivotally connecting the latter cranks, a crank secured to the upper end of the central spindle, means for oscillating the latter crank to simultaneously reciprocate the shoes and a scraper carried by the frame and extending longitudinally of each drum and contacting with the lining thereof in a location overlying the chutes.

1,808,864. COLLAPSIBLE WHEELED SUPPORT FOR SUITCASES OR LIKE RECEPTACLES. JOHN B. PINHEIRO, Oakland, Calif. Filed Feb. 25, 1929. Serial No. 342,421. 5 Claims. (Cl. 190—41.)

1. A wheeled vehicle for carrying cases comprising a receptacle adapted to be disposed in a longitudinal aperture in the bottom of said carrying case, brackets pivotally mounted in said receptacle and disposed at the opposite ends thereof, wheels rotatably mounted at the outer

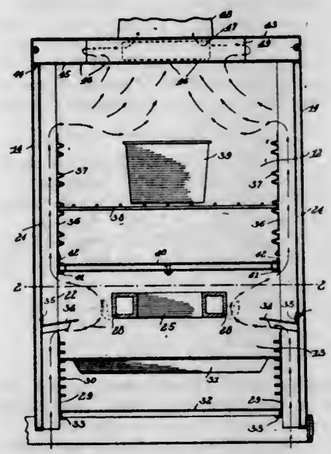


ends of said brackets, means for locking said brackets in operative position, and means for locking said brackets in folded position within said receptacle.

1,808,865. INTERIOR WALL FINISH. ARLIE WILLIAM SCHORGER, Madison, Wis., assignor to C. F. Burgess Laboratories Inc., Madison, Wis., a Corporation of Delaware. Filed Mar. 31, 1927. Serial No. 180,072. 2 Claims. (Cl. 106—34.)

1. A composition for interior wall finish comprising 40 to 60 parts of ground calcium sulphate, 15 to 35 parts of ground mica, 10 to 15 parts of fine asbestos, 8 to 10 parts of ground casein, and 5 to 7 parts of hydrated lime.

1,808,866. GAS OVEN CONSTRUCTION. THOMAS A. SOULTS, Rochester, N. Y., assignor to Sterling Range and Furnace Corporation, Rochester, N. Y., a Corporation of New York. Filed Dec. 6, 1927. Serial No. 238,160. 1 Claim. (Cl. 126—39.)



A cooking stove having separate upper and lower cooking compartments, a gas burner in the upper portion of the lower compartment having oppositely disposed portions each provided with openings arranged to discharge the gas outwardly toward the side walls of the compartment, vertically arranged air inlet conduits located at the sides of said lower compartment below the burner, plates overlying said conduits and extending inwardly from the side walls of the stove towards said burner portions and terminating short of the latter to afford open-

ings for the passage of air discharging from the conduits, said plates being substantially in alinement with the burner and the air being directed by said plates to said openings and into the path of the discharging gas, and vertically disposed outlet conduits at the sides of the upper compartment for discharging the products of combustion from the burner.

1,808,867. DIRECTIONAL ANTENNA ARRAY. JOHN STONE STONE, San Diego, Calif., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 26, 1927. Serial No. 163,774. 12 Claims. (Cl. 250—11.)



2. A directive antenna system comprising a plurality of pairs of linear arrays, each linear array consisting of a plurality of radiators, the radiators of each array being separated by unequal and predetermined distances, the linear arrays of each pair being a definite distance from each other, said pairs of arrays being situated side by side and at a predetermined distance apart.

1,808,868. DIRECTIONAL ANTENNA ARRAY. JOHN STONE STONE, San Diego, Calif., assignor to American Telephone and Telegraph Company, a Corporation of New York. Original application filed Jan. 26, 1927, Serial No. 163,774. Divided and this application filed Dec. 19, 1928. Serial No. 326,972. 14 Claims. (Cl. 250—11.)



4. A directive antenna system comprising a plurality of radiators constituting a plurality of arrays, the radiators of each array forming a cylindrical parabola, and means for energizing the radiators of the various arrays with currents that lag by definite phase angles corresponding to the distances between the respective arrays.

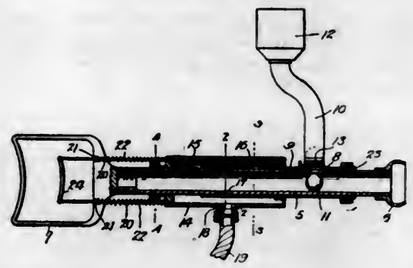
1,808,869. DIRECTIONAL ANTENNA ARRAY. JOHN STONE STONE, San Diego, Calif., assignor to American Telephone and Telegraph Company, a Corporation of New York. Original application filed Jan. 26, 1927, Serial No. 163,774. Divided and this application filed Nov. 23, 1929. Serial No. 409,402. 4 Claims. (Cl. 250—11.)



2. A directive antenna system comprising a linear array of conductors, said conductors being placed side by side at equal intervals, and means for energising said conductors with currents of unequal and predetermined amplitudes and of equal phase and frequency, said array effecting a beam of energy equivalent to that of a cylindrical parabolic surface having an equivalent source of energy coincident with its focal line.

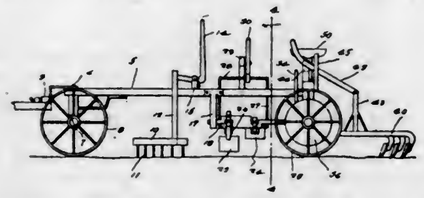
1,808,870. FLUE CLEANER. SAMUEL S. STRASBURG, Akron, Ohio. Filed Apr. 19, 1930. Serial No. 445,768. 1 Claim. (Cl. 15—104.06.)

A device for cleaning tubes, comprising a tubular body portion having an open end to be fitted against a tube to be cleaned, a handle on the opposite end of the body portion, said body portion having an opening near the open end, means for feeding balls to the body portion through the opening, said body portion having openings disposed intermediate the ends thereof, a tubular valve member slidably mounted on the body portion and having openings to register with the last mentioned openings, and having an



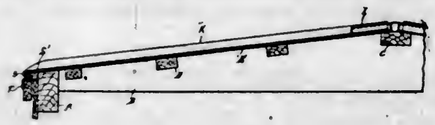
opening adapted to register with the first mentioned opening, a cylinder secured to the tubular valve member and spaced therefrom to provide an air chamber, means for directing air under pressure to the air chamber, and a handle carried by the cylinder to be gripped by the operator for moving the valve member to bring the openings of the valve member and body portion into registry to admit air and balls to the body portion.

1,808,871. COTTON CHOPPER. HAL TAYLOR, Moncure, N. C., assignor of two-thirds to James F. Alaston, Pittsboro, N. C. Filed May 18, 1929. Serial No. 364,071. 1 Claim. (Cl. 97—19.)



A machine of the class described comprising a wheeled structure, a crank shaft mounted for rotation in the structure, means for operatively connecting the crank shaft with one wheel of the structure for actuation thereby, a pair of shanks engaged on the cranks of the crank shaft, blades on said shanks, a loop frame slidable vertically through the structure and having open top pocket portions at the bottom thereof to slidably receive the shanks and support the intermediate portions thereof, a guide member for the upper portion of said frame, a lever swingably and pivotally mounted on said guide member and engaged with said frame so that by swinging the lever said frame may be raised or lowered for adjusting said shanks and blade.

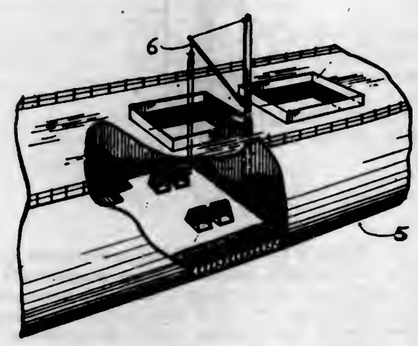
1,808,872. CAR ROOF. WILLIAM D. THOMPSON, Detroit, Mich., assignor, by mesne assignments, to Hutchins Car Roofing Company, Detroit, Mich., a Corporation of Delaware. Filed Sept. 21, 1925. Serial No. 57,730. 4 Claims. (Cl. 108—5.)



2. A universal car roof applicable to all variations in size and type of freight cars in general use on standard

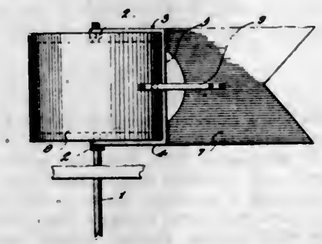
gauge tracks comprising a sheet intermediate the ridge and the eaves having continuous weather proofing means along its sides and across its ridge end, a flashing forming a weatherproof joint with the lower end of said sheet, and a ridge cap overlapping the upper end of said sheet and bearing thereon to form a weatherproof joint, the overlap being variable dependent upon the width of the cars and permitting adjustment to correspond to maximum and minimum widths.

1,808,873. METHOD AND APPARATUS FOR TRANSFERRING CARGOES BY CRANE. FRANCIS H. WEEKS, New York, N. Y. Filed Apr. 16, 1929. Serial No. 355,480. 2 Claims. (Cl. 214—152.)



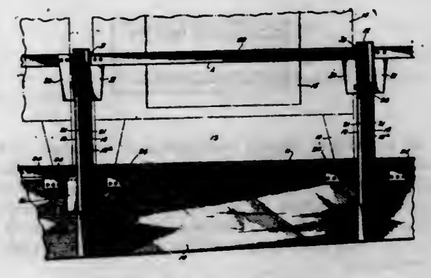
1. Method of transferring a cargo consisting of tree trunk sections, the length of which is several times the diameter, by means of a number of successively employed cargo carriers, which comprises assembling a number of said sections into a bundle of substantially circular cross-section, binding said bundle transversely with a closed ligament of fixed length, thereafter transferring said bundle by crane out of a cargo carrier and into a second cargo carrier, maintaining said bundle during transportation in said second cargo carrier, and thereafter removing said bundle and applied ligament by crane as a unit from said second cargo carrier, whereby the labor of stowing said sections individually and of assembling same into crane loads for successive transfers is obviated.

1,808,874. WIND MOTOR. TARLE F. WILSON, Bay Lake, Fla. Filed Feb. 24, 1928. Serial No. 256,685. 1 Claim. (Cl. 170—12.)



A wind motor comprising a vertical shaft, a wind wheel secured to said shaft, a U-shaped frame extending radially from said shaft including upper and lower arms and a connecting bight portion, the arms receiving the wind wheel therebetween and being provided with aligned bearings receiving said shaft, a semi-circular protecting housing for said wheel having one end rigidly secured to the inner face of the bight portion of the U-shaped frame and encasing substantially half of the wheel, and a wind vane having right angularly extending attaching feet rigidly secured to the outer face of the bight portion of said U-shaped frame.

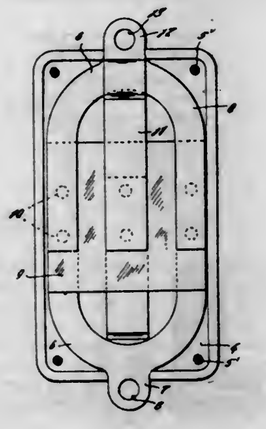
1,808,875. SECTIONAL FREIGHT CAR. GRAHAM C. WOODRUFF, Bronxville, N. Y., assignor to The L. C. L. Corporation, a Corporation of Delaware. Filed Apr. 12, 1929. Serial No. 354,638. 7 Claims. (Cl. 105—366.)



1. In a freight car the combination of bulkheads transversely disposed on the car in spaced relation to form a plurality of compartments on the car, posts at both ends of each bulkhead, vertical runways on each post, a bar extending across the end of each compartment and slidably mounted in said runways, a gravity lock in said runway to hold the bar in closed position to the posts.

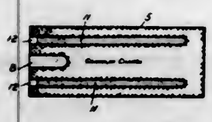
2. In a freight car, the combination with bulkheads transversely disposed on the car in spaced relation to form a plurality of compartments on the car, posts at each end of each bulkhead, a bar extending across the end of each compartment, and slidably mounted in said runways, a latch mounted on the bulkhead adapted to engage and hold the bar in its elevated position at the top of the posts.

1,808,876. LIGHTNING ARRESTER. CURTIS MOAELAND WRAY, La Fayette, Ind. Filed Apr. 5, 1929. Serial No. 352,828. 1 Claim. (Cl. 175—30.)



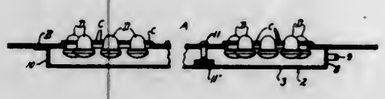
A lightning arrester comprising a housing, said housing comprising a rectangular frame and a pair of side plates for disposition against opposite sides of the frame, a pair of conductor elements, each of substantially U-shape, each end of the frame being provided with an opening, each conductor element being provided with a lug at its bight portion for disposition through one of the openings in the frame, the said conductor elements being of such length as to permit their leg portions to be disposed in overlapping relation, and a sheet of di-electric material interposed between the said elements.

1,808,877. PROPELLANT CHARGE FOR PROJECTILES AND METHOD OF FORMING THE SAME. CECIL G. YOUNG, Dover, N. J. Filed Dec. 21, 1929. Serial No. 415,800. 11 Claims. (Cl. 102—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



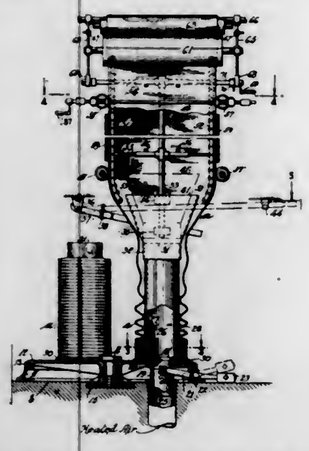
1. A propellant charge comprising a container having pockets and formed of a plurality of individual grains of powder cemented together without loss of identity, a main charge of loose grains of powder within the container and having the same characteristics as the grains forming the container, and inserts of black powder in the pockets of the container.

1,808,878. SIGN. STEPHEN S. ADAMS, St. Louis, Mo. Filed Feb. 27, 1931. Serial No. 518,629. 8 Claims. (Cl. 40—130.)



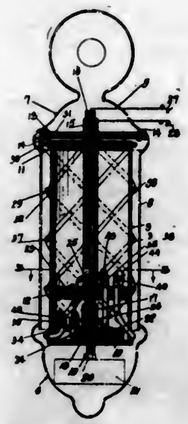
1. A sign of the class described, comprising a panel, cataphotes supported by said panel, a housing mounted on said panel at the rear face thereof for enclosing the rearmost portions of said cataphotes, and means for supporting said housing for sliding movement with respect to said panel.

1,808,879. FABRIC DRYING AND FINISHING MACHINE. EMILE B. BATES, Leicester, England. Continuation of application Serial No. 341,799, filed Feb. 21, 1929. This application filed June 5, 1930. Serial No. 459,370. 16 Claims. (Cl. 26—56.)



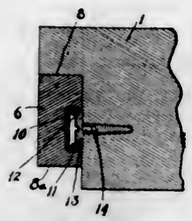
1. In a drying machine for fabrics, the combination, a turntable, a plurality of cartridges arranged on said turntable, each having a hollow stem upon the outside of which the wet fabric is placed, a tenter frame arranged to receive the fabric from said cartridges for drying purposes, an air supply pipe below said turntable and an adjustable sleeve for connecting the stem of one of said cartridges with said air supply pipe and means for raising said sleeve and for holding it in the connected position.

1,808,880. MEANS FOR BARBER POLE ILLUMINATION. MORRIS W. BERGER, San Francisco, Calif. Filed Nov. 27, 1929. Serial No. 410,157. 7 Claims. (Cl. 40—126.)



1. In a device of the class described, a revolvable opaque cylinder, independent inert-gas tubes semi-spirally arranged about said cylinder and having their intermediate sections alternating with each other and their electrodes positioned within an adjacent end of the cylinder, said tubes containing inert-gases of diverse character, and adapted, when illuminated, to display alternate colors, means for energizing the electrodes thereof, and means for constantly rotating said cylinder.

1,808,881. BUFFER. REES BEYNON, Chicago, Ill., assignor to Dryden Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed June 13, 1929. Serial No. 370,644. 1 Claim. (Cl. 16—86.)

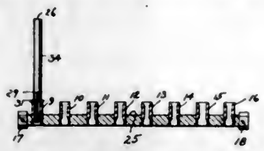


In combination, a rabbeted door jamb having a socket in its face and rabbeted edge, a resilient buffer member registered in said socket with a portion projecting outwardly beyond said rabbeted edge, a male snap fastener member comprising a mounting screw on the door jamb and in the socket, said screw having a head portion with a circumferential groove formed therein, said buffer member having a recess formed therein, a female snap fastener member secured in said recess, said female member having a spring for engaging in said groove whereby said buffer member is removably held in said socket.

1,808,882. PATTERN MECHANISM FOR CROCHET KNITTING MACHINES. SAMPSON BROADWIN, Brooklyn, N. Y. Filed Nov. 14, 1929. Serial No. 407,068. 3 Claims. (Cl. 66—156.)

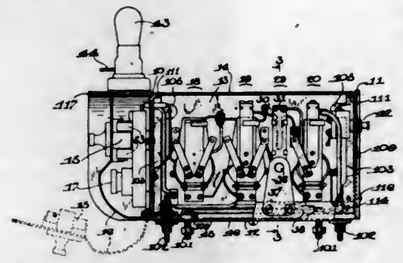
1. In a pattern mechanism for crochet knitting machines, a plurality of links, bosses formed thereon, a

socket engaged in each said boss each said socket having a perforation of two diameters extending therethrough, a pin arranged in each said socket, each said pin being



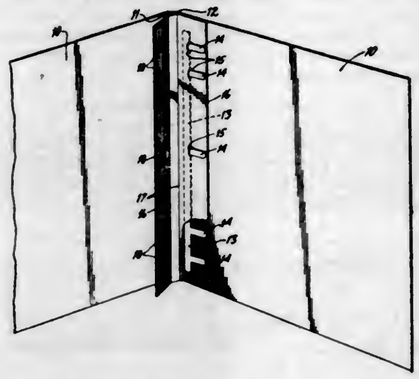
provided with an expansible means for retaining the pin in the socket and an enlarged head adapted to engage in that part of said perforation having the larger diameter.

1,808,883. SWITCH BOX FOR AUTOMATIC GENERATING PLANTS. ANTON FRANK BROTZ, Kohler, Wis., assignor to Kohler Company, Kohler, Wis., a Corporation of Wisconsin. Original application filed Oct. 5, 1925, Serial No. 60,702, Patent No. 134,557. Divided and this application filed May 23, 1927. Serial No. 193,658. 10 Claims. (Cl. 247—9.)



1. A switch box comprising end castings, a horizontal bottom member connected thereto, a vertical insulating panel mounted between the end castings and fitting against the bottom member, a cover hinged to the end castings and engaging the bottom member and forming a tight enclosure with the end castings and the panel and the bottom member, and switching mechanism mounted on the panel within the enclosure, there being screened openings in the bottom member for ventilation and preventing the entrance of insects to the enclosure.

1,808,884. LOOSE-LEAF FOLDER. EARL M. BUCKLAND, Chicago, Ill., assignor to Rockwell-Barnes Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 1, 1930. Serial No. 499,204. 6 Claims. (Cl. 129—25.)



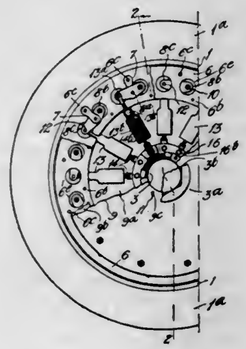
4. A folder adapted to contain loose leaves, comprising a member folded along median lines to provide connected cover portions, a plurality of substantially flat bendable metal tongues secured to said member adjacent one median fold line so as to lie parallel to one of the cover portions, said tongues being adapted to be bent up perpendicularly to said cover portion with their substantially flat faces extended parallel to said median fold line.

1,808,885. SURFACE ROD LINE PICK-UP. ALFONSO V. CLARK, Casey, Ill. Filed May 16, 1929. Serial No. 363,698. 7 Claims. (Cl. 74—17.)



1. In combination, a post, a ratchet rod slidably mounted therethrough, means for retaining ratchet rod in predetermined relationship with said post, a second post, a disconnecting hook associated therewith connected to said ratchet rod, a reciprocating member adapted to engage teeth successively to said ratchet rod and means on said reciprocating member for connection to a power plunger rod.

1,808,886. SHOCK ABSORBING ROAD WHEEL OF VEHICLES. THOMAS LEE COURTNEY, Maryborough, Victoria, Australia. Filed May 14, 1930. Serial No. 452,197. 3 Claims. (Cl. 152—47.)

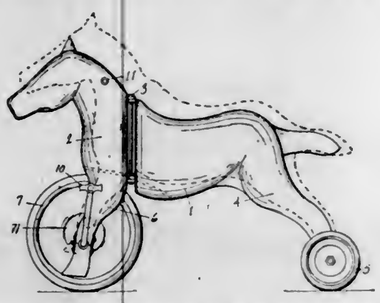


2. A shock absorbing wheel having fixed to each side of its hub a disc, spaced apart pins connecting the disc peripheries, levers each having one end mounted on one of said pins, a connection from each lever to the wheel rim, and at the other end of each lever a connection to a spoke of variable length, a spring device to control variation of said length as the result of wheel shock, a floating ring surrounding the hub, and a connection of each spoke to said ring.

1,808,887. HOBBY HORSE. BENJAMIN H. DUNKLEY, Kalamazoo, Mich. Filed May 23, 1930. Serial No. 454,897. 3 Claims. (Cl. 208—42.)

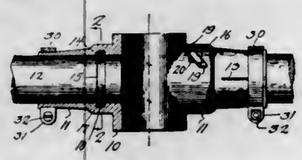
1. In a hobby horse, the combination of the body of the horse, the front portion of the horse hinged thereto by vertical pivot, wheels for the rear legs of the horse, a crankshaft axle therefor the cranks of which are journaled to the lower ends of said rear legs, a driving floor wheel disposed between and guided by the front legs of the horse and having an extended hub, a crankshaft with an offset center with its bearing disposed ec-

centrically to the center of the hub through the fore legs of the horse, cranks and pedals on the opposite ends of



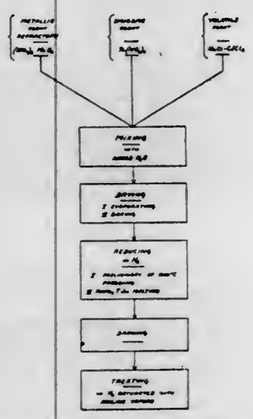
said crankshaft, and handles at each side of the horse's neck for steering the same, coacting as described for the purpose specified.

1,808,888. PROPELLER. OLE FAHLIN, Sioux City, Iowa. Filed Dec. 28, 1929. Serial No. 417,090. 7 Claims. (Cl. 170—173.)



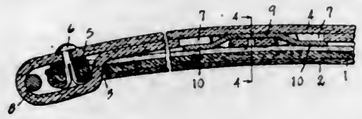
1. In an aeroplane propeller, a hub comprising a hub proper and sockets formed integrally therewith, each socket being provided with an internal annular recess, a blade shank received in the socket and formed with an annular recess registering with the socket recess to form therewith an annular space, the socket wall having an aperture communicating with said space, means insertible through said aperture and received in said space for transmitting longitudinal pull of the shank to the socket, and means to clamp the socket into gripping engagement with the shank.

1,808,889. MANUFACTURE OF METAL HAVING HIGH EMISSIVITY. COLIN G. FINK, Yonkers, N. Y. Filed June 21, 1924. Serial No. 721,493. 7 Claims. (Cl. 250—27.5.)



1. The process of producing a ductile metallic alloy having relatively high electronic emissivity, comprising mixing together with the aid of water soluble salts containing respectively a metallic agent, an emissive agent and a volatile agent, drying and reducing the mixture, pressing, sintering, the sintering temperature being such as to assure alloying of the components, drawing the reduced mass, and subsequently treating the drawn filament in an atmosphere of dry hydrogen.

1,808,890. DETACHABLE HANDLE. COLIN GRANT, Jackson, Mich., assignor of one-third to Clare R. Deem and one-third to Samuel Gay, Jackson, Mich. Filed May 26, 1930. Serial No. 455,646. 10 Claims. (Cl. 190—57.)



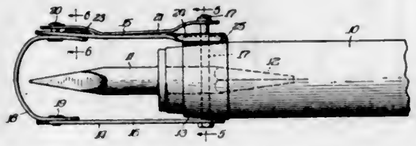
10. In a detachable handle, the combination of a main body portion of leather formed into channel shape and tapered toward the ends, and perforated with a transverse slot near each end, and a connecting strap disposed in the said channel extending around the ends and upwardly through the said slots and meeting and joined at the center.

1,808,891. PIKE POLE GUARD. ERIC O. HAMREN, Oshkosh, Wis., assignor to Leach Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Oct. 2, 1929. Serial No. 396,704. 6 Claims. (Cl. 294—19.)



1. The combination, with a pole, and a pike at one end of the same, of a guard removably associated with the pike, said guard being pivotally mounted on the pole whereby to permit it to be swung forwardly from either side of the pole into a protecting position with respect to the tip of the pike or backwardly into an unobstructive position at either side of the pole.

1,808,892. PIKE POLE GUARD. ERIC O. HAMREN, Oshkosh, Wis., assignor to Leach Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Mar. 1, 1930. Serial No. 432,372. 8 Claims. (Cl. 294—61.)

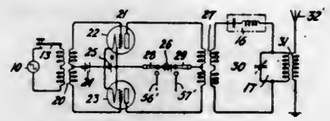


1. The combination with a pole, and a pike at one end thereof, of an improved guard removably associated with the pike, said guard being pivotally mounted on the pole whereby to permit the guard to be swung forwardly into a protective position with respect to the tip of the pike or backwardly into an inoperative position alongside the pole and in alignment therewith.

1,808,893. INSECTICIDE. LEON C. HECKERT, Bristol, Pa., assignor to Röhm & Haas Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 2, 1930. Serial No. 449,364. 9 Claims. (Cl. 167—22.)

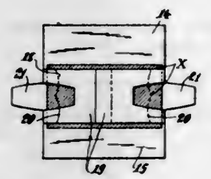
1. An insecticide comprising an aliphatic thiocyanate, the organic residue of which comprises a negative group.

1,808,894. ELECTRIC WAVE TRANSLATION SYSTEM. RAYMOND A. HEISING, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 29, 1924, Serial No. 709,736. Renewed Apr. 11, 1929. 23 Claims. (Cl. 250—17.)



5. In an electric wave translation system, a plurality of three-electrode space discharge devices, means for varying the individual impedance of said devices alternately from infinite to small finite values successively, an electric circuit including said devices arranged to have constant impedance, and selective elements associated with said circuit for transmitting desired waves and suppressing undesired waves, the combined reactance of said elements being substantially zero for all waves.

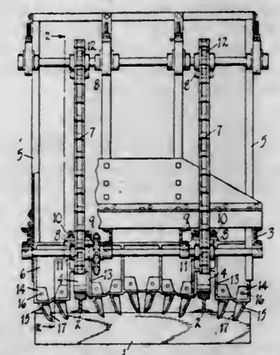
1,808,895. DISPLAY DEVICE. ABRAHAM HOLTZMAN, New York, N. Y. Filed Aug. 15, 1930. Serial No. 475,463. 6 Claims. (Cl. 206—82.)



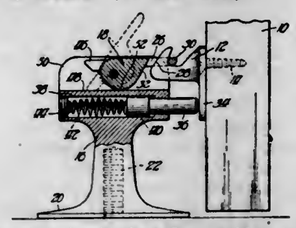
1. An article holder adapted to be mounted on a support, said holder being formed integrally from a single blank to present a body having a display aperture, end flaps on said body to fold over said aperture, tabs sheared from said flaps adapted to enter slits in the support, and side flaps on the body for folding over the end flaps.

1,808,896. ROADBED WORKING MACHINE. CORWILL JACKSON, Chicago, Ill. Filed Aug. 22, 1930. Serial No. 476,991. 15 Claims. (Cl. 104—12.)

1. In a machine of the class described, the combination of a truck adapted to travel upon a railway track, vertical ways on said truck, a crosshead constituting a drop hammer reciprocatingly mounted in said ways and recessed on its under side to receive the rails of a track, said crosshead having downwardly facing sockets therein at each side of the recesses disposed in inwardly stepped relation, downwardly and inwardly projecting blade-like tools disposed in said sockets in inwardly facing sets, said tools having vertical central rib-like cutters, and means for actuating said crosshead.

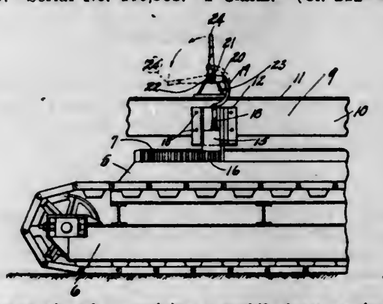


1,808,897. BUILDER'S HARDWARE. ELVIN H. JOHNSON, Winnetka, Ill. Filed Jan. 23, 1930. Serial No. 422,696. 7 Claims. (Cl. 292—246.)



1. A support, a latch pivoted on said support, a hook for engaging said latch, said hook and latch having cooperating cam surfaces for lifting the latch over the point of the hook to interlock the parts, and cam surfaces for throwing the latch clear of the hook upon further inward movement of the hook, said cam surfaces comprising two spaced surfaces on said latch and a single surface on said hook; said latch and support having cooperating portions for holding said latch in position to be engaged by said hook, or thrown back out of the way and inoperative, said support housing all but the outer tip of said latch in both positions, and resilient plunger means acting generally parallel to the movement of said hook and housed in said support, and tending to push said hook away from said support beyond the position for interlocking engagement with said latch.

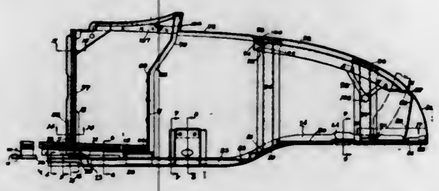
1,808,898. TURNTABLE LOCK. JOHN M. KERR, Bay City, Mich., assignor to Bay City Shovels, Inc., Bay City, Mich., a Corporation of Michigan. Filed Oct. 17, 1929. Serial No. 400,363. 1 Claim. (Cl. 212—69.)



A power shovel comprising a mobile base, a ring gear secured thereto, a turntable mounted on the base and

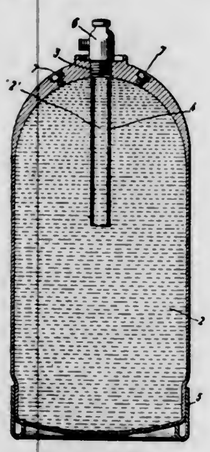
revoluble upon a vertical axis, a vertically disposed slide secured to said turntable, a locking member slidably mounted therein, and provided with a plurality of teeth for engagement with said ring gear, a link pivotally connected to said locking member, a shaft, a bell crank rotatably journaled thereon, and a curved link connecting said first mentioned link with the bell crank.

1,808,899. PRESSED METAL ROADSTER BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 9, 1926. Serial No. 80,362. 18 Claims. (Cl. 296—28.)



1. A sill structure for automobile bodies comprising inverted and obverted metal channel sections arranged end to end with their adjacent ends overlapping and longitudinally joined together in their overlapping portions through their side walls on one side and through a bottom wall and a side wall on the other.

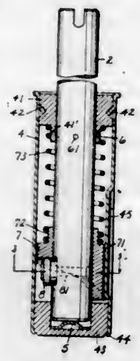
1,808,900. PROCESS AND APPARATUS FOR STORING ACETYLENE. EUGENE GEORGE LUENING, Louisville, Ky., assignor, by mesne assignments, to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 12, 1927. Serial No. 190,719. 14 Claims. (Cl. 23—246.)



1. A storage device for explosive fluids, including a container having a mouth, a filler of suitable porosity, and a partition of solid non-expansible porous material of greater density interposed between said filler and said mouth.

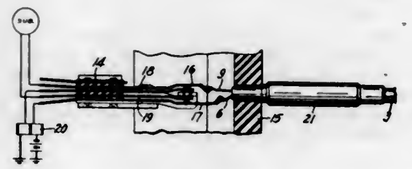
1,808,901. ROTARY AUTOMATIC CONTROL MEANS. JAMES J. MCGERRY, Chicago, Ill., and CHARLES H. WHITING, Kalamazoo, Mich. assignors to Rotary Utility Corporation, Chicago, Ill. Filed Aug. 4, 1930. Serial No. 473,106. 3 Claims. (Cl. 155—95.)

8. In a structure of the class described, the combination of a revoluble shaft, a casing having a head journaled on said shaft and having a suitable thrust bearing, a sliding cam on the said shaft, a spring for actuating the same



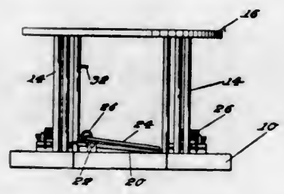
and a cooperating cam roller, one of which is secured to the said shaft and the other of which is secured to the said casing.

1,808,902. TELEPHONE PLUG. EMIL C. MUELLER, Elizabeth, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 17, 1930. Serial No. 453,176. 2 Claims. (Cl. 179—96.)



1. In a test plug for spring jacks of the type wherein a pair of cut-off springs normally engage the inner surfaces of the tip and ring springs of the spring jacks, in combination, a holder, and a pair of contact springs mounted thereon and adapted when inserted in said spring jack to engage said tip and ring springs on the outer surfaces of said springs to press these springs firmly against the inside cut-off springs.

1,808,903. ANIMAL TRAP. SVEN NELSON, Hornepayne, Ontario, Canada. Filed Aug. 21, 1930, Serial No. 476,931, and in Canada Aug. 26, 1929. 3 Claims. (Cl. 43—81.)



1. An animal trap including a base having an opening for the passage of animals upwardly therethrough, and spring traps spaced about the said opening, said spring traps comprising platforms and spring-operated jaws pivotally mounted on the platforms, said platforms being themselves pivotally mounted on the base and comprising release elements for the spring jaws upon depression of the platforms.

1,808,904. DAM AND METHOD OF CONSTRUCTING THE SAME. FRED A. NOETZLI, Los Angeles, Calif. Filed Mar. 15, 1928. Serial No. 261,979. 19 Claims. (Cl. 61—30.)



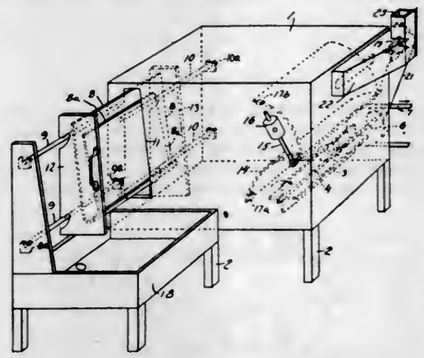
1. An arch dam comprising a plurality of arch laminæ, and an area of substantially loose contact between two adjoining said laminæ, said area extending upward from the bottom of said laminæ to the downstream face of said dam.

1,808,905. BUILDING MATERIAL. FRANK PAYNE, Chicago, Ill., assignor to Western Brick Company, Danville, Ill., a Corporation of Illinois. Filed May 28, 1928. Serial No. 281,196. 2 Claims. (Cl. 72—18.)



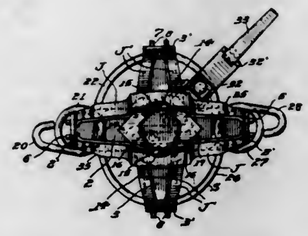
1. Building material having acoustical properties comprising burned shale bonded together with cement, the surface of the material being smooth and exposing smooth, cut surfaces of the burned shale.

1,808,906. ETCHING MACHINE. FRANK T. POWERS, Douglaston, N. Y. Filed Aug. 15, 1930. Serial No. 475,564. 4 Claims. (Cl. 41—9.)



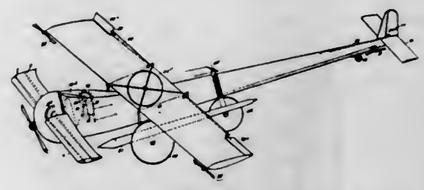
1. The combination in an etching machine of the type described, of a carrier for the object to be etched, cooperating with a plurality of track members, part of which are located wholly within the etching chamber, and part of which are located wholly without the etching chamber.

1,808,907. TRAP. LEOPOLD C. SCHNEIDER, Hatboro, Pa. Filed Apr. 11, 1929. Serial No. 354,221. 11 Claims. (Cl. 43—88.)



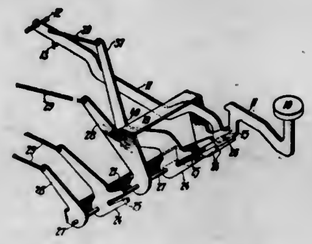
1. An animal trap comprising a base, two pairs of jaws respectively pivotally secured to the base, each jaw being of substantially arcuate contour and having a notch at the center of its inner edge, a spring arranged to directly actuate one of said pairs of jaws, means carried by said pair of jaws operative to actuate the other pair of jaws, and releasable means to hold all of the jaws in open position in opposition to the force of the spring.

1,808,908. FLYING MACHINE. FRANK STEINMANN, Sr., De Soto, Mo. Filed May 8, 1930. Serial No. 451,309. 9 Claims. (Cl. 244—14.)



1. In a flying machine in combination with a main sustaining plane, an auxiliary stabilizing wing in conjunction with main tiltable propeller, mounted on the forward end of fuselage, capable of adjustment to vary the incidence thereof and interconnected means for simultaneously varying the incident of the flying machine including a circular section of slotted tubing secured to forward end of fuselage or nacelle, means for pivoted movement around the slotted circular guide comprising the housing for propeller shaft, a crosshead and bearing for universal joint connection affixed to motor shaft within.

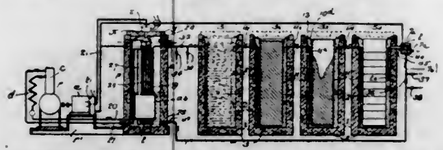
1,808,909. TYPEWRITING MACHINE. BURNHAM C. STICKNEY, Hillside, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 7, 1930. Serial No. 426,495. 15 Claims. (Cl. 197—27.)



1. In a portable typewriting machine having a standard key-lever system and a type-bar system of materially

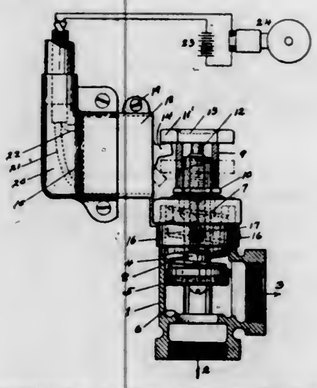
less width than the key-lever system, and a system of driving connections between the key-levers and the type-bars, said driving connections including bell-cranks, some of which are plain or flat and others of which are in the form of bails extending inwardly from the outer key-levers, each bail including an outer power-arm engaging its key-lever and also including an inner arm connected to drive the type-bar, the plain bell-cranks being interspersed with the drive-arms of the various bails.

1,808,910. REFRIGERATING APPARATUS. GARDNER TUFTS VOORHEES, Boston, Mass. Filed Apr. 18, 1921. Serial No. 462,283. 9 Claims. (Cl. 62—101.)



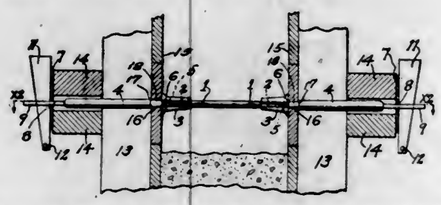
1. In a secondary refrigerator the combination of two concentric metallic cups and an insulating ring between and fixed to and joining their open upper ends, insulation between their opposed surfaces, a detachable brine conduit to and a detachable brine conduit from the inner cup.

1,808,911. VALVE ALARM. KENNETH WATSON, San Francisco, Calif. Filed Sept. 8, 1930. Serial No. 480,385. 9 Claims. (Cl. 137—162.)



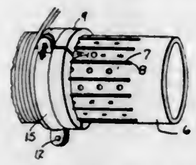
2. In combination, a pipe valve provided with means for automatic closing and a fusible link holding the same open, an electric alarm circuit provided with a switch arranged adjacent said valve, and means on said valve arranged to trip said switch upon closing movement of said valve.

1,808,912. ART OF AND MEANS FOR MOLDING CONCRETE STRUCTURES. JOHN MELVILLE WILLARD, Los Angeles, Calif. Filed July 7, 1928. Serial No. 290,983. 10 Claims. (Cl. 25—131.)



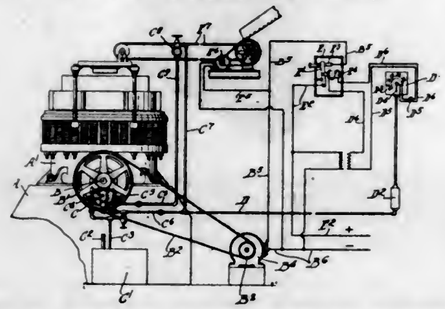
6. In a device for setting and holding concrete forms, the combination of a tension bar provided with a threaded end portion, and a flat rectangular end portion, a longitudinally directed slot in said flat end portion, a bearing plate movably carried on said flat end portion and longitudinally movable thereon, and a wedge inseparably but movably carried in said slot and adapted to bear against said bearing plate, said bearing plate being slidably carried by said tension bar between said wedge and threaded end of said bar.

1,808,913. HOLDING RING FOR MANUFACTURING WELL SCREENS. HILLSMAN D. WILSON, Jr., Houston, Tex., assignor to Howard F. Smith, Houston, Tex. Filed Nov. 25, 1929. Serial No. 409,733. 6 Claims. (Cl. 29—89.)



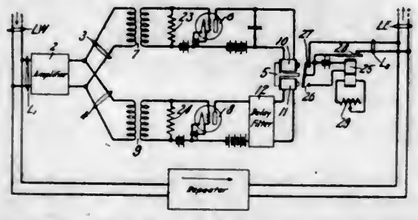
1. A holding ring of the character described comprising a band of material shaped to encompass a screen pipe, said band having notches on its inner face to receive and space apart the wire ribs longitudinally of said pipe, said band being slidably axially along said pipe.

1,808,914. AUTOMATIC CONTROL FOR CONE CRUSHERS. GEORGE W. BENNETT, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 16, 1929. Serial No. 386,403. 13 Claims. (Cl. 83—10.)



1. In combination, a crushing machine, an electrically actuated drive therefor, and an actuating circuit for said drive, an oil circulation system associated with the crushing machine, and means for breaking the drive actuating circuit in response to stoppage in the oil circulation system.

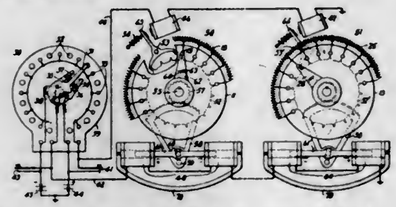
1,808,915. REPEATER CIRCUITS. BJÖRN G. BJÖRNSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 19, 1926. Serial No. 142,566. 11 Claims. (Cl. 178—44.)



1. In a signaling system, a path for steady alternating currents and voice currents, branches for said path,

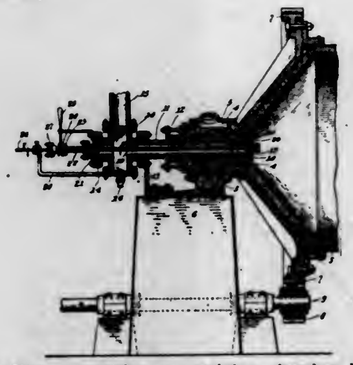
a rectifier in each branch, means for causing the effects of the rectified currents to act in opposition to one another, and means causing the effect in one branch to be predominant when said steady alternating currents are alone flowing in said path and the effect in the other branch to predominate when voice currents are flowing in said path.

1,808,916. CIRCUIT CONTROL SYSTEM. JOHN C. BURKHOLDER, Montclair, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 13, 1925. Serial No. 68,823. 7 Claims. (Cl. 178—44.)



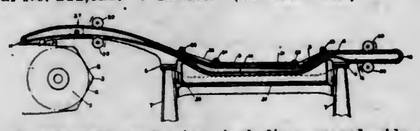
1. A circuit control apparatus comprising a rotary switch including a ratchet and pawl, a source of positive and negative impulses, means connected to said source and differently responsive to said positive or negative impulses for determining the direction of rotation of said ratchet, and means controlled by electrical impulses for determining the number of operations of said pawl.

1,808,917. FILTER. EDWIN BURT, Canutillo, Tex. Filed Dec. 10, 1928. Serial No. 325,036. 4 Claims. (Cl. 210—180.)



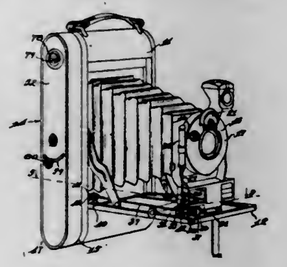
1. A filter comprising a revolving chamber having a hollow axial trunnion at one end; a supply nipple extending into said trunnion; connections for introducing material through said nipple; a valve seating against the inner end of said trunnion; a tubular valve stem for said valve passing outwardly through said nipple; an air supply nipple projecting into said valve stem; a spring on said valve stem holding said valve to its seat; and means outside of said nipple for manipulating said valve stem.

1,808,918. CONVEYER MECHANISM. GEORGE FREDERICK CROESSANT, Wyomissing, Pa. Filed Aug. 8, 1927. Serial No. 211,522. 7 Claims. (Cl. 198—109.)



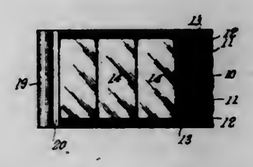
1. A conveyer mechanism including spaced side bars having endless runways consisting of upper and lower runs connected by return bends, said runs converging acutely to one of said bends, and an endless belt, the side edges of which are supported and guided by said runways; the belt being supported at said bends solely at its side edges.

1,808,919. AUTOMATIC FILM MOVING DEVICE FOR SINGLE EXPOSURE CAMERAS. EDWARD E. ELLIS, Alhambra, Calif., assignor of one-half to Oliver C. Stratton, Santa Monica, Calif. Filed July 11, 1927. Serial No. 204,782. 12 Claims. (Cl. 95—82.)



1. In the art described, the combination of a camera having a spool to wind a film thereon, a shutter mechanism and a removable back, a spring motor, a drive train from the motor to rotate the spool, a winding mechanism for the motor, an escapement mechanism for the said drive train, means preventing replacement of the back until actuation of the winding mechanism, said means interacting with the escapement, means controlled by the starting of the shutter actuating mechanism to engage the escapement means controlled by the shutter actuating mechanism after the closing of the shutter to release the escapement and allow rotation of the spool by the spring motor.

1,808,920. FLEXIBLE METALLIC STRAP. WILLIAM FORSTNER, Irvington, N. J., assignor to Forstner Chain Corporation, Irvington, N. J. Filed Dec. 1, 1928. Serial No. 323,182. 5 Claims. (Cl. 63—3.)

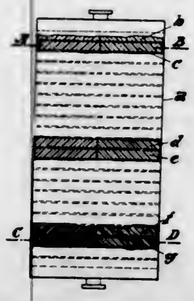


4. A flexible metallic strap comprising a woven wire strip having inturned selvaged edges, a plurality of narrow uniformly flat plates disposed transversely of said strip to extend over its inturned edges and spaced therebetween in juxtaposed relation, said plates being of lesser length than the width of said strip to disclose marginal portions adjacent both inturned edges, means for slidably confining said plates thereto, and means at the ends of said strip to retain said plates thereon.

1,808,921. METALLIC FILLING FOR COLD ACCUMULATORS. MATHIAS FRÄNKL, Augsburg, Germany, assignor to Philipp August Weydmann, Vienna, Austria. Filed July 21, 1928, Serial No. 294,356, and in Germany Aug. 1, 1927. 4 Claims. (Cl. 257—6.)

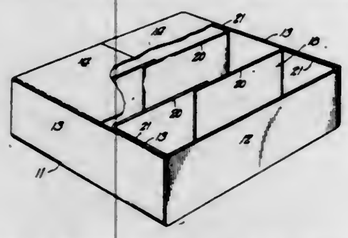
1. A cold accumulator comprising a shell, the inside space of such shell being divided into a number of zones, strips of sheet metal disposed in each of said zones and adapted to be chilled by a stream of cold gas passing

through the accumulator and to cool a subsequent stream of warmer gas, said strips disposed in such a way that



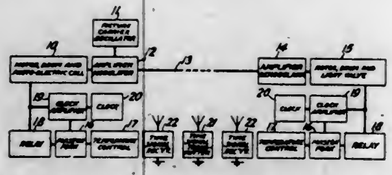
from zone to zone the extent of their surface and the mass of metal toward the colder end become greater, while the total flow area of the gas channels becomes smaller.

1,808,922. CONTAINER. CLARENCE P. GALLISTEL, Chicago, Ill., assignor to Container Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed Apr. 22, 1929. Serial No. 356,977.. 1 Claim. (Cl. 229—27.)



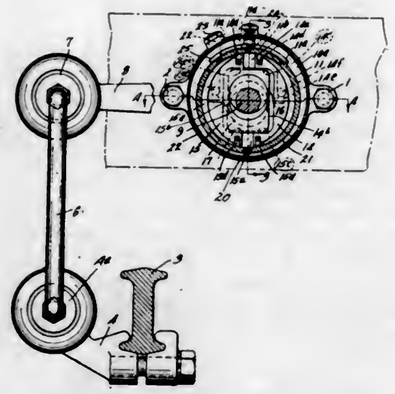
A container formed from a rectangular blank of sheet material comprising a bottom or main wall portion, two side walls, two end walls, elongated flaps integral with each side wall at each end thereof and each providing a portion substantially one-third the width of said bottom and providing another portion approximately one-half the length of said bottom whereby said elongated flaps may be folded so that their first mentioned portions lie inside and against the adjacent end walls and the second mentioned portions extend inwardly of the container to cooperate in pairs to form two partitions separating the interior of the container in substantially three equal parts, and additional portions on said rectangular blank integral with said end walls and extending to a distance substantially equal to the termini of said elongated flaps, said additional portions adapted to be folded inwardly to meet along a line substantially midway of the length of the container to form a second main wall or cover portion.

1,808,923. SYNCHRONIZING SYSTEM. JOSEPH W. HORTON, Cambridge, Mass., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1929. Serial No. 350,965. 6 Claims. (Cl. 178—69.5.)



1. The method of synchronizing moving mechanisms, such as are employed in electrical image producing systems, comprising motive means at each station for causing the movement of corresponding parts of the apparatus, which method comprises independently generating at each station fluctuating energy of substantially constant frequency for controlling said motive means at that station, obtaining an indication at each station proportional to the exact time required for the generation of at least several million cycles of energy from said source at said station, and checking the indication at each station against the same source of time measure.

1,808,924. HYDRAULIC SHOCK ABSORBER. STEPHEN JENCICK, Chagrin Falls, Ohio. Filed Jan. 14, 1929. Serial No. 332,415. 18 Claims. (Cl. 188—88.)



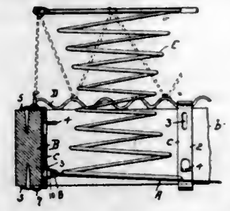
1. A shock absorber comprising a fluid-containing casing adapted for connection to one part of an automobile or the like, a plurality of plunger members within said casing, said casing and members being adapted for relative radial reciprocating movement therebetween and having oppositely disposed compression surfaces, rotatable means adapted for connection to a relatively movable part of an automobile or the like for causing relative movement between said compression surfaces towards and from each other so as to vary the compression of the fluid therebetween, and means of communication between opposite sides of the individual plunger members for the fluid so as to permit compression of the fluid also between said plunger members.

1,808,925. COMPOSITE CONDUCTOR. WILLIAM G. KNOX, Manhasset, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 9, 1926. Serial No. 153,678. 15 Claims. (Cl. 178—45.)



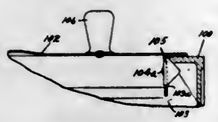
1. A signaling conductor comprising a plurality of component strands in close contact, and a thin layer of chromium on the contacting surface of at least one of said component strands, said layer being effective in preventing adhesion of said one strand to another of said strands during a heat treatment at temperatures of 700° C. or higher.

1,808,926. CHAIR SEAT AND COUCH BOTTOM. JACOB KRONHEIM, Cleveland, Ohio. Filed Nov. 29, 1929. Serial No. 410,395. 7 Claims. (Cl. 155—179.)



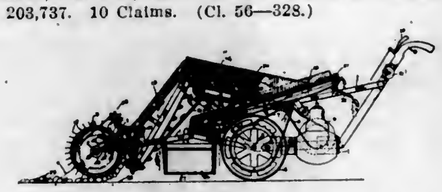
7. Suspensory means for resilient chair seats and couches, comprising a hanger having right-angled end portions grooved transversely, and a main body portion provided with a perforated ear and a slot relatively near the opposite right-angled ends thereof.

1,808,927. DOMESTIC APPLIANCE. RALPH L. LEE, Dayton, Ohio, assignor to Delco Light Company, Dayton, Ohio, a Corporation of Delaware. Original application filed Mar. 31, 1923, Serial No. 629,201. Divided and this application filed May 25, 1925. Serial No. 32,584. 4 Claims. (Cl. 220—55.)



2. Washing apparatus having a tub provided with an opening, a cover extending inside said opening for sealing said opening, a plurality of spring-pressed members carried at a plurality of spaced apart points by one of said elements and adapted to cooperate with the other element for impositively locking the cover at said plurality of points on said tub in sealing position, said member being disposed within the inclosure formed by the tub and cover.

1,808,928. FRUIT GATHERING MACHINE. PETER H. LINT, San Jose, Calif. Filed July 6, 1927. Serial No. 203,737. 10 Claims. (Cl. 56—328.)

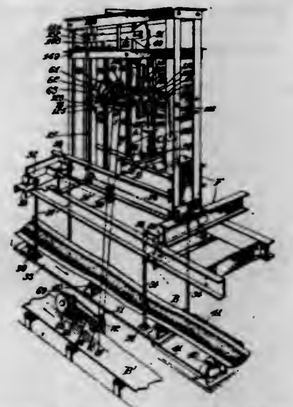


1. A fruit gathering machine comprising a frame, a rotatable fruit impaling drum mounted at the forward end thereof adapted to roll upon the ground, and a single supporting ground wheel cooperating with said drum spaced rearwardly therefrom, conveyor and draper means mounted on said frame arranged to carry fruit from said impaling drum, and a receiver into which said fruit is discharged, a small preponderance only of the weight of the machine being forwardly overbalanced with respect to the axis of said ground wheel and a guiding handle at the rear end of the frame for guiding the machine.

1,808,929. SULPHURIC ACID FUMING AND DECOMPOSITION PROCESS FOR THE RECOVERY OF ZINC. HERBERT HART MAYER and ROSS GEORGE LA MOTTE, Helena, Mont. Filed Sept. 29, 1926. Serial No. 138,566. 3 Claims. (Cl. 23—125.)

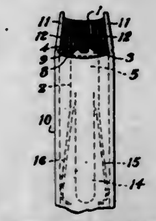
1. The process for treating zinc-bearing material which comprises mixing the material with a quantity of sulphuric acid in excess of that required to convert zinc and other metals contained therein to the sulfate form, subjecting the resulting mixture to a fuming operation to effect the desired conversion of metals to the sulfate form, roasting the resulting product to convert at least a portion of the zinc sulfate to zinc oxide, and recovering zinc from the roasted product by leaching with a sulphuric acid solution.

1,808,930. WEIGHER. EDWIN H. MESSITER, New York, N. Y., assignor to Merrick Scale Mfg. Company, Passaic, N. J., a Corporation of New Jersey. Filed Apr. 13, 1927. Serial No. 183,255. 61 Claims. (Cl. 265—28.)



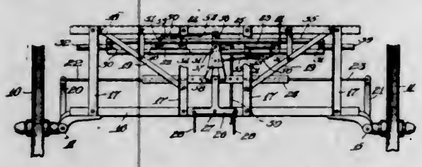
1. In a weigher, a travelling conveyer, scale mechanism having a support for a portion of the conveyer, balance mechanism to maintain the scale mechanism in position of equilibrium with no load on the conveyer and to counterbalance the load on that portion of the conveyer travelling over the support, a weight indicator, actuating means for the indicator movable in synchronism with the travel of the conveyer and normally uncoupled from the indicator, means to couple the actuating means with the indicator at successive predetermined movements thereof corresponding with predetermined lengths of conveyer travel, and means operative by the movement of the scale mechanism out of its normal position of equilibrium by the load applied thereto by the conveyer to control the coupling of the indicator with and the actuation thereof by the actuating means proportional to the weight of the load applied to the scale mechanism and indicate the weight of the material transported by each successive predetermined length of conveyor travel.

1,808,931. BOOKMARK. ROBERT H. MOORE, New York, N. Y. Filed May 21, 1929. Serial No. 364,898. 6 Claims. (Cl. 281—42.)



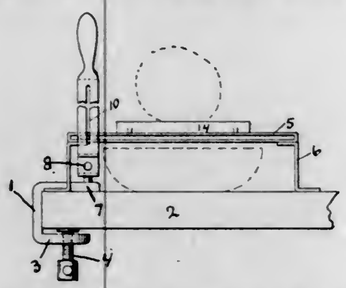
1. A book mark comprising a single piece of material adapted to be inserted between the back binding and leaves of a book, said material having a portion adapted for securing a marker cord thereto, said material consisting of springy portions normally projecting away from each other, and one of said portions being adapted to press against the interior side of the back binding and the other against the leaves of the book.

1,808,932. CULTIVATOR. JOHN R. ORELIND, Moline, Ill., assignor to Minneapolis-Moline Power Implement Co., Moline, Ill., a Corporation of Delaware. Filed Oct. 21, 1929. Serial No. 401,080. 6 Claims. (Cl. 97—155.)



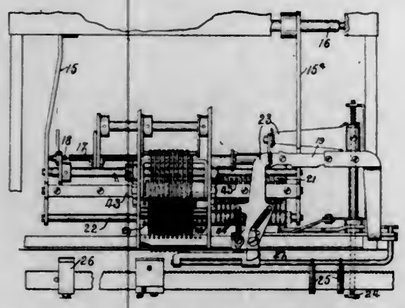
2. A cultivator having outside drag bar supports comprising off set members, the upper ends of said members extending laterally across the cultivator adjacent one another, inside drag bar supports having upper ends extending laterally adjacent the lateral extensions of the outside drag bar supports, clamping devices for selectively clamping the extensions of the inner supports to the extensions of either of the outer supports, means for moving the drag bar supports laterally, and connections between said moving means and said clamps.

1,808,933. VEGETABLE CUTTER. FRITZ PAHLOW, Chicago, Ill. Filed May 3, 1928, Serial No. 274,948. Renewed Dec. 8, 1930. 2 Claims. (Cl. 146—78.)



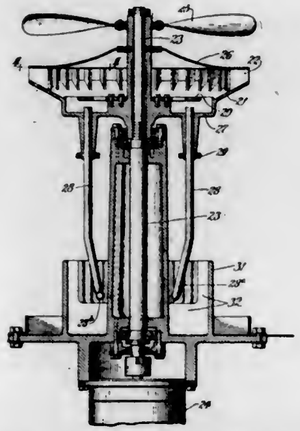
1. A device of the class described, including a support, cutting blades supported thereon, a reciprocating cutting blade movable beneath said first blades, a clamp on said support beneath said blades, angular bearing posts on the clamp, a U-shaped frame having perforated wings at its intermediate portion, pivoted on said posts, and the ends of said frame being slotted to receive the ends of the reciprocating blade.

1,808,934. CALCULATING MACHINE. WALTER J. PASINSKI, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 17, 1927. Serial No. 213,459. 3 Claims. (Cl. 235—60.)



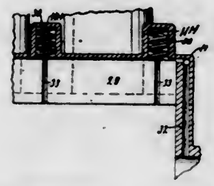
1. The combination in a calculating machine having actuator racks and a transfer mechanism positioned opposite the same, of a plurality of counters carried by a slidable frame which is movable longitudinally to separately position the counters in active position between the racks and transfer mechanism, each of said counters comprising a series of pinions some of which have different numbers of teeth than others and an individual series of trip pawls for each counter pivoted on said frame and movable longitudinally therewith into and out of active relation to said transfer mechanism.

1,808,935. HUMIDIFIER. EMIL J. P. PLANERT, Union City, N. J. Filed Aug. 13, 1928. Serial No. 299,213. 3 Claims. (Cl. 183—24.)



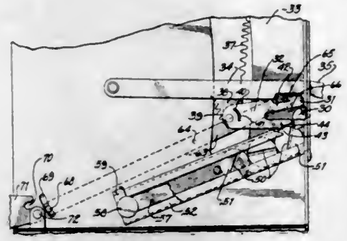
1. In apparatus of the class described, a member having a series of radial vanes and rotatable about a vertical axis, a plurality of tubes adapted to carry liquid secured to said member for rotation therewith and having forwardly projecting portions at their lower ends, a reservoir adapted to hold liquid into which the projections dip, means for maintaining a supply of liquid in said reservoir, means for preventing rotation of the liquid by said lower ends of the tubes, and means for deflecting said liquid toward said vanes.

1,808,936. ROTARY VALVE. LAWRENCE J. ROCHE, Harmony, Minn. Filed Dec. 13, 1926. Serial No. 154,642. 2 Claims. (Cl. 123—59.)



1. In a gas engine having a rotatable tubular gas intake and exhaust valve with transverse depressions in its exterior adapted during rotary movement of the valve to successively open passage means for intake of fuel to the engine and exhaust passage means from the respective compression chambers of the engine; an elongated compression bar member mounted in a groove provided in the engine head adjacent the exterior of said valve and longitudinally thereof, said bar having an elongated bearing surface contacting with the said valve, yieldable means pressing the said bar against the valve, and lubrication conducting means consisting of oil conducting passages provided in said engine head and leading to the outer parts of said bar, and further lubricating means in the bar comprising the provision of oil passages in the bar leading to its surface contacting with the valve, said latter conducting means being in communication with the first described conducting means.

1,808,937. VENDING MACHINE. EDWARD SCHULTZ, Chicago, Ill. Filed May 31, 1929. Serial No. 367,887. 13 Claims. (Cl. 194—54.)

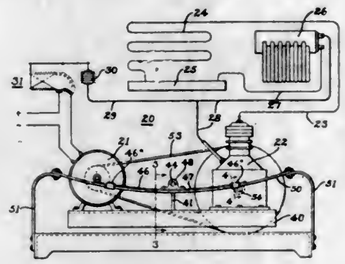


1. A vending machine comprising a compartment, a closure therefor and coin freed mechanism controlling the locking of said closure comprising means adapted to retain an inserted coin in predetermined position, resilient means normally tending to move the retaining means out of coin engaging position, means operable from the exterior of the compartment and adapted to be engaged by said coin to effect the release of said closure, and means controlled by the withdrawal of said closure for releasing the retaining means.

1,808,938. SULPHUR SLUDGE TREATMENT. GILBERT E. SEIL, Newark, N. J., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 7, 1926. Serial No. 107,522. 8 Claims. (Cl. 23—229.)

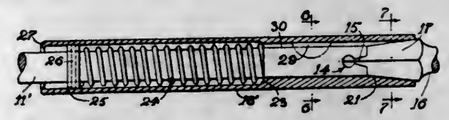
7. A process for separately recovering sulphur and solid extraneous material from a sludge containing the same comprising: depositing the sludge on a filtering medium; bringing steam alone into contact therewith while on said filtering medium to melt the sulphur; and concurrently filtering the melted sulphur away from the sludge through the filtering medium as it melts thereon under the heat of said steam.

1,808,939. REFRIGERATING APPARATUS. OTTO M. SUMMERS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Mar. 24, 1928. Serial No. 264,505. 5 Claims. (Cl. 248—16.)



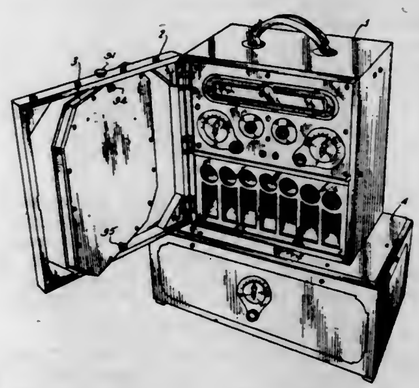
1. In a support for driving and driven members oscillating about a substantially definite axis, the combination of a supporting member, means for floatingly supporting said member substantially about said axis of oscillation, said means including upwardly concave strap members and means connecting said member to said strap.

1,808,940. BRACE CHUCK. CHARLES S. THOMAS, San Diego, Calif. Filed Mar. 7, 1928. Serial No. 259,772. 6 Claims. (Cl. 279—89.)



1. In a chuck of the character described, the combination of a driving shank having means at the outer end thereof for interlocking engagement with the end of a bit permitting coupling and uncoupling only by transverse movement of the bit with respect to the shank, a single sleeve slidable on the shank having means in the telescoping joint therebetween for holding the sleeve against turning relative to the shank, said sleeve having a tapered polygonal-shaped socket in the outer end thereof to receive the complementarily formed tapered end of the bit whereby to center the same and make wedging engagement therewith and transmit drive thereto, an annular shoulder on the shank having the inner end of the sleeve arranged to telescope thereon, spring means within said sleeve acting between the shoulder and the sleeve normally urging the sleeve outwardly toward its holding position, and means serving to limit the outward movement of the sleeve.

1,808,941. RADIO SYSTEM. ARTHUR F. VAN DYCK, Yonkers, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 7, 1925. Serial No. 67,474. 6 Claims. (Cl. 250—14.)

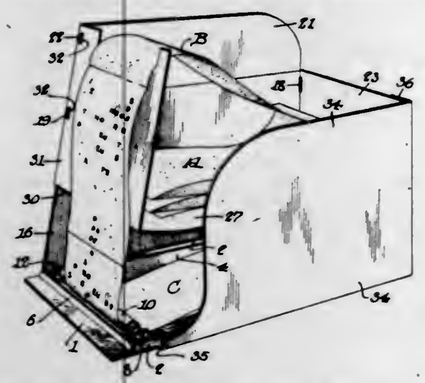


3. In combination with a portable cabinet comprising a radio receiving circuit, and a loop antenna removably mounted on the cabinet, a non-portable, supporting cabinet, containing means for operating said portable receiving circuit more efficiently, said last mentioned means including a tunable resonant circuit adapted to be connected to a grounded antenna, and means provided on the portable cabinet to receive the loop antenna when removed from said mounting, said last means being so disposed relative to the said tunable resonant circuit that the tunable circuit may be coupled to the portable receiving circuit by the loop antenna.

1,808,942. FOLDABLE NOTE PAD HOLDER FOR STENOTYPE OPERATORS. ALFRED C. ALLEN, Washington, D. C. Filed Sept. 30, 1930. Serial No. 485,524. 14 Claims. (Cl. 120—29.)

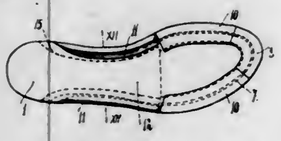
1. In a foldable note pad holder for stenotype operators, the combination of a base, an upright side member hing-

edly attached to the base, an upright rear member hingedly attached to the side member, a horizontal plate member hingedly connected to the side member for receiving the note paper which has been transcribed, a front member for holding a portion of the note pad to be transcribed, said



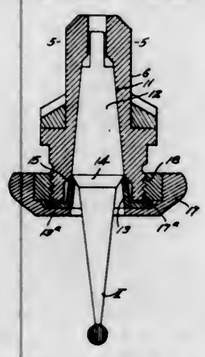
member being hingedly attached to the horizontal strip, means for supporting said front member in a slanting position, and means for fastening the aforesaid members one to the other in normal position for holding the stenotype note paper.

1,808,943. INSOLES FOR BOOTS AND THE LIKE. JAROSLAV BENDA, Prague, Czechoslovakia. Original application filed Oct. 11, 1924, Serial No. 743,140, and in Czechoslovakia Oct. 19, 1923. Divided and this application filed May 8, 1926. Serial No. 107,819. 5 Claims. (Cl. 36—22.)



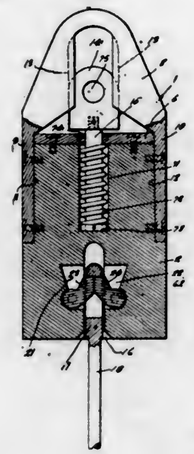
1. In an insole for boots and shoes, the combination with a sewing lip comprising strips which are connected to the insole, of a shank piece which covers the rear part of the sole including the entire heel portion and which carries the sewing lips at the waist, the shank piece as well as its sewing lips being cemented in position.

1,808,944. TOOL COUPLER. RAY W. BROWN, Altadena, Calif., assignor, by mesne assignments, to Henry Dalzell Wilson, Pittsburgh, Pa. Filed Jan. 30, 1929. Serial No. 336,317. 4 Claims. (Cl. 279—91.)



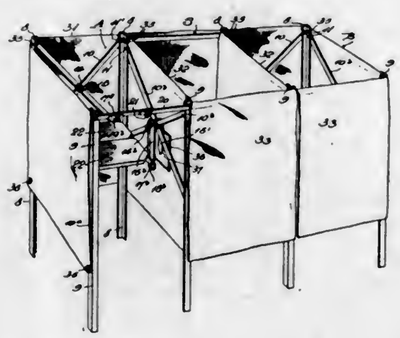
4. A coupler including a nut, a socket having an internal conical shoulder and a shank seat, a shank having a body part to bear on said seat and having a shoulder of reverse angle to and opposite said socket shoulder, and a slit wedging device interlocked loosely in the bore of the nut and having an annular nose extending axially and whose rim is contracted by said socket shoulder against and under said shank shoulder, as the nut is screwed on the socket.

1,808,945. COMBINATION AUTOMATIC BOAT RELEASE AND UTILITY HOOK. OLA D. BUTLER, Quantico, Va. Filed Sept. 24, 1929. Serial No. 394,873. 6 Claims. (Cl. 9—23.)



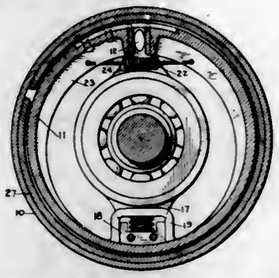
2. A device of the character described comprising a bolt adapted for connection to a hoisting apparatus, a locking arm connected to said bolt, a casing movably mounted on the bolt and locking arm, a pair of gripping jaws journalled in the casing and adapted to open and close and selectively controlled means cooperating with the gripping jaws and said locking arm for turning said jaws to open position as the hoisting force is released.

1,808,946. VOTING BOOTH. ISAAC S. DRAPER, Sullivan, Ind. Filed Nov. 18, 1929. Serial No. 408,018. 14 Claims. (Cl. 20—3.)



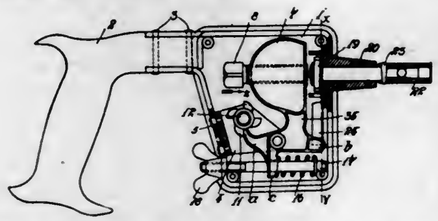
6. In a voting booth frame, a rear corner post, a rear brace connected to and inclining from said rear post, a shelf support, and means for supporting the front end of said shelf-support, the rear end of said shelf-support resting in the acute angle between said post and brace.

1,808,947. BRAKE MECHANISM. ARTHUR H. EDGERTON, Lakewood, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 15, 1929. Serial No. 378,351. Renewed Mar. 23, 1931. 5 Claims. (Cl. 188—178.)



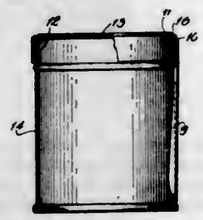
1. In a brake mechanism, a brake drum, a brake shoe in the form of a split-ring, a floatable friction member interposed between said drum and said shoe, and guiding means conforming to the contour of said shoe carried by one end of said shoe and overlapping the other end of said shoe.

1,808,948. PERCUSSIVE HAND TOOL. LOUIS FLUHR and ANTHONY VERHAAR, Brussels, Belgium. Filed Apr. 24, 1930, Serial No. 447,078, and in Belgium July 20, 1929. 2 Claims. (Cl. 255—41.)



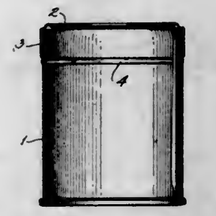
1. A percussive hand hammer, comprising a casing, a bent lever pivotally mounted in said casing, a striker integral with said lever, a cam wheel mounted for rotation in said casing and adapted to engage said lever, a spring acting upon said lever for bringing it back to its normal position after engagement by said cam and for imparting the required impulsion to the striker, a pawl pivotally connected to said lever, a ratchet wheel integral with the tool and adapted to be rotated by said pawl, a second pawl preventing the rotation of the ratchet wheel in the opposite direction, and the striking tool receiving percussive movements from the striker and intermittent rotary movements from the ratchet wheel.

1,808,949. DIPPER FOR SNUFF OR THE LIKE. JOHN C. FLYNN, Mount Vernon, N. Y., assignor to George W. Helme Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 29, 1928. Serial No. 329,209. 6 Claims. (Cl. 220—85.)



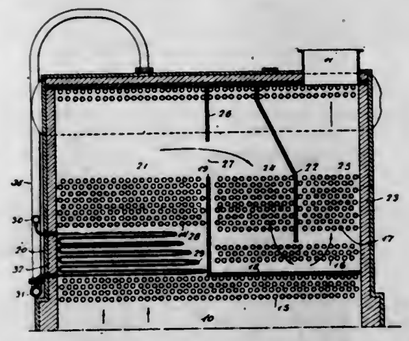
2. In combination with a can for snuff or the like and its flanged cover, a dipper structure of sheet material adapted for detachable connection to the cover and comprising a member having frictional peripheral engagement with the cover and a spoon connected to said member at one side and so positioned that when connected to the cover in place on the can body, the spoon extends downward close to the body wall.

1,808,950. DIPPER FOR SNUFF OR THE LIKE. JOHN C. FLYNN, Mount Vernon, N. Y., assignor to George W. Helme Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 29, 1928. Serial No. 329,210. 3 Claims. (Cl. 220—85.)



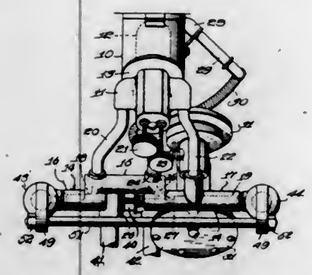
1. The combination with a can for snuff or the like, of a flanged cover, a spoon or dipper permanently connected with the cover in position to lie close against and substantially parallel with the side wall of the can when the cover is in place, the spoon being curved transversely throughout substantially its entire length to provide a concave surface for the snuff, and the curvature conforming to the curvature of the side wall of the can whereby to enable a close position of the spoon against the wall.

1,808,951. BOILER WITH SUPERHEATER. CHARLES W. GORDON, Pleasantville, N. Y., assignor to The Superheater Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1929. Serial No. 330,496. 4 Claims. (Cl. 122—478.)



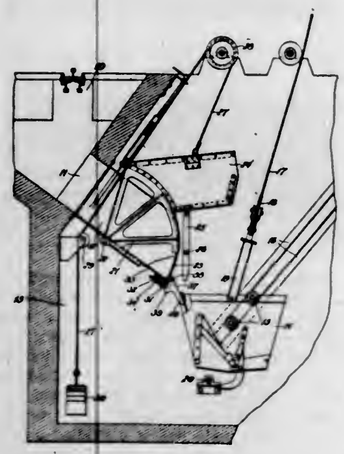
3. In a boiler, a furnace having walls, and a plurality of groups of water tubes within said walls arranged in different substantially horizontal planes, a plurality of substantially vertical baffles extending longitudinally of said tubes, a baffle in a plane substantially parallel to the planes of said groups and located above the lowest of said groups, said horizontal baffle extending from one of said vertical baffles transversely of said tubes to one of the walls of the furnace, said baffles providing a plurality of gas passes including a first gas pass having a relatively wide portion below the plane of said horizontal baffle and a relatively restricted portion above the plane of said horizontal baffle, those tubes only of one or more of said groups which are within said restricted portion being omitted to provide a clearance space, and a superheater arranged in said clearance space and having tubes arranged transversely of said water tubes.

1,808,952. BURNER SUPPORTING MEANS. SEELEY C. GULICK, Champaign, Ill. Original application filed Mar. 10, 1928, Serial No. 260,762. Divided and this application filed Oct. 15, 1928. Serial No. 312,677. 3 Claims. (Cl. 158—2.)



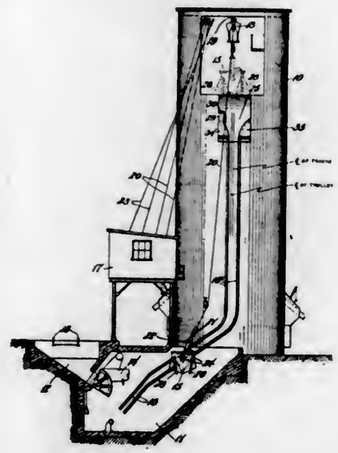
3. Mounting means for an oil burner comprising a body forming a part of the burner and having alined substantially horizontal end portions terminating in frusto-conical faces, a pair of elbows arranged outwardly of said body and each having one branch provided with a frusto-conical face adapted to engage against one of said first named frusto-conical faces, said body and said elbows being provided with passages forming supply means for the burner and communicating with each other through said frusto-conical faces, the passages through said elbows being continuous and unbroken, a pair of substantially parallel pipes possessing a substantial degree of resiliency and being anchored at one end, said pipes being free from each other intermediate their ends and having their opposite ends threaded in the other branches of said elbows, each of said elbows being provided with a laterally extending integral ear, and a releasable bolt passing through said ears for drawing said elbows toward each other.

1,808,953. HOPPER GATE. HAROLD E. HALLENBECK, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Apr. 16, 1929. Serial No. 355,517. 4 Claims. (Cl. 214—125.)



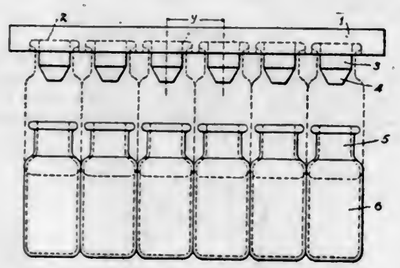
4. In combination, a chute having the lower end terminating in arcuate edges; a closure gate for the chute adapted to gravitate to open position when released; said gate comprising a pair of frames arranged at opposite sides of the chute and pivoted thereto; a curved plate secured between the outer ends of the frames and cooperating with the arcuate edges of the chute to close the latter when the gate is raised; means for releasably holding the gate in closed position; said means comprising a latch; a hoist bucket adapted to be lowered into filling position beneath the gate; and a pivoted bell-crank lever associated with the latch and having a short arm engageable with the latch and having a longer arm arranged to be engaged by the bucket when the latter is lowered, whereby the gate is automatically opened.

1,808,954. GUIDING MEANS FOR TROLLEY BUCKETS. HAROLD E. HALLENBECK, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Oct. 9, 1930. Serial No. 487,627. 7 Claims. (Cl. 214—119.)



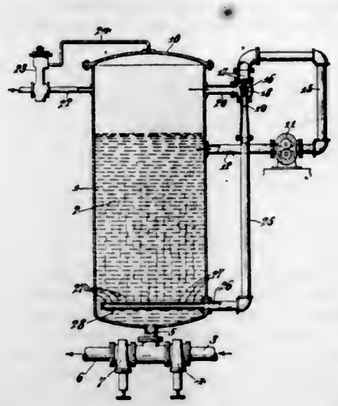
1. In combination, a bucket having rollers on opposite sides; a pair of upwardly extending tracks upon which the bucket rollers on each side travel; a pair of substantially vertical guide plates secured to the upper ends of the tracks; the bucket also having downwardly projecting fenders on each side; and means on the guide plates adapted to be engaged by said fenders to straighten the bucket as it descends, so that the rollers may properly engage the tracks.

1,808,955. MULTIPLE NECK GAUGE FOR BOTTLES. CARL G. HILGENBERG, Baltimore, Md. Filed Apr. 10, 1930. Serial No. 443,063. 2 Claims. (Cl. 33—174.)



2. A gauge for inspecting bottles comprising a base having a plurality of recesses of the shape and dimensions of the outer periphery of the bottle necks, and plugs disposed centrally of said recesses for gauging the openings in said necks, said recesses and plugs being spaced to correspond to the center distances of the bottles when inserted in said recesses and with adjacent bottles in contact.

1,808,956. APPARATUS FOR AND METHOD OF COMBINING LIQUIDS AND GASES. SIGMUND G. KETTERER, Philadelphia, Pa., assignor to Schutte and Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 17, 1930. Serial No. 461,696. 4 Claims. (Cl. 261—77.)



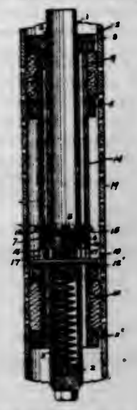
1. The method of treating a liquid with a gas, which comprises the continuous withdrawal of liquid from a body thereof contained in a closed receptacle, causing movement of the said liquid as a stream, causing a flow of gas from the top portion of said receptacle into the said stream of liquid, conducting the mixed stream of gas and liquid to the bottom portion of the said body of liquid and discharging the said mixed stream into the latter, permitting the unabsorbed or uncombined gas to bubble up through the said body of liquid, and thereafter causing a re-flow of the said portion of unabsorbed or uncombined gas into said stream of liquid and conducting the same with the said liquid back into the said body of liquid.

1,808,957. MANUFACTURE OF SEAMLESS TUBES. WILHELM KUNST, Barmen, Germany, assignor to Heinrich Esser, Hilden, Germany. Filed Apr. 4, 1927, Serial No. 181,010, and in Germany Jan. 17, 1927. 2 Claims. (Cl. 80—62.)



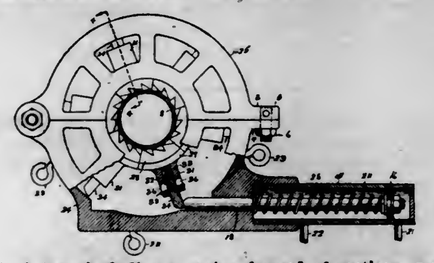
2. The process of producing seamless tubes by rolling, comprising reducing the wall thickness of a comparatively thick-walled tubular blank in a piercing mill, thereafter reducing the diameter of the said blank to the final diameter in a reducing mill and thereafter reducing the wall-thickness of said blank to the final thickness in a two-high rolling mill.

1,808,958. WELL SCREEN WASHER. CHARLES H. LANE and CHARLES H. REYNOLDS, Houston, Tex. Filed Sept. 3, 1929. Serial No. 390,012. 7 Claims. (Cl. 166—20.)



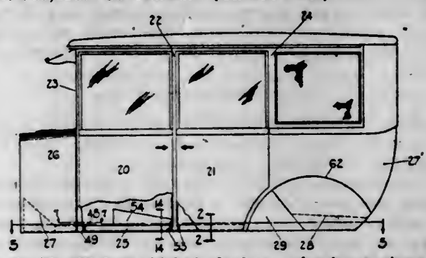
1. A well screen washer including a tubular stem having an outlet port, a yieldably mounted plunger therein normally blocking said port, a tubular perforated packer support around and spaced from the stem, spaced expansible packers around said stem support, means operable by said plunger and effective to simultaneously expand said packers.

1,808,959. TONG. CHARLES H. LANE and CHARLES H. REYNOLDS, Houston, Tex. Filed Sept. 7, 1929. Serial No. 391,094. 6 Claims. (Cl. 81—54.)



1. A tong including a casing formed of sections, means for securing the sections together about a pipe, gripping means in the casing engageable with the pipe therein and adapted to rotate the pipe, yieldably mounted dogs on said gripping means, means operable by fluid under pressure and operatively connected with and adapted to impart partial rotations to said gripping means, said fluid pressure operable means including a reciprocable rod engageable successively with said dogs.

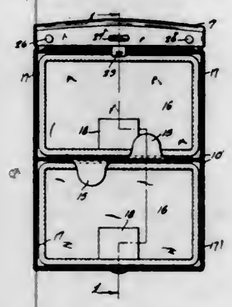
1,808,960. VEHICLE BODY CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 29, 1924. Serial No. 740,425. 36 Claims. (Cl. 296—28.)



1. A side sill for vehicle body frames having an inverted channel section, the outer wall of which is extended in the

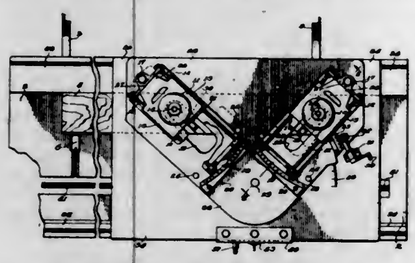
form of an angle section facing inwardly and downwardly whereby the sill forms the thresholds, the lower abutments for the doors, and a finish strip for the lower edge of the body.

1,808,961. COMPACT AND PUFF HOLDER FOR VANITY BOXES. ANKER S. LYHNE, Bridgeport, Conn.; The Bridgeport City Trust Co., Bridgeport, Conn., executor of said Anker S. Lyhne, deceased, assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 3, 1929. Serial No. 360,191. 6 Claims. (Cl. 132—83.)



1. In a vanity box, a substantially rectangular section, a second section hinged thereto, and a pair of separate and independent trays for holding cosmetic arranged side by side in one of said sections, said trays having upright side walls about their peripheries, the wall on one edge of each tray having an extension over the adjacent tray and located to one side of the center line of the tray to provide a holder to overhang a puff and hold it in said tray.

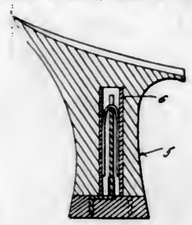
1,808,962. MACHINE FOR ROUTING STAIR STRINGERS. GEORGE MACKAY, Jackson, Mich. Filed Sept. 18, 1930. Serial No. 482,781. 7 Claims. (Cl. 144—136.)



1. In a routing machine, a frame structure, a plurality of routing units, supporting means for said routing units shiftably mounted upon said frame structure whereby said units may be simultaneously adjusted along said frame structure, angularly related guide means for each of said routing units whereby said units may be shifted angularly toward and away from each other, and each of said units being provided at its opposite ends with tool chucks.

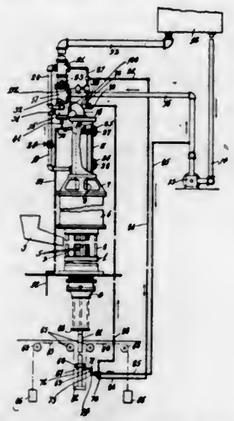
1,808,963. REMOVABLE HEEL LIFT. VINCENT MARINO, Haverhill, Mass. Filed Aug. 11, 1930. Serial No. 474,520. 2 Claims. (Cl. 36—42.)

1. A removable top lift of the type described comprising a shoe heel, provided with a vertical bore extending from its bottom side to a point near its upper side, a tubular dowel pin forced into said bore, the bottom side of said heel and the bottom end of said pin being provided transversely with co-incident slots, an attaching structure comprising a flat T-shaped member, a pair of lateral projections on one side of the lower longitudinal edge of the cross head having points downwardly projecting from the outer edges, a similar lateral projection on the other side of the cross head having a point downwardly projecting from the outer edge, a top lift adapted to be secured to said attaching structure and by said projections and said points, the free end of the vertical member of the T-formation provided with a slot, and a V-shaped spring wire



element having its bend disposed in said slots, the adjacent side portions of said slots being bent toward each other to retain said V-shaped wire therein, said vertical member of said T-formation adapted to be inserted in the dowel pin in the heel and the arms of the cross head thereof adapted to be disposed with the slots of the dowel pin and the bottom side of the heel, said V-shaped wire adapted to springedly contact the walls of said pin to retain said formation therein.

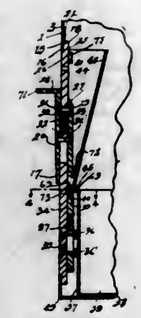
1,808,964. EXTRUSION MACHINE. WILLIAM MCCLINTOCK and FRANK Y. PEARNE, Los Angeles, Calif., assignors to Pacific Clay Products, Los Angeles, Calif., a Corporation of California. Filed July 28, 1929. Serial No. 380,297. 22 Claims. (Cl. 25—16.)



1. In a machine for the formation of articles by extrusion, a cylinder for plastic material, means for expressing said material from said cylinder, a pressure cylinder, a piston in said pressure cylinder operably connected to said expressing means, a tank for fluid, a source of fluid under pressure, a multiple port slide valve, and pipe means connecting said valve with opposed ends of said cylinder, the tank and said source of fluid pressure, said valve being adapted to selectively connect either end of said pressure cylinder with said source and simultaneously connect the opposed end of said cylinder with said tank.

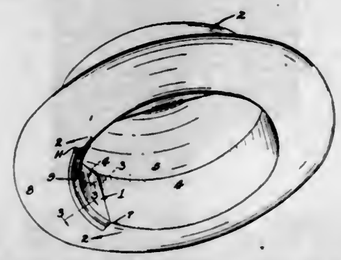
1,808,965. VENDING MACHINE. ORA L. MOBLEY, Cincinnati, Ohio. Filed Mar. 25, 1930. Serial No. 438,735. 13 Claims. (Cl. 124—69.)

1. A vending device comprising a container for packages of goods to be vended, said container having an opening therein, a trough slidably mounted beneath said opening and having compartments adapted to receive said packages through said opening, said trough having a lug connected therewith, a vertical front plate mounted in said container and having a coin slot therein, a lower rear-bar slidably mounted adjacent the rear of said plate and positioned below said coin slot and having a cut-out in its upper inner surface whereby a space is provided between



the upper edge of said bar and said front plate, said lug adapted normally to contact said bar and prevent slidable movement of said trough in one direction, means whereby a coin, passed through said coin slot, enters said cut-out, and manually operative means to engage said coin and force said bar downwardly below said groove, whereby said lug is adapted to enter said groove and said trough is adapted to be manually slid with one of said compartments outside said container.

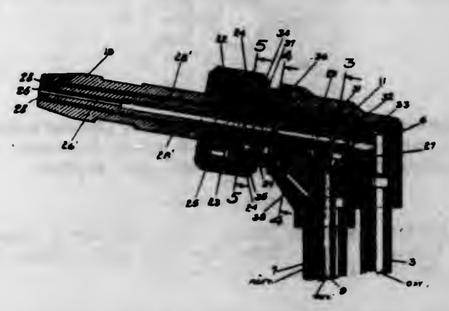
1,808,966. HATBAND PROTECTIVE MEANS. JOHN C. MORGAN, Los Angeles, Calif. Filed Nov. 28, 1927. Serial No. 236,158. 4 Claims. (Cl. 2—185.)



1. A hat band protecting shield comprising a sheet of non-absorbent material; means for securing said sheet to the sweat band of a hat; a flange extending forwardly from the lower edge of said sheet for a short distance under the hat brim; and a bead on said flange provided with openings through which perspiration may pass from said flange into the bead.

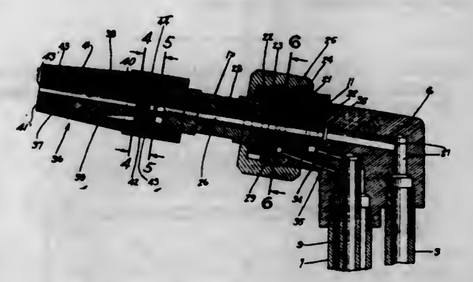
1,808,967. CUTTING TORCH. STUART PLUMLEY, Minneapolis, Minn., assignor to Smith Welding Equipment Corporation, Minneapolis, Minn., a Corporation of Minnesota. Filed June 27, 1929. Serial No. 374,074. 4 Claims. (Cl. 158—27.4.)

4. In a torch, the combination of a head provided with a tip having a central cutting orifice and a plurality of preheating orifices disposed around said cutting orifice, means for supplying a cutting fluid to said cutting orifice, conduits for supplying acetylene and oxygen to said preheating orifices, said head having annular cavities therein, one of which communicates directly with the acetylene supply conduit and the other with the oxygen supply conduit, said head also having annular chambers therein arranged to encircle said tip and directly communicating with said preheating orifices, one of said chambers having an annular narrow fuel passage connecting it with the cavity connected with said acetylene supply conduit and the other of said chambers having an annular narrow passage con-



necting it with the cavity connected with the oxygen supply conduit, said annular narrow passages causing the flow of gases from said cavities to their respective chambers, to be equally distributed around the tip body, whereby each of said preheating orifices will receive an equal supply of fuel gas.

1,808,968. CUTTING TORCH. STUART PLUMLEY, Minneapolis, Minn., assignor to Smith Welding Equipment Corporation, Minneapolis, Minn., a Corporation of Minnesota. Filed July 29, 1929. Serial No. 381,926. 7 Claims. (Cl. 158—27.4.)

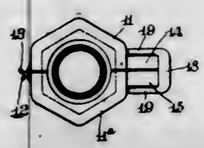


7. In a torch, the combination of a handle portion provided at one end with a head having oxygen and acetylene ports therein, a tip demountably secured to said head and including an intermediate section and a terminal section, said terminal section comprising a cylindrical member abuttingly engaged with one end of said intermediate tip section, and an outer tubular member fitting over said cylindrical member and having its walls spaced from the periphery of said cylindrical member to provide a narrow, annular passage between said members, means for securing said terminal tip members to said intermediate section, means connecting said annular passage with said oxygen port, an orifice in said inner member having means connecting it with said oxygen and acetylene ports, and valves for controlling the delivery of oxygen and acetylene to said annular passage and said orifice respectively.

1,808,969. METER SEAL. JOHN LAWRENCE POSTER, Columbus, Ohio. Filed Nov. 17, 1928. Serial No. 320,072. 1 Claim. (Cl. 70—123.)

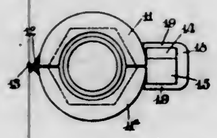
A sealing device for pipe couplings including a pair of shells having neck members, said neck members pro-

vided with notches in their ends and notches in their inner faces, a key for latching said neck members together including legs to lie opposite the outer faces of said neck



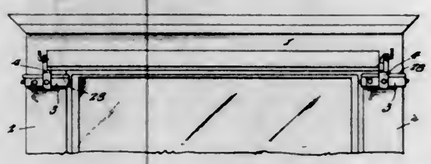
members and means on the key to engage said end notches, an intermediate leg carrying a spring to engage the notches of the inner faces of said neck members.

1,808,970. METER SEAL. JOHN LAWRENCE PORTER, Columbus, Ohio. Filed Nov. 19, 1928. Serial No. 320,276. 4 Claims. (Cl. 70—123.)



1. A sealing device for a pipe coupling including a pair of shells provided with cooperating neck members, one of which neck members has a groove at the outer side thereof, a key for locking said neck members together including a head portion provided with a leg to enter said groove, and a spring carried by said key having a hook to engage the bottom of said groove to prevent the withdrawal of the key.

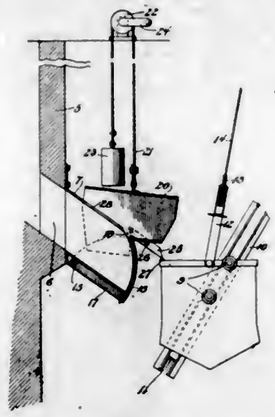
1,808,971. CURTAIN AND SHADE HANGER. EDWARD ROBERTS, Atchison, Kans. Filed June 23, 1930. Serial No. 463,300. 1 Claim. (Cl. 156—24.)



A curtain support comprising a clamp to extend across a side stile of a window frame, means to releasably secure said clamp in a set position upon the stile, a bracket carried by said clamp and consisting of a strip of material having one end portion bent to form a standard and an arm extending forwardly from the upper end of the standard, the other end portion of said strip being folded upwardly in spaced relation to itself to form a clamp encircling sleeve and terminating in tongues extended through recesses formed in opposite sides of the standard and clinched against the sleeve, and means to releasably secure the bracket in a set position upon the clamp.

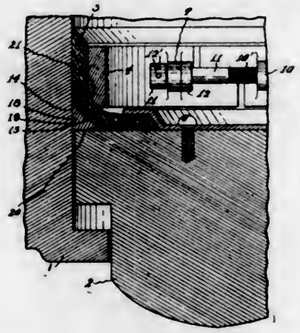
1,808,972. GATE. CLAIR M. ROOT, Detroit, Mich., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Dec. 29, 1925, Serial No. 78,163. Renewed Feb. 11, 1931. 7 Claims. (Cl. 214—125.)

4. A device for discharging material from a hopper into a hoisting bucket, comprising a combined gate and chute movable into a position to discharge into the bucket when the latter is lowered, and means engageable by the bucket when the latter is hoisted to raise the chute and close the gate, said means being pivoted



to the chute in such a position as to drop by gravity to afford clearance for the bucket as the latter is returned to filling position.

1,808,973. HYDRAULIC PISTON PACKING. HERMAN J. B. SCHARNBERG, Fort Wadsworth, N. Y. Filed Aug. 7, 1928. Serial No. 298,111. 17 Claims. (Cl. 74—109.)



1. A hydraulic press piston of the class described comprising a hydraulic cup leather and an expandible continuous metal fillet supporting ring for supporting the fillet of said cup leather.

1,808,974. MEANS FOR CABLE LAYING. FERDINAND WILKENS, Meldorf, Holstein, Germany. Filed Sept. 21, 1929, Serial No. 394,293, and in Germany Apr. 18, 1928. 4 Claims. (Cl. 111—5.)



1. An implement for laying underground cables, pipe lines and like articles in the ground at a distance below the surface of the soil, comprising in combination: a tractor; a swinging carrier beam pivotally mounted on said tractor; a knife-shaped supporting member attached to said carrier beam at the end remote from the pivot thereof; and mandrel means mounted on said knife-shaped

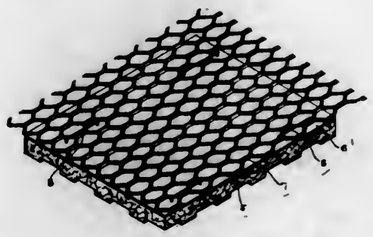
supporting member, for producing a closed underground channel by radial displacement and compression of the soil, said mandrel means having a greater diameter than the thickness of said knife-shaped supporting member and having the cable attached to it to enable the cable to be drawn into the underground channel.

1,808,975. SHEET MATERIAL CONTAINER FOR BULK ICE CREAM AND OTHER PRODUCTS. WILBUR L. WRIGHT, Fulton, N. Y., assignor to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,545. 4 Claims. (Cl. 229—4.5.)



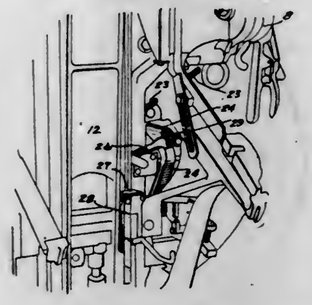
1. A paper container embodying a tubular barrel of stiff strong sheet fibrous material having a lower end extension longitudinally slit to form an annular series of longitudinal tongues, said barrel creased to expand from flat collapsed form to operative tubular form; bottom and top paper material exterior slip covers to exteriorly receive and tightly cover the otherwise open ends of the expanded barrel; and a separately formed stiff oversize paper material disk to form the inner bottom floor of the container and tightly press and expand the lower end of the expanded barrel against the surrounding rigid flange of the bottom slip cover and clamp the tongues of the body against the end wall of the bottom cover.

1,808,976. PLASTER BOARD. MILTON S. WUNDERLICH, St. Paul, Minn., assignor to Flaxlinum Insulating Company, St. Paul, Minn., a Corporation of Minnesota. Filed June 16, 1930. Serial No. 461,571. 10 Claims. (Cl. 72—124.)



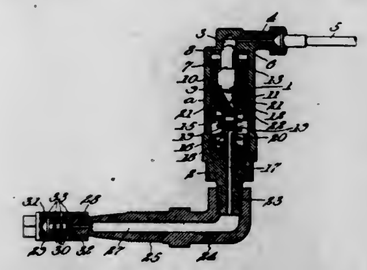
2. A composite lath and heat insulating material, comprising a felted flexible insulating layer and a flexible layer of expanded metal lath secured thereto, said material being flexible.

1,808,977. KNIFE WIPER FOR TYPE CASTING MACHINES. GEORGE L. CURLE, Minneapolis, Minn. Filed June 28, 1929. Serial No. 374,529. 13 Claims. (Cl. 199—62.)



1. In a type casting machine the combination with the type slug trimming knives thereof, of a wiper blade mounted for movement over said knives with a combined wiping and shearing action, and connections for intermittently operating the wiping blade from a movable part of the machine.

1,808,978. TERMINAL VALVE FOR FORCE FEED LUBRICATORS. FRANK W. EDWARDS, Chicago, Ill. Filed July 8, 1927. Serial No. 204,218. 6 Claims. (Cl. 184—76.)

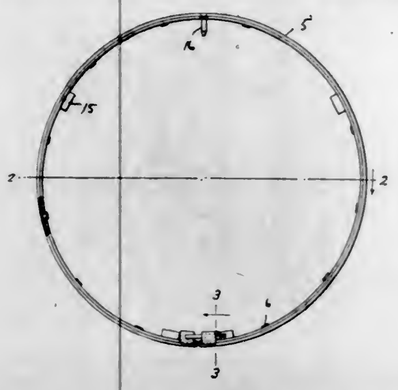


1. In a terminal valve for force-feed lubricators, a body having an inlet port and an outlet port, a housing slidable in said body, a check valve carried by said housing and acting under the influence of oil pressure to open said inlet port, means for seating said valve to close said inlet port, and means carried by the housing and cooperating with means adjacent to the outlet port for opening and closing said outlet port in response to the opening and closing of said inlet port.

1,808,979. EMERGENCY RIM AND PROTECTOR. ANDREW W. FITZ, Council Bluffs, Iowa. Filed Sept. 11, 1928. Serial No. 305,213. 1 Claim. (Cl. 152—23.)

An emergency tire and protector for automobile tire rims of the character described comprising a resilient split band including inner and outer laminations and an intermediate lamination, the intermediate lamination having its ends spaced inwardly from the ends of the inner and outer laminations, means securing the laminations together, a flat metallic strap extending transversely between the inner and outer laminations in one end portion of the bands and anchored therein adjacent one end of the intermediate lamination, said strap projecting laterally from the sides of the band, integral, substantially U-shaped hooks on the ends of the strap, a flat metallic strap extending transversely between the inner and outer laminations in the other end portion of the band and an-

chored therein adjacent the other end of the intermediate lamination, right angularly disposed, integral, apertured ears on the ends of the second named strap, and means



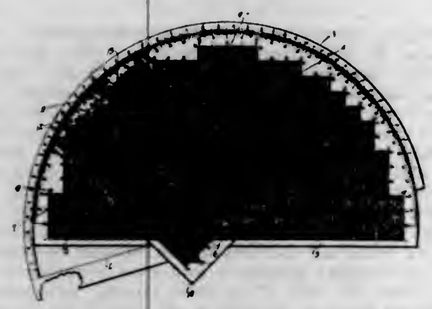
pivotally connected to the ears and adjustably engageable with the hooks for detachably connecting the ends of the band together in a manner to draw said ends toward each other.

1,808,980. BEARING FOR CLUTCH RELEASES. DAVID E. GAMBLE, Detroit, Mich., assignor to The Borg & Beck Company, Chicago, Ill., a Corporation of Illinois. Filed May 15, 1926. Serial No. 109,238. 2 Claims. (Cl. 192—98.)



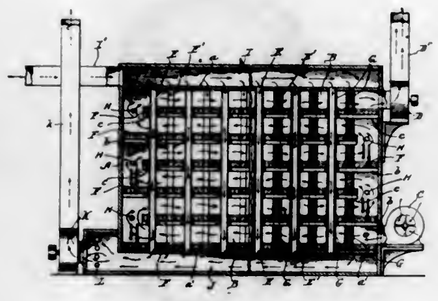
1. A clutch release yoke bearing comprising an anti-friction bearing block and a cup cast on said block, the bearing portion of said block projecting beyond the face of the cup, and said cup having integral and radially disposed supporting members projecting outwardly from the periphery and at the back thereof.

1,808,981. CALCULATING DEVICE. CLIFTON A. GLASS, Kansas City, Mo. Filed Jan. 31, 1927. Serial No. 164,718. 6 Claims. (Cl. 33—75.)



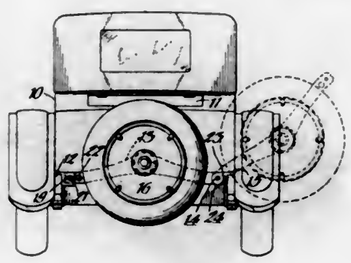
1. A calculating device comprising a semi-circular scale having arcuately-arranged graduations in terms of slope, a semi-disk pivoted on the axis of said scale and having peripheral graduations in terms of slope registerable with the graduations of said scale and right angularly intersecting lines, and a transparent index pivoted on the axis of said scale having longitudinal and transverse graduations cooperating with said lines to identify unknown dimensions and unknown angles.

1,808,982. AIR CONDITIONER. GORDON D. HARRIS, Stamford, Conn., assignor to The Industrial Dryer Corporation, Stamford, Conn., a Corporation of Connecticut. Filed Apr. 14, 1926. Serial No. 101,870. 25 Claims. (Cl. 62—139.)



1. In an apparatus of the class described, the combination of a flow channel including a plurality of passes, means for circulating air within the flow channel and through the successive passes thereof, means for artificially heating the air at the stages of its flow within the successive passes of said flow channel, a series of tubular members extending across the passes of said flow channel, absorbent material supported by said tubular members and exposed within the passes of said flow channel for the contact of air therewith, means for charging said absorbent material with liquid, and means for circulating air within said tubular members independently of the air flow within said flow channel.

1,808,983. CARRIER FOR SPARE WHEELS AND TIRES. EDWARD S. HEBELER, Buffalo, N. Y. Filed Dec. 29, 1928. Serial No. 329,115. 2 Claims. (Cl. 224—29.)



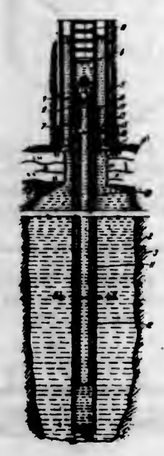
1. A carrier for the spare wheel or tire of a vehicle, comprising a vertically-swinging supporting member fulcrumed at one side of the longitudinal axis of the vehicle for movement in a plane crosswise thereof and including means for holding a spare wheel or tire thereon, means applied to the vehicle at one side of the fulcrum of said supporting member for sustaining the latter in position centrally at the rear end of the vehicle, and means on the vehicle for sustaining said member in a reversed position at the opposite side of said fulcrum transversely at one side of the vehicle above the ground and clear of its rear end to render the same accessible.

1,808,984. TOOTHED DRUM FOR QUACK GRASS DIGGERS AND PLOWS. SAMUEL H. HEINMILLER, New Hampton, Iowa. Original application filed June 1, 1929, Serial No. 367,720. Divided and this application filed Mar. 20, 1930. Serial No. 437,443. 1 Claim. (Cl. 97—216.)



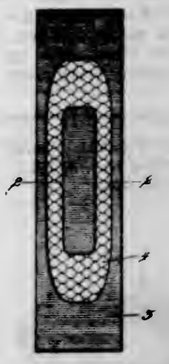
In a quack grass digger and plow, a drum, teeth of V-form in side elevation and of rectangular form in front elevation, means pivotally connecting the teeth to the drum with their forward sides extending radially from the drum, and means yieldingly holding the teeth against pivotal movement.

1,808,985. PUMP. GEORGE A. HELMLING, Pampa, Tex. Filed Sept. 14, 1928. Serial No. 306,066. 2 Claims. (Cl. 103—220.)



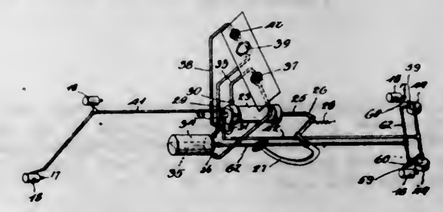
1. In apparatus of the character described including a casing, a working barrel, a standing valve support in the barrel having a lower end depending below the barrel, a strainer, and a gas trap pipe adapted to depend in the strainer, a coupling including upper and lower portions screw threaded to receive respectively the barrel and the strainer and adapted to support the valve support, said coupling including an intermediate portion provided with a port located below the valve support for admitting air from the casing to the barrel, said lower portion having an internal threaded shoulder for supporting the gas trap pipe in spaced relation with the strainer.

1,808,986. STENCIL. RALPH W. HUNTER, Jacksonville, Fla. Filed Apr. 29, 1929. Serial No. 358,816. 3 Claims. (Cl. 107—127.)



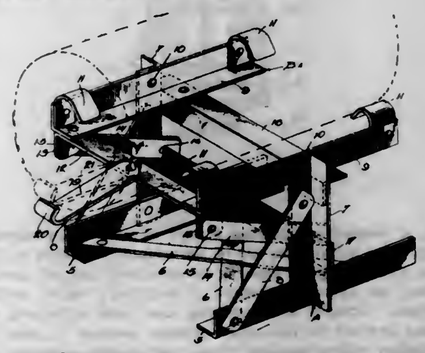
1. A stencil having a base of flexible material having stencil openings therethrough, and a continuous layer of wire mesh embedded between the surfaces thereof, said material being bonded together through the wire mesh openings.

1,808,987. FLUID-OPERATED FOUR WHEEL BRAKING SYSTEM FOR LAND VEHICLES. DWIGHT C. KELLOGG, Carthage, Mo. Filed May 23, 1924. Serial No. 715,445. 9 Claims. (Cl. 188—152.)



9. The combination with mechanism for applying a brake for a pivot wheel by fluid pressure; of means coaxial with the wheel pivot mechanically operated by the wheel upon pivoting of the wheel to control the fluid to the mechanism to cut off the supply and vent it after a predetermined pivotal movement of the wheel.

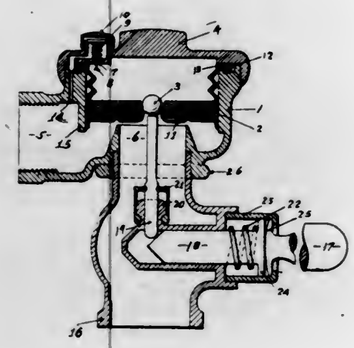
1,808,988. BARREL RACK. NATHAN LANG, Jr., Charleston, Ill. Filed Dec. 27, 1927. Serial No. 242,701. 3 Claims. (Cl. 248—58.)



1. In a barrel rack, a substantially rectangular barrel supporting frame including a pair of spaced side arms and spaced barrel supporting brackets secured to each arm adjacent the respective ends thereof and extending above

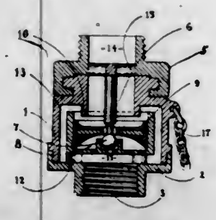
said arms, the brackets on one arm being spaced from each other and being also spaced from the brackets on the other arm to thus provide a multipoint support for a barrel carried by the frame, and a barrel engaging hook pivotally connected to one end of the frame and adapted to extend therefrom for cooperation with the barrel for initially loading the latter onto the frame, said hook and said spaced brackets being alone adapted to engage said barrel.

1,808,989. FLUSH VALVE. JESSE D. LANGDON, Los Angeles, Calif. Filed Nov. 8, 1927. Serial No. 231,915. 6 Claims. (Cl. 137—93.)



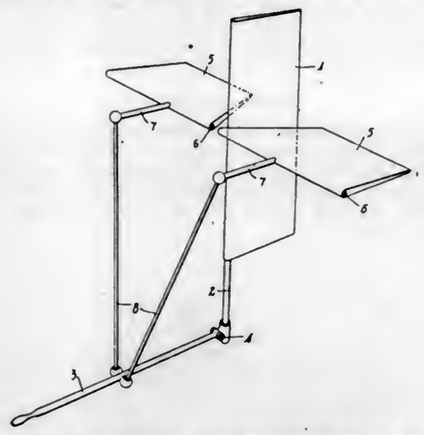
1. A valve comprising a body having a seat, and a valve member of flexible material movable in the body and having a metal plate partly embedded in said material, said plate and flexible material being both arranged to contact with said seat.

1,808,990. AUTOMATIC COUPLER VALVE. JESSE D. LANGDON, Los Angeles, Calif. Filed Mar. 1, 1928. Serial No. 258,402. 5 Claims. (Cl. 284—18.)



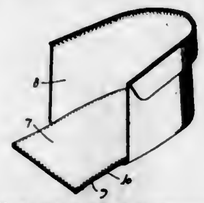
3. A coupler comprising a pair of coupler members, a main valve member in one of the coupler members to close same and having an opening therein, said coupler member having an aperture therein, a secondary valve member disposed between said opening and said aperture, and means carried by the other coupler member to open the secondary valve member when the coupler members are brought together, said main valve member adapted to be closed and opened by fluid pressure within the first named coupler member when the secondary valve member is closed and opened, respectively.

1,808,991. STEERING GEAR FOR AIRSHIPS. JESSE D. LANGDON, Los Angeles, Calif. Filed Apr. 8, 1929. Serial No. 353,623. 6 Claims. (Cl. 244—29.)



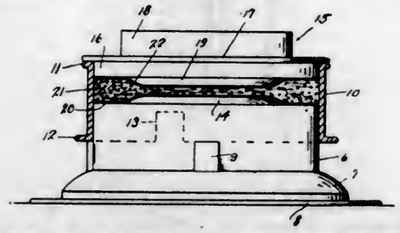
1. A steering gear for airships comprising a vertical shaft, a rudder connected to said shaft, lever arms mounted to turn on a horizontal axis, ailerons connected with said arms, a hand lever connected with said shaft to turn with same and adapted to be swung upwardly and downwardly, and links connecting said lever and arms.

1,808,992. COMBINED COUNTER LINER AND HEEL CUSHION. JESSE D. LANGDON, Los Angeles, Calif. Filed Apr. 12, 1929. Serial No. 354,578. 4 Claims. (Cl. 36—55.)



1. A counter liner for a shoe comprising a bottom portion formed with a pocket, and a cushion expanded laterally in said pocket to straighten out said bottom portion, the mouth of the pocket being of less width than the cushion.

1,808,993. PATTY FORMING DEVICE. NORRIS FEY MURRAY, Hinsdale, Ill. Filed Oct. 28, 1929. Serial No. 402,980. 1 Claim. (Cl. 107—19.)

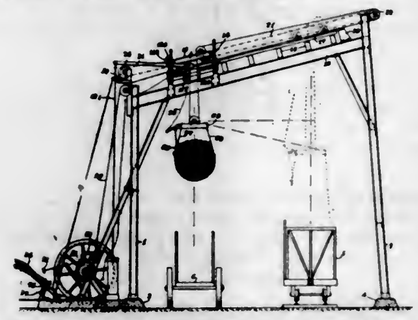


A food forming device of the character described comprising a base, an upwardly extending body on the base, a sleeve slidable on the body, said sleeve being open at its upper end, means for maintaining the sleeve in a position projecting a substantial distance above the top of the body, and a member for closing the upper end of the sleeve when the base within the confines of the sleeve has been filled with food, said means for maintaining the sleeve elevated comprising a plurality of cleats or formed lugs on the said body upon which the lower end of the sleeve may rest and which engages into recesses on the said sleeve when the sleeve is rotated to register said recesses with the cleats.

1,808,994. ADDITIVE COMPOUND OF DIETHYL BARBITURIC ACID AND 4-DIMETHYLAMINO-2.3-DIMETHYL-1-PHENYL-5-PYRAZOLON. PAUL PFEIFFER, Bonn-on-the-Rhine, Germany. Filed Mar. 20, 1925, Serial No. 17,130, and in Austria Mar. 27, 1924. 1 Claim. (Cl. 260—33.)

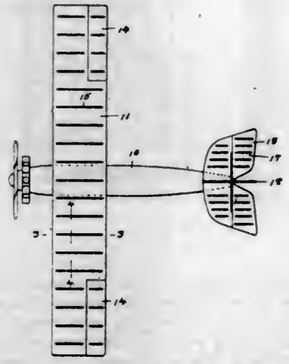
As a new product, the additive compound obtained by combining diethyl barbituric acid with 4-dimethylamino-2.3-dimethyl-1-phenyl-5-pyrazolon substantially in molecular proportion such compound forming substantially colorless needles of silky luster melting about between 113–115° C., dissolving in water and being decomposed by benzene.

1,808,995. LOADING APPARATUS. GERMAN VIERA RODRIGUEZ, Manzanillo, Cuba. Filed June 8, 1926. Serial No. 114,494. 4 Claims. (Cl. 265—32.)



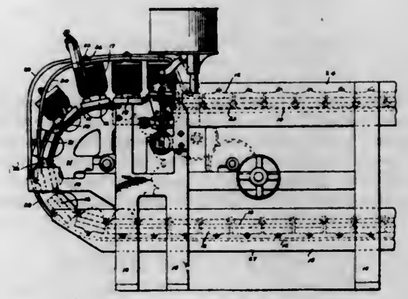
1. A weighing apparatus including a movable track section, plates carried by said movable track section, stirrups connected to said plates and supported from a fixture, a long arm connected to one of said plates and extending transversely of and beneath the track section and to a point beyond the opposite side of the track section, a short arm connected to the other of said plates and extending transversely of the track section to a point substantially in the longitudinal median line thereof, a swinging knife edge support carried by the long arm to provide a knife edge bearing for the free end of the short arm, and weight indicator operating mechanism connected to the free end of the long arm.

1,808,996. AIRPLANE. ROYALL H. ROYSTER, Oxford, N. C. Filed Nov. 23, 1928. Serial No. 321,418. 1 Claim. (Cl. 244—2.)



In an airplane, a wing including upper and lower walls having relatively narrow spaced slots and the slots of one wall alining with the slots of the other wall, and spaced pairs of strips connecting the upper and lower walls and forming air passages in alinement with the alining slots of the walls, said slots disposed in the direction of flight of the device to divide the upper surface of the wing into separate vacuum chambers during the flight of the airplane.

1,808,997. STRIPPER FOR PASTRY CAKE BAKING MACHINES. CHARLES SCHROEDER and HARRY TATOSIAN, Bridgeport, Conn., assignors to Ice Cream Cone Machinery Inc., Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 4, 1928. Serial No. 244,447. 2 Claims. (Cl. 107—58.)



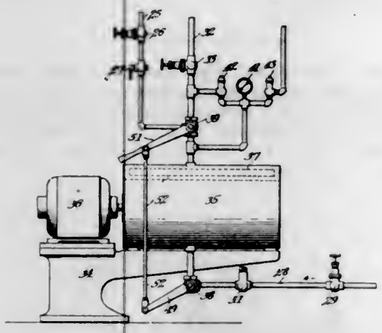
1. The combination with a cone cake baking machine including a series of hingedly connected pairs of baking irons, means for moving the same in a horizontal plane, means for raising one iron of each pair from the other of said pair of a cake picking device in the line of travel of each of the pair of baking irons while open, said picking device comprising a finger to engage and traverse the face of each of said irons as they move forward past the picker.

1,808,998. CELLULOSE FILM. SAMUEL E. SHEPPARD and JAMES G. MCNALLY, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 30, 1930. Serial No. 424,548. 2 Claims. (Cl. 95—9.)



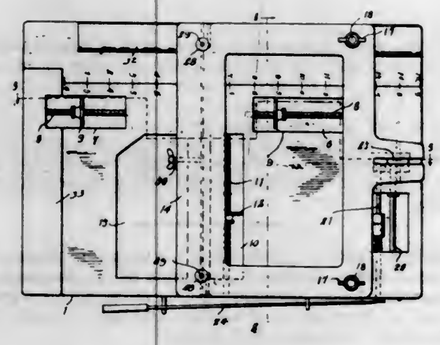
1. A substantially flat laminated cellulose ester film base comprising at least two laminæ having the grain of one lamina at an angle to the grain of the adjacent lamina, one lamina being composed of cellulose acetate and the other lamina being composed of cellulose nitrate.

1,808,999. REFRIGERATION. THOMAS SHIPLEY, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Oct. 12, 1927. Serial No. 225,774. 20 Claims. (Cl. 62—115.)



1. The method of arresting the refrigerative action of an evaporator containing at least a small quantity of volatile refrigerant in the liquid state, which consists in isolating the evaporator and admitting thereto gaseous refrigerant at a controlled pressure higher than that corresponding to the temperature of the liquid refrigerant in the evaporator.

1,809,000. PAPER FOLDING MACHINE. ELZA R. STEALY, Shenandoah, Iowa. Filed Jan. 4, 1929. Serial No. 330,164. 4 Claims. (Cl. 270—80.)

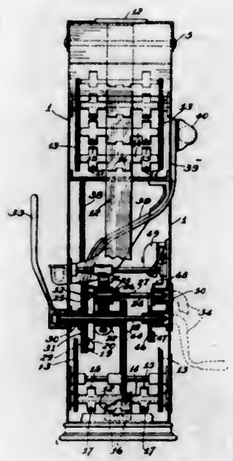


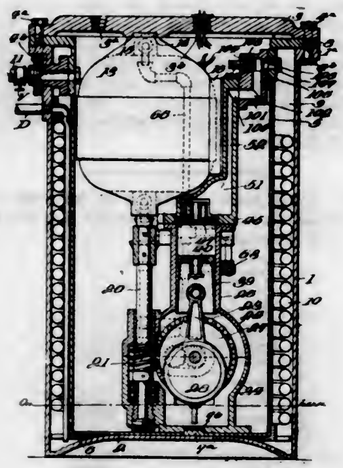
1. An appliance of the class described, a folding blade having a tapering sharp lower edge, a cooperating tapering slot structure, a paper guide near one end of the slot structure running at right angles with the slot, an adjustable guide near opposite end of slot adjustable parallel with the slot, an adjustable guide at each side of the slot individually adjustable toward and from the slot, means for adjusting the blade so that its lower edge will be parallel with the slot, and means for lowering the blade to force the material to be folded into the slot thereby forming a clear cut sharp fold, and again raising said blade to release the folded material from said slot.

1,809,001. COIN CONTROLLED VENDING MACHINE. ALBERT THOKE, Pittsburgh, Pa., assignor to D. L. Clark Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 19, 1928. Serial No. 326,946. 6 Claims. (Cl. 312—97.)

1. In a coin controlled vending machine a shaft rotatable within a casing, means for rotating said shaft in one direction, a notched disk borne by said shaft, a bar secured at one end to said casing and at the other end engaging said shaft in the form of a spring-compressed bearing, said bar being provided with a bore, and a bolt mounted in said bore and movable both rotatably and longitudinally therein and adapted to engage the notches of said disk.

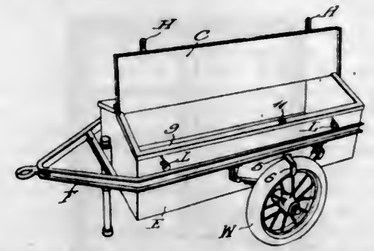
1,809,002. REFRIGERATING APPARATUS. LUCIEN L. TORREY, Los Angeles, Calif. Filed Jan. 31, 1925. Serial No. 6,079. 15 Claims. (Cl. 62—115.)





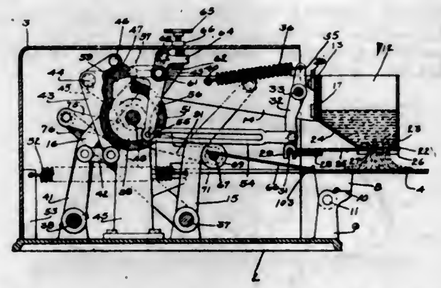
1. In a refrigerating unit, an outer and an inner tank, a compressor in said inner tank, means to close said inner tank from the atmosphere, said compressor in operative condition preventing reflux of gas from said outer to said inner tank through said compressor, and means to shut off communication between said tanks in the inoperative condition of said compressor.

1,809,003. TRAILER WHEEL LOCK. JOHN VAN VORST, Schenectady, N. Y., assignor to Mohawk Asphalt Heater Company, Schenectady, N. Y., a copartnership composed of John Van Vorst and George M. Baker. Filed Apr. 14, 1930. Serial No. 444,238. 6 Claims. (Cl. 188—31.)



1. In a vehicle having an enclosure, and a wheel spaced laterally therefrom, said enclosure having an opening near said wheel; a wheel-holding member adapted for engagement with said wheel and for passage through said opening, and means within said enclosure for locking said wheel-holding member against withdrawal from said opening.

1,809,004. MACHINE FOR BAKING CAKES. FRANK J. VIERLING and JAMES JESSEN, Minneapolis, Minn., assignors to Edward S. Harrison, Minneapolis, Minn. Filed Jan. 12, 1928. Serial No. 246,248. 11 Claims. (Cl. 107—4.)



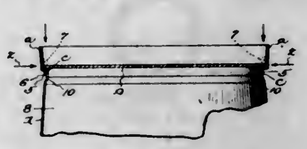
3. A machine for baking cakes, comprising in combination, a base member, a griddle mounted thereon, a batter-box, means for discharging batter onto the griddle in predetermined quantities, a carriage, a peel mounted on said carriage and having one edge normally engaged with the surface of said griddle, a cam mechanism for moving the carriage forwardly and backwardly over the griddle and means mounted on said carriage adapted to be actuated by movement of the carriage to partially rotate the peel at alternate forward movement thereof to cause the latter to invert the cakes upon the griddle.

1,809,005. AUTOMATIC DRAFT REGULATOR. RICHARD A. WALKER, St. Joseph, Mo., assignor to Walker Manufacturing Company, St. Joseph, Mo., a Corporation of Missouri. Filed Oct. 11, 1929. Serial No. 399,000. 7 Claims. (Cl. 236—45.)



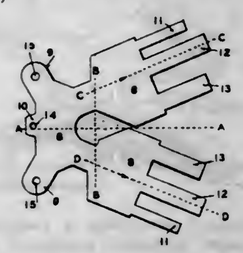
1. An automatic draft regulator comprising a pivotally mounted damper, interconnected link members pivotally connected to the inner side of said damper, a counterweight carried by said interconnected links, and means on the outer side of said damper for moving one of said pivotal connections relative to the other to adjust said interconnected links and counterweight.

1,809,006. METHOD OF BOTTOMING PAPER CONTAINERS. WILBUR L. WRIGHT, Fulton, and JOSEPH T. BOND, Phoenix, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed Feb. 15, 1927, Serial No. 168,334. Renewed July 9, 1928. 6 Claims. (Cl. 93—55.)



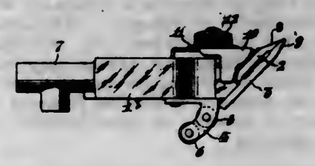
1. In the method of bottoming tapered body paper containers, those steps which comprise radially compressing inwardly an annular portion of the end portion of the body and simultaneously radially expanding the remaining end portion of the body to thereby form an intervening annular ledge, then inserting an oversize bottom disk in said expanded portion and against the internal annular ledge at the junction between the compressed and expanded portions, and then compressing and curling the end of the body inwardly and upwardly against the bottom face of the disk.

1,809,007. SHEET METAL GOVERNOR WEIGHT. OTTO WULFERT, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 447,883. 3 Claims. (Cl. 264—1.)



1. A governor element formed from a punched sheet metal blank having integral strips, said element having a weight member produced by folding said strips against the blank and folding the blank to enclose the strips within the weight members.

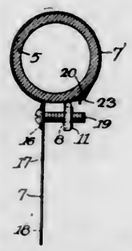
1,809,008. BARBER'S HAIR-CUTTING MACHINE. ALEXANDER ADAMS, Philadelphia, Pa. Filed June 21, 1928. Serial No. 287,098. 1 Claim. (Cl. 30—1.)



In a barber's hair cutting machine, a casing, upper and lower cutter plates at the head of said casing and inclined to the plane thereof, a curved projection extending downwardly and rearwardly from the casing adjacent said lower cutter plate, and a pair of rollers on said projection, said rollers being so disposed with respect to the

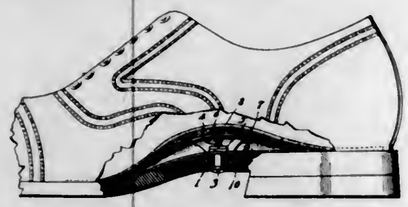
plane of the lower cutter plate wherein a relatively short cut may be obtained by using one of said rollers and said lower cutter plate as surfaces of contact, and whereby a relatively long cut may be obtained by using both rollers as surfaces of contact.

1,809,009. GROUND CONNECTER. GUSTAF E. ANDRE, Chicago, Ill., assignor to Belden Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 6, 1929. Serial No. 344,742. 9 Claims. (Cl. 173—273.1.)



1. In a connecter of the class described, the combination of a flexible metal member adapted to embrace a rod or the like, means for clamping said member on the rod, and means struck from said member for receiving an electric conductor and operative, as an incident to the clamping of said member on the rod, to grip said conductor to establish a good electrical connection therewith.

1,809,010. ADJUSTABLE ARCH SUPPORT. SAMUEL S. BAER, Atlantic City, N. J. Filed Dec. 9, 1926. Serial No. 153,567. 6 Claims. (Cl. 36—71.)



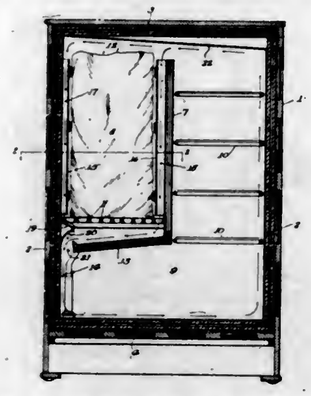
2. An arch-support comprising a vertically adjustable supporting member revolubly positioned at the shank portion of a shoe, and a conformable plate thereon of approximately equal length and width, each of these dimensions being less than the width of the aforesaid shank portion, so that the plate may be selectively placed in various positions with respect to the adjusting member in order to support various parts of the longitudinal or metatarsal arches.

1,809,011. INSULATED ELECTRICAL CONDUCTOR. CHARLES A. BARKER, Highland Park, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 4, 1927. Serial No. 196,640. 3 Claims. (Cl. 173—264.)

1. An electrical conductor having upon the surface thereof a plastic, ozone- and corona-proof, non-inflammable, insulating coating of substantial thickness comprising nitrocellulose, a softener, an inert material and a fire retardant compound.

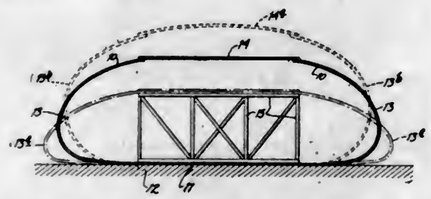
1,809,012. REFRIGERATOR. JOHN BECK, Ashland, Wis. Filed Mar. 2, 1928. Serial No. 258,494. 5 Claims. (Cl. 62—51.)

1. A refrigerator comprising a top and bottom, front and back, and two sides, a division wall intermediate said sides, skeleton frames spaced from said division wall and from one of said sides and forming air passages, a rack below said frames for supporting a cake of ice, an inclined drip pan fixed to said division wall and to said back and having an air-tight connection therewith, and spaced



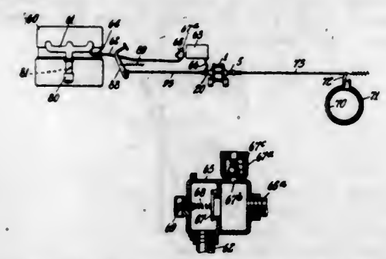
from a side to form a passage communicating with the space below said drip pan, an inclined member arranged beneath said top, and a baffle fixed to one of said side walls between the rack and the normal plane of the drip pan.

1,809,013. CONTAINER. HARRY C. BOARDMAN, Chicago, Ill., assignor to Chicago Bridge & Iron Company, a Corporation of Illinois. Filed Apr. 12, 1929. Serial No. 354,587. 4 Claims. (Cl. 220—85.)



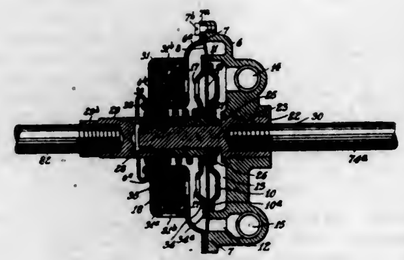
1. A closed container normally substantially rectangular in plan view with substantially straight sides and substantially elliptical in vertical central cross-section, the top of said container adapted to be flexed upwardly and domnwardly and the sides thereof adapted to be flexed outwardly and inwardly by changes in internal pressure.

1,809,014. VACUUM BRAKE MECHANISM. CALEB S. BRAGG and VICTOR W. KLIESRATH, Long Island City, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed June 10, 1926, Serial No. 114,934. Renewed Oct. 17, 1930. 1 Claim. (Cl. 121—38.)



The combination with an automotive vehicle, and an internal combustion engine for propelling the same, of a power actuator comprising a cylinder, a piston therein, and controlling valve mechanism therefor, a part to be actuated operatively connected with the actuator piston, an operator operated part connected with the reversing valve mechanism, a suction connection from the suction passage of the engine to the actuator cylinder, a check valve in said connection, a spring constructed to hold said check valve closed when the engine is operated at lower revolutions than operative running speed, to prevent the introduction of air into the suction passage of the engine from the portions of the suction connection beyond said check valve while starting the engine, operative connections between the operator operated part and the piston and the part to be operated thereby, and a normally closed relief valve for the cylinder and that portion of the suction connection between the check valve and the cylinder provided with a retracting spring of less strength than the check valve spring, permitting the relief valve to open readily whenever pressure accumulates in the cylinder forward of the piston.

1,809,015. CONTROLLING VALVE MECHANISM FOR VACUUM BRAKE SYSTEMS. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Sept. 12, 1929. Serial No. 392,003. 7 Claims. (Cl. 121—41.)

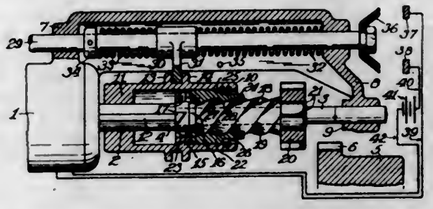


1. In valve mechanism of the kind described, the combination with a valve body provided with an annular seat, a diaphragm for engaging said seat provided with inlet apertures for higher fluid pressure and having marginal portions in sealing engagement with the valve body, a disc valve having a seat for engaging said diaphragm and closing communication through said apertures, a valve actuating part movable with respect to the valve body and connected with said diaphragm and disc valve, said valve actuating part and said valve body being provided with means for connecting them respectively with a physically operable part and with brake mechanism, said valve body being provided with means for connecting the portions thereof exterior to and within said annular seat respectively with a source of lower fluid pressure and with a power actuator, and means independent of the valve body for limiting the lost motion between said valve actuating part and the valve body, and connecting said physically operable part with said brake mechanism.

1,809,016. COMPOSITION FOR PRESERVATIVE TREATMENT OF FRESH FRUIT. ERNEST M. BROODEN, Santa Monica, and MILES L. TROWBRIDGE, Palms, Calif., assignors to Brogdex Company, Winter Haven, Fla., a Corporation of Florida. Filed Mar. 2, 1925. Serial No. 12,776. 6 Claims. (Cl. 99—1.)

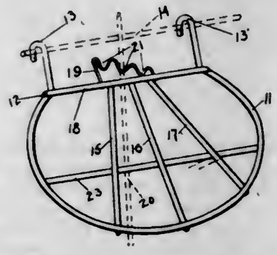
5. As a new composition of matter, a mixture non-toxic to humans and comprising paraffin, a refined mineral oil and high coefficiency acid derived from coal tar distillation.

1,809,017. STARTER DEVICE. DALMAR T. BROWNLEE, Indianapolis, Ind. Filed Oct. 20, 1927. Serial No. 227,527. 22 Claims. (Cl. 74—7.)



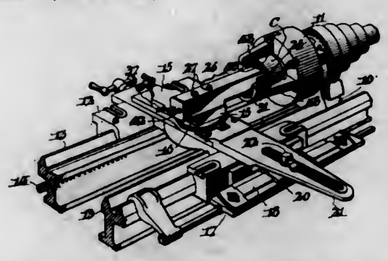
2. A starter device apparatus having a plurality of co-related elements comprising a housing having screw threads therein and a sleeve operating in the housing and having screw threads thereon in connection with the threads in the housing, each thread having a screw face widely separated from the screw faces of adjacent threads and a slightly inclined clutch face back having a width fully twice as great as the depth of the screw face, and a pinion fixed to the sleeve.

1,809,018. ADJUSTABLE BRACKET. CLARENCE A. BRUNING, Colfax, Wash. Filed Dec. 13, 1929. Serial No. 413,767. 4 Claims. (Cl. 211—181.)



1. In an adjustable bracket of the character described, a frame, the ends of the frame bent at an angle and terminating in hooks, a cross tie, bracket supporting members secured to the cross tie and to the frame, and a stepped adjusting member on said cross tie for maintaining the bracket in a horizontal position.

1,809,019. ROTARY CUTTING OPERATIONS AND APPARATUS THEREFOR. JOHN J. BUCKLEY, Chester, Pa. Filed Feb. 18, 1925. Serial No. 9,929. 7 Claims. (Cl. 82—17.)

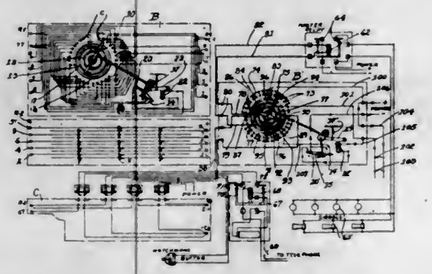


1. A method of concurrently cutting opposite tapers in a pipe coupling on a machine comprising lathe-ways, a revolving coupling-holder with axis of rotation parallel to said ways, carrier means movable along said ways, and means for feeding the same cross-wise of the ways in definite relation to its movement along them; which method comprises feeding through the two ends of the coupling, by and with the carrier means, oppositely pointing cutters

in such positions on the carrier means that their radial distances from the coupling-holder axis vary oppositely as the carrier means moves along and across the lathe-ways as aforesaid.

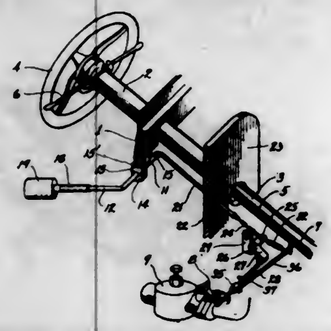
4. The combination with lathe-ways, a revolving coupling-holder with axis of rotation parallel to said ways, carrier means movable along said ways, and means for feeding the same cross-wise of the ways in definite relation to its movement along them, of cutters for the two coupling ends on said carrier means in such positions that their radial distances from the coupling-holder axis vary oppositely as the carrier means moves along and across the lathe-ways as aforesaid.

1,809,020. SIGNAL CODE SENDING DEVICE AND SYSTEM. HERBERT BURDICK, East Orange, N. J., assignor to Signal Engineering & Manufacturing Company, New York, N. Y., a Corporation of Massachusetts. Filed Jan. 3, 1927. Serial No. 158,665. 8 Claims. (Cl. 177—361.)



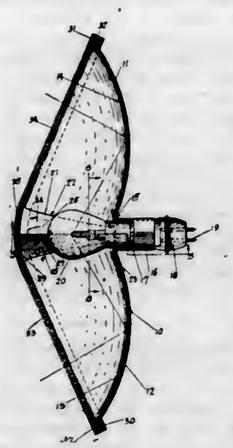
6. In a signalling system, an announcing circuit, code determining means and a commutator system conditioned thereby, means to render said commutator system effective sucessively to repeat a code signal into said announcing circuit, a second commutator system including means for applying a non-code signal to said announcing circuit, and switching means controlled in the operation of the second commutator system for suspending a code signal of the first mentioned commutator system during the interval only of the non-code signal.

1,809,021. ACCELERATOR ATTACHMENT. FABIUS M. BUTLER, Seattle, Wash. Filed Aug. 15, 1927. Serial No. 212,945. 9 Claims. (Cl. 74—81.)



1. In a vehicle of the character described in combination with the throttle member, an accelerator means comprising a pivoted support, a control lever slidable therein and operatively connected with the throttle member and extended to a position suitable for actuation by lateral movement of the knee or leg of a person in the driver's seat.

1,809,022. MOTOR VEHICLE HEADLAMP. WILLIAM H. CHAPMAN, Oakland, Calif. Filed Sept. 30, 1929. Serial No. 396,023. 4 Claims. (Cl. 240—41.35.)



1. A device of the class described, comprising, in combination, duplex shell-like reflectors of substantially parabolic form in cross-section and having an intermediately positioned light deflecting element, an illuminant coactively associated with said light deflecting element, and a third reflector positioned in front of said illuminant and forming a continuation of said light deflecting element to receive and reflect the light rays as received from the front end of said illuminant rearwardly and angularly to be received and re-reflected by said shell-like reflectors

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1,809,023. STRANDED BELT. EDWARD A. CONNER, Stratford, Conn., assignor to American Cable Company, Inc., a Corporation of Delaware. Filed Sept. 11, 1926. Serial No. 134,796. 8 Claims. (Cl. 74—67.)

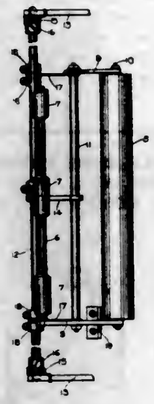


3. A belt comprising a plurality of wire ropes disposed in mutually spaced relation, a plurality of transversely disposed clips clamped upon said ropes, each clip being formed of a body portion bearing against one side of the ropes and a pair of end portions folded over and bearing against the opposite side of the ropes, the ropes being flattened at their points of intersection with the clip and said body portion being bent in between said ropes.

1,809,024. PAPER ROLLER MECHANISM. CHESTER W. CRUMRINE, Rochester, N. Y., assignor to Electromatic Typewriters, Inc., Rochester, N. Y., a Corporation of New York. Filed Dec. 9, 1926. Serial No. 153,588. 1 Claim. (Cl. 197—138.)

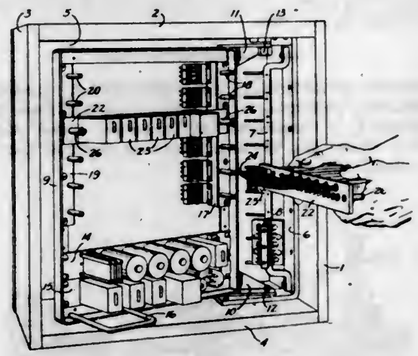
Paper-roller mechanism, for a typewriter or the like, comprising two parallel rollers, two end-levers each having loose pivotal connections with the corresponding ends of said rollers, a rod loosely connected, at its ends, with intermediate points of the respective end-levers, a rock-shaft parallel with said rollers and rod, an arm

fixed to the rock-shaft and having a loose pivotal engagement with the middle of said rod, two links, each



loosely pivoted, at its ends, to the rod and the rock-shaft, respectively, and a spring for rotating the rock-shaft in the direction to press the rollers against the paper.

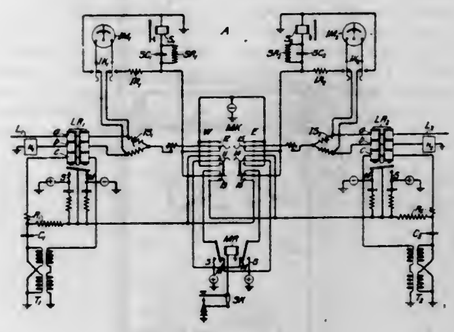
1,809,025. ELECTRICAL DEVICE. VICTOR I. CRUSAR, East Orange, N. J., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y., a Corporation of New York. Filed July 29, 1929. Serial No. 381,996. 7 Claims. (Cl. 179—91.)



1. An electrical device comprising electrical apparatus secured to a mounting plate and interconnected in a circuit terminating in a plug, said plug having a small range of movement with respect to said mounting plate.

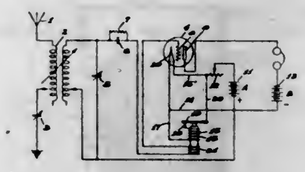
1,809,026. TELEGRAPH SYSTEM. GEORGE C. CUMMINGS, Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 8, 1928. Serial No. 298,158. 9 Claims. (Cl. 178—71.)

1. In a duplex telegraph repeater, a polar relay associated with one line section, another polar relay associated with the other line section, operating windings and armatures for said polar relays, a balancing network for each line section, circuit means interconnecting said windings, armatures, line sections and networks, a single circuit indicating device, a plurality of impedances included in said circuit means and switching means for



connecting said indicating device across any one of said impedances for observation of the current flow in said impedances.

1,809,027. RADIO RECEIVING SYSTEM. ERNEST G. DANIELSON, San Francisco, Calif. Filed June 23, 1925. Serial No. 38,961. 9 Claims. (Cl. 177—311.)



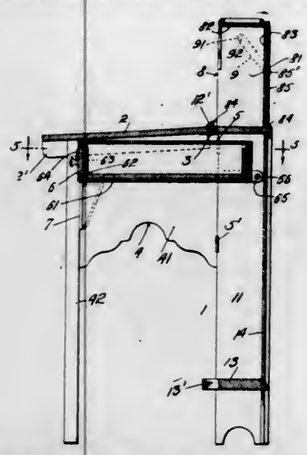
1. A radio receiving set including a three electrode vacuum tube and a telephonic device for normally reproducing audible frequencies, means responsive to abnormally high voltage on the filament of said tube for interrupting the filament circuit at audible frequency to protect the filament and produce a signal of said frequency in the telephonic device.

9. In a system of the class described, an electron tube relay having a grid, plate and filament, a circuit for heating said filament, an input circuit connecting said grid and filament, an output circuit connecting said plate and filament, translating means in said output circuit, and means including an electro-magnetic vibrator for generating a pulsating current of audio frequency connected in parallel with the filament and coupled to the input circuit, said means being responsive to an increase in the potential drop across the filament above a safe value to modulate the input circuit with said generated current whereby an amplified current of audio frequency is produced in the output circuit to actuate said translating means.

1,809,028. FOLDABLE DESK. JOHN FANARJIAN, Union City, N. J., assignor of one-half to Paul M. Hammalian, John M. Hammalian, and Jacob M. Hammalian, Hackensack, N. J. Filed Nov. 17, 1927. Serial No. 233,807. 5 Claims. (Cl. 45—46.)

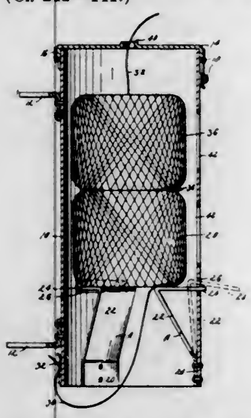
1. A folding desk embodying, in combination, a box-like body portion, a folding leaf having a hinged connection at the front edge of said box-like portion and foldable downwardly, a drawer element having a hinged connection

within said box-like body portion in a horizontal plane below said hinged connection of the leaf and in a vertical



plane adjacent to the rear wall of said body portion, means for supporting said writing leaf, and means for independently supporting said drawer.

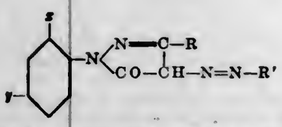
1,809,029. TWINE CONTAINER. CARLTON J. FULCHER, Early, Iowa. Filed Mar. 24, 1930. Serial No. 438,539. 7 Claims. (Cl. 242—141.)



1. In a twine container, a tubular receptacle and leaf spring members forming a bottom therefor, said members being capable of movement to a position allowing the insertion of a ball of twine through such bottom.

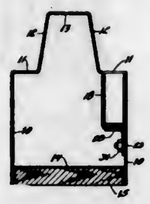
1,809,030. MONAZO DYES FROM p-CHLORPHENYL-PYRAZOLONES AND ANILINES. LEON W. GELLER, Hamburg, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Dec. 23, 1925. Serial No. 77,372. 38 Claims. (Cl. 260—87.)

1. As new products, the monazo compounds of the pyrazolone series which correspond with the probable formula



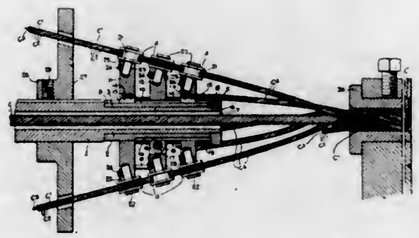
wherein x signifies a hydrogen atom which may be replaced by a sulfo or a carboxyl group, y a halogen atom, R a methyl or a carboxyl group, and R' an aryl radical of the benzene series which is free from a substituent containing a benzene nucleus but which may carry other substituents; said compounds being soluble in concentrated sulfuric acid to give yellow to red to brown colorations; and upon reduction yield a 1-(4'-halogen-phenol)-4-amino-5-pyrazolone which may contain a sulfo or a carboxyl group in the phenyl nucleus and an arylamino body of the benzene series which is free from a substituent containing a benzene nucleus.

1,809,031. VEHICLE BODY CONSTRUCTION. IRVING T. GILLIAN, Detroit, Mich. Filed Sept. 13, 1928. Serial No. 305,665. 4 Claims. (Cl. 16—86.)



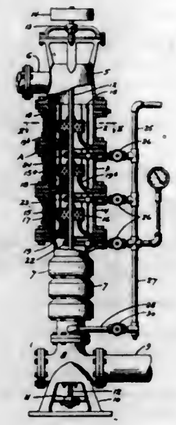
1. In combination with a door pillar provided with a pair of connected sheet metal walls extending at an angle to each other, one of said walls being provided with a notch extending perpendicularly to the line of junction of said walls, the other of said walls being provided with an opening joining said notch and extending beyond either side thereof, a female member of a door dovetail including a metal casing and opposed blocks insertable through and removable from said opening positioned within said pillar, said casing being provided with a flange overlying an exterior face of said pillar, and removable means securing said flange to said face.

1,809,032. STRANDING MACHINE HEAD. GEORGE C. GRIGSON, Belleville, N. J., assignor to American Cable Company, a Corporation of Delaware. Filed Aug. 4, 1927, Serial No. 210,543. Renewed Sept. 3, 1930. 6 Claims. (Cl. 117—16.)



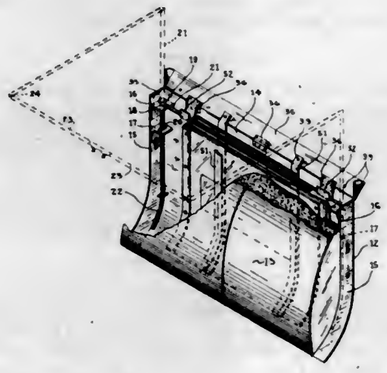
1. A stranding head for imparting to plural components of a stranded wire structure the form which each of said components is to occupy in the composite structure, said head comprising a support; a set of carriers mounted upon said support; means to retain said carriers in fixed position upon said support, said means being adapted to permit the axial spacing of said carriers relatively to each other to be varied; and radially adjustable forming devices arranged in groups around the peripheries of said carriers, with means to co-ordinate the radial position of said forming devices with the axial spacing of said carriers.

1,809,033. EMULSIFYING APPARATUS. ROBERT H. HARGREAVES, San Jose, Calif., assignor of one-third to Duncan Stewart and one-third to A. M. Riesen, San Jose, Calif. Filed Dec. 17, 1928. Serial No. 326,670. 5 Claims. (Cl. 261—93.)



1. In a device of the character described a housing, an inverted perforated cup-shaped rotor journalled within the housing said housing having an inlet opening formed in its lower end, and a discharge opening in its upper end, means for delivering a liquid through the inlet opening and for directing the liquid into the rotor, means for delivering a gaseous fluid and for directing it, together with the liquid into the rotor, means for rotating the rotor to centrifugally emulsify and discharge the liquid and the gas, and stationary agitating members vertically disposed within the housing exterior of the rotor and cooperating therewith to cause further agitation and emulsification of the fluids.

1,809,034. COLLAPSIBLE INCLOSURE FOR RUMBLE SEATS. FREDERICK E. HARTMAN, Milwaukee, Wis. Filed May 13, 1929. Serial No. 362,608. 2 Claims. (Cl. 296—99.)



1. The combination with an automobile having a rumble seat with a closure member therefor, said closure member being formed with a compartment therein, of a collapsible inclosure for said rumble seat, comprising a pair of frame members, perforated brackets extending from said closure member within said compartment, said frame members being slidably and pivotally positioned in the perforations of said brackets said perforations in the brackets being of such shape as to provide for passage of the locking means therethrough when the upper portions of the frame members are parallel to the closure members and to prevent passage therethrough when the upper portions of the frame members are at right angles to the closure member, locking means on said frame members, for releasably holding the frame members in a raised pivoted position, and a removable covering for said frame members, said frame members being movable from said raised position to a lowered collapsed position within said compartment, and said compartment being adapted to accommodate said removable covering.

1,809,035. SOUND HORN. JESSE BARNUM HAWLEY, St. Charles, Ill. Filed July 8, 1927. Serial No. 204,402. 22 Claims. (Cl. 181—27.)



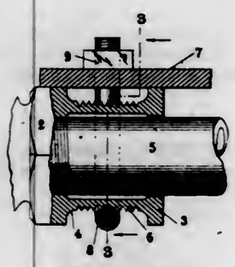
1. A sound horn having a hollow sound member, and solidified material in which said member is embedded.

1,809,036. ELECTROSTATIC SOUND REPRODUCER. JESSE B. HAWLEY, St. Charles, Ill., assignor to United Reproducera Patents Corporation, St. Charles, Ill., a Corporation of Nevada. Filed Mar. 7, 1928. Serial No. 259,717. 4 Claims. (Cl. 179—111.)



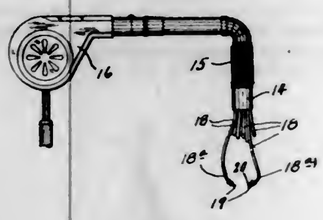
1. An electrostatic sound producer comprising an electroconductive plate provided with a depression having its upper edge gradually merging into said plate, and having a central opening in its bottom portion, said depression gradually diminishing in diameter from the top to the bottom thereof, a flexible dielectric diaphragm engaging said plate and covering said opening, the depth of said depression being less than its greatest diameter, so that a substantial part of the contiguous portion of the diaphragm will flex inwardly into contact with the adjacent portion of the inner surface of said depression, and means providing a conducting surface on the outer face of said diaphragm.

1,809,037. ANGLE COCK AND HOLDER THEREFOR. LOUIS A. HOBBS, St. Louis, Mo., assignor to Railway Devices Company, St. Louis, Mo., a Corporation of Missouri. Filed July 2, 1928. Serial No. 289,672. 1 Claim. (Cl. 248—31.)



In a device of the class described, the combination with a supporting plate, of an angle cock provided with an integral head having a pair of bearing faces for the plate and an intermediate clamping portion, and a U-bolt cooperating with said clamping portion to retain the angle cock in position, said clamping portion being provided with circumferentially extending corrugations, said U-bolt being provided on its concave face with corresponding corrugations cooperating with the first named corrugations.

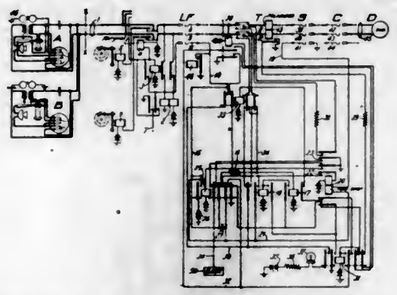
1,809,038. APPARATUS FOR COOLING SCALP. FRANK A. HOGREBE, St. Louis, Mo. Filed Sept. 24, 1928. Serial No. 308,019. 6 Claims. (Cl. 132—36.)



1. A device for cooling scalp comprising in combination a hollow distributor having one end open and the other closed and provided with a plurality of nipples extending from said closed ends, a flexible tubular coupling connected to the open end of said distributor and adapted to be connected to a suitable source of air supply, a plurality of flexible tubular connections attached to said nipples and leading from said distributor, and a nozzle attached to the free end of each connection and adapted to be detachably secured to the edge of a protector pad forming a part of hair treating apparatus, whereby a current of air is discharged against the scalp and blows away steam generated by said hair treating apparatus.

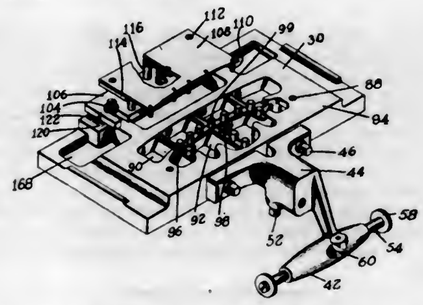
1,809,039. TELEPHONE EXCHANGE SYSTEM. HENRY HOVLAND, Williston Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 28, 1929. Serial No. 374,357. 9 Claims. (Cl. 179—9.)

1. In a telephone system, a line having a plurality of subscribers' stations, one of which is a calling station, a message register for each of said stations, a selector, means including a trunk for extending said line to said selector, means individual to said trunk for determining which of



said stations is the calling station, and means individual to said line for connecting said message registers to said trunk.

1,809,040. CUTTING OR PUNCHING MACHINE. JOHN HUSLER, Saugus, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 31, 1929. Serial No. 367,587. 18 Claims. (Cl. 164—29.)

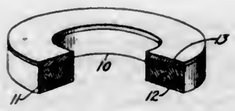


1. A die for use in a cutting or punching machine comprising a member provided with cutting edges and having apertures for the passage of chips of material, and a supporting plate for said member also having apertures for the passage of the chips of material and provided with a plurality of frangible projections having surfaces supporting said member between the apertures therein.

1,809,041. INHIBITOR. RUSSELL L. JENKINS, JOHN H. KARRH, and CAMPBELL R. MCCULLOUGH, Anniston, Ala., assignors to Swann Research, Inc., a Corporation of Alabama. Filed Feb. 3, 1930. Serial No. 425,712. 5 Claims. (Cl. 23—239.)

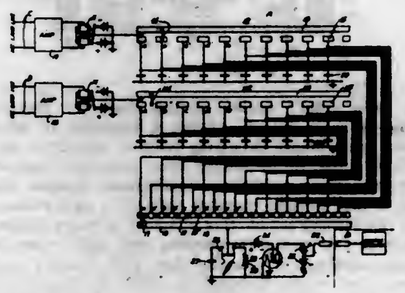
1. A composition for inhibiting the corrosive action of phosphoric acid on iron and steel, comprising an aldehyde and an ionizable compound of a high atomic weight halogen.

1,809,042. MAGNET CORE. GEORGE A. KELSALL, Belleville, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1926. Serial No. 151,625. 1 Claim. (Cl. 175—21.)



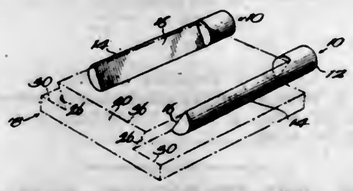
A magnetic core for use in circuits transmitting currents of super-audible frequencies, having the characteristics of low core loss coupled with high permeability at such frequencies, said core consisting of finely divided particles of a nickel-iron alloy annealed to remove strains and assembled loosely in core form in substantially the magnetic condition in which the material is left by the annealing treatment.

1,809,043. PRINTING TELEGRAPH SYSTEM. WILLIAM A. KNOOP, Hempstead, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 10, 1929. Serial No. 369,815. 12 Claims. (Cl. 178—70.)



1. In a signaling system, a repeater comprising a transmitting distributor mechanism having a plurality of segments, said segments being adapted to receive successive code combinations of message impulses from a plurality of separate sources, and electrostatic means connected directly to said segments for simultaneously storing upon the respective segments, records of the impulses received from said plurality of sources, whereby to provide an overlap between the selections received from either source and the corresponding selections transmitted by the distributor mechanism.

1,809,044. DOVETAIL MEASURING DEVICE. CHARLES OTTO KNUUTI, Berwyn, Ill. Filed Feb. 4, 1929. Serial No. 337,311. 13 Claims. (Cl. 33—143.)



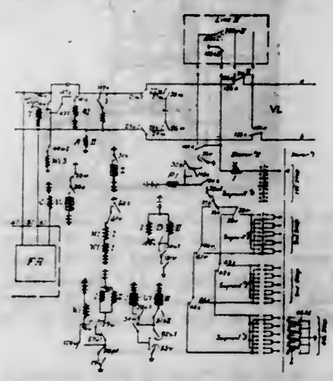
1. In a gaging device of the class described for use with angularly disposed surfaces, means including a substantially plane section having a surface for engaging a surface of the work to be measured, and a semi-cylindrical surface for receiving a work engaging portion of a calipering device, whereby the measurement between said work surface and another point may be accurately determined.

1,809,045. FINGER RING GUARD. MAX KRAFT, Brooklyn, and JACK BIRNBAUM, Bronx, N. Y. Filed Dec. 4, 1930. Serial No. 499,912. 4 Claims. (Cl. 63—17.)



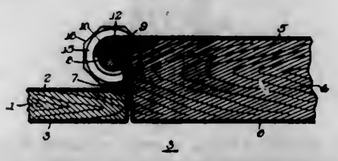
1. A finger ring guard comprising a resilient element of normally less curvature than a finger ring within which it is adapted to be mounted, said element having at least one lateral projection with a free end, said projection being of a length adapted to engage substantially entirely around the ring shank so that the free end of the projection will terminate at the finger engaging surface of the ring.

1,809,046. TELEPHONE SYSTEM. ROBERT KRUSE, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Filed Apr. 30, 1930, Serial No. 448,486, and in Germany June 12, 1929. 8 Claims. (Cl. 179—17.)



3. In a telephone system, a party line having a plurality of subscribers' stations, a switching device individual to said party line and capable of transmitting alternating current impulses over said line, a relay mechanism and a stepping switch individual to each of said subscribers' stations and all responding in synchronism to alternating current impulses from said switching device for selecting the wanted subscriber's station.

1,809,047. HINGE FOR VAT COVERS. OLAF LARSEN, Oak Park, Ill., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1929. Serial No. 377,964. 2 Claims. (Cl. 220—31.)

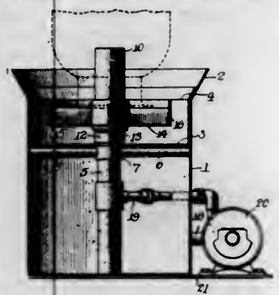


2. In combination with a stationary support and a swingable cover, said support and cover being outwardly constructed of sheet metal, a hinge connection between said support and said cover comprising, a cylinder formed in the sheet metal structure of said support adjacent said cover, an apron formed in the sheet metal structure of said cover adjacent said support, said apron overlying said cylinder in rotative relation thereto for the pivotal support of said swingable cover and having a wing extending endwardly of each end of said cylinder, a stud positioned in each end of said cylinder, a collar adjustably mounted on each of said studs and extending in overlying retaining relation to the adjacent one of said wings, and a cap mounted on each of said studs in adjustable abutting relation to said collar.

1,809,048. STERILIZER FOR MILK CANS. OLAF LARSEN, Oak Park, Ill., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed July 27, 1929. Serial No. 381,497. 2 Claims. (Cl. 167—3.)

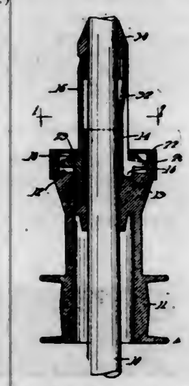
1. A device of the class described comprising a tank, an upright jet tube mounted therein having a plurality

of jet openings in its upper end, a valve sleeve operatively mounted on the upper portion of said jet tube and having its closed end overlying said jet openings, said sleeve having slots in its end portion operable into and out of register with said jet openings by rotation of said sleeve



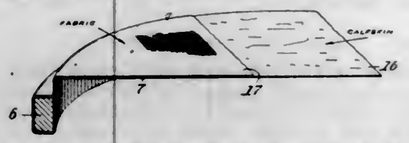
upon said tube, a can support mounted on said sleeve adapted to support a can in position to receive fluid discharged from said jet openings and to drain the same into said tank, said support and sleeve being rotatable by rotation of said can, and means for supplying fluid under pressure from said tank to said jet tube.

1,809,049. BOBBIN CLUTCH FOR SPINDLES. DAVID LEMOINE and GEORGE FOURNIER, Whitinsville, Mass. Filed Nov. 28, 1928. Serial No. 322,472. 2 Claims. (Cl. 242—46.7.)



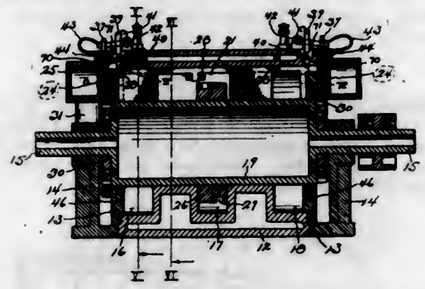
1. In a spindle, a blade, a whirl mounted thereon, centrifugal bobbin clutching members supported on said whirl with their upper ends free to move outward, means on said whirl engaging the lower portions of said clutch members to limit such outward movement of their upper ends, and a cap mounted on said blade and forming a projecting flange above and free from the upper ends of said clutch members, said cap having depending portions holding said clutch members in spaced relation and said depending portions being inclined downwardly and inwardly toward said spindle blade between said members.

1,809,050. HEAD FOR MUSICAL INSTRUMENTS. GEORGE H. LOGAN, Pittsburgh, Pa. Filed Feb. 23, 1929. Serial No. 341,900. 5 Claims. (Cl. 84—414.)



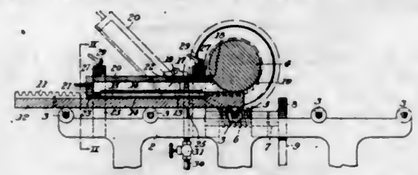
1. A head for a musical instrument comprising a layer of skin, a layer of fabric, and means for securing the skin and fabric to each other.

1,809,051. ROTARY ENGINE. GEORGE A. LUTHER, Kansas City, Kans. Filed Jan. 16, 1926. Serial No. 81,615. 3 Claims. (Cl. 123—14.)



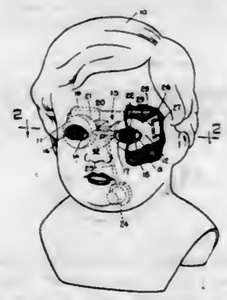
1. In a rotary engine of the character described, a casing, a rotor therein having a plurality of staggered spaced apart blades extending radially therefrom, an abutment adapted to be moved into successive cooperation with each blade to form a combustion chamber therebehind, a fuel storage chamber carried by said casing adjacent the formed combustion chamber, a valve joining said chambers and means for opening said valve when the adjoining combustion chamber has been formed including a series of levers disposed to co-act to impart opening and closing movement to said valve, said series of levers being directly actuated by said abutment member as it reaches a position behind each blade and to permit the passing thereof out of such position without moving said valve.

1,809,052. METHOD OF AND APPARATUS FOR PREPARING MATRICES FOR STEREOTYPE PLATES. BENJAMIN MACKLEY, Pittsburgh, Pa. Filed Mar. 27, 1929. Serial No. 350,154. 14 Claims. (Cl. 101—12.)



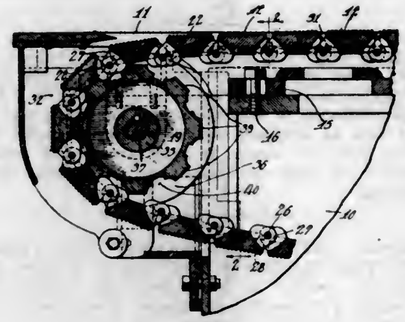
1. In a method of preparing matrices for stereotype plates, the steps comprising simultaneously subjecting dry flong to the action of a hot humidifying agent and impressing the flong.

1,809,053. DOLL EYE MOUNTING. SAMUEL MARCUS, Brooklyn, and ALEXANDER KONOFF, New York, N. Y., assignors to Markon Manufacturing Co. Inc., New York, N. Y., a Corporation of New York. Filed July 10, 1928. Serial No. 291,635. 18 Claims. (Cl. 46—40.)



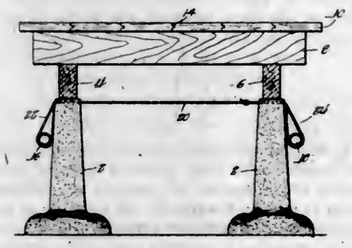
1. In combination, a doll's head having eye openings, eye socket members attached to said head at said openings, each of said socket members being adapted to receive and supportingly house an eye member, an eye set including a pair of eye members, and means for movably mounting said eye members in said socket members, said means comprising a resilient holder anchored to said socket members and active on said eye set to resiliently support the same with relation to said socket members.

1,809,054. CHAIN FEED DRIVE. CARL LAWRENCE MATTISON, Rockford, Ill., assignor to Mattison Machine Works, Rockford, Ill., a Corporation of Illinois. Filed Mar. 23, 1925. Serial No. 17,545. 10 Claims. (Cl. 198—193.)



5. In a block for an endless chain the combination of a body, means on said body by which the block is adapted to be incorporated in the endless chain, said block having on the under face a plurality of grooves for guides which support and guide the chain.

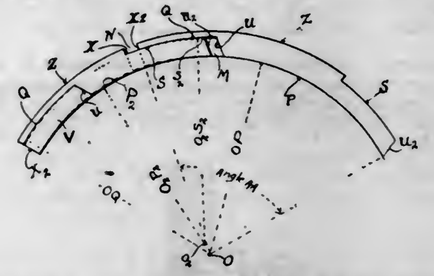
1,809,055. GREENHOUSE BENCH. PHILIP L. MCKEE, Chicago, Ill. Filed Oct. 17, 1927. Serial No. 226,549. 3 Claims. (Cl. 47—18.)



1. A greenhouse bench comprising in combination a plurality of spaced apart concrete legs, wooden cross supports extending across the tops of said legs forming a demountable superstructure, a wire extending across the top of a pair of such legs, said wire having looped portions depending downwardly on an exterior wall of each leg to form a sling, and heating pipes extending longitudinally of the bench structure and through said iron slings.

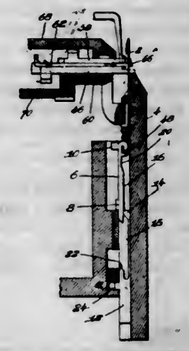
1,809,056. METALLIC PACKING. JOHN MELLOR, Bay Head, N. J. Filed Sept. 4, 1922. Serial No. 586,054. 7 Claims. (Cl. 288—3.)

1. In a metallic packing, a segmental ring comprising a series of segments, each having a countersink at one end and a projection at the opposite end adapted to contact respectively with adjacent segments and the outer surface of each projection having a curvature varying



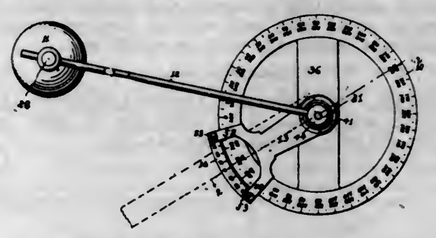
differentially from the surface on the adjacent segment with which it contacts, and resilient means for yieldingly retaining said segments in contact with each other.

1,809,057. KNITTING MACHINE. MAX C. MILLER, Cumberland, R. I. Filed Apr. 10, 1923, Serial No. 631,071. Renewed Feb. 28, 1930. 17 Claims. (Cl. 66—37.)



1. In a knitting machine spring needles, a stitch cam for drawing the needles to the stitch level adjustable to vary the stitch level, a separate cam for drawing the needles to the pressing level, and means for pressing the needles.

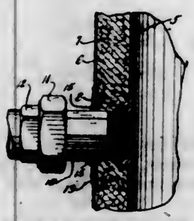
1,809,058. TOPOGRAPHIC MECHANISM. ERNEST L. MINER and CLARENCE M. LEATHERMAN, Coldwater, Mich., assignors to Coldwater Instrument Works, Coldwater, Mich. Filed May 21, 1928. Serial No. 279,281. 8 Claims. (Cl. 33—75.)



1. In a topographic mechanism, the combination of vertical standards one of which has a lower pointed end for engaging a drafting board, a connecting rod detachably spacing the upper ends of said standards, a protractor having an apertured cross member for receiving the pointed standard to be supported thereby, a vernier arc swinging about the periphery of said protractor, and means for pivotally supporting the vernier for movement

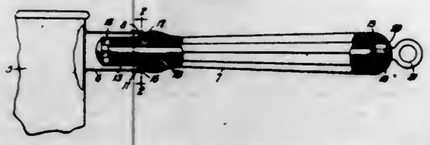
adjacent the edge of the protractor and in a horizontal plane about the pointed standard upon said board, so that swinging movement of the support means on the board will correspondingly move the vernier about the protractor.

1,809,059. ADJUSTABLE COLLAR. CLARENCE H. MORROW, Cleveland, Ohio, assignor to The Hotstream Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 26, 1928. Serial No. 322,074. 3 Claims. (Cl. 285—30.)



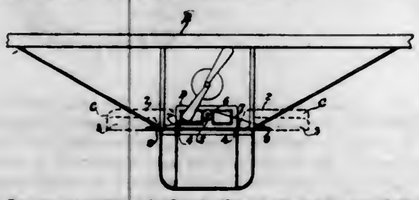
1. In a hot water heater, the combination of a water tank, a jacket surrounding the same and spaced therefrom and provided with an opening, a conduit member threaded into the tank and extending out through the jacket opening, said opening being larger than the conduit, and a closure for the gap between said conduit and the edges of said opening, comprising a washer-like member closely fitting and slidable upon the conduit and extending outwardly over the edges of the opening, and means for permanently securing the same to the jacket wall, whereby the conduit may be removed from or inserted into the tank without detaching the closure from the jacket.

1,809,060. HANDLE ATTACHMENT FOR COOKING UTENSILS. ANDREW W. NELSON and WILBUR TOPPING, Terre Haute, Ind., assignors to Columbian Enameling & Stamping Company, Terre Haute, Ind., a Corporation of Indiana. Filed Aug. 15, 1929. Serial No. 386,073. 3 Claims. (Cl. 53—8.)



1. A handle attachment for culinary vessels and the like comprising a tubular member fixed to the outer wall of the vessel, said member having its outer end provided with an inturned holding flange, a handle, a securing member projecting from said handle into the interior of said tubular member, a ferrule interposed between the end of said handle and said flange and encircling the adjacent portion of said tubular member, and means in said tubular member with which said securing member engages to clamp said handle and ferrule to said flange.

1,809,061. NONSINKABLE AEROPLANE BODY. LOUIS NYCZ, Binghamton, N. Y. Filed July 17, 1928. Serial No. 293,377. 3 Claims. (Cl. 244—2.)



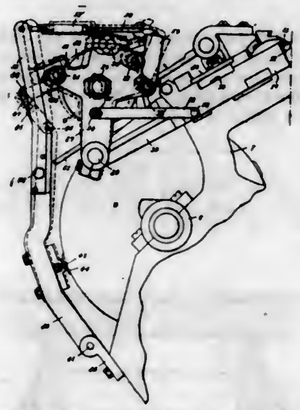
1. In an aeroplane body, hollow adjacent, parallel, pivotally mounted sections on top of the aeroplane body, filled with nonsinkable substance, pivotal spring operated supports beneath and at the ends of the same, means for contracting said spring mounting for drawing said sections into pivotal horizontal alinement, and means for releasing said springs and projecting said wings into parallel outward alinement at right angles to the side of the aeroplane body.

1,809,062. METHOD AND APPARATUS FOR MEASURING THE ACTIVE COMPONENTS OF ELECTRIC QUANTITIES. MENDEL OSNOS, Berlin, Germany. Filed Jan. 25, 1927, Serial No. 163,548, and in Germany Feb. 4, 1926. 10 Claims. (Cl. 171—95.)



2. In a device for measuring the active voltage component of an alternating current system by the use of a voltmeter, means comprising the secondary of a transformer connected in said system for supplying said voltmeter with an auxiliary voltage bearing a known phase relation with the current in said system, said auxiliary voltage being equal and opposite to the inactive voltage component.

1,809,063. PATTERN MECHANISM FOR STRAIGHT KNITTING MACHINES. WILLIAM S. PARKER, Rockford, Ill., assignor to Burson Knitting Company, Rockford, Ill., a Corporation of Illinois. Filed Apr. 17, 1929. Serial No. 355,691. 27 Claims. (Cl. 66—67.)

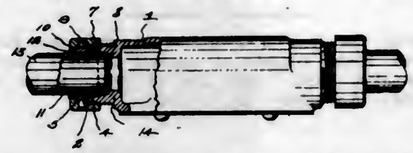


1. In a straight knitting machine, the combination with a bed of needles, of a main pattern cylinder arranged to be operated to determine the number of needles thrown into action in different stages in the knitting of an article, an auxiliary pattern cylinder arranged to be thrown into and out of operation to control the active needles, a carriage for said auxiliary cylinder, the auxiliary cylinder with its carriage tending normally to move freely in one direction to a certain position and arranged to assume such position when not otherwise operated, and means arranged to be operated at one or more intervals in the operation of the machine having connection with the carriage to move the same with the cylinder in the opposite direction to another position.

1,809,064. THREADLESS CONNECTER. JOHN T. PEARSON, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed May 10, 1929. Serial No. 362,008. 3 Claims. (Cl. 247—25.)

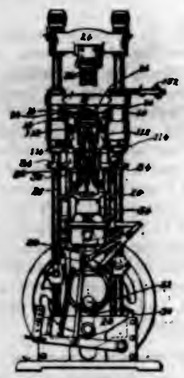
1. A conduit coupling comprising an externally threaded body having a tapered passage for receiving a conduit end, a conduit projecting into said passage and having its

end in engagement with the tapered sides of said passage, a contractile sleeve surrounding the conduit adjacent the end thereof and extending into said passage, the sleeve and passage having coacting surfaces to contract the sleeve



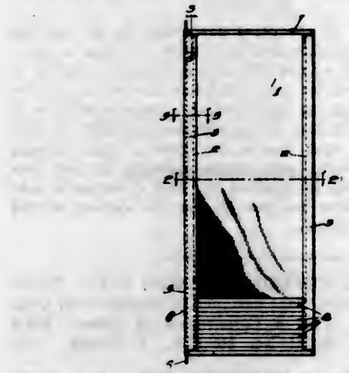
on the conduit end when the sleeve is forced into the passage, a nut threading on the body and having an internal flange thrusting against the sleeve to force it into the body during turning of the nut in one direction.

1,809,065. ART OF SHOEMAKING. JOSEPH H. POPE, Hamilton, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 23, 1923. Serial No. 676,649. 40 Claims. (Cl. 12—19.2.)



1. The method of operating upon the heel-seat of a shoe, which consists in molding said heel-seat to a form corresponding to the co-operating end of a heel to be attached and to produce a fastening-deflecting surface thereon, and attaching the elements of the heel-seat to one another while under the pressure applied for molding by a fastening positioned by said deflecting surface at the time of insertion.

1,809,066. VISIBLE INDEX OR RECORD SYSTEM. FRANK D. POWELL, Chicago, Ill., assignor to Acme Card System Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 5, 1930. Serial No. 426,021. 10 Claims. (Cl. 40—102.)



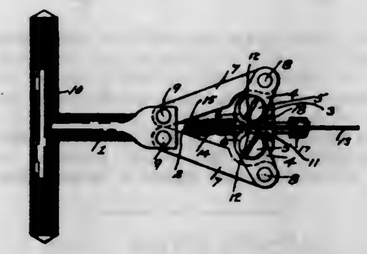
1. In combination, a flat web, a spacer strip comprising a sheet of bendable material folded over and enclosing one edge of the web and mounted on and secured to opposite faces of the web adjacent said edge, a second sheet of bendable material folded over and enclosing said spacer strip and the edge of the web, said second sheet of bendable material extending over a face of the web beyond the inside edge of said spacer strip to form a channel.

1,809,067. METHOD OF MAKING CATHODES. HOWARD T. RENYE, Millburn, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Oct. 7, 1924, Serial No. 742,111. Divided and this application filed June 9, 1928. Serial No. 284,197. 2 Claims. (Cl. 250—27.5.)



1. Method of making cathodes which comprises providing a vitrified vessel of vitrified inert material of high melting point with an inner lining of thermionically active material, placing cathode material in the vessel, subjecting the vessel and contents to heat sufficient to cause the reactive lining to combine with the melt to produce a thermionically active compound, and forming said compound into cathodes.

1,809,068. FISH TAPE PULLER. GEORGE J. ROTH, Los Angeles, Calif. Filed Feb. 11, 1930. Serial No. 427,498. 2 Claims. (Cl. 24—134.)

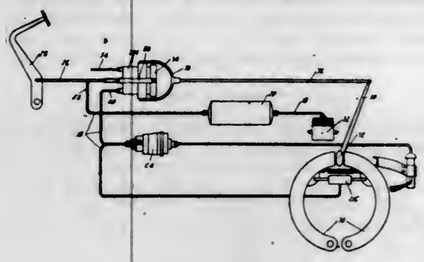


1. A puller comprising a pulling shank, a pair of links connected at one end to said shank, a pair of jaw levers connected at one end to the other end of said links respectively, jaws formed on the other ends respectively of said jaw levers for gripping a tape therebetween, and a cross head to which the jaw ends of said levers are pivoted to cause the jaw ends of said levers to swing rearwardly and said jaws to grip the tape when said shank is pulled forwardly, a guide rod on which said cross head is slidably mounted, and a head on the end of said rod for engaging and arresting the rearward movement of said cross head and said jaw levers with said jaws in maximum gripping position.

1,809,069. VEHICLE HAVING BRAKES. ROY S. SANROAD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 8, 1926. Serial No. 79,952. 16 Claims. (Cl. 188—152.)

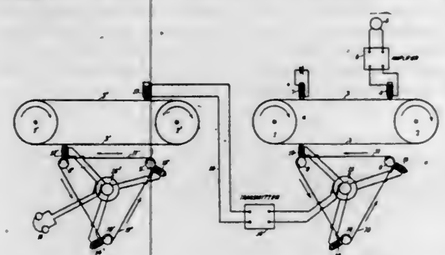
13. A vehicle having supporting springs, a chassis frame, and brakes and comprising, in combination there-

with, brake applying means, a pneumatic shock absorber unit and means including said shock absorber unit for



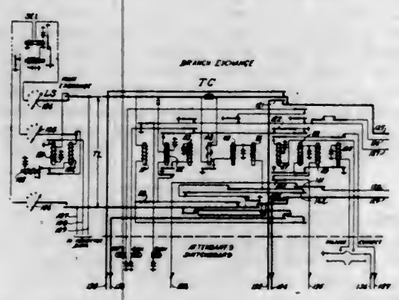
automatically and variably controlling the pressure applied to said brakes by said brake applying means according to the weight on the springs.

1,809,070. MEANS AND METHOD OF SECRET TRANSMISSION OF SIGNALS. CARL SCHAPIRA, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed July 1, 1927, Serial No. 202,835, and in Germany July 16, 1926. 12 Claims. (Cl. 179—1002.)



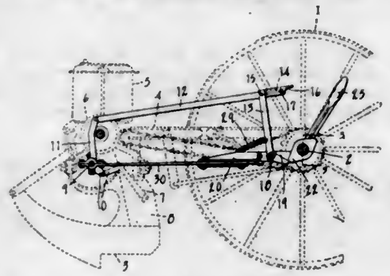
1. In an apparatus for transmitting a series of normally arranged signals, a recording medium, means for impressing the signals on said medium in normal order, a second recording medium, means coacting with each recording medium and arranged to transfer to the second the signal impressions on the first in inverted order, and means coacting with the second recording medium adapted to re-arrange said signals in normal order.

1,809,071. TELEPHONE SYSTEM. GEORGE E. SCHOMAKER, Sydney, New South Wales, Australia, and ROY F. GOULD, Chicago, Ill., assignors to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Apr. 28, 1928, Serial No. 273,469, and in Great Britain Aug. 26, 1927. 49 Claims. (Cl. 179—27.)



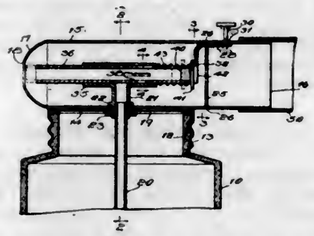
9. In combination, a plurality of telephone lines, an automatic connector switch having access thereto, a plurality of trunk lines each normally connected to said connector switch, and non-numerical switching means for connecting any calling one of the first-mentioned lines to any one of said trunk lines.

1,809,072. GRAIN PLANTER. MICHEL F. SCHOU, Kalamazoo, Mich., assignor of one-half to Mary Mazur, Kalamazoo, Mich. Filed Jan. 9, 1930. Serial No. 419,504. 5 Claims. (Cl. 111—16.)



1. The combination in a planter including a dropping mechanism and carrying and driving wheels provided with an axle, of a dropping mechanism actuating rockshaft operatively connected with the dropping mechanism, an arm on said rockshaft, a bell crank actuating lever, a link pivoted to said arm on said rockshaft and having a slot therein, said actuating lever being provided with a pin engaging said slot, a thrust member pivotally mounted on said link and adapted when swung to one position to hold the pin in engagement with the end of the slot whereby a movement of the actuating lever is imparted to the rockshaft and in another position to permit movement of the lever without actuating said rockshaft, a cam on said axle coacting with said actuating lever, a return spring for said lever, and a clutch for detachably connecting said cam to said axle.

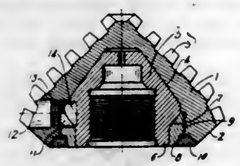
1,809,073. SPRAY. JOHN F. SCHYLANDER, Chicago, Ill. Filed Oct. 12, 1928. Serial No. 312,057. 10 Claims. (Cl. 299—89.)



1. In a device of the class described, an air conduit having an inlet opening and an outlet opening, a tubular member closed at one end and having an opening in registry with the outlet opening of said air conduit, means for slidably supporting said tubular member coaxially in said air conduit, means for conducting material to said tubular member, and means for moving said tubular member longitudinally and means operable by said longitudinal movement to regulate the flow of material into said tubular member and for placing its opening within that of said air conduit.

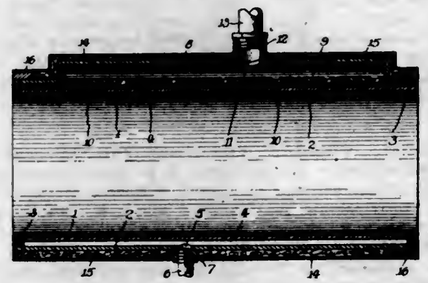
1,809,074. DRILL CUTTER RETAINING RING. FLOYD L. SCOTT, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed May 4, 1929. Serial No. 360,371. 3 Claims. (Cl. 255—71.)

1. In a drill cutter, a frusto-conical bushing threaded internally to screw upon the end of a shaft, a threaded neck on said bushing, a cutter fitting over and enclosing one end of said bushing, a retaining ring shaped to fit about the neck of said bushing, and screw into a threaded seat in



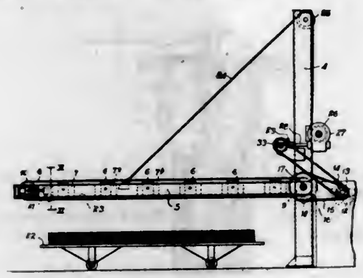
said cutter, there being an arcuate notch on the inner end of said ring to allow passage of a wrench pin to engage within a registering opening in said cutter and into a recess in said bushing.

1,809,075. REFRIGERATING APPARATUS. JOHN C. SCOVEL, Jr., Chicago, Ill., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 10, 1929. Serial No. 353,917. 3 Claims. (Cl. 62—95.)



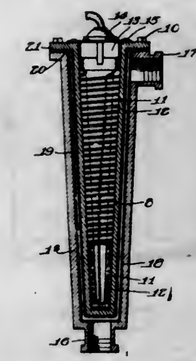
2. A pair of spaced cylinders endwardly joined to form a refrigerant expansion chamber therebetween, one of said cylinders having a refrigerant inlet opening in the bottom portion thereof and having a series of outlet openings spaced longitudinally in the top portion thereof, and a manifold sealed upon said cylinder in outward spaced enclosure of said series of outlet openings, said manifold having a suction outlet opening.

1,809,076. MATERIAL HANDLING APPARATUS. EDMUND W. SHINN, WILLIAM J. CROWLEY, and ROBERT H. SCOTT, Cumberland, Md. Filed Apr. 12, 1929. Serial No. 354,550. 4 Claims. (Cl. 198—41.)



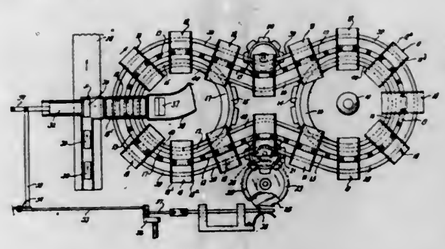
1. Apparatus for conveying articles of magnetic material which comprises a plurality of magnets having a continuous pole piece of one polarity and a continuous pole piece of the opposite polarity, the pole pieces being disposed in parallel relation and spaced apart such distance that the said article will function to complete the magnetic circuit therebetween continuously throughout the forward movement of the article, and means for imparting traveling movement to the article.

1,809,077. ELECTRIC WATER HEATER. LEO SHUMAN, Spokane, Wash., assignor, by mesne assignments, to Continental Manufacturing Company, a Corporation of Washington. Filed Dec. 30, 1927. Serial No. 243,507. 7 Claims. (Cl. 219—39.)



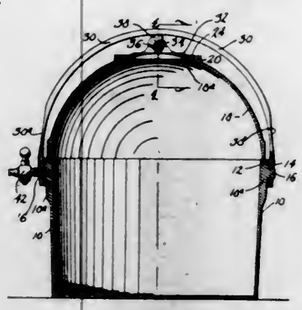
1. An electric water heater comprising an outer casing open at one end, a hollow inner casing open at one end and provided with a laterally extending flange which engages the end of the outer casing, removable fastening devices engaging said laterally extending flange and the end of the outer casing for connecting the inner casing with the outer casing to form a water-tight joint, a heating element inserted in the open end of the inner casing and supported on the interior of said hollow inner casing, the inner and outer casing being separated by a water space, the outer casing being provided with an inlet and an outlet communicating with said water space and an electrical connection by means of which said heating element may be connected in an electric circuit.

1,809,078. APPARATUS FOR TREATING ARTICLES WITH X-RAYS. FRANKLIN S. SMITH, Brooklyn, N. Y. Filed Aug. 2, 1928. Serial No. 296,981. 21 Claims. (Cl. 250—34.)



1. In apparatus of the character described, in combination, an X-ray tube mounted with its axis substantially vertical and having an anode whose active face extends transversely to said axis, a member having a plurality of carriers thereon and movable substantially about the vertical axis of said X-ray tube, said carriers extending in a direction toward the axis of said X-ray tube and each adapted to support a series of packages substantially alined so that successive packages of each series are at greater distances from the axis of said X-ray tube, means for intermittently advancing said member by a distance substantially equivalent to the effective spacing between adjacent carriers, and means operative at substantially each stoppage of said member for adding a package to the series of packages on one of said carriers and for correspondingly advancing said series of packages thereon to cause an end package thereof to be discharged from said carrier.

1,809,079. STEAM PRESSURE COOKER. JACOB A. SMITH, Ankeny, Iowa. Filed Sept. 30, 1929. Serial No. 396,133. 1 Claim. (Cl. 53—1.)



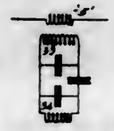
In a cooker, a container having a reinforced annular portion at its upper end formed with a groove in its upper surface, a dome top having an edge adapted to be received in said groove for thus cooperating with the container and having a flat upper central part with an upstanding annular rib, with opposite inwardly projecting lugs and a handle bail pivoted to said lugs, a curved resilient bail having end portions of substantially less thickness than its intermediate portion pivoted to opposite upper parts of the container, and an adjustable cam device interposed between the top and the central part of the bail for gripping the container and top together.

1,809,080. BRIDGING PLUG FOR OIL WELLS. CECIL H. SWEET, Brea, and EMMET F. COOPER, Long Beach, Calif. Filed May 21, 1929. Serial No. 364,806. 2 Claims. (Cl. 166—13.)



1. A bridging plug comprising a body member carrying an assembly of slips adapted to be engaged to a wall of a well casing into which the bridging plug has been inserted on a downward movement of the same, a second assembly of slips adapted to engage the wall of the casing on an upward movement of the body member, a compression spring engaging the mandrel and normally holding the first mentioned assembly of slips out of engagement with the wall of the casing while the plug is being lowered into position, means for expanding the first assembly of slips into engagement with the wall of the casing to plug the same, a packing member at the top of the body member for closing the casing above said body member, and means to lower said bridge plug into the well.

1,809,081. HIGH FREQUENCY TELEPHONY SYSTEM. PAUL TÄTZ, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H. Hallesches Ufer 12/13, Berlin, S. W. 11, Germany, a Corporation of Germany. Filed June 12, 1925, Serial No. 36,670, and in Germany June 13, 1924. 4 Claims. (Cl. 179—2.5.)

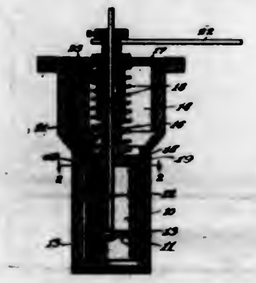


1. Means for insuring continuous service in wired radio frequency telephony on high tension lines regardless of conditions at ends of said lines comprising a source of high tension energy, a source of high frequency telephony energy adapted to generate a plurality of carrier frequencies, and means connected between said high tension source and said high frequency source for blocking the high frequency energy from said high tension source said blocking means comprising an inductance and a tuned circuit coupled thereto, said circuit being tuned to one separate carrier frequency and another tuned circuit coupled to said first mentioned tuned circuit and being tuned to another of said carrier frequencies whereby a path of high impedance to each high frequency and a path of low impedance to said high tension energy is provided.

1,809,082. PRODUCT FOR TREATING THE SKIN. JOSEPH URKOV and BENJAMIN R. HARRIS, Chicago, Ill.; said Urkov assignor to Epstein & Harris, Chicago, Ill., a Copartnership consisting of Albert K. Epstein and Benjamin R. Harris. Filed May 4, 1927. Serial No. 188,863. 8 Claims. (Cl. 167—85.)

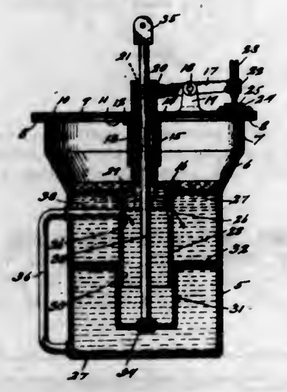
1. A product for treating the skin including substantially proportionately 100 grammes of high-grade commercial gelatine, 350 grammes of water, 85 grammes of zinc oxide, 50 cc. of ethylene glycol and 50 cc. of castor oil, intermixed to produce a homogenous plastic mass and poured into suitable containers for dispensing.

1,809,083. LIQUID BRAKE OR DASHPOT. ADRIANUS VAN DUYN, Rotterdam, Netherlands, assignor to Naamlooze Vennootschap Maatschappij tot Varvaardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands, a Limited Liability Company of The Netherlands. Filed July 11, 1927, Serial No. 204,744, and in Great Britain July 22, 1926. 8 Claims. (Cl. 188—97.)



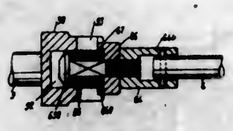
1. A liquid brake comprising a housing member having a cylindrical opening at one end thereof, a piston arranged to reciprocate in said opening, said housing having a chamber adjacent one end of said cylindrical opening, the wall of said housing having passages therein extending longitudinally of said cylindrical opening and disposed circumferentially about said passage for shifting circulation of liquid between opposite ends of said cylindrical opening, a spring-held valve for regulating the amount of opening at the ends of said passages, a stem for said valve extending through the end of said chamber, and a bushing sleeve surrounding said stem and extending into said chamber to prevent escape of liquid in case said housing is inverted.

1,809,084. DASHPOT BRAKE FOR SCALES. CORNELIS F. M. VAN BERKEL, Wassenaar, and ADRIANUS VAN DUYN, Rotterdam, Netherlands, assignors to Naamlooze Vennootschap Maatschappij tot Veraardiging van Snijmachines Volgens van Berkel's Patent en van Andere Werktuigen, Rotterdam, Netherlands, a Limited Liability Company. Filed Jan. 12, 1928, Serial No. 246,334, and in Germany Jan. 31, 1927. 16 Claims. (Cl. 188—97.)



1. A brake for weighing scales comprising an outer cylinder, an inner cylinder of smaller diameter centrally disposed within the outer cylinder and having an open end terminating above the bottom of the outer cylinder, a stepped piston mounted for reciprocation in the outer cylinder while telescoping with the inner cylinder and closing the end thereof, a radial flange on the piston fitting the diameter of the outer cylinder, and a piston rod for the piston projecting through a closed top for the outer cylinder.

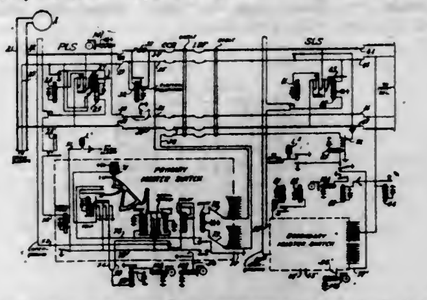
1,809,085. SHAFT COUPLING. HENRY H. VAUGHAN, Montreal, Quebec, and WILLIAM G. CUMMING, Westmount, Quebec, Canada. Filed Feb. 25, 1929. Serial No. 342,599. 9 Claims. (Cl. 64—96.)



1. In a shaft coupling, the combination of a drive shaft, a cupped end thereto, with a driven shaft, a resilient sleeve mounted at its end adapted to enter the cupped end, and means to compress the sleeve axially, in coupling.

1,809,086. TELEPHONE SYSTEM. JOHN H. VOSS, Berwyn, and BERNARD D. WILLIS, Oak Park, Ill., assignors to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed June 29, 1928, Serial No. 289,137. Renewed Sept. 6, 1930. 31 Claims. (Cl. 179—18.)

1. In a telephone system, a plurality of non-numerical switches each having a line relay, a circuit for each switch closed by the associated line relay, and series contacts on all said line relays arranged in a chain so that when a plurality of line relays are operated only one can close



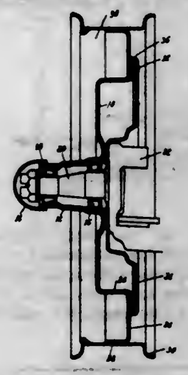
the circuit of the associated non-numerical switch, a signal, and means for operating said signal responsive to an open condition in the contact chain.

1,809,087. BRAKE TESTING LEVER. WILLIS H. WATROUS, Oakland, Calif. Filed Nov. 19, 1928. Serial No. 320,296. 1 Claim. (Cl. 74—54.)



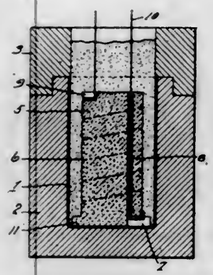
In a brake testing device of the character described, a rigid lever, a pair of interspaced hook-shaped members on the lever and at one end thereof, a ratchet gear having a hub member on each side thereof with which the hook-shaped members are adapted to engage, a spring actuated pawl pivotally mounted on the lever and engageable with the teeth of the ratchet gear, an operating lever pivotally mounted on the rigid lever at a point intermediate the ends of the rigid lever, and springs interposed between the two levers and resisting movement of the operating lever with relation to the rigid lever when the operating lever is moved in one direction, said pivoted pawl being so formed as to ride over the teeth of the ratchet gear when the operating lever is moved in the opposite direction.

1,809,088. BRAKE DRUM AND WHEEL. D'ORMAY McCALL WHITE, Chicago, Ill. Filed Sept. 21, 1925 Serial No. 57,600. 4 Claims. (Cl. 188—218.)



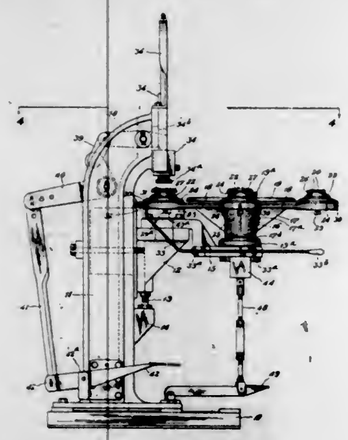
1. A brake drum having an outwardly-projecting flange at its free edge, in combination with an annular member encircling said drum adjacent said flange, and extending radially outwardly and substantially parallel to said flange and a backing plate having a part encircling the brake-drum flange and arranged with the edge of said part immediately adjacent the rear face of the annular member.

1,809,089. METHOD OF PRODUCING ELECTRICAL HEATING ELEMENTS. EDWIN L. WIEGAND, Pittsburgh, Pa. Filed Aug. 23, 1928. Serial No. 301,514. 12 Claims. (Cl. 201—64.)



11. The method of producing electrical heating elements of the character described which consists in winding a resistor on a self-sustaining friable resistor support, placing the resistor support with resistor thereon in a suitable casing, surrounding the same with a quantity of mobile insulating material, applying sufficient pressure axially of the support to collapse the support and integrate it with the insulating material so as to form a homogeneous mass with the resistor embedded therein and then closing the container.

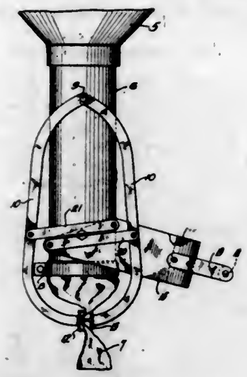
1,809,090. MACHINE FOR FORMING ELECTRICAL HEATING ELEMENTS. EDWIN L. WIEGAND, Pittsburgh, Pa. Filed Dec. 31, 1928. Serial No. 329,631. 24 Claims. (Cl. 18—1.)



1. In a machine of the kind described, a carrying member having means for positioning a resistor and receiving a mass of refractory material, in combination with means for compressing said mass about said resistor, and means for separating the compacted mass and the resistor positioning means.

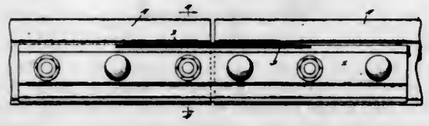
1,809,091. BAG FILLER. OLOF WIKEN, Milwaukee, Wis., assignor of one-half to Frederick C. Bogk, Milwaukee, Wis. Filed Apr. 5, 1928. Serial No. 267,673. 9 Claims. (Cl. 226—47.)

1. A bag filler comprising a hopper having a discharge opening, material discharging means having a portion constructed of compressible material connected to said opening, tongs in pivotal connection with said hopper



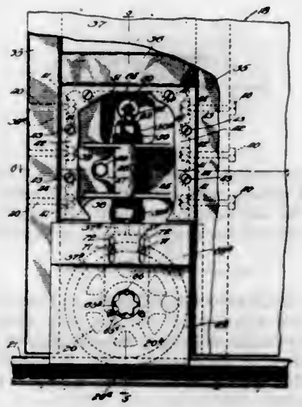
for gripping said compressible portion to check the flow of material therefrom, and a U-shaped lever in pivotal connection with said hopper for operating said tongs.

1,809,092. SPLICE BAR OR FISH PLATE. LAWRENCE S. WILBUR, Evanston, Ill., assignor to National Rail Joint Corporation, a Corporation of Illinois. Filed Apr. 15, 1929. Serial No. 355,097. 15 Claims. (Cl. 238—243.)



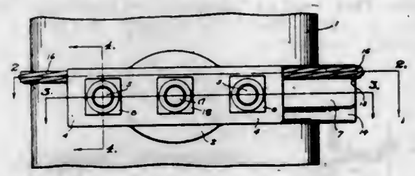
1. A rail joint comprising a splice bar or fish plate formed with a flanged foot and having its top reinforced by a separately formed and rigidly attached wearing strip of metal contacting with and bridging the joint between the ends of the rails, the fish plate and its said strip being solidly united, whereby the strip is a fixed part of the fish plate.

1,809,093. SUPPORTING MEANS FOR HANGAR DOORS. DONALD E. WILLARD, Danville, Ill. Filed Jan. 12, 1929. Serial No. 332,054. 6 Claims. (Cl. 16—100.)



1. The combination with an airplane hangar door having a pair of upwardly extending frame members, of a supporting roller mounted between said frame members, a roller frame carried by said roller, a spindle extending upwardly from said roller frame, a bearing sleeve journaled on said spindle, a supporting frame secured to said door between said frame members and having a hub engaged by said bearing sleeve, and means for securing said bearing sleeve in adjusted position within said hub.

1,809,094. POLE ATTACHMENT FOR ELECTRIC CONDUCTORS. ROLLAND G. WILLIAMS, Branford, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Filed June 13, 1928. Serial No. 285,193. 1 Claim. (Cl. 248—31.)

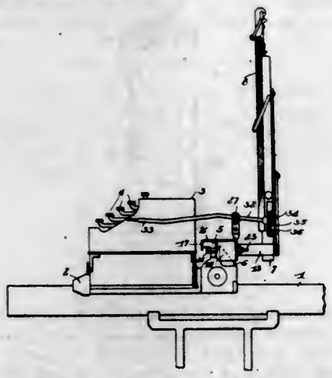


A clamp fixture for a pole, comprising a base portion and a clamping bar, the outer face of said portion and the inner face of said bar provided with horizontally extending and corresponding grooves that are spaced one above the other, a messenger cable housed within the upper pair of said grooves, a centrally located bolt and nut for clamping said base and bar together and securing them to said pole, said base having at one end a curved extension beyond the clamping bar and curved grooves therein which are continuations of the aforesaid spaced grooves, and clamping bolts extending through said base and bar at points near the ends of said bar, the bolt adjacent said extension being located at the point where the curve of said extension begins.

1,809,095. PROCESS OF COATING THERMIONIC CATHODES. JAMES R. WILSON, Mountain Lakes, and CHARLES M. BLACKBURN, East Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1927. Serial No. 236,875. 7 Claims. (Cl. 250—27.5.)

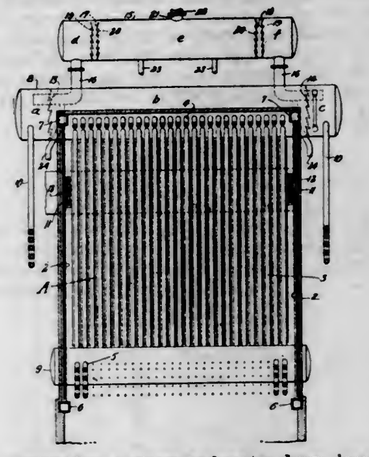
1. The process of manufacturing thermionically active cathodes, which comprises immersing a metal suitable for a cathode core in a molten alkaline earth nitrate.

1,809,096. COPYHOLDER. WILLIAM ROY WOLF, Rochester, N. Y., assignor, by mesne assignments, to Remington Rand, Inc., Buffalo, N. Y., a Corporation of Delaware. Filed Sept. 7, 1926. Serial No. 133,931. 3 Claims. (Cl. 120—28.)



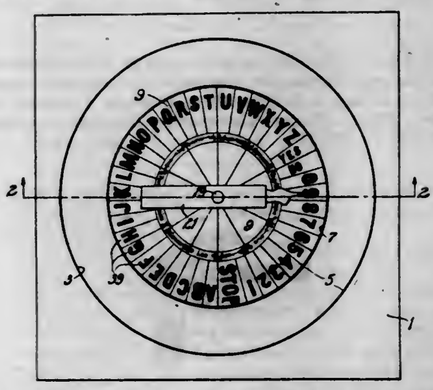
1. A support for mounting a copy holder on typewriters and billing machines of the type having a frame, comprising a member mounting said copy holder, arms extending forwardly from the member, and brackets carried by said arms, each bracket having a hooked tongue for hooking over the top of the frame to prevent movement thereon in one direction and also having side flanges engaging with other parts of the frame to prevent movement thereon in another direction.

1,809,097. STEAM GENERATOR. WILFRED R. WOOD, London, England, assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed July 24, 1928. Serial No. 294,976. 3 Claims. (Cl. 122—235.)



1. In combination a steam and water drum, louvre-like means for dividing said drum into communicating compartments, a plurality of substantially upright radiant heat evaporating tubes discharging into at least one compartment of said drum, a second drum, louvre-like means for dividing said second drum into communicating compartments, means for establishing communication between at least one compartment of the second drum and at least one compartment of the first drum which does not directly receive the discharge of said tubes, and a steam outlet for at least one compartment of the second drum which is not directly in communication with the first drum.

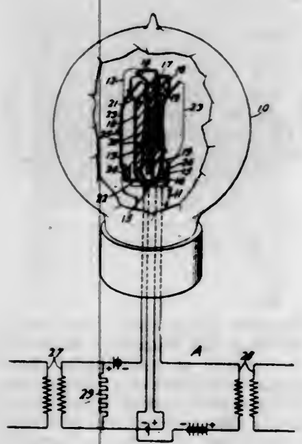
1,809,098. GAME. JOHN D. ZIELEY, Belmar, N. J., and HERMAN E. ROYS, New York, N. Y.; said Roys assignor to said John D. Zieley, Belmar, N. J. Filed Jan. 10, 1929. Serial No. 331,459. 3 Claims. (Cl. 273—161.)



1. The game which comprises a base, a rotatable disc mounted in said base, a second disc mounted in said ro-

tatable disc, said second disc being stationary with respect to said base, an indicator rotatably mounted on said second disc, and means connecting said rotatable disc and said rotatable indicator whereby said rotatable disc actuates said indicator, said means comprising a shaft for said indicator, a pulley on said shaft and a string affixed at one end to said base, passing diametrically across said rotatable disc and engaging said pulley and resilient means attaching the other end of said string to said base, said string engaging said rotatable disc between said pulley and its end affixed to said base.

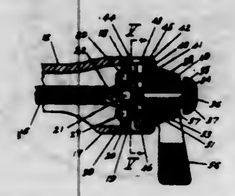
1,809,099. VACUUM TUBE. HAROLD D. ARNOLD, Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Nov. 2, 1915, Serial No. 59,210. Divided and this application filed Feb. 3, 1919. Serial No. 274,751. 16 Claims. (Cl. 250—27.5.)



1. A vacuum tube device comprising an arbor, a cathode, anode surfaces on opposite sides of said cathode and a unitary double grid electrode having a plurality of substantially parallel grid surfaces, each of which lies between said cathode and one of said anode surfaces, a rigid metallic member connecting said anode surfaces, and supporting connections from said arbor to each of said electrodes.

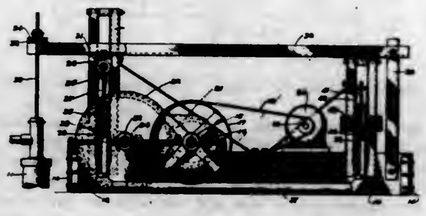
2. A grid electrode for vacuum tubes comprising two U-shaped frames and a plurality of members connected at spaced intervals therebetween.

1,809,100. ELECTRIC SWITCH FOR AUTOMOBILES. ARTHUR J. BAKER and EDWARD E. HUNTINGTON, Toledo, Ohio, assignors to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 14, 1924. Serial No. 699,226. 3 Claims. (Cl. 200—4.)



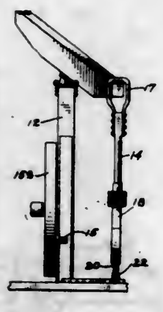
1. A switch comprising a base member and a movable member, said base member carrying terminals, one of said terminals being adapted to be connected to a source of electrical energy, and three other of said terminals being adapted to be connected to electrical units, said movable member including a contact plate adapted to co-operate with said terminals, said contact plate being capable of occupying but two operative positions, in one of which it engages said first mentioned terminal and one of said second mentioned terminals, and in the other of which positions it engages said first mentioned terminal and the remaining two of said second mentioned terminals.

1,809,101. WELL PUMPING UNIT. REUBEN C. BAKER, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Sept. 21, 1927. Serial No. 220,996. 8 Claims. (Cl. 44—71.)



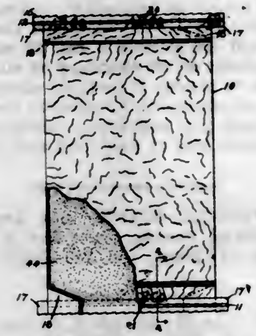
1. A pumping unit comprising an oscillatory walking beam pivoted at one end and adapted to be connected at the free end with the sucker rod of a pump to operate the same, a reciprocable crosshead operatively associated with the walking beam adjacent the free end to operate the same, a pair of communicating cylinders confining a body of fluid, a counterweight slidable on one of said cylinders and unconnected with the walking beam, a piston in each cylinder, said pistons being opposed, one piston being connected to the crosshead, the other piston being connected to the counterweight whereby a load imposed on the crosshead will be neutralized by the weight of the counterweight.

1,809,102. WELL PUMPING RIG. REUBEN C. BAKER, Coalinga, Calif., assignor to Baker Oil Tools, Inc., Huntington Park, Calif., a Corporation of California. Filed Jan. 21, 1930. Serial No. 422,354. 7 Claims. (Cl. 74—14.)



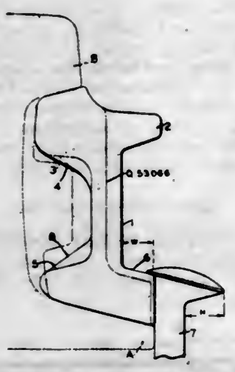
1. An apparatus of the character described including a walking beam, a revoluble crank, a pitman connecting the walking beam and crank, and means connected with the pitman and capable of sustaining the weight of the same relieving the weight thereof from the crank while the pitman is still connected with the crank.

1,809,103. SEALED PACKAGE AND METHOD OF MAKING THE SAME. ADELMER M. BATES, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed May 15, 1924. Serial No. 713,686. 13 Claims. (Cl. 229—62.)



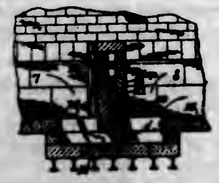
1. A seal for flexible walled packages, comprising a flat strip of reinforcing material, less flexible than the walls of the package, on each side of two adjacent edges of the package walls, and a sewed seam passing through the strips and the walls at a distance from either edge of the strips.

1,809,104. RAILWAY JOINT BAR. CHARLES W. BREED, Western Springs, and GEORGE R. BURKHARDT, Chicago, Ill. Filed Nov. 3, 1930. Serial No. 492,886. 18 Claims. (Cl. 238—243.)



1. A rail joint bar comprising inner and outer upper flanges united by a web to inner and outer lower flanges with integral bracing portions at intervals connecting the web to the inner upper flange and terminating downwardly in the web.

1,809,105. FURNACE. WILLIAM K. BROWNLEE and MICHAEL J. OWENS, Toledo, Ohio; said Owens assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 11, 1923. Serial No. 638,272. 9 Claims. (Cl. 49—54.)



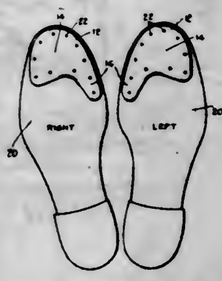
8. A glass furnace comprising a melting chamber and a refining chamber separated by adjacent walls spaced to provide a passageway for the circulation of air, said walls extending downward beneath the floor level of said chambers, a water tank between said walls and also extending downward below said floor level, means providing a channel extending downward through the floor of the melting chamber, transversely beneath said walls and tank and upwardly through the floor of the refining chamber, and refractory material interposed between the lower end of said water tank and the channel and forming the upper surface of the channel.

1,809,106. TIRE BEAD AND METHOD OF MAKING SAME. JAMES C. CARLIN, Gladwyne, Pa., assignor to Lee Rubber & Tire Corporation, Conshohocken, Pa., a Corporation of New York. Filed Aug. 10, 1929. Serial No. 384,899. 6 Claims. (Cl. 154—14.)



1. The method of making tire bead cores which comprises covering a flexible wire strip with plastic material and simultaneously applying an additional soft filler of said material to the edge of said strip.

1,809,107. TAP SOLE. SALVATORE CAPEZIO, East Paterson, N. J. Filed July 9, 1930. Serial No. 466,631. 8 Claims. (Cl. 36—1.)

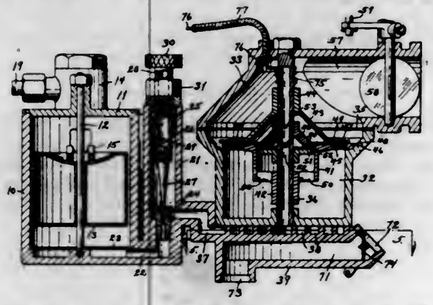


1. A tap sole for attachment to a dancing shoe comprising a rigid metal plate shaped to fit and cover the sole area at the toe portion of the shoe, the forward edge of said plate being curved to approximately follow the contour of the toe portion of the shoe, the rear edge of said plate extending generally transversely of the shoe, and the said edges defining an enclosed or solidly filled-in area of metal, one outside edge of said plate extending into the ball portion of the shoe, and extending toward the rear of the shoe, when attached thereto, a substantial distance further than the opposite outside edge of said plate, in order to permit bending of the shoe at the toe portion thereof, while permitting tapping with the edge of the foot.

1,809,108. CARBURETOR. JOHN LOUCIEN CHESNUTT, Long Beach, Calif. Filed Aug. 29, 1927. Serial No. 216,156. 9 Claims. (Cl. 261—63.)

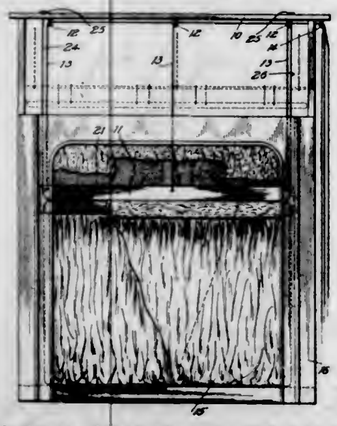
1. In a carburetor, a casing, an air pipe leading thereto, a throttle controlled exit from said casing to an engine, a fuel tube vertically arranged in said casing, means for admitting a liquid fuel to said tube, a hollow nozzle and spray device rigidly mounted on said tube and having a narrow peripheral exit to the interior of said casing, said tube having a fuel exit within said hollow nozzle and spray device, another hollow nozzle and spray device slidably mounted on said tube and inclosing the first nozzle and spray device, said casing being formed with means

for normally supporting the slidable nozzle and spray device, the slidable nozzle and spray device being formed with air openings at its lower end to permit a thin sheet of air to pass upwardly across the peripheral exit of the rigidly mounted nozzle and spray device, the slidable nozzle and spray device also being formed with a narrow



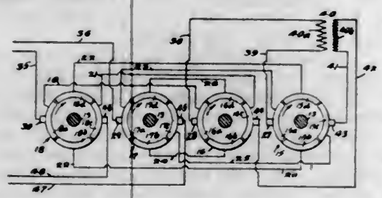
peripheral exit directed toward the wall of the casing, said slidable nozzle and spray device being designed to be lifted by the suction effect of the engine when traveling at higher speed to permit an additional quantity of air to pass in a thin stream across its peripheral exit to mingle with the mixture issuing therefrom.

1,809,109. TRACK. PETER CLARK, Great Neck, N. Y., and JERRY C. PINGLE, St. Louis, Mo. Filed Aug. 23, 1930. Serial No. 477,376. 8 Claims. (Cl. 156—27.)



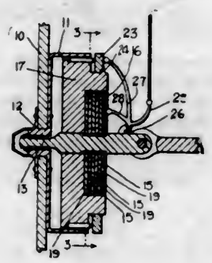
1. A device as characterized comprising a track held horizontal and having means for raising and lowering the same, said track adapted to support a curtain and having means for moving said curtain longitudinally of the track as the track is displaced in a vertical direction.

1,809,110. CONVERTER FOR ELECTRIC CURRENTS. JOHN H. CRAGG and KENNETH B. CRAGG, Hopkins, Minn. Filed Aug. 14, 1929. Serial No. 385,836. 4 Claims. (Cl. 171—123.)



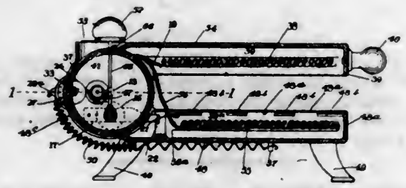
3. A conversion apparatus for electrical current having in combination, four rotatable commutators each having four commutator bars thereon, a pair of oppositely disposed brushes engaging each commutator, a pair of line conductors connected respectively to brushes engaging the first and second commutators, a second set of conductors connected to brushes respectively engaging the first and second commutators for delivering current, a transformer, conductors connected to brushes engaging said third and fourth commutators and connected to the primary of said transformer, a pair of conductors connected respectively to the secondary of said transformer and connected to brushes respectively engaging the third and fourth commutators, and conductors connecting opposite bars in said first and second commutator to corresponding opposite bars in said third and fourth commutators.

1,809,111. VEHICLE BRAKE. ROY ARTHUR CREBER, Toronto, Ontario, Canada. Filed Nov. 8, 1929. Serial No. 405,664. 3 Claims. (Cl. 188—140.)



1. In a vehicle brake, a wheel having a hub and a brake drum rigidly secured to said hub, an axle engaging with said hub and forming a journal for a locking member within said brake drum, and means for stopping the rotation of said wheel by engagement of said locking member with said drum, and means in said locking member and spaced from said axle to form an adjustment for the speed of engagement between said brake drum and locking member, and means for controlling said locking and adjusting means.

1,809,112. ELECTRIC BREAD TOASTER. HARRY J. CRINER, Burlington, Iowa. Filed Apr. 2, 1927. Serial No. 180,555. 10 Claims. (Cl. 219—19.)

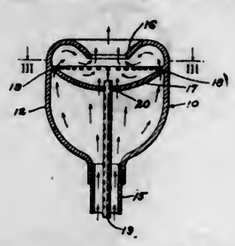


1. In an electric toaster, the combination with a pair of heating elements, of a support for holding a slice of bread between them, said heating elements and support being concentrically, pivotally united and spring-actuated means for automatically separating the heating elements from each other and from the bread support.

1,809,113. BURNER TIP FOR TORCHES. PERCY M. FORSTER, Berkeley, Calif. Filed Jan. 4, 1930. Serial No. 418,527. 1 Claim. (Cl. 158—109.)

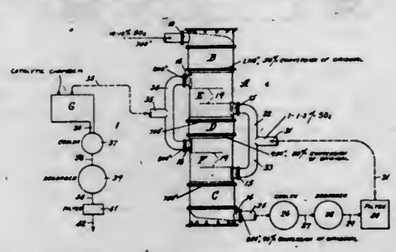
A burner tip of the character described including a hollow body having a substantially cylindrical end, a deflector at said end of the body portion, said deflector curling inwardly and being formed with an orifice at its center, a bowl arranged transversely within the body

portion and spaced from the deflector, a plurality of jets formed adjacent the peripheral edge of the bowl whereby gas passing through the jets will engage the deflector, a tube extending centrally through the bowl whereby to



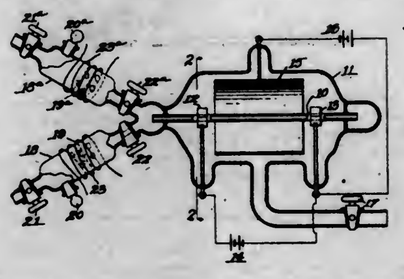
deliver air under pressure to the orifice, said bowl having a plurality of perforations surrounding the tube for delivering gas into the space intermediate the bowl and the deflector.

1,809,114. PROCESS AND APPARATUS FOR CATALYTIC REACTIONS. LOWRY GILLETT, Syosset, N. Y., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Nov. 24, 1924. Serial No. 751,802. 6 Claims. (Cl. 23—176.)



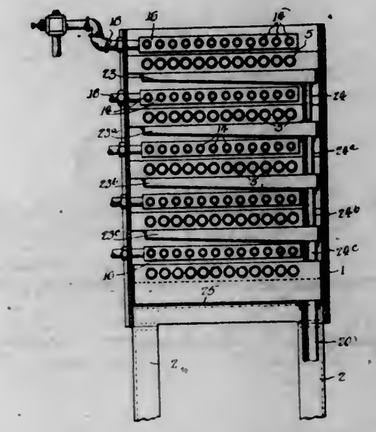
1. The process of carrying out catalytic gas reactions, which consists in subjecting the gases under treatment to a catalytic reaction in successive stages with an amount of catalytic material increasing from one stage to the next, absorbing the gaseous product resulting from such reaction, and using the gases remaining after such absorption, as a cooling medium for the gases which have become heated by part of the said catalytic reaction.

1,809,115. APPARATUS FOR PRODUCING IONS. ROBERT H. GODDARD, Worcester, Mass. Filed July 16, 1926. Serial No. 122,887. 6 Claims. (Cl. 250—225.)



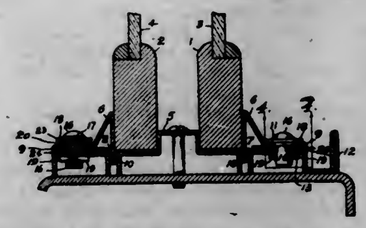
1. Apparatus for continuously producing ions comprising a vacuum casing, a cathode in said casing, an electrode mounted in said casing and having a relatively thin wall portion, and means to continuously supply ionizable material at one side of said wall portion, the ions to be liberated at the opposite side of said wall portion after penetrating through the material thereof, and means for replenishing said ionizable material from time to time during the continued operation of the machine.

1,809,116. MILK HEATER. JOSEPH H. GODFREY, Chicago, Ill., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 29, 1927. Serial No. 222,758. 19 Claims. (Cl. 257—185.)



5. A heater comprising, in combination, a casing, a plurality of milk tubes extending longitudinally in said casing and arranged in vertically disposed tiers, means for supporting said tubes arranged to connect the tubes to form a continuous passageway through the heater, a plurality of drip pans positioned one below each tier of tubes, said drip pans having drain openings vertically above each other, the lower-most pan being of sufficient capacity to receive the discharge from the remainder of the pans, and means to spray a heating medium onto said tubes, said means comprising a common riser, intake pipes fed independently from said riser for each tier of tubes, and means embodying a plurality of spray devices positoned along said tubes connected with each of said intake pipes.

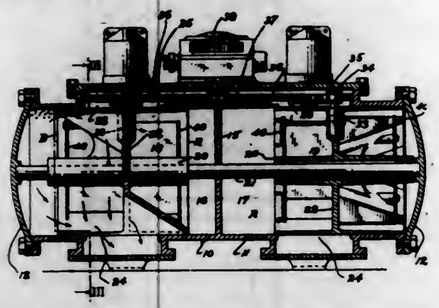
1,809,117. QUICK RELEASE STOP FOR RAILROAD CAR WINDOWS. ROBERT F. GOLDEN, South Orange, N. J., assignor to National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed July 10, 1930. Serial No. 466,935. 4 Claims. (Cl. 16—220.)



1. In a quick release stop for railroad car windows, the combination of the stop support, the stop having a base resting against said support, said base having concentric circular openings therethrough, while said support has an opening concentric with the opening in said base, diametrically opposite gates in said support leading into the opening thereof, a stud whose head is slotted like a screw and which has a flange below said head, lugs extending from diametrically opposed locations near the inner end of the stud, whereby said stud may be inserted through the base and then with its lugs inserted through the opening and gates in said support with the lugs beneath the inner wall of said support, and a

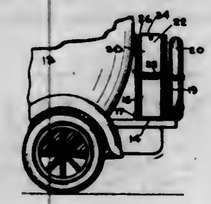
spring washer beneath said flange, whereby, when the stud is forced inwardly and given a quarter turn, the spring washer will be compressed and said lugs resiliently forced against the under surface of said support.

1,809,118. FLUID METER. ALBERT J. GRANBERG, Berkeley, Calif., assignor to Ralph N. Brodie Company, Oakland, Calif., a Corporation of California. Filed July 7, 1930. Serial No. 465,956. 5 Claims. (Cl. 73—30).



1. A meter including a horizontally disposed cylinder having an intake port adjacent the top thereof and an outlet port adjacent the bottom thereof, a reciprocable piston mounted in the cylinder and having ports adapted to cooperate with the ports in the cylinder, and means at the ends of the piston causing fluid to discharge simultaneously from the top and bottom of the space intermediate the end of the piston and the end of the cylinder.

1,809,119. LUGGAGE CARRIER. CHARLES HAFFKE, Boise, Idaho. Filed July 24, 1929. Serial No. 380,717. 1 Claim. (Cl. 224—29.)



In a luggage carrier for a vehicle, a base support carried by the vehicle and provided with an upright stop plate, and a plurality of brackets, a rectangular receptacle adapted to be disposed on the base support in engagement with said stop plate, said receptacle being provided with grooves opening on its top and ends and having lugs disposed in said grooves, a tire holder hingedly mounted on the base support and removably secured to the receptacle, and latches pivotally mounted on the base support at each end thereof outwardly of said stop plate and arranged to removably engage the lugs of said receptacle, said tire holder being adapted to be swung upwardly for disposing the receptacle in a vertical position and to swing downwardly into contact with said brackets for disposing the receptacle in a horizontal position.

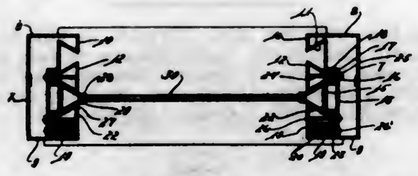
1,809,120. GOLF BAG. JOHN C. HALL, Whiting, Ind. Filed Apr. 21, 1928. Serial No. 271,791. 1 Claim. (Cl. 150—1.5.)

In a golf bag, a tubular casing closed at its lower end, a partition wall within the casing extending the length of the casing with its longitudinal edges disposed substantially diametrically opposite to divide the casing into two independent compartments, the wall having flat diametrical portions extending from its longitudinal edges being curved intermediate these flat portions with



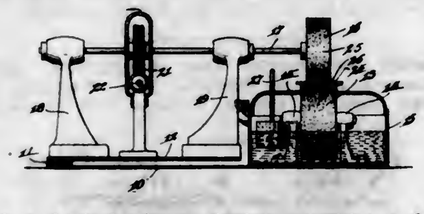
the curved portion extending into one of the compartments to render said compartment substantially arc-shaped in cross-section, and means securing said wall in position.

1,809,121. WINDOW SASH AND FRAME. EDGAR E. HART, Lincoln Park, Mich. Filed Oct. 5, 1929. Serial No. 397,481. 5 Claims. (Cl. 189—73.)



1. A window sash and frame of the class described comprising a sash having side walls inwardly offset at their inner face, said inwardly offset portion having an inclined side wall; and a movable wedge-shaped adjusting strip having its opposite side walls inclined, one of said side walls cooperating with the inclined side wall of said sash to provide a dovetailed groove; and a window frame having wedge-shaped side walls engageable in said dove-tailed groove and slidable therein.

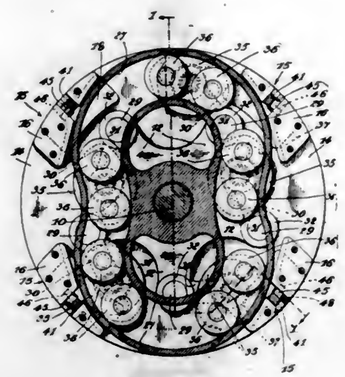
1,809,122. FABRIC CLEANING MECHANISM. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1929. Serial No. 390,228. 2 Claims. (Cl. 15—97.)



1. A fabric-cleaning mechanism comprising a fixedly mounted freely rotatable cleaning wheel, and a movable motor-carrying base plate upon which a coacting driven wheel is rotatively mounted so as to be yieldingly pressed by gravity into cooperation with said freely rotatable wheel.

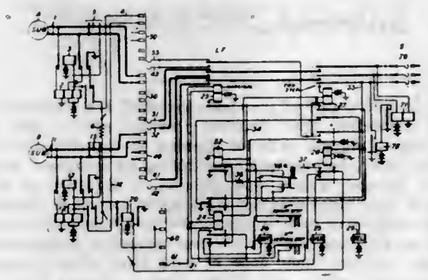
1,809,123. VARIABLE SPEED TRANSMISSION. ALPHONSE A. HEINZELMANN, New York, N. Y., assignor to Bludalk, Inc., New York, N. Y., a Corporation of New York. Filed July 19, 1929, Serial No. 379,425. Renewed May 2, 1931. 26 Claims. (Cl. 74—14.)

11. In a variable speed transmission, in combination, a revoluble driven member having a cam runway, a revoluble drive shaft, a spider having a plurality of legs fixedly attached to said shaft, a link pivotally attached to the end portion of each said leg, a roller-carrying member pivotally attached to the free end of each said link, a plurality of rollers pivotally attached to each said roller-carrying member positioned within said runway and capable of abutment upon the sides thereof whereby the revolution of said shaft will revolve said driven member



and means whereby the revolution of said driven member at a predetermined speed will automatically lock said driven member to said shaft.

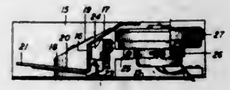
1,809,124. TELEPHONE EXCHANGE SYSTEM. HENRY HOVLAND, Williston Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 31, 1930. Serial No. 471,957. 7 Claims. (Cl. 179—10.)



1. In combination, an automatic switch comprising a plurality of terminal banks, a set of brushes for each bank, groups of lines, each group comprising a plurality of sub-groups one for each of said banks, group relays one for each of said groups of lines, means effective upon the operation of one of said group relays for advancing said sets of brushes, in a primary movement to select the corresponding sub-groups, a circuit for stopping said primary movement and for selecting one of said brush sets, and means for advancing said brush sets in a secondary movement into engagement with the terminals of the selected sub-groups.

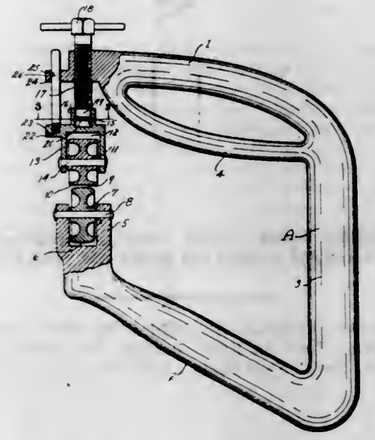
1,809,125. TELEPHONE SET MOUNTING. FREDERICK A. HOYT, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 21, 1930. Serial No. 454,313. 10 Claims. (Cl. 179—100.)

1. A telephone set mounting adapted to be inserted in a drawer of a desk or table comprising a casing having a separating wall, a flat member hinged to said wall adapted to receive a hand telephone, a reel carried by said



wall on the opposite side from said flat member, and a cord conductor extending from said reel to said handset through said wall.

1,809,126. METAL-WORKING TOOL. HERMAN W. JOHNSON, St. Louis, Mo., assignor to Stiles-Herman Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 20, 1928. Serial No. 300,800. 2 Claims. (Cl. 81—15.)



1. A fender rolling tool including, in combination, a rigid frame for manual manipulation of the tool and comprising spaced first and second arms, a piece joining said arms at an end thereof, an extension upon the second arm presented towards the first arm, and an arcuate brace re-enforcingly joined to the first arm, the arms and said extension being adapted to embrace the fender therebetween and said extension having a recess in its free end, a screw threaded for adjustment in the free end of the first arm in alining relation with said extension, a recessed bracket swiveled intermediate the arms upon the lower end of the screw, means for retaining the bracket against rotary movement relatively to the frame both during adjustments of said screw and working operations of the frame, a roller carried by and mounted for rotation in the recess of the bracket, and an opposed roller mounted for rotation in the recess of said extension, said rollers being adapted for engaging the opposite faces of the embraced fender.

1,809,127. COUPLING AND VALVE. WAYNE R. JOHNSON, Southgate, Calif. Filed Apr. 1, 1930. Serial No. 440,741. 2 Claims. (Cl. 284—19.)

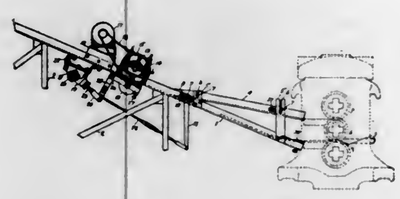
1. A valve coupling embodying two sections for forming a part of a fluid pressure line, one of said sections constituting a valve member and the other a contact member: said valve member having a valve cage chamber and a valve stem chamber with a main valve seat interposed between the chambers, an auxiliary sealing seat of limp material disposed over said main seat with a free edge adapted to clear the face thereof and depressible onto the face of said seat to form a liner therefor; a valve having a stem, means tending to seat said valve,

said auxiliary seat being engageable with and following said valve in partially unseated position to seal the latter;



said contact member having means to engage said stem when in coupled relation and unseat said valve from both seats.

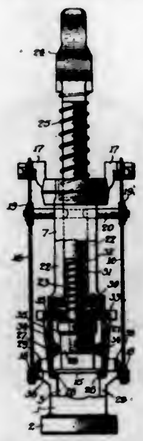
1,809,128. AUTOMATIC REPEATER FOR ROLLING MILLS. JOHN M. KOCH, Reading, Pa. Filed Apr. 12, 1930. Serial No. 443,741. 5 Claims. (Cl. 80—52.)



1. In an automatic repeater for rolling mills, the combination with a lower trough adapted to receive a rolled bar from a rolling mill, means to pull said bar away from said mill, controlling device for said means, said controlling device being adapted to be operated by said bar, an upper trough in a cooperative relation with said lower trough, and means to direct said bar into said upper trough, said upper trough being adapted to guide said bar into the return pass of said rolling mill.

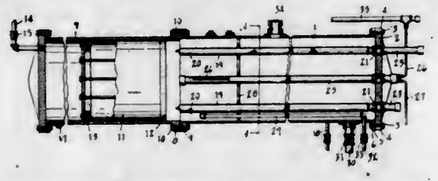
1,809,129. MECHANISM FOR CAPPING BOTTLES. OLAF LARSEN, Fort Atkinson, Wis., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 14, 1928. Serial No. 305,957. 2 Claims. (Cl. 226—92.)

1. In a bottle capping mechanism, a reciprocatory plunger having an operative support, a member mounted on said support and normally movable with said plunger, a pair of elements movably supported on said member and disposed laterally of said plunger, said elements normally being positioned to retain a cap endwardly of said plunger, a stop for limiting the advance movement of



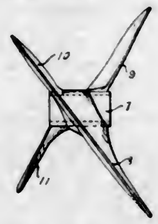
said member, and means normally in the path of said plunger and engageable thereby to cause the movement of said elements to release said cap.

1,809,130. APPARATUS FOR TREATING PARAFFIN. LEWIS H. MACOMBER, Kalamazoo, Mich. Filed May 13, 1929. Serial No. 362,569. 6 Claims. (Cl. 210—184.)



1. In a structure of the class described, the combination of a cylindrical filter chamber provided with a head at one end, a plunger cylinder opening to the opposite end of said filter chamber and constituting an extension therefor, a plunger within said cylinder, a plurality of perforated filter pipes provided with fabric coverings disposed longitudinally of said filter chamber and mounted on said head to discharge on the outside thereof, a foraminated support for the inner ends of said filter pipes disposed transversely within said filter chamber, closure bars removably insertable into said filter pipes at their open outer ends to constitute closures for the perforations of the filter pipes, said bars being threaded into the outer ends of said filter pipes.

1,809,131. PROPELLER. EDMUND R. MAISON, Mount Clemens, Mich. Filed June 3, 1929. Serial No. 367,849. 2 Claims. (Cl. 170—156.)



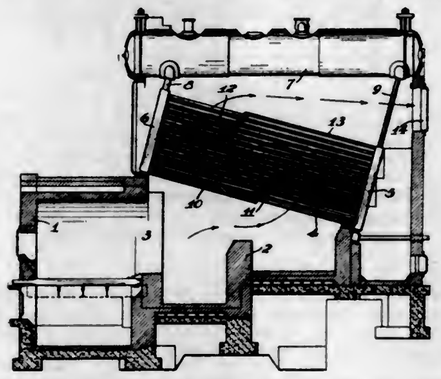
1. A propeller of the class described comprising: a hub determining the axis of rotation; a pair of propeller blades mounted on said hub at an inclination to the axis of rotation, said blades being extended across said axis in planes at substantially right angles to each other and crossing said axis at a line other than the transverse medial line of said blades, each of said blades being a planar body.

1,809,132. SIGNAL WINDOW FOR MOTOR VEHICLES. JAMES E. MARTIN, Pico, Calif., assignor of one-half to A. P. Schroder and one-half to W. L. Anderson, Pico, Calif. Filed Nov. 19, 1929. Serial No. 408,270. 1 Claim. (Cl. 296—44.)



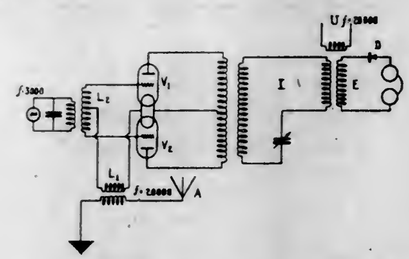
A disappearing sash for a motor vehicle including a frame carrying a divided, transparent window whose lower section is hung by horizontal pivots so that its lower edge may be tilted outward; the sections being co-planar and having mitered meeting edges.

1,809,133. WATER TUBE BOILER CONSTRUCTION. KINGSLEY L. MARTIN, Montclair, N. J. Filed Nov. 29, 1929. Serial No. 410,428. 1 Claim. (Cl. 122—291.)



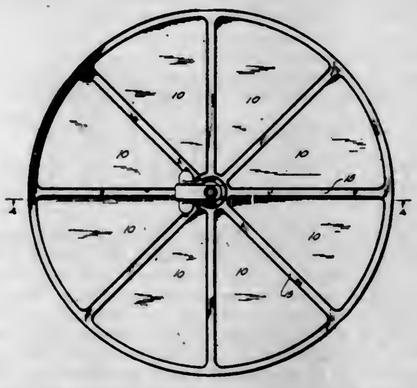
In a boiler of the water tube type having a furnace at the front end and comprising a bank of tubes inclined from front to rear, upright headers at the ends of the tubes and a steam and water drum above the headers with which they communicate, a combustion chamber below the forward end of the boiler with a bridge wall at its rear end, a baffle around the lower row of tubes extending rearward from the front header a part of the length of the tubes and terminating directly above the bridge wall, a cross baffle extending upward and to the rear from the end of the baffle at an obtuse angle to such baffle, a third baffle on one of the upper rows of tubes extending from the rear header forwardly a part of the length of the tubes, and a cross baffle extending downward from the end of said last baffle at an obtuse angle to such baffle.

1,809,134. METHOD FOR ELIMINATING DISTURBANCES IN RECEIVING WIRELESS TELEGRAPHY AND TELEPHONY. ALEXANDER MEISSNER, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Feb. 19, 1924, Serial No. 693,783, and in Germany Feb. 24, 1923. 4 Claims. (Cl. 250—20.)



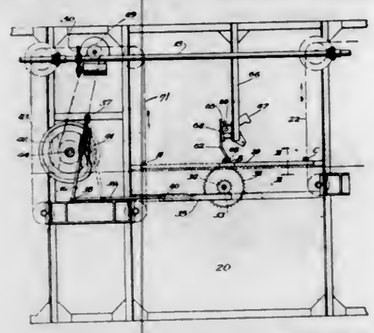
1. In combination an input circuit tuned to a receiving frequency, a push-pull amplifier having an input and an output circuit, said input circuit being coupled to said first named input circuit, a local audio frequency generator circuit coupled to said push pull amplifier input, said arrangement being adapted to combine said receiving frequency and said locally generated frequency, a tuned circuit coupled to said output circuit and heterodyne detection means coupled to said last named tuned circuit and using a beating oscillation of the same frequency as the received frequency and adapted to produce a beat note equal to said locally generated frequency.

1,809,135. MILK TREATING APPARATUS. GEORGE J. MEYER, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 14, 1928. Serial No. 319,207. 17 Claims. (Cl. 187—21.)



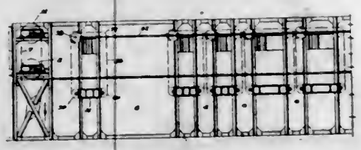
1. Milk treating apparatus comprising a series of jacketed chambers in combination with a pipe system having infeeding and outfeeding pipe sections provided with supply and exhaust connections, each set of pipe sections including one member permitting swinging movement upon a horizontal axis, and another member permitting swinging movement upon a vertical axis, each such member being ported for milk flow therethrough; each set of pipe sections also having one member of a length substantially equal to the depth of the jacketed chambers and adapted to swing into and out of an associated chamber upon the axis of its horizontal pivot member, and means for actuating said pipe section to swing them into and out of said chambers successively.

1,809,136. PLATING MACHINE AUTOMATIC WORK-SHIFT. CONSTANTINE G. MILLER, Chicago, Ill., assignor to The Meaker Company, a Corporation of Illinois. Filed June 30, 1928. Serial No. 289,591. 16 Claims. (Cl. 204—5.)



1. A work shift for plating machines comprising a plating tank, a trackway along said tank, said trackway comprising insulated end sections and a central bus bar section, means for delivering a work rod to the first insulated section of said trackway, a reciprocating rack for moving the rod onto the bus-bar section during one cycle of movement of the rack and away from said bus-bar in the same direction during the next cycle of movement of the rack, means for removing the rod from the tank after the same has been removed from the bus-bar, and means for reciprocating said rack intermittently whereby a time interval intervenes between the cycles of movement of said rack and during which interval the work rod remains at rest on the bus-bar.

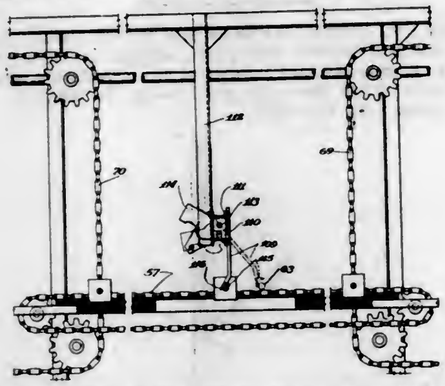
1,809,137. AUTOMATIC CONVEYER AND TRANSFER MECHANISM. CONSTANTINE G. MILLER, Chicago, Ill., assignor to The Meaker Company, a Corporation of Illinois. Filed June 30, 1928. Serial No. 289,587. 7 Claims. (Cl. 198—85.)



3. A conveying and transfer mechanism comprising a conveyer chain provided with fingers for moving a work rod in one direction along a trackway, said chain having an overhead return, means comprising endless chains for maintaining said rod in contact with said fingers during the vertical portions of said overhead return and a channel member for maintaining said rod in contact with said fingers during the horizontal portion of said return, transfer chains each having a pivoted cup thereon for lifting a rod from said trackway and depositing it on said trackway ahead of the position occupied by the rod when lifted, for further movement by said conveyer chain and means for driving said transfer chains in synchronism with said conveyer chain.

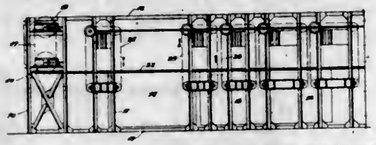
1,809,138. AUTOMATIC CHROMIUM PLATING MACHINE. CONSTANTINE G. MILLER, Chicago, Ill., assignor to The Meaker Co., a Corporation of Illinois. Filed June 30, 1928. Serial No. 289,588. 19 Claims. (Cl. 204—5.)

7. An automatic chromium plating machine comprising a plating tank, a trackway along said tank, said trackway having a bus-bar section and insulated sections outside of said bus-bar, a work rod having a conductor shoe sliding on said guideway, means for delivering the work rod to one of said insulated sections, an endless chain having pivoted fingers for moving said rod onto said bus-bar section, said rod coming to rest thereon, means for supplying



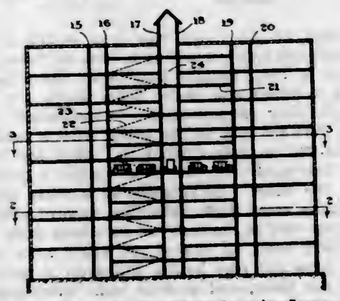
electric current to said bus-bar section while said rod and shoe are at rest thereon, means for cutting off said current, and means for moving said rod from said bus-bar section to another insulated section of the trackway, all of said parts being operated automatically and in timed relation.

1,809,139. AUTOMATIC WORK SHIFT FOR PLATING MACHINES. CONSTANTINE G. MILLER, Chicago, Ill., assignor to The Meaker Company, a Corporation of Illinois. Filed June 30, 1928, Serial No. 289,589. Renewed Sept. 4, 1929. 19 Claims. (Cl. 204—5.)



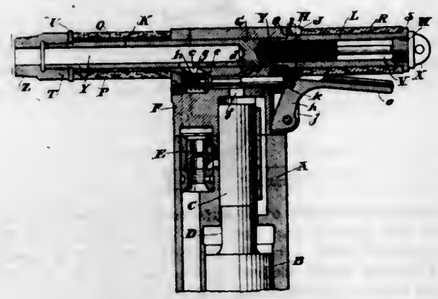
1. An automatic work shift for plating machines comprising means for delivering a work rod to a plating tank, a trackway along said tank for receiving said rod, a bus bar section in said trackway, a chain for moving said rod along the trackway to said bus-bar section, and another chain for moving said rod from said bus bar section, said chains being arranged to leave said bar on said bus-bar in rest position for a predetermined interval of time.

1,809,140. STORAGE BUILDING. CHARLES GORDON MITCHELL, Montreal, Quebec, Canada. Filed Oct. 15, 1928, Serial No. 312,671, and in Canada Aug. 31, 1928. Renewed Apr. 24, 1931. 3 Claims. (Cl. 20—1.13.)
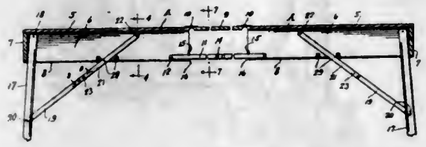


1. In a building, a plurality of main floors extending from end to end and from side to side of the building, a corridor encircling the building and spaced from the walls thereof, mezzanine floors intermediate the main floors, said mezzanine floors covering the area between the adjacent edges of the corridors, and ramps at each end of the building connecting the main floors with the mezzanine floors, said main floors having means formed therein between the ramps to allow for the passage of high vehicles between the ramps.

1,809,141. HANDLE FOR ROCK DRILLS. JOHN F. MOCK, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 21, 1927. Serial No. 241,535. 3 Claims. (Cl. 121—36.)



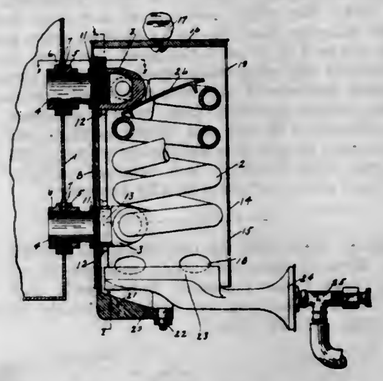
1. A handle for a fluid actuated rock drill, comprising a back head having a transverse bore, a tubular rod in the bore extending on opposite sides of the back head, said rod having a chamber for oil and a passageway for pressure fluid, means in the back head for controlling the admission of pressure fluid from the rod to the back head, tubular handle grips on the ends of the rod, means on the rod interlockingly engaging the back head for preventing rotation of the rod with respect to the back head, an integral flange on one end of the rod forming an abutment for one handle grip, and a hollow nut on the opposite end of the rod for maintaining the other handle grip on the rod.

1,809,142. COMBINATION PASTE TABLE AND CASE. WALTER E. MEYER, Kansas City, Kans. Filed Sept. 10, 1929. Serial No. 391,525. 1 Claim. (Cl. 190—12.)



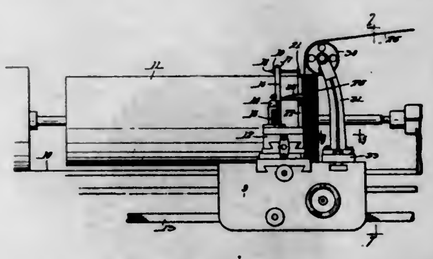
In an apparatus of the class described, a pair of case sections, a plate hingedly connected to the sections so that the sections may be extended in co-planar relationship or folded one above the other to provide a case, means for holding the sections in extended relationship, foldable leg structures associated with the case sections, each case section comprising a plate body having side walls and an end wall extending perpendicularly therefrom, each leg section comprising a leg frame pivotally engaging between the respective side walls of this respective case section, brace sections pivotally engaged with the frame, and other brace sections pivotally engaged with the respective side walls, means pivotally connecting the brace sections together including leaf springs having pins to pierce registering openings in the brace sections when in extended relationship, said means for holding the adjacent sections in extended relationship comprising brace sections pivoted to the side walls and pivoted together and having means including leaf springs and pins to pierce the openings in the last mentioned brace sections to hold them in extended relationship, cross rods having hooked ends to engage the last mentioned brace section.

1,809,143. HOT WATER HEATER. CLARENCE H. MORROW, Cleveland, Ohio, assignor to The Hotstream Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 27, 1929. Serial No. 366,377. 2 Claims. (Cl. 122—250.)



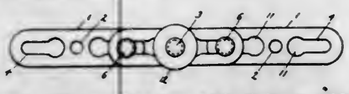
1. A water heater especially adapted for use with a water containing device having a relatively light sheet metal wall on which said heater is adapted to be mounted, comprising a water circulating member having one-piece terminal members secured on the two ends thereof, each of said terminal members having a threaded end portion adapted to extend through an opening in the supporting wall of said device and to receive a securing nut, whereby said circulating member can be mounted on said wall of said device, a relatively light sheet metal casing enclosing said circulating member and provided with a pair of openings through which said terminal members extend, and a relatively heavy bar-like member extending vertically along the inner surface of said casing and provided with a pair of openings registering with the openings of said casing and through which extend the terminal members of said water circulating member, said bar-like member providing a sturdy and rigid support for said terminal members in said casing.

1,809,144. APPARATUS FOR COVERING ROLLS WITH TOOTHED WIRE. JAMES A. NOONAN, Lowell, Mass., assignor to C. G. Sargent's Sons Corporation, Graniteville, Mass., a Corporation of Massachusetts. Filed Jan. 7, 1930. Serial No. 419,171. 6 Claims. (Cl. 153—64.5.)



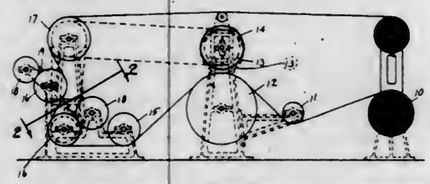
3. In a machine of the character described, the combination with a tool post and means for moving it along, of a bar carried by the tool post, a ring supported by said bar, springs carried by the ring, and a second ring spaced from the first for engaging the convolution of wire being wound and exerting a yielding pressure thereon.

1,809,145. CHAIN. NICOLAS K. PANZIREFF, Moscow, Union of Socialist Soviet Republics. Filed Aug. 24, 1929, Serial No. 388,120, and in Germany July 27, 1928. 1 Claim. (Cl. 74—49.)



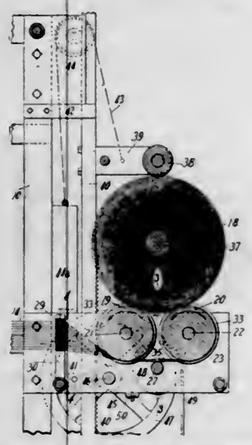
In a chain, the combination with links provided with elongated apertures at their ends, said apertures having enlarged portions at their inner ends, connecting pins for said links, the middle portions of said pins being of a larger diameter than the necks at their ends, said necks being adapted to fit said elongated apertures, the middle portions of said pins being adapted to pass through said enlarged portions of said elongated apertures, said links being further provided with central openings, locking pins adapted to fit into said middle openings, and washers at the ends of said pins adapted to prevent said connecting pins from reaching said enlarged portions of said apertures when said chain is fully assembled.

1,809,146. PROCESS OF DECORATING PAPER. HARRY M. ROSS, Indianapolis, Ind., assignor of one-half to Beveridge Paper Company, Indianapolis, Ind., a Corporation. Filed Aug. 11, 1928. Serial No. 298,927. 5 Claims. (Cl. 91—67.9.)



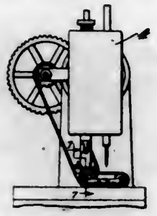
1. The process of decorating paper, consisting in passing the paper about a brushing roll having a tool marked surface, thinly applying a coloring material to said roll so as to cause said roll to apply said material to the surface of the paper, and operating said roll at a greater speed than the paper passing thereabout for causing the tool marked roll to streak the coloring material over the surface thereof.

1,809,147. REWINDING MECHANISM. CLEMENT J. ROWE, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 10, 1926. Serial No. 128,483. 4 Claims. (Cl. 242—76.)



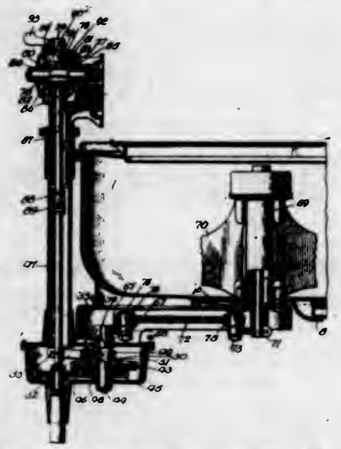
1. In a mechanism for rewinding a plurality of flexible webs in superimposed relation on a unit roll and including a roller having supporting engagement with the unit roll and about which the webs are led to said unit roll, a guide unit arranged in advance of and adjacent to said roller and comprising a plurality of superimposed bars rigidly secured one to the other and each having in one face thereof a longitudinal recess to receive one of said webs, the several recesses being arranged to properly position said webs with relation one to the other as they pass into engagement with said roller.

1,809,148. SEWING MACHINE. MORRIS M. SCHRAGO, Los Angeles, Calif. Filed Mar. 27, 1928. Serial No. 265,088. 3 Claims. (Cl. 112—212.)



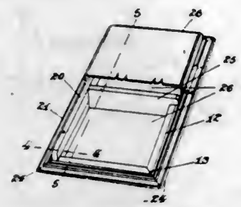
1. As a new article of manufacture, a presser foot having a foot portion and heel and toe portions, said foot being formed with a needle receiving opening, a presser bar receiving shank secured to the heel portion, sprocket wheels secured to the shank and toe portions, and a continuous chain extending between said sprocket wheels.

1,809,149. DRIVING MECHANISM FOR COMBINED WASHERS AND WRINGERS. OTTO E. SZEKELY, Holland, Mich. Filed May 2, 1927, Serial No. 188,145. Renewed Apr. 17, 1931. 1 Claim. (Cl. 74—7.)



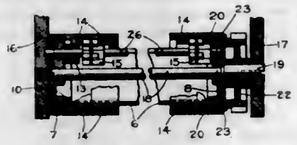
A driving mechanism for a combined washer and wringer including an impeller shaft, a vertical shaft, a crank on the impeller shaft and a crank on the vertical shaft, a link connecting said cranks for imparting an oscillating movement to the impeller shaft, a worm gear loosely mounted on the vertical shaft, a worm drive for operating said gear, a wringer drive gear secured to said worm gear and meshed with a gear on the wringer drive shaft, a clutch comprising a member rigid with said worm gear and a member movably mounted on the vertical shaft between the worm gear and the crank, a pivotally mounted operating arm having an end portion connected to the movable member of said clutch, and means connected to the other end of said pivotally mounted arm for imparting movement thereto for controlling operation of said vertical shaft and said impeller shaft from said worm gear.

1,809,150. REFRIGERATOR CLOSURE. ENOCH SWEDMAN, St. Paul, Minn., assignor to Seeger Refrigerator Company, St. Paul, Minn., a Corporation of Minnesota. Filed Dec. 16, 1927. Serial No. 240,375. 9 Claims. (Cl. 20—35.)



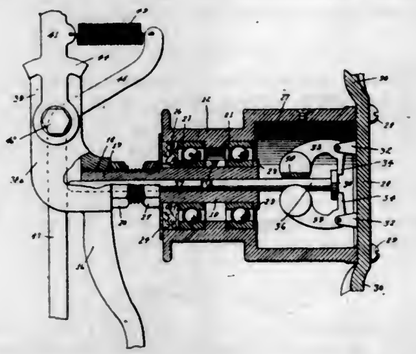
1. A refrigerator door including, a body portion, an outer and inner enameled surface, and means in said body portion adapted to arcuate the free edge of the door in a manner to cause the same to seal tight when locked.

1,809,151. ODOMETER. DEWITT TAPPAN, Rochester, N. Y., assignor, by mesne assignments, to North East Appliance Corporation, Rochester, N. Y., a Corporation of New York. Filed Jan. 12, 1928. Serial No. 246,344. 5 Claims. (Cl. 235—95.)



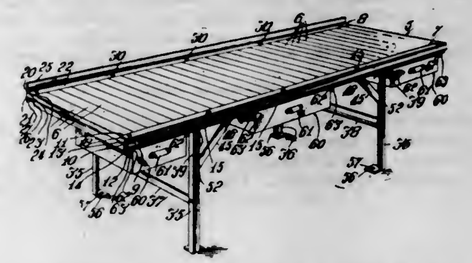
1. In an odometer provided with number rings and internal transfer pinions, a drum, on which the rings revolve, comprising a cylindrical, longitudinally slotted sheet-metal body ,two heads engaging the ends of said body and each provided with a circularly curved slot corresponding in diameter and extent with, and receiving, the corresponding end of the body so as to confine the latter in all directions against lateral movement or distortion, and means for drawing the heads tightly against the body.

1,809,152. COMBINED FAN AND GOVERNOR FOR INTERNAL COMBUSTION ENGINES. WILLIAM B. THIEMANN, Albert City, Iowa. Filed Apr. 23, 1929. Serial No. 357,505. 2 Claims. (Cl. 264—3.)



1. In a device of the class described, a supporting arm having an upwardly projecting member, a sleeve projecting laterally from said arm, a pulley rotatively mounted on said sleeve having a hollow hub open at its outer end, a cover plate carried by said hub for closing said opening, said cover plate having lugs projecting into the opening of said hub, the edge of said cover plate being provided with radially projecting fan blades, governor arms mounted within said hub and pivotally connected to said inwardly extending lugs, a slide rod mounted in the inner end of said sleeve and operatively connected to said governor arms, a second rod slidably mounted in the outer end of said sleeve, a ball mounted between the adjacent ends of said rods, a lever pivotally connected to the upwardly projecting member of said supporting arm, said lever being mounted in alinement with the outer one of said slide rods and designed to be engaged and operated thereby, one end of said lever being provided with a spring for yieldably supporting the lever in engagement with said rod, a second lever pivotally connected to the upwardly projecting member of said supporting arm, said second lever being connected to one end of said spring, the second lever and said upwardly projecting member being provided with serrated surfaces to yieldably lock said lever in various positions of its swinging movement.

1,809,153. SHOP BENCH. ARTHUR M. BARRETT, Winnetka, Ill., assignor to Barrett-Cravens Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 23, 1928. Serial No. 248,626. 6 Claims. (Cl. 45—31.)



1. In a bench of the class described, a top made up of a plurality of transversely arranged boards lying contiguous and with their adjacent ends in substantial longitudinal alignment, a pair of angle bars extending longitudinally along the ends of the boards and substantially normal the direction of extension of the boards, one of said bars having one flange disposed horizontally and overlying the ends of the boards and its other flange disposed vertically, the other bar having one flange disposed horizontally and underlying the ends of the boards and its other flange disposed vertically, said boards being solid, and means for securing the boards between the horizontal flanges of said angle bars, said board securing means forming the sole connection between said angle bars and the vertical flange of one of said angle bars depending downwardly with the vertical flange of the other angle bar upstanding upwardly above the top.

1,809,154. RIVETING. EMIL BECKER, Dessau, Germany, assignor to Hugo Junkers, Dessau, Germany. Filed June 30, 1928, Serial No. 289,481, and in Germany July 16, 1927. 3 Claims. (Cl. 218—29.)



1. The method of making a joint by riveting comprising inserting in the rivet holes of the parts to be joined a

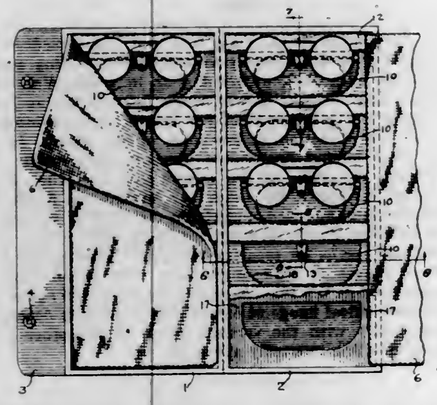
hollow pot-shaped body flanged at its open end and exerting pressure in radial direction on the inner wall of the projecting closed end of said body to increase its diameter beyond the diameter of said rivet holes.

1,809,155. DISPLAY CASE. JACOB P. BERTRAM and ABRAHAM BERLINER, Rochester, N. Y., assignors to Shuron Optical Company, Inc., Geneva, N. Y., a Corporation of New York. Filed Nov. 22, 1928. Serial No. 321,126. 1 Claim. (Cl. 206—44.)



A display case for finger-piece eyeglasses having a pocket comprising side and end walls, a strip attached to one of the side walls and inclined upwardly away from said wall affording a springlike yieldable support on which the lenses are adapted to rest, a retaining wall arranged transversely of the pocket adjacent to said yieldable support, and an overhanging top portion on said retaining wall adapted to overlie the movable guards of an eyeglass when the latter are brought into yieldable engagement with the sides of said retaining wall and thereby to hold the lenses against said yieldable support.

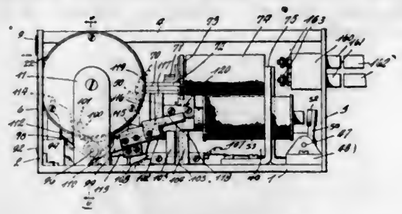
1,809,156. DISPLAY CASE. JACOB P. BERTRAM and ABRAHAM BERLINER, Rochester, N. Y., assignors to Shuron Optical Company, Inc., Geneva, N. Y., a Corporation of New York. Filed Nov. 22, 1928. Serial No. 321,127. 1 Claim. (Cl. 206—44.)



A spectacle case having a pocket comprising side and end walls, cushioned lens-supporting means at one side of the pocket on which the lenses are adapted to rest, a shoulder at the opposite side of the pocket affording means for engaging the ends of the temples to prevent their slipping upwardly, and a retaining device arranged below the lens-supporting means acting to overlie the body portions of the temples and to thereby retain the lenses against said supporting means.

1,809,157. REGISTERING DEVICE AND ANNUNCIATOR. HARRY RUSSELL BRAND, New York, N. Y. Filed Mar. 3, 1921. Serial No. 449,560. 13 Claims. (Cl. 235—92.)

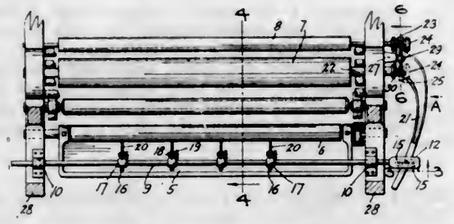
1. In a commodity sale registering machine operable by a controller, in combination, mechanism operated by said controller for registering within the machine a commodity sale and issuing a token, and means operated by the deposit of the token issued by said controller in registering the sale for deleting said registration within said sale registering machine.



1,809,158. ANHYDROUS METAL CHLORIDES AND HYDROGEN CHLORIDE. JOHANNES BRODE and CARL WUNSTER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Mar. 23, 1927, Serial No. 177,835, and in Germany Mar. 23, 1926. 2 Claims. (Cl. 23—94.)

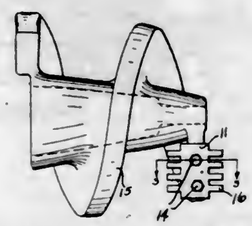
1. The process of producing anhydrous metal chlorides and hydrogen chloride, which comprises acting on material comprising metal oxide with a gas mixture containing carbon monoxide, at least 10 per cent by volume of hydrogen, and chlorine at a high temperature.

1,809,159. INK AGITATING APPLIANCE FOR PRINTING PRESSES. CARLYLE P. CORNELL and JOSEPH E. SLABY, Denver, Colo. Filed Oct. 15, 1928. Serial No. 312,609. 7 Claims. (Cl. 101—363.)



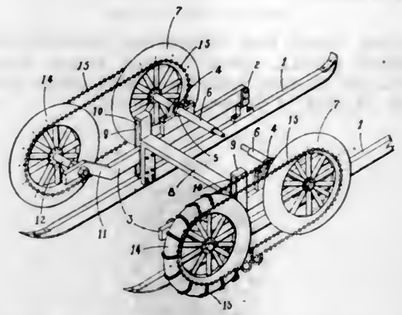
1. In inking mechanism for printing presses, an ink-fountain, a reciprocating inking roller, a stirring appliance for the fountain, and means for the operation of the appliance by the reciprocating movement of the roller.

1,809,160. LAMINATION DISINTEGRATOR. COSTANTE DALLA COSTE, Clayton, Wash. Filed Jan. 20, 1930. Serial No. 422,019. 3 Claims. (Cl. 25—14.)



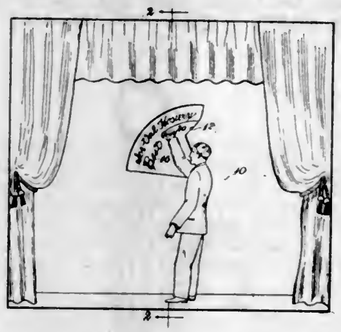
1. In a lamination disintegrator a base, a groove in the base, means for attachment to an auger, and outstanding fingers at right angles to the longitudinal line of the base for the purpose specified.

1,809,161. AUTO SLED ATTACHMENT. JOSEPH THOMAS DUNNIGAN, Detroit, Mich. Filed Nov. 12, 1928, Serial No. 318,816, and in Canada Mar. 28, 1928. 1 Claim. (Cl. 180—5.)



An auto sled for vehicles provided with a pair of runners; a suitable brace connecting said runners; each end of said brace being provided with a guide plate; vertical standards supported from said runners; connecting bars, having their forward ends pivotally connected to the upper ends of said standards; means for connecting the axle housing of a vehicle adjacent the forward ends of said connecting bars; the upward movement of said connecting bars being limited by said guide plates; auxiliary tracting wheels mounted from the rear end of said connecting bars and a traction tread chain extending beltwise around each respective auxiliary wheel and its coacting traction wheel.

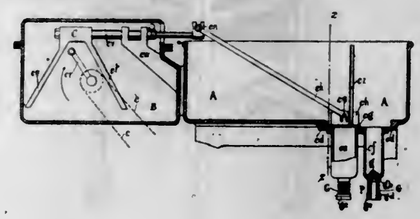
1,809,162. ADVERTISING DISPLAY MECHANISM. PETER A. EGELAND, St. Paul, Minn. Filed May 26, 1930. Serial No. 455,764. 4 Claims. (Cl. 46—40.)



1. A display mechanism, comprising a panel having an opening therein, a background panel spaced rearwardly from said panel and having indicia thereon in registry with the opening in the forward panel, and a rotatable member mounted between the panels and having the periphery thereof in sections spaced at different distances from the center of said rotatable member to disclose successive portions of the indicia upon rotation of said rotatable member.

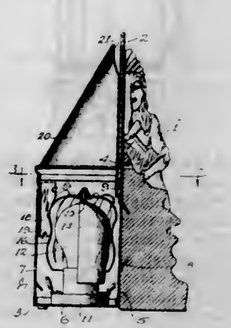
1,809,163. APPARATUS FOR AUTOMATICALLY MEASURING AND DELIVERING MILK OR OTHER LIQUIDS. ARTHUR GUY ENOCK, Wembley Park, England, assignor to Burlectas Limited, London, England. Filed Jan. 2, 1929, Serial No. 329,781, and in Great Britain Jan. 18, 1928. 2 Claims. (Cl. 226—108.)

1. A machine for filling bottles with a measured quantity of liquid comprising a bulk container, a plurality of measures open at the top fitted to the bottom of and opening for their full area directly into the body of the container, a horizontally operating inlet slide valve adapted to slide to and fro over the tops of the measures, air escape pipes mounted on the slide valve, two connecting rods controlling the slide valve, a sliding bar coupled to the



connecting rods, a forked bracket on the sliding bar and a crank to reciprocate the sliding bar to and fro, and outlet valves at the lower end of the measures to operate on the rising of the bottles after the inlet valve has closed to rapidly discharge the liquid into the bottles and evacuate air from the bottles.

1,809,164. LAMP FOR PRODUCING ILLUMINATED MOTION EFFECTS. FRANK GRITT, Indianapolis, Ind., assignor to Gritt, Inc., Indianapolis, Ind., a Corporation of Indiana. Filed Nov. 28, 1930. Serial No. 498,780. 5 Claims. (Cl. 40—40.)

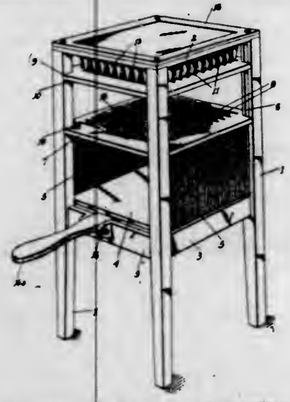


1. A device for producing illuminated motion effects comprising a housing, a sculptured representation of a stationary object adjacent said housing, a light permeable panel adjacent said sculpture, means in said housing for producing a fluctuating light, and a reflector in said housing adapted to reflect the light rays upon said panel to produce an illusory representation of a moving object in complementary visible relation to said sculpture.

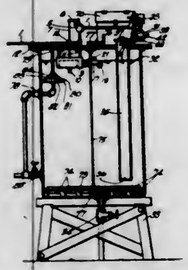
1,809,165. STEAK TENDERER. HARRY H. HART, Sacramento, Calif., assignor to Hart's Lunch, Inc., Sacramento, Calif. Filed Apr. 24, 1929. Serial No. 357,706. 5 Claims. (Cl. 17—25.)

1. A meat tenderer including a meat supporting table provided with a plurality of slots, a plurality of pointed knives alined with the slots at right angles to the table and normally spaced therefrom, a member permanently mounted with the knives arranged to normally guard and

cover the points of the knives and movable relative thereto in a direction parallel to the table, and means for moving the table toward the knives and guard to engage and move the latter to enable the knives to then project through the slots.

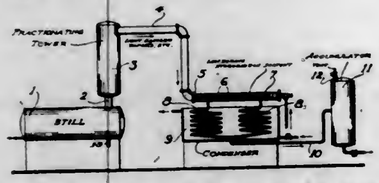


1,809,166. APPARATUS FOR AUTOMATIC WATER SOFTENERS AND CHEMICAL FEEDS THEREFOR. EARL S. HENRY, Medford, Okla. Filed Aug. 20, 1928. Serial No. 300,779. 2 Claims. (Cl. 210—21.)



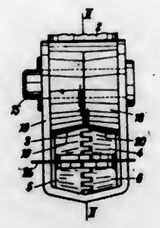
1. A device of the class described, in combination with a sedimentation tank, a float control in said tank for a water supply pipe, a water supply pipe, a coagulant tank and a water motor for measuring a definite amount of water at each stroke and for utilizing the hydraulic pressure of said water as a motive power, of a device of the class described including measuring means for measuring a definite amount of softening materials proportionate to the amount of water supplied with each stroke including a float means therefor, an over center oscillating weight means being adapted for regulating and delivering the proportionate amount of said softening materials and said water to said coagulant tank.

1,809,167. METHOD OF CONDENSING GASOLINE VAPORS. FREDERICK W. ISLES, Bayonne, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Jan. 25, 1927. Serial No. 163,329. 4 Claims. (Cl. 196—8.)



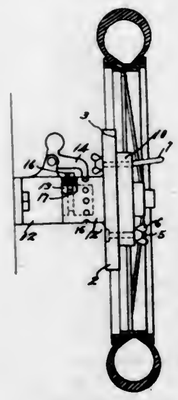
1. In a method of recovering low-boiling volatilized petroleum oils, of the type of light gasoline, the improvement that comprises bringing such oils into intimate contact with a solvent therefor having an average boiling temperature not materially different from that of benzol, cooling, and collecting condensed low-boiling petroleum oils and solvent.

1,809,168. TOOL FOR UPSETTING OR STRETCHING SHEET METAL. HUGO JUNKERS, Dessau, Germany. Filed Dec. 12, 1929, Serial No. 413,604, and in Germany Dec. 18, 1928. 5 Claims. (Cl. 78—61.)



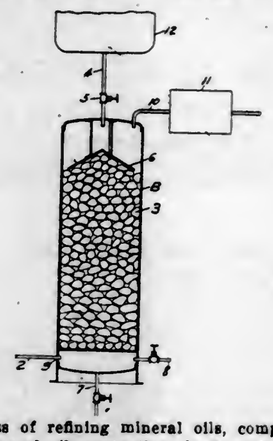
1. A tool for producing a change of form in sheet metal comprising two pairs of jaws, camming faces inclined in opposite directions on the jaws of each pair and camming means adapted to cooperate with said camming faces, said camming means comprising a pair of pivotally connected arms, means on one of said arms, about which said pairs of jaws are fitted to rock, said camming means being arranged on the other arm so as to cooperate with the camming faces of the adjacent pair of jaws, and faces on said first-mentioned arm on which the camming faces of the other pair of jaws are fitted to slide.

1,809,169. ADAPTABLE WHEEL HOLDER. HOMER R. KENNEDY, Los Angeles, Calif. Filed Nov. 5, 1930. Serial No. 493,583. 3 Claims. (Cl. 144—288.)



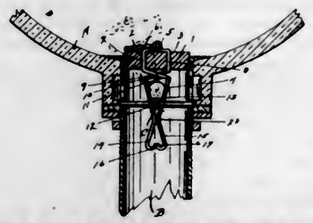
1. A wheel holder adaptable for holding various sizes and types of automotive vehicle wheels and which includes a flat faced rest provided with a rearward boss having a bracket base by which it may be butted against a convenient support and fastened; said rest having a radial row of holes from front to rear end a forwardly projecting hook securable in any of said holes to enter a bolt hole in the hub of the wheel to be hung on the rest and said rest having below the hook adjustable means to pass into a lock bolt hole of the hub and for clamping this to the face of the rest.

1,809,170. PROCESS OF REFINING HYDROCARBON OILS. ARTHUR LACHMAN, Berkeley, Calif., assignor to Richfield Oil Company of California, Los Angeles, Calif., a Corporation of Delaware. Filed May 8, 1929. Serial No. 361,513. 17 Claims. (Cl. 196—86.)



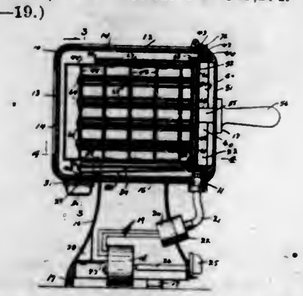
1. A process of refining mineral oils, comprising, vaporizing a mineral oil, contacting the vaporized oil with a water solution of a zinc salt maintained in solution and then condensing purified oil vapor separated from products of reaction and treating agent.

1,809,171. DRAIN PLUG. OLE ALONZO LARSEN, Salt Lake City, Utah. Filed Jan. 22, 1930. Serial No. 422,568. 1 Claim. (Cl. 4—295.)



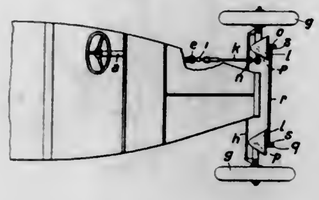
In a closure plug for basins the combination of a solid closure plug having spaced apart holes therethrough; and having a wire bent into a ring and then having the legs thereof passed down through the said holes, and having the ends crossed over, then bent inwardly to near each other and bent outwardly a short distance and curved back inwardly and upwardly to meet at the lower end.

1,809,172. COOKING APPARATUS. GEORGE ROSS LE SAUVAGE, Buffalo, N. Y., assignor to Republic Metalware Company, Buffalo, N. Y., a Corporation of New York. Filed Nov. 13, 1928. Serial No. 319,104. 5 Claims. (Cl. 219—19.)



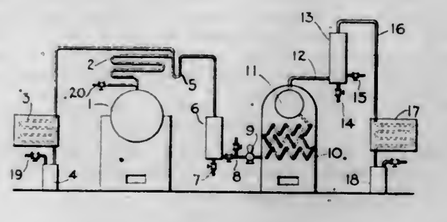
2. A cooking apparatus comprising a casing having a vertical slot in one end, heating means carried by the casing and arranged at each side of the slot, and a grid element having means for supporting the food being roasted, the grid element comprising a body for closing said slot when in one position, and a tray for closing said slot when in another position.

1,809,173. DIRIGIBLE HEADLIGHT. JOHANN LINK, Brachbach/Sieg, Germany. Filed Apr. 21, 1930, Serial No. 446,149, and in Germany Apr. 24, 1929. 3 Claims. (Cl. 240—62.)



1. A mechanism for automatically turning the front head lamp of motor cars into the direction of travel so that when the car is running along in a curve of the road the head lamp on the inner side of the curve oscillates at a greater amplitude than the other head lamp, comprising in combination with the pivot axles of the head lamps, a two armed lever on the pivot axle of one of said head lamps, a one armed lever on the pivot axle of the other head lamp, a fork shaped extension on each of said pivot axle levers, a rigid tube loosely mounted between the free ends of said levers, and a guide element on each end of said rigid tube on which said fork shaped extensions of said pivot axle levers bear.

1,809,174. CONVERTING HYDROCARBONS. NATHANIEL E. LOOMIS, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 5, 1924. Serial No. 711,138. 2 Claims. (Cl. 196—106.)

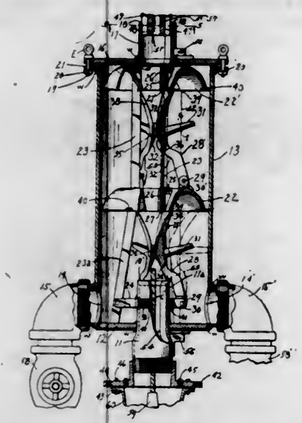


1. Apparatus of the character described, which comprises a still, a reflux condenser for receiving vapors therefrom, means for retaining pressure upon the vapors in the still and reflux condenser, a trap-out connection in the intermediate portion of said reflux condenser, a cracking coil for receiving trapped-out condensate and adapted to operate at higher pressure than the still, a vapor separator in connection with said cracking coil and a condenser in connection with said vapor separator.

1,809,175. SAFETY OIL SAVER. WALTER A. LOOMIS, Whittier, Calif. Filed July 14, 1927. Serial No. 205,757. 13 Claims. (Cl. 166—16.)

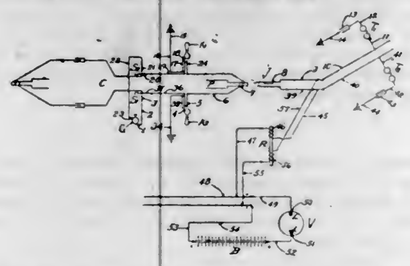
1. In an oil saver: a substantially tight housing provided with an oil outlet opening and with additional

openings through which a cable may pass; outwardly yieldable means, within said housing, for stripping oil



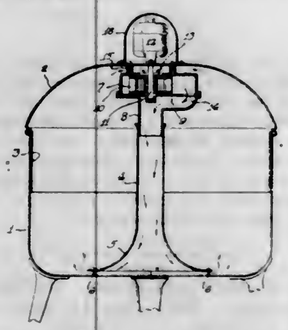
from said cable; and a plurality of downwardly concave annular deflectors spaced apart in said housing and each provided with a central opening.

1,809,176. MEANS FOR SELECTIVELY CONTROLLING RINGING CIRCUITS OF TELEPHONES. CHARLES M. MACGREGOR, Chicago, Ill. Filed Mar. 26, 1930. Serial No. 438,927. 6 Claims. (Cl. 179—84.)



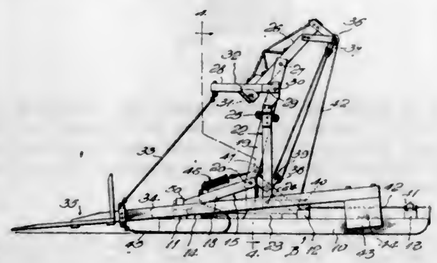
1. Means for selectively controlling the ringing circuits of telephones in a common battery switchboard equipment, said means embodying a relay bridged across the subscriber's line and in series with the battery, and an electrical valve unit between the battery and said relay and in series with the battery.

1,809,177. WASHING MACHINE. CHARLES L. MINER, Detroit, Mich. Filed May 9, 1928. Serial No. 276,240. 2 Claims. (Cl. 68—37.)



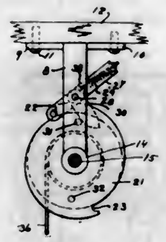
1. A washing machine comprising a cylindrical receptacle, a cover for tightly closing said receptacle, a vertical air tube arranged axially within the receptacle and secured to the bottom thereof, said lower end being flared outwardly toward the side walls of the receptacle with the edge thereof spaced therefrom and from the bottom of the receptacle for directing air passing down the tube laterally toward the outer vertical wall of the receptacle, a blower casing suspended within the cover with a space between the casing and top of the cover providing passageways leading to an air intake opening in the casing, a blower wheel within the casing, a tubular downwardly extending air discharge member on the casing adapted to engage within the upper end of the air tube in the receptacle, a motor mounted upon the cover with its shaft extending downwardly into the blower casing with the blower wheel secured thereto, and a casing for enclosing the motor.

1,809,178. HAY STACKER. JOSEPH F. CHLADEK, Niobrara, Nebr. Filed May 7, 1930. Serial No. 450,490. 3 Claims. (Cl. 214—143.)



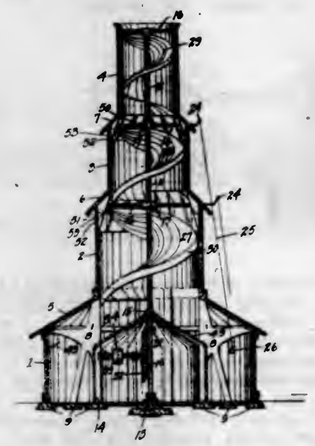
1. A stacker comprising a base, longitudinal arms pivoted to said base and having a stacking head, a standard pivoted to said base to swing longitudinally thereof, a second standard pivoted to said base to swing longitudinally thereof, a sliding connection between the two standards whereby swinging of one will swing the other, a longitudinal lever fulcrumed between its ends to the upper end of the first named standard, a second longitudinal lever fulcrumed at one of its ends to the upper end of said second standard and extending therefrom toward the receiving end of the stacker, lift connections between the other end of said second lever and the aforesaid arms, a sliding connection between one end of the first named lever and the intermediate portion of said second lever, and means connected with the other end of said first named lever for drawing said end toward the base.

1,809,179. LOCKING SHEAVE. TORGILS S. OPHEIM, Long Beach, Calif. Filed Oct. 19, 1928. Serial No. 313,624. 2 Claims. (Cl. 188—82.)



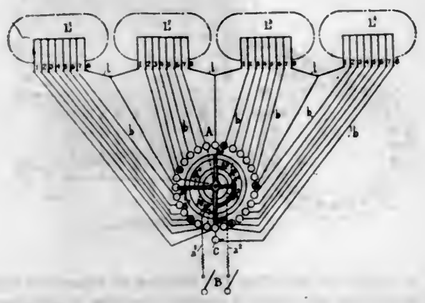
1. In a device of the character described, including a stationary support, a flanged drum rotatably mounted in said support, one of the flanges of the drum having peripheral notches therein, a locking dog pivotally mounted on said stationary support, a pin on the locking dog arranged to engage the notches to prevent rotation of the drum in one direction, a trigger pivotally mounted on the stationary support, a spring connecting said trigger and the locking dog, pins on the flange of the drum, said pins being arranged to engage the trigger and swing the locking dog out of the path of the notches when the drum is rotated in one direction, in the opposite direction of rotation of the drum, said pins engage the trigger to press the locking dog against the flange and means to rotate said drum.

1,809,180. FLUID CURRENT MOTOR. CONSTANT OTTEVAERE, Spokane, Wash. Filed Aug. 6, 1927. Serial No. 211,163. 1 Claim. (Cl. 170—40.)



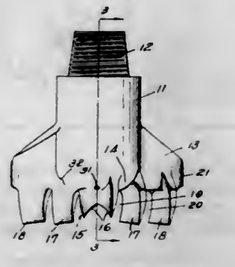
The combination in a motor comprising an air tower having a rotary base cylinder with openings therein and doors to regulate said openings, adjustable guide plates on said cylinder for directing air currents toward said openings, and a series of superimposed stationary cylinders of successively reduced diameters, of a sectional driving shaft journaled within the tower, clutch devices between the sections of said shaft, spiral vanes of successively reduced diameters on said shaft, and power transmitting mechanism operated from said shaft.

1,809,181. ELECTRICAL ILLUMINATING APPARATUS. LOUIS ALFRED RAMSDEN, Manchester, England. Filed Jan. 8, 1930, Serial No. 419,444, and in Great Britain Jan. 16, 1929. 6 Claims. (Cl. 240—3.1.)



1. Electrical apparatus for obtaining clear and/or colored illuminating effects for stage, scenic advertising and other purposes comprising a plurality of multi-contact electric incandescent lamps, a plurality of section filaments connected in series within each lamp, a controller, a cylindrical rotor within the controller, a plurality of contact bars insulated from each other let into the surface of the rotor and a plurality of contact makers bearing on the surface of the rotor each connected to a contact terminal to vary the specific filaments in the circuit.

1,809,182. BIT HAVING TANGENTIAL BLADES. JESSE C. REESE, Montebello, Calif., assignor to Reese Engineering Company Ltd., a Corporation of Nevada. Filed Feb. 18, 1929. Serial No. 340,725. 5 Claims. (Cl. 255—61.)

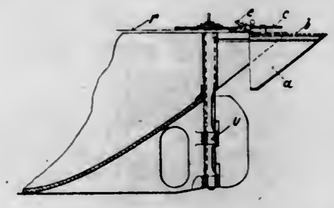


4. A bit of the character described, including: a body having inner and outer tangential blades projecting downwardly in a single diametral plane, said blades having the cumulative length of their cutting edges greater than the diameter of said bit and having the leading ends of their cutting edges a greater radial distance from the axis of rotation than the trailing ends of their cutting edges, said cutting edges being so disposed in a plane perpendicular to the axis of rotation that the paths traversed thereby overlap, and said outer blades having vertical leading edges adapted to cut with a reaming action.

1,809,183. HYDROCARBON OIL OF GOOD NONSMOKE RATING. CLARENCE I. ROBINSON, West New Brighton, N. Y., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 10, 1922. Serial No. 599,967. 3 Claims. (Cl. 196—150.)

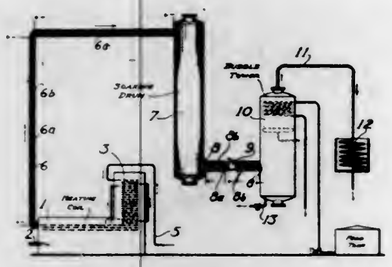
3. A hydrocarbon product having a distillation range between 300° and 575° F., and a non-smoke rating in excess of 125.

1,809,184. RUDDER ARRANGEMENTS FOR SHIPS. OSCAR SCHULTZ, Hamburg, Germany. Filed Mar. 3, 1930, Serial No. 432,876, and in Germany Aug. 3, 1929. 5 Claims. (Cl. 114—162.)



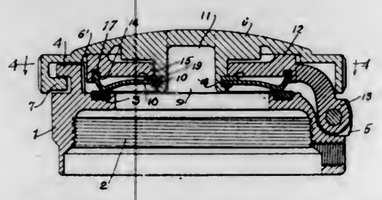
1. A rudder arrangement on ships in which the steering rudder can be exchanged while the vessel is floating, comprising in combination a stern wedge adapted to be pushed out towards the rear in forming a gap for the introduction of a fresh rudder, a locking device adapted to hold said stern wedge in the closing position, and a stern steering wheel mounted on the rudder tube having a slot adapted to register with the gap produced by the pushed out stern wedge when the rudder is in midship position.

1,809,185. PROCESS OF PYROGENETIC DECOMPOSITION OF OILS AND APPARATUS THEREFOR. HAROLD SYDNOR, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 6, 1927. Serial No. 203,856. 5 Claims. (Cl. 196—51.)



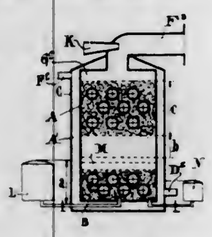
3. Cracking apparatus which comprises a digestion chamber, means for conducting cracked hydrocarbons from the digestion chamber to a point of condensation, means for applying heat to said conducting means.

1,809,186. RADIATOR CAP. KYLE E. STANT, Connersville, Ind., assignor to The Stant Machine Company, Connersville, Ind., a Corporation of Indiana. Filed Nov. 28, 1928. Serial No. 322,493. 9 Claims. (Cl. 220—24.)



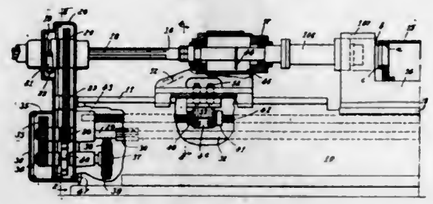
1. In a radiator cap, in combination with a collar, a hinge plate pivoted to said collar a cap having inwardly directed ears pivoted to said hinge plate, and ears extending up from the collar adapted to engage the cap ears to hold the cap in engagement with the collar.

1,809,187. OIL GAS APPARATUS. DMITRY BALACHOWSKY and PHILIPPE CAIRE, Paris, France, assignors to Societe des Brevets Catalex, Geneva, Switzerland. Filed June 29, 1925, Serial No. 40,389, and in France July 12, 1924. 2 Claims. (Cl. 48—95.)



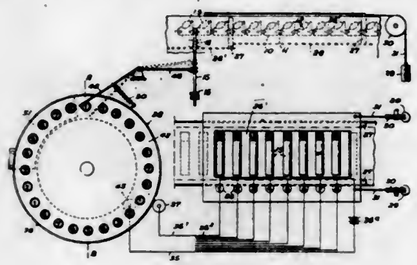
1. Oil gas apparatus, comprising inner and outer casings spaced from each other to provide circulation passage for hot gases at opposite sides of the inner casing, one side of such passage having an inlet for the hot gases, and the other side having an outlet therefor; a nest of tubes of catalytic metal extending through said inner casing and opening at their ends into said passage to conduct said fluids from the inlet side thereof to the outlet side; an oil gas delivery pipe leading from the upper part of the inner casing through the outer casing to the outside; means for supplying a mixture of finely pulverized hydrocarbon liquid and air to the lower part of said inner casing to be divided into fine streams by the tubes and decomposed catalytically to form oil gas by direct contact with the heated surfaces thereof during their passage to the delivery pipe; and means for supplying an aqueous liquid to the said lower part of the inner casing to facilitate the catalytic action.

1,809,188. HORIZONTAL BORING AND TAPPING MACHINE. JOHN S. BARNES, Rockford, Ill., assignor to W. F. and John Barnes Company, Rockford, Ill., a Corporation of Illinois. Filed Jan. 28, 1927. Serial No. 164,226. 29 Claims. (Cl. 10—130.)



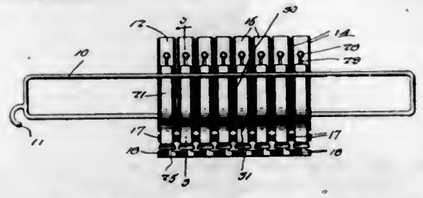
1. In a machine of the character described adapted for performing tapping operations, a bed providing ways thereon, a carriage movable on said ways, a feed screw rotatably mounted in said bed for feeding said carriage, a spindle arranged to carry a tap rotatably mounted in said carriage and arranged to be fed therewith, a driving element in said bed having connection with a source of power to be driven in either direction, transmission gears between said driving element and said feed screw for driving the latter, and other transmission gears between said feed screw and said spindle for driving the latter whereby the driven gear for the spindle is more remote from the driving element than the driven gear for the feed screw, for the purposes described.

1,809,189. APPARATUS FOR TURNING CIGARETTES RIGHT SIDE UP AS THEY ARE FED TO THE PACKING MACHINE. MARTIN BERGER, Freital-Deuben, near Dresden, Germany, assignor to United Cigarette Machine Company Aktiengesellschaft, Dresden, Germany. Original application filed July 1, 1929, Serial No. 375,264, and in Germany May 23, 1928. Divided and this application filed May 29, 1930. Serial No. 457,451. 5 Claims. (Cl. 226—5.)



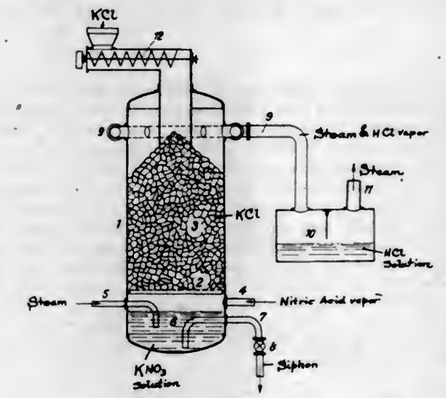
1. A device for enabling the turning of cigarettes right side up as they are fed to a packing machine comprising a frame having an aperture therein through which the cigarettes are observed; and an operating appliance in the frame for enabling the turning of any desired cigarette seen through the aperture, said frame being adapted to move with the cigarettes.

1,809,190. APPARATUS FOR HANDLING ARTICLES FOR COATING. ROBERT F. BRIMER, Washington, D. C. Filed Aug. 17, 1927. Serial No. 213,686. 6 Claims. (Cl. 91—60.)



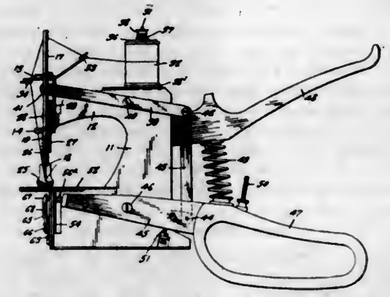
1. An article handling device comprising a frame, a plurality of gripping members slidably mounted on the frame and forming a bearing for partial rotation of the frame, said members being collectively releasable by relative movement between the frame and members.

1,809,191. PROCESS FOR MANUFACTURING NITRATES. JEGOR ISRAEL BRONN, Berlin-Charlottenburg, and GEORG FISCHER, Oberhausen, Germany; said Fischer assignor to said Bronn. Filed Jan. 26, 1928, Serial No. 249,713, and in Germany Jan. 24, 1927. 18 Claims. (Cl. 23—102.)



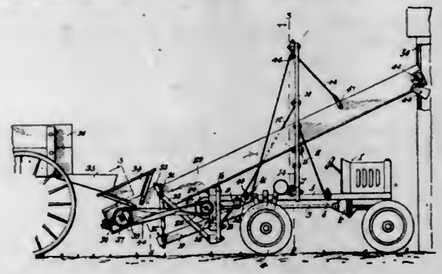
1. Process of manufacturing nitrates comprising treating chlorides of alkali-forming metals with oxides of nitrogen in the presence of copious quantities of steam.

1,809,192. HAND SEWING MACHINE. ROBERT E. CAHILL and JOHN CATERINI, Cleveland, Ohio. Filed July 14, 1928. Serial No. 292,659. 3 Claims. (Cl. 112—169.)



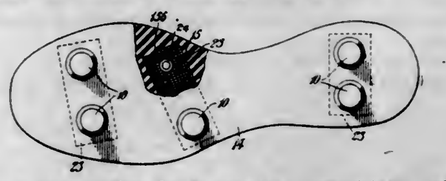
1. In a sewing machine, a plate, an arm extending therefrom, a needle carrying rod mounted for longitudinal reciprocatory movement at the outer end of the arm, a spring influenced rod also mounted for longitudinal movement at the outer end of the arm, a presser foot carried by the spring influenced arm, means cooperating with the presser foot to feed the work, a lower stitch forming mechanism, an operating lever mounted for pivotal movement upon the plate, a rocker arm also pivotally mounted upon the plate and operatively connected to the carrying rod, a rod connecting the operating lever and rocker arm to actuate the latter and operate the needle, and means carried by said lever and engaging both the work feeding means and the lower stitch forming mechanism to operate the same.

1,809,193. COMBINED ELEVATOR AND SAW. HENRY J. H. DUENSING, Odell, Nebr. Filed Mar. 31, 1930. Serial No. 440,469. 1 Claim. (Cl. 143—43.)



The combination with a twin shaft gear assembly, such as a rear-wheel driving mechanism for an automobile, including an elongated tubular axle housing, shafts journaled and enclosed in the housing and extended beyond the ends of the housing, and a differential located between the ends of the housing and connecting the said shafts: of means whereby such an assembly as a discarded rear-wheel driving mechanism, constructed as set forth, may be employed in the making of a portable power plant, said means comprising a main vehicle frame, ground wheels mounted on the main vehicle frame, a substantially vertical auxiliary frame fixed to the main frame to the rear of the ground wheels, an engine on the main vehicle frame, a driving shaft connected to the engine and to said differential, said differential constituting means whereby power is transmitted from the driving shaft to one of the enclosed shafts, and constituting means whereby the housing and the enclosed shafts may be turned in a substantially vertical plane transverse to the length of the vehicle frame, to cause the housing and the enclosed shafts to assume different angles, means for securing the housing fixedly to the auxiliary frame in at least two positions when the housing assumes any of said different angles, the auxiliary frame providing at least two spaced locations for means for holding the other of the enclosed shafts against rotation, when the housing assumes any of said different angles, thereby to render said differential effective to transmit power to the first-specified one of the enclosed shafts, and means on the first-specified one of the enclosed shafts or utilising the power transmitted to it.

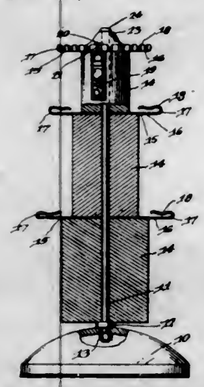
1,809,194. BOOT AND SHOE. FREDERICK WILLIAM EAST, Petersfield, England, assignor to I. T. S. Rubber Company Limited, Petersfield, England. Filed Dec. 11, 1929. Serial No. 413,366. 3 Claims. (Cl. 36—59.)



1. A boot or shoe for sports wear, comprising a sole formed of vulcanized rubber, a wire gauze reinforcement

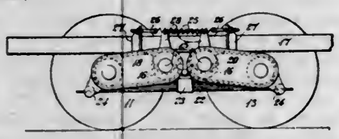
embedded in the said sole, screw-threaded metal ferrules molded into the said sole, such ferrules projecting downwardly through holes in the gauze reinforcement and having flanges extending above the said reinforcement, the said flanges being formed with downwardly extending spikes for engaging with the wire gauze reinforcement, and studs provided with screwed shanks for engaging with the said ferrules.

1,809,195. STAMP RACK. RICHARD EVANS, Highland Park, Ill. Filed Feb. 8, 1928. Serial No. 252,832. 2 Claims. (Cl. 211—39.)



1. A supporting member comprising a relatively flat plate having a plurality of inwardly extending recesses provided on the periphery thereof defining lugs, said lugs having portions bent upwardly and rearwardly so as to extend parallel but spaced from portions of said lugs between said recess whereby to provide resilient clips between which headed supporting members may be inserted whereby the members attached to said supporting members will be clamped against the lower side of said lugs by the upward action of the rearwardly bent portions of said lugs on the heads of said headed supporting members.

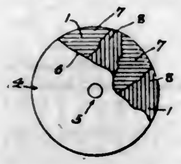
1,809,196. DRIVING AND SPRING SUSPENSION OF VEHICLES. FRANK SMEDLEY FARNSWORTH, Derby County, England. Filed Oct. 2, 1928, Serial No. 309,807, and in Great Britain Oct. 8, 1927. 9 Claims. (Cl. 180—22.)



1. A driving and spring suspension for vehicles having four driving road wheels, wheel carrying members mounted for pivotal movement with respect to the vehicle frame, a wheel carried by the free end of each member, a load carrying spring connected with the vehicle frame and cooperating with each pair of driving wheels below the mounting of such wheels in the wheel carrying members, and a reaction spring connected to the frame and to each of the wheel carrying members, said latter connections being in line with the pivotally supported members.

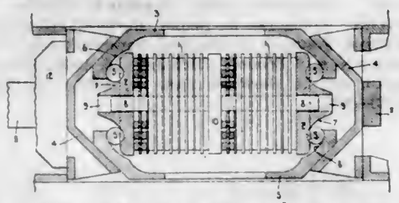
1,809,197. METHOD OF PRODUCTION OF GENERATOR ARMATURES. WILLIAM FENDRICH, Jr., Upper Montclair, N. J. Filed Aug. 6, 1929. Serial No. 383,841. 14 Claims. (Cl. 29—155.5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. The method of producing an armature of substantially uniform permeability which consists of aligning a sheet of metal with the grain in a predetermined position relative to the bed of a punch press, aligning the die and punch with the keyway of said die and punch at an angle



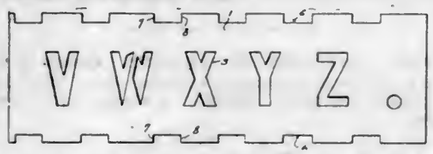
to the grain of the metal, punching a series of plates from said sheet metal, reversing alternate plates of said series and fixing said series upon a shaft.

1,809,198. CENTRAL BUFFING AND DRAWGEAR FOR RAILWAY VEHICLES. RICHARD THOMSON GLASCODINE, London, England. Filed Sept. 19, 1929, Serial No. 393,726, and in Great Britain July 19, 1929. 3 Claims. (Cl. 213—37.)



1. In central buffing and draw gear, a draw bar yoke, and friction draft gear embraced by said yoke comprising end pressure plates with inclined faces, friction wedge members located between said end pressure plates and having inclined ends that bear on the inclined faces of said end plates so that the said members are caused to move towards one another upon movement of the said end plates towards one another, an india-rubber spring arranged between said friction wedge members, bearing plates located one at each end of said india-rubber spring, means whereby the said bearing plates are moved towards one another upon the said friction members being moved towards one another, and an axial rod supported at its ends by said bearing plates and upon which said india-rubber spring is mounted.

1,809,199. STENCIL. ROBERT DAVID GOULD, Detroit, Mich. Filed May 24, 1930. Serial No. 455,406. 4 Claims. (Cl. 101—127.)



1. A stencil plate having openings defining characters and provided in its edge with notches alternating with the character-forming openings, each notch having oppositely disposed transverse right-hand and left-hand edges, the notches being of such length and being so disposed with respect to the character-forming openings that when the plate is shifted to bring one of the right-hand edges into the place frmerly occupied by one of the left-hand edges, the stenciled characters will be spaced properly from each other.

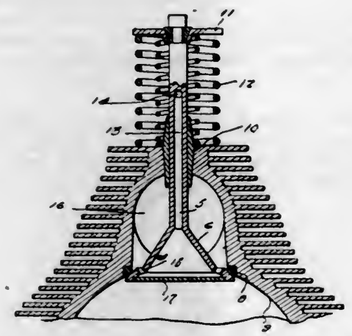
1,809,200. UNLOADING APPARATUS. ARTHUR L. GUILLE, Portsmouth, Va., assignor of one-half to H. R. Leonard, Norfolk, Va. Filed Nov. 29, 1927. Serial No. 236,510. 7 Claims. (Cl. 198—53.)

1. Apparatus of the character described comprising an endless conveyor having a substantially horizontal portion the upper and lower runs of which are adapted to be arranged respectively above and below a pair of vehicle rails, the upper run of the conveyor being adapted to receive material discharged from a hopper of a car arranged on the rails, said conveyor having detachable portions to permit it to be removed from above the rails, a pair of



spaced supports extending transversely of the rails and resting thereon, and a plurality of rollers journalled at their ends in said supports and adapted to support the upper run of the conveyor for movement across the rails, said rollers being arranged at least partially below the plane of the tops of the rails.

1,809,201. EXHAUST VALVE. JOHN HOWARD HIGGINS, Amarillo, Tex. Filed Mar. 23, 1929. Serial No. 349,412. 1 Claim. (Cl. 123—177.)



A valve for combustion engines comprising a hollow valve stem having an air intake port adjacent its outer end, a hollow conical head at the inner end of the stem providing an air chamber therein communicating with the hollow stem, the lower edge of said head being off-set outwardly providing a horizontal shoulder surrounding the head, said shoulder having a plurality of discharge ports at uniformly spaced intervals, said ports being inclined towards the walls of the exhaust manifold of the engine, whereby the air discharged from said ports is deflected by the walls of the manifold, causing a circulation of air within the manifold.

1,809,202. ELECTRIC TERMINAL CONNECTER. CHARLES E. HOOVER, Lancaster, Pa. Original application filed Feb. 27, 1928, Serial No. 257,354. Divided and this application filed June 28, 1929. Serial No. 374,355. 2 Claims. (Cl. 173—259.)

1. A cable-to-post connecter comprising a sleeve for attachment to the end of a cable, a clamp jaw fixed thereto, a separable jaw associated with said fixed jaw, said jaws having opposing post-gripping faces curved on a plurality of centers to adapt said faces to terminal posts of different diameters, said jaw having inter-engaging bearing means at the end remote from said gripping faces, and a bolt with nut passing loosely through apertures in said jaws at a place for securing the same together between the ends of said jaws, said inter-engaging bearing means

comprising a male and female bearing having a rocking and sliding adjustable movement whereby said separable jaw may slide longitudinally on said fixed jaw, and may



rock laterally and longitudinally to accommodate itself to battery posts of varying diameters and shapes, substantially as and for the purposes described.

1,809,203. PRIME MOVER. ALFRED A. HOVSEPIAN, Del Rey, Calif. Filed Sept. 29, 1930. Serial No. 485,253. 3 Claims. (Cl. 185—37.)



1. A prime mover comprising a spindle, an eccentric plate mounted on one end of the spindle, a drive shaft journaled on the forward end of said spindle and having a crank thereon journalled to the eccentric plate, and twistable means having one end supported on the spindle and the other end associated with the eccentric plate for causing rotation of the drive shaft.

1,809,204. HYDROGENATED HYDROXY-DERIVATIVES OF THE DIPHENYL SERIES AND PROCESS FOR MAKING. ERNST KORTEN, Fechenheim, near Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 9, 1928, Serial No. 268,810, and in Germany Apr. 12, 1927. 8 Claims. (Cl. 260—154.)

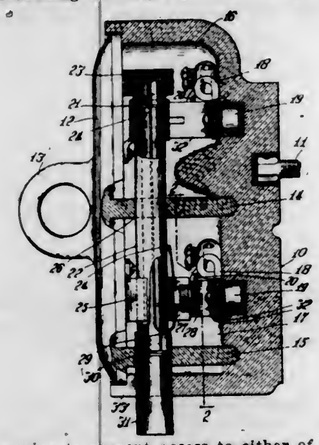
1. A process which comprises subjecting condensation products corresponding to the general formula

wherein the R's mean benzene nuclei and R_1 means a hydrogenated benzene nucleus, which nuclei all may contain further substituents, to a distillation in vacuo at temperatures of about 200° C.

1,809,205. EXPULSION FUSE. WILLIAM D. KYLE, Milwaukee, Wis., assignor, by mesne assignments, to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 18, 1929. Serial No. 347,887. 20 Claims. (Cl. 200—133.)

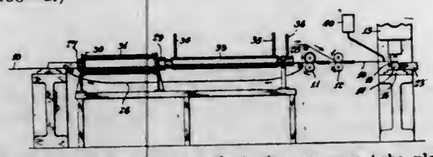
1. A device of the type described, comprising in combination a fuse box, means including a barrier plate providing a substantially tight closure for said box, a second barrier plate extending across said box providing a compartment separated from the remainder of the box, line terminals in said box at opposite sides of said second barrier

plate, a fuse electrically connecting said terminals, and means surrounding the major portion of the fuse within



the box serving to prevent access to either of said terminals by the gases generated by the rupture of said major portion of the fuse.

1,809,206. APPARATUS AND PROCESS FOR THE MANUFACTURE OF VACUUM TUBE ELECTRODES. ALBERT LOPPACKER, Bloomfield, N. J., assignor, by direct and mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed May 29, 1926. Serial No. 112,461. 9 Claims. (Cl. 153—2.)

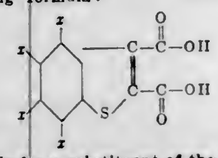


1. In apparatus for manufacturing vacuum tube plates, a press for punching the plates from a strip of material, a conveyor, means for automatically discharging the plates from the press onto the conveyor without manual intervention, and heating and cooling chambers surrounding the conveyor.

2. In the process of manufacturing vacuum tube plates, the steps of forming plates, feeding the formed plates onto a conveyor, and moving the conveyor through a heating chamber containing an atmosphere of hydrogen and thence through a cooling chamber containing an atmosphere of hydrogen.

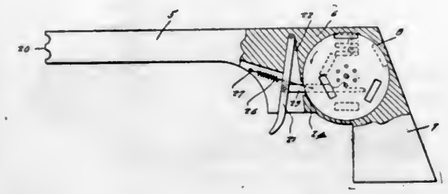
1,809,207. CONDENSATION PRODUCTS AND DYESTUFFS FROM THIONAPHTHENE-2.3-DICARBOXYLIC ACIDS AND PROCESS FOR PREPARING THE SAME. FRITZ MAYER, Frankfort-on-the-Main, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 5, 1926, Serial No. 146,574, and in Germany Nov. 10, 1925. 9 Claims. (Cl. 260—53.)

1. The process for preparing condensation products which comprises treating the anhydride of a compound of the following formula:



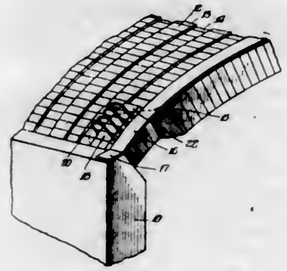
wherein x stands for a substituent of the group consisting of hydrogen, halogen, alkyl, and alkoxy, with an aromatic hydrocarbon in the present of aluminum chloride.

1,809,208. REPEATING GUN FOR SHOOTING ELASTIC BANDS. JESSE R. MCFARLAND, Oak Creek, Colo., assignor of one-half to Joseph W. McCune, Oak Creek, Colo. Filed Mar. 17, 1930. Serial No. 436,589. 5 Claims. (Cl. 124—14.)



2. In a repeating gun for shooting elastic bands, a gun comprising a barrel and a stock, a plurality of bell crank levers pivoted intermediate their ends through the stock on opposite sides of the stock, each of the bell crank levers including an arm for releasable engagement with the inner end of a rubber band, the other end of the band being adapted to engage the forward end of the barrel, a movable trigger mechanism cooperating with said bell crank lever for normally maintaining said arm against release, and a rotatable member engaging said bell crank lever and operating in conjunction with said trigger mechanism for positively preventing the release of more than one band with each movement of the trigger.

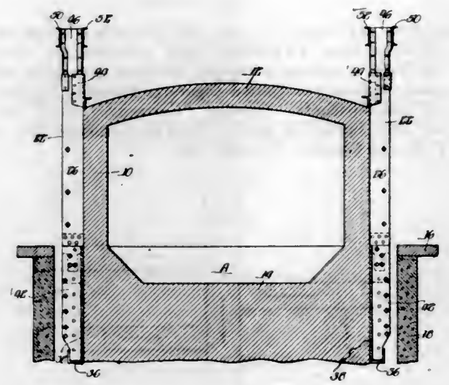
1,809,209. METHOD OF SUPPORTING, CONSTRUCTING, AND REPAIRING FURNACE ROOFS. JOHN P. MCLIMANS, Duluth, Minn. Filed June 25, 1927. Serial No. 201,487. 5 Claims. (Cl. 72—67.)



5. An apparatus for use in repairing furnace roofs comprising, in combination, a brace adapted to span the roof, said brace being of a shape conforming substantially to the roof to be repaired, and a plurality of loop shaped members having inwardly extending end portions arranged to engage within the side walls of bricks forming the repair course, said members being provided with shoulder portions for engaging the brace whereby the bricks are supported during the repair operation.

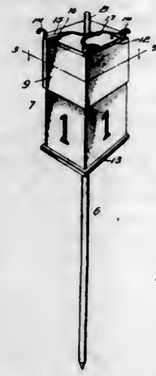
1,809,210. SECTIONAL BUCKSTAY. JOHN P. MCLIMANS, Duluth, Minn. Filed Jan. 30, 1929. Serial No. 336,252. 7 Claims. (Cl. 263—46.)

1. A furnace construction comprising, in combination, a plurality of side walls, and a plurality of vertically extending buckstays associated with the side walls and arranged to reenforce the same, the lower portions of the buckstays



being rigidly affixed in place and the upper portions thereof being separable from the lower portions to permit ready removal.

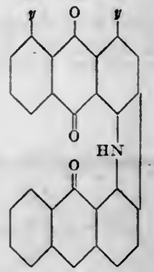
1,809,211. FOOTBALL DOWN SIGNAL. SAMUEL BUCHANAN MCMASTER, Columbia, S. C. Filed Feb. 27, 1931. Serial No. 518,820. 3 Claims. (Cl. 40—65.)



1. A football down signal or marker embodying a staff, a central body member mounted on the staff, this body member being rectangular in horizontal section, and having a flange at its lower end and a flange at its upper end, the four faces of this central body member being provided around its lower portion with a row of numerals 1 and its upper portion being provided with a row of numerals 4, three rectangular shields slidably mounted on this central body member, the outer shield having its four outer faces blank and the two inner shields being provided respectively upon their four faces with the numerals 2 and the numerals 3, and means for holding each of the three shields in their upper position to thus obscure all the numerals except the row of numerals 1 on the central member, whereby the shields may be dropped one by one as the game progresses.

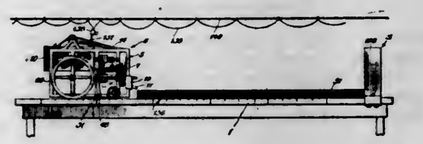
1,809,212. NEW AMINO-1.1'-ANTHRIMIDCARBAZOLS. WALTER MIEG, Opladen, and FRITZ BAUMANN, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 15, 1928. Serial No. 262,040. 2 Claims. (Cl. 260—46.)

1. Compounds of the probable general formula:



wherein at least one y stands for an amino group, x stands for a hydrogen atom, which may be replaced by an amino group, said products being yellowish brown to dark grey powders soluble in strong sulfuric acid with brown to olive colorations; dyeing cotton from the hydrosulfite vat brown to corinth shades.

1,809,213. CLOTH HANDLING MACHINE. RUDOLPH A. OESMAN, Brooklyn, N. Y. Filed Sept. 18, 1926. Serial No. 136,366. 37 Claims. (Cl. 270—30.)



1. In a cloth handling machine, a table, a cloth end holding mechanism, and means having movement on said table for feeding cloth ends and operating said mechanism to grip said ends, adapted to automatically lay and cut predetermined independent length of cloth on said table.

1,809,214. VITRIFIED ARGILLACEOUS PRODUCT. WILLIAM B. PINE, Okmulgee, Okla., and JOSEPH B. SHAW, State College, and MYRIL C. SHAW, Pittsburgh, Pa., assignors of twenty per cent to said Joseph B. Shaw, twenty per cent to said Myril C. Shaw, and sixty per cent to said Pine. Original application filed Nov. 4, 1929, Serial No. 404,863. Divided and this application filed July 16, 1930. Serial No. 468,452. 9 Claims. (Cl. 72—40.)

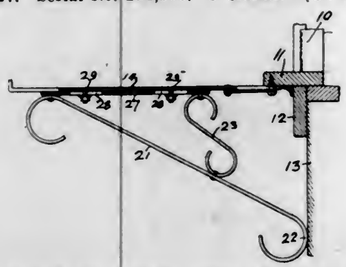
6. A vitrified argillaceous product in which the percentage of easily fusible constituents is too low to constitute a porcelain, and having about 10 to 30 per cent of binding material which has been fused and a percentage of pores less than the percentage of pores in any vitrified argillaceous product which could be produced from the same argillaceous material by wet molding and vitrifying by the standard method heretofore employed.

1,809,215. PROCESS OF MAKING VITRIFIED ARGILLACEOUS PRODUCTS. WILLIAM B. PINE, Okmulgee, Okla., and JOSEPH B. SHAW and MYRIL C. SHAW, State College, Pa., assignors of twenty per cent to said Joseph B. Shaw, twenty per cent to said Myril C. Shaw, and sixty per cent to said Pine. Filed Nov. 4, 1929, Serial No. 404,863. Renewed Mar. 21, 1931. 14 Claims. (Cl. 25—156.)

1. A process which comprises heating an argillaceous material selected from the herein described group con-

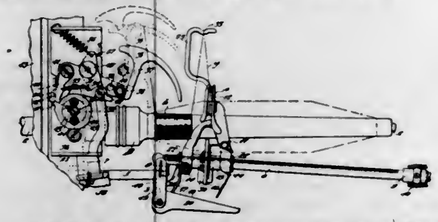
sisting of natural clays, shales and mixtures thereof, to a temperature which while below the P. C. E. value of the particular argillaceous material, is substantially above the temperature of incipient vitrification thereof, applying molding pressure to said material while at said temperature, to directly form a vitrified product.

1,809,216. ADJUSTABLE WINDOW BOX BRACKET. FELIX H. QUANDT, Rolling Prairie, Wis. Filed Oct. 5, 1927. Serial No. 224,108. 3 Claims. (Cl. 248—19.)



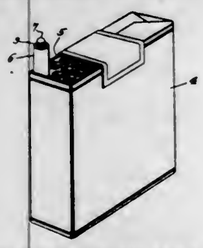
1. A window box bracket, constituted as a horizontal bar having its inner end bifurcated and widened to permit attachment to the underside of the plate of the ledge of a window at separated points to stabilize the structure, and a diagonal brace supporting the said bar at its outer end and provided with a heel, with means on the bar to permit adjustment of the heel in relation to the point of attachment of the bracket.

1,809,217. BUNCH-BUILDER FOR WINDING MACHINES. JOSEPH M. QUILL, Lowell, Mass., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed July 8, 1927. Serial No. 204,358. 20 Claims. (Cl. 242—27.)



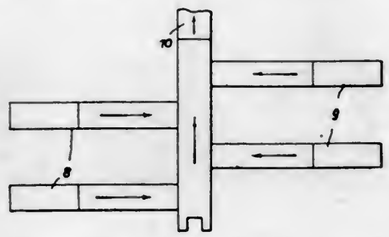
1. In a winding machine, the combination of means for initially winding yarn on a bobbin with a restricted traverse to build a bunch, means for laying the yarn with a longer traverse to build the service winding, and mechanically-actuated means operated upon the completion of the bunch to shift the yarn from the bunch-winding means to the service-winding means.

1,809,218. CIGARETTE GRASPER. CRAIG CLAYTON RIDDELL, Newton, Ontario, Canada. Filed Feb. 25, 1930. Serial No. 431,186. 1 Claim. (Cl. 131—52.)



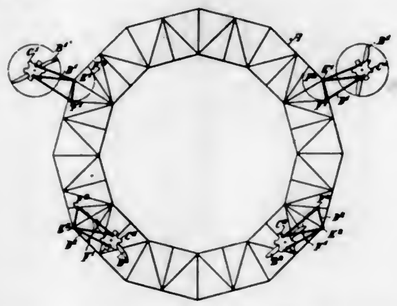
A cigarette comprising a wrapper and a tobacco filler, a flexible tab on one end of the wrapper, adapted for folding over on the end of the filler, said flexible tab formed integral with the wrapper and being segmental in shape, and having perforations along the chorded edge in alinement with the edge at one end of the wrapper.

1,809,219. APPARATUS FOR USE WITH PACKING MACHINES FOR FEEDING AND ADJUSTING CIGARETTES. ARTHUR RITSCHER, Dresden-Laubegast, Germany, assignor to United Cigarette Machine Company, Aktiengesellschaft, Dresden, Germany. Filed Mar. 26, 1930, Serial No. 439,169, and in Germany Mar. 22, 1929. 11 Claims. (Cl. 226—5.)



1. Apparatus for adjustably feeding cigarettes from a cigarette-making machine to a packing machine comprising in combination with the conveyor running from the cigarette-making machine to the packing machine two conveying means arranged on opposite sides of said conveyor, and two adjusting apparatus, each one being connected and cooperating with one of said conveying means and including means adapted to engage the seam of the cigarettes lying with the seam upwards for tilting them.

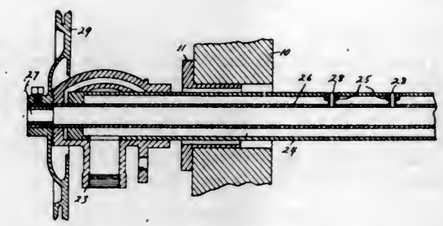
1,809,220. DRIVING GEAR FOR AIRSHIPS OF THE RIGID TYPE. JOHANN SCHUETTE, Lichterfelde-Ost, near Berlin, Germany. Filed Nov. 2, 1929, Serial No. 404,318, and in Germany Nov. 19, 1928. 5 Claims. (Cl. 244—6.)



1. Driving gear for air-ships of the rigid type, comprising a supporting arm of the cantilever type pivotally mounted in the annular framework of the body of the air-ship and adapted to be swung out into an outside position, and returned into an inside position within the framework of the body of the air-ship, and a motor and propeller supported by the said arm.

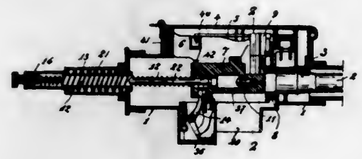
1,809,221. BOILER CLEANER. NORMAN L. SNOW and CLARENCE F. HIRSHFELD, Detroit, Mich., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 22, 1924. Serial No. 739,128. 17 Claims. (Cl. 122—392.)

1. In a boiler cleaner, a cleaning fluid supply pipe, a blower pipe, means for entraining a second fluid with the cleaning fluid and conveying the mixture to the blower pipe, said means including an extension on said blower pipe having a portion surrounding said supply



pipe but spaced therefrom to provide a passage for the said second fluid around said supply pipe, and means for rotating said blower pipe and starting the flow of the cleaning fluid in timed relation.

1,809,222. AUTOMATIC FIREARM HAVING A RECOILING BARREL AND AN AMPLIFYING PUSH LEVER. CESARE SONCINI, Brescia, Italy, assignor to Societá Italiana Ernesto Breda Per Costruzioni Meccaniche, Milan, Italy. Filed Feb. 24, 1928, Serial No 256,679, and in Italy Mar. 5, 1927. 12 Claims. (Cl. 42—4.)

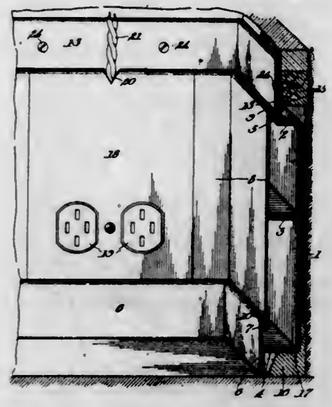


1. In a machine gun, a breech casing; a recoiling barrel; a sliding bolt having a flat on its under face; a carriage fixed to the breech end of the barrel; and an accelerator lever embodying two angularly-arranged arms mounted at the apex of the angle to rock about a pivot fixed to said casing, one arm projecting upwardly into the path of the carriage for coacting therewith and with said flat, and the other arm projecting toward said carriage and having a constant sliding engagement with the same.

10. In a machine gun of the belt-feed type, a breech casing; a recoiling barrel; a sliding bolt having a cam groove in its upper face; a rocking, pivotally-mounted feed lever for moving the belt step by step and operated indirectly by the bolt during its reciprocating movement; and a transmission connection between the bolt and the feed lever for effecting such indirect operation of said lever; such connection embodying an oscillating wing, and a vertical pivot on the breech casing and about which the wing swings, said wing having a recess to receive the pivot of the feed lever and also having a pin that projects into the cam groove in the bolt.

1,809,223. COMBINED CONDUIT AND MOLDING. ARMEN H. TASHJIAN, Cleveland, Ohio. Filed May 15, 1928. Serial No. 277,991. 3 Claims. (Cl. 247—3.)

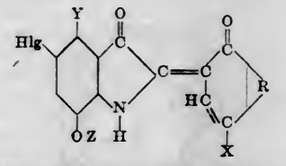
1. A combined conduit and molding, comprising a housing member forming a raceway for electric conductors, said raceway having a back, a bottom and a top, the lower portion of said housing member being bent upon itself to form said bottom and a finish molding, a face plate for said housing member, one edge of said plate provided with a reentrant bend, means carried at the top of said housing member for engagement with the bend of said face plate, and said finish molding provided with a reentrant bend forming a channel to receive the oppo-



site edge of said face plate, whereby the face plate is held in predetermined separable relation to said housing member.

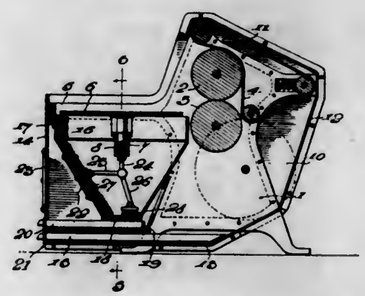
1,809,224. VAT DYESTUFFS. KARL THIESS and THEODOR MEISSNER, Frankfort-on-the-Main-Hochst, and WERNER ZERWECK, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 23, 1929, Serial No. 380,455, and in Germany Aug. 27, 1928. 5 Claims. (Cl. 260—49.)

1. As new products, compounds of the following probable formula:



wherein R stands for a naphthylene or phenylene residue, X for hydrogen or halogen, Y and Z for alkyl and Hlg for halogen, being vat dyestuffs of very good fastness properties.

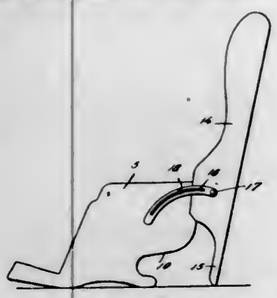
1,809,225. FLOUR SAVING MEANS FOR DOUGH BRAKES. CHARLES P. WAGNER and WILTZ W. WAGNER, New Orleans, La. Filed Jan. 6, 1931. Serial No. 506,987. 10 Claims. (Cl. 107—7.)



2. In a machine of the character described wherein is provided a dough receiving turntable, a waste dusting

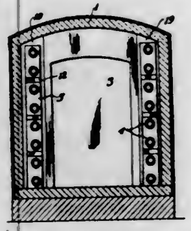
flour hopper mounted beneath the turntable, said hopper having a screen bottom, a receiving box into which said hopper delivers through said screen, and a waste flour receiving and removing drawer mounted in and removable from the box.

1,809,226. COMBINATION CHAIR AND BED. ARTHUR WALTER, Liverpool, N. Y. Filed May 7, 1930. Serial No. 450,498. 4 Claims. (Cl. 155—45.)



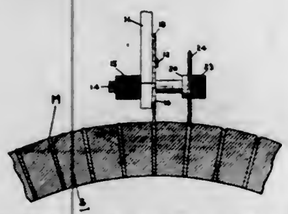
1. A device of the class described comprising a pair of side panels disposed in spaced parallel coextensive relationship to each other and adapted to rest on the floor or the like to rise vertically therefrom, a seat panel extending between the side panels, a back panel hinged to the rear edge of the seat panel, side panels on the back panel having extensions to engage the first mentioned panels to hold the back panel in coextension of the seat panel and for engagement with the floor to retain the back panel at an angle to said seat panel.

1,809,227. METALLIC RESISTOR ELEMENT. THADDEUS F. BAILY, Alliance, Ohio. Filed Mar. 11, 1926. Serial No. 93,893. 7 Claims. (Cl. 201—63.)



1. A resistor element comprising a plurality of straight, horizontally disposed portions, connections at alternate ends of the straight portions means connecting the straight portions with the connections, and means for supporting said connections upon each other and insulating the connections from each other.

1,809,228. COMMUTATOR MICA UNDERCUTTING TOOL. WALTER T. BALLOU, Los Angeles, Calif. Filed Oct. 30, 1929. Serial No. 403,557. 5 Claims. (Cl. 145—31.)

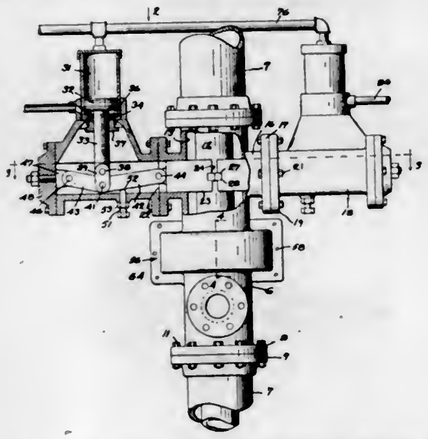


1. A mica undercutting tool comprising a shank, means providing a lip on the shank, a blade presenting saw teeth positioned on the shank having a notch adapted to receive the lip, and additional means for fastening the blade to the shank, said additional means providing guide means in spaced parallel relation to the blade.

1,809,229. ELECTRIC DISCHARGE TUBE. ALBERT CHARLES BARTLETT and JOHN WALTER RYDE, Wembley, England. Filed Nov. 17, 1927, Serial No. 234,030, and in Great Britain Nov. 25, 1926. 3 Claims. (Cl. 250—27.5.)

3. Cathodes for electric gas discharge tubes comprising a nickel cathode member coated with a reddish brown compound of barium, nickel and oxygen.

1,809,230. FIRE AND BLOW-OUT CONTROL. LOUIS M. BETTINGER, Downey, Calif., assignor of one-fourth to Rutland H. Baker, Downey, Calif. Filed Jan. 21, 1929. Serial No. 335,629. 8 Claims. (Cl. 137—139.)

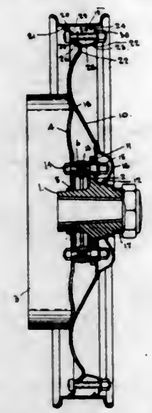


8. In a well control device, a housing, a gate slidable therein, a pair of pivotally joined links, one pivoted to said gate and the other to the housing, means for varying the angularity between said links to effect sliding of the gate, and a stop carried by said housing and adapted to limit further movement of said links with the gate at its extreme extended position and with the pivoted connection of said links to each other disposed beyond the plane including the pivotal connection of the links to the gate and to the housing.

1,809,231. VEHICLE WHEEL. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Aug. 21, 1922. Serial No. 583,339. 5 Claims. (Cl. 301—6.)

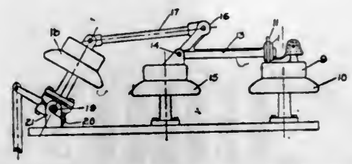
1. In a vehicle wheel, the combination with the hub, of a member upon and forming a unit with said hub, a disk having a portion spaced from said member and a second portion spaced radially outward from said first-mentioned portion and in contact with said member, means for detachably securing said first mentioned portion to said hub, and an end plate detachably secured to said hub independently of said securing means and contacting with said disk radially beyond said hub for reinforcing the inner portions of the disk.

5. In a vehicle wheel, the combination with a hub, of a member mounted upon said hub, a disk having a portion engageable with said hub and spaced from said member and a second portion spaced radially outward from said first mentioned portion and in contact with said member, means for detachably securing said first mentioned portion to said hub, an end plate having a portion sleeved upon said hub and abutting said first mentioned portion of said disk, said end plate having



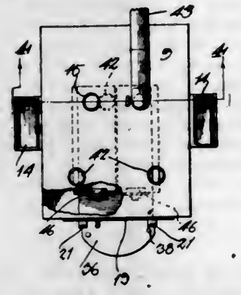
another portion contacting with said disk beyond said hub and concealing said securing means, and means other than the means aforesaid for detachably securing said plate to said hub.

1,809,232. ELECTRIC SWITCH. AUGUSTUS JESSE BOWIE, San Francisco, Calif. Filed Jan. 26, 1925. Serial No. 4,825. 6 Claims. (Cl. 200—48.)



1. In an electric switch a blade, a clip contacting with said blade for carrying current therefrom, in combination with means for allowing an initial motion of said blade and said clip without substantial change of contact surfaces, and means actuated by the initial motion of said blade and said clip for reducing the pressure between said blade and said clip, thereby effecting the ready release of said clip.

1,809,233. HOT AIR FURNACE. JOSEPH CAMIRÉ, Central Falls, R. I. Filed Sept. 12, 1929. Serial No. 392,161. 1 Claim. (Cl. 126—99.)



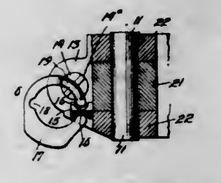
A hot air heater of the character described, comprising a sheet metal hot air casing constituting a portable unit having air inlets at the bottom thereof, and air outlets at the uppermost portion thereof, a fire box removably mounted in the hot air casing, means for feeding air to the fire box, including an opening in one wall thereof communicating with an opening in the hot air casing, a flue chamber mounted on the fire box, comprising an elongated box-like structure having an internal baffle plate extending centrally in respect thereto, and means for allowing the gases of the fire box to pass through the flue chamber to the exterior of the hot air casing.

1,809,234. CELLULOSE ESTER COMPOSITION. HANS T. CLARKE, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 9, 1929. Serial No. 338,889. 17 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose ester and a compound formed between chloral and a material selected from the group including an alkyl, alkoxy, and amino substituted carboxylic amides.

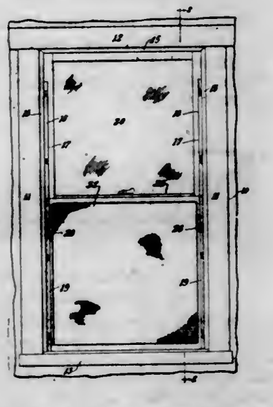
17. A composition of matter comprising cellulose acetate and a compound formed between chloral and urea.

1,809,235. SEAL PRESS. EMIL DIETZE, Richmond Hill, N. Y., assignor to American Casting and Manufacturing Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 16, 1930. Serial No. 421,087. 1 Claim. (Cl. 81—9.1.)



In a seal press of the class described for impressing ring seals provided with a gap in their peripheries to expose two ends, the combination with the fixed and movable jaws, each having a die, and leverage for actuating the movable jaw, of means adjacent to the dies for positioning the seal accurately between the dies, consisting of a post having an inverted V-shaped upper portion and vertical side grooves, which receive the open portions and the two ends of the seal.

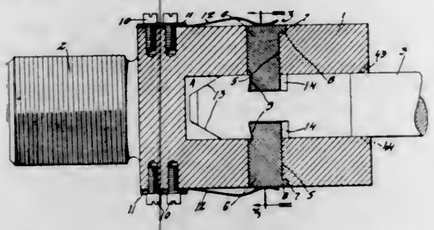
1,809,236. GUIDE FOR SLIDABLE WINDOW SCREENS. HARRY H. EVERHARD, Canton, Ohio. Filed June 28, 1930. Serial No. 464,576. 3 Claims. (Cl. 156—14.)



2. For use with a window having upper and lower sashes and a window screen for the lower sash, a guide

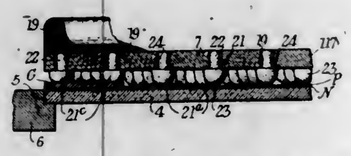
member for the screen adapted to extend substantially throughout the height of both sashes including upper and lower channel portions, an inside flange for the upper and lower channel portions, an outside flange for the lower channel portion located in parallel relation to the inside flange, an outside flange for the upper channel portion laterally offset from the inside flange having its lower end extending to a point adjacent the upper end of the outside flange of the lower channel portion and laterally offset from the inside flange a greater distance than the upper end of the outside flange of the lower channel portion to form an opening between the outside flanges for entering a screen into the guide member, and retaining means pivotally mounted on the guide member for closing the opening.

1,809,237. BROACH HOLDER OR ADAPTER. CARL J. HALBORG, Detroit, Mich., assignor to Colonial Tool Company, Detroit, Mich., a Corporation of Michigan. Filed June 24, 1926. Serial No. 118,377. 4 Claims. (Cl. 279—76.)



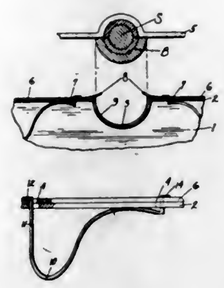
1. In combination, a broach having a shank tapered on opposite sides of its end and transverse slots in those sides of the shank corresponding with the tapers on the end thereof, said slots having their sides nearest the tapered end diagonally cut to form an acute angle with the bottoms of said slots, and a broach holder comprising a block having an axial recess in one end thereof adapted to fit said broach shank, and having transverse openings in opposite sides thereof leading into said recess, the outer edges of said transverse openings having notches therein, plugs movable in said openings having lateral extensions thereon adapted to engage and fit in said notches, and having the inner rear faces thereof diagonally cut to fittingly engage the diagonally cut sides of the slots in said broach shank, spring members secured to the outer surface of said block and adapted to retain said plugs in said transverse openings, and to urge said plugs into engagement with said slots in said broach shank.

1,809,238. PLATEN FOR PHOTOGRAPHIC PRINTING MACHINES. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 23, 1927. Serial No. 242,150. 11 Claims. (Cl. 95—73.)



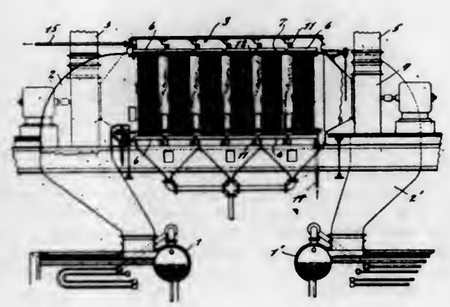
1. In a printing device, the combination with a printing panel, of a platen mounted to move to and from the panel, and means including a substantially flat transparent platen surface having projections thereon, said projections being made of resilient material, and forming contacts adapted to engage printing material laid on the panel.

1,809,239. ASSEMBLY TOOL. HORACE D. HUME, Garfield, Wash. Filed May 18, 1929. Serial No. 364,097. 4 Claims. (Cl. 29—84.)



1. An assembly tool of resilient metal having a pair of spaced outwardly extending end hooks, and a bow and fulcrum spring intermediate the hooks.

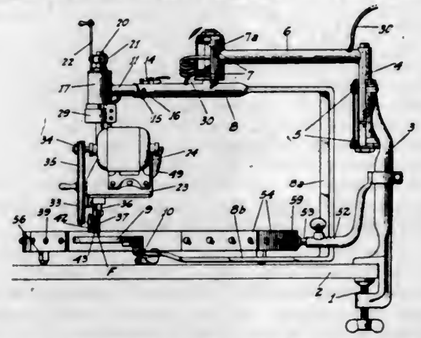
1,809,240. HEAT TRANSFER DEVICE. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed Sept. 4, 1918, Serial No. 252,550. Divided and this application filed June 22, 1929. Serial No. 372,939. 9 Claims. (Cl. 257—251.)



1. In a heat transfer device, a plurality of sections arranged side by side, each section having a pair of headers with cylindrical walls provided with sets of holes each arranged in a circumferentially extending band, tubes secured in said holes and connecting the two headers of each pair, at least some of said tubes being bent at their ends to enter said holes, the headers of adjacent sections being spaced apart and the tubes of the sections forming a bank, the tubes in the bank being spaced substantially uniformly across the bank in a direction transverse to the length of the headers, a compartment common to a group of headers at each end of the sections, and pipes connecting the end portions of said headers to said compartment.

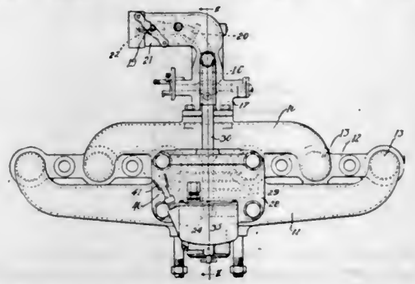
1,809,241. FANCY WORK MACHINE. NATHAN ALONZO JENNINGS, Stockton, Calif. Filed Aug. 11, 1927. Serial No. 212,293. 6 Claims. (Cl. 112—79.)

1. A fancy work machine including a vertical post, means for supporting said post in a fixed position, a horizontal arm turnably mounted on the post, a frame structure turnably mounted onto and under said arm, and a machine structure turnably supported by and depending



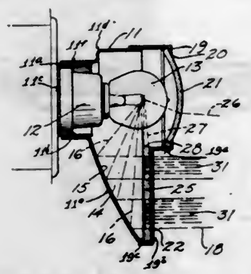
from the frame structure; said machine structure including a vertical needle disposed concentric with the axis of turning of the machine structure.

1,809,242. MANIFOLD. GEORGE KINGSTON, Kokomo, Ind., assignor to Kingston Products Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Mar. 14, 1927. Serial No. 175,385. 4 Claims. (Cl. 261—13.)



1. A vaporizing manifold for internal combustion engines comprising associated intake and exhaust manifolds, carbureting means for supplying an over rich mixture of fuel and air to a main air inlet containing a venturi and leading to the intake manifold, said carbureting means comprising a primary air passage leading through the exhaust manifold, a carburetor having a fuel nozzle opening into said passage through the exhaust manifold, a tortuous passage formed alongside said exhaust manifold and adapted to receive the carbureted air from said primary air passage, a duct leading from said tortuous passage, to the venturi in said main air inlet, and a weighted valve in said main air inlet.

1,809,243. ILLUMINATED SIGN. MORRIS P. KIRK, Los Angeles, Calif. Filed May 25, 1927. Serial No. 193,981. 3 Claims. (40—132.)



1. A sign comprising: a rear housing member having a base wall and a flange normal to said wall; a main housing having a flange telescopically engaging the flange of said rear housing member; a lamp socket in said rear housing member; a light bulb in said socket and extending into said main housing, said main housing having a depending portion; and a light-pervious sign plate positioned in the front wall of said depending portion and having sign configurations thereon adapted to become luminous when rays from said source enter an edge of said sign plate, said depending portion receiving light rays from said light bulb and having a reflecting surface for projecting said light rays through said sign plate.

1,809,244. SPRING LEAF LUBRICATOR. FRANCIS X. LA CHALL, Los Angeles, Calif. Filed May 11, 1927. Serial No. 190,464. 4 Claims. (Cl. 184—1.)



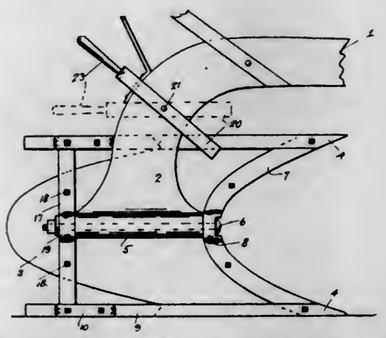
1. A spring lubricator, comprising in combination a receptacle, a pump barrel having ports leading therefrom into said receptacle, a pump plunger slidable in said barrel and adapted to be reciprocated therein by its own inertia when the barrel is vibrated, a distributor, means for attaching said distributor to a spring, oil ducts leading from the barrel to said distributor, a portion of said oil duct being disposed at as great an elevation as the highest oil level in said receptacle, said pump barrel being of cylindrical configuration and said plunger fitting therein, a weight on said plunger, said weight having an annular groove in which the pump barrel is disposed, and means for limiting the movement of said plunger.

1,809,245. BRIQUETTING FUEL MATERIAL. ARTHUR D. LITTLE, Brookline, Mass., assignor to Arthur D. Little, Incorporated, Cambridge, Mass., a Corporation of Massachusetts. Filed June 14, 1928. Serial No. 285,502. 10 Claims. (Cl. 44—15.)

1. That method of briquetting coal fines which is characterized by making a plastic mass of coal fines with cellulose hydrate dispersed in an excess of water, forming briquettes of said mass, and evaporating the water to a content productive of irreversibility in the cellulose.

10. Briquette, comprising fuel fines adhesively bound by intermixture of a colloidal cellulose in substantially dry condition and non-dispersible in water.

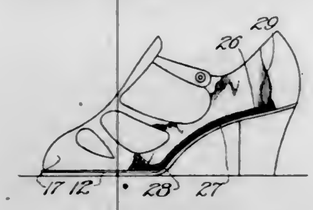
1,809,246. REVERSIBLE PLOW. ANDY MAURER, Round Mountain, Calif. Filed June 18, 1930. Serial No. 462,082. 3 Claims. (Cl. 97—31.)



2. In a plow construction, the combination of a beam having a standard terminating in a sleeve, a bolt extending

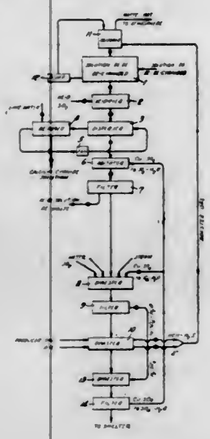
through the sleeve and projecting beyond the ends thereof, a double mold board, a supporting strap on the land side of the front edge portion of the mold board and having a bearing at the center thereof journalled about the forward end portion of the bolt, a share at each edge of the mold board and merging in rearwardly extending horizontal straps, a vertical supporting strap between the rear end portions of the horizontal straps and having an arcuate portion about the rear end portion of the bolt, a reinforcing strap fixed to the vertical supporting strap having an arcuate portion about the rear end portion of the bolt, a substantially U-shaped bracket having an intermediate portion fixed to the rear portion of the mold board and having its ends fixed to the horizontal straps.

1,809,247. TURN SHOE STRUCTURE. FRANK A. MELCHIONNA, Cincinnati, Ohio. Filed June 20, 1927. Serial No. 199,921. 4 Claims. (Cl. 36—18.)



1. In a turn shoe the combination of a sole channeled adjacent the edge, a reinforcing member on the sole and having its edge inserted in the channel, a false welt at the edge of the sole, an upper, stitching securing the upper, false welt, sole and reinforcing member together around the edge of the forward portion of the sole, whereby to leave free the rear end of the reinforcing member, and a shank leather and stiffener secured between the rear end of the sole and reinforcing member.

1,809,248. CYANIDE RECOVERY PROCESS. LOUIS D. MILLS and THOMAS B. CROWE, Palo Alto, Calif., assignors to The Merrill Company, San Francisco, Calif., a Corporation of California. Filed Aug. 14, 1928. Serial No. 299,554. 10 Claims. (Cl. 23—151.)



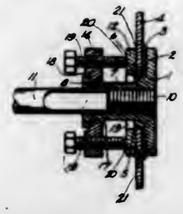
1. In a process for the recovery of cyanide from cyanide solution employed in the treatment of ore, the steps of roasting metallic cyanide compounds precipitated from a cyanide solution, introducing hydrogen cyanide recovered from said roasting operation into another cyanide solution, and recovering purified hydrogen cyanide from said last mentioned solution.

6. In a process for the recovery of cyanide from cyanide solution employed in the treatment of ore, the steps of roasting metallic cyanide compounds precipitated from a cyanide solution, introducing unpurified hydrogen cyanide in the form in which it is recovered from said roasting operation into an unacidified cyanide solution, effecting precipitation of metallic compounds from said last mentioned solutions by acidification and by the addition of a salt of a heavy metal, and removing purified hydrogen cyanide from said last mentioned solution.

1,809,249. REFRACTORY. JOHN D. MORGAN, Maplewood, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 15, 1928. Serial No. 312,573. 3 Claims. (Cl. 106—9.)

1. An article composed largely of zirconia bonded by the reaction products of zircon and phosphoric acid.

1,809,250. TANK FLANGE. CHARLES L. PENDLETON, Wewoka, Okla. Filed Oct. 27, 1928. Serial No. 315,569. 3 Claims. (Cl. 285—25.)



1. A device of the class described, comprising a body having a base, one surface of said base being roughed for securely holding a gasket member against the wall of a receptacle, a hollow internally threaded cylindrical neck integral with said base, said neck having on one end integral therewith a square cornered portion extending outwardly from said base for fitting in a square opening in the wall of said receptacle, and having on its free end integral therewith a rectangularly shaped square cornered head, said neck having, a washer there around for setting against said wall, a clamping plate encircling said neck and tightly seating under said head, said plate having a plurality of screw bolts seating on said washer and for rigidly clamping said washer and said base against said wall.

1,809,251. DRAWING DEVICE FOR SPINNING FRAMES AND FOR PREPARING MACHINERY. JULES PFLIMLIN, Mulhouse, France. Filed Jan. 6, 1930. Serial No. 418,711. 8 Claims. (Cl. 19—143.)



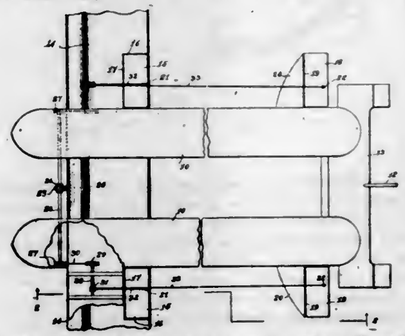
1. A drawing roll for spinning frames and the like comprising an arbor having two spaced collars and a shaft of smaller diameter intermediate said collars, a sleeve of flexible skin extending from one collar to the other and secured to said collars at its ends, and a shorter flexible backing inside said sleeve and held thereby out of contact with said collars, said sleeve and its backing lying out of contact with said shaft and concentric to its axis.

1,809,252. DRAWING DEVICE FOR SPINNING FRAMES AND FOR PREPARATORY MACHINERY. JULES PFLIMLIN, Mulhouse, France. Original application filed Nov. 10, 1928, Serial No. 318,558, and in Great Britain and France May 29, 1928. Divided and this application filed Jan. 6, 1930. Serial No. 418,712. 7 Claims. (Cl. 19—143.)



1. A drawing roll for spinning frames and preparatory machines comprising a resilient, hollow cylindrical sleeve member having provided integrally therewith at its ends lateral disks, constituting supple end walls partially closing the sleeve member and forming hubs to receive an arbor.

1,809,253. AIRCRAFT. MAX B. PUPP, Souderton, Pa., assignor of one-half to Clayton K. Gotwals, Souderton, Pa. Filed Apr. 17, 1930. Serial No. 444,938. 2 Claims. (Cl. 244—29.)



1. The combination with a semi-buoyant aircraft embodying a body and wings of sections of said wings at the after side and adjacent the body hinged to said wings and adapted to swing to an upwardly tilted position, means under the control of the pilot for tilting said sections and a similar device further astern tilting alike in synchronism.

1,809,254. HANDLE FOR FORKS AND LIKE IMPLEMENTS. BENJAMIN H. SMITH, Niles, Mich., assignor to Michigan Wire Goods Company, Niles, Mich. Filed May 20, 1929. Serial No. 364,512. 3 Claims. (Cl. 30—5.)

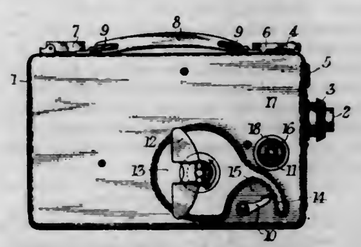


3. In an implement of the class described, the combination of a tubular handle of flattened cross section providing a socket of flattened cross section, and an implement provided with a loop-like shank of flattened cross section formed of wire folded upon itself with its members in spaced relation and secured together at their outer ends so that they are yieldingly supported in spaced relation, said shank being telescopingly arranged within said handle with its members under tension whereby it is frictionally held in its adjusted positions and is supported against rotative movement in the handle.

1,809,255. GERMICIDE AND INSECTICIDE. ROLAND P. SOULE, New York, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed June 11, 1924. Serial No. 719,280. 11 Claims. (Cl. 167—29.)

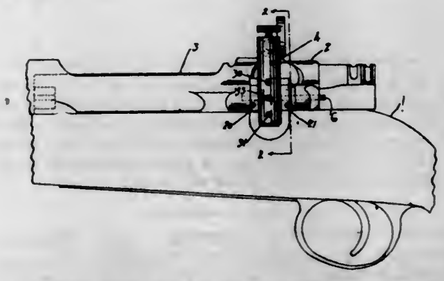
1. A germicide and insecticide containing a distillate of a primary or only partially decomposed primary tar, characterized by the presence of primary tar acids of which at least 50% distil above 220° C., together with a soap base.

1,809,256. MOTOR OPERATED MOTION PICTURE CAMERA. PAUL A. STEPHENSON, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 8, 1929. Serial No. 331,111. 10 Claims. (Cl. 88—18.4.)



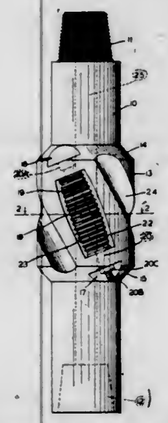
1. In motion picture apparatus, the combination with a pulldown mechanism, of a power drive for the mechanism, a trigger for releasing the power drive, mechanism associated with the power drive adapted to be moved to an operative position for altering the normal speed of the pulldown mechanism, a push button control member for actuating said mechanism, and a casing for enclosing said parts, an embossing on the casing adjacent the trigger and forming a guard therefor.

1,809,257. RECEIVER SIGHT FOR ARMY RIFLES. WALTER JOSEPH SUTTON, San Francisco, Calif. Filed May 7, 1928. Serial No. 275,720. 5 Claims. (Cl. 42—1.)



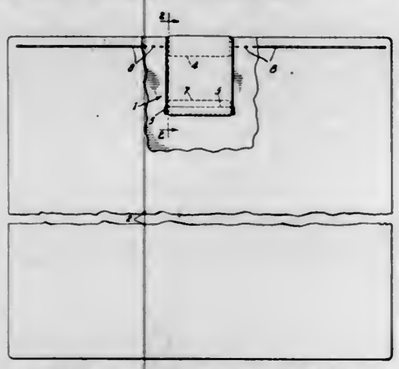
4. A sight for a gun of the character described, including a base adapted to be fixedly mounted in place of the magazine cut out on said gun and having a hole adapted to receive the pin originally holding said magazine cut out; and means for truing and holding said base rigidly in place.

1,809,258. WELL REAMER. JOHN A. VERTSON, Brea, Calif., assignor to Security Investment Company of Whittier, Whittier, Calif., a Corporation of California. Filed Oct. 17, 1929. Serial No. 400,316. 5 Claims. (Cl. 255—73.)



1. A reamer comprising a body, and rotary cutters mounted thereon, said cutters being so mounted that during reaming operations they will be held by the body the desired distance from its center, each cutter having its ends arranged one higher than the other and in different radial planes of the body, the upper ends of the cutters being in advance of their lower ends toward the direction of rotation of the body, the general contour of each cutter being somewhat barrel-shaped in form designed to engage the walls of a hole throughout substantially the complete length of the cutter.

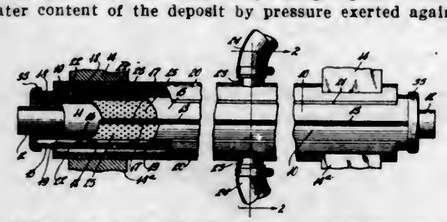
1,809,259. VALVE BAG CLOSURE. HARRISON R. WILLIAMS, New York, N. Y. Filed May 4, 1929. Serial No. 360,352. 5 Claims. (Cl. 150—9.)



1. In a valve bag, in combination, a body portion forming the bag structure, a valve sleeve extending into the bag, and a spring clip surrounding the inner end of said sleeve, normally maintaining said inner end closed but adapted to be distorted by a spreading element thrust into the sleeve to permit filling of the bag.

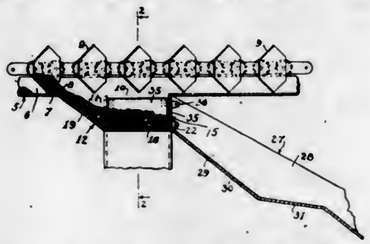
1,809,260. STRIPPING DEVICE AND METHOD. GEORGE F. WILSON, Akron, and WILLIAM H. SLABAUGH, Cuyahoga Falls, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Dec. 18, 1928. Serial No. 326,820. 4 Claims. (Cl. 18—58.)

3. The method which comprises forming a deposit of rubber on a form, from an aqueous rubber dispersion, sucking the wet deposit away from the form onto a foraminous supporting surface, and expressing a portion of the water content of the deposit by pressure exerted against



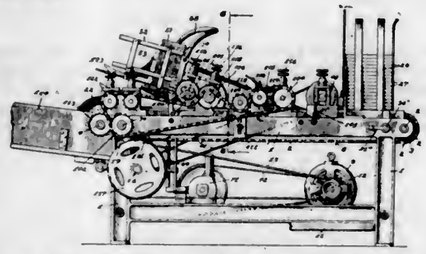
one side of the deposit by the foraminous supporting surface and against the other side of the deposit by the atmosphere.

1,809,261. COAL DISTRIBUTING MEANS. HENRY ADAMS, Plainfield, N. J. Filed Oct. 23, 1930. Serial No. 490,627. 8 Claims. (Cl. 198—68.)



1. In combination, a conveyor having a substantially horizontal floor having an opening therein; a hopper beneath said opening comprising a hopper floor having a platform and an inclined portion from said conveyor floor at the rear of said opening to the rear edge of said platform; walls for said hopper provided with door openings; chutes extending outwardly from the door openings; and removable closures for said door openings.

1,809,262. SHOOK LABELING MACHINE. GUSTAV A. AICHER, deceased, San Francisco, Calif., by Olga J. Aicher, executrix, San Francisco, Calif. Filed Mar. 18, 1930. Serial No. 436,787. 30 Claims. (Cl. 216—55.)

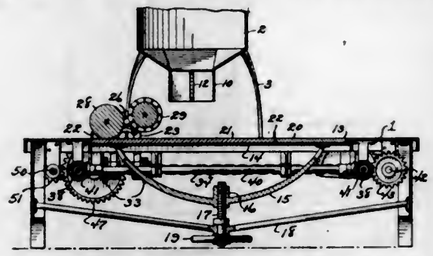


1. A shook labelling machine comprising a carrier; means for feeding shooks onto the carrier; means for rendering desired portions of the shooks adherent; suction operated label feeding means operating in timed relation to the movement of shooks therepast by the carrier; means for moving labels from the feeding means onto the adherent portions of the shooks; and means preventing the feeding of a label in the absence of a shook upon the carrier to receive the same.

1,809,263. BISCUIT, CAKE AND PIE MACHINE. JULIÁN SÁNCHEZ ACOSTA, Arecibo, Porto Rico, assignor of one-third to Luis A. Watlington, Arecibo, Porto Rico. Filed Feb. 13, 1929, Serial No. 339,641. Renewed Nov. 8, 1930. 7 Claims. (Cl. 107—23.)

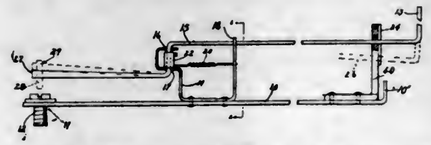
2. An apparatus of the class described comprising a table having an opening therein, a vertically movable

member arranged in the opening, manually operated means for moving said member, a dough board removably seated on said member, a roller carrying frame slidably arranged in the table, a pair of rollers carried thereby



for engaging dough placed on the dough board, one roller being plain and the other having cutters thereon, means for holding either roller in lowered or operative position while the other roller is in raised or inoperative position and power means for reciprocating the roller frame.

1,809,264. ADJUSTABLE TRIP FOR POSTAL MACHINES. WILBUR C. ALLEN, Los Angeles, Calif., assignor, by mesne assignments, to Ralph C. Whitlock Patents, Inc., a Corporation of Nevada. Filed Jan. 21, 1929. Serial No. 333,904. 7 Claims. (Cl. 101—91.)



1. A trip device comprising a trip; a mount therefor providing substantially universal movement of the trip and a movable support for the mount providing variable positions for the functioning of the trip.

1,809,265. MERCURY VAPOR LAMP AND APPARATUS. LEROY J. BUTTOLPH, East Orange, N. J., assignor to General Electric Vapor Lamp Company, a Corporation of New Jersey. Filed Sept. 27, 1923. Serial No. 665,069. 1 Claim. (Cl. 176—42.)



A mercury vapor lamp comprising an arc tube having a cathode chamber connected to one end thereof, a plurality of anode chambers connected to the opposite end thereof, each of said chambers having a portion thereof extending alongside of said arc tube, and all of said chambers being on the same side of a plane passing through the center line of said arc tube, mercury in said lamp and electrode leads sealed into said chambers said lamp being operable with substantially the same current potential characteristic with said arc tube in either a vertical or a horizontal position.

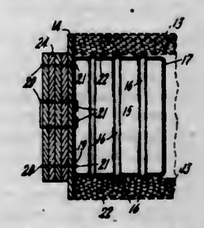
1,809,266. REEL. MANUEL CASTRO, Canton, Ohio. Original application filed Oct. 2, 1928, Serial No. 309,881. Divided and this application filed Nov. 3, 1928. Serial No. 317,060. 1 Claim. (Cl. 242—117.)

A reel for aircraft cargo handling apparatus and the like, including a reel barrel, a cargo handling cable for being wound about the reel barrel, a groove formed in the barrel, a lug extending from a side of the groove, a head on the reel end of the cable, a neck groove in the



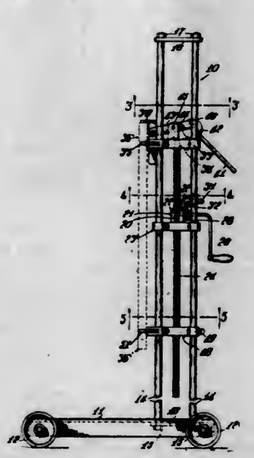
head, and the head normally lying in the barrel groove and releasably secured therein by the lug extending into the neck groove.

1,809,267. END CAP FOR TUBULAR PACKAGES. BENJAMIN CUSHING, Norwood, Mass. Filed Aug. 9, 1930. Serial No. 474,087. 3 Claims. (Cl. 206—59.)



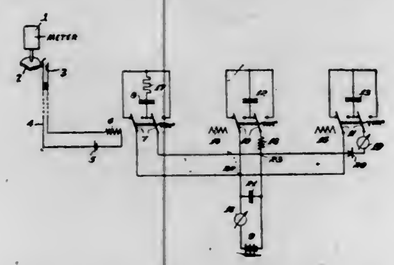
1. A protective end cap comprising a head formed to cover an end of a tubular package, and a tubular sheet metal plug formed to bear on an end portion of the internal surface of such package, and having annular outer and inner stiffening flanges, the outer flange being seated on the inner side of the head and the inner flange projecting inwardly from the periphery of the plug, and fastening means securing the outer flange to the head, the head including a flat sided inner portion of gerater diameter than the plug and bearing on the said outer flange, and an outer buffer portion bearing on the outer side of said inner portion and of smaller diameter than the latter, the outer margin of said buffer portion being arranged to sustain shocks or jars, transmit the same directly to the wall of the plug, and protect the margin of the inner portion.

1,809,268. EASEL. JEAN DUMAS, Chicago, Ill. Filed Sept. 18, 1929. Serial No. 393,535. 8 Claims. (Cl. 45—129.)



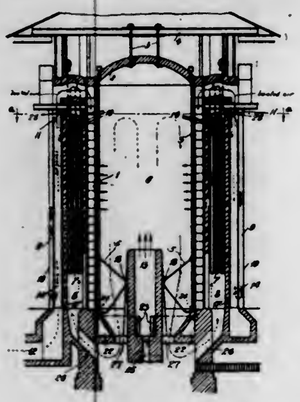
1. Easel construction comprising a base, a plurality of vertical rods mounted on said base, a pair of plates slidably mounted on said rods, the forward edges of said plates each forming a shelf, means operable to clamp one of said plates on said rods, and mechanism operable to selectively vary the spacing of said plates.

1,809,269. SUMMATION METER. WILHELM GAABZ, Berlin-Charlottenburg, and JOACHIM DALCHAU, Berlin-Tegel, Germany, assignors to Siemens & Halske Aktiengesellschaft, Siemensstadt, near Berlin, a Corporation of Germany. Filed Dec. 11, 1929, Serial No. 413,393, and in Germany Dec. 19, 1928. 10 Claims. (Cl. 171—34.)



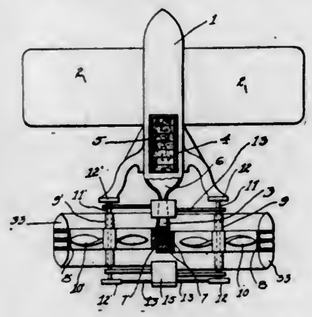
1. In a device for indicating the sum of several quantities, a source of current, several condensers, several switching devices which permit a temporary connection of the condensers with the source of current, a measuring instrument connected in a common part of the lines connecting the source of current with the switching devices and a rectifier in the individual line connecting the source of current with one of the condensers.

1,809,270. STEAM GENERATOR. HANS GLEICHMANN, Berlin-Siemensstadt, Germany, assignor to Siemens-Schuckertwerke Gesellschaft mit beschrankter Haftung, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Sept. 8, 1926, Serial No. 134,206, and in Germany Sept. 19, 1925. 4 Claims. (Cl. 122—235.)



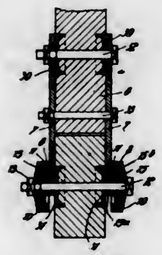
1. A steam generator having a nozzle furnace, heat absorbing tubes disposed in the furnace, a self-supporting furnace shaft and further heat absorbing elements disposed to absorb heat from the furnace gases after they have left the furnace, said shaft being hollow for conducting the combustion air to the furnace, said heat absorbing tubes being disposed in the furnace to shield the shaft walls against the hot gases, said shaft, said heat absorbing tubes, and said heat absorbing elements being disposed concentrically with each other, and a casing surrounding said heat absorbing elements and a plurality of partitions between said casing and said shaft, vertically supported independently of said shaft and dividing the space between the casing and the shaft into a plurality of chambers in which said absorbing elements are sectionally disposed, said partition walls having radially extending girders serving as a support for said heat absorbing elements.

1,809,271. PROPULSION OF AIRCRAFT. ROBERT H. GODDARD, Worcester, Mass., assignor of one-half to George Crompton, Worcester, Mass. Filed June 28, 1929. Serial No. 374,439. 10 Claims. (Cl. 244—18.)



1. In an aircraft, the combination with a source of energy and means for creating a blast of gas traveling at high velocity from said source of energy, of turbine wheels rotatable on axes disposed on opposite sides of said gas blast with propelling vanes on both of said wheels disposed in the path of said gas and a series of air propeller blades disposed within the vanes of each wheel.

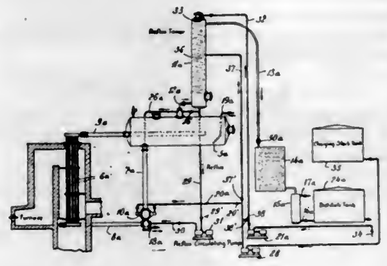
1,809,272. SUPPORTING STRUCTURE. WALTHER GREIM, Berlin, Germany, assignor to Siemens-Bauunion Gesellschaft mit beschränkter Haftung Kommanditgesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Oct. 15, 1928, Serial No. 312,570, and in Germany Oct. 19, 1927. 1 Claim. (Cl. 20—92.)



A supporting structure comprising in combination a plurality of bars converging towards a common assemblage point at a structural element, joint discs, arranged on opposite sides of this element, each bar having two suitably shaped lateral ends extending respectively to the two discs, each disc being undercut inwardly for slidingly engaging all bar ends of its pertaining side, and a transverse bolt in said element for joining said discs, whereby said bars are joined in a common plane, and whereby a joint is formed which resists tension and compression stresses and which permits said bars to adjust themselves relatively to each other, each of said discs having a bevelled recess at its outer face, and a mushroom-shaped washer disposed at each end of said bolt and having a bevelled rim to fit into the bevelled recess of the disc at the pertaining bolt end, so that when said washers are drawn by said bolt tightly against the structural element said discs are supported against eccentric streases set up by said bars.

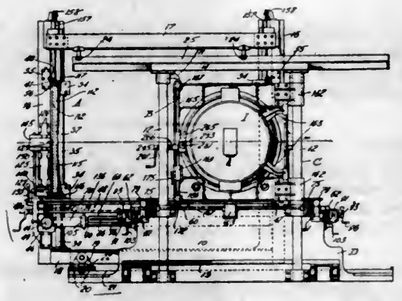
1,809,273. OPERATION OF PRESSURE STILLS. EUGENE C. HERTHEL, Chicago, Ill., assignor to Sinclair Refining Company, Chicago, Ill., a Corporation of Maine. Filed Nov. 21, 1924. Serial No. 751,213. 1 Claim. (Cl. 196—48.)

An improved method of cracking hydrocarbon oils, which comprises heating a body of the oil to a cracking temperature under pressure in a pressure still, passing the vapors from the still upwardly through a reflux tower, passing uncondensed vapors from the reflux tower to a condenser to produce a distillate, introducing an oil heavier than said distillate and including a substantial quantity of



constituents corresponding in character to constituents of the distillate into direct contact with the vapors in the upper end of the reflux tower, introducing a heavier oil into direct contact with the vapors at an intermediate point in the reflux tower, and returning reflux without substantial cooling from the tower to the still.

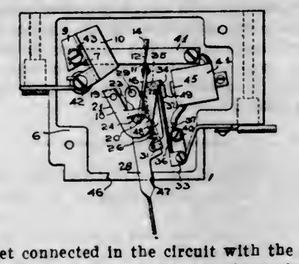
1,809,274. PHOTOGRAPHIC PRINTING APPARATUS. WILLIAM C. HUEBNER, Buffalo, N. Y., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y. Filed Nov. 23, 1927. Serial No. 235,379. 34 Claims. (Cl. 95—76.)



1. In a photographic printing apparatus, the combination with a holder adapted to carry a sensitized plate; of a support adapted to carry a printing plate, said support being movable to an operative position with respect to said holder; a member on which the printing plate is adapted to be detachably secured and held on said support, said member being movable relative to said support toward and from said holder to thereby place the printing plate into and out of contact with the sensitized plate; means for permitting such movement including resilient means for yieldingly moving said member towards said support for placing the printing and sensitized plates out of contact, and adjustable means for forcing said member towards said holder against the action of said resilient means for placing the plates into contact.

1,809,275. CIRCUIT BREAKER. OLIVER S. JENNINGS, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 14, 1925. Serial No. 69,030. 24 Claims. (Cl. 200—88.)

1. The combination with a switch and a current-carrying thermal responsive element having one end movable for controlling the switch and connected in series therewith and an armature on the movable end of the element, of an

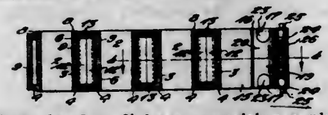


electromagnet connected in the circuit with the switch for actuating the thermal element under predetermined current conditions.

1,809,276. MANUFACTURE OF COMPOUND SHEETS OF GLASS AND CELLULOSE DERIVATIVE COMPOSITION. WILLIAM JOHNSTON, Ashford, England, assignor to Acetex Safety Glass Limited, London, England. Filed July 2, 1929, Serial No. 375,594, and in Great Britain Mar. 4, 1929. 8 Claims. (Cl. 49—81.5.)

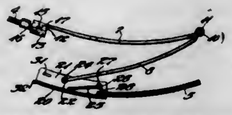
1. A process for effecting the interadherence of two sheets of glass to an interposed sheet of cellulose derivative composition, consisting in moistening the surface of said cellulose derivative composition sheet solely with a plasticizer of high boiling point, initially freely exposing and pressing together said glass sheets with said moistened cellulose derivative composition sheet interposed in a gas under pressure inert to said cellulose derivative composition sheet, and finally freely exposing and pressing said sheets in steam under pressure and at a temperature lower than the boiling point of said plasticizer.

1,809,277. FLEXIBLE STRAP, BAND, OR LINKAGE. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Oct. 23, 1928. Serial No. 314,487. 5 Claims. (Cl. 59—80.)



1. A strap, band or linkage comprising a plurality of main link-elements having centrally-disposed transversely extending solid portions with loops at their sides of less thickness than the central portions; and closed box-like connecting-links having portions projecting through the loops on two adjacent main links and bent therearound to hingedly connect the parts, said connecting-links having end portions overlying the ends of the loops on the main links to cover and conceal the joints therebetween and with the overlying portions of the connecting-links in the same plane as the top of the central solid portions of the main link-elements to provide a smooth unbroken upper surface on the linkage.

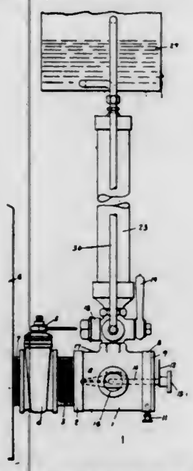
1,809,278. CLASPING DEVICE FOR WRIST WATCH STRAPS, BRACELETS AND THE LIKE. CHARLES H. KESTENMAN, Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed Dec. 20, 1929. Serial No. 415,585. 5 Claims. (Cl. 24—71.)



1. In a clasping-device for straps, bracelets or the like, the combination of extension-members, means for hingedly

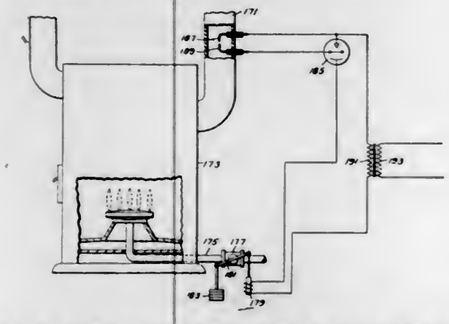
connecting said members to adapt them to be folded together in overlying relationship, means for attacning the ends of the strap to said members, detent-protuberances in the form of projections punched out from the metal of the sides of one member, and ears on the other member folded over upon themselves with their edges in position to snap over the detent-protuberances to secure the parts in closed position.

1,809,279. FUMIGATING APPARATUS. KENNETH A. KILBOURNE, Azusa, Calif., assignor to Owl Fumigating Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 3, 1924. Serial No. 741,517. 3 Claims. (Cl. 167—3.)



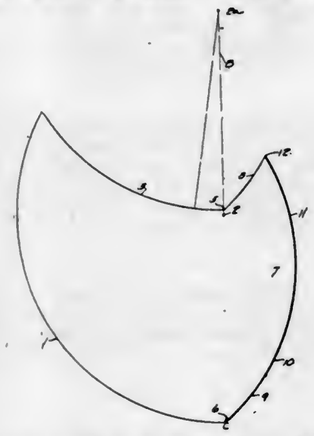
1. A fumigating apparatus comprising a measuring cylinder for volatile liquid fumigant carrying some water, a nozzle for receiving the fumigant from the cylinder, a needle valve in the nozzle, a chamber surrounding the nozzle, air ports in the chamber, a fumigating chamber to be evacuated connected with the chamber surrounding the nozzle, whereby when the fumigating chamber is evacuated, an inflow of air is induced through the ports and around the nozzle, and fumigant through the nozzle, the air being sufficient to volatilize the fumigant and prevent freezing of the water carried thereby on the needle valve and in the nozzle due to volatilization.

1,809,280. SAFETY SYSTEM. DEWEY D. KNOWLES, Forest Hills Borough, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 26, 1928. Serial No. 280,710. 8 Claims. (Cl. 158—117.1.)



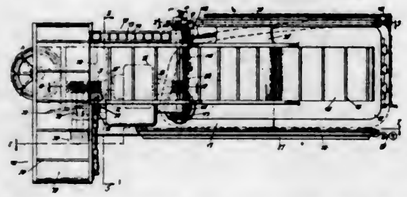
1. In a fuel-supply system of the general type having means for burning mobile fuel, said means including a pilot burner, current-operated means for controlling the flow of said fuel, means including an electric-discharge device having main electrodes and a control electrode, a source of potential, an output circuit for the discharge device including said main electrodes, source of potential and fuel-flow-controlling means, a pair of conductors making contact with the flame of said pilot burner and connections between one of said conductors and one of said main electrodes and between the other of said conductors and said control electrode.

1,809,281. CONICAL DRINKING CUP. LAWRENCE W. LUELLEN, Mountain Lakes, N. J. Filed Jan. 31, 1927. Serial No. 164,705. 9 Claims. (Cl. 229—1.5.)



1. A quadrangular blank for the manufacture of a conical cup, having two opposite sides of complementary form, one said side having an outwardly convex portion for forming the edge of the conical cup.

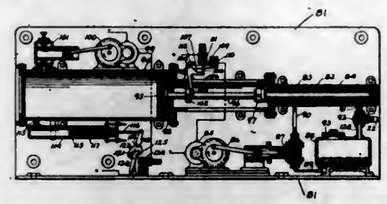
1,809,282. MINING AND LOADING MACHINE. EDMUND C. MORGAN, New York, N. Y.; Olive Eugenie Morgan executrix of said Edmund C. Morgan, deceased. Filed May 19, 1921, Serial No. 470,854. Renewed Aug. 20, 1928. 71 Claims. (Cl. 262—9.)



1. In a mining machine, the combination with a plane kerf-cutter, of a flat breaker carried thereby in the plane thereof to enter the kerf cut by said kerf-cutter, and means for supporting said flat breaker for limited movement transversely of itself and bodily transversely of the plane of said kerf-cutter.

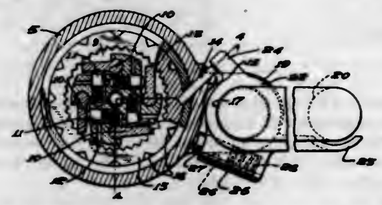
1,809,283. MEANS FOR CONTROLLING FLUID PRESSURE BREAKING MECHANISM FOR MINING MACHINES. EDMUND C. MORGAN, deceased, New York, N. Y., by Olive Eugenie Morgan, executrix, New York, N. Y. Original application filed June 25, 1920, Serial No. 391,844. Divided and this application filed Dec. 31, 1924, Serial No. 758,971. Renewed Mar. 7, 1929. 52 Claims. (Cl. 262—12.)

1. In apparatus for producing fluid pressure, the combination with a hydraulic cylinder, of a reservoir, a pump for supplying liquid to said cylinder from said reservoir, a conduit to convey liquid from said cylinder to a hydraulic breaker adapted to be used in a mine vein, and a valve in said conduit for controlling the flow of liquid



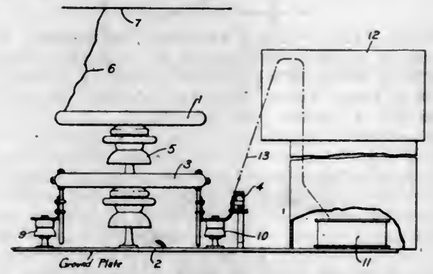
from said cylinder to said reservoir in one predetermined position of the valve and to direct the flow from said cylinder through said conduit to said breaker when said valve is in another predetermined position.

1,809,284. SLIP ROTATION FOR ROCK DRILLS. GUSTAV C. PEARSON, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed June 12, 1928. Serial No. 284,688. 7 Claims. (Cl. 121—7.)



1. In apparatus as set forth, the combination with a cylinder member, a reciprocatory piston therein capable of rotation, and means for effecting its rotation including a rifle bar with which the piston slidably engages, of ratchet mechanism for effecting the rotation of the rifle bar, including a ratchet ring, a pivotally mounted handle on the exterior of the cylinder member, means actuated by the handle for holding the ring against rotation, and means for urging the handle in a direction to cause said means to hold the ring.

1,809,285. ELECTROSTATIC TRANSFORMER. JOHN F. PETERS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 16, 1925. Serial No. 62,737. 4 Claims. (Cl. 175—41.)



1. An electrostatic transformer for deriving a reduced potential from a high-potential circuit, including a ground plate, a conducting element spaced therefrom in condensive relation therewith and electrically connected to said circuit, and means comprising a plurality of superposed high-potential pin-type insulators supported upon said ground plate for supporting said element in operative relation with respect to said ground plate.

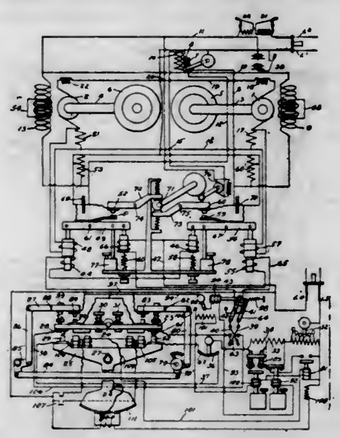
1,809,286. PULP OF HIGH WHITENESS AND STRENGTH AND PROCESS OF PRODUCING SAME. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed July 1, 1925. Serial No. 40,959. 18 Claims. (Cl. 92—11.)

1. In the treatment of kraft or "sulphate" pulp for the production of a pulp characterized by its whiteness and high strength, that step which comprises digesting said kraft pulp at an elevated temperature in an acid sulphite liquor containing free SO_2 in such amount but not exceeding combined SO_2 that the strength of the digested pulp remains substantially unchanged.

1,809,287. WHITE WOOD PULP FOR HIGH GRADE PAPER MANUFACTURE. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Nov. 18, 1930. Serial No. 496,566. 3 Claims. (Cl. 92—3.)

1. A pure-white wood pulp derived from alkaline-cooked pulp as a raw material, possessing the strength and tear resistance of its derivation material, but being of lower pentosan and much lower resin content than its derivation material.

1,809,288. METHOD OF AND APPARATUS FOR CONTROLLING MECHANICAL OSCILLATIONS. PERRY B. SAMPLE, New York, N. Y., assignor of one-fourth to Ira J. Adams. Filed Nov. 12, 1929. Serial No. 406,703. 25 Claims. (Cl. 114—122.)



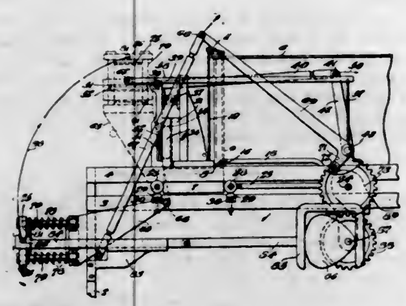
1. The method of stabilizing an oscillating object which consists in rotating two flywheels in opposite directions in planes that are parallel to the plane of oscillation, applying force to retard one flywheel and accelerate the other to produce reaction forces in opposition to the forces of oscillation and maintaining said applied forces substantially constant as the amplitude of oscillation increases.

24. The method of stabilizing an oscillating object which consists in connecting together the armatures of two dynamo electric machines rotating in opposite directions, causing one to operate as a generator and the other as a motor, and supplying current to said machine only to the extent necessary to make up the losses.

1,809,289. CASTING MACHINE. LOUIS G. STECKER, Philadelphia, Pa. Filed July 10, 1929. Serial No. 377,174. 5 Claims. (Cl. 29—2.)

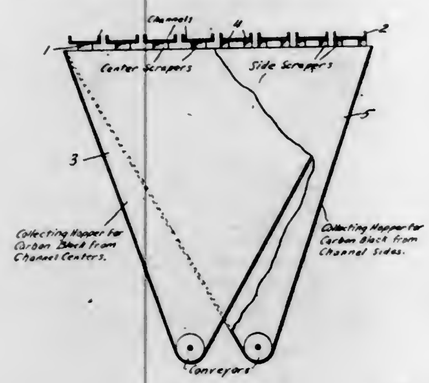
1. In a device of the character stated, a support, a molten metal tank carried thereby, a vertical stationary, mould section above said tank, a movable mould section adapted to coact with said stationary mould section, means

for injecting molten metal from said tank into said mould sections to form a grid, means for actuating said movable mould section away from said stationary mould section, the grid thus formed being carried by said movable mould



section, means for dislodging said grid from said movable mould section when the latter is in its upper horizontal position, means for receiving the dislodged grid, and means for trimming the edges of said grid, all of said means being automatically and synchronously operated.

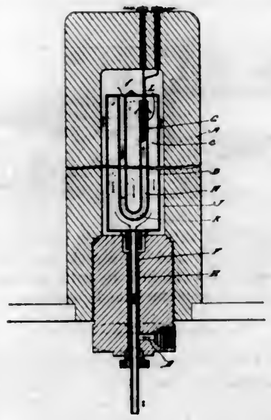
1,809,290. MANUFACTURE OF CARBON BLACK. WILLIAM BRYAN WIEGAND, Sound Beach, Conn. Filed Jan. 25, 1930. Serial No. 423,460. 3 Claims. (Cl. 134—60.)



1. In the manufacture of carbon black by the "channel process", the improvement which comprises selectively scraping the carbon black deposited on the channels therefrom to collect separately the carbon black deposited on the central longitudinal part of the face of the channels and the carbon black deposited on the adjacent outer longitudinal parts of the face of the channels thereby producing directly a carbon black of relatively low absorptive capacity collected from the central longitudinal part of the face of the channels and a carbon black of higher absorptive capacity collected from the outer longitudinal parts of the face of the channels.

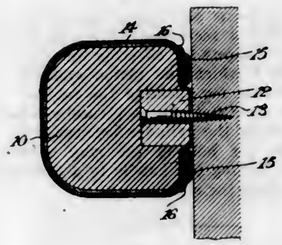
1,809,291. APPARATUS FOR EFFECTING SYNTHESIS. ROGER WILLIAMS, Wilmington, Del., assignor to Du Pont Ammonia Corporation, a Corporation of Delaware. Original application filed Feb. 2, 1926, Serial No. 85,497. Divided and this application filed Mar. 28, 1930. Serial No. 439,652. 3 Claims. (Cl. 23—289.)

1. An apparatus for effecting catalytic exothermic gaseous reactions, which comprises a receptacle for the main body of the catalyst and a U-shaped tube extending into the receptacle and permitting heat exchange between the



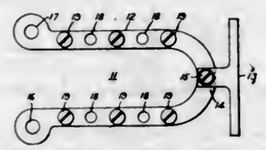
entering gaseous mixture and the main body, said tube enclosing another portion of the catalyst in the path of the gaseous mixture.

1,809,292. COVER FOR SEAT SIDE ARMS. WALTER L. FRY, Scarsdale, N. Y., assignor, by mesne assignments, to Wil-Fry Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 21, 1928. Serial No. 320,860. 4 Claims. (Cl. 155—182.)



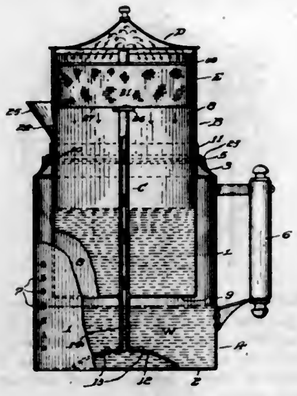
4. A cover for seat side arms in the form of a longitudinally slotted envelope shaped to pull on over and cover the aforesaid side arm, and a stiffening element associated with the slotted side of the said cover near the slot edges.

1,809,293. ADJUSTABLE THERMAL ELEMENT. EDWARD M. CLAYTOR, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 27, 1927. Serial No. 208,812. 4 Claims. (Cl. 200—113.)



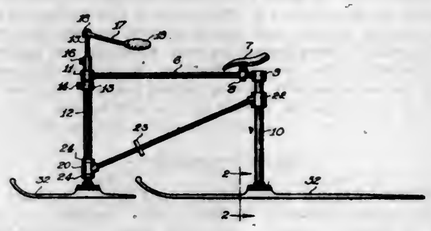
1. An adjustable thermal element for a thermal relay comprising a resistor element and means including an opening in the resistor element and a plug insertable therein for varying the current-conducting cross-sectional area of said resistor at a predetermined section thereof.

1,809,294. COFFEE PERCOLATOR. JOSEPH A. GUERIN, Sr., and JAMES M. GUERIN, Philadelphia, Pa. Filed Oct. 15, 1928. Serial No. 312,597. 2 Claims. (Cl. 53—3.)



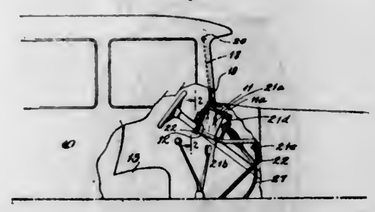
1. In a percolator for infusing pulverized coffee, the combination of a boiler, a pot depending downwardly from the top of said boiler into said boiler and having its side walls spaced from the walls of said boiler, a basket mounted within the upper part of said pot and having its bottom and side walls made of closely woven wire fabric, the spaces between the warp threads of which are substantially greater than the greatest diameter of a particle of pulverized coffee and the spaces between the weft threads of which are smaller than the smallest diametrical dimension of a particle of pulverized coffee, said warp threads extending vertically in the side walls of said basket, and means extending from the bottom of the boiler upwardly to discharge water from said boiler intermittently into said basket faster than the infusion of coffee formed in said basket can seep through said coffee and pass through the walls of said basket to said pot.

1,809,295. SKI-COASTER. CARL E. B. GUNDERSEN, Entwistle, Alberta, Canada. Filed Mar. 8, 1929. Serial No. 345,379. 1 Claim. (Cl. 280—16.)



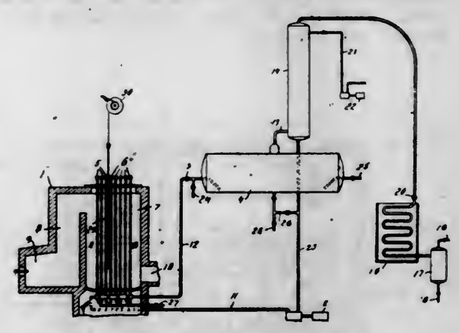
A ski-coaster including upstanding forward and rear frame members connected at their upper ends by an upper longitudinal frame member; said upstanding frame members also being connected by an incline frame bracing member attached to the upstanding rear frame member near the upper end of the latter and mounted on the upstanding forward frame member near the lower end thereof; each of said upstanding frame members having a rounded lower extremity with a central lug depending therefrom; a pivot bolt extended transversely through each of said lugs; forward and rearward ski runners having raised portions intermediate their ends; and bearing plates carried on said raised portions with pairs of upstanding bearing lugs; one of said pivot bolts being extended through the pair of upstanding bearing lugs of one of said bearing plates.

1,809,296. PORTABLE RADIO APPARATUS. WILLIAM M. HEINA, Long Island City, N. Y., assignor, by mesne assignments, to Transitone Automobile Radio Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 9, 1928. Serial No. 253,011. 1 Claim. (Cl. 250—14.)



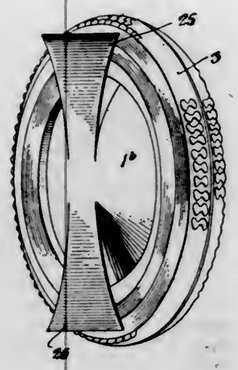
In combination with a dashboard of a vehicle, a radio apparatus comprising a radio set including a casing insertable in an opening formed through said dashboard; guide means, positioned in rear of said dashboard, for permitting inward and outward movements of said set through said dashboard opening; terminals permanently positioned at the back of the dashboard and connected to power sources, and other terminals mounted on said casing and respectively engaging said first terminals upon movement of said casing to its inner position within the dashboard, said first and second terminals contacting frictionally whereby connection therebetween is broken coincident to an outward movement of said set, and said guide means being inclined to insure said set and cooperating terminals against accidental release.

1,809,297. ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Flossmoor, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Feb. 8, 1930. Serial No. 426,901. 2 Claims. (Cl. 196—116.)



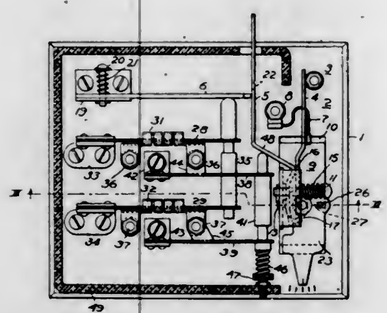
2. In apparatus for heating hydrocarbon oils to cracking temperatures, a vertical heating flue, means for admission of heating gases to one side near one end of said heating flue, two series connected batteries of series connected banks of series connected heating tubes arranged therein, said banks of heating tubes being arranged transversely to the general direction of travel of heating gases entering through said admission means, a vertical baffle separating said batteries of heating tubes arranged transversely to the general direction of travel of heating gases entering through said admission means and extending across said heating flue but arranged to leave passages across the upper and lower ends thereof, means for escape of heating gases from the opposite side near the other end of said heating flue, and means for supplying oil to the battery of heating tubes adjacent said admission means and for discharging hot oil products from the other battery of heating tubes.

1,809,298. DISPLAY DEVICE. ROBERT R. HEYWOOD, Jr., Orange, N. J. Filed Feb. 8, 1929. Serial No. 338,402. 5 Claims. (Cl. 40—125.)



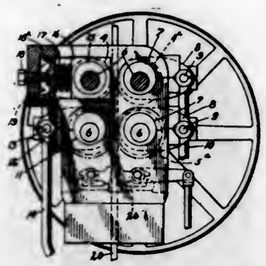
1. In a device of the kind described, in combination, a flexible sheet member having peripheral edges at least in part curved in form, a holder of lesser diameter than that of said member, said member having adjacent portions adapted to be brought into overlapping relation when it is being inserted in the holder, and having peripheral edges held in grooves in said holder, said member being of such diameter that when so inserted a substantially unbroken conical surface is presented for advertising display.

1,809,299. CONTROL DEVICE. CHARLES H. HODGKINS, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 13, 1927. Serial No. 239,668. 7 Claims. (Cl. 200—122.)



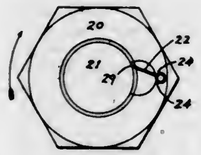
1. In a thermal relay in combination, a circuit interrupter biased to an open position, a pair of oppositely deflecting bimetallic members, a resilient member, and means for thermally energizing said bimetallic members, one of said bimetallic members being responsive to an increase in temperature to permit the circuit interrupter to be actuated from an initial circuit closing position to its open position, and the other of said bimetallic members being effective upon a decrease in temperature to permit the resilient member to actuate the circuit interrupter to its initial circuit closing position.

1,809,300. BOARD DROP HAMMER. HARRY G. KIMBALL, Bronxville, N. Y., assignor to The Billings & Spencer Company, Hartford, Conn., a Corporation of Connecticut. Filed July 15, 1926. Serial No. 122,570. 5 Claims. (Cl. 78—29.)



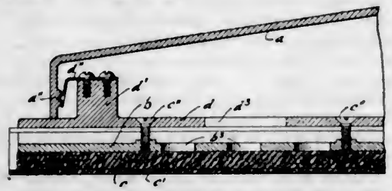
1. In a multiple roll-set, board drop-hammer, the combination of one roll of one of the pairs of rolls, a yielding mounting therefor, hammer-controlled means for moving said roll, relatively to said yielding mounting, toward and from the hammer board, and a roll of another pair also moved by said means.

1,809,301. LOCKING COOPERATING THREADED ELEMENT. JAMES B. LADD, Ardmore, Pa. Filed Jan. 15, 1930. Serial No. 420,853. 2 Claims. (Cl. 151—11.)



2. A device for locking a nut to a bolt or the like comprising a pawl, one end of which is seated in a recess in a nut and confined therein, but free to turn therein around an axis approximately parallel with the axis of the nut, the pawl extending from its seat into the bore of the nut, means co-acting with a pawl to limit its free angular movement to a small augle either side of a radial position relative to the nut, said limiting means causing the free end of the pawl to lockingly engage the thread on the bolt when the pawl is flexed beyond either limit of its free angular motion, and means permitting the free end of the pawl to move toward its seat, when the nut is forcibly rotated in the reverse direction, to permit the pawl to be turned angularly past a radial position relative to the nut to engage the thread on the bolt on the opposite side to resist rotation of the nut in the reverse direction.

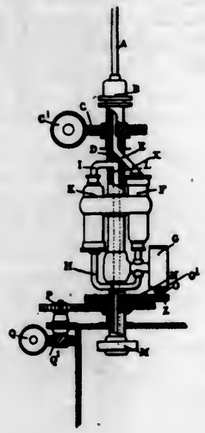
1,809,302. FLOOR POLISHING DEVICE. CHARLES B. LAWRENCE, Cleveland Heights, Ohio, assignor to The P. A. Geier Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 24, 1928. Serial No. 256,604. 3 Claims. (Cl. 15—246.)



3. In a polishing attachment, the combination with a longitudinally slotted member of substantial weight having perforations formed therein communicating with said slot, of a compacted felt member disposed within said slot

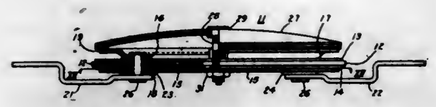
and extending beyond the face of the weighty member, a removable fabric covering disposed about said members and spaced away from the weighty member adjacent the felt member to afford an air space, and means for removably attaching the device for use with a suction member.

1,809,303. APPARATUS FOR SPINNING ARTIFICIAL THREADS FROM SOLUTIONS OF CELLULOSE ETHERS OR ESTERS. UGO MANCINI, Milan, Italy, assignor to Ruth-Aldo Company, Incorporated, New York, N. Y. Filed Mar. 27, 1928, Serial No. 265,161, and in France Dec. 26, 1927. 8 Claims. (Cl. 18—8.)



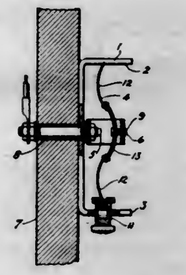
8. Apparatus for spinning artificial threads from solutions of cellulose ethers or esters, comprising a collodion supply pipe, a spinning nozzle rotatably mounted with respect to the supply pipe, and a feed pump fixed with relation to but rotatable with the nozzle for regulating the supply of collodion thereto.

1,809,304. THERMAL RELAY. HOWARD D. MATTHEWS, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 6, 1929. Serial No. 344,734. 4 Claims. (Cl. 200—138.)



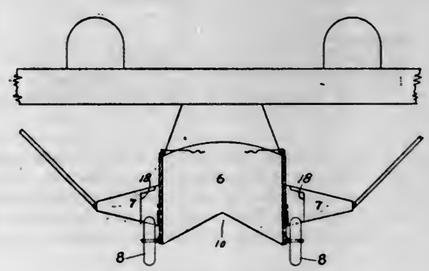
1. In a thermal switch, in combination, a substantially circular base, a supporting bar insulatedly mounted adjacent to one surface of the base, a pair of substantially semi-circular, dished, contact members insulatedly mounted against the other surface of the base, contact terminals extending through the base, supporting bar and one each of said contact members to securely clamp them in proper operative positions, and a thermally-actuable cupped disk supported on said bar and having rim portions only thereof engaging the semi-circular contact members at a predetermined temperature and maintaining an inwardly-moving line of engagement therebetween with change of temperature until a sudden separation thereof occurs.

1,809,305. THERMOSTAT. HOWARD D. MATTHEWS, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 14, 1924. Serial No. 731,975. 18 Claims. (Cl. 297—15.)



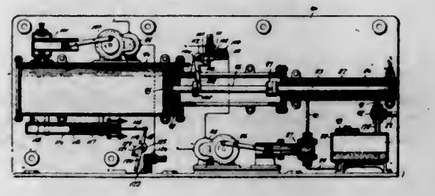
1. In a thermostat, a frame, a plurality of curved stressed members co-operating with the frame and a curved thermoresponsive member supported by the stressed members for controlling the radii of curvature of the stressed members.

1,809,306. HULL. JOHN MATTHEW MILLER, New Brunswick, N. J., assignor to Charles Shepard, Rochester, N. Y. Filed Nov. 7, 1924. Serial No. 748,392. 6 Claims. (Cl. 244—2.)



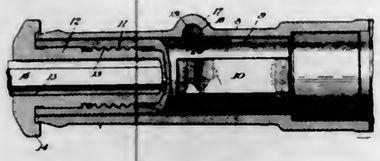
3. In a device of the character described, a hull, a lateral fin on said hull, and a guideway along the side of said hull and extending into said fin.

1,809,307. FLUID PRESSURE BREAKING MECHANISM FOR MINING MACHINES. EDMUND C. MORGAN, deceased, New York, N. Y., by Olive Eugenie Morgan, Executrix, New York, N. Y. Filed June 12, 1929. Serial No. 370,431. 21 Claims. (Cl. 262—12.)



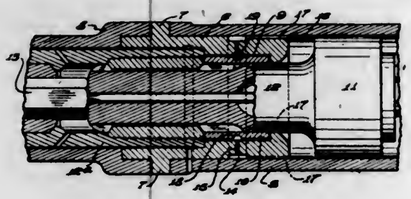
1. In a breaking device, the combination with a cylinder, of a spring adapted to be located within said cylinder, means for securing one end of said spring to the bottom of said cylinder, a plunger movable in said cylinder, and latch mechanism between the inner side of said plunger and the other end of said spring for detachably securing said plunger to said spring.

1,809,308. CHUCK STRUCTURE. WILLIAM G. MUELLER, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Feb. 17, 1928. Serial No. 255,106. 3 Claims. (Cl. 279—97.)



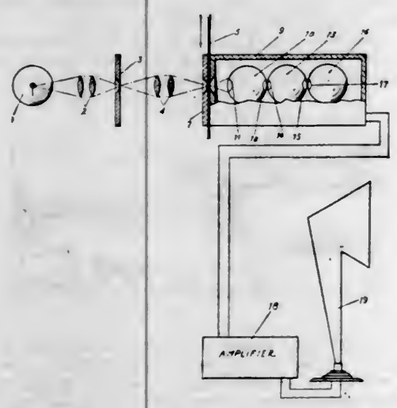
1. In a drilling tool, the combination with a housing, of a driving sleeve rotatably mounted in the housing, a tool-receiving wear member detachably fitted to the sleeve and normally rotated therewith to rotate a tool detachably engaged therein, and means for temporarily securing the sleeve against rotation in the housing to permit the tool-receiving member being moved with respect to the sleeve to detach said member.

1,809,309. FLUID OPERATED TOOL. ROBERT O. OLANDER, Calumet, Mich. Filed Apr. 24, 1928. Serial No. 272,542. 7 Claims. (Cl. 121—31.)



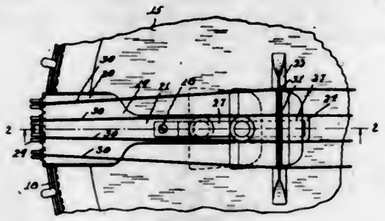
1. In a fluid operated tool, the combination with a cylinder member and a reciprocatory piston therein, of an element in which the piston has a reciprocatory bearing, said element having a limited lateral play to permit its lateral movement by reason of lateral pressure thereon of the piston.

1,809,310. METHOD AND MEANS FOR REPRODUCING PHOTOGRAPHIC SOUND RECORDS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y. Filed Mar. 8, 1929. Serial No. 345,577. 3 Claims. (Cl. 179—1003.)



1. The method of reproducing a photographic sound record comprising the steps of modulating light rays by said record, passing said modulated light rays through a plurality of aligned photoelectric cells, modulating an electric current by the output of all of said cells and conducting said modulated current to an amplifier and loud speaker.

1,809,311. MUTE FOR STRINGED MUSICAL INSTRUMENTS. ROBERT R. PAGE, New York, N. Y. Filed June 14, 1929. Serial No. 370,987. 10 Claims. (Cl. 84—273.)

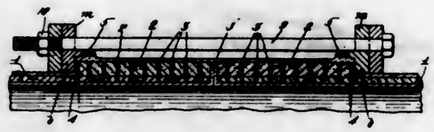


1. In a stringed musical instrument, having thereon a bridge, a tail piece having thereon an extension, a mute body having thereon a tapered part slidably mounted on said extension, a means for sliding said body on said extension with said part thereof into wedging engagement with said bridge and a means for normally holding said body on said extension in nonmuting position with said part thereon out of engagement with said bridge.

1,809,312. PROCESS OF PRODUCING WOOD PULP OF HIGH ALPHA CELLULOSE CONTENT. GEORGE A. RICHTER and MILTON O. SCHUR, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 19, 1927. Serial No. 185,019. 8 Claims. (Cl. 92—16.)

1. A process which comprises separating from raw pulp its long fiber portion, treating the separated portion of pulp with a lignin-reactive reagent and terminating the treatment slightly after a critical point is reached at which further consumption of the reagent is accompanied by a marked decrease in alpha cellulose and an increase in copper number, digesting the treated pulp in alkaline liquor, bleaching the alkaline-digested pulp, and classifying the bleached pulp into long fiber and short fiber portions.

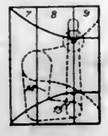
1,809,313. METHOD OF AND MEANS FOR JOINING CONDUITS. BERTWELL C. ROOT, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 12, 1926. Serial No. 108,672. 9 Claims. (Cl. 285—138.)



1. A method of preparing fibrous conduit for end joining, which comprises pegging a fibrous collar externally thereto substantially flush with its end, and then impregnating the conduit with waterproofing material.

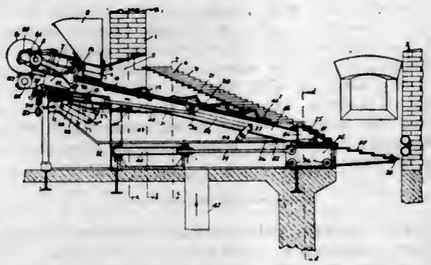
1,809,314. SOUND AMPLIFYING DEVICE. CARMEN E. ROSS, Vancouver, British Columbia, Canada, assignor to W. Wyllie Johnston, trustee, Vancouver, Canada. Filed May 21, 1928, Serial No. 279,476, and in Canada Mar. 28, 1923. 1 Claim. (Cl. 181—27.)

A sound amplifying device comprising a series of three corresponding and adjacent rectangular blocks, one surface of the middle block in said series and the adjacent surface of the outer block of said series being channeled in convolutionary form whereby a tubular cavity of circular cross section is formed by the combination of the two blocks, the extremities of said tubular cavity being connected with surface apertures in the said blocks and in planes which are right-angular to each other, central and correspondingly connected apertures transversely of said



convolutionary cavity in both said blocks, the other surface of the said middle block and that of the other outer block adjacent thereto being similarly channeled to connect the said central aperture and one of the said extremities, whereby a continuous tapered tubular cavity is produced within the said three blocks, the said cavity being so formed that a convolution around a straight portion is obtained.

1,809,315. MECHANICAL STOKER. GILBERT WAYNE RUGGLES, Youngstown, Ohio. Filed Jan. 7, 1922. Serial No. 527,604. 9 Claims. (Cl. 110—44.)



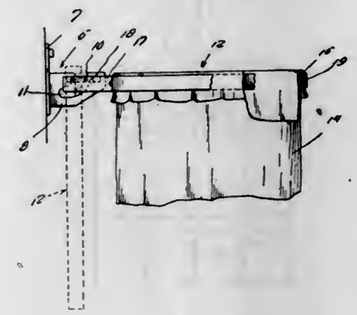
1. In mechanism of the character described, the combination of a retort, an inclined grate, a fuel supplying ram movably associated with said grate to form the intermediate inclined retort floor therebetween, said ram being open below and a shallow inclined air supply conduit disposed beneath said ram, said conduit being provided with openings in its upper wall allowing air to contact and cool said ram.

1,809,316. WATER RESISTANT FIBROUS ARTICLES AND THEIR MANUFACTURE. DILLON F. SMITH, Pensacola, Fla., and ERNEST J. PIEPER and CLARENCE C. VOOT, Lancaster, Pa., assignors to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Jan. 9, 1929. Serial No. 331,385. 11 Claims. (Cl. 92—21.)

1. The process of making fibrous articles, which comprises forming a water-containing pulp of resin bearing fibrous material, adding a siccative oleaginous material to the pulp and distributing it over the resin-containing fibers, forming the articles from such pulp, and drying and heating them so as to cause the resin and oil to combine and form a varnish in situ on the fibers.

1,809,317. ARTICLE SUPPORT. DANIEL O. SNYDER, Muncy, Pa. Filed Nov. 8, 1927. Serial No. 231,881. 2 Claims. (Cl. 248—20.)

1. In a structure of the class described, in combination, a hanger bracket embodying an attaching flange provided with an outstanding supporting arm, said arm being provided in its upper edge with a centralized entrance slot and being further provided below and at opposite ends of said slot with a pair of spaced notches opening in a direction toward each other, said notches communicating with said slot and functioning as keeper seats, and an article suspension device embodying means embracing said

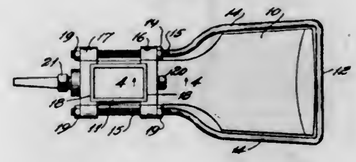


arm and equipped with a keeper insertable through said entrance slot and receivable in said keeper seats, whereby to cause said keeper to bridge said slot and to detachably connect said article suspension device with said arm.

1,809,318. MANUFACTURE OF SULPHUR CONTAINING DYES AND PRODUCT. OSKAR SPENGLER, Berlin-Neubabelsberg, and WERNER MÜLLER, Leipzig, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Filed Apr. 30, 1927, Serial No. 188,039, and in Germany Feb. 20, 1925. 11 Claims. (Cl. 260—17.)

1. A process of making sulphur-containing dyestuffs which comprises treating an aromatic compound containing at least one of the groups, $-NH_2$ and $-OH$, with a solution containing the reaction product of a sulphuryl-halide and a sulphocyanate and treating the sulphocyanogen compound thus produced with an alkaline substance at a temperature not exceeding essentially 100° C.

1,809,319. GUARD FOR ADZES. HENRY O. SWANN, Hattiesburg, Miss. Filed Nov. 15, 1930. Serial No. 495,966. 11 Claims. (Cl. 145—2.)

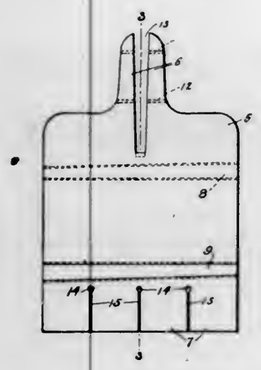


1. In combination with an adze, a guard laterally spaced from but positioned to parallel the cutting edge of the latter and prevent its penetration into the limb of the user.

1,809,320. PEEL-BLADE. OLE H. THORFINNSSON, Baltimore, Md. Filed Mar. 5, 1929. Serial No. 344,535. 1 Claim. (Cl. 107—67.)

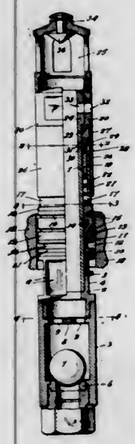
In a peel-blade, the combination of a wooden plate having a relatively sharp lifting edge and an opposite handle-engaging edge and being formed with a groove across the grain of the wood and having slots extending

from the lifting edge toward said groove, the said plate having circular bores therethrough at points between said



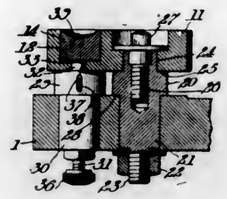
lifting edge and groove and in open communication with the said slots respectively, for the purpose specified, and a reenforcing strip fitted and secured in said groove.

1,809,321. DEEP WELL PUMP. JOHN C. VROMAN, Tulsa, Okla., assignor of one-half to C. P. Smith, Tulsa, Okla. Filed Oct. 9, 1929. Serial No. 398,470. 10 Claims. (Cl. 74—109.)



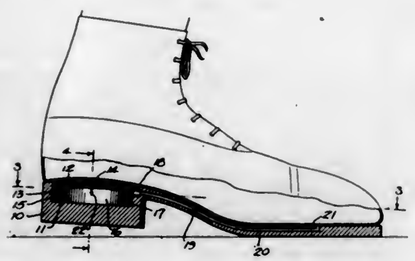
1. In a deep well pump, a tube having an external shoulder at its upper end and a small hole through the tube a short distance below the shoulder, packing supported on the tube, a follower having its lower end abutting the packing, the follower extending upwardly from the packing in spaced relation to the tube, a sleeve having an internal shoulder which fits underneath the shoulder on the tube, the sleeve extending downwardly within the follower, and a spring between the lower end of the follower and the lower end of the sleeve, said sleeve also having an interior groove and a hole in alinement with the small hole in the tube, and also having a depending flange which slidably fits and surrounds the follower whereby an enclosed chamber is formed.

1,809,322. SWINGING DIE HOLDER FOR FASTENER SETTING MACHINES. FRANK E. WARNER, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 14, 1930. Serial No. 452,495. 5 Claims. (Cl. 218—1.)



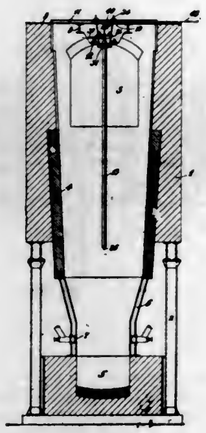
1. In a fastener setting machine, the combination with a relatively rigid base, of a die holder provided with means to receive a plurality of dies in spaced relation, a pivot member carried by and extending above said base and on which said holder is pivoted for swinging action out of contact with said base to bring any one of said dies into operative position, and a supporting member carried by said base and extending thereabove and cooperating with said holder beneath the same, said supporting member substantially aligning with the die which is swung into operative position, whereby said supporting member may receive the fastener setting thrust against said die and holder and with said pivot member provide a two-point support for said holder.

1,809,323. VENTILATING MEANS FOR FOOT COVERINGS. ORMSBY P. WILLIAMS, Sr., Southgate, Calif. Filed July 15, 1929. Serial No. 378,437. 10 Claims. (Cl. 36—3.)



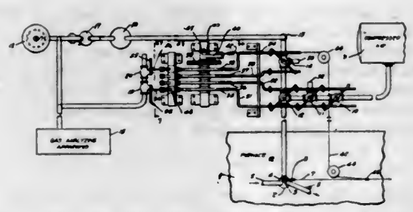
2. Ventilating means for foot coverings comprising a hollow resilient body adapted to be received in a heel cavity of the foot covering and to be deformed under the weight of the foot imposed on the body, in the act of walking, to alternately create positive and negative air pressures in the body, the body having a normally open slot positioned to be closed in response to the weight of the foot imposed on the body, and a normally closed slit positioned to be opened in response to the weight of the foot imposed on the body.

1,809,324. APPARATUS FOR BLAST FURNACE CONTROL. JOHN F. AUSTIN, Murray, and DONALD H. MCINTOSH, Salt Lake City, Utah, assignors to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 30, 1927, Serial No. 216,352. Renewed Nov. 14, 1930. 6 Claims. (Cl. 266—25.)



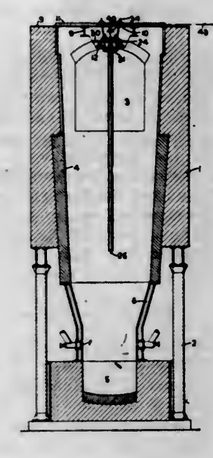
4. In combination, a metallurgical blast furnace comprising side walls having a flue near the top thereof and tuyères near the bottom thereof, a roof having a feed opening, a crucible at the bottom of the furnace, a distributor under said feed opening for distributing the charge, and a sampling tube suspended from said roof and passing through said distributor into the furnace.

1,809,325. APPARATUS FOR AUTOMATICALLY WITHDRAWING GAS SAMPLES. JOHN F. AUSTIN, Murray, and DONALD H. MCINTOSH, Salt Lake City, Utah, assignors to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 15, 1927. Serial No. 233,353. 8 Claims. (Cl. 23—257.)



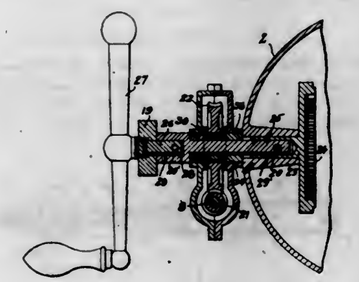
5. In an automatic gas sampling system, a furnace, a sampling device within said furnace, gas sampling apparatus, a source of compressed air, and means for automatically periodically selectively connecting said sampling device to said air source or to said sampling apparatus.

1,809,326. METHOD OF CONTROLLING BLAST FURNACES. JOHN F. AUSTIN, Murray, and DONALD H. MCINTOSH, Salt Lake City, Utah, assignors to American Smelting & Refining Company, New York, N. Y. a Corporation of New Jersey. Original application filed Aug. 30, 1927, Serial No. 216,352. Divided and this application filed Dec. 20, 1928. Serial No. 327,237. 9 Claims. (Cl. 75—17.)



1. The method of controlling the operation of a metallurgical furnace which comprises withdrawing a sample of gas from a sensitive zone within the charge and then adjusting the materials fed to said furnace in accordance with said sample.

1,809,327. MOTION PICTURE PROJECTOR. GERALD J. BADGLEY, Brooklyn, N. Y., assignor to Duplex Motion Picture Industries, Inc., a Corporation of Delaware. Filed July 23, 1924. Serial No. 727,678. 5 Claims. (Cl. 74—7.)



1. In a picture projecting apparatus, the combination with driving gear therefor, and motor-operated driving means for said driving gear, of means for permitting manual operation of said driving gear to adjust the position of the film and to bring any desired portion thereof into position for projection, said manual operating means embodying a removable crank having a shaft provided with a runway adapted for coaction with a stop carried by a bushing surrounding said shaft to lock said shaft and bushing together to permit rotary movement in unison.

1,809,328. BRAKE MECHANISM FOR MOTOR VEHICLES. WILLIAM J. BESLER, Plainfield, N. J. Filed Oct. 4, 1927. Serial No. 223,967. 1 Claim. (Cl. 188—152.)



A motor vehicle comprising a chassis having a cross frame member and friction brake elements cooperating with the wheels thereof, a brake operating mechanism including a fluid pressure motor connected to the brake elements by a longitudinally extending transmission member through which the operating force is applied and means for flexibly suspending the motor from the chassis, said means comprising two flexible cable members secured to the motor at transversely spaced points and to more widely spaced points on the cross member of the chassis, the said flexible members by their divergence acting to stabilize the motor against movements transversely of the chassis.

1,809,329. ARTIFICIAL STONE AND METHOD OF PRODUCING THE SAME. JOHN B. BOSSI, Allston, and PAUL MAZZUCHELLI, Newton, Mass., assignors to Cambridge Cement Stone Company, Brighton, Mass., a Corporation of Massachusetts. Filed Sept. 11, 1929. Serial No. 391,728. 4 Claims. (Cl. 18—60.)



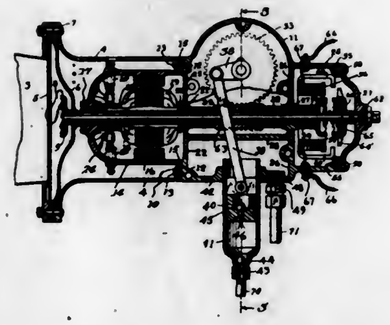
1. The method of casting artificial stone which consists in providing a mold, applying to one or more faces of the mold a water pervious paste consisting of a mixture of water and a fine powder-like material which will not permanently unite with the cement and which is adapted to prevent the cement from engaging the surface of the mold, then introducing into the mold a stone-producing compound containing hydraulic cement, and washing the paste from the face of the cast stone to reveal the texture of the stone.

1,809,330. TOOTHBRUSH. ALMOS A. DORRANCE and ARSHAM G. AVAKIAN, Detroit, Mich, assignors of one-third to Joseph G. Williams, Detroit, Mich. Filed Apr. 18, 1929. Serial No. 356,011. 6 Claims. (Cl. 15—133.)



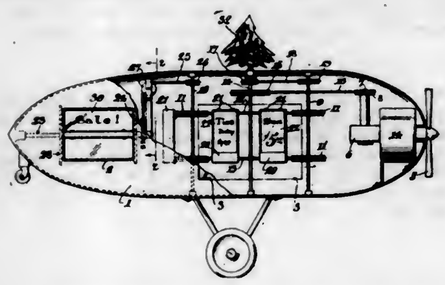
1. A tooth brush comprising a handle formed of two tubular compartments secured together in end to end relation, the adjacent ends of the compartments being closed and being each provided with an aperture, means for keeping the compartments in end to end relation, said means allowing the compartments to be manually rotated to permit or prevent communication between the compartments, a cap threaded onto the outer end of one compartment and provided with a filler plug, an internally threaded member connected to the outer end of the other compartment, a brush member having a plunger thereon movable longitudinally of the last named compartment, the brush member being adapted for threaded relation with the said threaded member, a duct extending longitudinally through the brush member and opening into the brush thereon, and a flexible rubber cap normally closing the end of the duct and provided with a discharge slot.

1,809,331. POWER UNIT FOR USE ON AUTOMOTIVE VEHICLES. CHARLES H. DUNCAN, Erie, Pa. Filed Sept. 22, 1925. Serial No. 57,981. 4 Claims. (Cl. 74—7.)



1. A power unit comprising a motor, a hollow drive shaft operable by the motor, a casing enclosing the motor and hollow shaft, said casing forming a liquid reservoir, a conduit communicating therewith, and means operable by the hollow shaft adapted to draw liquid through the conduit into the reservoir.

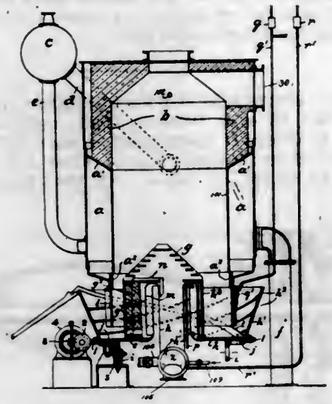
1,809,332. CHANGEABLE SIGN. JOSEPH GEORGE, Wilkes-Barre, Pa. Filed Sept. 29, 1930. Serial No. 485,174. 4 Claims. (Cl. 40—126.)



1. A changeable sign including a casing, an electric fan in one end portion thereof including a motor, a slow speed shaft, and a fan, there being a window in the casing, mechanism within the casing for bringing different signs successively into position for exposure through the window, down run water gas, said grate and said metal wall benism from the slow speed shaft.

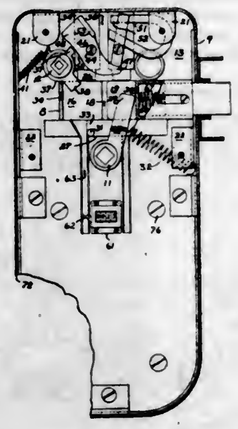
1,809,333. WATER GAS GENERATOR. ARTHUR G. GLASGOW, London, England, assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 18, 1925. Serial No. 9,926, and in Great Britain June 18, 1924. 4 Claims. (Cl. 48—78.)

4. A water gas generator having a fuel chamber the inner wall of which comprises an upper portion of refractory material superimposed on a lower portion of metal, means for admitting down run steam and taking off uprun water gas and air blast gases in the upper portion of the chamber, a mechanical ash and clinker expelling grate having ports for the passage of down run water gas and air and steam, means for admitting



air and steam to the grate, and means for withdrawing down run water gas, said grate and said metal wall being so arranged that the wall extends downward at least to the level of the lowest ports of the grate.

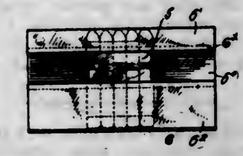
1,809,334. COIN-CONTROLLED LOCK. WALTER M. GLEASON, Oakland, Calif. Filed Nov. 30, 1926. Serial No. 151,696. 7 Claims. (Cl. 194—1.)



6. In a coin-controlled door-lock, means defining an inlet passage for a coin, a member mounted for movement to and between a pair of limiting positions and arranged when in each of said positions to have a different portion thereof interposed in said passage, one of said portions when disposed in said passage being displaceable by a coin to move said member to the other of said limiting positions to dispose the other of said portions in said passage whereby a closure is provided for the intake end of said passage to prevent the insertion of a second coin therein, and means independent of said coin operative to hold said member in position to provide a closure for the intake end of said passage.

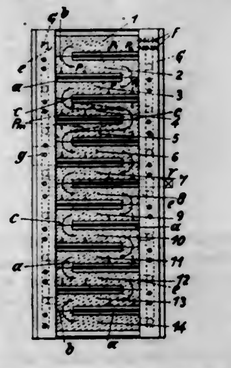
1,809,335. VISIBLE CIGAR PACKAGE. AUGUSTUS J. GOLDEN, Baltimore, Md. Filed Dec. 18, 1928. Serial No. 326,725. 3 Claims. (Cl. 206—44.)

1. A package of cigars convenient to fit the pocket and of a nature to partly display the contents, consisting of cigars arranged side by side, a portion of transparent material covering the cigars in part, and an external wrapper underlying the cigars with its upper and lower margins folded down onto the transparent material with



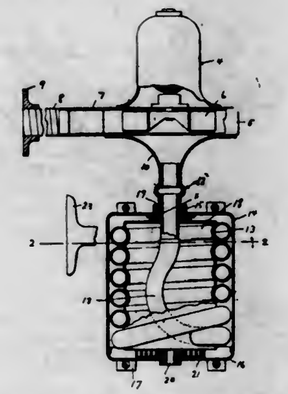
their edges spaced to expose the transparent material, the side portions of the wrapper including the folded upper and lower margins being folded backwardly onto the rear or underlying portion of the wrapper.

1,809,336. BRICK KILN FOR BURNING OF BRICKS AND SIMILAR ARTICLES. ALOIS HABLA, Rading-Theusing, near Karlsbad, Czechoslovakia. Filed July 30, 1928, Serial No. 296,368, and in Czechoslovakia July 29, 1927. 6 Claims. (Cl. 25—134.)



1. A brick kiln comprising long, spaced and substantially parallel walls, division walls of unburnt open brick work extending partly across the space alternately from the long walls to form a sinuous passage from end to end of the kiln, means to supply gases to the kiln, a portion of said gases passing through the sinuous passage and another portion passing directly through the division walls.

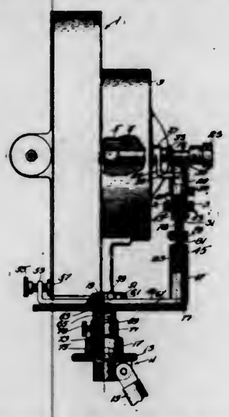
1,809,337. AUTOMOTIVE VACUUM CLEANER. HOLLIS B. HALL, Newton, Iowa. Filed May 18, 1929. Serial No. 362,629. 2 Claims. (Cl. 15—16.)



2. In a vacuum cleaner, a relatively fixed drum, a reel arranged within the drum and having spindles rotatably

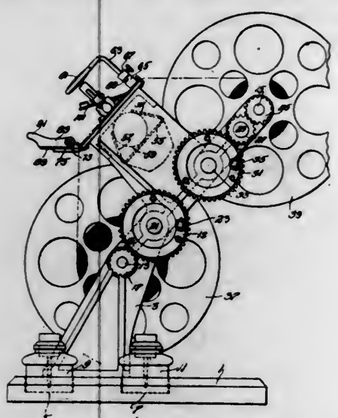
connected to the drum, a flexible hose trained about said reel and having one end portion arranged axially internally of the reel, a nipple engaged with said one end portion of the hose, said nipple extending through one of said spindles, the other end portion of said hose being movable through an opening provided therefor in the periphery of said drum, and a suction device operatively connected with said nipple exteriorly of said drum.

1,809,338. PANORAMIC CAMERA ATTACHMENT. ARTHUR C. HAYDEN, Brockton, Mass. Filed Mar. 14, 1927. Serial No. 175,116. 10 Claims. (Cl. 88—16.)



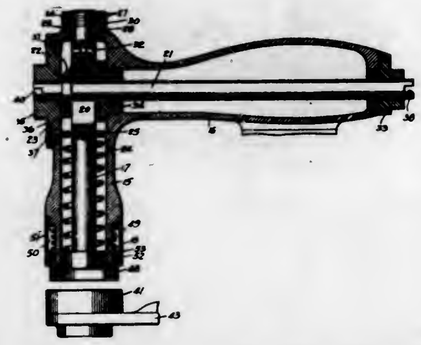
4. The combination of a motion picture camera having a film reel rotating main shaft and a spring for driving the same, said shaft having a socket adapted to receive a key for winding the spring; a supplemental shaft adapted for insertion into said socket and having a socket for receiving the key, that the latter may operate through the supplemental shaft and main shaft in winding the spring; a fixed gear, a pinion meshing with said gear, and a transmission between the supplemental shaft and the pinion for causing the latter to roll along the periphery of the gear and impart rotative movement to the camera.

1,809,339. MACHINE FOR INSPECTING, SPLICING AND REWINDING MOTION PICTURE FILMS. ARTHUR C. HAYDEN, Brockton, Mass. Filed Apr. 6, 1928. Serial No. 268,029. 4 Claims. (Cl. 154—42.)



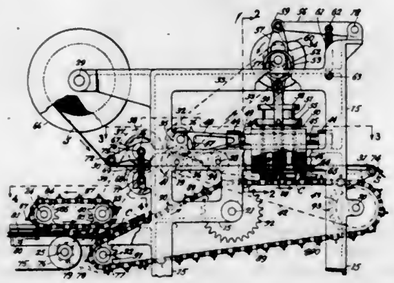
4. A machine of the character described comprising, in combination, a support, a table on the support having an aperture therein, a lamp beneath the table for illuminating the film over the aperture, pins on the table at opposite sides of the aperture for insertion into sprocket holes in end portions of the film to be spliced, and a slide on the table having a pair of fingers, one longer than the other for holding the film onto said pins.

1,809,340. PORTABLE POWER OPERATED HAMMER. JOHN ROY HILSTAD, Whittier, Calif., assignor of two-thirds to George G. Griffith and of one-third to Harry H. Canterbury, Whittier, Calif. Filed July 1, 1925. Serial No. 40,964. 3 Claims. (Cl. 153—48.)



1. In combination a power operated hammer including a hammer element, a yoke secured to the hammer and including a movable member pivotally connected to the yoke and a die secured to the movable member and supported in coacting relation to the hammer element.

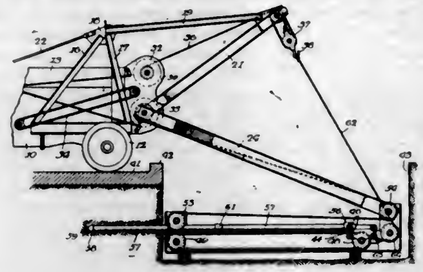
1,809,341. AUTOMATIC CONTAINER-CAP LINING MACHINE. THORMOD JENSEN, Brooklyn, N. Y. Filed Sept. 12, 1929. Serial No. 392,199. 8 Claims. (Cl. 113—80.)



1. In a container-cap-liner making and inserting machine through which travels a continuous liner strip, the combination, with a continuously moving cap-conveyer, of a twin punch and die carried by a reciprocating head, the said head moving with the said cap conveyer and liner strip and at the same speed during a portion of its forward stroke.

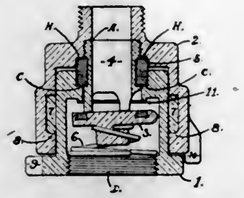
1,809,342. PIPE PUSHING MACHINE. HARRY A. JOHNSON, Chicago, Ill. Filed Nov. 16, 1927. Serial No. 233,536. 13 Claims. (Cl. 254—135.)

1. In a pipe pushing machine for forcing a service pipe from a trench through a section of earth, a motor driven vehicle having power take off means, a pushing unit secured to the vehicle and adapted to be extended into the trench, a reciprocable pipe engaging carriage on said unit, a pair of drums carried by the vehicle, means for



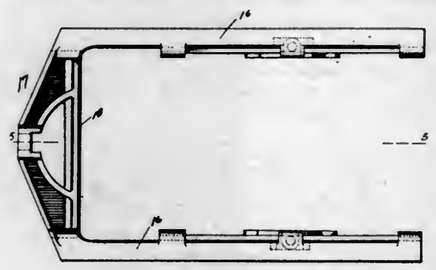
driving the drums from the power take off means and cables connected to said drums and to opposite ends of said carriage for operating the same.

1,809,343. AUTOMATIC COUPLER VALVE. JESSE D. LANGDON, Los Angeles, Calif. Filed Sept. 4, 1928. Serial No. 303,825. 7 Claims. (Cl. 284—18.)



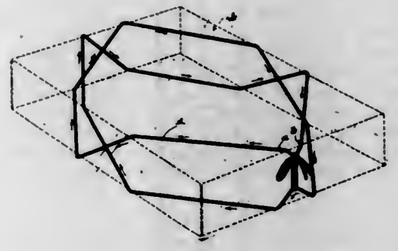
1. A coupler valve comprising two members having interengageable means to hold them together, and a bodily movable valve member seatable in one of the firstnamed members, the other firstnamed member having means to unseat said valve member with a tilting motion and to then move the valve member bodily from its seat when said firstnamed members are moved together.

1,809,344. TRACTOR. HOLMAN HARRY LINN, Morris, N. Y., assignor to The Linn Manufacturing Corporation, Morris, N. Y., a Corporation of New York. Original application filed May 13, 1924, Serial No. 713,022. Divided and this application filed Aug. 27, 1928. Serial No. 302,365. 1 Claim. (Cl. 308—59.)



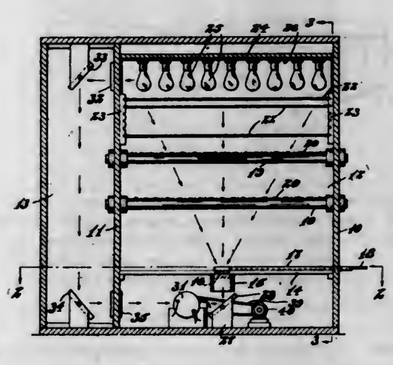
A carrier for tractor frames, including a hair-pin frame having side sills and a transverse yoke connecting them at one end, each of said sills being formed with longitudinally ranging channels to permit sliding cooperation of the carrier in the tractor frame, and idler-sprocket shaft bearings carried by the sills intermediate their ends and below said channels.

1,809,345. PACKAGE TIE. JOHN J. LYNCH, Riverdale, Md. Filed Feb. 14, 1930. Serial No. 428,312. 3 Claims. (Cl. 24—16.)



1. The system of forming a package tie comprising the passing of a single length of cord alternately over and under the adjacent corners of the package, forming a twist in the cord by turning the package, and again alternately passing the cord under and over adjacent corners of the package.

1,809,346. AREA MEASURING BY LIGHT. GILES W. O. MARTIN, Newton Highlands, Mass., assignor to Harding Engineering Company, East Boston, Mass., a Corporation of Massachusetts. Filed May 23, 1928. Serial No. 280,000. 1 Claim. (Cl. 88—14.)

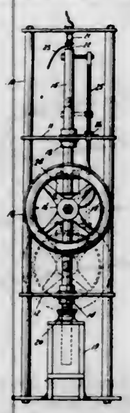


An improved device for measuring the superficial area of hides or skins comprising a photo electric cell, amplifying and indicating devices associated therewith, a light, means for dividing said source of light into two beams which impinges on the photo electric cell at two separate and distinct points, means for alternately cutting off the beams of light from the photo electric cell and means associated with said photo electric cell for indicating variations in the intensity of the lights in one of said beams due to the interposition of a hide or skin therein.

1,809,347. TIRE TESTING MACHINE. JOHN I. MARTIN, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed May 31, 1928. Serial No. 281,787. 10 Claims. (Cl. 265—13.)

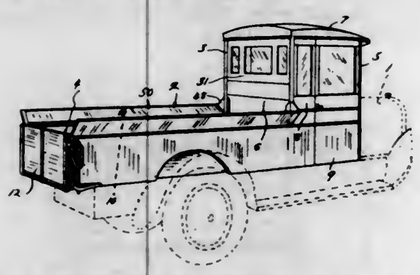
1. A testing machine of the class described comprising a reciprocable shaft, a tire-carrying wheel attached to said shaft, an anvil mounted below said wheel, means

for supporting said shaft with the wheel in raised position above said anvil, means for releasing said shaft to



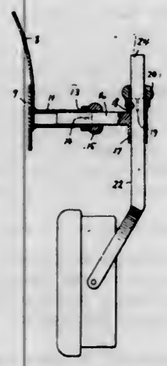
permit the same to fall until a tire carried by the wheel impacts with the anvil, and means for arresting the motion of the shaft after the tire has rebounded.

1,809,348. TRUCK BODY. NUGENT MILNER, Evansville, Ind., assignor to Graham Brothers, Evansville, Ind., a Corporation of Indiana. Filed Dec. 28, 1925. Serial No. 77,993. 6 Claims. (Cl. 296—28.)



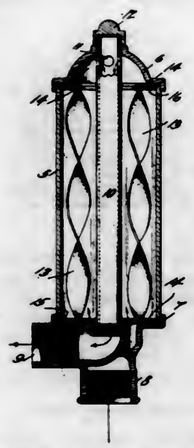
1. In a vehicle body, the combination with a base section, of a seat support thereon, a post projecting upwardly from the base section adjacent to said seat support, and a rear quarter section on the post having a plate provided with a laterally extending flange secured to said seat support.

1,809,349. SUPPORT FOR EAR PHONES. DONALD L. MOORE, St. Anthony, Newfoundland. Filed Aug. 23, 1929. Serial No. 387,950. 4 Claims. (Cl. 179—156.)



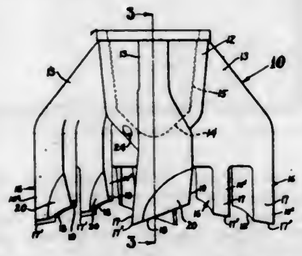
1. A supporting frame for earphones comprising a flat resilient metallic band of semi-circular configuration, a pair of plates secured to the ends of the band and extending on the opposite sides at right angles thereto, a sleeve secured at its inner end to each end of the band and projecting at right angles to the head of the user when the band is supported thereon, each sleeve having a threaded yieldable portion on its free end, a T-shaped member having a stem seated in and normally rotatable and horizontally movable with respect to the sleeve, means threadably engageable with the yieldable end of the sleeve for selectively locking the stem with respect to the sleeve, the head of the T-shaped member formed of a sleeve, having its upper end threaded and yieldable, a pair of forked supports, stems on the forked supports rotatably and vertically movable in the sleeves of the T-shaped members, means supported on the yieldable ends of the last-mentioned sleeves for locking the stems of the forked supports in selective position, the forked ends of the forked supports extending inwardly at an inclination to a vertical plane, and a pair of ear phones rotatably mounted in the forked support.

1,809,350. FLOW INDICATOR FOR OIL DISPLAY PUMPS. ROSCOE W. NICHOLS, Maywood, Ill., assignor to Oil Products Appliance Co., Maywood, Ill., a Corporation of Illinois. Filed Apr. 14, 1930. Serial No. 444,220. 1 Claim. (Cl. 116—117.)



A fluid flow indicator designed to be arranged in a transparent casing, including an upper ring, a lower ring, each of said rings corresponding to the internal diameter of the casing, and a series of whirligigs independently mounted in and freely rotatable with respect to both the upper and lower rings.

1,809,351. DRILLING BIT. GUY CARLTON OLIVER, Whittier, Calif., assignor of one-half to Roland R. Crum, Los Neitos, Calif. Filed June 26, 1929. Serial No. 373,883. 7 Claims. (Cl. 255—61.)



1. In a drill bit, a body, wings on said body, said wings comprising a plurality of pairs, with the wings of each pair

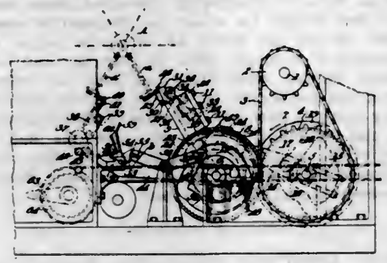
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arranged on opposite sides of the axis of said body, a plurality of arcuate cutting blades arranged in spaced relation on each wing, said blades having a front cutting edge and a narrower trailing cutting portion, said front cutting portion being disposed farther from the axis of said bit than the said trailing portion.

1,809,352. METHOD OF OBTAINING PHENYL-AZO-ALPHA-ALPHA-DIAMINO-PYRIDINE HYDROCHLORIDES. IWAN OSTROMISLENSKY, New York, N. Y., assignor to The Pyridium Corporation, New York, N. Y., a Corporation of New York. Original application filed Sept. 23, 1927, Serial No. 221,629. Divided and this application filed May 31, 1928. Serial No. 282,052. 1 Claim. (Cl. 260—42.)

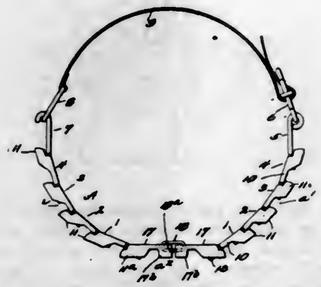
The method of obtaining dihydrochloride of phenyl-azo-alpha-alpha-diamino-pyridine, which consists in copulation of phenyl-diazonium-chloride with diamino-pyridine in a medium containing not less than 8% (by weight) hydrochloric acid.

1,809,353. TRANSFER MECHANISM FOR BOOK MATCH MACHINES. LUCIAN E. PARKER, Wadsworth, Ohio, assignor to The Ohio Match Company, Wadsworth, Ohio, a Corporation of Ohio. Filed May 25, 1929. Serial No. 366,071. 12 Claims. (Cl. 226—4.)



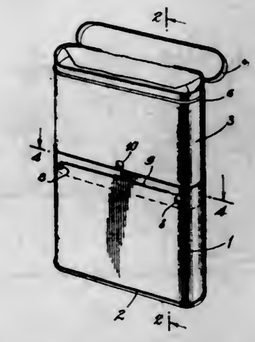
2. In a transfer mechanism for book match machines, means for grasping each match book after its completion by said machine and transferring it to a horizontally disposed carrier, the operation of said means being such that successive match books are deposited by gravity upon said carrier in recumbent position and in end-for-end reversed partially overlapping relation whereby they will stack evenly, and means for operating said transfer mechanism in timed relation to the operation of the book match machine.

1,809,354. NONSKID ATTACHMENT FOR VEHICLE WHEELS. OSCAR M. PETERS, Waynesboro, Pa. Filed May 21, 1930. Serial No. 454,382. 1 Claim. (Cl. 152—14.)



A non-skid cross chain comprising two side sections each composed of a plurality of similar links, the links in the side sections being reversely arranged, each of said links comprising a relatively flat body portion having an opening therethrough and having a finage at one end and a headed shank at the opposite end, the shank of each of said links extending through the opening in an adjacent link, and a central section comprising two similar oppositely arranged links each of the last mentioned links comprising a flat-body portion having at one end a flange and a slot similar to the flanges and slots in the links of the side sections, said slots in the central links each adapted to receive the headed shank of an adjacent side link, said central links being formed at their opposed ends with transverse slots and side flanges, and a flat metal loop extending through said slots, said side flanges projecting beyond the loop to protect the latter from wear on the roadway.

1,809,355. TELESCOPICALLY COLLAPSIBLE BOX. JAMES A. POWELL, Richmond, Va., assignor to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 18, 1929. Serial No. 356,060. 5 Claims. (Cl. 206—56.)



5. A pocket tobacco box composed of two telescoping sections having plane relatively wide side walls, and relatively narrow end walls, the sections having complemental stamped out bosses arranged to interlock when the sections are fully extended, said bosses being on the plane sides near their junction with the relatively narrow sides for the purpose set forth.

1,809,356. ARTIFICIAL FUR. GEORGES ROMANE, St. Mande, France. Filed Feb. 24, 1928, Serial No. 256,678, and in France May 19, 1927. 1 Claim. (Cl. 139—391.)

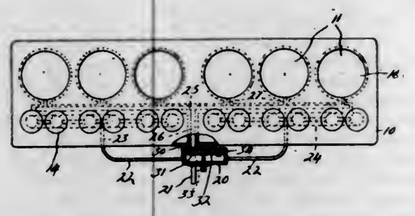


An imitation fur, comprising a support having carded looped threads attached thereto, each such thread itself embodying a multitude of small loops connected to a core.

1,809,357. LUBRICATING SYSTEM. HARRY G. SANGER and FLOYD F. KISHLINE, Detroit, Mich., assignors to Graham-Paige Motors Corporation, Detroit, Mich., a Corporation of Michigan. Filed Apr. 16, 1928. Serial No. 270,535. 5 Claims. (Cl. 184—6.)

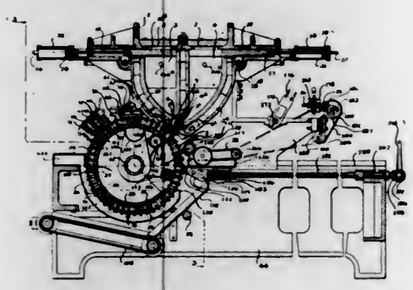
1. The combination with an internal combustion engine having cylinders and tappet bearings, of a lubricant

chamber adapted to receive a supply of lubricant under pressure, conduits for conducting lubricant from said cham-



ber to said cylinders and said bearings, and a thermostat in said lubricant chamber for controlling the flow of lubricant through one of said conduits.

1,809,358. MOLDING MACHINE. EDWARD S. SAVAGE, Rochester, N. Y. Filed Feb. 23, 1928. Serial No. 256,279. 33 Claims. (Cl. 107—17.)



1. A molding machine comprising a mold carrier movable in an endless path and provided with mold pockets arranged in a plurality of series extending transversely of the line of movement of the carrier, guides on the opposite side of the mold carrier, a crosshead, a series of pressers carried by said crosshead to cooperate with a series of mold pockets on the mold carrier, means for oscillating the crosshead over the mold carrier, means for effecting the movement of the crosshead toward and from the mold carrier to cause the pressers to cooperate with the mold pockets, and means on the crosshead for engaging with the guides on the mold carrier to center the crosshead as it travels toward the mold carrier.

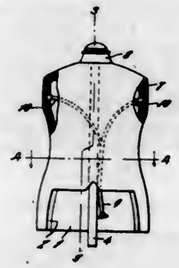
1,809,359. METHOD OF WATERPROOFING PILES. AUGUST E. SCHUTTE, Northboro, Mass. Filed Mar. 7, 1928. Serial No. 259,930. 1 Claim. (Cl. 91—70.)

A method of waterproofing and strengthening concrete pile by first applying heat to the concrete, evaporating the moisture locally and at the surface, applying an asphalt, subjecting said asphalt superficially to an intense heat until it penetrates to the desired depth, applying more asphalt and continuing the process until a desired penetration has been achieved, and proceeding thus from spot to spot until the entire surface has been covered.

1,809,360. CONCRETE PILE AND SIMILAR STRUCTURE. AUGUST E. SCHUTTE, Northboro, Mass. Filed Mar. 7, 1928. Serial No. 259,932. 2 Claims. (Cl. 91—70.)

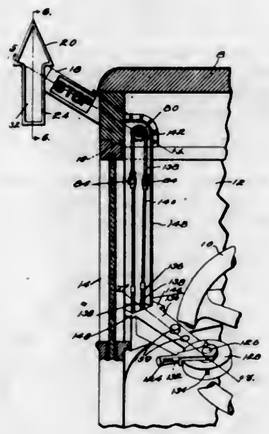
1. The method of producing waterproofed concrete structures which comprises molding a wet aggregate; allowing the molded structure to set; causing by successive steps slow relative movement between the molded structure having moisture inherently present therein and a body of liquid waterproofing material having a temperature sufficient to expel moisture from the structure, the interval between the steps being sufficient to permit the removal of the moisture, thereby to gradually heat and dry the structure in advance of the line of submergence of the structure in the liquid.

1,809,361. DISPLAY FORM. ALEXANDER SIMSON, Reno, Nev. Filed Dec. 10, 1929. Serial No. 413,096. 1 Claim. (Cl. 223—18.1.)



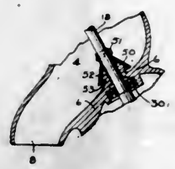
A display form of the character described comprising a hollow core having a cap block provided with an annular shoulder, a supporting standard secured to the cap block, a tubular one-piece covering of rubberized fabric mounted on the core having its upper end disposed to meet the shoulder on the cap block, an inflatable rubber casing constructed of a single piece of material and of substantially tubular form extending over the rubberized covering and having its upper end disposed beneath the annular flange, a metallic cap plate mounted on the cap block and extending downwardly over the upper end portion of the casing for maintaining said casing in position on said cap block, and means for inflating the casing, said means disposed within the core.

1,809,362. DIRECTION INDICATOR. ROBERT F. SMITH, Lynn, Mass. Filed Feb. 5, 1927. Serial No. 166,139. 2 Claims. (Cl. 116—47.)



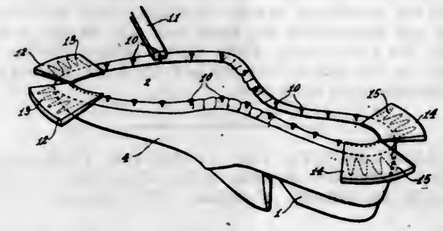
1. In a device of the character described, the combination of an oscillatory direction indicator, an operating member therefor, endless operating geared connections between said indicator and said operating member, and positive adjusting means arranged in each of the runs of said endless connection adapted to maintain said indicator and operating member in predetermined operative relation.

1,809,363. MATERIAL TREATING MACHINE. ALBERT R. TEARE, Lakewood, Ohio, assignor to Domestic Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 8, 1927. Serial No. 197,300. 9 Claims. (Cl. 83—13.)



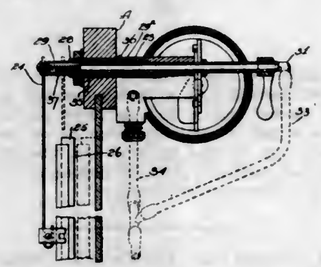
1. In a machine of the class described, a hollow casing member in the nature of a cup and having a discharge spout leading laterally from its bottom wall portion, an annular member partially closing the top of the cup and having a circular surface, a rotor having a complementary surface in close relation to the first mentioned surface, means extending through the said bottom wall portion and connected to the rotor for driving it, and means for containing material to be mixed and directing such material toward the said surfaces, said latter means being removable without disturbing the relationship of said surfaces.

1,809,364. ART OF MAKING SHOES. CHARLES TWEEDIE, Jefferson City, Mo., assignor to himself as trustee. Filed Oct. 8, 1927. Serial No. 224,813. 13 Claims. (Cl. 12—145.)



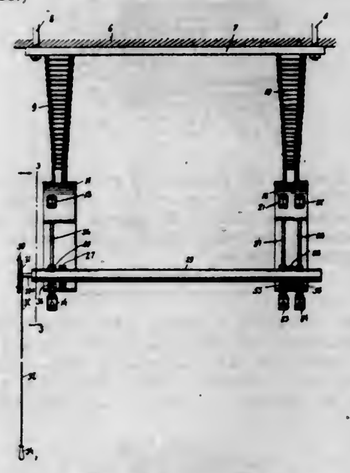
1. In the art of making shoes, the process comprising, applying cement to the margins of the upper, permitting the cement to harden, then lasting the upper over the insole in order to conform the upper to the last, softening the cement after such lasting, and sticking the cemented upper margin to the insole while it is held under tension and conformed to the last.

1,809,365. WINDSHIELD CLEANER. WALTER VAN GUILDER, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Dec. 3, 1928. Serial No. 323,334. 10 Claims. (Cl. 15—253.)



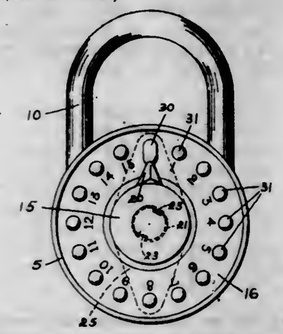
1. In a windshield wiper arranged to be operated by engine suction for giving the wiper its wiping movement over the windshield, a wiper mounted for being withdrawably pressed against the windshield; suction-operated means for pressing the wiper against the windshield consisting of two parts, one of which is telescoped within the other, the inner-telescoping one of said parts being tubular and having the connection with the suction conduit; whereby its cavity becomes a vacuum chamber, the outer telescoping part being that upon which the wiping member is mounted, and by its telescoping movement due to suction operating for pressing the wiper against the windshield.

1,809,366. HIGH TENSION SWITCH. FREDERICK H. WAPPLER, Flushing, N. Y., assignor to Wappler Electric Company, Inc., a Corporation of New York. Filed June 11, 1928. Serial No. 284,443. 5 Claims. (Cl. 200—48.)



1. A high tension switch comprising a pair of high tension insulators, means for supporting said high tension insulators upon the under side of a ceiling or the like, a pair of ring insulators mounted upon said first mentioned insulators and hanging therebelow, said ring insulators being parallel with each other, a rocking shaft of insulating material extending through said ring insulators, means for actuating said rocking shaft, and contact mechanisms carried by said ring insulators for opening and closing high tension electric circuits, said contact mechanisms being connected with said rocking shaft and controllable by movements thereof.

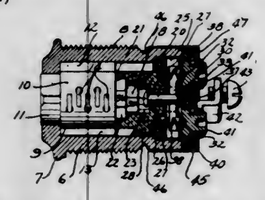
1,809,367. PERMUTATION LOCK. ROBERT K. WINNING, Wauwatosa, Wis., assignor, by mesne assignments, to Dudley Lock Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 28, 1929. Serial No. 335,511. 10 Claims. (Cl. 70—113.)



1. A permutation lock comprising a casing having a front wall outwardly embossed at predetermined stations,

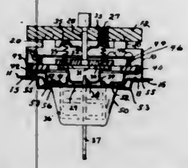
a knob rotatable with respect to said wall, and a spring connected with said knob for rotation therewith and provided with diametrically opposite parts arranged for substantially balanced interaction at said stations with the outwardly embossed portions of said wall.

1,809,368. IGNITION SWITCH, CONTACT CARRIER AND ACTUATOR. ROBERT K. WINNING, Wauwatosa, Wis., assignor to Clum Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 10, 1929. Serial No. 369,712. 16 Claims. (Cl. 200—166.)



1. In a switch, the combination with a contact carrier, of a contact actuator channeled to receive the carrier, central means for holding the carrier within the channeled actuator, and compression spring means between the actuator and carrier.

1,809,369. SWITCH BARREL AND THE LIKE AND METHOD FOR ITS MANUFACTURE. ROBERT K. WINNING, Milwaukee, Wis., assignor to Clum Manufacturing Company, Milwaukee, Wis. Filed Feb. 11, 1924. Serial No. 692,015. 8 Claims. (Cl. 200—168.)



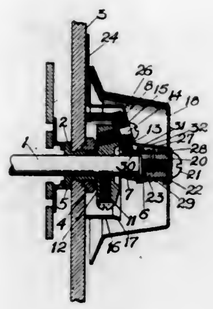
1. In a device of the character described, a tubular barrel having a cut from end to end in its wall, tongues integrally connected with said barrel adjacent the margins of said cut on opposite sides thereof, and a disk closure secured to the end of said barrel and provided with means to receive said tongues and to key said tongues together, whereby to maintain said barrel in tubular form, the engagement of said tongues in said disk constituting the sole means at said end of the barrel for maintaining the margins of the barrel together.

1,809,370. ILLUMINATED SIGN. ARCH K. WOOD, Jeannette, Pa., assignor to McKee Glass Company, Jeannette, Pa., a Corporation of Pennsylvania. Filed Feb. 17, 1930. Serial No. 428,884. 1 Claim. (Cl. 40—14.1.)



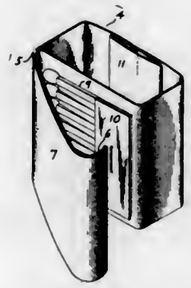
An element for an illuminated sign consisting of a plate of glass in which is formed a character in relief, the outer surface from which the character rises being a blown surface.

1,809,371. VARIABLE CONDENSER CONTROL. MORRIS H. BENNETT, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 7, 1927. Serial No. 203,898. 2 Claims. (Cl. 74—7.)



1. In a vernier condenser control, and in combination, a condenser shaft, an annular member fixed on said shaft, screws threaded into the annular memebr with axes oblique to the axis of the condenser shaft, friction wheels mounted on the screw shanks between the annular member and the screw heads, a bearing free on the end of the shaft and having an outer cone surface for contacting with the wheels, an annular stationary cage concentric with and surrounding the shaft, said cage having at its outer end an internal axially flaring surface forming a track for the wheels, and means to turn the bearing to frictionally drive the wheels.

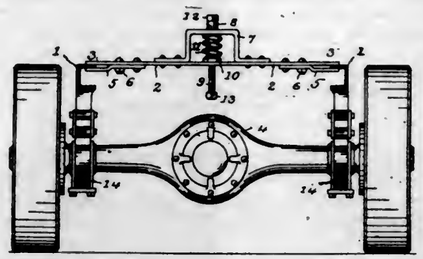
1,809,372. SHEATH FOR CIGARETTE PACKAGES. OLGA BERGHORN, Teaneck, N. J. Filed July 5, 1929. Serial No. 375,966. 3 Claims. (Cl. 206—48.)



1. An article of the character described, comprising a paper strip formed into a sheath adapted to receive a cigarette packet and a flap to cover one side of the sheath, a supply of matches mounted on said side of the sheath and covered by said flap, the opposite side of said sheath having a plait forming an external pocket, and means for securing said plait.

1,809,373. OVERLOAD INDICATOR. PERRY B. BONNETTE, Chicago, Ill. Filed Aug. 14, 1930. Serial No. 475,309. 2 Claims. (Cl. 116—114.)

1. An overload indicator for trucks comprising a transverse rail adapted for fixed attachment to the longitudinal beams of the truck underframe, an arch frame fixed centrally on said rail, an indicator stem guided vertically in said rail and frame, and a spring tending to force said



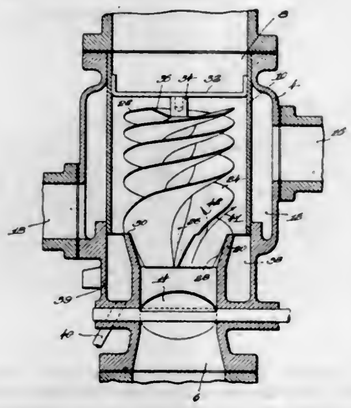
indicator stem downwardly, the lower end of the indicator stem having a normal spaced relation to the top of the transmission housing of the rear axle of the truck.

1,809,374. RAILWAY SIGNAL. VETABELLE PHILLIPS CARTER, San Francisco, Calif. Filed Dec. 3, 1927, Serial No. 237,361. Renewed Nov. 7, 1930. 14 Claims. (Cl. 246—126.)



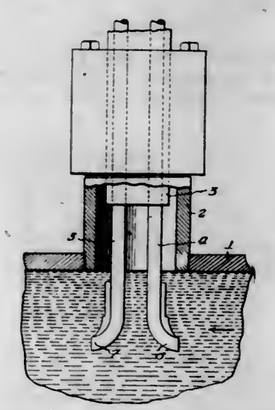
1. A railway signal comprising a plurality of electric lights, means adapted to energize repeatedly said lights in progression to represent the direction of approach of a train, and means operated by the approach of a train from said direction for actuating said means.

1,809,375. VAPORIZER. FRANCIS F. CHASE, Melrose, Mass. Filed Mar. 16, 1928. Serial No. 262,210. 6 Claims. (Cl. 48—180.)



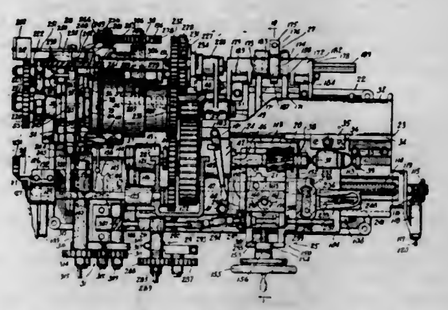
3. A vaporizer for internal combustion motors comprising a chamber adapted to be placed between the carburetor and intake manifold of the motor and having an opposed inlet and outlet, a stationary swirling device in the chamber coaxial with the inlet and outlet and comprising upwardly inclined helically shaped vanes having a plurality of convolutions, the outer edges of the vanes being spaced from the inner wall of the chamber to provide an unobstructed zone subjected to the engine suction through which the vapor mixture is free to pass upwardly and across which unvaporized particles are directed laterally by centrifugal force, and means for heating the wall of the chamber.

1,809,376. ORIFICE FOR FLOW MEASURING SYSTEMS. EDWARD S. COLE, New York, N. Y. Filed Apr. 11, 1924. Serial No. 705,811. 5 Claims. (Cl. 73—167.)



1. A rod-meter for flow-measuring systems having an orificed inlet end of such inclination to the vertical that it will cause an indication of the axial components of angular flows.

1,809,377. METHOD OF AND MACHINE FOR RELIEVING CUTTERS. JOHN EDGAR, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed July 9, 1928. Serial No. 291,161. 20 Claims. (Cl. 82—19.)

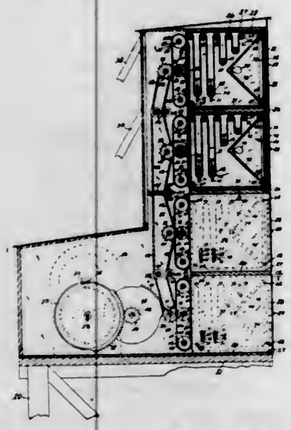


1. A machine for relieving the teeth of cutters having cutting faces longitudinally inclined to the axis of the cutter and having a contour with a peripheral lead comprising, in combination, cutter rotating mechanism, a tool having a cutting edge longitudinally inclined to the axis of the cutter, means for relatively moving the cutter and tool transversely of the cutter axis to back off the teeth, means for relatively moving the cutter and tool tangentially of the cutter at the cutting point, and means for varying the action of said first mentioned means to compensate for the inclination of the faces and for relatively adjusting the cutter and the tool longitudinally of the cutter to compensate for the lead of the contour.

10. A machine for cutting rotary cutters having generally longitudinal spiral gashes and having a spiral groove

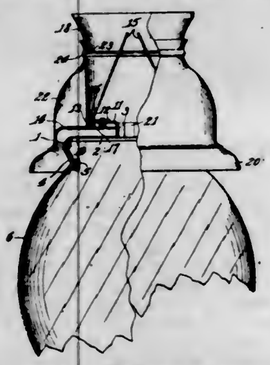
intersecting said gashes to define hob teeth comprising, in combination, a main drive shaft, a reversing clutch for said drive shaft, means connected to said shaft for rotating the cutter blank, a cutting tool, means operatively connected to said shaft for relatively traversing said tool longitudinally of said cutter, a relieving mechanism operatively connected to said shaft for effecting a relative relieving reciprocation between said tool and the cutter laterally of the latter once for each tooth, a separating mechanism operatively connected to said shaft for separating said tool and the cutter during each traverse in one direction, a cam operatively connected to said shaft for periodically opening said clutch, and means for automatically closing said clutch in the reverse direction from which it was opened.

1,809,378. INTERCHANGEABLE BLOCK BILLBOARD. GUSTAVUS W. ESCHENBACH, Los Angeles, Calif. Filed Aug. 22, 1929. Serial No. 387,569. 11 Claims. (Cl. 40—32.)



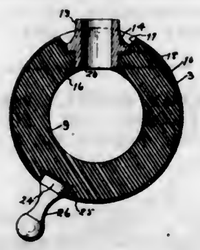
1. A bill-board including a vertically arranged frame, a plurality of interchangeable box units adapted to be placed adjacent each other and detachably secured in said frame so their pictorial sides are aligned with the front surface of said frame, and having panoramic pictorial advertising thereon formed to match at adjacent edges when arranged on the bill-board and interchangeable in position relative to each other.

1,809,379. GLOBE SUPPORT FOR ELECTRIC LIGHTS. CHARLES LEE FITCHET, Oakland, Calif. Filed May 12, 1930. Serial No. 451,545. 5 Claims. (Cl. 240—128.)



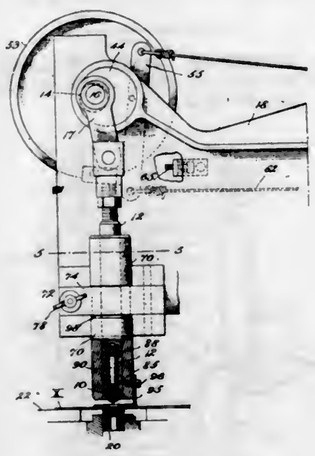
1. A globe support comprising a holder composed of complemental sections detachably secured in rigid relation, said holder including a substantially horizontal apertured body portion, a circumferential depending skirt portion contracted to embrace the neck of the globe, and a neck for embracing a lamp socket; arms directed radially outward from the neck of said holder, a reflector having radial arms supported upon and attached to the arms of said holder, a chimney-like draft tube superposed on said reflector, and suspension means leading outward from said attached arms.

1,809,380. CLARINET AND THE METHOD OF MANUFACTURE THEREOF. EDWARD J. GULICK, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed Oct. 12, 1928. Serial No. 312,089. 11 Claims. (Cl. 84—382.)



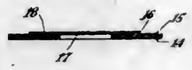
7. A musical instrument of the type described, comprising a body portion of non-metallic material, a layer of metallic material enclosing said body portion and a metallic ferrule firmly united with an end part of the body portion and covered by said layer of metallic material.

1,809,381. SCROLL CUTTING MACHINE. ROY E. HALLINOS, New York, N. Y. Filed Aug. 2, 1928. Serial No. 296,875. 4 Claims. (Cl. 164—86.)



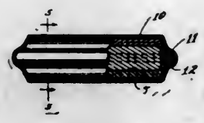
1. A machine of the character described comprising a frame, a crank pin journaled therein, a pitman connected to said crank pin and adapted to be disconected by sliding same axially of the pin, a plunger reciprocated by said pitman, a tubular guide for said plunger, means for detachably fastening the guide to said frame, and a punch removably carried by said plunger.

1,809,382. ILLUMINATED TRANSPARENCY. ROY E. HALLINOS, New York, N. Y. Filed June 18, 1928. Serial No. 286,173. 4 Claims. (Cl. 40—133.)



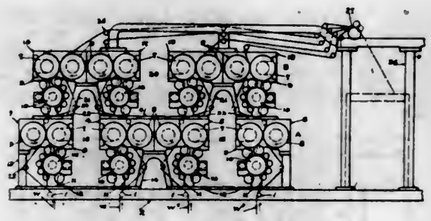
1. An illuminated sign, comprising a front plate having suitable apertures, a transparent sheet secured by adhesive material to the back of the said plate, said transparent sheet being fabric, and transparent globules secured by adhesive to one side of said fabric coincident with said apertures.

1,809,383. EDIBLE PRODUCT. ADRIAN HEYBOER, Grand Rapids, Mich. Filed Feb. 4, 1929. Serial No. 337,215. 1 Claim. (Cl. 99—10.)



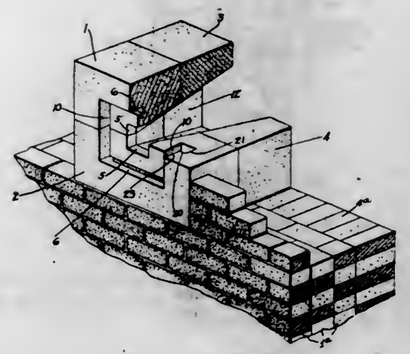
An edible product of the class described comprising a pair of narrow longitudinal shells consisting of crusts and provided with end walls and having horizontal marginal flanges extending around the sides and ends of the shells, central longitudinal strengthening ribs arranged interiorly of the shells and extending from one end wall to the other, interiorly arranged transverse strengthening ribs extending in opposite directions from the central rib to the side walls of the shells, said shells being placed together with their longitudinal flanges fitted flat against each other to form a hollow stick, and filling in said stick.

1,809,384. PRINTING MACHINE. ALBERT J. HORTON, White Plains, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 3, 1929. Serial No. 352,083. 8 Claims. (Cl. 270—5.)



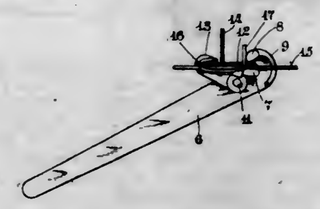
1. In a multi-unit press arrangement in which the printing members are cylinders, the combination of a plurality of printing units arranged in line with a space between the form cylinders which the form cylinders face and a closely adjacent superposed line of printing units spaced apart to form an aisle space which the form cylinders of two adjacent couples face, the units of each line being so arranged that certain of the cylinders of the lower units are below a space between the upper units and certain of the cylinders of the upper units are above a space between the lower units.

1,809,385. INSPECTION HOLE WALL STRUCTURE. MICHAEL LIPTAK, St. Paul, Minn. Filed Mar. 28, 1929. Serial No. 350,642. Renewed Feb. 10, 1930. 18 Claims. (Cl. 126—200.)



1. A fire wall element having an inspection opening, a groove in the face of the element circumscribing the opening, a face plate having an opening registered with said inspection opening and having a continuous bead projecting into said circumscribing groove, and cement filling said groove and embedding said bead.

1,809,386. FENCE FASTENER TOOL. WILLIAM H. MASON, Leesburg, Ohio. Filed May 27, 1929. Serial No. 366,141. 4 Claims. (Cl. 81—15.)

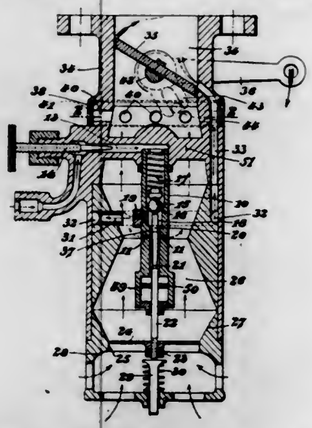


1. A fence clip fastening tool comprising a handle bar having at one end a curved portion to extend around one edge of a fence post and provided with a laterally offset portion forming a clip-bending jaw, a hook member pivoted to said handle bar to engage the other edge of said post, said hook member having a laterally offset portion near the axis of its pivotal connection constituting a clip-engaging jaw cooperating with the clip-bending jaw to press the clip toward the post during the clip bending operation.

1,809,387. CARBURETER. SAÜL EMMANUEL MELKMAN, Montreal, Quebec, Canada, assignor to Thelma Carburetor Company, Societe Anonyme, Brussels, Belgium, a Corporation of Belgium. Filed Jan. 22, 1927, Serial No. 162,803, and in Belgium Aug. 18, 1926. 8 Claims. (Cl. 261—41.)

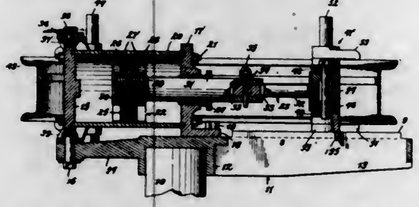
1. In a carburetor, a throttle valve, said carburetor having a duct adapted to form a by-pass around said

throttle valve, a fuel valve having an idling fuel outlet disposed opposite the inner end of the by-pass and adapted to discharge therein and also having a normal



speed fuel outlet, and means controlling the said fuel valve to successively discharge the fuel through the idling outlet and the normal speed outlet.

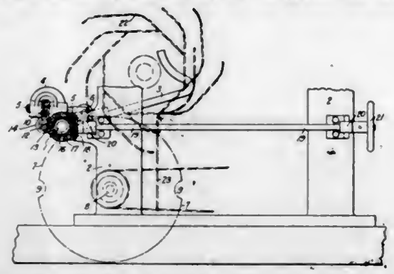
1,809,388. TIRE CHANGER. PURLEY V. MORGAN, Buffalo, N. Y., assignor, by mesne assignments, to Pneumatic Appliances, Inc., Kenmore, N. Y., a Corporation of New York. Filed Nov. 1, 1928. Serial No. 316,450. 3 Claims. (Cl. 157—1.)



1. A tire changer including a horizontal stationary enclosed cylinder, a piston in said cylinder, a piston rod secured to said piston and projecting outwardly from said cylinder, means for introducing fluid pressure to move said piston in opposite directions, a cross head pivoted intermediate its ends for horizontally swinging movement on the outer end of said piston rod, and a second cross head similarly mounted adjacent the opposite cylinder head, each of said cross heads comprising upper and lower arms and vertical rounded parts connecting said arms at their outer ends, said rounded parts forming shoulders adapted to engage the inner side of said rim to expand the same, upwardly inturned fixed hooks pivotally mounted at the lower outer ends of each vertical rounded part, and adapted to engage the lower flange of said tire rim to contract the same and removable inturned hooks pivotally mounted at the upper outer ends of said vertical rounded parts and adapted to engage the upper flange of said rim.

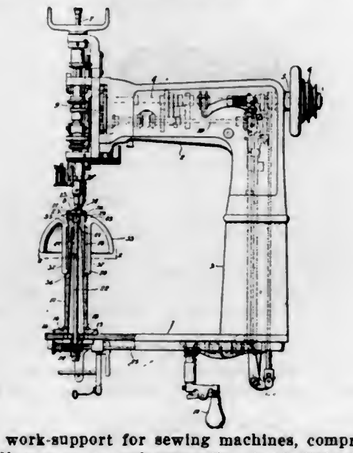
1,809,389. PRINTING MACHINE KICKER MECHANISM. EDWARD THOMAS MORRIS and THOMAS JOSEPH MILLS, London, England, assignors, by mesne assignments, to R. Hoe and Co., Inc., New York, N. Y., a Corporation of New York. Filed Jan. 19, 1923, Serial No. 613,630, and in Great Britain Jan. 28, 1922. 20 Claims. (Cl. 93—98.)

1. In a printing machine, the combination of a kicker mechanism for displacing a newspaper to indicate a group consisting of a predetermined number of papers, means for adjusting the timing of the kicker mechanism,



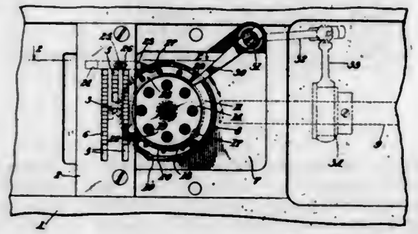
and means normally stationary relatively to the adjusting mechanism but operable while the machine is running for actuating said mechanism.

1,809,390. SEWING MACHINE WORK SUPPORT. WALTER MYERS, Bridgeport, Conn., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 17, 1929. Serial No. 363,775. 6 Claims. (Cl. 112—260.)



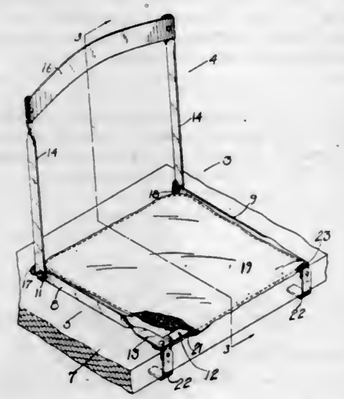
1. A work-support for sewing machines, comprising an upstanding post, a work-supporting head divided lengthwise of the post to provide complemental sections having outwardly extending flanges together providing a work-supporting surface encompassing the post, and means for securing the head sections upon the post for lateral detachment therefrom.

1,809,391. SEWING MACHINE LOOP-TAKER MECHANISM. WILLIAM N. PARKES, Brooklyn, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed May 10, 1929. Serial No. 361,896. 7 Claims. (Cl. 112—184.)



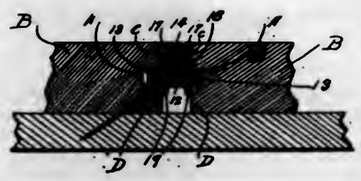
1. In a sewing machine provided with a throat-plate having a needle-aperture, a reciprocatory needle, a vertical-axis rotary loop-taker having a loop-seizing beak, a bobbin-carrier journaled in said loop-taker, means for restraining the bobbin-carrier against rotation with the loop-taker, and means for limiting oscillation of the bobbin-carrier in a direction opposite to the direction of rotation of the loop-taker comprising a stationary stop-element engaging the bobbin-carrier on its thread-loop cast-on side at a point spaced a substantial distance from a straight line transverse to the tangent to the path of the loop-taker beak in its loop-seizing position.

1,809,392. PORTABLE STADIUM SEAT. JEAN S. PONTEN, Piedmont, and OLAF W. PONTEN, Berkeley, Calif. Filed Apr. 4, 1929. Serial No. 352,368. 2 Claims. (Cl. 155—131.)



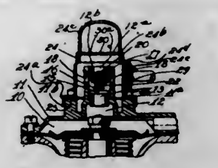
1. In a portable stadium seat, a back frame, a seat frame pivoted to the inner faces of the sides of said back frame, laterally and outwardly extended stop members integral with and lying in the plane of said seat frame for limiting the relative positioning of the two frames, downwardly extending portions on the forward ends of the sides of said seat frame arranged to lie against the forward edge of a stadium seat and seat engaging members pivoted to the outer faces of said portions and adapted to be swung on their pivots into an out of the way position above the plane of the lower ends of said downwardly extending portions and laterally to one side thereof.

1,809,393. INLAY FLOOR CONSTRUCTION. BYRD C. ROCKWELL, Camden, Ark. Filed May 9, 1929. Serial No. 361,769. 13 Claims. (Cl. 20—8.)



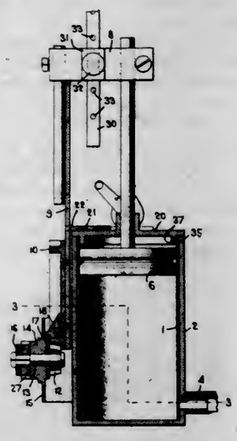
1. The method of manufacturing composite inlay tongues consisting in forming a tongue member having the sides provided with longitudinally disposed grooves, securing a resilient strip in the bottom of each groove and cutting away one side of the groove so as to expose the upper edges of said strips and of the intermediate portions to which said strips are secured.

1,809,394. VAPOR AND PRESSURE TRAPPING DOME FOR FUEL PUMPS. FRED G. SCHWEISTHAL, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Mar. 10, 1930. Serial No. 434,679. 7 Claims. (Cl. 103—223.)



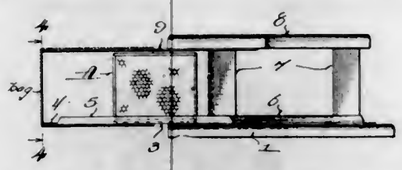
1. A device for the purpose indicated comprising a metal shell construction containing a vertically extending chamber closed at the upper end and open at the lower end and arranged at the lower end for mounting on the apparatus served, said shell encompassing at its lower open end a valve port of discharge from the apparatus served, a member containing said port and valve seat, and a valve controlling said port; a perforated member separably mounted in fixed position in the shell at the discharge side of said port and valve seat, said member forming at its perforated area a transverse partition in the shell separating a lower from an upper part of the shell cavity, a stop fixedly positioned with respect to said partition below the latter for limiting the opening movement of the valve, the structure having a discharge connection positioned laterally with respect to said chamber intermediate the valve seat and the partition; whereby the air and vapor carried by the liquid entering the shell is separated from the liquid by the perforated partition and trapped in the shell above said partition.

1,809,395. MEASURING PUMP. HARRY SEBELL, Boston, Mass., assignor of one-half to Arthur H. Parker, Lexington, Mass. Filed June 4, 1929. Serial No. 368,248. 6 Claims. (Cl. 103—163.)



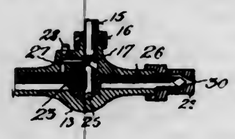
4. In a measuring pump, the combination with a cylinder having a port, of an inlet pipe, a discharge pipe, said cylinder being turnable about its axis from a position in which its port communicates with one pipe to a position in which its port communicates with the other pipe, a piston operating in said cylinder, an actuator connected to said piston and having a rack bar, and an operating pinion meshing with the rack bar, movement of the rack bar given to it by the pinion operating both to reciprocate the piston and to move the cylinder from one position to the other.

1,809,396. PACKAGING DEVICE. CARL W. AEPPLER and LESLIE LAWRENCE, Oconomowoc, Wis. Filed Mar. 15, 1930. Serial No. 436,213. 2 Claims. (Cl. 226—18.)



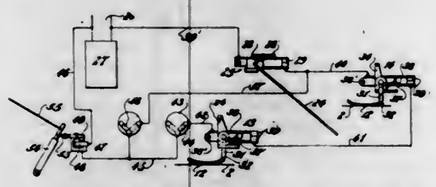
1. A device of the character described comprising a base, a blade secured thereto and projecting beyond said base, a support positioned above said base, a second blade carried by said support and aligned longitudinally and vertically with said first mentioned blade and cooperating with said first mentioned blade for receiving and spreading a folded paper bag, and means carried by said first mentioned blade for guiding an article into the bag.

1,809,397. GAS PILOT AND BURNER. IRVING M. AUSTIN, Jr., Rye, N. Y. Filed Mar. 23, 1929. Serial No. 349,346. 1 Claim. (Cl. 158—115.)



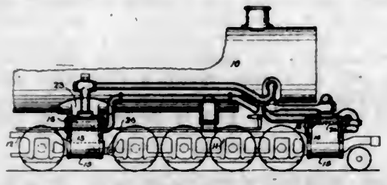
In a gas burner and pilot therefor located near the burner, a gas cock connected to the burner for controlling the supply of gas thereto, said gas cock comprising a body portion and a movable member with a bore therethrough, the body member having a pilot gas feeding bore connected to the pilot and a by-pass connecting the pilot bore with the gas supply side of the cock, the relative size and position of the bore in the movable element and the pilot bore being such that the supply of gas to the pilot is greatly increased just before and at the time gas is supplied to the burner which supply of gas to the pilot is decreased as the supply to the burner is increased through the movable element of the cock.

1,809,398. STOP MECHANISM FOR CLOTH DRYING MACHINES. CHARLES E. BEAN, Stafford Springs, Conn. Filed May 18, 1928. Serial No. 278,719. 5 Claims. (Cl. 192—127.)



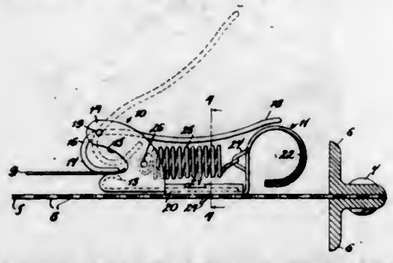
1. In combination with a cloth drying machine including a carrier chain and driving mechanism including a belt shipper, means for automatically stopping the machine should the cloth become detached from the carrier chain, said means comprising an arm for engaging the moving cloth, a contact operated by the arm, an electric circuit, an electro-magnet in the circuit, an armature for the electro-magnet, means operatively connected to the armature and belt shipper to release the belt shipper when the armature is demagnetized by the opening of the circuit by said arm becoming disengaged from the moving cloth.

1,809,399. LOCOMOTIVE. JAMES G. BLUNT and HARRY S. BURNHAM, Schenectady, N. Y. Filed May 26, 1930. Serial No. 455,499. 13 Claims. (Cl. 105—44.)



1. In a steam locomotive, the combination of two longitudinally spaced engines each comprising two duplicate castings, each casting having a working cylinder and a half saddle, the half saddle being formed at its top with a portion constituting one half of a shelf adapted to support either a boiler bearing or a platform, the four castings constituting the two engines being counterparts and interchangeable one with the other.

1,809,400. CLIP. CLAUDE A. BULKELEY, Kenmore, N. Y., assignor to Niagara Blower Company, Buffalo, N. Y., a Corporation of New York. Filed Aug. 5, 1930. Serial No. 473,147. 5 Claims. (Cl. 24—84.)



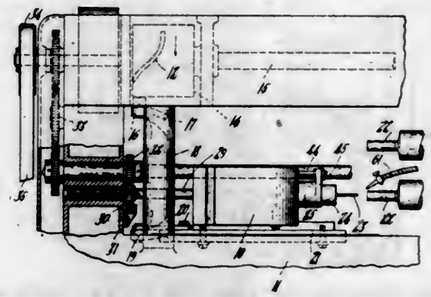
4. A fastener for holding hides or the like in a stretched condition on a frame, comprising a part having a lower flat portion having a depending finger by which it is adapted to be secured to said frame, a handle and reversely formed lips at the sides of said lower flat portion, a second part including a tongue slidably received between the said lips of said first part and formed at its front end to provide a reversely formed lower jaw and upstanding side wings and a movable jaw pivoted between said upstanding wings and movable toward said lower jaw to grip the edge of the hide therebetween and spring tension means tending to draw said parts together.

1,809,401. ADJUSTABLE JOINER. HERMAN C. CATTELL, Alliance, Ohio. Filed Mar. 5, 1928. Serial No. 259,333. 2 Claims. (Cl. 33—98.)



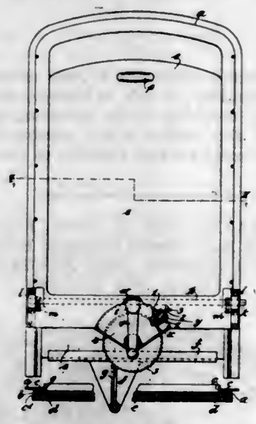
2. A tool of the class described comprising an extension member composed of telescoping sections, a sleeve adjustably secured to one section, a bushing within the sleeve, a slot in the next larger adjoining section, a projection on the sleeve adapted to extend within the slot, a spring within the said sleeve interposed between the bushing and the end of the said adjoining section, a bracket secured to one end of said extension member, a bolt passing through the said bracket, a tongue pivotally mounted on said bolt, a lock nut threaded on said bolt, a spring interposed between the bracket and the said locknut and a binding nut threaded on said bolt adapted to bind the tongue against movement with respect to the extension member.

1,809,402. RELIEVING DEVICE FOR HIGH SPEED DRILLS. FRANK L. CONE, Windsor, Vt. Filed Mar. 22, 1926. Serial No. 96,655. 2 Claims. (Cl. 77—32.)



1. In a device of the class described, a tool carriage having a tool-holder thereon, means for positively advancing the carriage continuously at a relatively slow speed through its range of travel toward the work, and means on said carriage for supporting said tool holder for advance substantially with the carriage, said last-named means operating periodically during the advance of the carriage for retracting said tool-holder from the work and returning the tool-holder at a relatively fast speed as far only as the position with respect to the work from which it was retracted.

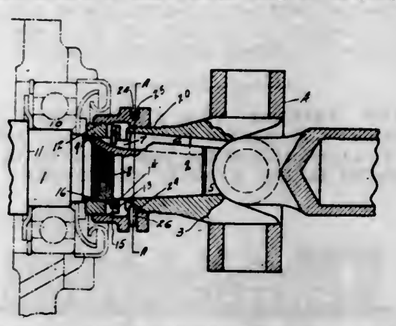
1,809,403. SLIDING WINDOW. ERNEST WILLIAM COTTER, London, England, assignor to J. Stone & Company Limited, Deptford, England, a Company of Great Britain. Filed Aug. 11, 1930, Serial No. 474,648, and in Great Britain Sept. 9, 1929. 5 Claims. (Cl. 114—177.)



1. Sliding window, particularly of the deckhouse type, comprising a fixed frame, a sliding light, a seating for said light, bars in which the light is guided in its sliding movement, rack and pinion operating means for adjusting said bars longitudinally and wedging means formed upon and engaging directly between said bars and said frame and operative, when said bars are adjusted longitudinally, to produce bodily lateral movement of said bars and the light in relation to said seating.

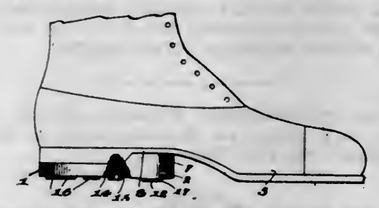
1,809,404. CONNECTION FOR UNIVERSAL JOINTS OR COUPLINGS. E. ESTAY CULBERTSON, Detroit, Mich., assignor to Spicer Manufacturing Corporation, a Corporation of Virginia. Filed Apr. 10, 1926. Serial No. 101,147. 3 Claims. (Cl. 287—53.)

1. In a device of the character described, the combination with a shaft having a seat, of a ring threaded on said shaft adjacent said seat, and being externally threaded, means for locking said ring to said shaft, a hub mounted on said shaft and having threads, of opposite direction of lead to those on said ring, on its periphery,



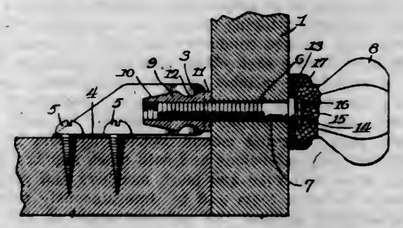
a coupling member having right and left hand internal threads adjacent its ends for engagement with the threads on said ring and hub, and means for locking said coupling member in operative position.

1,809,405. SHOE HEEL. ALBERT EHRENFRIED, Boston, Mass. Filed May 3, 1929. Serial No. 360,087. 1 Claim. (Cl. 36—76.)



An arch support, comprising a main portion adapted to be attached to the heel of a shoe to form the top lift thereof, and a forward portion extending under the inner edge of the shank of the shoe to support the inner longitudinal arch of the foot, the said forward portion being tapered in width and height longitudinally from the heel end and in height transversely from the inner side, the said portion contacting throughout with the shank of the shoe, the said forward portion having a protuberance extending below the normal traced surface of the heel.

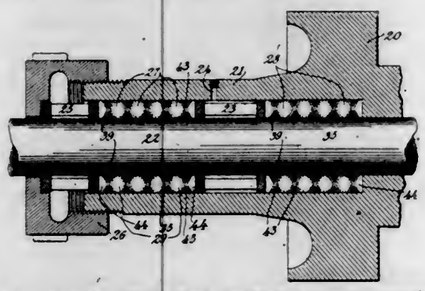
1,809,406. DOOR CATCH. WILLIAM D. FERRIS, Sterling, Ill., assignor to Frantz Manufacturing Co., Sterling, Ill., a Corporation of Illinois Filed Aug. 6, 1928. Serial No. 297,670. 1 Claim. (Cl. 292—17.)



A spring catch for doors or other closures, comprising a pair of opposed spring jaws, means for attaching the jaws to a stationary support adjacent the door, a rotatable catch member tapered to be pushed between said jaws, said member having a polygonal nut portion and a circumferential groove to receive the jaws, so that said member is operative in any rotated adjustment thereof, means for mounting said member on the door in position to engage the jaws, having screw provisions whereby

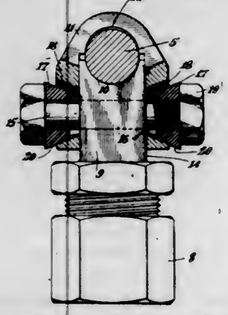
rotation of said member alone tightens the member against one side of the door, whereby the member is adjustable within limit for any thickness of door, a handle for pushing the door closed in latched position and for pulling the door open, said member serving also to retain said handle in position on the door, and means other than said member for positively limiting the closing of the door.

1,809,407. PACKING. EDGAR N. FOX, Palmyra, N. Y., assignor to The Garlock Packing Company, Palmyra, N. Y., a Corporation of New York. Filed May 15, 1922. Serial No. 561,139. 6 Claims. (Cl. 286—25.)



6. An annular piston rod packing element comprising a circular segmental ring of semi-rigid material, X shaped in cross section, having a cylindrical inner working face, an outer cylindrical bearing face, and inner, outer and lateral recesses bounded by conical surfaces.

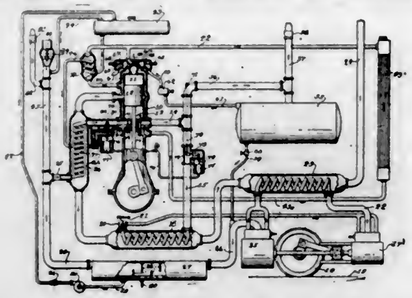
1,809,408. T-CONNECTER. ROBERT A. GOELLER, Larchmont, N. Y. Filed June 29, 1927. Serial No. 202,248. 7 Claims. (Cl. 173—273.)



1. In a connecter the combination with a block member having an end gripping surface for engaging one side of a conductor, of a cooperating relatively movable yoke member having a gripping surface for contacting with the opposite side of said conductor and side extensions having surfaces facing each other adjacent oppositely facing sides of said block member, and fastening means extending in a line passing transversely through said block member and side extensions and supported by said block member, said fastening means cooperating with at least one of said side extensions and said block member to relatively move said yoke and block members and grip said conductor between them and to simultaneously force the side extensions against the adjacent sides of the block member.

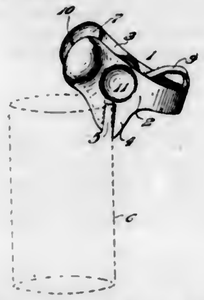
1,809,409. POWER GENERATING AND CONVERTING SYSTEMS. IRVING J. GRANGER, Waterbury, Conn. Filed July 13, 1926. Serial No. 122,091. 6 Claims. (Cl. 60—19.)

1. In a power transmitting apparatus, a chamber for mixing air with atomized water, means for compressing said mixture to form a vapor, a vapor engine driven by said compressed vapor, a condenser for separating the



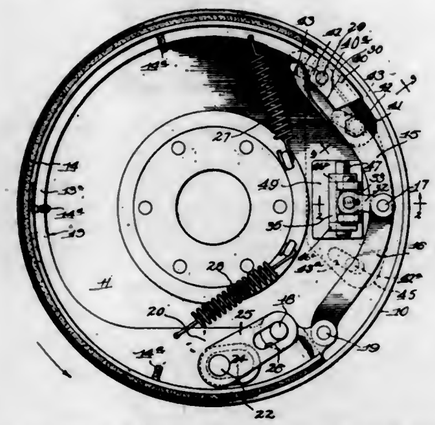
water element of said vapor from the air thereof, and means for returning said air and liquefied water to the mixing chamber.

1,809,410. JUICE EXTRACTOR. ANNA L. GROSS, Philadelphia, Pa. Filed Apr. 15, 1929. Serial No. 355,143. 1 Claim. (Cl. 100—41.)



A juice extractor comprising a piece of sheet material deflected intermediate its ends to form opposed sides and having a fruit receiving prong extending between said sides and each side having a slot opening extending inward from its lower edge to adapt it to be supported on a glass.

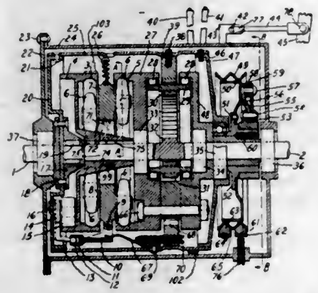
1,809,411. BRAKE. EARL G. GUNN, Racine, Wis., assignor to The Nash Motors Company, Kenosha, Wis., a Corporation of Maryland. Filed June 24, 1929. Serial No. 373,104. 9 Claims. (Cl. 188—78.)



1. In a brake, a drum, a support, friction means engageable with said drum, means for adjusting the idle position

of said friction means relative to said drum comprising a member movably mounted on said support, and applying means for said friction means including a lever having a pivotal connection on said support which is movable with said adjusting means, and maintaining said lever in a predetermined angular relation with said support in its various adjusted positions.

1,809,412. FLEXIBLE AUTOMATIC TRANSMISSION. GAIL H. HINES, Lansing, Mich. Filed Oct. 13, 1930. Serial No. 488,411. 20 Claims. (Cl. 74—34.)



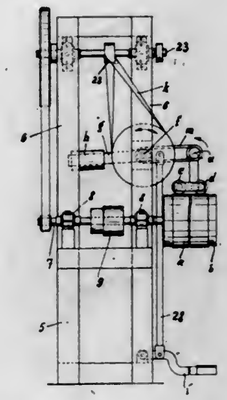
1. In a power transmission device, the combination of a drive member and a driven member, a differential mechanism connecting said members possessing a weight, means to revolve said weight in proportion to the speed of the driven member, means attached to the drive member to work the weight against centrifugal resistance, a drive gear attached to the drive member, an internal driven gear attached to the driven member, a connecting gear having a series of spiral teeth meshing with teeth of the drive gear and teeth of the driven gear, and means having operative connection with the driven member through said connecting gear to work the weight whereby to vary gradually the ratio of speed transmission, and of means to control the differential mechanism.

1,809,413. DRAIN. JOSEPH HIRSHSTEIN, Cleveland, Ohio, assignor to The Josam Manufacturing Company, Cleveland, Ohio, a Corporation of Delaware. Filed Oct. 20, 1926. Serial No. 142,983. 3 Claims. (Cl. 285—37.)



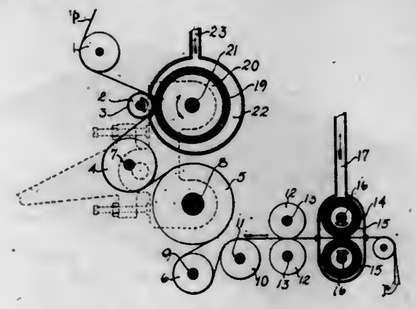
1. In combination, a drain having an upwardly extending portion and a laterally extending portion, an arm provided with a T-shaped head portion adapted to engage the outwardly and laterally extending portions of said body at the juncture of said portions with each other, a lug on said upwardly extending portion overlying and contacting with the upper side of said head portion and lugs on said laterally extending portion radially abutting the outside vertical surfaces of said T-shaped head portion of said arm whereby the arm is held against movement in one direction with reference to the drain body, a sheet of waterproofing material disposed above the laterally extending portion of said drain, and means associated with said arm for urging the waterproofing material into clamping engagement with the horizontal portion of said drain.

1,809,414. GRINDING MACHINE. JOHANN HÜSER, Polsum, Germany. Filed Feb. 15, 1929, Serial No. 340,094, and in Germany Mar. 19, 1928. 7 Claims. (Cl. 51—135.)



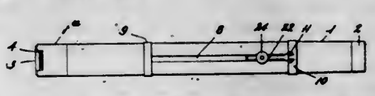
6. In a machine of the character set forth, the combination with a shaft, of a lever mounted on the shaft for rocking movement, a frame carried by the lever, rollers on the frame, means by which to impart rocking movement to the lever, and means for driving the rollers from said shaft.

1,809,415. METHOD AND APPARATUS FOR MAKING PHOTOGRAPHIC FILM BACKING PAPER WITH THIN EDGES. JOHN G. JONES and HAYWOOD G. DEWEY, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 25, 1929. Serial No. 395,014. 13 Claims. (Cl. 92—70.)



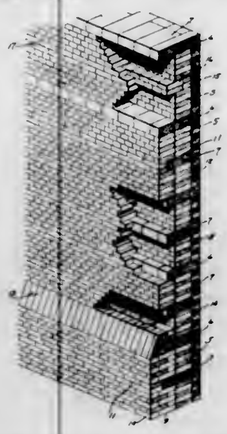
1. In a paper skiving machine, the combination with an anvil having a smooth surface, of a crown on the smooth surface of the anvil, means for stretching a sheet of paper over the anvil whereby a ridge is stretched in the surface of the paper sheet and mechanism for reducing the thickness of the stretched ridge.

1,809,416. FOUNTAIN PEN. JOHN G. LIDDELL, Everett, Mass. Filed July 11, 1929. Serial No. 377,388. 4 Claims. (Cl. 120—49.)



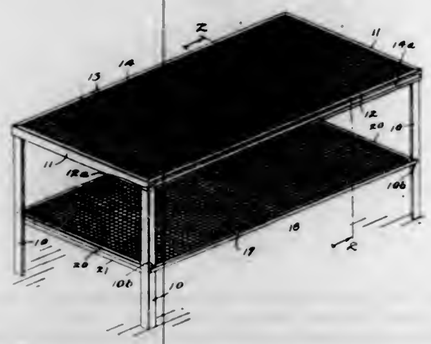
1. A fountain pen comprising a casing; a pen movably mounted within the casing; and a cap permanently attached to the casing but movable from closed position to permit protrusion of the pen, said cap being mounted to rotate about the longitudinal axis of the device.

1,809,417. FURNACE WALL. MICHAEL LIPTAK, St. Paul, Minn. Filed Oct. 5, 1925. Serial No. 60,463. 14 Claims. (Cl. 72—102.)



1. A wall structure comprising a permanent wall and a replaceable wall, the former having tie blocks that extend therefrom into the latter, said replaceable wall having a relatively thick lower portion, and sill blocks located at the line of junction between the thick and relatively thin portions of said replaceable wall, said sill blocks having beveled surfaces blending together the exposed surfaces of the relatively thin and thick portions of said replaceable wall.

1,809,418. TABLE WITH DUSTLESS STRUCTURE. CHARLES M. MCCARTHY, Minneapolis, Minn. Filed Dec. 6, 1929. Serial No. 412,066. 4 Claims. (Cl. 211—126.)



4. A table for displaying articles in a store, having in combination, a plurality of legs, an openwork frame supported by said legs at the tops thereof, a wire screen supported by the sides of said openwork frame, and forming the horizontal top of the table, the wires of said screen being spaced so that dust from the atmosphere will pass therebetween, said frame having means for removably receiving a plate, and a plate slidable into said frame from one side thereof, said plate being readily removable so that dust deposited thereon can be removed.

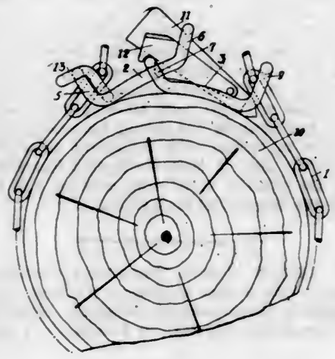
1,809,419. VALVE. EDWARD MULLER, North Bergen, N. J. Filed Jan. 4, 1927. Serial No. 158,924. 5 Claims. (Cl. 251—143.)

5. A valve comprising a casing having an inlet passage and an outlet passage separated by a partition formed with a valve opening surrounded by a valve seat, a valve stem slidably mounted in said casing, a valve head mounted on said stem to cooperate with said valve seat to close and open said valve opening upon movement of said stem in the direction of flow of liquid through the valve and in the opposite direction respectively, a piston disk fast on said valve stem, a pair of oppositely facing cups slid-



able on said valve stem between said piston disk and valve head and forming cylinders to loosely receive said parts, both said cups being movable with said piston disk and valve head upon opening movement of the latter, and means for limiting movement of said cups with respect to said piston disk and valve head upon closing movement of the latter, whereby closing of the said valve head is retarded.

1,809,420. CHAIN FOR TIMBER IN COMBINATION WITH A TIGHTENING DEVICE AND KEY. KARL RICHARD ALBERT NYLÉN, Solleftea, Sweden. Filed Aug. 31, 1929, Serial No. 389,854, and in Norway Mar. 2, 1929. 3 Claims. (Cl. 24—116.)

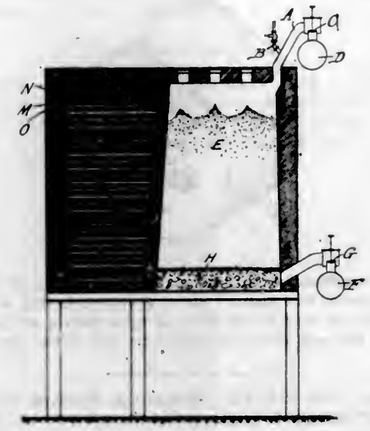


1. In combination with a chain laid around round timber logs, a member with upwardly curved narrow part engaging an upstanding link of said chain, a central larger part of said member allowing the free passage of said chain, an upwardly curved ring-shaped part of said member, a second member with upwardly curved narrow part engaging an upstanding link of said chain, a central larger part of said second member allowing the free passage of said chain, an upwardly curved part of said second member adapted to be inserted through the upwardly curved ring-shaped part of the first member, a hole in the upwardly curved part of the second member, a key adapted to be passed through said hole in the upwardly curved part of said second member.

1,809,421. APPARATUS AND PROCESS FOR PRODUCING COKE AND WATER GAS IN VERTICAL CHAMBER OVENS. CARL OTTO, Hellerup, Denmark, and CHARLES W. ANDREWS, Duluth, Minn. Filed May 8, 1925. Serial No. 28,822. 5 Claims. (Cl. 202—23.)

1. The process of producing coke and water gas in vertical chamber coke ovens, which consists in coking

the upper portion of the coal in the chamber of the oven, feeding steam to the top of the chamber after the ending of the coking of the coal in the upper part of the chamber

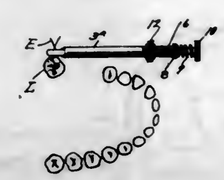


and before ending of the coking in the lower part of the chamber, and in drawing off the water gas so produced, at the bottom of the chamber, with the distillation gas which is still being produced.

1,809,422. METHOD OF MANUFACTURING SOLUTIONS OF CHOLESTERINE. FRIEDRICH PASSEK, Hamburg, Germany. Filed Feb. 14, 1929, Serial No. 340,003, and in Germany Sept. 10, 1927. 5 Claims. (Cl. 167—65.)

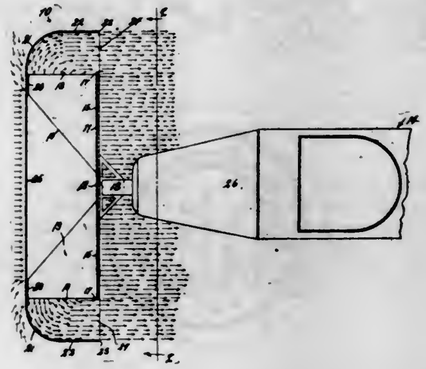
1. The method of manufacturing a substantially clear aqueous alcoholic solution of cholesterine or derivatives thereof comprising dissolving cholesterine or derivatives thereof in a comparatively small quantity of an aliphatic halogenated hydrocarbon having a marked solvent power therefor, and diluting the resulting solution with such a quantity of a diluted alcohol as will ensure the production of a permanently clear solution.

1,809,423. TOOTH BAND HOLDER AND CLAMP. ARTHUR E. PECK, Los Angeles, Calif. Filed Sept. 25, 1929. Serial No. 395,060. 2 Claims. (Cl. 32—17.)



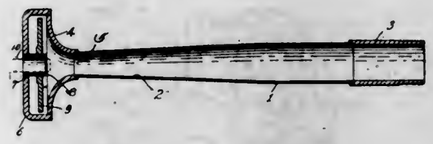
1. A dental wax-band holder comprising a center rod part and a slotted sleeve part in which it is non-turnable and longitudinally slidable, said rod and sleeve having on coordinate ends a pair of lateral jaws to receive the part to be gripped, and a spring operative on said rod and sleeve to close the jaws, a spur projecting through the slot from the rod, and a jamming nut running on said sleeve to engage the nut and jam the effective jaws closed on an object.

1,809,424. PROPELLER FOR DRIVING AND STABILIZING AIRCRAFT. ANDREW C. PEREBOOM, Los Angeles, Calif. Filed Nov. 28, 1928. Serial No. 322,518. 1 Claim. (Cl. 170—168.)



A propeller for driving and stabilizing an aircraft including a flanged hub secured to the engine shaft of the aircraft, a back plate arranged transversely to said shaft that is secured to said hub, taper blades arranged radially relative to the longitudinal axis of said shaft and extended straight forward from said back plate, flanged rear ends to said blades that are secured to said back plate, as casing enclosing said blades, a nose plate integral with said casing and arranged parallel to said back plate, forward end flanges to said blades that are secured to said nose plate so as to support said casing in advance of said blades, said nose plate having an air inlet therethrough that is greater in diameter than the diameter through the body of said aircraft, and a circumferential wall integral with said casing surrounding the rim of said back plate and spaced therefrom to form an annular discharge outlet through which said propeller can drive a cylindrical column of air so as to surround and stabilize said aircraft and propel it forward substantially as described.

1,809,425. MIXING DEVICE FOR GAS BURNERS AND THE LIKE. MILLARD J. ROBERTS, Tonawanda, N. Y., assignor, by mesne assignments, to Roberts-Gordon Appliance Corporation, Buffalo, N. Y., a Corporation of New York. Filed Sept. 27, 1927. Serial No. 222,357. 5 Claims. (Cl. 158—118.)



3. A mixing device for gas burners and the like comprising a metal conduit having a bell-like inlet end and a continuously smooth finished internal passage from said inlet end, and first converging from said inlet end and then slowing diverging to form a Venturi passage, said bell-like part and conduit being joined by a smooth joint at the smaller end of said passage, a strap extending across the bell-like end, and having angular legs extending towards and connected to the peripheral portion of the inlet end with the strap spaced from the flared inlet end, a sleeve carried by and extending through said strap towards and axially of the inlet end of the passage for receiving a jet device, and a valve plate disposed between

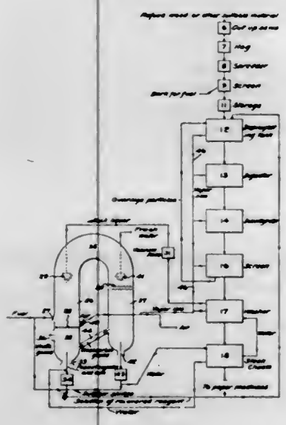
said strap and said inlet end and carried by and adjustable along said sleeve to vary the amount of air admitted to the inlet end around said sleeve.

1,809,426. HYGROMETER. ROY B. SOMERS, Zeeland, Mich. Filed Feb. 20, 1928. Serial No. 255,526. 3 Claims. (Cl. 73—24.)



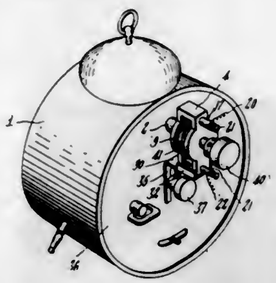
3. A device of the class described comprising, a supporting member, a curved band of metal fastened at one end to the said supporting member, flanges extending inwardly from the ends of said band and a plurality of tapered blocks capable of absorbing moisture from the air placed against the inner side of the band with their tapered sides in tight abutting relationship, said blocks extending continuously from one flange to the other.

1,809,427. PROCESS AND APPARATUS FOR MANUFACTURING PAPER. JOHN H. SPOHN, Jr., San Francisco, Calif., assignor to Chemical Development Co. Ltd., San Francisco, Calif., a Corporation of California. Filed Nov. 3, 1928. Serial No. 316,891. 2 Claims. (Cl. 92—11.)



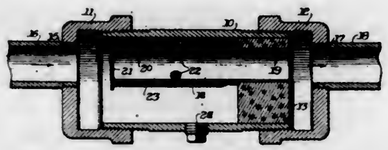
1. The process of recovering reagents used in a manufacturing process comprising injecting a black liquor into a furnace to concentrate the same and to burn out organic matter, scrubbing products of combustion and vaporized reagents from the furnace with a fluid to recover the reagents and to remove obnoxious gases, and separating a reagent constituent substantially insoluble in the scrubbing fluid from the fluid.

1,809,428. TIME CONTROLLED SWITCH. EVERETT E. STONE, Brookline, Mass. Filed May 9, 1930. Serial No. 451,001. 4 Claims. (Cl. 200—36.)



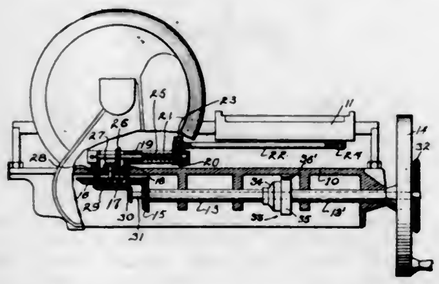
1. In combination with an alarm clock having an alarm winding stem and another stem, a switch having a shaft attachable to said alarm winding stem, and a supporting element for said switch securable to said other stem.

1,809,429. OIL FILTER. WILLIAM B. STURGIS, Chicago, Ill. Filed July 2, 1928. Serial No. 289,749. 3 Claims. (Cl. 210—165.)



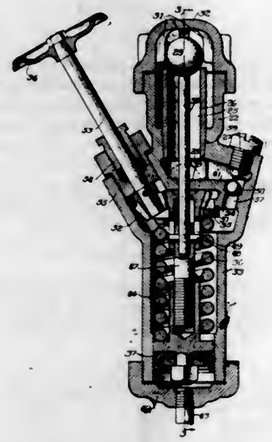
1. In an oil filter, the combination of a horizontally disposed pipe section having a normally closed drain in the bottom, a cylindrical cork forced into direct engagement with and confined wholly within one end of the pipe section and having a bore or aperture of uniform diameter extending therethrough, an elongated filtering element extending longitudinally of said pipe section and having one end thereof forced into and held in the aperture in the cork, and reducer caps screwed onto the ends of the pipe section for connecting the filter to a feed line.

1,809,430. SLICING MACHINE. ADRIANUS VAN DUYN, Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Jan. 20, 1927, Serial No. 162,229, and in Germany May 20, 1926. 18 Claims. (Cl. 146—102.)



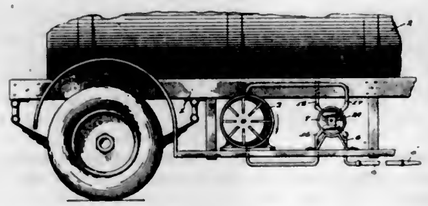
8. A slicing machine comprising a rotary slicing knife, a reciprocating table for presenting material to said knife to be sliced, a rotary crank arm having a cross-head adjustable longitudinally thereof, a link connecting said cross-head and table, a screw shaft for moving said cross-head along said crank arm, a hollow drive shaft for rotating said crank arm, an operating shaft extending through said hollow drive shaft, means connecting said operating shaft with said screw shaft to rotate said screw shaft from said operating shaft, a drive wheel, and variable speed connection between said drive wheel and drive shaft.

1,809,431. VALVE CONSTRUCTION. IRA A. WEAVER, Springfield, Ill., assignor to Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed Oct. 5, 1928. Serial No. 310,494. 3 Claims. (Cl. 137—153.)



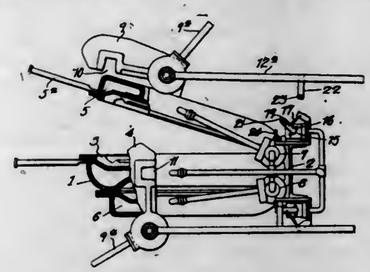
1. In a valve, the combination of a valve-casing having inlet and discharge ports, a valve controlling the passage connecting said ports, a piston slidable in a cylindrical part of said casing, a rod having a screw-threaded connection with said piston and adapted to open said valve upon movement of said piston, a spring opposing the valve-opening travel of said piston, means to apply fluid pressure to said piston in opposition to the action of said spring thereon, a gear in said casing having a sliding connection with said rod permitting the gear to turn said rod to change its effective length with relation to said piston, a second gear in said casing in mesh with said first gear, and means projecting outside of said casing by which said second gear may be turned to adjust the fluid pressure on said piston at which the latter will unseat said valve.

1,809,432. DELIVERY VALVE FOR LIQUID DELIVERY TRUCKS. SCOTT E. WEBB, Santa Rosa, Calif. Filed Feb. 25, 1930. Serial No. 431,105. 11 Claims. (Cl. 137—21.)



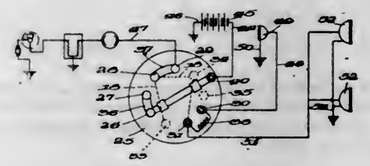
1. The combination with a delivery truck for liquid products provided with a tank, a pump, and a delivery nozzle, of a delivery valve comprising a hollow body having a suction port connected to the suction side of the pump, a pressure port connected to the pressure side of the pump, a delivery port connected to the delivery nozzle, and a tank port connected to the tank, said valve being provided with a movable member mounted within the hollow body provided with a pair of noncommunicating passages having ports movable to registering relation with the valve ports, to connect the nozzle port with either pump port and to connect the tank port with the other pump port as desired whereby liquid may be pumped to or from the tank as desired, the hollow body normally being filled with the liquid product to be delivered.

1,809,433. APPARATUS FOR VULCANIZING TIRES. HARRY WILLSHAW, THOMAS NORCROSS, and FREDERICK GEORGE BROADBENT, Erdington, England, assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a Corporation of New York. Filed Mar. 15, 1928, Serial No. 261,763, and in Great Britain Mar. 19, 1927. 5 Claims. (Cl. 18—17.)



1. Apparatus of the type described which comprises a chest in two parts, a link concentrically mounted on one part and adapted to engage the other of said parts with its free end, means for turning said eccentric against the part on which it is mounted, and means actuated by said eccentric turning means when the free end of said link is in engagement with said second part to admit fluid under pressure to the work within said chest.

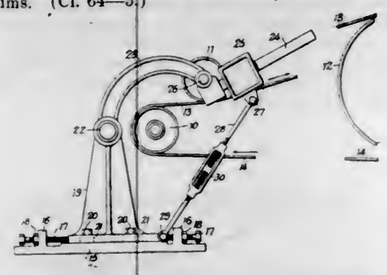
1,809,434. CONTROL SWITCH CIRCUITS FOR AUTOMOBILES. ROBERT K. WINNING, Wauwatosa, Wis., assignor to Clum Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Aug. 16, 1922, Serial No. 582,210. Divided and this application filed Apr. 24, 1928. Serial No. 272,468. 7 Claims. (Cl. 171—97.)



7. In the electrical system of an automobile, the combination with ignition, battery and lighting conductors; of a switch comprising nine arcuately arranged stations in a common plane; a first, second, third and fourth of said stations comprising terminals and a seventh and eighth of said stations comprising additional terminals; conductors connecting the terminals at the first and second stations and at the third and fourth stations, said conductors being in operative electrical connection respectively with said battery and ignition conductors, a resistance connecting the terminals at the seventh and

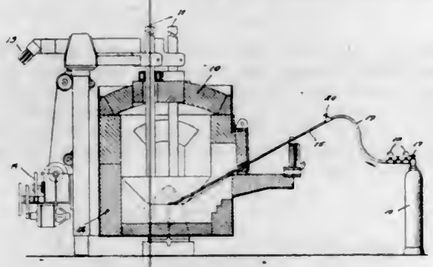
eighth stations, said lighting conductor being connected with the terminal at the eighth station; an additional lighting conductor connected with the terminal at the seventh station; and a movable contact element oscillatable with respect to said terminals and provided with contacts adapted to register with selected terminals in the various positions of said elements, there being contacts spaced apart the distance between two consecutive stations on one side of said element and contacts spaced apart the distance between three consecutive stations on the other side of said element, all of said contacts being in electrical connection.

1,809,435. BELT DRIVE. CHARLES O. WOOD, Chambersburg, Pa. Filed Aug. 18, 1927. Serial No. 213,895. 7 Claims. (Cl. 64—5.)



2. In a belt drive, the combination with a driving pulley, a driven pulley and a belt connecting them; of a contactor pulley engaging the slack reach of the belt, means for loading the contactor pulley, manual means to adjust the load on said contactor pulley, and means to automatically adjust the load on the contactor pulley in accordance with the stretching of the belt.

1,809,436. PROCESS OF PURIFYING METALS. CHARLES W. CARMAN, Washington, Pa., assignor, by mesne assignments, to Stainless Steel Corporation, Youngstown, Ohio, a Corporation of Delaware. Filed Feb. 26, 1927. Serial No. 171,318. 10 Claims. (Cl. 75—44.)

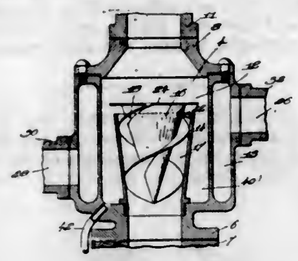


1. The process of purifying molten steel in a closed container which comprises adding material containing palladium oxide and aluminum in sufficient quantity to float the palladium oxide.

1,809,437. STAINLESS CHROMIUM ALLOY AND METHOD OF PRODUCING SAME. CHARLES W. CARMAN, Washington, Pa., assignor, by mesne assignments, to Stainless Steel Corporation, Youngstown, Ohio, a Corporation of Delaware. Filed Sept. 15, 1927. Serial No. 219,825. 6 Claims. (Cl. 75—44.)

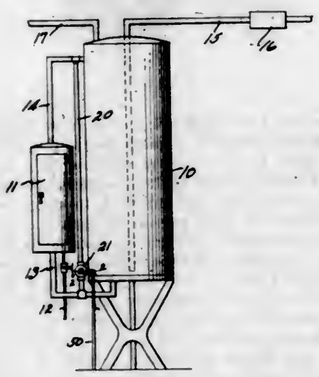
1. The method of purifying a bath of molten metal which comprises slagging off impurities, adding ferrochromium, injecting oxygen into the bath and adding a floatable material comprising a metallic oxide and a reducing agent that fuses off during the oxygen injection.

1,809,438. VAPORIZER. FRANCIS F. CHASE, Melrose, Mass. Filed July 7, 1927. Serial No. 203,939. 10 Claims. (Cl. 48—180.)



1. A vaporizer comprising a casing having an inlet and an outlet, means forming a helical conduit through which the mixture passes from the inlet toward the outlet, said means including vanes having their axis extending longitudinally between the inlet and the outlet and laterally opposed to the wall of the casing to direct the mixture by centrifugal force laterally toward the wall of the casing, means for supporting and enclosing the vanes and means for applying heat externally of the casing.

1,809,439. SAFETY VALVE FOR HEATERS. EARL R. CLARK, Highland Park, Mich. Filed Aug. 24, 1928. Serial No. 301,763. 1 Claim. (Cl. 122—504.)

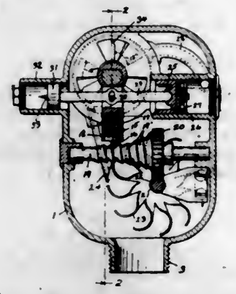


In a hot water heating system, a storage tank having a cold water inlet leading to and opening adjacent the tank bottom, and a hot water outlet in the top of the tank, a hot water heater on the side of the tank, a pipe leading from the bottom of the tank to the bottom of the heater, a pipe leading from the top of the heater to the upper portion of the tank, a by pass pipe connecting the latter two pipes, and a thermally sensitive relief valve in said by pass pipe near the lower end thereof and constructed to discharge a portion of the tank contents which has accumulated in said tank and spread thru said by pass pipe, when the tank contents have exceeded a predetermined temperature and not before.

1,809,440. FLUSH VALVE. DONALD ELDER, Berkeley, Calif. Filed Jan. 27, 1930. Serial No. 428,859. 17 Claims. (Cl. 221—101.)

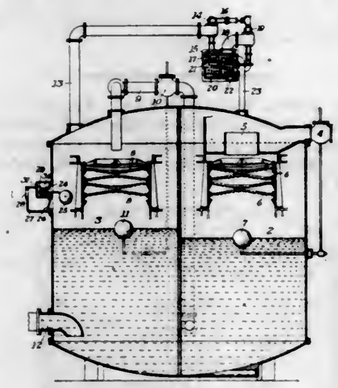
1. A water flow controlling device comprising a chambered body with an inlet and an outlet passage for water to flow therethrough, a rotary valve across the inlet passage, means accessible at the exterior of said body for

manually rotating said valve to open the same, means tending to close said valve including a piston under



pressure of water from a point ahead of said valve, and means within said body operated by flow of water therethrough controlling the time of closing.

1,809,441. METHOD AND APPARATUS FOR THE TREATMENT OF LIQUIDS. WILLIAM S. ELLIOTT, Pittsburgh, Pa. Filed Aug. 6, 1925. Serial No. 48,543. 21 Claims. (Cl. 183—2.5.)



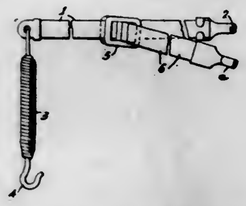
6. In a liquid handling apparatus, a vacuum chamber, and a combined vacuum breaker and overflow connection for said chamber.

14. In the method of deaerating and delivering low temperature water, the steps comprising treating the water under a vacuum the temperature corresponding to which is above the temperature of the supplied water, and then subjecting the water so treated to a vacuum the temperature corresponding to which is not materially below the temperature of the water being treated.

1,809,442. PROCESS FOR THE MANUFACTURE OF METALLIC BERYLLIUM OR ITS ALLOYS. HELLMUT FISCHER, Berlin-Friedenau, Germany, assignor, by mesne assignments, to Metal & Thermit Corporation, New York, N. Y., a Corporation of New Jersey. Filed Oct. 3, 1927, Serial No. 223,835, and in Germany Oct. 7, 1926. 3 Claims. (Cl. 204—19.)

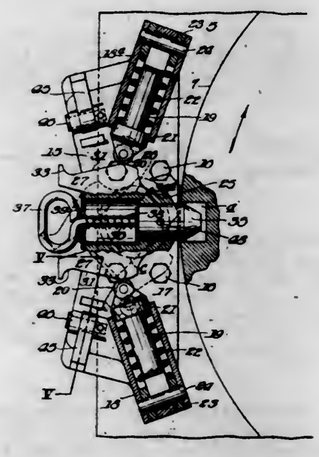
1. In the production of electrodeposited coatings containing beryllium, the process which comprises electrolyzing a molten bath containing a beryllium compound selected from a class consisting of bassic beryllium fluoride and beryllium oxyfluoride, and replenishing the bath by the addition of the same said class of beryllium compounds, as such.

1,809,443. DEVICE FOR APPLYING ANTISKID CHAINS. HERBERT A. FRAZIER, Butler, Pa. Filed May 8, 1930. Serial No. 450,837. 3 Claims. (Cl. 152—14.)



2. A device for applying anti-skid chains to vehicle wheels which comprises in combination a flexible strap, a hook attached to one end of the strap, a helical spring attached to the other end of the strap, a hook attached to the free end of the spring, a tongueless buckle mounted on said strap, a second strap attached to the bar of said buckle, and a hook on the free end of the second strap.

1,809,444. ROTARY DRILLING APPARATUS. EDGAR E. GREVE, Bellevue, Pa., assignor, by mesne assignments, to Oil Well Supply Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed May 23, 1929. Serial No. 365,360. 6 Claims. (Cl. 255—23.)

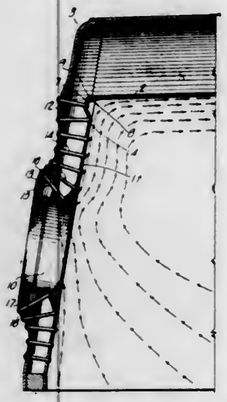


1. In a rotary, a plurality of members, at least two of which are rotatable relative to each other about the axis of the rotary and to a third member, means for positively rotating one of said rotatable members, and means for releasably locking the second of said rotatable members to said third member, said locking means having a cam surface cooperating with means acting to release said second member when the torque tending to turn the locked member exceeds a predetermined amount.

1,809,445. PRODUCTION OF POLYMERIZATION PRODUCTS OF DIOLEFINES. CLAUS HEUCK and HANS ENDERLEIN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 25, 1930, Serial No. 423,540, and in Germany Feb. 21, 1929. 4 Claims. (Cl. 260—6.)

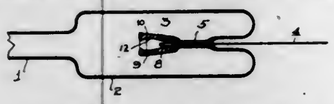
1. In the polymerization of a diolefine to a non-distillable product, facilitating the removal of the polymerization product from the reaction vessel by covering the inner wall of the reaction vessel with a sheet material which is readily removed.

1,809,446. STEAM BOILER. IRVING C. HICKS, Topeka, Kans., assignor of one-half to Henry V. Stevens, Topeka, Kans. Filed June 8, 1929. Serial No. 369,446. 4 Claims. (Cl. 122—58.)



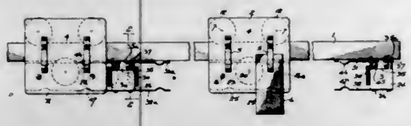
4. In a boiler, an end wall having a substantially plane inner surface, a door opening therethrough, and a water leg enlarged outwardly of the boiler circumferentially of the door opening for providing increased water capacity about said opening.

1,809,447. LUMINOUS TUBE. HAROLD W. HOWARD, Cleveland, Ohio, assignor to Neon Process, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 16, 1929. Serial No. 347,506. 8 Claims. (Cl. 176—126.)



1. An illuminating device of the character described, comprising a glass tube, a metallic electrode supported within said tube in spaced relation to the surrounding wall thereof, and a sheath of dielectric material surrounding and extending from said electrode and having a conical cavity almost closed at its free end to confine the metal sputtered from said electrode.

1,809,448. MONORAIL SYSTEM. PETER J. KOSTER and ALBERT A. KOORS, Pleasant Ridge, Mich. Filed Feb. 23, 1929. Serial No. 341,893. 38 Claims. (Cl. 105—151.)



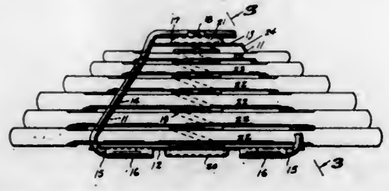
1. A monorail system comprising a rail, a car adapted to travel along it, wheels on said car adapted to ride on the upper and lower margins of said rail, and a member adapted to maintain said car in an upright position.

1,809,449. IMITATION PEARL. WILLIAM G. LINDSAY, Newark, N. J., assignor, by mesne assignments, to Celluloid Corporation, a Corporation of New Jersey. Filed Mar. 19, 1925. Serial No. 16,681. 22 Claims. (Cl. 106—37.)

4. A translucent article formed of a pyroxylin plastic having the silky variety of mercurous chloride distributed throughout the body thereof.

20. The method of forming a decorative material which comprises precipitating from a solution a silky, scintillating precipitate of a metallic salt in particles of a size sufficiently fine to give a pearly effect when distributed in a transparent medium, and incorporating said precipitate by mixing it into a mass of plastic material and below the surface thereof so as to impart to said material a pearly lustre.

1,809,450. WRENCH KIT HOLDER. ARTHUR I. PLATT, Fairfield, Conn., assignor to The Bridgeport Hardware Manufacturing Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 16, 1928. Serial No. 299,945. 6 Claims. (Cl. 206—16.)



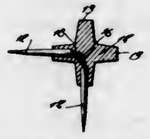
1. In a wrench kit holder, a base member having side flanges on which a plurality of wrenches may rest, a spring catch secured to the front of the base, a holder pivoted to the rear portion of the base and adapted to be swung over the wrenches and engage the catch to prevent removal of the wrenches, and a coiled spring extending between the front and rear walls of the base and adapted to hold the shanks of the wrenches between its respective coils as they rest on said flanges.

1,809,451. HAND OPENING CAN. JOSEPH F. QUINN, Burlingame, Calif., assignor to Geo. W. Caswell Co., San Francisco, Calif., a Corporation of California. Filed July 31, 1929. Serial No. 382,440. 3 Claims. (Cl. 220—53.)



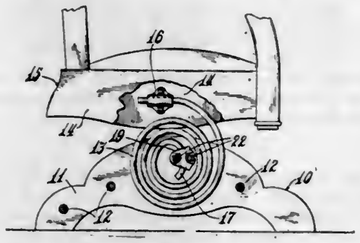
1. A can provided on one head with an opening covered with a thin plate, said plate removably secured along the entire length of its margins to the edges of the opening, and a device secured to said plate within the margins thereof adapted for gripping with the hand for forcibly removing said plate.

1,809,452. BATTERY CONNECTER TERMINAL. DAVID SCHAFFER, Pawtucket, R. I. Filed July 3, 1930. Serial No. 465,663. 3 Claims. (Cl. 173—259.)



1. A battery connecter including a terminal having a double pointed pin formed from a single length of wire bent to position the points at right angles to each other, the bend of the wire being flattened to form a disk and having a loop struck therefrom, a conductor wire having its terminal portions engaged through said loops, and cruciform heads surrounding said pins and having the pins extending axially outward through two of the arms, the head being provided with a boss through which the conductor extends.

1,809,453. CHAIR. ADOLPH W. SCHRAM, Chicago, Ill. Filed June 12, 1929. Serial No. 370,234. 3 Claims. (Cl. 155—54.)

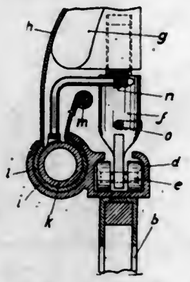


1. A chair comprising in combination a base member, a body member, two spiral springs each having a curved bearing portion at one end, brackets clamping said curved bearing portions adapted to be adjusted therealong and serving to hold such bearing portions in fixed position on one of said members, and other means for holding the other ends of said springs in fixed position on the other of said members.

1,809,454. ALDOL CONDENSATION PRODUCTS AND VULCANIZATION OF CAOUTCHOUC THEREWITH. LORIN B. SEBRELL, Silver Lake, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed Nov. 10, 1924, Serial No. 749,040. Divided and this application filed Dec. 4, 1929. Serial No. 411,692. 12 Claims. (Cl. 18—53.)

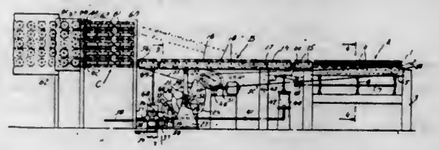
12. A method of treating rubber which comprises vulcanizing it in the presence of a reaction product of acetaldol and a material selected from a group consisting of ammonia, ethylene diamine, allylamine, butylamine, diethyl amine and dibutyl amine.

1,809,455. CANVAS COVER FOR VEHICLES AND THE LIKE. XAVER SEITZ, Emmishofen, Switzerland. Filed Nov. 25, 1927, Serial No. 235,579, and in Switzerland Dec. 6, 1926. 1 Claim. (Cl. 296—137.)



The combination with a canvas hood for a vehicle or the like, two supporting channels for said hood placed in juxtaposition, supporting hoops for the canvas guided in the innermost of said channels, and an inflatable tube adapted to be accommodated within the outer channel in a fold of the canvas.

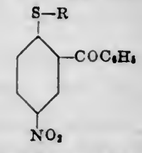
1,809,456. TRANSFER DEVICE. EDWIN HENRY STREETER, Cloquet, Minn. Filed Mar. 21, 1928. Serial No. 263,275. 6 Claims. (Cl. 198—20.)



1. Transfer mechanism comprising a unit adapted to receive an article from a conveyor, a second unit adapted to receive an article from said first unit, means for automatically elevating the discharge end of said second unit, a conveyor having a plurality of tiers communicating with the discharge end of said second unit, and means controlled by said second unit for actuating a selected tier of said conveyor.

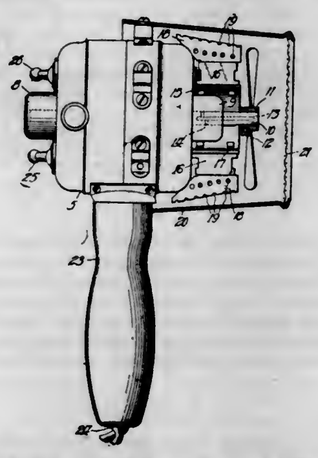
1,809,457. ACCELERATOR OF VULCANIZATION. JAN TEPPEMA, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 10, 1927. Serial No. 239,267. 8 Claims. (Cl. 18—53.)

7. A method of accelerating the rate of vulcanization of rubber which comprises heating it in the presence of a material having the following formula:



in which R is a material selected from a group consisting of thiazyl and dithiocarbamates.

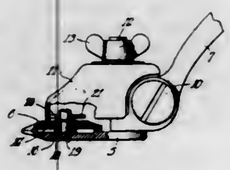
1,809,458. HAIR DRIER. LEO J. WAHL, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a Corporation of Illinois. Filed Sept. 20, 1929. Serial No. 393,932. 1 Claim. (Cl. 219—39.)



A hair drier comprising a motor having a casing, a projecting shaft at one end of said casing, a fan mounted on said shaft and spaced from the motor casing, a heater element encircling said shaft between the fan and motor casing, and a tubular member mounted on said motor casing and having its free end projecting beyond said fan and closed by a reticulated member, a handle projecting laterally from said motor casing and control switches

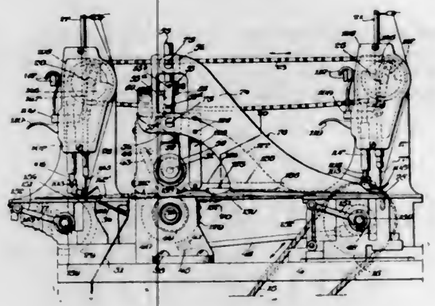
for said motor and heater mounted at the end of said motor casing opposite the fan, said motor switch being adjacent the handle so that it is operable by the thumb of the operator's hand when holding the handle.

1,809,459. HAND CLIPPERS. LEO J. WAHL, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a Corporation of Illinois. Filed May 2, 1930. Serial No. 449,255. 4 Claims. (Cl. 30—1.)



1. In a hair clipper a stationary blade, a movable blade having a guide slot therein, and means cooperating with said slot for guiding said movable blade comprising a block adapted to rest on said stationary blade, and a screw rotatable relatively to said block having screw threaded engagement with the stationary blade and having a shoulder thereon engaging said block for clamping the block to said stationary blade, said block being adjustable laterally relative to said screw for aligning said movable blade.

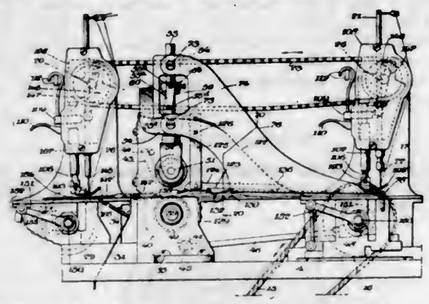
1,809,460. MACHINE FOR MAKING MULTIPLE SEAMS. JOHN P. WEIS, Nyack, N. Y., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y., a Corporation of Delaware. Filed Nov. 13, 1928. Serial No. 319,072. 36 Claims. (Cl. 112—2.)



1. In a machine for sewing multiple seams, the combination of means for stitching superposed plies of material with a line of stitches and positioning the seam margins at an angle to the work, means for overturning one ply of material, means for holding the seam margins spread in opposite directions and in parallelism with the plies of material, and means for stitching the seam margins with parallel rows of stitches.

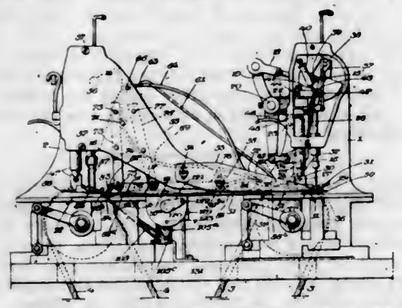
1,809,461. METHOD OF MAKING MULTIPLE SEAMS. JOHN P. WEIS, Nyack, N. Y., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y., a Corporation of Delaware. Original application filed Nov. 13, 1928, Serial No. 319,072. Divided and this application filed July 12, 1929. Serial No. 377,682. 12 Claims. (Cl. 112—262.)

1. The method of stitching articles with multiple seams which consists of stitching two superposed plies of material, then while the lower ply is maintained in substantially the same plane during the sequence of operations,



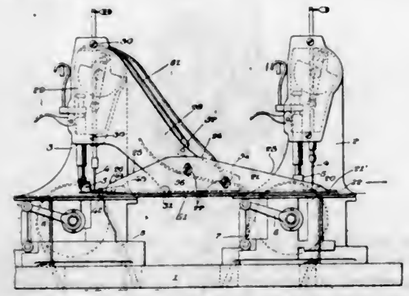
overturning the top ply thereof into reversed position with the inside outside, and then stitching the seam margins with parallel rows of stitches.

1,809,462. MACHINE AND METHOD FOR STITCHING SHOE UPPERS. JOHN P. WEIS, Nyack, N. Y., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y., a Corporation of Delaware. Filed Dec. 2, 1929. Serial No. 411,012. 31 Claims. (Cl. 112—2.)



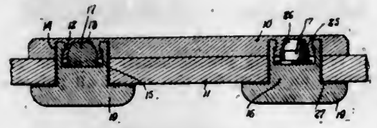
1. In a machine for sewing multiple seams, the combination of means for stitching superposed plies of material with a row of stitches, means for overturning a ply of material and throwing it in a direction opposite to its companion ply with its inside outside, means located in position to open the seam margins subsequent to the starting of the overturning of one of the plies, and means for stitching the opened seam margins.

1,809,463. MACHINE AND METHOD FOR FORMING FRENCH-FELLED SEAMS. JOHN P. WEIS, Nyack, N. Y., assignor to Metropolitan Sewing Machine Corporation, Nyack, N. Y., a Corporation of Delaware. Filed Dec. 2, 1929. Serial No. 411,013. 20 Claims. (Cl. 112—2.)



1. In a machine for sewing multiple seams, the combination of means for stitching superposed plies of material with a row of stitches, means for overturning a ply of material and throwing it in a direction opposite to its companion ply thereby forming a triple-ply seam, and means for stitching the triple plies with another row of stitches in parallelism with the first row thereof thereby to form a French-felled seam.

1,809,464. ANCHORAGE. WILLIAM H. WHEELER, New York, N. Y., and JUDSON C. LOGAN, Jersey City, N. J. Filed Feb. 17, 1927. Serial No. 168,909. 3 Claims. (Cl. 40—2.2.)



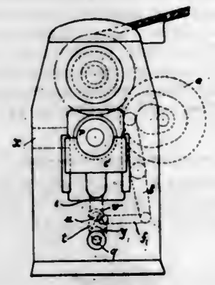
1. In an anchorage of the character described, a base formed with an aperture, a rivet comprising a head bearing against one side of the base and a shank passing through the aperture, the free end of the shank being formed with an undercut shouldered recess, a plate bearing against the opposite side of the base, said plate being formed with a flange adapted to enter the recess, and a plug movable in said recess and adapted to offset the flange into the undercut portion of the recess.

1,809,465. ANCHORAGE. WILLIAM H. WHEELER, New York, N. Y., and JUDSON C. LOGAN, Jersey City, N. J. Filed Feb. 17, 1927. Serial No. 168,911. 7 Claims. (Cl. 40—2.2.)



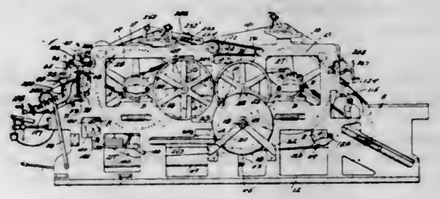
1. In an anchorage of the character described, a base formed with two apertures, a plate on one side of the base, a pair of screw plugs covered by and affixed to the plate and projecting through said apertures respectively, and, on the other side of the base, a nut common to both of said plugs and into which said plugs are screwed.

1,809,466. INTAGLIO PRINTING MACHINE. KARL ALBRECHT, Geisenheim-on-the-Rhine, Germany, assignor to Maschinenfabrik Johannisberg, G. m. b. H., Geisenheim-on-the-Rhine, Germany. Filed Dec. 3, 1928, Serial No. 323,430, and in Germany Dec. 8, 1927. 2 Claims. (Cl. 101—247.)



1. An intaglio printing machine comprising in combination an impression cylinder, a printing cylinder positioned below the impression cylinder and capable of coacting therewith, bearings for the said cylinders, frame ends for supporting the said bearings and having no free openings therein extending to the sides thereof, means for lowering the printing cylinder bearings in the said frame ends, each frame end having an internal recess extending from the printing cylinder bearing to the side of the frame end, the machine being adapted to receive means insertable therein for supporting the printing cylinder on the bearings thereof being lowered and guiding the cylinder through the said recesses at right angles to its axis out of the machine, as and for the purposes set forth.

1,809,467. IRONING MACHINE. WILLIAM J. ASHER, Colorado Springs, Colo. Filed July 8, 1926. Serial No. 121,220. 22 Claims. (Cl. 68—9.)



1. In an ironing machine of the class described, in combination, two spaced ironing cylinders, an apron associated with each of said cylinders, means for guiding said aprons in parallel substantially vertical paths between said cylinders, and a roller suspended in such manner as to swing toward and bear against one of said aprons under the influence of gravity, for the purpose set forth.

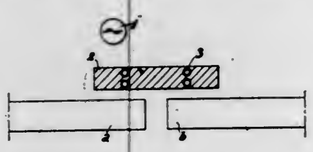
3. In an ironing machine, in combination, two spaced ironing cylinders, an apron associaed with each of said cylinders, said aprons cooperating in transporting the goods acted on by one cylinder to a point adjacent the second cylinder where they are separated, one apron passing around the second cylinder and the other returning toward the first cylinder, and means acting on said last mentioned apron adjacent the point of separation of said aprons, for causing dislodgement of any goods adhering thereto and their deposition on said second apron.

6. In an ironing machine of the class described, having a heating chamber, an apron and a plurality of parallel spaced endless tapes cooperating with the apron, means for maintaining a desired degree of tension in said tapes comprising a transverse member around which the tapes pass, and means for adjusting said members longitudinally of the tapes, said means including pinions on the said member meshing with stationary racks, and a pawl for holding said member against movement longitudinally of the tapes in one direction.

11. The combination with the power throw-off means of a power operated ironing machine, of an operating element therefor extending from the power throw off means to the feed end of the machine, and a plurality of control members operably engaging the same, each of said control members being so connected to said operating element that it may operate the same without moving the other members.

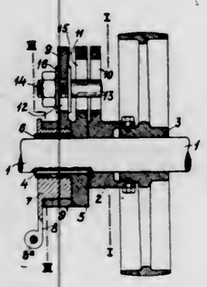
16. In an ironing machine, in combination, a frame, a heated cylinder mounted for rotation in the frame, a doffing bar for removing the work from the cylinder, an apron, tapes cooperating with the apron to remove the work from the vicinity of the doffing bar, a plurality of rollers around which the tapes and apron, respectively pass, adjustable arms upon which the rollers are rotatably supported, said arms being movable as a unit, and mechanical means for adjusting said arms so that all of the rollers may be simultaneously lifted away from the doffing bar.

1,809,468. ELECTRICAL METAL WELDING. EMILIEN BORNAND and HANS ARNOLD SCHLAEPFER, Geneva, Switzerland. Filed Nov. 29, 1929, Serial No. 410,583, and in France Feb. 19, 1929. 2 Claims. (Cl. 219—13.)



1. A welding appliance comprising an electrically insulating and refractory support placed in proximity of the seam to be welded, a coil embedded in said support, and a source of high frequency currents for feeding said coil to thereby induce Foucault currents in the parts to be welded.

1,809,469. DRIVING MECHANISM FOR ROTATING SHAFTS AT VARIABLE SPEED. FRIEDRICH BROCH, Vienna, Austria, assignor to Tannwalder Baumwoll-Spinnfabrik, Tannwald, Czechoslovakia, a Joint-Stock Company. Filed Feb. 13, 1930, Serial No. 428,181, and in Austria Feb. 20, 1929. 5 Claims. (Cl. 74—14.)



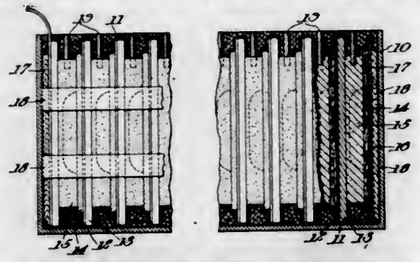
1. A driving mechanism for rotating shafts at a variable speed, which mechanism consists of a slotted arm idly mounted on the shaft to be driven and coupled to a driving member, another slotted arm, rigidly secured to the shaft and a third arm idly mounted on a fixed eccentric and carrying a pin, which extends through the two slots of the first mentioned arms, at least one of the said slots being inclined with respect to the radius passing through the respective slot.

1,809,470. DRESSING MEDIUM FOR TEXTILE MATTER AND THE PROCESS OF MANUFACTURING THE SAME. ISSAR BUDOWSKI, Berlin, Germany, assignor to Chemische Fabrik Jacobus, G. m. b. H., Charlottenburg, Germany, a Joint-Stock Company of Germany. Filed Feb. 15, 1928, Serial No. 254,628, and in Germany June 9, 1927. 2 Claims. (Cl. 134—11.)

1. The method of producing a restoring material, consisting in grinding oleic acids of high molecular weight with boric acid with the addition of an emulsion agent, so that a mass is formed which is emulsifiable in water.

1,809,471. DRY CELL BATTERY. NEWCOMB K. CHANEY, Lakewood, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Filed Feb. 10, 1927. Serial No. 167,251. 3 Claims. (Cl. 136—177.)

3. In a flat type dry cell battery having a moist depolarizing mix; a carbon electrode in contact with said depolarizer mix; a casing of gas and liquid impervious material enclosing the mix and electrode; one or more vents of gas pervious, water repellant, carbon rods extending through said casing and into the mix of each



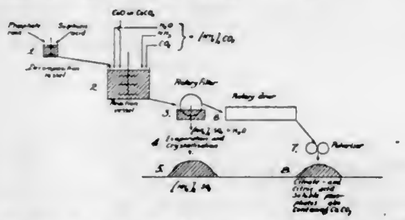
cell, each vent having promiscuously arranged gas passages, forming an outlet for the gas at all points of gas contact on the vent.

1,809,472. METHOD FOR PRESSING CORRUGATED CARDBOARD FLAT IN PLACES. LUDWIG CLEMENS, Berlin, Germany, assignor to the Firm Wezel & Naumann Aktiengesellschaft, Leipzig, Germany. Filed Apr. 18, 1928, Serial No. 270,998, and in Germany May 10, 1927. 1 Claim. (Cl. 154—2.)



A method for pressing corrugated cardboard flat in places which consists in supporting the cardboard on the reverse side and pressing it from the upper side to laterally lay over the corrugations on said upper side to shallow ribs corresponding in height to the thickness of the paper and to displace such shallow ribs during the pressing operation towards the yielding reverse side of the cardboard, thus producing a completely flat upper surface.

1,809,473. METHOD OF TREATING REACTION PRODUCTS OF PHOSPHATES AND SULPHURIC ACID. BJARNE COLBJÖRNSEN, Gaddviken, near Stockholm, Sweden. Filed Jan. 21, 1927, Serial No. 162,685, and in Sweden Jan. 23, 1926. 3 Claims. (Cl. 71—7.)



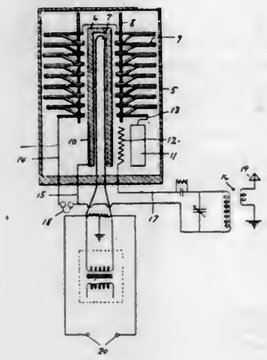
1. Method of treating raw phosphates decomposed by sulphuric acid, which comprises treating the decomposition product with water so as to partially dissolve and partially suspend the same, precipitating dicalcium phosphate therefrom, supplying ammonia and carbon dioxide thereto, separating the insoluble calcium salts from the solution and heating said solution so as to recover ammonium sulphate.

1,809,474. UMBRELLA. ROAL DOS SANTOS, Honolulu, Territory of Hawaii. Filed Aug. 7, 1929. Serial No. 384,009. 1 Claim. (Cl. 135—46.)



In a collapsible umbrella, a telescoping sectional handle having a pair of opposed pins radially and slidably mounted in the inner end of the smaller section, spring means engaging the pins to normally urge the same outward for engagement with the edge of the outer end of the larger section, said larger section having opposed notches in its inner wall at its outer end, said notches having inclined bottom walls merging into the inner wall of the larger section, said sections adapted to be turned relatively one to the other to register the pins with said notches whereby collapsing pressure on the sections moves said pins over said inclined bottom walls and retracts said pins into the larger section.

1,809,475. AUDION TUBE. RALPH B. DOWLER, Jr., Memphis, Tenn. Filed Mar. 5, 1930. Serial No. 433,393. 1 Claim. (Cl. 250—27.5.)



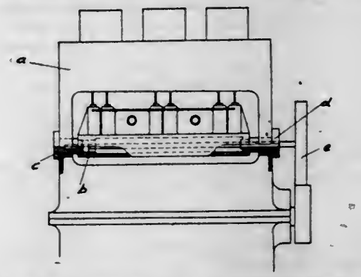
An audion tube comprising an evacuated container, a di-electric tube mounted within the container, a heating element disposed within said di-electric tube, a thermo-pile mounted outside of said di-electric tube and within the container, one end of the thermo-pile being connected to a terminal, a plate, said plate being connected to the opposite end of the thermo-pile, a grid interposed between the plate and the tube, said grid being connected to another terminal, and a cathode element mounted on said di-electric tube in opposed relation to the said grid.

1,809,476. PROCESS OF MAKING SODIUM FLUORIDE. ERICH ECKOLDT, Dresden, Germany. Filed July 18, 1927, Serial No. 206,796, and in Germany Aug. 6, 1926. 1 Claim. (Cl. 23—88.)

A process of making sodium fluoride from raw materials containing calcium fluoride consisting in mixing raw materials containing calcium fluoride with silica and melting them with potassium carbonate, washing the melt with water, separating silica from the solution obtained by adding potassium silica fluoride and adding sodium carbonate to the remaining solution of potassium fluoride after separating it from the precipitated silica.

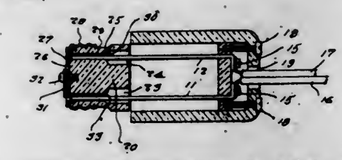
1,809,477. INTERNAL COMBUSTION ENGINE. KURT ELTZE, Mannheim-Kafertal, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart Untertürkheim, a Company of Germany. Filed Jan. 12, 1928, Serial No. 246,329, and in Germany Jan. 19, 1927. 4 Claims. (Cl. 123—90.)

2. An internal combustion engine with tappet valve gear having a cam shaft, a cam shaft housing, cam shaft bearings and tappet guides associated with the housing, the said cam shaft bearings consisting of sleeves acting as supports for the cam shaft housing, apertures in the end walls of the body of the engine to allow the said sleeves to be inserted endwise for engagement with the cam shaft housing, further cam shaft bearings inside the



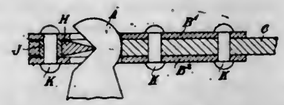
housing, the said cam shaft bearings inside the housing and tappet guides being both mounted in a removable manner on the engine, as set forth.

1,809,478. COMBINED SCREW AND PUSH ELECTRIC PLUG. JOHN A. GEFFERT, West Bridgewater, Pa. Filed Mar. 5, 1930. Serial No. 433,389. 3 Claims. (Cl. 173—361.)



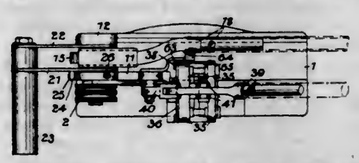
1. An electric plug comprising a casing, a pair of prongs extending from and within the casing and projecting therefrom, a peripherally threaded plug slidable on the prongs and in electrical contact therewith, and means extending through the casing and engageable with the plug for moving the screw plug on the prongs.

1,809,479. BRAKING MECHANISM. ALBERT HENRY GODFREY GIRLING, Harlow, England. Filed Mar. 28, 1929, Serial No. 350,673, and in Great Britain Apr. 5, 1928. 2 Claims. (Cl. 308—2.)



2. In combination, a lever having a notch formed in one edge thereof and having its opposite edge formed to a circumference struck from the root of the notch and an actuating member having a slot near one end, and a knife-edge at one edge of said slot, said lever being passed into said slot with the knife-edge in engagement with the notch and bearing at the root of the notch and having a taper section so as to enable it to swing freely sideways in the slot and at the same time fit closely sideways, as set forth.

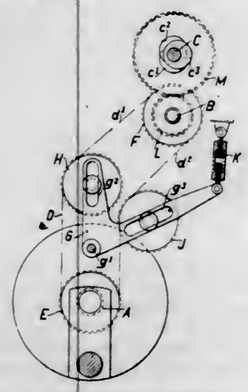
1,809,480. STRAP STRETCHING AND SEALING MECHANISM. EDOUARD CHARLES GLARDON, Hamburg, Germany. Filed Dec. 18, 1929, Serial No. 415,093, and in Germany Oct. 31, 1929. 3 Claims. (Cl. 81—9.1.)



1. An improved stretching and sealing mechanism for straps banding packing cases, boxes, bales and other pack-

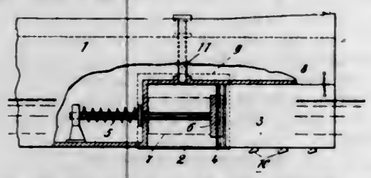
ages, comprising a pair of feed rollers, a shaft to which one of said rollers is secured, eccentric bearings for said shaft, means for rotating said bearings, a slotted frame carrying the second roller and guided by means of its slot on said shaft, a strap clamping plug arranged under the frame so as to take the thrust of the latter, the rotation of said eccentric bearings lowering the shaft and causing the movement of the frame relatively to the clamping plug and causing the feed rollers to be pressed together, and means for rotating the shaft so as to stretch a strap placed between the feed rollers while one end of said strap is held stationary between the frame and clamping ring.

1,809,481. CAM SHAFT DRIVE FOR INTERNAL COMBUSTION ENGINES. KARL HAUSSMANN, Kiel, Germany, assignor to Fried. Krupp Germaniawerft Aktiengesellschaft, Kiel-Gaarden, Germany. Filed June 17, 1929, Serial No. 371,388, and in Germany June 20, 1928. 4 Claims. (Cl. 64—5.)



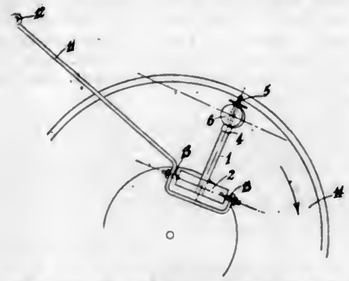
1. In an internal combustion engine a crank shaft, a controlling shaft, an endless chain drive inserted between said controlling shaft and the crank shaft, a tightening wheel for each side of said chain drive, a fulcrum, a swing member pivoted on said fulcrum and having mounted on it said two tightening wheels, and means for varying the distance existing between said wheels and said fulcrum.

1,809,482. RE-FLOATING OF STRANDED SHIPS. VICTOR HUBEATI, Berlin, Germany. Filed July 23, 1930, Serial No. 470,177, and in Germany Mar. 10, 1930. 6 Claims. (Cl. 114—219.)



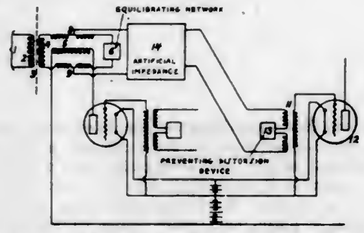
1. A shock absorbing device for ships including in combination, a hull the bow of which consists of two parts of which the part above the water line is integral with the hull while the submerged part is movable with respect to the hull, means for loosely and resiliently connecting the movable part to the hull in such manner that when striking an obstruction the movable part takes the impact in a yielding manner, said connecting means normally holding the movable part substantially flush with the front end of the bow of the hull and being breakable so as to become separate from the hull when the impact occurs, means on the movable part whereby the latter is anchored to the obstruction, and means on the integral stationary part to raise the hull to enable the hull to slide down and be freed from the lower part of the hull and the obstruction.

1,809,483. APPARATUS FOR THE REPRODUCTION OF MUSIC, SPEECH AND THE LIKE. FREDERICK WILLIAM LANCHESTER, Moseley, England. Filed Sept. 8, 1930, Serial No. 480,484, and in Great Britain Sept. 14, 1929. 6 Claims. (Cl. 179—100.41.)



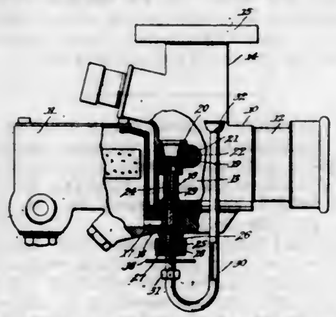
1. A pick-up to be used in conjunction with a record for the reproduction of music, speech, and the like in which a permanent magnet constitutes at least part of the supporting arm radially arranged in relation to the pivotal mounting of the pick-up.

1,809,484. ARTIFICIAL IMPEDANCE FOR TELEPHONE REPEATERS. MYRON LEBEDINSKY, Paris, France, assignor to Société des Téléphones Grammont, Paris, France, a Corporation of France. Filed July 25, 1929, Serial No. 380,977, and in France Nov. 24, 1928. 2 Claims. (Cl. 179—170.)



1. In a telephone circuit, the combination of a repeater, a transformer at the input side of said repeater, double wire connections therefor, a grid transformer forming part of the repeater, double means connecting the transformer and the grid transformer two opposed induction coils inserted in each of said means, a condenser shunting one of the coils of each connecting means, a wire connecting points in each connecting means between the corresponding coils and a condenser inserted in said wire.

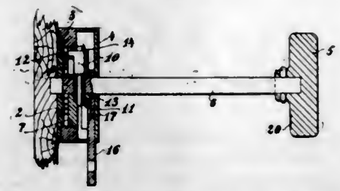
1,809,485. CARBURETOR. ALBERT W. LEE and ARTHUR W. HAMBY, Columbia, S. C. Filed Dec. 27, 1929. Serial No. 416,965. 12 Claims. (Cl. 261—121.)



1. In combination with the mixing chamber of a carburetor, a valve seat mounted in said chamber and having

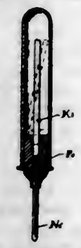
a supply opening therethrough, means for supplying gasoline through said opening to the engine, a needle valve having an axially disposed air hole and a coned-tip arranged to extend into said valve seat for controlling the flow of the fuel supply, said tip having a flat face in alignment with said hole whereby the fuel is vaporized before being introduced into the engine manifold.

1,809,486. SAFETY LOCK. ALFRED MAIRE, St. Imier, and ARMAND BÉGUELIN, Renan, Switzerland. Filed Dec. 17, 1928, Serial No. 326,532, and in Switzerland Jan. 4, 1928. 2 Claims. (Cl. 70—53.)



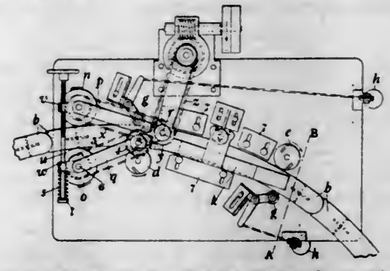
1. In a safety lock and in combination a casing having an annular rim provided with an inside division marked with notches, a projecting shaft with a handle arranged concentrically to said division and rotatable in said casing and constituting the locking and unlocking means, a similar division like the first and a guiding mark provided on said handle, a rotatable member fitting said annular rim and secured to said shaft, a short pointed pin lodged resiliently in said member and adapted to mark the steps taken by said member while passing said notches of the rim, a slidable pin carrying two cross pegs projecting on opposite sides, said pin being resiliently mounted in said member having a nose projecting beyond the periphery of the member, a stationary nose secured to the said rim and projecting in the path of the first nose, a latch held loose on the shaft close beside the said member and having a recessed part on the side of this member in the path of the respective peg of said slidable pin and a labyrinth of springy blades arranged concentrically to the shaft and forming a number of passages for the second peg on the bottom of the casing and arranged so as to constitute a guide for said peg and for the sliding pin in order to bring the first peg in contact with the non recessed part of the latch so as to release it from its catch.

1,809,487. HYPODERMIC SYRINGE FOR INJECTING LIQUIDS INTO THE BODY OR FOR TAKING THEM THEREFROM. FELIX MEYER, Aachen, Germany. Original application filed Nov. 7, 1924, Serial No. 748,390, and in Germany May 31, 1924. Divided and this application filed June 23, 1930. Serial No. 463,260. 1 Claim. (Cl. 128—216.)



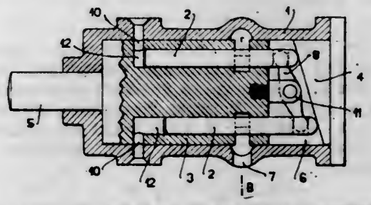
In a device of the character described including a needle, a mounting and a transparent container having an internal pressure different to that of the atmosphere, and adapted for communication with the needle, a frangible capillary tube seal of transparent material forming initially a continuation of the passage through the needle from the inner end of the needle within said container.

1,809,488. DOUBLE SPINDLE MOLDING MACHINE. EDGAR WALTER NEALE and ARTHUR HENRY HANDLEY, Birmingham, England. Filed Mar. 31, 1930, Serial No. 440,607, and in Great Britain Apr. 4, 1929. 7 Claims. (Cl. 144—145.)



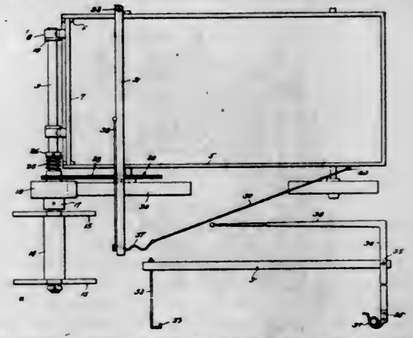
1. In double spindle molding machines, the provision of two feed rollers on radial arms adjustably and flexibly anchored together and pivoted about a common axis about which they can turn to allow the rollers to follow the contour of the work.

1,809,489. PUMP FOR SPINNING LIQUID SUCH AS VISCOSE. GUSTAV NEMETZ, Vienna, Austria, assignor to the Firm Alex. Friedmann, Vienna, Austria. Filed July 5, 1928, Serial No. 290,648, and in Austria Feb. 16, 1928. 2 Claims. (Cl. 103—162.)



2. In a pump for spinning liquids liable to solidification such as viscose, a piston, a cylinder, driving members for said piston, a chamber surrounding said piston and interrupting the walls of said cylinder, said chamber being located between the working space of said cylinder and said driving members, and adapted to collect liquid creeping along the piston from the working space and from the driving mechanism, said chamber having a wide and flaring opening against the outside allowing easy discharge of the liquid liable to solidification and easy cleaning and inspection.

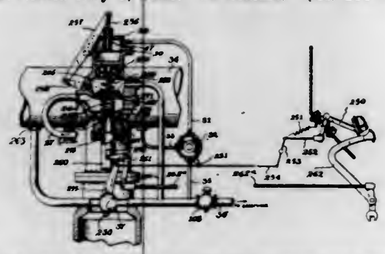
1,809,490. WIRE ROLLER. EMIL W. RIPPE, Ohiowa, Nebr. Filed Aug. 7, 1928. Serial No. 298,094. 1 Claim. (Cl. 242—91.)



In combination with a wagon body having a tail gate guide, of a panel removably fitted in said guide having horizontally alined bearings, a shaft rotatable in

the bearings extending beyond one end of the wagon body, a hub rotatable on the shaft, a wire reel on the shaft, means detachably connecting the reel to the hub, a frictional drive for the hub, a horizontal support detachably secured to the body in advance of the reel, and a wire guide pivoted to said support.

1,809,491. VACUUM BRAKE. CHARLES VICTOR ROWELL, McMahons Point, near Sydney, New South Wales, Australia. Filed May 3, 1927, Serial No. 188,581, and in Australia May 3, 1926. 10 Claims. (Cl. 188—152.)



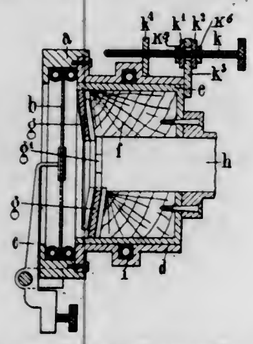
9. In a vacuum brake adapted to be associated with an internal combustion engine, an air valve normally open, means for closing said valve, a vacuum valve, a spring for normally holding said vacuum valve closed against vacuum which tends to lift it, and another spring tensioned to open said vacuum valve after the air valve has been closed.

1,809,492. CURRENT COLLECTOR FOR ELECTRIC TRAMWAY AND RAILWAY VEHICLES. THOMAS CARLYLE ELLISON ROWLAND, Sparkhill, Birmingham, and HECTOR MCPHAIL DUDGEON, Perry Barr, Birmingham, England. Filed Feb. 13, 1930, Serial No. 428,186, and in Great Britain Feb. 14, 1929. 5 Claims. (Cl. 191—55.)



1. In current collectors of the bow or pantagraph types for electric tramway or railway vehicles, the combination of a perforated collecting plate, a lubricating pad arranged at one side of the plate, and means for pressing the pad into contact with the plate, substantially as described.

1,809,493. SOUND BOX FOR TALKING MACHINES AND LIKE DEVICES. LEO ANDREA SMITH, Wimbledon, England. Filed July 15, 1926, Serial No. 122,707, and in Great Britain July 25, 1925. 3 Claims. (Cl. 274—27.)



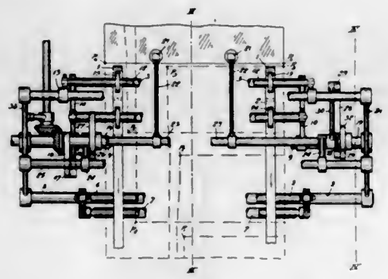
1. A sound box of the kind referred to comprising a casing, a diaphragm mounted in said casing, the latter having a surface immediately adjacent to and out of parallelism with the diaphragm, said surface constituting the base of the sound box and being formed as a plurality of radial steps which are spaced at different distances from said diaphragm.

1,809,494. MOUNTING FOR OPHTHALMIC LENSES. GEORGE A. SQUIER, Cleveland, Ohio. Filed May 9, 1930. Serial No. 450,932. 4 Claims. (Cl. 88—48.)



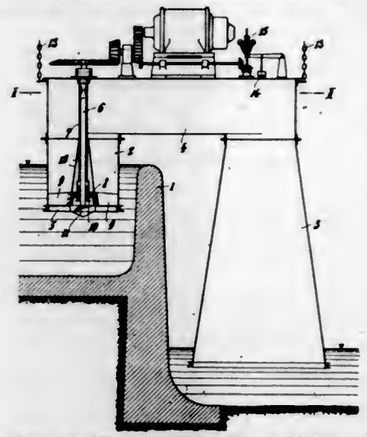
1. A mounting for ophthalmic lenses comprising a pair of guards, and arms connected at one end to said guards and having their opposite ends connected to the mounting substantially at the horizontal center of the lenses, said arms extending inwardly to a point above said horizontal center of the lenses, and being mounted at such a level on the mounting that the centers of the guards are above said horizontal center to position the guards with their nose contacting areas in contact with the upper structure of the nose immediately beneath the eyebrow and above the point where the nose starts to widen while such arms do not contact with the nose, each of said guards having that side thereof which faces the nose sufficiently small so that it will not project downwardly onto the bony structure of the nose, and made of non-yielding material of smooth convex form with its highest point in the center and with its surrounding area of uniform curvature throughout, such curvature being sufficiently gradual to prevent such highest portion from digging into the nose to an excessive extent and to prevent the edges thereof from digging into the nose to an excessive extent.

1,809,495. SHEET FEEDING MECHANISM. NILS GUSTAF ALLANSON STRÖMBERG and GEORG WILHELM WIDLUND, Stockholm, Sweden. Filed Sept. 4, 1929, Serial No. 390,408, and in Sweden Nov. 17, 1928. 13 Claims. (Cl. 271—30.)



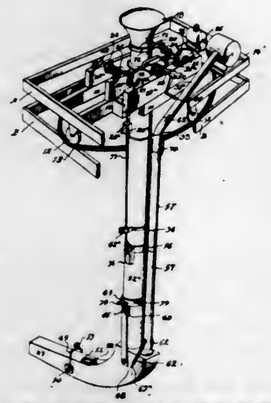
1. An arrangement for feeding sheets in sheet feeding apparatus for printing machines and the like, including endless sheet conveying bands, means movably supporting the bands in spaced relation whereby portions thereof may be utilized as supporting and conveying means for sheets, and gripping and conveying members movable above and below the plane of the supporting and conveying portions of the bands, and power operated actuating means for moving the gripping and conveying members to displace the latter relative to the plane of the conveying means of the bands.

1,809,496. SIPHON TURBINE. EDUARD SUESS, Vienna, Austria. Filed June 7, 1928, Serial No. 283,658, and in Austria Apr. 13, 1928. 3 Claims. (Cl. 253—141.)



1. A siphon-turbine comprising in combination an inlet pipe, a suction pipe, a box-shaped intermediate member adapted to establish communication between the two pipes, and a rotor in the admission opening of the inlet pipe.

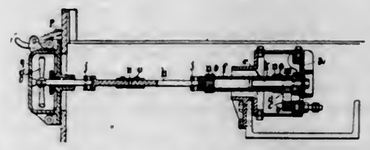
1,809,497. APPLIANCES FOR TRIMMING GRAIN THAT IS BEING LOADED IN BULK. FREDERICH WILLIAM THOMPSON, Paddington, New South Wales, Australia. Filed May 2, 1929, Serial No. 359,968, and in Australia Aug. 27, 1928. 4 Claims. (Cl. 193—3.)



1. Appliances for trimming grain as it is being loaded in bulk comprising a supporting platform, a tubular shoot formed in three sections and passing through the platform downwardly for any suitable distance, a bell mouth at the upper end of the shoot and a curved outflow section at the lower end thereof, a winch mounted upon the platform, means for shackling the winch rope to the section adjacent to the outflow section, means for increasing the length of the shoot by inserting an additional length of pipe and means for detachably clamping such additional pipe to the rope.

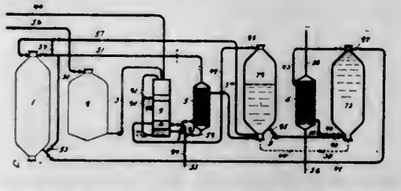
1,809,498. ELECTRIC SWITCH. ALFRED WILLIAM GEORGE TUCKER, Hollinwood, England, assignor to Ferranti, Limited, Hollinwood, Lancaster, England. Filed Dec. 21, 1923, Serial No. 682,103, and in Great Britain Jan. 6, 1923. 1 Claim. (Cl. 200—16.)

An electric switch including a series of contacts mounted upon a base, a spindle, a longitudinally displaceable and rotatable contact blade mounted thereon, means constantly urging said blade towards said contacts, a slotted cup secured to said base and constituting a bushing for



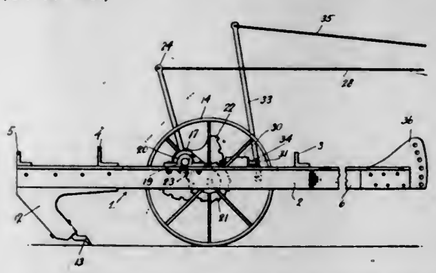
said spindle, means ensuring a correct registration between the contact blade and the fixed contacts and a swivelable mounting for said base providing a self-alignment between the spindle carrying the contact blade and said cup.

1,809,499. METHOD OF MANUFACTURING CELLULOSE ACCORDING TO THE SULPHITE METHOD. TORSTEN E. WAENERLUND, Ornskoldsvik, Sweden, assignor to M. O. Och Domsjö Aktiebolag, Ornskoldsvik, Sweden. Filed Sept. 8, 1930, Serial No. 480,530, and in Sweden Feb. 20, 1929. 4 Claims. (Cl. 92—11.)



1. Method of manufacturing cellulose by cooking cellulosic material with a cooking acid of high percentage of free sulphuric acid, comprising causing the cold raw acid, before introducing the same into the boiler, to pass through an absorption apparatus, enriching the same in said apparatus with SO_2 at atmospheric pressure passing the acid thus enriched through a heat transmission apparatus, introducing into said apparatus as heating medium warm waste products from the boiler and leading said heating medium, after it has given off heat to the acid, into the absorption apparatus, forcing the acid thus enriched and heated into a storage receptacle, heating the same and introducing it into the boiler for cooking cellulosic material therewith under pressure.

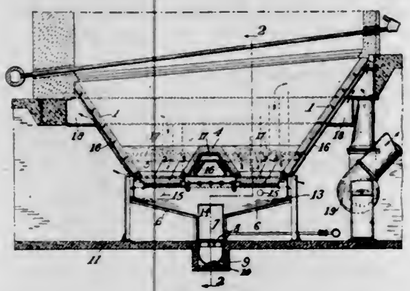
1,809,500. LIFT MECHANISM FOR AGRICULTURAL IMPLEMENTS. BRUNO W. WILLIG, San Angelo, Tex. Filed Aug. 20, 1929. Serial No. 387,107. 6 Claims. (Cl. 97—73.)



1. An agricultural implement of the character described comprising a frame, a pair of crank axles mounted for rotation on said frame in transverse alignment, toothed segments rigidly secured to said crank axles, shiftable latch bolts supported on said frame and normally engaging said segments, said segments and latch bolts constituting means for maintaining the crank axles against rotation with respect to the frame in selective adjusted position, means for simultaneously shifting said latch

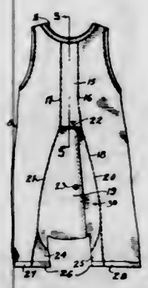
bolts out of engagement with the segments, wheels loosely mounted for rotation on the axles, annular ratchets carried by the wheels, pawls pivotally mounted on the crank axles for engagement with the ratchets, levers pivotally mounted on said crank axles, connecting links coupling said levers to the pawls, said ratchets, pawls, levers and connecting links constituting means for effecting the coupling of the wheels to the axles, resilient elements for shifting the levers in a manner to engage the pawls with the ratchets, and means connected with the levers for shifting the same in a manner to disengage the pawls from the ratchets.

1,809,501. APPARATUS FOR HANDLING ASHES. FRANK B. ALLEN, Lower Marion Township, Montgomery County, Pa., assignor, by mesne assignments, to The Allen-Sherman-Hoff Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 7, 1927. Serial No. 159,560. 3 Claims. (Cl. 110—171.)



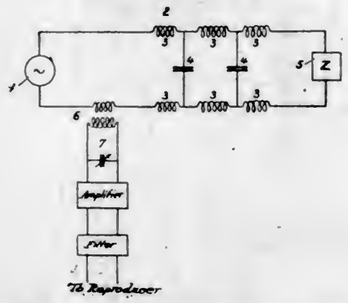
1. Apparatus for handling furnace residues comprising a hopper having a plurality of discharge openings disposed in rows lengthwise of the hopper and in pairs transversely of the hopper, the exterior faces of the walls between adjoining pairs of openings extending upwardly in spaced relation whereby an open passageway is formed, a wall beneath each opening of each pair, the walls of each pair converging downwardly and adapted to receive residues discharged through the opening, and a sluice beneath the discharge ends of the walls and extending lengthwise of the hopper adapted to receive residues discharged from the walls.

1,809,502. GARMENT. HOWARD JACOB BARCLAY, Sr., Spring City, Pa. Filed Jan. 7, 1930. Serial No. 419,142. 5 Claims. (Cl. 2—78.)



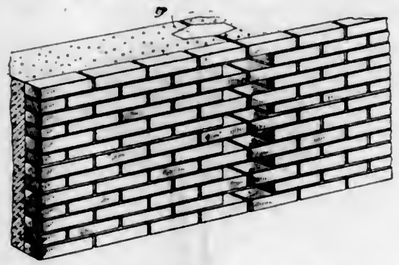
4. A garment comprising a back portion, a plural ply longitudinal reinforcement formed by folding a strip upwardly against said back portion, and being stitched thereto, a plurality of gussets forming a seat, overlapping adjacent the fold of said strip, the overlapping portions of said gussets being secured to said strip at said fold.

1,809,503. OSCILLATING CIRCUITS APPLIED TO ELECTRICAL MUSICAL INSTRUMENTS AND THE LIKE. JOSEPH BETHENOD, Paris, France. Filed May 20, 1929, Serial No. 364,633, and in France May 31, 1928. 6 Claims. (Cl. 178—44.)



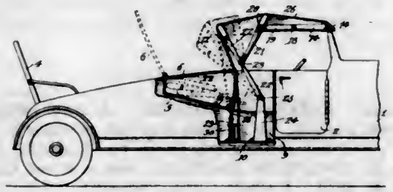
1. In an electrical musical instrument, a source generating an alternating current containing a fundamental and its harmonics, an artificial line supplied by said source, a shunt impedance terminating said artificial line, at least one circuit element inserted in series in a conductor of said line, and means for transmitting the potential difference delivered at the terminals of said circuit element to locations remote from said source.

1,809,504. BUILDING CONSTRUCTION. RICHARD CARVEL, New York, N. Y. Filed Oct. 11, 1927. Serial No. 225,426. 3 Claims. (Cl. 25—155.)



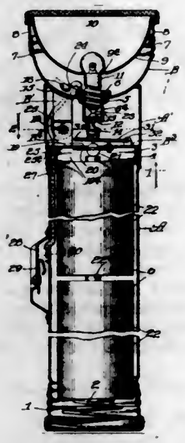
1. The method of forming a wall which comprises precasting a concrete section of sufficient size to form a substantial part of a finished wall, embedding in the front face of said wall during the precasting operation units of facing material such as stone, bricks or blocks which are commonly used in building walls, forming voids in said facing material along abutting edges of said sections, hoisting said sections into position, and filling in said voids by embedding units of similar facing material therein, arranged to overlap the joint between the sections.

1,809,505. AUTO BODY AND TOP. JAMES CAMPBELL, Jackson, Mich. Filed Nov. 12, 1929. Serial No. 406,648. 2 Claims. (Cl. 296—107.)



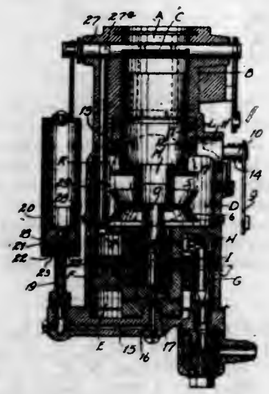
1. In an auto body and top, an automobile provided with a seat and having a platform, the automobile being provided with a compartment located behind the seat and having a bottom arranged above the platform and spaced vertically from the platform, a tension device disposed in said space and below the bottom of the compartment, a cover frame, a cover carried by the cover frame, means for pivotally connecting the cover frame to the automobile for folding into the compartment, and a connection between the lower end of the cover and the tension device, the connection being slidably mounted through the bottom of the compartment.

1,809,506. FLASH LIGHT. WILLIAM W. CARGILL, Madison, Wis., assignor to French Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Oct. 1, 1930. Serial No. 485,765. 10 Claims. (Cl. 240—10.67.)



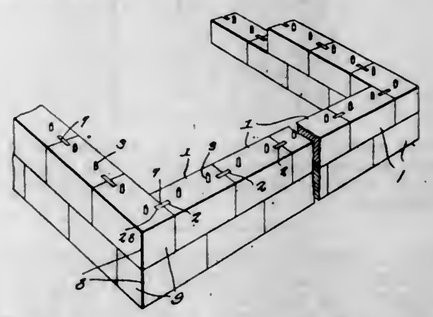
1. A flashlight comprising a main casing-section equipped with a support; a lamp-head carried by said support and adapted to be turned at an angle to the axis of the main casing-section; and a tubular casing-extension telescopically related to the main casing-section and adapted to bridge the space between the lamp-head and main casing-section.

1,809,507. CARBURETOR. WILLIAM C. CARTER, Flint, Mich. Filed Apr. 29, 1929. Serial No. 359,100. 8 Claims. (Cl. 261—46.)



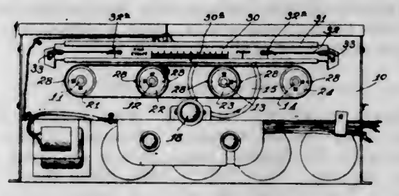
1. A carburetor provided with a main passageway, a throttle valve for said main passageway, a main fuel supply device, a plurality of venturis arranged in superimposed and concentric relation between the throttle valve and said fuel supply device, means for enabling the venturi that produces the first stage of suction amplification to be moved into a position wherein it serves as a choking device which cuts off the supply of air to said first venturi, and means whereby the venturi that produces the second stage of suction amplification can be moved into such a position that the supply of air is cut off from the annular passageways of the second and third venturis.

1,809,508. CHILD'S BUILDING BLOCK. WILLIS H. COLBY, Morehead City, N. C. Filed Nov. 22, 1929. Serial No. 409,097. 1 Claim. (Cl. 46—35.)



A rectangular block of the class described, provided in its ends with like slots, the block being supplied on one side with projecting pins spaced apart longitudinally of the block, the block being provided on its opposite side with an opening so shaped as to receive the pin of a similar block, the last specified side of the block having a transverse slot disposed at right angles to the slots in the ends of the blocks of the same size and shape as the slots in the ends of the block, the transverse slot being spaced from one end of the block by a distance equal to the distance between either of the slots in the ends of the block and the remaining side of the block.

1,809,509. RADIO TUNING MECHANISM. ALFRED CROSSLEY and LELAND H. HANSEN, South Haven, Mich., assignors to Howard Radio Company, South Haven, Mich., a Corporation of Illinois. Filed June 27, 1930. Serial No. 464,409. 2 Claims. (Cl. 116—124.1.)

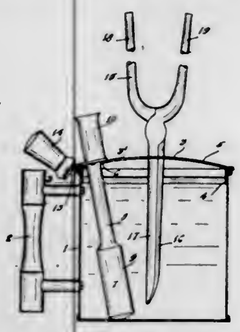


1. In combination with a plurality of shafts, tuning mechanism of the character described, for simultaneously rotating said shafts, said tuning mechanism including; a grooved driven friction disk on one of the shafts; a co-operating driving friction disk; pulleys mounted on said shafts; belt interconnecting said pulleys, whereby rotation of one shaft will simultaneously rotate the other shafts; and an elongated scale reciprocated by a flexible member wound about the groove in the driven friction disk with its ends attached to the ends of the scale.

1,809,510. CURLING IRON HEATER. ELIAS A. CHURCHILL, Brandon, Manitoba, Canada. Filed Mar. 2, 1929. Serial No. 343,922. 1 Claim. (Cl. 219—24.)

In a curling iron heater, a liquid containing vessel, a removable cover normally closing the open upper end

of the vessel and provided with suitably located openings permitting of the insertion within the vessel of the jaws of curling irons and with a side slot and an electrically operated immersion heater having the upper end resting on and supported by the cover, the shank thereof passing freely through the slot and laterally removable therefrom and the lower end thereof immersed in the liquid.

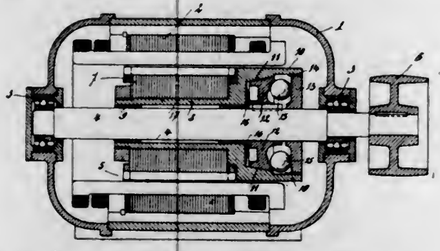


1,809,511. MESHED HEADPIECE. HELEN DAVIS, Topeka, Kans., assignor to The Helen Davis Cap Co., Topeka, Kans., a Corporation of Kansas. Filed Aug. 16, 1928. Serial No. 300,004. 7 Claims. (Cl. 132—49.)



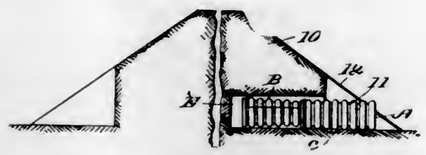
1. A head gear formed of generally limp and elastic fabric, including a head-pocket portion adapted to fit snugly over the head of the wearer to form the crown of the assembled head dress and a generally elongated streamer portion at least approximately twice as long as the head-pocket portion and extending from an end thereof, adapted to surround the lower periphery of the head-pocket portion to form the rim of the assembled head dress; the shape of the head dress, when mounted upon the head of the wearer; being maintained by the contour of the head of the wearer.

1,809,512. ELECTRIC MOTOR. VICTOR JEAN DEFAYS and PAUL JOSEPH LEFEBVRE, Brussels, Belgium, assignors to La Magneto Belge, Societe Anonyme, Brussels, Belgium. Filed July 9, 1929, Serial No. 377,010, and in Belgium July 13, 1928. 5 Claims. (Cl. 172—120.)



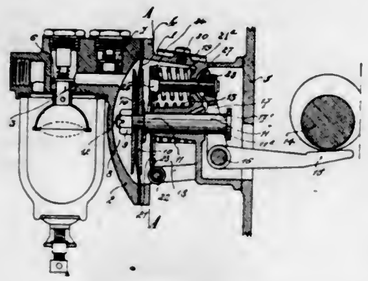
1. In an electric motor in combination a rotor, a sleeve on which the rotor is mounted, the said sleeve being free to turn on the shaft of the motor and being adapted to be displaced axially on the said shaft, whereby the magnetic centering of the rotor is obtained, a coupling clutch and a plate formed by the said sleeve, a clutch member keyed on the shaft and adapted to be displaced axially on the latter, balls free to rotate and disposed between the said plate and an inclined face of the said clutch member, the said balls being adapted to be displaced around the shaft and to be thrown away from the latter under the action of the centrifugal force, whereby the rotor is adapted to be clutched with the shaft.

1,809,513. METHOD OF CONSTRUCTING CULVERTS. DANIEL T. FINKBEINER, Beaver, Pa. Filed Apr. 2, 1927. Serial No. 180,492. 4 Claims. (Cl. 61—45.)



1. The method of constructing culverts and the like comprising forming a pipe of a plurality of sections, each pipe section after the first one laid being first contracted to less than normal diameter so as to maintain an expansible tension thereon, and while so contracted being passed through the previously laid sections and then allowed to expand under its natural expansible tension to its normal diameter, and finally securing one end of each expanded sections to a contiguous end of the last previously laid section.

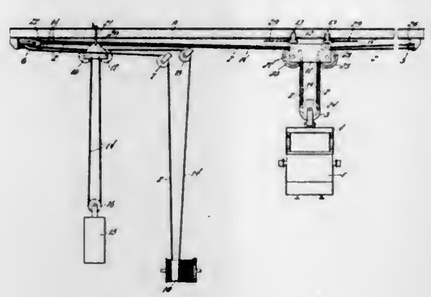
1,809,514. MOTOR FUEL PUMP. AUGUSTE GUIOT, Neuilly-sur-Seine, France. Filed Apr. 3, 1930, Serial No. 441,321, and in France Apr. 8, 1929. 4 Claims. (Cl. 103—150.)



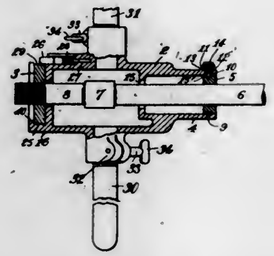
1. A motor fuel pump for feeding motors, which comprises an operating chamber, suction and delivery valves opening into said chamber, a pliable diaphragm obturating said chamber, a cage supporting the chamber, means operated by the motor to cause alternating movement of said diaphragm, a ventilating shutter placed at the rear of the diaphragm and outside the operating chamber in said cage freely open to the atmosphere and also driven by the motor operated means to actuate said shutter.

1,809,515. TROLLEY BUCKET INSTALLATION. HAROLD E. HALLENBECK, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed May 9, 1930. Serial No. 451,038. 6 Claims. (Cl. 212—95.)

1. In a trolley bucket installation, the combination of a bucket; a trolley; two cables for supporting the bucket from the trolley; both cables being secured to a fixed member at one end; a counterweight acting on one cable to maintain a tension thereon so as nearly to overcome the weight of the empty bucket; and a hoist drum; both cables being wrapped around said hoist drum, but in opposite directions.



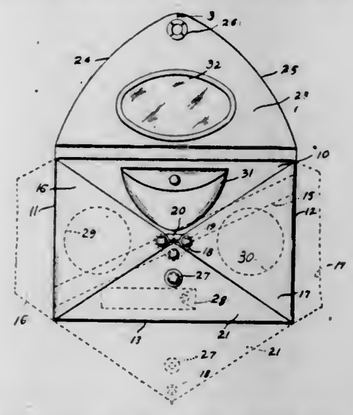
1,809,516. STOCK AND DIE. LOUIS W. JONES, New York, N. Y. Filed Jan. 20, 1930. Serial No. 421,978. 5 Claims. (Cl. 10—127.)



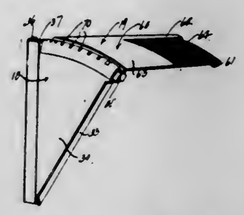
1. A die stock adapted to receive pipe sections and a coupling connecting the sections and including a hollow body having an apertured closure at one side thereof, a die holder external to said closure, a diaphragm intermediate the sides of said body and having an aperture of sufficient size to permit passage of a pipe coupling, the body externally of the diaphragm consisting of a bushing guide of considerably greater length than the length of a pipe coupling, and an annular bushing slidable in said guide from one end to the other thereof to take position at either end of the guide said bushing being of uniform external diameter throughout its length and being of considerably less length than the bushing guide whereby the bushing may rest against the diaphragm and provide space on the outer side of the bushing within the bushing guide for a coupling.

1,809,517. POCKETBOOK COMPACT. RAYMOND KATRINAK, Bridgeport, Conn. Filed Mar. 11, 1930. Serial No. 434,905. 5 Claims. (Cl. 150—34.)

1. A pocket book compact comprising a case, a substantially triangular flap hinged to each side of said case, each of said flaps having one element of a fastener at its apex, means in the case to secure the other element of a plurality of fasteners, a plurality of fastener elements on said means and adapted to cooperate with the fastener elements on the respective flaps with the exception of one flap, whereby said flaps may be individually secured closed and individually opened, the excepted flap overlapping the apexes of the other flaps, an element of a fastener secured on one of the overlapped flaps, and adapted to co-operate with the fastener at the apex of the overlapping flap, and said flaps substantially dividing said case into a plurality of compartments each adapted to receive a toilet article.

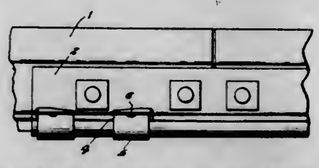


1,809,518. WINDOW VENTILATOR. OTTO KUBATZKY, Tulsa, Okla. Filed Jan. 6, 1930. Serial No. 418,869. 3 Claims. (Cl. 98—96.)



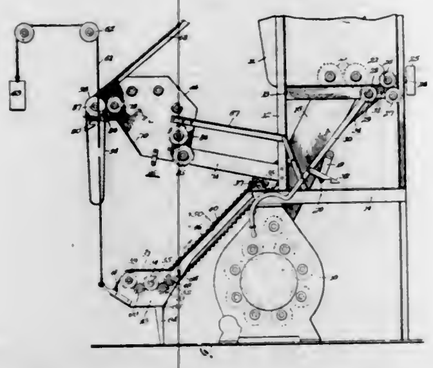
1. In a ventilating structure of the class described the combination of a sash including a frame having a window pane therein spaced from a portion of the frame to provide an opening, a main shield, side shields at the ends of the main shield, means mounting the lower margin of the main shield and the side shields in a movable relation in the openings of said sash to shut off or permit passage of a draft through the opening of the sash, guide members carried by the frame at the upper portion of the opening, and means providing guide channels in the end shields wherein said members project for stabilizing the end shields and main shield in operating movement during ventilating adjustments thereof.

1,809,519. RAILROAD SPIKE ANCHOR. JOHN A. LAMBERT, Spokane, Wash. Filed July 7, 1930. Serial No. 466,251. 2 Claims. (Cl. 238—294.)



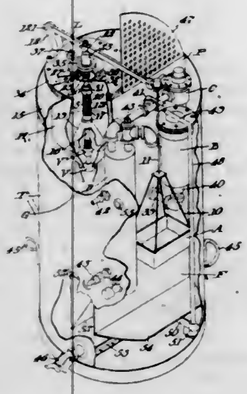
1. A spike anchor including a plate having angularly disposed legs and provided near the junction of said legs with a spike receiving opening, one of said legs being bent to provide a hook for engagement with a fish plate and the other of said legs being adapted to be bent to engage the head of a spike extending through said opening whereby said spike will be held in position in a tie.

1,809,520. COTTON BALING MACHINERY. ALEXANDER S. MACKENZIE, Houston, Tex., assignor to Clayton Gin Compress Company, Houston, Tex., a Corporation of Texas. Filed Sept. 30, 1925. Serial No. 59,566. 34 Claims. (Cl. 100—1.)



1. An accumulator for bale formers comprising a pair of sections forming a baling chamber, said sections when closed being adapted to wind or unwind cotton bat, and one of said sections being capable of movement to a position to operate independently of the other for unwinding cotton bat.

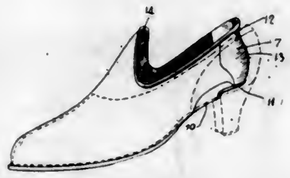
1,809,521. ACETYLENE GENERATOR. JOHN L. MANDEVILLE, Arlington, N. J., assignor to Oxweld Acetylene Company, a Corporation of West Virginia. Filed Sept. 3, 1925. Serial No. 54,322. 7 Claims. (Cl. 48—53.4.)



1. In an acetylene generator, the combination with a generating chamber and a buoyancy member chamber in hydraulic communication with each other, of mechanism for automatically feeding carbide to said generating chamber comprising a heavier-than-water buoyancy member operating in said buoyancy member chamber, and means for partially supporting the weight of said buoyancy member.

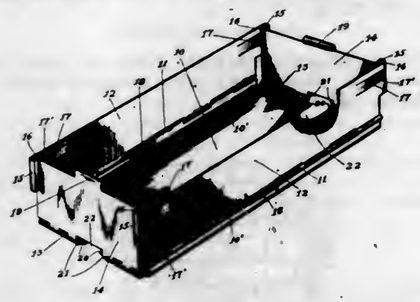
1,809,522. OVERSHOE. PETER H. MAROULIS, New York, N. Y. Filed Dec. 24, 1927. Serial No. 242,443. 9 Claims. (Cl. 36—6.)

1. An overshoe comprising a lined upper, and an unlined counter, an inner shoe heel opening being provided, and said opening and the opening of the overshoe for the insertion of the foot having each an elastic reinforcing bead encircling the opening, a sole connected with the



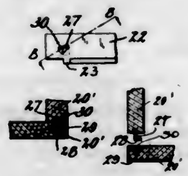
inturned edges of the upper, said sole having a nonelastic reinforce extending to the heel opening and having extensions on each side thereof.

1,809,523. WRAPPED-COIN CONTAINER. CHARLES E. MCLEAN, South Portland, Me. Filed Apr. 26, 1929. Serial No. 358,266. 3 Claims. (Cl. 220—97.)



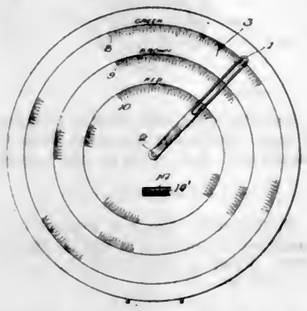
1. A wrapped-coin container comprising in combination, a box having two sides, two end members and a bottom member, an aperture through said bottom member, at each end thereof, providing access to the interior of said container from the under side thereof, a relatively narrow, upwardly extending and centrally disposed portion on the top of each of said end members, and means on said end members co-acting with means on said bottom member of one container, adaptable, respectively, of engagement with the end and inner surfaces of said centrally disposed portions on a subjacent container, whereby the two containers may be held, relatively, against horizontal movement in all directions, when assembled one upon the other.

1,809,524. DAY AND NIGHT LICENSE PLATE FOR MOTOR VEHICLES. JOHN M. MOORE, New York, N. Y. Filed Aug. 16, 1929. Serial No. 386,351. 3 Claims. (Cl. 40—133.)



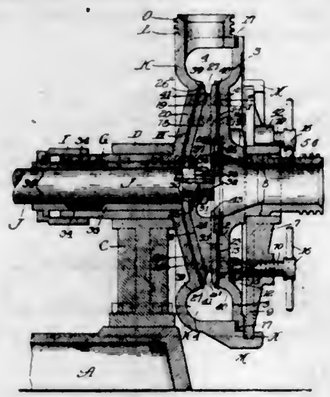
1. In a day and night license plate, a plate with outwardly embossed symbols having cutout portions, letters engaged on the plate and consisting of separate sections and having portions engaging in said cutouts for preventing relative turning of the sections, and coacting means on the letter sections for holding them together in relative positions as engaged on said plate and upon removal from the plate to release the sections upon slight rotation.

1,809,525. INDICATOR MECHANISM. WILLIAM C. MORAN, Laurel Springs, N. J., assignor to Riehle Bros. Testing Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 9, 1931. Serial No. 514,573. 13 Claims. (Cl. 116—129.)



1. In a device of the type described, a dial, a single pointer, means for causing a rotary motion of at least one of the aforementioned elements through more than one revolution, a scale on said dial corresponding to each revolution, and means comprising an indicator associated with said rotatable element for indicating which scale corresponds to the revolutions of the rotatable element at any time.

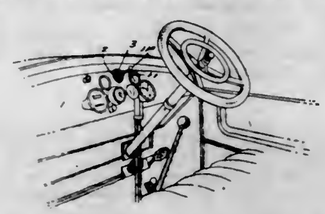
1,809,526. SANITARY CENTRIFUGAL MILK PUMP. JOSEPH NAMUR, Kenosha, Wis., assignor to Specialty Brass Company, a Corporation of Wisconsin. Filed Apr. 19, 1926. Serial No. 103,064. 2 Claims. (Cl. 103—115.)



1. A rotary impeller for pumps, comprising a rear impeller plate provided with a hub which is adapted to be received over the end of a drive-shaft, a centrally recessed front impeller plate adapted to be received over said hub, blades between said plates, and means for releasably securing said plates to said shaft and to each other, said means comprising a key, alignable keyways in said shaft and impeller parts, and a nut in threaded relation with the end of said drive-shaft.

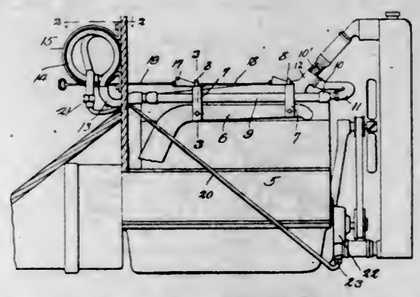
1,809,527. SWITCH. MATTHEW J. PATE, Wilson, N. C., assignor of one-half to Doane Herring, Wilson, N. C. Filed Aug. 10, 1928. Serial No. 298,730. 8 Claims. (Cl. 200—6.)

1. A device of the class described comprising a mounting plate, an annular block, supporting means carried by said mounting plate for supporting said block in spaced relationship to said plate, a current carrying annulus secured to one face of said block, current contacts secured to said block adjacent said current carrying annulus and spaced from contact therewith, an operating lever, said base plate having an oversized hole through which said operating lever extends, said operating lever having means to limit its movement in an axial direction toward the outer face of said base plate and the inner end of said operating lever extending into said annular block, a circuit closing enlargement on said lever within said block and adapted to



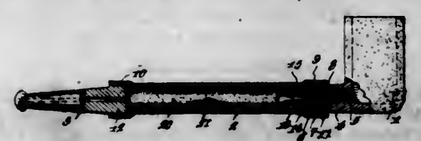
selectively engage the respective circuit contacts and said current carrying annulus, a cross piece carried by said supporting means, a supporting stem loosely extending through a hole in said cross piece, said stem and lever having a ball and socket connection, and a coil spring on said stem, said stem having a head enlargement against which said spring bears, the other end of said spring bearing against said cross piece whereby to hold said ball and socket joint assembled and the limiting means of said handle in contact with said base plate.

1,809,528. AUTO HEATER. LINDLEY H. PATTEN, Rugby, N. Dak. Filed Apr. 17, 1930. Serial No. 445,063. 3 Claims. (Cl. 257—241.)



1. In combination with the radiator of an internal combustion engine of a motor vehicle, a heater comprising pipes, means for establishing communication between the pipes and radiator to allow water from the radiator to pass through the pipes, means for adjustably supporting the pipes in proximity to the exhaust manifold of the engine, and a coil within the body portion of the vehicle and in communication with the pipes to direct heat to the vehicle.

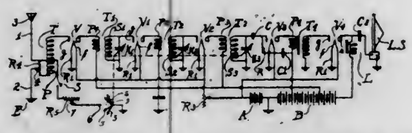
1,809,529. PROCESS AND MEANS FOR FILTERING AND COOLING THE SMOKE OF TOBACCO PIPES. WALTER G. PETTIBONE, Wilmington, Calif. Filed Jan. 9, 1929. Serial No. 331,367. 2 Claims. (Cl. 131—12.)



1. In a combination of the class described, a bowl, a stem, a mouthpiece, a coupling connected to said bowl, said coupling having a hollow boss which is internally

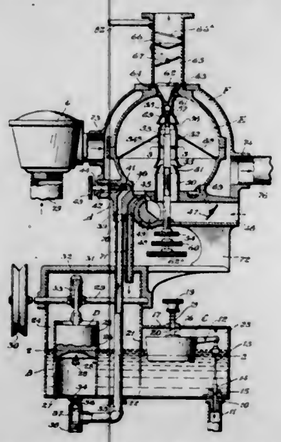
screw threaded and has a conical outer surface, a conical holder having a reduced screw threaded stem, said last mentioned stem being adapted to screw into said boss, at which time the conical holder will extend toward said mouthpiece, or said holder being adapted to fit upon the conical surface of said boss, at which time the screw threaded stem will extend toward said mouthpiece, as and for the purposes set forth.

1,809,530. VOLUME CONTROL. LAWRENCE T. PHELAN, Philadelphia, Pa. Filed Apr. 11, 1929. Serial No. 354,240. 7 Claims. (Cl. 250—20.)



1. In the operation of radio receiving apparatus having one or more circuits tunable by adjustment of the movable elements of tuning devices associated therewith, the method which comprises moving said elements continuously to change the resonant frequency of said circuits in search of signals from a desired station, and utilizing the movement temporarily to depress the sensitivity of the apparatus as the resonant frequency of the circuits passes through transmission frequency of nearby or powerful stations.

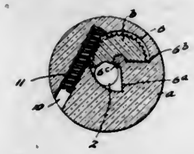
1,809,531. CARBURETOR. CHARLES NELSON POGUE, Winnipeg, Manitoba, Canada, assignor to Alfred Joseph Andrews, trustee, Winnipeg, Canada. Filed Aug. 20, 1927. Serial No. 214,360. 11 Claims. (Cl. 261—36.)



1. In a device of the character described and in combination, a fuel supply chamber, a vaporizing chamber, a pump in the fuel supply chamber, a conduit extending from the pump to the vaporizing chamber, a valve controlling the passage of fuel to the vaporising chamber, means for introducing a regulated quantity of air to atomize the fuel and means for introducing further regulated quantities of air at different portions of the vaporizing chamber to admix with the atomized fuel.

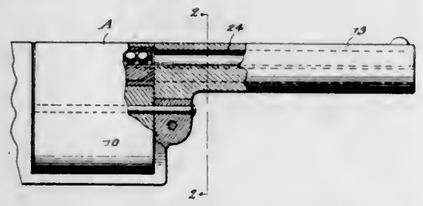
1,809,532. CORD ATTACHMENT FOR PLUGS AND SOCKETS. EDWIN ROLKER, Baltimore, Md., assignor to Safeasy Fixture Company, Baltimore, Md., a Corporation of Maryland. Filed Jan. 17, 1930. Serial No. 421,499. 8 Claims. (Cl. 173—322.)

6. The combination with a connector comprising a body of insulating material having a bore for receiving an electric cord and having terminals to which the wires of the cord may be attached, of a segmental gear journaled



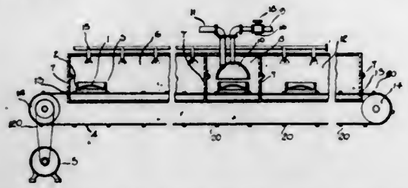
within the connector body and adapted to clamp the cord against the body, and means accessible from without the body for moving said gear to clamp and release the cord.

1,809,533. ORDNANCE. NOAH E. SCHOONOVER, Interior, S. Dak., assignor of one-half to Esli A. Woodburn, Interior, S. Dak. Filed May 21, 1930. Serial No. 454,378. 3 Claims. (Cl. 42—59.)



1. In a firearm, a single barrel having a plurality of longitudinally extending bores, a rotatable cylinder provided with chambers, cartridges for the chambers having a plurality of compartments therein adapted to align with the bores in the barrel, and projectiles in the different compartments of the cartridge.

1,809,534. GLASS TREATMENT. EDGAR D. TILLYER, Southbridge, and HAROLD R. MOULTON, Sturbridge, Mass., assignors to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts. Filed Aug. 1, 1929. Serial No. 382,706. 7 Claims. (Cl. 49—47.)

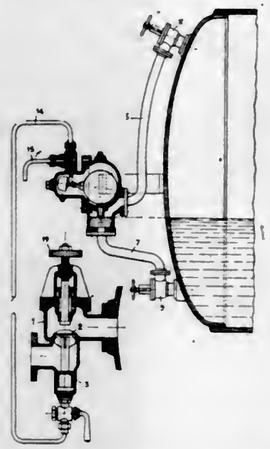


3. In a device of the character described, a block, a lens mounted on the block, a moving belt to carry the lens and block, a chamber to heat the lens when carried therethrough by the moving belt, a cooling blast adjacent the heating chamber under which the lens is carried by the moving belt to strengthen it, and a cooling chamber adjacent the blast adapted to receive the strengthened lens and slowly reduce it to its original temperature.

1,809,535. FEED REGULATOR FOR STEAM BOILERS. EGIDIO TORRE, Genoa, Italy. Filed Aug. 10, 1928, Serial No. 298,737, and in Great Britain Sept. 20, 1927. 1 Claim. (Cl. 137—101.)
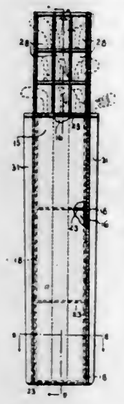
In combination with a steam boiler, an automatic feed regulator comprising a hollow, steam-tight casing forming a float chamber, a short depending tubular nozzle projecting downwardly of said casing and arranged with its mouth in alignment with the average level of the water

in the boiler, a sump below this tubular element and in communication through the nozzle with the float chamber and in communication with the steam and water space of the boiler, a hollow steam pressure resisting float member attached to a conterweighted double-armed lever housed within the float chamber, a needle valve attached to the float lever and tightly seated when the float is in its lowermost position; a separate differential valve inserted in



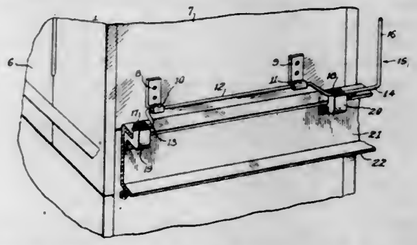
the water feed line of the boiler and comprising a larger valve head adapted to be tightly fitted on its seat and through which the feed takes place, and a plunger head connected to the valve and sliding with an untight fit in a bore of the valve casing; a pipe opening in the feed valve casing to the under side of the plunger head and leading to the seat of the said needle valve, and an outlet pipe connected to the discharge of the casing of said needle valve.

1,809,536. GOLF BAG. HENRY T. TUCKER, Fort Smith, Ark., assignor to Tucker Duck & Rubber Co., Fort Smith, Ark., a Corporation of Arkansas. Filed Aug. 27, 1929. Serial No. 388,789. 6 Claims. (Cl. 150—1.5.)



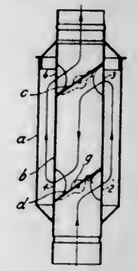
1. A bag for golf clubs comprising a bag-like flexible body portion of polygonal cross section including front and rear walls, flexible stiffening frames arranged in the front and rear walls of the body portion to maintain each yieldably stretched, and a plurality of flexible partitions arranged in the body portion and extending lengthwise thereof from side to side and from front wall to rear wall and dividing the body portion into rows of compartments extending crosswise of the bag and the rows of compartments being arranged one behind the other from front to rear of the bag.

1,809,537. END DOOR LIFT MECHANISM. JEFFREY JOHN WALLACE, Amite, La., assignor to Gullett Gin Company, Amite, La. Filed June 15, 1928. Serial No. 285,744. 5 Claims. (Cl. 100—19.)



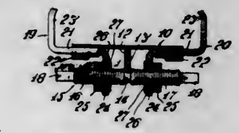
1. In a cotton baling press, supporting framework, a pair of side doors hinged to said framework, a pair of end doors movable bodily into and out of position between said side doors to form therewith a baling box, brackets fixed to said framework below the lower ends of said end doors having upwardly open notches, lugs fixed to the lower ends of said doors having downwardly open hooks, and crank shafts bearing in said bracket notches and lug hooks to lift said end doors and move them outwardly from baling position.

1,809,538. HEAT UTILIZER. HEINRICH WEISSHAAR, Stuttgart, Germany. Filed Feb. 19, 1930, Serial No. 429,799, and in Germany Feb. 27, 1929. 2 Claims. (Cl. 257—172.)



1. A heat utilizer for building in flues of heating furnaces, stoves and the like, comprising in combination an inner flue pipe, an outer heating jacket, partitions subdividing the space between said jacket and said pipe into two separate chambers with lateral openings between the same, and registers adapted to control said openings.

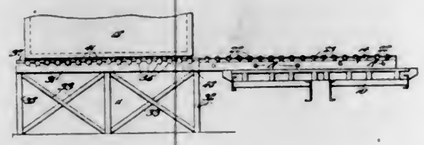
1,809,539. SKATE CLAMP. HENRY F. WHITCOMB, Jr., Milwaukee, Wis., assignor to Richardson Ball Bearing Skate Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 1, 1930. Serial No. 432,417. 1 Claim. (Cl. 208—180.)



In combination with the clamp screw of a skate, a clamp comprising a steel stamping forming the body of the clamp

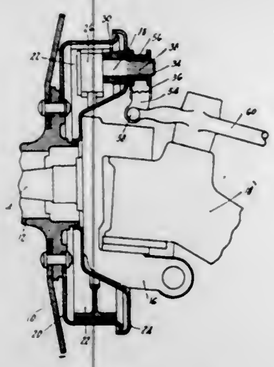
and provided with a perforated depending flange, and a ferrule internally threaded to engage the threading of the clamp screw and formed with a portion of reduced diameter to provide a shoulder, the reduced portion extending through the perforation of said flange and being upset at its end against the flange to secure the ferrule to the stamping.

1,809,540. CONTAINER HANDLING SYSTEM AND APPARATUS. CHARLES D. YOUNG, Wayne, Pa. Filed Sept. 17, 1928. Serial No. 306,551. 6 Claims. (Cl. 214—38.)



1. A container handling system which consists in locating two roller trackways upon a support, moving a container upon said tracks, driving wedge members beneath said container to elevate said container from said tracks, and removing said tracks for use with other containers.

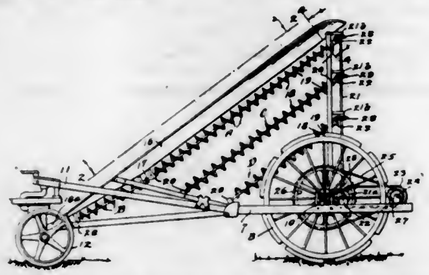
1,809,541. OPERATING DEVICE. WILLIAM J. ANDRES and CHARLES T. WAFFLE, South Bend, Ind., assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 23, 1926. Serial No. 156,549. 9 Claims. (Cl. 188—196.)



1. An operating device comprising, in combination, a shaft, an arm fixed on the shaft and having a sleeve portion embracing the shaft, a second arm having a sleeve portion loosely embracing the sleeve portion of the fixed arm, and a thrust member through which the second arm operates the fixed arm and the shaft.

1,809,542. CONVEYING AND GATHERING MECHANISM FOR HARVESTERS AND ANALOGOUS IMPLEMENTS. HARVEY H. BARDSLEY and WILLIAM J. EHLER, Kansasville, Wis. Filed Oct. 28, 1929. Serial No. 402,923. 4 Claims. (Cl. 56—119.)

1. In a harvester or analogous machine, of the type having a pair of forwardly disposed gathering members provided with converging and opposed inner edges and a throat, a pair of oppositely disposed spiral conveying elements mounted longitudinally of and below said converging inner edges, a pair of oppositely disposed conveying elements extending longitudinally of and at opposite sides of said throat, and means for rotating said several



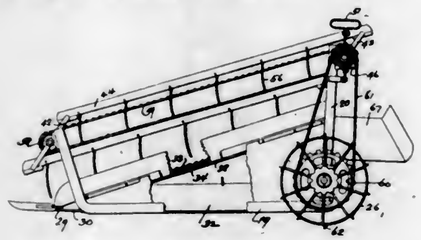
conveying elements to cause the screw conveying movement thereof to equal the forward movement of the harvester or machine over the ground.

1,809,543. DEVICE FOR PREVENTING THE ROTATION OF CABLES IN HANGER SEATS. JASPER BLACKBURN, Webster Groves, Mo. Filed June 6, 1927. Serial No. 196,990. 2 Claims. (Cl. 24—115.)



2. A device for preventing the rotation of cables in hanger seats comprising a U shaped member formed of spring material and having a bifurcated jaw adapted to receive one arm of a cable hanger suspended from a messenger wire, the ends of said U shaped member being bent outwardly, said member adapted to simultaneously engage with said cable hanger and having a cable carried thereby so as to prevent rotation of said cable in said hanger.

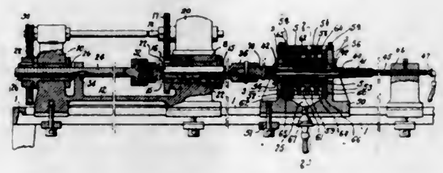
1,809,544. SEED HARVESTER. DELOSS BORLAND, Charleston, Miss., assignor of three-fourths to Morris Isenberg, Charleston, Miss. Filed Mar. 14, 1927. Serial No. 175,146. 4 Claims. (Cl. 56—207.)



1. A seed saver for attachment to the cutter bar of a mowing machine, including opposite, horizontally disposed, side members secured and braced apart, said side members having upwardly turned forward ends and having inwardly disposed flanges forming a support, a removable pan longitudinally slidable along said flanges and supported thereby, vertical posts secured to the rear ends of said side members and extending upward therefrom, axles extending laterally from said posts, and wheels on said axles, parallel supports secured to said posts, extending forwardly and downwardly therefrom to and secured to said upwardly

turned side members, a removable screen slidably disposed on said inclined supports and above said pan, a plurality of tedder bars disposed above said screen and means for actuating said bars from said wheels to move cut grasses backward along said screen.

1,809,545. APPARATUS FOR FINISHING BEARINGS AND BUSHINGS. THOMAS DAVID BOWES, Cynwyd, Pa. Filed July 5, 1928. Serial No. 290,679. 3 Claims. (Cl. 29—90.)



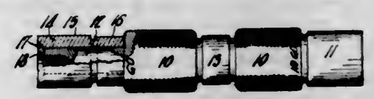
1. A bearing and bushing finishing apparatus comprising a clamp member, a rotatable mandrel, a bed plate upon which the mandrel and clamp member are operatively movable relatively to each other, said clamp member having a base plate adjustably mounted upon said bed plate, walls upon said base plate forming a clamp box to receive said bearing, said walls having an opening formed therethrough for the passage of the mandrel, sectional clamp plates within the clamp box adapted to embrace said bearing for rigidly holding the latter within the walls of the clamp member, said clamp member having a heating chamber formed therein, means for supplying heat to said chamber for heating the bearing, one of said clamp plates having apertures formed therein for the free passage of heat to the bearing, means for rotating the mandrel, and means for moving the mandrel axially through the bearing.

1,809,546. METHOD OF CLEANING WELLS. KIEL B. BOWMAN, Massillon, Ohio, assignor to The Ohio Drilling Company, Massillon, Ohio, a Corporation of Ohio. Filed Mar. 7, 1929. Serial No. 345,043. 12 Claims. (Cl. 166—21.)



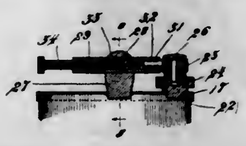
1. The process of removing incrusting solids from water wells which includes introducing an acid into the water, forcing gas under pressure into and through the solution for about twenty-four hours to drive off carbon dioxide formed by the action of the acid upon the incrusting solids, and then pumping the solution out of the well.

1,809,547. GAUGE DEVICE. OTTIS R. BRINEY, Pontiac, Mich. Filed Feb. 7, 1928. Serial No. 252,546. 6 Claims. (Cl. 33—178.)



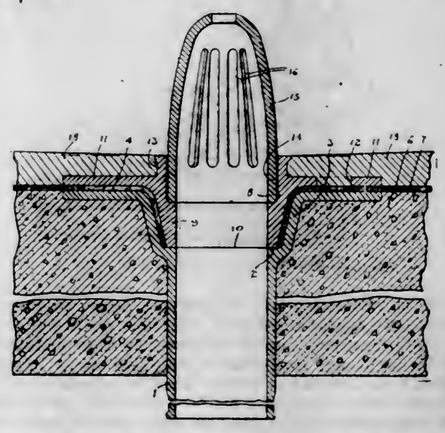
3. A gauge device having a handle and a gaging member on one end thereof and a diametrically reduced member on the other end thereof, a one piece element extendable over and removable from said reduced member and having a gaging portion and a checking portion smaller than said gaging portion by an amount equal to permissible wear of said gaging portion, and a checking portion on said handle and intermediate the ends thereof to facilitate calibration of the checking portion and of the same size as the first mentioned checking portion and diametrically smaller than said handle.

1,809,548. POCKET LIGHTER. WILLIAM J. BUTLER, Cranston, R. I., assignor to Henry Lederer & Bro. Inc., Providence, R. I., a Corporation of Rhode Island. Filed Apr. 11, 1928. Serial No. 269,268. 1 Claim. (Cl. 67—7.1.)



In a pocket lighter, a fuel reservoir, a tubular post upstanding from said reservoir, a combined friction wheel and thumb wheel element rotatably mounted on said post, a pin frictionally engaging the bore of said post and having a head projecting over said wheel element to lock the same on said post, a vertical standard on said reservoir having a transverse bore, and a pyrophoric tube frictionally engaging the transverse bore and having its end extending over the thumb wheel to additionally lock said wheel element on said post.

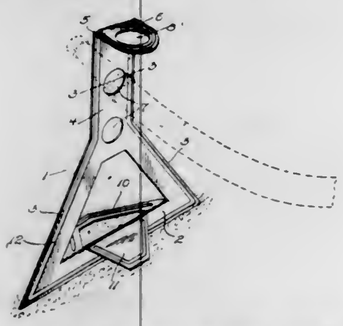
1,809,549. DRAIN HOPPER. ERSKINE DUNCAN and JOHN R. W. AMBROSE, Toronto, Ontario, Canada. Filed Aug. 22, 1927. Serial No. 214,650. 2 Claims. (Cl. 285—37.)



1. In a roof structure, the combination with a thin waterproof membrane covering therefor, of a tubular mem-

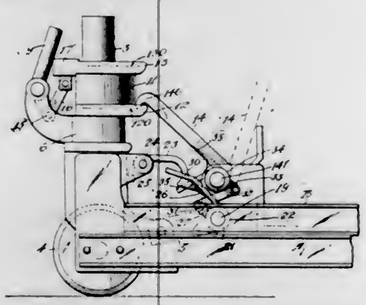
ber having a conical walled cup at the upper end bedded in the roof surface and having the membranous roof covering extending over the edge of the cup and downwardly thereinto, a cap having a flange resting on the top of the membranous roof covering and a conical boss extending down into the cup and binding the edge portions of the thin roof covering against the conical wall of said cup, said cap being formed with a flange extending upwardly above the level of its lateral flange, and a mastic roof covering extending over the lateral flange of the cap and the membrane and locking the cap in place.

1,809,550. HOSE HOLDER. KILBY FARRAR, London, Ohio. Filed Sept. 29, 1930. Serial No. 485,130. 3 Claims. (Cl. 248—29.)



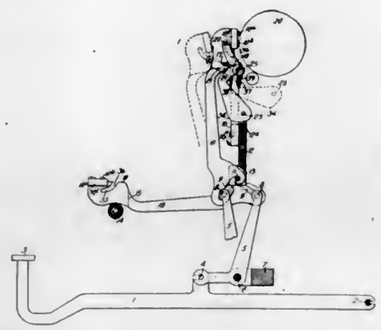
1. A hose holder made from a single piece of sheet metal comprising a substantially triangular base section arranged vertical and which base section is formed with struck-out portions serving as legs to hold the holder in a substantially vertical position, an elongated portion forming an extension of said base section provided with vertically spaced apertures therein, and a laterally directed portion formed with the upper end of said elongated portion which is also provided with an opening, said openings serving to hold the nozzle of a hose and to support the same in various angular positions with respect to the holder.

1,809,551. ELEVATING TRUCK. HENRY S. GERMOND, Bayonne, N. J. Filed Oct. 10, 1929. Serial No. 398,612. 10 Claims. (Cl. 254—10.)



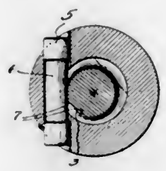
1. An elevating truck, comprising a frame, an elevating platform mounted thereon for composite vertical and horizontal movement, means for elevating said platform, a latch mechanism comprising a rotatable keeper having a curved surface and a pivotal hook to engage over said curved surface when said platform is raised, one arranged on said frame and the other on said platform, said keeper having a projection which upon rotation of the keeper engages said hook and dislodges it from said keeper, and means for rotating said keeper in one direction.

1,809,552. TYPEWRITING MACHINE. GEORGE G. GOING, Glenbrook, Conn., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Jan. 20, 1930. Serial No. 422,077. 17 Claims. (Cl. 197—27.)



6. The combination of a series of pivoted type bars, a cam on each type bar, key controlled means for actuating each type bar, and means for slowing down the movement of each type bar as it approaches the printing point and effecting substantially a noiseless pressure imprint, said means comprising a single momentum accumulator arranged in the path of each type bar to be actuated thereby, and a contact member carried by said momentum accumulater and with which the said cam on each type bar coacts as the latter approaches the printing position, whereby the momentum accumulator may be actuated by a type bar with a camming action.

1,809,553. TOOL HOLDER. HERMANN M. GRAUL, Detroit, Mich.; Edith P. Graul administratrix of said Hermann M. Graul, deceased. Filed Mar. 25, 1926. Serial No. 97,480. 4 Claims. (Cl. 279—89.)

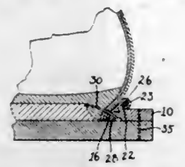


1. In a tool holder, the combination of a holder member provided with a tool receiving aperture, a yieldable pin positioned in the walls of the said holder member, the central portion of said pin being turned down and spaced from the walls of said tool holder, and a tool insertable longitudinally in said holder member, said tool being rotatable to press a portion of said pin out of alignment with the normal axis thereof to permit the tool to be moved in positive locking position.

1,809,554. COMPOSITION FOR PURIFYING PETROLEUM OILS. JULES H. HIAT, El Paso, Tex.; Harriet M. Hirt, executrix of said Jules H. Hirt, deceased, assignor to L. J. Hirt, New York, N. Y. Filed Mar. 23, 1929. Serial No. 349,520. 6 Claims. (Cl. 252—1.)

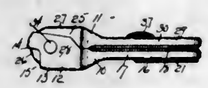
1. The process of making a composition for treating petroleum base liquids comprising dissolving a caustic alkali in water and adding thereto a metallic oxide and an alkali earth compound, and heating to produce a dry active product.

1,809,555. BEADED WELT. ALBERT L. HOWARD, Brockton, Mass., assignor to Hamilton-Wade Company, Brockton, Mass., a Corporation. Filed Nov. 9, 1929. Serial No. 405,968. 8 Claims. (Cl. 36—78.)



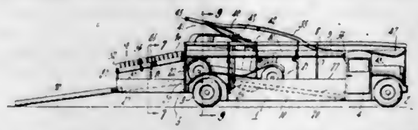
1. A beaded welt comprising a body portion having a bead-forming flap formed by an incision in the upper part of the body portion extending from the inner side edge of the welt, said flap being folded outwardly beyond the juncture of the flap with the body portion and then inwardly to form the bead, and said outwardly folded portion being fastened to the body of the welt.

1,809,556. NAIL TRIMMER. CHARLES J. JOLIDON, Hartford, Conn. Filed Sept. 15, 1928. Serial No. 306,169. 5 Claims. (Cl. 30—23.)



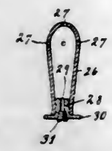
1. A nail trimmer including two members pivotally united and each comprising a head having registering and overlapping side closing walls and bottom walls forming a compartment to receive clippings, said members also including handles having registering closing side walls to form a hollow extension from said compartment and crossed cutting jaws located in cooperative cutting relation on each of said heads.

1,809,557. AUTOMOBILE TRANSPORTING TRUCK. LESTER J. LISHON, Brookline, Mass. Filed May 20, 1930. Serial No. 453,994. 17 Claims. (Cl. 296—1.)



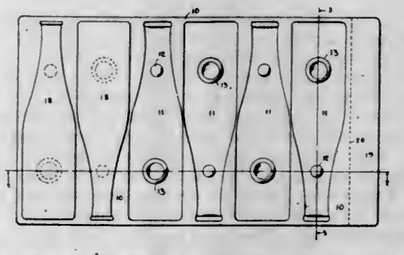
1. A device of the class described comprising a frame having front and rear pairs of supporting wheels, said rear wheels having an axle extending therebetween, a vehicle support movable relative to said frame and positioned between said pair of wheels, and means for adjusting the rear end of said support between a position to receive the wheels of a vehicle passed over said axle and a position substantially below said receiving position.

1,809,558. SURGICAL APPLIANCE. GOTTLOB E. LOEBLE, New York, N. Y. Filed Sept 6, 1928. Serial No. 304,194. 2 Claims. (Cl. 128—271.



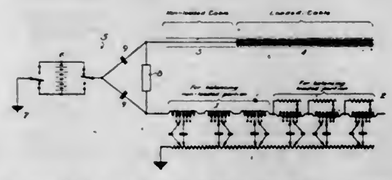
1. A surgical appliance comprising a hollow tubular member, one end of said member being curved and provided with perforations, the other end of said member being open, a bored plug fitting into the open end of said member, said plug having a flange on its outer end, and a removable filling plug fitting into the bore in the flanged plug.

1,809,559. PACKING CONTAINERS FOR FRAGILE ARTICLES. LEON MANN, Mount Vernon, N. Y., assignor, by mesne assignments, to Holed-Tite Packing Corporation, a Corporation of New York. Filed Dec. 14, 1927. Serial No. 239,877. 8 Claims. (Cl. 217—19.)



1. A packing of the character described, comprising a sheet of material provided with spaced recesses to form compartments for receiving articles to be packed, cushion elements formed in the walls of said recesses, said elements having curved portions extending laterally and longitudinally of said recesses and having locking relation with similar elements of a superimposed tray, whereby relative sliding movement in all directions is prevented.

1,809,560. ARTIFICIAL LINE NETWORK. JOSEPH W. MILNOR, Maplewood, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1929. Serial No. 354,573. 18 Claims. (Cl. 178—45.)



1. An artificial line comprising a series inductance provided with a plurality of central taps, a shunt condenser, an auxiliary shunt condenser having a capacity small with respect to that of the first mentioned condenser, and means for adjustably connecting each of said condensers to said central taps.

1,809,561. FOLDABLE GARMENT HANGER. ELISABETH MÜLLER, Brooklyn, N. Y. Filed Aug. 28, 1930. Serial No. 478,374. 1 Claim. (Cl. 223—63.)



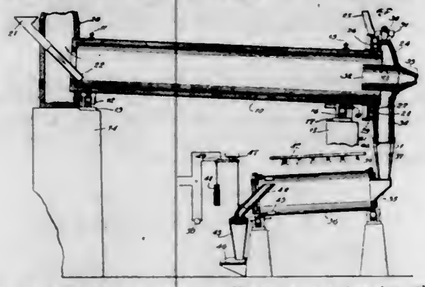
A garment hanger comprising a channeled body member, arms pivotal with their inner ends between the outer ends of the channeled member, and end members pivoted to the outer ends of said arms, and adapted to be folded into the same and with said arms into the channel of said body member, a flexible supporting member, and shoulders formed on said body member and said arms for engagement by the lower inner edges of said arms and end members, for preventing a collapsing of the structure in its garment supporting position.

1,809,562. SIGN HOOK. JOHN NELSON, Boston, Mass. Original application filed Oct. 25, 1927, Serial No. 228,573. Divided and this application filed Dec. 8, 1928. Serial No. 324,792. 2 Claims. (Cl. 40—125.)



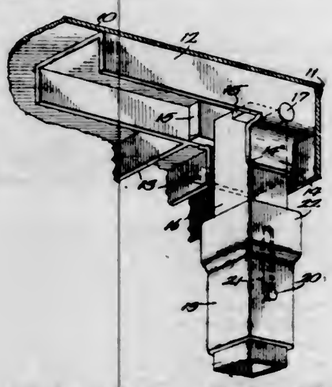
1. A sign hook formed from a single piece of material comprising a body, a penetrating portion, a head and an ear, said body being substantially wider than it is thick and tapering on all sides at one end to form said penetrating portion, the thickness of said penetrating portion at its lower end being less than one-third the thickness of said body, the other end of said body forming said head, said head being of substantially the same width and thickness as said body and being flat on its outer surface and adapted to receive the driving blow, the top surface of said ear slanting downwardly and outwardly from said head toward the outside end and its under surface being flat.

1,809,563. ROTARY FURNACE. HARLAND D. NEWKIRK, Syracuse, N. Y., assignor to Onondaga Steel Company, Inc., a Corporation of New York. Filed June 18, 1929. Serial No. 371,797. 9 Claims. (Cl. 263—32.)



1. In a furnace a rotary cylinder and a bearing therefor, and suction means for producing a partial vacuum surrounding the area of engagement of the bearing and cylinder.

1,809,564. FOLDING TABLE. JOHN B. O'CONNOR and JOHN B. ADLER, Aurora, Ill., assignors to Lyon Metal Products, Incorporated, Aurora, Ill., a Corporation of Illinois. Filed Aug. 16, 1926. Serial No. 129,867. 31 Claims. (Cl. 45—11.)



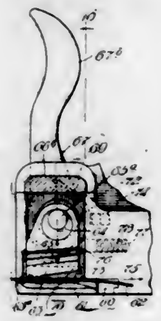
26. In a folding table, in combination with the top having a depending housing on its under side, said housing having opposed openings, a leg also having opposed registering openings, a pivotal pin passing through said openings and housing for hinging the leg to the table, a locking sleeve slidably mounted on said leg, a spring normally urging said sleeve in one direction to cause said sleeve to lockingly engage a portion of said housing, said housing having a cam portion across which the sleeve may travel during the movement of the leg for holding said sleeve out of locking position until said leg is swung to open position.

1,809,565. ELECTRICAL HEAT PRODUCING ELEMENT. JOSEPH OSTRAK, St. Louis, Mo. Filed Jan. 18, 1929. Serial No. 333,347. 1 Claim. (Cl. 219—34.)



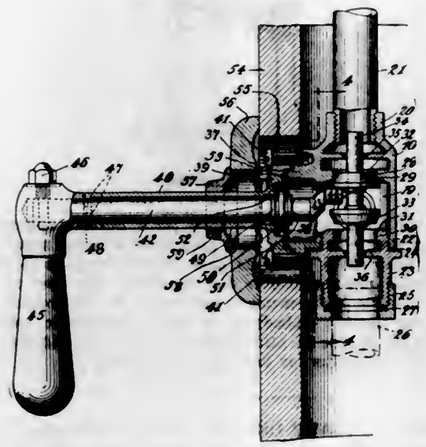
A heat producing unit comprising a high resistance electric conductor, a heat distributing element associated with said high resistance conductor, said heat distributing element being of greater area than said high resistance conductor and being provided with a substantially U-shaped recess in which said high resistance conductor is positioned in a manner to cause wall portions of the recess to be in close proximity to a plurality of sides of said high resistance conductor, and a substantially U-shaped electric insulating element interposed between said high resistance conductor and portions of the wall of said recess, said recess being of a depth which is substantially greater than the corresponding dimension of the electric conductor, whereby the heat distributing area of the walls of said recess is increased.

1,809,566. GRIPPING DOG. JOHN EKREN OTT, Chicago, Ill., assignor to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1928. Serial No. 276,564. 8 Claims. (Cl. 24—134.)



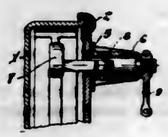
1. A gripping dog comprising a frame member having a part to engage a strap to be gripped, a gripping member, a supporting member on which said gripping member is rotatably mounted, and means having an eccentric connection with said supporting member for effecting rotation thereof to move said gripping member toward and from said strap, said gripping member having a gripping surface in one plane located at one side of a plane passing through the axis of movement of said supporting member normal to the surface of said strap.

1,809,567. TRANSFER VALVE. ABRAM N. PASMAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 26, 1928. Serial No. 249,544. 16 Claims. (Cl. 277—7.



9. A combination spout and spray fixture including a spray, a spout, means for connecting the spout and spray with a source of water under pressure, a diverter member adapted to remain normally open to permit water to flow from said source through the spout and adapted to be closed to cause said water to flow through the spray, the diverter member being held closed by the pressure of the water, and means to return the diverter member to the open position when the flow of water from the source is stopped.

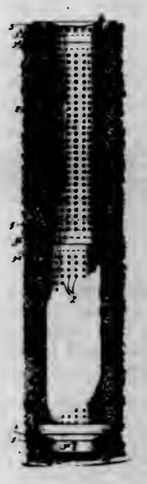
1,809,568. BRAKE. HENRI PERROT, Paris, France, and GERMAIN CALVIGNAC, Mannheim, Germany, assignors, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 2, 1929, Serial No. 337,127, and in France Sept. 26, 1928. 7 Claims. (Cl. 188—78.)



1. A brake comprising, in combination, friction means having separable ends, a bearing adjacent said ends, a shaft having a slotted end journaled in the bearing, and a cam between said ends having a flattened shaft portion pivoted in said slot.

1,809,569. MAKING AND SETTING TUBULAR WELL SCREENS. THOMAS O. POE, Massillon, Ohio. Filed Oct. 11, 1923. Serial No. 667,893. 3 Claims. (Cl. 166—5.)

1. A perforate, tubular well tube adapted to be inserted into an opening in the ground and provided with a series of perforate annular screening material support flanges terminating in upwardly disposed peripheral rims arranged to bear against the wall of said opening in the ground, for supporting screening material in a cylindrical



column around the tube and in direct contact with the wall of said opening in the ground, and for preventing deflection of the tube throughout the length of the tube.

1,809,570. SYNTHETIC RESINOUS COMPLEX AND METHOD OF MAKING SAME. ISRAEL ROSENBLUM, Jackson Heights, N. Y. Filed Jan. 31, 1929. Serial No. 336,632. 18 Claims. (Cl. 260—4.)

1. The method which comprises reacting a phenol, an aldehyde and an organic salt of a metal selected from the group consisting of the members of the alkali metal group and of the second group of the periodic system lead, manganese and cobalt in the presence of a natural resin which has been dry-distilled at a temperature of about 260° C., adding a polyhydric alcohol in quantity sufficient to form partial esters with such resin, and further heating the mass until a soluble resinous reaction product is obtained.

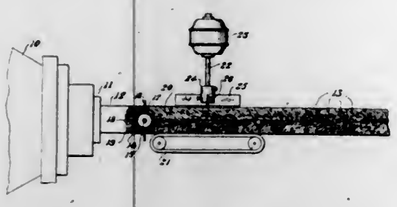
9. The soluble reaction product of a phenol, an aldehyde, an organic salt of a metal selected from the group consisting of the members of the alkali metal group and of the second group of the periodic system, lead, manganese and cobalt, a polyhydric alcohol and a cracked natural resin.

1,809,571. LOUD SPEAKER. HENRY JOSEPH ROUND, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 11, 1924, Serial No. 749,117, and in Great Britain Nov. 19, 1923. 12 Claims. (Cl. 181—31.)



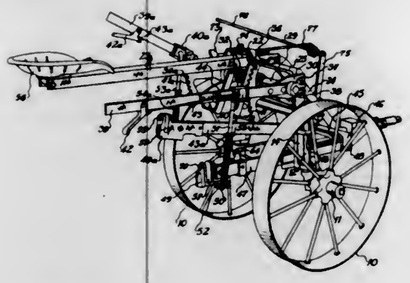
1. In combination, a plurality of spaced strips, a membrane covering the strips, stretchers attached to the strips and means for actuating the structure to reproduce sound.

1,809,572. APPARATUS AND PROCESS FOR TEXTURING BRICK. J. EBROL SMITH, Stonecreek, Ohio, assignor to The Stone Creek Brick Company, Stonecreek, Ohio, a Corporation of Ohio. Filed Jan. 28, 1929. Serial No. 335,616. 6 Claims. (Cl. 25—1.)



1. A texturing apparatus for a plastic column, and the like, including opposed cutters having radial blades and mounted upon axes perpendicular to opposite side surfaces of the column, and means for rotating the cutters upon their axes.

1,809,573. SULKY FOR PLOWS AND THE LIKE. CHARLES C. STEDMAN, Cleveland Heights, Ohio, assignor to Centaur Tractor Corporation, Greenwich, Ohio., a Corporation of Ohio. Filed Aug. 22, 1929. Serial No. 387,598. 14 Claims. (Cl. 97—91.)



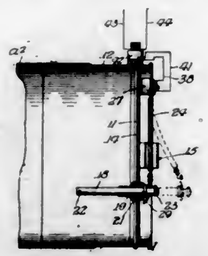
1. A sulky for plows and the like including a frame, wheels upon the frame, a transverse crossbar for supporting a plow and the like, means for raising or lowering each end of the crossbar relative to the other end thereof and means for raising or lowering both ends of the crossbar simultaneously.

1,809,574. REINFORCED PILING. JAMES M. STRAUB, Pittsburgh, Pa., assignor to Electric Welding Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 31, 1930. Serial No. 440,212. 5 Claims. (Cl. 61—56.)



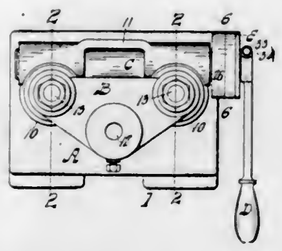
1. A pile of the kind disclosed composed of a continuous body of concrete having a series of pairs of internal longitudinal reinforcing rods having diametrically crossed U-shaped ends terminating near the driving head of the pile and provided with spirally wound retaining wires, and a surrounding cage-like reinforcing head telescoped thereover in tight engagement with said wires and forming an extension of the reinforcing rods.

1,809,575. DRAFT REGULATING SYSTEM. WILLIAM B. STURGIS, Chicago, Ill. Filed June 8, 1929. Serial No. 369,274. 14 Claims. (Cl. 236—68.)



1. A draft regulating system for a heating apparatus, comprising a casing-member associated with the apparatus and adapted to have gas pass therethrough, a movably mounted damper-member for regulating the flow of gas through the casing-member, and means for controlling the damper-member embodying a thermo-responsive element mounted on one of said members and means independent of the apparatus for heating the element.

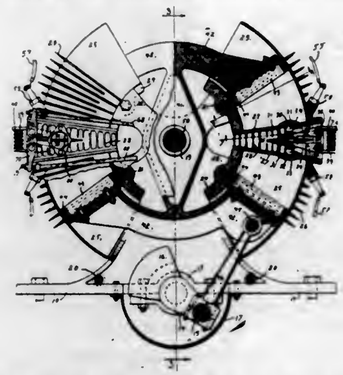
1,809,576. CLAMP DEVICE. JOSEPH VERDERBER, Cleveland, Ohio. Filed Mar. 29, 1928. Serial No. 265,759. 10 Claims. (Cl. 77—62.)



1. A clamp device including a movable clamping element, a fixed cup member, a shaft journaled in said cup member and operatively connected with said clamping element to move the same, a disc rotatable with said shaft and having a slot therein, a brake member in said slot adjacent the inner wall of said cup, a wedge member in said slot inwardly adjacent to said brake member, and an operating member rotatable on said shaft and having means to engage said wedge member to move the same and thereby rotate said disc to move said clamping element into clamping position and thereafter wedge said brake mamber into locking contact with said cup when said clamping element meets resistance to clamping movement thereof.

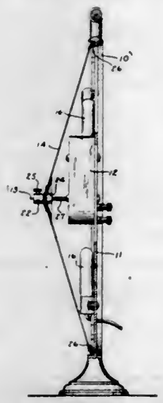
1,809,577. INTERNAL COMBUSTION ENGINE. LOUIS J. WOLFF, Omaha, Nebr., assignor to Oscillating Motors Company, Omaha, Nebr., a Corporation of Nebraska. Filed Mar. 2, 1929. Serial No. 344,085. 7 Claims. (Cl. 123—18.)

7. In an internal combustion engine, a plurality of toroidal cylinders arranged fixedly about a common axis, each cylinder having an open end, a rocker mounted for oscillation about said axis and having portions entering the open ends of the cylinders, pistons mounted fixedly upon said portions of the rocker and movable therewith within the cylinders, said pistons being supported solely by said rocker and being spaced from the cylinder-walls sufficiently to remain entirely out of contact therewith and provide an intervening clearance-space between the pistons and cylinder-walls under all conditions of operation, whereby to eliminate friction between the pistons and cylinders and inhibit conduction of heat from one to the other, and whereby heat may be conducted from the pistons through the connecting portions of the rocker,



and expansible packing rings carried by the pistons and extending across the clearance-spaces to engage the cylinder-walls, said rings being the sole elements contacting movably with the cylinder-walls.

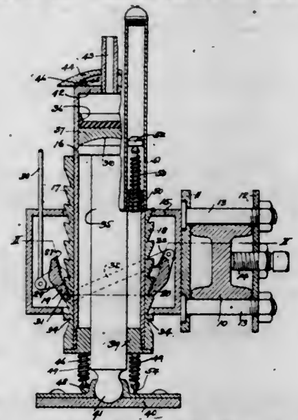
1,809,578. CONE TYPE LOUD SPEAKER. WILLIAM H. BRISTOL and FRANKLIN B. BRISTOL, Waterbury, Conn., assignors, by mesne assignments, to Wm. H. Bristol Talking Picture Corporation, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 10, 1926. Serial No. 101,064. 3 Claims. (Cl. 181—31.)



1. A cone type loud speaker, comprising a circular spider supporting frame, actuating mechanism mounted thereon, a reciprocatory rod adapted to be actuated thereby and extending substantially in the axis of the frame, a sound producing cone-shaped member mounted upon and carried by the rod with its mouth directed toward the actuating mechanism and covering substantially the front of the frame and having its edge unattached and free thereof to be freely removable from the front of said frame and to admit of ready substitution of the cone-shaped member, and means to removably secure the cone member at its apex to the rod.

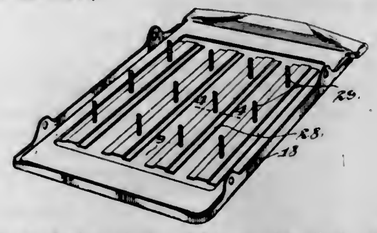
1,809,579. VEHICLE JACK. LEONARD N. BRYANT, Memphis, Tenn., WILLIAM W. EAST, Jr., Oxford, Miss., and MARTIN S. SWAIN, Chicago, Ill. Filed Apr. 16, 1930. Serial No. 444,656. 10 Claims. (Cl. 138—9.)

1. In a vehicle jack, a casing and means for attaching same to a part to be raised, a cylinder mounted and vertically slidable, in said casing, a plunger within said cylinder, releasable means for retaining said cylinder in raised position relative to said casing, means for releasing same



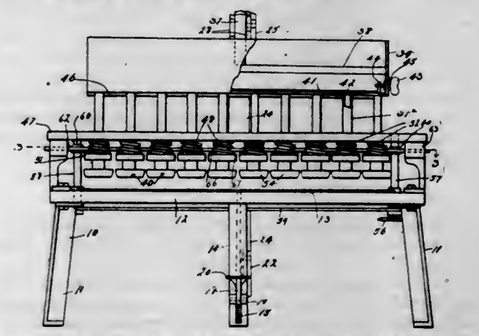
to allow said cylinder and plunger assembly to descend, releasable means for holding said cylinder in lowered position, and means for introducing fluid pressure into said cylinder to actuate said plunger.

1,809,580. APPARATUS FOR BROILING BACON AND THE LIKE. CLARENCE W. CARTER, Minneapolis, Minn. Filed Sept 27, 1928. Serial No. 308,706. 3 Claims. (Cl. 219—19.)



2. In a device of the character described, relatively movable shells, co-operating thin sheet metal broiling plates applied to the respective shells, and metallic reinforcing strips secured to the backs of the respective broiling plates, screws projecting through said stiffening strips and having heads held by said strips, and beating elements secured to the backs of the respective broiling plates, by the said screws.

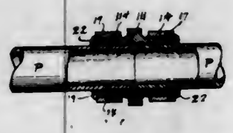
1,809,581. PAN GREASING MACHINE. JOSEPH CHVOJKA, Philadelphia, Pa. Filed May 31, 1930. Serial No. 458,319. 6 Claims. (Cl. 91—39.)



1. A pan greasing machine including a plurality of rotatable greasing elements, means to rotate said elements,

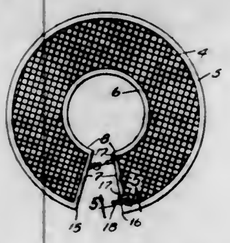
an elevating platform beneath said elements to hold a pan and move the same into operative relation with the greasing elements, manually operated means for actuating the elevating platform, a grease reservoir, conduits connecting said reservoir with several greasing elements, a piston for applying pressure to the grease in the reservoir, and means connected with the manually operated means for transmitting movement to the piston.

1,809,582. PIPE COUPLER. LEWIS H. CHURCH, Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 31, 1926. Serial No. 158,145. 4 Claims. (Cl. 285—124.)



1. A coupler comprising, a coupler member having an outwardly threaded neck terminating in a circumferential inwardly bevelled ring receiving and reducing surface, a gland nut adapted to be screwed onto the neck and formed with an inwardly bevelled ring receiving and reducing surface cooperating with the first named surface, and a split ductile gland ring being V-shaped in cross-section such that the sides of the ring are at a greater angle than the bevel of the gland nut disposed between the member and nut surfaces and adapted to have its over-all diameter first-reduced and subsequently its radial thickness reduced by approach of the surfaces.

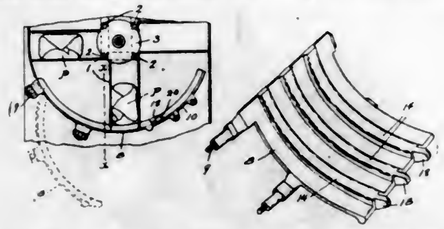
1,809,583. FAN PROTECTOR. EMMA K. COOK, St. Louis, Mo. Filed May 26, 1930. Serial No. 455,709. 1 Claim. (Cl. 230—275.)



A fan protector of the class described, comprising a cylindrical barrel of wire cloth, permanently closed at its outer end and having its inner end bound around with tri-folded metal, the outer fold of said tri-folded binding extending beyond the two other folds and curved first radially outward and then radially inward thereby forming a circumferential groove about the periphery of the inner end of said cylindrical barrel, an annular split ring member of wire mesh cloth circumferentially bound with bifolded sheet metal, said split annular ring having an external diameter greater than the diameter of said barrel and less than the internal diameter of said inwardly turned outer fold of said metal binding, means for fastening the ends of said split annular ring member.

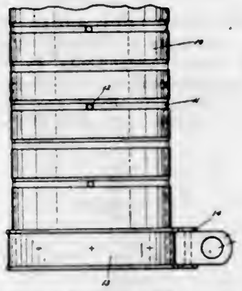
1,809,584. DISPENSING MECHANISM. ARTHUR H. DU GRENIER, Haverhill, Mass. Filed Mar. 18, 1930. Serial No. 436,685. 5 Claims. (Cl. 312—97.)

1. In a dispensing machine, an endless carrier arranged to be moved circularly in a vertical plane and having a series of article receiving receptacles each comprising a bottom and front and rear sides, and opening at its outer end to permit the discharge of the article therefrom, and a support located beneath the carrier having its upper surface disposed in proximity to the path of movement of the outer end edges of said sides, said support and said sides having oppositely projecting portions arranged



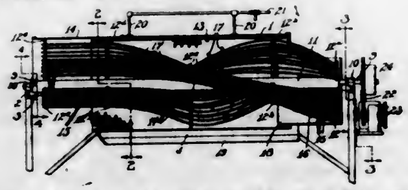
to extend in overlapping relation, the projections on the support being adapted and arranged to support the article above the ends of the projections on the sides during the portion of the movement of each receptacle in which the article tends to be discharged therefrom.

1,809,585. ENGINE VALVE SLEEVE. HENRY J. EDWARDS, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed June 7, 1927. Serial No. 197,069. 6 Claims. (Cl. 123—75.)



1. A sleeve for internal combustion engines comprising a cylindrical sheet metal member, a flanged sheet metal annular member rigidly secured to the base portion of the sleeve, and a bearing lug rigidly secured to the flange of the annular member.

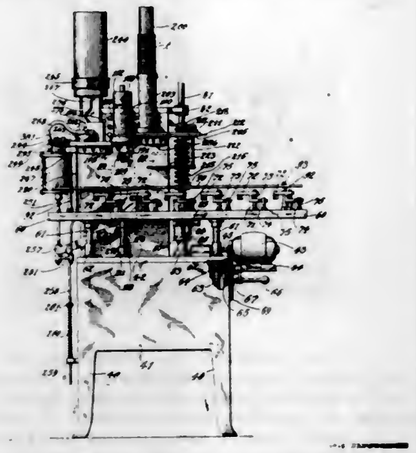
1,809,586. CONVEYER-SEPARATOR. LEONARD T. EVANS, Indianapolis, Ind. Filed Feb. 11, 1929. Serial No. 339,143. 8 Claims. (Cl. 19—90.)



1. In a device of the character described, the combination with a rotating foraminous cylinder, of a rotatable propeller mounted within said cylinder to rotate therewith and comprising a plurality of helically disposed slats arranged side by side.

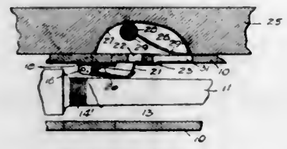
1,809,587. BOTTLE CAPPING AND SEALING MACHINE. HENRY B. FOULDES, Glenbrook, Conn., assignor of one-half to John P. Curry, Riverside, Conn. Filed Apr. 16, 1929. Serial No. 355,597. 69 Claims. (Cl. 140—94.)

1. In an apparatus of the character described, in combination, means for applying a skirted hood cap to an article to be sealed, means for encircling the skirt of the applied hood cap with a ring tie, means for twisting the tie to bind the hood cap on the article, and means for



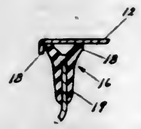
placing a nick in the tie adjacent the twisted portion to cause the tie to break at the neck when subjected to subsequent twisting.

1,809,588. LOOM. BENSON CLIFFORD GOODMAN, Far Rockaway, N. Y. Filed Jan. 27, 1928. Serial No. 250,065. 3 Claims. (Cl. 139—273.)



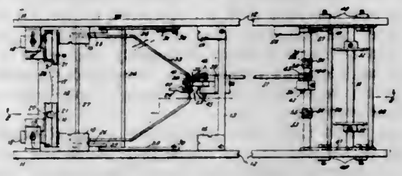
1. In a loom, the combination of a shuttle box and a shuttle, a yarn filled bobbin arranged in said shuttle, a detector disposed longitudinally of the bobbin and pivoted at one end in said shuttle and provided with a rounded nose yieldably urged towards the bobbin and into constant contact with the exterior of the yarn on the bobbin, an electrical contact carried in the shuttle and completed when the yarn is exhausted from the bobbin and the detector contacts with the said contact, and an electric circuit including an electromagnet controlled by said contact and position of the detector.

1,809,589. COWL VENTILATOR. GEORGE E. GRIMM, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed May 31, 1927. Serial No. 195,243. 2 Claims. (Cl. 20—69.)



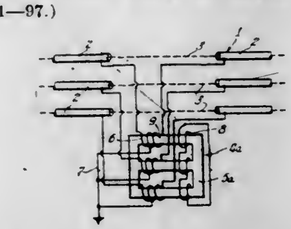
1. A gasket for sealing a joint between two adjacent sheet metal members arranged at right angles to each other, comprising a body portion having a slot adapted to engage opposite sides of one member, and a pair of identical extensions forming a V adapted to engage the other member.

1,809,590. BILLING MACHINE ALIGNER. LOUIS FRED HAGEMANN, Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Ontario, Canada. Filed June 17, 1926. Serial No. 116,592. 29 Claims. (Cl. 197—133.)



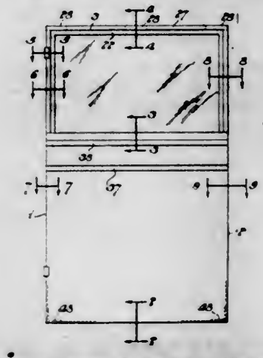
22. In a strip aligning device, in combination, an aligning pin movably mounted for engagement with a strip, operating mechanism connected to said aligning pin to move the same to effect strip alignment and a rigid locking mechanism for locking said aligning pin in final strip aligning position.

1,809,591. SHEATH BONDING AND METHOD. HERMAN HALPERIN and KENNETH W. MILLER, Chicago, Ill. Filed Nov. 30, 1927. Serial No. 236,634. 14 Claims. (Cl. 171—97.)



14. In a polyphase transmission system wherein there are provided separate sheathed cables for the respective phases, the sheath of each cable being divided into sections insulated from one another, the method of controlling the sheath current which comprises forcing the sheath currents to divide between the sheaths of the cables during abnormal conditions, and substantially preventing such division of current during normal operating conditions.

1,809,592. AUTOMOBILE DOOR CONSTRUCTION. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 13, 1927. Serial No. 160,867. 10 Claims. (Cl. 296—44.)



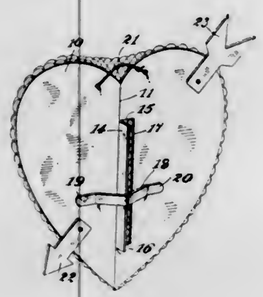
1. An automobile door having a slidable window arranged therein comprising a substantially Z shaped side rail formed of an integral stamping and having an inwardly directed offset in one of its arms, another of the arms of said rail forming, with an arm of said offset, a

guide channel for the slidable window, the outer face of the rail outside of the window guiding arm of the offset forming the finish molding of the door independently of outer paneling.

3. An automobile door having a slidable window arranged therein comprising an upwardly presenting channel top rail provided with an upwardly projecting flange on one of its arms forming the upper overlap of the door, and an angle member detachably connected to the top rail and forming therewith a downwardly presenting channel for receiving the upper edge of the window in its raised position.

5. An automobile door comprising a metal stamping secured to the top of the inner door panel and formed with a curved portion having its end backwardly flanged upon itself adapted to furnish a pocket for receiving the upholstery and a beading for the inner trim.

1,809,593. FOLDING ORNAMENT OF EXPANSIBLE TISSUE. HENRY E. LUHRS, Shippensburg, Pa., assignor to The Beistle Company, Shippensburg, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1930. Serial No. 430,155. 8 Claims. (Cl. 41—11.)



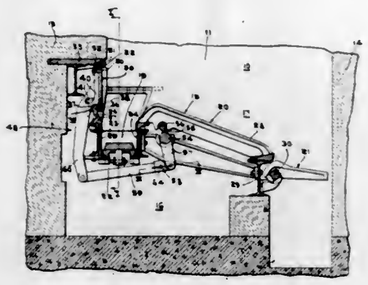
1. A folding ornament comprising a base formed of two members integrally connected together along a fold line, expansible material secured to said base and serving to cause folding of said members, a tab homogeneous with part of the base, and a strap extending across the fold line and over the tab, one end of the strap being attached to one half of the base and the other end of the strap being attached to the other half of the base, the tab being adapted to engage the strap to hold the base members in unfolded position against the action of said expansible matter.

1,809,594. NECKTIE. JAMES C. MCCURRACH, Brooklyn, N. Y., assignor to McCurrach Organization, New York, N. Y., a Corporation of New York. Filed Oct. 24, 1929. Serial No. 402,037. 3 Claims. (Cl. 139—426.)



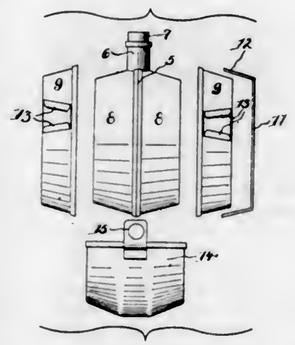
1. A fabric neck-tie formed on one face and to one end of a facing mesh and on the other face and as to its mid-portion but short of said end of a distinct backing mesh more resilient than the facing mesh, said tie including thread-loops scattered throughout the area common to the two meshes and connecting them together.

1,809,595. STOKER. CHARLES F. MILLER, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 6, 1929. Serial No. 405,167. 4 Claims. (Cl. 110—48.)



1. In stoker apparatus, the combination with a fuel trough having bottom and side walls; of a plate-like member disposed above one of the side walls, means for supporting the plate-like member adjacent its lower edge for movement about an axis extending substantially parallel to the walls of the trough; and means for moving the plate-like member about its axis of movement.

1,809,596. COMBINATION CANTEEN AND MESS KIT. WILLIS R. NASON, St. Paul, Minn. Filed Jan. 5, 1929. Serial No. 330,488. 4 Claims. (Cl. 206—4.)

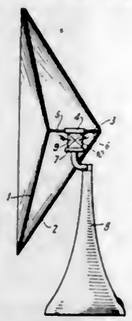


1. In a mess outfit, a canteen having opposite side portions of frusto-conical shape, a pair of pans of frusto-conical form adapted to fit in nesting engagement with the side portions of the canteen, a removable handle for a pan, means for detachably connecting said handle to at least one of said pans, said handle being formed to fit in nesting engagement with a pan when detached therefrom, a kettle formed to receive and hold together said canteen, pans and handle when in nesting engagement with each other and eye members secured to opposite sides of said kettle to receive a rigid shaft for supporting the same in horizontal position for cooking.

1,809,597. DOUBLE REENTRANT CONE LOUD SPEAKER. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company, a Corporation of California. Filed Mar. 17, 1927. Serial No. 175,989. 9 Claims. (Cl. 181—31.)

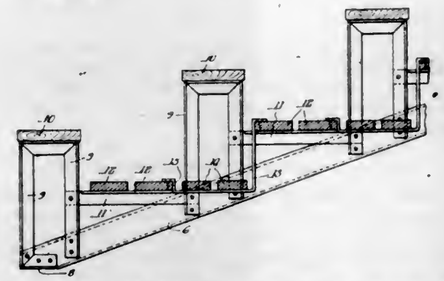
1. A loud speaker comprising a pair of conical diaphragms of different altitudes having their peripheries

secured together and their apexes disposed on the same side of the peripheral plane but spaced apart and driv-



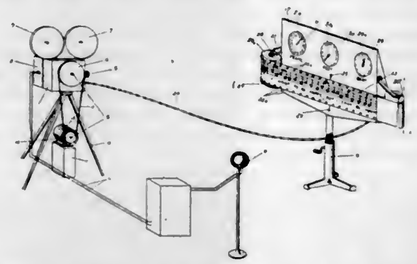
ing mechanism disposed between the apexes and connected thereto for imparting vibrations to each of said diaphragms.

1,809,598. STEEL BLEACHER. HENRY D. OBERDORFER, Newcastle, Ind., and JOHN B. JOHNSON, Louisville, Ky. Filed July 22, 1929. Serial No. 379,907. 10 Claims. (Cl. 189—2.)



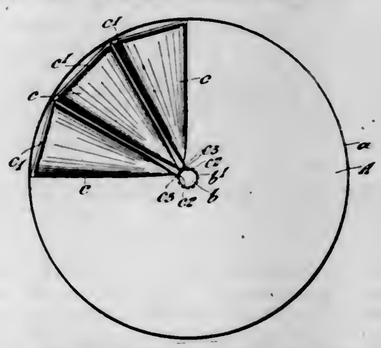
1. In a sectional stand construction, an inclined sectional stringer, a plurality of supports graduated in height, each support having a foot piece resting upon the ground into which the support is inserted, a head piece for each support attached to the stringer and supporting the stringer at an angle to the support, the angle supports having sleeves disposed intermediate the ends thereof, the sleeves, head pieces and foot pieces all being formed with perforated attachment wings, and a plurality of braces of different lengths extending from the wings to the stringers intermediate the supports and from some of the wings to adjacent wings for directly and cross connecting adjacent supports for bracing them against movement in all directions.

1,809,599. TALKING CARTOON MOTION PICTURE. FREEMAN H. OWENS, New York, N. Y. Filed Jan. 6, 1927. Serial No. 159,340. 20 Claims. (Cl. 88—16.2.)



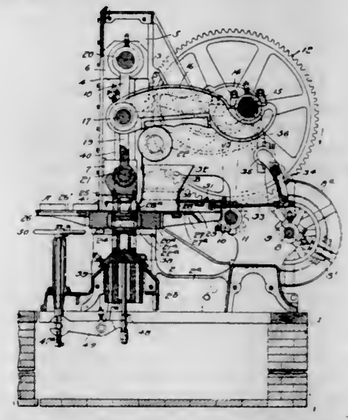
1. The method of synchronizing sound and motion pictures comprising the steps of, moving a sound chart, simultaneously photographing said moving sound chart and recording sound made in accordance with said chart, observing successive photographs of said chart, and then photographing cartoon pictures in corresponding relation to the successive photographs of said sound chart.

1,809,600. PACKING SEALED CONTAINERS CONTAINING MILK OR OTHER SUBSTANCES. HENRY WILLIAM SAMUEL PALMER, Gerrards Cross, England. Filed Sept. 20, 1929, Serial No. 393,857, and in Great Britain July 9, 1929. 4 Claims. (Cl. 206—46.)



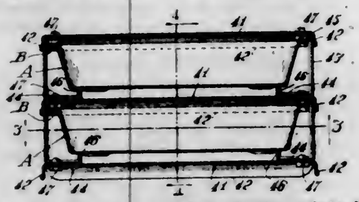
1. A packing box or casing for the reception of containers of cylindrical shape sealed at one end by a circular disc and at the other by pressing its opposite sides together to form a straight diametrical seam, comprising a cylindrical box or casing, and a vertical column fixed in the centre of the box or casing, the column being of a depth corresponding to the length of the diametrical seam of the container, while the distance between the column and the walls of the box or casing corresponds to the axial length of the container so as to prevent radial movement thereof when they are arranged radially therein side by side.

1,809,601. BRICK MACHINE. JACOB NESSLY PORTER, Kenilworth, W. Va., assignor to The Globe Brick Company, East Liverpool, Ohio, a Corporation of West Virginia. Filed Dec. 9, 1929. Serial No. 412,829. 13 Claims. (Cl. 25—89.)



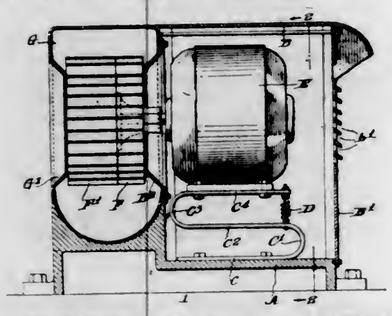
1. In a brick machine, the combination with brick shaping means, a feed table and a reciprocating member for successively feeding shaped bricks along said table to one position, of means disposed forward of and in spaced relation to said member, for moving each brick from the first referred to position along said table to another position.

1,809,602. KNOCKDOWN SECTIONAL RACK. WALTHER RASTER, Chicago, Ill. Filed May 17, 1930. Serial No. 453,338. 5 Claims. (Cl. 211—126.)



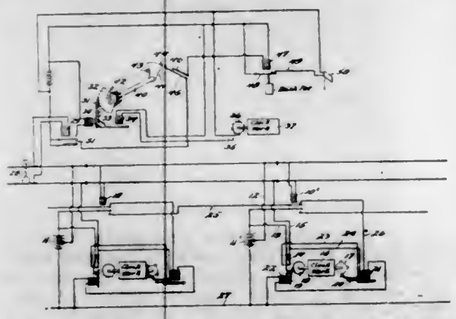
1. A sectional rack comprising a bottom plate for each compartment, receptacle supporting means disposed at a higher elevation than the plane of the lowermost surface portion of said member, side plates associated with said bottom plates and supporting the latter in spaced relation to each other, there being channel formations between said receptacle supporting means and said side plates, and both associating said side plates with said bottom plates and having projecting portions disposed in said channel formations.

1,809,603. SPRING SUPPORT FOR MOTORS. ARTHUR J. REED, Philadelphia, Pa. Filed Dec. 20, 1928. Serial No. 327,453. 3 Claims. (Cl. 248—16.)



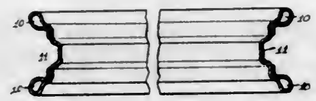
1. A spring support for a motor comprising in combination a U shaped spring, to one side of which the motor is attached, a spring under tension attached only to the ends of the U spring, and acting to exert a compression force thereon and a spring support for the U shaped spring extending from the end of the lower arm of the U to a base support.

1,809,604. RAILWAY SIGNALING. EDWARD C. SASNETT, Washington, D. C., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 20, 1925, Serial No. 24,544. Renewed Jan. 9, 1931. 29 Claims. (Cl. 246—41.)



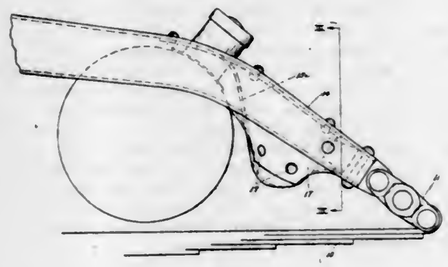
1. A code continuous indication system for the automatic control of railway vehicles, comprising a stretch of track divided into insulated blocks, a track relay connected across the rails at the entrance end of each block, a source of electrical energy connected across the rails at the exit end of each block, traffic controlled means for disconnecting the source of energy from the exit end of a block when a vehicle enters therein and for intermittently connecting a source of higher potential across the exit end of said block to cause relatively strong current impulses separated by a fixed time interval to flow in the rails of said block, in combination with a vehicle travelling on the track, a relay on the vehicle responsive to said current impulses, a timing device on the vehicle controlled by the vehicle relay, and train governing means controlled by said timing device and adapted to be held at one indication only so long as impulses are received from the track.

1,809,605. METHOD OF MAKING WHEEL RIMS. CLAUDE SAUZEDDE, Detroit, Mich. Filed Apr. 8, 1929. Serial No. 353,373. 7 Claims. (Cl. 29—159.1.)



1. A method of making a wheel rim consisting in forming a central boss in a disk of metal and retaining a flat ring in the original plane of said disk, flanging the free end of said boss, and shaping said ring and flange into curled rim edges.

1,809,606. VEHICLE FRAME. WILLIAM P. STRONG, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Aug. 16, 1928. Serial No. 300,066. 12 Claims. (Cl. 280—106.)



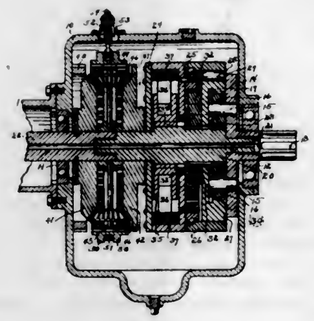
1. In a vehicle frame, the combination of two longitudinal channel members each comprising a vertical web and parallel horizontal flanged portions, a vertically inclined ear formed integrally with the lower flanged portion adjacent the extremity of each longitudinal member, a cross member interconnecting the longitudinal members having its ends turned substantially ninety degrees into engagement with the ears, the upper edge of the cross member adjoining the ears being flanged horizontally to engage the upper flange of the channel, and means for securing the horizontal member to the cross member at point of engagement.

1,809,607. DEVICE FOR HOLDING AND APPLYING TWINE. PHILIP J. SWIGART, Akron, Ohio. Filed Aug. 16, 1926. Serial No. 129,629. 3 Claims. (Cl. 242—141.)

2. In a device of the class described, a container, a handle projecting therefrom, a pad on said handle at a point adjacent the free end thereof, said handle provided with a longitudinally directed bore leading from said container and emerging from said handle at a point adjacent said pad, a second bore leading from a point on the other side of said pad to the free end of the handle, said container adapted to hold a ball of twine with the free end portion of the twine extending through said bores and contacting with said pad.

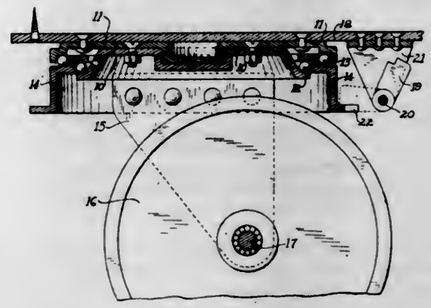


1,809,608. SEMIAUTOMATIC TRANSMISSION. THEODORE F. THOMPSON, Fort Dodge, Iowa. Filed Sept. 11, 1930. Serial No. 481,316. 8 Claims. (Cl. 74—34.)



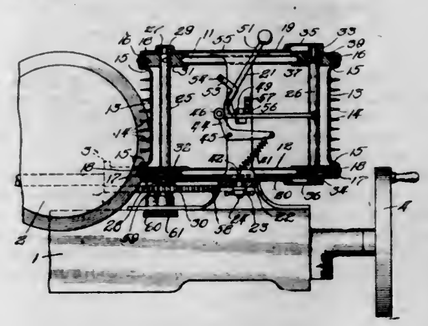
1. In a device of the class described, a shaft designed to have one of its ends operatively connected to a prime mover, a second shaft capable of being operatively connected to said first mentioned shaft at times, an internal ring gear embracing said second shaft and of a diameter much greater than the diameter of the said second shaft, gear teeth on said second shaft, a governor on said second shaft capable of locking said ring gear against independent rotation relative to said second shaft when a certain speed or lack of load pull of said shaft is realized, a spur gear engaging said internal ring gear and said teeth at points diametrically opposite from each other, a third shaft, a brake having a fixed portion and a movable portion; said movable portion capable of engaging and being locked against movement when rotated in one direction, a shaft secured to the movable portion of said brake for rotatably securing said spur gear to said movable portion, an internal ring gear secured to said movable portion, a plate secured to said third shaft, and a spur gear rotatably mounted on said plate having its teeth engaging said movable portion and teeth on said second shaft at points diametrically opposite from each other.

1,809,609. CASTER. GILES M. TURNER, Milwaukee, Wis. Filed Jan. 6, 1928. Serial No. 244,881. 2 Claims. (Cl. 16—21.)



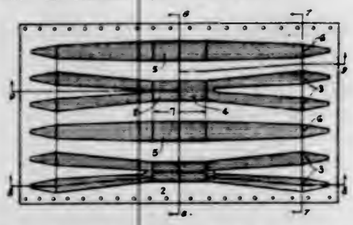
2. A caster comprising a ring member having a stepped inwardly extending annular flange forming inner and outer bearing shoulders, a pair of disk members secured together and shouldered and flanged to complete inner and outer ball raceways with said bearing shoulders of the ring member, bearing balls in said ball raceways, an outwardly extending strengthening flange at the lower edge of the ring member, curved bracket plates secured within the ring member and bearing against the upper flange thereof, a wheel mounted between the bracket members, a gusset plate secured to the disk members, a bearing bracket on the gusset plate, and a dog mounted on the bearing bracket and adapted to rest on the outwardly extending flange, said flange having a notch to receive the dog for locking the ring member against turning.

1,809,610. SLICING MACHINE. CORNELIS F. M. VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed June 14, 1928, Serial No. 285,346, and in Great Britain June 28, 1927. 11 Claims. (Cl. 146—94.)



1. A slice conveyer for slicing machines comprising in combination; a pair of spaced flexible traveling elements, slice-engaging means connecting said elements, pulleys around which said elements are guided, a pair of spaced supports upon which said pulleys are mounted, a pair of spaced plates, each plate being disposed at the opposite ends of said supports, alined guides at one end of each plate in which the opposite ends of one of said supports are slidably received, the ends of said other support being mounted in the other ends of said plates, a spacing member connecting said plates, and spring-operated means mounted on said spacing member and connected with said slidably mounted support to urge said support away from said spacing member and maintain said traveling element taut.

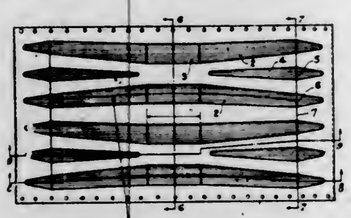
1,809,611. METAL STRUCTURE FOR RAILWAY CARS. WILLIAM E. VAN DORN, Pasadena, Calif., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 25, 1929. Serial No. 395,032. 12 Claims. (Cl. 105—410.)



1. A metallic plate formed with a plurality of substantially parallel embossments of substantially the same length, the alternate embossments having their opposite ends divided to form a greater number of portions and the embossments between said alternate embossments being not so divided.

2. A metallic plate formed with a plurality of substantially parallel equal width embossments of substantially the same length, the alternate embossments having their opposite ends divided to form a greater number of portions and the embossments between said alternate embossments being not so divided.

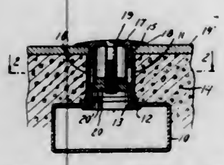
1,809,612. METALLIC STRUCTURE FOR RAILWAY CARS. WILLIAM E. VAN DORN, Pasadena, Calif., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 25, 1929. Serial No. 395,033. 16 Claims. (Cl. 105—410.)



1. A metallic plate formed with a pair of major embossments, the longitudinal axes of said major embossments diverging from each other at their ends, said plate also formed with a minor embossment between said ends of the major embossments.

2. A metallic plate formed with a pair of equal width major embossments which decrease in width toward their opposite ends, the longitudinal axes of said major embossments diverging from each other at their ends, said plate also formed with a minor embossment between said ends of the major embossments equal in width to the ends of the major embossments.

1,809,613. ACCESSORY FOR UNDERFLOOR DUCT SYSTEMS. HERVEY S. WALKER, Ardmore, Pa. Filed Mar. 15, 1929. Serial No. 347,199. 10 Claims. (Cl. 247—28.)

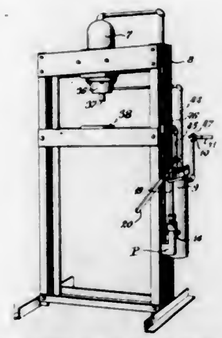


4. In an underfloor wiring system, a duct in the floor structure, an outlet element extending from the duct toward the floor surface, and a closure for the end of the element comprising a tube receivable into the element, an end plate closing one end of the tube and lying in contact with the floor surface, the open end of the tube being expansible and said plate having a smooth substantially flat top and being of greater diameter than said tube, an expanding member carried by the closure and engaging the open end of the tube, and means carried by said closure operable from the floor surface for actuating the said member.

1,809,614. PRODUCTION OF VACUA. HERBERT J. WERT, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Dec. 27, 1930. Serial No. 505,205. 7 Claims. (Cl. 230—101.)

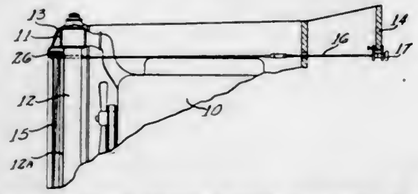
1. In a method of producing high-vacua by means of condensation pumps the improvement which comprises using a pumping substance for providing the propellent vapor, one containing at least one ester of a keto aromatic acid.

1,809,615. SAFETY DEVICE FOR HYDRAULIC PRESSES. FRANK C. WILSON, Arcade, N. Y. Filed Nov. 22, 1929. Serial No. 409,176. 5 Claims. (Cl. 138—10.)



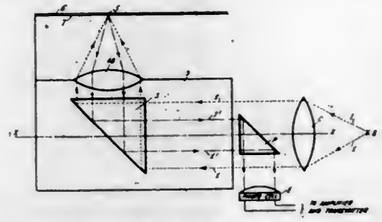
1. A hydraulic press including a working cylinder, said cylinder having a piston adapted to operate the movable members of the press and being in communication with a fluid reservoir, means for applying pressure to the fluid in said reservoir to operate said piston, an auxiliary hand pump in communication with said reservoir and adapted upon operation to force fluid from the same into the working cylinder of the press, and means operative upon pressure being applied to the fluid in said reservoir to lock the operating handle of said pump against movement.

1,809,616. CONTROL SHUTTER FOR ENGINE RADIATORS. DANIEL M. WINANS, Binghamton, N. Y., assignor to The Brewer-Titchener Corporation, Cortland, N. Y., a Corporation of New York. Filed July 15, 1929. Serial No. 378,197. 20 Claims. (Cl. 189—62.)



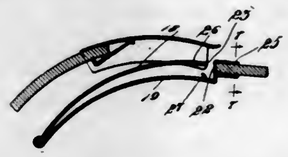
1. In a radiator shutter serving to control air-flow, a fenestrated frame work, slats of the twistable type pivotally mounted therein, and means for twisting the respective slats against said frame work and thereby substantially closing the frame fenestration to air-flow.

1,809,617. FACSIMILE SYSTEM. GEORGE MAURICE WRIGHT, Great Baddow, Chelmsford, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 23, 1929, Serial No. 365,355, and in Great Britain May 31, 1928. 2 Claims. (Cl. 178—7.)



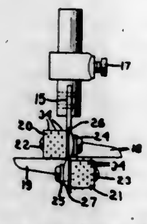
1. A picture transmission system, including a record carrying drum, a rotating prism mounted internally of said record carrying drum and adapted to be rotated within said drum, a wide aperture lens adjacent said prism and adapted to be rotated simultaneously therewith, a light source arranged centrally of said prism, said prism and lens being adapted to direct the light from said source toward the record surface carried upon said drum and to collect and re-direct the reflected light from said record surface along a path parallel to the path of projection, a stationary prism external to the path of incident light for re-directing the reflected light, and a photoelectric element in the path of said re-directed light from said prism for converting the re-directed light into proportionate strength electric current impulses.

1,809,618. EXTENSION DEVICE. MAURICE ANDERSON, Edgewood, R. I., assignor to Levy, Anderson Co., Inc., Providence, R. I., a Corporation of Rhode Island. Filed Jan. 7, 1930. Serial No. 419,048. 10 Claims. (Cl. 24—71.)



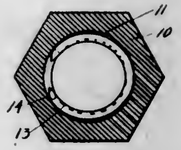
1. In a flexible bracelet, an extension device comprising a longitudinally arcuate sheet metal member having bracelet end clamping means at one end thereof, a longitudinally arcuate sheet metal end extension link hingedly secured thereto, said links also being arcuate in transverse section whereby said links are strengthened and fitting together when in folded position, and bracelet end clamping means at the free end of the end link.

1,809,619. CLOTH SPLITTING ATTACHMENT FOR LOOMS. CARL D. BROWN, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 9, 1929. Serial No. 384,721. 6 Claims. (Cl. 164—70.)



1. A cloth splitting attachment for looms comprising a rotary shear, means to support said shear normal to, and with its cutting point in, the plane of the cloth, and means actuated by the forward movement of the cloth to rotate said shear to split the cloth longitudinally during the weaving operation.

1,809,620. NUT LOCK. ELWYN Z. COLE, Philadelphia, Pa. Filed Feb. 7, 1929. Serial No. 338,096. 1 Claim. (Cl. 101—7.)

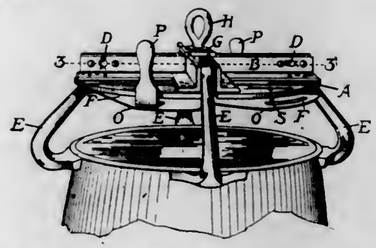


A locking nut comprising a nut having an internally threaded bore for coacting with a threaded bolt, said nut also having an annular groove around the bore; and a split spring metal ring fitted in said groove so as to track in the threads of said bolt and exert spring pressure upon the outer wall of the groove and upon the threads in which it is tracking, said ring having its ends bevelled in opposite directions to facilitate entrance in said threads.

1,809,621. INHIBITOR. HARRY P. CORSON, Lakewood, Ohio, assignor, by mesne assignments, to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Aug. 9, 1928. Serial No. 298,630. 9 Claims. (Cl. 148—8.)

1. A pickling and cleaning bath for metals comprising a dilute acid containing a small amount of a thiuram sulfide.

1,809,622. GRAPPLING APPARATUS. VERN G. ELLEN, Minneapolis, Minn., assignor to The Louden Machinery Company, Fairfield, Iowa, a Corporation of Iowa. Filed June 18, 1930. Serial No. 461,966. 4 Claims. (Cl. 294—82.)

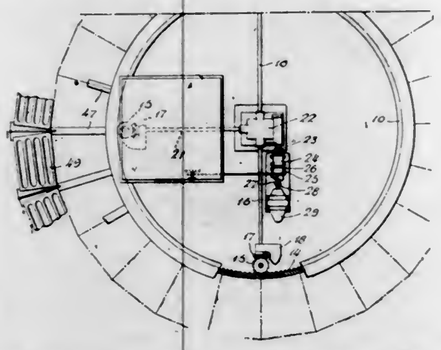


1. In a grappling apparatus, a main member adapted to be connected to a hoisting or a carrying device, and having grappling hooks pivoted on its opposite edges, whereby they tend to swing inward and engage and hold the article to be handled, and a subsidiary member centrally pivoted below the main member, the edges of said subsidiary member being so formed that by turning it on its pivot in one direction the hooks will be free to move inward and engage the article to be handled and by turning it in the opposite direction the hooks will be moved outward and be disconnected from said article.

1,809,623. APPARATUS FOR CASTING COPPER INGOTS AND OTHER ARTICLES. DANIEL R. FRANCIS, Waterbury, Conn., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Nov. 30, 1929. Serial No. 410,667. 4 Claims. (Cl. 22—77.)

1. The combination with a casting wheel for casting metallic ingots, bars, or the like, and having a plurality

of casting molds arranged at spaced intervals about said wheel and adapted to be successively brought to a charging position, of means for driving said wheel continuously at varying speeds without the production of shocks or jerks during an operative period consisting of successive



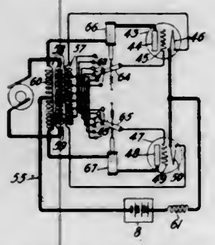
mold charging intervals of relatively slow wheel travelling speeds and mold shifting intervals of relatively higher wheel travelling speeds, said means comprising a hydraulic pump and a hydraulic motor, the latter having a driving shaft, and gearing connecting the driving shaft of said motor with said casting wheel.

1,809,624. RESONATOR. ERICH GIEBE and ADOLF SCHEIBE, Charlottenburg, near Berlin, Germany, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 21, 1927. Serial No. 185,429, and in Germany Apr. 24, 1926. 6 Claims. (Cl. 171—327.)



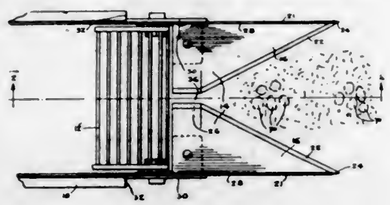
1. A piezo-electric resonator having an annular shape.

1,809,625. ELECTRIC CONTROL CIRCUITS. ELMER V. GRIGGS, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 3, 1921. Serial No. 504,933. 11 Claims. (Cl. 175—363.)



1. In a rectifying system, a pair of rectifiers, each having an anode, a cathode, and a grid, a source of alternating current oppositely related to said anodes, a transformer for connecting said source to the grids, and means for varying the effective ratio of secondary turns to primary turns of said transformer to apply similar potentials to each of said grids and to mechanically vary the adjustment of said grid potentials in response to variations in rectified current.

1,809,626. SCOOP FOR POTATO DIGGERS. GUST HEGLUND, Constance, Minn. Filed Dec. 23, 1929. Serial No. 416,031. 3 Claims. (Cl. 55—9.)

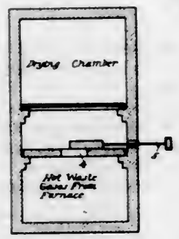


1. A scoop for potato diggers comprising two complementary members, each of said members having a triangular side wall and a triangular bottom wall, the bottom walls sloping downwardly toward the rear and the side walls forming points with the bottom walls at the front of the scoop, the edges of the side walls inclining upwardly and being sharp and the edges of the bottom walls being rearwardly convergent to produce a gap diminishing in width and being sharp.

1,809,627. PRODUCTION OF VACUUMS. ALPHONS O. JAEGER, Mount Lebanon, and HERBERT J. WEST, Crafton, Pa., assignors to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 28, 1931. Serial No. 526,136. 4 Claims. (Cl. 230—101.)

1. In a method of producing high-vacua by means of condensation pumps the improvement which comprises using a pumping substance for providing the propellent vapor, one containing at least one hexahydrophthalide.

1,809,628. MEANS FOR UTILIZING THE WASTE GASES FROM FURNACES. BOYD MILO JOHNSON, Metuchen, N. J., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Aug. 13, 1928. Serial No. 299,428. 16 Claims. (Cl. 25—142.)

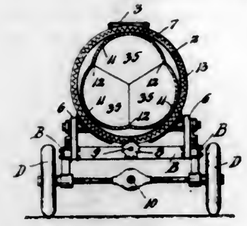


1. The combination with a kiln, of a drier, means for conducting waste combustion gases from the kiln to the drier, a heat exchanger, and means for deflecting some of the waste gases from the kiln to the heat exchanger, said means being variable whereby the amount of combustion gases necessary for the operation of the drier may be supplied the drier and the heat from the excess conserved without overheating the drier.

1,809,629. CONCRETE TRANSPORTING TRUCK. PHILIP A. KOEHRING, Milwaukee, Wis., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Filed Apr. 1, 1929. Serial No. 351,773. 2 Claims. (Cl. 83—73.)

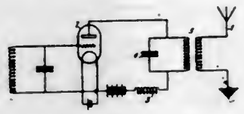
1. In a concrete mixing machine of the class described, in combination, a concrete mixing drum having an internal

shell having an interrupted periphery consisting of longitudinally extending sectors of equal convex contour, each sector being generated on a radius of equal length, an outer cylindrical shell member having a discharge end,



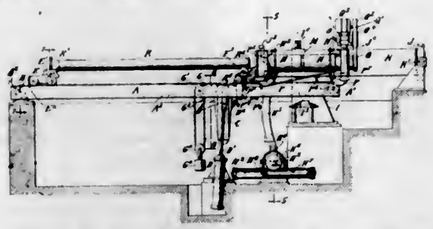
a closed end remote therefrom, an inlet passing through the outer shell and communicating with the internal shell, a closure for the discharge and a closure for the inlet opening.

1,809,630. VALVE TRANSMITTER ARRANGEMENT. WILHELM KUMMERER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose, Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Dec. 15, 1928, Serial No. 326,277, and in Germany Dec. 29, 1927. 3 Claims. (Cl. 250—17.)



1. In a transmitting device, an oscillation circuit comprising an inductive branch and a capacitive branch in parallel, an antenna circuit coupled to one of said branches and a reactance in series with said oscillation circuit having a value equal and opposite to the reactance of the other branch.

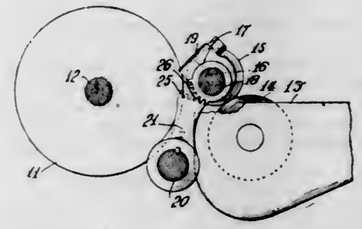
1,809,631. CENTRIFUGAL CASTING MACHINE. JAMES B. LADD, Ardmore, Pa., assignor to United States Cast Iron Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Nov. 5, 1921. Serial No. 512,980. 15 Claims. (Cl. 22—65.)



1. In a centrifugal casting machine a rotatable sleeve adapted to receive a flask and means for rotating said sleeve in combination with self centering chucks secured to the sleeve and having gripping jaws movable in radial planes, said jaws being adapted to center and grip a flask.

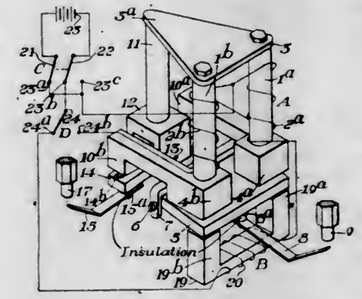
1,809,632. INKING MECHANISM FOR PRINTING PRESSES. HUBERT LANG, La Grange, Ill., assignor to The Goss Printing Press Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 17, 1929. Serial No. 386,563. 5 Claims. (Cl. 101—363.)

1. In an inking mechanism, the combination of an ink fountain, a fountain roller revolubly mounted therein, an ink drum in parallel relation to said fountain roller at a short distance therefrom, a transfer roller, means for supporting the transfer roller comprising movable supporting parts between which said transfer roller is revolubly mounted and rigidly stationary parts by which said movable supporting parts are revolubly supported in close proximity to said transfer roller on an axis in slightly eccentric position with respect to the axis of the roller, means for adjusting one of said movable supporting



parts circumferentially with respect to the other for changing the alignment of said transfer roller, and means for giving said movable supporting parts rotary movements in unison in alternately opposite directions for moving said transfer roller into contact alternately with said ink drum and said fountain roller.

1,809,633. ELECTRICAL RELAY. BRANKO LAZICH, Pittsburgh, Pa., asignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 9, 1929. Serial No. 398,337. 11 Claims. (Cl. 175—335.)

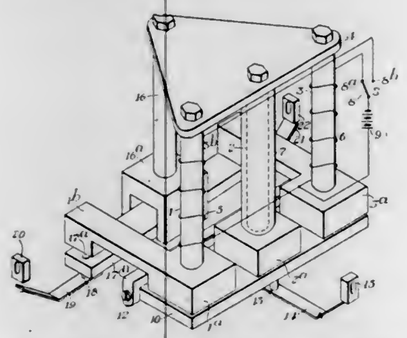


1. In combination, a main electromagnet and an auxiliary electromagnet, means for at times supplying current of one polarity or the other to both said electro magnets, means for at other times supplying current of one polarity or the other to said main electromagnet only, a first armature controlled by said main electromagnet in accordance with the polarity of the current supplied thereto, and a second armature normally occupying one position and arranged to be operated to another position when said main electromagnet is energized provided said auxiliary electromagnetic is de-energized.

10. In combination, a main electromagnet comprising two parallel cores connected together at one end by a back strap and each provided at the other end with pole pieces having integral extensions, a first winding on one core of said main electromagnet and a second winding on the other core of said main electromagnet, an auxiliary electromagnet comprising a magnetizable core provided with a third winding and having two poles, means for at times supplying said first winding with current of one polarity or the other and for at other times supplying said second and third windings in series with current of one polarity or the other, a main armature pivoted to swing between the pole pieces of said main electromagnet and the

poles of said auxiliary electromagnet and controlled by both said electromagnets in such manner that said main armature moves toward the pole pieces of said main electromagnet when said first winding is supplied with current but that said main armature is held away from said pole pieces by the poles of said auxiliary electromagnet when said second and third windings are supplied with current, a permanently magnetized core having one end engaging said back strap and having the free end located between the extensions of the pole pieces of said main electromagnet, and a polarized armature pivotally supported by the free end of said permanently magnetized core and arranged to swing toward one or the other of the extensions of the pole pieces of said main electromagnet depending upon the relative polarity of the current supplied to said first or said second winding.

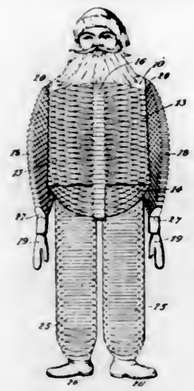
1,809,634. ELECTRICAL RELAY. BRANKO LAZICH, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 12, 1929. Serial No. 399,301. 11 Claims. (Cl. 175—335.)



8. A relay comprising a first and second parallel cores connected at their upper ends by a back strap and each provided at their lower ends with an enlarged pole piece, a third magnetizable core located between said first and second cores and connected at its upper end with said back strap and provided at its lower end with a third enlarged pole piece, a first winding on said first core and a second winding on said second core, means for energizing said first or said second winding in such manner that the flux set up by either of said windings threads said third core in the same direction, a neutral armature pivoted to swing toward said pole pieces when either of said windings is energized, a first and second integral extensions on said first and second cores respectively, a constantly magnetized core having one end engaging said back strap and having the other end located between said first and second extensions, a polarized armature pivoted intermediate its ends on such other end of said constantly magnetized core and arranged to swing toward said first or said second extension according as said first or said second winding is energized, contacts controlled by said armatures, respectively, and a sleeve of conducting material on said third core for delaying the decay of flux in said third core to prevent said neutral armature from opening if one of said windings is energized immediately after the other winding is deenergized.

1,809,635. MANIKIN. HENRY E. LUHRS, Shippensburg, Pa. Filed Sept. 13, 1930. Serial No. 481,630. 12 Claims. (Cl. 46—40.)

1. A figure comprising a piece of sheet material comprising a shoulder piece, a piece of sheet material comprising a hip piece, the hip piece being spaced from the shoulder piece, a supporting strip of flexible material attached to the shoulder piece and to the hip piece, and expansible cellular tissue forming the body of the figure,

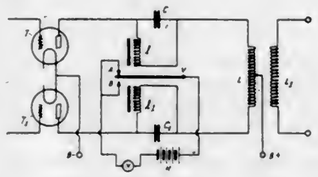


one end of the body tissue being attached to the front of the shoulder piece and the other end of the body tissue being attached to the front of the hip piece.

1,809,636. DAM. JAMES S. MILLER, Pittsburgh, Pa., assignor to Dravo Contracting Company, a Corporation of Pennsylvania. Filed July 3, 1929. Serial No. 375,662. 4 Claims. (Cl. 61—30.)

1. A monolithic dam structure including a block of concrete having embedded in its base a horizontally extending metallic reinforcement resting upon two parallel lines of sheet-piling, upon which piling the said reinforcement immediately rests and upon the upper rim of which piling the concrete is shaped and hardened.

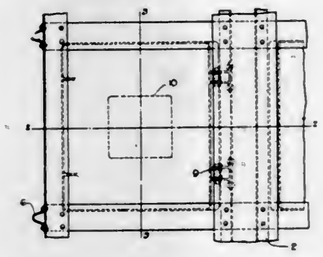
1,809,637. INDICATING DEVICE. ALFRED B. MOULTON, Riverhead, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 3, 1927. Serial No. 237,390. 5 Claims. (Cl. 250—27.)



1. In radio apparatus comprising a push pull stage having a pair of vacuum tubes, an output circuit connected

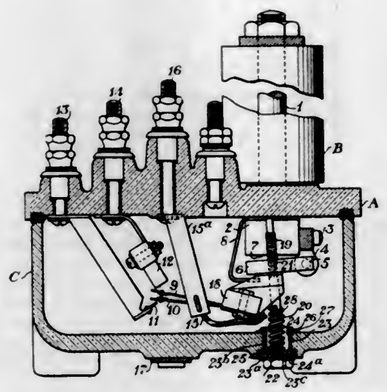
to the output elements of each of said tubes including a capacity shunted winding, an output winding in series therewith and a source of high potential common to both of said circuits, an armature associated with said capacity shunted windings, contacts associated with said armature, a circuit including a source of power connecting said contacts and armature, and a signalling device actuated by said last named circuit when closed.

1,809,638. CAST METAL HOPPER DOOR FOR RAILWAY CARS. WALTER P. MURPHY, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 2, 1929. Serial No. 396,666. 8 Claims. (Cl. 105—280.)



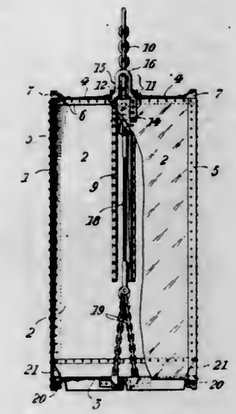
1. A cast metal hopper door for a railway car having a body part with a flat upper surface, said body part comprising a relatively thick middle portion extending between the ends of the door and a relatively thin portion adjacent each side of the door.

1,809,639. HOLDING MEANS FOR INSTRUMENTS. NOBLE C. SHAW, Swissvale, and THOMAS J. O'MEARA, Pittsburgh, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1931. Serial No. 510,578. 8 Claims. (Cl. 175—336.)



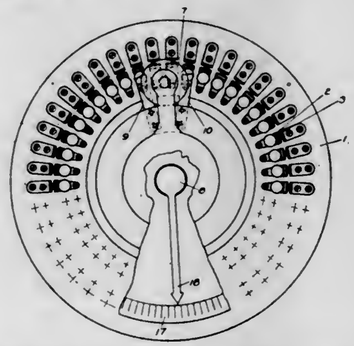
1. In combination, an instrument having a fixed part and a movable member, a second member attached to said movable member in such manner that said second member will engage said fixed part when said movable member occupies an intermediate position, and resilient means cooperating with said second member for holding said second member in the position in which said second member engages said fixed part.

1,809,640. DROP-BOTTOM CONTAINER. LEWIS M. SHOWERS, Jr., Juniata, Pa. Filed June 24, 1930. Serial No. 463,414. 7 Claims. (Cl. 294—71.)



1. In a drop-bottom shipping container, a container body, a bottom door, cables for holding said door closed, and guides for said cables disposed at opposite sides of the container, said guides having loops formed integrally therewith to afford points of attachment for the suspension of the container body.

1,809,641. COMPENSATOR SWITCH. ARNOLD M. SKUDRE, West Newton, Mass., assignor to Submarine Signal Company, Boston, Mass., a Corporation of Maine. Filed Aug. 31, 1929. Serial No. 389,726. 5 Claims. (Cl. 200—7.)

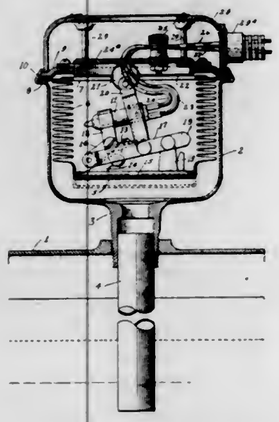


1. In an electric compensator for connecting retardation elements between receivers and indicators, a group of switch contacts, means for opening said switch contacts successively to vary the amount of retardation connected between the indicators and the receivers, a scale and pointer associated with said means to locate the position of said means, and resilient means normally maintaining said switch contacts closed and means adjusting the tension on said resilient means whereby the point of opening of said contacts may be adjusted.

1,809,642. PRESSURE ACTUATED ELECTRIC SWITCH. FRANK EARL SPERRY, Batavia, Ill., assignor to Mechanical Devices Company, Bloomington, Ill., a Corporation of Illinois. Filed Sept. 18, 1929. Serial No. 393,400. 2 Claims. (Cl. 200—83.)

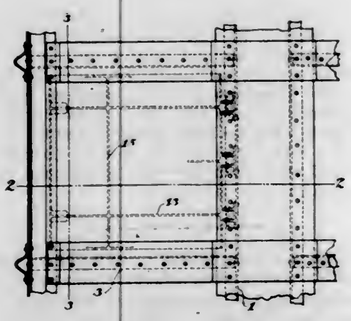
1. In a device of the character described, the combination of a closed casing with an expansible and contracta-

ble bellows member closed at the lower end and secured to the casing closure at the other end, said casing having a tubular projection adapted to be passed through and be secured to the wall of a tank and terminating adjacent the bottom of said tank affording a communication between the space in the casing surrounding the bellows and the air confined in the tubular member above the level of the liquid therein, whereby variations of said liquid level impart a vertical movement to the closed bottom of the bellows, a mercury tube switch adapted to be connected in the motor circuit of a pump for supplying liquid to said tank, a support for said switch having a depending ear pivoted to a



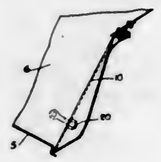
support carried upon the interior of the bellows closure, a short link pivoted at one end to said support above its pivoted point and at the other end to a lever pivoted at its opposite end to a support also carried upon the interior of the bellows closure, said lever intermediate its length pivotally connected to one end of a link pivoted at its opposite end to the casing closure all so proportioned that extreme contraction or expansion of the bellows through the pivoted links and lever imparts a movement to the mercury tube switch about its supporting pivot to break the circuit therethrough and at intermediate positions of the bellows to close the circuit through said switch.

1,809,643. RAILWAY CAR DROP DOOR. ARTHUR E. SMALL, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 25, 1929. Serial No. 358,008. 7 Claims. (Cl. 105—280.)



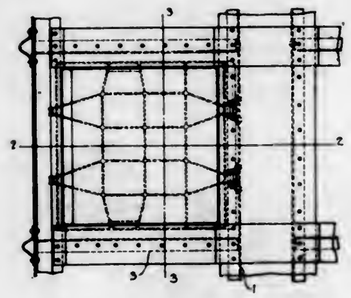
1. A door for a railway dump car comprising hinge elements adjacent one end thereof, support elements adjacent the other end thereof, bumpers adjacent the opposite sides thereof, a rib extending between each of the hinge elements and the opposite support elements, and another rib substantially normal to the first mentioned ribs extending between said bumpers.

1,809,644. HOPPER DOOR FOR RAILWAY HOPPER CARS. ARTHUR E. SMALL, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 10, 1929. Serial No. 398,625. 9 Claims. (Cl. 105—280.)



1. In a railway car, the combination of a pair of hoppers, each provided with a discharge opening, and a one piece casting comprising a pair of doors for said openings and an integral spreader beam connecting the doors.

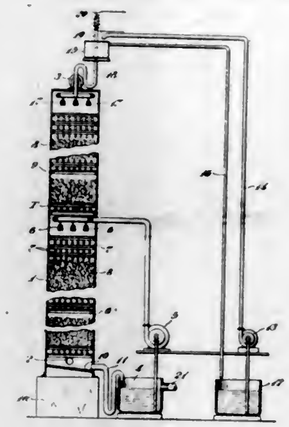
1,809,645. RAILWAY CAR DROP DOOR. ARTHUR E. SMALL, Chicago, Ill., assignor to Union Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Apr. 25, 1929, Serial No. 358,008. Divided and this application filed June 7, 1930. Serial No. 459,688. 5 Claims. (Cl. 105—280.)



1. A door for a railway dump car comprising hinge elements adjacent one end thereof, support elements adjacent the other end thereof, bumpers adjacent the opposite sides thereof, a pair of spaced apart ribs extending between each of the hinge elements and the opposite support elements which converge toward the hinge elements and support elementa, respectively, and another rib substantially normal to the first mentioned ribs extending between said bumpers.

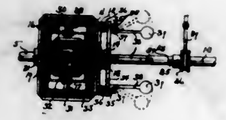
1,809,646. APPARATUS FOR TREATING GASES. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Pennsylvania. Original application filed Jan. 29, 1926, Serial No. 84,640. Divided and this application filed Oct. 1, 1927. Serial No. 223,305. 1 Claim. (Cl. 261—97.)

Apparatus for treating a gas with a liquid which comprises a tower containing alternately disposed strata of distributive units and permeable contact masses, the distributive units being comprised of superimposed layers of bars of quadrilateral cross section having the bars in one



layer contacting with the bars in another layer at their angular edges and at an angle with the bars in other layers of the same unit.

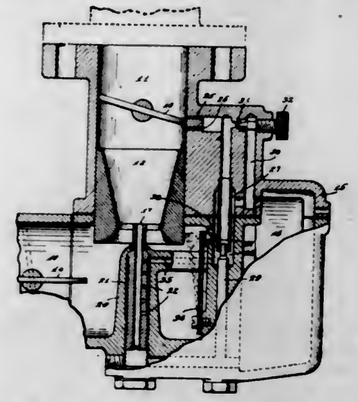
1,809,647. TRANSMISSION. THEODORE F. THOMPSON, Fort Dodge, Iowa. Filed Feb. 10, 1930. Serial No. 427,349. 7 Claims. (Cl. 74—34.)



1. In a device of the class described, a drive shaft designed to be in operative communication with a prime mover, a second drive shaft, a toothed gear loosely mounted on said first mentioned shaft, a second toothed gear rigidly secured to said second shaft, a third toothed gear on said first mentioned shaft and smaller in size than said before mentioned toothed gears, a means for rigidly securing said last mentioned toothed gear to said first mentioned shaft, a fourth toothed gear engaging the first and second toothed gears, a fifth toothed gear operatively connected to the fourth toothed gear and engaging the third mentioned toothed gear and of approximately the same size as the said third toothed gear, a plate rigidly secured to the first mentioned shaft and adjacent the first mentioned toothed gear, and a means for operatively connecting said plate with said first mentioned toothed gear after said first mentioned shaft has reached a predetermined speed rotation thereby preventing independent rotation between said plate and said first mentioned toothed gear.

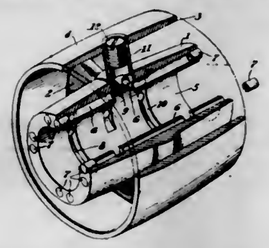
1,809,648. CARBURETOR. HAROLD H. TIMIAN, Indianapolis, Ind., assignor to The Wheeler-Schebler Carburetor Co., Indianapolis, Ind., a Corporation of Indiana. Filed Mar. 17, 1928. Serial No. 262,518. 3 Claims. (Cl. 261—41.)

1. In a carburetor, an air and mixture conduit, a main fuel nozzle arranged to discharge thereinto, an idling jet also arranged to discharge into said conduit, said main nozzle and idling jet being provided with air bleed openings



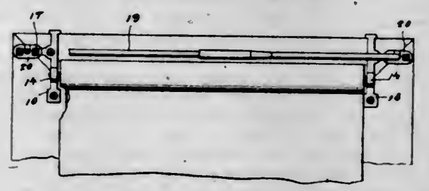
having fixed sizes to provide for a maximum amount of air-bleeding, and thermostatic means for varying the flow of air through said fixed air bleed openings.

1,809,649. LUBRICATING MEANS FOR BEARING SURFACES. EMIL TRAUB, Newark, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 28, 1928. Serial No. 328,943. 7 Claims. (Cl. 308—109.)



1. A rotatable member having a hub defining a bearing surface, said hub being provided with a plurality of lubricant-chambers spaced circumferentially of and extending lengthwise of the hub, said hub having in its bearing surface a plurality of segmental-grooves each intersecting less than the whole number of said chambers, and means for supplying lubricant to one of said chambers.

1,809,650. WINDOW SHADE BRACKET. DONATO VACCARO, Cleveland, Ohio. Filed July 30, 1930. Serial No. 471,765. 1 Claim. (Cl. 156—24.)



A curtain rod support provided with an ear disposed for abutting engagement with the attaching end of the curtain rod, a locking plate removably positioned upon the ear and attaching end of the rod and having a cut-out portion to accommodate an appropriate portion of the rod, and fastening means adapted to extend through the ear, end of the rod and the locking plate.

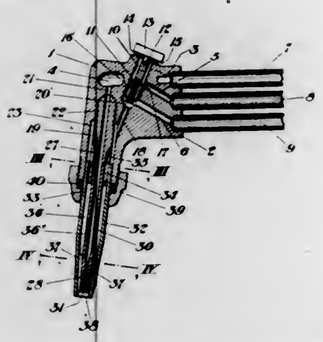
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1,809,651. COMBINED SWITCH AND SEAT OPERATING MEANS. OTTO H. VAN AMBURG and GEORGE W. LIEBERUM, Bridgeport, Conn., assignors to General Electric Company, a Corporation of New York. Filed June 27, 1927. Serial No. 201,678. 3 Claims. (Cl. 200—85.)



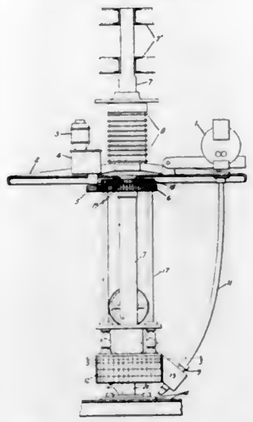
1. The combination with a chair having a frame and a pivoted seat, of a combined switch and seat operating means comprising a socket pivoted to the frame adjacent to the seat pivot, a casing fixed to the under side of the seat, a plunger in the casing, a plunger arm connected to the plunger at one end and having its other end located in said socket and adapted to slide therein, said casing, plunger arm and socket being in alignment and making a small angle with the bottom of the seat, a circuit closer in said casing controlled by movement of the plunger, and a spring between the end of the casing and the plunger and acting in a direction to raise the seat.

1,809,652. BLOWPIPE. JAMES E. VINCENT, Johnstown, Pa. Filed Mar. 1, 1929. Serial No. 343,647. 1 Claim. (Cl. 158—27.4.)



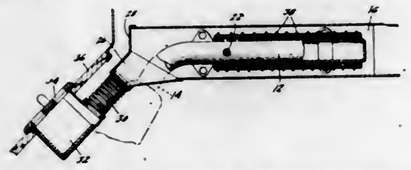
A blow pipe of the character described comprising a head, tip carried by said head and comprising an inner tip member having a central passageway for cutting oxygen, an outer tip member surrounding said inner tip member, said inner tip member having a materially reduced diameter for more than half of its length within said outer tip member so as to form a mixing chamber of material size, a plurality of V-shaped grooves in the portion of said inner tip member above said reduced diameter portion, the combined cross-sectional area of said V-shaped grooves being at least half of the cross-sectional area of the space formed by said reduced diameter portion and said grooves extending from above said outer tip member into said space formed by said reduced diameter portion, and the lower end of said inner tip member below said reduced diameter portion being also provided with a plurality of V-shaped grooves for the passage of the mixture of gases from said mixing chamber, and means for supplying cutting oxygen to the central passageway in said inner tip and a mixture of preheating oxygen and a combustible gas to the V-shaped grooves in said inner tip.

1,809,653. AUTOMATIC ARC WELDING MACHINE. PAUL WAGNER, Charlottenburg, and SALLY SANDELOWSKY, Berlin-Grunewald, Germany, assignors to General Electric Company, a Corporation of New York. Filed Dec. 7, 1928, Serial No. 324,420, and in Germany Jan. 14, 1928. 9 Claims. (Cl. 219—8.)



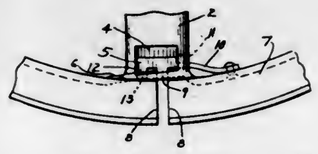
1. Welding apparatus comprising a flexible band, welding means mounted on said band, and means for moving said band above and about the surface of the work in a path of predetermined configuration.

1,809,654. VEHICLE HEATER. ROBERT R. WAGNER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 17, 1928. Serial No. 320,103. 2 Claims. (Cl. 257—241.)



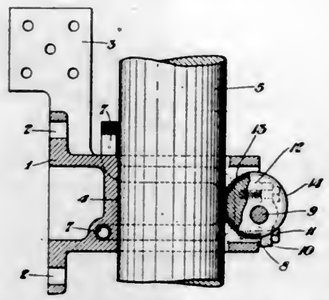
1. A vehicle heater comprising an exhaust manifold, a casing surrounding said manifold and forming a passageway around said manifold through which air may be conducted into the interior of the vehicle, and a mass of metal wool located in said passageway in contact with said exhaust manifold for the purpose of increasing the area of the heat radiating surface in said passageway.

1,809,655. METAL WHEEL. GEORGE WALTHER, near Dayton, Ohio, assignor to The Dayton Steel Foundry Company, a Corporation of Ohio. Filed Jan. 10, 1927. Serial No. 160,204. 4 Claims. (Cl. 301—12.)



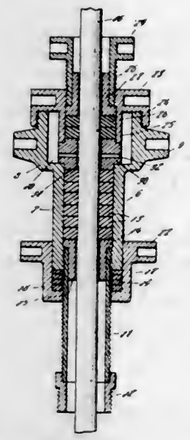
4. A metal wheel comprising a spider made up of a hub and spokes, an axially split rim adapted to be mounted upon the spoke ends, and a member radially movable from a spoke end, to a position between the ends of the rim to hold it expanded until it is mounted in its home position upon the spider.

1,809,656. ELECTRODE HOLDER. WILLIAM H. WALTER, Cynwyd, Pa. Filed Apr. 14, 1930. Serial No. 444,230. 1 Claim. (Cl. 266—1.5.)



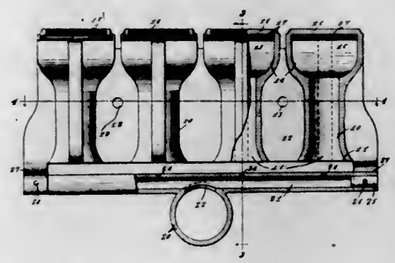
An electrode holder for electric furnaces, comprising in combination a one-piece supporting bracket provided with an opening conforming generally to the size and shape of the electrode to be supported, said bracket being slotted at its forward end to receive an eccentric locking member, a shaft journaled in bearings on the forward end of said bracket, said eccentric being mounted on said shaft and rotatable therewith, said eccentric being positioned with its longest radius at its top and having a serrated concave peripheral surface complementary to the outer periphery of the electrode to provide a maximum contact surface with the electrode, and said shaft having its ends projecting beyond the sides of said bracket and squared to receive a suitable tool for rotating said eccentric to grip or release the electrode.

1,809,657. STUFFING BOX. ROY C. WEANT, Ponca City, Okla. Filed Feb. 25, 1929. Serial No. 342,583. 1 Claim. (Cl. 286—17.)



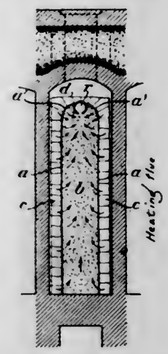
A stuffing box of the character described comprising a cylinder having an integral enlarged head on one end constituting an oil reservoir, a spacing ring seated on the upper end of the cylinder and disposed within the head in spaced relation therefrom having a central bore and oil conducting passages communicating with the bore and the oil reservoir, a closure threaded on the head and having an integral annulus depending therefrom and engaged with the spacing ring for maintaining same in position on the cylinder, packing rings mounted in the cylinder in engagement with the lower side of the spacing ring, means for compressing the packing rings against the spacing ring comprising a sleeve threaded for longitudinal adjustment in the lower end portion of the cylinder, a follower loosely mounted on the inner end of the sleeve for engagement with the packing rings, means threaded on the sleeve and slidable over the cylinder for securing said sleeve in adjusted position, wiping rings disposed in the annulus and resting on the upper side of the spacing ring, and means for compressing the wiping rings against the spacing ring comprising a sleeve threaded for adjustment in the closure and a follower mounted in the inner end of said sleeve for sliding movement through the annulus for engagement with the wiping rings.

1,809,658. GAS BURNER. CARL A. WENDT, Tulsa, Okla. Filed Feb. 6, 1929. Serial No. 337,883. 2 Claims. (Cl. 158—104.)



1. A gas burning unit, comprising a plurality of individual burners and intermediate webs connecting the burners as a single structure, said burners including independent air supply means, and said unit including a fuel feeding manifold having ports substantially aligned with the vertical axes of the burners, closures for the manifold, and a device securing each enclosure to the manifold and to the web structure of the unit, and passing through each of these members.

1,809,659. COKE OVEN AND METHOD OF OPERATING SAME. CARL WESSEL, Borbeck, near Essen-on-the-Ruhr, Germany, assignor to the Firm Carl Still, Recklinghausen, Germany. Filed Oct. 26, 1926, Serial No. 144,307, and in Germany Nov. 6, 1925. 5 Claims. (Cl. 202—5.)

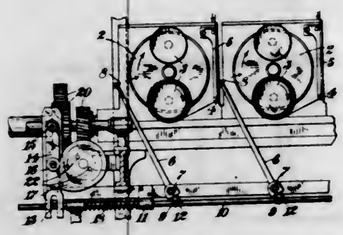


1. In a horizontal coke oven to produce coke as a final product, a chamber receiving a charge of fuel so as to leave a free gas space adjacent the top and having heated side walls, and suction means disposed in the upper part only of the chamber for withdrawing the gaseous products of distillation, said means having an entrance opening situated below the free upper surface of the charge.

5. In a horizontal coke oven to produce coke as a final product having means for drawing off gases, the process of withdrawing such gases from said chamber which consists in charging the chamber with a solid carbonizable material, heating the side walls of said chamber to gradu-

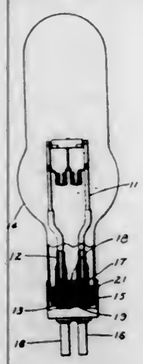
ally coke the solid products of the charge and therefore form seams, said heating causing the gases to ascend along said seams, and then withdrawing said gases from the chamber at a point immediately below the upper surface of said carbonizable material.

1,809,660. WINDING APPARATUS FOR THREAD OR THE LIKE. SAMUEL WILD and ERNEST HUGENTOBLER, Basel, Switzerland, assignors to Syntheta A. G., Basel, Switzerland, a Swiss Company. Filed Nov. 12, 1928, Serial No. 318,946, and in Great Britain Aug. 18, 1928. 1 Claim. (Cl. 242—19.)



For a winding apparatus of the character described having an intermittently movable carrier for a plurality of reels on which thread is to be wound in succession, a thread severing mechanism comprising in combination a fixedly pivoted lever arm, a knife secured at one end thereof, which lever arm is arranged so that the arc of movement of the knife extends between an empty and full reel, a cam for moving said lever arm, gearing for connecting the cam to the reel carrier, which gearing is timed so as to move the knife to cut the thread when a full reel is moved out of the winding position.

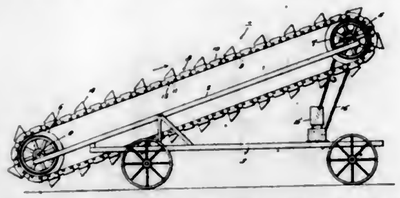
1,809,661. ELECTRIC LAMP. DANIEL K. WRIGHT, Cleveland Heights, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Feb. 18, 1929. Serial No. 341,004. 4 Claims. (Cl. 176—16.)



1. In an electric lamp or similar device comprising a translation element which is heated to high temperature during operation and which is enclosed in a hermetically sealed transparent container, a deposit removing means consisting of loose granules of a highly refractory material of substantially the same composition as the said translation element.

1,809,662. CONVEYER. JOHN ALBERT ALGER, Mantua, Ohio. Filed Jan. 29, 1929. Serial No. 335,812. 5 Claims. (Cl. 198—140.)

1. In a conveyer belt of the class described, a friction pulley, a series of spaced channel shaped units adapted to fit over the tread of the pulley so as to be propelled by the frictional contact of the pulley with the side walls of the units, a series of channel shaped plates arranged over the



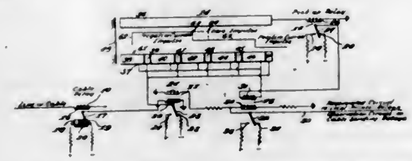
adjacent edge portions of the respective channel shaped units, means for securing the channel shaped units to the adjacent plates, and buckets arranged on the crown portions of the channel shaped plates.

1,809,663. TROLLING SPOON. EDWARD G. ALLEN, Everett, Wash. Filed Sept. 17, 1930. Serial No. 482,626. 3 Claims. (Cl. 43—45.)



1. A trolling spoon comprising a body of elongated form and stamped from sheet metal, the front end of the body being bent downwardly and the rear end upwardly, said rear end being of concavo-convex shape in cross section, a hook connected with the rear end, a swivel connected with the front end, a line connected with the swivel, an opening in the center of the body and a member extending through the center of the opening and connected with the body and arranged at right angles to the body.

1,809,664. CORRECTING DISTORTION AND INTERPOLATING IMPULSES IN CABLE TELEGRAPHY. HERBERT ANGEL, Brooklyn, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Oct. 19, 1929. Serial No. 400,868. 13 Claims. (Cl. 178—63.)



1. In a signaling system, an incoming line over which negative, zero and positive current conditions are received, a receiver associated with said line for translating the zero conditions into alternate negative and positive signals, and means including circuit connections so arranged that the receiver will invariably interpolate said negative and positive signals regardless of the duration of an impulse interval caused by any displacement from normal in the received signal.

1,809,665. MAGAZINE PENCIL. MONICO S. ANGELES, San Leonardo, Mueva Ecya, P. I. Filed Dec. 27, 1929. Serial No. 416,922. 3 Claims. (Cl. 120—14.)



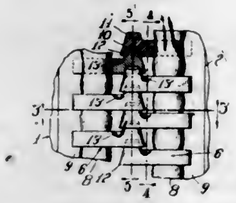
1. In a pencil, a barrel including an interiorly threaded rotatable section and a relatively stationary section, means to slidingly connect said sections, a plurality of longitudinally disposed individual lead carriers, a guide for each carrier, a thread engaging element rigid with each carrier and normally spaced from the threaded section of the barrel, and means engageable with the thread engaging elements to hold the latter in inactive position, or selectively move said elements to thread engaging position, whereby rotation of the rotatable section of the barrel will project a lead carrier outward.

1,809,666. SUPPLY CONDUIT FOR STEAM AND GAS TURBINES. GUSTAV BAUER, Hamburg, and CARL SCHMIESKE, Bremen, Germany. Filed Nov. 6, 1930, Serial No. 493,839, and in Italy Oct. 30, 1929. 3 Claims. (Cl. 253—69.)



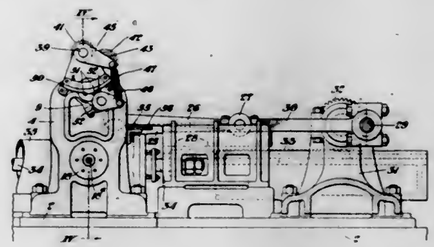
1. A turbine including a main casing and having an opening leading into the interior of said casing, a motive fluid supply connection on said casing and registering with said opening and larger than the latter, a removable tubular member within said connection and having a passage aligned with said opening, and having the peripheral wall thereof spaced from the wall of said connection, said tubular member being provided with a flange at the inlet end, and extending to the wall of said conduit so as to leave an annular space, a nozzle casing disposed entirely in said main casing, and securing members connecting said nozzle casing to said main casing, and having portions thereof extending into said space, whereby said securing members are protected from the stream of motive fluid.

1,809,667. FASTENER WITH LATERAL CLEARANCE. GEORGE W. BLAIR, Mishawaka, Ind., assignor to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed July 26, 1926. Serial No. 124,854. 2 Claims. (Cl. 24—205.)



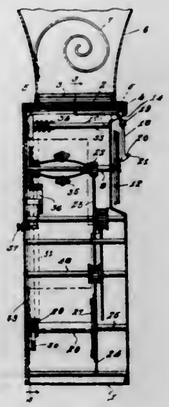
1. A fastening device of the type described, comprising in combination a plurality of fastener elements adapted to interlock in series with adjacent elements oppositely disposed, each of said elements being of elongated plate-like form having mounting means at one end and having at the other end a ridge extending thereacross from edge to edge of the element above one face and a correspondingly located recess in the other face, each of said elements being notched at each side opposite the end wall of the recess of the adjacent element for permitting free lateral flexing of the series of interlocked elements.

1,809,668. FLYING SHEAR. BRUCE N. BLETSO, East Cleveland, and GEORGE H. ROSE, Cleveland Heights, Ohio. Filed Oct. 16, 1929. Serial No. 400,066. 13 Claims. (Cl. 164—43.)



1. In a flying shear, a pair of knives each mounted to move about separate vertically spaced fixed axes, at least one of said knives being pivoted on a second axis movable about said fixed axis as said knife is moved about its fixed axis, means for moving said knives through a partial revolution alternately in opposite directions about said fixed axes, and means for automatically moving said pivoted knife about its pivoted axis in the direction it is being moved about its fixed axis adjacent the end of its movement in either direction.

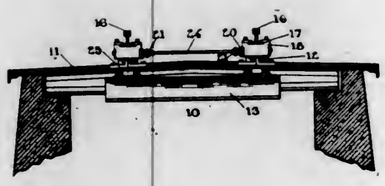
1,809,669. SOUND PRODUCING DEVICE. RUPERTO G. BORROMEO, Samar, P. I. Filed July 20, 1928. Serial No. 294,299. 1 Claim. (Cl. 274—1.)



A sound reproducing device comprising an upright casing having an opening it its top, a horn connected with the top of the casing and surrounding the opening, a diaphragm closing the opening, the upper front part of the casing having an opening therein, a block fitting in said opening and supported for movement about a horizontal axis, an arm connected with the diaphragm and having a part adjacent its front end connected with the block, the

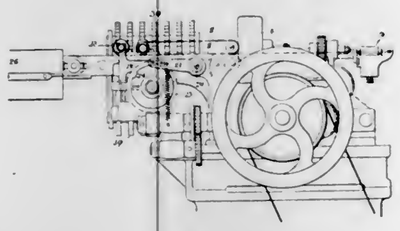
front end of the arm depending downwardly, a stylus arm having its upper end pivoted on said depending end, a horizontal shaft supported for rotary movement in the casing and having its front end extending through the front wall of the casing, a turntable and record disk detachably connected with said front end of the shaft, a needle carried by the lower end of the stylus arm and engaging the record and means for rotating the shaft.

1,809,670. ANTIRAIL SPREADER FOR TRACK SCALES. ALFRED BOUSFIELD, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed June 7, 1928. Serial No. 283,582. 5 Claims. (Cl. 265—71.)



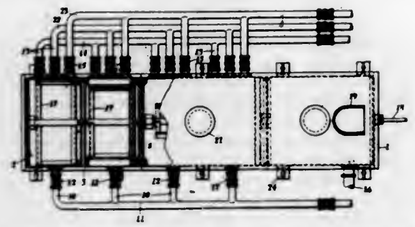
1. In a track scale, the combination with a plurality of rail stands having rails supported thereon, of a means pivotally connected to said rail stands comprising tie bars connecting said rail stands and mounted on pivot pins carried by the said rail stands, whereby said rails are prevented from spreading when a heavy load is run onto said scale.

1,809,671. MACHINE FOR INTERFOLDING SHEETS OF CIGARETTE PAPERS. ROGER BRAUNSTEIN, Paris, France, assignor to Société Anonyme des Anciens Etablissements Braunstein Fréres, Paris, France. Filed June 27, 1927, Serial No. 201,867, and in France July 6, 1926. 2 Claims. (Cl. 270—73.)



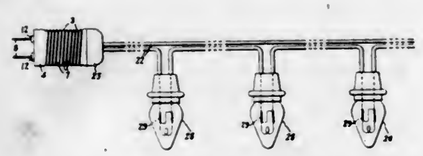
1. A machine for interfolding sheets of cigarette paper in which the paper is supplied in the form of a continuous web, comprising means for folding the web longitudinally before cutting, means for cutting the folded web into sheets of suitable length, toothed interfolding wheels for receiving the cut sheets, upper and lower conveying bands between which the sheets are conveyed from the cutting means to the interfolding wheels, a suction device by which the sheets are withdrawn from between the conveying bands and placed into the toothed spaces of the interfolding wheels, the several elements being so arranged as to positively control the paper through the conveying and manipulative steps, so that at no moment is it left to itself during its passage through the machine.

1,809,672. APPARATUS FOR MIXING LIQUIDS. ERIC WAKEFIELD BUTLER, Bristol, and JOHN CHRISTOPHER MANN, Birmingham, England, assignors to Robinson Brothers Limited, Birmingham, England, a Company of Great Britain, and Wm. Butler & Company (Bristol) Limited, Bristol, England, a Company of Great Britain. Filed July 6, 1929, Serial No. 376,374, and in Great Britain Jan. 19, 1929. 6 Claims. (Cl. 259—68.)



1. In an apparatus for mixing tarry liquids in a continuous process, in combination, a mixing vessel having a semi-cylindrical bottom, a rotatable shaft extending through the vessel and coaxial with the aforesaid semi-cylindrical bottom, stirrers mounted upon said shaft and arranged with their tips passing in proximity to the aforesaid bottom, a plurality of pairs of baffles within said vessel spaced along it and dividing it into a series of compartments each pair constituting a conduit connecting the compartments, and means for admitting liquid to some at least of said compartments, said terminal compartment having an outlet, said conduits and said outlet being operative to maintain a free surface of liquid at a substantially uniform level in said vessel, the stirrers being disposed to break through said liquid level upon rotation of the shaft.

1,809,673. ELECTRICAL PROTECTIVE DEVICE. HENRY E. BUTLER, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 21, 1930. Serial No. 454,499. 5 Claims. (Cl. 171—97.)

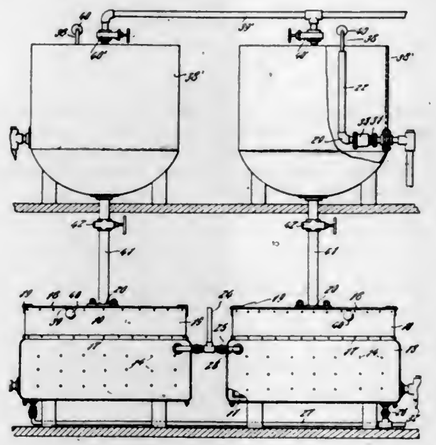


3. The combination with a string of incandescent lamps connected in series, and a cut-out connected across the filament terminals of each lamp, of a combined plug terminal and resistance connected to said string of lamps, said resistance being normally disconnected from the series circuit, and means actuated by the increase in current caused by the burning out of any one of said lamps and the operation of its cut-out for effecting the insertion of said resistance into the series circuit.

1,809,674. SETTLING AND EVAPORATING TANK. CHARLES E. CHANDLER, Philadelphia, Pa., assignor of one-half to Harry Garside, Philadelphia, Pa. Filed May 23, 1927. Serial No. 193,633. 1 Claim. (Cl. 137—21.)

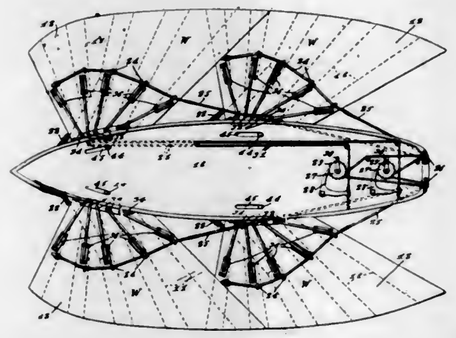
In a settling and evaporating tank, a drain pipe including a pair of horizontal sections arranged in end to end relation at a point adjacent the bottom of the tank, a sleeve threadedly secured to one of said sections and surrounding the adjacent section in spaced relation thereto, a flange formed on the outer end of the sleeve, a flanged cap closing said end of the sleeve, means for connecting said flanges in face to face contact, a flange formed on the inner end of the second mentioned pipe section and

arranged within the sleeve, thrust rings arranged at the opposite sides of the last mentioned flange, packing surrounding the said pipe section and maintained within the sleeve by said cap, said pipe section projecting through



an opening in said cap, a pipe section located within the tank, and mounted on the said last mentioned pipe section to swing in a path parallel to a vertical plane, and means for adjusting the said pipe section in said path within the tank for the purpose specified.

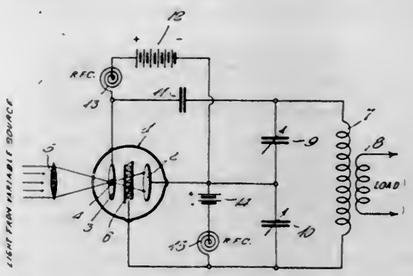
1,809,675. SAFETY DEVICE FOR BOATS. JOHN CHISON, Elm Grove, W. Va. Filed July 6, 1929. Serial No. 376,347. 7 Claims. (Cl. 114—126.)



1. In a boat, a hull, horizontally disposed foldable wings at opposite sides of the hull, means to secure the inner ends of the wings to the hull whereby the wings may fold against or be extended laterally from the hull, means to fold said wings and hold the same in folded position, and means movable longitudinally of the hull and operatively connected with said wings to move the latter to extended position.

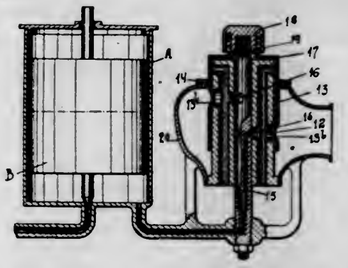
1,809,676. ELECTRICAL GENERATING SYSTEM CHARLES A. CULVER, Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 15, 1929. Serial No. 340,206. 5 Claims. (Cl. 250—36.)

2. A high frequency generating system comprising in combination a photoelectric cell having a light sensitive cathode, an anode and control electrode, input and output circuits connected to said cathode, anode and control



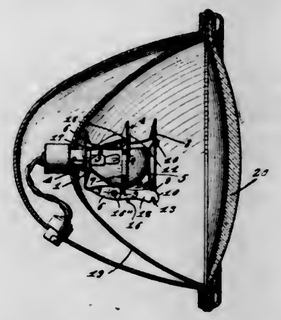
electrode for establishing high frequency oscillations, and a source of light energy incident upon said cathode for modulating said high frequency oscillations.

1,809,677. CARBURETOR. AGUSTIN PARIENTE DE LA CRUZ, Madrid, Spain. Filed May 10, 1926, Serial No. 108,102, and in France Apr. 7, 1926. 2 Claims. (Cl. 261—41.)



1. In a carburetor of the type comprising means forming a plurality of air passages with a nozzle in each of them for introducing the liquid fuel, means forming air passages with inlet ports at each end, and an outlet port in the middle part and a fuel nozzle in the axis of said outlet port.

1,809,678. GLARE ELIMINATING DEVICE. ELVIN C. DE VORSS and WILLIAM F. LUMSDEN, Denver, Colo. Filed May 9, 1930. Serial No. 451,074. 3 Claims. (Cl. 240—48.6.)



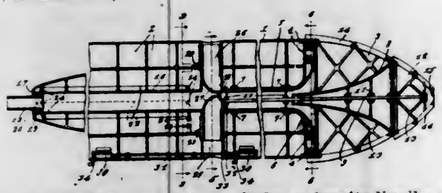
1. A glare eliminator for automobile headlights, comprising a cage in which the bulb of the headlight is enclosed, said cage comprising an inner base element, a central ring element and an outer disc element which is arranged against the outer face of the bulb, fixed arms on the base element and removable and swingable arms on the disc and on the ring member connected with the fixed arms.

1,809,679. CORRUGATED IRON BAND. WILLIAM S. DORSET, Sherman, Tex., assignor to Interstate Cotton Oil Refining Company, Sherman, Tex. Filed July 24, 1928. Serial No. 294,964. 1 Claim. (Cl. 217—66.)



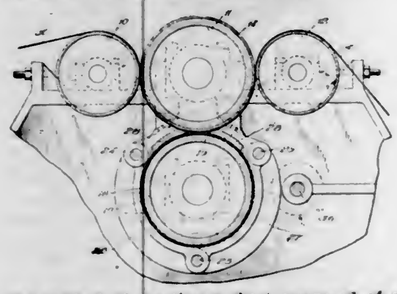
A flexible metal band for fastening boxes and the like having arcuate ends and a continuous bead extending along each edge and around the arcuate ends of said band, and in which the outer edge of the continuous bead is downturned to lie in a plane below the plane of that part of the band bounded by said continuous bead, the middle zone of the band within the bead being flat and yielding.

1,809,680. AIRSHIP. MATHEW M. EGAN, Fort Worth, Tex. Filed Feb. 17, 1930. Serial No. 429,172. 5 Claims. (Cl. 240—10.)



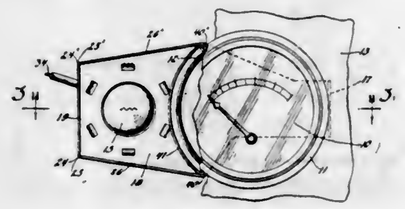
1. A dirigible comprising a body, a longitudinally arranged passage passing through the central part of the body, a pair of propellers at the front end of the body, one propeller being arranged in front of the other, means whereby the blades of the propellers will force air into the front end of the passage so that the air escaping from the rear end of the passage will act to force the ship forwardly, means at the rear end of the passage for directing the air in certain directions to guide the ship, means whereby some of the air from the passage can be directed through the top of the ship to force the ship downwardly and means whereby some of the air from the passage can be forced through the bottom of the ship to raise the ship such means comprising a vertically arranged tube passing through the body and intersecting the passage, a valve member in the lower part of the said tube which, when raised, will direct some of the air from the passage downwardly through the lower part of the ship to raise the same and a second valve member in the top part of the tube which, when lowered, will force some of the air from the passage upwardly through the top of the ship to cause the ship to descend.

1,809,681. METHOD OF AND MACHINE FOR TREATING FLEXIBLE VENEERED SHEETS. ARMIN ELMENDORF, Chicago, Ill., assignor to The Flexwood Company, a Corporation of Delaware. Filed Dec. 11, 1929. Serial No. 413,192. 9 Claims. (Cl. 144—309.)



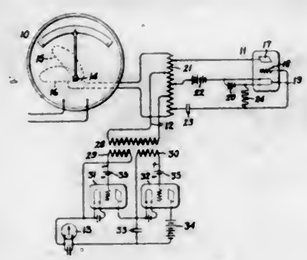
1. The method of treating a sheet composed of a flexible backing and a facing of wood veneer glued thereto, which consists in placing the sheet between a cushion and a roller of small diameter with the veneer on the side toward the cushion and the grain of the wood extending in the general direction of the long axis of the roller, and moving the cushion and roller relatively to each other under pressure so as to cause the roller to roll over the sheet and form therein a bend travelling progressively across the sheet and sufficiently sharp to stress the veneer across the grain beyond the rupture point.

1,809,682. INSTRUMENT CLAMP AND LIGHT HOUSING. JESSE E. ESHBAUGH, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Dec. 12, 1928. Serial No. 325,440. 2 Claims. (Cl. 240—8.16.)



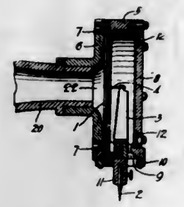
1. In an automotive vehicle: an instrument board provided with a circular aperture; and instrument initially rotatable therein and including a casing which has both a flange engaging said board and also a lateral light-admitting aperture; and a combined compression-flange clamp and light housing,— which is provided with means for retaining said instrument in the aperture in said instrument board and with means for retaining illuminating means within said housing and opposite said aperture.

1,809,683. FREQUENCY RESPONSIVE APPARATUS. ALAN S. FITZ GERALD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 4, 1928. Serial No. 310,397. 5 Claims. (Cl. 177—351.)



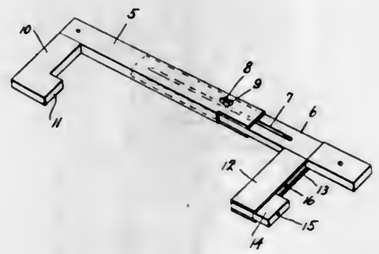
1. Frequency responsive apparatus for producing an indication proportional to the frequency of electric signalling currents comprising a source of direct current, a condenser, means including a thermionic valve for charging said condenser from said source, means including a second thermionic valve for discharging said condenser, the condenser thus having charging and discharging currents, a measuring instrument for measuring one of such condenser currents, and means responsive to signaling currents for alternately controlling said valves to alternately charge and discharge said condenser at a rate proportional to the signaling frequency.

1,809,684. SOUND RECORDING AND REPRODUCING INSTRUMENT. PAUL B. FLANDERS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 28, 1928. Serial No. 273,525. 5 Claims. (Cl. 274—35.)



2. An acoustic system comprising in combination a diaphragm, a sound conduit coupled to one side of said diaphragm, a casing enclosing the other side of said diaphragm, said casing having a plurality of apertures forming parallel walled slots of width between walls less than .005 inch, and the cross sectional area and length of said apertures being proportioned with respect to the area of said conduit whereby the apertures present a load impedance to said diaphragm which is constant and less than 20 per cent of the load due to said conduit at all important speech frequencies.

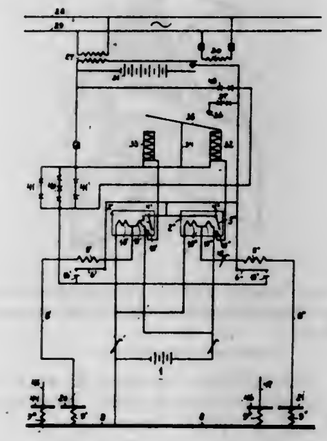
1,809,685. ANCHOR FOR TYPEWRITERS. LOTUS FOVAL, Maplewood, Mo. Filed Apr. 21, 1930. Serial No. 446,056. 3 Claims. (Cl. 248—16.5.)



1. An anchor for typewriters comprising a bar, means for fixedly securing the same to a support, an arm extending laterally from the bar intermediate the ends of the latter, a block slidably engaging said arm and cooperable with an adjacent portion of the bar for clamping therebetween a leg of the typewriter and means for retaining the block in engagement with the arm against casual movement relative thereto.

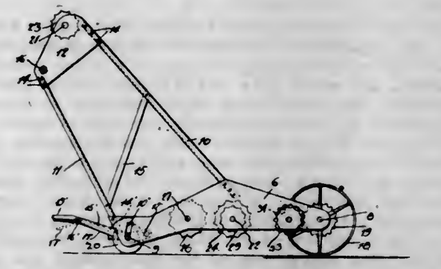
1,809,686. ELECTRICAL REMOTE CONTROL SYSTEM. HENRICUS FROGER, The Hague, Netherlands. Filed Feb. 29, 1928, Serial No. 258,010, and in the Netherlands Mar. 8, 1927. 2 Claims. (Cl. 246—128.)

1. In a remote control electrical system for signaling trains at crossings, the combination of a normally open signal circuit embracing means for causing a light signal, a source of electrical energy and a movable relay part for closing said circuit, and a normally closed signal controlling circuit embracing a source of electrical energy, a resistance arranged between an insulated portion of one rail of the railroad track and the other rail of said track and a signal relay comprising said movable part and adapted to cause said part to close the signal circuit upon short-circuiting of said resistance, with a normally open defect circuit embracing means for causing another light signal for indicating a defect, a source of electrical energy



and a movable part of a defect relay which is so embraced by the signal-controlling circuit that its movable part is caused to close the defect circuit upon the part of the controlling circuit comprising the said resistance becoming currentless.

1,809,687. WEED PICKER. JOE GAVRILOFF, Kent, Ohio. Filed Oct. 3, 1929. Serial No. 397,084. 2 Claims. (Cl. 55—66.)

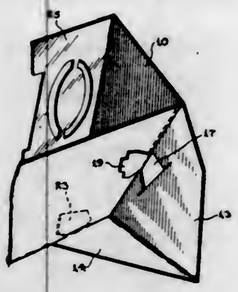


1. A weeder of the character described comprising a wheeled frame, an endless weeder supported thereon and operatively engaged with the frame wheels, said frame having substantially vertical arcuate slots at one end, a wheel axle movable in the slots, a lever associated with the axle for raising and lowering the same for varying the depth of cut of the weeder, and means for holding the axle in adjusted positions.

1,809,688. DISPLAY SIGN. ENOS GORDON GOUDEY, Allston, Mass., DAVID ALBERT STEVENS, Providence, R. I., and LESLIE CHAPMAN CRAFTS, Portland, Me. Filed July 30, 1927, Serial No. 209,474. Renewed Nov. 5, 1930. 3 Claims. (Cl. 40—130.)

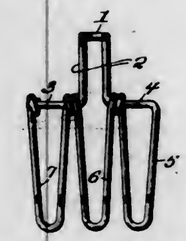
1. A display device formed from a single blank of material comprising front, bottom, end, back and supporting members, the ends consisting of extensions of the front member and having tabs adapted to engage the back member, and the supporting members consisting of extensions of the back member adapted to be folded back exteriorly of the main device and parts thereof adapted to be

bent into the plane of the bottom and having tabs adapted to engage the bottom member, the front member having



display indicia thereon and the rear member serving as a reflector of light to facilitate the display carried by said front member.

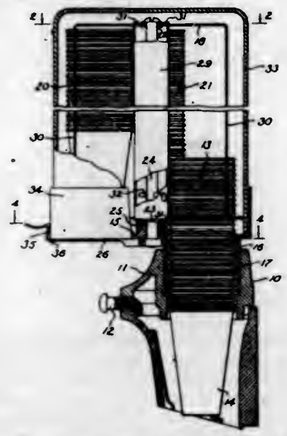
1,809,689. CLOTHESPIN. ANDREW H. GRAVES, Arkansas City, Kans. Filed Feb. 21, 1930. Serial No. 430,331. 1 Claim. (Cl. 24—139.)



A clothes pin shaped from a single strand of wire which is bent to provide a U-shaped portion and parallel arms extending right-angularly from the ends of the U-shaped portion, and which arms and U-shaped portion provide a handle, the arms having their ends bent to provide oppositely directed longitudinally extending strands, the end of one of such strands being bent downwardly and outwardly to provide the outer arm of a jaw, the second arm of the said jaw being similarly bent and coiled around the said longitudinal strand and from thence rounded downwardly and outwardly to provide one arm of a central jaw, the second arm of the central jaw being bent similar to the first named arm of the said central jaw and being coiled around the second longitudinal extension of the handle, the end coil being bent downwardly and outwardly to provide the inner arm of the second end jaw, the outer arm of the said jaw being bent similar to the first mentioned arm thereof and having its end coiled around the said longitudinal strand, all of the jaws being substantially V-shaped in plan and the end jaws having their outer ends extended in opposite angles from that of the intermediate jaw to provide a flared passage between the jaws.

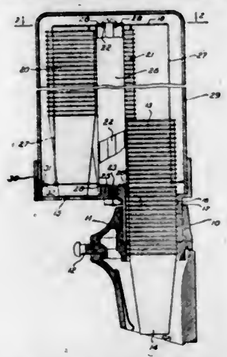
1,809,690. DISPENSING DEVICE FOR STACKED ARTICLES. HAROLD D. GREGORY, Haddonfield, N. J., assignor to Individual Drinking Cup Company, Inc., Easton, Pa., a Corporation of Pennsylvania. Filed Jan. 14, 1929. Serial No. 332,386. 7 Claims. (Cl. 312—44.)

1. A device of the character described comprising a base adapted to support a plurality of columns of stacked articles and provided with an opening through which said columns may pass, means associated with said base for rotation with respect thereto and adapted and arranged to effect movement of said columns into alignment successively with said opening for movement therethrough, said means being provided with a pivot passing loosely through said base, and manually-operable means connected to said pivot and adapted and arranged for cooperation



therewith to effect rotation of said means with respect to said base and movement of said columns into alignment successively with said opening for movement therethrough.

1,809,691. DISPENSING DEVICE FOR STACKED ARTICLES. HAROLD D. GREGORY, Haddonfield, N. J., assignor to Individual Drinking Cup Company, Inc., Easton, Pa., a Corporation of Pennsylvania. Filed Feb. 19, 1929. Serial No. 341,063. 3 Claims. (Cl. 312—44.)

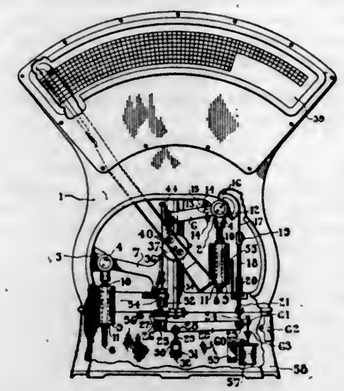


1. A dispensing device including a base having a discharge opening therein, a member rotatably supported by the base and adapted to support a plurality of stacks of articles to be dispensed with one of the stacks normally in alignment with the opening for discharge of articles therethrough and the lowermost articles of the remaining stacks resting upon the base for support thereby and operation thereover, an outwardly extending projection on the rotatable member, and a cover rotatably supported by the base for enclosing the articles and provided with an inwardly directed lug, the outwardly directed projection of the rotatable member engaging the lug on the cover whereby the member may be rotated by the cover to successively bring the stacks of articles into alignment with the discharge opening.

1,809,692. SCALES. HARLAN A. HADLEY, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed June 27, 1927. Serial No. 201,780. 9 Claims. (Cl. 265—37.)

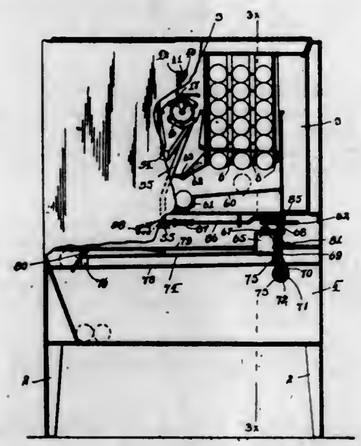
1. In a device of the character described, a frame, opposed pendulum arms carrying pendulums and a drum

mounted in the said frame, an indicator arm attached to said drum, means connecting the said pendulum arms to



said drum, and a balancing weight attached to said indicator arm and adapted to return the indicator arm to normal position after a weighing operation.

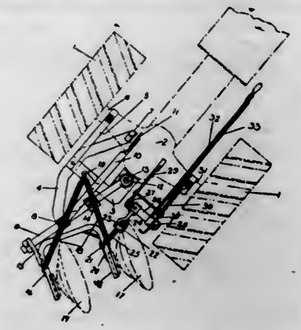
1,809,693. BOTTLE VENDING MACHINE. CHARLES HAHLING, Rochester, N. Y. Filed Nov. 4, 1929. Serial No. 404,672. 4 Claims. (Cl. 194—4.)



1. In a bottle vending and receiving machine the combination of means for ejecting a filled bottle, a plurality of coin controlled means for locking said ejecting mechanism, means for receiving an empty bottle and means controlled by said receiving mechanism to eject part of the coins used for operating said ejecting mechanism.

1,809,694. TRACTOR DRAWN DISK PLOW. FREDERICK GAINFORD HARRIS, Mount Bauple, Queensland, Australia. Filed Aug. 22, 1929, Serial No. 387,720, and in Australia Jan. 21, 1929. 3 Claims. (Cl. 97—47.)

1. A plow attachment for tractors, comprising a frame adapted to be secured to the differential housing of a tractor and to extend rearwardly therefrom, a bar secured to said frame and extending rearwardly therefrom and diagonally with respect to the axis of the tractor, a plow carrier frame pivotally connected to said bar and extending laterally therefrom, brackets adapted to be secured to the differential housing on the side opposite the first named frame, and a lever having a shaft mounted in

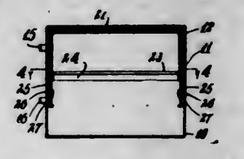


bearings, with which said brackets are provided, and also having an arm connected to said plow carrier frame, said lever serving to raise and lower the plow carrier frame.

1,809,695. MANUFACTURE OF NITROCELLULOSE SMOKELESS POWDER. ALAN S. HAWKESWORTH, Washington, D. C. Filed June 13, 1930. Serial No. 461,056. 1 Claim. (Cl. 52—22.)

The process of making nitrocellulose smokeless powder which comprises, the addition as a solvent and stabilizer of mono-nitro-toluene of around at least 6% by volume of the finished powder grain as the irreducible minimum, needed to completely coat each molecule of the nitrocellulose, together with the addition of an easily evaporable solvent sufficient to make a compound solvent that will completely dissolve the nitrocellulose into a smooth paste, and evenly distribute the mono-nitro-toluene, then moulding the said paste into the desired powder grain, and driving off the excess evaporable solvent from the finished powder grain by means of moderate heat, thereby leaving the non-evaporable mono-nitro-toluene coating over each and every one of the nitrocellulose molecules.

1,809,696. WATERPROOF BATHER'S CASE. SAMUEL HEILWEIL, New York, N. Y., assignor, by direct and mesne assignments, to Jacob Schierer, New York, N. Y. Filed Feb. 28, 1929. Serial No. 343,291. 3 Claims. (Cl. 206—37.)

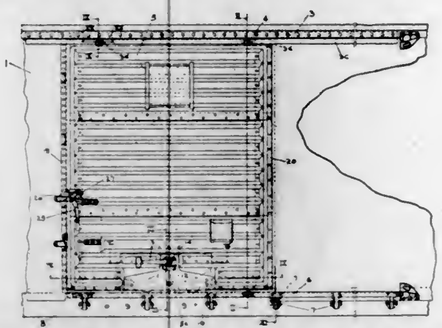


1. A case of the class described, comprising a hollow body open at the top, a cover hinged on the body, a horizontal ring supported within the body, a washer resting on the ring, and a lining of hard material within the cover and extending therefrom and pressing against the washer in closed position of the cover, and means for adjusting the vertical position of the said ring, consisting of lugs projecting from said body, and screws threadedly engaging thru said lugs and rotatively connected with said ring.

1,809,697. CAR DOOR. FREDERICK C. HEINEN, KENNETH J. TOBIN, and AXEL WARBERG, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 3, 1927. Serial No. 158,519. 1 Claim. (Cl. 16—99.)

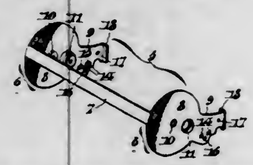
Door lift mechanism for a door provided with a pressed out portion extending forwardly of said door and form-

ing a casing, a pair of roller frames pivoted to said door adjacent the lower edge thereof within said casing, rollers journalled in said frames, a link pivotally connecting the inner ends of said frames, said roller frames and link



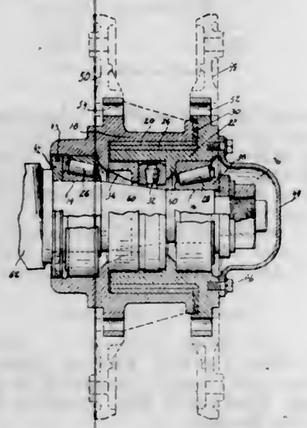
lying within said casing, an operating lever on the outside of said casing, a pivot rigid with said lever and pivotally connected to said casing, said pivot being provided with an arm lying within said casing and pivotally connected to said link.

1,809,698. LAWN MOWER FRAME. HERMANN M. HESSENBRUCH, Wynnewood, Pa., assignor to Philadelphia Lawn Mower Company Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 7, 1929. Serial No. 330,768. 6 Claims. (Cl. 56—253.)



1. A lawn mower frame comprising symmetrical paralleling side members united by an integrally formed brace component, each said side member being symmetrically-configured and having an inwardly-angled terminal extension.

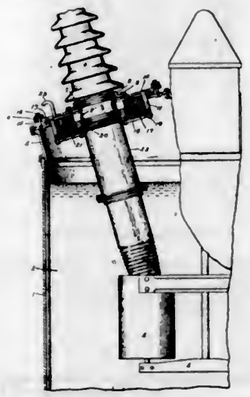
1,809,699. DUAL WHEEL ASSEMBLY. JAMES F. HIGBEE, Detroit, Mich., assignor of one-half to Stephen A. Griggs, Detroit, Mich. Filed Sept. 18, 1930. Serial No. 482,688. 6 Claims. (Cl. 280—96.1.)



1. A dual wheel assembly comprising, in combination, a spindle, a pair of telescoped wheel hubs each having an independent rotary bearing upon said spindle, and an intermediate bearing adapted to take the axial thrust of each of said hubs.

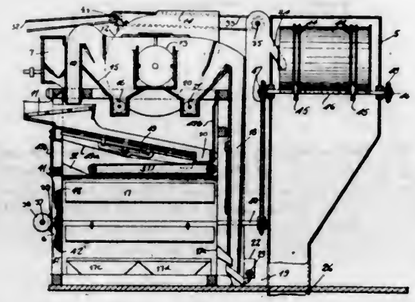
6. A dual wheel assembly comprising, in combination; a spindle, a wheel hub mounted thereon, a second wheel hub journalled thereon for rotation independently of the first hub and having a portion overlapping a portion of the first hub, and a bearing intermediate the extremities of the hub assembly for taking the axial thrust of each hub.

1,809,700. ELECTRICAL TRANSMISSION DEVICE. JOHN D. HILLIARD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 10, 1929. Serial No. 369,904. 8 Claims. (Cl. 200—150.)



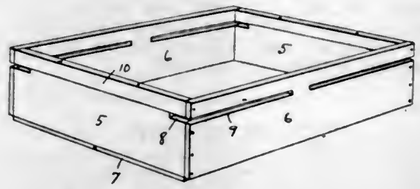
1. The combination with a metallic circuit breaker housing and insulating structure of brittle material supported thereby, of cushioning means interposed between said housing and structure for substantially precluding transmission of shock from said housing to said structure.

1,809,701. GRAIN CLEANING AND SEED TREATING APPARATUS. JOHN W. HOEFLING and PHILIP M. HOEFLING, Chico, Calif. Filed May 7, 1929. Serial No. 361,120. 1 Claim. (Cl. 209—12.)



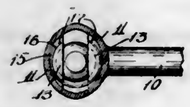
In a portable grain cleaning and treating machine, the combination with suction apparatus, of a disk separator associated with the suction apparatus with the grain aspirated by the suction apparatus before entering and after leaving the disk separator, and a vibrating screen interposed between the suction apparatus and disk separator, a mixing barrel receiving the grain from the separator, and means for metering a treating substance to the grain after discharge from the separator and prior to delivery into the tumbling barrel.

1,809,702. CONTAINER FOR PACKING AND SHIPPING FRESH FRUIT. CLARENCE J. HORN, Fresno, Calif., assignor to Growers Service Company, Fresno, Calif. Filed July 28, 1930. Serial No. 471,275. 1 Claim. (Cl. 217—40.)



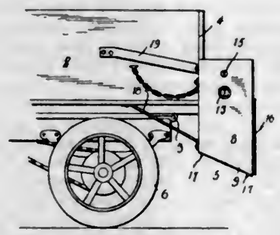
A box of the class described comprising a pair of side panels, a pair of end panels secured to the side panels, said end panels being shorter in height than the side panels, panel sections secured to the upper edges of the end panels terminating flush with the upper edges of the side panels and disposed therebetween, said side panels being formed with longitudinally extending slots starting from the ends thereof and terminating distances from the center thereof, and said end panels being provided with notches in their upper end corners registering with the slots the upper walls of the notches in the end panels being formed by the lower edges of the panel sections.

1,809,703. BALL JOINT CONNECTION. GEORGE H. HUFFERD and MATTHEW P. GRAHAM, Detroit, Mich., assignors to Thompson Products, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 26, 1928. Serial No. 315,208. 4 Claims. (Cl. 287—90.)



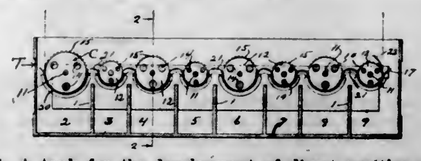
1. In a ball joint, a spherical member, separated seat members engaging said spherical member on opposite sides thereof and having outer cylindrical surfaces and a symmetrical housing having cylindrical surfaces eccentric with respect to each other and to said spherical member and engaging the cylindrical surfaces of said seat members and resilient means urging said seat members in opposite directions circumferentially of said spherical member.

1,809,704. STONE SPREADER. FRANK B. HURT, La Grande, Oreg. Filed Dec. 26, 1928. Serial No. 328,608. 4 Claims. (Cl. 275—2.)



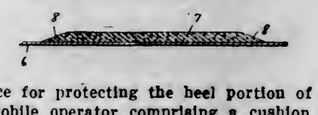
4. Means for spreading road material comprising a hopper having a centrally recessed front wall to fit below and extend laterally beyond and upwardly at the sides of a dumping truck body, means to secure the hopper to the truck body, and closure plates mounted on the end portions of the hopper front wall and adjustable laterally with respect to the truck body whereby the space between the ends of the hopper and the sides of the truck body may be bridged and the hopper applied to truck bodies of various widths.

1,809,705. DEVELOPING APPARATUS. WILLIAM H. JAEGER, Trenton, N. J. Filed Jan. 5, 1929. Serial No. 330,665. 3 Claims. (Cl. 95—94.)



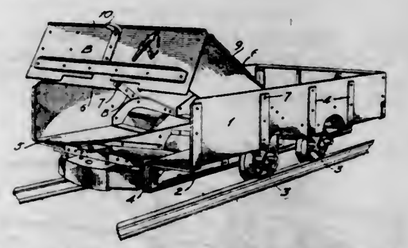
1. A tank for the development of direct positive print paper divided into a plurality of chambers, each containing a liquid incident to the development of the paper, spaced discs rotatably supported above each of the chambers and extending downwardly thereinto, means for driving said discs at the same peripheral speeds, guides associated with the lower portions of the discs to maintain the paper in proper position with respect to the discs, said discs having outstanding teeth for engagement with perforations in the paper, the guides being positioned outwardly of the teeth and engaging the marginal portions of said paper.

1,809,706. HEEL CUSHION FOR AUTOMOBILES. MARCIA B. JAMIESON, Houston, Tex. Filed Apr. 12, 1930. Serial No. 443,826. 1 Claim. (Cl. 74—81.)



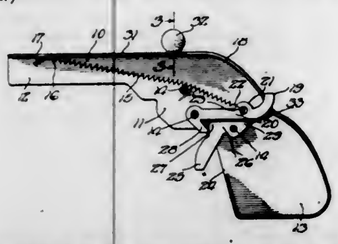
A device for protecting the heel portion of a shoe of an automobile operator comprising a cushion placed on the floor board in rear of the pedals of an automobile for engaging the rear part of the heel portion of the shoe when the foot is operating the pedals with the tip of the heel resting on a part of the floor board, said cushion comprising a rectangular flat strip of hard rubber and a rectangular strip of sponge rubber secured to the flat strip and of less area than the flat strip with the front edge beveled to receive said rear part of the heel.

1,809,707. MINE CAR. GEORGE E. JONES, Jr., and PERRY S. MCCALLEN, Knoxville, Tenn., assignors to Sanford Investment Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 23, 1929. Serial No. 416,188. 16 Claims. (Cl. 105—261.)



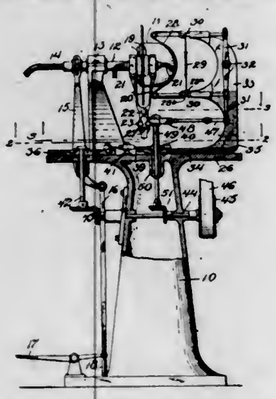
1. A car of the general type described, including car body sides and an end-gate having arms between the car body sides and means in position to embrace extended portions of the upper edges of the car body sides to resist spreading when the end-gate is in its closed position.

1,809,708. MISSILE PROJECTING DEVICE. PAUL F. KAHLER and STANLEY S. WICKER, Chicago, Ill. Filed Oct. 21, 1929. Serial No. 401,214. 1 Claim. (Cl. 124—12.)



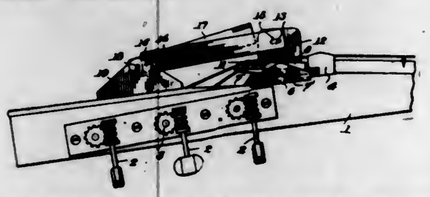
The combination with a toy pistol including side plates, said body providing a barrel and stock having an arcuate slot extending from the rear end of the barrel along the upper and rear wall of the stock, and means for moving a hammer head through said slot, of means for mounting a missile above the barrel and adjacent the rear end thereof, said means including spacing fingers extending parallel to said barrel rearwardly thereof, said side plates having slots therein parallel to and extending rearwardly of said barrel to provide said fingers so that a missile may be frictionally held therebetween in the path of said hammer head.

1,809,709. MACHINE FOR SURFACING HAT BODIES. FERDINAND E. KAUFFMANN, Rahway, N. J. Filed Sept. 11, 1926. Serial No. 134,784. 3 Claims. (Cl. 223—30.)



1. A machine for surfacing hat bodies comprising a rotatable hat support, a bracket arranged to oscillate adjacent the hat support, arms on the bracket, means for reciprocating the arms in opposite directions, a strip yieldingly supported by the arms, and means for rotating the hat support and reciprocating the arms.

1,809,710. STRINGED MUSICAL INSTRUMENT. JOHN T. KAUFMAN, Marion, and CHRIS KAUFMAN, Yankton, S. Dak. Filed July 13, 1928. Serial No. 292,567. 3 Claims. (Cl. 84—312.)



1. An attachment for a stringed musical instrument and comprising a base plate adapted to be secured to the neck of the instrument, a rock plate pivotally secured to said base plate at one end thereof, grooved rollers having connection with the rock plate for movement therewith, and for receiving the strings of the instrument, a block mounted for upward movement with respect to the neck, and receiving the strings thereon, said block being arranged in the path of the rock plate whereby the latter engages the same, means for rocking the rock plate to lift the block, and means for retaining the lifting means in operative or inoperative positions.

1,809,711. AUXILIARY MUDGUARD FOR AUTOMOBILE FENDERS. ALFRED W. KILE, Minneapolis, Minn., assignor to Durkee-Atwood Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Sept. 12, 1930. Serial No. 481,408. 5 Claims. (Cl. 280—152.)



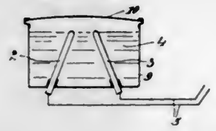
1. A splash guard comprising a semi-rigid body portion of unbreakable material, and clamping elements on said body portion adapted to engage an edge portion of an automobile fender to secure said body portion at any desired angle with respect to said fender at such points of attachment.

1,809,712. VALVE GEAR FOR STEAM ENGINES. FREDERICO ANTON KOWARICK, Sao Paolo, Brazil. Filed Jan. 9, 1929, Serial No. 331,263, and in Germany Jan. 16, 1928. 2 Claims. (Cl. 121—176.)



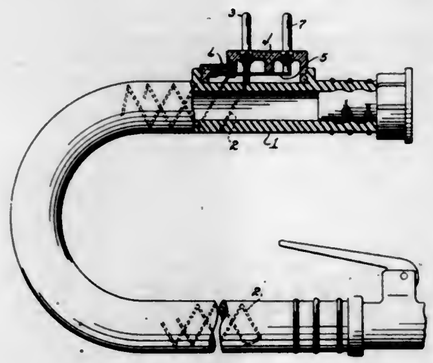
1. An eccentric valve gear for steam engines comprising a valve gear shaft, a sectional eccentric, one section of said eccentric being mounted upon said shaft, an eccentric strap, a second section of said eccentric having an inner diameter corresponding to the outer diameter of said first mentioned section and its outer diameter corresponding with the inner diameter of said strap, said two sections being eccentric to one another and rotatably mounted relatively to said valve gear shaft but in opposite direction to one another in order to secure any desired cut-off between the absolute zero-cut-off and a given maximum cut-off even while the engine is running and the lead may be adjusted also corresponding to the cut-off in question proportionately increasing or decreasing or may be held constant, an adjusting member mounted rotatively and longitudinally shiftable on the valve gear shaft with a helical connection, said adjustable member having a curved slot guide arranged to act on the said second section and said adjustable member having a further helical connection of different inclination arranged to act on the said first section, a fork for operating said adjusting member, a thickened part or collar on the valve gear shaft, a disk, curved slots in said disk, entraining pins on the second section of the eccentric projecting into said curved slots in said disk, a socket on the first mentioned section of the eccentric forming a boss surrounding the inner part of the valve gear shaft, a hollow boss on the disk fitted on the said socket and connected thereto by a helical connection.

1,809,713. MICROPHONE. WALTER KÜHNERT, Vienna, and MAX MAURER, Klosterneuburg, Austria. Filed Jan. 7, 1927, Serial No. 159,701, and in Austria Apr. 16, 1926. 9 Claims. (Cl. 177—386.)



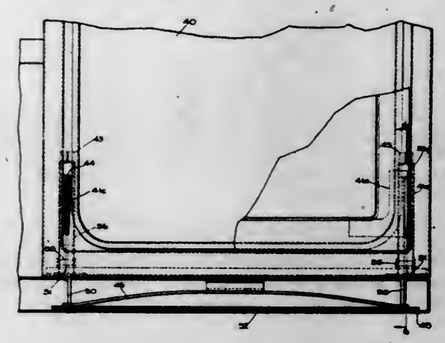
1. In an apparatus for transforming sound waves into variations of electric current, the combination of two electrodes mounted on a carrier at a fixed distance from each other, and an electrolyte in contact with the said two electrodes and forming a path of constant cross section for the current from one electrode to the other, the length of such current path being altered by the incoming sound waves during the action of the device.

1,809,714. HEATED WATER HOSE FOR FILLING STATIONS. CARL RAYMOND MATHEWS, Claremore, Okla. Filed Apr. 1, 1929. Serial No. 351,791. 1 Claim. (Cl. 219—39.)



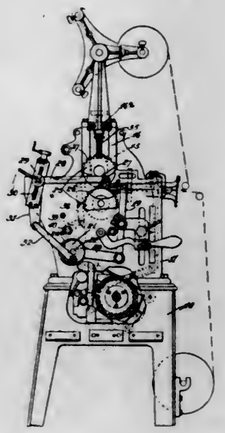
A fluid heater comprising a hose, an electrical heating coil embedded in the hose, walls formed on the hose to provide a socket, an insulated casing mounted in the socket, a shoulder in the casing, a terminal post carried by the casing and connected to one end of the coil, a second terminal post carried by the casing and located adjacent the shoulder, and a thermostat member having one end secured to the casing and the other end of the coil and extending across the shoulder into engagement with the second mentioned terminal post to complete a circuit and influenced by the heat of the coil to break the circuit when the fluid in the hose has been heated to a desired temperature.

1,809,715. COUNTERBALANCE FOR DOORS. FRANCIS H. MCCORMICK, Glen Ellyn, Ill., assignor to Edison Electric Appliance Company, Chicago, Ill., a Corporation of New York. Filed Oct. 12, 1929. Serial No. 399,331. 14 Claims. (Cl. 126—191.)



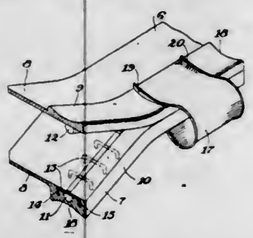
1. The combination with a member movable between a pair of limiting positions and biased to one of said positions, of a counterbalancing spring cooperating with said member and an auxiliary member frictionally engaging said spring so as to damp the motion of said first member.

1,809,716. PLAITING MACHINE. LAWRENCE E. MCDONOUGH, Chicago, Ill. Filed Apr. 20, 1929. Serial No. 356,755. 14 Claims. (Cl. 223—44.)



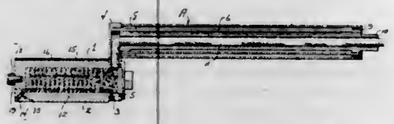
1. In a plaiting machine, a pair of cooperating pressure rolls, cloth-gripping members arranged to reciprocate adjacent the entering side of the rolls for over-tucking or under-tucking the cloth to form plaits, and means for relieving the pressure between the rolls in timed relation to the reciprocation of the cloth-gripping members to admit the loosely folded cloth.

1,809,717. FASTENING DEVICE. GIDEON SUNDBACK, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1930. Serial No. 426,013. 7 Claims. (Cl. 24—205.)



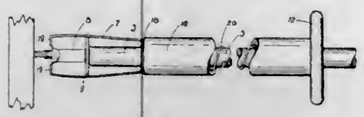
1. In a multiple fastener, a pair of flexible strips, interlocking projections on one of said strips, a projection-receiving recess on the other of said strips, and reinforcing means extending directly across said recess to resist separation of the walls thereof.

1,809,718. ELECTRICALLY HEATED SCRAPER. JAMES MCNEIL, Pittsburgh, Pa. Filed Nov. 9, 1929. Serial No. 406,009. 3 Claims. (Cl. 219—21.)



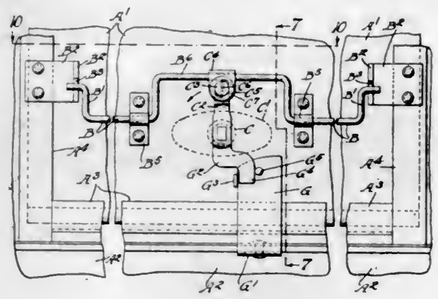
1. A device of the class described comprising a hollow member having a flat bottom, a heating unit in the member for heating the same, the front lower corner of the member having a diagonally arranged slot therein, a scraper blade in the slot, a hollow handle, an upright connecting one end of the handle with the rear of the member and conductors passing through the hollow handle and connected with the heating element.

1,809,719. SCREW DRIVER. STEPHEN MCWADE, Cobden, Ontario, Canada. Filed Aug. 31, 1928. Serial No. 303,293. 1 Claim. (Cl. 145—52.)



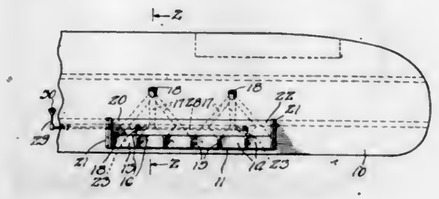
A screw driver comprising a shank, having a handle suitably retained on one end thereof; the other end of said shank being provided with a tapered bit; an enlarged portion adjacent the inner end of said bit of rectangular form in cross section having greater dimensions in one direction than on the transverse diameter; a cylindrical casing reciprocally and rotatably mounted on said shank; separate, removable, flat spring jaws supported from said casing; a tapered plug on said shank adapted to retain said jaws in position relative to said casing and to act as a bearing between said casing and said shank; a recoil spring connected between said shank and said plug adapted to retain said plug in tight position in said casing and to return said casing to normal position relative to said shank; an operating member on said casing adjacent said handle for rotating said casing and said enlarged portion adapted to spread and retain said jaws in spread position upon rotation of said casing a quarter turn and frictionally retaining the casing in fully projected position against the tension of the spring.

1,809,720. HOOD LATCH. NORTON A. MEARS and DIBRELL P. HYNES, Chicago, Ill., assignors to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed May 10, 1929. Serial No. 361,933. 12 Claims. (Cl. 292—49.)



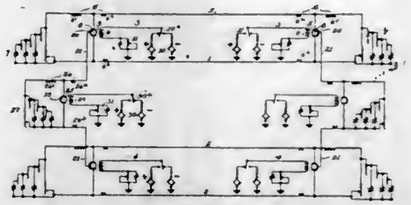
1. In combination with a latching device for the hinged section of an automobile hood, which includes a rock shaft mounted on the inner face of the hood, a plurality of latch abutments positioned within and spaced laterally inwardly from the hood and crank members associated with the rock shaft and adapted for locking engagement with the latch abutment in response to rotation of said shaft, means for rotating said rock shaft, including an offset portion intermediate the ends of the shaft, a stem pivotally mounted on the hood, an exterior handle therefor, a crank arm and crank pin associated with said stem, the pin being adapted to contact the offset portion of the crank arm, and a securing member, pivoted to the pin, adapted to maintain operative engagement between the offset portion and the pin, the pin being adapted to rotate the offset portion in response to rotation of the crank arm in one direction, the securing member being adapted to rotate the offset portion in response to rotation of the crank arm in the opposite direction.

1,809,721. WING STRUCTURE FOR AIRCRAFT AND THE LIKE. GEORGE MILLER, Chicago, Ill. Filed Mar. 19, 1930. Serial No. 437,196. 2 Claims. (Cl. 244—12.)



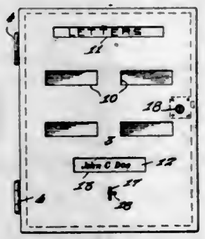
2. An aircraft wing structure including a body providing a compartment in the forward end of the wing, said wing having an opening therein leading into said compartment from the upper side thereof and adjacent the front end, means defining a plurality of pockets in said compartment, conduits leading angularly upward from said pockets and opening exteriorly on the upper side of the wing rearwardly of said opening, a slidable door over said opening, and means enabling the pilot to open and close said door for the purposes set forth.

1,809,722. SUPERPOSED TELEGRAPH SYSTEM. RONALD V. MORGENSTERN, Metuchen, and PAUL E. TETER, Plainfield, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Jan. 20, 1930. Serial No. 422,194. 8 Claims. (Cl. 178—65.)



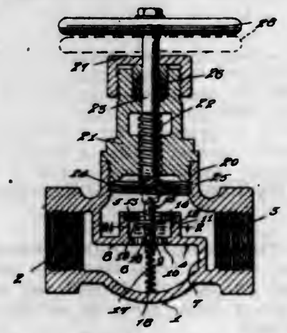
1. In a superposed telegraph system, a side circuit, generators at each end of the circuit, means to provide for polar signalling over said circuit by field reversals in said generator and means for superposing a circuit on said circuit by way of the armatures of said generators.

1,809,723. INDICATOR. NASEEB A. NADDAFF, Boston, Mass. Filed Sept. 10, 1930. Serial No. 481,026. 2 Claims. (Cl. 232—46.)



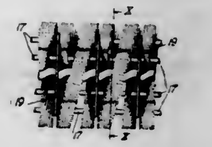
1. A mail box having a hinged and normally locked cover for the open face thereof, and which cover is provided with a slot and with a plurality of sight openings, a name card carried by the cover opposite one of the sight openings, a gravity influenced slidable plate on the inner face of the cover carrying name cards to aline with the remaining sight openings and to uncover the slot when the said slide moves downwardly and a key operated bolt to engage with the lower edge of the slide to move and sustain the same in a position to cover the sight openings and the slot.

1,809,724. VALVE. DEE R. PASSAUER, Lucinda, Pa. Filed May 31, 1930. Serial No. 458,777. 3 Claims. (Cl. 251—140.)



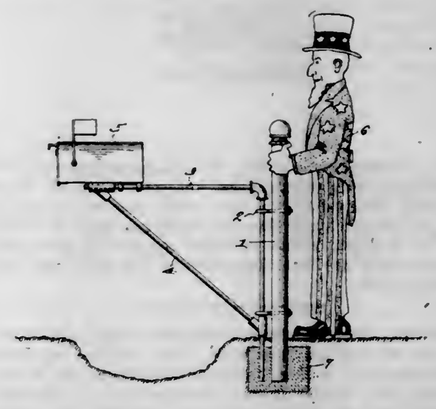
2. A valve comprising a body, a wall in said body and having a passage, a flange formed on the wall about the passage, a gasket carried by the flange, a disk detachably securing the gasket to the flange and cooperating with the latter in forming a valve seat, a spring pressed closure element for the seat, and a manual control means carried by the body to disengage the closure element from the valve seat.

1,809,725. BRUSH FOR CLEANING PIPES AND TUBES. JOSEPH HENRY ROE, Market Harborough, England. Filed Dec. 9, 1927, Serial No. 238,889, and in Great Britain Dec. 11, 1926. 7 Claims. (Cl. 15—206.)



1. A circular brush comprising a shank composed of wires twisted together, bristles radially disposed thereon, and discs on said shank to afford lateral support for the free portion of the bristles under operation of the brush in an axial direction.

1,809,726. MAIL BOX HOLDER. OSCAR SANDERS, St. Joseph, Mo. Filed Sept. 9, 1929. Serial No. 391,267. 1 Claim. (Cl. 232—40.)

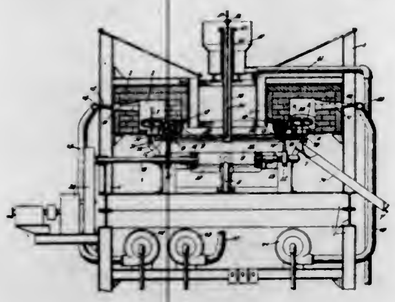


A mail box holder comprising a base embedded in the ground adjacent a roadway and having a socket opening outwardly through the top surface thereof, a vertical post having the lower end embedded in the base adjacent the socket, eye bolts secured to the post, a L-shaped support having the vertical portion thereof extending through the eye bolts and received in the socket and bearing against the bottom wall thereof, a brace connected to the horizontal portion of the support and to the vertical portion below the lowermost eye bolt to prevent vertical displacement of the vertical portion from the socket and from the post, and brackets attaching a mail box to the horizontal portion.

1,809,727. ROTARY VALVE FURNACE. WILBUR E. SANDERS, Muncie, Ind., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 12, 1929. Serial No. 385,133. 9 Claims. (Cl. 263—7.)

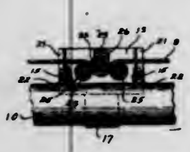
1. Heat treating apparatus including a chambered furnace, a movable conveyor for carrying articles through the

furnace and constituting one wall of the furnace chamber, and embodying refrigerating means so arranged that



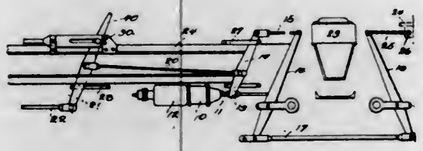
portions of the article positioned adjacent thereto are maintained cool while other portions extending into the furnace are heated.

1,809,728. FISHERMAN'S LINE DRIER. CARL O. SATHER and FELIX P. SAMPSON, Minneapolis, Minn. Filed Apr. 23, 1930. Serial No. 446,742. 9 Claims. (Cl. 43—25.)



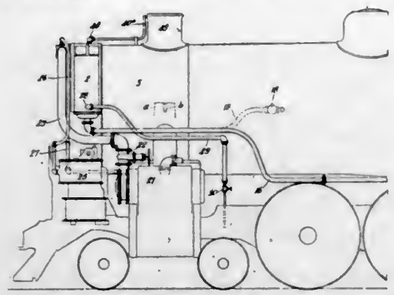
1. A line drier for fishing rods comprising a casing for attachment longitudinally of the rod, wringer rollers mounted transversely in the casing, means for guiding the line longitudinally thru the casing and over the rollers, and a wringing roller pivotally carried by the casing for clamping the line therebetween and said first mentioned rollers.

1,809,729. FOUNDATION BRAKE RIGGING. WILLIAM H. SAUVAGE, New York, N. Y., assignor, by mesne assignments, to Royal Railway Improvements Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 14, 1928. Serial No. 254,256. 11 Claims. (Cl. 188—33.)



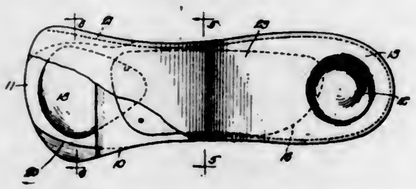
1. In a car brake rigging system of the character described, in combination, an air brake cylinder with cylinder levers, a lost motion regulator associated therewith, the effective operative ends of said levers being oppositely disposed with respect to the center sill of the car, live and dead truck brake levers connected with said cylinder levers, and points of anchorage on the car body for the dead truck levers.

1,809,730. FEED WATER HEATER. EUGENE L. SCHELLENS, Millburn, N. J., and CHRISTOPHER A. SCHELLENS, Marblehead, Mass., assignors to C-S Engineering Company, Jersey City, N. J., a Corporation of Delaware. Filed July 30, 1927. Serial No. 209,540. 17 Claims. (Cl. 122—441.)



1. A feed water heater having an arcuate casing formed of a pair of dished plates, and a pair of plates secured between them.

1,809,731. ARCH SUPPORT. WILLIAM M. SCHOLL, Chicago, Ill. Filed May 26, 1924. Serial No. 715,839. 1 Claim. (Cl. 36—71.)



As an article of manufacture, an arch support including a sole member having on its upper surface at its rear portion a skived recess therein, adapted to be disposed below the oscalcis of the foot of the wearer, surrounded by a marginal area of substantial width, a substantially oval-shaped yieldable pad adjacent the forward end of said members having a widened forward portion to underlie the second, third, and fourth metatarsophalangeal joints of the foot, a longitudinally arched spring plate underlying the sole member and supporting the longitudinal arch of the foot, said plate extending forward beneath the yieldable pad and supporting the plantar surface of the foot, and a lower covering member disposed below the pad and spring plate and protecting these members from contact with the shoe sole.

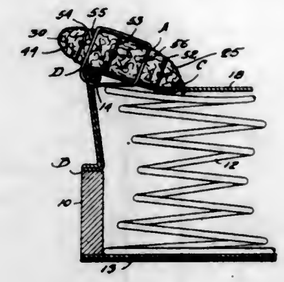
1,809,732. PROCESS OF PRODUCING OIL SOLUBLE PHENOL-ALDEHYDE CONDENSATION PRODUCTS. FRITZ SEEBACH, Erkner-Berlin, Germany, assignor to Bakelite Gesellschaft mit beschraenkter Haftung, Berlin-Charlottenburg, Germany. Filed Dec. 9, 1927, Serial No. 239,008, and in Germany Dec. 14, 1926. 10 Claims. (Cl. 260—4.)

1. A process of producing fatty oil-soluble resinous products which comprises heating a fusible phenol-aldehyde condensation product together with a polynuclear phenol until the reaction mass is soluble in fatty oil.

1,809,733. UPHOLSTERING EDGING. FRANK L. SMITH, Columbiana, Ohio. Original application filed Mar. 29, 1928, Serial No. 265,710. Divided and this application filed Jan. 6, 1930. Serial No. 418,896. 4 Claims. (Cl. 155—184.)

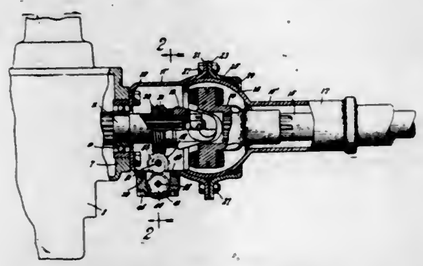
4. As an article of manufacture, upholstering edging comprising a transversely flattened elongated casing

of flexible sheet material doubled upon itself and having its marginal portions secured together, providing a pair of flaps in juxtaposed relation extending from the main



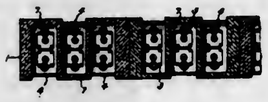
body of the casing inwardly of but adjacent to one only of the longitudinal edges of the said main body, and a filler of fiber-like material in said casing.

1,809,734. TORQUE BALL RETAINER AND SPEEDOMETER. WILLIAM R. SMITH, Toledo, Ohio, assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 10, 1928. Serial No. 318,568. 2 Claims. (Cl. 74—7.)



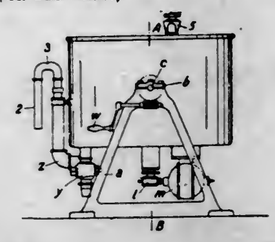
2. A hollow torque ball retainer having at one end an inwardly directed flange, internally located fastening means to secure said flange to said gear housing, said ball retainer being throughout its length radially greater than the radial distance of said fastening means, means to drive a measuring instrument associated with said ball retainer comprising a carrier, meshing gears mounted in said carrier, one of said gears to engage a gear on the spline shaft of the transmission, the other to operate a speedometer shaft, means including shims to secure said carrier in adjusted position, relative to said ball retainer to permit interchange of gears.

1,809,735. ELECTRIC SWITCH CELL STRUCTURE. TOWNSEND H. SOREN, Hartford, Conn., assignor to General Electric Company, a Corporation of New York. Filed Dec. 30, 1926. Serial No. 158,116. 3 Claims. (Cl. 175—298.)



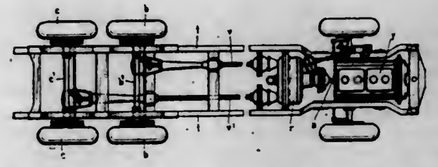
1. A switch cell structure providing a row of adjacent cells, switches in said cells, and a door for closing each cell at one side thereof, alternate cells having their doors arranged at one side of the row and other cells having their doors arranged at the other side of the row.

1,809,736. WASHING MACHINE FOR COMESTIBLES. ROBERT SPEIDEL, Pforsheim, Germany. Filed Mar. 26, 1927, Serial No. 178,603, and in Germany Dec. 20, 1926. 1 Claim. (Cl. 146—197.)



In a washing machine for potatoes, vegetables, fruit, salted meat, salted fish and other food substances, the combination with a tiltable receiver, of an agitator shaft extending up through the bottom of the receiver into the interior thereof, a frame upon the bottom of said receiver, said frame supporting a sieve bottom, a motor mounted on the bottom of the receiver and operatively connected to the lower end of the shaft below the bottom of the receiver, an agitator element having a central hub detachably mounted upon the upper end of the agitator shaft to rotate therewith, a water discharge pipe connected to the receiver, an upwardly extending telescoping pipe connected to said discharge pipe, and a U-shaped pipe connected to the upper end of the telescoping pipe and having a vent at its highest point.

1,809,737. DRIVING MECHANISM FOR MOTOR VEHICLES. WILLY STANIEWICZ, Brunswick, Germany, assignor to Automobilwerke H. Bussing, Aktiengesellschaft, Brunswick, Germany. Filed Jan. 25, 1930, Serial No. 423,462, and in Germany Dec. 8, 1928. 2 Claims. (Cl. 180—22.)



1. In a motor vehicle, the combination with a driving shaft and two driven axles, of two driven shafts each connected with a driven axle, gearings of different gear ratios each connecting said driving shaft to the driven shafts each set comprising a gear on the driving shaft and a gear for each driven shaft constantly in driving relation with said gear on the driving shaft, and coupling means for said gearings adapted to be shifted to connect one or the other of said gearings to the axles for driving the same.

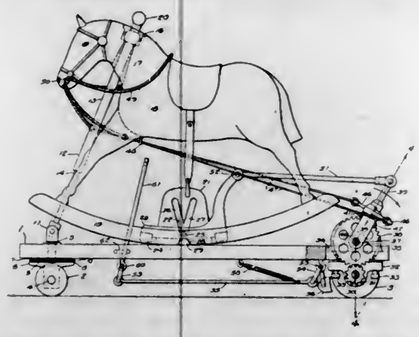
1,809,738. PROCESS FOR TREATING RESINS. PAUL STUHLMANN, Cologne-Lindenthal, Germany. Filed Feb. 9, 1928, Serial No. 253,203, and in Germany Jan. 24, 1927. 2 Claims. (Cl. 87—16.)

1. A process for bleaching resins which consists in subjecting them in an alkaline lye in the cold with continuous movement to the common action of a bleaching agent and of formaldehyde.

1,809,739. WHEELED TOY ROCKING FIGURE PROPELLED. GEORGE TAYLOR, Conshohocken, Pa. Filed Dec. 22, 1930. Serial No. 504,160. 9 Claims. (Cl. 208—42.)

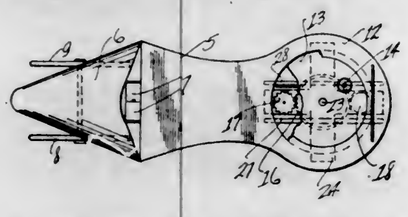
1. In a wheeled toy, rocking figure propelled, a base having front steering wheels and a steering mechanism there-

for, a pair of rear supporting wheels including an axle, bearings for the axle, resilient means between the bear-



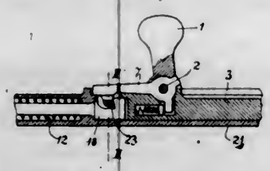
ings and the base, a shaft in bearings on the base and provided with a gear, a gear on the axle, so that when weight is applied to the base the two gears will intermesh.

1,809,740. CHILD'S VEHICLE. ALEXANDER N. TEBIEFF, Los Angeles, Calif. Filed June 3, 1929. Serial No. 367,999. 1 Claim. (Cl. 208—175.)



In a child's vehicle, a base, a disc rotatably secured in said base, means for rotating said disc, a master gear secured in said disc, a bearing plate pivotally positioned beneath said master gear, shafts carried in said bearing plate, planetary gears carried on said shafts and engaging said master gear, gears at the lower extremities of said shafts, a pair of steering wheels mounted below said bearing plate, said steering wheels having gears formed thereon and adapted to mesh with said last mentioned gears, for the purpose specified.

1,809,741. AUTOMATIC FIREARM. RUDOLF VON FROMMER, Budapest, Hungary. Filed Oct. 27, 1930, Serial No. 491,570, and in Hungary Nov. 13, 1929. 1 Claim. (Cl. 42—3.)



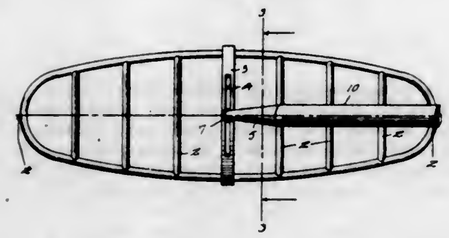
In an automatic fire arm, a breech bolt, a breech closing rod, an operating handle, a pivot bolt adapted to connect pivotally said handle with the breech bolt, a coupling arm pivotally mounted on said pivot bolt and having a hook adapted to engage and disengage with the closing rod, a guide for the coupling arm arranged on the breech casing, projections fitted on said hook, strips provided on the said guide and arranged above that part of the path of said projections, on which said coupling arm is intended to remain in engagement with the closing rod.

1,809,742. TOBACCO CAN. ELLIS MCWHORTER, Algona, Iowa. Filed Apr. 26, 1929. Serial No. 358,369. 2 Claims. (Cl. 206—38.)



1. A box of the class described open at both ends and provided with closures for such ends, a container for mounting in said box, both of the ends of said box and said container being of uniform size and shape and having complementary interengaging means whereby the container may be interchangeably mounted in said ends.

1,809,743. RUB HOE. WALTER E. CHASE, Sarasota, Fla. Filed Jan. 4, 1930. Serial No. 418,568. 3 Claims. (Cl. 55—10.)

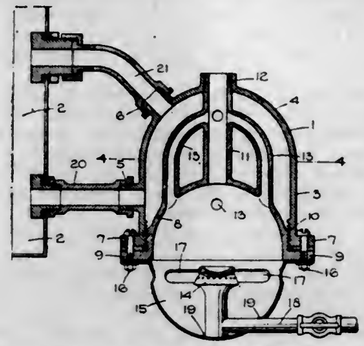


1. A rub hoe of the character described, comprising a frame having spaced bars arranged transversely thereof, said frame and bars being of substantially the same thickness whereby contact thereof with the surface of the ground will be had, and a handle connected at one end intermediate the ends of the frame and extending upwardly at an angle therefrom.

1,809,744. APPARATUS FOR HEATING LIQUIDS. EDWIN DARBY, Birmingham, England. Filed Nov. 23, 1929, Serial No. 409,326, and in Great Britain Nov. 29, 1928. 4 Claims. (Cl. 122—156.)

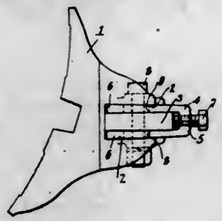
4. A liquid heating unit for application to a tank or supply pipe, comprising an outer shell domed at its upper end, a body member placed in said outer shell in spaced relation thereto, the space between said body and outer shell forming a liquid receptacle, said body having a domed lower end forming a combustion chamber, a vertical central flue tube projecting upwardly from said combustion chamber and projecting through said outer shell, a plu-

rality of auxiliary flue tubes connecting the central flue with the combustion chamber, the body portion together with the central main flue pipe and auxiliary flue pipes



being detachable from the outer shell, the outer shell having means at its upper and lower ends for connection to a tank or supply pipe and a heating unit in said combustion chamber.

1,809,745. BRAKE SHOE HOLDER. LEWIS J. DAVIS, Brooklyn, N. Y. Filed Sept. 12, 1928. Serial No. 305,509. 12 Claims. (Cl. 188—223.)



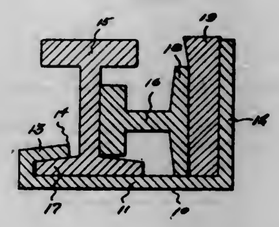
6. In combination, a brake shoe head having a rearwardly extending portion, a brake beam flatly confronting said rearwardly extending portion, and an adjustable wedge-shaped means for securing said brake shoe head against said brake beam.

1,809,746. CONTAINER FOR CIGARETTES AND THE LIKE. EDOUARD FRANÇOIS MICHAEL DÉCOBERT, Paris, France. Filed Aug. 22, 1928, Serial No. 301,359, and in France May 26, 1928. Renewed Apr. 25, 1931. 2 Claims. (Cl. 135—47.)



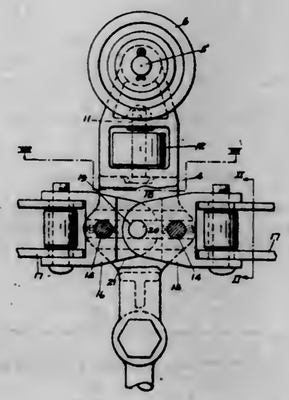
1. A cigarette case comprising a tube adapted to accommodate cigarettes arranged endwise, a sliding member supporting said cigarettes within the tube, a wire exterior to the tube connected with said sliding member and means associated with said wire for imparting sliding motion to said supporting member and ejecting the cigarettes singly from one end of the tube.

1,809,747. SLIDER RAIL CLAMP. EDWARD J. FILBURN, Terre Haute, Ind. Filed Dec. 30, 1929. Serial No. 417,522. 1 Claim. (Cl. 238—10.)



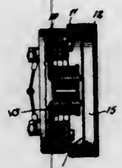
An inexpensive slider rail clamp comprising a flat rail supporting bottom, and one end of said bottom projecting upwardly at right angles thereto and then inwardly to cooperate with the flange of a work-ray rail, the other end thereof being folded at right angles to the bottom of the clamp to cooperate with the bottom of a slider rail, said latter folded upturned end lying within the same plane, said clamp being adapted to have a wedge inserted between the bottom of the slider rail and the upturned end cooperating therewith, whereby said wedge may be inserted or removed from the upper side.

1,809,748. TROLLEY CONVEYER. EARLE V. FRANCIS, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed May 4, 1928. Serial No. 275,212. 34 Claims. (Cl. 105—155.)



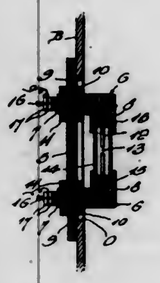
1. In a conveyer, the combination with a trolley hanger, a pair of draft members movably associated therewith and adapted to be normally arranged in longitudinal alignment; of means cooperating with said draft members for causing them to assume substantially the same angular relation with respect to said trolley hanger at both sides thereof.

1,809,749. TELEPHONE RECEIVER. GEORGE B. FRENCH, Southampton, N. Y. Filed Apr. 10, 1930. Serial No. 443,153. 4 Claims. (Cl. 179—107.)



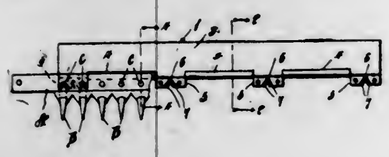
1. A receiver of the class described, including a casing, a cover associated with said casing, a diaphragm within said casing, means for vibrating said diaphragm in response to voice currents, and said diaphragm and said cover forming a closed air space.

1,809,750. IGNITION INDICATOR. ATTILIO HENRY GIUSTI, Philadelphia, Pa. Filed Nov. 18, 1929, Serial No. 408,117. Renewed Feb. 7, 1931. 2 Claims. (Cl. 175—183.)



1. In an ignition indicator, a support having two spaced openings, two L-shaped members each having a threaded shank and a lateral head, said shanks passing through said openings and having shoulders abutting one side of said support, nuts threaded on said shanks and abutting the other sides of said support, electrodes projecting from the outer ends of said lateral heads and spaced apart to provide a spark gap, and binding posts in conducting relation with said electrodes and projecting beyond the free ends of said shanks.

1,809,751. SUPPORT FOR CUTTER BARS OF MOWING MACHINES. JAMES W. HARDY, Russellville, Ark. Filed June 13, 1929. Serial No. 370,509. 3 Claims. (Cl. 56—307.)



1. A support for mower cutter bars, comprising a plate attachable under a cutter bar and extending from end to end thereof, said plate being downwardly and rearwardly extended from said cutter bar and adapted to support it above the ground and obstructions thereon.

1,809,752. CATALYTIC OXIDATION OF NAPHTHALENE. ALPHONS O. JAEGER, Crafton, Pa., assignor, by meane assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Original application filed June 3, 1927, Serial No. 196,893. Divided and this application filed Mar. 26, 1928. Serial No. 264,974. 27 Claims. (Cl. 260—123.)

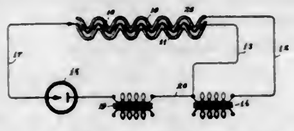
1. A method of oxidizing naphthalene to intermediate oxidation products, which comprises causing vapors of naphthalene and an oxidizing gas to react in the presence of a contact mass having associated therewith at least one compound, other than an oxide or hydroxide, of an element falling within the group consisting of alkali metals and alkaline earth metals.

1,809,753. MULTIPLE LAMP SOCKET. RICHARD L. JOHNSON, Fairfield, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 31, 1928. Serial No. 266,245. 1 Claim. (Cl. 173—335.)



In a multiple socket, socket members having openings therein, shell contacts in said socket members having tongues extending through said openings, each tongue extending also into an opening in an adjacent socket member and contacting with the tongue extending therethrough.

1,809,754. ELECTROSTATIC REPRODUCER. JOSEPH J. STEEDLE, Scranton, Pa. Filed May 13, 1929. Serial No. 362,681. 23 Claims. (Cl. 179—111.)



1. An electrostatic speaker, including a plurality of angular plates, and a diaphragm angularly disposed therebetween, whereby a plurality of angularly related propagating areas are formed by said diaphragm.

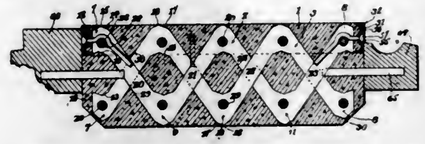
1,809,755. MATERIAL FOR FORMING COATINGS, FOR USE AS IMPREGNATING AGENTS OR FOR LIKE PURPOSES. GEORGE KING and RICHARD THRELFALL, Birmingham, England. Filed Feb. 7, 1928, Serial No. 252,669, and in Great Britain Feb. 16, 1927. 5 Claims. (Cl. 134—1.)

1. A process of making a solution of silica, which process comprises treating a silicic acid alkyl ester in presence of a solvent for the ester and for water, with a proportion of water not exceeding that required to decompose the ester completely.

1,809,756. ARMOR REENFORCED CONCRETE SLAB. GEORGE E. NAGEL, Columbus, Ohio. Filed Aug. 3, 1929. Serial No. 383,332. 10 Claims. (Cl. 94—8.)

1. An armor for encompassing the concrete body of a crossing slab comprising a frame including a pair of side

walls and a pair of end walls, each of said walls provided at its top and bottom with an inwardly extending, right angularly disposed flange between which said body extends, each flange being of a length less than the wall



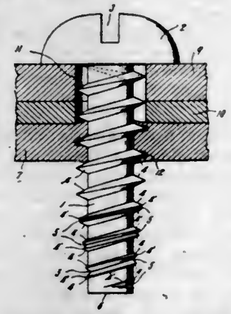
from which it extends whereby the ends of the flanges of the side walls will be spaced from the ends of the flanges of the end walls to provide the corners of the frame free of flanges.

1,809,757. CONCRETE FENCE POST. GEORGE E. NAGEL, Columbus, Ohio. Filed Feb. 2, 1931. Serial No. 513,015. 5 Claims. (Cl. 256—51.)



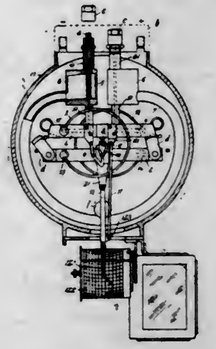
5. In wire fence construction, a post including a pair of sides and a front, fence wire coupling elements extending through said post, abutting the sides of the post and projecting beyond the front of the post, said elements having means at one end for anchoring fence wires against said front, and said elements being alternately disposed relatively to each other.

1,809,758. FASTENER. HEYMAN ROSENBERG, New York, N. Y. Filed July 23, 1926. Serial No. 124,454. 14 Claims. (Cl. 85—41.)



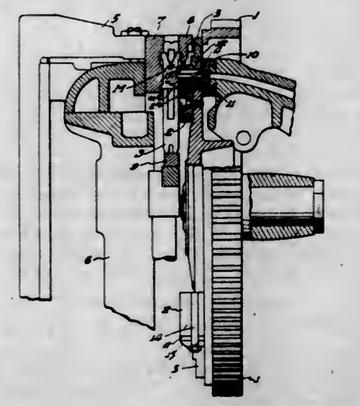
1. A fastener adapted for use in metal work comprising a body having a rib outstanding along the body and grooved longitudinally, providing a longitudinally-extending exposed entering edge at one side of the groove, the groove tapering along the rib.

1,809,759. PRESSURE GAUGE. ALBERT RÖVER, Quedlinburg, Germany, assignor to Steinle & Hartung, G. m. b. H., Quedlinburg, Germany. Filed Mar. 8, 1928, Serial No. 260,199, and in Germany Mar. 3, 1926. 4 Claims. (Cl. 73—31.)



4. Apparatus for measuring differences of pressure between two points of a system compriaing two hollow stationary supports, a fixed beam carried by said supports, each of the two supports communicating with one of the two points between which the difference of pressure is to be determined, a movable beam having two passages therein and mounted to rock about a horizontal axis, a communicating tube curved to an arc of a circle, mounted on said movable beam and adapted to contain a liquid, the two passages of the movable beam communicating respectively with the two ends of the communicating tube, and two tubular springs, each curved to an arc of a circle extending to at least two-thirds of a complete turn, each of said springs being clamped at one end to one end of the fixed beam, and establishing communication between one of said hollow supports and the passage in the adjacent end of the movable beam, said springs being in planes substantially perpendicular to the axis about which the movable beam rocks, and tending to rock said beam in opposite directions, the axis about which the movable beam rocks being so positioned that as the beam rocks, each of the tubular springs is subjected to substantially a pure bending stress which is uniform throughout its length.

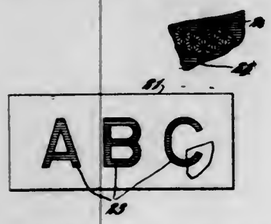
1,809,760. LINE CASTING MACHINE. SAMUEL E. SPERRY, Hollis, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 14, 1930. Serial No. 428,459. 6 Claims. (Cl. 199—55.)



1. In a line casting machine, the combination of a mold having a cavity therein for casting a type slug and em-

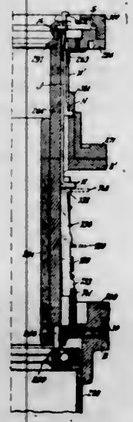
bodying a cap having a bevelled surface through which a portion of the mold cavity is exposed, and a member for bringing a matrix line into position in front of the mold, said member having a bevelled surface thereon cooperative with the bevelled surface on the mold cap to seal said exposed portion of the mold cavity.

1,809,761. LUMINOUS DISPLAY OR REFLECTOR SIGN. JONATHAN C. STIMSON, St. Louis, Mo. Filed July 9, 1923. Serial No. 650,403. 21 Claims. (Cl. 40—130.)



9. A luminous display sign having display characters visible from within a selected field, and a light source in front of and distant from said characters, said characters being formed by triple reflecting surfaces adapted to reflect light impinging thereon back towards the light source, and means cooperating with said surfaces adapted to slightly spread the reflected light to a definite degree in the form of a spreading beam or beams so as to confine the same within said field.

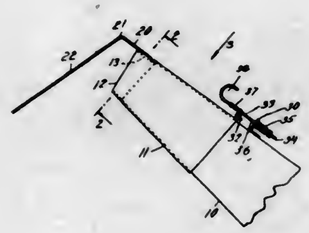
1,809,762. CIRCULAR KNITTING MACHINE. HARRY SWINGLEHURST, Orange, N. J., assignor to Scott & Williams, Inc., New York, N. Y., a Corporation of Massachusetts. Filed June 7, 1929. Serial No. 369,055. 12 Claims. (Cl. 66—36.)



1. A circular knitting machine having a needle cylinder, and needles in the tricks thereof and means to hold the needles radially inward, in combination with jacks in the tricks each adapted to flex the hook of its associated needle radially outward while said holding means for the flexed needle remains relatively stationary radially.

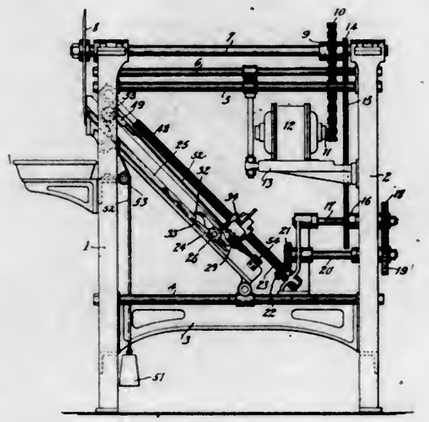
1,809,763. POURING POT NOZZLE. WILLIAM P. TARRANT, Saratoga Springs, N. Y., assignor to Tarrant Manufacturing Company, Saratoga Springs, N. Y., a Corporation of New York. Filed Jan. 29, 1930. Serial No. 424,248. 3 Claims. (Cl. 299—121.)

1. A nozzle comprising a tapered tubular sleeve having an orifice, a baffle plate secured to said sleeve, said sleeve being flattened at a point adjacent said orifice to provide a depressed bearing surface for said plate, the depression being sufficient to locate said plate flush with



the extension of the nozzle therebeyond, said nozzle having an eye adjacent the end of the nozzle opposite to the baffle plate, effective to receive a retaining means for the nozzle.

1,809,764. BIAS BACON SLICER. MAX TRUNZ, Brooklyn, N. Y. Filed Sept. 22, 1927. Serial No. 221,311. 9 Claims. (Cl. 146—113.)

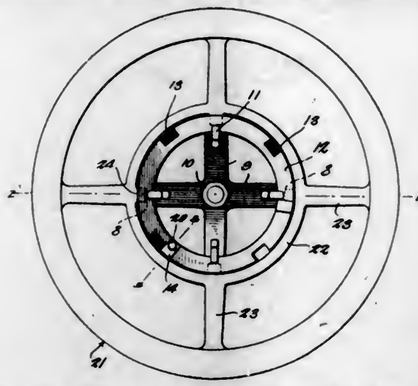


4. Apparatus for slicing bacon comprising a frame member, a rotary slicer supported by said frame member, an inclined bacon guide supported by said frame member at an acute angle to the plane of said slicer, means for advancing a strip of bacon in said guide upwardly toward said slicer; and means for simultaneously actuating said slicer and said advancing means.

1,809,765. THEFTPROOF STEERING WHEEL. ROBERT R. VAN HORN, Columbus, Ohio. Filed May 1, 1929. Serial No. 359,659. 1 Claim. (Cl. 74—33.)

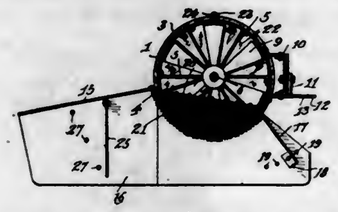
A steering wheel for motor vehicles, comprising a stationary disk-like member to be secured to the steering post of a motor vehicle, an upstanding circular central section of a diameter less than the diameter of the stationary member, providing a flange, said upstanding central section having notches, a locking ring having notches adapted to register with the notches of the central section, said locking ring being slidably mounted on the upstanding section, means for holding the locking ring against displacement on the upstanding section, a steering wheel, a central ring section forming a part of the steering wheel, lugs extending inwardly from the ring

section of the steering wheel and adapted to fit within the registering notches of the upstanding section of the



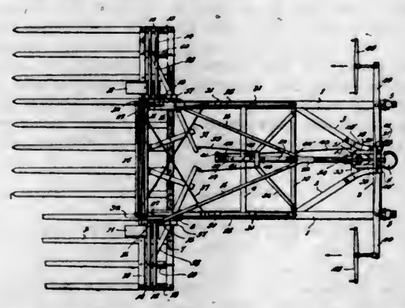
stationary member and locking ring, said locking ring adapted to move to overlie the lugs, and means for holding the locking ring against rotary movement.

1,809,766. INSECT CATCHER. GEORGE C. VAN KESSEL, Opa Locka, and MAURICE E. LINDGREN, Miami, Fla., assignors to International Insect Destroyer Manufacturing Company, a Corporation of Florida. Filed Apr. 14, 1930. Serial No. 444,231. 7 Claims. (Cl. 43—140.)



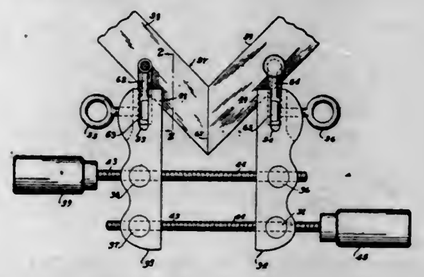
1. An insect catcher comprising, a cylindrical housing having a closed end and an open end and formed in its peripheral wall with a circumferentially extending recess in spaced relation to said open end, a rotatable shaft extending through the housing, a fan fixedly mounted on the shaft between said recess and the open end of the housing, a flexible bag secured to the open end of the housing, and a hood depending from the housing in registry with said recess.

1,809,767. SWEEP RAKE CLEARER. MANTLE VINEYARD, Milligan, Mont. Filed Dec. 17, 1928. Serial No. 326,583. 9 Claims. (Cl. 56—395.)



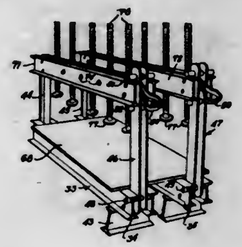
1. The combination with a sweep rake comprising a main frame, a rake head hingedly connected to the main frame and draft-applying devices mounted upon the rear end of the main frame and including a forwardly projecting connecting rod, of an ejecting gate mounted over the rake head, slide rods carrying said gate and mounted in bearings upon the main frame, a lost-motion connection between the rear ends of the slide rods and the front end of said connecting rod projecting forwardly from the draft devices, and releasable means on the main frame for positively locking the slide rods in either the forward or rearward position.

1,809,768. CLAMPING DEVICE. MAX WETZLER, New York, N. Y. Filed May 24, 1930. Serial No. 455,386. 2 Claims. (Cl. 144—300.)



1. In a clamp of the kind described the combination with a saddle body consisting of two members, said members terminating into bifurcated gripping jaws, of auxiliary clamps having screw spindles, jaws and shanks, said shanks engaging said bifurcations, swivel means for varying the distance between said first named jaws, the whole being adapted to operate as a single clamp when manipulated by the adjustable swivel means.

1,809,769. VENEER PRESS. MAX WETZLER, New York, N. Y. Filed Feb. 9, 1931. Serial No. 514,679. 4 Claims. (Cl. 144—281.)

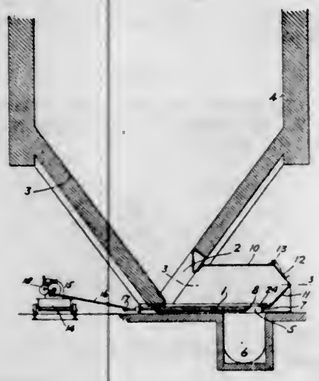


1. A press having a base, a header, a fixed end member, a pivotally disengaging end member, a connecting link, said base having within itself a track member capable of being elevated and lowered with the operation of said pivotal end member through the instrumentality of said link.

1,809,770. PROCESS OF MAKING SILVER SALT OF AMINO SULPHONATED CASTOR OIL. WALTER T. WINCKLER, Chicago, Ill., assignor to The Van Winkler Laboratories, Inc., Chicago, Ill., a Corporation of Illinois. Filed June 11, 1930. Serial No. 460,550. 2 Claims. (Cl. 260—11.)

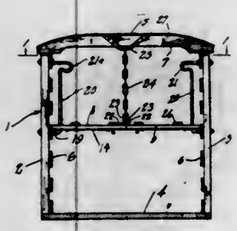
1. The process which comprises the preparation of a silver salt of amino sulphonated ricinoleic acid from the washed and dried silver salt of sulpho ricinoleic acid by the addition of ethylene diamine and the combination under pressure in an autoclave.

1,809,771. OUTLET APPARATUS FOR ASH BUNKERS. ROBERT H. BEAUMONT, Radnor, Pa., assignor to R. H. Beaumont Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 21, 1927. Serial No. 227,679. 4 Claims. (Cl. 110—165.)



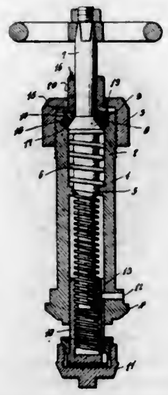
1. Outlet apparatus for ash bunkers comprising a hood open at one end for the reception of ashes and clinker and having at its other end an upwardly and outwardly inclined portion and an outwardly opening door, said hood having near the closed end a frame providing an outlet, and a plate reciprocatably mounted across said outlet at the lower portion of the hood and adapted to operate as a gate and a feeder and a clinker crusher.

1,809,772. FOLDING DECK STOCK CAR. ARTHUR R. BURKE, Rochester, Minn. Filed Feb. 25, 1928. Serial No. 256,948. 2 Claims. (Cl. 119—9.)



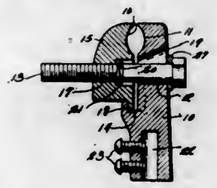
1. The combination of a car having side walls, a floor, and a top, spaced-apart supporting bars rigidly carried by the side walls, a deck comprising a pair of sections movably connected with said supporting bars, one of the sections being connected with the bars upon one side of the car and movable independently with respect to the section movably carried by the bars upon the opposite side, each of said bars being spaced away from the walls of the car and provided with a loop portion extending inwardly with respect to the car, said sections being arranged to be moved to depending positions from the lower ends of the bars or the loop portions, said sections being further arranged to be moved to inclined depending positions from the loop portions and connected together, said sections being further permitted to be placed substantially adjacent the top of the car while connected with the loop portions, and means cooperating with said bars whereby the sections may be supported in a plane parallel with the floor of the car.

1,809,773. PACKLESS VALVE. LOYD H. CAIN, Tyler, Tex. Filed June 4, 1929, Serial No. 368,368. Renewed Feb. 12, 1931. 3 Claims. (Cl. 251—47.)



1. A device of the class described comprising a tubular bonnet, a portion of the bore of which is enlarged, a valve stem therein having a conical enlargement, a bearing member for said valve stem seated in the enlarged portion of said bore and provided with a recess, a shoulder on said bearing member, means engaging said shoulder for securing the bearing member to the bonnet, and bearing material carried in the recess in the bearing member and engaged by said conical enlargement of the stem.

1,809,774. WIRE CLAMP. MANLEY R. COATES, Albany, Oreg. Filed Jan. 30, 1930. Serial No. 424,583. 2 Claims. (Cl. 173—273.)



1. A clamp of the character described comprising a fixed jaw member having a tapering slot therethrough elongated in the direction of the longitudinal axis thereof, said jaw member also having a transverse groove spaced downwardly from said slot, a movable jaw member having a threaded opening therethrough, a bolt loosely engaging said fixed jaw member in said elongated slot, said bolt threadedly engaging said movable jaw member, said movable jaw member having a downwardly extending transverse flange loosely engaging said transverse groove in said fixed jaw member, a pair of inwardly extending flanges secured to said movable jaw member and adapted to loosely engage the opposite side portions of said fixed jaw member, said bolt having an annular groove spaced intermediate the ends thereof, and a ring engaging in said annular groove whereby to prevent removal of the bolt from the fixed jaw member.

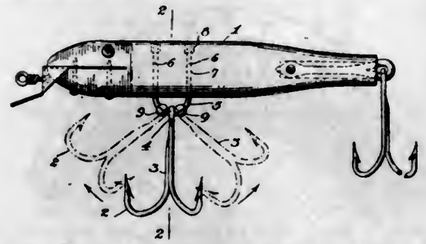
1,809,775. COMBINATION INSTRUMENT. ISAAC DAEHLIN, Freeport, Ill. Filed Jan. 2, 1929. Serial No. 329,834. 3 Claims. (Cl. 33—191.)

1. An instrument of the class described comprising a bar, a slide movable longitudinally of the bar, legs having their upper ends pivotally connected with the slide and arranged upon opposite sides of the bar, and links pivotally connecting the bar and legs, said links being pivoted to the bar on opposite sides and about a single



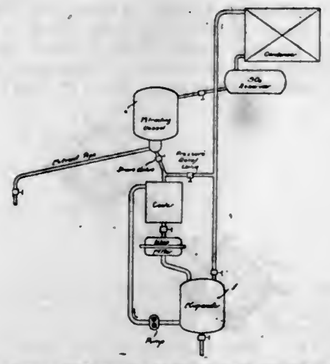
axis, said legs and links being adapted to move past each other to opposite sides of the bar to adjust the legs to measure inside or outside dimensions.

1,809,776. HOOK MOUNTING FOR LURES. SAM F. DAVENPORT, Auburn, Ind., assignor to The Creek Chub Bait Co., Garrett, Ind. Filed Mar. 12, 1930. Serial No. 435,293. 4 Claims. (Cl. 43—46.)



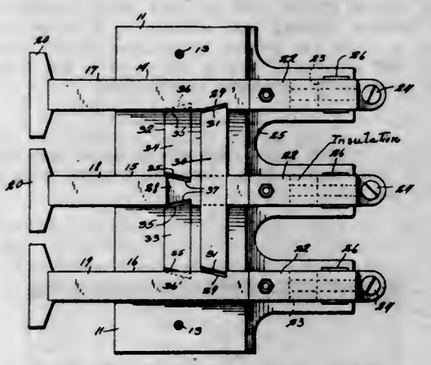
1. In a fish lure, a body portion, an integral substantially U-shaped member having its ends extending through the body portion and secured thereto with the base of the U-shaped portion extending beyond the lure body, and stops on said base for limiting the pivotal movements of a hook mounted thereon.

1,809,777. DEWAXING MINERAL OILS. LAZAR EDELEANU, Berlin-Charlottenburg, Germany, assignor to Edeleanu Gesellschaft m. b. H., Berlin, Germany. Filed Jan. 11, 1930. Serial No. 420,277. 8 Claims. (Cl. 196—19.)



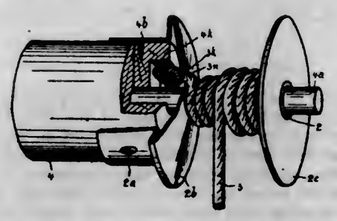
1. A process of dewaxing mineral oil by the addition of liquid SO_2 to a fraction already saturated with liquid SO_2 at the existing temperature and pressure to render the wax less soluble, followed by extreme lowering of the temperature to precipitate the wax, and thereafter removing the wax mechanically.

1,809,778. INTERLOCKING CONTROL MECHANISM. THEODORE C. EVANS, Terre Haute, Ind. Filed May 28, 1929. Serial No. 366,758. 2 Claims. (Cl. 74—83.)



1. A device of the character described including three rectilinearly movable rods, a support wherein the rods are mounted for rectilineal movement, the middle rod having a recess in one edge face and having ratchet recesses in its side faces, the lateral rods each having two ratchet recesses in the side face confronting the middle rod, a transverse bolt disposed in the recess of the middle rod, the recess being longer than the depth of the bolt and the bolt having beveled ends engageable in the corresponding ratchet recesses of the lateral rods, the middle rod having ratchet recesses in its side faces and bolts slidably mounted in said support on each side of the middle rod and having beveled ends adapted to fit into the ratchet recesses in the side faces of the lateral rods and into the ratchet recesses in the side faces of the middle rod whereby to cause the locking of the middle rod against movement when either of the lateral rods are shifted in one direction or to cause the locking of the lateral rods when the middle rod is shifted in one direction or to cause the locking of the middle and one of the lateral rods when the other lateral rod is shifted in one direction.

1,809,779. ROLLER FOR WINDOW SHADES AND WINDOW SHADE STICKS. LOUIS FROMONT, Brussels, Belgium. Filed Apr. 3, 1928, Serial No. 267,045, and in Belgium Apr. 19, 1927. 2 Claims. (Cl. 156—28.)



2. A curtain roller comprising a rod on which the curtain is to be rolled, and a reel consisting of a sleeve engaged on the end of said rod, a second sleeve smaller in diameter than said rod, and having a radial flange at its outer end, and a perforated web portion connecting said smaller sleeve with said first-mentioned sleeve and dished so as to leave a free space beyond the end of said rod wherein the knotted end of an operating cord may rest.

1,809,780. PRODUCING METALLIC ARTICLES. CHARLES L. GEBAUER, Shaker Heights, Ohio, assignor to The Ohio Instrument Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 4, 1929. Serial No. 337,532. 3 Claims. (Cl. 29—160.5.)

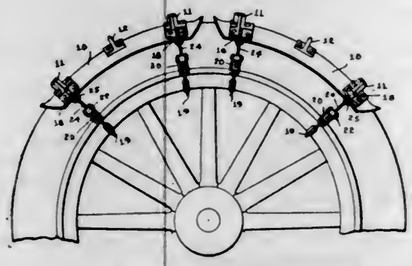
1. The process of producing a formed metallic article which consists in mixing intimately together powdered metal having a melting point about 2000° centigrade and a smaller amount of a second pulverized metal having a lower melting point, and of a nature not to dissolve in or become alloyed with the first metal; compacting said mixture, heating said mixture to a temperature which is above the critical temperature of the second metal, and afterwards forging the metal to the desired form at gradually decreasing temperatures.

1,809,781. SLIDE BOX. GERTRUDE G. GROSS, New York, N. Y. Filed Sept. 5, 1928. Serial No. 303,986. 4 Claims. (Cl. 206—16.)



1. In a device of the character described, a receptacle, a plurality of longitudinally extending dividing members therefor, a plurality of receiving grooves therein adapted to receive vertically extending slides and a longitudinally extending buffing member associated with said container.

1,809,782. TRACTION SHOE. DAVID E. HOFFMAN, Marquette, Mich., assignor to Nicholas J. Marks and George Kromidas, Marquette, Mich. Filed June 21, 1929. Serial No. 372,706. 1 Claim. (Cl. 152—14.)



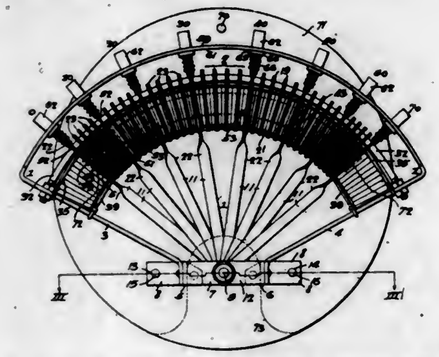
A traction shoe for a vehicle tire comprising a metal plate conforming to the curvature of the tire, said shoe having traction increasing members thereon, and means for securing said shoe to the tire, comprising hooks carried by said shoe at each side, a chain adapted to engage the rim of the wheel underneath said shoe and the ends thereof connected with said hooks, said chain comprising a U-shaped link, a swivel pin pivotally mounted in the ends of said link, said swivel pin having a central transverse threaded aperture, and a threaded pin adjustably secured in said aperture and having an eyelet for engaging a hook on said plate, said swivel pin and threaded pin constituting means for automatic angular adjustment with relation to said U-shaped link whereby said threaded pin and U-shaped link can conform generally to the curvature of the side wall of the tire.

1,809,783. INSTRUMENT CALIBRATING APPARATUS. THEODOOR DE KONING, Brooklyn, N. Y. Filed Jan. 27, 1925. Serial No. 5,174. 8 Claims. (Cl. 177—311.)



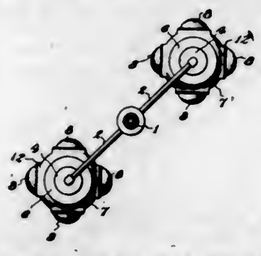
1. In an apparatus for calibrating electrical measuring instruments, the combination with an electric circuit including a standard instrument having a movable element adapted to be actuated by an energizing current, of means for moving said element to a predetermined position independent of the energization of said instrument, means for adjusting the energizing current to a value approximately equal to that required to maintain said element in said predetermined position, and means in said first-mentioned circuit for indicating when the energizing current is substantially equal to that required to maintain said movable element in said predetermined position.

1,809,784. MEANS FOR METER DIAL MARKING. TH DE KONING, Brooklyn, N. Y. Filed May 15, 1925. Serial No. 30,521. 12 Claims. (Cl. 33—174.)



5. An expansible and contractable structure including a plurality of elements having openings, and a track arranged adjacent the extremities of said elements for guiding the same during said expansion and contraction, said elements having co-axially mounted portions.

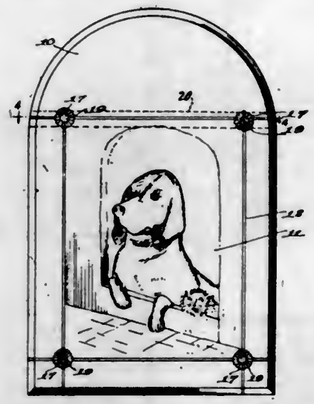
1,809,785. COMBINED LIGHT GLOBE AND TRAFFIC SIGNAL. ROLPH J. LACKNER, Ozone Park, N. Y., assignor to Lackner Products Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed April 5, 1928. Serial No. 267,620. 4 Claims. (Cl. 177—329.)



1. In a combined street light and signal, a globe of light penetrable material adapted to be connected with a light

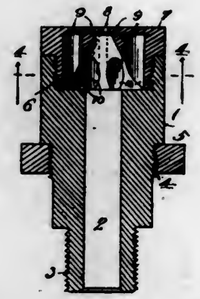
carrier in enclosing relation to a light carried thereby and having its intermediate portion formed with a hollow side extension projecting outwardly therefrom and formed with a circumferentially extending shoulder, an opening being formed in the outer end of the extension bordered by the shoulder, and a tinted lens secured against said shoulder in covering relation to the outer end of said extension and constituting an indicator.

1,809,786. PANEL MIRROR AND PICTURE MOUNTING. JAMES N. LE JEUNE, New Orleans, La. Filed July 11, 1929. Serial No. 377,501. 2 Claims. (Cl. 40—152.)



1. In a device of the class described, a mirror panel having an intermediate transparent area for the exposure to view therethrough of a picture positioned at the rear side thereof, a backing for said panel adapted to house the picture therebetween, means passing through said panel for securing said backing thereto, suspension means disposed at the rear side of said backing, and means for clamping said suspension means to the backing, said clamping means being held in place by certain of the securing means employed for securing the backing to said panel and acting as a reinforcement for the latter.

1,809,787. NOZZLE. MALCOLM WATE MCLAREN, Jackson Heights, N. Y., assignor, by mesne assignments, to Walter Kidde & Company, Inc., New York, N. Y., a Corporation of New York. Filed June 16, 1926. Serial No. 116,316. 6 Claims. (Cl. 62—121.)



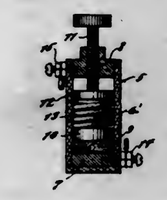
1. In a spraying nozzle, a body member having a bore therethrough, a cap for said member, having an orifice and a plurality of small openings surrounding the orifice, and means for preventing the stoppage of the orifice comprising a plurality of chambers each communicating with one of the small openings and with the bore.

1,809,788. METHOD FOR PRODUCTION OF ALCOHOLS FROM OLEFINES. SYLVAN R. MERLEY, Dover, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 26, 1926. Serial No. 97,600. 10 Claims. (Cl. 260—156.)

5. In the process of forming alcohols from olefines, the steps comprising absorbing a mixture of olefines in a mineral acid to form a mixture of esters, diluting the mixture with water to maintain the acid concentration in said mixture at substantially 15%, and hydrolyzing the resulting mixture under reflux condensing conditions at temperatures not exceeding about 90° C. for a period of approximately four hours.

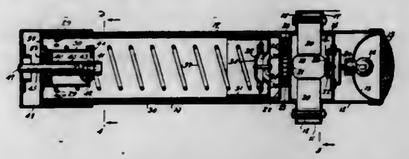
8. The process of removing polymers from a mixture of polymers and hydrolyzed alkyl esters, which comprises extracting the mixture with an alcohol having more than five carbon atoms in its molecule whereby the said polymers are dissolved in said alcohol and removed therewith from said mixture.

1,809,789. STATIC ELIMINATOR. FRED R. MONROE, HAROLD K. DOLSON, and BAYARD T. TUTTLE, Middletown, N. Y. Filed Feb. 12, 1930. Serial No. 427,669. 17 Claims. (Cl. 250—20.)



1. In combination, a radio receiving set, a speaker and electrical connections between the set and speaker, said connections having each interposed therein a static eliminator, said eliminator comprising conducting members spaced from each other, with the space therebetween containing a metallic powder with the particles forming it widely distributed throughout said space.

1,809,790. ELECTRIC LAMP. JULIO MORALES, Brooklyn, N. Y. Filed June 28, 1929. Serial No. 374,534. 5 Claims. (Cl. 240—10.5.)

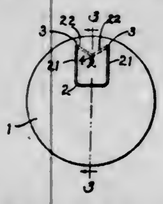


2. In a device of the character described, the combination with a lamp assembly and generator therefor, of fluid pressure energy transfer mechanism for operating said generator, a cylinder and piston for delivering fluid under pressure to said transfer mechanism, means within said cylinder for moving said piston, said means including a spring, a latch for retaining or releasing said spring, said latch being rotatable to compress said spring, and and means externally positioned on said device for controlling said latch.

1,809,791. CLOSURE FOR MILK BOTTLES AND OTHER CONTAINERS. FREDERIC K. PLYMPTON, Southport, Conn., assignor to Naomi D. Plympton, Fairfield, Conn. Filed Nov. 12, 1927. Serial No. 232,803. 5 Claims. (Cl. 215—51.)

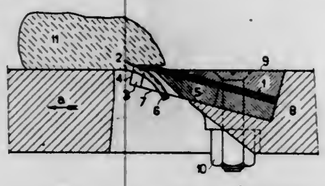
1. A closure substantially as described comprising a closure-disk having combined therewith an extractor-de-

vice normally of U-shape providing a closed bail or loop handle lying against the top face of the disk, with the legs of the device passed through the material of the disk and joined positively together at the under face of the disk



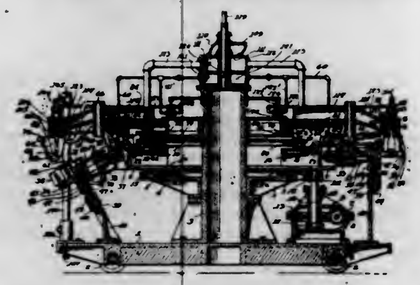
by a V-shaped bridge extending across the latter face from one leg to the other, the bridge together with the juncture of the legs being pressed into the under face of the disk.

1,809,792. DEVICE FOR CUTTING VEGETABLES. ERMIN POKORNY and JOSEF NESMĚRÁK, Prague, Czechoslovakia. Filed May 17, 1929, Serial No. 363,910, and in Czechoslovakia May 25, 1928. 2 Claims. (Cl. 146—129.)



1. In a device for cutting vegetables, a slicing blade having a sharpened forward edge, and a second blade positioned beneath and in contact with the slicing blade, said second blade having at its forward end a plurality of separable fingers the free ends of which are sharpened to provide cutting edges extending substantially at right angles to the edge of the slicing blade and having their ends adjacent the slicing blade slightly in rear of the edge of said slicing blade.

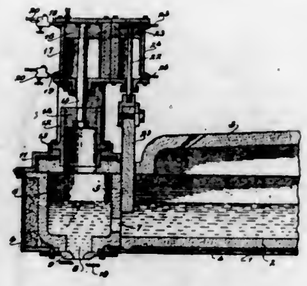
1,809,793. GLASS FORMING MACHINE. THOMAS STENHOUSE and DAVID STENHOUSE, Washington, Pa., assignors to Hazel-Atlas Glass Company, Wheeling, W. Va., a Corporation of West Virginia. Filed May 11, 1926. Serial No. 108,826. 25 Claims. (Cl. 49—5.)



1. In a glass forming machine, a continuously rotating table, a parison mold carried by the table, and a charge receiver in fixed relation with the mold, said receiver communicating with the lower end of the mold cavity and having an upwardly presented mouth.

16. In a glass forming machine, a mold, and a single means movable to position to steady an article while the mold is being opened, and being further movable in substantially the same direction and in the same plane to eject an article after the mold is opened.

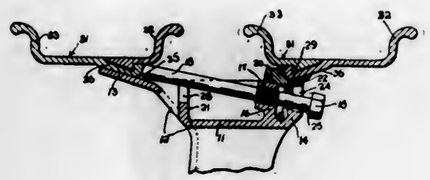
1,809,794. GLASS FEEDER. THOMAS STENHOUSE, Washington, Pa., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va., a Corporation of West Virginia. Filed July 8, 1927. Serial No. 204,233. 4 Claims. (Cl. 49—55.)



1. A glass feeder including a flow spout having a flow orifice, a pressure chamber associated with the flow orifice, an open-ended cylinder associated with and forming in effect an extension of said pressure chamber, and a piston reciprocable in said cylinder for producing variations in pressure in the pressure chamber, to alternately accelerate and retard the flow of glass through the flow orifice.

3. A timing mechanism including a rotatable shaft, cams mounted on said shaft, guideways arranged concentrically of said shaft, a valve mounted for sliding movement in each of said guideways, and means for independently adjusting each valve in its guideway.

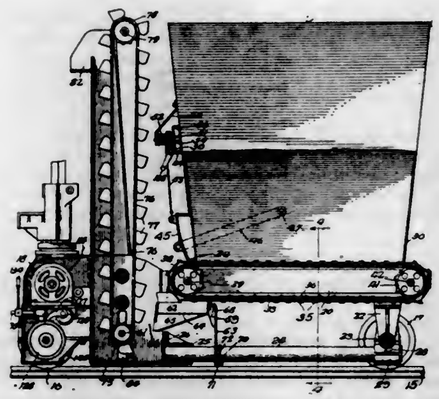
1,809,795. WHEEL STRUCTURE. HARVEY C. ARMSTRONG, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 27, 1926. Serial No. 151,106. 10 Claims. (Cl. 301—13.)



1. A wheel mounting comprising a felloe having an outwardly flared tapered portion forming an inner tire rim seat, an annular rib having a tapered outer surface and having a plurality of inclined screw-threaded apertures formed therein, a radial rib formed on the felloe and having slots cut therein and in registry with the inclined apertures, a tire rim formed with an inner circumferential tapered portion adapted to engage the rim seating surface on the felloe and means including a plurality

of bolts disposed through the inclined apertures and the slots and abutting the tapered portion of the rim to secure the rim upon the felloe.

1,809,796. SAND-HANDLING TRUCK. ELMER O. BEARDSLEY and WALTER F. PIPER, Chicago, Ill., assignors to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Original application filed Dec. 8, 1924, Serial No. 754,487. Divided and this application filed Jan. 11, 1926. Serial No. 80,447. 8 Claims. (Cl. 214—83.)



4. In foundry apparatus of the character described the combination of a wheeled truck comprising a housing extending transversely across the truck, a reservoir for containing a load of sand mounted on the truck, an elevator comprising a supporting-standard on the housing and having its lower end working in the housing, means for discharging sand in regulated quantity from the reservoir to the elevator, a motor mounted in and enclosed by the housing, said housing having chambers in its sides, gearing for driving the elevator from the motor including gears in said chambers, and removable means closing the outside of said chambers.

1,809,797. PRODUCTION OF ORGANIC ACIDS BY FERMENTATION. FRANK J. CAHN, Milwaukee, Wis. Filed Jan. 4, 1929. Serial No. 330,435. 14 Claims. (Cl. 260—120.)

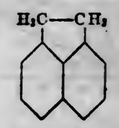
1. The method of producing organic acids by fugicidal action which comprises inoculating sections of plants containing fructose-yielding carbohydrates with a selected acid-producing fungus strain and growing said fungus thereon with exposure to the surrounding atmosphere to convert carbohydrate present to the desired acids.

1,809,798. ANTIOXIDANT OR AGE-RESISTER. ALBERT M. CLIFFORD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed Apr. 7, 1928, Serial No. 268,387. Divided and this application filed Mar. 8, 1929. Serial No. 345,607. 6 Claims. (Cl. 18—50.)

1. A method of preserving rubber which comprises incorporating therein the reaction product of beta-beta-dinaphthylamine and sulphur, said product having been formed with the elimination of hydrogen sulphide.

1,809,799. ANTIOXIDANT OR AGE-RESISTER. ALBERT M. CLIFFORD, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 16, 1930. Serial No. 421,261. 14 Claims. (Cl. 18—50.)

12. A method of preserving rubber which comprises subjecting it to vulcanization in the presence of a material having the formula

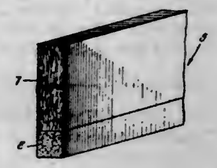


R, where R is attached to the naphthylene nucleus and is selected from the group consisting of hydrogen, —OH amino, hydrocarbon substituted amino groups naphthylamine groups, and residues obtained by condensing amino acenaphthene with an open chain aldehyde.

1,809,800. METHOD OF MAKING COMPRESSIBLE AND ELASTIC MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Dec. 21, 1925. Serial No. 76,906. 8 Claims. (Cl. 18—47.5.)

1. The herein described method of preparing preformed expansion joint material which consists in mixing a measured quantity of melted bituminous material with a measured quantity of liquid rubber, maintaining the bituminous material at a predetermined melted consistency, thereafter mixing in fibrous material in such a manner as to thoroughly incorporate the fibrous material in the mixture, and finally while the mixture is in a flowable, warm, plastic condition reducing it to form strips of expansion joint material of desired size.

1,809,801. PACKING MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed May 13, 1926. Serial No. 108,949. 11 Claims. (Cl. 154—45.5.)

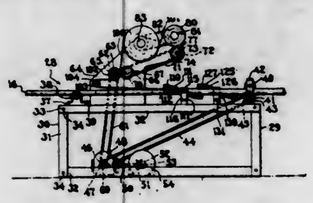


3. Packing material comprising a reenforced body of bituminous material which is compressible and expansible yet comparatively hard and tough, and an edge strip of bituminous material carried by said reenforced body, said edge strip being sufficiently hard enough to retain its preformed structure under ordinary conditions, yet being sufficiently soft and plastic to deform when subjected to pressure.

1,809,802. METHOD OF BUILDING CONDUITS. LOUIS H. GLADWIN, Akron, Ohio, and NIGEL G. BRUCE, deceased, Akron, Ohio, by Elizabeth W. Bruce, administratrix, Akron, Ohio, assignors to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 15, 1929. Serial No. 355,324. 5 Claims. (Cl. 154—8.)

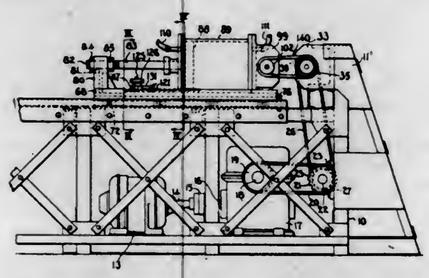
1. A method of manufacturing hose composed of rubberized material which comprises extruding a tube of rubber, disposing it on a cylindrical mandrel, successively folding a plurality of layers of rubberized fabric laterally about the mandrel during a continuous longitudinal move-

ment of the latter, spirally winding a strip of fabric about the mandrel during its aforesaid movement but subse-



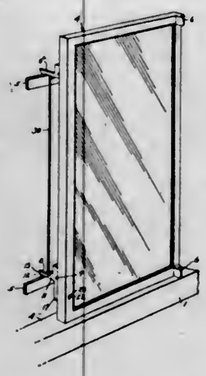
quent to the application of the rubberized fabric, vulcanizing the hose and thereafter removing the last mentioned fabric.

1,809,803. MACHINE FOR MANUFACTURING RUBBER BELTS. RAY M. JOHNSON, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 17, 1929. Serial No. 378,914. 10 Claims. (Cl. 69—1.5.)



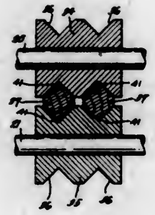
1. A machine for stretching endless belts comprising a frame, a pair of spaced relatively adjustable belt retaining rollers, a cylinder slidably mounted on the frame and secured to one of the rollers, a piston within the cylinder and having a rod projecting from one end thereof, said rod being adjustably connected to the frame, means for supplying fluid under pressure to the cylinder, and means for rotating one of the rollers.

1,809,804. LATCH OPERATING MEANS FOR DIRECTORY BOARDS, ETC. GRANVILLE S. RIDER, Flushing, N. Y., assignor to Nathan Schoenthal, New York, N. Y. Filed Feb. 7, 1930. Serial No. 426,475. 11 Claims. (Cl. 40—63.)



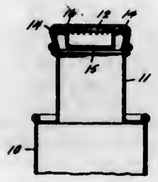
1. In a structure of the character described, a frame having an opening for an exhibition panel or the like, a panel pivotally mounted therein, a latch pivotally mounted at the inner side of the panel and cooperating with a fixed frame member, the latch having a releasing arm and the panel having therethrough an internally threaded hole, and a screw in the hole confronting the latch releasing arm for latch release by rotation of the screw.

1,809,805. DROP HAMMER. FRANK J. VLCHEK, Cleveland, Ohio, assignor to The Vlchek Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 24, 1931. Serial No. 532,395. 9 Claims. (Cl. 78—29.)



1. Actuating mechanism, as for actuating a drop-hammer hammer-head, including: a pair of cooperating roller means, and a rigid board of fibrous woody material, disposed therebetween and resiliently compressible under pressure; said roller means being forcibly engageable with said board, said board on the side toward at least one of said roller means being convex, and said roller means being cooperatingly concave, such convexity and concavity being of such sharp contour that said roller means embraces laterally to hold said board against slipping and edgewise splitting.

1,809,806. TAMPER-PROOF SEAL FOR CONTAINERS. GEORGE A. WILLIAMS, Decatur, Ill., assignor to Williams Sealing Corporation, Decatur, Ill., a Corporation of Illinois. Filed Oct. 6, 1926. Serial No. 139,824. 1 Claim. (Cl. 220—24.)



The combination with a nozzle having an inwardly rolled upper edge, of a cup-like sheet metal seal adapted to fit into the mouth of said nozzle, the upper edge of said seal flaring outwardly and contacting with the inner convex edge of said inrolled portion, and a cap having a lining contacting with said inrolled edge portion of the nozzle and outwardly flaring edge of the seal.

1,809,807. PROCESS FOR THE PRELIMINARY TREATMENT OF RAW SUGAR, AFTER PRODUCTS OR THE LIKE BEFORE REFINING. JULIEN BERGÉ, Tirlemont, Belgium, assignor to Raffinerie Tirlemontoise Société Anonyme, Tirlemont, Belgium, a Corporation. Filed Feb. 11, 1927, Serial No. 167,597, and in Germany Aug. 26, 1926. 4 Claims. (Cl. 127—61.)

1. The process of reducing the sugar content of syrup adhering to sugar crystals in raw sugars, and after-products, comprising placing the said sugar in a storage chamber, and regulating the temperature and moisture content of the air in said chamber to reduce the sugar content of the syrup by crystallization, and then freeing the sugar from the largest portion of the adhering syrup in a centrifuge exerting a particularly high centrifugal force.

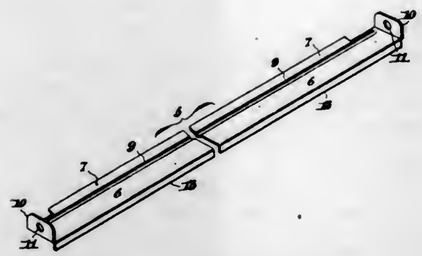
1,809,808. PROCESS FOR DESUGARING SYRUPS AND MOLASSES. JULIEN BERGÉ, Tirlemont, Belgium, assignor to Raffinerie Tirlemontoise Société Anonyme, Tirlemont, Belgium, a Corporation. Filed Feb. 6, 1928, Serial No. 252,417, and in Germany Jan. 26, 1927. 10 Claims. (Cl. 127—60.)

1. A method of desugaring sugar solutions comprising covering the surfaces of sugar crystals with thin layers of the solution, the quantity of crystals being sufficient to make the mass of a consistency similar to raw sugar, and aiding the desugaring of the solution by cooling and by evaporation.

1,809,809. PROCESS OF DESUGARING SYRUPS AND MOLASSES. JULIEN BERGÉ, Tirlemont, Belgium, assignor to Raffinerie Tirlemontoise Société Anonyme, Tirlemont, Belgium, a Corporation. Original application filed Feb. 6, 1928, Serial No. 252,417, and in Germany Jan. 26, 1927. Divided and this application filed Aug. 21, 1929. Serial No. 387,552. 10 Claims. (Cl. 127—60.)

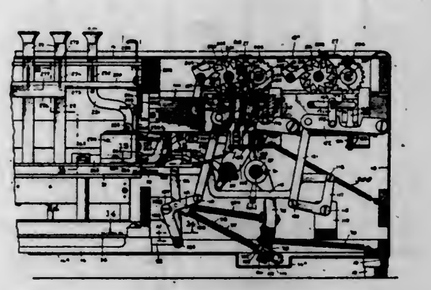
1. A method for crystallizing sugar from solutions, comprising admixing sugar crystals with massecuite to form a mass having a relatively large quantity of sugar crystals comprising about 85% of the mass and a relatively small quantity of syrup comprising about 15% of the mass so that the syrup is widely distributed over the surfaces of the sugar crystals and substantially all of the syrup is brought into close and intimate contact with the sugar crystals, and then cooling the mass.

1,809,810. STATIONARY KNIFE FOR LAWN MOWERS. HARRY T. COLDWELL, Philadelphia, Pa., assignor to Philadelphia Lawn Mower Company Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 7, 1929. Serial No. 330,777. 7 Claims. (Cl. 56—294.)



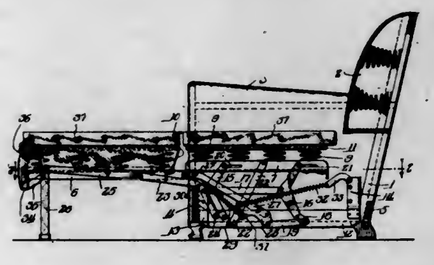
1. A stationary knife for lawn mowers integrally formed from sheet metal with a cutting edge and pivot sections at opposite ends, and a co-extensive longitudinal stiffening adjacent its cutting edge.

1,809,811. CALCULATING MACHINE. MICHELE GUGLIELMO DE SIMONE, Stapleton, N. Y., assignor to George B. Agnew, New York, N. Y. Filed May 26, 1925. Serial No. 32,892. 13 Claims. (Cl. 235—60.)



7. In a machine of the character described, the combination with a keyboard, of a bar corresponding to a monetary value, a counter, a shaft, and means operated by said shaft and controlled by said bar for operating said counter in correspondence to the numerical value of the operated key of said keyboard, said counter-operating means including a variable rack member having spring urged movable teeth elements, stop means co-acting with said spring urged movable teeth elements, and means connecting said bar with said movable teeth elements for moving said movable teeth elements into and out of operative position relative to said counter.

1,809,812. DAVENPORT BED. MARTIN FOX, Chicago, Ill., assignor to The Seng Company, a Corporation of Illinois. Filed Mar. 31, 1926. Serial No. 98,709. 5 Claims. (Cl. 5—22.)

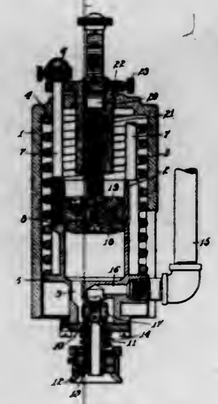


3. In a davenport bed, a pair of coil spring supporting frames, a support at each end of the frames, means for mounting the uppermost frame to swing outwardly in front of the support, means for mounting the lowermost frame to swing upwardly in the support, a connection between the mounting means of the frames for causing the lower frame to move upwardly when the upper frame is swung in front of the lower frame, and controlling means pivoted to the support and to the end of the lower frame for producing a forward movement of the frame with respect to the support when the frame is raised.

1,809,813. SIRUP VALVE FOR BOTTLE FILLERS. JAMES KANTOR, Chicago, Ill., assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 29, 1929. Serial No. 381,927. 6 Claims. (Cl. 226—103.)

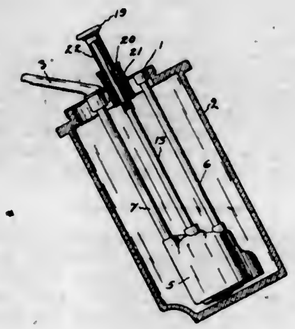
1. In a sirup dispenser for bottle filling machines, the combination with a reciprocating cylinder, of a sirup

receptacle mounted therein, movable with and relatively to said cylinder, a filler spout carried by said receptacle and having a limited movement relative thereto, a valve operated by said spout for controlling the delivery of sirup



to and from said receptacle, a plunger operating in said receptacle and having a stem, and a nut in which said stem is adjustably mounted, said nut being movable in one direction with respect to said cylinder by gravity and in the other direction by said cylinder.

1,809,814. LIQUID DISPENSING PUMP. THEODORE H. SCHUTT, Cleveland, Ohio. Filed Apr. 19, 1929. Serial No. 356,524. 9 Claims. (Cl. 225—35.)



5. In a syrup pump, a head, a casing supported below said head and having a cylinder closed at its ends, a discharge passage adjacent a side of said cylinder and opening thereinto at the lower end thereof, and an inlet passage adjacent a side of said cylinder, said inlet passage extending from adjacent the bottom of the casing and opening into said cylinder at the upper end thereof, a piston in said cylinder, and means for actuating said piston.

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Labels	30—No.	39,292 to No.	39,321, inclusive.
Prints	14—No.	13,233 to No.	13,246, inclusive.
Reissues	10—No.	18,097 to No.	18,106, inclusive.
Designs	63—No.	84,389 to No	84,451, inclusive.
Patents	1075—No.	1,809,815 to No.	1,810,889, inclusive.
Total	1,403		

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,581,902, J. G. E. Wright, Resinous condensation products, decided April 7, 1931, claim 3.

Pat. 1,650,150, I. I. Nelson, Relief valve, decided May 25, 1931, claim 2.

Pat. 1,653,065, F. N. Ross, Button attaching machine, decided April 25, 1931, claims 20 and 21.

Pat. 1,692,762, C. W. Peterson, Loud speaker, decided April 2, 1931, claim 3.

Pat. 1,720,908, Daniel Kondakjian, decided May 26, 1931, claims 1, 2, 3, 4, 6, 7, 8, 10, 11, 12, 13, and 14.

Pat. 1,738,575, F. E. Greswold, Radio speaker diaphragm, decided May 27, 1931, claims 10 and 11.

Pat. 1,747,465, Wm. Cameron, Combined forming and thread rolling mechanism for caps, decided May 28, 1931, claims 1 and 2.

Pat. 1,773,330, I. A. Weaver, Vehicle lifting appliance, decided May 26, 1931, claims 1 and 2.

Adjudicated Patents

(C. C. A. Wash.) Claude patent, No. 1,125,476, for system of illuminating by luminescent tubes, *Held* valid and infringed. *Claude Neon Electrical Products* v. *Brilliant Tube Sign Co.*, 48 F.(2d) 176.

(D. C. Pa.) Schweyer patent, No. 1,279,454, for train-stopping apparatus, claims 3, 23, 26, 27, and 32 *Held* valid, but not infringed. *Schweyer Electric & Mfg. Co.* v. *Reading Co.*, 48 F.(2d) 274.

(D. C. Pa.) Schweyer patent, No. 1,389,602 for train-control system, claim 5 *Held* valid but not infringed. *Id.*

(C. C. A. Cal.) Young patent, No. 1,586,277 for tearing-strip can, claims 1, 2, 3, and 5 *Held* not infringed. *American Can Co.* v. *M. J. B. Co.*, 48 F.(2d) 144.

(D. C. N. Y.) Leoni patent, No. 1,634,032 for necktie and lining therefor, claims 1 and 2 *Held* not infringed. *Franc-Strohmenger & Cowan* v. *Flex Thread Corporation*, 48 F.(2d) 261.

(D. C. N. Y.) Jones patent, No. 1,658,804 for capacitive-coupling control system, *Held* invalid. *Jones* v. *Freed-Eisemann Radio Corporation*, 48 F.(2d) 300 and *Jones* v. *Walthal Electric Co.*, 48 F.(2d) 310.

(D. C. N. Y.) Jones patent, No. 1,658,805, for capacitive-coupling control system, *Held* invalid. *Id.*

(D. C. N. Y.) Ullrich patent, No. 1,699,459 for sprinkling can, *Held* invalid. *Republic Metalware Co.* v. *Weed & Co.*, 48 F.(2d) 360.

(D. C. N. J.) Steinwand patent, No. 1,721,929 for process for peeling fruits, *Held* invalid. *Rubyette Co.* v. *Vineland Products Co.*, 48 F.(2d) 288.

(C. C. A. Mich.) Smith Reissue patent, No. 16,817 for reaming and counterboring tool, claims 1–3, 5, 7–9 *Held* invalid, and claims 4 and 6 *Held* valid and infringed. *Gairing Tool Co.* v. *Eclipse Interchangeable Counterbore Co.*, 48 F.(2d) 73.

Condition of Applications Under Examination at Close of Business May 29, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 94,189; Trade-Mark Division, 1,210. Oldest new case, Sept. 9, 1930; oldest amended, Sept. 9, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders: Handling and Hoist Line Implements.	Dec. 22	†Jan. 6	751
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Dec. 4	Dec. 4	1,408
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Dec. 18	†Mar. 17	907
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Dec. 1	Dec. 10	828
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 2	Dec. 3	810
318	6. LEWERS, A. M., Carbon Chemistry	Nov. 1	Nov. 5	2,089
106	7. JARBOE, C. G., Optics; Photography	Oct. 27	Oct. 27	2,053
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Nov. 7	Nov. 12	1,580
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Dec. 2	Dec. 1	1,417
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Dec. 4	Dec. 24	1,008
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Dec. 31	†Jan. 9	802
380	12. HENRY, C. C., Machine Elements	Oct. 6	Nov. 17	1,361
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Dec. 11	Dec. 11	1,136
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Dec. 1	Dec. 1	1,204
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 1	Nov. 1	2,528
242*	16. SPENCER, C. J., Telegraphy; Telephony	†Jan. 28	†Feb. 11	856
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Oct. 9	Oct. 9	1,535
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 4	Dec. 2	1,169
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Oct. 7	Oct. 11	2,064
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Dec. 5	Dec. 8	968
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Dec. 2	†Jan. 2	971
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Dec. 18	†Jan. 5	846
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 9	Oct. 2	1,067
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Nov. 10	Nov. 12	934
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 18	Nov. 17	1,513
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Dec. 9	Dec. 16	969
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Dec. 1	Dec. 1	1,173
225	28. BENSON, A. R., Internal-Combustion Engines	Nov. 10	Nov. 10	1,764
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Dec. 10	Dec. 16	567
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	Dec. 17	†Mar. 4	920
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Sept. 9	Sept. 9	2,591
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 2	†Jan. 7	1,356
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Dec. 1	Dec. 1	2,573
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Feb. 2	†Feb. 2	810
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Mar. 12	†Mar. 2	957
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Oct. 11	Oct. 9	2,288
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Nov. 4	Nov. 12	1,592
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Feb. 16	†Jan. 31	561
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Dec. 1	Dec. 1	1,665
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Oct. 22	Nov. 27	2,981
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Dec. 10	Dec. 4	795
223*	42. CUTTING, H. O., Electric Signaling	Nov. 6	Nov. 3	1,419
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 16	Dec. 16	1,620
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 2	Oct. 2	2,245
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Oct. 18	Oct. 20	2,254
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Dec. 5	Dec. 5	1,165
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Dec. 1	Dec. 1	2,194
212*	48. ROEPKE, O. B., Electricity, General Applications	Nov. 6	Nov. 10	1,198
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Dec. 30	†Jan. 8	1,234
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 9	Oct. 9	2,537
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Oct. 1	Oct. 1	2,182
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Dec. 23	Dec. 25	1,577
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 4	†Feb. 2	972
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Oct. 1	Oct. 1	2,671
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery {Designs	†Apr. 20 †May 7	†Apr. 16 †May 16	192 331
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Oct. 18	Oct. 18	1,898
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 3	Dec. 2	800
270*	58. DOWELL, E. F., Abrading; Typewriting	Oct. 18	Oct. 18	1,493
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Dec. 9	Dec. 11	1,694
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Oct. 6	Oct. 6	2,039
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 2	Oct. 2	2,132
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Oct. 1	Oct. 1	2,539
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Oct. 2	Oct. 2	2,416
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND, {Trade-Marks {Labels and Prints	†May 2 †May 2	†May 16 †May 18	1,067 143

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

McFarland *v.* Bender

No. 2,568. Decided February 11, 1931

Trade-Marks—Interference—Use of Mark by Third Party—Abandonment.

Evidence reviewed and *Held* insufficient to establish that the use of the trade-mark which had been registered to a third party and assigned to another had been abandoned prior to the adoption and use by the parties to the interference and *Held* further that, under these circumstances, neither party to the interference is entitled to registration of the mark.

Appeal from the Patent Office. Affirmed.

Mr. Bernard F. Garvey and *Mr. Irving L. McCathran* for McFarland.

Mr. James M. Spear and *Mr. Ellis S. Middleton* for Bender.

Hatfield, *J.:*

This is an appeal in a trade-mark interference proceeding from the decision of the Commissioner of Patents holding that neither of the involved parties was entitled to register the trade-mark "Red Caps" for use on certain medicinal preparations.

In his application filed June 5, 1925, appellant alleged that he had used the trade-mark on his goods continuously since July 1, 1921.

Appellee, in his application filed October 26, 1925, alleged that he had used the trade-mark on his goods continuously since October 7, 1925.

Appellant submitted no evidence and is restricted, therefore, to his filing date.

Appellee submitted evidence for the purpose of establishing continuous use of the trade-mark since long prior to appellant's filing date—June 5, 1925.

The Examiner of Interferences held that the evidence was sufficient to establish that appellee had used the trade-mark in question continuously for many years prior to, and since, appellant's filing date; and that, as he was the first to adopt and use the mark, he was entitled to register the same.

In his decision rendered February 6, 1929, the Commissioner of Patents held that the evidence submitted by appellee was not sufficiently clear and convincing to show that he had adopted and used the trade-mark prior to October 7, 1925. He further held that, as the record disclosed that the trade-mark in issue was registered by one Flora Ely Schmauser on April 23, 1907—No. 62,211—for use on an alleged "cold cure" and, as it appeared from the assignment records in the Patent Office that the registrant's title to, and interest in, the mark had been assigned to R. A. Gamble and William E. Armstrong on May 26, 1910, the title and the right to use the trade-mark were vested in the assignees of record when each of the parties adopted and first used the mark; and that, therefore, neither could claim priority. In this connection, he said:

> It appears, therefore, that when the parties to this interference adopted and appropriated the said mark, they were trespassers and neither could claim priority on the abandonment of the mark by the legal owners thereof, assuming the mark to have been abandoned by said owners. As was stated by the Court of Appeals, D. C., in *Justin Seubert, Incorporated, v. A. Santaella & Co.* (166 O. G. 987, 36 App. D. C. 447, 1911 C. D. 341):
>
> "If two or more persons are using the mark at the time of abandonment, with or without knowledge of its prior use, neither would be prior to the other in point of time, since no one could in any event date priority of use beyond the time when the prior owner surrendered title by the act of abandonment."

Thereafter, on February 26, 1929, counsel for appellant, McFarland, formally notified the Commissioner of Patents that a letter had been received from the registrant, Flora Ely Schmauser, stating that she had not used the registered mark since 1909; that the assignment of her title and right to use the mark was invalid; and that, therefore, registration No. 62,211 ought not to be considered as a bar to the registration of the mark by appellant. It was also stated, by counsel for appellant, that, if the showing made by counsel was deemed by the Commissioner of Patents to be insufficient, appellant should be given an opportunity to submit further evidence.

The letter from the registrant, Flora Ely Schmauser, referred to by counsel, reads as follows:

2/18/29.

Mr. B. F. Garvey,
Washington, D. C.

Dear Sir:

Your letter of inquiry was forwarded to me in reply will say I have not used the word "Red Caps" in years. Since 1909 and probably a year or two before that date. As for Dr. Gamble and Armstrong I cannot say. Hope this will be of some assistance to you.

I am, very truly,

MRS. FLORA SCHMAUSER.
202 Market Ave. So., Canton, Ohio.

Thereupon, on March 2, 1929, the Commissioner of Patents set aside his former decision and granted the parties to the interference a period of forty days within which evidence of abandonment of said registered mark might be submitted.

On April 12, 1929, counsel for appellant filed an affidavit of the registrant, Flora E. Schmauser, and the cause was again submitted to the Commissioner. The pertinent part of the affidavit reads as follows:

> Flora E. Schmauser, of 202 Market Avenue, South, Canton, Ohio, being duly sworn, deposes and says that she is the registrant of trade-mark registration No. 62,211, on trade-mark "Red-Caps" registered April 23rd, 1907; that use of this trade-mark was voluntarily abandoned by her in or about the year 1909 and has never been used by her since that date; that she is not aware that the mark has been used by others subsequent to her abandonment of the same; and that she has no interest whatsoever in the controversy now pending in the U. S. Patent Office, captioned Trade-Mark Interference No. 1112, Eugene J. Murphy Company v. Walter C. Bender v. Chas. A. McFarland; and that she is not acquainted with any of the parties thereto.
>
> FLORA E. SCHMAUSER.

Thereafter, on April 23, 1929, the Commissioner reconsidered the evidence in the case and held that the testimony submitted originally by appellee was sufficient to establish adoption and use of the involved trade-mark for medicinal preparations prior to appellant's filing date. He held, however, that the evidence was not sufficient to establish that the

registrant, Flora Ely Schmauser, had abandoned the use of the trade-mark prior to the date of her assignment of her title and right to use the same to Gamble and Armstrong; that the registration of the mark and the assignment thereof by the registrant was prima facie evidence of ownership by the assignees, Gamble and Armstrong; and that, as it appeared that each of the parties to the interference had attempted to adopt, appropriate, and use the mark on goods of the same descriptive properties during its ownership by Gamble and Armstrong, neither of them was entitled to register it.

Counsel for each of the parties are here contending that the letter and affidavit of the registrant, Flora Ely Schmauser, are sufficient to establish that she had voluntarily abandoned the trade-mark prior to her assignment of the same to her assignees; that the assignment by the registrant was invalid; and that, therefore, neither the registration nor the assignment thereof by the registrant is a legal bar to the registration of the mark. Accordingly, it is agreed by counsel for the involved parties that the question of priority is the only issue that this court need consider.

It is conceded by counsel for the parties that, if the evidence in the record is insufficient to establish that the registrant, Flora Ely Schmauser, voluntarily abandoned her registered trade-mark prior to her assignment of the same to her assignees, Gamble and Armstrong, neither of the parties is entitled to have the mark registered.

It appears from the record that the attention of counsel for the parties was directed to registration No. 62,211 several years before the Commissioner rendered his original decision; that, at the request of counsel for appellant, the Commissioner set aside his original decision and granted the parties a period of forty days in which to establish that the registrant had voluntarily abandoned the involved trade-mark prior to her assignment of the same; that the only evidence submitted by counsel consists of a letter from the registrant in which she said that she had not used the trade-mark "since 1909, and probably a year or two before that date. As for Dr. Gamble and Armstrong, I cannot say," and an affidavit signed by the registrant in which it was stated "that use of this trade-mark was voluntarily abandoned by her in or about the year 1909, and has never been used by her since that time; and that she is not aware that the mark has been used by others subsequent to her abandonment of the same."

We are of opinion that the statement contained in the registrant's letter and affidavit are not sufficient to establish that she abandoned the registered trade-mark prior to her assignment of the same. It is true that she said she had voluntarily abandoned it about the year 1909. However, it appears that, for a valuable consideration she assigned her right and title to the same on May 26, 1910. This circumstance is not explained by the registrant, nor did she refer to it in either her letter or her affidavit of record, although counsel for the parties knew, or should have known, that her assignment was a vital factor in the case. If the registrant had ceased to use the mark and had abandoned it in 1909, but, nevertheless, had assigned it, or attempted to assign it, in May, 1910, those facts should have clearly appeared from the evidence. What counsel asks this court to infer, they should have proved.

The registration of a trade-mark is prima facie evidence of ownership, and abandonment ought not to be presumed.

We do not mean to be understood as holding that abandonment of a registered trade-mark may properly be raised in a proceeding of this character. Due to our views of the evidence, it is unnecessary to decide this question.

In view of the fact that the registrant's assignees, R. A. Gamble and William E. Armstrong, were presumptively, at least, the owners of the involved trade-mark when each of the parties attempted to adopt and use it, we are unable to hold that either is prior to the other in its adoption and use, since neither could establish adoption and the right to use it during its ownership by the registrant's assignees. *Seubert* v. *Santaella & Company*, 36 App. D. C. 447, 166 O. G. 987.

For the reasons stated, the decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

UNITED STATES GYPSUM CO. *v.* PLASTOID PRODUCTS, INC.

No. 2,603. Decided February 11, 1931

1. TRADE-MARKS — OPPOSITION — ALLEGED FALSE REPRESENTATION.

Where it was alleged that the opposer, in filing a registration for trade-mark registration, had been guilty of a materially false representation because the labels filed had been used on samples and not on goods sold in interstate commerce, *Held* that the record does not clearly show that the labels were not precisely in the form of the trade-mark actually used and there is no indication from the evidence that the opposer misrepresented or had any intention of misrepresenting the fact.

2. SAME—SIMILARITY—"ROCKLATH" AND "LOCKLATH".

The term "Rocklath" as applied to wall board *Held* confusingly similar to the term "Locklath" previously used by another on the same goods.

APPEAL from the Patent Office. Affirmed.

Mr. Arthur A. Olson and *Mr. A. Arnold Brand* for United States Gypsum Co.

Mr. Albert J. Fihe for Plastoid Products, Inc.

HATFIELD, *J.:*

This is an appeal in a trade-mark opposition proceeding from the decision of the Commissioner of Patents affirming the decision of the Examiner of Interferences sustaining the opposition to the registration by appellant of the trade-mark "Rocklath" for use on plaster boards and plaster wall boards.

In its application, filed October 16, 1925, appellant alleged that it had used its trade-mark on its goods since June 1, 1925.

In its notice of opposition, filed December 22, 1925, appellee alleged that it had used the trade-mark "Locklath" on plaster boards and plaster wall boards since July 1, 1919; that the goods of the parties possessed the same descriptive properties and were sold to the same trade; that the marks were confusingly similar; and that appellee would be damaged by the registration of appellant's mark.

It was stipulated by the parties on the trial below that appellant had used its trade-mark on its goods since, but not earlier than, June, 1925. Accordingly, it was incumbent upon appellee to establish adoption and continuous use of the trade-mark "Locklath" on its goods prior to June, 1925.

Each of the tribunals of the Patent Office discussed the evidence somewhat in detail, and each held that appellee had used the trade-mark "Locklath" on its goods for many years prior to June, 1925; that the goods of the parties possessed the same descriptive properties; that appellant's mark "Rocklath" closely simulated appellee's mark "Locklath"; that the registration of appellant's mark would be likely to cause confusion or mistake in the mind of the public and deceive purchasers; and that appellant was not entitled to have its mark registered.

[1] Although counsel for appellant has advanced in this court many reasons why, in his opinion, the decision of the Commissioner should be reversed, his main contention is that, when appellee filed an application for registration of its mark "Locklath" on June 10, 1926, it forwarded with its application a label which had been used on samples, but not on goods sold in interstate commerce; and that appellee was guilty of a material false representation in the filing of its application, and, therefore, is not in a position to urge its opposition to the registration by appellant of its trade-mark.

This matter was presented on the hearing before the Examiner of Interferences, and again on a motion for a rehearing. The same question was presented to the Commissioner of Patents on both the hearing and an application for a rehearing.

If the label filed with appellant's application was not precisely in the form of the trade-mark actually used by appellant, that fact does not clearly appear from the record. In any event, there is no indication from the evidence that appellee misrepresented or had any intention of misrepresenting the facts.

Counsel for appellant has cited, in support of his argument, several cases holding in substance that, in order to establish his right to protection in a trade-mark opposition proceeding, the opposer must come into court with clean hands.

In view of our conclusions hereinbefore stated, it is unnecessary to discuss these cases.

[2] We are of opinion that appellee has established that it used its trade-mark "Locklath" continuously since long prior to the adoption and use by appellant of the mark "Rocklath"; that the goods of the parties possess the same descriptive properties; that the marks are confusingly similar; and that appellee would be damaged by the registration of appellant's alleged trade-mark.

Accordingly, the decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

CELANESE CORPORATION OF AMERICA *v.* VANITY FAIR SILK MILLS

No. 2,611. Decided February 11, 1931

TRADE-MARKS — SIMILARITY — "SILKENESE" AND "CELANESE."

The term "Silkenese" as applied to knitted and textile underwear *Held* confusingly similar to the term "Celanese" as applied to the same general class of goods.

APPEAL from the Patent Office. Reversed.

Messrs. Baldwin & Wight, Mr. Frank A. Bower, Mr. Isadore Seltzer, and *Mr. Chas. W. Levinson* for Celanese Corporation of America.

Messrs. Mason, Fenwick & Lawrence, Mr. Edward T. Fenwick, Mr. Edward G. Fenwick, and *Mr. Charles R. Fenwick* for Vanity Fair Silk Mills.

HATFIELD, *J.:*

This is an appeal in a trade-mark opposition proceeding from the decision of the Commissioner of Patents dismissing the opposition of appellant and holding that appellee was entitled to the registration of the mark "Silkenese" for use on knitted and textile underwear, consisting of vests, bloomers, knickerbockers, drawers, union suits, chemises, envelope chemises, corset covers, nightgowns, bathing suits, pajamas, pettibockers, step-in drawers, princess slips, bandeaux, bandeau chemises, and men's silk underwear.

In its application for registration, filed May 21, 1927, appellee alleged that it had used the trade-mark "Silkenese" since May 14, 1927.

In its notice of opposition, appellant alleged that it was the owner of the trade-mark "Celanese" for use on threads, yarns, fabrics, and garments; that it had continuously used said trade-mark on its goods since long prior to the first use by appellee of the trade-mark "Silkenese"; that it had expended large sums of money in advertising its trade-mark throughout the United States; that it has maintained the highest standards in the manufacture of its goods; that it has built up and is maintaining a large and valuable business throughout the United States in the manufacture and sale of its goods under the trade-mark "Celanese"; that the goods of the parties possess the same descriptive properties; and that the mark "Silkenese" sought to be registered by appellee is confusingly similar to appellant's trade-mark "Celanese".

Appellant pleaded ownership of the following trade-mark registrations: No. 178,422, January 8, 1924, of the trade-mark "Celanese" for use on "threads made wholly or principally from cellulose derivatives;" No. 179,796, February 19, 1924, for the trade-mark "Celanese" for use on "fabrics made wholly or principally from cellulose derivatives;" No. 186,516, July 22, 1924, for the trade-mark "Celanese" for use on 'ladies' knitted underwear—namely, knickers, and vests;" No. 191,844, November 18, 1924, for the trade-mark "Celanese" in combination with the word "Brand" for use on "women's and children's outerwear—namely, dresses, sweaters, jumpers, suits, gowns, and coats;" No. 207,622, Jan-

uary 5, 1926, for the trade-mark "Celanese" for use on "men's half hose;" No. 225,285, March 15, 1927, for the trade-mark "Celanese-Locknit" for use on "knitted, netted, and textile fabrics made wholly or partially of cellulose derivatives;" No. 226,304, April 5, 1927, of the trade-mark "Celanese" for use on "pyjamas, negligee shirts, undershirts of knitted fabric and textile fabric, collars, neckties, scrafs, mufflers, fabric gloves, cut-out linings for men's and women's coats and suits; men's underwear of knitted fabric and textile fabric; women's and children's hosiery;" No. 229,356, June 28, 1927, for the trade-mark "Celanese Ninon" for use on "woven, knitted, netted, and textile fabrics, in the piece, made wholly or partially of cellulose derivatives."

In its answer, appellee denied the material allegations contained in the notice of opposition and alleged that the opposer, appellant, was neither the originator nor the first to use a trade-mark which contained the "prefix the syllable or the letters 'Cela'" or the "suffix, syllable, or letters 'nese'" in a trade-mark for use on goods possessing the same descriptive properties as those upon which appellant used the trade-mark "Celanese".

Testimony was submitted by each of the parties.

It appears from the evidence submitted by appellee that it has been engaged in the manufacture and sale of garments and piece goods composed of silk for many years prior to March, 1927, and that its goods were sold under the trade-marks "Vanity Fair" and "Vanitysilk"; that, in March, 1927, appellee added to its line of silk goods certain articles and fabrics composed of "Japan silk and Bemberg synthetic yarn," on which it decided to use the trade-mark "Silkenese"; that it expended approximately $15,000 in advertising its so-called artificial-silk goods and the trade-mark "Silkenese". It also appears that appellant's celanese yarn was known to appellee as an artificial-silk product. The witnesses for appellee admitted that the trade-mark "Silkenese" was never used on appellee's piece goods.

It appears from the evidence offered by appellant that it expended from $200,000 to $300,000 in advertising its trade-mark "Celanese" and its so-called celanese products; that it used its trade-mark "Celanese" on yarns, piece goods, and on the various garments referred to in registrations Nos. 186,516, issued July 22, 1924, 191,844, issued November 18, 1924, and 207,622, issued January 5, 1926, long prior to the use by appellee of its mark "Silkenese" on its products. Appellant also introduced considerable testimony tending to establish that confusion already existed in the trade as to the goods bearing the marks "Silkenese" and "Celanese".

The Examiner of Interferences held that the goods of the respective parties possessed the same descriptive properties; that appellant had used its trade-mark "Celanese" long prior to the use by appellee of its trade-mark "Silkenese"; that the trade-mark "Silkenese" so closely simulated the trade-mark "Celanese" as to be likely to cause confusion in the mind of the public and, accordingly, sustained the opposition.

The Commissioner of Patents held that appellant had used its trade-mark "Celanese" on yarn, piece goods, and garments long prior to the use by appellee of the trade-mark "Silkenese"; that appellant had a very extensive business; and that its trade-mark was a valuable asset. He then said:

> Since the goods are deemed to possess the same descriptive properties and since it is regarded as established that the opposer was first in the field with its mark upon its goods, the decision in this case turns upon the question of similarity of the marks. * * * The only similarity to the applicant's mark resides in the suffix "nese" or "ese". This suffix has a definite meaning in our language when used in connection with certain words as signifying of or pertaining to. In the words Chinese, Japanese, Javanese, etc., this suffix indicates the people of such countries or goods or customs of the respective countries. The word "silken" of the applicant's mark is an ordinary descriptive word indicating a quality or the nature of the fabric or the goods. There is nothing similar in appearance, significance, or meaning between "celan" and "silken" and there is only a remote similarity in sound. The similarity between the two notations is regarded as residing substantially entirely in the suffix "nese" or "ese". If the opposer were the first to adopt upon goods of this character a notation ending in these letters, its claim for the broad protection it seeks might be more favorably considered. The applicant has, however, established that trade marks having these same letters as suffixes have been used and are still used upon goods of this same general character from a date long prior to the earliest date opposer entered the field.
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> Registration No. 135,857, issued Oct. 19, 1920, is for the notation "Pominese" used upon woolen goods in the piece. Trade mark No. 174,132, registered Oct. 2, 1923, is for the notation "Bernese Swiss" used upon cotton goods in the piece. There is testimony of Charles Twining that this last named mark is still in use. There is also testimony showing the mark "Pominese" has been used in the trade. The testimony of H. L. Hoff and H. B. Snader is to the effect that the notation or trade name "Milanese" has been quite widely used in connection with silk fabrics. In view of these established facts as to prior adoption and use of marks upon this class of goods, which marks have the same suffix which constitutes the only similar portion of the two marks here under review, *it is deemed the opposer is not entitled to such a breadth of protection as would preclude others from using any mark or notation however dissimilar from opposer's which has the same suffix.* (Italics ours.)

Accordingly, the Commissioner of Patents reversed the decision of the Examiner of Interferences, dismissed the opposition of appellant, and adjudged the applicant, appellee, entitled to the registration of its trade-mark "Silkenese".

It is claimed by appellant that the goods of the respective parties possess the same descriptive properties; that the marks are confusingly similar; and that appellant will be damaged by the registration of appellee's mark "Silkenese".

Counsel for appellee, on the contrary, contends that the marks are not confusingly similar; that appellant has never used the mark "Celanese" on garments in commerce, although it has registered its mark "Celanese" for use on such articles; and that, in view of the prior registrations of trade-marks ending in "nese", appellant is not the originator of a mark ending with those letters, and, therefore, is not entitled to broad protection in the use of its mark "Celanese."

It is not contended here that appellee was the first to adopt and use a trade-mark ending in the letters "nese". It may be that appellant was not entitled to the registration of its mark "Celanese". However, that question is not before us and will not be considered by this court in this proceeding. *Sharp & Dohme* v. *Parke, Davis & Co.*, 17 C. C. P. A. (Patents) 842, 37 F.(2d) 960, 394 O. G. 545; *American Fruit Growers, Inc.*, v. *Michigan Fruit Growers, Inc.*, 17 C. C. P. A. (Patents) 906, 38 F.(2d) 696, 393 O. G. 789; *National Biscuit Company* v. *Sheridan*, 18 C. C. P. A. (Patents) ——, 44 F.(2d) 987, 402 O. G. 4; *Decker & Cohn (Inc.)* v. *S. Liebovitz & Sons (Inc.)*, 18 C. C. P. A. (Patents) ——, 46 F.(2d), 179, 404 O. G. 797.

From a careful examination of the record we are satisfied that the tribunals below were right in holding that appellant has used its trade-mark "Celanese" on yarn, fabrics, and garments since long prior to any use by appellee of its mark "Silkenese"; and that the goods of the respective parties possess the same descriptive properties. It appears from the record that, prior to the year 1927, appellee had been engaged in the manufacture of piece goods and garments composed of silk; that it used the trade-marks "Vanity Fair" and "Vanitysilk" on those products; that it was not until March, 1927, that appellee commenced the manufacture of so-called artificial-silk products; and that, when it did so, it decided to advertise and sell them under the trade-mark "Silkenese". At, and prior to, that time, appellant's products and its mark "Celanese" had been extensively advertised and were generally known throughout the United States.

The goods of the respective parties are sold in the same stores and to the same class of people. Furthermore, they are so nearly alike in appearance and texture that, if sold under similar trade-marks, confusion would likely result. Nevertheless, appellee selected a trade-mark closely simulating the trade-mark of appellant. It is true that the marks are not identical and that they differ to some extent both in sound and in appearance. However, the public should not be required to analyze trade-marks with scrupulous care, nor should it be compelled to resort to a study of etymology in order to avoid confusion and mistake. *Apex Electrical Mfg. Co.* v. *Landers, Frary & Clark*, 17 C. C. P. A. (Patents) 1184, 41 F.(2d) 99, 398 O. G. 708; *Postum Cereal Co.* v. *Enzo Jel Co.*, 17 C. C. P. A. (Patents) 1258, 41 F.(2d) 101, 401 O. G. 235.

We are of opinion that the marks are confusingly similar, and that appellee is not entitled to have its mark registered.

The decision is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE HALE

No. 2,818. Decided February 11, 1931

PATENTABILITY—WHEEL STRUCTURE.

Claims for a wheel structure and the method of making the same *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Albert L. Ely, Messrs. Ely & Barrows, and *Mr. Conway P. Coe* for Hale.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

The Board of Appeals of the Patent Office affirmed the action of the Examiner denying patent to Hale for claimed "improvements in resilient wheels and method of making same", and the matter is before us on appeal from the Board's decision.

There are seven claims of which Nos. 1 and 6 are for the article and the others for the method.

Claims 1 and 2 may be taken as typical.

> 1. In a wheel structure the combination of a felloe, an outer tire carrying rim, a cushion of compressible resilient rubber between said felloe and said rim, said cushion being placed under compression imposed thereon during the assembly of the wheel, and a rigid metallic band to which the cushion is permanently secured.
>
> 2. The method of making a resilient wheel comprising permanently securing an endless cushion element to the inner surface of a one-piece metallic band, applying the cushion element to a felloe having a circumference greater than the inner circumference of the element before assembling, and forcing a tire carrying rim upon the said band.

Claims 6 and 7 are stated, in the brief of appellant, to be "specifically directed to the commercial form of the invention".

All were rejected upon two references: Harding, 1,294,796, February 18, 1910; Willis, 1,396,984, November 15, 1921.

The application discloses four modifications of a resilient wheel. The particular modification specifically claimed is that comprised in the disclosure of a wheel having a resilient tire secured to a flanged rim. Between this rim and the felly-band is a rubber member or cushion. This cushion is secured by vulcanization to the inner surface of the flanged metallic rim, and to the outer surface of the metallic felly-band.

The method of assembling claimed is that of applying the cushion unit to a felly-band whose outer circumference is greater than the inner circumference of the cushion unit before assembling (thus stretching the cushion unit and causing it to be tight upon the metallic band when assembled), vulcanizing the same thereto, and then forcing a tire carrying rim over the outer surface of the cushion and vulcanizing same.

The patent to Harding discloses a tire for vehicle wheels which has a felly and an outer metallic band or rim with a rubber member or cushion between felly and outer band, said rubber member being secured to the outer metallic band by being vulcanized thereto. The outer band constitutes the tread of the tire, having no rubber member mounted upon or around it. The tire is evidently rendered resilient merely by the cushion between felly and outer band.

In the Willis patent there is shown a resilient wheel having a wooden felly with a metallic rim shrunk thereon. Upon this felly rim is a cushion ring around the outer circumference of which is a metallic rim. Upon this latter is, in turn, mounted the tire rim which carries the outer rubber member or tire. In this patent no vulcanization is shown.

It seems, therefore, that appellant took features, all of which are disclosed in the prior art cited, or are obvious to one skilled in the art, and combined them in the production of his structure—a resilient wheel.

We fail to see wherein the result obtained presents patentable novelty, either in the article or the method.

Harding shows a beveled felly and it may be true, as is argued for appellant, that force fitting the

Willis band on a beveled felly would be impracticable, but it seems obvious that Willis taught, if indeed such teaching be not a matter of common knowledge, the method of force fitting in the application of his cushion ring. The permanent securing of the cushion to the metallic rings by vulcanization is shown in Harding.

It has been very earnestly insisted in the brief and oral argument for appellant that whatever may be said of claims 1 to 5, inclusive, claims 6 and 7 should be allowed. The basis of this argument rests very largely upon the *forcing* feature.

We are unable to agree to the contention.

Force fitting must be a very ancient art and we fail to see wherein its application by appellant, as proposed in the case at issue, constitutes invention.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE WALKER

No. 2,615. Decided February 11, 1931

PATENTABILITY—AGGREGATION—MECHANICAL DISHWASHER.

Claims for a mechanical dishwasher *Held* unpatentable as involving merely an aggregation of features old in the art.

APPEAL from the Patent Office. Affirmed.

Messrs. Denison and Thompson and *Mr. T. K. Bryant* for Walker.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming that of the Examiner, rejecting all of the claims of appellant's application. Claim 13 is illustrative of the question involved, and reads as follows:

13. In a mechanical dishwasher, a vat having an outlet in its bottom, a stand pipe connected to the outlet and provided with an over-flow passage some distance above the level of the outlet to limit the normal rise of water in the vat, a tubular post secured to and projecting upwardly from the bottom of the vat above the level of the over-flow passage, a rotary impeller having a hollow hub surrounding the upper portion of the post and having its upper end extended over the top of the post and closed, and means operatively connected to the hub for rotating the impeller.

The references relied upon are: Wolcott, 1,390,223, September 6, 1921; Walker, 1,397,846, November 22, 1921; Walker (British), 178,318, April 20, 1922.

The alleged invention is described in the decision of the Board of Appeals as follows:

The rejected claims are directed to a dish-washing machine comprising a cylindrical vat having a frusto-conical bottom. From the central part of the bottom there is an upwardly extending open topped hollow post that projects above the highest desired level of the water in the vat. From the lowest point of the vat there is a water outlet that extends into a discharge chamber through a vertical tube the height of whose discharge end determines the elevation of the water in the vat. Water is supplied to the vat from a supply pipe opening into the cylindrical side of the vat at a point above the level at which water stands in the vat. In the bottom of the vat there is an impeller carried upon the upper end of a motor driven shaft that projects through the tubular post. The impeller arms project radially from the lower end of a tubular shaft open at its lower end and closed at its upper end where it is secured to the upper end of a motor driven shaft. The water in the vat does not rise above the upper end of the tubular post.

As stated in appellant's brief, the claims in issue "are predicated upon the fact that *the tubular post (as 12) is secured to and projects upwardly from the bottom of the vat above the level of the overflow passage (as 24)*, or that the level of the overflow passage is below the top of the post." (Italics quoted.)

The new and useful result asserted to be accomplished by the combination claimed is that the rise of water within the vat is limited to a level below the top of the tubular port irrespective of the amount of water which may be introduced into the vat, thus preventing any possibility of leakage of water from the interior of the vat downwardly along the impeller shaft.

Discussing the references relied upon, the Board of Appeals said:

The British patent to Walker shows a mechanical dishwasher having a vat provided with an inverted frusto-conical bottom with an outlet in its apex, a standpipe 50 connected to said outlet and provided with an overflow passage some distance above the level of said outlet, the outlet passage being determined in height by the height of the partition 51 in the standpipe 50. The British patent shows a bearing in the apex of the conical bottom 2 for the impeller shaft 62 that corresponds in location to the tubular post specified in the rejected claims, a rotary impeller 42, 63, having a hub 61, is seated upon the upper portion of the bearing and is operatively connected to the hub for rotating the impeller. This British patent also shows a water supply pipe 43 connected to the upright wall of the vat some distance above the level of the overflow and provided with a valve 44 for controlling the flow of water therethrough to the interior of the vat. The patent to Wolcott shows a vat having a conical bottom and having a discharge outlet passage controlled by a faucet, a rotary impeller 13 having a hollow hub 12 surrounding the upper portion of the post 9 and provided with a closed upper end overlying the top of the post 9, means 10 extending through the post and operatively connected to the hub by a nut on the screw threaded upper end of the shaft 10 for rotating the impeller. We see no invention involved in the substitution of the post 9 and hollow hub 12 of Wolcott for the bearing and impeller hub connections shown in the British patent. The substitution of such parts would require no more than the expected skill of a mechanic and would produce no unexpected results.

We fully agree with the Board of Appeals in its statement that:

The specific impeller operating mechanism and its support does not cooperate with the specific construction of the overflow passage to produce any new result. The claims including both of these features are for aggregations. Neither the impeller mechanism nor the overflow passage is modified in operation by the use of the other in the same dish-washing machine and each feature is old in dish-washing machines.

It is so obvious that the claims in issue are for mere aggregations, not producing any new and useful result, that extended discussion is unnecessary.

The decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,040,461, G. Thorpe, Head covering, D. C. Mass., Doc. E 3150, *G. Thorpe et al.* v. *Gilchrist Co.* Consent decree dismissing bill with prejudice Jan. 25, 1930.

1,062,827, W. H. Hinz, Soap dish, D. C. Mass., Doc. E 3063, *W. H. Hinz et al.* v. *Hamblin & Russell Mfg. Co., Inc.* Dismissed without prejudice Dec. 3, 1929.

1,067,290, Washburn and Comtois, Culinary utensil, D. C. Mass., Doc. E 3064, *The Washburn Co.* v. *Hamblin & Russell Mfg. Co., Inc.* Dismissed without prejudice Dec. 3, 1929.

1,089,405, W. S. Ferguson, Reinforced concrete dock or pier, filed Mar. 2, 1931, D. C. N. J., Doc. E 4189, *The Dock & Terminal Engineering Co. et al.* v. *Standard Oil Co. of N. J.* Same, filed Mar. 5, 1931, D. C. N. J., Doc. E 4190, *The Dock & Terminal Engineering Co. et al.* v. *Bayway Terminal, Inc.* Same, filed Mar. 6, 1931, D. C., Territory of Hawaii (Honolulu), Doc. E 425, *The Dock & Terminal Engineering Co. et al.* v. *Inter-Island Steam Navigation Co., Ltd.* Doc. 4690, *The Dock & Terminal Engineering Co. et al.* v. *Ford Motor Co.* Dismissed Apr. 20, 1931.

1,104,013. (See 1,112,811.)

1,112,437, G. Cody, Anti-siphon self scouring trap, filed Jan. 20, 1931, D. C. N. J., Doc. E 4183, *Cody Brass Works, Inc., et al.* v. *J. O. Pearson et al.*

1,112,811, E. W. Labombarde, Combination feed for sheet material; 1,580,612, H. S. Labombarde, Stacker, filed Feb. 19, 1931; and 1,104,013, E. G. Staude, Folding and gluing machine; 1,127,538, same, Glue-pot for box-making machines, included by counter-claim Mar. 31, 1931, D. C. Minn. (St. Paul), Doc. E 2180, *The International Paper Box Machine Co.* v. *E. G. Staude Mfg. Co.*

1,113,149, E. H. Armstrong, Wireless receiving system, D. C. N. J., Doc. 4104, *Westinghouse Electric & Mfg. Co.* v. *Radio Craft Co., Inc., et al.* Dismissed Mar. 16, 1931.

1,125,476, G. Claude, System of illuminating by luminescent tubes, filed Apr. 17, 1931, D. C. N. D. Calif., N. Div., Doc. 582, *Claude Neon Electrical Products, Inc.*, v. *A. Alderson (Alderson Neon Sign Co.).* Doc. E 3158, *Claude Neon Lights, Inc., et al.* v. *J. B. Linstrom et al.* Consent decree dismissing bill against The Pierce-Arrow Sales Co. and for an injunction against J. B. Linstrom May 22, 1930.

1,127,538. (See 1,112,811.)

1,127,660, J. H. McMichael, Method of and apparatus for transporting and treating concrete, D. C. N. J., Doc. E 2838, *Concrete Mixing & Conveying Co.* v. *Heyman & Goodman Co. et al.* Dismissed Mar. 18, 1931.

1,179,476, G. P. Thomas, Metal punching machinery, filed Apr. 17, 1931, D. C., E. D. Mich., S. Div., Doc. 4743, *Whitman & Barnes, Inc.*, v. *Allied Products Corp.*

1,193,613, M. Riegler, Method and means for treating paper pulp, D. C. Mass., Doc. E 2943, *L. Schopper et al.* v. *Star Brass Mfg. Co.* Decree Dec. 30, 1929.

1,212,840, F. J. Straub, Building block and method of making same, D. C. N. J., Doc. 3824, *Crozier-Straub, Inc., et al.* v. *J. Cimo et al.* Decree for plaintiff Feb. 13, 1931. Doc. E 3827, *Crozier-Straub, Inc., et al.* v. *Hi-Test Concrete Products, Inc.* Consent decree for injunction Mar. 11, 1931. Same, filed Feb. 4, 1931, D. C. N. J., Doc. E 4179, *Crozier-Straub, Inc., et al.* v. *Cincercrete Products, Inc., et al.* Same, filed Feb. 8, 1931, D. C. N. J., Doc. E 4185, *Crozier-Straub, Inc., et al.* v. *Rockland Concrete Products, Inc., et al.* Same, filed Mar. 13, 1931, D. C. N. J., Doc. E 4191, *Crozier-Straub, Inc., et al.* v. *New Jersey Materials Co., Inc.* Same, filed Mar. 28, 1931, D. C. N. J., Doc. E 4197, *Crozier-Straub, Inc., et al.* v. *J. Bokop et al.*

1,227,557, Cochran and Younger, Make ready of impression cylinder of printing presses, D. C. Mass., Doc. E 3004, *New England Fibre Blanket Co.* v. *New England Newspaper Publishing Co.* Injunction Apr. 25, 1929.

1,271,529, M. C. Hopkins, Acoustic device, D. C. N. J., Doc. E 2770, *Lektophone Corp.* v. *Pal Radio Corp.* Discontinued Feb. 18, 1921. Doc. E 3999, *Lektophone Corp.* v. *Apollo Radio Co., Inc.* Discontinued Feb. 9, 1931. Doc. E 4000, *Lektophone Corp.* v. *Naedele-Janney, Inc.* Decree as above.

1,294,733, E. Weigele, Guide rail oiler, C. C. A., 3d Cir., Doc. 4472, *R. W. Bristol (Atlas Elevator Devices Co.)* v. *Otis Elevator Co.* Decree reversed Apr. 13, 1931.

1,302,205, A. Pagliuca, Chocolate coating machine, D. C. Mass., Doc. E 3318, *National Equipment Co.* v. *J. W. Greer Co.* Consent decree dismissing bill without prejudice Nov. 28, 1930.

1,365,848, W. M. Purvis, Railway construction, D. C., W. D. Okla. (Oklahoma City), Doc. E 1044, *W. M. Purvis et al.* v. *Oklahoma Rwy. Co.* Dismissed for want of prosecution Feb. 9, 1931.

1,391,738, F. E. Key, Sealing paste, D. C. Mass., Doc. E 2968, *Key Boiler Equipment Co.* v. *A. M. Coleman (Coleman Equipment Co.).* Decree affirmed (notice Apr. 15, 1931).

1,422,968, E. B. Hofertepen, Boots and shoes, D. C. Mass., Doc. E 3207, *Hofertepen Patents Co., Inc.*, v. *A. J. Bates Co.* Consent decree dismissing bill Sept. 26, 1930.

1,447,193, J. A. Watt, Water closet valve, D. C., S. D. N. Y., Doc. E 58/240, *American Rubber Products Corp.* v. *Durst Mfg. Co., Inc.* Consent decree for plaintiff (notice Apr. 13, 1931).

1,475,980, O. Zerk, Lubricating apparatus, D. C. Mass., Doc. E 2853, *The Bassick Mfg. Co.* v. *Ramsdell Tool & Mfg. Co.* Decree for plaintiff July 31, 1929. Doc. E 2854, *The Bassick Mfg. Co.* v. *U. S. Screw & Stamping Co.* Consent decree for injunction July 9, 1928. Doc. E 2986 *Alemite Mfg. Corp.* v. *Commonwealth Screw Co.* Injunction issued May 25, 1929.

1,488,604, M. A. Lawton, Suction-valve construction, D. C. Mass., Doc. E 2765, *A. J. Morse & Son, Inc.*, v. *Shotwell Pump & Tank Co.* Dismissed without prejudice for lack of prosecution Jan. 2, 1930.

1,526,982, E. W. Hill, Stencil sheet, D. C., S. D. N. Y., Doc. E 50/57, *A. B. Dick Co.* v. *Eagle Typewriter Co.* Decree for plaintiff (notice Apr. 15, 1931).

1,561,064, J. Edgar, Hob grinding machine; 1,617,798, same, Art of grinding hobs, D. C., E. D. Mich., S. Div., Doc. 3490, *Barber-Colman Co.* v. *Michigan Tool Co.* Consent decree for plaintiff Apr. 17, 1931.

1,580,612. (See 1,112,811.)

1,612,788, J. Walten, Tire flap, D. C. N. J., Doc. E 3068, *C. O. Tingley & Co. et al.* v. *B. F. Goodrich Rubber Co.* Dismissed under rule 57 Feb. 2, 1931.

1,613,333, J. M. Stone, Loop aerial, D. C. Mass., Doc. E 2832, *Trav-Ler Mfg. Corp. et al.* v. *Empire Radio Co.* Dismissed without prejudice for lack of prosecution Jan. 2, 1930.

1,617,798. (See 1,561,064.)

1,620,116, D. A. Maanum, Can washer, D. C., E. D. Mo., E. Div., Doc. 3958, *Cherry-Burrell Corp.* v. *Meyer Blanke Co.* Consent decree Mar. 26, 1931.

1,623,564, P. Theurich, Advertising panel or decorative wall covering, appeal filed Apr. 13, 1931, C. C. A., 2d Cir., Doc. —, *Wesel-Naumann Aktiengesellschaft* v. *Morgan Lithograph Co.*

1,692,372, H. A. Gardner, Treating artificial silk, filed Apr. 15, 1931, D. C., S. D. N. Y., Doc. E 59/198, *Tubize Chatillon Corp.* v. *Princeton Rayons, Inc.*

1,695,244, A. Cohen, Slip cover, D. C. Mass., Doc. E 3087, *Slipcover Patents Co., Inc.*, v. *Vatco Mfg. Co.* Consent decree for plaintiff Nov. 26, 1929.

1,700,624, G. Boulton, Lining trimming machine, D. C. Mass., Doc. E 3086, *United Shoe Machinery Corp.* v. *N. W. Mathey.* Dismissed Dec. 16, 1930.

1,717,938, F. K. Richtmyer, Sign, filed Sept. 25, 1929, D. C. Mass., Doc. E 3167, *Ray-Signs Corp.* v. *Persons-Majestic Mfg. Co.* Dismissed without prejudice Jan. 31, 1930.

1,725,742, J. A. Singmaster, Artificial silk filament and method of making same, filed Apr. 15, 1931, D. C., S. D. N. Y., Doc. E 59/197, *Tubize Chatillon Corp.* v. *Princeton Rayons, Inc.*

1,726,832, E. H. Hollingshead, Line marker, D. C., S. D. Tex. (Houston), Doc. E 409, *E. H. Hollingshead* v. *Russ Mitchell, Inc., et al.* Injunction Apr. 2, 1931.

1,779,951, E. J. Schneider, Armored electric conductor, filed Apr. 13, 1931, D. C., S. D. N. Y., Doc. E 59/187, *Eastern Tube & Tool Co., Inc.*, v. *National Electric Products Corp.*

1,788,935, W. H. Wood, Vehicle headlight, filed Apr. 17, 1931, D. C., N. D. Ohio, E. Div., Doc. E 3758, *W. H. Wood* v. *Peerless Motor Car Corp. et al.*

1,790,517, Davis and Murray, Preparation of olefine derivatives; 1,790,522, same, Olefine containing product; 1,790,518, H. S. Davis, Preparation of alcoholic derivatives of olefine bearing substances, filed Mar. 23, 1931, D. C. N. J., Doc. E 4196, *Petroleum Chemical Corp. v. Standard Oil Co.*

1,790,518. (See 1,790,517.) 1,790,522. (See 1,790,517.)

Re. 15,902, S. F. Zaloom, Preserving compound for pistachio nuts, D. C. Mass., Doc. E 2904, *Zenobia Co. v. Ararat Grocery Co.* Consent decree for plaintiff may 3, 1929.

Des. 79,799, J. B. Freysinger, Buckle, D. C. Mass., Doc. E 3296, *The North & Judd Mfg. Co. v. Haverhill Shoe Novelty Co.* Dismissed without prejudice Oct. 10, 1930.

Des. 82,765, A. Stockstrom, Range, filed Apr. 15, 1931, D. C., N. D. Ohio, E. Div., Doc. E 3734, *American Stove Co. v. H. P. Kirkland & Co.*

Des. 83,829, Peterson and Marcellus, Portable electric fan, filed Apr. 16, 1931, D. C., S. D. Ohio, W. Div., Doc. 294, *Barber-Colman Co. v. The Master Electric Co.*

Disclaimers

1,227,481.—*William L. Morris*, Fort Wayne, Ind. LUBRICATING MECHANISM. Patent dated May 22, 1917. Disclaimer filed May 20, 1931, by the assignee, *Auto Research Corporation*.

Hereby enters disclaimer to the combination of elements covered by claim 2 of said patent aforesaid except when said flow-impeding elements have diverse relative resistance capacities, maintained in such relative diversity as to be proportionate to the requirements of the bearings served thereby.

1,560,248.—*Harry E. Kerr*, Cleveland, Ohio. GAS BURNER. Patent dated November 3, 1925. Disclaimer filed May 23, 1931, by the assignee, *The Barber Gas Burner Company*.

Hereby enters this disclaimer to said claim 5 of said Letters Patent, which is in the following words, to-wit:

"5. A gas burner comprising an unobstructed commingler tube having a cross port forming an air inlet thereto and a gas jet aperture in the surface of said cross port aligned with said commingler tube, said air inlet port being restricted in area to retard the rate of flame propagation in the mixture whereby said tube will be swept free from all flame at mixture velocities obtainable with normal gas pressure."

1,593,356.—*David C. Prince*, Schenectady, N. Y. SYSTEM OF ELECTRICAL DISTRIBUTION. Patent dated July 20, 1926. Disclaimer filed May 20, 1931, by the assignee, *General Electric Company*.

Therefore, enters this disclaimer to claim 4 of said patent which is in the following words:—

"4. The combination in a system of electrical distribution of a transformer having primary and secondary windings, a source of direct current, a pair of electron discharge valves for supplying current from said source to each primary winding of said transformer, said valves being so connected that during the operation thereof the potential of the cathode of one valve of each pair remains substantially fixed with respect to earth while the potential of the cathode of the second valve of each pair varies with respect to earth potential, and means for producing similar current variations through all of said valves."

1,689,581.—*Morgan Robert Day*, Boston, Mass. STABILIZED LATEX AND PROCESS OF PRODUCING SAME. Patent dated October 30, 1928. Disclaimer filed May 22, 1931, by the assignee, *Rubber Latex Research Corporation*.

Therefore, enters this disclaimer as to claim 1 of said Letters Patent No. 1,689,581 which is in the following words:

"1. As a new material, stabilizer latex containing blood proteid."

And your petitioner, therefore, disclaims from the scope and meaning of claim 2 of said Letters Patent No. 1,689,581 any interpretation of the phrase "containing the 'red end' of blood" other than that the red end of blood contained in the stabilized latex is the isolated or separated fraction consisting substantially of the red end of blood.

1,710,348.—*Joseph H. Cohen*, Bridgeport, Conn. CIGAR LIGHTER. Patent dated April 23, 1929. Disclaimer filed May 20, 1931 by the patentee, assignee, *Casco Products Corporation*, assenting.

Hereby enters this disclaimer, to wit:

I hereby disclaim from the scope of claim 2 any and all cigar lighters except those in which the "cavity" referred to is deep and the "heating element" referred to is so located in the cavity as to prevent casual engagement of the heating element by parts of the operator's hand in handling the cigar lighter.

1,710,531.—*Joseph H. Cohen*, Bridgeport, Conn. ELECTRICAL DEVICE. Patent dated April 23, 1929. Disclaimer filed May 20, 1931, by the patentee, assignee, *Casco Products Corporation*, assenting.

Hereby enters this disclaimer, to wit:

I hereby disclaim from the scope of claim 1 any and all electric cigar lighters except those in which the igniting unit is in two-pole "closed circuit" engagement with the holding device when supported by the holding device.

1,762,376.—*Harry A. Andersen*, Racine, Wis. DRINK MIXER. Patent dated June 10, 1930. Disclaimer filed May 23, 1931, by the assignee, *Hamilton Beach Manufacturing Company*.

Hereby enters this disclaimer, to-wit:

(1) To the combination of claim 2, except where in such combination the diaphragm has one portion thereof fixedly secured to the bracket and another portion thereof fixedly secured to the support.

(2) To the combination of claim 3, except where in such combination the diaphragm has one portion thereof fixedly secured to the bracket and another portion thereof fixedly secured to the support.

(3) To the combination of claim 4, except where in such combination the diaphragm has one portion thereof fixedly secured to the bracket and another portion thereof fixedly secured to the support.

(4) To the combination of claim 10, except where in such combination the resilient means has a portion thereof fixedly connected to the bracket and another portion fixedly secured to the standard.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 16, 1931

[VOL. 407. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 311,461. DONNEN-FUEL, INC., New York, N. Y. Filed Feb. 25, 1931.



Applicant disclaims unqualifiedly the lump of coal as well as the descriptive words "Coal, Service, Quality, Satisfaction."

For Coal.

Claims use since Dec. 20, 1930.

Ser. No. 312,608. A. C. LAWRENCE LEATHER COMPANY, Peabody, Mass. Filed Mar. 27, 1931.

ACE-HI

For Shearlings or Wool Pelts.

Claims use since Mar. 2, 1931.

Ser. No. 313,426. FEDERAL STAR DYERS CORPORATION, New York, N. Y. Filed Apr. 10, 1931.

Champelt

For Dyed Furs, Skins, Pelts, and Hides.

Claims use since Sept. 12, 1930.

Ser. No. 314,174. THE SENECA COAL & COKE COMPANY, Tulsa, Okla. Filed May 4, 1931.

VIBRO

For Coal.

Claims use since Oct. 13, 1930.

Ser. No. 314,323. THE CLINTON COMPANY, Cleveland, Ohio. Filed May 8, 1931.

ALPINE

For Coal.

Claims use since Mar. 15, 1928.

CLASS 2

Receptacles

Ser. No. 313,378. JOHN MARSELLUS CASKET COMPANY, Syracuse, N. Y. Filed Apr. 15, 1931.

MEMOROL

For Tubular Containers for Mortuary Records.

Claims use since Feb. 23, 1931.

Ser. No. 313,678. SHUTTLEWORTH CARTON CO. INC., New York, N. Y. Filed Apr. 22, 1931.

SAFE TEX-CARTON

The words "Safe" and "Carton" being disclaimed apart from the mark as shown.

For Paper Boxes and Cartons.

Claims use since October, 1930.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 312,790. E. W. BREDEMEIER & Co., Chicago, Ill. Filed Apr. 1, 1931.

ZIPFOLIO
BREDEMEIER
CHICAGO-ILL

No claim is made to the words "Bredemeier, Chicago—Ill." apart from the mark as shown.
For Portfolios and Pocket-Books.
Claims use since Dec. 1, 1930.

Ser. No. 313,943. WASHINGTON LEATHER GOODS CO. INC., New York, N. Y. Filed Apr. 28, 1931.

Crepe Fantasie

No rights are asserted for the exclusive use of the word "Crepe" apart from the trade-mark shown in the drawing.
For Pocketbooks, Particularly Leather Pocketbooks.
Claims use since June 1, 1930.

Ser. No. 313,984. VUITTON & VUITTON, SOCIETE A RESPONSABILITE LIMITEE, Paris, France. Filed Apr. 29, 1931.

For Hat Boxes and Shoe Boxes Used for Luggage.
Claims use since 1897.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 307,206. THEODORE JOHNSON, New York, N. Y. Filed Oct. 27, 1930.

LINUM

For Preparations for Cleaning Linoleums.
Claims use since Sept. 15, 1930.

Ser. No. 311,070. PURITAN SOAP COMPANY, Rochester, N. Y. Filed Feb. 14, 1931.



For Soap, Fabric Cleaner, and Nickel Polish.
Claims use since September, 1929.

Ser. No. 312,068. SHINEEN PRODUCTS CORPORATION, Neenah, Wis. Filed Mar. 12, 1931.

RED E SHINE

No claim is made to the word "Shine" apart from the mark as shown.
For Chemically Treated Polishing Cloths for Furniture, Vehicles, and Gold and Silverware.
Claims use since Feb. 4, 1931.

Ser. No. 312,190. M. M. A. CHEMICAL COMPANY, Boston, Mass. Filed Mar. 16, 1931.

VAP

For Paste or Semi-Liquid Preparation in the Nature of a Dry Cleaner.
Claims use since Aug. 25, 1930.

Ser. No. 313,139. LYONS & COMPANY, New York, N. Y. Filed Apr. 9, 1931.

LYCO

For Preparation for Polishing and Cleaning and Dressing Shoes.
Claims use since March, 1931.

Ser. No. 313,273. ALBERCO CORPORATION, LTD., Hollywood, Calif. Filed Apr. 13, 1931.

NIK-SOLV

For Solvent Preparation for Removing Nicotine Stains.
Claims use since Mar. 28, 1931.

Ser. No. 313,832. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Apr. 27, 1931.

PALMOLIVE

For Toilet Soap and Shaving Cream.
Claims use since Jan. 1, 1900.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 276,931. FLORASYNTH LABORATORIES, INC., New York, N. Y. Filed Dec. 18, 1928.

FLORASYNTH

VANILLIC ESTER

Applicant disclaims the use of the words "Vanillic Ester" apart from the mark as shown.
For Synthetic Organic Products for Use in Vanilla Flavors, Food Flavoring Compounds, and for General Food Flavoring Purposes.
Claims use since 1918.

Ser. No. 278,089. BURROUGHS WELLCOME & CO. (U. S. A.) INC., New York, N. Y. Filed Jan. 17, 1929.



For Medicinal Acids, Acids for Chemical Reagents, Acids for Chemical Test Indicator, Albumens, Menthol, Medicinal Alkalies, Alkalies for Photographic Use, Alkalies for Chemical Analysis, Medicinal Alkaloids, Alums, Amids, Amins, Medicinal Ammonium Compounds, Anesthetics, Antiseptics, Benzin Derivatives, Acetanilid (Antifebrin), Acetphenetidin, Acetylsalicylic Acid, Amidol, Antipyrine (Phenazone), Amyl Nitrite, Benzoic Acid, Beta-Naphthol, Bismuth Subsalicylate, Creosote, Carbolic Acid (Phenol), Carbolic Acid Ointment, Dihydroxyphenylethylmethylamine, Diethylmalonylurea, Erythrol Tetranitrate, Guaiacol Carbonate, Guaiacol Camphorate, p-Hydroxyphenylethylamine, Homatropine Hydrobromide, Hydroquinone (Quinol), Iodohydroxyquinolinesulphonic Acid, Methyl Thioine Chloride, Mercury Salicylate, Mercury Succinimide, Metol, Metol-Quinol, Methynamine, Phenyl Salicylate, Romanowsky Stain, Sodium Sulphocarbolate, Stibamine Glucoside, Sodium Para-Amino-Phenylarsenilate, Sodio-p-Toluenesulphonchloroamide, Sodium Salicylate, Sulphonethylmethene, Sulphonmethane, Toluidine Blue, Zinc Sulphanilate, Zinc Sulphocarbolate, Cyanogen Derivatives, Deodorants, Dentifrice in Solid Form, Digestive Ferments, Disinfectants, Effervescent Salts, Germicides, Glucosids, Medicinal Vegetable Gums, Medicinal Vegetable Gum Resins, Iodine, Potassium Iodide, Calcium Iodoricineolate, Mercuric Potassium Iodide, Mercurous Iodide, Mercuric Iodide, Potassium Bromide (Medicinal), Potassium Bromide (Photographic Chemical), Sodium Bromide, Ammonium Bromide, Chloroform, Potassium Chlorate, Ammonium Chloride, Mercurous Chloride, Mercuric Chloride, Calcium Chloride, Calcium Hypo-Chlorite (Chlorinated Lime), Medicinal Animal Gland Substances (Thyroid Gland, Parotid Gland, Pituitary Gland, Prostate Gland, Thymus Gland, Mammary Gland), Dried Medicinal Animal Tissue Substances (Cerebrin, Ovarian), Ox Bile Substance, Pig Bile Substance, Residuum Rubrum (Dried Residue Ox Blood Substance), Bone Medulla Substance, Didymin (Testicular Substance), Kidney Substance, Spinal Cord Substance, Hemoglobin, Liquid Petrolatum (Plain), Liquid Petrolatum (Solidified), Cod Liver Oil, Calcium Iodoricineolate, Ethyl Iodo-Ricineolate, Chenopodium Oil, Phenol and Menthol Mixture, Sandalwood Oil, Chaulmoogra Oil, Cinnamon Oil, Ephedrine Inhalant (Plain), Ephedrine Inhalant Compound, "Paroleine" Spray Compound, Acetylsalicylic Acid, Sodium Salicylate, Bismuth Subgallate, Chrysarobin, Bismuth Subnitrate, Bismuth Subcarbonate, Bismuth Subsalicylate, Iron and Ammonium Citrate, Iron and Quinine Citrate, Iron Carbonate, Iron Hypophosphite, Iron Glycerophosphate, Iron Phosphate, Mercuric Potassium Iodide, Mercury Iodide, Lead Subacetate, Zinc Sulphate, Zinc Sulphocarbolate, Zinc Permanganate, Zinc Sulphanillic, Zinc Valerate, Zinc Oxide, Potassium Nitrate, Sodium Cacodylate, Methyl Alcohol, Methyl Salicylate, Methyl Violet, Methyl Orange, Methyl Thionine Chloride, Epinine, Magnesium Sulphate, Lithium Citrate, Potassium Bicarbonate, Potassium Iodide, Sodium Bicarbonate, Sodium Biphosphate, Sodium Citrate, Sodium Phosphate, Sodium Sulphate, Calcium Chloride, Sodium Chloride, Ammonium Chloride, Aluminium and Potassium Sulphate, Naphthols, Nucleins, Oleoresins, Phenols: Pho-

tographic Chemicals—Namely, Developers, Reducers, Intensifiers, Fixers, Sensitizers and Accelerators, Reducing Agents; Medicated Throat Pastilles—Namely, Lexative Fruit (Extract of Senna Fruit), Ammonium Chloride and Licorice, Codeine and Benzoic Acid Compound, Glycerin, Glycerin and Black Currant, Glycerin, Tannin, and Black Currant, Glycerin, Tannin, Capsicum, and Black Currant, Lemon Juice, Linseed, Licorice, and Chlorodyne, Menthol, Menthol and Eucalyptus, Pectoral, Pine-Tar Compound, Pinol; Blaud Pill, Blaud Pill and Aloin, Blaud Pill and Arsenic; Blaud Pill, Arsenic, and Strychnine; Blaud Pill and Cascara; Blaud Pill, Nux Vomica, and Cascara; Blaud Pill Compound; Blue Pill, Colocynth, and Hyoscyamus; Blue Pill, Squill, and Digitalis; Blue Pill and Rhubarb Compound, Pill Cathartic Compound, Pill Rhubarb Compound, Cocaine Hydrochloride, Homatropine Hydrobromide, Sodium Chloride, Ammonium Bromide, Emetine Bismuthus Iodide, Emetine Hydrochloride, Emetine Hydrobromide, Ephedrine Hydrochloride, Ephedrine Sulphate, "Ergamine" Acid Phosphate; Solid, Powdered, and Fluid Medicinal Extracts—Namely, Belladonna, Colocynth, Coffee, Aconite, Strophanthus, Digitalis, Cascara Sagrada, Nux Vomica, Hyoscyamus, Sugar of Milk.

Claims use since 1911.

Ser. No. 294,714. SEYMOUR B. DEWEY, Jr., Cleveland, Ohio. Filed Jan 13, 1930.



The drawing is lined to indicate red color. No claim is made to the word "Grippe" apart from the mark as shown.

For Cold and Grippe Capsules.

Claims use since Nov. 5, 1928.

Ser. No. 298,011. AARON GARD BURNETT, doing business as A. G. Burnett Pharmacal Co., Belleville, Ill. Filed Mar. 28, 1930.



The words "Medicine" and "Trade Mark" are disclaimed apart from the mark as shown. The portrait on the drawing is fanciful, and the signature is that of the applicant, Aaron Gard Burnett.

For Medicinal Preparation for Stomach Antacid, Gas Eliminant, Laxative, Mucous Tissue Sedative.

Claims use since Jan. 15, 1929.

Ser. No. 301,223. PIERRE ZIZINE, Paris, France. Filed May 24, 1930.

VIVOLEOL

For Cod Liver Oil.

Claims use since July 1, 1927.

Ser. No. 301,224. PIERRE ZIZINE, Paris, France. Filed May 24, 1930.

GASTROPANSEMENT

For Powder Used in Diseases of the Stomach and Intestines, for Dyspepsia and Gastrointestinal Troubles.

Claims use since Dec. 6, 1929.

Ser. No. 301,226. PIERRE ZIZINE, Paris, France. Filed May 24, 1930.

AGOZIZINE

For Medicinal Preparation for the Treatment of Liver Troubles.

Claims use since June 21, 1929.

Ser. No. 301,227. PIERRE ZIZINE, Paris, France. Filed May 24, 1930.

ZOOLEOL

For Cod Liver Oil.

Claims use since Oct. 30, 1928.

Ser. No. 301,228. PIERRE ZIZINE, Paris, France. Filed May 24, 1930.

SEDOGASTRINE

For Powder and Tablets Used for Diseases of the Stomach.

Claims use since Jan. 18, 1923.

Ser. No. 305,017. SECRETS, INC., Ottawa, Ill. Filed Aug. 25, 1930.



No claim being made to the word "Beauty" apart from the mark shown.

For Cleansing Cream, Tissue Building Cream, Cold Cream, Vanishing Cream, Bleaching Cream, Peroxide Cream, Benzoin Cream, Freckle Cream, Whiting Cream, Wrinkle Cream, Massage Cream, Almond Cream, Lemon Cream, Pore Cream, Mentholated Cream, Developing Cream, Astringent Cream, Acne Cream, Sunburn Cream, Cucumber Lotion, Lemon Lotion, Astringent Lotion, Freckle Lotion, Almond Lotion, Bleaching Lotion, Sun-burn Lotion, Chap Lotion, Eye Brow Pencil, Creme Rouge, Lip Rouge, Cake Rouge, Brilliantine, Permanent Wave Oil, Curl Set Preparation, Bandoline, Dandruff Pomade, Hair Tonic, Tar Shampoo, Cocoanut Oil Shampoo, Hair Dyes, Dandruff Eradicator, Depilatory; Secro-oil—Namely, a Water Soluble Vegetable Oil Shampoo; Toilet Water, Perfumes, After Shave Lotion, Muscle Oil, Skin Tonic, Deodorant, Complexion Beautifying Preparation, Bath Salts, Bath Powder, Face Powder, Talcum Powder, Tooth Powder, Tooth Paste, Foundation Cream, Skin Tonic, Hair Curling Fluid, and Scalp Ointment.

Claims use since July 1, 1930.

Ser. No. 308,614. CHEMISCHE FABRIK HELFENBERG A. G. VORM. EUGENE DIETRICH, Helfenberg, near Dresden, Germany. Filed Dec. 5, 1930.

Opolen

For Medicinal Preparation to be Used in the Treatment of Arthritis, Rheumatism, Neuralgia, Neuritis, Lumbago, Migraine, La Grippe, and Influenza.

Claims use since Mar. 27, 1930.

Ser. No. 309,004. SCHIEFFELIN & COMPANY, New York, N. Y. Filed Dec. 15, 1930.



The portrait appearing on the drawing is fanciful.

For Shampoo.

Claims use since May 3, 1919.

Ser. No. 309,758. W. & W. CHEMICAL CO., Brooklyn, N. Y. Filed Jan. 8, 1931.



The words "The Perfect Anti-Freeze" and "Wontfreez" are disclaimed, except in the association shown.

For Chemicals to Insure Protection Against Freezing of Water in Radiators of Automobiles.

Claims use since Nov. 3, 1930.

Ser. No. 309,879. WILLIAM H. ROHER, INC., Philadelphia, Pa. Filed Jan. 10, 1931.

NEONATALINE

For Medicine in Ampul Form Administered Hypodermically to Promote Contractions in Child Birth.

Claims use since May 21, 1930.

Ser. No. 310,001. WALLERSTEIN COMPANY, INC., New York, N. Y. Filed Jan. 15, 1931.

BIOBATE

For Enzymatic Preparation Used in the Treatment of Hides and Skins.

Claims use since Dec. 30, 1930.

Ser. No. 310,914. MICHAEL ANGEL CRISP, Los Angeles, Calif. Filed Feb. 10, 1931.



The words "Non-genuine without this signature" and "Trade-Mark" appearing on the drawing, are hereby disclaimed. The portrait and signature appearing on the drawing are that of the applicant.

For Medicines for Relieving Constipation, Indigestion, Kidney and Liver Troubles, High Blood Pressure, Sour Acid Stomach and Bowels, Rheumatism, Neuritis, Blood and Skin Diseases.

Claims use since July 30, 1920.

Ser. No. 312,061. LONGINOS PADILLA, Los Olmos, Santiago de Cuba, Cuba. Filed Mar. 12, 1931.



The words "Elixir" and "Dentifrico" are disclaimed apart from the other features of the mark appearing on the drawing.

For Tooth Paste and Mouth Wash.

Claims use since January, 1929.

Ser. No. 312,139. CHEMICAL UTILITIES, INC., New York, N. Y. Filed Mar. 14, 1931.

METALLOY

For Metal Plating and Polishing Compound.

Claims use since Mar. 6, 1931.

Ser. No. 312,734. AMERICAN DRUGGISTS SYNDICATE, INC., New York and Long Island City, N. Y. Filed Mar. 30, 1931.

TRONK-LETS

For Pastilles Used for Hoarseness, Dryness of the Throat, and Sore Throat.

Claims use since Mar. 24, 1931.

Ser. No. 312,835. THE CHIC-TONE COMPANY, INC., Angola, Ind. Filed Apr. 2, 1931.



No claim is made to the word "Inhalant", apart from the mark shown in the drawing.

For Medicine for General Colds, Roup, Pneumonia, Infections, Bronchitis and Respiratory Diseases in Rabbits and Cavies.

Claims use since August, 1928.

Ser. No. 312,876. MRS. LYDIA DANCHAK, doing business as Gold-Vein Co., Waco, Tex. Filed Apr. 2, 1931.

GOLD-VEIN

For Ointment for Use in the Treatment of Hemorrhoids.

Claims use since Dec. 9, 1930.

Ser. No. 312,950. BELISARIO DIAZ, Los Angeles, Calif. Filed Apr. 4, 1931.



For Insecticide.

Claims use since Mar. 1, 1931.

Ser. No. 313,176. GEORGE L. BALDAUF, doing business as The Borolatum Company, Milwaukee, Wis. Filed Apr. 10, 1931.

Casgen

CAS-GEN

For Compound to be Used for Medicinal Purposes, as a Stomachic and Tonic-Laxative.

Claims use since Jan. 10, 1931.

Ser. No. 313,207. RÖHM & HAAS COMPANY, Philadelphia, Pa. Filed Apr. 10, 1931.

CLARIPON

For Material in Powder or Liquid Form Containing Enzymes Used for Treating Plant Juices and Extracts for the Purpose of Aiding Clarification.

Claims use since Mar. 21, 1931.

Ser. No. 313,219. FRANK H. ARISMAN, Chicago, Ill. Filed Apr. 11, 1931.

Vita GLO
BODY-TONERS

No claim is made to the use of the words "Body-Toners," except as is used with the trade-mark applied for.

For Medicine for the Treatment of Stomach Disorders, Gall Stones, Nervousness, Constipation, Loss of Energy, Gas or Bloated Conditions, Liver Complaints, and Headaches.

Claims use since Jan. 15, 1931.

Ser. No. 313,264. FLAVO LAX CORPORATION, Brooklyn, N. Y. Filed Apr. 10, 1931.



For Physic and Laxative for Human Use.

Claims use since Oct. 10, 1930.

Ser. No. 313,321. ELIZABETH ARDEN, INC., New York, N. Y. Filed Apr. 14, 1931.



For Perfume.

Claims use since Oct. 7, 1930.

Ser. No. 313,323. MORRIS BOTWEN, doing business as Natural Health Products Co., New York, N. Y. Filed Apr. 14, 1931.



No claim being made to the exclusive use of the words "None Genuine Without This Trade Mark" apart from the mark as shown in the drawing.

For Food Having Laxative Properties.

Claims use since Mar. 1, 1931.

Ser. No. 313,349. JACOB S. NADOOLMAN, South Fallsburg, N. Y. Filed Apr. 14, 1931.

RIDALL

For Cold Salve and also a Preparation for Treatment of Dandruff.

Claims use since October, 1927.

Ser. No. 313,479. REBO & CARNRICK, Jersey City, N. J. Filed Apr. 17, 1931.

Panacoids

For Medicinal Preparations for Treatment of Intestinal Indigestion and Functional Disorders of the Pancreas.

Claims use since Apr. 6, 1931.

Ser. No. 313,547. C. E. JAMIESON & COMPANY, Detroit, Mich. Filed Apr. 20, 1931.

AGARVIS

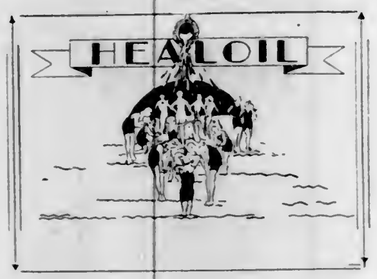
For Mineral Oil Used as an Intestinal Lubricant.
Claims use since Mar. 6, 1931.

Ser. No. 313,548. C. E. JAMIESON & COMPANY, Detroit, Mich. Filed Apr. 20, 1931.

CITRO-SAL

For Effervescent Salt.
Claims use since Oct. 4, 1930.

Ser. No. 313,599. DAN J. HEALY, doing business as Healoil Laboratories, Detroit, Mich. Filed Apr. 21, 1931.



For Shampoo.
Claims use since Aug. 19, 1929.

Ser. No. 313,605. C. G. MEADOWS, doing business as Aracoma Laboratories, Logan, W. Va. Filed Apr. 21, 1931.

SI-KEL

For Mouth Wash and a Preparation Used in the Treatment of Dandruff.
Claims use since Feb. 1, 1931.

Ser. No. 313,661. CHARLOTTE E. HOWELL, doing business as Europa Health Restorer Co., Glendale, Calif. Filed Apr. 22, 1931.

Europa Health Restorer

The words "Health Restorer" are disclaimed apart from the mark shown on the drawing. The word "Europa," in Greek mythology, refers to a sister of Cadmus, carried off to Delphi by Zeus in the form of a white bull.
For Preparation Taken Internally for Purifying the Blood.
Claims use since December, 1930.

Ser. No. 313,675. RIN-O-CUR COMPANY, Chicago, Ill. Filed Apr. 22, 1931.

RIN-O-CUR

For Nasal Cream.
Claims use since February, 1931.

Ser. No. 313,762. SWAMP & DIXIE LABORATORIES, INC., Fort Smith, Ark. Filed Apr. 24, 1931.

DIXIE

For Fever and Pain Powder.
Claims use since Nov. 14, 1899.

Ser. No. 313,953. ASSOCIATED LABORATORIES, INC., doing business as The Besinol Company, New York, N. Y. Filed Apr. 29, 1931.

BESINOL

For Obesity Preparation.
Claims use since Mar. 2, 1931.

Ser. No. 313,970. PITMAN-MOORE COMPANY, Indianapolis, Ind. Filed Apr. 29, 1931.

PHYCAMPHOL

For Ointment for Treating Acute Mammitus.
Claims use since 1917.

Ser. No. 313,972. PITMAN-MOORE COMPANY, Indianapolis, Ind. Filed Apr. 29, 1931.

NATRONOX

For Medicine for Treating Necrotic Inflammation for the Gastro-Intestinal Tract in Swine.
Claims use since May, 1930.

Ser. No. 313,973. PITMAN-MOORE COMPANY, Indianapolis, Ind. Filed Apr. 29, 1931.

SECTOFF

For Animal Insecticide.
Claims use since 1924.

Ser. No. 313,976. SANOVAPOR LABORATORIES, INC., Huntington, W. Va. Filed Apr. 29, 1931.

DEXENE

For Preparation for the Treatment of Diabetes.
Claims use since Apr. 11, 1930.

Ser. No. 313,988. PITMAN-MOORE COMPANY, Indianapolis, Ind. Filed Apr. 29, 1931.

CREGUIATONE

For Medicine for Treating Pulmonary Infections and Gastro-Intestinal Fermentation in Horses and Cattle.
Claims use since 1921.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 314,411. KOEHLER BROS., Saginaw, Mich. Filed May 11, 1931.



No claim is made to the exclusive use of the word "Backstop" apart from the mark as shown.
For Target Backstops.
Claims use since Apr. 20, 1931.

CLASS 11

Inks and Inking Materials

Ser. No. 313,872. STANDARD PIGMENT COMPANY, INC., Schuylerville, N. Y. Filed Apr. 27, 1931.

PERM-O-LITE

For Printing Inks.
Claims use since Oct. 1, 1928.

CLASS 12

Construction Materials

Ser. No. 293,933. SAYRE & FISHER BRICK COMPANY, Sayreville, N. J. Filed Dec. 20, 1929.

SAFISCO

For Fire Brick, Brick Specialties Such as Tile, and Fire Brick Cement and Ground Refractory of Ground Brick.
Claims use since Nov. 26, 1929.

Ser. No. 303,299. RAUB SUPPLY CO., Lancaster, Pa. Filed July 9, 1930.

MERCURY RAUB

The surname "Raub" is claimed only in connection with the other features of the mark.
For Galvanized Ridge Roll for Roofing, Corrugated and Wall Flashing.
Claims use since Apr. 12, 1919.

Ser. No. 306,991. ALBERT ARMSTRONG, Seattle, Wash. Filed Oct. 21, 1930.

ABCM

For Burned Clay Brick and Tile.
Claims use since Oct. 2, 1930.

Ser. No. 311,055. CERTAIN-TEED PRODUCTS CORPORATION, New York, N. Y. Filed Feb. 14, 1931.

WOODTEX

For Protective Siding for Buildings, Walls, Etc., to Simulate Clapboards and Like Siding Materials and Made from Sheet Roofing Materials Such as Slate-Surfaced Asphalt Saturated Felt Roofing.
Claims use since Dec. 11, 1930.

Ser. No. 311,947. AMERICAN BLUE STONE CO., New York, N. Y. Filed Mar. 10, 1931.

RAINBOW

For Flag Stones.
Claims use since July 22, 1930.

Ser. No. 312,338. FIRETITE PRODUCTS CORPORATION, Indianapolis, Ind. Filed Mar. 20, 1931.

Firetite

For Refractory Cements for High Temperature Work as a Coating for Saving of Fire Brick, Plastics for Heat Treating, Forging, and Welding Furnaces and Oil Burners, and Also for Application to Jambs, Arches, Door Lining, Side Walls, and Other Places in a Boiler Room, and Insulating Materials for Conserving Heat—That is, for Thermo Purposes.

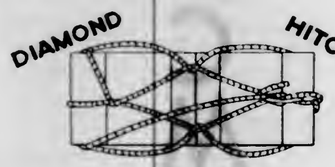
Claims use since Jan. 18, 1930.

Ser. No. 312,659. MEXICO REFRACTORIES COMPANY, Mexico, Mo. Filed Mar. 28, 1931.

MONO-FIBRIK

For Plastic Monolithic Fire Brick.
Claims use since October, 1930.

Ser. No. 312,696. H. B. CLIFFORD ROOFING COMPANY, Detroit, Mich. Filed Mar. 30, 1931.



For Composition Shingles.
Claims use since about Feb. 19, 1931.

Ser. No. 312,794. CHAMBERLIN METAL WEATHER STRIP COMPANY, Detroit, Mich. Filed Apr. 1, 1931.

CHAMBERLIN UNIVERSAL WEATHER STRIP

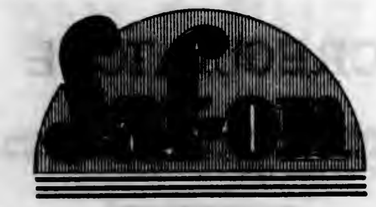
No claim is made to the words "Weather Strip."
For Weather Strips.
Claims use since Jan. 23, 1931.

Ser. No. 312,877. STANDARD WALL COVERING COMPANY, INC., Philadelphia, Pa. Filed Apr. 2, 1931.



No claim being made to the representation of the goods or the words "Large Panels One Piece Marble" apart from the mark as shown.
For Wall Panels.
Claims use since July 3, 1929.

Ser. No. 313,056. THE SAFETY PROCESSING COMPANY, Youngstown, Ohio. Filed Apr. 7, 1931.



The drawing is lined for red.
For Filler Comprising a Mixture of an Abrasive Material and a Binder in Plastic form for Filling Grooves in Marble, Stone, Terrazzo, Wood, Tile, Etc., as Used in Stair Treads, Ramps, and Floors and in Which the Mixture is Allowed to Harden, and Slabs Having Recesses Filled with the Filler Mixture.
Claims use since Nov. 20, 1930.

Ser. No. 313,089. NEW ENGLAND BRICK COMPANY, Boston, Mass. Filed Apr. 8, 1931.



No registration rights are claimed in the words "Hand-Mades" apart from the mark shown in the drawing.
For Brick.
Claims use since Jan. 31, 1931.

Ser. No. 313,168. MICHAEL HAYMAN & CO., INC., Buffalo, N. Y. Filed Apr. 9, 1931.

HAYMANITE

For Cement for Jointing Water Mains.
Claims use since Apr. 2, 1931.

Ser. No. 313,884. THE FLEXWOOD COMPANY, Chicago, Ill. Filed Apr. 27, 1931.

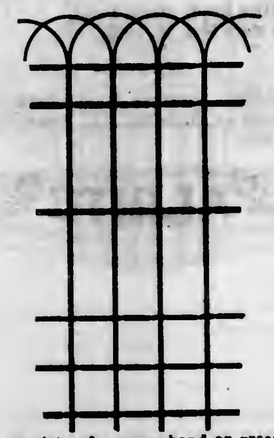
Flexwood

For Fabric-Backed Wood Veneer.
Claims use since May 28, 1930.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 299,109. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio. Filed Apr. 19, 1930.



The mark consists of a green band or green colored portion at or near the bottom of the fencing, no claim being made to the representation of fencing apart from the mark as shown by the drawing.
For Ornamental and Chain Link Metal Fencing.
Claims use since Mar. 15, 1930.

Ser. No. 307,875. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Nov. 14, 1930.

ALCOA

For Metal Cable Clamps, Devices for Preventing Vibration of Electric Cables, Non-Ferrous Tubing, Rivets, and Nails.
Claims use since May 9, 1930.

Ser. No. 307,876. ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Nov. 14, 1930.

ALCOA



For Metal Cable Clamps, Devices for Preventing Vibration of Electric Cables, Non-Ferrous Tubing, Rivets, and Nails.
Claims use since May 9, 1930.

Ser. No. 312,685. GLENN ANDERSON, Galesburg, Ill. Filed Mar. 30, 1931.

TRAVELING PLUMBER



No claim is made for the words "No Returning to the Shop for This or That", apart from the mark shown in the drawing. The lining on the drawing is for shading only.
For Fittings and Supplies Used in Plumbing and Heating Systems—Namely, Lavatories, Bath Tubs, Sinks and Laundry Trays, Water Closets, Urinals; Enameled and Vitreous China Handles for Valves and Faucets, Water-Softening Plumbing Fixtures, Valves, Bibbs, Faucets, Cocks, Traps, Stationary and Portable Showers, Drinking Fountains, Metal, Fiber, and Hard Rubber Pipes and Fittings, and Valve Facings, Washers, and Plugs.
Claims use since March, 1927.

Ser. No. 313,880. WYRSTAPES, INC., New York, N. Y. Filed Apr. 25, 1931.

WYRSTAPES

For Staples Used in Stapling Machines for Fastening Papers, Cardboard, Metal, Etc., or to Wood, Etcetera.
Claims use since Feb. 27, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 314,290. MARINE STEEL CORPORATION, New York, N. Y. Filed May 7, 1931.

BLUE WATER



For Non-Staining, Non-Tarnishing or Bright Alloy Steels in Cast, Forged, and Rolled Form.
Claims use since Nov. 1, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 290,220. MINNESOTA MINING & MANUFACTURING COMPANY, Wilmington, Del. Filed Sept. 25, 1929.

RETSUL

For Polishing Waxes for Lacquered Surfaces and for Automobiles, Furniture and Woodwork, and Lacquer Polishes for Automobile Finishes.
Claims use since Sept. 10, 1929.

Ser. No. 291,606. COLARDO PRODUCTS LIMITED, Reading, England. Filed Oct. 26, 1929.



For Fireproof Paints.
Claims use since May 2, 1929.

Ser. No. 310,343. JOHN G. MARSHALL, Brooklyn, N., Y. Filed Jan. 24, 1931.

EXTENDER

For Composition to be Mixed with Oil Paints to Modify or Decrease the Color Tone.
Claims use since November, 1927.

Ser. No. 312,064. THE RESINOUS PRODUCTS & CHEMICAL COMPANY, Philadelphia, Pa. Filed Mar. 12, 1931.

OILSOLATE

For Metallo-Organic Compounds, Being Brittle Resinous Materials for Use as Driers in Oils, Varnishes, Paints, Enamels, Baking Japans, Lacquers, and Coating Compositions.
Claims use since Dec. 18, 1930.

Ser. No. 312,107. JOHN G. MARSHALL, Brooklyn, N. Y. Filed Mar. 13, 1931.

MARLAC

For a Preparation in the Nature of a Waterproof Varnish to Give a Glossy Finish to Colored or Black and White Photographs to Make the Surface Waterproof and Effect a Glossy Appearance.
Claims use since Feb. 4, 1931.

Ser. No. 312,446. THE MORGAN COMPANY, Chicago, Ill. Filed Mar. 23, 1931.

METALEX

For Protective Ready Mixed Paint.
Claims use since Nov. 15, 1929.

Ser. No. 312,753. FIDELITY MANUFACTURING CO., INC., doing business as Alrite Mfg. Co., Zionsville, Pa. Filed Mar. 31, 1931.



For Touch-Up Enamel, Tire Paint, and Automobile and Wood Polishes.
Claims use since Jan. 17, 1931.

Ser. No. 313,059. THE STAMINITE CORPORATION, New Haven, Conn. Filed Apr. 7, 1931.

STAMINITE

For Transparent Stainproof, Waterproof Coating Compound in the Nature of a Paint or Varnish for Surfacing Floors and the Like and Giving a Weather-Proof Coating on Many Kinds of Material.
Claims use since Mar. 17, 1931.

Ser. No. 313,177. BLACK DUCK PRODUCTS, INC., Whittier, Calif. Filed Apr. 10, 1931.

BLACK DUCK



The drawing is lined for color, the linings appearing on the drawing representing black, blue, brown, green, and red colors.
For Enamel Paint for Motor Vehicles, Enamel Paint for Engines, Water Proofing Paint for Canvas.
Claims use since June 1, 1925.

Ser. No. 313,187. HANOVIA CHEMICAL & MANUFACTURING COMPANY, Newark, N. J. Filed Apr. 10, 1931.



For Metallic Decorating Paints; Liquid, Dry, and Paste Lustre Colors, and Overglaze and Underglaze Colors.
Claims use since Apr. 1, 1910.

Ser. No. 313,260. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Apr. 11, 1931.

KEM-SPAR

Applicant makes no claim herein to the name "Spar" apart from the mark as shown.
For Paints in Paste, Semi-Liquid, or Ready-Mixed Form; Varnishes, Lacquers, Paint Enamels, Varnish Enamels, Lacquer Enamels, and Clear Varnishes.
Claims use since Mar. 27, 1931.

Ser. No. 313,541. HARPOON PAINT PRODUCTS, INC., Long Island City, N. Y. Filed Apr. 20, 1931.



No claim is made to the word "Paint" apart from the mark shown in the drawing.
For Ready Mixed Paint.
Claims use since Apr. 11, 1931.

Ser. No. 314,041. CONSOLIDATED PRODUCTS CORPORATION, Plainfield, N. J. Filed May 1, 1931.

VALCUM

For Finishing Polish for Floors, Furniture, and Automobile Bodies.
Claims use since July, 1926.

CLASS 17

Tobacco Products

Ser. No. 312,800. H. & H. TOBACCO COMPANY, Chicago, Ill. Filed Apr. 1, 1931.

Pepsodent CIGARETTES

No claim being made for the word "Cigarettes" apart from the mark shown in the drawing.
For Cigarettes and Smoking and Chewing Tobacco.
Claims use since Mar. 1, 1931.

Ser. No. 312,801. H. & H. TOBACCO COMPANY, Chicago, Ill. Filed Apr. 1, 1931.

VAPO CIGARETTES

No claim being made for the word "Cigarettes" apart from the mark shown in the drawing.
For Cigarettes and Smoking and Chewing Tobacco.
Claims use since Mar. 1, 1931.

Ser. No. 312,802. H. & H. TOBACCO COMPANY, Chicago, Ill. Filed Apr. 1, 1931.



No claim being made for the word "Cigarettes" apart from the mark shown in the drawing.
For Cigarettes and Smoking and Chewing Tobacco.
Claims use since Mar. 1, 1931.

Ser. No. 312,803. H. & H. TOBACCO COMPANY, Chicago, Ill. Filed Apr. 1, 1931.

ATLANTIC AND PACIFIC

For Cigarettes, Smoking, and Chewing Tobacco.
Claims use since Mar. 1, 1931.

Ser. No. 314,273. CORTEZ CIGAR CO., Savannah, Ga. Filed May 7, 1931.

Pot O' Gold CIGARS



No claim being made to the word "Cigars" apart from the mark as shown.
For Cigars.
Claims use since July 18, 1930.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 313,125. DELCO PRODUCTS CORPORATION, Dayton, Ohio. Filed Apr. 9, 1931.

Delco

For Shock Absorbers for Automobiles and Other Self-Propelled Vehicles.
Claims use since Dec. 3, 1930.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 308,403. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930.



The trade-mark includes the facsimile signature of Walter Hagen.
For Golf Clubs and Golf Bags.
Claims use since April, 1929.

Ser. No. 308,404. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930.

Walter Hagen

The trade-mark consists of the facsimile signature of Walter Hagen.
For Wood and Metal Golf Clubs.
Claims use since Oct. 18, 1927.

Ser. No. 308,405. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930.

Walter Hagen
STAR-LINE

The trade-mark includes the facsimile signature of Walter Hagen.
For Wood and Metal Golf Clubs.
Claims use since Nov. 21, 1927.

Ser. No. 308,408. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930.

Walter Hagen
CHAMPION

The trade-mark includes the facsimile signature of Walter Hagen.
For Wood and Metal Golf Clubs.
Claims use since July 5, 1928.

Ser. No. 308,409. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930.

Hagen
TROPHY

The word "Trophy" is disclaimed apart from the mark shown on the drawing.
For Wood and Metal Golf Clubs.
Claims use since Jan. 28, 1930.

Ser. No. 308,410. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930.

Hagen
GETAWAY

For Wood and Metal Golf Clubs.
Claims use since Oct. 18, 1927.

Ser. No. 308,411. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930.

Walter Hagen
INTERNATIONAL

The trade-mark includes the facsimile signature of Walter Hagen.
For Wood and Metal Golf Clubs.
Claims use since Aug. 30, 1928.

Ser. No. 308,413. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930.

Walter Hagen
GREEN DRAGON

The trade-mark includes the facsimile signature of Walter Hagen.
For Wood and Metal Golf Clubs.
Claims use since Aug. 17, 1928.

Ser. No. 308,414. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930.

HAGEN  TRIANGLE

For Wood and Metal Golf Clubs.
Claims use since Aug. 27, 1928.

Ser. No. 313,670. PHILLIPS & UPPERCU, New York, N. Y. Filed Apr. 22, 1931.

WHIRLPOOL

For Table Board Games of Skill Played with Pieces and Having Guides for Effecting the Direction of Such Pieces.
Claims use since Oct. 1, 1930.

Ser. No. 313,728. BRINLY-HARDY COMPANY, Louisville, Ky. Filed Apr. 24, 1931.

WOBBLE WALK

For Toy Walking Devices in the Nature of Low-Down Stilts.
Claims use since Mar. 19, 1931.

Ser. No. 313,804. SCHILLER PIANO COMPANY, Oregon, Ill. Filed Apr. 25, 1931.

AERO THRILL COASTER

No exclusive right to the use of the word "Coaster" is claimed apart from the mark as shown.
For Sled Coasters.
Claims use since Feb. 26, 1931.

Ser. No. 313,980. DANIEL M. SHIPMAN, doing business as Whipponong Novelty Co., Whippany, N. J. Filed Apr. 29, 1931.

Spot-em

For Game Played with Discs.
Claims use since Mar. 25, 1931.

Ser. No. 314,079. SIMPLEX TYPEWRITER CO., INC., New York, N. Y. Filed May 1, 1931.

Simplex

For Toy Typewriters.
Claims use since 1898.

Ser. No. 314,385. WRIGHT & DITSON, Boston, Mass. Filed May 9, 1931.

Exploder

For Golf Clubs.
Claims use since March, 1931.

Ser. No. 314,447. DONALDSON MANUFACTURING COMPANY, LIMITED, Glasgow, Scotland. Filed May 12, 1931.

DURALOWOOD

For Golf Clubs, Including Steel Shafted Golf Clubs, Golf Irons, Golf Club Shafts, Golf Club Heads, Golf Balls, Golf Bags, and Golf Tees.
Claims use since Dec. 19, 1930.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 305,996. CONSOLIDATED SEWING MACHINE & SUPPLY CO., New York, N. Y. Filed Sept. 24, 1930.

CON-SEW

For Furriers' Tools Consisting of Knives, Pliers, Nail Pullers, Tweezers, Pincers, and Awls; Sewing Machine Needles, Sewing Machines and Parts Thereof Pertaining to the Needle Trade, Accessories Consisting of Pinking Machines, and Screw Drivers.
Claims use since Apr. 1, 1927.

Ser. No. 312,648. JABURG BROTHERS, INC., New York, N. Y. Filed Mar. 28, 1931.

JAY BEE

For Cutlery, Machines, Tools and Parts Thereof, Bakers' and Confectioners' Machinery and Appliances—Namely, Knives, Cutters, Food Beaters, Grinding, Slicing, Chopping Machines; Pumps, Table Ware Consisting of Knives, Forks, and Spoons (of Base Metals); Scoops, Shovels, Pokers, Oven Hoes, Cake Fillers, Ornamenting Sets, Dough Rollers, Doughnut and Noodle Machines, Bottle Corking or Capping Equipment, Washing and Wrapping Machines, Milk Aerating Devices, Pasteurizers, Emulsifying Machines, Fruit Pressers, Churns, Vending Machines, Internal Combustion Motors.
Claims use since April, 1915.

Ser. No. 313,580. NEW PROCESS PAINTING CO., Greenwich, Conn. Filed Apr. 18, 1931.



The word "Painter" is disclaimed apart from the mark shown in the drawing.
For Painting Machines.
Claims use since June 29, 1929.

Ser. No. 313,864. NATIONAL EQUIPMENT CORPORATION, Milwaukee, Wis. Filed Apr. 27, 1931.

MUD JACK

The representation of the name plate illustrated in the drawing is disclaimed as not being any part of the trade-mark sought to be registered.
For Machines for Pumping Cementitious Aggregates.
Claims use since Jan. 1, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 313,242. GRINNELL WASHING MACHINE CORPORATION, Grinnell, Iowa. Filed Apr. 11, 1931.



In the drawing the shading of the background represents the color orange and the shading forming the outlines of the words designates a dark blue color with a light blue shading inside the outline of the words, as shown. The shading on the periphery of the trade-mark designates the color blue.
For Laundry Washing Machines.
Claims use since July 22, 1930.

Ser. No. 313,643. THE BLACK & DECKER MANUFACTURING COMPANY, Towson, Md. Filed Apr. 22, 1931.

BLACK & DECKER

For Electric Laundry Washing Machines and Electric Ironing Machines or Mangles.
Claims use since Apr. 18, 1930.

CLASS 31

Filters and Refrigerators

Ser. No. 313,275. BELDING-HALL COMPANY, Belding, Mich. Filed Apr. 13, 1931.

Thor

For Refrigerators.
Claims use since Apr. 1, 1931.

CLASS 33

Glassware

Ser. No. 313,787. LATCHFORD GLASS COMPANY, Los Angeles, Calif. Filed Apr. 25, 1931.

MISSION

For Glassware, Especially Glass Jars and Bottles.
Claims use since February, 1926.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 310,141. W. C. HOPSON COMPANY, doing business as Simplex Brooder Stove Co., Grand Rapids, Mich. Filed Jan. 19, 1931.

JUNIOR

For Oil Burning Brooder Stoves.
Claims use since Jan. 1, 1914.

Ser. No. 312,327. ADAMS BROS. MFG. CO. INC., Pittsburgh, Pa. Filed Mar. 20, 1931.

CHEERFULATOR

For Radiant Gas Heaters and Parts Thereof.
Claims use since Jan. 21, 1931.

Ser. No. 313,739. LENNOX FURNACE COMPANY, INC., Syracuse, N. Y. Filed Apr. 24, 1931.

ECONOTROL

For Forced Draft Device for Furnaces.
Claims use since Dec. 30, 1930.

CLASS 35

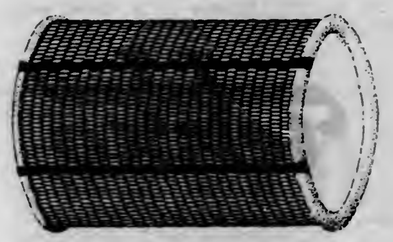
Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 302,896. OTTO W. HOELBINGER, doing business as O. H. Rubber Company, Folsom, Ridley Township, Delaware County, Pa. Filed June 27, 1930.

STICK FAST

No claim is made to the words "Stick Fast" apart from the mark shown.
For Pneumatic Tube Patches for Automobile Tires.
Claims use since Oct. 20, 1928.

Ser. No. 309,307. EUREKA FIRE HOSE MANUFACTURING COMPANY, New York, N. Y. Filed Dec. 24, 1930.



The trade-mark consists of narrow parallel red and blue lines running longitudinally upon the exterior of the hose and separated by a relatively wide interval of the white body fabric. The red and blue lines are formed by a plurality of red and blue warped threads incorporated in the fabric. The drawing is lined with hatchings to indicate the colors red and blue. No claim is made to the representation of a section of the hose shown in the drawing as being part of the trade-mark.
For Hose of Fabric and Rubber.
Claims use since 1906.

CLASS 37

Paper and Stationery

Ser. No. 296,039. WILLIAMS & MARCUS CO., Philadelphia, Pa. Filed Feb. 14, 1930.

In Cite

For Desk Pads Having a Pyraline or Other Transparent Cellulose Cover.
Claims use since Dec. 1, 1920.

Ser. No. 301,254. A. W. FABER, INC., Newark, N. J. Filed May 26, 1930.



For Pencils, Pencil Cases, Crayons, Copying Pencils, Chalk for Writing, Chalkholders, Slate Pencils, Pen Holders, Fountain Pens, Pen Cases, Rubber Erasers, Rubber Bands, Paper Folders, and Pencil Pointers.
Claims use since Apr. 25, 1906.

Ser. No. 302,231. BENJ. D. BENSON & SONS, INC., New York, N. Y. Filed June 7, 1930.

BANKRITE

For Writing Paper, Bank Checks, and Safety Paper.
Claims use since about January, 1928.

Ser. No. 303,657. SALUBRA S. A., Basel, Switzerland. Filed July 19, 1930.

Tekko

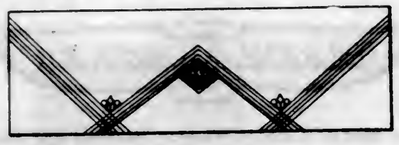
For Wall Coverings Made of Paper.
Claims use since Jan. 1, 1925.

Ser. No. 303,658. SALUBRA S. A., Basel, Switzerland. Filed July 19, 1930.

Salubra

For Wall Coverings Made of Paper.
Claims use since Jan. 1, 1925.

Ser. No. 313,824. MILTON BRADLEY COMPANY, Springfield, Mass. Filed Apr. 14, 1931.



For Crayons.
Cliams use since Mar. 1, 1931.

Ser. No. 313,519. WILSON-JONES COMPANY, Chicago, Ill. Filed Apr. 18, 1931.



For Ring Binders and Filler Sheets for Same.
Claims use since Mar. 1, 1930.

Ser. No. 313,528. THE APPLETON COATED PAPER CO., Appleton, Wis. Filed Apr. 20, 1931.



Applicant disclaims the words "Duplex" and "Enamel" apart from the mark shown. Color is not an essential feature of the mark and the lining is merely for the purpose of shading.
For Book Paper Coated on Two Sides, the Two Sides Each Having Different Colors.
Claims use since May 1, 1930.

CLASS 38

Prints and Publications

Ser. No. 299,218. NEWSPAPER NATURE FEATURES, INC., Cleveland, Ohio. Filed Apr. 21, 1930.

LITTLE NATURE INTERVIEWS

For Periodical in the Nature of Syndicated Newspaper Articles Supplied Over Definite Periods.
Claims use since Apr. 14, 1930.

Ser. No. 299,219. NEWSPAPER NATURE FEATURES, INC., Cleveland, Ohio. Filed Apr. 21, 1930.

Over

the Garden Hedge

For Periodical in the Nature of Syndicated Newspaper Articles Supplied Over Definite Periods.
Claims use since Apr. 14, 1930.

Ser. No. 302,015. POST-ENQUIRER PUBLISHING COMPANY, Oakland, Calif. Filed May 31, 1930.

THE POST-ENQUIRER

For Daily Newspaper.
Claims use since Jan. 1, 1922.

Ser. No. 311,713. THE ELECTROCHEMICAL SOCIETY, New York, N. Y. Filed Mar. 2, 1931.



For Printed Books or Periodicals.
Claims use since Oct. 29, 1930.

Ser. No. 311,922. MEREDITH PUBLISHING COMPANY, Des Moines, Iowa. Filed Mar. 9, 1931.

LIFETIME

For Cook Books.
Claims use since Feb. 28, 1931.

Ser. No. 312,809. FRED G. JOHNSTON, doing business as Indiana Clipping Service, Indianapolis, Ind. Filed Apr. 1,1931.

THE CONSTRUCTION DIGEST

For Newspapers.
Claims use since May, 1926.

CLASS 39

Clothing

Ser. No. 299,877. THE VISCOSE COMPANY, Marcus Hook, Pa. Filed May 2, 1930.

Bevaze

For Men's, Women's and Children's Underwear.
Claims use since Apr. 16, 1930.

Ser. No. 302,178. S. H. CHURCHILL & COMPANY, Chicago, Ill. Filed June 5, 1930.



For Men's Coats, Vests, Pants, Overcoats, Suits, Top Coats, Riding Breeches, Golf Knickers, and Uniforms.
Claims use since Jan. 1, 1909.

Ser. No. 307,342. WYLE HAT COMPANY, Chicago, Ill. Filed Oct. 29, 1930.



For Women's Hats.
Claims use since June 19, 1929.

Ser. No. 307,433. M. S. SIEGEL & COMPANY, INC., New York, N. Y. Filed Oct. 31, 1930.

SEELCO

For Ladies' Vests, Bloomers, Panties, Chemises, Bandeaux, Nightgowns, Pajamas and Pajama Ensembles.
Claims use since August, 1930.

Ser. No. 307,554. KNIT PRODUCTS CORPORATION, Belmont, N. C. Filed Nov. 5, 1930.

De-Moda

For Ladies', Men's, and Children's Hosiery.
Claims use since Oct. 2, 1930.

Ser. No. 308,165. EDWIN A. LEE, Philadelphia, Pa. Filed Nov. 21, 1930.

L'Baz

For Silk Hosiery.
Claims use since Sept. 23, 1930.

Ser. No. 310,148. AJAX HOSIERY MILLS, Phoenixville, Pa. Filed Jan. 20, 1931.

GRENA SHEEN

The word "Sheen" is disclaimed apart from the mark as shown in the drawing.
For Hosiery.
Claims use since Jan. 5, 1931.

Ser. No. 311,735. INTERNATIONAL CORSET COMPANY, Aurora, Ill. Filed Mar. 4, 1931.

"La Señorita"

For Corsets and Combination Corsets and Brassières.
Claims use since Feb. 20, 1931.

Ser. No. 312,199. RELIANCE MANUFACTURING COMPANY, Chicago, Ill. Filed Mar. 16, 1931.



The drawing is lined to indicate the outline of the diamond and the word "Kantshrink" as red. In practice the remainder of the mark is printed in a dark blue. For the purpose of this registration applicant disclaims exclusive right to the words "Product" "Kantshrink," "Full," and "Shrunk" per se.
For Men's and Boys' Work Shirts.
Claims use since Mar. 1, 1931.

Ser. No. 312,575. SEYMOUR TROY & COMPANY, INC., Brooklyn, N. Y. Filed Mar. 26, 1931.

Daylong

For Ladies' Shoes Made from Leather, Rubber, or Fabric or Combinations of Those Materials.
Claims use since Mar. 10, 1931.

Ser. No. 312,813. PAUSON & COMPANY, San Francisco, Calif. Filed Apr. 1, 1931.



The drawing is lined for the color red. Applicant disclaims an exclusive right to the word "Clothes" apart from the mark shown in the drawing.
For Men's and Boys' Suits, Overcoats, and Topcoats.
Claims use since February, 1928.

Ser. No. 312,887. COHEN, GOLDMAN & CO., INC., New York, N. Y. Filed Apr. 2, 1931.



No claim is made to the exclusive use of the words "Domus Specialitans Domus" separate and apart from the mark as shown on the drawing. Translation of these words is "House of Specialties."
For Men's, Boys', and Children's Outer Garments Consisting of Coats, Vests, Pants, Overcoats, Raincoats, Dusters, Mackinaws, Ulsters, Smoking Jackets, Automobile Coats, Bathwraps, and Knickerbockers; Men's Dress, Negligee, and Work Shirts; Men's, Women's, and Children's Underwear Made of Knitted, Netted, and Textile Fabrics; and Uppers for Shoes.
Claims use since Mar. 14, 1931.

Ser. No. 313,099. TABIN-PICKER AND COMPANY, Chicago, Ill. Filed Apr. 8, 1931.



No exclusive right in the word "Frocks" is claimed apart from the mark as shown.
For Ladies' Frocks.
Claims use since Feb. 5, 1931.

Ser. No. 313,131. GLY-DERS FOOTWEAR, INC., Racine, Wis. Filed Apr. 9, 1931.

GLY-DERS

For Slippers and Shoes Made of Leather, Felt, and Canvas, and a Combination of Felt, Leather, and Canvas.
Claims use since Feb. 21, 1931.

Ser. No. 313,210. SOL R. ULLMANN, doing business as Sol Hat Co., Not Incorporated, Chicago, Ill. Filed Apr. 10, 1931.



Exclusive use of "Ahead in Style", "Numode", "Quality", and "Comfort" is claimed only in association with the other features of the mark.
For Hats for Ladies', Misses', and Children, Men's Felt and Wool Hats, Straw Hats, and Men's and Boys' Caps and Spats.
Claims use since Aug. 1, 1930.

Ser. No. 313,218. ADAM HAT STORES, INC., New York, N. Y. Filed Apr. 11, 1931.

"Feltweight"

For Men's Hats.
Claims use since January, 1931.

Ser. No. 313,315. VALCO MANUFACTURING CO., INC., New York, N. Y. Filed Apr. 13, 1931.

Valco Knight

For Pajamas.
Claims use since March, 1931.

Ser. No. 313,438. S. H. KRESS & CO., New York, N. Y. Filed Apr. 16, 1931.



For Hosiery.
Claims use since Mar. 2, 1931.

Ser. No. 313,444. MAYEHOFF, INCORPORATED, Norwalk, Conn. Filed Apr. 16, 1931.

CLUB LIFE

For Misses', Women's, and Children's Dresses.
Claims use since Feb. 14, 1931.

Ser. No. 313,594. EXCELSIOR VARSITY UNDERWEAR CORPORATION, Baltimore, Md. Filed Apr. 21, 1931.

NITE LIFE

For Men's Pajamas.
Claims use since Mar. 23, 1931.

Ser. No. 313,595. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Apr. 21, 1931.

SERVISPUN

For Coats, Vests, Pants, and Overcoats for Men and Boys.
Claims use since Apr. 1, 1924.

Ser. No. 313,697. SLOTE & KLEIN, INC., New York, N. Y. Filed Apr. 22, 1931.

S&K CRITERION

For Ladies' Belts Made of Leather or Similar Materials.
Claims use since Feb. 1, 1931.

Ser. No. 313,729. BROWN SHOE COMPANY, INC., St. Louis, Mo. Filed Apr. 24, 1931.

Aktivator Feature

For Shoes Made of Leather, Cloth, Canvas, or Combinations Thereof.
Claims use since Apr. 3, 1931.

Ser. No. 313,731. FARRINGTON & EVANS, INC., New York, N. Y. Filed Apr. 24, 1931.

Sueda Flat

No claim is made to the word "Hat" apart from the mark shown in the drawing.
For Women's Hats Made of Woven Paper Simulating Straw.
Claims use since July 3, 1930.

Ser. No. 313,852. THE HOSIERY MILLS CO., Chicago, Ill. Filed Apr. 27, 1931.

WALTZ DREAM

For Hosiery for Women and Girls.
Claims use since Apr. 1, 1931.

Ser. No. 313,868. J. SCHOENEMAN, INCORPORATED, Baltimore, Md. Filed Apr. 27, 1931.

Fleeceter

For Coats, Vests, Trousers, Knickerbockers, Top Coats, and Overcoats for Men, Youths, and Boys.
Claims use since September, 1928.

Ser. No. 314,061. LEVY, FORMAN & CO., INC., New York, N. Y. Filed May 1, 1931.

LUCKY FELLER

For Bath Robes, Lounging Robes, Bathing Suits, Sweaters, Rain Coats; Knitted, Netted, and Woven Underwear; Leggings and Puttees of Leather and/or Fabric; Leather Coats for Men, Women, and Children.
Claims use since Aug. 22, 1929.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 312,085. JOSEPH BERKOWITZ, New York, N. Y. Filed Mar. 18, 1931.

A. C. T.
HIGHEST QUALITY
SHOE LACES

No claim is made for the words "All Corrugated Tip," "Highest Quality," "Shoe Laces" apart from the mark.
For Shoe Laces.
Claims use since Feb. 18, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser No. 300,209. LANDESHUTER LEINEN- UND GEBILDWEBEREI F. V. GRÜNFELD, Berlin, Germany. Filed May 9, 1930.

SVEA

Applicant disclaims the right to the exclusive use of the term "Svea" apart from the mark shown in the drawing.
For Textile Rugs.
Claims use since Jan. 1, 1930.

Ser. No. 306,333. OTTO F. WEIGAND, doing business as C. A. Weigand, Philadelphia, Pa. Filed Oct. 2, 1930.

Cawego

For Washable Water-Proof Window Shade Fabric or Material Sold in the Piece or Cut to Size.
Claims use since Aug. 27, 1930.

Ser. No. 308,817. SAMEK BROTHERS, Brno-Brunn, Czechoslovakia. Filed Nov. 18, 1930.



For Woolens—Namely, Piece Goods.
Claims use since Dec. 6, 1929.

Ser. No. 309,380. W. K. HILL, doing business as W. K. Hill & Co., Greer, S. C. Filed Dec. 27, 1930.

Hilltex

For Bedspreads.
Claims use since 1920.

Ser. No. 309,772. FAIRCLOUGH & GOLD, INC., Boston, Mass. Filed Jan. 9, 1931.

TAILORETTE

For Textile Fabric Curtains.
Claims use since Dec. 24, 1930.

Ser. No. 310,464. C. G. ASCHMANN & CO., New York, N. Y. Filed Jan. 28, 1931.

Surfoline

For Silk Piece Goods.
Claims use since Nov. 21, 1930.

Ser. No. 310,958. S. SLATER & SONS, INC., New York, N. Y. Filed Feb. 11, 1931.

FIBRAY

For Piece Goods of Silk, Linen, Wool, or Pile Fabrics or Combinations Thereof Used for Dress Goods or Wearing Apparel.
Claims use since Mar. 25, 1930.

Ser. No. 311,905. ARGUS KNITTING MILLS, INC., Brooklyn, N. Y. Filed Mar. 9, 1931.

DULRAY

For Cotton, Woolen, Silk, Artificial Silk and Rayon Piece Goods.
Claims use since Dec. 22, 1930.

Ser. No. 311,907. ARGUS KNITTING MILLS, INC., Brooklyn, N. Y. Filed Mar. 9, 1931.

NEVASHEEN

For Cotton, Woolen, Silk, Artificial Silk, and Rayon Piece Goods.
Claims use since Oct. 29, 1930.

Ser. No. 311,950. JACOB M. BRAMNICK, doing business as Ba-Bee-Net Manufacturing Co., Philadelphia, Pa. Filed Mar. 10, 1931.

BA-BEE-NET

No claim is made to the word "Net" except in the association shown.
For Canopies for Baby Carriages, Beds, Chairs.
Claims use since Jan. 5, 1931.

Ser. No. 312,028. BROOKLANDS KNITTING INDUSTRY LIMITED, Altrincham, England. Filed Mar. 11, 1931.

PAROLAINE

For Wool or Worsted Cloths and Stuffs in the Piece.
Claims use since June 30, 1930.

Ser. No. 312,332. S. J. CRAIG, Greenville, S. C. Filed Mar. 20, 1931.



Lizzie Fowler

The portrait appearing on the drawing is that of Lizzie Fowler.
For Hand Made Hooked Rugs.
Claims use since August, 1930.

Ser. No. 313,006. ROYAL RAYON CORPORATION, Brooklyn, N. Y. Filed Apr. 6, 1931.

ROYALNIZE

No claim is made to the word "Knit" apart from the mark shown on the drawing.
For Knitted Piece Goods Made of Rayon and Silk.
Claims use since October, 1930.

Ser. No. 313,078. THE FAIR, Chicago, Ill. Filed Apr. 8, 1931.

FAIR MEADOW

For Linen Table Cloths, Napkins, Towels, Sheets, Pillow Cases, Tea Cloths, Scarfs, Used for Draperies and on Furniture and Linen Piece Goods.
Claims use since Mar. 1, 1931.

Ser. No. 313,226. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 11, 1931.

Krushada

For Pile Fabrics in the Piece.
Claims use since Apr. 7, 1931.

Ser. No. 313,227. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 11, 1931.

Lepora

For Pile Fabrics in the Piece.
Claims use since Mar. 31, 1931.

Ser. No. 313,228. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 11, 1931.

Mantelope

For Pile Fabrics in the Piece.
Claims use since Mar. 30, 1931

Ser. No. 313,229. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 11, 1931.

Ultralam

For Pile Fabrics in the Piece.
Claims use since Apr. 7, 1931.

Ser. No. 313,280. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 11, 1931.

Wearwithal

For Pile Fabrics for the Manufacture of Jacquettes, in the Piece.
Claims use since Apr. 1, 1931.

Ser. No. 313,334. DUMARI TEXTILE CO., INC., New York, N. Y. Filed Apr. 14, 1931.

FROSTRAE

For Textile Fabrics in the Piece of Cotton, Wool, Silk, and Silk Substitutes Such as Rayon and/or Combinations Thereof.
Claims use since Dec. 29, 1930.

Ser. No. 313,335. DUMARI TEXTILE CO., INC., New York, N. Y. Filed Apr. 14, 1931.

MIRAE

For Textile Fabrics in the Piece of Cotton, Wool, Silk, and Silk Substitutes Such as Rayon and/or Combinations Thereof.
Claims use since Feb. 18, 1931.

Ser. No. 313,371. KATTENMANN AND MITCHELL COMPANY, New York, N. Y. Filed Apr. 15, 1931.

"BELLE AMIE"

For Silk Piece Goods.
Claims use since Apr. 9, 1931.

Ser. No. 313,433. HUDSON RIVER WOOLEN MILLS, New York, N. Y. Filed Apr. 16, 1931.

NAPODOWN

For Woolen Overcoatings.
Claims use since Jan. 22, 1931.

Ser. No. 313,456. VELVERAY CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 16, 1931.

Velveray

For Cotton Piece Goods, Silk Piece Goods, Woolen Piece Goods, Pile Fabric Piece Goods, Linen Piece Goods, Artificial Silk Piece Goods, Rayon in the Piece, and Piece Goods Composed of Various Mixtures and Combinations of Silk, Cotton, Wool, Linen, and Artificial Silk.
Claims use since Oct. 1, 1929.

Ser. No. 313,477. PERLMANN, SCHAL AND STERN, INC., New York, N. Y. Filed Apr. 17, 1931.

FLORENZIA

For Lace Doilies, Lace Runners, Lace Bed Spreads, Lace Table Cloths.
Claims use since Mar. 25, 1931.

Ser. No. 313,488. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 18, 1931.

Chinak

For Pile Fabrics in the Piece.
Claims use since Apr. 7, 1931.

Ser. No. 313,489. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 18, 1931.

Ermintex

For Pile Fabrics in the Piece.
Claims use since Apr. 8, 1931.

Ser. No. 313,490. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 18, 1931.

LA LOIE D'AMOUR

For Pile Fabrics in the Piece.
Claims use since Apr. 11, 1931.

Ser. No. 313,491. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 18, 1931.

Junglo

For Pile Fabrics in the Piece.
Claims use since Apr. 8, 1931.

Ser. No. 313,738. A. & M. KARAGHEUSIAN, INC., New York, N. Y. Filed Apr. 24, 1931.

MERAK

For Textile Rugs and Carpets.
Claims use since Oct. 30, 1930.

Ser. No. 313,854. A. & M. KARAGHEUSIAN, INC., New York, N. Y. Filed Apr. 27, 1931.

AMIR

For Textile Rugs and Carpets.
Claims use since Jan. 3, 1930.

Ser. No. 313,954. SIDNEY BLUMENTHAL & CO., INC., New York, N. Y. Filed Apr. 29, 1931.

Montrosia

For Pile Fabrics in the Piece.
Claims use since Apr. 22, 1931.

CLASS 43

Thread and Yarn

Ser. No. 313,213. ADAMSON BROS. COMPANY, New York, N. Y. Filed Apr. 9, 1931.

LASTEX

For Yarns.
Claims use since Sept. 1, 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 311,528. J. F. JELENKO & CO., INC., New York, N. Y. Filed Feb. 27, 1931.

NO. 7

For Casting Golds.
Claims use since Feb. 1, 1924.

Ser. No. 312,814. THE SANDFELDER COMPANY, Chicago, Ill. Filed Mar. 19, 1931.

Martha Dean

The name appearing upon the drawing is a facsimile signature of Martha Dean, permission granted.
For Elastic Reducing Garments for Women, Consisting of Bandages, Belts, Corsets, Abdominal Supporters, Etc., for Therapeutic Purposes.
Claims use since Jan. 15, 1931.

Ser. No. 312,598. ALBERT CASSETT, New York, N. Y. Filed Mar. 27, 1931.

PARISIANS

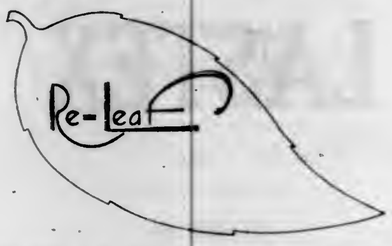
For Prophylatic Rubber or Tissue Membraneous Articles for the Prevention of Contagious Diseases.
Claims use since November, 1930.

Ser. No. 313,153. QUINTEX COMPANY, INCORPORATED, Philadelphia, Pa. Filed Apr. 9, 1931.

Quintex

For Sanitary Napkins.
Claims use since Mar. 1, 1930.

Ser. No. 313,546. THOMAS R. JAMES, Dallas, Tex. Filed Apr. 20, 1931.



For Pads to be Used During Hair Treating or Waving Operations to Facilitate Drying of the Hair and to Protect the Skin.
Claims use since Mar. 16, 1931.

Ser. No. 313,825. L. BAMBERGER & CO., Newark, N. J. Filed Apr. 27, 1931.

Napettes

For Cellulose Sanitary Napkins.
Claims use since Apr. 3, 1931.

Ser. No. 314,204. SAMUEL KOHN, doing business as Thrift Rubber Company, Newark, N. J. Filed May 5, 1931.

TRUCO

For Prophylactic Rubber and Membraneous Articles for the Prevention of Contagious Diseases.
Claims use since Feb. 7, 1928.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 310,923. W. AND I. RYLES, Flint, Mich. Filed Feb. 10, 1931.

TRIMA

For Ginger Beer.
Claims use since Jan. 7, 1931.

Ser. No. 313,166. WATSEKA WHOLESALE GROCERY COMPANY, Watseka, Ill. Filed Apr. 8, 1931.

SWEET TOOTH

For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Apr. 1, 1931.

Ser. No. 313,398. THE VITAMIN COMPANY OF AMERICA, Orlando, Fla. Filed Apr. 15, 1931.

SUNNY GROVE

For Nonalcoholic, Maltless, Concentrated Fruit Juices for Making Soft Drinks.
Claims use since Apr. 8, 1931.

Ser. No. 313,997. M. B. ECCLES, Omaha, Nebr. Filed Apr. 30, 1931.

MELBA

For Dry Maltless Compound Used for the Preparation of Non-Alcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Mar. 14, 1931.

Ser. No. 313,998. M. B. ECCLES, Omaha, Nebr. Filed Apr. 30, 1931.

KAOLA

For Non-Alcoholic Maltless Syrup for Making Soft Drinks.
Claims use since Mar. 14, 1931.

Ser. No. 314,393. BLUE SEAL EXTRACT COMPANY, Cambridge, Mass. Filed May 11, 1931.

NERV-U

For Carbonated, Non-Alcoholic, Non-Cereal, and Maltless Beverages and Extracts Therefor.
Claims use since Jan. 1, 1918.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 277,783. FOX & FOX, Philadelphia, Pa. Filed Jan. 10, 1929.

"MEAT MR. FOX"

THE PLEASURE

WILL BE ALL YOURS

"BELIEVE ME"

The applicant does not claim the use of the word "Meat" apart from its use in the trade-mark as shown in the drawing.
For Beef, Mutton, Pork, Poultry, and Game, Fresh, Dried, and Potted.
Claims use since May 1, 1913.

Ser. No. 298,644. MINNESOTA VALLEY CANNING COMPANY, Le Sueur, Minn. Filed Apr. 10, 1930.



The representation of the goods is hereby disclaimed apart from the mark as shown in the drawing.
For Canned Peas.
Claims use since July 20, 1926.

Ser. No. 299,418. TOMANGO LIMITED, Mataffin, Eastern Transvaal, Union of South Africa. Filed Apr. 24, 1930.

TOMANGO

For Dried, Preserved, Candied, and Crystallised Fruits, Vegetables, and Peels, Chutneys, and Fruit and Vegetable Sauces.
Claims use since June, 1924.

Ser. No. 303,769. H. A. JOHNSON COMPANY, Boston, Mass. Filed July 24, 1930. Under 10-year proviso.

PI-STOK

For Fruit Preserves, Pie and Pastry Fillings.
Claims use since 1890.

Ser. No. 307,351. ADOLPH FRIEDBERG, Montreal, Quebec, Canada. Filed Oct. 30, 1930.

Mayfruit

For Flavoring Extracts for Food Flavoring Purposes.
Claims use since Sept. 2, 1930.

Ser. No. 309,340. JEROME F. GLASSER, Cicero, Ill. Filed Dec. 26, 1930.

O'Kay

The representation of the goods is disclaimed apart from the mark shown in the drawing.
For Ice Cream and Frozen Confections.
Claims use since Sept. 1, 1930.

Ser. No. 310,406. PABST CORPORATION, Milwaukee, Wis. Filed Jan. 26, 1931.



No claim is made to the representations of the package, also the wording other than the names "Pabst," "Pabst-ett," and "Pabst Corporation."
For Cheese Preparation.
Claims use since Mar. 16, 1926.

Ser. No. 310,791. O. B. ANDREWS COMPANY, Chattanooga, Tenn. Filed Feb. 6, 1931.

The CREAM of the CROP

For Canned Fruits and Vegetables.
Claims use since Dec. 12, 1930.

Ser. No. 311,467. BOSTON TEA PARTY, INC., Troy, Ala. Filed Feb. 26, 1931.



For Liquid Tea Syrup.
Claims use since Aug. 19, 1930.

Ser. No. 312,748. AMERICAN POP CORN COMPANY, Sioux City, Iowa. Filed Mar. 31, 1931.



For Oil for Use in Popping Corn and Pop Corn Seasoning.
Claims use since June 1, 1924, on oil for use in popping corn and since Dec. 1, 1930, on pop corn seasoning.

Ser. No. 312,767. NIKOL JELL COMPANY, Portland, Oreg. Filed Mar. 31, 1931.

NIK-OL

For Gelatin Desserts.
Claims use since Mar. 14, 1931.

Ser. No. 312,888. GOLDEN GLOW SHOPS, INC., Somerville, Mass. Filed Apr. 2, 1931.

GOLDEN GLOW

For Pop Corn—Namely, Corn Kernels Before Being Popped, and the Corn After it is Popped and Pop Corn Salted or Buttered.
Claims use since Mar. 18, 1931.

Ser. No. 312,924. W. S. MACGILLIVRAY, San Antonio, Tex. Filed Apr. 3, 1931.

MILK-FROST

Exclusive right to the use of the word "Milk" is disclaimed.
For Frozen Confection Consisting Principally of Milk, Honey, and Fruit.
Claims use since Apr. 4, 1900.

Ser. No. 313,000. PLANTERS OYSTER COMPANY, INC., Port Norris, N. J. Filed Apr. 6, 1931.



For Canned Oysters in Their Natural State.
Claims use since Jan. 31, 1931.

Ser. No. 313,062. STROEHMANN BROTHERS CO., Norristown, Pa. Filed Apr. 7, 1931.



The picture shown on the drawing is purely fanciful. The representation of a loaf of bread and the words "Milk Bread" are disclaimed apart from the other features of the mark shown on the drawing.
For Bread.
Claims use since Mar. 19, 1931.

Ser. No. 313,261. C. F. SIMONIN'S SONS, INC., Philadelphia, Pa. Filed Apr. 11, 1931.

SIMCO SHORTENING

No claim being made to the exclusive use of the word "Shortening" apart from the mark as shown.
For Shortenings Composed of Vegetable Substances and of Combinations of Animal and Vegetable Substances.
Claims use since Mar. 27, 1931.

Ser. No. 313,272. GEORGE D. LEOCOPOULOS, Chicopee Falls, Mass. Filed Apr. 10, 1931.

HONEY
(CHEW)
DELIGHT
CANDY

No claim is made to the words "Honey," "Chew," "Candy," apart from the other features of the mark.
For Candy.
Claims use since Dec. 10, 1930.

Ser. No. 313,317. GEO. RASMUSSEN CO., Chicago, Ill. Filed Apr. 18, 1931.

GEO. RASMUSSEN CO.
QUALITY GROCERS

The words "Quality Grocers" are disclaimed apart from the mark as shown in the drawing.
For Canned Vegetables, Canned Fruits, Canned Soup, Canned Fish, Evaporated Milk, Sauerkraut, Spaghetti, Spices, Tea, Hominy, Pickles, Pickled Onions, Sandwich Spread, Catsup, Chow Chow, Chili Sauce, Sweet Relish, and Salad Dressings Such as Mayonnaise, French Dressing, and Thousand Island Dressing.
Claims use since Dec. 16, 1930.

Ser. No. 313,448. THE ROCHESTER BREAD COMPANY, Rochester, Minn. Filed Apr. 16, 1931.



For Cookies.
Claims use since Apr. 1, 1931.

Ser. No. 313,468. BERNARD M. DOUGLAS, New York, N. Y. Filed Apr. 17, 1931.



Applicant is the owner of registration Number 40,060.
For Roquefort Cheese.
Claims use since Oct. 1, 1901.

Ser. No. 313,559. PURITAN MALT EXTRACT COMPANY, Chicago, Ill. Filed Apr. 20, 1931.



The lining in the drawing is used to indicate the colors red, blue, and yellow.
For Malt Syrup.
Claims use since Apr. 9, 1931.

Ser. No. 313,757. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Apr. 24, 1931.



The lining on the drawing represents the color blue, which is particularly claimed. No claim is made to the word "Coffee" nor to the word "Brand" except in connection with the trade-mark as shown in the drawing.
For Coffee.
Claims use since Apr. 8, 1931.

Ser. No. 313,853. KAPSI-KON YEAST CORPORATION, Baltimore, Md. Filed Apr. 27, 1931.

KAPSI-KON

For Yeast.
Claims use since Mar. 1, 1931.

Ser. No. 314,147. CANINE FOOD COMPANY, San Francisco, Calif. Filed May 4, 1931.

K-9

For Dog Food.
Claims use since Apr. 29, 1931.

Ser. No. 314,250. RED BAND CO., INC., Johnson City, Tenn. Filed May 6, 1931.

SPUN GOLD

For Plain and Self Rising Flour.
Claims use since Apr. 7, 1931.

Ser. No. 314,274. CRAILO SWEETS, INCORPORATED, Brooklyn, N. Y. Filed May 7, 1931.

CRAILO

For Confectionery—Namely Chocolates and Candy.
Claims use since October, 1929.

Ser. No. 314,296. PURE CANDY KITCHEN, INC., New York, N. Y. Filed May 7, 1931.

Uncle Don

For Chocolate.
Claims use since Apr. 22, 1931.

Ser. No. 314,360. CANDY KITCHENS, INC., Chicago, Ill. Filed May 9, 1931.

Perky

For Candy.
Claims use since Apr. 1, 1931.

Ser. No. 314,362. DILLINO & COMPANY, Indianapolis, Ind. Filed May 9, 1931.

Champagne

For Candies.
Claims use since April, 1895.

Ser. No. 314,363. ELMER CANDY COMPANY, INC., New Orleans, La. Filed May 9, 1931.

BLOW ME DOWN

POPEYE

For Candy.
Claims use since Apr. 30, 1931.

Ser. No. 314,381. JOSEPH LOUIS SORDILLO, doing business as Sordillo Candy Co., Baltimore, Md. Filed May 9, 1931.



For Candy.
Claims use since Apr. 23, 1929.

CLASS 48
Malt Beverages and Liquors

Ser. No. 314,045. ESSLINGER'S, INC., Philadelphia, Pa. Filed May 1, 1931.

Esslinger's
GOLD COIN

For Malt Beverages Containing Not More Than the Legal Alcoholic Content.
Claims use since Apr. 24, 1931.

CLASS 50
Merchandise Not Otherwise Classified

Ser. No. 310,277. AMERICAN HAIR & FELT COMPANY, Chicago, Ill. Filed Jan. 23, 1931.

UNDO-FELT

No claim being made for the word "Felt" apart from the mark shown.
For Underlining for Floor Coverings Such as Carpets and Linoleum.
Claims use since Dec. 30, 1930.

Ser. No. 311,074. CARL ROMSON, Stockholm, Sweden. Filed Feb. 14, 1931.



Applicant disclaims apart from the mark as shown any representation of goods.
For Fire Escape Rope Apparatus.
Claims use since Jan. 10, 1927.

Ser. No. 312,198. PYRAMIDEN-FLIEGENFÄNGERFABRIK MAX DAMETZ, M. B. H., Zeitz, Germany. Filed Mar. 16, 1931.



No claim is made to the representation of the goods (the two pictures of the fly paper) nor to the words "The Famous Fly Catcher" apart from the mark as shown.
For Fly Catchers.
Claims use since June, 1930.

Ser. No. 313,475. SAMUEL MALLINGER, Pittsburgh, Pa. Filed Apr. 17, 1931.

ACE
HIGH

For Bottle Caps.
Claims use since Apr. 6, 1931.

Ser. No. 313,659. ARON GUSTAFSON, doing business as Johnson & Gustafson, Barre, Vt. Filed Apr. 22, 1931.



No claim is made to the exclusive use of the word "Memorials" except in connection with the mark as shown.
For Granite Monuments and Memorials.
Claims use since Apr. 11, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 16, 1931

284,044. LAMINATED OR NONSHATTERABLE GLASS. TRIPLEX SAFETY GLASS COMPANY OF NORTH AMERICA, Clifton, N. J.
Filed December 17, 1930. Serial No. 309,099. PUBLISHED MARCH 24, 1931. Class 33.

284,045. LAMINATED OR NONSHATTERABLE GLASS. TRIPLEX SAFETY GLASS COMPANY OF NORTH AMERICA, Clifton, N. J.
Filed December 17, 1930. Serial No. 309,100. PUBLISHED MARCH 24, 1931. Class 33.

284,046. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed December 31, 1930. Serial No. 309,506. PUBLISHED MARCH 24, 1931. Class 42.

284,047. PIECE GOODS OF SILK, RAYON, AND WOOL AND MIXTURES OF THESE MATERIALS. CHATILLON, MOULY, ROUSSEL, INC., New York, N. Y.
Filed January 2, 1931. Serial No. 309,552. PUBLISHED MARCH 24, 1931. Class 42.

284,048. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed January 2, 1931. Serial No. 309,555. PUBLISHED MARCH 24, 1931. Class 42.

284,049. SILK, RAYON, WOOL, COTTON, AND LINEN IN THE PIECE AND/OR ANY COMBINATION THEREOF. N. FLUEGELMAN & CO., INC., New York, N. Y.
Filed January 5, 1931. Serial No. 309,610. PUBLISHED MARCH 24, 1931. Class 42.

284,050. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed January 7, 1931. Serial No. 309,672. PUBLISHED MARCH 24, 1931. Class 42.

284,051. BUCKRAM, BOOK CLOTH, HAT NETS, AND FILTER CLOTH IN THE PIECE. GRISWOLDVILLE MANUFACTURING COMPANY, Griswoldville, Mass.
Filed January 10, 1931. Serial No. 309,813. PUBLISHED MARCH 24, 1931. Class 42.

284,052. WOVEN FABRICS—NAMELY, SILK CHIFFON. BELLMAN BROOK BLEACHERY CO., Fairview, N. J.
Filed January 14, 1931. Serial No. 309,918. PUBLISHED MARCH 17, 1931. Class 42.

284,053. SOAP. DOROTHY GRAY, Bloomfield, N. J., and New York, N. Y.
Filed December 17, 1930. Serial No. 309,071. PUBLISHED MARCH 24, 1931. Class 4.

284,054. STERLING-SILVER ORNAMENTAL WARE CONSISTING OF BOWLS, PLATES, VASES, AND CANDLESTICKS. M. FRED HIRSCH CO., New York, N. Y.
Filed December 20, 1930. Serial No. 309,207. PUBLISHED MARCH 31, 1931. Class 28.

284,055. MEDICINAL PREPARATION FOR INDIGESTION, GASTRITIS, ACID STOMACH, AND COMMON DISORDERS OF THE DIGESTIVE ORGANS, HAVING ALSO LAXATIVE AND OTHER BENEFICIAL EFFECT ON FUNCTIONAL DISORDERS OF THE INTESTINES. CHAS. W. BARTH, St. Louis, Mo., assignor to Barth Chemical Products, Inc., a Corporation of Missouri.
Filed December 29, 1930. Serial No. 309,408. PUBLISHED MARCH 24, 1931. Class 6.

284,056. CAKE MIX. H. C. BRILL CO., INC., New York, N. Y.
Filed January 5, 1931. Serial No. 309,604. PUBLISHED MARCH 24, 1931. Class 46.

284,057. STOCK FEED. EL CAMPO RICE MILLING COMPANY, El Campo, Tex.
Filed January 5, 1931. Serial No. 309,608. PUBLISHED MARCH 31, 1931. Class 46.

284,058. ATOMIZERS FOR BOTH MEDICAL AND SURGICAL USE. CLINICAL SUPPLIES, INCORPORATED, Pittsburgh, Pa.
Filed January 13, 1931. Serial No. 309,883. PUBLISHED MARCH 24, 1931. Class 44.

284,059. TIE GRIPS AND TIE HOLDERS MADE OF OR PLATED WITH PRECIOUS METALS. FREEMAN-DAUGHADAY COMPANY, Providence, R. I.
Filed January 13, 1931. Serial No. 309,891. PUBLISHED MARCH 17, 1931. Class 28.

284,060. CAKES. JOE LOWE CORPORATION, Brooklyn, N. Y.
Filed January 13, 1931. Serial No. 309,898. PUBLISHED MARCH 24, 1931. Class 46.

284,061. WOODEN FLOORING. GEO. H. STORM & CO., INC., New York, N. Y., assignor to Raymond W. Storm, New York, N. Y.
Filed January 14, 1931. Serial No. 309,950. PUBLISHED MARCH 31, 1931. Class 12.

284,062. SOAP. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed January 19, 1931. Serial No. 310,131. PUBLISHED MARCH 24, 1931. Class 4.

284,063. DYED SKINS. NOVO TRADING CORPORATION, New York, N. Y.
Filed January 20, 1931. Serial No. 310,186. PUBLISHED MARCH 24, 1931. Class 1.

284,064. PIANOS. HARRY J. SOHMER, doing business as Sohmer & Co., New York, N. Y.
Filed January 23, 1931. Serial No. 310,306. PUBLISHED MARCH 17, 1931. Class 36.

284,065. LIQUID PREPARATION FOR CLEANING AND POLISHING METALLIC SURFACES. MILRICK PRODUCTS CORPORATION, Kokomo, Ind., assignor to The Milrick Corporation, Kokomo, Ind., a Corporation of Indiana.
Filed January 26, 1931. Serial No. 310,401. PUBLISHED MARCH 24, 1931. Class 4.

284,066. PLASTIC RESIN USED IN THE DENTAL PROFESSION. PROSTHETIC PRODUCTS, INC., New York, N. Y.
Filed January 27, 1931. Serial No. 310,454. PUBLISHED MARCH 31, 1931. Class 44.

284,067. STERLING-SILVER AND SILVER-PLATED FLATWARE, HOLLOW WARE, AND TOILET WARE. INTERNATIONAL SILVER COMPANY, Meriden, Conn.
Filed January 29, 1931. Serial No. 310,517. PUBLISHED MARCH 17, 1931. Class 28.

284,068. STERLING-SILVER AND SILVER-PLATED FLATWARE, HOLLOW WARE, AND TOILET WARE. INTERNATIONAL SILVER COMPANY, Meriden, Conn.
Filed January 31, 1931. Serial No. 310,607 PUBLISHED MARCH 17, 1931. Class 28.

284,069. RICE. LAKE CHARLES RICE MILLING COMPANY OF LOUISIANA, INC., Lake Charles, La.
Filed February 2, 1931. Serial No. 310,646. PUBLISHED MARCH 31, 1931. Class 46.

284,070. JEWELRY FOR PERSONAL WEAR OR ADORNMENT, NOT INCLUDING WATCHES. PROVIDENCE STOCK COMPANY, Providence, R. I.
Filed February 3, 1931. Serial No. 310,695. PUBLISHED MARCH 17, 1931. Class 28.

284,071. PERFUME. CHANEL, INC., New York, N. Y.
Filed February 4, 1931. Serial No. 310,715. PUBLISHED MARCH 17, 1931. Class 6.

284,072. PERFUME. CHANEL, INC., New York, N. Y.
Filed February 4, 1931. Serial No. 310,716. PUBLISHED MARCH 17, 1931. Class 6.

284,073. PERFUME. CHANEL, INC., New York, N. Y.
Filed February 4, 1931. Serial No. 310,717. PUBLISHED MARCH 17, 1931. Class 6.

284,074. PANCAKE FLOUR. H. C. COLE MILLING COMPANY, Chester, Ill.
Filed February 5, 1931. Serial No. 310,758. PUBLISHED MARCH 31, 1931. Class 46.

284,075. CORNETS, TRUMPETS, TROMBONES, MELOPHONES, CLARINETS, AND SAXOPHONES. C. G. CONN, LTD., Elkhart, Ind.
Filed February 5, 1931. Serial No. 310,760. PUBLISHED MARCH 24, 1931. Class 36.

284,076. PHONOGRAPH NEEDLES. RAUL G. MONIZ, New York, N. Y. and Bahia, Brazil, South America.
Filed February 7, 1931. Serial No. 310,833. PUBLISHED MARCH 31, 1931. Class 36.

284,077. SHAVING CREAMS. PARKE, DAVIS & COMPANY, Detroit, Mich.
Filed February 9, 1931. Serial No. 310,878. PUBLISHED MARCH 24, 1931. Class 4.

284,078. FRATERNITY BADGES, LAPEL BUTTONS; SCARF, LAPEL, AND BREAST PINS; CUFF LINKS, TIE CLASPS, CHARMS, FINGER RINGS, BELT BUCKLES, AND ORNAMENTAL SHIELDS, ALL OF PRECIOUS METAL. PHI MU ALPHA SINFONIA FRATERNITY OF AMERICA, Chicago, Ill.
Filed February 9, 1931. Serial No. 310,879. PUBLISHED MARCH 17, 1931. Class 28.

284,079. SANITARY NAPKINS. BESSIE KAYE, doing business as Hy-G-Hy Company, New York, N. Y.
Filed February 10, 1931. Serial No. 310,916. PUBLISHED MARCH 24, 1931. Class 44.

284,080. SOAPS. COMFORT MANUFACTURING COMPANY, Chicago, Ill.
Filed February 16, 1931. Serial No. 311,083. PUBLISHED MARCH 31, 1931. Class 4.

284,081. SOAPS. COMFORT MANUFACTURING COMPANY, Chicago, Ill.
Filed February 16, 1931. Serial No. 311,084. PUBLISHED MARCH 31, 1931. Class 4.

284,082. COAL. THE BUKA COAL COMPANY, Cincinnati, Ohio.
Filed February 17, 1931. Serial No. 311,127. PUBLISHED MARCH 24, 1931. Class 1.

284,083. VAGINAL DIAPHRAGMS. JULIUS SCHMID, New York, N. Y.
Filed February 17, 1931. Serial No. 311,209. PUBLISHED MARCH 31, 1931. Class 44.

284,084. SOAP POWDERS. MILWAUKEE LUBRICANTS CO., Milwaukee, Wis.
Filed August 14, 1930. Serial No. 304,624. PUBLISHED MARCH 31, 1931. Class 4.

284,085. [WITHDRAWN.]

284,086. FINGER RINGS AND FINGER-RING MOUNTINGS MADE OF GOLD AND/OR PLATINUM. WILLIAM H. HURLBURT, doing business as H. O. Hurlburt & Sons, Philadelphia, Pa.
Filed September 19, 1930. Serial No. 305,862. PUBLISHED MARCH 17, 1931. Class 28.

284,087. COTTON, MERCERIZED COTTON, TINSEL, RAYON, AND SILK RIBBONS; BRAIDED RIBBON, LINGERIE RIBBON, AND COTTON-AND-RUBBER ELASTIC. THE WARREN FEATHERBONE COMPANY, Three Oaks, Mich.
Filed October 25, 1930. Serial No. 307,190. PUBLISHED MARCH 31, 1931. Class 42.

284,088. SOAP. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed October 31, 1930. Serial No. 307,407. PUBLISHED MARCH 24, 1931. Class 4.

284,089. SOAP. LEVER BROTHERS COMPANY, Cambridge, Mass.
Filed November 15, 1930. Serial No. 307,947. PUBLISHED MARCH 31, 1931. Class 4.

284,090. VIOLINS, CELLOS, VIOLAS, ETC. CZECHO-SLOVAK MUSICAL INSTRUMENTS COMPANY, New York, N. Y.
Filed December 8, 1930. Serial No. 308,533. PUBLISHED MARCH 24, 1931. Class 36.

284,091. SILK PIECE GOODS. ALBERT GODDE, BEDIN, INC., New York, N. Y.
Filed December 4, 1930. Serial No. 308,585. PUBLISHED MARCH 24, 1931. Class 42.

284,092. COTTON PIECE GOODS AND FOR FILLED AND FINISHED COTTON PIECE GOODS. THE HOLLISTON MILLS, INC., Norwood, Mass.
Filed December 8, 1930. Serial No. 308,732. PUBLISHED MARCH 24, 1931. Class 42.

284,093. MANICURE PREPARATIONS. L'ONGLEX LABORATORIES, LIMITED, London, England.
Filed December 8, 1930. Serial No. 308,739. PUBLISHED MARCH 24, 1931. Class 6.

284,094. ELECTROTHERAPEUTIC INSTRUMENT FOR PROVIDING DIAGNOSTIC ILLUMINATION, ETC. THE LIEBEL-FLARSHEIM CO., Cincinnati, Ohio.
Filed November 21, 1928. Serial No. 275,622. PUBLISHED MARCH 24, 1931. Class 44.

284,095. VELVETEEN TEXTILE FABRICS IN THE PIECE. A. D. JUILLIARD & CO. INC., New York, N. Y.
Filed June 5, 1929. Serial No. 285,100. PUBLISHED MARCH 31, 1931. Class 42.

284,096. SOAPS. MATE, INC., Philadelphia, Pa.
Filed September 11, 1929. Serial No. 289,637. PUBLISHED DECEMBER 10, 1929. Class 4.

284,097. CERTAIN NAMED CLEANING PRODUCTS. THE J. B. FORD COMPANY, Wyandotte, Mich.
Filed January 22, 1930. Serial No. 295,072. PUBLISHED MARCH 31, 1931. Class 4.

284,098. PRESERVE GLASSES, GLASS COOKING UTENSILS, GLASS KITCHEN UTENSILS, ETC. SIBOR, S. A. VERRERIES DE ROMONT, Romont, Switzerland.
Filed January 7, 1930. Serial No. 294,490. PUBLISHED MARCH 24, 1931. Class 33.

284,099. LAVALLIÈRES, PIN SETS, CUFF BUTTONS, ETC. EISENSTADT MANUFACTURING COMPANY, St. Louis, Mo.
Filed March 6, 1930. Serial No. 296,912. PUBLISHED MARCH 17, 1931. Class 28.

284,100. COAL OF VARIOUS KINDS AND SIZES. BLUE BLAZE COAL COMPANY, Salt Lake City, Utah.
Filed March 17, 1930. Serial No. 297,407. PUBLISHED MARCH 31, 1931. Class 1.

284,101. NUT BUNS, BUTTERED RINGS, ROLLS, AND DOUGHNUTS. TWENTIETH CENTURY BAKERY, INC., Haverhill, Mass.
Filed May 21, 1930. Serial No. 300,997. PUBLISHED MARCH 31, 1931. Class 46.

284,102. SOAP, WASHING POWDER, AND OTHER CLEANING PREPARATIONS. GORDON CORPORATION, LTD., doing business as Gordon-Allen Ltd., Berkeley, Calif.
Filed November 18, 1930. Serial No. 308,013. PUBLISHED MARCH 31, 1931. Class 4.

284,103. LUBRICATING GREASE. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,121. PUBLISHED MARCH 24, 1931. Class 15.

284,104. FLASH LIGHTS. BOND ELECTRIC CORPORATION, Jersey City, N. J.
Filed January 21, 1931. Serial No. 310,203. PUBLISHED MARCH 24, 1931. Class 21.

284,105. WIRES, CABLES, INSULATED WIRES, INSULATED CABLES, BRAIDED WIRES, BRAIDED CABLES, ARMORED WIRES, AND ARMORED CABLES. SIMPLEX WIRE & CABLE COMPANY, Boston, Mass.
Filed January 21, 1931. Serial No. 310,228. PUBLISHED MARCH 17, 1931. Class 21.

284,106. RADIO RECEIVING SETS AND PARTS THEREOF. GENERAL MOTORS RADIO CORPORATION, Dayton, Ohio.
Filed January 24, 1931. Serial No. 310,337. PUBLISHED MARCH 24, 1931. Class 21.

284,107. RADIO AERIALS, TONE CONTROLS, TRANSFORMERS, CONDENSERS, RESISTANCES, AND AERIAL WIRE. WELLSTON RADIO CORP., St. Louis, Mo.
Filed January 29, 1931. Serial No. 310,542. PUBLISHED MARCH 24, 1931. Class 21.

284,108. COIN-CONTROLLED MECHANICAL GAMES OF SKILL INCLUDING A SPIRAL RACEWAY FOR A PROJECTED BALL. PACE MANUFACTURING CO., Chicago, Ill.
Filed January 30, 1931. Serial No. 310,574. PUBLISHED MARCH 31, 1931. Class 22.

284,109. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT OF ALCOHOL BY VOLUME. PLEASANT BREW SALES CORPORATION, New York, N. Y., assignor to Liebmann Breweries, Inc., Brooklyn, N. Y.
Filed February 2, 1931. Serial No. 310,656. PUBLISHED APRIL 7, 1931. Class 48.

284,110. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS DRINKS, SIRUPS AND EXTRACTS FOR MAKING THE SAME. ALEX A. COHEN, doing business as Alco Advertising & Supply Co., Providence, R. I.
Filed February 10, 1931. Serial No. 310,912. PUBLISHED APRIL 14, 1931. Class 45.

284,111. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS, EXTRACTS, AND CONCENTRATES FOR MAKING THE SAME. CHOCOLATE PRODUCTS COMPANY, Chicago, Ill.
Filed February 18, 1931. Serial No. 311,024. PUBLISHED APRIL 7, 1931. Class 45.

284,112. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGE SOLD AS A SOFT DRINK AND FOR SYRUPS, EXTRACTS, AND CONCENTRATES FOR MAKING THE SAME. FRED RUPP, doing business as Twin Mountain Bottling Co., Port Jervis, N. Y.
Filed February 13, 1931. Serial No. 311,045. PUBLISHED APRIL 7, 1931. Class 45.

284,113. CARBONATED, NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS USED IN MAKING THE SAME. HENRY A. GIES, doing business as Havre Bottling Works, Havre, Mont.
Filed March 2, 1931. Serial No. 311,604. PUBLISHED APRIL 7, 1931. Class 45.

284,114. NONALCOHOLIC, MALTLESS BEVERAGES, CARBONATED OR UNCARBONATED, SOLD AS SOFT DRINKS AND SYRUPS, COMPOUNDS, FLAVORS, AND CONCENTRATES FOR MAKING THE SAME. GOLDEN STATE CITRUS PRODUCTS, INC., Los Angeles, Calif.
Filed March 3, 1931. Serial No. 311,681. PUBLISHED APRIL 7, 1931. Class 45.

284,115. NONALCOHOLIC, MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. J. Z. SCHONHOFF, doing business as Lord Baltimore Bottling Co., Baltimore, Md.
Filed March 3, 1931. Serial No. 311,698. PUBLISHED APRIL 14, 1931. Class 48.

284,116. NONALCOHOLIC, MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT ALCOHOL BY VOLUME. J. Z. SCHONHOFF, doing business as Lord Baltimore Bottling Co., Baltimore, Md.
Filed March 3, 1931. Serial No. 311,699. PUBLISHED APRIL 14, 1931. Class 48.

284,117. AUTOMOBILE RADIATOR PLATES AND BRONZE GONGS. KIWANIS INTERNATIONAL, Chicago, Ill.
Filed February 24, 1931. Serial No. 311,383. PUBLISHED APRIL 7, 1931. Class 18.

284,118. PAPER BAGS. BROOKLYN STANDARD BAG CO. INC., Brooklyn, N. Y.
Filed March 6, 1931. Serial No. 311,819. PUBLISHED APRIL 14, 1931. Class 2.

284,119. PAINTS IN READY-MIXED FORM. COOK PAINT AND VARNISH COMPANY, North Kansas City, Mo.
Filed December 18, 1930. Serial No. 309,121. PUBLISHED MARCH 3, 1931. Class 16.

284,120. PILE FABRICS MADE OF WOOL TO BE USED IN THE MANUFACTURE OF CLOTHING. GEM CLOTHING CO. INC., New York, N. Y.
Filed May 22, 1930. Serial No. 301,025. PUBLISHED MARCH 31, 1931. Class 42.

284,121. GUM USED AS AN ASSISTANT IN THE SIZING OF TEXTILE WARPS. E. F. HOUGHTON & Co., Philadelphia, Pa.
Filed July 19, 1930. Serial No. 303,643. PUBLISHED SEPTEMBER 2, 1930. Class 6.

284,122. MOLASSES. WALTER BLAIR RODDENBERY, Cairo, Ga.
Filed July 31, 1930. Serial No. 304,069. PUBLISHED MARCH 24, 1931. Class 46.

284,123. BACKINGS FOR ARTIFICIAL TEETH. THE COLUMBUS DENTAL MNAUFACTURING COMPANY, Columbus, Ohio.
Filed August 1, 1930. Serial No. 304,095. PUBLISHED MARCH 24, 1931. Class 44.

284,124. ELECTROMEDICAL SET AND PARTS THEREOF. OTTO GERHARDT CHRISTOF LUDWIG JOSEPH OVERBECK, Deansgate, Grimsby, England.
Filed August 4, 1930. Serial No. 304,211. PUBLISHED MARCH 24, 1931. Class 44.

284,125. RAYON THREADS AND YARNS. S. A. SETA ARTIFICIALE VAREDO, Turin, Italy.
Filed August 8, 1930. Serial No. 304,387. PUBLISHED MARCH 24, 1931. Class 43.

284,126. RAYON THREADS AND YARNS. S. A. SETA ARTIFICIALE VAREDO, Turin, Italy.
Filed August 8, 1930. Serial No. 304,388. PUBLISHED MARCH 24, 1931. Class 43.

284,127. WHEAT FLOUR, POULTRY AND DAIRY FEEDS. THE HOGAN MILLING COMPANY, Junction City, Kans.
Filed August 14, 1930. Serial No. 304,615. PUBLISHED MARCH 24, 1931. Class 46.

284,128. SILK, RAYON, COTTON, WOOL, LINEN, AND/OR COMBINATIONS THEREOF IN THE PIECE, WOVEN, KNITTED, OR NETTED. HOLLAND & SON, New York, N. Y.
Filed November 24, 1930. Serial No. 308,252. PUBLISHED MARCH 24, 1931. Class 42.

284,129. TEXTILE RUGS. THE ASSOCIATED MERCHANDISING CORPORATION, New York, N. Y.
Filed January 20, 1931. Serial No. 310,155. PUBLISHED MARCH 24, 1931. Class 42.

284,130. COTTON YARNS. P. LINDHORST, Berlin, Germany.
Filed January 27, 1931. Serial No. 310,449. PUBLISHED MARCH 24, 1931. Class 43.

284,131. WOOL YARNS. P. LINDHORST, Berlin, Germany.
Filed January 27, 1931. Serial No. 310,450. PUBLISHED MARCH 24, 1931. Class 43.

284,132. PIECE GOODS—NAMELY, AN ELASTIC WEBBING COMBINING THE FEATURES OF BOTH KNITTED AND WOVEN ELASTIC. THE FORMFIT COMPANY, Chicago, Ill.
Filed January 28, 1931. Serial No. 310,476. PUBLISHED MARCH 24, 1931. Class 42.

284,133. SILK, WOOLEN, LINEN, AND COTTON PIECE GOODS AND COMBINATIONS THEREOF. I. MILLER & SONS, INCORPORATED, Long Island City, N. Y.
Filed January 29, 1931. Serial No. 310,523. PUBLISHED MARCH 24, 1931. Class 42.

284,134. BROAD SILKS AND SILK MIXTURES CONSISTING OF SILK AND COTTON, SILK AND WOOL, SILK AND RAYON IN THE PIECE. THE SCHWARZENBACH HUBER CO., New York, N. Y.
Filed January 29, 1931. Serial No. 310,533. PUBLISHED MARCH 31, 1931. Class 42.

284,135. BROAD SILKS AND SILK MIXTURES CONSISTING OF SILK AND COTTON, SILK AND WOOL, SILK AND RAYON IN THE PIECE. THE SCHWARZENBACH HUBER CO., New York, N. Y.
Filed January 29, 1931. Serial No. 310,534. PUBLISHED MARCH 31, 1931. Class 42.

284,136. HOUSEHOLD LINENS FOR KITCHEN, DININGROOM, BEDROOM, AND BATHROOM USE AND LINEN PIECE GOODS. SEYMOUR H. LE BELL, New York, N. Y.
Filed February 3, 1931. Serial No. 310,683. PUBLISHED MARCH 31, 1931. Class 42.

284,137. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed February 4, 1931. Serial No. 310,712. PUBLISHED MARCH 31, 1931. Class 42.

284,138. WOOLEN BLANKETS NOT IN THE PIECE. WILLIAM HOLLINS & COMPANY, LIMITED, London, England.
Filed February 7, 1931. Serial No. 310,828. PUBLISHED MARCH 31, 1931. Class 42.

284,139. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y.
Filed February 9, 1931. Serial No. 310,855. PUBLISHED MARCH 31, 1931. Class 42.

284,140. FABRICS IN THE PIECE OF COTTON, LINEN, WOOL, SILK, AND SILK SUBSTITUTE (RAYON) AND/OR COMBINATION THEREOF. DUMARI TEXTILE CO., INC., New York, N. Y.
Filed February 11, 1931. Serial No. 310,936. PUBLISHED MARCH 31, 1931. Class 42.

284,141. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed February 12, 1931. Serial No. 310,983. PUBLISHED MARCH 31, 1931. Class 42.

284,142. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed February 12, 1931. Serial No. 310,984. PUBLISHED MARCH 31, 1931. Class 42.

284,143. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed February 12, 1931. Serial No. 310,986. PUBLISHED MARCH 31, 1931. Class 42.

284,144. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed February 12, 1931. Serial No. 310,988. PUBLISHED MARCH 31, 1931. Class 42.

284,145. WOOLEN PIECE GOODS. FORSTMANN & HUFFMANN COMPANY, Passaic, N. J.
Filed February 12, 1931. Serial No. 310,990. PUBLISHED MARCH 31, 1931. Class 42.

284,146. PILE FABRICS IN THE PIECE. J. B. MARTIN COMPANY, Norwich, Conn.
Filed February 14, 1931. Serial No. 311,067. PUBLISHED MARCH 31, 1931. Class 42.

284,147. PIECE GOODS, MADE OF COTTON, WOOL, RAYON, SILK, ARTIFICIAL SILK, ARTIFICIAL FIBERS, AND COMBINATIONS OF THE SAME. FARR ALPACA COMPANY, Holyoke, Mass.
Filed February 16, 1931. Serial No. 311,090. PUBLISHED MARCH 31, 1931. Class 42.

284,148. PIECE GOODS OF SILK, RAYON, COTTON, WOOL, AND METAL THREAD AND MIXTURES OF THESE MATERIALS. F. DUCHARME SILK CO. INC., New York, N. Y.
Filed February 16, 1931. Serial No. 311,087. PUBLISHED MARCH 31, 1931. Class 42.

284,149. ARTIFICIAL-SILK KNIT FABRICS, COMMONLY KNOWN AS RAYON KNIT FABRICS. ARGUS KNITTING MILLS, INC., Brooklyn, N. Y.
Filed February 1, 1930. Serial No. 295,454. PUBLISHED OCTOBER 14, 1930. Class 42.

284,150. CERTAIN NAMED PAINT PRODUCTS. THE EGYPTIAN LACQUER MANUFACTURING COMPANY, New York, N. Y.
Filed January 7, 1931. Serial No. 309,679. PUBLISHED APRIL 7, 1931. Class 16.

284,151. APPARATUS FOR ELECTRICALLY CONTROLLING WATER HEATING SYSTEMS CONSISTING OF THERMOSTATIC ELECTRIC SWITCHES, BURNER ELECTRODES, ELECTRICALLY-OPERATED FUEL VALVES, TRANSFORMERS, AND PARTS THEREOF. ELECTROMATIC GAS CONTROL CORPORATION, Cleveland, Ohio.
Filed January 8, 1931. Serial No. 309,727. PUBLISHED MARCH 17, 1931. Class 21.

284,152. LUBRICATING OIL. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa.
Filed January 14, 1931. Serial No. 309,952. PUBLISHED MARCH 17, 1931. Class 15.

284,153. CANNED SAUERKRAUT. THE FREMONT KRAUT CO., Pittsburgh, Pa.
Filed February 6, 1931. Serial No. 310,901. PUBLISHED APRIL 14, 1931. Class 46.

284,154. CANDIES. JULIA KING'S CANDY CORPORATION, Chicago, Ill.
Filed February 14, 1931. Serial No. 311,064. PUBLISHED APRIL 14, 1931. Class 46.

284,155. FRESH CITRUS FRUITS, FRESH DECIDUOUS FRUITS, FRESH VEGETABLES, AND NUTS AND PEANUTS IN THEIR NATURAL STATE. A. NARDI'S SONS, INC., Williamsport, Pa.
Filed February 14, 1931. Serial No. 311,068. PUBLISHED APRIL 7, 1931. Class 46.

284,156. CANDY. M. EDWARD WELCH, doing business as The Robert Welch Company, Freeport, N. Y.
Filed February 18, 1931. Serial No. 311,208. PUBLISHED APRIL 7, 1931. Class 46.

284,157. FRESH CITRUS FRUITS. JOHN MEYER, INC., New Orleans, La.
Filed February 21, 1931. Serial No. 311,338. PUBLISHED APRIL 7, 1931. Class 46.

284,158. CHEWING GUM. AMERICAN CHICLE COMPANY, Long Island City, N. Y.
Filed February 24, 1931. Serial No. 311,354. PUBLISHED APRIL 7, 1931. Class 46.

284,159. CHOCOLATE CANDY. W. F. SCHRAFFT & SONS CORPORATION, Boston, Mass.
Filed February 24, 1931. Serial No. 311,395. PUBLISHED APRIL 7, 1931. Class 46.

284,160. GREEN COFFEE AND ROASTED COFFEE. ECHAVARRIA INCORPORATED, New York, N. Y.
Filed February 28, 1931. Serial No. 311,566. PUBLISHED APRIL 14, 1931. Class 46.

284,161. CANDY. ELMER CANDY COMPANY, INC., New Orleans, La.
Filed March 3, 1931. Serial No. 311,651. PUBLISHED APRIL 7, 1931. Class 46.

284,162. SALTED PEANUTS. ADAMS PEANUT PRODUCTS, INC., Columbia, S. C.
Filed March 9, 1931. Serial No. 311,903. PUBLISHED APRIL 14, 1931. Class 46.

284,163. GREEN COFFEE AND ROASTED COFFEE. ECHAVARRIA INCORPORATED, New York, N. Y.
Filed February 28, 1931. Serial No. 311,567. PUBLISHED APRIL 14, 1931. Class 46.

284,164. PAINTS. CAMEL LEAD COLOR & CHEMICAL PRODUCTS MFG. CORP., Brooklyn, N. Y.
Filed January 31, 1931. Serial No. 310,595. PUBLISHED MARCH 24, 1931. Class 16.

284,165. PAINTS. CAMEL LEAD COLOR & CHEMICAL PRODUCTS MFG. CORP., Brooklyn, N. Y.
Filed January 31, 1931. Serial No. 310,596. PUBLISHED MARCH 24, 1931. Class 16.

284,166. PIPE-COATING ENAMEL OF THE NATURE OF PAINT. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed February 4, 1931. Serial No. 310,741. PUBLISHED APRIL 7, 1931. Class 16.

284,167. VARNISHES, PAINTS, AND ENAMELS. INTERNATIONAL COMPOSITIONS COMPANY, INCORPORATED, New York, N. Y.
Filed February 9, 1931. Serial No. 310,869. PUBLISHED APRIL 7, 1931. Class 16.

284,168. LIQUID PREPARATION IN THE NATURE OF A PAINT FOR DECORATING AND COLORING EARTHENWARE, PORCELAIN, ETC. THE ROESSLER & HASSLACHER CHEMICAL COMPANY, New York, N. Y.
Filed February 9, 1931. Serial No. 310,884. PUBLISHED APRIL 7, 1931. Class 16.

284,169. WOOD STAIN. RONUK, LIMITED, doing business as Ronuk Sanitary Polish Works, Portslade, near Brighton, England.
Filed February 18, 1931. Serial No. 311,201. PUBLISHED APRIL 14, 1931. Class 16.

284,170. CERTAIN NAMED PAINT PRODUCTS. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio.
Filed February 21, 1931. Serial No. 311,342. PUBLISHED MARCH 31, 1931. Class 16.

284,171. CONFECTIONERY—NAMELY, CANDY. SWEETS COMPANY OF AMERICA, INC., New York, N. Y.
Filed January 7, 1931. Serial No. 309,704. PUBLISHED APRIL 7, 1931. Class 46.

284,172. TRUCK-GARDENING PRODUCTS—NAMELY, POTATOES, STRAWBERRIES, BRUSSELS SPROUTS, BEANS, ASPARAGUS, PEAS, BEETS,, AND CUCUMBERS. ELMER W. VAN BRUNT, doing business as Van Brunt's and Fewacres Farm, Southampton, N. Y.
Filed February 7, 1931. Serial No. 310,845. PUBLISHED APRIL 14, 1931. Class 46.

284,173. CURED MEATS—NAMELY, HAMS. P. D. GWALTNEY Jr. & CO., INC., Smithfield, Va.
Filed November 8, 1930. Serial No. 307,672. PUBLISHED APRIL 14, 1931. Class 46.

284,174. FRESH DECIDUOUS AND CITRUS FRUITS, DRIED FRUITS, NUTS IN THEIR NATURAL STATE, AND UNROASTED AND ROASTED SHELLED NUTS. ANCHORAGE FARM TRADING CO., LTD., doing business as Anchorage Farm, San Francisco, Calif.
Filed November 3, 1930. Serial No. 307,465. PUBLISHED APRIL 14, 1931. Class 46.

284,175. WET STORAGE BATTERIES AND STRUCTURAL PARTS THEREOF. TROJAN BATTERY COMPANY, doing business as Trojan, Los Angeles, Calif.
Filed October 20, 1930. Serial No. 306,977. PUBLISHED MARCH 17, 1931. Class 21.

284,176. CERTAIN NAMED PAINT PRODUCTS. GENERAL PAINT CORPORATION, San Francisco, Calif.
Filed October 15, 1930. Serial No. 306,775. PUBLISHED APRIL 14, 1931. Class 16.

284,177. FRESH FISH—NAMELY, FILLETS OF HADDOCK. WILLIAM J. MCNASBY, doing business as MCNASBY FISK & OYSTER COMPANY, Akron, Ohio.
Filed September 29, 1930. Serial No. 306,194. PUBLISHED APRIL 14, 1931. Class 46.

284,178. ELECTRIC REFRIGERATORS AND PARTS THEREOF. MAJESTIC HOUSEHOLD UTILITIES CORPORATION, Chicago, Ill.
Filed September 13, 1930. Serial No. 305,668. PUBLISHED APRIL 7, 1931. Class 31.

284,179. WOVEN, KNITTED, AND NETTED PIECE GOODS. INTERNATIONALER MARATTI-MASCHINENVERKAUF-A. G. BERLIN, Berlin, Germany.
Filed September 10, 1930. Serial No. 305,531. PUBLISHED MARCH 24, 1931. Class 42.

284,180. ROASTED COFFEE. THE FRANK GROCERY CO., INC., doing business as Monogram Coffee Co., Shreveport, La.
Filed September 3, 1930. Serial No. 305,273. PUBLISHED APRIL 7, 1931. Class 46.

284,181. TOOL BOXES. DUPLEX WRENCH CORPORATION, Lakewood, N. Y.
Filed August 28, 1930. Serial No. 305,101. PUBLISHED APRIL 7, 1931. Class 2.

284,182. ELECTRIC AND ARC WELDERS AND PARTS THEREOF. AGIL SCHWEISSVERFAHREN G. M. B. H. Berlin, Germany.
Filed August 22, 1930. Serial No. 304,901. PUBLISHED MARCH 17, 1931. Class 21.

284,183. TUBING SUPPORTS FOR SUPPORTING OIL-WELL PIPE. THE BRIDGEPORT MACHINE COMPANY, Wichita, Kans.
Filed August 14, 1930. Serial No. 304,600. PUBLISHED APRIL 14, 1931. Class 13.

284,184. PAINTS. HURLOX MANUFACTURING CO. INC., Rockaway, N. J.
Filed August 7, 1930. Serial No. 304,328. PUBLISHED MARCH 31, 1931. Class 16.

284,185. ELECTRICAL APPARATUS AND MACHINES AND ACCESSORIES. THE BLACK & DECKER MANUFACTURING COMPANY, Towson, Md.
Filed July 21, 1930. Serial No. 303,684. PUBLISHED MARCH 17, 1931. Class 21.

284,186. ELECTRIC SWITCHES AND COIN-OPERATED ELECTRIC SWITCHES FOR STARTING THE OPERATION OF PHONOGRAPHS AND OTHER ELECTRIC APPLIANCES. OSCAR A. BRONSON, doing business as Automatic Service Company, Minneapolis, Minn.
Filed May 23, 1930. Serial No. 301,092. PUBLISHED MARCH 17, 1931. Class 21.

284,187. GALVANIZED, BRONZE, AND COPPER SCREEN CLOTH. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed March 5, 1931. Serial No. 311,794. PUBLISHED APRIL 14, 1931. Class 13.

284,188. PAPER CUPS AND PAPER LINERS FOR BAKING PANS AND SIMILAR DISHES. HARVEY PAPER PRODUCTS CO., Sturgis, Mich.
Filed March 2, 1931. Serial No. 311,607. PUBLISHED APRIL 14, 1931. Class 2.

284,189. NAILS. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio.
Filed March 2, 1931. Serial No. 311,599. PUBLISHED APRIL 14, 1931. Class 13.

284,190. WINDOW AND DOOR SCREENS. CORRY METAL CORPORATION, Corry, Pa.
Filed February 25, 1931. Serial No. 311,420. PUBLISHED APRIL 7, 1931. Class 13.

284,191. PLUG VALVES. MERCO NORDSTROM VALVE COMPANY, San Francisco, Calif.
Filed January 27, 1931. Serial No. 310,451. PUBLISHED APRIL 14, 1931. Class 13.

284,192. PLUG VALVES. MERCO NORDSTROM VALVE COMPANY, San Francisco, Calif.
Filed January 27, 1931. Serial No. 310,452. PUBLISHED APRIL 14, 1931. Class 13.

284,193. FLUID-HEATING APPARATUS AND HEAT-EXCHANGE APPARATUS. FOSTER WHEELER CORPORATION, New York, N. Y.
Filed February 2, 1931. Serial No. 310,642. PUBLISHED APRIL 7, 1931. Class 34.

284,194. VENT AND FLUE PIPES AND FITTINGS THEREFOR. PLANT RUBBER & ASBESTOS WORKS, San Francisco, Calif.
Filed February 6, 1931. Serial No. 310,809. PUBLISHED APRIL 14, 1931. Class 34.

284,195. GUIDING RODS TO BE ATTACHED TO AUTOMOBILE MUDGUARDS. CHARLES N. COLSTAD, Attleboro, Mass.
Filed February 10, 1931. Serial No. 310,913. PUBLISHED APRIL 7, 1931. Class 19.

284,196. FLUSH VALVES. SLOAN VALVE COMPANY, Chicago, Ill.
Filed February 10, 1931. Serial No. 310,925. PUBLISHED APRIL 7, 1931. Class 13.

284,197. KITCHEN EQUIPMENT. RANSOM-BARTON CO., Philadelphia, Pa.
Filed February 17, 1931. Serial No. 311,158. PUBLISHED APRIL 14, 1931. Class 13.

284,198. AUTOMOTIVE VEHICLES—NAMELY, AUTOMOBILES, TRUCKS, BUSSES, AND TAXICABS AND THEIR CONPONENT PARTS. THE PIERCE-ARROW MOTOR CAR COMPANY, Buffalo, N. Y.
Filed February 19, 1931. Serial No. 311,245. PUBLISHED APRIL 14, 1931. Class 19.

284,199. CONTAINERS—NAMELY, BOXES, TRAYS, CRATES, AND CARTONS ESPECIALLY FOR BULK MATERIAL, AS FRUITS, VEGETABLES, ETC. FRED M. LONGNECKER, Delta, Ohio.
Filed February 20, 1931. Serial No. 311,276. PUBLISHED APRIL 7, 1931. Class 2.

284,200. LACQUERS. FOSTER MFG. CO., LTD., Los Angeles, Calif.
Filed January 12, 1931. Serial No. 309,850. PUBLISHED APRIL 7, 1931. Class 16.

284,201. PAINTS, ENAMELS, AND VARNISHES. FOSTER MFG. CO., LTD., Los Angeles, Calif.
Filed January 12, 1931. Serial No. 309,851. PUBLISHED APRIL 7, 1931. Class 16.

284,202. CERTAIN NAMED PAINT PRODUCTS. THE EGYPTIAN LACQUER MANUFACTURING COMPANY, New York, N. Y.
Filed January 15, 1931. Serial No. 309,969. PUBLISHED MARCH 31, 1931. Class 16.

284,203. CERTAIN NAMED PAINT PRODUCTS. BELKNAP HARDWARE & MANUFACTURING COMPANY, Louisville, Ky.
Filed January 16, 1931. Serial No. 310,009. PUBLISHED APRIL 7, 1931. Class 16.

284,204. AUTOMOBILE AND FURNITURE POLISH. LESLIE P. DOHERTY, doing business as The Boland Products Co., Jersey City, N. J.
Filed January 17, 1931. Serial No. 310,046. PUBLISHED MARCH 24, 1931. Class 16.

284,205. CERTAIN NAMED PAINT PRODUCTS. BLUE RIBBON PAINT CO., Wheeling, W. Va.
Filed January 24, 1931. Serial No. 310,329. PUBLISHED MARCH 24, 1931. Class 16.

284,206. PAINT ENAMELS AND READY-MIXED PAINT. PAINT ENGINEERS, INC., Chicago, Ill.
Filed January 26, 1931. Serial No. 310,408. PUBLISHED MARCH 31, 1931. Class 16.

284,207. CERTAIN NAMED PAINT PRODUCTS. WAGGNER PAINT COMPANY, North Kansas City, Mo.
Filed January 27, 1931. Serial No. 310,458. PUBLISHED MARCH 31, 1931. Class 16.

284,208. POLISH FOR FURNITURE AND WOODWORK. ANTONIO GRAZIOSI, doing business as Antonio Graziosi Laboratories, Philadelphia, Pa.
Filed January 29, 1931. Serial No. 310,513. PUBLISHED MARCH 31, 1931. Class 16.

284,209. CANDY. M. J. HOLLOWAY & COMPANY, Chicago, Ill.
Filed March 4, 1931. Serial No. 311,728. PUBLISHED APRIL 14, 1931. Class 46.

284,210. HEATERS—NAMELY, COAL OR COKE BURNING FURNACES AND BOILERS AND GAS HEATING FURNACES; FUEL-CONSUMPTION-CONTROLLING TEMPERATURE REGULATORS FOR GAS, COAL, OR COKE FURNACES OR HEATERS; HUMIDIFIERS, AND FURNACE FANS. AMERICAN AIR CONDITIONING CORPORATION, Quincy, Ill.
Filed December 17, 1930. Serial No. 309,055. PUBLISHED APRIL 7, 1931. Class 34.

284,211. FLUSH VALVES. SLOAN VALVE COMPANY, Chicago, Ill.
Filed December 3, 1930. Serial No. 308,557. PUBLISHED APRIL 7, 1931. Class 13.

284,212. FLUSH VALVES. SLOAN VALVE COMPANY, Chicago, Ill.
Filed December 3, 1930. Serial No. 308,558. PUBLISHED APRIL 7, 1931. Class 13.

284,213. CURED MEATS. P. D. GWALTNEY, JR. & CO., INC., Smithfield, Va.
Filed November 12, 1930. Serial No. 307,815. PUBLISHED APRIL 14, 1931. Class 46.

284,214. CANDIES, CHOCOLATES, AND TEAS. SOCIETE ANONYME DU CHOCOLAT F. MARQUIS, Paris, France.
Filed November 29, 1930. Serial No. 308,458. PUBLISHED APRIL 14, 1931. Class 46.

284,215. PASSENGER CARS, LORRIES, AND SPECIAL VEHICLES. LIMITED COMPANY FORMERLY THE ŠKODA-WORKS, PLZEŇ, Prague-Smichov, Czechoslovakia.
Filed August 4, 1926. Serial No. 235,559. PUBLISHED AUGUST 5, 1930. Class 19.

284,216. LINEN PIECE GOODS AND TABLE NAPKINS, TABLECLOTHS, TOWELS OF LINEN. CARSON PIRIE SCOTT & CO., Chicago, Ill.
Filed June 6, 1928. Serial No. 267,580. PUBLISHED DECEMBER 2, 1930. Class 42.

284,217. GASOLINE. UTACAL OIL COMPANY, Cedar City, Utah.
Filed February 14, 1930. Serial No. 296,036. PUBLISHED MARCH 17, 1931. Class 15.

284,218. ELECTRIC HOT PLATES. NATIONAL ENAMELING & STAMPING CO. INC., Milwaukee, Wis.
Filed February 14, 1930. Serial No. 296,020. PUBLISHED MARCH 31, 1931. Class 21.

284,219. CANNED VEGETABLES—NAMELY, FROZEN FRESH PEAS. FAIRMONT CANNING CO., Fairmont, Minn.
Filed November 23, 1929. Serial No. 292,799. PUBLISHED APRIL 7, 1931. Class 46.

284,220. CLEANER AND POLISH FOR FLOORS, BOWLING ALLEYS, WOODWORK, AND FURNITURE. THE BRUNSWICK-BALKE-COLLENDER COMPANY, Wilmington, Del., and Chicago, Ill.
Filed June 10, 1929. Serial No. 285,327. PUBLISHED MAY 13, 1930. Class 16.

284,221. CANNED FRUITS AND FISH. PACIFIC TRADING CO., INC., San Francisco, Calif.
Filed October 17, 1928. Serial No. 273,933. PUBLISHED APRIL 7, 1931. Class 46.

284,222. SALTED NUTS. GRAY NUT COMPANY, INC., New York, N. Y.
Filed September 22, 1928. Serial No. 272,807. PUBLISHED APRIL 7, 1931. Class 46.

284,223. STEAM ACCUMULATORS, ENGINES, HAMMERS, ETC. LIMITED COMPANY FORMERLY THE ŠKODA-WORKS, PLZEŇ, Prague-Smichov, Czechoslovakia.
Filed August 2, 1926. Serial No. 235,488. PUBLISHED AUGUST 5, 1930. Class 23.

284,224. RUM. COMPAÑIA RON BACARDÍ, S. A., Santiago de Cuba, Cuba.
Filed December 12, 1930. Serial No. 308,880. PUBLISHED APRIL 7, 1931. Class 49.

284,225. RUM. COMPAÑIA RON BACARDÍ, S. A., Santiago de Cuba, Cuba.
Filed December 15, 1930. Serial No. 308,976. PUBLISHED APRIL 7, 1931. Class 49.

284,226. RUM. COMPAÑIA RON BACARDÍ, S. A., Santiago de Cuba, Cuba.
Filed December 15, 1930. Serial No. 308,977. PUBLISHED APRIL 7, 1931. Class 49.

284,227. RUM. COMPAÑIA RON BACARDÍ, S. A., Santiago de Cuba, Cuba.
Filed December 15, 1930. Serial No. 308,978. PUBLISHED APRIL 7, 1931. Class 49.

284,228. RUM. COMPAÑIA RON BACARDÍ, S. A., Santiago de Cuba, Cuba.
Filed December 15, 1930. Serial No. 308,979. PUBLISHED APRIL 7, 1931. Class 49.

284,229. ALUMINUM-BRONZE CONDENSER TUBES. THE YORKSHIRE COPPER WORKS LIMITED, Leeds, England.
Filed December 5, 1930. Serial No. 308,665. PUBLISHED APRIL 7, 1931. Class 13.

284,230. PORTABLE MINIATURE GOLF COURSES. THE CARNIE-GOUDIE MANUFACTURING CO., Kansas City, Mo.
Filed December 6, 1930. Serial No. 308,680. PUBLISHED APRIL 14, 1931. Class 22.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

284,231. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) WEST DISINFECTING COMPANY, Long Island City, N. Y. Filed June 13, 1930. Serial No. 302,423.

BOWLBRYTE

For Toilet-Bowl Cleanser.
Claims use since Apr. 23, 1930.

284,232. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) BUDLONG & FUNCHESS MOTOR PRODUCTS CO., Hanford, Calif. Filed Apr. 11, 1931. Serial No. 313,231.

NO NOCK
HYDRAULIC OIL SEALED

For Piston Rings.
Claims use since May 1, 1928.

284,233. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) ROCK SPRINGS FUEL COMPANY, Rock Springs, Wyo. Filed Apr. 20, 1931. Serial No. 313,560.

KLEEN-FYRE
COAL

For Coal.
Claims use since Aug. 1, 1929.

284,234. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BALLARD & BALLARD CO., Louisville, Ky. Filed Feb. 9, 1931. Serial No. 310,853.

Olde Kentuckie

For Special Preservatively-Packaged Uncooked Dough Formations Such as Biscuits or Rolls and the Like Ready for Cooking or Baking.
Claims use since Feb. 9, 1930.

284,235. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) CHARLES E. GREGORY, Brooklyn, N. Y. Filed May 7, 1930. Serial No. 300,061.



VACUUM MASSAGE GLOVE

For Vacuum Massage Glove.
Claims use since Apr. 1, 1930.

284,236. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) OLIVER H. WALTON, doing business as Charles Walton & Son, Needham Heights, Mass. Filed Apr. 28, 1930. Serial No. 299,609.

Superior

Seamless

For Elastic Hosiery.
Claims use since Apr. 1, 1930.

284,237. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) OLIVER H. WALTON, doing business as Charles Walton & Son, Needham Heights, Mass. Filed Apr. 28, 1930. Serial No. 299,608.

Charlton

SEAMLESS

For Elastic Hosiery.
Claims use since Apr. 1, 1930.

284,238. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) WEST BEND EQUIPMENT CORP., West Bend, Wis. Filed Apr. 18, 1930. Serial No. 299,099.

"weld-Bilt"

For Skid Platforms and Metallic Industrial Bench Legs.
Claims use since Mar. 31, 1930.

284,239. (CLASS 37. PAPER AND STATIONERY.) THE PAPER MILLS' COMPANY, Chicago, Ill. Filed Apr. 16, 1930. Serial No. 298,953.

AINSLEE

For Printing Paper and Envelopes Made Therefrom.
Claims use since Mar. 18, 1930.

284,240. (CLASS 37. PAPER AND STATIONERY.) THE PAPER MILLS' COMPANY, Chicago, Ill. Filed Apr. 16, 1930. Serial No. 298,952.

Rinaldo

For Printing Paper and Envelopes Made Therefrom.
Claims use since Apr. 1, 1930.

284,241. (CLASS 39. CLOTHING.) A. M. LEGG SHOE CO., Pontiac, Ill. Filed Sept. 28, 1929. Serial No. 290,369.

ROSA LEE

For Shoes of Leather, Fabric, and a Combination of the Same.
Claims use since Aug. 1, 1929.

284,242. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) HUNTINGTON RUBBER MILLS, Portland, Oreg. Filed Aug. 24, 1929. Serial No. 288,962.

UZE-AGAIN

For Rubber Bottle Caps.
Claims use since June 1, 1928.

284,243. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE MARX AND RAWOLLE CORPORATION, Springdale, Conn. Filed Feb. 2, 1931. Serial No. 310,652.

LUSTERLAC

For Prepared Shellac Substitute.
Claims use since 1920.

TRADE-MARK REGISTRATIONS RENEWED

35,747. CERTAIN NAMED MEDICAL COMPOUNDS. Registered January 8, 1901. EDWARD L. CROSBY, Des Moines, Iowa. Renewed January 8, 1931, to Dora Crosby Lehr, doing business as Dawn Mfg. Company, Ankeny, Iowa, successor.

36,189. CERTAIN NAMED STATIONERY. Registered April 9, 1901. DENNISON & SONS, New York, N. Y. Renewed April 9, 1931, to Dennison & Sons, Long Island City, N. Y., a Corporation of New York, successor.

81,616. LINEN AND DAMASK GOODS. Registered April 25, 1911. JOSEPH MATHERS, LIMITED. Renewed April 25, 1931, to Mathers' Snowdrop Linens Limited, Belfast, Northern Ireland, a Corporation of Great Britain, assignee.

82,206. CERTAIN TOOLS AND MACHINERY. Registered June 13, 1911. CELFOR TOOL COMPANY, Chicago, Ill. Renewed June 13, 1931, to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan, assignee.

82,972. WATCH-MOVEMENTS. Registered August 8, 1911. ELGIN NATIONAL WATCH COMPANY, Elgin and Chicago, Ill., a Corporation of Illinois. Renewed August 8, 1931.

83,138. BLANKETS. Registered August 22, 1911. CAPITAL CITY WOOLEN MILLS. Renewed August 22, 1931, to Sheuerman Brothers Inc., doing business as Capital City Woolen Mills, Des Moines, Iowa, a Corporation of Iowa, successor.

83,323. A PREPARATION OF WINE, EXTRACT OF MEAT, AND MALT. Registered September 5, 1911. COLEMAN & Co. LIMITED, Norwich, England, a Corporation of Great Britain. Renewed September 5, 1931.

83,325. ANTIMONY. Registered September 5, 1911. COOKSON & COMPANY LIMITED. Renewed September 5, 1931, to The Cookson Lead and Antimony Company Limited, Newcastle-upon-Tyne, England, a Corporation of Great Britain, assignee.

83,608. EYELETS AND LACING-HOOKS. Registered September 26, 1911. S. O. & C. Co., Ansonia, Conn., and Boston, Mass. Renewed September 26, 1931, to The S O & C Company, Ansonia, Conn., a Corporation of Connecticut.

83,833. WRITING-TABLETS AND WRITING-PADS. Registered October 17, 1911. HAMPTON ROADS PAPER COMPANY, Norfolk, Va., a Corporation of Virginia. Renewed October 17, 1931.

84,089. OILLESS AND ANTIFRICTION BEARINGS. Registered November 7, 1911. THE FRANKLIN COMPANY. Renewed November 7, 1931, to Bound Brook Oil-Less Bearing Company, Boundbrook, N. J., a Corporation of New Jersey, assignee.

LABELS

REGISTERED JUNE 16, 1931

39,292.—*Title:* U. S. DRY GINGER ALE. For Ginger Ale. FREDERICK R. ANDERSON, doing business as The Anderson Company, Detroit, Mich. Published April 4, 1930.

39,293.—*Title:* SHAVE MADE E-Z, USE E-Z SHAVE. For Preparation to be Used in Shaving to Soften the Beard. A. L. BACHMAN & Co., Montezuma, Iowa. Published February 28, 1931.

39,294.—*Title:* 'CINCY'S FAVORITE DRINK'—BOAT HOUSE LIQUID COFFEE. For Liquid Coffee. THE BOAT HOUSE COFFEE COMPANY, Cincinnati, Ohio. Published April 4, 1931.

39,295.—*Title:* WIESBADEN. For Malt Syrup. BOHEMIAN DISTRIBUTING CO. LTD., Los Angeles, Calif. Published April 15, 1931.

39,296.—*Title:* CARTER'S MIDNIGHT. For Carbon Paper. THE CARTER'S INK COMPANY, Cambridge, Mass. Published May 6, 1931.

39,297.—*Title:* CREAMERY BUTTER. For Creamery Butter. CONTAINER CORPORATION OF AMERICA, Chicago, Ill. Published April 28, 1931.

39,298.—*Title:* CREAMERY BUTTER. For Creamery Butter. CONTAINER CORPORATION OF AMERICA, Chicago, Ill. Published April 28, 1931.

39,299.—*Title:* ETHEL ETTIC. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 4, 1931.

39,300.—*Title:* LORELEI. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 12, 1930.

39,301.—*Title:* ANN HOWE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 18, 1930.

39,302.—*Title:* SMART SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 19, 1931.

39,303.—*Title:* SOLNIT & SHAPIRO SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 5, 1931.

39,304.—*Title:* LION SHOE CO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 9, 1931.

39,305.—*Title:* PAPAYLE. For Fruit Juice Made from Papayas. KARL KLAUS, doing business as Karl Klaus Co., El Paso, Tex. Published March 27, 1931.

39,306.—*Title:* THE SOAPY CIRCUS. For Soap. THE LAMP STUDIO, Utica, N. Y. Published July 21, 1930.

39,307.—*Title:* LINDYMAN'S CHOICE MALT SYRUP. For Malt Syrup. GAYLEN D. LINDEMAN, Cedar Rapids, Iowa. Published April 7, 1931.

39,308.—*Title:* MARTIN'S AMBER-LYTE QUICK DRYING FINISHES. For Finishes for Walls, Houses, Porches, Floors, Woodwork, Linoleum, Furniture, Etc. MARTIN VARNISH COMPANY, Chicago, Ill. Published May 9, 1931.

39,309.—*Title:* MALT SYRUP, HOP FLAVORED. For Malt Syrup. MILLER HIGH LIFE COMPANY, Milwaukee, Wis. Published March 1, 1931.

39,310.—*Title:* OLYMPIA BEANS WITH PORK. For Canned Beans with Pork. PHILLIPS PACKING COMPANY, INC., Cambridge, Md. Published April 4, 1931.

39,311.—*Title:* OLYMPIA COOKED SPAGHETTI. For Canned Cooked Spaghetti. PHILLIPS PACKING COMPANY, INCORPORATED, Cambridge, Md. Published April 4, 1931.

39,312.—*Title:* OLYMPIA TOMATO SOUP. For Canned Tomato Soup. PHILLIPS PACKING COMPANY, INC., Cambridge, Md. Published April 4, 1931.

39,313.—*Title:* REGAL BRAND MALT SYRUP. For Malt Syrup. REGAL PRODUCTS COMPANY, INC., Troy, N. Y. Published March 19, 1931.

39,314.—*Title:* THE "SEXAUER" SYSTEM OF STANDARDIZED REPAIR SERVICE. For Containers for Plumbing Supplies. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Published March 24, 1931.

39,315.—*Title:* CHASE & SANBORN HIGH GRADE COFFEE. For Coffee. STANDARD BRANDS INCORPORATED, New York, N. Y. Published April 4, 1931.

39,316.—*Title:* STROEHMANN'S MILK BREAD. For Bread. STROEHMANN BROTHERS CO., Norristown, Pa. Published March 19, 1931.

39,317.—*Title:* COFFEE. For Coffee. UNION BAG & PAPER CORPORATION, New York, N. Y. Published April 6, 1931.

39,318.—*Title:* TEA. For Tea. UNION BAG & PAPER CORPORATION, New York, N. Y. Published April 6, 1931.

39,319.—*Title:* COFFEE. For Coffee. UNION BAG & PAPER CORPORATION, New York, N. Y. Published April 14, 1931.

39,320.—*Title:* WRIGHT'S PEERLESS. For Radio B Batteries. WRIGHT AND WILHELMY COMPANY, Omaha, Nebr. Published April 1, 1931.

39,321.—*Title:* BREAD. For Bread. KARL R. ZIMMER, doing business as Zimmer Paper Products, Indianapolis, Ind. Published January 13, 1931.

PRINTS

REGISTERED JUNE 16, 1931

13,233.—*Title:* THE NEW SURF SUITS WITH EVENING GOWN BACKS. For Bathing Suits. THE B. V. D. COMPANY, INC., New York, N. Y. Published May 10, 1931.

13,234.—*Title:* JANET COULDN'T SEEM TO WIN HER GRANDMA'S HEART. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published May 5, 1931.

13,235.—*Title:* MOTHER'S DAY MAY 10. For Chocolates. DAGGETT CHOCOLATE CO., Cambridge, Mass. Published April 15, 1931.

13,236.—*Title:* THEY WALK SOFTLY AND GO FAR. For Shoes. DUNN & MCCARTHY, INC., Auburn, N. Y. Published May 9, 1931.

13,237.—*Title:* YES SIR! THAT'S HILLS BROS. COFFEE—ADFORM 118. For Coffee. HILLS BROS., San Francisco, Calif. Published March 14, 1931.

13,238.—*Title:* HILLS BROS. COFFEE—ADFORM 117. For Coffee. HILLS BROS., San Francisco, Calif. Published March 14, 1931.

13,239.—*Title:* HILLS BROS. COFFEE—ADFORM 116. For Coffee. HILLS BROS., San Francisco, Calif. Published March 14, 1931.

13,240.—*Title:* VITALIZED WITH SUNSHINE. For Malt Syrup. SCHLITZ BREWING COMPANY, Milwaukee, Wis. Published March 8, 1931.

13,241.—*Title:* SALES GO TO DEALERS WHO INVITE THEM. For Shoe Forms. SHOE FORM CO. INC., Auburn, N. Y. Published May 1, 1931.

13,242.—*Title:* A NEW TOY MOTOR BOAT LINE. For Toy Motor Boats. SHOE FORM CO. INC., Auburn, N. Y. Published May 1, 1931.

13,243.—*Title:* NEON CLOCK SIGN. For Outdoor Advertising Clocks. TENNESSEE NEON COMPANY, Wilmington, Del., and Memphis, Tenn. Published February 1, 1931.

13,244.—*Title:* THE LOW POINT SALE. For Furniture. JOHN WANAMAKER NEW YORK, New York, N. Y. Published May 8, 1931.

13,245.—*Title:* THE LOW POINT SALE. For Silk Crepe. JOHN WANAMAKER NEW YORK, New York, N. Y. Published May 11, 1931.

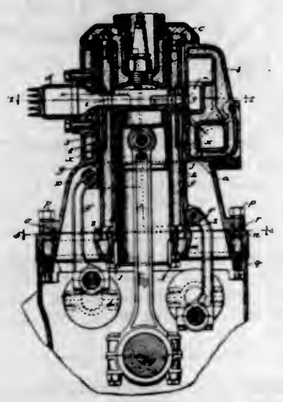
13,246.—*Title:* THE LOW POINT SALE. For Carpets. JOHN WANAMAKER NEW YORK, New York, N. Y. Published May 12, 1931.

CARNEGIE LIBRARY OF ATLANTA

REISSUES

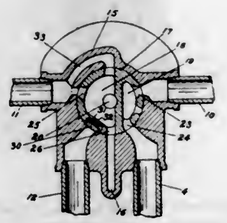
JUNE 16, 1931

18,097. SEMISLEEVE VALVE MOTOR. JOHN HEBER COYNE, Buffalo, N. Y., assignor, by mesne assignments, to Bi-Sleeve Engine Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,549,297, dated Aug. 11, 1925, Serial No. 703,107, filed Mar. 31, 1924. Application for reissue filed Feb. 16, 1931. Serial No. 516,231. 14 Claims. (Cl. 123—75.)



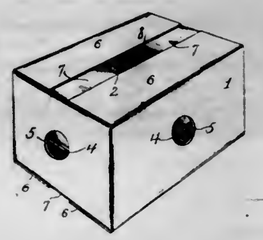
1. In an internal combustion engine, the combination of an engine block provided with an outer cylinder having intake and exhaust passages, an inner cylinder provided with intake and exhaust ports registering with said passages, said inner cylinder spaced from the outer cylinder, semi-sleeve valves operating in said space for controlling said ports, and a ported junk ring for sealing said valves with respect to the ports, said junk ring being sealed by thrust at both ends.

18,098. WATER SOFTENER VALVE. CHARLES P. EISENHAUER, Dayton, Ohio, assignor to The Duro Company, Dayton, Ohio, a Corporation of Ohio. Original No. 1,695,541, dated Dec. 18, 1928, Serial No. 3,951, filed Jan. 22, 1925. Application for reissue filed Feb. 26, 1930. Serial No. 431,612. 19 Claims. (Cl. 210—24.)



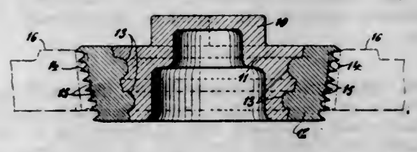
15. In a water softener, a tank, a valve housing having an upper and a lower connection with said tank, a supply inlet, a service outlet and a waste outlet, a valve member in said housing adapted in one position to direct the water from the supply inlet to the tank and from the tank to the service outlet, and a seal member on said valve member to seal the waste outlet.

18,099. ART OF PACKAGING FRUIT AND THE LIKE. GEORGE K. S. FERGUSON, North East, Pa. Original No. 1,732,264, dated Oct. 22, 1929, Serial No. 224,860, filed Oct. 8, 1927. Application for reissue filed Sept. 3, 1930. Serial No. 479,562. 5 Claims. (Cl. 206—46.)



3. Means for packaging fruit and the like, comprising a primary carton formed of manufactured fibrous sheet material and having plane sides and a flat top and bottom, the top and bottom and each side being provided with a ventilating opening of substantial area, superposed tiers of secondary containers so arranged in said carton as to allow air circulation around the secondary containers and through said openings, a horizontal divider between the tiers of containers, and means on the several containers supporting the divider and the top of the carton respectively in spaced relation to the respectively subjacent containers.

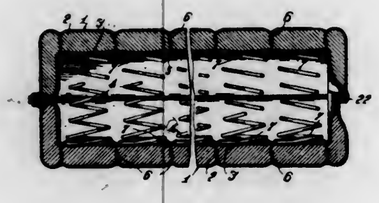
18,100. CLEAN OUT PLUG. FREDERICK J. MERSFELDER and PAUL BALZE, Leonia, N. J., assignors to M. & B. Manufacturing Co. Inc., Leonia, N. J., a Corporation of New Jersey. Original No. 1,702,878, dated Feb. 19, 1929, Serial No. 192,357, filed May 18, 1927. Reissue No. 17,528, dated Dec. 17, 1929, Serial No. 361,238, filed May 7, 1929, and subsequently became Reissue No. 17,667, dated May 13, 1930, Serial No. 432,885, filed Mar. 3, 1930. This application for reisaue filed Feb. 4, 1931, Serial No. 513,402. 10 Claims. (Cl. 137—76.)



1. The herein described fitting comprising a member having a uniform taper throughout the length thereof,

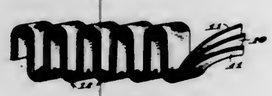
the thread having a broad root of a different diameter than a thread to engage same, said member having a soft metal body to permit a new thread to be cut into the said root on engaging said member with a hard metal threaded member, the taper of the thread of the soft metal member being greater than that of the other member, the pitch of the angles of the sides of the thread being substantially the same for both members.

18,101. MATTRESS AND CUSHION. LOUIS A. SUEKOFF, Wilmette, Ill., assignor of one-half to Fred A. Nachman, Chicago, Ill. Original No. 1,700,339, dated Jan. 29, 1929, Serial No. 114,599, filed June 9, 1926. Application for reissue filed Nov. 5, 1930. Serial No. 493,665. 8 Claims. (Cl. 5—235.)



5. The method of making cushion structures which includes disposing upon one face of a fabric sheet a layer of padding material and disposing upon the other face thereof fabric means for engaging springs with said fabric sheet, then passing stitch-chains through said layer of padding material, said fabric sheet and said fabric means to simultaneously permanently assemble the same, and engaging springs with said fabric means.

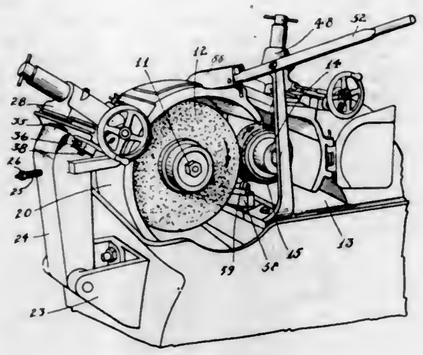
18,102. PACKING RING. THOMAS A. BOWERS, Boston, Mass., assignor to Pressed Piston Ring Company, a Corporation of Massachusetts. Original No. 1,796,882, dated Mar. 17, 1931, Serial No. 431,814, filed Feb. 27, 1930. Application for reissue filed Apr. 9, 1931. Serial No. 528,915. 40 Claims. (Cl. 74—109.)



1. A flexible packing ring for pistons and the like comprising a plurality of metal ribbons, said ribbons corrugated together in a unitary manner and in close formation, said corrugated formations being substantially perpendicularly disposed with respect to the side walls of a piston.

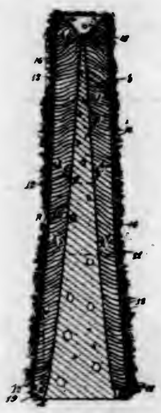
18,103. GRINDING. GEORGE W. BINNS, Cincinnati, Ohio, assignor, by mesne assignments, to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Original No. 1,709,818, dated Apr. 16, 1929, Serial No. 29,214, filed May 9, 1925. Application for reissue filed Jan. 28, 1930. Serial No. 424,040. 24 Claims. (Cl. 51—103.)

1. A centerless grinder including opposed grinding and regulating wheels, the grinding wheel having portions adapted to produce cylindrical and non-cylindrical portions on a work piece, and a regulating wheel having a work-controlling portion engaging and urging a cylindrically shaped portion of the work piece toward the grinding



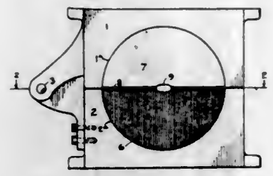
wheel whereby the work is reduced to a contoured form contrageometric to that imposed on the surface of the grinding wheel and is controlled in its rotation by the engagement of the regulating wheel with the cylindrical portion thereof.

18,104. EXTERNALLY-REENFORCED CONSTRUCTION. JAMES HENRY LEVERING, Los Angeles, Calif. Original No. 1,643,275, dated Sept. 20, 1927, Serial No. 302,470, filed June 7, 1919. Application for reissue filed Sept. 19, 1929. Serial No. 393,784. 17 Claims. (Cl. 61—30.)



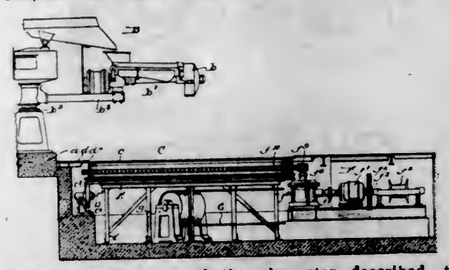
1. A structural unit having a face, cross sectional contours of which substantially conform, respectively, from abutment to mid-plane along the crest and also from base to crest of such unit, to a formula in which the abscisso is equal to the two-thirds power of the ordinate with the parts of greatest curvature at the base and at the abutments of said unit.

18,105. THERMOMETER TUBE AND METHOD OF MAKING THE SAME. MAX E. MOELLER, New York, N. Y., assignor, by mesne assignments, to Moeller Instrument Company, Inc., Brooklyn, N. Y., a Corporation of New York. Original No. 1,753,801, dated Apr. 8, 1930, Serial No. 290,565, filed July 5, 1928. Application for reissue filed Dec. 22, 1930. Serial No. 504,187. 20 Claims. (Cl. 49—81.)



1. A glass stem for thermometers or the like comprising a glass rod having a bore in the interior thereof and a non-transparent element therein extending from said bore toward the sides thereof.

18,106. APPARATUS FOR HANDLING SAND IN FOUNDRIES. WALTER E. NAYLOR, Chicago, Ill., assignor to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Original No. 1,759,625, dated May 20, 1930, Serial No. 166,342, filed Feb. 7, 1927. Application for reissue filed Apr. 27, 1931. Serial No. 533,318. 18 Claims. (Cl. 22—21.)

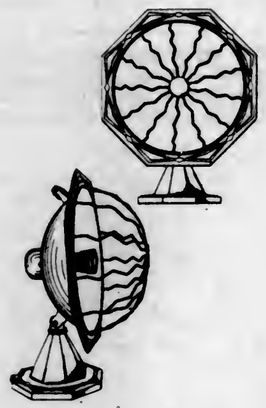


1. In an apparatus of the character described, the combination with a floor having an opening therein, of a turn-table positioned in said opening and having the top thereof exposed so that flasks may be placed thereon for filling purposes and removed, said turntable having openings through which the displaced flask-filling material will pass in lieu of cumulating thereon, mechanism for rotating the turn-table, and means under the table for catching the material that passes therethrough.

DESIGNS

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84,389. REFLECTOR HEATER. ERICK J. AJAX, Minneapolis, Minn., assignor to Dominion Electrical Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 27, 1931. Serial No. 39,267. Term of patent 7 years.



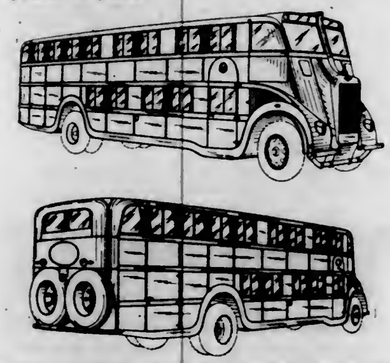
The ornamental design for a reflector heater, substantially as shown.

84,390. STOCKING. ROBERT N. APPAICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Apr. 22, 1931. Serial No. 39,591. Term of patent 14 years.



The ornamental design for a stocking, as shown and described.

84,391. VEHICLE. DWIGHT E. AUSTIN, Los Angeles, Calif. Filed Apr. 1, 1931. Serial No. 39,314. Term of patent 14 years.



The ornamental design for a vehicle substantially as shown.

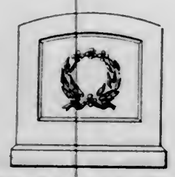
84,392. STOCKING. ROBERT N. APPRICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Apr. 24, 1931. Serial No. 39,616. Term of patent 14 years.



The ornamental design for a stocking, as shown and described.

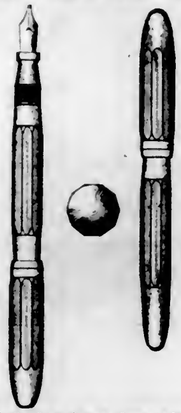
84,393. BURIAL VAULT. CHRISTY L. BERG, St. Louis, Mo. Filed Apr. 24, 1931. Serial No. 39,609. Term of patent 14 years.





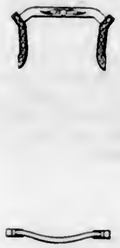
The ornamental design for a burial vault, as shown.

84,394. FOUNTAIN PEN. ANDREAS BIENENSTEIN, Toledo, Ohio, assignor to The Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 16, 1931. Serial No. 38,323. Term of patent 14 years.



The ornamental design for a fountain pen substantially as shown and described.

84,395. BRIDGE MEMBER FOR AN OPHTHALMIC MOUNTING. JOHN D. BROCK, Kansas City, Mo. Filed Mar. 31, 1931. Serial No. 39,311. Term of patent 3½ years.



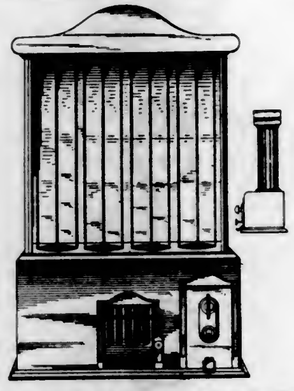
The ornamental design for a bridge member for an ophthalmic mounting, substantially as shown.

84,396. FENCE POST ANCHOR PLATE. FRANK G. CARREL, Western Springs, Ill., assignor to Calumet Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 20, 1931. Serial No. 39,560. Term of patent 14 years.



The ornamental design for a fence post anchor plate as shown.

84,397. CASING FOR FRUIT VENDING MACHINE. WELLS H. CLAUSSEN, Seattle, Wash., assignor to Apple Vender Co., Seattle, Wash., a Corporation of Washington. Filed Feb. 24, 1931. Serial No. 38,802. Term of patent 14 years.



The ornamental design for a casing for fruit vending machine, as shown.

84,398. DOLL. IRWIN COHN, New York, N. Y. Filed Apr. 14, 1931. Serial No. 39,477. Term of patent 3½ years.



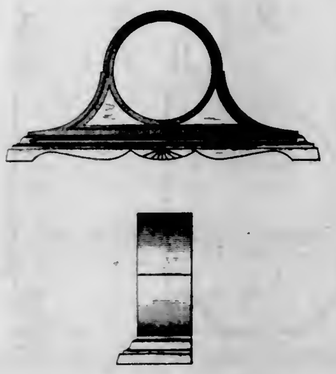
The ornamental design for a doll, as shown.

84,399. SPECTACLE FRAME. LAYTON EUGENE CROE, Kalamazoo, Mich. Filed Oct. 27, 1930. Serial No. 37,396. Term of patent 14 years.



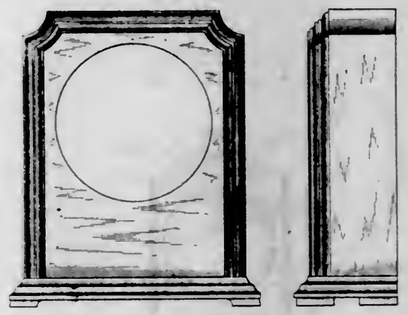
The ornamental design for a spectacle frame, as shown and described.

84,400. CLOCK CASE. FREDERIC J. DORNSEIF, Chicago, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1931. Serial No. 39,436. Term of patent 7 years.



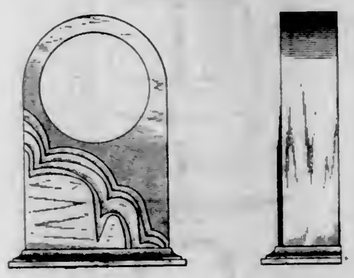
The ornamental design for a clock case, substantially as shown.

84,401. CLOCK CASE. FREDERIC J. DORNSEIF, Chicago, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1931. Serial No. 39,437. Term of patent 7 years.



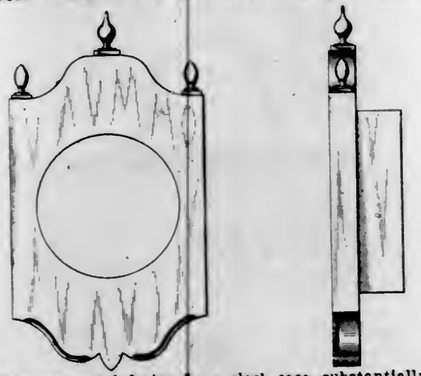
The ornamental design for a clock case, substantially as shown.

84,402. CLOCK CASE. FREDERIC J. DORNSEIF, Chicago, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1931. Serial No. 39,438. Term of patent 7 years.



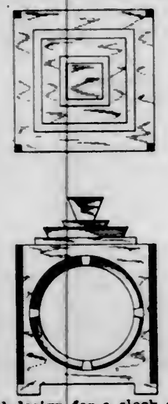
The ornamental design for a clock case, substantially as shown.

84,403. CLOCK CASE. FREDERIC J. DORNSEIF, Chicago, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1931. Serial No. 39,439. Term of patent 7 years.



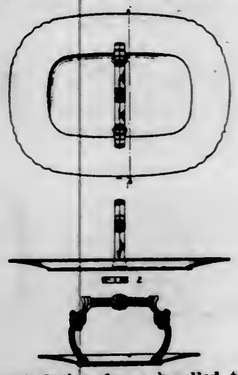
The ornamental design for a clock case, substantially as shown.

84,404. CLOCK CASE. FREDERIC J. DORNSEIF, Chicago, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1931. Serial No. 39,440. Term of patent 7 years.



The ornamental design for a clock case, substantially as shown.

84,405. HANDLED TRAY OR SIMILAR ARTICLE. JOSEPH M. DU BOIS, Bellaire, Ohio. Filed Apr. 6, 1931. Serial No. 39,381. Term of patent 3½ years.



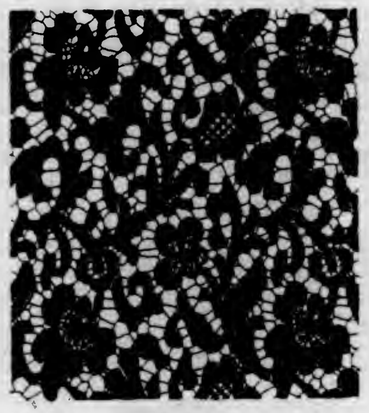
The ornamental design for a handled tray or similar article, as shown.

84,406. DISPLAY HEAD. RAY W. DUMONT, New York, N. Y., assignor to Best & Co. Inc., New York, N. Y. Filed Nov. 14, 1929. Serial No. 33,444. Term of patent 3½ years.



The ornamental design for a display head, as shown.

84,407. LACE. BERT EDSON, Pawtucket, R. I., assignor to New England Lace Mills, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 6, 1931. Serial No. 38,982. Term of patent 3½ years.



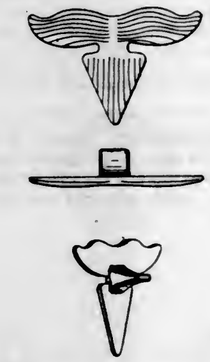
The ornamental design for lace, substantially as shown.

84,408. TABLE. ABRAHAM FRIEDMAN, Los Angeles, Calif. Filed Apr. 15, 1931. Serial No. 39,495. Term of patent 7 years.



The ornamental design for a table as shown.

84,409. CONFECTIONERY ARTICLE. ALBERT C. FRIEDLUND, Minneapolis, Minn. Filed Mar. 26, 1931. Serial No. 39,250. Term of patent 14 years.



The ornamental design for a confectionery article, substantially as shown.

84,410. RING. JOSEPH GOLDMAN, New York, N. Y. Filed Apr. 7, 1931. Serial No. 39,394. Term of patent 7 years.



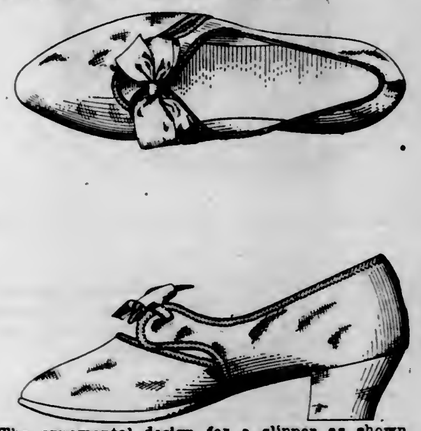
The ornamental design for a ring substantially as shown.

84,411. RING. JOSEPH GOLDMAN, New York, N. Y. Filed Apr. 7, 1931. Serial No. 39,395. Term of patent 7 years.



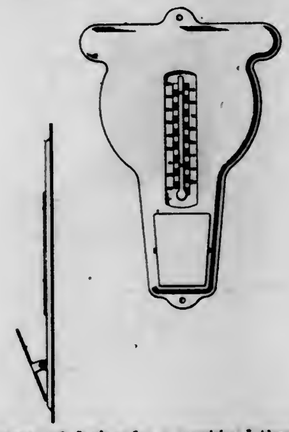
The ornamental design for a ring substantially as shown.

84,412. SLIPPER. LOUIS GOLDSTEIN, Brooklyn, N. Y., assignor to Knight Slipper Mfg. Corp., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 17, 1931. Serial No. 39,119. Term of patent 3½ years.



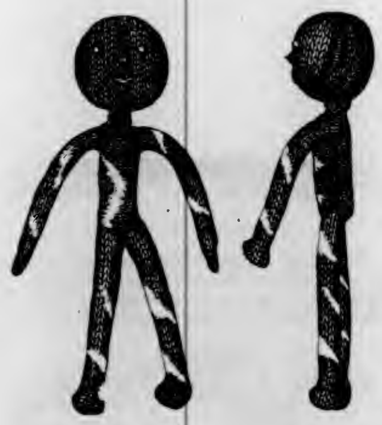
The ornamental design for a slipper as shown.

84,413. COMBINED THERMOMETER AND PAPER CLAMP. HUBERT E. GORSUCH, Springfield, Ohio. Filed Apr. 27, 1931. Serial No. 39,638. Term of patent 3½ years.



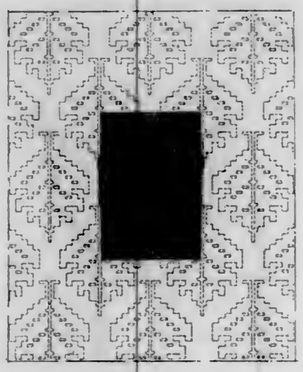
The ornamental design for a combined thermometer and paper clamp as shown.

84,414. DOLL. MARION GREENE, Montclair, N. J. Filed Aug. 30, 1930. Serial No. 36,828. Term of patent 14 years.



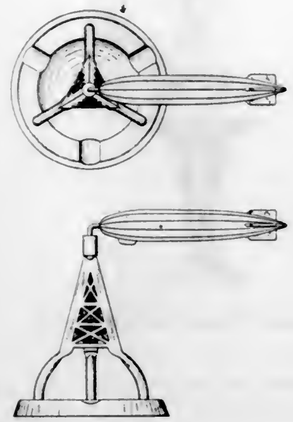
The ornamental design for a doll substantially as shown.

84,415. KNITTED FABRIC. MIRIAM GROSS, Milwaukee, Wis., assignor to Miriam Gross Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 28, 1931. Serial No. 38,881. Term of patent 7 years.



The ornamental design for knitted fabric as shown and described.

84,416. ASH TRAY. SILAS J. HUDSON and LAWRENCE M. GILLEY, Akron, Ohio. Filed Mar. 25, 1931. Serial No. 39,242. Term of patent 14 years.



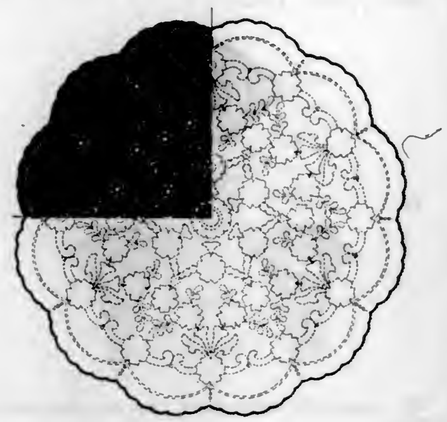
The ornamental design for an ash tray as shown.

84,417. ASH RECEPTACLE. ERNEST W. HUTTIG, Denver, Colo., assignor to Coors Porcelain Company, Golden, Colorado, a Corporation of Colorado. Filed Mar. 7, 1931. Serial N. 38,990. Term of patent 3½ years.



The ornamental design for an ash receptacle as shown.

84,418. DOILY. EDWARD KARFIOL, Brooklyn, N. Y. Filed Apr. 3, 1931. Serial No. 39,355. Term of patent 14 years.



The ornamental design for a doily as shown and described.

84,419. APPAREL BUCKLE. ALLEN H. KERNGOOD, Baltimore, Md., assignor to Alma Manufacturing Company of Baltimore City, Baltimore, Md., a Corporation of Maryland. Filed June 5, 1930. Serial No. 35,943. Term of patent 3½ years.





The ornamental design for an apparel buckle, as shown.

84,420. SHOE BUCKLE. CLIFFORD G. KING, Barrington, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 20, 1931. Serial No. 39,557. Term of patent 3½ years.





The ornamental design for a shoe buckle as shown.

84,421. SHOE BUCKLE. CLIFFORD G. KING, Barrington, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Apr. 20, 1931. Serial No. 39,558. Term of patent 3½ years.



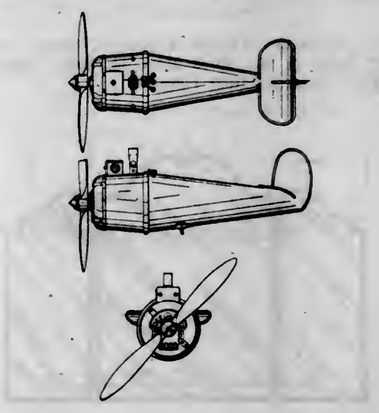
The ornamental design for a shoe buckle as shown.

84,422. LAMP BASE OR ARTICLE OF ANALOGOUS NATURE. MICHAEL KIWAD, New York, N. Y., assignor to La Belle Specialty Co., Inc., a Corporation of New York. Filed Apr. 14, 1931. Serial No. 39,475. Term of patent 3½ years.



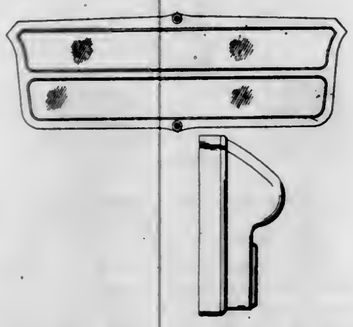
The ornamental design for a lamp base or article of analogous nature substantially as shown.

84,423. FAN. HARRY H. KNIGHT, Dallas, Tex., assignor to Dallas Engineering Corporation, Dallas, Tex., a Corporation of Texas. Filed Apr. 20, 1931. Serial No. 39,575. Term of patent 14 years.



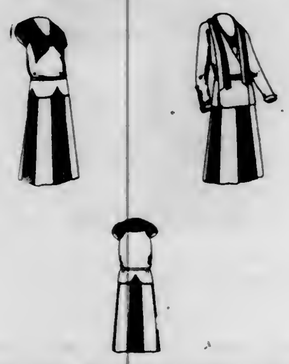
The ornamental design for a fan, substantially as shown.

84,424. VEHICLE LAMP HOUSING. S H HUNTER KUENZEL, Kalamazoo, Mich., assignor to Checker Cab Manufacturing Corporation, Kalamazoo, Mich. Filed Jan. 15, 1931. Serial No. 38,314. Term of patent 7 years.



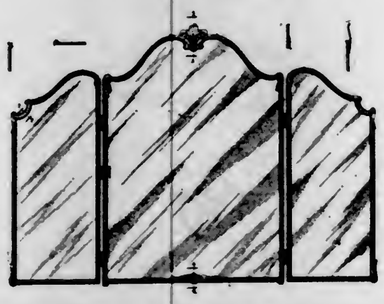
The ornamental design for a vehicle lamp housing as shown.

84,425. ENSEMBLE SUIT. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 38,903. Term of patent 3½ years.



The ornamental design for an ensemble suit substantially as shown.

84,426. MIRROR. ADOLPH MARCHAND, Jackson Heights, New York, N. Y. Filed Mar. 30, 1931. Serial No. 39,298. Term of patent 7 years.



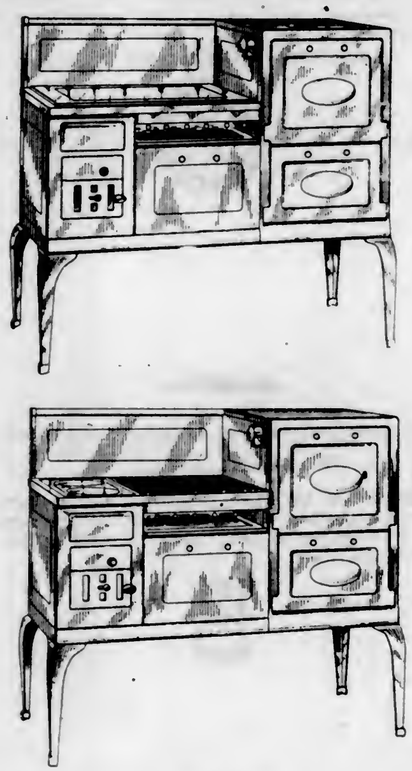
The ornamental design for a mirror, as shown.

84,427. RING. JOSEPH A. MEYERS and HENRY HEAD JOHNSON, Los Angeles, Calif., assignors to J. A. Meyers and Company, Inc., Los Angeles, Calif., a Corporation of California. Filed Mar. 1, 1930. Serial No. 34,711. Term of patent 14 years.



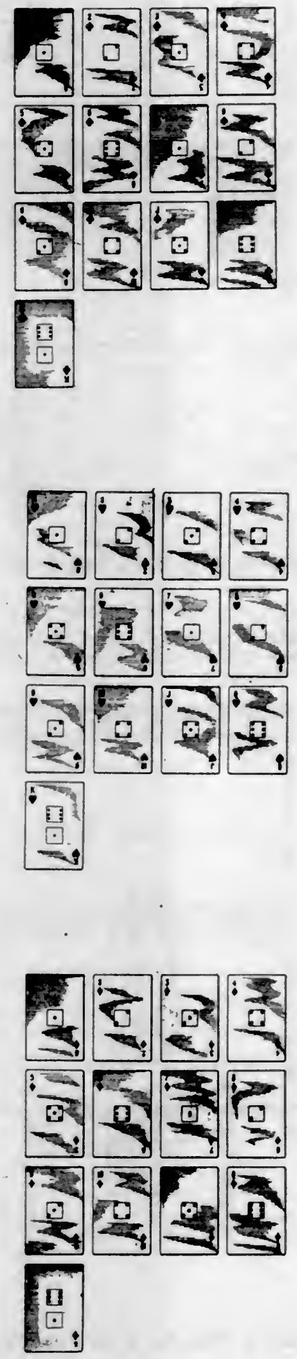
The ornamental design for a ring as shown and described.

84,428. KITCHEN HEATER GAS RANGE. LEWIS MOORE, Joliet, Ill., assignor to Moore Brothers Company, Joliet, Ill., a Corporation of Illinois. Filed Mar. 23, 1931. Serial No. 39,206. Term of patent 8½ years.

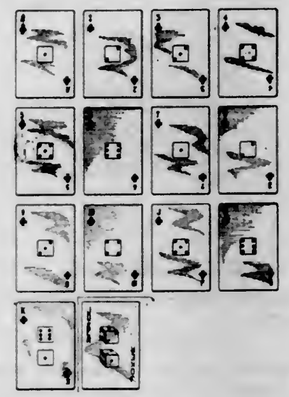


The ornamental design for a kitchen heater gas range as shown.

84,429. DECK OF PLAYING CARDS. WILLIAM L. MOORE, Jersey City, N. J. Filed Oct. 15, 1930. Serial No. 37,260. Term of patent 14 years.



84,429—Continued.



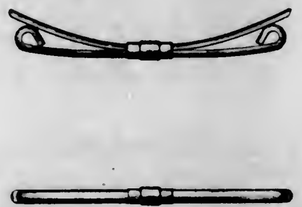
The ornamental design for a deck of playing cards as shown and described.

84,430. FRATERNAL BADGE. JAMES J. MURPHY, Washington, D. C. Filed Oct. 11, 1930. Serial No. 37,228. Term of patent 14 years.



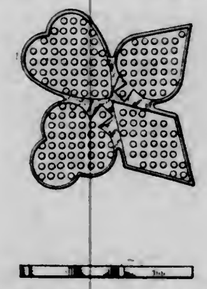
The ornamental design for a fraternal badge, as shown and described.

84,431. COLLAR FASTENER. MORRIS O. NOBBE, Newark, N. J., assignor to Krementz & Company, Newark, N. J. Filed Apr. 2, 1931. Serial No. 39,345. Term of patent 3½ years.



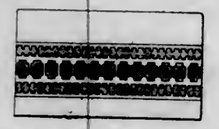
The ornamental design for a collar fastener, as shown.

84,432. BAKING UNIT OF A WAFFLE MOLD. KATHARINE H. OBER, Baltimore, Md. Filed May 16, 1930. Serial No. 35,673. Term of patent 14 years.



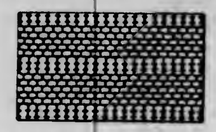
The ornamental design for a baking unit of a waffle mold, as shown.

84,433. KNITTED FABRIC. WILLIAM S. PARKER, Rockford, Ill., assignor to Burson Knitting Company, Rockford, Ill., a Corporation of Illinois. Filed Feb. 13, 1930. Serial No. 34,526. Term of patent 3½ years.



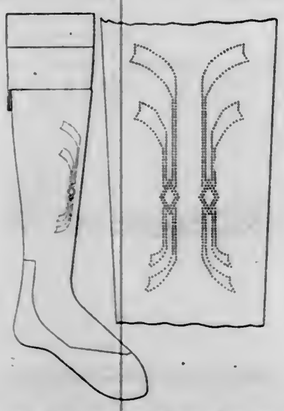
The ornamental design for a knitted fabric, as shown.

84,434. KNITTED FABRIC. WILLIAM S. PARKER, Rockford, Ill., assignor to Burson Knitting Company, Rockford, Ill., a Corporation of Illinois. Filed Feb. 13, 1930. Serial No. 34,529. Term of patent 3½ years.



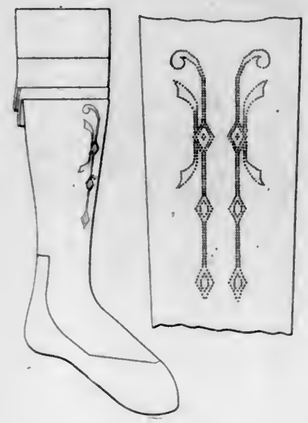
The ornamental design for a knitted fabric as shown.

84,435. STOCKING. HENRY PETERS, Clifton, N. J. Filed Mar. 13, 1931. Serial No. 39,065. Term of patent 14 years.



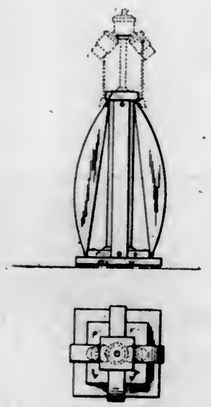
The ornamental design for a stocking as shown and described.

84,436. STOCKING. HENRY PETERS, Clifton, N. J. Filed Mar. 13, 1931. Serial No. 39,066. Term of patent 14 years.



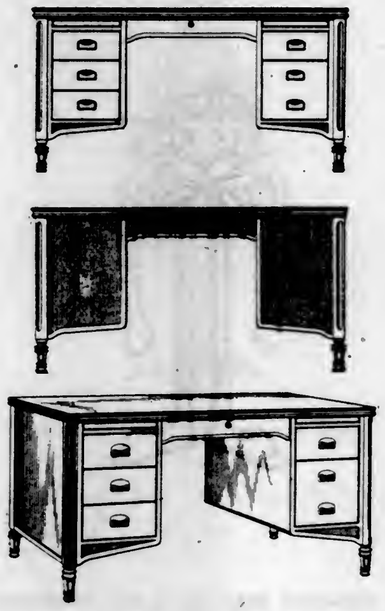
The ornamental design for a stocking as shown and described.

84,437. LAMP STAND. FRANKLIN B. PRICE, Newark, Ohio. Filed Mar. 19, 1931. Serial No. 39,162. Term of patent 3½ years.



The ornamental design for a lamp stand as shown.

84,438. DESK. EDWARD A. PURNELL, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed Mar. 19, 1931. Serial No. 39,163. Term of patent 14 years.



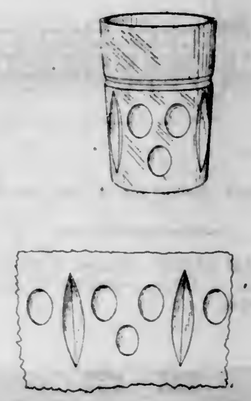
The ornamental design for a desk, as shown.

84,439. TABLE. EDWARD A. PURNELL, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed Mar. 19, 1931. Serial No. 39,164. Term of patent 14 years.



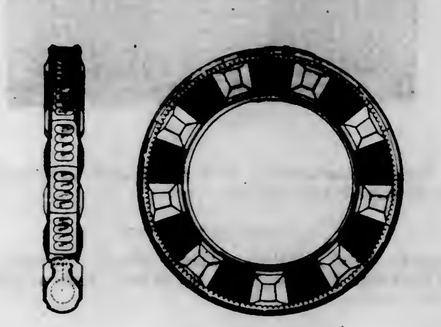
The ornamental design for a table, as shown.

84,440. GLASS TUMBLER OR SIMILAR ARTICLE. WILLIAM W. REESE, Washington, Pa., assignor to The Duncan & Miller Glass Company, Washington, Pa., a Corporation of Pennsylvania. Filed Apr. 3, 1931. Serial No. 39,356. Term of patent 7 years.



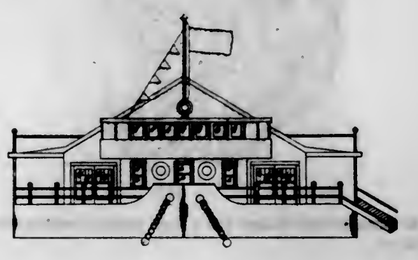
The ornamental design for a glass tumbler or similar article, as shown and described.

84,441. TIRE CASING. GEORGE REINHARDT, Pleasant Plains, Staten Island, N. Y. Filed Mar. 19, 1931. Serial No. 39,151. Term of patent 3½ years.

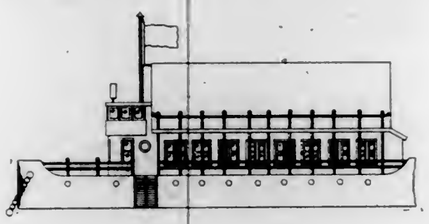


The ornamental design for a tire casing substantially as shown.

84,442. BOAT. EARL L. ROBERTS, Pittsfield, Mass. Filed Aug. 16, 1930. Serial No. 36,680. Term of patent 14 years.

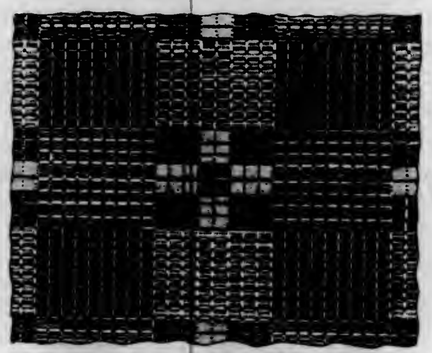


84,442—Continued.



The ornamental design for a boat, as shown and described.

84,443. TEXTILE FABRIC. FRANK E. RUDD, Louisville, Ky. Filed Jan. 7, 1931. Serial No. 38,231. Term of patent 3½ years.



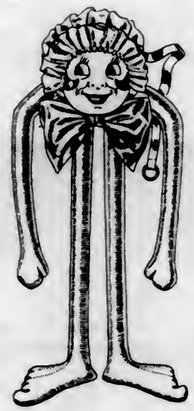
The ornamental design for a textile fabric substantially as illustrated and described.

84,444. TOY ANIMAL. ALBERT SÉROR, Chicago, Ill. Filed Mar. 5, 1931. Serial No. 38,935. Term of patent 3½ years.



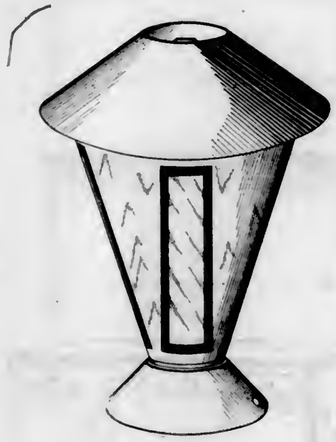
The ornamental design for a toy animal, substantially as shown.

84,445. DOLL. ALBERT SÉROR, Chicago, Ill. Filed Mar. 5, 1931. Serial No. 38,936. Term of patent 3½ years.



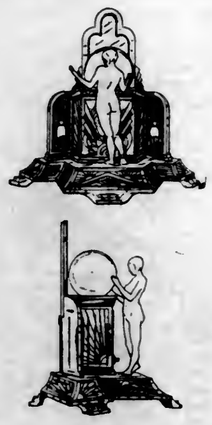
The ornamental design for a doll, substantially as shown.

84,446. LAMP. FRANK K. SEYDLER, Urbana, Ill. Filed Nov. 21, 1930. Serial No. 37,740. Term of patent 3½ years.



The ornamental design for a lamp as shown and described.

84,447. LAMP. WILLIAM H. SHLESINGER, Brooklyn, N. Y. Filed Apr. 13, 1931. Serial No. 39,462. Term of patent 3½ years.



The ornamental design for a lamp as shown.

84,448. SHOE BUCKLE. WALTER EDWARD SMITH, Warwick Downs, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed Mar. 11, 1931. Serial No. 39,035. Term of patent 7 years.



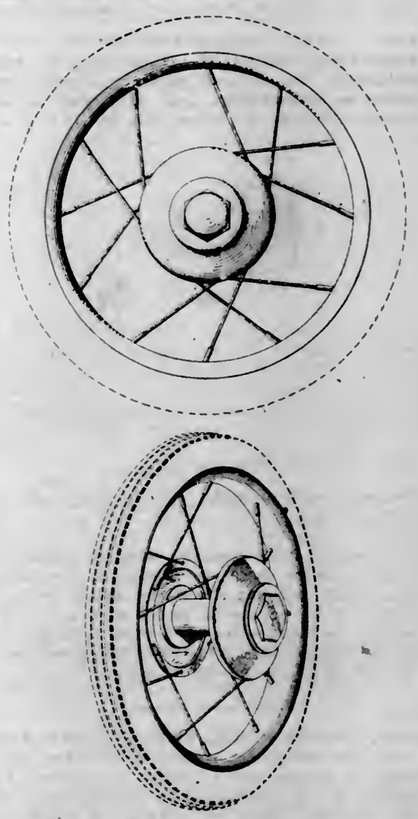
The ornamental design for a shoe buckle as shown.

84,449. ASH TRAY OR SIMILAR ARTICLE. ARTHUR VON FRANKENBERG, New York, N. Y., assignor to Frankart, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 9, 1930. Serial No. 37,207. Term of patent 7 years.



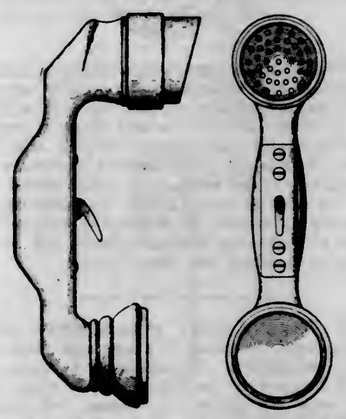
The ornamental design for an ash tray or similar article, substantially as shown and described.

84,450. WHEEL FOR JUVENILE VEHICLES. JOHN WEBER, Toledo, Ohio, assignor, by mesne assignments, to The American-National Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 20, 1930. Serial No. 34,187. Term of patent 14 years.



The ornamental design for a wheel for juvenile vehicles, substantially as shown and described.

84,451. CIGAR LIGHTER. WALTER M. WOLF, Chicago, Ill. Filed Feb. 20, 1931. Serial No. 38,749. Term of patent 14 years.

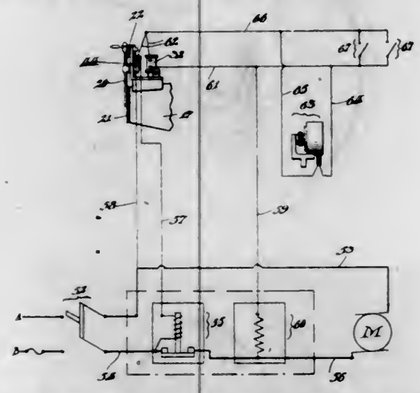


The ornamental design for cigar lighter, as shown.

PATENTS

GRANTED JUNE 16, 1931

1,809,815. SAFETY DEVICE FOR MOTION PICTURE PROJECTING MACHINES. JOHN FRANCIS ADAMS, Philadelphia, Pa., assignor to Sentry Safety Control Corporation, Philadelphia, Pa. Filed Oct. 12, 1927. Serial No. 225,808. 6 Claims. (Cl. 88—17.)



3. In a device of the character described having a support and a dowser, means for making and breaking an electric circuit including a mercury switch having one end hinged to the support, a spring tending to hold the switch tilted in one direction at an angle to the horizontal, and means adapted to be actuated by the dowser for tilting the switch in the opposite direction.

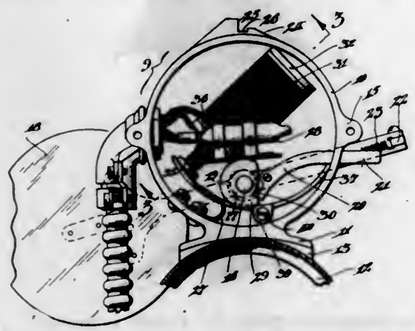
1,809,816. CENTRIFUGAL SWITCH. JOHN FRANCIS ADAMS and THOMAS T. ALLEN, Philadelphia, Pa., assignors to Sentry Safety Control Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 13, 1927. Serial No. 239,622. 1 Claim. (Cl. 200—80.)



A centrifugal switch comprising a rotatable part, means for operatively connecting said part with a moving part of a machine, a rotatable contact ring, contacts having one end pivotally connected to said ring and electrically connected therewith, leaf springs engaging said contacts and urging the free end thereof inward, stationary contact plates adapted to be engaged by said pivotal contact through the urge of said springs, and eccentric means for adjusting the tension on said leaf springs to regulate the speed at which the pivotal contacts will be thrown outwardly to disengage the contact plates.

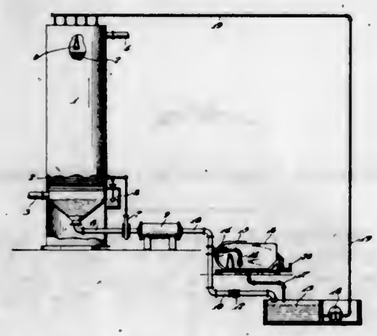
1,809,817. SAFETY UNIT FOR MOTION PICTURE PROJECTORS. THOMAS T. ALLEN and JOHN FRANCIS ADAMS, Philadelphia, Pa., assignors to Sentry Safety Control Corporation, Philadelphia, Pa. Filed Sept. 23, 1927. Serial No. 221,491. 6 Claims. (Cl. 88—17.)

1. In combination with a motion picture projecting machine and its motor, a control apparatus including a safety device having a dowser, a switch and an electro-magnet; a relay connected in series with the motor and having its winding connected in series with the switch



and in parallel with the motor; film actuated switches connected in parallel with the electro-magnet; and a centrifugal switch connected in parallel with the electro-magnet and film actuated switches.

1,809,818. GAS PURIFICATION PROCESS AND APPARATUS. GILBERT A. BRAGG, Pittsburgh, Pa., assignor to The Koppers Company, a Corporation of Delaware. Filed Dec. 31, 1927. Serial No. 243,856. 8 Claims. (Cl. 23—225.)

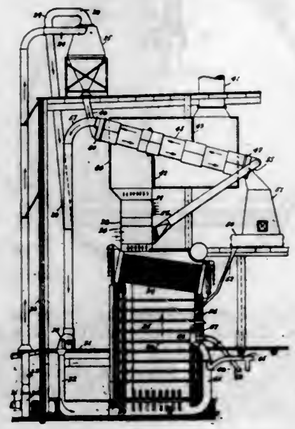


1. A process of purifying a gas from a sulphur impurity which comprises treating the flowing gas with a liquid capable of absorbing said impurity therefrom and of being actified with conversion of said impurity to free sulphur, removing the thereby fouled liquid, recirculating a portion of said liquid over the gas without actification, actifying the remaining portion and recirculating it over the gas.

1,809,819. WASTE FUEL-MAKING METHOD AND APPARATUS. RAYMOND B. CALLER, Scarsdale, N. Y. Filed Mar. 25, 1927. Serial No. 178,398. 11 Claims. (Cl. 110—7.)

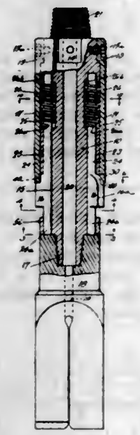
1. In combination, a disintegrator; a collector; a furnace having a draft pit; means for drawing fumes and material from the disintegrator and delivering them to the collector; means including a fan having cold fume and hot fume chambers drawing air and fumes from the collector and delivering them to the furnace through

said cold fume chamber of the fan; a flue extending upwardly from the furnace; a drier chamber receiving hot gases from the flue and provided with a stack; an inclined continuously rotary cylindrical drier passing through said chamber; a conveyor pipe from the collector to the upper end of the drier; a stoker receiving material from the lower end of the drier and delivering



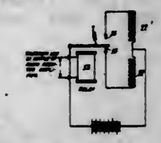
fuel to the furnace; an economizer conduit passing through the flue receiving and preheating exterior air, and extending to the lower end of the drier; a hot garbage fume pipe from the upper end of the drier to the intake of the hot fume chamber of the fan, said chamber discharging into said draft pit; and an emergency feeder for discharging pulverized coal into the furnace and air to the draft pit.

1,809,820. ROTARY UNDERREAMER. STEWART L. CAMPBELL, Berkeley, Calif., assignor to John Grant, Los Angeles, Calif. Filed Dec. 3, 1927. Serial No. 237,358. 6 Claims. (Cl. 255—76.)



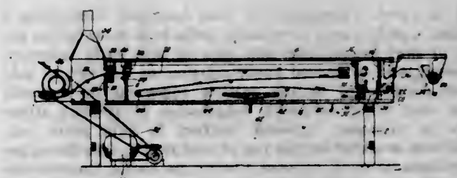
1. In an expansive tool of the character described, the combination of a body adapted to be passed through a well pipe, a horizontally swinging cutter element mounted on a vertical axis eccentric of the body axis and adapted to swing outwardly to a position where its outer part is projected beyond the body and beyond the interior diameter of the well pipe through which the tool has passed, means limiting movement of the cutter element to a position where its projecting part is non-radial to the body axis, and the upper corner of the projected cutter part being beveled to a surface having, in a cylindric surface of a diameter substantially equal to the inner diameter of said well pipe, horizontal contours which are successively, in downward progression as the cutter swings inwardly, substantially concentric with the body axis.

1,809,821. RECORDING APPARATUS FOR WIRE AND WIRELESS TELEGRAPHY. HENRI CHIRIX, Paris, France, assignor to Societe Francaise Radio Electrique, Paris, France, a Joint-Stock Company of France. Filed Apr. 12, 1928, Serial No. 269,339, and in France Apr. 14, 1927. 7 Claims. (Cl. 178—89.)



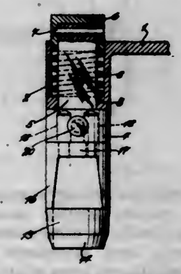
1. Recorder apparatus of the class described comprising a plunger electro-magnet adapted to directly push the paper tape against the inking means, and a pair of coil windings associated with said plunger, one of said windings being energized by the received signals, and the other of which being energized during the spacing or silent periods.

1,809,822. DEVELOPING APPARATUS. RICHARD FRED ALLIN, New York, N. Y., assignor to Eugene Dietzgen Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 26, 1927. Serial No. 228,719. 10 Claims. (Cl. 95—94.)



1. In a device of the class described, the combination of a cabinet having a developing chamber, means for providing said chamber with developing gas, an airing chamber located adjacent said developing chamber, said developing chamber and said airing chamber having communicating openings for the passage of light-sensitive sheet material therethrough, means for feeding said material uninterruptedly through said chambers in sequence, and means associated with the openings for said chambers for preventing the escape of gases therethrough while permitting the passage of the material.

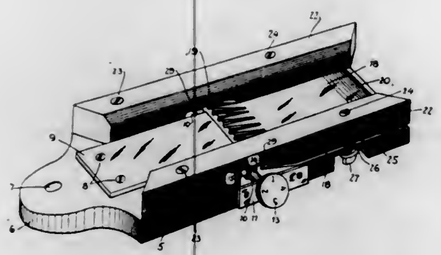
1,809,823. CUTTING OR ORNAMENTING DIE. ARTHUR W. ALTVATER, St. Louis County, Mo. Filed Jan. 30, 1929. Serial No. 336,122. 3 Claims. (Cl. 279—97.)



1. A device of the character described comprising a die holder having therein a socket extending transversely and

a pair of spaced sockets extending transversely of the plane of said first socket and opening into opposite sides of said first socket, a die, an abutment on the upper end of said die abutting rigidly against the lower end of said die holder, projections rigid with and extending beyond said abutment and into said second sockets and having notches in their adjacent sides matching the wall of said first socket, and a device mounted in said first socket and having a circumferential part engaged in said notches and thereby supporting said die in position in which said abutment bears against the lower end of said die holder.

1,809,824. POTATO-CHIPPER. JULIEN BADER, New York, N. Y. Filed Sept. 8, 1928. Serial No. 304,630. 4 Claims. (Cl. 146—171.)



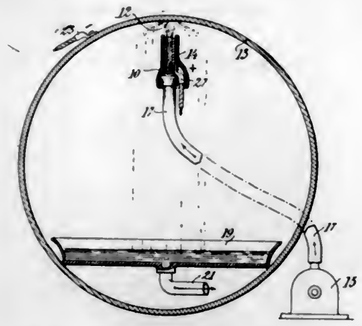
1. A potato chipper of the kind described, comprising a frame, a plate and a detachable knife both mounted on the top of said frame, with one edge of said knife adjacent, opposed, and in spaced apart relation to one end of said plate, said knife having cutting edges on its opposite ends and being reversible lengthwise to present either edge in adjacent, opposed relation to said plate end, side rails mounted on the top of said frame, near the opposite edges thereof, pivoted thereto to swing transversely thereover and over said knife in a plane parallel to the plane of the top of said frame, and means to clamp the swingable ends of said side rails upon said knife, to detachably and reversibly retain said knife in operative relation to said frame and said plate end.

1,809,825. SAFETY CRACKER. HAROLD S. BARNES, Allentown, Pa. Filed Dec. 6, 1930. Serial No. 500,589. 3 Claims. (Cl. 102—22.)



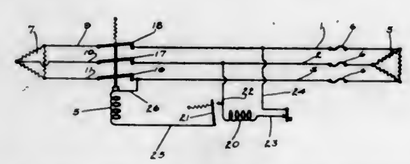
1. A safety cracker comprising a casing having compartments formed therein, sealing means intermediate said compartments normally to isolate the same from each other, and individually inert substances confined in said compartments, said substances being adapted, when allowed to commingle, to generate a gas which will burst said casing.

1,809,826. PROCESS OF ELECTRODEPOSITING CHROMIUM. WALTER S. BOHLMAN, Atlantic City, N. J., assignor to Chromium Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Sept. 6, 1927. Serial No. 217,597. 3 Claims. (Cl. 204—1.)



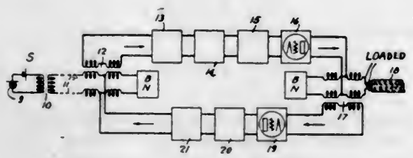
1. A method of electrodepositing chromium comprising projecting a chromic acid-acid radical plating solution against a surface in the form of a free jet, and passing a current through said jet largely in excess of the current required for normal depositions on an area corresponding to the cross-sectional area of said jet.

1,809,827. MOTOR PROTECTION DEVICE. GEORGE D. BOWER, Columbia Heights, Minn., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Oct. 15, 1927. Serial No. 226,403. 6 Claims. (Cl. 175—294.)



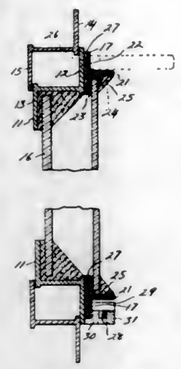
3. A three phase line, a main switch including an operating coil, a second coil connected across two of the phases, a second switch connecting the coil of the main line switch across the third phase, said second coil when energized controlling the second switch to connect the two coils in series with the remaining phase.

1,809,828. TELEPHONE TRANSMISSION. OLIVER E. BUCKLEY, Maplewood, and RALPH V. L. HARTLEY, South Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 21, 1929. Serial No. 341,623. 11 Claims. (Cl. 178—44.)



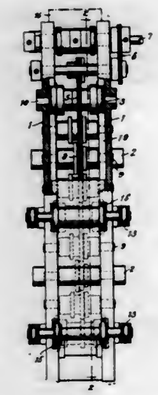
1. A method of telephone transmission over a system comprising a land line and a submarine cable characterized in this that the lower frequencies of the speech currents received from the land line are suppressed before transmission over the cable.

1,809,829. STORM SASH. CECIL F. CHARLTON, Birmingham, Mich. Filed Jan. 14, 1929. Serial No. 332,467. 2 Claims. (Cl. 189—64.)



1. The combination with a metal sash, of a storm sash having a frame formed of sheet metal shaped to provide in cross section an angular rib with inwardly and outwardly extending peripheral flanges, means for securing a glass sheet against said inwardly extending flange and means passing through said outwardly extending flange for securing said storm sash to said metal sash.

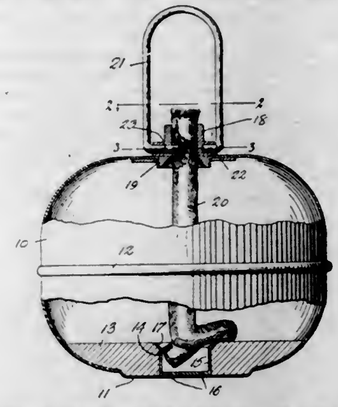
1,809,830. CONVEYER. HENRY Z. COBB, Providence, R. I., assignor to Revere Rubber Company, Chelsea, Mass., a Corporation of Rhode Island. Filed May 1, 1929. Serial No. 359,444. 3 Claims. (Cl. 198—127.)



1. A conveyer for photographic films and the like comprising a frame, a series of driving members rotatably mounted in the frame, driven members mounted for rotation in the frame, there being driven members on opposite sides of each of the driving members, means on each of the members for gripping the margins of a film, and mechanism for operating the driving members.

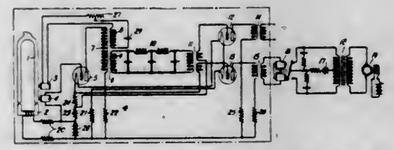
1,809,831. LAMP. ROBERT A. CURRIE, Syracuse, N. Y., assignor to R. E. Dietz Company, New York, N. Y. Filed Mar. 12, 1929. Serial No. 346,429. 7 Claims. (Cl. 67—55.)

7. In a lamp, the combination of a body, a wick tube thereon, a wick passing through said tube, a bail having inwardly extending ends pivoted in holes in said wick tube, one of said ends being adapted to extend through the wall of the wick tube into engagement with the wick for holding the wick in place in the wick tube, and a part on said wick tube adapted when said bail is swung



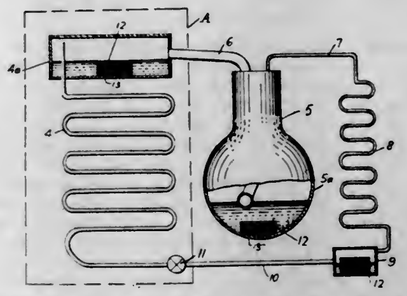
on its pivot to engage the bail and shift said wick-holding pivot out of engagement with the wick to permit movement of the wick in the wick tube.

1,809,832. SYNCHRONOUS DRIVING SYSTEM. AUSTEN M. CURTIS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 2, 1927. Serial No. 237,346. 9 Claims. (Cl. 178—44.)



4. A source of waves of unsymmetrical form, a relay operated by waves from said source and having contacts associated with a source of direct current, an inductive circuit comprising a magnetic core arranged to control the output current intensity to be supplied with current pulses of alternately opposite polarity from said source of current by said relay, and a selective circuit inserted between said source of waves and said relay whereby said waves are made symmetrical.

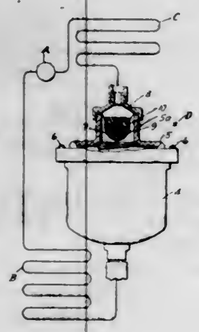
1,809,833. METHOD OF AND MEANS FOR STABILIZING REFRIGERANTS. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed June 17, 1926. Serial No. 116,512. 18 Claims. (Cl. 62—178.)



1. In a heat transforming system involving the change of state of a liquid capable of reacting with water, the

method of inhibiting said reaction which consists in repeatedly bringing said liquid into contact wth a substance adapted to supply hydroxyl ions thereto.

1,809,834. METHOD AND MEANS FOR STABILIZING THE ATMOSPHERE OF REFRIGERATING SYSTEMS. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Chicago Penumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 25, 1927. Serial No. 178,169. 5 Claims. (Cl. 62—115.)



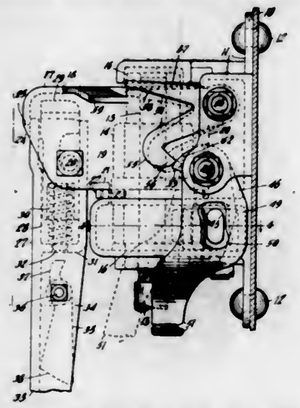
1. The method of stabilizing the atmosphere contained in a refrigerating system of the closed cycle type which comprises continuously acting upon said atmosphere in the highest pressure lowest temperature part of the system to remove any active oxidizing components of said atmosphere.

1,809,835. REFINING LEAD. PHILIP W. DAVIS, Cambridge, Mass. Filed Jan. 30, 1926, Serial No. 85,031. Renewed Oct. 30, 1930. 7 Claims. (Cl. 75—15.)

1. The method of refining scrap storage battery plates which consists in introducing the scrap material into a furnace, heating the material in the furnace whereby the lead alloy and the lead oxides contained in the battery plates are melted in intimate contact with each other in small masses, and flow downward into the bottom of the furnace, continuing this heating process until a body of refined lead containing but a small percentage of antimony is collected, drawing off such purified lead thus recovered, introducing reducing material into the furnace, heating the contents to smelt the lead and antimony content of the lead oxides into a lead-antimony alloy comparatively high in antimony, and in drawing off the lead-antimony alloy thus produced.

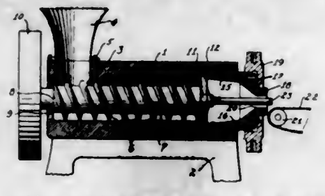
1,809,836. HAND BRAKE. GEORGE F. ENDICOTT, St. Paul, Minn., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 31, 1927. Serial No. 179,777. 7 Claims. (Cl. 74—116.)

1. In a hand brake, the combination with a member adapted to be rotated to effect tightening of a brake chain; of a ratchet wheel connected thereto and rotatable therewith; operating mechanism having actuating means engageable with said member normally to effect movement of the member and the wheel in unison therewith when moved in one direction and permitting relative movement with reference to said member when moved in a reverse direction; a releasable locking element for preventing reverse rotation of said ratchet wheel; means for latching said element in disengaged position when moved in a releasing direction; means for locking the actuating means of said operating mechanism to effect movement of said member in unison therewith in said reverse direction to effect unwinding of the brake chain; and means operable



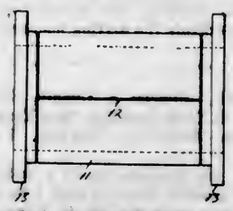
through movement of said operating mechanism in said first named direction for actuating said latching means to unlatch said locking element to render the same operative with respect to said ratchet wheel.

1,809,837. TUBING MACHINE. ELLIOTT S. EWART, Detroit, Mich., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Oct. 8, 1926. Serial No. 140,350. 4 Claims. (Cl. 18—14.)



2. In a tubing machine, an elongated die chamber having at the outlet end a discharging orifice and at the inlet end a core supporting spider, the walls of the chamber tapering gradually from said chamber for a portion of the length of the chamber and then converging abruptly on said discharge orifice, and a core supported by said spider and extending therefrom axially through said chamber and said orifice, the arms of said spider being axially inclined and tangential to said core, in combination with means for continuously forcing plastic stock between the arms and through said orifice.

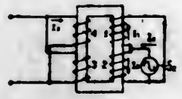
1,809,838. METHOD OF MANUFACTURING BEARINGS. WILLIAM J. FISORL and FREDERICK C. JONES, Detroit, Mich., assignors to Bohn Aluminum and Brass Corporation, Detroit, Mich., a Corporation of Michigan. Filed Jan. 8, 1928. Serial No. 244,287. 5 Claims. (Cl. 29—149.5.)



1. In the method of manufacturing backs for flanged half bearings, those steps which consist in shaping a flat

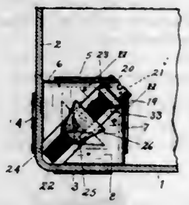
sheet by forming operations to produce a tubular body, preforming by suitable operations a flange member having a laterally extending base of a diameter substantially coincident with that of said tubular body, connecting said parts by means which results in a fusion or integration of the material thereof and longitudinally severing the structure into halves.

1,809,839. TRANSFORMER AND TRANSFORMER SYSTEM. FRANK E. FIELD, Somerville, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 19, 1925. Serial No. 38,124. 7 Claims. (Cl. 178—44.)



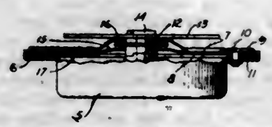
3. In a simplexed transmission system, a pair of line wires, a transformer having a pair of balanced windings connected in series, inductively aiding between said line wires, a tap at the common connection of said windings, a third path connected to said tap and constituting a return circuit for waves superimposed upon said line wires in parallel, and means for reducing the impedance of said transformer to superimposed currents, said means comprising a short-circuited path inductively coupled to said balanced windings.

1,809,840. OUTLET BOX CONNECTER. JAMES M. G FULLMAN, Sewickley, Pa., assignor to National Electric Products Corporation, a Corporation of Delaware. Filed Apr. 18, 1930. Serial No. 445,349. 4 Claims. (Cl. 247—25.)



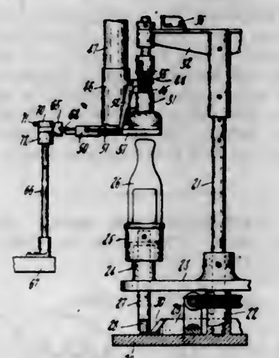
1. The combination of an outlet-box for electrical conductors having a bottom-wall and a side-wall, of a partition fixed to and projecting inwardly and upwardly from said walls, an opening through each wall located at one side of said partition, a screw rotatably retained within said outlet-box, said screw being inclined inwardly and upwardly from the line of intersection of said walls, and a clamping-member mounted upon and in threaded engagement with said screw, whereby by turning said screw the said clamping-member is caused to travel thereon and to engage a conductor inserted through either of said wall-openings and bind it laterally against said partition.

1,809,841. IMPULSE TRANSMITTER. HAROLD W. GOFF, Great Neck, and OSCAR F. FORSBERG, Yonkers, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1929. Serial No. 350,931. 4 Claims. (Cl. 179—90.)



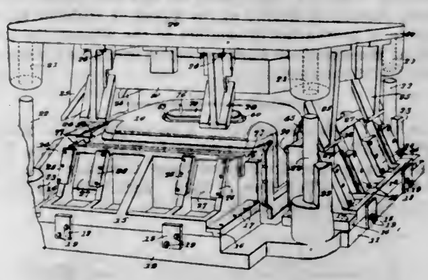
2. In combination with an impulse transmitting mechanism, a number plate, a receptacle for housing said mechanism and provided with a flange for mounting said number plate and a water shield comprising two discs interposed between said receptacle flange and said number plate and having skirted ends to form a reservoir, said discs cooperating to form a duct to permit water accumulated in said reservoir to flow therefrom.

1,809,842. BOTTLE CAPPING MECHANISM. CARL W. GOODWIN, Natick, Mass., assignor, by mesne assignments, to American Seal-Kap Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed May 29, 1928. Serial No. 281,505. 10 Claims. (Cl. 226—92.)



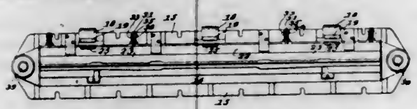
1. Mechanism of the class described, comprising a traveling support for a milk bottle, means traveling with said support for capping the bottle during its travel, spring actuated means secured to said capping means for feeding a cap to said capping means, a trigger normally holding said means ready for feeding motion, and a stationary tripping device engaged by said trigger at a predetermined point in the travel of said support to release said capping means for feeding motion.

1,809,843. APPARATUS FOR TRIMMING BODY PANELS. OTTO J. GROEHN, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 16, 1928. Serial No. 319,987. 12 Claims. (Cl. 164—29.)



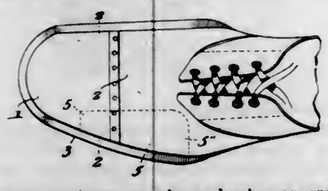
1. In a machine for trimming a back panel for an automobile body having back, top and quarter portions, the combination of a base having a die portion projecting upwardly therefrom adapted to receive said panel, an upper die member movable toward and away from the base, a presser foot yieldingly mounted upon said upper die member and arranged to engage and hold the panel positioned upon the die portion of said base, a plurality of slides movably mounted upon said base, a knife mounted on each slide, and a cam mounted on said upper die member adapted to engage and move said slides to trim the top and quarter portions of said panel along a substantially continuous line.

1,809,844. APPARATUS FOR SHAPING SHEET METAL. OTTO J. GROEHN, Grosse Pointe Park, and LAWRENCE S. LAMB, Grosse Pointe, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Original application filed Dec. 28, 1927, Serial No. 243,030. Patent No. 1,708,615, dated Apr. 9, 1929. Divided and this application filed Feb. 8, 1929. Serial No. 338,467. 4 Claims. (Cl. 153—13.)



1. In an apparatus for shaping sheet metal previously folded with an offset flange, the combination of a member for supporting the body of the metal sheet with the flange overhanging and normally resting thereagainst, a lower die movable under a portion of the body of the metal sheet to bring one side thereof against said flange and hold it against said member, and an upper die movable to shape said portion over said lower die and against another side thereof.

1,809,845. SIDE GUARD FOR SHOES. EDWARD HAAS, Houghton, Mich. Filed Mar. 11, 1930. Serial No. 434,906. 1 Claim. (Cl. 36—77.)



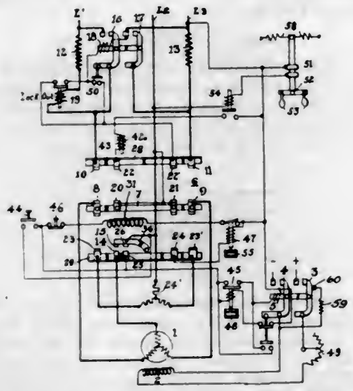
A shoe for workmen or miners, having an ordinary cap or box which protects the larger toes and the great toe and provided, in addition thereto, with a separate guard or stiffener which is located beneath the ordinary toe cap and over the lining and which comprises a suitably thick, yet bendable piece of material affording requisite stiffness and protection, with flexibility, said separate guard or stiffener extending in the direction of the length of the shoe and over the region of the vamp occupied by the smaller toes of the wearer of the shoe and past and beyond the rear edges of the ordinary top cap and also extending into the general central or median region of the vamp, the forward and rearward edges of said guard or stiffener being free to permit rocking or flexing of the guard or stiffener for the purpose of preventing discomfort to the wearer, the lower edge of the guard or stiffener being located adjacent the sole part of the shoe.

1,809,846. AIR RECEIVING AND DIRECTING MEANS FOR ROTARY FANS. LUCIEN L. HAAS, Buffalo, N. Y., assignor to Buffalo Pressed Steel Company, Inc., Buffalo, N. Y. Filed June 7, 1926. Serial No. 114,272. 7 Claims. (Cl. 230—240.)



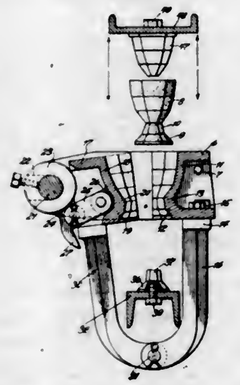
1. An air receiving device adapted for use in connection with a rotary fan having pitched blades, said device having an L-shaped flaring mouth, one arm of which extends partly in rear of a portion of the path of movement of the fan blades and the other arm beyond an arc of the path of movement of the peripheral portions of said blades, said device converging to a reduced neck portion so as to bring together various currents of air discharged by said fan.

1,809,847. CONTROL SYSTEM FOR ELECTRIC MOTORS. JAY H. HALL, Cleveland Heights, Ohio, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 28, 1926. Serial No. 84,290. 11 Claims. (Cl. 172—179.)



1. In a controller for synchronous motors, a source of alternating current supply, a source of direct current supply, a braking circuit, electro-responsive means for effecting the connection of the motor armature to the source of alternating current supply and for subsequently effecting the connection of the motor field to the source of direct current supply when the motor has accelerated to approximately synchronous speed, means operated by the said electro-responsive means for setting up a bias for disconnecting the armature from the alternating current source of supply and connecting it to the braking circuit, a safety switch, and means depending upon current flowing in the safety switch for preventing the bias from becoming effective for the purpose described.

1,809,848. MACHINE FOR FORMING PASTRY CUPS. ERNEST HAMWI, St. Louis, Mo. Filed Mar. 24, 1930. Serial No. 438,373. 19 Claims. (Cl. 107—66.)



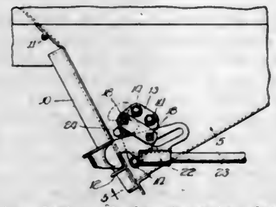
1. A machine of the character described, comprising two side members having opposite recesses in their adjacent sides forming mold cavities, means for supporting one of said side members in a stationary position while the other side member is moved, a rock shaft, connections from said rock shaft for moving said other side member from sidewise abutting contact with the stationary side member to release the articles from the mold cavities, cores projecting upwardly into the lower ends of the mold cavities and spaced from the walls thereof, and cores projecting downwardly into the upper ends of the mold cavities and spaced from the walls thereof and having their lower ends spaced upwardly from said first named cores.

1,809,849. SHUTTLE TENSION. ALEXANDER HANNAH, Paterson, N. J. Filed June 6, 1930. Serial No. 459,517. 9 Claims. (Cl. 139—217.)



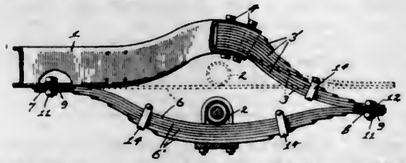
1. In combination, a shuttle having a filling guiding means, and a filling control device exerting a slip-grip on the filling and guided by the shuttle for back and forth movement in a substantially straight line and toward and from said means and normally urged from the same, said slip-grip representing a force against slippage of the filling relatively to said device exceeding that of the force urging said device from said means.

1,809,850. LATCH FOR DUMP CAR DOORS. WILLIAM J. HOSCEIT, Chicago, Ill., assignor to Rodger Ballast Car Company, Chicago, Ill., a Corporation of Maine. Filed Sept. 8, 1930. Serial No. 480,401. 3 Claims. (Cl. 105—308.)



1. A latching device of the character described comprising a pivot, a latching dog, having a door engaging portion, and an angular slot therethrough, said pivot being positioned through said slot for mounting said latching dog and forming a pivot therefor in either end of said angular slot, and means for manipulating said latching dog in either clockwise or counter clockwise directions.

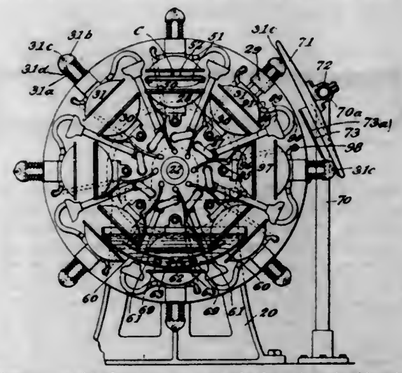
1,809,851. AUTOMOBILE SPRING. ULYSSES A. INMAN, Long Beach, Calif. Filed May 26, 1928. Serial No. 280,866. 10 Claims. (Cl. 267—45.)



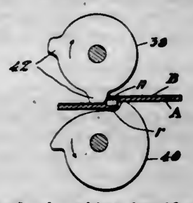
1. A spring suspension for automobiles comprising a quarter spring rigidly secured to the frame of an automobile and extending longitudinally therefrom; and a main spring rigidly secured at one end to the frame and rigidly secured at the opposite end to the outwardly extending end of the quarter spring, the flexing of the main spring being controlled at both ends by positive contacting engagement with the adjacent surfaces of the frame and quarter spring.

1,809,852. SUCTION PLATE MACHINE. WILLIAM C. JAY, Philadelphia, Pa., assignor to Sanitary Products Corporation of America, Philadelphia, Pa., a Corporation of Virginia. Filed May 29, 1930. Serial No. 456,846. 20 Claims. (Cl. 92—56.)

1. In a machine for forming articles from pulp, in combination, a pair of complementary foraminous formers, means for supplying pulp to said formers, means for causing said formers to travel as a unit toward and away from said pulp supplying means, means for moving said formers toward and away from one another during their travel as a unit, means for applying suction and compression to said formers respectively at suitably timed intervals during their travel, and a conveyor located adjacent the path of travel of said formers and between the same when separated to receive the completed articles therefrom.

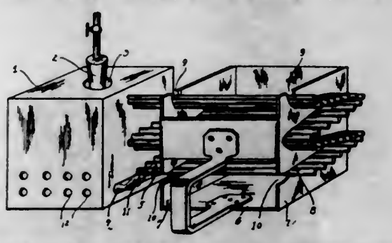


1,809,853. ART OF BOX MAKING. CUTLER D. KNOWLTON, Beverly, Mass., assignor to Hoague-Sprague Corporation, Lynn, Mass., a Corporation of Massachusetts. Filed Aug. 29, 1927. Serial No. 216,220. 26 Claims. (Cl. 93—36.)



16. The method of making box-blanks which consists in cutting a sheet of box-material at opposite sides along lines separated transversely of the sheet, and dividing the sheet in a plane joining the cut lines.

1,809,854. APPARATUS FOR SHAPING GLASS RODS. EUSTACHIUS W. KOERING, Vineland, N. J. Filed June 14, 1927. Serial No. 198,727. 5 Claims. (Cl. 49—7.)



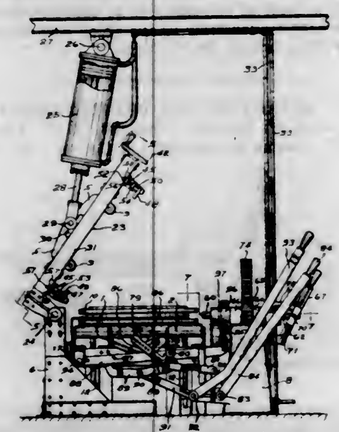
4. Apparatus for heating glass rods of large diameter without setting up disruptive strains therein, comprising a furnace having an opening in one side thereof for the exit of heat, and a rack for supporting said rods with the portion thereof to be heated adjacent the furnace, said rack having a guideway therein for permitting the rods to pass by gravity from a position remote from the furnace opening to a position opposite thereto and means associated with said furnace for directing the heat on desired portions of said rods.

1,809,855. LEVELING INSTRUMENT. ADOLPH LANGSNER, Chicago, Ill., assignor to Eugene Dietzen Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 20, 1928. Serial No. 255,635. 1 Claim. (Cl. 88—2.4.)



A hand level of the class described including a tubular casing, a second casing telescopically arranged within the first casing, manually operable means for pressing the first casing into engagement with the peripheral surface of the second casing for securing said parts in various positions of adjustment, a lens mounted at one extremity of the first mentioned casing, a second lens spaced from the first mentioned lens and movable with the second casing, an angularly disposed reflector positioned between said lenses, said first mentioned casing having an aperture positioned immediately above said reflector, an apertured frame positioned above said aperture, a plurality of stadia wires arranged in predetermined spaced relation and extending across the aperture of said frame, a housing detachably mounted upon the upper surface of said first tubular casing, a single screw extending through one extremity of said housing and providing the sole adjustable support for said apertured frame, a spirit level vial mounted in a fixed position within said housing immediately above the aperture of the frame, said spirit level vial having an indicator line provided thereon which is cooperatively positioned with respect to the stadia wires carried by the frame, and means within said first tubular casing for supporting the reflector in proper reflecting position.

1,809,856. TIRE MOLD SERVICING MACHINE. PAUL W. LEHMAN, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Aug. 6, 1929. Serial No. 383,969. 9 Claims. (Cl. 18—2.)



9. A tire mold servicing machine which comprises a support adapted to receive a tire mold, a plurality of wedge shaped centering members movable upwardly through the support to engage the lower half of the mold and hold it in predetermined position, a bridge member pivoted at one side of the support, means to raise and lower the bridge member, the bridge member when in lowered position extending diametrically across the top of a mold positioned on the support, adjustable fingers carried by the bridge member and movable into gripping position beneath the flange of the upper mold half, a wedge cam carried on the end of a shaft mounted at one side of the support, said shaft being horizontally movable to position the wedge cam between the flanges of the mold, means to rotate said shaft and wedge cam to separate the mold halves, means engaging the upper side of the bead ring of the tire to retain the tire in the lower half of the mold as the mold halves are separated and a pair of members engaging the lower side of the bead ring at substantially diametrically opposite points to strip the tire from the mold after the upper mold half has been raised by the bridge member.

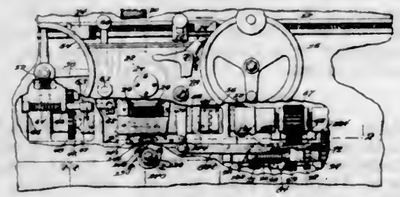
1,809,857. DOOR CONSTRUCTION. HARVEY J. LOUNSBURY, Glenn Ellyn, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 10, 1928. Serial No. 311,521. 2 Claims. (Cl. 189—46.)



1. In a door for railway cars, the combination with top and bottom channel-shaped beam members; of a beam of H-shape cross section forming one of the side edges of the door, the web of said H-beam being disposed at right angles to the plane of the door, one of the flanges of each of said channel beams at the same side of the door being secured to the flange of the H-beam at the corresponding side of the door; and sheet metal panel means forming the main body portion of the door, the top and bottom edges of said panel being secured to the remaining flanges of said channel members, and the edge section of said sheet metal panel means at said H-beam being turned inwardly at an angle to the main body of the panel and secured to the web of the H-beam.

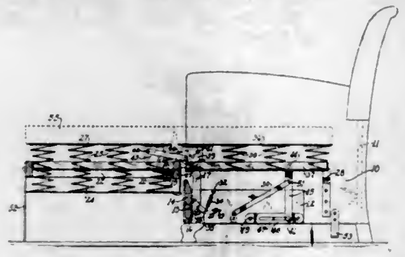
2. A door construction for railway cars including: a pair of doors hinged at their outer edges, the inner edge of each door being reinforced by a vertically disposed H-beam having the web thereof disposed at right angles to the plane of the door and the flanges thereof disposed in planes parallel to the plane of said door, said H-beam being fixed to the door proper, the H-beam of each door having a combined stop and sealing strip secured thereto, said sealing strips being disposed respectively on the inner and outer sides of the doors, the strip of each door being secured to the inner face of the flange of the H-beam at the corresponding side of the door and having an offset portion overlapping the outer face of the flange at the same side of the other door.

1,809,858. MACHINE TOOL. HAROLD E. MARTIN, North Providence, R. I., assignor to Brown and Sharpe Manufacturing Company, a Corporation of Rhode Island. Filed June 21, 1928. Serial No. 287,135. 14 Claims. (Cl. 74—98.)



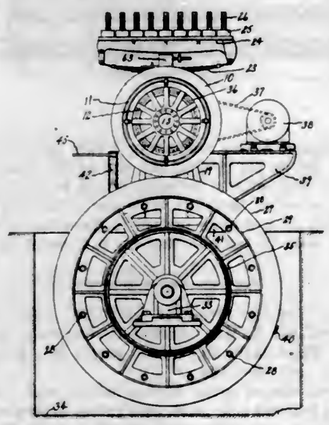
1. In a machine tool the combination with a stationary bed and a movable table of means including driving connections for driving the table, a reversing mechanism for automatically reversing the direction of the table drive, and a checking mechanism rendered operative by the reversing mechanism and acting independently of the said driving connections to cushion the stopping of the table.

1,809,859. BED DAVENPORT. CHARLES W. MEVES, Sheboygan, Wis., assignor to Sheboygan Couch Company, Sheboygan, Wis., a Corporation of Wisconsin. Filed Feb. 27, 1928. Serial No. 257,241. 2 Claims. (Cl. 5—31.)



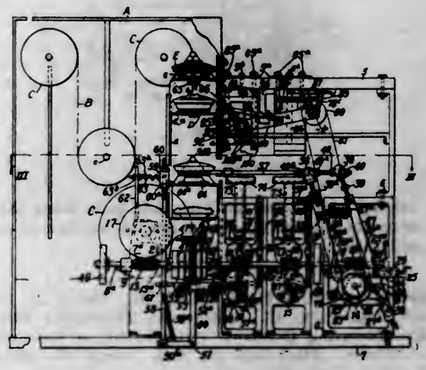
2. In a bed davenport, the combination of a seat member invertible to bed-forming position, supporting means for said seat member including supporting plates and swinging arms pivotally mounted on said plates and on said seat member, a bed member having an articulated connection with said seat member to lie below said seat member when the latter is in seat-forming position and to be lifted by said connection into elevated bed-forming position upon the inversion of said seat member to bed-forming position, a bracket secured to each of said supporting plates and having a substantially horizontal slot, a link member pivotally secured to said bed member to extend therebelow in substantially upright position in the elevated bed-forming position of said bed member and said link member being connected to said bracket for sliding travel in said slot, and a strut member pivotally mounted on said supporting plate forwardly of said slot and having a pivotal connection with an intermediate portion of said link member whereby to brace said link member in its bed-supporting position.

1,809,860. TIRE TESTING MACHINE. THOMAS MIDGLEY, Hampden, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Mar. 11, 1925. Serial No. 14,607. 8 Claims. (Cl. 73—51.)



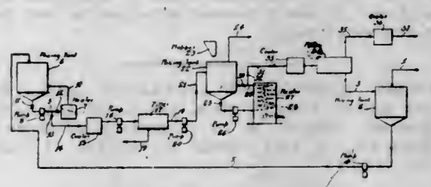
1. A tire testing device comprising a drum against which a tire may be run, a support and a rotating means for a tire and means to move said support and said rotating means so that the plane of rotation of the tire is at an angle to the plane of rotation of the drum.

1,809,861. AUTOMATIC MANUFACTURE OF POTTERY WARE. WILLIAM J. MILLER, Swissvale, Pa. Filed Jan. 19, 1928. Serial No. 247,957. 26 Claims. (Cl. 25—2.)



1. In apparatus of the class specified, the combination of a conveyor for molds and feeding and jiggering mechanism, means for driving said conveyor and mechanism, and mechanism operating in synchronism with said driving means for removing said molds from and replacing them on said conveyor.

1,809,862. PROCESS OF REFINING OILS. ARTHUR R. MOORMAN, Wood River, Ill., and IRVING C. CARPENTER, New Rochelle, N. Y., assignors to Contact Filtration Company, San Francisco, Calif., a Corporation of Delaware. Filed Jan. 4, 1929. Serial No. 330,809. 8 Claims. (Cl. 196—147.)

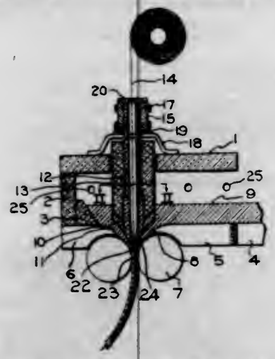


1. The process of refining acid treated oils which comprises heating the acid oil with a comminuted solid adsorbnt previously used for decolorizing neutralized oil, separating the adsorbent from the oil, adding fresh adsorbent to the oil, heating the mixture to above 212° F. to decolorize the oil, and finally separating the decolorized oil from the adsorbent.

1,809,863. APPARATUS FOR AND METHOD OF MAKING WIRE GLASS. ELISHA W. PAXTON, Washington, Pa., assignor to Highland Western Glass Company, Washington, Pa., a Corporation of Delaware. Filed Feb. 7, 1930. Serial No. 426,584. 8 Claims. (Cl. 49—32.)

1. Apparatus for making wire glass comprising an enclosure for supporting a glass pool having an opening

for the escape of the glass, a pair of rolls cooperating with said opening to form sheet glass and a wire guide



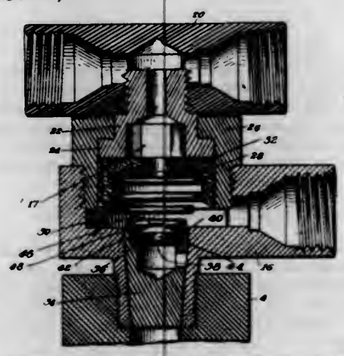
for feeding wire to the roll pass, said guide being shaped to cooperate with said rolls to control the flow of glass to said pass.

1,809,864. INSULATING BUSHING. OSCAR A. PEARSON, Oak Park, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 30, 1928. Serial No. 296,253. 4 Claims. (Cl. 247—43.)



1. The combination with a metal wall having an opening therein, of a bushing of insulating material fitting through said opening and provided with projections having notches on its inner face and at its outer face engaging said wall to prevent complete passage of said bushing; and one or more pliable tangs struck from and integral with said wall and bendable to engage said bushing at said notches to prevent withdrawal of said bushing from said opening.

1,809,865. LUBRICATING APPARATUS. ALBAN WARREN READER, Ferndale, Mich., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 25, 1927. Serial No. 170,799. 7 Claims. (Cl. 184—7.)



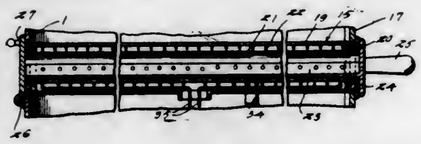
1. In a lubricating conduit system for the bearings adjacent the steering knuckle of an automotive vehicle, the combination of a chambered body adapted to be secured to the king bolt bearing and having a lateral inlet, a head having a plurality of lateral outlets and a downwardly extending flanged projection said projection having a passageway communicating with said outlets, a collar fitting over the flange of said projection and threaded within said body, a cup leather engaging the end of said projection and the side walls of said collar, and means for resiliently pressing said cup leather against the end of said projection.

1,809,866. COLLAPSIBLE TABLE. LOUIS H. RIESCHE, Chicago, Ill. Filed Oct. 10, 1929. Serial No. 398,605. 3 Claims. (Cl. 45—51.)



1. A collapsible table comprising a frame provided with vertically extending slots, an extensible table member, spring pressed rods mounted upon the inner edge of said table member and adapted to be slidably engaged in said slots, said frame also provided with sockets in said slots within which said rods are adapted to extend when said table is in elevated position, link members connecting the outer edge of said table member and the upper portion of said frame, and means for varying the link connection upon said table, substantially as described.

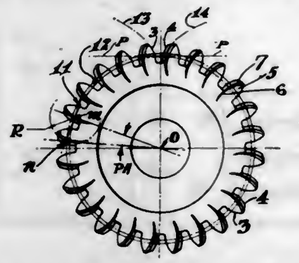
1,809,867. SAUSAGE AND ROLL HEATER. WILLIAM H. RITTBERGER, Granite City, Ill. Filed Jan. 2, 1930. Serial No. 418,142. 9 Claims. (Cl. 126—41.)



1. A sausage heater comprising a tube open at each end, shiftable means for closing one end of the tube, an open carrier of substantially the same length as the tube adapted to be extended thereinto from the other end, said carrier having an end plate formed to close the other end of the tube when in position therein, and means for heating the tube.

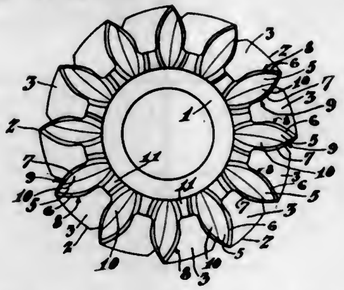
1,809,868. GEAR SHAPED CUTTER AND METHOD OF MAKING SAME. OLIVER G. SIMMONS, Lakewood, Ohio. Filed Mar. 15, 1928. Serial No. 261,813. 12 Claims. (Cl. 29—103.)

1. A gear shaped cutter having helical teeth which have generated helicoid side faces, said cutter having at one end spaced generated surfaces intersecting said helicoid faces to form cutting edges, the angle of intersection of said end surfaces which said helicoid faces, measured in any plane intersecting a cutting edge, being acute, all of said cutting edges lying substantially in a re-entrant conical surface of revolution coaxial with the cutter.



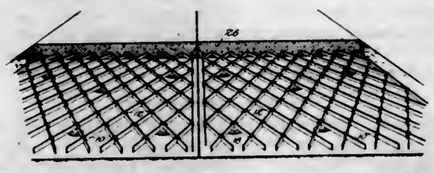
12. The herein described method of forming the cutting edges on teeth of a helical gear shaped cutter comprising generating a reentrant conical surface of revolution on an end face of the cutter and intersecting one helicoid side face of each tooth at acute angles and the remaining helicoid side faces at obtuse angles, and generating along each obtuse edge by means of a grinding wheel rotating in engagement with the cutter and on an axis lying in a plane substantially tangent to the base cylinder of the cutter an arcuate conical surface intersecting the first mentioned conical surface along a line substantially coinciding with the intersection of the adjacent helical face therewith.

1,809,869. GEAR SHAPER CUTTER AND METHOD OF MAKING SAME. OLIVER G. SIMMONS, Lakewood, Ohio. Filed Feb. 15, 1930. Serial No. 428,846. 17 Claims. (Cl. 29—103.)



5. A gear shaped cutter having an end face and teeth provided with involute helicoid side faces, each tooth having an end face provided with involute helicoid surfaces intersecting the side faces at substantially right angles to form involute cutting edges.

1,809,870. CONCRETE REENFORCEMENT. HARRY M. SMITH, Elkhart, Ind., assignor to Walter F. Bossert, Liberty, Ind. Filed Nov. 16, 1927. Serial No. 233,580. 5 Claims. (Cl. 72—122.)

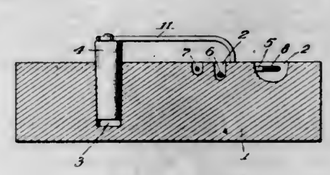


3. Means for reinforcing concrete consisting of a plurality of reinforcing units, each of said units consisting of a plurality of bars rigidly secured together, the bars of said units being bent into a continuous series of substantially V shaped formations, the end portions of the bars of one unit being bent to form an open V on one unit and a substantially closed V on the adjacent unit, and clips for securing said open and closed V bar sections together.

1,809,871. PRODUCTION OF BISMUTH. WALTER C. SMITH, Moylan, Pa., assignor to Cerro De Pasco Copper Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1928. Serial No. 329,678. 19 Claims. (Cl. 75—17.)

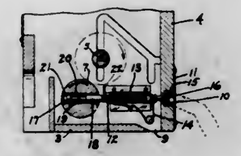
1. A process for producing bismuth from a molten bismuth-lead alloy which comprises adding sulfur and a metallic ingredient adapted to unite with the sulphur to form a matte capable of absorbing lead, and separating said matte from the purified bismuth thus produced.

1,809,872. DIE FOR DIE CASTING AND METHOD OF MAKING THE SAME. VICTOR L. SODERBERG, Detroit, Mich. Filed May 26, 1927. Serial No. 194,519. 2 Claims. (Cl. 204—1.)



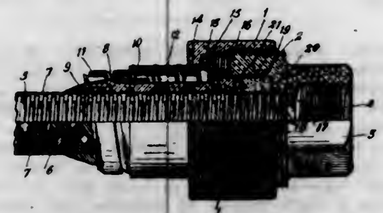
1. The method of making a die for die casting which consists in fashioning a die cavity in a block of metal easily cut but unsuitable for exposure as a face for a die cavity, supporting on and insulating from the block a conductor having elements of various sizes, shapes and locations depending on the nature of the portions of the cavities in which they are located, placing the block and anode in an electrolyte suitable for depositing chromium, and connecting the block as a cathode in a plating circuit in which said conductor is the anode.

1,809,873. TOWEL CABINET. GEORGE ADOLPH STEINER, Salt Lake City, Utah, and GEORGE WASILESKI and WILLIAM MURDO, Chicago, Ill., assignors to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed Mar. 16, 1925, Serial No. 15,881. 5 Claims. (Cl. 312—38.)



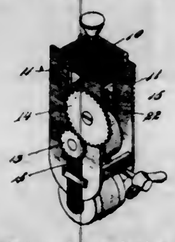
5. In a towel cabinet, the combination of a roller and a locking device therefor, said locking device comprising a stop member and a freely slidable, gravity actuated bolt carried by said roller and extending diametrically thereof, the said stop being so positioned with respect to the path of the projected bolt that when the said bolt contacts with the same the said bolt will be in a substantially horizontal position, and means to retract the said bolt out of contact with the said stop, the substantially horizontal position of the bolt when the roller is in stopped position insuring a retracted condition of the bolt when said bolt retracting means is released.

1,809,874. HOSE COUPLING. R. HARRY STONE, Irvington, N. J., assignor to Titeflex Metal Hose Co., a Corporation of New Jersey. Filed Jan. 12, 1925. Serial No. 1,735. 9 Claims. (Cl. 285—72.)



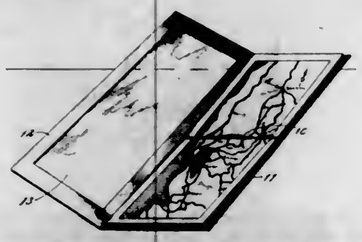
1. The combination with a corrugated tube having a section solid for substantially the depth of the corrugations, of a coupling within which said tube enters and packing bearing upon the said section.

1,809,875. METALLIC LEAF APPLYING DEVICE. STUART H. SWALLOW, Providence, R. I., assignor to W. H. Coe Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Nov. 7, 1928. Serial No. 317,843. 1 Claim. (Cl. 41—7.)



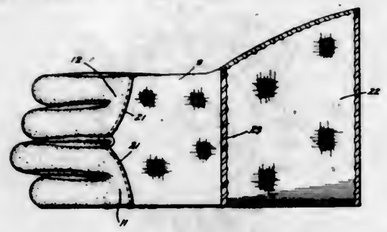
In a metallic leaf applying device, a pair of separable spaced support plates, spring pressed slide members movably mounted in said plates, a package roll shaft mounted in said slide members, a driving element on said package roll shaft, a friction roll mounted in said slide members, a package roll of metallic leaf rotatably mounted on said package roll shaft and having a recess receiving said driving element, whereby said roll is positively driven by said driving element and manually operable mechanism operatively connected to said package roll shaft.

1,809,876. MAP FOLDER. FRANK J. TAYLOR, San Francisco, Calif. Filed Nov. 28, 1927. Serial No. 236,132. 5 Claims. (Cl. 281—15.)



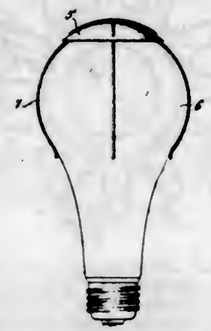
1. A map folder comprising a plurality of pages secured together in booklet form, having map data printed on each side thereof, and arranged so that a complete map, extending across said booklet, will be exposed to view when said booklet is opened, and a folder for said booklet having a cover hinged at right angles to said booklet binding, so that it can fold over said booklet in its open position and thereby protect the booklet and retain it open for ready reference, said cover having a cut out portion through which the map may be observed.

1,809,877. GLOVE. WILLIAM O. WELLS, Minneapolis, Minn., assignor to Wells-Lamont Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Apr. 26, 1930. Serial No. 447,566. 2 Claims. (Cl. 2—161.)



1. A glove including a portion adapted to cover the palm of the hand, portions forming the fronts of the fingers, another portion forming the back of the glove and stitched at its sides to said palm portion, the forward edge of said back portion being curved inwardly and forwardly from both sides and terminating in a point situated substantially between the two middle fingers, a portion shaped to form the backs of the first and second fingers and another portion forming the backs of the third and fourth fingers, said back finger portions being suitably stitched to the front finger portions, and said back finger portions having their rear edges shaped to correspond to the curved edge portions of said back portion and suitably stitched thereto.

1,809,878. PROTECTIVE SHIELD FOR INCANDESCENT LAMPS. CHANNING WHITMAN, Buffalo, N. Y., assignor to Flexlume Corporation, Tonawanda, N. Y., a Corporation of New York. Filed July 17, 1929. Serial No. 378,908. 2 Claims. (Cl. 240—138.)

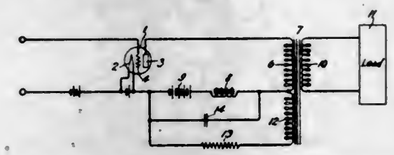


1. A shield adapted to protect an incandescent lamp consisting of a disc having a degree of concavity such that it may be fitted substantially conformably upon said lamp so as to overlie a part of the area thereof subtended by a chord of less extent than the diameter of the lamp, two pairs of apertures formed in said shield and a resilient wire passing through each of said pairs of apertures and adapted to conformably engage said lamp to permit adjustment of the shield about the lamp to cover a portion of the upper exposed surface thereof regardless of the angle at which the lamp is mounted, said wires crossing at a point over said cap.

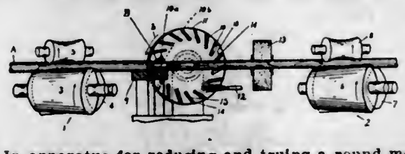
1,809,879. CIRCUITS FOR ELECTROMAGNETIC DEVICES. HORACE WHITTLE, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 28, 1927. Serial No. 177,818. 9 Claims. (Cl. 179—171.)

3. In combination, an electron discharge device having an anode, a cathode and a control electrode, a transformer,

a source of direct current connected between said cathode and anode through one winding of said transformer, means for impressing signals on said winding, a second winding on said transformer having substantially fewer turns than said one winding and connected to a direct current source such that the magnetomotive force set up in the core of said transformer by said second mentioned winding is substantially equal and opposite to the magnetomotive force set up by the direct current flowing through said first mentioned winding, thereby reducing the direct current flux in said core substantially to zero, said second mentioned winding being included in a circuit containing only impedance which remains constant as regards signal variations and a direct current source as the only source of voltage external to said winding.



1,809,880. METHOD AND APPARATUS FOR FINISHING ROUND BARS. GEORGE A. WISE, Pittsburgh, Pa., assignor to Sutton Engineering Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 4, 1929. Serial No. 360,449. 4 Claims. (Cl. 29—83.)



4. In apparatus for reducing and truing a round metallic section, the combination of means for straightening such metallic section, which means are adapted to effect a helical movement of the section in the general direction of its longitudinal axis, a surface-removing cutter adjacent the path of travel of said section as it leaves such straightening means, which cutter includes a blade and is rotatable to move the blade against said helically moving section, and rolls for the polishing of said section when it has passed said cutter, which polishing rolls are adapted to continue the helical movement of said stock.

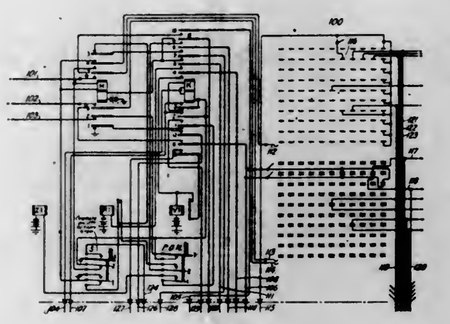
1,809,881. TOY TELEPHONE. WILLIAM C. WOOD, East Hampton, Conn., assignor to The N. N. Hill Brass Company, East Hampton, Conn., a Corporation. Filed Mar. 14, 1931. Serial No. 522,648. 4 Claims. (Cl. 46—46.)



1. A toy telephone, comprising a base, a yoke connected with the base, a longitudinally-movable hammer supported by the said yoke, and a gong pivotally connected with the top of the yoke.

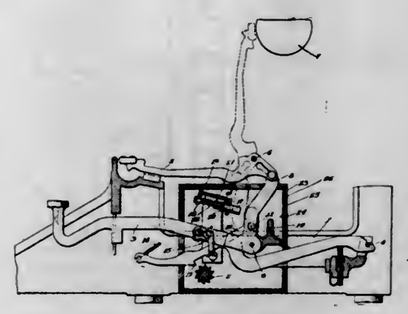
1,809,882. TELEPHONE EXCHANGE SYSTEM. ESMOND P. G. WRIGHT, Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed May 10, 1929, Serial No. 361,912, and in Great Britain Sept. 5, 1928. 15 Claims. (Cl. 179—18.)

1. In a telephone system, two switches, each having operating magnets individual thereto, means actuated in accordance with part of the designation of a desired line to cause both switches to hunt simultaneously for a free



line within different portions of the same group of lines and means for extending the connection over brushes of either of said switches.

1,809,883. TYPEWRITER. CONRAD D. YOUNGBERG, Woodstock, Ill., assignor to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed Jan. 2, 1925. Serial No. 29. 3 Claims. (Cl. 197—183.)

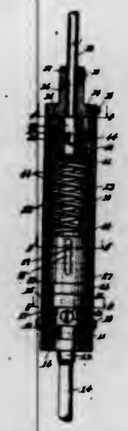


1. In a typewriter, the combination with a type bar, of actuating means therefor, comprising a pivoted sub-lever, a power roller, an actuator connected to said sub-lever, a key lever, means for connecting said actuator to said power roller to secure operation of said actuating means, and a spring-pressed plunger mounted in position to be engaged by said sub-lever when said type bar approaches its platen striking position.

1,809,884. POWER CONVERTING DEVICE. ELLIOTT E. ANTHONY, Chicago, Ill. Filed Feb. 20, 1929. Serial No. 341,378. 5 Claims. (Cl. 125—33.)

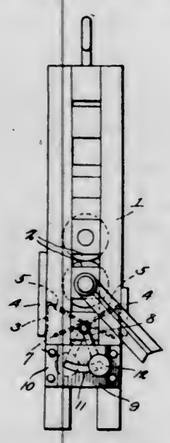
1. In a device of the character described, a tubular body casing, an element constituting an anvil and tool holder supported in the end portion of said tubular casing and having limited endwise movement, a spring-pressed impact element mounted to reciprocate longitudinally in said tubular casing and normally in contact with said anvil and tool holder element, and an axially rotatable power element in said tubular casing, said power element having a spiral cam and said impact element having a cooperat-

ing portion for engagement with said cam whereby said impact element is positively moved in one direction, said



impact element moving in the opposite direction by the reaction of its spring upon its disengagement from said cam.

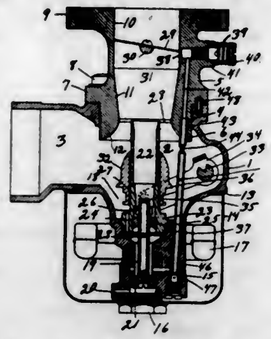
1,809,885. DRAIN BOARD FOR WRINGERS. OTTO BANKER, Mankato, Minn. Filed Mar. 25, 1930. Serial No. 438,824. 2 Claims. (Cl. 68—32.)



1. The combination with a wringer frame and rolls therein, of oppositely disposed downwardly converging water-deflecting members beneath the rolls, cross strips, a drain board tiltably mounted beneath said members and substantially concealed at all times between the cross strips, and means for tilting the drain board into contact with the bottom surface of either of said members, the distance between the upper and lower edges of the drain board being less than the distance between the cross strips, the lower portion of each of said cross strips constituting water deflecting means.

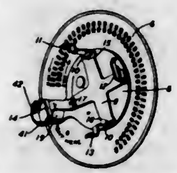
1,809,886. CARBURETOR. GEORGE M. BICKNELL and ARTHUR A. HAYDEN, St. Louis, Mo., assignors to Carter Carburetor Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Feb. 23, 1929. Serial No. 342,080. 7 Claims. (Cl. 261—41.)

1. In a carburetor, a body member having an air chamber therein, a stand pipe mounted in a wall thereof, said chamber having a circular opening in an opposite wall of said chamber, a member having an integral annular skirt extending into said opening, and projecting into the air chamber and a passageway terminating in said skirt, said



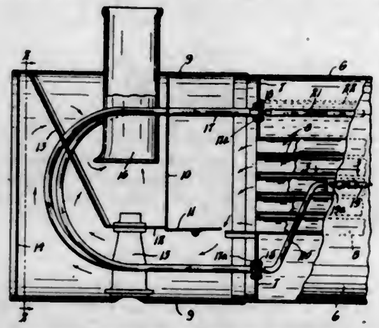
member having a Venturi portion forming a restriction of said passageway, and a choke valve slidably mounted on said stand pipe and adapted to be moved into the restricted portion of said passageway to close the same.

1,809,887. ADAPTER. HOWARD BROADWELL, Ridgewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 28, 1930. Serial No. 464,505. 7 Claims. (Cl. 179—90.)



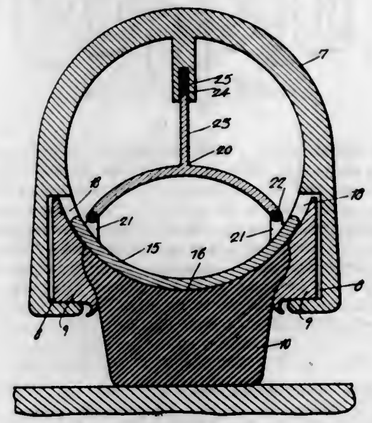
1. In combination, a telephone dial having a finger wheel, a disc, means for securing said disc to the finger wheel of said dial comprising a plurality of prongs adapted to engage the inner periphery of the holes in said finger wheel and means for distending said prongs to permit a non-rubbing engagement thereof with said finger wheel.

1,809,888. POSITIVE WATER CIRCULATOR. CLIFFORD M. CRANE, St. Paul, Minn., assignor to Lucius Winchester, Chicago, Ill. Filed Apr. 10, 1926. Serial No. 101,120. Renewed Apr. 27, 1931. 8 Claims. (Cl. 122—407.)



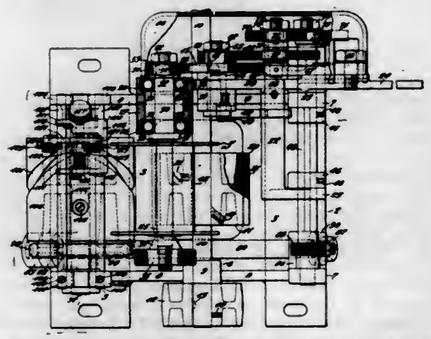
1. A water circulating means for a boiler, having a front flue sheet and a hot gas chamber at the front of the same, comprising one or more open ended conduits extending from the lower front portion of the boiler and flue sheet forwardly into said chamber then upwardly and rearwardly to the flue sheet and boiler adjacent the water level thereof, and a conduit in the lower portion of said boiler for each of said first mentioned conduits, each of said last mentioned conduits having its front end spaced a short distance from and substantially alined with the lower end of its respective first mentioned conduit and means for directing water through said last mentioned conduits to assist the heat in said gas chamber in causing a circulation of water from the lower portion of the boiler to the top thereof.

1,809,889. RESILIENT TIRE FOR WHEELS. JOSEPH DAVEY, Belle Harbor, N. Y. Filed Apr. 15, 1930. Serial No. 444,475. 6 Claims. (Cl. 152—8.)



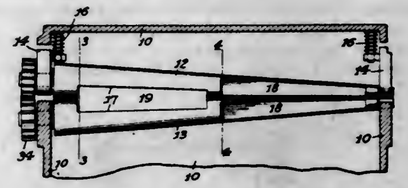
1. A resilient wheel comprising a channeled felloe member, a resilient tire mounted in said channeled felloe member, guide recesses formed in the side walls of said channeled felloe member, and a plurality of tire supporting blocks carried by said channeled felloe member, said blocks being mounted in the recesses and having sliding movements laterally of the channeled member.

1,809,890. WINDING MACHINE. ERNEST A. DE WOLF, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed May 17, 1929. Serial No. 363,918. 17 Claims. (Cl. 242—25.)



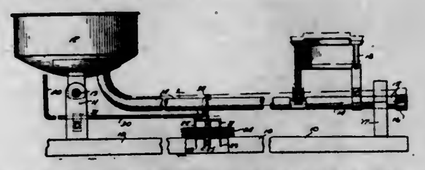
1. In a winding machine, the combination of a rotatable drive-roll, a winding-spindle for supporting a spool or other receiver to adapt it to be rotated from the drive-roll, means for mounting the winding-spindle to adapt it to move away from the drive-roll during the growth in the winding on the spool or receiver, a train of gearing driven directly from the winding-spindle, means for traversing the strand material back and forth axially of the spool or receiver, and gearing for operating the traversing-means from the train of gearing driven from the winding-spindle.

1,809,891. STAGGERED CHANNELED ROLLER FEATHER PLUCKING DEVICE. JULIUS DUNNER, New York, N. Y. Filed Oct. 30, 1929. Serial No. 403,589. 11 Claims. (Cl. 17—11.)



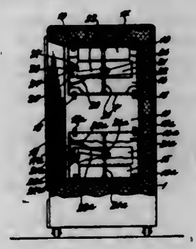
1. In a de-feathering machine, a pair of tapered contacting rollers each having a plurality of longitudinal channels at an angle to each other and arranged in opposite pairs, each pair at some time during a revolution of the rollers being in registration to provide successively formed air passages, for the purpose set forth.

1,809,892. BROODER HEATER. HAROLD E. ELLIS and FRANK THEODORE WILLIAMS, Meriden, Conn., assignors to The Miller Company, Meriden, Conn., a Corporation of Connecticut. Filed Aug. 21, 1929. Serial No. 387,822. 8 Claims. (Cl. 236—6.)



1. A burner regulator for brooders and the like, comprising, a supporting base, a fuel tank pivotally supported above the base and connected to a fuel pipe, a fuel burner carried by the free end of the fuel pipe, a vertically movable pipe carrier and a thermostat between the base and pipe carrier for controlling the height of the pipe and burner, the carrier having a manually movable wedge-shaped member for varying the height of the pipe and burner independently of the thermostat.

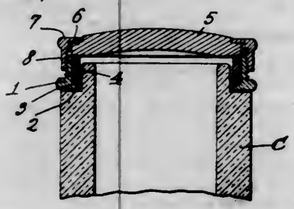
1,809,893. REFRIGERATOR. JEREMIAH FLYNN, St. Louis, Mo., assignor of one-fourth to Frank Tirreli and one-fourth to Jerome Flynn, St. Louis, Mo. Filed June 26, 1929. Serial No. 373,823. 4 Claims. (Cl. 62—48.)



1. A refrigerator, partitions dividing the inside of said refrigerator into separate compartments and having openings therethrough forming communications between said compartments, slides operative to open and close said openings to open and close communication between said compartments, a rod extending across each of said open-

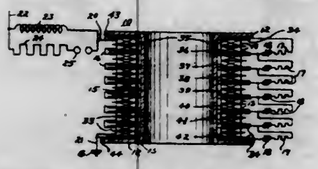
ings, a sleeve in connection with each of said slides mounted for sliding movements along the corresponding rod, a bell crank lever corresponding to each of said slides, a pivotal connection between one arm of each bell crank lever and the corresponding slide, a plunger engaging the other arm of each bell crank lever, and doors for the respective compartments for engaging said plungers and holding said bell crank levers in position to hold said slides in open positions when said doors are closed.

1,809,894. CLOSURE FOR BOTTLES, JARS, AND THE LIKE. CHARLES B. GARWOOD, Linthicum Heights, Md., assignor to Carr-Lowrey Glass Co., Baltimore, Md. Filed May 12, 1930. Serial No. 451,783. 2 Claims. (Cl. 215—43.)



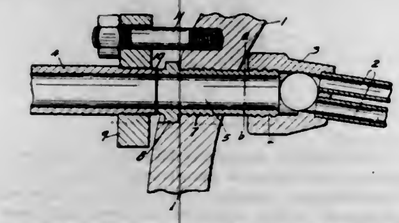
1. A closure of the class described including a ring having an internal inclined shoulder, a gasket fitted snugly in the ring and supported by the shoulder, a cap disk seated at its margin on the gasket, and a ring lapping the disk and in screw-threaded engagement with the first named ring.

1,809,895. PROTECTIVE SYSTEM FOR TRANSFORMERS. FRAZER W. GAY, Newark, N. J. Filed Oct. 8, 1928. Serial No. 311,112. 5 Claims. (Cl. 175—30.)



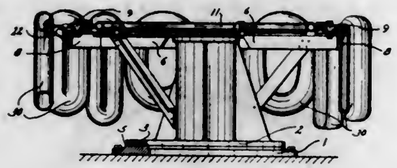
3. In combination with a transformer, a protective system therefor, said protective system comprising a choke coil in series relation with a winding of said transformer, a parallel circuit extending around said choke coil, said parallel circuit comprising a resistance and an electric valve and being adapted to pass surge currents past said choke coil, interconnected circuits shunted across said transformer winding, said interconnected circuits comprising resistances and condensers in series relation and being electrostatically coupled to said transformer winding at a plurality of points.

1,809,896. BOILER. OTTO H. HARTMANN, Cassel-Wilhelmshohe, Germany, assignor to The Superheater Company, New York, N. Y. Filed June 5, 1930, Serial No. 459,308, and in Germany June 21, 1929. 3 Claims. (Cl. 257—235.)



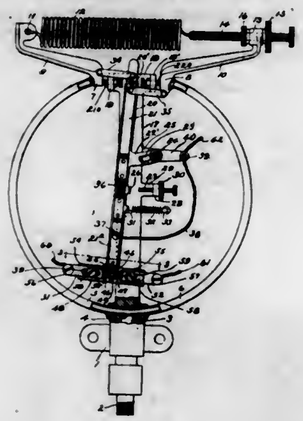
1. In apparatus comprising a drum, a manifold inside of the drum, a pipe outside of the drum, the combination with said parts of a connecting piece extending through the wall and into the manifold and expanded into each to form a tight joint, and means to secure the pipe to the exterior end of the connecting piece.

1,809,897. DEFLATING DEVICE. ROBERT P. HARVEY, Longmeadow, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Mar. 29, 1930. Serial No. 440,133. 3 Claims. (Cl. 154—9.)



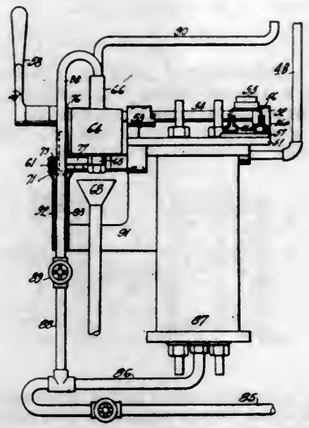
1. A deflating device which comprises a support movable in a closed path, a plurality of vacuum nozzles carried by the support and each adapted to be telescoped on the end of the valve stem of an article to be deflated, resilient gaskets carried by the nozzles and adapted to seal the valve stems in the nozzles, means in the nozzles to hold open the valve of the stems, means to supply vacuum to the nozzles and a two-way valve associated with each nozzle operable to alternately vent its nozzle to the atmosphere and connect it to the vacuum supply.

1,809,898. CONTROLLING APPARATUS. OTTO W. HEISE, Bridgeport, Conn., assignor, by mesne assignments, to Consolidated Ashcroft Hancock Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 26, 1925. Serial No. 52,703. 7 Claims. (Cl. 200—81.)



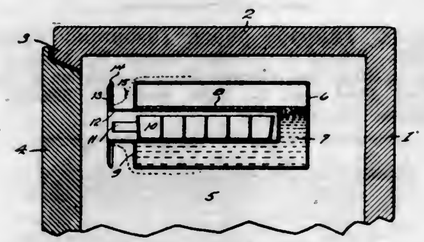
1. Apparatus of the class described comprising as externally loaded Bourdon tube, a pair of co-pivotal levers, one of said levers being connected to the Bourdon tube to be moved by the later, said lever carrying an electrically insulated contact support provided with oppositely directed contact elements, an insulating block mounted upon the other lever supporting a pair of spaced contacts adapted for engagement respectively by said oppositely directed contact elements, means tending to swing the later lever in the same direction that the first lever is moved by the Bourdon tube in response to increasing pressures, and a stop to limit movement of the second lever.

1,809,899. ELECTRICALLY OPERATED WATER HEATER. HERBERT HEROY, Belmar, N. J. Filed July 3, 1929. Serial No. 375,645. 11 Claims. (Cl. 219—38.)



1. In an electric water heater as described, the combination, a heating coil connected with an electric supply, a water supply for said coil, a float connected by an overflow to said water supply, a circuit controller controlling the circuit of said coil operated by said float and means for automatically disconnecting said circuit when the water ceases to flow in said overflow and for preventing said circuit being automatically restored after it is disconnected.

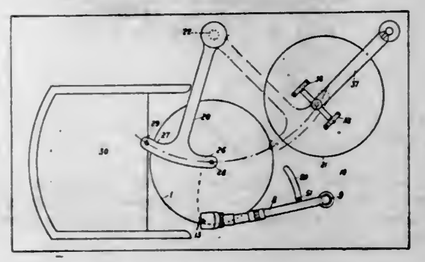
1,809,900. REFRIGERATOR. WILLIAM R. JEAVONS, Cleveland Heights, Ohio. Filed Nov. 8, 1930. Serial No. 494,343. 7 Claims. (Cl. 62—108.5.)



1. The combination, with a refrigerator having a space for the reception of food and a door, of a refrigerant container within said space and having a freezing chamber projecting thereinto from one of the walls thereof, and a shield for the mouth of said chamber, the said shield extending outwardly from said wall a distance sufficient to subject the outer end of said shield at least periodically to a temperature above the freezing point whereby the entrance to said chamber through said shield will not be detrimentally obstructed by an accumulation of ice.

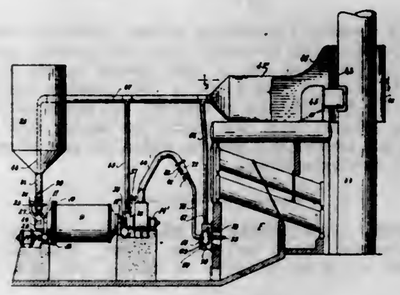
1,809,901. PHONOGRAPH AND THE LIKE. ALFRED DUKINFIELD JONES and STANLEY JAMES SMITH, Glasgow, Scotland. Filed Oct. 1, 1930, Serial No. 485,754, and in Great Britain Sept. 20, 1929. 4 Claims. (Cl. 274—10.)

1. An automatic phonograph comprising a turn-table, a tone arm having a vertical pillar, a record support or magazine, a record change-arm secured to swing over said turn-table and magazine, a pin carried by said arm and adapted to engage in the central hole of a record of said magazine, another pin carried by said arm and adapted to push a record off the turn-table, a motor driven spindle, two cams secured on said spindle, followers co-operative with said cams and yieldingly connected to the tone-arm



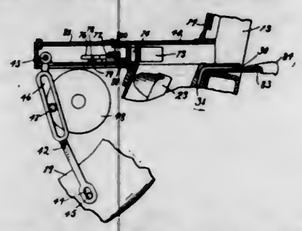
pillar, whereby said pillar is raised to lift the needle or other "pick-up" and is partially rotated to swing said "pick-up" from an inner to an outer position, a third cam secured on said driven spindle, a follower co-operative with said third cam and a brake device with which said follower is yieldingly connected and whereby the swinging movement of said tone-arm is limited.

1,809,902. SYSTEM OF AND MEANS FOR PREPARING FUEL AND DELIVERY THEREOF TO A PLACE OF COMBUSTION. JOSEPH E. KENNEDY, New York, N. Y. Filed Jan. 30, 1926. Serial No. 84,928. 13 Claims. (Cl. 110—104.)



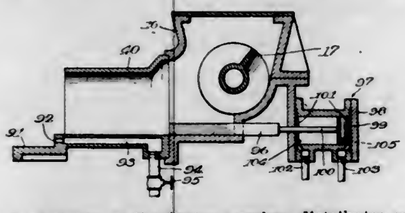
1. In a system for the preparation and delivery of coal to a furnace for combustion, a furnace, a burner mounted in an opening to the furnace, pulverizing means including a revoluble drum having means therein operative through the revolving of the drum to pulverize coal, means having a substantially air tight connection with the drum for charging coal to the drum to be pulverized and having an opening to the atmosphere to admit air to the drum, regulatable closure means for said opening for admitting air in variable volume to the drum, a fan rotatable independently of the drum of the pulverizing means having the intake connected with said drum and the outlet with the burner for drawing air into said drum for admixture with the coal as it is pulverized and to draw pulverized coal laden air from the drum and deliver the same to the burner and having an opening to the atmosphere in the connection thereof with the drum for admitting air to the intake of the fan from the exterior of the drum, and regulatable closure means for said opening for supplying air in variable volume to the pulverized coal laden air stream drawn from the drum for mixture and delivery with said stream to the burner.

1,809,903. LOCOMOTIVE STOKER. NATHAN M. LOWER, Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 13, 1924. Serial No. 699,096. 10 Claims. (Cl. 110—101.)



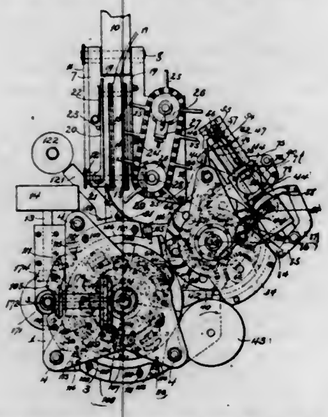
3. A plunger for transferring fuel comprising a support, a head pivoted to said support and means for adjusting and securing said head in angularly adjusted position relatively to said support.

1,809,904. STOKER MECHANISM. NATHAN M. LOWER, Pittsburgh, Pa., assignor, by mesne assignments, to The Standard Stoker Company Inc., New York, N. Y., a Corporation of Delaware. Filed July 31, 1926. Serial No. 126,159. 2 Claims. (Cl. 110—101.)



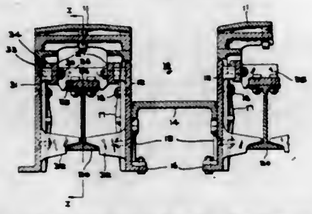
2. In a stoker, a distributor member, distributor means for projecting fuel forwardly from said member, mechanism for delivering fuel to said member outside of the zone of action of said means, a fluid pressure operated motor for operating said mechanism, and means operated by the exhaust from said motor for moving said fuel along said member to a position within the zone of action of said distributor means.

1,809,905. CAN SEALING MACHINE. ADOLPH K. MALMQUIST, South Bellingham, Wash. Filed Oct. 3, 1928. Serial No. 309,979. 19 Claims. (Cl. 113—24.)



1. In an apparatus for the purpose set forth, the combination of a stationary casing, a continuously rotating can carrier therein, said casing and carrier forming a vacuum chamber, means for continuously supplying loosely assembled cans and caps to the can carrier, and means within the can carrier for seaming the caps onto the cans, the top and bottom of the can carrier constituting the top and bottom of the vacuum chamber.

1,809,906. UNDERFEED STOKER CONSTRUCTION. CHARLES F. MILLER, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 21, 1930. Serial No. 430,325. 5 Claims. (Cl. 110—44.)



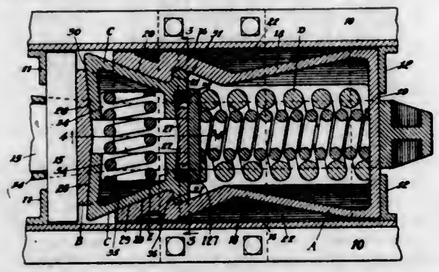
1. In an underfeed stoker having alternately-arranged retorts and tuyère rows, a supporting construction for the stoker including a beam arranged below each tuyère row and connected to adjoining side walls of adjacent retorts, and means connected to each beam for supporting the tuyères of the row thereabove independently of the retort side walls.

1,809,907. RUBBING OR SANDING PAD. FRANK E. NEWCOMB, East Cleveland, Ohio. Filed Jan. 31, 1930. Serial No. 424,852. 6 Claims. (Cl. 51—195.)



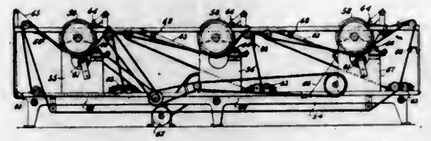
1. A rubbing or sanding pad comprising a hard rubber disk, and a soft rubber back extending over the edge of the disk.

1,809,908. FRICTION SHOCK ABSORBING MECHANISM. ROLAND J. OLANDER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 392,055. 5 Claims. (Cl. 213—31.)



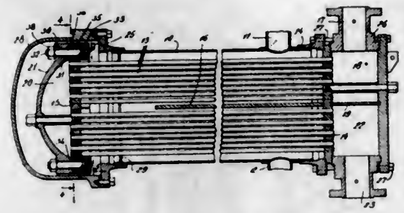
1. In a friction shock absorbing mechanism, the combination with a casing and a main follower, relatively movable toward and away from each other lengthwise of the mechanism, the casing having opposed interior, inwardly converging friction wedge faces; of a pair of friction wedge blocks having wedging engagement with the casing; spring means opposing lateral approach of the blocks; a carrier for the blocks, the carrier having a transverse front end wall interposed between the main follower and the front ends of the blocks, and having frictional engagement therewith; and spring resistance means within the casing opposing inward movement of the blocks.

1,809,909. FUR DYEING MACHINE. ERASMO PIERINI, Brooklyn, N. Y., assignor to Ideal Belgian Fur Dyeing Company, Inc., a Corporation of New Jersey. Filed Jan. 27, 1930. Serial No. 423,666. 3 Claims. (Cl. 8—19.)



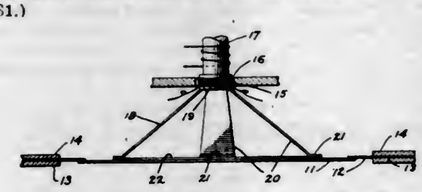
1. A fur dyeing machine including a plurality of units simultaneously driven, each unit including a plurality of spaced conveyor belts and means for applying material to fur carried by said belts, said means including rotary applying brushes mounted for movement of the bristles between the spaces of said belts whereby said belts will act to control the application of material to said fur by said brushes, the belts of one unit being out of different alignment to provide different longitudinal stripes in a fur treated by said machine.

1,809,910. HEAT EXCHANGER. JOSEPH PRICE, Stapleton, Staten Island, N. Y., assignor to The Griscom-Russell Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 12, 1929. Serial No. 413,491. 13 Claims. (Cl. 257—239.)



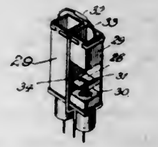
1. A heat exchanger of the class described comprising a shell, a tube bundle therein, a tube sheet for one end of the tube bundle sufficiently smaller than said shell to be easily removable therethrough, a cap for said tube sheet larger than the interior of the shell and having a rim engaging the outer face of the tube sheet, a sectional ring disposed inwardly of said tube sheet and engaging the inner face thereof, a continuous ring disposed in the plane of the tube sheet and serving to space the sectional ring from the rim of the cap, and a plurality of bolts for clamping said parts together.

1,809,911. SOUND DIAPHRAGM. EDWIN S. PRIDHAM, Oakland, Calif., assignor to The Magnavox Company, Oakland, Calif., a Corporation of Arizona. Filed May 15, 1929. Serial No. 363,312. 5 Claims. (Cl. 181—31.)



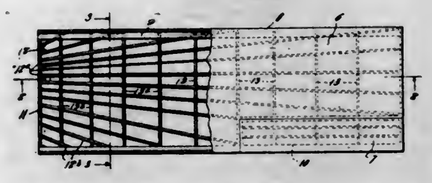
1. In an air actuating atructure, a substantially flat, thin vibratory diaphragm, means for flexibly supporting said diaphragm near its edge, and means for transmitting vibrations to said diaphragm in a direction transverse to its plane, and a reinforced surface disposed annularly around the center of the diaphragm upon which said last means acts.

1,809,912. GASEOUS DISCHARGE DEVICE. SAMUEL RUBEN, New York, N. Y., assignor to Ruben Patents Company, New York, N. Y., a Corporation of Delaware. Filed July 2, 1927. Serial No. 203,095. 3 Claims. (Cl. 250—27.5.)



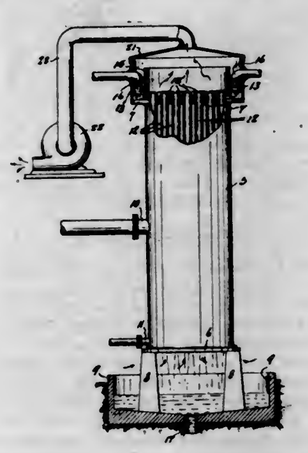
1. An ionic discharge rectifying device comprising two pairs of spaced asymmetrically conducting electrodes of opposite polarity, and an electron emissive filament in direct electrical contact with a cathode electrode and positioned in the leakage path of the device to be heated by the leakage current.

1,809,913. AIRFOIL. HARRY H. SEMMES, Chevy Chase, Md., assignor to Bendix Aviation Corporation of New York, N. Y., a Corporation of Delaware. Original application filed Nov. 19, 1929, Serial No. 408,375. Divided and this application filed Apr. 12, 1930. Serial No. 443,782. 9 Claims. (Cl. 244—3.)



1. An airplane wing construction having a plurality of spars arranged in a fan-like shape, the ends of said spars adjacent the root portion of the fan being positioned at varying distances from each other, the spars within the zone of center of preasure travel of the wing being in close proximity with each other.

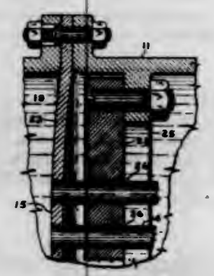
1,809,914. VERTICAL TUBULAR CONDENSER. JAMES M. SEYMOUR, Newark, N. J. Filed May 2, 1927. Serial No. 188,177. 2 Claims. (Cl. 257—57.)



1. In a vertical tubular condenser, means to supply water for movement through the tubes thereof, said water

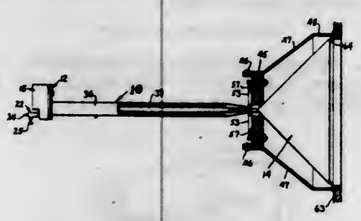
supply means having a baffle surrounding the intake ends of said tubes to assure even distribution of water to the latter, and means for also supplying air for movement through the tubes thereof in contact with said water comprising suction means at the upper ends of said tubes and an adit at the lower ends thereof, to cause said air to saturate and thereby absorb and carry away heat from said water which is transferred thereto through the tube walls, the air entering said tubes at atmospheric pressure and gradually falling in pressure as it rises in the tubes.

1,809,915. CONDENSER. JOHN H. SMITH, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 13, 1930. Serial No. 475,050. 8 Claims. (Cl. 257—43.)



1. In a surface condenser, in combination, a shell, a flexible tube sheet, a plurality of tubes each fixedly secured at one end in the flexible tube sheet, and tube-supporting means in slidable engagement with each of the tubes adjacent to the flexible tube sheet.

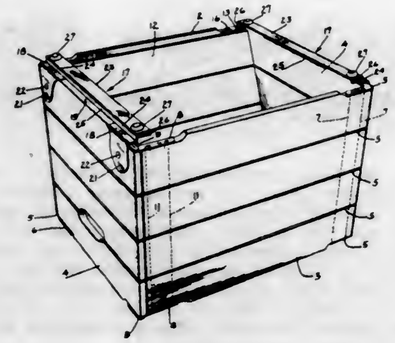
1,809,916. SOUND DEVICE. JESSE D. STAGGS, Los Angeles, Calif. Filed Dec. 23, 1929. Serial No. 415,903. 12 Claims. (Cl. 274—16.)



1. In a sound reproducer, an amplifier, a support, an anvil, tension members on said support and supporting said anvil, means to vibrate said anvil, and means to connect said anvil to said amplifier.

1,809,917. BOX. OWEN W. THOMAS, Minneapolis, Minn., assignor to Puffer-Hubbard Manufacturing Co., Minneapolis, Minn., a Corporation of Minnesota. Filed Mar. 22, 1930. Serial No. 438,039. 7 Claims. (Cl. 217—46.)

4. The combination with a foldable box comprising hinged together side and end walls and a hinged bottom, of metallic rails secured to the lower portions of the end walls, each of said rails having an upstanding ear at each end thereof adapted to engage outer surfaces of the end walls, horizontally disposed portions connected with said ears and adapted to be seated against the bottom edges of the walls, a vertical wall portion connected with the horizontally disposed portions of each rail and adapted to engage inner surfaces of said end walls, and a depending shelf-like portion connected with the horizontally



disposed and vertical portions of each rail, said shelf-like portion extending inwardly to provide supports for the box bottom when the box is open.

1,809,918. TOWEL HOLDER. CHARLES W. THOMPSON, Wollaston, Mass., assignor to Harvey C. Wheeler, Boston, Mass. Filed Mar. 13, 1928. Serial No. 261,230. 12 Claims. (Cl. 312—37.)

2. A towel holder comprising a case having a chamber for individual clean towels and another chamber for used towels, shelf means to support clean towels adapted to be automatically actuated by the act of the user in withdrawing a towel to thereby force clean towels upwardly in said case, and means to draw said towels downwardly, after being used, into said chamber for used towels.

1,809,919. POWER WHEEL. ROBERT S. TURNER, Indianapolis, Ind. Filed July 31, 1930. Serial No. 472,065. 4 Claims. (Cl. 170—27.)

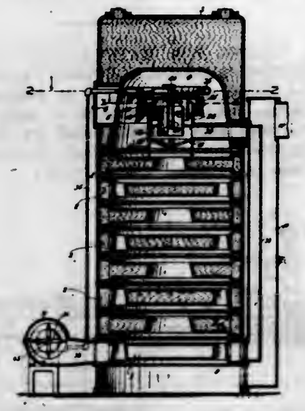
1. In a power wheel, a hub structure comprising a plurality of spaced discs, a cross arm hinged to each disc and with its ends extending a distance beyond the peripheral edge of the disc and adapted to swing to different positions, each cross arm having flat faces adapted to limit the hinging movement of said arm by contacting with the face of the disc, a blade at each end of each cross arm, the blade at one end of each cross arm being at

right angles to the blade at the opposite end thereof, whereby when one flat face of the cross arm is in engage-



ment with the face of the disc one of the blades of each cross arm will be faced flatwise to the propelling current and the other edgewise thereto.

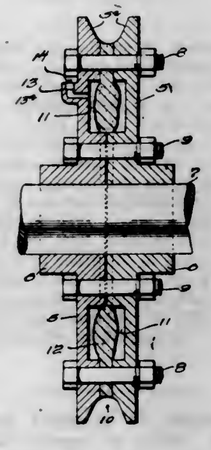
1,809,920. OIL BURNER BOILER. DANIEL C. WOODWARD, Lowell, Mass. Filed July 23, 1928. Serial No. 294,679. 6 Claims. (Cl. 122—210.)



1. An oil burner boiler comprising a number of superposed water sections having openings through them for the passage of hot gases, a water-containing dome surmounting the upper one of the water sections and cooperating therewith to form a combustion chamber between them, a burner for heating the dome from within the combustion chamber, means for supplying fuel to the burner, means for supplying heated air to the burner to mingle with the fuel including an air section associated with the water sections with opening through it for the passage of hot gases and through which air section air supplied to the burner is passed, and a flue passage for the escape of the gases after passage downward through the water sections and air section from out of the combustion chamber.

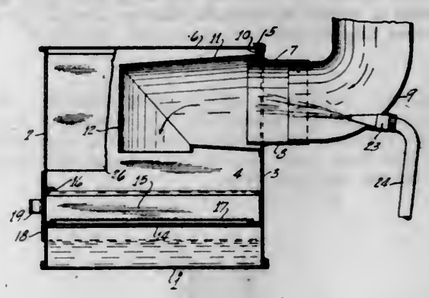
1,809,921. SHEAVE. MILES F. YOUNT, Beaumont, Tex. Filed May 16, 1929. Serial No. 363,696. 8 Claims. (Cl. 184—15.)

1. A guide sheave comprising beveled circular plates and opposed annular grooves providing an oil chamber and the beveled portions of the plates forming a line guide when the plates are assembled together, and having hubs for the passage of a shaft, inwardly projecting bosses extending from said plates outwardly of said oil chamber, a second series of bosses extending inwardly from said plates adjacent the hub portions thereof and adapted to be brought into flat contact with one another, bolts extending through said last mentioned bosses for fastening



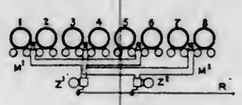
the plates together, there being spaces between opposed ones of each set of bosses, the first mentioned set of bosses being spaced from one another when the second mentioned set of bosses are contiguous, a disc-like wick member interposed between said plates and having recesses adapted to receive said second mentioned bosses, said wick extending to the shaft, bolts extending through said first mentioned bosses to compress said wick at spaced peripheral points.

1,809,922. DUST-COLLECTOR. JOSEPH ABRAMOWITZ, Madison, Ill., assignor of thirty-five per cent to Amanda E. King, Madison, Ill. Filed Aug. 20, 1928. Serial No. 300,731. 5 Claims. (Cl. 183—22.)



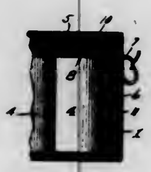
1. In combination, a dust-collecting shell having an opening in a wall thereof, a flue disposed and fixed at one end within the shell and at its inlet end surrounding said opening, a discharging extension disposed at an angle to and presented downwardly from the flue, a dust-conveying conduit having communication at its discharge end through said opening with the flue, means for spraying and wetting down the incoming dust, and a receptacle within the shell for receiving the matter discharging from said extension.

1,809,923. GAS DISTRIBUTION OF EIGHT CYLINDER MOTORS OF THE STRAIGHT TYPE. JEAN A. H. BARKEIJ, Los Angeles, Calif. Filed Nov. 16, 1925. Serial No. 69,431. 23 Claims. (Cl. 123—52.)



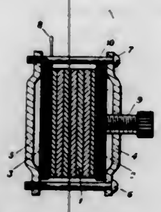
1. The combination of an internal combustion engine having eight cylinders operating on the fourstroke cycle, said cylinders arranged in a straight line and numbered successively from 1 to 8, said cylinders divided in two groups so that cylinders 1 and 2, and 5 and 6 are in one group, cylinders 3 and 4, 7 and 8 in another group; said first group having suction periods which overlap each other, said second group also having overlapping suction periods; the four cylinders of each group connected with a manifold having a single zone of distribution, one manifold having two branches from said zone, one to the left to cylinders 1 and 2, the other to the right to cylinders 5 and 6; the other manifold having two branches from said single zone, one to the left to cylinders 3 and 4, the other to the right to cylinders 7 and 8; the distances from each zone to the respective cylinders of each group being substantially equal.

1,809,924. METHOD OF MAKING DRY BATTERY STRUCTURES. CYRIL P. DEIBEL, Lakewood, Ohio. Filed Aug. 28, 1928. Serial No. 302,543. 12 Claims. (Cl. 136—175.)



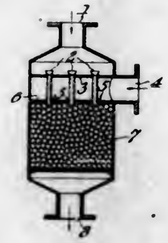
1. The method of making dry battery structures, consisting in arranging a plurality of cells in a container, mounting a plurality of line attaching clips upon a supporting member, and interconnecting said cells by wires soldered thereto and soldering said clips while upon said member to certain of said cells, thereby permanently assembling said supporting member with said clips.

1,809,925. VARIABLE RESISTANCE DEVICE. WILLIAM H. EDWARDS, Great Neck, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 14, 1929. Serial No. 363,088. 3 Claims. (Cl. 175—366.)



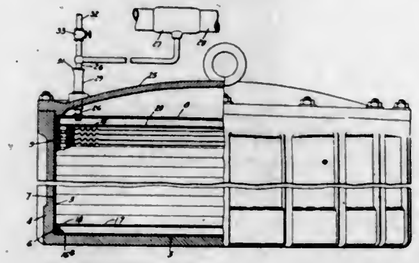
2. The combination of a plurality of thin film rectifier disks, a housing member for holding said disks, and an adjustable clamping screw for bending and superimposing stresses on said disks.

1,809,926. APPARATUS FOR CONDENSING CONDENSABLE VAPORS. OTTO EINSLER, Leverkusen/Rhine, and HANS TIETZ, Cologne-Mulheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Nov. 20, 1928, Serial No. 320,868, and in Germany Nov. 29, 1927. 2 Claims. (Cl. 261—95.)



1. An apparatus for condensing condensable vapors by direct contact with liquids comprising a container, a horizontal partition in the upper part of said container provided with one or more holes, a vertical pipe passing through each hole and spaced from the sides thereof, said pipes communicating with a vapor supply at their upper ends and at their lower ends opening into the space beneath the said partition, means for feeding liquid into the space above said partition, means for withdrawing liquid from said container, a horizontal perforated partition in the lower part of said container and a bed of loosely packed solid material between said two partitions, said bed extending up to the lower ends of said vertical pipes.

1,809,927. MEANS FOR MAINTAINING OIL PRESSURE IN HIGH TENSION ELECTRIC CABLES. LUIGI EMANUELI, Milan, Italy, assignor to Societa Italiana Pirelli, Milan, Italy, a Corporation of Italy. Original application filed Sept. 1, 1925, Serial No. 53,930. Divided and this application filed Sept. 19, 1927. Serial No. 220,334. 12 Claims. (Cl. 137—71.)

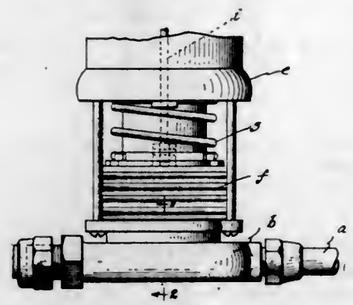


1. A variable capacity reservoir comprising a sealed container means, a plurality of individual cellular means located in the container means, each of which cellular means comprises a pair of thin metal disks united at their peripheral edges to define an internal chamber, said means being assembled flatwise to form a stack, means for holding the cellular means from side-wise movements in the container, said container means and cellular means both containing fluids which are separately maintained under pressure above the atmosphere, and a conduit for admitting fluid to and receiving it from one of said means in varying amounts.

1,809,928. REFRIGERATOR CONTROL. PATTERSON FARMER, Detroit, Mich. Filed Nov. 27, 1925. Serial No. 71,850. 3 Claims. (Cl. 62—2.)

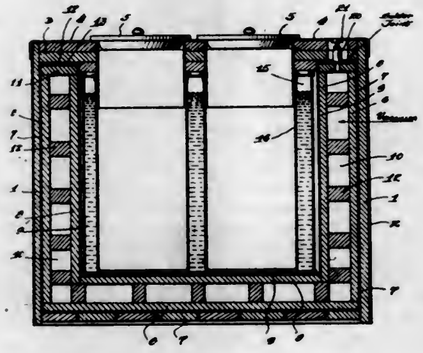
1. In a refrigerator control, the combination of a conduit bearing the expanded gases of the refrigerating

apparatus and including a fixture having a plurality of branches for dividing the gases and conveying the same through the fixture in a plurality of streams, a separate thin metal piece defining said branches and a fluid expansion type of thermostat provided with a depending



non-expansive chamber fitted snugly in said fixture and suspended beteen said branches to place the chamber in immediate heat conductive relation with said thin metal piece to prevent the entrance of convection currents between said chamber and fixture.

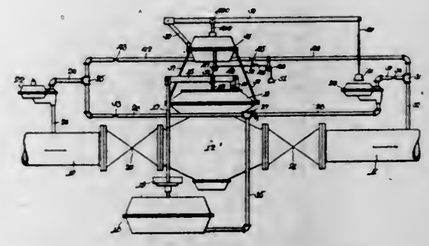
1,809,929. CABINET CONSTRUCTION. PATTERSON FARMER, Detroit, Mich. Filed Oct. 13, 1927. Serial No. 225,887. 1 Claim. (Cl. 220—9.)



A cabinet for containing food stuffs or the like, comprising in combination inner and outer substantially non-heat-conducting walls spaced to provide a vacuum space, valve means in the outer wall consisting of a port extending from the exterior side of the outer wall to the middle of said outer wall, a second port in the outer wall spaced from, and parallel to, the first mentioned port, and extending from the middle of the outer wall to the interior surface of the outer wall, said first and second ports being connected by a conduit, a valve member closing the second port and a closure for the first-named port, whereby the vacuum between the inner and outer walls may be tested without impairing said vacuum.

1,809,930. AUTOMATIC GAS GOVERNOR LOADER. ALBERT G. FORD, Aurora, Ill., assignor, by mesne assignments, to Reynolds Gas Regulator Co., Anderson, Ind., a Corporation of Indiana. Filed Dec. 16, 1926. Serial No. 155,325. 7 Claims. (Cl. 50—10.)

1. In a device of the character described, the combination with automatically operating governor means for a gas distributing system having low pressure on the delivery side and high pressure on the supply side, said means including therein a main governor and a low pressure auxiliary governor normally set for a predetermined pressure; of auxiliary pressure means responsive, auto-



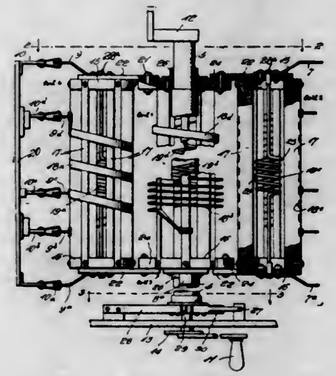
matically controlled by said governor means, when under load, for loading said low pressure auxiliary governor to effect a higher pressure setting thereof than that for which it is normally set.

1,809,931. SORGHUM CROPS TOPPING TOOL. MARK FARMER, Detroit, Mich. Filed Oct. 13, 1927. Serial No. 226,779. 2 Claims. (Cl. 30—9.)



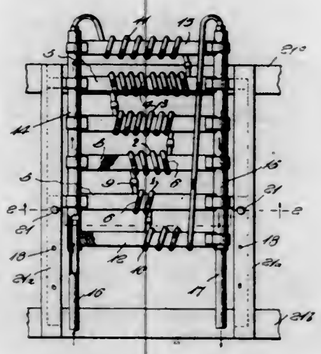
1. A new article of manufacture, a knife comprising a blade, both ends of which are provided with a curved, tapered prong extending at right angles therefrom and perpendicular to the plane therewith.

1,809,932. ADJUSTABLE INDUCTANCE AND COUPLING SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,690. 5 Claims. (Cl. 171—119.)



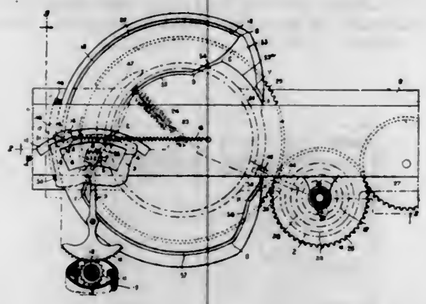
1. An adjustable inductance system comprising in combination a rotatable framework carrying a plurality of helical main inductance coils wound with spaced turns and adapted to carry currents of the magnitude used in radio transmitting sets, each of said coils having frame contact members therefor mounted on said rotatable frame, stationary contact members adapted to engage said frame contact members, and a plurality of auxiliary inductance coils each in individual electromagnetic relation with one of said main inductance coils.

1,809,933. INDUCTANCE SYSTEM. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,691. 12 Claims. (Cl. 171—242.)



1. An adjustable inductance system comprising a fixed framework, a rack framework movable with respect to said fixed framework, a plurality of individual inductance coils positioned on said rack framework, fixed contact elements carried by said fixed framework, said coils comprising lengths of metallic tubing adapted to be cooled by a circulating fluid, each of said coils being provided with coil contact elements adapted to engage said fixed contact elements selectively, and said rack framework adapted to be adjusted to different positions whereby said coils are selectively connected with an external circuit

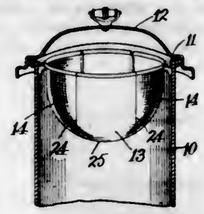
1,809,934. INDICATOR. JAMES B. GLENNON, Washington, D. C. Filed May 28, 1930. Serial No. 456,591. 12 Claims. (Cl. 116—31.)



1. In an indicator for a dirigible vehicle, the combination of an indicating medium operated by the means for steering the vehicle; and an indicating medium operated by a mechanical element of the vehicle in contact with the surface supporting the vehicle, the two indicating media being so related that by the operation of the means for steering the vehicle, the movements of the two media may be caused to co-incide.

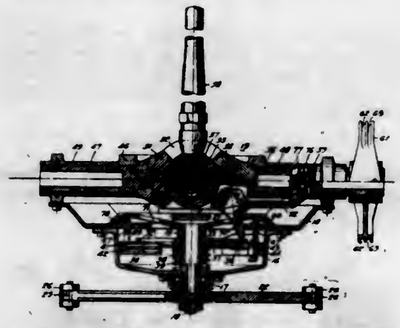
1,809,935. COFFEE URN BAG. ABRAHAM M. HERZMARK, Kansas City, Mo. Filed July 30, 1928. Serial No. 296,275. 3 Claims. (Cl. 53—3.)

1. In a bag of the character described, a central section of substantially uniform width, a pair of similar uninterrupted side sections having curved edge portions engaging with the longitudinal edges of said central section, a pair of non-intersecting smooth continuous seams extending entirely across said bag and uniting the engaging edges of said sections to form a bag having a smooth



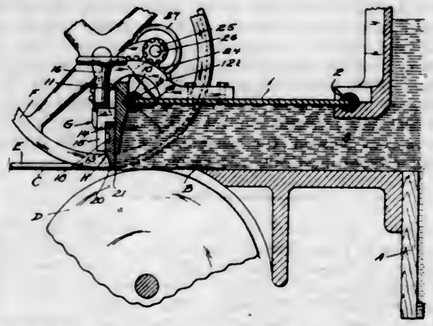
rounded concavo-convex outline when distended and having no pocket forming recesses therein, and a peripheral seam at the top thereof, said bag being otherwise seamless.

1,809,936. AIRPLANE CONTROL. EARL D. HILBURN Oakland, Calif. Filed Sept. 9, 1929. Serial No. 391,284. 9 Claims. (Cl. 244—29.)



1. A control for surfaces on an airplane comprising a first member movable to control a surface on the airplane, means for moving said member to control the surface, a second member movable to control another surface on the airplane, means for moving said second member to control the another surface, means for disabling the first member whereby the means for moving the first member is ineffective to control the surface, a second disabling means for rendering the second member disabled so that the means for moving the second member is ineffective to control the another surface, and a cam member rotatable to engage both the disabling means and to vary the disabling means whereby the moving means are enabled and disabled.

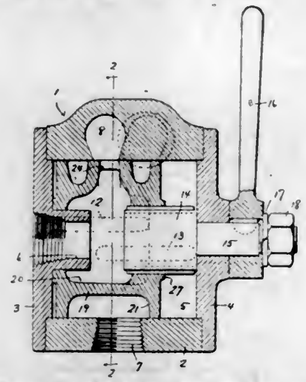
1,809,937. INLET FOR PAPER MAKING MACHINES. FORREST HILSHEIMER, Chillicothe, Ohio. Filed Apr. 20, 1929. Serial No. 356,804. 8 Claims. (Cl. 92—44.)



1. An inlet for paper making machines comprising a support, a slice formed to include a base member and a

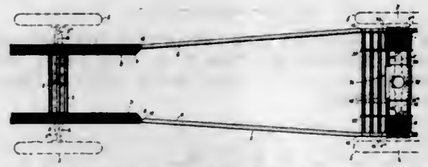
flexible blade member, adjusting means between said base and blade members admitting of the flexing of the latter in a vertical plane, and means admitting of the swinging of said slice bodily about a horizontal axis carried in conjunction with said support.

1,809,938. FLUID OPERATED REVERSING VALVE. WILHELM F. HOHULIN, Ottawa, Ill. Filed Apr. 25, 1930. Serial No. 447,255. 3 Claims. (Cl. 251—4.)



1. A valve of the character described comprising a casing having an inlet port and an outlet port and further having a pair of diagonally spaced ports, a shaft mounted for oscillatory movement in the casing, a valve core slidably keyed on the shaft for oscillatory movement therewith and being provided with means for establishing communication between the inlet port and one of the ports of the pair and between the outlet port and the other port of said pair upon rotary and sliding movement of the core in one direction and for establishing communication between the inlet port and the second named port of the pair and between the outlet port and the first named port of the pair upon rotary and sliding movement of the core in the opposite direction.

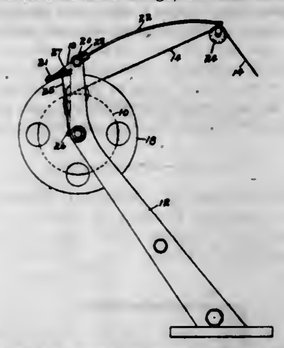
1,809,939. AUTOMOBILE LIFT. ERNEST W. HOLMES, Chattanooga, Tenn., assignor to Ernest Holmes Company, Chattanooga, Tenn., a Corporation of Tennessee. Filed Aug. 27, 1928. Serial No. 302,361. 8 Claims. (Cl. 254—89.)



1. An automobile lifting frame adapted to receive above it, the front and rear axles of an automobile, said frame having a relatively narrow portion of a width to engage the flat dropped portion of the automobile front axle, the sides of the frame diverging as they proceed rearwardly and having a rear portion of a width substantially equal to the length of the automobile rear axle, and axle supporting plates extending inwardly from the sides of the rear portion of the frame.

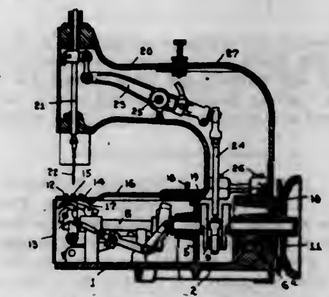
1,809,940. TAPE DISPENSING DEVICE. CARL G. KRONMILLER, Chicago, Ill., assignor, by mesne assignments, to St. Regis Paper Company, New York, N. Y., a Corporation of New York. Filed Dec. 22, 1926. Serial No. 156,428. 3 Claims. (Cl. 242—156.)

2. In a device for dispensing tape, a reel upon which tape may be wound, a flange affixed to the reel and extending outward beyond the periphery of the reel, a rock shaft mounted outside of said flange, an arm on the rock shaft



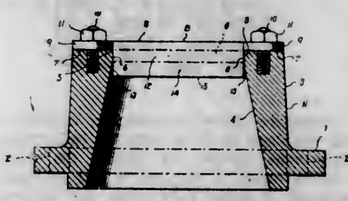
carrying a brake shoe in operative relation with said flange, a resilient arm extending from the rock shaft, and a tape guide on the outer end of the resilient arm.

1,809,941. BED STRUCTURE FOR SEWING MACHINES. FRIEDRICH LUTZ, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed June 28, 1928, Serial No. 288,830, and in Germany Nov. 22, 1927. 1 Claim. (Cl. 112—258.)



A sewing machine including a supporting bed structure having integral side walls with its ends substantially open, a throat plate mounted at one end of said bed structure, an overhanging arm mounted at the other end of said bed structure, a cover plate between the throat plate and the overhanging arm, a main actuating shaft located in said supporting bed and having an eccentric member mounted thereon, said opening in the bed structure adjacent the overhanging arm being of sufficient size to permit the shaft with the eccentric member thereon to be inserted therethrough, a sleeve for closing said opening and having a bearing for said shaft, and a cover plate for closing the other end of said supporting bed.

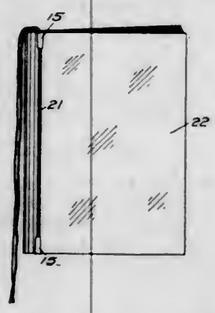
1,809,942. EXHAUST NOZZLE. BRADFORD L. MCLEOD, Frankfort, Ind. Filed Apr. 7, 1928. Serial No. 268,318. 1 Claim. (Cl. 230—100.)



In an exhaust nozzle, the combination of a pipe having an upwardly-convergent inner face and a constricted

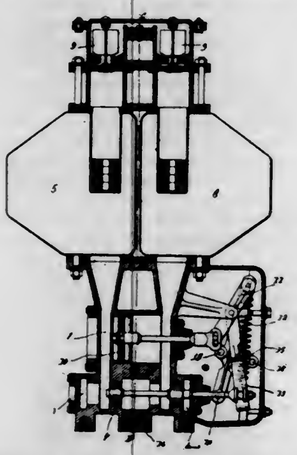
cylindrical throat with a rectilinear wall immediately above said face, and a plane-surfaced annular top immediately adjacent said throat; two bolts projecting from said top; a bridge having a wedge-shaped portion extending into said pipe beyond said throat so as to be disposed in the convergent portion of said pipe, said wedge-shaped portion having rectilinear ends in juxtaposition with the wall of said throat; and a circular wing at each end of said bridge received upon the top and about one of said bolts.

1,809,943. BOOKMARKER. PIERCE OCKENDEN, Edmonton, Alberta, Canada, assignor of one-half to William D. Lee, Edmonton, Canada. Filed Mar. 24, 1930. Serial No. 438,377. 1 Claim. (Cl. 116—119.)



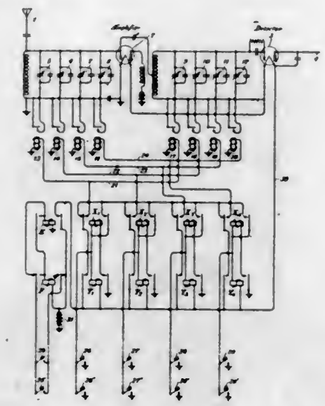
A bookmarker comprising a resilient strip of material, a pair of flat hooks having clamp extensions secured to the ends of said material and holes through the bills and backs and a string threaded through one of said hooks and fastened and adapted to be tied to the other hook.

1,809,944. AUTOMATIC GASOLINE FEEDING APPARATUS. RENÉ PORTE, Levallois Perret, France, assignor to Societe Hardoll (Etablissements Hariveau & Dollmier, et Rene Porte & Cie., Reunis), Levallois Perret, France. Filed June 10, 1925, Serial No. 36,174, and in France Nov. 14, 1924. 5 Claims. (Cl. 73—28.)



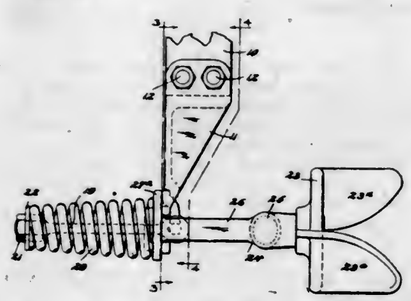
1. A volumetric meter including in combination, two measuring chambers of given capacity, each chamber having an air vent, means for closing the vent, means through which liquid is supplied to and discharged from said chambers, a valve mechanism for controlling the supply to and the discharge from said chambers, actuating means normally inactive for operating said valve mechanism, and means controlled by the pressure developing on the liquid after the chamber is filled for positively starting the movement of the valve mechanism and initiating the movement of said actuating means for operating the valve mechanism.

1,809,945. CONTROL ARRANGEMENT FOR CARRIER APPARATUS. WILTON T. REA, Flushing, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed July 2, 1929. Serial No. 375,552. 2 Claims. (Cl. 250—40.)



1. A translating device for a plurality of different carrier frequencies, an input circuit connected to said translating device, a plurality of selective circuits adapted to be connected to said input circuit for rendering it selective for the different carrier frequencies, a series of relays each of which controls the connection of one of said selective circuits to said input circuit, a second series of relays each of which is paired with one of the relays of said first series and operates to prepare an operating and locking circuit therefor, individual operating circuits for the relays of said second series, and means controlled by the operation of one of the relays of said second series subsequent to the prior operation of a pair of relays of both of said series for opening the locking circuits for said pair of relays.

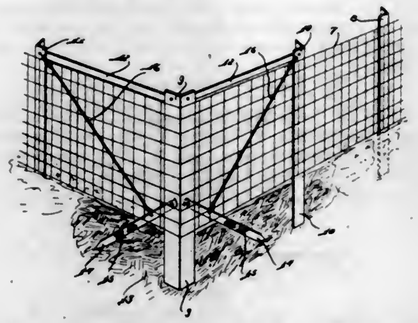
1,809,946. SUPPORT FOR AUTOMATIC CONNECTERS. JOSEPH ROBINSON, New York, N. Y. Filed Feb. 9, 1921, Serial No. 443,692. Renewed Jan. 3, 1927. 19 Claims. (Cl. 285—58.)



1. In a train pipe connecter, a bracket, an anchor device having one end thereof detachably hung on the bracket and the other end free from attachment to the bracket, said first mentioned end of said device being re-

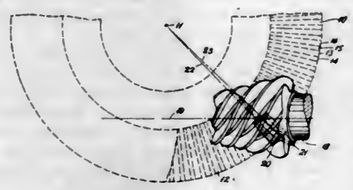
movable from the bracket by swinging the free end of the device relative to the bracket, a coupling head, and means associated with said anchor device for movably supporting the head in front of the bracket, said means including a spring which exerts pressure against said device to hold the same against swinging movement relatively to said bracket.

1,809,947. FENCE ANCHOR. PHIL SHEPARD, Owosso, Mich. Filed Sept. 1, 1928. Serial No. 303,520. 2 Claims. (Cl. 256—35.)



1. A fence anchor of the class described, comprising: a pair of vertically extended spaced posts; means for connecting said posts adjacent the upper ends thereof; a diagonally extended driven member driven at one end into the earth and attached at the opposite end to one of said posts adjacent the lower end thereof; and means attached to said diagonally extended member intermediate its ends and above their earth level and connected to the other of said posts.

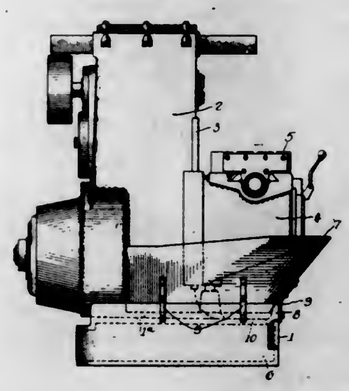
1,809,948. METHOD OF PRODUCING GEARS. BERNARD EDWARD SHLESINGER, Irondequoit, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Dec. 15, 1927. Serial No. 240,226. 17 Claims. (Cl. 90—4.)



1. The method of generating a tapered gear conjugate to a straight tooth basic gear, which consists in employing as a tool, a worm hob capable of meshing with said basic gear along a line offset from the axis of said basic gear and extending diagonally of the face thereof, and positioning said hob with its axis extending diagonally of the face of a tapered gear blank, rotating said hob in engagement with the blank while rotating the blank on its axis continuously and simultaneously producing a relative generating movement between the hob and blank corresponding to that of a gear meshing with said basic gear.

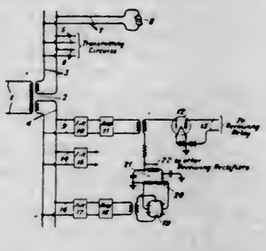
1,809,949. MACHINE TOOL. GUSTAF DAVID SUNDSTRAND, Rockford, Ill., assignor to Sundstrand Machine Tool Co., Rockford, Ill., a Corporation of Illinois. Filed Feb. 27, 1928. Serial No. 257,210. 2 Claims. (Cl. 90—11.)

1. In a machine tool, the combination of a base, box-like in character, provided with an upstanding wall along the front and side edges thereof, a work support above the front portion of said base, and a sheet metal shield extending along the front and the two sides of said base, said shield having inwardly and downwardly sloping sides



positioned with its lower edge within and attached to said wall so as to be supported thereby and arranged to catch cutter coolant which falls from the work support.

1,809,950. CARRIER TELEGRAPH SYSTEM. VAUGHN P. THORP, River Edge, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Aug. 5, 1929. Serial No. 383,557. 7 Claims. (Cl. 178—51.)

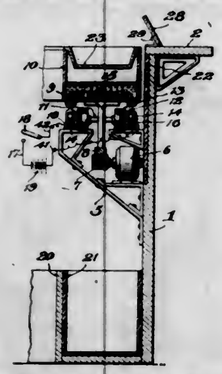


1. In a carrier telegraph system the method of signaling which comprises transmitting a plurality of different carrier frequency currents over the system, separately detecting said received carrier currents, simultaneously transmitting over the same system a separate carrier frequency current, and utilizing said separate carrier frequency current to control said detection.

1,809,951. TRAVELING HEATED AND COOLED FOOD CARRIER. GEORGE LUIGI VILFORDI, Dallas, Tex., assignor of twenty-five per cent to Metodi Petroff, and fifteen per cent to John Butera, Dallas, Tex. Filed Feb. 24, 1931. Serial No. 518,017. 7 Claims. (Cl. 186—1.)

1. In a device of the type described, a frame, a pair of spaced tracks, water receptacles having open tops, food pans received in the receptacles, a heating coil in each receptacle, arms depending from the receptacles into the space between the tracks, transverse shafts carried by the arms and having rollers which ride on the tracks, a pair of horizontal contact plates on the frame disposed on the outer sides of the respective tracks, contact means

carried by the water receptacles and depending therefrom, and having connection with the respective ends of the heating coils and also having wiping engagement



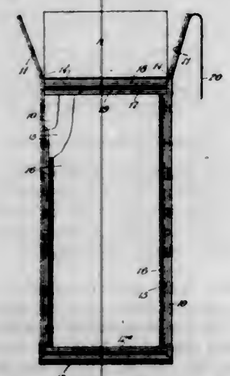
with the contact plates, means engaging the arms to effect travel of the water receptacles, and a circuit including said contact plates.

1,809,952. PERCUSSION TOOL. FRANK L. O. WADSWORTH, Pittsburgh, Pa. Filed Aug. 2, 1921. Serial No. 489,189. 16 Claims. (Cl. 121—15.)



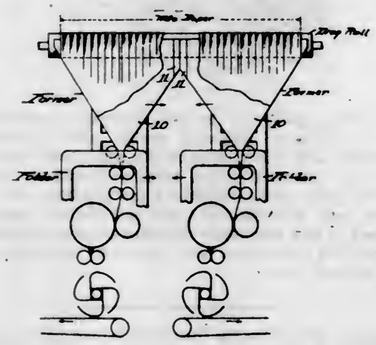
1. In combination in a fluid-driven impact tool, a cylinder, a piston operating therein, a valve mechanism comprising two independently movable sections, means for actuating one of said sections to admit motive fluid behind the piston and move it forwardly, means for actuating both sections conjointly for cutting off the supply of motive fluid during said forward stroke, and means for actuating the other of said sections to trap motive fluid in front of the piston and move it rearwardly.

1,809,953. SHIPPING CONTAINER. JAMES G. WITTE, Keokuk, Iowa, assignor of one-half to Iowa Fiber Box Company, Keokuk, Iowa, a Corporation of Delaware, and one-half to South West Box Company, Sand Springs, Okla., a Corporation of Delaware. Filed Apr. 18, 1929. Serial No. 356,070. 2 Claims. (Cl. 229—14.)



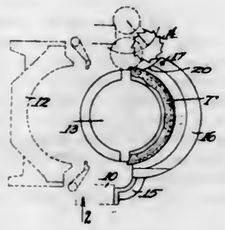
1. A shipping container comprising, in combination, an outside casing of corrugated fiber board of double thickness creased so as to be collapsible to be shipped flat and which may be expanded to form a rectangular body; foldable flaps integral with said casing and completely closing the two ends thereof; a corrugated fiber board liner which may be flattened out and which is creased to be folded and received within the rectangular casing and of such dimensions as to contact on all sides with the body which is to be shipped in the container; a second corrugated fiber board liner enclosing the first and interposed between and in contact with both the casing and the first liner; said second liner being creased so as to be capable of shipment in the flat and also foldable to fit in the casing; the inner liner having its corrugations extending transversely of the box and being smooth on its interior face; and means for closing the end flaps of the body.

1,809,954. SECTIONAL FORMER. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 18, 1927. Serial No. 213,848. Renewed June 20, 1929. 7 Claims. (Cl. 270—94.)



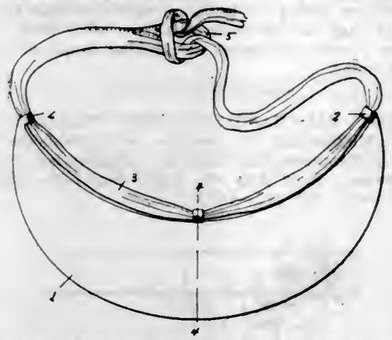
1. The combination with two formers arranged side by side and movable apart of two sections adapted to be located between them when they are moved apart to form continuations of the formers and support the web between them, and to be swung back beneath the formers to permit the formers to be moved nearer together.

1,809,955. TAIL SHELF FOR STEREOTYPE PLATE CASTING MACHINES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 6, 1929. Serial No. 353,202. 8 Claims. (Cl. 22—3.)



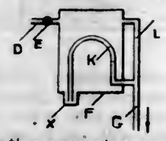
1. The combination with a stereotype plate casting machine having means for delivering the united tail and plate on the side away from the casting back and in vertical position and a saw for cutting the tail from the plate as the plate is delivered, of a shelf located in a position to surround the outer side of the cylinder for receiving the tail when it is detached from the cylinder.

1,809,956. EYESHIELD. CHARLES N. WRENSHALL, Asheville, N. C. Filed May 29, 1930. Serial No. 457,187. 7 Claims. (Cl. 2—12.)



1. An eye shield of the character described comprising a visor, a series of eyes mounted on one marginal portion of said visor and projecting therefrom, and a strip of flexible, moisture absorbing material extending through the eyes and constituting means for supporting the visor on the head of a wearer.

1,809,957. COMPRESSION REFRIGERATING APPARATUS. LEONARD KAY WRIGHT, Astoria, Long Island City, N. Y. Filed Aug. 27, 1926. Serial No. 131,944. 7 Claims. (Cl. 62—116.)



1. In a refrigerating apparatus, an evaporator equipped with a supply line, a suction line, and a siphoning tube so arranged that in normal operation a portion of its length is above the surface of the liquid refrigerant; one end of the siphoning tube being in close proximity with the lowest portion of the inside of the evaporator the other end of said tube being connected to said suction line.

1,809,958. REFRIGERATION APPARATUS. LEONARD KAY WRIGHT, Jackson Heights, Long Island, N. Y. Filed Jan. 27, 1928. Serial No. 249,949. 8 Claims. (Cl. 62—118.)



1. A liquid cooler comprising a cabinet, an elongated compartment in the cabinet open at each end, a generator positioned in the upper portion of the compartment and a condenser subjacent generator.

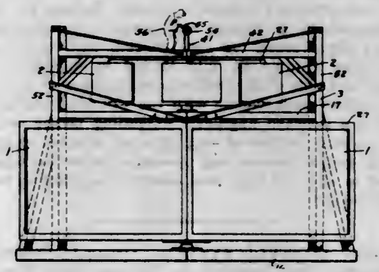
4. A liquid cooling device comprising a two compartment cabinet, a well within one of the compartments surrounded with insulating material, an expansion coil and a receiver within said compartment, a generator and condenser within the other compartment so arranged as to induce the flow of a cooling air through the compartment.

1,809,959. SPRING. GEORGE H. BEAUMONT, Cleveland, Ohio, assignor to Sterling Spring Company, Cleveland, Ohio, a Corporation of Delaware. Filed June 26, 1928. Serial No. 288,313. 5 Claims. (Cl. 267—45.)



1. In a vehicle chassis spring, a main load carrying spring, an auxiliary spring associated therewith, knuckles formed on selected leaves on each of said springs, link mechanism pivotally interconnecting said knuckles and normally securing said springs in mutually opposed relationship and means associated with said link mechanism for transferring stresses to the entire load carrying spring.

1,809,960. ROTARY SIGNBOARD. LOUIS A. BURCH, Seattle, Wash. Filed Oct. 27, 1928. Serial No. 315,401. 3 Claims. (Cl. 40—39.)

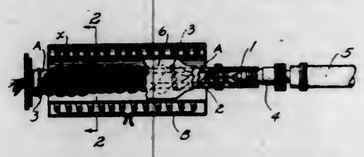


1. In a wind operated rotary sign board of the class described, a comparatively large rectangular shaped frame having a lower horizontal member, an upper horizontal member, and vertical struts connecting the said members; sign boards on the flat vertical sides of the said frame, a supporting frame, a downwardly extending pin in the center of the said lower horizontal member, a cup in the said supporting frame into which the said pin extends forming an exposed grease retaining bearing, a similar bearing at the top with the cup in the said upper horizontal member and the pin in the supporting member, a superimposed frame somewhat smaller and of similar construction, similar bearings rotatably mounting said superimposed frame in said supporting frame, a flat rectangular shaped sail at each corner of the said superimposed frame, means for pivotally mounting the said sails at both the upper and lower edges with the leading portion somewhat longer than the trailing portion, rigid vertical bars on the frame positioned to be engaged by and to form stops for the said sails, and suitable gears for operating the large frame by the superimposed frame.

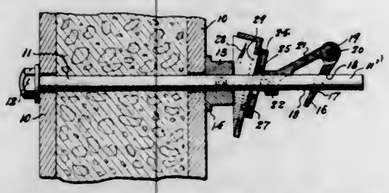
1,809,961. HAIR CURLING MACHINE. LIONEL A. CARTER, Webster Groves, Mo., assignor to Koken Companies, St. Louis, Mo., a Corporation of Delaware. Filed June 24, 1929. Serial No. 373,316. 6 Claims. (Cl. 132—33.)

6. A hair curling or waving apparatus, comprising a hollow expansible member around which a strand of

hair is adapted to be wrapped or coiled, said member being constructed of elastic material, and a device adapted to be detachably connected with said member for introducing a medium under pressure into same so as to inflate said member and thus distend the portions of said member surrounded by the coils of the strand.

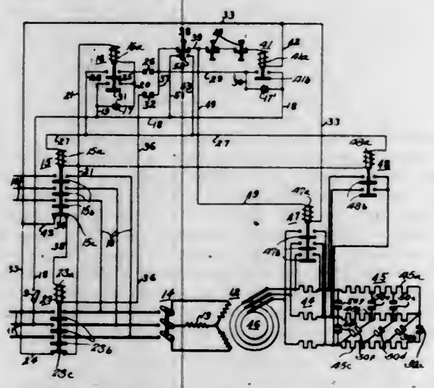


1,809,962. PRESSURE EXERTING DEVICE. SAMUEL S. COLT, Orange, N. J. Filed Oct. 8, 1927. Serial No. 224,918. 5 Claims. (Cl. 254—29.)



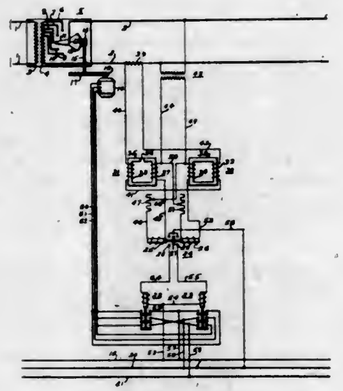
1. A pressure exerting device of the kind described engageable with tie-rods of concrete forms or other structures, comprising a gripping element having an opening through which a tie-rod may extend, to dispose said element transversely of said tie-rod, said gripping element being tiltable on said tie-rod in direction of the longitudinal axis of the latter to bring edges of its opening into gripping engagement with the tie-rod, a wedge member, and a forward angularly extending means connected with one end portion of said gripping element engageable by said wedge member and operative under back-pressure thereof to tilt and hold said element in gripping relation to said tie-rod.

1,809,963. CONTROL SYSTEM. OSCAR C. CORDES, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 19, 1928. Serial No. 279,078. 9 Claims. (Cl. 172—179.)



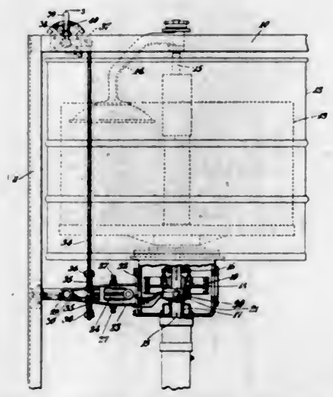
1. In a control system for an alternating-current motor having a primary and a secondary winding, a plurality of power sources having different frequencies, a plurality of resistor banks connected to the secondary winding, one of said resistor banks being bridged during normal operation of the motor, and means operable to institute a braking operation comprising means for transferring the connection of the primary winding from one power source to another power source of lower frequency and simultaneously removing the bridging connection from the one resistor bank and short-circuiting the other bank of resistors, thereby to control the braking torque developed by the motor.

1,809,964. TAP-CHANGING SYSTEM. WILLIAM R. FARLEY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 31, 1929. Serial No. 382,460. 9 Claims. (Cl. 171—119.)



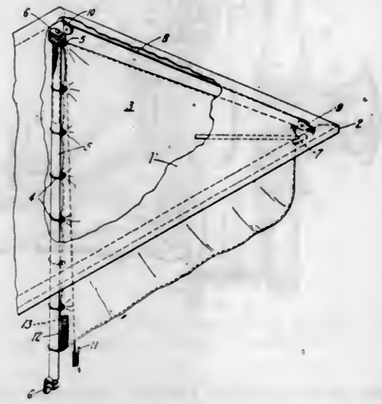
1. An automatic tap-changing system for transformers comprising, in combination, a plurality of power lines, a transformer connecting said power lines, said transformer being provided with motor-operated tap-changing equipment, and means associated with one of said power lines and responsive to the reactive component of current in said power line for so controlling the operation of said equipment as to maintain the ratio of transformation substantially equal to the ratio of the voltages of the respective power lines.

1,809,965. CLUTCH OPERATING MECHANISM. GEORGE W. FELTON, Hamilton, N. Y., assignor to Utica Products, Inc., Utica, N. Y., a Corporation of New York. Filed Feb. 10, 1928. Serial No. 253,272. 7 Claims. (Cl. 74—39.)



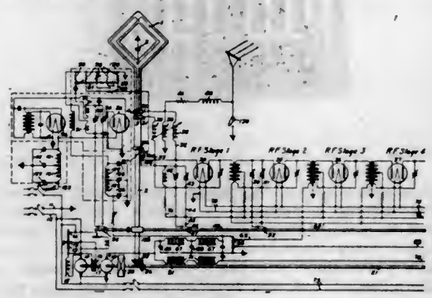
1. A clutch operating mechanism comprising a pivoted lever, a rotatable member operatively connected with one end of said lever, impositive means for holding said lever in one position, a second rotatable member, a flexible shaft connecting said rotatable members, and means for applying progressively increasing torque to said second rotatable member.

1,809,966. AWNING. CHRISTIAN P. FOGH, Oakland, Calif. Filed Apr. 16, 1929. Serial No. 355,504. 6 Claims. (Cl. 156—44.)



4. A side wing for awnings comprising a sheet of flexible material, a spring actuated roller on which said sheet is rolled, said sheet being fixed at one end to said roller and loosely connected at its opposite end with said roller to cause one end to wrap around the roller ahead of the other, and means including a flexible element attached to said sheet and for controlling the winding and unwinding operation of said sheet, and a flexible weight member disposed at the loosely mounted end of said sheet which weight member is adapted to wind around the roller.

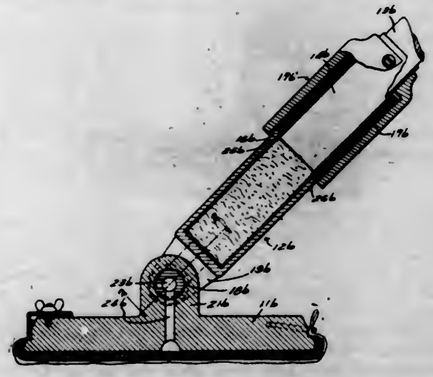
1,809,967. RADIANT ENERGY RECEIVING SYSTEM. HENRY C. FORBES, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 15, 1929. Serial No. 340,256. 9 Claims. (Cl. 250—20.)



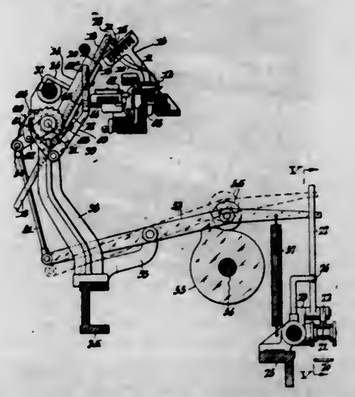
1. In combination, a directional energy-receiving device, and means for continuously indicating the direction from which energy is being received and the average amplitude of said energy.

1,809,968. CARTRIDGE-HOLDING FLOOR POLISHER. EDNA R. GEDGE, Los Angeles, Calif., assignor to Peerless Products Co., a Corporation of California. Filed Jan. 21, 1926. Serial No. 82,735. 3 Claims. (Cl. 91—39.)

1. In means of the general character described; a waxer body having a wax delivery passage; a handle for manipulation of said body; a wax container mounted on the lower end of said handle and provided with an interiorly threaded cap adapted to cooperate therewith; an apertured ear integrally formed on the top of the body and having a wax passage extending between the aperture in the ear and the wax delivery passage; said ear and container being pivotally joined; the container having an extension fitting into the aperture in the ear and arranged with a passageway communicating with the passageway in the ear; a plunger movable in the container; and means whereby axial movement of the handle is effective to move said plunger.



1,809,969. YARN CARRIER CONTROL MECHANISM FOR FLAT KNITTING MACHINES. ALBERT GEE, Elkins Park, Pa. Filed May 20, 1929. Serial No. 364,366. 11 Claims. (Cl. 66—129.)

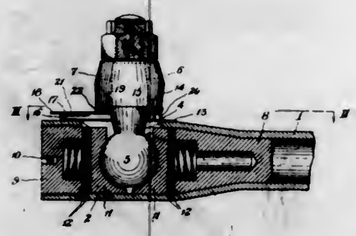


1. Yarn carrier control mechanism for flat knitting machines comprising a slidable stop bar under friction restraint and having a profile edge of serially-arranged studs to intercept the yarn carriers; and means to intermittently shift the stop bar transversely of the carriers for presentation of different portions of its profile edge in the path of said carriers, thereby to variously limit the throw of the latter as the knitting proceeds.

1,809,970. CLEANER. IRVING L. HOLLAND and ROY W. KLAUS, Chicago, Ill.; said Holland assignor to John A. Marzall. Filed Dec. 28, 1928. Serial No. 329,071. 4 Claims. (Cl. 87—5.)

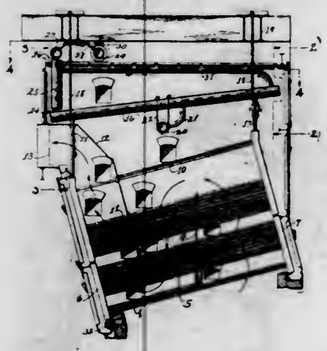
2. A liquid cleaner composed of approximately 16.67% denatured alcohol, 4.16% of 36% glacial acetic acid, .55% oil of sassafras and 78.62% of water, by volume.

1,809,971. DUST COVER FOR TIE-RODS OR THE LIKE. GEORGE H. HUFFERD, Detroit, Mich., assignor to Thompson Products Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 19, 1925. Serial No. 76,454. 10 Claims. (Cl. 287—90.)



10. A dust cover and oiler for ball joints, comprising a cover plate provided with an opening and having a continuous rib around the margin of the opening except at one side where it is extended laterally to provide an oil conveying recess, in combination with a flexible plate superimposed upon said cover plate and having an opening therein aligned with the opening in said cover plate, an arcuate flange cooperating with said rib and an indented portion received in said recess.

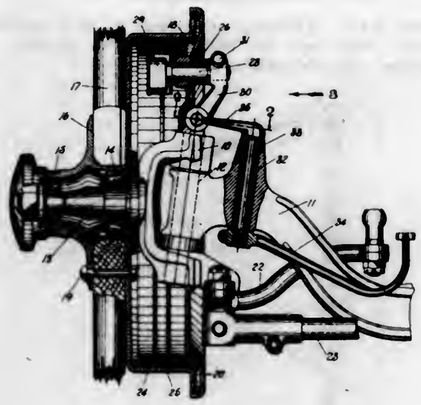
1,809,972. STEAM BOILER. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Aug. 25, 1927. Serial No. 215,301. 4 Claims. (Cl. 122—265.)



1. In a water tube boiler, vertically disposed headers, inclined tubes connected to said headers, inclined headers, connections from said vertically disposed headers to said inclined headers, and vertically disposed headers located above said inclined headers and connected to the respective end portions of said inclined headers out of line with said first named connections.

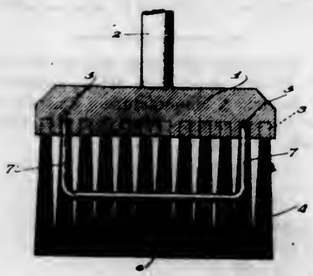
1,809,973. BRAKE OPERATING MEANS. WILLIAM S. JAMES, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed June 17, 1929. Serial No. 371,473. 4 Claims. (Cl. 188—194.)

1. In a steering wheel brake mechanism, a rotatable drum, braking means engageable therewith, a shaft having means thereon operable to move said braking means into engagement with said drum, a lever secured to said shaft, a contact member having its longitudinal axis extending substantially perpendicular to the longitudinal axis of said shaft adjustably supported in said lever, a shaft journaled substantially parallel to the pivoted axis of said wheel



having an arm extending therefrom engageable with said contact member, and means for rotating said last named shaft to engage said braking means with said drum.

1,809,974. BRUSH. PAUL A. JONES, Jonesville, Mich. Filed June 13, 1929. Serial No. 370,588. 1 Claim. (Cl. 15—168.)



As an article of manufacture, a brush including a head member having a plurality of pockets therein, bristles secured in some of said pockets, a plurality of elongated U-shaped wires concealably disposed among said bristles of less width than said head and arranged tending to maintain certain of said bristles in substantially their initial position, said wires having their end portions embedded in other of said pockets.

1,809,975. HELICAL BLADED REAMER. WILLIAM J. KATTREIN and FREDERICK W. BECKER, Albany, N. Y., assignors to Watervliet Tool Co., Inc., Albany, N. Y., a Corporation of New York. Filed May 13, 1926. Serial No. 108,857. 2 Claims. (Cl. 77—75.5.)

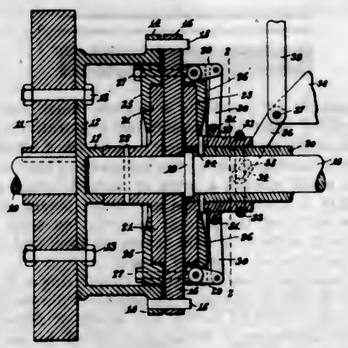
1. In combination, a body having a plurality of spirally arranged grooves of relatively narrow width having their bottoms lying in an imaginary cone; twisted blades fitted in said grooves respectively and tapered reversely to the cone; said blades being to a substantial degree flexible to

permit flexure when in the grooves, whereby they may be sprung to rest on the bottom of the grooves; means to



hold the ends of the blades against the bottoms of the grooves and to shift the blades longitudinally in the grooves.

1,809,976. CLUTCH. JUSTUS R. KINNEY, Jamaica Plain, Mass. Filed Apr. 12, 1928, Serial No. 269,422. Renewed Oct. 2, 1930. 7 Claims. (Cl. 192—48.)



7. The combination of a rotatable friction disk; two revoluble members having flanges adapted to contact with the opposite faces of said disk; two sets of toggle mechanisms adapted to operate simultaneously to force one flange into engagement with and at the same time force the other flange from engagement with said disk; and a slidable member for simultaneously actuating both toggle mechanisms.

1,809,977. HAIR WAVING APPARATUS. CHARLES KLEINE, Kingston, N. Y. Filed Nov. 8, 1929. Serial No. 405,559. 7 Claims. (Cl. 132—36.1.)



1. In a hair waving apparatus, a clamp comprising a pair of metal bars, a hinge connecting said bars at one end, a latch and pin connection at the other end, a block of pliable material fixed on one of said bars, a hollow metallic casing on the other bar, said casing having a perforate upper wall, and a strip of yieldable material set in said casing to contact said block, the adjacent faces of said block and casing being longitudinally undulated in complementary relation.

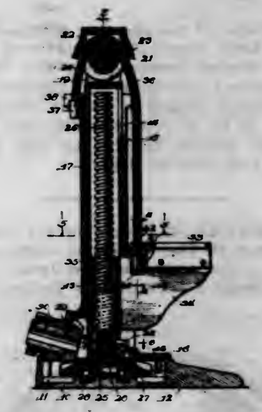
1,809,978. PROCESS OF PRODUCING HYDROGEN. ALFRED T. LARSON, Wilmington, Del., assignor to Du Pont Ammonia Corporation, Wilmington, Del., a Corporation of Delaware. Filed July 21, 1928. Serial No. 294,596. 8 Claims. (Cl. 23—213.)

1. The process of producing hydrogen which comprises causing steam and carbon monoxide to react according to the equation

$$H_2O + CO = H_2 + CO_2$$

in the presence of a catalyst containing the elements copper, zinc and one of the elements selected from the group consisting of chromium, tungsten, silicon, vanadium and molybdenum.

1,809,979. LIFTING JACK. EDWARD L. LEINBACH, Chicago, Ill. Filed Sept. 12, 1927. Serial No. 218,881. 7 Claims. (Cl. 254—148.)

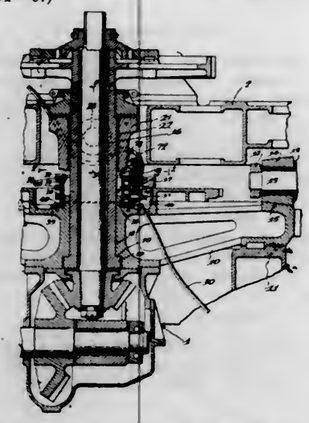


1. A lifting jack embodying telescoping standards, a lifting member having an active face adapted to assume a position adjacent the lower end of both of the standards, said member traversing said standards in directions lengthwise thereof during the telescoping movements of said standards, an upright screw for moving the standards relatively one with relation to the other, means for operating the screw, means responsive to the movement of one of said standards with respect to the other for causing the said lifting member to travel successively along the standards, and means on said lifting member co-operating with the screw for guiding and maintaining said lifting member in position during the entire movement of the standards out of telescoping relation, the said screw and lifting member being movable independently with respect to each other.

1,809,980. WOOD COLORING PROCESS. CHARLES E. LENTZ, South Bend, Ind., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 20, 1928. Serial No. 313,949. 8 Claims. (Cl. 99—12.)

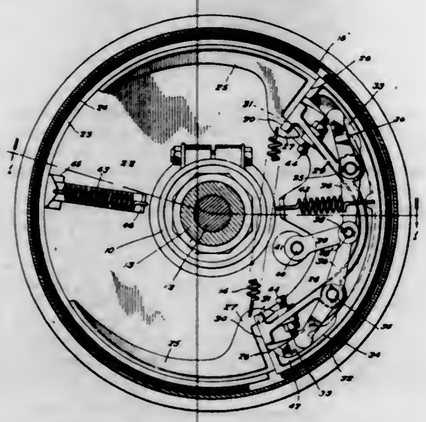
1. The process of coloring wood, consisting in vacuating the pores and interstices of the wood thereby rendering the wood absorbent, introducing a measured quantity of anhydrous ammonia into a closed receptacle containing the wood, and then introducing steam into said receptacle to raise and maintain for a definite period a temperature of approximately 235° F.

1,809,981. ELECTRIC MOTOR DRIVEN EXCAVATING MACHINERY. GEORGE J. LEXA and ROLF LJUNGKULL, Wauwatosa, Wis., assignors to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 18, 1929. Serial No. 393,563. 8 Claims. (Cl. 191—9.)



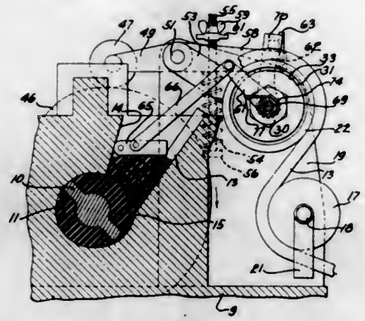
1. In a machine of the character described, a truck, a revolving platform supported on said truck for turning movement, a member interconnected with the revolving platform for rotary movement in a horizontal plane but constrained against tipping or rocking while leaving the platform free to tip or rock, collector rings mounted on the truck and brushes mounted on said member and coacting with said collector rings.

1,809,982. VEHICLE BRAKE. VINCENT LINK, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Jan. 10, 1927. Serial No. 160,118. 9 Claims. (Cl. 188—78.)



1. The combination with a stationary part and a rotatable member having a drum with a cylindrical surface thereon, of a noncontinuous friction member positioned adjacent to said cylindrical surface and normally out of contact therewith, a second friction member positioned between the free ends of the first-mentioned friction member, fixed stops normally engaging the ends of the first-mentioned friction member, and means slidably engaging said second friction member for moving it into contact with said cylindrical surface to be carried thereby into contact with said first-mentioned friction member and cause the same to engage said drum.

1,809,983. MATERIAL FEEDING DEVICE. JOSEPH EVERETT LODGE, Maywood, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 2, 1929. Serial No. 329,809. 10 Claims. (Cl. 18—21.)



2. In material feeding apparatus, means for retarding the material being fed, and means responsive to the amount of material fed for varying the effectiveness of the means for retarding the material.

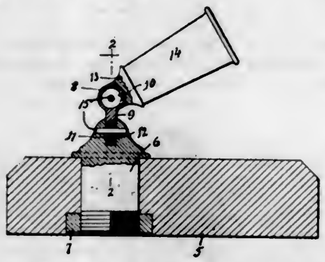
1,809,984. SURFACE FINISHING FOR MOLDED ARTICLES. GERALD H. MAINS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 28, 1925. Serial No. 71,941. 12 Claims. (Cl. 154—2.)



2. A method of providing a surface finish for molded articles which comprises assembling a plurality of layers of fibrous sheet material impregnated with a binder capable of being hardened under the influence of heat and pressure in a mold, placing a layer of metallic sheet material coated with a binder on said assembled layers, disposing a surface layer of translucent material on said metallic material and subjecting said layers to heat and pressure to form an integral hardened mass.

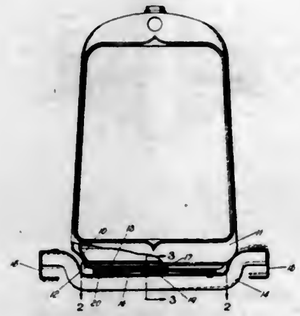
11. A composite molded article comprising a body portion composed of a plurality of layers of fibrous material and an outer layer of metal, the layers of fibrous material being impregnated with, and united to each other and to the metal layer into a composite unitary structure by means of, an infusible, heat-hardened binder.

1,809,985. PEN DESK SET. LUCIFER J. MOST, New York, N. Y., assignor to Mable Todd & Co., New York County, N. Y. Filed Nov. 13, 1929. Serial No. 406,741. 6 Claims. (Cl. 120—108.)



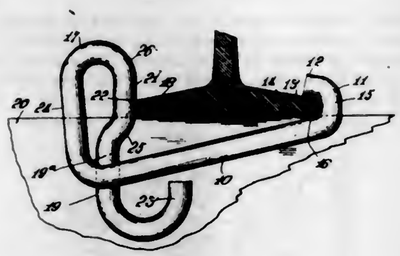
1. A pen desk set, comprising a base, a pen carrier and means connecting the pen carrier to the base, on two pivots at right angles above the base in different horizontal planes in the normal position of the carrier.

1,809,986. RADIATOR SUPPORT. CLYDE R. PATON, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Mar. 3, 1928. Serial No. 258,877. 4 Claims. (Cl. 180—68.)



1. The combination with a motor vehicle frame having a cross member extending transversely thereof, of a radiator shell having a horizontal lower flange, a radiator core within said shell, a strap secured intermediate its ends to said lower flange substantially at the central axis thereof and secured at its ends to said cross member, and a resilient block positioned between the central portion of said strap and said cross member to permit flexing of said strap upon twisting movement of said frame to eliminate the transfer of twisting stresses from said frame to said core.

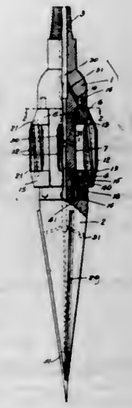
1,809,987. RAIL ANCHOR. FREDERICK A. PRESTON, Lake Forest, Ill., assignor to The P & M Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1929. Serial No. 372,338. 14 Claims. (Cl. 238—330.)



1. A rail anchor formed at one end with means for engagement with one flange of a rail base, an upstanding loop at the other end movable downwardly into gripping engagement with the other base flange of the rail, and angularly disposed means at the extremity of said loop for bearing against a stationary part of the road bed.

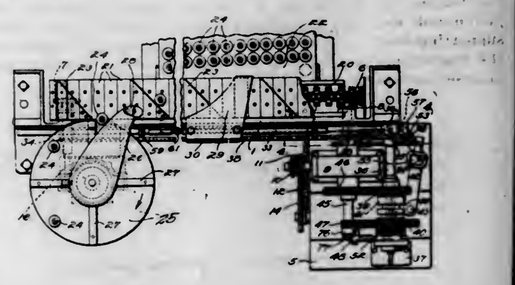
1,809,988. UNDERREAMER. EDWARD F. RAYMOND, Santa Fe Springs, Calif. Filed July 6, 1927. Serial No. 203,725. 7 Claims. (Cl. 255—76.)

3. A tool of the character described comprising a body having an axially elongated annular recess, a cutter roller in the recess, and distinctly separate bearing means for the respective ends of the cutter roller, said bearing means being mounted beyond the respective ends of the cutter roller with at least one of said bearing means eccentrically pivoted to the body at an end of the annular recess for retracting or expanding the cutter roller



relative to the body, the eccentrically pivoted bearing means being adapted for abutment against the body when the cutter roller is expanded.

1,809,989. LEER STACKER. GEORGE E. ROWE, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Feb. 14, 1929. Serial No. 339,851. 8 Claims. (Cl. 198—31.)

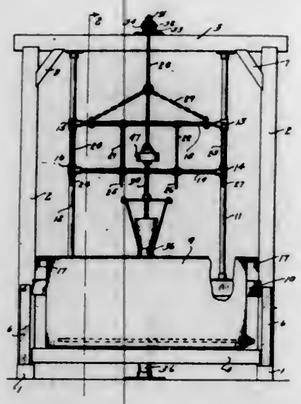


1. In a leer stacker, the combination of a stacker conveyer to be disposed in angular relation to the leer conveyer, a plow arranged for reciprocation above the working strand of the stacker conveyer, means for moving the plow in one direction for its working movements and in the other direction for its return movements, means for causing the plow to dwell at the completion of its return movements, and means whereby the movemnet of the stacker conveyer determines the start of the working movements of the plow.

1,809,990. METHOD OF MAKING MATERIAL FOR THE PURIFICATION OF GASEOUS MIXTURES. GILBERT EDWARD SEIL, Conshohocken, Pa., assignor to E. J. Lavino and Company, Philadelphia, Pa., a Corporation of Delaware. Filed June 11, 1928. Serial No. 284,671. 5 Claims. (Cl. 252—25.)

4. The method of preparing from an iron bearing substance a material which is adapted for use in the purification of gas, which comprises the step of heating the said iron bearing substance in the presence of alkali to a temperature which may range from 200° C. to 400° C. and subsequently quenching the heated material in water.

1,809,991. DEVICE FOR TIME DIPPING. EDWARD R. STEVENS and ARTHUR F. NICOLAI, Portland, Oreg. Filed Oct. 24, 1929. Serial No. 402,079½. 1 Claim. (Cl. 91—46.)



A device of the class described comprising a fabricated frame, guide bars vertically disposed in spaced relationship within the frame, an article supporting head slidably disposed upon the guide bars, a liquid holding cylinder vertically disposed between the guide bars, a piston reciprocably disposed within the cylinder, said piston having a plurality of valves disposed within its body, one of said valves being an adjustable needle valve, the other of said valves having a hollow valve stem and being adapted to be maintained in closed position, a piston rod secured to the piston, a counter balance secured to the piston rod, and a flexible support secured to the article supporting head and to the counter balance for connecting the supporting head to the piston and valve mechanism disposed within the cylinder.

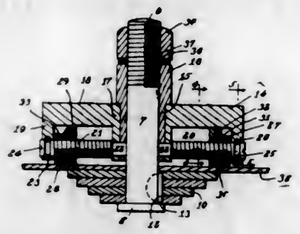
1,809,992. FOUNTAIN PEN. OSCAR J. SUNDSTRAND, Rockford, Ill. Filed Mar. 30, 1925. Serial No. 19,209. 9 Claims. (Cl. 120—48.)



1. A fountain pen having, in combination, an ink reservoir, a feed bar, a pen point, said feed bar having a longitudinal bore opening into said reservoir to provide an outlet therefrom, said feed bar also having an ink discharge duct leading from said bore to said pen point, a stem slidably mounted in said bar, said stem having thereon a collar forming a valve member to close said outlet, said stem also having a duct leading from the upper end of the stem to a point below said valve member and arranged to communicate with said ink discharge duct, the lower end of said stem being exposed upon the lower portion of the feed bar and said exposed portion being shaped for engagement by the finger of the operator whereby the stem may be slid to seat and unseat said valve member.

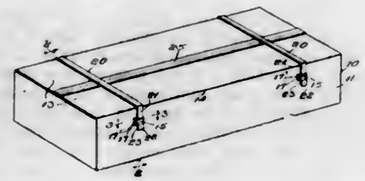
1,809,993. CIRCLE HOLE CUTTER. EDWIN C. SWANSON, Rockford, Ill., assignor to Greenlee Bros. & Co., Rockford, Ill., a Corporation of Illinois. Filed Mar. 1, 1929. Serial No. 343,593. 6 Claims. (Cl. 164—82.)

1. A circle cutter of the character described comprising a supporting member, a plurality of interchangeable circular discs of different diameters mounted thereon, and a cutter bar coaxial with said discs and rotatable about said supporting member, said cutter bar being equipped



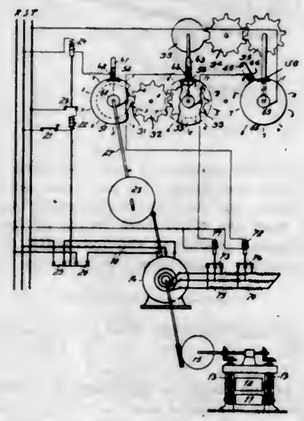
with cutter wheels and screw adjusting means operable to support and position the cutter wheels in cutting relation with the periphery of any one of said circular discs.

1,809,994. STORAGE CASE. KARL R. TEMPLETON, Chicago, Ill. Filed Oct. 6, 1928. Serial No. 310,773. 4 Claims. (Cl. 229—47.)



1. In a device of the class described, a container having a bottom wall, side walls and closure means, a resilient U-shaped clamp extending across said closure means and embracing opposed side walls, the legs of said clamp being resiliently urged away from said walls, a loop member attached to each of said walls, and means on said legs releasably engageable by said loop members.

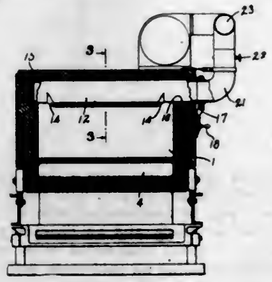
1,809,995. MECHANISM FOR ADJUSTING MACHINE TOOLS. HERMANN UNVERDROSS, Frankfort-on-the-Main, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 12, 1927, Serial No. 190,700, and in Germany May 14, 1926. 4 Claims. (Cl. 172—239.)



1. In combination, a member disposed to be set in different positions, an adjusting mechanism, a motor for actuating said mechanism, means for starting the motor,

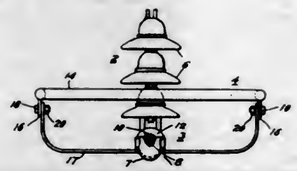
means for varying the speed of the motor, and means actuated by the motor for stopping it in a predetermined position, said means comprising a train of rotatable members disposed to operate at different speeds, and a corresponding number of adjustable members disposed to be set in predetermined angular positions, co-operating contact members carried by the rotatable and adjustable members, said contact members being disposed to individually effect the operation of the speed varying means and to affect the motor stopping means only when said contact members are actuated into engagement simultaneously.

1,809,996. APPARATUS AND METHOD FOR ANNEALING GLASSWARE. HAROLD A. WADMAN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 24, 1928. Serial No. 328,152. 11 Claims. (Cl. 49—47.)



1. In a continuous tunnel lehr for annealing glassware, a combined cooling and drift controlling means, comprising a nozzle mounted in said tunnel in the cooling portion thereof, means to cause a flow of cooling medium through said nozzle, and means to adjust the angular position of said nozzle so that said cooling medium flows in a direction at a selected angle with the longitudinal axis of said tunnel.

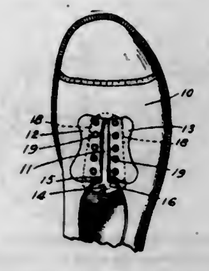
1,809,997. TRANSMISSION LINE DEVICE. NILS A. WAHLBERG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1927. Serial No. 209,440. 4 Claims. (Cl. 173—318.2.)



2. An electrostatic-field-control loop including separable end-to-end related portions, and supporting means therefor including elements of substantially less thickness than the maximum thickness of the perimetral portion of the loop measured perpendicular to the loop axis, and connected one adjacent to the end of each of said portions at positions substantially displaced from the plane of the loop nearest the field, said plane being at right angles to the loop axis, and a section of the length of each element extending away from the loop in the general direction of the axis.

1,809,998. SHOE CONSTRUCTION. CARL G. WERNMARK, Los Angeles, Calif., assignor of one-half to Claus G. Peterson, Los Angeles, Calif. Filed Nov. 18, 1929. Serial No. 407,845. 2 Claims. (Cl. 36—50.)

1. In shoe construction, a pair of eyelet facings formed of pieces of material folded upon themselves, to embrace the raw edges of a shoe upper along its instep opening, a shoe tongue fastened to the underfolded portions of



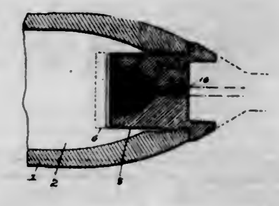
said facings, and eyelets, by which the facings may be secured to the shoe upper and the tongue will be held in position.

1,809,999. NOZZLE. STUART A. WIER, Dallas, Tex., assignor to Tridex Corporation, Dallas, Tex., a Corporation of Delaware. Filed Feb. 4, 1929. Serial No. 337,300. 2 Claims. (Cl. 299—153.)



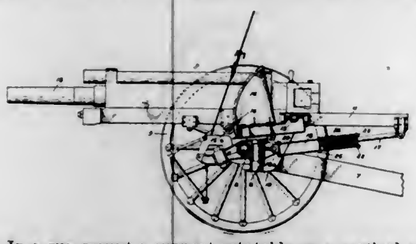
1. A nozzle having one end portion curved and provided with a curved bore and a head, said head having a reduced transverse discharge opening, the upper lip of the opening having a concaved notch and the lower lip of the opening having a concaved notch, the upper notch overhanging the lower notch and the lower concaved notch being deeper than the upper concaved notch, whereby the bore of the head overhangs the lower notch.

1,810,000. BOOSTER. JOHN H. WOODBERRY, U. S. Army, Frankford Arsenal, Bridesburg, Pa. Filed June 7, 1921. Serial No. 475,745. 10 Claims. (Cl. 102—39.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



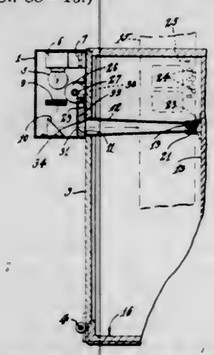
1. Means for increasing the effectiveness of booster charges embodying, a strong walled container having a cavity therein, the walls of which gradually converge toward the bottom, a detonator located in the strong walled container and remote from the booster cavity and a cord of explosive connecting the detonator and booster cavity.

1,810,001. GUN MOUNT. HARRY C. ZIMMERMAN, Washington, D. C. Filed Apr. 20, 1929. Serial No. 356,725. 2 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



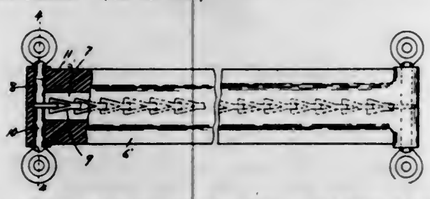
2. In a gun mount a support rotatable on a vertical axis, a cradle trunnioned therein in rear of its center of gravity, an equilibrator connected to the cradle in rear of the trunnions and to the support forwardly of and below the trunnions and the point of attachment to the support being in rear of the vertical axis of the support.

1,810,002. FILM MARKING DEVICE. JOHN ARNOLD, Los Angeles, Calif., assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif., a Corporation of New York. Filed Mar. 11, 1930. Serial No. 434,916. 5 Claims. (Cl. 88—16.)



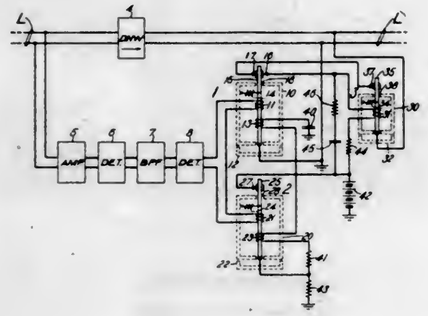
1. A film marking device comprising, in combination with a motion picture camera, a housing, a source of light within the housing, an opening from said housing into said camera, a shutter operably positioned with respect to said opening within the housing, electromagnetic means operably connected to said shutter, a light passage leading off from said opening into said camera and into operative relation with film in such camera, and means for selectively energizing the electromagnetic means to operate the shutter.

1,810,003. DOORCHECK. CHARLES W. BECK, Toledo, Ohio, assignor, by mesne assignments, to Alcet Electro Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 3, 1924. Serial No. 696,619. 13 Claims. (Cl. 16—86.)



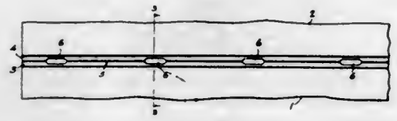
1. A door check comprising a pair of brackets, a yieldable member connected thereto, and means extending between said brackets for limiting the yielding movement of the yieldable member.

1,810,004. VOICE OPERATED RELAY CIRCUITS. BJORN G. BJORNSON, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1929. Serial No. 368,985. 7 Claims. (Cl. 178—44.)



1. A vibrating system including a main polar relay and an auxiliary polar relay, each of said polar relays having an armature, a pair of contacts between which said armature is adapted to swing, and an operating winding and an accelerating winding associated with said armature, said accelerating winding on said main relay connected in series with said accelerating winding on said auxiliary relay across the armature and normally closed contact of said auxiliary relay to supplement the action of the operating windings on the respective relays when the normally closed contact on said auxiliary relay is opened, a third polar relay having a winding which is energized by a circuit including said last mentioned winding, a high resistance, the normally open contact and the armature of said main relay connected in series across a source of potential when the normally open contact on said main relay is closed, and a slow electrical circuit connected to said third relay to retard the release of said relay.

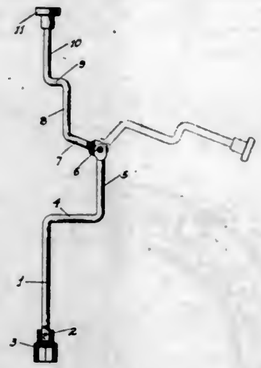
1,810,005. METHOD OF ARC WELDING. HOWARD J. BURNISH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,479. 5 Claims. (Cl. 219—10.)



1. In arc welding, the steps which comprise providing recesses in the metal to be welded at spaced intervals along the abutting edges of the seam and filling said recesses with welding metal to tack the metal to be welded in position for final welding.

1,810,006. WRENCH. ALBERT EDWARDS, Sacramento, Calif., assignor to J. W. Wooldridge, Sacramento, Calif. Filed Nov. 16, 1929. Serial No. 407,696. 1 Claim. (Cl. 81—73.)

A wrench comprising a tool tip and a main handle coaxial therewith, two eccentric handles connected to each other and to the tip and first handle by radius arms of different lengths, the radius arm between the eccentric handles extending at an obtuse angle thereto, and pivot connections between the outermost of said eccentric handles and said last named radius arm.



1,810,007. THREAD MOISTENING GUIDE. ERNST ERWIN FISCHER, Rockledge, Pa. Filed July 17, 1929. Serial No. 378,891. 2 Claims. (Cl. 91—46.)

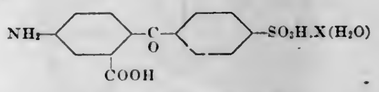
1. A unitary detachable thread guide adapted for use with and supported by a water box having substantially parallel opposite walls, formed of molded vitreous material having a longitudinal body part provided with thread guiding portions spaced apart and an intermediate downwardly extending part having a thread guiding portion at its free end whereby the thread is caused to travel through a relatively lower path and in contact with the water within the box while passing between the spaced guiding portions, said body part having the underside of one end provided with a downwardly opening transverse grooved portion adapted to fit upon one edge of the box while permitting adjustment longitudinally of said edge thereof and having its other end extended so as to rest upon and be supported by the other edge of the water box.

1,810,008. 4'-SULPHO-2-BENZOYL-5-NITRO-BENZOIC ACID AND PROCESS FOR MAKING SAME. IVAN GUBELMANN, HENRY J. WEILAND, and OTTO STALLMANN, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation, a Corporation of Delaware. Filed July 2, 1927. Serial No. 203,259. 7 Claims. (Cl. 260—64.)

1. The process for preparing 4'-sulpho-2-benzoyl-5-nitro-benzoic acid, which comprises reacting a solution of 4'-sulpho-o-benzoyl-benzoic acid in concentrated sulphuric acid with a nitrating agent.

1,810,009. 4'-SULPHO-2-BENZOYL-5-AMINO-BENZOIC ACID. IVAN GUBELMANN, HENRY J. WEILAND, and OTTO STALLMANN, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation, a Corporation of Delaware. Filed July 2, 1927. Serial No. 203,260. 1 Claim. (Cl. 260—64.)

As a new article of manufacture, 4'-sulpho-2-benzoyl-5-amino benzoic acid, having most probably the following chemical constitution, in which X represents O or an integer:



1,810,010. 2-NITRO-ANTHRAQUINONE-7-SULPHO-ACID AND PROCESS FOR MAKING THE SAME. IVAN GUBELMANN, HENRY J. WEILAND, and OTTO STALLMANN, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation, a Corporation of Delaware. Filed July 2, 1927. Serial No. 203,261. 4 Claims. (Cl. 260—57.)

1. The process of preparing 2-nitro-anthraquinone-7-sulpho-acid which comprises treating 4'-sulpho-2-benzoyl-5-nitro-benzoic acid with 25% oleum as dehydrating agent at an elevated temperature, diluting up the "ring-closing" mass with water and filtering off the product.

1,810,011. 2-NITRO-7-CHLORO-ANTHRAQUINONE AND PROCESS OF MAKING THE SAME. IVAN GUBELMANN, HENRY J. WEILAND, and OTTO STALLMANN, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation, a Corporation of Delaware. Filed July 2, 1927. Serial No. 203,262. 2 Claims. (Cl. 260—57.)

1. The process which comprises heating 2-nitro-7-sulpho-anthraquinone in dilute hydrochloric acid solution with a solution of sodium chlorate to form 2-nitro-7-chloro-anthraquinone.

1,810,012. 2-AMINO-7-CHLORO-ANTHRAQUINONE AND PROCESS OF MAKING THE SAME. IVAN GUBELMANN, HENRY J. WEILAND, and OTTO STALLMANN, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation, a Corporation of Delaware. Filed July 2, 1927. Serial No. 203,263. 2 Claims. (Cl. 260—60.)

1. The process of preparing 2-amino-7-chloro-anthraquinone, which comprises reducing 2-nitro-7-chloro-anthraquinone by means of sodium sulphide in the presence of caustic alkali at boiling temperature and filtering off the product.

1,810,013. PROCESS OF PREPARING 4'-SULPHO-O-BENZOYL-BENZOIC ACID. IVAN GUBELMANN, HENRY J. WEILAND, and OTTO STALLMANN, South Milwaukee, Wis., assignors, by mesne assignments, to Newport Chemical Corporation, a Corporation of Delaware. Filed July 2, 1927. Serial No. 203,265. 5 Claims. (Cl. 260—64.)

2. The process of preparing 4'-sulpho-o-benzoyl-benzoic acid, which comprises reacting a mixture of 4'-mercapto-o-benzoyl-benzoic acid and its corresponding disulphide with an oxidizing agent which is a member of the group consisting of alkaline hypohalites and halogens in alkaline solution.

1,810,014. LINGERIE HOLDER. CORA L. HILL, Los Angeles, Calif. Filed Mar. 2, 1931. Serial No. 519,359. 4 Claims. (Cl. 24—73.)

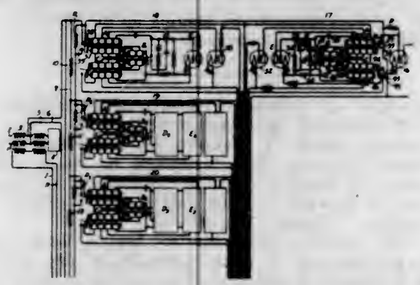
2. A lingerie holder comprising, in combination, a safety pin of a structure presenting end holes, a bight of chain whose ends are hitched to the pin at the end holes, a

snap fastener element attached to the loop of the bight and having a stretch of free chain provided at its end with a fastener element which is complementary to the



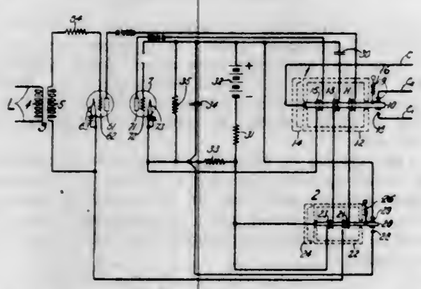
aforesaid bight-carried element; said bight loop being passed through respective apertures in the contiguous snap element.

1,810,015. TRANSMISSION SYSTEM. JOHN L. HOGG, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 3, 1929. Serial No. 375,629. 18 Claims. (Cl. 178—44.)



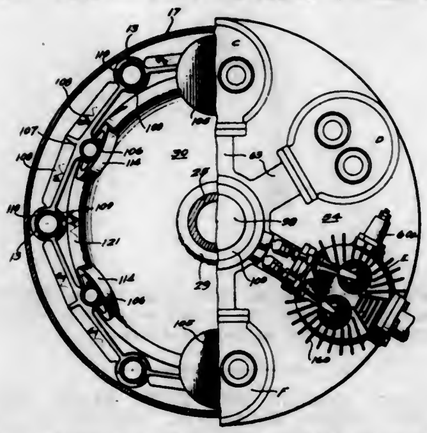
1. In a transmission system, impedance means for controlling the volume in a signal channel, means for automatically controlling said impedance means according to a characteristic of the signal channel to maintain the volume substantially constant at a point in said channel, and means operative upon starting the operation of said automatic means for accelerating the operation thereof.

1,810,016. VOICE OPERATED RELAY CIRCUITS. JOHN L. HOGG, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1929. Serial No. 368,955. 6 Claims. (Cl. 178—44.)



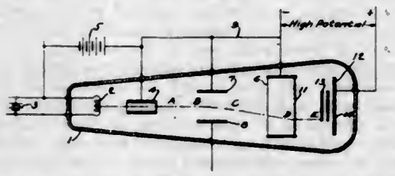
1. In an electrical communication system over which signal current impulses are transmitted, a main relay and an auxiliary relay, means for initially energizing said main and auxiliary relays by said current impulses, means including a condenser for further energizing said main and auxiliary relays, means including a three-element thermionic discharge device for still further energizing said main relay, means for releasing said auxiliary relay at the cessation of said signal current impulses, and a slow electrical circuit comprising capacitance connected between the grid and filament of said thermionic discharge device and high resistances connected to said capacitance, to prevent the release of said main relay for a predetermined time after said signal current impulses have ceased.

1,810,017. VARIABLE STROKE CAM-ENGINE. HERBERT W. HOUSTON, Los Angeles, Calif. Filed Nov. 20, 1928. Serial No. 320,579. 3 Claims. (Cl. 123—58.)



1. In a cam-engine, the combination of: primary and secondary supporting structures; a plurality of longitudinal cylindrical members holding said supporting structures in spaced relationship; a plurality of cylinders secured to said secondary supporting structure between said longitudinal members; a piston in each of said cylinders; a crosshead for each of said pistons disposed between two of said members and having opposed arcuate surfaces engaging said members, said cross-head being guided by said longitudinal members; and means for moving said cross-heads.

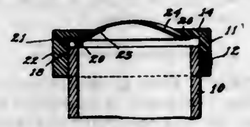
1,810,018. CATHODE RAY OSCILLOGRAPH. DOUGLAS E. HOWES, Northfield, Vt., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 28, 1924. Serial No. 716,294. 8 Claims. (Cl. 171—95.)



4. In a cathode-ray tube, a source of electrons, a tube confining the electrons into a stream, and a foraminate plate at the same potential as said tube, the axes of the foramina being parallel to said tube, means between said tube and said plate for deflecting the stream, and means for increasing the speed of said electrons after leaving said plate.

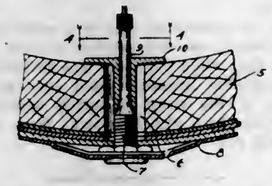
1,810,019. CLOSURE. MICHAEL JAWORSKY, Chicago, Ill. Filed Nov. 20, 1929. Serial No. 408,455. 4 Claims. (Cl. 220—35.)

1. A closure comprising a cap, said cap having a central opening in its horizontal wall affecting an inner annular flange therein, the edge of said flange being upwardly tapered, and a closure plate of a substantially semi-spherical shape adapted to fit within said opening and



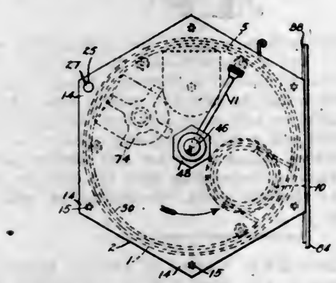
by its edge adapted to engage and closely fit the tapered edge of said flange, said closure plate having a depression for affecting an opening communicating within said cap.

1,810,020. VALVE STEM. HAROLD A. KING, Birmingham, Mich. Filed Mar. 28, 1930. Serial No. 439,838. 2 Claims. (Cl. 152—12.)



2. The combination of a pneumatic tire stem having a reduced portion and a radially extending rubber disc having an axially extending hub vulcanized to such reduced portion for closing the valve stem in a wheel felloe.

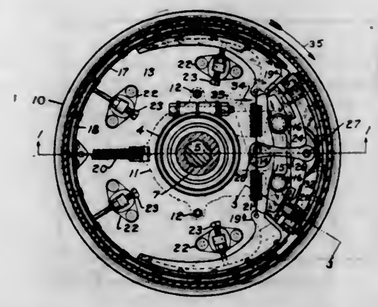
1,810,021. OSCILLOGRAPH FILM HOLDER. JOSEPH W. LEGG, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 5, 1923. Serial No. 610,953. 13 Claims. (Cl. 234—1.)



1. A graphic-recording device comprising a record-chart supporting drum rotatable relative to a record-receiving position, record-chart supply and take-up rollers mounted in the drum and means for extending the chart from the supply to the take-up roller over one of a selection of arcs on the perimeter of the drum.

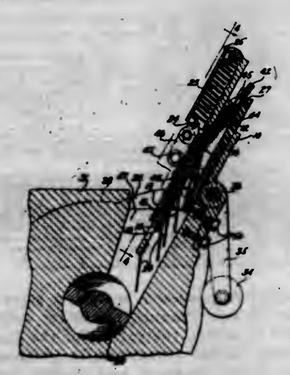
1,810,022. VEHICLE BRAKE. VINCENT LINK, Detroit, Mich., assignor to The Studebaker Corporation, Detroit, Mich., a Corporation of New Jersey. Filed Aug. 23, 1923. Serial No. 659,026. 16 Claims. (Cl. 188—78.)

1. The combination with a rotatable wheel having a brake drum with a cylindrical surface thereon and a part stationary in relation thereto, of a non-continuous brake band within said drum normally spaced from said cylindrical surface, brackets secured to said brake band adjacent its free ends, stops normally in engagement with both of said brackets, a friction shoe floating between said brackets and normally out of engagement with said cylindrical surface, an eccentric and a link pivotally connecting said shoe and said eccentric whereby movement of said eccentric causes said shoe to engage said cylin-



drical surface, said engagement causing said shoe to abut against one of said brackets and expand said brake band into engagement with said cylindrical surface upon rotation of said wheel.

1,810,023. FEEDING DEVICE. JOSEPH EVERETT LODGE, Maywood, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 14, 1927. Serial No. 205,822. 12 Claims. (Cl. 18—12.)

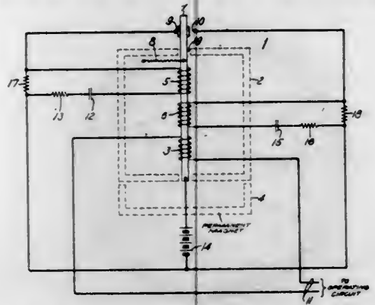


6. In material feeding apparatus, a material advancing screw, a cam attached thereto, a slide, a plurality of teeth carried thereby, a bell crank associated with the cam and adapted to actuate the slide, a bracket supporting the slide, a coiled spring for retracting the slide, means for actuating the screw, a plurality of stationary toothed elements attached to the bracket for maintaining a strip of material in advanced position, and means controlled by the screw for decreasing the feed when the force exerted by the movable teeth upon the material exceeds a predetermined amount.

1,810,024. RELAY CIRCUIT. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1929. Serial No. 368,895. 6 Claims. (Cl. 175—320.)

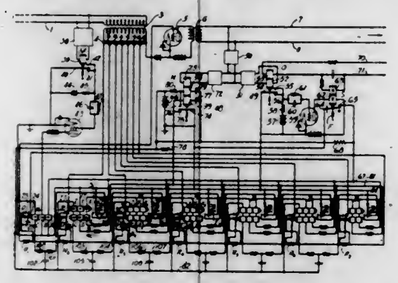
1. A polar relay circuit including a relay having a pair of contacts, an armature arranged to swing between said contacts, an operating winding and accelerating windings, a source of potential, a capacitance and a resistance connected in series across each of said accelerating windings, connections from said resistances to said contacts, other connections from said resistances to said source of poten-

tial, a connection from said armature to said source of potential, said connection arranged in a manner such that the charging and the discharging of said condensers ac-



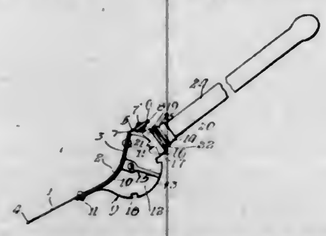
celerates the movement of said relay armature from either of said contacts to the other of said contacts and hold said armature against said other contact for a predetermined period of time.

1,810,025. TRANSMISSION SYSTEM. ROBERT C. MATHES, Wyoming, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 22, 1929. Serial No. 372,951. 17 Claims. (Cl. 178—44.)



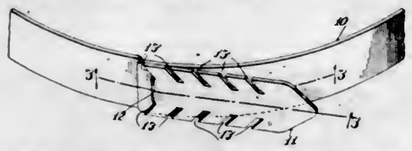
3. In a signal transmission system, a signal channel, a potentiometer in said channel, relays for controlling said potentiometer to govern the volume of the signals in said channel, control means automatically governed according to the volume of the signals on said channel for controlling said relays to maintain the volume of the signals substantially constant, and means comprising a condenser shunted by a resistance element for governing said control means to insure the holding of the potentiometer in any set position for a limited period.

1,810,026. SNOW HANDLING IMPLEMENT. EMIL R. MOLLER, Chicago, Ill., assignor of one-half to George A. Moller, Chicago, Ill. Filed July 12, 1929. Serial No. 377,813. 2 Claims. (Cl. 294—53.)



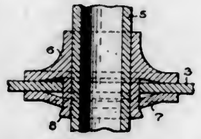
1. In a combined scoop and scraper, a scraper member formed of a flat plate curved up at one edge portion to form a scoop, a handle member pivotally mounted on the back of the scoop and means for retaining the handle at various angles to the scoop, the edge portion of the curved part of the scoop bent back into a plane nearly parallel with the front uncurved portion.

1,810,027. STRAP. JOHN L. MORAN and ALVIN J. LEE, Spokane, Wash., assignors of one-fourth to Robert Malcom, Chicago, Ill., and one-fourth to Francis E. P. Wilder, Spokane, Wash. Filed May 8, 1930. Serial No. 450,631. 1 Claim. (Cl. 24—17.)



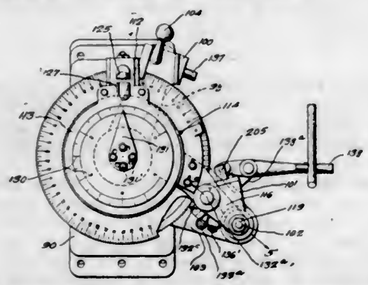
A strap of the character described comprising a strip of pliable material, one end portion whereof is provided with a closed slot, while the other end portion is provided with slits extending inwardly from the opposite longitudinal edges of the strap, arranged opposite to each other and sloping in a direction away from the end provided with said slot.

1,810,028. INDUCTION METER. PAUL PASZKOWSKI, Irvington, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 22, 1925. Serial No. 4,026. 5 Claims. (Cl. 287—52.07.)



1. In an electrical instrument, the combination with a pivoted shaft and a single flexible disc having a hole therein, of means for mounting securely, without deformation, said shaft normal to said disc in said hole comprising a hub mounted on said shaft, said hub having a dished clamping portion and a dished clamping member secured thereto, said dished clamping portion and member having opposite flat surfaces cooperating with the opposite sides of said disc in a ring-like region surrounding, but removed from, said hole.

1,810,029. SETWORKS. GEORGE M. PELTON, Milwaukee, Wis., assignor to The Filer & Stowell Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed July 2, 1928, Serial No. 289,881. Divided and this application filed Feb. 5, 1930. Serial No. 425,933. 7 Claims. (Cl. 143—124.)

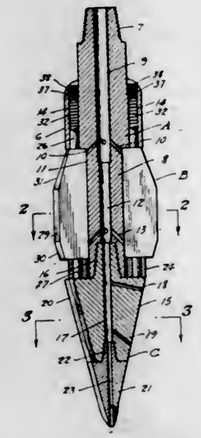


1. A setworks comprising a column, a shaft rotatably mounted thereon and adapted to be driven from a set

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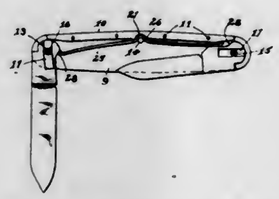
shaft, a rotatable ratchet drum fixed to the shaft, a setting arm mounted for rotation about the shaft and drum, a manually operable pawl carried by the setting arm and engageable with the ratchet, a clash block carried by the setting arm, a cooperable fixed clash block mounted on the column, an adjustable abutment facilitating setting of the setting arm, an index plate disposed substantially in a horizontal plane and carrying said abutment, a fixed ratchet plate underlying the index plate, a latch carried by the adjustable abutment and engageable with the fixed ratchet plate to hold the adjustable abutment in said position, said index plate having a scale therein indicating the thickness of boards to be cut, and a pointer carried by the ratchet plate and cooperable with the scale of the index plate.

1,810,030. UNDERREAMER. EDWARD F. RAYMOND, Santa Fe Springs, Calif., assignor to John W. MacClatchie, Compton, Calif. Filed May 5, 1926. Serial No. 106,814. 6 Claims. (Cl. 255—74.)



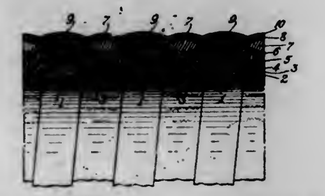
6. A tool of the character described comprising a body having an undercut shoulder and an axially projecting mandrel, an outstanding bearing means axially spaced from the shoulder, a pilot end projecting axially beyond the bearing means, a cutter having trunnions at its ends journalled respectively in the shoulder and in the bearing means and adapting the cutter for swinging to expanded or contracted position, and a torsion spring on one of the journaled trunnions tending to swing the cutter to expanded position.

1,810,031. POCKETKNIFE. GEORGE M. SCHRADE, Bridgeport, Conn. Filed Mar. 3, 1930. Serial No. 432,678. 2 Claims. (Cl. 30—10.)



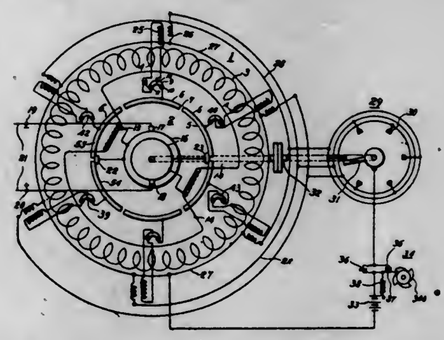
1. In a press-button, fly-open knife, the combination of a lining and a back, a blade having a back, a cutting edge, subatantially parallel straight edge portions, and a circular tang end pivoted in the lining and including a curved pocket therein adjacent the straight edge on the cutting edge side of the blade having a relatively higher circular edge portion adjacent said pocket, a spring secured to the lining and back and positioned to normally lie flat against one of said straight edge portions of the tang under tension in a manner to throw the blade open when released, the free end of said spring adapted to pass freely through the curved pocket of the tang during the preliminary opening movement of the blade and to frictionally engage the remaining higher circular edge portion of the blade after the blade has been thrown half way open, and press-button releasable locking means for the blade.

1,810,032. OIL HOSE. ERNEST SCHULTHESS, South Orange, N. J. Filed Apr. 16, 1931. Serial No. 530,593. 10 Claims. (Cl. 137—90.)



1. In a construction of oil hose, the combination with a helical liner of segment-sectional wire, the convolutions of which are spaced from one another, of successive layers of a closely woven duck, rubber, a plurality of plies of duck, a second layer of rubber, a helix of wire, of substantially oval cross-section, approximating in width the width of the spaces between the convolutions of the segment-sectioned wire, and a covering layer of heavy duck frictioned with an oil-resisting compound.

1,810,033. ELECTRIC APPARATUS. JOSEPH SLEPIAN, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 2, 1924, Serial No. 684,061. Renewed Apr. 12, 1930. 17 Claims. (Cl. 171—228.)

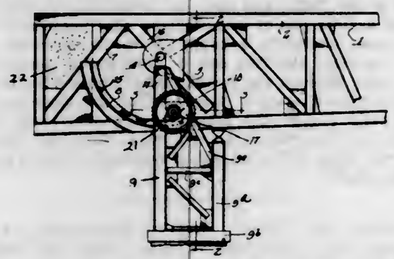


1. The combination of a dynamo-electric commutation circuit of which a portion is desired to carry current at times in one direction only and at other times in the other direction only, of a mercury-arc device having two mercury electrodes which are connected in series with said current.

1,810,034. BRIDGE. JOSEPH B. STRAUSS, Chicago, Ill. Filed Oct. 29, 1923. Serial No. 671,822. 6 Claims. (Cl. 14—35.)

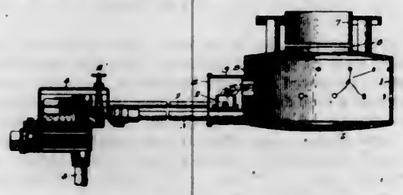
6. A bascule bridge comprising a truss, a trunnion therefor, a support for said trunnion, the truss members

of the truss adjacent the trunnion comprising four elements two of said elements meeting at the trunnion, two racks connected to one of said elements on opposite sides



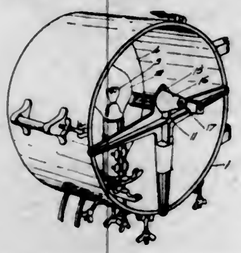
thereof, two pinions meshing with said racks, a shaft for said pinions passing through the truss members, said truss members clearing said shaft in all the various positions of the truss.

1,810,035. OIL BURNER PILOT. BEN VALJEAN, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a Corporation of Michigan. Filed Sept. 19, 1929. Serial No. 393,629. 4 Claims. (Cl. 158—91.)



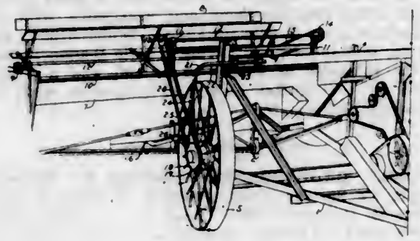
1. The combination with an oil burner comprising an oil pan and side walls forming a combustion chamber thereabove, and a fuel supply inlet, of a pilot therefor comprising a casing having a combustion chamber in communication by an outlet port through the side of the burner to its interior above the fuel pan, a pan in said pilot chamber, an oil supply to said pan, an air inlet to said pilot chamber adjacent the pan, whereby ignited oil in the pan will be supplied air for combustion from the air inlets and the resulting flame will be projected into the burner above the fuel pan to ignite fuel supplied to the latter.

1,810,036. LAMP SETTING DEVICE. OSCAR WERNER, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1928. Serial No. 316,054. 2 Claims. (Cl. 88—14.)



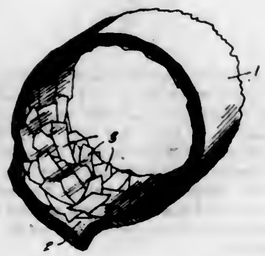
1. A lamp-setting device to aid in focusing the lamps of flood-lights and the like comprising a frame disposed to engage the projector housing and provided with peep holes in said frame for observing the location of the filament laterally, vertically and in-and-out with relation to said housing and a source of light associated with the frame to illuminate the lamp filament.

1,810,037. REEL DRIVING MECHANISM FOR HARVESTERS. ERNEST W. BALDWIN and GEORGE D. BALDWIN, Independence, Mo., assignors to The Gleaner Combine Harvester Corporation, Kansas City, Mo., a Corporation of Delaware. Filed Apr. 28, 1928. Serial No. 273,661. 5 Claims. (Cl. 56—123.)



1. In combination with the main frame and grain wheel of a harvesting machine, a cutting unit adjustable relative to the main frame, a reel rotatably mounted on the cutting unit, a counter-shaft on he cutting unit operatively connected with the reel, a flexible driving connector operably connecting the counter-shaft and the grain wheel, and means on the main frame, including a rolling fulcrum for said flexible connector, for maintaining driving relation of said connector with the grain wheel and countershaft at different elevations of the cutting unit.

1,810,038. SELF SEALING TIRE TUBE. JESSE R. CROSSAN, Wadsworth, Ohio, assignor to Seiberling Rubber Company, a Corporation of Delaware. Filed Dec. 10, 1927. Serial No. 239,029. 4 Claims. (Cl. 152—13.)



1. A tire tube composed of rubber and having on its inner surface, at least throughout its tread portion, a layer of soft plastic sealing composition, said composition layer being covered on its inner surface with a series of permanently overlapping broken up pieces of cellulose product.

1,810,039. PROCESS FOR OBTAINING IODINE AS IODIDE FROM IODINE-CONTAINING ADSORPTION CARBON. FRITS ELLINGER, The Hague, Netherlands, assignor to Mijnbouw en Handelsmaatschappij "Wonoh Gedeh", The Hague, Netherlands. Filed Mar. 7, 1929, Serial No. 345,230, and in the Netherlands June 12, 1928. 2 Claims. (Cl. 23—217.)

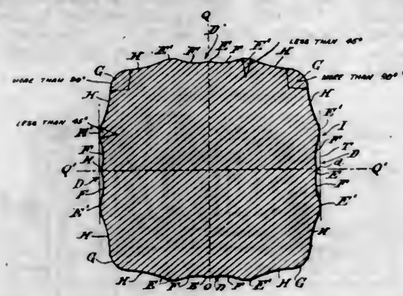
1. Process for obtaining iodine as iodide from iodine-containing carbon, which comprises extracting the iodine from the carbon at approximately 100° C. with an excess of a sodium carbonate solution, filtering the extract and washing the carbon with hot water.

1,810,040. ORNAMENTAL CHAIN. KARL FASSNACHT, Providence, R. I., assignor to Speidel Chain Co., Providence, R. I., a Firm composed of Frederic Speidel and Eugen Speidel, Pforzheim, Germany. Filed July 18, 1929. Serial No. 379,220. 6 Claims. (Cl. 59—80.)



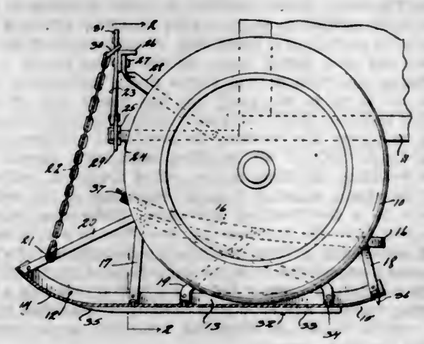
1. In a sheet metal chain band two spaced series of connected link members along opposite margins of the band and a series of spacing cross bars loosely connected at their ends to the links of each of said spaced series of links, said links extending along opposite surfaces of said cross bars.

1,810,041. METALLIC INGOT. EMIL GATHMANN, Baltimore, Md. Filed Nov. 7, 1930. Serial No. 494,108. 5 Claims. (Cl. 22—218.)



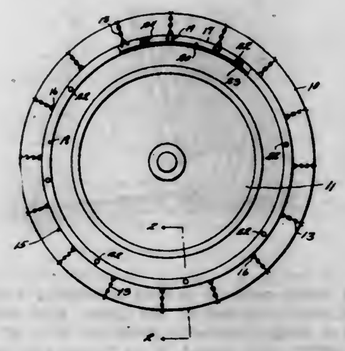
1. A metallic ingot having two oppositely disposed sides each of which includes more than two connected outwardly-arched portions, only two of which are initially roll-contacting.

1,810,042. SNOW RUNNER. AUGUST GERTH, Deuel County, S. Dak. Filed Apr. 19, 1930. Serial No. 445,689. 3 Claims. (Cl. 280—13.)



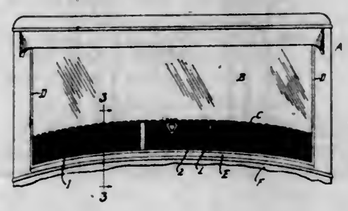
1. A snow runner of the character described comprising a shoe, a U-shaped tire engaging member, bracing means for mounting said tire engaging member on the shoe, anti-slipping means mounted on the lower surface of the shoe, and means carried by the shoe for facilitating placement or displacement of the shoe from the wheel, said latter means projecting downwardly from said shoe and being normally out of engagement with the ground.

1,810,043. TRACTION ATTACHMENT FOR VEHICLE WHEELS. AUGUST GERTH, Hidewood Township, Deuel County, S. Dak. Filed Apr. 19, 1930. Serial No. 445,690. 2 Claims. (Cl. 152—14.)



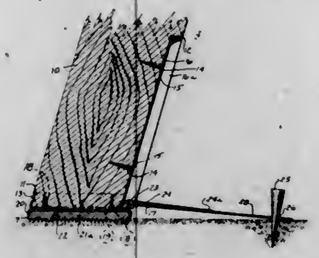
1. A traction device of the character described comprising in combination with an anti-skid chain, a cylindrical member, a pair of L shaped side members secured to the opposite ends of said cylindrical member, one of said side members having a plurality of spaced apertures therethrough adapted for engagement with the cross chains of the anti-skid chain, said cylindrical member having a plurality of raised portions in the periphery thereof and means extending transversely of said cylindrical member and engaging said side members for maintaining one leg of said side members in vertical position.

1,810,044. SCREEN FOR WINDSHIELDS. FRANK REID HARRIS, Jr., St. Louis, Mo. Filed June 11, 1930. Serial No. 460,401. 3 Claims. (Cl. 296—94.)



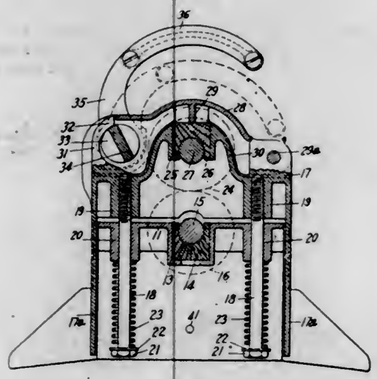
3. In combination with a motor vehicle body having a vertically slidable windshield and provided with a transversely arranged member at the lower portion of the windshield support and a dash board element spaced with respect to said transverse member to provide a ventilating space wherein members are arranged which support said dash board element, a screen, with respect to which said windshield is movable, for guarding the space beneath the windshield of the motor vehicle body when said windshield is elevated, the lower portion of said screen being located within said ventilating space and said screen being supported at all times by said supporting members within said ventilating space and having its upper edge in contact with the windshield, said motor vehicle body including a sealing member with respect to which the lower edge portion of the windshield is moved when same is moved to its closed position, and said dash board element having a screen contacting portion associated therewith, said sealing member and said screen contacting portion of said dash board element being arranged in contact with opposite sides of the screen at points above the lower edge thereof for siding in the rigid support thereof.

1,810,045. SAFETY SHOE FOR LADDERS. JOHN HEINIGER, Cleveland, Ohio. Filed July 18, 1930. Serial No. 468,782. 3 Claims. (Cl. 228—61.)



1. A safety shoe for ladders comprising a fixture attached under the foot of the ladder stile, said fixture having a flanged extension along one edge of the stile, and a safety plate hinged to the fixture and foldable between the flanges thereof.

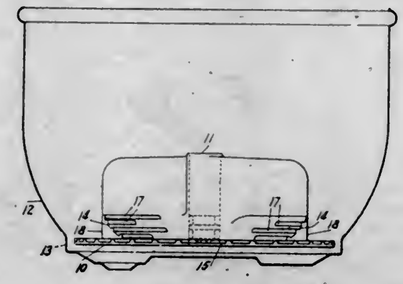
1,810,046. CLOTHES WRINGER. LOVELL A. HERSH, Dayton, Ohio, assignor to Harry Bohn, Dayton, Ohio. Filed June 27, 1929. Serial No. 374,065. 20 Claims. (Cl. 68—32.)



1. In a clothes wringer, a normally stationary support, a roller carried by said support, a second support mounted for movement toward and from said stationary support, means to yieldably resist the movement of said movable support from said stationary support, a roller mounted for bodily movement with relation to said movable support, a device to hold the last mentioned roller normally against bodily movement with relation to said movable support, and means operable with relation to said device to release said last mentioned roller for bodily movement with relation to said movable support.

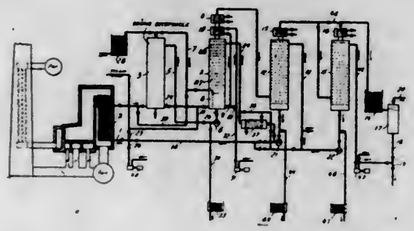
1,810,047. AGITATOR FOR CLOTHES WASHING MACHINES AND THE LIKE. LOVELL A. HERSH, Dayton, Ohio, assignor to Harry Bohn, Dayton, Ohio. Filed Aug. 16, 1929. Serial No. 386,370. 8 Claims. (Cl. 259—101.)

1. In an agitator, a base having a central hub rising above the same, and a plurality of blades extending from said hub toward the peripheral edge of said base, those parts of said base which lie between the adjacent sides of said blades each having a substantially flat central portion and having its end portions sloped gradually



upwardly from said central portion toward the respective blades to provide scrubbing surfaces on the adjacent sides of said blades.

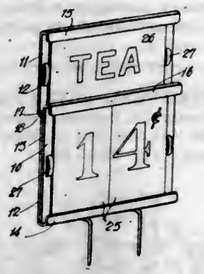
1,810,048. ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Mar. 7, 1929. Serial No. 345,199. 11 Claims. (Cl. 196—61.)



1. In a combined vapor phase cracking and coking operation, the improvement which comprises subjecting oil stock having a carbon residue content as determined by the U. G. I. gas oil distillation test not exceeding about 0.3% to a vapor phase cracking operation, subjecting a liquid oil mixture to a coking operation in which said oil mixture is coked by direct heat exchange with the hot vapor mixture from the vapor phase cracking operation, discharging the hot vapor mixture from the coking operation into and beneath the surface of a liquid body of oil maintained in the lower end of a baffled tower subjecting the vapors to a refluxing operation in said baffled tower, introducing the raw oil stock to be coked into the lower end of the baffled tower to mingle with said liquid body of oil therein and supplying the resulting composite oil mixture from said liquid body of oil including condensate formed in said refluxing operation to the coking operation, subjecting the vapors escaping from the upper end of the baffled tower to a fractionating operation, discharging vapors escaping from the fractionating operation to a condenser and condensing a distillate product therein, introducing condensate separated from the vapors in the fractionating operation into the upper end of the baffled tower as a refluxing medium, and supplying condensate separated from the vapors in the fractionating operation to the vapor phase cracking operation.

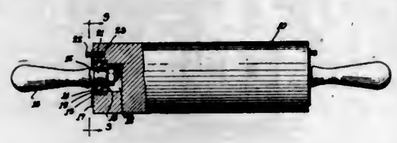
1,810,049. PRICE TICKET HOLDER. LEO HOPP, New York, N. Y., assignor of one-half to George Hopp and one-half to Harriet Gold, New York, N. Y. Filed Apr. 15, 1930. Serial No. 444,471. 6 Claims. (Cl. 40—5.)

1. A device of the character described comprising two members secured together in overlying relation, a plurality of ticket retaining flanges formed on one of said members, a single ticket retaining flange formed on the



other of said members and an off-set formed in one of said members coacting with a portion of the other member to form a space to receive an edge of a ticket.

1,810,050. ROLLING PIN. GUSTAVE KLEMPP, Glenwood, Iowa. Filed Aug. 20, 1930. Serial No. 476,570. 3 Claims. (Cl. 7—50.)



3. A rolling-pin comprising a cylindrical roller having chambered ends, a housing for a roller bearing in each end chamber, handles, spindles formed with said handles in said roller bearings, extending into said chamber, nuts on the threaded ends of said spindles in said chamber engaging washers, flanged plates provided with arcuate slots closing the outer ends of said housings, screw bolts adjustable in said arcuate slots, threaded members formed in the roller into which the inner ends of said screw bolts engage, and outer heads on said bolts.

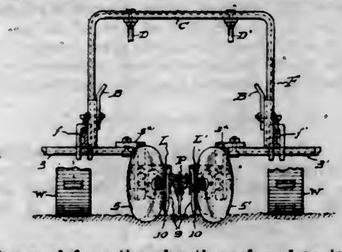
1,810,051. RAILROAD CROSSING GATE. OBED O. LEES and THOMAS J. FINN, Columbus, Ohio, said Lees assignor to said Finn; Ella S. Dailey executrix of said Thomas J. Finn, deceased. Filed July 14, 1930. Serial No. 467,915. 3 Claims. (Cl. 39—7.)



1. A grade crossing gate of the character described comprising a revolvable stand, a swingable gate bar mounted on the stand, a shaft mounted within the stand, a governor on the shaft, a connection between the governor and the gate bar, and a motor for operating the shaft.

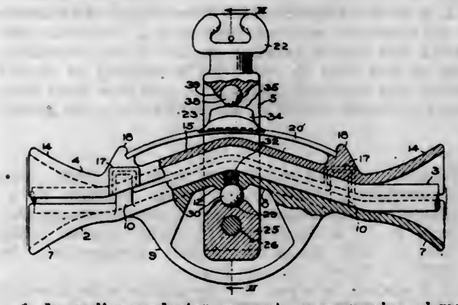
1,810,052. LEAF GUARD FOR DISK CULTIVATORS. JOSEPH MADER, Philadelphia, Pa., assignor to S. L. Allen & Co., Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1930. Serial No. 489,037. 5 Claims. (Cl. 97—192.)

1. In combination with a cultivator comprising a cultivating disk and a bracket operative to support said disk, a leaf guard carried by said bracket and having an arm extending horizontally adjacent one face of said disk to



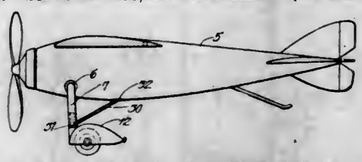
a point spaced from the edge thereof, and an integral depending leg disposed adjacent the opposite face of the disk in spaced relation thereto.

1,810,053. SUSPENSION CLAMP. FREDERIC H. MILLER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 19, 1927. Serial No. 234,374. 8 Claims. (Cl. 248—31.)



1. In a line-conductor support, a suspension element having a portion of substantially loop-shape, an elongated conductor-receiving element extending through, and supported by, the loop portion in relatively movable relation thereto, adjacent to the bottom thereof, said conductor-receiving element being arched at its mid portion, and bearing means between said elements beneath, and adjacent to, the crown of said arched portion.

1,810,054. LANDING GEAR FOR AEROPLANES. WALDEMAR MILLER, New York, N. Y. Filed Jan. 6, 1931. Serial No. 506,998. 2 Claims. (Cl. 244—2.)



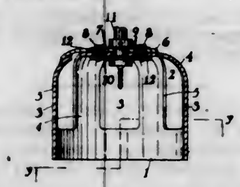
1. In a landing gear for aeroplanes, tubular members depending from the body of the plane, a plurality of landing wheels, a hood partially enclosing each of said wheels, means carried by each hood and projecting into said tubular members for pivotally mounting said hoods and wheels, and means connecting said hoods for causing said wheels to operate in unison.

1,810,055. METHOD OF RECIPROCAL ACTION BETWEEN GASES AND FINELY SUBDIVIDED MATERIALS. GEORG MÜLLER, Frankfort-on-the-Main, and JOHANNES JAENICKE, Cronberg, near Frankfort-on-the-Main, Germany. Filed Mar. 20, 1928, Serial No. 263,222, and in Germany Feb. 9, 1927. 6 Claims. (Cl. 183—4.)

1. Process of interacting a stream of gas and a finely divided substance suspended therein in a confined reaction

space by so adjusting the velocity of the gas stream that the relative position of the general mass of finely divided substance in the confined space does not substantially change either in the direction of flow of the gas stream or in the opposite direction wherein after completion of the reaction the finely divided substance is removed from the reaction space by increasing the velocity of the gas stream.

1,810,056. ROTOR FOR ASYNCHRONOUS ALTERNATING CURRENT MOTORS. HERMANN PAPST, St. Georgen, Schwarzwald, Germany. Filed Sept. 29, 1930, Serial No. 485,164, and in Germany Oct. 5, 1929. 4 Claims. (Cl. 172—120.)

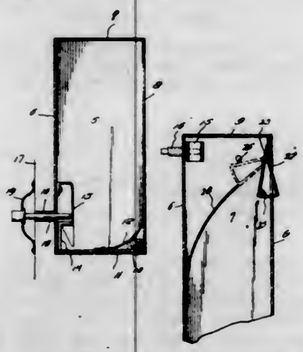


1. A rotor for asynchronous alternating current motors of the character described, comprising a cylindrical body having slits therein arranged parallel to the longitudinal axis of said body to constitute a plurality of equally spaced bars separated by the slits, said bars being alternately connected in parallel with each other in two groups.

1,810,057. SOLUBLE TUBE FOR DYEING AND BLEACHING. WILLIAM N. PHARR, Concord, N. C., assignor of two-thirds to Hartsell Mills Company, Concord, N. C., a Corporation of North Carolina. Filed Nov. 14, 1929, Serial No. 407,283. Renewed Apr. 24, 1931. 6 Claims. (Cl. 8—19.)

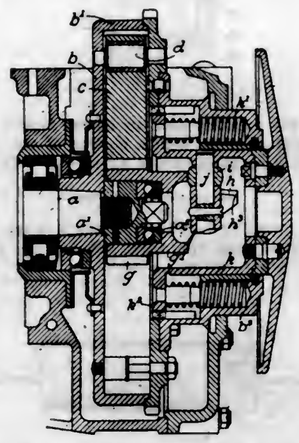
1. A support for a yarn package soluble in the bleaching and dyeing fluids to which the yarn is subjected, and comprised of an ingredient which will act as a retarder for the dye.

1,810,058. MAIL BOX. DAVID QUINN, Eau Claire, Wis. Filed July 14, 1928. Serial No. 292,822. 1 Claim. (Cl. 232—23.)



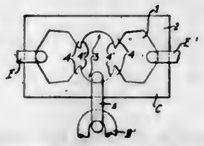
A mail box having a spring actuated door, an L-shaped extension disposed adjacent the free edge of the door, a spring catch having a lateral end portion anchored to one wall of the box and having a free and portion disposed in spaced parallelism to said one wall and provided with means engageable with said L-shaped extension for normally retaining the door in a closed position, a plunger slidable through said one wall of the box and having its inner end normally spaced from the last referred to end portion of said spring catch, a spring secured intermediate its ends to the outer end of said plunger, said spring having opposite end portions fixed to a suitable support remote from said one wall of the mail box, and having at its intermediate portion normally flexed outwardly from the support for normally urging said plunger in a direction away from said last mentioned end portion of said spring catch.

1,810,059. CENTRIFUGAL GOVERNOR MECHANISM. JOHN HOGG ROBERTSON, London, England. Filed Dec. 2, 1929, Serial No. 411,094, and in Great Britain Dec. 19, 1928. 6 Claims. (Cl. 264—16.)



1. A centrifugal governor mechanism, comprising a rotary shaft, a supporting member secured upon said shaft, a plurality of eccentrically weighted levers pivoted upon said supporting member, each of said levers including a toothed segment concentric with the respective pivot, a toothed pinion meshing with the toothed segments of said levers, a rotatable sleeve mounted coaxially of said shaft, said toothed pinion being fast with said sleeve, a member driven by said shaft and slidable axially in relation thereto, a helical cam device adapted to produce axial displacement of said slidable member, and an outer sleeve enclosing said helical member and carrying said slidable member, said outer sleeve including an externally toothed flange and said supporting member including a correspondingly toothed interior surface meshing with said flange for positive drive of said slidable member.

1,810,060. BRACELET AND LINKS THEREFOR. OLIVER SELLE, St. Louis, Mo. Filed Aug. 18, 1930. Serial No. 476,018. 4 Claims. (Cl. 63—4.)

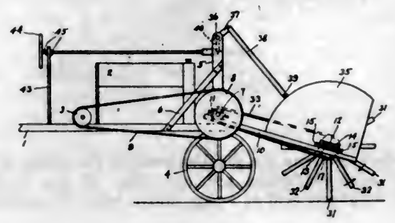


1. In combination, a link for a bracelet or the like comprising a member having a cut-out inner portion, an element associated with said link by being extended through said cut-out portion, and abutments for limiting movement of said element longitudinally of said link.

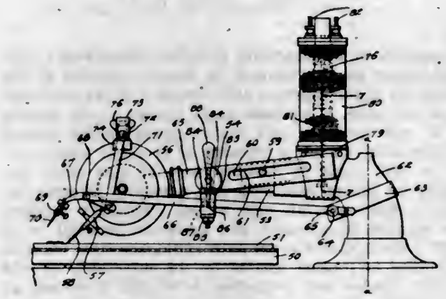
1,810,061. STALK AND WEED CUTTER. ANGUS D. SIMS and ARCH C. WRIGHT, Quitman, Miss. Filed Oct. 14, 1930. Serial No. 488,652. 5 Claims. (Cl. 55—61.)

1. A stalk and weed cutter of the character described comprising a supporting structure, a transverse stationary

shaft mounted on the supporting structure, brackets fixed on the shaft, a rotary shaft journaled on each bracket, gears fixed on the end portions of each of the rotary shafts, annular internal gears rotatably mounted on the stationary shaft outwardly of each bracket, the annular gears being operatively engaged with one of the gears on the adjacent rotary shafts, sprocket gears fixed on the annular gears, disks rotatably mounted on the stationary shaft inwardly of the brackets, gears fixed on the disks and engaged with the other of the gears on the rotary shafts for actuation thereby in a direction opposite to the direction of rotation of the annular gears, a series of outer cutters rigidly secured, at their ends, to the annular gears and radiating therefrom, a series of inner cutters rigidly secured, at their opposite ends, to the disks, and means connected with the sprocket gears for rotating the annular gears.



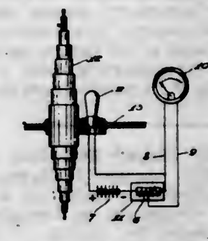
1,810,062. SYNCHRONIZING MECHANISM FOR COMBINED TALKING AND MOVING PICTURE MACHINES. ELMER R. TAYLOR, East Jordan, Mich.; Jerusha Ruth Taylor administratrix of said Elmer R. Taylor, deceased. Filed Jan. 7, 1928. Serial No. 245,194. 14 Claims. (Cl. 88—16.2.)



12. A mechanism for operating phonographs in synchronized relation to a moving picture film including electro-magnetically operated means for raising the stylus of a phonograph sound box from a sound record and holding it raised while the electro-magnetically operated means is energized, and means operating in correapondence with and controlled by the film operating mechanism acting to intermittently open and close the circuit of said means.

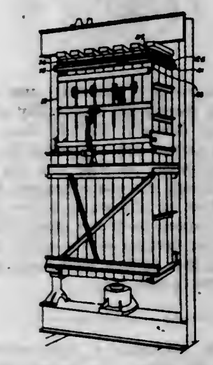
1,810,063. CONDENSER-BUSHING VOLTAGE CONTROL. PHILLIPS THOMAS, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 13, 1929. Serial No. 370,689. 3 Claims. (Cl. 171—95.)

1. The combination with a condenser bushing, a conducting tank supporting said bushing, and a controlled device, of means for affecting said controlled device in accordance with the potential impressed on said bushing,



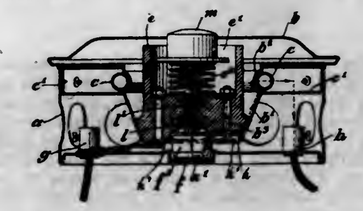
including a two-element electronic device disposed in the electrostatic field between said condenser bushing and said tank and in circuit relation with said controlled device.

1,810,064. COTTON PRESS. JEFFREY JOHN WALLACE, Amite, La., assignor to Gullett Gin Company, Amite, La., a Corporation of Louisiana. Filed July 5, 1929. Serial No. 376,172. 4 Claims. (Cl. 100—19.)



1. In a press box for cotton having collapsible sides, means for retaining said sides in assembled position, supporting members secured to opposite sides of said box, a plate and rollers, slidably mounted in each of said supporting members, said plate having an inclined plane on one end to engage one of said rollers and a straight plane surface on the opposite end to engage another of said rollers.

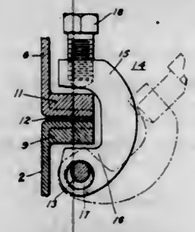
1,810,065. ELECTRIC CIGAR-LIGHTER. HEINZ AGATZ, Berlin-Adlershof, Germany. Filed Oct. 17, 1927, Serial No. 226,742, and in Germany Oct. 19, 1926. 3 Claims. (Cl. 219—32.)



1. An electric cigar lighter including a hollow junction box open at the upper end, springs defining the open end of the box, an igniter carrier having a conical portion to project within the junction box, said carrier at the upper terminal of the conical portion being formed to interfit with the springs to hold the carrier within the box against casual displacement, a refractory body arranged in the carrier, a resistance element adapted to become in-

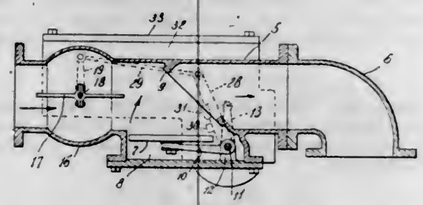
candescent under the passage of an electric current carried by and projecting beyond the refractory body, a push-button operative through the carrier, and a circuit for the resistance element including a member secured to the refractory body and normally in non-circuit closing position, said member being in the plane of movement of the push-button and being adapted to move to a circuiting position in operation of the button in one direction.

1,810,066. HINGED CLAMP FOR GAS OR LIQUID-PROOF HOUSINGS. ANDREW H. BAKKEN, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 6, 1928. Serial No. 317,623. 7 Claims. (Cl. 220—55.)



1. A housing comprising a receptacle and a cover, a rod associated with the receptacle, a plurality of clamps having holes of greater diameter therein than that of said rod by which said clamps are supported to permit angular and lateral movement on said rod, an extension on each end of each clamp, the one extension having an engaging face, the other an adjustable screw, said face and said screw being adapted to clamp said cover to said receptacle, whereby the turning of the screw is adapted to draw said engaging face against said housing without applying a lateral force to said rod.

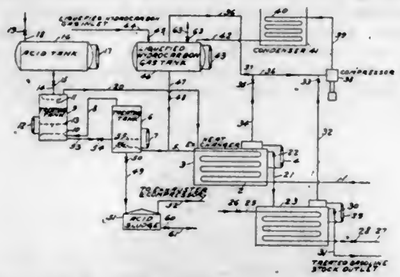
1,810,067. VALVE. CHARLES F. BECKWITH, New York, N. Y., assignor, by direct and mesne assignments, to Aqua Systems Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1929. Serial No. 344,720. 11 Claims. (Cl. 137—68.)



1. Valve mechanism comprising the combination of a housing, a main valve mounted at one side of the housing normally lying out of the path of flow, a valve seat lying across the path of flow, means for swinging the valve into the path of flow whereupon the pressure of the fluid seats it, an auxiliary valve for checking the flow and thus reducing the valve-closing pressure, and means for moving the auxiliary valve across the path of flow before the main valve is seated.

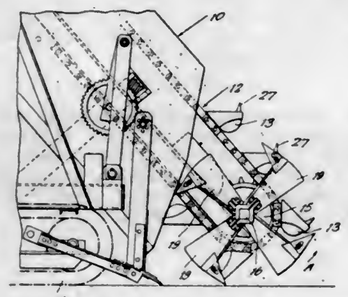
1,810,068. PROCESS OF TREATING HYDROCARBON OILS. JOHN C. BLACK, Los Angeles, and MARVIN L. CHAPPELL, Watson, Calif. Filed Jan. 31, 1928. Serial No. 250,864. 17 Claims. (Cl. 196—31.)

11. A method of separating unstable, unsaturated hydrocarbons from gasoline stock containing the same, comprising, subjecting the gasoline stock containing not less than 10 per cent liquefied hydrocarbon gases having boil-



ing points less than the gasoline stock to the action of sulphuric acid containing not less than 76 per cent by weight sulphuric acid at temperatures below 32 degrees F.

1,810,069. WAGON LOADER. WILLIAM H. BOSWORTH, Yonkers, N. Y., assignor to George Haiss Manufacturing Co. Inc., New York, N. Y., a Corporation of New York. Filed Oct. 24, 1929. Serial No. 402,166. 1 Claim. (Cl. 37—190.)



A machine of the character described comprising a conveyor having buckets adapted to receive material at the pick-up end of the conveyor and elevate it to the discharge end of the same, a rotatable shaft located at the pick-up end of said conveyor and projecting outwardly beyond opposite sides thereof, a plurality of propeller blades carried by said shaft at opposite ends of said shaft and adapted to impart forwardly and upwardly directed impacts to the material, and having oppositely inclined faces adapted to act upon and move the material to be loaded toward and into the path of the conveyor buckets, a plurality of tongues carried by the outer ends of said propeller blades and projecting forwardly therefrom at the forward edges thereof, and a plurality of digging elements associated with said tongues and projecting forwardly from said propeller blades, said digging elements being tapered forwardly and terminating in entering edges located in advance of the respective propeller blades.

1,810,070. PREPARATION OF COKED AGGLOMERATES. EARL HAMLIN BUNCE, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 15, 1928. Serial No. 319,735. 7 Claims. (Cl. 75—65.)

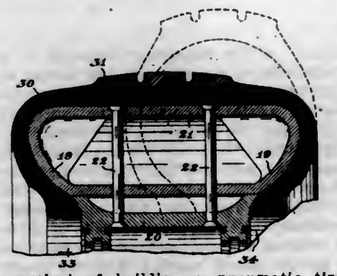
1. The method of preparing coke agglomerates of finely divided zinciferous material and carbonaceous material which comprises subjecting the zinciferous material to a sintering operation, intimately mixing the sintered zinciferous material with the carboneacous material, forming the resulting mixture into agglomerates, and subjecting the agglomerates to a coking operation.

1,810,071. FUSIBLE ELEMENT FOR ELECTRIC FIXTURE SOCKETS. JOHN CIOTTA, New York, N. Y. Filed Apr. 16, 1929. Serial No. 355,450. 2 Claims. (Cl. 200—113.)



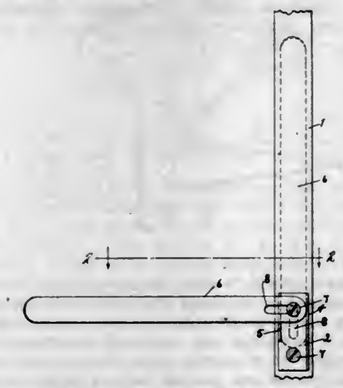
1. In a fusible element for electric fixture sockets, a disk of non-conducting material having a centrally disposed opening and a plurality of openings disposed between the central opening and the outer peripheral edge of the disk, said disk adapted for insertion in the fixture socket, metallic plates detachably secured on opposite sides of the disk over the central opening, angular tongues formed integrally on the peripheral edge of each plate and projecting into the second named openings and a fusible metallic strip extending through the central opening and having its opposite ends in contact with the plates, and fastening elements passing through the plates and ends of said fusible metallic strip and into said disk.

1,810,072. PNEUMATIC TIRE AND METHOD OF AND APPARATUS FOR BUILDING THE SAME. HAROLD A. DENMIRE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 4, 1926. Serial No. 139,486. 6 Claims. (Cl. 154—14.)



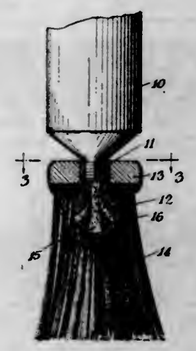
1. The method of building a pneumatic tire casing that consists in building up the carcass with a flattened crown of materially reduced external diameter and with side walls in the reinforced zone of the bead of substantially normal size and shape, and subsequently placing the tire carcass in a mold and bringing the carcass to normal form by materially increasing the diameter of the crown portion of the carcass.

1,810,073. DRAPERY HOLDBACK. FRANK THURSTON EVANS, Cambridge, Mass. Filed Apr. 9, 1930. Serial No. 442,841. 1 Claim. (Cl. 156—33.)



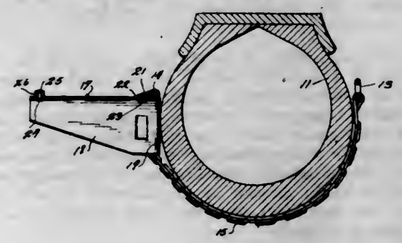
The combination in a drapery holdback comprising a stationary supporting member, holes formed in the ends of said member, one of its edges being bent outwardly at right angle throughout its length, the other edge having a narrow portion bent outwardly at right angle and located half way between the holes, a movable member having a longitudinal slot in one of its ends, a pivot to rotatively secure the member to the stationary member in such manner that the movable member will be positively locked against lateral movement when in a vertical position and against lateral downward movement when in a horizontal position.

1,810,074. LATHERING BRUSH. HANS FRIEDLANDER, New York, N. Y. Filed Apr. 14, 1930. Serial No. 443,985. 1 Claim. (Cl. 15—135.)



In a device of the character described, a brush head, a distributing nozzle formed with said head in substantially the center thereof, and provided with a neck part having an inner thread to allow the attachment of the brush to the threaded nipple of a shaving cream tube, said distributing nozzle having a larger central channel formed therein with a restricted central diameter, and branch channels branching off from said central channel to ensure an even and uniform distribution of the cream pressed from the tube into the brush.

1,810,075. LUG FOR WHEEL CHAINS. AUGUST GERTH, Hidewood Township, Deuel County, S. Dak. Filed Apr. 19, 1930. Serial No. 445,691. 5 Claims. (Cl. 152—14.)



3. In combination with an anti-skid chain having a plurality of spaced cross chains, a plurality of radially disposed outstanding traction lugs, means for securing said traction lugs to said cross chains, a bracing member integrally formed with said traction lug, means for securing said bracing member to a side chain, and a circumferentially disposed bracing member secured to each of said first bracing members.

1,810,076. STIFFENING FABRIC FOR WEARING APPAREL. CURT HINSEL, Forst, Germany. Filed June 28, 1928, Serial No. 289,084, and in Germany Sept. 5, 1927. 3 Claims. (Cl. 139—427.)

1. For use in wearing apparel, a stiffening interlining comprising a ground fabric of hair yarn equally stiff and

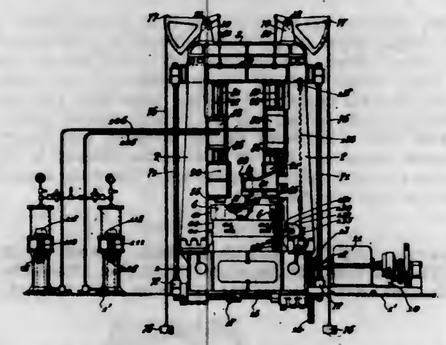
elastic in a warp as well as in weft, modified by a replacement of threads, in equal and definite spacing in warp as well as in weft, by threads of other kinds.

1,810,077. CLIP, CLASP, AND LIKE FASTENING FOR NECKTIES. HEINRICH HENGSTLER, Oberwinterthur, Switzerland. Filed Dec. 11, 1929, Serial No. 413,263, and in Germany Apr. 20, 1929. 1 Claim. (Cl. 24—49.)



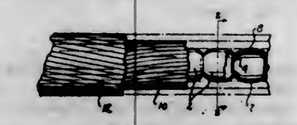
In a clip device for a necktie, of the kind set forth, the combination of: a longitudinally slitted sheath, and a resilient clamping member hinged to said sheath and curved inwardly towards the interior of the latter in such manner that when it is in the closed position the tie is clamped between the inner wall of said sheath and said clamping member, substantially as and for the purpose specified.

1,810,078. APPARATUS FOR AND METHOD OF MAKING BRICKS. GEORGE SCOTT HOUSMAN, Norristown, Pa., assignor to E. J. Lavino and Company, Philadelphia, Pa., a Corporation of Delaware. Filed Jan. 21, 1928. Serial No. 248,296. 28 Claims. (Cl. 25—66.)



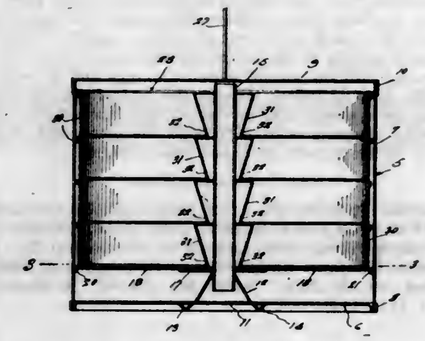
1. In an apparatus of the character described, the combination of a movable member having mold cavities located at intervals therein in which bricks are adapted to be molded, means for effecting movement of said member at intervals, a plunger for subjecting the material in a mold cavity to a preliminary pressure of predetermined amount, and means for thereafter applying final pressure of predetermined amount to the material in said mold cavity, the said final pressure being greater than the preliminary pressure.

1,810,079. ELECTRIC CONDUCTOR. HERBERT C. JENNISON, Bridgeport, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 1, 1924. Serial No. 740,922. 2 Claims. (Cl. 173—13.)



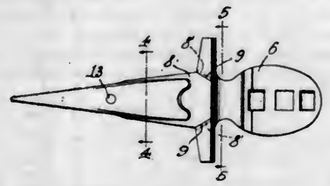
1. In a conducting cable, the combination of a series of cups constituting a supporting means comprising a plurality of diaphragms and round contacting conductors spirally wound about said supporting means, the several cups having on their sides longitudinally extending surfaces alining the cups within the spirally wound conductors, and adjacent end portions of adjacent cups being suitably nested so as to form ball and socket joints between them.

1,810,080. OYSTER RECEPTACLE. GEORGE A. KEGEL, Lancaster, Pa. Filed Aug. 31, 1929. Serial No. 389,753. 3 Claims. (Cl. 220—20.)



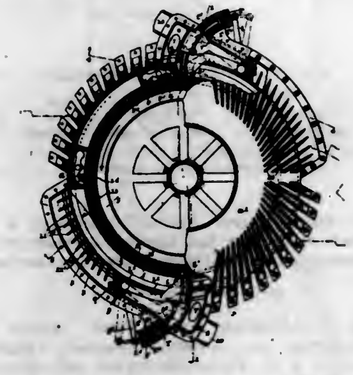
1. A device of the character described, a receptacle having a removable cover, and side and bottom walls, said bottom wall having an opening therein, a hollow upstanding supporting member secured to the inner face of the bottom wall about the opening, a tube secured within the hollow support member at its lower end and terminating at its upper end adjacent the upper edges of the side wall of the receptacle, a plurality of trays having central apertures disposed about the tube and stacked one on top of the other, means on the side walls of the receptacle in spaced relation thereto, each of said trays having upstanding hollow alined spacing members secured about the central aperture and circumposed about the tubes for providing support at the centers of the stacked trays, said spacing members having openings therein to carry off water from the superjacent tray, and a plurality of openings in the side wall of the receptacle below the lowermost tray to permit the water to escape from the receptacle, said bottom wall inset and having a pair of spacing ribs on the under side of the bottom wall adjacent the opening for resting upon the supporting surface to prevent the bottom wall from bulging under weight.

1,810,081. MOWER GUARD. CHARLES L. KUCHA, Artesian, S. Dak. Filed Oct. 11, 1927. Serial No. 225,558. 1 Claim. (Cl. 56—311.)



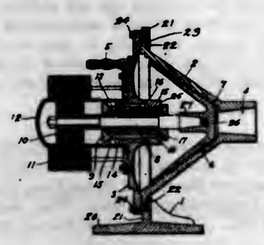
In a mower guard, a body portion having undercut shoulders formed adjacent to the inner end thereof, a ledger plate having beveled edges at the rear end thereof and adapted to engage the undercut shoulders to secure the ledger plate on the body portion, said ledger plate having a cut out portion formed in the forward edge thereof, said body portion having a tapered opening extending vertically therethrough and registering with the cut out portion of the ledger plate, and a tapered pin positioned in the opening and engaging within the cut out portion of the ledger plate for forcing the inclined edges of the ledger plate into close engagement with the undercut shoulders of the body portion.

1,810,082. ROTARY EXPLOSION ENGINE. FREDERICK B. MARVIN, Matamoras, Pa. Filed Dec. 19, 1925. Serial No. 76,385. 8 Claims. (Cl. 123—15.)



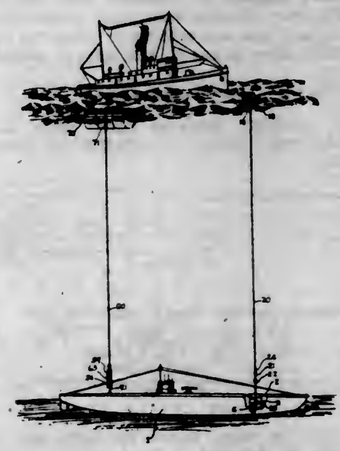
1. A rotary machine substantially as herein set forth including, in combination, rotor and stator elements forming one a piston and the other a circular cylinder and one having a head interrupting the continuity of the cylinder space, an abutment coactive with said head to confine the charge and pivoted in the other element to move into and out of the way of said head, and electromagnetic means to move the abutment back and forth including an electric circuit and a source of energy therein, oppositely acting solenoid coils in the circuit, cores operatively connected with the abutment and respectively arranged to be moved by the coils, said coils and cores being curved to arcs concentric with the path of movement of said abutment, and means, controlled by the rotor, to switch the current to said coils alternately.

1,810,083. HIGH VACUUM MOLECULAR PUMP. ERNST HARALD NORINDER, Uppsala, Sweden. Filed Nov. 24, 1928, Serial No. 321,586, and in Sweden Nov. 30, 1927. 2 Claims. (Cl. 230—118.)



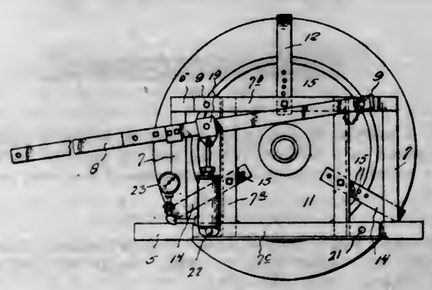
1. A vacuum pump of the molecular type comprising a support having floor-resting base and a ring portion disposed in a plane perpendicular thereto, said ring having a substantially rabbet groove at one side of its inner perimeter, a one-piece hollow substantially frusto-conical stator member having an outwardly-extending annular flange at its major-base end fitting said groove, the remainder of said member being at the side of said ring opposite said groove and including a hollow cylindrical inlet-port portion projecting from its minor-base end, a transverse wall member closing said major-base end and secured to said ring to hold said first member in position, said wall member having a central bearing opening and an outlet opening, a one-piece hollow substantially frusto-conical rotor member fitting said stator, said rotor having a closed minor-base end and a sleeve projecting inwardly therefrom, one of said frusto-conical members having a helical groove in a surface adjacent to the other of decreasing cross-sectional area from adjacent to its minor toward its major-base end, a shaft secured at one end in said sleeve and projecting through and beyond said central bearing opening, means supported by said wall member in its central opening for journalling and longitudinally adjusting said shaft, a rotatable electric motor armature at the other end of said shaft, a stator for the armature mounted on said support and an end-bell cover for sealing the armature from the atmosphere.

1,810,084. MARINE SALVAGE DEVICE. FRANK G. PRESTON, Tacoma, Wash., assignor of one-half to John N. Marker, Tacoma, Wash. Filed Apr. 22, 1929. Serial No. 357,065. 10 Claims. (Cl. 114—16.5.)



1. In a marine vessel, a housing, a buoy releasably and movably contained therein, means rendered active by inward depression of the buoy incident to external pressure thereagainst for ejecting the buoy from the housing, and a cable connection between the buoy and the housing.

1,810,085. BRAKE TESTING DEVICE. OSCAR F. RETTIG and CARL E. WEST, Watertown, Wis., assignors to Right-Way Brake Tester Company, Watertown, Wis., a Corporation of Wisconsin. Filed June 21, 1928. Serial No. 287,236. 4 Claims. (Cl. 265—1.)



1. In a brake testing device for vehicle wheels, an open frame, outwardly projecting hooks carried by the frame and adjustable radially of the wheel for gripping

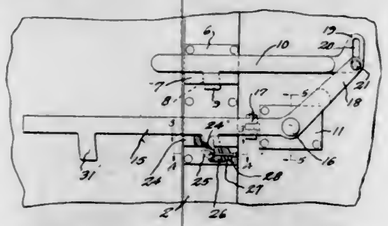
engagement with the wheel tire, a lever pivoted to the frame, a hydraulic compressor equipped with a pressure gage and connecting the lever and the frame, and means to pivotally connect the lever and the compressor to either end of the frame.

1,810,086. BALANCER. HARPER A. REYNOLDS, East Cleveland, Ohio, assignor to The H. N. White Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 10, 1929. Serial No. 361,989. 10 Claims. (Cl. 84—395.)



1. A balancer, as for use on trombones, and to be applied as to a brace connecting two tubes of said trombone, comprising: a base recessed to receive said brace; cover means adapted to cooperate with said base to clamp said brace therebetween; and cooperating screw-threads on said base and said cover means for releasably securing said cover means to said base in adjustable relation.

1,810,087. LATCH. BERNARD ROHE, Elgin, Ill. Filed July 22, 1930. Serial No. 469,736. 1 Claim. (Cl. 292—11.)



In a latch for doors, spaced apertured ears mounted at one side of the door, a lever pivoted to the door, having one end extending upwardly from the pivot point and provided with spaced ears, a second lever having a lateral extension at one end adapted to be arranged between the ears on the first lever, said extension having a slot, a pin carried by the first lever and movable in said slot, and downwardly projecting lugs on said levers adapted to be engaged with the spaced apertured ears for retaining said door in a closed position.

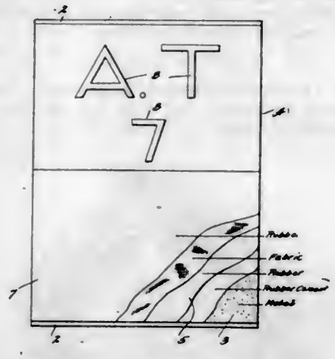
1,810,088. PRINTING PLATE MOLD. JULIUS SCHMUTZ, Louisville, Ky. Filed July 31, 1929. Serial No. 382,554. 13 Claims. (Cl. 101—401.1.)



1. A method consisting in the step of keying a plastic compound to a metallic backing and its opposite surface to a metallic border by the application of heat and pressure.

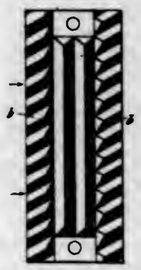
1,810,089. PRINTING PLATE. JULIUS SCHMUTZ, Louisville, Ky. Filed Sept. 3, 1929. Serial No. 390,087. 3 Claims. (Cl. 101—401.1.)

1. A method of producing a printing plate consisting in forming a resilient impression material with a design having a metallic backing formed with transverse lateral flanges treating the surface of said backing with a cleansing substance, applying a cementitious composition to said cleansed surface, covering the said cementitious



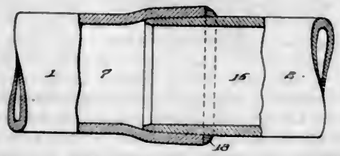
substance with a rubber material interposing a fabric intermediate the rubber and impression sheets and then homogeneously uniting the asembly by vulcanization.

1,810,090. FILTERING APPARATUS. WILLY SELL, Windelsbleiche, near Bielefeld, Germany, assignor to the Firm K. & Th. Möller Gesellschaft mit beschrankter Haftung, Brackwede, Westphalia, Germany. Filed May 23, 1929, Serial No. 365,464, and in Germany June 5, 1928. 9 Claims. (Cl. 183—8.)



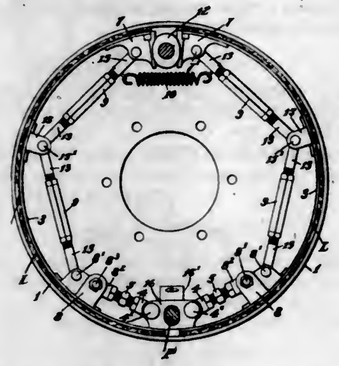
5. Air filtering apparatus of the type including baffles coated with a dust-collecting liquid, characted ized by the fact that said baffles include angularly-disposed portions constituting means for causing the air stream to take a zig zag course, and other portions constituting means for directing the air stream upwardly to separate from said air stream dust-collecting liquid entrained therein during the passage of said air stream along said zig-zag course.

1,810,091. JOINT FOR IRON AND STEEL PIPES AND TUBES. JACOB C. SIEGLE, Youngstown, Ohio, assignor to The Youngstown Sheet and Tube Company, Youngstown, Ohio, a Corporation of Ohio. Filed Sept. 5, 1928. Serial No. 304,095. 3 Claims. (Cl. 285—115.)



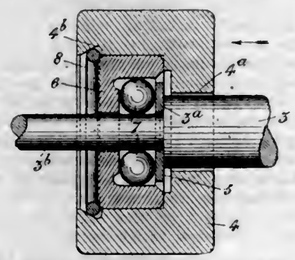
2. In a pipe joint, a pipe section having an exterior inwardly tapered zone of substantial width spaced from one of its ends and an inwardly curved and relatively shorter zone extending therefrom to the adjacent end of the section, a second pipe section having an integral bell at one end internally inwardly tapered from its extremity for a substantial distance and inwardly curved beyond said taper for a relatively shorter distance in correspondence with the taper and curvature of the first section and thus adapted to receive the end of the first section when the latter is inserted in the bell and form intimate contact therewith substantially throughout the tapered and curved zones thereof, and welding material disposed in the angle formed between the end of the bell and the peripheral surface of the first section and serving to permanently unite said sections.

1,810,092. INTERNAL EXPANSION BRAKE. GEORGE H. STONER, East Boston, Mass., assignor, by mesne assignments, to Stoner-Ames Brake Company, Inc., Boston, Mass., a Corporation of Massachusetts. Filed July 13, 1927. Serial No. 205,478. 8 Claims. (Cl. 188—78.)



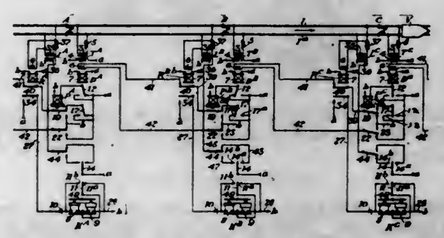
1. In a brake, a pair of shoe members having free cam contacting ends, an anchor pin set opposite thereto, a slotted member mounted on said pin and overlying the adjacent ends of the shoes in bearing relation thereto and adjustably connected thereto within the ends and radially movable upon the expansion of the shoes to contact the adjacent shoe ends.

1,810,093. BALL BEARING MOUNTING. WILLIAM TIMSON, Birmingham, England, assignor to W. & T. Avery Limited, Soho Foundry, Birmingham, England. Filed Jan. 29, 1929, Serial No. 335,066, and in Great Britain Feb. 8, 1928. 3 Claims. (Cl. 308—189.)



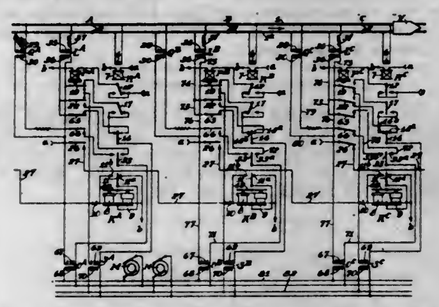
1. A ball bearing mounting for the shafts of weighing apparatus comprising a cup-shaped annular body member the open end whereof is outwardly disposed, an aperture in the closed end of the said member through which the shaft is adapted to pass, a cup-shaped bush member adapted to fit within the annular body member, the closed end of the said bush member being outwardly disposed, a hole in the closed end of the bush member permitting of the passage of the shaft therethrough, an abutment carried by the shaft and which is oppositely disposed relatively to the inner face of the bush member and a plurality of bearing balls adapted to be disposed concentrically about the shaft said balls being of a diameter such that the peripheries thereof contact simultaneously with the bush member, abutment and shaft at diametrically opposed points the lines joining which are either parallel to or at right angles to the axis of rotation of the shaft.

1,810,094. RAILWAY TRAFFIC CONTROLLING APPARATUS. HERBERT A. WALLACE, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 5, 1926, Serial No. 106,871. Renewed Aug. 3, 1929. 19 Claims. (Cl. 246—33.)



1. Railway traffic controlling apparatus comprising a stretch of railway track, a coding relay controlled by traffic conditions and comprising two normally open contacts arranged at times to be operated intermittently so that the contacts are closed for different intervals of time, and means controlled by said coding relay for supplying current to said stretch.

1,810,095. RAILWAY TRAFFIC CONTROLLING APPARATUS. HERBERT A. WALLACE, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed May 5, 1926, Serial No. 106,871. Divided and this application filed Aug. 5, 1929. Serial No. 383,731. 33 Claims. (Cl. 246—34.)

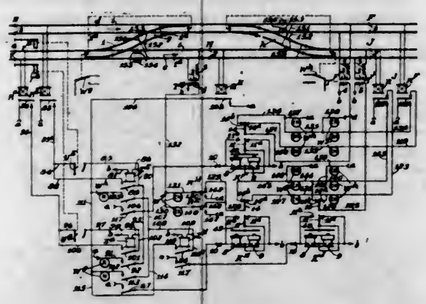


4. In combination, a stretch of railway track, means for normally supplying said stretch with one alternating current of one frequency, and means for at times periodically interrupting said one current and for supplying a second alternating current of a different frequency to said rails when said one current is interrupted.

1,810,096. RAILWAY TRAFFIC CONTROLLING APPARATUS. HERBERT A. WALLACE, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed May 5, 1926, Serial No. 106,871. Divided and this application filed Aug. 5, 1929. Serial No. 383,732. 15 Claims. (Cl. 246—34.)

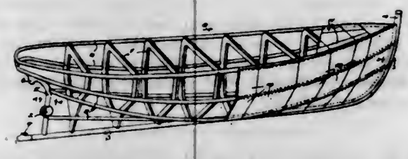
1. Railway traffic controlling apparatus comprising a stretch of railway track, a coding device controlled by

traffic conditions, and comprising two normally closed contacts arranged at times to be operated intermittently so that the contacts are open for different intervals of



time, a source of energy, and means for connecting said source with the rails of the stretch over a selected one of said contacts.

1,810,097. WELDED SHIP. EDWIN B. WHEELER, New London, Conn. Filed Nov. 28, 1928. Serial No. 322,321. 4 Claims. (Cl. 114—79.)



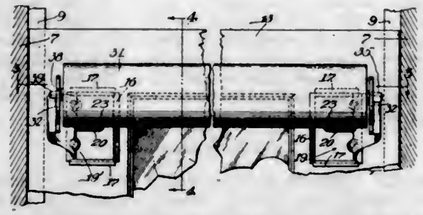
1. In combination in a hull construction for ships, a keel of circular cross-section comprising the stem of the hull, a plurality of transverse belt frames welded to the keel, longitudinal frame members shaped about the frames and welded thereto, said members being of circular shape, and covering plates having their edge portions seating upon the frame members and the keel and stem, said plates being welded to the frames and to the frame members and the keel and stem.

1,810,098. SEAMLESS HOSIERY AND PROCESS OF MANUFACTURING SAME. JOHN M. ALLEN, Toronto, Ontario, Canada, assignor to Scott & Williams Incorporated, New York, N. Y. Filed Mar. 5, 1929. Serial No. 344,192. 11 Claims. (Cl. 66—187.)



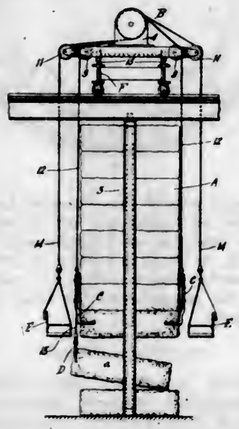
11. A knitted stocking having a narrowed and widened toe pocket and a gusset between the instep and the toe pocket having tapered ends, the shortest course of said gusset extending between the inner ends of the sutures of the toe pocket and the points of the gusset extending beyond the sutures, and a compensating segment of fabric interposed between and connecting the widened end of the toe pocket with the underside of the foot and being formed with tapered ends to meet the tapered ends of said gusset.

1,810,099. DETACHABLE VENTILATING SHADE BRACKET. GEORGE ANDERSON, Chicago, Ill. Filed May 29, 1924. Serial No. 716,722. 4 Claims. (Cl. 156—24.)



1. A support, a grooved slide fixed to said support and having stop projections extending from the face thereof, a shade supporting bracket slidable into said slide and having recesses formed therein to receive said projections and limit said sliding movement.

1,810,100. METHOD OF AND APPARATUS FOR STORING AND HANDLING COTTON BALES. CHARLES ALVIN BERTEL, New Orleans, La. Filed Jan. 6, 1928. Serial No. 244,800. 3 Claims. (Cl. 214—6.5.)

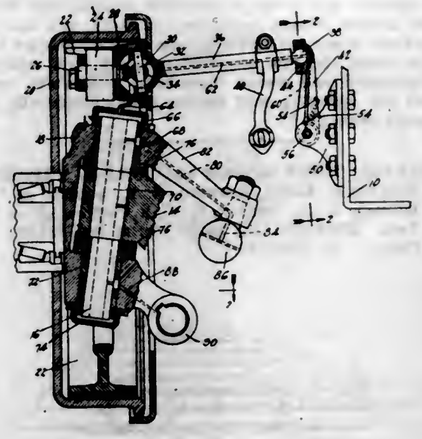


2. Apparatus for handling articles of like form and of considerable weight which are arranged in stacks each comprising a plurality of superimposed articles arranged in vertical alignment, including grippers adapted to be applied to the article above one selected for removal at opposite ends thereof, tongs adapted to be applied to the selected article at the end thereof which is adjacent the face of the stack across the plane of which the bale moves when it is removed from the stack, means for moving the grippers with the gripped article and the ones thereabove to a position clear of the article to be removed, and means for moving the tongs to a position which will remove the selected bale from its stack.

1,810,101. BRAKE MECHANISM. ADIEL Y. DODGE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Continuation in part of application Serial No. 43,953, filed July 16, 1925. This application filed Aug. 5, 1925. Serial No. 48,387. 7 Claims. (Cl. 188—194.)

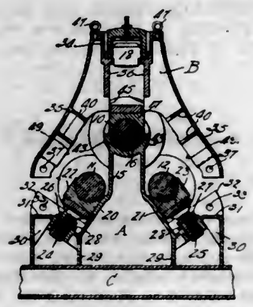
1. A vehicle having a spring-supported chassis frame and a brake on an unsprung part, and comprising, in combination with said parts, a brake-operating substantially horizontal shaft terminating adjacent the frame

in a ball end, a lever pivoted on the frame and having a socket receiving the ball end to form a universal joint,



the lever having a lubricant conduit emptying into the socket, and means carried by the bracket for introducing lubricant into the conduit.

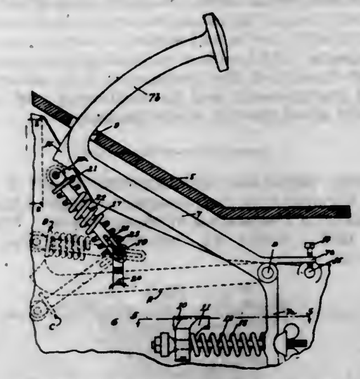
1,810,102. BEARING HOUSING FOR CANE MILLS OR THE LIKE. OTTO FABER, Kenmore, N. Y., assignor to The Geo. L. Squier Mfg. Co., Buffalo, N. Y. Filed Nov. 14, 1927. Serial No. 233,092. 14 Claims. (Cl. 100—47.)



2. A bearing housing for a cane mill or the like, including a pair of lower rolls and an upper roll, said bearing housing including a lower portion adapted to support the roll shafts in operative relation to each other, and an upper member secured to said lower member and serving to cooperate with said lower member to hold said roll shafts in operative relation to each other and having legs cooperating with the lower member to form guides along which the lower rolls may move toward and from the upper roll, and means by which the lower rolls may be adjusted along said guides.

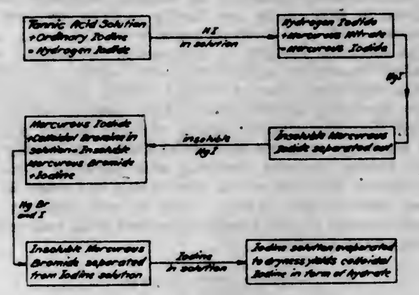
1,810,103. CLUTCH CONTROL DEVICE. CORNELL FLAGSTAD, Minneapolis, Minn. Filed Dec. 31, 1928. Serial No. 329,360. 6 Claims. (Cl. 192—99.)

1. In combination with a clutch lever, means associated therewith for alternately effecting retarding and assisting actions to the clutch engaging and disengaging movements thereof, said means comprising an oscillatable compression spring connected at one end to the lever and



at its other end to a stationary support at a point between the fulcrum of the lever and the arc defined by the swingable end of the spring.

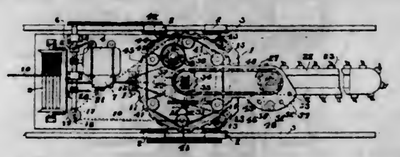
1,810,104. PREPARATION OF COLLOIDAL HALOGENS. ERNEST GOVETT, New York, N. Y., assignor to Govett, Ltd., New York, N. Y., a Corporation of New York. Filed Mar. 20, 1928. Serial No. 263,211. 14 Claims. (Cl. 23—216.)



1. In the process of preparing colloidal halogen, the steps which comprise reacting the halogen with a soluble organic acid, whereby a hydrogen halide is produced, and then effecting a metathetical reaction by adding a compound adapted to react with the said hydrogen halide, whereby an insoluble halide is formed.

12. As a new product, a colloidal, non-toxic halogen hydrate.

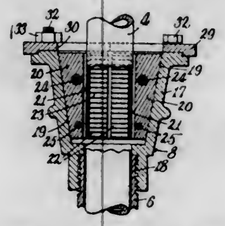
1,810,105. MINING MACHINE. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Oct. 29, 1917. Serial No. 199,053. Renewed Oct. 10, 1929. 25 Claims. (Cl. 262—28.)



1. In a mining apparatus, wheeled truck adapted to run along a mine trackway, a support mounted on said truck for adjustment bodily vertically rectilinearly relative thereto and for rotative movement about a vertical axis, kerf cutting mechanism on said support including

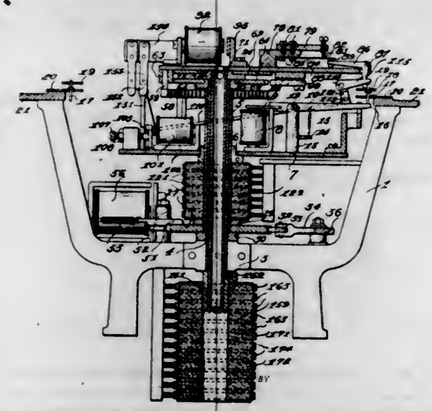
a pivoted cutter bar swingable about a parallel vertical axis and provided with cutting elements moving in an orbit within whose limits the pivot of said bar is disposed, and means, including motor operated devices for adjusting and rotating said support relative to said truck, for disposing said bar in transverse planes beneath the level of the top of the trackway with its pivot at one side of the trackway, and for positioning said bar substantially above the top of the trackway.

1,810,106. DRILLING APPARATUS. HARRY C. JOHANSEN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 31, 1927. Serial No. 243,907. 13 Claims. (Cl. 279—28.)



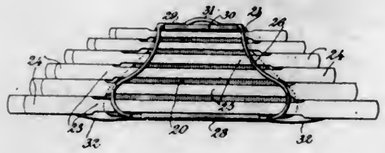
1. In a drilling apparatus, a chuck for locking a pair of telescopically arranged elements against relative rotative movement and against telescoping movement in one direction, said chuck comprising a casing having interior inclined surfaces, a plurality of gripping members loosely mounted in said casing and having inclined surfaces cooperating with said inclined surfaces in the casing, and means rotatable relative to said casing for locking said gripping members against removal while permitting limited movement thereof in said casing, said rotatable means including a rotatable locking member having a central irregular-shaped opening through which one of said telescopic elements extends and when in locking position having portions overlying said gripping members to maintain the same within said casing and when in released position said opening being of such shape as to permit removal of said gripping members from said casing through said opening.

1,810,107. STORAGE TRANSMITTER. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 5, 1929. Serial No. 330,540. 20 Claims. (Cl. 178—17.5.)



1. In a transmitter, a mechanical transmitting mechanism comprising a plurality of stationary mechanically operated members, arranged in groups, means for setting said mechanical members in each group in accordance with a code to the transmitter, means for moving said last mentioned means with respect to said mechanical members, to position said means in operative relation with successive groups of said mechanical members, and manually operated means for restoring any of said operated members before the code in accordance with their setting is transmitted and means comprising a separate remote unit for operating said setting means electrically connected thereto.

1,810,108. TOOLS IN SETS AND HOLDER THEREFOR. WILLARD C. KRESS, Kenmore, N. Y., assignor to J. H. Williams & Co., Buffalo, N. Y., a Corporation of New York. Filed Aug. 22, 1929. Serial No. 387,601. 10 Claims. (Cl. 206—16.)



1. A holder for a set of tools, said holder having a yielding wall adapted to serve as a take-up device, a second wall spaced therefrom between which and the yielding wall sets of tools of variable thickness may be held in close mutual contact, a third wall permanently connecting said spaced walls, and a tool-retaining element hinged to one of said walls and detachably engageable with the other.

1,810,109. COMBINED PENCIL AND CLIP. JOSEPH P. MCENERY, Flushing, N. Y. Filed Aug. 14, 1930. Serial No. 475,178. 7 Claims. (Cl. 120—84.)



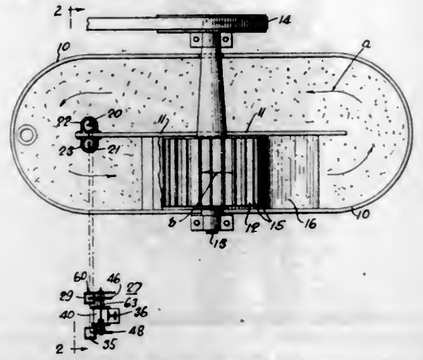
1. A device of the character described comprising a holder for a pencil or other article of similar shape, and a pair of clip members attached at their ends to said holder for movement relative to the holder, said clip members being adapted to clasp the plies of a folded article with a pencil interposed between the plies.

1,810,110. PENCIL HOLDER. JOSEPH P. MCENERY, Flushing, N. Y. Filed Dec. 30, 1930. Serial No. 505,539. 13 Claims. (Cl. 120—84.)



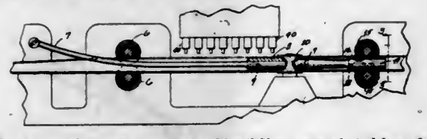
12. A device of the character described comprising a holder for a pencil or other implement of similar shape, a pair of clip arms pivotally attached thereto, a lug carried by each of said arms, and a pair of tongues struck out from said holder and extending into engagement with said lugs to maintain said arms under stress toward the axis of the holder.

1,810,111. CONSISTENCY RESPONSIVE DEVICE. SIDNEY E. MEYERS, Lockport, N. Y., assignor of one-half to Ericsson H. Merritt, Lockport, N. Y. Filed Nov. 12, 1928, Serial No. 318,676. Renewed July 15, 1930. 23 Claims. (Cl. 92—46.)



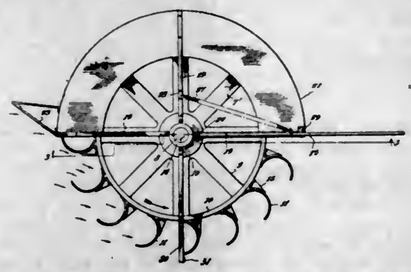
1. In condition-responsive devices, the combination comprising means adapted to indicate the hydraulic level in moving mediums at two successive points in the line of flow, and means responsive to the differential in said heights.

1,810,112. PROCESS FOR WELDING METAL TUBING. ERNEST RIEMENSCHNEIDER, Cleveland, Ohio, assignor to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 6, 1930. Serial No. 473,484. 4 Claims. (Cl. 219—10.)



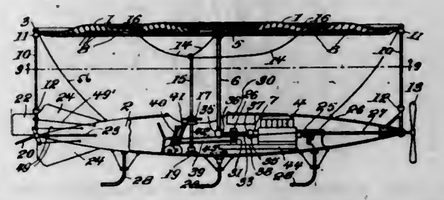
1. A continuous process of welding metal tubing from strip metal stock which consists of moving the strip along a given path, forming said strip into substantially tubular form with the original edges close to each other to form an open seam cleft while so moving and passing the edges of the seam of said strip through an elongated heating zone whereby the temperature of said edges is gradually increased to melting temperature and the edges melted for the full depth thereof and maintaining the molten metal of the edges in the molten condition and retaining it in the open seam cleft and supporting the under surface of the molten metal, to form a long narrow molten pool, whereby the metal is welded together along said seam.

1,810,113. WIND MOTOR. WALTER S. SCHLOTZHAUER, Douglas, Ariz. Filed Apr. 30, 1929. Serial No. 359,388. 3 Claims. (Cl. 170—15.)



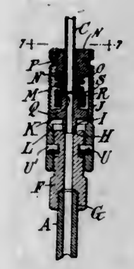
1. A wind motor including a vertical shaft, a horizontal wind wheel keyed to the shaft, a shield loose upon the shaft and enclosing a portion of the wind wheel, a vane mounted upon the shield and adapted to be acted upon by the wind to position the shield to hold the wind wheel in or out of the wind, and a manually controlled clutch having one member connected with the shield to rotate therewith and having the other member engaged with the shaft to turn therewith and movable toward and away from the companion member to effect clutched engagement of the wind wheel and shield.

1,810,114. FLYING MACHINE. RODRIGO M. SMYTH, San Jose, Costa Rica. Filed Feb. 24, 1928. Serial No. 256,735. 14 Claims. (Cl. 244—11.)



9. In a flying machine, a body, substantially inelastic pliable members mounted on said body, means for producing waves in said pliable members and means for communicating the motions of the pliable members to the surrounding air.

1,810,115. AIR BAG VALVE COUPLING. JOHN WAHL and OTTO MELZER, Queens, N. Y., assignors to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 30, 1927. Serial No. 179,583. 6 Claims. (Cl. 285—176.)

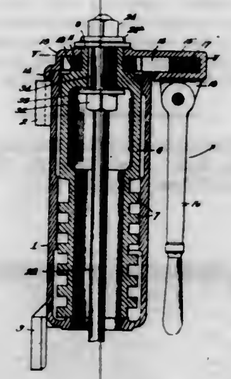


5. A coupling of the character described, comprising an entered member and an entering member, a spring-mounted seating member in one of the aforementioned members, a pipe in the same member as the seating member, said pipe having a tapered end and said seating member having a tapered surface for cooperative engagement with the end of the pipe.

1,810,116. RAILWAY CAR HAND BRAKE. HARLEY E. ANDERSON, Kansas City, Mo., assignor to Gustin-Bacon Manufacturing Company, Kansas, City, Mo., a Corporation of Missouri. Filed Mar. 22, 1928. Serial No. 263,710. 10 Claims. (Cl. 74—120.)

10. Brake operating mechanism comprising a support and a worm cooperating therewith, said support and worm being so mounted that one member remains station-

ary and the other member is adapted for rotation and longitudinal movement, threaded means carried by the sup-



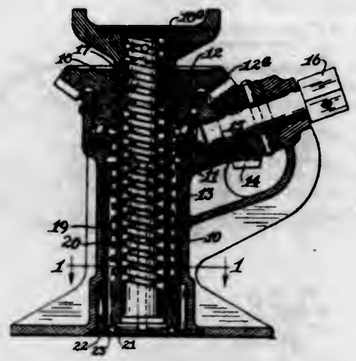
port and movable into and out of enmeshment with the worm, and means for moving said threaded means into and out of enmeshment with said worm.

1,810,117. WINDOW CONSTRUCTION. MACIEJ BABIARZ and JOSEPH BABIARZ, Spotswood, N. J. Filed Mar. 3, 1930. Serial No. 432,763. 2 Claims. (Cl. 20—53.)

1. In a window of the class described, including tiltable sashes, an upper screen resting on the upper frame bar of the lower sash and engaging the lower frame bar of the upper sash, and a screen vertically disposed with its lower frame bar on the window sill and engaging with the cut-away edges of its upper frame bar the side bar of the lower window sash in its inclined position.

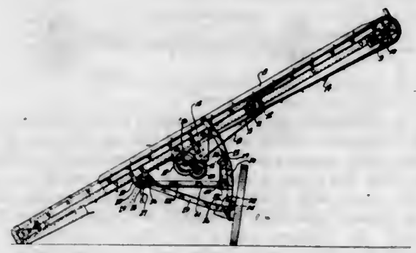
1,810,118. SCREW JACK. JOHN W. BATZ, Racine, Wis. assignor to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Feb. 12, 1927. Serial No. 167,703. 6 Claims. (Cl. 254—102.)

1. In a double screw jack, a casing, a nut revolubly mounted thereon, means for turning said nut, a hollow outer screw member threaded in said nut and having internal threads, an inner screw member threaded into said internal threads, a sheet metal member extending into the space about one of said screws and having a friction bearing thereon to cause said screw to move longitudinally



with respect to said nut as it is turned, and a cap for closing the bottom of said jack, said sheet metal member being secured to said cap.

1,810,119. MATERIAL HANDLING MACHINE. CHARLES H. BEBINGER, Janesville, Wis., assignor to Northern Conveyor & Mfg. Co., Janesville, Wis., a Corporation of Wisconsin. Filed Feb. 28, 1929. Serial No. 343,355. 2 Claims. (Cl. 198—233.)

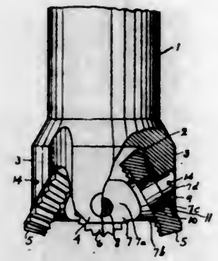


1. A material handling machine comprising a conveyer, side members extending at an angle from and below said conveyer, arcuate members connecting the outer ends of said side members with the conveyer, a supporting truck to which the conveyer is pivoted, said truck consisting of side members pivoted at one end to opposite sides of the conveyer, a transverse member connecting the other ends of said truck side members, and arcuate members extending upwardly from said ends of the side members and slidably engaging the arcuate members connected with the conveyer, and means for causing slidable movement of the arcuate members with respect to one another to cause pivotal movement of the conveyer on the supporting truck.

1,810,120. ROLLER BIT. GUY E. BEHNKE, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Apr. 6, 1928. Serial No. 267,877. 8 Claims. (Cl. 255—71.)

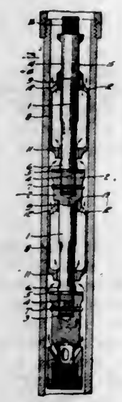
1. A roller bit having a head with a recess in the bottom thereof, and slots in the walls of said recess, the surfaces of said walls being inclined upwardly and inwardly toward the vertical axis of the head, a support extending across said recess and having a bridge portion and a pair of spindle portions, said spindle portions

extending upwardly and outwardly at an angle to said bridge portion and having ends slidable in said slots, side roller cutters on said spindle portions and adjacent the



said surfaces of said walls, a pin carried by the head and extending across said recess and through said bridge portion, and cross roller cutters on said pin.

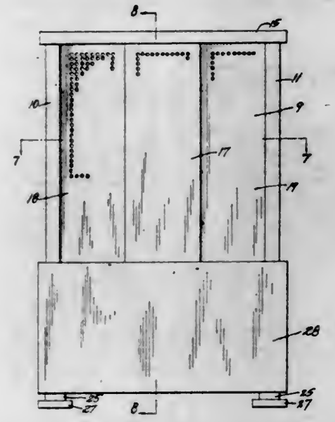
1,810,121. MULTISTAGE PUMP PLUNGER. LESTER C. BLACK, Los Angeles, Calif. Filed Jan. 24, 1928. Serial No. 248,997. 6 Claims. (Cl. 103—194.)



1. A multi-stage pump plunger comprising a plunger rod; a plurality of spaced enlarged portions provided on said rod; a valve seat on the upper end of each enlarged portion and an annular shoulder on the lower end of each enlarged portion; cylindrical plungers having ends of a reduced diameter loosely surrounding said rod and longitudinally slidable between adjacent enlarged portions, the reduced upper ends of said plungers having a plurality of ports, the cylindrical plungers being gradually merged into the ends of reduced diameter in the form of a continuously curved surface whereby to eliminate the formation of protuberant edges which would tend to catch on the joints of the pump tubing.

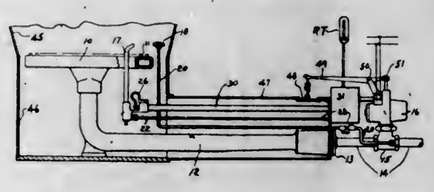
1,810,122. RADIATOR COVER. ALBERT EDGAR BLACKMAN, Mount Vernon, N. Y. Filed Aug. 23, 1927. Serial No. 214,910. 7 Claims. (Cl. 237—79.)

1. A box-like radiator cover, adapted to enclose a radiator, having a top, front, back and ends, an extension piece having a front and ends and an open top and bottom, and means for fastening said extension piece in various vertical positions on the lower portion of the cover, the front of said piece serving as a vertical extension of the front of the cover, and the ends of said piece



serving as vertical extensions of the ends of the cover, whereby said cover and extension piece can be fastened together to fit radiators of different heights.

1,810,123. FLUID-FUEL-BURNER CONTROL. NELSON T. BRANCHE and VILYNN O. BEAM, Toledo, Ohio, assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed May 12, 1930. Serial No. 451,635. 9 Claims. (Cl. 236—1.)

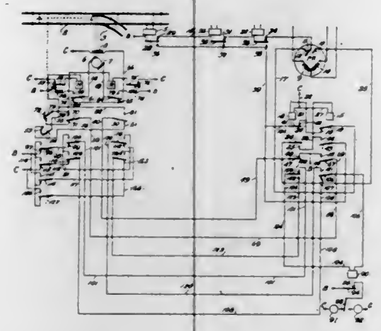


1. The combination with a fluid fuel burner and a master thermostat for controlling the operation thereof, of a normally-out pilot, means for admitting fuel to the pilot when the thermostat calls for heat, a heat-controlled mechanism, means under the joint control of said thermostat and said mechanism and adapted when said mechanism permits to admit fuel to said burner, and means for lighting said pilot, the latter when lighted supplying the heat required by said mechanism to permit its cooperation with said thermostat for the said purpose, the pilot and lighting means therefor being positioned at opposite sides of said burner.

1,810,124. RAILWAY SWITCH CONTROLLING APPARATUS. CHARLES A. BROOKS, Swissvale, and HENRY S. YOUNG, Wilkinsburg, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 24, 1929. Serial No. 401,999. 5 Claims. (Cl. 246—160.)

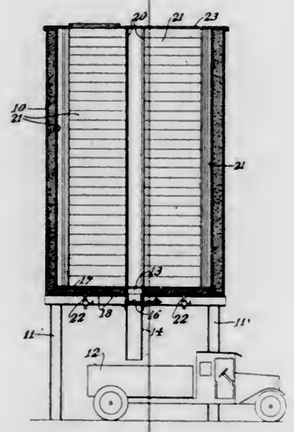
1. In a switch control apparatus, a motor for operating the switch, a pair of relays for establishing circuits through said motor to cause the latter to move the switch to either normal or reverse position according as one relay or the other is energized and for preventing operation of said motor when said relays are concurrently energized, selective means and circuit connections controlled thereby for energizing either of said relays to

effect the desired setting of the switch, contacts controlled by said switch for breaking the circuit through the selected relay upon the arrival of the switch at its desired setting, and means comprising a front contact



of the non-selected relay for energizing the selected relay in response to energization of said non-selected relay when said selective means is in a condition for selecting the selected relay.

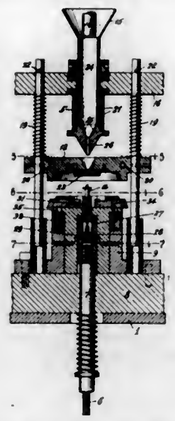
1,810,125. APPARATUS FOR AGING PLASTIC MIXTURES. WILLIAM H. BROOKS and FRANCIS M. TAYLOR, Birmingham, Ala. Filed Aug. 16, 1928. Serial No. 300,128. 4 Claims. (Cl. 23—285.)



1. In apparatus for aging lime putty and like plastic mixtures, the combination of an elevated water tight tank, permeable filter means extending throughout the depth and along the bottom in the tank, controllable means for removing excess water from the mixture by gravity, and separate means for removing the contents of the tank by gravity.

1,810,126. PROCESS OF MAKING MOLDED ARTICLES. HERMANN BUCHHOLZ, Berlin, Germany, assignor to W. D. Grote. Filed Nov. 14, 1923. Serial No. 674,630. 11 Claims. (Cl. 18—55.)

1. The process which comprises heating the material to be molded until the same acquires flowing characteristics, then forcing said material directly from the point of heating through a relatively constricted passage under pressure to increase its flowing characteristics and in



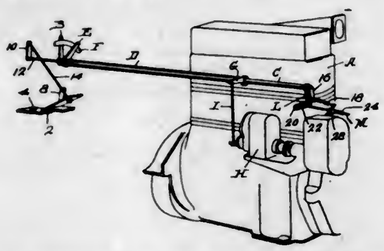
this condition forcing it into the mold and cooling the mold during the introduction thereto of the fluid material.

1,810,127. METHOD OF DECORATING GLASS. ALVA B. CARTER, Lincoln, Nebr. Filed Mar. 3, 1930. Serial No. 432,938. 1 Claim. (Cl. 41—22.)



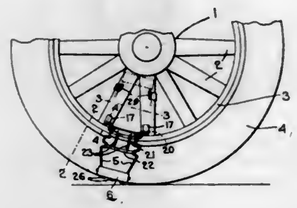
The method of ornamenting glass surfaces with pigments suspended in a slow flowing medium which adheres to glass, the said method consisting in applying the pigments in a plurality of colors and shades to a suitable support in designs such that the suspended pigments in their medium will slowly flow toward each other to blend at the edges, in then applying a piece of glass to the pigment treated support, in removing the glass with some of the pigment adhering thereto in the blended design, and in finally flooding the pigment treated surface of the glass with a white pigment in a similar medium to provide for a blending of the reflected light rays in addition to the blending of the pigments.

1,810,128. DECELERATOR. CHAUNCEY C. CHAPEL, Simpson, Kans. Filed May 28, 1930. Serial No. 456,462. 3 Claims. (Cl. 74—39.)



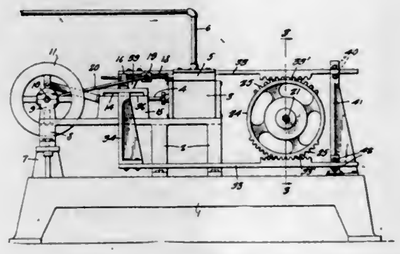
1. In combination with the throttle valve of an internal combustion engine, rod for controlling said valve, a hand controlled throttle shaft, and a suitable connection between said rod and said throttle shaft; a rock-shaft operably mounted in said throttle shaft, a resilient pedal adapted to return to normal position after being operated for the purpose of effecting closure of said valve to the desired extent, a crank fixed upon said rock-shaft, a rod connecting said crank and the pedal, a second crank fixed to said rock-shaft, and a suitable connection between said second crank and rod for controlling the valve.

1,810,129. NONSKID DEVICE FOR AUTOMOBILE WHEELS. CHARLES E. CLAPP, Hingham, Mass. Filed July 21, 1930. Serial No. 469,423. 6 Claims. (Cl. 301—50.)



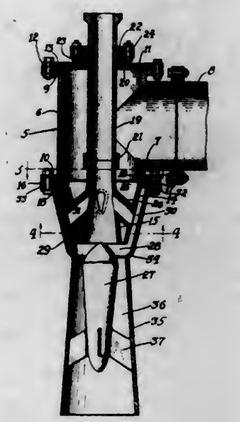
2. A non-skid device for an automobile wheel comprising a holder presenting two side members, each shaped to fit partially around a spoke of the wheel, means tying said side members together on both the inside and outside of the wheel, the outer ends of the side members being bent into loop formation, a spring within each loop, a cap enclosing each loop and spring, a non-skid member having trunnions extending through the loops and backed by said springs, said non-skid member being adapted to be swung from operative position alongside of the tire to inoperative position lying against the wheel and means for holding the non-skid member yieldingly in operative position.

1,810,130. ENGINE. EMERY J. COLLYER, Henryetta, Okla. Filed Mar. 11, 1930. Serial No. 434,933. 1 Claim. (Cl. 74—14.)



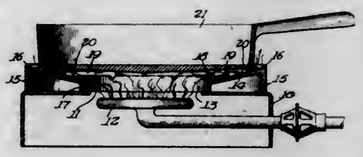
An engine including a base having a power take-off shaft journalled adjacent one end thereof and provided with a belt wheel, a frame mounted on the base and extending from the other end thereof to a point intermediate the ends of said base, a reciprocating engine carried by the frame, a head secured to the engine and reciprocated thereby, guide members on the frame for the head and having slots, laterally extending arms on the head and slidable in the slots, vertical standards on the base, rack bars slidable on the standards and arranged in a plane one above the other and laterally of each other, vertical brackets connecting the bars to the arms, segmental gears journalled on the shaft and in mesh with the rack bars, and pawl and ratchet means between the shaft and gears.

1,810,131. DEVICE FOR MIXING GASES AND LIQUIDS. JAMES MARLOWE DAILY, Chicago, Ill., assignor to American Ozone Company, Chicago, Ill., a Corporation of Illinois. Filed May 25, 1929. Serial No. 365,864. 8 Claims. (Cl. 261—76.)



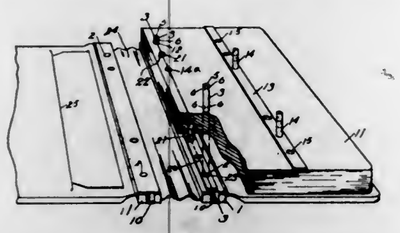
1. In a mixer of the character described, the combination of a vertically extending casing member connected at the lower end thereof to receive liquid under pressure, a vertical pipe connected to a supply of gas and having its lower end projecting into the casing member and forming with the latter an annular liquid conduit which is restricted at its bottom end and serves to project the liquid downwardly in a thin annular stream, a hollow brace extending across the conduit and connecting the casing member and pipe, and means forming a gas chamber having a portion thereof opening onto and facing the outer peripheral portion of the annular stream of liquid so that the gas in the chamber may be drawn into contact with said outer peripheral portion of the stream, said chamber being connected to receive gas from the pipe through the hollow brace.

1,810,132. HEAT DISTRIBUTOR PLATE FOR COOK STOVES. FOREST V. DETWILER, Grand Rapids, Mich. Filed Sept. 30, 1929. Serial No. 396,099. 15 Claims. (Cl. 126—215.)



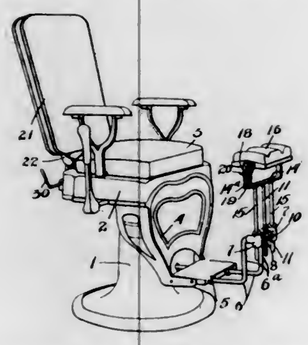
1. A heat distributor plate for cooking purposes, said plate having an opening of considerable size therethrough at the center thereof, a downwardly projecting imperforate flange encompassing said opening, and a downwardly projecting imperforate flange encompassing the periphery of the plate, the lower edges of said flanges being in substantially the same plane.

1,810,133. LOOSE LEAF BINDER. CHARLES J. DUNBAR, Kalamazoo, Mich., assignor to Le Febure Corporation, Cedar Rapids, Iowa, a Corporation of Iowa. Filed June 8, 1929. Serial No. 369,307. 8 Claims. (Cl. 129—8.)



1. In a loose-leaf binder, the combination of clamping bars; leaf-holding posts; means for detachably securing said leaf holding posts to the clamping bars to permit of post substitution for expansion; and a sheet-holding mechanism comprising a cross-bar at each side of the binder detachable with the leaf body from the binder, said bars having overlapping posts engaging the leaf body.

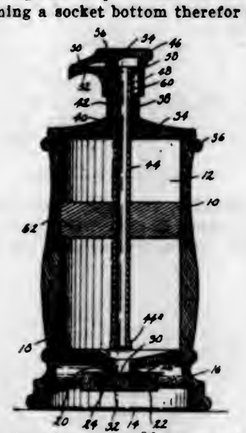
1,810,134. CHIROPODIST CHAIR. JOHN R. EMMERT, Chicago, Ill., assignor to Emil J. Paidar Co., Chicago, Ill., a Corporation of Illinois. Filed July 16, 1928. Serial No. 293,003. 1 Claim. (Cl. 155—172.)



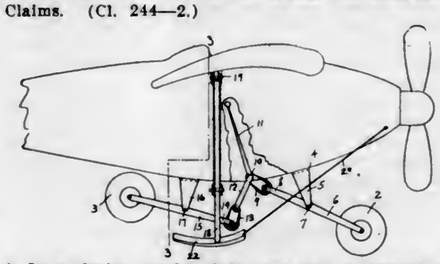
In a chiropodist chair having a foot board, a bracket comprising a bearing having a pair of rods slidably mounted in said foot board, said bearing having spaced apertures and an intermediate aperture, a foot rest having spaced rods extending through said spaced apertures and an intermediate rod extending through said intermediate aperture, said intermediate aperture having an enlarged portion, a spring mounted in said enlarged portion, a friction locking plate having an aperture for receiving said intermediate rod, said bearing having a slot for receiving an end of said plate and a shoulder adjacent said slot for supporting said plate, said spring normally engaging said plate and said plate projecting beyond said bearing for engagement by the knee of the operator.

1,810,135. CREAM DISPENSER. FRED W. FITCH, Des Moines, Iowa. Filed Feb. 4, 1929. Serial No. 337,345. 1 Claim. (Cl. 221—103.)

In a dispenser, a casing having a bottom provided with an interiorly smooth tubular passageway, a plunger tube slidably mounted with respect to said casing, the lower end of said plunger tube being adapted to enter said tubular passageway at the lower end of the casing when moved downwardly relative to the casing, an exteriorally smooth plug longitudinally movable in said tubular passageway, forming a socket bottom therefor and also forming a stop for the plunger tube and means for selectively locking said plug in any of its positions relative to said tubular passageway.

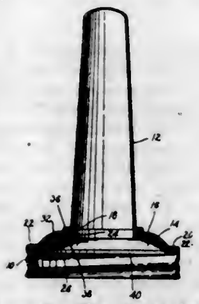


1,810,136. FLYING MACHINE. JOHN W. FRY, Struthers, Ohio. Filed Mar. 18, 1930. Serial No. 436,903. 2 Claims. (Cl. 244—2.)



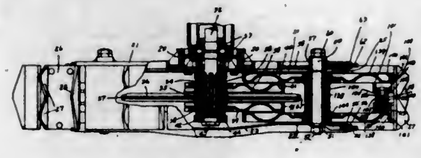
1. In a device of the class described, a take-off and landing portion comprising two wheel positioned directly underneath a center portion of body of flying machine and one wheel directly behind a front wheel, two dependent pivot supports secured to body of said flying machine, a pivot-arm carried on each of said depended pivot-supports, outer ends of each pivot-arm carrying a wheel, inner ends of said pivot-arms functioning with a plurality of elastic bands of uneven lengths, means for raising and lowering rear wheel in relation to the flying machine.

1,810,137. SPOUT CONSTRUCTION. WALTER R. HENION, Minneapolis, Minn., assignor to Boe Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Jan. 27, 1930. Serial No. 423,678. 7 Claims. (Cl. 221—28.)



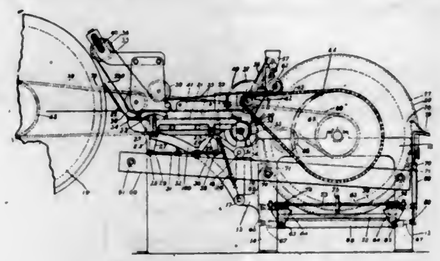
1. In a spout construction, a cap having a peripheral ledge, an inner wall in said cap and having its edge in contact with said ledge and a spout member having flanges above the cap and below the inner wall for holding the cap, inner wall and spout assembled together.

1,810,138. ARTICULATED TRACTOR TRACK. LEO T. KINCANNON, Scottdale, Pa., assignor to Marion Machine Foundry & Supply Company, Marion, Ind., a Corporation. Filed July 27, 1928. Serial No. 295,663. 2 Claims. (Cl. 305—3.)



2. A power operable load sustaining mechanism including an endless articulated tread, a plurality of front and rear wheel supports therefor, each including spaced portions, intermediate spaced wheel supports arranged in overlapping relation relative to the front and rear wheel supports, and a gear operatively engaging only the upper run of said tread for driving the same, each of said wheel supports being of substantially the same diameter and the gear being of greater diameter than and coaxial with the intermediate wheel supports and offset sufficiently from the plane including the front and rear wheel support axes whereby only the upper run of the tread is engaged by the gear.

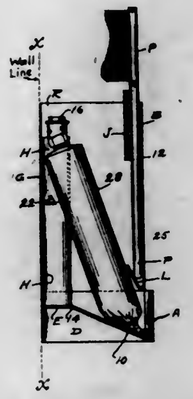
1,810,139. DOUGH MOLDER. WILLIAM G. KIRCHHOFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 31, 1925. Serial No. 47,215. 8 Claims. (Cl. 107—9.)



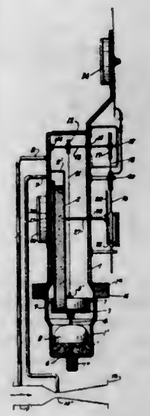
1. In a device of the class described the combination of a pressure board, a conveyor belt mounted for movement in substantial parallelism with the pressure board, cutter means disposed in alignment with the pressure board and extending into a space between the pressure board and conveyor belt, and a drum molder having a peripheral flange extending in alignment with the cutter means whereby a mass of dough severed by the cutting means may have its severed portions pass directly from the cutter means into abutment with the peripheral flange.

1,810,140. DENTAL CABINET. CLARENCE A. LAWSON, Sr., and CLARENCE A. LAWSON, Jr., Alhambra, Calif. Filed May 20, 1929. Serial No. 364,614. 15 Claims. (Cl. 132—84.)

5. A device of the character disclosed, including a casing provided with separate brush holders formed and arranged to maintain the brushes in upright position with the brush-heads above such holders, and means for supporting the lower ends of the brushes to retain same in alignment with the holders; said casing having a compartment for reception of a dentifrice container or the like; said casing having an inclined bottom portion for disposing said dentifrice holder in inclined position within the casing.

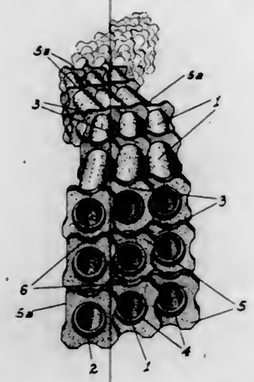


1,810,141. LIQUID METER. JOHN W. LEDOUX, Swarthmore, Pa., assignor, by mesne assignments, to Simplex Valve & Meter Company, Philadelphia, Pa., a Corporation of Delaware. Filed Aug. 4, 1921. Serial No. 489,757. 7 Claims. (Cl. 73—167.)



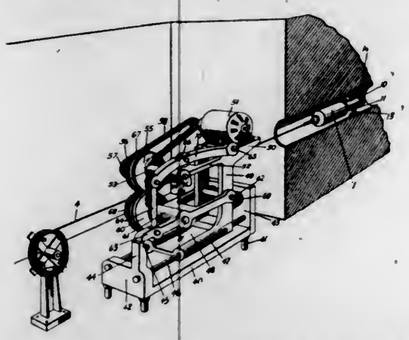
1. A meter comprising a casing, a buoyant member of gradually upwardly decreasing cross sectional area, a buoying liquid in said casing, supporting said buoyant member, a liquid container having a closed bottom and supported by said member, a liquid container communicating with said container first named through the top thereof and supported independently of said member and means for creating several differential pressures from a flowing liquid and communicating one of said pressures to a liquid in one of said containers and another of such differential pressures to liquid in the other of said containers, said buoyant member having a shape effecting movement thereof in simple functional relation to changes in the rate of flow of said flowing liquid.

1,810,142. CONDUIT COUPLING COLLAR. JOHN F. MAKOWSKI, Oakland, Calif., assignor to Fireproof Wall Company, Reno, Nev., a Corporation of Nevada. Filed July 20, 1929. Serial No. 379,812. 5 Claims. (Cl. 247—34.)



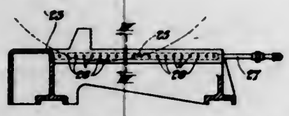
1. A conduit support comprising a collar having an orifice to receive one end of a conduit therein; the exterior periphery of the collar being shaped to engage the ground in non-tipping relationship, and also to form a cradle for an adjacent conduit.

1,810,143. APPARATUS FOR FEEDING LINES. PERRY OKEY, Columbus, Ohio. Filed July 22, 1929. Serial No. 380,226. 5 Claims. (Cl. 175—376.)



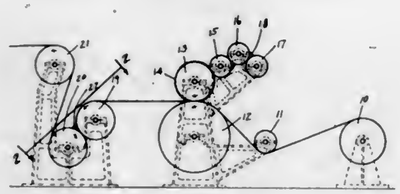
1. A combination of a projectile, a line attached to said projectile, power rotated rolls, means for automatically causing said rolls to exert successive pulls upon said line, means for causing said rolls to relieve the pull on said line intermittently, and means in said projectile for translating each pull into stored potential energy and rendering it effective as kinetic energy to advance said projectile when each pull is relieved.

1,810,144. SAWING APPARATUS. JOHN S. OURSLER, Munhall, Pa. Filed Apr. 27, 1928. Serial No. 278,272. 1 Claim. (Cl. 29—69.)



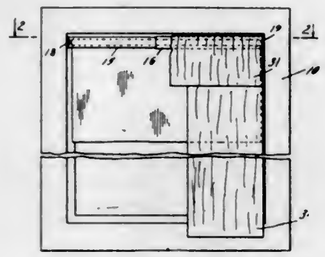
In a rotary saw for sawing rolled metal shapes the combination of a saw supporting structure having a rotary saw blade mounted thereon and a support for the shape to be cut, said support being provided with a slot in which the saw blade travels when cutting the shape, conduits formed in said support on both sides of and in horizontal alinement with said slot, openings forming passages extending transversely from said conduits through the walls of said slot, and water supply pipes connected to said conduits, said conduits and openings being adapted to direct water against both sides of the saw blade below the work-piece immediately after the blade has passed through the work-piece.

1,810,145. PROCESS OF DECORATING PAPER. HARRY M. ROSS, Indianapolis, Ind., assignor of one-half to Beveridge Paper Company, Indianapolis, Ind., a Corporation. Filed Aug. 3, 1928. Serial No. 297,234. 3 Claims. (Cl. 91—67.9.)



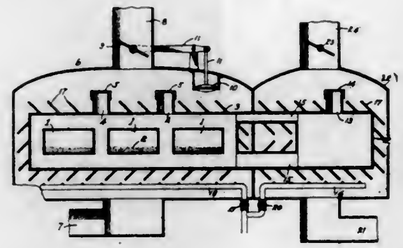
1. The process of decorating paper, consisting in passing a sheet of paper under an embossing roll for forming elevations and depressions therein, applying a coloring material to the protruding surface of the embossing roll so as to cause such coloring material to color the depressions formed thereby in the paper, passing the paper about a coloring roll bringing a second coloring material into direct contact with the paper and causing the paper to be passed by the coloring material at such speed that said material will contact only with the elevations thereof and shade off into the depressions.

1,810,146. CURTAIN AND SHADE FIXTURE. WILLIAM A. SCHOLLMEYER, Yonkers, N. Y. Filed Aug. 1, 1929. Serial No. 382,657. 6 Claims. (Cl. 156—13.)



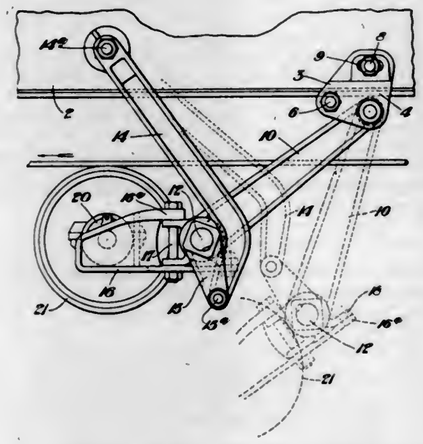
4. A fixture of the character described having end portions provided with sockets for supporting a shade roller, and having a central portion provided with an upwardly opening and a downwardly opening longitudinally extending channel adapted to receive the upper edges of curtains and to support the curtains.

1,810,147. CATALYTIC APPARATUS. JAMES M. SELDEN, Pittsburgh, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Original application filed Jan. 2, 1920, Serial No. 348,871. Divided and this application filed Sept. 26, 1927. Serial No. 221,952. 8 Claims. (Cl. 23—288.)



1. In catalyzing apparatus, the combination with a catalyzing chamber, of a casing enclosing the same, a jacket in the casing enclosing the catalyzing chamber, a reservoir outside the casing having communication with the jacket, and a heater for the reservoir.

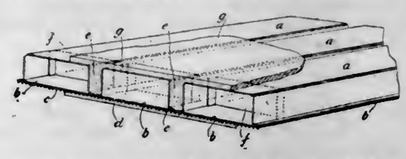
1,810,148. RETURN ROLLER SUPPORT. FRANK E. SMITH, Scottdale, Pa. Filed June 24, 1929. Serial No. 373,443. 5 Claims. (Cl. 308—20.)



1. A vertically adjustable roller mounting comprising in combination a fixed support, a pair of transversely spaced arms pivotally connected at one end to and depending from said support, a shaft journaled in said arms, a second pair of transversely spaced arms pivotally connected at one end to and depending from said support, said second pair of arms being spaced relative to said first pair of arms in a direction parallel with the longitudinal axis of said fixed support, a pair of crank-arms fixedly mounted on said shaft and pivotally connected to the lower free ends of said second pair of arms, and a roller carried by said first pair of arms.

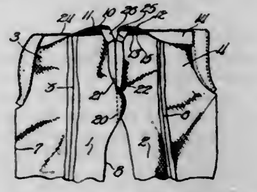
1,810,149. FIREPROOF FLOOR. JOSEPH HEATON SOUTHERN, Redcar, England. Filed May 29, 1928, Serial No. 281,541, and in Great Britain Aug. 13, 1927. 10 Claims. (Cl. 72—66.)

4. A hollow floor comprising a plurality of substantially rectangular steel box like beams closed by end plates at each end disposed in parallel relationship and encased and hermetically sealed on all external surfaces with a concrete heat insulating and rust resisting covering which



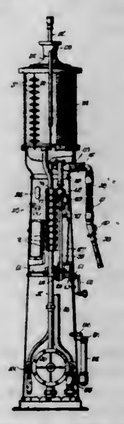
also forms a continuous floor surface the beams being of such cross section number and disposition as to be capable unaided of carrying at least the dead weight of construction of the completed floor.

1,810,150. GARMENT. MOLLIE TODES, Milwaukee, Wis. Filed Dec. 12, 1930. Serial No. 501,838. 7 Claims. (Cl. 2—236.)



1. A pair of trousers the rear part of which comprises two separate body portions joined together along the median line of the garment to leave overlapping flaps, and a waistband liner comprising two strips on the inside of the garment, one strip extending along the edge of one of the body portions and the other strip extending along the edge of the other body portion, the overlapping flap of each of the body portions being folded back with the upper end thereof between the liner and the body portion and the edge of the liner being also folded back to extend between the liner and the folded flap of the corresponding body portion, machine stitching joining the corresponding folded back portions and being free of the body portion of the garment and concealed on one side by the body portion of the garment and on the other side by the exposed side of the liner strip.

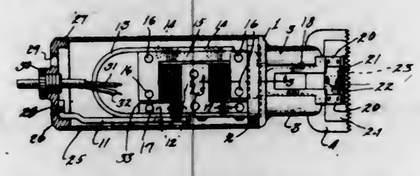
1,810,151. LIQUID DISPENSING APPARATUS. WILLIAM S. TOWNSEND, Rochester, Pa., assignor, by mesne assignments, to The Wayne Company, Baltimore, Md. a Corporation of Maryland. Filed Feb. 4, 1928. Serial No. 251,982. 15 Claims. (Cl. 221—100.)



1. In liquid dispensing apparatus, the combination of a measuring chamber, discharge means therefor movable

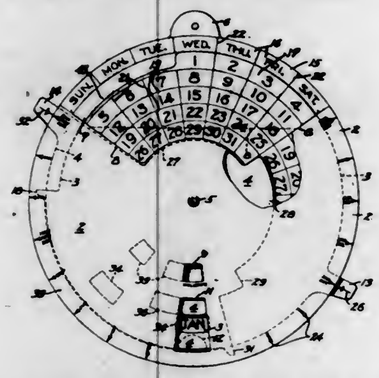
to predetermined positions for gravitationally discharging predetermined amounts of liquid, means in said chamber for controlling flow from said chamber to said discharge means, and revoluble and reciprocatory means associated with said discharge means for controlling operation of said second named means.

1,810,152. ELECTRIC HAIR CLIPPER. CHRIS L. VOLZ, Detroit, Mich. Filed Dec. 22, 1930. Serial No. 503,892. 5 Claims. (Cl. 30—1.)



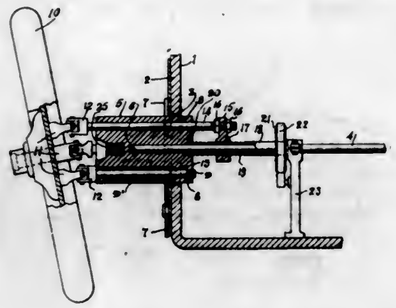
1. In an electric hair clipper, a tubular handle or casing, a cap mounted in one end thereof, a stationary member fitting in the opposite end thereof, a pair of arms extending from the stationary member, a stationary clipper blade mounted on the said arms, an electro-magnet mounted on the stationary member and extending within the tubular handle or casing, a U-shaped metal spring member secured at one end to the electro-magnet, an armature secured to the opposite end of the metal spring member, a bracket secured to the electro-magnet and terminating adjacent the cap, a screw extending through the cap and threaded into the bracket, a vibratable arm secured to the armature, the stationary member being provided with a slot through which the vibratable arm extends, a spring metal strip secured to the end of the vibratable arm and a movable clipper blade secured to the spring metal strip and riding in contact with the stationary clipper blade.

1,810,153. CALENDAR. LEONARD AKER, Atherton, Calif., assignor to The Recorder Printing and Publishing Co., San Francisco, Calif., a Corporation of California. Filed Jan. 27, 1930. Serial No. 423,690. 4 Claims. (Cl. 40—115.)



1. A calendar comprising a day scale, a date section adapted for coordination with the day scale, a month scale cooperating with the day scale and date section, a pair of month indexes each bearing a fixed relation to the day scale, means for registering the date section and a portion of the month scale with one of the month indexes to calendrically align the date section and day scale, and means for registering the remaining portion of the month scale with the other month index to indicate the month as determined by the calendric relation between the date section and day scale.

1,810,154. MECHANICAL MOVEMENT. LEO ALIO, Dayton, Ohio. Filed July 7, 1930. Serial No. 466,011. 18 Claims. (Cl. 115—1.)

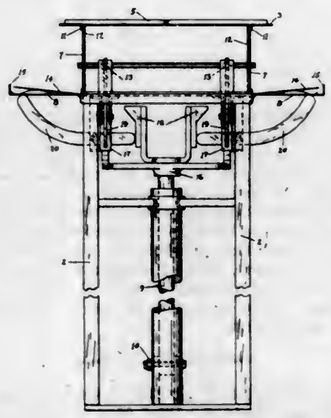


1. In a mechanical movement for operating a disc as a boat propeller and vehicle wheel, means to support said disc for rotation, and means for holding said disc in a vertical plane and shifting the disc out of the vertical plane and holding it so.

1,810,155. RE-ACTIVATED ADSORBENT AND METHOD OF MAKING SAME. WALTER S. BAYLIS, Los Angeles, Calif., assignor, by mesne assignments, to Filtrol Company of California, Los Angeles, Calif., a Corporation of California. Filed Apr. 10, 1928. Serial No. 269,031. 4 Claims. (Cl. 252—2.)

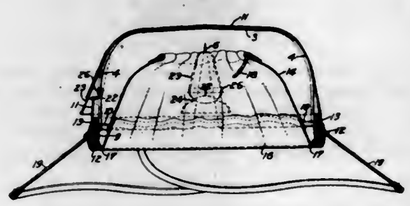
1. In the process of revivifying adsorbent clay of the bentonite type which has been treated with acid and subsequently washed and which has been used in the decolorizing of oils, the steps which comprise roasting the clay with access of air and with stirring until the carbonaceous matter is substantially eliminated, but the clay preserved unsintered, then making the clay into a mud containing water and 1% to 4% of the dry weight of the clay as sulphuric acid.

1,810,156. PACKAGE WRAPPING DEVICE. CLYDE S. BRANDENBURG, Chicago, Ill. Filed Mar. 26, 1930. Serial No. 438,982. 5 Claims. (Cl. 93—2.)



1. A device for wrapping packages with cellophane including a table, spaced apart wrapper supports thereabove, means between the supports to maintain the body of the wrapper when placed thereon in the same plane and allows the package to be wrapped to be depressed upon the wrapper between the supports to the table surface, and manually operated means adapted to be actuated after the operator has folded the sides of the wrapper about the top of the package to fold in the portions of the wrapper extending in prolongation of the sides of the package and then the portion extending in prolongation of the bottom of the package about the ends thereof to be manually secured by the operator.

1,810,157. SAFETY HAT. EDWARD W. BULLARD, San Francisco, Calif., assignor to Pacific Safety Equipment Company, San Francisco, Calif., a Corporation of California. Filed Aug. 14, 1928. Serial No. 299,542. 11 Claims. (Cl. 2—5.)



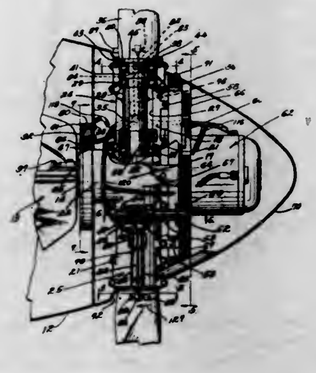
1. A safety headgear comprising a crown formed from a single sheet of hard compacted fibrous material having a plurality of notches in the periphery thereof to facilitate shaping the crown, a retaining ring secured adjacent the edge of the crown to hold the notches substantially closed, a water-proof cover over the crown, and means securing the cover to the ring.

1,810,158. WELDING TORCH CONSTRUCTION. LORN CAMPBELL, Jr., Cleveland, Ohio. Continuation of application Serial No. 1,847, filed Jan. 12, 1925. This application filed Apr. 18, 1929. Serial No. 356,270. 6 Claims. (Cl. 158—27.4.)



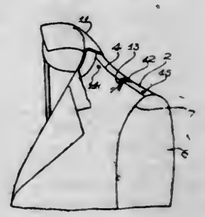
1. A torch member having in combination, a body or handle portion having front and rear ends, a mixing chamber in the front end of said body portion, a tip carrying member comprising a single conduit attached to the front end of said portion, an end casting attached to the rear end of said portion, a plurality of regulating valves carried by said casting having operating handles and constructed and arranged for fine and accurate adjustment and to maintain such adjustment, a plurality of control valves wholly disposed in said end casting between said body portion and said regulating valves, passages extending from said control valves to said mixing chamber, said casting having spaced members projecting therefrom adapted to receive flexible gas supplying conduits, means disposed in said body portion for operating said control valves, and a member operatively connected to said last mentioned means disposed at the side of said main body portion.

1,810,159. AUTOMATIC PROPELLER CONTROL. JAMES E. CAROL, Los Angeles, Calif., assignor of one-third to Byron D. Hammons and one-third to William W. Jones, Los Angeles, Calif. Filed Oct. 3, 1927. Serial No. 223,612. 18 Claims. (Cl. 170—163.)



1. In an airplane, the combination of: an engine; a variable-pitch propeller operated by said engine; a joy stick adapted to operate certain controls on said airplane; and means on said joy stick operable to vary the pitch of said propeller.

1,810,160. METHOD OF MAKING COATS AND COAT PRODUCED BY SUCH METHOD. RUDOLPH COHEN, Rochester, N. Y. Filed Sept. 9, 1929. Serial No. 391,234. 4 Claims. (Cl. 2—93.)

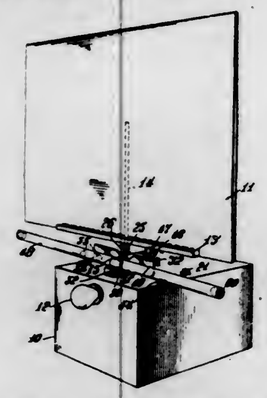


1. A method of making coats which comprises taking a temporary tuck in the outside goods at the shoulder seam, securing the outside goods to the canvas at two spaced points near the shoulder seam one adjacent the collar and the other adjacent the sleeve, while leaving the outside goods free of the canvas between said points, removing the tuck holding means, spreading the outside goods on the canvas by distributing the additional material rearwardly in the shoulder, securing to the canvas the outside goods in the distributed condition, and then finishing the operations on the coat.

1,810,161. ELECTRICALLY ILLUMINATED ADVERTISING DEVICE. ALONZO B. CONKLIN, Chicago, Ill. Filed Mar. 24, 1930. Serial No. 438,288. 7 Claims. (Cl. 40—33.)

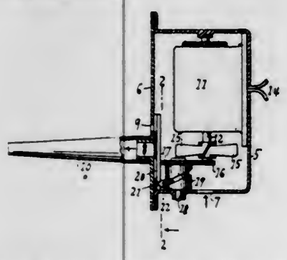
1. In a device of the kind described, a rotatable member, spring means tending to rotate said member continuously, a latch member fixedly mounted upon the rotatable member and carried thereby in a circumferential path, a balanced stop member mounted to oscillate about a horizontal axis underneath the rotatable member, gravity

actuated means operable to alternately tilt the opposite ends of said stop member into the path of said latch



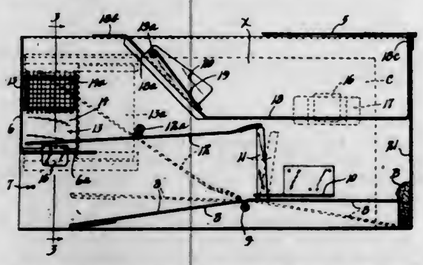
member thereby stopping the rotation of said rotatable member twice during a complete rotation and releasing said rotatable member after a predetermined interval.

1,810,162. ALARM SIGNAL. MICHAEL J. DAVIS, Brooklyn, N. Y. Filed Feb. 3, 1930. Serial No. 425,606. 3 Claims. (Cl. 116—112.)



1. An alarm signal comprising a casing having a fluid inlet and a fluid outlet, a motor secured in the casing provided with a rotor shaft, a fan mounted on the shaft, a signal communicating with the outlet, means actuated by the rotor shaft for increasing or decreasing and momentarily shutting off the volume of the fluid forced into the outlet by the fan, and a vent located in the casing brought into action when the outlet is closed to expel the fluid generated by the fan.

1,810,163. ANIMAL TRAP. THEODORE C. ENGLUND, Minneapolis, Minn. Filed June 9, 1930. Serial No. 459,906. 7 Claims. (Cl. 43—76.)



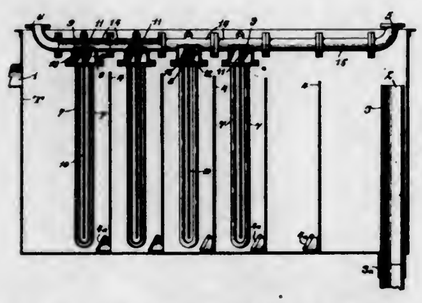
1. In an animal trap, an enclosure having an entrance, a tread-operated tripping device disposed inwardly of said entrance, a tilting platform pivoted above said tripping device and having a relatively heavy inner end adapted to swing downwardly to obstruct said entrance, means associated with said tripping device for normally holding said platform in raised position, a captive compartment having an entrance disposed above said tilting platform, said platform when swung downwardly constituting an approach to said last mentioned entrance.

1,810,164. HEATING DEVICE. OWEN JAMES FAY, Chicago, HARRY TOBIAS HEIMBERGER, Riverside, and EMERSON PUGH, Downers Grove, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Dec. 23, 1927, Serial No. 242,046. Divided and this application filed Mar. 30, 1929. Serial No. 351,172. 6 Claims. (Cl. 219—26.)



1. In an electrical heating device, a heating device, a heating element wound in a helix, and a strand extending inside a convolution of the heating element and twisted with a connecting portion of the heating element for increasing the strength and conductivity of the portion.

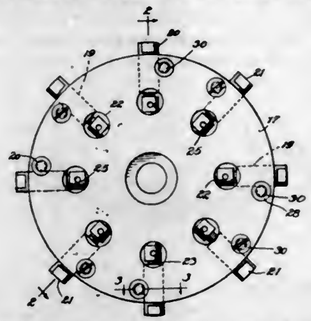
1,810,165. HEAT INTERCHANGER. OLIVE E. FRANK, Buffalo, and HERBERT P. WILDER, Kenmore, N. Y., assignors to O. E. Frank Heater & Engineering Co., Inc., Buffalo, N. Y., a Corporation of New York. Filed Sept. 24, 1928. Serial No. 307,931. 15 Claims. (Cl. 257—109.)



3. A heat interchanger comprising a tank, means arranged to divide said tank into a series of compartments and heat connected exchange elements located in and severally removable from said compartments, each element providing through the compartment in which it is located a substantially U-shaped path of flow for one of the heat exchanging fluids and having associated therewith means for cooperation with the walls of such compartment to delimit a substantially U-shaped path of flow for the other heat exchanging fluid, said fluids being arranged to flow in opposite directions.

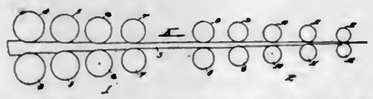
1,810,166. ADJUSTABLE GAUGE. KEITH F. GALLIMORE, Fond Du Lac, Wis., assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 5, 1923. Serial No. 649,410. 8 Claims. (Cl. 33—178.)

8. In apparatus of the class described, a flat member, a set of gauge members projecting from the edge of said flat member and located close to one side face thereof, a set of gauge members projecting from the edge of said flat member and located close to the other side face thereof, and adjustment means for each gauge member whereby the two sets of gauge members may be adjusted to successively caliper an opening in a workpiece by the first set and then by the second set of gauge members, the



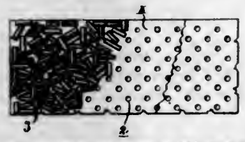
member requiring limited motion to introduce the first set of gauge members and but little more motion to introduce the second set of gauge members.

1,810,167. ART OF ROLLING METAL. JEROME R. GEORGE, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 10, 1929. Serial No. 353,970. 9 Claims. (Cl. 80—60.)



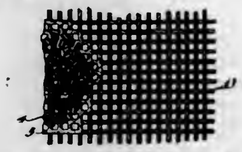
1. In the continuous rolling of hot metal, the improvement which consists in passing the stock through successive stands of rolls that decrease in diameter from the roughing to the finishing end of the mill, and causing the larger rolls to procure the bulk of the required reduction in thickness of said stock, thereby to heat up said stock sufficiently so that its temperature is substantially maintained during the finish rolling thereof.

1,810,168. MOTION PICTURE SCREEN. JAMES A. GRAY, St. Paul, Minn. Filed Aug. 2, 1929. Serial No. 383,079. 6 Claims. (Cl. 88—24.)



1. A motion picture screen, comprising a fabric backing, an adhesive dressing applied thereto, and a covering layer of solid glass cylinders imbedded in and applied to said adhesive coating and positioned thereon at varying angles.

1,810,169. MOVING PICTURE SCREEN. JAMES A. GRAY, St. Paul, Minn. Filed Feb. 12, 1930. Serial No. 427,760. 6 Claims. (Cl. 88—24.)

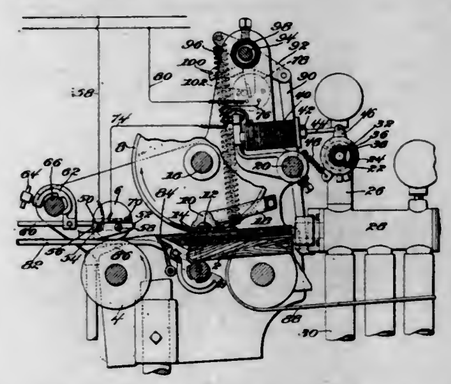


3. A projection screen having a backing of evenly woven mesh material, a pigmented coating over the strands of said mesh material, but not extending over the mesh openings, and a layer of small cylindrical glass particles partially embedded in said pigmented coating.

1,810,170. PROCESS OF PURIFYING AND DECOLORIZING ROSINS WITH RESORCINOL. IVAN GUBELMANN and CLYDE O. HENKE, South Milwaukee, Wis., assignors to The Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed July 25, 1927. Serial No. 208,407. 9 Claims. (Cl. 87—2.)

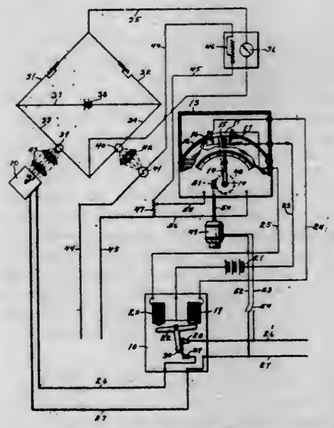
1. In the process of purifying and decolorizing rosins, the steps which comprise treating a rosin dissolved in a common rosin solvent with resorcinol at an elevated temperature, said solvent being relatively immiscible with resorcinol at low and ordinary temperatures, and cooling to precipitate the resorcinol containing dissolved impurities and coloring matter.

1,810,171. PAPER FEEDING MACHINE. HENNING HALLSTREAM, Brockton, Mass., assignor to Cross Paper Feeder Company, Boston, Mass., a Corporation of Massachusetts. Filed May 14, 1924. Serial No. 718,233. 4 Claims. (Cl. 271—28.)



1. A sheet feeding machine having, in combination, a suction feed wheel having a perforated rim, a suction nozzle within the rim over which it travels, a cut-out valve for reducing the suction through the nozzle, an electromagnet for operating the valve, and a switch in the magnet circuit operated by the sheet advanced by the wheel.

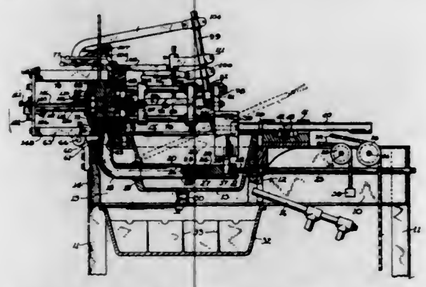
1,810,172. SYSTEM OF TEMPERATURE CONTROL. ANSON HAYES, Ames, Iowa. Filed Nov. 6, 1926. Serial No. 146,739. 5 Claims. (Cl. 236—15.)



1. A system for controlling the temperature of a hot body, comprising an electrical circuit arranged to control

the supply of heat-producing energy thereto and normally in open circuit, a pyrometer which is responsive to the temperature of said hot body, including a Wheatstone bridge in said circuit, two arms of said bridge containing photoelectric cells, a standard light in said circuit, one of said cells arranged to receive radiations from said standard light and another arranged to receive radiations from the hot body, means for changing the resistance of the circuit through the standard light, and means for measuring the potential drop in the circuit through said standard light, an instrument for indicating the variations in temperature of the hot body, and including a movable member, connections between said pyrometer and said instrument for actuating said movable member in accordance with such temperature variations, a pair of spaced contact points associated with said instrument arranged for constant conjunctive travel and adapted for contact by said movable member, a relay device including a pair of electro-magnets and an armature selectively operable by said magnets for closing or opening the circuit above mentioned, and electrical connections between said magnets and the respective contact points.

1,810,173. CASTING MACHINE. MAX O. HELD, Milwaukee, Wis. Filed July 8, 1929. Serial No. 376,551. 19 Claims. (Cl. 22—68.)



1. In a casting machine, the combination of a container for holding molten metal therein and including a side wall having a transverse passage through which molten metal is forced, a cylinder removably mounted within said container and having an end portion in register with said passage, means engageable with the opposite end portion of said cylinder for removably retaining said cylinder in communication with said passage, and a piston movably mounted within said cylinder for forcing molten metal into said passage.

1,810,174. PROCESS FOR THE PRODUCTION OF CONDENSATION AND POLYMERIZATION PRODUCTS OF ACETYLENE. WILLY O. HERRMANN, HANS DEUTSCH, and WOLFRAM HAEHNEL, Munich, Germany, assignors to Consortium fur Elektrochemische Industrie, Munich, Germany. Filed Jan. 16, 1925. Serial No. 2,945, and in Germany Jan. 23, 1924. 7 Claims. (Cl. 260—2.)

1. Process for the production of water insoluble condensation and polymerization products which consists in causing acetylene to react in the absence of water and in the presence of a catalytically acting salt selected from the group consisting of the salts of mercury and aluminium, upon a compound selected from the group consisting of hydrocarbons, halogen substituted hydrocarbons and aliphatic alcohols and carrying the condensation beyond the stage of oily reaction products.

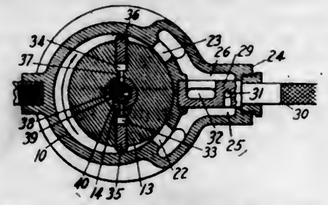
4. Process for the production of water insoluble condensation and polymerization products which consists in causing acetylene to react in the absence of water and in the presence of a catalytically acting salt selected from the group consisting of the salts of mercury and aluminium, and a strong acid upon a compound selected from the group consisting of hydrocarbons, halogen substituted hydrocarbons and aliphatic alcohols and carrying the condensation beyond the stage of oily reaction products.

1,810,175. LUBRICATING MEANS. WARD B. HILL and VIRGIL M. WATT, Indianapolis, Ind. Filed Mar. 2, 1929. Serial No. 344,033. 1 Claim. (Cl. 267—50.)



In a lubricating means for springs or the like, a main spring leaf, one or more spring leaves having slots extending longitudinally thereof from points adjacent their ends, the extreme end portions of said slots being part-way through said leaves and the remaining portion entirely therethrough, said slots forming a lubricant reservoir, additional spring leaves having channels extending longitudinally thereof from points adjacent their ends, said additional spring leaves having ports adjacent their ends for successively feeding the lubricant from the reservoir to the succeeding leaves, the ends of each succeeding slot extending a distance beneath the solid bottom portions of the preceding slot and the ends of each succeeding channel extending a distance beyond the opening through the preceding spring, and means for introducing lubricant into said reservoir adjacent the outer ends thereof.

1,810,176. AIR MOTOR. ION V. K. HOTT, Dayton, Ohio, assignor of one-third to William F. Bippus and one-third to Jesse M. Switzer, Dayton, Ohio. Filed Oct. 4, 1927. Serial No. 223,998. 10 Claims. (Cl. 121—87.)

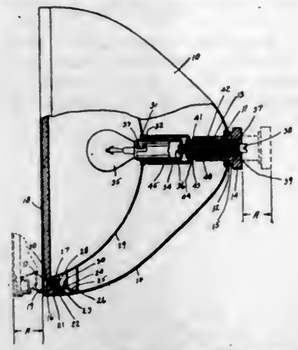


1. In a portable air motor, a casing having a work chamber, a hollow shaft journaled in said casing and extending through said chamber, a piston carried by said shaft within said chamber and having radial guideways, blades mounted in said guideways for radial movement, said shaft having ports connecting said guideways with the interior thereof, a normally stationary member mounted in said hollow shaft and having a longitudinal bore and also having a circumferential groove connected with said bore and communicating with said ports to deliver air to said guideways at the inner edges of said blades, means for connecting said bore with a source of supply for air under pressure, and means for admitting air under pressure to and exhausting the same from said work chamber.

1,810,177. INTERIOR TELESCOPING RIM HEAD LAMP. SAMUEL W. HYATT, Connersville, Ind., assignor to Indiana Lamp Corporation, Connersville, Ind. Filed Jan. 24, 1930. Serial No. 422,983. 1 Claim. (Cl. 240—41.5.)

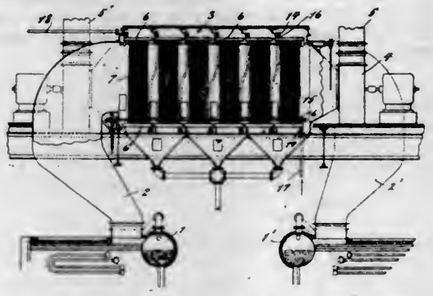
In a head lamp construction, the combination of a casing having an apertured rear end, a reflector nested therein, a lens closure for closing the reflector, a rim engaging the closure and including a casing receivable portion, co-operating wedge portions upon the adjacent ends

of the reflector and rim, a threaded sleeve slidable longitudinally in the casing aperture and having a registering aperture, a threaded member carried by the reflector and having threaded engagement with the sleeve for reciprocating the reflector relative to the casing for locking the casing, rim and reflector together and for unlocking the



same, said threaded member including an internally threaded portion, a bulb socket slidably supported by said reflector, and a focusing member rotatably supported at one end by said socket and having its other end exposed through the sleeve aperture, said focusing member including an intermediate threaded portion having threaded engagement with said reflector carried threaded member.

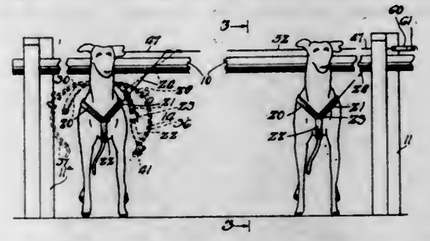
1,810,178. HEAT TRANSFER DEVICE. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed Sept. 4, 1918, Serial No. 252,550. Divided and this application filed June 22, 1929. Serial No. 372,940. 10 Claims. (Cl. 257—251.)



1. In a heat transfer device, a plurality of sections arranged side by side, each section having a pair of headers with longitudinally extending flat wall portions provided with sets of holes, each arranged in a transversely extending band, tubes secured in said holes and connecting the two headers of each pair, at least some of said tubes being bent at their ends to enter said holes, the headers of adjacent sections being spaced apart and the tubes of the sections forming a bank, the tubes of the bank being spaced substantially uniformly across the bank in a direction transverse to the length of said headers, a compartment common to a group of headers at each end of the sections, and pipes connecting the end portions of said headers to said compartment.

1,810,179. STARTING APPARATUS. THOMAS A KEEN, St. Louis, Mo., assignor to Hannah M. Smith, Chicago, Ill. Filed Nov. 14, 1928. Serial No. 319,335. 12 Claims. (Cl. 119—15.5.)

1. In a device for use in maintaining a dog at the starting line of a race course, a member surrounding the dog's body and comprising a separable split ring member having strap members engaging the dog's shoulders, a



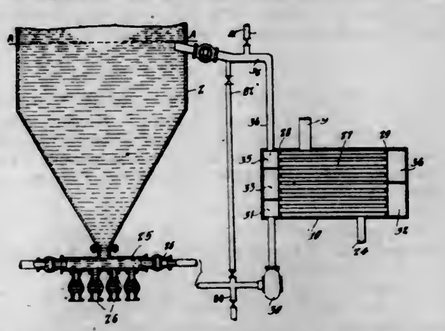
latch for said ring member, and a pin for securing said straps one to another, said latch and pin being releasable to free the dog from said device.

1,810,180. COLOR PHOTOGRAPHY. WILLIAM V. D. KELLEY, Jersey City, N. J., assignor, by mesne assignments, to Max B. Du Pont Vitacolor Corporation, Los Angeles, Calif., a Corporation of Delaware. Filed Dec. 12, 1922, Serial No. 606,369, and in Great Britain Aug. 13, 1921. 19 Claims. (Cl. 95—2.)



1. Process of producing two differently colored prints in a single silver halid emulsion consisting in printing a diapositive and a dianegative image of the same subject in registration in different strata of the emulsion, developing the respective prints, rendering the dianegative print invisible, and differently coloring the respective prints.

1,810,181. PROCESS AND APPARATUS FOR RECOVERING VALUES FROM BRINE. FRANCIS MACDONALD, WILLIAM H. ALLEN, CHARLES F. RITCHIE, and VINCENT T. MANCHEE, Trona, Calif., assignors to American Potash & Chemical Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept 29, 1928. Serial No. 309,279. 23 Claims. (Cl. 23—41.)

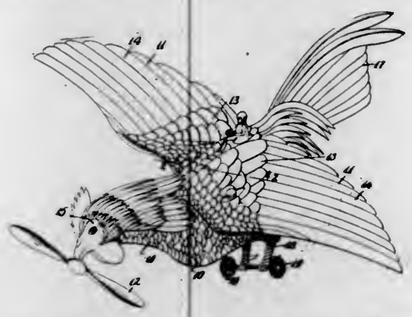


1. A process of evaporating brine while precipitating salt therefrom which comprises, circulating the brine from an evaporator to an external heater, back into the evaporator, and super-heating the brine in the heater to a high degree of super-heat.

1,810,182. AEROPLANE. ANGEL MATEO, Santiago, Dominican Republic. Filed June 28, 1930. Serial No. 464,532. 8 Claims. (Cl. 244—20.)

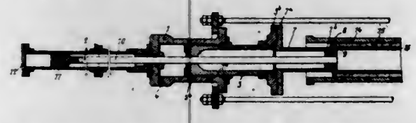
1. An aeroplane of rooster shape, comprising an aeroplane body simulating a rooster and having a pair of

pivotal wings, a motor-driven traction propeller mounted on the front of said body, each of said wings being composed of inner and outer sections telescopically and slidably arranged in edge contacting relation, means for re-



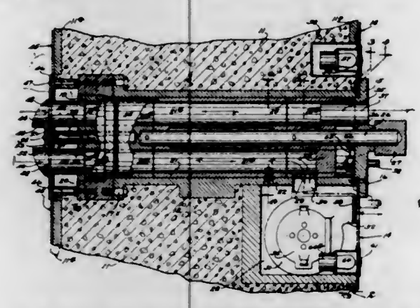
tracting the outer wing sections in lowered positions of the wings, means for projecting the outer wing sections in raised positions of the wings, and means for raising and lowering said wings so as to constitute flapping.

1,810,183. APPARATUS FOR EJECTING PIPES CAST IN FLASKS IN ONE PIECE. LÉON LOUIS MATHIEU, Rouen, France, assignor to Societe Anonyme des Hauts-Fourneaux et Fonderies de Pont-A-Mousson, Pont-A-Mousson, Meurthe-et Moselle, France. Filed Dec. 29, 1928, Serial No. 329,207, and in France Apr. 4, 1928. 15 Claims. (Cl. 22—94.)



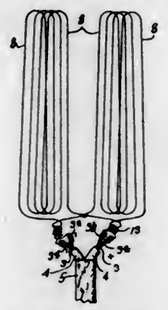
1. An ejector device for pipe casting machines, comprising an ejecting head, a fluid pressure cylinder, a piston in said cylinder adapted to cooperate with the ejecting head, a second fluid pressure cylinder of smaller cross-section than the first cylinder and having a length which substantially corresponds to that of the pipe to be ejected from the mold, and a piston in said second cylinder, adapted to cooperate with the said ejecting head.

1,810,184. VAULT VENTILATOR. OLIVER B. MCCLINTOCK, SILVAN R. POPP, and EDWARD C. HANSON, Minneapolis, Minn., assignors to O. B. McClintock Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Dec. 13, 1929. Serial No. 413,824. 9 Claims. (Cl. 109—1.)



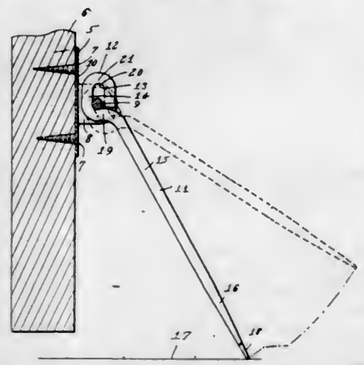
1. In a vault ventilator, an encasing cylinder and within said cylinder two sets of core sections provided with air conduits adapted to be moved into and out of registration by rotation of one set of said core sections in respect to the other, one set of core sections comprising inner, outer and intermediate members, the other set of core sections being positioned between the end and intermediate members of the first noted set of core sections, and means for rotating one set of core sections in respect to the other.

1,810,185. HEATING APPARATUS FOR LIQUIDS. DALTON U. POWELL, Woodsfield, Ohio, assignor of one-half to Orton C. Dunn, Marietta, Ohio. Filed May 1, 1929. Serial No. 359,435. 11 Claims. (Cl. 219—41.)



1. In an electrical resistance unit, positive and negative electrical supply cables having their ends divided in two spaced parts, a resistance ribbon connected to one of said parts on the positive side to a corresponding part on the negative side, a second resistance ribbon so connected, said respective ribbons being twisted together adjacent their points of connection to the supply cables.

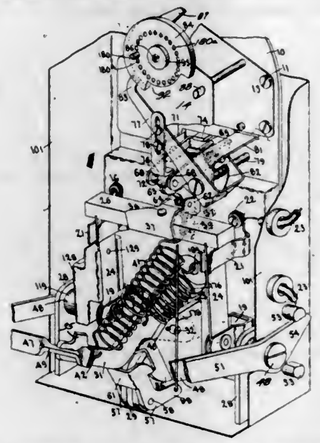
1,810,186. DOORSTOP. FREDERICK T. RICHARDS, Peoria, Ill., assignor to Stover Manufacturing & Engine Co., Freeport, Ill., a Corporation of Illinois. Filed Sept. 26, 1929. Serial No. 395,413. 1 Claim. (Cl. 292—338.)



A door prop of the character described comprising a prop arm arranged to move between an operative and an inoperative position including a lower end adapted to engage the floor at one side of the door when in the operative position and a bearing loop having substantially parallel sides positioned at an angle with respect to the remainder of said arm and defining an elongated opening having the same angular relation as said sides with respect to said arm, and a bracket adapted to be positioned upon a door, said bracket having a vertical wall at the face of the door and a bearing pin spaced therefrom to engage the elongated opening formed by said loop, whereby said prop arm may be turned thereon from said operative position to said inoperative position with said arm extending upward against the door, the parallel

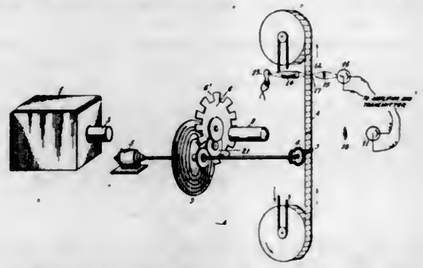
sides of said loop sliding over said pin to bring said prop arm inward against the door, and said prop arm in the operative position having thrust engagement at the lower end of its elongated opening upwardly against the bearing pin.

1,810,187. DOUBLE ACTING SWITCH TIMER. RAYMOND D. SMITH, Pleasantville, N. Y., assignor to Tremont Products Corporation, Boston, Mass., a Corporation of Massachusetts. Original application filed May 8, 1918, Serial No. 233,350, renewed Mar. 22, 1923, now Patent No. 1,521,841, issued Jan. 6, 1925. Divided and this application filed Nov. 12, 1924. Serial No. 749,479. 31 Claims. (Cl. 200—39.)



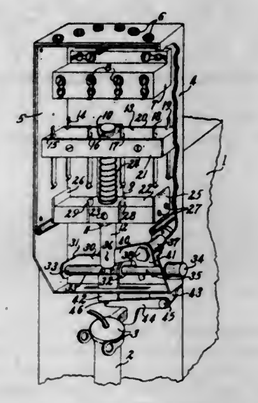
1. In combination, a time motor, a manually operable timer returnable to its starting position by said motor when manually displaced from said position, electric circuit control means operable by said timer to effect a circuit change when said timer is returning toward its starting position, and a second timer operatively adjustable relative to said first timer and likewise returnable to its starting position by said motor and when so returning operative upon said means to effect a different circuit to predeterminable time relation to the first said circuit change, one of said timers being so connected that the act of displacing same from its starting position winds the driving spring of said motor.

1,810,188. TELEVISION SYSTEM. THEODORE A. SMITH, Ridgewood, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed July 19, 1929. Serial No. 379,384. 21 Claims. (Cl. 178—6.)



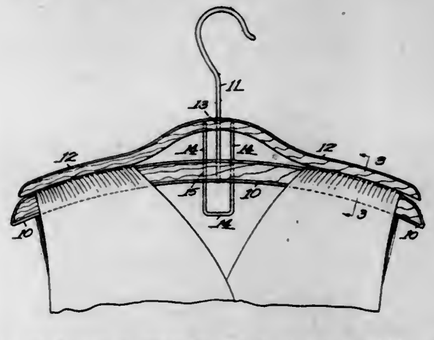
1. A system for the electrical transmission of motion picture film which includes in combination means for moving a motion picture film at a predetermined constant speed relative to a predetermined point, and means for scanning a lesser number of picture frames of the motion picture film than pass before said predetermined point during a unit time period.

1,810,189. PROTECTIVE DEVICE. WILLARD J. STANTON, Chicago, Ill., assignor, by mesne assignments, to American Electric Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 27, 1929. Serial No. 350,245. 9 Claims. (Cl. 179—78.)



1. In a telephone system having a line and arresters, the combination of a telephone, and means for preventing the mechanical operation of said telephone until after said line has been connected to said arresters.

1,810,190. GARMENT HANGER. CAROL L. STRAUSS, Bangor, Me. Filed Dec. 23, 1929. Serial No. 416,060. 2 Claims. (Cl. 223—64.)

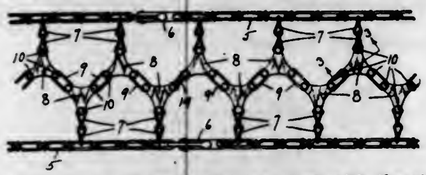


1. An article of manufacture, a garment hanger comprising a lower bar to receive a garment and an upper bar adapted to rest on the lower bar and retain the garment therebetween, a supporting hook having a straight vertical shank fixed to the lower bar, a plurality of guides fixed to the upper bar and effective to prevent twisting of one bar with respect to the other, said upper bar being vertically perforated at its center to slidably receive said hook, and said lower bar being perforated to slidably receive said guides, said guides being connected together below the lower bar, the connection of the bars together constituting a stop to limit the upward motion of the upper bar.

1,810,191. NONSKID TIRE CHAIN. JOHN A. STUECKLE, Spokane, Wash. Filed Mar. 28, 1930. Serial No. 439,639. 2 Claims. (Cl. 152—14.)

2. A non-skid tire chain having in combination a plurality of triangular plates, said plates disposed in zigzag arrangement with a side of each plate parallel with a side of the other plates, a traction calk on each corner of the plates, links connecting the plates disposed through

the calks of adjacent plates at points offset from the plates, side chains for the plates, and links connecting



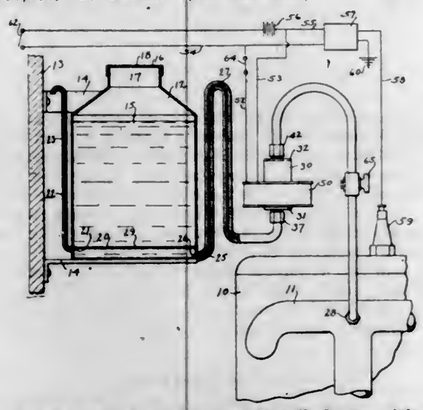
the third corners of each adjoining plate with the side chains normal thereto and disposed in alternate counter directions from the plates.

1,810,192. PROCESS OF PREPARING ALKYL SULPHATES. RENÉ DE M. TAVEAU, Elizabeth, N. J., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed June 11, 1921. Serial No. 476,699. 18 Claims. (Cl. 260—98.)

1. The process of making acid alkyl sulphates from gases containing butylenes, propylene and ethylene which comprises treating the gases in three successive stages or steps with sulphuric acid of progressively increasing concentrations, the first two stages being conducted at cool temperatures and the last stage at a hot temperature to separately absorb the several olefins substantially in the order of chemical affinity, whereby acid alkyl sulphates corresponding to the several olefins are separately produced.

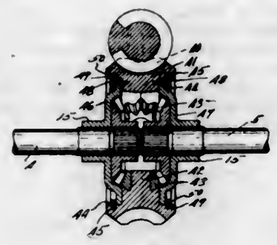
18. In the process of treating gases derived from the pyrogenic decomposition of hydrocarbon oils and containing substantial amounts of olefines, the steps comprising absorbing the butylenes and the more easily polymerized products by treating the gases with a relatively weak acid maintained at a temperature not exceeding 30° C., and thereafter treating the gases with stronger acid under a temperature suitable for the absorption of propylene, whereby the corresponding acid alkyl sulphates are separately produced.

1,810,193. INTERNAL COMBUSTION ENGINE. CHARLES A. THOMAS, Dayton, Ohio, assignor to Thomas and Hochwalt Laboratories, Inc., Dayton, Ohio, a Corporation of Ohio. Filed Apr. 22, 1929. Serial No. 357,087. 16 Claims. (Cl. 123—198.)



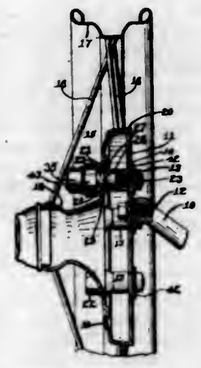
1. Apparatus of the character described, comprising in combination, an internal combustion engine having a cylinder, an electrical circuit for said engine, a switch within said electrical circuit, and means operatively associated with said electrical circuit and switch for automatically introducing chemical into the cylinder of said engine upon the opening of said switch to break the electrical circuit.

1,810,194. DIFFERENTIAL MECHANISM. ELVERTON W. WEAVER, Cleveland Heights, Ohio, assignor to The Columbia Axle Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 27, 1928. Serial No. 308,749. 5 Claims. (Cl. 74—99.)



1. In differential mechanism, the combination of a gear element having a hollow body portion provided with recesses on its opposed lateral faces and circumferential slots in the outer walls of said recesses, casings disposed in said recesses and resilient rings engaged in said slots and against said casings, whereby said casings are removably locked in engagement with said gear element.

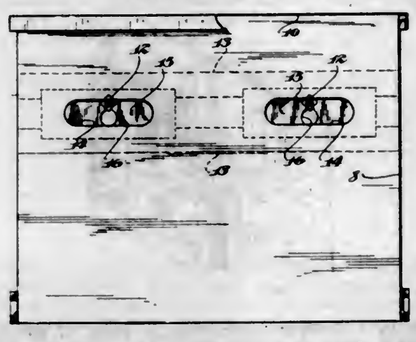
1,810,195. SPARE WHEEL LOCK. JOHN J. WHARAM, Detroit, Mich., assignor to Ford Motor Company, Fordson, Mich., a Corporation of Delaware. Filed Oct. 19, 1928. Serial No. 313,404. 7 Claim. (Cl. 70—122.)



1. In a device of the character described, a bolt having a recessed head, a sleeve rotatably and non-slidably mounted on said bolt adjacent to the head, a protective casing adapted to be rotatably mounted in said sleeve and to enclose the bolt head, and means for locking the protective casing into said recess to permit rotary movement of the casing relative to the bolt and to prevent axial movement of the casing relative to the bolt.

1,810,196. ADJUSTABLE HANGER FOR CABINET RADIATORS. JAY C. WILLCOX, Minneapolis, Minn., assignor to McQuay Radiator Corporation, Minneapolis, Minn., a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,192. 2 Claims. (Cl. 248—17.)

1. The combination with an upright support and an object to be mounted thereon, of a fixed anchor on the support, said object having an aperture through which the anchor projects with clearance to permit a limited horizontal adjustment of the object on the support, a slide mounted in a way on the object for horizontal sliding movement, covering the aperture and having a coincident keyhole slot through which the anchor projects and has interlocking engagement with the slide.

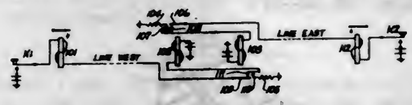


1,810,197. STOCKING. ARMIN H. WITTENBERG, Los Angeles, Calif. Filed Apr. 14, 1928. Serial No. 269,892. 2 Claims. (Cl. 66—182.)



2. A full fashioned stocking, comprising reinforced sole and heel portions integrally formed with the foot portion of said stocking, the threads forming said foot portion being knitted with the threads forming the instep portion of the stocking along a tortuous line, said tortuous line running in zig-zag fashion along the side of the sole and instep portion of the stocking at the sides of the foot portion thereof whereby pulling strains in said stocking are distributed over wide areas at the sides of the foot portion of the stocking.

1,810,198. TELEGRAPH SYSTEM. JOHN I. BELLAMY, Brookfield, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Nov. 30, 1928. Serial No. 322,631. 10 Claims. (Cl. 178—71.)



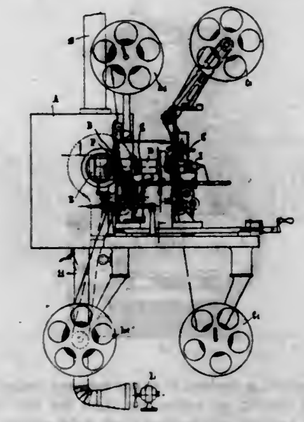
1. In a telegraph system, two lines, a repeating device having two coils connected in series with said lines, respectively, and arranged to be energized thereover, means responsive to a deenergization of either coil when the associated line is broken for breaking the other line, and additional means for energizing the coil of the other line in a local circuit while the other line is thus broken.

1,810,199. DISH HOLDING BASKET. GEORGE S. BLAKESLEE, deceased, Oak Park, Ill., by George R. Blakeslee, executor, Oak Park, Ill., and George P. Anstiss, Oak Park, Ill., assignors to G. S. Blakeslee & Co., Cicero, Ill., a Corporation of Illinois. Original application filed Aug. 2, 1928, Serial No. 655,241. Divided and this application filed Mar. 28, 1925. Serial No. 19,019. 5 Claims. (Cl. 141—9.)



1. A dish holding rack for dish washing machines comprising parallel horizontal wooden bars provided with round holes therein at intervals and inclined to the vertical, the upper surfaces of said bars around said holes being at right angle to the axis of said holes, a series of fingers carried by said bars, said fingers having square tenons at their lower ends inserted in said holes, and having shoulders perpendicular to the bases of said tenons abutting against said inclined surfaces, and means for spacing said bars apart.

1,810,200. PRINTING MACHINE FOR COLORED FILMS. PAUL BROSSE, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 28, 1928, Serial No. 322,504, and in France Dec. 3, 1927. 4 Claims. (Cl. 88—24.)



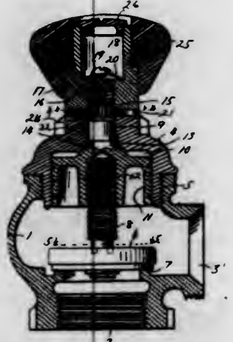
1. A projection printing machine for reproducing colour prints on goffered film, comprising a source of light; an oscillating mirror to intercept the light beam before it reaches the original film; an optical system between which and the mirror the original film passes, and through which the beam is projected by said mirror upon the copying film after having first passed through the original film; an oscillating diaphragm; a lens for regulating the angle of incidence of the projecting beam upon the copying film; a shutter and shutter shaft between the regulating lens and the optical system; and means for synchronising the movements of the shutter, diaphragm and mirror.

1,810,201. RENEWABLE REAMER. STEWART L. CAMPBELL, Berkeley, Calif., assignor to John Grant, Los Angeles, Calif. Filed Dec. 5, 1928. Serial No. 324,007. 18 Claims. (Cl. 255—76.)



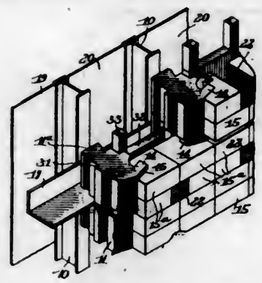
1. An expanding changeable cutter reamer, comprising a body, a cutter-carrier mounted on the body and adapted to be moved in a plane transverse of the body, a plurality of cutters mounted on the cutter-carrier and adapted to be selectively moved to expanding position by virtue of such movement of the cutter carrier, and means mounted on the body and movable longitudinally relative thereto and adapted to move the cutter-carrier step by step.

1,810,202. PACKLESS VALVE. JOSEPH H. CHEETHAM, Detroit, Mich. Filed Sept. 21, 1925, Serial No. 57,584. Renewed Nov. 19, 1930. 2 Claims. (Cl. 251—47.)



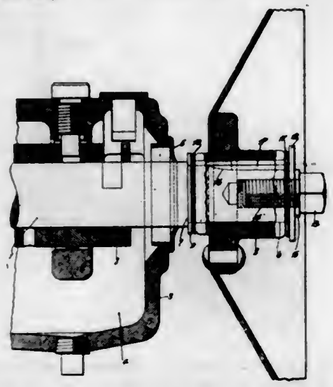
1. In a valve, a casing, a valve member adapted to seat within said casing, an actuating stem for said valve having an end portion projecting from said casing, a handle for actuating said stem, having a central opening between its top and bottom faces, a member carrying the handle entering said opening, and rigidly connected to the handle, said member having a driving engagement with said projecting portion of the stem and being slidable upon said portion, and said member being formed with a chamber opening in its outer end, means within said chamber securing said member upon the stem, and a closure for the chamber of said member carried by said member within said central opening of the handle and removable independently of any loosening of said handle on said member and removable independently of the handle securing means.

1,810,203. FURNACE AND THE LIKE. ROGER D. DE WOLF, Rochester, N. Y. Filed May 1, 1926. Serial No. 106,123. 24 Claims. (Cl. 72—102.)



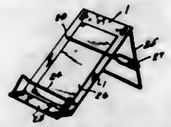
23. In a furnace construction, a series of upwardly extending beams provided with abutments, hanger bricks supported by said abutments, and facing bricks having detachable interlocking engagement with said hanger bricks.

1,810,204. RESILIENT MOUNTING FOR DRIVEN ELEMENTS ON MOTOR SHAFTS. ALBERT C. DICKSON, St. Louis County, Mo., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed May 31, 1927. Serial No. 195,263. 4 Claims. (Cl. 64—89.)



3. A device of the class described comprising, in combination, a motor shaft having a reduced portion; a driven element having a hub fitting over said reduced portion; resilient coupling means between said hub and the motor shaft, including a washer loose on the shaft and a spring disc washer between the loose washer and the face of the hub; a key of compressible material loosely fitted between the hub and the shaft; and locking means for locking the mounting including a bolt threaded into the end of the shaft and a lock washer beneath the head of said bolt.

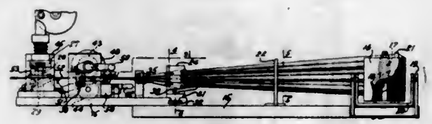
1,810,205. BOOKREST. THEODORE GENSMER, Portland, Oreg. Filed Feb. 28, 1928. Serial No. 257,600. 1 Claim. (Cl. 45—57.)



A book rest comprising a one-piece body element having one of its ends turned inwardly to form a ledge, openings

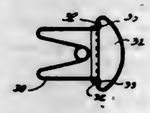
disposed on the oppositely disposed edges of the body element in spaced relation, a clamping element movably associated with the ledge comprising a resilient member having an inwardly turned back, and downwardly turned arms having inwardly turned terminals adapted to fit the openings disposed within the ledge, said terminals being so shaped as to create a tension between the back of the resilient member and the body element, and a U-shaped resilient member having upturned arms and inwardly turned terminals, said terminals being disposed within the openings disposed within the body member and being so constructed as to create a tension between the resilient member and the body member, substantially as shown and described.

1,810,206. APPARATUS FOR PRODUCING ARTICLES FROM SHEET MATERIAL. AUGUSTUS WILKES GUDGE, Newark, N. J., and EARL WENSLEY, Cicero, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed June 9, 1928, Serial No. 284,208. Divided and this application filed Mar. 6, 1929. Serial No. 344,854. 8 Claims. (Cl. 270—40.)



1. In an article forming apparatus, means for supporting a ribbon of paper, a plurality of blades positioned to alternately engage opposite sides of the paper to produce folds, a guide roller for engaging the paper as it leaves the blades, a second set of blades for resiliently pressing the folded paper, and a pair of rolls for creasing the paper.

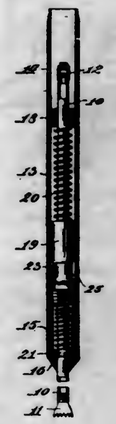
1,810,207. CURTAIN ROD PILOT. EARL H. HART, Berkley, Mich. Filed Mar. 13, 1929. Serial No. 346,561. 3 Claims. (Cl. 223—38.)



3. A curtain rod pilot comprising a piece of wire bent to form a spring coil and having the extending ends thereof extending at an angle one to the other, each extending end being return bent and provided with an outwardly extending hook portion and a sheet metal head having an inturned flange behind which the hook portions are adapted to be engaged.

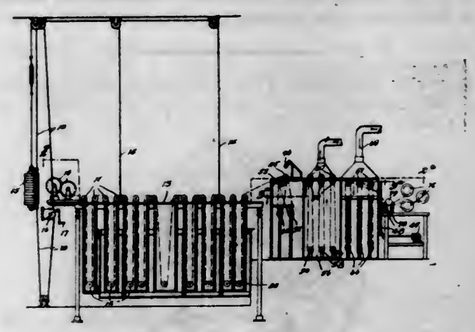
1,810,208. CORE DRILL. EARL S. HARTSON, Los Angeles, Calif. Filed May 25, 1928. Serial No. 280,515. 9 Claims. (Cl. 255—27.)

1. In a core drill, a tubular body adapted to be connected to a drill pipe, a core barrel axially arranged in said tubular body, a drill carried by the lower end of said core barrel, a spring pressed hammer arranged for sliding movement on said core barrel within said tubular body, an anvil block arranged in the lower portion of the



tubular body, a shoulder on the core barrel which is adapted to engage against the said anvil block, and means for latching the hammer to said core barrel.

1,810,209. FILM TREATING MACHINE. GEORGE HAYNES, Jersey City, N. J., assignor, by mesne assignments, to Max B. Dupont Vitacolor Corporation, Los Angeles, Calif., a Corporation of Delaware. Filed Jan. 4, 1926. Serial No. 79,144. 9 Claims. (Cl. 95—94.)

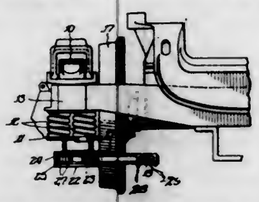


4. A machine for treating long films, comprising a series of tanks, a plurality of idler pulleys therein for guiding the film in its passage successively through said tanks, driving pulleys beyond the tanks engaging the film to pull the film through the tanks, a second set of driving pulleys beyond the first set frictionally engaging the film to pull it onward, and adjustable compensating pulleys engaging the film between the first and second sets of driving pulleys to maintain an even tension in the film and to allow for change in film length.

1,810,210. SUPPORTING MEANS FOR BRAKES. WILLIAM C. HEDGCOCK, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Dec. 15, 1928. Serial No. 326,243. 3 Claims. (Cl. 188—210.)

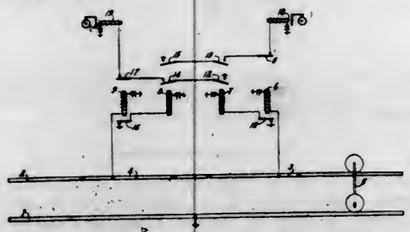
1. In a railway car truck, the combination of a side frame having on its outer under side a depending L-shaped

projection, an arm extending laterally from said side frame for carrying a brake beam engaging element and



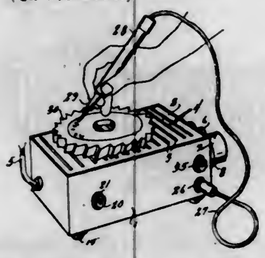
having a portion seated in said L-shaped projection, and means extending through said projection and arm for securing together said parts.

1,810,211. REGISTERING SYSTEM. HARRY E. HERSHEY, Oak Park, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Nov. 12, 1928. Serial No. 318,715. 7 Claims. (Cl. 235—92.)



1. In a metering system, a plurality of meters, a plurality of relays associated therewith, and means for operating said relays in a predetermined order to operate a certain one of said meters and to operate said relays in the reverse order to operate another one of said meters.

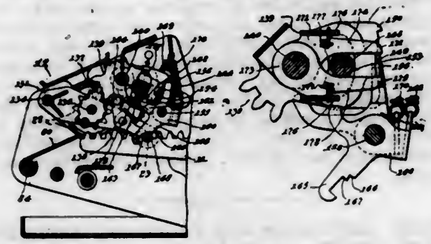
1,810,212. ELECTRIC TOOL. ROBERT L. HINDS, Toledo, Ohio. Filed Dec. 21, 1928. Serial No. 327,631. 4 Claims. (Cl. 175—356.)



1. A transformer housing having a conductor face, a transformer therein having primary and secondary windings, electric current supply connections to the transformer, a branched connection at one side of the transformer from the secondary winding extending as to one branch thereof to the housing conductor face, and a flexible extension from the other branch thereof having a terminal for connection away from the housing.

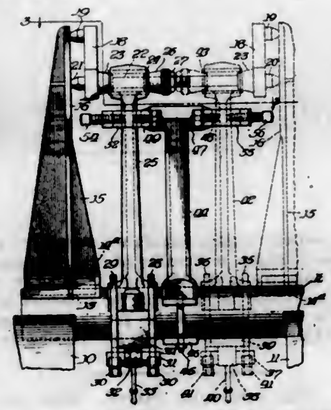
1,810,213. CALCULATING MACHINE. OLIVER D. JOHANTGEN, Winnetka, Ill., assignor to Victor Adding Machine Co., Chicago, Ill., a Corporation of Illinois. Filed July 5, 1927. Serial No. 203,464. 18 Claims. (Cl. 235—137.)

2. In an adding and subtracting mechanism, the combination with accumulator wheels, of a reciprocatory carrier adapted to move forward and backward to effect carrying from a wheel of lower order to a wheel of higher order either for addition or for subtraction according to the direction of movement of said carrier, spring con



trolled detents acting against said carrier to move it forward or backward, and means for setting said detents to determine the direction in which said carrier may move.

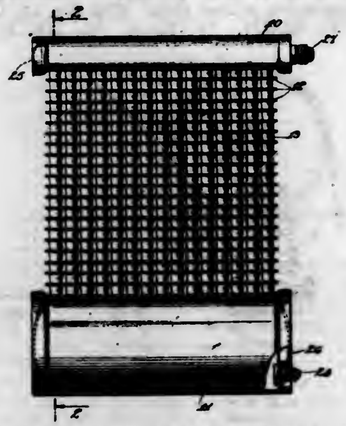
1,810,214. ALIGNING FIXTURE. LEONARD W. JOHNSON, Batavia, Ill. Filed Feb. 11, 1927. Serial No. 167,574. 1 Claim. (Cl. 77—62.)



A fixture for aligning a pair of engine-connecting-rods preparatory to reaming the wrist pin openings thereof, comprising in combination a base member having an intermediate portion shaped to be received in the terminal crank shaft bearings of the engine-connecting-rods to be reamed, means adjustably mounted upon the intermediate portion of said base member and provided at opposite sides with means for engagement with respective connecting-rods for adjustably clamping said rods on the base member at right angles thereto, a gauge member provided at one end with a clamping seat to selectively receive either end portion of the base member and provided at its other end with a gauge face disposed at right angles to the base member, and a second gauge member for interposition between the said gauge face and the adjacent connecting-rod, said second gauge member being provided upon one side with a set of gauge projections for engagement with said gauge face and on its opposite side with a gauge projection to enter the wrist pin opening of the adjacent connecting-rod and locate said wrist pin opening vertical to said gauge face portion.

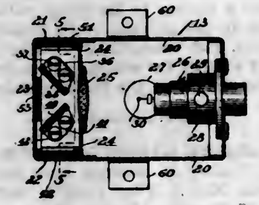
1,810,215. HEADER CONSTRUCTION. JOHN KARMAZIN, Detroit, Mich. Filed Mar. 31, 1927. Serial No. 179,786. 12 Claims. (Cl. 257—154.)

2. A high pressure radiator comprising headers having arcuate walls, a cooling section comprising a plurality of conduits extending between the headers, the headers having flattened wall sections which are perforated in alignment with said conduits, a reinforcing plate within each header extending over the flattened wall and adjacent parts of the arcuate wall, said reinforcing plates having perforations registering with the perforations in



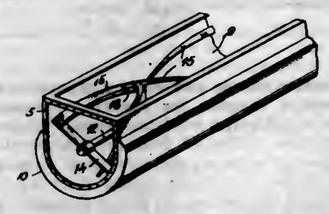
the header walls, and members having tube sections, adapted to engage and hold the water tubes of the cooling section, superposed on the reinforcing plates.

1,810,216. VEHICLE LIGHT. HENRY F. KURTZ, Rochester, N. Y., assignor to Benneville Lloyd Singley, Meadville, Pa. Filed Feb. 15, 1929. Serial No. 340,193. 10 Claims. (Cl. 240—8.2.)



10. The combination with an automobile including front and rear fenders and a running board between said fenders, of a light source mounted on the top of said running board, and means including a lens and a reflecting element for projecting a relatively narrow beam of optically directed and controlled light from said source past the outer edge of one of said fenders substantially parallel to the center line of said automobile and at a slightly upward inclination.

1,810,217. CONTINUOUS CRYSTALLIZER. WILLIAM H. LOHMANN, Wilmington, Del., assignor to General Chemical Company, New York, N. Y., a Corporation of New York. Filed Feb. 5, 1927. Serial No. 166,035. 10 Claims. (Cl. 23—273.)



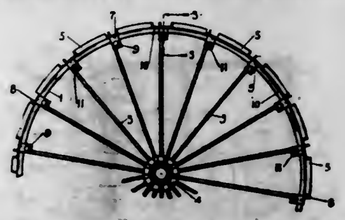
1. A continuous crystallizer comprising a crystallizing chamber, inlet and discharge ports for said chamber, a helical conveyor rotatable in said chamber, and means cooperating with said helical conveyor for scooping up the crystals formed in said chamber and for conveying the crystals to the discharge port.

1,810,218. CHECKING RING. SETH R. MILBURY, Irvington, N. J. Filed Mar. 20, 1928. Serial No. 263,152. 1 Claim. (Cl. 40—21.)



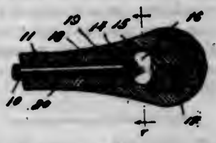
A checking device adapted to be used for identifying a person with his effects deposited in a particular receptacle, consisting of a ring member adapted to be worn upon a limb of the person and having upon its surface characters identifying the receptacle in which the effects are deposited, said ring member having at its side an integrally joined lug extension adapted to retain an effect identifying check.

1,810,219. LUG FOR WHEELS. LEONARD B. NEIGHBOUR, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 21, 1929. Serial No. 334,079. 1 Claim. (Cl. 301—44.)



The combination with a wheel including a hub, spokes, and a tire having a plurality of lugs mounted permanently thereon and arranged alternately diagonally relatively to each other, of a supplemental lug mounted on the tire and in contact with one of the permanent lugs, and means operative to secure the supplemental lug to the tire, said means contacting with the adjacent spoke of the wheel.

1,810,220. SPECTACLE TEMPLE. JOHN N. NELSON, Providence, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 20, 1928. Serial No. 263,047. 2 Claims. (Cl. 88—52.)



1. A spectacle temple formed of a wire core covered with a non-metallic tube, means at the end of the tube for locking the tube to the wire, and an enlarged non-metallic cap having a bore to receive the end of the tube and the locking means to cover the same, the contacting surfaces of said end piece and tube being of non-metallic material and cemented together.

1,810,221. STRIPING TOOL. HERBERT O'CONNELL, Syracuse, N. Y., assignor to H. H. Franklin Manufacturing Company, Syracuse, N. Y., a Corporation of New York. Filed Dec. 14, 1926. Serial No. 154,752. Renewed Nov. 7, 1930. 6 Claims. (Cl. 101—127.)



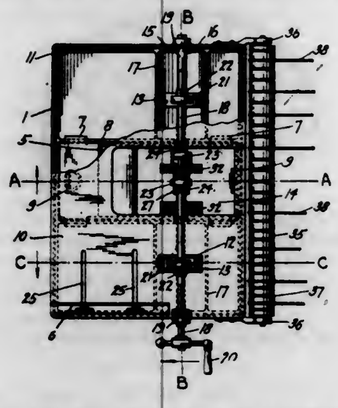
1. A stenciling tool comprising a plate having a slot therein through which paint is projected to form a stripe,

the plate being formed with depressions providing openings in the face of the plate, suction cups mounted in the depressions and having stems extending therefrom to the rear of the plate, the stems having shoulders at their outer ends and springs interposed between the shoulders and the tops of the depressions.

1,810,222. PROCESS OF PURIFYING AND DECOLORIZING ROSIN. ROBERT C. PALMER, Pensacola, Fla., assignor to The Newport Company, Carrollville, Wis., a Corporation of Delaware. Filed Sept. 19, 1927. Serial No. 220,646. 6 Claims. (Cl. 87—2.)

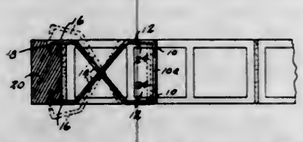
1. The process of improving the quality of rosin, which comprises partially purifying the rosin with resorcinol and subsequently treating the partially purified rosin with an adsorptive material to remove remaining impurities.

1,810,223. APPARATUS FOR GLUING BACKS ON TO BOOKS. ALFRED PETERSON, Denver, Colo. Filed Jan. 27, 1928. Serial No. 249,897. 1 Claim. (Cl. 91—51.)



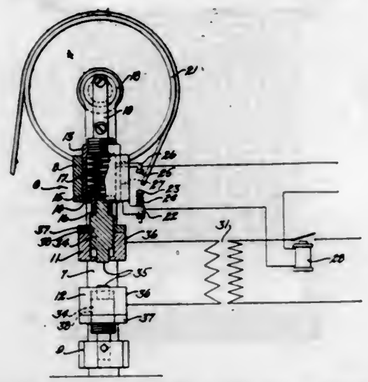
In a machine for applying adhesive material to sheets, a shaft, a hub carried by and of greater diameter than the shaft and a gluing wheel, comprising sections adapted to be correlatively attached to form a wheel on said hub, of different widths predetermined according to the number of sections thus attached, said sections being relatively detachable and adapted to be removed from said hub and to hang upon said shaft and out of operative position when detached.

1,810,224. BUCK ANCHOR. CLYDE W. PRICKETT, Santa Monica, Calif. Filed Mar. 22, 1929. Serial No. 349,099. 3 Claims. (Cl. 72—101.)



1. A buck anchor, comprising an inner cross member, first portions inclined away from the ends thereof and away from each other, second portions inclined away from the ends of said first portions and toward each other, third portions inclined away from the ends of said second portions and from each other, and pointed members turned back from the ends of said third portions whereby said second portions may be sprung across each other and said pointed members may be caused to engage between them a buck, said anchor being or resilient material and constraining said pointed members to enter the buck.

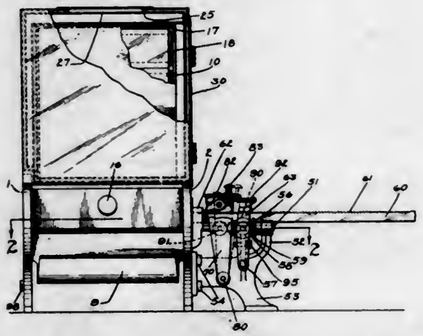
1,810,225. METHOD OF AND APPARATUS FOR WELDING. EMERSON PUGH, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 11, 1927. Serial No. 225,591. 13 Claims. (Cl. 219—10.)



1. In a welding apparatus, a pair of electrodes, means for engaging the electrodes with the work, means for exerting a pressure on the electrodes, means for applying a current to the electrodes, means insulated from the work for decreasing the unit area pressure on the conducting surfaces of the electrodes, and independent means for controlling the application of the welding current.

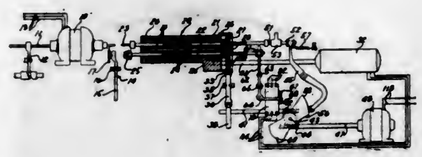
7. A method of welding, which consists of applying and confining a current to an initial contacting area of constant size to the material to be welded to produce a welding action, and subsequently distributing a pressure over a larger area as the welding action progresses while confining the current to the initial contact area.

1,810,226. BUTTER HANDLING DEVICE. WILLIAM E. V. SHAW, DALLAS B. BENHAM, and ROY H. BENHAM, Minneapolis, Minn. Filed June 9, 1927. Serial No. 197,649. 15 Claims. (Cl. 31—20.)



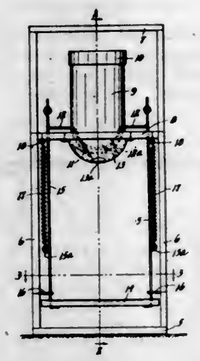
15. A butter storing and cutting apparatus including a refrigeration chamber for receiving open-end butter containing cartridges, a receiving chamber adapted to receive cartridges discharged from the refrigeration chamber, and having walls adapted to prevent warming of the contents of the cartridges; means including a hollow walled plunger for feeding the butter through a cartridge when in the receiving chamber, said plunger having substantially a piston fit with the cartridge walls, and means for cutting the butter as it issues from said receiving chamber, said cutting means being adapted when inoperative to prevent warming of the receiving chamber, by substantial closure of one end of said chamber.

1,810,227. DRIVE FOR SCREW MACHINES AND THE LIKE. JOHN RICHARD SHEA, River Forest, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 28, 1928. Serial No. 329,032. 7 Claims. (Cl. 29—41.)



1. A drive mechanism for screw machines and the like, comprising means for rotating the work at a constant speed, means for advancing the tool relative to the work, a threading tool adapted to operate on the work, an electric motor adapted to rotate the tool, means supplying current to the motor to cause it to rotate the tool at a higher speed than the work, means supplying current to the motor to cause it to rotate the tool at a lower speed than the work, and a switch mechanism controlled by the operation of the advancing means rendering said two last mentioned means alternately inoperative.

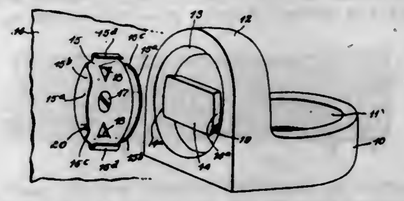
1,810,228. CHICKEN TREATER. JOE SNYDER, Iroquois, S. Dak. Filed Mar. 8, 1928. Serial No. 259,990. 3 Claims. (Cl. 119—157.)



1. A device for treating fowls with insecticide having in combination, a frame having spaced side members, a member extending between said side members some distance from the top thereof, a container for insecticide mounted on said last mentioned member, said container having a substantially semi-spherical screen bottom, a substantially semi-circular oscillating agitator movable over said bottom, a bar extending between said side members adjacent their lower ends and vertically movable therebetween, members connected to said bar and to said agitator, and springs connected to said last mentioned members and to said frame for raising said bar after the same has been depressed by a fowl.

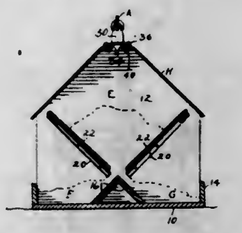
1,810,229. COUPLING AND MOUNTING MEMBER FOR FIXTURES AND THE LIKE. FRANK A. STIRRUP, Westfield, N. J. Filed Apr. 7, 1928. Serial No. 268,317. 9 Claims. (Cl. 248—20.)

8. In a fixture of the class described, the back wall of which is provided with a comparatively large recess, the boundary wall of which is circular in form, a bar-like coupling member arranged centrally of and within the recessed portion of the fixture, the end walls of said coupling member being comparatively wide and terminating short of the boundary wall of said recess, and said end walls



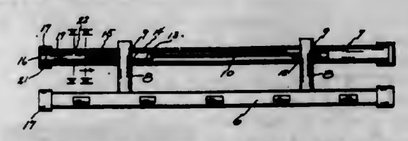
being eccentric with respect to the wall of said recess to form cam surfaces facilitating the coupling of the fixture with a suitable support.

1,810,230. POULTRY FEEDER. HENRY F. THUMANN, Redfield, Ark. Filed Jan. 21, 1929. Serial No. 333,920. 2 Claims. (Cl. 119—52.)



1. In a feeder of the class described, a bottom member having a longitudinal divider ridge, relatively shallow side walls for forming the outer portions of troughs, end members projecting upwardly from the bottom member and above the side members, inclined supports mounted on the inner surfaces of the end members for supporting hopper walls so as to form a hopper tapered toward said divider ridge, removable hopper walls detachably resting on said supports having shoulders at their upper edges for engaging the supports for limiting the downward movement of the hopper walls, and a cover member for the feeder.

1,810,231. LOOSE LEAF BINDER. RICHARD M. VAN VALKENBURGH and CLARENCE A. CEDERLEAF, Kansas City, Mo., assignors, by mesne assignments, to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Jan. 24, 1927. Serial No. 163,078. 11 Claims. (Cl. 129—12.)

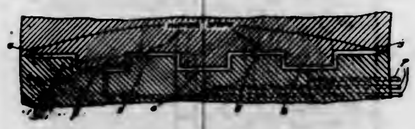


9. In a loose leaf binder, a sheet-engaging member, a post passing therethrough, a lock housing positioned in said member, and a double locking means in said housing, one of which is formed to lockingly engage the post and the other of which is formed to cooperate with said housing to lock said first locking means against operation when it is in engagement with said post.

1,810,232. ART OF EQUALIZING STRESSES IN STRUCTURAL ELEMENTS. FREDRIK VOGT, Trondhjem, Norway, assignor of one-half to E. C. La Rue and B. F. Jakobsen, Los Angeles, Calif., doing business as La Rue & Jakobsen. Filed Apr. 14, 1928. Serial No. 269,930. 10 Claims. (Cl. 61—30.)

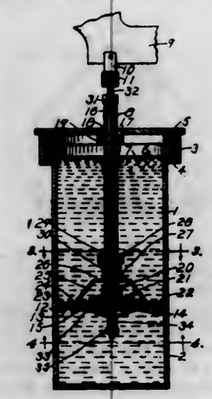
1. The method of equalising stresses in a load carrying structure which is subjected to a non-uniform distribu-

tion of stresses over a sectional area, that includes forming over such cross-sectional area a joint opening having sub-divisional enclosed pressure receiving spaces, and applying and holding different pressures respectively and



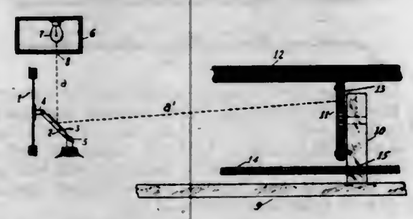
separately on the several pressure receiving spaces, the pressures being such that the stresses to which that portion of the structure is subjected will be subtantially uniformly distributed across the face of the cross-sectional joint area.

1,810,233. DASHPOT. LERNA D. WALDEN, Kansas City, Kans. Filed June 4, 1928. Serial No. 282,587. 20 Claims. (Cl. 188—96.)



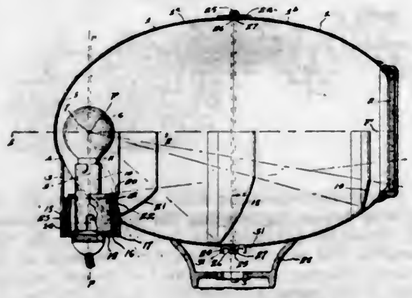
1. A dashpot comprising a liquid-containing cylinder, a piston movable in the cylinder and provided with a plurality of ports, a sleeve extending in the cylinder, a piston rod in the sleeve and attached thereto, and spring-pressed means operable against opposite sides of the piston respectively controlling said ports.

1,810,234. SYSTEM FOR OPTICALLY RECORDING PHONOGRAPH RECORDS. JULIUS WEINBERGER, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 27, 1925. Serial No. 65,134. 4 Claims. (Cl. 274—46.)



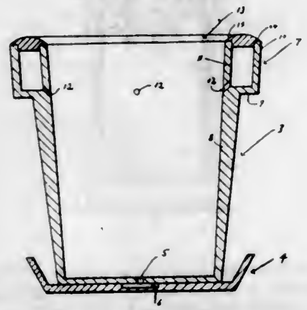
4. In combination, a point source of light; a mirror mounted so as to be vibrated, a diaphragm adapted to be vibrated by sound waves, linked to said mirror for the purpose of vibrating it, a circular plate having gear teeth on its periphery, a disc of sensitised material mounted on said plate, a carriage for said plate, a screw threaded rod for moving said carriage relative to said mirror, and an elongated gear meshing with the teeth on said plate, for rotating said plate.

1,810,235. HEAD LAMP CONSTRUCTION. EDWARD J. WHALEN, Syracuse, N. Y., assignor to Redirected Light Corporation of America, Syracuse, N. Y., a Corporation of New York. Filed June 26, 1928. Serial No. 288,340. 2 Claims. (Cl. 240—41.35.)



1. A headlight comprising a concave reflector having a light opening at its front end and a passage at its rear end arranged at an angle to the axis of the reflector, a source of light, a lamp socket support mounted in said passage and removable with the source of light through the outer end of the passage, said passage having an internal inwardly presented shoulder and a rearwardly presented reflector located in front of the source of light and having a sleeve fitting said passage and abutting against said shoulder and surrounding the lamp socket support.

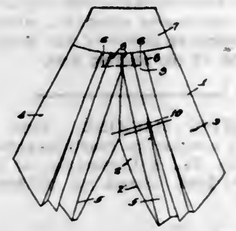
1,810,236. FLOWERPOT. ELIZABETH D. BENDER, Clearfield, Iowa, assignor of one-half to Beatrice Marie Bender, Clearfield, Iowa. Filed Aug. 18, 1930. Serial No. 476,210. 2 Claims. (Cl. 47—38.)



1. As a new product of manufacture, a watering flower pot comprising a pot proper having an upwardly thickened wall formed adjacent its top with an outstanding marginal ledge and an upstanding marginal rim integrally joining said ledge, the upper portion of said wall above said ledge being relatively thin and said rim and thin wall being spaced apart to form an intervening space constituting a water receiving trough, said thin wall being formed with circumferentially spaced diagonal water discharge ports, and a removable lid for said trough having thinned marginal edge portions resting on the upper edges of the trough walls and a relatively thick central portion depending into the water space.

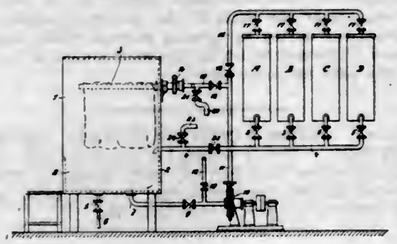
1,810,237. COMBINATION TROUSER SKIRT. MARCIA CAHN BOHR, San Francisco, Calif. Filed Apr. 29, 1930. Serial No. 448,310. 4 Claims. (Cl. 2—212.)

1. A combination trouser skirt having a crotch formed therein for providing leg portions, inverted pleats disposed adjacent to the crotch for hiding the crotch, said pleats being overlapped at their tops for causing their



lower portions to abut during walking and thus cover the crotch at all times, and a row of stitching connecting the pleats and holding the tops of said pleats in place.

1,810,238. LOADING OF SILK, OR SILK-CONTAINING TEXTILE MATERIAL. RENÉ CLAVEL, Basel, Switzerland. Filed July 9, 1928, Serial No. 291,292, and in Switzerland Aug. 23, 1927. 5 Claims. (Cl. 8—19.)



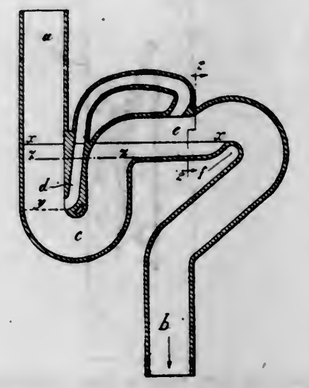
1. An apparatus for loading silk or silk-containing textile materials comprising a tank forming a reservoir in the lower portion thereof; a plurality of liquid supply vessels; means for connecting said vessels with the tank to supply liquids thereto; means in the tank for supporting the textile materials to be loaded; means for circulating fluids through the materials; and means for extracting the fluid from the textile materials through the supporting means for the materials.

1,810,239. METHOD OF PRODUCING FERTILIZER. SAMUEL M. DOOLITTLE, Decker, Ind. Filed Nov. 11, 1929. Serial No. 406,538. 1 Claim. (Cl. 71—9.)

The method of producing simultaneously a fertilizer in both solid and liquid form which consists in gathering together a mass of cut weeds and other waste vegetation, placing thereover a covering of quicklime, applying a top covering of stable and chicken manure, tobacco waste, shredded corn fodder and bran mixed with ammonia, potash and phosphoric acid, directing water onto the entire bulk of material from time to time to facilitate disintegration of the mass, and trapping the liquid drained from the mass.

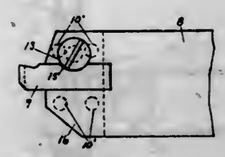
1,810,240. SANITARY LIQUID TRAP. ROBERT ARTHUR GREENWOOD, Chelsea, London, England. Filed Aug. 9, 1930, Serial No. 474,275, and in South Africa June 4, 1930. 1 Claim. (Cl. 182—12.)

A sanitary liquid trap including a laterally offset liquid storage chamber communicating with and located wholly to one side of the outlet branch of the trap proper, and a by-pass communicating with the chamber adjacent the overflow end of such chamber, the exit end of the by-pass



inclining at an angle to the flow of the liquid, whereby the liquid flows from the by-pass into the chamber in a direction away from the overflow end of the chamber.

1,810,241. CHASER AND CHASER HOLDER. CHARLES P. HARRISON, Wesleyville, Pa., assignor to Jarechi Manufacturing Co., Erie, Pa., a Corporation of Pennsylvania. Filed Aug. 5, 1929. Serial No. 383,572. 6 Claims. (Cl. 10—120.)



1. The combination of a cutting tool substantially in the form of a parallelopiped, a holder having a slot providing spaced jaws to receive the tool, said slot exposing a cutting face of the tool and an end thereof, a plate extending across the slot at the other end of the tool and secured to the holder in spaced relation to the bottom of the slot to leave to outlet for chips and the like, a clamping screw having a cylindrical head fitting in an arcuate opening at the exposed end of the tool and in a coacting elongated arcuate opening in the holder, the opening in the tool being struck on a radius longer than that of the head to permit the head to force the tool toward the bottom of the slot, said screw having a tapered body engaging a conical face of slightly larger radius on the tool whereby the body of the screw may also act to force the tool against the bottom of the slot in the holder, said screw having a reduced threaded end for engagement with a threaded hole in the head adjacent said plate to draw the tool against said plate, whereby the tool is clamped simultaneously against the bottom of the slot and a side thereof and against said plate by said screw, substantially as set forth.

1,810,242. ROPE ANCHOR. JESSE C. HAYES, Kittanning, Pa. Filed May 26, 1930. Serial No. 455,840. 3 Claims. (Cl. 24—131.)

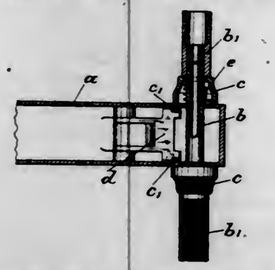
1. In a device of the character described, an anchoring member formed from a single strand of wire looped at its opposite ends to accommodate retaining elements whereby the device may be secured to a support, one

of said ends intermediate its end and the adjacent looped portion merging into a horizontally disposed open ended



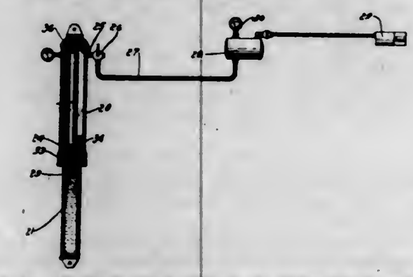
loop portion in turn merging into a vertically disposed rope receiving hook, and the other of said ends merging into an inverted V-shaped rope receiving hook portion.

1,810,243. TRIGGER MECHANISM FOR FIREARMS MOUNTED ON A CARRIAGE AND HAVING A POINTING HANDLE. FRITZ HERLACH, Dusseldorf, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf, Germany, a Corporation of Germany. Filed Nov. 24, 1930, Serial No. 497,930, and in Germany May 28, 1930. 3 Claims. (Cl. 89—27.)



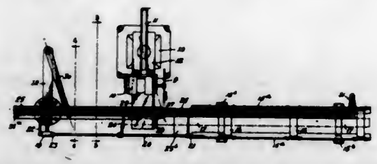
1. In a trigger mechanism for fire arms mounted on a carriage, a pointing handle and a member adapted to manipulate said trigger mechanism, said member being arranged in range of the firer's hand grasping said pointing handle and capable of being turned about the longitudinal axis of said pointing handle, thereby releasing the shot.

1,810,244. AIRPLANE. HAROLD A. HICKS, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a Corporation of Delaware. Filed May 6, 1930. Serial No. 450,148. 1 Claim. (Cl. 244—2.)



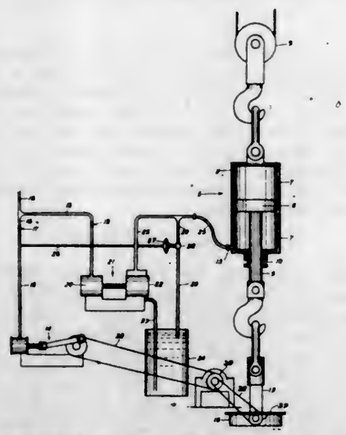
In an airplane construction, a fuselage, a landing gear, telescopic shock absorbers supporting said fuselage on the landing gear, said shock absorbers having hydraulic means for checking the rebound of the landing gear and pneumatic means resisting the compression thereof, and an auxiliary source of compressed air under the control of the pilot while operating the airplane for varying said pneumatic compression resistance, whereby the pilot may vary the operating stroke of the shock absorber to suit the character of the landing field.

1,810,245. SAWING MACHINE. JOHN O. HORTON, Montrose, Pa., assignor to Beach Manufacturing Company, Montrose, Pa., a Corporation of Pennsylvania. Filed Dec. 18, 1930. Serial No. 503,288. 9 Claims. (Cl. 143—6.)



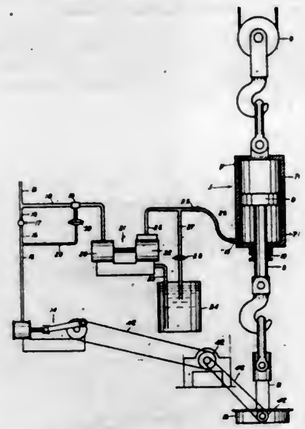
1. In a cutting apparatus, a cutter support comprising an angularly adjustable member upon which a cutter is reciprocated, a work-support traversed by the cutter in its travel and a guide-element for the work resting upon the work-support and movable longitudinally thereon and so engaged by said adjustable member as to travel on said support as the angle of the member changes; said guide-element having an opening through which the cutter may travel and which is thus kept always in registry with the path of cutter travel.

1,810,246. STEAM ACTUATED ROTARY DRILLING CONTROL. PHILIP JONES, Los Angeles, Calif. Original application filed Dec. 10, 1927, Serial No. 239,143. Divided and this application filed June 24, 1929. Serial No. 373,370. 4 Claims. (Cl. 255—19.)



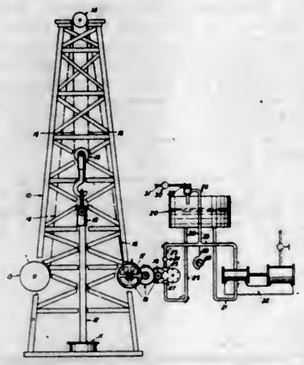
1. An apparatus for controlling the pressure exerted by a rotary well-drilling bit on the bottom of the hole being drilled, comprising: a steam-actuated engine adapted to rotate said bit; a hydraulic jack adapted to raise and lower said bit; means adapted to force fluid into said jack for raising said bit; an orifice communicating with said jack adapted to permit escape of fluid therefrom for lowering said bit; a steam-actuated means adapted to control the area of said orifice, and a means for admitting a flow of steam under pressure to a means of communication between said engine and said orifice-controlling means, whereby said engine is actuated and the area of said orifice is simultaneously controlled.

1,810,247. STEAM ACTUATED AUTOMATIC ROTARY DRILL. PHILIP JONES, Los Angeles, Calif. Original application filed Dec. 10, 1927, Serial No. 239,143. Divided and this application filed June 24, 1929. Serial No. 373,371. 6 Claims. (Cl. 255—19.)



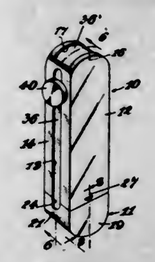
1. An apparatus for controlling the pressure exerted by a rotary well-drilling bit on the bottom of the hole being drilled, comprising; a steam-actuated engine adapted to rotate said bit; a hydraulic jack adapted to raise and lower said bit; a steam-actuated pump adapted to force fluid into said jack for raising said bit; an orifice communicating with said jack adapted to permit escape of fluid therefrom for lowering said bit; means for admitting steam into said pump for actuating said pump; valve means for controlling the flow of steam into said pump; steam actuated means for controlling the opening of said valve means, and a means for admitting a flow of steam under pressure to a means of communication between said engine and said valve-controlling means.

1,810,248. POWER ACTUATED MEANS FOR FEEDING ROTARY DRILLS. PHILIP JONES and PAUL W. PRUTZMAN, Los Angeles, Calif. Filed June 24, 1929. Serial No. 373,372. 3 Claims. (Cl. 255—19.)



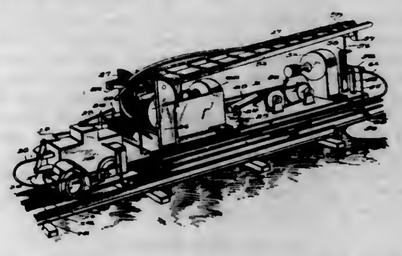
1. A secondary feeding means for rotary drills, comprising: a winding reel adapted to raise the drill by reeling-in a portion of the drilling line; a liquid-actuated motor connected to said reel and adapted to drive said reel in a forward or winding-in direction when supplied with liquid under pressure; means for supplying said motor with said liquid; means for maintaining said pressure substantially constant and for manually controlling said pressure, and means for permitting the reversal of the direction of said motor without substantial loss of forward torque when said winding reel is subjected to a weight overbalancing the forward torque of said motor.

1,810,249. COSMETIC CONTAINER. EDWIN H. KOEHLER, New York, N. Y. Filed Apr. 12, 1930. Serial No. 443,738. 10 Claims. (Cl. 206—56.)



1. In a device of the character described, in combination, a casing having an open end and a closed end, a flexible band within said casing capable of longitudinal movement across said casing opening closing said opening, a pencil-carrier carried by said band and capable of longitudinal movement within said casing, and exterior operating means capable of moving said band.

1,810,250. ELECTRICAL TOY. HARRY E. LOVINO, Baltimore, Md., assignor of one-half to Joseph Golomb, Baltimore, Md. Filed May 29, 1930. Serial No. 457,461. 19 Claims. (Cl. 46—48.)

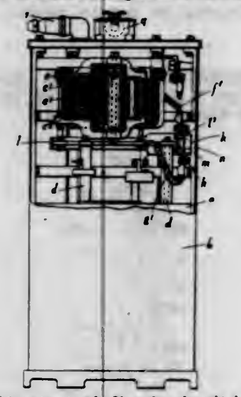


1. In an electrical toy railway comprising a pair of main rails and a third rail having an insulated section, a fourth rail adjacent said insulated section and electrically connected thereto, a motor toy adapted to be mounted on said main rails and having a collector adapted to engage said third rail, automatic circuit controlling means carried by said toy, and an auxiliary collector electrically connected to said circuit controlling means and adapted to engage said fourth rail.

1,810,251. ELECTRIC ARC WELDING PLANT. ROMEO JOSE MUSTO, London, England, assignor to The Quasi-Arc Company, Limited, London, England, a British Company. Filed July 25, 1929, Serial No. 381,042, and in Great Britain Sept. 20, 1928. 6 Claims. (Cl. 171—119.)

1. An alternating current arc welding plant comprising in combination, a welding transformer having a tapped output winding, a choke coil having its winding also tapped and having its magnetic field separate from and uninfluenced by the magnetic field of said transformer, a set of contact members connected to the taps of the output winding of said transformer, a second set of contact members connected to the taps of the winding of said choke coil, and a connector for joining at one time any one contact member of the first set to the corresponding con-

tact member of the second set, the connection of said taps to said contact members being such that when the number



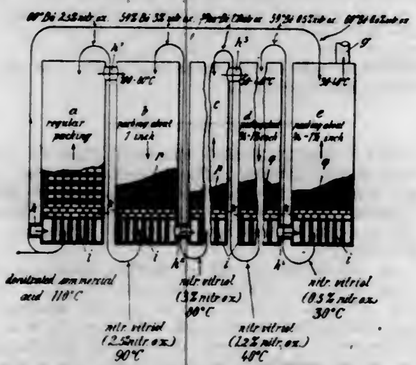
of turns of said output winding in circuit is increased the number of turns of the winding of said choke coil in circuit is also increased.

1,810,252. EXHAUST MUFFLER FOR INTERNAL COMBUSTION ENGINES. ALBERT S. NOONAN, Utica, N. Y. Filed Mar. 17, 1930. Serial No. 436,522. 1 Claim. (Cl. 137—160.)



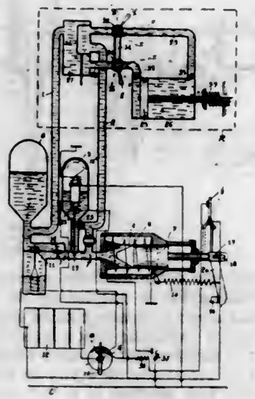
An exhaust muffler comprising a tube, transverse partitions secured within the tube near both ends thereof and provided with openings therethrough, said tube being divided through one side and its meeting edges welded together, and reinforcing rings fitted in opposite ends of the tube to abut against the adjacent partitions, said rings being divided through one side and having their meeting ends registered with the meeting edges of the tube, said tube having its outer ends crimped inwardly across the outer ends and inner faces of the adjacent rings to hold the latter in operative position.

1,810,253. MANUFACTURE OF SULPHURIC ACID. HUGO PETERSEN, Berlin-Steglitz, Germany. Filed May 5, 1925, Serial No. 28,126, and in Germany Mar. 13, 1923. 4 Claims. (Cl. 23—168.)



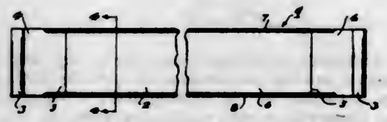
1. In the manufacture of sulphuric acid by the chamber method, treating sulphur-dioxid gases with strong sulphuric acid liquors containing nitrogen oxids and in presence of finely granular packing bodies, substantially not exceeding four-tenths inch in diameter, denitrating a certain portion of the liquid produced in the presence of granular packing bodies, substantially not exceeding one inch in diameter, and producing a vigorous movement of the gases of reaction.

1,810,254. HYDRAULIC MOTOR INSTALLATION. HENRI PIEPER, Brussels, Belgium. Filed Mar. 30, 1927, Serial No. 179,699, and in Belgium June 17, 1926. 6 Claims. (Cl. 60—52.)



1. A hydraulic motor installation, comprising a power vessel containing liquid and gas under pressure; a storage vessel; a cylinder, and a piston movable therein; a duct between said cylinder and the storage vessel; a valve opening toward the cylinder and located in said duct; a spring acting to close said valve; a duct between the cylinder and the lower vessel; a valve opening toward the power vessel and located in the last-named duct; means for effecting the displacement of the piston in a given direction under the action of the liquid under pressure in the power vessel; external means of reduced power for effecting the displacement of the piston in the opposite direction during the first part of its stroke; means for keeping open the spring-closed valve during said displacement so as to force back into the storage vessel the liquid which has operated the piston; external means of greater power for effecting the movement of the piston for the remaining length of its stroke; and means for enabling closure of the spring-closed valve during the last-named displacement.

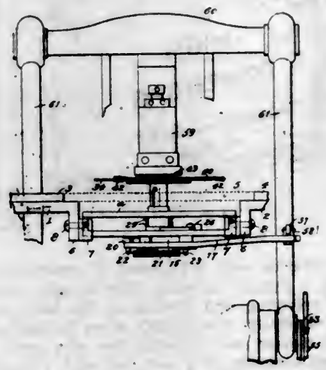
1,810,255. EXERCISER AND BODY BUILDER. FRANK POULOS, New York, N. Y. Filed Jan. 21, 1930. Serial No. 422,886. 1 Claim. (Cl. 272—79.)



In an exercising device of the class described, a wide and relatively thin elastic band having T-shaped knobs

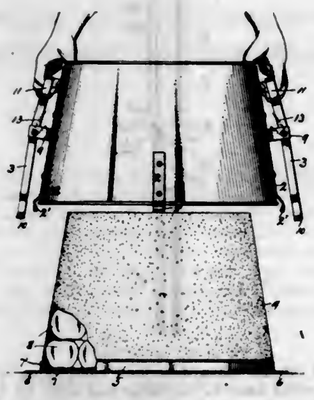
at the ends, said band being thickened near the said knobs, and a flange along both edges of the band on one face thereof, the opposite face being smooth.

1,810,256. PRINTING PRESS ATTACHMENT. WILLIAM EMMETT SHACKLETT, New Albany, Ind., assignor to Shacklett Automatic Card Feeder Company, Louisville, Ky., a Corporation of Kentucky. Filed May 9, 1924. Serial No. 712,020. 33 Claims. (Cl. 101—287.)



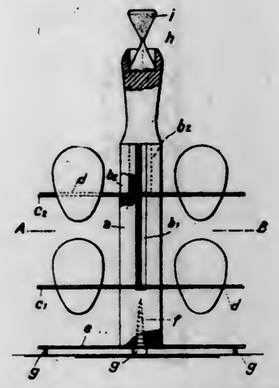
1. A rotatable carrier for feeding cards or the like to a printing press comprising a supporting plate for the cards, a pivoted lever carried by the plate and engageable with the cards, and means for adjusting the lever for positioning the cards relative to the plate.

1,810,257. COMBINED CLAMP AND LIFTER FOR FRUIT PACKING TUBS. SAMUEL H. SHELLER, Marion, Pa. Filed Sept. 16, 1929. Serial No. 392,886. 9 Claims. (Cl. 226—17.)



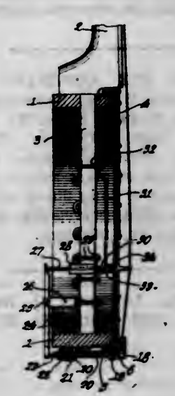
1. The combination with a tub or shell for use in packing fruit, and a fruit support, of combined clamps and lifters carried by the tub which clamp the fruit support to the tub while serving as sustaining and carrying devices by which the fruit and fruit support may be carried from place to place.

1,810,258. EGG-BOILING FRAME. BERNHARD SPERBER, Berlin, Germany. Filed July 23, 1930, Serial No. 470,148, and in Germany May 24, 1930. 7 Claims. (Cl. 53—1.)



1. An egg-boiling frame, comprising in substance a central column, platforms furnished with holding apertures for the eggs, abutments provided in oppositely disposed grooves in the said column, and projections in a recess of the said platforms adapted to engage with the said abutments.

1,810,259. BANJO MUTE. BARNEY A. STALLONE, Tacoma, Wash. Filed Jan. 23, 1930. Serial No. 422,821. 6 Claims. (Cl. 84—273.)

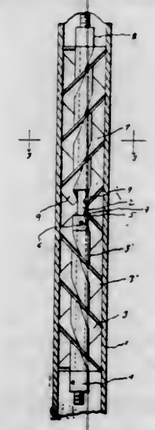


2. In a banjo comprising a rim, a head, brackets on the rim, and tension members for the head and mounted in the brackets; a mute co-operating with the head, actuating mechanism for the mute, said mechanism embodying an arm rest and a plunger operatively connected to the arm rest, means held on one of the brackets by one of the tension members for mounting the arm rest movable, and means held on another of the brackets by the corresponding tension member for guiding the plunger.

1,810,260. WELL TUBE CLEANER. LEVI SWINFORD, Comanche, Okla. Filed Jan. 15, 1931. Serial No. 509,021. 2 Claims. (Cl. 166—18.)

1. A well tube cleaning device comprising a rod, right and left spirals rotatably arranged on the rod, means whereby the upper spiral has limited sliding movement

on the rod and extensions of the spiral fins at the adjacent ends of the spirals which overlap each other when



the upper spiral moves downwardly on the pulling of the device from the tubing for preventing the paraffin passing through the device.

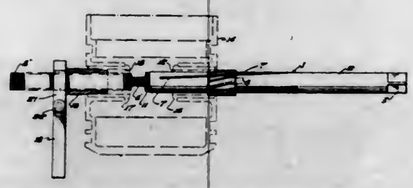
1,810,261. QUINOLIN-BENZOIC-CARBOXYLIC ACID. WILLARD L. VOGEL, Los Angeles, Calif., assignor of one-tenth to Paul W. Prutzman. Filed May 22, 1928. Serial No. 279,853. 2 Claims. (Cl. 260—39.)

2. A method of manufacturing quinolin-2-benzoic-4-carboxylic acid, which comprises: combining in alcoholic solution unimolecular proportions of 2-phenyl-quinolin-4-carboxylic acid and sodium salicylate; heating to produce reaction, and separating the reaction product from the solution.

1,810,262. MEANS FOR COVERING CULTIVATED GROUND. OTTOMAR WEBER, Rathen-on-the-Elbe, Germany. Filed Aug. 9, 1929, Serial No. 384,781, and in Germany Aug. 18, 1928. 5 Claims. (Cl. 47—9.)

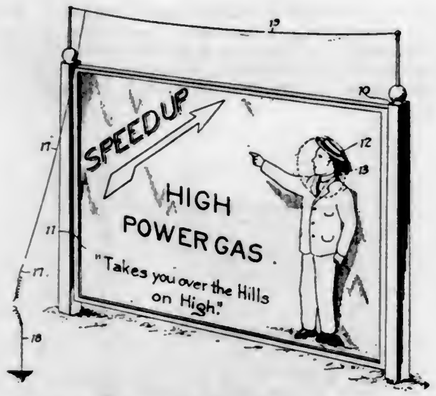
1. A covering for cultivated ground for the purpose of promoting the growth of plant life in the ground, consisting of a loose mass of long fibred vegetable material impregnated with a decay-preventing preservative and penetrable by air, light and moisture.

1,810,263. REAMER. LAWRENCE O. BEARD, Lancaster, Pa. Filed Feb. 9, 1929. Serial No. 338,806. 1 Claim. (Cl. 77—76.)



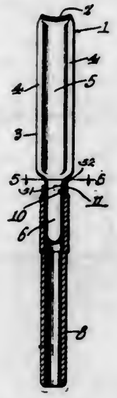
A reamer comprising a hollow expansible shank, cutting blades formed on said shank, a member having a reduced portion adapted for insertion within said shank for expanding the same, said member having an enlarged threaded portion, a centering sleeve slidably mounted on said enlarged threaded portion and a threaded feeding member for engagement with the said enlarged threaded portion adapted to engage and hold the centering sleeve in place and to feed the reamer and blades when said reamer is rotated.

1,810,264. APPARATUS FOR AUDIBLE SIGNBOARD ADVERTISING. FRED W. BONITZ, Charlotte, N. C. Filed Nov. 2, 1928. Serial No. 316,842. 1 Claim. (Cl. 40—125.)



The combination with a billboard of appreciable thickness having a suitable opening therethrough, sections of wire mesh overlying said opening at the front and rear thereof, a relatively thin display sheet having advertising matter thereon and covering the wire mesh at the front of said opening; of a radio set with a loudspeaker attached to the signboard behind said opening, a sound collector around the rear wire mesh covering the opening for the loudspeaker, a housing attached to the board and completely enclosing the radio set, loudspeaker and collector, and means for starting the radio set, said means including an antenna mounted on the billboard, and a circuit closer disposed in such position as to be actuated by nearby passing traffic.

1,810,265. RAZOR STROPPER. LUCIUS HOMER BROOKS, Atlanta, Ga. Filed Dec. 1, 1927. Serial No. 237,054. 1 Claim. (Cl. 30—25.)



A device of the class described comprising a tubular handle provided near to its outer end with an inwardly-extended projection, and a blade-grip including long and short arms which are insertible into the handle, the difference in the length of the arms being greater than the distance between the projection and the outer end surface of the handle, whereby the projection will first ride along the inner edge of the long arm and then pass between the arms, thereby facilitating the insertion of the arms into the handle, the arms being inwardly beveled to engage

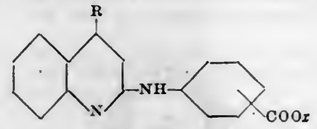
with the outer end surface of the handle, the difference in the length of the arms causing the said beveled portions to engage one at a time with the outer end surface of the handle, thereby facilitating the insertion of the arms into the handle.

1,810,266. COMPOSITION FOR DYEING LEATHER, SHOES, GLOVES AND HIDES. EMILE COMES, Les-Ponts-De-Martel, Switzerland. Filed Sept. 28, 1928, Serial No. 309,128, and in Switzerland Oct. 11, 1927. 2 Claims. (Cl. 8—5.)

1. A composition for dyeing leather, shoes, gloves and hides, consisting of a fatty body, an oil soluble dye, turpentine oil and acetone.

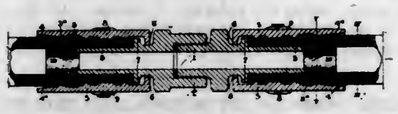
1,810,267. ALKYL-QUINOLYL-AMINO-PHENYL CARBOXYLIC ACIDS. KURT DESAMARI, Leverkusen-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 30, 1928, Serial No. 322,975, and in Germany Dec. 7, 1927. 2 Claims. (Cl. 260—39.)

1. As new products the compounds of the probable general formula:



wherein R stand for an alkyl group and x stands for a hydrogen or an alkyl group, being generally substances soluble in organic solvents and being valuable therapeutical substances and starting materials in the manufacture of dyestuffs.

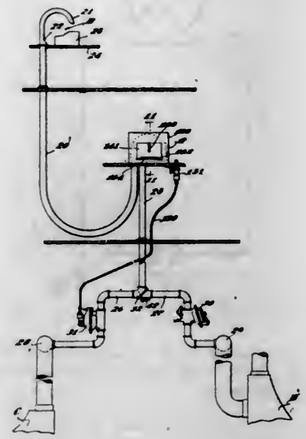
1,810,268. HOSE COUPLING. ALFRED L. DOLD, Drexel Hill, Pa. Filed Aug. 16, 1928. Serial No. 300,086. 1 Claim. (Cl. 285—84.)



The combination of a hose section, a coupling shank or stem inserted therein; said shank or stem having its free end reduced internally and externally, and a double-walled sheath of relatively soft material enclosing the reduced end of said shank or stem and having a portion interposed between the same and the inner wall of the hose; the bore of the inner portion of said sheath having the same diameter as the bore of the shank or stem.

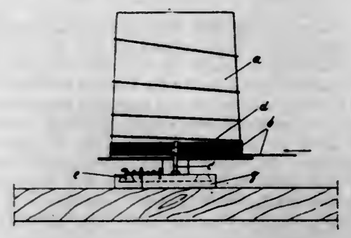
1,810,269. PNEUMATIC DISPATCH SYSTEM. MERTON L. EMERSON, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Aug. 2, 1929. Serial No. 382,876. 14 Claims. (Cl. 243—2.)

1. In a pneumatic dispatch system, two stations, a single transmission tube connecting said stations, means normally maintaining a minimum flow of air through the tube, and responsive to a reduction in such flow resulting from the insertion of a carrier in the tube, for initiating a carrier impelling flow through the tube in one direction



at least and means for terminating said minimum flow and initiating a carrier impelling flow through the tube in the opposite direction.

1,810,270. FRICTIONLESS AUTOMATIC DEVICE FOR RAISING WIRE WINDINGS ON VERTICAL CONICAL WINDING-UP DRUMS. ERICH ERDMANN, Ihmert, Germany. Filed Oct. 31, 1927, Serial No. 230,045, and in Germany Apr. 28, 1927. 3 Claims. (Cl. 242—78.)

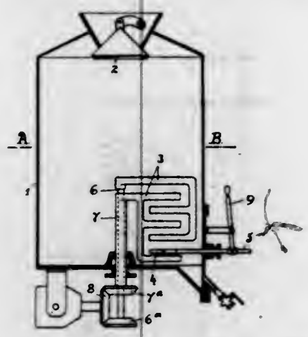


1. An automatic device for raising wire windings, comprising in combination a conical vertical drum, a control element rotatably arranged at the side at the lower end of said drum shortly behind the point at which the wire is coming into contact with said drum, said control element being inclined towards the arriving wire and means for pressing said control element permanently against said drum so that it is rotated from said drum and uniformly pushes the wire windings upward on said drum.

1,810,271. INJECTING AND DELIVERING MACHINE FOR MORTAR AND OTHER MATERIALS. ERNST FRAENKEL, Berlin, Germany. Filed June 8, 1929, Serial No. 369,485, and in Germany Feb. 29, 1928. 4 Claims. (Cl. 302—56.)

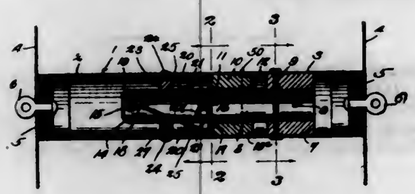
1. An injecting and delivering machine for mortar and other materials that are to be used in a fluid and moistened condition comprising, a vessel into which the material is charged, means for maintaining the material in said vessel in constant motion, a compressed air nozzle opening into

the mass of material in said vessel, a delivery pipe disposed in alignment with the discharge end of said nozzle



and means connected to the exterior of said vessel for adjusting the interior relation of said delivery pipe with respect to said nozzle.

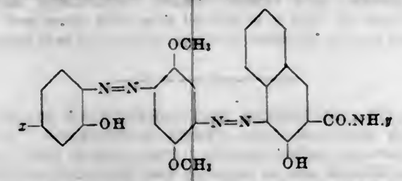
1,810,272. TOILET PAPER HOLDER. HERMAN LOUIS GOLDBECK, Adelaide, Australia. Filed Nov. 15, 1928. Serial No. 319,688. 2 Claims. (Cl. 242—55.2.)



1. In a device of the class described, a shaft comprising tubular members, a stem carried by one of the tubular members and of such length as to enter the other of the tubular members, said other of the tubular members having a keeper, a latch mounted on the stem and engageable with the keeper, a releaser slidable on the stem and cooperating with the latch to move it inwardly out of engagement with the keeper, the releaser being accessible from without the shaft but being so located that it will be covered by a roll on the shaft, and means for holding a roll on the shaft against removal from the shaft longitudinally of the shaft.

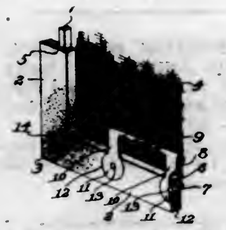
1,810,273. NEW AZO DYESTUFFS. JOSEF HALLER, Wiesdorf-on-the-Rhine, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1928, Serial No. 266,875, and in Germany Apr. 16, 1927. 3 Claims. (Cl. 260—84.)

1. New dyestuffs of the probable general formula:



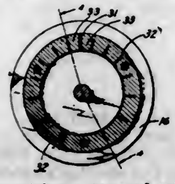
wherein x stands for hydrogen or the nitro-group and y for a naphthalene nucleus, said dyestuffs being dark powders, insoluble in water, sparingly soluble in the usual organic solvents, soluble in strong sulfuric acid with violet-blue to blue colorations, dyeing cotton blue-black to black shades.

1,810,274. METAL WINDOW SCREEN. FREDERICK F. HASKELL, Arlington, Mass., assignor to Apexeon Company, Jamaica Plain, Mass., a Corporation of Massachusetts. Filed Dec. 18, 1928. Serial No. 326,873. 3 Claims. (Cl. 156—14.)



3. A window screen comprising a frame of aluminum alloy, the four sides of which are welded together at the corners, the material of the frame at the corners where the sides are welded together being stiffer and more rigid than at other portions of the frame.

1,810,275. MANDREL. JAMES W. HOWELL, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 30, 1927. Serial No. 236,631. 6 Claims. (Cl. 29—89.)



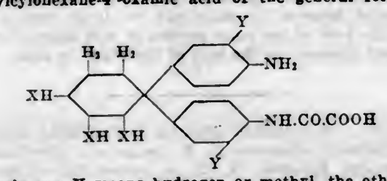
1. A mandrel comprising a tapered arbor, a split sleeve mounted thereon, the said sleeve having a plurality of kerfs cut in its inner periphery and means for drawing the sleeve upon the tapered portion of the arbor.

1,810,276. FOOD PRODUCT AND PROCESS OF MAKING THE SAME. ELOISE JAMESON and EARL D. STEWART, Corona, and CLARENCE P. WILSON, Pomona, Calif., assignors to California Fruit Growers Exchange, Los Angeles, Calif., a Corporation of California. Filed Jan. 15, 1927. Serial No. 161,462. 6 Claims. (Cl. 99—5.)

6. A dry relatively non-hygroscopic mixture of highly hygroscopic fruit juice solids and lactose.

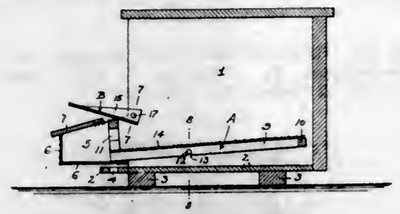
1,810,277. NEW AZO DYESTUFFS AND PROCESS OF MAKING SAME. GEORG KALISCHER, Frankfort-on-the-Main, and RICHARD FLEISCHHAUER, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 22, 1929, Serial No. 387,802, and in Germany Aug. 28, 1928. 7 Claims. (Cl. 260—86.)

1. A process which comprises diazotizing a 4-aminodiarylcylohexane-4'-oxamic acid of the general formula:



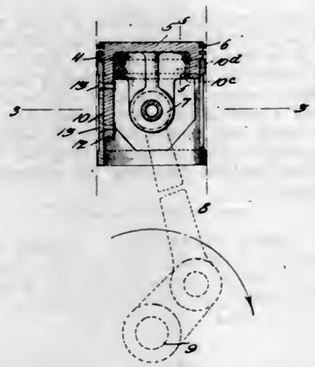
wherein one X means hydrogen or methyl, the other X's hydrogen and the Y's means hydrogen, halogen, methyl or alkoxy-groups combining the diazo-compound with any azo-component, saponifying the azodyestuff thus formed, diazotizing the saponified dyestuff and combining this diazo-compound with any azocomponent.

1,810,278. CLEAN EGG NEST. EDWIN H. KIELSMEIER, Sunnyside, Wash. Filed Dec. 9, 1929. Serial No. 412,878. 2 Claims. (Cl. 119—47.)



1. A nest of the class described comprising a body open at its front, a tiltable platform in the lower part of the body having an upward extension at its front end, a pivoted door at the front of the body normally resting against the extension and raised when the platform is tilted by a hen entering the nest, an egg chamber at the front lower part of the body for receiving the eggs rolling down the platform when the same is in its normal position, a door forming the top of the egg chamber and a removable bottom for the body.

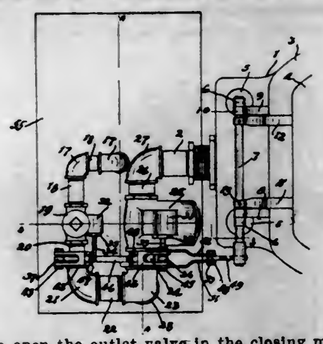
1,810,279. PISTON. CLARENCE C. KRAUSE, Chattanooga, Tenn. Filed Mar. 20, 1930. Serial No. 437,413. 3 Claims. (Cl. 74—108.)



1. In an anti-slap piston, a piston having a longitudinally extending anchorage, a skirt fastened thereto at its side, that portion of the skirt substantially opposite the side of the anchorage having free edges in spaced relation to each other and adapted to engage a cylinder wall.

1,810,280. LAVATORY CLOSET. JOSEPH LEWIS, Winnipeg, Manitoba, Canada. Filed Dec. 27, 1929, Serial No. 416,960, and in Canada Nov. 16, 1929. 2 Claims. (Cl. 4—21.)

1. The combination with a lavatory closet bowl, and the hinged seat lid thereof, of an air tight pressure tank located to the rear of the bowl, a pressure water service pipe passing first upwardly through the tank and then horizontally in the form of a loop above the tank and finally communicating with the back of the bowl, a branch pipe leading from the loop downwardly into the tank and opening to the tank adjacent the bottom thereof, an inlet valve in one of the legs of the loop controlling the passage of water to the branch pipe from the source of supply, an opposing outlet valve in the other leg of the loop controlling the passage of water from the tank to the bowl, a connection between the valves, said connection and valves being set so that the outlet valve is closed when the inlet valve is open and an operating connection between the seat lid and the outlet valve



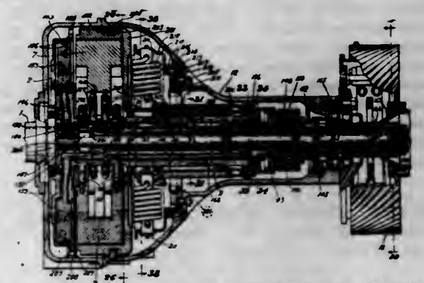
adapted to open the outlet valve in the closing movement of the lid and to close the outlet valve in the opening movement of the lid.

1,810,281. METHOD OF MANUFACTURING VENEERED METAL SURFACES. MAX LINSE, Berlin-Biesdorf-Sud, Germany, assignor to Erwin O. Haberfeld, Berlin, Germany. Filed Jan. 11, 1929, Serial No. 331,956, and in Germany Jan. 18, 1928. 7 Claims. (Cl. 154—2.)



1. The method of applying wood veneer to metal surfaces, consisting in covering the metal surface with a composition of casein, talc, and slacked lime, letting said covering dry, and affixing the veneer thereon by means of glue.

1,810,282. POWER TRANSMISSION. FREDRIK LJUNGSTRÖM, Lidingo, Sweden, assignor, by mesne assignments, to Ped, Incorporated, a Corporation of Delaware. Continuation of application Serial No. 139,420, filed Oct. 4, 1926, and in Sweden Oct. 14, 1925. This application filed Nov. 14, 1929. Serial No. 407,236. 111 Claims. (Cl. 74—14.)

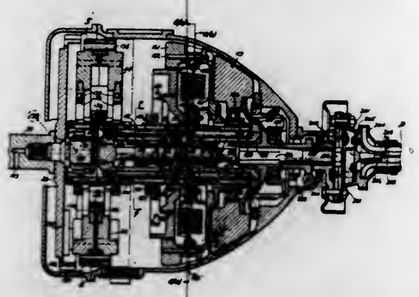


1. In a variable-speed power transmission, a driving shaft, a driven shaft, an abutment, means actuated by the driving shaft for alternately producing opposite turning moments, and a plurality of reversible one-way clutches for transmitting the produced opposite turning moments to the driven shaft and the abutment respectively.

1,810,283. POWER TRANSMISSION. FREDRIK LJUNGSTRÖM, Lidingo, Sweden, assignor, by mesne assignments, to Ped, Incorporated, a Corporation of Delaware. Continuation of application Serial No. 218,293, filed Sept. 8, 1927. This application filed Apr. 28, 1930, Serial No. 447,896, and in Sweden Feb. 16, 1927. 173 Claims. (Cl. 74—14.)

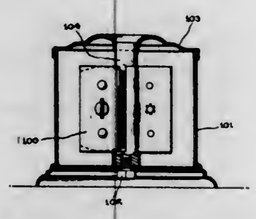
1. A variable-speed power transmission comprising a driving member, a driven member, an abutment, means

actuated by the driving member for alternately producing opposite turning moments, a one-way action clutch for transmitting turning moments of one sense to the driving member, a one-way reaction clutch for directing



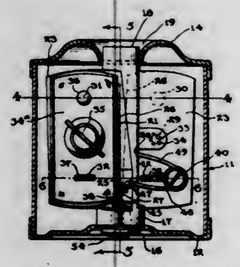
turning moments of the opposite sense toward the abutment, and an inertia mass between the reaction clutch and the abutment for altering the characteristics of the forces transmitted to the abutment from the reaction clutch.

1,810,284. PENCIL SHARPENER. VALENTINE C. LUPPERT, Williamsport, Pa. Filed Dec. 14, 1929. Serial No. 414,077. 3 Claims. (Cl. 120—91.)



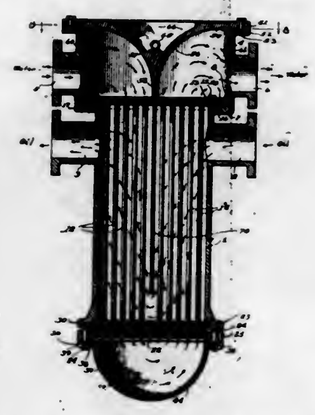
1. A pencil sharpener including a stationary casing, a stationary cutting head in the casing provided with a tubular portion having oppositely projecting wings and slots leading from the wings to the interior of the tubular portion, razor blades mounted on said wings and having cutting edges extending through said slots and converging toward the axis of the head, clamping plates bearing on said blades, and thumb screws securing the blades and plates to the wings, said wings being provided with means to prevent the blades from turning on the thumb screws.

1,810,285. PENCIL SHARPENER. VALENTINE C. LUPPERT, Williamsport, Pa. Filed Aug. 25, 1930. Serial No. 477,773. 18 Claims. (Cl. 120—9.)



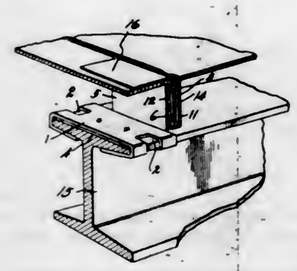
1. A pencil sharpener including a stationary casing, a stationary cutter-head detachably mounted in the casing and provided with a cutter, a broken pencil point ejector supported by said head, and means projecting from the cutter-head to the exterior of the casing for operating said ejector.

1,810,286. HEAT EXCHANGER. ANDERSON MACPHEE, Meadowbrook, Pa. Filed Apr. 6, 1927. Serial No. 181,464. 2 Claims. (Cl. 257—222.)



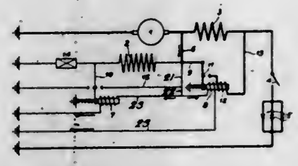
1. In a heat exchanger including a casing adapted to contain a nest of tubes for the cooling fluid about which the fluid to be cooled is circulated, a packed closure including a removable cover for one end of said casing, a gland member supporting said cover and secured to said casing, and a sealing ring between said gland member and said casing, said closure adapted to visibly indicate a leakage of either fluid as well as to permit free access to said tubes without disturbing the mounting thereof in said casing.

1,810,287. DECK PLATE CLIP. RUSSELL C. MAHON and WILLIAM G. MILLER, Detroit, Mich., assignors to The R. C. Mahon Company, Detroit, Mich., a Corporation of Michigan. Filed May 16, 1929. Serial No. 363,619. 6 Claims. (Cl. 189—35.)



1. In a deck plate clip for deck plates in which a depending flange at the edge of one deck plate engages in a return bent flange at the edge of another deck plate, a sheet metal base member having bifurcated ends adapted to be bent about a supporting beam, a sheet metal clip member extending from the base member and formed to engage over the return bent flange of one deck plate, the clip member extending into the channel formed by the said return bent flange and being adapted to receive the depending flange of the adjacent deck plate when inserted in the said channel, the clip member being also provided with an extending end adapted to be bent over the adjacent portion of the deck plate having the depending flange.

1,810,288. VOLTAGE REGULATION FOR ELECTRIC GENERATORS. ALFRED MATTES, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed June 20, 1927, Serial No. 200,166, and in Germany June 26, 1926. 4 Claims. (Cl. 171—223.)



1. The combination, with a generator having a series exciting winding, of a voltage regulating system comprising an automatic regulator arranged in circuit with the series exciting winding of the generator, said regulator comprising a make-and-break armature in combination with a tension coil and a current coil, the current-coil being arranged to be put into circuit with the series-winding through said armature to weaken the effect of said series winding.

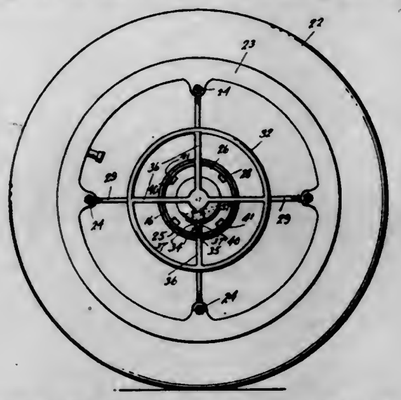
1,810,289. RADIATOR ORNAMENT. VIOLA MCPHILLIPS, Memphis, Tenn. Filed Aug. 19, 1929. Serial No. 386,983. 3 Claims. (Cl. 240—8.11.)



1. A radiator ornament comprising a hollow symbolical figure of translucent material, a bracket adapted to be supported on an automobile radiator, means for attaching the figure to the bracket, means on the bracket for supporting an electric lamp within said figure, and means for connecting the lamp to a source of current; substantially as set forth.

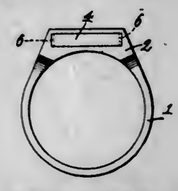
1,810,290. SUPPLEMENTAL WHEEL FOR MOTOR VEHICLES. JOHN PATRICK O'LEARY, Long Island City, N. Y. Filed Nov. 20, 1929. Serial No. 408,542. 8 Claims. (Cl. 301—38.)

6. A supplemental wheel for a motor vehicle comprising in combination a hub, means for securing said hub to the hub of a supporting wheel of the vehicle for rotation with the latter, a web member carried by the supplemental wheel in axial alinement with said hub member, a shaft rotatably supported in said web member, a hand wheel on one end of the shaft, a cap for said hub member, means operatively connecting said cap with said shaft for movement of the cap axially of said shaft upon rotation of said hand wheel, said cap being provided with a plurality of circumferentially spaced studs, and said hub member being provided with a plurality of circumferentially spaced lugs adapted to be engaged by said studs upon movement of said cap in one direction for retaining said cap in



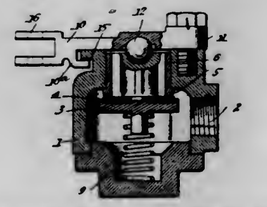
relatively fixed position with respect to said hub, and means for locking said hand wheel against casual rotative movement.

1,810,291. ARTICLE OF JEWELRY. HENRY W. PETERS, Boston, Mass., assignor to H. W. Peters Co. Inc., Boston, Mass. Filed Jan. 7, 1929. Serial No. 330,904. 2 Claims. (Cl. 63—15.)



1. An article of jewelry including a box having two open faces and flat inner walls free from depressions, a setting insertible into the box through one open face for exposure of its outer surface through the other open face and for snug engagement with the flat inner surfaces of the box, said setting having a recess in one edge opening through one surface of the setting, that portion of the surface containing the recess being concealed by the box, and means integral with the box for displacement inwardly into engagement with the cut-away portion of the setting, thereby to hold the setting against withdrawal from the box.

1,810,292. QUICK RELEASE VALVE. BERT PRATT, Chicago, Ill. Filed Nov. 22, 1929. Serial No. 409,047. 8 Claims. (Cl. 251—132.)



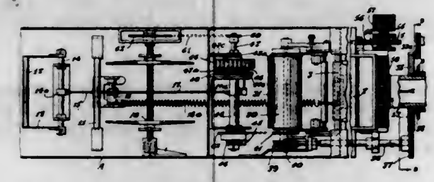
2. A quick release valve for the purpose described comprising a casing provided with an inlet and an outlet, a valve within the casing adapted to close the outlet, an operating arm pivotally mounted on the casing to move across the outer end of the outlet, and means between the arm and valve whereby the latter will be moved to open the outlet as the arm is turned about its pivotal connection with the casing.

1,810,293. DOOR CLOSER. ALFRED REESE, Hamburg, Germany. Filed May 17, 1929, Serial No. 363,821, and in Germany Apr. 25, 1929. 2 Claims. (Cl. 16—76.)



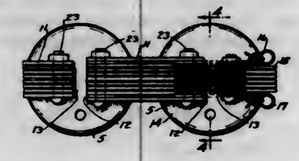
1. A door closer consisting of a spirally wound spring slidable over the door hinge pintle with one end on the door frame and with the other end resiliently on the door, a pressure button of soft material preferably rubber loosely accommodating each of the ends of said spring parallel to the axis of said spring, said spring ends adapted at the swinging of the door to turn and slide in said buttons.

1,810,294. MACHINE FOR APPLYING TRANSFER STAMPS. CHARLES G. RICHARDSON, Springfield, Vt., assignor to Parks & Woolson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Mar. 15, 1929. Serial No. 347,293. 9 Claims. (Cl. 41—1.)



1. A machine for applying transfer stamps to fabric embracing a cloth engaging revoluble drum, coacting revoluble presser elements for impressing an interposed transfer stamp against an interposed piece of fabric, means coordinated with the drum to intermittently feed a stamp carrying tape over one of said presser elements, and means controlled by the operator while the drum is revolving to adjust the tape to cause the stamps thereon to be properly positioned with relation to the presser elements.

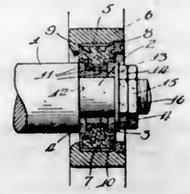
1,810,295. ELECTROCHEMICAL CONVERTER. JOHN H. RITTER and JOHN J. RITTER, Seattle, Wash. Filed Nov. 22, 1928. Serial No. 321,183. 1 Claim. (Cl. 175—315.)



In a device of the character described, a plurality of cells forming a battery, a plurality of electrodes arranged in sets in the said cells, with the electrodes of one set alternating with the electrodes of the other and insulated therefrom, ears of the plates extending upward through the battery top, and suitable connectors for connecting the ears of the electrodes of one cell with the ears of similar electrodes in an adjoining cell, said electrodes being so arranged that the connectors will mesh externally with the ears of the plates of the respective cells.

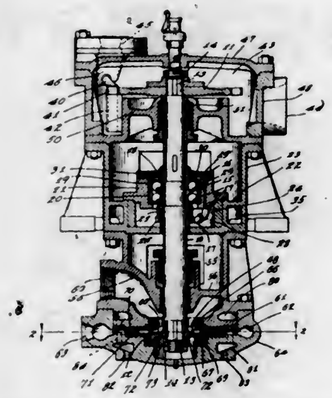
1,810,296. BEARING CONSTRUCTION. LOUIS J. SAUER, Oak Park, Ill., assignor to Charles H. Joy, sr., Chicago, Ill. Filed Jan. 17, 1929. Serial No. 333,120. 2 Claims. (Cl. 308—240.)

1. A bearing construction comprising an oil impregnated metal bearing ring in which the shaft turns, and means for supporting said ring and keeping it supplied with oil, comprising an annular metal housing and supporting ring to be fitted into a circular opening in a supporting member, said supporting ring being coaxial



with said bearing ring and serving as a support against radial movement thereof, and lubricating material in said annular housing and supporting member from which oil is supplied to the bearing ring supported thereby to keep it impregnated with lubricating material.

1,810,297. TURBO-PUMP. VICTOR SCHLEYER, Anderson, Ind., assignor to Dean Hill Pump Company, Anderson, Ind., a Corporation of Indiana. Filed Oct. 31, 1925. Serial No. 66,080. 3 Claims. (Cl. 103—87.)

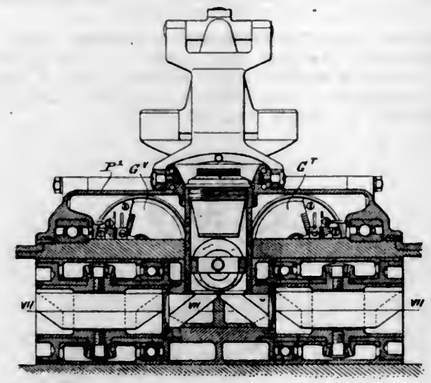


1. A turbine-pump unit, comprising a vertical shaft, a turbine having a rotor mounted on the upper end of said shaft, a centrifugal pump having a runner mounted on the lower end of said shaft, and bearing means for said shaft, said pump being provided with diffusers through which the pump runner discharges and also with steam-jacket chambers located above and below such pump runner and interconnected by passages extending through such diffusers.

1,810,298. APPLIANCE FOR THE AUTOMATIC DETERMINATION OF THE RANGE FACTORS FOR COMBATING AIRCRAFT WITH GUNS HAVING TWO OR THREE AXES AND MOUNTED ON MOVING PLATFORMS. LEOPOLD SCHMIDT, The Hague, Netherlands, assignor to Naamlooze Vennootschap Hollandsche Industrieen Handelmaatschappij, The Hague, Netherlands, a Corporation of the Netherlands. Filed Dec. 29, 1928, Serial No. 329,125, and in the Netherlands and Germany Dec. 31, 1927. 10 Claims. (Cl. 89—41.)

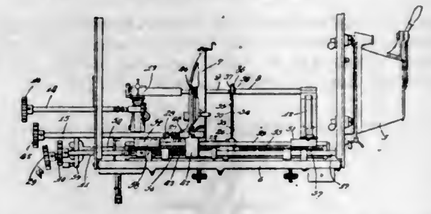
1. Space direction appliance, particularly for the automatic determination of the shooting data necessary for combating air targets with guns having two or three axes, mounted on moving platforms, comprising a foundation rigidly connected with the platform, a Cardan support carried on springs, a corrected reverse pendulum oscillating in the support, which pendulum provides the fixed reference plane

necessary for the determination of the target co-ordinates, lever arms arranged symmetrically around the vertical reverse pendulum axis, spring accumulators acting on said



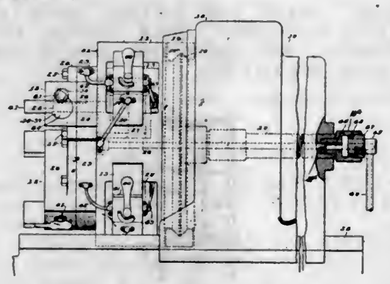
lever arms and compensating the mass pressures of the pendulum, and means for coupling the spring accumulators elastically with the outer Cardan ring.

1,810,299. ARC LAMP. ORAL F. SPAHR, Chicago, Ill., assignor to Enterprise Optical Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed May 23, 1927. Serial No. 193,433. 11 Claims. (Cl. 176—51.)



10. In an arc lamp having longitudinally and vertically adjustable carbon pencils and a longitudinally and angularly adjustable reflector, the combination of a combined crater position indicator and arc striker mechanism, said mechanism being movable into an operative position in front of the reflector and adjustable in harmony with the adjustment of the carbon pencils.

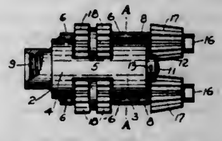
1,810,300. MULTIPLE SPINDLE CHUCKING MACHINE. JOSEPH JOHN SPRING, New Britain, Conn., assignor to The Goss and Delecuw Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed Dec. 4, 1926. Serial No. 152,526. 12 Claims. (Cl. 29—38.)



1. In a machine tool, a turret having a working face with an opening therethrough extending into said turret; a chucking unit, adapted to be mounted in said opening, said unit comprising chucking jaws and fluid pressure operating means therefor adapted to be mounted within said opening, said operating means comprising a cylinder, piston means therein, and operating connections from said piston means to said jaws, said opening being of sufficient depth whereby cylinders of various lengths may be used to allow various length piston strokes whereby the operating range of the jaws may be substantially varied.

8. In a machine tool, a rotary turret comprising a cylindrically shaped substantially hollow member having a working face and an opening therethrough into said hollow member; a chucking unit adapted to be mounted in said opening, said unit comprising chucking jaws, means for mounting said jaws on said face, a cylinder connected to said means adapted to extend into said hollow member and piston means in said cylinder connected to operate said jaws; a central shaft extending from said cylindrical member having an axial passage for fluid pressure extending therethrough into said turret; a control valve for said unit mounted on said turret; and fluid connections from said axial passage to said valve and from the valve to said cylinder.

1,810,301. BOILER TUBE CLEANER. HARRISON L. STALEY, Martinsville, Ind. Filed Mar. 21, 1928. Serial No. 263,286. 9 Claims. (Cl. 15—104.14.)



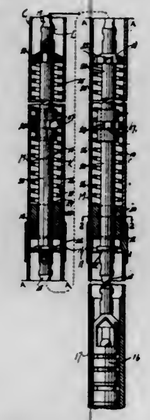
1. A tube cleaner comprising a body having a longitudinally extending transverse slot through the body thereof, a pair of overlapping frames slidably mounted in the transverse slot and toothed cutters rotatably secured in said frames substantially as described.

1,810,302. APPARATUS FOR PHOTOGRAPHING THE SEA BOTTOM. FRANK I. STILES, Miami, Fla. Filed Apr. 23, 1929. Serial No. 357,512. 1 Claim. (Cl. 61—69.)



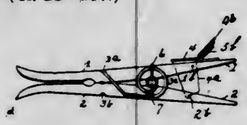
In a device of the class described, a hollow rectangular body closed at one end and open at its other end, a pane of transparent material mounted in the closed end of the body whereby a photographer entering the body may make photographic exposures through said pane when the body is immersed endwise in inclined position in a body of water, a cable connected to the body adjacent the upper rear corners thereof, another cable connected to the body adjacent the upper front corners thereof, the cables constituting means whereby the body may be maintained in a definite tilted position for endwise immersion in the water, a weight upon the top of the body at the forward end thereof and a weight within the body upon the bottom thereof and at the forward end of said bottom.

1,810,303. MEANS FOR SUPPORTING SUCKER ROD AND PUMP LINES. JOHN C. STOKES, Houston, Tex. Filed June 21, 1928. Serial No. 287,076. 9 Claims. (Cl. 103—202.)



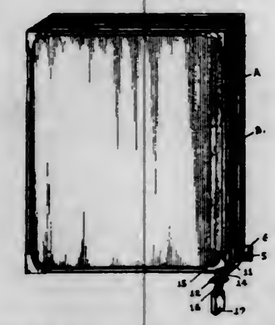
1. In well pumping equipment a string of tubing, a sucker rod line operable in the tubing, a spring device in the tubing, means to yieldably support the sucker rod line on the spring device, and means comprising a spring urged pawl on the spring device detachably engageable with the tubing to transmit the weight of the sucker rod line to the tubing through the spring device.

1,810,304. CLAMP OR CLOTHESPIN. LOUIS H. TANGEN, Duluth, Minn. Filed Oct. 12, 1929. Serial No. 399,275. 2 Claims. (Cl. 24—137.)



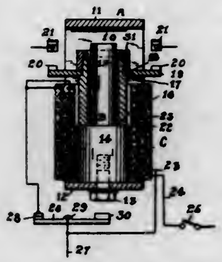
2. A clamp comprising rockable jaws, a resilient fulcrum for said jaws, and clips engaging said fulcrum and jaws for holding said jaws in rockable position against said fulcrum.

1,810,305. LOCKING DEVICE FOR BLACKBOARDS. JOHN M. TRACY and FRANCIS R. SCHERER, Rochester, N. Y., assignors to Prose-Maco Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed June 29, 1929. Serial No. 374,778. 3 Claims. (Cl. 35—15.)



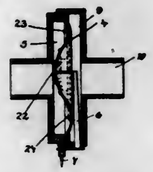
1. The combination with a plurality of swinging exhibitors, of locking means therefor comprising a fixedly mounted socket piece, an arm rigidly mounted in the socket piece, and a plurality of links on said arm adapted to engage with said exhibitors, for the purpose set forth.

1,810,306. ELECTRORESPONSIVE DEVICE. LEV A. TROFIMOV, Cleveland, Ohio, assignor to The Electric Controller & Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 19, 1928. Serial No. 271,163. 12 Claims. (Cl. 200—111.)



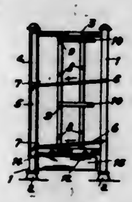
1. In an electro-responsive device, a winding, a movable member, means whereby a rising direct current in the winding induces in the movable member a current for operating the movable member, and means magnetized by a continuous flow of current in the winding for holding the movable member in its operated position.

1,810,307. DIAPHRAGM FOR SOUND REPRODUCTION. ANTON VON SUCHORZYNSKI, Breslau-Bischofswalde, Germany. Filed Mar. 31, 1927, Serial No. 179,997, and in Germany Aug. 28, 1926. 1 Claim. (Cl. 181—32.)



A cup-shaped diaphragm for sound receiving or sound reproducing device, comprising in combination a cup shaped diaphragm, intersecting circular and radial ribs on the cup-shaped surface of said diaphragm subdividing said surface into small sections the vertex of the cup-shaped diaphragm being eccentric to the diaphragm edge, said intersecting circular and radial ribs subdividing the whole diaphragm surface into convex and concave shaped segments of different sizes.

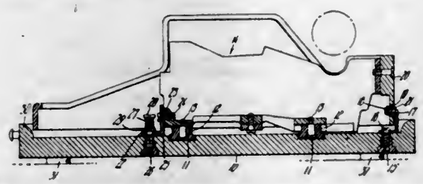
1,810,308. FRAME FOR HOLDING BOOTS ESPECIALLY SNOWSHOES. JOSEF WANDELER, Lucerne, Switzerland. Filed June 10, 1929. Serial No. 369,826. 3 Claims. (Cl. 211—37.)



1. A frame for boots especially snow shoes with elements for supporting the shoes and means for receiving,

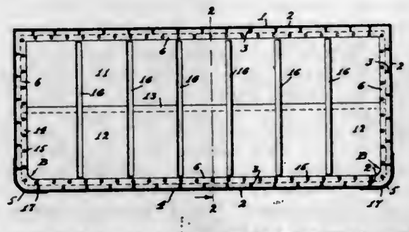
collecting and discharging the snow water therefrom, comprising a rear wall formed of a sheet metal box having longitudinal slots in its front wall, horizontal partitions, preferably of sheet metal fixed in said frame inclined towards the rear wall ending each in a horizontal slot, and supporting bars for the shoes above each horizontal partition.

1,810,309. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 29, 1925. Serial No. 65,524. 13 Claims. (Cl. 248—16.5.)



1. The combination with a typewriter-frame having depending legs, and a baseboard for mounting the frame and receiving the depending legs, of a forwardly-extending hook mounted on the baseboard and engaging an opening in the back of the frame to provide a pivotal anchorage for the frame at its back, anchoring screws set in the baseboard and extending through brackets at the front of the frame, and coil springs directly held down by the screws against the brackets to absorb shocks by permitting the frame to swing out a distance from the board upon said hook as a pivot.

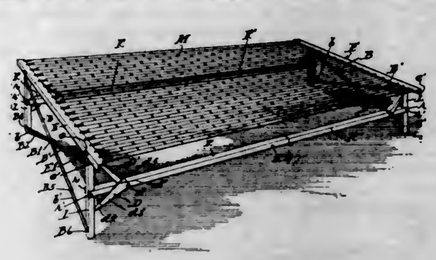
1,810,310. BULKHEAD FOR STEEL BARGES. WILLIAM G. ESMOND, Stratford, Conn., assignor to Edgar Ames, New York, N. Y. Filed Oct. 29, 1927. Serial No. 229,669. 16 Claims. (Cl. 114—79.)



1. A bulkhead for barges of the class described, comprising in combination with a flanged channel beamed hull, of a framing therefor, said framing having spaced notches to receive the flanges of said channels and being welded to said channel flanges at their points of notched contact therewith, and having bulkhead forming partitions affixed thereto, said bulkhead partitions being provided with vertical stiffening braces, bent channels forming bilge members between the sides and bottom of said hull, and outer bilge reinforcing plates riveted to channels on either side of said bent channels.

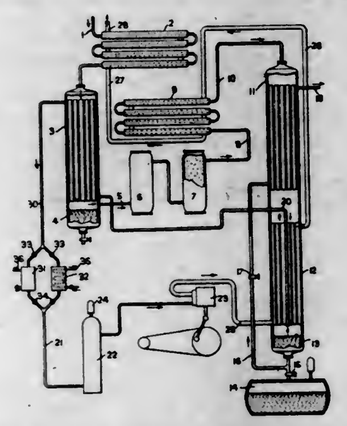
1,810,311. CAMPING BED. ELMER E. FREY, Los Angeles, Calif. Filed Oct. 4, 1927. Serial No. 223,963. 4 Claims. (Cl. 5—112.)

1. A folding bed comprising side rails, legs pivoted at points intermediate their ends to the side rails, means on the upper ends of the legs for supporting a mattress, levers having U shaped attaching portions pivoted to and inwardly of the ends of the side rails, channeled arms eccentrically pivoted to said levers, cooperating means on the upper ends of said legs and said arms whereby the same may be adjustably engaged, said levers being oper-



able for moving said arms in opposite directions over dead center position for supporting said arms in locked and unlocked position, the lower ends of said arms abutting said side rails when the arms and legs are in locked position.

1,810,312. PROCESS OF SEPARATING GASES. RUDOLPH LEONARD HASCHE, Elizabeth, N. J., assignor to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed May 5, 1928. Serial No. 275,391. 6 Claims. (Cl. 183—115.)

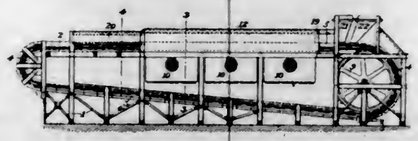


2. The process of recovering sulphur dioxide from gas mixtures such as gases from sulphur burners and by product furnaces which comprises compressing said gases to a pressure substantially above atmospheric, removing the moisture from the compressed gases and cooling the gases to substantially the melting point of sulphur dioxide at the pressure involved removing the liquid sulphur dioxide from contact with the stripped gases at said temperature, then removing the remaining traces of sulphur dioxide from the stripped gases whereby said traces are prevented from freezing when the gases are further cooled and expanding said gases with the production of external work to further cool the same whereby the expanded gases may be utilized as a refrigerant in the above cycle.

1,810,313. PROCESS OF AND APPARATUS FOR HEAT TREATING ALKALINE EARTH CARBONATE AND OTHER MATERIALS. REED W. HYDE, Summit, N. J., assignor to Dwight and Lloyd Metallurgical Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 16, 1926. Serial No. 102,593. 11 Claims. (Cl. 222—4.)

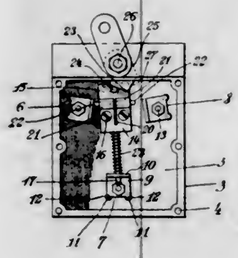
5. The process of calcining alkaline earth carbonate material which comprises forming a pervious layer of said

material, continuously feeding said layer through a calcining zone, passing gases heated to a calcining temperature through the entire layer of said material in said calcining zone, then passing said layer through a soaking zone whereby loss of heat by radiation and conduction is prevented and whereby the material is maintained at a calcining temperature for a further period of time.



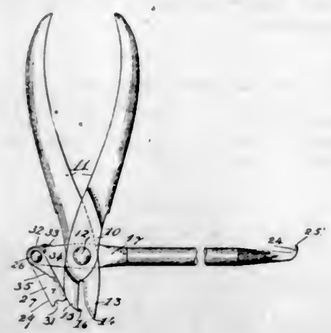
11. In apparatus for heat-treating material, a heating chamber in which material is heated, a suction box beneath said chamber, a series of receptacles having perforate bottoms for supporting the material in a pervious layer, said receptacles being movable successively through said heating chamber and over said suction box, means for producing a hot gaseous fluid, and means for introducing the same transversely of said heating chamber and throughout substantially the entire length thereof, and means for causing said fluid to pass through said material while in said heating chamber.

1,810,314. SNAP SWITCH. GUSTAV H. JOHANSON, Philadelphia, Pa., assignor to Christian Wilhjelm, Philadelphia, Pa., as Trustee. Filed Jan. 19, 1929. Serial No. 333,721. 1 Claim. (Cl. 200—68.)



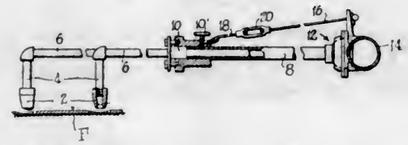
1. In a snap switch of the character described, three fixed terminals, each of said terminals forming a base and an integral upright contact member, a movable switch member supported on one of said terminals and adapted to engage either of the two other terminals, said movable switch member comprising a contact piece bent to form two jaws, contact pins in said jaws, a non-conducting block, screws for securing said bent contact piece to the said block and for adjustably clamping the contact pins in the said jaws, a stem in said bent contact piece passing through a hole in the upright portion of the said one contact member in slidable and swingable relation thereto, a spring surrounding said stem between the bent contact piece and the said one terminal, a pin in said block and a lever adapted to engage said pin for operating the said movable contact member.

1,810,315. PLIER COVER REMOVER. WALTER I. KASER, Clark Township, Holmes County, Ohio, assignor of one-half to Joseph F. Glidden, Lakewood, Ohio. Filed May 2, 1929. Serial No. 359,780. 4 Claims. (Cl. 81—3.1.)



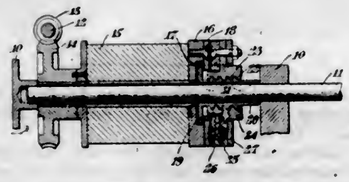
1. A can top removing device comprising a pair of pliers and a lever member pivoted between its ends upon the pivot of the said pliers and having a standard hinged at one of its ends to one end of the lever member and adapted to rest upon the rim of a can whose top is to be removed.

1,810,316. ART OF MAKING DECKLE EDGE PAPER. WILLIAM J. LAMORY, Holyoke, Mass., assignor to American Writing Paper Company, Holyoke, Mass., a Corporation of Delaware. Filed Dec. 21, 1928. Serial No. 327,624. 6 Claims. (Cl. 92—68.)



3. The method of producing deckle edge paper which consists in, flowing paper making fibrous stuff onto a movable web forming member to form a wet web, moving the web past the nozzle of a suction apparatus which has a relatively narrow orifice to remove fibers of the web entirely from the forming member along a longitudinal line to provide separate webs having adjacent deckle edges and then in moving adjacent webs in opposite directions opposed to the planes of their surfaces to separate said webs entirely from one another.

1,810,317. CLUTCH MECHANISM FOR CARD PUNCHES. WILLIAM W. LASKER, Brooklyn, N. Y., assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 13, 1927. Serial No. 183,388. 4 Claims. (Cl. 192—24.)

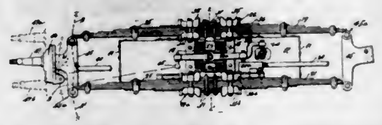


1. In a clutch mechanism, the combination of a driving ring, a driven shaft, a clutch element mounted on said shaft for rotating said shaft and slidable axially on said shaft, a flange on said element for engagement with one face of said ring, a second clutch element concentric with said first clutch element and connected thereto by a quick acting thread, a flange on said second clutch element, and a clutch face ring mounted on the flange of said second clutch element for engagement with the other face of said driving ring thereby producing a greater friction between the second clutch element and the driving ring than that produced between the first clutch element and driving ring to increase the gripping action between the clutch elements and driving ring.

1,810,318. PRODUCTION OF ESTERS OF GLYCOLS. OSKAR LOEHR, Uerdingen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 16, 1926, Serial No. 142,152, and in Germany Oct. 21, 1925. 6 Claims. (Cl. 260—106.)

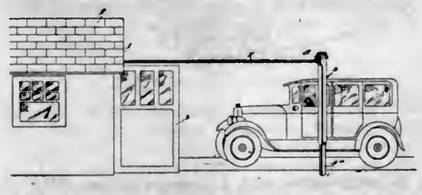
1. The process which comprises reacting at least two molecular proportions of a mono carboxylic acid with one molecular proportion of a mono olefine oxide at a temperature between about 50° C. and the boiling point of the reaction mixture and in the presence of an esterification catalyst.

1,810,319. SPRING MOUNTING. OSCAR F. LUNDELIUS and JOHN R. DILLON, Los Angeles, Calif., assignors to Lundelius & Eccleston Motors Corporation, Las Vegas, Nev., a Corporation of Delaware. Filed Jan. 9, 1929. Serial No. 331,230. 10 Claims. (Cl. 280—124.)



1. A mounting for connecting a horizontally extending spring to a spring supported frame, embodying a pair of spaced, axially alined perches adapted to take the spring at two longitudinally spaced points therealong, said perches each embodying a pair of vertically opposed interconnected blocks spaced respectively from the upper and lower surfaces of the spring, a pair of pads one between each of said blocks and the spring, the bearing surface of each pad being curved longitudinally of the spring and away from the spring on each side of its point of contact therewith, and the inner surfaces of the blocks engaging the pads being curved similarly to said bearing surfaces of the pads.

1,810,320. GARAGE DOOR OPERATOR. ANDREW EUGENE MICHAELSON, Portland, Oreg., assignor, by mesne assignments, of forty-nine per cent to Hilda Eschenfeld, Portland, Oreg. Filed July 18, 1928. Serial No. 293,521. 7 Claims. (Cl. 268—62.)



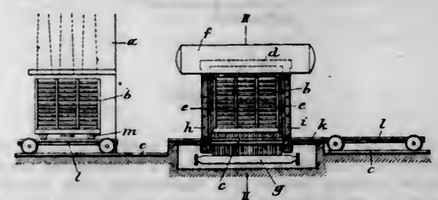
1. An operating mechanism for doors and the like comprising a power pulley, means for locking said pulley to hold the door in connection with which it is used in either open or closed or partially opened or closed position, and a cable wound on said pulley and operable by pull exerted thereon to simultaneously release said locking means and actuate the pulley to operate the door.

1,810,321. METAL DOOR. NATHAN MICHELMAN, Brooklyn, N. Y. Filed Dec. 24, 1927. Serial No. 242,414. 2 Claims. (Cl. 189—46.)



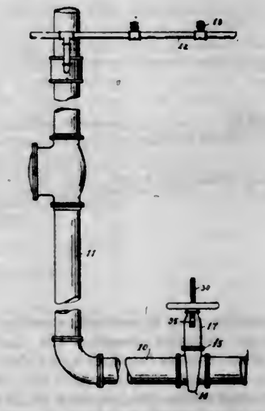
1. A metal door comprising front and back wall sections each section shaped with integral stiles and rails from a single sheet of steel, each section having a pair of integral side members which abut against the edges of the adjacent side members to create an air space between the walls of the sections with a packing material arranged therebetween, a top and bottom channel plate secured to the sections and a plurality of holes located in the plates, pairs of interlocking keepers welded to the inner portion of the sections adjacent the abutting edges, and a key passing through each hole made to engage the keepers so as to lock the sections together.

1,810,322. APPARATUS FOR THE DRY-COOLING OF COKE. ARNOLD MOETTELI, Oberwinterthur, Switzerland, assignor to the Firm: Dry Quenching Equipment Corporation, New York, N. Y. Filed Nov. 21, 1927, Serial No. 234,626, and in Switzerland Nov. 22, 1926. 3 Claims. (Cl. 202—227.)



1. An installation for the dry cooling of incandescent coke and the like comprising a chamber, a boiler comprising a lower header, an upper drum and rows of upright tubes communicably connecting said header and said drum, said tubes being arranged with one row lining one side wall of the chamber and another row lining the opposite side wall of the chamber, a hot coke container, and means for conveying said container into said chamber.

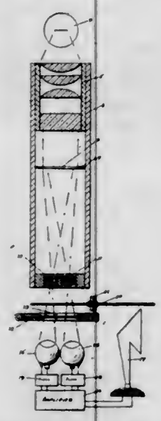
1,810,323. TRAPPED KEY SIGNAL TRANSMITTER AND VALVE CONTROL MEANS. JAMES G. NOLEN, New York, N. Y., assignor to Robert L. McElroy, Charlottesville, Va. Filed Nov. 11, 1925. Serial No. 68,435 14 Claims. (Cl. 177—360.)



1. In combination, a key-controlled means for releasing the key of said means when said means is locked in one

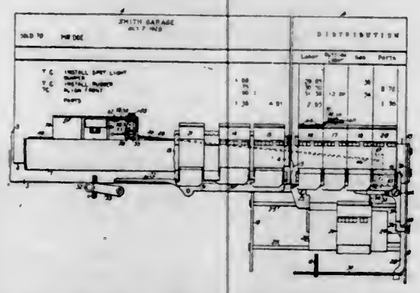
position and trapping the key when said means is not in said position; and signal means controlled by the key for trapping the key and giving one kind of signal when the key is trapped and another kind of signal when the key is released.

1,810,324. SOUND REPRODUCING APPARATUS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed June 18, 1929. Serial No. 371,811. 5 Claims. (Cl. 179—100.3.)



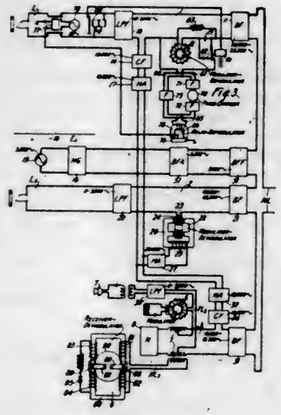
1. A sound reproducing apparatus comprising means for supporting a traveling film having a plurality of sound records thereon, means for illuminating said records, means for translating and rendering audible said records including light sensitive devices, an amplifier, loud speaker and frequency filters in the circuits between said light sensitive devices and said loud speaker, and rotatable means between said illuminating means and said light sensitive devices and having alternately disposed openings for selectively controlling the passage of light to said light sensitive elements.

1,810,325. COMBINED TYPEWRITING AND COMPUTING MACHINE. ROY PENNICOTT, Seattle, Wash., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Mar. 31, 1927. Serial No. 180,003. 7 Claims. (Cl. 235—59.)



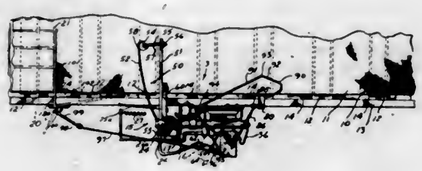
1. The combination with a carriage, a series of vertical totalizers and an actuator therefor the one traveling relative to the other, a cross totaliser and a device adapted to be tripped to test said cross totaliser for clearance, of trip mechanism comprising two coacting parts one associated with said series of vertical totalizers and one traveling relative to the other, one of said parts being constructed to yield in one direction such that said device will not be tripped during the step by step travel of the carriage and not to yield but to operate the trip mechanism during the return motion of the carriage.

1,810,326. WAVE MODULATION AND APPLICATION THEREOF. EUGENE PETERSON, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 30, 1926. Serial No. 145,113. 15 Claims. (Cl. 179—15.)



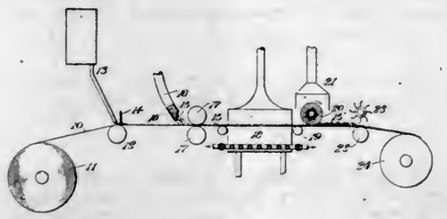
2. The method which comprises generating a flux by intermodulating magnetomotive forces, and controlling a flux responsive mechanical device in response to the generated flux.

1,810,327. STAMPING MACHINE FOR CONVEYERS. JOHN S. PHELPS, Whittier, Calif. Filed Oct. 8, 1928, Serial No. 310,973. Renewed May 19, 1930. 27 Claims. (Cl. 101—35.)



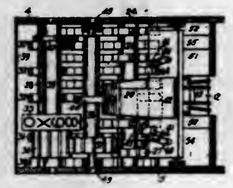
1. In combination with a conveyer system along which an article moves: a stamping member movable into and from the path of travel of said article by motive power derived from the movement of said article; a reboundable stamping means carried by said stamping member and adapted to engage said article; and means for catching said stamping means on the rebound to prevent further contact thereof with said article.

1,810,328. ART OF MAKING PILE FABRICS. NELSON SLATER, Webster, Mass., assignor to S. Slater & Sons, Inc., Webster, Mass., a Corporation of Massachusetts. Filed May 3, 1927. Serial No. 188,424. 2 Claims. (Cl. 154—1.)



1. The herein described apparatus for making pile fabric comprising means for feeding a web of stock, means for depositing an adhesive coating thereon, means for applying the pile material to said coating, a dryer through which the stock and deposited pile passes and means for raising the pile.

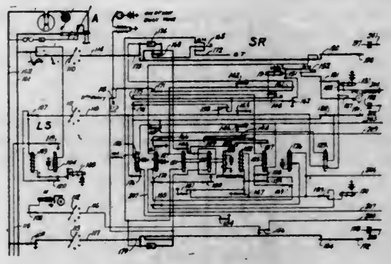
1,810,329. COMPUTING MACHINE. ROBERT H. STROTHER, Stamford, Conn., assignor to Remington Accounting Machine Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 2, 1929. Serial No. 329,767. 17 Claims. (Cl. 235—59.)



6. In a computing machine in which the digits of a number are computed one after another, a symbol computer having in combination a part to be set in accordance with the symbol of a number, a series of denominational wheels, a shaft geared to the odd-numbered wheels, a shaft geared to the even-numbered wheels, and means for gearing said part to said odd and even-numbered wheels alternately in such wise that the odd-numbered wheels cause said part to turn in one direction and the even-numbered wheels cause said part to turn in the opposite direction.

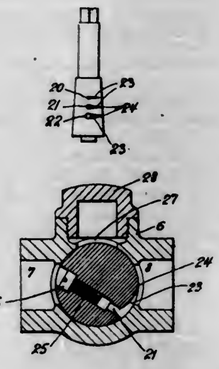
1,810,330. ZONE METERING SYSTEM. JOHN WICKS, Oak Park, Ill., assignor to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed June 3, 1929. Serial No. 367,996. 19 Claims. (Cl. 179—9.)

1. In a telephone system, a calling line, switches available to said line for use in extending connections to called lines, a meter associated with the calling line, meter control equipment common to said switches, means responsive to the seizure of one of said switches for automatically associating said switch with said meter control equipment, means in said meter control equipment operable incidental to the establishment of a connection to determine the minimum charge to be made for the call, means also included in said equipment for making a corresponding charge at the termination of a predetermined time period after a



call has been answered and periodically thereafter, and means operative responsive to the termination of the call for causing said minimum charge to also be made.

1,810,331. OIL VALVE. CHRISTIAN WILHJELM, Philadelphia, Pa., assignor, by mesne assignments, to Christian Wilhjelm, Philadelphia, Pa., as trustee. Filed Jan. 19, 1929. Serial No. 333,782. 2 Claims. (Cl. 251—92.)

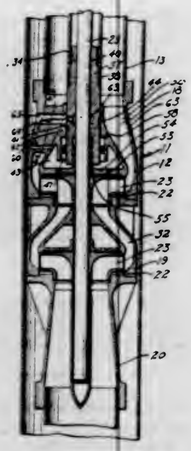


1. A valve mechanism comprising a valve chamber having an inlet and an outlet, a valve plug in said chamber provided with a plurality of passages leading from said inlet to the said outlet, each of said passages comprising an orifice leading from an eccentric tapered groove in the surface of said plug in its outlet side a distance into said plug and a threaded bore leading from the orifice to the inlet side of the plug, screws for closing said threaded bores, all of said orifices and grooves being graded in size and all of said bores being of the same size and means permitting access to the said plug from outside the valve.

1,810,332. MEANS FOR APPLYING TENSION ON SHAFT INCLOSING TUBING. JOHN A. WINTROATH, Los Angeles, Calif., assignor to Peerless Pump Company, Los Angeles, Calif., a Corporation of California. Filed Aug. 30, 1926. Serial No. 132,387. 12 Claims. (Cl. 103—102.)

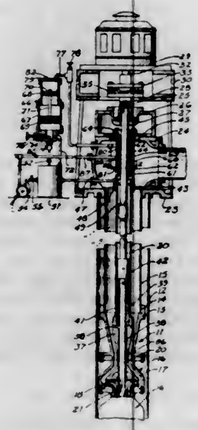
1. In a pump the combination of: a pump head; a pump section suitably supported in a well; an impeller in said pump section; a pump shaft operatively connecting said pump head and said impeller; a shaft tubing sur-

rounding said pump shaft; means for holding the upper end of said shaft tubing; and a plunger attached to the lower end of said shaft tubing, said plunger being slid-



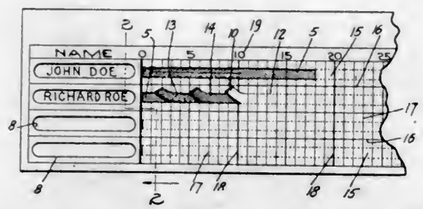
able in a chamber of said pump section, one face of said plunger communicating with a fluid passage of said pump section and the other face of said plunger communicating with the exterior of said pump section.

1,810,333. HIGH PRESSURE PUMP HEAD. JOHN A. WINTROATH, Los Angeles, Calif., assignor of one-half to Edward D. Smith, Chicago, Ill., and one-half to Wintroath Pumps, Ltd., Alhambra, Calif., a Corporation of California. Filed Sept. 7, 1926. Serial No. 133,878. 10 Claims. (Cl. 103—102.)



1. A turbine pump comprising: a pump unit adapted to be inserted in a well; a pump head situated near the top of said well; a pump shaft extending from said pump unit to said pump head, by means of which said pump unit is operated; a gas-filled tube enclosing said pump shaft; and means for maintaining in said tube a gas pressure which is higher than the pumped liquid.

1,810,334. GRAPHIC CHART. EDWARD M. ANDRES, Phoenix, Ariz., assignor of one-half to Russel W. Tallman, Gunnison, Colo. Filed Nov. 26, 1928. Serial No. 321,931. 9 Claims. (Cl. 35—12.)



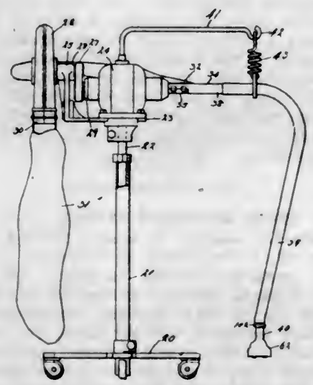
1. A chart comprising a plurality of sheets having markings and having superposed, removable strips between weakened lines, and means to fasten the sheets together at opposite sides of the removable strips.

1,810,335. ARCHER'S BOW. GEORGE E. BARNHART, Pasadena, Calif. Filed Oct. 15, 1927. Serial No. 226,295. 12 Claims. (Cl. 273—106.5.)



1. In an archer's bow, the combination of: a bow member including a pair of tubes disposed end to end and connected by a tubular bushing extending into adjacent ends of said tubes; a handle surrounding the connected ends of said tube; and a string joining outer ends of said tubes.

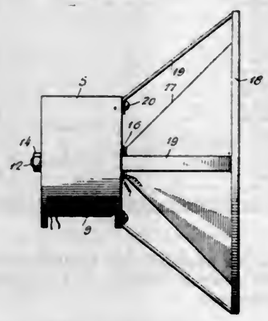
1,810,336. PORTABLE BLACKBOARD RENOVATOR. ALBERT BENNINGTON, Ridley Park, Pa. Filed July 9, 1928. Serial No. 291,187. 4 Claims. (Cl. 51—170.)



4. A device of the kind described including a head having two compartments, a neck formed with said head and

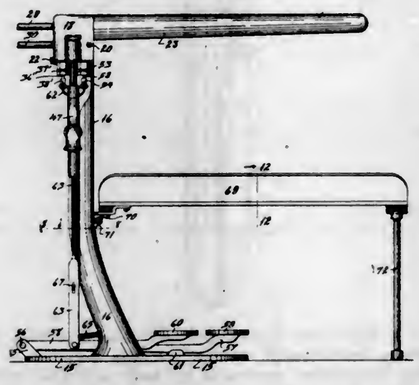
communicating with one of the compartments therein, means to provide an enclosed passage-way through the neck and the compartment with which said neck communicates to the other compartment in said head, a pair of rollers journalled in the compartment with which the neck communicates, a train of gears mounted in the other compartment for revolving said rollers in reverse directions, and mechanism in the enclosed passage-way for transmitting motion from a prime mover to the train of gears.

1,810,337. LOUD SPEAKER. CARL A. BERGMANN, Brooklyn, N. Y. Filed Mar. 8, 1930. Serial No. 434,196. 3 Claims. (Cl. 179—115.5.)



1. A speaker pot for dynamic loud speakers, comprising a hollow metallic body all parts of which are integral with each other and provided with an opening in its peripheral wall dimensioned to admit a magnet coil to the interior of said body.

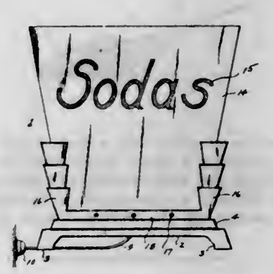
1,810,338. STEAM BOARD. HERMAN BETKE, Denver, Colo. Filed Oct. 24, 1929. Serial No. 402,047. 11 Claims. (Cl. 68—9.)



1. A steam board comprising an operating head, a steaming chamber supported by and projecting laterally from said head, a heating unit within and sealed from said steaming chamber, a steam line communicating through said head with said heating unit, a steam passage within said head between said steam line and the interior of said steaming chamber and valve means in said head and intersecting said steam passage for selective control of the flow of steam therethrough.

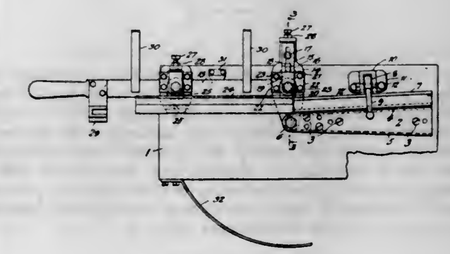
10. In a steam board having a pedestal base, an operating head supported on and by said base, a hollow heating unit supported by and projecting laterally from said head, a perforated steaming chamber adjacent and sealed from said heating unit and means including a steam line and a steam return line communicating through said head with said heating unit for the continuous circulation of steam therethrough, valve-controlled means in said head for the optional circulation of steam from said steam line within and through said steaming chamber and separate valve-controlled means in said head and operable from said steam line to withdraw steam and air from said steaming chamber.

1,810,339. ADVERTISING DISPLAY SIGN. WALTER H. BLACK, Cleveland, Ohio., assignor of one-tenth to Arthur J. Gilbert, Brooklyn, N. Y. Filed May 7, 1930. Serial No. 450,355. 4 Claims. (Cl. 40—130.)



1. An advertising display sign comprising in combination, a base, a translucent plate mounted upon the forward portion of said base and extending upwardly therefrom for receiving advertising matter to be illuminated, said plate having upwardly and outwardly inclined side edges, a source of light mounted upon said base rearwardly of said translucent plate for illuminating the advertising matter thereon, and a reflecting shield mounted upon said base in surrounding relation to said source of light, said reflecting shield having upwardly and outwardly inclined side and back walls, the top surface of said base and the inner surfaces of said reflecting shield being mirrored and cooperating with the rear surface of said translucent plate for reflecting and diffusing light from said source upwardly and rearwardly with respect to said display sign.

1,810,340. DEVICE FOR BENDING TUBES. GEORGE A. BRYAN, Peru, Ind., assignor to Bryan Steam Corporation, a Corporation of New Mexico. Filed Apr. 23, 1929. Serial No. 357,432. 4 Claims. (Cl. 153—46.)



1. A machine for bending tubes comprising a bed-plate, a stationary arcuate swaging block secured to said bed-plate, a lever arm pivoted coaxial with said arcuate stationary swaging block, a movable swaging block carried by said lever arm and having a longitudinally slid-

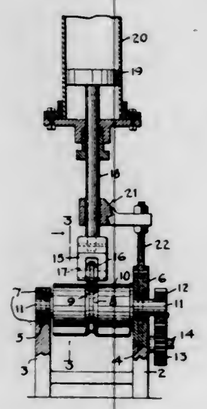
able connection therewith, and means for moving said movable swaging block laterally to the lever arm and clamping said movable swaging block into frictional engagement with the surface of said arcuate stationary swaging block.

1,810,341. SHOE AND METHOD OF MAKING THE SAME. TYCHO BURK, Philadelphia, Pa. Filed Oct. 8, 1927, Serial No. 224,840. Renewed Dec. 15, 1930. 3 Claims. (Cl. 36—3.)



1. The method of producing a shoe upper part which consists in providing a blank of the desired shape, then forming slots and also slits between adjacent slots parallel therewith to produce a predetermined pattern, and then weaving strips through the slots and slits to complete a design.

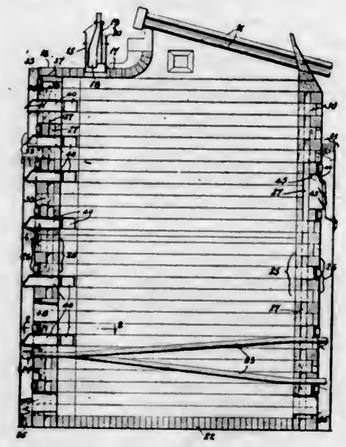
1,810,342. MACHINE FOR CRIMPING PIPE SLEEVES. ARTHUR J. BULGER, Brooklyn, N. Y., assignor to Pierce Steel Pipe Corporation, New York, N. Y., a Corporation of New York. Filed July 24, 1930. Serial No. 470,879. 2 Claims. (Cl. 153—73.)



1. A machine for crimping pipe sleeves, comprising a frame, a mandrel roll having a groove intermediate its ends, said roll being mounted in the frame so that it can be raised to permit placement and removal of the sleeves over it, means for driving the mandrel roll, crimping rolls and a crimping roll carriage over the mandrel roll, means for pressing said crimping roll carriage downward and for raising it, and a connection whereby this means also serves to raise the mandrel roll.

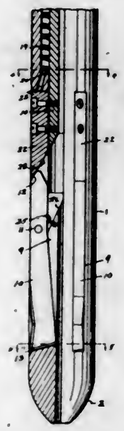
1,810,343. FURNACE. VIRGINIUS Z. CARACRISTI, Bronxville, N. Y., assignor to Locomotive Pulverized Fuel Company, a Corporation of Delaware. Filed Sept. 30, 1922. Serial No. 591,449. 3 Claims. (Cl. 110—75.)

1. In a furnace of the character described, an outer wall structure, an inner refractory wall structure, members bonding said structures together in spaced relation and being also spaced from each other to provide vertical



and horizontal air passages, and air-inlet conduits in the spaces between bonding members and extending through both wall structures.

1,810,344. PIPE CUTTER. WALTER L. CHURCH, Houston, Tex., assignor of one-half to W. L. Pearce, Harris County, Tex. Filed Apr. 29, 1929. Serial No. 359,093. 9 Claims. (Cl. 81—195.)

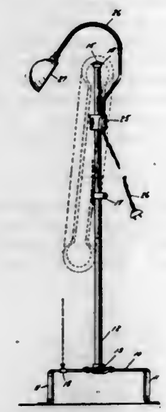


1. A pipe cutter including a body having a fluid passageway therethrough, cutters pivotally mounted in external longitudinal grooves in the body, a member having separate, detachable, blade expanders shaped to engage the upper ends of said cutters and effective to thereby move the lower ends of said cutters outwardly, and fluid pressure operated means on said member.

1,810,345. TIRE DISPLAY STAND. FRED. C. COLLINS, Akron, Ohio. Filed Mar. 15, 1929. Serial No. 347,307. 1 Claim. (Cl. 211—23.)

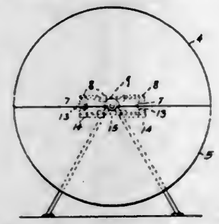
A tire display stand comprising a suitable base, an upright comprising a rod extending upwardly from said base, the upper end of said rod having an elongated head swiveled thereon adapted to receive a tire casing thereover with the interior of the casing under the tread resting

upon said head, with said head extending circumferentially of the inside of a tire casing supported thereon, and said stand suspending the tire with an outer side of the tire



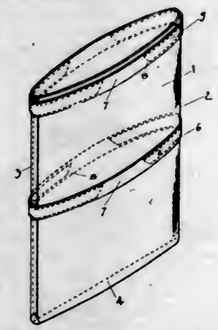
at the lower portion thereof resting by gravity against the rod whereby the tire may be easily rotated about the diameter along which it is supported to any desired angular position respecting the stand.

1,810,346. MOVING PICTURE SCREEN. EDWARD M. CRAWFORD, Houston, Tex. Filed June 17, 1929. Serial No. 371,666. 8 Claims. (Cl. 88—24.)



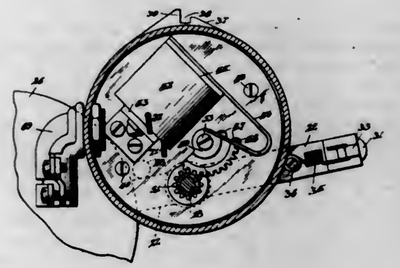
1. A rotatable screen formed of sections, said sections being adjustable along a transverse axis into different planes of rotation and means for rotating the screen.

1,810,347. SHOPPING BAG. EVA DAITCH, Brookline, Mass. Filed July 10, 1929. Serial No. 377,160. 2 Claims. (Cl. 150—1.7.)



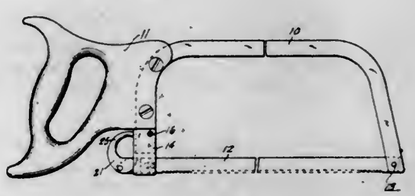
1. A shopping bag comprising a tubular body formed of a strip of integral, uniform, flexible, farbic material, and having an open and closed end, handle members adjacent said open end, a second pair of handle members midway between said open and closed ends, both of said handle members being mounted on the same side of said body, each of said handle members consisting of a fabric strap parallelly disposed to the other and to said open and closed ends of said body, and partially stitched along its length to said body, whereby the unstitched portions form grips.

1,810,348. DOWSER CONTROL MECHANISM FOR MOTION PICTURE PROJECTING MACHINES. JOSEPH T. FEWKES, Philadelphia, Pa., assignor to Sentry Safety Control Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed June 4, 1928. Serial No. 282,844. 6 Claims. (Cl. 145—53.)



1. Dowser control mechanism comprising a casing, a shaft journaled in said casing, a dowser fixed on said shaft at right angles to the length of said shaft, a magnet, a keeper, and a gear segment on said keeper meshing with a gear on said shaft for holding said dowser out of light obstructing position when the said magnet is energized.

1,810,349. SAW STRETCHER. JAMES H. GREEN, Stratford, Conn. Filed July 10, 1929. Serial No. 377,208. 3 Claims. (Cl. 145—53.)

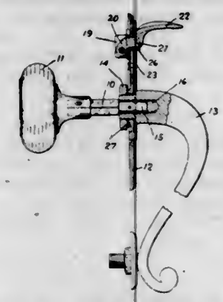


1. A saw stretcher and holder comprising a substantially U-shaped frame, a handle secured to said frame and so located that one end of the frame projects beyond the handle, a block secured to said projecting end of the frame and adapted to closely fit said end with the forward edge of the latter flush with the face of the block, the upper face of the block flatly abutting the handle so as to afford no crevices between the block, U-frame and handle, a blade secured to the other end of the frame, and means on the block for drawing the blade tight.

1,810,350. ACTUATOR. JOHN HINES, Astoria, N. Y., assignor to Segal Lock & Hardware Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 2, 1928. Serial No. 316,636. 12 Claims. (Cl. 292—348.)

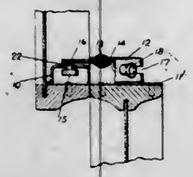
1. An actuating device including a plate, an operating member slidably mounted upon said plate, a lever rocking-

ly connected to said plate, a rotatable spindle also connected to said plate and means coupling said operating



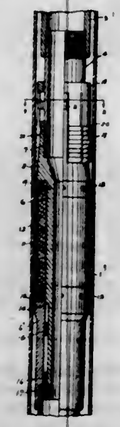
member to said lever and spindle to convert the rocking movements of the former into rotational movements on the part of the latter.

1,810,351. FASTENING DEVICE. JOHN HINES, Astoria, N. Y., assignor to Segal Lock & Hardware Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 2, 1928. Serial No. 316,637. 9 Claims. (Cl. 292—241.)



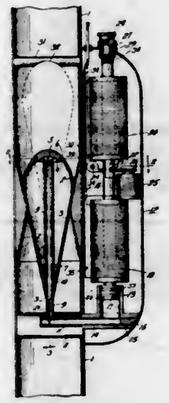
1. A fastening device including a pair of sheet metal members of substantially constant gauge, a lever pivotally carried by one of said members, the second of said members being formed with a slot eccentrically disposed with respect to the point of pivotal connection of said lever, and means carried by said lever to ride within said slot.

1,810,352. COMBINATION PACKER AND SETTING TOOL. GRANVILLE A. HUMASON, Houston, Tex., assignor of one-half to J. A. Logan, Harris County, Tex. Filed Oct. 14, 1929. Serial No. 399,664. 1 Claim. (Cl. 166—12.)



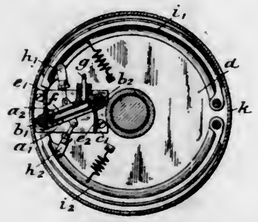
Apparatus of the character described for forming a fluid tight joint between an inner tubing and an outer casing and including a tubular packer support longitudinally movable with respect to said tubing, an expansible packer around the support and attached to the support and tubing, said support and tubing having means adjacent the ends of the packer effective to expand said packer when the support and tubing are relatively moved longitudinally in one direction, interengaging abutments carried by the support and tubing, respectively, arranged to limit such movement to limit the expansion of the packer, one of said abutments being adjustable and an abutment on the support with which the tubing abutment may engage to suspend the tubing from said support.

1,810,353. AUTOMATIC VALVE. RAYMOND P. JOHNSON, Lynbrook, N. Y., assignor to Standard Oil Company of New York, New York, N. Y., a Corporation of New York. Filed July 14, 1928. Serial No. 292,649. 12 Claims. (Cl. 137—139.)



1. A valve of the character described, including a fluid conduit, a valve seat member of double cone-shaped formation having a Venturi opening disposed within said conduit, a guide rod, a pear-shaped closure member telescoping over said guide rod and movable longitudinally thereon to open and close the valve the larger end of the closure member being presented against the direction of intended fluid flow through the valve, and in advance of the most restricted part of the opening in said valve seat member, and means for controlling the movement of said closure member.

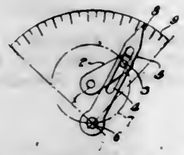
1,810,354. WHEEL BRAKE. PETER KARSTEN, Dusseldorf, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik Sommerda Aktiengesellschaft, Sommerda, Germany, a Corporation of Germany. Filed Oct. 2, 1929, Serial No. 396,624, and in Germany Nov. 12, 1928. 2 Claims. (Cl. 60—54.6.)



1. A fluid motor for compressed air brake systems, particularly for power driven vehicles, comprising two spaced

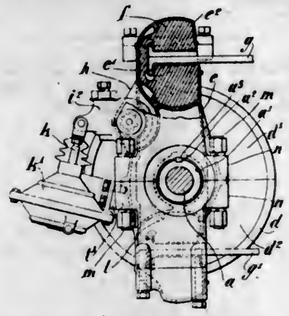
parallel fixed plates, two curved wall sections extending between said plates in transverse perpendicular relation thereto, two swinging pistons pivoted at diagonally opposed points of said wall sections and having their free ends movable along the same, an inflatable elastic member enclosed between said pistons and wall sections, and a compressed air conduit passing through one of said pistons for conducting air under pressure to said inflatable member whereby said pistons are pivotally actuated in opposite directions to develop a braking action.

1,810,355. RADIO TUNING INDICATOR. RUSSELL T. KINGSFORD, Wyncote, and LEWIS H. DAVIS, Upper Darby, Pa., assignors to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 6, 1930. Serial No. 459,528. 15 Claims. (Cl. 74—7.)



1. In a tuning system utilizing a rotor of a tuning device and a pointer with its scale, a mechanical movement for determining the relative movements of the rotor and pointer comprising a member movable in fixed relation with respect to the rotor, and a pointer actuating member controlled by said member and pivoted upon a circle substantially in an arc of which said member moves.

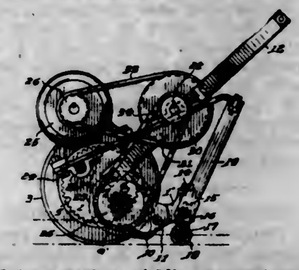
1,810,356. BRAKE SPIDER. AUGUST H. LEIPERT, College Point, Long Island, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 1, 1928. Serial No. 282,261. 4 Claims. (Cl. 188—206.)



1. In combination with vehicle springs and an axle housing, a brake spider comprising independent sections, means to secure the sections as a unit upon the axle housing, and means to secure one of the springs to each of the sections.

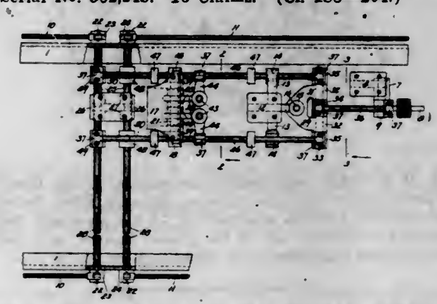
1,810,357. ELECTRICALLY DRIVEN LAWN MOWER. JOHN LENHART, Richboro, Pa. Filed Oct. 21, 1930. Serial No. 490,112. 3 Claims. (Cl. 56—26.)

1. In a motor driven lawn mower, the combination with a mower frame, driving wheels therefor, a cutter blade shaft geared to one of said wheels, a spider, and cutter blades carried thereby, said spider being secured to said shaft near the ends of said cutter blades, of a sprocket wheel having an opening for the free passage of said shaft therethrough and terminating in a radially extending flange fitting against the outer side of said spider, an annular member insertable between said blades and adapted to lie flat against the inner side of said spider and bolts passing through said ring and freely through said spider and into said flange to clamp said sprocket rigidly to the outer side of said spider, a rigid framework secured to said mower frame and extending above said cutter blades, a motor mounted on said framework, a countershaft mount-



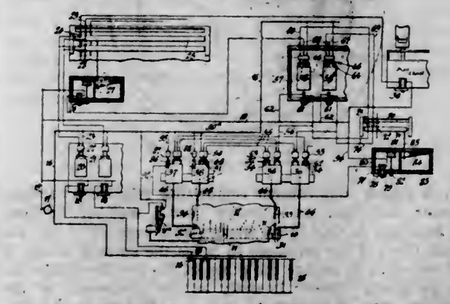
ed on said framework, a yielding power transmission between said motor and said countershaft and a positive power transmission between said countershaft and said sprocket wheel on said spider, whereby the power of the aforesaid motor is transmitted to the cutter shaft to rotate the same and the cutter shaft drives said wheel to propel the mower forwardly.

1,810,358. FOUR-WHEEL BRAKE EQUALIZER. LEROY N. LINSCOTT, Thompsonville, Conn. Filed May 11, 1929. Serial No. 362,245. 16 Claims. (Cl. 188—204.)



15. In an equalizer of the class described, mechanism connected with four brake-actuating elements, said mechanism including a series of rocker arms and operating rods therefor and swivels which carry certain of said arms which are operable in opposed planes.

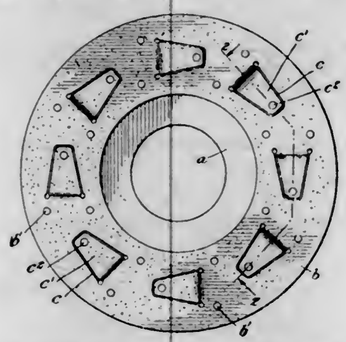
1,810,359. AUTOMATIC MUSICAL INSTRUMENT. LOUIS S. LOCKWOOD, North Tonawanda, N. Y., assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y., a Corporation of New York. Filed Dec. 13, 1926. Serial No. 154,385. Renewed Apr. 9, 1931. 30 Claims. (Cl. 84—98.)



7. An automatic musical instrument, comprising a tracker having a pair of openings, an electro-pneumatic

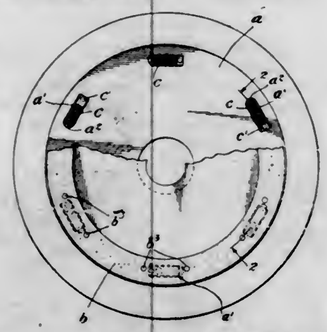
device to be actuated, pneumatics connected with said tracker openings, an electric circuit including said electro-pneumatic device, switches in said circuit controlled by said pneumatics, the latter being actuated to close said switches when said pair of tracker-openings is uncovered to render said electro-pneumatic device operative, and to open said switches when the openings are covered, and a normally closed switch in said circuit controlled by one of said pneumatics and arranged to be momentarily opened before said first-named pneumatic switches are closed to render the device inoperative during the initial uncovering of the tracker openings, said switch being closed during and after the closing and opening of the pneumatic switches to retain the device operative when the tracker-openings are covered.

1,810,360. CLUTCH DISK CONSTRUCTION. BRUNO LOEFFLER, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 392,077. 2 Claims. (Cl. 192—107.)



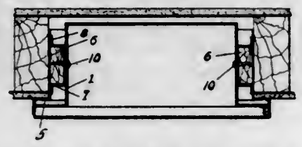
1. In a clutch construction, an annular plate, friction members secured to the plate at opposite sides thereof, and resilient portions stamped out of the plate and members and projecting out of the planes thereof, said resilient portions projecting upon opposite sides of the plate.

1,810,361. CLUTCH DISK CONSTRUCTION. BRUNO LOEFFLER, Plainfield, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 12, 1929. Serial No. 392,078. 2 Claims. (Cl. 192—52.)



1. A clutch construction comprising relatively rotating annular members, an annular spring member between the members having faces sloping with respect to the adjacent faces of the members to cause the surface of one of said members to engage the other of the members adjacent one periphery thereof initially in the movement of the members into engagement, and a cylindrical extension on the annular member adjacent its inner periphery.

1,810,362. WALL CABINET. MAURICE LUMLEY, Cincinnati, Ohio, assignor to The F. H. Lawson Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 1, 1929. Serial No. 375,122. 1 Claim. (Cl. 20—1.11.)



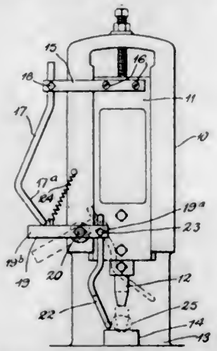
A mounting for a metal wall cabinet, comprising a frame with side walls intermediate the width of which metal boxes are mounted, said metal boxes retaining wooden fillers and having holes through which screws, extended through said cabinet, may be seated in said filler members.

1,810,363. UNDERSHIRT PULLER. VASELE N. MALAPETA, Terminous, Calif. Filed Oct. 18, 1929. Serial No. 400,718. 3 Claims. (Cl. 223—20.2.)



1. A garment puller comprising an elongated shank formed at one end to serve as a handle, and a smooth-edged and non-pointed fabric engaging element projecting toward the handle from the opposite end of the shank and rigid therewith.

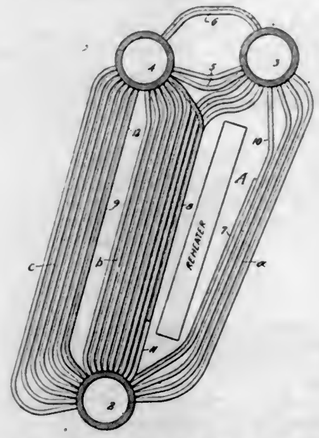
1,810,364. GUARD FOR PRESSES. CLINTON E. MARSHALL, Brooklyn, N. Y. Filed June 7, 1929. Serial No. 369,102. 4 Claims. (Cl. 74—105.)



1. A guard attachment for presses comprising a part adapted to be coupled with the plunger of the press, a lever pivoted to the lower end of the frame of the press above the bed plate thereof, a guard arm adjustably supported in connection with one end of said lever and having an offset portion arranged to move transversely with respect to and adjacent the front of the plunger die of the press, an operating rod adjustably coupled with said part and extending from said part to said lever and bearing upon the other end of said lever to transmit

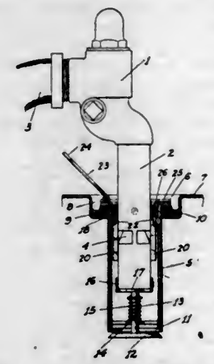
movement to said guard arm in the descent of the plunger, and tensional means coupled with said frame and with the last named end of said lever for maintaining said end of the lever in constant engagement with said rod.

1,810,365. BENT TUBE BOILER. LEONARD J. MARSHALL, Westwood, N. J., assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 4, 1929. Serial No. 352,369. 1 Claim. (Cl. 122—302.)



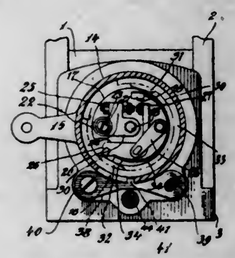
In combination, a bent tube boiler having a mud drum, upper steam and water drums and banks of tubes connecting said drums including a front bank, the tubes of which connect the mud drum and the front steam and water drum, and a second bank certain of the tubes of which connect the mud drum and a second steam and water drum and other tubes of which connect the mud drum and the front steam and water drum, said banks of tubes being so bent as to provide a substantial space therebetween for the major part of the longitudinal extent of the banks of tubes, a steam heater in said space, a rear baffle for the front bank terminating short of the front steam and water drum, and a front baffle for the second bank terminating short of the mud drum and shielding all of the tubes of said second bank.

1,810,366. SELF-CLOSING DRUM FILLING VALVE. FELIPE MARTIN, Fairfield, Calif. Filed June 10, 1930. Serial No. 460,141. 1 Claim. (Cl. 284—14.)



. A self-closing filling valve structure for drums for use in connection with a cylindrical nozzle having discharge openings intermediate its ends, said structure comprising a barrel of greater diameter than the nozzle adapted to be removably secured on and depend into a drum, a downwardly opening valve for the bottom of the barrel mounted in connection with the barrel, means to yieldably hold the valve closed, means adapted to be mounted on the lower end of the nozzle to depress and open the valve after the nozzle has been inserted into the barrel a distance sufficient to dispose the intermediate openings of the nozzle below the top of the barrel, a sleeve to loosely fit inside the barrel adapted to be mounted on the nozzle with its upper end above the openings and with its lower end below said openings, and releasable catch means between the sleeve and barrel to hold the nozzle in a valve opening position; said sleeve having side ports in the zone of the nozzle openings.

1,810,367. ADJUSTING DEVICE FOR MAGNETOS. JOHN F. MARTIN, Springfield, Mass., assignor to American Bosch Magneto Corporation, Springfield, Mass., a Corporation of New York. Filed Jan. 24, 1930. Serial No. 423,228. 12 Claims. (Cl. 123—149.)



1. In a magneto, an interrupter, means for actuating the interrupter, and a plane member held against the end of the magneto and extending adjustably across said end, said member engaging said means to fix the edge distance of said magneto.

1,810,368. GEAR CONSTRUCTION. JULIAN L. PERKINS, West Springfield, and HIRAM D. CROFT, Springfield, Mass., assignors to Perkins Machine & Gear Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 13, 1930. Serial No. 420,521. 3 Claims. (Cl. 74—41.)

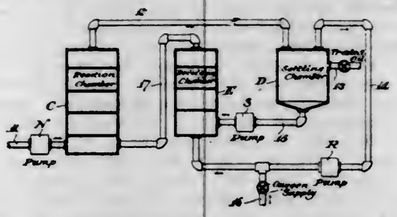


1. A gear assembly comprising in combination, a gear having peripheral teeth converging towards its axis at a side thereof, a hub disposed at said side concentrically thereof which is joined thereto by welding to provide a unified rigid structure, the said hub having a part which intersects the included angle of the root of the teeth of said gear.

1,810,369. REFINING HYDROCARBON OILS. ALBERT G. PETERKIN, Jr., Bryn Mawr, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 4, 1928. Serial No. 323,690. 9 Claims. (Cl. 196—30.)

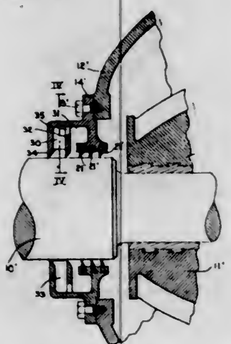
1. A continuous closed cyclic process for treating sour hydrocarbon oil, which comprises passing the oil in a continuous stream through a treating zone, during such passage subjecting the oil to the action of a confined quantity of sweetening agent capable of reactivation by

free oxygen, maintaining the sweetening agent active by contacting it with a confined quantity of gas containing



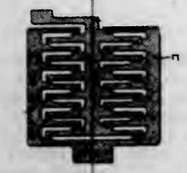
free oxygen, and replacing the oxygen consumed in maintaining the sweetening agent active by adding free oxygen to said gas.

1,810,370. BEARING HOUSING SEAL. JAMES L. RAY, Swarthmore, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 1, 1927. Serial No. 171,823. 1 Claim. (Cl. 286—9.)



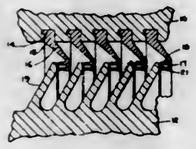
An oil vapor seal for the clearance space between a bearing housing and a shaft projecting through a wall thereof, comprising a member carried by the housing and providing outer and inner annular chambers having a partition therebetween and open sides facing the shaft, said partition having an opening therein spaced from the inner periphery thereof, and a deflector carried by said member and disposed in the outer chamber for deflecting the moving film of air surrounding the shaft when rotating and directing the same away from the shaft and through said opening to the inner chamber.

1,810,371. LABYRINTH GLAND PACKING. KARL BAUMANN, Urmston, England, assignor to Westinghouse Electric & Manufacturing Company, a Corporation or Pennsylvania. Filed Apr. 13, 1928, Serial No. 269,816, and in Great Britain Apr. 28, 1927. 3 Claims. (Cl. 286—10.)



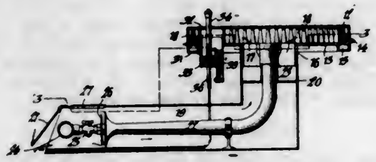
1. Labyrinth gland packing for two relatively rotatable members comprising a plurality of concentric substantially cylindrical packing strips carried by one member and a plurality of similar strips carried by the other member and interleaving with the first-mentioned strips, said strips being sufficiently thin and axially elongated to provide radial flexibility of the free ends, each of said strips, other than the outermost, being extended radially outwardly at its fixed end to cooperate with the integral free end of the adjacent outer strip to provide a fluid seal construction, there being sufficient clearance between the free end of each strip and the fixed end of the externally adjacent strip to avoid contact upon expansion of the free end.

1,810,372. LABYRINTH PACKING. FRANCIS HODGKINSON, Philadelphia, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 9, 1928. Serial No. 311,345. 8 Claims. (Cl. 286—10.)



1. In a labyrinth packing for sealing the space between two relatively rotatable members, an annular conical packing element carried by one of said members and having a free edge extending axially toward and packing against a part of the other member by axial clearance and so disposed as to move in the direction in which it increases said axial clearance in case of heating and expansion of the free edge.

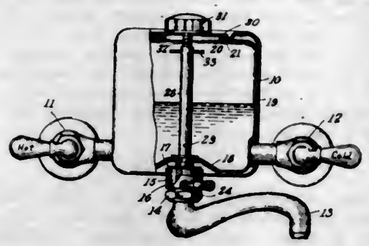
1,810,373. GAS BURNER. MILLARD J. ROBERTS, Buffalo, N. Y., assignor to Roberts-Gordon Appliance Corporation, Buffalo, N. Y. Filed Jan. 2, 1929. Serial No. 329,754. 11 Claims. (Cl. 158—99.)



1. A gas burner, comprising a body having a primary chamber for the gas, a secondary chamber for the air and outlets therein for the gaseous mixture, burner-tubes communicating at their lower ends with said primary chamber and discharging at their upper ends adjacent said outlets, an air duct leading to said secondary chamber, means for interrupting the supply of air to said duct, and a mixing tube for the gaseous mixture and receiving air from within said air duct and communicating at its inner end with said primary chamber.

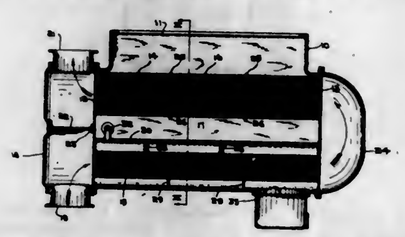
1,810,374. DISHWASHING MACHINE. RAYMOND B. SHOEMAKER and CHARLES L. LAWRENCE, New York, N. Y. Filed Aug. 30, 1927. Serial No. 216,409. 8 Claims. (Cl. 299—85.)

1. In an apparatus of the character described the combination with oppositely directed hot and cold liquid supply pipes, of a mixing chamber into which said supply pipes empty, means for controlling the supply of liquid from each pipe to temper a mixture of liquids from said pipes in said chamber, a container within said chamber and between said pipes constructed for supplying fluid material to the mixture in response to pressure on each side thereof from either the hot or cold liquid supply,



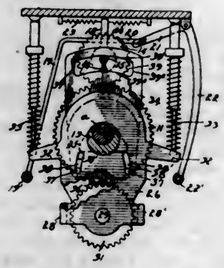
an outlet from said chamber comprising a regulating device for the liquid before it is mixed with the material from said container.

1,810,375. CONDENSER. JOHN H. SMITH, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 29, 1930. Serial No. 457,825. 17 Claims. (Cl. 257—43.)



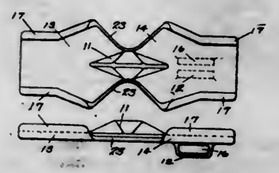
1. In a condenser, the combination of a shell structure, a tube nest extending longitudinally through the shell structure and embodying first and second passes, water boxes associated with the ends of the tube nest and providing for the circulation of cooling water through the first pass of the tube nest and thence through the second pass of the tube nest, an inlet provided in the shell structure for distributing gaseous media to be condensed to one of the passes of the tube nest, longitudinally-extending passageway means of substantial flow area between the passes for distributing gaseous media to the other pass of the tube nest, and means communicating with the interior of the shell structure near the entrant end of that pass in which the cooling water is first circulated for removing non-condensable gaseous media from the shell structure.

1,810,376. CONTROLLING MEANS. HORACE F. STEVENS, Kenilworth, N. J. Filed July 3, 1930. Serial No. 465,490. 6 Claims. (Cl. 74—54.)



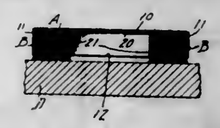
1. In an automatic control of the character described, the combination with a driven rotary element of an oscillatory toothed rotary element, a gear on and revolving with said driven element, at least one other gear loose on said driven element, said oscillatory element being adapted to engage both said gears, means influencing the rotation of said loose gear so as to cause said oscillatory element to oscillate and be retained out of its normal position while said driven element is rotating and including means cooperating with said oscillatory element for actuating said first named means, and means for automatically returning said oscillatory element to its initial position after the rotation of said driven element cases.

1,810,377. METHOD OF MAKING SEPARABLE FASTENER SLIDERS. GIDEON SUNDBACK, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Original application filed Jan. 27, 1925, Serial No. 5,020. Divided and this application filed Mar. 29, 1927. Serial No. 179,233. 10 Claims. (Cl. 29—148.)



1. The method of making a separable fastener slider which comprises forming a thickened portion on a strip of sheet material, forming wings on either side of said thickened portion, and bending said wings toward each other to compress said thickened portion between them.

1,810,378. BASE FOR TYPEWRITERS AND OTHER ARTICLES. CHARLES B. ULRICH, Jamestown, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y. Filed Mar. 14, 1928. Serial No. 261,655. 2 Claims. (Cl. 248—16.)



1. A vibration absorbing support for a typewriter or similar article, including a rigid frame member upon which the article is supported and having a plurality of relatively long and narrow recesses formed in the lower face thereof, a soft resilient cushion extending into certain of said recesses and having a relatively small portion thereof extending beyond the walls of said recesses, the walls of the recesses lightly engaging said cushion to avoid interfering with the vibration absorbing properties of the portion of the cushion within said recess.

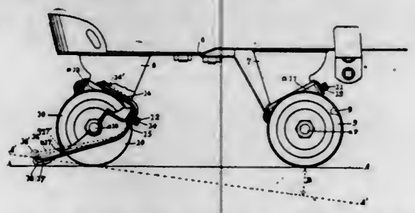
1,810,379. CURRENT TRANSFORMER. MARIO URBINATI, Rome, Italy. Filed June 20, 1928, Serial No. 286,953, and in Italy June 23, 1927. 4 Claims. (Cl. 171—123.)



1. Apparatus for the transformation of electric alternating current into direct current and vice-versa, comprising a transformer inclusive of an iron core, a primary

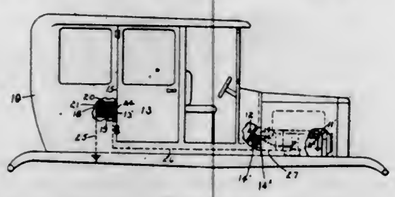
winding wound thereabout, a secondary winding wound thereabout, said secondary winding comprising a plurality of groups of turns, at least one turn of each group being of fractional length, the number of said groups and the values of the fractional turns thereof and of the iron surrounded by said fractional turns being such that the sum of the induced electromotive forces corresponding to the total of the fractional turns of all of the groups is equivalent to the electromotive force corresponding to a single turn around the entire section of the core.

1,810,380. ROLLER SKATE. WILLIAM V. VAN ETTEN, Bellingham, Wash. Filed May 20, 1930. Serial No. 454,070. 3 Claims. (Cl. 208—173.)



1. A roller skate including a foot plate, front wheels attached to and mounted beneath the front end of the foot plate for revolution, a bolster fastened beneath the rear end of the foot plate, a rear axle connected to the bolster, rear wheels mounted on the rear axle for revolution, a brake device attached to the front side of the bolster extended rearward between the rear wheels, and a T head on the rear end of the brake device disposed adjacent the rear wheels and adjacent the floor on which the skate may run to bear on the rear wheels and on the floor when the front wheels are above the floor.

1,810,381. LOCKING DEVICE FOR MOTOR VEHICLES. ABRAHAM WEISS, New York, N. Y. Filed Aug. 24, 1928. Serial No. 301,846. 5 Claims. (Cl. 180—82.)



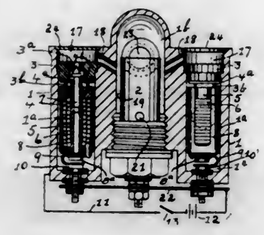
1. In a motor vehicle having driving control means, a door and an electrical fuel ignition system, a switch controlled through said door, a switch controlled through said driving control means and series electric connections between said switches across the ignition system such that when the door is open and the driving control is placed in operative position the ignition system will be short circuited.

1,810,382. MEANS FOR VAPORIZING HYDROCARBON FUEL. IRVING E. ASKE, Duluth, Minn. Filed May 2, 1922. Serial No. 557,832. 2 Claims. (Cl. 48—180.)



1. A fuel vaporizing and mixing device comprising an L-shaped gaseous fuel conduit having a discharge port and an intake port, an enlarged chamber located adjacent to the bend and formed on the upper wall of the conduit leading from the bend to the discharge port, said chamber having no part of the same projecting into the conduit, an electric heated element mounted wholly within the chamber, said element being spaced from the back wall and from the side wall of the chamber nearest the discharge port of the conduit, whereby the condensed particles of fuel in the fuel stream are thrown laterally against the electric heated element to be vaporized and be returned to the fuel stream.

1,810,383. VAPORIZER. IRVING E. ASKE, WILLIAM F. ASKE, and LEONARD E. ASKE, Minneapolis, Minn. Filed Dec. 4, 1929. Serial No. 411,484. 1 Claim. (Cl. 261—12.)



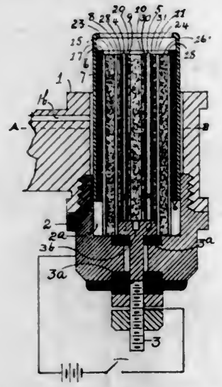
In a vaporizer, the combination of a heater chamber containing an electric heater; a fuel oil valve chamber provided with an intake port adapted to communicate with a source of hydrocarbon fuel supply, said valve and heater chambers having a port in common through which said valve chamber may discharge hydrocarbon fuel into said heater chamber; an electro-magnetic valve positioned between the intake and discharge ports of said fuel oil chamber and adapted to govern the flow of hydrocarbon fuel to said heater chamber; an air valve chamber provided with an intake port communicating with the atmosphere, said air valve chamber and said heater chamber having a port in common through which said air valve chamber may discharge air into said heater chamber; an electro-magnetic valve positioned between the intake and discharge ports of said air valve chamber and adapted to govern the flow of air to said heater chamber, said heater chamber having a discharge port formed therein adapted to discharge heated and vaporized hydrocarbon fuel and fumes from said heater chamber, and electric means for energizing said valves and for independently energizing said heater and adapted to open said valves when said heater is in operation.

1,810,384. VAPORIZER. IRVING E. ASKE, Minneapolis, Minn. Filed Jan. 24, 1930. Serial No. 428,130. 5 Claims. (Cl. 219—38.)

1. The combination of a cup open at one end and closed at the opposite end and provided with an intake port, an electricity conducting post extending into said cup through its closed end and insulated therefrom, a pair of non-absorbent refractory leaves extending into said cup, an electric resistance member electrically connected at one end to the inward said post and grounded at its opposite end and extending intermediate of its ends between said leaves and in contact with the inward faces thereof, absorbent members in contact with the outward faces of said non-absorbent leaves, a sheath of heat insulating material encircling said absorbent members leaves and resistance member and provided with a fuel intake port, a shell

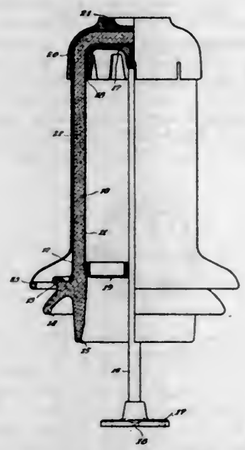
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encircling said sheath and spaced for a part of its length from the side wall of said cup, and provided with an intake



port adapted to communicate with the intake port of said sheath and with the space between said shell and the side wall of said cup.

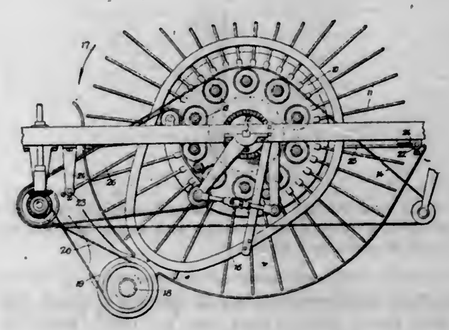
1,810,385. CONDENSER. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed May 27, 1927. Serial No. 194,604. 13 Claims. (Cl. 175—41.)



1. A condenser comprising a tubular dielectric member having the upper end thereof closed, conductor coatings on the outer and inner surfaces of said member terminating back of the lower end of said member and an upwardly curved dielectric flange on the outer surface of said member between the termination of the outer coating and the open end of said member and a metallic weather shield on the outer surface of said member having an outwardly projecting flange overlying said dielectric flange.

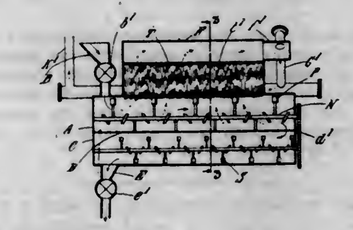
1,810,386. COTTON PICKER. HIRAM N. BERRY, Greenville, Miss., assignor, by direct and mesne assignments, to Cotton Harvester Corporation of America, Greenville, Miss., a Corporation of Delaware. Filed Nov. 28, 1927. Serial No. 236,229. 5 Claims. (Cl. 56—44.)

1. In a cotton picker, a revolving cylinder, rotating spindles radiating from said cylinder, stripper bars, means to move said bars inwardly and outwardly on the spindles with respect to the cylinder, a series of protecting bands



surrounding the stripper bars between the spindles, and supporting members extending from said bands to points beyond the ends of the spindles.

1,810,387. CRACKING, CATALYZING, AND HYDROGENATION OF CARBONACEOUS MATERIALS. ALBERTO EDOARDO BIANCHI, Milan, and GALILEO GUARDABASSI, Rho, near Milan, Italy, assignors, by mesne assignments, to "Intercarbo" Societe Anonyme pour la Carbonisation et la Traitement Catalytique des Combustibles, Paris, France. Filed Nov. 30, 1926, Serial No. 151,648, and in Great Britain May 27, 1926. 4 Claims. (Cl. 196—53.)



4. In apparatus for cracking and hydrogenating carbonaceous materials, a retort, means for passing said materials continuously through said retort, a chamber located above said retort and opening thereinto, chains suspended in said chamber and forming a thick foraminous mass having a large contact surface, agitators adapted to revolve in said retort and to keep said chains in continuous vibration, an outlet pipe for gases at the upper part of said chamber, two outlet pipes of less cross-sectional area communicating with said first named outlet pipe, two outlet pipes of greater cross-sectional area each communicating with one of said outlet pipes of lesser area, and two ascension pipes of less cross-sectional area each communicating with out of said outlet pipes of greater cross-sectional area.

1,810,388. FIRE KINDLER. CHARLES BLAMFIELD, Boston, Mass. Filed Mar. 10, 1930. Serial No. 434,683. 7 Claims. (Cl. 44—38.)

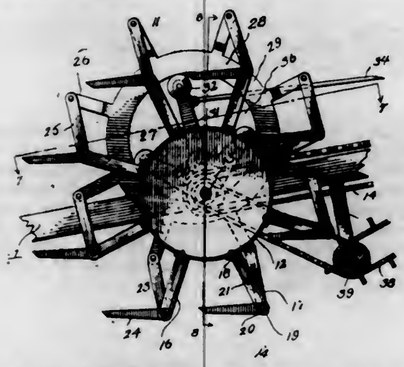
2. A fire kindler comprising a block of combustible material, a layer of porous material attached to one face of said block, said layer being saturated with suitable

readily combustible substance, means to attach said kindler to a piece of wood to be ignited thereby, and means



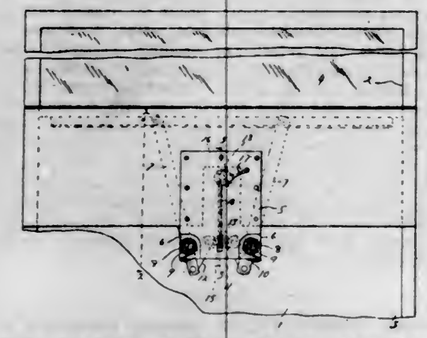
to space said kindler a predetermined distance from said wood, each kindler being provided with means whereby two or more kindlers may be united.

1,810,389. SCOOPING MACHINE. HERMAN H. BOETTCHER, Blue Earth, Minn. Filed Jan. 31, 1927. Serial No. 164,948. 13 Claims. (Cl. 55—59.)



1. A rotary scoop construction comprising a rotary support, a plurality of trays mounted on the support and projecting radially therefrom, a conveyor positioned to receive articles from the trays, and means for scooping up articles and depositing the same onto the trays, said means passing through the trays to facilitate the depositing of the articles on the trays.

1,810,390. WINDOW REGULATOR. HOWARD C. BORTEL, Toledo, Ohio, assignor, by mesne assignments, to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 23, 1925. Serial No. 70,853. 7 Claims. (Cl. 268—126.)



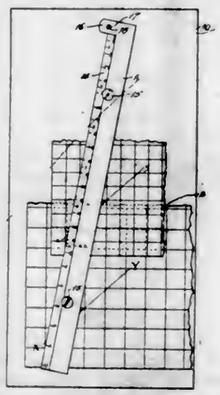
1. In a window regulator, the combination with a closure, of a plurality of pivotal arms for operating said closure and actuating means for said arms including a pivotal equalizer and connections between said equalizer and arms.

1,810,391. ROTARY ACTION BIT. EUGENE L. BOYNTON, Pasadena, Calif. Filed Oct. 24, 1927. Serial No. 228,271. 1 Claim. (Cl. 255—27.)



In the art described, a drill bit having a stem with helical splines, a block having a small lower bore and a larger upper bore defined from each other by a shoulder, the lower bore having threads complementary to the splines, an anvil attached to the top of the stem adapted to engage the shoulder, and a hammer extending downwardly from the top of the upper bore adapted to engage the anvil, there being a reduced portion formed in the stem at the bottoms of the splines as and for the purpose described.

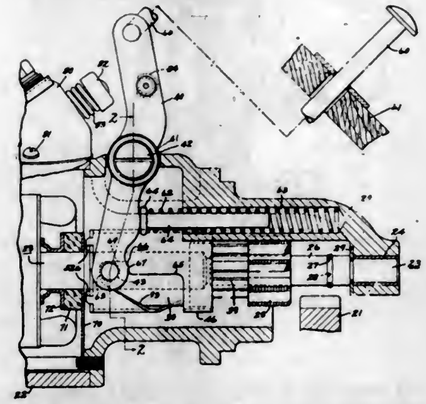
1,810,392. PROPORTIONAL SCALE. ARTHUR M. CLARK, Seattle, Wash. Filed June 6, 1929. Serial No. 368,823. 2 Claims. (Cl. 33—111.)



1. An enlarging and reducing instrument including a straight-edge having an edge provided with a plurality of interchangeable scales having their zero points in common, said scales extending in the same direction from the zero point and having their scale divisions all extending to the same edge of the straight-edge.

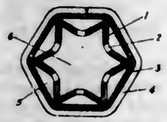
1,810,393. ENGINE STARTING APPARATUS. JOHN B. DYER, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 29, 1928. Serial No. 258,071. 19 Claims. (Cl. 74—7.)

1. Engine starting apparatus comprising, in combination, a motor; a shaft operated thereby; means for connecting the shaft with the gear of an engine to be started and including a pinion meshing endwise with the gear and provisions whereby the pinion will be automatically demeshed when the engine starts; a device for moving the pinion endwise and operating in case of abutment with the engine gear for rotating the pinion while it is pressed against the engine gear; a manually operable actu-



ator; disconnectible motion transmitting elements operatively connected respectively with the actuator and the shifting device; means for automatically moving the element connected with the shifting device away from the path of movement of the element connected with the actuator before the engine starts; and means for restoring the operative connection between these elements.

1,810,394. MEANS FOR THE PRODUCTION OF FOAM. JENS DYHR, Dresden, Germany, assignor to Schaumbad Gesellschaft mit beschrankter Haftung, Dresden, Germany. Filed Nov. 5, 1929, Serial No. 404,977, and in Germany Feb. 21, 1929. 3 Claims. (Cl. 261—100.)

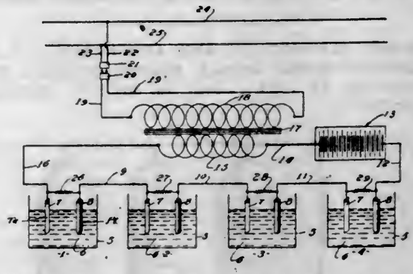


1. A device for introducing gas in a finely distributed condition into liquids for foam forming purposes, comprising a tube shaped to provide a plurality of grooves and ribs, said tube perforated between the ribs to form a fluid passageway, a porous medium enveloping said tube, a perforated metal wrapper surrounding said porous medium, and means associated with said tube for creating a fluid pressure therein, whereby the fluid is caused to pass through the porous medium in a finely distributed condition.

1,810,395. METHOD OF USING ELECTROLYTIC RECTIFIERS IN SERIES. EDGAR W. ENGLE, Lake Forest, Ill., assignor to Fansteel Products Company, Inc., North Chicago, Ill., a Corporation of New York. Filed Jan. 7, 1927. Serial No. 159,522. 6 Claims. (Cl. 175—318.)

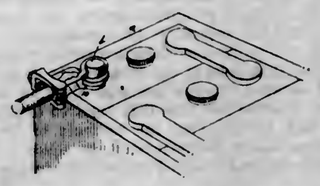
1. An electrolytic rectifier comprising a number of electrolytic cells in series, each cell having a filmed tantalum electrode and being provided with a high resistance connection across its terminals providing a shunt path for current flowing in a direction opposite to the normal flow through said cells to reform the film on the tantalum electrodes.

5. The method of preventing hydrogen absorption by the filmed electrode of one of a series of electrolytic rectifiers which comprises shunting a film forming current



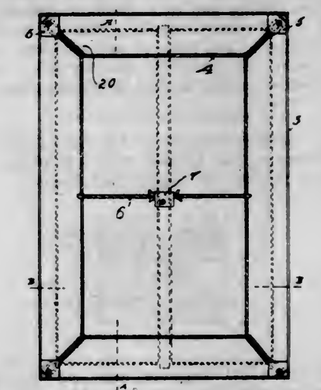
across the terminals of the remaining cells, whereby the film is built up during the period when normally no current would flow.

1,810,396. TERMINAL CLAMP FOR STORAGE BATTERIES. HENRY GILLAR, Milltown, N. J. Filed Nov. 28, 1927. Serial No. 236,078. 4 Claims. (Cl. 173—259.)



1. A terminal clamp for storage batteries or the like comprising two separable elements each formed with a hook shaped jaw and a semi-cylindrically curved jaw, the former serving to engage around the terminal post and the latter around a cable or wire and common means on one of said elements adjacent to the semi-cylindrically curved jaw capable of engaging the other element adjacent its semi-cylindrical curved jaw for clamping the said elements together in operative position.

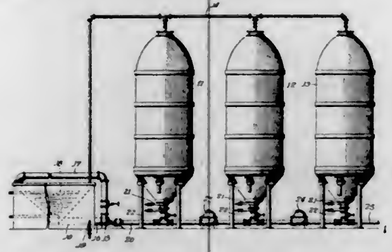
1,810,397. LIFE FLOAT. CARL L. HARKRADER, East Orange, N. J., assignor to Welin Davit & Boat Corporation, Long Island City, N. Y., a Corporation of New York. Filed May 10, 1930. Serial No. 451,277. 5 Claims. (Cl. 9—11.)



1. A life float comprising a buoyant body enclosed within a casing of balsa wood to form a raft-like structure with flat top and bottom surfaces, said top and bottom surfaces being equipped with life lines fastened at the

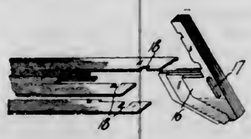
corners of said balsa wood casing, and means whereby the life lines may be made taut and positioned a few inches within the edges of the float and parallel to said edges.

1,810,398. METHOD OF AND APPARATUS FOR DIGESTING WOOD. PAUL E. HODGDON, Munising, Mich. Filed May 27, 1929. Serial No. 366,215. 22 Claims. (Cl. 92—7.)



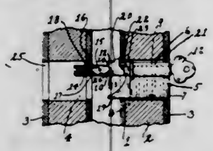
1. The method of digesting wood which consists in charging the wood chips into a presaturating tank, supplying acid to the tank and maintaining the temperature of the contents of the tank at approximately 105 degrees Cent. until the chips are saturated, then pumping the contents of the tank into a digester without materially reducing the temperature, then raising the temperature in the digester to proper cooking temperature and allowing cooking to proceed for a period less than that required to complete the cooking, then withdrawing the contents of the first digester, mechanically disintegrating the solids and delivering the material into a second digester for further cooking.

1,810,399. INTERLOCKING KEY ASSEMBLY. PAUL P. HORNI, Newark, N. J. Filed Jan. 27, 1928. Serial No. 250,020. 4 Claims. (Cl. 74—83.)



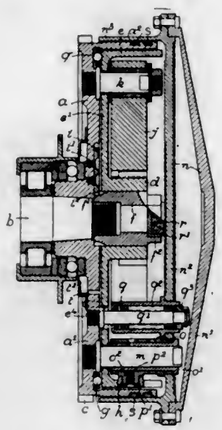
1. An interlocking key assembly comprising a plurality of manually operatable members, each tending to assume the open position, an interlocking bar engaging a plurality of the members, means on each of said members for shifting the interlocking bar to a different position when a member is closed from the position that it would be placed by the operation of any other of said members, and means on each member for permitting the closure of only one of said members at a time by said interlocking bar.

1,810,400. NONPICKABLE KEYHOLE LOCK. FREDERICK T. HUGHES, Los Angeles, Calif. Filed Apr. 4, 1927. Serial No. 180,789. 9 Claims. (Cl. 70—8.)



1. A non-pickable key-hole lock constructed to be slipped into the key hole from one side of the door and having a detent to engage a part within the door to prevent withdrawal of the lock, said detent having a contour operating to prevent the same from being disengaged by an instrument inserted from the other side of the door.

1,810,401. GOVERNOR. JOHN HOGG ROBERTSON, London, England. Filed Oct. 7, 1930, Serial No. 486,996, and in Great Britain Dec. 17, 1929. 8 Claims. (Cl. 264—16.)



1. A centrifugal governor, comprising a rotary support, a ring mounted on said support and rotatable in relation thereto, a pinion mounted at the center of said ring, a plurality of weighted levers pivoted upon said support, each of said levers being formed with a toothed sector, said central pinion meshing with the toothed sectors of said levers, a plurality of parallel pillars mounted in said support, a slidable member to be operated by the governor, said slidable member being engaged upon said pillars, and cam and roller connections between said rotatable ring and said slidable member.

1,810,402. PROCESS FOR OBTAINING ALUMINA AND PHOSPHATES. FRITZ ROTHE and HANS BRENEK, Berlin, Germany, assignors to the Firm: Rhenania-Kunheim Verein Chemischer Fabriken Aktiengesellschaft, Berlin, Germany. Filed July 22, 1927, Serial No. 207,809, and in Germany July 30, 1926. 11 Claims. (Cl. 23—52.)

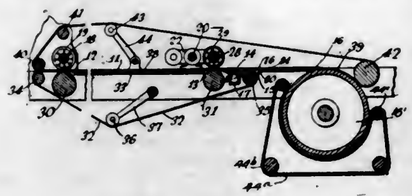
1. A process for obtaining alumina and phosphates which may be used as fertilizers, from aluminum phosphate comprising subjecting a mixture of aluminium phosphates and alkaline earth metal compounds and alkali metal compounds to a heating at sintering temperatures for said mixture in the presence of steam.

9. A process for obtaining alumina and phosphates which may be used as fertilizers, from aluminium phosphate comprising subjecting a mixture of aluminium phosphates and alkaline earth metal sulphates and alkali metal sulphates to a heating at sintering temperatures for said mixture in the presence of steam, said mixture containing for 1 molecule or phosphoric acid 2 molecules of alkaline earth metal sulphate and 1 molecule of alkali metal sulphate and for 1 molecule of alumina a further molecule of alkali metal sulphate and in addition thereto such quantities of alkaline earth metal sulphate that any silica present in the mixture can be bound as alkaline earth orthosilicate.

1,810,403. GRIPPER AND BREAKER WHEEL AND BRIDGING SPRING FOR WEB FEEDING AND SEVERING APPARATUS. CARL A. RUPP, Los Angeles, Calif., assignor to Commercial Iron Works of Los Angeles, Los Angeles, Calif., a Corporation of California. Filed Aug. 21, 1928. Serial No. 300,992. 20 Claims. (Cl. 164—34.)

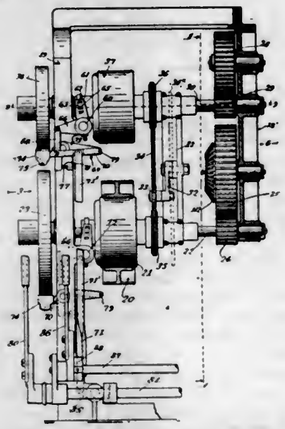
10. In a web feeding and severing apparatus, a sectional feeding table, certain sections being spaced, a

transverse bar between certain sections and in spaced relation thereto, there being a gap between the bar and a portion of the table for the passage of belts, means to feed



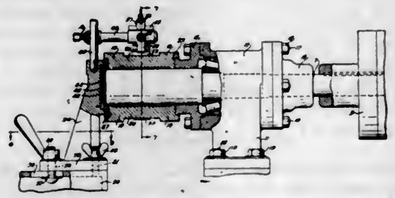
paper on the table across the gap, and a series of adjustable bridging springs fitting between the bar and the portion of such table across such gap.

1,810,404. DRIVE AND CONTROL FOR PRINTING PRESSES. CARL A. RUPP, Los Angeles, Calif., assignor to Commercial Iron Works of Los Angeles, Los Angeles, Calif., a Corporation of California. Filed Feb. 26, 1929. Serial No. 342,694. 13 Claims. (Cl. 101—220.)



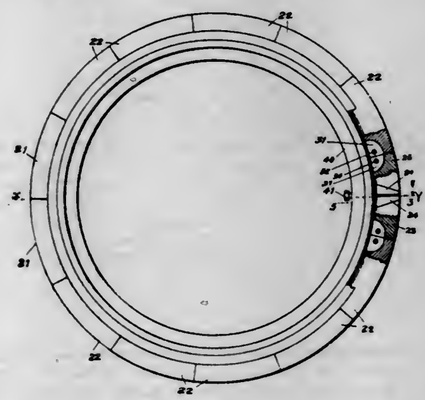
1. A printing press having an upper and a lower deck, a main drive shaft operated through a clutch from a source of power, a main drive gear operated by said shaft, a gear train for each deck meshing with the main transmission gear, one of said trains being disconnectible therefrom and adapted to mesh with a secondary transmission gear, a secondary drive shaft to operate the secondary transmission gear, and means to drive the secondary power shaft from the source of power through the medium of a secondary clutch.

1,810,405. FRICTION TESTING MACHINE. ADOLPH ALOYSIUS SCHAEFER, North Tonawanda, N. Y. Filed July 5, 1928. Serial No. 290,606. 5 Claims. (Cl. 73—51.)



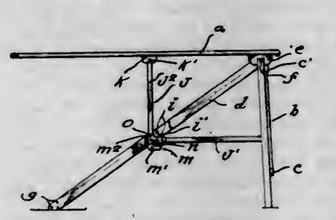
1. In a friction testing machine, the combination with a rotatable shaft and a plurality of blocks adapted to bear upon the shaft, of a strap surrounding the blocks for retaining them against the shaft, a cage in which the blocks are contained, a pivotal member mounted in the vicinity of the cage and to which one end of the strap is permanently secured and the other end adjustably secured, and adjustable means tending to swing the pivotal member away from the cage to exert a tension upon the strap.

1,810,406. PROCESS AND MEANS FOR MAKING CUSHION TIRES. ALBERT L. SCHOFF, Caldwell, and EDWARD NELSON and GEORGE J. NELSON, Belleville, N. J., assignors to Overman Cushion Tire Company, Inc., New York, N. Y., a Corporation of New York. Filed May 26, 1927. Serial No. 194,362. 29 Claims. (Cl. 18—45.)



14. Apparatus for making a hollow vulcanized-on cushion tire, comprising a metal base-band having an undercut circumferential groove in its outer periphery and a longitudinal slot registering with a part of said groove, an annular core consisting of arcuate core sections having lateral flanges fitting loosely in said groove under the over-hanging edges thereof and each of a length less than that of the slot, and means for expanding said core circumferentially to force said lateral flanges against the over-hanging edges of the groove.

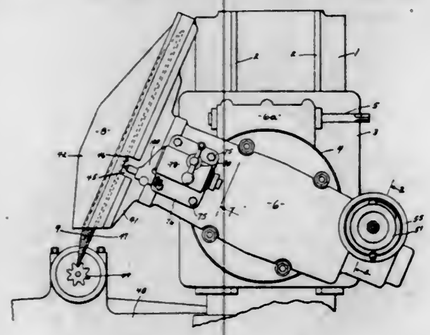
1,810,407. IRONING TABLE. RICHARD F. SCHULZKE, Portland, Oreg. Filed June 21, 1928. Serial No. 287,161. 3 Claims. (Cl. 68—10.)



1. In an ironing table, an ironing board and a collapsible supporting frame for the latter, said frame comprising a leg and a diagonal crutch, both pivotally connected to the board at one end of the latter, a jointed brace member pivotally connected at one end to the middle of said board and at the other to the leg, the crutch being provided with a laterally arranged member with which one element of said brace member slidingly engages, a channeled fitting straddling the brace member, constituting the joint therein, and provided with web portions extending along the sides thereof and over-

hanging the latter, a bayonet joint formed in said overhanging portions of said webs, adapted when such supporting frame is extended, to engage said laterally arranged member.

1,810,408. TRUING AND POSITIONING DEVICE FOR GRINDING WHEELS. CHARLES H. SCHURR, Cleveland, Ohio, assignor to The Lees-Bradner Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed May 15, 1922, Serial No. 561,219, and in Germany May 2, 1923. Divided and this application filed Jan. 14, 1928. Serial No. 246,707. 13 Claims. (Cl. 125—11.)



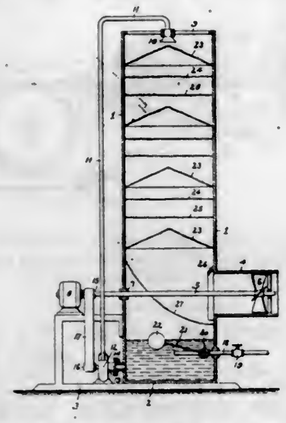
1. In an apparatus for giving true shape and position to the planular face of the grinding wheel of a gear grinding machine, a main frame, means for moving the grinding wheel axially on the frame, a stop device for stopping the said axial movement of the wheel at a working position thereof, and means for dressing the planular face of the wheel into coincidence with a predetermined plane on the frame when in said stopped working position, said means including a dressing reference station on the frame, a dressing element mounted for movement into engagement with the reference station to position the element, and mounted for movement in said predetermind plane.

1,810,409. METHOD OF PLATING METALS. WILLIAM E. WATKINS, New York, N. Y., assignor to Copper Plate Sheet & Tube Company, New York, N. Y., a Corporation of New Jersey. Filed May 29, 1929. Serial No. 367,125. 4 Claims. (Cl. 91—70.2.)

1. The method of forming a plating of an alloy of two or more metals on a metal base which comprises passing the metal to be plated through a molten bath of one of the metals of the alloy to form a plating on the metal base, applying a plating mixture of the second metal to the plated metal, heating the coated metal to cause one of the metals of the alloy to diffuse into the other and form a coating of the desired alloy, and then subjecting the coated metal to a temperature sufficient to form a non-stripping plating of the alloy on the metal base.

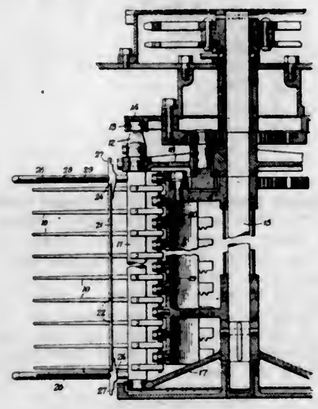
1,810,410. COOLING AND VENTILATING APPARATUS. ANDREW B. ALLDREDGE, Sweetwater, Tex. Filed May 31, 1930. Serial No. 458,795. 3 Claims. (Cl. 261—29.)

1. A cooling and ventilating apparatus comprising a casing, open at its top, an air intake spout extending laterally from the lower portion of the casing, a fan in said spout for delivering air into the casing, a water supply pipe communicating with the casing below the spout, means for conducting water from the casing and delivering the same into the casing at the top thereof, a foraminous baffle within the casing in the path of the delivered water, and a second foraminous baffle within



the casing curving upwardly from that side of the casing at which the spout is located, and at a point below the spout, and extending to the opposite side of the casing.

1,810,411. COTTON PICKER. CHARLES R. BERRY, Greenville, Miss., assignor of two-ninths to Edna Irene Berry, administratrix of the estate of Hiram N. Berry, deceased, two-ninths to Hugh A. Gamble, Greenville, Miss., and three-ninths to Albert M. Hanauver, Pittsburgh, Pa. Filed July 27, 1928. Serial No. 295,741. 7 Claims. (Cl. 56—47.)



1. In a cotton picker, a plurality of spindles in vertical series, a plurality of separate spindle supports revolving as a series and each rotatable on a vertical axis and supporting a single vertical series of spindles, a stripper bar adjacent each support shiftable lengthwise of the spindles thereof, a cam member for successively shifting the stripper bars outwardly along the spindles during a portion of the revolution of the supports, and means for returning each bar to the inner ends of its series of spindles upon release from said cam.

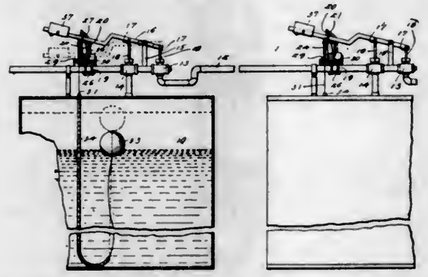
1,810,412. COUNTER TOP. CLAUDE A. CRIDER, Jefferson City, Mo. Filed June 20, 1929. Serial No. 372,453. 4 Claims. (Cl. 45—140.)

3. A counter top comprising a body member having a compartment positioned centrally of its upper face, said body member further having a pair of opposed compartments interposed between the rear walls of the central compartments and the rear side of said body member, a



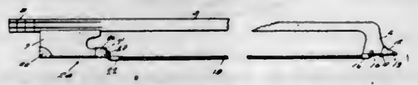
slab seated in said central compartment and rabbeted at its rear marginal portion, and transparent panels for closing said pair of compartments, said panels seating on said rabbets.

1,810,413. TANK FILLING APPARATUS. NEWTON M. DE ARMAN, Ventura, Calif. Filed Apr. 26, 1928. Serial No. 273,043. 1 Claim. (Cl. 137—68.)



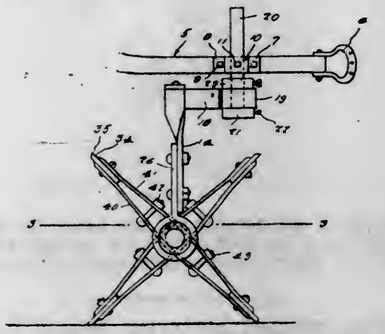
In combination, a filling line, a series of tanks connected thereto, a valve at each tank adapted to be closed to cut off the flow line from succeeding tanks of a series, a second valve at each tank and adapted to be opened to permit delivery of fluid from the line to the tank, a lever pivoted between its ends and connected to the valves and adapted when raised to hold said first valve closed and said second valve opened, a bracket arm secured to the flow pipe, a standard secured to the bracket arm, a brace secured to the bracket arm and standard, a latch pivoted to the standard and engaging the lever whereby to hold the lever in upraised position, a spring connected to the brace and lever for holding the latch into engagement with the lever, a float within the tank, and a flexible connection between the float and latch said float upon filling of the tank pulling said flexible connection for release of the latch from the lever against the tension of said spring.

1,810,414. VIOLIN BOW. CLARENCE DILLON and DILLARD DAUGHHETER, Richland Center, Wis. Filed Sept. 21, 1929. Serial No. 394,200. 6 Claims. (Cl. 84—282.)



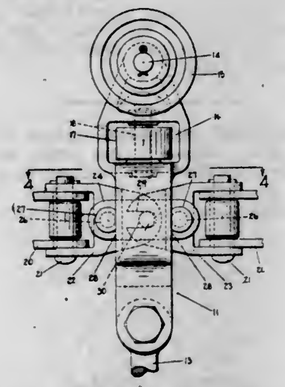
1. In combination, a violin bow, a shoe member embodying a base adapted to extend along the bottom edge of the frog of the bow, said base terminating at one end into a heel portion adapted for the reception of the rear end of said frog, and means at the other end of the base for securing the latter in the toe portion of the frog, said base at said last mentioned end having an aperture formed therein adapted to receive the knotted ends of a bow string, and a sleeve carried by said base and said last mentioned end, and through which the end portions of the bow strings is adapted to extend, and a slipper member having a toe portion adapted to receive the toe of the enlarged end of the violin bow, said slipper member further embodying a base having an aperture formed therein adapted to receive one knotted end of the bow string.

1,810,415. STALK CUTTER ATTACHMENT. ASA L. FORTSON, Melvin, Tex., assignor of one-fourth to S. W. Hughes, Brady, Tex. Filed Apr. 4, 1930. Serial No. 441,576. 2 Claims. (Cl. 55—61.)



1. In a stalk cutter and in combination, spaced bearings, a shaft of angular cross section journaled in and arranged between said bearings, radially disposed blades spaced apart and grouped about said shaft, and pairs of connections between the shaft and blades, located between the bearings; the connections of each pair being disposed at right angles to each other, and each connection including two bars disposed against opposite flat sides of the shaft and receiving between their end portions blades, means extending through and connecting said end portions of the bars and the blades, and means connecting the bars together at points intermediate the shaft and the blades and holding the bars against said opposite flat sides of the shaft.

1,810,416. TROLLEY CONVEYER. EARLE V. FRANCIS, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 23, 1929. Serial No. 416,187. 17 Claims. (Cl. 105—155.)

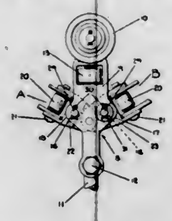


1. In a trolley conveyer, the combination of a load support having an opening therethrough between its upper and lower ends; of an independent and complete draft element extending through said opening for propelling the load support.

1,810,417. TROLLEY CONVEYER. EARLE V. FRANCIS, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 21, 1930. Serial No. 446,068. 14 Claims. (Cl. 198—189.)

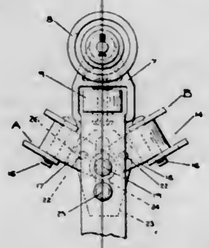
2. In a trolley conveyer, the combination with a trolley hanger; of a draft device having interconnected

portions connected to the hanger and extending from opposite sides of said hanger, and a sliding connection be-



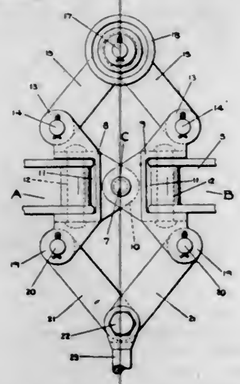
tween one of said portions and said hanger for causing the portions of the draft device to be arranged at equal angles with respect to said hanger at opposite sides thereof.

1,810,418. TROLLEY CONVEYER. EARLE V. FRANCIS, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio., a Corporation of Ohio. Filed Apr. 21, 1930. Serial No. 446,069. 10 Claims. (Cl. 198—189.)



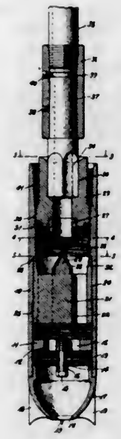
1. The combination with a trolley hanger; of a draft device having portions connected with said hanger extending from opposite sides thereof to swing vertically, and a sliding element mounted in said hanger and having movement longitudinally of said hangers and connected with said portions of the draft device for causing equal angular movement thereof.

1,810,419. TROLLEY CONVEYER. EARLE V. FRANCIS, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 21, 1930. Serial No. 446,070. 14 Claims. (Cl. 105—155.)



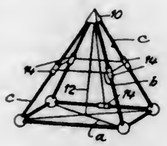
1. A conveyor chain comprising a series of links joined on axes, a pair of elements included therein and pivotally connected on an axis at right angles to said axes, and levers pivotally connected to said elements to produce equal and opposite pivotal movement thereof.

1,810,420. SEALABLE FOOT VALVE. FRED I. GETTY, Jennings, La. Filed Nov. 17, 1928. Serial No. 320,198. 11 Claims. (Cl. 166—20.)



1. A seal for foot valves comprising, in combination, a central plug having a longitudinal passage past the same, a sealing surface carried by said plug, a ring having a passage therethrough and a cutting edge adapted to contact with said surface, one of said passages in communication with a wash pipe receiving socket and the other thereof with the outlet of the valve, and means to permit relative movement between said plug and ring whereby to close communication between said passages.

1,810,421. MODEL FOR GEOMETRY INSTRUCTION. JEAN GUYER, Zurich, Switzerland. Filed May 10, 1928, Serial No. 276,737, and in Germany June 11, 1927. 1 Claim. (Cl. 35—12.)

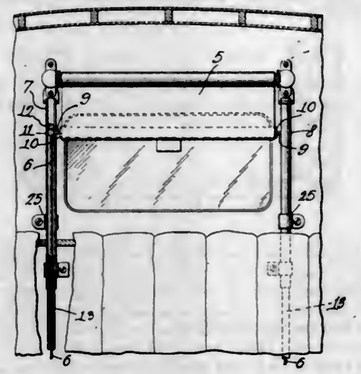


In apparatus of the class described, rods arranged at an angle to one another, sleeves slidable on the rods and an elastic cord connecting the sleeves together.

1,810,422. MOTOR VEHICLE REAR CURTAIN OPERATOR. EMIL EDWARD HALL, Groton, Conn. Filed July 23, 1930. Serial No. 470,156. 1 Claim. (Cl. 156—28.)

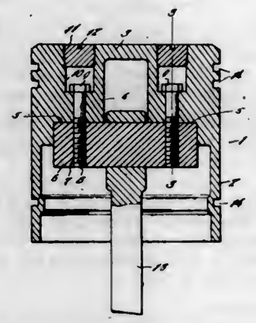
An operating mechanism for the rear curtain of a motor vehicle, comprising tubes extending from the driver's seat to points at the sides of the rear curtain of the vehicle, said tubes having slots formed in the inner sides thereof, near the curtain, said curtain including a curtain stick, shanks secured to the ends of the curtain stick and extending into the slots, balls on the ends of the shanks and fitted in the tubes, said balls having openings, controlling wires extending through the tubes and openings of the

balls, balls on the free ends of the controlling wires and adapted to engage the first mentioned balls to draw the



curtain stick and curtain connected therewith, downwardly, and operating rods connected with the controlling wires.

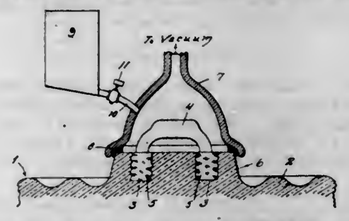
1,810,423. PISTON. ROSCOE J. HATCH, Macy, Ind. Filed Feb. 13, 1930. Serial No. 428,127. 1 Claim. (Cl. 74—108.)



A piston of the character described comprising an upper wall, a skirt depending therefrom, a pair of spaced, opposed wrist pin supporting blocks integrally formed on the upper wall and depending therefrom, and integrally connected to the skirt on diametrically opposite sides thereof, the upper wall and blocks being provided with threaded sockets, said blocks being further provided with substantially semi-circular complemental recesses in their lower end portions, said blocks being still further provided with bores communicating with the threaded sockets and the recesses therein, a wrist pin of circular cross section having its opposite end portions seated in the recesses, provided with transversely extending threaded bores for registry, with the bores in the blocks, headed bolts disposed in the threaded sockets and extending through the bores in the blocks for threaded engagement in the bores of the wrist pin in a manner to rigidly and detachably anchor said wrist pin in the recesses, closure plugs threadedly engaged in the threaded bores above the headed bolts, a connecting rod operatively connected to an intermediate portion of the wrist pin between the blocks.

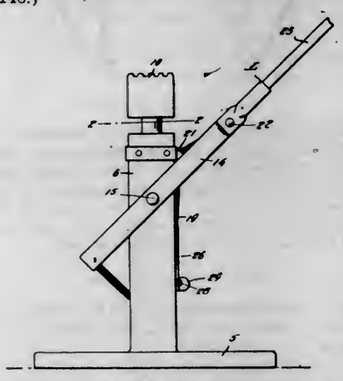
1,810,424. MEANS FOR SEALING INSULATORS. KENT A. HAWLEY, Baltimore, Md., assignor to Lockne Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Apr. 12, 1926. Serial No. 101,602. 2 Claims. (Cl. 91—43.)

1. In an insulator treating system of the character described, means engageable upon a portion of an insulator of a type having an element secured thereto by metal cast thereabout and within a recess in the insulator, said means being adapted to have vacuum producing means connected therewith for withdrawing the air from the crevices about the cast metal mass, and means connected with said first



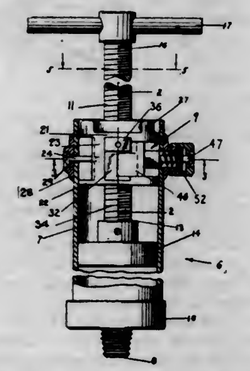
mentioned means for introducing fluent sealing compound whereby upon the restoration of atmospheric pressure conditions the sealing material will be caused to enter the crevices.

1,810,425. JACK. ANDREW V. JORDAN, Asher, Okla. Filed May 29, 1930. Serial No. 457,252. 5 Claims. (Cl. 254—148.)



1. A jack of the class described comprising a standard, a shank slidable longitudinally through the standard, a pulley on the inner end of the shank, a lever rockably mounted on the standard, a cable anchored to the lever at spaced points one to each side of the standard and trained under the pulley, a secondary pulley on the standard adjacent one end thereof over which said cable is trained.

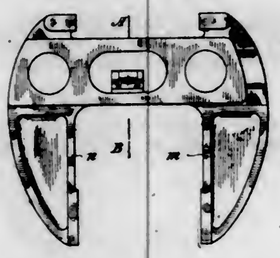
1,810,426. GREASE GUN. RENÉ RAPELLIN, Los Angeles, Calif. Filed Aug. 14, 1929. Serial No. 385,875. 12 Claims. (Cl. 74—40.)



1. A feeding mechanism comprising a feed screw, guiding means having said screw slidably extending there-

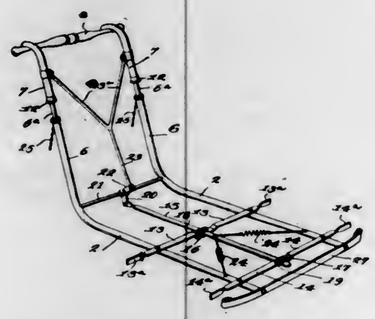
through, a split nut having its parts threaded complementarily to said screw, means slidable radially of said guiding means for moving said nut parts to bring the threads thereof optionally into or out of mesh with the threads of said screw, and means engageable with said nut parts for retaining them in selected position.

1,810,427. CALIPER. KARL KISSENDORFER, Oberndorf-on-the-Neckar, Germany, assignor to Mauser-Werke Aktiengesellschaft, Oberndorf-on-the-Neckar, Germany. Filed July 7, 1928, Serial No. 291,068, and in Germany July 30, 1927. 4 Claims. (Cl. 33—143.)



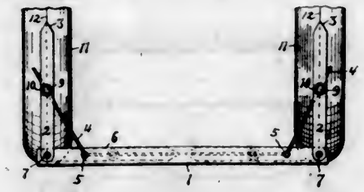
1. A caliper of the type referred to, comprising two laterally co-operating main bars having jaws at their outer ends and a longitudinal groove in each of the two co-operating surfaces of the bars, a guiding bar in the groove of one main bar, a brake bar in the groove of the other main bar, and means carried by the brake bar for releasably and adjustably interconnecting the bars.

1,810,428. BABY CARRIAGE. NELLO LAZZERI, Virginia City, Nev. Filed June 18, 1929. Serial No. 371,919. 9 Claims. (Cl. 188—20.)



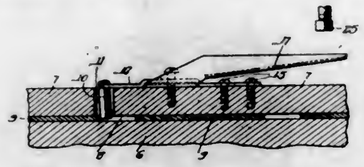
1. In a baby carriage, the combination with the supporting frame, axles and wheels, of push bars each comprising a lower section fixed to the supporting frame and an upper section slidable on the lower section, a handle bar for propelling the vehicle rigidly connected with the upper slidable push bar sections, a brake mounted on the supporting frame for movement into and out of engagement with one of the wheels, a connection between said brake and the upper slidable push bar sections whereby when said handle bar is moved upwardly the brake will be moved into engagement with the wheel, and when pressed downwardly the brake will be moved out of engagement with the wheel, and spring means acting to normally maintain said handle bar in its elevated position.

1,810,429. INSTRUMENT FOR ALIGNING AUTOMOBILE WHEELS. ARCHIE LIMPERT, Hicksville, Ohio. Filed Apr. 15, 1929. Serial No. 355,051. 3 Claims. (Cl. 33—203.)



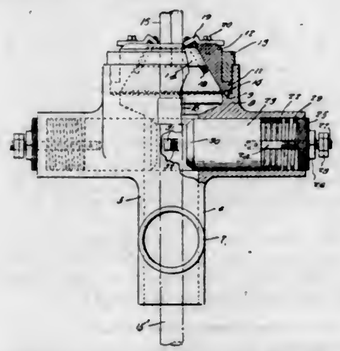
2. An instrument for aligning automobile wheels comprising a base-bar; an index arm pivoted at one end thereof at each end of said base-bar and having folding relation therewith, each arm having an offset adjacent its pivoted end; a clamping means on each arm spaced from its pivoted end; and a brace-rod for each arm adjustably secured by said clamping means thereon and pivotally connected at one end with said bar and extending between said arm and the base-bar when the arm is folded.

1,810,430. WORK STOP. ALEXANDER M. MASZCZYK, Chicago, Ill. Filed Apr. 18, 1930. Serial No. 445,418. 10 Claims. (Cl. 104—59.)



1. A work stop comprising a resilient member attached at one end, a stop member at the other end, and operating means engaging the resilient member intermediate its ends and adapted to flex the free end of the resilient member to move the stop member.

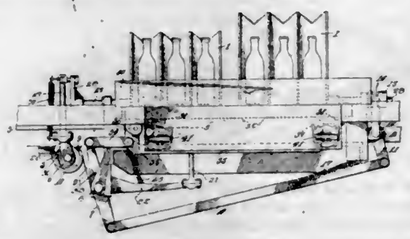
1,810,431. BLOW OUT PREVENTING DEVICE AND OIL SAVER FOR DRILLING RIGS. JOHN MCNEFF and SAMUEL HOGAN, Pyote, Tex. Filed Oct. 23, 1928. Serial No. 314,350. 4 Claims. (Cl. 24—263.)



1. A device of the class described comprising a casting forming a coupling for the open end of the well casing and having an opening extending vertically therethrough for receiving the well drilling rod, and clamping means for the rod mounted in the upper end of the casting and comprising a rotatable collar having its inner wall inclined

from a vertical plane, said collar being rotatable in the casting, a plurality of collet segments disposed in wedging position between the collar and the drilling rod, and adjusting means for the segments extending parallel with the inclined wall of the collar.

1,810,432. BOTTLE UNLOADER. ROBERT EUGENE MILLER, Bainbridge, Ga., assignor to The Miller Manufacturing Co., Bainbridge, Ga. Filed Aug. 16, 1926. Serial No. 129,503. 6 Claims. (Cl. 198—27.)



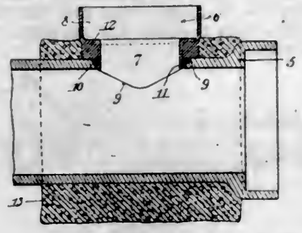
1. A bottle unloader, comprising a tiltable box; fingers slidably mounted under the box, adapted to be projected to engage the neck of an inverted bottle; and means for tilting the box, to cause the bottle to topple out of the fingers and right itself in the tilting box.

1,810,433. OPTICAL APPARATUS FOR DETERMINING FINISH ON PAPER. CHARLES H. MILLIGAN, Hamilton, Ohio, assignor to The Champion Coated Paper Company, Hamilton, Ohio, a Corporation of Ohio. Filed July 5, 1929. Serial No. 376,149. 10 Claims. (Cl. 88—23.)



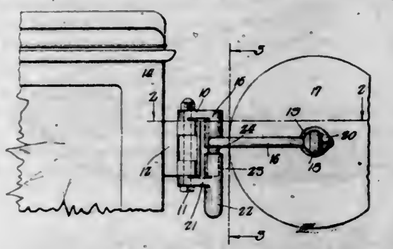
1. Apparatus for determining finish on paper comprising supporting means for a sheet of paper to be tested, means for directing a beam of light onto the paper at an angle of incidence less than 20° to illuminate an area less than one inch in longitudinal dimension, an eyepiece, means for imaging the beam of light reflected from the paper on said eyepiece, a photometer, means for directing a comparison beam of light through said photometer and means for imaging the comparison beam of light on said eyepiece.

1,810,434. PIPE CONNECTION. ROBERT B. MORSE, Hyattsville, and HOWARD R. DEVILBISS, Riverdale, Md. Filed Mar. 18, 1930. Serial No. 436,765. 5 Claims. (Cl. 285—106.)



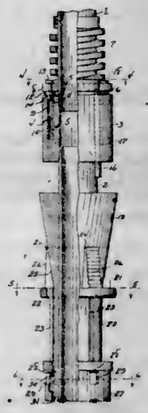
1. The combination with a main pipe having an opening therein, of a union member, a neck on said member projecting in said opening, a bead on said neck disposed in close proximity to the edges of said opening, a stop on said member to engage the outer surface of said pipe, and packing surrounding said neck and resting upon said bead.

1,810,435. AUTOMOBILE MIRROR. HENRY C. PAULSON, Cleveland, Ohio, assignor to The Proof Machine and Brass Foundry Company, Cleveland, Ohio. Filed Feb. 25, 1929. Serial No. 342,496. 1 Claim. (Cl. 45—97.)



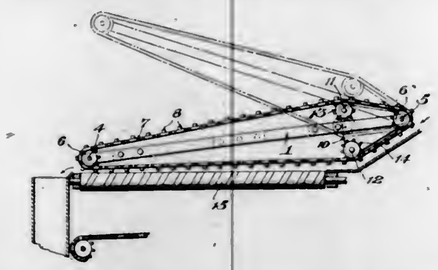
An attaching bracket for mirrors upon the door hinges of motor vehicles comprising complemental attaching ears receiving the terminal ends of the hinge pin therethrough, extensions carried by and depending from the outermost projecting ends of said ears, an attaching arm for the mirror carried by one of the extensions, a sleeve member mounted upon and upstanding from the remaining extension and spaced from the adjacent end of the first mentioned extension, and a pin member carried by and depending from the first mentioned extension projecting terminally thereof within the bore of said sleeve.

1,810,436. TUBING DRAIN. EZRA A. PHILLIPS, Smackover, Ark., assignor of one-half to Walter J. H. Lown, Smackover, Ark. Filed May 31, 1930. Serial No. 458,475. 4 Claims. (Cl. 103—221.)



1. In a tubing drain of the class described, the combination with upper and lower sections of a well tube, of a cylindrical valve casing connecting the ends of said sections and provided with bores opening through its upper end, the said casing having ports communicating with the lower ends of the bores and with the interior of the casing, a tubular valve slidably mounted in each of said bores and open at its lower end, spaced heads upon the upper end of each valve, an annular head slidably fitting the upper tube section, means connecting the valves with the said annular head, a compression spring upon the said upper tube section bearing upon the said annular head and yieldably holding the same in lowered position and with the lower heads of the valves closing the upper ends of the respective bores, and the valves closing the ports, and an abutment movable with respect to the said valve casing and projecting below the same, the abutment being connected with the annular head and engageable by the swage upon upward movement of the same whereby to elevate the annular head and effect opening of the valves.

1,810,437. FEEDER CONVEYER FOR HUSKING UNITS. JOHN POWELL, Kokomo, Ind. Filed July 14, 1928. Serial No. 292,748. 3 Claims. (Cl. 130—5.)



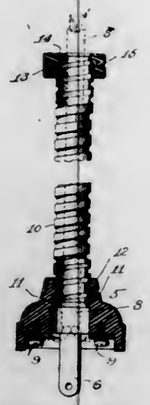
1. In a husking unit, the combination with husking rolls, of means for segregating and passing husk bearing ears of corn over said rolls comprising a conveyer including a frame pivoted at one end, shafts mounted at the ends of said frame, an endless conveyer mounted between said shaft and adapted to engage individual ears of corn and pass the same over the husking rolls and spreading means for holding the respective flights of said conveyer in predetermined spaced relation, said spreading means being pivoted to said frame.

1,810,438. METAL FABRIC AND PROCESS FOR MANUFACTURING THE SAME. LEOPOLD RADÓ, Halensee, Berlin, Germany. Filed Sept. 1, 1928, Serial No. 303,608, and in Germany Apr. 7, 1928. 4 Claims. (Cl. 154—2.)



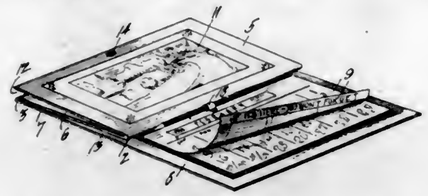
3. In the process of producing metal fabric the step which consists in coating metal foil on both sides with a cellulose hydrate, dividing said coated foil into narrow strips and then coating said strips over their faces and edges with a water resisting layer.

1,810,439. ELECTRIC PLUG. MICHAEL A. ROLLMAN, Mount Joy, Pa. Filed May 15, 1928. Serial No. 277,865. 3 Claims. (Cl. 173—322.)



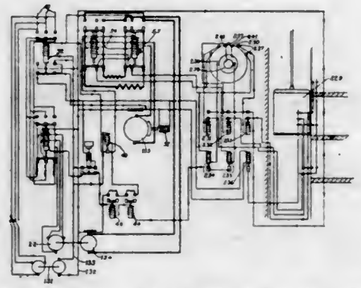
1. In combination with a plug provided with a pair of terminals and having an internally-threaded bore, a spiral flexible tube threaded into said bore and secured therein by flanging over the end of the tube against an internal shoulder in the bore, and a binding- or set-screw carried by the plug and adapted to bear against the tube to thus assist in locking the tube in the plug.

1,810,440. CALENDAR. HUGH FRANKLIN SHEDD, Minneapolis, Minn. Filed Feb. 6, 1930. Serial No. 426,404. 8 Claims. (Cl. 40—119.)



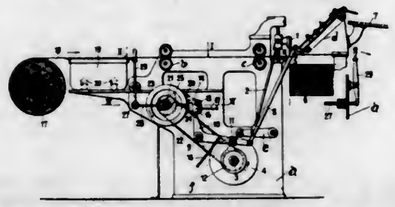
1. A calendar constructed of a backing sheet divided into sections, date sheets on the lower section, the remaining sections being folded to present oppositely opening front and rear pockets above the date sheets.

1,810,441. MOTOR CONTROL. OSCAR F. SHEPARD, Cincinnati, Ohio. Filed Sept. 26, 1923. Serial No. 664,822. 5 Claims. (Cl. 172—152.)



1. The combination of a source of power supply, a primary motor, a generator driven by the primary motor, a secondary motor, means for energizing and de-energizing the primary motor, means for varying the field strength of the generator for providing variable voltage for the secondary motor, and reversing switches for reversing the flow of current to the secondary motor armature, the reversing switches being simultaneously actuated with the means for energizing and de-energizing the primary motor.

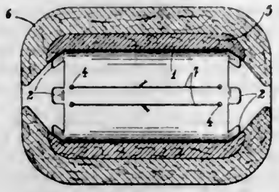
1,810,442. SHEET CUTTING MACHINE. GEORG SPIESS, Leipzig-Plagwitz, Germany. Filed Apr. 14, 1927, Serial No. 183,746, and in Germany Apr. 24, 1926. 3 Claims. (Cl. 214—11.)



1. A sheet cutting machine comprising a driving shaft, means for conducting the sheets to separate piles according to their quality, mechanism for operating said conducting means, hand-operated means for placing said mechanism in condition to actuate said conducting means,

a cam plate on said driving shaft, a rocking lever operatively connected with said conducting means on the one hand, and with said cam plate on the other hand, means for locking said rocking lever against operation from said cam plate, a rotary disc operatively connected with said driving shaft, a pawl carried on said rotary disc and adapted to co-operate with said locking means, hand-operated means for placing said pawl into active position with respect to said locking means, and automatic means for returning it into its inactive position, the motion of said rotary disc being so timed with respect to that of said driving shaft, that the motion of said conductive means lags with respect to that of said driving means.

1,810,443. LUBRICATING PAD. JEAN MATHIEU MARIE ARTHUR STEURS, Vilvorde, Belgium, assignor to Société Anonyme Manufacture d'Appareils Graisseurs, Vilvorde, Belgium. Filed Jan. 30, 1929, Serial No. 336,297, and in Belgium Dec. 22, 1928. 1 Claim. (Cl. 308—243.)
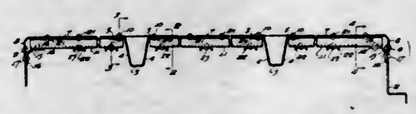


A lubricating pad for wheel-axles, especially for railway vehicles, designed for being inserted into the axle-box, under the journal, comprising a cylindrical metallic frame made of a single thin sheet of steel, means for securing the two edges thereof, a supporting and stuffing layer of very soft textile material, means for securing said layer onto said metallic frame, small projecting parts made integral with said frame and slightly bent towards the inside thereof for preventing said layer from being cut by the edges of said metallic frame, a covering made of wool and means for securing said covering over said stuffing layer, substantially as set forth.

1,810,444. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed July 31, 1930. Serial No. 472,165. 19 Claims. (Cl. 108—5.4.)



1. A roof for railway cars involving a plurality of carlines, a beam of inverted channel shape extending longitudinally of the car beneath the carlines, and a plurality of members extending transversely of and fixedly secured to the beam, each of said members forming with the beam a structure of box-like section and being adapted to serve as a support for a load lifting means.

1,810,445. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed July 31, 1930. Serial No. 472,166. 10 Claims. (Cl. 108—5.4.)



1. A roof for railway cars involving roof sheets, carlines disposed beneath said roof sheets and projecting downwardly therefrom, a beam extending longitudinally of the car between said carlines and above the lower edges of the latter, said beam being of inverted channel shape and being rigidly secured to said carlines, and a member extending transversely of and rigidly secured to said beam, said member forming with the beam a structure of box-like section and being adapted to serve as a support for a load lifting means.

1,810,446. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed July 31, 1930. Serial No. 472,167. 9 Claims. (Cl. 108—5.4.)



1. A roof for railway cars involving a plurality of roof sheets having marginal flanges along their side edges, carlines respectively secured to adjacent flanges of neighboring roof sheets, members extending transversely of the car and respectively secured to said carlines, each of said members having a laterally projecting flange spaced beneath said roof sheets, a channel shaped beam extending longitudinally of the car between said members and rigidly secured to the flanges of said members, and means rigidly secured to said beam and forming therewith a structure of box-like section, said means being adapted to serve as a support for a load lifting device.

1,810,447. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed July 31, 1930. Serial No. 472,168. 18 Claims. (Cl. 108—5.4.)



1. A roof for railway cars involving roof sheets, upstanding carline portions, a longitudinally disposed beam extending between said carline portions in overlapping relation to the outer face of an adjacent roof sheet, and a member extending transversely of the car beneath the roof sheets, said member being rigidly secured to said beam and constituting means for supporting a load lifting device.

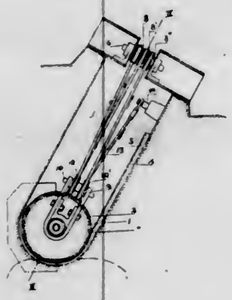
1,810,448. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed July 31, 1930. Serial No. 472,169. 15 Claims. (Cl. 108—5.4.)



1. A roof for railway cars involving roof sheets, carline means projecting below the roof sheets, a beam extending longitudinally of the car above the carlines and roof sheets, and a plurality of members extending trans-

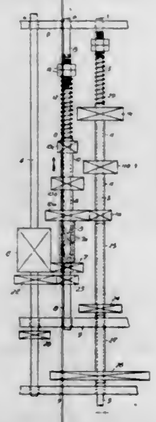
versely of the car beneath the roof sheets, each of said members being rigidly secured to said beam and constituting means for supporting a load lifting device.

1,810,449. MOVABLE DAM. HISAKICHI TAHARA, Tokyo, Japan. Filed June 30, 1928, Serial No. 289,565, and in Japan Feb. 8, 1928. 4 Claims. (Cl. 61—22.)



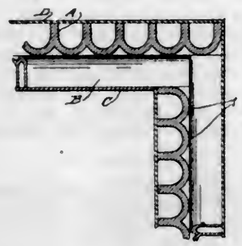
1. A movable dam, comprising axles and mounted at its ends in journals for rotatable movement; supports for the journals and pulleys operatively mounted in said supports; a separate set of pulleys operatively mounted in a bridge support and a gate to receive said support; a single suspension cable operative with both sets of pulleys, one end of said cable being connected to a fixed point and having operative connection to a hoisting means at its opposite end.

1,810,450. VARIABLE SPEED-GEAR MECHANISM. MAXWELL LOUIS FREDERICK VON BROEMBSEN, Pretoria, Transvaal, South Africa. Filed Jan. 6, 1930, Serial No. 418,911, and in South Africa Nov. 28, 1929. 4 Claims. (Cl. 74—58.)



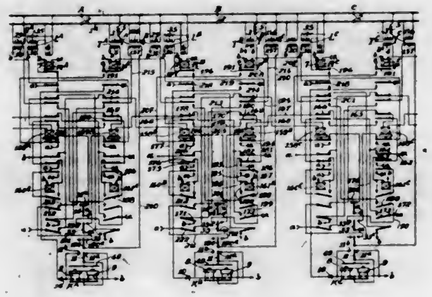
1. An automatically variable speed-gear mechanism, comprising a driving-shaft, a driven-shaft, a lay-shaft, means for gearing the lay-shaft to the driven-shaft at a plurality of various gear ratios successively, a pinion splined helically upon the lay-shaft and geared to the driving-shaft, and gear-changing mechanism operable by the traversing movement of said pinion upon the lay-shaft under variations in the load applied to the driven-shaft.

1,810,451. TRUNK AND BOX. FRED L. WAGAR, Wagar, Ala. Filed May 29, 1929. Serial No. 366,887. 7 Claims. (Cl. 220—1.)



1. A casing, such as a box, trunk or chest, having the main body part thereof comprised of two sheets of corrugated metal, the corrugations of one sheet disposed at angles to the corrugations of the other sheet and the said sheets united at their points or areas of contact.

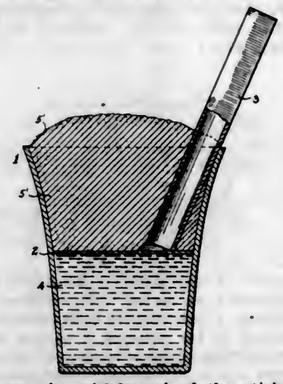
1,810,452. RAILWAY TRAFFIC CONTROLLING APPARATUS. HERBERT A. WALLACE, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed May 5, 1926, Serial No. 106,871. Divided and this application filed Aug. 5, 1929. Serial No. 383,733. 23 Claims. (Cl. 246—33.)



1. In combination, a stretch of railway track, means for normally supplying uninterrupted alternating current to the rails adjacent one end of the stretch, and means controlled by traffic conditions for at times periodically interrupting said current and for at other times supplying interrupted current to the rails adjacent the other end of the stretch.

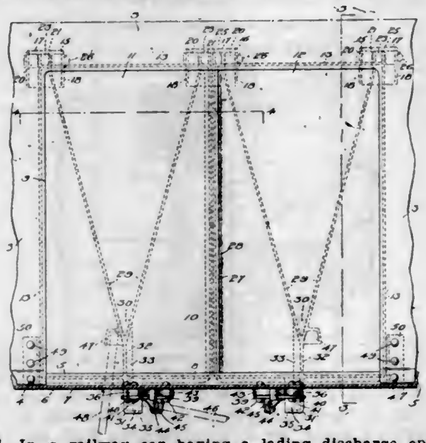
1,810,453. CHEWING GUM CONFECTION. RAYMOND B. WEBSTER, ALFRED I. FAGERLIE, and IRVING C. BARAGER, Eau Claire, Wis. Filed July 1, 1929. Serial No. 375,275. 2 Claims. (Cl. 99—16.)

2. As an improved article of manufacture, a chewing gum confection made in the form of a drinking glass or tumbler, open at the top and closed at its bottom, and provided with a thin imperforated horizontal partition, also made of chewing gum or wax, forming a lower sealed chamber and an upper open ended chamber; the lower chamber carrying a suitable flavoring syrup or juice and the upper chamber carrying a suitable confection filler made to represent ice cream, and a tube or straw inserted into and carried by the upper chamber and provided with a solid penetrating stick designed to pierce the partition to permit the syrup to be sucked through



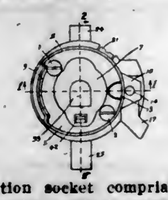
the tube upon the withdrawal of the stick; the whole representing a glass of soda water or an ice cream sundae substantially as described.

1,810,454. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio, and GEORGE B. CHRISTIAN, Washington, D. C., assignors to Wine Railway Appliance Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 25, 1929. Serial No. 349,833. 20 Claims. (Cl. 105—280.)



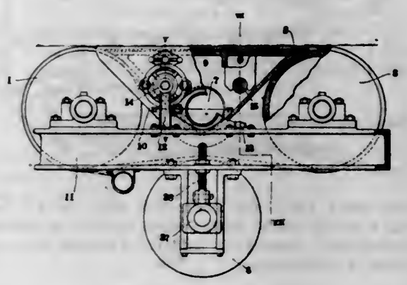
1. In a railway car having a lading discharge opening, a hinged closure for said opening, said closure being integrally formed with reinforcing members which converge from adjacent the hinged edge of the closure and intersect at a point adjacent the opposite edge of the closure.

1,810,455. CAM LOCK CONTRACTION SOCKET. ARCHIE REXALD WOLFE, Summit, N. J. Filed Mar. 6, 1929. Serial No. 344,888. 6 Claims. (Cl. 173—355.) (Granted under the act of Mar. 3, 1883, as amended April 30, 1928; 370 O. G. 757.)



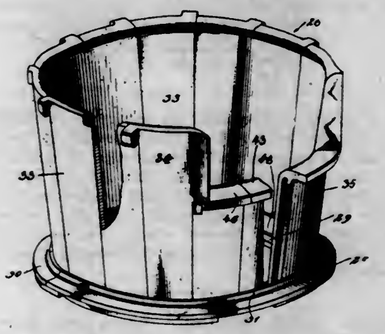
1. In a contraction socket comprising an insulation body, a movable center contact mounted on said body, an elevating and depressing means within said body for elevating and depressing said center contact, and a means on the outside of said body for operating said elevating and depressing means.

1,810,456. SUCTION DEVICE OF PAPER-MAKING MACHINES. TARIO YONEKURA, Takaoka, Japan. Filed July 26, 1928, Serial No. 295,563, and in Japan Aug. 18, 1927. 3 Claims. (Cl. 92—51.)



1. In a suction device for paper-making machines, the combination of a prime-mover roll at one end of the machine, a follower roll at the other end thereof, a suction pipe between said rolls, a flexible belt extending around said rolls and suction pipe to form a chamber having a suction surface, and side-walls for said chamber combining with said belt to make the chamber airtight.

1,810,457. FURNACE CONSTRUCTION. FRANK Z. AHL, Sacramento, Calif. Filed June 6, 1927. Serial No. 196,675. 1 Claim. (Cl. 126—151.)

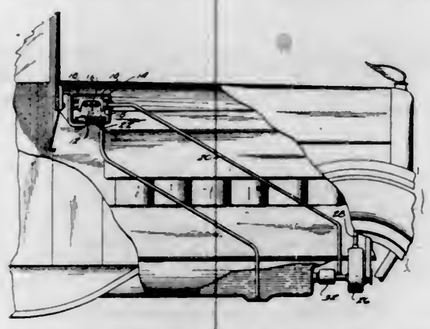


A fire-box of the character described comprising a plurality of vertically extending cooperating sections, flanges formed on the vertical edges of said sections, and locking lugs carried by the upper edges of said sections for maintaining the flanges of adjacent sections in cooperative relation with each other.

1,810,458. MOTOR CAR FILTER SYSTEM. RENÉ AUDUBERT, Paris, France, assignor to Societe Anonyme des Procedes R. Audubert, Paris, France, a Corporation of France. Filed May 4, 1928. Serial No. 275,140. 1 Claim. (Cl. 184—6.)
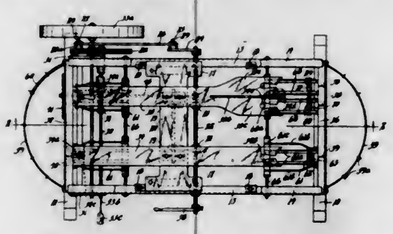
In combination with an internal combustion engine, an oil reservoir, a filter, a pump, an oil supply line for the filter running from the reservoir, an oil discharge line for the filter connected with the intake of the pump, and means for maintaining a substantially uniform de-

gree of sub-atmospheric pressure in said discharge line when the pump is operating, sufficinet to cause the oil to be sucked up said supply line to said filter, the intake



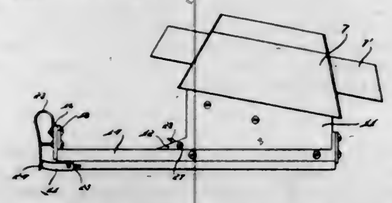
at said pump being also connected with the oil reservoir by a pipe provided with a valve adapted to maintain sub-atmospheric pressure in said oil discharge line when the pump is in operation.

1,810,459. POTATO CUTTING MACHINE. JOHN A. BERGREN and CHARLES G. BERGREN, Lake Park, Minn., assignors to Bergren Manufacturing Company, a Corporation. Filed July 11, 1927. Serial No. 204,716. 11 Claims. (Cl. 146—169.)



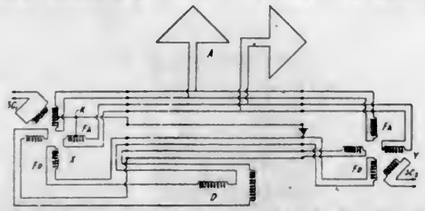
1. A potato cutting machine having in combination, a knife disposed in a vertical plane, means for supporting a potato for movement and presentation to said knife and a horizontal movable plunger for moving said potato along said means to said knife, said plunger having a slot therein for embracing said knife, said slot increasing in size toward the end thereof remote from said knife and also having its sides diverging downwardly from the upper side thereof.

1,810,460. NAIL HOLDER. OSCAR BREITHAUPT, Detroit, Mich. Filed May 28, 1928. Serial No. 281,252. 1 Claim. (Cl. 1—49.7.)



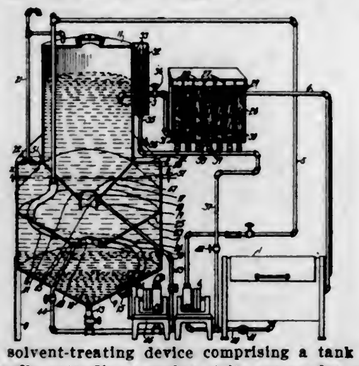
In a nail holder of the class described: a trough provided with a longitudinally extended slot; a pair of spaced extensions mounted on an open end of said trough and projecting beyond said end, the projecting ends of said extensions being angularly upwardly turned; and a J-shaped resilent closure for said end of said trough.

1,810,461. WIRELESS TELEGRAPH RECEIVING SYSTEM. JOHN BROWN, Chelmsford, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed June 19, 1925, Serial No. 38,138, and in Great Britain July 1, 1924. 11 Claims. (Cl. 250—11.)



1. In a system of the character described a plurality of radiogoniometers connected to a common directional receiving antenna, a pair of field coils in each radiogoniometer connected to the antenna, a second pair of field coils in each radiogoniometer connected to an artificial aerial, a single search coil in each radiogoniometer, said field coils and search coils arranged so that flux from the pairs of field coils in each radiogoniometer links with its corresponding search coil, and so that the reactance of one search coil upon another is neutralized.

1,810,462. PURIFYING TANK. GEORGE M. BUCHY, Englewood, Mo., assignor of one-half to Joseph D. Chansler, Kansas City, Mo. Filed Sept. 24, 1928. Serial No. 308,115. 11 Claims. (Cl. 210—44.)



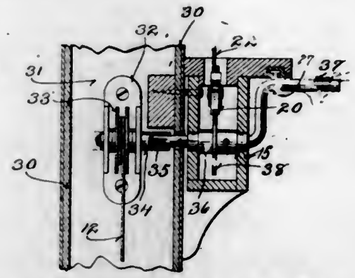
1. A solvent-treating device comprising a tank having an inwardly extending annulus at its upper edge provided with a vent, a tower of less diameter than the tank comprising an upward extension thereof supported by said annulus, a funnel-like member depending from the tower into the tank, and means for circulating solvent upwardly through the funnel-like member.

1,810,463. ANCHOR STAPLE FOR MULCHING PAPER. JAMES H. COOK, Tulsa, Okla. Filed June 17, 1929. Serial No. 371,445. 7 Claims. (Cl. 47—9.)



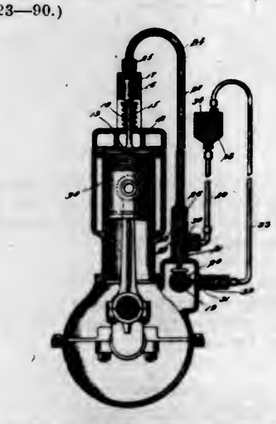
1. A staple of the character described comprising a single piece of corrugated wire having a flat body portion and leg portions extending at right angles to the body portion.

1,810,464. DAMPER CONTROL DEVICE. THEODORE B. COWLES, Madison, Wis., assignor of one-half to Charles M. Park, Madison, Wis. Filed Nov. 18, 1927. Serial No. 234,134. 1 Claim. (Cl. 74—39.)



A device of the class described including a supporting bracket, having spaced perforated ears, a shaft rotatably mounted in said ears, a drum on the shaft between said ears, a key at one end of said shaft, a housing supported adjacent the bracket having a horizontal shelf at its upper side, a crank having one end rotatably mounted in the housing with its terminal projecting beyond one wall thereof and having a keyway for the reception of the key on the shaft, a notched disc on the crank shaft within the housing and a movable stop carried by the shelf and adapted to be engaged by the crank handle for limiting the movement of the same.

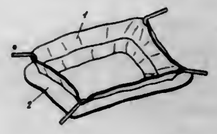
1,810,465. VALVE MOTION MECHANISM FOR INTERNAL COMBUSTION ENGINES. ARTHUR V. DA COSTA, Providence, R. I., assignor to Da Costa Engine Company, Providence, R. I., a Corporation of Rhode Island. Filed Aug. 20, 1928. Serial No. 300,736. 7 Claims. (Cl. 123—90.)



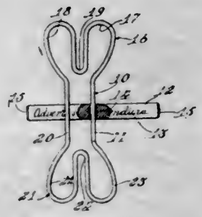
1. In an internal combustion engine, a valve, a cam, a motion transmitting hydraulic column operatively connecting the cam and valve, a reservoir communicating with said column, means actuated by said cam for supplying air under pressure to said reservoir, and means for controlling the flow from the reservoir to the column to compensate for expansion and contraction of the column and the adjacent parts to maintain the column intact.

1,810,466. DEVICE FOR GIVING ACCESS TO CAVITIES OF THE ANIMAL AND HUMAN BODY. JOSEF DEUTSCH, Vienna, Austria. Filed May 8, 1929, Serial No. 361,304, and in Austria May 25, 1928. 2 Claims. (Cl. 128—348.)

1. A temporary closure for surgical incisions comprising a flange of soft, impermeable, irresorbable material adapted to be secured adjacent to said incision and provided with a narrow slit in registry therewith, and a sleeve of soft, impermeable, yielding, irresorbable material projecting outwardly from said flange at said slit and normally held thereby in a collapsed, sealed condition, said sleeve being capable of being widened to present a much larger opening to render the interior of the incision accessible therethrough.

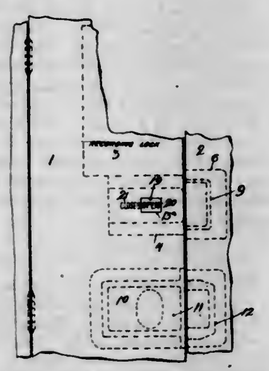


1,810,467. ADVERTISING AMUSEMENT DEVICE. CHARLES DOERING, Chicago, Ill. Filed July 1, 1929. Serial No. 375,175. 6 Claims. (Cl. 272—8.)



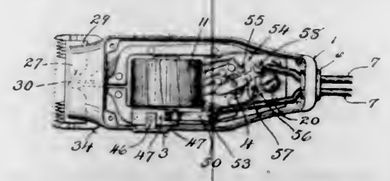
3. In a device of the character described, the combination with a resilient frame, of an elongated member pivotally associated with said frame, a barrier on said frame in the path of said member to limit the oscillatable movement thereof, said barrier serving to flip said member to reverse the movement thereof, thereby creating a visual illusion of its passage through said barrier.

1,810,468. LOCK. CLARENCE V. DOYLE, New York, N. Y., assignor to Richard J. Sherwood, San Francisco, Calif. Filed Jan. 28, 1929. Serial No. 335,452. 12 Claims. (Cl. 40—66.)



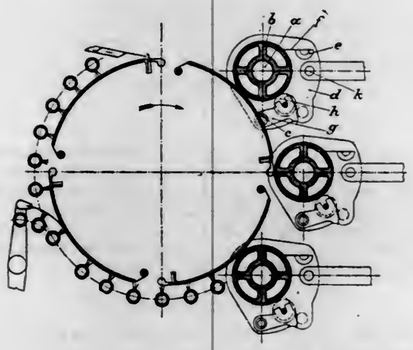
1. The combination of a closure, a primary lock, a recording lock, both of said locks being adapted to fasten the closure in the same position, said recording lock having means for recording the time at which said closure is locked and unlocked by the recording lock, and means to automatically indicate to persons exterior of said closure when the recording lock is unlocked while the closure is in its closed position.

1,810,469. ELECTRIC HAIR CLIPPER. ALBERT J. DREMEL, Racine, Wis. Filed Aug. 22, 1927. Serial No. 214,750. 2 Claims. (Cl. 175—338.)



1. A device of the class described including a casing, a frame mounted therein and carrying an electro-magnet, a vibratory armature pivotally joined to said frame adjacent the rear end of said armature, and a laminated U-shaped spring surrounding the pivot point of said armature and fastened at its ends to said armature and said frame.

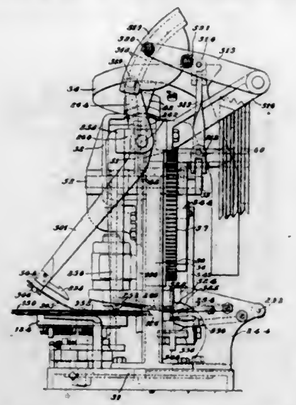
1,810,470. INTAGLIO PRINTING MACHINE. ARNOLD EGLI, Hamburg, Germany. Filed July 20, 1928, Serial No. 294,272, and in Germany July 28, 1927. 3 Claims. (Cl. 101—152.)



1. In an intaglio printing machine, in combination, an impression cylinder, a pair of carrier frames pivoted adjacent to said cylinder, a printing cylinder journalled in said carrier frames, and means for oscillating said frames on their pivots to move the printing cylinder alternately toward and away from the impression cylinder, the pivotal axis of said plates being in substantial vertical alignment with the center of gravity of the mass mounted on said pivots, whereby oscillation of the printing cylinder toward and away from the impression cylinder is effected without appreciably raising or lowering said center of gravity, and the power required to move said printing cylinder is reduced.

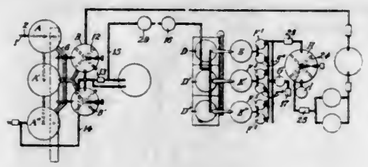
1,810,471. WRAPPING MACHINE. ANALDO M. ENGLISH, Brookline, Mass., assignor, by mesne assignments, to Pneumatic Scale Corporation, Limited, Quincy, Mass., a Corporation of Massachusetts. Original application filed June 20, 1923, Serial No. 646,574. Divided and this application filed Nov. 1, 1928. Serial No. 316,573. 3 Claims. (Cl. 271—2.5.)

1. A wrapping machine having, in combination, a movable wrapper feeding device having a pair of cloth gripper plates, a cam device between the plates adapted to open and close the plates for releasing and engaging the wrapper, a stationary wrapper guide for presenting wrapping material to the feeding device, means on the stationary guide for engaging the cam device to close the gripper plates when the feeding device is moved toward the stationary guide, a stationary pawl which is engaged by the feeding device at the limit of its feeding move-



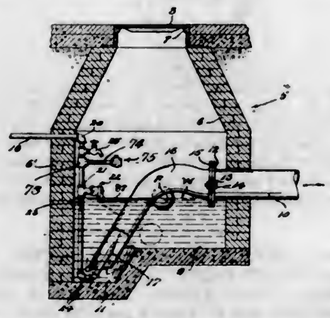
ment, and connections between the pawl and the cam device for actuating the latter to open the plates as the feeding device starts its movement in the reverse direction.

1,810,472. PROCESS OF RECOVERING RESINOUS BY-PRODUCTS IN THE MANUFACTURE OF WOOD PULP. EDWARD H. FRENCH, Columbus, Ohio. Original application filed Aug. 15, 1925, Serial No. 50,526. Divided and this application filed Oct. 29, 1928. Serial No. 315,784. 10 Claims. (Cl. 87—2.)



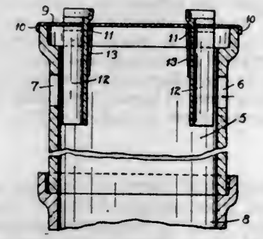
1. The process of recovering rosin from alkaline liquors containing resinates which comprises the step of passing an acid gas through the said liquors to liberate at least part of the rosin content thereof.

1,810,473. FLUSH TANK. ERNEST L. GAINES, Seattle, Wash. Filed Oct. 14, 1929. Serial No. 399,645. 20 Claims. (Cl. 182—3.)



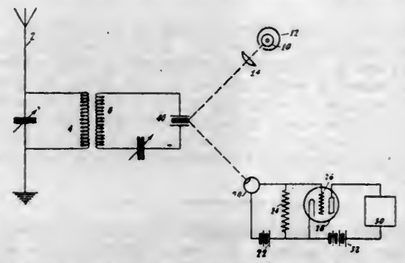
1. A flush tank for a sewer system comprising a reservoir having an outlet into the sewer positioned above the high level of the water within said reservoir, an elbow detachably secured to said outlet and having an open throat disposed adjacent the floor of the reservoir, a nozzle disposed within said throat, a service pipe connection to said reservoir and the nozzle, an adjustable leak valve on said pipe connection for supplying water to said reservoir, a control valve interposed in said service pipe between said leak valve and said nozzle, and float means responsive to the rise and fall of water within said reservoir for actuating said valve for intermittent flushing activity from said nozzle to the sewer.

1,810,474. SEPTIC TANK. IRWIN GUTMAN, Pittsburgh, Pa. Filed Mar. 7, 1930. Serial No. 433,922. 5 Claims. (Cl. 210—6.)



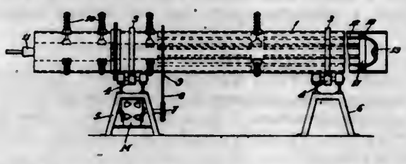
1. A cover for septic tanks and the like having a slot therein for permitting insertion of a baffle member, and means depending from said cover for supporting the baffle member against displacement in a direction transversely of said member.

1,810,475. RECEIVER. CLARENCE W. HANSELL, Rocky Point, Long Island, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 2, 1927. Serial No. 188,155. 12 Claims. (Cl. 250—31.)



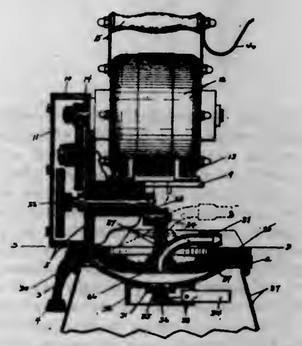
1. Means to detect signal energy comprising a photoelectric cell, a source of light, and a piezo-electric crystal responsive to the signal energy cooperating with the source and the cell to cause a change in the light energization of the cell which is dependent upon vibration of the crystal at its own natural frequency.

1,810,476. ROTARY DRIER. WILLIAM A. HARTY, Buffalo, N. Y., and FRANK W. MOORE, Thorold, Ontario, Canada, assignors to Harmor & Co. Inc., Buffalo, N. Y., a Corporation of New York. Filed Dec. 15, 1928. Serial No. 326,253. 6 Claims. (Cl 34—5.)



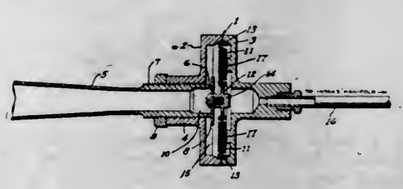
1. In a heat exchanger, a hot mandrel and a shell spaced therefrom and rotating therewith, having an external series of longitudinally extending return heat channels, and a return heat deflector mounted over the exhaust end of the mandrel in spaced relation thereto for returning a substantial portion of the hot gases discharging from the mandrel into and along said return heat channels.

1,810,477. MILKING MACHINE. RALPH L. HINMAN, Oneida, N. Y., assignor to Hinman Milking Machine Company, Incorporated, Oneida, N. Y., a Corporation of New York. Filed Apr. 27, 1928. Serial No. 273,385. 2 Claims. (Cl. 31—70.)



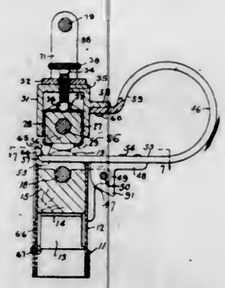
1. In a device of the class described, a frame having a central opening therethrough, a flexible diaphragm having an annular groove, a milk bowl having its periphery positioned in such annular groove, grooves in the frame for receiving the rim of the diaphragm whereby the diaphragm will be releasably held in position beneath the central opening of the frame, and means for moving the diaphragm in relation to the milk bowl.

1,810,478. HORN. HENRY HUEBER, Buffalo, and ERWIN C. HORTON, Hamburg, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y. Filed Oct. 3, 1930. Serial No. 486,228. 12 Claims. (Cl. 116—142.)



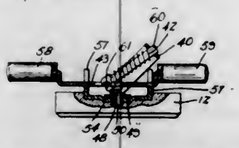
1. In combination with a source of reduced pressure, such as that which maintains in the intake manifold of an operating internal combustion engine, a hollow casing having a chamber provided with an exhaust opening connected to the source of reduced pressure by a conduit, a rigid annular seat in the chamber on the wall thereof, said casing having an inlet opening establishing communication between the outside atmosphere and the chamber through the annular seat, a sound wave generator normally engaging the seat to close the passage therethrough, said sound wave generator being of less diameter than the chamber, means separate from and resiliently supporting the sound wave generator against said seat whereby the sound wave generator will repeatedly unseat and seat to interrupt the air stream through the chamber and produce sound waves, and a trumpet connected to the chamber inlet opening acting in modification of the frequency of the pulsations set up.

1,810,479. WRINGER. GUSTAVE H. JANTZ, Wyoming, Ohio. Filed Aug. 7, 1929. Serial No. 384,145. 9 Claims. (Cl. 68—32.)



1. In a wringer, the combination of a breakdown frame for the wringer comprising a plurality of frame-parts each including bearing means for a wringer-roll, wringer rolls comprising shafts in said bearing means, pivot means between said frame-parts whose pivotal axes are substantially parallel with the axis of said bearing means, one of said frame-parts comprising bow-springs as part of its frame structure for exerting pressure between said wringer-rolls, said bow-springs located between said pivot means and said bearing means for said one of said frame-parts, said pivot means being at one side of said wringer-rolls, said second-named frame section provided with extensions reaching between and beyond the other side of said shafts where they are provided with catching means, latching means at said other side of said wringer-rolls coacting with said catching means for holding said frame-parts in operative relation, and quick releasing means for said latching means for quick release of said latching means from said catching means for quick separating movement between said wringer-rolls.

1,810,480. SWITCH FOR ELECTRIC LAMPS. FRANK E. JOHNSON, New Bedford, Mass., assignor to John I. Paulding, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed Aug. 24, 1928. Serial No. 301,715. 4 Claims. (Cl. 173—355.)



1. A switch having, in combination, a fixed contact, a U-shaped frame having its upwardly turned ends each provided with a right-angled recess opening out the top side thereof, a push-through member slidably mounted in said recesses and held against lateral movement by the sides thereof, said member having its ends offset to act as stops by engagement with the upwardly turned ends of said frame to limit the reciprocation of said member, the offset ends thereof being provided with push buttons, a movable contact and a spring actuated by said push-through member for throwing said movable contact into and out of engagement with said fixed contact.

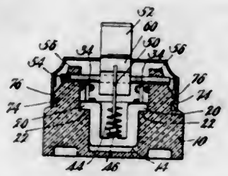
1,810,481. ATTACHMENT PLUG RECEPTACLE. GUSTAF A. JOHNSON and ARTHUR A. JOHNSON, New Bedford, Mass., assignors to John I. Paulding, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed July 14, 1927. Serial No. 205,708. 5 Claims. (Cl. 173—330.)

1. An attachment plug receptacle comprising a one-piece insulating body recessed in its inner face, a plurality of pairs of jack-blade slots entering said recess from the outer face of said body, a pair of contact plates mounted in said recess, each contact having each of its two ends provided with a pair of contacts projecting into two of said jack-blade slots, a pair of terminal plates, a pair of screws, each of said screws connecting one of said terminal plates with one of said contacts and serving to hold said



terminal plate and said contact in fastened position, a sheet of insulating material mounted within said recess and underlying said contacts, means for centrally fastening said insulating sheet to said body and means for mounting said receptacle in permanent position, said mounting means being adapted to serve as means for holding the two ends of said insulating sheet in locked position within said recess.

1,810,482. ELECTRIC SWITCH. GUSTAF A. JOHNSON, New Bedford, Mass., assignor to John I. Paulding, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed Apr. 30, 1929. Serial No. 359,259. 14 Claims. (Cl. 200—67.)



14. An electric switch having, in combination, a one-piece insulating body having a pair of projecting lug portions and a central recess therebetween, fixed contacts in said recess, a rocker member in said recess for bridging said contacts, an actuating spring, a toggle lever mounted in and between said lug portions for operating said spring and a cover, said cover and said lug portions having interlocked projections for detachably holding said cover in place.

1,810,483. STENCIL SHEET. CHARLES F. KUMLI, Chicago, Ill., assignor, by mesne assignments, to Selectograph Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 20, 1928. Serial No. 327,481. 14 Claims. (Cl. 41—38.6.)

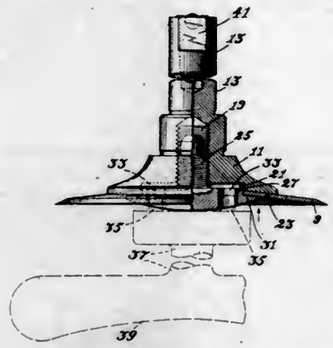
1. A stencil sheet comprising a porous base coated with a mixture of an organic colloid, a tempering agent and a water soluble permanganate.

1,810,484. STENCIL SHEET. CHARLES F. KUMLI, Chicago, Ill., assignor, by mesne assignments, to Selectograph Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 20, 1928. Serial No. 327,482. 15 Claims. (Cl. 41—38.6.)

14. A stencil sheet coated with a mixture of a protein, colloid, a tempering agent, and Schweitzer's reagent.

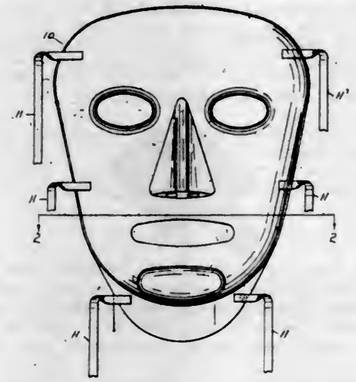
1,810,485. SKIVING MACHINE. FRED N. LA CHAPELLE, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 15, 1929. Serial No. 407,344. 4 Claims. (Cl. 164—70.)

1. In a skiving machine, a shaft, a blade-supporting member rigid with the shaft, said member having a threaded hole therein and being recessed to provide an annular dished supporting surface, a normally flat flexible blade circular in outline and having an opening through its center, and a clamping member comprising a threaded stem



screwed into the hole in the supporting member, a head extending into the central opening in the blade, and a projecting flange engaging the blade only along a narrow annular area to force it against the supporting surface and thereby impart to it a dished shape.

1,810,486. RUBBER MASK. RAYMOND D. LANCASTER, Akron, Ohio. Filed June 30, 1928. Serial No. 289,369. 2 Claims. (Cl. 128—163.)

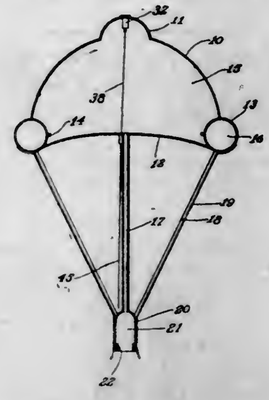


2. A mask for the purposes set forth, said mask being formed of flexible, elastic rubber, the normal curvature of the mask being of less radius than the general curvature of the face, the edge of the mask being formed with a bead normally turned inwardly but adapted to be turned outwardly when applied to the face whereby the mask will fit the face snugly over its whole area and the edge of the mask will seal itself by the action of the inherent, contractile forces therein.

1,810,487. RECOVERY OF CYANID FROM ALKALIN LIQUORS. CLARENCE W. LAWE, Pachuca, Hidalgo, Mexico. Filed Dec. 14, 1928. Serial No. 326,159. 4 Claims. (Cl. 23—84.)

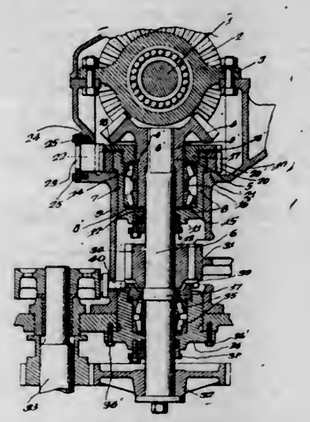
3. A method of recovering cyanogens from alkalin solutions of cyanides containing a soluble alkalin earth salt, which comprises neutralizing the solution with a material containing an acid ion capable of forming an insoluble precipitate of alkalin earth, removing the precipitate, adding an excess of acid ion containing material and blowing it with air to remove free cyanogens.

1,810,488. PARACHUTE. ALBERT LEHMANN, Brooklyn, N. Y. Filed Feb. 20, 1930. Serial No. 429,895. 5 Claims. (Cl. 244—21.)



1. In a parachute, a hemispherical head, a conduit encircling said head, a hemispherical roof closing said head, a gas container, a hose connecting with the chamber in said head, said hose being adapted to be connected to said container, and openings in said conduit entering into the chamber in said head and means for valving gas out of said head.

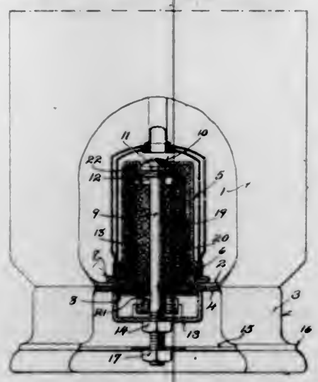
1,810,489. POWER TRANSMISSION MECHANISM. ROLF LJUNGKULL, Wauwatosa Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 18, 1929. Serial No. 393,561. 5 Claims. (Cl. 74—7.)



1. In a machine of the character described, a main frame, a horizontally disposed jack shaft rotatably mounted on the main frame, clutch controlled oppositely disposed driving bevel gears mounted on said jack shaft, a driven bevel gear meshed with said driving bevel gears, means on said frame providing a gear casing and a combined bearing support and guide, a bearing for said driven bevel gear including a bearing assembly coacting therewith, a casing for said bearing assembly, said bearing assembly being slidably fitted in said combined bearing support and guide, an adjusting collar threaded on said bearing casing, said gear casing having a seat on which said adjusting collar is supported, said gear casing also having an opening through which access is had to said adjusting collar, a vertical shaft having its

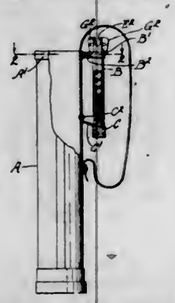
upper end slidably interfitted with the driven bevel gear to be constrained to rotate therewith and yet free to move axially relative thereto, and a separate bearing detachably connected to the gear casing and coacting with the shaft.

1,810,490. ELECTRIC PERCOLATOR. WALTER S. MARVIN, Two Rivers, Wis., assignor to Metal Ware Corporation, Two Rivers, Wis. Filed Sept. 4, 1928. Serial No. 303,892. 4 Claims. (Cl. 219—44.)



1. In an electric percolator, the combination of a pot having a bottom, a base having a transverse wall, said bottom and said wall having aligning apertures, an electric heating unit shell mounted on said bottom in said pot and having an extension projectng through the aligning apertures, an inverted cap bearing on the underside of said transverse wall, a shield plate carried by the base and spaced from the transverse wall of the base, a bolt carried by the upper end of the heating unit shell and extending downwardly through the cap and shell plate, a nut carried by the bolt adjacent its outer end and locking said cap in place, and a second nut on the outer end of said bolt engaging the outer face of the shield plate to retain the same in position in the base.

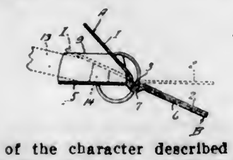
1,810,491. GOLF BALL CONTAINER. EARL N. MCCLURE, Chicago, Ill. Filed Nov. 8, 1928. Serial No. 317,914. 8 Claims. (Cl. 150—1.5.)



1. The combination with a golf bag of a combined handle and golf ball carrier, including a rigid tube secured to and spaced from the upper portion of the bag, said tube having a dispensing aperture and being adapted to contain golf balls.

5. As a new article of manufacture, a golf ball receptacle including a tubular member adapted to receive a series of golf balls stacked one upon the other and having a dispensing aperture for the balls, dispensing means mounted adjacent said aperture normally preventing the passage of golf balls from within the tube outwardly through the aperture while permitting balls to be passed inwardly through said aperture, said dispensing means including a movable stop member having a portion engaging the outermost ball of the series to prevent its escape from the tube, and a second portion movable across the path of movement of the remaining balls in the tube in response to thrust upon the first mentioned portion of the stop member incident to manual outward movement of the outermost ball, the tube adjacent said stop member being provided with ball exposing openings whereby the balls may be grasped for movement past the stop member.

1,810,492. DEVICE FOR EXTINGUISHING AND HOLDING CIGARETTES. CHARLES W. MEARS and HERMAN EISELE, Cleveland, Ohio; said Eisele assignor to said Mears. Filed Feb. 28, 1929. Serial No. 343,268. 4 Claims. (Cl. 206—41.)



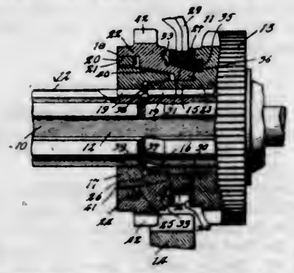
1. A device of the character described comprising in combination a pair of members each having a jaw and a handle projecting therefrom, the said members being mounted in rocking engagement intermediate their ends, and cylindrical springs each having a slit extending the full length thereof and adapted to receive the side portions of both jaws therein, each of said springs being received within slots provided in the sides of the rocking portions of said members, one of said members having side flanges thereon.

1,810,493. IDENTIFICATION SEAL. ABRAHAM MESSER, New York, N. Y., assignor, by direct and mesne assignments to Jacob Schierer, New York, N. Y. Filed June 7, 1929. Serial No. 369,023. 3 Claims. (Cl. 40—2.2.)



1. In a seal, a bendable strip, circular ridges pressed in the ends thereof for projecting the ends of identification eyelets, and identification eyelets engaged in the ends of the strip so as to have their ends protected by the ridges, said eyelets having identification cuts on their ends.

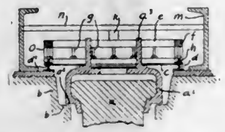
1,810,494. DOUBLE CONE CLUTCH SYNCHRONIZER. HOWARD J. MURRAY, Brooklyn, N. Y., assignor to Sure-Shift Transmission Corporation, East Pittsburgh, Pa., a Corporation of Delaware. Filed Dec. 30, 1926. Serial No. 158,125. 19 Claims. (Cl. 74—58.)



1. In a device of the class described, the combination of a spline shaft, a gear unit slidable thereon, resilient

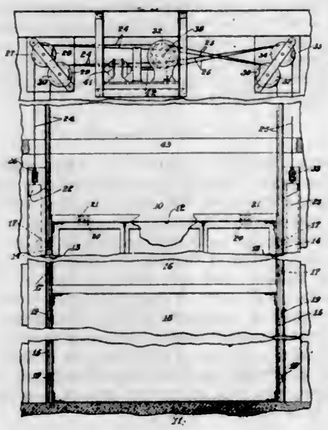
means tending to restrain its freedom of axial movement on the shaft, said unit provided with a peripheral groove, a synchronizer mounted in said groove and having a slight freedom of axial movement relative to the sides of the groove, the inner periphery of the synchronizer and the bottom of the groove coacting to form a conical type of friction clutch, a control ring mounted on the synchronizer and having a slight freedom of axial movement thereon, the outer surface of the synchronizer and the inner surface of the control ring coacting to form a conical type of friction clutch and means engaging the ring for shifting the same axially in one direction to cause said friction clutches to be moved into operative condition.

1,810,495. CLOSURE FOR COKE OVEN CHAMBERS. CARL OTTO, Essen-Ruhr, Germany. Filed Nov. 21, 1927, Serial No. 234,851, and in Germany Nov. 26, 1926. 9 Claims. (Cl. 202—248.)



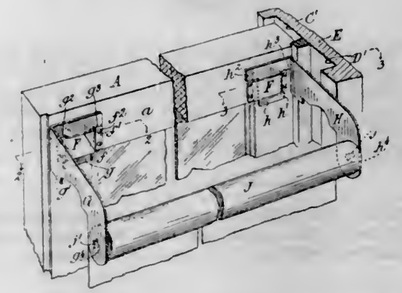
1. In a coke oven, a stationary door frame, a door body, abutting sealing surfaces on said door frame and said door body, a stationary sealing frame mounted adjacent to the door frame and provided with an abutting sealing surface, an elastic sealing plate arranged on said door body and adapted to engage with said last-named sealing surface, clamping means adapted to close the door and to press said door body and said sealing plate against the respective abutting and sealing surfaces, and means for transmitting the pressure exerted by said clamping means to said sealing plate and to said door body.

1,810,496. ELEVATOR DOOR. ROBERT S. PEELLE, Hollis, New York, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 3, 1926. Serial No. 152,362. 8 Claims. (Cl. 268—59.)



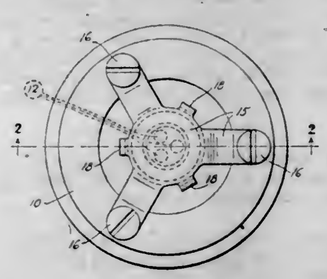
2. An elevator door embodying therein a plurality of panels vertically slidable in the same direction and in parallel planes, guides adjacent the opposite sides of the door opening, means upon said panels co-operating with said guides respectively, counterweighting means, means limiting the downward movement of said counterweighting means and said panels respectively, flexible connections between said counterweighting means and each of said panels, pinch groove pulleys operative upon different portions of said connections, said pulleys being of different diameters to impart simultaneous movement with a differential in speed, to said panels, guides for said connections between said pulleys and said panels respectively, and between said pulleys and said counterweighting means, a source of power, and operative connections between said source of power and said pulleys, whereby the load of the door and said counterweighting means upon opposite sides of said pulleys permits the application of power for either raising or lowering the door, and the relieving of said connections from the load of either said door or said counterweighting means will prevent a further application of power to the door.

1,810,497. SHADE ROLLER MOUNTING. ISRAEL PERPER, Bronx, N. Y. Filed Apr. 28, 1930. Serial No. 447,908. 3 Claims. (Cl. 156—24.)



1. A shade roller mounting comprising a member adapted to be secured to the face of a window sash and to provide therewith a socket, an angular bracket having an arm adapted to support one end of a shade roller and an arm having a part insertable into the socket and a part adapted to seat against the top of the member, the part which is insertable into the socket being of less width than said socket and adapted for lateral movement therein and co-operating parts on said socket member and said insertable part for latching said members together when said insertable part is laterally moved within the socket member.

1,810,498. VALVE. CLYDE EDWARD PLOEGER, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 5, 1929. Serial No. 344,116. 12 Claims. (Cl. 251—119.)

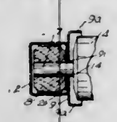


1. A valve comprising a port member having a port therein and a valve closure for covering said port comprising a plurality of flexible flat plates having securing portions secured to different parts of said port member and converging from the respective secured points toward the port and toward each other and having overlapping portions adjacent said port.

1,810,499. TRANSFORMER WINDING WIRE. JOHAN ROMP, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 31, 1929, Serial No. 403,915, and in the Netherlands Dec. 4, 1928. 6 Claims. (Cl. 175—356.)

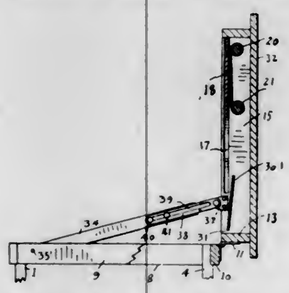
1. A high frequency transformer in which the wire of at least one of the windings consists of a metallic core of great tensile strength and low corrosion resistance surrounded by a metallic sheath which is highly resistant to corrosion.

1,810,500. WRINGER. ERNEST J. SCHUDA, Erie, Pa., assignor to Lovell Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed May 31, 1930. Serial No. 458,575. 2 Claims. (Cl. 68—32.)



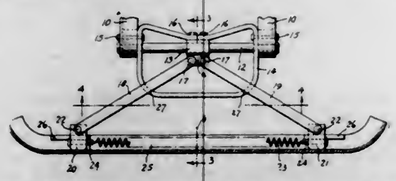
1. In a wringer, the combination of a side stile of box form having inturned lips along its inner face with a roll shaft receiving slot between the lips, said lips having guard plate ear-receiving notches; and a guard plate secured to the stile having ears extending into said notches and headed over on the inside of the stile.

1,810,501. BLACKBOARD STAND AND WORK CASE. WILLIAM F. SPENCER, Muncie, Ind. Filed Feb. 18, 1929. Serial No. 340,774. 6 Claims. (Cl. 45—69.)



1. A blackboard stand and work case, comprising a support frame, a case hingedly connected to one side of said support frame and adapted to rest thereon, a blackboard disposed within said support frame and hingedly connected to the side thereof which is opposite to the hinge connection of the case, and connections between the case and the blackboard, operable when the case is swung to upright position, to raise the blackboard to inclined position, and to retain the case and the blackboard in their said upright and inclined positions respectively.

1,810,502. AUTOMOBILE BUMPER. ADOLPH A. THOMAS, New York, N. Y. Filed June 19, 1930. Serial No. 462,162. 15 Claims. (Cl. 293—55.)



1. An automobile bumper structure comprising a bumper bar, a pair of blocks slidably connected to said bar, an elastic element connected to said blocks and free to expand when the blocks are moved apart, and means for so supporting said blocks that they are forced apart when the bumper bar strikes an obstruction, the normal length of said elastic element being at least one-half the length of said bar.

1,810,503. FLOATING REAMER HOLDER. GEORGE H. THOMAS, Erie, Pa., assignor to American Sterilizer Company, Erie, Pa., a Corporation of Pennsylvania. Filed Oct. 4, 1926, Serial No. 139,448. Renewed Apr. 24, 1929. 7 Claims. (Cl. 279—16.)



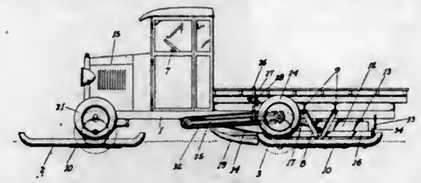
1. A tool holder comprising a shank member; an intermediate member; a socket member; transverse shoulders forming a transversely sliding driving connection between the shank member and the intermediate member; and transverse shoulders forming a transversely sliding driving connection between the intermediate member and the socket member, said shoulders being alternately arranged, said shank member, intermediate member, and socket member having centrally engaging thrust surfaces, said surfaces gradually receding from each other from the center out and maintaining an approximately central thrust relation through the intermediate member.

1,810,504. MANUFACTURE OF ARTICLES FROM AQUEOUS DISPERSIONS OF RUBBER AND SIMILAR VEGETABLE RESINS OR COMPOUNDS THEREOF. GEORGE GRAHAM THORNTON, Erdington, Birmingham, England, assignor to American Anode, Inc., Akron, Ohio, a Corporation of Delaware. Filed Mar. 22, 1928, Serial No. 263,980, and in Great Britain Mar. 29, 1927. Renewed Dec. 10, 1930. 5 Claims. (Cl. 18—58.)

1. The method of producing irregular markings on the surface of rubber articles which comprises forming a rubber deposit from an aqueous dispersion of rubber, drying the deposit, confining the dried deposit between suitably shaped plates, and immersing the deposit together with the plates in a heated liquid.

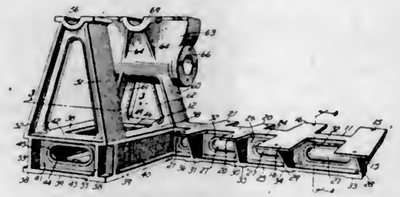
1,810,505. POWER DRIVEN SNOW VEHICLE. EMMITT M. TUCKER, Medford, Oreg. Filed Mar. 26, 1928. Serial No. 264,720. 2 Claims. (Cl. 180—8.)

2. A snow vehicle including a frame, runners for supporting the frame from the snow mounted in fixedly spaced relation thereto, rear wheels vertically adjustable relative to the frame for supporting the rear end of the same from the ground, front wheels for supporting the front end of the frame from the ground, transversely extending axle members on the outer ends of which the front wheels are mounted, pivotal supporting connections



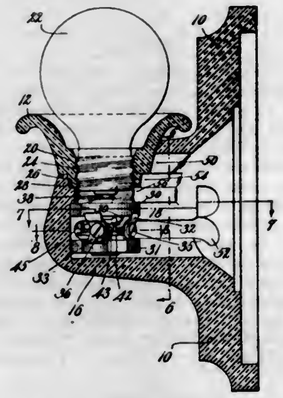
for the adjacent ends of the axles to permit the same to swing in a vertical plane transversely of the vehicle, and detachable link means for holding said axle members rigid with each other when fully raised or lowered.

1,810,506. BASE FRAME FOR ELEVATOR MACHINES. FREDERICK E. TURNER, Kansas City, Mo. Filed Oct. 30, 1926. Serial No. 145,217. 10 Claims. (Cl. 248—14.)



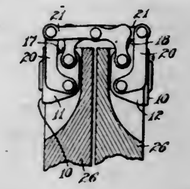
1. In combination with spaced beams, a base frame comprising a longitudinal body member supported wholly by one of the beams and having an integral, outriding, lateral extension at one end of the body member supported at its free end on the other beam.

1,810,507. ELECTRIC LIGHT FIXTURE. HENRY K. WACK, New Bedford, Mass., assignor to John I. Paulding, Inc., New Bedford, Mass., a Corporation of Massachusetts. Filed May 16, 1929. Serial No. 363,417. 12 Claims. (Cl. 240—73.)



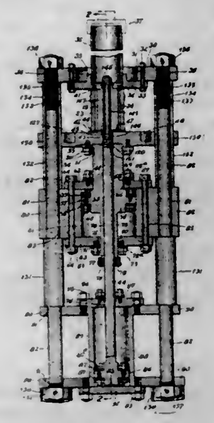
12. A wall fixture comprising a hollow wall member having a single lateral opening in its front face, a lamp socket comprising switch and shell portions mounted inside said hollow member with its shell portion in said lateral opening, the interior of said member being so formed as to require said socket to be inserted sidewise therein from the inner face thereof and to lock said socket against withdrawal through said lateral opening and an annular member threaded on said shell member for locking said socket in lamp receiving position.

1,810,508. HINGE. FREDERICK B. WALTER, Wabash, Ind., assignor to B. Walter & Company, Inc., Wabash, Ind., a Corporation of Indiana. Filed July 30, 1928. Serial No. 296,351. 3 Claims. (Cl. 16—163.)



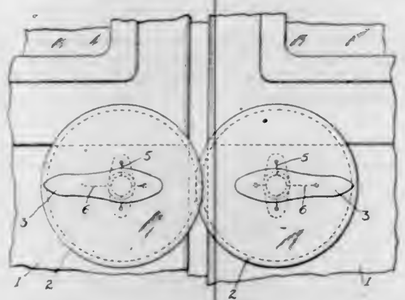
1. A hinge comprising two reversely arranged sheet metal strips of equal length, the ends of which are upturned and perforated, the metal around the perforations of only one upturned portion of each strip being extended laterally of the portion, two pairs of levers pivotally associated with the adjacent upturned portion at the perforations thereof and pivotally connected with companion levers, said levers having thickness substantially equal to said lateral extensions, the intermediate portions of each of said strips being provided with two perforations for the reception of fastening means, said perforations being symmetrically arranged relatively to the intermediate portion of the strip.

1,810,509. APPARATUS FOR MAKING CASTINGS. JAMES H. WILLIAMS, Providence, R. I., assignor to Detroit and Security Trust Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 11, 1929. Serial No. 391,783. 7 Claims. (Cl. 22—93.)



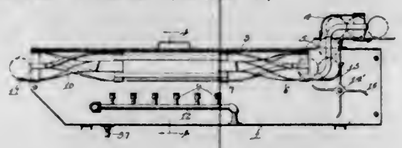
1. In an apparatus of the class referred to, means for supporting a casting and a metal mold section embraced by the walls of the said casting, said means comprising a pair of abutments spaced from each other to receive between them the casting and mold section and one of said abutments being movable toward and from the other; in combination with means for subjecting the joint between the mold section and casting to liquid under pressure so as to separate them, said last mentioned means comprising a passageway located in one of the said abutments and connected to a supply of liquid under pressure.

1,810,510. AUTOMOBILE DOOR PROTECTOR. LANSING F. WINNE, Nyack, N. Y. Filed July 24, 1929. Serial No. 380,494. 2 Claims. (Cl. 296—44.)



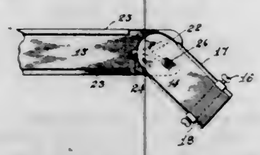
1. A motor car door protector comprising a felt pad and an ornamental cover stitched together around the margins thereof and provided with a centrally located circular opening, and slotted at intervals to provide flexible segmental portions adapted to conform to various sizes and shapes of door handle hubs.

1,810,511. CAN WASHING DEVICE. JOSEPH WOLFINGER, Dundas, Wis. Filed Oct. 7, 1929. Serial No. 397,933. 3 Claims. (Cl. 141—7.)



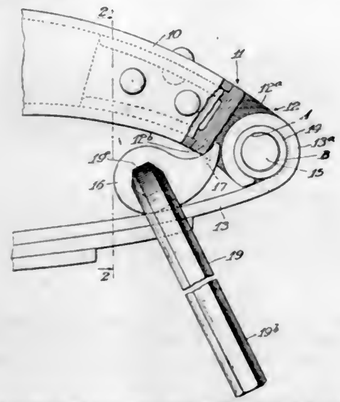
1. In a can washing device, an elongated housing, a guide extending into the housing at one end for receiving the cans in a horizontal position, a central rectangular guide with a spiral guide connecting the first guide and the central guide whereby to move the cans from a horizontal to an upended position, means for injecting fluid into the upended cans as they pass through the central guide, a feeding device including a rotor having radially disposed arms movable in the path of the cans in the first guide for engaging said cans and forcing them through the spiral guide and into the central guide, and means for simultaneously imparting movement to the rotor for moving the cans through the guides and turning on the fluid supply for cleansing the cans as they pass through the central guide.

1,810,512. CHUTE. GEORGE J. WORST, Philadelphia, Pa. Filed Nov. 26, 1929. Serial No. 409,795. 3 Claims. (Cl. 193—3.)



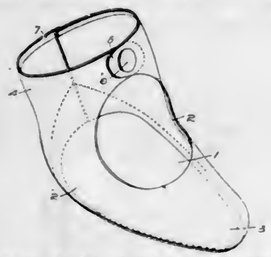
1. A chute comprising two sections one of which has divergent slots, pivotal connection for the sections employing said slot as a guide, rigid sidewalls on said sections, the sidewalls of one section being overlapped to form U-shaped slots, and resilient sidewalls extending out from the ends of the sidewalls of the other section and adapted to extend into the U-shaped slots of the first section.

1,810,513. SHACKLE JIMMY. HERMAN W. ZIMMERMAN, Chicago, Ill., assignor to Automotive Maintenance Machinery Co., Chicago, Ill., a Corporation of Illinois. Filed June 21, 1928. Serial No. 287,337. 4 Claims. (Cl. 29—87.1.)



4. In a device of the character described, a body including an opening and a curved peripheral surface and having a hook-shaped tongue projecting therefrom, said body being shaped to seat and rock upon one of the parts to be adjusted, and said tongue being adapted to non-slip engage the other of the parts to be adjusted and an adjustable handle detachably mounted in said opening and arranged to effect a rotary-rock movement of said body.

1,810,514. UNIVERSAL SANDAL FOR FOOTWEAR. WALTER J. BENNETT, Hudson, Mass. Filed June 29, 1929. Serial No. 374,801. 1 Claim. (Cl. 36—6.)

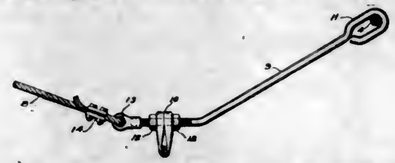


An all elastic sandal of the class described comprising two marginally secured blanks, one constituting a fore-sole member, and the second comprising a toe cap, shoe upper embracing side walls, an instep embracing body portion and elastic strap portions forming extensions of the side walls and instep embracing body, said second blank being intrajoined by a lap-seam at the under side of its instep embracing body portion, and said first blank being joined to said intra-lapped second blank by a continuous lap-seam thereof of greater overlap at the underside of said instep embracing body portion than around said shoe upper embracing side walls, said overlap at the underside of said instep embracing body portion being greatest at said intra-joined lap-seam, thus strengthening said sandal with assembly-produced reinforcing areas marginally of the sole and at the underside of the instep embracing portion thereof.

1,810,515. TROLLEY SYSTEM. LELAND W. BIRCH, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Nov. 14, 1929. Serial No. 407,141. 12 Claims. (Cl. 191—41.)

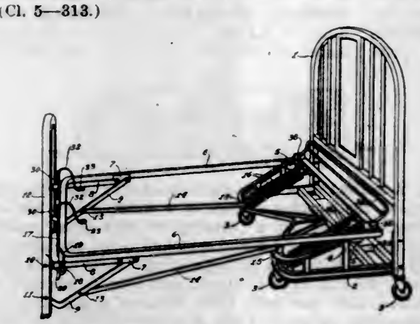
1. An overhead system comprising a pair of spaced upright poles, arms projecting from each pole, insulators

mounted upon the arms adjacent their ends, a messenger cable suspended between the insulators and continuing therebeyond and supported by the said insulators in a catenary curve and positioned in a vertical plane, a back-bone cable extending between the poles and assuming a curved condition positioned in an oblique plane to the said vertical plane, a trolley wire positioned in a horizontal



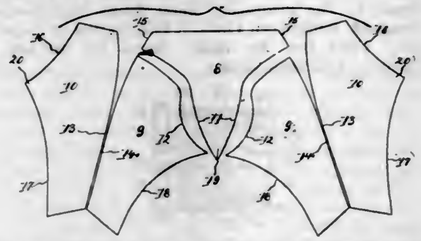
plane and curved in the direction of the poles, spaced pull-off wires extending between the trolley wire and back-bone cable and maintaining the curvature in the back-bone cable and the trolley wire and a rigid arm having one end rigidly secured to the trolley wire at the points of connection of the pull-off wires and having its other end supported by the messenger cable without bringing a sidewise thrust upon the messenger cable.

1,810,516. FOLDING BED. WILLIAM J. DUVALL, St. Louis, Mo., assignor to Smith & Davis Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 6, 1928. Serial No. 297,647. 1 Claim. (Cl. 5—313.)



In a folding bed, a sub-frame, a bed frame, pivotally mounted on the sub-frame, a foot frame, a link connecting said foot frame to said bed frame, a latch on the link disposed to engage said bed frame, and maintain said foot frame in extended position, a second link connecting said bed frame and foot frame, said links cooperating to guide and brace the foot frame in its movements, and an operating member connecting said second link to said sub-frame.

1,810,517. METHOD OF CONSTRUCTING LEG COVERING GARMENTS. JACOB FINK, deceased, St. Paul, Minn., by Rose J. Fink, administratrix, St. Paul, Minn. Filed Nov. 6, 1929. Serial No. 405,107. 7 Claims. (Cl. 2—224.)

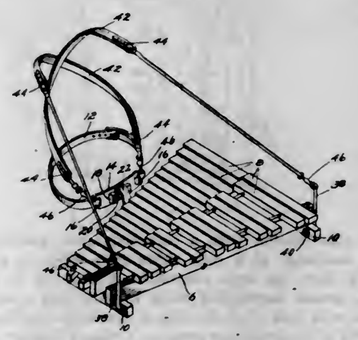


1. The method of constructing a leg covering garment, having leg covering and seat members, which comprises, laying out the pattern for the rear part of one of the leg members, said pattern having edges representing the waistline and center line of the back of the garment, laying out on the surface of the pattern so formed and extending along said said center line a pattern for a seat piece, the latter pattern having its lower end formed by a line extending obliquely upward from said center line, allowing material to project above the waistline for the upper part of the seat piece, forming a seat piece and a leg covering member from said patterns and moving said seat piece downward from its corresponding position in the pattern relative to said first mentioned pattern and joining the edges of the seat piece and leg member together in their new relative positions.

1,810,518. PROCESS OF MAKING LIQUID MALTED MILK. WILLIAM O. FROHRING, Cleveland, Ohio, assignor, by mesne assignments, to The Telling Belle Vernon Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 16, 1925. Serial No. 56,742. 2 Claims. (Cl. 99—11.)

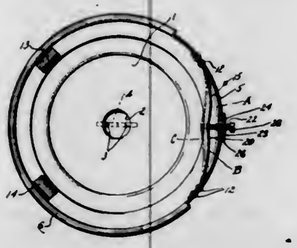
1. The process of making a non-perishable and palatable liquid malted milk, consisting in boiling a mixture of flour and water to swell the starch, adding an enzyme, heating until the starch is malted, condensing the malted flour solution to more concentrated liquid form, both the heating and condensing steps being performed at a temperature below boiling to avoid imparting a cooked flavor to the liquid material, adding milk, homogenizing the liquid mixture, hermetically sealing the mixture while still in liquid form in containers, and heating said containers and the liquid mixture therein to a temperature above boiling to sterilize the product and kill the enzyme, thereby producing a permanent, non-perishable liquid product having no cooked flavor and ready for immediate service upon opening the container.

1,810,519. COMBINED XYLOPHONE AND CARRYING APPARATUS. THOMAS R. GERHART, Lawrence, Kans. Filed Nov. 21, 1929. Serial No. 408,792. 3 Claims. (Cl. 84—327.)



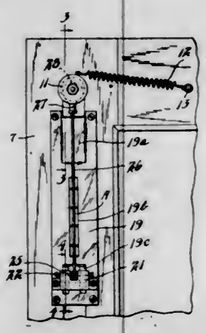
1. In a device of the character described, a xylophone frame, a body encircling belt, a plate carried by said belt, a bracket projecting from one side of said frame to join said plate, adjusting mechanism for the bracket for selectively maintaining said frame and plate in varying spaced relation, a pair of shoulder straps connecting the plate and xylophone frame and length adjusting devices for said shoulder straps, said straps being coupled to said xylophone frame at the side opposite from said projecting bracket, said releasable means for the bracket including a flanged channel secured to said frame and slidably supporting said bracket, a series of holes formed in said channel and a plunger carried by the bracket to selectively engage the said holes.

1,810,520. SHADE HOLDER. GEORGE E. GLATTHAR and FREDERICK WENING, Cleveland, Ohio, assignors to The Art Metal Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 29, 1930. Serial No. 478,574. 8 Claims. (Cl. 240—132.)



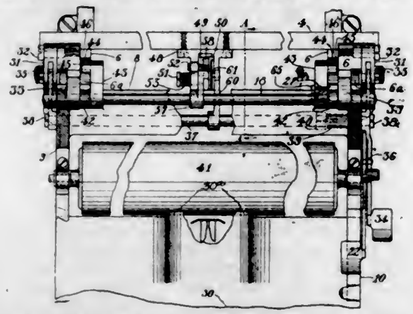
1. A shade or globe holder, comprising a canopy provided within the bottom portion thereof with a pair of opposed shade or globe supporting members adapted for supporting engagement with the rim or neck of the shade or globe, one of said members comprising a strip of flexibly resilient metal having its ends secured to the canopy bottom portion and also comprising an adjusting screw carried by said canopy bottom portion and having its inner end engaging the middle portion of said strip, so that by adjusting said screw, the middle portion of said strip is moved inwardly and outwardly to and from various shade or globe supporting positions.

1,810,521. COIN DETECTOR FOR COIN CONTROLLED MACHINES. OTTO R. HERMANEK, Minneapolis, Minn. Filed Mar. 28, 1930. Serial No. 439,670. 1 Claim. (Cl. 194—98.)



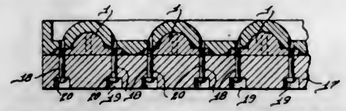
The combination with a coin controlled mechanism of a slot machine, of a coin chute into which a coin discharged from the coin controlled mechanism is adapted to fall, means permitting coins in said coin chute to be viewed, said coin chute having a discharge portion below the level of its receiving portion, a tipper member pivoted adjacent the discharge portion of the coin chute, said tipper member having a pair of spaced forked arms, the forked ends of which may be carried into said coin chute, resilient means normally holding the forked ends of one of said arms into said chute to support a plurality of coins therein with the forked ends of the other of said arms out of said chute, a cam adapted to be rocked when said coin controlled mechanism is operated, a rod connected at one end to said tipper member, a loop connected to the other end of said rod and within which said cam fits, said rod being adapted to tip said tipper member as said cam is rocked to carry the forked ends of the arm normally in said chute out of said chute and to carry the forked ends of the arm normally out of said chute into said chute.

1,810,522. TYPEWRITING MACHINE. FREDERIC W. HILLARD, Prince Bay, Staten Island, N. Y., assignor to Mary R. Hillard, Middlebury, Conn. Filed Mar. 14, 1929. Serial No. 346,898. 19 Claims. (Cl. 197—60.)



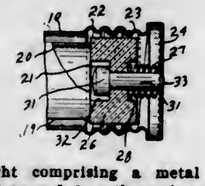
1. In a visible writing front strike typewriter the combination of an endwise movable truck, a platen carriage mounted forwardly of the truck and operatively connected therewith, means for mounting the carriage for movement out of the work field toward the truck and means for mounting the carriage to lift it to an elevated position on the truck at the end of said movement toward the truck.

1,810,523. METHOD OF MAKING MULTIPLE CORE BOXES. JOHN H. LAUKEL, Detroit, Mich. Filed Apr. 2, 1930. Serial No. 441,125. 4 Claims. (Cl. 204—6.)



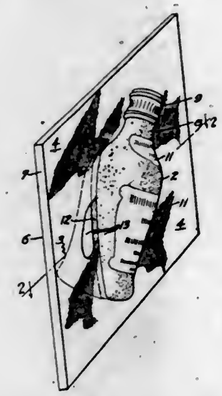
4. A method of preparing a cathode for the electro deposition of the working surface of a multiple core box consisting of laying out a plurality of split cores, molding a pattern of a core drier over said split cores, casting a core drier from said pattern, fitting said split cores in said drier, locating the counterparts of said split cores in matched registration upon said split cores, forming a cast over said counterparts, laying said cast with the counterparts therein upon a slab, securing said counterparts upon said slab in the position maintained by said cast, with the parting faces engaging said slab, removing said cast, and preparing said counterparts and slab for immersion in a plating bath for electro deposition on said counterparts, laying the core drier with the first named split cores therein upon another slab, and similarly securing said split cores upon said slab, removing the drier from said split cores, and preparing the slab and split cores for immersion in a plating bath and for electro deposition upon said split cores.

1,810,524. FLASH LIGHT. ANKER S. LYHNE, Bridgeport, Conn.; The Bridgeport-City Trust Co., Bridgeport, Conn., executor of said Anker S. Lyhne, deceased, assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Oct. 30, 1929. Serial No. 403,436. 7 Claims. (Cl. 240—10.68.)



7. A flashlight comprising a metal casing, a lamp mounted in and grounded on the casing at one end, a battery in the casing and having one pole electrically connected with the lamp, a metal cap threaded on the other end of the casing, a contact carried by the cap and adapted to engage the other pole of the battery, an insulating block slidable on said contact toward and from the cap and engaging the end of the battery, said block having a recess in each of its ends, a spring extending into one of said recesses and tending to force the block away from the cap and against the battery, and said contact carried by the cap having an enlarged portion entering the other recess in the block.

1,810,525. ADVERTISING DEVICE. FOSTER MARTIN, Hayward, Calif., assignor to California Conserving Company, Incorporated, San Francisco, Calif., a Corporation of Nevada. Filed Aug. 13, 1929. Serial No. 385,541. 6 Claims. (Cl. 40—126.)



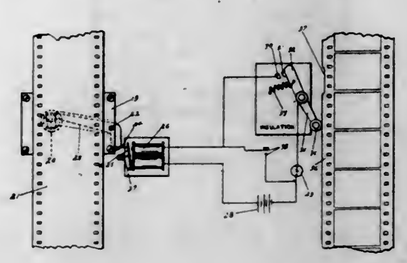
1. An advertising device comprising a transparent support, and portions of an article secured to the said support to simulate the appearance of the entire article projecting therethrough.

1,810,526. PROCESS FOR MAKING GLASS SIGNS. CARL J. OLSON, Minneapolis, Minn. Filed Apr. 16, 1930. Serial No. 444,701. 2 Claims. (Cl. 41—29.)



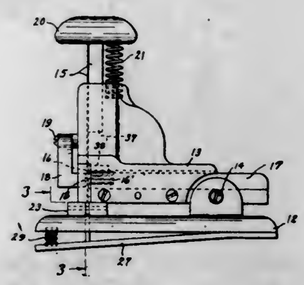
1. The process of making a shaded metal leaf design glass sign, which consists in applying metal foil to the back of the glass upon which the sign is to appear, cutting the outlines of both the shaded and unshaded portions of the design to be reproduced in metal leaf through the metal foil to the glass, removing, from the glass, strips of metal foil which cover portions of the glass to be filled in by the shaded portions of the metal leaf design, processing the glass in the spaces left therein by withdrawal of said strips to produce the desired shading effect when metal foil is applied over said open portions of the glass, removing, from the glass, strips of the metal foil covering those portions of the glass that are adapted to be filled in by the unshaded portions of the metal leaf, filling in the open portions of the glass produced by removal of said first mentioned and second mentioned metal foil strips with metal leaf and then removing the metal foil about the metal leaf design.

1,810,527. SOUND SHUTTER. FREEMAN H. OWENS, New York, N. Y. Filed Feb. 8, 1927. Serial No. 165,632. 9 Claims. (Cl. 179—100.3.)



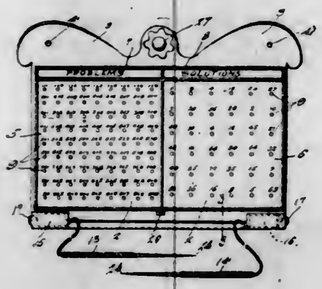
1. In combination, a source of light, a film strip having a sound record thereon in the path of said light for varying the intensity of said light passing from said film in accordance with the sound record, an optical slit through which said light passes to said film, a splice connecting one film strip to a continuing film strip, one of said film strips being notched in advance of said splice, and shutter means operative by said notched film strip for interrupting the passage of said light to said film when said splice passes said optical slit.

1,810,528. STAPLING MACHINE. ROY E. PETERSON, East Norwalk, Conn., assignor to The E. H. Hotchkiss Company, Norwalk, Conn., a Corporation of Connecticut. Filed June 12, 1929. Serial No. 370,341. 9 Claims. (Cl. 1—8.)



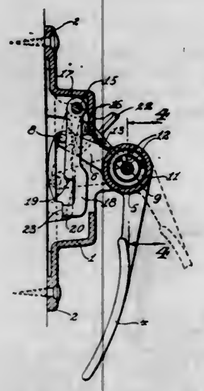
1. In a stapling machine, a base, a housing pivoted to the base, a reciprocable plunger carried by the housing, an anvil carried by the base and slidable to force the free end of a staple toward the under side of the articles to be stapled, means below the base on which the base rests and movable toward the base, means carried by the latter means to slide said anvil laterally on depression of the plunger and spring means to normally hold the base above the carrier for the anvil operating means.

1,810,529. ELECTRIC APPARATUS FOR TEACHING MATHEMATICS. KIRK RICE, Oklahoma City, Okla., assignor to H. F. Allen, Oklahoma City, Okla. Filed Jan. 24, 1930. Serial No. 422,996. 2 Claims. (Cl. 35—12.)



1. A question and answer device characterized by a board having question and corresponding answer contacts electrically connected in circuit with a pair of pointers, a source of electric energy and signal means; said contacts comprising a shallow cup adapted to receive the tips of said pointers.

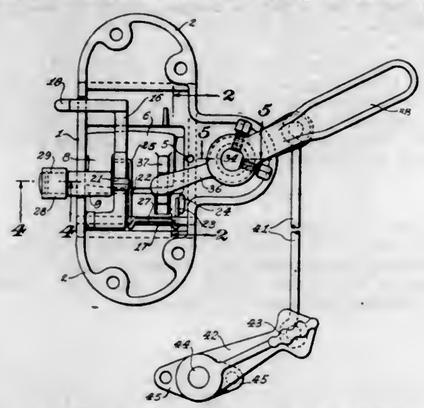
1,810,530. REFRIGERATOR LATCH. ADOLPH RUBIN, St. Louis, Mo. Filed Jan. 21, 1929. Serial No. 333,764. 9 Claims. (Cl. 292—332.)



1. A refrigerator door latch comprising, a base, a handle pivotally mounted on said base for rotation in a plane transverse of the door, a bolt integral with said handle adapted to cooperate with a keeper, a spring to actuate the bolt, and a trigger adapted to engage the bolt and hold it in an inoperative position after it has been disengaged from the keeper.

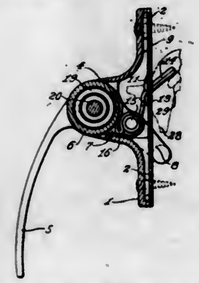
1,810,531. REFRIGERATOR LATCH. ADOLPH RUBIN, St. Louis, Mo. Filed Jan. 21, 1929. Serial No. 333,765. 8 Claims. (Cl. 292—332.)

1. A refrigerator door latch comprising a casing having attached flanges, a handle and bolt pivotally mounted on said casing about the same axis for rotation in a plane transverse of the door, a spring to actuate such



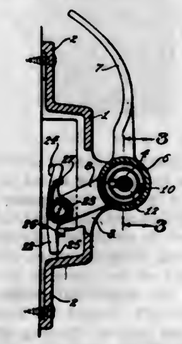
latching member, a trigger adapted to engage and hold the latching member in inoperative position while the door is open, and a spring to actuate said trigger.

1,810,532. REFRIGERATOR LATCH. ADOLPH RUBIN, St. Louis, Mo. Filed Sept. 28, 1929. Serial No. 395,891. 10 Claims. (Cl. 292—336.)



1. A latch for refrigerator doors including a latching element having a bolt to engage a keeper, a trigger pivotally mounted on and supporter by said latching element and adapted to retain the bolt in withdrawn position when the door is open and a spring to actuate the trigger.

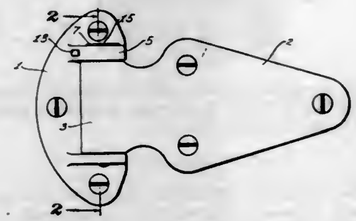
1,810,533. REFRIGERATOR LATCH. ADOLPH RUBIN, St. Louis, Mo. Filed Sept. 28, 1929. Serial No. 395,892. 3 Claims. (Cl. 292—336.)



1. A refrigerator door latch including a casing having attaching flanges, a bolt adapted to cooperate with a

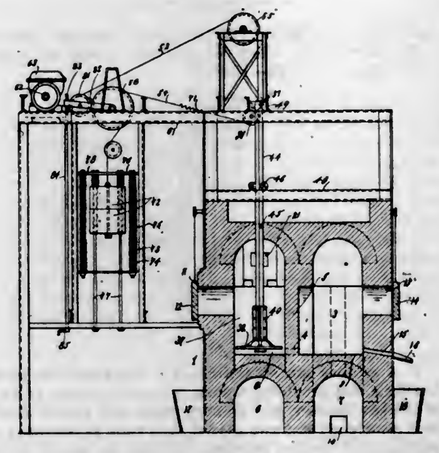
keeper and a trigger pivotally mounted on said bolt, said trigger comprising a lever of the first class, a projection from one end of said lever adapted to strike the keeper to release the trigger, the other end of said lever having a surface adapted to engage a shoulder on the casing to retain the bolt in withdrawn position when the door is open.

1,810,534. SPRING HINGE. ADOLPH RUBIN, St. Louis, Mo. Filed Sept. 30, 1929. Serial No. 396,318. 2 Claims. (Cl. 16—180.)



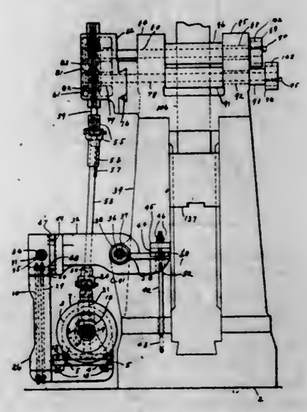
1. A spring hinge comprising, a butt having upstanding lugs, a leaf having a sleeve positioned between said lugs, a hinge pin through said sleeve and said lugs secured to one of said lugs, a spring within said sleeve and about said hinge pin having one end attached to said pin and the other end attached to said sleeve; said hinge pin having a cylindrical head with a hole in the periphery of said head adapted to register with a hole in one of said lugs radial to said hinge pin and to accommodate a key pin, a longitudinal slot in the head adapted to secure one end of the spring, and a shoulder on the lower end of the pin to abut a ring integral with and at one end of the sleeve; the spring being attached to the sleeve by having its end inserted in an orifice in the said ring.

1,810,535. METHOD OF REWORKING FINELY DIVIDED METAL PARTICLES. JOHN SCHMELLER, Sr., Lakewood, Ohio, assignor to Schmeller Holding Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Apr. 3, 1926, Serial No. 99,482. Divided and this application filed Feb. 8, 1928. Serial No. 252,738. 19 Claims. (Cl. 75—58.)



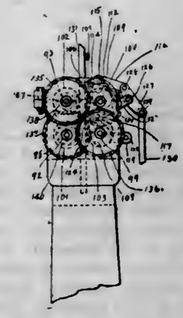
1. In a method of melting and refining metal, the steps which consist in applying heat to bring the metal to a molten condition, and thereafter maintaining the molten condition of said metal and refining and deoxidising the same by puddling the molten material from a position above the level thereof downwardly in a substantially vertical direction and setting up a plurality of substantially vertical current streams of molten metal to interact upon each other.

1,810,536. DROP HAMMER. JOHN NIVER SCISM, Hartford, Conn. Filed July 14, 1923. Serial No. 651,602. 4 Claims. (Cl. 248—16.)



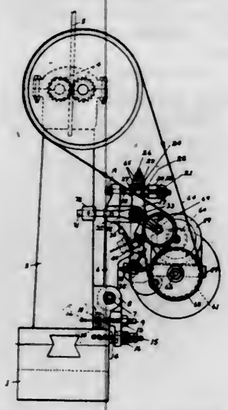
1. A motor support comprising a supporting frame, lever arms pivotally mounted in said frame, cushioning means interposed between said arms and said frame, a motor supporting platform, supporting arms pivotally connecting said platform with the lever arms in said frame, and cushioning means interposed between said platform and supporting arms.

1,810,537. DROP HAMMER. JOHN NIVER SCISM, Hartford, Conn. Filed Oct. 5, 1923, Serial No. 666,730. Renewed Nov. 20, 1930. 8 Claims. (Cl. 78—29.)



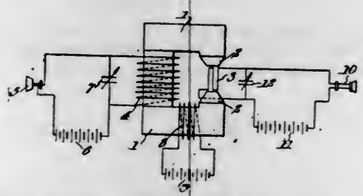
1. A drop hammer comprising a board, a pair of upper rolls, a pair of lower rolls, the front upper roll and the rear lower roll being mutually geared and the lower front roll and the upper rear roll being mutually geared, and eccentrically mounted shafts connected with both of the front rolls and so arranged that the centers of the front rolls are movable simultaneously and arcuately in opposite directions to engage and disengage the board and to maintain proper engagement of the gear teeth.

1,810,538. MOTOR MOUNTING. JOHN N. SCISM, Wilkinsburg, Pa. Filed June 14, 1928. Serial No. 285,808. 15 Claims. (Cl. 248—16.)



1. The combination of a drop hammer and a motor mounting therefor comprising a lever having a vertical component of extent pivoted to the drop hammer housing intermediate its length, stop means yieldingly interengaging said housing and the portion of said lever extending below the pivot point of said lever and arranged to definitely limit movement of rotation of the lever in either direction, and a motor platform suspended by pivotal connections from said lever arm upwardly of the plane of mounting of said lever in said housing.

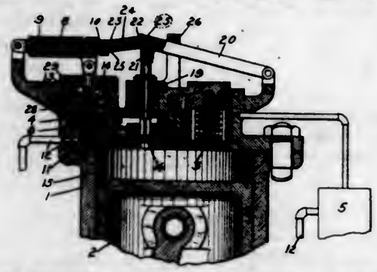
1,810,539. METHOD OF AND APPARATUS FOR AMPLIFYING WEAK ELECTRIC CURRENTS. BORIS N. SOKOLOFF, Rosendale, N. Y., assignor to Federal Telegraph Company, San Francisco, Calif., a Corporation of California. Filed Aug. 16, 1926. Serial No. 129,546. 10 Claims. (Cl. 179—171.)



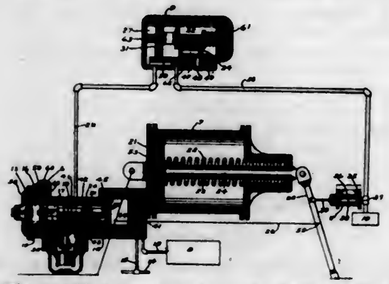
1. In an electric current amplifying device, a pair of pole members, a magnetic circuit including a constant flux extending between said pole members and including a variable resistance conductor disposed between said pole pieces and in alignment therewith, the longitudinally extending portions of said conductor being aligned with the direction of magnetic flux between said pole pieces, two electric circuits, means connected in one electric circuit to produce changes in the magnetic circuit, said variable resistance conductor being included in the second electric circuit, whereby current changes in the first circuit are translated into magnetic changes in the magnetic circuit and into amplified current changes in the second circuit.

1,810,540. VALVE CONTROLLING DEVICE. FRANK B. THOMAS, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 21, 1927. Serial No. 241,652. 24 Claims. (Cl. 230—30.)

1. The combination with a fluid pressure controlling valve, of a pressure sensitive element, a member operated by said pressure sensitive element, a member operative to control the operation of said valve, and means pivotally engaging both of said members adapted, upon a predetermined movement of the first mentioned member in one direction to cause the second mentioned member to operate in the opposite direction.

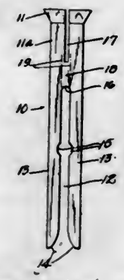


1,810,541. BRAKE RELEASE DEVICE. THOMAS H. THOMAS, deceased, Edgewood, Pa., by Mable M. Thomas, executrix, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Aug. 10, 1929. Serial No. 384,826. 8 Claims. (Cl. 303—68.)



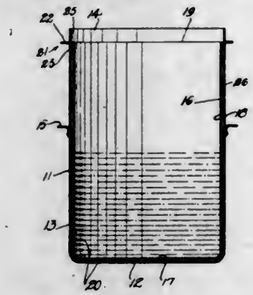
1. The combination with a triple valve device having a quick service bulb, a brake lever and a brake cylinder controlled by said triple valve device and adapted to operate said lever only in one direction, of means actuated by fluid pressure from said quick service bulb for operating said lever in the opposite direction.

1,810,542. SAFETY CLOTHESPIN. GEROME TRUPIANO, Brooklyn, N. Y. Filed Oct. 4, 1930. Serial No. 486,324. 2 Claims. (Cl. 24—138.)



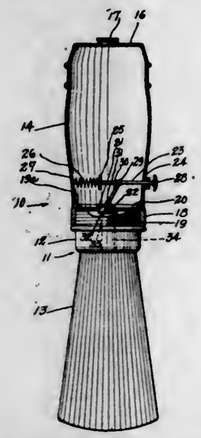
1. A clothes pin consisting of a one piece bar member having a slot providing a fork, a handle portion at an end of the bar member, and an open ended slot alined with the first mentioned slot and spaced therefrom to provide a connecting neck portion between the slots, the slot in the handle portion being narrower than the first mentioned slot and taking up compression created in the handle portion on springing the prongs of the fork apart.

1,810,543. PROTECTIVE STRAINER AND COOKING POT. GEROME TRUPIANO, Brooklyn, N. Y. Filed Oct. 4, 1930. Serial No. 486,325. 3 Claims. (Cl. 53—1.)



1. A device including a pot having recesses in the rim portion thereof, and a removable strainer in the pot having handle means secured thereto, said handle means extending laterally through said recesses to the outside of the pot for removal of the strainer from the pot.

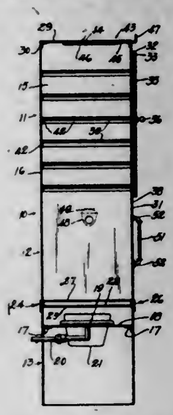
1,810,544. FOUNTAIN SHAVING BRUSH. GEROME TRUPIANO, Brooklyn, N. Y. Filed Oct. 4, 1930. Serial No. 486,326. 2 Claims. (Cl. 15—138.)



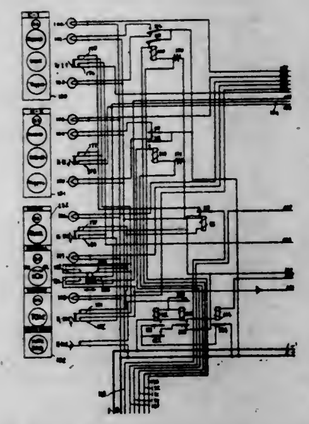
1. A fountain shaving brush, including a brush head, a reservoir detachably connected thereto, said reservoir and the brush head having communicating openings for supplying a lathering material to the bristles of the brush, a valve for said opening coaxial with the reservoir, a bar mounted in the reservoir for endwise movement transversely to the axis of the valve, a coil spring alined with said bar and acting between the same and the wall of the reservoir, said bar having a portion extending outside of the reservoir and a finger piece on said end portion, and a link connecting the valve and the bar at an acute angle with said valve axis, whereby the finger piece and the spring move said bar in opposite directions lengthwise of the bar for closing and opening the valve in the axial direction mentioned.

1,810,545. STERILIZER. GEROME TRUPIANO, Brooklyn, N. Y. Filed Oct. 4, 1930. Serial No. 486,327. 2 Claims. (Cl. 167—3.)

2. A sterilizer including an article containing cabinet and a water tank superimposed upon each other and having rear and side walls lying in the same upright planes, the rear side walls of the water tank and cabinet being respectively integral, the cabinet having a door constituting the front wall thereof, said door having closure coacting with the water tank, and heating means for said water tank, and a base enclosing said heating means and having walls lying in the planes of the walls of the water tank, the walls of said cabinet, water tank and base being made of sheet metal, and a strap extending around the joint between the water tank and the base and coacting to form a butt connection between the latter.



1,810,546. REMOTE SUPERVISORY CONTROL SYSTEM. THOMAS U. WHITE, Genoa, Ill., assignor to Leich Electric Co., Genoa, Ill., a Corporation of Illinois. Filed Jan. 28, 1927. Serial No. 164,247. 5 Claims. (Cl. 177—353.)



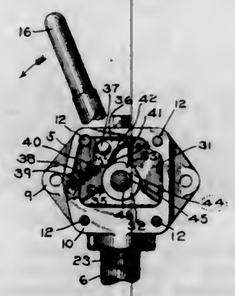
1. In a selective distant control and supervisory system, a means of presetting a plurality of control code sending operations, a code finder device to which said presetting means are connected in a definite order, means for indicating the position of said code finder device, a code transmitting device, and means including said pre-setting means operative to cause the transmission of said control code sending operations in an irregular order, and regardless of the order in which said control codes are preset on said control code sending device.

2. A distant control system for controlling a plurality of remote apparatus units from a station comprising means for selecting one of said units from said station and con-

necting it to a remote control device, indicating means becoming operative when the selection has been made for indicating at said station that a selection has been made and means operative from said station to indicate at said station the selection made and the position of the unit selected independently of said first named indicating means.

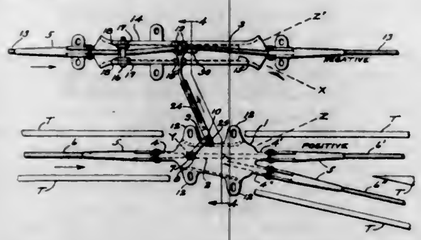
4. A distant control system for controlling a plurality of remote apparatus units from a single station including means for selecting any one of said units and connecting it to a remote control device, means for causing a change in the position of said selected unit by sending a code from said station, and means interrupting the sending of the code and sending a supervisory signal to said station when a change in position of any of said units occurs without releasing the unit selected from its remote control device.

1,810,547. BRAKE APPLICATION VALVE DEVICE. JOHN H. WOODS, Hamilton, Ontario, Canada, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 7, 1930. Serial No. 442,048. 16 Claims. (Cl. 303—51.)



1. The combination with a fluid pressure brake application valve device having a lap position and an application zone, of means operative automatically upon the operation of said device from lap position to the beginning of said zone for locking said device against operation from the beginning of said zone to lap position.

1,810,548. TROLLEY SWITCH. JEDEDIAH F. WOOLLEY, Jr., and LAWRENCE J. LONG, Salt Lake City, Utah. Filed Jan. 20, 1930. Serial No. 421,908. 21 Claims. (Cl. 191—38.)



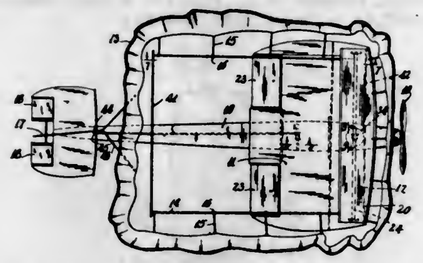
1. In an overhead system the combination of two overhead conductors of opposite polarity, a track and turnout having the same polarity as one of the overhead conductors, a switch in one of the overhead conductors corresponding to the track and turnout and having a pivotally mounted switching tongue, an operating mechanism positioned in the other overhead conductor and operable by a trolley head contacting therewith and moving in a predetermined direction and connecting means between the operating mechanism and the switch tongue to move the switch tongue to correspond to said predetermined direction.

1,810,549. AVIATOR'S HELMET. EDMUND T. ALLEN, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash. Filed Mar. 19, 1930. Serial No. 436,977. 3 Claims. (Cl. 179—156.)



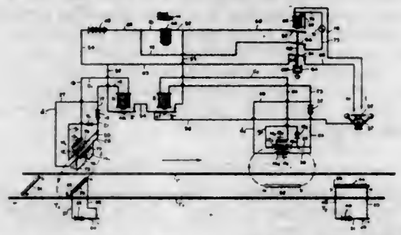
3. In a helmet, in combination with means to support telephone receivers therein, a telephone transmitter and a bail support therefor, the ends of which have circular holes, pivot bolts of a size to fill said holes, carried by said receiver supports thus providing a pivot for rotation of the bail thereabout, each pivot bolt being provided with a knurled head for fixing said transmitter support in any one of a plurality of adjusted positions against all except intentional movement.

1,810,550. AEROPLANE SAFETY LANDING DEVICE. ANDREW BOCHNAK, Bobtown, Pa. Filed Sept. 18, 1930. Serial No. 482,737. 11 Claims. (Cl. 244—21.)



1. In combination with an aeroplane having wings, a pocket on said wings and having its opening facing rearwards, means in said pocket for folding a parachute sail, a frame on said aeroplane and including side-forming elements extending from said pocket rearwards, a parachute sail with a plurality of support cords attached along its edges, rings on the free ends of said cords and slidably engaged on said side-forming elements, means for drawing said parachute from said pocket and into operative position, and means for clamping said rings in stationary positions along said side-forming elements for holding the parachute in the operative position.

1,810,551. TRAIN CONTROL SYSTEM. THEODORE BODDE, Niagara Falls, N. Y., assignor to The Regan Safety Devices Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 13, 1924. Serial No. 731,695. 19 Claims. (Cl. 246—63.)



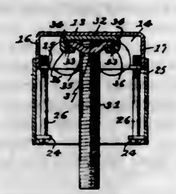
1. In combination, a vehicle control mechanism including a plurality of relays combinedly controlling vehicle

circuits, a plurality of electron discharge devices of which magnetic fields form controlling components one electron discharge device for each relay and roadside mechanism including a plurality of control means, one individual to each of the devices for influencing the same in the movement of the vehicle over the roadway.

1,810,552. SECONDARY BUTYL XANTHATES. LUDWIG J. CHRISTMANN, Jersey City, and DAVID W. JAYNE, Jr., Elizabeth, N. J., assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Apr. 14, 1930. Serial No. 444,345. 4 Claims. (Cl. 260—106.)

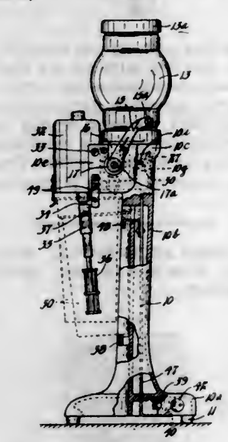
1. Alkali metal secondary-butyl xanthate.

1,810,553. OUTLET BOX FIXTURE SUPPORT. RUSSELL F. CLUNY, Stratford, Conn. Filed July 27, 1925. Serial No. 46,320. 4 Claims. (Cl. 247—20.)



4. The combination with an outlet box, a supporting member carried thereby and longitudinally movable in said box, and a fixture supporting nipple carried by said member and movable therethrough at an angle to the direction of movement of the member to contact with the box to secure said fixture in the desired adjusted position.

1,810,554. DRINK MIXING DEVICE. THEODORE M. COSTAKOS, Minneapolis, Minn. Filed Nov. 11, 1929, Serial No. 406,377. Renewed Nov. 20, 1930. 8 Claims. (Cl. 259—108.)

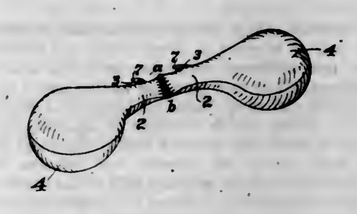


1. A drink making apparatus having in combination, a frame comprising a standard, a motor mounted on the upper end of said standard, said motor having a shaft projecting downwardly adjacent said frame carrying a mixing device, a catch depending from said motor, said frame having a surface opposite said catch and spaced therefrom so that the receptacle may be placed against said surface and held in place by said catch with said mixer disposed therein when the motor is not running.

1,810,555. LUBRICANT. MAURICE O. EDMISTON, St. Louis, Mo. Filed Mar. 30, 1927. Serial No. 179,716. 8 Claims. (Cl. 87—9.)

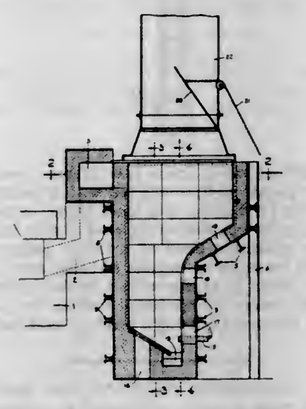
1. A liquid lubricant comprising a substantially water-free mixture of a major proportion of mineral oil and minor proportions of a fatty acid and an alkali metal hydroxide dissolved in glycerin, the hydroxide being in sufficient amount to neutralize the acid and the resultant neutral compound being dissolved in the mineral oil.

1,810,556. WATER WINGS. FRANK FENTON, Akron, Ohio, assignor, by mesne assignments, to The Miller Rubber Company Inc., Wilmington, Del., a Corporation of Delaware. Filed Sept. 5, 1929. Serial No. 390,546. 1 Claim. (Cl. 9—17.)



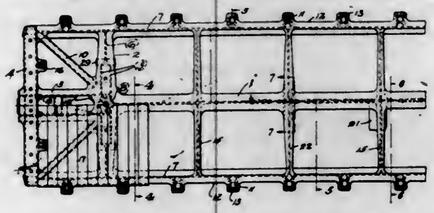
A device for assisting swimmers, said device comprising a pair of impervious inflatable rubber air chambers, and an inflatable pectoral yoke member integral therewith, said yoke member comprising non-communicating extensions of said air chambers joined by a die-cut seam.

1,810,557. CONDENSER AND METHOD OF OPERATING THE SAME. FRANCIS A. J. FITZGERALD, Niagara Falls, N. Y., and JAMES KELLEHER, Chippawa, Ontario, Canada, assignors to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Mar. 25, 1929. Serial No. 349,678. 15 Claims. (Cl. 75—28.)



1. A method of condensing zinc vapors which consists in conducting vaporized zinc to the top of a vertical condenser flue, forcing the vapor to move downward through the condenser, conducting a cooling medium upwards on two sides of the condenser through two independent cooling flues, maintaining the temperature of the condenser below the zinc condensation temperature, and collecting the zinc thus condensed.

1,810,558. RAILWAY VEHICLE UNDERFRAME. CHARLES F. FREDE, St. Louis, Mo., and EINAR G. HALLQUIST, Edwardsville, Ill., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Oct. 20, 1930. Serial No. 490,026. 20 Claims. (Cl. 105—416.)



1. A railway vehicle integral underframe including side sills, a pair of bolsters, a single center sill between said bolsters, and transoms connecting said sills intermediate said bolsters, all of said members having upper flanges in substantially the same plane for carrying a floor.

2. In a railway vehicle underframe, spaced bolsters, end sills, spaced draft sills between said bolsters and end sills, and a single center sill between said bolsters, diagonal struts from the ends of said end sills to the middle of the bolster, all of said parts forming an integral structure and having upper flanges in substantially the same horizontal plane.

1,810,559. COMBINED SAFETY RAZOR AND STROPPER. PATRICK FRIEL, New York, N. Y. Filed Jan. 9, 1931. Serial No. 507,627. 12 Claims. (Cl. 30—12.)



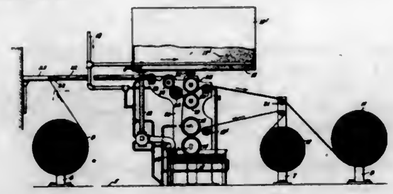
1. A combined safety razor and stropper, comprising a razor blade guard rigidly connected with a handle, a blade holder, means for holding said blade holder on said guard, a frame pivotally mounted on the ends of said blade guards and having elongated arms of a length sufficiently long to allow the frame to be capable of being swung over one edge of the guard to engage with a lateral portion of the handle or to assume an operative position over said blade holder, and means for holding a blade on said frame.

1,810,560. COMPOSITE PRODUCT AND METHOD OF MAKING THE SAME. BENJAMIN S. GARVEY, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Feb. 9, 1929. Serial No. 338,886. 16 Claims. (Cl. 91—68.)

1. The method of making a composite product which comprises halogenating a rubber surface, and applying a layer of halogenated rubber thereto.

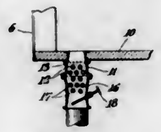
10. The method of making a composite product which comprises chlorinating a vulcanized soft rubber surface and applying thereto a solution comprising rubber chloride and o-nitro-diphenylether.

1,810,561. COMPOSITE SHEET FORMING MACHINE. HARRY GINSBERG, New York, N. Y., assignor, by mesne assignments, to National Container Corporation, Long Island City, N. Y., a Corporation of New York. Filed July 22, 1927. Serial No. 207,615. 2 Claims. (Cl. 154—37.)



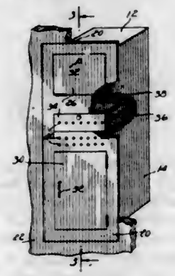
1. A sheet-forming machine, including means for uniting two strips of material, one of which comprises a fabric having longitudinally and transversely extending strands, and a pair of rollers arranged in advance of said uniting means and over the opposed peripheral areas of which said last-named strip passes in its travel towards said means, each of said rollers engaging and acting upon said strip to transversely stretch the same in its passage towards said uniting means, said rollers being arranged so that said strip traverses a substantial portion of the periphery of one of said rollers before it reaches the other and so that said strip traverses a substantial portion of the periphery of said other roller after it leaves the first roller.

1,810,562. ORE COOLING APPARATUS. HENRY J. HARTLEY, Hastings-on-Hudson, and FREDERICK B. SCHILLING, Flushing, N. Y., assignors to Nichols Copper Company, New York, N. Y., a Corporation of New York. Filed Dec. 2, 1929. Serial No. 410,970. 2 Claims. (Cl. 263—26.)



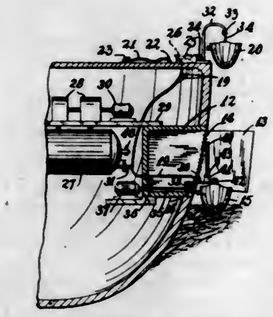
1. The combination with an ore roasting furnace comprising a hearth provided with an ore discharge orifice; of a cooling device secured below said orifice comprising a frame provided with outwardly flaring sides, cooling pipes supported in said sides, a second cooling device comprising a frame secured to said first mentioned frame and provided with sides converging inwardly from the ends of the frame, and a series of cooling pipes supported in said sides.

1,810,563. LAUNDRY RECEPTACLE. SAMUEL KATZMAN, Brooklyn, N. Y. Filed Apr. 14, 1927. Serial No. 183,642. 5 Claims. (Cl. 232—1.)



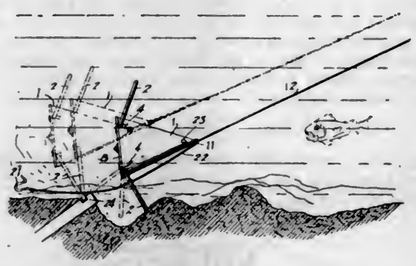
1. A laundry receptacle comprising a flat-sided container having an opening in the upper portion of its front wall for the deposit into said receptacle of large articles of laundry to be collected, a second opening in the lower portion of its front wall for the removal from said receptacle of said collected laundry, a drawer between said two openings for the deposit therein of small articles of laundry to be collected, and a baffle secured within the receptacle and extending from a point substantially above the forward end of said drawer thence rearwardly and downwardly to a point above the rear end of the drawer, said container from said upper opening past said baffle to said lower opening forming a continuously open passage of sufficient capacity to permit of the articles deposited into the receptacle through the upper opening falling to the bottom of the receptacle to be removed through the lower opening, and doors for controlling said openings mounted to be disposed in both the opened and closed positions thereof out of the path of travel through said passage.

1,810,564. SAFETY DEVICE FOR SHIPS. GEORGE KELEMEN, South Omaha, Nebr. Filed Dec. 19, 1930. Serial No. 503,369. 7 Claims. (Cl. 114—68.)



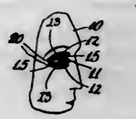
1. A safety device for sinking ships and the like, comprising a series of compartments along the side of a boat, an inflatable boat in each compartment, means for moving said boats from each compartment to the exterior, means for inflating said boats, and means for holding said inflated boats at various adjusted heights so as to hold the boats against the water line to support the sinking ship.

1,810,565. FISH LURE AND GRAPPLE. WILLIAM J. KENELY, Elizabeth, N. J. Filed Oct. 13, 1930. Serial No. 488,334. 4 Claims. (Cl. 43—4.)



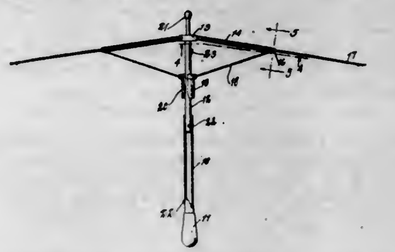
1. A device of the character described comprising a body having means at one end for attachment to a line, and a plurality of arms pivotally mounted on said body to swing in the direction of and opposite to that of the pull upon the line into a position substantially parallel with the axis of said body, and spring means for yieldingly resisting movement of said arms in the direction opposite to that of the pull upon the line.

1,810,566. ARTIFICIAL EYELASH. VICTOR KENBY, New York, N. Y. Filed Mar. 3, 1930. Serial No. 432,700. 4 Claims. (Cl. 46—40.)



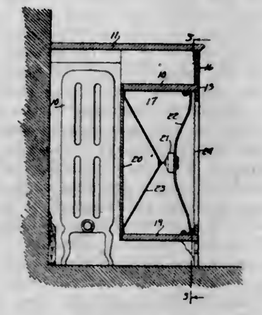
1. An eye lash member for dolls, comprising a rigid base member for supporting strands of hair simulating eye lashes and formed with a curved rear face for engaging flush against a doll's face and adapted to be supported upon said doll's face, and strands of hair attached on said base member, the opposite ends of said base member being parallel and formed with grooves to receive tongues from lugs projecting from a doll's face to accomplish the supporting.

1,810,567. FOLDING UMBRELLA. HUGO KRÜGER, Hoboken, N. J. Filed Sept. 27, 1927. Serial No. 222,312. 1 Claim. (Cl. 135—46.)



In a folding and collapsible umbrella, a hollow stick, a rod adapted to telescope into said stick, said stick having a bayonet slot formed near its upper end, and a spring controlled dog on said rod adapted to pass through the bayonet slot when the umbrella is folded and collapsed to prevent separation of the parts and another dog on said rod to engage said bayonet slot when the umbrella is opened to limit the outward movement of said rod.

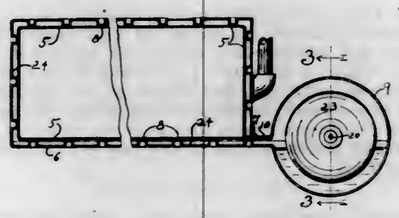
1,810,568. LOUD SPEAKER CABINET. OSCAR P. LIEBREICH, Jackson Heights, N. Y. Filed May 5, 1927. Serial No. 188,954. 2 Claims. (Cl. 312—7.)



1. A combined radiator cover and loud speaker cabinet having an open back comprising a frame work having a vertical longitudinally extending divider therein, the said divider terminating short of the top and bottom of said cabinet, horizontal partition members extending between the top and bottom edges of said divider and the front of said cabinet to form a compartment, the sides

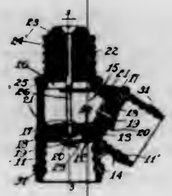
of said cabinet above and behind said compartment being enclosed by grilles and the front and sides of said compartment being enclosed by screens.

1,810,569. REFRIGERATION APPARATUS. GEORGE W. MASON, Detroit, Mich., assignor to Copeland Products, Inc., a Corporation of Michigan. Filed Mar. 26, 1930. Serial No. 439,014. 8 Claims. (Cl. 62—126.)



1. In combination, a freezer for refrigeration systems composed of superposed sheets of metal having refrigerant passages between them and a float controlled refrigerant tank integrally connected with the freezer, said tank being positioned substantially on the level of the lowermost of said passages.

1,810,570. COMBINED LAMP SOCKET CLUSTER AND CONNECTION PLUG. BENJAMIN P. MCKINLEY, Brooklyn, N. Y., assignor to The Bryant Electric Company, a Corporation of Connecticut. Filed Dec. 14, 1921. Serial No. 522,280. 9 Claims. (Cl. 173—335.)



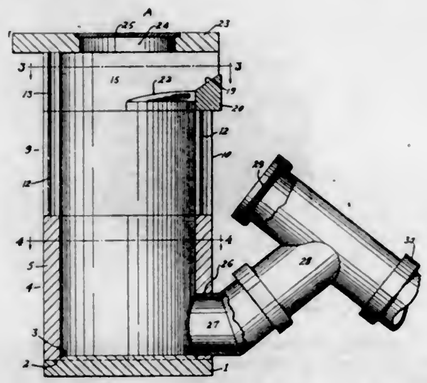
1. In a lamp socket cluster, electrically connected lamp receiving shells, a molded one piece body of insulated material with the shells encased by and in embedded relation thereto uniting the shells and insulator body in an integral rigid structure, said insulator body having a recess molded therein at the inner ends of the shells with a wall of the insulating material interposed between said recess and the inner ends of the shells and having perforations therethrough centrally of the shells, contact terminals carried in said perforations exposed centrally of and in insulated relation to the shells, a connection plug embodying a block of insulating material having a bore therethrough and a threaded shell contact terminal encircling the same, tie members of conducting material extended through the insulator block of the plug and the wall of the insulating material of the body between the recess and one lamp receiving socket to unite the plug with the insulator body and electrically connect the shell of said latter socket and the shell contact terminal of the plug, a plate of conducting material electrically connecting the central contact terminals of the socket shells within the recess in the insulator body, a headed bolt extended through the bore of the plug to constitute the center contact thereof and having threaded connection with said plate, and the insulator body at the outer end of the shells having external shade supporting threads molded therein.

1,810,571. SYSTEM AND METHOD OF HYDRAULIC MINING. HARRY L. MEAD, Brewster, Fla., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed Sept. 15, 1924. Serial No. 737,721. 11 Claims. (Cl. 262—1.)



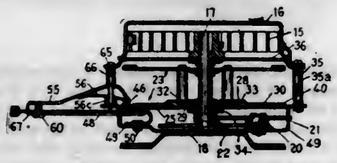
1. In a system of hydraulic mining, a sump, a high pressure nozzle for directing material to said sump, a pump system for removing material from said sump, a de-watering device in the pump system, and means for utilizing water from said pump system for directing material into said sump.

1,810,572. SEWER INLET. ERNEST H. PATTRATH, St. Louis, Mo. Filed Oct. 19, 1929. Serial No. 400,787. 2 Claims. (Cl. 182—6.)



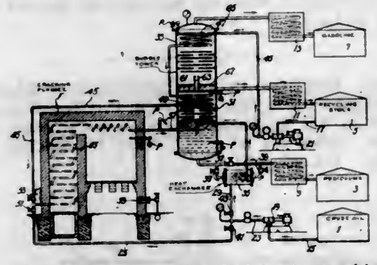
1. A sewer inlet comprising a plurality of elements formed of concrete or similar material including a substantially cylindrical inlet portion arranged within the sewer opening longitudinally thereof, said cylindrical inlet portion being comprised of a bottom, a lower cylindrical section, and an intermediate cylindrical section, said lower cylindrical section and said intermediate cylindrical section being each formed of a plurality of semicylindrical elements secured to each other and to the elements of the associated cylindrical section to provide a unitary structure and a substantially U-shaped top member supported by said intermediate section at the top thereof, said top member being comprised of a plurality of elements secured together, and a sill which is in the form of a separate element secured in place in the structure of the top member and partially closes the open portion thereof.

1,810,573. AUTOMATIC FISHING REEL. EMMETT BURGESS PERRINE, Los Angeles, Calif. Filed Dec. 17, 1928. Ser. No. 326,490. 5 Claims. (Cl. 242—84.5.)



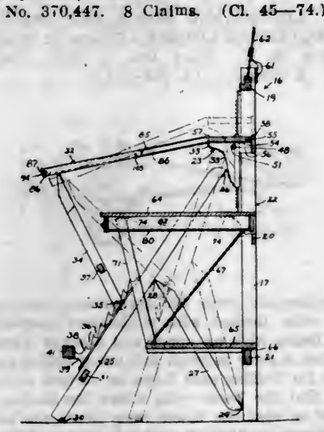
2. In an automatic fishing reel, the combination of a rotatable spool, a rotatable member, a ratchet device between said member and said spool which causes said member to rotate when said spool rotates in the direction to wind the fishline on said spool and which permits independent movement between said member and said spool when the latter rotates in the reverse direction, and a hand-operable brake associated with said rotatable member.

1,810,574. METHOD OF MANUFACTURING HIGH COMPRESSION AUTOMOTIVE DISTILLATE. CLIFTON JOHN PRATT, St. Louis, Mo., assignor to The Automotive Distillate Corporation, Independence, Kans., a Corporation of Kansas. Filed June 14, 1928. Serial No. 285,407. 2 Claims. (Cl. 196—61.)



1. The process of treating hydrocarbons which comprises preheating said hydrocarbons, subjecting said preheated hydrocarbons to a preliminary cracking operation at substantially atmospheric pressure by establishing a liquid level of said preheated hydrocarbons and introducing cracked hydrocarbon vapors beneath said liquid level, whereby the preheated hydrocarbons are cracked and mixed vapors and liquid residuums are formed, removing said liuqid residuums, partially condensing said mixed vapors to form recycling hydrocarbons, separately removing and cooling said recycling hydrocarbons, maintaining an independent bulk supply of said cooled recycling hydrocarbons, whereby the optimum treating conditions for said recycling hydrocarbons may be continuously controlled, withdrawing recycled hydrocarbons from said bulk supply, and substantially completely cracking said recycled hydrocarbons without dilution in the vapor phase at a temperature of the order of 1250° F. at substantially no superimposed pressure, bringing the hot cracked vapors thus formed into contact with said preheated hydrocarbons, and removing light cracked hydrocarbon vapors and condensing the same.

1,810,575. COLLAPSIBLE DRAWING TABLE. KORNELIUS QUIAING, Oakland, Calif. Filed June 12, 1929. Serial No. 370,447. 8 Claims. (Cl. 45—74.)



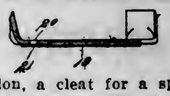
1. In a folding table, a back frame portion including upright side members, brackets adjustable on and along said side members, a top supported in part on the brackets, a leg pivoted to a said bracket, and a strut hinged to said top and adjustably engaged with said leg to support said top in position for use.

1,810,576. SNAP FASTENER ELEMENT. DANIEL I. REITER, New York, N. Y. Filed Aug. 14, 1930. Serial No. 475,170. 17 Claims. (Cl. 24—208.)



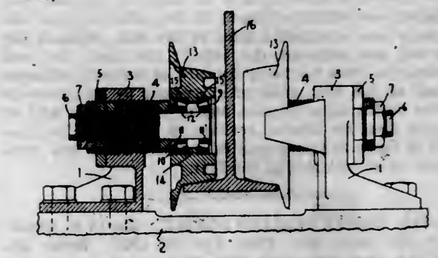
4. In a snap fastener element made of a single piece of sheet material, a continuous cylindrical outer wall, a longer continuous cylindrical inner wall joined at one end to the outer wall and arranged coaxially thereof and parallel thereto, and a slotted reentrant expansible portion at the other end of the inner wall, the outer wall terminating at a point between the ends of the inner wall.

1,810,577. CLEAT MOUNTING. EDWARD A. RICHARDSON, West Mansfield, Mass. Filed Jan. 15, 1930. Serial No. 420,916. 5 Claims. (Cl. 36—59.)



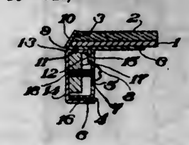
1. In combination, a cleat for a sport shoe having a central opening, and a cupped filler for said opening.

1,810,578. TROLLEY FOR HOISTS. CARL E. SCHIRMER, Springfield, Ohio, assignor to Robbins & Meyers, Inc., Springfield, Ohio, a Corporation of Ohio. Filed July 15, 1929. Serial No. 378,401. 6 Claims. (Cl. 105—154.)



1. In a device of the character described, a wheel, adjustable anti-friction bearings for said wheel, adjustable devices for supporting said bearings and wheel, one adjustment of said devices acting to adjust said wheel and its bearings in an axial direction and another adjustment of said devices serving to take up wear in said bearings.

1,810,579. EDGE CONSTRUCTION FOR TABLE TOPS AND THE LIKE. FRED A. SCHMITZ, Canton, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed June 18, 1928. Serial No. 286,094. 8 Claims. (Cl. 45—31.)



1. In an edge construction for table tops and the like, a top plate, a member secured to the lower surface of said plate, a binding strip abutting the edges of said plate, a retaining member of channel cross-section abut-

ting said binding strip, tapped plates secured to the web of said retaining member, and means extending through said first-named member and into said tapped plates, and serving to retain the binding strip in place.

1,810,580. KNITTED FABRIC. WILLIAM J. SCHUBERT, Bethlehem, Pa., assignor to Standard-Trump Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Filed June 6, 1929. Serial No. 368,828. 24 Claims. (Cl. 66—201.)

	m	*n*	*o*	*p*
FACING	○*a*	●*c*	●*b*	●*c*
MIDDLE	●*b*	○*a*	●*c*	●*b*
BACKING	●*c*	●*b*	○*a*	○*a*

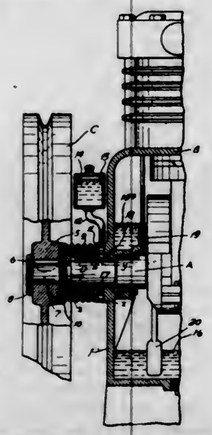
1. A single, flat, plain knitted fabric including at least two threads extending continuously along successive courses of the fabric, said fabric having a portion in which both threads are knit into loops with one of said threads overlying the second of said threads, another portion in which the first thread is knit into loops and overlies the second thread which floats behind such loops, and still another portion in which the second thread overlies the first thread.

1,810,581. SHOE. DAVID STARK, Arverne, N. Y. Filed Nov. 12, 1928. Serial No. 318,703. 4 Claims. (Cl. 36—76.)



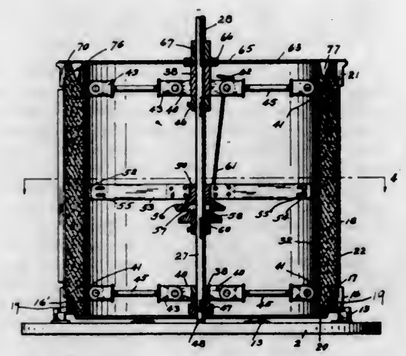
1. A shoe having a tripod metal reinforcement in the bottom thereof of substantially the width of the shoe sole extending less than the length of the sole and from the heel to points at opposite sides of the sole, adjacent the little toe and adjacent the ball of the foot, the part adjacent the little toe being forward of the part adjacent the ball of the foot, said reinforcement by torsional resistance acting to counteract displacement of the heel of the shoe from its normal position in the tripod relation which it bears to two points in the sole under the little toe and under the ball of the foot.

1,810,582. SHAFT SEALING DEVICE. EDWIN H. STEEDMAN, St. Louis, Mo. Filed Apr. 27, 1927. Serial No. 186,964. 2 Claims. (Cl. 288—11.)



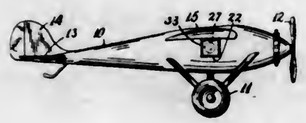
1. In a compressor or similar machine, the combination of a crank shaft, a crank case having an opening in one of its walls through which said crank shaft passes, a stationary rubbing surface on the outer side of said wall surrounding said crank shaft opening and provided with two concentric, annular grooves arranged intermediate the inner and outer edges of said rubbing surface, a bellows surrounding said shaft and attached at one end by a gas-tight joint to a fixed part on said shaft, a sealing member connected by a gas-tight joint to the opposite end of said bellows and having a rubbing surface that co-acts with said stationary rubbing surface, said co-acting rubbing surfaces constituting the only joint through which air or gases can enter or escape from the interior of said bellows, and means for keeping both of the grooves in the stationary rubbing surface filled with a medium that will effectively seal the joint between said rubbing surfaces.

1,810,583. METHOD AND APPARATUS FOR MAKING CONCRETE PIPE. OSCAR TUERCK, Portland, Oreg., assignor to The McKenzie Company, a Corporation of Oregon. Filed Oct. 2, 1928. Serial No. 309,736. 19 Claims. (Cl. 25—30.)



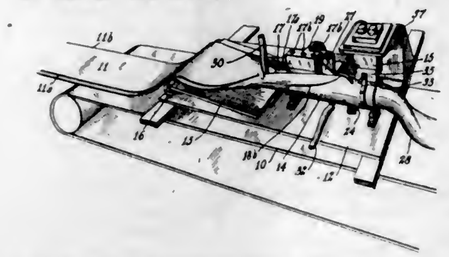
1. The method of making lined concrete pipe, consisting in mounting and securing lining plates upon the exterior of a mold-core, inserting said core and attached plates within the exterior mold-jacket, and feeding concrete pipe material within the mold-space between the core and jacket to embed said lining plates in the interior wall of the pipe.

1,810,584. ADJUSTABLE ROTOR FOR AEROPLANES AND HELICOPTER ROTORS. FREDERICK WANDER, Jr., New York, N. Y. Filed Jan. 7, 1931. Serial No. 507,049. 8 Claims. (Cl. 244—14.)



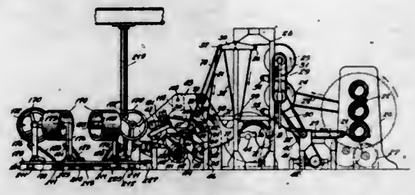
1. An adjustable rotor for aeroplanes, comprising an aeroplane wing formed with a chamber opened at the bottom, a frame with an upper and a lower wing within said chamber, a rotor between said upper and lower wings, and means for holding said frame in various adjusted positions so that the lower wing closes the bottom of said chamber or so that the upper wing closes the bottom of said chamber or so that the rotor is in any extended position out of said chamber.

1,810,585. TUBE-MAKING METHOD AND APPARATUS. HARVEY L. YOUNG, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed July 27, 1928. Serial No. 295,694. 17 Claims. (Cl. 154—5.)



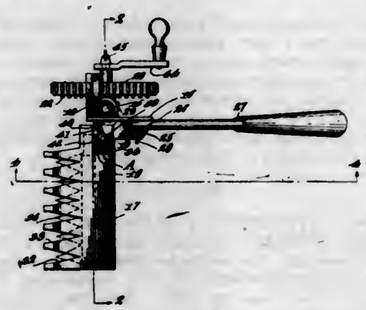
5. Tube-making apparatus comprising means for folding a strip of material into tubular form and means for directing pressure fluid between the strip and said folding means.

1,810,586. TUBE-MAKING METHOD AND APPARATUS. HARVEY L. YOUNG, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Sept. 1, 1928. Serial No. 303,417. 13 Claims. (Cl. 154—7.)



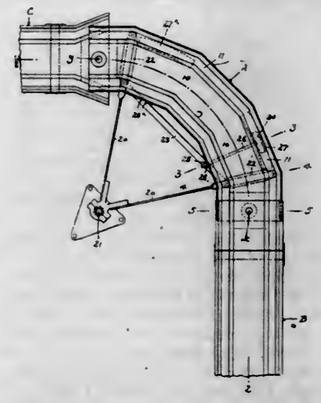
3. Tube-building apparatus comprising means for feeding successive tube-forming strips of material to a tube-building station, and means for presenting tube-building forms in succession at said station in position to receive the respective strips thereon and to be driven by said strip-feeding means, means for feeding a continuous strip onto the first-mentioned strip-feeding means and means for severing successive portions therefrom to provide the successive tube-forming strips.

1,810,587. GRASS TRIMMER. LUTHER D. ALBERTSON, Corydon, Ind., assignor of one-fourth to John W. Davidson, one-fourth to Emmett Beanblossom, one-fourth to Albert Stover, one-sixteenth to George C. Simler, three thirty-seconds to Oliver W. Hottel, and three thirty-seconds to Cecil W. Miles, Corydon, Ind. Filed Dec. 8, 1928. Serial No. 324,723. 2 Claims. (Cl. 56—264.)



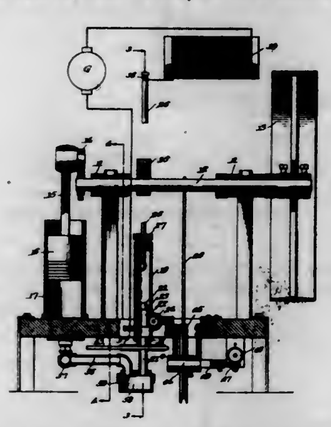
1. A combined lawn border and hedge trimmer comprising a supporting frame, a cutter bar, a drive stub shaft rotatably carried by the frame, a ground traction wheel secured to said shaft, a crown gear formed on one face of said traction wheel, a vertical actuating shaft rotatably carried by said frame, a pinion keyed to said actuating shaft cooperating with the crown gear, and a crank and pitman connection between said actuating shaft and cutter bar.

1,810,588. CONVEYER. EDWIN H. ALLFREE, Ironton, Ohio. Filed Apr. 16, 1930. Serial No. 444,723. 12 Claims. (Cl. 198—220.)



1. A corner pan for a horizontal reciprocable conveyer train, said pan being formed with an arcuate center line.

1,810,589. GERMICIDAL GAS AND METHOD OF AND APPARATUS FOR PRODUCING THE SAME. JAMES N. ALSOP, Cincinnati, Ohio, assignor to American Therapeutic Gas Company, Cincinnati, Ohio, a Corporation of Delaware. Filed Oct. 7, 1925, Serial No. 61,042. Renewed Dec. 15, 1928. 9 Claims. (Cl. 204—31.)



2. The new and improved method of producing a germicidal gas which consists in subjecting atmospheric air to the action of a flaming discharge of electricity and commingling with the air so heated the more volatile constituents of wood released by the action of heat of the resultant of the treated air and without combustion.

7. In apparatus of the class described, the combination of a closed chamber having an air inlet and an outlet, a pair of electrodes in said chamber, means for supplying an electric current to said electrodes to form an arc, means

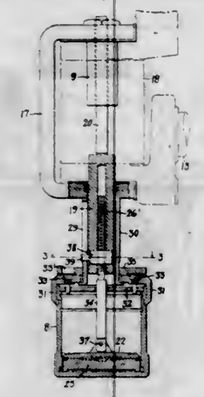
for withdrawing through the outlet of said chamber the resultant products of atmospheric air, and means for automatically feeding an organic substance through the stream of products withdrawn from said chamber to liberate the more volatile constituents thereof without combustion of such substance.

1,810,590. BRACELET CHAIN. MAURICE ANDERSON, Edgewood, R. I., assignor to Levy, Anderson Co., Inc., Providence, R. I., a Corporation of Rhode Island. Filed Apr. 20, 1931. Serial No. 531,349. 4 Claims. (Cl. 59—80.)



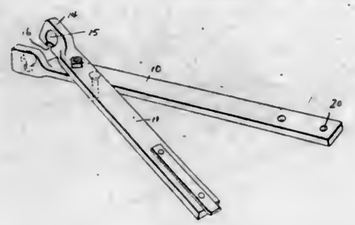
1. In a bracelet chain, a plurality of interconnected links, each link being a generally thin unit of generally rectangular form, embodying a thin sheet metal top wall with an opening therethrough, the stock of the top wall between said opening and one end of the link being deflected downwardly substantially the thickness of the stock of the top wall, and the stock at the other end of the link extending beyond the end thereof and folded closely about the deflected portion of the next link to have its top surface lie flush with the top surface thereof, and the sides of each link being folded thereunder on an arc of short radius and continued to lie close to the under surface of said top wall and flush with the outer under surface of said end extension, whereby a compact and relatively thin stiffened unit link is formed and connected in a chain with a flush top surface and a smooth back.

1,810,591. TIME ELEMENT DEVICE. WINFIELD A. ATWOOD, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed July 24, 1929. Serial No. 380,723. 5 Claims. (Cl. 175—372.)



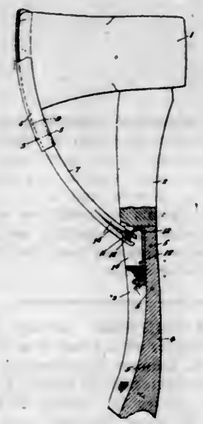
1. A time element electroresponsive device including a rotatable disk, an electromagnet having an armature adjustably mounted on said disk whereby on rotation of the disk to vary the pick-up point of the electromagnet, a pot within which said disk is longitudinally movable, said disk and pot having cooperative engaging surfaces, and supporting means for the pot including means for restraining the disk and pot against relative rotation adapted to be operated to permit rotation of the pot independently of the disk whereby to vary the extent of surface engagement between the disk and pot.

1,810,592. TRAILER HITCH. JOHN BILLSTEIN, Little Falls, Minn. Filed May 9, 1930. Serial No. 451,079. 1 Claim. (Cl. 280—33.44.)



In a trailer hitch of the class described, a ball, means for attaching the ball to a towing vehicle, a pair of bars, means pivotally connecting the bars together in proximity to adjacent ends thereof, said adjacent ends being formed with plates adapted to abut each other when the bars are superimposed, the opposed faces of the plates being formed with recesses to receive the ball, one of said bars being provided with means whereby it may be attached on top of a draw bar of a towed vehicle.

1,810,593. AX GUARD. ROBERT E. BROWN, Olean, N. Y. Filed Nov. 5, 1930. Serial No. 493,643. 7 Claims. (Cl. 145—2.)

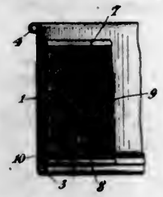


1. An ax comprising a head, a handle extending from said head and formed with a longitudinally extending pocket, and a guard for the cutting edge of the ax head movable from a folded position within the pocket to an extended position and consisting of an inner section movable into and out of the pocket, and an outer section slidably carried by the inner section and adapted to cover the cutting edge of the ax head when extended.

1,810,594. DUSTPROOF CASING FOR SPOOLS OR OTHER ARTICLES. ALFRED E. BRUNS, Huntington, N. Y., assignor, by mesne assignments, to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed June 29, 1928. Serial No. 289,140. 8 Claims. (Cl. 206—52.)

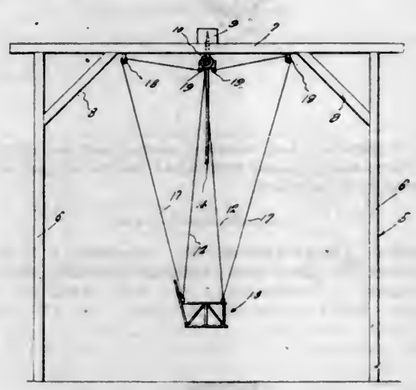
8. As a new article of manufacture, a spool holder consisting of a drum or hollow cylinder open at both ends and

provided with a bead adapted to be engaged by a head of the spool and limit the insertion of the spool axially there-



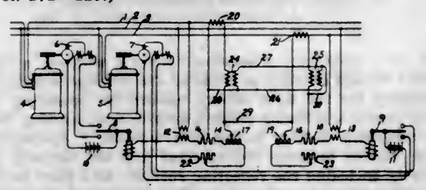
in and with means on its inner side adapted to automatically engage a head of the spool to hold the same in position when fully inserted.

1,810,595. SWING CONSTRUCTION. JARRETT C. CAMPBELL, Napfor, Ky. Filed Oct. 9, 1930. Serial No. 487,594. 1 Claim. (Cl. 230—245.)



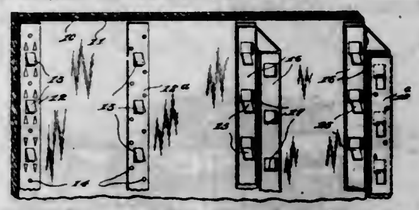
In a swing structure of the class described, a support, suspension eye bolts carried thereby and depending therefrom, a chair, suspension elements connected at their lower ends with the chair and rockably connected at their upper ends with the eye portions of said screws, a fan blade, a rocker block attached to the upper end thereof, said block being provided at its opposite ends with trunnions mounted for oscillation in the eye portions of said suspension screws, guide pulleys on said support, pull cables connected at their lower ends with said chair having their upper end portions trained inwardly toward each other over the pulleys, and said inner end portions being operatively connected with said rocker board.

1,810,596. ELECTRICAL REGULATING SYSTEM. FRANKLIN J. CHAMPLIN, Dalton, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 18, 1930. Serial No. 475,935. 19 Claims. (Cl. 171—119.)



1. In combination, a three phase alternating current circuit, a pair of control circuits, means respectively connecting said control circuits in different conductors of said three phase circuit and between different conductors of said three phase circuit, and interconnecting means between said first mentioned means for causing the respective current components in said control circuits which are due to the connections in and between the conductors of said three phase circuit to be in phase at unity power factor.

1,810,597. BUILDING CONSTRUCTION. DAVID STANLEY CORWIN, Greenport, N. Y. Filed Mar. 1, 1930. Serial No. 432,585. 17 Claims. (Cl. 72—1.)



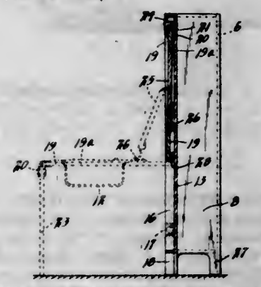
1. A building construction comprising a frame member having spaced openings on opposite sides thereof, a strip of metal having a plurality of projections extending therefrom in the same general direction and at a distance apart equal to the distance apart of the openings in the frame member, the strip having means for attachment to a wall board said projections and openings interlocking when in operative position.

1,810,598. SCANNING DISK. BYRON R. CUMMINGS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 26, 1929. Serial No. 342,727. 2 Claims. (Cl. 178—6.)



1. A rotatable scanning member adapted for use in picture transmitting apparatus comprising a disk having mounting means at its center and having a series of lenses forming therewith a one-piece structure and arranged in a row adjacent the periphery of the disk.

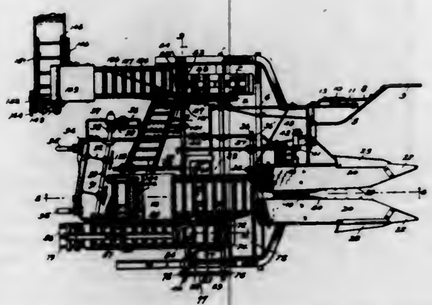
1,810,599. CABINET. NETTIE B. FRENCH, Worthington, Minn. Filed Oct. 27, 1928. Serial No. 315,409. 3 Claims. (Cl. 45—38.)



1. In a cabinet, a hinged section, a panel pivoted at one edge to said section in spaced relation from the ground,

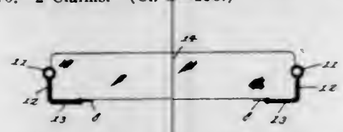
said panel having an opening therein within which a tub is adapted to be placed, a cover pivoted to said panel and adapted to fill said opening so that the cover lies flush with the upper side of said panel and a pair of legs pivoted to the free end of said panel, said legs being adapted to support said panel in substantially horizontal position when the panel is downwardly swung.

1,810,600. CORN HARVESTER. WILHELM A. GIERMANN, Onawa, Iowa. Filed Aug. 21, 1929. Serial No. 387,544. 12 Claims. (Cl. 56—66.)



1. In a corn harvester the combination with forwardly extending stalk-gathering and severing means, of an elevator for receiving the stalks from said means, and mechanism at the rear of the machine for gathering loose material from the ground over which the machine has passed and directing it to said conveyor.

1,810,601. MATTRESS RETAINER. NATHANIEL GOLDBERG, Brooklyn, N. Y. Filed May 13, 1929. Serial No. 362,670. 2 Claims. (Cl. 5—193.)



1. A mattress retainer formed from a single piece of rigid material and including a tubular portion adapted to be embedded in the sides of a mattress, and having an upstanding flange and a horizontal flange the latter being adapted to support the longitudinal margin portion of the mattress.

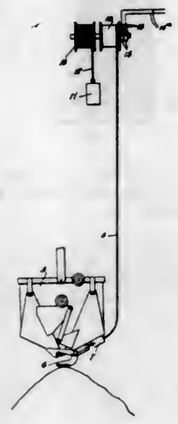
1,810,602. METALLIC SHOE LACE TIP. RAY F. GOOD, Lykens, Pa. Filed Mar. 4, 1930. Serial No. 433,127. 6 Claims. (Cl. 24—143.)



1. A device of the class described including, in combination with a lace, a skeleton anchored thereto, said skeleton comprising a plurality of strands, and a cover for said skeleton.

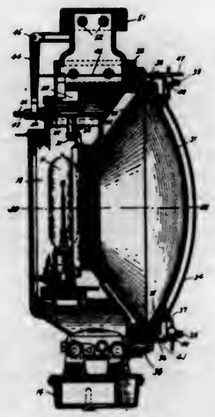
1,810,603. SELF-REVERSING TROLLEY BUCKET. HAROLD E. HALLENBECK, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Nov. 11, 1929. Serial No. 406,470. 6 Claims. (Cl. 214—128.)

2. An electrical trolley bucket installation comprising, in combination, a dumping bucket; a limit switch on the bucket; a reversible motor for hoisting and lowering the bucket; switch operating means on the bucket arranged to move the switch as the bucket comes in contact with the



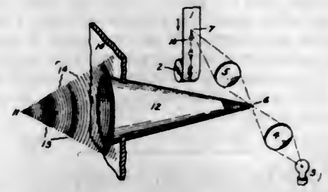
pile of material; and electrical connections for effecting automatic stoppage and reversal of the motor upon such movement of the switch.

1,810,604. LIGHT PROJECTOR. CROMWELL A. B. HALVORSON, Jr., Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 28, 1924. Serial No. 695,868. 9 Claims. (Cl. 177—329.)



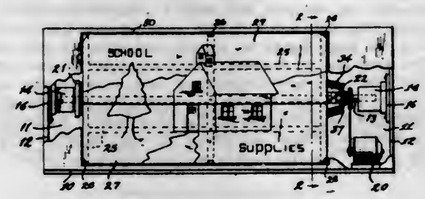
6. In a projector, a housing having a window, a light source in said housing in front of the window, a light interrupter for the light source, means for operating the interrupter, a reflector located outside said housing with its reflecting surface facing said window, a transparent hood located between the reflector and the housing and entirely enclosing the reflecting surface, said hood having a portion which covers said window, and means connecting the hood to the rim of the reflector and to the housing, said reflector and hood projecting beyond the casing to define an area for the passage of light from the reflecting surface.

1,810,605. SOUND RECORDING. HERBERT P. HOLLNAGEL, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 13, 1926. Serial No. 148,185. 8 Claims. (Cl. 274—5.)



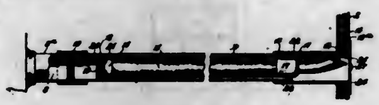
4. Apparatus for forming an image of sound waves comprising an image receiving member, a source of light, means for producing a point of concentration of the light directed on the receiving member and means for refracting the light at said point by directing a concentration of the sound waves on said point.

1,810,606. ADVERTISING DEVICE. JOSEPH C. HOUCK, Los Angeles, Calif. Filed Feb. 28, 1930. Serial No. 432,208. 7 Claims. (Cl. 40—35.)



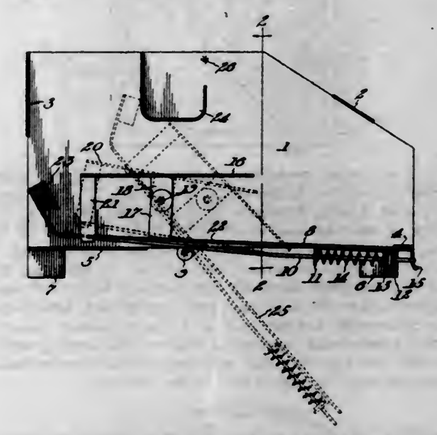
1. In an advertising device, the combination of a casing provided with a display opening, with a horizontal shaft journaled in the casing, opposite discs fixed on the shaft, a plurality of frames pivotally mounted between the discs with each frame carrying display cards on its opposite faces, means for rotating the shaft to turn the frames to register the cards successively with the display opening in the casing, a detent positioned in the upper part of the casing to engage the free ends of the frames turned to upright position to maintain temporarily the foremost upright frame in approximately the same plane as the preceding pendent frame before the casing opening, the pivotal mounting of the two frames on the discs providing an overlap of the inner edges of the frames so that the two cards presented by said frames complement each other to form an unbroken surface before the casing opening.

1,810,607. AIR EXHAUSTING APPARATUS. JOHN H. IRONS, Saratoga Springs, N. Y. Filed Apr. 3, 1929. Serial No. 352,311. 1 Claim. (Cl. 15—2.)



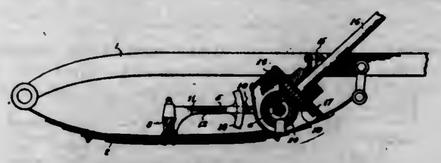
The combination with a support provided with an aperture; of an air exhausting apparatus including a casing having exhaust and intake openings; a tubular housing connected at its inner end to said casing to communicate with the intake opening, and provided at its outer end with an enlarged portion extending into said aperture and secured to said support; a flexible tube telescopically mounted within said housing in substantially fluid tight relation thereto and adapted to be extended through said aperture; and a suction nozzle on the outer end of the tube adapted to be positioned within the enlarged portion of said housing when the parts are in telescopic relation.

1,810,608. ANIMAL TRAP. ERNEST JACOBS, Milesville, S. Dak. Filed Apr. 19, 1928. Serial No. 271,342. 2 Claims. (Cl. 43—70.)



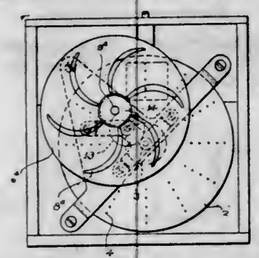
1. An animal trap, having suitable enclosing walls, a tiltable bottom pivotally mounted intermediate its front and rear ends and between said walls and having depending brackets on its lower forward portion, a rod extending lengthwise of the bottom and mounted in said brackets, a spring arranged on the rod and engaging one of the brackets and the forward portion of the rod, a keeper fixed on one of said walls and engaged by said rod, a counterweight mounted on the rear end of the tiltable bottom, said bottom provided with a longitudinal slot, a tiltable platform mounted upon the bottom at the rear of the pivotal axis of said bottom and having a depending arm rigid therewith, and extending through said slot and connected directly with the rear end of the rod, said platform having an initial tilting movement on said bottom to release the rod from said keeper, by the immediate action of said rigid depending arm on said rod, after which the bottom and tiltable platform tilt together to discharge the trapped animal, the counterweight and spring serving thereafter to restore the tiltable bottom and platform to normal position upon the discharge of the animal from the bottom.

1,810,609. STEERING GEAR. WALFRID JOHNSON, Summit, N. J. Filed May 6, 1930. Serial No. 450,253. 2 Claims. (Cl. 280—96.)



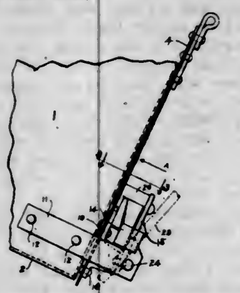
1. In a steering mechanism for vehicles, the combination with a drag link and pivoted wheel spindles, of a pair of spaced arms rigidly connected to each spindle, shackle arms each pivoted to swing about a vertical axis on a corresponding end of the drag link, said shackle arms being each pivoted to swing about a horizontal axis between a corresponding pair of said spaced arms, and arcuate cross heads disposed in vertical planes on the spaced arms for directing pivotal movement of the shackle arms between the spaced arms.

1,810,610. TELEVISION APPARATUS. WILLIAM MARTIN JONES, JR., Rochester, N. Y. Filed Apr. 26, 1930. Serial No. 447,713. 2 Claims. (Cl. 178—6.)



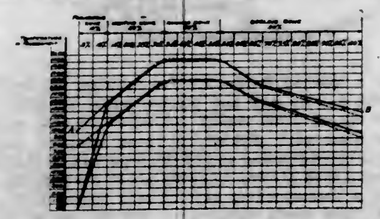
1. A scanning mechanism for the analyzing or composition of pictures in television comprising a rotary scanning disk having exposure openings arranged in a plurality of convolutions about the axis of rotation of the disk, and a rotary disk shutter arranged to turn about an axis eccentric to the axis of rotation of the scanning disk and provided with a curved exposure slot which will open the entire area of said openings successively, and means for connecting the shutter and the scanning disk for rotative movement together so that on the turning of the shutter, the scanning disk will carry the entire series of openings past the curved slot in the shutter.

1,810,611. RAILWAY CAR. BYERS W. KADEL, Baltimore, Md. Filed Mar. 21, 1924. Serial No. 700,752. 21 Claims. (Cl. 105—308.)



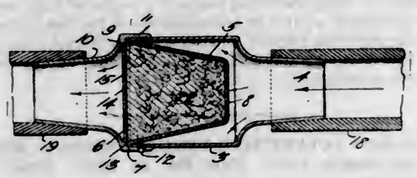
1. A railway car having a door, a fixed locking member and a latch member adapted for door supporting engagement therewith, one of said members carried by the car body and the other by the door, pivotal means for the latch member, and a movable locking member adapted to lock the two members in engaged positions, said locking member being also adapted to force the door from a preliminary position of closure to a more completely closed position by bodily moving the latch member longitudinally of its pivotal axis.

1,810,612. METHOD OF HEAT TREATING METAL. ARTHUR T. KATHNER, Pittsburgh, Pa. Filed Feb. 9, 1929. Serial No. 338,780. 3 Claims. (Cl. 148—21.5.)



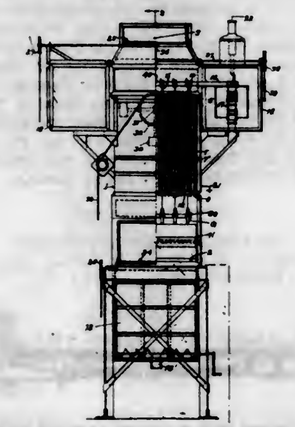
1. The herein described method of heat treating steel which resides in passing low carbon steel continuously and in the presence of non-oxidising gases through communicating heating and cooling zones of a furnace, heating the steel in the heating zone to a temperature above the upper critical temperature range of the steel and between about 1600° F., and 1950° F., cooling the steel in the cooling zone to about a dull red heat, and discharging the steel from the furnace at such a temperature that the steel will have reached about a black heat when discharged into the open air, the time consumed by the steel in passing thru the cooling zone being not less than the time consumed in heating the steel to its maximum attained temperature.

1,810,613. ACCESSORY FOR VACUUM CLEANERS. LEO P. KELLER, Columbus, Ohio. Filed Oct. 11, 1927. Serial No. 225,530. 1 Claim. (Cl. 167—3.)



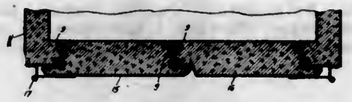
An accessory for vacuum cleaners, including a cylindrical body open at one end and with a reduced extension at the opposite end, a foraminous cage of convergent form having an edge flange to overlie and bear on the edge of the open end of the body, a cap threaded on said open end of the body and bearing on and securing the cage in place, said cap having an extension corresponding in size and form to that of the body, and a foraminous plate secured in and carried by the cap, and forming a cover section for the cage when the cap is in place.

1,810,614. APPARATUS FOR ELECTRICAL SEPARATION OF SUSPENDED MATERIAL FROM GASES. ARTHUR P. KNIGHT, Glendale, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Sept. 11, 1929. Serial No. 391,871. 4 Claims. (Cl. 183—7.)



1. An electrical precipitator comprising a precipitating chamber, means for passing gas to be treated through said chamber, collecting electrode means mounted in said chamber and comprising two sets of rows of collecting electrode members, the rows of one set extending transversely to the rows of the other set so as to subdivide the space within the precipitating chamber into a plurality of compartments, there being a plurality of collecting electrode members at each side of such compartment, and discharge electrode members mounted and insulated within said chamber and extending within the respective compartments aforesaid.

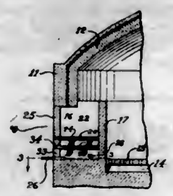
1,810,615. REFRIGERATOR CABINET. JAMES L. KNIGHT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 12, 1927. Serial No. 183,205. 15 Claims. (Cl. 220—9.)



5. A refrigerator cabinet having spaced metallic inner and outer walls, a door comprising two cooperating door members hinged at their outer edges and adapted to engage each other at their adjacent edges, an opening frame for said doors and the edge portions of said door members being formed of thin strips of a resinous product.

6. A refrigerator cabinet having inner and outer metal walls spaced apart and provided with a door opening, a frame for the door opening consisting of a thin non-hydroscopic non-metallic material having low heat conductivity and being impervious to moisture, said frame extending through the door opening and connecting said inner and outer walls to form a closure between them.

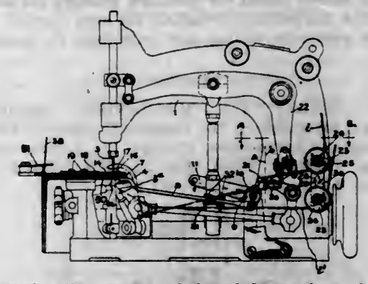
1,810,616. GAS FIRED KILN. PETER J. LENGSHOLZ, Massillon, Ohio. Filed Sept. 18, 1930. Serial No. 482,726. 4 Claims. (Cl. 25—149.)



3. Fire box construction for gas fired kilns, including a bottom wall, side walls and a bag wall; a perforate wall spaced from the bottom wall extending between the side walls terminating short of the bag wall and a front wall extending between the side, bottom and perforate walls forming a mixing chamber; gas and air supply lines leading to the mixing chamber; a second perforate wall spaced from the perforate wall extending between the side walls and a second front wall extending between the side and perforate walls forming a primary combustion chamber, and a third front wall extending between the side walls and above the second perforate wall forming with the bag wall, second perforate wall, and side walls a secondary combustion chamber.

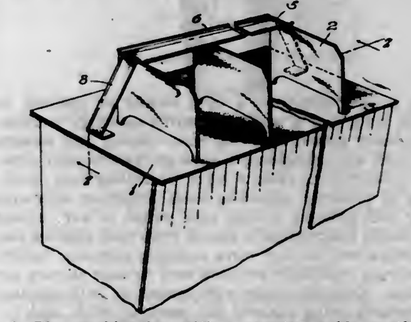
1,810,617. OVEREDGE SEWING MACHINE. KARL MAIER, Stuttgart, Germany, assignor to Union Special Maschinenfabrik, G. m. b. H., Stuttgart, Germany. Filed Feb. 26, 1927, Serial No. 171,563, and in Germany Mar. 25, 1926. 11 Claims. (Cl. 112—162.)

1. The combination of cooperating stitch forming elements for forming overedge thread loops, means for holding said overedge thread loops when the stitches are set, means whereby said thread loop holding means can be shifted laterally for varying the position of the holding means during the running of the machine, means independent of the stitch forming elements for drawing thread from the supply for the overedge thread loops, and means



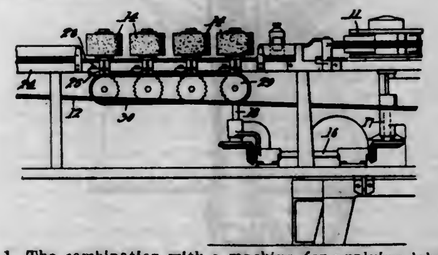
for varying the amount of thread drawn from the supply to correspond with the position of the means for varying the overedge thread loops.

1,810,618. SHIELD ATTACHMENT FOR EATING TABLES AND THE LIKE. AUGUST W. NELSON, Spokane, Wash., assignor of one-half to Victor Sjodin, Spokane, Wash. Filed Aug. 24, 1929. Serial No. 388,166. 3 Claims. (Cl. 45—141.)



1. The combination with a counter, table or the like, of means mounted thereon for providing separate spaces for use by individual persons while eating, said means including partitions proportioned to shield from each other the faces of customers while eating, the lower portions of the partitions being cut away to provide spaces for the reception of articles while being transferred laterally from one compartment to another, there being recesses in the counter, table or the like and legs depending from the partitions and removably fitted in the recesses.

1,810,619. WIPING ROLLS FOR LABELING MACHINES. CHARLES H. OSLUND, Worcester, Mass., assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 11, 1929. Serial No. 362,360. 2 Claims. (Cl. 216—58.)

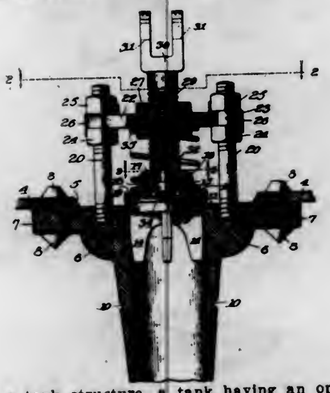


1. The combination with a machine for applying labels in the panels of paneled objects, of a conveyor comprising a horizontal strand for supporting and conveying the

labeled articles, a pair of rolls on vertical axes located on opposite sides of said strand and above it having thick surfaces of sponge rubber for yieldingly pressing the labels down within the panels throughout the area thereof, and means for positively driving said rolls from the labeling machine

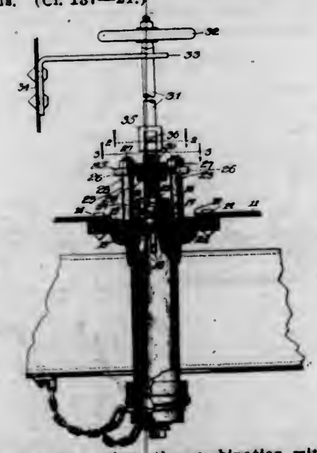
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1,810,620. OUTLET VALVE MECHANISM. OSTRANDER J. PARKS, River Forest, Ill., assignor to General American Tank Car Corporation, Chicago, Ill., a Corporation of West Virginia. Filed May 21, 1927. Serial No. 193,313. 9 Claims. (Cl. 137—21.)



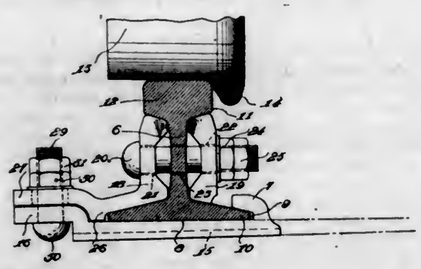
1. In a tank structure, a tank having an opening in its lower wall, and a valve and outlet-assembly comprising a member extending across said opening and secured to said wall and containing a passage therethrough forming an outlet for the tank, a valve controlling said outlet, a series of upwardly extending studs connected with said member and grouped around said outlet, a nut carried by said studs and vertically spaced from said member and an operating rod for said valve engaging said nut, fastening means on said studs securing said member thereto for adjustment along the studs with respect to said opening, said assembly being adapted for assembly with, and removable from, said tank, as a unit.

1,810,621. VALVE MECHANISM. OSTRANDER J. PARKS, River Forest, Ill., assignor to General American Tank Car Corporation, Chicago, Ill., a Corporation of West Virginia. Filed Dec. 19, 1927. Serial No. 241,084. 7 Claims. (Cl. 137—21.)



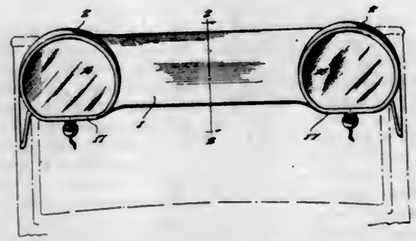
1. In valve mechanism, the combination with a valve-seat-equipped member, a valve proper for cooperation with said seat, a stem having a head at its inner end for engagement with said valve proper, said head engaging the center of said valve proper, means operating, when said stem is rotated, to move said stem lengthwise, and means for actuating said valve proper by said stem constructed and arranged to rotate said valve proper against said seat during a portion only of the movement of said stem in a direction toward said seat and thereafter discontinue said rotation and force said valve proper to said seat.

1,810,622. RAIL JOINT. CHARLES PASCAL, Montreal, Quebec, Canada. Filed Feb. 8, 1928, Serial No. 252,821. Renewed Nov. 21, 1930. 7 Claims. (Cl. 238—211.)



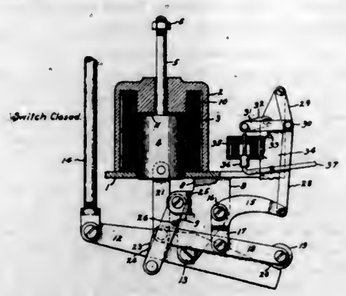
1. A rail joint comprising a base plate that is of substantially the same cross section at all points along the length thereof arranged beneath the adjacent ends of a pair of rails and having a recess to receive a portion of the base of the rails and an uninterrupted inclined rail supporting surface extending away from said recess, and rail joining means secured to said rails and extending across the joint therebetween, said rail joining means being provided with a longitudinal shoulder coextensive therewith and abutting a shoulder on the base plate and secured to said base plate.

1,810,623. NONGLARE HEADLIGHT. CHARLES ROY PLEDGER, Kearney, Nebr. Filed Nov. 18, 1929. Serial No. 408,132. 1 Claim. (Cl. 240—7.1.)



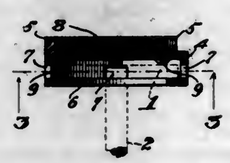
A combined visor and headlight for motor vehicles comprising a visor having lateral attaching brackets, the visor being shaped adjacent one of the brackets to bulge upwardly above the visor and downwardly below the visor to form a lamp casing integral with the visor, said casing having a marginal flange, a reflector in the casing having a cylindrical marginal extension the edge of which slopes downwardly and rearwardly from a point above the visor to a point below the visor, said extension having a marginal flange, a lens, a channeled clamp ring receiving the marginal flange of the casing and the marginal flange of the extension and also receiving the edge of the lens for clamping said parts together, and a lamp mounted in the casing.

1,810,624. SWITCH OPERATING AND CONTROLLING MECHANISM. WILLIAM K. RANKIN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 15, 1925. Serial No. 62,642. 13 Claims. (Cl. 200—89.)



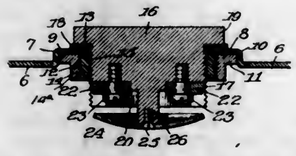
1. Switch operating and controlling mechanism comprising a switch operating member, a restraining device for holding the member in operated position, said restraining device being disengageably related to said switch operating member, a latching device for controlling said restraining device, and means operated by the reaction of the switch on the operating member for moving said restraining device from a restraining to a releasing position in response to actuation of said latching device.

1,810,625. ACCELERATOR HEAT PROTECTOR. JESSE BERNICE ROUSE, Dunn, N. C. Filed July 28, 1930. Serial No. 471,286. 1 Claim. (Cl. 74—81.)



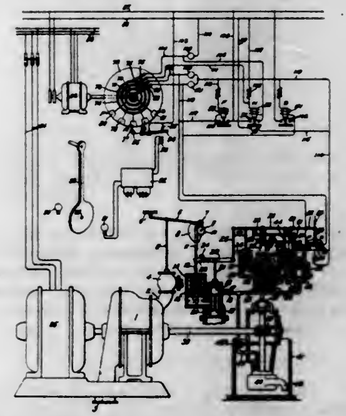
As a new article of manufacture, a pedal cap formed from a single piece of rubber and comprising a body having ribs on its upper face and hollowed out within and with an annularly inwardly extending flange on its bottom, said ribs forming spaces therebetween open at their ends, said body provided in its sides with ventilating openings opening upon the hollow interior of the body, and a central depending lug and depending tits within said hollow body, constituting spacing means, substantially as shown and described.

1,810,626. CONTAINER. HENRY SCHWARTZ, Chicago, Ill. Filed July 9, 1928. Serial No. 291,422. 8 Claims. (Cl. 220—39.)



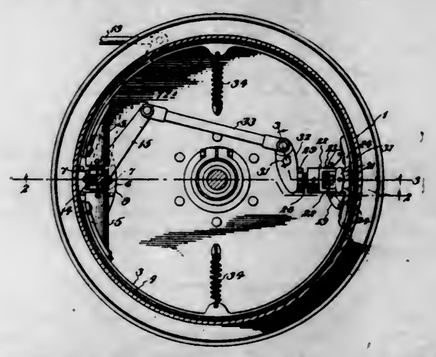
1. The combination with a container having a threaded opening, of a bushing having internal and external threads and screwed into said opening, the cooperating threads of said bushing and container being such that in screwing the bushing to place the bushing moves toward the outer end of said opening and becomes jammed in said opening, and a closure plug screwed into said bushing and provided with means operating upon the unscrewing of said plug from said bushing, to so mutilate the internal threads of said bushing as to render it unadapted for receiving a similar plug.

1,810,627. CONSTANT SPEED CONTROL FOR PRIME MOVERS. REGINALD G. STANDERWICK, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 19, 1929. Serial No. 400,985. 7 Claims. (Cl. 290—40.)



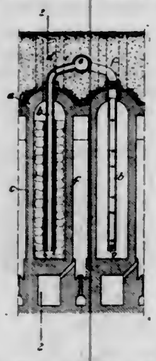
4. The combination with a prime mover having a governing means and correcting means for rendering said governing means substantially isochronous, of means for moving said correcting means to increase or decrease the speed of the prime mover wherever the prime mover loses or gains a predetermined number of revolutions and for restoring said correcting means to normal position when the predetermined number of revolutions has been gained or lost.

1,810,628. AUTOMOBILE WHEEL BRAKE. ROBERT W. STEVENS, Granite City, Ill. Filed May 24, 1929. Serial No. 365,717. 3 Claims. (Cl. 188—78.)



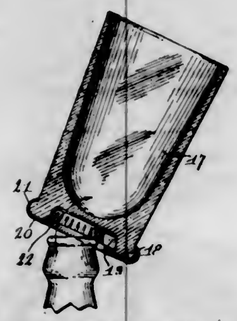
1. The combination with a brake drum, and a back plate, of a split brake band confined within the drum, a block anchored to the back plate, a frame slidable on the block and secured to the band between the ends thereof, a cam mounted between and bearing against the terminals of the band, a second cam pivotally supported by the back plate and bearing against the inner end of said slidable frame, yieldable means for holding said frame to said cam, and means for simultaneously rocking the cams for spreading the terminals of the band and sliding the frame upon the block to cause the band to frictionally engage the drum.

1,810,629. COKE OVEN. CARL STILL, Recklinghausen, Germany. Filed May 17, 1926, Serial No. 109,791, and in Germany May 18, 1925. 16 Claims. (Cl. 202—257.)



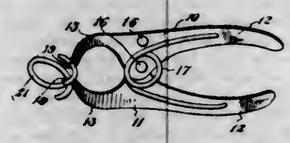
1. A coke oven comprising two spaced parallel heating walls partially defining a horizontally elongated coking chamber, a longitudinal row of vertical suction pipes located within said chamber between the heating walls communicating with said chamber and a common suction main connecting all of said pipes.

1,810,630. COMBINATION CONTAINER AND BOTTLE OPENER. CHARLES ERNEST TAPP, Barachois, Quebec, Canada, assignor to Antonio Paradis, Quebec, Canada. Filed Feb. 13, 1930. Serial No. 428,166. 5 Claims. (Cl. 65—46.)



1. A device of the character described comprising a container having a recess formed in the under side of the bottom, a cap removing member rigidly fastened to the bottom of the container, and a cap engaging element formed on the said removing member in registration with the recess in the container bottom adapted to engage the edge of the cap and to remove the same by swinging the bottle in a fulcrum movement.

1,810,631. POULTRY LEG-BAND PLACER AND REMOVER. CHARLES A. TAUMP, Derry, Pa. Filed Dec. 30, 1929. Serial No. 417,509. 3 Claims. (Cl. 128—330.)

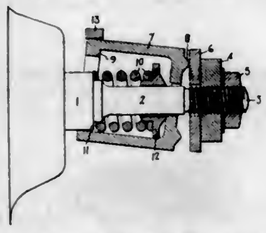


1. In a tool of the class described, handles pivotally connected together and terminating in jaws having curved inner faces adapted to encircle the leg of the fowl, a spring carried by said handles and normally holding said jaws closed, said jaws terminating in substantially straight prongs adapted to be passed between the terminals of a spiral leg ring marker for prying open the marker, said prongs contacting with each other whereby to limit closing movement of the jaws, said prongs being provided with notches opposite their contacting faces adapted to receive the terminals of a split ring leg marker.

1,810,632. IMPROVING PRESSURE DISTILLED OIL PRODUCTS. VANDERVEER VOORHEES and EDWARD J. SHAEFFER, Whiting, Ind., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Dec. 7, 1925. Serial No. 73,864. 6 Claims. (Cl. 196—40.)

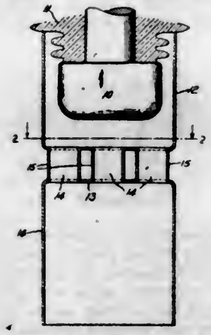
3. The method of producing color stability in hydrocarbon oil pressure distillates of satisfactory initial color which consists in subjecting such distillates to the action of dilute sulfuric acid, of a concentration not exceeding 70% without substantially modifying the color thereof and adjusting the strength and quantity of such acid with respect to the distillate to prevent the production of an appreciable quantity of sludge and of a substantial impairment of color of the distillate.

1,810,633. EMERGENCY GOVERNOR. DONALD F. WARNER, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 2, 1929. Serial No. 396,736. 4 Claims. (Cl. 264—15.)



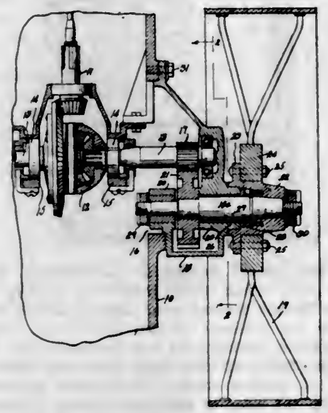
1. The combination with a shaft, of an emergency governor comprising a bearing plate on the shaft, a cylindrical weight member which extends parallel to, and encloses the shaft and at one end engages the bearing plate on opposite sides of the shaft, the material at the other end of the weight being so distributed that the weight is unbalanced, and a spring which surrounds the shaft and holds the weight member in engagement with the bearing plate.

1,810,634. MERCURY ARC RECTIFIER. FRANK P. WHITAKER, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed June 17, 1929, Serial No. 371,574, and in Great Britain June 20, 1928. 4 Claims. (Cl. 250—27.5.)



3. In a vapor discharge device, an anode, a cylindrical shield arranged to surround said anode and provided with a perforated wall arranged below said anode, and a plurality of tubes inserted in the perforations of said wall, the distance between said wall and said anode being substantially equal to the diameter of said tubes.

1,810,635. SUPPORTING AND DRIVING MEANS FOR TRACTORS. ROLLIN H. WHITE, Cleveland Heights, Ohio. Filed Sept. 27, 1928. Serial No. 308,772. 2 Claims. (Cl. 180—70.)



1. In a tractor having driven axles projecting from the sides thereof, traction means comprising a hub section fixed to each of said axles, and a wheel having a hub section detachably secured to each of said fixed hub sections, said wheels being reversible relative to said fixed hubs.

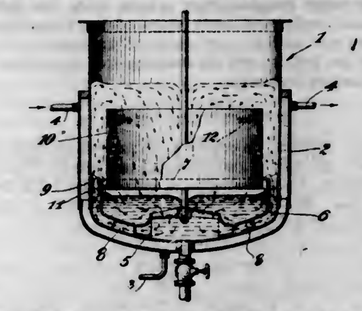
1,810,636. TEXTILE ROLL. JACOB ADLER and PAUL DOERSELN, Paterson, N. J., assignors to Silk City Metals Coating Company, Inc., Paterson, N. J., a Corporation of New Jersey. Filed Dec. 29, 1930. Serial No. 505,314. 3 Claims. (Cl. 139—307.)



1. A roll-like body having its periphery adapted to grip textile fibrous material and formed of metal and with numerous minute integral gripping nodules.

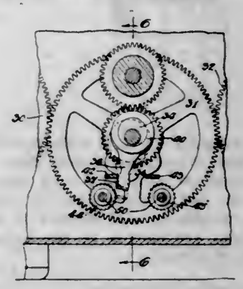
1,810,637. MIXING AND HEAT INTERCHANGE APPARATUS. HENRY SANFORD BEERS, Westport, Conn., assignor to The Turbo-Mixer Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1929. Serial No. 354,463. 11 Claims. (Cl. 257—108.)

1. In combination with a tank having a thermal jacket and material-circulating means within the tank, means for confining and directing a major part of the circulated material to flow in close proximity to the jacketed tank surface, said means including a shield spaced from the tank wall, and terminating at a moderate distance above the tank bottom, and an upper, generally-cylindrical shield having its lower margin overlapping the upper margin of



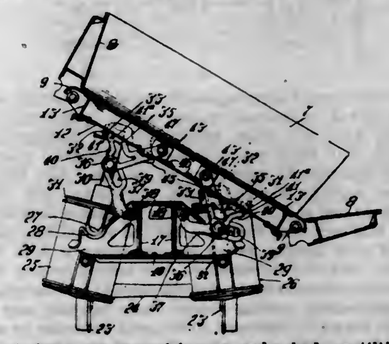
the shield first named, and spaced therefrom, and extending to a plane substantially above the upper edge of the shield first named.

1,810,638. ATTACHMENT FOR CALCULATING MACHINES. LEE R. BROWN, East Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Apr. 5, 1929. Serial No. 352,718. 1 Claim. (Cl. 235—91.)



The combination of a reversing cycle calculating mechanism including a gear rotatable in either direction, an element mounted eccentric to the axis of said gear and operable by said gear, an actuator on said element, means for clutching said actuator to said gear, cycle counters operable by said actuator, and means for limiting the amount of movement of said actuator effected by the action of the clutching means.

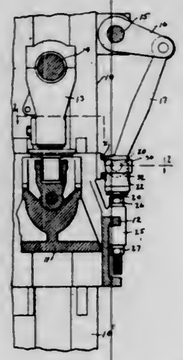
1,810,639. DUMP CAR. WILLIAM L. BURNER, Columbus, Ohio, assignor to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Filed Jan. 18, 1929. Serial No. 333,436. 26 Claims. (Cl. 105—261.)



1. A dump car comprising an under body, a tilting bed mounted thereon and adapted to tilt to either side thereof,

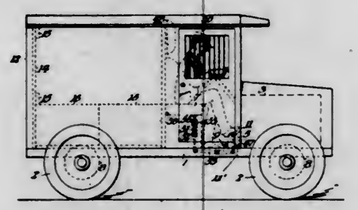
and power operated means for tilting the bed to dump the load, including means for applying upward thrust to the bed at a point comparatively remote from the dumping side thereof during an early stage of the dumping operation, and for shifting the point of application of such thrust to the bed toward its dumping side at a later stage of the dumping operation.

1,810,640. PRESS. ARTHUR A. BYERLEIN, Detroit, Mich., assignor, by mesne assignments, to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Mar. 27, 1929. Serial No. 350,310. 5 Claims. (Cl. 113—38.)



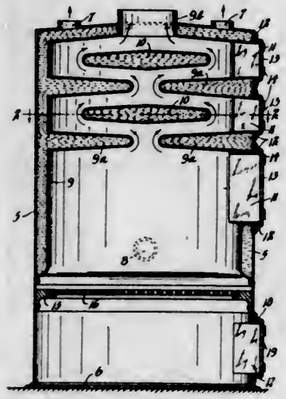
1. In a toggle press, a frame, a slide operable in said frame, a toggle link for operating said slide, a member adjustably supported on said slide and pivotally connected to said link, and a guide fixed to the slide and guiding an upper portion of said member to receive and withstand horizontal components of the thrust of said link when the link is inclined.

1,810,641. METHOD OF AND MEANS FOR TRANSPORTING VALUABLES. JOSEPH PARKER CAMP, Germantown, Pa. Filed Oct. 20, 1928. Serial No. 313,722. 5 Claims. (Cl. 180—82.)



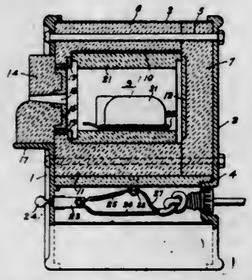
1. A motor truck carrying a safe inclosure provided with locking means; removable means rigidly connecting said inclosure with said truck, incased by said inclosure and accessible only when said inclosure is unlocked; wherein the safe inclosure is provided with an outer door formed in three sections having hinges connecting them with each other; one end of said door having hinges connecting it with said inclosure, and the other end of said door being provided with locking means for connecting it with said inclosure; and said intermediate door section having locking means for connecting it with the sides of said inclosure; said intermediate locking means being operable only by a handle normally concealed within said inclosure by said door and accessible only when the lock provided end of said door is opened.

1,810,642. WATER HEATER. CECIL G. CARLSON, Willmar, Minn. Substitute for application Serial No. 84,960, filed Jan. 30, 1926. This application filed Dec. 22, 1930. Serial No. 504,184. 3 Claims. (Cl. 122—165.)



1. A water heater having in combination, an outer casing, an inner casing spaced therefrom, whereby a water chamber is formed between said casings, spaced comparatively wide flat conduits of less width than said inner casing extending horizontally and centrally therethrough and communicating at their ends with said water chamber, pairs of opposed spaced flat conduits extending inwardly from the sides of said inner casing having closed inner ends terminating short of the center of said inner casing providing a space between said closed inner ends, said last mentioned conduits communicating with said water chamber at their outer ends and disposed respectively between said first mentioned conduits so that said first mentioned and said pairs of last mentioned conduits extend in said inner casing at alternately different levels upwardly, said first mentioned conduits being so disposed as to bridge the space between said pairs of opposed conduits throughout their extent, a fuel burner adjacent the bottom of said inner casing, and an outlet conduit at the top of said casing communicating with said inner casing whereby a circuitous passage is formed for the products of combustion between the ends of said last mentioned conduits and around the sides of said first mentioned conduits.

1,810,643. DENTAL FURNACE. ORA A. COLBY, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 14, 1928. Serial No. 254,208. 4 Claims. (Cl. 263—2.)



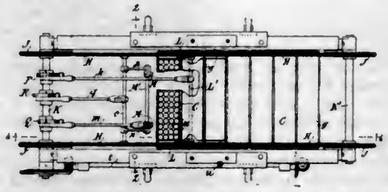
1. In a furnace, a furnace wall including a relatively thick body of heat-insulating ceramic material, and a relatively thin embedded plate of porcelain constituting a substantially non-spalling heat-resistant face for said wall and molded substantially integral therewith.

1,810,644. LOCK WASHER. WILLIAM DIETER, Newark, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of Delaware. Filed Sept. 10, 1926. Serial No. 134,653. 5 Claims. (Cl. 151—33.)



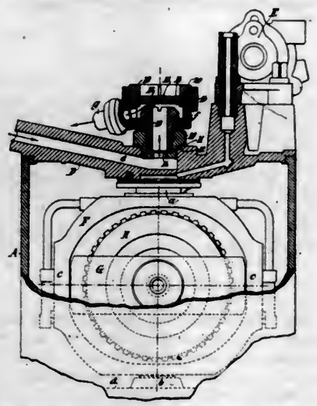
2. In combination with a member having a threaded neck and a nut engaged thereon having a peripheral flange and provided with a plurality of notches, a lock washer having an outer annular portion and a plurality of spring tongues extending radially from the annular portion having their free ends disposed normally in a plane parallel with that of the annular portion, certain of the tongues engaging against the flange to urge the annular portion of the washer to seat against the member, and one of the tongues being received through one of the notches to lock the nut against rotation on the threaded neck.

1,810,645. INTERMITTENT FEED MECHANISM. WILLIAM DIETER, Newark, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of Delaware. Filed Oct. 15, 1927. Serial No. 226,416. 13 Claims. (Cl. 198—34.)



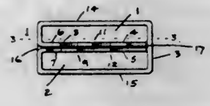
1. A feed mechanism applicable to control the movements of a series of objects having a tendency to forward movement, comprising two stops, the one adapted to initially stop the foremost object and to release it, and the other adapted to stop said object in a second stopping position, and one of said stops movable to another position to arrest the object at a third stopping position.

1,810,646. GYROSCOPIC STEERING MECHANISM. WILLIAM DIETER, Newark, N. J., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of Delaware. Original application filed Apr. 16, 1926, Serial No. 102,429. Divided and this application filed Feb. 1, 1928. Serial No. 251,186. 1 Claim. (Cl. 74—78.)



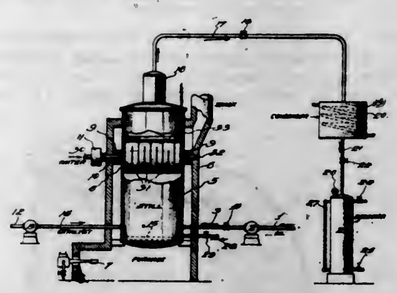
In an automobile torpedo, a gyroscopic steering mechanism comprising a gyroscope enclosed in a frame having means for rotating it to permit of angle-fire adjustment, a head which is stationary with relation to the torpedo, a spinning-up turbine, a high-pressure air duct leading to the spinning-up turbine, a swivel connection in said duct, the porton of said duct leading to such swivel connection having immovable relation to said head, and the portion of said duct leading from said swivel connection to the spinning-up turbine adapted for angular displacement with said frame, said swivel connection having a removable closure permitting access to its interior and a removable swivel member which may be taken out through said closure.

1,810,647. SLIDE BUCKLE. JOHN H. DOMKEE, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Dec. 13, 1929. Serial No. 413,863. 2 Claims. (Cl. 24—200.)



2. A slide buckle comprising a pair of wire loops arranged in a common plane and integrally connected at one side and the engaging metal surfaces of the loops, secured in permanent intimate union at the opposite side; and intermediate bars in planes relatively parallel and extending integrally from the secured side to the connected side and having angular formations projecting in plane perpendicular to and out of the plane of the loops, the metal surfaces of the bar extremities being secured within said plane in permanent intimate union with the metal surface of the connected side.

1,810,648. APPARATUS FOR CATALYTICALLY TREATING HYDROCARBON OIL. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Aug. 16, 1922, Serial No. 582,296. Renewed Sept. 1, 1928. 1 Claim. (Cl. 196—54.)

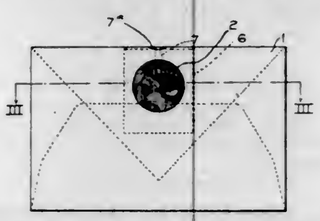


An apparatus for catalytically treating hydrocarbon oils in combination with a still, of cooling means positioned within the vapor space of the still, means for charging oil and means for chargng catalytic material to the still, means for removing precipitated catalyst from the cooling means, and means for condensing the vaporous constituent.

1,810,649. DISPLAY ENVELOPE. GEORGE S. ELLIOTT, Wilkinsburg, Pa. Filed Feb. 25, 1930. Serial No. 431,279. 3 Claims. (Cl. 229—71.)

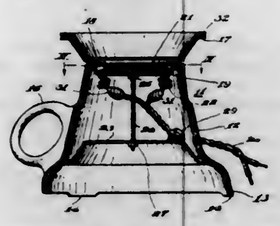
1. The combination with an envelope having a letter compartment provided with an opening at one side and

an auxiliary compartment adjacent said opening and constituting a display window, of an article for said auxiliary



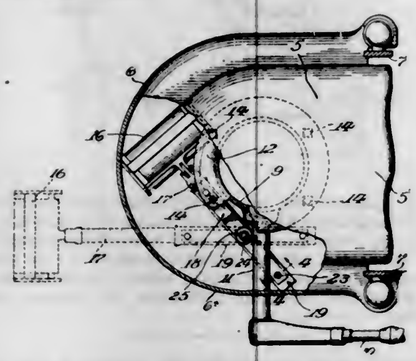
compartment, said article being provided with means for engaging the contents of said letter compartment to render said article removable therewith.

1,810,650. ELECTRIC VAPORIZER. CARL J. FAY, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 5, 1929. Serial No. 375,988. 5 Claims. (Cl. 219—43.)



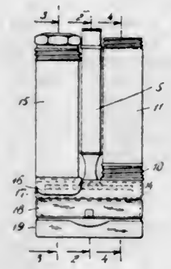
1. In an electric vaporizer, in combination, a hollow refractory body member of substantially frusto-conical shape, a metal plate located at the top of the body member, a metal plate located within the body member, a single means extending through both plates to clamp them in proper operative positions relatively to the refractory body member and a heating element located below and closely adjacent to the upper metal plate.

1,810,651. ADJUSTABLE SUPPORT FOR HEADRESTS. CHARLES W. FISCHER, Chicago, Ill., assignor to Theo A. Kochs Company, Chicago, Ill., a Corporation of Illinois. Filed July 27, 1929. Serial No. 381,422. 7 Claims. (Cl. 155—188.)



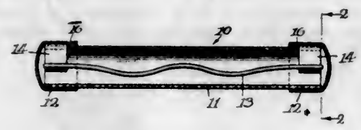
7. In combination with a barber chair seat and its pedestal, of a head rest support pivotally mounted to one side of said pedestal and in spaced relation with the underside of the chair seat, said head rest support having a receiving end adapted to normally occupy a position adjacent one edge of the chair seat and swingable abont the pivot to a position adjacent to the pedestal, whereby a head rest may be placed in said support from one side of the chair seat and swung to concealed position beneath the seat.

1,810,652. SHAVING KIT. GERHARD FLINTERMANN, West Orange, N. J. Filed Feb. 26, 1931. Serial No. 518,344. 11 Claims. (Cl. 132—80.)



11. In a toilet kit of the character described, in combination with a safety razor having a cutting head and an elongated handle extending substantially at right angles to said head, a shield having a transverse passage for the reception of said head and a transverse opening in said passage for said razor handle, an elongated container having at least a part thereof permanently secured to said shield across said opening on one side of said handle and extending from said shield in a position substantially parallel to said handle, a second elongated container hingedly secured to said shield on the other side of said handle and means for releasably securing said second container across said opening in a position substantially parallel to said handle.

1,810,653. ELECTRIC FUSE. WILLIAM G. HARTWIG, Chicago, Ill., assignor to Railway Utility Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 26, 1928. Serial No. 272,965. 3 Claims. (Cl. 200—131.)



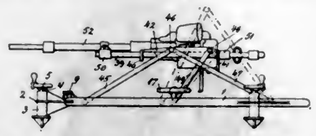
1. The combination in a fuse of an insulating tube having slots at the ends thereof, a clamping member detachably mounted in each of said slots, each clamping member comprising a reversely bent conducting member having a pair of parallel arms having side wings extending over the outer surface of said insulating tube, said arms of said clamping members engaging the ends of said fusible element, and cap members seated over the ends or said tube to contact with said clamping members and thereby establish electrical connection with said fusible element.

1,810,654. SUPPORT ESPECIALLY FOR HEAVY MACHINE GUNS OR THE LIKE. WERNER CHRISTIAN LASSEN HAUBROE, Copenhagen, Denmark. Filed Nov. 30, 1929, Serial No. 410,704, and in Denmark July 20, 1929. 1 Claim. (Cl. 89—40.)

Support especially for heavy machine guns or the like consisting of an annular circular base member fitted with

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vertically adjustable feet and supporting a rotatable frame which carries a supporting frame proper for one or more machine guns the said rotary frame being of pentagonal shape and being fitted with a transverse brace and longitudinal braces and having at each corner a gusset plate with guiding rolls mounted for running along the ring.



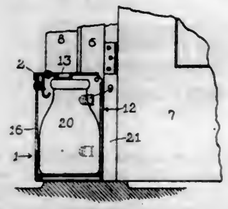
one of the frame members being further fitted with a bracket with a driving pinion cooperating with a row of holes in the ring and being rotated by a driving gear operated by the handwheel and, maybe, fitted with a disengaging clutch or the like, so that the frame may be turned directly on the ring.

1,810,655. BATHING CAP. RICHARD T. HOSKING, Wilmette, Ill., assignor to H. R. Hough Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 26, 1929. Serial No. 395,426. 2 Claims. (Cl. 2—68.)



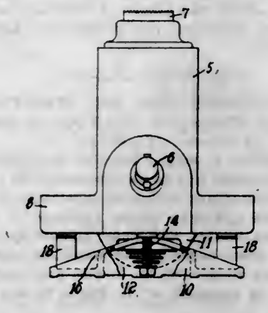
1. A bathing cap, an inverted pocket for said cap comprising a second cap nested therein, the lower marginal portions of said caps secured together by water-tight seams excepting a portion that defines the mouth of the pocket, the marginal edge of the pocket orifice being of elastic material for the purposes set forth.

1,810,656. AUTOMATICALLY LOCKED RECEPTACLE. ERIC W. JOHNSON, Newark, N. J. Filed Dec. 13, 1929. Serial No. 413,756. 1 Claim. (Cl. 232—42.)



In a receptacle of the character described, including a receptacle proper having an open rear side and an open top, there being means to removably retain said receptacle with the open rear side against a door, a cover hinged upon said receptacle and arranged to close down upon said open top, an interior latch means arranged within said receptacle and a corresponding latch member disposed upon the inside of said cover, and means for opening said cover from the exterior when said receptacle is empty including a perforate portion upon said cover through which a finger may be inserted to release said latch means and member from mutual engagement, but which perforate portion is arranged in such position over an object when the latter is deposited in said receptacle, that said object will directly block the path from said perforate portion to said latch means and member within said receptacle and thereby prevent opening said receptacle from without while said deposited object remains within the same.

1,810,657. JACK. JOHN H. KOHLER, Pittsburgh, Pa., assignor to Rees Manufacturing Corporation, a Corporation of Pennsylvania. Filed May 28, 1928. Serial No. 279,878. 7 Claims. (Cl. 254—101.)



7. A jack having a base, a lifting member, and a support for said lifting member, a universal connection between said base and said support, means for yieldingly maintaining said support and lifting member normal to the plane of said base, and means for limiting relative rotary movement between said support and base.

1,810,658. DECOLORIZING SUBSTANCE. WOLF KRITCHEVSKY, Chicago, Ill., assignor to Rit Products Corporation, Chicago, Ill., a Corporation of Delaware. Filed Dec. 7, 1928. Serial No. 324,581. 6 Claims. (Cl. 8—2.)

1. A composition of matter for stripping of color comprising a sulphonic acid salt of an alkylated polynuclear hydrocarbon, having a high wetting power, and a chemical of the hydrosulfite class that will act as a reducing agent.

6. The process of stripping fabrics which consists in treating the fabric in an aqueous medium to which is added a composition of matter comprising a sulphonic acid salt of an alkylated polynuclear hydrocarbon having great wetting power and a chemical of the hydrosulfite class, and then when the color is stripped removing the garment, washing it free from the chemicals, and drying.

1,810,659. PROCESS OF TREATING WOOD. WOLF KRITCHEVSKY and CARL J. BECKERT, Chicago, Ill. Filed Feb. 14, 1929. Serial No. 339,910. 4 Claims. (Cl. 99—12.)

2. A process for treating sap walnut which consists in placing the same in a closed vessel in the presence of an amount of water equal to from 10 to 60 percent of the weight of the wood and subjecting the contents to a steam pressure of between 35 and 50 pounds.

1,810,660. METHOD OF AND COMPOSITION FOR INCREASING THE CONDUCTIVITY OF HYDROCARBONS. WOLF KRITCHEVSKY and ELLIOTT MORRILL, Chicago, Ill., assignors, by mesne assignments, to Sparkless Cleaner Company, a Corporation of Illinois. Filed June 20, 1929. Serial No. 372,534. 8 Claims. (Cl. 87—5.)

2. A composition of matter that is a conductor of electricity consisting of a chemical of the general formula



in which R equals hydrogen, an alkyl group, hydroxy derivatives of any alkyl group, the substitution products of any alkyl group, N equals nitrogen, FA is any soap forming higher fatty acid, X equals an alkyl group, hydroxy de-

rivatives of any alkyl group, the substitution products of any alkyl group, and a solvent therefor, the finished product being soluble in light petroleum distillate.

6. A composition of matter for increasing the conductivity of light petroleum distillates, consisting of monoethanol amine oleate and a solvent therefor that is not a light petroleum distillate, the composition being soluble in said distillate.

1,810,661. COMBINED DYE AND STRIPPER. WOLF KRITCHEVSKY, Chicago, Ill. Filed Oct. 23, 1929. Serial No. 401,982. 2 Claims. (Cl. 8—6.)

1. A composition of matter in solid form adapted to be dispensed in packages and to be combined with a liquid for simultaneous dyeing and stripping consisting of chemicals that will evolve hydrogen in the presence of water, and strip color from fabrics, and water soluble dyes that will be reduced to leuco bases by the stripping chemicals and that will attach themselves to fabrics and oxidize to the original color on exposure of the fabric to the air.

1,810,662. COMBINED DYE AND STRIPPER. WOLF KRITCHEVSKY, Chicago, Ill. Filed Oct. 23, 1929. Serial No. 401,983. 2 Claims. (Cl. 8—6.)

1. A composition of matter in solid form adapted to be dispensed in packages and to be combined with a liquid for simultaneous dyeing and stripping consisting of chemicals that will evolve hydrogen in the presence of water and strip color from fabrics, and water soluble dyes that will not be affected by the reducing agents and dye the fabric the color of the dye used.

1,810,663. STRIPPER FOR FABRICS. WOLF KRITCHEVSKY and HAROLD C. PRUTSMAN, Chicago, Ill., assignors to Rit Products Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,782. 6 Claims. (Cl. 8—2.)

6. A composition of matter consisting of a hydrosulphite, petrolatum in intimate mechanical mixture therewith in a sufficient quantity to form a film about substantially all the particles of the hydrosulphite, and isopropyl naphthalene sodium sulphonate in quantity sufficient to cause the petrolatum to form an emulsion in a water solution and thereby release the hydrosulphite from the film.

1,810,664. DYE REMOVER. WOLF KRITCHEVSKY and HAROLD C. PRUTSMAN, Chicago, Ill., assignors to Rit Products Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,783. 5 Claims. (Cl. 8—2.)

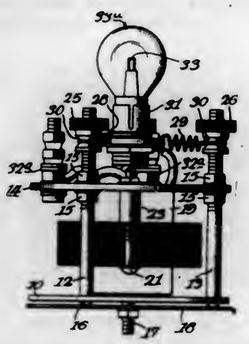
4. A composition of matter consisting of a solid mixture of hydrosulphite, a saponifiable oil that will envelop the particles of the hydrosulphite and exclude air and moisture, and soda ash.

1,810,665. FABRIC STRIPPER. WOLF KRITCHEVSKY and HAROLD C. PRUTSMAN, Chicago, Ill., assignors to Rit Products Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,784. 8 Claims. (Cl. 8—2.)

8. A composition of matter consisting of sodium hydrosulphite, a substantially anhydrous salt of a sulfonated oil intimately mixed therewith and acting to envelope the particles of the chemical and exclude air and moisture therefrom, and anhydrous soda ash.

1,810,666. LAMP MOUNTING. CARL H. LARSON, Elkhart, Ind., assignor to The Adlake Company, a Corporation of Illinois. Filed Aug. 31, 1929. Serial No. 389,847. 5 Claims. (Cl. 240—44.2.)

5. In a lamp structure of the type including a lamp adapted to be positioned at the focus of a condensing lens or reflector, the combination of a base, a plurality of posts projecting from the base, a lamp socket between the posts, radial elastic members secured to the socket,



and means carried by the posts supporting the outer extremities of the elastic members and capable of independent graduated movement along the posts for effecting a universal adjustment of the lamp.

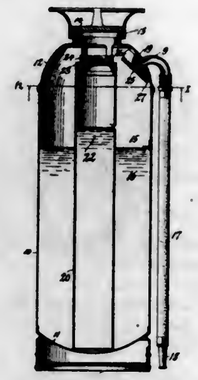
1,810,667. JACK. WALTER E. LARSON and ROY S. HARVEY, Pittsburgh, Pa., assignors, by mesne assignments, to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed May 10, 1928. Serial No. 276,620. 6 Claims. (Cl. 254—101.)

2. The combination in a jack of relatively movable base members, a universal joint between said base members to permit tilting of said jack during operation thereof, a fastening bolt in each corner of one of said members extending loosely through each of the corners of the other of said members and a flexible connection between said bolts and said other member.

1,810,668. FIRE EXTINGUISHER. HUGO LEIPOLD, Buffalo, N. Y., assignor to Buffalo Fire Appliance Corporation, Buffalo, N. Y., a Corporation of New York. Filed Apr. 5, 1928. Serial No. 267,542. 5 Claims. (Cl. 169—32.)

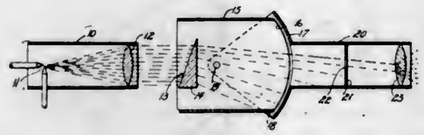
1. A fire extinguisher comprising a tank forming an outer chamber adapted to contain one liquid of an extinguishing fluid and having an outlet at its upper end, a tube arranged within the tank and forming an inner chamber adapted to contain another liquid of an extinguishing fluid and provided at its upper end with an outlet, a screen arranged over the inner side of the outlet of the tank, and a baffle arranged within the tank between

said screen and the outlet of said inner chamber, and having its horizontally opposite ends connected with the



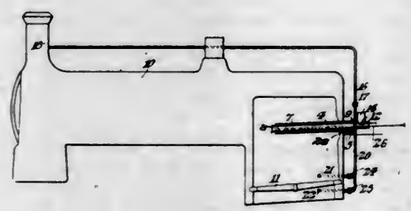
adjacent wall of the outer chamber and separated at its upper and lower ends from the adjacent wall of the outer chamber by upper and lower passages.

1,810,669. SPECTRUM LAMP. CARL LOEB, Chicago, Ill. Filed Oct. 18, 1929. Serial No. 400,630. 3 Claims. (Cl. 174—177.)



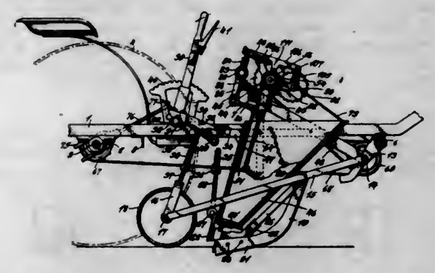
1. A spectrum lamp, including a casing, means for producing a complete spectrum in said casing, and a second casing pivotally connected to said first casing and having means for selecting a color band from said spectrum and projecting it onto an object.

1,810,670. FRACTIONAL COMBUSTION APPARATUS. PROSPER JEAN AUGUSTE MAIGNEN, Philadelphia, Pa. Filed July 18, 1925. Serial No. 44,430. 9 Claims. (Cl. 110—24.)



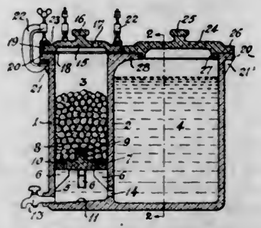
1. In fractional combustion apparatus, the combination with a furnace casing provided with a chimney vent; of means arranged to maintain a base fire in said casing; a hollow fuel container, constructed and arranged to be movable in and out of said casing to a variable extent; means, in said container, for the introduction of raw fuel and means for the discharge of carbonized matter into said furnace casing; and means controlling the escape of volatile matter released from fuel in said container.

1,810,671. PNEUMATIC PLANTER. ANDREW A. MATHESON, Denver, Colo., assignor to Matheson Pneumatic Planters Corporation, Lander, Wyo., a Corporation of Wyoming. Filed Sept. 23, 1929. Serial No. 394,488. 8 Claims. (Cl. 111—52.)



1. In a planter having a frame which is supported on wheels, and which has plows pivotally connected at their front ends therewith, a hopper for each plow, and a dropping mechanism associated with each hopper, a delivery pipe extending from the under side of the dropping mechanism to a point at the rear of the corresponding plow, said pipe terminating adjacent the bottom of the plow, means for operating the dropping mechanism so as to periodically bring seeds into position above the pipe, means for delivering a blast of air into the upper end of the pipe after the seeds have been deposited therein, whereby the seeds will be moved downwardly through the pipe at a high speed, and means for directing a stream of air into the lower end of each hopper for the purpose of stirring the seeds contained therein.

1,810,672. GAS GENERATOR. WILLIAM MINRATH, New York, N. Y. Filed Sept. 26, 1929. Serial No. 395,254. 10 Claims. (Cl. 23—282.)

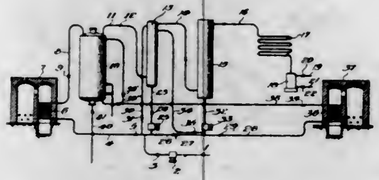


1. A gas generator comprising a container having a rectangular shape, a partition wall dividing said container into a charge chamber and a liquid chamber, a plurality of ports provided in the lower part of said wall, a grid mounted in said charge chamber above the height of said ports, a cover making a gas tight joint with the top of said charge chamber, and a gas outlet provided in the upper part of said charge chamber for withdrawing gas therefrom.

8. A gas generator comprising a container, a transverse partition extending from one wall of said container to another and dividing the same into a charge chamber for solid material and a liquid chamber having its top open to the atmosphere, communicating means provided at the lower portion of said wall for providing fluid communication for liquid to flow into said charge chamber and contact with solid material to generate gas and then to flow back into the liquid chamber upon an increase of gas pressure in excess of the static head of the liquid in said liquid chamber, a grid mounted in said charge chamber above the bottom thereof for supporting a charge of solid material, a removable cover making a gas-tight joint with the top of said charge chamber whereby a gas storage space is provided therein extending

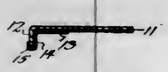
higher than the level of liquid in said liquid chamber, and a gas outlet provided in the upper part of said charge chamber for withdrawing gas from said gas storage space.

1,810,673. HYDROCARBON OIL CONVERSION. JACQUE C. MORRELL and WARREN P. FARAGHER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 1, 1929. Serial No. 336,858. 3 Claims. (Cl. 196—48.)



1. A hydrocarbon oil cracking process which comprises subjecting the oil to cracking conditions of temperature and super-atmospheric pressure in a heating zone subsequently reducing the pressure on the hot oil in a flashing zone to effect vaporization thereof, dephlegmating the evolved vapora thereby forming reflux condensate, combining a portion of said reflux condensate with the oil being subjected to cracking conditions in said heating zone, passing another portion of said reflux condensate to a second heating zone independent of the first mentioned heating zone and there subjecting the same to cracking conditions of temperature and pressure, and discharging the heated reflux condensate from said second heating zone directly into said flashing zone.

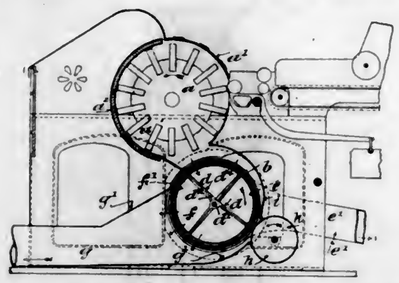
1,810,674. ROOF CONSTRUCTION. HENRY G. MUHR, Sioux City, Iowa. Filed July 21, 1930. Serial No. 469,385. 1 Claim. (Cl. 108—26.)



A composition shingle comprising a flat body portion, a flange bent at right angles thereto and a sheet metal reinforcing plate comprising a portion resting flatly against the under surface of the body portion of the shingle, a flange portion resting snugly against the inner side of the flange portion of the shingle and a channel portion formed as the termination of said flange portion receiving and clamped upon the flange portion of the reinforcing member.

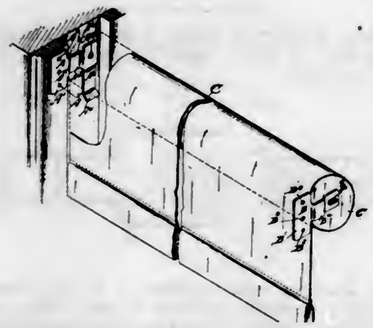
1,810,675. OPENING, MIXING, BLOWING ROOM, AND LIKE MACHINERY USED IN COTTON MILLS. TOM NUTTALL, Farnworth, near Bolton, and SYDNEY ALFRED SHORTER, Didsbury, Manchester, England, assignors of one-third to The British Cotton Industry Research Association, Manchester, England, a British Association. Filed June 11, 1929, Serial No. 370,077, and in Great Britain July 3, 1928. 5 Claims. (Cl. 19—75.)

1. Means for the opening and cleaning treatment of cotton comprising a beater device, a dust cage capable of being driven at a high speed, a casing between the beater device and the high speed dust cage, and enclosure for the said dust cage, a damper located in said dust cage, outlets for the dust and dirt in the dust cage enclosure to cause the dust and dirt to travel laterally along the interior of the cage, suction provision for extracting the dirty air which leaves the dust cage for good, a cotton receiving conduit outside the dust cage and below the dampered section of the cage, clean air inlet provision to the cotton receiving conduit and means to exert a suction on the cotton receiving conduit so as to continue the



carriage of the cotton in clean air, the dirty air being conveyed out of the dust cage and the cotton liberated to the clean air conduit.

1,810,676. WINDOW SHADE BRACKET-FIXTURE. DUANE A. PARKES, Detroit, Mich. Filed Mar. 11, 1929. Serial No. 346,084. 1 Claim. (Cl. 156—24.)

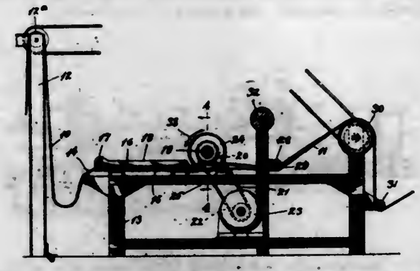


A window shade bracket consisting of an elongated base portion adapted to be secured to a window stop and an integral laterally extending web portion terminating in a gudgeon receiving portion adapted to overlie the path of the window sash and spaced therefrom and having a suitably shaped bearing hole to receive the gudgeon of a shade roller, said base portion having a plurality of holes to receive securing means, one of the holes lying in the same plane as said bearing hole, and the entire bracket lying in substantially the same vertical plane, whereby the bracket may be first oscillated on said securing means across the inner face of the window stop and thereby swing the shade roller and web portion and its gudgeon-receiving portion into and out of the path of movement of the window sash to align the shade roller and then fixedly secured in alignment by securing means passing through another hole of the base portion so as to support the shade roller in the path of movement of the sash and to suspend the shade with its side edges in close proximity to the window stop, leaving practically no space between the side edges of the shade and casing for the passage of light around the edges of the shade.

1,810,677. FABRIC SLITTING MACHINE. FRED B. PFEIFFER, Akron, Ohio, assignor to Seiberling Rubber Company, Barberton, Ohio, a Corporation of Delaware. Filed Apr. 2, 1929. Serial No. 351,912. 1 Claim. (Cl. 164—61.)

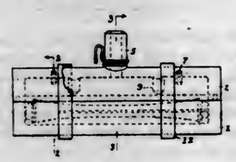
In a fabric-slitting machine, the combination of fabric-guiding means having a cutting slot, means for drawing

the fabric without substantial tensions over said slot, a rotary cutter having an interrupted cutting periphery disposed above said fabric guiding means and projecting



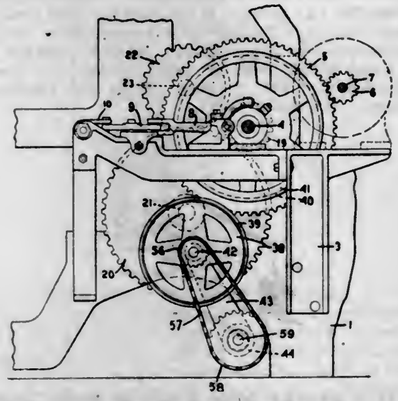
into said slot, and means for rapidly rotating said cutter in a direction that the active portion moves in the direction of the fabric feed.

1,810,678. HAIR CURLING DEVICE. NOËL PLATEL, Totowa, N. J. Filed Feb. 18, 1929. Serial No. 340,998. 7 Claims. (Cl. 132—36.)



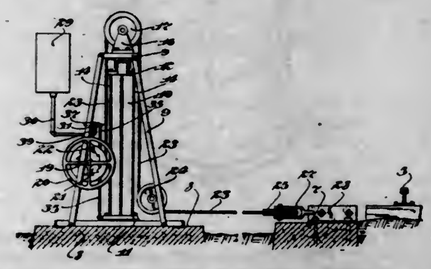
1. A box to contain a wisp of hair to be treated comprising sections fitted together edge to edge to form an enclosed space for such wisp and having edge portions of such sections coactive to grip such wisp between them, the section including one such edge portion consisting of an integral mass of plastic material having low heat-conductivity and being formed as to such edge portion yielding and elastic and as to the remaining portion thereof appreciably less yielding, and means, holding said edge portions pressed together, for maintaining said sections in the edge to edge relation.

1,810,679. PROTECTIVE LOCK FOR LOOM REVERSING MECHANISM. LEONARD M. ROGERS, Mendon, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Jan. 10, 1930. Serial No. 419,968. 5 Claims. (Cl. 139—1.)



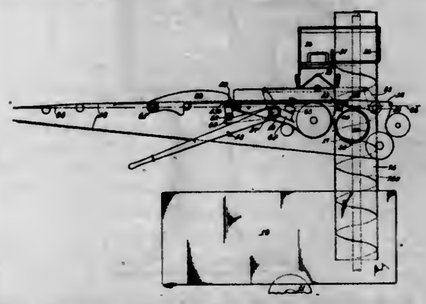
1. In a loom comprising a continuously rotating driving mechanism having an auxiliary frictional pulley, clutch mechanism for transmitting power from said driving mechanism to actuate the movable parts of the loom in a normal direction to weave fabric, manually controlled, alternately operable, auxiliary power-transmitting mechanism having a friction pulley movable into frictional engagement with the friction pulley of said driving mechanism operable to actuate the movable parts of the loom in a reverse direction, and means for preventing engagement of said friction pulleys during power-transmitting engagement of said clutch members.

1,810,680. PNEUMATIC CAR PULLER. ANDREW E. ROTHGARN, Minneapolis, Minn., assignor to Samuel C. Clow, Minneapolis, Minn. Filed Feb. 10, 1930. Serial No. 427,284. 3 Claims. (Cl. 254—93.)



1. A car puller comprising an anchored frame, a cylinder anchored to said frame, a piston working in said cylinder and having a projecting stem, a cable-guiding sheave carried by the projecting end of the piston stem, a cable passed over the sheave carried by said piston stem, a windlass adjustably anchoring one end of said cable to said frame, said cable at its free end having means for attachment to a car body, and a cable guide intermediate of the sheave carried by the piston stem and the free end of said cable.

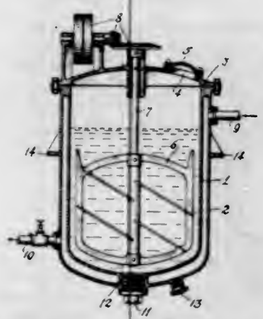
1,810,681. ENROBING OR CONFECTION-COATING APPARATUS. ROBERT SAVY and LOUIS LEBERT, Courbevoie-on-the-Seine, France, and MAX MARC GUGGENHEIM, Saginaw, Mich., assignors to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed July 2, 1930, Serial No. 465,284, and in Great Britain May 22, 1929. 4 Claims. (Cl. 91—3.)



3. In a river-flow producer comprising a cylindrical conduit having a longitudinal outlet adapted to produce an immersion bath of coating material upon a band or other surface adjacent said outlet, and an inlet at one end of said outlet for the admission of coating material, a valve for controlling said outlet comprising a rotatable cylindrical sleeve coaxial with said conduit having a longitudinal port, that edge of said port which is the lower when the port is in register with the outlet of the conduit forming a helix directed so that the end of said edge near the

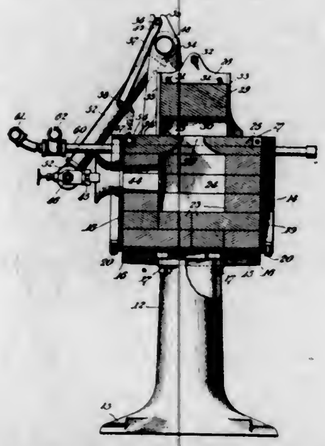
inlet to the conduit is the highest point of said edge, to produce a uniform flow along said outlet by compensating for the drop in pressure which exists along said conduit.

1,810,682. METHOD OF PREPARING LACTOSE. PAUL FRANCIS SHARP, Ithaca, N. Y., assignor to Cornell University, Ithaca, N. Y., an Educational Corporation of New York. Filed Dec. 4, 1929. Serial No. 411,465. 2 Claims. (Cl. 127—31.)



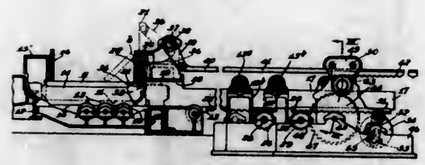
2. The process of producing beta lactose crystals substantially free from admixture with alpha lactose crystals, which comprises heating in a closed vessel a saturated solution of lactose above the transition point in the presence of undissolved alpha lactose, until all of the alpha lactose has gone into solution.

1,810,683. FURNACE FOR HEATING DRILL STEELS. BARTON R. SHEETS, Denver, Colo., assignor to Gardner-Denver Company, Denver, Colo., a Corporation of Delaware. Filed Dec. 31, 1928. Serial No. 329,589. 13 Claims. (Cl. 263—9.)



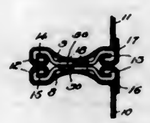
1. In a furnace of the character set forth, the combination with a furnace body having a combustion chamber, and a heating chamber surmounting the same and having an open front side, of a shield supported in advance of and above the heating chamber and having its lower end spaced from the body to give access to the open side of the heating chamber, a burner for the combustion chamber, means for supplying fuel to the burner, and a tubular air heater interposed between the upper portion of the shield and the top of the heating chamber and located over said top of the latter.

1,810,684. BILLET MANIPULATOR FOR ROLLING MILLS. JOHN A. SMITMANS, Pittsburgh, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 2, 1929. Serial No. 382,887. 14 Claims. (Cl. 80—48.)



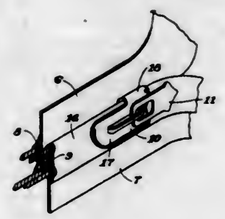
1. A manipulator comprising a movable side guide, a device for moving the same, a tilting element associated with said side guide, and means for actuating said tilting element, said actuating means including a rotatable member cooperatively associated with said device so as to be rotated at a peripheral speed substantially the same as the speed of movement of said side guide, and means for operating said rotatable member to actuate said tilting element.

1,810,685. SEPARABLE FASTENER. GIDEON SUNDBACK, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Original application filed Sept. 22, 1926, Serial No. 137,018, and in Great Britain Sept. 22, 1927. Divided and this application filed Nov. 11, 1929. Serial No. 406,280. 5 Claims. (Cl. 24—205.)



4. In a separable fastener, a pair of members of flexible material, cooperating fastener elements, attached to the adjacent edges of said members, and a separate flexible covering strip attached to each of said members adjacent said fastener elements, said covering strip extending over and at all times lying closely against said fastener elements.

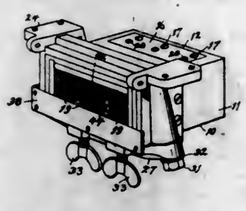
1,810,686. SEPARABLE FASTENER. GIDEON SUNDBACK, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Original application filed Sept. 22, 1926, Serial No. 137,018, and in Great Britain Sept. 22, 1927. Divided and this application filed Feb. 5, 1930. Serial No. 426,014. 7 Claims. (Cl. 24—205.)



1. In a fastening device, a pair of flexible strips of material each having a beaded edge, said beaded edge comprising an enlargement disposed wholly on one side

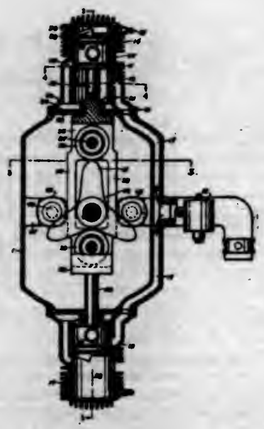
of and along the edge of each strip, and a series of fastener elements carried by each strip, each of said elements having an attaching portion engaging said enlargement.

1,810,687. ELECTRICAL CONNECTER RECEPTACLE. LOUIS ROBERTS TAYLOR, Milwaukee, Wis., assignor to Loeffelholz Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 20, 1927. Serial No. 227,511. 4 Claims. (Cl. 173—332.)



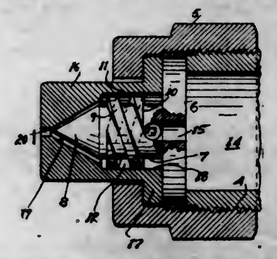
1. An electrical connecter receptacle, comprising a casing having an open end, fixed contacts therein, a yielding contact bridging member, a bracket frame mounted on said open end and having an easily removable clamping portion, a plug member for entering the casing to engage the contacts, the bridging member being beneath said contacts and automatically movable with respect thereto in a line perpendicular to the axis of insertion of the cooperating plug contacts, a follower member engaging said fixed contacts, and means associated with said bracket frame and engaging said follower for causing the fixed contacts to clampingly engage the plug contacts.

1,810,688. TRIPLE CAM INTERNAL COMBUSTION MOTOR. CHARLES A. TOCE and ALEXANDER CLARK, Houston, Tex. Filed Nov. 10, 1928. Serial No. 318,326. 2 Claims. (Cl. 123—56.)



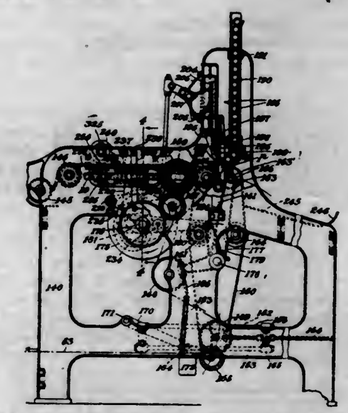
1. A two-cycle motor comprising a housing, a cam shaft therein, a cam on said shaft, a tie bar straddling said cam and adapted to compel rotation thereof, a series of braces for said tie bar to prevent lateral motion thereor, a piston disposed on each end of said bar, each of said pistons adapted to reciprocate between two compression chambers, inlets and outlets for each of said chambers and means to explode the compressed fuel in one of said chambers.

1,810,689. OIL BURNER. KNOWLSON TOWNSEND, San Francisco, and ROBERT HILL, Oakland, Calif. Filed May 15, 1930. Serial No. 452,757. 2 Claims. (Cl. 299—137.)



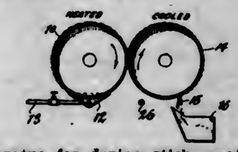
2. An oil burner comprising a flanged atomizer, a flanged tip fitting over said atomizer, and both flanges one on the other being clamped to the end of an oil supply pipe.

1,810,690. WINDING MACHINE. WILLIAM W. TRINKS, deceased, Bridgeport, Conn., by Hannah Braman, administratrix, Stratford, Conn.; and BENJAMIN W. TUCKER, deceased, South Orange, N. J., by Halcyon L. Tucker, administratrix, South Orange, N. J.; said William W. Trinks and said Benjamin W. Tucker assignors to Pulilean Manufacturing Corporation, Bridgeport, Conn., a Corporation of Delaware. Original application filed Nov. 21, 1921, Serial No. 516,806, Patent No. 1,778,777, dated Oct. 21, 1930. Divided and this application filed Aug. 1, 1930. Serial No. 472,426. 17 Claims. (Cl. 242—55.)



1. In a machine of the class described, the combination of a winding belt, means for feeding a mandrel to said belt and forming a loop in the latter to retain the mandrel, means for feeding a strip of material to said mandrel in the belt loop, and means for operating the belt to wind the strip around said mandrel.

1,810,691. APPARATUS FOR DRYING STICKY MATERIALS. DIRK J. VAN MARLE, Buffalo, N. Y., assignor to Buffalo Foundry and Machine Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 16, 1928. Serial No. 312,826. 5 Claims. (Cl. 159—11.)



1. An apparatus for drying sticky materials comprising a rotary heated drum having a drying surface upon

which the material to be dried is deposited and a rotary cooled drum having a cooling surface which receives the material from the heated drum and has its surface arranged in substantially contacting relation to the latter and moving in a direction opposite to that of the surface of the heated drum where these surfaces are substantially in contact.

1,810,692. RECEIVING APPARATUS FOR TELEVISION. GEORGE WALD, Belleville, Ill. Filed June 24, 1929. Serial No. 373,076. 4 Claims. (Cl. 176—122.)



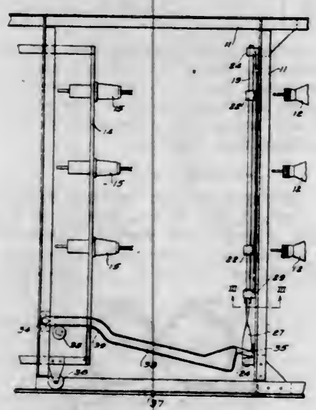
1. A receiving element for reproducing images comprising a sealed tube, a frame supported in said tube, a plurality of intersecting wires supported in said frame, one series of wires constituting anode elements and the other series constituting cathode elements, choke coils within the tube connected respectively with the said anode and cathode elements, terminals for said coils extending exteriorly of said tube, and means for connecting said terminals into an external energizing circuit.

1,810,693. AEROPLANE. HERACLIO ALFARO, East Cleveland, Ohio. Filed Mar. 7, 1928. Serial No. 259,811. 12 Claims. (Cl. 244—12.)



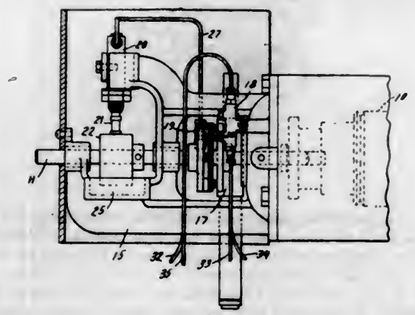
1. An airfoil having a flap adjacent its rear edge and adapted to be positioned at an angle to the airfoil, and means for transferring air from a point on the airfoil surface adjacent the vertex of the angle between said airfoil and flap to the forward part of the suction side of the airfoil.

1,810,694. SWITCH MECHANISM. JAMES M. BROWN, deceased, Pittsburgh, Pa., by Jane D. Brown, administratrix, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 1, 1926. Serial No. 145,650. 3 Claims. (Cl. 175—298.)



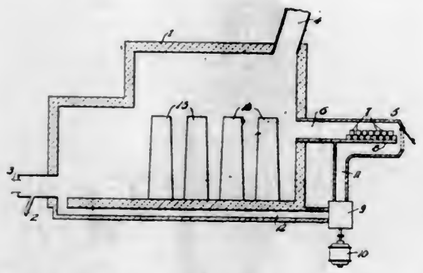
1. The combination with a pair of relatively movable structures having cooperating contact members thereon, of a partition disposed between said structures and comprising a plurality of vertical, pivoted shutter members, each having a helical cam thereon and a lever pivoted to one of the structures and movable by the other structure for cooperating with the cam to impart a turning movement to the shutters when the lever is operated.

1,810,695. ELEVATOR GUIDE RAIL LUBRICATING MECHANISM. CLARENCE R. CALLAWAY, Long Beach, N. Y., assignor to Gurney Elevator Company, Inc., New York, N. Y., a Corporation of Pennsylvania. Filed May 22, 1929. Serial No. 364,978. 4 Claims. (Cl. 184—21.)



4. Lubricating mechanism for elevator guide rails comprising a car operating shaft, a shaft adapted to rotate therewith, an eccentric mounted on said last named shaft, a pump disposed above said eccentric and having a piston and a piston rod operatively driven by said eccentric, guide rails, and conduits for conducting oil from the pump to said rails.

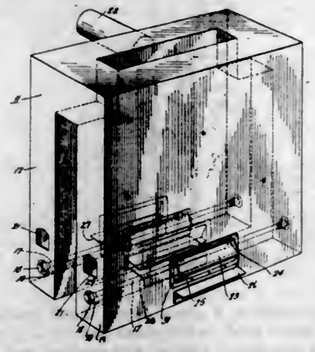
1,810,696. PROCESS FOR THE HEAT TREATMENT OF STEEL. WALTER M. CROSS, Kansas City, Mo., assignor, by mesne assignments, to Lord Southborough, London, England. Filed Apr. 8, 1929. Serial No. 353,577. 3 Claims. (Cl. 148—16.)



1. A process for the heat treatment of steel which comprises the steps of impregnating a treating furnace atmosphere with a gaseous material comprising lime and a substantially non-carburizing, carbon-carrying material and recirculating a portion of the atmosphere to obtain a uniform distribution of the treating materials throughout the furnace.

1,810,697. EXPLOSION RELIEF. CLAUDE M. DIBBLE, Joliet, Ill., assignor to Moore Brothers Company, Joliet, Ill., a Corporation of Illinois. Filed Feb. 8, 1928. Serial No. 252,900. 9 Claims. (Cl. 126—85.)

1. The combination with a plurality of spaced, vertically and horizontally elongated gaseous fuel burner chambers providing an intermediate air heating chamber, gaseous fuel burners respectively located in said chambers adjacent the bottom and extending substantially the horizontal length thereof, the vertical side walls of said chambers having explosion relief vents directly communicating with the locality of the gaseous fuel burners in said chambers and leading outwardly into the intermediate air heating chamber, doors respectively pivoted at the tops of said vents and movable by gravity to keep them normally



closed, and baffles respectively projecting horizontally from the side walls of the fuel burner chambers into the intermediate air heating chamber, said baffles being located below the vents but positioned at different levels to arrest the downward spread of flame discharged through the vents without obstructing the upward flow of air in the heating chamber during normal operation.

1,810,698. APPARATUS FOR MANUFACTURING SEAMLESS TUBING. SAMUEL E. DIESCHER, Pittsburgh, Pa., assignor to S. Diescher & Sons, Pittsburgh, Pa., a Partnership consisting of Samuel E. Diescher and August P. Diescher. Filed June 11, 1925. Serial No. 36,892. 2 Claims. (Cl. 80—14.)

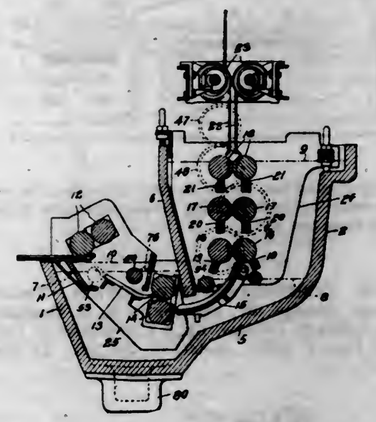


1. A swedging mill for the manufacture of seamless tubing having external longitudinal vanes formed integrally with it, comprising a pair of swedging rolls having a tube-forming pass and vane-forming grooves adjacent to said pass, means for oscillating the rolls, feed mechanism for moving a billet into the bite of the rolls, means effective at the beginning of a swedging operation for rapidly rotating a billet on its longitudinal axis when the swedging rolls swing to a position remote from the feeding mechanism and means for rendering said rotating means inoperative while forming vanes on a route.

1,810,699. METHOD OF AND APPARATUS FOR THE MANUFACTURE OF TIN PLATE. SAMUEL E. DIESCHER, Pittsburgh, Pa., assignor to S. Diescher & Sons, Pittsburgh, Pa., a Co-partnership consisting of Samuel E. Diescher and August P. Diescher. Filed Dec. 5, 1925. Serial No. 73,379. 17 Claims. (Cl. 91—70.2.)

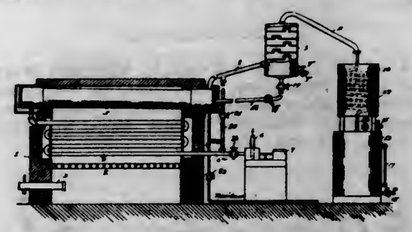
1. In the manufacture of tin plate in which plates to be coated are passed through a body of flux resting upon a bath of molten tin, the step consisting of causing the chilled tin and its content of impurities at the surface of the bath adjacent to the flux to continuously move laterally to present substantially unchilled clean molten tin to the centering plates.

3. In the manufacturing of tin plate in which plates are passed through a bath of molten tin, the method comprising causing the molten tin to continuously flow in a cycle in its container and segregating the impurities of the bath for removal from it at a point in the cycle of flow of the bath.



13. Tin plating apparatus comprising a pot having an entering and a discharge side, plate guiding and tinning apparatus mounted in the pot, a flux box at the entering side of the pot and through which plates are fed into molten tin contained in the pot, a roll in the flux box at a side of the path of entering plates and partially projecting above the metal line, and means for continuously rotating said roll for moving laterally the impurities at the surface of the molten tin.

1,810,700. APPARATUS AND PROCESS FOR TREATING HYDROCARBONS. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 4, 1919, Serial No. 342,405. Renewed May 12, 1927. 6 Claims. (Cl. 196—48.)

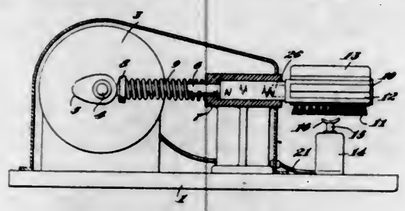


1. A process for treating hydrocarbons consisting in subjecting the oil in a tube and vapor chamber still to heat to crack the oil, passing the vapors into a dephlegmator, returning heavier reflux condensates to that part of the still where the highest temperature prevails, the lighter refluxes to the vapor chamber and passing the lighter vapors to a water condenser and receiver for condensation and collection, maintaining a vapor pressure upon the oil during distillation and condensation.

1,810,701. FINGER NAIL POLISHER. CHARLES J. FOERSTER, Newton, Mass. Filed Aug. 28, 1930. Serial No. 478,326. 2 Claims. (Cl. 132—74.)

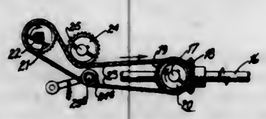
1. Apparatus of the class described comprising a reciprocable polishing tool, an electric motor operatively connected to the tool, means for reciprocating the tool upon operation of the motor, a finger rest mounted beneath the

tool, yielding means normally urging the rest toward the tool, and a switch connected in the circuit of the motor and actuable upon depression of the rest against said yielding



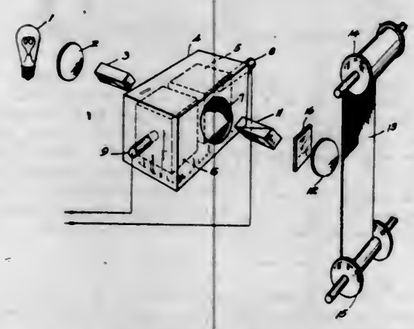
means for closing said circuit to start the motor, the switch being opened by said yielding means when the finger is removed from the rest.

1,810,702. IRREGULAR DRIVE MOTION. PHILIP A. FRAZIER, Chicago, Ill., assignor to R. R. Donnelley & Sons Company, Chicago, Ill., a Corporation of Illinois. Filed June 4, 1928. Serial No. 282,786. 10 Claims. (Cl. 11—1.)



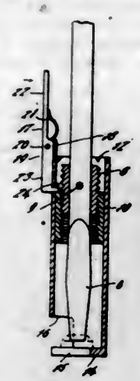
1. In a machine of the class described, a continuous chain conveyor, means thereon for conveying objects to be operated on, a sprocket for driving the chain conveyor and of such diameter and such few relatively widely spaced apart teeth that said sprocket advances said conveyor with an irregular motion, mechanism comprising an element moving generally in the direction of movement of said conveyor adapted to perform an operation on the object carried by the conveyor, a sprocket driven by the drive for the conveyor sprocket at a uniform rate, and an eccentric sprocket driven by a chain running over the secondmentioned sprocket for driving said element with substantially the same irregular motion as that of the chain conveyor.

1,810,703. SOUND RECORDING SYSTEM. WALTER GALLAHAN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1928. Serial No. 274,732. 1 Claim. (Cl. 179—100.3.)



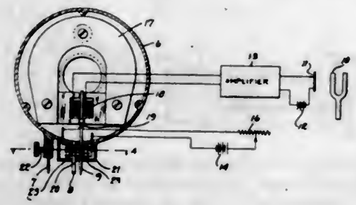
In a system of photographic recording, incorporating a Kerr cell of the type utilizing nitro-benzol for a dielectric, a color filter transparent to blue light adapted to compensate for the yellow color of said nitro-benzol.

1,810,704. SCREW DRIVER. HENRY THOMAS GENTRY, Kalispell, Mont. Filed Sept. 30, 1929. Serial No. 396,154. 2 Claims. (Cl. 145—52.)



1. In combination, a screw driver shank provided with a blade, a sleeve fixed on the shank and externally threaded, a sleeve internally threaded and engaged with the first mentioned sleeve, a barrel slidable over the second mentioned sleeve and having inturned lug stops to engage one edge of the internally threaded sleeve and formed with a bottom having a slot therein and said barrel having an opening merging into the slot, and latch means on the barrel for engagement with the said second-mentioned sleeve to prevent outward movement thereof with respect to the barrel during the operation of the screw driver, said means being releasable to permit such outward movement for disengaging the screw driver from the kerf of a screw.

1,810,705. THERMAL SOUND RECORDING SYSTEM. EDMUND H. HANSEN, New York, N. Y. Filed Feb. 16, 1928. Serial No. 254,742. 5 Claims. (Cl. 179—100.4.)



1. In combination a spirally grooved heat plastic disc, an electromagnetic recording motor having a heated recording stylus, a cold guiding stylus mounted on the recording motor adapted to engage the spirally grooved disc, and a heated erasing stylus also mounted on said motor between the cold guiding stylus and the heated recording stylus whereby the grooving in the heat plastic disc is erased in the area preceding the recording stylus.

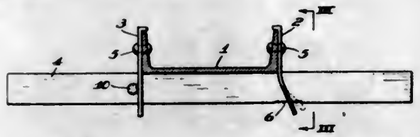
1,810,706. SCREW CAP. JAMES S. HARDIMAN, Ridgewood, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Nov. 11, 1926. Serial No. 147,625. 9 Claims. (Cl. 215—44.)



1. As an article of manufacture, a screw cap comprising a cover portion, a depending skirt, and a bead at the lower

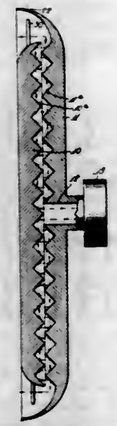
edge of said skirt, said bead being deformed to provide a plurality of locking projections from the normal portions thereof adapted to engage suitable threads on a container without interrupting the continuity of the bead.

1,810,707. BRAKE BEAM GUARD ARM. BRODERICK HASKELL, Franklin, Pa., assignor to Davis Brake Beam Company, Johnstown, Pa., a Corporation of Pennsylvania. Filed Apr. 1, 1930. Serial No. 440,745. 5 Claims. (Cl. 188—210.)



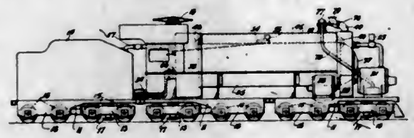
1. In a railway car truck, a spring plank, a brake beam guard bar below the spring plank, and a resilient bracket attached to said spring plank and provided with an opening for receiving and supporting said bar, said bracket yieldingly engaging said bar to normally lock it in operative position.

1,810,708. METHOD OF AND APPARATUS FOR AMPLIFYING AND PROJECTING SOUND WAVES. MILLER REESE HUTCHISON, Llewellyn Park, West Orange, N. J., assignor to Echodon, Inc., West Orange, N. J., a Corporation of Delaware. Filed Jan. 9, 1929. Serial No. 331,343. 12 Claims. (Cl. 181—27.)



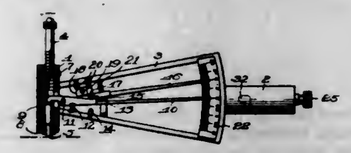
1. A method of amplifying sound which consists in propagating sound waves from a center through a tortuous conduit, repeatedly right angularly reflecting the wave while circularly expanding it in one dimension, at intervals and preventing expansion thereof in the other dimension.

1,810,709. LOCOMOTIVE. HOWARD L. INGERSOLL, Stamford, Conn. Original application filed Nov. 23, 1923, Serial No. 676,497. Divided and this application filed Nov. 22, 1926. Serial No. 150,005. 4 Claims. (Cl. 105—36.)



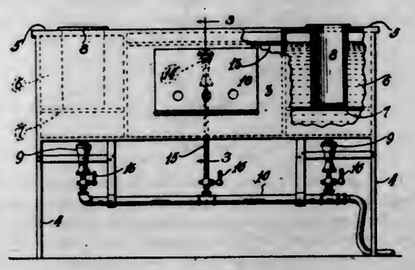
1. In a locomotive, the combination of a plurality of driving axles with their wheels, electric motors therefor, an electric generator, a steam turbine for driving the generator, and a boiler for producing steam at a pressure upwards of 400 pounds whereby to run the turbine at an efficiency point which is high enough to overcome the necessity for using a condenser.

1,810,710. GAUGE. CARL EDVARD JOHANSSON, Detroit, Mich. Original application filed Apr. 12, 1923, Serial No. 631,499, and in Sweden Apr. 27, 1922. Divided and this application filed Feb. 8, 1928. Serial No. 252,700. 6 Claims. (Cl. 33—178.)



1. In a gauge the combination of a head, two measuring studs located in alignment in said head and adapted to engage walls on the object to be measured, one of said studs being adapted to slide in said head, a pointer actuated by said sliding stud, two locating studs located in said head on either side of and at equal distances from said sliding measuring stud and disposed in a plane common to said measuring studs, means for rigidly securing said locating studs to one another, said locating studs and connecting means being movable in said head in a direction parallel to the direction of movement of said sliding measuring stud, and means urging said locating studs in a direction outwardly of said head.

1,810,711. STOVE. GEORGE JONES, Waxahachie, Tex. Filed Dec. 13, 1929. Serial No. 413,807. 1 Claim. (Cl. 126—37.)



A stove of the character described, having front and rear walls and an open top, said top comprising two end portions and a central frying plate, all arranged on substantially the same level, said end portions being provided with openings to permit admission of suitable vessels, water chambers beneath said end portions, said central plate having a downwardly offset portion at the forward end thereof forming with the front wall of the stove a readily available warming recess extending lengthwise of the stove for keeping warm articles of food and cooking utensils, and burners beneath said end chambers and said central plate.

1,810,712. RADIATOR. WILLIAM J. KENNEY, Chicago, Ill. Filed Mar. 30, 1929. Serial No. 351,447. 6 Claims. (Cl. 257—141.)

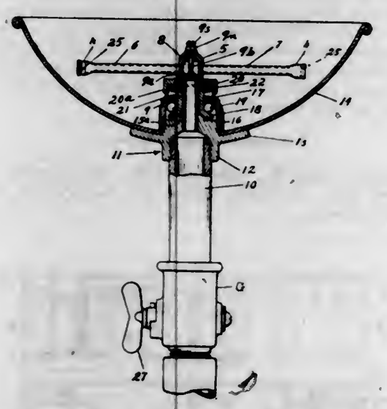
2. In a radiator, two separated hollow heads, comparatively thin hollow walls extending between the heads

and connecting their interiors together, said walls rising from the bottom of the radiator and curving laterally to one of the sides, and the walls diverging from their lower



ends toward the top to produce between them open-ended air passages increasing gradually in cross-sectional area from their lower to their upper ends.

1,810,713. GAS BURNER. JOHN H. KINKAID and STANTON H. WESTON, Los Angeles, Calif., assignors of one-third to Robert D. Pearson, Los Angeles, Calif. Filed June 19, 1929. Serial No. 372,196. 3 Claims. (Cl. 158—99.)



1. In a burner, a rotary burner head comprising a tubular body one end of which is closed and the other end of which is provided with an out-curved circumferential flange, means operatively to support said head and to feed fuel thereto under pressure, said means comprising a standard juxtaposed to the flanged end of said head and a pivot pipe over which said head is rotatably fitted, a dome shaped housing mounted upon said standard inclosing said flange in spaced relation thereto, and ball bearings contacting on one side with the interior of said housing and on the other side with the concave side of said outcurved flange, said housing and outward curved flange cooperating to form a cage for said ball bearings.

1,810,714. PROCESS OF MAKING ASBESTOS FRICTION ELEMENTS. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to Raybestos-Manhattan, Inc., a Corporation of New Jersey. Original application filed Sept. 10, 1920, Serial No. 409,388. Divided and this application filed Oct. 31, 1928. Serial No. 316,344. 1 Claim. (Cl. 91—70.)

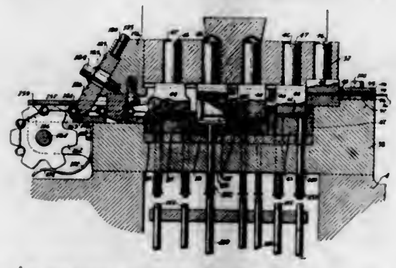
A process which comprises saturating an unwoven felted asbestos mass in a bath of heated asphaltic base oil, then subjecting said saturated mass to a baking operation at an elevated temperature, thereafter resaturating said mass in a bath of similar saturant, and thereafter subjecting the mass to a final baking operation at an elevated temperature continued until the saturant is substantially insoluble in asphaltic solvents.

1,810,715. JACK HANDLE. WALTER E. LARSON and JOHN H. KOHLER, Pittsburgh, Pa., assignors, by mesne assignments, to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Aug. 8, 1927. Serial No. 211,415. 5 Claims. (Cl. 74—33.)



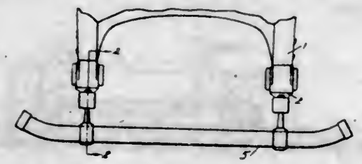
2. A joint for fastening a plurality of metal links together, comprising a flanged portion on the end of the one link having an off-center cylindrical opening and a groove therein, a flanged portion on a second link having an off-center cylindrical opening and a projection thereon adapted to cooperate with the opening and groove on the first link, and means extending through the corresponding cylindrical openings when the links are in aligned position to rigidly hold the said links in fixed relation to each other.

1,810,716. APPARATUS FOR MAKING CHAIN. SYLVANUS D. LOCKE, Bridgeport, Conn., assignor to The Locke Steel Chain Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 24, 1926. Serial No. 131,233. 17 Claims. (Cl. 53—6.)



1. In a machine for making chain links, means for removing sections of similar shape one by one from a strip of metal to provide blanks, a set of working elements adapted to successively engage each blank, means for delivering the blanks one at a time to said mentioned set of working elements, means for removing each blank from said mentioned set of working elements after an operation is performed, means for feeding the blanks one at a time to a different set of working elements, and means for assembling the blanks into a chain.

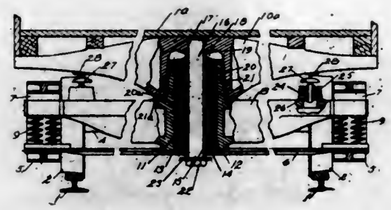
1,810,717. CUSHION MOUNTING. HUGH C. LORD, Erie, Pa. Filed Feb. 11, 1927, Serial No. 167,432. Renewed Oct. 21, 1929. 12 Claims. (Cl. 293—55.)



1. In a mounting, the combination with a supporting member and a supported member, one having a tubular

wall and the other a projection adapted to telescope the wall, a rubber bushing between and locked with the projection and the wall.

1,810,718. CAR. HUGH C. LORD, Erie, Pa. Filed Mar. 14, 1927, Serial No. 175,190. Renewed Mar. 2, 1929. 18 Claims. (Cl. 105—199.)



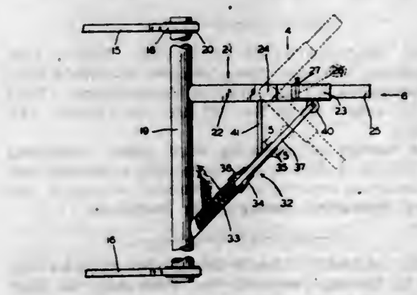
1. In a car, the combination of a truck; a body pivotally mounted on the truck; and rubber dampener means between the truck and body insulating the body from metallic contact with the truck.

1,810,719. MEAT TENDERER. MARK LOWENTHAL, Newark, N. J. Filed July 28, 1928. Serial No. 296,010. 1 Claim. (Cl. 17—30.)



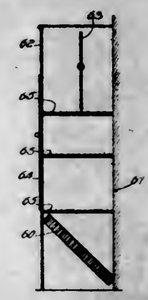
A meat tenderer, comprising a handle provided with a centrally arranged, threaded recess, a plurality of apertured cutters, said cutters being provided with two oppositely arranged cutting edges, an inner clamping member provided with aligning pins adapted to pass through the cutters, an outer clamping member provided with a pin having an externally threaded end to threadedly engage the threaded recessed portion of the handle, and spacing blocks between each of the cutters adapted to maintain them in spaced relation, said blocks being of less width than the cutters whereby both cutting edges of the cuttera will be exposed.

1,810,720. SAFETY SWINGING FINGER BOARD FOR WELL DRILLING DERRICKS. KENNETH ALBERT MCCOY, Fullerton, Calif., assignor of one-half to Estee T. Brown, Fullerton, Calif. Filed Jan. 2, 1930. Serial No. 418,100. 17 Claims. (Cl. 211—60.)



16. In combination with a well derrick, a pivotally mounted vertical post, a finger board connected thereto to swing in a horizontal plane, a finger tip mounted on the board to swing in a vertical plane, a brace fixedly connected to the post and having an engagement with the finger tip, said brace normally holding the tip in a horizontal position but permitting the tip to rise above the said brace, the said brace being depressible on depression of the tip, and having means to return the tip to the horizontal position.

1,810,721. HEATING APPARATUS. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Apr. 25, 1923. Serial No. 634,492. 9 Claims. (Cl. 257—136.)



3. In a heating apparatus, an enclosure having an air outlet and having a front wall provided with an opening in the lower portion thereof, a radiator disposed at said lower opening, perforated shelves arranged above the radiator, said radiator having passage ways providing the only means whereby air may pass through said lower opening into said enclosure, and a damper mounted in the upper portion of said enclosure.

1,810,722. IRONING BOARD CONSTRUCTION. CLAYTON M. MORRIS, Los Angeles, Calif. Filed Jan. 15, 1930. Serial No. 420,893. 2 Claims. (Cl. 68—10.)



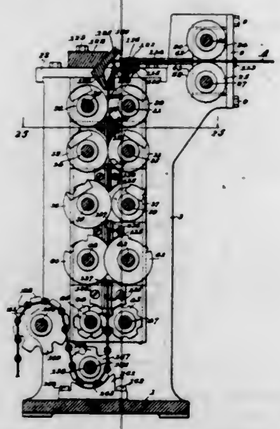
1. A separable ironing board construction comprising a base board, a board secured in an upright position to said base board to form a standard, there being a substantially horizontal rib projecting from each side of the upper portion of said standard, an ironing board proper having cooperating parallel spaced cleats secured to one face thereof, said cleats having grooves adapted to telescope over said ribs, and a catch device comprising two parts which are yieldingly engageable with each other to releasably hold said ironing board proper in its attached position upon said standard, one part of said catch being attached to said ironing board proper and the other part thereof being attached to said standard, one part of said catch being a metallic plate having two cooperating spring arms integral therewith, and the other part of said catch comprising a part positioned to be embraced by said arms.

1,810,723. TRANSMISSION LINING. WILLIAM NANFELDT, Paterson, N. J., assignor to World Bestos Corporation, Paterson, N. J., a Corporation of Delaware. Filed Nov. 21, 1928. Serial No. 321,037. 12 Claims. (Cl. 91—70.)

1. As a new article of manufacture, a friction fabric adapted for transmission lining operated in oil which

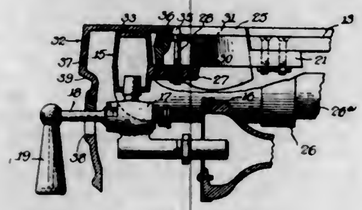
is composed of woven asbestos and cotton yarns and contains polymerized china wood oil together with an impregnated vegetable wax.

1,810,724. CHAIN MAKING MACHINE. CHARLES PARKER, Bridgeport, Conn., assignor to The Locke Steel Chain Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 23, 1926. Serial No. 150,312. 10 Claims. (Cl. 59—6.)



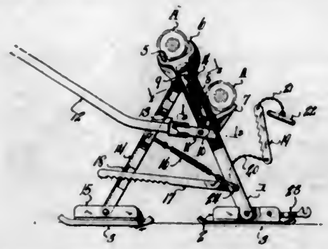
1. In a machine for transforming a strip of metal into a chain, means for severing link blanks from the strip, a plurality of sets of dies arranged vertically one below another, means for feeding a blank to the uppermost of said sets, means for discharging the blank from one set of dies to the next lower one, said means permitting the blank to pass by gravity to said lower set, the lowermost set of dies being adapted to assemble the links into a chain.

1,810,725. GAS RANGE. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed Mar. 9, 1929. Serial No. 345,688. 5 Claims. (Cl. 126—39.)



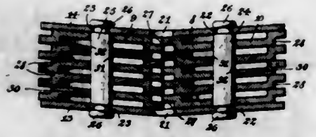
5. A gas range having, in combination, a cooking top comprising a frame including side and rear members, a supporting member of inverted channel shaped cross section extending across the front of the stove top with its upper surface offset downwardly from the upper surfaces of the side members, a gas supply manifold having supporting arms detachably secured to the underside of said supporting member and having valve stems projecting forwardly therefrom, and an angular casting comprising a horizontal part of substantial width with its rear edge portion detachably secured on the upper side of said supporting member, said casting further having a substantially vertical part extending downwardly from the forward edge of the horizontal part and being apertured to permit said valve stems to extend therethrough.

1,810,726. VEHICLE SUPPORT. MAURICE CAMPBELL PIERCE, Madison, Wis. Filed Jan. 12, 1929. Serial No. 331,996. 4 Claims. (Cl. 248—41.)



1. A vehicle support comprising a pair of telescopic members, means for urging said members apart, a leg hinged to one of said members, a spring for retracting said leg, means for locking said telescopic members against retraction, and means for locking said leg against spreading.

1,810,727. KNIFE SHARPENER. WILLIAM F. POLSON, Buffalo, N. Y. Filed Apr. 5 1927. Serial No. 181,083. 5 Claims. (Cl. 76—87.)



1. A knife sharpener, comprising a support, a pair of spaced parallel spindles carried by said support, a set of sharpening disks on each spindle marginally overlapping the set on the other spindle, and means embodied in the construction of the knife sharpener to permanently hold the set of disks on one spindle in angular relation to the set on the other, said disks being rotatable and non-tiltable on said spindles.

1,810,728. MANUFACTURE OF PAPER. HAROLD R. RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Nov. 27, 1928. Serial No. 322,291. 10 Claims. (Cl. 92—21.)

1. The method of producing filled paper, comprising adding a metallic salt to a mix comprising fibrous material and filler under conditions favoring the minimizing of time of contact, and thereafter making paper therefrom.

1,810,729. MANUFACTURE OF PAPER. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Nov. 27, 1928. Serial No. 322,292. 15 Claims. (Cl. 92—21.)

1. The method of producing filled paper, comprising adding filler to a fibrous mix containing a metallic salt under conditions favoring the minimizing of time of contact, and thereafter making paper therefrom.

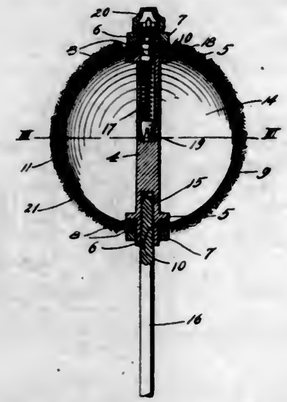
1,810,730. GLASS FURNACE CHARGING APPARATUS. JOHN H. RITTER, Charlerol, Pa. Filed Aug. 23, 1929. Serial No. 387,916. 6 Claims. (Cl. 49—14.)

6. A glass-furnace charging apparatus adapted to prevent dusting, comprising a charge-carrying ladle having long and short side walls and a bottom forming an open-top charge-receiving chamber of J-like cross section, a shutter pivotally connected to the upper edge of said short side wall, and a shaft for supporting and rotating the ladle connected to an end thereof below the center of



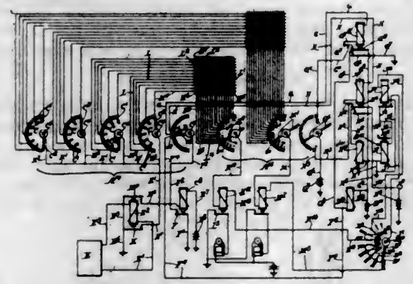
said end, said shutter being effective to retain the charge in the ladle until it is inverted and when inverted swinging downwardly and with said longer side wall cooperating with the surface of the molten glass to prevent spreading of dust in the furnace.

1,810,731. DRUM BEATER. ERNEST O. ROARK, Kansas City, Mo., assignor of one-fourth to Clara M. O'Shaughenessy, Kansas City, Mo. Filed Sept. 12, 1927. Serial No. 218,941. 10 Claims. (Cl. 84—422.)



1. A substantially non-elastic hollow head for drum beaters.

1,810,732. PROGRAM MACHINE. HULBERT SANNER, Chicago, Ill., assignor to Lothar A. Ederer, Chicago, Ill. Filed Sept. 4, 1923. Serial No. 660,694. 17 Claims. (Cl. 161—4.)



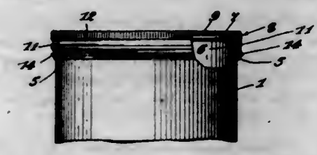
1. In an electric program machine, a plurality of time switches, means for giving them a continuous forward step by step movement, a day switch and means for giving it a forward day by day movement and means for automatically reversing the direction of movement of the day switch for returning it to the starting position at the end of a predetermined number of days, the day switch being operated under the control of the time switch.

1,810,733. PULL-OFF YOKE. WILLIAM SCHAAKE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 20, 1930. Serial No. 453,929. 5 Claims. (Cl. 191—40.)



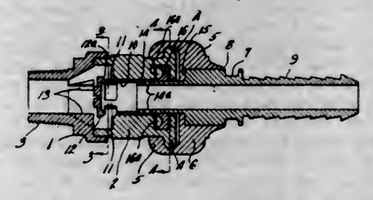
1. A pull-off yoke for a trolley conductor comprising, in combination, a section of metal tubing curved near one end, a section of metal tubing telescoped over the curved portion of the tubing to reinforce it, both of said sections being expanded vertically along the curved portion to increase the section modulus with respect to the horizontal axis, thereby increasing the mechanical strength of the pull-off yoke.

1,810,734. CONTAINER. EDGAR SCOFIELD, New York, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a Corporation of New York. Filed Nov. 30, 1927. Serial No. 236,603. 11 Claims. (Cl. 229—5.7.)



1. In a device of the class described, the combination of a paper carton, a threaded metal collar adapted to receive a screw cap telescoped about the upper end of said carton, said collar having a continuous upper edge secured in position by an interlocking inturned folding engagement of the upper edge of the collar with the upper periphery of the carton whereby only the upper peripheral edge of the carton is deformed in the application of the collar to the container and the raw edge of the metal collar is concealed.

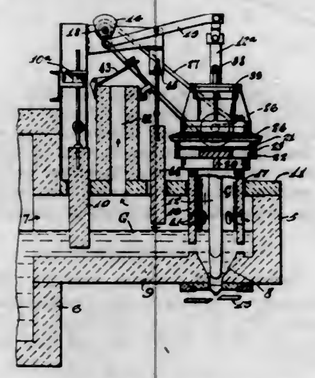
1,810,735. HOSE COUPLING. CHARLES T. SMITH, Cleveland Heights, Ohio. Filed May 18, 1928. Serial No. 278,851. 1 Claim. (Cl. 284—18.)



A hose coupling comprising two members adapted for interlocking connection for the passage of fluid therethrough, a valve in one of said members, the other of said members having a projecting portion adapted for insertion within said one member for opening engagement with said valve, said one member having an annular three wall groove in its inner surface in immediate proximity to the end thereof, and a readily accessible, expansible gasket arranged in said groove and around said projecting portion for sealing the connection, said gasket having an annular channel facing the incoming pressure so as to be exposed to the full and direct pressure of the fluid and being engaged only by said projecting portion and being subject to only radial expansion, whereby the inner

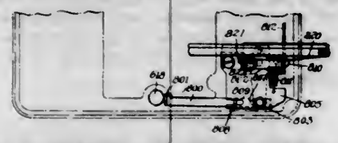
and outer walls of the gasket will be maintained in effective sealing engagement between the inner wall of said groove and said projecting portion, respectively.

1,810,736. GLASS FEEDER. LEONARD D. SOUBIER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 27, 1928. Serial No. 328,679. 19 Claims. (Cl. 49—55.)



12. The combination in a glass feeder of a container for molten glass having a bottom outlet opening, means to control issue of glass thru said opening including a tube projecting into the glass over the opening, and means to supply heat to the interior of the tube to reheat portions of the glass in the container.

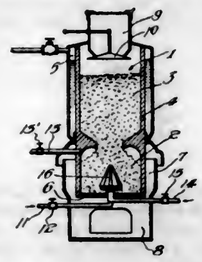
1,810,737. CASH REGISTER. OSCAR J. SUNDSTRAND, Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 28, 1929. Serial No. 374,596. 5 Claims. (Cl. 235—22.)



1. The combination of a computing machine having in its extreme rear portion a part movable up and down in each cycle of operations of the machine, a drawer-unlatching plunger below said part, an element adapted to be interposed between said part and said plunger to transmit movement from said part to said plunger, said element being movable transversely of the machine, a spring tending to interpose said element, settable means to control printing, said means being located at the front end of the machine, and connections between said means and said spring for restraining the spring when said settable means is in its initial position, said connections including a link extending along the side of the machine.

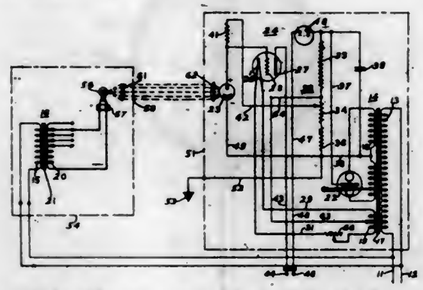
1,810,738. GAS PRODUCER. ARTHUR P. VAN HEEDEN, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 19, 1927. Serial No. 227,068. 3 Claims. (Cl. 48—63.)

1. In a gas producer, a gasifying chamber and means for supplying fuel thereto, an inverted metallic cap member disposed within said gasifying chamber, a steam inlet pipe extending through said gasifying chamber into said cap member and terminating adjacent the upper portion of the latter whereby steam introduced through said inlet pipe is caused to travel downwardly through said cap member in contact with the walls thereof, a steam outlet at the lower portion of said cap member whereby the steam is discharged from the cap member into said gasifying chamber, and an air inlet pipe terminating



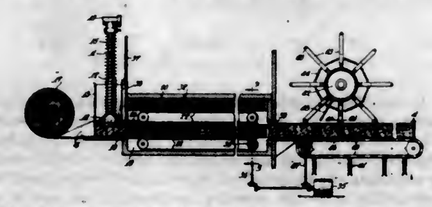
directly in said gasifying chamber outside of said cap member and independent thereof whereby air may be introduced directly into said gasifying chamber independently of the steam introduced to said cap member.

1,810,739. SMOKE INDICATOR SYSTEM. EDWIN H. VEDDER, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 9, 1928. Serial No. 318,298. 5 Claims. (Cl. 250—1.)



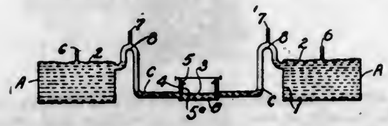
1. In an electric circuit, in combination, a primary source of supply of electric energy, a photoelectric cell having an anode and a cathode, a resistor connected in series circuit with the anode thereof and the source of energy for the cell, a plural electrode thermionic amplifier tube, means for connecting the filament to the source of energy to energize the filament, means for connecting the plate circuit to the source of energy, means connecting the control electrode of the tube to the anode of the photoelectric cell to be controlled thereby, a light source for energizing the photoelectric cell energized from the primary source of supply, and an indicating instrument in the plate circuit to incidate the degree of energization of the photoelectric cell by said light source.

1,810,740. APPARATUS FOR CONTINUOUS PRODUCTION OF BRICKS OF ICE CREAM OR ANALOGOUS MATERIAL. CLARENCE W. VOGT, Louisville, Ky., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky., a Corporation of Delaware. Filed Oct. 25, 1929. Serial No. 402,339. 40 Claims. (Cl. 62—114.)



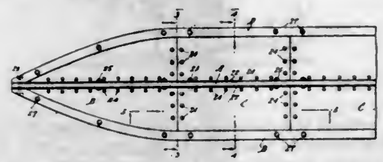
3. An apparatus for forming ice cream bricks, including means for delivering a strip of wrapping material in substantially channel form, means for delivering the partially frozen ice cream into said channel, conveying means for continuously advancing the wrapping material with the ice cream therein, means for further freezing the material during its advancing movement, and means for subdividing the hardened ice cream into successive separate sections.

1,810,741. APPPARATUS FOR STORING LIQUIDS. JOHN H. WIGGINS, Bartlesville, Okla. Filed May 2, 1927. Serial No. 188,387. 2 Claims. (Cl. 220—85.)



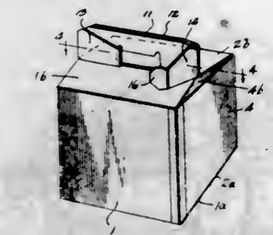
1. An apparatus for storing volatile liquids, comprising a main tank provided with a metallic top connected at its peripheral edge to the side wall of said tank and constructed so that it is capable of flexing to provide for the expansion and contraction of the liquid in said tank, an auxiliary storage tank, a conduit leading from said main tank to said auxiliary tank and provided with an overflow point located at a point higher than the top edge of the side wall of said main tank, a vent for said main tank, a vent for said overflow conduit, and means for returning liquid from the auxiliary tank to the main tank.

1,810,742. SECTIONAL HULL STRUCTURE FOR HOUSE-BOATS OR THE LIKE. WILLIAM WILSON, New York, N. Y. Filed Feb. 14, 1931. Serial No. 515,846. 11 Claims. (Cl. 114—77.)



7. In a hull construction, a continuous rigid keel member corresponding in height and length to the hull and hollow water-tight hull sections secured to opposite sides of said keel member.

1,810,743. BOX WITH HANDLE. HOWARD G. ALLEN, Niagara Falls, N. Y., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed July 20, 1929. Serial No. 379,666. 7 Claims. (Cl. 229—52.)



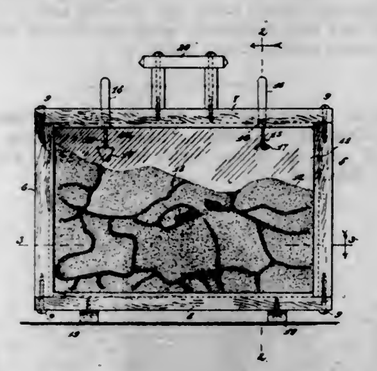
1. In a box of fibre board or the like, a blank having flaps adapted to be folded to form the cover of the box, an extension on a flap adapted to project from said cover and having an aperture therein to form a handle for the box, and an ear associated with said handle extension and adapted to engage said extension with a cover flap to hold said extension substantially flush with said cover, whereby said handle extension does not interfere with the stacking of a plurality of said boxes.

1,810,744. PRESS AND DISPLAY RACK. JOHN O. AMBLER AUBERT, New York, N. Y. Filed May 16, 1928. Serial No. 278,238. 6 Claims. (Cl. 100—57.)



6. A device of the class described, comprising two outer and a plurality of intermediate panel units, arranged face to face, coil springs connecting the two outer units in proximity of one of their edges, said springs passing through the intermediate units inserted therebetween, and forming expansible hinge means for said units, means for adjustably fastening together the opposite edges of said two outer units, and a snap over spring connecting said two outer units to each other, said spring being adapted to retain the device in both its closed and its open position.

1,810,745. EDUCATIONAL APPARATUS. FRANK EUGENE AUSTIN, Hanover, N. H. Filed June 21, 1929. Serial No. 372,703. 1 Claim. (Cl. 119—1.)

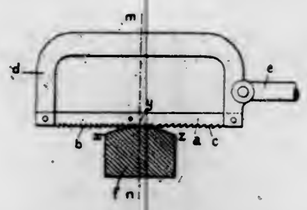


An apparatus of the class described comprising a case having a glass side and containing soil and ants, the tunnels and rooms made by the ants being exposed through the glass side, there being an aperture in the case, an elongated handle for closing the aperture, and a shank extending inwardly from the handle and providing means for supporting sustenance for the ants.

1,810,746. METAL SAWING MACHINE WITH ARCUATE CUT. JULES BABIN and ACHILLE PAYS, Paris, France; said Pays assignor to said Babin. Filed Oct. 6, 1925, Serial No. 60,892, and in France Oct. 15, 1924. 1 Claim. (Cl. 29—73.)

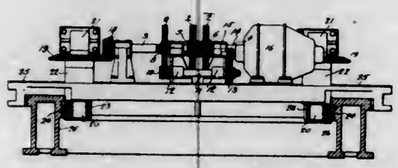
A reciprocating saw machine for the sawing of metals comprising a rectilinear saw blade having its two halves toothed in opposite directions, the arrangement of the cut-

ting faces of the teeth of the saw blade having, in relation to the straight edge of the blade, an inclination in-



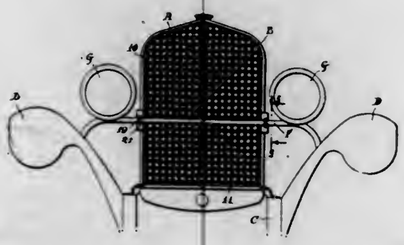
creasing from the middle of the saw up to its extremities, and means for moving said saw blade to produce an arcuate cut in a stationary workpiece.

1,810,747. DIFFERENTIAL GEAR. GEORGE H. BENZON, Jr., Jenkintown, Pa., assignor to William Sellers & Company, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 14, 1928. Serial No. 306,023. 6 Claims. (Cl. 74—7.)



1. A differential mechanism comprising independent right and left helical gears, and a double helical gear coactive with said first-named gears and free to move axially within predetermined limits.

1,810,748. ORNAMENTAL GUARD FOR AUTOMOBILE RADIATORS. KORNEL C. BERGER, New York, N. Y. Filed Aug. 22, 1930. Serial No. 477,156. 8 Claims. (Cl. 293—54.)



1. An ornamental guard for automobile radiators, including a grill and a channeled frame fitted over the edges of the grill, said frame having a separate section applied thereto after the positioning of the grill within the remainder of the frame.

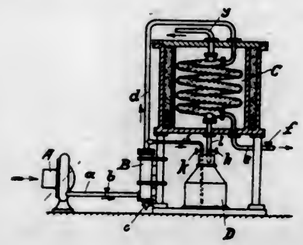
1,810,749. DOWEL. FREDERICK THOMAS BOWLER, Highland Park, Mich. Filed Feb. 19, 1929. Serial No. 341,099. 4 Claims. (Cl. 85—2.4.)

3. The combination of an expansible tubular dowel element of spring metal having a single longitudinal slot, and an expander turnable within said dowel element in contact therewith, said expander having a longitudinal contact



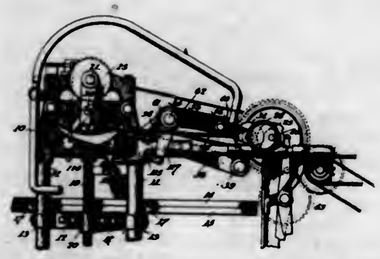
edge movable into and out of said slot by turning said expander, to expand said element or to allow said element to contract.

1,810,750. PROCESS FOR THE GENERATION OF A REFRIGERANT JET FOR DENTAL OPERATIONS. SCHULIM BRAUNSTEIN and SEMION MEERSON, Berlin, Germany. Filed Jan. 14, 1928, Serial No. 246,892, and in Germany Jan. 15, 1927. 11 Claims. (Cl. 62—170.)



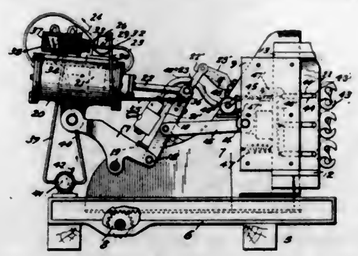
1. A process for the generation of a refrigerant stream for dental purposes consisting in impelling a stream of air, subjecting said stream of air to the cooling influence of the vapor of a liquefied gas, and by-passing a part of the stream of air into the liquefied gas to vaporize the same.

1,810,751. SHEET FEEDING MECHANISM. ALBERT BROADMEYER, Harrisburg, Pa., assignor to The W. O. Hickok Manufacturing Company, Harrisburg, Pa., a Corporation of Pennsylvania. Original application filed Apr. 28, 1926, Serial No. 105,174. Divided and this application filed July 18, 1927. Serial No. 206,646. 11 Claims. (Cl. 271—62.)



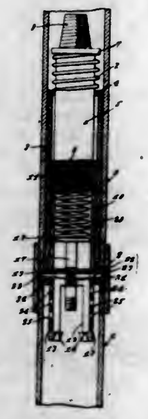
1. In sheet feeding apparatus, the combination with a pile support and mechanism for elevating it, of a device having an individual movement in a direction for delivering sheets edgewise from the pile, and means controlled by the sheet delivering device for controlling the operation of the pile support elevating mechanism.

1,810,752. COMBINATION GRAB DOG AND TAPER. JAMES M. BROPHY, Hattiesburg, Miss., assignor to Brophy Automatic Air Dog Corporation, Hattiesburg, Miss. Filed Jan. 22, 1927. Serial No. 162,830. 3 Claims. (Cl. 143—125.)



1. The combination with a saw mill carriage having movable knees, of a movable dog carrying member mounted for movement through each knee, dogs carried by each dog carrying member, and a valve actuated by the movement of the dog carrying member for controlling the operation of the dogs simultaneously with the movement of the dog carrying member to a position to taper a log.

1,810,753. DEVICE FOR REMOVING PARTS FROM WELLS. CORNELIUS BROWN, Beirut, Okla. Filed July 23, 1930. Serial No. 470,182. 4 Claims. (Cl. 294—100.)



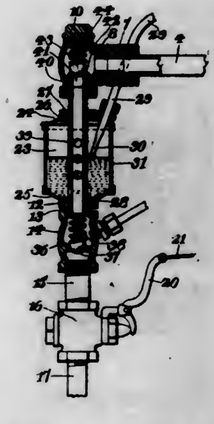
1. In a device for removing drilling tools and other parts from a well, a hollow tubular barrel, a stem having a threaded upper end to adapt it to be connected to a part working in the well for up and down movement, the said stem fitting slidably through the upper end of the barrel, and having an abutment near its upper end, a compression spring fitting the said stem and bearing between the abutment and the said end of the barrel, a sleeve fitted, at its upper end, to the lower end of the stem, clamping members extending downwardly from the lower end of the sleeve and having inwardly directed portions to engage beneath a head, or the like, upon the part to be removed, a stem having spaced heads slidably fitting in the sleeve, the sleeve being formed, in each of its clamping members with a series of openings, and fingers pivotally mounted, at their inner ends in the lower portion of the stem and engageable, at their outer ends in the said openings in the respective clamping members.

1,810,754. BOBBIN CHANGING DEVICE. HEINRICH BUDDECKE, Chemnitz, Germany. Filed Apr. 5, 1929, Serial No. 352,763, and in Germany Dec. 31, 1927. 5 Claims. (Cl. 118—18.5.)



1. A bobbin changing device for spinning machines, winding and twisting frames, comprising vertically adjustable grippers for seizing the bobbins prior to their removal from the spindles; and rubber pads provided on the said grippers to insure uniform seizing of the bobbins.

1,810,755. POSITIVE REGULATED OILING APPARATUS FOR EDGER ARBORS. WILLIAM R. CARLSON, Prescott, Oreg. Filed Aug. 16, 1928. Serial No. 299,989. 6 Claims. (Cl. 184—56.)

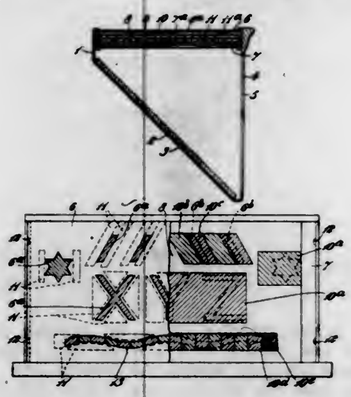


1. An oiling apparatus comprising an oil cup, means to automatically provide the oil cup with a supply of oil of predetermined quantity, a discharge pipe connected with the cup and having a spring controlled valve, a constantly charged compressed air line leading to the cup and having a normally closed manually controlled valve, and a second spring controlled valve positioned between the manually controlled valve and cup, said spring controlled valves being normally closed and adapted to open when the manually controlled valve is opened to permit the oil to be forced from the cup by the air from said air line.

1,810,756. SIGN. WILLIAM CARTER, Islington, London, England. Filed Apr. 25, 1930, Serial No. 447,305, and in Great Britain June 13, 1929. 6 Claims. (Cl. 40—130.)

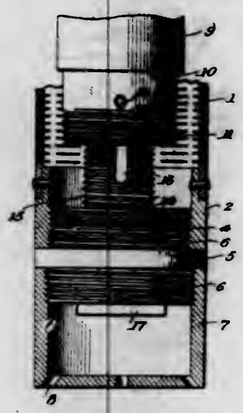
1. An advertising sign comprising a casing having two open sides at an angle to each other, a reflector in the casing at an angle to the open sides thereof whereby to reflect through one side, a pair of duplicate stencils set

in the other open side of the casing, a transparent slide fitted between the stencils for limited reciprocation, and



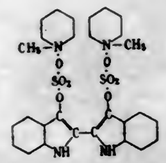
color plates on the slide located to cover the respective openings in the stencils in all positions of the slide, said plates being of various colors.

1,810,757. WELL STRAINER ATTACHMENT. ALFRED EUGENE CUNNINGHAM, Trenton, Tenn. Filed Mar. 11, 1929. Serial No. 346,164. 2 Claims. (Cl. 166—20.)



1. A well strainer having a band riveted to the bottom thereof and which band is provided with interior left hand pitch threads a body having a shouldered portion to rest on the band provided with an annular extension having inner and outer threads, the latter engaging with the threads of the band, a hollow bottom screwed on the body and having its base portion apertured, a nipple coupled to a wash pipe and having left hand pitch threads to engage with the inner threads of the body, a hollow plug having a closed bottom and provided its entire length with left hand pitch threads, the body having a threaded bore to engage with the threads of the plug, said plug having a series of annular apertures adjacent to its closed bottom and its upper open end provided with oppositely disposed notches, and a removable pin extending transversely through and secured to the nipple and designed to be received in said notches, when the plug is to be turned to bring its apertures into or below the bore of the body and to be removed when the nipple is screwed into the body to permit of the strainer being raised by the wash pipe out of the well hole.

1,810,758. PROCESS FOR THE MANUFACTURE OF DERIVATIVES OF VAT DYESTUFFS. HUGH ALBERT EDWARD DRESCHER, JOHN EDMUND GUY HARRIS, BIRKETT WYLAM, and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed Mar. 3, 1927, Serial No. 172,550, and in Great Britain Mar. 15, 1926. 12 Claims. (Cl. 260—53.)



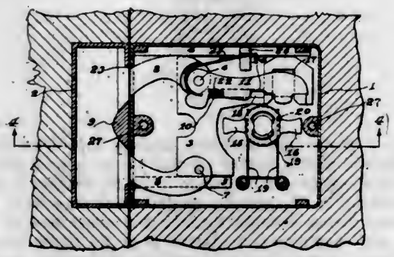
1. The process for the manufacture of derivatives of vat dyestuffs which consists in reacting on a vat dyestuff with a quaternary ammonium halide, a metal, a tertiary organic base and pyridine sulphur trioxide.

1,810,759. MANUFACTURE OF SOAP. ERNST FLAMMER and CHRISTIAN KELBER, Heilbronn, Germany. Filed Nov. 16, 1925, Serial No. 69,488, and in Germany Nov. 20, 1924. 9 Claims. (Cl. 87—16.)



1. A process for the manufacture of soap flakes which comprises forming soap containing water but less than 15% thereof, incorporating with said soap a per-alkaline salt and forming said mixture into thin flakes.

1,810,760. LOCK. JACOB FRIEDMAN, New York, N. Y. Filed Sept. 26, 1929. Serial No. 395,389. 6 Claims. (Cl. 70—74.)



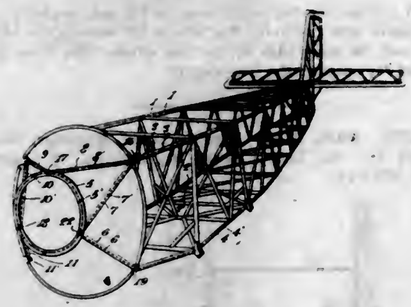
1. In a lock of the class described comprising a casing, a keeper, a bolt actuator slidably supported in said casing, a pair of pivots attached to the forward part of said bolt actuator, one of said pivots having attached thereto a hook shaped bolt, the other of said pivots having attached thereto a co-operating hook shaped bolt and a lever, said lever having a pair of notches which correspond to the locked and unlocked positions of the bolts, a locking lug which engages with said notches for preventing any accidental movement of the bolt actuator, and a pair of cams for moving said bolt actuator.

1,810,761. DIVIDING STRIPS FOR FLOORS. PASQUALE GALASSI, New York, N. Y. Filed July 24, 1929. Serial No. 380,669. 2 Claims. (Cl. 94—17.)



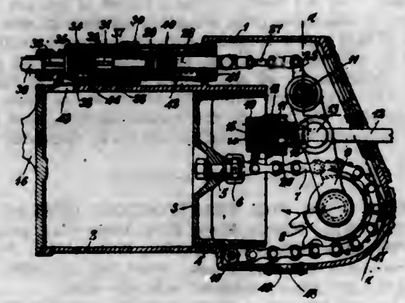
1. A dividing strip for floors comprising a relatively thick upper section and means forming a relatively thin lower section, said upper section having a longitudinal groove in its lower edge portion, said lower section having its upper edge portion secured within said groove, the height of said upper section being such that its lower surface will serve as positioning means for the strip.

1,810,762. AEROPLANE. DANIEL B. GISH, Worcester, Mass. Filed Aug. 15, 1930. Serial No. 475,477. 2 Claims. (Cl. 244—31.)



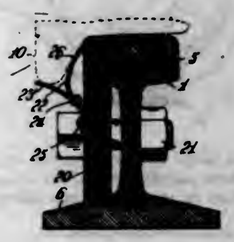
1. In an aeroplane, the framework of which consists essentially in a plurality of hollow tubes, each of those tubes, which extend longitudinally of the essential parts of an aeroplane and which constitute the main longitudinal support, having an individual cable extending therethrough and tied at each end, each of said cables being arranged so as to be taut but not under tension.

1,810,763. SERVO-BRAKE. PAUL HALLOT, Paris, France. Filed July 6, 1927, Serial No. 203,847, and in Belgium July 7, 1926. 13 Claims. (Cl. 188—152.)



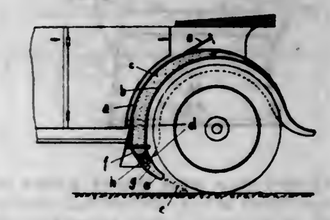
1. A servo-brake comprising the combination of a brake gear, a brake rod connected to said brake gear, a cylinder, a piston in said cylinder, a lever to which said brake rod is jointed, a pulley mounted on said lever, connective means passing round said pulley having one end connected to said piston and the other end connected to a fixed point, and means for creating a difference in fluid pressure in said cylinder on the two sides of said piston.

1,810,764. WHEEL FLANGE OILER. PERRY H. HAMILTON, Baltimore, Md., assignor to Maintenance Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 22, 1928. Serial No. 314,166. 16 Claims. (Cl. 184—3.)



1. An oil spreader for wheel flange oilers, comprising a plate extending longitudinally of the rail and inclined to substantially fit against the inner surface of the wheel flange, and means for supporting the plate at the side of the railhead.

1,810,765. SAND SPRAYING DEVICE FOR MOTOR VEHICLES, ESPECIALLY MOTOR CARS. WILHELM HERDLING, Wehen, Germany. Filed May 13, 1930, Serial No. 452,035, and in Germany Mar. 29, 1930. 1 Claim. (Cl. 291—39.)

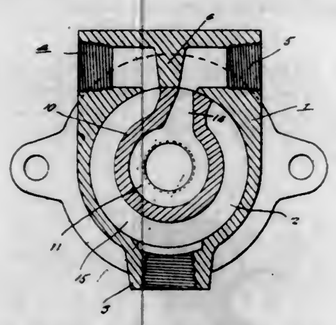


A sand spraying device for motor vehicles, especially for motor cars adapted to be operated from the driver's seat, comprising in combination the mudguards of the car wheels having a double wall adapted to form a chute for the spraying material, a charging flap on the upper part of the outer one of said walls, and a mouthpiece detachably flanged on the lower end of said chute adapted to regulate the discharge of the spraying material.

1,810,766. FLUID REVERSING VALVE. WILHELM FRIEDRICH HORULIN, Ottawa, Ill. Filed Mar. 4, 1930. Serial No. 433,104. 2 Claims. (Cl. 251—104.)

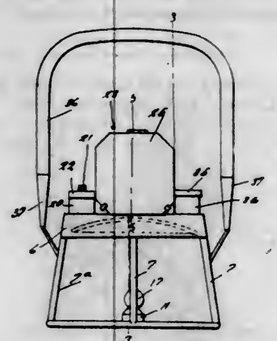
1. A fluid reversing valve of the character described comprising a casing having a circular chamber therein provided with a pair of ports on one side and an outlet port spaced from said pair of ports, said casing being further provided with a centrally disposed inlet port, and a core mounted for rotation in the chamber having an inner chamber constantly in communication with the inlet port of the casing and a circumferentially extending peripheral channel constantly in communication with the outlet port of the casing, said channel adapted to be selectively brought into communication with the first named ports, said inner core chamber having an outlet passage

for selective communication with the first named ports whereby communication between the inlet port and one



of the first named ports and between the outlet port and the other of said first named ports is simultaneously established upon rotation of the core in the casing.

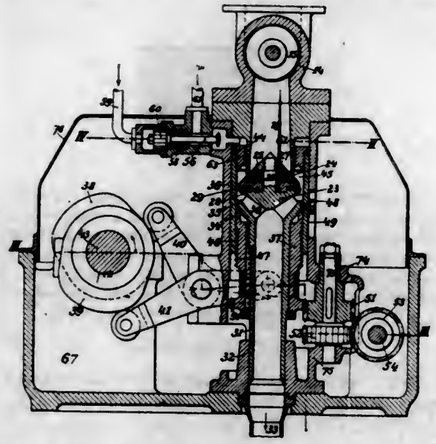
1,810,767. LANTERN. DAVID NATHANIEL HOLLAND, North Little Rock, Ark. Filed Sept. 16, 1929. Serial No. 392,873. 1 Claim. (Cl. 240—10.63.)



A lantern comprising a caged support, a plate mounted upon said support and having centered transversely of its upper surface an integrally formed horizontally disposed casing open at one end and integral receptacles on opposite sides of the casing and respectively open at their upper ends, one of said receptacles serving as a switch box and the other as a storage box, cover means for said casing and said receptacle, a bevelled edge lamp socket in the lower end of said caged support adapted to direct the light upwardly therefrom, a hollow conduit connecting said socket with said switch box, switch means in said switch box, a battery in said casing electrically connected with said switch means, a lamp in said socket, means extending within said hollow conduit and electrically connecting said socket with said switch means, and a concaved reflector means on the under side of said plate.

1,810,768. MEANS FOR PERIODICALLY INTRODUCING PULVERULENT FUELS INTO INTERNAL COMBUSTION ENGINES. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed June 12, 1929, Serial No. 370,312, and in Germany Apr. 3, 1928. 14 Claims. (Cl. 16—41.)

1. Apparatus for the periodical supply of pulverulent fuels in internal combustion engines comprising in combination a fuel supply pipe, means for supplying the hollow space of the fuel supply pipe with pulverulent fuel, an abutment located transversely to the fuel supply pipe and adapted to cover with its surface the inlet of the fuel supply pipe and to shut off the supply of fuel, the surface



of said abutment being continuous on the side opposite the fuel supply pipe and actuating means for moving the abutment and the inlet edge of the fuel supply pipe from one another for opening the fuel supply.

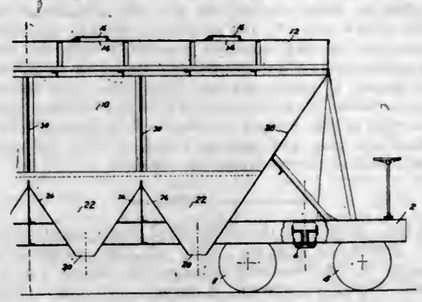
1,810,769. MAIL BOX. FRED I. JADEN, Hastings, Nebr. Filed Jan. 30, 1929. Serial No. 336,164. 3 Claims. (Cl. 232—28.)

1. A mail box including a hollow section comprising top, back and end walls; a tray adapted to contain mail matter, a detachable pivot mounting the tray on said end walls of said hollow section for pivotal movement with respect to said hollow section, to opened and closed positions, an abutment on said hollow section, a stop lug on said tray engageable with said abutment, to limit the movement of the tray to the opened position, said tray being separable from said hollow section by detaching said pivot.

1,810,770. CAR FOR TRANSPORTING CEMENT OR THE LIKE. MORRIS KIND, Bryn Mawr, Pa., assignor to Hercules Cement Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 13, 1928. Serial No. 312,269. 3 Claims. (Cl. 105—248.)

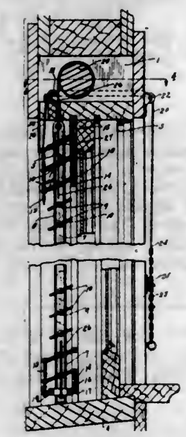
1. A car comprising a frame including a longitudinally extending draft beam, a body mounted on said frame including side and end walls, and hoppers extending downwardly on opposite sides of the draft beam, said hoppers having bottom discharge openings with closure means therefor and having inner and outer walls, the inner walls

of adjacent hoppers meeting in a ridge extending longitudinally of the car above the draft beam and extending to said openings, and the outer walls extending from the



side walls of the body to the openings, the outer walls of the hoppers being inclined at larger angles to the horizontal than the inner walls of the hoppers whereby the openings are located adjacent the sides of the car body.

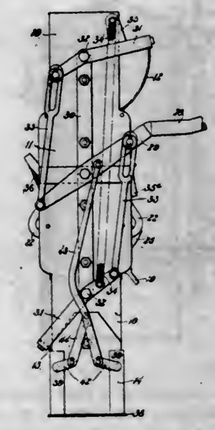
1,810,771. COMBINATION SHADE AND SHUTTER WITH AUTOMATIC LOCKING MEANS. HENRY KRUEGER, Spokane, Wash. Filed May 15, 1930. Serial No. 452,684. 3 Claims. (Cl. 20—62.)



2. In a device of the class described, the combination of a frame, a movable sill suspended within the frame by flexible elements, a plurality of shade forming elements, one side of each of which are secured to a depending flexible element from the frame, the oppositely disposed sides of each of the shade forming elements being secured to a movable flexible element, means for positioning the movable flexible element for predetermining the spaced relationship between the shade forming elements and for predetermining the angle of repose of each of the shade forming elements and means for raising the assembly of shade forming elements from the bot tom upward, said means consisting of a flexible band secured to the movable sill passing centrally through each of the shade forming elements and passing around a winding drum, and hand manipulative means for rotating the drum and for fixedly positioning the drum in placement.

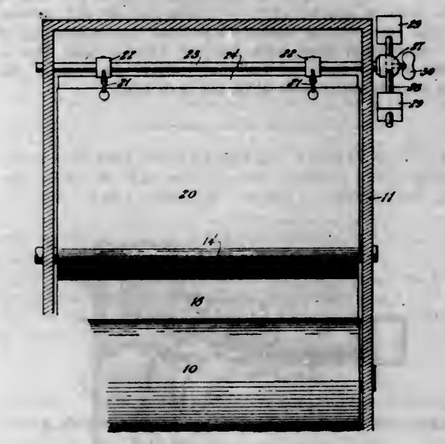
1,810,772. BAG FILLING DEVICE. PETER LASSEN, Roanoke, Tex. Filed June 2, 1928. Serial No. 282,484. 5 Claims. (Cl. 226—58.)

1. A measuring and sacking device comprising, in combination, a chute having a measuring compartment therein; inlet and outlet valves in said chute; a lever having links operatively connected to said valves; a plurality of springs associated with said valves and said lever and



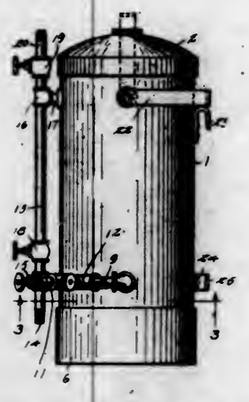
arranged normally to maintain the inlet valve open and the discharge valve closed, one of said springs acting to close both of said valves; and a discharge spout associated with the lower end of said chute.

1,810,773. GRAIN FEEDER. RALPH F. LINDERS, Baldwin, Ill. Filed Feb. 7, 1929. Serial No. 338,250. 3 Claims. (Cl. 83—44.)



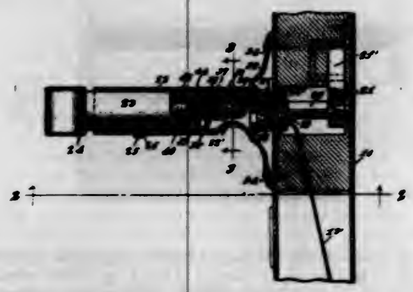
1. A grain feeder of the character described comprising, in combination, a hopper having an inlet opening at the top; a sheet metal bottom wall in the hopper; a beater within the hopper; a fixed screen constituting a front hopper wall adjacent to the beater and extending from the front edge of the bottom wall to permit grain to be discharged therethrough; a slidably mounted sheet metal control gate having a rearwardly bent lower edge contacting with the screen to control the discharge opening; a counterbalancing feed pan connected to the control gate and suspended within the hopper; and a curved portion on the bottom of the counterbalancing pan so arranged that incoming grain falls thereon whereby the rate of flow of the incoming grain controls said gate.

1,810,774. WATER HEATER. JAMES H. MACKLEY, Denver, Colo. Filed Sept. 13, 1928. Serial No. 305,666. 1 Claim. (Cl. 122—17.)



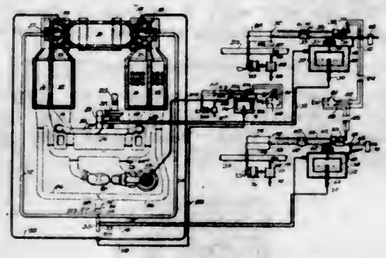
A water heater comprising a tank body having a head in the upper and lower end thereof, a coiled pipe extending through the body and opening through the upper and lower heads and constituting a heat flue, a heating element disposed beneath the lower head, an arcuate water pipe extending circumferentially about a portion of the tank adjacent the bottom thereof and opening at one end through the tank wall, an inlet coupling intermediate the ends of said arcuate pipe, a valve element disposed in the arcuate pipe on each side of the inlet coupling, a pipe extending longitudinally of the tank body and having communication adjacent its lower end with the other end of the arcuate pipe and having communication adjacent its other end with the interior of the tank adjacent the top thereof, said longitudinally extending pipe being open at its ends, a control valve in the longitudinally extending pipe between the arcuate pipe and the connection of the longitudinal pipe with the top of the tank, and a second control valve in the longitudinal pipe above the upper connection thereof with the tank body.

1,810,775. KEYHOLE ILLUMINATING MEANS. LOUIS MARTIN, New London, Conn. Filed Aug. 30, 1929. Serial No. 389,572. 1 Claim. (Cl. 240—2.13.)



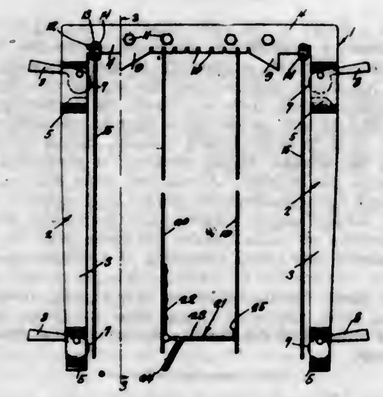
A keyhole illuminating means including a door latch operating shank confined in a door, a tubular member having one end formed on the shank and extending outwardly of the door, said member provided with a reduced portion and an opening arranged over the keyhole of the door, a plate mounted on the reduced portion and secured to the door to limit the movement of the tubular member toward the door, a shoulder on the reduced portion, a spring between said shoulder and plate to maintain the tubular member and shank in proper position relative to the door and the latch thereof, a slidable shank in the tubular member, a handle on the slidable shank for permitting the rotation of the tubular member by a person for actuating the door latch and to move the slidable shank relative to the tubular member, an electric lamp carried by the slidable shank and positioned adjacent the opening, contacts associated with the lamp and tubular member and electrically connected to an electrical source to illuminate the lamp when the slidable shank is moved inwardly relative to the tubular member, a stop in the tubular member, and a tension means between said stop and slidable shank to urge the latter in one direction to disconnect the contacts.

1,810,776. METHOD OF CONTROLLING COMBUSTION IN METALLURGICAL AND GLASS FURNACES. GEORGE R. MCDERMOTT, Chicago, Ill. Filed July 24, 1925. Serial No. 45,824. 5 Claims. (Cl. 158—117.5.)



1. A method of controlling combustion in a reducing furnace which consists in conveying fuel to the furnace through a closed conduit, conveying air to the furnace through a second closed conduit, creating a differential in pressure in each of said air and fuel conduits, and independently controlling the volume of fuel and air supplied through said conduits by the variation in the differential in pressure created in each of said air and fuel conduits.

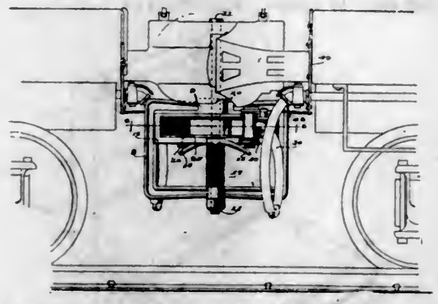
1,810,777. CLAMP. WILLIAM J. MCKEE, Los Angeles, Calif. Filed Feb. 18, 1828, Serial No. 255,303. Renewed Nov. 13, 1930. 5 Claims. (Cl. 25—131.)



1. A form clamp for hollow poured concrete walls employing the usual form boards for the outer faces of the wall, comprising a pair of elongated members designed

to extend substantially vertically over the outer mold boards, means for connecting said members at their upper ends, a pair of mold plates designed to be arranged in spaced relation to form the hollow center of the wall, means for adjustably connecting the top edges of said mold plates with said connecting means, a brace element carried by one of said plates designed to engage the adjacent plate to maintain the lower edges of the plates in spaced relation, a swinging guard strip carried by said connecting means and designed to be arranged between an elongated member and the adjacent outer mold board, means carried by said elongated members for exerting an inward pressure against the guard strips and the adjacent outer mold boards, and means associated with said connecting means for limiting the inward movement of the outer mold boards under the pressure exerted thereon by the said pressure exerting means.

1,810,778. AUTOMATIC AIR LINE CONNECTER. DANIEL B. MCTAGGART, Butte, Mont. Filed July 5, 1928. Serial No. 290,602. 8 Claims. (Cl. 285—58.)



1. In an air line connecter, a pair of like members for interfitting relation each having an air passageway having lateral branches which register when the members are in interfitting relation, and a hollow piston slidable in each lateral branch and held in abutting relation by air passing through the passageway to provide an air seal therebetween while air pressure is in the passageways.

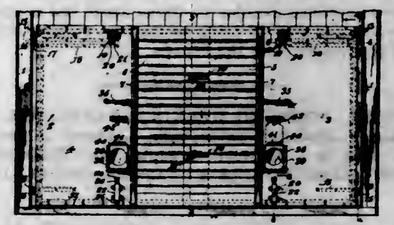
1,810,779. GUN CASTING ROD. WILLIAM A. MILAM, Austin, Tex. Filed June 20, 1929. Serial No. 372,393. 2 Claims. (Cl. 43—19.)



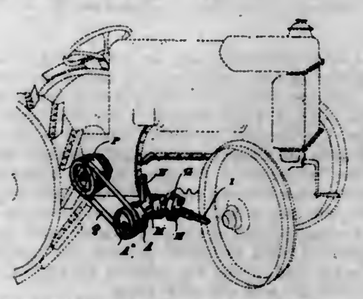
1. A device of the class described comprising a barrel, an ejector movable therein, means to operate the ejector, a holder extending from the barrel and having a portion overlapping the same, a floating body adapted for disposition in the holder and engagement by the ejector, said body having a hollow portion and a port leading thereto for coaction with a line as described, a ring secured to and surrounding the holder and barrel at said portion, said ring having an eyelet through which the line is adapted to extend.

1,810,780. COMBINED DOOR AND PARTITION. ROBERT E. MOORE, St. Louis, Mo. Filed Oct. 27, 1930. Serial No. 491,579. 5 Claims. (Cl. 105—376.)

1. In a combined door and partition for a car, means for latching the combined door and partition in position with respect to the car, locking means for the latching means, and means for elevating the combined door and partition to unlatch the same when said locking means is unlocked, said elevated means including a housing secured to the combined door and partition, a sliding support carried by the housing, a roller mounted on the lower end of the support, and releasable means carried by the housing and support for latching the support in a position to project the roller below the combined door and partition.

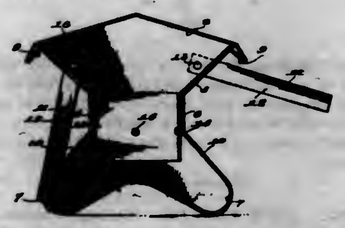


1,810,781. MECHANICALLY DRIVEN MOWING MACHINE. MAURICE FRANÇOIS MOREAU, Epinouze, France. Filed Apr. 2, 1927, Serial No. 180,529, and in France Apr. 2, 1926. 1 Claim. (Cl. 56—25.)



A mowing machine attachment for a tractor, provided with a take-off pulley connected directly to the motor shaft, comprising in combination with cutting apparatus including a finger bar and a reciprocating cutter bar, means to attach the cutting apparatus to a tractor, a box having means whereby the same may be attached to the tractor, a pair of shafts arranged at right angles to each other and mounted in bearings with which said box is provided, said shafts being geared together and one of them being parallel with the axis of said take-off pulley and provided with a pulley, an endless band connecting said pulleys, a crank disc carried by the other shaft and a rod pivoted on the crank of said disc and pivotally connected to the cutter bar of the mowing mechanism.

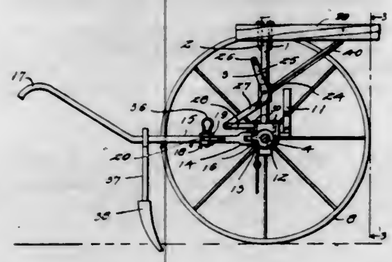
1,810,782. CHICK FEEDER. B FREDERICK C. MORRIS, El Reno, Okla. Filed Sept. 14, 1928. Serial No. 306,028. 1 Claim. (Cl. 119—63.)



In a chick feeder, a hopper, a laterally disposed longitudinally extending trough below the same, a plate arranged to one side of the hopper having parallel flanges

at its ends and projecting beyond the inner edge of the plate and overlying the hopper end walls, fixed laterally projecting threaded elements carried by the hopper end walls and pivotally receiving the flanges, and nuts coacting with the threaded elements in maintaining the plate in predetermined angular positions above the hopper, the plate being capable of being swung to a substantially vertical position to close the hopper.

1,810,783. STEERING WALKING CULTIVATOR. WILLIAM H. NOBLE, Lepanto, Ark., assignor of forty-nine per cent to A. E. Noble, Lepanto, Ark. Filed Dec. 12, 1929. Serial No. 413,663. 7 Claims. (Cl. 97—155.)



1. A cultivator comprising an axle having a raised central portion, a fork carried at each end of the axle, a stub shaft carrying steering knuckle pivotally mounted in each of said forks, a wheel carried by the stub shaft of each knuckle, a plow beam pivotally attached to the axle adjacent each end thereof whereby both vertical and lateral swinging movement of the same may be accomplished, a link connection between each plow beam and an adjacent steering knuckle, a bell crank element pivotally mounted on the raised portion of the axle adjacent each plow beam and adapted when oscillated to effect the raising of the plow beam, and means for coupling an arm of each bell crank with the adjacent plow beam.

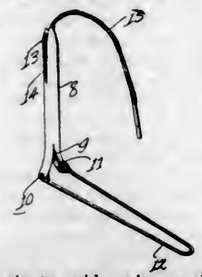
1,810,784. REFUSE RECEPTACLE. EDWARD JOSEPH PAVELKA, New York, N. Y. Filed Aug. 17, 1929. Serial No. 386,656. 7 Claims. (Cl. 220—18.)



1. The combination with a closure having an opening therein, of a removable receptacle, a support on said closure for supporting said receptacle below said opening, a cover for said receptacle, and means connecting said cover with said closure for movement to open and close said receptacle.

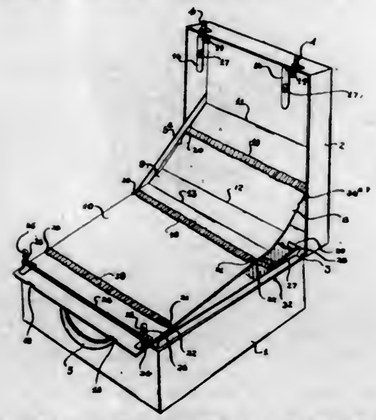
1,810,785. HAIR CURLER. GEORGE PONABOUSE, San Francisco, Calif. Filed Sept. 13, 1929. Serial No. 392,339. 5 Claims. (Cl. 132—42.)

1. A hair curler comprising a tubular casing, split at one end and bifurcated at its opposite end, an elongated frame hingedly connected to the split end and receivable over the bifurcated end of said casing for initially locking



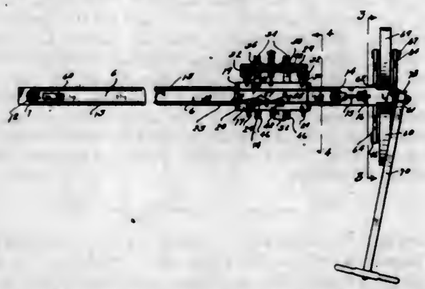
the strands of hair to said casing, and a curl holding cord fixedly secured to the bifurcated end of said curl and detachably secured to the opposite end thereof.

1,810,786. LUGGAGE CARRIER. RAYMOND POWNALL, Rochester, N. Y. Filed Jan. 21, 1928. Serial No. 248,494. 10 Claims. (Cl. 190—41.)



1. A luggage carrier comprising a chambered bottom member, a top member hinged to the rear wall of the bottom member and having an inwardly opening chamber, a closure for said chamber, a member hinged to the top member within the chamber at a point intermediate to the hinge and the swinging edge of the top member, and a flexible connection between said member and the closure through which said member may be swung outwardly when the top is in open position and the closure for the chamber top is pulled forwardly.

1,810,787. AGRICULTURAL IMPLEMENT. ANDREW RAAB, Portland, Oreg. Filed Jan. 12, 1929. Serial No. 332,019. 5 Claims. (Cl. 97—136.)



1. In a device of the class described, the combination of a structural body element, a fixed standard for supporting

one end of the body element, a king bolt comprising a pin having a thread disposed on its one end and a cross bar secured on the pin a substantial distance from the other end connecting the body element with the fixed standard, said cross bar constituting means for maintaining the king bolt relatively fixed to the supporting standard, a tool holder head slidably positioned upon the body element, a sprocket threadably disposed upon the upper end of the king bolt, a chain passing about the sprocket, means for securing the tool holder head to the chain, to cause the head to travel longitudinally of the body element as the body element is rotated about the fixed supporting standard, tool holders depending from the tool holder head, and tools removably secured to the tool holders.

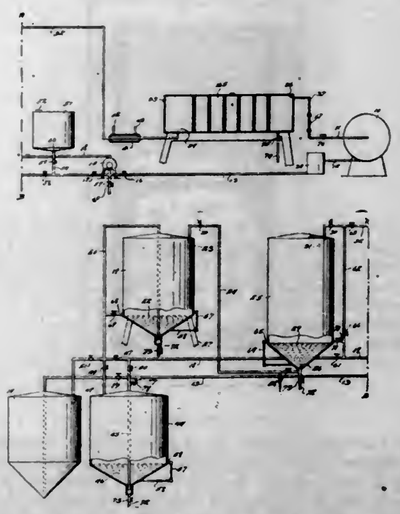
1,810,788. FOUNTAIN DRAWING PEN. JUAN RAMOS, Olongapo, P. I. Filed Nov. 11, 1929. Serial No. 406,388. 2 Claims. (Cl. 120—43.)



1. A fountain drawing pen including a hollow body having drawing blades extending from one end and the opposite end internally screw threaded, a reservoir having a reduced portion threaded in the body and extending through the latter and disposed between the blades, a second reduced portion of a diameter less than the diameter of the first reduced portion and formed integrally therewith and providing a valve seat between said portions, a combined cleaning and ink applying member extending into the free end of the second reduced portion, a barrel in the first reduced portion to engage the valve seat, a stem connecting the barrel to the combined cleaning and ink applying member and of a length to unseat the valve when the combined cleaning and ink applying member is positioned to close the end of the second reduced portion and to seat the valve prior to the combined cleaning and ink applying member fully disengaging from the end of the second reduced portion, and an operating means slidable on the exterior of the body and connected to the combined cleaning and ink applying member to move the latter into and out of engagement with the free ends of the blades.

1,810,789. LIQUID PURIFICATION SYSTEM. CARL C. REYNOLDS, Santa Fe, N. Mex. Filed Feb. 13, 1930. Serial No. 428,188. 3 Claims. (Cl. 210—44.)

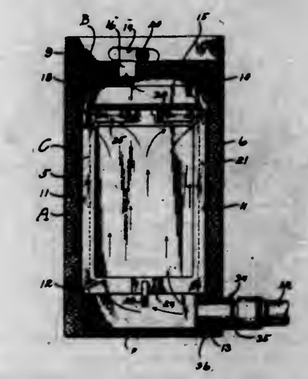
1. A purifying system of the character described comprising in combination with washing means, a reservoir, a relatively large cleaning tank, a rinsing tank substantially smaller but of greater height than said cleaning tank and positioned in a plane below said cleaning tank, a filter member substantially smaller than said rinsing tank and mounted in a plane below said rinsing tank, connecting means adapted to connect said cleaning tank with said rinsing tank, connecting means adapted to connect said reservoir, cleaning tank, rinsing tank and filtering member with said washer whereby to provide a passage permitting the liquid to gravitate toward said washer, draining means secured to each of said tanks whereby to permit the draining thereof to the reservoir, heating means engaging said connecting means and adapted to raise the temperature of the liquid within said connecting means, normally closed vents for each of said tanks and



a second connecting means connecting said washer and said cleaning tank whereby to provide a passageway for oppositely directed liquid, and a pump interposed in said latter connecting means, said pump being adapted to withdraw the liquid from said washer and coactively force the liquid into said cleaning tank

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1,810,790. APPARATUS FOR DEVELOPING PHOTOGRAPHIC NEGATIVES. LEO JAMES RIGGLE, Monroe, Wis. Filed May 9, 1928. Serial No. 276,364. 5 Claims. (Cl. 95—90.)



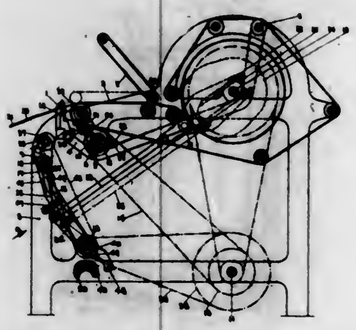
1. In apparatus for developing photographic negatives, the combination of a tank having an opening at its lower end provided with a removable closure plug and having an internal shoulder provided adjacent the upper end of the tank, a cover plate having a flat upper side, removably fitting in the upper end of the tank above said shoulder and having an opening provided with a removable closure plug, and securing means for the cover plate embodying a cylindrical retaining rod having its ends movable with a cam action in the end walls of the tank and laterally across the cover plate into engagement with the upper flat face of the cover plate at one side of the opening provided therein.

1,819,791. SLIDING WINDOW SCREEN. JOSEPH F. ROESLER, Lufkin, Tex. Filed Aug. 21, 1930. Serial No. 476,918. 3 Claims. (Cl. 156—14.)



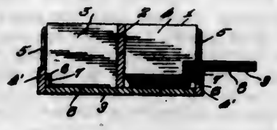
2. A bearing member for window screens comprising a rectangular supporting member, a bar slidably mounted by said member and having one end polygonal in cross section and the other end reduced and circular in cross section, the member provided with openings slidably receiving the bar and corresponding in shape to the respective ends of the bar, a roller journaled in the polygonal end of the bar, and spring means engaging the bar and normally projecting said roller.

1,810,792. MACHINE FOR STRIPPING TOBACCO LEAVES. CARL GEORG BERTIL ROTHELIUS, Stockholm, Sweden, assignor to Aktiebolaget Formator, Stockholm, Sweden. Filed Jan. 7, 1929, Serial No. 330,715, and in Sweden Dec. 8, 1928. 9 Claims. (Cl. 131—56.)



1. In a machine for stripping the stem from a tobacco leaf, the combination of a device for gripping the leaf and moving it into the machine, a gripper adapted to seize the stem of the leaf, means whereby the said device and said gripper are moved in relation to each other to cause the stem to be pulled from the leaf, a roller device for feeding the stem arranged beside the path of movement of the gripper, and means whereby said roller device is kept in an inoperative position when passed by the gripper, at the beginning of the stripping process, but immediately after this has happened assumes an operative position so as to grip the stem and co-operate in or effect the continued stripping of the stem from the leaf.

1,810,793. POSTING TRAY. GEORGE R. SCHROEDER, Beverly, Kans., assignor of one-half to Temple L. Campbell, Beverly, Kans. Filed July 17, 1929. Serial No. 379,040. 1 Claim. (Cl. 206—73.)

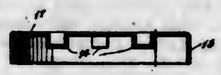


A posting tray for the purpose set forth, comprising a box-like member centrally divided by a partition into spaced compartments for the reception of checks and deposit slips for said checks, the deposit slip of each check being arranged directly below said check, the outer sides of the compartments being of a less height than the tray, arched wire members secured to the ends of the tray and to the upper edges of the sides, and terminating away from the center of said sides, a shelf having an angle end pivotally secured to each side, swingable against the bottom of each compartment and designed to have its flanged portion contact with the inner face of the outer side of the compartment and to rest and be supported on the outer edge of the said side when the said tray is swung outward of the compartment, each shelf having its outer edge notched and said shelves serving as supports for the tickets and deposit slips when the same are arranged thereover and positioned angularly with respect to the checks.

1,810,794. PROCESS FOR RECOVERY OF PHOSPHATE FINES. PHILIP MCG. SHUEY and ERWIN WOODWARD, Savannah, Ga. Filed Sept. 23, 1929. Serial No. 394,730. 4 Claims. (Cl. 209—2.)

1. A process of treating wet or moist phosphate fines having attached finer gangue that includes the drying and dry size separating of the mixture.

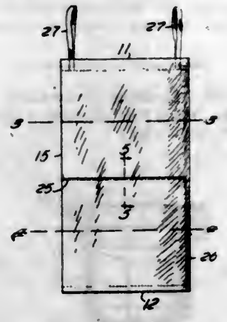
1,810,795. LOCKING KEY FOR CLOSURE PLUGS. ARTHUR R. SODERQUIST, Idaho Falls, Idaho. Original application filed Feb. 17, 1927, Serial No. 169,019. Patent No. 1,712,361, dated May 7, 1929. Divided and this application filed Jan. 24, 1929. Serial No. 334,756. 1 Claim. (Cl. 81—90.)



A locking key for closure plugs comprising an annular one-piece sheet metal body, said body being circular and having a marginal flange depending from the top thereof, stamped out lugs on the body extending in the same direction as said flange and being of less depth, said lugs being arranged at points of a circle substantially concentric with the center of the disk, the key being unobstructed at the top to facilitate grasping thereof in the hand.

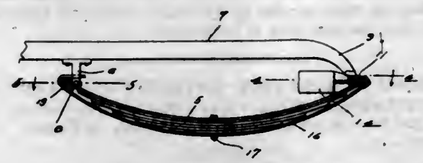
1,810,796. SLIP. ELIZABETH MCC. STONE, Rosslyn, Va. Filed July 31, 1928. Serial No. 296,482. 5 Claims. (Cl. 2—73.)

1. The method of making a slip which comprises folding a portion of a substantially rectangular piece of material upon itself to form a front and rear portion, cutting the material inwardly from one edge along the folded over free edge to a point midway between the top and bottom, folding the remaining free section of the material



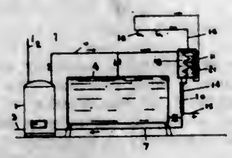
upon itself to provide a two ply panel, and folding over the two ply panel section upon the exterior of the infolded rear portion to form a slip.

1,810,797. SHOCK ABSORBER. JOHN HEINRICK SYMANK, Austin, Tex. Filed May 22, 1929. Serial No. 365,048. 3 Claims. (Cl. 267—47.)



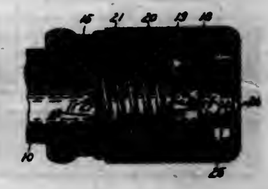
1. In combination, a semi-elliptical spring, a leaf of semi-elliptical formation on the convexed side of the spring and having inwardly directed lip extensions over the ends of the spring, and a resilient cushioning element disposed between the leaf and one of the extensions and engaged with the spring.

1,810,798. HOT WATER SUPPLY SYSTEM. GUNNAR RICHARD TELLANDER, Gottenborg, Sweden. Filed Jan. 12, 1928, Serial No. 246,343, and in Sweden May 14, 1926. 1 Claim. (Cl. 122—32.)



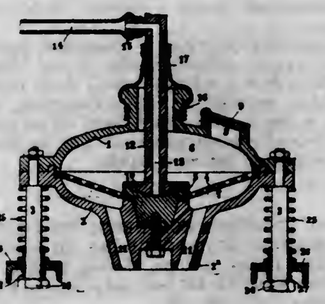
A system for heating service water intended to be drawn off, comprising in combination, a heater, a receptacle of comparatively small volume, a storage tank of a comparatively large volume entirely filled with a heating medium and communicating at its upper portion to the upper portion of the receptacle and with the upper portion of the heater, and at its lower portion with the lower portion of the receptacle and with the lower portion of the heater, whereby to form together with said heater and said receptacle a closed circulation system for the heating medium, a tube system for conveying the water to be heated arranged within the receptacle, means for preventing the interior of said tube system from communication with the heating medium, and said tube system being connected at one of its ends directly to a supply pipe for the cold water to be heated and at its other end directly to a pipe for the heated service water to be drawn off.

1,810,799. NOZZLE. PAUL C. TEMPLE, Decatur, Ill., assignor to A. W. Cash Company, Decatur, Ill., a Corporation of Delaware. Filed Dec. 3, 1928. Serial No. 323,358. 7 Claims. (Cl. 299—128.)



3. A nozzle comprising a pipe having an orifice in one end thereof arranged to discharge a concentrated jet of liquid, a cylindrical sleeve mounted on the discharge end of the pipe and provided with a slot at each side thereof inclined to the axis of the jet, a deflecting bar arranged with one end in each slot and slidable into and out of the path of the jet, and a member adjustable longitudinally of the sleeve which is arranged to slide the bar along the slots.

1,810,800. APPARATUS FOR REDUCING TO FINE POWDER VARIOUS MATERIALS AND PRODUCTS SUCH AS ENAMELS. JOSEPH LOUIS MARIE THOMAS, Morez Du Jura, France. Filed May 15, 1930, Serial No. 452,784, and in France May 18, 1929. 3 Claims. (Cl. 83—57.)

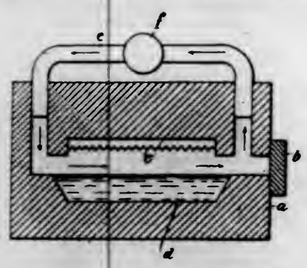


1. Apparatus for reducing to fine powder various products comprising, a closed chamber, springs for the suspension of this chamber, a conical sieve in the said chamber, dividing the latter in two superposed compartments, the upper compartment receiving the products to be pounded, and the lower compartment being provided with suitable channels adapted to ensure the evacuation of the pulverized products, an anvil secured in the center of the sieve, a hammer having a hollow stem and adapted to reciprocate in the upper compartment and to strike upon the anvil, means for actuating the said hammer, means for supplying, through the said hollow stem of the hammer compressed air on the anvil, for projecting on the sieve the materials in proportion as they are pulverized, and ensuring the evacuation of these materials as soon as they have reached the desired degree of fineness.

1,810,801. METHOD OF REMOVING GASES FROM MOLTEN LIGHT-METALS SUCH AS ALUMINUM AND ITS ALLOYS. WILHELM TODT, Lautawerk/Lausitz, Germany. Filed July 29, 1929, Serial No. 382,000, and in Germany June 12, 1928. 3 Claims. (Cl. 75—17.)

1. A method of freeing a bath of molten light-meals such as aluminum and aluminum alloys from gases oc-

cluded therein, which consists in circulating the gases located above the molten metal, without passing them



through the metal and without substantially changing their volume and the temperature of the molten metal, and preventing the admission of fresh air to the furnace.

1,810,802. GRANULAR FERTILIZER AND PROCESS OF PRODUCING THE SAME. JOHN T. TRAVERS and OLIVER M. URBAIN, Columbus, Ohio, assignors, by direct and mesne assignments, to The Ohio Sanitary Engineering Corporation, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 29, 1929. Serial No. 359,188. 12 Claims. (Cl. 71—6.)

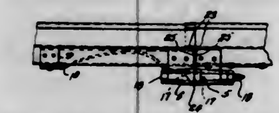
1. A granular fertilizer containing a substantial quantity of dispersible organic colloidal matter in the form of sludge precipitated from a polluted organic waste liquid, containing organic colloidal matter in dispersion, by the ionization in the organic waste liquid of an electrolyte to supply ions of opposite sign to that of the charge carried by the colloids in the waste liquid, said sludge having incorporated therein a colloidal binder in the form of stick.

7. A fertilizer containing a substantial quantity of dispersible organic colloidal matter in the form of sludge precipitated from a polluted organic waste liquid, containing organic colloidal matter in dispersion, by the ionization in the organic waste liquid of an electrolyte to supply ions of opposite sign to that of the charge carried by the colloids in the waste liquid.

1,810,803. PROCESS FOR DESULPHURIZING LIQUID PETROLEUM HYDROCARBONS OR LIGHT DISTILLATES. HENRY ULRICH, Mexico, Mexico. Filed May 29, 1930, Serial No. 457,544, and in Mexico Mar. 14, 1930. 6 Claims. (Cl. 196—29.)

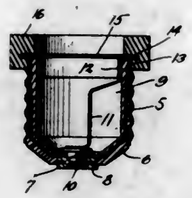
1. A process for desulphurizing liquid petroleum hydrocarbons or light distillates, which consists in contacting the said liquids in a dry state at temperatures below zero degrees Fahrenheit with dry ozonized air for the formation of new sulphur compounds, and removing said compounds.

1,810,804. TROUGH CONNECTION FOR RECIPROCATING CONVEYERS. RAYMOND A. WALTER, New York, N. Y., assignor to Conveyor Sales Company, New York, N. Y., a Corporation of New York. Filed June 22, 1926. Serial No. 117,827. 2 Claims. (Cl. 198—220.)



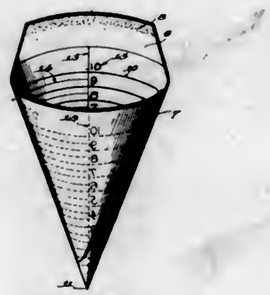
1. A connection for conveyer troughs comprising a plurality of bands attached to the troughs one band being attached flush with the end of one trough and the other band back from the end of the adjacent trough to allow overlapping thereof, the sides of the bands being formed to provide frusto conical apertures to receive bolts, the bolts having longitudinally extending feathers adapted to fit in the open portions of the bands on the peripheries of the apertures to prevent rotative movement of the bolts with respect thereto, the adjacent edges of the bands being cut away to allow relative pivotal movement between the troughs.

1,810,805. FUSE. CHARLES LLEWELLYN WILSON, Birmingham, Ala. Filed Feb. 15, 1930. Serial No. 428,811. 1 Claim. (Cl. 200—130.)



In a fuse plug, an outer shell, an inner removable shell, a contact ring positioned over the upper edge of the inner removable shell, a fuse wire within the inner removable shell, one end of the fuse wire being disposed under the contact ring, the opposite end of the fuse wire extending to the inner end of the inner removable shell, and a contact member carried by the inner removable shell and to which the fuse wire is connected.

1,810,806. GRADUATED ENVELOPE OR FLEXIBLE CONTAINER. MURRAY LANE WILSON, Shreveport, La. Filed May 24, 1930. Serial No. 455,385. 2 Claims. (Cl. 229—15.)



1. A package comprising a container made of opaque paper, said container being provided with sealing means and with graduations on the interior of the container arranged in such a way as to indicate different specific quantities of the commodity to be packaged therein.

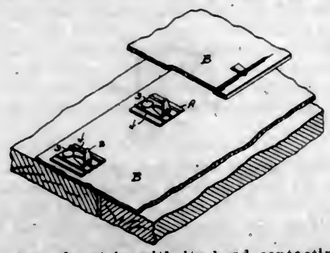
1,810,807. SLIDING CLASP FASTENING. MARTIN WINTERHALTER, Halle-on-the-Saale, Germany. Filed Sept. 6, 1928, Serial No. 304,383, and in Germany Oct. 24, 1927. 3 Claims. (Cl. 139—384.)

1. A method of manufacturing bands double corded at one of their edges for sliding clasp fastenings, consisting in weaving the bands and the cords together and stretching the cords alone during the weaving operation, as and for the purpose set forth.

1,810,808. ROOFING FASTENER. HENRY YOST, Kenton, Ohio. Filed July 5, 1929. Serial No. 376,125. 1 Claim. (Cl. 108—33.)

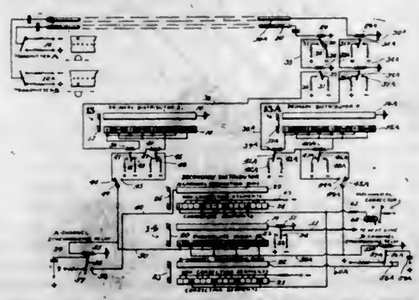
A fastener for the covering of roofs and the like comprising a small metal strip having an upstanding tongue punched therefrom, the tongue being arranged adjacent

one end of the strip, a large headed nail passing through the strip adjacent the other end, the nail being permanent-



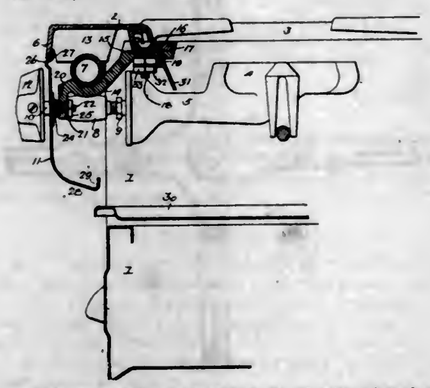
ly fastened to the strip with its head contacting the upper face of the strip and strengthenning ribs formed on the strip, one rib extending over a part of the tongue.

1,810,809. SYNCHRONOUS TELEGRAPH SYSTEM. HERBERT ANGEL and JAMES W. ROBINSON, Brooklyn, N. Y., assignors to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Nov. 5, 1929. Serial No. 405,040. 8 Claims. (Cl. 178—53.)



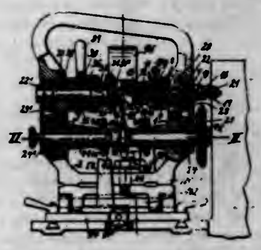
1. In a telegraph system, two cables over which impulses are transmitted, a primary distributor at the receiving end of each of said cables, and means for repeating impulses alternately from said distributors over a single line, said means embodying a single correcting element controlled by any phase shifts of the received impulses over both of said cables.

1,810,810. GAS RANGE. WILLIAM D. ANTRIM, Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 14, 1930. Serial No. 420,716. 2 Claims. (Cl. 126—39.)



1. The combination in a gas range, of a top plate having a deep flange at its front edge; a manifold extending under the front edge of the top plate, back of the flange; valves connected to the manifold; two brackets secured to the top plate at a point back of the manifold, said brackets extending under the manifold and supporting the manifold; a separate front plate extending back of the flange of the top plate and extending inwardly at its lower edge, said front plate having openings for the stems of the valves, each bracket having a depending portion in which is a hole; bolts attached to the rear of the front plate and extending through the holes in the depending portions of the brackets; and a nut on each bolt, securing the front plate to the depending portions of the bracket.

1,810,811. MACHINE FOR MILLING AND PLANING PROFILED ELEMENTS OF WOOD, LEATHER, AND THE LIKE. PAUL BASTIAN, Jr., Stuttgart-Oberturkheim, Germany, assignor to The Firm Fortuna-Werke Spezial-Maschinenfabrik Aktiengesellschaft, Stuttgart-Cannstatt, Germany. Filed Dec. 20, 1927, Serial No. 241,408, and in Germany Mar. 10, 1926. 12 Claims. (Cl. 144—134.)



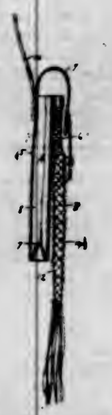
1. A machine for milling and planing profiled elements of any kind of wood and similar material, comprising in combination a stationary cutter, a horizontal axle, a bearing bracket, in which the article is rotatably mounted so that it can be easily interchanged, oscillatably mounted on said horizontal axle, eccentrics controlling the movements of said bearing bracket with regard to said stationary cutter, and an axle perpendicular to said horizontal axle around which said bearing bracket is adapted to rotate.

1,810,812. DISPLAY RACK. HARRY L. BEACH, Coshocton, Ohio. Filed May 9, 1930. Serial No. 451,048. 2 Claims. (Cl. 211—23.)



1. A tire display rack comprising, in combination, a frame having upright members; rack supporting legs pivotally connected at their upper ends to said upright members intermediate their ends; cross bars pivotally connected at intervals to said supporting legs; and U-shaped tire engaging rods adjustably secured to said cross bars.

1,810,813. SPORT BAG. ANTHONY BERTINI, Bridgeton, N. J. Filed Nov. 16, 1929. Serial No. 407,698. 1 Claim. (Cl. 150—28.)



A device of the class described comprising a bag including front and rear walls and gussets connecting the side and bottom edges of the walls, another bag, including front and rear walls, disposed in opposed relation to the front wall of the first named bag, the rear wall of the second named bag abutting the front wall of the first named bag, said front wall of the first named bag having its upper portion folded over the upper portion of the rear wall of the second named bag and secured thereto, a binding enclosing the upper portion of the front wall of the second named bag and stitched thereto, bindings enclosing portions of the vertical edges of the side gussets, the front wall of the first named bag, the walls of the second named bag and the end portions of the first named binding for securing the bags together, said bags open at their tops, an integral flap on the rear wall of the first named bag, and coacting means on the flap and the front wall of the second named bag for detachably connecting the flap thereto, said flap constituting a closure common to the bags, the first named bag formed of waterproof material and the second named bag formed of open mesh material.

1,810,814. BACK FIRE ARRESTER FOR COMBUSTIBLE GAS CONDUITS. CHARLES HENRI BICHLER, Paris, France, assignor to The Firm Air-Securite, Paris, France. Filed Dec. 27, 1927, Serial No. 242,866, and in France Jan. 7, 1927. 1 Claim. (Cl. 48—192.)



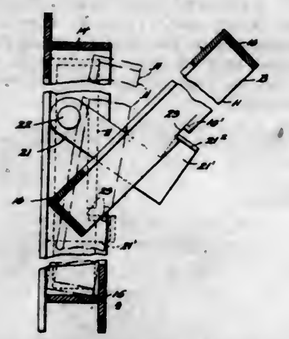
In a combustible gas conduit; a back fire arrester comprising an elongated bundle of spaced parallel strips inserted lengthwise in the conduit, the strips being provided with bolts passing through openings near their ends elongated spacing members bolted between the strips, and said spacing members having a rounded front end and a wedge-shaped rear end.

1,810,815. BOTTLE CRATE. WILLIAM W. BIENSTOCK, York, Pa. Filed Aug. 21, 1929. Serial No. 387,449. 6 Claims. (Cl. 217—65.)



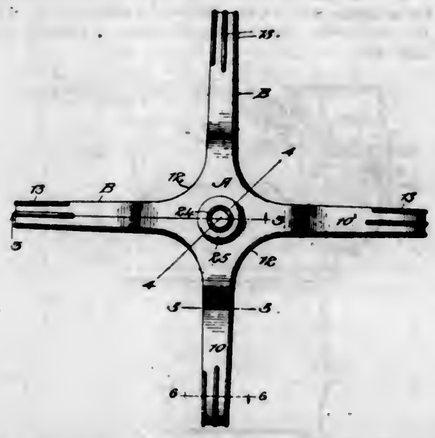
1. A crate having sides and ends composed of strips arranged one above another, angular corner members fitting the corners of the crate at the inner and outer sides of said strips, and tongues extending through the thickness of said strips and slidably connecting said members.

1,810,816. WINDOW. ROBERT H. BLISS, East Syracuse, N. Y. Filed May 6, 1929. Serial No. 360,790. 15 Claims. (Cl. 189—69.)



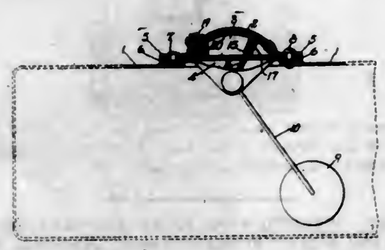
1. A window construction comprising in combination, a frame having a vertically disposed seating surface for a movable sash, a sash the margin of which is adapted to bear against said seating surface when in closed position, and means on the frame for supporting the sash when it is moved to open position, said means wholly disengaging the sash when the sash is in closed position.

1,810,817. BASE FOR SWIVEL CHAIRS. GEORGE C. BRAINARD and JASON A. FITCH, Youngstown, Ohio, assignors to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed Aug. 7, 1930. Serial No. 473,665. 7 Claims. (Cl. 155—138.)



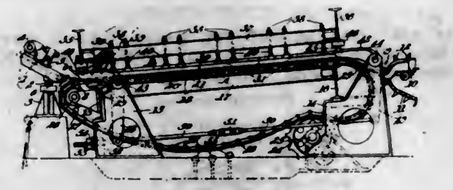
1. A base for swivel chairs comprising a central portion and a plurality of legs formed in one piece with said central portion, the legs being of inverted U-shape in cross section and each comprising a top wall and a pair of side walls, the adjacent side walls of adjacent legs being connected with and forming integral continuations of one another, and a reinforcing plate structure secured at the bottom of said central portion, said plate structure having side portions disposed flush with the outer faces of the connecting portions of the side walls of said legs.

1,810,818. OIL LEVEL GAUGE. MOSES E. CHENEY, Flushing, N. Y., assignor to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Original application filed Dec. 18, 1928, Serial No. 326,775. Divided and this application filed Apr. 8, 1930. Serial No. 442,547. 2 Claims. (Cl. 201—48.)



1. A float operated rheostat comprising a casing composed of upper and lower stampings having flat marginal portions secured together and having upwardly and downwardly pressed central portions forming a chamber, an arcuate resistance coil mounted in the upwardly pressed portion of the upper stamping, a shaft journaled in the downwardly pressed portion of the lower stamping, and substantially coaxial with said coil, a contact arm within the chamber fixed to the shaft and engaging said arcuate resistance coil, and a float arm fixed to said shaft exteriorly of the casing.

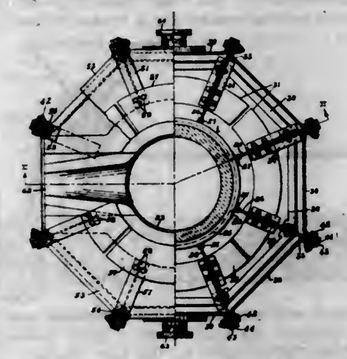
1,810,819. METHOD OF AND APPARATUS FOR STRAIGHTENING PIPES, TUBES AND SIMILAR ARTICLES. WILLIAM F. CLARK, Baltimore, Md. Filed Nov. 28, 1928. Serial No. 322,434. 21 Claims. (Cl. 153—32.)



1. The method of straightening cylindrical articles which comprises rolling such articles under substantially continuous pressure between a fixed member and a uni-directionally movable member.

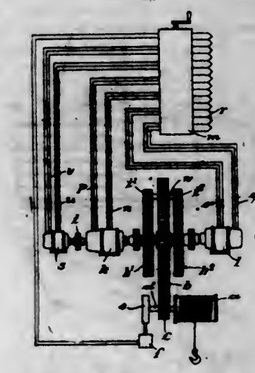
1,810,820. INDUCTION FURNACE. NEVILLE RYLAND DAVIS, Sale, and MAURICE JAMES MARCHBANKS and JOHN HEYWOOD LUDLOW, Manchester, England, assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 7, 1930, Serial No. 450,343, and in Great Britain May 8, 1929. 8 Claims. (Cl. 13—27.)

1. In an induction furnace having a crucible, and an energising coil surrounding it, means for supporting said coil including annular top and bottom members, a plurality of relatively thin metal members extending radially and longitudinally between the top and bottom members,



each of said thin metal members having a recess in its inner edge, and electric-insulating material in said recesses for supporting the energizing coil.

1,810,821. ELECTRICALLY OPERATED WINDLASS. RICHARD ECK, Dresden, Germany, assignor of one-half to Friedrich Adolf Richard Göbel, Dresden, Germany. Filed July 20, 1927, Serial No. 207,251, and in Germany July 2, 1927. 1 Claim. (Cl. 172—152.)

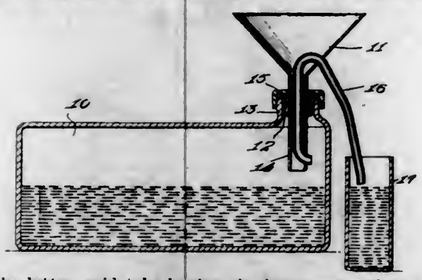


In a device of the class described, a windlass, a balancing gearing operatively coupled to said windlass, an asynchronous motor operatively coupled to said balancing gearing, a second asynchronous motor also operatively coupled to said balancing gearing, means for controlling said motors whereby both of the same are first caused to run at full speed in such directions with relation to each other that the windlass remains at rest under the action of the balancing gearing thereon, said control means being operable to retard the rotary motion of one of said motors to zero, then to reverse the same and thereafter to accelerate it in the opposite direction to cause the windlass to move a load thereon, said retarding movement of said motor being accomplished by the application to the same of a counter current, and an auxiliary motor coupled to the last named of said motors to counteract the drop of the rotary speed of the same during the retarding movement thereof aforesaid.

1,810,822. FUNNEL. JOHN E. ERICKSON, East Grand Forks, Minn. Filed Apr. 19, 1929. Serial No. 356,561. 1 Claim. (Cl. 226—33.)

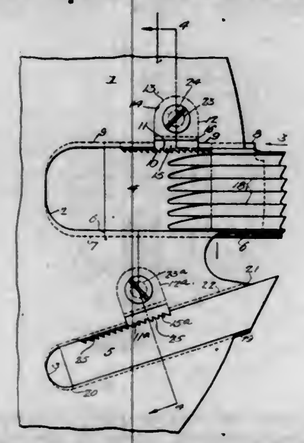
An overfilling overflow device comprising a filling element having an enlarged entrance end, a tubular discharge

portion for the filling element being of corresponding width throughout its length, a discharge tube projected through the enlarged entrance end of the filling neck and depending centrally of the longitudinal axis of the tubular discharge portion and having a bore equavilent to that



of the latter, said tube having the innermost end thereof projected through the wall of the tubular discharge portion and at right angles to the bore thereof, and the outermost end of the discharge tube being disposed outwardly and beyond the entrance end of the device.

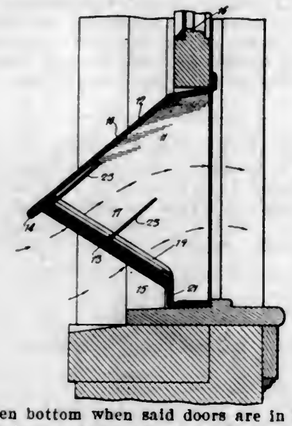
1,810,823. CIRCULAR SAW. SAMUEL T. FREAS, Trenton, N. J., and CHARLES A. GEHR, Wissinoming, Pa., assignors to Henry Disston & Sons, Incorporated, Tacony, Pa., a Corporation of Pennsylvania. Filed June 13, 1930. Serial No. 460,968. 1 Claim. (Cl. 143—149.)



The combination in a body of a circular saw having an elongated recess in its periphery, of a tooth adapted to the recess, and having a tongue and groove connection with one wall of the recess, said tooth having a series of retaining teeth at one edge, one wall of the recess having a notch extending entirely through the body of the saw; a shallow recess on one side of the body extending to said notch; an angular plate, the body portion of the said plate being adapted to the recess and flush with the side of the saw, the other portion of the plate being located in the notch of the recess for the tooth and extending to the opposite side of the saw; teeth on the said portion of the plate extending the full width of the tooth and engaging the retaining teeth of the tooth; and means for securing the angular plate within the recess of the body of the saw.

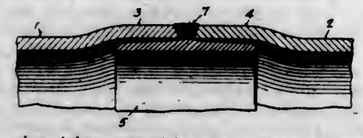
1,810,824. AIR REGULATOR FOR WINDOW VENTILATORS. VICTOR W. I. FREDERICK, Brooklyn, N. Y. Filed Mar. 25, 1930. Serial No. 438,816. 3 Claims. (Cl. 98—99.)

1. In combination with a window ventilator of substantially V-shaped configuration having an inclined screen bottom wall, an air regulator including a frame supported upon said screen bottom wall, and doors hinged to said frame for shutting off the entrance of air through



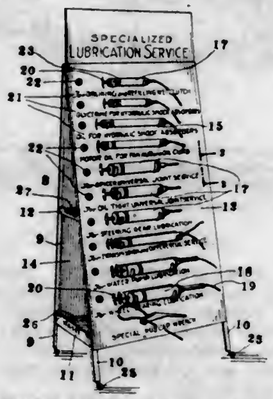
said screen bottom when said doors are in a closed position, and for regulating the flow of air therethrough by opening either or both of said doors.

1,810,825. WELDED PIPE JOINT AND METHOD OF MAKING SAME. RUDOLPH FUBAER, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,747. 8 Claims. (Cl. 113—112.)



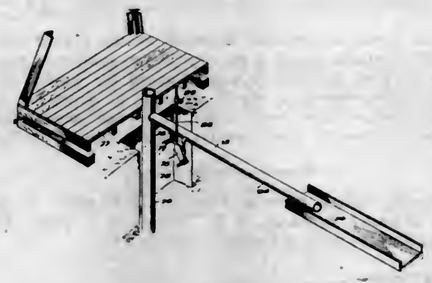
1. A pipe joint comprising two pipe sections to be joined having their adjacent ends belled, a chill ring arranged within the annular space provided by said belled ends, said chill ring being tapered outwardly to provide beveled surfaces against which the end edges only of the pipe sections are abutted to thereby space the ends of said pipe sections and center the chill ring with respect thereto, and welding metal deposited in the space between the ends of said pipe sections and joining said sections and chill ring.

1,810,826. GREASE SERVICE RACK. LEIL L. GRAY, Minneapolis, Minn. Filed Jan. 20, 1931. Serial No. 509,916. 11 Claims. (Cl. 35—12.)



1. A specialized lubricating service rack including a series of pump supports, for receiving a series of pumps containing different fluids, a corresponding series of dispensing pumps mounted upon said supports, a series of indicia upon said rack in juxtaposition to said series of pump supports, respectively, each indicating a particular part of the automobile requiring a specialized lubrication or service and a series of identification marks upon said pumps, and a corresponding series of identification marks upon said rack in juxtaposition to said pump supports, for identifying each with its particular support and nence with the particular legend denoting the part of the automobile to which said pump is properly applicable.

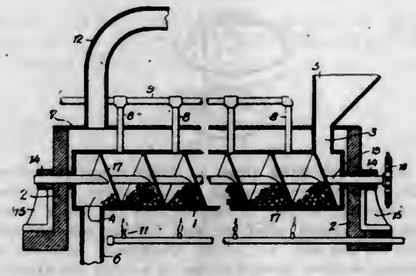
1,810,827. WELL CUTTING SAMPLER. OSCAR HATCHER and EARL L. BYERS, Tulsa, Okla., assignors to Gypsy Oil Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Nov. 18, 1929. Serial No. 408,054. 9 Claims. (Cl. 73—21.)



1. In apparatus for obtaining samples of cuttings in mud laden fluids used in rotary well drilling, the combination of a main conduit for the fluid, a casing forming a trap, said casing having an unrestricted opening at one end, a removable closure for said opening, connections for delivering flushing fluid to the casing, and a branch pipe connecting said conduit and casing.

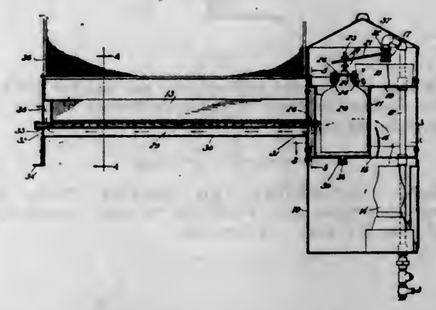
5. An apparatus for obtaining samples of cuttings in mud-laden fluids used in rotary well drilling, comprising a conduit for the fluid connected to the outlet from the well casing and having an opening in its under side, a tubular member attached to said conduit about its opening and extending downwardly therefrom, and a closure on the lower end of said tubular member.

1,810,828. METHOD OF CARBONIZING COAL. CHARLES HAYES, Paris, France, assignor to Coal Carbonization Company, a Corporation of Delaware. Filed May 16, 1927. Serial No. 191,877. 3 Claims. (Cl. 202—28.)



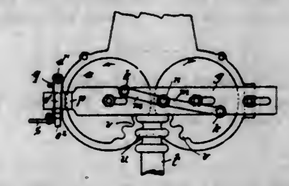
1. The process of carbonizing coal which comprises forming a body of coal in a stationary horizontal retort on the bottom thereof, in quantity insufficient to fill said retort so that there is a free space in said retort above said body of coal, carbonizing said body of coal in said retort while transferring said body of coal along said retort on said bottom by alternately advancing said body of coal along said retort a distance that is materially shorter than half the length of said retort and retracting said body of coal a distance that is less than the first said distance, heat being applied to said coal from the bottom of the retort during the carbonization.

1,810,829. WATERING FOUNTAIN. JONATHAN HAYNES, La Cygne, Kans. Filed June 21, 1928. Serial No. 287,132. 7 Claims. (Cl. 119—73.)



1. A watering fountain of the character described comprising, in combination, a water supply; a chamber; a float in the chamber of such size as to limit the capacity thereof to a small volume; a valve in the supply pipe automatically controlled by the float; and an elongated watering trough connected at one end to the casing to communicate with the float chamber and having its bottom adjacent to the water level in the float chamber so that only a small amount of water is exposed to contamination and fresh water will be admitted automatically when small quantities are consumed.

1,810,830. AUTOMATIC RAILWAY CAR COUPLING. CARL HELLWIG, Cali, Colombia. Filed Dec. 29, 1930, Serial No. 505,897, and in Germany Sept. 17, 1929. 2 Claims. (Cl. 213—186.)

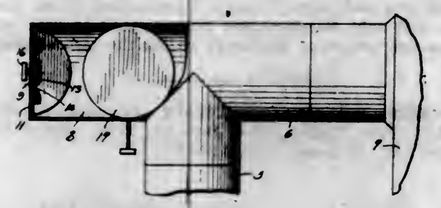


1. An automatic railway car coupling comprising two rotatable coupling members and a cooperating coupling member adapted to engage said rotatable coupling members when the car on which the cooperating coupling member is mounted approaches the car on which said rotatable coupling members are mounted, a locking bar, links connecting the last named members with said locking bar and a latch adapted to engage and lock said locking bar in coupling position of the coupling members.

1,810,831. VENTILATING STOVEPIPE. JOHN F. JEWART, Blasdell, N. Y. Filed Apr. 10, 1930. Serial No. 443,148. 1 Claim. (Cl. 126—312.)

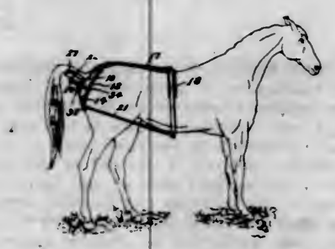
A stove pipe ventilator comprising a body portion embodying a pipe to be connected with a stove pipe, a closure for closing one end of the body portion, a bar extending across one end of the body portion, said closure embodying a pair of sections connected with the bar, a shaft

extending through the bar, a cross bar on the inner end of the shaft and adapted to engage the sections to move



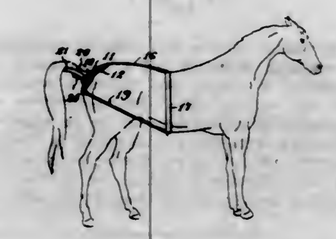
the closure to its closed position, and the said bar having curved portions adjacent to the ends thereof to exert a pressure on the closure.

1,810,832. ADJUSTABLE TAIL HOLDER. FRANK B. JUDY, Cynthiana, Ky. Filed Aug. 15, 1930. Serial No. 475,590. 5 Claims. (Cl. 54—78.)



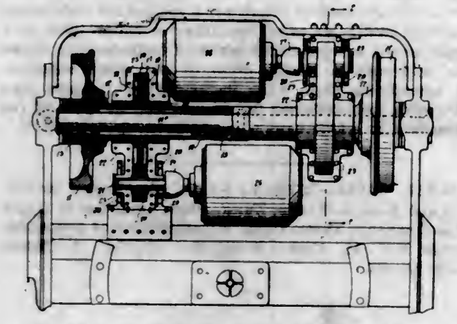
1. An adjustable tail holder comprising side frames rigidly held spaced apart, said side frames having integral ears, each ear being provided with a row of perforations, a tail supporting pad pivoted at one end to said side frames, and a pin carried by said pad remote from the pivot of the pad and selectively receivable in the perforations of said ears to maintain the pad at any desired angular inclination relatively to said side frames.

1,810,833. ADJUSTABLE TAIL HOLDER. FRANK B. JUDY, Cynthiana, Ky. Filed Oct. 21, 1930. Serial No. 490,288. 6 Claims. (Cl. 54—78.)



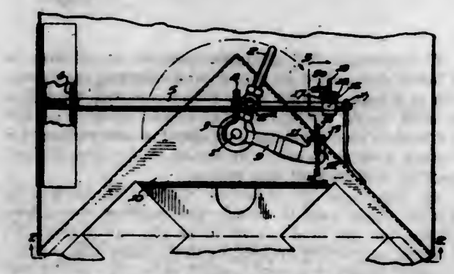
1. A tail holder for simultaneously lifting and adjusting a defective tail after an operation comprising side frames adapted to be mounted on an animal's buttocks, a pad for supporting the tail, and means operatively connecting the pad to the side frames and adapted to secure the pad in raised, lowered and transversely inclined positions relatively to the side frames.

1,810,834. ROLLER-BEARING FREE WHEEL DRIVE. WILLIAM C. KLEIN, Allentown, Pa. Filed Dec. 3, 1930. Serial No. 499,820. 7 Claims. (Cl. 105—113.)



1. A device of the class described having a fixed axle, a pair of wheels mounted for rotation on said axle, housings carrying said wheels and arranged for coaxial differential movement, a motor, gearing to drive one of said housings from said motor, a second motor, and means to drive the other housing from the second motor.

1,810,835. BACK CHECK FOR GAS METERS. DAVID N. LAMBERT, Brooklyn, N. Y. Filed Oct. 8, 1930. Serial No. 487,316. 9 Claims. (Cl. 73—1.)



1. In a meter comprising meter mechanism having a member movable therewith, a back stop pawl normally clear of the path of said member, and a gravity controlled element set during reverse movement of said member to move said pawl into the path of said member to stop it.

1,810,836. BOTTLE RACK. HARRY W. LAURENSTEIN, Ashland, Pa. Filed June 4, 1929. Serial No. 368,366. 1 Claim. (Cl. 248—65.)



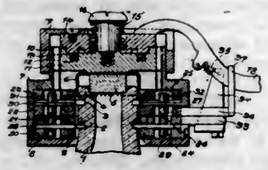
A rack constructed from a single piece of material forming a bottom member, an upper member, and a member connecting the bottom member and the upper member together in spaced relation, said bottom member being adapted to support an article positioned thereon, and said upper member being adapted to confine the article in supported position on the bottom member, said bottom and upper members having flanges which extend laterally with respect to said connecting member to engage opposite sides of a suitable support, and said connecting members having holes to receive fastening elements to secure the rack to said support.

1,810,837. METHOD OF APPLYING TEMPORARY WRAPPERS. HARRY MACELHONE, Binghamton, N. Y. Filed Apr. 6, 1931. Serial No. 528,053. 1 Claim. (Cl. 107—54.)



A method of the character herein described comprising the steps of placing a substantially flat blank having a substantially arcuate body portion and bottom tab on a rigid mould, and manually pressing the blank into the mould whereby simultaneously to line the bottom, and sides of the mould to form a wrapper for material to be placed therein.

1,810,838. BOTTLE CAPPING MACHINE. JOSEF MARIAN, Vienna, Austria. Filed Mar. 19, 1931, Serial No. 523,810, and in Austria Mar. 18, 1930. 9 Claims. (Cl. 226—86.)

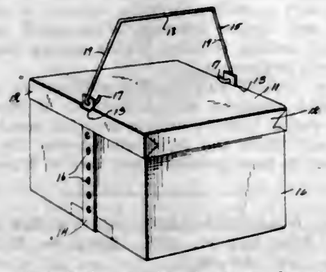


1. A device for sealing bottles or the like by means of caps, comprising a casing adapted to be fitted over the mouth of a bottle, a die mounted in the upper part of the casing and movable axially thereof, cap clamping cheeks mounted in the lower part of said casing and guided for rectilinear radial movement with respect to the axis of said casing, means for actuating said die and cheeks, and means carried by the casing for clamping the latter on the neck of a bottle.

1,810,839. MANUFACTURE OF DIRECT DYEING DISAZO-DYESTUFFS. CARL METTLER, Basel, Switzerland, assignor to the Firm of J. R. Geigy S. A., Basel, Switzerland. Filed Oct. 23, 1929, Serial No. 401,978, and in Germany Nov. 15, 1928. 3 Claims. (Cl. 260—77.)

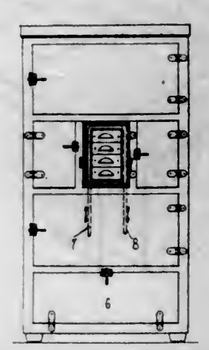
1. A process for the manufacture of direct dyeing disazo-dyestuffs, consisting in tetrazotizing 3 : 3'-diamino-4 : 4'-dihydroxy-diphenylsulphones and coupling the tetrazo-product with two molecular proportions of arylated 2-amino-5-naphthol-7-sulphonic acids.

1,810,840. CARRYING HANDLE. TAYLOR L. MILLER, Silverton, Tex. Filed Apr. 15, 1930. Serial No. 444,529. 2 Claims. (Cl. 229—52.)



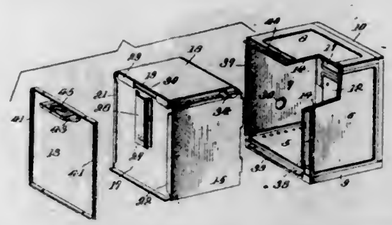
1. A carrying device of the character described comprising in combination with a receptacle having a slotted lid, a U shaped flat strap adapted to substantially surround the receptacle, said strap having longitudinally spaced apertures therethrough, and a bail removably engaging selected apertures in said strap.

1,810,841. ELECTRIC REFRIGERATOR. HUGO MOCK, New York, N. Y. Filed Dec. 7, 1929. Serial No. 412,551. 6 Claims. (Cl. 62—99.)



1. In an electric refrigerator, a refrigerating coil and enclosure in the center thereof, and a series of refrigerating chambers circumferentially abutting and surrounding said central refrigerating coil, said chambers being entirely disconnected from each other.

1,810,842. INSULATED RANGE. HENRY MOECKER, Jr., Flossmoor, Ill., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed Sept. 19, 1929. Serial No. 393,757. 11 Claims. (Cl. 126—39.)

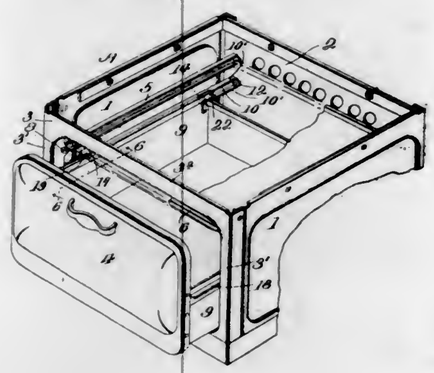


1. An improved range construction, comprising an oven housing having a removable wall, a lining for said housing slidable into the same when said wall is removed, an outlet flue formed as a part of said lining, and said removable housing oven wall having a flue outlet adapted for communication with the oven lining flue, for the purpose described.

1,810,843. SERVICE DRAWER FOR RANGES. HENRY MOECKER, Jr., Flossmoor, and THEODORE THOMPSON, Harvey, Ill., assignors to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed Oct. 25, 1929. Serial No. 402,484. 4 Claims. (Cl. 126—41.)

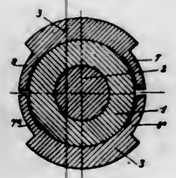
1. A service drawer for ranges comprising a housing having a drawer opening, a drawer located within the opening, longitudinally extending track portions supported by the side walls of the housing, fixed wheels located at the front ends of the track portions, said drawer having the outer sides of its side walls provided with longitudinal

flanges extending outwardly therefrom and located between the said tracks, the inner ends of the drawer



carrying wheels adapted to engage the said track portion whereby the drawer can be moved backward and forward and at all times be supported by the said wheels.

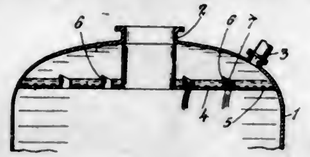
1,810,844. MAGNETO-ELECTRIC MACHINE. EMILE MOREL, Domene, France. Filed Nov. 7, 1928, Serial No. 317,829, and in France and Germany Nov. 9, 1927. 3 Claims. (Cl. 171—209.)



1. A magneto electric machine of the inductor type having an inductor comprising a magnetic ring of steel of high coercive force and remanence, a mounting core passing through said ring for rotating it, a plurality of polar masses of soft magnetic material attached to and in magnetic contact with the periphery of said ring so as to be magnetically connected therewith, and prolongations upon said polar masses, said prolongations being spaced a short distance from said ring and partly embracing it, the extremities of the prolongations on adjacent polar masses being a small distance apart in the neighbourhood of the neutral polarities of the said ring.

1,810,845. TOP SCREEN FOR WOOD PULP DIGESTERS OR THE LIKE. EINAR MORTERUD, Torderod, near Moss, Norway. Filed Mar. 19, 1930. Serial No. 437,093. 3 Claims. (Cl. 92—7.)

2. In a wood pulp digester or the like a screen or sieve near the top thereof for distributing liquid evenly over the cross sectional area of the vessel, holes for the passage of liquid distributed over the area of said sieve

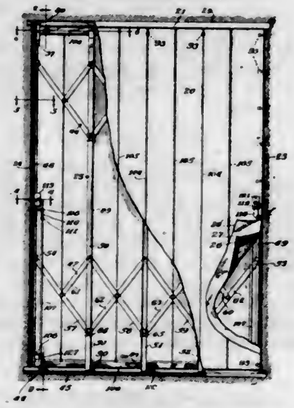


and tubes passing through said screen or sieve and extending a certain distance above the level thereof so as to provide auxiliary passages for the liquid.

1,810,846. PROCESS OF MAKING DIALKYL BARBITURIC ACIDS AND 1-PHENYL- 2,3 DIMETHYL-4-DIMETHYLAMINO - 5 - PYRAZOLONE. FRITZ MÜLLER, Basel, Switzerland, assignor to Chemical Works formerly Sandoz, Basel, Switzerland. Filed Nov. 20, 1928, Serial No. 320,763, and in Switzerland Dec. 3, 1927. 3 Claims. (Cl. 260—33.)

1. A process for the preparation of compounds of 5,5-disubstituted barbituric acids and 1-phenyl-2,3-dimethyl-4-dialkylamino-5-pyrazolones, consisting in the interaction of alkali metal salts of 5,5-disubstituted barbituric acids and strong mineral acid salts of 1-phenyl-2,3-dimethyl-4-dialkylamino-5-pyrazolones, the latter being used in form of a saturated aqueous solution forming solvent for the double decomposition.

1,810,847. FOLDABLE CURTAIN. CARL H. NORDELL and PEDER E. ERLINDER, Chicago, Ill., assignors to Folding Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1928. Serial No. 301,528. 18 Claims. (Cl. 20—20.)



2. In a foldable curtain, the combination of an extensible supporting means having a transverse end frame member, with a flexible covering secured to said frame member, said flexible covering being bowed out beyond said frame member to effect flexible sealing contact with an adjacent member.

6. In a foldable curtain, the combination of a pair of extensible members with a plurality of stiles carried thereby, and a foldable flexible covering secured to the ends of said stiles and tensioned between the points of attachment to form predetermined lines of flexure.

1,810,848. ROLLING SCREEN. ALVIN F. NYE, Rochester, N. Y. Filed May 11, 1928. Serial No. 277,044. 15 Claims. (Cl. 156—39.)

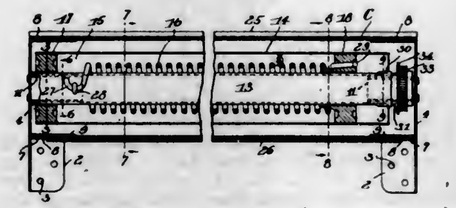
2. In a construction including supporting means provided with a groove, and a rolling screen having an edge

normally engaged in said groove, the combination with said groove of guiding members extending obliquely out-



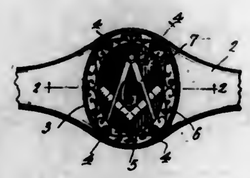
wardly from the sides of said groove to assist in replacing the edge of the screen which has become disengaged from the groove.

1,810,849. ROLLER SCREEN MOUNTING. ALVIN F. NYE, Rochester, N. Y. Filed July 22, 1929. Serial No. 380,014. 7 Claims. (Cl. 156—39.)



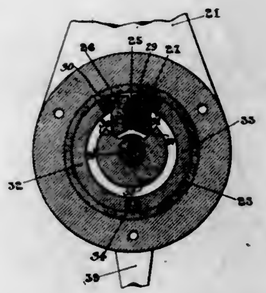
1. In a roller screen mounting, the combination with end brackets having inwardly projecting hubs thereon, of a tubular core piece slidable telescopically on the hubs, a screen roller shell enclosing the core piece and supported thereon for relative movement and forming a chamber, and a spring in the chamber reacting between the core piece and shell.

1,810,850. FINGER RING AND THE LIKE. HENRY W. PETERS, Boston, Mass. Filed May 11, 1929. Serial No. 362,362. 3 Claims. (Cl. 63—15.)



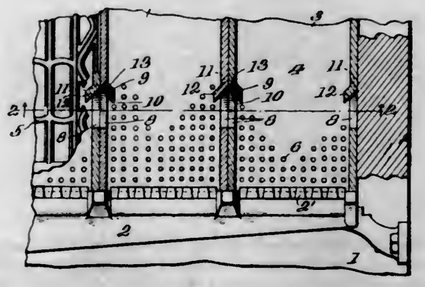
1. An article of jewelry including a base, a box integral therewith and having an open face for the reception of a setting, a retaining element fitted snugly within the open face of the box and bearing upon the setting, and means integral with the box and engaging and flush with the outer surface of the retaining means for holding the retaining means and the setting within the box.

1,810,851. ROTATABLE TRANSMISSION IRREVERSIBLE IN BOTH DIRECTIONS. RAYMOND PETIT, Paris, France, assignor to Société Anonyme Francaise Dite: Bricard, Ancienne Maison Sterlin, Paris, France. Filed Apr. 28, 1928, Serial No. 273,533, and in France Mar. 29, 1928. 2 Claims. (Cl. 192—8.)



1. An unlocking mechanism for application to an irreversible gear comprising a primary member, a plurality of locking segments, a plurality of levers adapted to act respectively upon the said locking segments each lever having two arms, a secondary member acting upon the outside of the levers, while the primary member is adapted to act on the inside thereof, and a member operated from the outside and adapted to rigidly connect the primary and secondary members.

1,810,852. RADIANT HEATER. MINARD A. POSSONS, Cleveland, Ohio, assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed May 12, 1930. Serial No. 451,723. 4 Claims. (Cl. 126—92.)

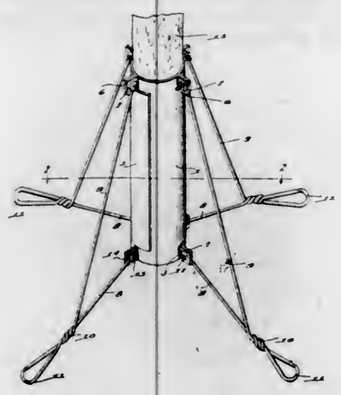


1. A radiant element for radiant heaters comprising an oblong body having a solid back and solid walls and a foraminated front and an open bottom, each side wall of said element being provided with a flash opening, the upper wall of each opening having portions inclined in opposite directions, one of the inclined walls of each of said openings being extended inwardly into said hollow element.

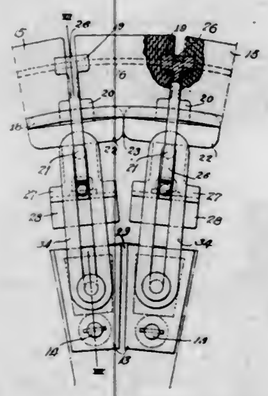
1,810,853. CHRISTMAS TREE STAND. JOSIAH B. RAY and JESSE A. RAY, Decatur, Ind. Filed July 24, 1930. Serial No. 470,482. 3 Claims. (Cl. 248—88.)

1. A tree holder comprising a plurality of curved plates disposed in overlapping relation, each of said plates having

a plurality of ears, means passing through the ears of adjacent plates for securing them together, and a plurality of legs, each of said legs having a portion secured to one of said ears and another portion secured to another of said ears.



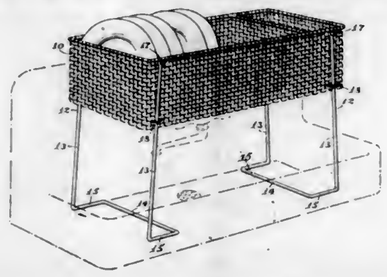
1,810,854. ELASTIC WHEEL WITH FLEXIBLE RIM. EMILE RIMAILHO, Paris, France. Filed May 13, 1927, Serial No. 191,200, and in France May 25, 1926. 3 Claims. (Cl. 152—29.)



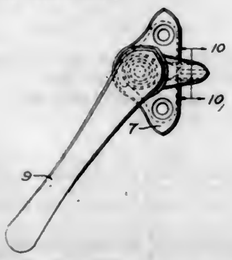
1. In an elastic wheel, the combination of an internal rigid circular element, an external flexible rim, elastic members subjected to tension connecting the said rigid circular element with the said flexible rim, this rim being constituted by at least one circular flexible strip, bearing pieces carried by the strips and to which are attached the said elastic members, these bearing pieces being provided with stops disposed upon the circumference so as to maintain the said pieces apart, india rubber blocks pressed between these pieces and acting as interposed elastic elements and as removable tread segments.

1,810,855. DRAIN DEVICE. JEANNETTE ROCKMORE, New York, N. Y. Filed Aug. 30, 1930. Serial No. 479,053. 6 Claims. (Cl. 141—11.

5. A device of the class described comprising a basket, studs on said basket, U-shaped elements pivotally connected with said studs, retainers on the basket which cooperate with the side members of said elements to releasably retain said elements disposed in relation to the basket to serve as the legs therefor, said elements being releasable from said retainers to engage said studs for disposition in relation to the basket to serve as handles therefor.

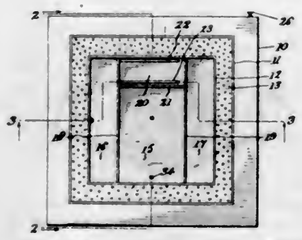


1,810,856. WINDOW CASEMENT LOCK. WILLIAM SCHNELL, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 20, 1929. Serial No. 415,469. 5 Claims. (Cl. 292—202.)



1. A lock for two relatively movable members comprising in combination an integral die-cast handle and locking leg arranged to be movably mounted on one of said members for inter-engaging the said movable members by a sliding cam action, and a reinforcement insert having a trough-like portion cast within the said handle and locking leg portion and having a portion projecting through to the outside of the locking leg portion to present a wearing surface during the sliding cam action of the inter-engaging members.

1,810,857. COOLED DEVELOPMENT APPARATUS. WILFORD G. THOMPSON and JAMES E. JORDAN, El Paso, Tex. Filed Mar. 17, 1930. Serial No. 436,586. 2 Claims. (Cl. 95—89.)

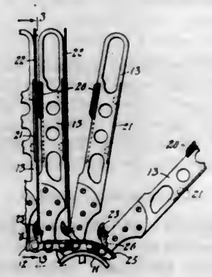


1. In a developing apparatus, a cabinet, a tank in the upper portion of the cabinet exposed through the upper portion of said cabinet, a receptacle within and spaced from the bottom and sides of the tank and having intersecting partitions dividing the interior space of the receptacle into a plurality of compartments all opening substantially through the upper part of the cabinet, a refrigerating coil in one of the compartments, a refrigerating unit contained in the lower portion of the cabinet and connected to said coil, a cooling coil in said compartment connecting with the source of wash water supply and with an adjacent compartment for wash water, and a fixing bath contained in a third compartment.

1,810,858. PROCESSES FOR THE DECOMPOSITION OF CRUDE PHOSPHATE. THEODOR THORSSELL and AUGUST KRISTENSSON, Cassel, Germany. Filed Nov. 11, 1929, Serial No. 406,504, and in Germany Nov. 28, 1928. 2 Claims. (Cl. 71—7.)

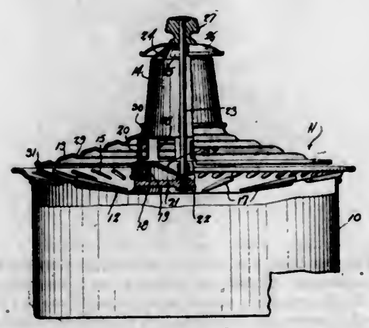
1. In a process for the decomposition of crude phosphate with an acid and potassium sulphate with precipitation of gypsum containing double potassium-calcium salts, the recovery of the potash from the said double salts, comprising the steps of washing with water the gypsum containing the said double salts, agitating with water, containing nitric acid, and washing again with water, as set forth.

1,810,859. CONVEYER. JOHN H. THURMER, Brooklyn, N. Y. Filed Mar. 31, 1930. Serial No. 440,502. 9 Claims. (Cl. 198—134.)



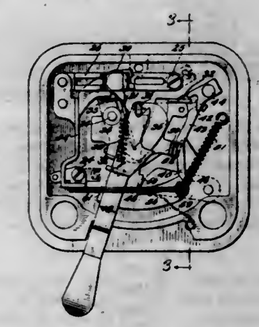
2. A conveyer comprising a linked belt, alternate links having bifurcations at their inner and outer sides, rigid arms projecting from the bifurcations at the outer sides of said links, and material engaging members pivotally mounted in the bifurcations at the inner sides of said links.

1,810,860. POT AND PAN COVER. MARIA V. TREMBLAY, Willimantic, Conn. Filed Jan. 19, 1931. Serial No. 509,785. 9 Claims. (Cl. 53—1.)



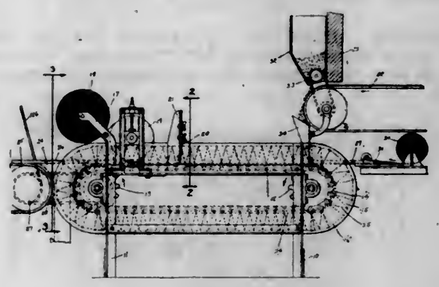
1. In a cover for pots, pans and the like, a double wall construction having a central passage therethrough and the outer edges of the walls being spaced to permit air to enter between the walls and flow upwardly through the central passage, a vertical stack surrounding the central passage and supported on one of the cover walls, the other cover wall being supported on the stack and said stack having openings therein permitting flow of air from between the covers to the central passage.

1,810,861. CIRCUIT BREAKER. EMIL H. W. ULLRICH, New York, N. Y., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 30, 1928. Serial No. 274,086. 11 Claims. (Cl. 200—116.)



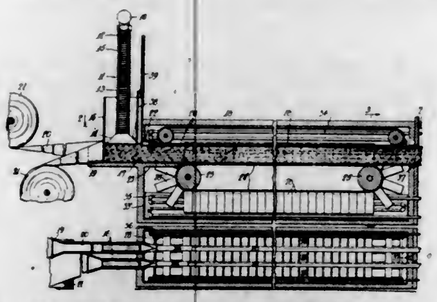
1. In an automatic circuit breaker, a spring-stressed operating lever manually movable between a single open circuit and a closed-circuit position, a spring-stressed element engaging the lever to move it to open-circuit position, a detent normally holding said element in fixed location enabling said lever to occupy either of its positions, and a thermostatically controlled means acting on overload to open the circuit independently of the said operating lever and to free said detent.

1,810,862. DENSITY CONTROL AND DELIVERY OF ICE CREAM OR THE LIKE. CLARENCE W. VOGT, Louisville, Ky., assignor to Vogt Instant Freezers, Inc., Louisville, Ky., a Corporation of Delaware. Filed Oct. 27, 1927. Serial No. 229,180. 12 Claims. (Cl. 107—1.)



11. The process of forming a continuous bar of a plastic comestible, including delivering the comestible to a moving wrapper of channel shape, reducing the comestible to predetermined thickness without increasing the density by preventing advancement of excess material with said wrapper, and thereafter compacting the comestible to a lesser predetermined thickness and uniform density.

1,810,863. APPARATUS FOR CONTINUOUSLY HARDENING PLASTIC MATERIALS. CLARENCE W. VOGT, Louisville, Ky., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky., a Corporation of Delaware. Filed Apr. 23, 1930. Serial No. 446,474. 16 Claims. (Cl. 62—114.)

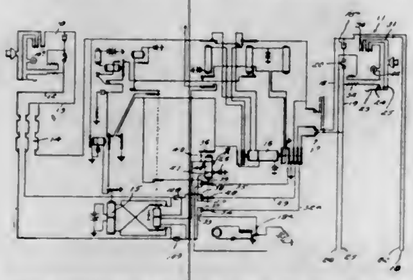


1. An apparatus for reducing the temperature of a substance comprising a heat conducting element containing a congealable liquid, a container for a body of liquid refrigerant, means for immersing said element into said refrigerant and for advancing said element into heat transferring relationship with said substance.

1,810,864. PROCESS FOR THE PRODUCTION OF FOOD PRODUCT BRICKS. CLARENCE W. VOGT, Louisville, Ky., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky., a Corporation of Delaware. Original application filed Oct. 25, 1929, Serial No. 402,339. Divided and this application filed Jan. 9, 1931. Serial No. 507,629. 36 Claims. (Cl. 62—174.)

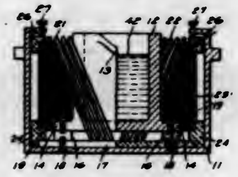
1. The process of forming a solid body of an edible product, including enclosing the product in a wrapper, applying refrigerant to the top, bottom and lateral sides of the wrapper to solidify the material therein, and continuously advancing the material during such solidification.

1,810,865. AUTOMATIC TELEPHONE SYSTEM. HAROLD LYNWOOD WARWICK, Fort Worth, Tex. Filed May 9, 1928. Serial No. 276,857. 14 Claims. (Cl. 179—18.)



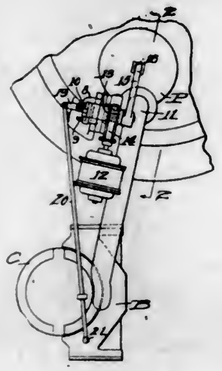
2. The combination with an automatic telephone system including the usual ringing apparatus and a talking circuit including means producing a series of current impulses at the called station upon operation of the dial switch of the calling station after the talking circuit is established, of recording apparatus including a plurality of elements advanced to recording position by said current impulses, means operative after a predetermined number of operations of the ringing apparatus establishing the talking circuit and then consecutively connecting the elements of the recording apparatus thereto, and means connecting said recording apparatus for operation by said ringing means whereby the sequence of operations may be completed through said ringing means when a recording operation is abandoned while partially completed.

1,810,866. INDUCTION FURNACE. CLIFTON S. WILLIAMS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 14, 1929. Serial No. 385,791. 7 Claims. (Cl. 13—26.)



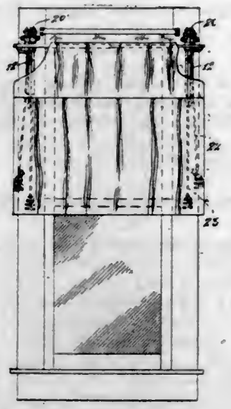
1. In an electric induction furnace, in combination, a crucible and a two-part energizing coil for said crucible, the longitudinal axes of the two parts of the coil being symmetrically and oppositely inclined angularly with respect to the longitudinal axis of the crucible and intersecting the same above the bottom of the crucible.

1,810,867. CASTING PUMP OPERATING MEANS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed Aug. 28, 1925, Serial No. 53,182. Divided and this application filed May 1, 1929, Serial No. 359,565. Renewed Apr. 16, 1931. 6 Claims. (Cl. 22—2.)



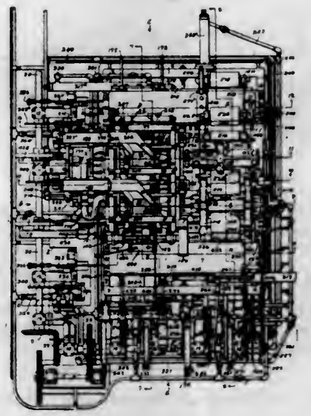
1. The combination with a stereotype casting box and power-operated means for opening and closing it, of a pump for introducing metal into the mold, power-operated means for operating the pump, an electric switch for starting the said last named power-operating means, and means whereby when the pump has performed a complete cycle of operations to fill the mold with a charge of metal the power-operated means will be shut off automatically.

1,810,868. CURTAIN HOLDING DEVICE. WILLIAM ZURY, Homestead, Pa. Filed Dec. 10, 1930. Serial No. 501,390. 2 Claims. (Cl. 156—27.)



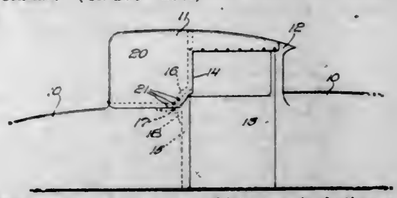
1. A curtain supporting apparatus comprising extensible means vertically disposed upon opposite sides of a window opening, telescopically associated sections forming the extensible means, reversely curved rod members carried by some of the sections, braking elements carried by the rod members for engagement with the sections to retain same in adjusted position, and pulls having operative connection with the rod members for regulating the position of the apparatus.

1,810,869. MACHINE FOR MAKING INLAID FLOOR COVERINGS. GILBERT V. ANDERSON, Philadelphia, Pa., assignor to Congoleum-Nairn Inc., Philadelphia, Pa., a Corporation of New York. Filed Sept. 6, 1927. Serial No. 217,794. 89 Claims. (Cl. 154—23.)



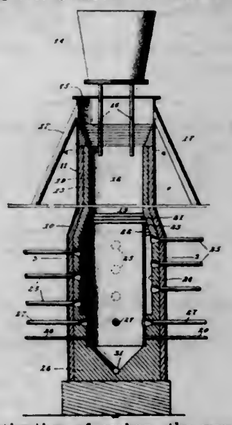
20. In a machine for making molded inlaid linoleum, the combination of a mold structure; a wall on said mold structure defining a chamber adapted to form a unit of the body portion of said linoleum, said chamber being open at its top; means for automatically dropping granular material into said unit forming chamber; a plunger within said chamber; and means for moving said plunger within said chamber to regulate the capacity of said chamber.

1,810,870. COVER FASTENER AND THE LIKE. ALEXANDER CARLSON and ERIC W. ERICSON, Detroit, Mich., assignors to Dietrich Incorporated, a Corporation of Michigan. Filed June 27, 1929. Serial No. 374,221. 12 Claims. (Cl. 296—107.)



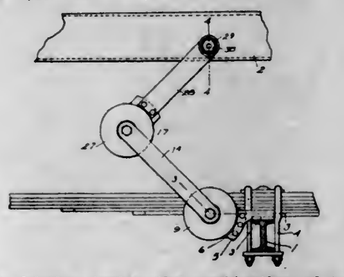
1. For use in securing a vehicle top including a cam surface; a snap fastener comprising a male and a female member, means carried by one of said members and slidable therein upon engagement with said surface, to bear against and detach the other of said members.

1,810,871. ACTIVATION OF CARBON. RAYMOND G. DAVIS, Marshall, Tex., and MARSHALL T. SANDERS, Wilmington, Del., assignors to Darco Corporation, Wilmington, Del., a Corporation of Delaware. Filed Sept. 17, 1928. Serial No. 306,375. 8 Claims. (Cl. 252—3.)



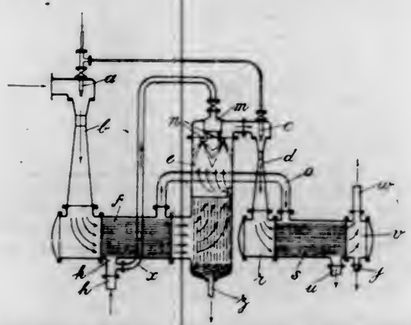
1. In the activation of carbon, the process which comprises preheating carbon to a temperature approaching but not above 800° C. by contacting it with hot combustion gases containing CO_2, removing the preheated carbon from said contact and then heating the carbon to a higher temperature in an atmosphere of steam substantially free of CO_2.

1,810,872. FRICTION DEVICE. HUGH C. LORD, Erie, Pa. Filed Nov. 13, 1925. Serial No. 68,795. 29 Claims. (Cl. 188—130.)



1. In a friction device, the combination of two relatively movable members; a rubbing plate having a broken surface on one member; and a rubber friction pad abutting on the other member and acting on said surface.

1,810,873. MULTISTAGE STEAM-JET EJECTOR. JAMES SIM, Glasgow, Scotland, assignor to G. & J. Weir, Limited, Glasgow, Scotland. Filed Apr. 12, 1930, Serial No. 443,837, and in Great Britain May 16, 1929. 6 Claims. (Cl. 230—104.)



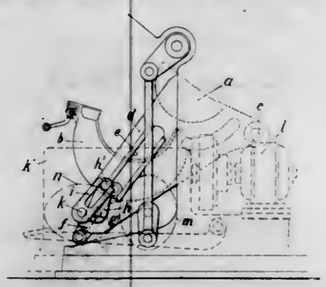
1. A multi-stage steam-jet ejector arrangement for use in a steam power plant, involving a surface-inter-condenser and a direct-contact-inter-condenser, these two inter-condensers being in series with the surface-inter-condenser nearest to the first-stage steam jet, the arrangement being such that the cooling water used in the said surface-inter-condenser is thereafter delivered into the feed system of the plant.

1,810,874. TENDER FRAME. CHARLES W. WERST, Philadelphia, Pa., and ELMER E. HICKEN, Collingswood, N. J. Filed Apr. 17, 1930. Serial No. 445,040. 6 Claims. (Cl. 105—415.)



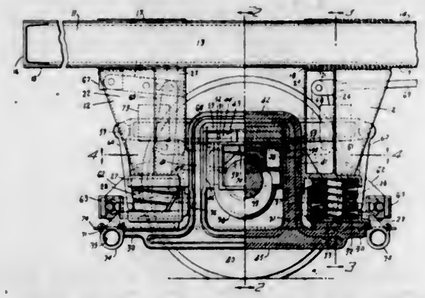
1. The combination in a frame for a tender of a locomotive, consisting of two series of rolled members, one series extending longitudinally and continuously throughout the length of the frame, and the other series extending transversely, and being slotted for the passage of the longitudinal members, which are located intermediate of the sides of the frame, and notched at each end to fit against the side longitudinal members.

1,810,875. DRIVING GEAR OF MACHINES FOR CASTING STEREOTYPE PLATES. CARL WINKLER, Bern, Switzerland, assignor to Winkler Matera & Stereo A. G., Glarus, Switzerland, a Corporation of Switzerland. Filed Sept. 17, 1929, Serial No. 393,276, and in Germany Sept. 17, 1928. 3 Claims. (Cl. 22—2.)



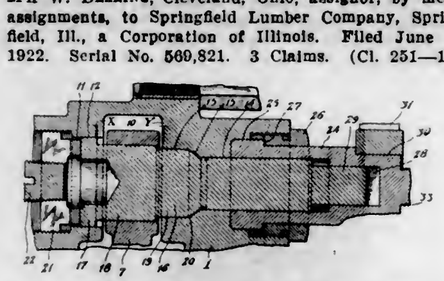
1. A driving gear for opening and closing the mold of machines for casting stereotype plates, comprising in combination a shaft, mechanism connected with said shaft for raising and lowering the mold-bed, a crank, carrying a crank pin, fixed on said shaft, a driving crank connected with said first crank and turning about an axis eccentric to said first shaft and arranged at such an angular position in regard to said first crank that at the moment of opening the mould a larger angular movement of said driving crank produces a smaller angular movement of said first crank.

1,810,876. RAILWAY CAR. CHAMP CARRY, WILLIAM H. MUSSEY, and MARTIN P. BLOMBERG, Chicago, Ill., assignors to Pullman Car & Manufacturing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1931. Serial No. 506,110. 16 Claims. (Cl. 105—222.)



1. In a railway car, the combination with pedestals disposed longitudinally of the car, of journal boxes between the pedestals, a wheel and axle assembly movable transversely of the car with respect to said pedestals and supporting the journal boxes, hangers pivotally hung from said boxes for yieldably supporting said pedestals, and crossbars connecting said hangers.

1,810,877. SELF SEALING VALVE CONTROL. JOSEPH W. DEARING, Cleveland, Ohio, assignor, by mesne assignments, to Springfield Lumber Company, Springfield, Ill., a Corporation of Illinois. Filed June 21, 1922. Serial No. 569,821. 3 Claims. (Cl. 251—18.)



1. The method of sealing a valve casing which consists in fitting a rotatable metal valve actuating member in a bearing formed in said casing with a modicum of clearance in excess of that required for said bearing at a place exposed to the action of corrosive elements in order purposely to allow a measure of corrosion to occur at the most exposed portion of said clearance space and to act as a sealing agent effective to prevent leakage along said bearing.

1,810,878. PROCESS OF PRODUCING AN ARTIFICIAL FUEL. GLENN W. TRAER, Chicago, Ill., assignor to Northern Lignite Coal Company, Chicago, Ill., a Corporation of Delaware. Filed June 15, 1925. Serial No. 37,384. 5 Claims. (Cl. 202—9.)

1. A process of producing a non-coking fuel from a coking coal which comprises in subjecting the coking coal to a temperature above its incipient volatilization temperature and below its fusion temperature and maintaining the temperature of the coal between these temperatures until emission of volatiles characteristic of that temperature range substantially ceases.

1,810,879. ENGINE SUPPORT. CHARLES R. UEBELMESSER and WILLIAM WENDERHOLD, New York, N. Y., assignors to Elizabeth M. Uebelmesser, New York, N. Y. Filed Feb. 7, 1928. Serial No. 252,456. 6 Claims. (Cl. 180—57.)

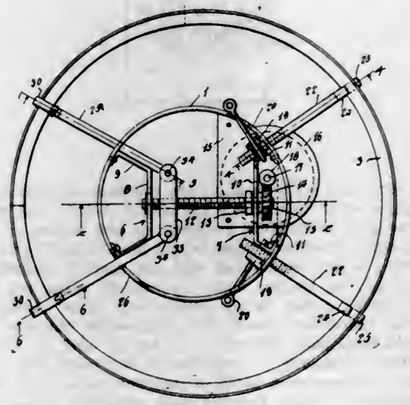


1. In a device of the character described, an engine having a crank case and cylinder, rods between said crank case and cylinder, said crank case having means for supporting the same from an axle housing, and a link having ball and socket joints at opposite ends, one end of the link adapted to be attached to an automobile frame and the other end to one of said rods between said crank case and cylinder.

1,810,880. ROOFING AND WEATHERPROOFING MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original application filed Sept. 6, 1921, Serial No. 498,861. Divided and this application filed Sept. 10, 1927. Serial No. 218,863. 6 Claims. (Cl. 87—17.)

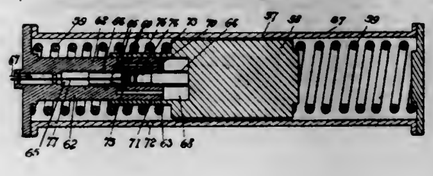
1. A building material comprising a vehicle carrying a normally non-adhesive substance of jelly-like consistency and adapted to be rendered adhesive by contact with a bituminous waterproofing material.

1,810,881. TIRE RIM BREAKING MACHINE. ALBERT S. GRAY, Wenatchee, Wash., assignor of one-half to John David Certain, Wenatchee, Wash. Filed Aug. 14, 1930. Serial No. 475,336. 5 Claims. (Cl. 157—1.)



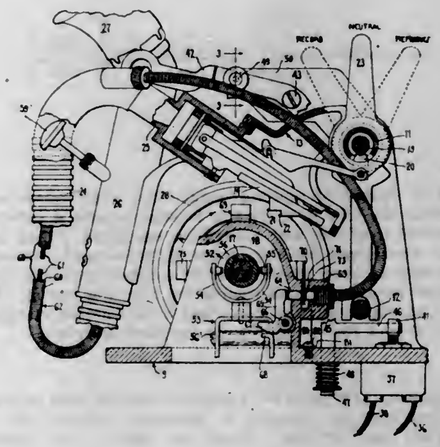
1. A tire rim breaking machine, comprising a circular casing, a pair of arms extending through the wall and radially of the casing, means for adjusting said arms radially of and securing them to the casing, a second pair of arms within and extending radially from the casing through the wall thereof, a connecting body between the adjacent ends of the last mentioned pair of arms, said arms being formed at their outer ends to engage and support a tire rim, a horizontally disposed screw member threadably extended through said body, a gear carried by said screw, an electric motor carried by said casing and having a worm connected with said gear, and switch control means for said motor.

1,810,882. CONVEYING OF MATERIAL. HANS HEYMANN and ERNST LEHR, Darmstadt, Germany, assignors to the Firm: Carl Schenck, Eisengresserei und Maschinenfabrik Darmstadt G. m. b. H., Darmstadt, Germany. Original application filed Oct. 27, 1925, Serial No. 65,160, and in Germany Oct. 31, 1924. Divided and this application filed Jan. 22, 1927. Serial No. 162,808. 9 Claims. (Cl. 198—220.)



1. A conveying device comprising a conveying trough, supported for vibratory movement in the longitudinal direction, an oscillatable mass resiliently connected with and arranged for free vibratory movement relative to and in the same direction as said trough, and means for causing said mass to vibrate freely in such a manner that its linear displacement is of variable magnitude.

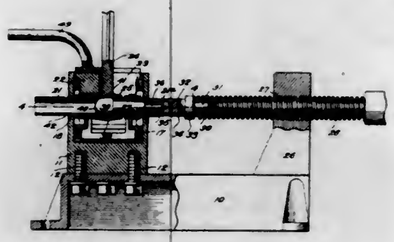
1,810,883. PHONOGRAPH. ARTHUR A. JOHNSON, Bridgeport, Conn., assignor to Dictaphone Corporation, Bridgeport, Conn., a Corporation of New York. Filed Oct. 19, 1927. Serial No. 227,123. 18 Claims. (Cl. 192—116.5.)



1. In a dictation machine, the combination of machine driven means; rotating machine driving means; a start-

and-stop device to intermittently connect the driving and driven means; and means operatively related to the driving means to permit operation of the start-and-stop device when the driving means rotates, and prevent operation when the driving means is stationary.

1,810,884. MACHINE FOR REMOVING AND REPLACING PISTON WRIST PINS. EARL O. MINOR, New York, N. Y. Filed May 21, 1930. Serial No. 454,427. 5 Claims. (Cl. 29—88.2.)



1. In a wrist pin removing and replacing machine, a piston holder having openings therein and adapted to receive a piston, a reinforcing member adapted to be inserted within the piston to engage the walls thereof, a wrist pin carrier mounted for longitudinal movement, means to move the carrier, and means supported by the carrier and located in advance of a wrist pin mounted upon said carrier to engage and force an old wrist pin from the piston and provide a pilot for the carrier mounted wrist pin.

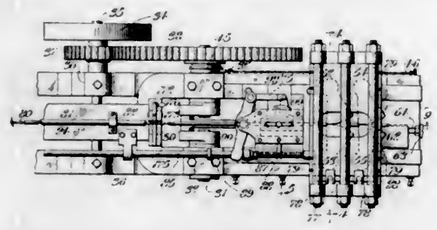
1,810,885. METHOD OF TAPERING METAL TUBES. GEORGE E. NEUBERTH, Newark, N. J. Filed Oct. 31, 1927. Serial No. 229,887. 6 Claims. (Cl. 80—62.)



6. A method of tapering metal tubes which comprises, feeding the tube in successive increments over a tapered mandrel from the large toward the small end, rolling the tube successively down the taper of the mandrel, and rolling back up upon the tube but at a circumferentially displayed position without feeding the tube, the feeding and turning thus occurring singly and in alternation at opposite ends of the rolling for the purposes described.

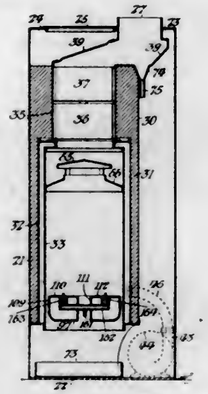
1,810,886. METHOD OF AND APPARATUS FOR WORKING METAL. GEORGE E. NEUBERTH, Newark, N. J. Filed Apr. 9, 1929. Serial No. 353,717. 59 Claims. (Cl. 80—1.)

57. In apparatus for reducing metal stock in successive increments of length, in combination, a frame in which reducing devices are mounted gripping jaws for feeding the stock forward, a reciprocable mounting box for said jaws, and means actuated by the reciprocatory action between said frame and feed jaws for causing the jaws to



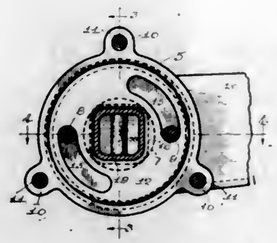
intermittently grip the stock and feed it in successive increments to the reducing devices between the actions of the latter upon the stock.

1,810,887. GAS WATER HEATER. ALOYSIUS T. SPONAR, Conshohocken, Pa., assignor to John Wood Manufacturing Company, Conshohocken, Pa., a Corporation of Pennsylvania. Filed Aug. 9, 1929. Serial No. 384,631. 4 Claims. (Cl. 122—17.)



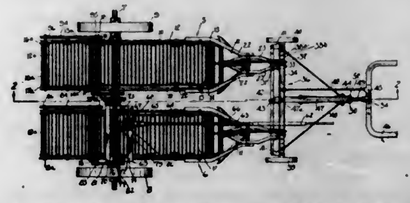
1. In a gas water heater; the combination with a rectangular outer casing; of a cylindrical shell in said casing inclosing a combustion chamber; a gas burner in said combustion chamber; a gas supply conduit leading to said burner; means controlling said gas conduit including a valve and an electric motor operatively connected with said valve; a flue casing within said outer casing and spaced therefrom above said combustion chamber and in communication therewith; a heater unit, of cellular structure including a congeries of flue tubes and water spaces between them fitted in said flue casing and spaced therefrom; a pump between said cylindrical casing and rectangular casing having a water inlet conduit leading through said rectangular casing to said pump; a water discharge conduit leading from said pump to the water spaces in said heater unit; a heater outlet conduit leading from said heater unit through said rectangular casing; an electric motor operatively connected with said pump; and a thermostat exterior to said rectangular casing constructed and arranged to control both of said electric motors in coordinate relation.

1,810,888. HINGE. WALTER M. HANSON, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Nov. 3, 1930. Serial No. 492,940. 8 Claims. (Cl. 155—86.)



1. In a device of the class described, a pair of discs provided with peripheral bearing flanges, a pair of cupped members secured together adjacent their rims and forming a housing and bearing surface for said bearing flanges, and an axially disposed shaft associated with said discs for rotating them within said housing.

1,810,889. AGRICULTURAL IMPLEMENT. SHELDON S. SPIRE, Syracuse, N. Y., assignor to Syracuse Chilled Plow Company, Inc., Syracuse, N. Y., a Corporation of New York. Filed Mar. 31, 1930. Serial No. 440,314. 4 Claims. (Cl. 55—51.)



1. A two-row potato digger comprising a wheel supported axle, a first and a second digging unit mounted on said axle for independent pivotal movement with respect to each other, each unit having an elevator, a jack shaft mounted on the first unit, means for driving said jack shaft, driving connections between said jack shaft and the elevator of said second unit, said latter connections including a double sprocket journaled on said axle, a driving chain connection from said double sprocket to a sprocket on said jack shaft and a driving chain connection from said double sprocket to the elevator of said second unit.

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Patents Nos. 1,810,890 to 1,811,833

THE

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OF THE

United States Patent Office

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Total	1,248		

Notices of Cancellation

U. S. PATENT OFFICE, *Washington, June 4, 1931.*

The National Gum Co., Inc., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, Greenleaf, Leon, and Forsyth Streets, Boston, Mass., to effect the cancellation of the trade-mark registration of The National Gum Co., Inc., of 44 Spring Street, Newark, N. J., No. 220,985, dated November 23, 1926, and the notice of such proceeding sent by registered mail to the said The National Gum Co., Inc., at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said The National Gum Co., Inc., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

U. S. PATENT OFFICE, *Washington, June 4, 1931.*

American Pozzolana Company, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Master Builders Company, of Cleveland, Ohio, to effect the cancellation of the trade-mark registration of the American Pozzolana Company, of 210 Penway Building, Indianapolis, Ind., No. 130,612, dated May 4, 1920, and the notice of such proceeding sent by registered mail to the said American Pozzolana Company at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said American Pozzolana Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

Vacation Notice

U. S. COURT OF CUSTOMS AND PATENT APPEALS,
Friday, June 5, 1931.

It is ordered that the vacation period of this court, in so far as it affects the postponement by stipulation of the filing of appellants' and appellees' briefs in customs appeals, as provided in paragraph 8 of Rule XIX, and in so far as it affects the postponement of the printing of records and the filing of appellants' and appellees' briefs in patent appeals, as provided in paragraph 1 of Rule XXVI and in paragraphs 3 and 4 of Rule XXVII, shall commence on the 6th day of June, 1931.

Adjudicated Patents

(C. C. A. Ohio.) Deutsch et al. patent, No. 1,635,115, for apparatus for cleaning containers and the like, claims 7, 8, 9, 13, 14, 15, and 16 *Held* not infringed, and claim 19 *Held* valid and infringed. *Merit Oil Equipment Co. v. Fry Equipment Corporation,* 48 F.(2d) 488.

(C. C. A. Mo.) Collins reissue patent, No. 17,207, for waterproof plastic, claims 1, 2, 10–15 *Held* valid and infringed, and claims 7, 8, and 9 *Held* not infringed. *Kansas City Southern Ry. Co. v. Silica Products Co.,* 48 F.(2d) 503.

Changes in Classification

Order No. 3,194, June 9, 1931, directs:

In *class 62, Refrigeration* (Division 44), establish the following subclass and definition:

169.1 Supports.

169.1. SUPPORTS. This subclass includes inventions directed to supporting means for the various feature elements of refrigeration apparatus.

Note.—For supports for rotary ice boxes and receptacles see this class, subclasses 49, 59, and 77.

Note.—For supports for elevator refrigerators see this class, subclass 71.

Note.—For supports for ice tanks see this class, subclass 157.

Note.—For supports for the pumps and motors see class 248, SUPPORTS, and the appropriate pump and motor classes.

Note.—For supports in the nature of racks and cabinets, not involving refrigeration structure see classes 211, SUPPORTS, RACKS, and 312, SUPPORTS, CABINET STRUCTURES.

The patents contained in this subclass have been taken for the most part from class 62, Refrigeration, subclass 95, Refrigerators, Indirectly cooled.

In *class 62, Refrigeration* (Division 44), in subclass 95, Refrigerators, Indirectly cooled, insert in the second line of the definition, after the word "liquid," the following:

or other holdover or heat conducting means.

Condition of Applications Under Examination at Close of Business June 6, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 93,859; Trade-Mark Division, 1227. Oldest new case, Oct. 6, 1930; oldest amended, Oct. 6, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	Dec. 29	†Jan. 28	776
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Dec. 10	Dec. 10	1,421
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Dec. 20	†Mar. 12	915
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Dec. 9	Dec. 16	816
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 6	Dec. 8	793
318	6. LEWERS, A. M., Carbon Chemistry	Nov. 7	Nov. 10	2,080
106	7. JARBOE, C. G., Optics; Photography	Nov. 5	Nov. 5	2,051
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Nov. 18	Nov. 18	1,571
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Dec. 8	Dec. 8	1,439
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Dec. 23	†Jan. 16	1,034
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Jan. 10	†Jan. 17	789
380	12. HENRY, C. C., Machine Elements	Oct. 15	Nov. 30	1,338
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Dec. 18	Dec. 18	1,133
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Dec. 8	Dec. 13	1,213
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 11	Nov. 11	2,569
242*	16. SPENCER, C. J., Telegraphy; Telephony	†Feb. 7	†Feb. 13	876
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Oct. 18	Oct. 25	1,529
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 9	Dec. 11	1,169
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Oct. 16	Oct. 16	2,061
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Dec. 11	Dec. 17	960
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Dec. 8	†Jan. 2	969
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Jan. 5	†Jan. 13	844
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 9	Oct. 10	1,091
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Nov. 20	Nov. 22	934
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 25	Nov. 26	1,529
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Dec. 15	Dec. 20	982
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Dec. 4	Dec. 10	1,168
225	28. BENSON, A. R., Internal-Combustion Engines	Nov. 21	Dec. 13	1,748
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	Dec. 29	†Jan. 2	575
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Jan. 3	†Mar. 13	918
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Oct. 6	Oct. 6	2,593
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 9	†Jan. 9	1,366
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Dec. 8	Dec. 6	2,563
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Feb. 7	†Feb. 11	826
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Mar. 19	†Mar. 19	933
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Oct. 16	Oct. 15	2,297
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Nov. 17	Nov. 14	1,585
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Mar. 2	†Mar. 11	568
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Dec. 6	Dec. 11	1,666
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Oct. 31	Dec. 4	2,970
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	Dec. 19	Dec. 17	765
222*	42. CUTTING, H. O., Electric Signaling	Nov. 14	Nov. 10	1,424
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 22	Dec. 24	1,629
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 7	Oct. 9	2,261
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Oct. 27	Oct. 28	2,229
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Dec. 13	Dec. 14	1,156
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Dec. 6	Dec. 11	2,193
212*	48. ROEPKE, O. B., Electricity, General Applications	Nov. 18	Nov. 24	1,181
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	†Jan. 6	†Jan. 19	1,250
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 16	Oct. 16	2,525
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Oct. 9	Oct. 9	2,189
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Jan. 7	†Jan. 7	1,559
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 4	†Feb. 12	924
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Oct. 8	Oct. 8	2,733
102	55. BOWEN, S. T., {Bread, Pastry, and Confection Making; Cutlery	†Apr. 27	†Apr. 23	171
	{Designs	†May 8	†May 23	311
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Oct. 31	Nov. 1	1,866
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 3	Dec. 10	792
270*	58. DOWELL, E. F., Abrading; Typewriting	Oct. 27	Oct. 31	1,498
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Dec. 19	Dec. 22	1,712
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Oct. 13	Oct. 13	2,037
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 9	Oct. 11	2,152
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Oct. 10	Oct. 10	2,545
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Oct. 10	Oct. 15	2,410
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND, {Trade-Marks	†May 8	†May 23	1,058
	{Labels and Prints	†May 8	†May 25	169

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Spencer

No. 2,622. Decided March 25, 1931

1. Application—Claims—Multiplicity.

"The practice of filing unnecessary duplicates of claims, differentiated from each other by only the slightest change of language and with no material advantage to the applicant, can not be too strongly condemned and is more often an indication of the inability of the pleader to properly state his case than of anything else."

2. Patentability—Thermostatic Bimetallic Device.

Certain claims for a thermostatic bimetallic device *Held* patentable.

Hatfield, *J.*, and Lenroot, *J.*, concurring and dissenting.

Appeal from the Patent Office. Modified.

Mr. Leroi J. Williams, *Mr. Robert L. Kahn*, *Mr. Samuel Ostrolenk*, *Mr. Delos G. Haynes*, and *Mr. C. Bonifant Hamilton* for Spencer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Graham, *P. J.*:

[1] Appellant filed his application in the Patent Office for an improvement in thermostats. Attached to his application were a multitude of claims which unnecessarily and vexatiously clouded the issue. The Examiner and the Board of Appeals both referred to this unnecessary duplication, and had it in mind while making allowance of certain claims to the appellant. The practice of filing unnecessary duplicates of claims, differentiated from each other by only the slightest change of language and with no material advantage to the applicant, can not be too strongly condemned and is more often an indication of the inability of the pleader to properly state his case than of anything else. However, by abandonment and otherwise there are finally presented for our consideration eight claims which are as follows:

22. A thermo-responsive controlling device comprising a pair of spaced supports and an initially stressed and curved bimetallic member resiliently secured between the supports.

30. A thermo-responsive device consisting of a flexible bimetallic bow-shaped strip, and discrete means disposed at opposite ends thereof and adapted to initially stress and curve said strip, at least one of said means being resilient.

37. A thermostatic device comprising a bimetallic thermostatic member, resilient discrete means operatively connected to one end thereof and maintained in a flexed condition in such a manner that upon change in temperature of said member, said means and said member are caused to suddenly change their respective shapes.

38. A thermostatic device comprising an initially curved bimetallic strip and means cooperating with the opposite ends thereof, adapted first to resist the tendency of said strip to change its curvature in response to strains within said strip due to temperature changes, and then to aid said strip in assuming its new shape in response to the strains induced therein by temperature changes, said strip delineating a simple curve at the beginning and end of its movement, but a compound curve at intermediate portions of its movements.

40. A thermostatic device comprising a flexible bimetallic strip means cooperating with the ends thereof to cause said strip to have the shape of a simple curve at positions of stable equilibrium and to assume the shape of a compound curve at positions of unstable equilibrium.

43. A thermostat comprising a bimetallic element, supporting means associated with the opposite ends of said element, the supporting means comprising a resilient element, both of said elements being initially maintained in flexed condition, a stationary contact member, and a movable contact member connected with said second element, one of said elements having a compound curve as it approaches an axis of pressure and then abruptly changing curvature for a quick separation of said contact members.

45. A thermostat comprising a bimetallic element, supporting means associated with the opposite ends of said element, the supporting means cooperating with at least one end of said strip comprising a resilient element, both of said elements being initially maintained in flexed condition, a stationary contact member, and a movable contact member connected with said second element, said elements tending to increasingly stress and flex themselves as they approach a condition of instability and then to abruptly reverse their curvature for a quick separation of said contact members.

54. A thermostat comprising a bimetallic element, a resilient mounting engaging the ends of said strip at points spaced apart a distance less than the distance between the same points of the strip when it is straight, so that the strip has two positions of stable equilibrium and one position of unstable equilibrium.

These claims were rejected by the Board of Appeals, which cited as pertinent references a German patent, No. 319,620, of March 12, 1920, and a United States patent to Schwimmer, No. 1,523,351, of January 13, 1925.

It is said by the appellant, and not denied by the Solicitor of the Patent Office, that the Schwimmer patent is not a proper reference in this matter, inasmuch as appellant's application, being a divisional one, and referring to his application Serial No. 565,244 of June 1, 1922, antedates said Schwimmer patent. Under the rules of the Patent Office, (rules 41 and 42), the subject matter of such divisional application must have been included in such original application. The application of the appellant having been filed prior to the issuance of the Schwimmer patent, said patent can not be cited here as a reference showing the prior art. *Bates* v. *Coe*, 98 U. S. 31, 15 O. G. 337; *Gray Tel. Pay Sta.* v. *Baird*, 174 Fed. 417; *Johns-Pratt Co.* v. *Freeman*, 201 Fed. 356, aff. in *Freeman* v. *Johns-Pratt Co.*, 204 Fed. 288. We shall therefore disregard this reference in considering the matter.

Appellant's device consists of a bimetallic thermostatic strip in the form of a hollow rectangle having a curved and resilient spring steel member extending across the said hollow longitudinally, and rigidly connected to the opposite ends of the said thermostatic strip by rivets. This spring steel strip is so curved as to give laterally, when strain is placed upon it. The object of the invention, as explained in the application, specification and drawings, is to provide a thermostatic strip which, when heated by an electric current to a certain degree, will open the electrical contacts with a sudden or snapping movement, thus preventing arcing and the destruction of the contact points.

Both tribunals in the Patent Office found that the invention had been anticipated by the aforesaid German patent and it is to that point we shall refer ourselves. The German patent shows a thermostatic strip which is more easily understood from the following excerpt from the specification:

a is a strip of spring tempered sheeting, bent twice at right angles. Upon the center piece which is slightly bent upwards, there is welded or soldered on a second plate strip

b, the latter consisting of a metal with small expansion co-efficient. The center part is therefore a bi-metallic strip or a Breguet spring. Upon heating it tends to stretch and finally to bend through downward. The plate strip *a* with its ends is rigidly connected with an insulating piece *c*. The spring force of the vertical arms of the plate strip *a* opposes the stretching of the center part. The arising forces and counter forces which are always in equilibrium, attain their maximum value if the spring is stretched in a straight line. At such moment the equilibrium or balance is an unstable one and there suffices the smallest further increase in temperature to bring about a sudden strong bending of the center part, inasmuch as the forces which were heretofore opposed are now acting in the same direction. This peculiarity of the arrangement is taken advantage of, in accordance with the invention, in order to bring about a sudden interruption of the current.

The appellant contends that his device and idea is not anticipated by said German patent, and he invokes the rule that the said reference being to a foreign patent, its disclosure must be so clear and definite as to enable any mechanic skilled in the art to construct the patented invention certainly, directly and without the necessity of any experiment. That this is the law must be conceded. *In re Gillam*, 17 C. C. P. A. (Patents) 877, 37 F.(2d) 959, 395 O. G. 1135; *In re Crowell*, 17 C. C. P. A. (Patents) 1009, 39 F.(2d) 681, 397 O. G. 3; *Selectasine Patents Co.* v. *Prest-O-Graph Co.*, 267 Fed. 840; *Permutit Co.* v. *Harvey Laundry Co.*, 274 Fed. 937; *Warren Bros.* v. *Owosso*, 166 Fed. 309.

The question as to whether the German patent involved is sufficiently explicit so that anyone skilled in the art might so construct it that it would anticipate the appellant's device, is one of some difficulty. Incorporated in the record are the affidavits of scientists of note who assert that they have experimented with devices constructed as shown in the specification of the German patent, and that it will not operate in the way set out in the appellant's application, and in the way in which it is conceded his device will operate. All of these affiants unite in stating that a device constructed as shown by the German specification will separate the contact points slowly, and will not snap suddenly into position unless constructed with vertical members of such thickness as to practically constitute rigid members. The principal controversy in this respect is as to the exact conception of the German applicant, it being contended on the part of the appellant here that the German applicant had a conception of a device in which the thermostatic strip would, by the influence of the heat, change from an upward bowed form to a straight line, and then would break the contact by bowing in the other direction. In this respect it is demonstrated by the scientists who have filed affidavits here, and is admitted by the Board of Appeals in its written decision, that in order to have such a thermostatic strip suddenly change its position with a snap, it must do so as the result of compound curves induced by the action of the heat, and not as the result of having assumed first a straightened position and then a curve opposite to its first curved form. The Board of Appeals, however, is of the opinion, in spite of this fact, that it is within the scope of knowledge of anyone skilled in the art to so construct the vertical side supports of this thermostatic strip that such compound curving and consequent sudden change of position will result.

As we have said, the case is one of much difficulty. It is quite apparent the appellant here has a device which will perform a very useful and desirable process. It is not clear that the German applicant had either a mental conception of the same thing, or of a device with which it might be brought about. It is true that in the German application it is stated that a sudden change of position in the thermostatic strip is the end to be accomplished, but it is equally true that the concept which he seems to have had would not have brought about such a result. The construction of the devices, also, is not the same. Hence, it is one of those cases, in our opinion, where the applicant is entitled to the benefit of the doubt, and should be allowed to have any protection which the Patent Office may give him.

Claims 22, 30 and 54 are so general as to read upon the said German application, and hence are not properly allowable. Claims 37 and 45 do not contain the element of a device which will cause a compound curve of the thermostatic strip while operating, but depend for their force and effect upon an abrupt reversal of curvature of the strip. It is argued by the Solicitor for the Patent Office that such recital is of the function of the device and is therefore not patentable under *In re Hammond, jr.*, 17 C. C. P. A. (Patents) 803, 37 F.(2d) 760, 394 O. G. 275. The same argument is offered as to claims 38, 40 and 43, in which claims the element of a device causing a compound curve is recited. We agree with this contention as to said claims 37 and 45. Nothing is therein stated which will confine the device to any particular form and hence these claims, omitting the functional features, may also be read upon the German reference.

Claims 38, 40 and 43 are, in our opinion, allowable. The recitation therein of the compound curve created in the thermostatic strip, in view of the device disclosed in the specification and drawings, cannot properly be said to be the recital of a function but rather to be a recital in aid of the related description of the device itself. Claims 38, 40 and 43 will therefore be allowed and patent will issue thereon. The decision of the Board of Appeals is, in all other respects, affirmed.

Modified.

HATFIELD, *J.*, concurring and dissenting:

I concur in the majority opinion so far as it affirms the decision of the Board of Appeals holding that claims 22, 30, 37, 45, and 54 are not patentable.

I am of opinion, that claims 38, 40, and 43, so far as they may be differentiated from the prior art, are functional in character and that, therefore, the decision of the Board of Appeals, rejecting those claims, should be affirmed.

LENROOT, *J.*, concurs in the above concurring and dissenting opinion.

U. S. Court of Customs and Patent Appeals

ST. JOHN AND GRAY *v.* SCHULZE

No. 2,596. Decided March 25, 1931

1. INTERFERENCE—PRIORITY—REDUCTION TO PRACTICE—COMMERCIAL INSTALLATION NOT NECESSARY.

"The counts of the interference call for a process of producing useful mineral oil by a certain process of distillation. Schulze successfully produced by his process the useful mineral oil which he sought to produce and he clearly taught the art of its production. It was not necessary for him in order to be entitled to priority of the counts involved to install a commercial plant and prove by such installation that his process would be a commercial success."

2. SAME—SAME—SAME.

Evidence reviewed and *Held* to establish that S, who was the first to conceive the invention was also the first to reduce it to practice and priority was properly awarded to him.

APPEAL from the Patent Office. Affirmed.

Messrs. Emery, Booth, Varney & Whittemore, Mr. Lucius E. Varney, Mr. Nichol M. Sandoe, Mr. M. Whittemore, and *Mr. A. M. Holcombe* for St. John.

Messrs. Steward & McKay and *Mr. Roy F. Steward* for Schulze.

BLAND, *J.*:

This is an appeal by St. John and Gray from concurring decisions of the Patent Office tribunals, awarding priority of invention to appellee Schulze.

The invention in issue is a process for producing useful mineral oil distillates, particularly lubricating oils, by distilling certain oil materials under very high vacuum, that is to say, at a very low absolute pressure and under non-oxidizing conditions. The three counts in issue follow:

1. The process of producing useful mineral oil distillates which comprises distilling, under an absolute pressure not exceeding 25 millimeters mercury, mineral oil material containing substantially no constituents as volatile as gasoline.

2. In the manufacture of lubricating oils, the process which comprises distilling a lubricant-containing mineral oil material at an absolute pressure not substantially exceeding 15 mm. of mercury and under non-oxidizing conditions.

3. In the manufacture of lubricating oils, the process which comprises distilling a lubricant-containing mineral oil material at an absolute pressure not substantially exceeding 10 mm. of mercury and under non-oxidizing conditions.

The junior party Schulze filed his application on on March 18, 1922, which matured into Patent No. 1,448,709 on March 13, 1923.

The senior party, St. John and Gray, filed a joint application on April 21, 1919.

St. John and Gray took no testimony and are therefore restricted to their filing date (April 21, 1919.)

In October, 1924, a year and a half after Schulze had obtained his patent and two years after the Schulze process had gone into commercial use on a large scale, St. John and Gray, whose application was still pending in the Patent Office, claimed the invention in the issues, and an interference was instituted which involved the three counts above quoted and which were taken from the Schulze patent.

There seems to be no controversy here, as far as the issue is presented to us, but that both parties, after St. John and Gray had filed an amended application copying numerous claims of the Schulze patent, claimed, in their applications, the same invention as described in the issues of the counts. While the issue that St. John and Gray could not make the counts had been contested before the Primary Examiner and the Law Examiner, as well as before the Board of Appeals, the Examiner of Interferences and the Board of Appeals found it unnecessary to go into this phase of the matter inasmuch as Schulze was found by the board to be the prior inventor.

The evidence is voluminous. The record shows that Schulze is a petroleum technologist and had been connected with practical oil refining since 1910. Soon after the United States entered the World War, he resigned to go into military service as an enlisted man. A few months after enlisting in the Army, he was assigned to work at the Bureau of Standards under Winslow H. Herschel, who was in charge of the oil section of automotive power division where his work consisted of analytical examination of mineral oils, together with research work for the lubricating division of the Aircraft Production Board of the United States Army.

In August, 1918, Herschel assigned him to the line of work which eventually led to the invention here at issue. One Van Klooster in the bureau was at the time running some vacuum distillations in an effort to get some high grade lubricating oil fractions for use by Bingham in standardizing a viscosimeter. On August 8, 1918, Van Klooster resigned his position at the bureau. Herschel assigned Schulze to take up Van Klooster's work, since the oil fractions so far obtained were wholly unsatisfactory.

Schulze inspected the apparatus which Van Klooster had been using as well as the lubricating oil distillates which had been obtained. He found the oils to be cloudy and unstable and containing cracked products, and determined that it would not be possible by the methods then used to obtain the character of oil desired.

He was familiar with the so-called vacuum process of distillation of oils as was then practiced and employed in refining work, which process was carried on by never getting below 100 millimeters of mercury as a minimum and in laboratory distillations never getting below 40 to 50 millimeters. He believed that success could be obtained by distillations at a lower absolute pressure than had previously been employed and then had in mind employing an absolute pressure of 25 millimeters or less.

With the assistance of a glass blower in the Bureau of Standards, Schulze set up a small glass distilling apparatus, the joints of which were sealed with care in order to exclude the air. The apparatus was designed to operate with or without steam. It is described in the record as a—

glass distilling flask of 1-liter capacity connected to a Liebig condenser, and two separatory funnels one above the other to provide a two-chamber receiver for condensate coming from the condenser.

The same was set up and ready for operation by September 19, 1918, as is shown by the sketch of the apparatus in the record, known as Exhibit 1.

During the remainder of the year 1918, Schulze conducted numerous distillations with this appara-

tus at pressures below 25 millimeters absolute. Notes were kept showing the results under different pressures. Various types of materials were worked upon. Excellent lubricating distillates were obtained by this process as the result of numerous attempts.

All of his work during his 1918 service at the Bureau of Standards is corroborated fully by other competent witnesses, some of whom were employed in the Bureau of Standards and some of whom were not.

In December, 1918, Schulze was mustered out of the service, which severed his relation with the Bureau of Standards. During the first part of January, 1919, after passing the necessary Civil Service examination, Schulze again was connected with the Bureau of Standards where he worked under one Stratford. Stratford insisted upon his efforts being employed toward the production of oil by a distillation method at 40 to 50 millimeters and that he use a distilling apparatus which had been designed by Stratford and which was of metal. The result was not satisfactory. Stratford soon left the bureau, and by May, 1919, Schulze, with the assistance of one Reynolds, succeeded in getting the apparatus in such shape that he could run distillates at from 14 to 20 millimeters, and by June, the apparatus had been revamped to a point where he could operate consistently at 5 to 6 millimeters absolute, with the result that the desired oil was produced.

On about April 1, 1920, in the Bureau of Standards, Exhibit 6 was constructed, and many tests were made on many different kinds of materials with the result that oil of high grade was produced at pressures varying from 5 to 6 millimeters absolute to as low as 1.5 to 2 millimeters absolute. This apparatus was made of metal and so tightened as to exclude the air and was of 2 quart capacity.

From the latter part of 1918 Schulze had endeavored to interest numerous persons in commercially producing lubricating oil by his method. It is conceded that those familiar with the art at that time in the commercial production of lubricating oil had no faith or confidence in producing the same by the Schulze method. The vacuum method was known to the art but under pressures of from 100 to 200 millimeters absolute which did not give satisfactory results. The record contains long and detailed statements of his efforts to interest others in distilling oil on a large scale by his method. It is conceded that he, the appellee, was not financially able to install a plant which was large enough to produce oil on a large commercial basis and did not attempt to do so. The Bureau of Standards refused to permit the construction of a still of 50 barrel capacity since it did not require that kind of still in order to illustrate the operation of his process or in order to obtain the oil which was needed for the purposes above stated.

In 1920, the Bureau of Standards sent Schulze as a representative or delegate to the Independent Oil Men's Association at Denver where he explained his process and produced samples of oil made thereby.

In February, 1921, he secured help in the installation of his process on a commercial scale, and, at Burnham, Ill., began supervising the erection of a unit of 50 barrels capacity. It was put into commercial operation September 30, 1921, and proved to be a complete success and cost about $30,000.00. The plant was soon enlarged. New units of large capacity were built there and elsewhere. A large number of refining companies of large production have taken licenses under the Schulze plan, and the production of lubricating oils by this process, in this country and other countries, has now grown to be very large.

The exact method used by Schulze in 1918 was later exclusively adopted by the bureau for the distillation of oils.

The Examiner of Interferences held that the production of oil by the first two sets of apparatus closely approached reduction to practice, but that since it was clear that appellee did reduce to practice in 1920 and was diligent, he should be awarded priority, regardless of whether his 1918 work was or was not a reduction to practice.

The Board of Appeals held that appellee's work in 1918 was a reduction to practice and also held that from the time of the 1918 operation until a commercial plant was built and the application for a patent filed, that Schulze was diligent in every respect.

In this court it is urged by appellant that Schulze's work and accomplishments up to the installation of the commercial plant in 1920 did not amount to reduction to practice for the reason that it was not demonstrated that the process could be successful in producing oil on a commercial scale and that the record did not show a state of facts warranting the conclusion that Schulze was diligent from or immediately prior to the time appellant entered the field until his actual reduction to practice which the appellant concedes is the installation of the commercial plant.

We agree with the decision of the Board of Appeals in each of its findings, but since we conclude that Schulze reduced to practice in 1918, it is not necessary to discuss in detail the subject of his diligence. We agree with the statement of the Board of Appeals as follows:

> • • • There appears to be no question but that Schulze knew definitely what he was attempting to do and that when he did it there was no difficulty in reproducing the operation and in obtaining the desired oils. This is true both for the glass still and the iron still. Appellant contends that while he was successful with the small stills unexpected difficulties might have arisen with a larger commercial plant and that without such plant there was no actual reduction to practice. Some instances are cited of difficulties that might have arisen with the different conditions in the larger plant.
>
> We are convinced that the operations both with the one liter and the two liter stills were actual reductions to practice. The fact that difficulties might arise with the large commercial apparatus is not believed to be material. We are concerned with a method of producing oil and not with some particular apparatus for doing so. The method as carried out at the bureau was an absolute success for the purpose intended, that is, producing an oil for use in a viscosimeter and there is no question but that the oil produced was highly successful for lubricating purposes and the method carried out was an improvement over certain existing methods. Appellant has contended that Schulze was an analyst and that his work was merely analysis. The fact that he was employed as an analyst is not material as the production of oil in the manner described was purely a manufacturing operation.

[1] The counts of the interference call for a process of producing useful mineral oil by a certain process of distillation. Schulze successfully produced by his process the useful mineral oil which he sought to produce and he clearly taught the art of its production. It was not necessary for him in order to be entitled to priority of the counts involved to install a commercial plant and prove by such installation that his process would be a commercial success. The Examiner of Interferences, referring to one of the later operations by appellee on a later device aptly said:

> There was no apparent reason for supposing that equally satisfactory results could not be obtained on a larger scale and it can therefore be said that the success of the process had been adequately demonstrated.

This suggestion, we think, applies with equal force to the work of appellee in 1918.

The contention of appellant here was substantially the contention of appellant in *Harrison* v. *Cadwell*, 17 C. C. P. A. (Patents) 1024, 5 Pat. Quarterly 91, 39 F.(2d) 704, 398 O. G. 177. There it was contended that the laboratory vulcanization of rubber and rubber articles was not a reduction to practice of the process of vulcanization called for by the counts since it was not demonstrated that it would be successful commercially. Following the decision of the Supreme Court of the United States in *Corona Cord Tire Co.* v. *Dovan Chemical Co.* 276 U. S. 358, 370 O. G. 1011, this court said:

> • • • These tests were sufficient to prove conclusively the character of vulcanization attained. If laboratory test and laboratory costruction of inventions were to be rejected in cases of this kind, it would seem to us that it would lead to very grave consequences for future inventions. It may be that there are in the field of invention certain articles in which laboratory tests and laboratory manufacturing would hardly be regarded as a reduction to practice, but we do not think vulcanization of rubber can be placed in that class.
>
> • • • True enough, those who contemplate great expenditures in manufacturing establishments and equipment of times apply many different tests in order to determine the commercial expediency of wholesale manufacture, but because this is a practice among careful and responsible manufacturers, it does not follow that such a practice is the measure by which the patent tribunals should determine the question of reduction to practice in a case like that at bar.

See also *Wietzel* v. *Lacy*, 17 C. C. P. A. (Patents) 943, 39 F.(2d) 672, 5 Pat. Quarterly 86, 396 O. G. 523.

Appellants argue with great earnestness that there are technical difficulties with Schulze's "experimental work" in 1918 which "failed to show would not be prohibitive in a commercial apparatus" and call attention to the fact that in high vacuum distillation of petroleum there is a phenomenon known in the art as "puking" or "spewing", which in the language of the layman has reference to a large mass of froth and foam which may form in the still and completely fill the vapor space and thus cause unvaporized oil to be carried over into the distillates.

Schulze's record of his 1918 apparatus, Exhibit 1, states "Oil started foaming, heated the side and neck of flask to prevent 'puking'." It is urged that overcoming this difficulty in this manner was not suggesting the means of overcoming it in a commercial apparatus. The appellee made no answer to this argument in his brief and the Examiner of Interferences and the Board of Appeals do not mention it in their decisions.

In the addition to the record which is submitted on stipulation, the Examiner in considering a claim in the St. John and Gray application said:

> Claims 6 to 9 are rejected for lack of invention; it is old to superheat the vapors in a distillation process to prevent spewing, as see—

and here cites two references.

We do not think the "spewing" question is in any way determinative of the issues here. The method of controlling "spewing" was probably old in the art but if new, Schulze explained how he overcame the difficulty. He has asked no patent on his method or apparatus for overcoming it. His method calls for a process of producing oil which he described in detail and reduced to practice by producing oil in the manner called for by the claims.

[2] We, therefore, conclude that in order for Schulze to have reduced to practice his prior conception of the process of producing lubricating oil, it was not necessary to produce it on a commercial scale and that in his production of the same in 1918, he had demonstrated that his process would produce such oil when larger stills more suited to the needs of commerce were used. Certainly there was nothing connected with his operations in 1918 to leave him or anyone as familiar as himself with the subject matter in doubt as to the possibility of producing the same under commercial conditions.

The decision of the Board of Appeals is affirmed.

Costs of additional record to be taxed against appellant.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE RUTLEDGE

No. 2,630. Decided March 25, 1931

1. DESIGNS—ANTICIPATION—MECHANICAL PATENTS MAY BE.

   "The references are all for mechanical or product patents, but it is well settled, we think, that a patent upon an article may constitute anticipation of a design. *Bradley* v. *Eccles*, 126 Fed. 945; *Roberts* v. *Bennett*, 136 Fed. 193."

2. SAME—PATENTABILITY—STOCKING.

   Designs for a stocking *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Messrs. Paul, Paul & Moore and *Mr. J. T. Newton* for Rutledge.

Mr. T. A. Hostetler for the Commissioner of Patents.

GARRETT, *J.*:

Appellant applied for a patent for a design for stockings. The application was denied by the Examiner upon three grounds:

First, that the design, or shape, of the stocking was believed to have a mechanical function as its chief purpose, viz, to make the ankle seem slender; second, it was thought that the stockings when on display on the counter are folded in such a manner as that the ordinary observer would not see the full design and hence there would be lacking "the effect upon the eye", an essential of patentability under design patent law; and, third, upon prior art

as shown in patents to Lawson, 1,467,549, Bosworth, 1,476,042, and Landenberger, 1,111,658.

The Board of Appeals disagreed with the Examiner as to the existence or applicability of the two first grounds, but affirmed his rejection upon the references cited, and applicant has appealed to this court.

The design is thus described in the opinion of the Board of Appeals:

> The design is formed by distinctive texture or color comprising an upwardly extending straight sided band or stripe at the middle of the back to just above the height of the ankle where it tapers to a point by straight inclined sides. A row of dots somewhat simulating stitching extends upwardly on each side of the back midseam.

Lawson shows a stripe, or portion, extending from near the top of the heel part of a stocking upwardly in an inclined line to a given point and thence vertically to the top of the stocking, but states that it may be stopped at a designated point corresponding closely to the point where appellant fixes the apex of his pointed design. The general formation of appellant's "heel and high splice" is substantially the same as that of the Lawson patent, excepting the pointed effect. Bosworth shows a pointed effect differing somewhat from that of appellant; Landenberger in one or more of his figures shows an even nearer approach to appellant's pointed effect.

[1] The references are all for mechanical or product patents, but it is well settled, we think, that a patent upon an article may constitute anticipation of a design. *Bradley* v. *Eccles*, 126 Fed. 945; *Roberts* v. *Bennett*, 136 Fed. 193.

[2] It seems to us that the variance between appellant's figure and those shown in the art cited is so slight as that patentable invention cannot be held to inhere in the former. *Mygatt et al.* v. *Schaffer*, 218 Fed. 827, 835. *Atlantic Works* v. *Brady*, 107 U. S. 192, 200, 23 O. G. 1330.

In the brief for appellant our attention is directed to a design in a patent, which, however, is not in the record, that has been granted another since this case was appealed, which is alleged closely to simulate the design of appellant, and it is argued that the granting of this patent is entitled to consideration in determining the patentability of appellant's production, in that, at least, it indicates a lack of concurrence upon the subject matter by the Patent Office tribunals, and tends to create a doubt of which appellant seeks the benefit under the familiar rule that doubt will be resolved in an applicant's favor.

It is sufficient to say that even if the patent were regularly a part of the record and we had the right to consider it we should not feel at liberty to turn our decision upon it. *In re Fischer*, 18 C. C. P. A. (Patents) ——, —— F.(2d) ——.

Commercial success is alleged. This is a factor to be considered in cases of doubt, but, as was said by us in *In re Kirke*, 17 C. C. P. A. (Patents) 1121, 1125, 40 F.(2d) 765, 398 O. G. 353, and as has been said, in substance, by this and other courts in numerous cases:

> Certainly it [commercial success] ought not to be adverted to where it is obvious that the claimant has disclosed no invention.

The case of *Franc-Strohmenger & Cowan, Inc.*, v. *Arthur Siegman, Inc.*, 25 F.(2d) 108, is also in point on the question of commercial success.

We feel that there was no error on the part of the Board in rejecting the claims on the prior art and its decision is, therefore, affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

971,838, W. M. Fulton, Process of making tubular metal walls, D. C. Mass., Doc. E 2852, *The Fulton Co.* v. *Clifford Mfg. Co.* Dismissed without prejudice Apr. 2, 1928.

1,018,502, Just and Hanaman, Incandescent body for electric lamps; 1,180,159, I. Langmuir, Incandescent electric lamp, appeal filed June 26, 1929, C. C. A., 3d Cir., Doc. 4182, *Santa Fe Electric Co., Inc., et al.* v. *General Electric Co.*

1,025,822, W. H. Millspaugh, Paper making machine; 1,163,251, same, Paper making, D. C. Mass., Doc. E 3079, *The Guardian Trust Co. et al.* v. *Crocker Burbank & Co., Inc.* Dismissed without prejudice Feb. 3, 1930.

1,029,042, W. E. Beede, Electrical measuring instrument, D. C. Mass., Doc. E 2498, *The Sterling Mfg. Co.* v. *Lundquist Tool & Mfg. Co.* Dismissed without prejudice Jan. 2, 1930.

1,089,405, W. S. Ferguson, Reinforced concrete dock or pier, D. C., E. D. Mich., S. Div., Doc. 4889, *The Dock & Terminal Engineering Co. et al.* v. *Nicholson Universal Steamship Co.* Dismissed Apr. 23, 1931.

1,129,849, H. D. Colman, Method of treating warp threads preparatory for weaving, D. C. Mass., Doc. E 2692, *Barber-Colman Co.* v. *J. Withnell.* Dismissed without prejudice Jan. 2, 1930.

1,142,361, G. Ornstein, Process of antisepticizing water, D. C., W. D. N. Y., Doc. E 1309–G, *Electro Bleaching Gas Co. et al.* v. *Y. M. C. A.* Discontinued Apr. 17, 1931.

1,163,251. (See 1,025,822.) 1,180,159. (See 1,018,502.)

1,233,107, R. M. Myers, Road building machine; 1,470,157, J. L. Fike, Stone spreader; 1,581,784, M. M. Butler, Device for spreading asphaltic concrete; 1,605,094, same, Rock-spreading machine, filed Apr. 14, 1931, D. C., N. D. Ohio, E. Div., Doc. E 3733, *The Burch Corp.* v. *Galion Iron Works & Mfg. Co.*

1,247,335, H. W. Russ, Wood heel turning machine, D. C. Mass., Doc. E 2838, *United Shoe Machinery Corp.* v. *Globe Leather Co. et al.* Decree for plaintiff May 24, 1929.

1,257,498. (See Re. 14,651.) 1,259,917. (See 1,718,177.)

1,287,934, Farnsworth and Allen, Welded pipe joint, appeal filed Apr. 20, 1931, C. C. A., 10th Cir., Doc. 473, *Patent Specialties Corp.* v. *H. C. Price (Welding Engineering Co.) et al.*

1,302,733. (See Re. 14,651.)

1,320,354, J. H. Adams, Oil converting apparatus; 1,320,727, same, Apparatus for the conversion of liquids, fluids and oils; 1,327,263, same, Process for the conversion of liquids, fluids and oils, D. C., S. D. Tex. (Houston), Doc. E 307, *The Texas Co.* v. *Houston Oil Co. of Texas.* Dismissed Apr. 9, 1931.

1,320,727. (See 1,320,354.) 1,327,263. (See 1,320,354.)

1,326,520. (See Re. 14,651.)

1,337,333, H. S. Simpson, Foundry mixer; 1,508,031, same, Foundry sand mixer; 1,615,525, same, Automatic device for operating and closing discharge doors on mixers; 1,771,398, A. C. Christensen, Door operating mechanism for mixing machines, filed Apr. 21, 1931, D. C., S. D. Ohio, W. Div., Doc. 296, *National Engineering Co. et al.* v. *The International Clay Machinery Co. et al.*

1,350,677, 1,357,360, H. H. Spoenenburg, Rail anchor; 1,511,546, H. G. Warr, same, D. C. Mass., Doc. E 3084, *The P. & M. Co.* v. *Continental Rwy. Supply Corp. et al.* Dismissed Oct. 16, 1929.

1,356,314, L. G. Sabbag, Permutation lock, D. C. Mass., Doc. E 2721, *H. Siskind* v. *Arcade Mfg. Co. et al.* Dismissed without prejudice Jan. 2, 1930.

1,357,360. (See 1,350,677.)

1,365,896, T. I. Duffy, Disk wheel for vehicles, D. C., E. D. Mich., S. Div., Doc. 2444, *G. H. Forsyth* v. *Motor Wheel Corp.* Dismissed Apr. 20, 1931.

1,379,224. (See 1,630,812.) 1,381,728. (See 1,504,697.)

1,395,893, C. E. Beck, Steering wheel and method of forming same, C. C. A., 6th Cir., Doc. 5497, *The Beck-Frost Corp.* v. *Ford Motor Co.* Claims 14 and 18 held not infringed, claims 20 to 25, inclusive, held invalid Nov. 13, 1930.

1,406,335, G. Boulton, Lining trimming machine; 1,578,375, E. Sehl, Cutting machine, D. C. Mass., Doc. E 2958, *United Shoe Machinery Corp.* v. *N. W. Mathey.* Dismissed Dec. 16, 1930.

1,434,356, H. T. Doulett, Eyeleting machine, D. C. Mass., Doc. E 2803, *United Shoe Machinery Corp.* v. *L. Muther et al.* Consent decree for plaintiff against Peerless Machinery Co.

1,458,168, G. J. Day, Oven thermometer, D. C., W. D. N. Y., Doc. 125, *G. J. Day (The Day Indicator Co.)* v. *Brown & Bigelow.* Dismissed (notice Apr. 21, 1931).

1,470,157. (See 1,233,107.)

1,474,246, F. L. Donovan, Display device, D. C. Mass., Doc. E 2912, *F. L. Donovan* v. *City of Cambridge.* Consent decree for plaintiff July 26, 1928.

1,486,383, E. P. Halliburton, Method of hydrating cement; 1,500,385, same, Method of and apparatus for mixing materials, appeal filed Apr. 16, 1931, C. C. A., 10th Cir., Doc. 468, *Independent Oil Well Cementing Co.* v. *Halliburton Oil Well Cementing Co. et al.*

1,487,925, 1,506,978, 1,668,765, T. Elliott, Railway car, filed Apr. 15, 1931, D. C., E. D. Mich., S. Div., Doc. 4742, *The Cincinnati Car Corp.* v. *General Motors Truck Co. et al.*

1,488,407, 1,495,134, H. L. Redmond, Infant's band, D. C. Mass., Doc. E 2802, *The W. Carter Co.* v. *Earnshaw Knitting Co.* Dismissed May 24, 1928.

1,495,134. (See 1,488,407.) 1,498,359. (See 1,526,714.)

1,500,385. (See 1,486,383.)

1,503,510, A. S. Margason, Windshield for closed motor cars; 1,552,332, Miller and Harvey, Air deflector, D. C., S. D. Calif. (Los Angeles), Doc. E O–52–M, *L. M. Harvey et al.* v. *J. E. Wrightsman (Automobile Glass Co.).* Decree for defendant Apr. 18, 1931.

1,504,697, 1,381,728, J. A. Menard, Abrasive compound, D. C. Mass., Doc. E 3209, *Timesaver Products Co.* v. *J. O. Werner.* Decree for plaintiff May 16, 1930.

1,506,978. (See 1,487,925.) 1,507,440. (See 1,630,812.)

1,508,031. (See 1,337,333.) 1,511,546. (See 1,350,677.)

1,514,100, W. J. Rancourt, Tap splitting machine, D. C. Mass., Doc. E 2497, *W. J. Rancourt* v. *Ponco Rubber Co.* Bill and counterclaim dismissed Nov. 21, 1927.

1,517,059, F. Grover, Machine for automatically folding wrappers around rectangular and other bodies, D. C., S. D. N. Y., Doc. E 55/28, *Forgrove Machinery Co., Ltd.*, v. *White Star Import Corp.* Dismissed without prejudice Apr. 20, 1931.

1,517,659, F. C. Warne, Disc harrow, D. C., S. D. Calif. (Los Angeles), Doc. E O–124–M, (*The Roderick Lean Co.*) *International Harvester Co.* v. *P. G. Beissel.* Patent held valid and infringed Apr. 14, 1931.

1,526,714, 1,563,506, J. O. Luthy, Recovery and utilization of materials of old secondary battery plates; 1,498,359, H. P. Dodge, Battery plate building, D. C., E. D. Mo., E. Div., Doc. 9198, *Luthy Research Laboratory* v. *S. Ford et al.* Consent decree for plaintiff Apr. 7, 1931.

1,526,982, E. W. Hill, Stencil sheet, D. C., S. D. N. Y., Doc. E 50/60, *A. B. Dick Co.* v. *The Shallcross Co., Inc.* Injunction granted Apr. 22, 1931.

1,527,395, 1,527,396, 1,589,718, A. R. Ridderstrom, Folding machine and method, D. C. Mass., Doc. E 2727, *Beacon Folding Machine Co.* v. *Rotary Machine Co. et al.* Consent decree after mandate Feb. 17, 1930.

1,527,396. (See 1,527,395.)

1,547,623, E. L. Smalley, Electric furnace, D. C., E. D. Wis. (Milwaukee), Doc. 2785, *Hevi Duty Electric Co.* v. *Globe Steel Tubes Co.* Decree for plaintiff Apr. 18, 1931.

1,552,382. (See 1,503,510.) 1,563,506. (See 1,526,714.)

1,576,138, A. C. McBride, Brake band relining machine, D. C. Mass., Doc. 2703, *W. A. Wright et al.* v. *Multibestos Co.* Dismissed without prejudice Jan. 2, 1930.

1,577,030, A. S. Howell, Intermittent feed mechanism; 1,620,726, same, Motion picture camera, D. C., S. D. Iowa (Davenport), Doc. 4101, *The Bell & Howell Co.* v. *Victor Animatograph Co.* Dismissed without prejudice (notice Apr. 20, 1931).

1,578,375. (See 1,406,335.) 1,581,784. (See 1,233,107.)

1,589,718. (See 1,527,395.)

1,597,633, H. F. Stephens, Bathing suit, filed Apr. 10, 1931, D. C., N. D. Calif. (San Francisco), Doc. 2880–L, *West Coast Knitting Mills* v. *Gantner & Mattern Co.*

1,605,094. (See 1,233,107.)

1,612,762, J. M. Flynn, Detailing mechanism for candy coating machines, D. C. Mass., Doc. E 2811, *United Drug Co.* v. *National Equipment Co.* Bill dismissed without prejudice Aug. 29, 1928.

1,615,525. (See 1,337,333.) 1,620,726. (See 1,577,030.)

1,630,812, O. P. Smith, Traction car; 1,379,224, same, Dog racing amusement; 1,507,440, same, Housing for conveyor cars and tracks, D. C., N. D. Okla. (Tulsa), Doc. E 271, *H. M. Smith et al.* v. *Magic City Kennel Club, Inc., et al.* Decree on mandate for defendant, bill dismissed (notice Apr. 20, 1931).

1,632,341, J. Koch, Feed grinder, filed Mar. 13, 1931, D. C., W. D. Ky. (Louisville), Doc. 637, *Badger Equipment Co.* v. *R. V. Board.*

1,646,558, J. P. Ratigan, Beam hanger; 1,720,056, same, Adjustable beam hanger, filed Apr. 21, 1931 D. C., E. D. Okla. (Muskogee), Doc. E 4299, *J. P. Ratigan* v. *P. D. Hammer et al.* (*Coline Specialty Co.*).

1,668,765. (See 1,487,925.)

1,675,275, R. O. Oakley, Weatherstrip, appeal filed Apr. 18, 1931, C. C. A., 8th Cir., Doc. 9195, *R. O. Oakley et al.* v. *Peerless Weatherstrip & Caulking Co., Inc.*

1,711,466, E. A. Turner, Locomotive stoker, filed Apr. 20, 1931, D. C. Md., Doc. E 1874, *The Standard Stoker Co., Inc.*, v. *Lower Stoker Co. et al.*

1,718,177, W. H. Nutt, Heel covering; 1,259,917, E. L. Sharpneck, Heel for shoe, D. C., S. D. Ohio, W. Div., Doc. E 680, *United Shoe Machinery Corp.* v. *The Day Wood Heel Co.* Dismissed without prejudice (notice Apr. 20, 1931).

1,720,056. (See 1,646,558.)

1,763,380, 1,798,962, C. E. Trube, Electric coupling system, filed Apr. 22, 1931, D. C., S. D. N. Y., Doc. E 59/254, *Haseltine Corp.* v. *General Motors Radio Corp.* Doc. E 59/255, *Haseltine Corp.* v *Westinghouse Electric & Mfg. Co.* Doc. E 59/256, *Haseltine Corp.* v. *General Electric Co.* Doc. E 59/257, *Haseltine Corp.* v. *Radio Corp. of America.* Doc. E 59/258, *Haseltine Corp.* v. *R. C. A. Victor Co., Inc.*

1,771,398. (See 1,337,333.) 1,798,962. (See 1,763,380.)

Re. 14,651, E. H. Lanier, Pastry making apparatus; 1,257,498, Lanier and Driesbach, Pastry molding and baking apparatus; 1,302,733, W. W. Turnbull, Machine for making ice cream cones; 1,326,520, A. McLaren, Ice cream cone and package container, D. C. Mass., Doc. E 2945, *McLaren-Consolidated Cone Corp.* v. *B. Smith et al.* (*Old South Cone Co.*). Dismissed without prejudice Jan. 2, 1931. Doc. E 2960, *McLaren-Consolidated Cone Corp.* v. *The Preferred Baking Co.* Decree as above.

Re. 15,582, R. C. Russell, Index, D. C. Mass., Doc. E 3005, *R. C. Russell* v. *Massachusetts Bonding & Insurance Co., Inc.* Consent decree for plaintiff Dec. 3, 1928.

Re. 17,328, F. J. Schleicher, Paper box, D. C., E. D. Mo., E. Div., Doc. 9137, *Box Patents, Inc.* v. *Universal Paper Box Mfg Co.* Dismissed Feb. 26, 1931.

Des. 69,978, Des. 69,979, Des. 70,046, G. N. Allen, Spoon; Des. 70,208, Des. 70,816, Des. 69,980, same, Coffee pot, D. C. Mass., Doc. 2949, *Oneida Community, Ltd.* v. *Quaker Silver Co.* Consent decree for plaintiff as to Des. 70,208 and Des. 70,816, and dismissing bill without prejudice as to Des. 69,978, Des. 69,979, Des. 69,980 and Des. 70,046.

Des. 69,979. (See Des. 69,978.) Des. 69,980. (See Des. 69,978.)

Des. 70,046. (See Des. 69,978.) Des. 70,208. (See Des. 69,978.)

Des. 70,816. (See Des. 69,978.)

Des. 75,287, L. W. Rice, Table lighter, D. C. Mass., Doc. E 2988, *B. Rice's Sons, Inc.*, v. *Evans Case Co.* Dismissed by consent Nov. 16, 1929.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,632,767, E. J. Bloom, Chassis lubrication, decided May 28, 1931, claim 2.

Pat. 1,684,732, William Harrison, Manufacture of carbohydrate derivatives, decided June 2, 1931, claim 3.

Pat. 1,728,223, A. W. Winship, Wardrobe hatbox, decided Moy 14, 1931, count 5.

Pat. 1,758,894, A. H. Schaffert, Window structure, decided June 1, 1931, claims 1, 2, 3, and 7.

Disclaimers

Re. No. 17,413.—*Arthur T. Kathner,* Mount Lebanon, Pa. ANNEALING AND HEAT-TREATING FURNACE. Patent dated August 20, 1929. Disclaimer filed June 5, 1931, by the patentee, exclusive licensee, *The Duraloy Company,* approving.

Hereby does disclaim from the scope of claims 15 and 17 of the said Reissue Letters Patent No. 17,413, any and all furnaces except metal sheet treating furnaces in which the furnace causes a gradual and prolonged cooling of the metal sheet in the furnace.

Des. 73,995.—*Thomas W. Behan,* Binghamton, N. Y. A COMBINED CASING AND FRAME FOR A WASHING MACHINE. Patent dated December 6, 1927. Disclaimer filed June 6, 1931, by the assignee, *Nineteen Hundred Corporation.*

Hereby enters this disclaimer to the claim in said Letters Patent.

1,725,398.—*Arthur T. Kathner,* New Cumberland, W. Va. METAL-TREATING FURNACE. Patent dated August 20, 1929. Disclaimer filed June 5, 1931, by the patentee, exclusive licensee, *The Duraloy Company,* approving.

Hereby does disclaim from the scope of claim 8 of the said Patent No. 1,725,398, any and all furnaces except sheet metal treating furnaces in which heat insulating material is employed in a portion of the cooling zone adjacent to the heating zone to retard the dissipation of heat from the sheet metal and gases in such portion of the cooling zone.

Your petitioner further does hereby disclaim from the scope of claim 4 of the said Patent No. 1,725,398 any and all processes of heat treating metal except sheet metal treating processes in which the control of the time, rate, and uniformity of cooling of the metal in the cooling zone is accomplished in part by slowly dissipating heat from the entering end of the cooling zone to the discharging end thereof while maintaining narrow temperature variations in any given transverse section of the cooling zone.

Your petitioner hereby further does disclaim from the scope of claims 5 and 6 of the said Patent No. 1,725,398 any and all methods of heat treating metal except sheet metal treating methods in which the time, rate and uniformity of cooling of the sheet metal is controlled in part by retarding the dissipation of heat from the sheet metal for a portion of the length of the cooling zone adjacent to the heating zone.

Your petitioner further hereby does disclaim from the scope of claim 7 of the said Patent No. 1,725,398 any and all furnaces except sheet metal treating furnaces having conveyors which space the sheet metal apart from the walls of the cooling chamber and employing heat insulating material below the sheet metal and/or in a wall or walls of a portion of the cooling chamber to retard dissipation of heat from gases in the portion of the cooling chamber adjacent to the heating chamber.

Your petitioner further hereby does disclaim from the scope of claim 9 of the said Patent No. 1,725,398 any and all furnaces for heat treating metal except sheet metal treating furnaces which have a restricted passage therein and are adapted to cause a gradual and prolonged cooling of the metal by heated gases passing through the restricted passage, about the metal and out the exit end of the furnace.

1,750,417.—*Leslie N. McClellan, Phillip A. Kinzie, John L. Savage,* and *Charles M. Day,* Denver, Colo. PRESSURE-ACTUATED CONTROL VALVE. Patent dated March 11, 1930. Disclaimer filed May 25, 1931, by the assignee, *Universal Hydraulic Corporation.*

Hereby enters this disclaimer to the subject matter comprising claim 5, which claim 5 reads as follows:

"5. A fluid receiving and controlling valve, including a valve body arranged to be connected to a fluid conveying conduit, said valve being arranged to receive flowing fluid at one end and to control its discharge from the opposite end, a valve seat arranged in said body, a movable plunger adapted for cooperation with said seat, a fixed valve element within said body and having a conical head at one end and adapted to telescopically receive said movable plunger at its opposite end, said valve element providing an annular waterway within said body, a piston movable with said plunger, a fixed tubular member within said valve element, a fixed diaphragm carried by the end of said tubular member and arranged to fit within said plunger, said valve member, plunger, piston and diaphragm providing three tandem pressure chambers adapted to receive pressure fluid from said conduit, and means for controlling the relative pressures in all of said chambers."

1,787,186.—*Jean A. H. Barkeij,* Los Angeles, Calif. INLET MANIFOLD FOR STRAIGHT-EIGHT INTERNAL-COMBUSTION ENGINES. Patent dated December 30, 1930. Disclaimer filed June 3, 1931, by the patentee.

Hereby enters this disclaimer to that part of the claim in said specification, and to the subject matter of each of the claims of said Letters Patent, except when said engine is combined with the crankpin arrangement as shown in Fig. 4, in which crankpins 1, 2, 3, 4 are in one plane and crankpins 5, 6, 7, 8 are in the other plane, perpendicular to said first plane. Or in other words all the claims are restricted to the scope of the sixth object. This disclaimer is made in view of the specification of Automotor Journal of February 29, 1908, pages 269–271, inclusive.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 23, 1931

[VOL. 407. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for " under the ten-year proviso " are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 299,855. PALMER LIME & CEMENT COMPANY, New York, N. Y. Filed May 2, 1930.

CHALLENGE

For Limestone.
Claims use since May 29, 1909.

Ser. No. 309,788. FRED RUEPING LEATHER CO., Fond Du Lac, Wis. Filed Jan. 9, 1931.

XL-TAN

No claim is made to the exclusive appropriation of the word "Tan" apart from the mark as shown.
For Leather.
Claims use since Dec. 18, 1930.

Ser. No. 314,136. AMERICAN HIDE AND LEATHER COMPANY, Boston, Mass. Filed May 4, 1931.

OUTING ELK

The word "Elk" is disclaimed apart from the mark as shown on the drawing.
For Side Leather.
Claims use since Mar. 9, 1930.

CLASS 2

Receptacles

Ser. No. 313,361. THE HOOVER COMPANY, North Canton, Ohio. Filed Apr. 16, 1931.

FILTAIRE

For Dust Filtering and Collecting Bags Formed of Fibrous Material for Suction Cleaners.
Claims use since Nov. 1, 1930.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 310,729. MAJESTIC LEATHER GOODS CO., INC., New York, N. Y. Filed Feb. 4, 1931.

MAJESTIC-ROBE

The use of the word "Robe" is disclaimed apart from the mark as shown on the drawing.
For Travelling Bags, Luggage for Men and Women, Comprising Oxford Bags, Club Bags, Gladstone Bags, Railroad Bags, Pullman Bags, Kit Bags, Suit Cases, Satchels, Grips, Dressing Cases, Hat Boxes, and Hand Wardrobe Trunks.
Claims use since Dec. 1, 1930.

Ser. No. 313,658. GEMSCO, INC., New York, N. Y. Filed Apr. 22, 1931.

Sportsman

For Riding Equipment and Accessories—Namely, Spurs, Spur Chains and Spur Straps.
Claims use since March, 1929.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 281,074. THE CARBORUNDUM COMPANY, Niagara Falls, N. Y. Filed Mar. 21, 1929.



The trade-mark consists of the color green applied to the steel center of the abrasive wheel, as indicated by the lining shown in the drawing. The representation of the abrasive wheel per se is disclaimed.
For Steel Center Abrasive Wheels.
Claims use since 1913.

Ser. No. 308,828. THE HEWITT BROS. SOAP COMPANY, Dayton, Ohio. Filed Dec. 10, 1930.

EZY-DAY

For Soap in Granular Form.
Claims use since Sept. 10, 1930.

Ser. No. 309,434. T. M. E. JOHNSON, doing business as Johnson Company, Mulberry, Kans. Filed Dec. 29, 1930.

Win-a-Way

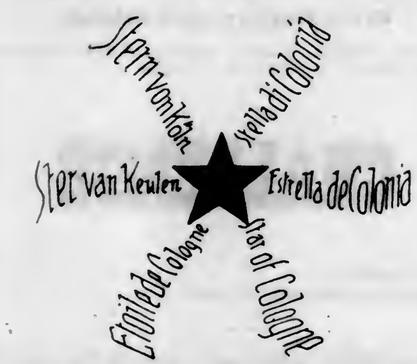
For Floor, Furniture, Woodwork, Automobile and Linoleum Polishes and Waterproofing Finish Renewers Comprising Polishes Having Water Repelling Ingredients for Automobiles and Painted or Varnished Surfaces.
Claims use since November, 1930.

Ser. No. 310,307. J. A. SEXAUER MFG. CO., INC., New York, N. Y. Filed Jan. 23, 1931.

Mule Kick

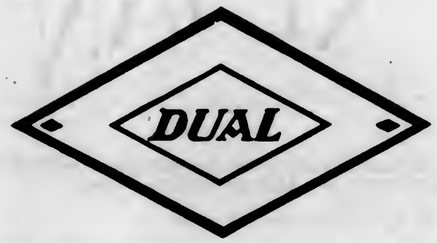
For Closet Bowl Cleaner and Porcelain Cleaner and Polish.
Claims use on closet bowl cleaner since Feb. 19, 1929; on porcelain cleaner and polish since May 6, 1929.

Ser. No. 311,018. PAUL PETER MÜLHENS, doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" Gegenüber der Pferdepost von Ferd Mülhens, Cologne, Germany. Filed Feb. 12, 1931.



For Soaps, including Toilet Soaps and Shaving Sticks.
Claims use since Mar. 7, 1891.

Ser. No. 311,784. THE ITECO COMPANY, Portland, Oreg. Filed Mar. 5, 1931.



For Denture Polish—Namely, a Polish for Artificial Plates and Teeth.
Claims use since Dec. 20, 1930.

Ser. No. 313,752. THE OMEGA CHEMICAL COMPANY, New York, N. Y. Filed Apr. 24, 1931.

Cadum

The lining is for shading only.
For Toilet Soap.
Claims use since 1913.

Ser. No. 313,798. REX PRODUCTS & MANUFACTURING COMPANY, Detroit, Mich. Filed Apr. 25, 1931.

TRIAD

For Soap Powders with Water Softening Properties.
Claims use since Apr. 3, 1931.

Ser. No. 313,801. RONUK, LIMITED, Portslade, England. Filed Apr. 25, 1931.

RONUK

For Boot Polish.
Claims use since January, 1896.

Ser. No. 314,157. THOMAS F. GAMAGE, doing business as De Gama Chemical Co., San Francisco, Calif. Filed May 4, 1931.

Milptopal

For Soap.
Claims use since Apr. 18, 1931.

CLASS 5

Adhesives

Ser. No. 313,689. WEBB PRODUCTS COMPANY, INC., San Bernardino, Calif. Filed Apr. 22, 1931.



For Household Glue, China and Glass Cement, Waterproof Cement, Fabric Special Cement, Leather and Shoe Cement, Plastic Filler, and Fabric Special Waterproof Cement, All of These Goods Being Adhesive Cements.
Claims use since Sept. 1, 1928.

Ser. No. 313,835. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Apr. 27, 1931. Under section 5b of the act of 1905 as amended in 1920.

Eastman

For Lantern Slide Binders and Mounting Tape Both in the Nature of Adhesive Tape and Adhesive Photographic Paste.
Claims use since 1910 on lantern slide binders, since 1912 on mounting tape, and since 1925 on photographic paste.

Ser. No. 313,967. PACIFIC BONE COAL & FERTILIZING CO., San Francisco, Calif. Filed Apr. 29, 1931.

LUSTRA GLUE

No claim is made to the word "Glue."
For Glue.
Claims use since Apr. 10, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 301,225. PIERRE ZIZINE, Paris, France. Filed May 24, 1930.

PEPTODIASE

For Liquid Preparation for Dyspepsia, Indigestion, and Gastro-Intestinal Troubles.
Claims use since Mar. 2, 1915.

Ser. No. 301,534. VIVINY PERFUMERS, INC., New Haven, Conn. Filed May 28, 1930.



For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Eyebrow and Eyelash Grower, Pomades, Face Powders, Talcum Powders, Sachets, Hair Salves, Hair Elixirs, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Lip Sticks, Incease, Tooth Powders, Dentifrices, Tooth Pastes, Nail Powders, Nail Creams, Nail Bleaches, Foot Powders, Bay Rum, Perfumes, and Toilet Waters.
Claims use since May 24, 1930.

Ser. No. 303,077. JOHANN A. WÜLFING, Berlin, Germany. Filed July 2, 1930.

Complamin

For a Preparation for Internal Use in the Form of Tablets for Use in the Treatment of Influenza, Catarrh of the Upper Respiratory Tract, Neuralgia, Rheumatism, Gout, Dysmenorrhea, and Lumbago.

Claims use since July, 1929.

Ser. No. 304,664. LESTER H. MILES, Los Angeles, Calif. Filed Aug. 15, 1930.



AFTRSHAV CREAM

No claim is made to the words "Aftrshav Cream" apart from the mark shown. The portrait shown in the mark is fanciful, and no claim is made thereto apart from the mark shown. The lining on the drawing is for shading only.

For Face Creams.

Claims use since Aug. 5, 1930.

Ser. No. 306,649. HEADLEY EMULSIFIED PRODUCTS COMPANY, Philadelphia, Pa. Filed Oct. 11, 1930.



In the drawing the larger rectangular field is of black and is shown to accord with the convention prescribed by the Patent Office for indicating that color and the smaller rectangular field of scroll shape is of orange color, as is indicated by the convention prescribed by the Patent Office for indicating that color. No claim is made to the name Headley apart from the rest of the mark.

For Asphalt Emulsions for Waterproofing, Dampproofing, General Protective Coating, Protection Against Corrosion by Gases, Acids, Alkalies, Lime, Salt Water, and Soils.

Claims use since Nov. 1, 1929.

Ser. No. 307,490. HERCULES GLUE COMPANY, doing business as Colloidal Products Corporation, San Francisco, Calif. Filed Nov. 3, 1930.



For Chemical Spreader for Insecticides and the Like.

Claims use since February, 1929.

Ser. No. 309,171. PHILIP MUELLER, Minneapolis, Minn. Filed Dec. 19, 1930.

VIGRO

For Tonic for Eliminating Impurities in the Blood.

Claims use since Sept. 5, 1930.

Ser. No. 309,302. E. BILHUBER, INC., Jersey City, N. J. Filed Dec. 24, 1930.

Phyllicin

For Medicinal Preparation for the Treatment of the Cardiovascular System and the Kidneys.

Claims use since Dec. 10, 1930.

Ser. No. 309,921. CLOROX CHEMICAL CO., Oakland, Calif. Filed Jan. 14, 1931.



The trade-mark comprises the indicia arranged upon a bottle for containing the goods, as illustrated in the drawing. No claim is made for the representation of the bottle per se. The lining on the drawing is for shading only.

For Bleaching, Cleansing, Antiseptic, and Germicidal Compounds.

Claims use since Sept. 13, 1930.

Ser. No. 310,460. THOMAS A. KRIDOS, Brooklyn, N. Y. Filed Jan. 27, 1931.

THE KRIDOS

No claim is made for the words "The Kridos" apart from the mark shown in the drawing.

For Preparations for Use in the Treatment of the Hair and Scalp.

Claims use since November, 1918.

Ser. No. 311,102. NÄHRMITTELFABRIK JULIUS PENNER A.-G., Berlin-Schoneberg, Germany. Filed Feb. 16, 1931.

NIPASOL

For Medicated Bandages and Preservatives for Foodstuffs Against Decomposition or Change Caused by Micro-Organisms.

Claims use since Nov. 18, 1930.

Ser. No. 311,103. NÄHRMITTELFABRIK JULIUS PENNER A.-G., Berlin-Schoneberg, Germany. Filed Feb. 16, 1931.

NIPAGIN

For Medicated Plasters, Medicated Bandages, Animal and Vegetable Exterminating Preparations, Disinfectants, Chemical Products for Antiseptic and Preservative Uses, Fire Extinguisher Preparations, Antiseptic Dental Paste, and Preservatives for Tooth Fillings.

Claims use since Apr. 29, 1929.

Ser. No. 311,125. ALBERT BERNARD, doing business as A. F. Johns Co., New York, N. Y. Filed Feb. 17, 1931.



For Hair Tonics.

Claims use since Jan. 11, 1931.

Ser. No. 311,679. GABILLA, INCORPORATED, New York, N. Y. Filed Mar. 3, 1931.

GABILLA

For Perfume, Toilet Water, Face Powder, Liquid Powder, Sachet Powder, Dusting Powder, Compacts, Rouges, Lip Sticks, Bath Salts, Brilliantine, Eyebrow Pencils, Eye Shadow, Mascara, Toilet Cream, Face Cream, Liquid Cream, Lotions for the Hair, and Tonics for the Hair.

Claims use since 1910.

Ser. No. 311,718. THE CHIC-TONE COMPANY, INC., Angola, Ind. Filed Mar. 4, 1931.



Applicant is the owner of registered Trade-Mark No. 250,039. No claim is made to the word "Inhalant" apart from the mark shown in the drawing.

For Medicine for General Colds, Roup, Pneumonia, Infections Bronchitis, and Respiratory Diseases in Poultry.

Claims use since August, 1928.

Ser. No. 311,898. W. A. SUNDAY, Jr., doing business as The Sheba Company, Los Angeles, Calif. Filed Mar. 7, 1931.

CREAM OF SHEBA

No claim is made to the word "Cream" apart from the mark as shown in the drawing.

For Bleach Astringent Cream.

Claims use since Dec. 16, 1930.

Ser. No. 312,141. DY-O-LA DYE CO., Burlington, Vt. Filed Mar. 14, 1931.



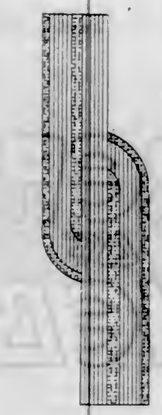
The exclusive use of the descriptive word "Tints" being disclaimed apart from the mark shown.
For Tints.
Claims use since Oct. 1, 1930.

Ser. No. 312,760. KELCO COMPANY, San Diego, Calif. Filed Mar. 31, 1931.

VITADINE

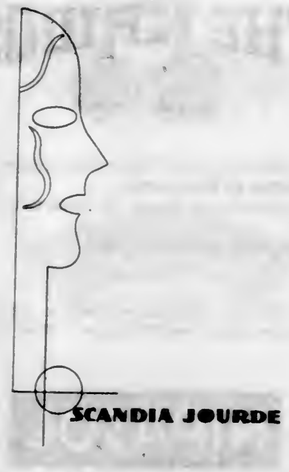
For Kelp and Kelp Preparations for Use in the Treatment of Goiter and Other Deficiency Diseases and Ailments.
Claims use since June 1, 1930.

Ser. No. 313,052. THE NORWICH PHARMACAL COMPANY, Norwich, N. Y. Filed Apr. 7, 1931.



The lining on the drawing denotes the colors red and yellow.
For Mineral Oil Used as an Internal Lubricant and for Constipation.
Claims use since Oct. 20, 1930.

Ser. No. 313,208. SCANDIA-JOURDE CORP., New York, N. Y. Filed Apr. 10, 1931.



For Cold Creams, Skin Lotions, Astringents, Lotion for the Stimulation of the Circulation, Tonic for the Skin Around the Eyes, Foundation Lotion for the Skin, and Cream Used to Correct a Shiny Skin.
Claims use since April, 1930.

Ser. No. 313,688. J. E. WEBB, doing business as K. D. Chemical Co., St. Petersburg, Fla., and Philadelphia, Pa. Filed Apr. 22, 1931.

PYRO-MAGNA

For Dental Cream.
Claims use since Sept. 1, 1930.

Ser. No. 313,691. JOHN WILTON BARLOW, New York, N. Y. Filed Apr. 22, 1931.

CON

For Medicinal Treatment for Consumption.
Claims use since Jan. 1, 1931.

Ser. No. 313,753. RADIATOR SPECIALTY COMPANY, Charlotte, N. C. Filed Apr. 24, 1931.

KWIXEAL

For Composition for Stopping Leaks in All Hot Water Circulating Systems Such as Automobile Radiators, Boilers, Steam and Hot Water Radiators, Cylinder Blocks, and Pumps.
Claims use since Mar. 7, 1931.

Ser. No. 313,896. WM. A. WAHL, St. Louis, Mo. Filed Apr. 27, 1931.

JUSO

For Medicines Used as a Tonic and Blood Purifier and to Regulate the Liver and Bowels, Used as a Medicine in Gall Bladder Trouble, Diabetes, Catarrh, Headache, Indigestion, and Disordered Kidneys.
Claims use since Jan. 1, 1930.

Ser. No. 313,974. PITMAN-MOORE COMPANY, Indianapolis, Ind. Filed Apr. 29, 1931.

T. A. C.

For Medicine for Treating Round Worms in Fowls.
Claims use since 1924.

Ser. No. 314,037. BOND ELECTRIC CORPORATION, Jersey City, N. J. Filed May 1, 1931.

FLOZON

For Anti-Freeze Products.
Claims use since Apr. 1, 1931.

Ser. No. 314,053. FEROLEUM PRODUCTS, INC., Irvington, N. J. Filed May 1, 1931.

FEROLEUM

For Liquid Coating Material to be Used by Itself or as an Ingredient for Paints and the Like for Preventing Rust and Corrosion of Metals and Rot or Decay of Wood, for Preserving Metallic and Wooden Structures and Articles, and for Waterproofing Textile Fabrics.
Claims use since February, 1930.

Ser. No. 314,076. RYAN, SCULLY & COMPANY, Philadelphia, Pa. Filed May 1, 1931.

CARBAIR

For Granular Mixtures for the Reduction of Oxygen in Heat Treating Processes.
Claims use since Apr. 20, 1931.

Ser. No. 314,139. BREWER & COMPANY, INC., Worcester, Mass. Filed May 4, 1931.

COPRAL

For General Tonic.
Claims use since Dec. 9, 1928.

Ser. No. 314,214. SCHERING & GLATZ, INC., Bloomfield, N. J. Filed May 5, 1931.

NEOTROPIN

For Urinary Antiseptic.
Claims use since Apr. 10, 1931.

Ser. No. 314,216. BENJAMIN D. SMITH, doing business as American Manufacturing Company, Utica, N. Y. Filed May 5, 1931.

Kro-Nox

For Preparation for Preventing Birds and Animals from Destroying Corn.
Claims use since Mar. 22, 1930.

Ser. No. 314,221. ABBOTT LABORATORIES, North Chicago, Ill. Filed May 6, 1931.

COPRON

For Liver Extract Indicated in Hemoglobin Deficiencies.
Claims use since Mar. 20, 1931.

Ser. No. 314,222. ALKA-SEPTOL, INCORPORATED, Beacon, N. Y. Filed May 6, 1931.



For Antiseptic Compound.
Claims use since Apr. 14, 1931.

Ser. No. 314,228. GEORGE BOARDMAN, doing business as Vermel Company, Sioux Falls, S. Dak. Filed May 6, 1931.

Vermel

For Insecticide.
Claims use since Apr. 15, 1931.

Ser. No. 314,233. DEKTOL CORPORATION, Kansas City, Mo. Filed May 6, 1931.

Dektol

For Antiseptic Liquid Mouth Wash for the Mouth, Teeth, and Gums.
Claims use since Jan. 1, 1931.

Ser. No. 314,284. THE H. B. CO., Jersey City, N. J. Filed May 7, 1931.

H-B

For Cough Drops.
Claims use since Feb. 23, 1917.

Ser. No. 314,294. ROBERT J. PIERCE, INC., New York, N. Y. Filed May 7, 1931.

Pierlac

For Vaginal Jelly.
Claims use since Apr. 25, 1930.

Ser. No. 314,346. SINASPRA CORPORATION, Columbus, Ohio. Filed May 8, 1931.

Sinaspra

For Nasal Spray.
Claims use since May 15, 1930.

Ser. No. 314,370. KALINE WATER COMPANY, INC., Wilmington, Del., and Washington, D. C. Filed May 9, 1931.

DISO-HYDRIC

For Alkaline Medicinal Water, Artificially Prepared for the Purpose of Restoring and Maintaining a Normal or Alkaline Balance, Indicated in Such Acid Conditions Where Alkalinization is Desired, Maintaining a Normal Dehydration Embracing in Its Properties an Alternative Action.
Claims use since Mar. 1, 1931.

Ser. No. 314,432. HERMANN STEIN, doing business as Hair Research Laboratories, New York, N. Y. Filed May 11, 1931.

ALBYNO

For Preparations for Treating Hair to Remove Stains Therefrom.
Claims use since July 1, 1930.

CLASS 7

Cordage

Ser. No. 314,646. HAZARD WIRE ROPE COMPANY, Wilkes-Barre, Pa. Filed May 16, 1931.

LAYSET

For Wire Rope.
Claims use since June 14, 1930.

CLASS 10

Fertilizers

Ser. No. 314,343. ROBERTS COMPANY, Burlingame, Calif. Filed May 8, 1931.

Irox

For Soil Conditioner and Snail Control, in Granulated Form.
Claims use since Dec. 4, 1930.

CLASS 12

Construction Materials

Ser. No. 299,754. PALMER LIME & CEMENT COMPANY, New York, N. Y. Filed Apr. 30, 1930.

BIG-YIELD

For Lime for Building Purposes.
Claims use since Jan. 15, 1927.

Ser. No. 309,803. CHICAGO MILL AND LUMBER CORPORATION, Chicago, Ill. Filed Jan. 10, 1931.

For Rough and Finished Lumber.
Claims use since 1900.

Ser. No. 311,945. AMERICAN BITUMULS COMPANY, Wilmington, Del., and Oakland, Calif. Filed Mar. 10, 1931.

AERO-MULS

For Asphalt, Pavement Materials, Asphaltic Binders, Asphaltic Emulsions, and Compounds.
Claims use since Jan. 22, 1931.

Ser. No. 311,946. AMERICAN BITUMULS COMPANY, Wilmington, Del., and Oakland, Calif. Filed Mar. 10, 1931.

ZERO-MULS

For Asphalt, Pavement Materials, Asphaltic Binders, Asphaltic Emulsions, and Compounds.
Claims use since Jan. 22, 1931.

Ser. No. 313,316. WHEELER LUMBER BRIDGE & SUPPLY COMPANY, Des Moines, Iowa. Filed Apr. 12, 1931.

WHEELER W SPECIAL

The word "Special" is disclaimed apart from the other features of the mark shown.
For Lumber.
Claims use since Jan. 5, 1931.

Ser. No. 313,505. THE GLENN L. MARTIN COMPANY, Baltimore and Middle River, Baltimore, Md. Filed Apr. 18, 1931.

"INSOLO"

For Compounds for Sealing the Joints of Fuel Tanks and Their Accessories.
Claims use since Apr. 6, 1931.

Ser. No. 313,684. EDWARD B. SICKLE, doing business as Paint Products Laboratories, Chicago, Ill. Filed Apr. 22, 1931.

STRUCTURAL STIKUM

No claim is made to the word "Structural" apart from the mark as shown.
For Plastic Composition Material.
Claims use since Mar. 1, 1930.

Ser. No. 314,410. HEZ K. JOHNSON, Chillicothe, Mo. Filed May 11, 1931.

Mo-Roc-A

For Rock Asphalt.
Claims use since Feb. 1, 1930.

CLASS 13

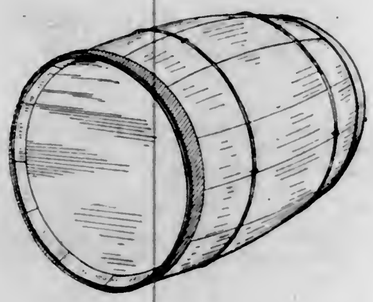
Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 308,286. BOBRICK MANUFACTURING CORPORATION, Los Angeles, Calif. Filed Nov. 25, 1930.

SOP-O-ZON

For Liquid Soap Dispensers.
Claims use since June 15, 1910.

Ser. No. 312,697. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo. Filed Mar. 30, 1931.



The mark consists of a brown band. The band encircles an end of a keg or barrel containing the nails. The drawing is ruled to indicate the color brown. The representation of the barrel per se is disclaimed.

For Nails.

Claims use since Feb. 23, 1931.

Ser. No. 313,206. THE OSCAR C. RIXSON CO., Chicago, Ill. Filed Apr. 10, 1931.

RXN

For Builders' Hardware—Namely, Hinges, Casement and Transom Operators, Door Checks, Door Holders, Door and Casement Pivots, Casement Holders, Stays, and Parts Thereof.

Claims use since Mar. 31, 1931.

Ser. No. 314,143. BRITISH ROPES LIMITED, London, England. Filed May 4, 1931.

VALLIUM

For Barbed Wire Fencing and Wire Netting and Fencing.

Claims use since Nov. 20, 1929.

Ser. No. 314,150. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo. Filed May 4, 1931.

C

For Spikes and Bolts.

Claims use since Jan. 1, 1923, on spikes and since Jan. 1, 1907, on bolts.

Ser. No. 314,422. IRA I. NELSON, doing business as The Stack Heater Company, Boston, Mass. Filed May 11, 1931.

4 IN 1

For Relief Valves.

Claims use since Mar. 9, 1931.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 307,086. BETTER BEARINGS CORPORATION, Salt Lake City, Utah. Filed Oct. 23, 1930.

CU-LEAD-ITE

No claim being made to the word "Lead" apart from the mark as shown in the drawing.

For Castings Made of Bronze, Alloys of Lead, Copper, Tin, and Iron, Lead, Copper, and Tin, Copper, Aluminum, Tin, and Iron and Other Similar Metals Formed or Forged Into Castings.

Claims use since Apr. 1, 1930.

CLASS 16

Paints and Painters' Materials

Ser. No. 299,915. KINGDOM PAINT PRODUCTS COMPANY, INC., Bronx, N. Y. Filed May 3, 1930.

KINGDOM

The crown is shown in the drawing by conventional color linings as printed in red and black.

For Ready Mixed Paints, Varnishes, and Paint Enamels.

Claims use since Apr. 9, 1930.

Ser. No. 304,041. CHARLES M. DAVIS, doing business as Scientific Research Products, Long Beach, Calif. Filed July 31, 1930.

Spot-o-Ma

The drawing is lined to indicate the colors red and orange.

For Automobile Polishes.

Claims use since July 8, 1930.

Ser. No. 305,464. MIDWAY CHEMICAL COMPANY, Chicago, Ill. Filed Sept. 8, 1930.

Autobrite

For Automobile Polish.

Claims use since Oct. 13, 1926.

Ser. No. 312,301. THE KEPEC COMPANY, Milwaukee, Wis. Filed Mar. 19, 1931.

ALUMINALL

For Ready Mixed Paints.

Claims use since Feb. 15, 1931.

Ser. No. 313,837. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Apr. 27, 1931. Under section 5b of the act of 1905 as amended in 1920.

Eastman

For Ground Glass Substitute in the Nature of Varnish, Lantern Slide Varnish, and Spotting Colors.

Claims use since 1886 on ground glass substitute, 1910 on spotting colors, 1913 on lantern slide varnish.

Ser. No. 314,064. THE MASTER BUILDERS COMPANY, Cleveland, Ohio. Filed May 1, 1931.

SEAL-O-WAX

No claim is made to the word "Wax" except in association shown on the drawing.

For Liquid Composition for Protecting and Polishing Concrete Floors and Protecting the Same from Staining and Other Injury.

Claims use since Apr. 10, 1931.

Ser. No. 314,117. KEYSTONE VARNISH COMPANY, Brooklyn, N. Y. Filed May 2, 1931.

TENSITE

For Paint Enamels and Varnishes.

Claims use since July 1, 1930.

CLASS 17

Tobacco Products

Ser. No. 312,372. LOUIS B. GRABOSKY, Philadelphia, Pa. Filed Mar. 21, 1931.

CO·ED

For Cigars.

Claims use since Mar. 18, 1931.

Ser. No. 312,373. LOUIS B. GRABOSKY, Philadelphia, Pa. Filed Mar. 21, 1931.

ROYALIST

For Cigars.

Claims use since Mar. 18, 1931.

Ser. No. 313,814. WOLF BROTHERS & CO., Red Lion, Pa. Filed Apr. 25, 1931.

MARK TWAIN



KNOWN TO EVERYONE - LIKED BY ALL

The portrait shown on the drawing is a draftsman's ink drawing of a picture of Mark Twain.

For Cigars.

Claims use since July, 1877.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 313,539. FRUEHAUF TRAILER COMPANY, Detroit, Mich. Filed Apr. 20, 1931.

Engineered Transportation

For Trailers of All Kinds Including Four-Wheel Trailers, Semitrailers, Pole Trailers, Heavy Duty Trailers, and Parts Thereof, and Tractor-Trailer Connections Therefor.
Claims use since Apr. 10, 1931.

Ser. No. 314,098. CHANCE VOUGHT CORPORATION, Hartford, Conn. Filed May 2, 1931.

CORSAIR

For Aircraft—Namely, Land and Hydro-Airplanes and Structural Parts Thereof.
Claims use since Jan. 1, 1927.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 303,056. JENKINS TELEVISION CORPORATION, Jersey City, N. J. Filed July 2, 1930.



For Unitary Transmitting and/or Receiving Apparatus Suitable for the Transmission and Reception of Images, Pictures, Facsimiles, Graphical Representations or the Like, and Parts Thereof Consisting in Photo-Electric Cells, Light Sensitive Relays, Lamps, Radio Receiving and Transmitting Sets, Electric Motors, and Scanner Devices.
Claims use since Dec. 1, 1929.

Ser. No. 308,196. THE A. C. GILBERT COMPANY, New Haven, Conn. Filed Nov. 22, 1930.

Vital-Aire

For Portable Electrically Operated Humidifiers for Conditioning the Air in Rooms.
Claims use since Oct. 10, 1930.

Ser. No. 312,789. HAROLD H. BENNETT, Scarsdale, N. Y. Filed Apr. 1, 1931.

Lumineon

For Electrically Lighted Signs.
Claims use since Mar. 31, 1931.

Ser. No. 313,195. MARKS PRODUCTS CO. INC., Brooklyn, N. Y. Filed Apr. 10, 1931.

SNAPIT

For Electrical Attachment.
Claims use since January, 1927.

Ser. No. 313,196. MARKS PRODUCTS CO. INC., Brooklyn N. Y. Filed Apr. 10, 1931.

HEETACH

For Electrical Attachment Plugs.
Claims use since January, 1927.

Ser. No. 313,369. MARSHALL FIELD & COMPANY, Chicago, Ill. Filed Apr. 15, 1931.

AURORA

For Radio Receiving Sets.
Claims use since Jan. 2, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 299,803. THE SHALER COMPANY, Waupun, Wis. Filed May 1, 1930.

SHALER "Medal"

No claim is made to the word "Medal" except in the association shown herewith.
For Iron and Wood Head Golf Clubs.
Claims use since Nov. 1, 1929. Applicant is owner of registration Nos. 129,872 and 130,235.

Ser. No. 299,804. THE SHALER COMPANY, Waupun, Wis. Filed May 1, 1930.

SHALER

Applicant is owner of registration Nos. 129,872 and 130,235.
For Iron and Wood Head Golf Clubs.
Claims use since Nov. 1, 1929.

Ser. No. 300,353. THE KROYDON COMPANY, Maplewood, N. J. Filed May 12, 1930.

"C U"

For Golf Clubs.
Claims use since Apr. 15, 1930.

Ser. No. 307,624. JOYTOYS, INCORPORATED, Chicago, Ill. Filed Nov. 7, 1930.

THE JUNGLE CAR

The applicant disclaims the word "Car" except as a part of the mark shown.
For Toy Vehicles for Children.
Claims use since Oct. 16, 1930.

Ser. No. 308,406. THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930.



For Wood and Metal Golf Clubs.
Claims use since Oct. 18, 1927.

Ser. No. 308,789. MONTAGUE ROD AND REEL COMPANY, Montague City, Mass. Filed Dec. 9, 1930.



For Fishing Rods.
Claims use since Nov. 12, 1930.

Ser. No. 311,442. NATIONAL BELLAS-HESS COMPANY, INC., New York, N. Y. Filed Feb. 25, 1931.

MATCH PLAY

For Golf Balls.
Claims use since Jan. 27, 1931.

Ser. No. 311,904. AMERICAN JUNIOR AIRCRAFT COMPANY, Portland, Oreg. Filed Mar. 9, 1931.

AMERICAN JUNIOR

For Toy Airplanes and Gliders and Parts Thereof.
Claims use since Sept. 1, 1929.

Ser. No. 312,264. O. MUSTAD & SÖN, Oslo, Norway. Filed Mar. 18, 1931.



No claim is made to the representation of a fishhook except in the association shown nor to any of the words and numerals shown in the drawing with the exception of the word "Key" and the name of the applicant firm.
For Fishhooks.
Claims use since November, 1930.

Ser. No. 313,524. ALL FAIR INCORPORATED, Churchville, N. Y. Filed Apr. 20, 1931.



For Table Games, Table Board Games Played with Pieces and Cards and Toy Figures.
Claims use since Dec. 1, 1929.

Ser. No. 313,622. THE BURKE GOLF COMPANY, Newark, N. J. Filed Apr. 10, 1931.

Lady Burke

For Golf Clubs.
Claims use since Apr. 23, 1928.

Ser. No. 314,553. THE CANTON MINIATURE AIRCRAFT CORPORATION, Canton, Ohio. Filed May 14, 1931.

Yellow BIRD

For Miniature Aircraft, Namely Toy Gliders.
Claims use since Apr. 3, 1931.

Ser. No. 314,751. THE FRED D. DIVINE COMPANY, Utica, N. Y. Filed May 19, 1931.

Glorivest

For Fishing Rods and Fishing Poles.
Claims use Nov. 15, 1924.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 292,240. ESSEX FOUNDRY, Newark, N. J., and New York, N. Y. Filed Nov. 1, 1929.

"TUBAL PROCESS"

Applicant disclaims exclusive right to the use of the word "Process" except as used in association with the name or word "Tubal."
For Machines for Shaking Out the Cores from Cast Iron Pipe.
Claims use since January, 1928.

Ser. No. 303,205. PACIFIC MARINE SUPPLY COMPANY, Seattle, Wash. Filed July 7, 1930.

THE PACIFIC PUMPER

The word "Pumper" is disclaimed.
For Pack Saddles in the Nature of Human Carrying Harness, Knapsack Tanks Comprising Pump, Tank, Hose, and Nozzle, for Fire Fighting Purposes, Portable Pumpers, Fixed Pumpers.
Claims use since Feb. 6, 1924.

Ser. No. 303,705. RUDOLF VON HOLZER, doing business as Firm Rudolf von Holzer, Frankfort-on-the-Main, Germany. Filed July 21, 1930

PETTYPET

For Typewriting Machines, Copying Machines, Fastening Machines and Polygraphs.
Claims use since June, 1930.

Ser. No. 307,591. FOSTER BROS. & CHATILLON CO., Fulton, N. Y. Filed Nov. 6, 1930.

4-POINT

For Knives Made Only of Base Metal.
Claims use since Aug. 22, 1930.

Ser. No. 311,038. LINK-BELT COMPANY, Chicago, Ill. Filed Feb. 13, 1931.

STRAIGHTLINE

For Sewage and Water Screens, Parts and Accessories, Activated Sludge Plants, Settling Tanks, Sludge Grit and Scum Collectors, Skimming Tanks, Grit Chambers and Grit Washers, Aerators, Driving and Controlling and Mechanical Accessories Exclusive of Electric Motors Therefor.
Claims use since Dec. 1, 1929.

Ser. No. 312,371. FIRTH-STERLING STEEL COMPANY, McKeesport, Pa. Filed Mar. 21, 1931.

NITRARD

For Upsetting Inserts, Punches, Mandrels, Plugs, Hobs, Burnishing Tools, Arbors, Glass Drills, Forming Tools, Jaw Punches, Head Tester Dies, Shank Tester Dies, Insert Dies, Hot Ending Dies, Face Plate Dies, Gauges, Sand-Blast Nozzles, Rollers, Rolls, Spindles, Die Rings, Valve Stems, Valve Heads, Seamer Rolls, Drills, Vanes, Gauge Ways, Cutting Tools, Upsetting Head Dies, Drawing Dies, Cartridge Dies, Punch Dies, Forming Dies, Tube Drawing Dies, Pressing Dies, Blanking Dies, Tube Dies, Briquetting Dies, Straightener Dies, Wire Drawing Dies, Compound Blanking and Drawing Dies, Rod Dies, Cold Drawing Dies, and Spindle Dies.
Claims use since Feb. 19, 1931.

Ser. No. 312,806. KLEENGLAS (1929) LTD., London, England. Filed Apr. 1, 1931.

Kleenglas MACHINE

No claim is made to the use of the word "Machine" apart from the trade-mark shown on the drawing.
For Machine for Washing, Drying, and Polishing Tumblers, Cups, and Like Hollow-Ware.
Claims use since Feb. 19, 1930.

Ser. No. 312,922. LINCOLN ENGINEERING COMPANY, St. Louis, Mo. Filed Apr. 3, 1931.

FLEX-O-MATIC

For Stationary Lubricating Apparatus of Automatic and Semi-Automatic Type for Greasing Machinery Comprising Pumps, Lubricant Injectors, Supply Tanks, and Auxiliaries Therefor.
Claims use since Dec. 19, 1930.

Ser. No. 313,458. ALBERT WESTPFAL, New York, N. Y. Filed Apr. 16, 1931.

Standpat X AW

For Knives, Shears, Scissors, Sharpening Steels, Dish Scrapers, Ice Picks, Kitchen Forks, Cake Turners, Can Openers, Potato Mashers, Apple Corers, and Kitchen and Table Knives, All Made of Base Metal.
Claims use since January, 1930.

Ser. No. 313,696. ABRAHAM SELSKY, Coney Island, N. Y. Filed Apr. 22, 1931.

Glasoil

For Glass Cutters.
Claims use since Apr. 8, 1931.

Ser. No. 313,745. THE GLENN L. MARTIN MOTORS COMPANY, Middle River and Baltimore, Md. Filed Apr. 24, 1931.

GLENN L. MARTIN

The trade-mark for which registration is sought, consists in a white star displayed in a blue field, said field being surrounded by a rim in red, and the name of applicant in blue and white overlying said star, field, and circle. The hatching lines used in the drawing indicate the colors red and blue.
For Engines.
Claims use since Mar. 26, 1931.

Ser. No. 313,755. THE SABIN MACHINE COMPANY, Cleveland, Ohio. Filed Apr. 24, 1931.

GUMFINGER

For Litter Gathering Implements—Namely, Lawn Rakes.
Claims use since Oct. 20, 1930.

Ser. No. 313,839. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Apr. 27, 1931.

Eastman

Applicant claims ownership of registrations Nos. 67,012, dated Jan. 14, 1908, and 67,187, dated Jan. 21, 1908, registry of both having been effected under the 10-year proviso of the 1905 Trade-Mark Act and both having been renewed.
For Rollers, Print Trimmers, Print Paddles, Etching Knives, and Tacking Irons.
Claims use since 1886 for rollers, since 1910 for print trimmers, since 1913 for print paddles, since 1914 for etching knives, and since 1918 for tacking irons under section 5b of the act of 1905, as amended in 1920.

Ser. No. 314,125. OUTING MANUFACTURING COMPANY, Elkhart, Ind. Filed May 2, 1931.

FLOAT-O

For Lubricating Devices for Internal Combustion Engines.
Claims use since June 15, 1929.

Ser. No. 314,466. SCHNEFEL BROS., INC., Newark, N. J. Filed May 12, 1931.

La Cross

For Tweezers for All Purposes Except Dental, Manicure and Surgical Use; Barber Scissors, House Scissors, Pocket Scissors, Embroidery Scissors, Desk Sets Consisting of Scissors and Steel Letter Openers Mounted in Leather Sheaths, Letter Openers of Base Steel, and Scissor Sets.
Claims use since 1922.

CLASS 24

Laundry Appliances and Machines

Ser. No. 313,130. GENERAL ELECTRIC COMPANY, Schenectady, N. Y. Filed Apr. 9, 1931.



For Laundry Washing Machines and Ironing Machines.
Claims use since December, 1930.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 301,323. AGFA ANSCO CORPORATION, Binghamton, N. Y. Filed May 27, 1930.

ACTIV ANSCO

For Photographic Cameras.
Claims use since Jan. 1, 1930.

Ser. No. 301,324. AGFA ANSCO CORPORATION, Binghamton, N. Y. Filed May 27, 1930.

MASTER QUICK

The word "Quick" is disclaimed.
For Photographic Cameras.
Claims use since Jan. 1, 1930.

Ser. No. 301,327. AGFA ANSCO CORPORATION, Binghamton, N. Y. Filed May 27, 1930.

INDIATONE

For Sensitized Photographic Paper.
Claims use since Nov. 1, 1929.

Ser. No. 308,070. INTERNATIONAL TIME RECORDING COMPANY OF NEW YORK, Endicott, N. Y. Filed Nov. 19, 1930.

ELECTROPRINT

For Time Stamps.
Claims use since May 23, 1930.

Ser. No. 313,759. UHLEMANN OPTICAL CO., Chicago, Ill. Filed Apr. 24, 1931.

ARISTON

For Lenses for Eyeglasses and Spectacles.
Claims use since Mar. 18, 1929.

Ser. No. 314,100. RALPH C. COXHEAD CORPORATION, New York, N. Y. Filed May 2, 1931.

MATHEMATON

For Calculating and Adding Machines.
Claims use since Mar. 11, 1930.

Ser. No. 314,593. THE WALMAN OPTICAL CO., Minneapolis, Minn. Filed May 14, 1931.

WALTEX

For Optical Lenses.
Claims use since Mar. 1, 1931.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 313,077. DIAMOND SILVER COMPANY, Lambertville, N. J. Filed Apr. 8, 1931.



For Silver Plated Table Ware.
Claims use since Feb. 2, 1931.

Ser. No. 313,360. INTERNATIONAL SILVER COMPANY, Meriden, Conn. Filed Apr. 15, 1931.

VICTOR SANISIL

For Silver-Plated Flat-Ware and Hollow-Ware for Table and Counter Use and the Like.
Claims use since Mar. 30, 1931.

CARNEGIE LIBRARY OF ATLANTA

CLASS 31

Filters and Refrigerators

Ser. No. 314,540. ALL-AMERICAN MOHAWK CORPORATION, Chicago, Ill., and North Tonawanda, N. Y. Filed May 14, 1931.

MOHAWK

For Refrigerators of All Types, Refrigerating Apparatus and Ice Boxes, Including Electric Refrigerators and Refrigerator Parts.
Claims use since Apr. 18, 1931.

Ser. No. 314,566. THE ILLINOIS MOULDING COMPANY, Chicago, Ill. Filed May 14, 1931.

LA SALLE

For Refrigerators.
Claims use since Apr. 1, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 314,691. THE GENERAL FIREPROOFING COMPANY, Youngstown, Ohio. Filed May 18, 1931.



For Office, Store, Hospital and Bank Furniture—Namely, Files, Filing Cabinets, Transfer Cases, Sectional Files, File Drawer Partitions, Filing Cabinet Bases, Kitchen Cupboards, Storage Cabinets, Map Cases, Transfer Files, Book Cases, Card Files, Lockers, Cash Drawers, Desks, Sloping Drawer Partitions, Tables, Card Record Desks, Library Shelving, Store Shelving, Tire Shelves, Tire Racks, Wheel Racks, Shelving Trucks, Counters, Display Racks, Display Cabinets, Display Counters, Tables of Steel and Glass, Fender Racks, Spring Racks, Bar Racks, Pipe Racks, Tool Racks, Milling Cutter Racks, Voting Booths, Laboratory Tables, Laboratory Cupboards, Wardrobes, Hospital Cabinets, Hospital Desks, Hospital Tables.
Claims use since Apr. 29, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 313,004. RICHMOND RADIATOR COMPANY, New York, N. Y. Filed Apr. 6, 1931.

FLOORLINE

For Radiators for Use in Connection with Steam, Hot-Water, Vapor, Vacuum, or Other Heating Systems.
Claims use since July, 1929.

Ser. No. 313,251. SUN HEAT AUTOMATIC OIL BURNER CORP., New York, N. Y. Filed Apr. 11, 1931.

SUNHEAT

The applicant does not claim the word "Heat," but claims only the word "Sun" in connection with the automatic oil burner.
For Automatic Oil Burners.
Claims use since Jan. 2, 1930.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 309,094. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 17, 1930.

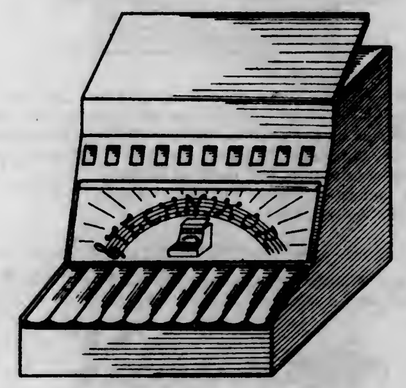
BLACK-ACE

For Canvas Belting.
Claims use since January, 1930.

CLASS 36

Musical Instruments and Supplies

Ser. No. 313,388. EUGENE ROTH, Antwerp, Belgium. Filed Apr. 15, 1931.

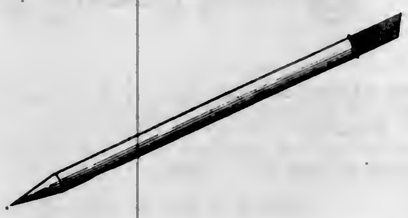


No claim is made to the representation of a keyboard exercising machine for the fingers apart from the mark shown in the drawing.
For Keyboard Devices for Exercising the Fingers in Teaching Music.
Claims use since May, 1928.

CLASS 37

Paper and Stationery

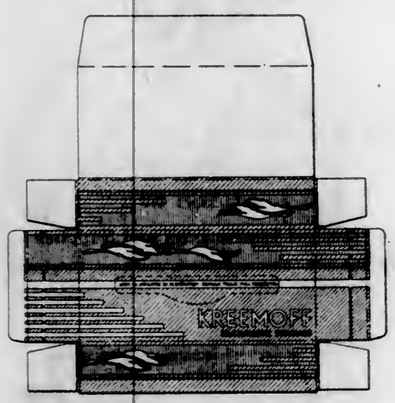
Ser. No. 278,176. KOH-I-NOOR BLEISTIFTFABRIK L. & C. HARDTMUTH, Budweis, Czechoslovakia. Filed Jan. 19, 1929.



The trade-mark consists of arbitrarily coloring approximately an inch at one end of the pencil red, the end of said red-colored section being cut at an angle to form a bevel. No claim is made to the representation of a pencil apart from the mark shown and described.

For Lead Pencils.
Claims use since 1899.

Ser. No. 309,999. VELDOWN COMPANY, INC., New York, N. Y. Filed Jan. 15, 1931.



The drawing is lined for pink and grey. No claim is made to the exclusive right to the use of the words "Open as Indicated by Perforation. Remove Tissue. Pull Toward You," nor "Cleansing Tissues," nor to the representation of a carton apart from the mark as shown.

For Cleansing Tissues Formed of Paper.
Claims use since Nov. 1, 1930.

Ser. No. 313,169. GOLDSMITH BROS., New York, N. Y. Filed Apr. 9, 1931.

PENCO

GOLDSMITH BROS. N.Y.

The words "Goldsmith Bros. N. Y." are hereby disclaimed in the statement apart from the mark shown.

For Writing and Typewriting Paper.
Claims use since Feb. 28, 1931.

Ser. No. 313,563. SCRIPTO MANUFACTURING COMPANY, Atlanta, Ga. Filed Apr. 20, 1931.

Sharpont

For Stationery Items—Namely, Pencils, Leads, and Rubber Erasers.
Claims use since Apr. 9, 1931.

Ser. No. 314,310. WESTFIELD RIVER PAPER COMPANY, INC., Russell, Mass. Filed May 7, 1931.

RIVER SHEEN

For Embossed Papers.
Claims use since Feb. 11, 1931.

Ser. No. 314,384. UNITED STATES ENVELOPE COMPANY, Springfield, Mass. Filed May 9, 1931.

Penguin Post

For Correspondence Paper and Envelopes.
Claims use since Apr. 14, 1931.

CLASS 38

Prints and Publications

Ser. No. 275,905. MEDIA RECORDS, INC., New York, N. Y. Filed Nov. 27, 1928.



The term "Records" is disclaimed apart from the mark shown.

For Printed Records, Bulletins, and Reports on Business and Advertising, Published Periodically.
Claims use since Jan. 1, 1928.

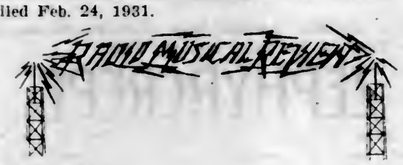
Ser. No. 307,340. FRED G. KNAPP, Lakewood, Ohio. Filed Oct. 29, 1930.

Mobilmap

The lining shown on the drawing is not essential to the mark and is for the purpose of shading only.

For Touring Maps.
Claims use since July 2, 1930.

Ser. No. 311,406. IRWIN P. WENER, doing business as Charlotte-Irving and Company, New Haven, Conn. Filed Feb. 24, 1931.



For Sheet Music.
Claims use since Dec. 1, 1930.

Ser. No. 312,380. MACFADDEN PUBLICATIONS, INC., New York, N. Y. Filed Mar. 21, 1931.

TRUE MYSTERY STORIES

For a Monthly Magazine.
Claims use since Mar. 11, 1931.

Ser. No. 313,076. DAILY TRADE RECORD CO. OF NEW YORK, New York, N. Y. Filed Apr. 8, 1931.

Fairchild Publications

•

A SELLING POWER of BILLIONS

Applicant disclaims the words "Fairchild Publications" apart from the mark shown.

For Daily Newspaper.
Claims use since Apr. 4, 1931.

Ser. No. 313,190. INTERNATIONAL PUBLICATIONS, INC., New York, N. Y. Filed Apr. 10, 1931.

THE AMERICAN ARCHITECT

For Monthly Publication.
Claims use since Jan. 1, 1876.

Ser. No. 313,952. ARMSTRONG CORK COMPANY, Lancaster, Pa. Filed Apr. 29, 1931.

THE ARMSTRONG INSULATOR

For Magazine Published Bi-Monthly.
Claims use since Apr. 13, 1931.

Ser. No. 314,007. NICHOLSON & MILLER, Fort Worth, Tex. Filed Apr. 30, 1931.



For Cartoon Strips.
Claims use since Feb. 12, 1931.

Ser. No. 314,180. TEXAS COTTON CO-OPERATIVE ASSOCIATION, Dallas, Tex. Filed May 4, 1931.

Texas Co-operative News

For Periodical Issued Semi-Monthly.
Claims use since May 15, 1930.

Ser. No. 314,183. VITAPRINT PROCESS COMPANY, Chicago, Ill. Filed May 4, 1931.

Vitaprints

For Prints from Engraved Plates, Prints from Etched Plates, Prints from Wood Blocks, and Lithographic Prints, and Show Cards, Posters, and Display Cards.
Claims use since May 15, 1930.

Ser. No. 314,403. FAWCETT PUBLICATIONS, INC., Minneapolis, Minn. Filed May 11, 1931.

GUN SQUAD STORIES

For Magazine Published Monthly.
Claims use since Mar. 1, 1931.

Ser. No. 314,472. TIDE, INC., New York, N. Y. Filed May 12, 1931.

TIDE

For Publication.
Claims use since January, 1931.

Ser. No. 314,649. THE JOURNAL FOR THE PIECE GOODS BUYER, INC., New York, N. Y. Filed May 16, 1931.

THE PIECE GOODS PURCHASER

For Magazine Published Monthly.
Claims use since Mar. 20, 1931.

Ser. No. 314,654. NORWEGIAN LUTHERAN CHURCH OF AMERICA, Minneapolis, Minn. Filed May 16, 1931.

LUTHERAN HERALD

For Periodical.
Claims use since Jan. 6, 1931.

Ser. No. 314,675. AMERICAN ASSOCIATION OF PERSONAL FINANCE COMPANIES, Washington, D. C. Filed May 18, 1931.

PERSONAL FINANCE NEWS

For Monthly Publication.
Claims use since January, 1930.

CLASS 39

Clothing

Ser. No. 296,813. LEHIGH SILK HOSIERY MILLS, INC., New York, N. Y. Filed Mar. 4, 1930.

ZEPHYRTWEED

No claim is made to exclusive use of the word "Tweed" except as associated with the word "Zephyr."
For Hosiery.
Claims use since Jan. 1, 1930.

Ser. No. 299,663. LEHIGH SILK HOSIERY MILLS, INC., New York, N. Y. Filed Apr. 29, 1930.

ZEPHYRCREPE

No claim is made to the exclusive use of the word "Crepe" except as associated in the instant mark with the word "Zephyr".
For Hosiery.
Claims use since Apr. 1, 1930.

Ser. No. 301,248. CONSOLIDATED MILLINERY COMPANY, Chicago, Ill. Filed May 26, 1930.

Harry-Lee Hat

No claim being made to the word "Hat".
For Ladies', Misses', and Children's Hats.
Claims use since Nov. 18, 1929.

Ser. No. 301,277. JOSEPH R. MERMELSTEIN, doing business as Blossom Hat Co., New York, N. Y. Filed May 26, 1930.

Janglad

For Ladies', Misses', and Children's Hats.
Claims use since Dec. 2, 1929.

Ser. No. 306,566. HOLLAND SHOE COMPANY, Holland, Mich. Filed Oct. 9, 1930.



The words "Too Tuff to Scuff" are disclaimed apart from the mark shown.
For Leather Boots and Shoes.
Claims use since Nov. 15, 1929.

Ser. No. 308,159. FRANC-STROHMENGER & COWAN, INC., New York, N. Y. Filed Nov. 21, 1930.

CUSHION

For Neckties.
Claims use since Nov. 18, 1930.

Ser. No. 309,692. MEYER L. KAPLAN, doing business as Kaplan & Son, Los Angeles, Calif. Filed Jan. 7, 1931.

Sport-rite

No claim being made to exclusive right to the word "Sport" apart from the other features of the mark.
For Ladies', Misses', Juniors', and Children's Dresses, Coats, Suits, and Skirts.
Claim use since Oct. 30, 1930.

Ser. No. 310,187. REAL SILK HOSIERY MILLS, INC., Indianapolis, Ind. Filed Jan. 20, 1931.

HEM-GUARD

No claim is made to exclusive rights in the terms "Hem" and "Guard" apart from the mark as shown.
For Hosiery.
Claims use since Sept. 15, 1930.

Ser. No. 310,374. AARON GLICKSMAN, doing business as A. Glicksman & Co., Chicago, Ill. Filed Jan. 26, 1931.

MASTER

For Leather Findings—Namely, Composition Taps, Wood Heels, Insoles, Heel Linings, and Heel Grippers.
Claims use since Dec. 1, 1929.

Ser. No. 311,578. THE TOLEDO GLOVE MANUFACTURING COMPANY, Toledo, Ohio. Filed Feb. 28, 1931.



No claim is made to the word "Brand" apart from the representation shown.
For Gloves and Gauntlets Made from Fabrics and Combinations of Fabric and Leather.
Claims use since Dec. 8, 1930.

Ser. No. 312,385. EDGAR MOVSESIAN, Haverhill, Mass. Filed Mar. 21, 1931.



For Shoes Made of Leather, Fabric, or Rubber and Combinations of Leather, Fabric, and Rubber.
Claims use since Apr. 11, 1930.

Ser. No. 312,861. PECK SHOE COMPANY, Worcester, Mass. Filed Apr. 2, 1931.

The Royal Worcester

Applicant owns registration No. 36,246 for the trademark "Royal Worcester."
For Shoes of Leather.
Claims use since beginning of 1901.

Ser. No. 313,028. CORBETT & NORTH, INC., New York, N. Y. Filed Apr. 7, 1931.

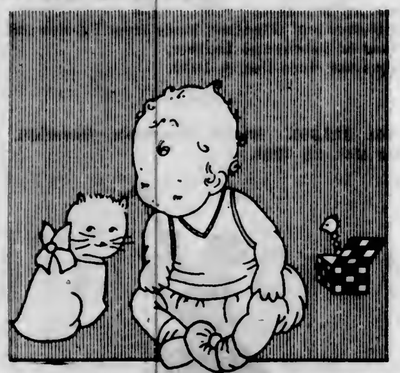
Ralma SPORTSWEAR

No claim being made to the exclusive use of the words "A Product Sportswear," apart from the mark as shown in the drawing.

For Women's Clothing, Particularly Sweaters, Blouses, Outer Skirts, Bloomers, Brassières, Union-Suits, Step-In Underdrawers, Pajamas, Beach Pajamas and Bathing Suits.

Claims use since Mar. 1, 1931.

Ser. No. 313,279. BOSTON KNITTING MILLS, INC., Newton, Mass. Filed Apr. 13, 1931.



The lining shown on the drawing indicates blue shading lines that appear on the trade-mark as actually used.

For Boys', Infants', Misses', Ladies' Knit or Woven Underwear, Including Shirts, Bands, Panties, Shorts, Vests, Union Suits, Step-In Suits, and Pajamas.

Claims use since 1926.

Ser. No. 313,292. HAHN DEPARTMENT STORES, INC., Wilmington, Del. Filed Apr. 13, 1931.

Charmode
COMBINATION LAST
FASHION ARCH

Applicant disclaims the right to the exclusive use of the descriptive expressions "Combination Last" and "Fashion Arch" except in the association shown.

For Shoes Made of Leather, Part Fabric and Part Leather, Part Leather and Part Rubber Composition.

Claims use since Jan. 25, 1931.

Ser. No. 313,386. M. L. PARKER COMPANY, Davenport, Iowa. Filed Apr. 15, 1931.

M L P Parklaine Fashions ML MODERNE
M. L. PARKER CO.
DAVENPORT

The descriptive word "Fashions" and the geographical term "Davenport" are disclaimed apart from the mark as shown on the drawing.

For Women's Coats, Suits and Dresses.

Claims use since Jan. 20, 1931.

Ser. No. 313,649. DIAMOND SHOE CORPORATION, New York, N. Y. Filed Apr. 22, 1931.

"TOWN-MODE"

Applicant disclaims the right to the exclusive use of the word "Mode," except in association with the word "Town" as shown in the specimens filed.

For Women's and Men's Shoes Made Wholly or in Part of Leather and Fabric.

Claims use since Mar. 8, 1931.

Ser. No. 313,693. GOTHAM SILK HOSIERY COMPANY, INC., New York, N. Y. Filed Apr. 22, 1931.

ADJUSTABLES

For Hosiery.

Claims use since Mar. 9, 1931.

Ser. No. 313,707. EAGLE CLOTHES, New York, N. Y. Filed Apr. 23, 1931.



The lining shown on the drawing indicates shading.

For Clothing for Men and Young Men—Namely, Top Coats and Overcoats.

Claims use since Feb. 27, 1931.

Ser. No. 313,748. NEW IDEA INFANTS WEAR CO., INC., New York, N. Y. Filed Apr. 24, 1931.

MUSTWIN

For Apparel for Men, Women, and Children—Namely, Hats, Caps, Hosiery, Sweaters, Bathing Suits, Coats, Dresses, Skirts for Outer and Under Wear, Drawers, Step-Ins in the Nature of Underdrawers, Bloomers, Robes, Combinations in the Nature of Combined Brassières and Under Pants or Underdrawers, Waists, Nightgowns, Pajamas and Shirt Waists.

Claims use since Nov. 2, 1930.

Ser. No. 313,756. JACOB SIEGEL, doing business as Jacob Siegel Company, Philadelphia, Pa. Filed Apr. 24, 1931.

ALPACUNA

For Men's Topcoats, Overcoats, and Suits.

Claims use since May 10, 1930.

Ser. No. 313,841. EASTMAN KODAK COMPANY, Rochester, N. Y. Filed Apr. 27, 1931. Under section 5b of the act of 1905 as amended in 1920.

Eastman

For Laboratory Aprons.

Claims use since 1910.

Ser. No. 313,999. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Apr. 30, 1931.



ALPINE DOWNS

For Coats, Vests, Pants, and Overcoats for Men and Boys.

Claims use since July 1, 1930.

Ser. No. 314,000. FASHION PARK ASSOCIATES, INC., Rochester, N. Y. Filed Apr. 30, 1931.

Kal-Kashan

For Coats, Vests, Pants, and Overcoats for Men and Boys.

Claims use since Apr. 1, 1930.

Ser. No. 314,018. ROSENBLATT & HOLLUB, INC., New York, N. Y. Filed Apr. 30, 1931.

Flower Garden

For Ladies' Dresses.

Claims use since Apr. 17, 1931.

Ser. No. 314,023. VAN RAALTE COMPANY, New York, N. Y. Filed Apr. 30, 1931.

Woolywyns

For Women's Underwear Made of Knitted Fabric.

Claims use since Apr. 20, 1931.

Ser. No. 314,164. JOSEPH KUPFER, doing business as J. Kupfer & Co., New York, N. Y. Filed May 4, 1931.

KUPSHIRE

For Ladies' Outer Coats of Silk, Rayon, Wool, and/or Combinations Thereof, With or Without Fur Trimming.

Claims use since Nov. 1, 1929.

Ser. No. 314,238. OTTO HEIN, New York, N. Y. Filed May 6, 1931.

Laxatmud

For Rubber Hosiery Protector.

Claims use since Aug. 5, 1929.

Ser. No. 314,256. THE STROUSE-BAER CO., INC., Baltimore, Md. Filed May 6, 1931.

"Gymy"

For Gymnasium Suits for Men, Women, Boys, and Girls, and Shorts, Running Trunks, Gymnasium Shirts, Bloomers, and Middies for Girls, Boys, Men, and Women.

Claims use since May 1, 1931.

Ser. No. 314,278. DONNELLY GARMENT COMPANY, Kansas City, Mo. Filed May 7, 1931.

Don Alls

For Women's and Children's Dresses, Frocks, Aprons, Service Uniforms and Aprons, Smocks, Beach, Lounging, and House Pajamas; Housedresses and Negligees.
Claims use since September, 1929.

Ser. No. 314,341. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y. Filed May 8, 1931.

Gaymode

For Men's, Women's, and Children's Hosiery.
Claims use since Apr. 13, 1931.

Ser. No. 314,355. AUGUSTA KNITTING CORPORATION, Utica, N. Y. Filed May 9, 1931.

AUGUSTA WINTERETTS

For Women's Underwear.
Claims use since Mar. 20, 1931.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 303,031. MCKESSON & ROBBINS, INCORPORATED, Bridgeport, Conn. Filed July 1, 1930.

St. Regis

For Hard Rubber Combs.
Claims use since May 2, 1930.

Ser. No. 307,189. THE WARREN FEATHERBONE COMPANY, Three Oaks, Mich. Filed Oct. 25, 1930.

"Warren's"

For Bias Fold Tape, Blanket Binding, Braids, Bloomer Elastic, Collar Supports, Featherbone, Lingerie Ribbons in Cut Lengths, Rick Rack and Trimmings Including Edgings, Frillings, and Decorative Tapes.
Claims use on bias fold tape since July, 1926; on blanket binding since Oct. 3, 1928; on braids since May, 1928; on bloomer elastic since June, 1924; on collar supports since June 5, 1928; on featherbone since July, 1925; on lingerie ribbons since Mar. 2, 1929; on rick rack since March, 1925; and on trimmings, June, 1929. Applicant is the owner also of United States trade-mark registrations, No. 154,851 dated May 9, 1922, and No. 161,031 dated October 31, 1922.

Ser. No. 312,862. RHEINISCHE GUMMI- UND CELLULOID-FABRIK, Mannheim-Neckarau, Germany. Filed Apr. 2, 1931.

COSMOS

For Combs Not Made of Precious Metal.
Claims use since May 16, 1904.

Ser. No. 313,041. I. B. KLEINERT RUBBER COMPANY, New York, N. Y. Filed Apr. 7, 1931.

SOFTEX

For Dress Shields.
Claims use since March, 1927.

Ser. No. 313,084. AARON A. HURWITZ, doing business as A. A. Hurwitz, Boston, Mass. Filed Apr. 8, 1931.

Sanaline

For Hat Linings.
Claims use since Dec. 18, 1930.

Ser. No. 313,356. UNITED LACE & BRAID MANUFACTURING CO., Providence, R. I. Filed Apr. 14, 1931.

Beaucrin

For Braids of Cotton, Linen, Silk, and Rayon.
Claims use since Jan. 31, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 313,740. LEXINGTON WORSTED MILLS, INC., Central Falls, R. I. Filed Apr. 24, 1931.



For Sample Lengths of Various Yardage, Half Pieces, and Full Pieces of Worsted Cloth.
Claims use since January, 1928.

Ser. No. 313,826. L. BAMBERGER & Co., Newark, N. J. Filed Apr. 27, 1931.

"Under the China-berry Tree"

For Bunting and Blankets.
Claims use since Nov. 1, 1930.

Ser. No. 313,942. TRIPPE, BARKER & Co., New York, N. Y. Filed Apr. 28, 1931.

VELORIC

For Piece Goods of Cotton and Rayon and Mixtures of These Materials.
Claims use since Mar. 9, 1931.

Ser. No. 313,944. RAPHAEL WEILL & COMPANY, San Francisco, Calif. Filed Apr. 28, 1931.

NAME-O-GRAM

For Handkerchiefs.
Claims use since Jan. 15, 1926.

Ser. No. 314,095. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed May 2, 1931.

Kidtex

For Pile Fabrics in the Piece.
Claims use since Apr. 27, 1931.

Ser. No. 314,096. SIDNEY BLUMENTHAL & Co. INC., New York, N. Y. Filed May 2, 1931.

Flurritex

For Pile Fabrics in the Piece.
Claims use since Apr. 27, 1931.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 311,041. MAX NEGWER, Potsdam, Germany. Filed Feb. 13, 1931.

OHROPAX

For the Following Articles Which are Used for Therapeutic, Hygienic, or Corrective Purposes—Namely, Wind Protection Devices for Ears, Water Protection Devices for Ears, Sound Absorbers for Ears, Ear Protection Devices of Wool, Cotton, or Similar Material, Antiseptically Prepared.
Claims use since Dec. 27, 1911.

Ser. No. 311,332. FRANK HATTON, Miami, Fla. Filed Feb. 21, 1931.

PAL

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Feb. 26, 1930.

Ser. No. 312,284. NATIONAL DENTAL LABORATORY, Baltimore, Md. Filed Mar. 18, 1931.

presidenture
fit for a President

For Artificial Dentures.
Claims use since December, 1930.

Ser. No. 312,988. HARRISON-NOYES CHEMICAL CORP., Long Beach, Calif. Filed Apr. 6, 1931.

K-2 OL

For Attachment or Clasp for Dental Plates and Mould Boxes for Dental Inlays or the Like.
Claims use since Feb. 1, 1930.

Ser. No. 313,299. KOTEX COMPANY, Chicago, Ill. Filed Apr. 13, 1931.



The lining of the background represents the color dark blue or purple. The words "Genuine" and "Chicago, Ill., U. S. A.," and the representation of the container are hereby disclaimed apart from the mark as shown on the drawing.

For Sanitary Napkins.

Claims use since Aug. 15, 1919.

Ser. No. 313,472. HAHN DEPARTMENT STORES, INC., Wilmington, Del. Filed Apr. 17, 1931.

NUMBER THREE

For Sanitary Napkins.

Claims use since Feb. 8, 1930.

Ser. No. 313,596. JULIUS W. GOLDSMITH, doing business as Empire Shield Company, New York, N. Y. Filed Apr. 21, 1931.

EMSCO

For Sanitary Step-Ins, Sanitary Bloomers, Sanitary Aprons, Sanitary Belts.

Claims use since Nov. 15, 1930.

Ser. No. 314,044. THE DEANE PLASTER CO., Yonkers, N. Y. Filed May 1, 1931.

STRAP-AID

"STRAP IT WITH STRAPAID"

For Non-Medicated Adhesive Bandage Dressing.

Claims use since Apr. 22, 1931.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 297,668. K. HEINRICHS, Albany, N. Y. Filed Mar. 21, 1930.

HEINRICHS HIT THE SPOT BEVERAGES

No claim is made to the exclusive use of the word "Beverages" apart from the other features of the mark.

For Carbonated, Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks.

Claims use since Nov. 15, 1928.

Ser. No. 307,254. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Oct. 28, 1930.

Gold Bar

For Fruit Juices Sold as Soft Drinks, and Ginger Ale.

Claims use since 1918 on fruit juices and since Mar. 18, 1930, on ginger ale.

Ser. No. 307,261. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Oct. 28, 1930.

SUN-KIST

For Fruit Juices Other Than Citrus Fruit Juices Sold as Soft Drinks.

Claims use since Apr. 9, 1912.

Ser. No. 307,262. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Oct. 28, 1930.

SUN-KIST

The lining on the drawing indicates the color red.

For Fruit Juices Other Than Citrus Fruit Juices Sold as Soft Drinks.

Claims use since Apr. 9, 1912.

Ser. No. 314,702. LOS ANGELES BREWING CO., Los Angeles, Calif. Filed May 18, 1931.

MAKES THE PARTY

For Nonalcoholic, Maltless, Noncereal Beverages Sold as Soft Drinks and Syrups, Extracts, and Concentrates Used in Preparing the Same.

Claims use since Apr. 20, 1931.

Ser. No. 314,778. SILURIAN WAUKESHA WATER DISTRIBUTING CO., Milwaukee, Wis. Filed May 19, 1931.

SILCO

For Nonalcoholic, Noncereal, Maltless Carbonated Beverages, Sold as Soft Drinks and Syrups and Extracts for Making Same.

Claims use since March, 1924.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 260,449. THE E. KAHN'S SONS COMPANY, Cincinnati, Ohio. Filed Jan. 21, 1928. Under 10-year proviso.

Kahn's

For Fresh, Pickled, Smoked, and Cured Meats—Namely, Sliced Beef, Cottage Style Butts, Skinned Ham, Selected Bacon, Meat (i. e., Fresh Beef, Fresh Pork, Fresh Veal, Fresh Lamb, Fresh Mutton), Flat Boneless Cooked Ham, Ham, Dried Beef, Cooked Boneless Ham, Calas, Cooked Trimmed Ham, Cooked Boneless Shoulder, Bacon Belly, Shoulder, Lard, Bakers' Pure Lard, Open Kettle Rendered Lard, Bacon, Sausage, Cooked Ham, Picnic, Pork Tenderloin, Pig Feet, Meat Loaf, Tongue, Eggs, and Dressed Poultry.

Claims use since Jan. 1, 1885.

Ser. No. 266,045. PAUL H. RAYMER, doing business as The New Yorkers Company, New York, N. Y. Filed May 7, 1928.

NEW YORKERS

For Chewing Gum.

Claims use since October, 1925.

Ser. No. 297,120. BLUM BROS., Jersey City, N. J. Filed Mar. 11, 1930.

TWO PINES

For Olive Oil.

Claims use since Nov. 13, 1929.

Ser. No. 299,014. EUGENE J. PETROSEMOLO, New York, N. Y. Filed Apr. 17, 1930.

ITALIAN BEAUTY

For Canned Tomatoes.

Claims use since Mar. 1, 1930.

Ser. No. 302,824. THE INTER-STATE GROCER COMPANY, Joplin, Mo. Filed June 25, 1930.

BIG HORN



For Raisins, Dried Pears, Sauer Kraut, Canned Carrots, Canned Hominy, Pure Maple Syrup, Cane and Maple Syrup, Crystal White Corn Syrup, Honey, Preserves, Vinegar, Mustard, Peanut Butter, Olives, Sweet Relish, Salad Dressing, Pepper Sauce, Olive Oil, French Dressing, Canned Pimientos, Canned Fruit Salad, Canned Grape Fruit, Rice, Macaroni, Spaghetti, Lemon Extract for Food Flavoring Purposes, Vanilla Extract for Food Flavoring Purposes, Evaporated Milk, Jelly Dessert, Corn Flakes, Shelled Popcorn, Dried Beans, Spices, Canned Crabmeat, Shelled Nuts, Nuts in the Shell, Kraut Juice, Tomato Juice, Cocoa, Candy, and Sardines.

Claims use on raisins, pears, kraut, carrots, hominy, syrup, and honey since Aug. 4, 1909; on preserves, vinegar, mustard, peanut butter, olives, and relish since July 24, 1912; on salad dressing, pepper sauce, olive oil, and French dressing since Sept. 4, 1913; on pimientos since Aug. 2, 1917; on fruit salad and grape fruit since July 29, 1922; on rice since Jan. 1, 1923; on macaroni and spaghetti since Dec. 4, 1923; on lemon extract and vanilla extract since Jan. 1, 1925; on milk since July 26, 1926; on jelly dessert since Oct. 2, 1926; on corn flakes since Nov. 5, 1926; on popcorn and dried beans since Nov. 12, 1926; on spices since Jan. 10, 1927; on crabmeat since Feb. 12, 1927; on shelled nuts and nuts in the shell since Dec. 1, 1927; on kraut juice, tomato juice, cocoa since Jan. 1, 1929; and on candy and sardines since Jan. 1, 1930.

Ser. No. 306,593. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif. Filed Oct. 10, 1930.

CALAVO

For Avocado Pulp as a Base for Shortening or Flavoring Foods.

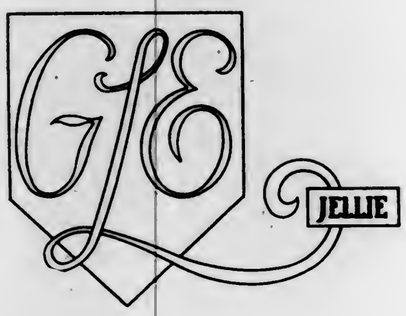
Claims use since 1926.

Ser. No. 308,339. P. PASTENE & Co., INC., Boston, Mass. Filed Nov. 26, 1930. Under 10-year proviso.

PASTENE

For Canned Fruits, Canned Vegetables, Canned Milk; Vegetables (Canned, Dried, Preserved, and Pickled); Canned Vegetables with Fish, Canned Beans, Canned Soups, Canned and Dried Fruits, Canned Fish and Oysters, Canned Spawn; Fish (Salted, Smoked, and Preserved in Oil); Fish and Alimentary Pastes, Olive Oil, Salad Oil, Mayonnaise, Hors D'Oeuvre; Olives (Ripe, Unripe, Dried, and Baked); Olive Paste, Olive Cake, Pickles, Pimientos, Rice; Vegetable, Pickle, and Hot Relishes, Prepared Condiment of Spices, Spices, Vinegar, Sugar, Dried Herbs for Flavoring Purposes, Nuts (Both Shelled and Unshelled and in Their Natural State), Pine Kernels, Jellies, Marmalades, Biscuits, Alimentary Paste Products, Coffee, Tea, Cheese, Fruit Syrup for Use in Preparing Foods.
Claims use since 1874.

Ser. No. 310,863. G L E CANDY CORPORATION OF AMERICA, Chicago, Ill. Filed Feb. 9, 1931.



No claim is made to the word "Jellie" apart from the mark as shown.
For Candy.
Claim use since Dec. 1, 1930.

Ser. No. 311,478. M. E. HORTON, INC., Washington, D. C. Filed Feb. 26, 1931.

LYRIC

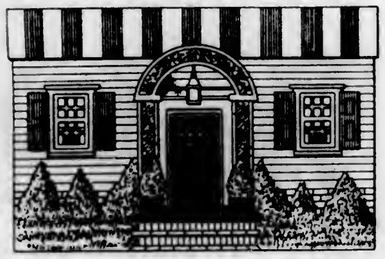
For Canned Vegetables, Canned Fruits, Flavoring Extracts for Foods, Spices, Tomato Catsup, Fruit Jelly, Macaroni, Spaghetti, and Peanut Butter.
Claims use since 1928.

Ser. No. 311,683. LYNN A. HAWKINS, doing business as The Silver-Forest Fruit and Stock Farms, Silver Creek and Forestville, N. Y. Filed Mar. 3, 1931.



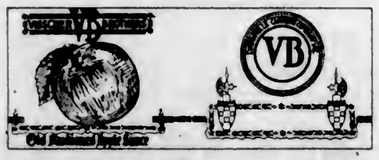
For Fresh Milk and Live Cattle.
Claims use since Jan. 1, 1925.

Ser. No. 312,271. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Mar. 18, 1931.



The lining on the drawing is not indicative of or restrictive to any particular colors.
For Tea.
Claims use since 6th day of July, 1928.

Ser. No. 312,441. LYNDONVILLE CANNING COMPANY, INC., Lyndonville, N. Y. Filed Mar. 23, 1931.



No claim is made to the words "Old Fashioned Apple Sauce" and the pictorial representation of an apple or to the outline of the label apart from the mark as shown.
For Canned Apple Sauce.
Claims use since 1920.

Ser. No. 312,932. SUPERIOR PRODUCE DISTRIBUTORS, Los Angeles, Calif. Filed Apr. 3, 1931.

TELEGRAM

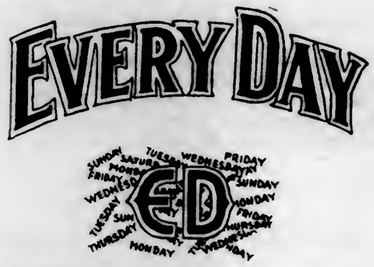
For Fresh Citrus Fruits, Fresh Vegetables.
Claims use since Nov. 14, 1930.

Ser. No. 312,991. TOM HUSTON FROSTED FOODS, INC., Columbus, Ga. Filed Apr. 6, 1931.

PEACH POP

No claim is made to the word "Peach" apart from the mark shown in the drawing.
For Frozen Confection.
Claims use since Jan. 30, 1931.

Ser. No. 313,383. NESTLE'S MILK PRODUCTS, INC., New York, N. Y. Filed Apr. 15, 1931.



For Evaporated Milk.
Claims use since Mar. 1, 1931.

Ser. No. 313,451. J. HUNGERFORD SMITH CO., Rochester, N. Y. Filed Apr. 16, 1931.

HAPPY JACK

For Coating Material for Ice Cream Confections Made from Vegetable Fats.
Claims use since Apr. 4, 1931.

Ser. No. 313,667. I. C. PARKER, Fort Worth, Tex. Filed Apr. 22, 1931.



The word "Frozen" and the representation of the goods are disclaimed apart from the other features of the mark shown in the drawing.
For Ice Cream Confection.
Claims use since Mar. 11, 1931.

Ser. No. 313,776. T. A. FAULDS CO., INC., Boston, Mass. Filed Apr. 25, 1931.



The portrait being fanciful, and the words "Kake-Mix" so far as they have any descriptive significance being disclaimed apart from the mark shown.
For Food Product for the Use of Bakers, Consisting of a Mixture of Flour, Baking Powder, and Other Suitable Ingredients for Use in Producing a Variety of Cakes.
Claims use since Jan. 26, 1925.

Ser. No. 313,874. THE VONEIFF-DRAYER COMPANY, Baltimore, Md. Filed Apr. 27, 1931.

Cheerio

For Candies and Assorted Chocolates.
Claims use since August, 1930.

Ser. No. 313,905. COMMANDER-LARABEE CORPORATION, Minneapolis, Minn. Filed Apr. 28, 1931.

Sunfed

For Wheat Flour.
Claims use since Dec. 17, 1930.

Ser. No. 314,068. ORBIT LISTERATED GUM COMPANY, Chicago, Ill. Filed May 1, 1931.

LUCKY PENNY

The word "Penny" is disclaimed apart from the mark as shown.
For Chewing Gum.
Claims use since Apr. 22, 1931.

Ser. No. 314,295. JOHN L. PRATT, New York, N. Y., and Fredericksburg, Va. Filed May 7, 1931.

SHERWOOD FOREST FARM

For Fresh Apples.
Claims use since Nov. 21, 1930.

Ser. No. 314,676. PUBLIC SERVICE COMMUNITY KITCHENS, INC., New York, N. Y. Filed May 18, 1931.

CHIN LEE'S

For Chow Mein, Chop Suey, Chinese Rice Cakes; Condiments—Namely, Herb Seasonings; Smoked Beef, Smoked Tongue, Boston Style Baked Beans with Pork, Boston Style Baked Beans with Tomato Sauce, Preserved Fruit, Preserved Vegetables, Deviled Meats, Chinese Candies, Baked Soy Beans, Saratoga Chips, Chinese Almond Cakes, Soups, Prepared Fish, Peanut Butter, Preserved Chicken, Chinese Mushroom Sauce, Italian Style Macaroni with Cheese, Italian Style Macaroni au Gratin, Pure Jelly, Cooked Shrimp, Chinese Fried Rice, Mexican Style "Red Hot" Chili con Carne, Mexican Style Hot Tamales, Chinese Fried Noodles, Italian Style Spaghetti with Caruso Sauce; Chinese Dinner Complete, Consisting of Chow Mein or Chop Suey, Fried Rice and Noodles; Canned Fruits and Vegetables.
Claims use since Apr. 10, 1931.

Ser. No. 314,677. PUBLIC SERVICE COMMUNITY KITCHENS, INC., New York, N. Y. Filed May 18, 1931.

Ching Chow's

For Chow Mein, Chop Suey, Chinese Rice Cakes; Condiments—Namely, Herb Seasonings; Smoked Beef, Smoked Tongue, Boston Style Baked Beans with Pork, Boston Style Baked Beans with Tomato Sauce, Preserved Fruit, Preserved Vegetables, Deviled Meats, Chinese Candies, Baked Soy Beans, Saratoga Chips, Chinese Almond Cakes, Soups, Prepared Fish, Peanut Butter, Preserved Chicken, Chinese Mushroom Sauce, Italian Style Macaroni with Cheese, Italian Style Macaroni au Gratin, Pure Jelly, Cooked Shrimp, Chinese Fried Rice, Mexican Style "Red Hot" Chili con Carne, Mexican Style Hot Tamales, Chinese Fried Noodles, Italian Style Spaghetti with Caruso Sauce; Chinese Dinner Complete, Consisting of Chow Mein or Chop Suey, Fried Rice and Noodles; Canned Fruits and Vegetables.
Claims use since Feb. 7, 1931.

CLASS 48

Malt Beverages and Liquors

Ser. No. 312,742. CHARLES SCHALLITZ, Milwaukee, Wis. Filed Mar. 30, 1931.

QUALITY BEVERAGE
CINCINNATI
SODA BEER

No claim is made to the words appearing on the drawing except in the association shown.
For Malt Beverage Containing Less Than One-Half of One Per Cent Alcohol by Volume.
Claims use since Jan. 10, 1930.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 310,514. J. W. GREER COMPANY, Cambridge, Mass. Filed Jan. 29, 1931.

CERTIFIED

The word "Certified" is disclaimed apart from the mark shown on the drawing.
For Coated Fabrics.
Claims use since Jan. 17, 1931.

Ser. No. 314,020. SHOE FORM CO., INC., Auburn, Ohio. Filed Apr. 30, 1931.

FLEX-A-TREE

No registration rights are claimed in the word "Tree" apart from the mark shown in the drawing.
For Shoe Forms.
Claims use since Apr. 20, 1931.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 23, 1931

284,244. ELECTRIC GENERATORS AND MOTORS, ROTARY CONVERTERS, ETC. LIMITED COMPANY FORMERLY THE ŠKODA-WORKS, PLZEŇ, Prague-Smichov, Czechoslovakia.
Filed August 4, 1926. Serial No. 235,558. PUBLISHED AUGUST 5, 1930. Class 21.

284,245. DYED SKINS. ICELAND FUR DYEING CORPORATION, Brooklyn, N. Y.
Filed May 9, 1929. Serial No. 283,742. PUBLISHED APRIL 7, 1931. Class 1.

284,246. BREAD. GENERAL BAKING COMPANY, New York, N. Y.
Filed July 24, 1929. Serial No. 287,639. PUBLISHED OCTOBER 22, 1929. Class 46.

284,247. WELL-BORING PLANTS, DRILLING TOOLS, STEEL DERRICKS, ETC. THE OIL WELL ENGINEERING COMPANY, LTD., New York, N. Y., and London and Stockport, England.
Filed November 21, 1929. Serial No. 292,680. PUBLISHED APRIL 7, 1931. Class 23.

284,248. WHEAT FLOUR, SELF-RISING FLOUR, GRAHAM FLOUR, WHOLE-WHEAT FLOUR, AND CORN MEAL. THE ARNOLD MILLING COMPANY, Sterling, Kans.
Filed December 5, 1929. Serial No. 293,257. PUBLISHED SEPTEMBER 23, 1930. Class 46.

284,249. TRUCK WINCHES. MUSKOGEE IRON WORKS, Muskogee, Okla.
Filed January 6, 1930. Serial No. 294,433. PUBLISHED APRIL 14, 1931. Class 23.

284,250. CANDLES, WAX CANDLES, BEESWAX CANDLES, STEARIC-ACID CANDLES, STEARINE CANDLES, TAPERS, CIERGES, DIPS, DIPPED CANDLES, CAST CANDLES, MINERAL AND VEGETABLE WAX FOR MAKING CANDLES, AND CANDLES FOR VOTIVE LIGHTS. MUENCH-KREUZER CANDLE CO. INC., Syracuse, N. Y.
Filed January 16, 1930. Serial No. 294,852. PUBLISHED MARCH 17, 1931. Class 15.

284,251. WORK SHIRTS. JAMES DAVID RENFROE, doing business as Macon Woolen Mills, Macon, Ga.
Filed January 24, 1930. Serial No. 295,192. PUBLISHED MARCH 17, 1931. Class 39.

284,252. STEEL SHEETS. INLAND STEEL COMPANY, Chicago, Ill.
Filed February 20, 1930. Serial No. 296,275. PUBLISHED APRIL 7, 1931. Class 14.

284,253. HOSIERY. BROWN DURRELL CO., Boston, Mass., and New York, N. Y.
Filed February 25, 1930. Serial No. 296,477. PUBLISHED MARCH 17, 1931. Class 39.

284,254. HOSIERY. BROWN DURRELL CO., Boston, Mass., and New York, N. Y.
Filed February 25, 1930. Serial No. 296,478. PUBLISHED MARCH 31, 1931. Class 39.

284,255. CANVAS-COVERED METAL-LINED RUBBER HOSE. METAL HOSE & TUBING CO., INC., Brooklyn, N. Y.
Filed February 25, 1930. Serial No. 296,489. PUBLISHED APRIL 14, 1931. Class 35.

284,256. ELECTRICAL CONDENSERS. AEROVOX WIRELESS CORPORATION, Brooklyn, N. Y.
Filed February 28, 1930. Serial No. 296,624. PUBLISHED MARCH 17, 1931. Class 21.

284,257. RADIO RECEIVING SETS, RADIO B BATTERIES, STORAGE BATTERIES, DRY CELLS, AND ELECTRICAL APPLIANCES—NAMELY, IRONS CONSISTING OF FLATIRONS, CURLING IRONS, SOLDERING IRONS, AND WAFFLE IRONS, TOASTERS, PORTABLE ROOM HEATERS, COOKSTOVES, PERCOLATORS, FANS, DRINK MIXERS AND FOOD MIXERS, AND CLEANERS CONSISTING OF SUCTION SWEEPERS. SUPERIOR DISTRIBUTORS, INC., New York, N. Y.
Filed March 29, 1930. Serial No. 298,123. PUBLISHED MARCH 17, 1931. Class 21.

284,258. CANNED FISH. HAAS-BARUCH & COMPANY, Los Angeles, Calif.
Filed April 16, 1930. Serial No. 298,943. PUBLISHED APRIL 14, 1931. Class 46.

284,259. FOOD DRINK COMPRISED OF MALT, MILK, CHOCOLATE, AND OTHER INGREDIENTS. ABE KANNER, doing business as Globe Bottling Co., Los Angeles, Calif.
Filed April 23, 1930. Serial No. 299,325. PUBLISHED APRIL 14, 1931. Class 46.

284,260. RUBBER AND FABRIC COMPOSITION BELT. THE ATWOOD MACHINE COMPANY, Stonington, Conn.
Filed May 3, 1930. Serial No. 299,888. PUBLISHED APRIL 7, 1931. Class 35.

284,261. WARDROBE TRUNKS, HAND TRUNKS, AND AUTOMOBILE TRUNKS. MAY & MALONE, INCORPORATED, Chicago, Ill.
Filed August 9, 1930. Serial No. 304,417. PUBLISHED APRIL 7, 1931. Class 3.

284,262. MOTOR-LUBRICATING OIL. GARLAND PRODUCTS COMPANY, St. Louis, Mo.
Filed August 13, 1930. Serial No. 304,552. PUBLISHED MARCH 17, 1931. Class 10.

284,263. ELECTRIC BATTERIES. DAISY BATTERY CORP., New York, N. Y.
Filed August 15, 1930. Serial No. 304,651. PUBLISHED MARCH 17, 1931. Class 21.

284,264. PERMANENT-WAVING MACHINES AND SUPPLIES THEREFOR. THERMIQUE, INCORPORATED, New York, N. Y.
Filed August 20, 1930. Serial No. 304,835. PUBLISHED APRIL 14, 1931. Class 44.

284,265. GASKETS AND PARTS THEREOF, WASHERS, SHIMS AND STRIP SHIM STOCK, ETC. VICTOR MANUFACTURING & GASKET COMPANY, Chicago, Ill.
Filed September 8, 1930. Serial No. 305,460. PUBLISHED APRIL 7, 1931. Class 35.

284,266. SHEET BRASS AND UNFINISHED FORGINGS. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn.
Filed September 9, 1930. Serial No. 305,497. PUBLISHED APRIL 7, 1931. Class 14.

284,267. SILK, COTTON, AND SILK AND COTTON, WOOLEN, SILK AND WOOLEN, AND COTTON AND WOOL HOSIERY. CHENANGO KNITTING COMPANY, INC., Sherburne, N. Y.
Filed September 13, 1930. Serial No. 305,656. PUBLISHED APRIL 7, 1931. Class 39.

284,268. PLATES AND WASHERS FOR BOTTLES AND OTHER WARE OF ARTIFICIAL CORK, PLATES OF ARTIFICIAL CORK, BATH MATS OF ARTIFICIAL CORK, CORKS, COVERS FOR STRAPS AND ROPES OF ARTIFICIAL CORK, COVERS FOR FLOORS OF ARTIFICIAL CORK, DISCS AND CROWN PLATES OF ARTIFICIAL CORK, STOPPERS AND CHAMPAGNE CORKS, AND LABORATORY RINGS OF ARTIFICIAL CORK. SUBERIT-FABRIK A.-G., Mannheim-Rheinau, Germany.
Filed September 16, 1930. Serial No. 305,769. PUBLISHED APRIL 14, 1931. Class 50.

284,269. WEAVING AND KNITTING MACHINES AND PARTS OR ATTACHMENTS AND TOOLS. INTERNATIONALER MARATTI-MASCHINENVERKAUF-A.-G. BERLIN, Berlin, Germany.
Filed September 22, 1930. Serial No. 305,931. PUBLISHED APRIL 14, 1931. Class 23.

284,270. IRON BRACKETS WHICH ARE USED AS A SUPPORT FOR SCAFFOLDS DURING WORK ON BUILDINGS. ARNOLD RASMUSSEN, Greenwich, Conn.
Filed October 3, 1930. Serial No. 306,366. PUBLISHED APRIL 7, 1931. Class 50.

284,271. STEEL USED IN FORGING HAND TOOLS INCLUDING WRENCHES, PLIERS, SNIPS, NAIL PULLERS, SCRATCH AWLS, SCREW DRIVERS, PUNCHES, DRILLS, CHISELS, AND ELECTRICIANS' CONNECTORS. CRESCENT TOOL COMPANY, Jamestown, N. Y.
Filed October 20, 1930. Serial No. 306,940. PUBLISHED APRIL 14, 1931. Class 14.

284,272. WEIGHING SCALES. DAVID C. ROCKOLA, Chicago, Ill.
Filed March 7, 1931. Serial No. 311,887. PUBLISHED APRIL 14, 1931. Class 26.

284,273. CRUSHING AND GRINDING MILLS. F. L. SMIDTH & CO., New York, N. Y.
Filed March 3, 1931. Serial No. 311,702. PUBLISHED APRIL 14, 1931. Class 23.

284,274. RAZOR BLADES. THE PREMIER CO. INC., New York, N. Y.
Filed March 6, 1931. Serial No. 311,846. PUBLISHED APRIL 14, 1931. Class 23.

284,275. WIRE, TAMPICO, AND BRISTLE BRUSHES. THE SPECIALTY MANUFACTURING COMPANY, Cleveland, Ohio, assignor to The Pittsburgh Plate Glass Company, Pittsburgh, Pa.
Filed December 20, 1930. Serial No. 309,215. PUBLISHED APRIL 7, 1931. Class 29.

284,276. PROPHYLACTIC RUBBER ARTICLES. HARRY L. AIN, doing business as Goodwear Rubber Company, New York, N. Y.
Filed December 27, 1930. Serial No. 309,368. PUBLISHED APRIL 7, 1931. Class 44.

284,277. SALAD DRESSING. WILLIAM E. PAGE, doing business as Tulsa Dressing Co., Tulsa, Okla.
Filed January 3, 1931. Serial No. 309,591. PUBLISHED APRIL 7, 1931. Class 46.

284,278. CANDIES, ICE CREAM. GANTT, INCORPORATED, Chicago, Ill.
Filed January 12, 1931. Serial No. 309,852. PUBLISHED APRIL 7, 1931. Class 46.

284,279. CIGARS, CIGARILLOS, CIGARETTES, AND SMOKING TOBACCO, CHEWING TOBACCO, AND SNUFF TOBACCO. VERELLEN LIMITED, Antwerp, Belgium.
Filed January 13, 1931. Serial No. 309,911. PUBLISHED APRIL 7, 1931. Class 17.

284,280. CIGARS, CIGARILLOS, CIGARETTES, AND SMOKING TOBACCO, CHEWING TOBACCO, AND SNUFF TOBACCO. VERELLEN LIMITED, Antwerp, Belgium.
Filed January 13, 1931. Serial No. 309,913. PUBLISHED APRIL 7, 1931. Class 17.

284,281. PROPHYLACTIC RUBBER ARTICLES. REUBEN AURNAU, doing business as Arrow Rubber Co., New York, N. Y.
Filed January 20, 1931. Serial No. 310,157. PUBLISHED APRIL 14, 1931. Class 44.

284,282. COFFEES. JOHN H. DOUNVEOR, doing business as Gov's Coffee Company, Detroit, Mich.
Filed January 27, 1931. Serial No. 310,459. PUBLISHED APRIL 14, 1931. Class 46.

284,283. PYROXYLIN-COATED AND SIMILARLY-COATED FABRICS OR TEXTILES. THE SHOTT MANUFACTURING COMPANY, Cincinnati, Ohio.
Filed January 27, 1931. Serial No. 310,462. PUBLISHED APRIL 14, 1931. Class 50.

284,284. PUDDING AND PIE FILLING. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed January 28, 1931. Serial No. 310,503. PUBLISHED APRIL 14, 1931. Class 46.

284,285. ROUGH AND SEMIFINISHED IRON ALLOY CASTINGS. UNITED CONVEYOR CORPORATION, Chicago, Ill.
Filed December 31, 1930. Serial No. 309,538. PUBLISHED APRIL 14, 1931. Class 14.

284,286. NICKEL-CONTAINING IRON CASTINGS. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y.
Filed January 26, 1931. Serial No. 310,380. PUBLISHED APRIL 7, 1931. Class 14.

284,287. ASH TRAYS. WM. DEMUTH & CO., New York, N. Y.
Filed February 27, 1931. Serial No. 311,520. PUBLISHED APRIL 14, 1931. Class 8.

284,288. ICE-CREAM CONFECTION OR FROZEN CONFECTION COMPRISING A FROZEN CORE AND A CHOCOLATE COVERING THEREFOR AND ALSO FROZEN CONFECTIONS SOLD IN CUPS OR OTHER CONTAINERS. FRANK A. MARCHIONI, New York, N. Y.
Filed February 3, 1931. Serial No. 310,687. PUBLISHED APRIL 7, 1931. Class 46.

284,289. MEDICINAL ATOMIZERS. NAZALIZER COMPANY, Boston, Mass.
Filed February 3, 1931. Serial No. 310,691. PUBLISHED APRIL 7, 1931. Class 44.

284,290. THERAPEUTIC ELECTRICAL APPLIANCES AND MACHINES. DO-X CORPORATION, Indianapolis, Ind.
Filed January 10, 1931. Serial No. 309,810. PUBLISHED APRIL 7, 1931. Class 44.

284,291. TABLE SYRUP. PHILADELPHIA MALT EXTRACT CO., Philadelphia, Pa.
Filed February 7, 1931. Serial No. 310,834. PUBLISHED APRIL 7, 1931. Class 46.

284,292. SANITARY BELTS, SANITARY APRONS, ETC. LOUIS H. SCADRON, New York, N. Y.
Filed February 7, 1931. Serial No. 310,837. PUBLISHED APRIL 14, 1931. Class 44.

284,293. PUDDING AND PIE FILLING. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed January 28, 1931. Serial No. 310,502. PUBLISHED APRIL 7, 1931. Class 46.

284,294. NICKEL CHROME ALLOY STEEL. UNIVERSAL STEEL COMPANY, Bridgeville, Pa.
Filed February 7, 1931. Serial No. 310,844. PUBLISHED APRIL 14, 1931. Class 14.

284,295. CANNED PEELED TOMATOES AND CANNED TOMATO PASTE. F. VITELLI & SON, New York, N. Y.
Filed February 12, 1931. Serial No. 311,010. PUBLISHED APRIL 14, 1931. Class 46.

284,296. POWDER PUFFS. THE HYGIENOL CO. INC., New York, N. Y.
Filed February 27, 1931. Serial No. 311,527. PUBLISHED APRIL 14, 1931. Class 29.

284,297. CONDIMENTAL SAUCE AND SALAD DRESSING. PRICE FLAVORING EXTRACT COMPANY, Chicago, Ill.
Filed February 12, 1931. Serial No. 311,014. PUBLISHED APRIL 14, 1931. Class 46.

284,298. CONDIMENTAL SAUCE AND SALAD DRESSING. PRICE FLAVORING EXTRACT COMPANY, Chicago, Ill.
Filed February 12, 1931. Serial No. 311,015. PUBLISHED APRIL 14, 1931. Class 46.

284,299. FUDGE POWDERS. FRENCH MAID COCOLAT COMPANY, INC., New York, N. Y.
Filed February 16, 1931. Serial No. 311,092. PUBLISHED APRIL 14, 1931. Class 46.

284,300. MALT SYRUP. FRANK W. JACOBSON, doing business as Reliable Home Supply Co., Cleveland, Ohio.
Filed February 13, 1931. Serial No. 311,035. PUBLISHED APRIL 14, 1931. Class 46.

284,301. PURE OLIVE OIL. MANUEL A. ALMEIDA, doing business as Tagus Importing & Exporting Co., New Bedford, Mass.
Filed February 17, 1931. Serial No. 311,122. PUBLISHED APRIL 14, 1931. Class 46.

284,302. RUG AND CARPET CUSHIONS. ALLEN INDUSTRIES, INC., Detroit, Mich.
Filed March 2, 1931. Serial No. 311,591. PUBLISHED APRIL 14, 1931. Class 50.

284,303. HOSIERY. L. BAMBERGER & CO., Newark, N. J.
Filed January 15, 1931. Serial No. 309,961. PUBLISHED MARCH 17, 1931. Class 39.

284,304. MEN'S UNDERWEAR (SHORTS). L. BAMBERGER & CO., Newark, N. J.
Filed January 15, 1931. Serial No. 309,959. PUBLISHED MARCH 31, 1931. Class 39.

284,305. COLLARS AND DRESS, NEGLIGEE, AND WORK SHIRTS WITH COLLARS ATTACHED. APOLLO SHIRT CO., New York, N. Y.
Filed January 16, 1931. Serial No. 310,005. PUBLISHED MARCH 17, 1931. Class 39.

284,306. LUBRICATING OILS AND GREASES. THE PENNZOIL COMPANY, Los Angeles, Calif.
Filed January 16, 1931. Serial No. 310,041. PUBLISHED MARCH 31, 1931. Class 15.

284,307. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,102. PUBLISHED MARCH 17, 1931. Class 15.

284,308. ELECTRIC DIRECTION LAMP SIGNAL FOR VEHICLES. HENDRICK J. VAN SPANJE, New York, N. Y.
Filed January 20, 1931. Serial No. 310,196. PUBLISHED MARCH 24, 1931. Class 21.

284,309. ELECTRIC MOTORS AND MOTOR-DRIVE OUTFITS CONSISTING OF ELECTRIC MOTORS, FLYWHEELS, AND BELTS. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed January 21, 1931. Serial No. 310,216. PUBLISHED MARCH 31, 1931. Class 21.

284,310. UNDERWEAR FOR MEN AND WOMEN. LUXITE SILK PRODUCTS CO., Milwaukee, Wis.
Filed January 21, 1931. Serial No. 310,223. PUBLISHED MARCH 17, 1931. Class 39.

284,311. LUBRICATING OIL. CONTINENTAL OIL COMPANY, Ponca City, Okla.
Filed January 19, 1931. Serial No. 310,108. PUBLISHED MARCH 17, 1931. Class 15.

284,312. RAYON UNDERWEAR FOR WOMEN. THE "E-CUT" KNITTING MILLS, Royersford, Pa.
Filed January 28, 1931. Serial No. 310,474. PUBLISHED MARCH 31, 1931. Class 39.

284,313. YARNS OF SILK, RAYON, WORSTED, AND COMBINATIONS OF SAID MATERIALS. MOSTER & FELDMAN, Brooklyn, N. Y.
Filed January 29, 1931. Serial No. 310,524. PUBLISHED APRIL 14, 1931. Class 43.

284,314. HOSIERY. UNION HOSIERY CORPORATION, High Point, N. C.
Filed January 29, 1931. Serial No. 310,540. PUBLISHED MARCH 31, 1931. Class 39.

284,315. RADIO RECEIVING SETS. HAIG MARQUIS PRINCE, doing business as Prince Radio Manufacturing Co., Los Angeles, Calif.
Filed January 31, 1931. Serial No. 310,612. PUBLISHED MARCH 24, 1931. Class 21.

284,316. MEN'S DRESS, NEGLIGEE, AND/OR WORK SHIRTS; COLLARS, SOCKS, AND PAJAMAS; UNDERWEAR MADE OF KNITTED, NETTED, AND TEXTILE FABRICS; NECKWEAR — NAMELY, MUFFLERS AND NECKTIES. HENRY C. REUSCH & CO., INC., Newark, N. J.
Filed January 31, 1931. Serial No. 310,613. PUBLISHED APRIL 7, 1931. Class 39.

284,317. UNDERWEAR FOR MEN AND BOYS, OF BOTH KNITTED AND WOVEN MATERIAL, MADE OF COTTON, RAYON, MERINO, OR SILK. WILLIAM RAVNER, doing business as Robert C. King & Co., New York, N. Y.
Filed January 5, 1931. Serial No. 309,620. PUBLISHED MARCH 31, 1931. Class 39.

284,318. HOSIERY. COMBINE HOSIERY CORPORATION, Wilmington, Del., and New York, N. Y.
Filed January 27, 1931. Serial No. 310,443. PUBLISHED MARCH 31, 1931. Class 39.

284,319. RADIO ELECTRON TUBES. ZENITH RADIO CORPORATION, Chicago, Ill.
Filed January 21, 1931. Serial No. 310,233. PUBLISHED MARCH 31, 1931. Class 21.

284,320. RADIO ELECTRON TUBES. ZENITH RADIO CORPORATION, Chicago, Ill.
Filed January 21, 1931. Serial No. 310,232. PUBLISHED MARCH 31, 1931. Class 21.

284,321. WIRES, CABLES, INSULATED WIRES, INSULATED CABLES, BRAIDED WIRES, BRAIDED CABLES, ARMORED WIRES, AND ARMORED CABLES. SIMPLEX WIRE & CABLE COMPANY, Boston, Mass.
Filed January 21, 1931. Serial No. 310,229. PUBLISHED MARCH 17, 1931. Class 21.

284,322. RADIO RECEIVING SETS AND PARTS THEREOF. ZENITH RADIO CORPORATION, Chicago, Ill.
Filed January 21, 1931. Serial No. 310,288. PUBLISHED MARCH 17, 1931. Class 21.

284,323. RADIO ELECTRON TUBES. ZENITH RADIO CORPORATION, Chicago, Ill.
Filed January 26, 1931. Serial No. 310,429. PUBLISHED MARCH 31, 1931. Class 21.

284,324. DEVICE FOR ELECTRICALLY CONTROLLING THE OPERATION OF THEATRE STAGE CURTAINS. TIFFIN SCENIC STUDIOS, Tiffin, Ohio.
Filed December 20, 1930. Serial No. 309,217. PUBLISHED MARCH 31, 1931. Class 21.

284,325. PORTABLE ELECTRIC-LIGHTING OUTFITS AND FITTINGS. IRA F. DASH, doing business as Darow Manufacturing Co., Brooklyn, N. Y.
Filed December 27, 1930. Serial No. 309,374. PUBLISHED MARCH 31, 1931. Class 21.

284,326. READY-TO-WEAR WORK AND FLANNEL SHIRTS FOR MEN. WARDAN MANUFACTURING CO., St. Louis, Mo.
Filed January 2, 1931. Serial No. 309,577. PUBLISHED MARCH 17, 1931. Class 39.

284,327. HOSIERY. THE WINDSOR MILLS, INC., Philadelphia, Pa.
Filed January 9, 1931. Serial No. 309,792. PUBLISHED APRIL 7, 1931. Class 39.

284,328. ICE CREAM. THE JERSEY ICE CREAM PRODUCTS CORPORATION, Baltimore, Md.
Filed December 26, 1930. Serial No. 309,345. PUBLISHED APRIL 7, 1931. Class 46.

284,329. SCALES. DAVID C. ROCKOLA, Chicago, Ill.
Filed January 7, 1931. Serial No. 309,701. PUBLISHED APRIL 14, 1931. Class 26.

284,330. OLEOMARGARINE, MAYONNAISE, SANDWICH SPREAD, AND SALAD DRESSING. THE BALTIMORE BUTTERINE COMPANY, Baltimore, Md.
Filed January 8, 1931. Serial No. 309,721. PUBLISHED APRIL 7, 1931. Class 46.

284,331. WALLETS, HAND BAGS, OVERNIGHT BAGS, SUITCASES, AND VALISES. THE PREMIER CO., INC., New York, N. Y.
Filed January 9, 1931. Serial No. 309,787. PUBLISHED APRIL 7, 1931. Class 3.

284,332. FARINA, SELF-RAISING FLOUR PREPARED FROM ANY KIND OF FLOUR, SELF-RAISING FLOUR PREPARED FROM A COMBINATION OF TWO OR MORE KINDS OF FLOUR, BUCKWHEAT FLOUR, AND PANCAKE FLOUR. HECKER-H-O COMPANY, INC., Buffalo, N. Y.
Filed January 21, 1931. Serial No. 310,219. PUBLISHED APRIL 7, 1931. Class 46.

284,333. PLAIN AND SELF-RISING FLOUR. M. FORCHHEIMER GROCERY CO. INC., Mobile, Ala.
Filed January 26, 1931. Serial No. 310,373. PUBLISHED APRIL 7, 1931. Class 46.

284,334. LEATHER CEMENT. AARON GLICKSMAN, doing business as Solflex Co., not Inc., Chicago, Ill.
Filed January 26, 1931. Serial No. 310,375. PUBLISHED APRIL 14, 1931. Class 5.

284,335. FEED FOR POULTRY, RABBITS, DOGS, DAIRY AND LIVE STOCK. NOWAK MILLING CORPORATION, Hammond, Ind.
Filed January 26, 1931. Serial No. 310,403. PUBLISHED APRIL 7, 1931. Class 46.

284,336. MALT SYRUP. STERLING PRODUCTS COMPANY, Evansville, Ind.
Filed January 26, 1931. Serial No. 310,420. PUBLISHED APRIL 14, 1931. Class 46.

284,337. MALT SYRUP. THE AMERICAN MALT COMPANY, Baltimore, Md.
Filed January 27, 1931. Serial No. 310,438. PUBLISHED APRIL 14, 1931. Class 46.

284,338. FURNITURE. SACHS QUALITY FURNITURE INC., New York, N. Y.
Filed January 30, 1931. Serial No. 310,576. PUBLISHED APRIL 14, 1931. Class 32.

284,339. AUTOMOBILE TIRES COMPOSED OF GENUINE RUBBER, RUBBER COMPOUND, AND COTTON FABRIC. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed February 11, 1931. Serial No. 310,948. PUBLISHED APRIL 7, 1931. Class 35.

284,340. FILMS FOR X-RAY EXPOSURE. GENERAL ELECTRIC X-RAY CORPORATION, Chicago, Ill.
Filed February 13, 1931. Serial No. 311,031. PUBLISHED APRIL 7, 1931. Class 26.

284,341. PHOTOGRAPHIC SENSITIZED PAPER. THE HALOID COMPANY, Rochester, N. Y.
Filed February 13, 1931. Serial No. 311,034. PUBLISHED APRIL 7, 1931. Class 26.

284,342. CANNED DOG FOOD. CARL O. SATTINGER, doing business as Sattinger's Wholesale Grocery, Los Angeles, Calif.
Filed February 21, 1931. Serial No. 311,341. PUBLISHED APRIL 7, 1931. Class 46.

284,343. CRAVATS. CHENEY BROTHERS, South Manchester, Conn.
Filed February 10, 1931. Serial No. 310,910. PUBLISHED APRIL 7, 1931. Class 39.

284,344. MEN'S CLOTHING. FRANKLIN SIMON & CO. INC., New York, N. Y.
Filed February 11, 1931. Serial No. 310,938. PUBLISHED MARCH 31, 1931. Class 39.

284,345. CRAVATS. CHENEY BROTHERS, South Manchester, Conn.
Filed February 12, 1931. Serial No. 310,970. PUBLISHED APRIL 7, 1931. Class 39.

284,346. SPARK PLUGS. FIRESTONE BATTERY COMPANY, Akron, Ohio.
Filed February 17, 1931. Serial No. 311,134. PUBLISHED MARCH 31, 1931. Class 21.

284,347. SICK-ROOM OR COMMODE CHAIRS. ANNA K. LINDSEY, Morrisonville, Ill.
Filed February 4, 1931. Serial No. 310,724. PUBLISHED APRIL 14, 1931. Class 32.

284,348. COMPASSES AND DIVIDERS OF THE KIND EMBODYING A SMALL PEN AND PENCIL. THE AMERICAN NEWS COMPANY, INC., New York, N. Y.
Filed February 5, 1931. Serial No. 310,747. PUBLISHED APRIL 7, 1931. Class 26.

284,349. POULTRY AND STOCK FOODS CONTAINING A VITAMIN PREPARATION OBTAINED FROM COD-LIVER OIL AND/OR SARDINE OIL. NATIONAL OIL PRODUCTS COMPANY, Harrison, N. J.
Filed February 9, 1931. Serial No. 310,876. PUBLISHED APRIL 7, 1931. Class 46.

284,350. POULTRY AND STOCK FOODS CONTAINING A VITAMIN PREPARATION OBTAINED FROM COD-LIVER OIL AND/OR SARDINE OIL. NATIONAL OIL PRODUCTS COMPANY, Harrison, N. J.
Filed February 9, 1931. Serial No. 310,875. PUBLSHED APRIL 7, 1931. Class 46.

284,351. BOXES PROVIDED WITH A GRILLE FRONT BUILT INTO THE WALL OF BUILDINGS TO CONCEAL BELL BOXES OF TELEPHONE SYSTEMS. TUTTLE & BAILEY MANUFACTURING COMPANY, Brooklyn and New York, N. Y.
Filed February 12, 1931. Serial No. 311,009. PUBLISHED APRIL 14, 1931. Class 32.

284,352. CHICKEN FEED—NAMELY, LAYING MASH, EGG MASH, CHICK-STARTER RATION, BROILER AND GROWING RATION, AND CONTROL MASH. MARITIME MILLING CO., INC., Buffalo, N. Y.
Filed February 14, 1931. Serial No. 311,066. PUBLISHED APRIL 7, 1931. Class 46.

284,353. PETROLEUM COKE. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif.
Filed February 20, 1931. Serial No. 311,290. PUBLISHED APRIL 7, 1931. Class 1.

284,354. SEED—NAMELY, LAWN-GRASS SEED. KELLOGG SEED COMPANY, Milwaukee, Wis.
Filed February 20, 1931. Serial No. 311,312. PUBLISHED APRIL 14, 1931. Class 1.

284,355. SUBSTANCE IN LIQUID OR POWDER FORM OR IN THE FORM OF A FILM HAVING ADHESIVE AND/OR BINDING PROPERTIES AND CAPABLE OF CEMENTING OBJECTS TOGETHER, ESPECIALLY SHEETS OF GLASS. RÖHM & HAAS COMPANY, Philadelphia, Pa.
Filed February 25, 1931. Serial No. 311,447. PUBLISHED APRIL 14, 1931. Class 5.

284,356. PHOTOGRAPHIC SHUTTERS. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed February 25, 1931. Serial No. 311,425. PUBLISHED APRIL 7, 1931. Class 26.

284,357. COAL. PITTSBURGH COAL COMPANY OF WISCONSIN, Minneapolis, Minn.
Filed February 25, 1931. Serial No. 311,449. PUBLISHED APRIL 7, 1931. Class 1.

284,358. LADIES' HAND BAGS AND PURSES. CHARLES BURSTEIN & BRO. INC., New York, N. Y.
Filed February 26, 1931. Serial No. 311,468. PUBLISHED APRIL 7, 1931. Class 3.

284,359. COAL. SOVEREIGN POCAHONTAS COMPANY, Bluefield, W. Va., and New York, N. Y.
Filed February 26, 1931. Serial No. 311,493. PUBLISHED APRIL 14, 1931. Class 1.

284,360. DYED SKINS. JOSEPH M. RYAN & CO. INC., Hoboken, N. J.
Filed February 27, 1931. Serial No. 311,537. PUBLISHED APRIL 14, 1931. Class 1.

284,361. PRESSURE GAGES. CONSOLIDATED ASHCROFT HANCOCK COMPANY, New York, N. Y.
Filed March 2, 1931. Serial No. 311,598. PUBLISHED APRIL 7, 1931. Class 26.

284,362. SPOOLS OF LEATHER BELTING. J. H. HEMMERDINGER & SON, INC., Brooklyn, N. Y.
Filed March 3, 1931. Serial No. 311,685. PUBLISHED APRIL 14, 1931. Class 35.

284,363. NECKTIES. KNOX HAT COMPANY, INC., New York, N. Y.
Filed February 3, 1931. Serial No. 310,682. PUBLISHED MARCH 31, 1931. Class 39.

284,364. UMBRELLAS. LYNN UMBRELLA MFG. CO., Boston, Mass.
Filed February 3, 1931. Serial No. 310,685. PUBLISHED APRIL 7, 1931. Class 41.

284,365. ICE CREAM. THE FRANKLIN ICE CREAM CORPORATION, Kansas City, Mo.
Filed October 20, 1930. Serial No. 306,948. PUBLISHED APRIL 14, 1931. Class 46.

284,366. ELECTRICALLY-CONTROLLED TYPESETTING AND TYPECASTING APPARATUS AND ELECTRICAL CONTROL UNITS, TRANSMITTERS, RECEIVERS, PERFORATORS, REPERFORATORS, AND PARTS OF THE APPARATUS JUST SPECIFIED. TELETYPE CORPORATION, Chicago, Ill., assignor to Teletypesetter Corporation, Chicago, Ill.
Filed October 25, 1930. Serial No. 307,183. PUBLISHED MARCH 17, 1931. Class 21.

284,367. COFFEE. FIRESIDE COFFEE CO., INC., Nashville, Tenn.
Filed November 8, 1930. Serial No. 307,668. PUBLISHED APRIL 7, 1931. Class 46.

284,368. SMOKING AND CHEWING TOBACCO. MACLIN-ZIMMER-MCGILL TOBACCO CO., INC., Petersburg, Va., assignor to Penn Tobacco Company, Incorporated, Wilkes-Barre, Pa., a Corporation of Pennsylvania.
Filed November 8, 1930. Serial No. 307,683. PUBLISHED APRIL 14, 1931. Class 17.

284,369. CIGARS. MARCELINO PEREZ & CO., Tampa, Fla.
Filed November 11, 1930. Serial No. 307,790. PUBLISHED APRIL 7, 1931. Class 17.

284,370. ELECTRICAL REMOTE CONTROL, VISUAL AND AUDIBLE SIGNALING EQUIPMENT AND PARTS THEREOF, ETC. TEMPORATOR COMPANY, Chicago, Ill.
Filed November 13, 1930. Serial No. 307,861. PUBLISHED MARCH 31, 1931. Class 21.

284,371. LADIES' AND CHILDREN'S UNDERGARMENTS MADE OF RAYON, SILK, WOOL, COTTON, AND MIXTURES—NAMELY, BLOOMERS, PANTIES, STEP-INS, CHEMISE, SLIPS, NIGHTGOWNS, AND VEST AND BLOOMER COMBINATIONS THEREOF. KRUMHOLZ & LICHTBLAU, New York, N. Y.
Filed November 17, 1930. Serial No. 307,980. PUBLISHED MARCH 17, 1931. Class 39.

284,372. AMMETERS, VOLTMETERS, WATTMETERS, THERMO-ACTUATED INSTRUMENTS FOR MEASURING TEMPERATURE, AND PRESSURE-RESPONSIVE DEVICES FOR INDICATING PRESSURE. PROCESS ENGINEERING AND EQUIPMENT CORPORATION, Attleboro, Mass.
Filed November 18, 1930. Serial No. 308,033. PUBLISHED APRIL 7, 1931. Class 26.

284,373. WOMEN'S GOWNS, FROCKS, DRESSES; LADIES' COATS, SUITS, ENSEMBLES CONSISTING OF A DRESS AND COAT OR A SKIRT, WAIST, AND COAT; WAISTS, BLOUSES, SKIRTS, NEGLIGEES, AND PAJAMAS. MAX COHEN, INC., New York, N. Y.
Filed November 20, 1930. Serial No. 308,103. PUBLISHED APRIL 7, 1931. Class 39.

284,374. LUBRICATING GREASE COMPOUND. MERCO NORDSTROM VALVE COMPANY, San Francisco, Calif.
Filed November 20, 1930. Serial No. 308,120. PUBLISHED MARCH 24, 1931. Class 15.

284,375. PUDDING POWDERS OF VARIOUS FLAVORINGS. EVERETT M. SALISBURY, Providence, R. I.
Filed November 22, 1930. Serial No. 308,222. PUBLISHED APRIL 14, 1931. Class 46.

284,376. ELECTRIC CELLS AND BATTERIES. NATIONAL CARBON COMPANY, INC., New York, N. Y.
Filed November 28, 1930. Serial No. 308,383. PUBLISHED MARCH 31, 1931. Class 21.

284,377. ELECTRICALLY-OPERATED PORTABLE VACUUM CLEANERS AND ATTACHMENTS THEREFOR FOR BLOWING, FILTERING, AND CLEANING AND PARTS THEREOF. ELECTROLUX, INC., New York, N. Y.
Filed November 28, 1930. Serial No. 308,416. PUBLISHED MARCH 17, 1931. Class 21.

284,378. ELECTRICALLY-OPERATED PORTABLE VACUUM CLEANERS AND ATTACHMENTS THEREFOR FOR BLOWING, FILTERING, AND CLEANING, AND PARTS THEREOF. ELECTROLUX, INC., New York, N. Y.
Filed November 28, 1930. Serial No. 308,417. PUBLISHED MARCH 17, 1931. Class 21.

284,379. BUTTER. WM. F. GRAVINS & CO., INC., Richmond, Va.
Filed December 5, 1930. Serial No. 308,624. PUBLISHED APRIL 7, 1931. Class 46.

284,380. NONALCOHOLIC, MALTLESS SYRUP USED IN THE PREPARATION OF SOFT DRINKS. HENRY A. RUGGIERI, doing business as Jo-Jo Company, New Haven, Conn.
Filed December 5, 1930. Serial No. 308,642. PUBLISHED APRIL 14, 1931. Class 45.

284,381. BLOOMERS FOR THE UNDER WEAR OF WOMEN, MISSES, AND CHILDREN. WINGET KICKERNICK COMPANY, Minneapolis, Minn.
Filed December 5, 1930. Serial No. 308,661. PUBLISHED MARCH 31, 1931. Class 39.

284,382. ADHESIVE PASTES, GLUES, GUMS. MANHATTAN PASTE & GLUE CO., INC., New York, N. Y.
Filed December 12, 1930. Serial No. 308,804. PUBLISHED APRIL 7, 1931. Class 5.

284,383. MEN'S AND BOYS' OUTER GARMENTS—NAMELY, SUITS, COATS, VESTS, AND TROUSERS. LOUIS H. MANKO, doing business as L. H. Manko & Company and National Summer Clothing Company, Philadelphia, Pa.
Filed December 12, 1930. Serial No. 308,895. PUBLISHED MARCH 31, 1931. Class 39.

284,384. CIGARS. PHILIPPINE TOBACCO CO., INC., New York, N. Y.
Filed December 15, 1930. Serial No. 308,998. PUBLISHED APRIL 14, 1931. Class 17.

284,385. CHOCOLATE-COVERED SUGAR WAFERS. FEDERAL SWEETS & WAFER CO., INC., New York, N. Y.
Filed December 17, 1930. Serial No. 309,072. PUBLISHED APRIL 14, 1931. Class 46.

284,386. PORTABLE FIRE EXTINGUISHERS. PYRENE MANUFACTURING COMPANY, Newark, N. J.
Filed December 22, 1930. Serial No. 309,250. PUBLISHED APRIL 7, 1931. Class 23.

284,387. IMITATION STRAW AND IMITATION HORSEHAIR MADE OF CELLULOSE. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England.
Filed January 7, 1931. Serial No. 309,675. PUBLISHED APRIL 7, 1931. Class 1.

284,388. BIRD FOOD. H & R SALES COMPANY, Cleveland, Ohio.
Filed January 12, 1931. Serial No. 309,854. PUBLISHED APRIL 14, 1931. Class 46.

284,389. MACHINE FOR WIRE STITCHING SIGNATURES, BOXES, AND BOOKS. IDEAL STITCHER & MFG. CO., Racine, Wis.
Filed January 12, 1931. Serial No. 309,857. PUBLISHED APRIL 7, 1931. Class 23.

284,390. CORN FLAKES. STANDARD RICE COMPANY, INC., Houston, Tex.
Filed January 26, 1931. Serial No. 310,416. PUBLISHED APRIL 14, 1931. Class 46.

284,391. CEREAL BREAKFAST FOOD. STANDARD RICE COMPANY, INC., Houston, Tex.
Filed January 26, 1931. Serial No. 310,417. PUBLISHED APRIL 14, 1931. Class 46.

284,392. LUNCHEON ROLLS. F. G. VOGT & SONS, INCORPORATED, Philadelphia, Pa.
Filed February 2, 1931. Serial No. 310,669. PUBLISHED APRIL 14, 1931. Class 46.

284,393. DOG FOOD. SIDNEY SCHIFF, doing business as Iff Products Co., New York, N. Y.
Filed February 17, 1931. Serial No. 311,146. PUBLISHED APRIL 14, 1931. Class 46.

284,394. PREPARED SANDWICHES. LLOYD P. SEYMOUR, Dallas, Tex.
Filed February 19, 1931. Serial No. 311,247. PUBLISHED APRIL 14, 1931. Class 46.

284,395. SEED—NAMELY, LAWN-GRASS SEED. KELLOGG SEED COMPANY, Milwaukee, Wis.
Filed February 20, 1931. Serial No. 311,313. PUBLISHED APRIL 14, 1931. Class 1.

284,396. COCOA-BUTTER SUBSTITUTE CONSISTING OF REFINED CHINESE VEGETABLE TALLOW USED PRIMARILY FOR FOOD PURPOSES. COBUS CORPORATION, New York, N. Y.
Filed February 26, 1931. Serial No. 311,470. PUBLISHED APRIL 14, 1931. Class 46.

284,397. BIRD FOOD. H & R SALES COMPANY, Cleveland, Ohio.
Filed February 28, 1931. Serial No. 311,572. PUBLISHED APRIL 14, 1931. Class 46.

284,398. BREAD. MAX HERSKOWITZ, New York, N. Y.
Filed March 6, 1931. Serial No. 311,886. PUBLISHED APRIL 14, 1931. Class 46.

284,399. FINE-GROUND ALFALFA MEAL. MASON MILLS, INC., Pauls Valley, Okla.
Filed March 7, 1931. Serial No. 311,879. PUBLISHED APRIL 14, 1931. Class 46.

284,400. WHEAT FLOUR, RYE FLOUR, AND CORN MEAL. HUBBARD MILLING COMPANY, Mankato, Minn.
Filed January 13, 1931. Serial No. 309,896. PUBLISHED APRIL 14, 1931. Class 46.

284,401. BRONZE MACHINERY BUSHINGS. JACKSON-WHEELER METALS SERVICE, Brooklyn, N. Y.
Filed February 14, 1931. Serial No. 311,061. PUBLISHED APRIL 7, 1931. Class 23.

284,402. BEVEL RING GEARS, PINIONS, TRANSMISSION GEARS, ETC. WARNER GEAR COMPANY, Muncie, Ind.
Filed February 2, 1931. Serial No. 310,670. PUBLISHED APRIL 7, 1931. Class 23.

284,403. SAFETY-RAZOR BLADES. THOMAS H. FROST, Boston, Mass.
Filed February 21, 1931. Serial No. 311,827. PUBLISHED APRIL 7, 1931. Class 23.

284,404. STOOKING OR GRAIN-SHOCKING MACHINES AND GRAIN-SHOCK-LOADING MACHINES. REED HARVESTING MACHINE CO., Kansas City, Mo.
Filed February 27, 1931. Serial No. 311,536. PUBLISHED APRIL 14, 1931. Class 23.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

284,405. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) UTICA STEAM & MOHAWK VALLEY COTTON MILLS, Utica, N. Y. Filed Apr. 14, 1930. Serial No. 298,869.

Pipedtint

For Sheets, Pillowcases, and Bolster Cases.
Claims use since Mar. 12, 1930.

284,406. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) JULIUS SCHMID, INC., New York, N. Y. Filed Apr. 18, 1930. Serial No. 299,088.

MOLL BATIST

For Sanitary Rubber-Coated Bed Sheeting.
Claims use since Apr. 15, 1930.

284,407. (CLASS 39. CLOTHING.) MAX M. GUTTMAN, New York, N. Y. Filed Apr. 22, 1930. Serial No. 299,264.

The WINDSOR KNIT JACKET

For Knit Jackets.
Claims use since Apr. 11, 1930.

284,408. (CLASS 39. CLOTHING.) NORWICH KNITTING COMPANY, New York, N. Y. Filed Apr. 26, 1930. Serial No. 299,513.

Biarritz

For Union Suits, Undershirts, Drawers, and Negligee Shirts for Men, Women, and Children.
Claims use since Apr. 10, 1930.

284,409. (CLASS 39. CLOTHING.) J. R. BEATON COMPANY, INC., New York, N. Y. Filed May 6, 1930. Serial No. 300,008.

Dultone

For Hosiery.
Claims use since Apr. 28, 1930.

284,410. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) M. H. ROGERS, INC., New York, N. Y. Filed May 17, 1930. Serial No. 300,759.

WINDSORUG

For Textile Rug.
Claims use since May 7, 1930.

284,411. (CLASS 37. PAPER AND STATIONERY.) HAMPSHIRE PAPER COMPANY, South Hadley Falls, Mass. Filed May 6, 1930. Serial No. 300,021.

WILTON

For Writing and Printing Paper.
Claims use since Apr. 1, 1930.

284,412. (CLASS 15. OILS AND GREASES.) MILWAUKEE LUBRICANTS CO., Milwaukee, Wis. Filed May 29, 1930. Serial No. 301,681.

-OILGREZ-

For a Transmission Lubricant.
Claims use since Apr. 5, 1930.

284,413. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE TOY-PACK CORPORATION, New Haven, Conn. Filed May 29, 1930. Serial No. 301,735.

Toypak

For Toys—Namely, Beads, Balloons, Bubble Sets, Harmonicas, Jacks and Balls, Jump Ropes, Marbles, Metal Puzzles, Rattles, Rubber Dolls, Sewing Sets, and Tops.
Claims use since Mar. 24, 1930.

284,414. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) TILLIE SHERWIN, Woodmere, N. Y. Filed May 31, 1930. Serial No. 302,053.

Bentel

For Candies and Chocolates.
Claims use since Apr. 15, 1930.

284,415. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MRS. JAMES H. ANDERSON, doing business as J. H. Anderson, Canton, N. C. Filed July 25, 1930. Serial No. 303,797.

THE ANDERSON

For a Preparation for Use in the Treatment of Coughs, Colds, Croup, and All Bronchial Troubles.
Claims use since Apr. 20, 1930.

284,416. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) ONEIDA COMMUNITY, LIMITED, Oneida, N. Y. Filed Oct. 16, 1930. Serial No. 306,831.

DEAUVILLE

For Silver Flatware and Hollow Ware for Table Use.
Claims use since Aug. 24, 1929.

284,417. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE L. A. YOUNG COMPANY, Detroit, Mich. Filed Nov. 28, 1930. Serial No. 308,407.

Fleetwood

For Wood and Metal Golf Clubs.
Claims use since Nov. 15, 1928.

284,418. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE FAIR, Chicago, Ill. Filed Dec. 29, 1930. Serial No. 309,422.

DEARBORN PERCALE

For Sheets and Pillowcases.
Claims use since Apr. 16, 1930.

CARNEGIE LIBRARY OF ATLANTA

284,419. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) JOHN S. MASON, Rochester, N. Y. Filed Feb. 16, 1931. Serial No. 311,168.



For Kites.
Claims use since Apr. 23, 1930.

284,420. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SMOKE-MINT CO., South Bend, Ind. Filed Mar. 16, 1931. Serial No. 312,203.

Smoke-mint

For Liquid Preparation for Flavoring Cigarettes, Pipes, and Smoking Tobacco.
Claims use since Mar. 15, 1928.

284,421. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FIFTH AVENUE LABORATORIES, INC., New York, N. Y. Filed Mar. 19, 1931. Serial No. 312,296.

Dr. Rice's THROATABS

For Medicinal Tablets for Use in the Treatment of Hoarseness and Throat Ailments.
Claims use since Sept. 12, 1927.

284,422. (CLASS 39. CLOTHING.) ROSE BROS., New York, N. Y. Filed Mar. 23, 1931. Serial No. 312,461.

"RinklePruf"

For Men's, Boys', and Young Men's Topcoats, Overcoats, Sport Coats, and Suits, Consisting of Coats, Vests, Pants, and Knickerbockers.
Claims use since July 2, 1928.

284,423. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) WIEBOLDT STORES, INC., Chicago, Ill. Filed Apr. 2, 1931. Serial No. 312,874.

Kingsbury

For Radio Receiving Sets.
Claims use since Sept. 1, 1928.

284,424. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EVERETT M. SALISBURY, Providence, R. I. Filed Apr. 2, 1931. Serial No. 312,890.

DUTCH

The lining of the drawing is intended for shading only and not for color.
For Dessert Powders of Various Flavorings.
Claims use since Oct. 18, 1927.

284,425. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) STAPLES, JOHNSON & CO., Biddeford, Me. Filed Apr. 9, 1931. Serial No. 313,157.

MARBLEHEAD

For Pleasure Boats, and Particularly Cruisers.
Claims use since Oct. 15, 1928.

284,426. (CLASS 39. CLOTHING.) MONROE SHIRT CO., New York, N. Y.. Filed Apr. 21, 1931. Serial No. 313,606.

Monroe

For Boys' and Youths' Dress, Negligee, and Work Shirts and Blouses, Pajamas, and Underwear, Including Shirts, Drawers, Union Suits, Running Pants, and Drawers Otherwise Known as Shorts.
Claims use since January, 1914.

284,427. (CLASS 37. PAPER AND STATIONERY.) THOMAS DUGAN, San Francisco, Calif. Filed Apr. 11, 1931. Serial No. 313,269.

EVER-KLEAN
PAPER DISH RAG

For Paper Dishrags.
Claims use since Jan. 10, 1930.

284,428. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) STANDARD BRIQUETTE FUEL COMPANY, St. Louis, Mo. Filed May 2, 1931. Serial No. 314,132.

Standard Briquets
A Blended Anthracite

For Briquettes.
Claims use since August, 1929.

284,429. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ROBERT BOSCH AKTIENGESELLSCHAFT, Stuttgart, Germany. Filed July 27, 1928. Serial No. 270,230.

BOSCH

For Lubricating Devices Comprising Oil Pumps and Grease Pumps for Lubricating Motors and All Other Kinds of Machines, and Parts of Lubricating Devices—Namely, Nonreturn Valves, Drop Indicators; Carbureters, Fuel-Injection Devices Used with Internal-Combustion Engines, Comprising Fuel-Injection Pumps, Nozzles, Jets, Nozzle Holders, Pipes.
Claims use since 1911.

284,430. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) BUEGELEISEN & JACOBSON, New York, N. Y. Filed Feb. 20, 1931. Serial No. 311,307.

Tricolo Salanti
Armonica Italiano

For Accordions.
Claims use since 1910.

284,431. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) BUEGELEISEN & JACOBSON, New York, N. Y. Filed Feb. 20, 1931. Serial No. 311,308.

ENRICO BERTINI
BOLOGNA ITALIA

For Accordions.
Claims use since May, 1928.

TRADE-MARK REGISTRATIONS RENEWED

36,496. TERNE PLATE. Registered May 28, 1901. AMERICAN TIN PLATE CO., New York, N. Y. Renewed May 28, 1931, to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey, successor.

36,497. TERNE PLATE. Registered May 28, 1901. AMERICAN TIN PLATE CO., New York, N. Y. Renewed May 28, 1931, to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey, successor.

36,498. TERNE PLATE. Registered May 28, 1901. AMERICAN TIN PLATE CO., New York, N. Y. Renewed May 28, 1931, to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey, successor.

36,499. TERNE PLATE. Registered May 28, 1901. AMERICAN TIN PLATE CO., New York, N. Y. Renewed May 28, 1931, to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey, successor.

36,500. TERNE PLATE. Registered May 28, 1901. AMERICAN TIN PLATE CO., New York, N. Y. Renewed May 28, 1931, to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey, successor.

37,259. DISINFECTANTS. Registered October 29, 1901. SOCIÉTÉ FRANÇAISE DE DÉSINFECTION. Renewed October 29, 1931, to Dagand & Cie., Paris, France, a Firm, successor.

81,793. A PREPARATION FOR EXTERMINATING ANTS. Registered May 9, 1911. HATTIE DIEZ, New Orleans, La. Renewed May 9, 1931.

81,882. LINSEED-OIL. Registered May 16, 1911. KELLOGGS & MILLER. Renewed May 16, 1931, to Kelloggs & Miller, Inc., Amsterdam, N. Y., a Corporation of New York, assignee.

82,783. DRESSES, DRESS AND SHIRT WAISTS, HOUSE-GOWNS, AND PETTICOATS. Registered July 18, 1911. WALDORF MANUFACTURING COMPANY. Renewed July 18, 1931, to Waldorf Manufacturing Company, Inc., Syracuse, N. Y., a Corporation of New York, successor.

82,832. GLUE, ARABIC, PASTE, AND MUCILAGE. Registered July 25, 1911. SANFORD MANUFACTURING COMPANY, Chicago, Ill., a Corporation of Illinois. Renewed June 25, 1931.

83,120. ICE-CREAM FREEZERS. Registered August 22, 1911. ACME FREEZER COMPANY. Renewed August 22, 1931, to Acme Can Company, Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

83,247. CANNED CORN, CANNED PUMPKIN, AND CANNED HOMINY. Registered August 29, 1911. GRIMES CANNING & PRESERVING COMPANY, Grimes, Iowa. Renewed August 29, 1931, to Grimes Canning Corporation, Des Moines, Iowa, a Corporation of Iowa, successor.

83,379. NUTCRACKERS. Registered September 5, 1911. WOLDERT GROCERY COMPANY, Tyler, Tex., and Chicago, Ill. Renewed September 5, 1931, to Alex Woldert Company, Tyler, Tex., a Corporation of Texas, by change of name.

83,517. CANDLES. Registered September 19, 1911. SCHAEFFER BROS. & POWELL MFG. CO., St. Louis, Mo., a Corporation of Missouri. Renewed September 19, 1931.

83,518. CANDLES. Registered September 19, 1911. SCHAEFFER BROS. & POWELL MFG. CO., St. Louis, Mo., a Corporation of Missouri. Renewed September 19, 1931.

LABELS

REGISTERED JUNE 23, 1931

39,322.—*Title:* AGRE'S SPECIAL ROLL BUTTER. For Enveloping Butter. K. AGRE & SONS, Philadelphia, Pa. Published April 14, 1931.

39,323.—*Title:* ATLANTIC. For Malt Syrup. ATLAS FOOD PRODUCTS CO., INCORPORATED, Philadelphia, Pa. Published March 25, 1931.

39,324.—*Title:* BEECH-NUT BRAND CHEWING GUM, WINTERGREEN. For Chewing Gum. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published May 13, 1931.

39,325.—*Title:* CHINA PLATED SHELF AND LINING PAPER. For Shelf and Lining Paper. K. BEZIC, Parchment, Mich. Published March 1, 1931.

39,326.—*Title:* THE LITTLE MICHIGAN SANDWICH SHOP. For Sandwiches. LESTER A. GRAYBIEL, Kalamazoo, Mich. Published May 1, 1931.

39,327.—*Title:* SUNRISE COFFEE. For Coffee. KANSAS CITY WHOLESALE GROCERY COMPANY, Kansas City, Mo. Published April 1, 1931.

39,328.—*Title:* LUCKY PENNY CHEWING GUM. For Chewing Gum. ORBIT LISTERATED GUM COMPANY, Chicago, Ill. Published April 22, 1931.

39,329.—*Title:* LUCKY PENNY CHEWING GUM. For Chewing Gum. ORBIT LISTERATED GUM COMPANY, Chicago, Ill. Published April 22, 1931.

39,330.—*Title:* ARRO-LIN. For Penetrating Liniment. D. EARLE POWELL, Tampa, Fla. Published April 30, 1931.

39,331.—*Title:* SCHOENHUT'S NOBBY NOBS. For Sets of Toy Construction Blocks. THE A. SCHOENHUT COMPANY, Philadelphia, Pa. Published April 15, 1931.

39,332.—*Title:* SCHOENHUT'S RING-A-HUB. For Ring Tossing Game. THE A. SCHOENHUT COMPANY, Philadelphia, Pa. Published April 15, 1931.

39,333.—*Title:* INDIAN CHIEF. For Petroleum Lubricating Oils. TECUMSEH PETROLEUM COMPANY INC., Philadelphia, Pa. Published April 18, 1931.

39,334.—*Title:* TRIPLE AAA—THE ENEMY TO PAIN. For Tablets for the Treatmeat of Headaches, Colds, Etc. TRIPLE AAA TABLETS, INC., Buffalo, N. Y. Published May 1, 1931.

39,335.—*Title:* COFFEE. For Coffee. UNION BAG & PAPER CORPORATION, New York, N. Y. Published April 6, 1931.

39,336.—*Title:* WRIGLEY'S PEPSIN CHEWING GUM. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published April 22, 1931.

39,337.—*Title:* WRIGLEY'S PEPSIN CHEWING GUM. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published April 22. 1931.

PRINTS

REGISTERED JUNE 23, 1931

13,247.—*Title:* CANTEEN. For Candy Bars. AUTOMATIC CANTEEN COMPANY, Chicago, Ill. Published May 4, 1931.

13,248.—*Title:* CAPITAL BAKERS. For Bread. CAPITAL CITY BAKING CO., Harrisburg, Pa. Published February 18, 1931.

13,249.—*Title:* SHE'S THE BELLE OF AMHERST. For Wheat Breakfast Food. THE CREAM OF WHEAT CORPORATION, Minneapolis, Minn. Published May 19, 1931.

13,250.—*Title:* BAKE-O-GRAM. For Bakery Products. CUSHMAN'S SONS, INC., Chicago, Ill. Published April 1, 1931.

13,251.—*Title:* LUCKY PENNY CHEWING GUM. For Chewing Gum. ORBIT LISTERATED GUM COMPANY, Chicago, Ill. Published April 22, 1931.

13,252.—*Title:* CAMEL-LIGHTING TIME. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 21, 1931.

13,253.—*Title:* LET'S GO. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published January 31, 1931.

13,254.—*Title:* A WINTER'S TALE. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published January 1, 1931.

13,255.—*Title:* IT KEEPS THEM SO MILD AND FRESH. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published April 25, 1931.

13,256.—*Title:* COMPANIONSHIP. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published December 20, 1930.

13,257.—*Title:* UP SPOKE THE DUKE (IN MEASURE FOR MEASURE)—I'LL TAKE A CAMEL FOR MAXIMUM PLEASURE. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 15, 1931.

13,258.—*Title:* TWAS CAMELS' MILDNESS BROUGHT ABOUT THE TAMING OF THE SHREW, NO DOUBT. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published May 10, 1931.

13,259.—*Title:* CAMELS BROUGHT CHEER TO GOOD KING LEAR. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published April 12, 1931.

13,260.—*Title:* AND CYRANO DE BERGERAC OPENED UP ANOTHER BOX. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published December 21, 1930.

13,261.—*Title:* CAMELS NO PHANTOM PLEASURE, HAMLET FINDS. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published January 18, 1931.

13,262.—*Title:* CAMELS PLEASE MY ROMAN BEEZER. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published February 15, 1931.

13,263.—*Title:* UNHURRIED CHOOSING. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published March 1, 1931.

13,264.—*Title:* SWING ALONG. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published February 28, 1931.

13,265.—*Title:* COMRADES OF THE SUN. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published February 1, 1931.

13,266.—*Title:* IT MUST BE SPRING. For Cigarettes. R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Published April 1, 1931.

13,267.—*Title:* THE LOW POINT SALE. For Furniture. JOHN WANAMAKER NEW YORK, New York, N. Y. Published May 18, 1931.

13,268.—*Title:* THE LOW POINT SALE. For Eastern Rugs. JOHN WANAMAKER NEW YORK, New York, N. Y. Published May 19, 1931.

13,269.—*Title:* THE LOW POINT SALE. For Axminster Rugs. JOHN WANAMAKER NEW YORK, New York, N. Y. Published May 20, 1931.

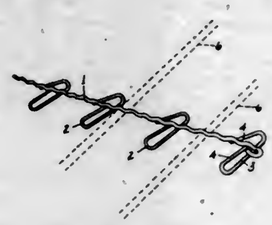
13,270.—*Title:* THE LOW POINT SALE. For Lamps. JOHN WANAMAKER NEW YORK, New York, N. Y. Published May 21, 1931.

13,271.—*Title:* WRIGLEY'S PEPSIN CHEWING GUM. For Chewing Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published April 22, 1931.

REISSUES

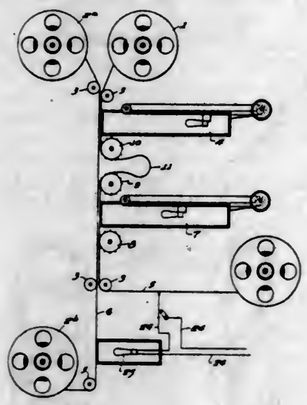
JUNE 23, 1931

18,107. STRUCTURAL UNIT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Original No. 1,706,558, dated Mar. 26, 1929, Serial No. 212,244, filed Aug. 11, 1927. Application for reissue filed Aug. 1, 1930. Serial No. 472,429. 6 Claims. (Cl. 72—122.)



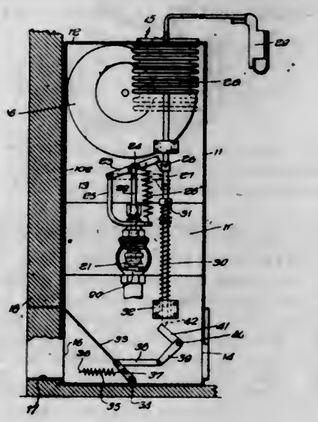
6. A reinforce bar support comprising a corrugated longitudinal supporting rod disposed with its corrugations in a vertical plane, the corrugations being comparatively shallow relative to the length of the rod and constituting seats with which the elements to be supported may be selectively engaged, and supporting feet for said rod fixedly secured thereto in spaced relation.

18,108. TALKING MOTION PICTURES AND METHOD OF OBLITERATING STIPULATED PORTION OR PORTIONS THEREFOR. LEE DE FOREST, New York, N. Y., assignor, by mesne assignments, to General Talking Pictures Corporation, a Corporation of Delaware. Original No. 1,695,415, dated Dec. 18, 1928, Serial No. 713,887, filed May 17, 1924. Application for reissue filed Dec. 16, 1930. Serial No. 502,843. 11 Claims. (Cl. 95—75.)



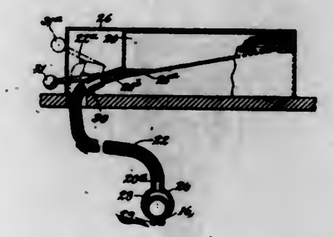
1. The method of preventing the production of ground noises from positive photographic films having sound records separated by unexposed portions, which comprises subjecting the positive film to light exposure at the unexposed portions corresponding to the silent portions of the negative to blacken those portions of the film when developed.

18,109. HEATING AND VENTILATING APPARATUS. GERALD E. OTIS, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Original No. 1,753,157, dated Apr. 1, 1930, Serial No. 337,367, filed Feb. 4, 1929. Application for reissue filed May 8, 1931. Serial No. 536,048. 11 Claims. (Cl. 236—38.)



1. In an apparatus of the character described, the combination with a housing having a recirculating inlet for indoor air and an inlet for outdoor air, and an outlet through which said air is discharged into an indoor compartment; heating means arranged within said housing, and coordinated regulating mechanism for controlling said heating means, said indoor air inlet, and said outdoor air inlet, said means being adapted within its complete range of operations to progressively and in the following order restrict the heat output of the heating means, and to progressively restrict the ingress of recirculated air and to resultantly increase the admission of outdoor air into said housing.

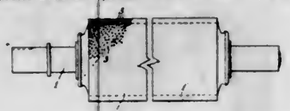
18,110. CAR HEATER. SERGIUS VERNET, Brooklyn, N. Y. Original No. 1,705,550, dated Mar. 19, 1929, Serial No. 200,328, filed June 21, 1927. Reissue No. 17,431, dated Sept. 10, 1929, Serial No. 380,738, filed July 24, 1929. This application for reissue filed July 17, 1930. Serial No. 468,718. 18 Claims. (Cl. 237—12.3.)



1. A vapor pressure heating system for a vehicle having an engine, comprising a vapor generator for absorbing heat from the exhaust gases of the engine, a condenser radiator, conducting means operatively connecting the

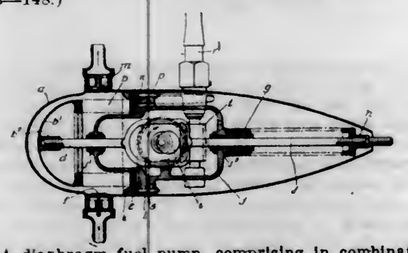
generator and the radiator for the flow of vaporized fluid from the generator to the radiator and the return of condensate from the radiator to the generator, and means for trapping varying amounts of fluid to vary the quantity of fluid actively in circulation, the return of condensate to the generator being modified by said means only when the amount of trapped fluid is being changed.

18,111. ROLL. FREDERICK R. WOODWARD, Newton, Mass., assignor to Stowe & Woodward Company, Newton Upper Falls, Mass., a Corporation of Massachusetts. Original No. 1,787,890, dated Jan. 6, 1931, Serial No. 413,483, filed Dec. 12, 1929. Application for reissue filed May 2, 1931. Serial No. 534,683. 8 Claims. (Cl. 92—49.)



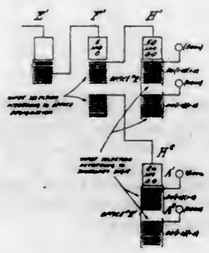
1. A roll comprising pieces of rock forming a portion of the active surface of the roll; and a binder of material other than said rock for holding said pieces in the desired position.

18,112. DIAPHRAGM FUEL PUMP. JEAN LOUIS LÉON ALEXANDRE ALBERT MOULET, Boulogne-sur-Seine, France, assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Original No. 1,597,689, dated Aug. 31, 1926, Serial No. 244,126, filed July 9, 1918, and in France June 4, 1917. Application for reissue filed Apr. 10, 1930. Serial No. 443,204. 16 Claims. (Cl. 103—148.)



1. A diaphragm fuel pump, comprising in combination, an outer envelope, an inlet valve on said envelope adapted to be connected to a fuel supply, an outlet valve on said envelope adapted to be connected to the constant level fuel tank of a carbureter, an inner collapsible and extensible envelope forming a liquid-tight joint with the outer envelope, a sliding rod secured to the inner collapsible envelope, an eccentric cam adapted to positively move said rod in the direction corresponding to suction to draw fuel from the fuel supply past the inlet valve, means for operating said cam, and elastic means adapted to return the inner collapsible envelope in the opposite direction.

18,113. MULTIOFFICE AUTOMATIC TELEPHONE SYSTEM. MICHAEL SCHWARTZ, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Feb. 8, 1924, Serial No. 691,327. Renewed Oct. 24, 1927. Original No. 1,674,134, dated June 19, 1928. Application for reissue filed June 18, 1930. Serial No. 462,115. 72 Claims. (Cl. 179—18.)



1. In a multi-office telephone system wherein telephone numbers consist respectively of an office designation and a numerical designation, a train of automatic switches for connecting a calling and called line, a director comprising registering apparatus and sending apparatus controlled by said registering apparatus to produce series of impulses for operating said switches, two sets of wipers in one of said switches, and means in said director controlled in accordance with the office designations of called numbers for controlling the selection of either set of wipers.

DESIGNS

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84,452. ICE-CREAM CONTAINER. JAMES L. BALTON, Baltimore, Md. Filed Oct. 27, 1930. Serial No. 37,402. Term of patent 14 years.



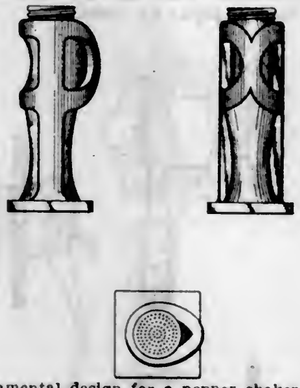
The ornamental design for an ice-cream container, as shown and described.

84,453. SALT SHAKER. HARVEY M. BARR, New York, N. Y. Filed Apr. 7, 1931. Serial No. 39,392. Term of patent 7 years.



The ornamental design for a salt shaker, as shown.

84,454. PEPPER SHAKER. HARVEY M. BARR, New York, N. Y. Filed Apr. 7, 1931. Serial No. 39,393. Term of patent 7 years.



The ornamental design for a pepper shaker, as shown.

84,455. COSMETIC JAR. JOSEPH J. BAUMAN, Chicago, Ill. Filed Apr. 1, 1931. Serial No. 39,329. Term of patent 3½ years.



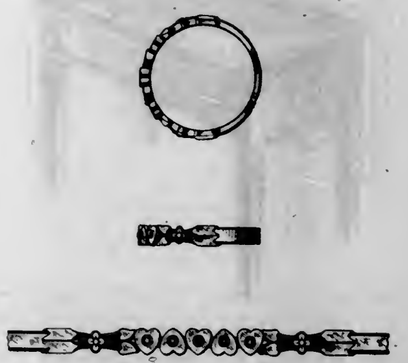
The ornamental design for a cosmetic jar as shown.

84,456. FLASH LIGHT HEAD. LOUIS A. BEAN, Denver, Colo., assignor to Ivan L. Bean, Denver, Colo. Filed Mar. 14, 1930. Serial No. 34,861. Term of patent 7 years.



The ornamental design for a flashlight head, as shown.

84,457. FINGER RING OR SIMILAR ARTICLE. JACOB BERLINGER, Brooklyn, N. Y. Filed Apr. 3, 1931. Serial No. 39,360. Term of patent 14 years.



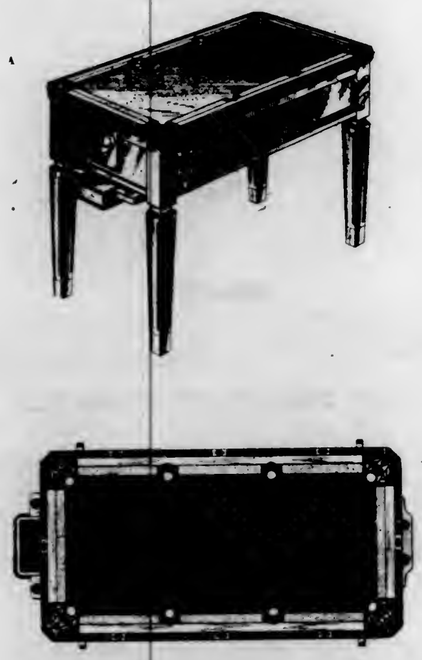
The ornamental design for a finger ring or similar article, substantially as shown.

84,458. WATER CLOSET BOWL. GEORGE BRAIN, Tiffin, Ohio, assignor to Standard Sanitary Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Mar. 25, 1931. Serial No. 39,238. Term of patent 14 years.



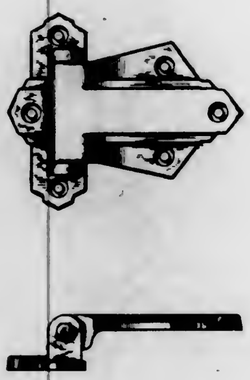
The ornamental design for a water closet bowl, as shown.

84,459. POOL TABLE. ISAAC H. BURNSTINE, Chicago, Ill. Filed May 1, 1931. Serial No. 39,680. Term of patent 14 years.



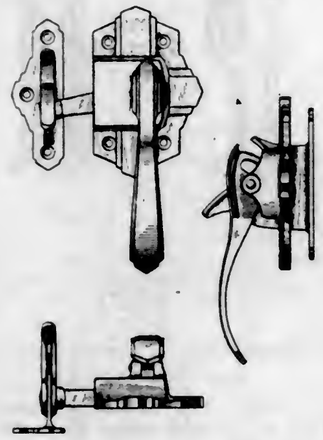
The ornamental design for a pool table as shown.

84,460. HINGE. EDWARD BURTON, Rockford, Ill., assignor to National Lock Co., Rockford, Ill., a Corporation of Delaware. Filed Apr. 20, 1931. Serial No. 39,561. Term of patent 7 years.



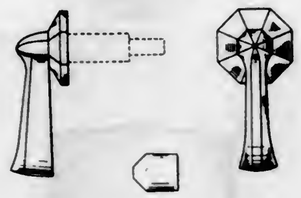
The ornamental design for a hinge as shown.

84,461. LATCH. EDWARD BURTON, Rockford, Ill., assignor to National Lock Co., Rockford, Ill., a Corporation of Delaware. Filed Apr. 20, 1931. Serial No. 39,562. Term of patent 3½ years.



The ornamental design for a latch, as shown.

84,462. HANDLE FOR FLUSH TANKS OR THE LIKE. HERBERT D. CLEMMONS, Sturgis, Mich., assignor to Scovill Manufacturing Company, Sturgis, Mich. Filed Mar. 27, 1931. Serial No. 39,270. Term of patent 14 years.



The ornamental design for a handle for flush tanks or the like, as shown.

84,463. CIGAR LIGHTER. JOSEPH H. COHEN, Bridgeport, Conn. Filed Apr. 11, 1931. Serial No. 39,445. Term of patent 14 years.



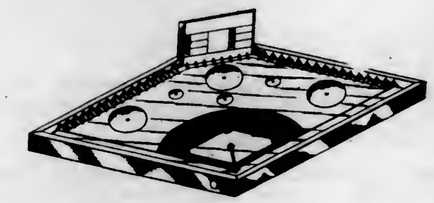
The ornamental design for a cigar lighter, as shown.

84,464. CIGAR LIGHTER. JOSEPH H. COHEN, Bridgeport, Conn. Filed Apr. 11, 1931. Serial No. 39,446. Term of patent 14 years.



The ornamental design for a cigar lighter, as shown.

84,465. BASEBALL GAME BOARD. BURDETTE R. COLBION, Maywood, Ill. Filed Mar. 16, 1931. Serial No. 39,105. Term of patent 7 years.



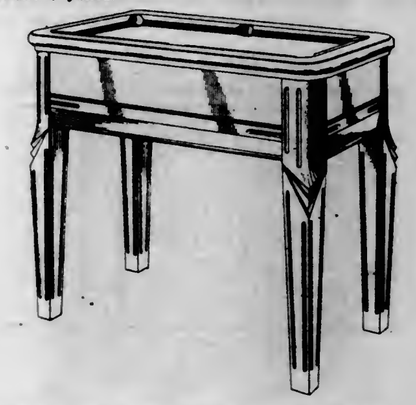
The ornamental design for a baseball game board as shown.

84,466. ROOM HEATER. CLAUDE M. DIBBLE, Joliet, Ill., assignor to Moore Brothers Company, Joliet, Ill., a Corporation of Illinois. Filed Sept. 27, 1930. Serial No. 37,077. Term of patent 7 years.



The ornamental design for a room heater as shown and described.

84,467. POOL TABLE. WILLIAM G. EBERHART, Chicago, Ill. Filed May 1, 1931. Serial No. 39,673. Term of patent 7 years.



The ornamental design for a pool table, as shown.

84,468. TEXTILE FABRIC OR SIMILAR ARTICLE. GUSTAVE M. FAUSER, Ardsley on Hudson, N. Y., assignor to Atkinson, Wade & Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 20, 1931. Serial No. 39,173. Term of patent 3½ years.



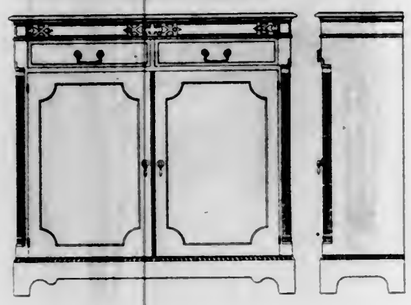
The ornamental design for a textile fabric or similar article, substantially as shown and described.

84,469. BOTTLE. JOHN E. FOWLER, Rosslyn, Va. Filed Apr. 23, 1931. Serial No. 39,604. Term of patent 14 years.



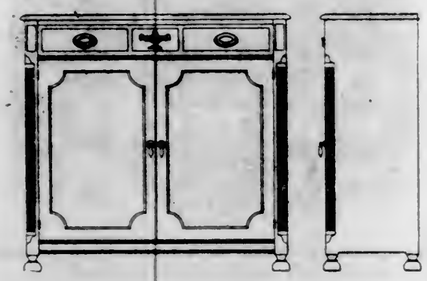
The ornamental design for a bottle substantially as shown.

84,470. HUMIDIFIER CABINET. WILLIAM A. FRENCH, Minneapolis, Minn. Filed Apr. 16, 1931. Serial No. 39,501. Term of patent 3½ years.



The ornamental design for a humidifier cabinet, as shown.

84,471. HUMIDIFIER CABINET. WILLIAM A. FRENCH, Minneapolis, Minn. Filed Apr. 16, 1931. Serial No. 39,502. Term of patent 3½ years.



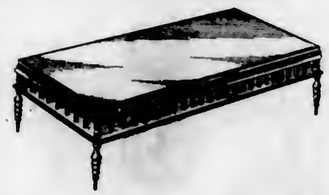
The ornamental design for a humidifier cabinet, as shown.

84,472. TABLE LIGHTER. HENRY J. GOLDBLATT, Chicago, Ill., assignor to Vidrio Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 23, 1931. Serial No. 39,203. Term of patent 7 years.



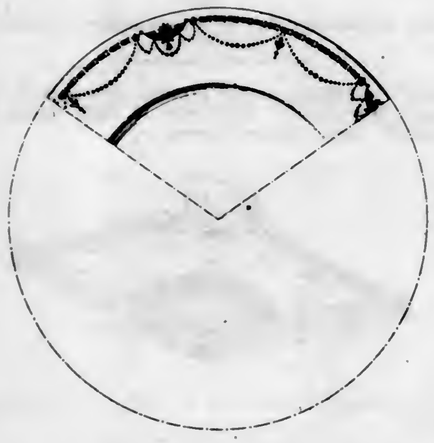
The ornamental design for a table lighter as shown and described.

84,473. TABLE. JULIUS O. GULBRANSON, Richmond, Va. Filed Apr. 13, 1931. Serial No. 39,459. Term of patent 7 years.



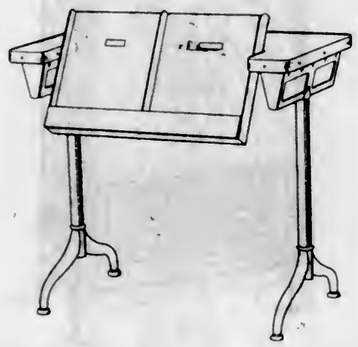
The ornamental design for a table, as shown.

84,474. PLATE. EDWIN HALE, Wheeling, W. Va., assignor to Warwick China Company, Wheeling, W. Va. Filed May 4, 1931. Serial No. 39,706. Term of patent 3½ years.



The ornamental design for a plate, as shown and described.

84,475. DISPLAY TABLE. WALTER M. HANSON, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Apr. 3, 1931. Serial No. 39,354. Term of patent 3½ years.



The ornamental design for a display table, substantially as shown.

84,476. BOTTLE. THOMAS S. HARRIS, Lowell, Mass., assignor to The Ayer Company, Lowell, Mass., a Corporation of Massachusetts. Filed Apr. 18, 1931. Serial No. 39,543. Term of patent 14 years.



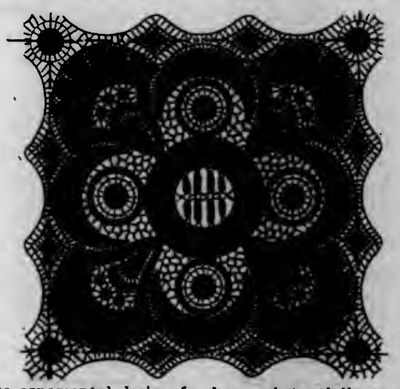
The ornamental design for a bottle substantially as shown and described.

84,477. GAME BOARD. MAX M. HIRTENSTEIN, Jamaica, N. Y. Filed Feb. 20, 1931. Serial No. 38,741. Term of patent 7 years.



The ornamental design for a game board as shown.

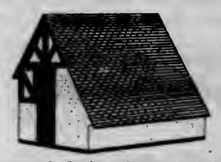
84,478. LACE. HAGE W. HUCKNALL, Elyria, Ohio, assignor to The American Lace Mfg. Co., Elyria, Ohio, a Corporation of Ohio. Filed Apr. 25, 1931. Serial No. 39,623. Term of patent 3½ years.



The ornamental design for lace, substantially as shown and described.

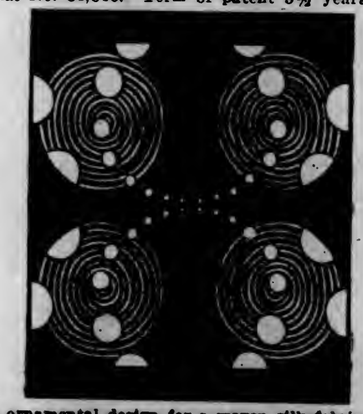
84,479. BUILDING. SEWARD B. JACKSON, Chatham, N. J. Filed Jan. 16, 1931. Serial No. 38,329. Term of patent 7 years.





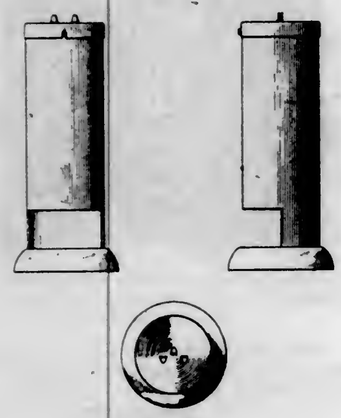
The ornamental design for a building, as shown.

84,480. WOVEN SILK FABRIC OR SIMILAR ARTICLE. GEORGE KATEB, New York, N. Y. Filed Feb. 27, 1931. Serial No. 38,846. Term of patent 3½ years.



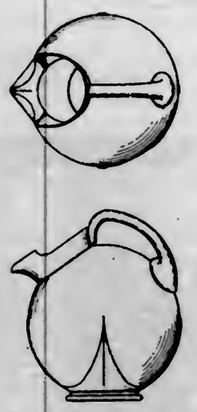
The ornamental design for a woven silk fabric or similar article, as shown and described.

84,481. DISPLAY STAND. MELVILLE KEIM, Chicago, Ill., assignor to The Apex Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed July 8, 1929. Serial No. 31,966. Term of patent 14 years.



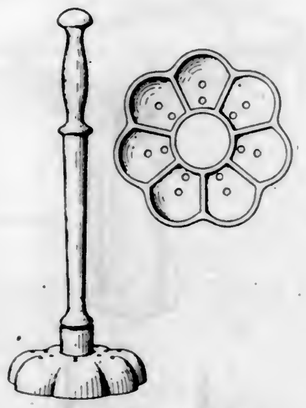
The ornamental design for a display stand, as shown.

84,482. WATER JUG OR SIMILAR ARTICLE. JESS CLAIR KELLY, Cambridge, Ohio. Filed Apr. 21, 1931. Serial No. 39,585. Term of patent 7 years.



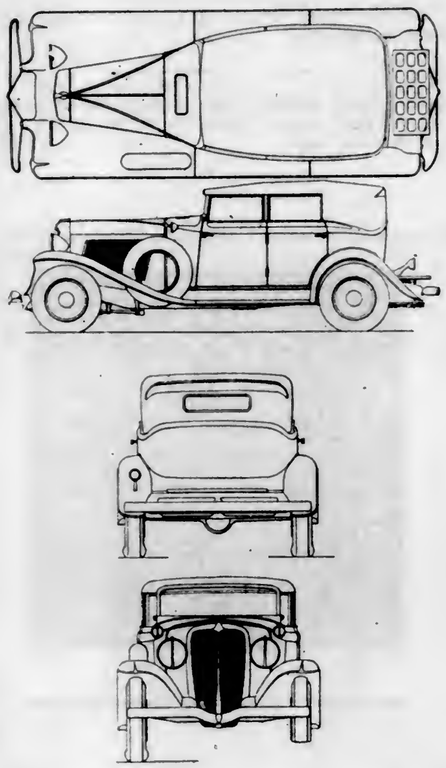
The ornamental design for a water jug or similar article, as shown.

84,483. WASHING APPLIANCE. MAUDE T. KELLEY, Mount Vernon, N. Y. Filed May 1, 1931. Serial No. 39,685. Term of patent 14 years.



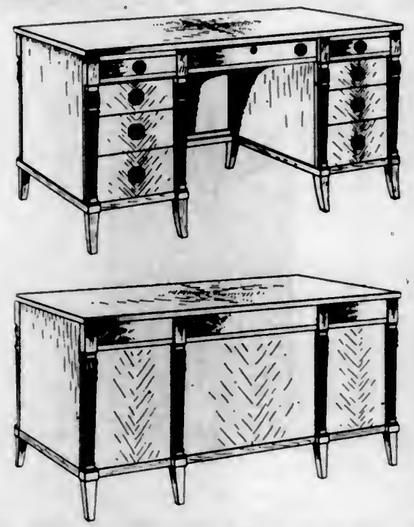
The ornamental design for a washing appliance, as shown.

84,484. AUTOMOBILE. ALAN H. LEAMY, Auburn, Ind., assignor to Auburn Automobile Company, Auburn, Ind., a Corporation of Indiana. Filed Apr. 24, 1931. Serial No. 39,614. Term of patent 7 years.



The ornamental design for an automobile substantially as shown.

84,485. DESK. JOSEPH R. MCCARGAR, Grand Rapids, Mich. Filed May 4, 1931. Serial No. 39,710. Term of patent 7 years.



The ornamental design for a desk, as shown.

84,486. TABLE. RALPH K. MERRILL, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Mar. 19, 1931. Serial No. 39,159. Term of patent 7 years.



The ornamental design for a table, substantially as shown.

84,487. SCHOOL DESK. RALPH K. MERRILL, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Mar. 19, 1931. Serial No. 39,160. Term of patent 7 years.



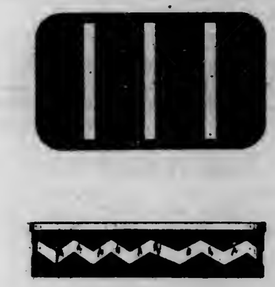
The ornamental design for a school desk, substantially as shown.

84,488. TABLE. ERVING B. MORGAN, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Mar. 12, 1931. Serial No. 39,048. Term of patent 7 years.



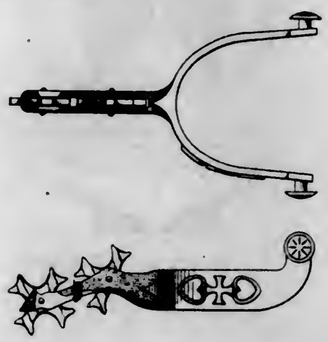
The ornamental design for a table, substantially as shown.

84,489. RUBBER SOAP DISH. ALBERT L. MURRAY, Auburn, Ind. Filed Mar. 16, 1931. Serial No. 39,107. Term of patent 3½ years.



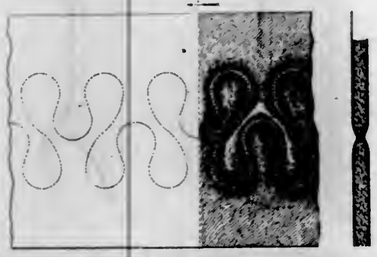
The ornamental design for a rubber soap dish, as shown.

84,490. RIDING SPUR. GILBERT J. ORMISTON, Judson, N. Dak. Filed Apr. 13, 1931. Serial No. 39,458. Term of patent 7 years.



The ornamental design for a riding spur, substantially as shown.

84,491. MATTRESS BORDER. HUGO PERLESZ, Chicago, Ill., assignor to Burton-Dixie Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 23, 1931. Serial No. 39,217. Term of patent 14 years.



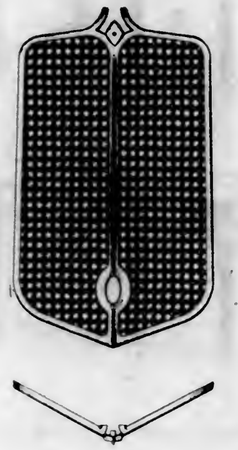
The ornamental design for a mattress border, as shown and described.

84,492. RADIATOR GUARD. BENJAMIN PUTTERMAN, Brooklyn, N. Y., assignor to Yankee Metal Products Corp., a Corporation of New York. Filed Apr. 20, 1931. Serial No. 39,573. Term of patent 7 years.



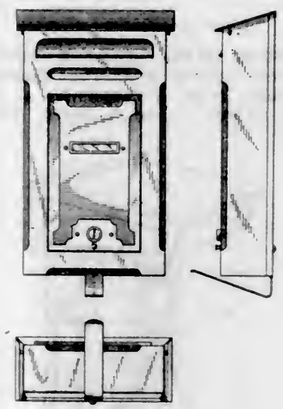
The ornamental design for a radiator guard, substantially as shown and described.

84,493. RADIATOR GUARD. BENJAMIN PUTTERMAN, Brooklyn, N. Y., assignor to Yankee Metal Products Corp., a Corporation of New York. Filed Apr. 20, 1931. Serial No. 39,574. Term of patent 7 years.



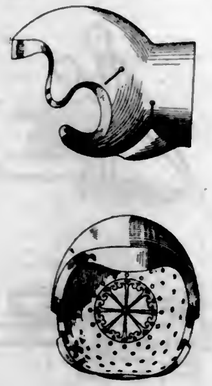
The ornamental design for a radiator guard, substantially as shown.

84,494. MAIL BOX. GEORGE H. REIMER, Fulton, Ill., assignor to Patent Novelty Company, Fulton, Ill., a Corporation of Illinois. Filed Apr. 27, 1931. Serial No. 39,635. Term of patent 7 years.



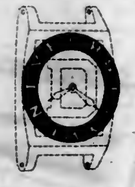
The ornamental design for a mail box, as shown.

84,495. HOOD FOR A HAIR DRIER OR ARTICLE OF SIMILAR NATURE. PETER SANTURELLO, Columbus, Ohio. Filed Jan. 27, 1931. Serial No. 38,460. Term of patent 14 years.



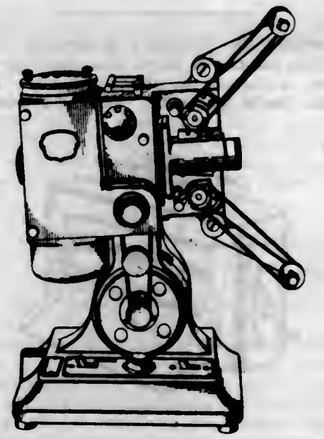
The ornamental design for a hood for a hair drier or article of similar nature, as shown.

84,496. WATCHCASE. WILLIAM SCHEIBEL, New York, N. Y., assignor to Bulova Watch Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 21, 1930. Serial No. 37,338. Term of patent 14 years.



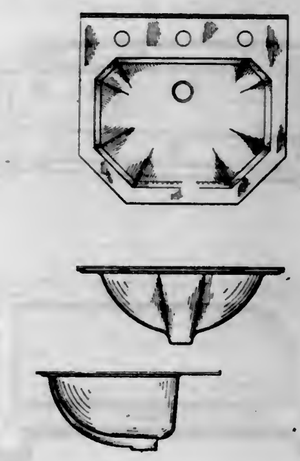
The ornamental design for a watchcase, as shown and described.

84,497. CASING FOR A CINEMATOGRAPH. ABRAHAM SHAPIRO, Chicago, Ill., assignor to Universal Stamping & Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1931. Serial No. 38,620. Term of patent 14 years.



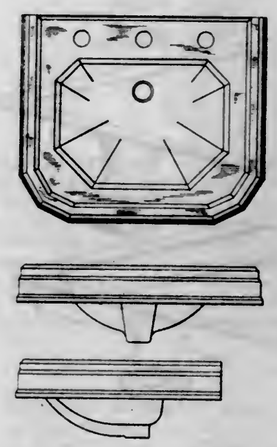
The ornamental design for a casing for a cinematograph as shown and described.

84,498. LAVATORY. CARMI J. STEELE, Los Angeles, Calif., assignor of one-third to Roy C. Troeger and one-third to Wallace R. Coates, Los Angeles, Calif. Filed Apr. 2, 1931. Serial No. 39,346. Term of patent 3½ years.



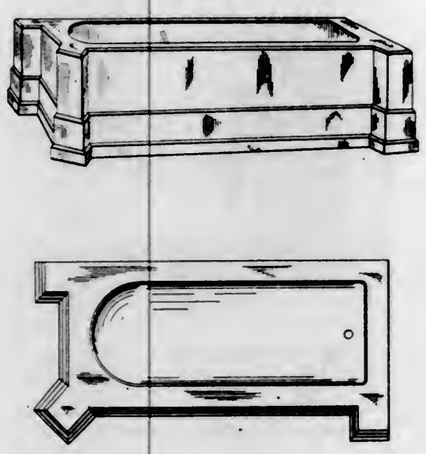
The ornamental design for a lavatory, as shown.

84,499. LAVATORY. CARMI J. STEELE, Los Angeles, Calif., assignor of one-third to Roy C. Troeger and one-third to Wallace R. Coates, Los Angeles, Calif. Filed Apr. 2, 1931. Serial No. 39,347. Term of patent 3½ years.



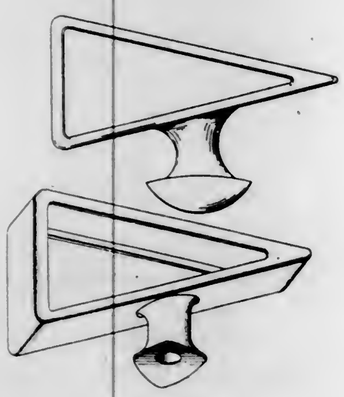
The ornamental design for a lavatory, as shown.

84,500. BATHTUB. CARMI J. STEELE, Los Angeles, Calif., assignor of one-third to Roy C. Troeger and one-third to Wallace R. Coates, Los Angeles, Calif. Filed Apr. 2, 1931. Serial No. 39,348. Term of patent 3½ years.



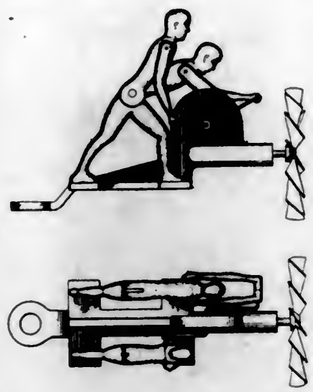
The ornamental design for a bathtub, as shown.

84,501. LAMP CASING. JOHN TEMPLETON, Detroit, Mich. Filed Feb. 13, 1930. Serial No. 34,530. Term of patent 7 years.



The ornamental design for a lamp casing, as shown.

84,502. RADIATOR CAP ORNAMENT. WILLIAM B. VANDEGRIFT, Minneapolis, and SIGFRED O. BYSTROM, St. Paul, Minn. Filed Apr. 18, 1931. Serial No. 39,554. Term of patent 7 years.

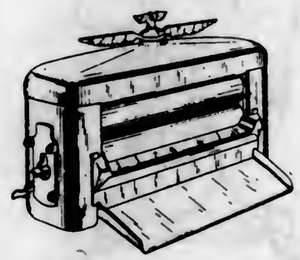


The ornamental design for a radiator cap ornament as shown.

84,503. WRINGER. WALTER L. KAUFFMAN, 2d, Youngstown, Ohio, assignor to Lovell Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 17, 1931. Serial No. 38,704. Term of patent 14 years.

The ornamental design for a wringer, as shown and described.

84,504. WRINGER. WALTER L. KAUFFMAN, 2d, Youngstown, Ohio, assignor to Lovell Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Feb. 17, 1931. Serial No. 38,705. Term of patent 14 years.

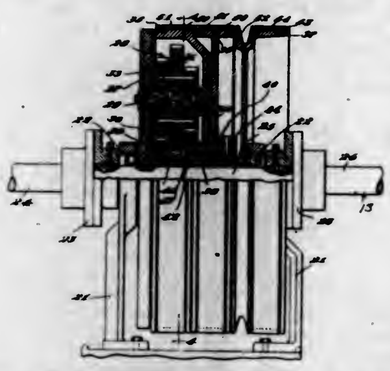


The ornamental design for a wringer, as shown and described.

PATENTS

GRANTED JUNE 23, 1931

1,810,890. ACTUATING APPARATUS FOR THEATER CURTAINS AND THE LIKE. EARLE F. ALLEN, Cambridge, Mass., assignor to Allen-Drew Co., Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 2, 1929. Serial No. 351,842. 7 Claims. (Cl. 254—141.)



1. Actuating apparatus for raising, lowering or holding in position theatre curtains or like articles comprising a power driven rotary shaft, a plurality of units carried by the shaft and including means normally free from turning therewith, connections from each said unit to the article to be actuated and means operable upon each said unit for holding the normally free means of the unit against rotation upon said shaft whereby the article is stationary and for causing the same to be rotated by the shaft either in the same or the opposite direction as the shaft rotates in one direction whereby the article is raised or lowered at the will of the operator.

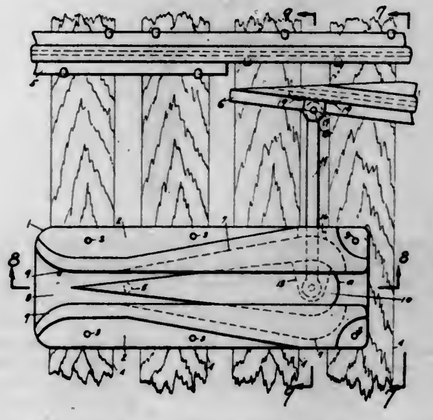
1,810,891. BUILDING CONSTRUCTION. ALBERT F. BEMIS, Newton, Mass., assignor to Bemis Industries, Inc., Boston, Mass., a Corporation of Delaware. Filed Nov. 20, 1926. Serial No. 149,766. 11 Claims. (Cl. 72—30.)



1. A wall construction comprising a row of parallel studs, a layer of slabs upon each side of the row, said slabs having intermediate grooves in interfitting engagement with certain of the studs, and having marginal portions cut away to engage studs at their edges.

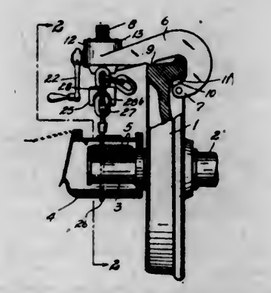
1,810,892. AUTOMATIC RAIL SWITCH OPERATING DEVICE. JOHN BOYKO, Detroit, Mich., assignor of one-half to Nikolas Stepankow, Detroit, Mich. Filed Dec. 7, 1928. Serial No. 324,358. 5 Claims. (Cl. 246—269.)

1. A railway switch operating device adapted for automatically opening and closing a railway switch and used in combination with a track vehicle operating bar, comprising a hollow track casing having means for rigidly attaching same to the track ties between the double track rails, a V-shaped switch block pivotally mounted within said hollow track casing by a pivot positioned near the pointed end thereof, said switch block being capable of swinging sidewise within said hollow casing when engaged by a single track vehicle operating bar, a switch point operating bar having one end pivotally attached to



the movable end of said switch block, and means mounted on the opposite end of said operating bar for attaching same to a railway switch point.

1,810,893. JOURNAL BOX JACK. THOMAS CARDWELL, St. Louis, Mo. Filed Apr. 2, 1928. Serial No. 266,524. 7 Claims. (Cl. 254—34.)

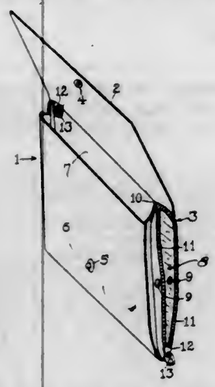


1. A journal box suspension jack comprising a hanger member adapted to bear against the tread of a car wheel and having an integral hooked inner end portion adapted to embrace the flanged edge of the rim of said wheel at the top thereof, a dog pivoted on the hooked portion of said hanger in position to bear against the inner periphery of said rim, a vertically movable lifting screw mounted on the outer end of said hanger, and a flexible member carried by said screw for suspending the journal box therefrom.

1,810,894. COMBINED HAND BAG AND CONCEALED MUFF. ABRAHAM COTLER and CARL F. W. FORSSBERG, Brooklyn, N. Y.; said Forssberg assignor to said Cotler. Filed June 25, 1929. Serial No. 373,677. 5 Claims. (Cl. 2—66.)

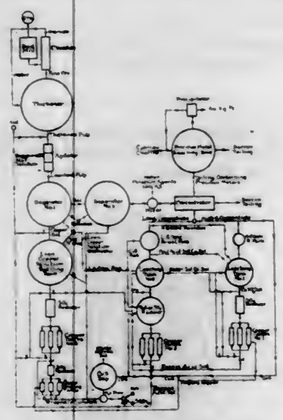
1. A combined hand bag and concealed muff including a bag having a front and back wall, a muff structure built into the back wall so that the ends of the muff structure

are open at the ends of the back wall independently of the opening of the bag proper, co-operating closure means



arranged at the ends of said muff structure, and concealable means for closing said closure means, and thereby closing the ends of said muff structure at will.

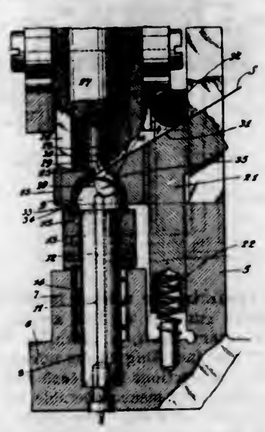
1,810,895. COPPER EXTRACTION PROCESS. WILLIAM E. GREENAWALT, Denver, Colo. Filed Feb. 14, 1927. Serial No. 167,999. 8 Claims. (Cl. 204—15.)



1. A process of treating mixed oxide and sulphide copper ore comprising, leaching the ore with an acid solution to extract the copper in its oxide combinations, chemically precipitating the copper from the resulting solution, subjecting the leached residue to flotation or gravity concentration to separate a sulphide concentrate, roasting the concentrate to make a portion of the copper water soluble and a portion acid soluble, leaching the roasted concentrate to extract the water soluble copper, electrolyzing the resulting copper solution to deposit the copper and regenerate acid, then leaching the concentrate to extract the acid soluble copper, separately electrolyzing the resulting copper solution containing salts of iron to deposit the copper and regenerate acid and ferric iron, reducing the ferric iron formed by the electrolysis to the ferrous condition with the chemically precipitated copper, and again electrolyzing the solution.

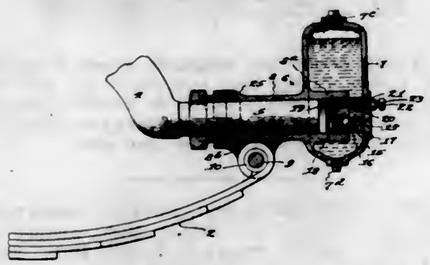
7. A copper extraction process comprising, treating copper ore to separate a sulphide copper concentrate, roasting the concentrate to make a portion of the copper water soluble and a portion acid soluble, leaching the roasted concentrate to extract a portion of the copper as a relatively pure and relatively rich copper solution, then leaching the roasted concentrate to extract the remaining copper as a relatively impure copper solution containing salts of iron, precipitating the copper from the relatively pure and relatively rich copper solution in one electrolytic circuit, precipitating the copper from the relatively impure copper solution containing salts of iron in another electrolytic circuit to deposit the copper and regenerate acid and ferric iron, reducing the ferric iron so formed with concentrated copper sulphide, and again electrolyzing the solution.

1,810,896. METHOD AND MEANS FOR ASSEMBLING THE PARTS OF ARTIFICIAL EYES. LEO J. GRUBMAN, Belle Harbor, Long Island, N. Y., assignor to Margon Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 12, 1927, Serial No. 167,634. Renewed Feb. 12, 1930. 19 Claims. (Cl. 18—1.)



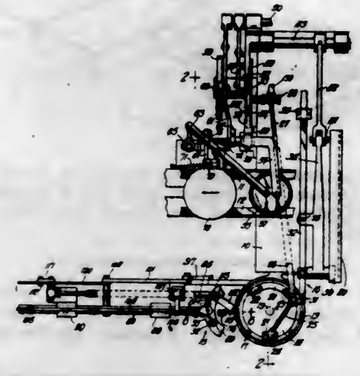
1. In a method of assembling the parts of an artificial eye, first arranging two semispherical shell members one within the other and with their edges disposed in the same plane, then moving said members relative to each other to dispose the walls thereof in concentric contacting engagement and simultaneously turning the edge of the outer shell member inwardly and clinching the same upon the edge of the inner member.

1,810,897. CHASSIS SPRING CONTROL. ERLE K. BAKER, Chicago, Ill. Filed Apr. 18, 1928. Serial No. 271,015. 12 Claims. (Cl. 267—32.)



1. A chassis spring control embodying therein a barrel element, a fluid reservoir connected thereto, a plunger element positioned in said barrel element the one being longitudinally movable with respect to the other, one of said elements being carried by a fixed part of an automobile and the other being connected to the end of the spring which as it flexes causes relative longitudinal movement between said elements alternately withdrawing and returning fluid to said reservoir.

1,810,898. SHEET FEEDING MECHANISM. ARTHUR W. BELL, Chicago, Ill., assignor, by mesne assignments, to Kraft-Phenix Cheese Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 26, 1928. Serial No. 280,701. 14 Claims. (Cl. 271—30.)



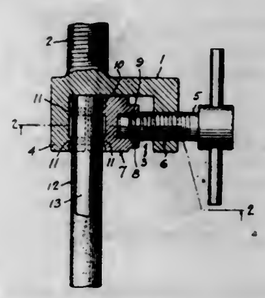
1. In a sheet feeding device of the class described, the combination of a support for a stack of sheets to be fed, a movable device having means for picking up the top sheet of a stack of sheets on said support, operative to carry said sheet to one side of said stack and to there deposit said sheet, and means carried by said movable device for preliminarily moving said top sheet relative to the next lower sheet so as to reduce the adhesion between said top and next lower sheet, thereby to assist said device to pick up said top sheet.

1,810,899. WINDOW SHADE. CARL NORMAN BOEHM, Washington, N. J., assignor to Woodweb Shade Manufacturers, Inc., Washington, N. J., a Corporation of New Jersey. Filed Mar. 25, 1929. Serial No. 349,584. 9 Claims. (Cl. 156—16.)



9. In a device of the class described, a plurality of thin, flat, guide rods secured at their upper and lower ends and having arcuate portions extending therebetween, a shade comprising transverse, flexibly united members and guide engaging members secured to certain of said transverse members, adjacent guide engaging members being separated from each other by more than two transverse members, said guide engaging members having openings through which said guide rods are threaded, whereby the shade is restrained against lateral movement, the width of said openings being slightly in excess of that of said rods.

1,810,900. WELDROD CHUCK FOR ELECTRIC ARC WELDING. HENRY R. BORMANN and ALFONS STEINHART, Milwaukee, Wis., assignors to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Sept. 3, 1929. Serial No. 390,028. 5 Claims. (Cl. 219—8.)



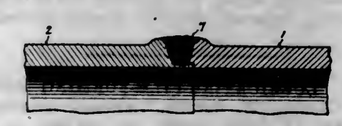
1. A weldrod holder comprising a body portion having a recess therein, one side wall of the recess having arcuate cutting edges adapted to conform with a portion of the periphery of the weldrod, a slidably mounted clamping member disposed in said recess and provided with arcuate cutting edges in complementary relation to the arcuate cutting edges of said recess, and means for radially actuating said clamping member to permit the insertion and removal of the weldrod.

1,810,901. WELDROD HOLDER FOR ELECTRIC ARC WELDING. HENRY R. BORMANN and ALFONS STEINHART, Milwaukee, Wis., assignors to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Sept. 16, 1929. Serial No. 392,896. 6 Claims. (Cl. 219—8.)



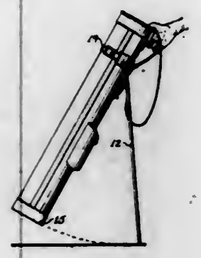
1. A device of the class described comprising a clamping mechanism adapted to retain a weldrod in proper welding relation, means for applying pressure to said clamping mechanism to cause the same to firmly grip the weldrod, and abrading means effective upon the actuation of said pressure applying means for removing foreign material from the contacting surface of the weldrod.

1,810,902. ELECTRIC ARC WELDING OF PIPE JOINTS. HOWARD J. BURNISH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Nov. 18, 1929. Serial No. 407,978. 5 Claims. (Cl. 219—10.)



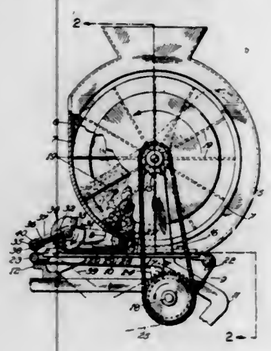
1. A pipe joint comprising two sections of pipe having their meeting ends interlocked, raised beads at the outer circumference of said ends to define a welding groove therebetween, and welding metal deposited between said beads and ends and fused with and joining said interlocked ends to form an integral tubular structure.

1,810,903. GOLF CLUB BAG SUPPORT. PHIL I. CAMPBELL, Wichita, Kans., assignor of one-fourth to Frank C. Brosius, Wichita, Kans. Filed May 3, 1929. Serial No. 360,106. 1 Claim. (Cl. 150—1.5.)



In a device of the class described; a pair of members connected by an intermediate link; each having an outer loop as belt receiving elements; each member having a pair of spaced apart ear elements, one element projecting further than the other and having a slot; a cross rod passing the paired slots, clamp means locating said rod to project a desired distance towards the opposite ear; a rod leg hinged to each set of ears; and a finger ring on the cross rod for effecting movements of said rod within the paired slots for the purposes specified.

1,810,904. ROTARY TOBACCO FEED FOR CIGAR MACHINES. HJALMAR ERIK CARLSON, Brooklyn, N. Y., assignor to International Cigar Machinery Company, a Corporation of New Jersey. Filed Sept. 8, 1928. Serial No. 304,682. 8 Claims. (Cl. 131—39.)

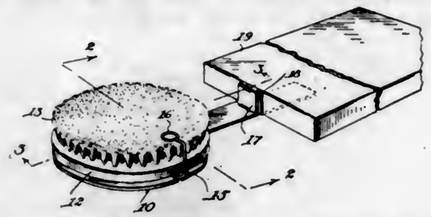


1. The combination with means for forwarding a sheet of tobacco, of means for tumbling a mass of tobacco over and over above said forwarding means, and means for feeding tobacco down from the bottom of the tumbling means to said forwarding means, said tumbling means including a hopper having oppositely disposed rotating sidewalls.

1,810,905. LUBRICATING-FILM-FORMING COMPOSITION. DONALD W. CARTER, Cleveland Heights, Ohio. Filed May 17, 1926. Serial No. 109,784. 2 Claims. (Cl. 87—9.)

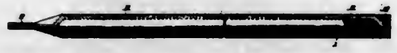
1. A composition of the character described including in substantially equal proportions a lubricating material composed of one half commercial lard oil and one half commercial petroleum oil, oxide of zinc and commercial whiting and a binder material of the family in which lime is found.

1,810,906. GOLF TEE AND PRACTICE MAT. WILLIAM E. CARTER, Anderson, Ind. Filed Aug. 12, 1929. Serial No. 385,200. 9 Claims. (Cl. 273—33.)



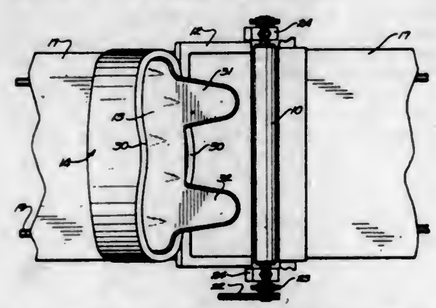
1. Golf apparatus comprising a base plate, a turn table mounted thereon on a vertical axis, and a ball-support closely overlying the upper face of said turn table at the edge thereof.

1,810,907. PITOT TUBE CONNECTION OR ROD METER. EDWARD S. COLE, New York, N. Y. Filed Apr. 5, 1926. Serial No. 99,797. 7 Claims. (Cl. 73—167.)



1. In a device of the class specified comprising a rod or bar having longitudinal grooves formed in the surface thereof and pressure tubes parallel to the longitudinal axis of the said rod, said tubes occupying, and being secured in the said longitudinal grooves.

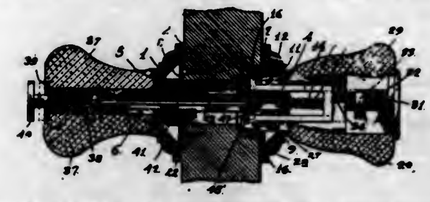
1,810,908. METHOD AND APPARATUS FOR PRODUCING SHEET GLASS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 24, 1928. Serial No. 328,072. 16 Claims. (Cl. 49—33.)



15. In combination in apparatus for producing sheet glass, an inclined receiver, a pair of sheet forming rolls arranged at one end of the receiver, an elongated receptacle containing a mass of molten glass and adapted, when tilted, to deliver the glass upon the receiver in stream form, one side wall of the receiver being provided with an upstanding lip at substantially the longitudinal center there of so that when the receptacle is tilted the glass will flow therefrom first adjacent its opposite ends and subsequently from the center over said lip.

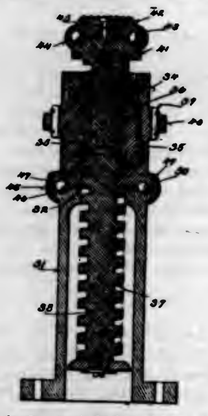
1,810,909. DOORKNOB LOCKING DEVICE. ELLING ELLINGSON, San Francisco, Calif. Filed Mar. 5, 1929. Serial No. 344,513. 15 Claims. (Cl. 70—91.)

1. A locking device comprising a knob stem extending through a door and adapted to be partially rotated to actuate latch mechanism mounted within the door; a bearing plate secured upon one side of the door; a bushing rotatably mounted within the bearing plate and engaging one end of the knob stem; a locking member slidably mounted in connection with the bushing and movable into locking engagement with the bushing and bearing plate to lock said bushing against rotation when said member is in a locking position, said locking member being disengaged from the stem when in a locking position and being movable into actuating engagement with the stem when said



member is moved to an unlocking position; means mounted in connection with the locking member for normally moving the same to a locking position; a knob secured to the bushing; and key actuated means mounted within the outer end of the knob for moving the locking member to unlocking position.

1,810,910. ANTIFRICTIONAL MEANS FOR SCREWS. ALVA RAY ESMOND, Union Grove, Wis. Filed Nov. 18, 1927. Serial No. 234,110. 1 Claim. (Cl. 254—98.)



In a lifting jack, a tubular base member having a restricted apertured upper portion, a rotatable nut member mounted on the base and in operative relation therewith, a lifting screw threaded into the nut and extending into the base, the threads of said nut and said screw having opposed flat faces with semi-annular channel portions, ball members movable through said channel portions, said nut having a passageway with a downwardly extending upper end leading from one of the channel portions and having an upwardly extending lower end opening into said channel portions whereby the balls from said channel portions will enter the downwardly extending upper end from the channel portions and into the channel portions from the upwardly extending lower end, a ratchet on the nut, and means cooperating with the ratchet for imparting movement to the nut for raising and lowering the screw.

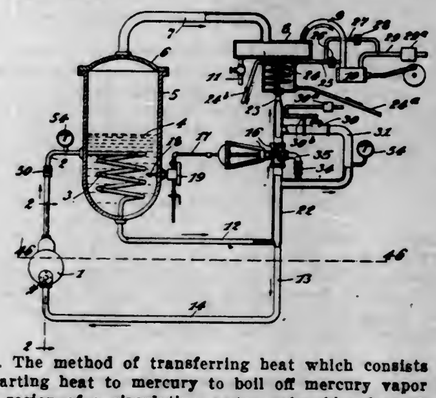
1,810,911. GLASS MELTING FURNACE AND PROCESS FOR PRODUCING MOLTEN GLASS. ENOCH T. FERNGREN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 1, 1926. Serial No. 91,331. 18 Claims. (Cl. 49—54.)

4. In a tank furnace containing molten glass, a rotatable member, means for cooling said member, means for raising and lowering the member relative to the molten glass, means preventing the member from drifting longitudinally of the furnace, means for rotating the member to impart a backward flow movement upon the surface of said molten glass, the surface of said member being so shaped to cause the backward moving surface glass to



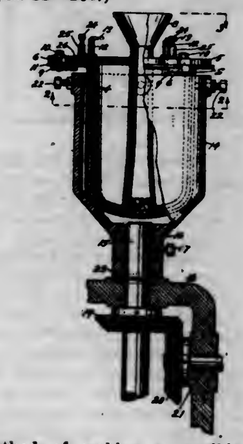
creep towards the side walls of said furnace, and means for removing the backward moving glass from said tank furnace.

1,810,912. METHOD OF HEAT TRANSFER AT HIGH TEMPERATURES. CROSBY FIELD, Brooklyn, N. Y., assignor to Chemical Machinery Corporation, a Corporation of New York. Original application filed Apr. 17, 1922, Serial No. 553,640. Divided and this application filed Feb. 5, 1927. Serial No. 166,072. 5 Claims. (Cl. 126—370.)



2. The method of transferring heat which consists in imparting heat to mercury to boil off mercury vapor in one region of a circulating system, absorbing heat from the mercury vapor at another region of the system to condense it; and governing the temperature of condensation by boiling off amounts of mercury vapor in excess of the condensing capacity of the region of condensation and maintaining a desired pressure in the circulating system by venting the necessary amounts of said vapor.

1,810,913. METAL LINING CRUCIBLE. WILFORD JUDSON HAWKINS, Claiborne, Md., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 1, 1929. Serial No. 359,665. 8 Claims. (Cl. 22—203.)



1. The method of making a crucible comprising an outer shell and a thick inner lining held together by their

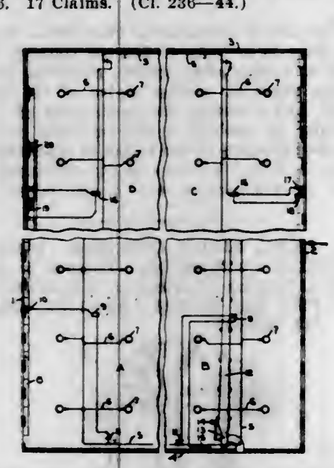
cohesion throughout their contacting surfaces, which consists in introducing a core within the shell, whirling the core and shell and directing molten metal for the lining through the core to the inner side of the crown of the shell to enable the centrifugal force developed by the whirling shell to spread the molten metal over the inner surface of the shell.

1,810,914. ARTICLE ATTACHING DEVICE. KATHERYNE L. JOHNSTON, Chicago, Ill. Filed Mar. 30, 1929. Serial No. 351,149. 10 Claims. (Cl. 24—103.)



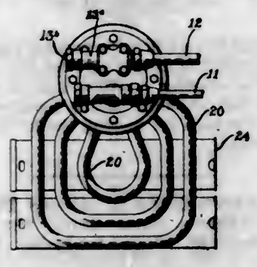
1. An article attaching device comprising a stem portion and a curved engaging member angularly disposed with respect to said stem portion, said engaging member having an end to penetrate material and successively pass through a pair of apertures in an article, the curve of said member being of a diameter substantially the distance between the centers of said apertures.

1,810,915. METHOD AND APPARATUS FOR HUMIDIFYING AND COOLING THE AIR OF INCLOSURES. ALFRED F. KARLSON, North Leominster, Mass., assignor to Parks-Cramer Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 11, 1927. Serial No. 232,696. 17 Claims. (Cl. 236—44.)



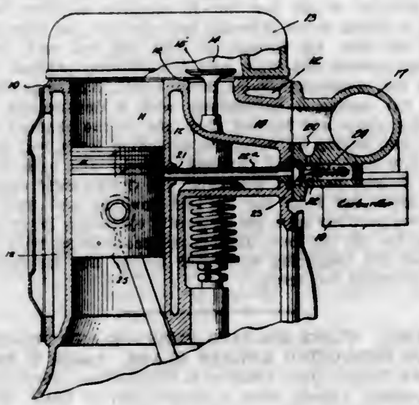
3. Apparatus for maintaining relative humidity at a predetermined standard in the air of an inclosure when said air is subject to variable increases in temperature due to heat liberated therein from uncontrollable sources, comprising humidifying means acting when in operation to discharge and vaporise water within said inclosure, ventilating means operative to determine the exchange of air between the interior and exterior of said inclosure, means sensitive to and actuated by variations of the humidity and temperature of the air within said inclosure acting to control the humidifying means and the ventilating means to maintain an exchange of air with a maximum supply of moisture when the temperature of the air of the inclosure is above a predetermined temperature and thereby produce a maximum cooling of the air of the inclosure, to effect discontinuance of the operation only of the humidifying means in response to humidity within said inclosure in excess of said predetermined standard of humidity while maintaining said air exchange and to effect discontinuance only of said exchange of air in response to humidity within said inclosure in deficiency of said standard while maintaining said maximum supply of moisture.

1,810,916. REFRIGERATING APPARATUS. JESSE G. KING, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,673. 1 Claim. (Cl. 62—126.)



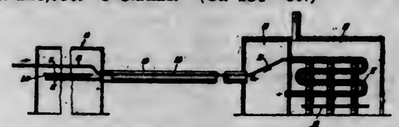
Refrigerating apparatus comprising in combination a refrigerator cabinet having a cooling compartment; a door forming a closure for the front of said compartment; and a refrigerating element including an elongated header forming a reservoir for liquid refrigerant extending substantially the entire width of the compartment, an elongated casing for supporting an ice-making container transverse to the header and having an opening facing the door, and a plurality of sets of ducts for circulating refrigerant connected to the header and thermally connected to the sides of the casing, each set including a plurality of loops disposed one outside of the other in a vertical plane transverse to the axis of the header.

1,810,917. INTERNAL COMBUSTION ENGINE. OSCAR C. KREIS, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Mar. 5, 1928. Serial No. 259,019. 21 Claims. (Cl. 123—75.)



1. In an internal combustion engine, a cylinder, a conduit for supplying a vaporized hydrocarbon to the cylinder, a second conduit communicating with the first said conduit and with the cylinder independently of the first said conduit for removing therefrom unvaporised portions of the hydrocarbon, and a check valve controlling the said second conduit.

1,810,918. MANUFACTURE OF CARBON BLACK. GEORGE CHARLES LEWIS, New Dorp, N. Y., assignor to Columbian Carbon Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 14, 1928. Serial No. 246,750. 5 Claims. (Cl. 134—60.)



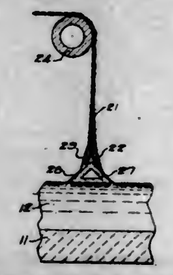
1. The process of manufacturing carbon black, which includes heating a hydrocarbon gas to a temperature at which chemical change is effected, but without substantial liberation of free carbon, substantially reducing the pressure and increasing the volume of the heated gas to thereby cool the gas by its expansion, further cooling the same but not to a temperature at which ingredients of the heated gas condense or separate out, burning the gaseous mixture and impinging the flame on a cooling plate.

1,810,919. LOOSE LEAF BINDER. ADOLPH G. LOTTER, Milwaukee, Wis., assignor to Stationers Loose Leaf Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 4, 1929. Serial No. 404,678. 9 Claims. (Cl. 129—23.)



1. In a loose leaf binder, a pair of binder heads, a post member having extensible connection to one head and adapted to be passed into the other, means for applying tension to said post member, a slide bar concealed within said other binder head for readily detachably connecting the same with the post member, and means for positively preventing the detachment of the slide bar from the post member when tension is applied to the post member.

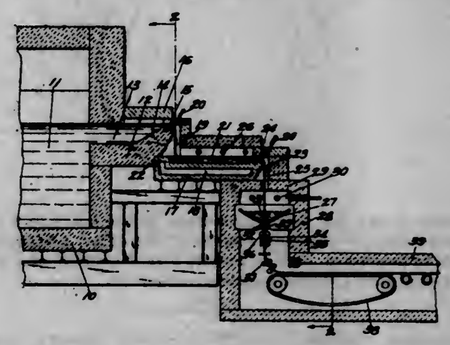
1,810,920. SHEET GLASS APPARATUS. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 21, 1926. Serial No. 117,302. 22 Claims. (Cl. 49—17.)



1. In sheet glass apparatus, a receptacle containing a mass of molten glass, stationary means arranged above the glass, and means for drawing a plurality of films of glass over said stationary means and in contact therewith.

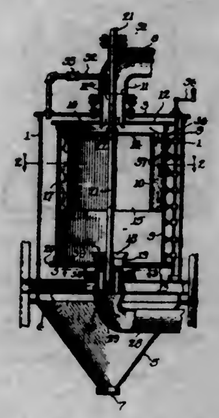
1,810,921. SHEET GLASS FLOWING APPARATUS. LEOPOLD MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Substitute for application Serial No. 1,759, filed Jan. 12, 1925. This application filed Aug. 26, 1926. Serial No. 131,785. 6 Claims. (Cl. 49—17.)

1. In sheet glass apparatus, a furnace containing a mass of molten glass and having an outlet at one end thereof, a table arranged in a lower horizontal plane than the outlet end of the furnace and adapted to receive the molten glass therefrom, said table having an overflow lip at one end, a trough arranged below the overflow lip of said table and adapted to receive the molten glass therefrom, said trough comprising a plurality of closely associated pipes



constituting the side walls thereof, means for circulating a temperature control medium through said pipes, means for maintaining the glass at a constantly high temperature from the furnace to the trough, said glass flowing from the trough in stream form, and means for absorbing heat from the stream as it leaves the trough to form a sheet.

1,810,922. CENTRIFUGAL SEPARATING APPARATUS. HARRY L. MILLS, Harvey, Ill., assignor to Centrifugal Separation Company, a Corporation of Illinois. Filed May 28, 1928. Serial No. 281,073. 7 Claims. (Cl. 183—77.)

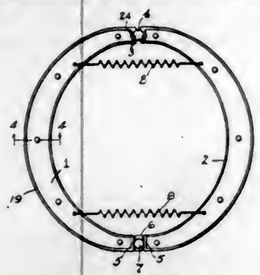


3. An apparatus of the class described having a rotor provided with an axially extending passage with imperforate longitudinal walls and having an ejector outlet in the outer wall at the far end of said passage, said rotor being enclosed in a mechanically closed casing provided with means for collecting and permitting the removal of the separated material in a dry condition.

1,810,923. MANUFACTURE OF PRESSED BRAKE SHOES. LOUIS P. MOORES, Cleveland, Ohio, assignor to The Columbia Axle Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 31, 1927. Serial No. 216,617. 1 Claim. (Cl. 29—148.)

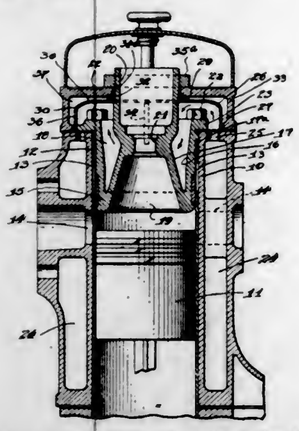
In a method of making two piece steel pressed brake shoes, the steps which consist in forming arcuate plates

having a width tapering from a maximum at the center to a minimum at the ends, bending said plates into channel members having continuous flanges of unequal width, and



having a flat cam engaging surface at one end and a recessed flat pin engaging surface at the other, assembling two of said strips back to back to form a member of I section and then integrally uniting said strips.

1,810,924. SLEEVE VALVE ENGINE. ARCHIE MACPHAIL NIVEN, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed Nov. 16, 1927. Serial No. 233,549. 21 Claims. (Cl. 123—173.)



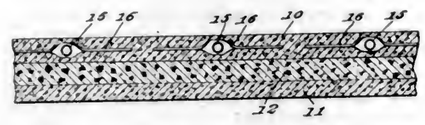
1. An internal combustion engine of the sleeve valve type comprising in combination, a water jacketed cylinder, a piston operable therein, a water jacketed cylinder head forming a sleeve pocket with the cylinder and provided with a barrel portion, a cylinder head cover through which said barrel extends, a sealing ring between the barrel and cover, and a member intermediate the cylinder head cover and cylinder head having an opening received by the barrel, said member constructed and arranged to support the sealing ring and to form a water deflecting passage in conjunction with the cylinder head packet for directing water from the cylinder jacket to flow generally downwardly into and across the cylinder head.

1,810,925. CAN CONSTRUCTION. PETER OFTEDAHL, San Francisco, Calif., assignor to Elfrida M. Oftedahl, San Francisco, Calif. Filed May 1, 1929. Serial No. 359,492. 7 Claims. (Cl. 220—49.)



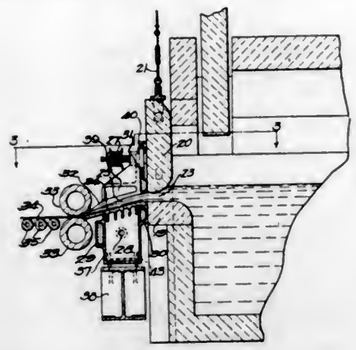
2. A can comprising a body formed from a sheet metal blank having edges crimped into interlocking relation forming a seam, said body having a peripheral groove formed adjacent the top of the body and notches formed in the edges of the blank at the ends of the groove; a wire mounted within the groove, the ends of the wire being hooked into the notches and being secured between the edges of the blank and one of said ends extending outwardly at the end of the seam to be engaged and wound upon a key to sever the can along the groove; and a cover secured upon the top of the can and enclosing the wire within the groove.

1,810,926. SKATING RINK FLOOR. WILLIAM C. PALSON, Manchester, Mass., assignor of one-half to Arthur C. Walworth, Newton, Mass. Filed Jan. 22, 1929. Serial No. 334,270. 5 Claims. (Cl. 62—12.)



2. A skating rink floor having therein a cooling system comprising widely separated conduits for a cooling fluid, and heat absorbing elements of sheet material connected to said conduits and extending therefrom to points substantially midway between conduits and having relatively large portions of their plane surfaces parallel to the surface of said floor, said conduits being spaced apart a distance materially greater than their diameter.

1,810,927. SHEET GLASS APPARATUS. INGVALD O. PEDERSEN, Pittsburgh, Pa., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 29, 1926. Serial No. 144,930. 14 Claims. (Cl. 49—33.)

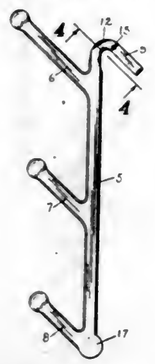


1. In sheet glass apparatus, a continuous tank furnace for supplying a stream of molten glass to sheet forming means, including a bowed lower front wall, and a flow block for retarding the flow movement of the central portion of the stream more than the border portions as said stream flows from the tank.

1,810,928. CLOTHES HOOK FOR LOCKERS. GEORGE B. PICKOP, New Haven, Conn., assignor to Malleable Iron Fittings Company, Branford, Conn. Filed Jan. 6, 1927. Serial No. 159,354. 2 Claims. (Cl. 248—22.)

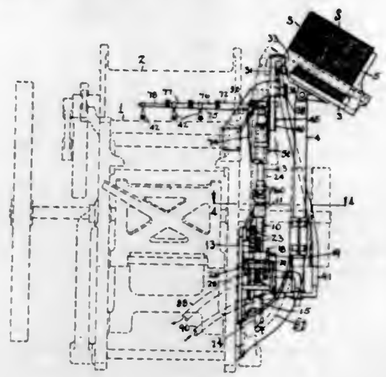
1. A clothes hanger for lockers or the like, comprising a body portion, a clothes supporting member secured thereon, and means formed on said body portion at the upper end thereof adapted to engage an opening in a locker wall

to support the clothes hanger, said means comprising a downwardly and rearwardly extending arm, said arm being rectangularly shaped and wider than and spaced from



the body portion and lying in a plane at right angles to the general plane of the hanger, and a relatively narrow neck connecting said arm to the body portion.

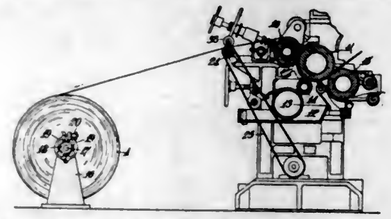
1,810,929. SHEET FEEDING MECHANISM FOR PRINTING PRESSES. CHARLES F. ROOT, Cleveland, Ohio, assignor to The Chandler and Price Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 3, 1927. Serial No. 172,346. Renewed Nov. 13, 1930. 59 Claims. (Cl. 101—287.)



1. In mechanism of the character described, the combination of a support oscillatory about and reciprocable longitudinally of an approximately vertical axis; a guide member wholly independent of and normally occupying a fixed position relatively to said support; a horizontally extending member movably attached to said guide member and carrying a sheet engaging and moving device; and connections including a universal joint between said support and said carrying member, whereby oscillatory and reciprocatory movement of the former is imparted to the latter.

1,810,930. PAPER CORRUGATING MACHINE. KARL SIEG, Brooklawn, N. J., assignor to Samuel M. Langston Co., Camden, N. J., a Corporation of New Jersey. Filed Oct. 24, 1928. Serial No. 314,587. 10 Claims. (154—30.)

2. A machine for making corrugated paper, including a pair of intermeshing corrugating rolls, means for supporting a supply roll of paper to be corrugated, a feed roll engaging the paper between the supply roll and the corrugating roll, a friction brake on the supply roll, a slip friction drive on the feed roll, and means for adjusting the friction of the drive of the feed roll so that it is slightly less than the friction of the brake of the supply roll.

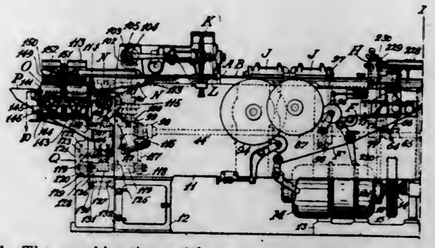


1,810,931. ELECTRIC SWITCH. HOWARD A. SPAHR, Milwaukee, Wis. Filed Oct. 10, 1927. Serial No. 225,221. 4 Claims. (Cl. 200—72.)



1. An electric switch comprising a two-part casing, one of said parts having a threaded aperture, screws carried by the other of said parts and extending into said threaded aperture, said second mentioned part of the casing having a threaded portion through which the threaded portion of the screw may be passed, said screw having a shank of reduced diameter from the external diameter of the threaded part, whereby the screw is prevented from inadvertently dropping from the second mentioned portion thereof, and switch mechanism carried within said casing.

1,810,932. CIGARETTE MACHINE DRIVE. JOHN A. STEIN, New York, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed May 9, 1927. Serial No. 189,923. 9 Claims. (Cl. 131—43.)

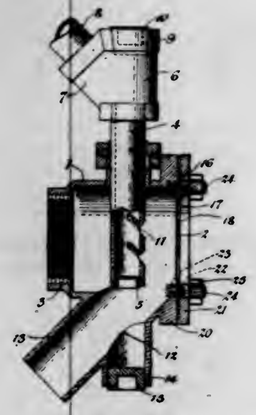


1. The combination with cigarette making mechanism, of a constant speed source of motion, a main shaft for driving said mechanism, speed varying gearing and a clutch connecting said source with said shaft, and controlling means including operating connections to said clutch and said gearing for causing said shaft to start only at subnormal speed and devices for accelerating said spred after starting.

1,810,933. APPARATUS FOR SCREENING PASTES. IRVING T. THORNTON, Buffalo, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 26, 1929. Serial No. 388,528. 10 Claims. (Cl. 209—273.)

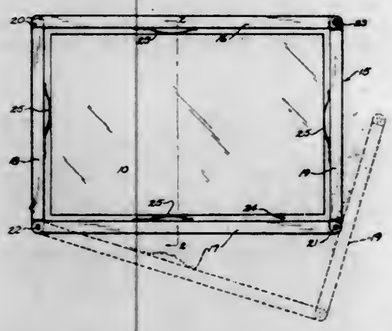
1. An apparatus of the character described comprising a casing having a plurality of threaded studs projecting from one end thereof and being tapped to receive a bolt,

an annular plate having openings therein aligned with the studs and tapped bore to adapt it to fit over the end of the casing, a screen clamped between the plate and casing end, nuts threaded on the ends of the studs and a bolt threaded into the tapped bore of the casing



to clamp the screen in position, means for introducing material to be screened into the casing, means for directing the material to be screened against the screen under a velocity head, means for removing run-off material and means for equalizing air pressures on the inside and outside of the casing.

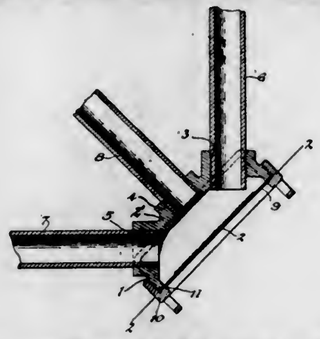
1,810,934. APPARATUS FOR USE IN THE MANUFACTURE OF LAMINATED GLASS. GEORGE B. WATKINS, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 7, 1928. Serial No. 324,456. 6 Claims. (Cl. 49—81.)



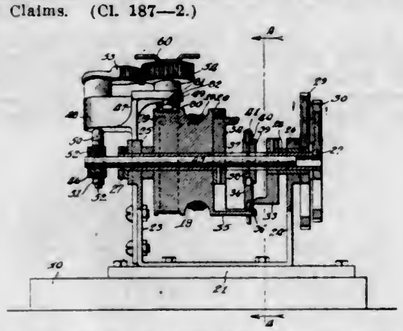
1. Means for holding a plurality of superposed sheets of material to be joined against relative movement with respect to one another during such joining, including a frame for receiving the assembled sheets therein, and means carried by the frame and adapted to engage the edges of said sheets.

1,810,935. APPARATUS FOR SCREENING LIQUID MATERIALS. ROBERT O. WOOD and BYRON L. WEST, Hamburg, N. Y., assignors to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 26, 1929. Serial No. 388,527. 7 Claims. (Cl. 209—273.)

1. An apparatus of the character described comprising a screening chamber having a foraminous member therein, means for projecting a stream of material to be screened directly against the foraminous member, means for conveying away run-off material which collects in the chamber and means for equalizing air pressure on the two sides of the foraminous member.

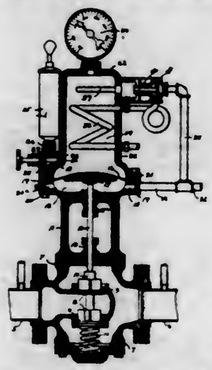


1,810,936. HOISTING APPARATUS. CARL ZETTERLUND, Chicago, Ill. Filed Nov. 5, 1928. Serial No. 317,170. 10 Claims. (Cl. 187—2.)



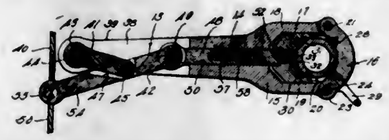
4. In a hoist of the type described, the combination with elevator platforms, a suspensory cable therefor, drum means for actuating said cable, a pair of oppositely rotating shafts, a clutch dog for each shaft, and a clutch element pivotally carried in driving relation on said drum means for alternately engaging said clutch dogs.

1,810,937. DIFFERENTIAL REGULATOR FOR VALVES. DOUGLAS H. ANNIN, Glendale, Calif., assignor to Neilan, Schumacher & Company, Los Angeles, Calif. Filed July 7, 1930. Serial No. 465,961. 8 Claims. (Cl. 236—26.)



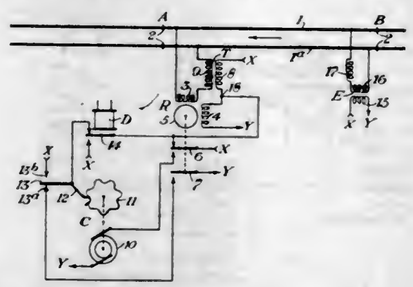
7. Means for maintaining a constant pressure in a fluid, comprising a valve for controlling the pressure of said fluid, a pressure responsive member, means for causing the fluid the pressure of which is to be maintained to act on one side of said member, means for causing an opposing fluid to act on the opposite side of said member at pressure substantially equal to that which is to be maintained in the first mentioned fluid, whereby the said member is moved differentially by the said fluids, connections between said member and the valve for positioning the latter in accordance with the position of said member, and means under control of the said opposing fluid for maintaining the temperature of said opposing fluid substantially constant.

1,810,938. TONGS. LAWRENCE F. BAASH, Los Angeles, and WILLIAM H. MAXWELL, Beverly Hills, Calif. Filed Mar. 18, 1930. Serial No. 436,694. 9 Claims. (Cl. 81—53.)



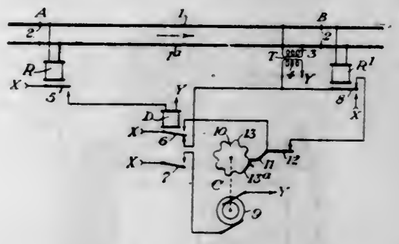
1. Tongs of the character described including, a pipe encircling head, a gripping element slidably carried in the head, a handle projecting from the head, and means for operating the gripping element including, two pivotally connected links, one link pivoted at the outer end of the handle, the other link connected with the element, and an operating lever arm on one link projecting from the outer end of the handle for connection with tong operating member.

1,810,939. RAILWAY TRAFFIC CONTROLLING APPARATUS. GEORGE W. BAUGHMAN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 18, 1930. Serial No. 461,967. 3 Claims. (Cl. 246—34.)



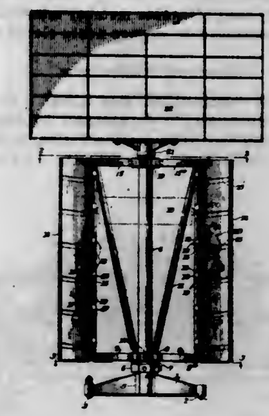
1. In combination, a section of railway track, a source of alternating track circuit current connected across the rails at one end of said section, a track relay having two windings one of which is connected across the rails at the other end of said section, a train control transformer the secondary of which is interposed between the said one winding of said relay and one of the track rails, a circuit extending from the first terminal of a source of alternating current through the primary of said transformer and the second winding of said relay to the second terminal of said source, means operating when said track relay is closed to connect the junction of said primary and said second relay winding with the first terminal of said source whereby the primary is then on short circuit, and means operating when said track relay is open to alternately connect said junction with the two terminals of said source whereby the primary and the second relay winding are alternately energized and each is on short circuit while the other is energized.

1,810,940. RAILWAY TRAFFIC CONTROLLING APPARATUS. GEORGE W. BAUGHMAN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 18, 1930. Serial No. 461,968. 1 Claim. (Cl. 246—34.)



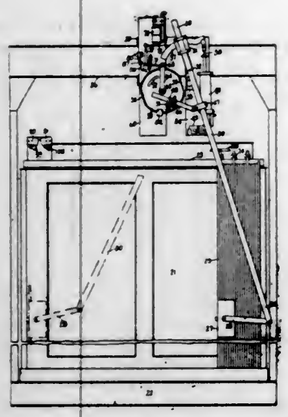
In combination, a section of railway track, a track circuit for said section including a source of alternating current and a track relay; a coder comprising a motor, a cam driven by said motor, and a contact operated by said cam for periodically interrupting the supply of current from said source to the track rails; and means for setting said coder into operation when said track relay becomes deenergized, said cam having a special tooth which is longer than the others whereby once during each revolution of the cam current will be supplied to the track rails for a longer period of time than normal, so that if the length of each normal tooth is insufficient to pick up the track relay when a shunt is removed from the rails the relay will pick up when said contact is operated by the special tooth.

1,810,941. STORAGE RACK. ULRIK I. T. BLOMBERG, Enskede-Stockholm, Sweden, assignor to Ditto, Incorporated, Chicago, Ill., a Corporation of West Virginia. Filed July 28, 1928. Serial No. 296,026. 7 Claims. (Cl. 211—44.)



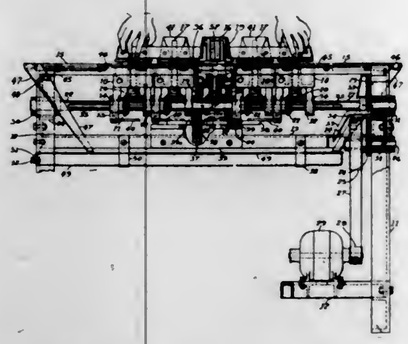
6. In a storage rack, in combination, a vertical spindle, a pair of collars encircling said spindle at regions spaced along said spindle, a plurality of radial arms connected to each of said collars, said radial arms connected to each of said collars being made up of metal strips of truncated V-shaped conformation, the bases of said V-shaped conformations being secured to their corresponding collars, adjacent legs of adjacent strips converging toward one another away from said spindle, and elongated box members disposed parallel with said spindle, said box members being secured to extremities of said radial arms.

1,810,942. CLOSURE OPERATING MECHANISM. THOMAS BRADY, East Orange, New Jersey, assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 4, 1929. Serial No. 411,468. 11 Claims. (Cl. 187—52.)



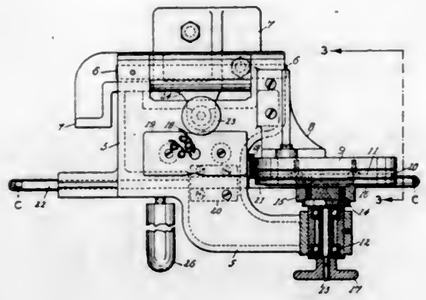
1. In combination with a closure; a closure operator adapted to move said closure to closed position; means for restraining said closure operator from moving said closure comprising, a rotatable member operable upon movement of said closure, and means adapted to engage said rotatable member to prevent movement of said closure to closed position by said closure operator; means adapted to be operated to free said rotatable member from said engaging means to permit said closure to be moved to closed position by said closure operator, said last mentioned means being momentarily operated; a latch adapted to maintain said engaging means out of cooperative relation with said rotatable member to permit continued movement of said closure by said closure operator upon cessation of operation of said momentarily operated means; and means carried by said rotatable member adapted to release said latching means as said closure nears closed position.

1,810,943. PAN GREASING MACHINE. WILHELM B. BRONANDER, Montclair, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Oct. 4, 1929. Serial No. 397,331. 11 Claims. (Cl. 91—38.)



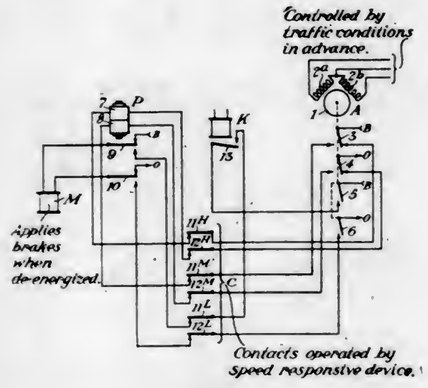
1. In a pan greasing machine, the combination with a plurality of spaced pan greasing units, of lever means for simultaneously adjusting each of said units relative to the others to fit groups of variously spaced pans.

1,810,944. HOT AND COLD CIGARETTE ROD SEALER. WILHELM B. BRONANDER, Montclair, N. J., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Apr. 30, 1930. Serial No. 448,667. 9 Claims. (Cl. 131—143.)



1. The combination with means for applying heat to the freshly pasted traveling seam of a cigarette rod, of mechanism for immediately thereafter applying pressure and cooling said seam, whereby sweating of the cigarette rod is avoided.

1,810,945. RAILWAY TRAFFIC CONTROLLING APPARATUS. HAROLD W. BRYAN, South Hills, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 17, 1930. Serial No. 496,091. 5 Claims. (Cl. 246—63.)

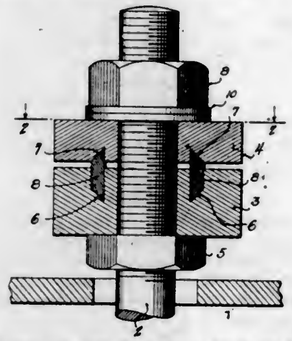


1. Train carried speed controlling apparatus comprising a main relay controlled from the trackway and energized in normal or reverse direction according as traffic conditions in advance permit of high speed or require medium speed, a speed responsive device having a high speed contact and a medium speed contact, a slow-releasing pilot relay having two windings, a circuit for the first winding of said pilot relay including a normal contact of said main relay and the high speed contact of said speed responsive device, a circuit for the second winding of said pilot relay including a reverse contact of said main relay and the medium speed contact of said speed responsive device, a brake controling magnet acting when deenergized to cause an automatic application of the brakes, and a circuit for said magnet controlled by a front contact of said pilot relay.

1,810,946. NONCORROSIVE SOLUTIONS. WILLIAM S. CALCOTT, Penns Grove, N. J., and HERBERT W. WALKER, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 7, 1929. Serial No. 391,106. 16 Claims. (Cl. 23—239.)

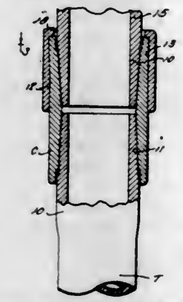
2. A composition of matter, which when added to water and water-alcohol mixtures renders said liquids substantially non-corrosive toward ferrous materials, comprising at least one substance from the group of hydroxyl-containing compounds consisting of mono-hydric alcohols and polyhydric alcohols together with a small amount of a water soluble derivative of an amino carboxylic acid.

1,810,947. CUTTING HEAD FOR SHAPERS. JOHN P. COELING, Sheboygan, Wis. Filed July 11, 1929. Serial No. 377,394. 1 Claim. (Cl. 144—231.)



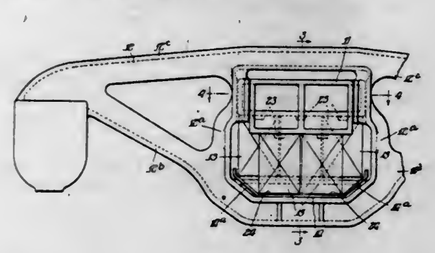
A cutter head for use with wood working shapers comprising upper and lower similar circular collars of substantially the same diameter and adapted to be fitted on a shaper spindle, said collars having opposed knife receiving slots in their confronting faces, the slots in the lower collar being substantially deeper than the slots in the upper collar, a knife fitted in each pair of vertically alined slots and embedded for a substantial portion of its extent in the direction parallel to the axis of the spindle in the lower collar so that a substantial portion of the knife lies within the confines of the periphery of the lower collar, each slot of the lower collar, at least, terminating at one end inwardly of the periphery of the collar, the periphery of the lower collar being smooth except for the projecting end of the knife and being entirely exposed whereby stock may be presented to the entire cutting edge of the knife while positioned to ride on the smooth periphery of the lower collar, and means coacting with the collars to force them into clamping engagement with the knife.

1,810,948. COLLAR, TUBING, AND CASING PROTECTOR. NORMAN L. DORN and WILLIAM A. CLARK, Long Beach, Calif. Filed May 13, 1930. Serial No. 452,019. 7 Claims. (Cl. 255—28.)



4. In combination, a length of tubing having a tapered screw-threaded portion, a collar having a tapered screw-threaded opening receiving the said portion of tubing, and a protector having a smooth tapered opening tightly receiving the end portion of the collar which has been expanded by cooperation between the threaded portion of the tubing and the tapered threaded opening in the collar, and an inwardly projecting flange at the largest end of the protector opening engaging an end of the collar.

1,810,949. TRUCK CONSTRUCTION. HARRY C. DREIBUSS and GEORGE S. CHILES, St. Louis, Mo., assignors to Scullin Steel Co., St. Louis, Mo., a Corporation of Delaware. Filed Nov. 14, 1927. Serial No. 233,042. 21 Claims. (Cl. 105—197.)



1. A railway car truck comprising, in combination, a side frame, a bolster, and a plurality of springs for supporting the bolster for said side frame, said springs having their axes arranged in a plurality of planes arranged transversely of said side frame, one of said planes including the longitudinal center line of said side frame, the springs having their axes in said last mentioned plane being at a higher level than the springs in said other planes.

1,810,950. INSULATOR. ALBERT C. EARHART, Cleveland Heights, Ohio. Filed Apr. 5, 1930. Serial No. 441,773. 8 Claims. (Cl. 173—314.)

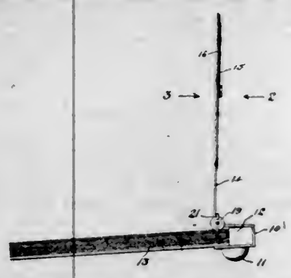


1. In an insulator, means adapted to have one end thereof attached to a support, the other end thereof being enlarged, a rubber insulating member having a cavity formed therein, said cavity having a restricted neck portion, said enlarged end being received in said cavity and yieldably held therein, and means associated with said insulating member for securing a conductor thereto.

1,810,951. GAME PROMPTER. NATHAN EISENBERG, Philadelphia, Pa. Filed Dec. 30, 1930. Serial No. 505,534. 3 Claims. (Cl. 281—15.)

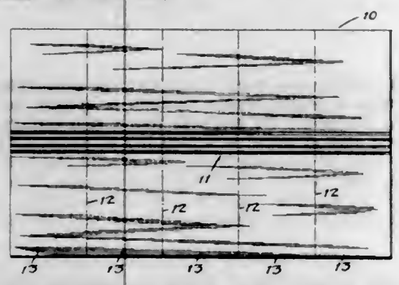
1. A game prompter comprising a channel member of resilient material, a cover upstanding from said channel

member and carrying prompting indicia, means to clamp the cover at an angular position relative to the channel



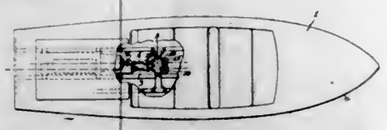
member, and a tablet clamped by the channel member and serving as an easel foot to maintain the cover member in upstanding position.

1,810,952. BOOK COVER. HENRY N. FELEY, East Orange, N. J. Filed Feb. 16, 1928. Serial No. 254,696. 3 Claims. (Cl. 281—29.)



3. A filler blank for a book cover, comprising a substantially rectangular sheet of stiff material having four parallel grooves cut across said sheet at approximately the central portion thereof, said grooves being cut entirely across said blank and leaving only a thin web of material so as to permit of said blank being handled in one piece.

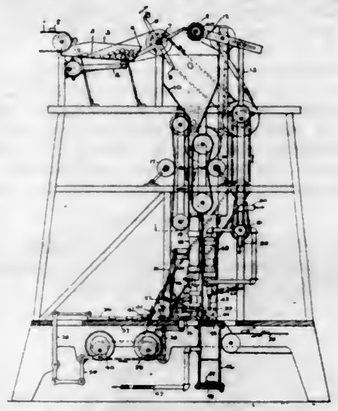
1,810,953. MOTOR BOAT LAYOUT. FRANK O. FERNSTRUM, Detroit, Mich., assignor to Gray Marine Motor Co., Detroit, Mich., a Corporation of Michigan. Filed May 31, 1930. Serial No. 458,350. 2 Claims. (Cl. 115—34.)



1. In a boat hull, a single motor mounted therein, a seating compartment entirely forward of said motor, a propeller shaft journalled in the center plane of said hull, a propeller on said shaft, said motor being geared to said propeller shaft and offset laterally from said plane in a position to balance the starting torque reaction of said propeller.

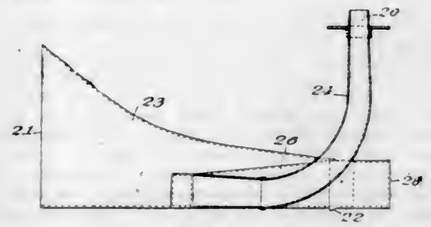
1,810,954. PRUNE PITTER. THOMAS W. W. FORREST, Fresno, Calif., assignor to Sun-Maid Raisin Growers of California, Fresno, Calif., a Cooperative Association of California. Filed Feb. 15, 1928. Serial No. 254,457. 13 Claims. (Cl. 146—17.)

1. A holder arranged and adapted to hold a drupaceous fruit body, a soft rubber member, means for presenting said holder against one side of said member with one end of the fruit thereagainst, and means operative against the opposite end of the fruit for pushing the end of the



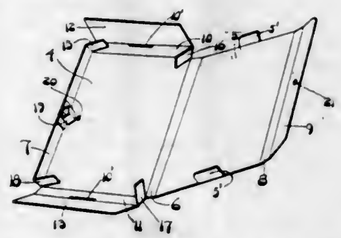
pit of the fruit through said member and suction means active on the opposite side of said member arranged to draw the pit therethrough.

1,810,955. SOUND REPRODUCING MACHINE. WILLIAM THOMAS FORSE, London, England, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Dec. 23, 1926, Serial No. 156,599, and in Great Britain Feb. 26, 1926. 8 Claims. (Cl. 181—27.)



8. In a sound amplifier, a forwardly curved tube providing an inlet section, a pair of tubes communicating with said inlet section to receive sound therefrom, said tubes running rearwardly at each side of said inlet section and having their rear ends reversedly bent in the plane of their major portion with their rear ends projecting forwardly, and independent outlet sections connected with said ends of said intermediate sections, said outlet sections running forwardly of said intermediate sections and curving laterally toward each other to close the space between the outlet ends.

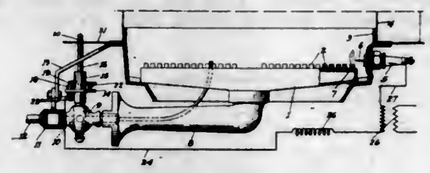
1,810,956. FOLDING BOX. WILLIAM P. FRANKENSTEIN, Cincinnati, Ohio. Filed Aug. 22, 1930. Serial No. 477,056. 1 Claim. (Cl. 229—43.)



A folding box comprising a top, a bottom, ends, sides and closure flaps formed integrally from a blank of sheet

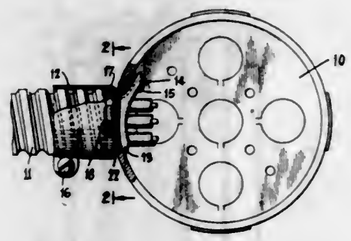
material, members of a snap fastener in the flap and bottom, and means between the top and bottom, forming a part of the box and constituting a support permitting pressure on the fastener member of the flap and the box top to lock the box closed by snapping the fastener element together.

1,810,957. GAS IGNITION MEANS FOR GAS FURNACE BURNERS. RICHARD E. FRASER, Stockton, Calif., assignor to Fraser Furnace Company, Stockton, Calif., a Corporation of California. Filed Mar. 25, 1929. Serial No. 349,610. 1 Claim. (Cl. 200—53.)



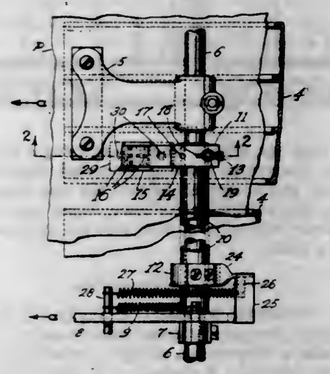
A combination gas valve and electric switch including a valve member, a turnable plug therein, a disc rigid with the plug, a contact pin upstanding from the disc in offset relation to the plug, a vertical socket member resting on the disc, a stem formed with said member to turnably seat in the disc centrally thereof, said socket being adapted to receive an operating rod in nonturnable but removable relation, and an arm formed with the socket and projecting radially therefrom to engage the contact pin.

1,810,958. ARMORED CABLE CONNECTER FITTING. JAMES M. G. FULLMAN, Sewickley, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 17, 1930. Serial No. 428,882. 10 Claims. (Cl. 247—25.)



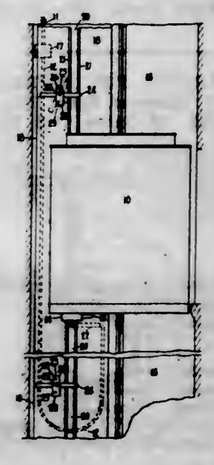
1. A connecter fitting having a body portion, a clamping portion to clamp upon an inserted armored cable and a portion adapted to extend through a box wall, said connecter fitting also being provided at a point in the body portion which is without the box wall when the fitting is in assembled relation thereto with an inspection aperture disposed and related to provide for the inspection of the end of an insulating bushing, which bushing is within the armored cable and which bushing has its end which is to be inspectable projecting over the terminating end of the armored cable and disposed within the connecter fitting.

1,810,959. MARKING DEVICE FOR WRAPPING MACHINES. HENRY E. GOERKE, Floral Park, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Oct. 19, 1927. Serial No. 227,126. 4 Claims. (Cl. 164—87.)



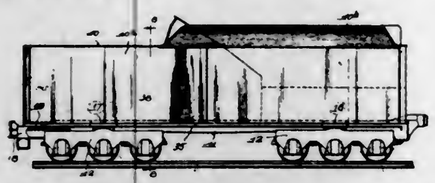
1. The combination with a paper clamping device for paper feeding mechanism, of mechanism for moving said device into and out of clamping position, and means controlled by said mechanism for marking paper fed by the paper feeding mechanism.

1,810,960. ELEVATOR CONSTRUCTION. HARRY EDWARD HALL, Englewood, N. J., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 22, 1930. Serial No. 490,427. 10 Claims. (Cl. 187—1.)



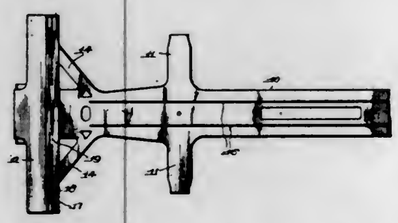
1. In an elevator installation, a hatchway, a body adapted to travel up and down the hatchway, a flexible member attached to said body and depending therefrom into the hatchway, a chute for said flexible member, and means for preventing egress from the chute of any portion of said member within the chute.

1,810,961. TENDER FRAME STRUCTURE. CLARENCE B. HARBISON, Lima, Ohio, assignor to The Ohio Steel Foundry Company, Lima, Ohio, a Corporation of Ohio. Filed Jan. 27, 1928. Serial No. 249,823. 5 Claims. (Cl. 105—236.)



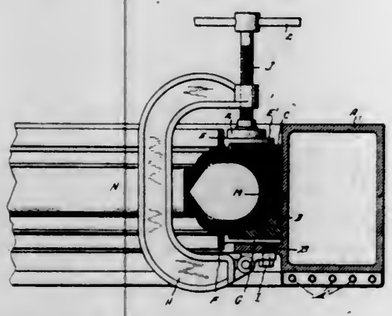
1. In a tank car, a main frame comprising a lingitudinal center sill, transverse bolsters connected therewith, and tank bottom plates secured to said sill and bolsters in a continuous line adjacent their lower edges, and extending laterally therefrom to form with said sill and bolsters the bottom of a tank.

1,810,962. TENDER FRAME. CLARENCE B. HARBISON, Lima, Ohio, assignor to Ohio Steel Foundry Company, Lima, Ohio, a Corporation of Ohio. Filed July 11, 1928. Serial No. 291,719. 4 Claims. (Cl. 105—236.)



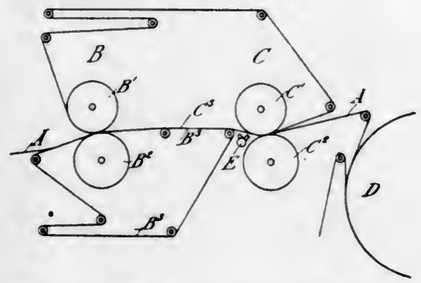
1. In combination with a tank, a single piece tender frame casting comprising a longitudinally disposed main beam, bolsters, and an end frame member including a transversely disposed tank supporting portion extending substantially the width of said tank, said main beams, bolsters and end frame member affording the sole support for a tank.

1,810,963. APPARATUS FOR RETREADING TIRES. JAMES C. HEINTZ, Lakewood, Ohio. Filed June 23, 1928. Serial No. 287,665. 17 Claims. (Cl. 18—18.)



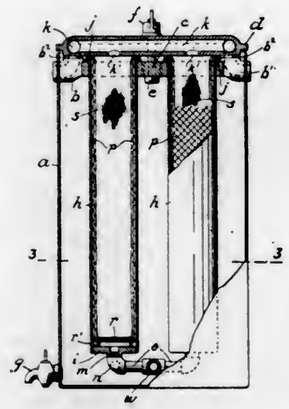
5. A tire retreading apparatus comprising a heating chamber and a matrix comprising a plurality of tread forming sections of such size and shape as to receive only the tread portion of a tire therein, a flexible bag adapted to be arranged within the tire and inflatable to force the tread portion of the tire against said matrix, separate side wall holding members engaging the opposite side walls of the tire to hold the same against distortion as a result of internal pressure, said side wall holding members engaging only a portion of the side walls and leaving a considerable space between their edges and the beads of the tire so as to permit the tire to bulge as a result of internal pressure, said side wall holding members being spaced from the matrix so as to maintain the same below vulcanizing temperature and having a plurality of projections thereon extending over said matrix and preventing movement of the holding rings toward each other.

1,810,964. ARRANGEMENT OF WET PRESSES ON PAPER AND BOARD MAKING MACHINERY. WALTHER HELLER, Heidenheim-on-the-Brenz, Germany, assignor to J. M. Voith, Heidenheim-on-the-Brenz, Germany, a Corporation of Germany. Filed Aug. 10, 1929, Serial No. 384,919, and in Germany May 24, 1928. 4 Claims. (Cl. 92—49.)



1. In a wet press for paper making machines, horizontally spaced sets of press rolls between which the paper is adapted to be moved in substantially a horizontal plane, the upper roll in one set and the lower roll in the other set having a hard finished surface whereby the opposite surfaces of the paper sheet are smoothly pressed without reversal thereof.

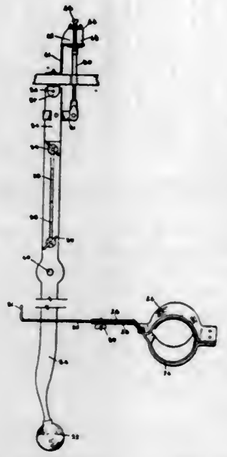
1,810,965. FILTER. ALFRED HOPKINS, Philadelphia, Pa., assignor to Hopkins-Tull Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 9, 1929. Serial No. 353,844. 1 Claim. (Cl. 210—184.)



A filter comprising a casing, a plate supported across the upper part thereof, members secured to the casing and plate and through which liquid to be filtered is adapted to respectively inflow and outflow, a casing head above said plate provided with a passage communicating with the flow passages in said members, filter containers aligning with holes in said plate and depending from and supported by said plate, a filter bag within each container, and means for outflow of unfiltered liquid from the passage in said plate through said holes to the respective filter containers.

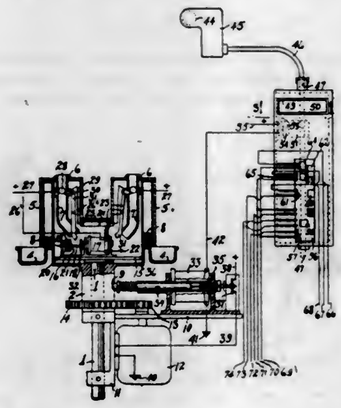
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1,810,966. SIGNAL FOR TURNING CORNERS. LOUIS HORSTMAN, Sterling, Nebr. Filed Feb. 10, 1930. Serial No. 427,337. 2 Claims. (Cl. 74—39.)



1. Operating mechanism for a turning signal for automobiles in which a pivoted signal arm is movable to operative and inoperative positions and displays turning indicia in its operative position, said operating mechanism including a hand lever adapted for attachment to the footboard of the automobile, an extensibly adjustable guide member adapted for attachment at its extremities to the steering post and to a side wall respectively of the automobile, a connection between said lever and the signal arm for moving the signal arm to operative or inoperative position in response to the movements of said lever, and means for adjustably altering the length of said lever.

1,810,967. ZONING AND FARE COLLECTING SYSTEM. JOHN W. HULME, Jackson Heights, N. Y. Original application filed Jan. 21, 1927, Serial No. 162,581. Divided and this application filed Oct. 23, 1929. Serial No. 401,741. 21 Claims. (Cl. 194—6.)



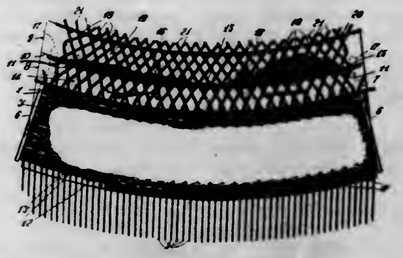
1. In a zoning system the combination with a restricted entrance-way and a restricted exit, barriers in said ways, means actuated by a coin for releasing the barriers of the entrance-way and delivering a token, and means controlled by the token representing the relative position of the exit way with respect to the point of travel at which delivery of the token was effected for releasing the barriers of the exit way.

1,810,968. AUTOMOBILE SIGNALING DEVICE. FRANK J. JAROS and EDWARD T. JAROS, Chicago, Ill. Filed Dec. 30, 1927. Serial No. 243,500. 2 Claims. (Cl. 200—11.)



1. A manually operated signaling switch adapted to alternately close one of two circuits, comprising a casing, a shaft rotatably mounted within said casing, a contact member mounted upon the end of said shaft and provided with two contact arms, two circuit terminal posts within said casing, connected respectively to alternative circuits, and a central terminal post connected to a source of electric current, whereby rotation of said shaft in opposite directions serves to alternately close the circuit between said central terminal post and one of said circuit terminal posts, said contact arms and posts constructed and arranged to prevent the simultaneous closing of the circuit between said central terminal post and both of said circuit terminal posts and a base plate provided with upturned flanges for restricting movement of said contact arms, substantially as described.

1,810,969. METHOD OF MAKING COMBINED CLOSELY WOVEN AND FITCH WORK FABRIC. LEWIS LARSEN, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 28, 1928. Serial No. 328,894. 8 Claims. (Cl. 147—48.)



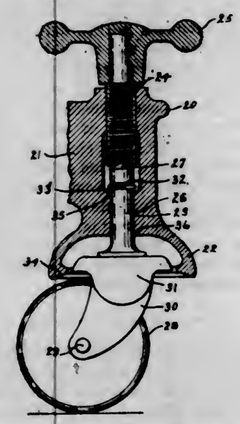
1. The method of making a fabric of the kind described which consists in providing a piece of substantially close woven stake and strand fabric material having stake portions projecting beyond one edge thereof, then placing said material upon a templet having stake guiding means thereon, deflecting the projecting stake portions substantially in the plane of the material and engaging them with the desired guiding means and then fitching in strands upon said deflected projecting stake portions along the desired line thereon to form a combined close woven stake and strand and fitched fabric.

1,810,970. FURNITURE FRAMING AND METHOD OF MAKING THE SAME. LEWIS LARSEN, Menominee, Mich., assignor to Heywood-Wakefield Company, Boston, Mass., a Corporation of Massachusetts. Filed June 17, 1929. Serial No. 371,338. 1 Claim. (Cl. 144—309.)



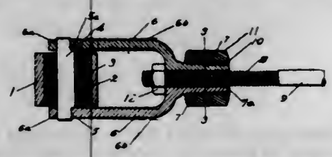
The method of making a furniture frame member or the like which consists in providing a thin walled metal tube, inserting a plurality of wooden dowel members therein in endwise spaced relation at least in part and then bending the composite structure at a zone containing such a dowel member.

1,810,971. ADJUSTABLE CASTER. RALPH L. LEE, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Aug. 6, 1923. Serial No. 655,916. 5 Claims. (Cl. 16—19.)



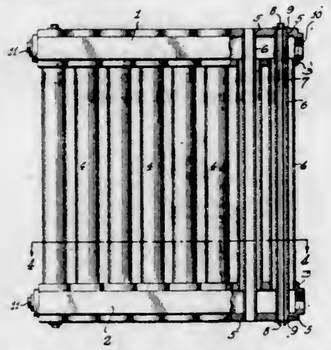
1. Supporting mechanism comprising, in combination, an article to be supported including a foot member; a caster having a stem portion journalled in said foot member, said stem portion and foot member adapted to be relatively slidable; and means including a screw threaded into said foot member and in alignment with the caster stem and provided at its lower end with a step bearing portion for receiving the caster stem for producing relative endwise movement between the step bearing and the foot member.

1,810,972. CLEVIS. HUGH C. LORD, Erie, Pa. Filed Oct. 13, 1924. Serial No. 743,307. 7 Claims. (Cl. 287—100.)



1. In a clevis mechanism, the combination of a joint comprising an outer and inner joint member; a rubber bushing between said members, the contacting surfaces of the bushing and members being fixed relatively to each other and receiving oscillatory movement by distortion of the rubber; and a split clevis locked relatively with and contacting the inner joint member, the clevis having sufficient clearance relatively to the outer member to prevent contact under normal axial thrusts.

1,810,973. RADIATOR. JOHN B. LUKOMSKI, Detroit, Mich. Filed May 5, 1930. Serial No. 449,755. 2 Claims. (Cl. 257—142.)



1. A radiator comprising a pair of headers, outer tubes joined to confronting walls of said headers and establishing communication between the headers, inner tubes passed through said outer tubes and headers and secured in the outwardly facing walls thereof, said inner tubes being open to the atmosphere at both ends, inlet means in one of the headers, outlet means in the other header, tie rods passing through certain of said inner tubes, and means on said rods clamping said headers against the ends of said outer tubes.

1,810,974. PNEUMATIC DISPATCH CARRIER. DANIEL J. MACMILLAN, Brooklyn, N. Y. Filed Apr. 4, 1930. Serial No. 441,485. 4 Claims. (Cl. 116—133.)



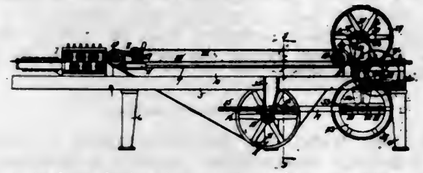
1. A dispatch carrier, comprising a rigid inner tube of comparatively thin walls, a pair of comparatively narrow rings arranged to turn on the inner tube and provided with numerals on their periphery, a pair of outer tubes of thicker material than the inner tubes, one mounted between the end of the carrier and the said rings at each end portion and secured to the inner tube, one of the outer tubes having a mark arranged to register with the numerals on the rings, a closure for one end of the tube, a bumper ring mounted on each said outer tube at the end portion, and a split ring of very thin spring metal placed between each said number ring and the inner tube to provide friction to retain the number ring in adjusted positions.

1,810,975. ROTARY DRAW WORKS HAVING DUAL ROTARY MACHINE DRIVE. ARTHUR E. MARTOIS, Los Angeles, Calif. Filed Jan. 12, 1929. Serial No. 332,135. 16 Claims. (Cl. 255—19.)



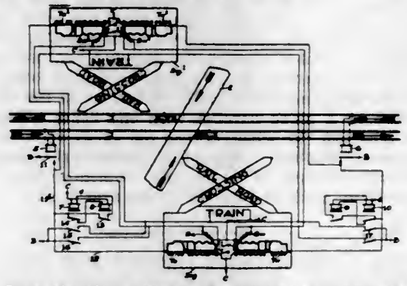
1. In combination: a derrick structure having a base; a plurality of draw works uprights secured to said base at their lower ends and to the derrick at their upper ends; a rotatable drum rotatably supported by certain of said uprights; a line-shaft mounted on certain of said uprights above said drum; drum-drive means connected to said line-shaft and said drum; a jack-member rotatably supported by certain of said uprights near said base; means mounted on said jack-member for driving a rotary machine; a counter-shaft rotatably supported in a lower plane than said line-shaft; high-speed drive-means connected to said jack-member and said counter-shaft; low-speed drive-means connected to said jack-member and said counter-shaft; means connected to said line-shaft and said counter-shaft whereby one of said shafts operates the other of said shafts; and means for operating said counter-shaft.

1,810,976. STRIP STRAIGHTENING AND CUTTING MACHINE. GEORGE F. MATTESON, Rockyhill, Conn., assignor to The F. B. Shuster Company, New Haven, Conn., a Corporation of Connecticut. Filed Sept. 28, 1928. Serial No. 308,977. 14 Claims. (Cl. 153—32.)



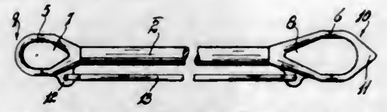
1. A feeding device for metal working machines, said device including an endless, flexible actuator, guides for said actuator, said actuator including a gripper interposed in the length of said actuator and located and movable in line with and wholly between said guides, means for effecting a reciprocating movement of said actuator, and means on said gripper for automatically gripping a piece of stock when the gripper is moved in one direction but to release said stock when the gripper is moved in an opposite direction.

1,810,977. HIGHWAY CROSSING SIGNAL. JAMES C. MOCK, Detroit, Mich. Filed Feb. 26, 1930. Serial No. 431,616. 8 Claims. (Cl. 246—130.)



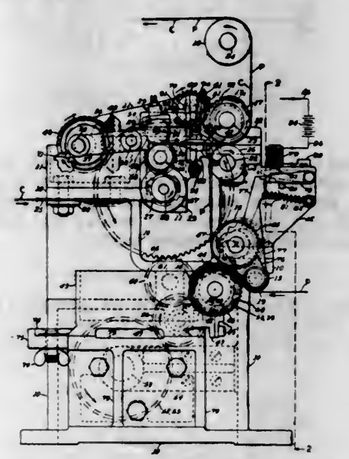
1. In a signalling system for highway crossings where a highway crosses a railroad track, a signal including illuminable pictorial representations of trains facing in opposite directions, circuits for selectively illuminating said representations, and control means for said circuits, automatically responsive to traffic conditions, to illuminate that representation corresponding to actual approaching danger.

1,810,978. WELDLESS ELEVATOR LINK. GEORGE W. MOORE, Long Beach, Calif. Original application filed Nov. 18, 1927, Serial No. 234,228. Divided and this application filed Sept. 23, 1929. Serial No. 394,671. 4 Claims. (Cl. 59—84.)



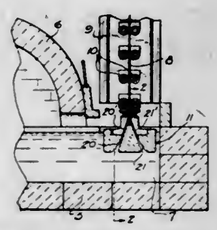
1. A weldless elevator link for oil well elevators formed of a single piece of metal, said link comprising a straight central section, enlarged ends on said piece, eyes cut in said enlarged ends, a loop on said link on both ends thereof and a hand grasp secured to said loops.

1,810,979. CIGARETTE CORK TIPPER. PETER MARTIN NEJEDLY, Brooklyn, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Feb. 7, 1930. Serial No. 426,756. 16 Claims. (Cl. 131—39.)



1. In a machine for applying covering material to separated portions of a continuous strip of material, the combination with means for continuously feeding the strip of material and applying adhesive to separated portions thereof, of means for intermittently feeding a continuous strip of covering material, a continuously rotating knife for cutting strips of covering material while it is stationary, and mechanism for applying the severed strips to the adhesive portions of the material.

1,810,980. METHOD AND APPARATUS FOR FORMING SHEET GLASS. WILLIAM E. NOBBE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 28, 1928. Serial No. 250,127. 12 Claims. (Cl. 49—17.)

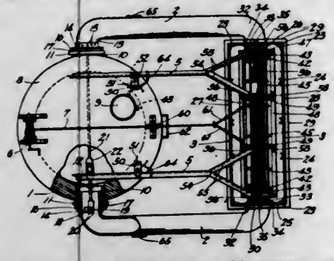


6. The method of forming sheet glass which consists in drawing a plurality of streams of molten glass upwardly from a molten bath, uniting said streams at their upper ends and while they are still in a substantially vertical position to form a single sheet, and in continuously forcing glass upwardly into the stream sources under hydrostatic pressure.

1,810,981. ADJUSTABLE SCREEN INTAKE. OLIVER E. NOBLE, Oklahoma City, Okla. Filed Sept. 6, 1929. Serial No. 390,830. 5 Claims. (Cl. 61—17.)

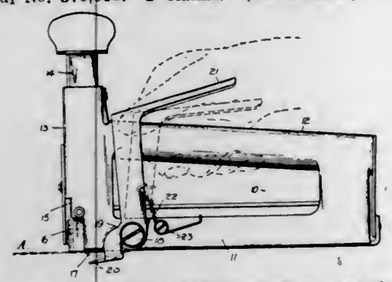
1. In a device, as described, the combination with a closed topped intake well disposed in a water reser-

voir, said well having opposite side intake openings, a pair of parallel pipe members one end of each pivotally mounted in one of said openings, their free end portions curved inwardly toward each other, of a screen supported therebetween, an open bottomed skimmer box disposed



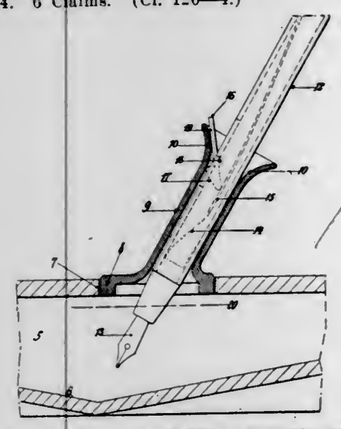
upon said free end portions about said screen, means within said skimmer box for regulating the flow of water to said screen, means for clamping said pipe members in said openings, and strut means for holding said skimmer box and screen rigidly at a desired height.

1,810,982. ATTACHMENT FOR STAPLING MACHINES. LOU OBSTFELD, Brooklyn, N. Y. Filed June 11, 1929. Serial No. 370,052. 2 Claims. (Cl. 1—46.5.)



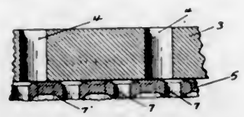
1. In a stapling device having an upright staple driving arrangement, a lateral base portion and hand grip spaced thereover, the combination of gripping means mounted on the device and having a jaw portion operating under the base, and a lever projecting over the hand grip whereby the stapling device may be held and gripping means operated in the same hand.

1,810,983. WRITING IMPLEMENT. JAMES O'SHAUGHNESSY, Tuckahoe, N. Y. Filed Feb. 19, 1931. Serial No. 516,874. 6 Claims. (Cl. 120—4.)



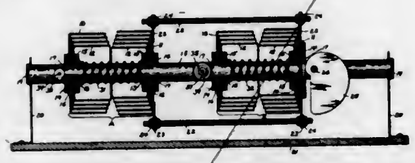
1. In combination, a self filling fountain pen having a lever for actuating the self filling mechanism of said pen, an inkstand and means on the latter adapted to operate said lever when the pen is inserted into the inkstand to fill the pen.

1,810,984. PRESSING APPARATUS. VANNEY A. RAY, San Francisco, Calif., assignor of one-third to Daniel P. Kelleher. Filed Mar. 24, 1930. Serial No. 438,404. 4 Claims. (Cl. 68—9.)



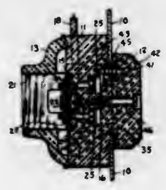
3. A covering plate formed to fit over the face of a steaming and pressing machine head comprising a thin metal sheet finely perforated over its working surface and having burrs around the perforations on the outer surface of the sheet.

1,810,985. GANG OR MULTIPLE-UNIT VARIABLE ELECTRIC CONDENSER. HOWARD F. REICHENBACH, Wolcott, Conn., assignor to Chase Companies, Inc., Waterbury, Conn., a Corporation. Filed Feb. 10, 1928. Serial No. 253,333. 8 Claims. (Cl. 175—41.5.)



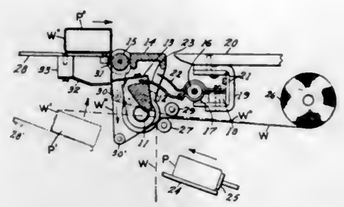
8. A gang or multiple-unit variable electric condenser, comprising a plurality of condenser-units, each consisting of a pair of complementary members, each having a plurality of vanes offsetting toward the vanes of its complementary member; means for coupling one member of one unit to a member of an adjoining-unit; a rotary cam for imparting concurrent bodily movement to the coupled members in a plane parallel with the vanes thereof so as to telescope the same between the vanes of their complementary members; whereby a differential movement-ratio may be imparted to the said coupled-members by a substantially uniform rotation of the said cam.

1,810,986. CONVENIENCE OUTLET FOR ELECTRIC APPLIANCES. EDWIN A. RUTENBER, Milwaukee, Wis., assignor to A. J. Lindemann & Hoverson Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 15, 1928. Serial No. 277,969. 6 Claims. (Cl. 200—133.)



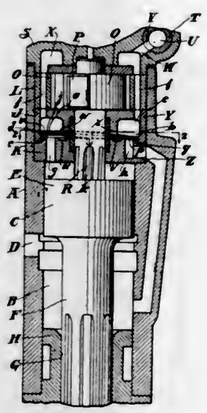
1. A convenience outlet adapted to be used with electrical apparatus comprising a base having line terminals and a fuse socket on one face thereof, outlet contacts on another face thereof, a removable outlet cap adapted to secure said base to a support and a key member protruding from said last named face adapted to engage said support in interlocking relation.

1,810,987. KNIFE HEATER FOR WRAPPING MACHINES. FRANK REINHOLD SCHMITT, Queens Village, N. Y., assignor to American Machine & Foundry Company, a Corporation of New Jersey. Filed Jan. 24, 1930. Serial No. 423,106. 20 Claims. (Cl. 146—43.)



1. The combination with a knife acting on a plastic coated material, of mechanism for moving said knife in and out of cutting position, and means for establishing in the path of said knife a heated zone, whereby said knife is kept practically free of plastic material.

1,810,988. VALVE MECHANISM FOR ROCK DRILLS. FRED M. SLATER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 12, 1929. Serial No. 331,961. 9 Claims. (Cl. 121—19.)

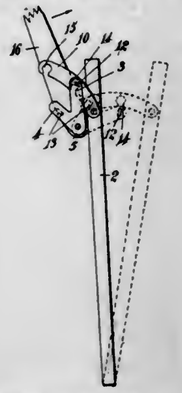


1. In a fluid actuated rock drill, the combination of a cylinder and a piston, an exhaust port in the cylinder controlled by the piston, a valve chamber, inlet passages leading from the valve chamber to the cylinder, an oscillatory plate valve in the valve chamber controlling the inlet passages, and means in the valve chamber cooperating with the valve to cut off the flow of pressure fluid to both ends of the cylinder during a portion of each opening movement of the valve.

1,810,989. MEANS FOR TREATING SOLIDIFIED CARBON DIOXIDE. ORVALL SMILEY, Indianapolis, Ind. Filed Feb. 12, 1930. Serial No. 427,997. 5 Claims. (Cl. 23—239.)

1. Means for treating solidified carbon dioxide for retarding evaporation thereof, comprising commingling with the mass of solidified substance a dividing element.

1,810,990. LEVER MECHANISM. HUGH BOGART TARBOX, Toronto, Ontario, Canada. Filed Dec. 9, 1927. Serial No. 238,788. 2 Claims. (Cl. 74—110.)



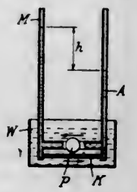
1. A lever mechanism comprising two unitedly rotatable lever arms arranged one in advance of the other, the leading arm being longer than the following arm and provided with a projecting key, a pivoted link having a recess into which the key enters and from which it recedes for causing a partial forward movement of the link during the forward rotation of the lever arms, the other lever arm engaging the link and completing its forward movement when the key recedes from the recess.

1,810,991. BINDING FOR LINOLEUM TOPS. ANTHONY VANDERVELD, Grand Rapids, Mich., assignor to Grand Rapids Store Equipment Corporation, Grand Rapids, Mich., a Corporation of Michigan. Filed Sept. 17, 1930. Serial No. 482,456. 4 Claims. (Cl. 45—31.)



1. In a construction of the class described, a horizontal supporting frame having spaced apart upwardly extending bosses thereon, a sheet metal plate located over the supporting frame resting on and secured to said bosses, a linoleum cover over said plate, and a binding strip of metal around the edges of said plate and linoleum and engaging thereagainst, said binding strip having parts extending therefrom underneath the plate, over said frame and between said bosses engaging with said frame to secure the strip against disconnection.

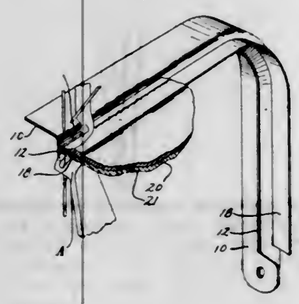
1,810,992. METHOD AND MEANS FOR DETERMINING THE VISCOSITY OF LIQUID SUBSTANCES. RICHARD VON DALLWITZ-WEGNER, Heidelberg, Germany. Filed Dec. 22, 1926, Serial No. 156,416, and in Germany Jan. 7, 1926. 7 Claims. (Cl. 265—11.)



1. The method of measuring the viscosity of liquids which consists in causing the liquid to be forced at a

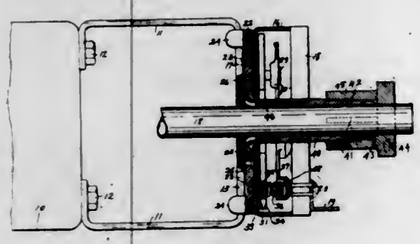
comparatively low and uniform rate into a vessel while permitting return slippage through an open passage of fixed cross sectional area, whereby the viscosity is determined by the level to which the liquid is raised in said vessel.

1,810,993. METHOD OF MANUFACTURING TRAVELING BAGS. HENRY F. WELTZ, St. Louis, Mo., assignor to Milwaukee Stamping Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 11, 1929. Serial No. 406,434. 2 Claims. (Cl. 190—54.)



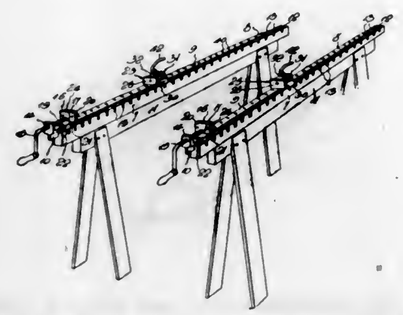
1. The method of forming traveling bags consisting in first completing a set of jaw frames, and then securing to their outer surfaces along lines inset from their outer margins, a set of laterally projecting metal connector strips of sufficient thinness and softness to permit stitching operations by an ordinary bag sewing machine, then applying the marginal portions of a bag to said connector strips with its edges abutting the jaw frames, and machine stitching the same to the connector strips while supporting and guiding the jaw and connector strip upon a portion of the sewing machine in the angle at the line of their connection for straight line stitching at a uniform distance from the frame.

1,810,994. STEERING COLUMN SWITCH. ROBERT K. WINNING, Wauwatosa, Wis., assignor to Clum Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 20, 1927. Serial No. 192,830. 23 Claims. (Cl. 200—59.)



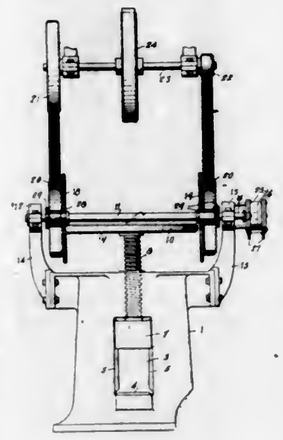
1. The combination with a driving shaft and a relatively fixed member adjacent thereto, of a switch casing including a terminal head with housed contacts interlocked with said member against rotative movement about the axis of said shaft and freely disengageable from said member in an axial direction, a switching mechanism including a movable part housed within said casing and operatively arranged for interaction with said contacts and provided with a connection to said shaft, said connection comprising a means for maintaining said casing in engagement with said member.

1,810,995. WOODWORKER'S CLAMP. WILLIAM H. WOELK, Crookston, Minn. Filed July 23, 1930. Serial No. 470,142. 5 Claims. (Cl. 144—291.)



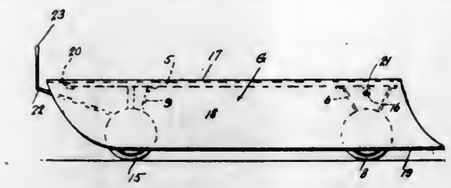
2. In a work clamping means, two parallel clamp-supporting bars, each bar having a longitudinal groove and a plurality of transverse grooves intersecting said longitudinal groove and opening through opposite sides of the bar, all of said grooves being relatively deep and narrow, two clamp base bars adapted to rest upon said clamp-supporting bars in positions extending either longitudinally or transversely thereof, said clamp base bars having longitudinal flanges adapted for reception in either said longitudinal grooves or said transverse grooves, and relatively adjustable clamp jaws carried by said clamp base bars.

1,810,996. SCREW POWER PRESS. EDMUND W. ZEH, Newark, N. J. Filed July 27, 1929. Serial No. 381,658. 11 Claims. (Cl. 74—26.)



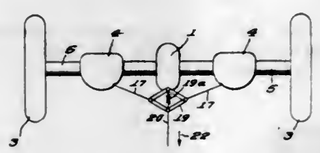
1. In a power press, the combination with a frame, a screw mounted in said frame, a head on one end of said screw and a friction wheel on the other end, of coaxial friction drive members at opposite points on the edge of said friction wheel, means for rotating said drive members at different speeds, and means for causing alternate engagement of said friction drive members with said friction wheel.

1,810,997. GLIDER. EDWARD C. BAUER, Cincinnati, Ohio. Filed Jan. 28, 1930. Serial No. 424,001. 5 Claims. (Cl. 280—8.)



1. In a structure of the type embodying, a wheeled frame and a sled attachment, a plate to rest on top of the wheeled frame having depending side runners terminating a distance above the ground outside of the wheels, and quick detachable means fastening the sled attachment upon the wheeled frame.

1,810,998. BACKSTOP FOR MOTOR VEHICLES. OLOF BJORK, Taft, British Columbia, Canada. Filed Apr. 28, 1930. Serial No. 447,977. 4 Claims. (Cl. 188—30.)



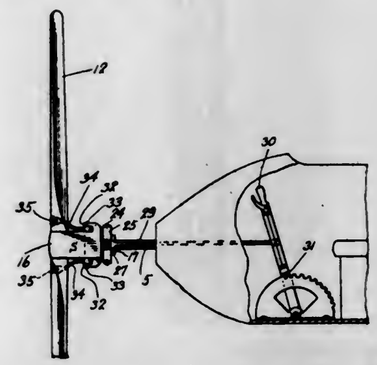
1. A backstop for motor driven vehicles comprising, in combination with the driving axle, housings arranged upon and receiving said axle upon opposite sides of the differential housing, a clutch comprising a clutch member keyed to said axle and a clutch member loose upon said axle in each housing, expansion coil springs upon said axle abutting said housings and said loose clutch members, a coil spring pivotally supported at one end and encircling said loose clutch member, a resilient frame supported between said housings, connection between said spring and loose clutch members, and manually operable means for actuating said resilient frame.

1,810,999. FLY-OPEN KNIFE. ROBERT E. BROWN, Olean, N. Y. Filed Nov. 18, 1930. Serial No. 496,484. 3 Claims. (Cl. 30—10.)



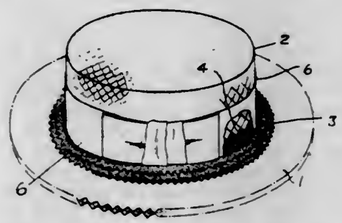
2. A knife comprising a handle defining a pocket open along one side and having side walls and a spring between the side walls extending longitudinally of the pocket with its free end adjacent an end of the pocket, a blade pivoted in the said end of the pocket and having shoulders engageable by the free end of the spring to releasably secure the blade in opened and closed positions, an actuating leaf extending longitudinally in said pocket and having pins at one end engaged in sockets formed in the side walls to pivotally mount the leaf, a lever at one side of said leaf extending through an opening in the adjacent side wall and disposed against the outer face of the side wall and movable longitudinally thereof to rock said leaf and move the spring out of engagement with a shoulder of said blade to release the blade, and a latch to releasably secure said lever against movement.

1,811,000. AEROPLANE PROPELLER. CLYDE BYER, Marion, Ind. Filed July 24, 1929. Serial No. 380,674. 2 Claims. (Cl. 170—163.)



1. A propeller structure of the class described including, in combination, a shaft, a block fixed to the shaft, a pair of propeller blades extending from the block in opposite directions, means for rockably engaging the propeller blades with the block, a slide of U-shaped formation to provide a bight with a pair of spaced parallel sides projecting therefrom in one direction to straddle the block, and a hub projecting therefrom in the opposite direction and having an annular groove, said hub and bight being circumjacent the shaft and rotatable therewith, projections on opposite corners of the bight extending in spaced parallelism with adjacent edges of the sides, links pivotally mounted between the projections and adjacent edges of the slide, ears on the propellers with which the links are pivotally engaged, and means for sliding the slide on the shaft comprising a sectional ring seated in the groove of the hub and provided with pins at diametrically opposite sides, an annular frame having openings for pivotally receiving said pins, an arm pivotally supporting one side of the frame and an operating lever operatively attached to the opposite side of the frame.

1,811,001. STRAW HAT. JOHN CAVANAGH, Norwalk, Conn., assignor to Hodshon-Berg, Inc., Norwalk, Conn. Filed May 24, 1930. Serial No. 455,263. 1 Claim. (Cl. 2—193.)



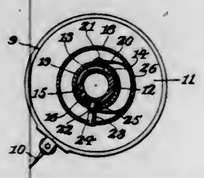
A straw-braid hat of the character described, comprising a flat stiffened brim, a stiffened crown, and means for connecting said brim and crown, said means comprising an annular flexible portion extending horizontally through a portion of the brim and vertically through a portion of the crown and spacing apart said brim and crown, said portion consisting of overlapping strips of felted cloth having their edges exposed to view in the brim portion and concealed from view in the crown portion only by the usual ribbon and sweat band.

1,811,002. WELL DRILLING APPARATUS. REBUS D. DODDS, Pampa, Tex., assignor to James C. Dodds, Houston, Tex. Filed Feb. 24, 1928. Serial No. 256,539. 17 Claims. (Cl. 255—64.)



1. The combination with a tubular drill stem, of a reciprocable drilling tool at the lower end of the stem, an operating cable extending from the ground surface down through the stem and connected to said tool and means operable by the stem and effective to release said cable from said tool.

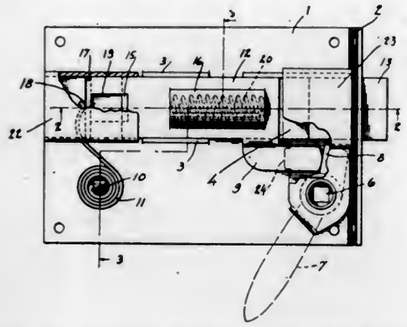
1,811,003. PHONOGRAPH ATTACHMENT. KOSMOS ETTIHIOS, New Orleans, La. Filed Mar. 21, 1929. Serial No. 348,947. 1 Claim. (Cl. 274—24.)



In a phonograph, a tone arm, a sound reproducer having a stylus for engagement with a record, and coacting means on said tone arm and reproducer for adjustably securing the latter with the stylus selectively extending at forward and rearward inclinations whereby the reproducer may be applied to a record at diametrically opposite points thereof, said securing means including a head on the tone arm and formed with spaced, concentrically arranged flanges provided with aligned openings, a spring disposed between the flanges, a pin extending through the outermost of said openings and forced by said spring to project through the innermost of said openings, a collar formed on the reproducer and extended within the innermost of said flanges, said collar having its periphery formed with a pair of spaced depressions for the selective reception therein of the inner end of said pin to resiliently lock the head and reproducer against relative rotation, said depressions being disposed at equal distances from and on opposite sides of a plane passed through the stylus and perpendicular to the plane through which the stylus is movable to extend the same at said forward and rearward inclinations.

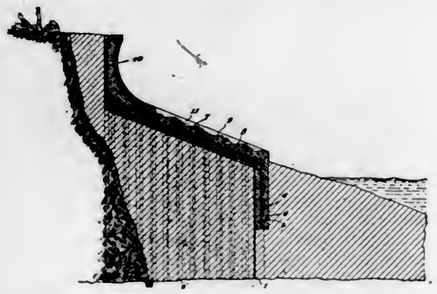
1,811,004. LOCK ASSEMBLY FOR VEHICLES. JOHN B. FLYNN, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 4, 1929. Serial No. 330,240. 4 Claims. (Cl. 292—169.)

1. In a door lock, a reciprocable bolt arranged to engage a keeper and having a semi-cylindrical portion, a slide having a semi-cylindrical portion and adapted to slidably engage said bolt, said semi-cylindrical portion of the bolt adapted to cooperate with the semi-cylindrical portion of the slide to form a chamber, and resilient means in said chamber for resisting relative movement between said



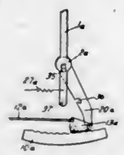
slide and said bolt, and resilient means of greater strength for projecting said slide and bolt whereby the bolt alone can be retracted against the resistance of the weaker resilient means and the bolt and slide against the resistance of the stronger resilient means.

1,811,005. SEA WALL. EDWARD ARTHUR FORBES, West Palm Beach, Fla. Filed May 22, 1930. Serial No. 454,737. 4 Claims. (Cl. 61—39.)



1. A sea wall comprising sheet metal piling interlocked and driven to a depth to insure permanency and stability and forming a bulkhead, transverse sheet metal piling permanently and rigidly connected to the bulkhead piling and extending shoreward and driven to a depth to insure a rigid and stable structure, longitudinal and transverse rods engaging the upper portions of the piling, and a concrete superstructure supported upon the piling and reinforced and strengthened by the said longitudinal and transverse rods which are embedded therein and bonded thereby.

1,811,006. MECHANISM FOR CONTROLLING BRAKES. ROBERT S. GANS, Detroit, Mich., assignor of one-half to John J. Grabfield, Detroit, Mich. Filed Feb. 3, 1928. Serial No. 251,533. 8 Claims. (Cl. 74—39.)



1. A mechanism for controlling automobile brakes or the like comprising in combination, a lever movable toward and away from a seat of the automobile, a brake rod,

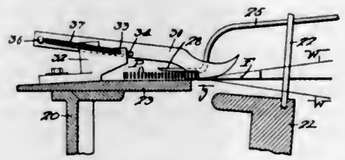
intermediate mechanism connecting the brake rod and lever including interengaging devices which lock by reason of pull by the brake rod when the brakes are applied, said lever being adapted to be pulled back towards the said seat of the automobile when the brakes are applied, and a separable connection between the lever and the said mechanism which permits the lever to be disconnected whereby the same can be moved independently of the said intermediate mechanism and away from the seat while the brakes are held applied by said interengaging devices.

1,811,007. VENDING MACHINE. JACOB ROSS GROVE, York, Pa., assignor to Jacob Ross Grove, trustee, in trust for said Jacob Ross Grove, and Charles B. Wolf, Mount Wolf, Pa. Filed Aug. 21, 1928. Serial No. 300,987. 15 Claims. (Cl. 221—100.)



1. In a gasoline vending machine, the combination of a visible dispensing container having valve controlled inlet and outlet openings, a reservoir in which fuel is stored under pressure, said reservoir being connected to said inlet opening, an operating lever or handle for actuating the inlet and outlet valves, and means operable by depletion of gasoline in the reservoir for locking said lever against operation.

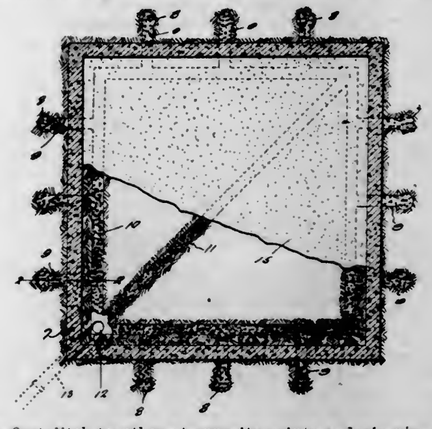
1,811,008. CROSS WIRE CARPET LOOM. WALTER HALL, Worcester, Mass., assignor to M. J. Whittall Associates, Worcester, Mass., a Voluntary Association of Massachusetts. Filed Feb. 17, 1930. Serial No. 428,893. 7 Claims. (Cl. 139—39.)



1. In a cross wire carpet loom, means to hold the last inserted pile wire from rearward movement, and a device mounted on the loom frame adjacent the selvage at the fell of the cloth and effective to depress the selvage pile warps by downward engagement therewith at the rear of but closely adjacent to the last inserted pile wire.

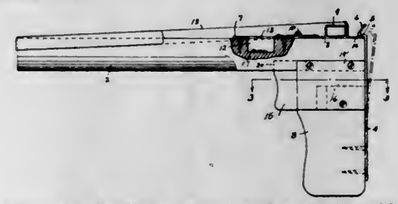
1,811,009. DRAINAGE SYSTEM. SAMUEL A. HARTMANN, Jackson, Mo. Filed Jan. 7, 1930. Serial No. 419,090. 1 Claim. (Cl. 72—10.)

The combination with a building including foundation walls and a bottom floor, of drainage means for the building comprising ditches arranged below the walls and floor and within the confines of the wall and following the outline thereof, a diagonal ditch connecting the corners of



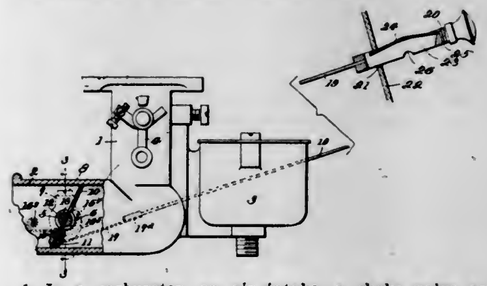
the first ditch together at opposite points, a drain pipe connected with the first ditch, and lateral ditches connected with the first ditch and extending below and beyond the foundation walls.

1,811,010. TOY GUN. JAMES C. HAWS, Houston, Tex. Filed Sept. 21, 1929. Serial No. 394,176. 3 Claims. (Cl. 124—14.)



3. A toy gun having a barrel and a stock, said stock forming a grip, a throw arm pivoted to the barrel, a spring attached to the stock and whose upper end is shaped to engage and hold the throw arm in rearward or retracted position, an upstanding projection carried by the throw arm, said stock having bearing, a plunger like trigger working through said bearing and movable rearwardly against said spring to effect the release of the spring from the throw arm, said spring being effective to return the trigger to forward position upon the release of the throw arm by said spring.

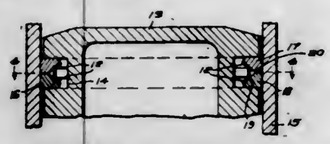
1,811,011. CHOKE OPERATING MEANS FOR CARBURETORS. FRANK H. HEITGER, Flint, Mich. Original application filed Feb. 20, 1928, Serial No. 255,821. Divided and this application filed Apr. 17, 1929. Serial No. 355,956. 5 Claims. (Cl. 137—139.)



1. In a carburetor, an air intake, a choke valve arranged in said intake, a spring for normally holding said

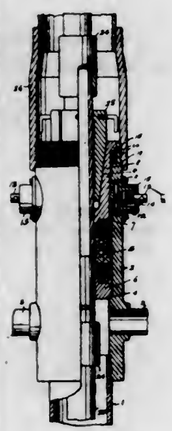
valve in open position, actuating means for said valve including a loose connection to permit the valve to open under suction influence from the engine when the actuating means is in intermediate position, a manual control member, and motion multiplying means comprising a cam and a strap operatively connecting said manual control member to the actuating means.

1,811,012. PISTON PACKING. JAMES G. HODGE, East Orange, N. J. Filed Nov. 28, 1930. Serial No. 498,851. 1 Claim. (Cl. 74—109.)



A corrugated piston ring expander comprising a body formed of a strip of flat spring sheet metal provided with spaced inwardly extending divergent wings connected to the opposite side edges of the body at their inner ends and having their outer ends freely flexible with respect to the body portion of said expander.

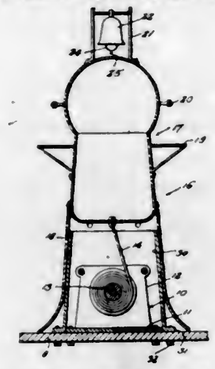
1,811,013. COMBINED CASING HEAD AND BLOW-OUT PREVENTER. GRANVILLE A. HUMASON, Houston, Tex. Filed Mar. 13, 1930. Serial No. 435,404. 1 Claim. (Cl. 166—14.)



A casing head and blow out preventer including a tubular bowl connected to the upper end of an outer pipe in a well bore and having an inside seat and an outlet beneath said seat, a sleeve like packing in said bowl and seated on said seat, said packing being shaped to surround an inner pipe and having an expansible element and its upper end being formed into a spider having a slip seat, pipe engaging slips in said slip seat, and releasable interengaging means between the bowl and packing and effective to retain the packing in the bowl, said interengaging means comprising teeth on the spider and a yieldably mounted dog in the bowl engageable with said teeth.

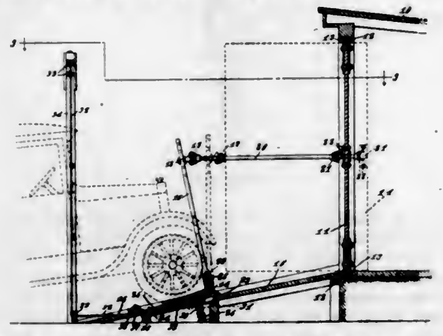
1,811,014. INDICATOR BUOY FOR SUNKEN SHIPS. HENRY J. KERWIN, Phoenixville, Pa.; Lucille A. Kerwin administratrix of said Henry J. Kerwin, deceased. Filed Sept. 3, 1929. Serial No. 390,038. 6 Claims. (Cl. 9—9.)

1. In a structure of the class described, a relatively stationary support, a windlass structure mounted thereon including a rotary drum and a feed cable mounted on said drum, a float, one end of the cable being connected with said float, and a depending skirt portion carried by



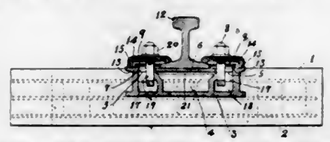
said float and normally resting on said support, a tubular shell fixed to said stationary support and immediately surrounding said windlass structure.

1,811,015. DOOR OPERATING MECHANISM. BERDIEN KLING, Dunn Center, N. Dak. Filed May 7, 1928. Serial No. 275,870. 3 Claims. (Cl. 268—35.)



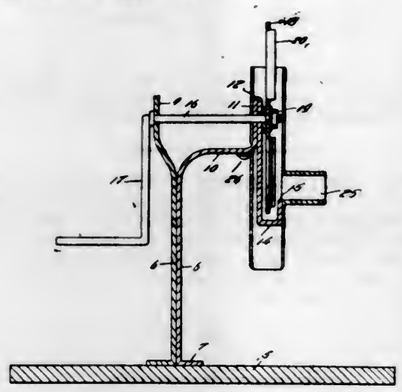
3. In combination with a building having an entrance and inclined platform therefor and provided with an opening, a door for the entrance, trunnions carried by the upper and lower edges of the door and adjacent one of the side edges thereof, journals carried by the building to receive the trunnions, a treadle hinged at one end to the platform and closing the opening, a vertically disposed arm pivotally mounted at the lower end to the platform, an operating rod having universal connection between the door and arm, a second arm secured to the treadle and pivotally and slidably connected to the first mentioned arm, tension means carried by the platform to engage the treadle to automatically return the treadle to its normal position when disengaged by a vehicle, a latch to hold the treadle in a door-opening position, and means to operate the latch to permit the tension means to close the door.

1,811,016. SLEEPER. JINICHI KUMAMOTO, Tokyo, Japan. Filed Apr. 14, 1930, Serial No. 444,224, and in Japan May 3, 1929. 6 Claims. (Cl. 238—265.)



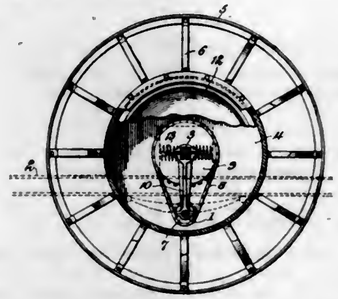
1. In a railway sleeper made of concrete, a combination comprising a bed plate formed with a hollow open upwardly and a resilient floor plate for seating a rail thereon, which is disposed on the said bed plate and over the said hollow so that it is resiliently yieldable to the load placed on it.

1,811,017. SOAP SHAVER. TILLMAN HOMER LEHMAN, Berne, Ind. Filed Apr. 2, 1930. Serial No. 441,049. 3 Claims. (Cl. 146—116.)



1. An apparatus of the class described including a pair of vertical strips disposed in abutment to each other and having at their lower ends feet, the upper end of one strip being offset and the upper end of the other strip being curved to extend outwardly at right angles and to merge into an upstanding portion which in turn merges into a depending portion lying there alongside and terminating below the first mentioned portion, and said last mentioned portion merging into an outwardly extending portion which terminates in a riser, a shaft journalled between the second and third mentioned portion and the offset end, a crank on the shaft and a cutting disk on the shaft.

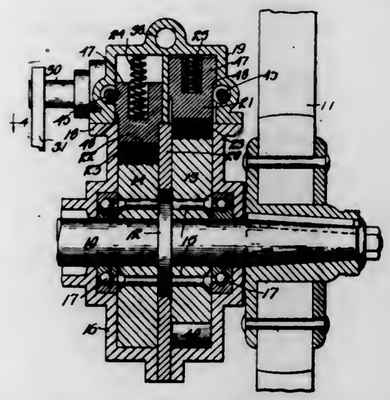
1,811,018. TRACTION OF VEHICLES. JUAN CARLOS MOLINA MASSEY, Adrogue, Argentina. Filed Oct. 11, 1929, Serial No. 398,971, and in Argentina Sept. 9, 1929. 2 Claims. (Cl. 180—10.)



1. The combination of a traction wheel; a floating shaft carrying the same; a driving shaft; resilient means active on the floating shaft to tension the same when displaced; means uniformly spacing the shafts from each other; and means for transmitting motion from one shaft to the other.

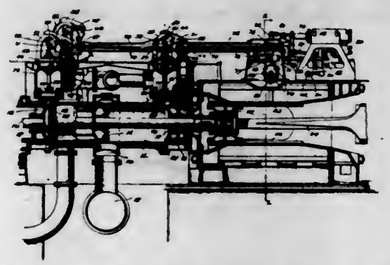
1,811,019. HYDRAULIC BRAKE MECHANISM. FRED Y. MCKENNEY, Chattanooga, Tenn., assignor of one-half to Jackson Z. Easley, Chattanooga, Tenn. Filed May 1, 1929. Serial No. 359,654. 5 Claims. (Cl. 188—91.)

1. A casing, a shaft mounted in said casing, eccentric pistons mounted upon said shaft, abutments slidably mounted in said casing having their inner ends in engagement with the pistons, ports to the chambers formed at each side of the said abutments, a valve controlling



the said ports, and means controlled by the said valve for holding the abutments out of engagement with the pistons when the valve is opened, substantially as set forth.

1,811,020. REVERSIBLE ROLLING MILL ENGINE. BRUNO V. NORDBERG, deceased, Milwaukee, Wis., by Helena C. Nordberg, executrix, Milwaukee, Wis. Filed May 21, 1925. Serial No. 31,954. 35 Claims. (Cl. 121—136.)

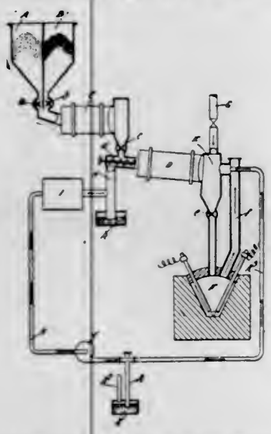


21. The combination with a simple engine having more than three double-acting cylinders, and having cranks arranged to cause the individual working spaces to deliver their impulses seriatim at uniform intervals; ot cam actuated inlet valve mechanisms controlling the inlets to said working spaces, the actuating cams of said valves being capable of over-travel after the valve is closed and after it has been opened; a reversing valve gear of the Marshall type including a swinging yoke and radius bars, the radius bars and yoke being of unequal radii; means for controlling all said yokes simultaneously to vary the cut-off when running in either direction; and unloading valves one adjacent each inlet valve and each serving the same working space as the adjacent inlet valve, said unloading valves being arranged to be opened by the over-travel of the inlet valve actuating cam beyond inlet valve closing position.

1,811,021. REDUCTION OF CALCIUM CARBONATE FOR THE MANUFACTURE OF CARBIDES. GEORGES PATART, near Paris, France, and HARALD NIELSEN, Bromley, England. Filed Dec. 4, 1928, Serial No. 323,771, and in Great Britain Dec. 30, 1927. 3 Claims. (Cl. 204—62.)

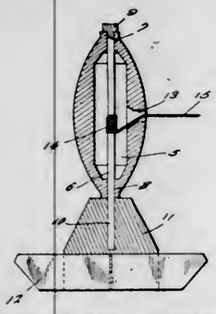
1. A method of manufacturing calcium carbide, wherein calcium carbonate is admixed with sufficient raw solid

carbonaceous material to effect not only the calcining of the carbonate, but also to yield calcium carbide when the mixture is fluxed in an electric furnace, comprising calcining the carbonate and converting it into calcium oxide in a distillation chamber by the action of a mixture of hot combustion gases and a controlled volume



of a gas deficient in carbon dioxide so that said gases contain less carbon dioxide than is normally present in ordinary combustion gases, whereby the conversion is effected at lower temperatures than usual, and feeding the admixed oxide and coke resulting from said treatment into a carbide furnace.

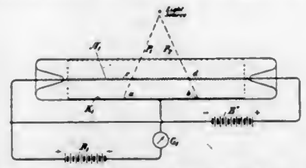
1,811,022. TOY. JOHN PETROSKY, Niles, Ohio. Filed Oct. 17, 1930. Serial No. 489,461. 1 Claim. (Cl. 46—14.).



A toy comprising a shell of substantially elliptical shape having a bearing opening at each end and also an opening in the side thereof, a shaft having one end journalled in one bearing opening, and an intermediate portion of said shaft journalled in the other bearing opening, the lower end of the shaft projecting below the shell, a head anchored to the projecting end of the shaft and abutting the shell, a cord having one end anchored to the shaft interiorly of the shell, said cord being trained through the opening in the side of the shell, the outer end of the head having radial slots therein, blades passing through the slots and projecting from the head, said blades being set edgewise to the axis of the device, and a pull ring on the free end of the cord.

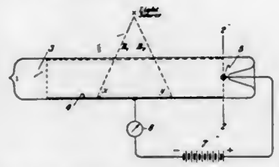
1,811,023. PHOTO-ELECTRIC CELL. RALPH K. POTTER, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 8, 1926. Serial No. 134,298. 5 Claims. (Cl. 250—1.)

1. In a photo-electric device, an envelope, a photo-sensitive cathode and an anode therein, the envelope being adapted to admit the whole of a beam of light to fall upon said cathode at different points over a substantial range of displacement of the beam, means for impressing



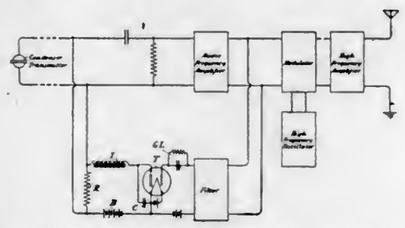
a voltage between said cathode and said anode, and means for varying the output current of the device in response to the displacement of an incident light beam.

1,811,024. PHOTO-ELECTRIC TUBE. RALPH K. POTTER, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Original application filed Sept. 8, 1926, Serial No. 134,298. Divided and this application filed Sept. 8, 1926, Serial No. 134,299. Renewed July 19, 1928. 1 Claim. (Cl. 250—27.5.)



A photo-electric tube comprising an elongate envelope, a light sensitive elongate cathode therein, said envelope having a longitudinal slit adapted to admit the whole of a beam of light to fall upon said cathode at different points over a substantial range of displacement of the beam, and a spherical anode positioned substantially adjacent one end of said slit.

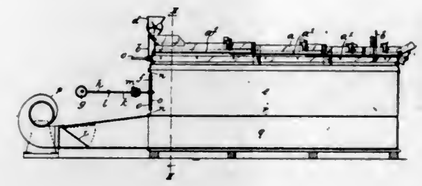
1,811,025. REGULATION OF LEVEL IN BROADCAST TRANSMISSION. RALPH K. POTTER, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 3, 1927. Serial No. 230,909. 15 Claims. (Cl. 178—44.)



1. In a system including a device for converting sound into electrical energy, a radiating antenna, and an intermediate path, the method of decreasing changes in volume of transmitted signals which consists in impressing a constant normal polarizing potential on the sound converting device and regulating said potential in accordance with level variations in the intermediate path.

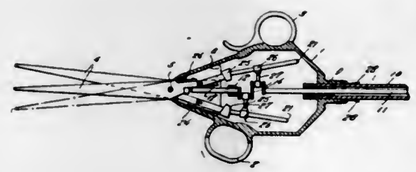
1,811,026. PROCESS AND APPARATUS FOR THE SEPARATION OF SOLID MATERIALS OF DIFFERENT SPECIFIC GRAVITIES. GEORGE RAW, Washington, England. Filed Sept. 27, 1928, Serial No. 308,787, and in Great Britain Oct. 28, 1927. 10 Claims. (Cl. 209—502.)

1. Process for the separation of solid materials of different specific gravities, comprising forming a bed with the materials and distending this bed, to cause the portions of different specific gravities to stratify, by pneumatic pressure applied in a series of synchronous superposed waves.



10. Apparatus for the separation of solid materials of different specific gravities, comprising a pervious deck, a pneumatic chamber of substantially rectangular form in longitudinal section and of approximately uniform cross-section, a pulsator device at one end of the chamber and means for delivering gaseous fluid to the chamber to set up a mean pressure independent of the impulses due to the pulsator.

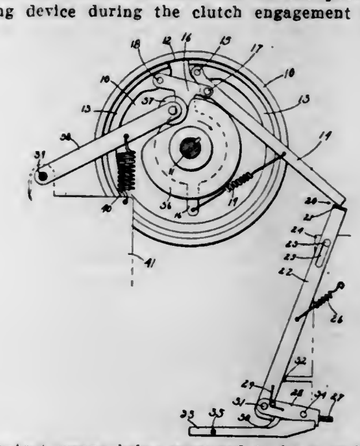
1,811,027. POWER DRIVEN SHEARS. ALFRED REA, San Diego, Calif., assignor of one-half to Joseph McGowan, San Diego, Calif. Filed Oct. 16, 1930. Serial No. 489,173. 4 Claims. (Cl. 30—13.)



1. Shears of the character described comprising a housing, a pair of co-acting cutting blades pivotally mounted on the housing and extending thereinto, a pair of levers pivotally connected with the blades for swinging movement independently of the blades and disposed within the housing, a crank shaft mounted for rotary and sliding movement in the housing, means operatively and slidably connecting the crank shaft with the levers in a manner to actuate said levers, and means for selectively coupling the levers to their respective cutting blades in a manner to retain said levers against swinging movement independently of the cutting blades.

1,811,028. CLUTCH-OPERATING MECHANISM. COMMODORE D. RYAN, Los Angeles, Calif., assignor, by mesne assignments, to Ralph G. Whitlock Patents, Inc., a Corporation of Nevada. Filed Feb. 18, 1929. Serial No. 340,944. 8 Claims. (Cl. 192—26.)

1. In a clutch operating mechanism comprising in combination a clutch having a control element movable with an element of the clutch; a tripping device for actuation independently of the clutch; contact means normally occupying the path of the control element to effect clutch release and movable by said tripping device out of the path of said control element to effect clutch engagement; and automatic means to restore said contact means to the path of said control element out of the path of said tripping device during the clutch engagement interval;



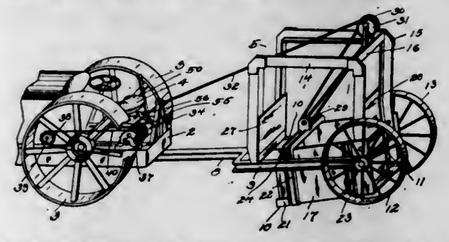
said contact means being arranged to be moved by said control element into the path of said tripping device following a clutch release.

1,811,029. PROCESS OF PREPARING LIGHT-SENSITIVE LAYERS BY MEANS OF DIAZO COMPOUNDS AND THE PRODUCTS OBTAINABLE THEREBY. MAXIMILIAN PAUL SCHMIDT and WALTER SPIETSCHKA, Wiesbaden-Biebrich, Germany, assignors to Kalle & Co., Aktiengesellschaft, Wiesbaden-Biebrich, Germany. Filed Nov. 30, 1928, Serial No. 322,959, and in Germany Dec. 10, 1927. 9 Claims. (Cl. 95—7.)

1. The process of preparing light-sensitive layers which consists in applying on a suitable base diazo compounds of aminonaphtholcarboxylic acids.

5. The process of preparing light-sensitive layers which consists in applying on a suitable base a mixture of the diazo compound of 1-amino-2-hydroxy-3-naphthoic acid, boric acid, tartaric acid, and trisodium phosphate dissolved by means of an alkali.

1,811,030. EXCAVATING AND SCRAPING APPARATUS. ALLAN B. SHAW, Delaware, Ohio, assignor to Wesley C. Shaw, Delaware, Ohio. Filed June 3, 1929. Serial No. 367,863. 5 Claims. (Cl. 37—133.)

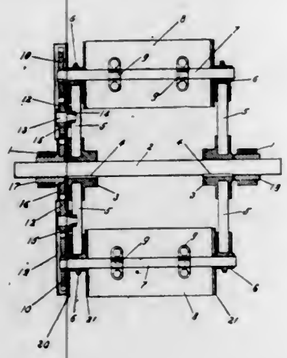


4. In a scraper, a frame, means for supporting the frame spaced from the ground, an open ended scoop pivoted at one end to the rear portion of said frame, a wall for the open pivoted end of said scoop stationarily carried by said frame, and serving to close the end of the scoop during the loading thereof and means for raising the scoop at its front end so that the bottom of the scoop becomes spaced from said end wall.

1,811,031. WATER WHEEL. EDWARD F. SMITH and CHARLES D. SMITH, Cincinnati, Ohio. Filed Sept. 25, 1926. Serial No. 137,784. 6 Claims. (Cl. 170—120.)

1. A propelling water wheel including a body rotatable about a horizontal axis a number of parallel horizontal

shafts carried by the body, and each having its ends journaled in said body, paddles arranged on said shafts, gears fixed to said shafts, a stationary gear having its axis coaxial with the axis about which the body rotates, and

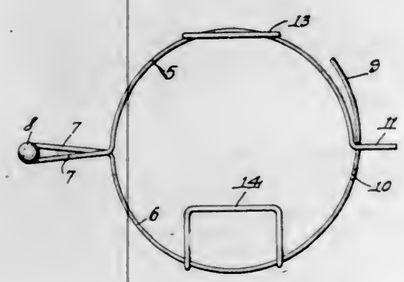


idler gears mounted on said body and meshing with the first mentioned gears and with said stationary gear, all of said gears being of the same size, whereby all of the paddles are maintained in vertical positions while the wheel rotates.

1,811,032. MANUFACTURE OF MAGNETIC ALLOY. WILLOUGHBY STATHAM SMITH, Benchams, NEWTON POPPLEFORD, HENRY JOSEPH GARNETT, Sevenoaks, and WALTER FREDERICK RANDALL, Ewell, England. Filed Aug. 16, 1930, Serial No. 475,838, and in Great Britain June 22, 1929. 11 Claims. (Cl. 178—45.)

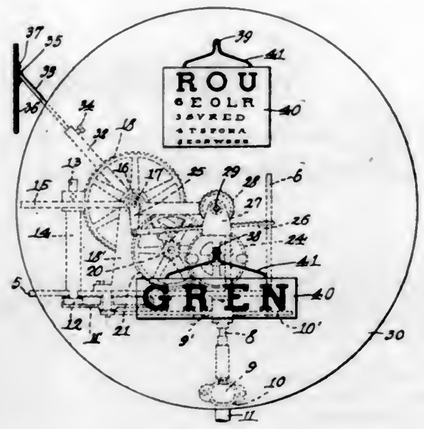
10. A method for the heat treatment of substantially carbon and cobalt free magnetic alloys comprising mainly iron, nickel and an element to increase specific resistance to the alloy and which goes into solid solution, which comprises subjecting the alloys to a heat treatment at a temperature to anneal completely the alloy, followed after cooling, by a second heat treatment at a lower temperature but in excess of the magnetic change point of the alloy.

1,811,033. SMUDGE POT LIFTER. BURGESS TOLLSPAY, San Dimas, Calif. Filed Aug. 27, 1930. Serial No. 478,220. 2 Claims. (Cl. 294—27.)



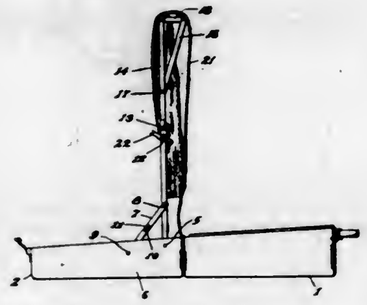
1. A lifter of the class described, comprising pivotally connected sections, means for securing the free ends of the sections together, means on the device for engaging the upper edge of the article to be lifted by the device to support the lifter while the free ends of the sections are brought together, and a handle on the lifter.

1,811,034. MEANS FOR TREATING AND EXERCISING THE OCULAR MUSCLES. WILLIAM M. UPDEGRAVE, Johnstown, Pa. Filed Mar. 18, 1930. Serial No. 436,824. 6 Claims. (Cl. 88—20.)



1. A device for operating optical charts for eye testing purposes, comprising a pivotal base, means for operating the base in a horizontal plane, gearing mounted on the base, a supporting member supported by the gearing and adapted to oscillate in a vertical plane, and pivoted members mounted on the supporting member.

1,811,035. TRAVELING CASE. OSSIP JOSEPH WALINSKY, New York, N. Y. Filed May 7, 1930. Serial No. 450,335. 8 Claims. (Cl. 190—41.)

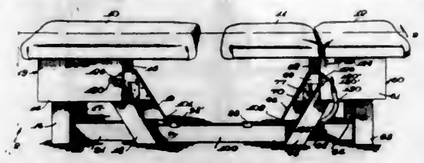


1. A traveling case comprising a section adapted to be positioned with an open side thereof uppermost, a garment hanging device mounted in said section and hinged with respect thereto so as to stand upright from the section, a garment hanger at the outer end of said device upon which garments may be hung downwardly toward the open section, said device being foldable substantially midway of its height, and a bar adjacent the line of folding of said device over which garments will be folded upon folding the device.

1,811,036. OPERATING SUPPORT. LEE M. WILSON, Los Angeles, Calif. Filed Aug. 2, 1927. Serial No. 210,108. 9 Claims. (Cl. 128—72.)

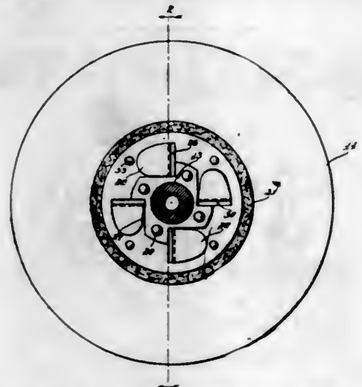
5. An operating table, comprising a pair of spacedly aligned base sections, a top section mounted on one of said base sections, a stationary top section carried by the other of said base sections, an intermediate top section

hingedly connected to said stationary top section and in slightly spaced relation with respect to said first named top section, said intermediate top section being adapted for tension opposed swinging movements between said base sections, and means for releasably securing said



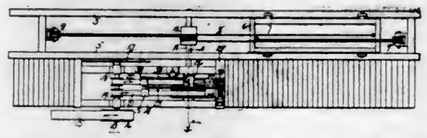
intermediate top section in adjusted substantially horizontal positions, comprising a supporting beam hingedly mounted on said stationary section and slidably supporting said intermediate top section and detent means mounted on said stationary section for variably positioning said beam relative to said section.

1,811,037. ABRASIVE DISK. FRANS O. ALBERTSON and GUSTAV OLSEN, Sioux City, Iowa, assignors to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Filed Dec. 30, 1927. Serial No. 243,492. 1 Claim. (Cl. 51—195.)



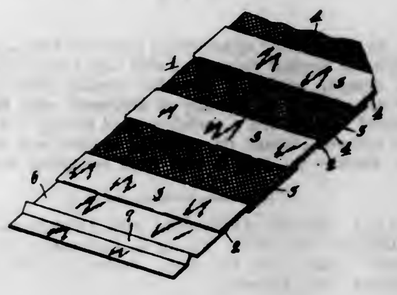
In an abrasive device, the combination of a metal hub having an outwardly projecting attaching portion and a centrally located boss, with a resilient and flexible metal disk fixedly secured to said attaching portion, and having an aperture for receiving said boss, said boss being spun outward to engage said disk, a circular cushion pad secured to said flexible disk by a plurality of rivets, said rivets being depressed in the face of said cushion pad, an abrasive disk comprising a sheet of abrasive material and a backing of fiber board, said abrasive disk, pad and metal disk having a plurality of apertures and a separate metal plate located outside said abrasive disk and having a plurality of bendable tabs for passage through said apertures in said pad and metal disk to secure said abrasive disk on said abrasive device in either of two positions.

1,811,038. CONTROLLING MECHANISM FOR SAWMILL CARRIAGES. CHARLES S. AMIDON, West Willington, Conn. Filed June 29, 1927. Serial No. 202,807. 10 Claims. (Cl. 74—21.)



1. In combination with a carriage mounted for reciprocating movement, controlling mechanism operatively connected with said carriage and including a carriage driving shaft, a pulley secured to said shaft, a belt to drive said pulley, a pulley loosely mounted on the shaft next adjacent the secured pulley, a belt for driving said last mentioned pulley, and a connection, independent of said shaft, between said last mentioned pulley and the pulley secured to the shaft for driving the latter in a direction contrary to that effected by its belt.

1,811,039. FLASHING STRUCTURE. SAMUEL H. COHEN, Malden, and JACOB WASSERMAN, Cambridge, Mass. Filed July 23, 1928. Serial No. 294,631. 8 Claims. (Cl. 72—127.)

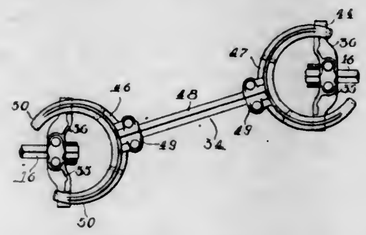


1. An article of manufacture consisting of a section of flashing of non-corrodible, imperforate sheet metal provided with metallic keying material which serves to key with the mortar where such flashing is used, said keying material being of the character of metal lath, wire cloth, chicken wire, or the like, whereby said flashing may be keyed to said mortar longitudinally and laterally.

1,811,040. STEEL PRESERVATIVE PAINT. CLARENCE H. COX, Massillon, Ohio. Filed Aug. 31, 1929. Serial No. 389,863. 4 Claims. (Cl. 135—39.)

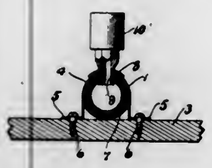
1. An iron preservative composition consisting of from about 40% to about 60% of a mixture of zinc chromate 12.5%, basic lead chromate 12.5%, sublimed blue lead 25% and magnesium silicate 50%, and from about 60% to about 40% of a mixture of linseed oil 60%, China-wood oil 20%, turpentine 10%, and oil drier 5% and a mineral thinner 5%.

1,811,041. CHECKROW PLANTER. SAMUEL K. DENNIS, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Aug. 18, 1926. Serial No. 129,887. 5 Claims. (Cl. 64—91.)



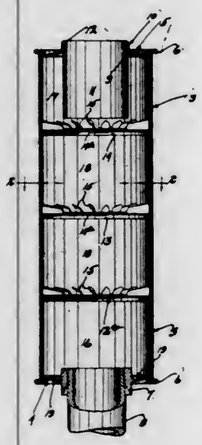
3. In a drive coupling for multiple unit corn planters, two shafts disposed in end to end relation, and a flexible shaft coupling operably connecting the shafts, said coupling comprising a two-part crank arm mounted on each shaft having one part angularly adjustable on the shaft with respect to the other part, and means flexibly connecting the crank arms on adjacent shafts.

1,811,042. SPRINKLING APPARATUS. JOHN E. DESMOND, Muskegon Heights, Mich., assignor, by mesne assignments, to Desmond Manufacturing Company, Muskegon, Mich., a Corporation of Michigan. Filed May 20, 1929. Serial No. 364,483. 2 Claims. (Cl. 299—106.)



1. In a sprinkling apparatus, a length of hose, a base, a rigid metal member clamped on said base against the hose, said member having a threaded opening therethrough, said hose having an opening in alinement with the said threaded opening and a sprinkler head having a threaded stem screwed through the threaded opening and into the hose whereby the hose is kept from collapsing inwardly.

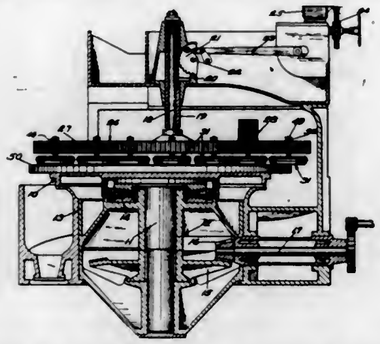
1,811,043. SPARK ARRESTER FOR INTERNAL COMBUSTION ENGINES. FRANK A. DONALDSON, St. Paul, Minn. Filed Feb. 21, 1929. Serial No. 341,675. 4 Claims. (Cl. 183—91.)



1. A spark arrester comprising a tubular casing having a head at each end thereof, an intake passage near one end of the casing and an axial other passage in the head at the outlet end of the arrester, axially spaced partitions in said casing, an annular series of circumferentially spaced deflecting blades or veins formed near the outer edge of each of said partitions close to the side of the casing, the baffle partition near the intake end of the arrester having a closed central portion and the partition near the outlet end of the arrester having an axial opening, and an outlet tube extending inward from the axial outlet passage in the head at the outlet end of the arrester and terminating short of the partition at the outlet end of the arrester.

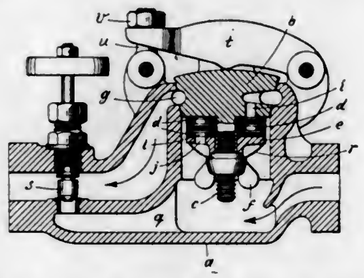
1,811,044. SHEET GLASS SURFACING APPARATUS. JOHN L. DRAKE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 18, 1927. Serial No. 169,207. 6 Claims. (Cl. 51—120.)

1. In glass surfacing apparatus, a horizontal supporting member rotatable about a substantially vertical axis, and a plurality of polishing members carried by said supporting member, each polishing member including a vertical spindle projecting upwardly through said supporting member and slidably keyed thereto, a compression spring



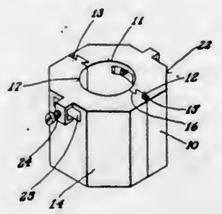
encircling said spindle above said supporting member, a plurality of vertical pins supported by said polishing member and received within pockets formed in the underside of said supporting member, and compression springs encircling said pins within said pockets.

1,811,045. STEAM TRAP. GUSTAV F. GERDTS, Bremen, Germany. Filed Apr. 6, 1929. Serial No. 353,154. 6 Claims. (Cl. 137—103.)



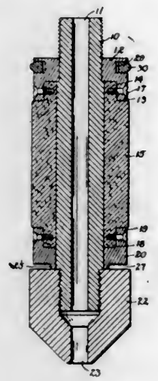
1. In a steam trap having a shell with an admission, a discharge and an intermediate opening, a plug held in the intermediate opening and forming with the shell a steam tight circumferential duct in direct communication with the discharge opening and communicating with the admission opening through an axial passage leading to the inner face of the plug and through labyrinthic channels formed by and between a plurality of baffle plates immovably held against the said inner face of the plug in axial juxtaposition and contacting parallelism.

1,811,046. EMERGENCY PIPE CUTTER. HARRY GOLDHAGEN, New York, N. Y. Filed Apr. 17, 1930. Serial No. 444,911. 4 Claims. (Cl. 81—191.)



1. In a pipe cutter, a pair of complemental bodies, discs in said bodies, means for projecting said discs into cutting relation with a pipe, dovetailed ridges on one of said bodies, dovetailed passage ways on the complemental body and means on said ridges for latching said complemental bodies in matched position.

1,811,047. PACKER. ELLSWORTH GRAY, Houston, Tex. Filed Sept. 17, 1929. Serial No. 393,147. 10 Claims. (Cl. 294—96.)



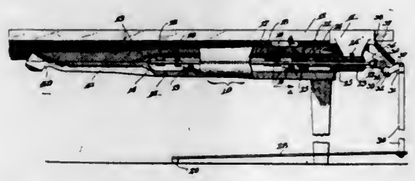
1. A packer including a mandrel, a packer head anchored thereon, a flexible packer member connected to said head, a follower ring confining the lower end of said member, said ring being exposed to fluid pressure and slidable on said mandrel to compress said packer member in response to fluid pressure.

1,811,048. SASH GUIDE. WILLIAM S. HAMM, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed July 22, 1929. Serial No. 379,925. 6 Claims. (Cl. 189—75.)



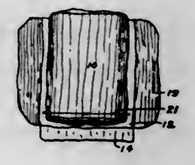
1. In a sash guide, a fixed strip, a removable strip carried thereby, a connection therebetween which is releasable upon movement of the removable strip in one direction, and means for yieldingly resisting movement of the removable strip in that direction.

1,811,049. HOSIERY TURNING AND INSPECTING FORM. HUGO HEMMERICH, Wyomissing, Pa., assignor to Berkshire Knitting Mills, Wyomissing, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1929. Serial No. 390,227. 7 Claims. (Cl. 223—20.)



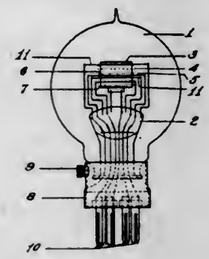
1. An inspecting form for use with tubular garments comprising two sections mounted for relative lateral movement, one of said sections having a member slidably connected therewith, and links connecting the other section to the said member, said sections being hinged together along one side.

1,811,050. PARACHUTE SKIRT DELAYER. EDWARD L. HOFFMAN, Dayton, Ohio. Filed Sept. 6, 1929. Serial No. 390,816. 4 Claims. (Cl. 244—21.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. The combination with a parachute and a container therefor of means for retaining the skirt portion only of the parachute fixed relative to said container until forcibly withdrawn therefrom.

1,811,051. ELECTRON DISCHARGE TUBE. GILLES HOLST, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven. Filed Oct. 28, 1924, Serial No. 746,396, and in Germany Nov. 27, 1923. 1 Claim. (Cl. 250—27.5.)

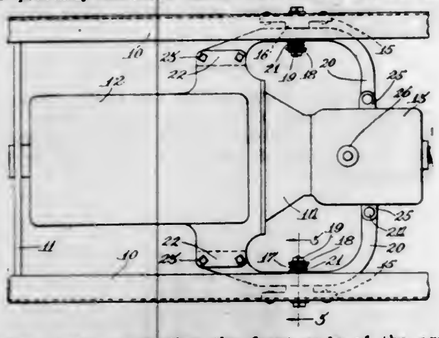


A discharge tube comprising a glass envelope, a base to which the envelope is sealed, a press supported by said base, a straight filamentary cathode perpendicular to the direction of the press, a cylindrical control grid mounted about the filament as axis, a cylindrical plate concentric with the control grid, an auxiliary cylindrical grid between the filament and the control grid, a second auxiliary cylindrical grid mounted between the control grid and the anode, prongs projecting downwardly from said base, an additional terminal on the base, a lead from one of the electrodes to said terminal, and leads from the remaining electrodes to the prongs.

1,811,052. UNIT POWER PLANT SUPPORT FOR MOTOR VEHICLES. EDWARD A. JOHNSTON, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Nov. 24, 1928. Serial No. 321,615. 8 Claims. (Cl. 180—64.)

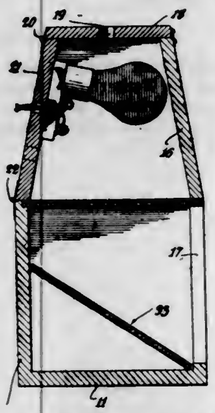
1. The combination with a motor vehicle having a pair of side frame members, a motor, a transmission, of means for connecting the transmission to the motor and mounting the two as a unit on the frame members, said means

comprising a bearing on each of the frame members, an arm pivotally mounted intermediate its ends on each



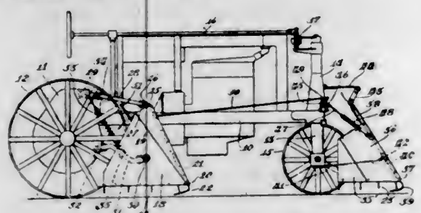
bearing, means connecting the front ends of the arms to the motor, and means connecting the rear ends of the arms to the transmission.

1,811,053. COMBINED DAYLIGHT AND ILLUMINATED SIGN. ALFRED O. KELLOGG, Pelham Manor, N. Y. Filed Sept. 8, 1928. Serial No. 304,721. 12 Claims. (Cl. 40—130.)



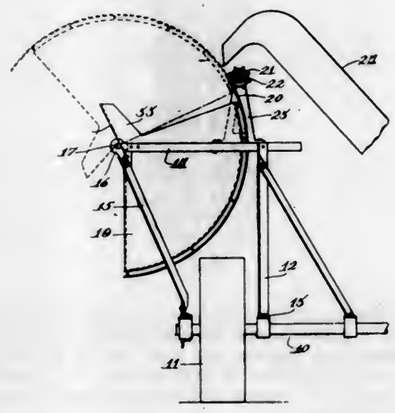
1. A sign comprising a translucent glass or equivalent supporting plate in combination with an opaque paper or equivalent paster adhesively carried by said plate and bearing a transparent legend thereon so arranged as to cause an inverse image of the legend on a mirror, a light causing said image, said light coming from the opposite side of the plate from the mirror, and being of a plurality of irregularly changing colors.

1,811,054. TRACTOR WHEEL FENDER. ROY H. KIPP and WILLIAM H. THOMPSON, Canton, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Apr. 8, 1929. Serial No. 353,383. 5 Claims. (Cl. 280—160.)



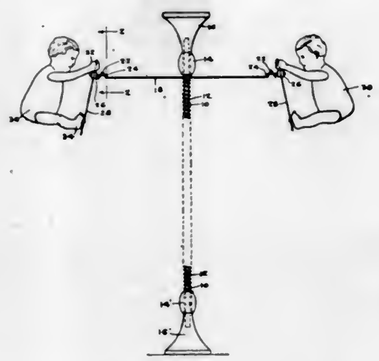
1. The combination with the traction member of a tractor, of a fender comprising an arched structure embracing the forward tread portion of the traction member and formed with its sides and upper portion converging to a forward apex located on the plane of the lower edge of the structure, a forwardly extending link connecting said structure to the tractor and pivoted to both on horizontal axes, and resilient means for supporting said structure in position.

1,811,055. GRAIN TANK FOR HARVESTERS. FRANK N. G. KRANICH, Racine, Wis., assignor to International Harvester Company, a Corporation of New Jersey. Filed Apr. 20, 1929. Serial No. 356,654. 3 Claims. (Cl. 56—122.)



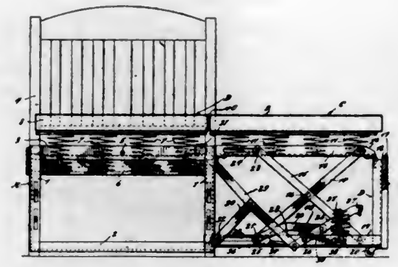
1. For a harvester having a framework, a tank having an open top, means pivotally connecting an upper edge of the tank to a shaft on said framework, and power actuated means for tilting the tank to dump the same.

1,811,056. TOY. SIDNEY L. LONG, Minneapolis, Minn. Filed Aug. 17, 1929. Serial No. 386,595. 4 Claims. (Cl. 46—40.)



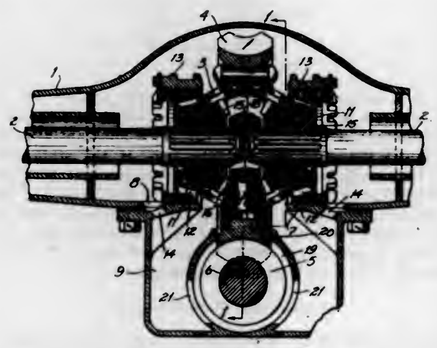
1. In a device of the class described, the combination of a standard surrounded by a helix, a bar slidable on said helix and adapted to gravitate from top to bottom thereof with an oscillating and rotating motion, outwardly and downwardly extending members pivotally attached to the ends of said bar, seats formed on the lower portions of said members, toy figures positioned on said seats, arms formed on the upper portions of said members having clamping engagement with said toy figures, and base members secured to the two ends of said standard.

1,811,057. COMBINATION COUCH AND BED. JOSEPH MARTIN, New York, N. Y., assignor to United States Cabinet Bed Co., Brooklyn, N. Y., a Corporation of New York. Filed Sept. 10, 1929. Serial No. 391,587. 6 Claims. (Cl. 5—20.)



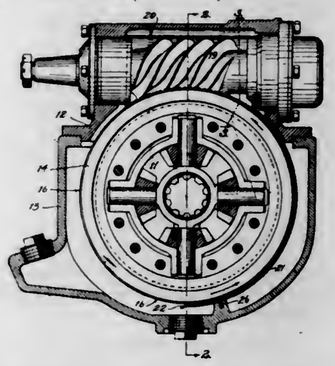
1. The combination with a frame, of a main bed bottom pivotally connected to said frame to form a couch bed surface in one position and when reversed to form one of the bed bottoms of a double bed, a carriage guided by said frame to be movable from and into a position under said main bed bottom, the couch formation, and from and into a position adjacent said frame, the double bed formation, an extension bed bottom, means connecting the extension bed bottom to said main bed bottom, supporting means connecting said extension bed bottom with said carriage for supporting said extension bed bottom in lowered position beneath said main bed bottom in couch formation or in raised position adjacent to said main bed bottom as the other bed bottom of a double bed formation, means for actuating said carriage for inverting said main bed bottom and co-operating with said supporting means for lowering said extension bed bottom below said main bed bottom when actuating the bed bottoms into couch formation, said actuating means being also operative for reinverting said main bed bottom and co-operating with said supporting means for raising said extension bed bottom to one side of, and in alinement with said main bed bottom for actuating said bed bottoms into double bed formation, and means connecting said supporting means with said actuating means.

1,811,058. WORM DRIVE AXLE. MATHEW B. MORGAN, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Nov. 25, 1929. Serial No. 409,517. 13 Claims. (Cl. 74—36.)



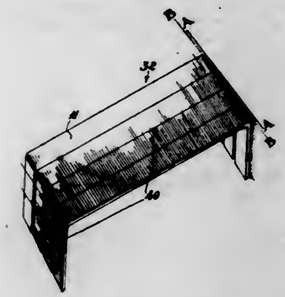
4. A housing having a lubricant containing chamber, a worm gear mounted in said housing above said chamber, a worm located in said chamber underneath said gear and meshing with the latter, and a hollow cylindrical casing located in said chamber and enclosing said worm and the portion of the worm gear meshing therewith, the lower portion of said casing communicating at each end with said chamber.

1,811,059. SELF-LUBRICATING GEAR SET. MATHEW B. MORGAN, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed May 17, 1930. Serial No. 453,147. 6 Claims. (Cl. 74—99.)



1. The combination with a shrouded gear, an overhung driving member engaging said gear, a casing snugly enclosing said driving member and having a semi-cylindrical extension concentric with said gear and wholly beyond but adjacent to the periphery thereof.

1,811,060. STAPLE CLIP AND METHOD OF FABRICATING THE SAME. LOU OBSTFELD, Brooklyn, N. Y., assignor, by mesne assignments, to said Lou Obstfeld and Abe I. Obstfeld, Brooklyn, N. Y. Filed Mar. 18, 1930. Serial No. 436,082. 21 Claims. (Cl. 1—56.)



1. As an article of manufacture, a staple clip comprising a series of contiguous staples of general inverted U-shaped form, the legs of the staples having flattened portions, the tops of said staples being in substantially the same plane, and the faces of the flattened portions of said legs being wracked relatively to each other into saw-tooth conformation.

1,811,061. APPARATUS FOR AND METHOD OF LOADING BOMBS. HENRY H. OLMSTEAD, Wharton, N. J. Filed Sept. 10, 1929. Serial No. 391,653. 7 Claims. (Cl. 86—20.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

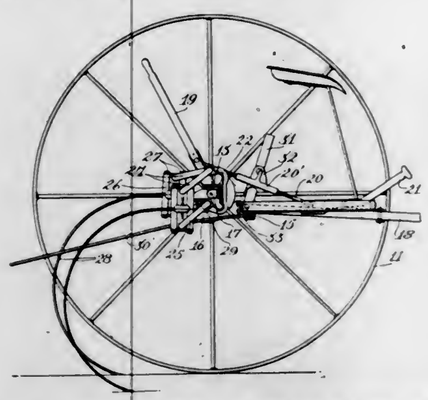
1. A method of loading an explosive into a container having an opening for receiving a booster casing which

consists in releasably supporting a rigid shell about the insertable portion of the booster casing by frictional engagement therewith, sealing the joint between the shell



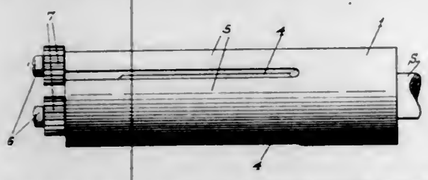
and the casing, applying the casing to the container and introducing a fused explosive through a second opening provided in the container.

1,811,062. RAKE. CHARLES PEARSON, Chicago, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed May 20, 1929. Serial No. 364,383. 25 Claims. (Cl. 56—394.)



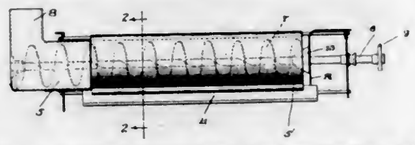
1. The combination with a rake having a finger bar, of a plurality of sets of rake tooth gangs in which each set is independently and pivotally connected to the bar.

1,811,063. ROTARY TUBE AND PIPE CLEANER. RICHARD W. RANDALL and JOHN C. KOCH, Stockton, Calif. Filed Apr. 4, 1930. Serial No. 441,536. 2 Claims. (Cl. 15—104.13.)



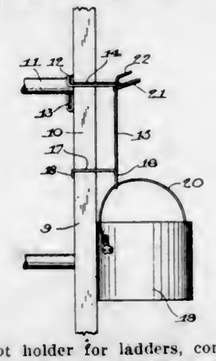
1. A tube cleaner comprising a body slotted lengthwise from one end toward the other to form a plurality of fingers capable of flexing toward and from each other at their free ends, and cutting wheels turnably mounted on the different fingers at their free ends on axes parallel to that of the body, said wheels projecting outwardly of the periphery of the body to engage the interior walls of a tube in which the body is inserted.

1,811,064. MATERIAL FEEDING MECHANISM. CLEMMA R. RANEY, Riverside, and ARNOLD E. W. JOHNSON, Chicago, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Jan. 6, 1927. Serial No. 159,259. 1 Claim. (Cl. 198—213.)



In a grain feeding mechanism, the combination of a distributor housing having an end wall and a straight shaft arranged horizontally in the housing and journaled in said end wall, a continuous auger feeder on the shaft within the housing to feed the material therethrough and toward said end wall, a substantially cone-shaped shield located at the terminal end of the housing and carried on the shaft in a manner substantially to fill the space at the said terminal end of the housing, the wide end of the conical shield being disposed closely adjacent to the end wall of the housing and rotating in close proximity thereto while the apex end of said conical shield is directed way from said end wall toward the shaft, whereby said shield functions to prevent winding of lengths of fibrous material around the discharge end of the shaft adjacent said end wall, and said auger having its terminal end flight continued partly to overlap the said conical shield.

1,811,065. PAINT POT HOLDER. JOHN S. STROEBEL, Milwaukee, Wis. Filed Aug. 25, 1926. Serial No. 131,431. 5 Claims. (Cl. 248—22.)

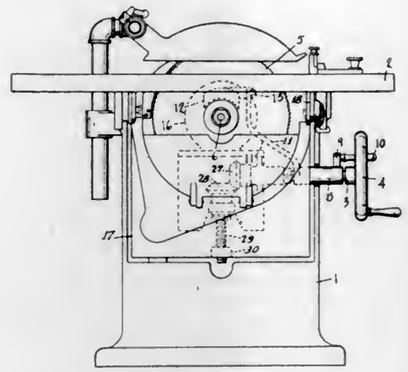


1. A paint pot holder for ladders, comprising a rung hook, a bail-receiving member fixed therewith and disposed laterally outwardly of the ladder style substantially adjacent the plane of the forward face of the style, and spaced laterally projecting members engageable with the forward face of said style, the upper of said laterally projecting members being adjacent said rung hook and the lower of said members being laterally adjacent said bail-receiving member and both being fixed with respect to said rung hook and bail-receiving member.

1,811,066. SAWING MACHINE. CARL E. TANNEWITZ, Grand Rapids, Mich. Filed Feb. 23, 1929. Serial No. 341,929. 6 Claims. (Cl. 143—157.)

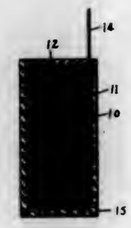
1. The combination in a sawing machine comprising a table, a saw and adjusting means, including a shaft, of a

circular saw operatively associated with said table and provided with a support pivotally mounted on said table, said saw being provided with an arbor having saw clamping collars, a bell crank brake supporting and actuating



lever pivotally mounted on said shaft and provided with a hand piece on one arm, and a brake shoe mounted on the other arm of said lever whereby the brake shoe is supported for engagement with a side of the saw adjacent the periphery of one of its said saw clamping collars.

1,811,067. CONDENSER AND METHOD OF MAKING SAME. PAUL B. VALLÉ, New Haven, Conn. Filed June 25, 1927. Serial No. 201,466. 9 Claims. (Cl. 175—41.)



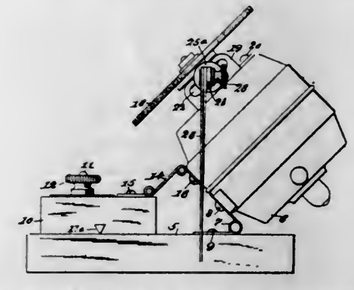
1. The method of making an electrical condenser which comprises forming a condenser cartridge consisting of alternate wrappings of insulating and conducting material, forming a casing of a moldable dielectric material having the property of becoming plastic when heated, inserting the cartridge into the case when the latter is in plastic condition, and cooling the assembled unit to cause the case to be shrunk upon the cartridge and exert a mechanical pressure thereon.

1,811,068. ALLOY. RICHARD R. WALTER, Starnberg, Germany. Filed Sept. 20, 1929, Serial No. 394,137, and in Germany Dec. 3, 1928. 4 Claims. (Cl. 75—1.)

1. An alloy comprising a powdered, mixed, compressed and sintered metallic aggregate, comprising over fifty per cent of a carbonitride of metal of the chromium group and up to thirty per cent of a high melting metal of the chromium group and as remainder metal of the iron group.

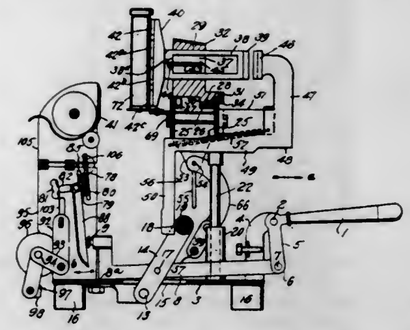
1,811,069. GRINDER. EDWARD L. WEBB, West Liberty, Iowa. Filed June 10, 1929. Serial No. 369,838. 2 Claims. (Cl. 51—128.)

1. In a grinder, a motor carrying a flat-faced grinding wheel, a base pivotally connecting with the motor, means adapted to tilt the motor and fix it in tilted positions, a pivoted laterally disposed guide support adjacent to the wheel, a flat-faced guide hung from said support, and



fastening means adapted to secure the guide in a position radial to the wheel, with its guiding face at an angle to that of the wheel.

1,811,070. PLACARD TYPEWRITING MACHINE. KONRAD KARL WEISSFLOCH, Nuremberg, Germany. Filed June 15, 1928, Serial No. 285,707, and in Germany Aug. 12, 1926. 2 Claims. (Cl. 197—1.)

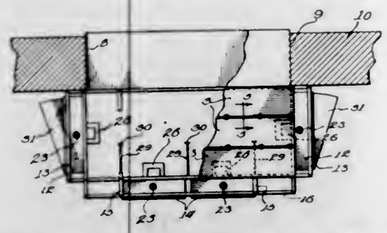


1. A typewriting machine comprising the combination with a feed roll adapted to carry a sheet of writing material, said feed roll being movable for line spacing letter feed purposes, and letter space escapement mechanism operatively connected to said feed roll and a platen in front of the feed roll for supporting the writing material at the printing point of type carriers having type thereon of a large size suitable for placards, price tickets, advertisements and the like, guiding means for said type carriers adapted to guide the carriers with the type thereon from an inoperative position to an operative position with the type in contact with a sheet of writing material on the platen supported by said abutment plate, said guiding means being spaced from the platen, so as to leave an interval between the platen and the type in the inoperative position for enabling the writing point to be visible, and being arranged at a height such that they do not obscure the view of the platen obtainable through said interval, and means actuatable by hand for moving said type carriers into and out of the operative position, as and for the purposes set forth.

1,811,071. MULTIPLE UNIT SPACE HEATER. FRED M. YOUNG, Racine, Wis. Filed Aug. 21, 1929. Serial No. 387,361. 4 Claims. (Cl. 257—137.)

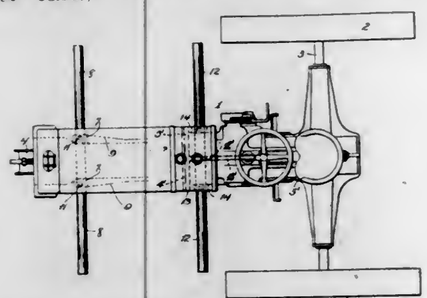
2. Heating apparatus of the class described comprising a casing having a pair of air outlets, the lower end of said casing being open for admitting air from the interior of a building, a pair of unitary space heaters, each mounted on said casing in registration with one

of said air outlets and each comprising a heat interchanger, a separate blower for each space heater for withdrawing air from said casing and discharging it through



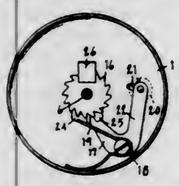
said heat interchanger, and a cover on the top end of said casing comprising removable sections for admitting air through the top of said casing and reducing the draft at the bottom thereof.

1,811,072. TRACTOR. HERMAN E. ALTGELT, South Bend, Ind., assignor, by mesne assignments, to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Mar. 19, 1928. Serial No. 262,930. 12 Claims. (Cl. 280—33.15.)



10. The combination with a tractor having a longitudinally extending frame, there being an aperture in said frame extending transversely therethrough, and a transversely projecting beam secured rigidly to said frame and extending through said aperture.

1,811,073. SPRING WINDING FISHING REEL. FRANK BUADICK, Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Mar. 7, 1930. Serial No. 433,869. 8 Claims. (Cl. 242—84.3.)



8. In a spring wind fishing reel, the combination of a frame, a spool, a driving spring having driving connection with said spool, winding means for said spring provided with a ratchet wheel, a coacting pawl, and a pawl releasing member operatively associated with said pawl and winding means whereby on rotation of said ratchet wheel in winding direction said pawl is automatically shifted to disengaged position.

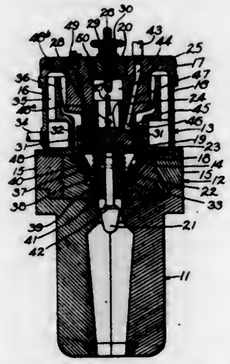
1,811,074. CONTAINER. SILAS E. BUTLER, Toledo, Ohio. Filed Mar. 7, 1929. Serial No. 345,044. 6 Claims. (Cl. 229—37.)

1. A container of the class described, made from a one piece blank and comprising five panels folded to form four sides, one of said sides being double, and a flap connected to the bottom end of each panel, each flap being folded to extend a short distance upwardly adjacent the panel from the bottom end thereof, thence across the bottom of the container and thence downwardly adjacent



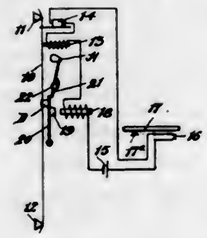
the opposite panel to the bottom edge thereof, thereby forming a peripheral downwardly disposed flange about the bottom of the container, one side of said flange being five-ply, another side thereof being four-ply, and the other two sides being three-ply.

1,811,075. METHOD AND APPARATUS FOR SHAPING GLASS. ROBERT W. CANFIELD, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Jan. 26, 1929. Serial No. 335,210. 16 Claims. (Cl. 49—5.)



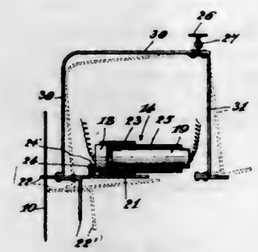
3. In glassware forming apparatus, a mold, a suction head coacting with the said mold, means therein for withdrawing air from the mold through a plurality of openings and means for substantially instantaneously varying the total size of the openings in response to variations in the level of the glass within the mold.

1,811,076. ELECTRICAL SOSTENUTO PIANO. SIMON COOPER, Brooklyn, N. Y. Filed Mar. 25, 1927. Serial No. 178,209. 22 Claims. (Cl. 84—262.)



1. In an electrical musical instrument, the combination of a vibrating string, a key, a source of current supply, an electro-magnet for giving the string an initial vibration when in circuit with said source, said magnet and source being normally out of circuit, and means operated by a single movement of the key for making such circuit and then for breaking such circuit.

1,811,077. ELECTRICAL SOSTENUTO PIANO. SIMON COOPER, Brooklyn, N. Y. Filed Mar. 24, 1930. Serial No. 438,466. 13 Claims. (Cl. 84—262.)



7. In an electric sostenuto piano, vibratory strings, magnets for actuating the same, pulsators for said magnets connected with the strings, a common support, and means including connections from said support to a plurality of the pulsators for simultaneously disconnecting said plurality of controllers.

1,811,078. COATING COMPOSITION CONTAINING POLYMERIZED DIVINYL BENZENE. HARRY B. DYKSTRA, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 4, 1930. Serial No. 433,178. 6 Claims. (Cl. 134—26.)

1. A new composition of matter comprising polymerized divinyl benzene and a raw drying oil.

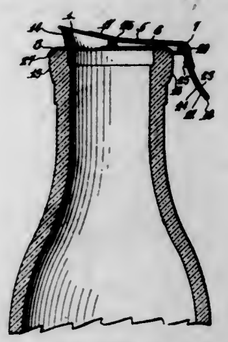
1,811,079. SAW. I. ROY FORSYTH, Spokane, Wash. Filed Mar. 8, 1930. Serial No. 434,266. 1 Claim. (Cl. 143—133.)



A circular saw having a circular periphery of uniform diameter, a plurality of spaced, equidistant teeth projecting beyond the periphery of the saw, said teeth having outturned front edges and projecting laterally beyond the opposite sides of the saw body, said periphery having recesses in front of the teeth and extended in uniform width along lines tangential to the center of the saw, and said saw having a gradually reduced surface area in front of each recess to reduce the diameter of the saw bounding such area.

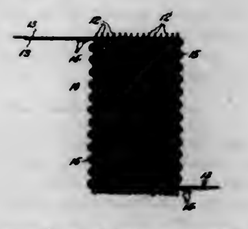
1,811,080. REMOVABLE POURING COVER FOR MILK BOTTLES. WILLIAM GADKE, Philadelphia, Pa. Filed May 17, 1928. Serial No. 278,373. 5 Claims. (Cl. 215—100.)

1. A bottle cover having a pouring spout, means for clipping the cover to the top of the bottle, a lid for the pouring spout, a finger piece continuous with the pouring spout lid, reversely bent and having a hinge member, a hinge member upon the cover and a pintle for the hinge



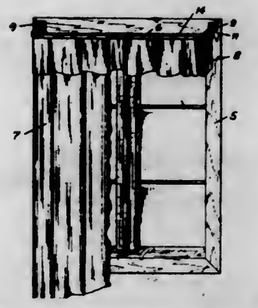
members whereby the pouring spout lid is continuous with one of the hinge members and is additionally strengthened at the hinge and throughout the finger piece length.

1,811,081. COMPOSITE METALLIC FABRIC. RALF L. HARTWELL, Orange, N. J., assignor to Metal Textile Corporation, West Orange, N. J., a Corporation of Rhode Island. Filed Dec. 8, 1928. Serial No. 324,638. 4 Claims. (Cl. 139—425.)



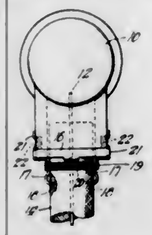
1. A fabric comprising a body composed of fibre warp threads and continuous metallic and fibre weft threads arranged in superimposed substantially parallel relation, said metallic constituent of said weft thread serving to stiffen said fabric transversely uniformly throughout the area thereof, whereby said fabric is caused to be readily flexible about transverse axes passing therethrough and is relatively rigid about longitudinal axes passing therethrough.

1,811,082. DEVICE FOR HANGING CURTAINS. JULIUS HEIMAN, Yonkers, N. Y. Filed Sept. 1, 1928. Serial 303,404. 13 Claims. (Cl. 156—19.)



1. A device for hanging curtains comprising a pair of substantially identically formed members, one of said members being mounted in stationary position, the other of said members being mounted to rotate and frictionally engage with the first member.

1,811,083. INSULATOR AND CLAMP FOR USE IN ELECTRICAL WORK. EDWARD F. HOGAN, Chicago, Ill., assignor to Q. R. S. De Vry Corporation, Chicago, Ill., a Corporation of Illinois. Filed Oct. 20, 1928. Serial No. 313,916. 6 Claims. (Cl. 173—322.)



1. A clamp of the character described adapted to secure an insulated conductor so as to project into a hollow insulator comprising a pair of prong-like elements adapted to be indented in the insulated covering of said conductor, means for uniting said elements, means whereby said elements and uniting means may be attached to said hollow insulator, and a slidable clamp for indenting said prong-like elements in said insulated covering.

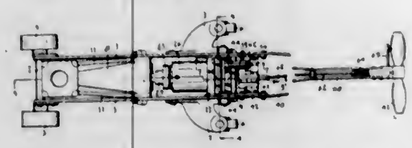
3. In combination, a hollow insulator, an insulated conductor projecting into said insulator and a clamp for clamping the conductor in place comprising a body portion having spaced projecting resilient prongs for hooking into the insulated covering of the conductor, and having spring fingers for attachment of the body portion to the insulator, said insulator having means receiving said fingers to hold them in place.

1,811,084. LIGHTING APPARATUS. ERNST EMANUEL HOLMQVIST, Stockholm, Sweden, assignor to Elvira Victoria Holmqvist, Stockholm, Sweden. Filed Mar. 28, 1929, Serial No. 350,702, and in Sweden Mar. 30, 1928. 9 Claims. (Cl. 240—78.)



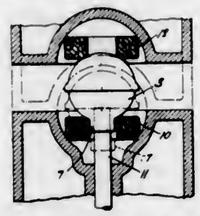
1. The combination with a source of light, of a lower substantially plane reflector and an upper plane reflector group, the lower reflector being translucent and light diffusing and arranged below the light source, and in the way of at least the vertical and near-vertical direct rays from the light source, higher placed reflector being larger than lower placed reflector.

1,811,085. HYDRAULIC JACK. ARTHUR C. HOPKINS, Niles, Mich., assignor to National-Standard Company, Niles, Mich. Filed Jan. 6, 1928. Serial No. 244,840. 6 Claims. (Cl. 138—9.)



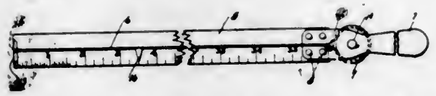
1. In a lifting jack, the combination of a frame, a lifting lever pivotally mounted on said frame, a cylinder block journaled on said frame for tilting movement and provided with a pump cylinder, a pump plunger, a ram cylinder carried by said cylinder block, a ram pivotally connected to said lifting lever, a sump, a valved intake from said sump to said pump cylinder, a valved discharge port from said pump cylinder to said ram cylinder, a valved exhaust connection from said ram cylinder to said pump, an actuating lever pivoted on the journals of said cylinder block, links connecting said actuating lever to said plunger, a releasing means for the exhaust valve comprising a push rod, a pivoted releasing lever operatively connected to said push rod, a segmental rack mounted for reciprocating movement in a plane parallel to the plane of oscillation of said actuating lever and operatively connected to said releasing lever, a return spring for said rack, and a tripping pawl on said actuating lever adapted to be selectively engaged with the teeth of said rack.

1,811,086. METHOD OF MOLDING ARTICLES PRODUCED FROM PLASTIC MATERIALS. HENRY J. KASCH, Dayton, Ohio, assignor to The Kurz-Kasch Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 3, 1927. Serial No. 158,782. 6 Claims. (Cl. 18—59.)



1. The herein described method of molding articles from phenolic condensation material and the like, consisting in preheating a hollow metallic form having substantially the same shape and proportions but of less size than the finished article, enclosing the preheated core in a matrix, and molding thereabout a stratum of phenolic condensation material under influence of external heat and pressure of substantially uniform thickness.

1,811,087. CALIPER RULE. ARTHUR L. KUHLMAN, Bay City, Mich. Filed Mar. 19, 1928. Serial No. 262,642. 2 Claims. (Cl. 33—107.)



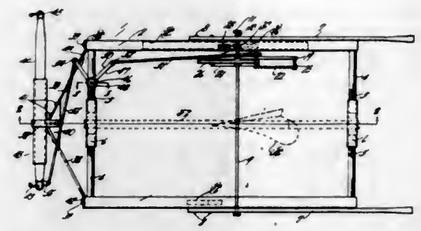
1. A grooved rule having a handle on the one end thereof, a sheave journaled in said handle and having its edges projecting beyond the edges of said handle, flexible means adapted to travel in said groove, and means on the opposite end of said rule through which the flexible means is threaded, said flexible means being trained over said sheave and forming a continuous circuit.

1,811,088. UPHOLSTERY TAG-PIN. JOSEPH S. LAUNDERVILLE, Los Angeles, Calif. Filed May 7, 1930. Serial No. 450,483. 2 Claims. (Cl. 40—11.)



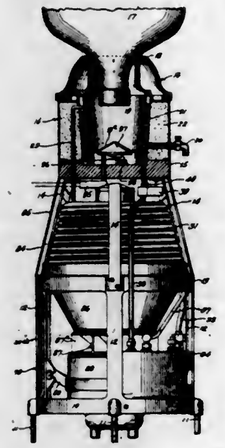
1. A fastener, for attachment to upholstery, including a button part having on its reverse face a system of fixed pins disposed about 90°, relatively; and having on its obverse face hooking and gripping means for cards and tags.

1,811,089. PLOW. JOHN THOMAS LAWRENCE, Castor, La. Filed Dec. 6, 1929. Serial No. 412,015. 3 Claims. (Cl. 97—1.)



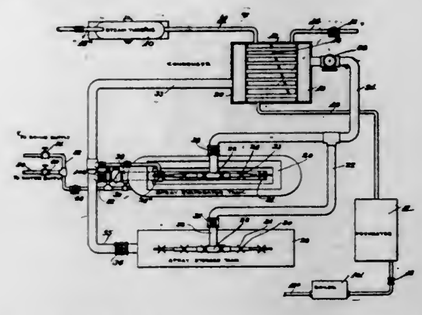
3. In a device of the kind described, a frame, including spaced side members, a fixed plow receiving foot secured to one of the side members, a longitudinally adjustable plow receiving foot operatively mounted on the other side member, a lever fulcrumed in the frame and operatively connected to the said adjustable plow receiving foot whereby the same may be adjusted forwardly and rearwardly in the frame, and a laterally adjustable draft mechanism mounted at the front of the frame and connected to the said lever whereby the said draft mechanism may be adjusted laterally of the frame coincident with the longitudinal movement of the plow receiving foot.

1,811,090. REFRIGERATION. ALAN VARLEY LIVINGSTON, New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Mar. 7, 1925. Serial No. 13,701. 45 Claims. (Cl. 62—4.)



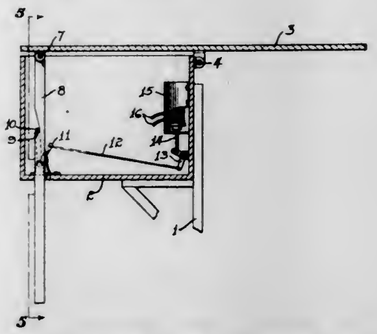
1. In apparatus of the nature of that herein described, in combination, a compressor, a single phase induction motor for driving said compressor and having a starting winding, means forming a substantially fluid tight casing having included therein said compressor and said motor, a condenser for receiving compressed fluid from said compressor, means for circulating cooling fluid in thermal contact with said condenser, a prime mover for driving said circulating means, a cooling device adapted to have expanded into it condensed fluid from said condenser, means for controlling the operation of said motor but dependent upon the state of operation of said prime mover, means responsive to the temperature of said cooling device for controlling the operation of said prime mover, and means exterior of said casing means for controlling the circuit of said starting winding of said motor substantially in accordance with the speed of said motor.

1,811,091. APPARATUS FOR THE PRODUCTION OF SALTS FROM BRINES AND SOLUTIONS. OTTO V. MARTIN, Sand Springs, Okla., assignor, by mesne assignments, to Texaco Salt Products Company, New York, N. Y., a Corporation of Delaware. Original application filed May 19, 1926, Serial No. 110,219, now Patent No. 1,657,633, dated Jan. 31, 1928. Divided and this application filed Oct. 22, 1927. Serial No. 227,912. 6 Claims. (Cl. 159—32.)



1. In an apparatus for concentrating salt brines, an open tank, a support running longitudinally of the tank and projecting thereabove, an inlet pipe carried by the upper end of the support and provided with a plurality of spray nozzles for creating a brine mist over the tank, a condenser having a cooling jacket, a pipe connecting the cooling jacket of the condenser with the first mentioned pipe, a discharge pipe running longitudinally of the tank and disposed below the first mentioned pipe, a return conduit connected with the cooling jacket of the condenser and with the discharge pipe, a supply pipe for solutions having an open end for discharging into the return conduit, said supply pipe being connected with a source of brine, and a pump for causing withdrawal of the brine from the tank and for forcing the brine from the tank to the condenser, and valves selectively operable to cause said pump to return the brine to the first mentioned pipe and the spray nozzles.

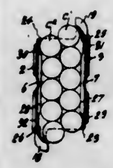
1,811,092. AMUSEMENT DEVICE. NATHAN MYRE, Toledo, Ohio. Filed Feb. 27, 1930. Serial No. 431,915. 5 Claims. (Cl. 273—102.)



1. In an amusement device, a platform fulcrumed intermediate its ends, and adapted to receive a weight at one end thereof, a member pivoted to and depending from the opposite end portion of said platform, said opposite end and said member being of greater weight than said weight receiving end, a trip member engageable with said pivoted member adapted normally to prevent said platform from swinging when a weight is imposed on the end thereof remote from said pivoted member, and means for releasing said trip member to permit swinging of

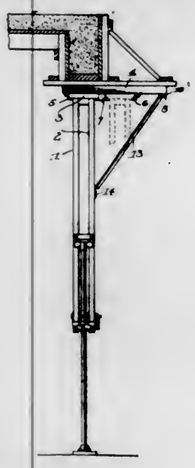
said platform whereby upon discharge of the weight the platform returns to normal position due to the greater weight on the end away from said weight-receiving end.

1,811,093. CARTRIDGE CLIP. CHESTER T. NEAL, Springfield, Mass. Filed Mar. 21, 1930. Serial No. 437,704. 23 Claims. (Cl. 42—88.)



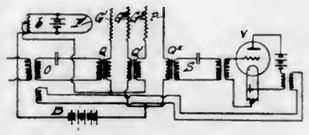
1. The combination with a gun having a magazine chamber of a clip adapted to hold a stack of cartridges in double row staggered relation, said clip having a back and stack embracing sides similarly constructed at the top and bottom so that said clip is reversible for insertion with said stack into said chamber, one side of said clip having an extended inturned ear portion only at the top, the other side of said clip having an extended inturned ear portion only at the bottom, whereby said oppositely extended ear portions determine the positions for the top and bottom cartridges of a stack, a receiver ear mounted in said gun for movement in and out of its functioning position in said magazine chamber, and means rendered operative by the movement of a clip in said magazine chamber for positioning said receiver ear.

1,811,094. SHORE ATTACHMENT. HENRY W. ROOS, Cincinnati, Ohio. Filed Dec. 1, 1926. Serial No. 152,033. 3 Claims. (Cl. 248—30.)



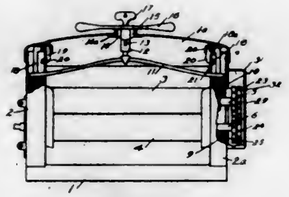
1. The combination with a shore, of an extension beam detachably mounted thereon, said extension beam projecting laterally from the head of said shore, a member extending parallel to and spaced from the under side of said extension beam so as to provide a socket between the member and the beam, and a brace arranged to extend obliquely between said extension beam and the body of said shore, said brace having an upper end bent at an angle to the oblique body of said brace so that said upper end extends horizontally and may be inserted in said socket by a horizontal motion, and a lower end attachable to the body of said shore.

1,811,095. THERMIONIC AMPLIFIER AND DETECTOR. HENRY JOSEPH ROUND, Muswell Hill, London, England, assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Sept. 13, 1920, Serial No. 410,025, and in Great Britain Dec. 9, 1919. Renewed Aug. 27, 1930. 24 Claims. (Cl. 179—171.)



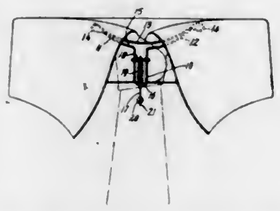
13. In combination in a high frequency receiving system of an electron discharge tube having cathode, control grid and anode electrodes, a plurality of auxiliary electrodes disposed between the control grid and the anode electrode, said auxiliary electrodes being biased to different potentials.

1,811,096. WRINGER. ERNEST J. SCHUDA, Erie, Pa., assignor to Lovell Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed May 17, 1929. Serial No. 363,728. 15 Claims. (Cl. 68—32.)



1. In a wringer, the combination of side stiles; rolls mounted in the side stiles; a cross bar on the side stiles; a pressure device between the rolls and the cross bar; detachable connections between the cross bar and the side stiles; a safety release device on the cross bar releasing the pressure device; shafts for the rolls, said shafts extending through one of the stiles; and gears on said shafts outside of the stiles, said gears being normally in mesh, the side stile at the gear end of the shaft being slotted through its inner wall and outer wall through its top and the side stile opposite the gear being slotted through its inner wall and to the top permitting the direct removal of the upper shaft with its gear through said slots.

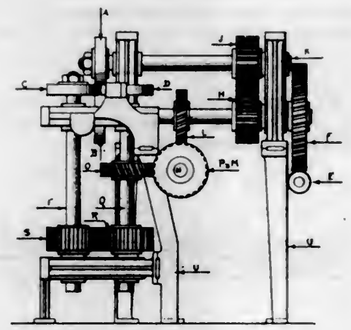
1,811,097. TIE FORM AND HOLDER. HERBERT GORDON SCOTT, Whitestone Landing, N. Y., assignor to Rosamund Lenore Gordon Scott, Whitestone Landing, N. Y. Filed Sept. 23, 1929. Serial No. 394,399. 11 Claims. (Cl. 24—57.)



1. A tie form and holder comprising a substantially T-shaped frame, the head of the T being formed with a slot therein adapted to receive a portion of the tie and the

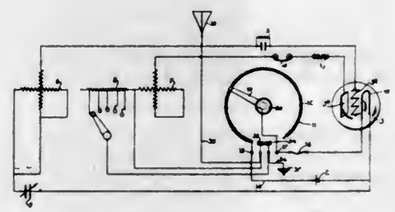
stem forming a body about which the tie may be knotted, and means for attaching the stem of the T to a collar button, said means being resiliently extensible.

1,811,098. MACHINE FOR UNDULATING WIRE. CASIMIRO HERNÁNDEZ SOLÁ, Barcelona, Spain. Filed Dec. 23, 1927, Serial No. 242,239, and in Spain Feb. 24, 1927. 2 Claims. (Cl. 140—105.)



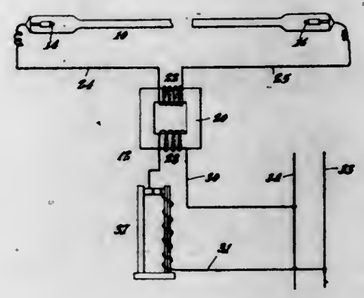
1. A machine for producing ornamental undulations in wire in two planes, situated at an angle to each other, comprising, in a unitary construction, a first pair of co-operating rotatable discs or the like arranged in one plane, between which the wire passes so as to form the undulation in this plane, and a second pair of such discs, separate from the first, arranged in the second plane, between which the wire passes after leaving the first pair, so as to form the undulations in the second plane, shafts carrying discs, and means mounting the shafts on one side only of each pair of discs.

1,811,099. RADIO APPARATUS. LAWRENCE W. STONEQUIST, Chicago, Ill., assignor of one-half to Charles Rottum, Chicago, Ill. Filed Apr. 2, 1923. Serial No. 629,350. 5 Claims. (Cl. 250—16.)



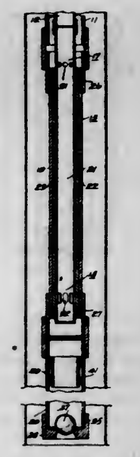
4. A radio apparatus comprising a rheostat, a tube, a circuit making and breaking device on said rheostat for connecting the resistance thereof in circuit with the tube filament and disconnecting it therefrom, a second circuit making and breaking device on said rheostat and a single movable element for successively controlling and maintaining operative either of said circuit making and breaking devices.

1,811,100. OPERATION OF LUMINOUS TUBES. CYRIL S. TREACY, Mount Vernon, N. Y., assignor to International Neon Company, Incorporated, New York, N. Y., a Corporation of Nevada. Filed Nov. 6, 1928. Serial No. 317,681. 3 Claims. (Cl. 176—124.)



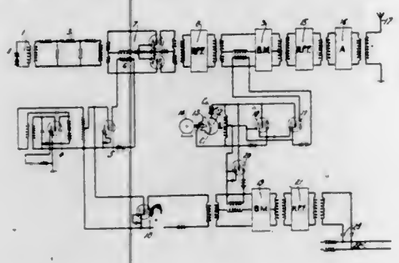
1. A luminescent sign, comprising a gas-conducting display tube of the internal electrode type, having a period of the order of seconds, at the end of which flickers appear after illumination, and means for intermittently supplying current to said tube for periods not greater than the period in which said flickers appear.

1,811,101. OIL WELL PUMP. HAROLD F. WATKINS, Oakland, Calif., assignor to Watkins Intermitting Pump Company, San Francisco, Calif., a Corporation of California. Filed Apr. 17, 1929. Serial No. 355,702. 3 Claims. (Cl. 103—240.)



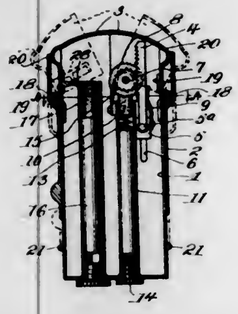
1. In an oil well pump, oil and gas pipe strings extending down into the well for a substantial distance below the normal level of oil in the same, said gas pipe string being adapted for connection with a source of gas under pressure at the surface of the well, a valve for establishing and interrupting communication between said pipes at a point substantially below said level, means actuated from the surface of the well for directly applying motion to said valve whereby it is recurrently opened and closed, a second oil valve adapted to control flow of oil into said oil pipe from the well, said second valve being located below the first and being adapted to be recurrently operated responsive to operation of the first valve, and a third valve associated with the oil pipe and serving to control flow between the second valve and the well.

1,811,102. SIGNAL TRANSMISSION BY GUIDED AND UNGUIDED WAVES. RAY R. ADAMS, Maplewood, N. J., and ELMER V. GRIGGS, White Plains, N. Y., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1924. Serial No. 736,830. 6 Claims. (Cl. 250—6.)



1. The method of secret radio signaling which comprises controlling the action of signal transmitting apparatus so as to produce two complementary components of a signal modulated wave, both of which are essential to intelligible reception of the signal, broadcasting one component through space and transmitting the other component by wire to selected receiving stations in the radio field of said one component.

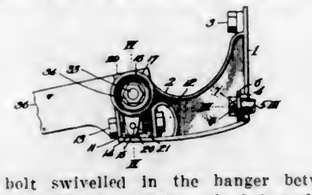
1,811,103. LIGHTER. LUCY COTTON AMENT, now by judicial change of name Lucy Cotton Thomas, New York, N. Y. Filed Aug. 24, 1929. Serial No. 388,230. 9 Claims. (Cl. 67—7.1.)



6. In combination in a lighter, an inner casing, cover members hinged at opposite sides of the top of said casing, spring means at the hinges of said covers urging them to open position, a sleeve slidable outside of said casing to frictionally engage and close the hinged covers or to allow them to open, a fuel reservoir and wick within said casing, wick igniting means comprising a frictional wheel and sparking stone within the casing, said frictional wheel having ratchet teeth thereon, and a rack bar secured to said sleeve and movable with the sleeve to operate the lighting means in unison with the opening of the covers upon downward movement of the sleeve.

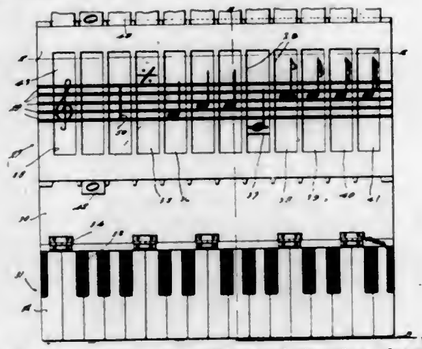
1,811,104. LATERAL ARM AWNING FOR STORE FRONTS. FREDERICK A. ANTON, Topeka, Kans. Filed Jan. 20, 1930. Serial No. 422,062. 12 Claims. (Cl. 156—44.)

10. In an awning, a hanger having a transverse tubular head, a pair of clamping elements rotatably adjustable in said head, a bracket having a boss projecting into one of said clamping elements, a bolt extending axially through said boss and said clamping elements and provided with a head at one end and a retaining device at the other end for preventing separating movement of said elements and brackets; said elements having depending lugs and one of them bearing an interlocked relationship to said



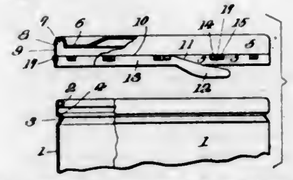
bracket, a bolt swivelled in the hanger between the said lugs, and a collar threaded on the bolt and provided with trunnions pivotally engaging the said lugs respectively.

1,811,105. EDUCATIONAL APPLIANCE. THEODORE A. APPIA, New York, N. Y. Filed June 6, 1929. Serial No. 368,846. 5 Claims. (Cl. 84—471.)



2. In an educational appliance of the class described, a base, a multiplicity of longitudinally spaced partitioning strips secured on said base and having their outer ends terminating flush with one longitudinal edge of the base, the inner ends of said strips being spaced from the remaining longitudinal edge of the base to form a writing area, said strips co-operating with each other and said base in forming open-ended guides, indicia equipped slides removably and slidably positioned in said guides, and projectable through the opposite open ends of the guides, and a facing panel fastened across the strip in spaced parallelism to the base, said panel having sight openings at longitudinally spaced points in registry with said guides, the panel being further provided with members intersecting said sight openings and arranged with respect to each other to provide a musical notation staff for co-operation with the indicia on said slides, said panel being of a width less than the length of the strip, and the opposite ends of the strips projecting beyond the corresponding longitudinal edges of the panel, said projecting ends being bevelled to facilitate insertion and removal of the slides.

1,811,106. METAL CONTAINER. CHARLES J. AULBACH, Passaic, N. J., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 22, 1929. Serial No. 349,064. 3 Claims. (Cl. 220—54.)

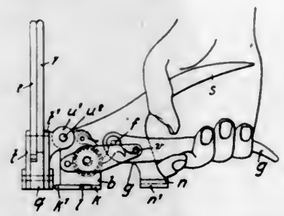


3. A metal container comprising a body portion having an annular shoulder parallel with the opening and a cover having a depending flange adapted to extend down over the body portion, a sealing material between the cover and the body portion, said flange being provided with spaced inwardly extending lugs adapted to engage said shoulder, each lug having associated therewith an outwardly extending seating projection whereby said lugs may be simultaneously forced into positive gripping engagement with the shoulder.

1,811,107. PROCESS OF RECOVERING SOLVENTS. OSCAR L. BARNEBEY, Columbus, Ohio, assignor to American Solvent Recovery Corporation, a Corporation of Ohio. Filed July 5, 1924. Serial No. 724,418. 11 Claims. (Cl. 252—4.)

1. The process of recovering volatile solvents comprising vaporizing the solvent with air in excess of the amount adapted to produce an explosive mixture with the solvent; contacting the air and solvent mixture with a solid adsorbent to adsorb the solvent and thereby separate it from the air; and distilling the solvent from the adsorbent by direct application of steam.

1,811,108. STRAP STRETCHING AND FASTENING TOOL. JOSEF BAYER, Barmen, Germany. Filed Oct. 15, 1927, Serial No. 226,476, and in Germany Apr. 20, 1927. 1 Claim. (Cl. 81—9.1.)



A bale-tie fastener of the character described, comprising a frame having an upward and rearward extension forming a handle, a straining lever arranged under said extension and pivoted to the frame, and a crimping and sealing tool pivoted to said frame in front of the extension, said lever and sealing tool being movable in the vertical plane of the extension.

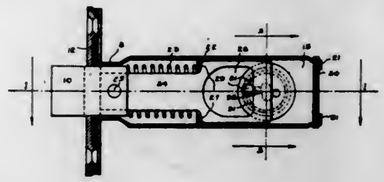
1,811,109. TIRE RIM. LOUIS BENZ, Denver, Colo. Filed Oct. 25, 1930. Serial No. 491,287. 8 Claims. (Cl. 301—32.)



3. In a tire rim, the combination of a primary section provided with a slot in one end, an auxiliary section provided with a tongue and a spur flange, said spur flange adapted to fit into said slot, and fastening means on the tongue and primary section.

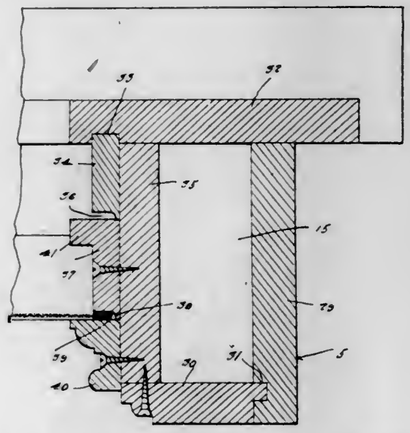
1,811,110. TUBULAR NIGHT LATCH. FRANK ELLISON BEST and FRANKLIN H. HARP, Seattle, Wash., assignors to Frank E. Best, Inc., Seattle, Wash., a Corporation of Washington. Filed May 14, 1927. Serial No. 191,411. 4 Claims. (Cl. 70—46.)

1. In a lock, a bolt, a spring urging said bolt outwardly, a tongue connected with said bolt and extending rearwardly therefrom, said tongue having an opening cut in its rear end the rear edge of said opening affording a straight edge having a shallow notch therein and a throw pin movable in the arc of a circle to engage said straight edge and retract said bolt and to enter said notch and



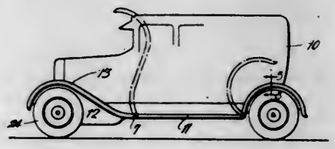
hold said bolt in maximum retracted position, said opening clearing said throw pin to allow said bolt to be pushed rearward.

1,811,111. WINDOW SCREEN AND FRAME CONSTRUCTION. JAMES W. BOOTHMAN, Providence, R. I. Filed May 27, 1930. Serial No. 456,129. 2 Claims. (Cl. 156—39.)



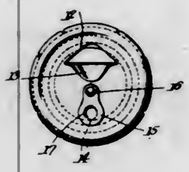
2. In a window frame construction with sliding sash comprising vertical side pieces for the sash, said sash having a screen secured to one end thereof with the side edges of the screen extending beyond the side edges of the sash, guides for the side edges of the screen, each guide being formed by spacing the adjacent vertical edges of the vertical side pieces.

1,811,112. MUD GUARD FOR AUTOMOBILES. AIMÉ CARTON, Woodcliffe, N. J. Filed Apr. 5, 1930. Serial No. 441,896. 1 Claim. (Cl. 280—152.)



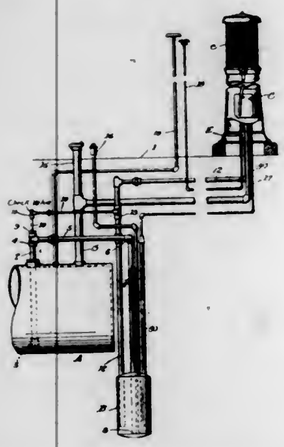
In an automobile having a running board, a wheel, and a guard apron terminating adjacent said wheel, a mud guard having one end hinged to said running board, means for removably securing said mud guard to said guard apron, said means including spaced threaded studs extending outward from said guard apron along the length thereof for the passage through openings provided in said mud guard, and securing nuts threaded to the outer ends of said studs.

1,811,113. CAP AND POURER. THOMAS N. DERBY, Round Lake, N. Y., assignor, by mesne assignments, to said Thomas N. Derby and Elwin S. Bentley. Filed Aug. 30, 1929. Serial No. 389,511. 2 Claims. (Cl. 215—38.)



1. A container closure having a plurality of spaced pouring openings therein, a spout in direct communication with one of said openings, a closure for the other of said openings and means for securing the closure to a receptacle, said spout being directed across the container closure toward the other opening.

1,811,114. DISPENSING APPARATUS. CURTIS H. EDWARDS and ROBERT L. TRANSTROM, Los Angeles, Calif., assignors, by mesne assignments, to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Nov. 10, 1926. Serial No. 147,474. 3 Claims. (Cl. 221—100.)



1. Apparatus of the character disclosed, including a dispensing cylinder, an overflow pipe within said cylinder, a drain pipe at the base of said cylinder, and valve means between the overflow pipe and the drain pipe, and a second drain pipe joined to said valve whereby when the valve is open liquid will pass from the first drain pipe into the second drain pipe.

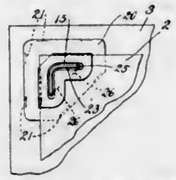
1,811,115. RESINOUS COMPOSITION AND PROCESS OF MAKING SAME. CARLETON ELLIS, Montclair, N. J. Filed Apr. 7, 1927. Serial No. 181,892. 21 Claims. (Cl. 260—8.)

1. A soluble and fusible sulpho-chlorinated glyceride resin.

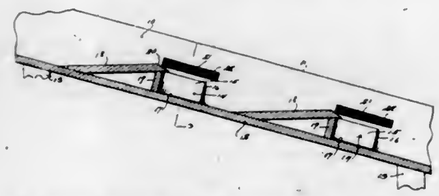
7. A heat hardened sulpho-chlorinated glyceride resin.

1,811,116. PICTURE MOUNTING DEVICE. ALBERT W. ENGEL, Chicago, Ill. Filed Dec. 7, 1928. Serial No. 324,387. 10 Claims. (Cl. 40—156.)

1. A device for mounting pictures and the like, consisting of a corner fitting of sheet material provided with two spaced apart slits having their respective ends terminating in a pair of planes perpendicular to each other and adapted to have a corner of a picture inserted through both of said slits, and having a depressed area intermediate said slits adapted to yieldingly engage the surface of the picture for frictionally maintaining said fitting in place, and means for attaching said fitting to a mounting member.

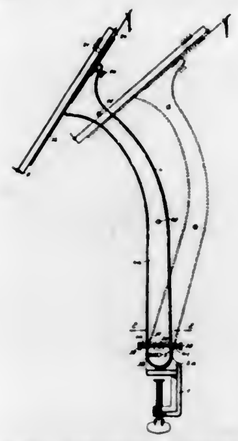


1,811,117. POCKET SLUICE. HERBERT FARNELL, Littleton, Colo. Filed Oct. 5, 1929. Serial No. 397,615. 2 Claims. (Cl. 209—458.)



1. A sluice comprising an inclined conduit, a water fall member mounted in said conduit in substantially horizontal position, the lower end of said water fall member being downwardly inclined and positioned in spaced relation to the bottom of said conduit, an open top removable receiver in said conduit and adapted to catch the water from said water fall member, and a screen secured to said conduit whereby to screen the water entering the receiver.

1,811,118. COPYHOLDER FOR TYPEWRITERS. OSKAR FISCHER, Berlin, Germany. Filed Sept. 24, 1927, Serial No. 221,798, and in Germany Dec. 23, 1925. 8 Claims. (Cl. 120—28.)

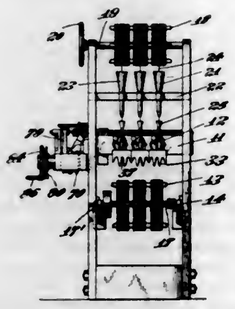


1. A copy-holder, comprising a copy-supporting frame, a curved supporting arm for said frame composed of two channeled and inter-connected members disposed with their channeled faces opposing each other and formed at their top ends with enlargements providing a plane face, a guide member secured to said plane face and having said copy-supporting frame slidably mounted thereon, and a base to which the arm is connected.

1,811,119. PROCESS FOR THE TREATMENT OF ANIMAL FIBER AND THE PRODUCT. ABRAHAM P. FURMAN, New York, N. Y., assignor, by mesne assignments, to Corticelli Silk Company, New London, Conn., a Corporation of Connecticut. Filed July 13, 1923. Serial No. 651,432. 33 Claims. (Cl. 18—54.)

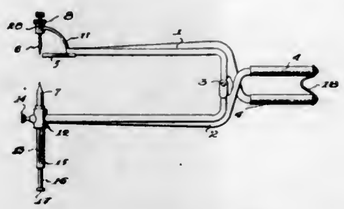
31. A process for manufacturing animal fiber which consists in dissolving animal fiber in a solvent formed from a compound of a metal selected from the group comprising nickel and copper, an alkali and an organic substance selected from the group comprising glycerine and sucrose, reforming the fiber by precipitation, washing in a bath containing glycerine, and elongating.

1,811,120. SKEIN LACING MACHINE. STEPHEN A. GASPA and DANIEL R. CAHILL, Bethlehem, Pa. Filed Dec. 26, 1928. Serial No. 328,356. 42 Claims. (Cl. 28—21.)



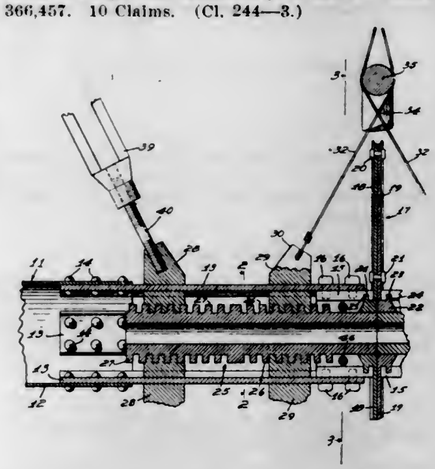
1. In a machine for lacing a skein of material, means for dividing the strands of the skein into groups, a lace feeder, a lace carrier, means to guide the carrier in a predetermined path above, below, and between said groups and also about the portion of the lace emerging from said feeder remote from said skein and means to propel said carrier along said guide means.

1,811,121. TRACING DEVICE. ALBERT GASTELL, Mainz, Germany. Filed Mar. 26, 1929, Serial No. 350,071, and in Germany May 9, 1928. 2 Claims. (Cl. 33—24.)



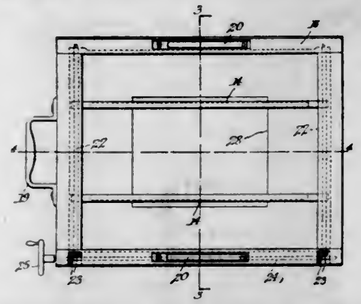
1. In a hand operated freely movable transmission device for the purpose described, including in combination, two rigid arms having their inner portions arranged in crossed formation and pivotally connected to each other, handles on said inner portions, pins mounted on the free outer ends of both of said arms and extending toward each other and arranged in alignment with each other, a tilting preventing member for engaging the surface to be operated upon mounted on one of said arms, a guide member on the arm opposite the tilting preventing member, the pin on the arm carrying the guide member being in the form of a pencil, a sleeve for receiving said pencil and longitudinally adjustable in the guide member and provided with a scale, a spring mounted in the sleeve and bearing against the inner end of the pencil, and a tension regulating member acting on the spring and the pencil.

1,811,122. EXPANSION DEVICE FOR DIAGONALS AND BULKHEAD WIRES. OTTO GEISLER and GEORGE W. SETH, Chicago, Ill. Filed May 27, 1929. Serial No. 366,457. 10 Claims. (Cl. 244—3.)



2. In an airship of the lighter than air type, a plurality of movable bracing members, a plurality of bulkhead wires, and means operatively connected with said plurality of bracing members and the plurality of bulkhead wires whereby the same may be placed and held under various degrees of tension.

1,811,123. COPYHOLDER FOR PROJECTION APPARATUS. RUDOLPH A. GLASER, Cleveland, Ohio, assignor, by mesne assignments, to Gardner Abbott, as trustee. Filed Oct. 31, 1927. Serial No. 230,133. 3 Claims. (Cl. 88—24.)



1. An improved negative or positive holder-frame for projecting cameras adapted to be inserted in a suitable groove in the camera, comprising a frame, means supported by said frame for clamping the negative or positive and automatically positioning the image carrying surface thereof in a predetermined plane with respect to the front face of said holder-frame, and means carried by said frame to automatically position the holder-frame in the camera groove with its front face in a predetermined plane with respect to the camera lens, whereby a plurality of separation images may be successively projected with assurance that the projections of corresponding elements of the images will coincide with precision.

1,811,124. BOOKHOLDER. WILLIAM H. GREELEY, Newton, Mass., assignor to Ginn and Company, Boston, Mass., a Copartnership. Filed Dec. 16, 1929. Serial No. 414,608. 1 Claim. (Cl. 24—66.)

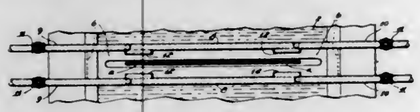
A book cover holder comprising a piece of wire formed with a center bar, and two resilient clips only, each

formed perpendicularly to the center bar at the ends thereof, each clip consisting of two adjacent lengths of the wire separated from each other at the bottom by a sufficient distance to accommodate covers of a considerable thickness



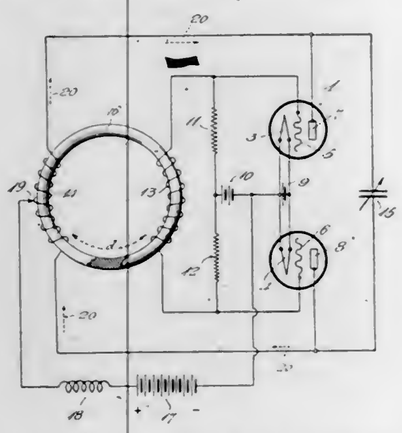
and having portions closely adjacent to each other and converging together at the open end to resiliently grip the covers, the two clips lying in the same plane and including the center bar.

1,811,125. APPARATUS FOR DRAWING SHEET GLASS. HOWARD L. HALBACH, Clarksburg, W. Va., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Apr. 4, 1928. Serial No. 267,240. 1 Claim. (Cl. 49—17.)



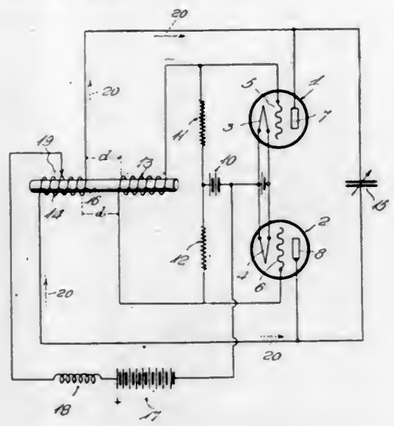
The combination with apparatus for drawing a glass sheet continuously from a body of molten glass, of a hollow metal color extending transversely of the bath adjacent such bath and the glass sheet and having a pair of opposing vertical faces with the face next to the face of the sheet substantially parallel thereto, and provided opposite the marginal portions of the sheet with enlargements whose faces also lie parallel to the sheet and closer to the sheet than does the face of the cooler intermediate the enlargements, and means for circulating a cooling liquid through the cooler.

1,811,126. BALANCED MAGNETOSTRICTIVE OSCILLATOR. JAMISON R. HARRISON, Middletown, Conn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1928. Serial No. 325,367. 6 Claims. (Cl. 250—36.)



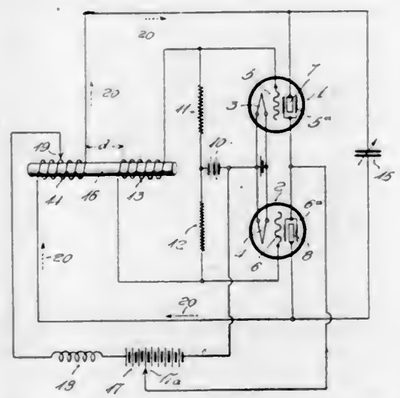
1. An electrically balanced circuit arrangement comprising in combination a plurality of thermionic tubes having cathodes, anodes and control electrodes, input and output circuits interconnecting said electrodes, an inductance included in said input circuit, an inductance included in said output circuit, means for selectively tuning said output circuit and a torus ring of metal interlinking the axes of said inductances.

1,811,127. BALANCED MAGNETOSTRICTIVE OSCILLATOR. JAMISON R. HARRISON, Middletown, Conn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1928. Serial No. 325,368. 6 Claims. (Cl. 250—36.)



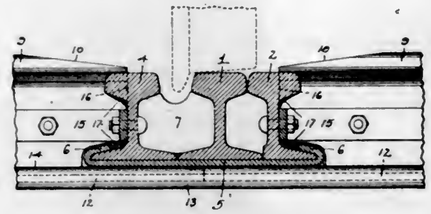
1. An electrically balanced circuit arrangement comprising in combination a plurality of thermionic tubes having cathodes, an input circuit connected between said control electrodes and said cathodes, anodes and control electrodes, an inductance included in said input circuit, an output circuit connected between said anodes and cathodes, an inductance connected in said output circuit, the windings of said inductances having the turns thereof extending in the same directions, a rod of metal cocident with the axes of said inductances and means for tuning said output circuit.

1,811,128. BALANCED MAGNETOSTRICTIVE OSCILLATOR. JAMISON R. HARRISON, Middletown, Conn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 11, 1928. Serial No. 325,369. 15 Claims. (Cl. 250—36.)



1. An electrically balanced circuit arrangement comprising in combination a plurality of thermionic tubes having cathodes, anodes, shielding anode electrodes and control electrodes, input and output circuits interconnecting said electrodes, an inductance included in said input circuit, an inductance included in said output circuit, said inductances being wound in the same direction and a magnetostrictive rod extending through said inductances and means for tuning said circuits to the frequency of free vibration of said magnetostrictive rod.

1,811,129. RAIL CROSSING. WILLIAM R. HESSKEW and JOSEPH J. NULTY, San Antonio, Tex. Filed Sept. 10, 1930. Serial No. 480,976. 4 Claims. (Cl. 246—457.)

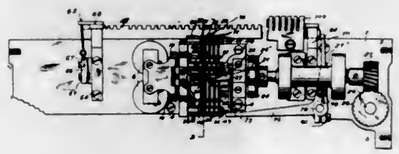


1. A railroad crossing made up of channeled rails having their confronting ends spaced, their base flanges extending from their ends and their webs at the juncture with the base flanges notched, plates welded under and to the base flanges of the rails, T-rails of a less height than the channeled rails, arranged beneath the confronting ends of the channeled rails and comprising each a main rail, a reinforcing rail contacting the main rail and a guard rail spaced from the main rail, a plate welded to the under faces of the base flanges of the reinforcing and guard rails and resting on the connecting plates for the channeled rails and having their outer base flanges received in the notches of said channeled rails and angle fish plates secured to and arranged in the outer fishing spaces of the reinforcing rail, the guard rail and the channeled rails.

1,811,130. PROCESS FOR THE POLYMERIZATION OF OLEFINES. FRITZ HOFMANN and MICHAEL OTTO, Breslau, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 30, 1927, Serial No. 188,041, and in Germany Apr. 22, 1926. 4 Claims. (Cl. 260—170.)

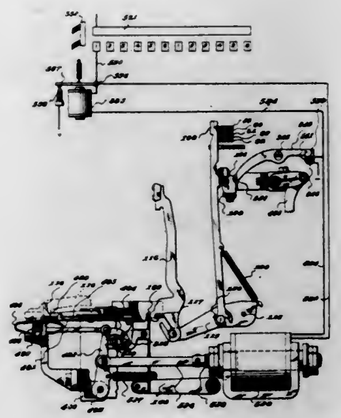
1. A process for polymerizing ethylene which comprises subjecting it to the action of boron fluoride under pressure.

1,811,131. SELECTIVE SYSTEM AND APPARATUS. EDWARD E. KLEINSCHMIDT, Long Island City, N. Y., assignor, by mesne assignments, to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 3, 1924. Serial No. 704,022. 63 Claims. (Cl. 178—33.)



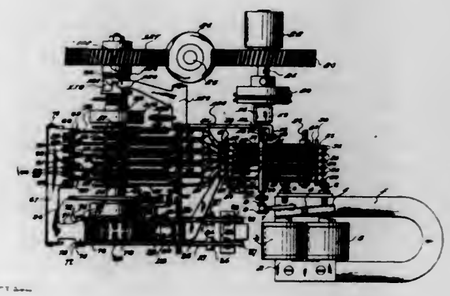
1. In selecting mechanism, a plurality of selector members, a magnet responsive to received code combinations of electrical conditions; and a cam shaft comprising a cam individual to each selector bodily moved by the actuation of said magnet in response to the received code combinations.

1,811,132. SELECTIVE SYSTEM AND APPARATUS THEREFOR. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 11, 1925. Serial No. 68,307. 68 Claims. (Cl. 178—4.)



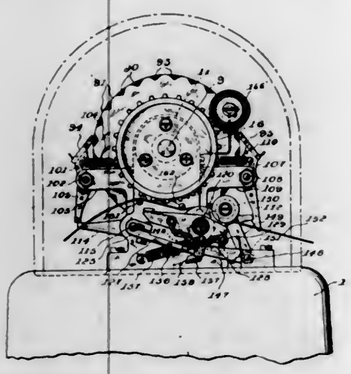
1. A printing telegraph receiver comprising a selecting mechanism embodying a plurality of notched permutation members responsive to code combinations of uniform marking conditions and uniform spacing conditions; printing means embodying a plurality of groups of characters, each group being selectable by a different code combination; a shift mechanism for determining the character of a selected group to be printed and means responsive to a special shift selecting condition added to said code combinations controlling said shift mechanism.

1,811,133. PRINTING TELEGRAPH. EDWARD E. KLEINSCHMIDT, Park Ridge, Ill., assignor to Teletype Corporation, Chicago, Ill. Filed Feb. 23, 1927, Serial No. 170,283. Renewed Sept. 17, 1929. 91 Claims. (Cl. 178—38.)



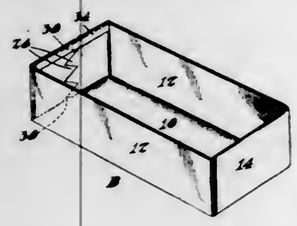
1. In a printing telegraph receiver, a selector device operatively responsive to received line current impulses and means following each operation of said selector device in response to a line current impulse for rendering it unresponsive to further impulses for a predetermined interval.

1,811,134. PRINTING TELEGRAPH. EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Refile of abandoned application Serial No. 726,839, filed July 18, 1924. This application filed Nov. 30, 1928. Serial No. 322,946. 113 Claims. (Cl. 178—28.)



1. A selecting receiver responsive to received code combinations of electrical conditions comprising a normally moving member stopped in operation at the beginning of each reception of a code combination, and started in operation at the end of each code combination.

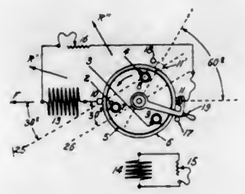
1,811,135. BOX. CUTLER D. KNOWLTON, Beverly, Mass., assignor to Hoague-Sprague Corporation, Lynn, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1926. Serial No. 90,569. 3 Claims. (Cl. 229—34.)



1. A box comprising shell-material having a body-portion, opposite side wings, corner-laps extending from the opposite sides of the side wings and provided at their outer extremities with serrations intermeshing wire corresponding serrations upon opposite corner-laps, end wings adhesively secured to the outer surfaces of the corner-laps, and end-wing extensions overlying the outer ends of the meeting lines between the serrations and being adhesively secured to the inner surfaces of the corner-laps, said box while in blank-form having cover-paper adhesively secured to the entire surface which furnishes the outside of the box when set up.

1,811,136. SYNCHRONOUS MOTOR. JAROSLAW K. KOSTKO, Ferguson, Mo. Filed Sept. 11, 1926. Serial No. 134,845. 11 Claims. (Cl. 172—120.)

1. The method of operating a motor which carries variable load at synchronous speed, comprising, producing a primary flux which revolves with respect to the primary, causing the primary flux to generate induction-motor-torque producing ampereturns in a winding on the secondary, producing an auxiliary voltage which is of slip frequency below synchronism, of an amplitude independent of its frequency, and which becomes unidirectional at synchronism, impressing below synchronism the auxiliary voltage on the secondary winding carrying the induction-motor-torque producing ampereturns, synchronizing the motor by adjusting the phase of the auxiliary voltage to approximately coincide, very near to synchronism, with the phase of the induction-motor-torque producing ampereturns, and thereafter limiting the amplitude of the auxiliary voltage to less than that which was available during synchronization.



2. The method of operating a motor which carries variable load at synchronous speed, comprising, producing a primary flux which revolves with respect to the primary, causing the primary flux to generate induction-motor-torque producing ampereturns in a winding on the secondary, producing an auxiliary voltage which is of slip frequency below synchronism, of an amplitude independent of its frequency, and which becomes unidirectional at synchronism, impressing below synchronism the auxiliary voltage on the secondary winding carrying the induction-motor-torque producing ampereturns, synchronizing the motor by adjusting the phase of the auxiliary voltage to approximately coincide, very near to synchronism, with the phase of the induction-motor-torque producing ampereturns to synchronize the motor with an alternating synchronizing torque having unequal positive and negative maxima, and thereafter modifying the adjustment which was made to secure approximate phase coincidence between auxiliary voltage and induction-motor-torque producing ampereturns.

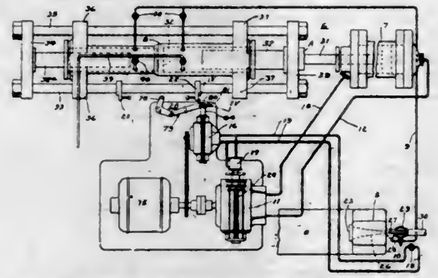
1,811,137. SOCKET WRENCH. WILLARD C. KRESS, Kenmore, N. Y., assignor to J. H. Williams & Co., Buffalo, N. Y., a Corporation of New York. Filed Jan. 15, 1930. Serial No. 420,855. 10 Claims. (Cl. 81—121.)



5. A wrench comprising a handle and a socket block having sockets of different dimensions in different faces, the block being pivotally mounted in the handle so that a socket in use may be rotated with respect thereto to either of two oppositely-disposed working positions, the socket being of the form of a polygon having multiple symmetry with respect to a point and a number of axes of symmetry divisible by two, the pivotal axis of the socket block and the longitudinal axis of the handle being relatively inclined at an angle greater than zero which is not exactly divisible by the angle at the center of the socket between two of its axes of symmetry which are nearest parallel.

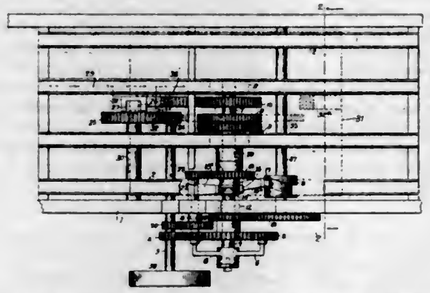
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1,811,138. APPARATUS FOR PRESSURE TESTING. BENJAMIN LASSMAN, Pittsburgh, Pa., assignor to The American Fluid Motors Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 3, 1927. Serial No. 223,590. 33 Claims. (Cl. 73—51.)



1. The combination with a material supporting device and reversible fluid-actuated means for supplying fluid under pressure thereto, of a control device for the fluid-actuated means comprising a variable and reversible delivery pump for delivering fluid under predetermined pressure to the supply means.

1,811,139. BED DRIVING MECHANISM FOR BED AND CYLINDER PRESSES. HOWARD EVANS LAUBACH, Cincinnati, Ohio, assignor to Delphos Printing Press Corp., Providence, R. I., a Corporation of Delaware. Filed June 4, 1929. Serial No. 368,225. 23 Claims. (Cl. 74—98.)



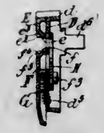
1. In a printing press a bed, a bed driving rack attached to the underside of the bed, a bed reversing rack attached to the underside of the bed adjacent each end of the bed driving rack, a pair of bed driving gears, means for independently and continuously rotating said gears in opposite directions, said gears being adapted to drive the bed on the major portions of its strokes, means for shifting said gears axially during the reversal period respectively into and out of position to engage with the bed driving rack, and means cooperating with said reversing racks while the bed driving gears are out of mesh with the bed driving rack, to slow down and stop the bed and start it in the reverse direction.

1,811,140. VISOR SIGNAL FOR MOTOR VEHICLES. THOMAS J. LAW, Clear Lake, S. Dak. Filed Apr. 1, 1930. Serial No. 440,821. 4 Claims. (Cl. 177—329.)



1. A motor vehicle signal comprising an elongated shallow casing including a flat top plate apertured to outline a signal symbol, means for mounting said casing at one edge to and at the top of a motor vehicle windshield to constitute a visor therefor, means for illuminating the interior of the casing, and means connecting the body portion of the casing with the top thereof whereby the body portion may be shifted relative to the top to open the casing.

1,811,141. KEY ESCUTCHEON. MITCHELL LEVENTHAL, Brooklyn, N. Y., assignor to Sosy, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 19, 1930. Serial No. 429,628. 2 Claims. (Cl. 70—8.)

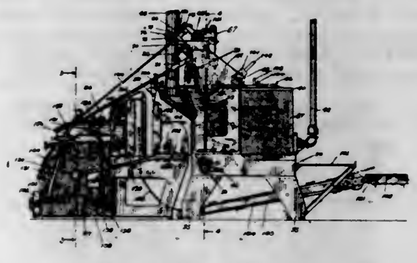


1. An escutcheon comprising an element having a keyhole therein, a member mounted on, and slidable relatively to said element and having its top surface substantially flush with the top surface of the element, a shoulder on said element in superposed relation to the keyhole, the slidable member having an end face normally held in abutting relation to said shoulder, and a depression in at least one of the aforementioned parts at their abutting surfaces adapted to receive the bit end of a key, said slidable member being adapted to yield and permit the entrance of the key into the key-hole when said key is pressed against said depression.

1,811,142. PROCESS FOR THE RECOVERY OF TIN FROM ALKALINE STANNATE SOLUTIONS. WILLIAM T. LITTLE, Westfield, N. J. Filed Oct. 6, 1928. Serial No. 310,931. 4 Claims. (Cl. 23—144.)

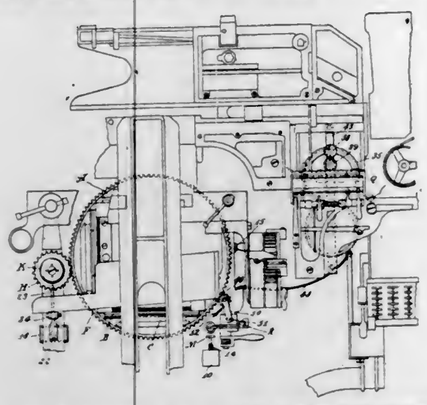
1. In recovering tin in detinning processes with cyclic use of baths, the process which comprises detinning in an alkaline bath containing alkali nitrate and nitrite until a substantial amount of solid alkali stannate is formed, removing such stannate, reacting upon such stannate in solution with nitrous gases to precipitate tin oxid, removing the precipitate and returning the liquor to the detinning bath.

1,811,143. GRID CASTING MACHINE. ARTHUR D. LUND, Minneapolis, Minn., assignor to Alcet Electro-Products Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 24, 1928. Serial No. 301,830. 29 Claims. (Cl. 22—57.)



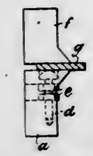
27. In a casting machine a pair of complementing molds, a ram for operating one of the molds, a feed mechanism for filling the molds, said feed mechanism having a piston and a valve for controlling the feed of the molten metal to the molds, a continuously rotatable rotor, a cam carried by the rotor for actuating the ram, a second cam carried by the rotor for actuating the piston, and a third cam carried by the rotor for actuating the valve.

1,811,144. SIGNALING AND INDICATING DEVICE FOR PROTECTING THE MOLDS AND MOLD LINERS OF TYPESETTING MACHINES. ARTHUR J. MCLOUGHLIN, Corona, New York, N. Y. Filed May 31, 1929. Serial No. 367,429. 15 Claims. (Cl. 199—52.)



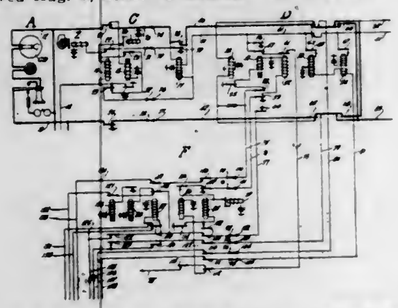
1. An attachment for linotype machines including means operable to produce a continuous signal by setting of the mold disk pinion for manipulation and means operable by manipulation of the ejector blade changing mechanism for discontinuing said signal.

1,811,145. SLUG-TRIMMING KNIVES FOR TYPOGRAPHICAL LINE-CASTING MACHINES. CARL MUEHLEISEN, Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Filed Mar. 5, 1930, Serial No. 433,217, and in Germany Mar. 8, 1929. 6 Claims. (Cl. 199—59.)



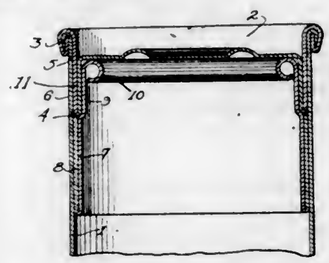
3. A slug-trimming knife for typographical line-casting machines comprising a body portion and a cutting-edge portion, the said portions being separated by a gap, and means adapted to deflect the cutting-edge portion relatively to the gap.

1,811,146. AUTOMATIC TELEPHONE SYSTEM. RODNEY G. RICHARDSON, Chicago, and MARTIN L. NELSON, Park Ridge, Ill., assignors, by mesne assignments, to Automatic Electric Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 23, 1922, Serial No. 538,551. Renewed Aug. 4, 1930. 8 Claims. (Cl. 179—27.)



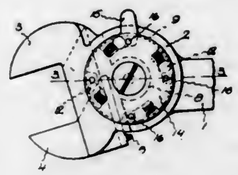
1. In a telephone exchange system, a calling line, selector switches for extending a connection from said calling line, a registering mechanism for controlling said switches, said mechanism comprising a plurality of registers and an impulse controlling device, means under the control of the calling subscriber for setting said registers to record digits of desired connections, a cross-connecting rack interposed between said registers and said impulse controlling device, and means for connecting terminals of said registers corresponding to non-existing offices of the exchange to said rack whereby connections attempted to such non-existent offices are routed to an operator's position.

1,811,147. EASY OPENING CONTAINER. FRANK J. O'BRIEN, New York, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed July 20, 1929. Serial No. 379,824. 4 Claims. (Cl. 220—54.)



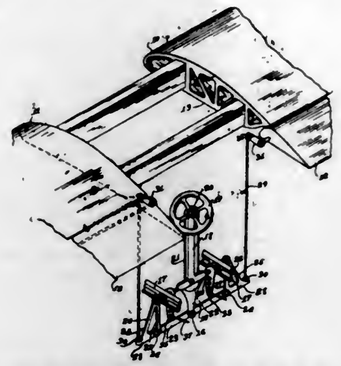
1. An easy opening container, comprising a body having ends seamed thereto, said body having spaced score lines forming a tearing strip for releasing the end from said body, a collar located within the body and attached thereto below the score lines and extending upwardly, the upper portion of the collar being inset from the wall of the body, and a depending member fixed to the upper end and disposed between the collar and the wall of the body making contact with the portion of the body having the score lines and making a removable outside slip contact with said collar when said tearing strip is removed.

1,811,148. ADJUSTABLE WRENCH. JOHAN PEHRSSON, Skillingaryd, Sweden. Filed Dec. 17, 1929, Serial No. 414,744, and in Sweden Jan. 4, 1929. 9 Claims. (Cl. 81—133.)



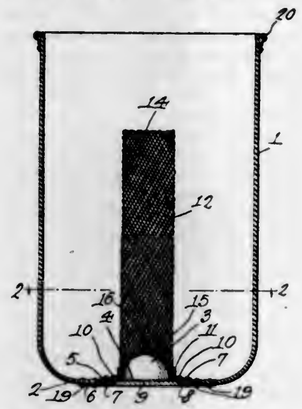
1. An adjustable wrench comprising a handle member, a wrench head rigidly connected therewith and provided with a transverse cavity one edge of which forms a fixed locking abutment, a fixed jaw rigidly connected with said head, an adjustable jaw mounted in the head for movement in relation to the fixed one, a toothed rack member connected with the adjustable jaw, a disc rotatably mounted within said cavity, means connected with the disc and provided with a peripheral row of teeth positioned in mesh with said toothed rack, the edge of said disc having circumferentially extending recesses facing the fixed abutment surface, locking means provided within said recesses and adapted for coaction with said abutment surface, means for effecting an automatic locking action of said locking means, and means for manually releasing the locking means in counteraction to the means for effecting the automatic locking action.

1,811,149. STEERING CONTROL FOR AEROPLANES. ARTHUR G. PETERSEN, Brooklyn, N. Y. Filed Jan. 25, 1930. Serial No. 423,287. 17 Claims. (Cl. 244—29.)



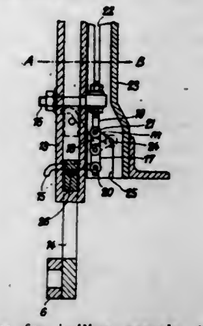
1. In combination with an aeroplane having right and left wings and an elevator each wing provided with an aileron movable to change the wing profile on the pressure side, a shaft mounted for movements about its axis, a stick pivotally supported on said shaft so as to move in planes longitudinal with said axis, means for moving the free end of the stick in all directions, and means for transmitting forward and rearward movements of the stick into up and down movements of said elevator and into downward movements of said right and left ailerons and sideward movement of the stick in one direction into simultaneous upward movement of the right aileron and downward movement of the left and sideward movement in the other direction into simultaneous downward movement of the right aileron and upward movement of the left and combination movements of the stick forward or rearwards and sidewards into combination movements of said ailerons and elevator.

1,811,150. FIREPROOF MAIL BAG. HAROLD BERNICE PEYTON, Jacksonville, Fla. Filed Sept. 3, 1929. Serial No. 390,025. 2 Claims. (Cl. 169—2.)



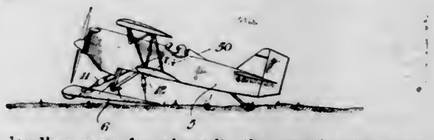
1. A mail bag having a mouth and provided on its bottom with a receptacle having an outlet discharging into the bag, thermal means for closing the outlet, and a tubular guard constructed of closely woven foraminous material and closed at its end adjacent the mouth of the bag, the guard being disposed within the bag and about the receptacle, the guard extending toward the mouth of the mail bag far enough to permit a discharge of the contents of the receptacle throughout the major portion of the mail in the bag when the thermal means acts to open the outlet of the receptacle.

1,811,151. SAFETY VALVE FOR BOILING VESSELS. JAKOB PFOTZER, Kehl, Baden, Germany. Filed Feb. 12, 1930, Serial No. 427,893, and in Germany June 25, 1928. 2 Claims. (Cl. 137—53.)



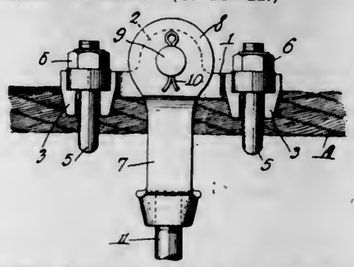
1. A safety valve for boiling vessels, the contents of which are liable to cause the valve to stick to its seat, having a valve lever, a weight on the said lever, an electric lifting magnet, a contact pressure gauge for controlling the lifting magnet, two loosely interengaging stirrups capable of acting in the lifting direction of the magnet for coupling the lifting magnet and the valve lever, one stirrup being attached to the movable part of the magnet and the other to the valve lever, two strap members pivoted together, a slotted guide for guiding the pivots of the said strap members, an intermediate member between the stirrups attached to the magnet and one of the strap members, stops on the stirrup attached to the valve lever and transmission levers attached to the free end of the other strap member for transmitting the weight of the lifting magnet by way of the said stop to the valve lever and the valve, as and for the purpose set forth.

1,811,152. LANDING GEAR FOR AIRCRAFT. ALEXANDER PROCOFIEFF-SEVERSKY, New York, N. Y. Filed July 24, 1926. Serial No. 124,562. 7 Claims. (Cl. 244—2.)



1. In landing gear for aircraft, the combination with an axle, of an extension member arranged to be connected to said axle, a ground engaging member mounted on the axle and extension to permit relative angular movement and longitudinal movement.

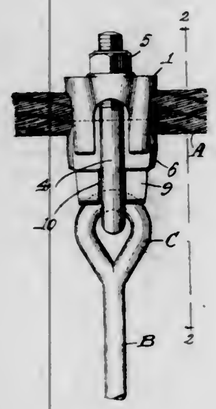
1,811,153. FITTING FOR HEAVY DUTY SUSPENSION HANGERS. FRANK WARD REILLY, Chattanooga, Tenn., assignor to Williamsport Wire Rope Company, a Corporation of Pennsylvania. Filed Jan. 10, 1930. Serial No. 419,920. 4 Claims. (Cl. 14—22.)



1. A fitting of the class described including an elongated saddle adapted to rest upon a span cable and hav-

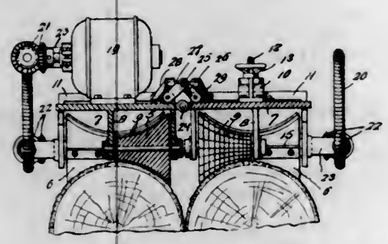
ing helical grooves to receive cable strands, means at the ends of the saddle for binding it upon said cable, a hanger engaging clevis suspended from the saddle and straddling the cable and saddle, and a coupling pin connecting the clevis to the saddle for transmitting the weight of a load from the clevis through the saddle to the cable.

1,811,154. FITTING FOR LIGHT DUTY SUSPENSION HANGERS. FRANK WARD REILLY, Chattanooga, Tenn., assignor to Williamsport Wire Rope Company, a Corporation of Pennsylvania. Filed Jan. 10, 1930. Serial No. 419,921. 4 Claims. (Cl. 14—22.)



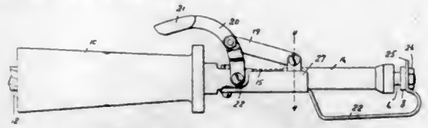
1. A fitting of the class described including a clip for straddling a cable, said clip having grooves for the reception of portions of the cable, a block movably mounted in the clip having a cable-receiving recess and a recess for the reception of one end portion of a hanger, and a U-bolt straddling the block and adjustably connected to the clip for binding a cable between the grooved surface of the clip and the recessed end of the block, said bolt constituting means for extending through and engaging a hanger.

1,811,155. LOG TRIMMING MACHINE. WILLIAM T. RICH, Lufkin, Tex. Filed July 26, 1929. Serial No. 381,227. 8 Claims. (Cl. 144—208.)



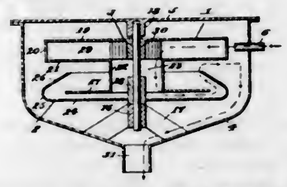
1. In a portable log trimming machine, a log trimming instrumentality including an elongated frame provided with supporting rollers to promote travel of and guide the same along the log, said rollers being of concave form and arranged in spaced tandem relation, an arm rigid with and projecting rearwardly from the frame, a bracket suspended from said arm, a horizontal concave vertically movable cutting cylinder journaled in said bracket in position to debark or trim the circumference of the log, manually operable means for turning said bracket to angularly adjust said cutter cylinder relative to the line of travel of the machine, and driving means for said cutter cylinder.

1,811,156. WELDING HANDLE. HUBERT C. SADLER, Hamilton, Ohio. Filed Feb. 19, 1929. Serial No. 341,194. 3 Claims. (Cl. 219—8.)



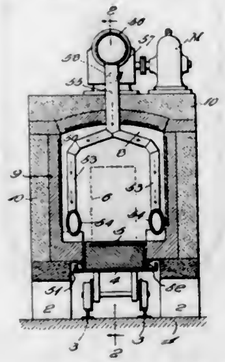
1. In a welding handle of the class described, a shank having a hole at its outer end extending in a direction transverse to the length of the shank and through which a welding rod is adapted to slide, a sleeve slidable on said handle and including a portion engageable with the rod, spring means for urging the sleeve into rod gripping position, manually manipulated releasing means for the sleeve, said means comprising a pivoted lever and an operating link between the lever and the sleeve.

1,811,157. CENTRIFUGAL APPARATUS FOR PURIFYING OIL. WALTER SCHWERDTFEGER, Rathenow, Germany. Filed Dec. 10, 1928, Serial No. 324,897, and in Germany Jan. 2, 1928. Renewed Feb. 3, 1930. 7 Claims. (Cl. 233—24.)



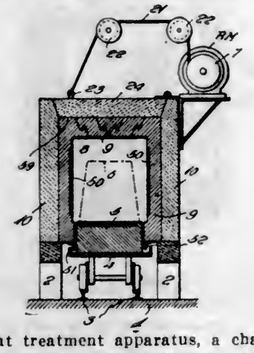
1. An apparatus for cleaning lubricating oil comprising a casing, a shaft rotatably mounted in said casing, a centrifugal separating means mounted upon said shaft and a jet impelled turbine operated by the oil to be cleaned also located within said casing for rotating said separating means.

1,811,158. FURNACE OR HEAT TREATMENT CHAMBER COOLING MEANS. EDWIN L. SMALLEY, Whitefish Bay, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Feb. 9, 1928, Serial No. 253,199. Divided and this application filed Apr. 1, 1929. Serial No. 351,679. 8 Claims. (Cl. 263—44.)



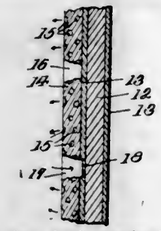
1. In a heat treatment apparatus, a chamber for material to be subjected to heat treatment, a plurality of vertically extending flues positioned adjacent the interior walls of said chamber, horizontally extending manifolds interconnecting opposite ends of said flues, and means for forcing a cooling mixture through said manifolds and flues for lowering the temperature of said chamber over a predetermined time period.

1,811,159. FURNACE OR HEAT TREATMENT CHAMBER COOLING MEANS. EDWIN L. SMALLEY, Whitefish Bay, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Feb. 9, 1928, Serial No. 253,199. Divided and this application filed Apr. 1, 1929. Serial No. 351,680. 8 Claims. (Cl. 263—44.)



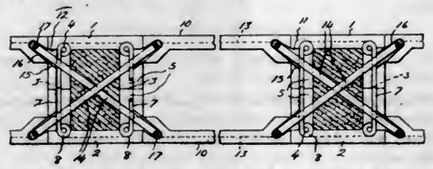
3. In a heat treatment apparatus, a chamber for material to be subjected to heat treatment, a heat resisting covering for said chamber, means for eliminating the heat resisting effect of said covering over predetermined time intervals for facilitating the cooling of the material within said chamber over a predetermined time period without admission of free air to said chamber and means for restoring the heat resisting effect of said covering when said chamber cools to a predetermined temperature.

1,811,160. CONTAINER FOR FOOD PRODUCTS. ARTHUR E. STEVENSON, Chicago, Ill., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed June 5, 1928. Serial No. 283,131. 5 Claims. (Cl. 220—64.)



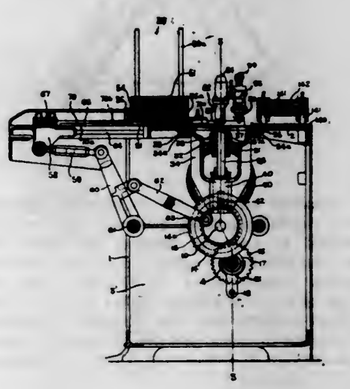
3. A container for food products containing juices which dissolve tin and iron comprising a body of tin plate having its internal surface covered by a coating containing a portion of a stannous compound, said compound being exposed to the food products in a quantity sufficient to dissolve therein and produce a precipitate on any exposed iron, so as to prevent corrosion thereof leading to perforations or hydrogen springers, said quantity of soluble tin being not sufficient to affect the food products.

1,811,161. UNIT WALL CONSTRUCTION. AVILA O. THOMAS, Detroit, Mich., assignor to The Structural Concrete Units Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 16, 1929. Serial No. 392,945. 17 Claims. (Cl. 72—30.)



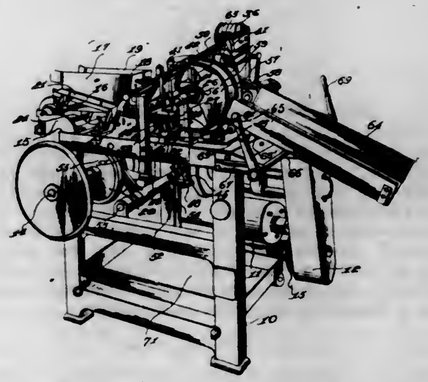
1. In a wall construction, a plurality of hollow columns, each comprising one or more pairs of vertically abutting units, wall plates between said columns and abutting said units, and a common means for maintaining the abutting relation of the column-forming units with each other and with said wall plates.

1,811,162. CAN END LINING MACHINE. NELSON TROYER and PAUL E. PEARSON, Seattle, Wash., assignors to Troyer-Fox Manufacturing Co., Seattle, Wash., a Corporation of Washington. Filed Oct. 1, 1928. Serial No. 309,663. 12 Claims. (Cl. 113—80.)



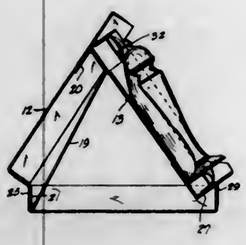
12. In a can end lining machine, means for axially rotating can ends, a support having a pivot about which it is adjustable, a nozzle on the support from which lining material may be discharged to the can ends as they are rotated by said rotating means, means coaxial of the said support for opening and closing the nozzle and which maintains its operativeness for all positions of radial adjustment of the support.

1,811,163. SAUSAGE WRAPPING METHOD AND APPARATUS. CHARLES H. VOGT, Philadelphia, Pa. Filed Feb. 4, 1928. Serial No. 251,871. 12 Claims. (Cl. 93—5.)



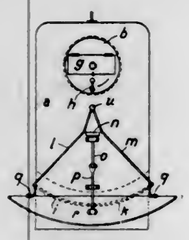
1. A method of wrapping sausages which comprises compressing each sausage out of its normal shape; providing the sausage with a wrapper while compressed; and permitting the sausage to expand within the wrapper to its normal shape to cause the wrapper to tightly engage the sausage.

1,811,164. DISPLAY BOX. CLARENCE C. WILSON, Bridgeport, Conn., assignor to The Compressed Paper Box Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed June 13, 1929. Serial No. 370,546. 6 Claims. (Cl. 206—44.)



1. A container adapted for shipping or displaying its contents comprising a base receptacle, a complementary cover hinged at one end thereto, an insert receptacle hinged at one end to the other end of said base receptacle and nesting therein when in shipping formation, the hinged end of the insert being higher than the other walls of the insert and the base and adapted to cooperate with said cover when in closed position and said insert adapted to cooperate with the cover to exhibit its contents when in display formation.

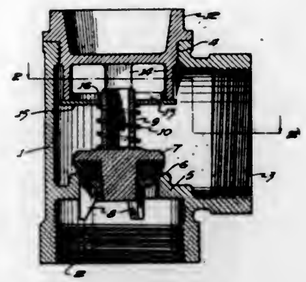
1,811,165. DUSTBIN. JONNY WOLTER, Hamburg, Germany. Filed May 28, 1930, Serial No. 456,772, and in Germany Nov. 8, 1928. 2 Claims. (Cl. 220—36.)



1. A dust-bin comprising a closed receptacle, a plate supported rotatably in one of the walls of said receptacle, said plate having an aperture forming the inlet for the receptacle, a frame secured to said plate inside the receptacle, a slide guided in said frame and adapted to be extended from the receptacle through said aperture, means for securing an ash pan to said slide so that it can be inserted together with the latter into the receptacle and so that it will be retained thereon when the frame is turned over by means of the plate inside the receptacle, and a hinged lid for closing said aperture.

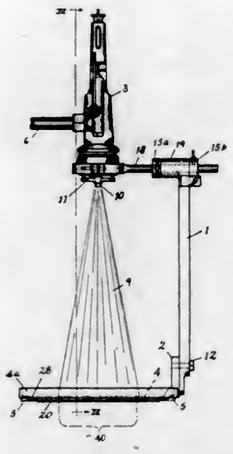
1,811,166. CHECK VALVE STRUCTURE. FARNHAM YARDLEY, West Orange, N. J., assignor to Jenkins Bros., New York, N. Y., a Corporation of New Jersey. Filed Apr. 14, 1930. Serial No. 444,318. 2 Claims. (Cl. 251—144.)

1. A check valve structure, comprising a casing having angularly disposed inlet and outlet openings, an intermediate valve seat, and a third opening parallel with the valve seat, a valve disk having guide members on its face cooperating with the seat and a stem on its back, a screw cap closing the third opening and having a rim extending



within the casing, a floating guide plate slidably engaging said rim and traversed by the valve stem, and a spring surrounding the stem and engaging said guide plate.

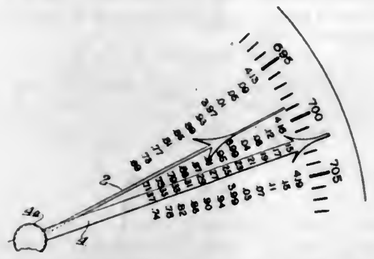
1,811,167. STENCILING DEVICE. HERMAN ANDERSON and RAYMOND J. GANNON, Pittsburgh, Pa., assignors to Jas. H. Matthews & Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 19, 1929. Serial No. 415,148. 5 Claims. (Cl. 101—123.)



1. In a portable stenciling machine which is movable as a unit to a position of rest upon the surface to be marked, the combination of a supporting base for the machine, a stencil removably secured in said supporting base, which stencil conforms to the surface to be marked and comprises the bottom face of said base which is adapted to lie in close contact with said surface to be marked, a standard extending upward from said base, and a paint-gun movably secured to said standard above said base and its included stencil.

1,811,168. BAROMETER FOR USE IN CONNECTION WITH DIAGNOSTIC WORK. DANIEL R. BAAR, Grand Rapids, Ohio, assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Apr. 25, 1928. Serial No. 272,686. 2 Claims. (Cl. 73—4.)

1. In a barometric device, the combination with a pointer, of a dial for the pointer having along its periphery a set of barometric pressure indications corresponding to different positions of the pointer and having inwardly of each of said pressure indications a radial group of diagnostic indicia, a member pivotally mounted con-

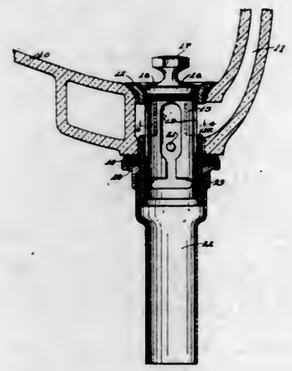


centrically with the pointer and the dial and bearing temperature indicia in radial alignment for correlation with the said diagnostic indicia, and means for moving the said member and the dial relative to one another.

1,811,169. PROCESS FOR DECOLORING SUGAR CRYSTALS. JULIEN BERGÉ, Tirlemont, Belgium, assignor to Raffinerie Tirlemontoise Société Anonyme, Tirlemont, Belgium, a Corporation. Filed Feb. 11, 1927, Serial No. 167,601, and in Germany Sept. 30, 1926. 2 Claims. (Cl. 127—64.)

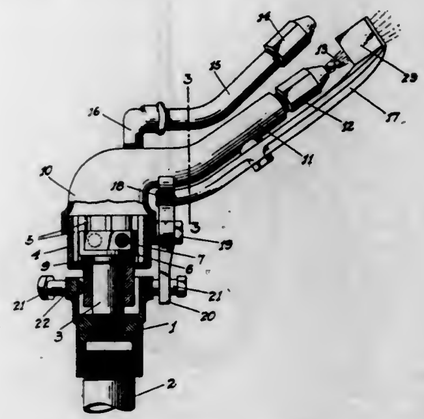
1. A process for removing coloring matter from sugar crystals by means of a pure white sugar solution without substantial loss of crystallized sugar and in which said solution is maintained in a condition in which it is adapted to be regenerated by passing it through a filter of the charcoal type, comprising first completely freeing the sugar crystals from mother liquor, then mashing said sugar crystals with a pure white sugar solution to remove the coloring matter from said sugar crystals, said coloring matter passing into said solution, then separating said color bearing solution from said crystals and maintaining said separated solution in a condition in which it may be regenerated by passing it through a filter of the charcoal type.

1,811,170. LAVATORY DRAIN. FRANK G. BROTZ, Kohler, Wis., assignor to Kohler Company, Kohler, Wis., a Corporation of Wisconsin. Original application filed Feb. 8, 1930, Serial No. 425,471. Divided and this application filed Jan. 31, 1931. Serial No. 512,589. 3 Claims. (Cl. 4—288.)



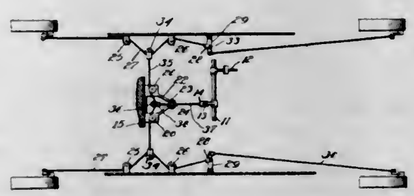
1. A drain for lavatories or the like comprising a drain connection, a nut member threaded on the drain connection and provided with an internally threaded skirt portion, and a tailpiece having an upper end portion surrounding the threaded end of the drain connection and threaded into the skirt portion of the nut.

1,811,171. OSCILLATING SPRINKLER. WILLIAM A. BUCKNER, Fresno, Calif. Filed Jan. 25, 1930. Serial No. 423,385. 8 Claims. (Cl. 299—71.)



8. A sprinkler having a rotatable sprinkler head which includes a nozzle positioned to discharge in a substantially horizontal direction, means to rotate the head in one direction, and at a certain speed, separate means to rotate the head in the opposite direction and at a lesser speed, and means functioning with the rotation of the head to render the head rotating means alternately effective.

1,811,172. BRAKE EQUALIZER. HARRY E. BURTON, Chicago, Ill. Filed Aug. 6, 1929. Serial No. 383,832. 6 Claims. (Cl. 188—204.)

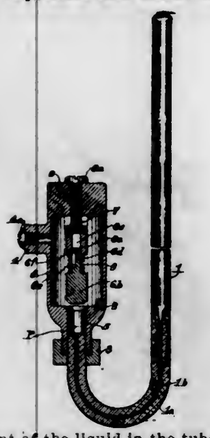


1. In a vehicle having four-wheel brakes, a cable operatively connecting a front and rear brake on each side of said vehicle, pulleys engageable with said cables, a cross cable connecting said pulleys, a slidable element, pulleys on said slidable element and supporting said cross cable, a central pulley supported by said cross cable, and means operatively connected to said central pulley for equally distributing any pressure which may be transmitted to said last named means.

1,811,173. PRESSURE GAUGE. HERBERT A. CLARK, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Mar. 29, 1928. Serial No. 265,745. 5 Claims. (Cl. 73—31.)

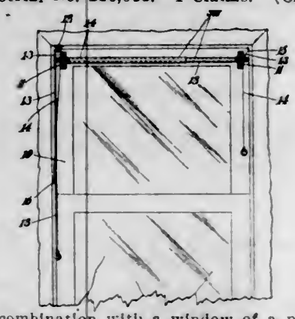
4. In apparatus of the character described, the combination with a tube, a well having a relatively thick bottom wall and a cylindrical depression in the bottom wall, the tube being closed at the top and having at the bottom a U-shaped connection to the bottom of said depression, and a liquid filling the tube and partly filling the well, the latter having an outlet above the level of the liquid, of a piston accurately fitting the said depression and disposed

above the latter, means for moving the piston into and out of the said depression and means for permitting ex-



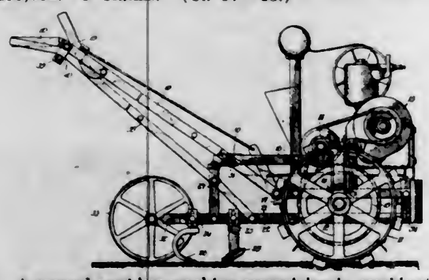
pansive movement of the liquid in the tube when the piston is disposed in the depression, comprising resilient means between the piston and the means for moving it.

1,811,174. MEANS FOR OPERATING WINDOWS. FRANCISCO P. CORTÉS, New York, N. Y. Filed Aug. 29, 1927. Serial No. 216,088. 4 Claims. (Cl. 268—130.)



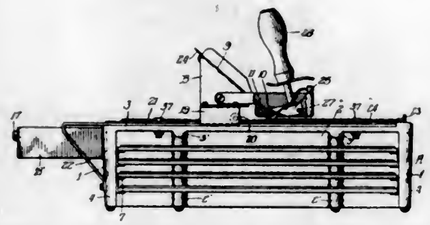
1. The combination with a window of a pair of multi-roller pulleys mounted in a casing securing to said window on opposite sides thereof, cords so arranged with respect to said pulleys that manipulation of the cords causes raising and lowering of said window, and means for preventing binding of said window against the window casing during movement thereof comprising guide rollers mounted between projections extending from the casing of said pulleys in peripheral contact with the window casing.

1,811,175. GROUND CULTIVATING MACHINE. FOREST V. DONALD, Minneapolis, Minn., assignor to Gilson Manufacturing Company, Port Washington, Wis., a Corporation of Wisconsin. Filed Sept. 9, 1921. Serial No. 499,432. 9 Claims. (Cl. 97—48.)



1. A ground working machine comprising in combination, a wheeled frame, a wheeled tool carrying frame connected to the wheeled frame in such manner as to be dragged thereby, the connection between the wheeled frame and tool frame consisting of a pair of laterally spaced substantially rigid members connected by spaced loose connections to the wheeled frame in advance of the wheel axis, said members being free to swing laterally relative to the wheeled frame.

1,811,176. DUPLICATING MACHINE. JOHN J. FLANIGAN, Oak Park, Ill. Filed Apr. 10, 1929. Serial No. 353,918. 6 Claims. (Cl. 101—133.)

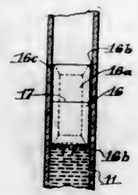


1. The combination of a frame having a supporting bed, a substantially L-shaped margin bar fixed at one end of the bed, a gelatin tablet on said bed, and means for detachably holding the tablet in operative relation to the margin bar.

1,811,177. PROCESS OF TREATING PETROLEUM EMULSIONS. JULIUS HYMAN and ARTHUR F. SCHLANDT, Chicago, Ill., assignors to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Mar. 26, 1929. Serial No. 350,125. 5 Claims. (Cl. 196—4.)

4. The process of breaking petroleum oil emulsions, which comprises introducing into a body of such an emulsion a treating agent consisting of an oxidized hydrocarbon motor fuel produced by the molecular decomposition of high boiling point hydrocarbons while the latter are in the vapor phase, allowing the body to stand until the oil therein separates and rises to the top, and finally drawing off the oil.

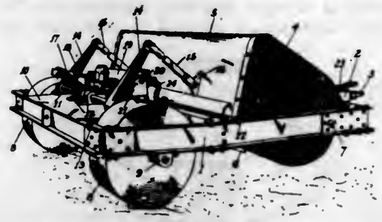
1,811,178. MERCURY PRESSURE GAUGE. GEORGE B. IRELAND, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed July 26, 1928. Serial No. 295,414. 3 Claims. (C. 73—31.)



1. In an instrument of the character described, the combination with a glass tube containing a column of mercury, of a cylindrical float adapted to rest upon the mercury column having an axial longitudinal bore widening toward its ends substantially to the periphery of the float.

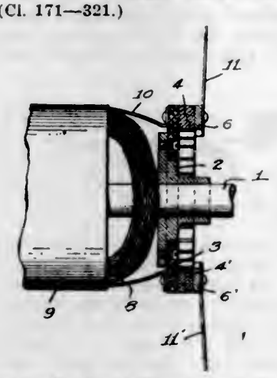
1,811,179. DIRT MOVER. BUTLER JACK, Jr., Sacramento, Calif. Filed Apr. 8, 1930. Serial No. 442,517. 2 Claims. (Cl. 37—169.)

1. A dirt mover including a horizontal frame, a bucket mounted in the frame, pivot connection means between the bowl adjacent its forward end and the sides of the frame, a transverse shaft supported from and adjacent the frame rearwardly of the bucket, an arm projecting upwardly and rearwardly from said shaft, a piston rod extending forwardly from the upper end of said arm, a hydraulic cylinder from which the rod projects supported from the



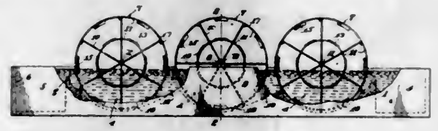
frame between the shaft and bucket, and connections between said shaft and the back of the bucket for raising and lowering the same with the movement of the rod and the turning of the shaft.

1,811,180. COMMUTATOR CONSTRUCTION FOR ELECTRIC MACHINES. CLYDE W. LANDERS, New York, N. Y. Filed Oct. 26, 1928. Serial No. 315,262. 3 Claims. (Cl. 171—321.)



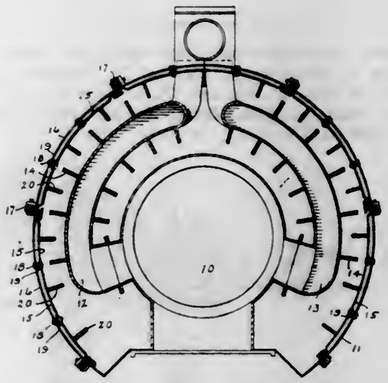
1. In a commutator for a dynamo-electric machine and in combination an insulating disc, and a plurality of segments of non-metallic conductive material secured in fixed relation to said disc to define a ring of electrically separated segments the separations between said segments constituting channels for the free passage of air when the commutator is rotated.

1,811,181. PROCESS AND APPARATUS FOR TREATING SEWAGE OR OTHER ORGANIC MATTERS. ARTHUR T. MALTBY, Chicago, Ill. Filed Oct. 20, 1928. Serial No. 313,845. 10 Claims. (Cl. 210—8.)



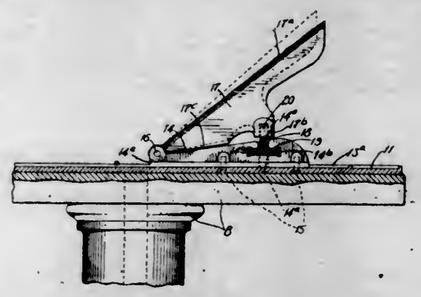
1. Apparatus for treating sewage or other liquid organic matters including a rotor provided with a plurality of radially disposed transverse plates carrying bacterial growths, and a container for the liquid the lower portion of the container formed as a circular transverse pit the curved surface of which is arranged to receive and closely conform to the curve of the wheel periphery and the wheel positioned and caused to rotate in said container with the lower portion of the wheel periphery moving in close relation to the curved surface of the pit and in such manner that the bacterial growths are periodically submerged in the liquid and exposed to the atmosphere.

1,811,182. FURNACE. HARRY W. NEAL, Indianapolis, Ind., assignor to Hall-Neal Furnace Company, Indianapolis, Ind. Filed Oct. 21, 1929. Serial No. 401,074. 2 Claims. (Cl. 126—118.)



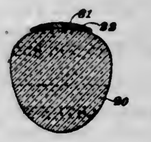
1. In a furnace, a heated sheet metal casing, vertical fins of folded sheet metal disposed about said casing, a sheet metal housing surrounding said surface, and similarly folded fins projecting from said housing toward said casing, each of said housing fins being disposed between two adjacent casing fins.

1,811,183. SUNDIAL. HERMAN NEUWIRTH, New York, N. Y. Filed Sept. 20, 1930. Serial No. 483,173. 2 Claims. (Cl. 33—62.)



1. In a sundial construction, an attachment piece adapted to be secured to the face-plate of the sundial, a gnomon movably attached to one end of said piece, a screw projecting from said gnomon spaced from said end, and a nut threaded on said screw, said piece having a portion spaced from said end formed to engage said nut for permitting angular adjustment of the gnomon with respect to said piece.

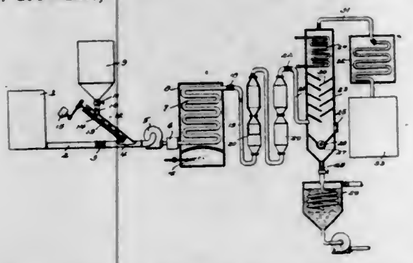
1,811,184. THERMOMETER. HARRY Y. NORWOOD, West Rush, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Feb. 26, 1930. Serial No. 431,443. 2 Claims. (Cl. 49—79.)



2. In a process of making thermometer tubing, the steps of forming a bore, which consist in forming a groove-

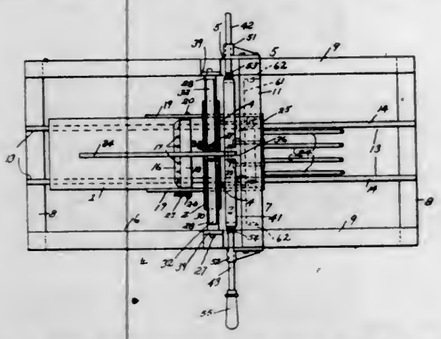
forming rib on the surface of a relatively large body of metal, pressing a body of glass in plastic condition against the said surface, joining thereto while in plastic condition another piece of glass to form a cover for said groove and then drawing the resulting body of glass.

1,811,185. METHOD OF DECOLORIZING OILS. RUDOLPH C. OSTERSTROM, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed June 18, 1928. Serial No. 286,103. 7 Claims. (Cl. 196—147.)



4. In a method of purifying and decolorizing petroleum oils, the step of heating a mixture of petroleum oil and a finely divided adsorbent clay to a temperature above that at which the oil under treatment vaporizes but below a cracking temperature, preventing the evolution of oil vapors from said mixture by the application of super-atmospheric pressures thereto while said mixture is under heat treatment to maintain the oil in the liquid phase and to cause the oil to thoroughly penetrate the adsorbent clay, reducing the pressure on the mixture while said mixture is substantially at a temperature above that at which the oil vaporizes, for the purpose of releasing vapors and maintaining the oil vapors and finely divided adsorbent clay at such reduced pressure for a period of time sufficient to insure the desired contact between the adsorbent clay and the oil vapors.

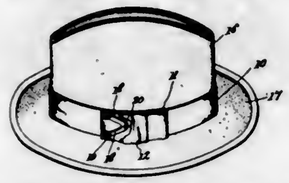
1,811,186. MACHINE FOR SLICING FRESH MEAT. JOHN A. RANKIN, Los Angeles, Calif. Filed Oct. 1, 1928. Serial No. 309,423. 6 Claims. (Cl. 146—151.)



1. A meat slicing machine comprising a knife, a movable table on which the meat is placed and sliced when the table is moved under the knife, and hooks for engaging the sliced forward end of the meat when said end of the meat passes through the knife.

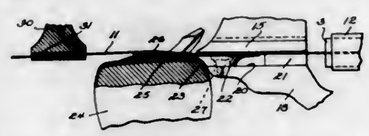
1,811,187. HATBAND FASTENER. FREDERICK R. ROBERTS, New York, N. Y. Filed Dec. 28, 1929. Serial No. 417,097. 7 Claims. (Cl. 24—150.)

1. As a new article of manufacture, a device for affixing hat bands, comprising a substantially V-shape frame of sheet metal adapted to be placed within the loop of the bow of a hat band, said frame having flat plate portions on the outer ends of its diverging arms to engage in the crease of the bow and having pointed prongs integral with said plate portions stamped inwardly therefrom and inclined backwardly, said prongs adapted to engage through the



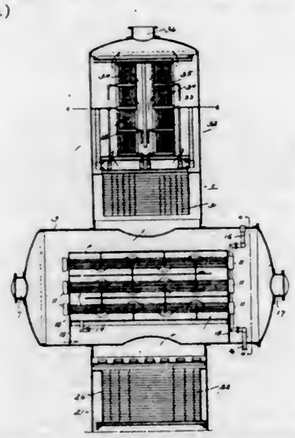
bow to hold the article therein and adapted to engage through the underlying end of the hat band when the ends thereof are disposed in overlapping position upon a hat, said prongs being of a length adapted to project inwardly from the overlapping ends of the hat band and bite into the outer surface of the hat crown to anchor the band thereon.

1,811,188. HEEL SEAT TRIMMING MACHINE. ALBERT C. ROGOE and HIRAM GORDON, Columbus, Ohio. Filed Feb. 1, 1929. Serial No. 336,806. 14 Claims. (Cl. 12—31.5.)



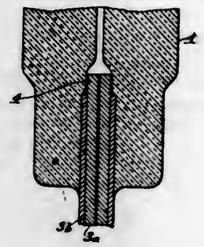
1. A machine for beveling the sole of a shoe to provide a heel seat margin constituting a convex surface approximating the mating concave surface of a wood heel, comprising a frame, a relatively thin flexible cutter blade supported for reciprocation between spaced guides carried by said frame, and a thin-edge work positioning member closely adjacent and in parallel plane with the cutting edge of said blade, said cutting blade and work positioning member being adapted to be forced into angular relationship by the work to provide a work receiving throat in relation to which the work is to be turned.

1,811,189. OIL FRACTIONATING APPARATUS. CLYDE L. SMITH and CORNELIUS B. WATSON, Chicago, Ill. Filed Feb. 28, 1928. Serial No. 257,690. 9 Claims. (Cl. 196—139.)



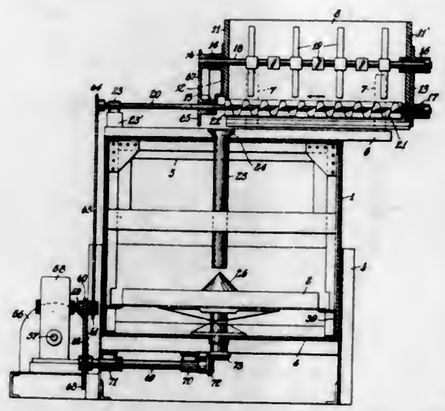
8. A fractionating tower comprising a shell of substantially closed hollow form, a vapor inlet in the lower part of said shell, and a vapor outlet in the upper part of said shell, a heating coil situated in the bottom of said shell, a cooling coil in the upper part of said shell, stripping baffles stationarily mounted in said shell between said vapor inlet and said heating coil, stationary groups of fractionating baffles mounted within said shell between said vapor inlet and said cooling coil, a plurality of vertically arranged drying baffles situated in the upper part of said shell between said cooling coil and said vapor outlet and means for causing the vapors to travel laterally and upwardly through said drying baffles.

1,811,190. THERMOMETER. KENNETH L. TATE, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Dec. 27, 1928. Serial No. 328,772. 2 Claims. (Cl. 73—52.)



1. In a mercury thermometer, the combination of a glass stem having a capillary bore and terminating in an enlarged bore, a capillary tubing embedded in the enlarged bore, said tubing consisting of an inner layer of a metal immune to mercury and an outer layer of a metal of such character and such thickness relatively to the inner layer that the coefficient of expansion of the tubing as a whole is substantially that of the glass of the stem, the inner layer at the end of the tubing in the stem extending beyond the end of the outer layer and forming with the inner surface of the glass a seal against contact of the mercury with the outer layer.

1,811,191. SMOKE GENERATOR. HARDEN F. TAYLOR, Bronx, N. Y., assignor to The Atlantic Coast Fisheries Company, New York, N. Y., a Corporation of Maine. Filed July 27, 1928. Serial No. 295,714. 14 Claims. (Cl. 99—9.)



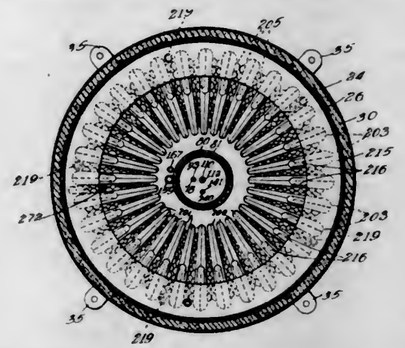
14. A smoke generator comprising a housing, a delivery tube mounted within said housing, a feed hopper mounted on said housing adapted to feed fuel into said delivery tube, means mounted adjacent the exit end of said delivery tube to distribute the fuel fed thereby, an electrical heating element, a rotatable table disposed beneath said heating element and adapted to receive the fuel from said distributing means and maintain it in contact with said heating element, and means to feed the fuel across said table during the rotation of the latter.

1,811,192. BRUSH. HENRY THEISS, Los Angeles, Calif. Filed Aug. 3, 1929. Serial No. 383,345. 8 Claims. (Cl. 15—129.)



1. A shaving brush of the character described including, a tubular body, there being openings in the wall of the body, a shell around the body and spaced from the body, a resilient tubular handle detachably connected to the body and shell, means for carrying an antiseptic agent in the body, a brush head in one end of the body, and means for discharging fluid at the brush head, there being a space between the body and shell at the brush head to discharge fluid at the brush head from the shell.

1,811,193. STEAM GENERATING APPARATUS. CLAYTON L. THORNE, Chicago, Ill. Filed Sept. 3, 1926. Serial No. 133,450. 3 Claims. (Cl. 122—221.)
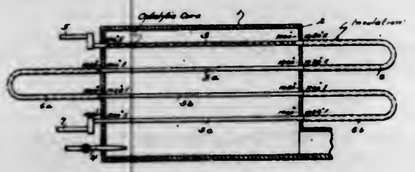


1. In a boiler, the combination of a plurality of wedge-shaped radially disposed hollow members, and a plurality of hollow bosses formed on opposite wall portions of said members, the outer faces of the bosses on one of said members engaging the faces of the bosses on adjacent members for spacing said members annularly within the boiler.

1,811,194. METHOD OF CONVERTING OILS IN VAPOR PHASE. CARY R. WAGNER, Chicago, Ill., assignor to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 21, 1928. Serial No. 300,998. 6 Claims. (Cl. 196—61.)

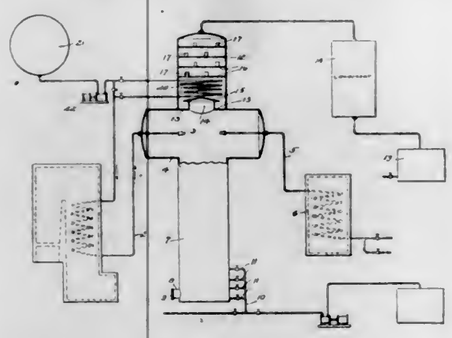
1. The process of cracking high boiling point hydrocarbons in the vapor phase which comprises vaporizing the

hydrocarbons, separating the vapors from the unvaporized hydrocarbons, heating the vapors in a stream to a cracking temperature, passing the vapors thru a zone wherein sub-



stantially only endothermic cooling occurs, again heating the vapors to a cracking temperature, and condensing and collecting the products.

1,811,195. METHOD OF TREATING PETROLEUM OIL. CORNELIUS B. WATSON, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed Feb. 9, 1927. Serial No. 167,052. 1 Claim. (Cl. 196—63.)



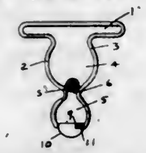
A process for cracking hydrocarbon oil to produce motor fuel which consists in vaporizing a flowing stream of high boiling point oil, and heating the oil vapors to a temperature of between 750° F. and 900° F. at a relatively low pressure and for an insufficient time to substantially crack them, then injecting the heated vapors at a high velocity into a reaction zone against a stream of superheated steam having a temperature of between 1000° F. and 1500° F. so that the temperature of the oil vapors is raised to a temperature at which they will decompose, withdrawing non-vaporous products from the reaction zone, withdrawing the vapor products overhead from the reaction zone and suddenly cooling them to a non-converting temperature directly after they leave the reaction zone, and then fractionating the cooled lighter vapors to obtain the desired motor fuel fraction.

1,811,196. AIRSHIP. GEORGE D. HAZARD, Chicago, Ill. Filed May 14, 1928. Serial No. 277,466. 4 Claims. (Cl. 244—6.)



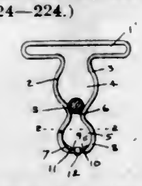
3. An airship comprising a gas enclosing body, wings of substantially equal surface area mounted on the top of said body at the front and rear thereof and provided with power units, a wing intermediate said front and rear wings and of relatively greater surface area, and a cabin mounted below said body.

1,811,197. BUTTON LOOP. GEORGE B. HEATHER, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Feb. 20, 1930. Serial No. 429,947. 1 Claim. (Cl. 24—224.)



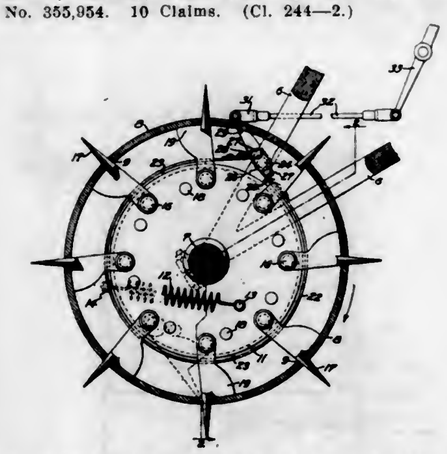
A button loop comprising spring arms cooperating to form associated loops in axial alignment and having an intermediate normally contracted throat, the ends of the arms overlapping and each carrying a fixed pin extending outwardly in a perpendicular direction to the plane of the loops; a clip member securing the overlapped ends against relative movement out of the plane of the loops; and slots provided by the clip member to receive the pins thereby limiting the movement of the overlapped ends in the plane of the loops.

1,811,198. BUTTON LOOP. GEORGE B. HEATHER, West Haven, Conn., assignor to The Wire Novelty Manufacturing Company, West Haven, Conn., a Corporation of Connecticut. Filed Feb. 20, 1930. Serial No. 429,948. 2 Claims. (Cl. 24—224.)



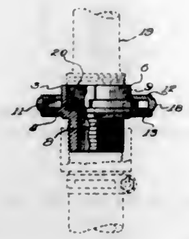
1. A reversible button loop comprising spring arms cooperating to form associated loops in axial alignment and having an intermediate contracted throat, the ends of the arms overlapping and each being provided with an intermediate reduced section relatively normally registering, and a band of less width than the length of the reduced sections and securing the overlapped ends in limited relative movement in the plane of the loops and against movement out of said plane.

1,811,199. AIRPLANE LANDING BRAKE. SAMUEL C. IRVING, Berkeley, Calif. Filed Apr. 17, 1929. Serial No. 355,954. 10 Claims. (Cl. 244—2.)
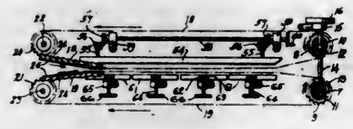


9. In an airplane landing gear, a wheel, a brake controlled drum movably mounted on said wheel, and grousers movably mounted on said wheel and operatively connected to said drum.

1,811,200. SPLIT SCREW COUPLING. FREDERICK C. KAINER, Park Ridge, Ill. Filed Nov. 2, 1928. Serial No. 316,675. 2 Claims. (Cl. 285—150.)



1. A split screw coupling comprising a supporting structure having an internally threaded arcuate flange sector projecting from one surface thereof, the outer surface of said flange sector being concentric with said support, an internally threaded member pivotally mounted upon said support and formed to provide a continuation of said flange, shoulder on the outer surface of said member, the outer edge of said shoulder being eccentrically curved with reference to the curvature of said member, a ring surrounding said flange and member, the inner surface of said ring having one portion formed according to the eccentricity of the shoulder on said pivot member, and the remaining portion of said surface having the same curvature as the outer surface of said flange.

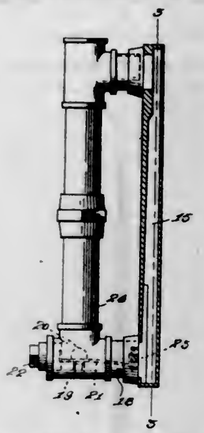
1,811,201. BOOK-COVERING MACHINE. PAUL E. KLEINEBERG, Brewster, N. Y., assignor to American Assembling Machine Company, New York, N. Y., a Corporation of Delaware. Filed May 6, 1926. Serial No. 107,054. 9 Claims. (Cl. 198—165.)



1. A book conveyor comprising two coacting endless conveyors travelling in a horizontal plane each having a series of abutting face plates squared and arranged to provide direct-contacting, continuous bands disposed in vertical parallelism to engage opposite sides of the books held vertically therebetween, and a series of flat cam-plates over which said conveyors travel continuously throughout their book-engaging runs, said plates being disposed in parallel extended relation and also separately adjustable in spaced relationship with one another.

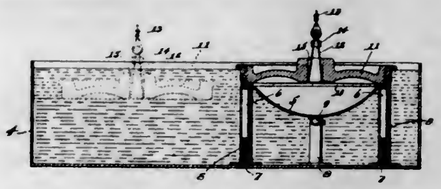
1,811,202. DRAIN DEVICE. THOMAS GORDON LADSHAW, Spartanburg, S. C. Filed Dec. 6, 1928. Serial No. 324,302. 7 Claims. (Cl. 137—34.2.)

1. In combination with a water pipe, a relatively thin casing forming a section of said water pipe and providing a water chamber having a larger heat transmitting surface than the heat transmitting surface of the water pipe, the thinness of the casing and of the corresponding water column combined with the large heat transmitting surface serving to greatly decrease the time of freezing the



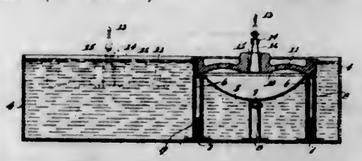
water within said chamber from that in the water pipe, and means controlled by the freezing action of water to drain the pipe on the outlet side of the casing.

1,811,203. METHOD FOR TREATING CAR WHEELS. ELMYR A. LAUGHLIN, Oregon, Ill., assignor of one-half to himself and one-half to Joshua R. H. Potts, Chicago, Ill.; Bessie D. Laughlin administratrix of said Elmyr A. Laughlin, deceased. Filed Aug. 26, 1926. Serial No. 131,585. 2 Claims. (Cl. 148—21.)



1. The method of treating car wheels which consists in first heating the same to a temperature above the upper critical range thereof; then substantially uniformly and simultaneously quenching the entire exterior surfaces of the wheels for a period of time varying from ten to thirty seconds; then discontinuing the quenching a sufficient length of time to permit said surfaces to reheat by conduction from the interior of the wheel and until the entire wheel reaches a temperature of from 1200° to 1500° F.; and then quenching the tread surfaces only of said wheel, substantially as described.

1,811,204. APPARATUS FOR TREATING CAR WHEELS. ELMYR A. LAUGHLIN, Rockvale, Ill., assignor of one-half to himself and one-half to Joshua R. H. Potts, Chicago, Ill.; Bessie D. Laughlin administratrix of said Elmyr A. Laughlin, deceased. Original application filed Aug. 26, 1926, Serial No. 131,585. Divided and this application filed Oct. 17, 1930. Serial No. 489,352. 8 Claims. (Cl. 266—6.)



1. Apparatus for treating car wheels comprising a tank, and a depressible spring-held rest in said tank adapted

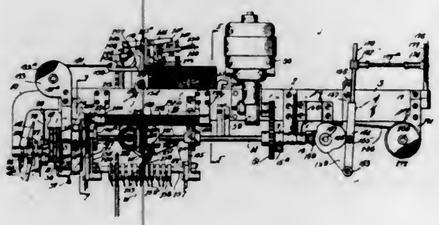
and arranged to be depressed by the weight of the wheel thereon to expose the tread surfaces only of said wheel to fluid in said tank, substantially as described.

1,811,205. PIPE CLEANER. WILLIAM R. LEE, Rochester, N. Y. Filed Feb. 28, 1930. Serial No. 432,202. 3 Claims. (Cl. 131—13.)



1. A pipe cleaner comprising a stem formed of ductile material, and fibres extending radially from the stem throughout the length of the latter, the fibres gradually increasing in length from one end of the stem to the other.

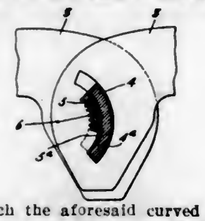
1,811,206. TEXTILE APPARATUS. SEBASTIANO MAGNANO, Lawrence, Mass., assignor to Magnano Corporation, Lawrence, Mass., a Corporation of Massachusetts. Filed Aug. 28, 1929. Serial No. 388,972. 16 Claims. (Cl. 28—41.)



1. A machine for associating detached loom elements with warp yarns comprising a magazine and means for moving the magazine relatively to the warp yarns including resilient means tending to move the magazine in one direction and power driven means for moving it in the opposite direction.

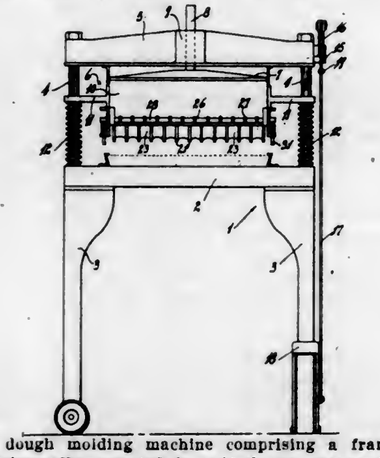
1,811,207. DRIVE CHAIN. FRANK L. MORSE, Ithaca, N. Y., assingor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Dec. 16, 1927. Serial No. 240,378. 8 Claims. (Cl. 74—32.)

1. A drive chain comprising in combination, a series of links composed of plates having heads, a joint for pairs of said links comprising two pintle parts having complementary curved bearing surfaces, one part being non-rotative in the head of one link and the other part being non-rotative in the head of the adjacent link, the



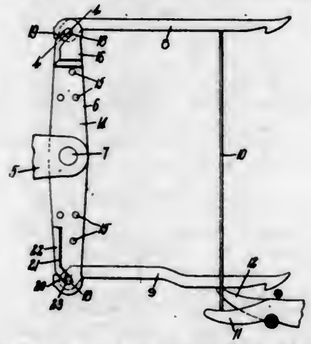
center from which the aforesaid curved bearing surfaces are struck being located at a point offset from the center of the head.

1,811,208. DOUGH MOLDING MACHINE. OSCAR NEUBERT, Jr., Long Beach, Calif. Filed Nov. 2, 1929. Serial No. 404,296. 7 Claims. (Cl. 107—21.)



1. A dough molding machine comprising a frame, a head reciprocally mounted in said frame, means to reciprocate said head, a knife plate in the head, a plurality of knives depending from said plate, said knives being spaced apart, molding blocks between adjacent pairs of knives, said blocks being slidably mounted between the knives and means securing all of said blocks together whereby they are simultaneously actuated, said knife plate being slidably mounted in the head and yieldable means bearing against the plate whereby said plate is normally urged downwardly.

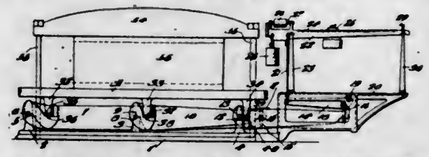
1,811,209. DOBBY LEVER. ROBERT C. NEWTON, Needham, Mass., assignor to H. F. Livermore Co., Allston, Mass., a Corporation of Massachusetts. Filed July 3, 1930. Serial No. 465,495. 5 Claims. (Cl. 139—74.)



1. A dobby lever embodying therein bifurcated end bearing portions, the furcations thereof being provided with

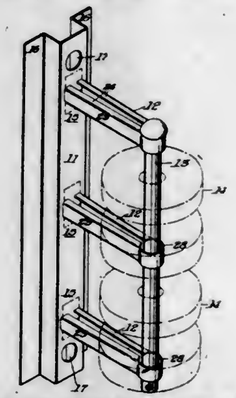
slots therein to receive the pivot members of a dobby hook, said slots being open at an end thereof, and flexible means adapted to hold said pivot members in said slots.

1,811,210. LEVER FOR TESTING MACHINE WEIGHING SYSTEMS. TINIUS OLSEN, Philadelphia, Pa., assignor to Tinius Olsen Testing Machine Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1926. Serial No. 149,578. 3 Claims. (Cl. 265—16.)



1. In a testing machine weighting mechanism having the conventional four-corner platform supports formed by a main lever and forward end levers fulcrumed on opposite sides of the main lever, intermediate levers between the end levers and the main lever, and fulcrumed on opposite sides of the main lever, and connected therewith at their forward ends, all of said levers having their effective power applied at the same point.

1,811,211. INSULATOR RACK. CHARLES L. PEIRCE, Jr., Pittsburgh, Pa., assignor to Hubbard & Company, a Corporation of Pennsylvania. Filed Jan. 26, 1929. Serial No. 335,293. 5 Claims. (Cl. 173—321.)



4. An insulator rack comprising a base member having a plurality of spaced rectangular openings therein, and recesses on the sides of said openings, tong-shaped insulator pin supports, T-shaped projections on the ends of said pin supports adapted to be received in said recesses and to cooperate and engage with said base member on each side of said recesses, and means for securing said T-shaped projections in their respective positions.

5. An insulator pin support of general tong-like appearance, having inwardly extending flanges on the leg portions of said pin supports, T-shaped projections on the ends of said legs at right angles to said flanges and a pin aperture formed at the fulcrum of said legs.

1,811,212. WALL BOARD. HARRY C. RAYNES, Portsmouth, N. H., assignor, by mesne assignments, to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Filed Sept. 10, 1926. Serial No. 134,663. 3 Claims. (Cl. 72—124.)



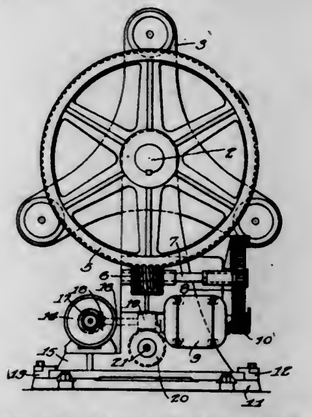
1. A fibre board composed of two substantially integral layers, one of said layers being of fine fibres having its outer surface calendered, whereby it is adapted to receive paint and varnish without the necessity of excessive sizing, and the other layer being of comparatively coarse fibres having its outer surface roughened and having open interstices between its fibres, whereby it is adapted to receive and retain plaster.

1,811,213. FURNACE HEATED BY HIGH FREQUENCY COILS. WILHELM ROHN, Hanau-on-the-Main, Germany. Filed Jan. 7, 1930, Serial No. 419,151, and in Germany Aug. 8, 1927. 8 Claims. (Cl. 13—26.)



1. A strengthened coil for a furnace heated by high frequency electric currents in which bars of electrically insulating material capable of withstanding the temperatures which arise are fixed to the coil by means of a nut-and-bolt connection, one element of the nut-and-bolt connection being externally soldered on to the various turns of the coil, and the bolts being passed through holes in the bars.

1,811,214. APPARATUS FOR SUPPLYING PAPER TO PRINTING PRESSES. JAMES E. RUST, Chicago, Ill., assignor to Gustavus A. E. Kohler, Chicago, Ill. Filed Sept. 26, 1925. Serial No. 58,768. 7 Claims. (Cl. 242—64.)

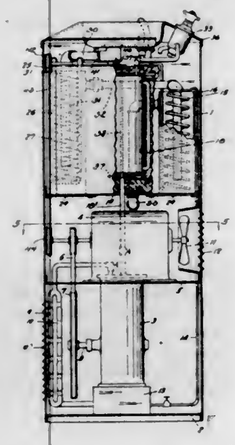


1. An apparatus for supplying paper to printing presses comprising a rotatable, roll carrying device for carrying a plurality of rolls of paper, a pedestal at one end thereof upon which said roll carrying device is rotatably mounted, a motor supported upon said pedestal and an operative connection between said motor and said roll carrying device, said motor being located within the vertical planes extending through the edges of the support whereby the apparatus may be used either as a right or left hand apparatus.

1,811,215. LIQUID REFRIGERATING AND DISPENSING APPARATUS. ADEN E. SMITH, Columbus, Ohio, assignor to The D. A. Ebinger Sanitary Mfg. Co., Columbus, Ohio, a Corporation of Ohio. Filed Jan. 25, 1929. Serial No. 335,055. 1 Claim. (Cl. 62—141.)

In a liquid refrigerating and dispensing apparatus, a casing formed to include a plurality of superimposed

compartments, louvers formed in one wall of the lower of said compartments and in the opposite wall of the intermediate compartment, a compressor unit in said lower compartment, a tank situated in said upper compartment, an expansion unit in said tank, a connection between said expansion unit and said compressor, means for circulating a liquid to be cooled through said tank, means situated at the top of said casing for dispensing said cooled liquid,



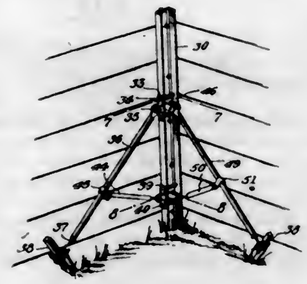
a motor unit in said middle compartment, said motor being positioned with its drive shaft at right angles to said louvers, a fan on one end of said drive shaft and adjacent said louvers for causing air to circulate through said lower and intermediate compartments, means carried by the opposite end of said shaft for driving said compressor, and an inwardly extending flange secured to the wall of said intermediate compartment for surrounding said louvers and said fan.

1,811,216. FENCE WIRE CONNECTION. CHARLES A. SPAUGH, Durham, Okla. Filed Jan. 27, 1930. Serial No. 423,835. 1 Claim. (Cl. 256—52.)



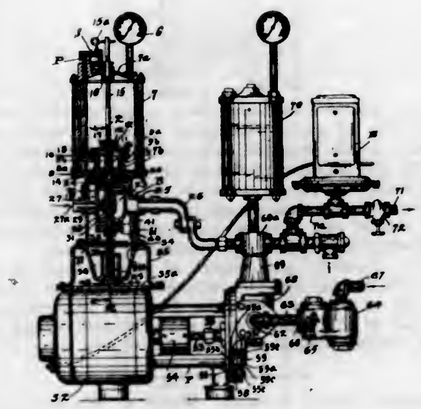
A device of the character set forth including a grooved post having openings in the inner wall of the groove, an elongated bar of substantially U-shape in cross section seated in the groove of the post to force fence wires against the walls of the groove, heads of substantially U-shape in cross section positioned in the bar, fasteners extending through the heads and side portions of the bar to prevent displacement of the heads in the bar, bolts formed on the heads and extending through the openings, and fasteners on said bolts and engaging the post.

1,811,217. FENCE POST BRACE. CHARLES A. SPAUGH, Durham, Okla. Filed Jan. 27, 1930. Serial No. 423,837. 2 Claims. (Cl. 189—31.4.)



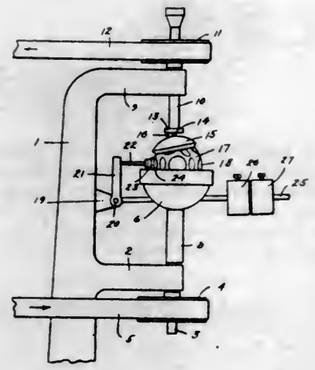
1. The combination with a fence post of U-shape formation in cross section, of a bracket arranged on one side of the post, an additional bracket arranged between the spaced parallel side members of the post, bolts common to both of said brackets for attaching the latter to the post, spaced apertured lugs projecting from each bracket, brace rods having their corresponding upper extremities connected with said lugs, anchors adapted to be driven into the ground, and a longitudinally adjustable element forming part of each brace rod and terminally connected with the adjacent anchor.

1,811,218. CARBONATING APPARATUS. LESLIE STINSON, Grand Forks, N. Dak. Filed July 31, 1930. Serial No. 471,951. 5 Claims. (Cl. 261—27.)



1. In apparatus for impregnating liquid with gas, a tank, a discharge connection therefor, liquid and gas supply connections thereto, means responsive to the differences in the pressures of the tank and the liquid supply connection for controlling the supply of gas to the tank, a source of liquid supply under pressure, a pump interposed between said source and said liquid supply connection, said pump permitting the passage of liquid to said tank when inoperative and means for operating said pump when the pressure of said liquid supply falls below a predetermined point.

1,811,219. LENS GRINDING AND POLISHING MACHINE. IGNATZ G. VETTER, Buffalo, N. Y. Filed June 25, 1927. Serial No. 201,354. 3 Claims. (Cl. 51—118.)



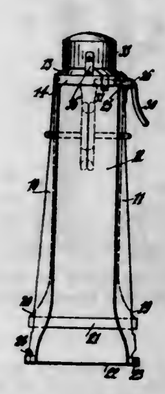
3. In a device of the class described, a frame and tool support mounted therein so as to be capable of a rotary movement, a lens grinding tool fixed on said support, adapted to hold a spherical blocker for grinding, an auxiliary grinding tool mounted above said blocker for operation in opposition thereto, a support rockingly mounted in proximity to said first-named tool, a pressure device carried thereby, and means for holding said last-named support with said pressure device yieldably in position to exert pressure against a blocker held in said tools.

1,811,220. HOLDER FOR COLLAPSIBLE TUBES. FRANK WOLF, New York, N. Y. Filed Jan. 18, 1928. Serial No. 247,501. 12 Claims. (Cl. 248—41.)



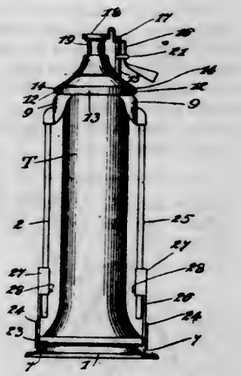
1. In a holder for collapsible tubes, a stand having upright members movable toward and away from each other, said upright members being adapted to engage the laterally projecting end portions of the tube base, means at the upper end of the stand for clamping a relatively narrow portion of the tube adjacent its outlet end, and means slidable on said upright members for locking the same in clamping position with reference to the tube.

1,811,221. HOLDER FOR COLLAPSIBLE TUBES. FRANK WOLF, New York, N. Y. Filed Jan. 18, 1928. Serial No. 247,502. 11 Claims. (Cl. 248—41.)



1. In a holder for collapsible tubes, a stand having spaced leg members adapted to straddle a tube, a head member on the upper ends of said leg members, said head member being centrally apertured for the reception of the neck of the tube, and tube clamping means pivoted on said head member.

1,811,222. STAND OR HOLDER FOR CONTAINERS. FRANK WOLF, New York, N. Y. Filed Dec. 24, 1928. Serial No. 328,104. 10 Claims. (Cl. 248—41.)

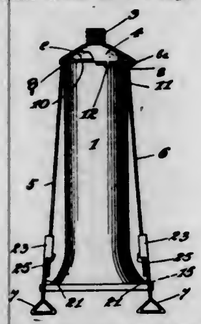


1. A stand for a collapsible tube having a body and a rigid top with a peripheral bead-flange, the stand comprising a base, legs supported at their lower ends to the base, the legs being shaped at their upper ends to engage the flanged top of the tube, and means at the upper ends of the legs to hold the legs in engaging position.

1,811,223. HOLDER FOR CONTAINERS OR STORAGE VESSELS. FRANK WOLF, New York, N. Y. Filed Dec. 24, 1928. Serial No. 328,106. 8 Claims. (Cl. 248—41.)

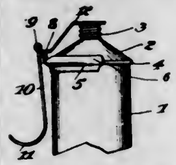
7. A holder stand for a collapsible tube with a soft body and a rigid top having a bead-flange at its periphery, the stand comprising legs, a cover member for said top, the legs being attached to said member, one leg being hinged

thereto for movement relatively to the other leg, and projections on the inner sides of the legs, said projections



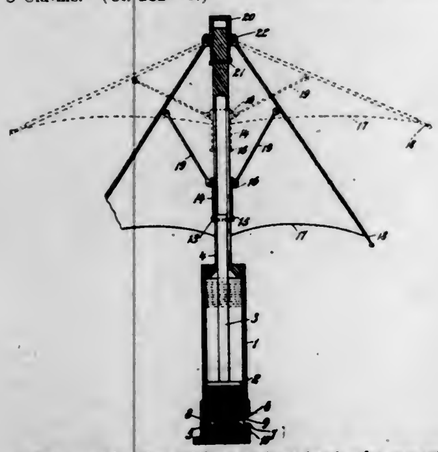
being adapted on the movement of the hinged leg toward the other leg, to indent and press into said tube just below said flange.

1,811,224. ACCESSORY DEVICE FOR COLLAPSIBLE TUBES. FRANK WOLF, New York, N. Y. Original application filed Jan. 18, 1928, Serial No. 247,499. Divided and this application filed Dec. 24, 1928. Serial No. 328,107. 4 Claims. (Cl. 221—60.)



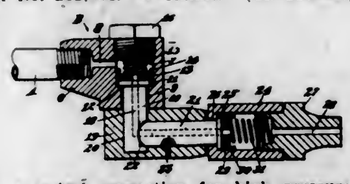
1. A device for attachment to a collapsible tube having a body and a top with a relatively stiff bead-flange around its lower edge outstanding from the body, said device comprising a semi-circular clamp formed of resilient metal the arms of which tend to have a closing spring action for gripping the bead-flange, said arms being grooved for receiving the bead-flange therein and in cross section being formed of angularly related portions rigid with respect to each other, which define the groove, said portions being adapted to contact the opposite sides of the bead-flange and retain the latter between them, whereby firmly to support the tube by said clamp.

1,811,225. SAVINGS BANK. ALFONSO F. ZERBEE, New York, N. Y. Filed July 31, 1929. Serial No. 382,449. 8 Claims. (Cl. 232—4.)



1. The combination with a savings bank of a receptacle comprising a hollow chamber, a piston within said chamber and means comprising an umbrella adapted to be operated by said piston to indicate the contents of said chamber.

1,811,226. HIGH PRESSURE HOSE. CHARLES G. BANKS, Glendale, Calif., assignor of one-half to Chas. M. O'Leary, jr., Los Angeles, Calif. Filed Nov. 11, 1927. Serial No. 232,653. 3 Claims. (Cl. 285—9.)



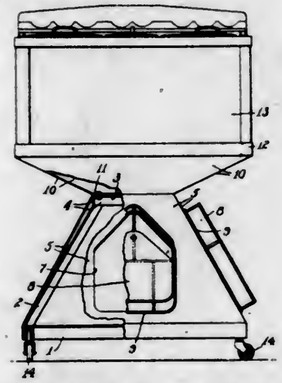
1. In a swivel connection for high pressure hose, a block, a pair of tubular pins extending into said block at right angles to each other, the inner end of one of said pins being counter-sunk into the side of the other pin with the bores of said pins communicating, and swivel connections on the outer ends of said pins.

1,811,227. KEY AND ACTUATOR LOCK FOR WRITING-ADDING MACHINES. HARRY ARTHUR FOOTHORAP, Harrisburg, Pa., assignor to Elliott-Fisher Company, a Corporation of Delaware. Filed Dec. 31, 1920. Serial No. 434,252. 15 Claims. (Cl. 235—130.)



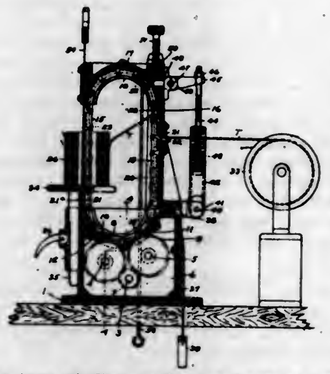
1. In a machine of the class described, the combination with a traveling series of adding keys, and an adding mechanism including a series of number wheels and a master wheel, a key locking mechanism, and means movable with the master wheel to cause the key locking mechanism to lock the keys when the master wheel advances beyond the number wheels.

1,811,228. STAND FOR BOTTLE DISPENSING REFRIGERATORS. CHESTER A. FRICK, Muncie, Ind., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind., a Corporation of Indiana. Filed May 5, 1930, Serial No. 449,711. Renewed May 7, 1931. 3 Claims. (Cl. 248—41.)



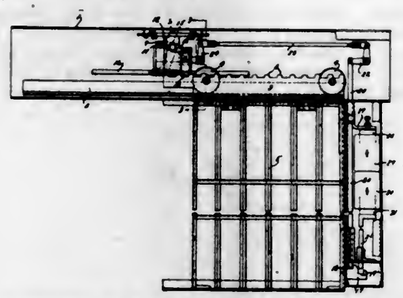
1. A supporting stand for bottle cooling receptacles comprising a pyramidal base having a rectangular base frame, four upwardly extending inwardly converging corner posts, means for connecting said corner posts together at their tops, panel plates secured to said corner posts and an inverted pyramidal support mounted on the tops of said corner posts.

1,811,229. TAPE WINDING MACHINE. GUSTAV W. FRIES, FRANK W. FINKHOUSEN, and LINUS J. JOHNSON, Fort Wayne, Ind. Filed Nov. 15, 1928. Serial No. 319,709. 2 Claims. (Cl. 242—6.)



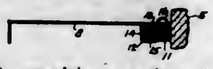
1. In a tape winding machine, a frame, a track formed on the frame, an endless carrier slidable on the track, a head slidably mounted on the frame and having a track slidably supporting the carrier, resilient means opposing the movement of the head to maintain tension on the carrier, means to move the head to release the said tension, means to drive the carrier, means to support the object to be taped in the path of the carrier and a spool of tape, the free end of the tape being extended through the carrier for attachment to the object.

1,811,230. JAIL DOOR MECHANISM. HARRY D. GARBER, Cuyahoga Falls, Ohio, assignor to The Van Dorn Iron Works Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 9, 1930. Serial No. 450,992. 6 Claims. (Cl. 189—7.)



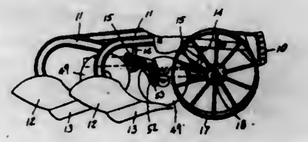
3. In combination with a plurality of sliding jail doors, gang means including a pair of latch bolts for each door for securing said doors against opening, said gang means being adapted to deadlock one of the latch bolts of each door, and lock controlled means for individually releasing the doors each from its other latch bolt.

1,811,231. WARM AIR REGISTER SEAL. GEORGE F. GEHRI, Tacoma, Wash. Filed Apr. 23, 1929. Serial No. 357,578. 1 Claim. (Cl. 98—114.)



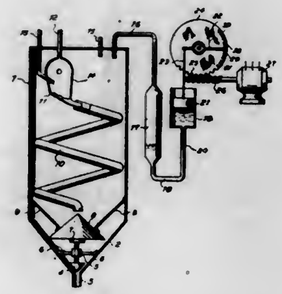
A register seal comprising a register frame; a holding strip bent in cross-section to form a holding groove adapted to lie inside of and in contact with the edge of the register frame and a bead adapted to lie outside of the edge of the register frame, said strip fitting over the edge of the register frame; and a continuous flexible sealing body held in said groove in the holding strip and extending therefrom into tight contact with the wall.

1,811,232. MULTIPLE TRASHER. DAYTON H. GILSON, Rushville, Ind. Filed Oct. 17, 1930. Serial No. 489,357. 11 Claims. (Cl. 97—209.)



1. In a multiple share plow, the combination of a plurality of spaced plow shares, a similar number of jointer stems ahead of the same, a trashing disc positionable ahead of each share, a bar connecting each disc to its stem, and an independent bracing connection interposed between each pair of adjacent discs for uniting the disc supports.

1,811,233. AUTOMATIC ANALYZING AND CONTROL SYSTEM AND APPARATUS THEREFOR. ARCHIBALD C. HARRISON, Birmingham, Ala., assignor to The Brown Instrument Company, Philadelphia, Pa. Filed July 7, 1924. Serial No. 724,630. 19 Claims. (Cl. 23—230.)

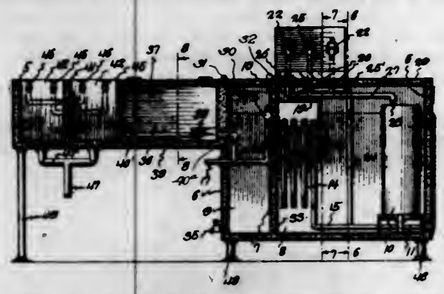


18. The method of controlling a process of treating materials which comprises the step of chemically analyzing a portion of materials entering into the process, and controlling the process by the variations in a physical characteristic of one of the products of the chemical analysis.

1,811,234. APPARATUS FOR REFRIGERATING AND DISPENSING BEVERAGES. FRANK R. HICKS, Jr., and FRANK A. MAYES, Shreveport, La. Filed Jan. 17, 1928. Serial No. 247,342. 4 Claims. (Cl. 225—28.)

1. In dispensing apparatus of the class described, a dispensing faucet, a liquid reservoir, a cooling unit, a refrigerating unit associated with the cooling unit, a coil communicating at one end with the dispensing faucet and disposed in juxtaposition to the cooling unit, a compartment in which the said reservoir, the cooling unit, and the coil are arranged, a compartment separated from and in communication with the first mentioned compartment, a wall dividing the said compartment, the wall having circulating passageways therein to provide for the circulation

of water between the compartments, a storage compartment displaced with respect to the last mentioned com-



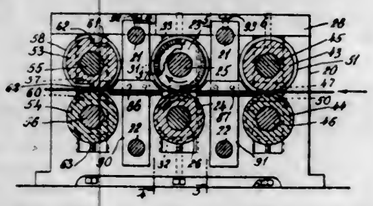
partment, and a cooling unit in the said storage compartment in communication with the pipes of the first mentioned cooling unit.

1,811,235. WELL SCREEN. WALTER E. KING, Houston, Tex. Filed Jan. 15, 1926. Serial No. 81,448. 4 Claims. (Cl. 166—6.)



4. In combination with a screen pipe having uniform diameter openings therein, a strainer button for each of said openings, said button having peripheral projections thereon of greater diameter than that of said openings, whereby said projections may deform the faces of said openings when said buttons are driven in place.

1,811,236. SAW FORMING DEVICE. CHARLES C. KNAPP, Jersey City, N. J., assignor of one-half to Roswell B. Smith, Brooklyn, N. Y. Filed Apr. 11, 1928. Serial No. 269,141. 7 Claims. (Cl. 76—25.)



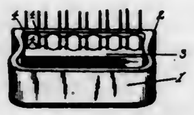
1. A saw forming device comprising means for slitting a strip of saw stock longitudinally to provide two strips each having spaced groups of saw teeth, means for setting said teeth, means for guiding said strips to said tooth-setting means and for holding said strips in engagement with each other, and means for cutting said strips transversely.

1,811,237. COLLAPSIBLE WINDING SHAFT. FRANK E. LANGDON, Vancouver, Wash. Filed Feb. 10, 1930. Serial No. 427,141. 3 Claims. (Cl. 242—72.)



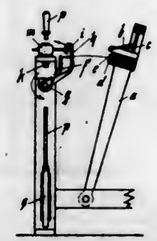
1. A collapsible winding shaft having in combination a tubular core, a plurality of arcuate jaws surrounding said core and slidably mounted thereon, wedge means between said jaws and core for moving said jaws radially as they slide longitudinally, spring means for urging said jaws to an expanded position, a slidable collar attached to all of said jaws having means for exerting a leverage between same and said tubular core, said slidable collar being normally non-rotatable with relation to said core, the fastening between said collar and jaws consisting of a rivet and keyhole connection whereby a rotary movement of said collar will permit a separation of said jaws and tubular core, and removable pin means for permitting the rotation of said collar with relation to said tubular core.

1,811,238. BALL RECEIVER. FRANK LANZA, Philadelphia, Pa. Filed Mar. 31, 1928. Serial No. 266,345. 1 Claim. (Cl. 273—11.)



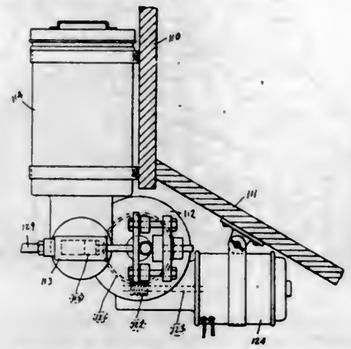
The combination with a pool table having ball return chutes formed of multiple spaced ductile wires of a ball receiver having in one wall a plurality of openings to receive the ends of said chutes, the wall of each opening having spaced recesses to receive the individual ductile wires, and all of said openings communicating transversely whereby lateral clearance is provided to facilitate placing of the wires without undue bending.

1,811,239. DEVICE FOR STOPPING ELECTRICALLY DRIVEN LOOMS BY THE WEFT-GUARD. KARL LENZKES, Gladbach-Neuwerk, Germany. Filed Feb. 8, 1929, Serial No. 338,479, and in Germany Apr. 17, 1928. 1 Claim. (Cl. 139—375.)



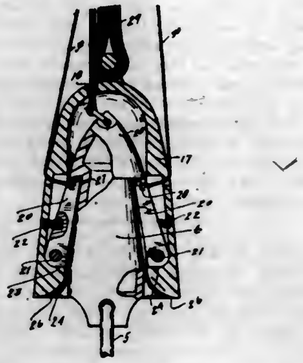
A mechanism for stopping an electrically driven loom by the weft guard, comprising in combination, with an electromotor adapted to be switched for forward and backward running, a three-pole reversing switch, a switch lever, a disengaging rod hingedly connected to said switch lever, a disengaging lever to which said disengaging rod is hingedly connected, a locking lever, a strong blade spring acting on said disengaging lever from the one side, a less strong pressure spring acting on said disengaging lever from the other side, and a projection on said locking lever adapted to lock said disengaging lever in intermediate position in which the circuit to the electromotor is interrupted.

1,811,240. PRESSURE LUBRICATING SYSTEM. JOHN B. MCFERRAN, Jr., Louisville, Ky., assignor to Louisville Electric Manufacturing Company, Louisville, Ky., a Corporation. Filed Sept. 15, 1928. Serial No. 306,274. 4 Claims. (Cl. 184—7.)



1. The combination with a vehicle, of a power lubricator mounted thereon, said lubricator including a lubricant containing receptacle, a plurality of tubes connecting said receptacle with the individual parts of the vehicle to be lubricated, a valve mounted between said receptacle and tubes, power driven means for forcing lubricant from said chamber through said valve under pressure when said valve is in open position, and a handle for selectively positioning said valve for permitting the lubricant to be forced therethrough into one of said tubes while preventing lubricant from passing through the other tubes, and means controlled by the position of said valve for actuating said power driven means when said valve is in open position with respect to said selected tube.

1,811,241. AUTOMATIC LOCATOR AND RECOVERY FOR SUNKEN VESSELS. WILLIAM O. MOREY, Portland, Oreg. Filed Mar. 18, 1929. Serial No. 347,901. 1 Claim. (Cl. 114—16.8.)

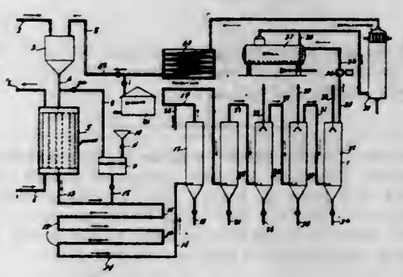


A ship raising device comprising, in combination, a conical shaped locking head, said locking head having a flange outwardly extending from the cone-shaped head, a bail secured to the top of the locking head, said bail having a buoy line secured thereto, and a conical shaped hollow lifting head, a lifting line secured to the top thereof, an opening disposed through the top of the lifting head, a plurality of openings disposed through the side of the lifting head, a plurality of hinged locking latches disposed within the lifting head and adapted to intimately engage the flanged conical shaped locking head, said locking latches being in alignment with the openings through the side wall, and trip lines disposed through the said side openings and secured to the locking latches adapted for placing the locking latches out of engagement with the locking head.

1,811,242. HEAT CONDUCTING HIGH TEMPERATURE RESISTANT REFRACTORY. JOHN D. MORGAN, Maplewood, N. J., and WILLIAM G. BJORKSTEDT, Jamaica, and RUSSELL E. LOWE, New York, N. Y., assignors to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed June 11, 1928. Serial No. 284,668. 5 Claims. (Cl. 106—9.)

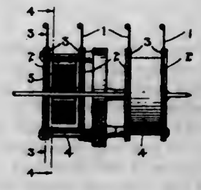
1. A composition of matter comprising substantially equal parts of zircon and silicon bonded by reaction products of phosphoric acid therewith and having a coefficient of heat transmission equal to bonded carborundum at temperatures above 2000° F., and capable of commercial use at 2600° F.

1,811,243. PROCESS OF REFINING HYDROCARBON OILS WITH METALLIC HALIDE. JAMES HAROLD OSMER, El Segundo, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Feb. 25, 1927. Serial No. 171,045. 6 Claims. (Cl. 196—44.)



1. A process of refining a heavy hydrocarbon oil which comprises forming a mixture of said heavy oil and a lighter oil previously treated with a metallic halide, contacting said mixture with a metallic halide at a temperature insufficient to cause any substantial conversion to lower boiling oils, and separating purified heavy oils from the light oil.

1,811,244. THERMAL ELECTRIC METER. LOUIS A. PAINE, Toronto, Ontario, Canada, assignor, by mesne assignments, to The Lincoln Meter Company, Inc., Springfield, Ill. Filed May 6, 1929. Serial No. 360,692. 6 Claims. (Cl. 171—308.)

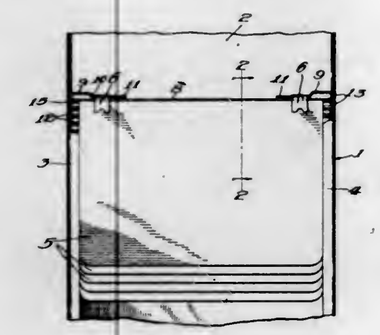


1. A thermal electric meter, comprising a chamber enclosed by heat insulating material, means thermally responsive to the flow of electric current enclosed within said chamber and affected only by the temperature therein, and means for registering only the thermal changes within said chamber, whereby power factor and temperature errors are reduced.

1,811,245. VISIBLE RECORD SYSTEM. FRANK D. POWELL, Chicago, Ill., assignor to Acme Card System Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 3, 1930. Serial No. 418,234. 9 Claims. (Cl. 129—16.)

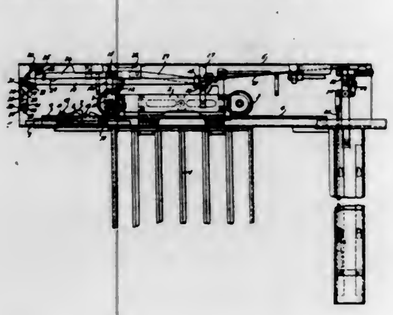
1. The combination with a frame having spaced guide flanges, of means for removably attaching a card to said

frame, comprising a member having return-bent ends forming spaced bearing portions for insertion beneath said



guide flanges and offset continuations of said return-bent portions in the same plane therewith adapted to detachably engage the card.

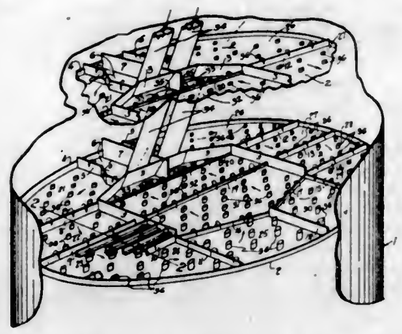
1,811,246. JAIL DOOR MECHANISM. ARTHUR E. SHANK, Cleveland Heights, GOTTFRIED FISLER, Cleveland, and JOHN M. LINDEN, East Cleveland, Ohio, assignors to The Van Dorn Iron Works Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 9, 1930. Serial No. 451,020. 2 Claims. (Cl. 189—7.)



1. In an apparatus of the class described and including a sliding door, means for moving the same between open and closed positions and including a gap nut movable between corresponding positions and operator-controlled means for associating the door with said gap nut to cause the door to follow the gap nut movements, a lock bar for securing the door in one of said positions when the door is released from said gap nut, and means adapted when the door is secured by said lock bar and the gap nut is in its corresponding position, to cause releasing movement of said lock bar upon movement of the gap nut from its said position.

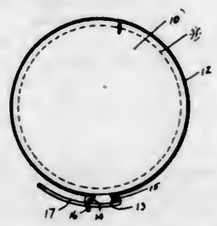
1,811,247. BUBBLE TRAY. AATHUR J. SMITH, Kansas City, Mo., assignor to Smith Engineering Company, a Corporation of Missouri. Filed May 22, 1930. Serial No. 454,701. 6 Claims. (Cl. 261—114.)

1. A device of the class described comprising a tray having a well thereon formed by partitions attached to said tray, a series of compartments formed by partitions attached to said tray extending from said well around one side of said tray and terminating in a central compartment and a second series of compartments extending from said well around the opposite side of said tray and terminating in said central compartment, said well and compartments being so constructed as to cause a liquid



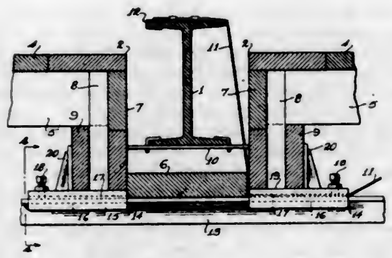
to flow progressively and uniformly from said well through said separate series of compartments into said central compartment.

1,811,248. PISTON RING CLAMP. ELMER A. SPENCER, St. Louis, Mo., assignor to Ramsey Accessories Manufacturing Corporation, St. Louis, Mo. Filed May 10, 1930. Serial No. 451,267. 3 Claims. (Cl. 29—86.4.)



1. The combination with a split piston ring compressing sleeve, of means for locking said sleeve in compressed position comprising an apertured member locked with said sleeve adjacent one free edge thereof while movable relative thereto, and a strap having substantially the curvature of said sleeve with one end secured adjacent the other free edge thereof and extending through the aperture in said member, said strap being adapted to freely slide through said member when in one position and interlock therewith through a wedging action when in another position.

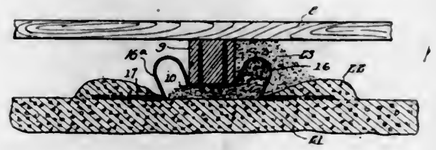
1,811,249. FORM CONSTRUCTION FOR CONCRETE FLOORS. CHARLES T. WHITESCARVER, New York, N. Y., assignor to Universal Form Clamp Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 20, 1929. Serial No. 356,800. 7 Claims. (Cl. 25—131.5.)



4. A device of the class described comprising a rail adapted to support a mold section, tie elements adapted

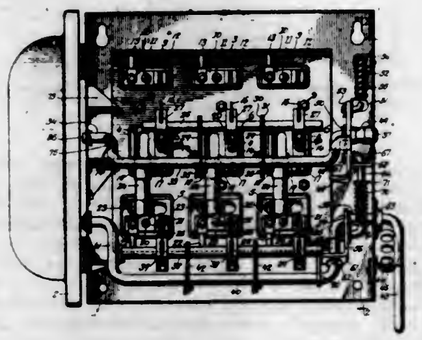
to support said rail, a pair of cleats mounted on said rail and adjustable longitudinally thereof, shelves on said cleats adapted to support other mold sections, said cleats having guideways extending therethrough for receiving the tie elements, and means on said cleats for clamping sail cleats to said tie elements and to said rail.

1,811,250. SOUND-REDUCING CONSTRUCTION. BRUNO E. BALDUF, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 15, 1929. Serial No. 340,121. 6 Claims. (Cl. 20—6.)



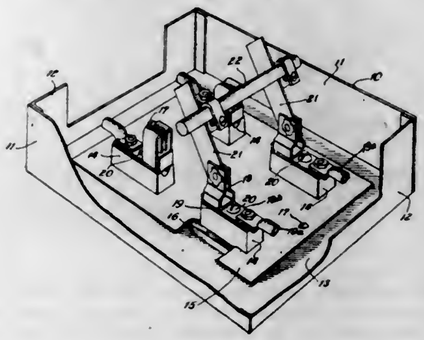
4. In a resilient impact absorber for adjacent structural parts, a spring metal clip having a central saddle for attachment to one structural part, a plurality of end portions in a different plane than that of said saddle for connection to another structural part, curved, resilient, integral loops connecting said saddle and end portions, said loops having legs extending toward said end portions at an acute angle thereto.

1,811,251. ELECTRICAL SWITCH. ALBERT P. BALL, Royal Oak, Mich., assignor to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed July 19, 1920. Serial No. 397,261. 26 Claims. (Cl. 200—3.)



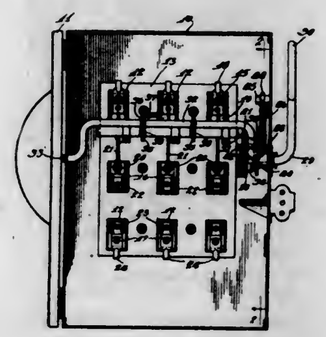
19. In a switch, a casing, main stationary contacts, a switch arm cooperating therewith, auxiliary stationary contacts, a fuse adapted to extend therebetween, an auxiliary switch arm adapted to shunt said fuse only, said arms being individually pivotally mounted in said casing, and means connecting said switch arms whereby they may be moved substantially together toward a closing position, but whereby said fuse shunting circuit is immediately snapped open after said main switch is closed by the independent movement of said arms.

1,811,252. UNIT BASE CONSTRUCTION. ALBERT P. BALL, Detroit, Mich., assignor to Square D Company, Detroit, Mich., a Corporation of Michigan. Original application filed July 19, 1920, Serial No. 397,261. Divided and this application filed Mar. 7, 1923. Serial No. 623,356. 23 Claims. (Cl. 175—369.)



1. In a switch, a support, terminal blocks, means adapted to fit over and substantially peripherally surround said blocks, and means to secure said last means to said support whereby said terminal blocks are firmly held in relation therewith.

1,811,253. ELECTRICAL SWITCH. ALBERT P. BALL, Detroit, Mich., assignor to Square D Company, Detroit, Mich., a Corporation of Michigan. Original application filed July 19, 1920, Serial No. 397,261. Divided and this application filed Dec. 22, 1928. Serial No. 327,939. 27 Claims. (Cl. 200—67.)

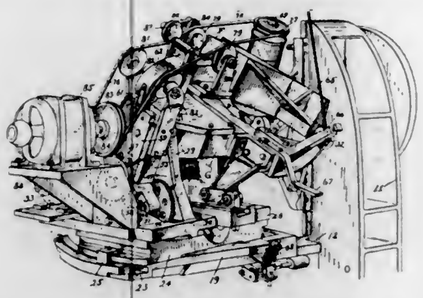


1. In a switch, stationary contacts, movable contacts, an arm carrying the latter, a member loosely associated with said arm, an operator having a finger thereupon, and lugs on said member adapted to engage said arm and to be engaged by said finger, said arm, said operator, and said member all being loosely journalled about one another, and all having independent motion.

1,811,254. METHOD AND APPARATUS FOR GENERATING CURVED SURFACES ON GEAR TEETH. GUY L. BAYLEY, Chicago, Ill., assignor to Bevel Gear Grinding Company, Detroit, Mich., a Corporation of Delaware. Filed Sept. 21, 1926. Serial No. 136,803. 16 Claims. (Cl. 51—52.)

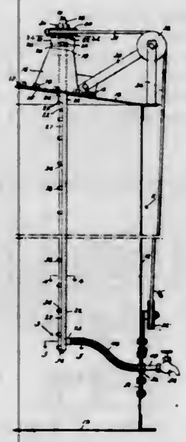
1. The herein described method of generating the curved faces of gear teeth with a cutting element provided with a cutting portion formed complementary to the face of a gear tooth and adapted to contact with the gear

tooth along a line extending transversely across the face thereof from substantially the top to the bottom of said tooth, which comprises engaging the cutting element with a gear blank, causing a relative movement between the



cutter and blank longitudinally of the tooth face, and simultaneously causing a relative movement about an axis intersecting the line of contact between the cutter and blank.

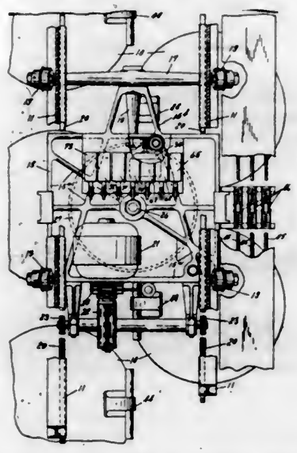
1,811,255. LIQUID SAMPLING DEVICE. CHARLES A. BERGGREN, Los Angeles, Calif., assignor to Morris B. Pendleton, San Gabriel, Calif. Filed July 16, 1928. Serial No. 293,211. 7 Claims. (Cl. 137—18.)



1. A liquid sampling device, for use in combination with a tank, which comprises: a bearing sleeve member suspended in said tank and having a segmental cylindrical inner surface; a sampling tube rotatably mounted in said bearing sleeve, one side of said tube being adapted to admit the passage of liquid into said tube; means for adjustably holding said sampling tube in sliding contact with said sleeve; means for rotating said sampling tube; and means for withdrawing liquid from said tube.

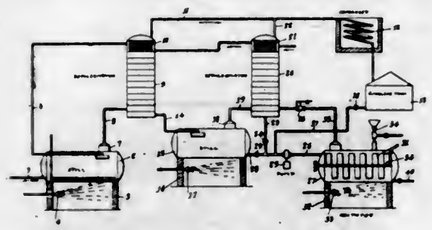
1,811,256. MOLD SERVING DEVICE. ROY W. BROWN, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 28, 1930. Serial No. 432,022. 20 Claims. (Cl. 18—2.)

1. In combination, a plurality of aligned molds arranged in two parallel rows, a pair of tracks above said rows of molds, a bridge, means adapted to give said bridge a three-point rolling suspension on said tracks, a carriage, axial means for pivotally supporting said carriage below said bridge, an arcuate crane arm pivotally carried at the axis of its arc on the lower end of said carriage, a rack on the arcuate surface of said arm, a pinion on said carriage adapted to engage with said rack, a motor to control said pinion and thus the position of the crane



arm, a vertically extending chuck pivotally mounted at the end of said crane arm and adapted to engage in openings in said molds, and interlocking means on said chuck and in the mold openings.

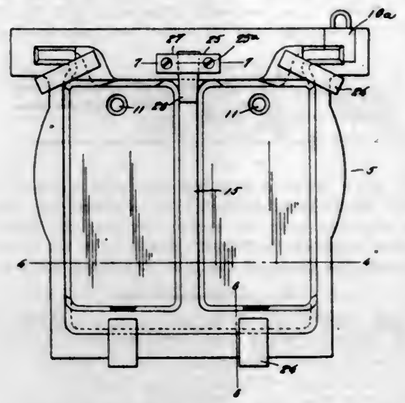
1,811,257. METHOD OF PRODUCING MOTOR FUEL OR GASOLINE FROM PETROLEUM OIL. MARVIN L. CHAPPELL, Los Angeles, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Jan. 22, 1927. Serial No. 162,705. 8 Claims. (Cl. 196—54).



1. A process of producing blended motor fuel comprising first distilling from crude petroleum oil the lower boiling point fractions including gasoline stocks boiling below 437° F. and higher boiling point oil, subjecting the vapors to reflux separation in which operation an overhead gasoline stock vapor is formed containing oils substantially all of which have boiling points below 437° F., while forming a reflux condensate of higher boiling point oils, re-distilling from said reflux condensate a gasoline stock having boiling points between 284° F. and 437° F., subjecting the remaining higher boiling point oil after the separation of such last mentioned vapors to reaction with metallic halide under suitable temperature and pressure to decompose the oil and form a gasoline stock having boiling points mainly below 284° F., and blending the three gasoline stocks thus produced.

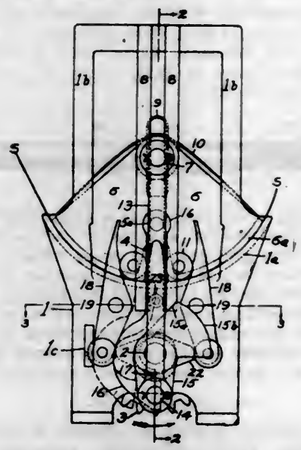
1,811,258. ADAPTER FOR MOLDS. HARRY A. CLARK, Warren, Ariz. Filed July 29, 1930. Serial No. 471,505. 5 Claims. (Cl. 22—136.)

1. An adapter for a copper anode mold comprising a T-shaped element having bevelled edges to conform to the walls of the mold, and irregularly shaped pieces similarly beveled to close the lug recesses of said mold, and



clamps adapted to clamp said adapter and irregularly shaped pieces in position in said mold and to divide said mold into a plurality of chambers.

1,811,259. METHOD AND APPARATUS FOR FORMING SHEET METAL. ARTHUR R. CURTIS, Cleveland, Ohio. Filed Dec. 28, 1923. Serial No. 683,206. 25 Claims. (Cl. 153—12.)

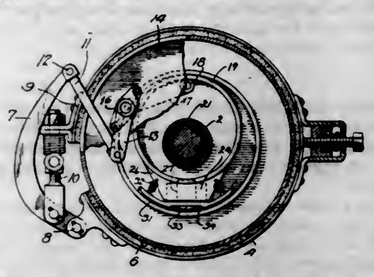


1. The method of forming perforated sheet metal articles which have portions with relatively sharp bends, which comprises perforating a sheet to provide perforated areas with relatively narrow unperforated strips lying between the perforated areas and subjecting the sheets to pressure between forming members engaging the sheets along the unperforated strips only.

17. Sheet metal forming apparatus comprising a rigid form having an intermediate upstanding rib and cylindrical face portions on opposite sides of the rib, and means co-operating with said rigid form to hold the sheet against the top of the rib and to bend the sheet over the rib and into conformity with the rib and cylindrical face portions of the rigid form.

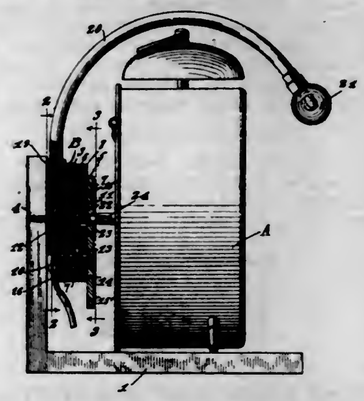
1,811,260. ELECTRIC BRAKE. DAVID R. CUSHMAN, Albany, Calif. Filed Dec. 8, 1926. Serial No. 153,291. 14 Claims. (Cl. 188—78.)

1. In combination, a revolvable element, a cam element mounted coaxially therewith, a radial plunger reciprocating in said cam and having a shoe thereon adapted for engagement with the revolvable element for impart-



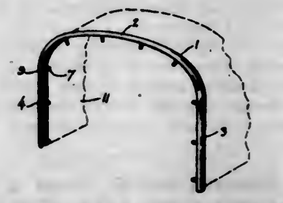
ing rotary motion to the cam, a brake mechanism operated by the cam and electro-magnetic means operating the plunger for rendering the cam active.

1,811,261. ALARM TIME SWITCH. ADRIAN M. DE JEU, Cleveland, Ohio. Filed Mar. 15, 1930. Serial No. 436,155. 1 Claim. (Cl. 200—36.)



Means for controlling a circuit by an alarm clock comprising a support having a circular recess therein, a pair of ring contacts carried by the support and insulated therefrom and from each other, each contact having its ends spaced apart, a circular member of non-conducting material rotatably arranged in the recess, a brush carried by the member for engaging the ring contacts, said circular member having a slot therein for receiving the winding key of the alarm mechanism of the clock, a cover plate connected with the circular member and having a slot therein through which a part of the key passes and a handle formed on the cover plate.

1,811,262. COWL MOLDING. ARTHUR J. DE SANA, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 5, 1928. Serial No. 290,360. 2 Claims. (Cl. 296—29.)



1. A molding comprising a strip of metal stock fashioned transversely into a bead formation, the edges of the stock extending inwardly of the bead, fastening means overlying said edges and projecting therefrom for securing the

molding to a support, and separate spring means for urging the fastening means into frictional engagement with the molding whereby such fastening means is automatically and frictionally held in position prior to the securing of the molding to the support.

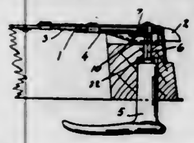
1,811,263. BAKING POWDER. AUGUSTUS H. FISKE, Providence, R. I., assignor to Rumford Chemical Works, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 2, 1928. Serial No. 258,694. 2 Claims. (Cl. 99—10.)

1. As a new culinary product, a baking powder comprising gas producing reactants and an activated starchy diluent also constituting a carrier for oxygen available in gluten improving quantities upon mixing in the batter.

1,811,264. PREPARED FLOUR. AUGUSTUS H. FISKE, Providence, R. I., assignor to Rumford Chemical Works, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 26, 1928. Serial No. 264,972. 1 Claim. (Cl. 99—10.)

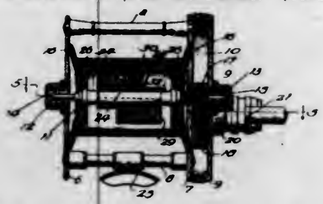
In a self rising flour, an acid and a basic reactant and a basic organic addition product of urea having its hydrogen peroxide combined in loosely connected crystalline relation, the acid reactant being in neutralizing amount to both basic factors involved, whereby the basic addition product releasing its hydrogen peroxide in nascent form accelerates the gluten improving rate during mixing.

1,811,265. COACH LOCK. JOHN B. FLYNN, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 4, 1929. Serial No. 330,241. 8 Claims. (Cl. 70—91.)



1. In a lock, a handle spindle consisting of a plurality of recessed parts adapted for relative longitudinal movement, and means cooperating with said relatively movable recessed parts to lock and unlock said handle.

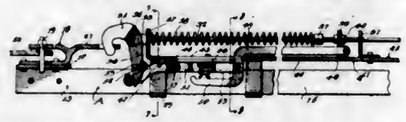
1,811,266. FISHING REEL. WILLIAM A. FOSS, Cleveland, Ohio, assignor to American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 10, 1923. Serial No. 679,544. 10 Claims. (Cl. 242—84.5.)



9. In a fishing reel, the combination of a frame adapted to be secured on a fishing rod, a spool rotatably mounted in the frame, the spool comprising a hollow cylindrical winding portion, means for operating the spool to wind a line on the cylindrical portion thereof, and a dynamically unbalanced weight disposed within the hollow portion of the spool and frictionally rotatable thereby.

1,811,267. TRACTOR HITCH. HARRY A. GEMBERLING and ASLE BJELLA, Epping, N. Dak. Filed July 26, 1929. Serial No. 381,362. 5 Claims. (Cl. 280—33.16.)

1. A tractor hitch comprising a pair of slidably connected sections, a clevis carried by one section for connection with a tractor, a clevis carried by the other section for connection with a farm implement, a pivoted draw bar head carried by the section having the clevis for the farm implement and normally engageable with the clevis of the other section, resilient means normally holding the



pivoted draw bar head in engagement with the clevis, said resilient means being adapted to be overcome when undue stress is placed upon the section carrying the clevis for the farm implement to permit the release of the draw bar head from the clevis of the first mentioned section.

1,811,268. METHOD OF PREPARING A LIQUOR FOR THE PRODUCTION OF SULPHITE CELLULOSE. GUSTAF HAGLUND, Stockholm, Sweden, assignor to Patent Aktiebolaget Gröndal-Ramen, Stockholm, Sweden, a Limited Company. Filed Jan. 4, 1929, Serial No. 330,414, and in Sweden Jan. 10, 1928. 2 Claims. (Cl. 92—11.)

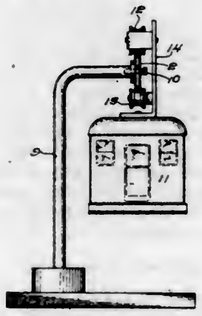
1. In the production of sulphite cellulose, the method of preparing a liquor having a high concentration of dissolved organic matters by the use of waste liquor from a previous boiling of such cellulose, which comprises, mixing the waste liquor with an alkali bisulphite solution, and adding the necessary quantities of sulphurous acid.

1,811,269. STEERING WHEEL. WALTER I. HANSON and OTTO R. STELZER, Akron, Ohio, assignors to Firestone Steel Products Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 13, 1929. Serial No. 354,780. 4 Claims. (Cl. 74—33.)



2. A steering wheel comprising a substructure including a metal hub member, a series of endless segmental members of wire provided with inner arcuate portions fitting about and secured to the hub member, radial portions positioned adjacent each other in adjoining segments to provide spokes and outer arcuate portions at the rim of the wheel, an endless rim member fitted about and secured to the outer arcuate portions of said segmental members, and a molded covering over said sub-structure.

1,811,270. MONORAIL TRACK. GEORGE C. HENDERSON, Detroit, Mich. Filed Feb. 10, 1930. Serial No. 427,207. 10 Claims. (Cl. 104—106.)



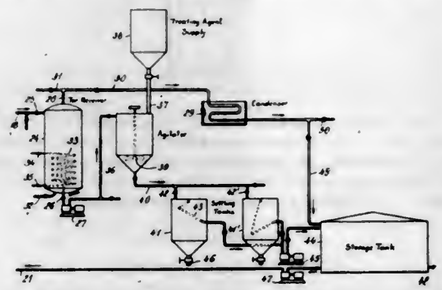
1. A mono-rail track comprising a pair of spaced upper and lower rails, and a plate of insulation rigidly connecting said rails.

1,811,271. BARBER'S COMB. JAMES W. INGRAM, San Francisco, Calif. Filed July 16, 1930. Serial No. 468,255. 8 Claims. (Cl. 132—11.)



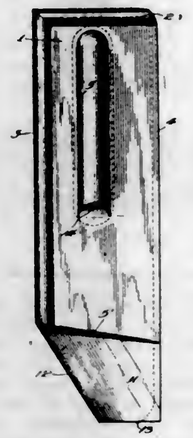
1. A barber's comb having a hand hold and a thumb-rest, said thumb-rest comprising a double-reverse curved portion for its back edge with the convexity of the central portion of said curve facing inwardly toward the body of said comb.

1,811,272. CRACKING OF HYDROCARBONS AND TREATMENT OF RESIDUES. EDWARD W. ISOM, Winnetka, Ill., assignor to Sinclair Refining Company, Chicago, Ill., a Corporation of Maine. Filed June 30, 1924. Serial No. 723,081. 6 Claims. (Cl. 196—69.)



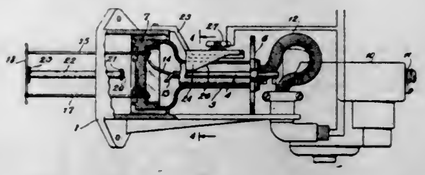
1. The method of treating oil mixtures containing tar produced by the cracking of hydrocarbon oils under pressure when heated to approximately the cracking temperature, which comprises subjecting the tar and oil to a substantial reduction in temperature and dispersing therethrough finely divided adsorbent material, and thereafter separating the adsorbent material and accompanyng tar from the remaining substantially tar free oil.

1,811,273. REAMER BLADE. CHARLES B. KENNEDYE, University City, Mo., assignor to The Kennedye Corporation, Wilmington, Del., a Corporation of Delaware. Filed Mar. 3, 1927. Serial No. 172,247. 2 Claims. (Cl. 255—61.)



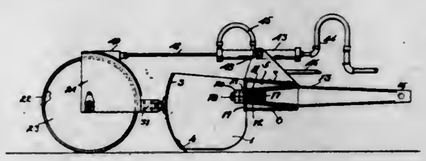
1. A reamer blade consisting essentially of a supporting body of greater length than width and of greater width than thickness, one side of which comprises an elongated reaming means adapted to be presented to the formation being drilled and consisting of a plurality of longitudinal relatively thin spaced cutting edges, a cutting blade projecting from the lower edge thereof of substantially less width, length and thickness than the supporting body and so disposed as to form an offset shoulder on the entire lower edge of said supporting body, and an integral locking lug projecting from one face of the supporting body intermediate opposite longitudinal edges, said locking lug lying in a plane substantially parallel to said longitudinal edges.

1,811,274. IGNITION MECHANISM FOR OIL BURNERS. JAMES N. MACRAE, Stamford, Conn., assignor to Petroleum Heat and Power Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 10, 1929. Serial No. 353,950. 3 Claims. (Cl. 175—115.)



3. Ignition apparatus comprising a non-metallic resistance element as an electrode, a pair of metal supporting rods, a metal bridge across said rods, metal means intermediate the electrode and said bridge member for preventing the formation of a non-conducting film between the electrode and bridge, a spring contact for pressing the electrode into contact with said intermediate metal means, and metal intermediate the spring contact and electrode for preventing the formation of a non-conducting film between the contact and electrode.

1,811,275. SLIP TONGUE FOR SCRAPERS. WESLEY K. MCMILLAN, San Francisco, Calif., assignor, by mesne assignments, to American Tractor Equipment Co., a Corporation of Nevada. Filed July 30, 1928. Serial No. 296,200½. 3 Claims. (Cl. 37—169.)

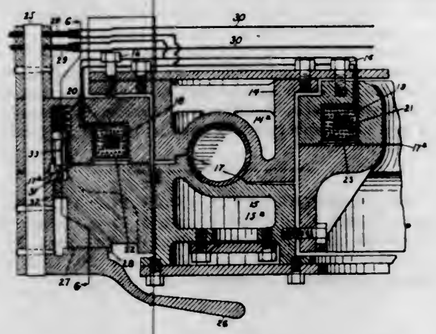


1. A scraper of the class described comprising a scraper member having end plates and a hardened knife at its lower edge, a pair of horizontal plates spaced apart and fixed to the end plates and extending across the front of the scraper, other plates secured thereto forming a square tapering pocket, and a square tapering tongue secured in said pocket to operate the scraper.

1,811,276. VULCANIZER. THEODORE A. MILLER, Akron, Ohio, assignor to Andrew J. Fleiter, Akron, Ohio. Filed Apr. 28, 1928. Serial No. 273,684. 14 Claims. (Cl. 18—17.)

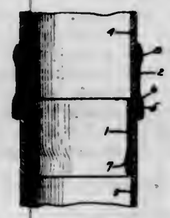
8. The combination with hinged vulcanizer sections movable to and from mating relationship and electromagnetic means for holding the sections together, of means for locking the mold sections together, for energizing or de-energizing the electromagnetic means and for cracking the mold sections comprising a rock shaft having a locking cam lug thereon, a cracking cam lug thereon and

a switch thereon so as to be rocked in one direction to lock the sections and energize the electromagnetic means and to be rocked in the other direction to de-energize the mag-



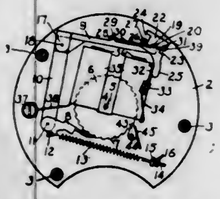
netic means and crack the vulcanizer, and means for locking said rock shaft against actuation to energize the electromagnetic means when the vulcanizer is open.

1,811,277. PIPE CONNECTER. ABRAHAM K. MOSLEY, Troy, N. Y., assignor to Bessie K. Stoll, Troy, N. Y. Filed June 15, 1929. Serial No. 371,154. 2 Claims. (Cl. 285—192.)



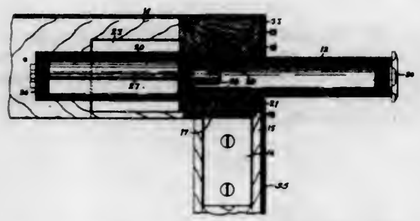
1. A pipe connecter formed from sheet metal comprising two ferrule portions of different diameters, the smaller of said ferrule portions adapted to fit the interior diameter of one of two pipe sections to be joined, and the larger of said ferrule portions adapted to fit the exterior diameter of the other of said pipe sections, and an intermediate portion folded upon itself to form a two-ply axially extending annular flange concentric with the inner end of the smaller of said ferrule portions and forming therewith a U-shaped channel adapted to receive and firmly grip the end of the respective pipe section, the inner and outer surfaces of the base of said U-shaped channel portion comprising abutments for the ends of the pipe sections to be joined.

1,811,278. ELECTRIC DRIVING MECHANISM. ANDREW H. NEUBEUTHER, Peru, Ill., assignor to Western Clock Company, Peru, Ill., a Corporation of Illinois. Filed May 31, 1927. Serial No. 195,490. 10 Claims. (Cl. 185—40.)



1. In a driving mechanism, an electro-magnet, an armature mounted adjacent to said magnet, power storing means connected with and actuated by said armature, a member having a plurality of slots pivotally mounted on said armature, resilient means on said armature for controlling the positions of said member in combination with a contacting part and external means in one of said slots co-operating with said resilient means to bring said member into engagement with said contacting part.

1,811,279. REFRIGERATING APPARATUS. ALFRED QUARNSTROM, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,112. 3 Claims. (Cl. 312—1.)



1. In a heavy elongated cabinet including a rigid framework and a casing having a frangible coating covering said framework, the combination of a sleeve rigid with said framework and a lift bar slidable into said sleeve and slidable substantially entirely within the casing.

1,811,280. COMMUNICATING HELMET. ALFRED A. RODGERS, Los Angeles, Calif., assignor to Scully Bros. Inc., Los Angeles, Calif., a Corporation of California. Filed Aug. 17, 1929. Serial No. 386,680. 6 Claims. (Cl. 181—23.)

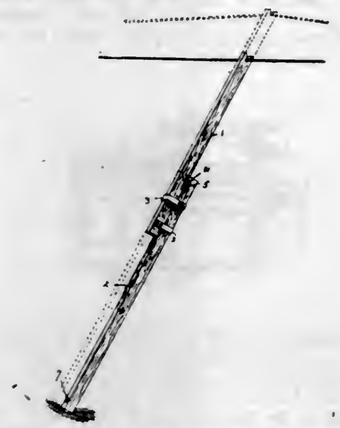


1. In combination with an aviator's headgear, a concave sound clarifying and amplifying device, having a sound communicating tubular member, and a pad attached to the edge of said amplifying device and adapted to lie against and encircle the ear of the wearer and to form a non-reverberant sound chamber.

1,811,281. ADJUSTABLE CLOTHESLINE PROP. PERRY H. SHROYER, Dayton, Ohio. Filed Dec. 23, 1929. Serial No. 416,009. 5 Claims. (Cl. 68—12.)

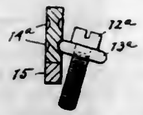
1. In a clothes line prop or the like, two bars arranged in parallel contacting relation, keeper bands carried by each bar and enclosing the other for relative longitudinal sliding motion, one of the bars having an inclined notch in its face contiguous to the other bar the inclined surface of such notch being longitudinally grooved, and a ball having rolling movement in the inclined groove into and

out of wedging engagement with the other of said bars, said ball being accessible through the open sides of the notch above the groove for disengagement from its wedg-



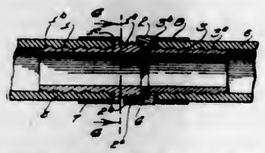
ing position said ball acting to lock the bars against retractive movement but permitting the extension by relative longitudinal sliding adjustment.

1,811,282. KNIFE FOR HULLERS. OLIVER G. SIMMONS, Lakewood, Ohio, assignor to The National Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 27, 1927. Serial No. 222,249. 4 Claims. (Cl. 83—14.)



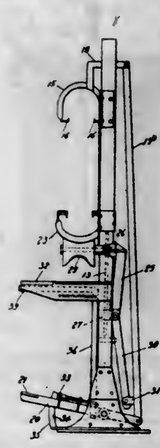
1. A knife for hullers and the like comprising a relatively flat metal bar of substantially rectangular cross section having cutting edges extending substantially the length of the bar and located on the opposite longitudinal edges of the bar on a side thereof, said bar also having a pair of recesses arranged in the side adjacent the cutting edges, said recesses being arranged on opposite sides of a plane perpendicular to the side of the bar and midway between the cutting edges thereof, said recesses further being arranged equidistant from their adjacent cutting edge, whereby the bar may be used reversibly in knife channels of greater depth than the width of the bar.

1,811,283. HOSE COUPLING. FREDERICK HARRIS SMITH, San Diego, Calif. Filed May 7, 1928. Serial No. 275,690. 4 Claims. (Cl. 285—120.)



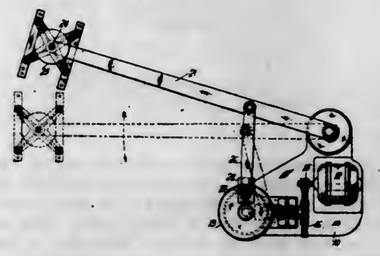
1. A hose coupling, including a hollow hose coupling member provided with external threads on one end thereof, and revolubly mounted, annular hose coupling member provided with several turns of internal threads corresponding with the threads of said other member, said annular hose coupling member being provided with a longitudinally extended portion on one side thereof adapted to engage the side of said externally threaded hose coupling member and being open at the opposite side adapted to receive the extended threaded portion of the other coupling member sideways.

1,811,284. TIRE CASING SPREADING MACHINE. OTTO E. SORDS, Cuyahoga Falls, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 12, 1927. Serial No. 160,666. 7 Claims. (Cl. 18—2.)



1. A tire casing spreader comprising a plurality of spaced hook members for engaging the beads of a tire casing at points about the inner periphery thereof, one of said members being reciprocable for drawing a portion of the casing radially outward, the remaining hook members being fixed, reciprocable elements adjacent said fixed hook members for engaging the exterior or tread portion of the casing, means for reciprocating said elements and said reciprocable hook member simultaneously in the same direction to spread the casing, means for latching said last-named means in its casing spreading position, and means for releasing said latching means.

1,811,285. CASTER TESTING DEVICE. HORACE D. STEVENS, Akron, Ohio, assignor to The Firestone Tire and Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 28, 1926. Serial No. 143,717. 8 Claims. (Cl. 73—51.)

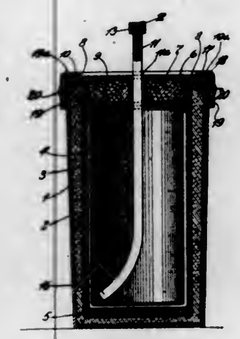


3. A device for testing casters or the like, including a carriage adapted to be supported by the casters to be tested, an arm for moving the carriage to and fro in an arcuate path, said carriage being swiveled to the arm, and means for oscillating the arm.

1,811,286. DRINKING CUP. JESSIE CARR TYNDALL, St. Louis, Mo. Filed Aug. 13, 1927. Serial No. 212,680. 7 Claims. (Cl. 215—1.)

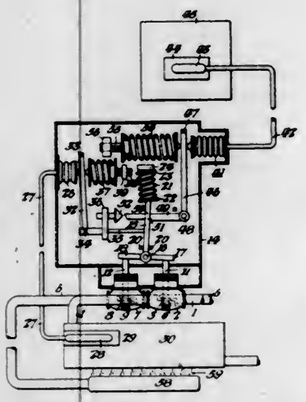
1. A drinking cup, a drinking tube arranged and positioned with its lower end in said cup and near the bottom thereof and with its upper end outside of said cup

and adapted whereby a person may drink liquid through said tube from said cup, and a top attached to said cup



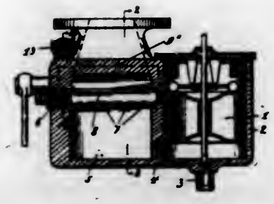
and said tube and otherwise arranged and positioned to prevent liquid from flowing from said cup except through said tube.

1,811,287. THERMOSTATIC SNAP CONTROL. JOSEPH WILLIAM WINTER, Penfield, Pa., assignor to Master Domestic Refrigerating Company, Inc., Consbohocken, Pa., a Corporation of New York. Original application filed Nov. 13, 1928, Serial No. 319,051. Divided and this application filed July 24, 1929. Serial No. 380,517. 5 Claims. (Cl. 236—48.)



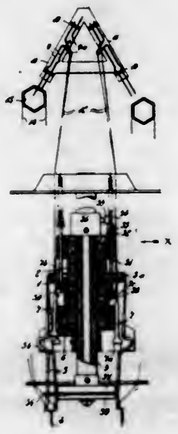
1. The combination with two valves, having respective reciprocatory stems in parallel relation and each having a valve spring continually stressing it in one direction; of a toggle device comprising a lever having three arms in radial relation with its fulcrum, including a main arm extending between said stems and substantially parallel therewith, and auxiliary arms extending transversely to said stems and respectively in cooperative relation therewith, and a spring compressed, with its axis adapted to intersect the fulcrum of said lever, in pivotal connection with the free end of said lever, adapted to snap said lever in either direction in which said lever is otherwise turned past the dead center line between the lever fulcrum and the pivotal connections of said toggle spring; and respective thermostatic devices adapted to alternately engage said main lever arm and move said toggle lever past its dead center, in respectively opposite directions, at respective predetermined temperatures; whereby, said valves are automatically alternately opened and closed, by the same lever, at such predetermined temperatures.

1,811,288. CARBURETOR. GEORGE ASHTON, Geiselgasteig, near Munich, and GOTTFRIED FREI, Munich, Germany, assignors to Arnold Haefell, Munich, Germany. Original application filed Aug. 15, 1927, Serial No. 213,022, and in Germany Apr. 16, 1927. Divided and this application filed May 28, 1929. Serial No. 366,682. 2 Claims. (Cl. 261—60.)



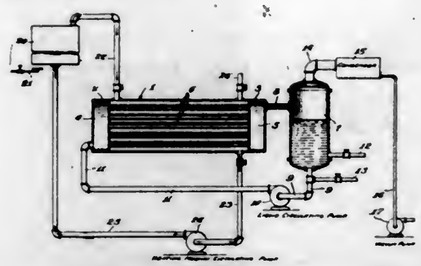
1. The combination with a carburetor body, a float chamber and a narrow slot-like chamber into which the float chamber discharges; of a horizontal tube closing the top of the latter chamber the lower wall of which tube has jet openings at the liquid level and whose upper wall has a slot over said openings, said tube being mounted in a bore of the carburetor body, a horizontal air inlet opening at about the level of said slot, a second, larger bore in the carburetor body, a rotatable throttle valve in the bore past said opening and having a horizontal passage therethrough, said passage proximate the slot in the tube, the valve passage having a controlling edge inclined to the axis of the valve to gradually control the mixture formation, and adjustable means to limit the rotation of the valve for idle engine running.

1,811,289. CIRCULAR KNITTING MACHINE. FRED ATTENBOROUGH, Harrington Park, Long Eaton, England. Filed Apr. 10, 1928, Serial No. 268,980, and in Great Britain Oct. 3, 1927. 12 Claims. (Cl. 66—135.)



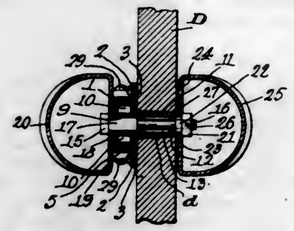
1. In a circular knitting machine, a series of radially displaceable depending thread guides arranged in a circular series, a rotary cam device operating within the circle of thread guides to displace said guides to lay threads on the machine needles, separate vertically displaceable jacks located between the cam and guides, jacquard mechanism functioning selectively to raise said jacks from an inoperative position to a position wherein same act upon and select the guides to be radially displaced by the cam and positive means for lowering the jacks to the inoperative position after having been raised by said jacquard.

1,811,290. POLYMERIZATION OF DRYING OILS. WALTER L. BADGER, Ann Arbor, Mich., assignor to Swenson Evaporator Company, Harvey, Ill., a Corporation of Illinois. Filed Aug. 16, 1928. Serial No. 299,958. 4 Claims. (Cl. 87—12.)



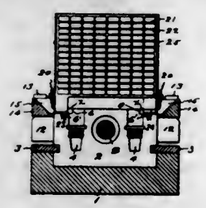
1. The method of polymerizing drying oils that comprises circulating the oil at a rapid rate from a vessel under reduced pressure through a heater and back to the vessel, and rapidly imparting heat to the oil as it passes through the heater.

1,811,291. LOCK. OTTO BANKER, Mankato, Minn. Filed May 2, 1930. Serial No. 449,282. 1 Claim. (Cl. 292—169.)



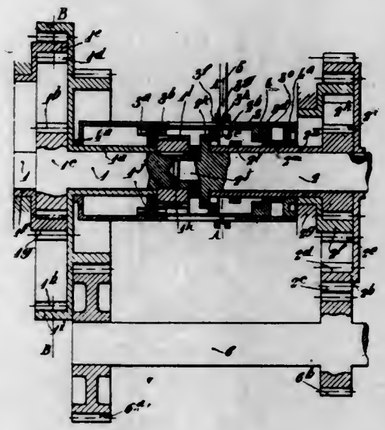
A lock including a casing constituting a grease container, said casing having a normally closed opening, a bolt slidable in the casing, a sleeve journaled in the casing and operatively connected to the bolt, a tapered tubular bushing for insertion into a door or the like, and a slotted inner bushing rotatable in the tapered bushing for receiving grease from the sleeve and housing, a spindle secured in the slotted bushing and sleeve and rotatable with the sleeve, and operating handles fixedly secured to the respective end portions of the spindle for holding the housing and bushings in abutment.

1,811,292. MANUFACTURE OF STORAGE BATTERY UNITS. FRED W. BARHOFF, Hartford, Conn., assignor to Engineering Products Corporation, Hartford, Conn., a Corporation of Delaware. Filed Dec. 22, 1928. Serial No. 327,932. 5 Claims. (Cl. 22—204.)



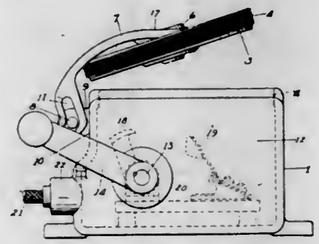
1. The art of uniting metal parts comprising flowing molten metal at substantially normal melting temperature of such metal in the course of casting the same to form a part and directing the path of flow to cause contact of the molten metal with a non-molten part of like metal, retarding the velocity of the flowing metal for prolonging maximum heat delivery from the molten metal to the non-molten part until fusion occurs between the formerly non-molten part and the molten metal, and solidifying the parts in the fused condition.

1,811,293. POWER TRANSMISSION DEVICE. FERNAND BERTRAND BARBERÉ, Hautaget, France. Filed Oct. 11, 1929, Serial No. 399,060, and in France Oct. 18, 1928. 2 Claims. (Cl. 74—59.)



1. In a power transmission device, a driving shaft, a first sleeve turning on the driving shaft, means for connecting the driving shaft to the said first sleeve whereby the angular speeds of the driving shaft and the said first sleeve are different, a driven shaft, a second sleeve turning on the driven shaft, means for connecting the driven shaft to the said second sleeve whereby the angular speeds of the driven shaft and the said second sleeve are different, coupling means carried by the driving shaft, by the driven shaft, by the first sleeve and by the second sleeve, and other coupling means associated with the preceding means for rigidly associating the driving shaft or the sleeve turning thereon with the driven shaft or the sleeve turning thereon.

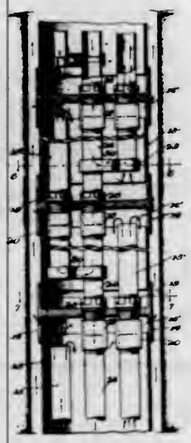
1,811,294. ELECTRIC SWITCH. WALTER J. BAUROTH, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 30, 1926. Serial No. 105,873. 4 Claims. (Cl. 220—39.)



1. In a device of the class described, a casing element having a circular collared aperture provided with peripheral threads, a circular peripherally threaded cover element for said aperture, said cover element being removable from said aperture on its axial line upon its rotation relative to the casing in the unscrewing direction,

and subsequently in a swinging movement in a plane of its axial line, a hinge pin mounted on the outside of the casing and extending transversely of the plane of swing of the cover element, and a hinge arm pivoted to the central portion of the cover element to permit rotation of the latter about its central axis relative to the arm, said arm having an elongated slot in which said pin engages, whereby the described removal movements are permitted.

1,811,295. AIR LIFT PUMP. GEORGE BLOW, Knoxville, Tenn. Filed May 28, 1926. Serial No. 112,405. 5 Claims. (Cl. 103—233.)



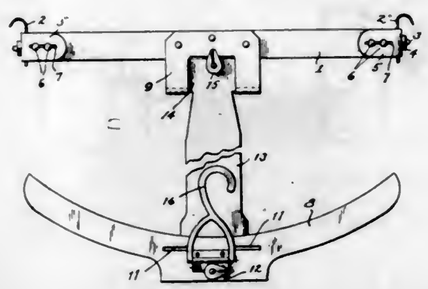
1. The combination of a sectional exterior pipe, a series of stage couplings connecting the sections thereof, a series of riser pipes delivering liquid to said stage couplings serially, means sealing the upper or outlet end of said exterior pipe, whereby gas under pressure can be retained in said exterior pipe, and means venting the gas passing through the riser pipes to the external atmosphere against pressure exceeding atmospheric pressure.

1,811,296. GOLF BAG. JAMES E. BODEN and ROY T. ORR, La Crosse, Wis., assignors to Siluntkaddi Corporation, La Crosse, Wis., a Corporation of Wisconsin. Filed Nov. 23, 1929. Serial No. 409,283. 6 Claims. (Cl. 150—1.5.)



4. Means for supporting a golf bag comprising a plurality of ground-penetrating spurs on the bottom of the bag, guards yieldably mounted on the bottom of the bag and having openings through which the respectively adjacent spurs may pass, and means for limiting the downward movement of the guards.

1,811,297. GARMENT HANGER. JOSÉ VIDAL BOSQUE, Habana, Cuba. Filed Sept. 4, 1929. Serial No. 390,335. 2 Claims. (Cl. 223—61.)



1. A garment hanger comprising a cross bar having a U-shaped member fixed thereto, the arms thereof having terminal hooks, a garment supporting member having slots therein, a member having one of its ends connected with the garment supporting member and its other end provided with a cross member, said hook terminals being adapted to engage said slots to hold said members in one position and to engage the cross member to hold said members in an inverted position.

1,811,298. PROCESS AND PRODUCT FOR PROTECTING ALUMINIUM, MAGNESIUM AND THEIR ALLOYS AGAINST CORROSION. CHARLES BOULANGER, Clichy, France, assignor to Société Continentale Parker, Clichy, France. Filed Oct. 21, 1929, Serial No. 401,384, and in France Nov. 10, 1928. 5 Claims. (Cl. 148—6.)

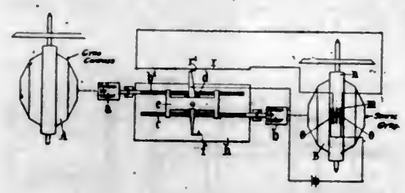
1. Process for protecting articles made of aluminium, magnesium, or their alloys, against corrosion, comprising the treatment of the said articles in a bath containing carbonate of soda and an alkali salt of the most oxygenated oxide of a metal capable of forming at least two oxides the most oxygenated one being soluble in alkaline solution and the less oxygenated one being insoluble.

1,811,299. VISE. PAUL BROCKHAUS, Jr., Oesterau in Westphalia, Germany. Filed May 17, 1929, Serial No. 363,827, and in Belgium Aug. 25, 1928. 4 Claims. (Cl. 81—35.)



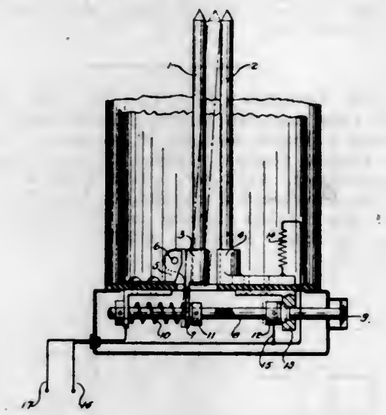
1. A vise, comprising a base-plate, guide-rails arranged on said base-plate parallel to each other and provided each with an approximately U-shaped lateral external channel having oppositely arranged guide-surfaces, a pair of vise-jaws movably seated on said guide-rails, pendent guide-cheeks arranged on the under-side of said vise-jaws and solely bearing on said guide-surfaces, pendent nuts on said vise-jaws, and a spindle adapted to move said vice-jaws simultaneously in opposite directions.

1,811,300. GYROSCOPIC DIRECTIONAL INSTRUMENT. SIDNEY GEORGE BROWN, North Acton, London, England. Filed Dec. 22, 1926, Serial No. 156,487, and in Great Britain Feb. 3, 1926. 8 Claims. (Cl. 33—226.)



1. The combination of a north-seeking gyro-compass, an independently acting static gyroscopic azimuth-indicating instrument, and means operated by these instruments for indicating the algebraic sum of their azimuthal deflection.

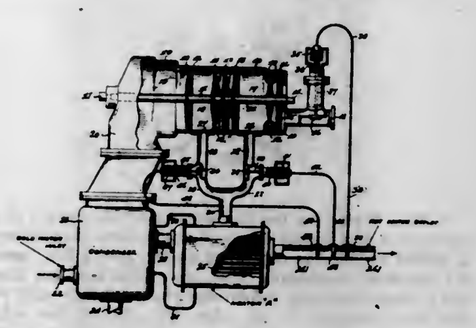
1,811,301. REGULATOR FOR SHORT CIRCUIT AMPERAGE ON STARTING ARC LIGHTS. NEWCOMB K. CHANEY, Lakewood, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Filed July 31, 1928. Serial No. 296,458. 5 Claims. (Cl. 176—92.)



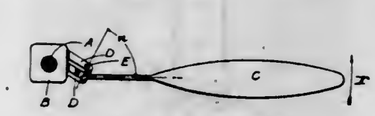
4. An arc lamp comprising electrodes mounted to separate by a predetermined distance and form an arc-gap; a resistance in series circuit with said electrodes; a shunt circuit around said resistance; and electrode moving means manually operable to shorten the arc-gap and simultaneously open said shunt circuit.

1,811,302. ELASTIC FLUID TURBINE POWER INSTALLATION. MAYNARD D. CHURCH, Wellsville, N. Y., assignor to Moore Steam Turbine Corporation, Wellsville, N. Y., a Corporation of New York. Filed Sept. 13, 1927. Serial No. 219,273. 4 Claims. (Cl. 60—67.)

2. A multi-expansion turbine comprising a plurality of expansion stages, means for supplying high pressure steam to the first stage, a final exhaust passage connected to the last stage of expansion, a primary condenser connected to said final exhaust, secondary exhaust passages connected to a plurality of stages of expansion subsequent to the first stage of expansion and in advance of the last stage of expansion, a secondary heater connected to said secondary exhaust passages, said primary condenser and secondary heater connected in series and arranged to permit a fluid to pass first through the primary condenser and later the secondary heater, a heated fluid passage connected with the outlet of said secondary heater, and separate and independent means controlled by the temperature of the heated fluid passing from the secondary heater to regulate the supply of high pressure steam to the first stage of expansion and the temperature and pressure of the exhaust steam passing from said plurality of stages of expansion into the secondary heater.

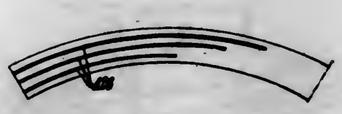


1,811,303. AIRCRAFT WITH ROTATIVE WINGS. JUAN DE LA CIERVA, Madrid, Spain, assignor, by mesne assignments, to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 1, 1926, Serial No. 145,654, and in Great Britain Nov. 24, 1925. 3 Claims. (Cl. 170—164.)



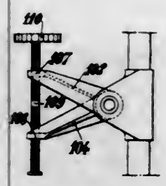
3. In an aircraft, a sustaining unit comprising a plurality of aerofoils positioned radially about a common substantially vertical axis, and means for mounting the aerofoils including means for permitting them to rotate freely about their axis under the action of relative air flow and means for permitting them individually to assume during rotation a position of equilibrium under the lift forces and centrifugal forces of rotation set up by said airflow, said last means including a flexible joint for each aerofoil having an axis set at an angle oblique both to the longitudinal axis of the aerofoil and to a plane perpendicular to the common axis of rotation of the aerofoils.

1,811,304. AIRPLANE. RENÉ ALEXANDRE ARTHUR COUZINET, Paris, France. Filed Feb. 15, 1928, Serial No. 254,558, and in France Feb. 26, 1927. 1 Claim. (Cl. 244—14.)



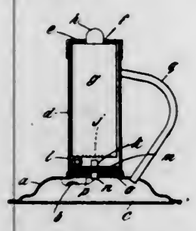
In an airplane having a hull or fuselage, wings and a tail plane, pieces of wood split partially or completely parallel to the direction of the fibers before bending, resisting strips provided in the slots and means for uniting the fibers and the resisting strips after bending for constituting resisting curved parts of the airplane.

1,811,305. CONTROL MEMBERS OF AN AIRPLANE. RENÉ ALEXANDRE ARTHUR COUZINET, Levallois-Perret, France. Original application filed Feb. 15, 1928, Serial No. 254,558, and in France Feb. 26, 1927. Divided and this application filed Sept. 15, 1930. Serial No. 482,068. 3 Claims. (Cl. 244—29.)



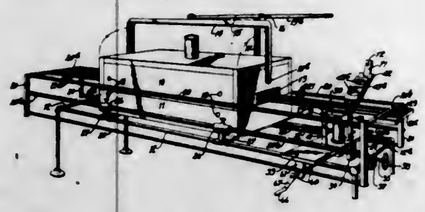
1. In a device for the foot control of the rudder of an airplane, a first rudder bar connected to the rudder levers, a second rudder bar controlled by the pilot's feet, means for angularly connecting these two rudder bars but allowing a relative angular displacement of one of the said rudder bars relatively to the other, for allowing the rudder bar controlled by the pilot to be brought back to its normal position when the rudder is permanently inclined, when compensating, by the said rudder, the stoppage of a side engine of the said airplane.

1,811,306. GAS-LIGHTER. GEORGE DAVIES, Paddington, and ALFRED HOWELL RIDGE and GEORGE ROYER, Holborn, London, England. Filed Apr. 26, 1928, Serial No. 272,980, and in Great Britain May 3, 1927. 4 Claims. (Cl. 219—32.)



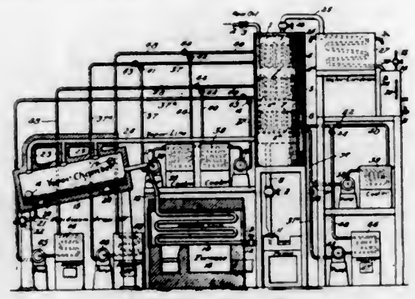
1. A gas lighter comprising a metal casing, an electric battery within and movable longitudinally of said casing, a projection from one terminal of the battery extending through an aperture in an end wall of the casing and being constantly in electrical connection with said wall, a metal stud supported within the casing beyond the other terminal of the battery and insulated from the casing, yielding means of non-conducting material normally holding the adjacent battery terminal from contact with said stud, and a resistance wire having its ends connected respectively to the metal casing and said stud.

1,811,307. CERAMIC FURNACE. JOSEPH A. DEDOUCH, Oak Park, Ill. Filed Dec. 22, 1928. Serial No. 327,889. 8 Claims. (Cl. 25—142.)



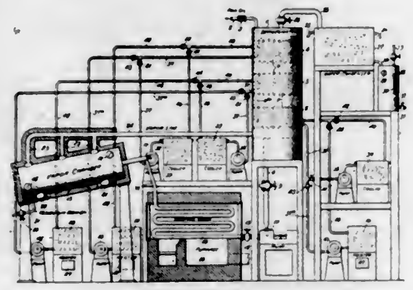
1. A ceramic furnace having a heating chamber, and a reciprocable frame having work supporting strands extending entirely through the heating chamber.

1,811,308. PROCESS AND APPARATUS FOR PRODUCING LOW BOILING POINT HYDROCARBON OILS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Original application filed May 17, 1920, Serial No. 381,922. Renewed Apr. 24, 1928. Divided and this application filed May 5, 1923. Serial No. 636,860. 4 Claims. (Cl. 196—48.)



2. A process for producing low boiling point hydrocarbon oils, consisting in cracking the oil in heating and reaction zones, dephlegmating the oil vapors by intimately intermingling them with the incoming raw oil in a plurality of pools, separately controlling the condensation in the dephlegmating stage by increasing the temperature of the oil in the respective pools by local extraneous circulations from said pools through heating means and back to the respective pools.

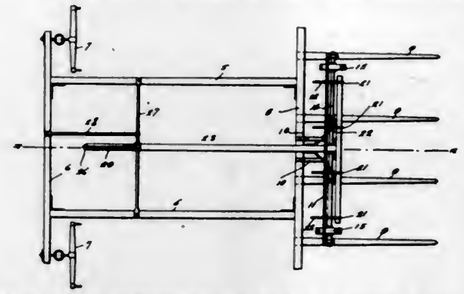
1,811,309. PROCESS AND APPARATUS FOR PRODUCING LOW BOILING POINT HYDROCARBON OILS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 1, 1928, Serial No. 316,565, in turn a continuation of application Serial No. 381,922, filed May 17, 1920. Divided and this application filed Mar. 21, 1930. Serial No. 437,764. 5 Claims. (Cl. 196—94.)



1. In the art of fractional distillation of petroleum, the process which comprises passing vapors upwardly through a plurality of fractionating zones at different levels, passing reflux liquid downwardly in a continuous stream through said zones countercurrent to and in contact with said vapors, withdrawing liquid from one of said zones and cooling it, and returning liquid so colled to a zone at least as high as the zone from which it was withdrawn.

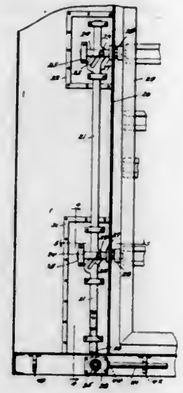
1,811,310. UNLOADING DEVICE FOR BUCK RAKES. JAMES M. ERICKSON, Glasgow, Mont. Filed Apr. 19, 1929. Serial No. 356,432. 1 Claim. (Cl. 56—395.)

In a buck rake, a front cross bar, a plurality of forwardly extending tines connected with said cross bar, a pair of spaced parallel rearwardly extending side bars connected to the front bar, a rear cross bar connected to the rear ends of the side bars and extending beyond the opposite faces of said side bars, a bowed cross rod connecting the side bars together intermediate the ends thereof, a transversely extending pusher board slidable on the tines, a rearwardly extending beam secured to the pusher board



and arranged intermediate the side bars having a downwardly and rearwardly inclined terminal, a spade carried by the extreme lower end of said terminal, a flexible connection between the terminal and the bowed cross rod, and a plurality of upwardly extending spring fingers secured to the pusher board having depending rearwardly extending arcuate upper ends, as and for the purpose specified.

1,811,311. SAFETY DOORLOCK. FREDERICK K. FILDES, Altoona, Pa. Filed June 7, 1928. Serial No. 283,524. 18 Claims. (Cl. 105—366.)

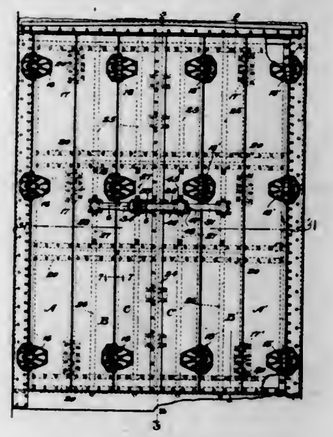


1. In combination with a portable container having a door in one side, means for locking said door, operating mechanism for said locking means comprising a rock shaft mounted adjacent the bottom of the container and an arm fixed to said shaft adapted to engage the support on which the container is seated when the shaft is rotated in a direction to unlock the door.

2. In combination with a portable container having a door in one side, a bolt adapted to lock the door, and operating mechanism for said bolt comprising a rock shaft mounted under the bottom of the container, and an arm on said rock shaft adapted to strike the support on which the container is seated when the shaft is rotated in a direction to withdraw the bolt from locking position, whereby the door cannot be unlocked so long as the container rests on its support.

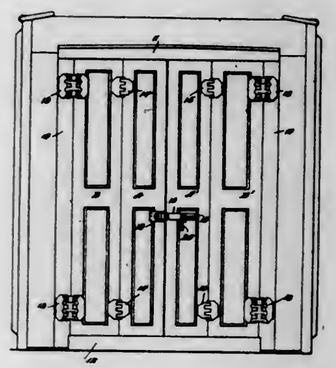
1,811,312. CLOSURE FOR CONTAINERS. FREDERICK K. FILDES, Altoona, Pa. Filed Oct. 9, 1929. Serial No. 398,379. 13 Claims. (Cl. 189—46.)

1. In a container having a door opening, a door comprising two leaves hinged respectively at the sides of the opening, each leaf consisting of a plurality of sections hinged so as to fold together on parallel axes, locking bolts mounted on the insides of some of the sections, arms



on the outsides of the sections respectively connected to said bolts, and means for interlocking the arms when the door is closed.

1,811,313. CONTAINER FOR THE SHIPMENT OF FRACTIONAL CAR LOTS. FREDERICK K. FILDES, Altoona, Pa. Filed Oct. 28, 1930. Serial No. 491,800. 4 Claims. (Cl. 105—366.)



1. A container for the shipment of fractional car load lots having registering door openings in its two sides and a double door for each opening, each of said doors being composed of two leaves respectively hinged to the sides of the door opening and each leaf comprising a plurality of sections foldable on axes parallel to the hinge axes.

1,811,314. REFRACTORY MATERIAL. TURE ROBERT HAGLUND, Stockholm, Sweden. Original application filed Nov. 12, 1927, Serial No. 232,947, and in Germany June 4, 1927. Divided and this application filed Oct. 6, 1928. Serial No. 310,917. 4 Claims. (Cl. 75—22.5.)

1. As a new article of manufacture a fused refractory material containing not less than 15% of oxide of magnesium, not less than 5% of oxide of chromium, not less than 75% of oxides of magnesium, aluminum and chromium counted together, and with a content of silica less than 12% and of oxide of iron less than 5%, characterized by high softening temperature and resistance against chemical erosion.

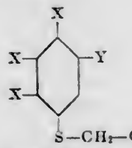
1,811,315. DISPLAY STAND. GEORGE C. HERREN, Atlanta, Ga.; Ella P. Herren, administratrix of said George C. Herren, deceased, assignor to Ella P. Herren, Atlanta, Ga. Filed July 18, 1930. Serial No. 468,908. 1 Claim. (Cl. 211—154.)



A display stand comprising a rectangularly formed upright having a plurality of vertical rows of downwardly and inwardly inclined parallel slots formed in the faces thereof, each slot of each row extending entirely across a face of the upright and into the adjacent faces on each side thereof, and terminating short of the top edge of a horizontal slot formed in each adjacent face of the upright.

1,811,316. TRIHALOGEN ARYLTHIOGLYCOLIC ACIDS AND PROCESS OF MAKING SAME. RICHARD HERZ, Frankfort-on-the-Main, ERNST RUNNE, Frankfort-on-the-Main-Hochst, and EDUARD ALBRECHT, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Mar. 15, 1928, Serial No. 262,031, and in Germany Mar. 18, 1927. Divided and this application filed Feb. 13, 1930. Serial No. 428,238. 3 Claims. (Cl. 260—108.)

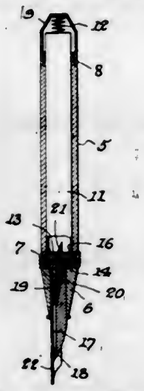
2. As new compounds products corresponding probably to the general formula:



in which formula the X's mean chlorine and Y means hydrogen or an alkyl group, being crystalline powders, insoluble in alkalis which can be condensed to the corresponding oxythionaphthene-derivatives.

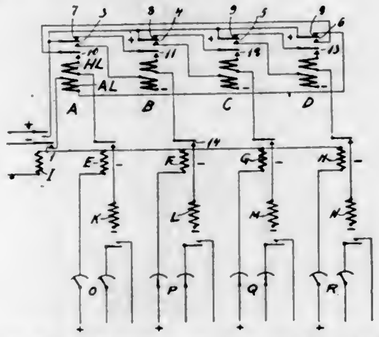
1,811,317. FOUNTAIN PEN. CLAUDE W. HOLSTEIN, St. Albans, W. Va. Filed June 4, 1930. Serial No. 459,137. 1 Claim. (Cl. 120—42.)

In a fountain pen, a feeder formed of suitable material and adapted to be supported in the stock of the fountain pen, said feeder provided on the top face thereof with an ink groove leading inwardly from the forward end of the feeder to terminate at its inner end inwardly from the rear end of the feeder, said feeder at said rear end having an inclined bore inclining rearwardly from the inner end of said groove to the rear end of the feeder, and a tube having an end portion extending through said



bore to terminate at the inner end of said groove, said tube having its opposite end portion extending beyond the corresponding end of said feeder, said tube providing an ink feed leading from the barrel of the pen into said ink groove.

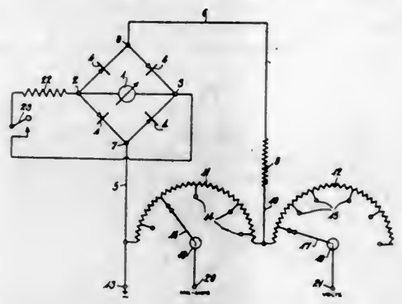
1,811,318. CIRCUIT ARRANGEMENT FOR RELAY SWITCHES. KARL GEORG JOHNSON, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed June 26, 1929, Serial No. 373,907, and in Sweden Apr. 21, 1928. 1 Claim. (Cl. 179—16.)



In a circuit arrangement for telephone systems in combination a series of relays forming a relay switch adapted to be used as a call consecution controller or a call distributor, a working and a holding winding at each relay, the working circuit of the first relay in the series being controlled by the last relay and the working circuits of each of the following relays being arranged to be closed by the working contacts of each of the preceding relays, a holding circuit for the first relay controlled by the last relay, and holding circuits for each of the following relays controlled by each of the preceding relays, and a number of relays corresponding to the circuits to be served, said relays being adapted to control said holding circuits.

1,811,319. ALTERNATING-CURRENT DIRECT-CURRENT METER. VIVION A. JOHNSON, Greenwood, Miss., assignor to Supreme Instruments Corporation, Greenwood, Miss. Filed Sept. 8, 1930. Serial No. 480,493. 8 Claims. (Cl. 171—95.)

1. A meter comprising a rectifier, a direct current measuring instrument for measuring the output of said rectifier, means for changing the current flow in said instrument by a fixed small fractional part thereof under constant input conditions of said meter comprising a shunt



circuit around said instrument including a resistance of a value considerably greater than that of the resistance of said instrument and means for opening and closing said shunt circuit.

1,811,320. ADVERTISING DEVICE. RUSSELL HERBERT KERR and EDWARD F. URICH, San Antonio, Tex. Filed Apr. 11, 1930. Serial No. 443,501. 1 Claim. (Cl. 40—126.)



A display device symbolic of a pair of human limbs, said limbs pivotally connected at one end, a wire spring, one end of said spring secured to the body of one limb, the opposite end secured to the body portion of the opposite limb, thereby defining a loop, one of said limbs permanently attached to a movable object and the other limb adapted to swing freely when said movable object is vibrated.

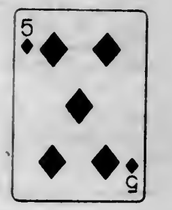
1,811,321. AIRCRAFT LANDING AND RELEASING APPARATUS. WOLDEMAR KIWULL, Riga, Latvia. Filed Dec. 11, 1928, Serial No. 325,308, and in Germany Dec. 14, 1927. 20 Claims. (Cl. 114—0.5.)



1. The method of taking up floating bodies, more particularly aircraft, onto platforms, e. g. vessels or landing stages, consisting in mechanically producing a swell of water between the platform and the water surface and transferring said floating body onto said platform over said swell of water.

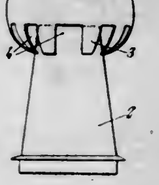
2. In combination a platform projecting beyond a water surface, means for producing a stream in the water in the vicinity of said platform, a baffle body suspended from said platform and lying in the water stream and adapted to dam up the water supplied to it by said stream.

1,811,322. OPAQUE WASHABLE PLAYING CARD AND METHOD OF MANUFACTURING SAME. SIEGFRIED KLAUSNER, Vienna, Austria, and ARTHUR EICHENGRÜN, Charlottenburg, and RICHARD RÖHM, Troisdorf, near Cologne, Germany. Filed Jan. 11, 1929, Serial No. 331,946, and in Germany Jan. 18, 1928. 4 Claims. (Cl. 273—152.)



2. An opaque washable playing card blank consisting of a sheet of cellulose derivative composition of a thickness of below about 0.35 mm. with which has been incorporated a mixture of powdered zinc white and a less quantity of powdered titanium white.

1,811,323. STATIC SUCTION APPARATUS. RAYMOND LEJAY, Vincennes, France. Filed Mar. 18, 1929, Serial No. 348,103, and in France Mar. 30, 1928. 3 Claims. (Cl. 98—66.)

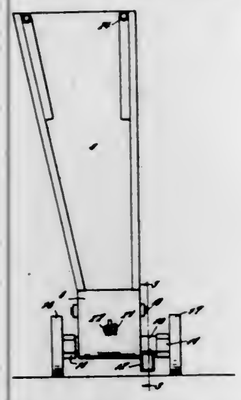


1. In a suction apparatus of the type described, an ovoid enclosure the generatrix of which has a curve increasing from its free edge to the fixed part on the suction conduit, deflectors disposed internally of the said enclosure for resisting the admission of a plunging wind in the suction conduit, tongues on the part with maximum curvature and forming openings between them, and means for fixing the fore ends of the said tongues on the suction conduit.

1,811,324. STONE SPREADER. ARTHUR E. LOCKARD, Grafton, W. Va. Filed Feb. 8, 1930. Serial No. 426,895. 3 Claims. (Cl. 275—2.)

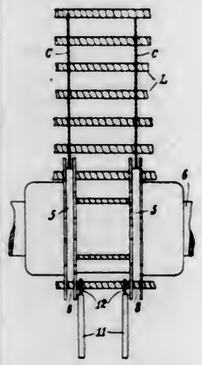
1. In an apparatus of the class described, a hopper, a trough in the bottom of the hopper, a screw conveyor journaled in the trough, a wheel journaled on one end of the conveyor, a wheel keyed to the other end of the conveyor, and a spout provided at one end portion of the trough, a gate valve hingedly mounted in the hopper above the

trough, and means for swinging and holding the gate valve in adjusted position, said hopper including a side wall



adjacent said one wheel which is inclined upwardly and outwardly from the other side wall to enable the apparatus to be easily tilted.

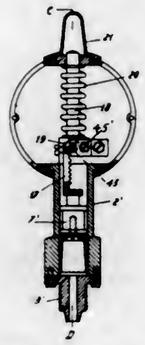
1,811,325. MANUFACTURE OF FABRICS. JAMES MORTON, Cramond Bridge, West Lothian, Scotland. Filed Oct. 28, 1930, Serial No. 491,745, and in Great Britain Nov. 21, 1929. 10 Claims. (Cl. 139—8.)



1. A method of supplying, to a given position, lengths of yarn for incorporation in fabrics during the manufacture thereof, which consists in forming yarns into side-by-side chains of loops, chaining together in parallel formation successive lengths of the yarn to be supplied by introducing them into appropriately spaced loops, and moving said chains past said position to permit said lengths of yarn to be withdrawn in succession.

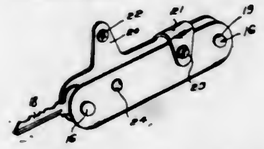
1,811,326. PRESSURE GAUGE. ADOLF MÜLLER, Zurzach, Switzerland. Filed Oct. 28, 1925, Serial No. 65,446, and in Switzerland Oct. 29, 1924. 1 Claim. (Cl. 73—111.)

A pressure gauge including a casing formed with diametrically opposed openings, a sleeve secured within the casing and depending through one of said openings, said sleeve being of uniform diameter throughout, a piston operative within the sleeve and having a tapered skirt arranged for sealing cooperation with the bore of the sleeve, a guide member removably secured to and overlying the piston, said guide member having guiding function with the bore of the sleeve, a rack bar removably secured to and overlying the guide member, said rack bar being reciprocated within the sleeve according to and in accordance with the movements of the piston, an angle piece secured to the upper end of the rack bar, a rod secured to and rising above the angle piece and guided at all times in the other of said opening in the casing, a spring encircling the guide bar and bearing between the wall of the casing and the angle piece, a frame bar supported by the casing, a pinion supported in said frame bar and at all times in coopera-



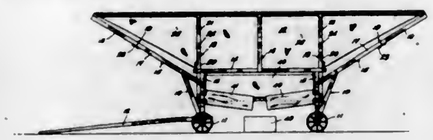
tion with the teeth of the rack bar, a shaft for the pinion extended beyond the frame bar, a pointer carried by the shaft, and a cap secured to the casing and overlying the opening through which the rod is guided, said cap receiving the end of the rod in the operative movements of the piston, the angle piece engaging the upper end of the sleeve within the casing to limit the movement of the rack bar under the influence of the spring.

1,811,327. KEY POUCH. JOSEPH A. PARRELLA, Washington, D. C. Filed Oct. 1, 1929. Serial No. 396,519. 6 Claims. (Cl. 150—40.)



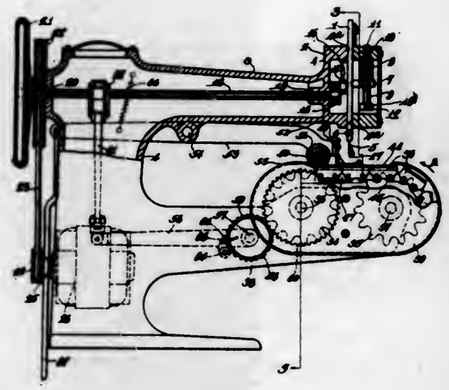
2. A key pouch formed of a sheet of flexible material folded upon itself, comprising opposite side walls, key posts uniting the said walls adjacent their ends and adapted to pivotally support sets of keys, flaps carried by one of said walls and adapted to fold over the other of said walls, and separable snap fasteners for uniting the free ends of said flaps with the second named wall.

1,811,328. FRUIT GATHERER. STEPHEN PAVLOFF, Camas, Wash. Filed Apr. 7, 1927. Serial No. 181,766. 2 Claims. (Cl. 56—329.)



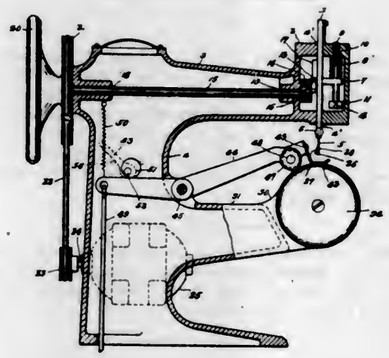
1. In a fruit gatherer of the class described, a pair of mobile units adapted to be positioned one on each side of a tree, each of said units comprising a frame having a plurality of arms upwardly and outwardly inclined from the tree, said arms each composed of a plurality of abutting members; hinge connection between said arm members; fabric members secured to said arms; and means for preventing the unintentional breaking of the hinge connections between said arm members.

1,811,329. MACHINE FOR REPAIRING KNITTED FABRICS. JOSEPH S. PECKER, Philadelphia, Pa., assignor to Patent Development Co., a Corporation of Pennsylvania. Filed Apr. 10, 1929. Serial No. 354,134. 21 Claims. (Cl. 66—1.)



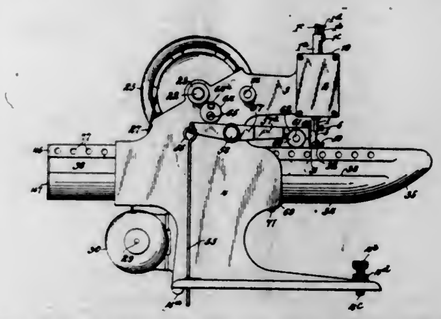
1. A machine for mending runs in fabrics, including a vertically reciprocating needle bar provided with a needle having means for looping the threads of a run in a fabric, and means for reciprocating the needle bar comprising an eccentric device arranged to positively actuate the needle bar in an upward direction, and yieldable means for moving the needle bar in a downward direction.

1,811,330. MACHINE AND METHOD FOR REPAIRING KNITTED FABRICS. JOSEPH S. PECKER, Philadelphia, Pa., assignor to Patent Development Co., a Corporation of Pennsylvania. Filed Apr. 23, 1929. Serial No. 357,426. 25 Claims. (Cl. 66—1.)



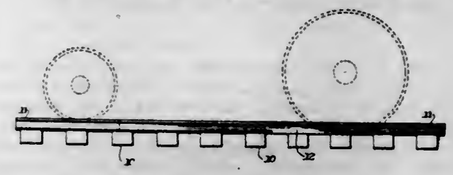
1. A machine for mending runs in fabrics including a needle provided with means for manipulating the threads of a run to close the same, and manually operable means for feeding the fabric and feeding the threads of a run successively at will by hand to the needle whereby to feed the fabric to the needle according to the gage of the fabric.

1,811,331. MACHINE FOR REPAIRING KNITTED FABRICS. JOSEPH S. PECKER, Philadelphia, Pa., assignor to Patent Development Co., a Corporation of Pennsylvania. Filed May 11, 1929. Serial No. 362,386. 29 Claims. (Cl. 66—1.)



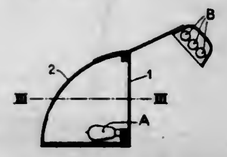
1. A machine for mending runs in fabrics, including a single needle provided with means for manipulating the threads of a run to close the latter, and manually operable means slidable at will by hand longitudinally of the run for feeding the threads thereof to the needle according to the gage of the fabric.

1,811,332. RERAILING RAILROAD EQUIPMENT. ELLIS M. PRESSNALL, Proctor, Minn. Filed Oct. 9, 1929. Serial No. 398,499. 4 Claims. (Cl. 104—268.)



1. A replacer for rerailing equipment, comprising a base portion, a top portion, an inclined portion adjacent the top portion and terminating substantially with said base portion, said replacer having means for engaging the end of a rail, said means comprising spaced abutments extending from an end of said replacer.

1,811,333. ART OF ILLUMINATION. HOLGER MARIUS RASMUSSEN, Faaborg, Denmark. Filed Dec. 10, 1928, Serial No. 325,003, and in Denmark Dec. 10, 1927. 7 Claims. (Cl. 40—130.)

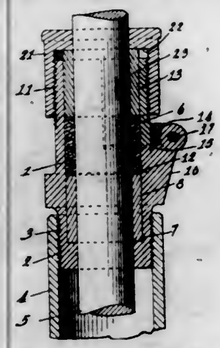


3. The art of illuminating, which comprises directing primary colored light through a perforated sheet and simultaneously directing complementary colored light onto the face of the sheet.

1,811,334. STUFFING BOX. MAX ROEMER, Lost Hills, Calif. Filed Nov. 26, 1928. Serial No. 322,004. 5 Claims. (Cl. 286—34.)

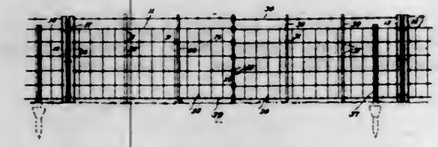
1. A stuffing box comprising a body member having a shaft extending therethrough, packing disposed in said box and surrounding said shaft, a hinged member swingable

into a position for exposing said packing from a position exterior of said box, an adjustable cap for securing said hinged member in an operative position, and a member



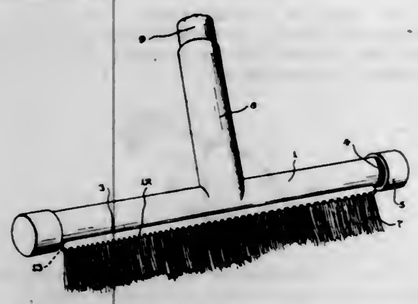
disposed between said cap and said packing whereby a movement of said cap will force said packing against said shaft.

1,811,335. FENCE PANEL COUPLING. CHARLES A. SPAUGH, Durham, Okla. Filed Jan. 27, 1930. Serial No. 423,838. 3 Claims. (Cl. 256—26.)



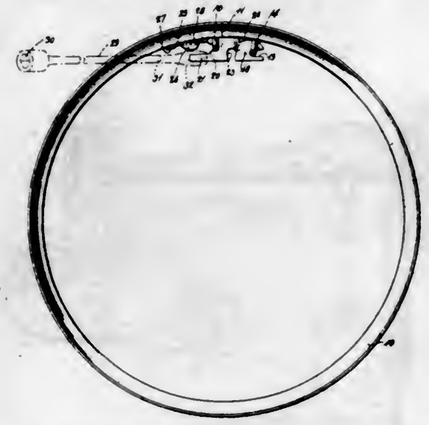
1. A fence of the character described comprising a plurality of detachable panels adapted to be arranged in end to end relation, companion bars carried by the adjacent ends of the respective panels, and having openings therein and a U-shaped link having its limbs received by said openings and detachably connecting said bars together, and each panel including a plurality of pivotally connected sections adapted to be folded one upon the other when not in use.

1,811,336. MOP HEAD. CAMILLO SPINO, Latrobe, Pa., assignor of one-half to Emilio D'Aviero, Clarksville, Pa. Filed May 28, 1930. Serial No. 456,770. 2 Claims. (Cl. 15—147.)



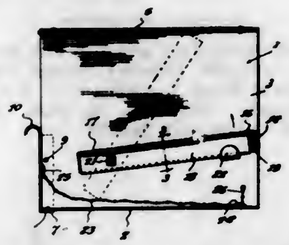
1. A mop-head comprising a tubular member closed at one end and provided with a longitudinal slot extending from adjacent said closed end to and through the opposite end of said tubular member, said slot permitting passage of a mop into said tubular member, the last-mentioned end of the tubular member being exteriorly screw threaded, an interiorly screw threaded cap having threaded fit with said exterior screw threaded portion of the tubular member, and a bar in the tubular member to secure the mop from accidental withdrawal from the tubular member.

1,811,337. DEMOUNTABLE RIM. JOHN WILLIAM STARK, Bowling Green, Ky. Filed July 5, 1928. Serial No. 290,538. 7 Claims. (Cl. 301—34.)



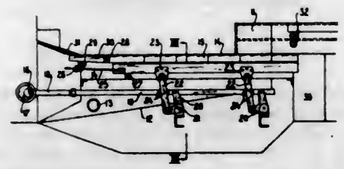
1. The combination of a one-piece transplit demountable rim, a rim-operating lever hinged at one end to an end of the rim, a pintle member secured to the other end of the rim, the other end of said lever being longitudinally notched to constitute a fork in which said pintle member is held by the inherent elasticity of the rim, and means by which said lever may be swung to make or break the rim.

1,811,338. HEN'S NEST. HERBERT A. THULLINGER, Clackamas County, Oreg. Filed May 29, 1929. Serial No. 367,095. 4 Claims. (Cl. 119—48.)



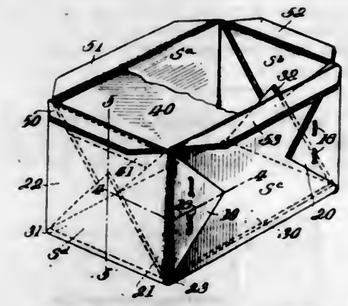
1. A nest comprising a housing open at its front and rear ends, and a laying tray in said housing pivotally mounted adjacent its front end and having its side portions bearing against side walls of the housing, said tray being adapted to be swung upwardly from an operative to a substantially vertical inopertive position and held in the raised position by frictional binding with the side walls of the housing.

1,811,339. FURNACE. ANNE J. M. A. VAN DER DOES DE BIJE, The Hague, Netherlands. Filed Oct. 22, 1928, Serial No. 314,245, and in the Netherlands Oct. 31, 1927. 4 Claims. (Cl. 110—38.)



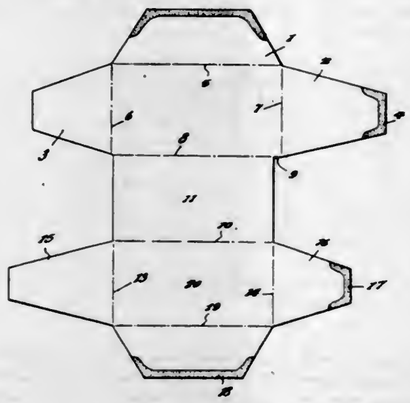
1. In a furnace the combination, a central stationary grate, cooperating means for feeding coal to the central portion of the grate and spreading it laterally therefrom, an ash-pit at the rear end of the furnace, movable grate means arranged on opposite sides of the feeding means and the stationary grate and forwardly of the ashpit and embodying a plurality of parallel arranged longitudinally and vertically movable grate bars, means for actuating the bars, and means for varying the stroke of some of the bars with respect to the other bars so that the speed with which the coal on said grate bars is conveyed toward the ashpit will have different values at different lateral distances from the central line of the feeding means and the stationary grate.

1,811,340. CANNED GOODS CONTAINER. FRANK WATSON, Baltimore, Md., assignor to The Lafayette Company, Inc., Baltimore, Md., a Corporation of Maryland. Filed Sept. 20, 1927. Serial No. 220,733. 6 Claims. (Cl. 229—32.)



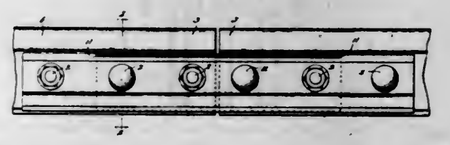
1. In a fibre container a body formed with a bottom and side walls, each side wall having a tab overlapping and reinforcing the adjacent side wall, the tabs of two opposite side walls being inside the respective adjacent side walls, said tabs having their upper edges inclined downward toward the center of the respective side, and a closure member to close the top of the body, said closure member having downturned flanges parallel to opposite side walls of the body with inclined edges to rest upon the inturned tabs so that the closure member is supported independently of the contents of the container.

1,811,341. ENVELOPE. WILLIAM A. WELCH, Holyoke, Mass. Filed Aug. 26, 1929. Serial No. 388,496. 1 Claim. (Cl. 229—73.)



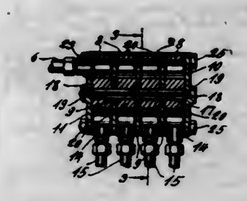
An envelope comprising a blank having three rectangular panels, one end panel being wider than the other end panel and the central panel whereby when the narrower panels are folded onto the wider panel an opening will be provided at one end to receive an opener, and side flaps and end flaps on the end panels, the side flaps on the same panel being of unequal width and the flaps on the two end panels being relatively reversed whereby the thickness of the flaps will be distributed over the area of the panels when the blank is folded and sealed.

1,811,342. SPLICE BAR OR FISH PLATE. LAWRENCE S. WILBUR, Evanston, Ill., assignor to National Rail Joint Corporation, a Corporation of Illinois. Filed Apr. 20, 1929. Serial No. 356,814. 12 Claims. (Cl. 238—243.)



1. A rail joint comprising a splice bar having a section of metal forming a longitudinal reinforce on the inner side thereof, conforming thereto and solidly united therewith, forming a fixed part of the bar itself.

1,811,343. LUBRICATING DEVICE. GEORGE J. BANCROFT and MARTIN E. ANDERSON, Denver, Colo. Filed May 21, 1928. Serial No. 279,454. 6 Claims. (Cl. 184—7.)

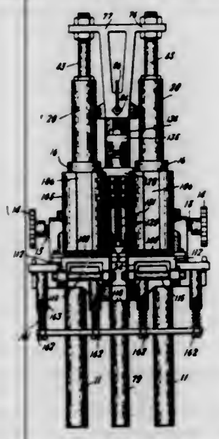


1. A lubricating system including a main conduit and a plurality of resilient noncircular branch conduits, means for producing a flow of lubricant through the main conduit and the branch conduits and means at the juncture of the main conduit and the branch conduits and operable solely by the pressure of the entering lubricant for distributing the flow of lubricant in the branch conduits in a predetermined ratio for establishing a positive flow through each of the several branch conduits in accordance with the proportion of distribution allotted for each of the branch conduits.

1,811,344. CAP FEEDING MECHANISM FOR BOTTLE CAPPERS. EWALD GEORGE BAUM, Natick, Mass., assignor, by mesne assignments, to American Seal-Kap Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed June 19, 1929. Serial No. 372,205. 4 Claims. (Cl. 226—92.)

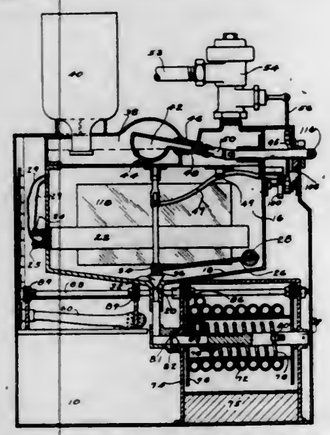
1. In a capping mechanism, a vertically movable head having an opening engaging over and around the mouth of a bottle to be capped, a vertically reciprocable support member connected with said head, means resiliently maintaining said head and its support member in an intermediate position relative to each other, a cap magazine

rigidly attached to said head, a cap feeding slide horizontally reciprocable beneath said magazine, and means



actuable by relative movement between said head and its supporting means from said intermediate relative position to reciprocate said slide to either end of its stroke.

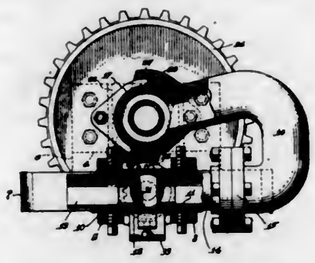
1,811,345. DEVICE FOR DISPENSING THE EQUIPMENT NECESSARY FOR THE PRACTICE OF FEMININE HYGIENE. CATHERINE M. BELL, Seattle, Wash. Filed Feb. 10, 1930. Serial No. 427,127. 5 Claims. (Cl. 128—227.)



1. A dispensing device of the class described consisting of a wall cabinet; a coin controlled operating handle; a door closing said cabinet; a latch for said door adapted to be operated by said handle; means adapted to discharge irrigation tips singly; a solution mixing reservoir; discharge tubing permanently connected to the discharge of said reservoir; a storing reel for said tubing; means coacting with said door to turn said reel with considerable force when the door is opened and closed; means for supplying a measured amount of water; means for measuring and discharging chemicals into said water; electrical means adapted to heat said water to a desired temperature; means for discharging said water when the desired temperature is reached, and a switch adapted to control said heating means.

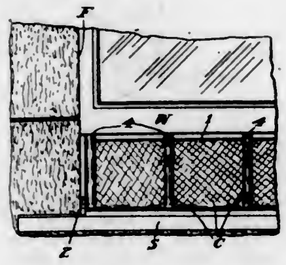
1,811,346. SOOT BLOWER FOR BOILERS. JAMES C. BENNETT, Detroit, Mich. Filed Dec. 17, 1924. Serial No. 756,452. 3 Claims. (Cl. 122—392.)

1. In a soot blower, a rotary blower arm having a lateral outlet, means for supplying steam to said arm, a valve in said means, a gear segment movable with said arm, a pinion carried by said valve and engageable by said segment, means for turning said arm alternately in opposite directions, said gear segment being arranged to



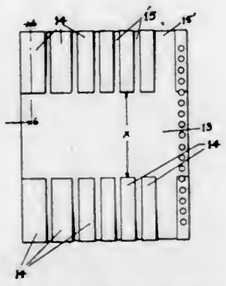
open the valve in one direction of turning and to close the valve in the other direction of turning, and bi-terminal stop means for said arm and gear operative on disenaggement of said gear from said pinion in either direction of turning.

1,811,347. SOUND ABSORBING VENTILATOR AND THE LIKE. CHARLES R. C. BORDEN, Brookline, Mass. Filed Mar. 7, 1927. Serial No. 173,322. 3 Claims. (Cl. 98—99.)



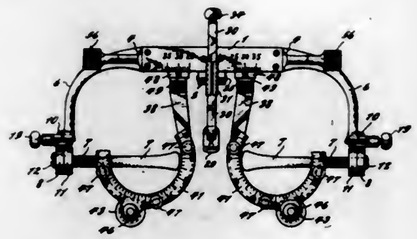
1. In a ventilator, an inwardly and upwardly inclined flat deflector member, vertical forwardly projecting end members and a plurality of intermediate vertical fins, the entire structure formed of sound deadening material and a reenforcing frame for said sound deadening material.

1,811,348. LOOSE LEAF DEVICE. JOHN LOUIS BURGOYNE, San Mateo, Calif., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed June 19, 1929. Serial No. 372,117. 9 Claims. (Cl. 129—1.)



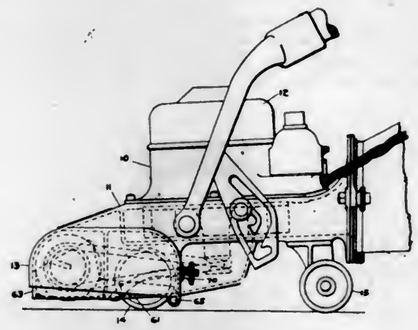
4. A loose leaf book device comprising a flexible leaf for the book provided with wedge elements spacedly arranged along a side edge and extending from the binding portion of the leaf outward, said wedge elements provided with a combined surface area substantially greater than the spaces between the wedges.

1,811,349. OPHTHALMIC TRIAL FRAME. HANS CLEMENT, New York, N. Y., assignor to General Optical Co., Inc., a Corporation of New York. Filed Jan. 4, 1927. Serial No. 158,841. 16 Claims. (Cl. 88—20.)



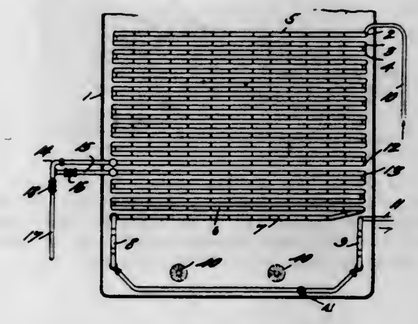
1. A trial frame having, in combination, a straight rigid cross bar extending from side to side to form a main frame part, gradually tapering stiffly resilient curved temple arms rigidly connected at their larger inner ends to the outer ends of the cross bar and extending therefrom on gradually merging curved lines outwardly and rearwardly and downwardly in substantial conformation with the shape of the head, a temple connected to the outer end of each of said arms, and a pair of trial case lens holders below and carried by said cross bar independently of said temple arms.

1,811,350. ADJUSTABLE AUXILIARY NOZZLE FOR SUCTION CLEANERS. GORDON C. CURRY, North Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Oct. 8, 1924. Serial No. 742,315. 2 Claims. (Cl. 15—8.)



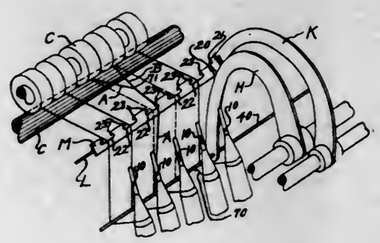
1. A suction sweeper having a main frame member defining a fan chamber, a forwardly extending open bottom nozzle hood, a suction passage connecting the fan chamber and nozzle hood, the suction passage defined in part by walls depending from the fan chamber, an auxiliary nozzle intake having its forward and its side edges defined by walls substantially perpendicular to the plane of the nozzle intake, and the rear edge defined by a flat unobstructed plate member having its forward portion substantially in the plane of the nozzle intake, the auxiliary nozzle pivotally mounted at substantially the rear of the nozzle hood, the unobstructed flat portion of the auxiliary nozzle comprising in cooperation with the depending walls a portion of the suction passage, a rod fixed to said auxiliary nozzle and arranged to extend rearwardly and in close relation to a portion of said main frame member at a point substantially above where said auxiliary nozzle is pivotally mounted, and means adjustable in connecton with said rod and co-operating with said main frame member to raise and lower said auxiliary nozzle intake with respect to said nozzle hood.

1,811,351. EMERGENCY RELIEF WITH REMOTE CONTROL. ANDREW T. DUDLEY, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed June 21, 1928. Serial No. 287,275. 4 Claims. (Cl. 196—110.)



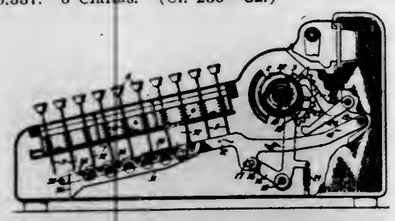
1. A pipe still comprising a plurality of tube sections through which a fluid to be heated is circulated and arranged so that the sections of tubing nearest the exit are exposed to radiant heat, heat retaining walls surrounding said still, means for heating the tubes containing the fluid, means for interrupting the flow of said fluid at a point in advance of the hottest part of the fluid-containing system, and means located at said point for diverting the flow of said fluid from said system.

1,811,352. TENSION FALLER BAR FOR SPINNING MULES. WALTER A. FEUGILL, Methuen, and JOHN R. HOSKING, North Andover, Mass. Filed Jan. 23, 1930. Serial No. 422,793. 6 Claims. (Cl. 118—10.)



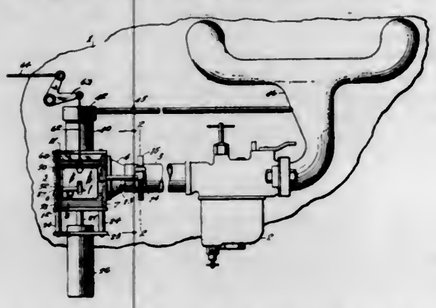
1. The combination with a spinning mule having a fixed frame and a plurality of delivery rolls revoluble therein, a carriage on which are a plurality of inclined revoluble spindles, said carriage being movable to and from said rolls, and means to move the carriage, together with means to cause such spindles to revolve for spinning, for winding, for backing off and to cause them to stop, winding faller sickle arms pivoted on the carriage and a faller wire carried thereby, tension faller sickle arms pivoted on the carriage and a faller wire carried thereby, and means to move said arms for drawing, spinning, backing off and winding; of a series of yarn guide bars each of flat metal bent at the ends and fixed between adjoining tension arms, each bar having in its upper edge a plurality of recesses the centre of each of which is opposite a spindle, there being an overhanging finger at each end of each recess, each of such fingers having in its lower edge an inverted V shaped nick having sharp cutting edges.

1,811,353. CALCULATING MACHINE. CARL M. F. FRIDEN, Oakland, Calif., assignor to Marchant Calculating Machine Company, Emeryville, Calif., a Corporation of California. Filed Sept. 17, 1928. Serial No. 306,337. 3 Claims. (Cl. 235—82.)



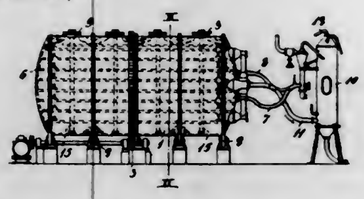
1. In a calculating machine, a plurality of impulse operated keys, a pivoted key bar positioned below the keys, a movable unit connected to said key-bar and a slide moved by the keys into engagement with the key bar to limit downward movement of the key-bar.

1,811,354. AUTOMATIC CHOKE FOR CARBURETORS. THOMAS D. JOECK, Belmar, N. J. Filed Dec. 14, 1928. Serial No. 325,992. 5 Claims. (Cl. 123—124.)



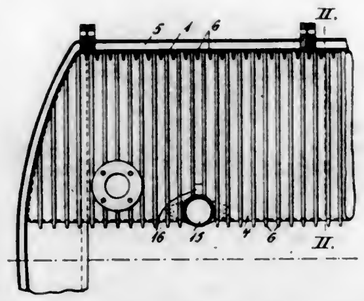
1. In combination with a carburetor, choking means for regulating the supply of air to said carburetor, said choking means comprising a valve automatically operated in response to variations in the vacuum applied to said carburetor, and dash-pot means for retarding any decrease in the choking effect of said valve, but offering substantially no resistance to an increase in the choking effect thereof.

1,811,355. DRYING APPARATUS. AUGUSTINUS EDVARD JONSSON, Lidingo, Sweden. Filed Feb. 14, 1929, Serial No. 339,999, and in Sweden Feb. 14, 1928. 2 Claims. (Cl. 257—93.)



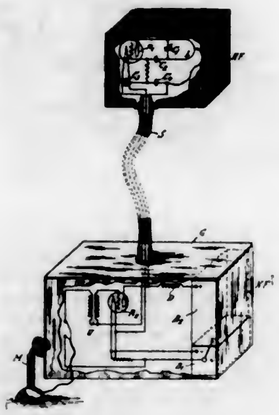
1. A drying apparatus, comprising a rotatable cylinder, hollow heating units disposed within said cylinder for the reception of a heating fluid, said units forming flat shelves extending through the whole length of the cylinder and grouped in parallel at opposite sides of a free space extending diametrically through the axis of the cylinder perpendicular to the plane of the shelves, each of said shelves extending from the circumference of the cylinder to the said diametrical free space, said space communicating with feeding and discharging openings in the wall of the cylinder.

1,811,356. DRYING APPARATUS. AUGUSTINUS EDVARD JONSSON, Lidingo, Sweden. Filed Feb. 14, 1929, Serial No. 340,000, and in Sweden Feb. 15, 1928. 5 Claims. (Cl. 257—93.)



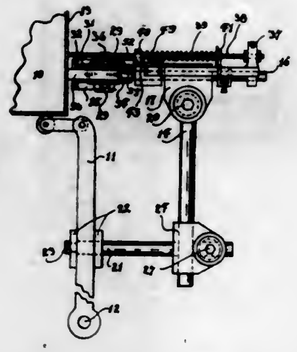
1. A drying apparatus comprising in combination with a rotatable cylinder, a plurality of hollow flat heating shelves extending through the whole length of the cylinder and grouped in parallel on both sides of a free space extending diametrically through the axis of the cylinder perpendicular to the plane of the shelves, each of said shelves extending from the circumference of the cylinder to said diametrical free space, said space communicating with the feeding and discharging openings in the wall of the cylinder, said flat shelves having a plurality of ribs disposed in embracing relation to the exterior of the heating shelves and extending perpendicular to the axis of the cylinder thereby to prevent the material being dried from coming into direct contact with the walls of the flat shelves.

1,811,357. WIRELESS SIGNALING APPARATUS. EDUARD KARPLUS, Berlin-Tempelhof, Germany, assignor to C. Lorenz Aktiengesellschaft, Berlin-Tempelhof, Germany. Filed Mar. 11, 1929, Serial No. 345,914, and in Germany May 12, 1928. 6 Claims. (Cl. 250—16.)



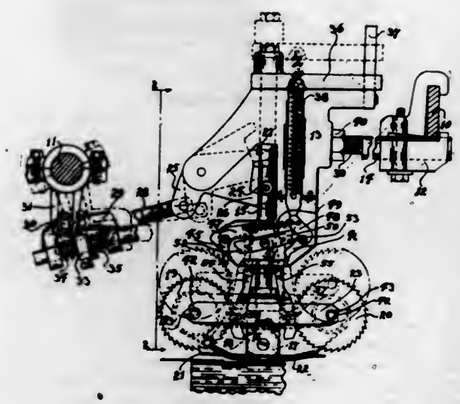
1. An apparatus for wireless signaling by ultra-short waves comprising two parts arranged in spaced relation to one another, the first of said parts including the circuits for high frequency and the second of said parts comprising a screened metal casing connected with earth and including circuits for low-frequency and direct current; the said two parts being connected galvanically through leads which are screened by a metallic protective covering, and condensers shunting said leads at their connection points with the high frequency circuits.

1,811,358. DATING ATTACHMENT FOR PACKAGING MACHINES. MAXIMILIAN H. KERN, Richmond Hill, New York, N. Y., assignor to Roberts Numbering Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,200. 14 Claims. (Cl. 101—318.)



1. A dating attachment for packaging machines embodying therein a shaft, a head carried thereby, a rod, means connecting said shaft to said rod, printing characters carried by said head, a ribbon feed mechanism movable with said shaft and said head, a spacer bar, means adjustably connecting said spacer bar with said rod, and means whereby said bar may be rigidly connected with an oscillatory lever forming a part of a package forming machine.

1,811,359. DATING ATTACHMENT FOR WRAPPING MACHINES. MAXIMILIAN H. KERN, Richmond Hill, New York, N. Y., assignor to Roberts Numbering Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,201. 18 Claims. (Cl. 101—318.)



1. A dating attachment for wrapping machines embodying therein a support positioned above the feed shelf of the feeder for a wrapping machine, a rod slidably mounted in said support, a head carried by said rod, printing characters carried by said head, means supporting and feeding an inked ribbon in relation to said printing characters, a bell crank lever, a lost motion connection between said lever and said rod, a crank member carried by a rock shaft forming a part of a feeder, and connections between said rock shaft and said bell crank lever.

1,811,360. PROCESS FOR RECOVERY OF TIN FROM STANNATE SOLUTIONS. WILLIAM T. LITTLE, Westfield, N. J. Filed Nov. 1, 1928. Serial No. 316,623. 1 Claim. (Cl. 23—144.)

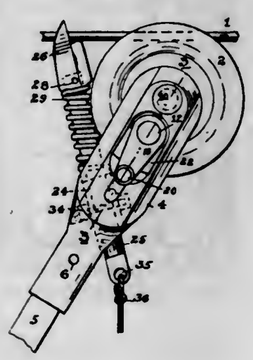
In the detinning of lead alloys containing tin by the action of a molten mixture of caustic soda and sodium nitrate, the process of producing sodium nitrate therefor and of recovering tin which comprises cooling said mixture after use, extracting with cold water to produce a solution of sodium stannate, treating said solution of sodium stannate with gaseous oxids of nitrogen to precipitate tin oxid and form sodium nitrate, separating the tin oxid from the solution of sodium nitrate thus obtained, recovering said sodium nitrate from said solution and adding said sodium nitrate thus obtained to said molten mixture of caustic soda and sodium nitrate.

1,811,361. INK BOTTLE PEN FILLING PROTECTOR. CHARLES WIGHT MACMILLAN, Denver, Colo. Filed Feb. 4, 1930. Serial No. 425,876. 3 Claims. (Cl. 120—57.)



1. An ink bottle pen filling protector consisting of a flat, washer-shaped ring; the flat surface of said ring being soft and forming a cushion; a thin, elastic membrane attached to and extending radially from the outer, circumferential edge of said ring; said elastic membrane terminating in a circular, elastic bead and being provided with means of allowing air to pass thru said membrane; said membrane being flexible, and elastic and assuming no definite, rigid shape.

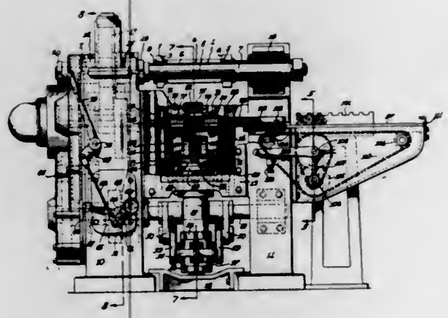
1,811,362. TROLLEY HARP AND WHEEL STRUCTURE. SALVATOR MAGGIO, Pittsburgh, Pa. Filed Aug. 7, 1930. Serial No. 473,737. 15 Claims. (Cl. 191—61.)



15. In a trolley harp and wheel structure, the combination with the harp and the wheel rotatably mounted between the arms of the harp, of a member comprising

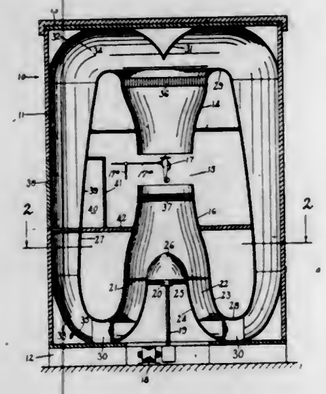
a bifurcated head which is arranged to straddle the overhead conductor from below and in advance of the wheel, and a stem which is mounted for longitudinal movement relative to the harp, means for spring-pressing the member into engagement with the conductor, means for limiting the longitudinal movement of the member relative to the harp, and means for attaching a trolley rope to the lower end of the member.

1,811,363. MILLING MACHINE. HENRY E. MORTON, Muskegon Heights, Mich. Filed May 22, 1929. Serial No. 365,187. 12 Claims. (Cl. 90—18.)



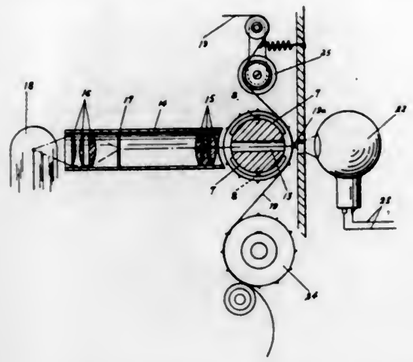
1. A milling machine including a milling cutter, means for rotating said cutter, a vertically movable head beneath said cutter, a work holder on said head removable therefrom, a horizontally reciprocable member to interlock with said holder when said holder is in lowered position, means for receiving said member, and means for raising and lowering said head.

1,811,364. WIND TUNNEL FOR TESTING AEROPLANES. DIMITRY E. OLSHEVSKY, Milford, Conn. Filed June 7, 1930. Serial No. 459,781. 14 Claims. (Cl. 35—12.)



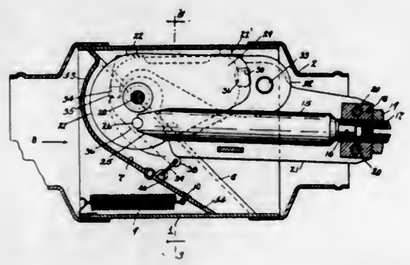
1. In a wind tunnel, a pair of throats mounted one above the other and having a gap therebetween in which an aeroplane may be suspended, and means for causing the passage of air from one of said throats to the other.

1,811,365. ROLLER SUPPORT FOR TRAVELING FILMS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed May 22, 1930. Serial No. 454,765. 5 Claims. (Cl. 179—100.3.)



1. A roller film support, comprising a fixed arbor, a two part roller mounted for rotation on said arbor, means for maintaining the parts of the roller longitudinally separated, and said arbor being provided with an opening passing diametrically therethrough at a point in the length of the arbor between said separated roller parts.

1,811,366. THERMOSTATIC VALVE FOR AUTOMOBILES. JOHN V. O. PALM, Cleveland Heights, Ohio. Filed Jan. 9, 1924. Serial No. 685,195. 6 Claims. (Cl. 236—34.)

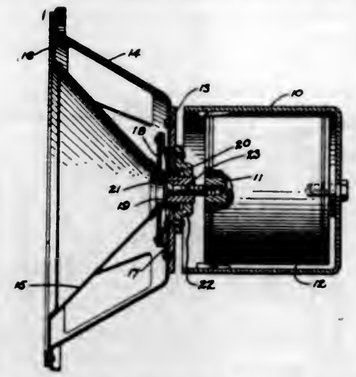


1. In a valve for automobile engine circulating systems, the combination of a conduit adapted to be interposed in said system between the engine and the radiator, said conduit being slightly larger than the connections of said circulating system, a valve mounted in said conduit and movable to open or close the same, said valve cooperating with the inner wall of said conduit, a relatively non-expansible frame mounted longitudinally within said conduit, and in proximity to said valve, and means carried by said frame, said means being arranged parallel to the frame and including a temperature actuated expansible member and connections between the same and said valve for actuating the latter, said connections having a different cofficient of expansion than the expansible member.

1,811,367. LOUD SPEAKER. EDWIN S. PRIDHAM, Oakland, Calif., assignor to The Magnavox Company, Oakland, Calif., a Corporation of Arizona. Filed Mar. 27, 1929. Serial No. 350,188. 7 Claims. (Cl. 179—115.5.)

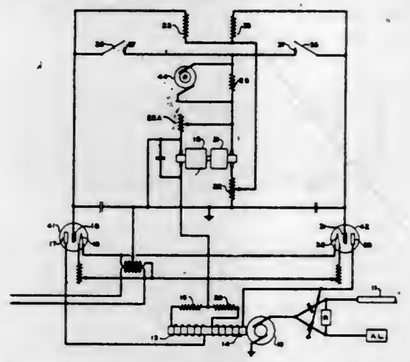
6. The method of manufacturing loud speakers which comprises forming the speaker in two major parts, one part comprising the magnetic field structure and the other

comprising a removable pole piece and an open ended conical diaphragm head assembly, and securing the two parts



together in operative relation by a single securing means which is accessible only through the opening in said diaphragm.

1,811,368. TELEGRAPH SYSTEM. MICHAEL I. PUPIN, Norfolk, Conn., assignor to The Commercial Cable Company of New York, New York, N. Y., a Corporation of New York. Filed Feb. 11, 1929. Serial No. 339,213. 11 Claims. (Cl. 178—58.)



1. A telegraphic signalling system comprising a plurality of vacuum tubes having a cathode, an anode, and a grid, the anode circuits containing the field windings of a dynamo electric generator, generators of direct and alternating electromotive forces to be impressed upon the anode and the grid circuits of said vacuum tubes, and movable contacts in said grid circuits with means for impressing by said contacts a biasing potential upon the grids during a definite phase-interval of the alternator.

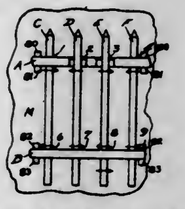
1,811,369. GUARD FOR GUYS AND THE LIKE. EVERETT ST. JOHN, Westport, Conn., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 10, 1928. Serial No. 304,868. 2 Claims. (Cl. 189—31.5.)



2. A guard for guy wires and the like comprising an elongated trough shaped member which lies along the wire, said guard having a plurality of apertures therein, said apertures being out of alignment with respect to the center line of said guard, means for securing said guard to said wire comprising a plurality of threaded members extending through said apertures into the concave portion of said guard, and adjustable means on said threaded members for securely holding said wire against the underside of said guard

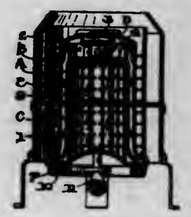
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1,811,370. METAL FENCE. JOSEPH F. SOUCY, Lowell, Mass. Filed July 13, 1929. Serial No. 378,073. 3 Claims. (Cl. 256—22.)



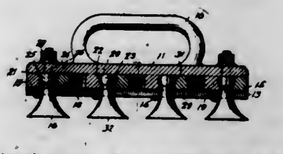
3. The combination in a metal picket fence of a top metal bar, such bar having spaced angular picket holes and a bottom bar having spaced angular picket holes in line with those on the top bar; and a plurality of angular metal pickets each of which passes through alined picket holes in the top and bottom bars and extends beyond each bar, each picket being slightly twisted in one direction under the top bar and in the other direction over the top bar.

1,811,371. OIL BURNER. SATORU TAKIMIZU, Toyotama Gun, Tokyo Fu, and HIROSHI IDEMITSU, Susaki, Fukuoka, Japan. Filed Dec. 10, 1929, Serial No. 413,004, and in Japan Dec. 31, 1928. 1 Claim. (Cl. 158—86.)



An oil burner, comprising in combination, an inner and an outer perforated tube disposed in concentric relation, said tubes forming a combustion chamber in the space between them, the said inner tube having a number of vertical channels at its periphery, a vaporizing chamber disposed above said inner tube, a vapor conducting pipe disposed in each of said channels and communicating with the vaporizing chamber at a point near its top wall, an asbestos ring disposed in the lower end of said combustion chamber, said tubes communicating with the combustion chamber immediately above said ring, means for supplying fuel to said ring for initially lighting the burner, and a source of fuel supply communicating with said vaporizing chamber at a point near its bottom wall.

1,811,372. STIPPLING TOOL. HARRY TAYLOR, West Babylon, N. Y., assignor of one-half to Paul Krause, West Babylon, N. Y. Filed Aug. 28, 1930. Serial No. 478,536. 20 Claims. (Cl. 41—5.5.)



1. In a stippling tool, the combination with a series of stippling members, of a grooved holder having a handle

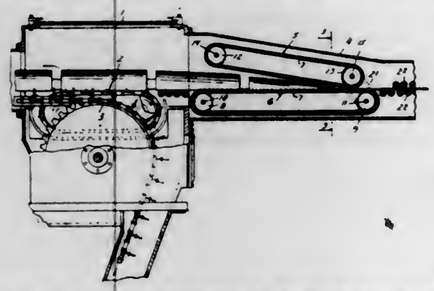
thereon, and a slide movable relatively to, and in the groove of, said holder, the holder and the slide having complementary recesses to engage said stippling members for holding said members removably in assembled relation to the holder.

1,811,373. FURNACE WALL. HOWARD C. THAYER, Jersey City, N. J., assignor to Bernitz Furnace Appliance Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 11, 1927. Serial No. 225,522. 7 Claims. (Cl. 122—6.)



1. In a furnace wall, the combination of a series of tubes, clamps secured to said tubes and constructed to hold said tubes spaced from each other and in a definite positional relationship to each other, refractory blocks protecting said tubes and clamps, and additional means for securing said blocks to said tubes.

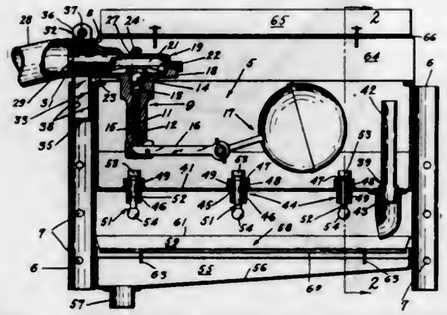
1,811,374. APPARATUS FOR HANDLING SHEET METAL. WILLIAM E. WATKINS, New York, N. Y., assignor to Copper Plate Sheet & Tube Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 6, 1929. Serial No. 390,787. 3 Claims. (Cl. 153—32.)



1. A sheet flattening device for flattening arched metal sheets comprising a pair of conveyors arranged in converging planes to flatten the sheets as they advance through the device, each of said conveyors comprising a pair of side chains spaced apart a distance greater than the width of the sheet, transverse strips connecting said chains, and means for driving one of said conveyors to advance the sheet.

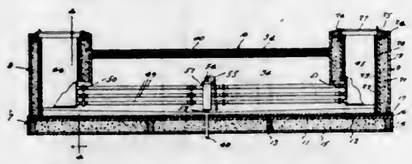
1,811,375. POULTRY DRINKING FOUNTAIN. STEWART WYSONG, Oakland, Calif., assignor of one-half to C. W. Hendrickson, Oakland, Calif. Filed Aug. 17, 1929. Serial No. 386,610. 6 Claims. (Cl. 119—80.)

1. A domestic fowl drinking fountain, comprising a container for holding water which is provided with an outlet immovably fixed thereto, a movable valve element seating on top of the outlet to control the flow of water through the outlet, a stem serving to operate the valve element and arranged within the outlet and extending to the exterior of the container, the water flowing down the stem when the valve element is open, said stem having a part of a shape



and size to be received in the beak of the fowl and being arranged to be lifted by the fowl to open the valve, and means for supporting the container at such an elevation above the body of the fowl that the fowl retains its neck in a raised position when drinking so that the water will flow down such neck.

1,811,376. REFRIGERATED DISPLAY CASE. MICHEL ABOOD, Jacksonville, Fla. Filed Jan. 27, 1930. Serial No. 423,828. 3 Claims. (Cl. 62—37.2.)

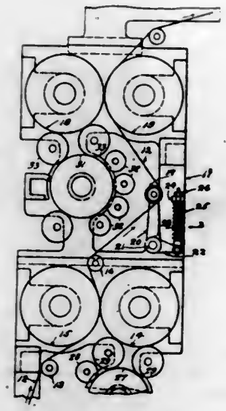


1. A refrigerated display case of the character described having end compartments and further having an intermediate display compartment extending between the end compartments and having communication with the lower portions thereof, containers mounted in the end compartments for the reception of a cooling medium, said containers having their bottoms spaced above the bottoms of the end compartments, a series of pipes traversing the display compartment and having their ends connected to the containers for the reception of the cooling medium therefrom, a drip pan disposed in the display compartment beneath the pipes to receive condensate therefrom, said drip pan extending into the end compartments and terminating in enlarged end portions disposed beneath the containers for receiving condensate therefrom.

1,811,377. WEB GUIDING MECHANISM FOR PRINTING MACHINES. HARRY V. BALL, Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 28, 1928. Serial No. 322,388. 1 Claim. (Cl. 101—220.)

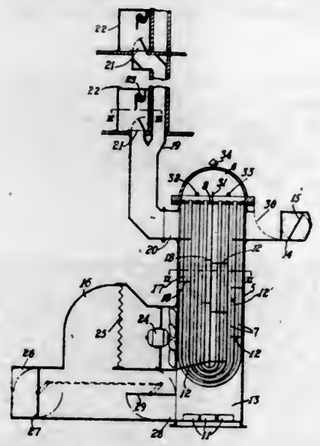
In a rotary web printing machine, a first printing couple adapted to print on one side of the web and comprising a first plate cylinder carrying a plate engaging with a first impression cylinder, a second printing couple adapted to print on the other side of the web and positioned in superposed relation to the first couple and comprising a second plate cylinder carrying a plate engaging with a second impression cylinder, inking mechanism below each of the printing couples, a first guide roller arranged to hold the web in contact with the first impression cylinder after it has passed the line of engagement with

the plate on the first plate cylinder, and a second guide roller arranged to guide the web around the inking mechanism for the second plate cylinder and to hold the web in contact with the second impression cylinder before it



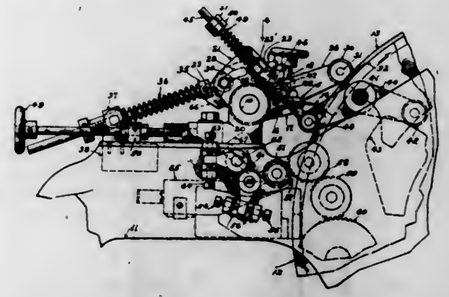
reaches the line of engagement with the plate on the second plate cylinder; one of said guide rollers being resiliently supported, whereby web breaks between the couples due to variations in the radial dimensions of the printing surfaces of the plates are avoided.

1,811,378. AIR CONDITIONING SYSTEM. BRYANT BANNISTER, Pittsburgh, Pa. Filed Jan. 25, 1928. Serial No. 249,346. 2 Claims. (Cl. 126—101.)



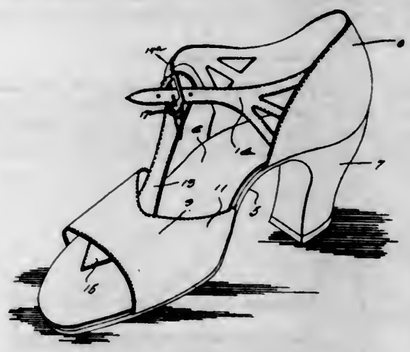
1. A heat exchange apparatus including a header, a tube sheet associated therewith, a plurality of U shaped tubes supported in said sheet and opening into said header, a housing for said tubes, a partition associated with said tubes and cooperating with said housing so that one leg of each of said tubes is located in one compartment and the other leg of each of said tubes is located in the other compartment, means for passing air through one of said compartments in contact with said tubes and a heating mechanism located in said housing and associated with the other of said compartments for passing a heating medium therethrough.

1,811,379. PLATE PRINTING MACHINE. WILLIAM EDWARD BENNISON, Wandsworth Borough, England, assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Sept. 5, 1928, Serial No. 304,124, and in Great Britain Sept. 22, 1927. 6 Claims. (Cl. 101—157.)



1. In a printing machine, a cylinder, a printing plate on the cylinder, an ink salvaging roller, a blade secured to a pivoted support, means for pressing the blade against the plate, means for moving the blade into engagement with the salvaging roller, a cam roller on an arm operably connected to the support, and a cam on the cylinder adapted to engage the roller and position the blade with respect to the plate.

1,811,380. SLIPPER. MARIE BERNARD, New York, N. Y. Filed Jan. 19, 1929. Serial No. 333,619. 2 Claims. (Cl. 36—1.)

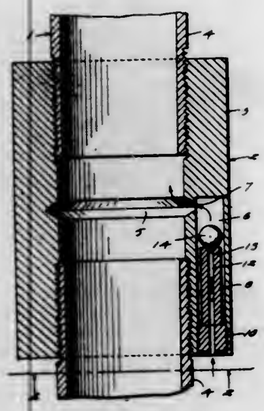


1. A high heeled shoe of the type described comprising inner and outer soles, a heel counter, a strap projected forwardly from an intermediate portion of the forward edge portion of each side of the counter; and a vamp having its edges secured between the soles, said vamp extended from the shank to a point short of the tip of the shoe, an instep strap secured on the underside of the vamp and extended rearwardly, one of said straps on the counter being extended across the upper portion of the instep strap and secured thereto, a buckle mounted at the juncture of the said straps, and the other of said straps in the counter being adapted to be extended across the upper portion of the instep strap and said one strap and adjustably secured by said buckle, said juncture of the straps being over the center of the instep of the foot.

1,811,381. OIL WELL PUMPING AND FLOWING APPARATUS. ROBERT E. BERWICK, Newkirk, Okla. Filed Sept. 11, 1930. Serial No. 481,242. 1 Claim. (Cl. 103—232.)

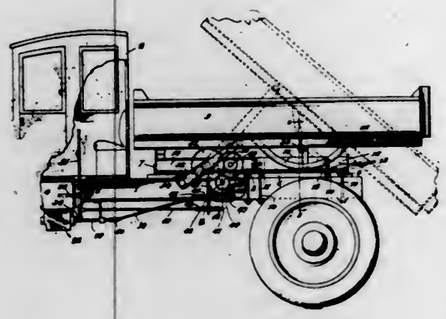
A flow valve for the tubing of an oil well flowing and pumping apparatus, comprising a one-piece hollow body

adapted to be interposed in the tubing and provided in the inner side of its wall between the ends thereof with an inner annular groove of less depth than the thickness of the wall and increasing in width in the direction of the longitudinal axis of the body, the body being provided in its wall radially beyond the bottom of said groove with a



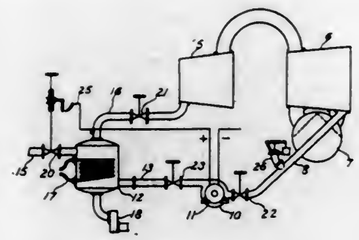
passage extending from the lower end of the wall to a point above the bottom of the groove, the wall of the body being provided with a radial port smaller diametrically than the greatest width of the groove and establishing communication between the upper end of the passage and the bottom of the groove, and a downwardly seating valve in the passage.

1,811,382. DUMPING TRUCK. EPHRIAM P. BORDEAUX, Galion, Ohio, assignor to Perfection Steel Body Company, Galion, Ohio, a Corporation of Ohio. Filed Dec. 15, 1930. Serial No. 502,521. 2 Claims. (Cl. 298—21.)



1. In a dumping truck comprising a chassis, and a dumping body mounted for tilting movement on the chassis, the combination of hoisting mechanism operatively connected with the dumping body and including a shaft having diametrically opposed projections thereon, means for rotating said shaft, a power take-off for driving said means, a lever pivotally mounted adjacent said shaft and provided at one end with a fork spanning the shaft and provided on its inner surfaces at its ends with projections to contact with the projections on the shaft, connections between the opposite end of said lever and the power take-off whereby to arrest the action of the take-off, and means for shifting said lever whereby to dispose either projection thereof in the path of the projections on the shaft.

1,811,383. MEANS FOR PREHEATING TURBINES. ERIC BROWN, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Apr. 26, 1929, Serial No. 358,208, and in Germany May 3, 1928. 6 Claims. (Cl. 253—1.)

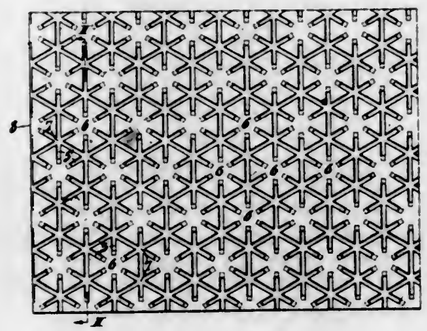


1. In a system for retaining turbines at the operating temperature, a turbine, a heat exchanger connected in the steam supply line of the turbine, means connected with said heat exchanger to separate water from the steam supply flowing therethrough, means for supplying said heat exchanger with heat, and means for causing the circulation of heating steam through the turbine and through said heat exchanger.

1,811,384. COMPOSITION FOR ARTIFICIAL PARTS FOR CORPSES. WILLIAM J. COLLIER, New York, N. Y. Filed July 30, 1929. Serial No. 382,293. 8 Claims. (Cl. 106—39.)

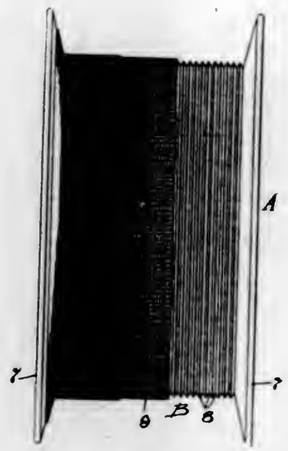
4. A composition of matter for the production of artificial parts for corpses comprising zinc oxide, about 50 parts, glucose, about 10 parts, borax about 20–25 parts, plaster of Paris, about 3 parts, phenol about 1 part, and alum, two tablespoons to 5 pounds of material.

1,811,385. ACOUSTICAL BOARD. FRANKLIN M. DIETZ, Hutchinson's Mills, Hamilton Township, Mercer County, N. J., assignor, by mesne assignments, to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 390,967. 6 Claims. (Cl. 181—30.)



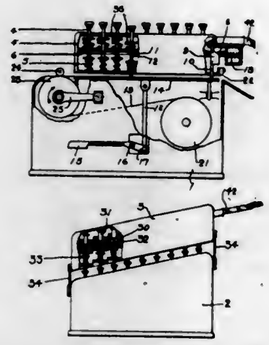
1. Acoustical board having its surface broken by a multiplicity of channels forming a recurrent pattern of polygonal units, the channels bounding each unit being prolonged into adjacent units.

1,811,386. CAKE SPOOL. WILLIAM H. FURNESS, National Park, N. J., assignor to Furness Corporation, Philadelphia, Pa., a Corporation of New Jersey. Filed July 26, 1929. Serial No. 381,199. 3 Claims. (Cl. 242—118.)



1. A spool for cakes of thread having a plurality of annular grooves on its spindle portions and a foraminous covering over said spindle portion upon which the thread is adapted to be wound.

1,811,387. RECORD MAKING MECHANISM. ROGER J. GILMORE and LEONARD W. LANGFORD, Boston, Mass.; said Gilmore assignor to said Langford. Filed Feb. 7, 1927. Serial No. 166,472. 9 Claims. (Cl. 235—60.)



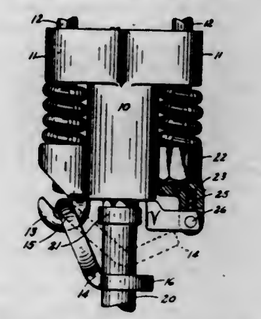
1. An apparatus for making records, comprising the combination of a punch press having a plurality of record-forming punches, a member adapted to be superposed over the keyboard of an adding or like machine and having a plurality of key operating elements so arranged as to adapt the elements to operate the keys of such machine when the member is thus superposed, means for moving the said elements to perform their key operating function, and means forming connections between the punch press and first named means whereby the elements corresponding to the punches selected and operated are caused to function.

1,811,388. TROLLEY SHOE. WALTER F. GRAHAM, Richland, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 10, 1930. Serial No. 460,204. 17 Claims. (Cl. 191—59.1.)



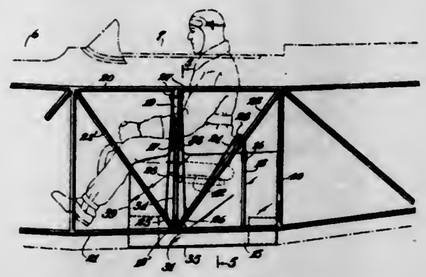
1. A trolley shoe comprising a body of ferrous material having a grooved portion with an elongated surface to receive and engage a trolley wire, a portion of the body forming said grooved surface having a higher carbon content than the other portions of the shoe.

1,811,389. LOCKING DEVICE FOR TOOL RETAINERS. DANIEL J. HAFFORD, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 21, 1929. Serial No. 372,692. 7 Claims. (Cl. 121—32.)



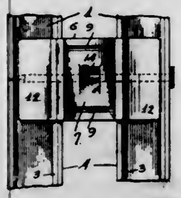
1. In combination with a tool retainer for a reciprocatively operated tool, a machine head, a tool retainer adjustably supported thereby, and movable stop means interposed between said retainer and machine head.

1,811,390. AIRCRAFT. CARL BROWN HARPER, Washington, D. C. Filed Apr. 6, 1929. Serial No. 352,945. 17 Claims. (Cl. 89—40.)



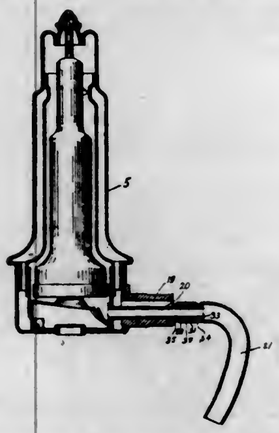
1. In an airplane a body having a gunner's compartment therein, a deck gun mount near the upper part of said compartment, a tunnel gun mount adjacent the lower part of said compartment, a lowerable platform in the compartment adjacent the tunnel gun mount which is normally on a level with the bottom of the body, said platform being movable independently of the gun mounts to a position substantially lower than the compartment floor upon which platform the gunner may stand to operate a gun on the deck mount or may kneel to operate a gun on the tunnel mount.

1,811,391. PARTITION-STUD CLAMP. WILBERT D. HENDERSON, San Francisco, Calif. Filed Aug. 22, 1928. Serial No. 301,361. 2 Claims. (Cl. 189—35.)



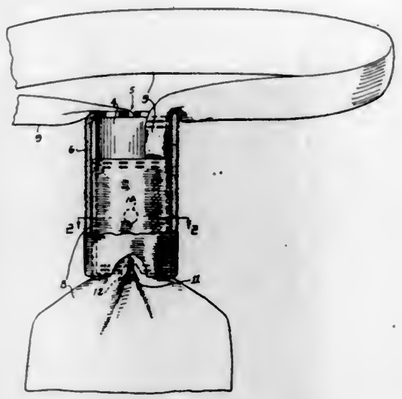
1. A clamp for partiti n studding members comprising a spring metal strip shaped to engage and hold a pair of structural iron channel members in spaced parallel relation, said strip comprising a central body portion, a pair of channel engaging portions formed at the ends of the body portion to engage adjacent legs of the channel members, the sides of each channel engaging portion being inclined relatively to each other at an angle slightly less than the angle between the inner and outer faces of the channel leg, and end portions extending laterally from the channel engaging portions and inclined toward the plane of the body portion to engage the inner surfaces of the backs of the channels; and an outwardly disposed apertured lug struck from the body portion to receive a securing member inserted through the aperture of the lug and engaging the backs of the channels to spring the channel engaging portions into gripping engagement with the legs of the channels and compress the end portions against the inner surfaces of the channel backs to exert a spring pressure against said channels.

1,811,392. SWIVEL TUBE CONNECTION. GEORGE D. HOFFMAN, Pasadena, Calif., assignor to Hoffman Specialty Company, Waterbury, Conn., a Corporation of Illinois. Original application filed Jan. 24, 1922, Serial No. 531,425. Divided and this application filed June 9, 1925. Serial No. 36,055. 3 Claims. (Cl. 285—9.)



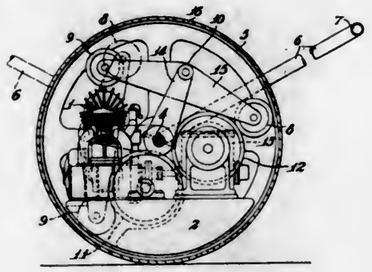
1. The combination of two tubes, one of which projects at its end within the end of the other, the inner tube having two external encircling collars or ribs spaced apart from each other and from the adjacent end of the tube with an open space between them adapted to admit the liquid passing through the tubes, said end forming a trunnion, and the outer tube having an internal shoulder surrounding and bearing on said trunnion, and being set inward at its extremity toward the inner tube beyond the shoulder most remote from said trunnion, the portion of the outer tube between said internal shoulder and extremity being formed to surround and bear freely on the outer circumferences of said collars.

1,811,393. NECKTIE. EDWARD J. HOOPER, Nutley, N. J. Filed Sept. 23, 1929. Serial No. 394,713. 1 Claim. (Cl. 2—150.)



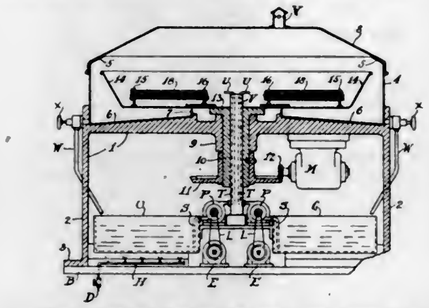
In a necktie, the combination with a tubular body having a completely open vertical slit at the rear, and a V-notch in its lower edge at the front, of a fabric breast piece applied to the interior of the tubular body, and puckered to project through the V-notch in a fold, and a fabric covering secured about said body and a neck piece also secured to the tubular body at one end so that its free end may be drawn laterally through the open vertical slit, and means for securing the free end of the neck piece within the tubular body.

1,811,394. INTERNALLY DRIVEN POWER ROLLER. HAROLD HORNSBY, Scunthorpe, England. Filed Mar. 8, 1930. Serial No. 434,422. 6 Claims. (Cl. 180—19.)



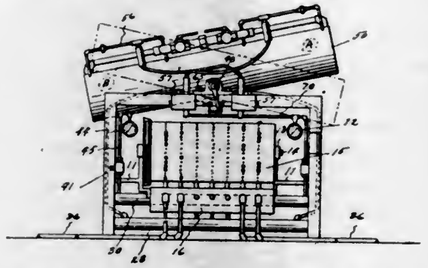
1. A power-driven roller for the purposes specified, having contained within the drum a suspended weighted body on which are mounted a power unit and rotatable friction discs constantly driven by said power unit, and having a displaceable element carrying rollers adapted to be brought into use selectively to frictionally transmit the drive from the rotary friction discs to the roller drum and rotate same in one or the other direction, and a guiding handle for the roller adapted to swing and to transmit its movements to the said displaceable element in order to effect driving of the roller in the direction required characterized in that the said displaceable member within the drum comprises a rigid arm secured to the drum axle and a rocker pivotally attached to said arm and having mounted on its respective ends a pair of rollers.

1,811,395. METHOD FOR INCREASING THE TENSILE STRENGTH OF YARNS. FREDERICK J. HOXIE, Phenix, R. I., and ASHTON M. TENNEY, New Rochelle, N. Y., assignors, by direct and mesne assignments, of one-half to Wellington, Sears & Company, New York, N. Y., a firm consisting of Harry L. Bailey, Norman S. Hope, John H. Bennett, and Charles O. Richardson and one-half to Warwick Mills, West Warwick, R. I., a Corporation of Rhode Island. Filed Mar. 19, 1926. Serial No. 95,978. 13 Claims. (Cl. 91—70.)



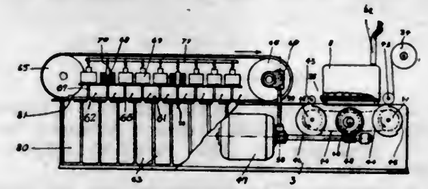
1. The process of coating yarns in the skein for increasing the tensile strength thereof which consists in immersing the yarn in an aqueous solution of gelatine, subjecting said yarn to whirling, then immersing said yarn in a heated oil the temperature of which is above the evaporating point of the water in said gelatine solution, to vaporize said water, then whirling the yarn to remove the heated oil.

1,811,396. AUTOMATIC INTERMITTER. SHERMAN D. JACKSON, Seminole, Okla. Filed May 20, 1929. Serial No. 364,540. 19 Claims. (Cl. 137—145.)



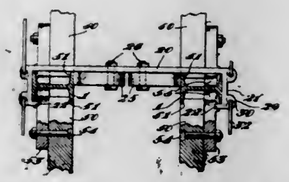
2. In an intermitter for controlling fluid pressure, a fluid valve for supplying such pressure at each of a plurality of points of use, fluid lines connected to said valves for individually operating the same, means for individually controlling the supply of compressed fluid to said lines, movable means for selectively varying the period of flow through each of said fluid line controlling means, and means for intermittently operating the movable means.

1,811,397. RECORD MAKING MECHANISM. LEONARD W. LANGFORD, Boston, Mass. Filed Jan. 20, 1927. Serial No. 162,367. 14 Claims. (Cl. 235—60.)



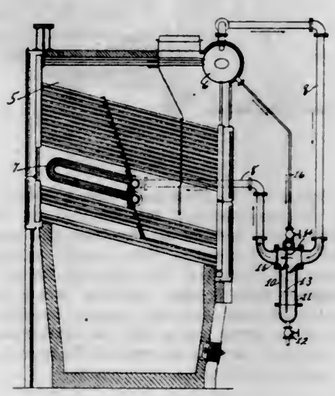
1. An apparatus for making records, comprising the combination of a punch-press having a plurality of punches, a keyboard adapted to be superposed over the keyboard of an adding or like machine in a manner to operate the latter from the former, means for operating the punches to punch record blanks supplied thereto, and means forming connections between the superposed key-board and punch-press whereby the punches corresponding to the keys depressed are selected.

1,811,398. CONCRETE FORM. ISAAC W. LITCHFIELD, Boston, Mass., assignor to Bemis Industries Inc., Boston, Mass., a Corporation of Delaware. Filed Nov. 25, 1927. Serial No. 235,439. 9 Claims. (Cl. 25—131.)



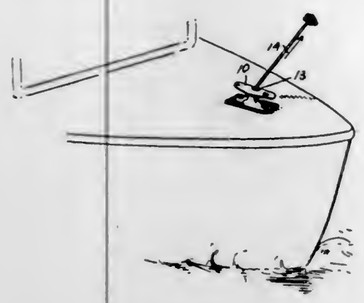
3. A self-supporting concrete form comprising uprights, form boards extending between the uprights, vertically extending channels in the uprights receiving the form boards and locking means engaging the channel walls to hold the boards in place, transverse ties securing uprights to each other and comprising members extending about the outer surfaces of the uprights, and means combined with the transverse ties for engaging longitudinal connections between the uprights, said transverse ties being vertically slidable upon the uprights, and said form boards being vertically slidable in the channels.

1,811,399. STEAM CLEANING DEVICE. CHARLES E. LUCKE, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 26, 1927. Serial No. 235,813. 5 Claims. (Cl. 122—459.)



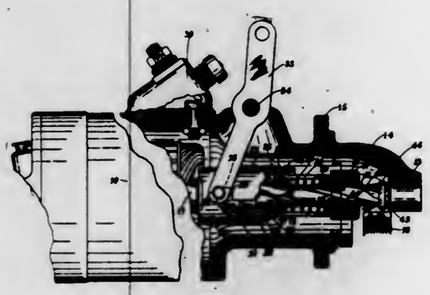
1. In a steam boiler, means for separating impurities from steam generated in said boiler and removing them from the system, said means being located below the water level of said boiler and comprising a connection to the water space of said boiler, said connection being so connected to the separating means as to wash the impurities therefrom.

1,811,400. MOORING CLEAT FOR BOATS AND THE LIKE. WILLIAM DODSON MCCLELLAN, Richmond, Va. Filed Nov. 10, 1930. Serial No. 494,718. 7 Claims. (Cl. 114—218.)



1. A means for mooring or docking small craft comprising a spring reel secured to an inner surface of the craft hull, a rope and a device on a hull outer surface for holding engagement with the rope, the rope passing freely from the reel to said device.

1,811,401. ENGINE STARTING MECHANISM. WILLIAM L. MCGRATH, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Oct. 2, 1929. Serial No. 396,769. 10 Claims. (Cl. 74—7.)



1. In a device of the class described, a power member, a driving member mounted for longitudinal movement and limited rotary lost motion thereon and adapted to engage and drive a member of an engine to be started, means under the control of the operator for moving the driving member into driving position, means for automatically moving said driving member to idle position when the engine starts and means for restricting the rotary lost motion of the driving member on the power member when in driving position.

1,811,402. HEATER OR COOLER. DANIEL RAYMOND MCNEAL, Abington, Pa., assignor to Andale Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 12, 1927. Serial No. 232,745. 13 Claims. (Cl. 257—222.)

1. In apparatus of the character described, a casing member and a tube plate member secured thereto, one of said members having a groove cooperating with the other member to form a channel with a joint at each side thereof, a head secured to said casing member, said

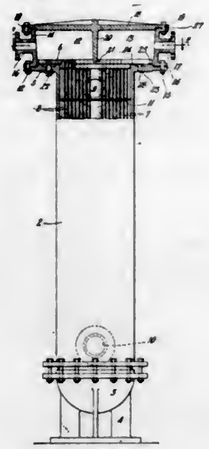
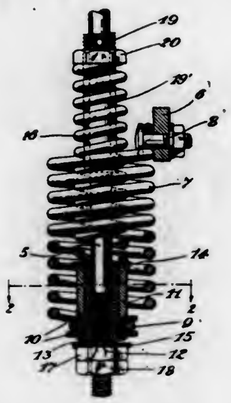


plate and casing forming a chamber and said plate, casing, and head forming another chamber, and an outlet connected to said channel.

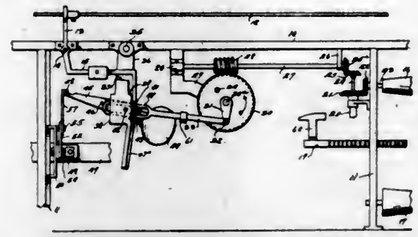
1,811,403. ADJUSTING MEANS FOR SPRING CUSHIONING DEVICES. HENRY MESINGER, Mount Vernon, N. Y. Filed Dec. 10, 1928. Serial No. 324,843. 6 Claims. (Cl. 267—60.)



1. In combination with cushioning means having an outer expansion spring fixed at its upper end, an inner compression spring, and a rod movable through said inner and outer springs, means for regulating the action of said cushioning springs including an abutment member on the rod engaged by the upper end of the inner spring, a sleeve surrounding said rod and connected with the lower end of the outer spring and transmitting the thrust of said inner spring thereto, and manually adjustable means on said rod to coact with said sleeve and thereby simultaneously adjust the tension of the inner and outer springs.

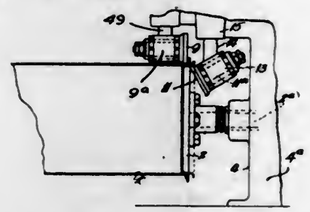
1,811,404. KNOCK-OFF MECHANISM FOR SLUBBERS AND ROVING FRAMES. JAMES C. NULLALLY, Greer, S. C. Filed Mar. 20, 1930. Serial No. 437,408. 9 Claims. (Cl. 242—39.)

1. In a stop motion for winding machines, the winding machine including a vertically reciprocatable bobbin rail, a shipper lever forming part of the stop motion, a swingable member normally supporting the shipper lever in a raised position, a latch carried by the swingable member and normally projecting therefrom, means actuated from the driving mechanism of the winding machine acting



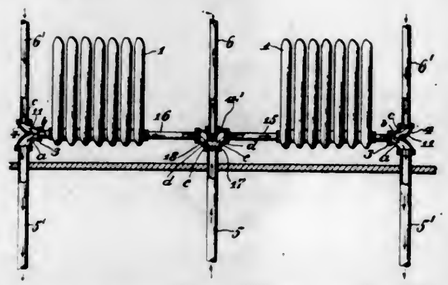
after a predetermined time from the start of said driving mechanism to release the direct engagement of the member with the lever and permit the lever to drop upon said latch, and means actuated upon a downward movement of the bobbin rail to retract the latch.

1,811,405. APPARATUS FOR ATTACHING THE HEADS OF SHEET METAL RECEPTACLES. CHARLES JOSEPH RHODES, Wakefield, England. Filed Jan. 10, 1929, Serial No. 331,452, and in Great Britain Oct. 2, 1928. 7 Claims. (Cl. 113—23.)



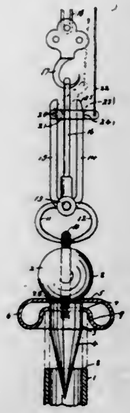
1. Apparatus for attaching the heads to sheet metal receptacles comprising two head-stocks, axially aligned chucks supported by said headstocks, between which the work is held, means for rotating said chucks, a supporting roller, a flanging roller cooperating with said supporting roller so constructed and arranged that it presents a minimum surface of contact with the work throughout the flanging operation and other rollers for completing the attachment of the head to said receptacles.

1,811,406. PRESSURE EQUALIZING MEANS FOR HEATING SYSTEMS. ALFRED J. RUDOLPH, Bywood, Pa. Filed Nov. 29, 1927. Serial No. 236,408. 8 Claims. (Cl. 237—1.)



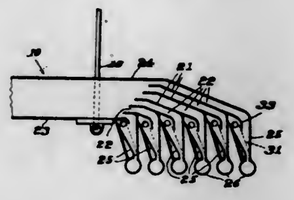
1. A heating system comprising heat radiating means, a supply pipe for supplying a heated fluid to said means, a return pipe for conveying the said fluid from said heat radiating means, means for connecting the supply pipe to the said heat radiating means, means for connecting the said return pipe to the said heat radiating means, and means embodied in each of said pipes which tend to cause the heated fluid to flow therefrom through the said connections toward the said heat radiating means to thereby balance the pressures of the heated fluid in said heat radiating means.

1,811,407. OIL CASING PLUG. ULYSSES G. SKELLY, Los Angeles, Calif. Filed June 25, 1930. Serial No. 463,689. 7 Claims. (Cl. 166—14.)



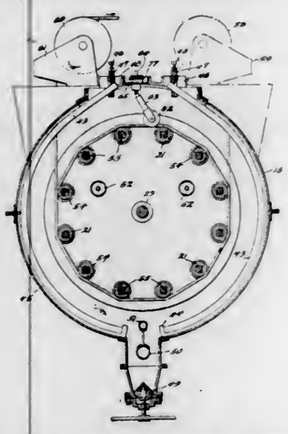
1. A fire extinguisher-plug for gas and oil well casings comprising: a cylindrical body adapted to fit tightly the inner periphery of the casing to which it is intended to be applied, a tapered extension on one end of said body, and a sleeve secured to the other end of said body and adapted to fit the outer periphery of said casing when the body is seated therein.

1,811,408. SLUICE CONCENTRATOR. ALBERT H. STEBBINS, Los Angeles, Calif. Filed Apr. 28, 1927. Serial No. 187,372. 2 Claims. (Cl. 209—458.)



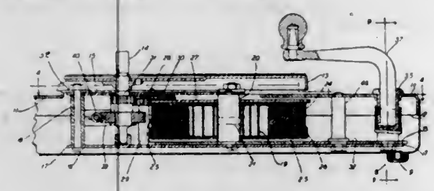
1. A sluice concentrator, comprising in combination, a sluice pipe closed from the point of feed to the points of discharge and adapted to have a stream of water bearing the materials to be separated forced therethrough under a maintained head pressure and constructed to promote a gravity stratification of the materials within the flowing stream so that materials differing in specific gravity will remain suspended in different vertically disposed portions of the stream moving through the pipe, settling receptacles, and partitions extending across said pipe near its discharge end and arranged one above the other to form a series of discharge conduits leading to said receptacles and each conduit being adapted to carry off at an undiminished rate of flow the entire volume of water that enters the space between the adjacent partitions of a conduit to thereby avoid intermingling of the material of the different sections of the stream adjacent the entrance to the conduits.

1,811,409. ELECTROPLATING APPARATUS. ALBERT F. W. THORMANN, Pittsburgh, Pa. Filed June 29, 1929. Serial No. 374,787. 5 Claims. (Cl. 204—5.)



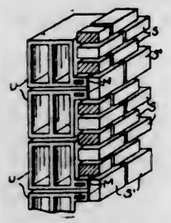
1. A continuous working apparatus for electrodepositing a copper coating on wire rope or similar products, comprising a tank for the electrolyte, a drum in the tank, rotary rods carried by the drum, rope seizing and guiding grooves in the rods, the rope being spirally wound around the drum in the grooves and successive grooves in adjacent rods being relatively offset conformably to the spiral path followed by the rope and means for rotating the rods.

1,811,410. PHONOGRAPH. ROY T. WATTS, Baltimore, Md., assignor, by mesne assignments, to William W. Varney, Baltimore, Md. Filed Feb. 9, 1927. Serial No. 166,990. 3 Claims. (Cl. 185—39.)



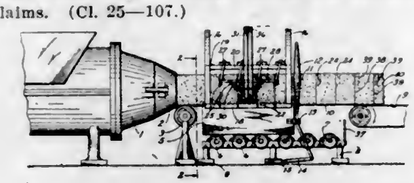
1. In a phonograph provided with a turntable operated by gears operating in a plane parallel with the plane of operation of said turntable, a spring driving said gears and a winding mechanism for winding said spring operated by gears operating in a plane parallel to said plane of operation of said turntable, and a crank for turning one of said gears operating above the plane of operation of said turntable.

1,811,411. WALL CONSTRUCTION. DONALD D. WHITTACRE, Waynesburg, and JOHN C. WOOD, Lakewood, Ohio. Filed May 5, 1928. Serial No. 275,313. 6 Claims. (Cl. 72—41.)



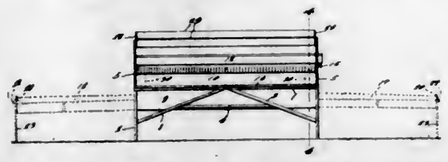
1. A composite brick and tile wall, comprising face brick laid in a plurality of stretcher courses, tile blocks behind the face brick having integrally formed lips extending into the brick facing portion of the wall between stretcher courses of brick, and brick units disposed with a lesser lateral dimension than the width of the stretcher brick and comprising part of the wall facing and lying flush with the face of the wall and disposed horizontally adjacent said tile lips between said first named stretcher courses of brick.

1,811,412. CUTTER. DONALD D. WHITACRE, Waynesburg, Ohio. Filed Sept. 7, 1929. Serial No. 391,070. 12 Claims. (Cl. 25—107.)



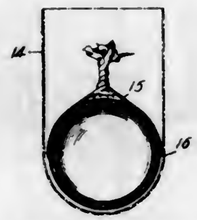
1. In apparatus for cutting a moving stream of plastic material into similiarly shaped pieces the combination of a table adapted to move with said material, and cutting mechanism adapted to move with said table comprising means for making spaced apart cuts through said stream of material and means for simultaneously making other cuts in said material starting in spaced relation to said first named cuts and extending to said first named cuts.

1,811,413. POULTRY FEED TROUGH. RAY C. WISEMAN, Parkersburg, W. Va. Filed Oct. 6, 1930. Serial No. 486,781. 9 Claims. (Cl. 119—61.)



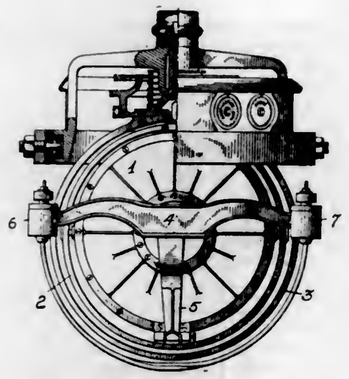
1. A poultry feeder of the class described comprising in combination, a casing, feed trays slidably mounted in said casing, said casing being open at its ends whereby said trays may be moved relative to one another into and out of said casing, said casing being open at its top, and a feed containing trough supported on the upper edge of said casing normally closing said top.

1,811,414. METHOD AND MEANS FOR REDUCING THE SIZE OF TENNIS BALLS AND HOLDING THE SAME WHILE REDUCED. JOHN R. GAMMETER, Akron, Ohio, assignor to A. G. Spalding & Bros., New York, N. Y., a Corporation of New Jersey. Filed Apr. 19, 1928. Serial No. 271,312. 7 Claims. (Cl. 206—46.)



1. A tennis, or similar, ball having a wall of elastic material and an inflating medium therein under superatmospheric pressure, said wall being constructed to conform to prescribed size and rebound requirements, and a pellicular coating substantially impervious to air shrunk upon the ball for holding it under compression and within the aforesaid prescribed size.

1,811,415. LIQUID CONTROLLED GYROCOMPASS. PERCY E. HARRIS, Brooklyn, N. Y., assignor to Sperry Gyroscope Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 29, 1929. Serial No. 389,146. 6 Claims. (Cl. 33—226.)



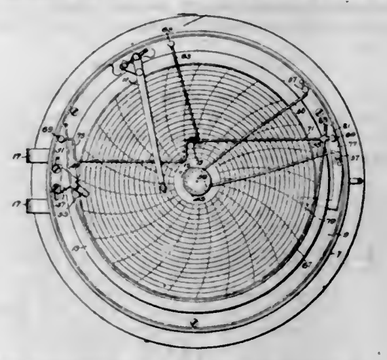
1. In a liquid controlled gyro-compass, the combination with gyroscopic element, a plurality of liquid containers located on the north side thereof and spaced in the E-W direction, a plurality of liquid containers located on the south side thereof and similarly spaced, and means interconnecting said containers in both the E-W and N-S directions.

1,811,416. REENFORCED INSULATION FABRIC. SAMUEL A. WILLIAMS, Scarsdale, N. Y., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 5, 1928. Serial No. 317,235. 8 Claims. (Cl. 154—44.)

2. A fire and heat-resisting sheet comprising matted layers of mineral fibres having reenforcing members incorporated therein, said reenforcing members consisting of cords of mineral fibres having ragged outer surfaces which mat with the fibres of the sheet and reenforced with a strand of relatively large tensile strength.

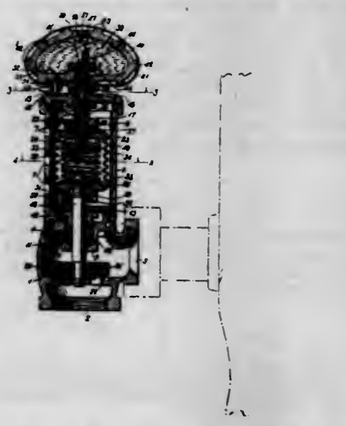
1,811,417. RECORDING INSTRUMENT. EDGAR H. BRISTOL, Foxboro, Mass., assignor to the Foxboro Company, Foxboro, Mass., a Corporation of Massachusetts. Filed June 6, 1925. Serial No. 35,352. 40 Claims. (Cl. 234—1.)

1. A recording instrument comprising a dial plate, a time shaft for supporting a chart to rest against and rotate over said plate and means for holding the margins of the chart including a bowed member secured at its ends to



the plate and having a main portion encircling a marginal portion of the chart and beneath which the chart may be slid for attachment to said shaft.

1,811,418. VALVE. MICHAEL E. MILLER, Washington, D. C. Filed Jan. 17, 1930. Serial No. 421,550. 11 Claims. (Cl. 236—42.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A device of the class described comprising a valve body having inlet and outlet openings, for the flow of temperature changing fluid, a partition provided with a valve seat separating said openings, a chamber open at one side to atmospheric temperature and closed at its ends, mounted on said body with its axis in line with the axis of the valve seat, a valve adapted to co-operate with said seat to control the flow of fluid, said valve having a divided stem, connected by a bellows, a combined hand wheel and reservoir mounted on the stem, passages connecting the interior of the reservoir and bellows and an expansible fluid sealed in said last named parts and adapted to close the valve at a predetermined temperature substantially as and for the purposes specified.

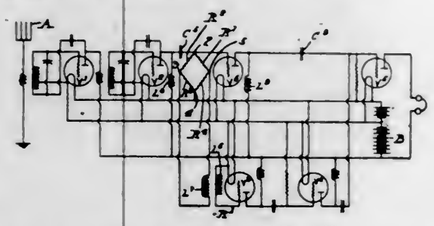
1,811,419. FISHING ROD CONSTRUCTION. CALVIN M. ANDERSON, Columbus, Ohio. Filed May 29, 1929. Serial No. 367,027. 6 Claims. (Cl. 43—18.)



1. A fishing rod consisting of a hollow body composed of longitudinally extending strips of bamboo, said strips being

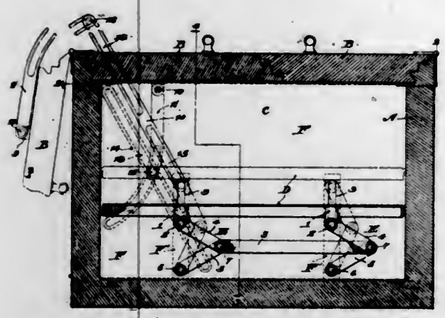
adhesively united along their longitudinal meeting edges, and a plurality of truss strips arranged within said body and extending perpendicularly to said body strips, said truss strips being interengaged along the longitudinal axis of said rod.

1,811,420. APPARATUS FOR THE RECEPTION OF RADIO MESSAGES. WILLIAM O. BARNES, Worcester, Mass. Filed Dec. 27, 1926. Serial No. 157,122. 4 Claims. (Cl. 250—20.)



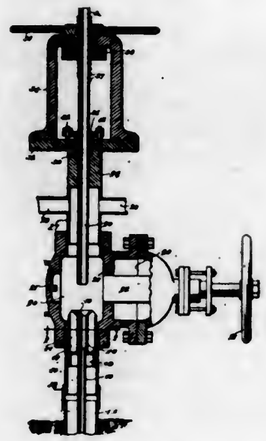
1. In a receiving device for signals transmitted in the form of electric waves, the combination with means for receiving the waves and a regulated amplifying element, of four resistances connected together in the form of a Wheatstone bridge, two opposite terminals of said Wheatstone bridge being connected with a receiving circuit, the other two opposite terminals being connected with the amplifying element to vary the intensity of the currents therein, the opposite resistances in each case being constructed to heat up at different rates under the influence of electric current and thus change their relative resistance, the four resistances constituting means whereby when the intensity of the receiving current decreases the intensity of the currents through the amplifying element will increase and vice-versa.

1,811,421. CARD POSTING SAFE. GEORGE C. BRAINARD, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed Dec. 16, 1926. Serial No. 155,215. 2 Claims. (Cl. 312—174.)



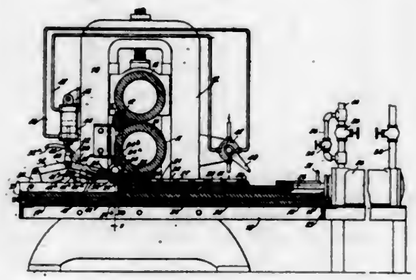
1. In combination with a receptacle having a door hinged for swinging movement from a position closing an open side of the receptacle through an arc of approximately 270° to a position overlying an adjacent side of the receptacle substantially parallel thereto; a support within said receptacle, means mounting said support for movement towards and from the open side of the receptacle comprising a slotted guide member fixed within the receptacle, a pin carried by said support and extending through the slot in said guide member, a toggle arm pivotally connected at one end to said pin, and a second toggle arm having a fixed pivot at one end within the receptacle and pivotally connected at its other end with the second end of said first mentioned toggle arm, and a connection between said door and said support whereby the final portion at least of opening movement of said door is effective to move said support towards the open side of the receptacle, said connection comprising an arm pivoted to the door, and a lost motion link connection between said arm and said pin.

1,811,422. WELL HEAD EQUIPMENT. CICERO C. BROWN, Hebbronville, Tex. Filed June 27, 1929. Serial No. 374,113. 6 Claims. (Cl. 166—15.)



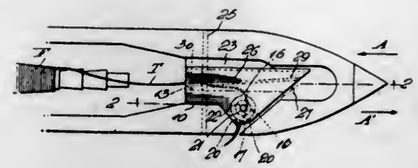
1. A head for oil wells having means for attachment to the top of a master gate valve casing, said head having a chamber provided with a side opening for connection with a fluid conduit and a sealing bearing closing the top of said chamber, a flow pipe extension vertically movable in said bearing, a permanent well flow pipe in the well the upper end of which terminates below the valve, the lower end of said pipe extension normally having close communication with the upper end of said permanent well flow pipe to form a continuous conduit, and means to move said pipe extension from said well flow pipe to permit said valve to be closed.

1,811,423. METHOD AND APPARATUS FOR FILLING MOLDS. JAMES W. BRUNDAGE, Akron, Ohio, assignor to John R. Gammeter, Akron, Ohio. Filed May 27, 1927. Serial No. 194,647. 17 Claims. (Cl. 18—30.)



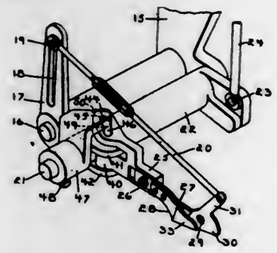
15. Molding apparatus comprising means for movably supporting a mold, means for moving the mold thereon, and means for pressing stock into the mold as the mold moves past the said pressing means, the means for moving the mold comprising a fluid-pressure cylinder, conduits for charging and venting the two ends of the cylinder and a fine-adjustment throttle-valve for regulating the venting of one end of said cylinder to regulate the speed of the mold's movement past the pressing means, one of the conduits being provided with a by-pass and with a valve within the span of the by-pass, and the throttle valve being mounted in the by-pass.

1,811,424. SHUTTLE THREADER. LOUIS ALEXANDRE CADORET, Pawtucket, R. I. Filed July 17, 1930. Serial No. 468,714. 4 Claims. (Cl. 139—222.)



1. In a shuttle threader, a vertical wall, outwardly thickened at its front end, the front face of said thickened end being at an acute angle to the inner side of said wall and at an acute angle to the top of said wall, said thickened wall end having a recess, a vertical thread slot from said recess through the inner side of said wall and a vertical thread slot from said recess through the outer said of said thickened wall end, the portion of the latter in front of said recess and said slots terminating sufficiently above the bottom of the threader to allow entrance of thread into the recess and slots, and thread-tensioning means confined within said recess.

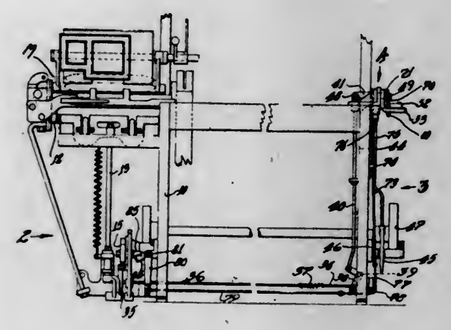
1,811,425. COMBINED SHUTTLE FEELER AND THREAD CUTTER. AUGUSTIN J. CHEVRETTE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 22, 1929. Serial No. 380,181. 4 Claims. (Cl. 139—264.)



1. In a weft replenishing loom having a shuttle and a combined shuttle feeler and thread cutter and clamping unit pivoted above and behind the lay when the latter is in its forward position, a fixed operating member, and a lever device to cooperate with the operating member supporting said unit and movable in a vertical plane to effect shuttle feeling and movable in a horizontal plane under influence of the operating member to cause the thread clamp to move toward the selvage, a holder for the unit movable vertically pivotally connected thereto, said fixed means to cooperate with the unit and effective during vertical motion of the holder to cause pivotal movement of the unit in a direction toward the selvage.

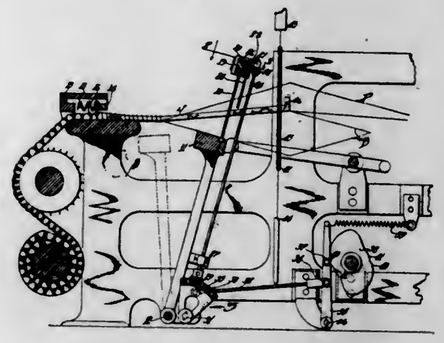
1,811,426. WEFT DETECTOR CONTROLLING DEVICE. AUGUSTIN J. CHEVRETTE, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 28, 1929. Serial No. 417,241. 5 Claims. (Cl. 139—230.)

1. In a weft replenishing loom, shifting shuttle boxes at one end of the loom having a normal running position and a replenishing position, weft replenishing mechanism associated with said shifting shuttle boxes, a weft detecting device at the other end of the loom, normally inoperative means to shift said shuttle boxes, said means being



rendered operative by said weft detecting device upon indication of weft exhaustion, and means to render said weft detecting device inoperative whenever and so long as said boxes are removed from normal running position.

1,811,427. STATIONARY WIRE WILTON LOOM. EDWARD J. DACEY, Philadelphia, Pa., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed May 3, 1929. Serial No. 360,229. 6 Claims. (Cl. 139—47.)

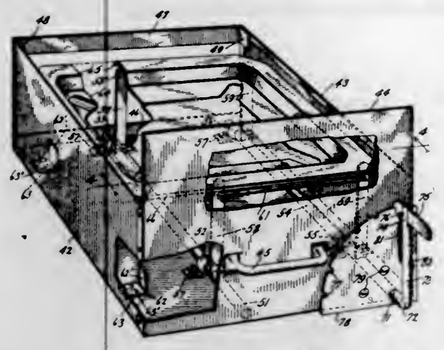


1. In a pile fabric loom, a stationary pile wire extending longitudinally of the fabric being woven and having a free rear end, a lay having a hand rail, a rack movable along the hand rail, fingers movable with the rack to engage the active pile yarn, means to move the rack laterally with respect to the lay to shift the active pile yarn from one side to the other side of the pile wire, said fingers being of such length that as the active pile yarn moves downwardly it will pass out of control of the fingers and when below the pile wire be free to move back to its original position.

1,811,428. BROILER. CLAUDE M. DIBBLE, Joliet, Ill., assignor to Moore Brothers Company, Joliet, Ill., a Corporation of Illinois. Filed Dec. 31, 1926. Serial No. 158,194. 9 Claims. (Cl. 126—41.)

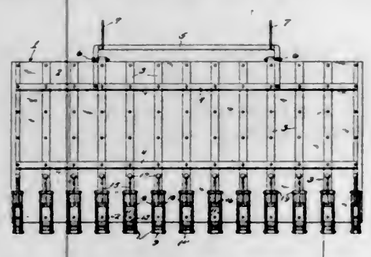
1. In a broiling oven, an oven compartment, a source of heat positioned within the compartment, a drawer

positionable within the compartment providing a closure therefor, a plurality of fingers mounted in the drawer



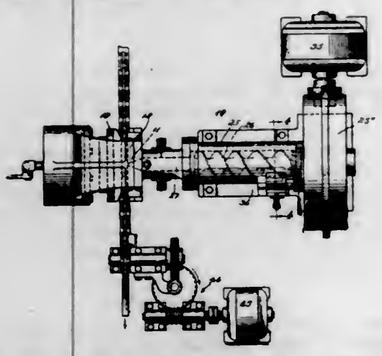
pivoted for rotation in vertical planes transverse the drawer, and a broiling tray slidingly supported by the fingers.

1,811,429. BRICK STACK CARRIER. ROBERT A. FONTAINE, Martinsville, Va. Filed June 16, 1928. Serial No. 285,912. 14 Claims. (Cl. 294—63.)



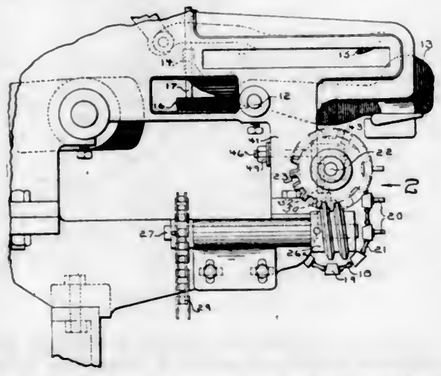
1. A brick carrier comprising a back member equipped with suspension means, a plurality of arm members carried by the back member and adapted to engage beneath a stack of bricks, and link and lever means cooperating with the back member for normally maintaining said arm members rigid with respect to the back member, said means being releasable.

1,811,430. MOLD FILLING APPARATUS. JOHN R. GAMMETER, Akron, Ohio. Filed Mar. 30, 1928. Serial No. 265,839. 11 Claims. (Cl. 18—30.)



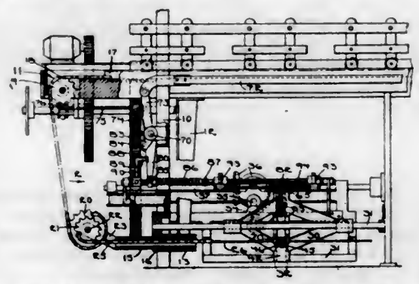
7. A mold filling machine for rubber heels, comprising a cylinder having a stock supply inlet adjacent one end and a die plate with a restricted discharge opening at the other end, a screw rotatable in the cylinder for propelling plastic rubber therethrough, a feed roller at the stock supply inlet to feed the rubber into the cylinder at a substantially constant pressure, spaced parallel guide members disposed in a plane adjacent and parallel to that of the die plate and adapted to support a flat mold for movement transversely of the discharge opening, the mold having successive series of cavities adapted to be brought into communication with the discharge opening, fluid-pressure means for maintaining the mold in surface contact with the die plate, and an endless belt for moving the mold on said guide members while the screw and feed roller are rotated.

1,811,431. DOBBY FOR LOOMS. ANTHONY D. GARGOLINSKI, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 23, 1929. Serial No. 357,544. 5 Claims. (Cl. 139—74.)



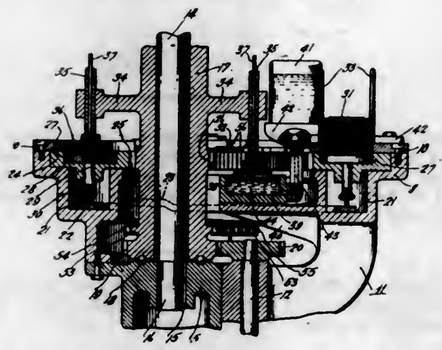
1. In a loom dobby having a set of dobby fingers pivotally mounted on a transverse support, a pattern chain cylinder under the fingers having an axis substantially parallel to the support, a pair of spaced feet, one on each side of the fingers, each foot having a slot therein the plane of which is substantially perpendicular to the axis of the cylinder, each foot also having a main bearing surface substantially parallel to the axis of the cylinder and an auxiliary surface at an angle to the main surface, bearing blocks in which the cylinder is rotatably mounted, holding means for the blocks passing through the slots and movable in the latter to place the blocks in different positions relatively to the fingers, said blocks having surfaces parallel to the axis of the cylinder and engaging the said bearing surfaces, said blocks having fins parallel to the slots to engage the auxiliary surfaces, and means to hold the blocks against the bearing surfaces.

1,811,432. STOPPING MECHANISM FOR NARROW WARE LOOMS. ELBRIDGE R. HOLMES, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 9, 1930. Serial No. 466,660. 7 Claims. (Cl. 139—336.)



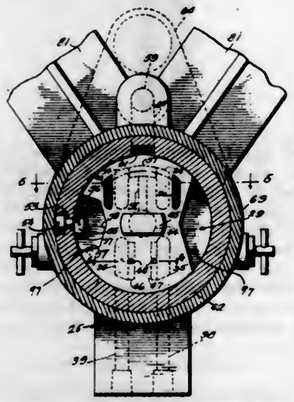
1. In a narrow ware loom, shuttle reciprocating devices, actuating mechanism therefor, a yieldable driving connection between said mechanism and said devices, said connection being disabled if normal movement of said shuttle reciprocating devices is prevented, and means for stopping the loom, said latter means being rendered operative by disablement of said driving connection.

1,811,433. COMPOUND LINING MACHINE. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 1, 1927, Serial No. 223,283. Renewed Feb. 26, 1931. 19 Claims. (Cl. 113—80.)



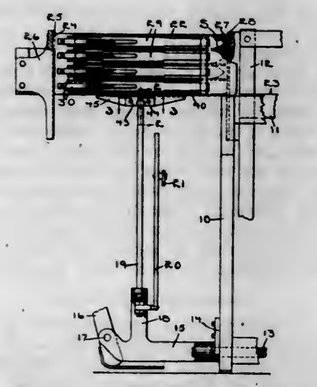
1. In a gasket lining machine for can ends having a lining applying station, the combination of a source of lining compound, continuously moving dies having the shape of the gasket to be formed and receiving lining compound from said source to form said gasket, a continuously moving can and carrier having a path of travel intersecting that of the dies, and means causing relative approach and retreat of the can ends and dies at such intersection to accomplish the application of the compond.

1,811,434. FLUID PRESSURE OPERATED VALVE GEAR SHIFTING MECHANISM. SAMUEL HANCE LEWIS, Richmond, Va. Filed Sept. 5, 1923. Serial No. 661,075. 10 Claims. (Cl. 121—41.)



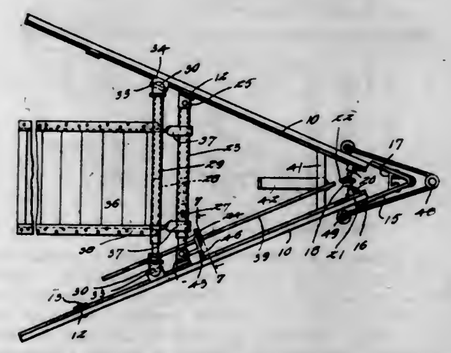
1. The combination with a cylinder, a piston mounted to reciprocate therein, and means for connecting the piston to the valve gear of a steam engine, of a valve seat provided with admission ports communicating with opposite ends of the cylinder and an exhaust opening communicating with the atmosphere, a valve engaging said seat and provided with a plurality of admission ports adapted to move progressively into and out of registration with the admission ports of said seat the admission port of said valve which initially moves into registration with one of the admission ports of said seat being of restricted area, said valve being further provided with an exhaust port adapted to afford communication between one port of said seat and the exhaust opening of said seat when the valve is moved a predetermined distance, and means for supplying fluid pressure to said admission ports.

1,811,435. DROP SHUTTLE BOX AND CONNECTER THEREFOR. CARL J. LINDEGREN, Providence, R. I., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 16, 1930. Serial No. 444,842. 8 Claims. (Cl. 139—182.)



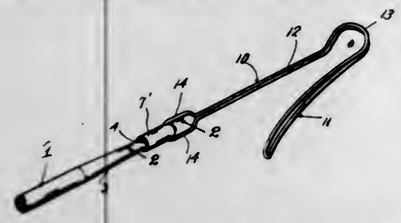
1. In a loom having a lay, shifting shuttle boxes movable to different positions with respect to the lay, a box lifter, a ball formed on the lifter, and a socket member carried by the shuttle boxes and housing the ball, the ball and socket constituting a means of transmitting force from the lifter to the shuttle boxes.

1,811,436. SNOWPLOW. ABRAHAM LUYSTER and CULVER P. LUYSTER, Muskegon Heights, Mich. Filed Nov. 7, 1929. Serial No. 405,402. 5 Claims. (Cl. 37—46.)



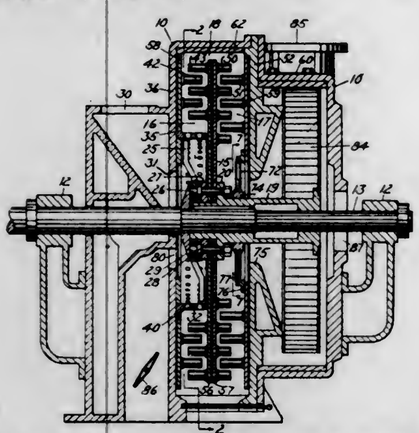
5. In a plow of the character described, two convergent wings spaced apart at their forward ends and pivotally and detachably connected to each other whereby the wings may be shifted into or out of a more or less convergent position, means adjacent the rear end of the plow whereby the wings may be held in angularly adjusted relation nearer to or further from each other and a metallic nose V-shaped in cross section permanently attached on one side to one wing of the plow and projecting forward therefrom but unattached to the other wing of the plow and extending to the adjacent edge of this wing said nose closing the gap between the wings.

1,811,437. STOCK AND POULTRY HOOK. THOMAS CLARENCE ORR, Willows, Calif. Filed Oct. 1, 1929. Serial No. 396,501. 2 Claims. (Cl. 119—152.)



1. A stock and poultry hook of the character described comprising a socketed thimble for mounting on a handle, a laterally extending flange on the thimble, a forwardly extending shank of less diameter than the flange connected thereto, a tubular sleeve having one end slidably and rotatably mounted on the flange, said sleeve extending over the shank in spaced relation thereto and having an end wall adjacent the end of the shank, said shank, the flange and the end wall being provided with longitudinally aligned openings, a threaded shank anchored in the thimble and extending through the aligned openings, a securing nut threaded on the forward end of the threaded shank in a manner to secure the sleeve in position and a hook extending forwardly from the sleeve.

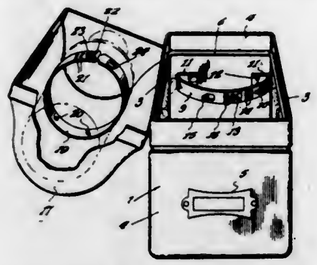
1,811,438. PULVERIZING APPARATUS. ROBERT SANFORD RILEY and OLLISON CRAIG, Worcester, Mass., assignors to Riley Stoker Corporation, Worcester, Mass., a Corporation of Massachusetts. Original application filed Nov. 7, 1925, Serial No. 67,639. Divided and this applicaiton filed May 1, 1926. Serial No. 106,082. 5 Claims. (Cl. 83—11.)



1. A pulverizing apparatus comprising a casing having an inlet and an outlet centrally located on opposite sides of the casing; means dividing the casing into two zones connected by an annular passage; hammers revolubly mounted adjacent the inlet in one zone to crush the material preliminarily; revolving beaters surrounding and concentric with the hammers which receive the material from the hammers and deliver it to the second zone through said annular passage; and beaters arranged in the second zone to pulverize the material as it travels inwardly towards the outlet.

1,811,439. LUNCH BOX. LOUIS SCHERZ and EMIL SCHERZ, Wilkes-Barre, Pa. Filed Apr. 2, 1929. Serial No. 351,978. 2 Claims. (Cl. 206—4.)

1. A lunch box comprising a body open at its top and having a bottom and upstanding walls, means in the body to removably secure a container, said means consisting of resilient jaws extending horizontally in said body and adapted to be drawn towards each other about a container, one jaw having openings in its free end portion



spaced longitudinally of the jaw and the other jaw having a bill at its free end engageable in a selected opening of the first jaw, finger holds projecting from said jaws to facilitate movement of the jaws towards each other, and a cover for said body.

1,811,440. WINDSHIELD WIPER. BERNARD J. SHEPARD, Brooklyn, N. Y. Filed Jan. 13, 1930. Serial No. 420,564. 2 Claims. (Cl. 15—255.)

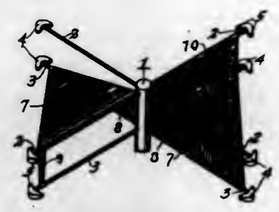


2. A wind shield wiper, comprising an elongated flat casing open at one edge only, a non-heat-conducting lining located in said casing and having rubberized opposite edge portions protruding beyond the open edge of the casing and adapted for contact with the surface of a wind shield to be wiped, and a heater element arranged in the fold of the lining and casing and disposed in direct alignment with the space between said wiper elements for radiating heat directly from the heater element to the surface confined between the wiper elements.

1,811,441. AIRPLANE PROPULSION DEVICE. SAM R. SMITH, South Bend, Ind., assignor of one-fourth to Paul G. Hoffman and one-fourth to Dorothy B. Hoffman, South Bend, Ind. Filed Nov. 13, 1929. Serial No. 406,957. 11 Claims. (Cl. 170—169.)

1. In a propulsion device, a rotatable shaft, spaced parallel inner and outer sets of radially extending arms carried by said shaft in balanced relation, and air displacing members carried by said shaft, the edges of each of said air displacing members extending from the inner end of an arm of the outer set to the outer end thereof, thence

to the outer end of the parallel arm of the inner set, thence diagonally in counter rotation direction to the



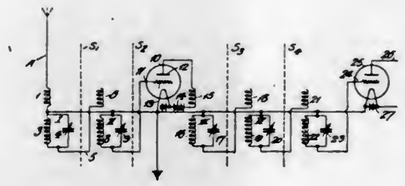
outer end of an adjacent arm of the inner set, thence to the inner end of said last named arm, and thence to the point of beginning.

1,811,442. THERMOSTAT. WALTER O. SNELLING, Allentown, Pa. Filed Nov. 3, 1925. Serial No. 66,674. 7 Claims. (Cl. 297—15.)



5. In a thermostat, a temperature responsive element anchored at one end, spring means opposing movement of the free end of said element, the spring means being so shaped as to offer greater opposing force to movement of the said end in one direction than in the other, means for adjusting the resistance offered by said spring means, a member carried by said element and a second member fixed with respect to the anchored end so as to lie in the path of said member, one of said members being resilient.

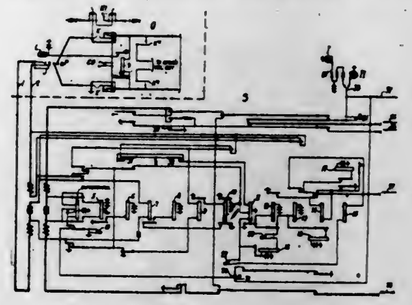
1,811,443. SYSTEM OF SELECTIVE SIGNALING. GEORGE A. SOMERSALO, New York, N. Y. Filed Aug. 15, 1927. Serial No. 212,872. 12 Claims. (Cl. 178—44.)



1. An electric wave receiving system comprising a number of tuning stages, connected in cascade means for inductively coupling these stages with substantial elimination of mutual impedances between adjacent stages, said means including an open coil, and means of amplification associated with these stages.

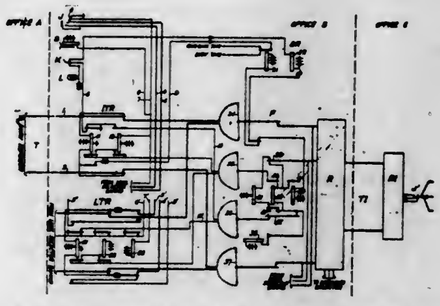
1,811,444. TOLL SERVICE TRUNKING SYSTEM. VICTOR S. THARP, Elmhurst, Ill., assignor to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 19, 1930. Serial No. 445,570. 15 Claims. (Cl. 179—27.)

9. In a toll transmission selector adapted to cooperate with connectors which either open or reverse the direction of current flow over a control circuit when a called line is connected with, a control circuit over which a current flow is maintained during the setting up of a con-



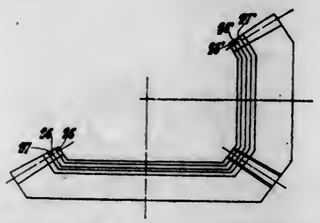
nection, and a switchover relay operative responsive to either the opening of or the reversal of current flow over said control circuit.

1,811,445. MULTIOFFICE TELEPHONE SYSTEM. VICTOR S. THARP, Elmhurst, Ill., assignor to Reserve Holding Company, Chicago, Ill., a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,701. 11 Claims. (Cl. 179—27.)



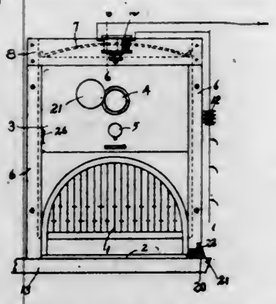
1. In a telephone system, an exchange, incoming trunk lines and outgoing trunk lines terminating in said exchange, a manual switchboard at the exchange for answering calls over said incoming trunk lines, and switching mechanism at said exchange for automatically extending incoming trunk calls over said outgoing trunk lines when said switchboard is unattended.

1,811,446. BEVEL WHEEL. GEORGES VEBER, Epinal, France, assignor to Roger Gabriel Louis Coutant, Vincennes, Seine, France. Filed Sept. 26, 1927, Serial No. 222,060, and in France Nov. 5, 1926. 1 Claim. (Cl. 74—41.)



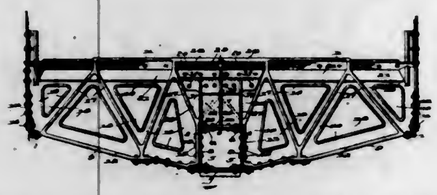
A bevel gear wheel, wherein the addendum cone and the dedendum cone have the same vertex and wherein the teeth are straight and symmetrical and have a section in the form of an involute, which remains the same the entire length of the tooth, so that the pressure angle varies from one end of the tooth to the other.

1,811,447. ROBBERYPROOF EQUIPMENT. PAUL F. WEST and EVERETT HOBART REED, Detroit, Mich. Filed Nov. 10, 1928. Serial No. 318,527. 6 Claims. (Cl. 20—1.01.)



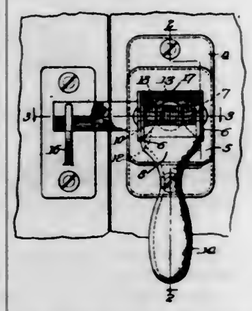
1. A robbery-proof apparatus of the class described, comprising in combination, a bullet-proof steel main plate, mounted in channels or grooves, and means to actuate said steel plate; and means to stop said main plate before it reaches a position that would injure any one's hand that may be underneath, at the time of its movement, leaving an opening at one end, and a sub-plate operated by a spring, and released by said main plate, after it has been stopped at the end of its travel, said sub-plate closing the opening left by said main plate.

1,811,448. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio. Filed Apr. 11, 1929. Serial No. 354,358. 17 Claims. (Cl. 105—230.)



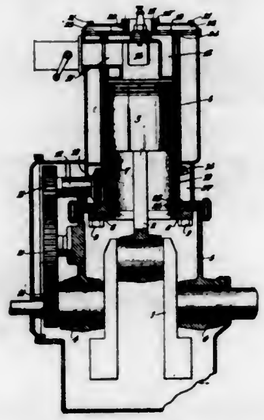
1. In a railway car, the combination with a center sill having a top cover plate, of a body bolster provided with a portion overlying the center sill in spaced relation to its cover plate, and load sustaining means interposed between and rigidly secured to the cover plate and the said portion of the bolster for bracing the latter.

1,811,449. LATCH. GEDOR W. ALDEEN, Rockford, Ill., assignor to National Lock Co., Rockford, Ill., a Corporation of Delaware. Filed Jan. 31, 1927. Serial No. 164,729. 10 Claims. (Cl. 292—224.)



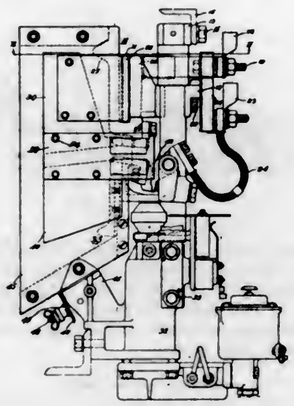
1. In a latch, the combination of a housing, a pivotally movable latch bar, an operating lever connected to said bar, and a spring disposed in said housing and in direct contact with both said lever and bar for yieldably holding both in predetermined position and so connected to said lever and bar that a movement of either from its respective predetermined position causes an increase in the potential of the spring acting upon the other.

1,811,450. SLEEVE VALVE INTERNAL COMBUSTION ENGINE. JOSEPH A. ANGLADA, Jenkintown, Pa. Filed Feb. 12, 1927. Serial No. 167,617. 6 Claims. (Cl. 123—80.)



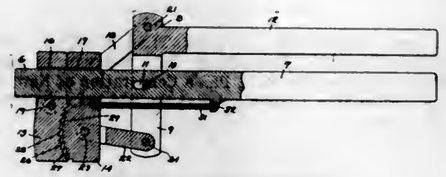
1. In an internal combustion engine of the rotary sleeve valve type an outer cylinder, an inner stationary working cylinder insertable from below and having a water cooled combustion chamber formed integral with and closing its upper end, and extending adjacent said sleeve valve.

1,811,451. CONTROL APPARATUS. BASCUM O. AUSTIN, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 26, 1925. Serial No. 18,635. 13 Claims. (Cl. 200—147.)



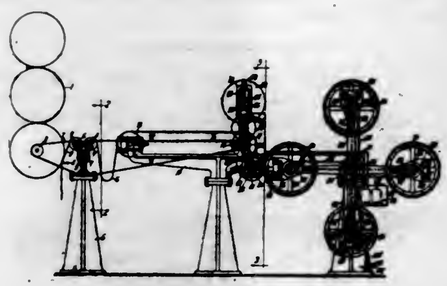
1. In an arc-rupturing device, in combination, a plurality of relatively movable arc horns, cores adapted to concentrate the lines of magnetic force induced by current flowing through the arc horns to provide an arc-rupturing field, said arc horns being looped about the cores to strengthen the arc-rupturing field as arcs travel along them.

1,811,452. PIPE WRENCH. JAMES E. BLALOCK, Pacific Palisades, Calif. Filed Aug. 21, 1928. Serial No. 301,003. 5 Claims. (Cl. 81—88.)



1. A wrench comprising a shank, one end of said shank being extended to provide a handle, a pair of opposed gripping jaws slidably mounted upon the shank above the handle, an actuating lever comprising a transverse portion pivoted to and extending across the shank and a longitudinal portion extending adjacent the handle, a link pivoted at one end to the uppermost of said jaws and at the other end to said transverse portion adjacent the same end thereof as that to which the longitudinal portion is affixed, and a link pivoted at one end to the lowermost of said jaws and at the other end adjacent that end of the transverse portion of the lever opposite the point of attachment of the other of said links.

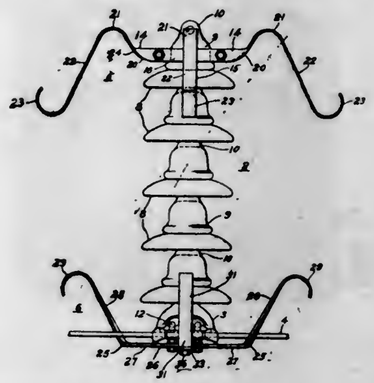
1,811,453. APPARATUS FOR THE MANUFACTURE OF INNER TUBES. HENRY C. BOSTWICK, Kenmore, Ohio, assignor to The Akron Standard Mold Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 29, 1927. Serial No. 179,274. 23 Claims. (Cl. 154—7.)



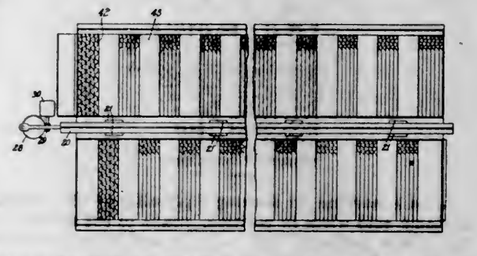
3. An apparatus for forming cylindrical blanks for use in the manufacture of inner tubes, comprising the combination of a calender, a drum and a pressure roller in contact therewith, the sheeted rubber passing directly from the calender to the pressure roller by which it is applied to tthe drum, and means for shifting the position of the drum relative to the line of feed of the sheeted rubber, said means including a split nut fixed at the axis of said drum and adapted to cooperate with threads on the hub of the drum.

1,811,454. FIELD CONTROL DEVICE. RICHARD W. CARLISLE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 29, 1928. Serial No. 289,319. 7 Claims. (Cl. 173—318.)

1. In combination, in a transmission-line device, an insulator and an upper arcing-horn structure therefor comprising an arm extending substantially parallel to the line and an arm extending transversely to the line, each of said arms having a supporting portion adjacent to the insulator, a portion extending upwardly from said supporting portion and a portion extending downwardly from said upwardly-extending portion to a position below said supporting portion.



1,811,455. REGENERATIVE AIR PREHEATER. GEORGE C. COOK, Millington, N. J. Filed Apr. 10, 1926. Serial No. 101,032. 6 Claims. (Cl. 257—6.)

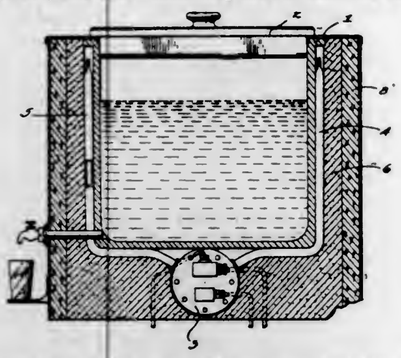


3. A regenerative preheater for air and the like in furnace plants, comprising an open-ended casing a regenerative mass therein consisting of continuous alternate plain and corrugated heat-interchanging plates affording uninterrupted channels between the said ends of the casing and all of said plates extending the full length of the corresponding casing walls; a pair of distributing hoods located respectively at the casing ends; means to effect a relative continuous reciprocation between the hoods and the channels afforded by the successive plates, partitions dividing said hoods longitudinally into transverse compartments and all of the plates extending to the planes in which the ends of the hoods and partitions thereof reciprocate, and said hoods also being entirely open at the portion contiguous to said mass to deliver fluid directly thereto, and having also adjacent rows of alternate openings and closures along the top staggered relatively to each other; and adjacent ducts contiguous to and conforming to tops of the respective hoods for supplying and removing air and gas through corresponding openings therein.

1,811,456. DISPENSING UNIT EMBODYING MECHANICAL REFRIGERATION. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Apr. 30, 1928. Serial No. 273,786. 8 Claims. (Cl. 62—141.)

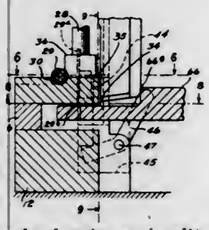
1. A refrigerating apparatus of the liquid dispensing type, comprising an integral container for receiving the liquid to be cooled and dispensed, an evaporator positioned in heat conducting relation with one of the walls

of said container for receiving and circulating a volatile refrigerant, and heat conducting branch members extend-



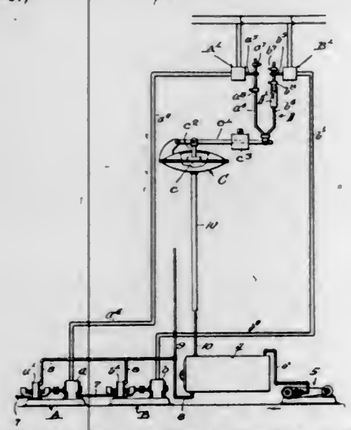
ing from said evaporator in heat conducting relation with other walls of said container whereby to effect equalization in the cooling of said liquid contents.

1,811,457. MACHINE FOR FORMING BEAD WIRES. CLARENCE DE PUY, Newark, and ROBERT BAINDLE, Jr., West Orange, N. J., assignors to Arcturus Radio Tube Company, Newark, N. J., a Corporation of Delaware. Filed May 16, 1929. Serial No. 363,472. 15 Claims. (Cl. 153—25.)



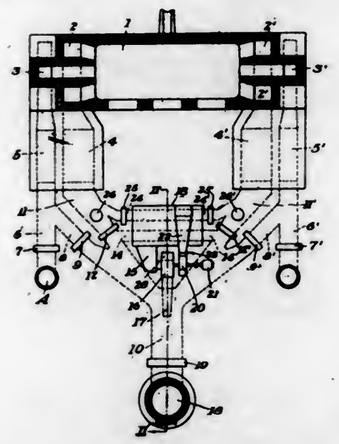
1. In a machine for forming a plurality of wires, means to clamp said wires in position, means to cut off some of said wires, means to bend some of said wires in one direction, and means to bend some of said wires in another direction, said cutting and bending operations being performed while the wires are clamped in position.

1,811,458. ELECTRIC SWITCH ACTUATING MECHANISM. AUGUSTUS C. DURDIN, Jr., Chicago, Ill. Filed Aug. 6, 1928. Serial No. 297,907. 24 Claims. (Cl. 200—5.)



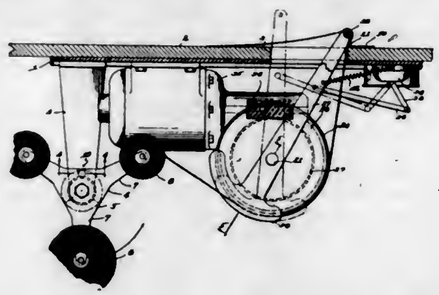
1. Mechanism for actuating a plurality of devices in alternate sequence, comprising a pressure device which is responsive to variations of pressure, and motion transmitting connections between said pressure device and the individual devices to be actuated thereby, said connections including alternately acting means for actuating said individual devices in alternate sequence.

1,811,459. REGENERATIVE HEATING SYSTEM. WALDEMAR DYRSSEN, Sharpsburg, Pa., assignor to Blaw-Knox Company, Blawnox, Pa., a Corporation of New Jersey. Filed May 1, 1928. Serial No. 274,221. 8 Claims. (Cl. 263—15.)



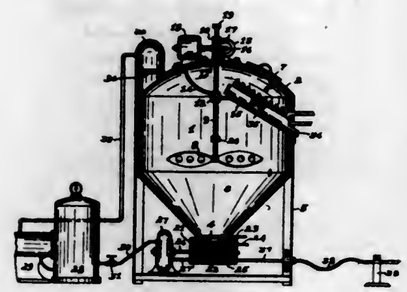
5. The combination with a regenerative heating system including a checker chamber, of a preheater for the regenerative heating system, and means for passing a regulable portion of the waste gases from the checker chamber through the preheater.

1,811,460. FABRIC PULLING MACHINE. HORACE M. EATON, Nahant, Mass., assignor of one-half to George L. Preble, Lynn, Mass. Filed Oct. 12, 1927. Serial No. 225,718. 7 Claims. (Cl. 242—55.)



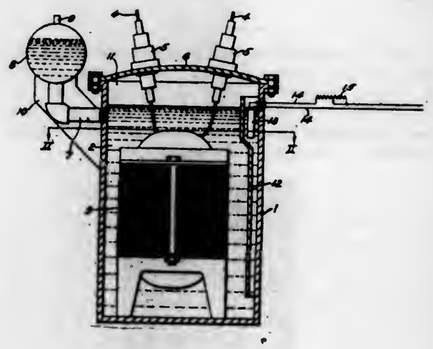
1. Apparatus for pulling a run of adhesively coated material from a roll of said material, comprising a friction roll adapted frictionally to engage the run of material, means to impart movement to said friction roll, control means for said first-named means, a rotatable support adapted to hold a plurality of rolls of coated material and to permit rotation of the same, said support being positioned to cause a run of said material to engage a segmental surface of the friction roll, said support being movable to a plurality of positions to supply coated runs of different characteristics to the friction roll and means adapted automatically to lock the support in each of its several positions.

1,811,461. PULVERIZED FUEL CARBURETOR. HENRY L. ELLIOTT, Claysville, Pa., assignor of one-third to Thomas W. Henderson, Washington, Pa. Filed Feb. 19, 1929. Serial No. 341,100. 4 Claims. (Cl. 302—44.)



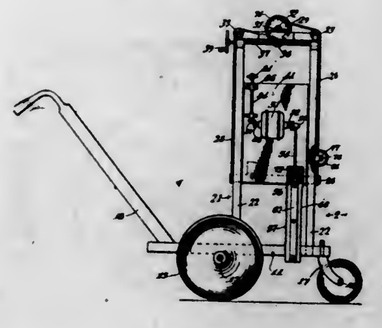
1. In a pulverized fuel carbureting apparatus of the character described, a tank for storing the pulverized fuel, a mixing chamber disposed below and communicating with said tank, means for feeding said pulverized fuel from said tank to said mixing chamber, a condenser element mounted in said tank for dehydrating the air and pulverized fuel in said tank, a compressed air element drawing its air supply from said tank, and means for passing the compressed air through said mixing chamber for conveying the pulverized fuel from the latter.

1,811,462. GAS EXCHANGE SYSTEM. OTTO H. ESCHHOLZ, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 6, 1927. Serial No. 211,090. 8 Claims. (Cl. 23—2.)



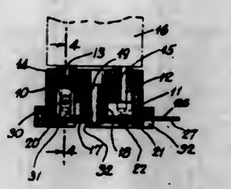
1. In the art of controlling interchange between a gaseous medium and a contacting liquid medium in which an electrical translating device is immersed, the step which consists in elevating the temperature of said liquid medium in a local region only independently of the heat generated by said translating device for transferring a constituent of said gaseous medium to said liquid medium.

1,811,463. HEDGE TRIMMER. ISRAEL EVANS, San Bernardino, Calif. Filed June 20, 1928. Serial No. 286,783. 11 Claims. (Cl. 56—237.)



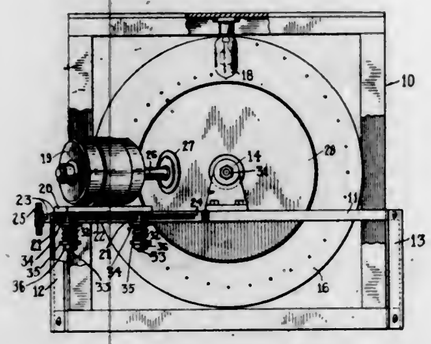
1. A hedge trimmer comprising a movable carriage, a framework carried thereby, a platform vertically slidable upon said framework, a serrated knife guard extending from said platform, a serrated knife slidable longitudinally upon said guard, and means carried by said platform for reciprocating said knife upon the guard, said platform being hingedly supported to permit its being positioned optionally with the guard and knife disposed horizontally or vertically.

1,811,464. SOCKET. JOHN GELOSO, New York, N. Y., assignor, by mesne assignments, to Pilot Radio & Tube Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed June 15, 1928. Serial No. 285,517. 1 Claim. (Cl. 173—328.)



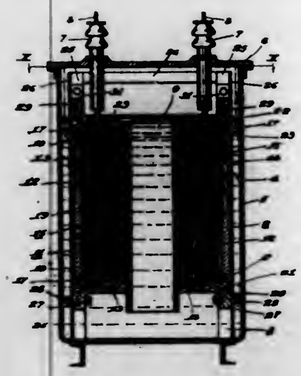
A socket for a vacuum tube, comprising a casing having a series of chambers formed interiorly thereof adjacent its periphery, apertures disposed in the top of said casing, forming the termination of said chambers, an aperture formed centrally in the top of said casing and merging into a smaller aperture extending to the base of said casing, a carrier plate positioned at the base of said casing for enclosing the chambers therein, resilient conductor members positioned in the respective chambers for contacting with the prongs of a vacuum tube passing through the apertures leading thereto, said conductors being fixed intermediate their ends to said carrier member and extending radially from said carrier member for forming contacts with elements in a radio circuit, said conductors being adapted to rest in cutout portions along the periphery of the casing at the base thereof, an aperture disposed centrally of said carrier in line with the central aperture of the casing, and a rivet for fastening the casing and said carrier at their central apertures, and a cutout portion on the outer periphery of said carrier, and a projection in the base of said casing for positioning the carrier, so as to locate the contact members in their proper chambers, and to prevent displacement thereof.

1,811,465. TELEVISION DEVICE. JOHN GELOSO, New York, N. Y., assignor, by mesne assignments, to Pilot Radio & Tube Corporation, Brooklyn, N. Y., a Corporation of Delaware. Filed Dec. 24, 1928. Serial No. 328,076. 8 Claims. (Cl. 178—6.)



1. The combination of a scanning disc, a motor having an armature shaft, a friction element on said shaft adapted to engage said disc to drive the same, a carriage for supporting said motor, and means for moving said carriage in a direction parallel to the plane of said disc.

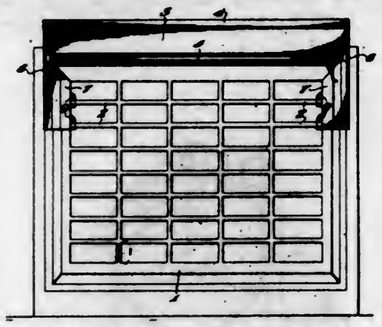
1,811,466. CURRENT-LIMITING REACTOR. ROBERT B. GEORGE and HOMER B. WEST, Sharon, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 18, 1929. Serial No. 393,564. 6 Claims. (Cl. 175—361.)



1. In a current-limiting reactor, means for conducting the stray magnetic flux along the periphery of said reactor coil when energized, said means comprising parallel groups of continuous iron laminations attached to the periphery of said reactor and formed integral therewith.

1,811,467. FURNACE REGISTER SHIELD. JOSEPH L. GILLMAN, Jr., Columbus, Ohio, assignor to The W. E. Lamneck Company, Columbus, Ohio, a Corporation of Ohio. Filed July 24, 1930. Serial No. 470,397. 2 Claims. (Cl. 98—108.)

1. A shield for furnace registers, formed of sheet metal, comprising a body of channel form in cross section adapted to bear against a margin of a register and extending therefrom at an obtuse angle, end bracket walls joined with said body, each wall having an inturned flange to bear against the top portion of the side margin of the register, and



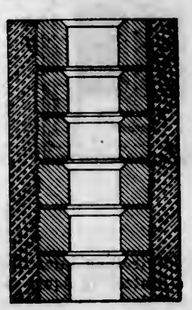
one or more tangs extending laterally therefrom of hook form to engage with the lattice-work of a register for slip-on connection therewith.

1,811,468. MOTOR HEAT INDICATOR. HENRY C. HEBIG, Hoffmans, N. J., assignor to Harrison Hurlbert Boyce, Jericho, N. Y. Filed Feb. 10, 1928. Serial No. 253,297. 13 Claims. (Cl. 116—114.)



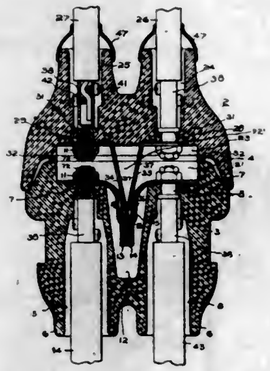
1. In a device for indicating the heat condition within an automotive radiator, having a mechanical indicating element, a casing for housing said indicating element, and a cylindrical magnifying means within said casing and adjacent said indicating element.

1,811,469. METHOD OF MAKING COMPOSITE DISKS. WILLARD H. KEMPTON, Wilkinsburg, and THOMAS C. ROANTREE, East Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed June 22, 1927. Serial No. 200,666. 4 Claims. (Cl. 74—28.)



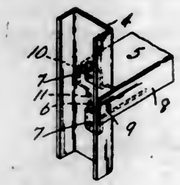
1. The method of manufacturing composite disks consisting of metal hubs and rims of laminated material comprising providing a plurality of hub portions, molding a single rim portion about the said hub portions and cutting the blank so formed transversely to form disks.

1,811,470. CABLE TERMINAL. SAMUEL B. KRAUT, South Bend, Ind., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1928. Serial No. 251,854. 3 Claims. (Cl. 173—353.)



1. A quick-disconnecting cable terminal comprising a top member and a bottom member, said top member having a depending flange adapted to fit down over said bottom member, the top member having a recessed inner portion and a plurality of channels communicating with said recess, bushings disposed in said channels, connectors extending through said bushings, the bottom member having an inner recessed portion and a plurality of openings communicating therewith, bushings disposed in said openings, and connectors extending through said bushings and coacting contact members disposed in said recesses.

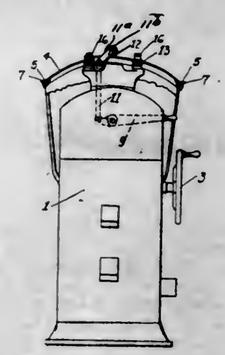
1,811,471. METAL FURNITURE AND THE LIKE. OSCAR J. LARSON and JAMES RICHARD JONES, Jamestown, N. Y., assignors to Art Metal Construction Company, Jamestown, N. Y. Filed Feb. 16, 1929. Serial No. 340,602. 5 Claims. (Cl. 312—141.)



1. In a sheet metal furniture and the like, a pair of spaced walls, a pair of posts extending laterally toward one another from said spaced walls, a cross bar fitted between and secured to said posts at its upper and lower edges between the forward and rear faces of each post, said bar having an extension at each end abutting and secured to one of said faces of the adjacent post.

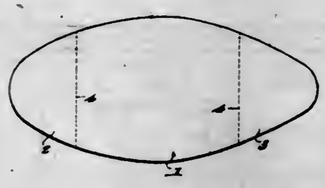
1,811,472. DOUGH MIXER. FRANK X. LAUTERBUR and EDWARD J. LAUTERBUR, Sidney, Ohio. Filed June 30, 1926. Serial No. 119,706. 6 Claims. (Cl. 220—36.)

1. In combination with a mixing machine, a bowl element pivotally mounted on a fixed axis, walls of said bowl having upper edges arcuately shaped along arcuate lines formed with said fixed axis as a center, a cover for said bowl, having a contour similar to that of the upper edges of said walls, depending portions of said covers adapted to seat within said bowl walls to form a tight closure, and



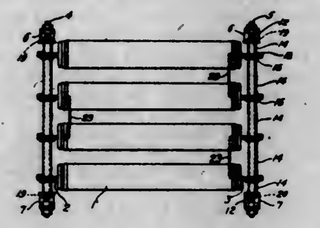
means for elevating said cover so as to permit said bowl to be tilted from under said depending portions of said cover.

1,811,473. TAP FOR SHOES. GILMORE MANDELL MELLOR, Oak Park, Ill., assignor to The American Oak Leather Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 18, 1929. Serial No. 407,870. 1 Claim. (Cl. 36—25.)



A tap for use in the manufacture or repair of shoes comprising a blank of ovate outline forming a composite half sole and heel lift, the intermediate portion of said blank with one end portion forming a tap sole for attachment to a pointed toed shoe and the other end, with the intermediate portion, forming a tap sole for attachment to a blunt toed shoe.

1,811,474. LOCKING DEVICE. HARRY C. NAGEL, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 8, 1927. Serial No. 224,878. 5 Claims. (Cl. 207—63.)



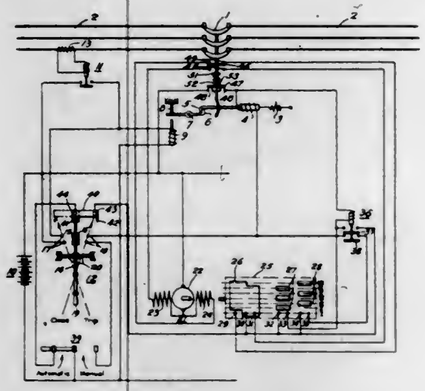
1. In a resistance device, the combination with a frame comprising a plurality of screw-threaded rods, of a resistor element provided with a plurality of ears having open slots in one side whereby the resistor element may be mounted upon the screw-threaded rods from a side position, a plurality of flanged members disposed upon the rods with their flanged portions extending over one side of said ears, and means for holding said ears and said flanged member in locking relation to each other.

1,811,475. SPIKE DRIVING APPARATUS. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 12, 1929. Serial No. 354,514. 1 Claim. (Cl. 145—1.)



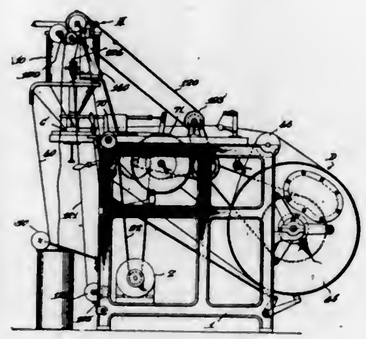
A punch formed at one end with a shank for insertion into a power operated percussive machine, the portion of the punch remote from said shank being cut away in planes at right angles to one another to form a penetrating portion substantially square in cross section, the cut away portion on two opposed sides being of greater extent than on the two other sides thereby to provide advance projections for limiting the penetration of said punch.

1,811,476. CIRCUIT INTERRUPTER CONTROL SYSTEM. ALFRED J. A. PETERSON, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 15, 1926. Serial No. 102,206. 7 Claims. (Cl. 175—294.)



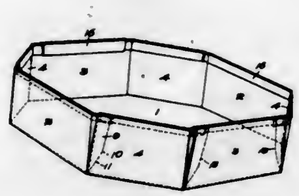
1. In an electrical system, in combination, a circuit interrupter, closing means and tripping means therefor, automatic means for rendering the closing means operative, a manually operable switch having a neutral position and two operative positions, means for returning said switch to and maintaining it in its neutral position after an actuation thereof to either of its operative positions, means cooperating with said switch when it is actuated to one of its operative positions to render the closing means operative, means cooperating with said switch when it is actuated to the other of its operative positions to render the tripping means operative, and a contact member actuated by said switch when said switch is actuated from its neutral position to the operative position other than the operative position to which it was last previously actuated, but unaffected by the actuation of said switch to the same operative position to which it was last previously actuated and by the return of said switch from either of its operative positions to its neutral position, said contact member being adapted to render the aforesaid automatic means operative when the said manually operable switch is actuated to said one of its operative positions to render the circuit interrupter closing means operative, and to render said automatic means inoperative when said switch is actuated to its other operative position to render the tripping means effective, and a transfer switch for selectively rendering either the automatic means or the manually operable switch ineffective to operate said closing means.

1,811,477. RIBBON COVERING MACHINE. GEORGE LINCOLN PREBLE, Lynn, Mass., assignor to Parco Specialty Co., Lynn, Mass., a Corporation of Massachusetts. Filed Nov. 7, 1927. Serial No. 231,439. 4 Claims. (Cl. 154—37.)



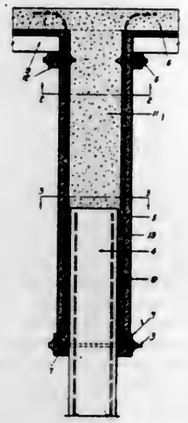
1. Apparatus for applying a covering strip to a ribbon which has a portion adjoining one margin adhesively coated and the remainder uncoated, said apparatus comprising a guide passage for the ribbon, a guide passage of smaller width for the covering strip arranged to direct the strip toward the coated portion of the ribbon, and a roller adapted to receive the ribbon and strip wrapped thereabout in superimposed relation, a pair of rollers, means yieldably urging said rollers toward each other, said pair of rollers being arranged to receive therebetween the strip and ribbon as they leave the first named roller.

1,811,478. BOX AND COVERING BLANK THEREFOR. RICHARD P. SECKENDORF, Somerville, Mass., assignor to The Cambridge Paper Box Co., Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 4, 1929. Serial No. 352,542. 6 Claims. (Cl. 229—30.)



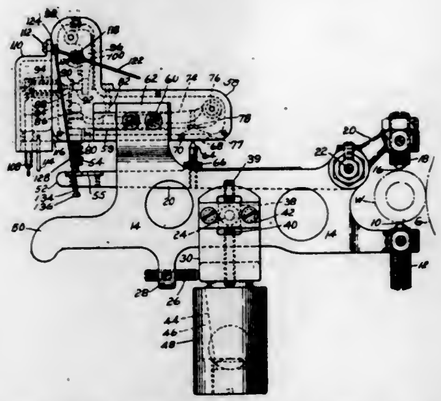
1. A covered box comprising a box proper having a bottom and at least three upturned side walls extended in different directions, and a box covering comprising a blank applied to said bottom and with as many outwardly extended flaps as there are box sides, one of more of said flaps initially upturned having both their edges winged to overlap adjacent portions of adjoining box walls, at least one of said flaps for final upturning having both edges inwardly tapering, and at least one intermediate flap provided with one winged and one tapering edge covering said box proper and the walls thereof.

1,811,479. REENFORCED CONCRETE PILE CONSTRUCTION. HARRY E. SQUIRE, Oakland, Calif., assignor of one-half to Frank G. White, San Francisco, Calif. Filed Nov. 1, 1927. Serial No. 230,247. 6 Claims. (Cl. 61—50.)



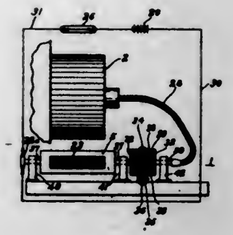
1. The method of extending a driven pile to a predetermined position which comprises positioning an extension on said pile, said extension having a loose fit with respect to said pile, supporting said extension on said pile, and adjusting said extension vertically and laterally to said predetermined position.

1,811,480. FEELER CONTROL GAUGE. SIDNEY E. STOCKWELL and ALFRED E. MURDOCK, Hartford, and CHARLES J. WINZIG and ERNEST F. MORRIS, West Hartford, Conn., assignors to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Dec. 13, 1927. Serial No. 239,768. 12 Claims. (Cl. 51—165.)



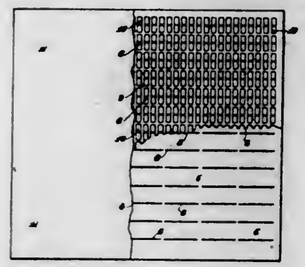
1. In a device of the character described, a gauge housing, a lever pivoted in the gauge housing, an arm pivoted in the housing and having an electric contact making member, a cooperating contact member, a spring for pressing the arm in a direction to bring the contact members together to complete an electric control circuit of the machine, a trigger bar mounted on the lever for latching or releasing the arm, a lever outside the housing and having a feeler for engaging a work-piece during machining, means for transmitting movement from the feeler lever to the lever in the housing, and means actuated by the feeler lever for moving the arm to latched position; substantially as described.

1,811,481. STROBO-ROTOSCOPIC DEVICE. MORRIS STONE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 17, 1927. Serial No. 240,840. 10 Claims. (Cl. 88—14.)



1. An instrument for observing the successive phases of a periodic motion comprising the combination with means for periodically flashing a light, and means for periodically exposing said phases to be viewed only during said flashing periods.

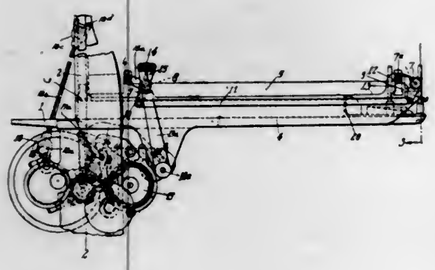
1,811,482. ELECTROSTATIC ACOUSTIC AMPLIFYING DEVICE. CLIVE OSBORNE TAYLER, Victoria, British Columbia, Canada. Filed Apr. 9, 1930. Serial No. 442,907. 2 Claims. (Cl. 179—111.)



1. In an electric static acoustic amplifying device the combination comprising, a base member consisting of a sheet of metal rectangular in form and having a series of parallel lines of narrow slots formed therein, said slots being in spaced apart relation in said lines and positioned transversely of said sheet, said member being coated with insulating varnish on its operative edges and surface, a sheet of insulating fabric of corresponding rectangular form and size and having a series of clean edged rectangular apertures in spaced apart relation and positioned side by side and end towards end and in such spaced relation that the width of insulation between adjacent apertures is less than half the width of the said aperture, the relative positions of the two said sheet members being such that the narrow slots in the one span the apertures in the other at a point intermediate of their ends, a third sheet member corresponding in form and size with the other said members and comprising a film of super-thin metal, said metal film having a coating of insulating varnish on one surface, the varnished surfaces of the two metallic members aforesaid being firmly cemented to the respective surfaces of the said insulating member, whereby when an electric wave impulse of suitable frequency is passed through the two said metallic members a sound vibration will be set up by the said super-thin member

within the said apertures and emitted through the said narrow slots in addition to the sound propagated by the outward face of the vibrating member.

1,811,483. CLAMP FOR PAPER CUTTERS. WILLIAM L. VALIQUETTE, Dayton, Ohio, assignor to The Harris-Seybold-Potter Company, Dayton, Ohio, a Corporation of Delaware. Filed May 11, 1927. Serial No. 190,579. 6 Claims. (Cl. 164—45.)



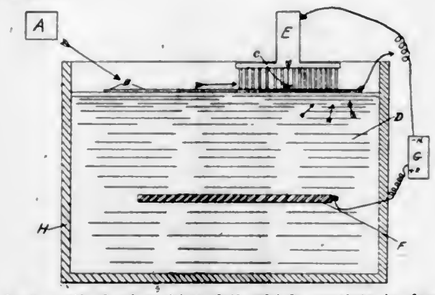
1. In combination with a table and means for clamping paper thereon adjacent an edge of the paper to be cut, a pressure frame and means for suspending same in horizontal alignment with the table, and for imparting parallel movement to said frame with relation to the table, a trigger arm secured to said means for holding the frame in suspended position and means operated by the clamp operating mechanism to release said trigger arm ahead of the engagement of the clamping means with the paper, for the purpose described.

1,811,484. SAFETY DEVICE FOR AUTOMOBILES. JOHN H. WESTLUND, Marshalltown, Iowa. Filed July 11, 1927. Serial No. 204,784. 5 Claims. (Cl. 180—83.)



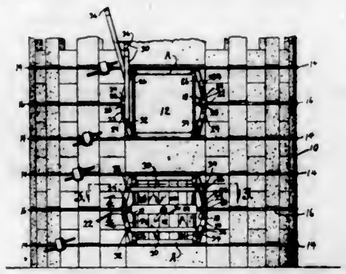
1. In combination with a vehicle having a motor thereon, a device of the character disclosed comprising shut off means for stopping said motor, starting means for starting said motor and movable means mounted on the extremities of said vehicle, said movable means being associated with said shut off means and with said starting means whereby movement of the movable means will operate the shut off means and lock it in shut-off position and movement of the starting means to again start the motor will release the shut off means in readiness to be again operated by the movable means.

1,811,485. METHOD OF FORMING METAL FOILS. GIBSON YUNOBLUT, Dayton, Ky., and HARRY C. FISHER, Cincinnati, Ohio, assignors to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Jan. 9, 1925. Serial No. 1,456. 8 Claims. (Cl. 204—1.)



1. A method of making foil which consists in forming an emulsion of finely divided metal, driving off the emulsifying agent while same is supported on a liquid, and uniting the film into a foil by establishing contact therewith to make of the film a cathode, said film being supported at this stage particularly, on an electrolyte.

1,811,486. SILO DOOR FRAME AND LADDER CONSTRUCTION. SIGURD E. ANDERSON, Des Moines, Iowa. Filed Dec. 18, 1929. Serial No. 414,963. 8 Claims. (Cl. 72—6.)



1. In a silo door frame and ladder construction a frame member, means for attaching the sides of said frame member to the ends of a pair of spaced silo rods and ladder step members extending across said door frame from side to side thereof.

1,811,487. HARD FACING ALLOY. ELMER C. BELDING, Whittier, Calif., assignor to National Tool and Metals, Incorporated, Torrance, Calif., a Corporation of California. Filed Apr. 16, 1929. Serial No. 355,662. 2 Claims. (Cl. 75—1.)

1. A hard facing alloy comprising fifty-five per cent tantalum, four per cent molybdenum, forty-one per cent tungsten.

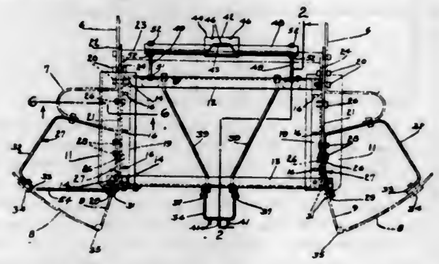
1,811,488. SUPPORTING MEANS FOR LOOM PICKER SPINDLES. JOHN BERNINI, Allentown, Pa. Filed May 10, 1930. Serial No. 451,213. 11 Claims. (Cl. 139—158.)



1. Picker-spindle supporting devices for a loom having, in combination, guiding means holding the spindle

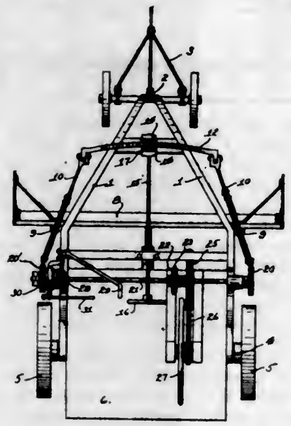
in parallel with the lay, a step limiting endwise movement of the spindle in one direction, and a wedge acting upon the spindle to force it against the step.

1,811,489. TRUNK RACK. SIDNEY B. BLAKELY, Minneapolis, Minn., assignor to Durkee-Atwood Company, Minneapolis, Minn., a Corporation of Minnesota. Filed May 31, 1930. Serial No. 457,798. 5 Claims. (Cl. 224—29.)



1. A trunk rack including spaced-apart supporting plates having means for securing a trunk thereto, means for connecting said supporting plates with the frame of an automobile, a laterally disposed member adjustably connected with said plates and situated above and forwardly thereof, and a bracket adapted to partially encircle said member and having means for connecting it with the vehicle body, said bracket having an adjustable connection with said member.

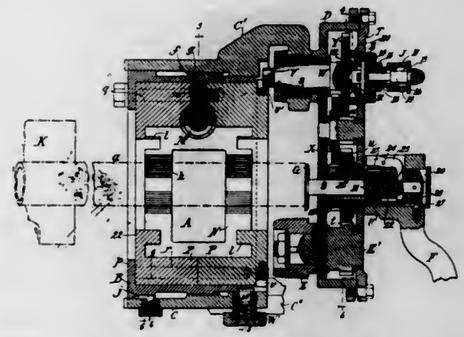
1,811,490. LAND GRADER. EDGAR P. BROWN, Watsonville, Calif. Filed Feb. 7, 1930. Serial No. 426,540. 5 Claims. (Cl. 37—155.)



5. A land grader comprising a frame; a blade movably carried thereby; a horizontal shaft rotatably mounted upon said frame; a hand wheel connected with said shaft; a pair of endless flexible members running over and operated by said shaft, one run of each member being connected with one end of said blade; and means for separably connecting one of said members with said shaft.

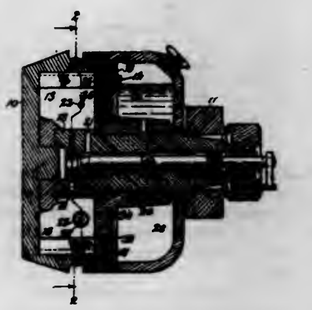
1,811,491. PLANETARY PIPE-THREADING TOOL. THEODORE M. BRUBACK and DE LOS E. HIBNER, Jr., Du Bois, Pa. Filed July 3, 1928. Serial No. 290,176. 15 Claims. (Cl. 10—154.)

1. A portably planetary pipe-threading tool comprising a stationary body and means for locking it on the pipe, a casing rotative around and receiving said body, a rotary multiple thread cutter, a mounting for said cutter movable with respect to said casing for feeding the cutter toward the pipe axis, a crank for rotating said cutter,



gearing driven by said crank for rotating said casing around the body to advance the cutter in a planetary course around the pipe, and means for limiting such planetary movement to one revolution.

1,811,492. SHOCK ABSORBER. ANTHONY B. CASPER, Buffalo, N. Y., assignor to Houde Engineering Corporation of Buffalo, N. Y., a Corporation of New York. Filed July 26, 1929. Serial No. 381,164. 4 Claims. (Cl. 188—89.)

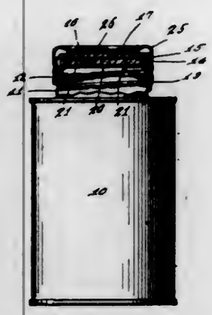


1. A wall arranged between a working chamber and a replenishing chamber and provided with an opening having an internal screw thread, and a plug having an external screw thread engaging the internal thread of said opening, said plug being fixed in said opening and parts of the opposing faces of said threads being out of engagement with each other throughout their length to such an extent that a helical passage is formed between said plug and partition which will permit the passage of air from the working chamber to the pressure chamber but prevent the passage of liquid therethrough.

1,811,493. LIQUID CONTAINER. MOREY D. COCHRAN, Indianapolis, Ind., assignor to Industrial Solvents, Inc., Indianapolis, Ind., a Corporation of Indiana. Filed Mar. 14, 1931. Serial No. 522,583. 6 Claims. (Cl. 15—134.)

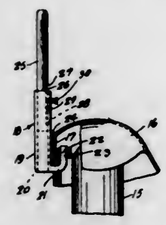
1. A container for liquids, comprising a hollow body having an opening at its top, a disk of absorbent material supported over said opening, and means for regulating the supply of liquid to said disk when the container is inverted, said means comprising two baffles

and an interposed layer of porous material, each of said baffles having one or more liquid-passing holes, any hole or holes in one baffle being out of alinement with the



hole or holes in the other baffle whereby liquid will be directed to flow laterally through said layer of porous material.

1,811,494. FENDER PROTECTOR. JOHN J. CONWAY, Bridgeport, Conn., assignor to The Acme Shear Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 19, 1931. Serial No. 509,771. 3 Claims. (Cl. 116—31.)



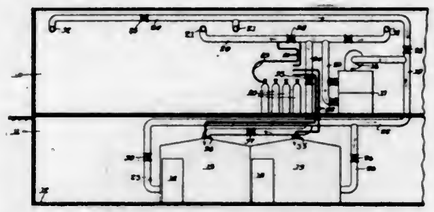
1. A fender protector comprising a body, means for securing said body to a fender, upright indicating means adjustable vertically through said body, means to hold said indicating means in adjusted position, and means to prevent withdrawal of the adjustable indicating means from the body.

1,811,495. MULTIPLE-IMAGE CAMERA. HAROLD N. COX, Glen Ridge, N. J., assignor to Cox Multi-Color Photo Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 25, 1928. Serial No. 295,256. 1 Claim. (Cl. 88—1.)



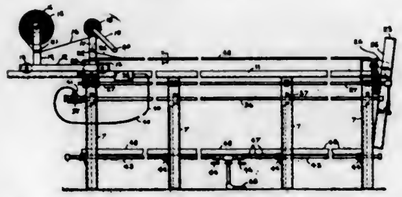
A lens system for multiple-image work adapted to serve interchangeably with a single-image lens of given focal length and width of aperture, and to project upon a film and within the area covered by the single-image lens multiple-images of equal angle of view, such system including a plurality of identical lens units, of fixed aperture symmetrically spaced about an axis, the focal length of which lenses is substantially $\frac{1}{2}n \times w$, in which n= the numerical aperture of the lens units of the multiple-image system, and w=the width of the film area.

1,811,496. EQUIPMENT FOR TREATING PERISHABLE PRODUCTS. FRED JOHN DAY, Los Angeles, Calif., assignor to Pre-Cooling Car Service Co., Los Angeles, Calif., a Corporation of California. Filed July 7, 1928. Serial No. 290,971. 7 Claims. (Cl. 62—24.)



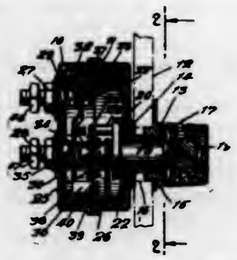
1. In apparatus of the class described, the combination of a railway track, a fixed storage room located in proximity to the track, a refrigerator car on the track in proximity to the storage room and provided with ice bunkers, means for establishing air connection between the refrigerator car and the storage room, and means exterior of the storage room for maintaining an air circuit through said refrigerator car and said storage room, for equalizing the temperature in the storage room and in the refrigerator car.

1,811,497. CONTINUOUS PROCESS FOR THE DECORATING OF A FABRIC AND DEVICE FOR CARRYING OUT SAID PROCESS. HUGH DENNIS, New York, N. Y., assignor, by mesne assignments, to Madeleine Dennis. Filed Sept. 11, 1928, Serial No. 305,274. Renewed Apr. 8, 1931. 11 Claims. (Cl. 41—1.)



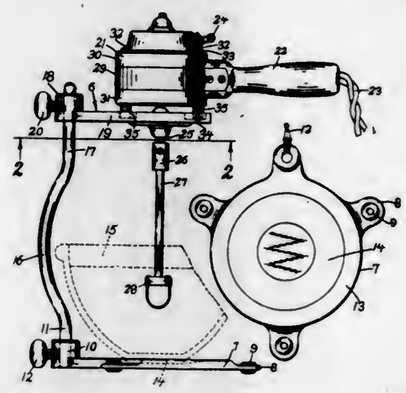
1. A process for placing decorations on a fabric by hand which consists of stretching a section of a bolt of cloth both longitudinally and laterally in a position adapted to receive said decorations, placing said decorations thereon by hand, drying the decorations, rolling said decorated section of fabric on a roller between rolls of paper, repeating said operations until the full bolt of decorated fabric is rolled onto said roller and placing the same in an oven to set the colors of said decorations.

1,811,498. SWITCH. JOHN GELOSO, New York, N. Y., assignor to Pilot Electric Manufacturing Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 5, 1929. Serial No. 368,463. 8 Claims. (Cl. 200—67.)



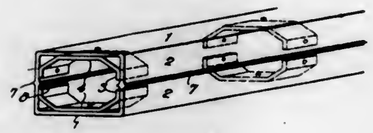
1. A switch comprising a casing, a plurality of fixed terminals extending therefrom, a fixed contact mounted in the casing, in electrical contact with one of said terminals, a movable contact pivoted on the other of said fixed terminals, a crank and resilient means interconnecting the crank with one extremity of said movable contact, and a spindle fixed to said crank, a knob for actuating said spindle, stop means for limiting the displacement of the said crank, said movable member, being displaceable about its pivot, into and out of contact with the fixed contact, upon the rotation of said spindle.

1,811,499. MIXING APPARATUS. ALFRED C. GILBERT, Hamden, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn. Filed Mar. 17, 1928. Serial No. 262,539. 19 Claims. (Cl. 259—135.)



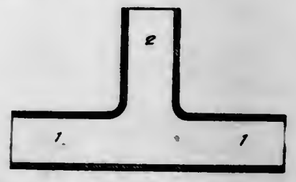
1. In a beverage mixer or the like, a motor, a mixing element carried by said motor and a motor support, said support being provided with an opening through which said mixing element projects, and means for supporting said motor in said opening in spaced relation to the motor support, said means positively preventing rotational displacement of the motor on the support, said motor being freely movable away from said support in an upward direction without intereference from said positive means.

1,811,500. WELDING SEGMENTS. HENRY S. HOLMES, New York, N. Y., assignor, by mesne assignments, to Metropolitan Engineering Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 23, 1929. Serial No. 334,379. 2 Claims. (Cl. 219—10.)



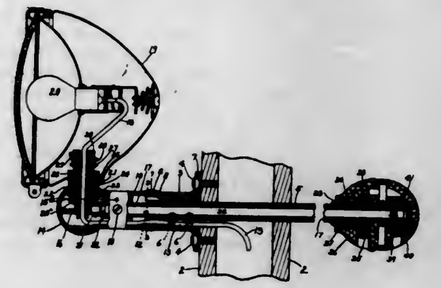
1. The method of making a hollow article of sheet metal segments which consists in first applying and uniting stiffeners to the inside of the segments near their edges, then assembling and pressing the edges of said segments together between electrodes and passing a welding current.

1,811,501. PRODUCING PIPE FITTINGS AND OTHER HOLLOW ARTICLES. HENRY S. HOLMES, Rockville Center, N. Y., assignor, by mesne assignments, to Metropolitan Engineering Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 11, 1929. Serial No. 339,023. 7 Claims. (Cl. 29—157.)



1. The method of making a tubular product which consists in bending up sheet metal blanks to form segments, welding such segments together along longitudinal edges to form a thin-walled tubular blank and upsetting an end of said tubular blank by an endwise pressure to increase its thickness without diminishing its diameter.

1,811,502. SPOTLAMP FOR VEHICLES. ROBERT H. HUMMERT, Dayton, Ohio, assignor to The S. H. Thomson Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 7, 1929. Serial No. 391,038. 5 Claims. (Cl. 240—61.13.)



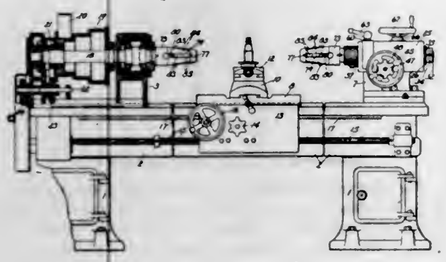
1. In a device of the type described, a horizontal support attachable to a vehicle, a gear housing free to turn vertically on said support, a hollow shaft passing through said support and connected to the gear housing to turn it, said housing having a hole in its top portion, a post projecting upwardly through said hole, a shaft passing through the hollow shaft, a pinion on the second shaft, a floating gear surrounding said post for engagement with said pinion, and a lamp housing secured to the floating gear.

1,811,503. COIN COUNTING MACHINE. JOSEPH JANOVSKY, New York, and JULIUS J. LANGE, Astoria, N. Y., assignors to Abbott Coin Counter Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 20, 1928. Serial No. 248,061. 17 Claims. (Cl. 133—8.)



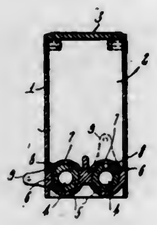
1. A coin counting machine having, in combination, a counting device, a feed wheel for feeding coins past the counting device to actuate the same, and means acting automatically to move the feed wheel out of the path of the coins when a predetermined number of coins have been fed past said device.

1,811,504. ROLL TURNING MACHINE. ROBERT A. JOHNSON, Longmeadow, and EARLE M. CHASE, Springfield, Mass., assignors to Porter-McLeod Machine Tool Co., Hatfield, Mass., a Corporation of Massachusetts. Filed May 29, 1928. Serial No. 281,500. 3 Claims. (Cl. 82—31.)



1. A tail stock structure comprising in combination, a body having a spindle reciprocable therein, a rack on said spindle, an operating sleeve rotatable in the body having a pinion meshing with said rack, a hand wheel on an outer end of said sleeve at a side of said body, an operating shaft rotatable in said body having a hand wheel at another side of said body, a worm on said shaft, a worm gear rotatable on an inner end of said sleeve having a clutch face, a rod rotatable in said sleeve having a hand wheel at its outer end adjacent said first-named hand wheel, a clutch member associated with an inner end of said sleeve and rod for engaging the clutch face of the worm gear, a member reciprocable in a part fixed to said body for actuating said clutch member and means associated with said rod and member whereby the latter is actuated by rotation of the former.

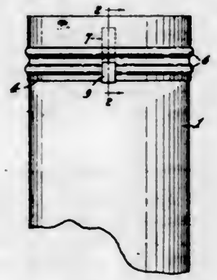
1,811,505. COATING APPARATUS. JOSEPH A. KENNEDY, Pawtucket, R. I., assignor to Anaconda Wire and Cable Company, New York, N. Y., a Corporation of Delaware. Filed May 19, 1930. Serial No. 453,719. 5 Claims. Cl. 91—46.)



1. A lacquering box, comprising a body portion forming a lacquer reservoir, a member adjacent the reservoir and having a tube receiving passage and a connecting port through which lacquer flows from the reservoir to the first said passage, and means whereby the said member can be moved to a position closing said port.

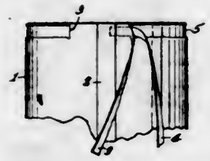
1,811,506. SHEET METAL PACKAGE. HENRY KIELBERG, Martins Ferry, Ohio, assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Sept. 28, 1929. Serial No. 395,884. 3 Claims. (Cl. 220—53.)

1. In a sheet metal package, a cylindrical body having an open end, a sheet metal band attached in embracing relation to said body at said end, a closure having an annular outwardly extending flange fitted within the embrace of said end, said band having its upper edge portion turned inwardly into interiorly seated relation to said closure flange, and a sheet metal strap interposed between said body and said band, said strap having one end anchored to said closure flange and its other end protruding from



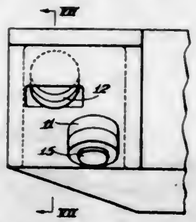
beneath the lower edge of said band to form a tongue, said tongue being adapted to be grasped and pulled to effect cross-tearing of said band.

1,811,507. SHEET METAL PACKAGE. HENRY KIELBERG, Martins Ferry, Ohio, assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Sept. 28, 1929. Serial No. 395,885. 3 Claims. (Cl. 220—53.)



1. A sheet metal package comprising a tubular body of readily rupturable material, having an open end, said body having an aperture therein adjacent to said end, a closure for said end having an outwardly directed annular flange provided with a recess, said closure being received within said end in a position wherein said recess is located adjacent to said aperture, and a metal-tearing member interposed between said closure flange and said body in embracing relation to the former, one end of said member having a hook end received in said recess and having its opposite end projected outward through said aperture, the extreme end of said body being turned inward into interiorly seated relation to said closure flange.

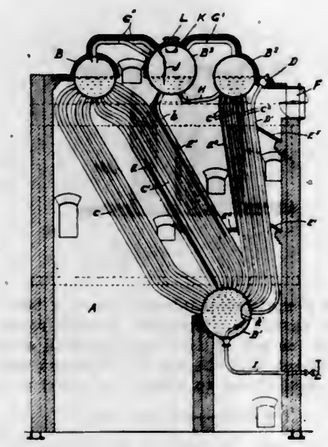
1,811,508. RECIPROCATING MACHINE BED. NORMAN H. KLAGES, Pittsburgh, Pa., assignor to G. W. Klages & Son, Inc., a Corporation of Pennsylvania. Filed Nov. 3, 1928. Serial No. 317,007. 1 Claim. (Cl. 308—6.)



In combination, a base provided with a pair of guide rails, each of which has a pair of guide surfaces lying at an angle to each other and extending longitudinally of the base, one of said rails having the surfaces thereof at an acute angle to each other, and a table carried by the base and provided on one side with a single set of rollers, one roller of which set engages one surface on the guide rail having its surfaces at an acute angle, and the other of which set engages the other surface on said rail, said table being provided on its other side with two sets of rollers

spaced apart longitudinally of the table, with one roller of each set engaging one surface on the other guide rail and the other roller of each set engaging the other surface on such last rail, the surfaces on said last rail lying at an acute angle to a horizontal plane, and means for adjusting one roll of said single set toward the surface which it engages comprising a bearing pin on which the roll is mounted having an end which is eccentrically disposed with respect to the axis of rotation of the roll, a support in which said end is mounted for rotative adjustment, and means for securing said end against rotation in its various positions of adjustment.

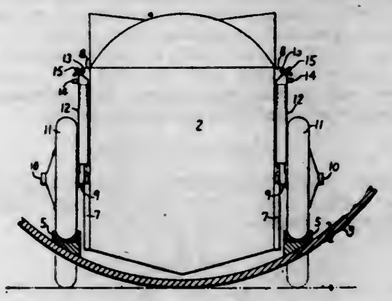
1,811,509. BENT TUBE BOILER. WALTER LOCKE, Philadelphia, Pa., assignor to Edge Moor Iron Company, Edge Moor, Del., a Corporation of Delaware. Filed Apr. 21, 1930. Serial No. 445,904. 2 Claims. (Cl. 122—302.)



1. A bent tube boiler comprising a steaming section made up of an upper and lower drum connected by two banks of bent tubes and provided with baffles located between the tube banks and in the rear of the rear bank to direct furnace gases upward along the front bank and downward along the rear bank, said boiler having also a water heating section made up of a drum located approximately on the level of the upper drum of the steaming section and tubes connecting said drum to the lower drum of the steaming section each heating secton being provided with baffles for directing the gases upward along the tubes, in combination with a fourth drum located approximately on the level of the upper drums aforesaid, said fourth drum being unconnected with the tube banks forming the main circulatory system of the steaming and water heating elements of the boiler but having steam conduits connecting its steam space with the steam spaces of the other two upper drums and water conduits connecting its bottom with the bottom of the rear upper drum acting to maintain an approximately uniform water level in the so connected drums.

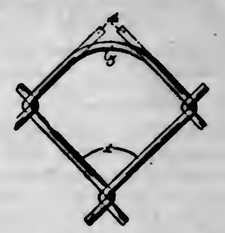
1,811,510. HANDLING CARRIAGE FOR STOWING AIRPLANES. GROVER LOENING, New York, N. Y. Filed Nov. 7, 1930. Serial No. 493,942. 3 Claims. (Cl. 244—2.)

1. A handling carriage for stowing airplane bodies, comprising wheels and wheel-carriers disposable adjacent the sides of the body of the airplane, means for detachably connecting the wheel-carriers with the body, and means controlling vertical movement of the wheels relatively to the body so that in an elevated position the wheels will support the body in a curved berth and in a depressed posi-



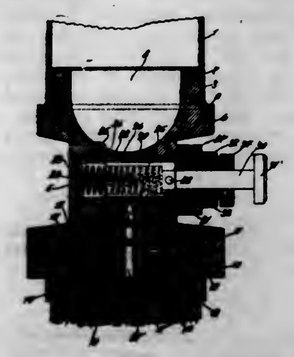
tion they will support it on a flat surface, said means adapted to sustain the load on the wheels throughout the range of vertical movement.

1,811,511. METHOD OF FORMING WIRE FENCE FABRIC. FRANK J. MAFERA, Revere, Mass. Filed Sept. 3, 1930. Serial No. 479,475. 2 Claims. (Cl. 140—3.)



1. The method of forming woven wire fencing with a selvage devoid of projections, which consists in bending the terminal end portions of related pairs of the strands of the fencing into alined end-to-end abutting relation, and welding said end portions together.

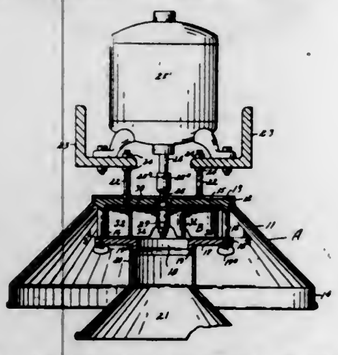
1,811,512. FOUNTAIN BRUSH. WALT MARSH, Belleville, Ill., assignor to Marsh Stencil Machine Company, Belleville, Ill., a Corporation of Illinois. Filed Sept. 16, 1929. Serial No. 392,821. 2 Claims. (Cl. 15—138.)



1. A fountain brush comprising a body member having in one end an inlet opening and in the opposite end an outlet opening that is out of alinement with said inlet opening, a device mounted in said body member between said openings controlling passage of fluid from said inlet opening to said outlet opening, a receptacle in connection with that end of said member having said inlet opening, an internally threaded extension in connection with the op-

posite end of said member concentric with said outlet opening, a ring screwed into said extension, a wall attached to the upper portion of said ring, a downwardly tapered central portion in connection with said wall, a downwardly tapered portion in connection with said body surrounding said outlet opening and engaging said tapered portion of said wall, and brush bristles having their upper ends clamped between said ring and said downwardly tapered wall portion for receiving and distributing the substance discharged from said outlet opening.

1,811,513. FOAM DESTROYER. CHARLES DOREL MASON, Des Moines, Iowa. Filed Sept. 8, 1930. Serial No. 480,469. 6 Claims. (Cl. 183—2.6.)
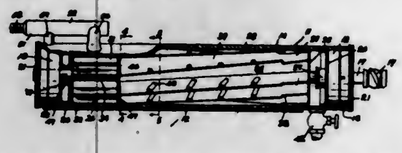


2. In a foam destroyer, a hoodlike structure having a top and a downwardly extending wall, an annular plate supported below said top, a foam intake member extending downwardly from the opening in the plate, a fan arranged between said top and plate having a disc-like top and substantially radial blades below the top.

1,811,514. VEHICLE SPRING CONSTRUCTION. GEORGE MATAKOVICH, Keewatin, Minn. Filed Aug. 21, 1929. Serial No. 387,381. 12 Claims. (Cl. 267—45.)



1. The combination comprising a vehicle frame, an axle, a primary spring unit supporting the frame with respect to the axle, a secondary spring unit comprising a horizontally disposed series of leaf springs secured to the frame with one end pivotally connected to the axle, said secondary spring unit being normally inactive, and means for rendering the secondary spring unit active when the frame is spread from the axle a predetermined distance.

1,811,515. TURBINE. ANTHONY C. MCGINTY, Los Angeles, Calif. Filed Mar. 12, 1930. Serial No. 435,222. 3 Claims. (Cl. 253—50.)

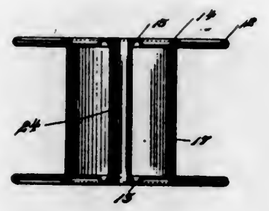


1. A turbine comprising a housing, a rotor revoluble therein and comprising a shaft journalled axially of said housing, a plurality of vanes rigid with and extending along said shaft, means for directing fluid against said vanes adjacent one end of the rotor, and a plurality of deflectors arranged on each vane and inclining toward said shaft and toward the other end of the rotor to direct said fluid inwards towards the axis of revolution of said rotor.

1,811,516. HIGH TEMPERATURE HEAT INSULATION MATERIAL AND METHOD OF MAKING THE SAME. CARLTON EARLE MILLER, Redwood City, Calif. Filed Apr. 7, 1924. Serial No. 704,696. 10 Claims. (Cl. 106—18.)

1. A heat insulating material comprising a mixture of diatomaceous earth, calcium carbonate, and basic magnesium carbonate.

1,811,517. REEL. FRANK MOSSBERG, Attleboro, Mass., assignor to Mossberg Pressed Steel Corporation, Attleboro, Mass., a Corporation of Massachusetts. Filed July 26, 1928. Serial No. 295,415. 6 Claims. (Cl. 242—77.)



1. A reel comprising a tubular barrel, a head on each end thereof having a continuous circular recess therein for receiving one end of the barrel, one wall of the recess forming a pocket with the end of the barrel and welding material in said pocket to secure the barrel to the head.

1,811,518. CLAMP. GEORGE E. PALMER, Cedar Rapids, Iowa. Filed Sept. 28, 1929. Serial No. 395,955. 3 Claims. (Cl. 144—303.)

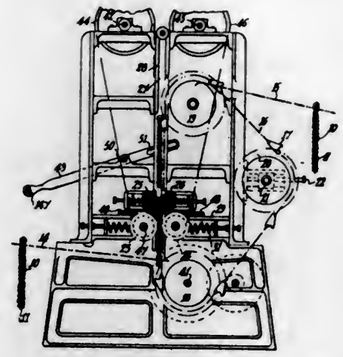


1. In a hand-clamp, the combination of a smooth-edged bar, an abutment jaw attachable to the bar and provided with a lateral seat for another bar at an angle to the first-mentioned bar, a companion jaw slidable on the bar, and having diagonally disposed bar-gripping members at opposite sides of the bar, a compression screw and head carried by the slidable jaw, and means for attaching the secondary bar to a fixed support, and the connected head to said bar.

1,811,519. DEBURRING MACHINE. WALTER PERKS, London, England, assignor to William Vicars, Rose Bay, near Sydney, Australia. Filed Mar. 1, 1928, Serial No. 258,397, and in Australia July 18, 1927. 5 Claims. (Cl. 149—19.)

1. In a deburring machine, a pair of endless traveling members spaced apart from each other and disposed for movement through a vertical path, a plurality of skin-carrying members, means for delivering said members in succession to a position between said traveling members,

and cooperating means carried by said traveling members and skin-carrying members automatically operative to en-



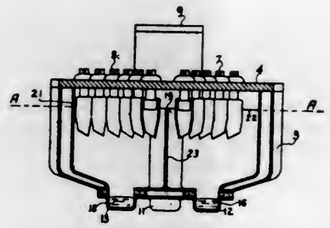
gage the latter and move them through said vertical path and to release the skin-carrying members after their passage through said path.

1,811,520. JEWEL SETTING. MAURICE J. SCHLESS, New York, N. Y. Filed Aug. 4, 1930. Serial No. 472,868. 2 Claims. (Cl. 63—26.)



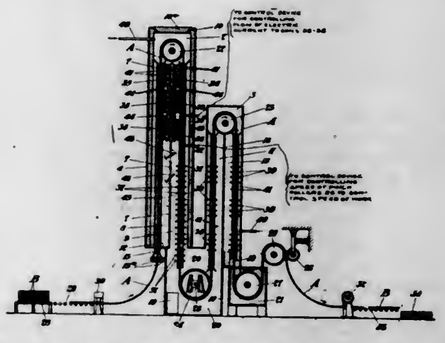
1. In a jewel setting, a substantially rectangular mounting plate formed with a jewel receiving aperture, means to secure a jewel therein, attaching means integral with the plate and comprising projecting corners having straight sides parallel to the sides of the plate and being cut away on the upper surfaces to form recessed reflecting surfaces lying in a plane parallel to the plane of the plate surface.

1,811,521. ELECTRIC CURRENT RECTIFIER. OSKAR SEITZ, Baden, Switzerland. Filed Aug. 26, 1930, Serial No. 477,807, and in Germany Aug. 2, 1929. 3 Claims. (Cl. 250—27.5.)



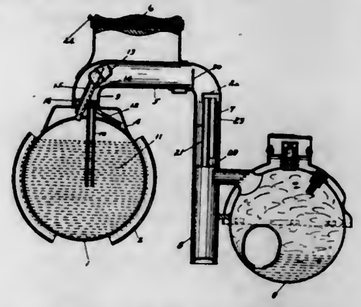
1. In an electric current rectifier of the metallic vapor type, a closed tank, a plurality of groups of anodes extending into said tank, a cathode divided into a plurality of portions equal in number to the number of said anode groups and arranged in the bottom of said tank, and metallic walls substantially separating said groups of anodes into separate compartments within said tank.

1,811,522. FURNACE. BARTON R. SHOVER, Pittsburgh, Pa., and FRANK P. TOWNSEND, East Orange, N. J., assignors to Strip Tin Plate Company, Pittsburgh, Pa., a Corporation of Delaware. Refiled for application Serial No. 334,203, filed Jan. 22, 1929, and in France Nov. 17, 1930. This application filed May 14, 1931. Serial No. 537,408. 7 Claims. (Cl. 263—3.)



3. A vertically disposed heat treating furnace comprising at least one stack divided by a vertically disposed partition to form up and down-travel chambers for the material to be treated, said materials being in the form of a continuous strip, means for movably suspending said material in said chambers, heat radiating means adjacent the upper end of said chambers below said material suspending means, and means for causing a flow of gas through said furnace counter-current to the direction of travel of the material being heated.

1,811,523. REFRIGERATION UNIT. RUSSELL T. SMITH, Cincinnati, Ohio, assignor to The Crosley Radio Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 20, 1930. Serial No. 429,981. 4 Claims. (Cl. 62—120.)

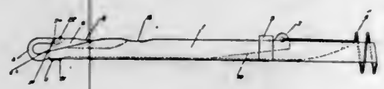


1. In an absorption system refrigeration unit the combination with a generator absorber shell, a condenser evaporator shell and tubular means connecting the same, the generator absorber shell being loose from the tubular means except for defined passageways, of a shell erected about the generator absorber shell, said shell communicating with the tubular means and arranged to retain a portion of the absorbent agent used in the system, and a conduit extending from the tubular means to a point below the absorbent level within said erected shell in order to promote absorption within the same.

1,811,524. NEEDLE FOR REPAIRING KNITTED ARTICLES. MARCEL VITOUX, Troyes, France. Filed Mar. 1, 1930, Serial No. 432,298, and in France Mar. 29, 1929. 5 Claims. (Cl. 66—117.)

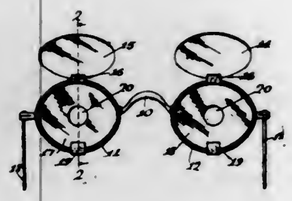
1. A sliding latch needle for repairing knitted articles, comprising, in combination, a rod terminating in a hook,

a movable latch within a longitudinal slot of said rod, said latch alternately opening and closing said hook, a strap surrounding said rod and rigidly connected therewith, and resilient means connecting said latch with said



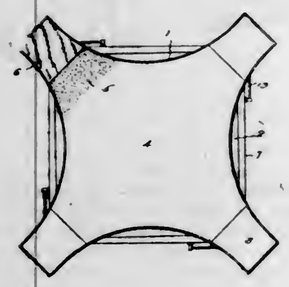
rod, said latch being also displaced by the threads of the knitted article in a direction perpendicular to the longitudinal axis of said rod, this displacement being limited by the bottom of said groove and by said strap.

1,811,525. GLARE SHIELD FOR EYELENSES. CHARLES I. WALKER, Los Angeles, Calif. Filed July 31, 1928. Serial No. 296,511. 1 Claim. (Cl. 88—41.)



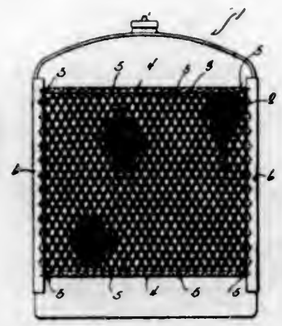
A glare shield comprising a spectacle frame, a pair of lenses formed of semi-transparent material, pivotally mounted upon the tops of the lens frames of the spectacle frame, adapted to assume positions over the lens frames, and a second pair of lenses formed of semi-transparent material, pivotally mounted upon the bottoms of the lens frames, adapted to assume positions over the lens frames, one of the pairs of lenses having apertures formed centrally thereof.

1,811,526. CARD TABLE. ALFRED R. WRIGHT, Essex, Conn. Filed July 2, 1929. Serial No. 375,350. 2 Claims. (Cl. 45—11.)



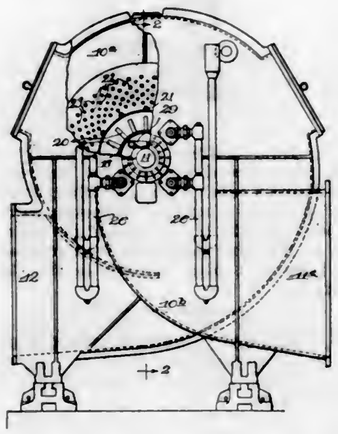
1. A table comprising a unitary top with a plane upper playing surface, said top having four concaved side edges and four wide radial and integral extensions separating the concaved sections, with legs hinged to the under side of said extensions and adapted to fold against and open from the table, said legs when folded extending across the concaved recesses in the side edges and providing handles for transporting the table.

1,811,527. RADIATOR. FRED M. YOUNG, Racine, Wis. Filed Sept 8, 1930. Serial No. 480,388. 3 Claims. (Cl. 293—54.)



1. In combination with a radiator having a core, a protecting screen for the core having its medial portion bulged and four of its edge portions flat and in a common plane, and means for attaching the screen to the radiator.

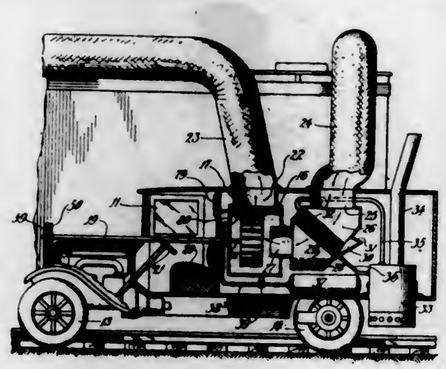
1,811,528. ROTARY DISINTEGRATOR. CHARLES W. ANDREWS and SELWYNE P. KINNEY, Chicago, Ill., assignors to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1929. Serial No. 378,257. 6 Claims. (Cl. 261—90.)



1. In a disintegrator apparatus, in combination with a casing, a cylindrical basket rotatable in said casing, means for supplying water to said basket, a plurality of tubes adapted for discharge of water radially from said basket, and a plurality of relatively, rotative radially spaced disintegrator members operating in said casing radially beyond said basket, one of said disintegrator members being a fixed, cylindrical, perforated screen closely approached to the discharge ends of the tubes carried by said basket.

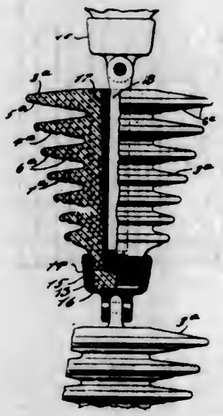
1,811,529. PORTABLE APPARATUS FOR CONDITIONING PERISHABLE PRODUCTS. WELCH BARATOW and FRED JOHN DAY, Los Angeles, Calif., assignors to Pre-Cooling Car Service Co., Los Angeles, Calif., a Corporation of California. Filed June 13, 1928. Serial No. 285,134. 6 Claims. (Cl. 99—2.)

2. In an apparatus of the class described, the combination of a vehicle including a roofed over box body, running gear and an engine for propelling the vehicle, two pipes secured to the roof of the box body and adapted to extend to opposite ends of the enclosure to be treated, means for clamping the ends of the pipes to the enclosure to provide for the passage of air into and out of the enclosure, a fan casing located within the box body and communicating with the end of one of the pipes, a fan within the fan casing, and power connections from the



engine for driving the fan, an air conditioning box located adjacent the fan casing and in communication therewith and in communication with the other pipe, a radiator extending across the air conditioning box and in interposed relation to the passage of air therethrough, means for supplying a heating medium to the radiator, a gas tank located within the box body, and a gas pipe leading therefrom to a suitable position to admit gas into the air circuit.

1,811,530. INSULATING DEVICE. FRANK G. BAUM, San Francisco, Calif., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 20, 1921. Serial No. 509,148. 2 Claims. (Cl. 173—318.)

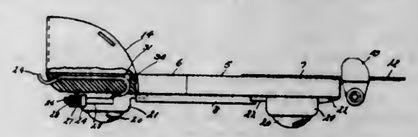


2. An insulator of the character described comprising an elongated tubular porcelain body, a metal cap secured upon one end of said body, a bolt extending axially within the body, a mass of cement embedding one end of the bolt within the said end of the body, the other end of the bolt projecting beyond the other end of the body and a mass of water-repellant plastic material filling the space within the body between said mass of cement and the second named end and acting to center the bolt.

1,811,531. SILICEOUS MATERIAL AND METHOD OF PRODUCING THE SAME. ABRAHAM SIDNEY BEHRMAN, Chicago, Ill., assignor, by mesne assignments, to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 4, 1927. Serial No. 231,164. 12 Claims. (Cl. 23—113.)

5. A base exchange material comprising the reaction product of an alkali metal amphoterate and an adsorbent siliceous material.

1,811,532. SKATE. ANDREW G. BENETATOS, New York, N. Y. Filed Mar. 17, 1930. Serial No. 436,358. 6 Claims. (Cl. 208—173.)



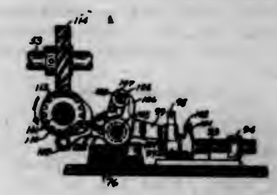
1. A skate consisting of a foot piece, socket members mounted on the outer surface of said foot piece, supporting balls retained by said sockets, and anti-friction devices carried by the foot piece and engaged by the supporting balls.

1,811,533. FILTER BAG CONNECTER. JOHN B. BERRIGAN, Chicago, Ill., assignor to The Press & Drier Co. Filed Feb. 17, 1930. Serial No. 429,147. 3 Claims. (Cl. 100—54.)



1. The combination of a plurality of filter bags arranged side by side in parallel relation, registering apertures in the fabric walls of adjacent bags, a piece of flexible material having a similar opening therein, secured to the exterior side of each filter bag at the openings therein, a ring between said piece of flexible material and the side wall of a bag, and U-shaped clips applied over the outer edges of said rings to connect adjacent bags together, said U-shaped clips being resilient and having the inner edges of their ends beveled.

1,811,534. CASH REGISTER. SAMUEL BRAND, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed June 13, 1927. Serial No. 198,499. 5 Claims. (Cl. 235—22.)



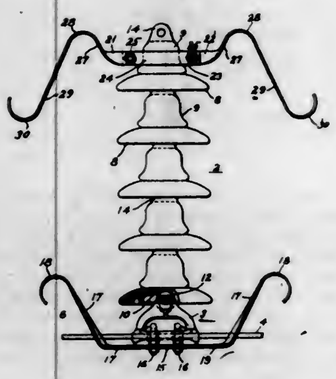
1. In a cash register, the combination of a plurality of keys, a differential mechanism controlled thereby, a plu-

rality of receptacles, a finger shaft controlled by said differential mechanism, the position of which shaft determines which of said receptacles will be released, a cam and arm for raising said finger shaft to release said selected receptacle, a manually operable lever, and a rod shiftable longitudinally by said lever and having notches, the positions of which render said releasing means ineffective upon operation of the machine.

1,811,535. PROCESSES FOR PURIFICATION OF OIL SOLUBLE SODIUM SULPHONATES. HYYM E. BUC, Roselle, and HOWARD R. TATE, Elizabeth, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 19, 1927. Serial No. 234,548. 6 Claims. (Cl. 260—159.)

6. The process of preparing a non-deteriorated sodium salt of an oil soluble sulphonic acid derived from the treatment of petroleum oil with fuming sulphuric acid of sulphuric anhydride, which comprises dissolving the salt in an organic solvent in which inorganic materials are relatively insoluble and evaporating the solution so obtained in the presence of an alkali metal salt of a weak organic acid, which salt is capable of forming either a true or colloidal solution with petroleum lubricating oil, to recover the solvent and produce a residue of non-deteriorated oil soluble sodium sulphonate mixed with the added salt of the weak organic acid.

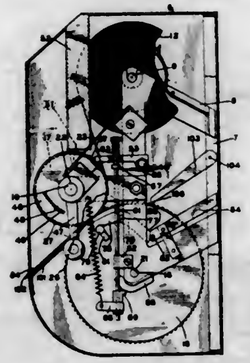
1,811,536. FIELD CONTROL DEVICE. RICHARD W. CARLISLE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 29, 1928. Serial No. 289,320. 10 Claims. (Cl. 173—318.)



1. An electrostatic-field-control device comprising spaced electrodes one of which has an inner portion adjacent to the longitudinal axis of the device, a portion extending from said inner portion to a position laterally at one side, and longitudinally removed from, said inner portion in a direction away from the other electrode and a portion extending from said position toward said other electrode to a position longitudinally spaced from said other electrode.

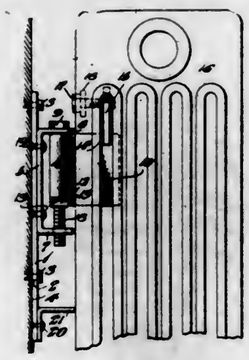
1,811,537. SANITARY TOILET SEAT DISPENSER. SCHILLER B. CUMMINGS, Long Beach, Calif., assignor, by mesne assignments, to Richard Pendleton Johnson, Long Beach, Calif. Filed Jan. 21, 1929. Serial No. 334,050. 5 Claims. (Cl. 164—68.)

1. In a dispensing device, a housing having a delivery opening therein, means for freely supporting a supply of the article to be dispensed, a pair of rolls journalled within said housing and engaging therebetween a portion of said article, said rolls being disposed to propel the end of said portion through the delivery opening



as they are rotated, means for rotating said rolls, a knife disposed within a groove extending longitudinally of one of said rolls, spring means urging said knife outwards of said groove to sever a predetermined length of the article, and means for withdrawing said knife.

1,811,538. RADIATOR BRACKET. ANTHONY E. DAVIS and JOHN N. INMAN, Jr., Philadelphia, Pa. Filed Jan. 17, 1928. Serial No. 247,331. 5 Claims. (Cl. 248—17.)

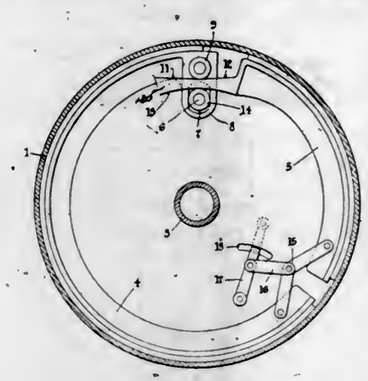


5. In a radiator hanger, the combination with a wall engaging member and a bracket arm supported on said member and arranged to project between sections of a radiator, of a carrying member engaging the arches of juxtaposed sections and resting on and removably engaging said arm.

1,811,539. BRAKE. WALTER HAMILTON DELAHAYE, Ottawa, Ontario, Canada, assignor to Bendix Brake Company, South Bend, Ind. Filed May 1, 1929. Serial No. 359,448. 13 Claims. (Cl. 188—78.)

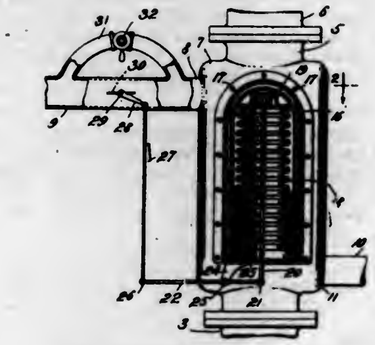
1. In a brake and in combination with a fixed support, an anchor on said support, a shoe mounted for limited

radial movement on said anchor, a servo shoe, means connecting the adjacent ends of said shoes for urging them



into engagement with a brake drum, the other end of said servo shoe lying outside the anchor and bearing against the shoe anchored thereon.

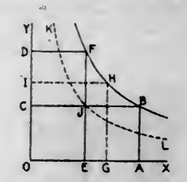
1,811,540. INTERNAL COMBUSTION ENGINE. WILLIAM P. DEPPE, Brightwaters, N. Y. Filed Oct. 16, 1923. Serial No. 668,842. 10 Claims. (Cl. 123—122.)



1. In the operation of an internal combustion engine, the method of producing a superheated dry gaseous mixture and operating the engine thereon, which comprises forming a mixture of air and liquid fuels in predetermined ratio, then passing said mixture to the engine while simultaneously subjecting it to heat at a preselected substantially constant temperature, which is above the vaporizing or boiling points of the fuel constituents in the air ratio employed and below the temperature of cracking and of the spherical state of the liquid fuels, said constant temperature being maintained by heat from a substantially continuous source in conjunction with heat from a source subject to control for maintaining the preselected constant temperature, the arrangement and control of the heat being such that a superheated homogeneous dry gaseous mixture is produced, maintained and delivered to the combustion chambers of the engine.

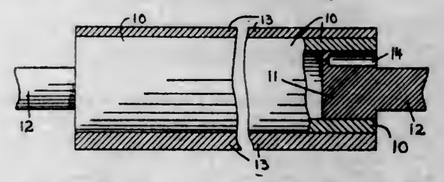
1,811,541. METHOD AND MEANS FOR MEASURING AND RECORDING APPARENT POWER. ALEXANDER DAWES DU BOIS, Minneapolis, Minn. Filed July 26, 1927. Serial No. 208,530. 13 Claims. (Cl. 234—1.5.)

6. In conjunction with the moving element of an ammeter and the moving element of a voltmeter, the combination of: directive elements actuated by said moving elements of ammeter and voltmeter; a platen consisting of strips of conductive material, separated by insulative material, arranged substantially in the form of a family of



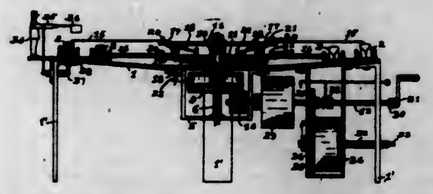
hyperbolic curves; a stylus, movable jointly by said directive elements, in contact with said platen; and means for indicating which one of the conductive strips is in contact with the stylus at any given time.

1,811,542. PROCESS OF PRODUCING BALANCED ROLLS AND THE LIKE. HARLAND FANKBONER, Chicago, Ill., assignor to The Goss Printing Press Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 13, 1930. Serial No. 420,320. 19 Claims. (Cl. 18—59.)



1. The process of producing balanced rolls and the like, comprising the provision about a metal support of a layer of easily applied material with its outer surface concentric with respect to an established axis of rotation of said support, then balancing said covered support with respect to said axis, and then after the balancing operation providing a layer of body material about said metal support with its outer surface concentric with respect to said axis.

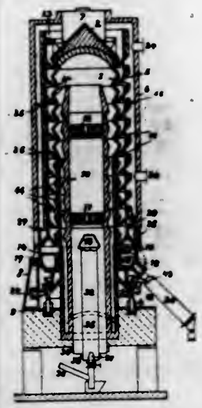
1,811,543. MECHANICAL TOY. JOSEPH G. GAVLAK, Monongahela City, Pa. Filed Jan. 31, 1930. Serial No. 424,848. 10 Claims. (Cl. 273—86.)



1. In a mechanical racing toy of the character described, a track member, a turning disk revolubly mounted on said track member, racing elements, and means pivotally connected with said turning disk and joined with said racing elements.

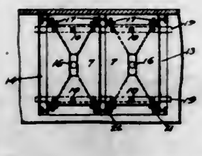
10. In a mechanical racing toy of the character described, a track member, a pair of turning disks mounted on said track member, a plurality of connecting rods each having pivotal connections with one of said turning disks, a racing element carried at the outer end of each of said connecting rods and travelling on said track member, a driving mechanism for simultaneously rotating said pair of turning disks at different speeds relatively to each other, means carried by each of said pair of turning disks for limiting the movements of said connecting rods on said pivotal connections, and means carried by one of said pair of turning disks and by said track member for intermittently engaging the inner ends of said connecting rods for shifting the latter forwardly on their said pivotal connections.

1,811,544. RETORT OVEN. KARL GEISSEN, Berlin-Zehlendorf, and WERNER VORBRODT, Spandau, near Berlin, Germany, assignors, by mesne assignments, to Kohlenveredlung Aktiengesellschaft, Berlin, Germany. Filed Jan. 8, 1926, Serial No. 79,996, and in Germany Jan. 8, 1925. 8 Claims. (Cl. 202—218.)



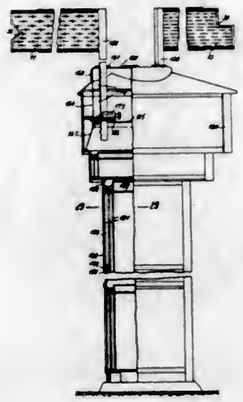
1. Retort oven comprising an outer shell a vertical tubular inner shell within the same and entirely closed save at the bottom end and supported solely at the bottom end, apertured means for guiding the material to be treated in contact with the outer surface of said inner shell, and means for guiding heating gases in downward direction in contact with the inner surface of said inner shell and means for taking off gas from the material treated.

1,811,545. AUTOMOBILE STORAGE. CHARLES F. GODDARD, Denver Colo., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 12, 1926. Serial No. 141,159. 15 Claims. (Cl. 214—16.1.)



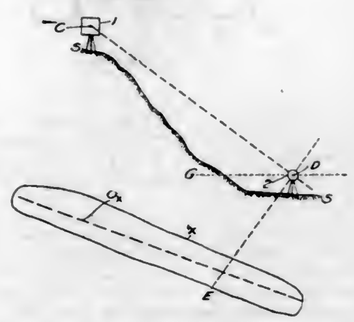
1. In an elevator system, means defining a pair of adjacent vertical columns interconnected at their respective ends, a plurality of load receptacles in each of said columns supported one upon another, means for circuitously moving said receptacles through the path defined by said columns, said moving means comprising a cylinder at the bottom of each of said vertical columns and reciprocating means for each cylinder, said cylinder having a non-elastic fluid for actuating said reciprocating means for that cylinder, said reciprocating means moving the adjacent columns of receptacles simultaneously in opposite directions until the topmost receptacle in the first column is entirely above the topmost receptacle in the second column and the bottommost receptacle in the second column is entirely below the bottommost receptacle in the first column, means mounted on said means defining said vertical columns for supporting said receptacles in each column in this position, and means movable by subsequent movement of said reciprocating means for transferring the topmost receptacle in the first column laterally into vertical alinement with the receptacles in the second column and the bottommost receptacle in the second column laterally into vertical alinement with the receptacles in the first column.

1,811,546. TRAFFIC REGULATING SIGN. MARTIN HEINE, Schwelm/Westfalen, Germany. Filed Aug. 14, 1928, Serial No. 299,549, and in Germany Jan. 29, 1927. 14 Claims. (Cl. 40—145.)



1. In a traffic regulating device, the combination of a central pillar, at least one horizontal plate mounted on said pillar, said horizontal plate being provided with openings arranged around and at a distance from the axis of said plate, pointers provided with rods adapted to be inserted into said openings, means for attaching said rods and adjusting them with respect to said horizontal plate, and a housing for said pillar and plate, said housing including a frame-work and show-boards forming closed panels in the side walls of said housing.

1,811,547. METHOD AND APPARATUS FOR LOCATING UNKNOWN CONDUCTIVE BODIES. JOHN J. JAKOSKY, Los Angeles, Calif., assignor to The Radiore Company, Los Angeles, Calif., a Corporation of California. Filed June 19, 1928. Serial No. 286,557. 8 Claims. (Cl. 175—182.)



1. The method of locating conductive bodies within a mass of less conductive material which comprises energizing such a conductive body by means of an electromagnetic field transmitted from an energizing loop, and then, by means of a direction-finding coil, detecting the presence and measuring the effect of the secondary electromagnetic field resulting from the induced current in said conductive body, at a plurality of points adjacent said energizing loop, the direction-finding coil being rotated, for the purpose of making such measurements, about an axis substantially parallel to the direction from said coil to the energizing loop.

6. An energizing apparatus for use in electromagnetic induction methods of locating unknown conductive bodies

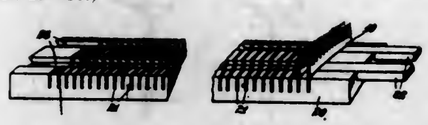
comprising a ring-shaped housing of insulated material mounted upon a tripod for universal adjustment thereon, said housing having an enlarged portion at the bottom, a transmitting loop wound within said ring-shaped housing, and oscillating circuit means located within said enlarged portion and connected to said loop, said housing completely enclosing the turns of said loop and the enlarged portion thereof completely enclosing said oscillating circuit means.

1,811,548. BREAST HOLDER. HENRIETTE KLOPFER, Berlin-Wilmersdorf, Germany, assignor of one-half to the Firm W. & G. Neumann, Berlin, Germany. Filed Sept. 29, 1927, Serial No. 222,872, and in Germany June 24, 1927. 2 Claims. (Cl. 2—42.)



1. A method of producing breast pockets for breast holders consisting each of a triangular piece of fabric, consisting in cutting a square piece of fabric along one of the diagonals into two equal right angle triangles each forming the material for one breast pocket, in folding said right angle triangles along a line extending from the apex perpendicular to the base to form two equal right angle triangles, in stitching said folded triangles on a line extending at an incline from the base near the right angle corner of the triangle to the folded edge of the triangle, in cutting off the right angular corner of the triangle parallel to said stitching, in cutting off the remaining piece of the base on a line extending from the lower end of said stitching perpendicular to the diametrically opposite side of the triangle, and in turning the remaining piece of fabric inside out to form a breast pocket having a bulged out portion for accommodating the nipple.

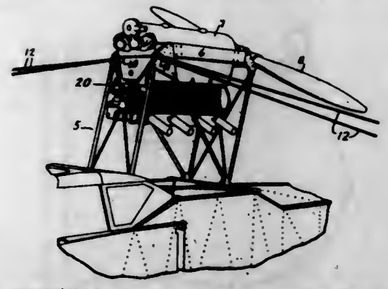
1,811,549. RAG GRINDING MACHINE. EDUARD LANGER, Leipzig, Germany. Filed June 26, 1930, Serial No. 463,884, and in Germany Mar. 24, 1930. 6 Claims. (Cl. 19—83.)



1. In a rag grinding machine of the type described, i. e. having a rotary grinding drum studded with sharply pointed pins and being cooperatively associated with rag feeding and supporting rollers, a drum presenting at its cylindrical surface slots which extend substantially parallel to the direction of the equatorial line of symmetry of the drum and transverse grooves, which extend substantially parallel to the axis of the drum, toothed blades having holes provided therein and being adapted to be inserted into the said slots in radial direction relatively to the drum, keys adapted to be inserted into the said transverse grooves (key ways), so as to detachably secure the toothed blades in their working position at the drum, and rag feeding and supporting rollers having an inner core of metal and an outer coat of non-metallic elastic material.

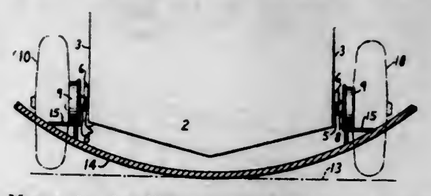
1,811,550. FLYING BOAT. GROVER LOENING, New York, N. Y. Filed June 26, 1930. Serial No. 463,875. 1 Claim. (Cl. 244—31.)

In a monoplane flying-boat, the combination of an engine mount above the wing, comprising members rising from the hull, longitudinal engine-bearers carried by said members, an inverted engine within the mount supported on said bearers, said engine-bearers extending beyond the ends of the engine, top cross-bracing for the engine



mount comprising cross-members connecting said bearers in front and rear of the engine, and top stays for the wings connected to said cross-bracing and carried thereby directly across the top of the engine mount.

1,811,551. HANDLING CARRIAGE FOR AIRPLANE BODIES. GROVER LOENING, New York, N. Y. Filed Nov. 7, 1930. Serial No. 493,943. 4 Claims. (Cl. 244—2.)



1. Means for handling and stowing airplane bodies, comprising a large and a small wheel applicable to each side of the airplane body, and wheel supports adapted to connect said wheels detachably to the body and to permit the large wheels to be removed while the small wheels remain in place.

1,811,552. STABLE MIXTURE OF PETROLEUM HYDROCARBONS AND SECONDARY ALCOHOLS. MATTHEW D. MANN, Jr., Roselle, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 9, 1929. Serial No. 377,078. 4 Claims. (Cl. 44—9.)

1. A compositition of matter consisting of liquid petroleum hydrocarbon and secondary alcohol.

1,811,553. SCREEN. BARNEY E. MCELYEA, St. Louis, Mo. Filed May 31, 1930. Serial No. 457,980. 2 Claims. (Cl. 156—14.)

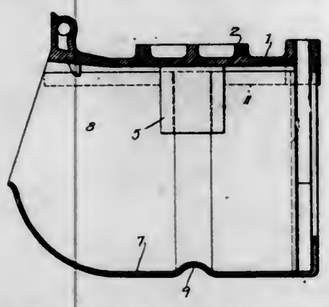


1. An improved screen comprising a frame, a metallic screen proper secured therein, and metallic fastening means of similar electric affinity to the screen proper, substantially as described.

1,811,554. CAR JOURNAL BOX. THOMAS E. MURRAY, Jr., Brooklyn, N. Y., assignor to Metropolitan Engineering Company, a Corporation of New York. Filed June 4, 1924. Serial No. 717,728. 1 Claim. (Cl. 308—39.)

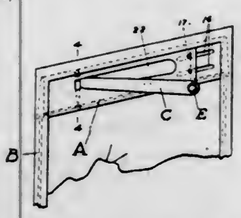
A journal box cellar comprising a cast upper segment comprising a top portion constituting an arch bar seat

with bolt openings and projections constituting inside stop pieces, and a sheet metal lower segment having grooves at the sides registering with said stop pieces and in line with said bolt openings, the cast upper segment having



flanges on its lower face abutting against the edges of the sheet metal lower segment and having flanges beyond said stop pieces projecting down on the outside of the lower segment, said segments being welded together along the abutting edges of the flanges and the lower segment.

1,811,555. AUTO SIGNAL. GUS MYERS, Fargo, N. Dak. Filed Jan. 28, 1927. Serial No. 164,272. 6 Claims. (Cl. 116—52.)



1. A signal for vehicles adapted to be positioned in the window pane channel including, a panel, spring means adapted to expand the thickness of a portion of said panel into the side edges of the channel in a manner to hold said signal in operative position when the window is up or down.

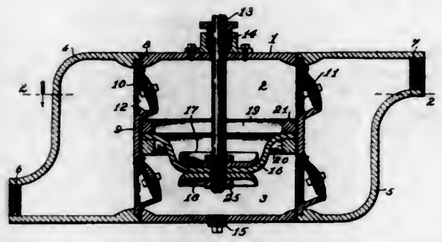
1,811,556. HYDRAULIC JACK STRUCTURE. LEONARD D. NILSON, Wayzata, Minn., assignor to Marquette Manufacturing Company, St. Paul, Minn. Filed June 25, 1928. Serial No. 288,101. 11 Claims. (Cl. 138—9.)



1. In a jack structure, a frame, a lifting arm pivoted thereon and a hydraulic actuating mechanism having one end pivoted to said frame and its other end pivoted to said lifting arm for swinging the same when the hydraulic mechanism is actuated, said mechanism comprising a piston rod and a cylinder slidable relative thereto and a pump structure in said piston rod.

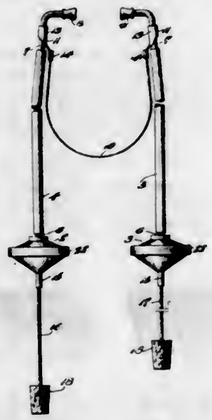
1,811,557. DOUBLE-ACTING PUMP. EDWARD N. OVE, Dike, Iowa. Filed May 26, 1930. Serial No. 455,620. 1 Claim. (Cl. 103—150.)

A duplex pump, comprising in combination, a pump barrel having open opposite ends, and having a top bearing aperture, closure plates for said open ends, a pair of medial clamping rings mounted in said barrel, a flexible piston member partitioning said barrel and having its margin clamped between said rings, a pump rod seated to reciprocate in said barrel bearing aperture and having a termination traversing said piston member centrally, clamping disks contacting opposite faces of the piston member and removably secured upon said rod, said closure plates having above and below said piston member



valve ports, valves for said ports opening in one direction only, and like but reversed outer chambers secured to said pump barrel and clamping between them said closure plates removably, said chambers having respectively like ports reversed in position, of which one port is a receiving port and the other port is a discharge port, the said closure plates, and said chambers being interchangeable each for the other respectively.

1,811,558. LOCATOR OF ABNORMAL SOUNDS AND VIBRATIONS. GEORGE PORTER, Berlin, N. J. Filed Oct. 4, 1930. Serial No. 486,300. 10 Claims. (Cl. 181—24.)

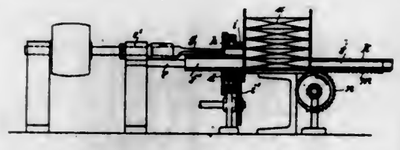


1. In a device of the character stated, a pair of independent sound detecting and transmission elements, a corresponding pair of independent sound insulating and conveying elements and a pair of independent sound amplifiers operatively interposed between said corresponding pairs of elements respectively, each of said amplifiers comprising a sound box, a diaphragm transversely secured therein, cushioning means for said diaphragm, a plurality of spaced vibratory elements in said box intermediate said diaphragm and the corresponding sound detecting and transmitting element, and means for adjusting the distance between said vibratory elements.

1,811,559. MACHINE FOR MAKING CLOTHES PEGS. KARL PRÖNNECKE, Quedlinburg, Harz, Germany. Filed Sept. 15, 1930, Serial No. 481,955, and in Germany Nov. 27, 1929. 1 Claim. (Cl. 144—9.)

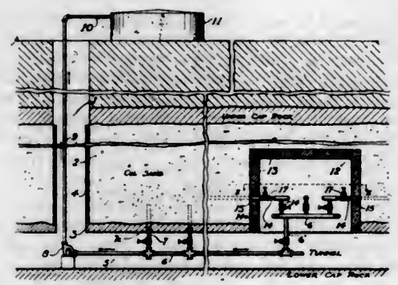
In a machine for working clothes pegs, the combination of a drum, an axle carrying said drum, a rotary

milling cutter arranged above said axle adapted to cut a raised curved surface on the inner side of one arm of the peg and a cavity in the other arm in a single operation, carriage guides arranged eccentrically on said drum adapted to accommodate the peg blanks and feed said



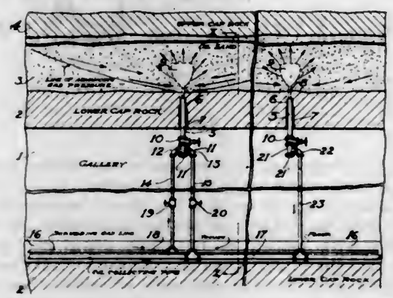
blanks past said cutter, means for periodically stopping said drum after every half revolution and means for ejecting the finished milled pegs out of one of said carriage guides and for inserting a fresh peg blank in the other of said carriage guides.

1,811,560. METHOD OF AND APPARATUS FOR RECOVERING OIL. LEO RANNEY, New York, N. Y., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Apr. 8, 1926. Serial No. 100,531. 4 Claims. (Cl. 262—1.)



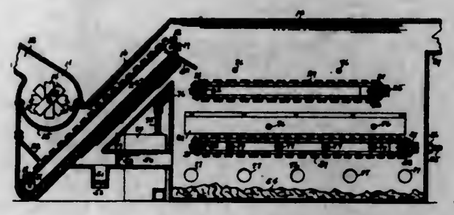
1. Method of recovering oil from the earth, comprising forming a gallery adjacent and generally parallel to the oil-bearing stratum, forming a chamber within the oil-bearing stratum but spaced therefrom by a wall of impervious material, drilling a plurality of elongated openings from said chamber and into the oil-bearing stratum in a plane substantially parallel to the gallery, and individually and selectively controlling simultaneous flow from a number of said openings.

1,811,561. METHOD AND MEANS FOR WORKING OIL SANDS. LEO RANNEY, New York, N. Y., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Jan. 13, 1927. Serial No. 160,793. 5 Claims. (Cl. 262—1.)



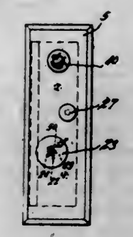
1. In an installation for recovering oil from the earth by means of a mine gallery adjacent an oil sand, but spaced therefrom, the improvement which comprises a series of pipes in the gallery and tapping the oil sand, a gate valve near the exposed end of certain of said pipes, an elbow connected to each said pipe below the gate valve, an oil-collecting pipe, and a connection between said elbow and said oil-collecting pipe.

1,811,562. GARBAGE INCINERATOR. DAVID M. REESE, Des Moines, Iowa. Filed May 3, 1928. Serial No. 274,780. 8 Claims. (Cl. 110—15.)



1. In a device of the class described, a cremating housing, grates in said housing, a hopper, an enclosed trough having one end communicating with the bottom of said hopper and its other end communicating with the upper portion of said housing, a hot air distributing pan embracing the bottom of said trough having its upper end communicating with the inside upper portion of said housing, a pipe leading from said cremating housing to said pan, and a means for regulating the amount of hot air passing through said pipe.

1,811,563. COMBINATION LOCK. DARIO ROBERTI, Springfield, Mass. Filed Dec. 19, 1929. Serial No. 415,265. 4 Claims. (Cl. 70—18.)

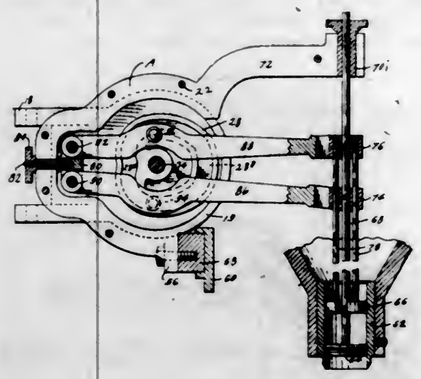


1. In a combination lock in combination, a lock bolt movable between lockable and unlockable positions, a plurality of separately operated racks mounted in intersecting relation with said lock bolt for locking the same in its lockable position, each of said racks having an arbitrarily positioned notch for freeing said lock bolt, selective means for operating said racks comprising a sliding pinion adapted to engage with any one of several racks, a return spring and a holding pawl associated with each rack.

1,811,564. ADJUSTABLE DOUGHNUT MACHINE. FRED L. SCHOEL, Waterloo, Iowa. Filed Apr. 14, 1930. Serial No. 444,290. 5 Claims. (Cl. 107—14.)

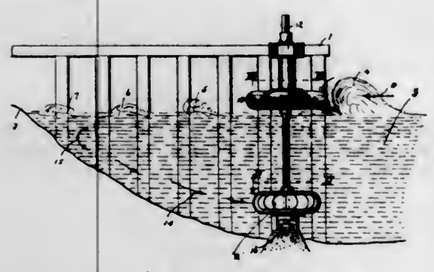
1. In a dough dispensing machine having a dough hopper and a movable member for dispensing dough therefrom, a shaft, a cam thereon, an arm pivotally connected with said movable member the cam surface of said cam coacting with said arm to move the same upon rotation

of the shaft, a bearing member, one end of said arm being pivoted to said bearing member, said bearing mem-



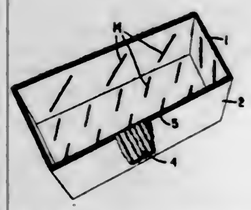
ber being movable toward and away from said movable member to vary the pivot point of said arm relative to said cam and said movable member.

1,811,565. WAVE MOTOR. SAM I. SCHWABACHER, San Francisco, Calif. Filed July 22, 1929. Serial No. 380,083. 2 Claims. (Cl. 170—115.)



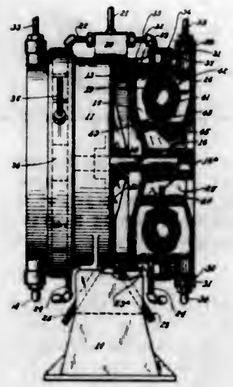
1. A wave motor comprising a framework adapted to be supported on an ocean bed, a vertically disposed shaft journalled in said framework, a first impeller on said shaft adapted to be actuated by the advancing waves of the ocean whereby said shaft is rotated in a predetermined direction, and a second impeller of less diameter than said first impeller on said shaft and adapted to be actuated by the receding waves of the ocean whereby said shaft is rotated in said direction.

1,811,566. CORRUGATED BAKING PAN LINER. JAMES A. SCOTT, Somerville, Mass. Filed Jan. 2, 1930. Serial No. 418,145. 4 Claims. (Cl. 53—6.)



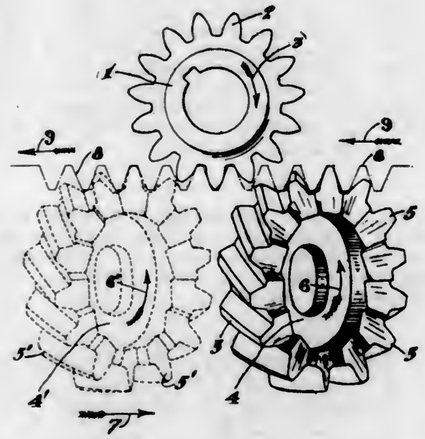
1. A hollow container for baking formed of fabricated sheet material having a corrugated outer layer, and a flat smooth inner surface layer united to form an air cell structure.

1,811,567. VULCANIZER. FLORAIN J. SHOOK, Akron, Ohio, assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 9, 1926. Serial No. 153,563. 20 Claims. (Cl. 18—17.)



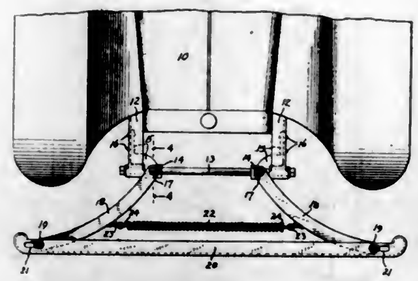
18. A heater mold comprising a cylinder having an open end, a fluid pressure actuated member mounted for reciprocating movement in the cylinder, a mold section in the cylinder carried by the fluid pressure actuated member, and a mold section removably secured to the open end of the cylinder whereby said fluid pressure actuated member forcibly mates said mold sections together to define a molding cavity.

1,811,568. METHOD OF GENERATING GEARS. OLIVER G. SIMMONS, Lakewood, Ohio. Filed Nov. 21, 1927. Serial No. 234,788. 20 Claims. (Cl. 90—9.)



1. The herein described method of generating teeth in a gear blank with a gear shaper cutter having helical teeth which comprises positioning the cutter with its axis at an angle to the axis of the blank, moving the cutter laterally with respect to the blank along the common tangent to the pitch circles of the cutter blank, rotating the cutter and blank at the rates at which they would be driven by an imaginary rack moving along said tangent line, and reciprocating the cutter to generate the teeth of the gear blank.

1,811,569. VEHICLE BUMPER. ADOLPH A. THOMAS, New York N. Y. Filed Apr. 16, 1930. Serial No. 444,636. 13 Claims. (Cl. 293—55.)



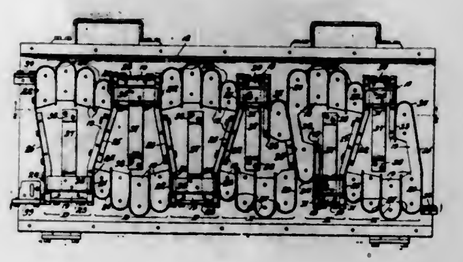
1. A bumper structure for automobiles comprising a pair of outwardly diverging levers pivoted at their inner ends to the car, tensioned elastic means connected to said levers at points between the inner and outer ends of the levers, and a bumper bar slidably connected to the outer ends of said levers, whereby the latter are spread apart to expand said elastic means when the bumper bar strikes an obstruction.

1,811,570. GLOVE. ALBERT C. ACKERMAN, Ballston Spa, N. Y. Filed May 21, 1930. Serial No. 454,367. 1 Claim. (Cl. 2—169.)



In a glove, the combination with a back section comprising finger portions and a wrist portion; of a front section comprising finger portions, a thumb portion and a wrist portion, the wrist portion of the front section being narrower than the wrist portion of the back section; and the thumb portion being disposed in longitudinal alinement with the fore-finger portion of the front section; and a combined thumb and wrist strip, the thumb portion of the strip being opposed to the thumb portion of the front section and the wrist portion of the strip being disposed alongside of the wrist portion of the back section, the combined width of the wrist portion of the front section and the wrist portion of the strip being substantially equal to the wrist portion of the back section whereby to permit flat lying of the front section and the thumb and wrist strip compositely upon the back section, said sections and a strip being united by stitching.

1,811,571. GANG DIE FOR CUTTING GLOVE BLANKS. ALBERT C. ACKERMAN, Ballston Spa, N. Y. Filed June 25, 1930. Serial No. 463,733. 9 Claims. (Cl. 164—29.)



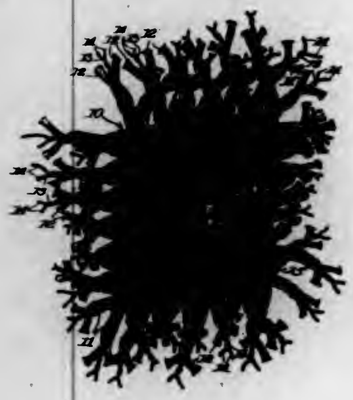
1. A glove face blank cutting die comprising cutting edges disposed to stamp out a glove face blank having an extended wrist portion at one end and finger extensions at its other end, and cutting edges for stamping out a thumb portion connected to and extending from the blank in the direction of the wrist portion.

1,811,572. GAS DISCHARGING DEVICE. ADRIAN S. AILES, Chicago, Ill., assignor, by mesne assignments, to The Lake Erie Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 21, 1929. Serial No. 341,641. 4 Claims. (Cl. 299—89.)



2. A device of the character described, comprising a casing, a frangible container for containing a noxious fluid mounted in the casing, means for breaking said container to liberate the liquid, an atomizer arranged for the discharge of the liquid after liberation, and a frangible cartridge containing a compressed gas for operating said breaking means and atomizing said liquid poison or noxious fluid.

1,811,573. FILTER CLOTH. WILLIAM H. BACHELDOR and WILLIAM E. WOOD, Wood River, Ill., assignors to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed July 29, 1929. Serial No. 382,057. 7 Claims. (Cl. 139—425.)



1. A filter cloth for filtering highly heated viscous hydrocarbon oils in pressure filters which comprises interwoven threads each thread being formed of asbestos fibres and not more than 5% of cotton fibres intermingled th rewith.

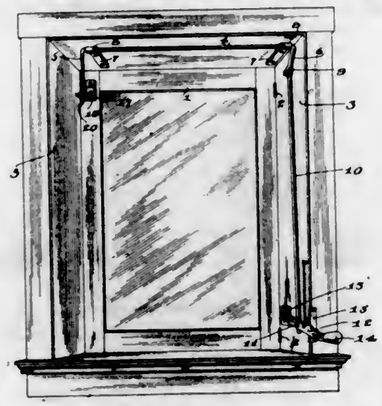
1,811,574. COLLAPSIBLE BAG. WILLIAM E. BARRETT, Flint, Mich. Filed Mar. 14, 1930. Serial No. 435,864. 1 Claim. (Cl. 229—53.)



A receptacle for a potted plant comprising a substantially rigid bottom of circular shape, an upwardly tapered body of circular shape in cross section having its lower end connected with the bottom, said body being formed with a plurality of superimposed folds, a number of flaps, each of triangular shape in cross section having their bases connected with the top of the body and adapted to be folded inwardly to provide a conical closure for the top of the receptacle.

1,811,575. DEVICE FOR CLOSING CASEMENT WINDOWS. WALTER FREDERIC BROADWATER, Orlando, Fla. Filed July 17, 1930. Serial No. 468,721. 2 Claims. (Cl. 292—196.)

1. A sash closer comprising an eye member secured to the inner face of the sash near its swinging edge, a lever member pivoted to the window frame having a hooked arm adapted to engage the eye member, a second arm disposed at an acute angle to the first arm, a second

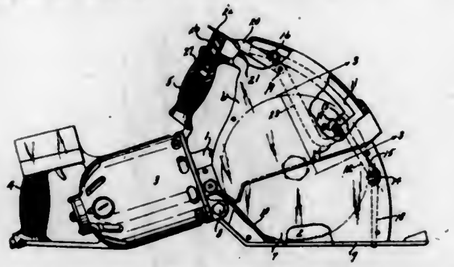


lever pivoted to the window frame and a link connecting the second mentioned arm of the first lever and the second lever.

1,811,576. DYEING OF CELLULOSE DERIVATIVES. RENÉ CLAVEL, Basel-Augst, Switzerland. Filed Jan. 18, 1923, Serial No. 613,533, and in Great Britain July 28, 1922. 11 Claims. (Cl. 8—5.)

1. In a process for dyeing cellulose acetate with azo development dyes, treating the material with the developer component at above 60° C.

1,811,577. HAND TOOL. JOHN M. CHOWE, Covington, Ky., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Aug. 21, 1930. Serial No. 476,758. 5 Claims. (Cl. 143—159.)

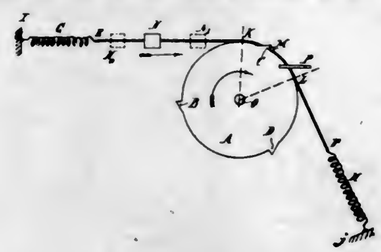


1. In a portable power-driven hand tool adapted to be applied bodily to the work and moved along the same by the operator, a frame, a cutting blade operatively mounted thereon, blade-driving means, a guard movably mounted on said frame to advance or recede to guard or expose a cutting portion of said blade, means tending to advance said guard, latch means for automatically securing said guard in full guarding position, operator-operated means associated with said latch to release said guard therefrom and arranged to be ineffective to prevent relatching of the guard following the guard-releasing operation and recession of the guard.

1,811,578. MOTION TRANSFORMING MECHANISM. CHARLES LOUIS FLORISSON, Courbevoie, Becon-les-Bruyeres, France, assignor of one-half to Societe de Condensation & d'Applications Mecaniques, Paris, France, a Corporation of France. Filed Oct. 30, 1929. Serial No. 403,465, and in France Nov. 8, 1928. 10 Claims. (Cl. 74—14.)

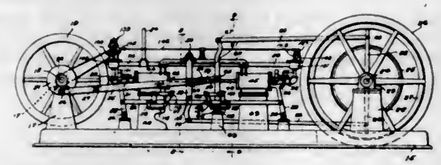
1. A mechanical movement of the type described comprising a driving shaft, a ratchet wheel on said driving

shaft, flexible means extending part way round the periphery of said ratchet wheel, resilient means supporting the ends of said flexible means, means on said flexible



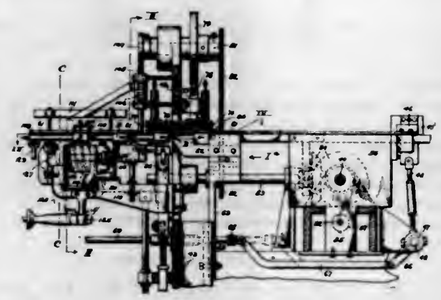
means for engaging the teeth of said ratchet wheel and reciprocable means operatively engaged by said flexible means.

1,811,579. FLUID PRESSURE ENGINE. FRED A. GERLING, Boise, Idaho. Filed Jan. 18, 1930. Serial No. 421,778. 12 Claims. (Cl. 121—117.)



10. In an engine, a pair of cylinders, inlet and exhaust means connected with one end of each cylinder, pistons within the cylinders, piston rod means connecting the pistons, centralizing levers pivotally supported upon opposite sides of the piston rod means and connected with the same, a rotatable member, operating levers pivotally supported at the center of the rotatable member and extending in opposite directions, gripping devices carried by the operating levers and engaging the rotatable member and operating in opposite directions, rods connected with the gripping devices and with the centralizing levers, a rotatable stroke regulating element, and a rod connecting the stroke regulating element with the connecting rod means, the stroke regulating element being rotatable in either direction independently of the rotation of said member.

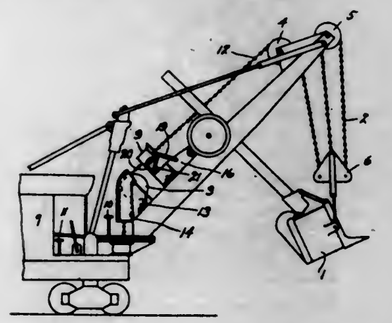
1,811,580. METHOD OF AND APPARATUS FOR MAKING FERRULES. LILBURN T. GOLDSBOROUGH, Baltimore, Md. Filed July 17, 1930. Serial No. 468,669. 20 Claims. (Cl. 113—9.)



1. The mode herein described of making a ferrule from a flat metallic blank, said mode consisting in bending such a blank at a point substantially midway of its length, overlapping the ends of such bent blank with a slightly curved surface contact to form an enclosed hollow structure tapered toward the overlapping ends, disengaging such overlapped ends from each other, and permitting the same to frictionally re-engage in overlapping relation with the former inner end on the outer side and the former outer end on the inner side.

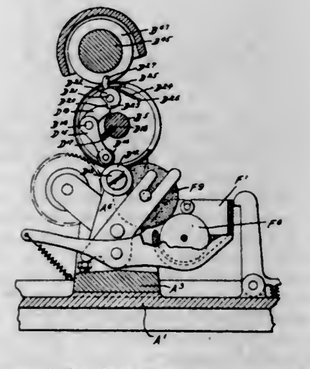
10. The combination, in a machine for forming ferrules from flat metallic blanks, of a horn, of blank feeding means cooperating with said horn, blank bending means which bends and overlaps the free ends of a blank, and means for temporarily disengaging the overlapped ends of the blank but permitting them to reengage in overlapping relation but with the former inner end on the outside and the former outer end on the inside.

1,811,581. STEAM SHOVEL SAFETY ATTACHMENT. GEORGE R. INGHAM, Ajo, Ariz. Filed July 23, 1929. Serial No. 380,313. 1 Claim. (Cl. 214—135.)



In a steam shovel, the combination with the boom, sheaves at the ends of the boom, and a hoist chain passing over said sheaves, of a pair of relatively spaced chain guards, one of said guards being of elongated channel section and fastened to a lower sheave support and of substantially L-shape for covering the inner side of the sheave and lower portion of the hoist chain and the other guard consisting of a relatively short tube fastened to the boom in spaced relation to the lower sheave support and encircling the portion of the hoist chain immediately above the lower sheave, said tubular guard being flanged outwardly at its upper end.

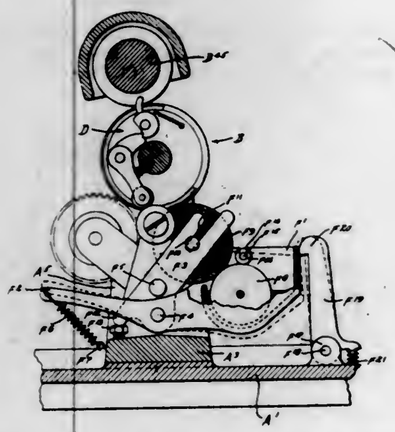
1,811,582. PRINTING AND STAMPING MACHINE. RAYMOND F. JAHN, Brooklyn, N. Y. Original application filed Apr. 13, 1927, Serial No. 183,318. Patent No. 1,744,770, dated Jan. 28, 1930. Divided and this application filed June 22, 1929. Serial No. 372,822. 6 Claims. (Cl. 101—235.)



1. A machine of the class described, comprising a printing roller, a fixed stop adjacent the roller, a stop lever

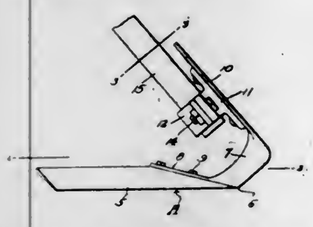
pivoted on the roller and adapted to normally engage against said fixed stop, and a trip lever independently pivoted on the roller, said trip lever and stop lever having mutually engaging means for maintaining the stop lever in its normal position.

1,811,583. PRINTING AND STAMPING MACHINE. RAYMOND F. JAHN, Brooklyn, N. Y. Original application filed Apr. 13, 1927, Serial No. 183,318, Patent No. 1,744,770, dated Jan. 28, 1930. Divided and this application filed June 22, 1929. Serial No. 372,823. 3 Claims. (Cl. 101—351.)



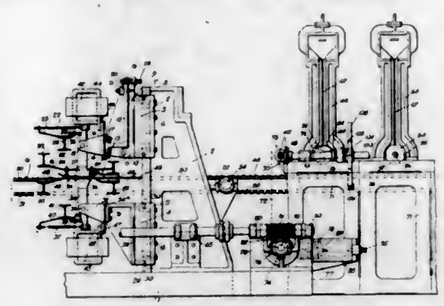
1. In a printing machine of the class described, the combination with a printing couple, of inking means including an ink well, an ink roller associated therewith, an ink distributing roller mutually engaging said ink roller and the printing member of the printing couple, swinging arms supporting the distributing roller for movement toward and away from the printing element, and an eccentric pivotal connection between said arms and the ink well.

1,811,584. CULTIVATOR SWEEP. MELVIN JOHNSON, Forest City, Iowa. Filed Oct. 10, 1930. Serial No. 487,851. 1 Claim. (Cl. 97—205.)



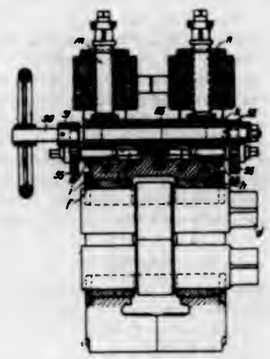
A device of the class described comprising a substantially V-shaped sweep including rearwardly diverging wings having their outer edges disposed below the horizontal plane of their inner edges, the outer edges formed to provide knife edges, a knife extending upwardly and forwardly from the apex portion of the sweep, said knife being of a substantially isosceles triangular cross sectional shape, an integral apertured arm extending upwardly and rearwardly from the lower end portion of the knife and rigidly secured to the sweep, a shank plate merging upwardly and rearwardly from the upper end of the knife, and a clamp mounted on the shank plate for engagement with a support, the cutting edge of the knife being rounded adjacent its point of mergence with the plate.

1,811,585. WIRE WELDING MACHINE. THOMAS HENRY KANE, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed July 19, 1922. Serial No. 575,943. 33 Claims. (Cl. 140—112.)



1. In a machine of the kind described, in combination, a common feeding means operative to effect both the feeding of a series of longitudinal wires and the feeding of a succession of individual cross wires, prior to the welding thereof to said longitudinal wires, means for operating said feeding means, and welding means operative to weld the cross wires to the longitudinal wires at the points of intersection thereof.

1,811,586. ROLLING MILL. RUDOLF KRONENBERG, Hans Kronenberg, Germany. Filed Aug. 28, 1929, Serial No. 389,007, and in Germany Jan. 29, 1929. 5 Claims. (Cl. 80—56.)

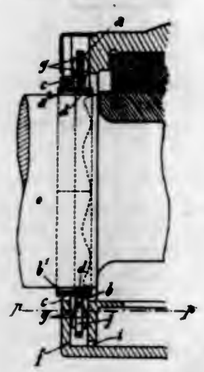


1. A rolling mill, comprising rollers, in combination with one of the rollers, an adjusting member provided for it and located above, and being coupled with it, a projection extending forth from the middle portion of said member; threaded bolts engaging said projection parallel to the ax's of said roller on the two sides concerned, correspondingly threaded stationary members in which said bolts are supported; cog-wheels on the free ends of the bolts; other cog-wheels meshing with those first mentioned; a shaft to which said other cog-wheels are secured, and means for turning said shaft.

1,811,587. PROCESS OF PURIFYING WATER. KARL P. MCELROY, Washington, D. C., assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 1, 1929. Serial No. 343,851. 6 Claims. (Cl. 210—24.)

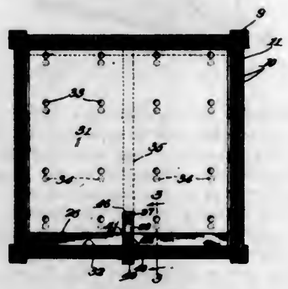
1. The process of removing dissolved alkali from softened water containing dissolved sodium salts introduced in softening, which comprises dealkalizing such water by passing it through a pervious bed of granular, acid-treated, acid-resistant, siliceous material, then regenerating said material by passing an acid solution through said bed, washing the bed and repeating the cycle.

1,811,588. OIL LOSS PREVENTING DEVICE. JULES MOREAU, La Garenne-Colombes, France. Filed Mar. 19, 1929, Serial No. 348,319, and in France Apr. 7, 1928. 3 Claims. (Cl. 286—6.)



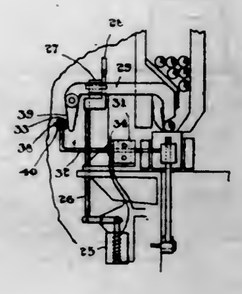
1. A device for preventing waste of lubricant in journal boxes and bearings of rotatable shafts comprising a plate, a tube rigid with said plate, a band of supple material disposed on the interior of said tube adapted to surround the shaft and a plurality of sinuous projections formed on said band for projecting the particles of lubricant which come in contact therewith toward the interior.

1,811,589. CALIBRATED VENTILATOR ADJUSTMENT FOR INCUBATORS. BENJAMIN F. C. MORRIS, Oklahoma City, Okla. Filed June 28, 1927. Serial No. 202,041. 2 Claims. (Cl. 119—35.)



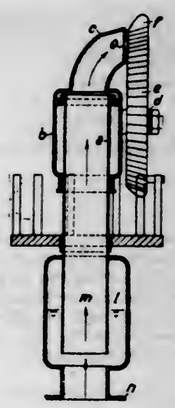
1. In a ventilating adjustment for incubators, the combination with the floor of the incubator having a series of spaced openings therein adapted to admit unheated atmospheric air through the incubator chamber, a movable slide mounted on the floor and of less width than the floor in the incubator chamber, said slide having openings therein adapted to be moved into and out of register with the openings in the floor, said slide having a recess, a block in the recess having a threaded opening, a bottom strip connected to the slide and to the block and operating in a groove across the bottom in its top surface, a screw having a bearing in the front wall of the incubator and held against movement therein, said screw being threaded into the block and having a head externally of said wall with calibrations thereon, and a pointer on said wall cooperating with said calibrations.

1,811,590. FEELER MOTION FOR AUTOMATIC SILK LOOMS. GEORGE W. NICELY, Montreal, Quebec, Canada, assignor to British American Silk Mills Limited, Montreal, Canada. Filed Aug. 26, 1929, Serial No. 388,500, and in Canada July 24, 1929. 2 Claims. (Cl. 139—271.)



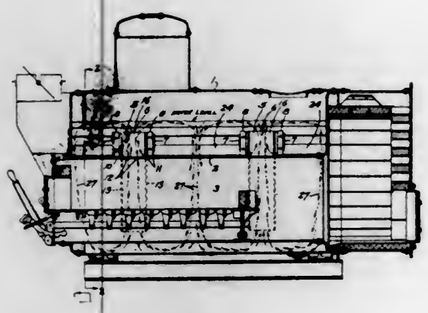
1. In a loom, a bobbin having a metallic wrapping thereon, replenishing mechanism including a transferrer, an insulated block, feeler mechanism comprising a pair of spaced feeler elements slidable through said blocks, means for limiting the movements of said elements in one direction, resilient means urging and normally maintaining said elements in contacting engagement with said bobbin, a bar connecting the corresponding outer extremities of said elements, a solenoid, one of said elements being electrically connected with the solenoid, means connecting the solenoid and the other of said elements with a source of electrical supply, and an extension carried by the transferrer and engaging said bar to move said feeler elements in a direction away from the bobbin as and for the purpose specified.

1,811,591. PERIODIC JET ROTARY SPRINKLER. THEODOR OEHLER, Berlin-Lichterfelde, Germany, assignor to the Firm Hydor G. m. b. H.,-Regenanlagen- und Silo-Bau, Berlin-Mariendorf, Germany. Filed Jan. 21, 1930, Serial No. 422,307, and in Germany Aug. 24, 1927. 9 Claims. (Cl. 299—68.)



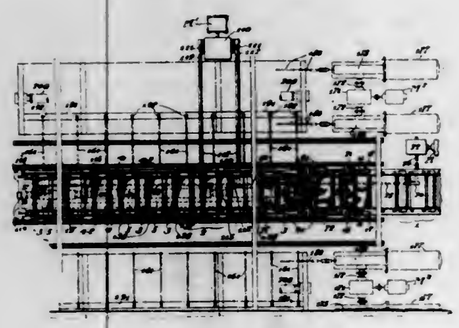
1. In a sprinkler, a supply pipe, a discharge nozzle connected to said supply pipe, an air chamber in said supply pipe, and automatic means for periodically throttling said nozzle.

1,811,592. CIRCULATING DUCT FOR BOILERS. HORACE H. PEEK and ALPHEUS C. GRIST, Chattanooga, Tenn.; said Grist assignor to said Peek. Filed July 18, 1930. Serial No. 468,903. 3 Claims. (Cl. 122—410.)



1. In combination, an internal fired horizontal type boiler having a furnace shell forming the outside of the furnace, and a boiler shell surrounding the furnace shell, lug means comprising a plurality of lugs, each lug having spaced legs attached to the furnace shell, and one or more water circulating ducts attached to the lug means.

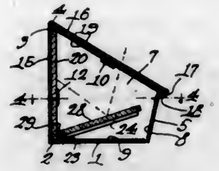
1,811,593. PLATE PILING MACHINE. EDWARD T. PETERSON, Reading, Pa., assignor to Birdsboro Steel Foundry and Machine Company, Birdsboro, Pa., a Corporation of Pennsylvania. Filed Apr. 12, 1929. Serial No. 354,519. 23 Claims. (Cl. 214—6.)



1. In a plate piling machine, the combination of a delivery table including means for conveying plates over the said table, means for lifting the said plates from the said conveying means, and means located midway of the opposite sides of said table and movable transversely of the said table in opposite direction for discharging plates laterally therefrom in either direction.

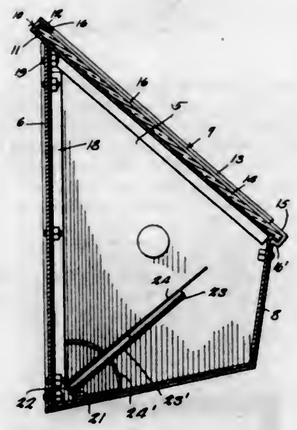
1,811,594. STREET SIGN. WILLIAM M. POWERS, Minneapolis, Minn., assignor to Powers Sign Co., Inc., Minneapolis, Minn., a Corporation of South Dakota. Filed Feb. 26, 1930. Serial No. 431,504. 4 Claims. (Cl. 40—130.)

1. In a device of the class described, a casing having a top through which light can pass, the casing having a sign on its front, a shaft journaled in the casing and having a crank, a reflector so disposed in the casing as to receive light from the top of the casing and reflect the



light through the sign, the reflector resting on the crank and having its lower edge in loose abutment with a portion of the front, and means for holding the shaft in adjusted positions.

1,811,595. STREET MARKER. WILLIAM M. POWERS, Minneapolis, Minn., assignor to Powers Sign Co., Inc., a Corporation of South Dakota. Filed Aug. 6, 1930. Serial No. 473,400. 4 Claims. (Cl. 40—130.)

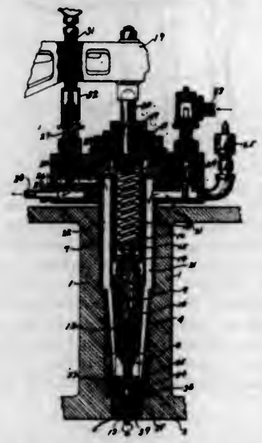


1. An illuminated sign comprising a casing, a front wall having cut out portions, forming a part of the casing, a shaft mounted within the casing, said shaft having an offset supporting portion, a reflector loosely mounted within the casing and resting on the supporting section, a keeper having notches disposed within the casing, one end of the shaft extending at right angles and adapted to engage within the notches to hold the shaft in its position of adjustment, and a transparent top forming a part of the casing, to allow light rays to pass therethrough.

4. An illuminated sign comprising a casing, said sign having a front wall formed with cut out portions defining words, a transparent top disposed at an oblique angle with respect to the front wall to project light rays inwardly to the interior of the casing, a rear wall and end walls forming a part of the casing, and a bottom forming a continuation of the rear wall.

1,811,596. INJECTION VALVE MEANS FOR HYDROCARBON MOTORS. CARL D. SALISBURY, Cleveland, Ohio, assignor to The Winton Engine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 24, 1929. Serial No. 402,178. 1 Claim. (Cl. 123—139.)

In a hydrocarbon motor having a combustion chamber, a fuel injection apparatus therefor comprising means forming a metering chamber adjacent and having communication with said combustion chamber, plunger means arranged to vary the metering chamber volume, an injection valve arranged to seat within said metering chamber to cut off said communication and to be unseated by me-

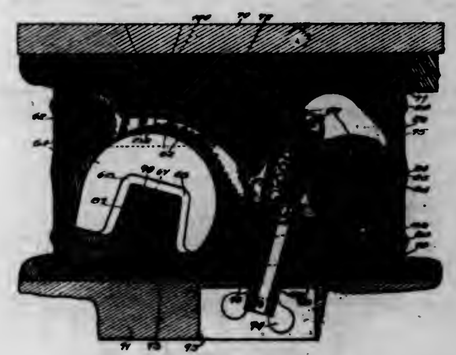


tering chamber fluid pressure, yieldable means for opposing valve unseating movement, and stop means cooperative with said valve for limiting said unseating movement whereby reseating of said valve is unaffected by unseating inertia forces.

1,811,597. APPARATUS FOR CLEANING GASES. ALFRED STEINBART, Pittsburgh, Pa. Filed Dec. 28, 1929. Serial No. 417,247. 2 Claims. (Cl. 183—85.)

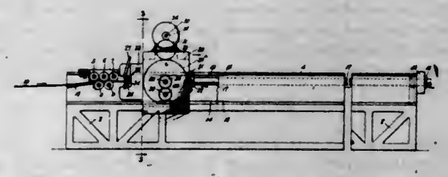
1. An apparatus for cleaning gases comprising a lengthwise vertical cylindrical gas cleaning chamber having a lengthwise vertical inlet opening adjacent its upper end, a lengthwise vertical cylindrical gas supply box having a lengthwise vertical outlet opening, a duct connecting said opening in said gas supply box with said inlet opening in said chamber, said duct being arranged tangentially so as to impart a whirling motion to the gases passing through said duct and into said chamber, horizontal webs extending from side to side within said duct to reenforce the duct and form a plurality of separate channels in said duct, selected ones of said channels being adapted to be obstructed to increase the speed of the gas flowing through the other of said channels, a clean gas conduit communicating with the upper end of said chamber, a downwardly tapering nozzle connected to said clean gas conduit and extending downwardly within said chamber, said nozzle having an inlet opening of materially smaller diameter than the diameter of said clean gas conduit, an impurity discharge opening at the lower end of said chamber, a horizontal disk of materially less diameter than the diameter of said chamber mounted within said chamber above said impurity discharge opening to prevent the suction of the whirling gases reaching the impurities deposited in said chamber.

1,811,598. AMPLIFYING HORN. FRED W. TEMPLE, Chicago, Ill., assignor to Temple, Inc., Chicago, Ill., a Corporation of Illinois. Original application filed Aug. 1, 1927, Serial No. 209,730. Divided and this application filed Nov. 19, 1927. Serial No. 234,486. 31 Claims. (Cl. 181—27.)



1. An amplifying horn comprising a massive-like member having passage therein, means forming a chamber directly in front of the outlet end of said passage, and a reproducing unit disposed in said chamber and communicating with the inlet end of said sound passage.

1,811,599. MACHINE FOR ROLLER LEVELING AND STRETCHING STEEL SHEETS. THOMAS L. THOMAS, Youngstown, Ohio, assignor to The Youngstown Foundry & Machine Company, Youngstown, Ohio, a Corporation of Ohio. Filed Jan. 9, 1930. Serial No. 419,615. 5 Claims. (Cl. 153—35.)



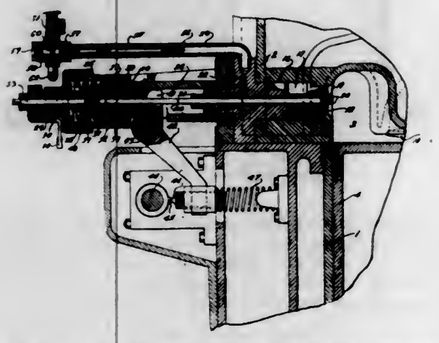
1. A machine for leveling and stretching steel sheets comprising a plurality of horizontally disposed rolls, means for preliminarily actuating the rolls to thread the sheet therein, means for gripping the sheet and adapted to pull the sheet through the rolls and thereby actuate the rolls, and the said rolls also providing a proper tension on the sheet whereby the sheet will be roller leveled and stretched as the same is pulled through the rolls.

1,811,600. PROCESS FOR PRODUCING CLICHÉS FOR TWO, THREE OR MORE COLOR PRINTS, LANTERN SLIDES, AND COLORED WINDOWS AND THE LIKE. LOUIS OSCAR VAN STRAATEN, Biggekerke, Netherlands. Filed Aug. 29, 1930, Serial No. 478,786, and in the Netherlands Sept. 6, 1929. 2 Claims. (Cl. 95—2.)

1. Process for producing clichés for two, three or more color prints, lantern slides, colored windows and the like which comprises producing a first series of two, three or

more photographic negatives of an object with the employment of a corresponding number of different color filters (for example, green, violet and orange), simultaneously producing corresponding negative images of primary colors (for example, blue, yellow and red), producing a second series of photographic negatives of the said object with the employment of light filters of the corresponding complementary colors of the said primary colors (for example red, yellow and blue), producing a corresponding series of diapositives from the second series of negatives of a density which corresponds to the inherent faults of the first series of negatives as disclosed by the images of the three primary colors upon the first series of negatives, so placing each of the first series of negatives with relation to the corresponding diapositives that the images coincide exactly to form a compound element for the purpose set forth.

1,811,601. INJECTION VALVE MEANS. ALEXANDER WINTON, Lakewood, Ohio. Filed Oct. 8, 1927. Serial No. 224,917. 2 Claims. (Cl. 137—145.)



1. Valve means for the purpose described comprising a valve having a stem portion, a movable intermediate member and spring means, said stem portion and said intermediate member having abutting portions and said spring means being associated with said intermediate member to act through sad abutting portions to urge said valve to seated relation, gear for periodically moving said intermediate member against said spring means, resilient means effective between said valve and said intermediate member to cause said valve to follow movements of said intermediate member effected by said gear, and means for adjustably limiting said following movements of said valve.

1,811,602. MANUFACTURE OF PHOSPHORUS SULPHOCHLORIDE. WILLARD H. WOODSTOCK and GUY A. MCDONALD, Chicago Heights, Ill., assignors to Victor Chemical Works, a Corporation of Illinois. Filed Mar. 13, 1930. Serial No. 435,661. 3 Claims. (Cl. 23—14.)

1. The method of producing phosphorus sulphochloride from ferrophosphorus which comprises chlorinating ferrophosphorus, thereby forming a phosphorus pentachloride-iron chloride complex, and reacting thereupon with sulfur.

1,811,603. MANUFACTURE OF ELECTRICAL RECTIFIERS. DONALD G. ACKERLY, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 11, 1929. Serial No. 391,985. 5 Claims. (Cl. 175—366.)

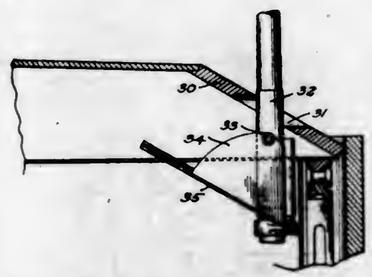
1. The process of producing a rectifier unit which consists in treating a copper blank to form cuprous oxide thereon, and then placing the treated blank in a bath of molten metal to reduce the outer surface of the oxide to copper.

1,811,604. GARDEN TOOL. WILLIAM P. BANCROFT, Lincoln, Nebr. Filed Feb. 11, 1929. Serial No. 339,233. 3 Claims. (Cl. 97—63.)



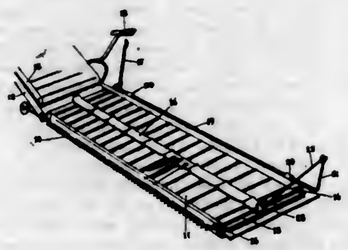
2. A garden tool having a flattened intermediate portion and a pair of flattened tines projecting therefrom at the extremities thereof, said intermediate portion and said tines being each provided with front and rear cutting edges, and means for securing a handle to said intermediate portion to project rearwardly therefrom, said means inclined rearwardly from said intermediate portion and in the direction of said tines but terminating appreciably short of the free extremities thereof whereby said garden tool is reversible to operatively position the cutting edges of either said intermediate portion or said tines.

1,811,605. ORDNANCE. CHARLES BITTINGER, Washington, D. C. Original application filed Apr. 26, 1926, Serial No. 104,832. Divided and this application filed Apr. 3, 1930. Serial No. 441,329. 3 Claims. (Cl. 89—37.)



1. A gun mount including a turret having a conventionally inclined armored wall having a port, a gun projecting through the port, a trunnion support for the gun in which it is horizontally pivoted, means for moving the trunnions in a plane substantially parallel with the inclined wall so that the trunnions are in substantial vertical alignment with the port whereby the gun may be elevated to the vertical for firing.

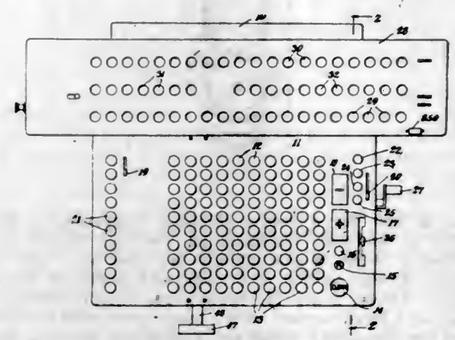
1,811,606. GRAIN RETARDER. JOHN BOYLE, Scribner, Nebr. Filed Mar. 26, 1929. Serial No. 349,996. 2 Claims. (Cl. 56—466.)



1. A grain retarder for binder platforms, said grain retarder comprising a strap having a length substantially

equal to the length of the binder platform, said grain retarder being provided with a plurality of spaced ridges throughout its length, the distances between successive ridges decreasing from the outer extremity toward the inner extremity of said grain retarder, and means at the outer extremity of said grain retarder for pivotal connection with the frame of the binder platform at the outer extremity thereof.

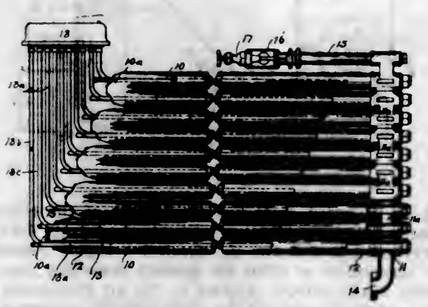
1,811,607. CALCULATING MACHINE. EDWIN F. BRITTEN, Jr., Maplewood, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Sept. 8, 1930, Serial No. 480,475, and in France Jan. 15, 1930. 13 Claims. (Cl. 235—63.)



1. In a calculating machine, the combination of a set of register wheels, differential actuators therefor, intermediate transmitting means between said actuators and said register wheels, a carriage supporting said register wheels and movable relatively to said actuators, means for moving said carriage relatively to said actuators, and means automatically operable upon initiating an operation of said carriage, for moving said transmission means to ineffective position.

9. In a machine of the class described, the combination of a transversely movable carriage, register wheels mounted thereon, gears for operating said register wheels, a swinging frame supporting said gears, a latch cooperative with said frame for holding its gears in effective relation to said register wheels, and a finger-piece operable for first moving said latch to ineffective position and then moving said carriage laterally.

1,811,608. AUXILIARY APPARATUS FOR STEAM GENERATORS. ALFRED W. BRUCE, New York, N. Y. Filed Aug. 13, 1929. Serial No. 385,659. 11 Claims. (Cl. 122—477.)



1. In an apparatus for locomotives, the combination of an economizer comprising a plurality of superposed water tubes arranged in vertical rows, the tubes of each row being connected at their rear ends in pairs by separate, spaced, return bends to permit the flow of combustive gases longitudinally between said tubes, means for connecting the opposite ends of the tubes to permit the circulation of water therethrough, and a plurality of fire tubes each passing through one of the water tubes.

1,811,609. BOBBIN BUSHING. EDWIN C. BUFFINGTON, Manchester, N. H., assignor, by mesne assignments, to U S Bobbin & Shuttle Company, 1929, Providence, R. I., a Corporation of Rhode Island. Filed July 27, 1927. Serial No. 208,745. 4 Claims. (Cl. 242—120.)

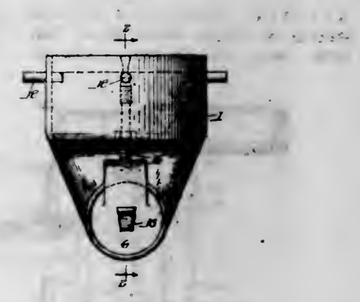


1. A bobbin bushing comprising a longitudinally split tubular body adapted to fit within the bore of a bobbin, said bushing having an element which is yieldable to a position substantially within the body of the bushing to permit the bushing to move axially in one direction along the bobbin bore but which tends to bite into the wall of the bore to oppose movement of the bushing in the opposite direction.

1,811,610. METHOD OF PREPARING METALLIC MOLDS FOR CASTING METAL. FRANK S. CARLILE, Abington, Pa. Filed Aug. 2, 1930. Serial No. 472,768. 10 Claims. (Cl. 22—192.)

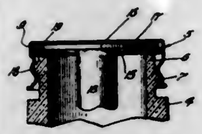
1. The method of preparing metallic molds for casting metal consisting in applying to the said mold a varnish like coating and heating the said mold to a temperature sufficiently high to cause the said coating to blister.

1,811,611. FLOOR DRAIN. FRANK W. CARLSON, Chicago, Ill. Filed Jan. 18, 1930. Serial No. 421,669. 8 Claims. (Cl. 182—15.)



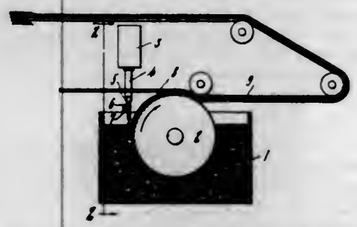
2. A drain valve comprising a main body having a portion of the wall thereof extended inwardly to provide a horizontal wall portion, said main body having an outlet opening therein below said horizontal portion and having a valve seat around said opening, a valve member cooperating with said valve seat, a portion depending from said horizontal wall portion providing a support, a lug on said valve member rested on said support for supporting said valve member for movement relative to said valve seat, means for preventing displacement of said lug from said support, a drain plate for closing the open upper end of said main body, and a member depending from said drain plate for preventing movement of means preventing displacement of said lug.

1,811,612. MUCILAGE SPREADER. WILLIAM W. S. CARPENTER, Chicago, Ill. Filed June 21, 1930. Serial No. 462,774. 3 Claims. (Cl. 91—67.2.)



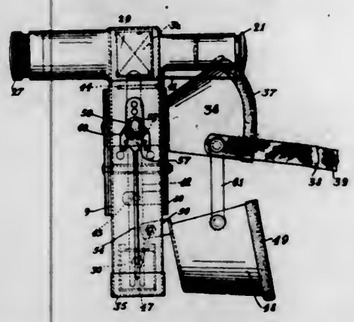
1. The combination with a bottle, of a liquid applicator integrally made of soft, flexible material adapted to extend down inside of the bottle and comprising a shank, a spreader at the lower end of the said shank, and a disk at the upper end of said shank and integral therewith and providing a closure for said bottle.

1,811,613. MOTTLED OR COLORED SHINGLE AND METHOD FOR PRODUCING IT. ALBERT L. CLAPP, Danvers, Mass., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 7, 1924. Serial No. 697,485. 6 Claims. (Cl. 92—21.)



1. A daub coat for application to fibrous stock as it is being sheeted on a paper machine, which comprises an aqueous pulp having a relatively small proportion of fibrous material capable of being formed with the fibrous stock into a sheet and having a relatively large amount of water-insoluble coloring matter and waterproofing material fixed thereto by a precipitate.

1,811,614. BINOCULAR OPTICAL INSTRUMENT. HARVEY S. COVER, South Bend, Ind. Filed Aug. 22, 1928. Serial No. 301,220. 7 Claims. (Cl. 88—33.)



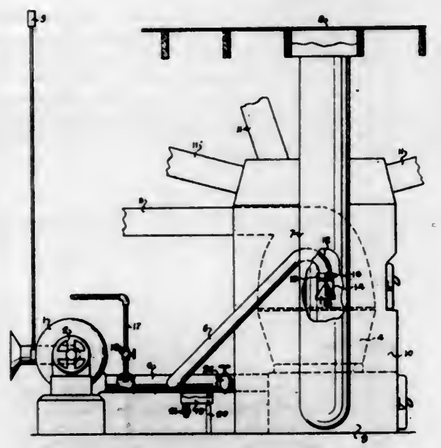
1. A binocular optical instrument, comprising a central frame member, a pair of telescopic members, each provided with a total reflecting prism operatively interposed between an objective and an ocular lens, one of said telescopic members being pivotally connected to said frame member at a point axially offset from the ocular lens, and one of said total reflecting prisms being shiftably and rotatably mounted for lateral and rotative movements to obtain proper stereoscopic vision between said telescopic members.

1,811,615. ELECTRIC SOCKET. JOHN CUTHBERT, Chicago, Ill., assignor to Economy Fuse and Manufacturing Company, Chicago, Ill., a Corporation of New York. Filed May 21, 1920. Serial No. 383,085. 2 Claims. (Cl. 173—350.)



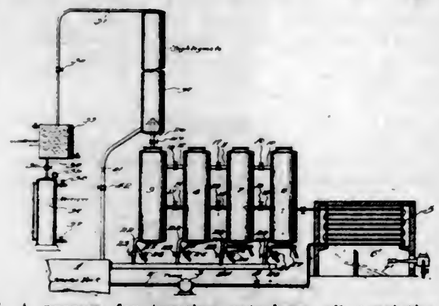
1. A base for a socket cartridge comprising a disc carrying conductor terminals on one face thereof and having a recess in the opposite face thereof, a pair of switch springs secured to the disc and positioned in the recess thereof, a key for causing the switch springs to make and break contact with a snap action, and a second disc for closing the recess and cooperating with the first disc to hold the key in place.

1,811,616. HOT AIR FURNACE. ALFRED DOYLE, Hamilton, Ontario, Canada. Filed Mar. 18, 1930. Serial No. 436,814. 3 Claims. (126—110.)



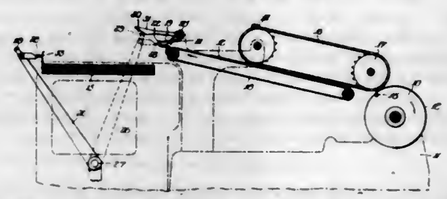
1. In a forced draft hot air furnace of the character described, the combination with the forced air draft delivery conduit and the air circulation supply conduit to the furnace, of a third air conduit extending from the forced draft delivery conduit to the air circulation supply conduit, the end of the third conduit projecting into the centre of the air circulation supply conduit and extending in the same direction as the air flow in the air supply conduit, and means for spreading the air passing from the third conduit into the air supply conduit.

1,811,617. PROCESS FOR TREATING PETROLEUM OIL. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed July 31, 1922. Serial No. 578,703. 5 Claims. (Cl. 196—59.)



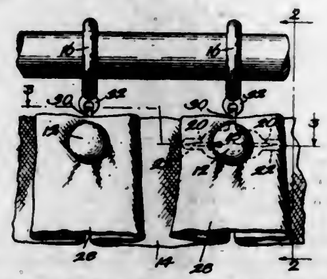
1. A process for treating petroleum oil consisting in raising the oil to a conversion temperature in a cracking zone, passing the oil through successive vapor chambers in maintaining a superatmospheric pressure on the oil in said chambers, withdrawing the evolved vapors therefrom and subjecting them to a dephlegmating action, condensing the dephlegmated vapors and recycling the unvaporized oil from selected vapor chambers to the cracking zone for retreatment, and withdrawing the unvaporized oil from the remaining vapor chambers from the system without returning the same to said cracking coil for further cracking.

1,811,618. DELIVERY MECHANISM. EDWARD F. DUDLEY, Oak Park, Ill., assignor to The Miehle Printing Press & Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 15, 1928. Serial No. 285,616. 10 Claims. (Cl. 271—68.)



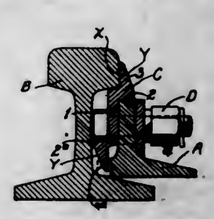
1. In a delivery mechanism for printing presses and the like, the combination of a sheet carrier operative to remove a sheet from a cylinder of the press at cylinder speed, oscillating delivery means, and means continually moving at a slower speed than said carrier and adapted to receive a sheet therefrom and advance it towards said delivery means.

1,811,619. DRAPERY HANGER. RAYMOND B. DWYER, Chicago Ill. Filed Feb. 26, 1927. Serial No. 171,281. 9 Claims. (Cl. 156—21.)



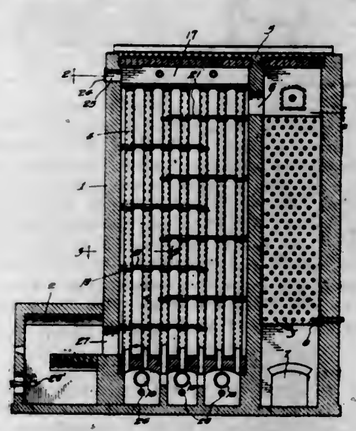
1. A drapery hanger including detachably connected plates, one of which is provided with means to pierce the arranged folds of the drapery and to extend through a perforated portion of the other part, said piercing part being bendable behind the perforated part into clinching engagement therewith to hold the folds in position between the plates, and means provided on one of said parts for connecting said hanger to a curtain ring.

1,811,620. REVERSIBLE TERMINAL MEMBER FOR SWITCH POINTS. ROBERT E. EINSTEIN, St. Louis, and BENJAMIN B. BETTS, Webster Groves, Mo. Filed Oct. 25, 1930. Serial No. 491,210. 4 Claims. (Cl. 246—437.)



1. A renewable terminal member for switch points, having a web that is adapted to be arranged in overlapping relationship with the web of a point and secured to same, and a wheel-engaging portion at the top edge of the web of said terminal member provided at its inner side with a surface that is adapted to bear against the head of a running rail and provided on its outer side with a wheel flange engaging surface.

1,811,621. APPARATUS FOR HYDROCARBON OIL CONVERSION. OSCAR H. FAIRCHILD, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 10, 1927. Serial No. 225,078. 8 Claims. (Cl. 196—110.)

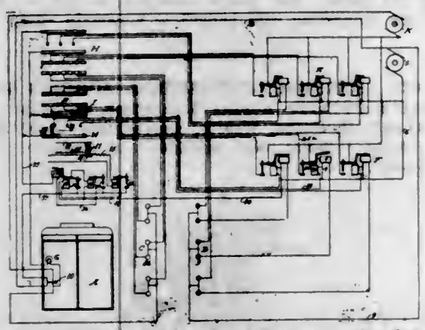


1. An apparatus for cracking hydrocarbon oil vapors, comprising in combination, a furnace and connected sections of tubing forming a continuous passageway mounted therein, said sections being constructed of carborundum.

1,811,622. SIGNAL SYSTEM FOR ELEVATORS. HAROLD J. FEAR, Montclair, N. J., assignor to Elevator Supplies Company, Inc., Hoboken, N. J., a Corporation of New Jersey. Filed July 14, 1926. Serial No. 122,342. 11 Claims. (Cl. 177—336.)

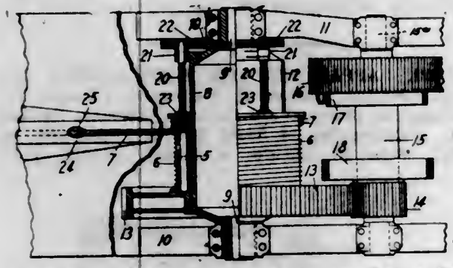
1. In an elevator signal system a car, a signal for said car for a floor at which said car may stop and a circuit therefor, means at said floor for setting said circuit in signal operating condition, means operating in

synchronism with the car for operating said signal in response to the operation of said signal setting means, means for restoring said signal setting means to its normally inoperative condition comprising a restoring circuit,



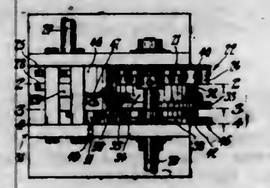
two normally open switches in said circuit, means for closing one of said switches as an incident to the stopping of the car at said floor, and means for closing the second switch only upon the departure of said car from said floor.

1,811,623. SELF-ALIGNING CABLE DRUM. BERLIN S. FERGUSON, Marion, Ohio, assignor to The Marion Steam Shovel Company, Marion, Ohio, a Corporation of Ohio. Filed June 8, 1928. Serial No. 283,976. 3 Claims. (Cl. 254—186.)



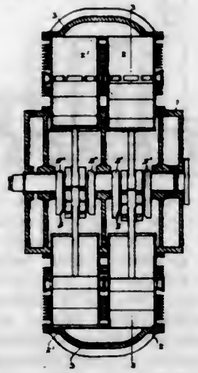
1. In a mechanism of the character described, a frame having bearings, a supporting member having trunnions journaled in said bearings, a drum mounted on said supporting member for rotation therewith and for axial movement with relation thereto, means for rotating said supporting member, screws rotatably mounted on said supporting member, extending lengthwise thereof and held against axial movement, nuts carried by said drum to receive said screws, gears secured to the respective screws at one end of said supporting member, and a gear rigidly mounted on said frame concentric with the axis of said supporting member and meshing with the gears on said screws.

1,811,624. INTERMITTENT DRIVE. HANNIBAL C. FORD, Jamaica, N. Y., assignor to Ford Instrument Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Dec. 28, 1927. Serial No. 243,032. 12 Claims. (Cl. 74—7.)



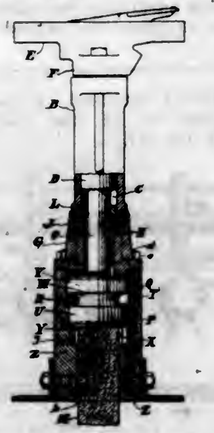
1. A transmission gearing comprising a reversible rotatable driving element and a driven element, said elements having relatively shiftable relation, shifting means operable to relate and irrelate said elements, and a control for said shifting means whereby the driven element passes successively between conditions of sustained rest and rotation.

1,811,625. TWO CYCLE RADIAL ENGINE. HERALD B. GREENING, Hamilton, Ontario, Canada, and JAMES W. GALLOWAY, Detroit, Mich., assignors to Galloway Engineering Company Limited, Hamilton, Ontario, Canada. Filed Dec. 28, 1928. Serial No. 329,021. 3 Claims. (Cl. 123—53.)



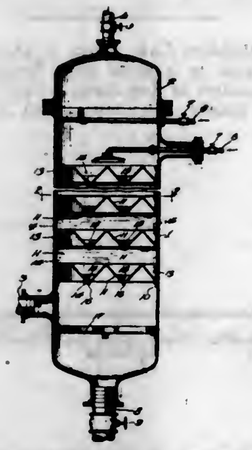
1. An improved radial-type engine, comprising in combination a crank shaft having a pair of power cranks slightly offset one from the other in a direction circumferentially of the shaft axis, a plurality of paired cylinder units spaced circumferentially around the shaft axis, the cylinders of each unit being disposed side by side longitudinally of the shaft axis with their axes intersecting the shaft axis and being connected at their outer ends by a common combustion head, pistons operating in said paired cylinder units, and a group of connecting rods radiating from each of said cranks, each group co-operating respectively with the pistons of the corresponding circumferential group of cylinders of said paired cylinder units whereby the pistons of said cylinders operate in groups, one group being in advance of the other to effect the operation of one piston of each of said paired cylinder units in advanced relation to the other.

1,811,626. PILE DRIVER ATTACHMENT FOR ROCK DRILLS. CHARLES C. HANSEN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 21, 1929. Serial No. 387,382. 6 Claims. (Cl. 61—77.)



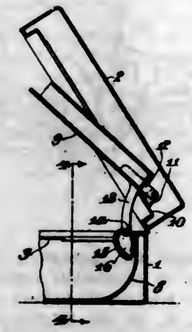
1. The combination with a rock drill having a cylinder and a hammer piston therein having a stem, of a front head abutting the front end of the cylinder, a bore in the front head comprising an enlarged portion and a smaller portion, a bushing in the smaller portion of the bore forming a guide for the stem, a head on the bushing engaging both the cylinder and the front head to maintain the front head in axial alignment with the cylinder, and means in the enlarged portion of the bore for transmitting the blows of the hammer piston to an element intended to be actuated.

1,811,627. FRACTIONATING COLUMN. JACOB BENJAMIN HEID, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 31, 1927. Serial No. 164,990. 4 Claims. (Cl. 261—114.)



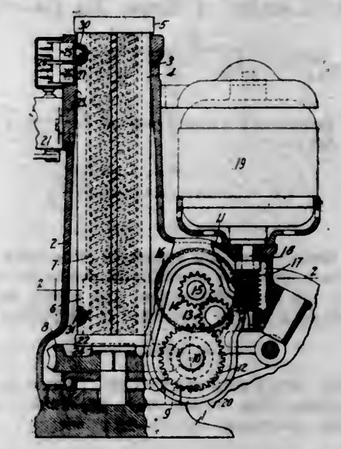
1. A dephlegmator comprising a shell having a vapor inlet and outlet and a liquid outlet, a plurality of vertically disposed layers of inverted V-shaped baffle elements within said shell, the elements of each layer being spaced to provide passages therebetween and the elements in one layer being arranged transversely with respect to the elements in the adjacent layer, and liquid overflow members positioned in said passages.

1,811,628. CASING-COVER LOCKING DEVICE. HERMAN HOLLERITH, Jr., Riverton, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Sept. 1, 1928. Serial No. 303,418. 19 Claims. (Cl. 312—8.)



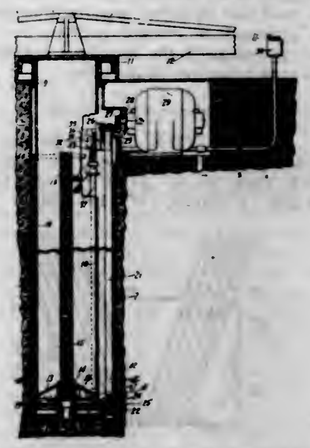
3. In a portable phonograph comprising two hingedly connected sections, a receptacle for records pivotally mounted on one of said sections and movable with respect to said sections, means on one of said sections, and means connected to said receptacle and engaging said first named means, the aforesaid means cooperating to prevent relative movement of said sections when in open position and being releasable by movement of said receptacle to permit the closing of said sections.

1,811,629. ELECTRICALLY OPERATED LIFTING JACK. ION V. K. HOTT, Dayton, Ohio, assignor to The Joyce-Cridland Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 29, 1927. Serial No. 216,127. 5 Claims. (Cl. 254—103.)



1. In a lifting mechanism comprising a nut and a screw engaging said nut, one of said elements being rotatable to impart axial movement to the other element, said nut and said screw having high pitch threads to permit said axially movable element to move downwardly under the weight of a load thereon, a worm wheel connected with said rotatable element, a high pitch worm meshing with said worm wheel, a second worm wheel, reducing gearing connecting said second worm wheel with said worm, a second worm having a low pitch thread engaging said second worm wheel and serving to lock the same against reverse movement, a motor connected with said second worm to operate the same at high speed, and means to control the operation of said motor.

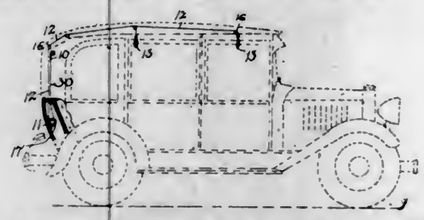
1,811,630. LIFTING MECHANISM. ION VON KERT HOTT, Dayton, Ohio, assignor to The Joyce-Cridland Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 17, 1928. Serial No. 326,422. 11 Claims. (Cl. 254—103.)



1. In a lifting mechanism of the character described, a casing, an actuating screw rotatably mounted in said

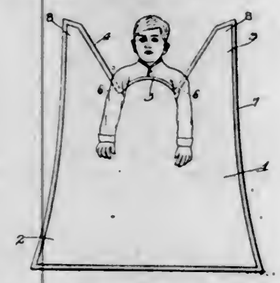
casing, a supporting member having a screw threaded part engaging said screw and held against rotation, a lifting element rotatably mounted on said supporting member, a shaft mounted in said casing alongside of said lifting element, a gear train connecting said shaft with said screw, and a motor connected with the upper end of said shaft.

1,811,631. SHADE CONTROLLING APPARATUS. WILLIAM J. HUEBNER, Garfield, N. J. Filed May 22, 1930. Serial No. 454,660. 2 Claims. (Cl. 156—28.)



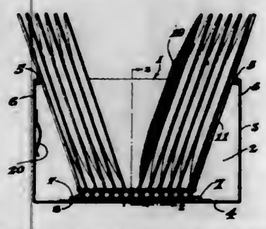
1. A shade controlling apparatus comprising means for pulling on a shade for unrolling it, means for holding the shade in the unrolled position, and means for releasing the shade on a further movement of the pulling means.

1,811,632. INFANT'S BLANKET. LOUIS A. HUMMEL, Milwaukee, Wis. Filed Mar. 26, 1930. Serial No. 439,076. 2 Claims. (Cl. 2—83.)



1. A blanket of the class described including a body portion, a cutout portion at one end of the body, a curved part at the intermediate portion of the cutout providing notches between the junction of the side walls of the cut away and the curved part, tabs at each side of the cutout adapted to be arranged in crossed relation at the back of a child and extended over the shoulders with the terminals arranged in crossed relation over the chest, and means for securing the terminals against movement relative to each other and to the body.

1,811,633. VISIBLE FILE CASE. LE ROI E. HUTCHINOS, Tonawanda, N. Y., assignor to Remington Rand Inc., New York, N. Y. Filed July 26, 1927. Serial No. 208,499. 8 Claims. (Cl. 129—34.)



6. In combination, a frame member having channels formed at the opposite sides thereof, a plurality of separator supporting members having portions at the opposite sides on one end of said members for engagement in said channels to pivotally mount said supporting members in said frame member, said supporting members being removable from said channels by movement transversely thereof, and a releasable locking member on said frame member engageable with one of said portions on each supporting member for preventing removal of said portions from said channels.

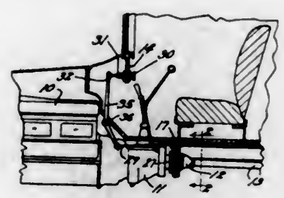
7. In combination, a panel unit including a plurality of panels and a frame member mounting said panels, a case having bottom and side walls formed to house said unit in one position, and means on the bottom of said case for receiving and centering said frame member between said side walls when said unit is placed in said case in another position.

1,811,634. LOGGING CAR. FRED A. ISAACSON, Topeka, Kans., assignor to America Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Apr. 12, 1929. Serial No. 354,474. 10 Claims. (Cl. 105—384.)



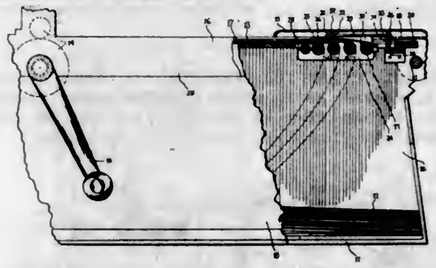
1. An arrangement of the character described, comprising, in combination, a plurality of side stakes mounted for movement between operative and inoperative positions, means for locking the side stakes in their operative positions, said locking means being releasable to permit movement of the side stakes to their inoperative positions, and automatic means for centering the side stakes when the latter occupy their operative positions.

1,811,635. SAFETY DEVICE FOR AUTOMOBILES AND THE LIKE. ANTON A. JOHNSON, Loveland, Colo. Filed May 19, 1930. Serial No. 453,480. 9 Claims. (Cl. 188—30.)



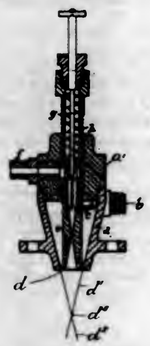
1. A safety device for preventing a reversal of the propeller shaft of an automobile comprising: a ratchet gear arranged for attachment to said propeller shaft; a brake band fixed at its one extremity and adapted to partially surround said ratchet gear; a pawl tooth positioned adjacent the free extremity of said brake band; and manually operated means for bringing said pawl tooth into engagement with the teeth of said ratchet gear so that rotation of the latter will act to clamp said brake band thereagainst.

1,811,636. MANIFOLDING MACHINE. ARTHUR A. JOHNSON, Bridgeport, Conn., assignor to Autographic Register Company, Hoboken, N. J., a Corporation of New Jersey. Filed June 17, 1927. Serial No. 199,498. 19 Claims. (Cl. 271—2.1.)



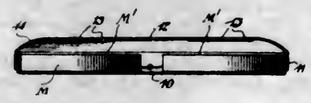
1. In a manifolding machine having a platen over which a plurality of webs is fed, a plurality of sets of means extending between the webs as they approach the platen to separate and frictionally engage the webs; and adjustable means common to said plurality of sets of means for applying thereto a variable pressure.

1,811,637. SPRAYING NOZZLE. CARL LADISCH, Meissen-on-Elbe, Germany. Filed May 18, 1924. Serial No. 713,112. 2 Claims. (Cl. 299—115.)



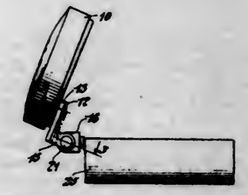
1. In a spraying nozzle, a liquid supply pipe open at one end and having an unimpeded but restricted port appreciably distant from the open end thereof, the inner wall of the pipe flaring outwardly from the restricted port to the end thereof to cause a liquid passing through the restricted port to flow slower along the flaring wall to the open end of the pipe, and a casing surrounding the said pipe and tapering to an open end substantially coincident with the open end of the said liquid supply pipe and forming therewith an annular discharge port for a fluid under pressure whereby the liquid flowing through the supply pipe in its substantial entirety is brought directly into contact with the fluid as the same is discharged through the said annular discharge port.

1,811,638. EARPHONE TRANSMITTER. HUGO LIEBER, New York, N. Y., assignor to Sonotone Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 9, 1929. Serial No. 412,685. 7 Claims. (Cl. 179—179.)



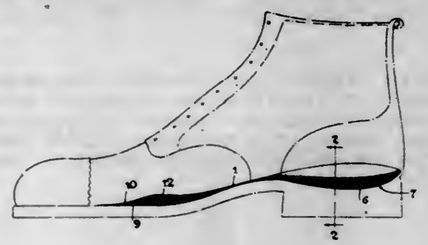
1. An earphone transmitter, comprising the combination with microphonic apparatus, of a sound-box casing having a back wall, an edge wall, and a front wall comprising a central portion substantially parallel to the face of the microphonic apparatus having an area materially less than that of the entire front wall spaced outwardly from the face of the microphonic apparatus and containing perforations and an inwardly inclined portion connecting the edge wall to said central portion and having a width not less than one-sixth of the width of the casing.

1,811,639. EARPHONE. HUGO LIEBER, New York, N. Y., assignor to Sonotone Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 9, 1929. Serial No. 412,686. 7 Claims. (Cl. 179—107.)



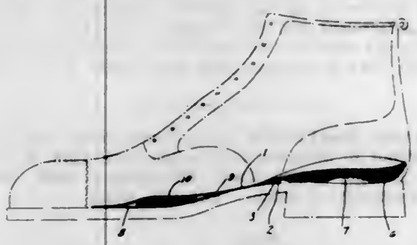
1. In an earphone device, the combination with a transmitter and a battery electrically connected, a hinge connection between the transmitter and the battery formed to permit the transmitter to be turned between a position in which its back extends along and substantially parallel to the adjacent side of the battery but spaced away therefrom and a position in which it extends transversely of such side to enable the battery to be used as an adjustable support for the transmitter.

1,811,640. ARCH CORRECTING MEMBER. ISAAC J. MARCELLE, Buffalo, N. Y. Filed Dec. 6, 1929, Serial No. 412,187, and in Canada June 15, 1929. 2 Claims. (Cl. 36—71.)



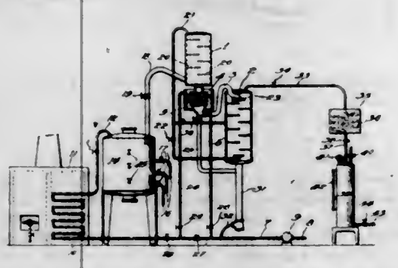
1. An arch correcting member for application in a shoe, comprising a main body member formed of an elongated piece of flexible sheet material having one end portion shaped to fit under the heel of a foot and the opposite end portion adapted to fit under the foot in advance of the heel portion, a heel member of sheet material superposed on the underside of the first named portion of said main body member and having the edge portions thereof substantially coincident with the edge portions of said main body member throughout said first named end portion, a transverse row of stitches securing the forward edge of the heel member to said main body member, a longitudinal row of stitches extending from said transverse stitches to the rear of said members and securing said heel member to said main body member along the median longitudinal portion thereof to provide a pair of pockets on opposite sides of the heel portion between said members opening at the sides, an insert adapted for removable insertion in either of said pockets, and a cushioning pad of resilient material mounted on the under face of said heel member and substantially coextensive therewith, for providing a cushion support for said insert and said members in the heel portion of a shoe.

1,811,641. ARCH CORRECTING INSERT FOR SHOES. ISAAC J. MARCELLE, Buffalo, N. Y. Filed Jan. 2, 1930. Serial No. 418,075. 1 Claim. (Cl. 36—71.)



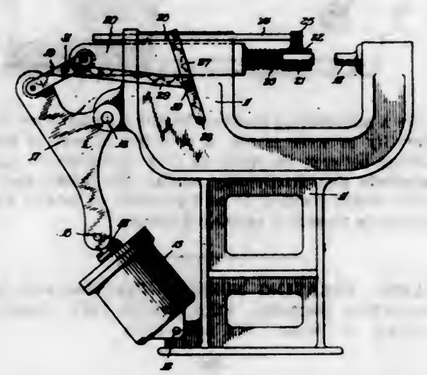
As an article of manufacture, an arch correcting member adapted for removable insertion in a shoe, comprising a main body member formed of an elongated piece of flexible sheet material having one end portion shaped to fit under the heel of a foot and the opposite end portion extending under the foot in advance of the heel portion, a heel member of sheet material superposed on the heel portion of the main body member and having the edge portions thereof substantially coincident with the edge portions of said main body member, a transverse row of stitches extending between the opposite edges of said main body member and securing the front edge portion of said heel member to said main body member, a longitudinal row of stitches extending from the front end of said heel member to the rear end thereof along the median longitudinal portion thereof for securing said heel member to said main body member to provide a pair of pockets between said members opening at opposite sides thereof and positioned at opposite sides of the median longitudinal dimension of said members, a heel supporting insert adapted for insertion in either of said pockets, and a cushioning pad securely to said heel member and substantially coextensive therewith having a central concave recess in the bottom face thereof, having portions of greatest thickness adjacent the edges of said recess and of successively decreasing thickness toward its outer edge portions.

1,811,642. PROCESS FOR CONVERTING HYDROCARBON OILS. JACQUE C. MORRELL and HARRY P. BENNER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 21, 1923. Serial No. 633,638. 7 Claims. (Cl. 196—48.)



1. A process for cracking hydrocarbon oils, consisting in raising the oil to a cracking temperature in a heating zone, in passing the heated oil to an enlarged zone, wherein substantial vaporization occurs, in passing the vapors thence to a primary dephlegmating zone, passing uncondensed vapors from said primary dephlegmating zone to a secondary dephlegmating zone, in withdrawing reflux condensate from said primary dephlegmating zone, in introducing portions of such withdrawn reflux condensate to said secondary dephlegmating zone, to act as a dephlegmating medium for the vapors therein, in returning reflux condensate from said secondary dephlegmating zone to said heating zone without again admitting any portion thereof to either of said dephlegmating zones, in condensing the vapors issuing from said secondary zone, and in maintaining in superatmospheric pressure on the oil undergoing conversion and the vapors in both said primary dephlegmating zone and secondary dephlegmating zone.

1,811,643. PLATE CLOSER. ADOLF A. NORIN, Chicago, Ill., assignor to Hanna Engineering Works, Chicago, Ill., a Corporation of Illinois. Filed Oct. 30, 1928. Serial No. 316,088. 9 Claims. (Cl. 78—52.)



1. In combination with a riveter, a movable die, means for moving the movable die, a plate closer carried by the riveter, and means to move the plate closer upon movement of the movable die simultaneously with the die, a greater distance than the movement of the movable die and at a different rate of movement than the die.

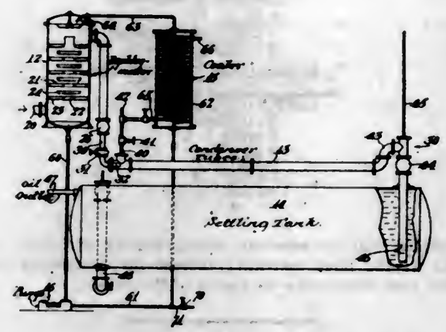
1,811,644. INDUCTION ELECTRIC FURNACE. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed Mar. 14, 1929. Serial No. 347,020. 19 Claims. (Cl. 13—29.)



1. The method of maintaining circulation of molten metal in a submerged channel communicating with a molten furnace pool, which consists in electromatically applying a progressively advancing motor field drag lengthwise of the channel to produce uni-directional flow throughout the length of the channel and into and from the pool, thus mixing the metal of the channel with that of the pool.

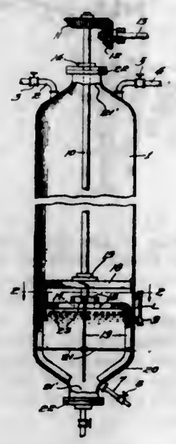
1,811,645. OIL REFINING SYSTEM. DANIEL PYZEL, Oakland, Calif., assignor, by mesne assignments, to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Dec. 27, 1920, Serial No. 433,099. Renewed Oct. 22, 1929. 2 Claims. (Cl. 196—94.)

1. An improvement in the art of treating hydrocarbon oil vapors containing constituents which upon condensation would form emulsions with water comprising introducing the vapors to a dephlegmating column, removing condensate from the dephlegmating column, placing the same under a mechanical pressure, passing such condensate thence through a cooling zone and returning the cooled



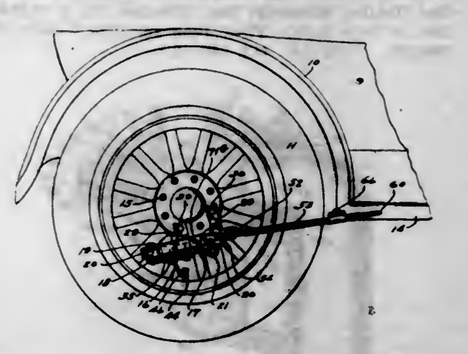
condensate to the dephlegmating column, maintaining the rate of circulation of said condensate from said dephlegmating zone through said cooling zone and back to said dephlegmating zone such that the vapors escaping from the dephlegmating column will be free of said constituents.

1,811,646. HYDROCARBON OIL TREATMENT. DANIEL PYZEL, Piedmont, Calif., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 29, 1927. Serial No. 202,192. 1 Claim. (Cl. 196—68.)



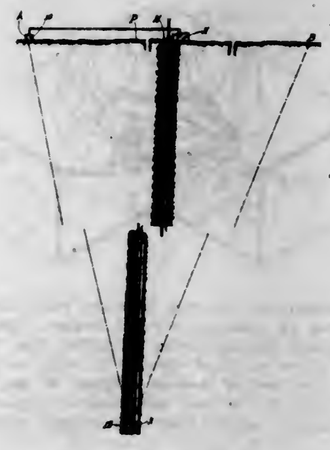
An improvement in a cracking process of the character in which the oil is heated to a cracking temperature in a coil and thence delivered to a reaction zone wherein cracking and substantial vaporization occur comprising maintaining a relatively small body of liquid oil in the reaction chamber, compelling each particle of the liquid oil to remain in the reaction chamber for substantially the same time period by supplying the oil to the reaction chamber above the small body of oil therein, and removing the unvaporized oil from the bottom of the reaction chamber, regulating the volume of oil contained in the chamber relative to the amount flowing therethrough to control the time period of retention of each particle of oil in the reaction chamber and preventing the formation of a stagnant oil film about the periphery of said oil body by causing the oil at the periphery of the body only to have an eddy-like circulation.

1,811,647. TIRE CHARGING AIR PUMP. LORRN RISK, Minneapolis, Minn. Filed Jan. 20, 1930. Serial No. 422,044. 1 Claim. (Cl. 152—11.)



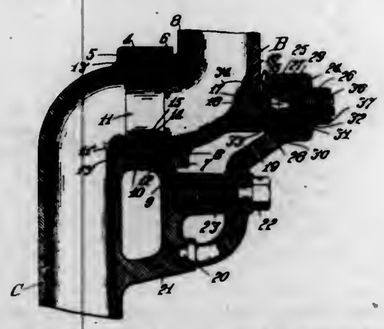
An air charging device for wheels having pneumatic tires comprising a pump frame having means for attachment to the wheel, a crank journaled to said pump frame, a cylinder and piston pump with its cylinder pivoted to said pump frame and with its piston connected to said crank, said cylinder having an air discharge pipe equipped with means for attachment to a pneumatic tire, a relatively small spur gear connected to one side of said crank, a relatively large gear detachably journaled to said pump frame and removably meshed with said smaller gear on said crank, and an operating rod connected to said larger gear to reciprocate the same and oscillate said crank with a multipled stroke, said operating rod having means whereby it may be applied at will to either of said two gears and also having means whereby it may be anchored at its extended end to a relatively fixed part of a vehicle.

1,811,648. METHOD OF DETERMINING THE STRAIGHTNESS OF DRILL HOLES IN THE EARTH. ESME EUGENE ROSAIRE, Fort Worth, Tex., assignor to Geophysical Research Corporation, New York, N. Y., a Corporation of New Jersey. Filed Jan. 5, 1929. Serial No. 330,542. 7 Claims. (Cl. 181—0.5.)



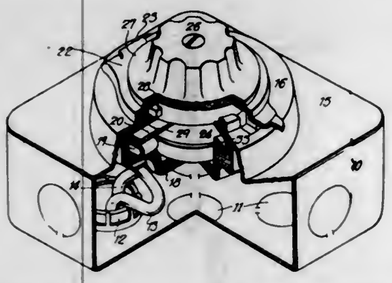
2. The method of determining the deviation from vertical of a bore formed in the earth which consists in producing sound waves at points on the earth's surface equidistant from the bore, and recording the time intervals required by the sound waves to travel from each of said points to a selected point in the bore below the earth's surface.

1,811,649. ADJUSTABLE THRUST BEARING AND SEALING MEANS FOR FLEXIBLE PIPE JOINTS. EDWARD A. RUSSELL, Chicago, Ill., assignor to Vapor Car Heating Company, Inc., Chicago, Ill., a Corporation of New York. Filed June 13, 1929. Serial No. 370,675. 7 Claims. (Cl. 285—9.)



1. In a metallic flexible pipe conduit, a pair of conduit sections having their end portions journaled together for relative rotation about the central axis of the conduit, there being an annular gasket receiving recess formed between the members one end wall of the recess being formed on one member and the other end wall on the other member, a gasket within the recess and bearing at its respective ends on the respective end walls of the recess, one of the conduit sections having an elbow bend adjacent the pipe joint, a bearing stud projecting from the elbow in line with the axis of the pipe joint, a bracket arm projecting from the other conduit section, a socket thrust bearing mounted in the bracket arm, and means for adjusting the socket bearing toward the joint to take up wear and increase the pressure on the ends of the gasket.

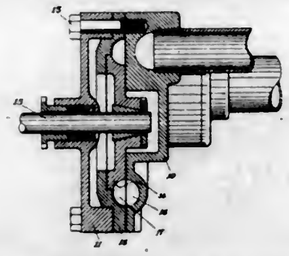
1,811,650. FUSE AND SWITCH BOX. ALBERT B. RYPINSKI, Laurelton, N. Y., assignor to Metropolitan Device Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 25, 1929. Serial No. 357,979. 11 Claims. (Cl. 200—114.)



1. Apparatus of the type described which comprises a box having an opening, terminal contact clips, a cover plate for said opening having a rotating fuse carrier and contact blades mounted thereon to enter said opening when turned out of contact relation to said terminal contact clips and to lock said cover in closed position when turned to contact with said terminal contact clips.

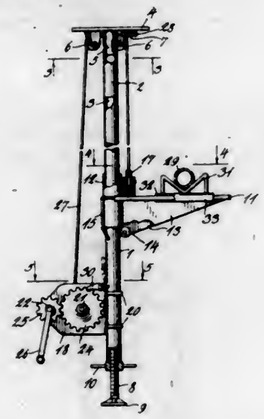
1,811,651. PRIMER FOR IMPULSE PUMPS. HENRY SCHLACHTER, Beatrice, Nebr., assignor to Dempster Mill Manufacturing Company, a Corporation of Nebraska. Filed July 5, 1929. Serial No. 375,998. 5 Claims. (Cl. 103—96.)

1. A fluid outlet for rotary pumps having a rotor with blades in a casing provided with a fluid inlet, said fluid outlet including a conduit for discharging the fluid from the casing, and a chamber for receiving a portion of the fluid from said conduit, the wall of said chamber being



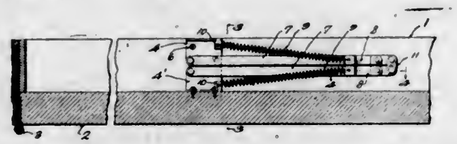
provided with an aperture communicating with said conduit at the inlet extremity thereof for conducting fluid from said chamber to the blades of the rotor.

1,811,652. LIFTING DEVICE. OTTO H. SCHUH, Denver, Colo. Filed Feb. 8, 1930. Serial No. 426,837. 4 Claims. (Cl. 254—146.)



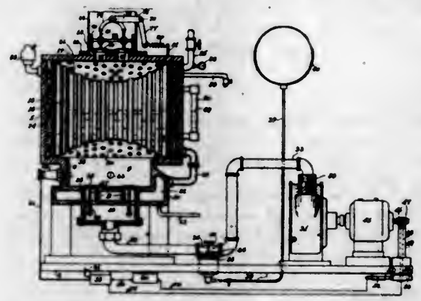
1. A lifting device of the class described comprising, in combination, a tubular member, an abutment plate secured to the upper end thereof, a screw extending into the lower end thereof, a nut associated with the screw and adapted to engage the lower end of the tubular member, a supporting bracket slidably secured to the tubular member, and means for moving the bracket along the tubular member, said means comprising a windlass secured to the tubular member and connected to the bracket by means of cables.

1,811,653. DOOR SPRING. HENRY L. SCHWARTZ, CARL A. QUAST, and LOUIS SPITZ, Milwaukee, Wis. Filed Feb. 25, 1930. Serial No. 431,104. 2 Claims. (Cl. 16—72.)



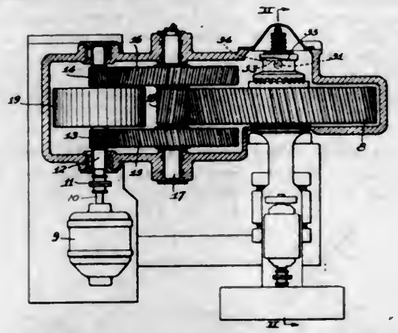
1. A device of the character described comprising a pair of angular brackets connected to a door and door casing respectively, an arm having its one end pivotally connected to the horizontal portion of each bracket, a link pivotally connecting the other ends of said arms, apertured ears carried by the other angle of said brackets, and coil springs having one end connected to the apertured ears and the other end connected to the arms adjacent their ends which are pivotally connected.

1,811,654. INTERNALLY FIRED HEAT OR POWER GENERATOR. JOHN E. SHEPHERD, Charlottesville, Va., assignor to National Cold Steam Company, Charlottesville, Va., a Corporation of Delaware. Filed Oct. 15, 1925. Serial No. 62,645. 13 Claims. (Cl. 158—1.)



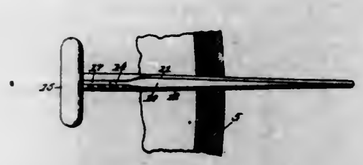
1. In combination, a housing providing a combustion chamber; a top wall on said housing having an exhaust pipe pedestal thereon, having an annular rib thereon and exhaust ports extending through the top wall into communication with said exhaust pedestal; an exhaust pipe resting on said pedestal around said rib; upwardly opening exhaust valves on said exhaust ports having upwardly pointing stems; a ring resting on said rib and carrying a cross rod having guide apertures receiving said stems; a yoke pivotally carried by the upper ends of the stems; an elbow lever fulcrumed at its elbow part on the outer face of the pipe and having a downturned lower arm, and an inner arm passing into said pipe and pivoted to the mid part of said yoke; a pin mounted on said top wall; and a spring tensioned between said pin and lower arm exterior to the pipe whereby the valves are held on the ports without overheating the spring.

1,811,655. CLUTCH MECHANISM. JOHN A. SMITMANS, Pittsburgh, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 11, 1929. Serial No. 391,835. 7 Claims. (Cl. 192—24.)



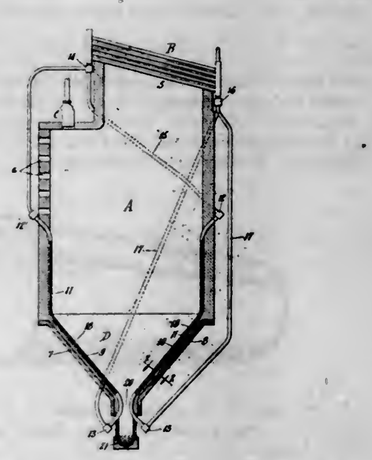
1. In a clutch, the combination of a driving clutch member, means for continuously rotating said member, a normally stationary but rotatable driven clutch member, means for moving one into engagement with the other of said clutch members, a motor, and driving connections from said motor to said driven clutch member for intermittently imparting rotation to the latter in the direction of rotation of said driving clutch member prior to the operation of said clutch-moving means.

1,811,656. METHOD OF REPAIRING PUNCTURED TIRES. ADOLPH G. SOMMERBECK, Chicago, Ill., assignor to Kex Company, Incorporated, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 6, 1928. Serial No. 252,151. 3 Claims. (Cl. 152—27.)



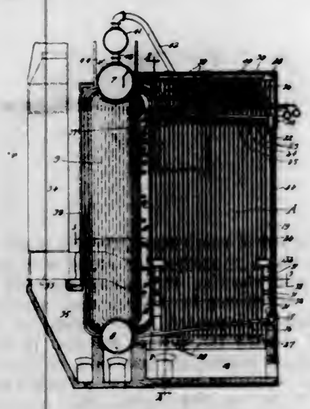
1. The method of repairing a puncture in an automobile tire casing which comprises the steps of simultaneously expanding and cleaning the casing material around a puncture; then placing in the puncture, while the casing material remains expanded and cleaned, an elastic element; then causing the cleaned material of the automobile tire casing, around the puncture, to compress upon said element; and then heating and softening and spreading the outer end of said element upon and against the outer periphery of the tire casing around said puncture.

1,811,657. FURNACE FOR BURNING PULVERIZED FUEL. WILFRED R. WOOD, London, England, assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed June 16, 1925, Serial No. 37,428, and in Great Britain Sept. 26, 1924. Renewed Mar. 13, 1931. 5 Claims. (Cl. 122—235.)



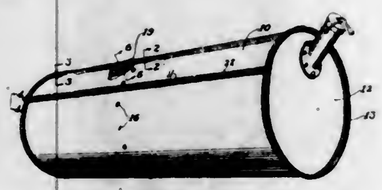
1. In a furnace for burning finely divided fuel in suspension, a boiler, a combustion chamber having substantially upright walls and a sloping bottom portion therebelow, a plurality of closely spaced tubes lining the sloping bottom portion and extending up within the combustion chamber adjacent an upright wall thereof, each of the said tubes lying in a substantially upright plane and having within the furnace and bottom thereof fin members at opposite sides, the fins on one tube being in substantial juxtaposition to the fins on adjacent tubes to form a continuous metallic surface, the said tubes being bent at their upper ends to extend out through a wall of the combustion chamber, and means connecting said tubes into the circulation of the boiler.

1,811,658. **STEAM GENERATION.** WILFRED R. WOOD, London, England, assignor to International Combustion Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed May 21, 1928, Serial No. 279,428. Renewed Sept. 5, 1930. 5 Claims. (Cl. 122—235.)



1. In combination, an upper and a lower drum, a bank of convection heat tubes connecting the same, a combustion chamber in front of the bank, a row of upright radiant heat tubes on each upright wall of the chamber, substantially horizontally disposed tubes connecting the upper ends of one of said rows with the upper drum and arranged below the top of the chamber to provide a space, a superheater in said space, and a baffle in the bank arranged so as to provide communication between said space and the bank, and communication between the said space and the combustion chamber proper being through spaces between said horizontal tubes.

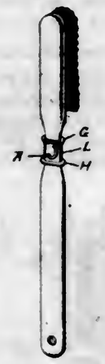
1,811,659. **FUEL TANK AND METHOD OF MAKING THE SAME.** ANDREW A. ANDRAKE, Cleveland, Ohio, assignor to The Glenn L. Martin Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 31, 1927. Serial No. 216,559. 6 Claims. (Cl. 29—148.2.)



6. The method of sealing the built up joints of a tank fabricated from aluminum alloy sheets with strips of metal inserted between and riveted to said sheets in intimate face to face relation comprising the introduction into said tank and said joints of an acid the reaction of which is such as to form a salt of said metal which is insoluble in petroleum products.

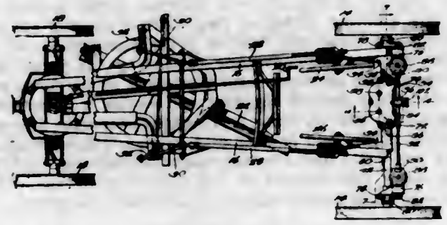
1,811,660. **IDENTIFIER FOR TOOTHBRUSHES AND THE LIKE.** HARRY BAUSHER, Montclair, N. J. Filed Apr. 1, 1930. Serial No. 440,679. 1 Claim. (Cl. 40—21.)

An identifier for the purpose referred to consisting of an elastic band adapted by its elasticity to be placed in position upon the article to be identified and to hold itself in position upon said article, said identifier being formed of moulded rubber having a relatively thin body of generally annular contour and having relatively raised marginal beads at its opposite ends moulded as integral parts of the identifier, and said identifier also having a relatively raised identifying mark moulded as an integral part



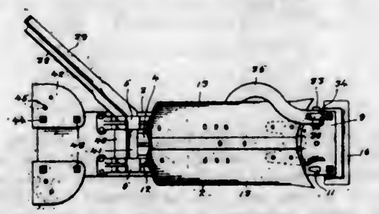
thereof in the space between said marginal beads, said marginal beads being raised to a relatively higher level than said identifying mark to thereby constitute protecting means for said identifying mark.

1,811,661. **LEANING WHEEL ROAD SCRAPER.** WILLIAM T. BEATTY, Flossmoor, FRANK S. DAVIS, Homewood, and FRED D. WILSON, Harvey, Ill., assignors to Austin Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 10, 1923. Serial No. 673,907. 5 Claims. (Cl. 37—157.)



1. In mechanism of the class described, in combination with a grader frame, a hollow gear housing carried by the frame, a horizontally reciprocable axle slidable through the gear housing, gearing in the housing for reciprocating the axle, a hollow wheel support on an end of said axle which extends beyond the frame, a traction wheel pivoted on a horizontal shaft carried by the wheel support, a gear rigid with the wheel, inside the wheel support, a worm inside the wheel support meshing with the gear, and means operable in all positions of the axle for operating the worm to incline the wheel with reference to the frame.

1,811,662. **GRADING AND DITCHING MACHINE.** DWIGHT L. BEATTY, Missoula, Mont. Filed Oct. 5, 1927. Serial No. 224,260. 2 Claims. (Cl. 37—173.)



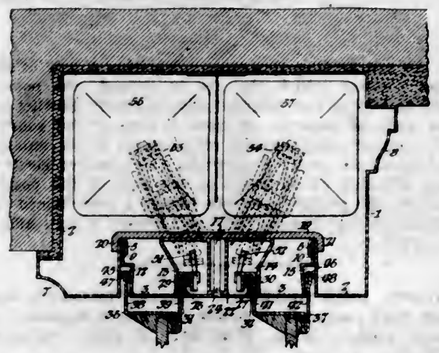
2. In a machine of the character described, a land side, a mold board angularly adjustably connected therewith, and a handle structure comprising a single bracket member secured to the inner face of the land side and formed

with sockets arranged in angular relation, and handle members having shanks detachably engaged within said sockets from either side thereof and diverging rearwardly.

1,811,663. **METHOD OF PRODUCING EXPLOSIVES.** NEWTON C. BOYD, Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 12, 1928. Serial No. 269,613. 4 Claims. (Cl. 52—22.)

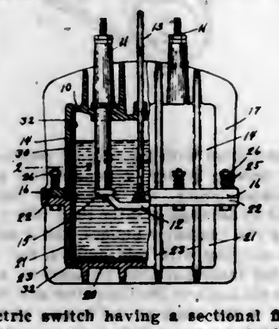
1. The method of producing an explosive which includes effecting the nitration of a quantity of glycerin in the presence of a nitrating mixture and then adding a quantity of sugar to the nitrated glycerin while still in the presence of the nitrating mixture, and effecting nitration of the sugar and solution of the nitrated sugar in the nitrated glycerin.

1,811,664. **METALLIC WINDOW STRUCTURE.** ALBERT LINDSAY DOERING, Germantown, Pa., assignor to J. S. Thorn Company, Philadelphia County, Pa., a Corporation of Pennsylvania. Filed Dec. 31, 1929. Serial No. 417,627. 8 Claims. (Cl. 189—65.)



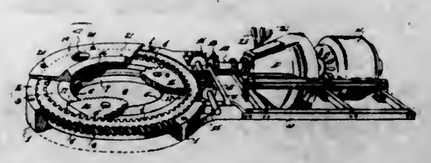
1. In a window frame; the combination with a jamb frame member formed of sheet metal and having a groove therein adapted to receive a sash weathering flange; of a sash mounted to slide in said jamb frame and having a weathering flange extending into said groove; and a weathering cap on said flange, formed of anti-friction spring sheet metal, adapted to slide in said groove in resilient contact therewith while affording a weathering seal for such slide joint; wherein the sash weathering flange is J-shaped at its end extending in said groove, and the weathering cap has one edge extending in the J-bight of said flange.

1,811,665. **ELECTRIC SWITCH.** WILLIAM S. EDSALL, Boston, Mass., assignor, by mesne assignments, to Condit Electrical Manufacturing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 17, 1922. Serial No. 595,172. 21 Claims. (Cl. 200—156.)



1. An electric switch having a sectional fluid-perforate enclosing casing, and a relatively weak fluid-tight oil receptacle enclosed within and supported yieldingly by said casing, the walls of said casing conformed generally with and arranged to support the corresponding walls of said oil receptacle against rupture and against change in configuration due to internal pressures.

1,811,666. **AUTOMATIC POWER DRIVEN PIPE WRENCH.** WALTER W. FOSTER, Wichita Falls, Tex., assignor to Hill & Foster Company Incorporated, Wichita Falls, Tex. Filed Dec. 14, 1929. Serial No. 413,990. 1 Claim. (Cl. 81—57.)

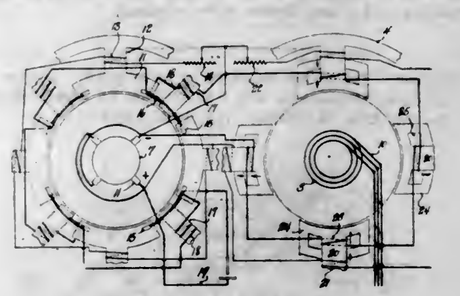


In an automatic power driven pipe wrench, the combination including a casting having a circular portion with inner and outer flanges having a beveled approach to said opening and an extended portion to receive a frame, the said frame being rectangular in shape and extending from said casting to support power supplying means, a ring gear disposed to rotate between the flanges of said casting having gears on its inner and outer peripheries, spaced, cam shaped members having gears engageable with the gears on the inner periphery of said ring gear and provided with teeth projecting inwardly in the direction of the opening in said casting, a cover conforming to said casting and having an opening in register with said casting and likewise having a beveled approach to its opening, and means for transmitting rotary motion to said ring gear from said power supplying means.

1,811,667. **FLUX FOR SOLDERING.** JAMES H. GRAVELL, Elkins Park, Pa., assignor to American Chemical Paint Company, Ambler, Pa., a Corporation of Delaware. Filed Feb. 4, 1930. Serial No. 425,823. 1 Claim. (Cl. 148—23.)

A flux for soldering, being an admixture comprising zinc chloride, butyl alcohol, aniline hydrochloride, and petrolatum.

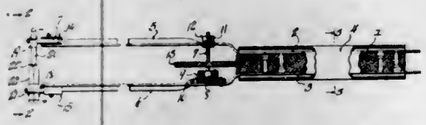
1,811,668. **DYNAMO ELECTRIC MACHINE.** KLAUS L. HANSEN, Milwaukee, Wis. Filed Apr. 9, 1928. Serial No. 268,658. 4 Claims. (Cl. 171—123.)



4. The combination of a direct current dynamo having a rotor provided with a winding and a separate and distinct synchronous motor having a rotor provided with a winding, said dynamo supplying the current for energizing its field, the windings of said rotors being interconnected, a work circuit connected to said dynamo, said dynamo having a series commutating winding, said motor having a series field winding, and means for producing a large

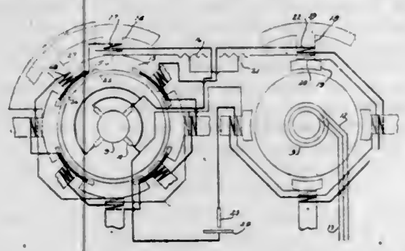
leakage flux interlinking the said series field winding of said synchronous motor, whereby a highly reactive load circuit is provided.

1,811,669. ARC WELDING APPARATUS. KLAUS L. HANSEN, Milwaukee, Wis. Filed Aug. 9, 1928. Serial No. 298,494. 3 Claims. (Cl. 219—8.)



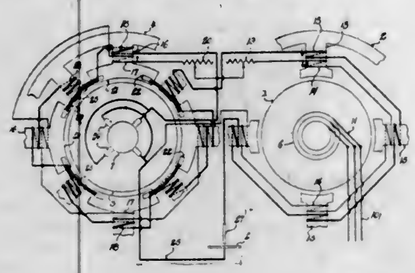
1. An arc welding apparatus comprising a pair of electrodes between which the arc is formed, the positive electrode having two enlarged approximately parallel portions and the negative electrode having its end located between the enlarged portions of the positive electrode, the negative electrode being arranged at an angle to the axis of the positive electrode.

1,811,670. DYNAMO ELECTRIC MACHINE. KLAUS L. HANSEN, Milwaukee, Wis. Filed Jan. 26, 1929. Serial No. 335,179. 2 Claims. (Cl. 171—123.)



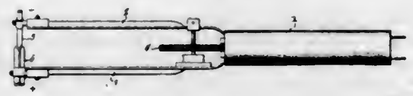
1. In a dynamo electric machine, the combination of two rotors, one of said rotors being a driving rotor and having an alternating current winding thereon, the other of said rotors being a generator rotor, slip rings connected to said winding, a winding carried jointly by said rotors, a commutator connected to said last mentioned winding, brushes bearing upon said commutator, a field structure for each of said rotors, the field structure for said generator rotor having a shunt winding and a differential series winding thereon, the other of said field structures having a shunt winding and a cumulative series winding.

1,811,671. DYNAMO ELECTRIC MACHINE. KLAUS L. HANSEN, Milwaukee, Wis. Filed Apr. 24, 1929. Serial No. 357,633. 4 Claims. (Cl. 171—123.)



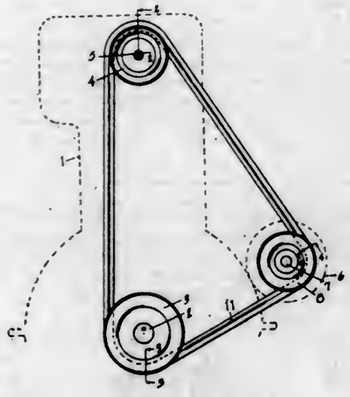
3. A dynamo electric machine comprising a direct current rotor, a field structure associated therewith, an alternating current rotor, a field structure associated therewith, an alternating current winding carried by each rotor, a direct current winding carried by the direct current rotor and inductively coupled to that portion of the alternating current winding carried by the direct current rotor, a shunt field and a cumulative series field winding carried by the field structure associated with said alternating current rotor, said field windings being supplied by said direct current winding.

1,811,672. ARC WELDING APPARATUS AND METHOD OF ARC WELDING. KLAUS L. HANSEN, Milwaukee, Wis. Filed Sept. 9, 1929. Serial No. 391,253. 5 Claims. (Cl. 219—8.)



1. An arc welding apparatus comprising a pair of electrodes between which the arc is formed, the positive electrode having two enlarged approximately parallel portions, and the negative electrode having its end substantially symmetrically located with respect to the enlarged portions of the positive electrode, the negative electrode being arranged at an angle to the axis of the positive electrode, the positive electrode having a core formed of a material of high conductivity and having a high affinity for oxygen.

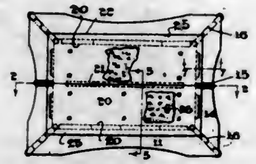
1,811,673. BELT GEARING. CHARLES HOLLERITH, Jackson, Mich., assignor to Automotive Fan & Bearing Company, Jackson, Mich. Filed Mar. 12, 1930. Serial No. 435,080. 6 Claims. (Cl. 74—21.)



1. The combination with an internal combustion engine, of a flanged driving pulley, a flanged fan pulley and a flanged generator pulley, the flanges of the fan pulley being disposed at an angle greater than that of the flanges of the driving and generator pulleys, and a belt of tapered cross section coacting with said pulleys, the side walls of the belt having inner portions disposed at an angle corresponding to the angle of the fan pulley and outer portions corresponding to the angle of the flanges of the generator pulley.

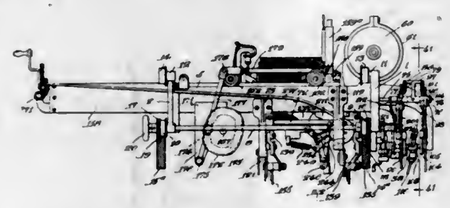
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1,811,674. COLLAPSIBLE STEPPING BOX. FREDERICK W. LONGLEY, Verdun, Quebec, Canada. Filed July 21, 1928. Serial No. 294,460. 2 Claims. (Cl. 155—169.)



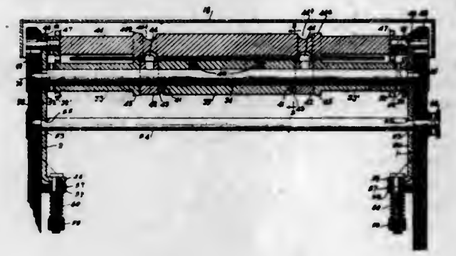
1. A step box comprising side members, sectional top members hingedly attached to one another and to the side members, and sectional end members, each end member being hingedly attached to one another at their adjacent edges and at their remote edges to the side members.

1,811,675. TEXTILE MACHINE. SEBASTIANO MAGNANO, Lawrence, Mass., assignor to Magnano Corporation, Lawrence, Mass., a Corporation of Massachusetts. Filed Jan. 26, 1929. Serial No. 335,190. 58 Claims. (Cl. 28—41.)



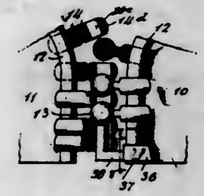
1. A machine for associating detached loom elements with warp threads comprising means for presenting such an element for engagement with a thread and means for moving said presenting means in a path substantially parallel to the warp threads.

1,811,676. AUTOGRAPHIC REGISTER. FRANK E. PFEIFFER, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 31, 1930. Serial No. 440,278. 25 Claims. (Cl. 282—16.)



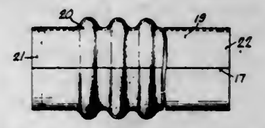
1. In an autographic register having a plurality of superimposed sheets with interleaved carbon sheets, said paper sheets having spaced holes therein, means for ejecting said sheets, aligning means associated with said ejecting means, means on the ejecting means to limit the movement of the aligning means between predetermined limits, and means for rendering inoperative said ejecting means when the aligning means is engaged by the ejecting means at one end of the limit of relative movement of the aligning means with respect to the ejecting means.

1,811,677. SEPARABLE FASTENING DEVICE. LOUIS ROCKE, Brooklyn, N. Y. Filed Apr. 21, 1928. Serial No. 271,764. 3 Claims. (Cl. 24—205.)



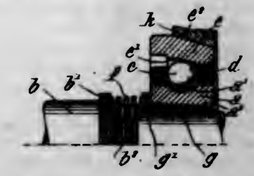
1. A slider for a separable fastening device of the type wherein two sets of metallic fastening members secured to the edges of the two pieces of flexible material are moved into and out of interlocked engagement by the action of said slider, characterized by the slider being made of a single piece of sheet metal formed to provide a front portion and a back portion, each of which is provided with inturned flanges forming slotted side walls for said slider, a bridge portion joining said front and back portions at the top thereof and a pair of tabs each having a pair of reduced lateral extensions extending from said bridge portion, said front and back portions being provided with a pair of axially alined apertures, and the reduced ends of said tabs being inserted into said apertures and being riveted over to hold said portions in spaced relationship.

1,811,678. METHOD OF MAKING CIRCUMFERENTIALLY CORRUGATED SHEET METAL PIPE. GEORGE M. SMITH, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed July 27, 1928. Serial No. 295,711. 4 Claims. (Cl. 113—33.)



1. The method of making circumferentially corrugated sheet metal pipe, which consists in corrugating a metal plate transversely between its plain ends, bending the plate on lines crossing the corrugations to form a curved section, aligning and abutting the corrugated edges with others of like formation, and welding the aligned and abutted edges and the plain edges together on a line extending in the direction of the length of the pipe.

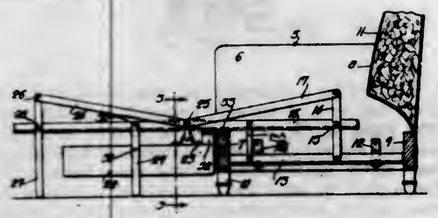
1,811,679. BALL AND ROLLER BEARING. RENÉ ALFRED LAURENT VOLET, La Varenne St. Hilaire, France. Filed July 10, 1929, Serial No. 377,178, and in Belgium Aug. 13, 1928. 8 Claims. (Cl. 308—236.)



1. In combination,—a shaft,—a sleeve slidably mounted on said shaft, said sleeve having an external conical surface,—means tending to force said sleeve along said shaft,—a ring having an internal conical surface coacting with the external conical surface of said sleeve,—a plurality of rotatable elements mounted to roll in contact with the external surface of said ring,—an annular body having an internal surface positioned to contact with said rotatable

elements, said internal surface of the annular body converging towards the external surface of the ring, said annular body having an external conical surface,—and a journal member having an internal conical surface coacting with the external conical surface of said annular body.

1,811,680. COMBINATION BED AND CHAIR. TILLIE ARZT, New York, N. Y. Filed Jan. 24, 1929. Serial No. 334,725. 1 Claim. (Cl. 5—31.)



A combination chair and bed comprising a chair, a foldable seat therefor, an inner and an outer spring frame, links pivotally joining said frames, a reinforce bar connecting said links, means securing the reinforce bar to the chair seat, angle strips in the chair, front and rear links pivoted on the ends of said reinforce bar, floor engaging legs pivoted to and depending from the ends of said front links and also pivoted to the outer frame, links depending from the ends of said rear links and pivotally connected to the inner frame and to the supporting angle strips, auxiliary legs connecting said inner frame with the support strips, other legs connecting the chair seat and the said outer frame, and the seat being hinged to the chair.

1,811,681. WINDOW AND SCREEN SECURER. WALTER BILDSTEIN, Brooklyn, N. Y. Filed June 20, 1930. Serial No. 462,551. 1 Claim. (Cl. 292—262.)

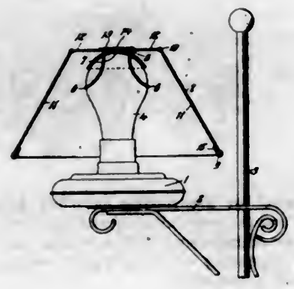


A device for keeping the sashes of sliding windows and screens apart and locking the same in their relative adjusted positions comprising two telescoping hollow members, one slotted at its lower end, a band guided about this slotted end, oppositely disposed, perforated ears at the inner ends of said band, a screw bolt extending through the perforations of these ears, a head formed at one end of said bolt to limit its movement in one direction and a sleeve and hand wheel carried by the other end of said bolt for allowing a firm squeezing of the slotted lower end of one member about the upper end of the other member telescoping therein, a plug received in the upper end of the upper member and means securing the same therein, a head formed with said plug laterally projecting beyond the outer limits of the upper member at its upper end, a projection on the outer end of said head adapted to engage in a socket on the lower face of a window frame, a base for the lower end of one of said members undercut to form a depending lip adapted to engage the upper bar of a window frame, means for securing said foot on said member, and a rubber cushion on the lower end of said foot.

1,811,682. NONFERROUS ALLOY. RALPH L. BINNEY, Toledo, Ohio, assignor to The Binney Castings Company, Toledo, Ohio, a Corporation of Ohio. Filed July 31, 1929. Serial No. 382,591. 8 Claims. (Cl. 75—1.)

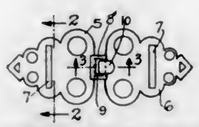
4. An alloy having high resistance to scaling and checking at high temperatures, the ability to withstand distortion, and low coefficient of expansion, the alloy containing from 40 to 80% copper, from 10 to 30% nickel, from 6 to 9% aluminum, from 6 to 9% zinc, and from an effective amount up to 5.0% vanadium.

1,811,683. MEANS FOR SUPPORTING AND EQUILIBRATING LAMP SHADES. JOHN ESTEN BOLLING, Mountain Lakes, N. J. Filed Mar. 8, 1930. Serial No. 434,224. 6 Claims. (Cl. 240—138.)



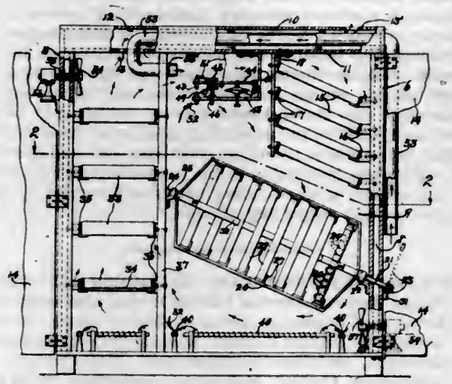
1. Means for supporting and equilibrating lamp shades, comprising pivotal supporting means permitting lateral swinging of the shade with respect thereto, and equilibrating weighting means disposed at separated points around the vertical axis of the shade to maintain the shade stationary with its said axis in a true vertical position at all times.

1,811,684. BUCKLE CONSTRUCTION. BORIS COOPER, New York, N. Y. Filed May 27, 1930. Serial No. 456,084. 1 Claim. (Cl. 24—75.)



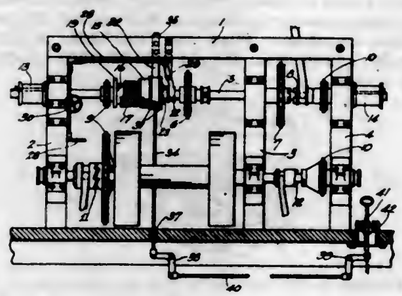
A metallic belt buckle combination cast to provide an eye member and a hook member, said members having the eye and hook portions thereof formed as an integral part of each of said members, and each of said members being also cast to provide integral belt engaging loops, and said eye portion and loops being out of the plane of the member with which they are cast.

1,811,685. INCUBATOR. LOUIS DE VRIES, Streator, Ill. Filed Oct. 20, 1928. Serial No. 313,761. 3 Claims. (Cl. 119—37.)



1. An incubator comprising a casing having a cradle mounted therein with its axis at an inclination from a horizontal line, egg trays mounted transversely and removably in said cradle for holding eggs therein, and handle means at the outside of said casing for turning the cradle and trays a half revolution and thereby turning the eggs.

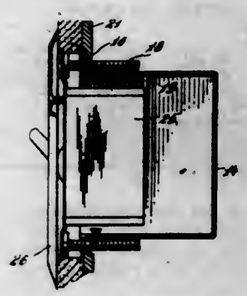
1,811,686. DIRECT PULLING PIPE SPINNING WINCH. WILLIAM H. ENDSLEY, Maud, Okla. Filed Feb. 14, 1929. Serial No. 339,925. 3 Claims. (Cl. 254—187.)



1. The combination with a standard draw works of a rotary well drilling outfit having a frame, said frame having two end posts and an intermediate post, a drum, a drum shaft carrying the same and supported on the posts, a line shaft supported on the posts, and means for driving said line shaft and said drum shaft, of a rope drum carried by said line shaft, means within said drum for operably connecting it to and disconnecting it from said line shaft, means for operating said connecting and disconnecting means from a point adjacent one of said end posts, a brake for said drum, and means for operating said brake from a point adjacent the other of said end posts.

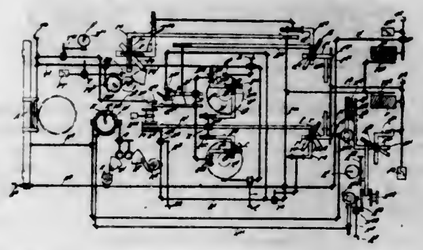
1,811,687. ADJUSTABLE OUTLET BOX. PHILIP GOLDBERG and NELSON L. COSTELLO, Mount Vernon, N. Y. Filed Feb. 15, 1930. Serial No. 428,600. 2 Claims. (Cl. 247—21.)

2. In a device of the class described, an outlet box adapted to house a switch unit, adjusting screws, ears on said outlet box, said ears being stepped down from the marginal edge of said box, said adjusting screws engaging said ears, a set screw mounted in said outlet box engaging said adjusting screw for securing the screw in adjusted position, a head on said adjusting screw, a plurality of aligned threaded openings, all but one of said threaded openings being offset from the axis of said adjusting screw, said adjusting screw when rotated being adapted to shift



on the central threaded opening selectively from one position to another to permit angular, sidewise or vertical displacement of said switch unit.

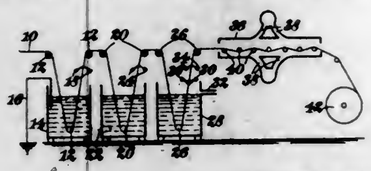
1,811,688. APPARATUS FOR USE IN THE LAYING OF ANTIAIRCRAFT GUNS. PERCY WILLIS GRAY, Westminster, London, England, assignor to Vickers Limited, Westminster, London, England. Filed Nov. 28, 1922, Serial No. 603,888, and in Great Britain Dec. 22, 1921. 23 Claims. (Cl. 235—61.5.)



1. Apparatus for use in the laying of antiaircraft guns, comprising elements adjustable in accordance with the initial horizontal range of a target, elements adjustable in accordance with the initial angle of bearing of the target, elements adjustable in accordance with the speed of the target in the horizontal plane, elements adjustable in accordance with the course of the target in the horizontal plane, elements adjustable in accordance with the height of the target and means jointly controlled by all of said elements for predicting the future position of the target after the lapse of a given interval of time.

5. Apparatus for use in the laying of anti-aircraft guns, comprising elements adjustable in accordance with the initial horizontal range of a target, elements adjustable in accordance with the speed of the target in the horizontal plane, elements adjustable in accordance with the course of the target in the horizontal plane, means associated with the elements adjustable in accordance with the speed and course of the target and adjustable in accordance with the rate of change of horizontal range, means for correcting the movement of said means in accordance with the effect of the wind on the shot, means for multiplying the corrected rate of change of horizontal range by the time of flight of the shot, a member movable by the last named means in accordance with the change of horizontal range, a part movable in accordance with the instantaneous horizontal range, means for mechanically adding the displacement of the member to that of the part and a member movable in accordance with the sum of said displacements.

1,811,689. MANUFACTURE OF SHEETS OR FILMS. HENRY JAMES HANDS, London, England, assignor to Spicers Limited, London, England, a British Company. Filed Aug. 20, 1928, Serial No. 300,932, and in Great Britain Aug. 30, 1927. 12 Claims. (Cl. 18—57.)



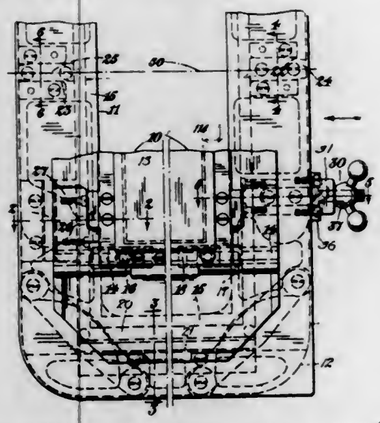
1. A process of the type described for the manufacture of cellulose acetate films, which consists in spreading in the form of a film on a supporting surface a solution of the cellulosic acetate in a volatile solvent, concentrating the solution by the evaporation of solvent therefrom, and removing the film from the supporting surface aforesaid and passing it through an electrically conducting aqueous bath which is capable of wetting the film and is electrically connected to earth.

1,811,690. DUPLICATING OR PRINTING APPARATUS. ROBERT HARRIS, London, England, assignor, by mesne assignments, to Lithoprintex Corporation, a Corporation of Delaware. Filed Sept. 17, 1926, Serial No. 136,017, and in Great Britain Sept. 25, 1925. 4 Claims. (Cl. 95—73.)



1. In photographic step-and-repeat contact-printing apparatus, the combination of a fixed support, a press member movable towards and away therefrom, leaf springs each connected at the middle of its length to said press member, and an unit-holding frame connected to the said springs at their ends, substantially as set forth.

1,811,691. PRESS-FRAME FOR DUPLICATING OR PRINTING APPARATUS. ROBERT HARRIS, London, England, assignor, by mesne assignments, to Lithoprintex Corporation, a Corporation of Delaware. Filed June 10, 1927, Serial No. 197,789, and in Great Britain Aug. 11, 1926. 9 Claims. (Cl. 95—73.)

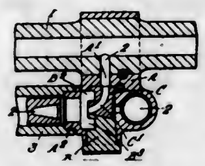


1. A press frame of the character described, comprising in combination a base member, a supporting member detachably mounted on the base member, a unit-holder for carrying a unit adjustably carried by said supporting member, clamping means for clamping said holder in its adjusted position on said supporting member, and holding means for removably securing the supporting member in its operative position on the base member, locating means for automatically locating said supporting member in its operative position on the base member in two directions at right angles to one another at the end of its sliding movement into its operative position, which said holder can be adjusted on the supporting member in two directions lying transversely to one another and also angularly in its own plane in relation to the supporting member when said clamping means is slack but is still carried by said holder or said supporting member.

1,811,692. ELECTROLYTIC RECOVERY OF ZINC. HARRY HEY and ARTHUR FANNIN EVANS, Melbourne, Victoria, and ROWLAND THOMAS DRYLL WILLIAMS and ARCHIBALD PHILIP NEWALL, Risdon, Hobert, Tasmania, Australia, assignors to Electrolytic Zinc Company of Australasia Limited, Melbourne, Australia. Filed Dec. 17, 1927, Serial No. 240,923, and in Australia Dec. 29, 1926. 2 Claims. (Cl. 204—18.)

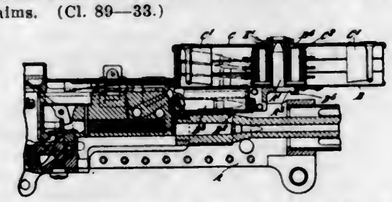
2. In the electrolytic recovery of zinc, the electrolysis of zinc sulphate solutions, containing a toxic substance of the nature of cobalt, the addition to the electrolyte of a soluble salt of antimony in such quantities as will provide an antimony content in the electrolyte of from about 0.1 to about 0.5 milligrams of antimony per litre.

1,811,693. GAS OPERATED MACHINE GUN AND AUTOMATIC SMALL ARM. CARL ALFRED LARSSON and PERCY REUBEN HIGSON, Westminster, England, assignors to Vickers-Armstrongs Limited, Westminster, England, a British Company. Filed Jan. 13, 1931, Serial No. 508,402, and in Great Britain Feb. 10, 1930. 4 Claims. (Cl. 42—3.)



1. For use in the gas block of a machine gun or automatic small arm of the gas operated type, a gas plug composed of a main part which is adapted to be secured in the gas block, and a subsidiary part which fits into the main part and is provided with a curved gas passage in the form of a recess opening on to one of the faces of said subsidiary part.

1,811,694. DRUM MAGAZINE FOR MACHINE GUNS AND AUTOMATIC SMALL ARMS. CARL ALFRED LARSSON and PERCY REUBEN HIGSON, Westminster, England, assignor to Vickers-Armstrongs Limited, Westminster, England, a British Company. Filed Jan. 13, 1931, Serial No. 508,405, and in Great Britain Apr. 10, 1930. 5 Claims. (Cl. 89—33.)



1. A drum magazine for use with a machine gun or automatic small arm in which the cartridges are withdrawn rearwardly from the magazine during the rearward movement of the lock or bolt, the said magazine comprising in combination a stationary pan portion and a movable cover portion serving to displace the cartridges step by step in order to bring them one at a time into a discharge opening in the base of said pan portion, an inclined chute or conduit which communicates with said discharge opening and conveys the cartridges into the required position for being extracted during the rearward movement of the lock or bolt, and a removable member at the lower or outer end of said chute or conduit, this member when in position serving to locate the lowermost or outermost cartridge in its extracting position and when removed opens the chute or conduit so as to enable the magazine to be recharged with cartridges.

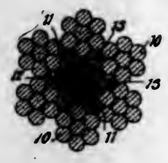
1,811,695. MANUFACTURE OF RUBBER ARTICLES FROM RUBBER LATEX. TULLIO GUIDO LEVI, Milan, Italy, assignor to Società Italiana Pirelli, Milan, Italy, a Corporation of Italy. Filed June 20, 1930, Serial No. 462,704, and in Great Britain June 27, 1929. 25 Claims. (Cl. 18—58.)

1. In the manufacture of rubber articles direct from normal rubber latex by local heating of the latex in the presence of a coagulant of such nature and in such proportion as to produce at the temperature of addition to the latex at the most a decrease in fluidity and on heating to the forming-temperature thickening and coagulation, the process which comprises subjecting the latex, prior to the introduction of the coagulant, to a period of moderate heating followed by cooling.

1,811,696. CARBON-FREE METAL. PAUL DYER MERICA, Westfield, N. J., and AUGUSTUS ERNEST KAYES, Huntington, W. Va., assignors, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed May 19, 1927. Serial No. 192,782. 2 Claims. (Cl. 75—66.)

1. The process of producing nickel-containing castings, which comprises melting the metal, subjecting it to a treatment which completely oxidizes any carbon present, boiling out the resultant gaseous oxides, and thereafter adding silicon and magnesium and substantially completely deoxidizing the nickel.

1,811,697. WIRE ROPE. FRANK WARD REILLY, Chattanooga, Tenn., assignor to Williamsport Wire Rope Company, a Corporation of Pennsylvania. Filed Feb. 19, 1930. Serial No. 429,546. 2 Claims. (Cl. 117—59.)



1. A wire rope for oil well pumping and analogous purposes, comprising a wire rope center including a plurality of strands, each of which consists of a plurality of wires, and a plurality of outer strands each consisting of a plurality of wires, the outer strands being in approximately direct contact with portions of the center strands and with longitudinal interstices between the outer and center strands, and fibrous packing impregnated with liquid proof material compressed and completely filling said interstices and preventing leakage of oil or other liquid surrounding the rope through the rope interstices.

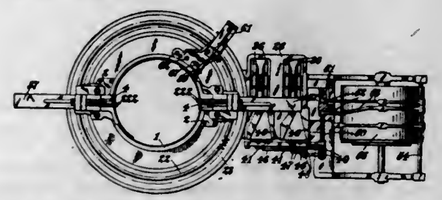
1,811,698. MANUFACTURE OF VANADIUM STEEL. BYRAMJI D. SAKLATWALLA, Crafton, Pa., assignor to Vanadium Corporation of America, Bridgeville, Pa., a Corporation of Delaware. Filed Dec. 20, 1928. Serial No. 327,480. 1 Claim. (Cl. 75—45.)

The process of making vanadium steel of controllable grain size, which comprises forming a molten bath of steel in which is incorporated a reducing agent and introducing vanadium into the bath partly in the form of a previously reduced vanadium alloy and partly in the form of an unreduced vanadium compound charged into the molten bath and reduced therein by the reducing agent present in the bath.

1,811,699. PREVENTION OF CAKING OF CRYSTALS, POWDERS, AND THE LIKE. ALEXANDER CRUICKSHANK SCOTT, Faversham, England. Filed Nov. 3, 1928, Serial No. 317,120, and in Great Britain Nov. 11, 1927. 8 Claims. (Cl. 23—243.)

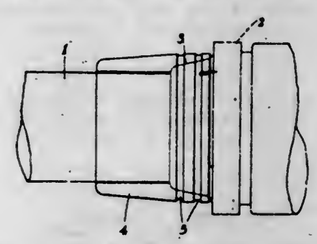
1. A method of preventing caking of a crystalline mass which consists in intimately incorporating with the said mass a proportion of asbestos fibre not exceeding 5%.

1,811,700. KNITTING MACHINE. EDWIN WILDT and HENRY HAROLD HOLMES, Leicester, England, assignors to Wildt & Company Limited, Leicester, England, a British Company. Filed July 12, 1927, Serial No. 205,181, and in Great Britain Sept. 8, 1926. 15 Claims. (Cl. 66—137.)



1. For a knitting machine having a needle-bed and needles therein, the combination of reverse-plating mechanism comprising interchangeable yarn-feeders relatively movable side-by-side in straight-line paths that are inclined with respect to the lengths of the needles in planes that are parallel to those lengths, individual selector means for every needle in succession in a plurality thereof at which yarn reversal is to be effected, and an operative connection between said selector means and said reverse-plating mechanism to enable reversal of the yarn-feeding positions to be effected optionally at each and every one of the said plurality of needles.

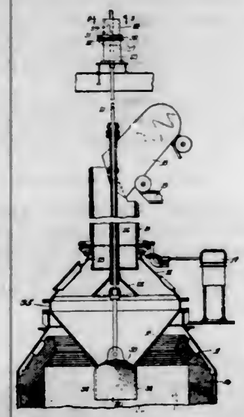
1,811,701. JOINTING OF LEAD OR LIKE PIPES OR SHEATHS. ALFRED EDGAR WILSON, Kent, England. Filed July 23, 1930, Serial No. 469,998, and in Great Britain July 31, 1929. 2 Claims. (Cl. 29—148.)



1. The method of jointing pipes (or other equivalent members), one of which by reason of its material, form or dimensions offers greater resistance to compression than the other, which comprises taking a sleeve of com-

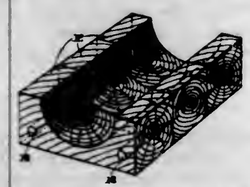
pressible metal, fitting it over the ends of the two pipes to be joined, arranging that at one end of the sleeve there is less resistance to the compression than at the other end, owing to the provision of spaces into which the metal can flow, the easier flow being at the end where the pipe offers the greater resistance to compression, and applying compression to the outside of the sleeve to compress it as a whole into contact with the ends of the two pipes.

1,811,702. FURNACE CHARGING BELL. CHARLES W. ANDREWS, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 1, 1928. Serial No. 250,970. 5 Claims. (Cl. 214—36.)



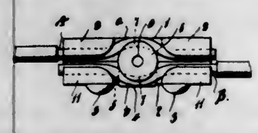
1. In a blast furnace or the like, a rotatable charging bell located interiorly of the top of the furnace, a hopper ring having a circular edge engaging the upper surface of the bell for closing the furnace top, said bell being of varying radial widths at different points on its circumference, and being substantially symmetrical about any vertical plane passed through the vertical axis of the bell.

1,811,703. BEARING. KARL W. ATWATER, Chicago, Ill., assignor to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed July 29, 1929. Serial No. 381,844. 5 Claims. (Cl. 308—238.)



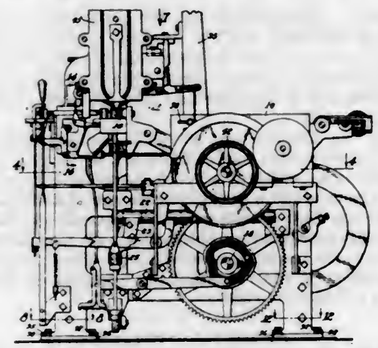
1. A bearing for rolling mills formed of a dense hard wood containing a natural lubricant, the bearing having the grain running approximately transversely of the bearing seat.

1,811,704. WIRE CONNECTER OR CABLE CLAMP. STEPHEN M. BAYUS, Bakersfield, Calif. Filed July 11, 1930. Serial No. 467,347. 3 Claims. (Cl. 24—125.)



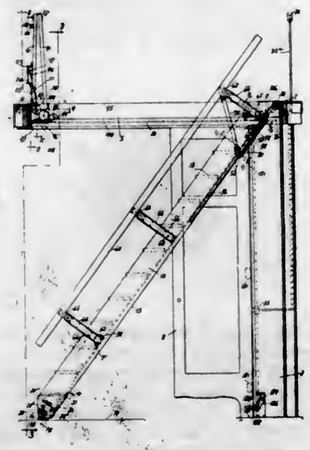
3. A wire connecter and cable clamp, comprising elongated blocks adjustably engaging one another, a laterally extending tongue on one block, the other block having a groove slidably mounting said tongue, a grooved post on the first block intermediate of its ends, a grooved offset on said block on each side of said post, a grooved offset on the other block on each side of the groove aforesaid, the grooved offsets and post being adapted to receive the meeting ends of wires or cables and the post to kink said wires or cables between the offsets on the respective blocks, and means to secure the blocks in assembled position.

1,811,705. POWER LOOM. CARL P. BERGSTROM, Millbury, Mass., and CARL J. LINDEGREN, Providence, R. I., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 15, 1929. Serial No. 332,691. 4 Claims. (Cl. 139—1.)



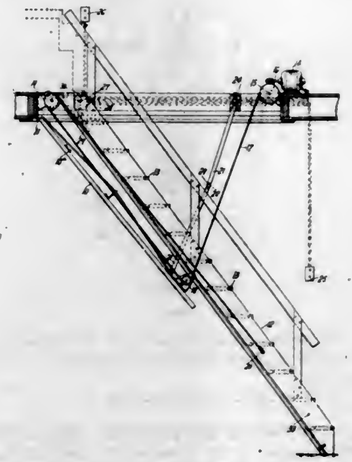
1. In a loom, a loom frame comprising loom sides each substantially flat and unobstructed on its outer face and having spaced finished bearing surfaces thereon, each loom side being provided with a plurality of relatively deep stiffening ribs on its inner face and with inner cored bearing portions supported by said ribs, and cross frame members having their ends abutting said inner bearing portions and firmly secured to said loom sides.

1,811,706. DISAPPEARING WALL STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to The Bessler Disappearing Stairway Company, Akron, Ohio, a Corporation of Ohio. Filed May 12, 1928. Serial No. 277,171. 26 Claims. (Cl. 228—50.)



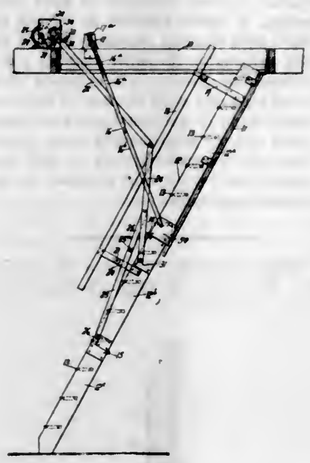
2. In a device of the class described, a ceiling having an opening therein, a pivoted support on one end of the opening, and a stairway longitudinally movable in the support from vertical to inclined position.

1,811,707. DISAPPEARING STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to The Bessler Disappearing Stairway Company, Akron, Ohio, a Corporation of Ohio. Filed July 20, 1928. Serial No. 294,275. 15 Claims. (Cl. 228—50.)



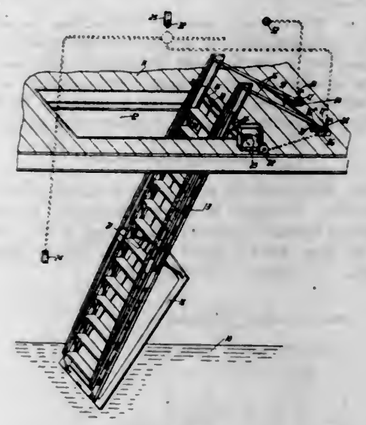
10. A disappearing ceiling stairway comprising a movable panel, a stair structure carried thereby and movable thereon, power means for moving the panel and for moving the stair structure on the panel, means for supplying power to the power means, and means actuated by movement of the panel and stair structure respectively to its retracted position and its position for use to disconnect the supply of power from the power means.

1,811,708. DISAPPEARING STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to The Bessler Disappearing Stairway Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 27, 1928. Serial No. 315,430. 19 Claims. (Cl. 228—50.)



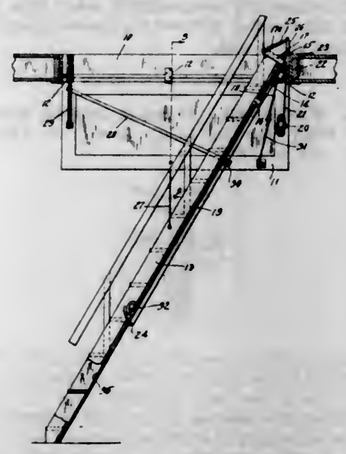
15. In a disappearing stairway adapted for use in an opening between a lower and upper floor, a movable panel closure for the opening, a foldable stair structure carried by the panel, means for opening and closing the panel, and means actuated thereby for positively unfolding and folding the stairway.

1,811,709. DISAPPEARING STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to The Bessler Disappearing Stairway Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 19, 1929. Serial No. 333,551. 10 Claims. (Cl. 228—50.)



5. In a disappearing stairway installation comprising a stair structure pivotally and slidably mounted to move through a ceiling opening to a position of use on the lower floor and having a panel on the lower portion for closing the opening when retracted, reversible power means for actuating the stairway, and means operable by movement of the stairway for stopping the power means and setting it in reverse when the stairway is moved into its position of use and into its retracted position.

1,811,710. DISAPPEARING STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to The Bessler Disappearing Stairway Company, Akron, Ohio, a Corporation of Ohio. Filed Apr. 4, 1929. Serial No. 352,556. 15 Claims. (Cl. 228—50.)

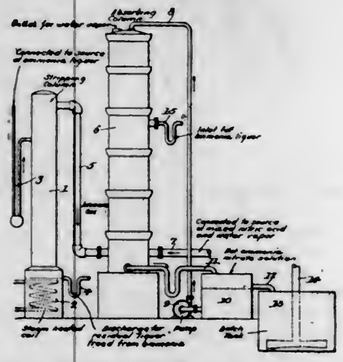


12. The combination in a disappearing stairway cooperating with a ceiling opening between lower and upper floors of a building, of a stair structure, mounting means for pivotally and slidably supporting the stair structure on one end of said opening, a closure panel hinged at one side of said opening, and means on the panel adapted to limit the pivotal movement of the stairway at a proper inclination when said stairway is extended to the lower floor.

1,811,711. PROCESS FOR MAKING SYNTHETIC MENTHOL. JOHN WILLIAM BLAGDEN, London, England, assignor of one-half to Howards & Sons Limited, Ilford, Essex, England. Filed June 19, 1924, Serial No. 721,137, and in Great Britain May 21, 1924. 18 Claims. (Cl. 260—153.)

1. In a process of making crystalline menthol by catalytic hydrogenation of cyclic ketones which yield on hydrogenation a mixture of crystalline menthol and a normally liquid product, the step which consists in adding to the ketone to be hydrogenated a quantity of the normally liquid constituent of the hydrogenated ketone.

1,811,712. METHOD OF MANUFACTURING AMMONIUM NITRATE. RICHARD N. BOYD, Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y., a Corporation of New York. Filed Dec. 14, 1927. Serial No. 240,012. 1 Claim. (Cl. 23—103.)



The method of concentrating an aqueous solution of ammonium nitrate, which comprises adding to such solution nitric acid occurring in vaporous condition with or without water vapor, and ammonia in vaporous condition, and simultaneously evaporating water from the ammonium nitrate solution, the latent heat of evaporation required to effect such evaporation being supplied solely from the heat evolved in the reaction between the gaseous ammonia and the vaporous nitric acid.

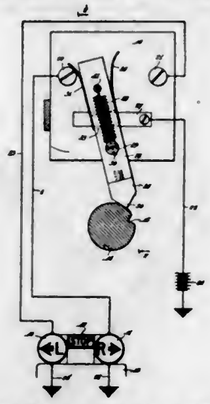
1,811,713. FASTENER. FRANK H. BROOME, Rutherford, N. J. Filed May 31, 1930. Serial No. 458,397. 4 Claims. (Cl. 24—67.)



1. A paper fastener comprising a substantially T-shaped member formed of a strip of flexible non-metallic material including a body and legs extending from the body and having extremities adapted for passage through openings provided in a plurality of sheets of paper, an adhesive upon one face of said extremities, and a relatively stiff reinforcing member secured to the body.

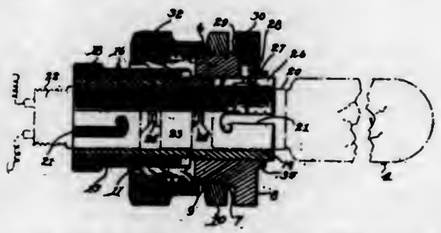
1,811,714. SWITCH. PETER T. CALAMARI, Deep River, Conn. Filed Nov. 4, 1927. Serial No. 231,105. 5 Claims. (Cl. 200—59.)

1. An electrical switch including a stationary block and a pair of spaced contacts thereon, a switch arm slidably fulcrumed intermediate its ends on the block for rocking movement across the face of the block, a pair of spaced spring contacts carried by one end of the arm engageable



with the respective fixed contacts as the arm is rocked, and a rotatable member operatively connected to the other end of the arm.

1,811,715. FOCUSING MECHANISM. GEORGE H. CUSHING, Washington, D. C., assignor to Cushing Lamp Incorporated, Washington, D. C., a Corporation of Delaware. Filed Feb. 16, 1929. Serial No. 340,570. 7 Claims. (Cl. 240—44.2.)



1. A device for adjusting the position of a filament of an electric light bulb relatively to a reflecting surface, comprising a tubular member mounted in fixed relation to a reflecting surface, a sleeve adapted to receive the base of an electric light bulb slidably mounted in said member, an internally and externally threaded bushing positioned between said sleeve and member, the external threads being of one hand and engaging with threads in said member, the internal threads being of another hand and engaging with threads on said sleeve, said bushing upon rotation being adapted to move the sleeve relatively to said member, and tightening means carried by said member for locking the sleeve in adjusted positions.

1,811,716. FIRE ALARM. THOMAS C. DUNCAN, Portsmouth, Va. Filed Sept. 5, 1930. Serial No. 479,989. 1 Claim. (Cl. 116—105.)



A device of the class described comprising a casing having explosive material therein, a fuse passing through one end of the casing and projecting therefrom, the other end of the casing being flattened and having a hole therein for receiving a nail or the like to fasten the device to a support and a covering of inflammable and waterproof material fitting over the casing and having one end extended and enclosing the projecting part of the fuse.

1,811,717. WINDSHIELD WIPER. WILLIAM C. ELLIXSON, Jackson, Mich. Filed June 6, 1930. Serial No. 459,543. 3 Claims. (Cl. 15—255.)



1. A windshield wiper comprising a block, a wiper strip carried thereby, a channel shaped member in which the block fits, means for adjusting the block to cause the strip to properly contact the windshield, an outer channel shaped member having flaring flanges and in which the first channel shaped member fits, scraper blades attached to the flaring flanges, a heating element arranged between the outer channel shaped member and the first channel shaped member for heating the scraper blades and means whereby the outer member can be detached from the other parts.

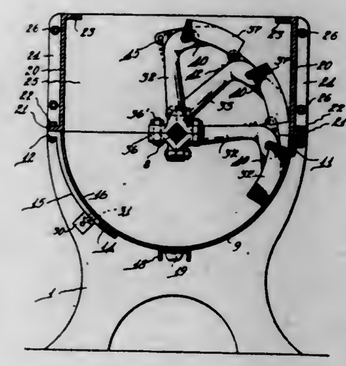
1,811,718. TRUNK. HANS HOFBAUER, Munich, Germany. Filed Jan. 13, 1928, Serial No. 246,559, and in Germany Aug. 12, 1926. 2 Claims. (Cl. 190—28.)



1. A joint structure of the character set forth for lidded containers, comprising counterpart double U-shaped members for respective attachment to the body and lid members of the container, each such member comprising a body portion, a short flange extending from said body portion, and a relatively longer flange extending from said body portion in substantial parallelism with said shorter flange and spaced therefrom, to form a channel between the two flanges, the shorter flange being set back from the outer plane of the body portion to substantially an extent of the width of the longer flange, and a compressible sealing means in said channel, the two opposed joint members when in interlocking position forming a doubly sealed four-flanged interengagement.

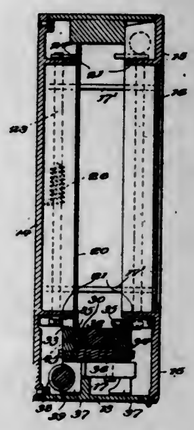
1,811,719. MIXING MACHINE. FRANCIS JOHNSON, Detroit, Mich. Filed Mar. 1, 1929. Serial No. 343,588. 6 Claims. (Cl. 83—73.)

1. In a mixing machine, side and end members forming an enclosure open at its top and bottom, parallel retaining members attached to the lower edges of said side members, one of said retaining members being detachable, a bottom member at the bottom of said enclosure between said retaining members and abutting said retaining members, and



a supporting member on which said bottom member rests, said supporting member being spaced from said detachable retaining member to permit withdrawal of the bottom member in a direction transverse of said enclosure, on removal of said detachable retaining member.

1,811,720. ADVERTISING EXHIBITOR. ALBERT J. KAUFFMAN, Hollywood, Calif. Filed Sept. 23, 1929. Serial No. 394,594. 3 Claims. (Cl. 40—79.)

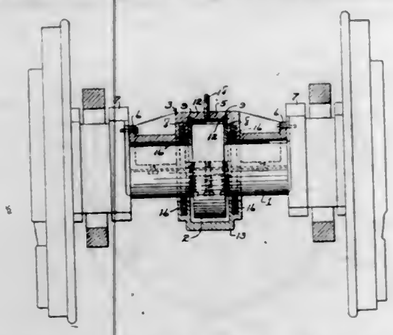


1. An advertising exhibitor including a casing equipped with a fixed advertising card receiving platform, a card transfer carriage slidably engaged with said platform, and anti-friction means interposed between the carriage and platform.

1,811,721. LATERAL ELIMINATOR. JOSEPH J. KECK and ERNEST E. KELLEY, Parsons, Kans. Filed Mar. 10, 1930. Serial No. 434,776. 4 Claims. (Cl. 105—80.)

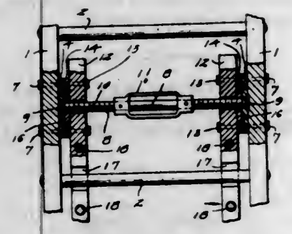
2. In combination with an axle and its journal boxes, said axle having a centrally arranged circular enlarge-

ment, a housing extending between the boxes and secured at its ends thereto and having a semi-circular chamber therein for receiving a part of the enlargement, an oil pan,



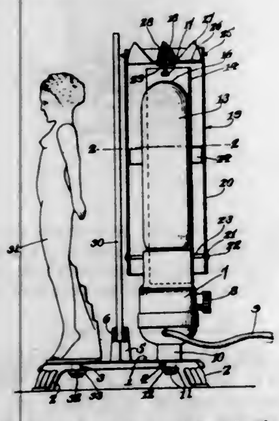
bolts connecting the pan to the under part of the chamber and compression springs on the bolts, said pan enclosing the lower part of the enlargement.

1,811,722. LADDER. WILLIAM H. KIMBERLIN, Natchez, Miss., assignor of one-half to William Henry Beatty, Natchez, Miss. Filed May 11, 1929. Serial No. 362,313. 6 Claims. (Cl. 228—64.)



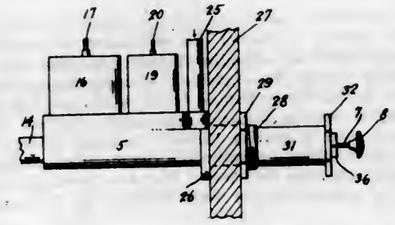
1. A ladder structure of the character described comprising rung connected side members, oscillatable prop legs adjustable relative to said members, means for shifting said prop legs laterally of the side members and relative to one another, and means for securing the prop legs in one shifted position.

1,811,723. LIGHT EFFECTING DEVICE. ALVIN C. LOEWER, Parkville, Md. Filed Apr. 7, 1930. Serial No. 442,420. 5 Claims. (Cl. 240—10.)



1. In a device for the purpose set forth, a base provided on its upper face with a socket, a vertically disposed light diffusion member mounted in said socket, an upstanding light source coupled to the base rearwardly of said member, an object coupled to the base forwardly of said member, a vertically disposed, resilient, cylindrical reflector split from end to end surrounding the light source, said reflector gradually increasing in diameter from its lower to its upper end, the split ends of said reflector being arranged in spaced relation to provide a light ray passage, a diametrically disposed bar secured within said reflector adjacent the larger end of the latter and provided on its outer face with a tapered pin and a revoluble light ray color changer element supported upon the pin and enclosing the reflector when interposed between the reflector and said member.

1,811,724. MEASURING FAUCET. JOE R. MANLEY, East Liverpool, Ohio. Filed June 14, 1929. Serial No. 370,986. 2 Claims. (Cl. 225—26.)

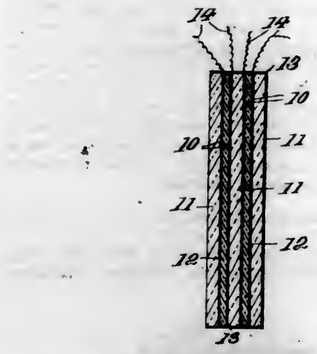


1. In a device of the kind described, a measuring faucet comprising an elongated hollow body, a water supply pipe connection at one end, a water container mounted on said body near the water pipe connection, having a passage communicating with the interior of said hollow body, a syrup container mounted intermediate the water container and the other end of the hollow body and having an outlet port and an inlet port communicating with said interior of said hollow body, a syrup supply pipe mounted in the hollow body intermediate the syrup container and the spigot end thereof and communicating with the interior of said hollow body, a slidable closed ended hollow mixing cylinder having ports registrable with the outlet passage in the water container and the outlet port of the syrup container, and other ports registrable with the inlet port of the syrup container and the syrup supply pipe, respectively, and said cylinder having a depression in the side of said cylinder to cooperate with the inlet port of the syrup container and the syrup supply pipe to form thereby a passage for syrup from the supply pipe to the syrup container when the cylinder is moved to close all the other passages in said hollow body except the water inlet port to the water container, and discharge passages near the spigot end of the cylinder to discharge its contents into the said spigot, and a cylinder operating push rod journaled in the end of the hollow body and connected to the companion end of the cylinder, an annular shoulder on the inner surface of the hollow body to act as a stop and form with the closed end of the cylinder a spigot valve, a spring associated with the push rod to return the cylinder end, when the push rod is released, to abutting relation with said shoulder to close the spigot, said shoulder operating push rod adapted to be pressed inwardly toward the hollow body to register with the outlet port of the spigot and water container and discharge the contents thereof through the cylinder and through said spigot and to dispense the same, and air vents in the containers for permitting gravitational discharge of the contents thereof.

1,811,725. ELECTRICAL DEVICE AND METHOD OF MAKING THE SAME. OTTO S. MARCKWORTH, Columbus, Ohio. Filed Sept. 18, 1922. Serial No. 588,922. 5 Claims. (Cl. 175—41.)

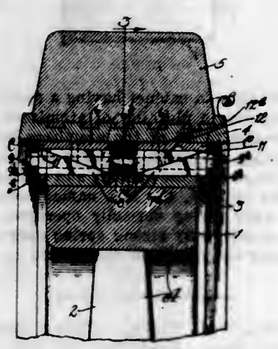
1. The method of constructing a composite article comprising first producing components for said article by

applying a permanent conductive surface coating to each one of a plurality of sheets of dielectric material, moistening binder sheets with a solvent which is normally incapable of attacking the binder sheet, so that the condition of said binder sheet remains unchanged during the application of the solvent, interposing the moistened binder sheets



between and in contact with the coated surfaces of two or more of said components, and finally causing said solvent to become sufficiently active to soften the moistened portions of said binder sheets so as to cause the moistened surfaces to unite with contiguous coated surfaces of other components.

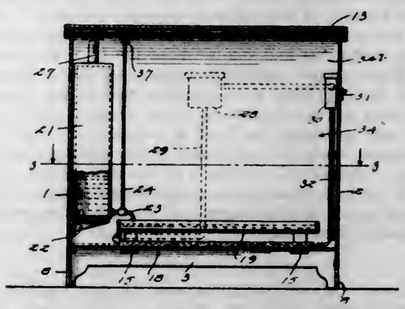
1,811,726. WHEEL CONSTRUCTION. WILLIAM C. MARTIN, Chicago, Ill., assignor to John H. Lee, Oak Park, Ill. Filed Aug. 3, 1928. Serial No. 297,158. 7 Claims. (Cl. 301—20.)



1. In combination; a wheel-center; an encircling tire having an annular base; a pair of rings interposed between the wheel-center and said annular base; a series of wedge-devices associated with each ring, comprising a circle of wedge-blocks within the ring having out-turned points and a circle of complementary wedge-blocks within the first-mentioned circle having inturned points, each pair of blocks associated with one ring being in alinement with a pair of blocks associated with the other ring; and an annular series of bolts, each bolt extending through two alined pairs of blocks and serving to draw the inwardly tapering members thereof together.

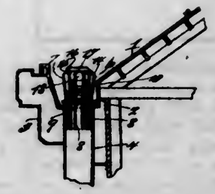
1,811,727. ELECTRIC HUMIDIFIER. CLIFFORD C. McCLOUD, Mayville, Wis. Filed Sept. 17, 1929. Serial No. 393,295. 4 Claims. (Cl. 219—38.)

1. A humidifier comprising a cabinet provided at its lower side with an air inlet and at its front side with an air outlet, a deflector arranged within the cabinet and extending from the upper edge of the front side of the cabinet to a point adjacent the lower edge of the rear side of the cabinet, a hinged top for the cabinet, a pan arranged within the cabinet and adapted to contain water, a water supply tank arranged within the cabinet and provided with a filling opening arranged rearwardly of the deflector, a



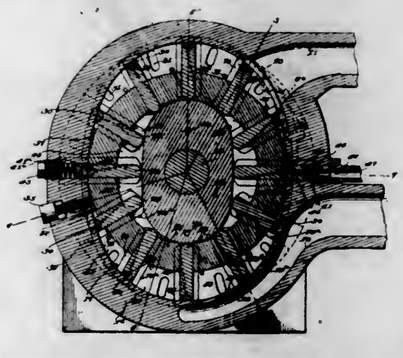
closure for said opening, a pet-cock extending from the lower end of the tank and discharging into the pan, a rod extending from the pet-cock to a point above the deflector, and a heating element arranged within the cabinet below the pan.

1,811,728. DRAINAGE DEVICE FOR ROOF GUTTERS AND THE LIKE. ROBERT MCKEE, Philadelphia, Pa. Filed May 31, 1929. Serial No. 367,562. 4 Claims. (Cl. 210—170.)



1. A drain device for roof gutters and drain pipes, comprising a cage having depending yieldable stays, which engage within the drain pipe, said cage having an apex cap supported at the top of the device, a plurality of cylindrical concentric spaced rings operatively supported within the cage at gradually increasing heights, thereby arranging the rings in conical formation.

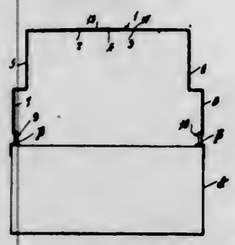
1,811,729. ROTARY ENGINE. HENRY F. MOLKENBUR, Bellaire, White Bear Lake, Minn. Filed Apr. 22, 1926. Serial No. 103,944. 10 Claims. (Cl. 123—16.)



1. A rotary engine comprising a housing having elliptical shoulders, a rotor revolubly mounted about the shoulders,

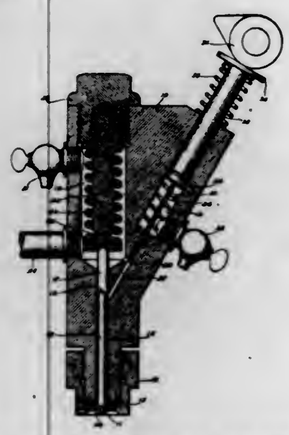
said rotor having radial slots, abutments slidably mounted in said slots and having their inner ends riding over the elliptical shoulders for causing radial movement of the abutments, said housing having an elliptical inner wall engaged by the outer free ends of the sliding abutments, the rotor being in contact with the elliptically shaped wall of the housing at diametrically opposite points, but spaced from the remaining portion of said wall, the spaces formed by the abutments and side walls of the rotor and housing providing variable compression and combustion chambers, means for supplying a combustible fluid to the chambers at a point in the travel of the rotor where said abutments have been extended the limit of outward movement, and an exhaust conduit connected with the housing, said rotor having a cylindrical portion and annular flanges at each end of the cylindrical portion, and lateral chambers being located in one of the flanges, and communicating with the combustion and compression chamber.

1,811,730. GRAPPLE FOR STORAGE BATTERIES AND THE LIKE. HARRY E. NEWTON, Hardy, Iowa. Filed May 28, 1930. Serial No. 456,479. 2 Claims. (Cl. 294—106.)



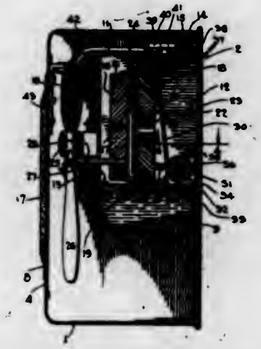
1. A grapple for storage batteries and the like, comprising two strips of rigid material hingedly secured together end to end, each of said strips being downturned intermediate of their ends, the extremities of said downturned portions being inturned to provide grappling jaws, and the side edges of the hinged ends of the strips being curled upwardly to strengthen said portions of the strips and to provide a handhold, said upwardly curled edges tapering in width from the hinged portion outwardly therefrom.

1,811,731. COMBINED FUEL MEASURING PUMP AND FUEL FEED VALVE FOR INTERNAL COMBUSTION ENGINES. VERN REED PETTY, Brooklyn, N. Y. Filed Sept. 30, 1926. Serial No. 138,800. 1 Claim. (Cl. 123—139.)



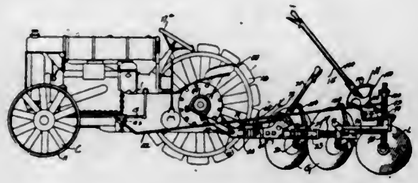
A combined fuel measuring pump and fuel feed valve for internal combustion engines, comprising a body having a vertical portion, a supply chamber in the upper part thereof and a discharge chamber in the lower part thereof, an integral angularly related portion containing a pressure chamber communicating with said supply and discharge chambers and also containing a recess located above said pressure chamber, a plunger slidably mounted in said pressure chamber and extending into said recess, said plunger having a shoulder, a coil spring on said plunger and bearing against said shoulder, means for actuating said plunger, an oil bleeder valve communicating with the lowermost part of the recess, an air bleeder valve communicating with the uppermost part of said supply chamber, a supply tube communicating with said supply chamber, a valve located in said discharge chamber and having a smaller diameter than said chamber, an enlarged portion of said valve extending into said supply chamber and means for urging the valve to closed position.

1,811,732. CABINET. ALBERT PFEIFER, New York, N. Y. Filed Oct. 31, 1927. Serial No. 230,079. 9 Claims. (Cl. 167—3.)



1. In combination, a cabinet having a door, a sterilizing apparatus including a plurality of atomizers, a tank, and a bellows common to all of the atomizers to operate the same, a plurality of article supports for each atomizer, mechanism operated by the opening and closing of the door to operate the bellows, the last named means including a relatively weak spring normally operative to open the bellows, and a relatively strong spring operative to close the bellows and the door and compressed by the opening of the door.

1,811,733. TRACTOR PLOW. JOSEPH HERSCHEL TAYLOR, Athens, Tenn. Filed Nov. 19, 1928. Serial No. 320,367. 7 Claims. (Cl. 97—47.)



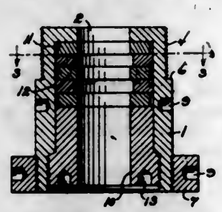
1. In a tractor plow the combination of a tractor including rear running and traction gearing including an axle housing and a draw bar cap connected therewith between its ends, a hitch member connected at its ends to the axle housing and intermediate its ends having a coupled connection with the draw bar cap, a plow frame, and means connecting the plow frame with the hitch member at opposite sides of the draw bar cap for sliding movement along the hitch member and pivoted vertical movement.

1,811,734. PLANOGRAPHIC PRINTING PLATE HAVING MERCURIALIZED INK REFUSING AREAS FOR PHOTOMECHANICAL PRINTING. ARTHUR RONALD TRIST, London, England, assignor to William Y. Dear, Montclair, N. J., as trustee. Filed Apr. 8, 1927, Serial No. 182,059, and in Great Britain May 18, 1926. Renewed Oct. 28, 1930. 13 Claims. (Cl. 41—41.5.)



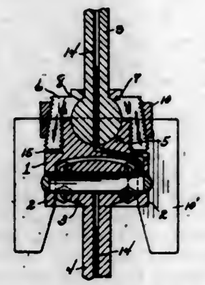
7. A planographic printing plate comprising printing areas of chromium, and non-printing areas of mercurial amalgam.

1,811,735. PACKING GLAND. FRANK VAN BEZEL, El Centro, Calif., assignor to Dual Aircraft Motors Inc., Ltd., El Centro, Calif. Filed July 19, 1929. Serial No. 379,465. 1 Claim. (Cl. 286—35.)



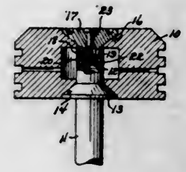
In combination with a member having a threaded hole therein and a flat shoulder surrounding the lower end of the hole and a second member having a hole therein of greater diameter than the threaded hole, a gland having its body provided with a reduced upper part exteriorly threaded to fit in the threaded hole, the shoulder formed at the junction of the reduced part with the other part of the body engaging the shoulder on the first member and the lower part of the body passing through the hole in the second member, a nut threaded on the lower end of the body and bearing against the second member, packing rings in the body and a removable retainer threaded in the lower part of the body for holding the packing rings in place.

1,811,736. PISTON ROD COUPLING. FRANK VAN BEZEL, El Centro, Calif., assignor to Dual Aircraft Motors Inc., Ltd., El Centro, Calif. Filed July 19, 1929. Serial No. 379,466. 1 Claim. (Cl. 287—87.)



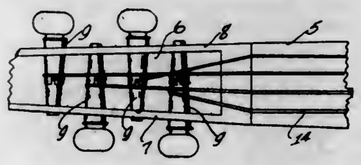
A universal connection comprising a body having a reduced upper part exteriorly threaded, a split nut engaging the threaded part, said upper part of the body and the nut having recesses therein forming a spherical socket, a member having a spherical enlargement fitting in the socket, a lock nut engaging the split nut, said split nut having a tapered exterior which is threaded to receive the lock nut and said lock nut having a tapered interior to fit over the tapered part of the split nut.

1,811,737. PISTON AND ROD CONNECTION. FRANK A. VAN BEZEL, El Centro, Calif., assignor to Dual Aircraft Motors Inc., Ltd., El Centro, Calif. Filed July 11, 1930. Serial No. 467,367. 2 Claims. (Cl. 74—108.)



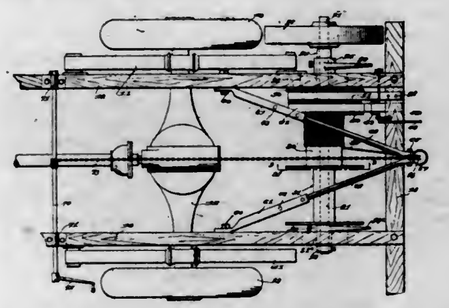
1. In combination, a piston having an opening therethrough and beveled seats at each end of the opening, a rod having a hollow interiorly threaded end within said opening, a beveled collar integral with the rod adjacent said end and engaging one of the beveled seats of the piston, a beveled plug engaging the other seat of the piston, a split threaded stem carried by the plug for removable engagement with the threaded end of the rod, and means to force the threads of the stem into binding engagement with the threads of the rod to lock the parts against relative movement.

1,811,738. MUSICAL INSTRUMENT STRING SECURING DEVICE. CALVERT B. WILLIAMS, Santa Cruz, Calif. Filed May 23, 1930. Serial No. 455,039. 2 Claims. (Cl. 84—297.)



1. A musical instrument string securing device comprising a rotatable tuning peg, a ring positioned on said peg, said peg and said ring having coinciding openings extending therethrough and adapted to grip a string passing through said openings.

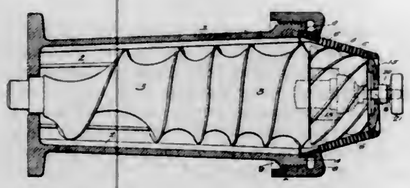
1,811,739. ATTACHMENT FOR TRUCKS. REUBEN M. WILLIS, CARTER A. WILLIS, and GORDON J. WILLIS, Chanute, Kans., assignors to The Willis Drilling Machine and Manufacturing Company, Chanute, Kans., a Corporation of Kansas. Filed June 25, 1928. Serial No. 288,169. 4 Claims. (Cl. 254—166.)



1. An attachment for a truck provided with traction wheels, comprising a frame, a cable, a derrick mounted on the frame for supporting the cable, a shaft mounted

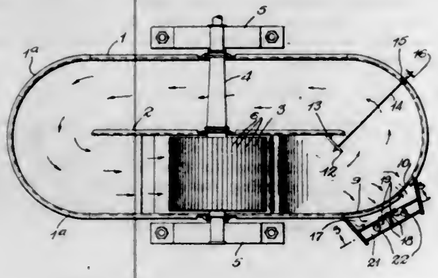
on the frame, a pulley on the shaft, eccentrics receiving the shaft and adapted when actuated for laterally displacing the shaft and pulley for causing the pulley to frictionally engage a traction wheel, and spools driven by the shaft and connected with the cable for winding up the cable.

1,811,740. MEAT CHOPPER. CHARLES W. ASBURY, Philadelphia, Pa., assignor to The Enterprise Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1929. Serial No. 341,753. 2 Claims. (Cl. 146—185.)



1. The combination in a chopper for meat and like substances, of a barrel; a frusto-conical perforated cutting head; means for detachably securing the cutting head to the barrel; a feed screw in the cutting head; a cutter having spiral blades and mounted on the end of the feed screw and arranged to turn therewith, the blades of the cutter extending to the end thereof, the cutting head being open at the end; a plate arranged to close said opening; and means for attaching the plate to the rotating cutter, so that on detaching the plate the clogged material can be removed.

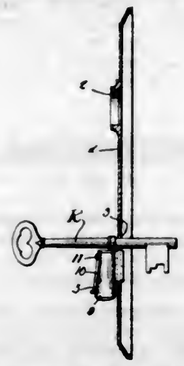
1,811,741. CONTINUOUS BEATER FOR PAPER MAKING. BENJAMIN M. BISHOP, Terre Haute, Ind., assignor to The Terre Haute Paper Company, Terre Haute, Ind., a Corporation of Ohio. Filed Oct. 7, 1929. Serial No. 397,990. 5 Claims. (Cl. 92—23.)



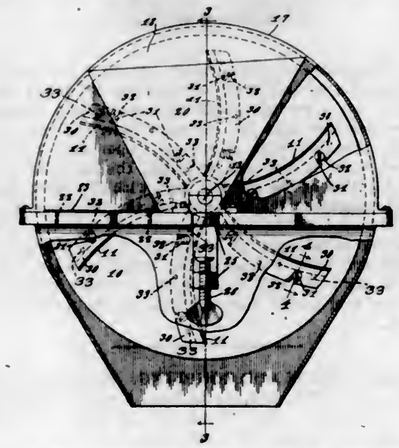
1. In a continuous beating machine, the combination with a tub having an enclosing wall, a mid-feather, a beater-roll and cooperating bed-plate, and a back-fall in rear of the beater-roll, of a screen interposed in the wall and forming a part thereof, and arranged rearwardly of the back-fall, said screen being curved transversely and so arranged that the pulp flowing over the back-fall impinges against the inner face of the screen, and a vertical deflector supported by the mid-feather in angular position for deflecting the pulp horizontally toward the screen.

1,811,742. KEYHOLE GUARD. ALICE L. BREWER, East Hartford, Conn. Filed Jan. 15. 1931. Serial No. 508,958. 2 Claims. (Cl. 70—7.)

1. A guard attachment for keyholes comprising a tubular casing longitudinally split on one side, an outwardly directed extension at each side edge of the split portion, an outwardly directed lug at the outer end of each extension to be engaged with the edge walls of a keyhole, and a wedge member in the casing to prevent movement of the lugs toward each other.



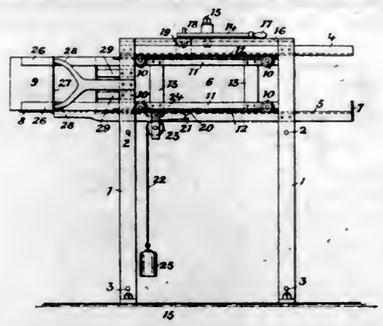
1,811,743. CUTTER FOR VEGETABLES AND FRUITS. AUGUST BROMBERG, Wauwatosa, Wis., assignor of one-half to Enos L. Dillon, Milwaukee, Wis. Filed July 20, 1928. Serial No. 294,160. 1 Claim. (Cl. 146—114.)



A cutter including a casing having a hopper and a discharge neck, a cutter disk journaled in said casing and having knife grooves each including a straight side wall and an oppositely inclined side wall, adjusting screws threaded into the disk at the grooves, cutting blades positioned in the grooves with the cutting edges disposed adjacent the inclined side walls and having slots opening outwardly through the non-cutting edges thereof to receive the screws to permit the blades to be adjusted to vary the cutting edges towards and from the inclined walls and set screws carried by the disks at the opposite side of the disks from the adjusting screws and bearing against the blades and cooperating with the adjusting screws in varying the inclination of the cutting edges of the blades relative to the inclined side walls of the grooves.

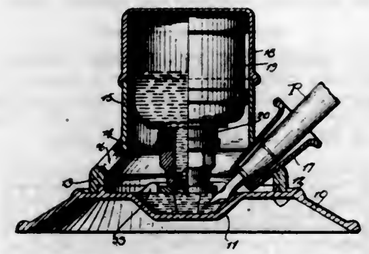
1,811,744. METHOD OF AND APPARATUS FOR TYING PACKETS. HUGO BRÜNINGHAUS, Barmen-Wichlinghausen, Germany. Filed Sept. 21, 1929, Serial No. 394,371, and in Germany Sept. 25, 1928. 11 Claims. (Cl. 140—93.)

1. An apparatus of the kind described, comprising a frame, a carriage adapted to run thereon and to receive a packet to be tied, angle pieces mounted on said carriage and adapted to abut on parallel edges to be embraced by a tying means, of the packet upon said carriage running



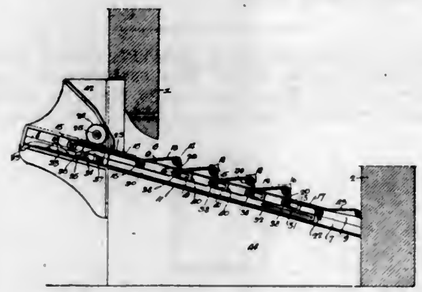
in one direction, and means for shifting the packet out of said angle pieces and carriage upon the latter running in opposite direction.

1,811,745. READY DIP INKWELL. JAN P. CLARY, Hartford, Conn. Filed Mar. 31, 1930. Serial No. 440,437. 9 Claims. (Cl. 120—59.)



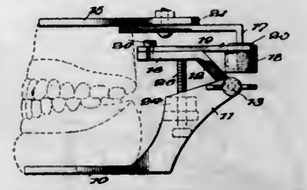
1. In an ink well, a base having a central well portion, a casing having pen openings and mounted on said base and adapted to contain an inverted ink bottle, the lower edge of the casing being spaced from the central well, an ink bottle, and a normally closed valve in the neck of said bottle arranged to open upon proper positioning of the bottle in the casing with the lower end of the bottle terminating at the upper end of the well and spaced from the sides of the well whereby a pen inserted in the pen opening may enter the well beneath the bottle.

1,811,746. STOKER. EDMUND J. CLERGET, Chicago, Ill., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 19, 1924. Serial No. 732,971. 10 Claims. (Cl. 110—33.)



1. A grate structure comprising a longitudinal series of pivotally connected grate and hinge plates, said grate plates alternating with said hinge plates, and tripping means operable to cause the buckling of pairs of said grate and hinge plates upon an application of force to one end of said grate structure.

1,811,747. DENTAL ARTICULATOR. LUCIAN G. COBLE, Greensboro, N. C. Filed Aug. 21, 1929. Serial No. 387,483. 2 Claims. (Cl. 32—1.)



2. In a dental articulator, the combination of a lower jaw, a sectional upper jaw, a pivotal connection between said jaws, and a receptacle on one of said jaws capable of retaining in liquid form a readily fusible metal when the articulator is in its normal upright position, a portion of the other jaw extending into the receptacle and held rigidly upon solidification of the material in the receptacle.

1,811,748. NECKTIE. CARLO DI TOSTO, Patchogue, N. Y. Filed Aug. 15, 1929. Serial No. 385,988. 2 Claims. (Cl. 2—150.)



1. A necktie comprising a hollow member tapering from each end to its center, a tie body provided with folds and having the upper portion thereof covering the front and sides of the hollow member, a knot forming portion covering the upper portion of the tie body and the upper portion of the hollow member with the ends thereof secured together at the rear of said hollow member, said knot forming portion extending over one edge of said hollow member and disposed against the inner face thereof, a neck band having the ends thereof passing through the hollow member, a latch means for pressing portions of the neck band against the hollow member, a wedge member in the upper part of the hollow member for clamping a portion of the knot forming portion in the hollow member, the free ends of the neck band entering the folds of the tie body, and means for connecting the edges of the folds together to hold said ends of the neck band in place.

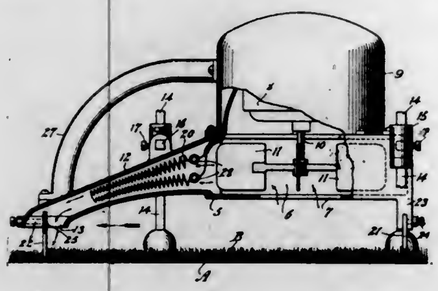
1,811,749. POWDER PUFF OR DIP. MARIE E. FROMERT, East Rockaway, N. Y. Filed Mar. 14, 1931. Serial No. 522,698. 5 Claims. (Cl. 132—78.5.)



1. The method of manufacturing powder puffs consisting in rolling fibrous material into compressed rolls,

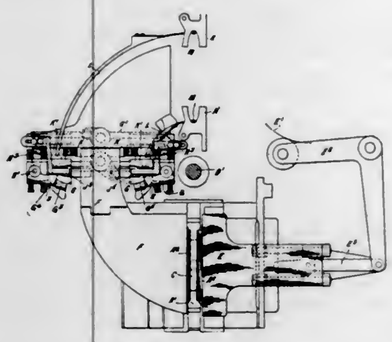
coating these rolls with translucent material, removing a part of the translucent material to leave a handle, and fluffing the fibrous material out where the protector has been removed.

1,811,750. FUR TREATING DEVICE. BENJAMIN FURGANG, Brooklyn, N. Y. Filed July 20, 1929. Serial No. 379,803. 6 Claims. (Cl. 149—24.)



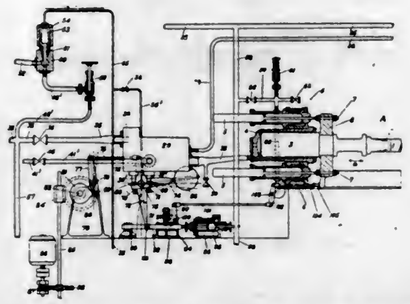
2. In a device for the treatment of fur or pelts adapted for movement over the fur or pelt, a casing defining a draft chamber having an inlet and formed with a downwardly directed outlet nozzle, a rotary impeller within the draft chamber for drawing air into the inlet and expelling the same from the outlet nozzle, and means for supporting the casing for movement over the fur or pelt.

1,811,751. MACHINE FOR WRAPPING CIGARS AND OTHER ELONGATED BODIES. FREDERICK GROVER, Leeds, England, assignor to The Forgrove Machinery Company Limited, Leeds, England. Filed July 25, 1928, Serial No. 295,127, and in Great Britain Aug. 16, 1927. 6 Claims. (Cl. 93—7.)



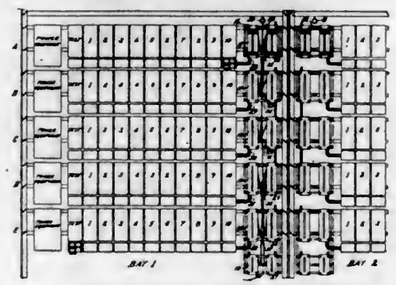
1. A machine for wrapping cigars and other elongated bodies, comprising in combination means for enclosing the body in a tubular wrapper the ends of which wrapper project beyond the body, means for holding the body thus enclosed in the tubular wrapper, male and female dies located at opposite ends of the tubular wrapper, means for approaching the male and female dies towards each other transversely of the body, means for distancing such male and female dies after the under ends of the wrapper have been bent upwards to form two side ears, a transversely moving finger adapted to turn inwardly one side ear fold of the two side ear folds formed by the dies at each end of the body, means for turning inwardly the other side ear fold in the opposite direction to overlap the first side ear fold, and means for turning down the central projecting ear fold formed by the turning in of the side ear folds.

1,811,752. INSTALLATION FOR FORCING VISCOUS FLUID INTO CONTAINERS. THOMAS EDMUND HOLMES, Glasgow, Scotland. Filed Feb. 26, 1930, Serial No. 431,554, and in Great Britain Mar. 1, 1929. 13 Claims. (Cl. 103—48.)



1. An installation for forcing viscous liquid into a receiver, comprising a hydraulic cylinder, a cylinder for viscous liquid adjoined with said hydraulic cylinder, a forcing ram presenting a high pressure end working in said cylinder for viscous liquid and a low pressure end working in said hydraulic cylinder, inlet and delivery valves for said cylinder for viscous liquid, and fluid pressure means for operating said inlet and delivery valves.

1,811,753. AUTOMATIC TELEPHONE SYSTEM. OLE C. HOVLAND, Chicago, Ill., assignor to Reserve Holding Company, Kansas City, Mo., a Corporation of Delaware. Filed Nov. 23, 1928, Serial No. 321,353. Renewed May 15, 1930. 22 Claims. (Cl. 179—98.)



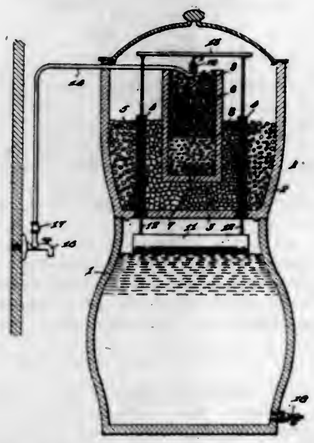
6. In a telephone system, a plurality of groups of connector switches, a terminal block mounted adjacent to each group, bank cables connecting from the banks of said connector switches to said terminal blocks, other terminal blocks mounted adjacent the first-mentioned terminal blocks, respectively, and facilities for running jumpers between the first-named terminal blocks and the said other terminal blocks.

1,811,754. ELECTRICALLY HEATED SALT BATH FURNACE. AXEL GUSTAF EMANUEL HULTGREN, Soderfors, Sweden. Filed June 10, 1930, Serial No. 460,231, and in Sweden Feb. 25, 1930. 4 Claims. (Cl. 13—1.)



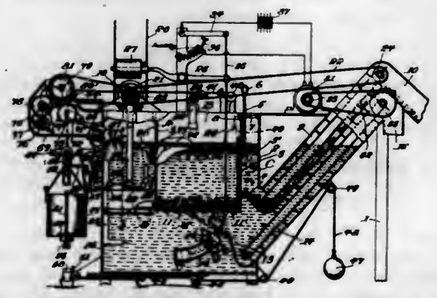
1. Salt bath furnace for heating of tools and other metal objects, in which heat is supplied by electric current passing through the salt, having an even number of electrodes arranged in pairs in the crucible in such a manner that the space to be occupied by the immersed objects is not traversed by any straight current paths drawn between coordinated electrodes.

1,811,755. WATER FILTER. VIRGIL S. JOHNSTON, Huntington Park, Calif. Filed Oct. 6, 1930. Serial No. 486,839. 2 Claims. (Cl. 210—104.)



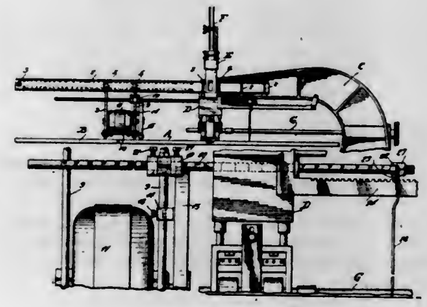
1. A filter of the class described comprising upper and lower receptacles, a tube passing through the bottom of the upper receptacle and extending to a point well above the bottom of the said receptacle, filtering material in the upper receptacle through which the tube passes, a small container in the upper receptacle having an opening in its bottom, filterng material in the small contniner, said small container having its lower part embedded in the filtering material in the upper receptacle, a flont in the lower receptacle, a rod connected with the float and passing through the tube, a projection on the upper end of the float, a supply pipe extending into the upper receptacle and arranged above the small container therein and a normally closed valve in the pipe engaged by the projection on the rod when the float lowers to open the valve.

1,811,756. SEPARATING JIG. PETER MARADEO, Nesquehoning, Pa. Filed Nov. 24, 1928. Serial No. 321,628. 4 Claims. (Cl. 209—496.)



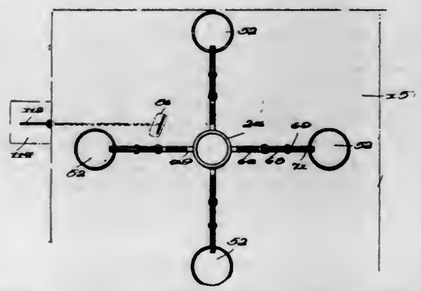
1. A jig of the class described comprising a tank having a plunger chamber, a plunger in the plunger chamber, means for operating the plunger, a discharge door in the bottom of the tank, valve controlled means for supplying water to the tank, automatic means for opening the door and the valve at predetermined intervals, such means being operated from the plunger actuating means, means whereby the door is closed before the closing of the valve and means associated with the plunger and cooperating with the door and valve opening means for actuating such means if the material should collect in the bottom of the tank through damage of the screen, said mans associated with the plunger including a member operated by impact with the material in the bottom of the tank.

1,811,757. VENEER CUTTER AND MATCHER. RAYMOND HILLS MCLEOD, Laurel, Miss., assignor to McLeod Furniture Company, Laurel, Miss., a Corporation of Mississippi. Filed June 28, 1930. Serial No. 464,623. 8 Claims. (Cl. 144—279.)



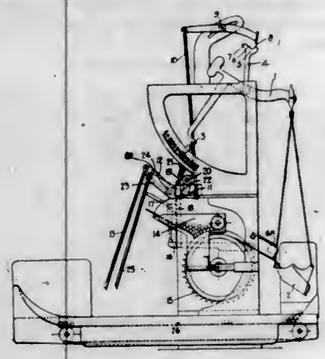
1. A veneer cutting and matching attachment for taping machines comprising a pair of angle bars, rollers adapted to travel upon said bars, a frame suspended from said rollers, a motor driven cutter mounted upon said frame, a bar having graduations thereon, means for adjustably connecting said bar to said cutter supporting frame whereby the latter may be retained at the predetermined positions upon the taping machine, and means for retaining said bar in various adjusted positions.

1,811,758. AMUSEMENT DEVICE. JAMES L. MEEHAN, Ashland, Ky. Filed Oct. 26, 1929. Serial No. 402,750. 35 Claims. (Cl. 104—53.)



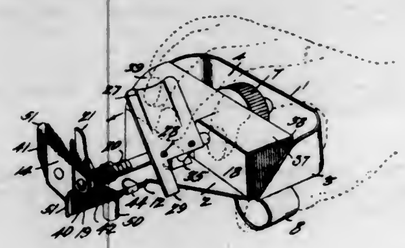
1. An amusement device comprising a floor space, a revolving head, latch means releasably connecting a vehicle thereto, and manually controlled cam means for actuating said latch means to release the vehicle from said head to be free to move under its own momentum over said floor space.

1,811,759. CIGARETTE MAKING MACHINERY. WALTER EVERETT MOLINS, Deptford, London, England. Filed Sept. 9, 1929, Serial No. 391,496, and in Great Britain Sept. 25, 1928. 12 Claims. (Cl. 131—39.)



1. In apparatus for use on a cigarette making machine, the combination with weighing apparatus, of mechanism for delivering a batch of cigarettes comprising a predetermined number from the machine to said weighing apparatus, and means operatively associated with said weighing apparatus for controlling the feed of tobacco in the machine.

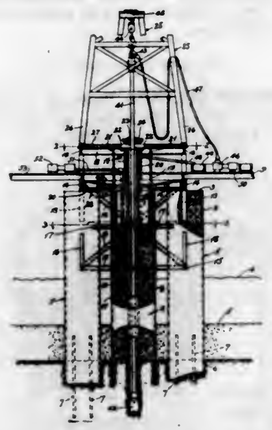
1,811,760. HAIR CUTTING MACHINE. HUGH BODDINGTON RONEY, London, England. Filed Aug. 1, 1929, Serial No. 382,785, and in Great Britain Aug. 1, 1928. 2 Claims. (Cl. 30—1.)



1. A hair cutting device comprising a handle made up of a gripping section and a body section mounted for sliding cooperation, means whereby the gripping section and body section may be relatively adjusted to meet the requirements of the operator, a shaft mounted in the body section and terminally provided with a blade, a fixed cooperating blade carried by the body section, a plate secured to the shaft and projecting laterally therefrom to serve as a means for moving the shaft in one direction, and a spring for moving the shaft in the opposite direction whereby under finger pressure on the plate the shaft is oscillated to actuate the cutter carried thereby.

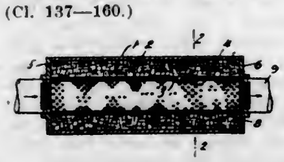
1,811,761. SUBMARINE OIL WELL DERRICK. CHARLES L. ROBERTS, Reno, Nev. Filed Feb. 8, 1930. Serial No. 426,863. 2 Claims. (Cl. 61—48.)

1. In apparatus for off-shore oil wells consisting of a derrick supported on a series of piers, the combination therewith of a caisson extending down into the ocean bottom, a conductor pipe within said caisson for reception of drills and production of oil, said pipe extending down into the ocean bottom, the space between the pipe and the caisson walls, except for a suitable space adjacent the top of the caisson acting as a cellar, being filled with



concrete, said concrete extending to the ocean floor to seal the interior of the caisson to prevent contamination of the ocean waters by oil, and vice versa.

1,811,762. EXHAUST MUFFLER. FREDERICK H. SCHNELL, Madison, Wis., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed May 8, 1929. Serial No. 361,376. 20 Claims. (Cl. 137—160.)



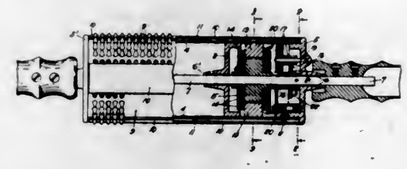
1. A muffler for the noise producing exhaust of an internal combustion engine comprising the combination with a substantially imperforate casing, of a substantially straight duct in said casing forming a substantially straight passage for said gas through said casing, said duct having a foraminous wall and a contiguous backing of porous gas-pressure absorbing and sound absorbing material of sufficient thickness and porosity to cause gas pressure peaks in said gas to be suppressed primarily in the interstices of said absorbing material, said material occupying from 1 to 20 per cent of the volume of the space into which it is packed, said absorbing material not causing any material increase in the resistance to the flow of said gas through said duct.

1,811,763. FOUNTAIN PEN. JOHN F. SCHWEIGER, Flora, Ind. Filed Apr. 20, 1929. Serial No. 356,657. 6 Claims. (Cl. 120—42.)



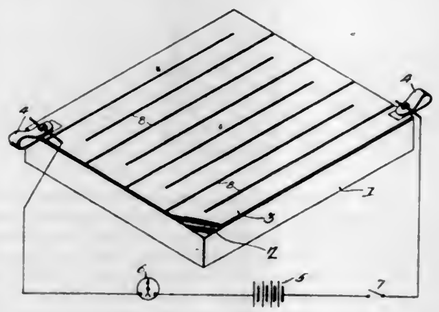
1. A fountain pen comprising a barrel, a pen stock removably fitting in one end of the barrel and having an ink pocket and a feed duct communicating with the pocket, and a non-collapsible ink container supported at one end in the pen stock with its open end extending into said pocket into abutting engagement with one wall thereof, said open end of the container being notched in its side to provide communication between the container and ink pocket.

1,811,764. MASSAGE DEVICE. WILLIAM MARTIN FENNELL SHERWOOD, London, England. Filed Jan. 17, 1930, Serial No. 421,477, and in Great Britain June 28, 1929. 3 Claims. (Cl. 174—89.)



1. A massage roller comprising in combination a metal cylinder rotatable upon a central shaft having handles at its ends, electrodes and massage pads disposed alternately around the outer surface of said cylinder, said electrodes being in metallic connection therewith, a magneto-electric machine, arranged internally of said cylinder, comprising a wound stator carried by said cylinder and a permanent magnet rotor arranged to rotate freely on said shaft, and epicyclic gearing connecting said rotor with said shaft whereby a high rate of rotation of said rotor relative to said stator is produced by rotation of said cylinder upon said shaft, the ends of said stator winding being connected respectively to said cylinder and to said gearing so that a difference of potential is set up between said electrodes and said handles.

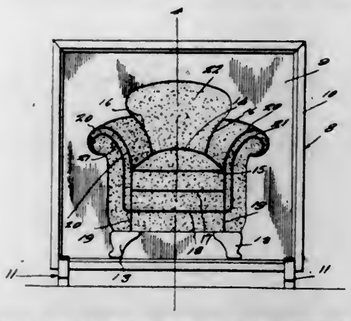
1,811,765. APPARATUS AND METHOD FOR TESTING THE EFFECTIVENESS OF PROTECTIVE MEDIUMS. WALTER O. SNELLING, Allentown, Pa., assignor to Trojan Powder Company, New York, N. Y., a Corporation of New York. Filed Dec. 7, 1928. Serial No. 324,506. 11 Claims. (Cl. 175—183.)



1. The method of testing the ability of a protecting medium to withstand progressive deterioration, which comprises applying a film of said medium to an electrically conductive material, exposing the coated surface to an agent capable of affecting the conductance of said material, and determining the deterioration of the said film by successive measurements of the conductance of said material.

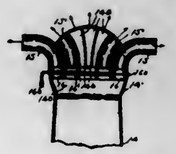
1,811,766. ADVERTISING SCREEN. EDWIN E. STEADMAN and EZEKIEL DONALD KUHN, North Tonawanda, N. Y.; said Kuhn assignor to said Steadman. Filed Mar. 6, 1929. Serial No. 344,759. 1 Claim. (Cl. 35—17.)

An advertising and display device comprising a panel having an opening therein of the general shape of the article to be advertised, a backing board, form blocks on the front face of said board, each block being of a shape to simulate a part of the article, means for holding the board against the rear face of the panel with the blocks located in the opening in the panel, with fabric placed between the board and panel and covering the blocks, said



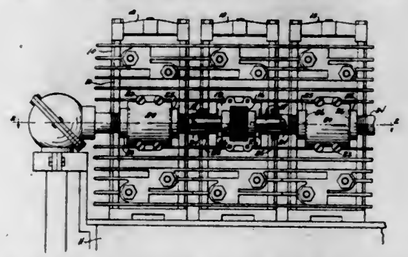
blocks being spaced apart and a wire frame stretched across the opening and having its wires located to press portions of the fabric into the spaces between the blocks.

1,811,767. WINDSHIELD HEATER. HORACE W. TURNER, Phoenix, N. Y. Filed Feb. 24, 1930. Serial No. 430,726. 2 Claims. (Cl. 299—146.)



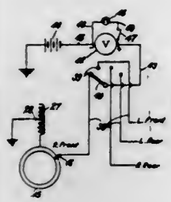
2. A device for distributing fluid against the windshield of an automobile or the like composed of a tubular head having a plurality of members therein forming independent passages for distributing fluid outwardly of the head, a common chamber communicating with each of the inner ends of the passages, a common shaft extending through the common passage, and independent dampers on the shaft for each of the passages, the dampers having a relative angular relation so as to alternately divert the fluid from the common chamber into the respective passages.

1,811,768. SLEEVE VALVE OPERATING SHAFT. FRANK A. VAN BEZEL, El Centro, Calif., assignor to Dual Aircraft Motors Inc., Ltd., El Centro, Calif. Filed July 11, 1930. Serial No. 467,357. 4 Claims. (Cl. 123—59.)



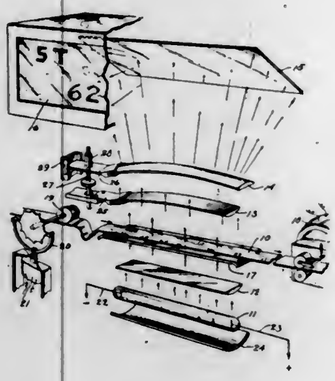
1. In an engine, cylinders, sleeves rotatable within the cylinders, gears carried by the sleeves, a shaft disposed transversely with respect to the cylinders and including a separate section for each cylinder, a gear mounted upon each section of the shaft and engaging one of the sleeve gears to rotate the sleeves when the shaft is rotated, means to rotate the shaft, means providing a detachable interlocking engagement between the shaft sections, removable bearings for the shaft sections, and a separate removable bearing housing for each section.

1,811,769. TELEMETRIC INDICATING SYSTEM. JOHN P. WEAVER, Anderson, Ind. Filed July 31, 1929. Serial No. 382,551. 9 Claims. (Cl. 177—351.)



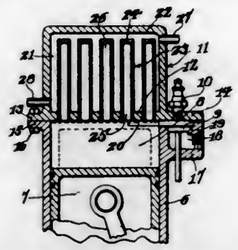
2. A tire inflation indicator comprising, in combination, a pressure gauge in continuous communication with the inner tube of said tire, a resistance element adjacent the movable element of said pressure gauge, a contact carried by a movable portion of said pressure gauge and in contact with said resistance element, said contact grounded to the frame of the vehicle, a voltmeter having a movable dial, means to connect said resistance with said voltmeter and with a grounded battery, a resistance element connected in parallel with said voltmeter, means to break the circuit through said last named resistance and means whereby to adjust said dial in accordance with the condition of the charge of said battery whereby when said last named resistance is removed from circuit the dial may be adjusted to give a true reading of the degree of inflation of the tire when said last named resistance is restored to circuit.

1,811,770. PROJECTING APPARATUS. EVAN R. WHEELER, North Plainfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 23, 1929. Serial No. 380,387. 6 Claims. (Cl. 88—24.)



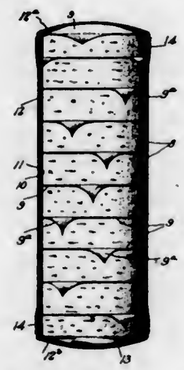
1. In a projecting apparatus, the combination with a tape having markings thereon, of a source of light substantially coextensive with the length of tape to be projected at any instant, means for projecting said light upon said tape, a reflector, a lens interposed between the tape and reflector for projecting the markings of the tape upon the reflector, and a screen disposed so as to receive the image from said deflector, said lens having a linear dimension substantially coextensive with the light source and being convex towards said reflector along said linear dimension.

1,811,771. INTERNAL COMBUSTION ENGINE. WILLIAM P. WIEMANN, Pittsburgh, Pa. Filed July 23, 1929. Serial No. 380,386. 7 Claims. (Cl. 123—191.)



1. In an internal combustion engine, a cylinder, and plurality of spaced units providing a divided compression space external of the cylinder, each unit consisting of a tube closed at its outer end and opening at its inner end into the bore of the cylinder.

1,811,772. METHOD AND MEANS OF PACKETING DOUGH. LIVELY B. WILLOUGHBY, Louisville, Ky., assignor to Ballard & Ballard Company, Louisville, Ky., a Corporation of Kentucky. Filed Mar. 10, 1931. Serial No. 521,599. 16 Claims. (Cl. 99—8.)



3. A method of packeting a number of raw dough formations preservatively for commercializing purposes, which consists in applying the formations together with separating material therebetween and with an enveloping material therearound within a closed container having a vent at one end, and causing an expansion of the dough inside the container so as to press over and seal said vent after first expelling the air therefrom by the pressure of expansion.

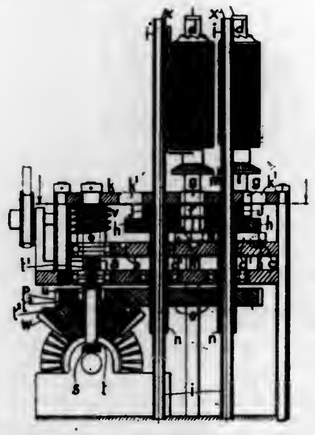
12. As an article of manufacture, a container provided with an air vent and having an expanded filling of dough sealing said vent while in the expanded condition and therewithin preserved in fresh soft condition ready for baking on removal.

1,811,773. CLOSURE FASTENER. ALMIRA L. H. WILLSON, Virden, Ill. Filed Sept. 14, 1929. Serial No. 392,702. 2 Claims. (Cl. 220—32.)



1. In combination, a pair of abutting hinged closure members, a keeper carried by one of said members, and a tongue carried by the other member and engageable in said keeper whereby to lock said one member upon closing of said other member.

1,811,774. BRAIDING MACHINE. ADOLF ZEHNDER, Birmenstorf, and JEAN KAPPELER, Mellingen, Switzerland. Filed Dec. 26, 1930, Serial No. 504,912, and in Switzerland Jan. 9, 1930. 2 Claims. (Cl. 96—12.)



1. A high speed braiding machine, comprising a stationary guide plate with a groove comprising circular sections, braiding heads on said plate for the braid warp threads, travelling bobbin spindles guided in said guide plate groove, rotating discs in the braiding heads for driving said bobbin spindles, a control foot bridge on each bobbin spindle, a pair of carrying balls arranged to run in said guide groove and to support said foot on opposite sides of the spindle, and controlling means so arranged as to so swing said control foot lever fashion about the point of support formed by the rearmost ball, alone at the beginning of operations and with the aid of the centrifugal force of the spindle during normal running, that the front leading ball is forced out of the one circular section of the guide-way into the next circular section thereof for the passage of the bobbin spindle from one braiding head to the next.

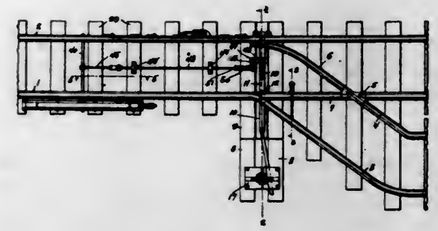
1,811,775. TONGUE CLEANER. WILLIAM H. BARKWILL, Cleveland, Ohio. Filed July 30, 1930. Serial No. 471,753. 1 Claim. (Cl. 128—304.)



A device of the kind described, comprising a straight handle having a flattened laterally spreading end portion provided with a cut-away area to form a depression therein, the wall of the depression being outwardly beveled, and a straight flange confronting the depression and disposed at right angles to the plane of the handle, said flange having a working edge beveled throughout.

1,811,776. AUTOMATIC RAILWAY SWITCH. THOMAS E. BLACKWELL and LESLIE T. SMITH, McKinney, Tex. Filed Dec. 14, 1927. Serial No. 239,957. 1 Claim. (Cl. 246—277.)

A track device comprising a plate adapted to be arranged longitudinally of and adjacent one rail of a track, said plate having an apertured upturned end at one end thereof, an elongated treadle bar, means movably connecting said bar to said plate, an arm pivotally mounted on said treadle bar and passing through said apertured upturned end, a

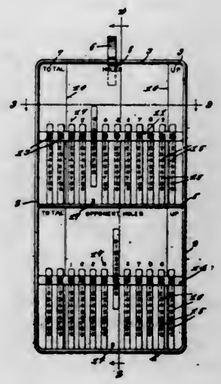


spring on said arm on each side of said upturned end, thereby holding the treadle bar in its proper position, and means operated by the movement of the treadle bar for connecting the same to a switch.

1,811,777. PROCESS FOR MAKING SYNTHETIC MENTHOL. JOHN WILLIAM BLAGDEN, London, England, assignor of one-half to Howards & Sons Limited, Ilford, England. Original application filed June 19, 1924, Serial No. 721,137, and in Great Britain May 21, 1924. Divided and this application filed Dec. 16, 1925. Serial No. 75,886. 14 Claims. (Cl. 260—153.)

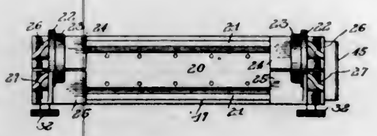
1. A process of making crystalline menthol, which comprises treating piperitone with hydrogen under pressure in presence of a hydrogenating catalyst at a temperature between 130° C. and 160° C. until there has been absorbed a quantity of hydrogen substantially in excess of that theoretically required to convert the piperitone into menthone.

1,811,778. GOLF SCORE BOARD. ROY BOWEN, Hoopeston, Ill. Filed Sept. 12, 1930. Serial No. 481,488. 6 Claims. (Cl. 40—65.)



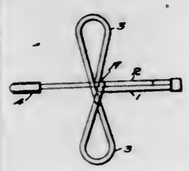
1. A score board of the class described comprising a body plate, a member extending transversely of the plate and formed with a longitudinal series of slots spaced with respect to the face of the plate, and also formed with a series of openings each opposite a respective one of the slots, and a resilient numeral bearing strip slidably adjustably fitted through each of said slots and adjustable to bring any one of the numerals opposite the respective opening.

1,811,779. ROLL HOLDER FOR PHOTOGRAPHIC APPARATUS. ARTHUR W. CAPE, Rochester, N. Y., assignor to Photostat Corporation, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 4, 1927. Serial No. 172,842. 10 Claims. (Cl. 242—71.)



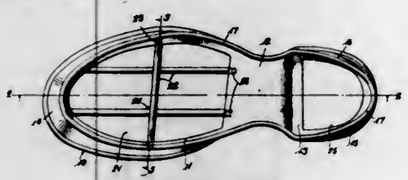
1. In photographic apparatus, a roll casing, a guide rail rigidly mounted within said casing and extending substantially parallel to a side wall thereof, and a roll holder provided with a groove for the reception of said guide rail mounted on said guide rail with the said rail engaging the walls of said groove; said roll holder being slidably movable from a substantially central position on said rail to a position in which the rail and groove walls are out of engagement.

1,811,780. SAFETY PIN. MOSES F. CARR, Lexington, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 10, 1928. Serial No. 260,687. 3 Claims. (Cl. 24—150.)



1. A non-swallowable safety pin having a back portion, a pointed pin portion and interlocked loops to prevent distortion formed integral with and extending laterally at each side of one of said portions to provide guard means for preventing swallowing of the said safety pin.

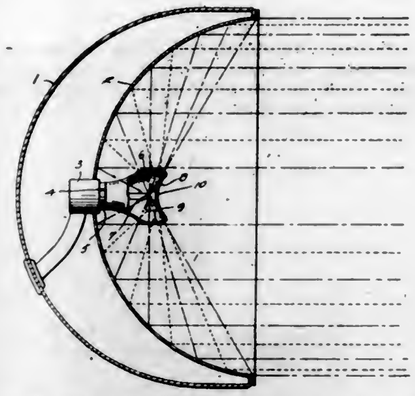
1,811,781. OVERSHOE. EUGENE R. DEGGE, Chicago, Ill. Filed Mar. 26, 1930. Serial No. 439,105. 7 Claims. (Cl. 36—11.6.)



1. In an overshoe, a plurality of elements to form a tread surface below spikes of an engaged shoe, said elements being movable one relative to the other for positioning according to the disposition of the said spikes.

1,811,782. LIGHT PROJECTOR. THOMAS P. DUNCAN, Jr., Newport News, Va. Filed Dec. 31, 1929. Serial No. 417,756. 1 Claim. (Cl. 176—34.)

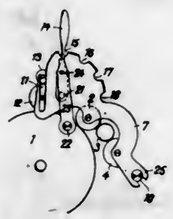
An incandescent lamp for use with a parabolic reflector, comprising a bulb, a filament within the bulb formed to provide a radiant designed to be located at the focal center of the reflector, an in-pressed portion at the forward end of the bulb having the center in relatively close proximity to the filament, and a silvering substance upon the outer surface of the in-pressed portion providing a convex mirror facing the filament, said in-pressed portion being of substantially parabolic contour and so disposed relative to the radiant as to intercept all light rays issuing therefrom in an angle defined by lines drawn from the radiant tangential to the reflector of the bulb.



1,811,783. METHOD FOR MAKING WHITE AND BLEACHED WOOD PULP SUITABLE FOR THE MANUFACTURE OF PAPER WITHOUT ADDITION OF CELLULOSE. ERNST ELGERUS, Niklasdorf-on-the-Mur, Austria. Filed Mar. 28, 1929, Serial No. 350,778, and in Germany Sept. 26, 1927. 4 Claims. (Cl. 92—11.)

1. A method for making bleached wood pulp which consists in treating wood for several hours at superatmospheric pressure with hot waste sulfite liquor without supplying any heat other than that contained in the liquor and disintegrating the treated wood to mechanical wood pulp.

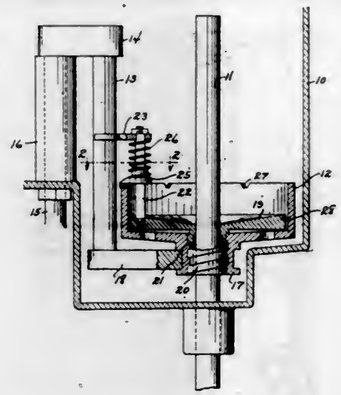
1,811,784. OFFSET PRINTING MACHINE. FERDINAND FISCHER, Berlin, Germany. Filed Mar. 21, 1928, Serial No. 263,343, and in Germany Apr. 14, 1927. 1 Claim. (Cl. 101—352.)



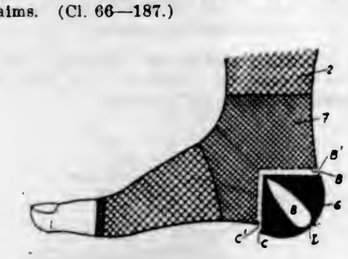
Inking mechanism for offset printing machines comprising a movable frame, inking rollers on the frame, an inking cylinder on the machine, and means whereby said frame may be adjusted to and held in different positions so that the inking rollers can be brought in to and out of contact with the usual form cylinder and the inking cylinder and into a position in which they contact only the inking cylinder.

1,811,785. ADJUSTABLE SIRUP MEASURING CUP. FRANK E. FOWLER, Athens, Ga. Filed June 8, 1928. Serial No. 283,870. 1 Claim. (Cl. 226—102.)

The combination with a bottle filling machine, a measuring cup mounted for vertical and rotary movement and having spaced dog engaging means around its edge, a lifting rod for said cup to move the cup vertically, a false bottom within the cup, means connected to the bottom and cup to provide for independent vertical and rotary movement of said bottom to regulate the capacity of the cup, a vertically disposed rod carried by the false bottom, means carried by said rod for sliding engagement with the lifting rod, a spring influenced dog mounted upon the rod to engage the dog engaging means and yieldingly hold the false bottom and cup against accidental rotation.

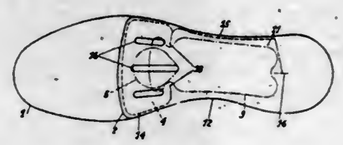


1,811,786. STOCKING FOR VARICOSE VEINS. ELISABETH FREI, Zurich, Switzerland. Filed July 25, 1929, Serial No. 380,964, and in Switzerland Nov. 22, 1928. 3 Claims. (Cl. 66—187.)



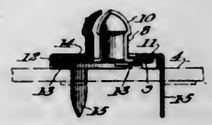
1. A knitted surgical stocking for varicose veins, having an opening at the heel, the sides of which openings are at substantially right angles to each other and a heel portion inserted in said opening and the ends of which are stitched to the angularly related sides of the heel opening, said inserted heel portion being provided on opposite sides with substantially elliptical openings arranged with their axes coincident with a plane extending from the apex of the heel to the center of the instep.

1,811,787. FOOT ARCH SUPPORT. ELISABETH FREI, Zurich, Switzerland. Filed Jan. 27, 1930, Serial No. 423,821, and in France Jan. 28, 1929. 3 Claims. (Cl. 36—71.)



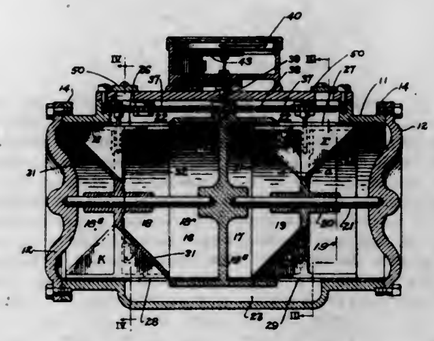
1. A foot arch support comprising a lower part adapted to cover the whole foot area, an upper part adapted to cover the whole area of the foot from the heel to the metatarsal bones, stitching uniting the said two parts to form three pockets, a transverse pocket adapted to accommodate pads to support the metatarsal bones, a second pocket adapted to receive a longitudinal arch supporting insert and a heel pocket to accommodate cushioning pads, the said insert projecting into said transverse pocket.

1,811,788. FLOATING TRIM STUD. JOHN H. GOSS, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 1, 1927. Serial No. 223,878. 1 Claim. (Cl. 24—213.)



A floating trim stud, having a head member comprising a shank having a head at one end and a flange at its opposite end, and a base provided with a central opening of considerably greater diameter than the diameter of said shank and a flanged rim provided with inturned fingers formed by cutting into the flange so that the fingers when bent inwardly are spaced from and out of contact with a support, with the free edge of the flange abutting said support, thereby to support the head member above the level of the lower level of the rim flange and permit freedom of lateral motion of the head member within its base so as to accommodate the head member to its complemental socket member, and attaching prongs extending from the lowermost edge of the rim flange in a direction away from the head member, so that the device may be located on the inner or unexposed side of said support and thereby avoid protuberances on the outer or exposed side.

1,811,789. FLUID METER. ALBERT J. GRANBERG, Berkeley, Calif., assignor to Ralph N. Brodie Company, Oakland, Calif., a Corporation of California. Filed Dec. 20, 1927. Serial No. 241,309. 13 Claims. (Cl. 73—30.)



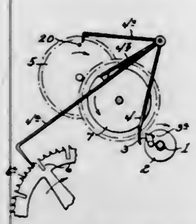
1. A meter comprising a casing having an intake and an exhaust chamber, a pair of metering cylinders arranged in axial alignment, a piston in each metering cylinder, said pistons being adapted to be reciprocated by fluid from the intake chamber, said metering cylinders and said pistons having cooperating ports to admit fluid to one end of each chamber and to permit fluid at the opposite end of each chamber to be displaced by the pistons during each stroke thereof, an indicating device and mechanism connected with the pistons and with the indicating device and actuated by the reciprocation of the pistons to impart rotary movement to the pistons and to operate the indicating device.

1,811,790. AUTOMOBILE WINDOW OPERATOR. JAMES W. GREIG, Grosse Pointe, Mich. Filed Jan. 10, 1928. Serial No. 245,754. 2 Claims. (Cl. 268—126.)



1. In a closure operating device, a support, a solid cam element journaled on the support in closely spaced relation therewith and having a closed side remote from the support and an opposite side provided with a spiral groove formed therein and faced toward the support, a single closure operating lever pivotally mounted on the support and extending between the latter and the solid cam element for direct connection with the closure, roller means journaled on the closure operating lever and engaged in the spiral groove of the solid cam element, the point of engagement of said roller means and groove always lying on an arc struck from the pivot point of said closure operating lever as a center and passing through the center of said cam element whereby said roller means is always maintained on dead center relative to said groove, and means for rotating said solid cam element to thereby swing said lever and move said closure.

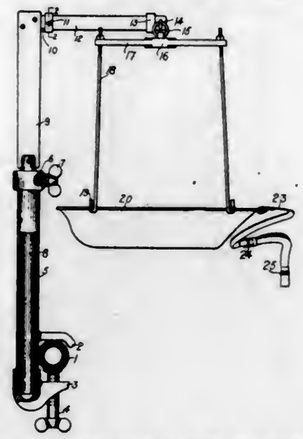
1,811,791. STRIKING CLOCK. ELWOOD C. HALL, Vienna, N. J. Filed July 9, 1928. Serial No. 291,320. 2 Claims. (Cl. 58—8.)



1. An interrupter for a striking clock including an arbor and having a striking train and a minute post, a wheel having spaced notches associated with the striking train, teeth arranged on the wheel between the notches, a pin carried by one of the gears of the striking train, a second wheel having a notch associated with the striking train, a releasing wire fixed to the arbor, a disk secured to the minute post, a pivoted pawl on said disk to engage and actuate the releasing wire, tension means to return the pawl to its normal position when disengaged from the releasing wire, a second wire connected to the releasing wire to engage the periphery of the first wheel between the teeth and to drop into one of the notches thereof after the completion of a striking operation, a third wire secured to the first and second wires to engage the periphery and drop into the notch of the second wheel, and a fourth wire secured to said wires to be engaged by the pin when the third wire drops into the notch of the second wheel to further prevent movement of the striking train.

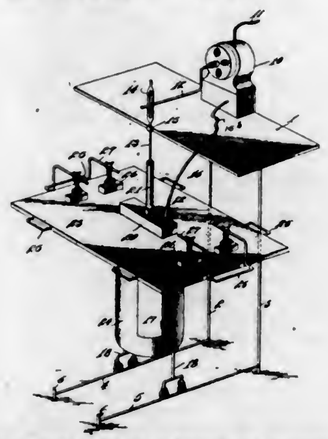
1,811,792. SUPPORT FOR SCROTUM BOWLS. LILLIAN M. HOOVER, Lansing, Mich. Filed July 26, 1929. Serial No. 381,295. 2 Claims. (Cl. 128—1.)

2. In a support of the character described, the combination with a base clamp, of an extensible upright adjustable vertically and rotatable on its vertical axis, an arm projecting at an angle from said upright, the said arm having an extensible portion, a spider carried by the end of the said extensible portion in detachable relation, a plurality of rods disposed vertically and having upper ends adjustably connected with the spider, said rods hav-



ing hooks at their lower ends, a bowl having spaced holes in its rim constructed to removably engage the hooks of said rods, and a plurality of extensible straps attached to the said bowl at separated points and having clips arranged to engage the clothing of the patient or bed at separated points whereby said bowl may be positioned and held against swinging or turning.

1,811,793. IRONING MACHINE. HARLEY A. W. HOWCOTT, New Orleans, La. Filed Nov. 10, 1928. Serial No. 318,398. 3 Claims. (Cl. 68—9.)

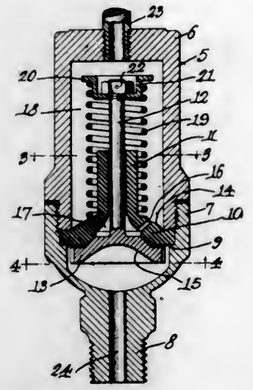


1. In an ironing machine, a supporting structure, power supply means having a crank shaft, a sad iron, a tube pivotally connected with the upper face of said iron, a driving shaft inserted in said tube and pivotally mounted on said structure and having a slot extending longitudinally of said shaft through which said crank shaft passes to impart oscillatory motion to said iron.

1,811,794. OIL VALVE. JOSEPH D. KILLIAN, Cheyenne, Wyo. Filed June 22, 1928. Serial No. 287,495. 1 Claim. (Cl. 184—58.)

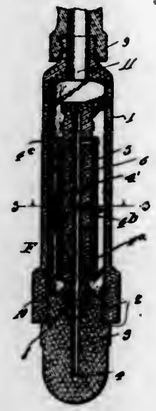
A valve for force feed lubrication, comprising a valve housing, a removable valve seat mounted within the

housing and dividing the housing into upper and lower compartments, said valve seat having an extension, a valve member including a valve stem, mounted within the extension, said valve engaging the valve seat to control the passage of oil through the valve, a coiled



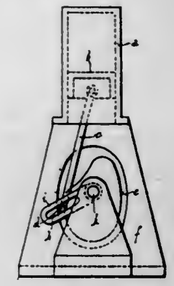
spring surrounding the extension, a cap on one end of the valve stem and engaged by the spring to normally hold the valve seated, said valve seat having an opening to allow oil to pass therethrough, and inlet and outlet pipes connected with the housing.

1,811,795. FILTER FOR VISCOSE SOLUTIONS. THOMAS L. KIRBY, Old Hickory, Tenn. Filed Feb. 1, 1927, Serial No. 165,220. Renewed Apr. 28, 1931. 1 Claim. (Cl. 210—164.)



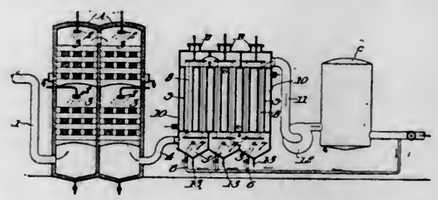
A filter of the class described, comprising a casing open at both ends, a filter, a plug seated in the lower end of said casing and having an angular passage therethrough, a member rising centrally from said plug, said member having a vertical passage therein in communication at its lower end with the vertical leg of the passage in said plug and extending beyond the plane of the upper end of said filter, the upper end of the passage in said member being closed, said passage in said member having spaced upper and lower parallel lateral branch passages opening outwardly through the same and into said casing, an intermediate lateral branch passage opening through said body at right angles to the said first named lateral branch passages, said filter comprising a filtering material surrounding said member and secured thereto at points above and below said upper and lower lateral branch passages and corrugations formed in the outer surfaces of said member and extending between the several of the lateral branch passages for distributing the fluid to be filtered to the filtering material.

1,811,796. DRIVING CRANK FOR PISTON ENGINES. KARL KUEHN, Cologne, Germany. Filed Jan. 18, 1929, Serial No. 333,445, and in Germany Jan. 25, 1928. 2 Claims. (Cl. 74—20.)



1. In a piston engine, a rod with its foot connected to the piston, means for guiding the head end of said rod including a fixed curved cam groove and a crank connected loosely to the rod head, said cam groove having an incurved part situated on the side corresponding to the drive stroke of the active surface of the piston and beginning in the direction of rotation at a point located slightly in front of the line of the dead points of said piston, said part forming a small angle with the line of the dead points.

1,811,797. PROCESS FOR THE PRODUCTION OF SULPHURIC ACID AND OLEUM BY THE CONTACT PROCESS. FRITZ LECHLER, Frankfort-on-the-Main, Germany. Filed June 14, 1928, Serial No. 285,418, and in Germany July 7, 1927. 5 Claims. (Cl. 23—178.)

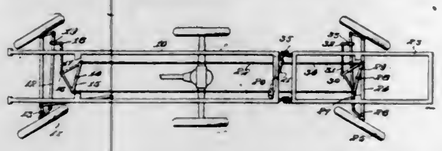


1. A process for preparing sulfur dioxide-containing gases for conversion into sulphuric acid and oleum by the contact process which comprises first contacting the gases with a series of sprays of sulphuric acid of successively greater strength up to a strength at which an appreciable amount of water is left in the gases, and thereafter, without any further treatment of the gases with sulphuric acid sprays, introducing sulfur trioxide into the gases and simultaneously subjecting the gases to the action of an electrical potential and to indirect cooling to remove the remaining amounts of water and other impurities.

1,811,798. AUTOMOBILE TRAILER. ADAM J. LUCKE, Gooding, Idaho. Filed Dec. 26, 1928. Serial No. 328,530. 1 Claim. (Cl. 280—33.55.)

In a trailer of the class described, the combination with the chassis frame of a tractor vehicle, the front wheels thereof, and a connecting rod extending between the wheels, of a triangular rock lever mounted, intermediate the ends of one of its sides, in the frame for transverse

swinging movement, an arm upon the connecting rod, a rod connecting the said arm and the forward corner of said lever, a bar rock lever pivotally mounted between its ends at the rear end of the chassis frame, rods connecting the other corners of the triangular rock lever and the ends of the bar rock lever, a trailer comprising a chassis frame, an axle, wheels mounted for turning adjustment at the ends of the axle, a rod extending between the wheels, a

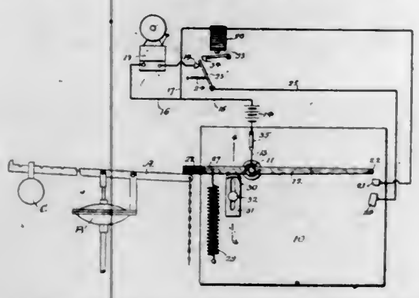


triangular rock lever mounted, intermediate the ends of one of its sides, in the frame, an arm upon the rod, a rod connecting the arm and the forward corner of the said lever, rods connecting the other corners of the said lever and the ends of the rock lever, and coiled springs connected to and extending between the corresponding rear and front ends of the tractor chassis and trailer chassis frames.

1,811,799. MAGNESIUM OXYCHLORIDE MIXTURE AND METHOD OF MAKING THE SAME. HIRAM S. LUKENS, Philadelphia, Pa., assignor to Solidon Products, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 12, 1929. Serial No. 406,560. 5 Claims. (Cl. 106—29.)

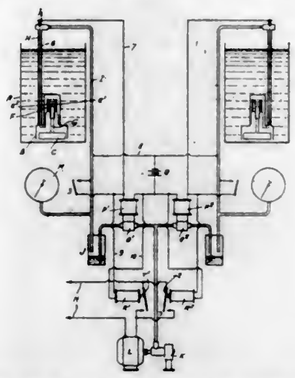
1. As a new composition of matter, a mixture of magnesium oxide, magnesium chloride and aggregate in such proportions that the amounts of magnesium oxide and magnesium chloride are within the ratio of one part by weight of magnesium oxide to form about .84 to 1.25 parts by weight of $MgCl_2 6H_2O$, and the ratio of the amount of aggregate to the combined amounts of magnesium oxide and magnesium chloride is such that the amount of water required to produce therefrom a mix of proper consistency for manipulation will not be in excess of that amount which would produce a solution of 16°B. if the amount of magnesium chloride in the mixture were dissolved therein.

1,811,800. ALARM OR SIGNAL FOR BOILERS. FREDERICK J. MILDENBERGER, Passaic, N. J. Filed Dec. 28, 1927. Serial No. 242,996. 3 Claims. (Cl. 177—311.)



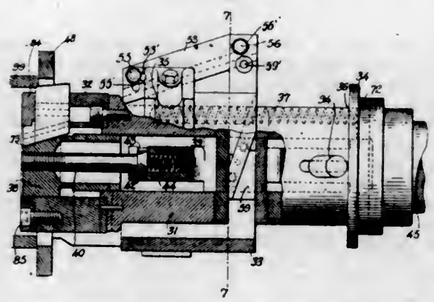
1. A device for signaling the reduction of pressure in a steam boiler equipped with a pressure responsive element, said device including a signal, means operable by said pressure responsive element upon a predetermined pressure reduction for actuating said signal, a member manually movable to render the signal inactive, a detent for retaining said member in an inactive position and means automatically operable by a predetermined increase in pressure above said predetermined reduction for releasing said detent to permit of a subsequent functioning of said member to actuate the signal.

1,811,801. APPARATUS FOR INDICATING THE DEPTH OF LIQUIDS IN TANKS OR OTHER CONTAINERS. LEONARD MURPHY, Dublin, Ireland. Original application filed Mar. 15, 1928, Serial No. 261,919, and in Great Britain May 5, 1927. Divided and this application filed Apr. 13, 1929. Serial No. 354,923. 8 Claims. (Cl. 73—54.)



8. Apparatus of the type described for indicating the depth of liquid in a plurality of tanks or other receptacles, said apparatus comprising an air compressor; an electric motor for actuating said air compressor; an electric circuit to said motor; a line pipe charged with air from said compressor; branch pipes from said line pipe; a plurality of vessels for immersion, respectively, at the lower portions of said receptacles, each of said vessels being closed at its upper end and open at its lower end, said vessels having their upper ends connected, respectively, to said branch pipes; a normally closed valve in each branch pipe; an electromagnetic device for opening each of said valves; relay magnets for closing the electric circuit to said motor; circuits connecting said relay magnets, respectively, to said electromagnetic devices; a casing attached to the upper part of each of said vessels; electric contacts fixed within each of said casings; the electric contacts in each casing being in the electric circuit to the electromagnetic device associated with the corresponding vessel; a float in each of said vessels; a spindle secured to each float; a collar on each of said spindles for bridging the contacts in the casing associated with the vessel in which its associated float is contained when such float rises to close the electric circuit to the corresponding electromagnetic device and also energize the corresponding relay magnet; and a switch in the circuit of each of said casings by which the contacts in such casing can be short circuited at any time.

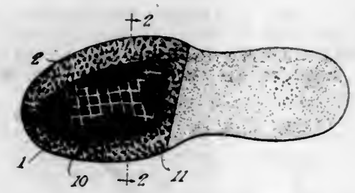
1,811,802. COLLAPSIBLE TAP. SAMUEL F. NEWMAN, Waynesboro, Pa., assignor to Landis Machine Company, Waynesboro, Pa., a Corporation. Filed Apr. 25, 1927. Serial No. 186,470. 15 Claims. (Cl. 10—145.)



1. A collapsible tap comprising a body, a member slidable axially of said body having a cam groove in the end

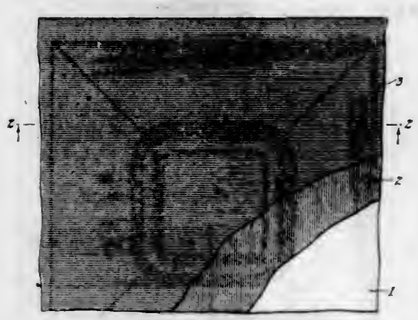
thereof for engagement with a corresponding cam surface upon a cutter holder member and having a shoe member on the opposite end for engagement with a radially slidable member having cam grooves cut at an angle therein, a ring member mounted upon said body, a member having a cam surface secured to said ring member and adapted to engage a corresponding cam edge in the transverse member whereby movement of the ring member in one direction will force the said transverse member inwardly and force a retraction of the slidable member to produce a taper thread, substantially as set forth.

1,811,803. RUBBER SOLE AND HEEL FOR BOOTS AND SHOES. LAURENCE M. OAKLEY, Trenton, N. J., assignor to Essex Rubber Company, Trenton, N. J., a Corporation of New Jersey. Filed Nov. 1, 1927. Serial No. 230,210. 1 Claim. (Cl. 36—59.)



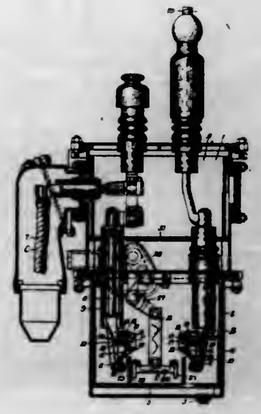
A rubber sole or heel having textile strands embedded therein at or near the surface thereof and lying in a plane parallel to the plane of the tread surface of the sole or heel, said strands being spaced apart a substantial distance and running both longitudinally and transversely thereof, the longitudinal strands being double and the transverse strands being single.

1,811,804. DECALCOMANIA AND DECALCOMANIA PAPER. ALFRED B. POSCHEL, Brooklyn, N. Y., assignor to Decorative Development, Inc., a Corporation of Delaware. Filed Dec. 27, 1929. Serial No. 416,910. 4 Claims. (Cl. 41—33.)



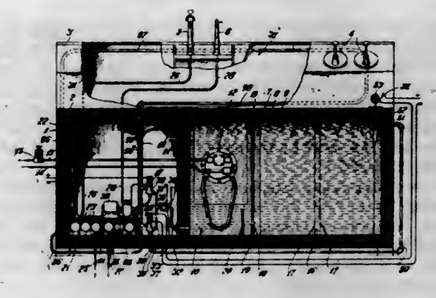
1. A decalcomania paper particularly adapted for high speed offset printing presses, comprising a paper stock, a water-soluble coating and a non-water-soluble coating placed on top of the water-soluble coating, said non-water-soluble coating having as one of its ingredients a dryer capable of drying the ink deposited thereon from even high-speed offset printing press.

1,811,805. OIL SWITCH. JOSEPH RAH, Chicago, Ill., assignor to G. & W. Electric Specialty Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 7, 1927. Serial No. 181,667. 1 Claim. (Cl. 200—150.)



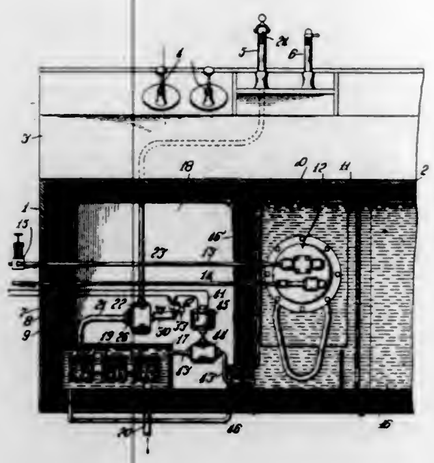
In a switch the combination of a casing including an oil receptacle, fixed electrodes extending into said oil receptacle below the oil level thereof, contact shoes, means resiliently connecting said contact shoes and electrodes, resilient means disposed between said shoes and electrodes for urging said shoes away from said electrodes, a contact block having contact shoes thereon, means for moving said contact block whereby said shoes contact said first named shoes for electrically connecting said electrodes, said shoes having noses shaped to guide said shoes into rubbing contact, arcing leaves carried by said electrodes and aligned with the noses of the associated shoes, and means on said electrodes cooperating with the shoes carried thereby for limiting the position thereof and presenting said shoes for flat surface engagement by the shoes of said contact block.

1,811,806. SODA FOUNTAIN. FRED I. RAYMOND, River Forest, Ill. Filed Mar. 18, 1929. Serial No. 347,947. 21 Claims. (Cl. 62—2.)



1. In a refrigerating apparatus of the character described, a cooler for a fluid, a tank containing brine in which this cooler is immersed, and means for varying the temperature of the brine comprising thermostatic mechanism responsive to the temperatures of both the fluid in the cooler and the brine in the tank.

1,811,807. SODA FOUNTAIN. FRED I. RAYMOND, River Forest, Ill. Filed Mar. 20, 1929. Serial No. 348,488. 19 Claims. (Cl. 62—7.)



15. In a refrigerating apparatus, the combination of a main brine tank, an auxiliary brine tank, a cooler in said auxiliary tank, and means responsive to the flow of liquid through said cooler for controlling the flow of brine from said main tank into said auxiliary tank.

1,811,808. PHENOLIC CONDENSATION PRODUCT AND PROCESS OF PRODUCING THE SAME. LAWRENCE V. REDMAN, ARCHIE J. WEITH, and FRANK P. BROCK, Evanston, Ill., assignors to Bakelite Corporation, New York, N. Y., a Corporation of Delaware. Filed May 23, 1921. Serial No. 471,918. 21 Claims. (Cl. 106—22.)

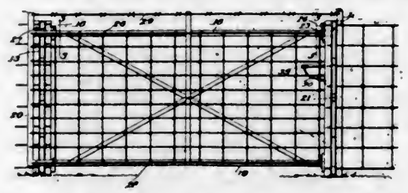
1. In a process of the character set forth, the step which comprises producing a reaction between a mass comprising a fusible non-reactive condensation product and a free phenolic body, and a substance adapted to convert the free phenolic body into a compound which will not readily react with an active methylene body.

1,811,809. PULVERULENT PREPARATION FOR THE PRODUCTION OF A RINSING LIQUID FOR THE AFTER TREATMENT OF WASHED ANIMAL FIBERS, WOOLEN OR SILKEN FABRICS, AND ESPECIALLY THE HAIR OF THE HEAD. KURT SCHWARZKOPF, Tempelhof, near Berlin, Germany. Filed July 17, 1930, Serial No. 468,730, and in Germany May 24, 1928. 2 Claims. (Cl. 23—250.)

1. A pulverulent preparation for the production of a rinsing liquid for the aftertreatment of washed animal fibers (woolen or silken fabrics) and especially the hair of the head, composed of a mixture of an organic acid and a non-hygroscopic acid having no influence on the chemical properties thereof.

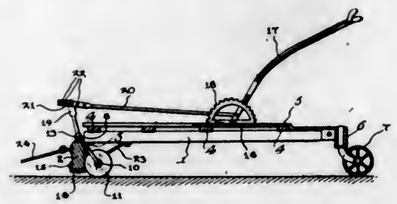
1,811,810. GATE. CHARLES A. SPAUGH, Durham, Okla. Filed Jan. 27, 1930. Serial No. 423,836. 1 Claim. (Cl. 39—87.)

A gate including a gate frame having slots in the upper and lower rungs and adjacent one end thereof and a fence post of substantial U-shape in cross section, arms secured to one side of the post and having portions thereof offset laterally of the respective side of the post with the free ends bent vertically and disposed through the slots with the upper and lower rungs of the gate frame resting



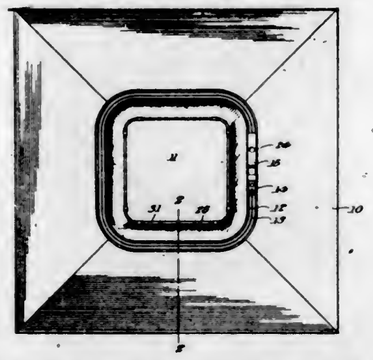
on the laterally disposed portions, and pins carried by the post and projecting over the upper and lower rungs to prevent displacement of the gate frame from the arms when in the act of latching or unlatching said gate.

1,811,811. LAND LEVELING IMPLEMENT. MYRON THORNTON, Glenrock, Wyo., assignor of forty per cent to Roscoe R. Gardner, Glenrock, Wyo. Filed Nov. 30, 1929. Serial No. 410,779. 3 Claims. (Cl. 37—165.)



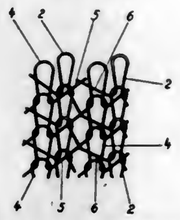
1. A land leveling implement comprising a triangular shaped frame, a caster wheel secured to and carried by the rear or apex end of said frame, a transversely extending scraper bar rigidly secured to and depending from the forward end of said frame, means for adjustably supporting the forward end of the frame whereby the lower edge of said scraper blade may be retained in various positions with respect to the ground over which it travels and a draft connection pivotally connected to the forward face of said scraper bar.

1,811,812. AMUSEMENT DEVICE. BOWMAN B. UBER, Youngstown, Ohio. Filed June 5, 1929. Serial No. 368,722. 6 Claims. (Cl. 273—108.)



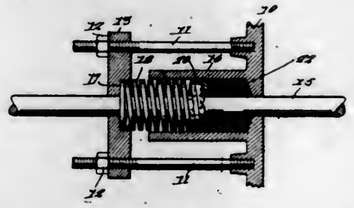
1. An amusement device embodying a table, a target movable along one edge thereof, means whereby the target may be moved, a gravity projectile capable of movement over the top of the table toward the target and means for automatically stopping the target by contact with the gravity element.

1,811,813. DOUBLE-SIDED WARP GOODS. FRIEDRICH WAGNER, Russdorf B/Oberfrohna, Germany. Filed Nov. 28, 1928, Serial No. 322,398, and in Germany Dec. 3, 1927. 1 Claim. (Cl. 66—195.)



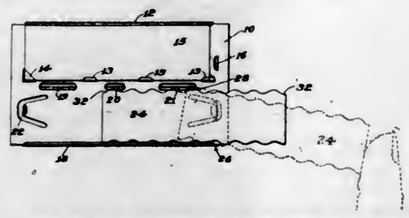
A double-sided warp fabric consisting of a thread system forming loops on one side of the fabric only and running through said loops in one direction, and a second thread system forming loops on the other side of the fabric only and running through its loops in one direction, said thread systems crossing each other only by the thread parts connecting the loops together and the loops of one thread system being arranged before the loops of the other thread system.

1,811,814. STUFFING BOX. FRANCIS G. WORDEN, Brinkley, Ark. Filed Nov. 30, 1925. Serial No. 72,393. 1 Claim. (Cl. 286—30.)



In a device of the class described, a box for receiving packing, a body of packing material therein, a gland bearing on said body and provided with a helical groove on the side opposite that portion contacting with the body of packing material, a spring extending into the box and retaining the gland in position, the end portion of the spring being threaded into said groove in the gland, the outer surfaces of the gland and of the spring where threaded being flush and adapted to contact with the walls of the box when an element mounted to reciprocate with reference to the box is slightly out of alinement, and an adjustably mounted element engaging the outer end of the spring.

1,811,815. PRINTING PLATE. STANLEY ANTHONY, Boston, Mass., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 21, 1929. Serial No. 408,839. 2 Claims. (Cl. 101—369.)



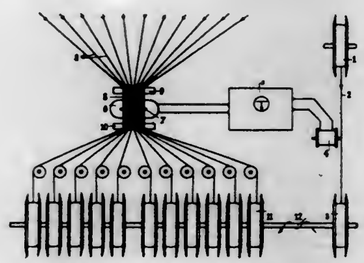
1. A printing plate comprising a metal strip for use in a holder having retaining means with which the plate engages to seat it in printing position, said strip being of greater length than width and both longitudinal edges thereof having a sinuous or serpentine outline.

1,811,816. TUBULAR BODY FOR HEATING OR THE LIKE AND METHOD OF MAKING THE SAME. GEORGE E. BLAKE, East Aurora, N. Y., assignor to Forsyth Metal Goods Company, Inc., East Aurora, N. Y., a Corporation of New York. Filed Mar. 21, 1929. Serial No. 348,798. 11 Claims. (Cl. 137—75.)



1. A method of making the body part of a heater which comprises cutting a piece of flexible metal tubing longitudinally from end to end to form two sections and forming the edges of said sections to provide an interfitting joint between the same.

1,811,817. DUPLICATION OF SOUND RECORDS OBTAINED BY MAGNETIC MEANS. CURT STILLE, Berlin, Germany, assignor to Telegraphie-Patent-Syndikat G. m. b. H., Berlin, Germany. Filed Apr. 12, 1929, Serial No. 354,686, and in Germany Oct. 20, 1928. 4 Claims. (Cl. 179—100.2.)

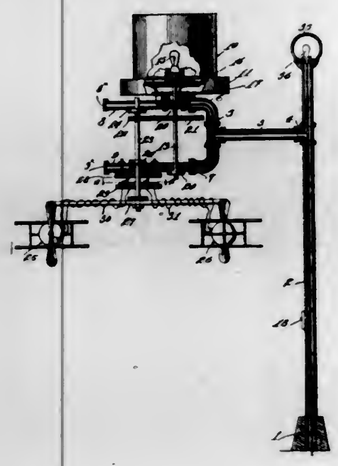


1. An apparatus for the simultaneous repeated duplication of steel carriers in the form of bands or wires on which acoustic vibrations are magnetically recorded comprising in combination with a magnetic master record a duplicating "talking head" and means inserted between the said master magnetic record and the duplicating talking head for influencing the latter in accordance with the magnetic record of the acoustic vibrations on the master record, the said talking head having a wide magnet over which the steel carriers to be duplicated are caused to pass parallel and close to one another.

1,811,818. ADVERTISING APPARATUS. BEN T. PARIS, Cave Spring, Ga., assignor of one-fourth to James C. Davenport and one-fourth to Walter N. Crawford, Washington, D. C. Filed May 31, 1930. Serial No. 458,540. 3 Claims. (Cl. 40—33.)

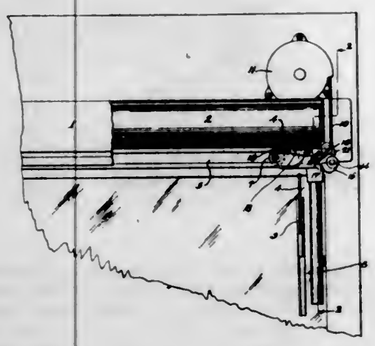
1. In an advertising apparatus a supporting structure, an indicia carrying member revolubly mounted on said structure, motors supported on said structure and mounted to revolve thereon, means for lighting said indicia carry-

ing member to display the indicia thereon, means for supplying electricity to said motors, said indicia carrying



member and said motors being connected whereby the former is driven by the latter and propellers driven by said motors.

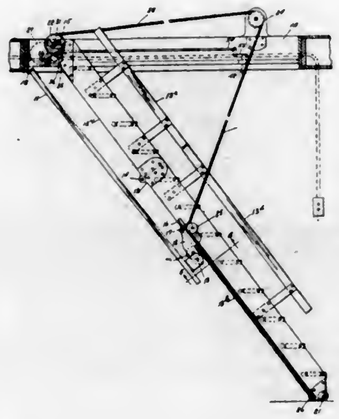
1,811,819. WINDSHIELD CLEANER. BARTON A. BEAN, Jr., Williamsville, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed July 1, 1927. Serial No. 202,856. 14 Claims. (Cl. 15—253.)



1. A windshield cleaner comprising a reciprocatory carrier, a wiper operable thereby, a movably mounted and normally parked heater, and means for coupling the heater to the wiper for movement therewith and while the latter is in operation.

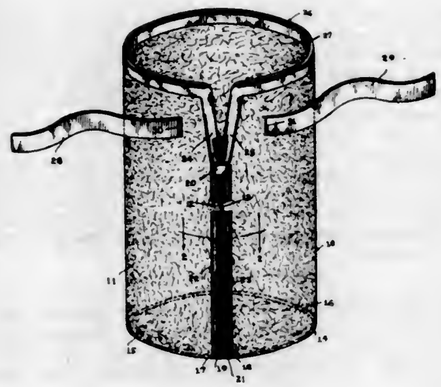
1,811,820. DISAPPEARING STAIRWAY. FRANK E. BESSLER, Akron, Ohio, assignor to The Bessler Disappearing Stairway Company, Akron, Ohio, a Corporation of Ohio. Filed Feb. 23, 1929. Serial No. 342,028. 18 Claims. (Cl. 228—50.)

2. The combination with the ceiling of a lower room having an opening therein to give access to an upper room, of a stair structure supported at its upper end at said opening so as to be moved upwardly out of the way through said opening and comprising a single pair of



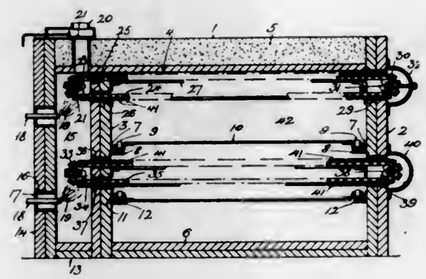
sections pivoted to each other so that the stair structure may be collapsed to inverted V-formation in the manner of a toggle to pass through said opening.

1,811,821. ROBE. DAVID BLOOM, New York, N. Y., assignor to Tidy Products Corporation, New York, N. Y. Filed June 15, 1929. Serial No. 371,194. 1 Claim. (Cl. 2—69.)



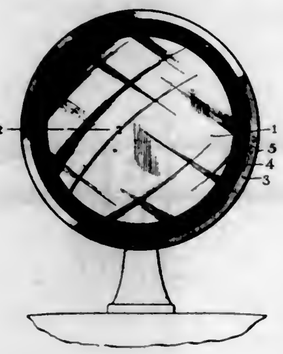
A robe of the character described comprising fabric material formed into a bag-like member and having a bottom member formed thereon leaving an open top, and leaving the other edges open longitudinally, a combined closure for said open longitudinal edges comprising at one portion of said edges co-operative stringers and interlocking fastener elements including a slide therefor serving to bring said edges into open or contact engagement, said stringers being fastened at spaced points from said edges, the combined width of said spaced portions being greater than the combined width of the stringers when engaged, whereby the edges of the fabric are contacted into compressed engagement overcoming the inherent resiliency of the fabric and covering the stringers, and flexible adjustable fastening means for the other portions of said longitudinal edges adjacent the top of the bag whereby the top of the bag may be fastened.

1,811,822. BAKING OVEN AND METHOD OF HEATING THE SAME. IRWIN ELLIOTT, Bronx, N. Y., assignor to Universal Oven Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 12, 1929. Serial No. 346,452. 8 Claims. (Cl. 107—55.)



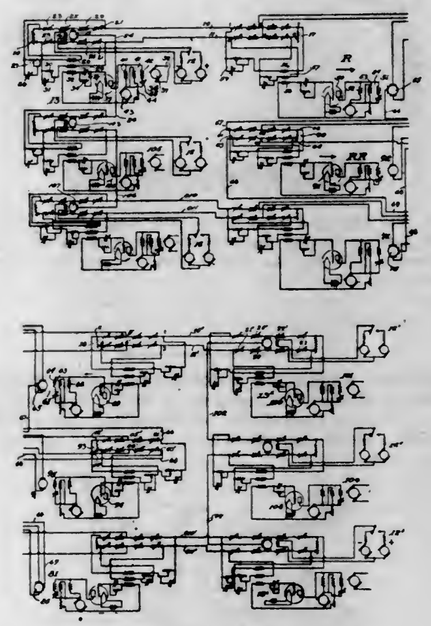
2. A baking oven comprising a structure forming a baking chamber and a combustion chamber, said baking chamber having a hearth to support the products to be baked, movable means disposed above and below said hearth and having members to receive heat, heating means in said combustion chamber for heating said members while they are traveling in said combustion chamber, said heating members being adapted to release their heat in the baking chamber above and below said hearth while traveling in the baking chamber.

1,811,823. FENDER MIRROR. ERWIN C. HORTON, Hamburg, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed Feb. 24, 1930. Serial No. 430,963. 4 Claims. (Cl. 88—1.)



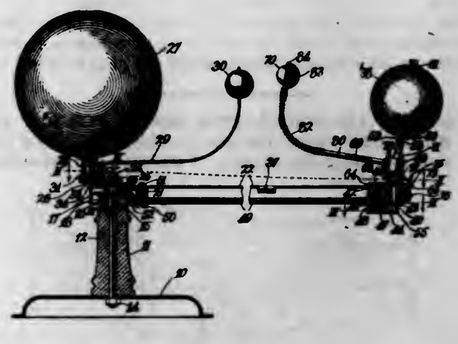
1. A rear view mirror for motor vehicles comprising a reflective plate, a frame encircling the same and having a brilliant finish simulating the field, and a non-reflecting border separating the field from the frame whereby reflections from the field are definitely spaced from any reflected rays from the frame.

1,811,824. VACUUM TUBE REPEATER AND TERMINAL SET FOR SUPERPOSED TELEGRAPH SYSTEMS. RONALD V. MORGENSTERN, Irvington, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Feb. 20, 1930. Serial No. 430,075. 20 Claims. (Cl. 178—71.)



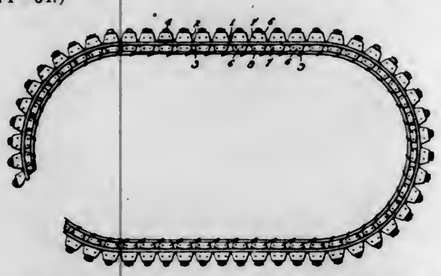
1. In a superposed telegraph system, a metallic circuit repeater comprising a dynamo electric unit, a superposed circuit repeater and a conductor connecting the superposed circuit repeater to the midpoint of the armature of said dynamo electric unit.

1,811,825. PLANETARIUM. JACOB B. NEEVEL, Kansas City, Mo.; Mrs. Jacob B. Neevel, executrix of said Jacob B. Neevel, deceased, assignor to Harry L. Neevel. Filed May 25, 1928. Serial No. 280,541. 3 Claims. (Cl. 35—3.)



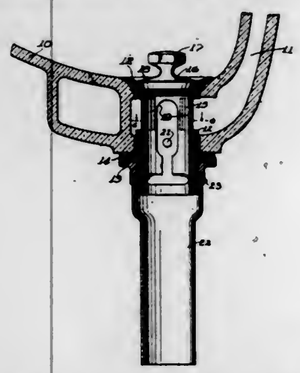
2. In a planetarium, an upright standard, a fixed vertical spindle carried by said standard, a planet carrying arm provided with a combination gear and clamping device rotatively securing said arm to said spindle for movement about the axis thereof, and a second planet carrying arm actuated by the gear portion of said combination device.

1,811,826. POWER TRANSMISSION BELT. PAUL B. REEVES, Columbus, Ind., assignor to Reeves Pulley Company, Columbus, Ind., a Corporation of Indiana. Filed Mar. 22, 1929. Serial No. 349,082. 7 Claims. (Cl. 74—64.)



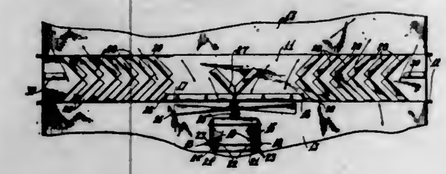
1. An edge and face drive belt comprising a flexible belt member having secured thereto at regularly spaced intervals and on the inner faces thereof transversely extending blocks, wedge shaped in cross section, and a flat friction belt secured on the inner faces of said blocks and comprising a plurality of overlapping sections.

1,811,827. LAVATORY HAND LIFT DRAIN. FRANK G. BROTZ, Kohler, Wis., assignor to Kohler Company, Kohler, Wis., a Corporation of Wisconsin. Filed Feb. 3, 1930. Serial No. 425,471. 1 Claim. (Cl. 4—204.)



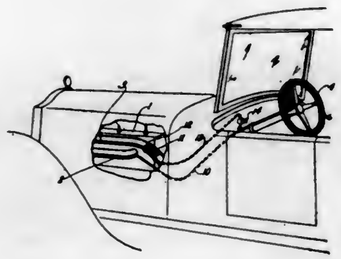
A lift drain for lavatories or the like comprising a drain connection, a plug member seated therein and provided with a handle by means of which it may be turned or lifted, a guide tube in which the plug member is removably threaded, said guide tube fitting loosely in the drain connection and having a pin and slot connection therewith for limiting the movements of the plug member.

1,811,828. AIR CIRCULATING DEVICE FOR HOT AIR FURNACES. EMIL ACKERMAN, Chicago, Ill. Filed Jan. 8, 1929. Serial No. 331,087. 7 Claims. (Cl. 230—240.)



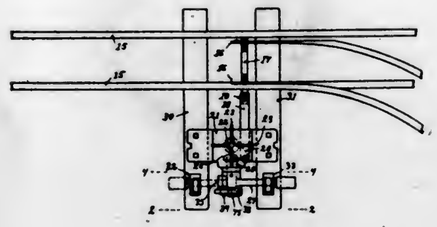
1. An air circulating device for a furnace, having in combination, a blower fan, a fixed deflector adjacent said blower fan, an air passage on each side of said blower fan for spreading the draft created by said blower fan, and a plurality of fixed deflectors in said air passages.

1,811,829. HEATER ATTACHMENT FOR AUTOMOBILES. FREDERICK G. FOLBERTH and WILLIAM M. FOLBERTH, Cleveland, Ohio, assignors to Trico Products Corporation, Buffalo, N. Y., a Corporation of New York. Original application filed Sept. 24, 1923, Serial No. 664,618. Divided and this application filed June 21, 1927. Serial No. 200,469. 2 Claims. (Cl. 237—12.3.)



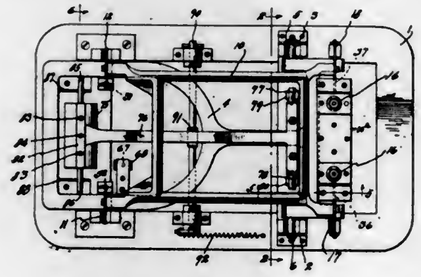
1. In combination with a motor vehicle provided with a rimmed steering wheel and an internal combustion engine having an intake manifold and an exhaust manifold, a radiator comprising a tube coiled around the steering wheel rim and having one end connected to the intake manifold, whereby the suction within the latter will induce a flow of air from the radiator into the intake manifold, an air inlet conduit connected to the opposite end of the radiator and open to the atmosphere for admitting atmospheric air thereinto, said conduit being heated by the exhaust manifold whereby the inflowing air will be heated thereby and effect a warming of the radiator, and valve means for closing the conduit to the heat from the exhaust manifold and opening the conduit directly to the atmosphere whereby the radiator for the steering wheel may be cooled.

1,811,830. SWITCH STAND. WALLACE M. GRAY, Cincinnati, Ohio, assignor to The American Valve and Meter Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 20, 1930. Serial No. 429,951. 11 Claims. (Cl. 246—289.)



1. In combination with a switch, a crank shaft provided with a crank operatively connected to the switch, a switch actuating lever adapted to actuate said crank shaft and to be latched to normally hold the switch in place at either extremity of the switch movement, a stop member normally movable with said crank shaft and actuating lever to permit a full throw of said actuating lever and crank shaft, and yieldable means adapted to normally hold said actuating lever in predetermined operative relation to said crank shaft and switch, said yieldable means being adapted to yield when said actuating lever is latched and said switch is forced to change the relation of said stop member to said actuating lever and thereby permit said switch to be forced a fraction of its normal throw and prevented by said stop member from being forced a complete normal throw, and thereby indicating by the position of the switch that the switch has been forced.

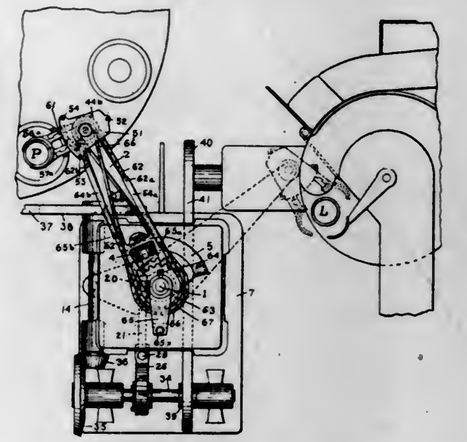
1,811,831. SCALE. BERT W. KING, Detroit, Mich., assignor to Barnes Scale Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 21, 1927. Serial No. 220,899. 21 Claims. (Cl. 265—61.)



1. In a scale, a lever system comprising a main load lever of the first order, bearings near one end of the lever for receiving the load, the other end of the lever being arranged to counterbalance the load, load platform supporting means carried by said bearings, and a pair of spaced arms constituting check links pivotally connected to the platform supporting means and extending in the same direction as the main load lever and being pivotally mounted adjacent the counterbalancing end of the main load lever.

1,811,832. AUTOMATIC TRANSFER MACHINE. WILBUR S. MAYERS, Fairmont, W. Va., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Aug. 23, 1926, Serial No. 130,915. Renewed Oct. 4, 1928. 25 Claims. (Cl. 214—1.)

25. Glassware handling apparatus comprising a member pivotally supported at one end, ware gripping means on the other end of said member, means for effecting a translatory movement of said member in a horizontal plane about a center in one direction, and means for simultaneously moving the last named end of said member about the first named end as an axis in the opposite angular direction.



1,811,833. CAPSULE TOOTHBRUSH. KARL A. SIMON, Jackson, Mich., assignor of one-half to Edward J. Boardman, Jackson, Mich. Filed Mar. 1, 1930. Serial No. 432,299. 4 Claims. (Cl. 15—135.)



1. A capsule tooth brush adapted for receiving and retaining tooth paste therein ready for use, comprising a suitable brush handle, rows of brush bristles set in one face of said handle at one end thereof, said brush handle being formed with an elongated back recess placed opposite the brush and having an elongated slotted passage leading from said recess directly into said brush, said recess and slot being extended nearly the full length of the head, and an elongated severable paste capsule inserted within said back recess adjacent the slotted passage.

Patents Nos. 1,811,834 to 1,812,849

THE

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Issue of June 30, 1931

Trade-Marks	100—No.	284,432 to No.	284,531, inclusive.
Labels	59—No.	39,338 to No.	39,396, inclusive.
Prints	16—No.	13,272 to No.	13,287, inclusive.
Reissues	4—No.	18,114 to No.	18,117, inclusive.
Designs	55—No.	84,505 to No.	84,559, inclusive.
Patents	1,016—No.	1,811,834 to No.	1,812,849, inclusive.
Total	1,250		

Vacation Notice

U. S. Court of Customs and Patent Appeals,
Friday, June 5, 1931.

It is ordered that the vacation period of this court, in so far as it affects the postponement by stipulation of the filing of appellants' and appellees' briefs in customs appeals, as provided in paragraph 3 of Rule XIX, and in so far as it affects the postponement of the printing of records and the filing of appellants' and appellees' briefs in patent appeals, as provided in paragraph 1 of Rule XXVI and in paragraphs 3 and 4 of Rule XXVII, shall commence on the 6th day of June, 1931.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,660,564, Fletcher Thorington, Means for the radio-translation of phonographically recorded sound waves, decided June 11, 1931, claims 2 and 3.

Pat. 1,771,794, L. L. King, Liquid level indicator, decided May 25, 1931, claims 2 and 3.

Pat. 1,778,486, N. W. Dorman, A. H. Schlotz, and M. K. Hatch, Adjustable bed for power presses, decided June 6, 1931, claims 2, 3, 8, 9, 10, 11, and 12.

Trade-Marks Canceled

93,326. Certain prints and publications. Barse & Hopkins, New York, N. Y. Registered September 9, 1913. Canceled May 27, 1931.

255,410. Table syrup. California Vinegar Co., also doing business as Golden West Syrup Co., Los Angeles, Calif. Registered April 23, 1929. Canceled May 27, 1931.

257,744. Mineral waxes. Vacuum Oil Company, New York, N. Y. Registered June 18, 1929. Canceled May 27, 1931.

263,174. Men's dress shirts and negligee shirts. I. Janov-Abeles Shirt Co., New York, N. Y. Registered October 29, 1929. Canceled May 27, 1931.

Notices of Cancellation

U. S. Patent Office, *Washington, June 4, 1931.*

American Pozzolana Company, its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Master Builders Company, of Cleveland, Ohio, to effect the cancellation of the trade-mark registration of the American Pozzolana Company, of 210 Penway Building, Indianapolis, Ind., No. 130,612, dated May 4, 1920, and the notice of such proceeding sent by registered mail to the said American Pozzolana Company at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said American Pozzolana Company, its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

U. S. Patent Office, *Washington, June 4, 1931.*

The National Gum Co., Inc., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of the United Drug Company, Greenleaf, Leon, and Forsyth Streets, Boston, Mass., to effect the cancellation of the trade-mark registration of The National Gum Co., Inc., of 44 Spring Street, Newark, N. J., No. 220,965, dated November 23, 1926, and the notice of such proceeding sent by registered mail to the said The National Gum Co., Inc., at the said address having been returned by the post-office as undeliverable, notice is hereby given that unless said The National Gum Co., Inc., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

M. J. MOORE,
Assistant Commissioner.

Condition of Applications Under Examination at Close of Business June 13, 1931

(Total number of applications awaiting action, excluding Trade-Mark Division, 93,963; Trade-Mark Division, 1,186. Oldest new case, Oct. 13, 1930; oldest amended, Oct. 13, 1930. The dates given are 1930 except where † indicates 1931.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
112	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Scattering Unloaders; Handling and Hoist Line Implements.	†Jan. 9	†Feb. 6	775
126	2. HADEN, C. F., Fishing and Trapping; Bee Culture; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Dec. 18	Dec. 19	1,423
331	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment	Dec. 26	†Mar. 21	915
234	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Dec. 13	Dec. 27	834
108*	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 15	Dec. 15	803
318	6. LEWERS, A. M., Carbon Chemistry	Nov. 19	Nov. 14	2,061
106	7. JARBOE, C. G., Optics; Photography	Nov. 12	Nov. 12	2,031
133	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Nov. 18	Nov. 18	1,607
221	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Dec. 16	Dec. 16	1,429
118	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	†Jan. 5	†Jan. 31	1,025
148*	11. BENHAM, E. V., Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	†Jan. 17	†Jan. 21	776
380	12. HENRY, C. C., Machine Elements	Oct. 16	Dec. 6	1,336
154*	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Dec. 26	Dec. 26	1,145
102*	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet-Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Assembling, and Blanks and Processes.	Dec. 15	Dec. 18	1,208
329	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 19	Nov. 19	2,595
242*	16. SPENCER, C. J., Telegraphy; Telephony	†Feb. 19	†Mar. 4	860
307	17. RAFTER, G. S., Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Oct. 22	Oct. 29	1,513
229	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 15	Dec. 15	1,142
236	19. KENNEDY, A. R., Furnaces; Heating Systems; Liquid and Gaseous Fuel Burners; Stoves and Furnaces.	Oct. 23	Oct. 16	2,069
179	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches: Safes; Undertaking	Dec. 16	Dec. 24	963
212	21. THOMPSON, T. J., Textiles; Cloth Finishing	Dec. 15	†Jan. 2	991
244*	22. COLWELL, J. H., Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	†Jan. 15	†Jan. 24	829
217	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 23	Oct. 20	1,076
147*	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Nov. 20	Dec. 10	945
202*	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Dec. 2	Dec. 3	1,518
228*	26. HODGES, J. S., Electricity, Generation; Motive Power	Dec. 19	†Jan. 5	962
214	27. ANDERSON, L. S., Brush, Broom, and Mop Making; Brushing, Scrubbing, and General Cleaning; Laundry; Washing Apparatus.	Dec. 13	Dec. 17	1,167
225	28. BENSON, A. R., Internal-Combustion Engines	Dec. 2	Dec. 3	1,739
160*	29. MORRIS, B. N., Woodworking; Tools; Compound Tools	†Jan. 9	†Feb. 4	572
248	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation; Illuminating Burners; Illumination; Thermostats and Humidostats.	†Jan. 14	†Mar. 23	904
312	31. HOLMES, W. N., Distillation; Gas, Heating and Illuminating; Mineral Oils	Oct. 13	Oct. 13	2,607
249	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 15	†Jan. 15	1,351
152	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Dec. 15	Dec. 13	2,555
304	34. SIMPSON, G. R., Electricity, Transmission to Vehicles: Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders.	†Feb. 14	†Feb. 13	796
116*	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	†Mar. 27	†Mar. 24	940
105	36. MORTON, G. L., Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Oct. 22	Oct. 22	2,302
224*	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Nov. 21	Nov. 29	1,599
145	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	†Mar. 11	†Mar. 23	556
220	39. COWLES, A. W., Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Dec. 13	Dec. 15	1,641
262*	40. OBERLIN, J. J., Bottles and Jars; Receptacles	Nov. 8	Dec. 15	2,974
125	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances.	†Jan. 2	†Jan. 7	765
223*	42. CUTTING, H. O., Electric Signaling	Nov. 24	Nov. 15	1,439
124*	43. NASH, P. N., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 24	Dec. 29	1,628
253	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 14	Oct. 20	2,237
379	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides; Spring Devices	Oct. 27	Oct. 30	2,228
233	46. TAYLOR, M., Concentrating Evaporators; Fluid Sprinkling, Spraying, and Diffusing; Fire Extinguishers; Liquid Heaters and Vaporizers.	Dec. 21	Dec. 26	1,152
264	47. BARKER, H., Clutches and Power Stops; Brakes and Motors	Dec. 15	Dec. 17	2,172
212*	48. ROEPKE, O. B., Electricity, General Applications	Dec. 1	Dec. 2	1,174
239	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	†Jan. 21	†Jan. 21	1,274
322	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 16	Oct. 16	2,525
240*	51. BACKUS, C. D., Radiant Energy, Wave Transmission	Oct. 20	Oct. 20	2,195
144	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Jan. 13	†Jan. 13	1,554
201*	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 18	†Feb. 19	918
241*	54. WAITE, W. E., Electric Lamps; Conductors; Vapor Electric Devices; Space Discharge Tubes	Oct. 18	Oct. 18	2,781
102	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	†May 4	†May 2	159
	Designs	†May 20	†June 1	294
309	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Nov. 10	Nov. 12	1,847
257*	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horseshoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 8	Dec. 23	781
270*	58. DOWELL, E. F., Abrading; Typewriting	Nov. 7	Nov. 7	1,495
315	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Dec. 31	†Jan. 8	1,607
213*	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants; Conduits and Housings.	Oct. 17	Oct. 24	2,043
269	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 15	Nov. 8	2,141
245*	62. COCHRAN, W. W., Toys; Amusement Devices; Furniture; Baggage; Package and Article Carriers	Oct. 20	Oct. 20	2,522
300	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Oils, Fats, and Glue; Preserving; Sugar, Starch, and Carbohydrates.	Oct. 18	Oct. 21	2,388
163	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	†May 18	†May 23	1,047
	Labels and Prints	†May 16	†June 1	139

* Refers to room numbers in the annex.

DECISIONS IN PATENT AND TRADE-MARK CASES

Commissioner's Decisions

Ex parte McBrides Theatre Ticket Offices, Inc.

Decided April 16, 1931

Trade-Marks—Theatre Tickets—Merchandise.

Theatre tickets *Held* to be merely tokens of service and not merchandise within the meaning of the Trade-Mark Act and a mark used thereon properly refused registration.

On Appeal.

Application for registration of trade-mark for theatre tickets.

Mr. E. F. Wenderoth for applicant.

Kinnan, *First Assistant Commissioner:*

The applicant has appealed from the decision of the Examiner of Trade-Marks denying registration under the ten-year proviso of the Trade-Mark Act of February 20, 1905, as amended, of the name "McBride's" as a trade-mark applied to tickets for amusement enterprises.

Registration was refused on the ground that the goods upon which the name is used are merely tokens of service and not goods or merchandise which are sold and consequently the trade-mark is not "used in commerce."

The applicant purchases and resells theatre tickets. These tickets, as well stated by the Examiner, obviously have no intrinsic value but are mere evidences of a contract entered into between the seller and the purchaser to furnish the latter an entertainment.

The Examiner has relied upon certain adjudicated cases in support of his ruling and the applicant has invited attention to various additional adjudicated cases upon which reliance is placed in support of the appeal. A review of the cases referred to by the applicant fails to support the contention that the bits of pasteboard in themselves possess any intrinsic value or are goods or merchandise in any sense save that they are mere evidence that their owners have purchased a right to certain service of the nature and to be rendered at a time indicated upon the ticket.

While the language of some of these adjudicated cases might be construed to indicate property in the bit of pasteboard comprising the ticket yet a careful reading of such cases shows clearly enough that property or the thing that is sold resides in a right to enjoy or be present at an entertainment. It is deemed plain the applicant is not entitled to the registration sought.

The decision of the Examiner is affirmed.

Thompson *v.* Keller

Decided May 23, 1931

Interference—Patent and Application—Application for Reissue of Patent—Open to Inspection by Opposing Party.

Where an applicant for the reissue of a patent is involved in interference on the original patent, the application for reissue will, ordinarily, be open to inspection by the interfering party, upon his request.

Recommendation of the Examiner of Interferences.

Messrs. Pennie, Davis, Marvin & Edmonds for Thompson.

Mr. De Witt C. Tanner, Mr. John G. Roberts, Mr. Joel C. R. Palmer, and *Mr. E. W. Adams* for Keller.

Kinnan, *First Assistant Commissioner:*

The Examiner of Interferences under date of May 18, 1931, has submitted to the Commissioner a recommendation that the Thompson reissue application Serial No. 419,692 be made special. A copy of the recommendation of the Examiner of Interferences is enclosed.

The record of the interference is fully set forth in a decision of the Examiner of Interferences dated May 18, 1931, suspending "proceedings in this interference until the Thompson reissue application has been finally disposed of and Thompson has been thus definitely limited to one of his present two conflicting positions."

The party Keller copied certain claims from the Thompson patent and the interference resulted. The application for reissue of the Thompson patent was filed before the declaration of the interference and in such reissue application the claims involved in the interference were omitted although many other claims additional to those of the original patent were made in the reissue application. There has been filed in the interference record a statement of counsel for the applicant for reissue that no claims appear in this reissue application which could be made in the application of Keller with which the patentee is in interference.

It is clear this interference should not be determined or terminated until the reissue application filed by the party Thompson is either granted or abandoned, to the end that the status of the original Thompson patent be first finally settled. Should the party Thompson however unduly delay the prosecution of this reissue application the party Keller may, upon renewed motion, again raise the question of entering judgment in the interference prior to the final disposition of the reissue application. Under the conditions here present it is thought the party Keller should, in order to protect his interests, be in position to know the status of the reissue application since obviously there may be presented at any time before final allowance of such reissue application claims which would interfere with subject matter claimed by the party Keller. Where therefore, as in the present case, an applicant for reissue of a patent is involved in an interference as to the original patent, the reissue application will, ordinarily, be open during the interference for inspection by the interfering party, upon his request, to the end that the entire controversy between the parties may be terminated in one proceeding. The present situation of the instant interference justifies vacating my decision of March 24, 1931, in which the party Keller was denied access to the reissue

application, and it is now held that such party may during the interference have access to the Thompson reissue application.

Applications for reissue of patents are under the rules made special and the Examiner will so far as practicable expedite the prosecution of the reissue application. To the extent indicated, the recommendation of the Examiner of Interferences is approved.

U. S. Court of Customs and Patent Appeals

PRATT FOOD COMPANY v. THE CRETE MILLS AND SECURITY MILLS AND FEED COMPANY

No. 2,681. Decided March 25, 1931

1. TRADE-MARKS—INTERFERENCE—PRACTICE.
   Where the Examiner of Trade-Marks denied a motion to dissolve the interference based on the ground that there was no interference in fact *Held* that it was not necessary for the Examiner of Interferences either to affirm or reverse that ruling.
2. SAME—SIMILARITY—"VICTOR" AND "VICTORY".
   A mark consisting of the word "Victory" used as a trade-mark for foods for chickens, etc., *Held* confusingly similar to a mark for the same goods consisting of the word "Victor" printed somewhat diagonally and pierced at an angle by a representation of a sword, the word "Victor" being the dominating feature of the latter mark and the representation of the sword being but a subordinate character playing little if any part in the uses of the trade of the products.
3. SAME—INTERFERENCE—PRIORITY.
   Evidence reviewed and *Held* to establish that the C. Company used its mark, the dominant feature of which is the word "Victor" prior to the date on which the P. Company began the use of the mark "Victory" upon the same goods and priority was properly awarded the former.

APPEAL from the Patent Office. Affirmed.

Mr. George R. Hamlin for Pratt Food Co.

Mr. Emil F. Lange and *Mr. Raymond J. Mawhinney* for The Crete Mills and Security Mills and Feed Company.

GARRETT, *J.*:

This is a trade-mark interference proceeding arising under the Trade-Mark Registration Act of 1905, as amended.

Appellant, as Pratt Food Company, of Philadelphia, Pennsylvania, on January 23, 1923, secured registration, No. 163,695, of the word "Victory" for trade-mark use for "foods for chickens, ducks, turkeys, geese, pigeons, birds and fowl". The application for this registration seems to have been filed December 6, 1921, and use of the mark alleged "since on or about October 1, 1920."

Prior to that time, to wit, on February 14, 1922, Security Mills and Feed Company, of Knoxville, Tenn., had secured registration, No. 151,941, of the word "Victor", apparently, in connection with the figure of an eagle having outstretched wings, for use on "Poultry feed".

In an application originally filed July 28, 1926, but which was put in final form December 13, 1927, The Crete Mills, of Crete, Nebr., sought to register, for use on certain poultry feeds, the word "Victor", printed somewhat diagonally and pierced at an angle by a representation of a sword. Use of the mark was alleged as follows: for chick mash, 1918; chick food, 1908; growing mash, 1918; hen scratch, 1918; laying mash, 1918; poultry fattener, 1914; husky scratch, 1920; crate fattener, 1914.

In April, 1928, the Examiner of Trade-Marks declared an interference to exist between the application of The Crete Mills and the registrations mentioned.

Registrant, Security Mills and Feed Company, made no response to the notice of interference and took no part in the subsequent proceedings. It is, therefore, only a nominal party herein and its registration need be no further considered. The issue is solely between Pratt Food Company and The Crete Mills, and "appellee", as hereinafter used, will be understood as referring wholly to The Crete Mills.

On May 9, 1928, appellant filed a motion for dissolution of the interference on the ground—

> that no interference in fact exists between the trade-mark "Victory" * * * and the trade-marks of the [other] parties.

This motion alleged (*a*) that "Victory" and "Victor" do not conflict; (*b*) that "Victory", as registered by appellant, stands alone and has a wholly different appearance from "Victor" in association with the figure of an eagle, or in association with a representation of a sword; (*c*) that some admission by counsel for The Crete Mills in a "paper filed August 17, 1927," expressing doubt whether confusion could arise between the two marks was binding; and (*d*) that a certain waiver by the Quaker Oats Company in appellee's favor negatived the presumption that appellee was claiming the word "Victor" alone, as did the fact that, in the drawing accompanying appellee's application, the word was associated with the sword.

In June, 1928, the motion for dissolution was overruled by the Examiner of Trade-Marks, who stated, among other things:

> The Examiner is clearly of the opinion that the words Victor and Victory conflict when used upon the same goods. Sound and appearance of the words are alike and the association of either word with such devices as swords or eagles merely enhances the idea of conquest common to the two words. It is not believed that any expressions of doubt in the record of one of the parties estops that party from seeking to have the doubtful issue determined in an interference or that failure to oppose a published mark should lead to a presumption of acquiescence.

Following the overruling of this motion for dissolution proof was taken by both parties, and, on January 28, 1929, the Examiner of Interferences rendered decision adjudging The Crete Mills to be "entitled to the registration for which it has made application".

Upon appeal to the Commissioner of Patents the decision of the Examiner of Interferences was affirmed. The issue was then brought before us by appeal.

In the notice of appeal, appellant sets out 15 assignments of error; in his brief it is stated that his reliance is upon 10 of these assignments.

Of those so relied upon it seems proper first to consider the ones which assert error in the alleged failure of the Examiner of Interferences to "rule upon interference in fact". This contention is expressed in assignments 2, 3 and 10.

It is the insistence of appellant that the Examiner of Interferences made no ruling upon its motion to dissolve, and that, therefore, the provisions of section 7 of the Trade-Mark Registration Act were not complied with; that it has been denied a right made mandatory by statute, and that the decision should be reversed and, presumably, the matter remanded for an express declaration or holding by the Examiner of Interferences upon this point.

As to this contention we have only to say that it seems to us that appellant would have read into the statute language not now contained therein. Section 7 of the statute makes no mention of "motions for dissolution". The only applicable language here seems to be that:

> * * * the Commissioner * * * in every case of interference * * * shall direct the Examiner in Charge of Interferences to determine the question of the *right of registration* to such trade-mark, * * * in such manner and upon such notice to those interested as the Commissioner may by rules prescribe. (Italics ours.)

Appellant has not made, and is not before us making, objection to appellee registering its mark, except, of course, it does not wish this to be done under an adjudication of priority in appellee's favor.

Appellant is not an opposer, in the sense of the statute, in these proceedings; the interference was not declared upon its initiative, but was the act of the Examiner of Trade-Marks, presumably, acting for the Commissioner of Patents under general instructions.

The obvious purpose of declaring the interference was to place the matter in a situation where the *right of appellee to register* might be passed upon in the light of the prior registrations found of record. Since no one appearred opposing appellee's application, and since, under the facts appearing, the Examiner of Trade-Marks did not feel it proper to either grant or reject the application without the question of priority being determined the interference was declared.

Section 26 of the Trade-Mark Registration Act provides:

> That the Commissioner of Patents is authorized to make rules and regulations, not inconsistent with law, for the conduct of proceedings in reference to the registration of trade-marks provided for by this act.

Acting under this general authority rules "governing the registration of trade-marks" have been promulgated, among them rule 54, the here material portion of which reads:

> Motions to dissolve an interference upon the ground that no interference in fact exists * * * or which deny the registrability of an applicant's mark * * * will be heard and determined by the examiner of trade-marks.

Also rule 55, which, in part, reads:

> The decision of the Examiner in Charge of Trade-Marks, upon a motion for dissolution, will be binding upon the Examiner in charge of interferences unless reversed or modified on appeal.

We find nothing inconsistent with the statute in these rules. The statute does not require the Examiner of Interferences to pass upon motions to dissolve except, of course, as such motions may relate to the "right of registration". In determining that right he may reverse or modify a decision of the Examiner of Trade-Marks. If there were no rule such as 55 and the Examiner of Interferences did not expressly or by clear implication reverse or modify a decision of the Examiner of Trade-Marks declaring an interference, the latter's holding would necessarily stand as an adjudication.

What the statute expressly requires of the Examiner of Interferences is determination of the right to registration. That he did expressly determine and declare in his decision in this case.

Our recent decision in the *Skookum Packers' Ass'n. v. Pacific Northwest Canning Co.*, 18 C. C. P. A. (Patents) ——, 45 F.(2d) 912, 403 O. G. 515 will be found to contain matter here relevant.

In cases where there is an opposer the Examiner of Interferences is also charged by the statute with determining "the sufficiency of objections to registration".

That element is not presented in this case. Appellant's motion to dissolve was not the act of an opposer. On the contrary, it was equivalent to an act of acquiescence, or of consent on appellant's part to the registration sought.

The expression in the decision of the Examiner of Interferences, which reads,

> This adjudication is regardless of whether the trade-mark rights of the parties are the same or different,

is taken by us to mean that no matter whether he agreed with the Examiner of Trade-Marks or not, on the matter of an interference being properly declared, appellee was entitled to register; that is, were the interference dissolved, appellee would be entitled to register because of there being no conflict, while, if there was a conflict between the words, appellee was still entitled to register because of its priority in the use of its word.

[1] Under this view it was not necessary for the Examiner of Interferences either to affirm or reverse the Examiner of Trade-Marks.

Assignments of error Nos. 2, 3 and 10 are without merit and are overruled.

Other assignments of error relate to the matter of appellee's word being associated with a representation of a sword, it being claimed that the mark must be treated as a whole, and that the presence of the sword affects the appearance of the mark.

This goes to the question of whether the marks of the respective parties so nearly resemble each other as that their application to goods, admittedly of the same descriptive properties, would be likely to cause confusion or mistake in the mind of the public or to deceive purchasers.

[2] We think there can be no serious question that such is the case. A mere inspection of appellee's mark is sufficient to demonstrate that the word "Victor" is its dominating feature. The evidence is practically undisputed that the products upon which it is used are designated in the trade by both customers and salesmen as "Victor" products. The sword is but a subordinate characteristic of the mark and plays little, if any, part in the usages of trade in the products. Even without testimony "Victor" and "Victory" so closely simulate each other in appearance and sound as that it seems obvi-

ous confusion would likely arise in their use. But we are not left to speculate about likelihoods or probabilities. Actual confusion has been proven to have already occurred not alone when the words have been applied to flour, a product not here involved, but when applied to poultry foods.

The assignments of error upon this issue are also overruled.

The only remaining question of importance is that of who was the prior user.

There is no serious dispute but that appellant has used its word "Victory" upon poultry food products substantially continuously since 1920.

Relative to the use of "Victor" by appellee, the Board, in its decision, said:

It must be held the decision of the Examiner of Trade-Mark Interferences that The Crete Mills was first to adopt the mark including the word "Victor" upon poultry feed is correct. The witnesses A. L. Johnson, Q. 54 to Q. 59, and B. L. Johnson, Q. 28 to Q. 30 and Q. 32, corroborated by the witnesses Talheim, Q. 12 to Q. 14 and Q. 18, and Monaghan, Q. 18, fairly establish the use of the Victor trade-mark, whether with or without the sword is deemed immaterial, upon poultry food as early as 1908.

Appellant has attacked the sufficiency of the evidence adduced by appellee to prove use of its mark upon poultry feeds earlier than the time when appellant began the use of "Victory" on its poultry food,

[3] It is sufficient for us to say, on this point, that the evidence has been examined and we do not feel justified in reversing the finding of facts by the tribunals of the Patent Office in concurring decisions.

The assignments of error relating to the effect of a certain permission given by the Quaker Oats Company to The Crete Mills to use "Victor" upon certain products is not pressed by appellant, nor is there any serious insistence that an expression by an attorney, for appellee, in a letter of August 17, 1927, addressed to the Patent Office, to the effect that "it is not at all certain" whether confusion would occur, is binding upon appellee.

We do not regard either of these matters as entitled to consideration in determining the case. All assignments of error are overruled and the decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

BOURJOIS, INC. (INTERNATIONAL PERFUME CO. INC., SUBSTITUTED), *v.* CHEATHAM CHEMICAL CO.

CHEATHAM CHEMICAL CO.

No. 2,614. Decided March 25, 1931

TRADE-MARKS—SIMILARITY—"POLLY PEACHTREE" AND "PEACHES", "PEACH BLOW", "PEACHES AND CREAM" AND "VELVET OF PEACHES".

The term "Polly Peachtree" as used by the applicant as a trade-mark for toilet articles *Held* not confusingly similar to the marks "Peaches", "Peach Blow", "Peaches and Cream" and "Velvet of Peaches", previously used and registered by the opposer.

BLAND, *J.*, and HATFIELD, *J.*, dissenting.

APPEAL from the Patent Office. Affirmed.

Mr. Louis Alexander and *Mr. Conway P. Coe* for Bourjois, Inc. (International Perfume Co. Inc., Substituted).

Mr. Will T. Gordon and *Mr. Philip Weltner* and *Mr. T. L. Mead, jr.*, for Cheatham Chemical Co.

LENROOT, *J.*:

This is a trade-mark opposition proceeding. Appeal is taken from a decision of the Commissioner of Patents affirming a decision of the Examiner of Interferences dismissing the opposition of appellant to the registration by appellee of its claimed trade-mark consisting of the notation "Polly Peachtree" for toilet water, perfumes, bay rum and other toilet articles. In its representation of the mark the words are in script with the word "Polly" above the word "Peachtree."

In its notice of opposition, appellant alleged prior adoption and use by it of trade-marks for toilet articles of like character, said trade-marks consisting of the words "Peaches", registered February 13, 1917, No. 115,435, and "Peach Blow", registered October 19, 1886, No. 13,745, the latter mark being again registered on November 11, 1924, No. 191,436; said notice of opposition further alleges that if appellee were permitted to use and register the mark "Polly Peachtree" as a trade-mark for toilet preparations, confusion in trade and deception of the public would result therefrom, and that appellant believes it would be damaged thereby.

Both parties took testimony.

It is conceded that the marks of the parties are used upon goods of the same descriptive properties.

The Commissioner of Patents concurred in the finding of the Examiner of Interferences that the marks of appellant were used and owned by it prior to the adoption and use by appellee of its mark, but found, as did the Examiner, that the marks of the respective parties do not bear such a close resemblance to each other as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers.

Appellant offered in evidence certificates of the registrations pleaded, and in addition two other certificates of registration owned by it, one of the words "Peaches and Cream" and the other of the words "Velvet of Peaches." Appellee objected to the introduction in evidence of the two certificates last above named, upon the ground that they were not pleaded in the notice of opposition. Inasmuch as it appears in the decision of the Commissioner that he considered the said last named marks, and as it is clear that he had a right to do so under that provision of section 7 of the trade-mark law of 1905, which requires in an opposition proceeding a determination of the question of the right of registration of a trade-mark, as well as the sufficiency of objections made thereto, the certificates of registration of the marks "Peaches and Cream" and "Velvet of Peaches" are properly before us.

We therefore have four trade-mark registrations of appellant, "Peaches", "Peach Blow", "Peaches and Cream" and "Velvet of Peaches", all of which registrations were made prior to the first use claimed by appellee of its trade-mark "Polly Peachtree", and the question is whether said last named mark so nearly resembles any of said marks of appellant, when applied to goods of the same descriptive properties, as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers.

That appellant's marks are valid trade-marks we do not question, but it is also true that if one engaged in the production of perfumeries should manufacture a perfume made from peach blossoms, he would have the right to so label and describe it upon such goods, notwithstanding appellant's trade-marks, provided he did so in such a way as to differentiate such description from the form of the marks used by appellant. Furthermore, Funk & Wagnalls Standard Dictionary gives as one of the definitions of "peach blossom": "a pink color dashed with yellow."

The same authority defines "peach bloom" as:

The delicately fine powder found on a ripe peach; hence a soft pinkish color of the skin, especially of the cheek.

It also defines "peach blow", which is one of appellant's marks,

A light purple glare inclining to pink, seen on some oriental porcelain.

We think that one manufacturing a face powder or rouge having the color of "peach blossom", "peach bloom" or "peach blow", as above defined, would have the right to indicate such color upon such goods without infringing appellant's trade-marks.

We have referred to the fact that certain combinations of words containing the word "peach" may be descriptive of certain goods of the class to which the marks here in issue are applied, as a circumstance which we think it proper to consider in passing upon the likelihood of confusion arising from the use of the marks of the respective parties hereto.

In Nims on Unfair Competition, sec. 216, certain observations are made which we think are sound and here applicable:

There is a distinct difference between a true trade-mark and a name in the public domain at the very instant of first use. When a fanciful word is first used that first use is as a trade-mark and *it has only one meaning in all the world*, i. e., its trade-mark meaning. The day Kodak was first used on a camera, it had only one meaning, i. e., its trade-mark meaning. * * *

On the other hand, in the case of a word of the language—or a name in the public domain, when it is first used as a trade-mark it has also a significance other than its trade-mark meaning and if its trade-mark use is such that it is possible that the public may give to it, even when used on merchandise, its public meaning instead of its trade-mark meaning, it may be that the trade-mark rights in the word are limited by, and must follow the education of the public in recognizing its trade-mark meaning. * * * (Italics quoted.)

Appellant contends that the key word of its various trade-marks is the word "peach", and that its various combinations are only to indicate various members of its "peach" family. This may be true, and if "peach" was a purely fanciful word, we would be of the opinion that anyone purchasing the same class of goods under another trade-mark, but in which the word "peach" occurs, would be very likely to ascribe to appellant origin of such goods from that fact alone; but, holding as we do that the word "peach", as used by appellant, is not a fanciful word, we think the purchasing public would not be so likely to ascribe to appellant origin of goods, because of the presence of the word "peach" in both marks, as if it were a purely fanciful word. Therefore, in ascertaining whether confusion or mistake will arise in the mind of the public in the use of the two words, the presence of the word "peach" in the two marks is not determinative of the issue, but the question is whether the words "Polly Peachtree" are confusingly similar to the words "Peaches", "Peach Blow", "Peaches and Cream" and "Velvet of Peaches", or any of them, when applied to goods having the same descriptive properties.

It appears from the testimony that the words "Polly Peachtree" have been used for years as a nom de plume by a columnist in a daily newspaper in Atlanta, Georgia, where appellee is located, and that Peachtree Street is a wellknown street in that city, and that it was from these facts that appellee conceived the idea of adopting the words "Polly Peachtree" as a trade-mark for use upon its goods. Of course, if confusion or mistake is likely to be caused by the use of appellee's mark, its good faith can not aid it in securing registration. We simply say here that there is no fradulent intent claimed or shown with reference to the conduct of either of the parties to the case at bar.

Considering, therefore, the trade-mark "Polly Peachtree" as a whole, we are of the opinion that it is not so similar to the marks of appellant, or any of them, as to be likely to cause confusion or mistake in the mind of the public or to deceive purchasers.

We think purchasers would not dissect the mark and emphasize the syllable "peach" in "Peachtree", but would either remember the word "Polly" or the words "Polly Peachtree" as a whole, and we do not think that upon seeing the mark, or hearing it pronounced, the ordinary purchaser of the goods to which the mark was applied would ascribe their origin to appellant.

The decision of the Commissioner of Patents is affirmed.

Affirmed.

BLAND, *J.*, dissenting:

I must dissent from the opinion of the majority for two reasons.

First. The reasoning of the opinion leads to the conclusion that there would be less likelihood of confusion between "Polly Peachtree" and the trade-marks of the opposer "Peaches", "Peach Blow", "Peaches and Cream" and "Velvet of Peaches", on account of the fact that "Peaches" is suggestive rather than "fanciful". The fact that the word "Peach" is suggestive, which the majority concedes in no way invalidates the trade-mark, would make the probability of confusion more likely since the predominant thought in "Polly Peachtree" obviously is "Peach", which is equally suggestive of the character of the goods in all the marks.

It is hardly logical to say that "appellant's marks are valid trade-marks", and at the same time sustain appellee's right to register chiefly upon the theory, as I understand the situation, that opposer unfortunately selected trade-marks which are so suggestive as to make confusion easy.

The majority opinion says:

That appellant's marks are valid trade-marks we do not question, but it is also true that if one engaged in the production of perfumeries should manufacture a perfume made from peach blossoms, he would have the right to so label and describe it upon such goods, notwithstanding appellant's trade-marks, provided he did so in such a way as to differentiate such description from the form of the marks used by appellant.

Just what is meant by this statement is difficult to say. If the writer intended to convey the impression that on account of the word "Peach", in appellant's marks, being suggestive, the appellee would have the right to so label his peach perfumery and in doing so use the word "Peach" as a trade-mark, regardless of confusion that might result, it is clearly against numerous decisions by this court. If the statement does not mean that, it is useless and misleading. Of course he would have the right to "describe" his product by saying that it was made from peach blossoms, but that is far from saying that he would have the right to use "Peach Blossom" as a trade-mark. We have repeatedly held that the right to register is to be distinguished from the right to use. *National Biscuit Co.* v. *Sheridan*, 18 C. C. P. A. (Patents) —, 44 F.(2d) 987, 402 O. G. 4; *American Fruit Growers, Inc.*, v. *Michigan Fruit Growers, Inc.*, 17 C. C. P. A. (Patents) 906, 38 F.(2d) 696, 393 O. G. 789; *California Packing Corp.* v. *Tillman & Bendel, Inc.*, 17 C. C. P. A. (Patents) 1048, 40 F.(2d) 108, 394 O. G. 789. A trade-mark may not be registered if it is probable that confusion will result between it and a valid registered mark. Since appellee concedes that appellant's trade-marks are valid, the fact that they are suggestive should not lessen our vigilance in ascertaining the probability of confusion, since if they both suggest the same thing there is more probability of confusion than there would otherwise be.

Second. Irrespective of the above consideration, I think this record presents a state of facts from which no other reasonable conclusion can be deduced than that confusion to the public will result from the registration and use of appellee's trade-mark "Polly Peachtree". For two or three generations, appellant's "Peach brand" trade-marks have been one of the leaders of toilet articles and have been popular with the toilet article purchasing public. It is natural to conclude that when a new trade-mark containing the word "Peach", used in connection with the sale of a toilet atricle, is placed on the market, the public will think it is another of the "Peach" family of appellant. The fact that appellant has four "Peach" trade-marks increases the likelihood of confusion. Many purchasers will be led to buy "Polly Peachtree" toilet water through an incorrect belief as to its origin.

Congress intended to encourage the registration of trade-marks only which would not lead to confusion. It had no right to remedy, and did not attempt to provide a remedy for, the confusion the public would necessarily have to suffer by virtue of rights and limitations which grew out of the use of trade-marks and irrespective of their registration.

Since I am convinced that confusion will result and disagree with the inferred reasons for arriving at the conclusion which the majority reached, I must dissent. The opposition should have been sustained.

HATFIELD, *J.*, concurs in the dissenting opinion.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

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1,594,490, E. C. Bertolet, Method of dyeing bone and the product thereof, appeal filed Sept. 8, 1930, C. C. A., 3d Cir. Doc. 4487, *G. K. Hale Mfg. Co.* v. *Hafleigh & Co. et al.*

1,617,171. (See 1,545,207.) 1,617,172. (See 1,545,207.)

1,617,174. (See 1,545,207.) 1,617,177. (See 1,545,207.)

1,617,178. (See 1,545,207.) 1,617,179. (See 1,545,207.)

1,617,180. (See 1,545,207.) 1,617,181. (See 1,545,207.)

1,624,689. (See 1,594,334.) 1,630,812. (See 1,379,224.)

1,636,721. (See 1,536,044.) 1,646,377. (See 1,594,334.)

1,646,378. (See 1,594,334.) 1,651,035. (See 1,240,459.)

1,658,792, J. S. Bushey, Axle setting apparatus for autos; 1,761,516, same, Method of adjusting camber in automobile wheels, filed Apr. 18, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E T–97–M, *Food Machinery Corp. et al.* v. *Kelley Bros. et al.* Doc. E T–98–C, *Food Machinery Corp. et al.* v. *F. Bechtoldt.*

1,663,505, W. H. Mason, Hard grainless fiber product and process of making, filed Apr. 2, 1931, D. C. Del., Doc. E 871, *Masonite Corp.* v. *The Celotex Co.*

1,704,961, T. Birkenmaier, Disconnecting block; 1,743,942, E. Volkmann, Switch; 1,731,775, W. A. Heinrich, Hanger, D. C., E. D. Mo., E. Div., Doc. 9161, *W. N. Matthews Corp.* v. *J. R. Kearney Corp.* Consent decree Apr. 1, 1931.

1,731,775. (See 1,704,961.)

1,741,118, Rosenfeld and McCabe, Sign and method of manufacture, D. C., N. D. Ohio, E. Div., Doc. 3449, *The Grabler Mfg. Co.* v. *Vacuum Oil Co.* Claims 1, 7, and 8 held valid and infringed (notice Apr. 25, 1931).

1,743,942. (See 1,704,961.) 1,744,207. (See 1,365,043.)

1,761,516. (See 1,658,792.) 1,783,665. (See 1,240,459.)

Re. 14,916, A. H. Pitney, Mail marking machine and postage meter; Re. 15,734, same, Postage meter and mail marking machine, 1,382,224, same, Locking mechanism for numeral wheels, 1,554,054, E. N. Weyer, Envelope mailing and stamping machine, filed Mar. 26, 1931, D. C. Del., Doc. E 870, *Pitney-Bowes Postage Meter Co.* v. *Whitlock Metered Mail Co., Ltd.*

Re. 15,231. (See 1,377,566.) Re. 15,734. (See Re. 14,916.)

Re. 17,180, C. T. Hibbard, Method and means for starting synchronous motors, filed Apr. 28, 1931, D. C., S. D. N. Y., Doc. E 59/278, *Electric Machinery Mfg. Co.* v. *General Electric Co.*

Re. 17,328, R. D. Davies, Process of facing the cutting edges of drilling tools, filed Apr. 23, 1931, D. C., S. D. Calif. (Los Angeles), Doc. E T–104–J, *P. L. & M. Co.* v. *F. A. Bell.*

Des. 78,526, C. K. Marcell, Vanity case, D. C., S. D. N. Y., Doc. E. 50/25, *C. K. Marcell* v. *Sagamor Metal Goods, Inc.* Patent held valid and infringed, counter-claim dismissed Apr. 28, 1931.

Des. 81,678, J. Tuteur, Electric vacuum cleaner, filed Apr. 27, 1931, D. C. Conn. (New Haven), Doc. E 2127, *Electric Vacuum Cleaner Co., Inc.*, v. *Landers, Frary & Clark.*

Disclaimers

1,165,825.—*Garfield A. Wood*, St. Paul, Minn. HYDRAULIC PUMP. Patent dated December 28, 1915. Disclaimer filed June 17, 1931, by the assignees, *Wood Corporation of Delaware, and Wood Hydraulic Hoist & Body Company.*

Hereby make disclaimer with respect to the improvement described and defined in claim 15 of so much thereof as is in excess of the following:

"A motor driven vehicle having a dumping body pivotally mounted thereon, a fluid pressure operated piston in a cylinder for elevating the body against the action of gravity, a pump driven by the motor of said motor driven vehicle for pumping fluid continuously to actuate the piston to elevate the body, means for automatically limiting the height of elevation of said piston, means for maintaining a circulation of fluid through said cylinder for maintaining said piston in elevated position, and means for reversing and permitting acceleration of fluid flow through said cylinder to increase the speed of return of said piston to normal position."

1,529,912.—*James V. L. Peacock*, Dothan, Ala. PULLING MACHINE. Patent dated March 17, 1925. Disclaimer filed June 15, 1931, by the patentee, and the *Medley Manufacturing Company*.

Your petitioners, therefore, hereby enter this disclaimer to that part of the claim in said specification which is in the following words, to-wit:

"4. The combination with a tractor having front and rear axles and supporting wheels therefor, of a pulling attachment comprising gears adapted to be mounted in place of the wheels on the rear axles and to be driven thereby, a pedestal adapted to support the rear axles, a drum shaft journaled in said pedestal and carrying a drum and gearing driven by the gears on said rear axles, means to brace the pedestal to the tractor, and means to connect an anchorage to said pedestal."

"7. The combination with a motor tractor having front and rear axles and wheels mounted on said axles, of a pulling attachment comprising gears adapted to replace the rear tractor wheels, a pedestal adapted to support the rear end of the tractor, a drum shaft journaled in the rear end of said pedestal, a transmission to drive said drum shaft from said rear axle gears, journal bearings for said drum shaft having caps adapted to be moved to permit the drum shaft to be rolled rearwardly off the pedestal, means to brace the pedestal fore and aft to said tractor, and means to provide an anchorage for said pedestal."

1,692,837.—*Raymond Henry*, Rock Island, Ill. OILLESS SPRING SHACKLE. Patent dated November 27, 1928. Disclaimer filed June 9, 1931, by the assignee, *O.-N. Spring Shackle Company*.

Hereby disclaims claim 11 of said Letters Patent.

1,727,308.—*Frederick S. Denison* and *Lewis L. Cunningham*, Minneapolis, Minn. HEAT-REGULATING DEVICE. Patent dated September 3, 1929. Disclaimer filed June 15, 1931, by the assignee, *Minneapolis-Honeywell Regulator Company*.

Hereby enters this disclaimer to claims 20 to 24, inclusive, of said Letters Patent which are in the following words, to wit:

"20. A device of the class described including ignition and fuel supply means and circuits therefor, a relay controlling the fuel supply circuit, a warp switch having a heating coil and a shunt circuit for the coil, the coil of the warp switch being in series with the coil of the relay, a switch for the shunt circuit, and means for causing operating of the switch as result of ignition of fuel delivered by fuel supply means.

"21. A device of the class described including ignition and fuel supply means and circuits therefor, an electromagnetic device controlling the fuel supply circuit, a thermally operable device having a heating coil and a shunt circuit for the coil, the coil of the latter device being in series with the coil of the electro-magnetic device, a switch for the shunt circuit and means for controlling its operation as the result of ignition of fuel delivered by the fuel supply means.

"22. An electric fuel supply system comprising a relay controlling a fuel supply circuit, a warp switch having a heating coil, and a shunt circuit for the coil, the coil of the warp switch being in series with the coil of the relay and said warp switch controlling energization of the relay, a switch for the shunt circuit, and means for causing the operation of the switch as the result of the ignition of fuel delivered by the fuel supply means.

"23. A device of the class described including ignition and fuel supply means and circuits therefor, a relay controlling the fuel supply circuit, a warp switch having a heating coil and a shunt circuit for the coil, said switch being in circuit with said relay, electrical connections for energizing the heating and relay coils simultaneously, a switch for the shunt circuit, and means for causing operation of the switch as result of ignition of fuel delivered by fuel supply means.

"24. A device of the class described including ignition and fuel supply means and circuits therefor, a relay controlling the fuel supply circuit, a warp switch having a heating coil and a shunt circuit for the coil, the coil of the warp being electrically connected with the coil of the relay, a switch for the shunt circuit and means for causing operation of the switch as result of ignition of fuel delivered by fuel supply means."

1,758,894.—*Adolf H. Schaffert*, Youngstown, Ohio. WINDOW STRUCTURE. Patent dated May 13, 1930. Disclaimer filed June 9, 1931, by the patentee, and the assignee, *Truscon Steel Company*.

Hereby enter this disclaimer to that part of the claim in the specification, which is in the following words, to-wit:

"1. The combination with a window frame, of a plurality of sashes mounted in said frame to swing, an actuating bar mounted to reciprocate in the window frame, a connection between one of the sashes and the bar that causes the swinging of the sash on the reciprocation of the bar, and a bolt movably mounted on the other sash and detachably engaging with the bar to effect its movement with the latter sash and to permit the independent movement of said latter sash.

"2. The combination with a window frame, of a plurality of sashes mounted in said frame to swing, an actuating bar mounted to reciprocate in the window frame, a connection between one of the sashes and the bar that causes the swinging of the sash on the reciprocation of the bar, and a device mounted on the other sash and having a detachable pivotal engagement in the bar and a slidable interfitted mounting on said bar that is operative when the pivotal engagement is detached.

"3. The combination with a window frame, of a plurality of sashes, links pivoted to the frame and to the sashes, reciprocatory actuating bars at the sides of the frame, a pivotal mounting for one sash on the said bars, and a bolt structure mounted on the other sash and having detachable pivotal mountings on the bars and mountings that are slidably interfitted with the bars when the pivotal mountings are disengaged."

"7. The combination with a window frame, of guideways at the opposite sides of the frame, actuating bars mounted to reciprocate in the guideways, upper and lower sashes, connections between the sashes and the frame that permit the sash to swing, pivotal connections between one sash and the bars to cause its swinging movement on the reciprocation of the bars, sliders on the bars adjacent the other sash, and bolts on said other sash that slidably pass through the sliders and detachably interlock with the bars, said bolts when detached from the bars maintaining their engagements with the sliders and causing the sliding movements of the sliders on the bars when the sash is swung."

Adjudicated Patents

(C. C. A. Ohio.) Bucknam patent, No. 1,059,329, for blowpipe apparatus, claims 1 and 4 *Held* valid and infringed. *White Tool & Supply Co.* v. *Air Reduction Co.*, 48 F.(2d) 720.

(D. C. Calif.) Claude patent, No. 1,125,476, for system of illuminating by luminescent tubes, claim 1 *Held* valid and infringed. *Electrical Products Corporation* v. *Neale, Inc.*, 48 F.(2d) 824.

(D. C. Pa.) Lowenstein patent, No. 1,258,423, for variable electrical apparatus, claims 1, 2, 3, 4, 9, and 10 *Held* valid and infringed. *Scovill Mfg. Co.* v. *Balistocky*, 48 F.(2d) 875.

(C. C. A. and D. C. Calif.) Lorraine patents, Nos. 1,396,860, for method and apparatus for separating oil and gas; 1,577,917, for method and apparatus for separating gas and oil; and 1,620,771, for oil and gas separator, and Reissue 15,220, for oil, gas and sand separator, *Held* invalid as to the claims in suit. *Lorraine Corporation* v. *Union Tank & Pipe Co.*, 48 F.(2d) 847 and 848.

(D. C. Calif.) Miller and Harvey patent, No. 1,552,332, for air deflector, *Held* valid but not infringed. *Harvey* v. *Wrightsman*, 48 F.(2d) 845.

(D. C. Tex.) Cook patent, No. 1,783,006, for method of coating pipes, *Held* invalid. *Wailes Dove-Hermiston Corporation* v. *Oklahoma Contracting Co.*, 48 F.(2d) 901.

(C. C. A. N. Y). Berlinger design patent, No. 70,209, for wedding ring, *Held* invalid. *Berlinger* v. *Busch Jewelry Co.*, 48 F.(2d) 812.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 30, 1931

[VOL. 407. No. 5]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 311,150. LITTLE WAR CREEK COAL COMPANY, Charleston and Litwar, W. Va. Filed Feb. 17, 1931.

Litwar

For Coal.
Claims use since 1921.

Ser. No. 311,595. THE CHAMPION FIBRE COMPANY, Canton, N. C. Filed Mar. 2, 1931.

RADIANT

For Soda Pulp.
Claims use since Jan. 15, 1931.

CLASS 2

Receptacles

Ser. No. 314,521. UNION BAG & PAPER CORPORATION, New York, N. Y. Filed May 13, 1931.

UNION
TRANS-O-FACE

The drawing is lined to indicate red.
For Paper Bags.
Claims use since May 4, 1931.

Ser. No. 314,727. UNION BAG & PAPER CORPORATION, New York, N. Y. Filed May 18, 1931.

UNION
TRANS-PAK

The drawing is lined to indicate red.
For Paper Bags.
Claims use since May 12, 1931.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 310,730. MAJESTIC LEATHER GOODS CO., INC., New York, N. Y. Filed Feb. 4, 1931.

PREST ACK T

For Travelling Bags; Luggage for Men and Women Comprising Oxford Bags, Club Bags, Gladstone Bags, Railroad Bags, Pullman Bags, Kit Bags, Suit Cases, Satchels, Grips, Dressing Cases, Hat Boxes, and Hand Wardrobe Trunks.
Claims use since Jan. 2, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 305,386. BESSIE B. BURGESS, doing business as Budge-It Products, New York, N. Y. Filed Sept. 6, 1930.

BUDGE-IT

For Chemical Compound in the Form of a Paste Used for Rug and Carpet Cleaning and Which May Also Be Used for General Household Cleaning Purposes.
Claims use since Aug. 7, 1930.

Ser. No. 309,172. SAUL PALAIS, doing business as Lucky Kat Stove Polish Company, Peabody, Mass. Filed Dec. 19, 1930.

Lucky Kat
SHAKE WELL
STOVE POLISH

The words "Shake Well" and "Stove Polish" are disclaimed apart from the mark shown.
For Stove Polish.
Claims use since Sept. 1, 1930.

Ser. No. 312,688. ADA BALDWIN, Philadelphia, Pa. Filed Mar. 30, 1931.

WET ME WET

For Cleansing and Polishing Compounds for Metal and Glass.
Claims use since 1900.

Ser. No. 313,913. GREEN OIL SOAP COMPANY, Chicago, Ill. Filed Apr. 28, 1931.

GRENOL

For Shaving Cream, Paste Soap, Sweeping Powder, Soap Powder, a Cleanser in Liquid Form for Rubber, Cork, Tile, Wood, Varnished and Enameled Surfaces; Shampoo Base Soap, Surgical Base Soap, Surgical Soap, Shampoo Base and Coco Base Soap.
Claims use since Sept. 15, 1924.

Ser. No. 314,599. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed May 15, 1931.



The shading in the drawing is to indicate colors. The solid black indicates a black band; the vertical lines at the right end of the band indicate a red seal; and the word "Palmolive" as it appears in the aforementioned black band is in gold.
For Soap.
Claims use since June, 1899.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 300,726. WALTER KORTE COMPANY, Cincinnati, Ohio. Filed May 17, 1930.

SANTONY

For Foot Powder and Ointment for External Use for Cuts, Burns, and the Like, and Also for Application to the Chest in Congestion and as an Inhalent for Head Colds and Catarrh.
Claims use since Jan. 15, 1930.

Ser. No. 306,657. LESTER H. MILES, doing business as Miles Laboratories, Los Angeles, Calif. Filed Oct. 11, 1930.



The color lining in the drawing is used for shading purposes only.
For Bleaching, Cleaning, and Softening Creams.
Claims use since Sept. 10, 1930.

Ser. No. 309,742. SALTZMAN & BROMBERG, New York, N. Y. Filed Jan. 8, 1931.



The lining shown on the drawing is for shading purposes only. No rights are claimed herein to the representation or outline of the label per se. The representation of the female figure in the mark is purely fanciful.
For Perfumes, Toilet Waters, Face Lotions, Hand Lotions, Facial Creams, Hair Waving Fluids, Rouges, Brilliantine, Lipsticks, Face Powders, Sachets, Eyebrow Pencils, Bath Salts, Talcum Powders, Shampoos, Nail Polishes, and Hair Tonics.
Claims use since June 21, 1930.

Ser. No. 311,860. THE FORESTAL LAND, TIMBER & RAILWAYS COMPANY LIMITED, London, England. Filed Mar. 5, 1931.



For Tanning Extracts.
Claims use since July 4, 1908.

Ser. No. 312,399. IPPOLITO V. & SON, New York, N. Y. Filed Mar. 20, 1931.

WIPPOSON

For Medicinal Preparation for Treating Piles, Diarrhea, Constipation, Dysentery and for Treating the Prostate Gland.
Claims use since Jan. 2, 1931.

Ser. No. 313,512. J. WILLIS SAYLES, Wichita, Kans. Filed Apr. 18, 1931.

FOUR-IN-ONE FACE CREAM

No claim is made to exclusive rights in the words "Face Cream" apart from the mark as shown.
For Face Creams.
Claims use since Jan. 1, 1928.

Ser. No. 313,971. PITMAN-MOORE COMPANY, Indianapolis, Ind. Filed Apr. 29, 1931.

ASCARIFUGE

For Vermicide and Purgative for the Removal of Round Worms in Swine.
Claims use since 1924.

Ser. No. 314,083. SOCIÉTÉ ANONYME JEAN-PATOU, Paris, France. Filed May 1, 1931.

LASH-LIGHT

For Perfumes, Toilet Water, Face Powder, Talcum Powder, Lip Rouge, Sachets, Brilliantine, Bath Salts, Lotion for the Skin and Hair, Face Cream.
Claims use since Mar. 13, 1931.

CLASS 7

Cordage

Ser. No. 314,788. CLARK and JACKSON, Columbia, S. C. Filed May 20, 1931.

TYBACO

For Cotton Cordage, Rope, and Twine.
Claims use since May 4, 1931.

Ser. No. 314,835. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio, Chicago, Ill., Pittsburgh, Pa., New York, N. Y., Worcester, Mass., Hoboken, N. J. Filed May 21, 1931.

AMGAL

For Wire Rope, Particularly Galvanized Wire Rope Used as Drilling Lines.
Claims use since Mar. 13, 1928.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 314,870. VULCAN MATCH CO., INC., New York, N. Y. Filed May 21, 1931.

COTTON BALE

For Matches.
Claims use since May 9, 1931.

Ser. No. 314,871. VULCAN MATCH CO., INC., New York, N. Y. Filed May 21, 1931.

DIXIE

For Matches.
Claims use since May 9, 1931.

Ser. No. 314,872. VULCAN MATCH CO., INC., New York, N. Y. Filed May 21, 1931.

DIXIELAND

For Matches.
Claims use since May 9, 1931.

Ser. No. 314,873. VULCAN MATCH CO., INC., New York, N. Y. Filed May 21, 1931.

KING COTTON

For Matches.
Claims use since May 9, 1931.

Ser. No. 314,874. VULCAN MATCH CO., INC., New York, N. Y. Filed May 21, 1931.

MAGNOLIA

For Matches.
Claims use since May 9, 1931.

Ser. No. 314,875. VULCAN MATCH CO., INC., New York, N. Y. Filed May 21, 1931.

OLD PLANTATION

For Matches.
Claims use since May 9, 1931.

Ser. No. 314,876. VULCAN MATCH CO., INC., New York, N. Y. Filed May 21, 1931.

SOUTHLAND

For Matches.
Claims use since May 9, 1931.

Ser. No. 314,877. VULCAN MATCH CO., INC., New York, N. Y. Filed May 21, 1931.

SUNNY SOUTH

For Matches.
Claims use since May 9, 1931.

CLASS 10

Fertilizers

Ser. No. 310,856. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Feb. 9, 1931.

DEEP SEA

For Fish Meal.
Claims use since Sept. 30, 1930.

CLASS 12

Construction Materials

Ser. No. 305,458. UNITED STATES GYPSUM COMPANY, Chicago, Ill. Filed Sept. 8, 1930.

Baldy

For Metallic Clips Used for Spacing Apart Structural Parts Such as Ceilings, Floors, Walls, Machinery Bases, Etc.
Claims use since Feb. 10, 1930.

Ser. No. 310,465. ACOUSTONE COMPANY, LTD., Los Angeles, Calif. Filed Jan. 28, 1931.

TruTone

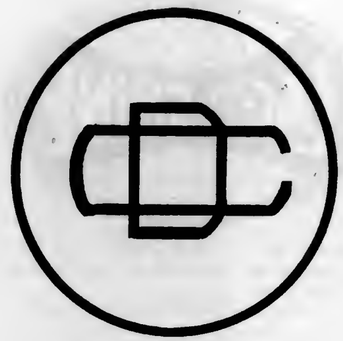
For Sound Absorbing and Acoustical Tile.
Claims use since Sept. 8, 1930.

Ser. No. 312,533. SHELL OIL COMPANY, San Francisco, Calif. Filed Mar. 25, 1931.



For Asphalt.
Claims use since Oct. 15, 1929.

Ser. No. 313,830. CHAPMAN & DEWEY LUMBER CO., Marked Tree, Ark. Filed Apr. 27, 1931.



For Lumber—Namely, Flooring, Drop Siding, Moulding, Construction Timbers, Roll Roofing, Roll Roofing Felt, Composition Shingles, Lime, and Brick.
Claims use since Apr. 1, 1928.

Ser. No. 314,354. ACME BRICK COMPANY, Danville, Ill. Filed May 9, 1931.

Cayuga Matt

No claim being made to the word "Matt" apart from the mark shown.
For Brick.
Claims use since February, 1929.

Ser. No. 314,595. J. H. WISE COMPANY, INC., St. Louis, Mo. Filed May 14, 1931.

ER-TEX

For Steel Plates and Steel Mesh Used for Constructing Bullet-Proof Partition Walls and Counters.
Claims use since Apr. 30, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 291,326. W. W. CROSS & COMPANY, INCORPORATED, Portland, Me. Filed Oct. 21, 1929.



Any right to the exclusive use of the representation of a tack apart from the mark shown is disclaimed.
For Tacks.
Claims use since Sept. 5, 1929.

Ser. No. 310,566. MID-STATES STEEL & WIRE CO., Crawfordsville, Ind. Filed Jan. 30, 1931.

REGAL

For Wire Fence and Barb Wire.
Claims use since January, 1926.

Ser. No. 311,098. KNAPE & VOGT MANUFACTURING CO., Grand Rapids, Mich. Filed Feb. 16, 1931.

K-Venience

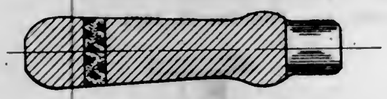
For Clothing Carriers, Extension Closet Rods, Show Racks, Tie Racks, Metal Wall Hat Holders, Shoe Racks, Stationary Garment Brackets.
Claims use since Dec. 18, 1930.

Ser. No. 311,751. THE RAWLPLUG COMPANY, INC., New York, N. Y. Filed Mar. 4, 1931.

LOK-CROWNERS

No claim is made to the word "Lok" and the representation of the goods apart from the mark shown in the drawing.
For Metal Covers or Heads for Fasteners, Such as Screws, Bolts, Nuts, and the Like.
Claims use since Dec. 10, 1929.

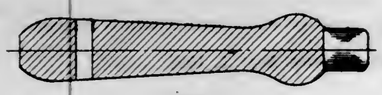
Ser. No. 313,850. HAMBLIN & RUSSELL MANUFACTURING COMPANY, INC., Worcester, Mass. Filed Apr. 27, 1931.



The trade-mark is applied to the goods by printing or enameling the handles of the articles in the manner shown, with a gold band at a material distance from the tip end. No claim is made to the exclusive right to the handle shown. The band on the drawing is lined to indicate the color gold, and the diagonal lines are for shading only.

For Hand Strainers, Tea Strainers, and Soup Strainers.
Claims use since June 25, 1930.

Ser. No. 313,851. HAMBLIN & RUSSELL MANUFACTURING COMPANY, INC., Worcester, Mass. Filed Apr. 27, 1931.



The trade-mark is applied to the goods by printing or enameling the handles of the articles, in the manner shown, with an ivory band at a material distance from the tip end. The diagonal lines are for shading only. No claim is made to the exclusive right to the handle shown.

For Hand Strainers, Tea Strainers, and Soup Strainers.
Claims use since Mar. 12, 1930.

CLASS 15

Oils and Greases

Ser. No. 314,471. TECUMSEH PETROLEUM COMPANY, INC., Philadelphia, Pa. Filed May 12, 1931.

INDIAN CHIEF



For Petroleum Lubricating Oils.
Claims use since Apr. 18, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 294,113. R. G. HASKINS CO., Chicago, Ill. Filed Dec. 27, 1929.

LAC-R-SHINE

The lining appearing on the drawing is for shading. Applicant disclaims use of the term "Lac-R-Shine" apart from the mark shown.

For Shining Compound or Polish for Painted, Varnished, Enameled, or Lacquered Surfaces, Automobile Bodies, and Furniture.
Claims use since Oct. 10, 1929.

Ser. No. 298,266. THE BARRETT COMPANY, New York, N. Y. Filed Apr. 2, 1930.

CRYSTAL

For Prepared Paint and for Priming Material and Roof Coating of the Nature of Paint.
Claims use since July 1, 1902.

Ser. No. 310,024. MONTGOMERY WARD & CO., INC., Chicago, Ill. Filed Jan. 16, 1931.

Wardway

For Paints in Both the Dry and Ready Mixed Forms, Enamels, Kalsomine, and Varnishes.
Claims use since February, 1917.

Ser. No. 310,693. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Filed Feb. 3, 1931.

RISISTEX

For Paint Enamel for Wood and Metal Surfaces.
Claims use since Dec. 11, 1930.

Ser. No. 314,443. MILTON BRADLEY COMPANY, Springfield, Mass. Filed May 12, 1931.



For Artists' Water-Color Paints.
Claims use since Mar. 1, 1931.

CLASS 17

Tobacco Products

Ser. No. 314,283. MORRIS J. GOODMAN, doing business as Goodman Cigar Co., Westfield, Mass. Filed May 7, 1931.

GENERAL EDWARDS

The name "General Edwards" is that of a deceased celebrity.

For Cigars.
Claims use since Apr. 1, 1931.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 299,313. GIMBEL BROTHERS, INC., New York, N. Y. Filed Apr. 23, 1930.



For Bicycles.
Claims use since July 1, 1929.

CLASS 20

Linoleum and Oiled Cloth

Ser. No. 315,037. CONGOLEUM-NAIRN, INC., Kearny, N. J. Filed May 26, 1931.

LINTONA

For Linoleum and Products of a Linoleum-Like Nature Adapted for Use as Decorative and Utility Materials for Wall or Floor Coverings.
Claims use since May 4, 1931.

Ser. No. 315,038. CONGOLEUM-NAIRN, INC., Kearny, N. J. Filed May 26, 1931.

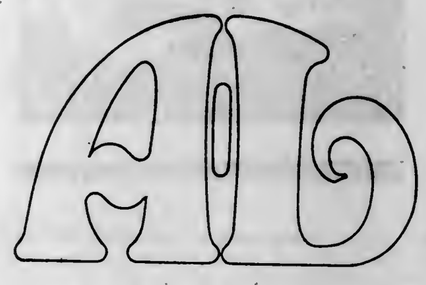
VELTONA

For Linoleum and Products of a Linoleum-Like Nature Adapted for Use as Decorative and Utility Materials for Wall or Floor Coverings.
Claims use since May 4, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 299,652. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio. Filed Apr. 29, 1930.



For Storage Batteries.
Claims use since Mar. 19, 1930.

Ser. No. 308,807. ALTORFER BROS. COMPANY, East Peoria, Ill. Filed Dec. 10, 1930.

ABC

For Electric Power Units for the Operation of Electrically Driven Beaters, Knives, Mixers, Slicers, Shredders, Chippers, Choppers, Sieves and Rollers, Juice Extractors, Grinders, Droppers, and Water Jackets.
Claims use since Oct. 8, 1930.

Ser. No. 308,808. ALTORFER BROS. COMPANY, East Peoria, Ill. Filed Dec. 10, 1930.

ABC *Electrotable*

For Electric Power Units for the Operation of Electrically Driven Beaters, Knives, Mixers, Slicers, Shredders, Chippers, Choppers, Sieves and Rollers, Juice Extractors, Grinders, Droppers, and Water Jackets.
Claims use since Oct. 8, 1930.

Ser. No. 308,809. ALTORFER BROS. COMPANY, East Peoria, Ill. Filed Dec. 10, 1930.

ABC Electrotable

For Electric Power Units for the Operation of Electrically Driven Beaters, Knives, Mixers, Slicers, Shredders, Chippers, Choppers, Sieves and Rollers, Juice Extractors, Grinders, Droppers, and Water Jackets.
Claims use since Oct. 8, 1930.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 314,272. CONDOR MANUFACTURING CO., INC., Long Island City, N. Y. Filed May 7, 1931.

CONDOR
MATCHED CLUBS

The words "Matched Clubs" are disclaimed apart and aside from the mark as shown.
For Golf Clubs.
Claims use since Jan. 2, 1931.

Ser. No. 314,480. ALL METAL PRODUCTS COMPANY, Wyandotte, Mich. Filed May 13, 1931.

"WYANDOTTE TOYS"

No claim is made to the word "Toys" except in the association shown in the drawing.
For Pop Guns, Air Rifles, Toy Airplanes, Toy Trucks, and Toy Automobiles.
Claims use since December, 1929.

Ser. No. 314,793. EDWARDS & WALKER COMPANY, Portland, Me. Filed May 20, 1931.

EDWARDS & WALKER COMPANY. IT TRADE MARK PORTLAND, MAINE, U.S.A.

No claim is made to the words "Trade Mark," "Portland, Maine, U. S. A.," nor to the representation of a golf ball.
For Golf Balls.
Claims use since Jan. 1, 1931.

Ser. No. 314,878. ANDREW WALUS, Brooklyn, N. Y. Filed May 21, 1931.

ACE

For Swimming Belts.
Claims use since Feb. 27, 1931.

Ser. No. 314,915. S. H. KRESS & Co., New York, N. Y. Filed May 22, 1931.

CHARME

For Playing Cards.
Claims use since May 15, 1931.

Ser. No. 314,917. S. H. KRESS & CO., New York, N. Y. Filed May 22, 1931.

Fairlawn

For Playing Cards.
Claims use since May 15, 1931.

Ser. No. 314,926. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass. Filed May 22, 1931.

RENO KENO

For Board Game.
Claims use since May 19, 1931.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 302,491. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed June 16, 1930.

DEFIANCE

For Lawn Mowers.
Claims use since Feb. 15, 1927.

Ser. No. 313,494. THE CLYDE CUTLERY COMPANY, Clyde, Ohio. Filed Apr. 18, 1931.

KIT-CHIN-KING

For Kitchen Ware, Comprising Spatulas, Forks, Cleavers, Bowl Knives, Boning Knives, Bread Knives, Butcher Knives, Carving Knives, Slicing Knives, Cook Knives, Fish Knives, Grape Fruit Knives, Ham Slicers, Paring Knives, Lettuce Knives, Oyster Knives, Steak Knives, Sticking Knives, Vegetable Knives, Putty Knives, Scraping Knives, Sandwich Knives, Skinning Knives, Shoe Knives, Hamburger Knives, Beef Slicers, Pie Knives, and Cake Turners.
Claims use since Apr. 8, 1931.

Ser. No. 314,225. THE AUTOBACCONIST CORPORATION, Glen Cove, N. Y. Filed May 6, 1931.

AUTOBACCONIST

For Cigarette Vending Machines.
Claims use since Apr. 15, 1931.

CLASS 25

Locks and Safes

Ser. No. 313,964. KANKAKEE TOOL & DIE WORKS, Kankakee, Ill. Filed Apr. 29, 1931.

REALOX

For Ventilating Window Locks.
Claims use since Sept. 4, 1930.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 309,876. TUNSTALL OPTICAL CO. LTD., Croydon, England. Filed Jan. 12, 1931.

NUOCEE

For Spectacles and Eyeglasses.
Claims use since June 29, 1929.

Ser. No. 314,348. UNIVERSAL PICTURES CORPORATION, New York, N. Y. Filed May 8, 1931.

WHIRLWIND PICTURES

No claim being made to the word "Pictures" appearing in the said drawing except as used in conjunction with the other features of the mark.
For Motion Picture Films.
Claims use since Apr. 22, 1931.

Ser. No. 314,929. RICHARDSON & BOYNTON COMPANY, New York, N. Y. Filed May 22, 1931.

R&B

For Height and Pressure Gauges.
Claims use since Oct. 1, 1921.

CLASS 27

Horological Instruments

Ser. No. 312,740. EMILE WOLF, La Chaux-De-Fonds, Switzerland. Filed Mar. 30, 1931.

BE PREPARED
BE P

For Watches, Parts of Watches, Small Pendulum Clocks, and Clocks.
Claims use since November, 1930.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 313,937. JACOB SCHORSCH, New York, N. Y. Filed Apr. 28, 1931.

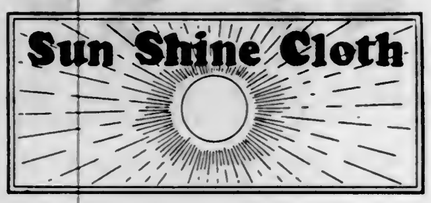
"AS YOU LIKE IT"

For Necklaces and Clasps Therefor.
Claims use since Apr. 1, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 310,992. JOHN C. GALLAGHER, doing business as Detroit Waste Works, Detroit, Mich. Filed Feb. 12, 1931.



The word "Cloth" is disclaimed apart from the other features of the mark shown on the drawing.
For Polishing and Dusting Cloth for Automobiles.
Claims use since Jan. 1, 1931.

CLASS 31

Filters and Refrigerators

Ser. No. 314,884. THE RUDOLPH WURLITZER COMPANY, Cincinnati, Ohio. Filed May 21, 1931.

Chieftain

For Refrigerators of All Types, Refrigerating Apparatus and Ice Boxes, Including Electric Refrigerators and Refrigerator Parts.
Claims use since Apr. 15, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 283,332. MRS. GEORGE HERZOG, doing business as The Closet Shop, New York, N. Y. Filed May 1, 1929.



The words "780 Madison Avenue, New York" appearing in the said specimen labels are disclaimed as a part of the trade-mark.
For Built-In Household Furnishings—Namely, Closed and Curtained One-Piece and Sectional Compartments and Closets; Shelves, Both Plain and Pull Out or Sliding Shelves, as Well as Slanting Shelves Provided with a Heel Rest Strip; Drawers, Both Open and Closed Tops and Including Shirt Trays; Bins and Clothes Hampers, Both with Separate Cover and in the Nature of a Drop Front Drawer; Cupboards, and Miscellaneous Built-In Items—Namely, Clothes Rods, Fur Arms, Tie Racks, Cane and Umbrella Racks, Shoe Racks, Garment Racks, Tables, Chairs, and Benches, the Equipment Being Adapted in Type to Suit Nurseries, Play-Rooms, Bed Dressing Rooms, Kitchen and Bath Rooms, and Closet Spaces Associated Therewith; Household Furniture—Namely, One-Piece and Sectional Wardrobe Units, One-Piece and Sectional Cabinet Units for Haberdashery, Etc.; Single Section, Multiple Tier Shoe Cabinets, Double Tier Shoe Cabinets to be Folded Upon Each Other, and Shoe Trunks, All Intended for Household Use; One-Piece and Sectional Cupboards, Tables, Chairs, and Benches for Household Use; Kitchen Furniture Sets, Bassinets, Pillows, Costumers, Clothes Racks, Valet Stands, Hat Stands, and Cupboards.
Claims use since Apr. 12, 1927.

CLASS 33

Glassware

Ser. No. 304,477. VITREA COMPANY, INC., Brooklyn, N. Y. Filed Aug. 11, 1930.



For Sheet Glass.
Claims use since January, 1930.

CLASS 34

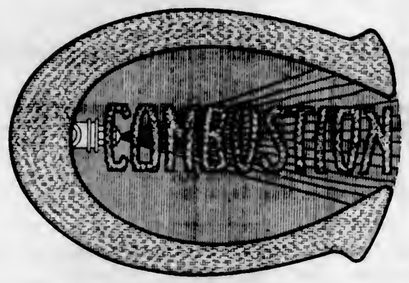
Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 310,163. DAY & NIGHT WATER HEATER CO., LTD., Monorovia, Calif. Filed Jan. 20, 1931.



For Gas and Solar Water Heaters, Multi-Flue Water Heating Units, and Range Boilers.
Claims use on gas water heaters, since Sept. 1, 1916; on multi-flue water heating units, since June 1, 1925; on range boilers, since Feb. 1, 1929; and on solar water heaters, since July 1, 1909.

Ser. No. 313,144. MILWAUKEE AIR POWER PUMP CO., doing business as Combustion Oil Burner Co., Milwaukee, Wis. Filed Apr. 9, 1931.



The exclusive use of the word "Combustion" is disclaimed apart from the mark as shown. The word "Combustion" and the large "C" surrounding the same appear in gold and the background for the word "Combustion" appears in red.
For Oil Burners.
Claims use since June 10, 1925.

Ser. No. 314,230. FRANCIS B. CARLETON, Boston, Mass. Filed May 6, 1931.

"IMP"

For Gasoline Blow Torch.
Claims use since 1907.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 292,389. THE BADGER RUBBER WORKS, Milwaukee, Wis. Filed Nov. 14, 1929.

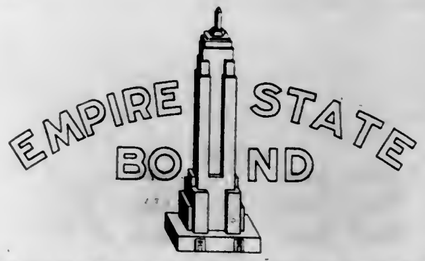
BEAVER

For Inner Tubes, Tire Patches, Boots and Sleeves for Automobile Tires, All Made Wholly or Partly of Rubber.
Claims use since Sept. 1, 1922.

CLASS 37

Paper and Stationery

Ser. No. 312,595. ALBERT BERNSTEIN, doing business as Cadillac Printing Co., New York, N. Y. Filed Mar. 27, 1931.



The words "Empire State Bond" appearing on the drawing are disclaimed apart from the mark shown.
For Writing Paper.
Claims use since Mar. 6, 1931.

Ser. No. 313,562. SAXON PAPER PRODUCTS INC., New York, N. Y. Filed Apr. 20, 1931.

ANIMATION
BOND

No claim is made to the exclusive use of the word "Bond" apart from the mark as appearing on the drawing.
For Bond Paper.
Claims use since April, 1929.

Ser. No. 314,329. FRANKWOOD PROCESS COMPANY, Portland, Oreg. Filed May 8, 1931.

INKSET

For Safety Paper.
Claims use since Mar. 28, 1931.

Ser. No. 314,625. NEKOOSA-EDWARDS PAPER COMPANY, Port Edwards, Wis. Filed May 15, 1931.

BLANCRAFT

For Kraft Paper.
Claims use since July 1, 1930.

Ser. No. 314,655. THE OVERFOLD COMPANY, Chardon, Ohio. Filed May 16, 1931.

SNAPOUT

For Manifold Forms.
Claims use since May 1, 1931.

Ser. No. 314,816. NEKOOSA-EDWARDS PAPER COMPANY, Port Edwards, Wis. Filed May 20, 1931.

ARTONE

For Bleached Kraft Paper.
Claims use since Sept. 1, 1928.

Ser. No. 314,905. OSCAR FRADUS, doing business as Setex Distributing Company, New York, N. Y. Filed May 22, 1931.

SETEX

For Toilet Seat Covers Made of Paper.
Claims use since May 1, 1931.

CLASS 38

Prints and Publications

Ser. No. 310,626. KROY WEN PUBLISHERS, INC., New York, N. Y. Filed Jan. 31, 1931.

TURFAX

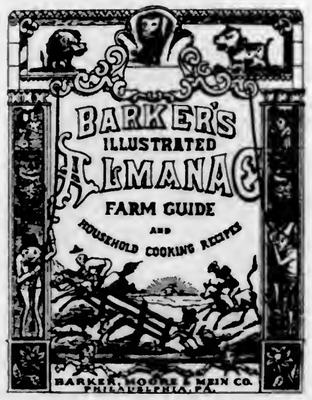
For Loose-Leaf Monthly Magazine.
Claims use since October, 1929.

Ser. No. 311,653. MORRIS ENGL, doing business as The International At-A-Glance Chart Co., New York, N. Y. Filed Mar. 3, 1931.

AT A GLANCE

For Charts.
Claims use since Feb. 6, 1931.

Ser. No. 312,750. BARKER, MOORE AND MEIN CO., Philadelphia, Pa. Filed Mar. 31, 1931.



No claim is made to the words "Illustrated Almanac Farm Guide and Household Cooking Recipes" and "Philadelphia, Pa." apart from the mark as shown.
For Periodical Publication.
Claims use since January, 1884.

Ser. No. 312,976. BEVERLY HALL CORPORATION, doing business as The Philosophical Publishing Company, Quakertown, Pa. Filed Apr. 6, 1931.

NATURA

For Books, Magazines, and Courses of Instruction.
Claims use since 1921.

Ser. No. 313,034. FLICKERETTE COMPANY, New York, N. Y. Filed Apr. 7, 1931.

FLICKERETTE

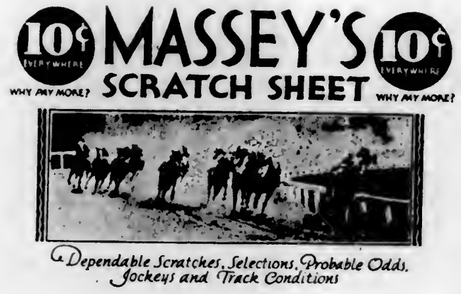
For Animated Picture Booklets.
Claims use since Mar. 24, 1931.

Ser. No. 313,067. ELLIOTT RALSTON CORPORATION, Nashville, Tenn. Filed Apr. 2, 1931.



For Business Directory and Routing Booklet Published from Time to Time.
Claims use since Mar. 1, 1928.

Ser. No. 313,713. ROBERT A. MASSEY, Washington, D. C. Filed Apr. 23, 1931.



No claim is made to the exclusive use of the words "Scratch Sheet," "10¢ Everywhere," "Why Pay More," and "Dependable Scratches, Selections, Probable Odds, Jockeys and Track Conditions" apart from the mark shown.
For Daily Scratch Sheet.
Claims use since Apr. 22, 1931.

Ser. No. 313,923. KING FEATURES SYNDICATE, INC., New York, N. Y. Filed Apr. 28, 1931.

DAVE'S DELICATESSEN

For Comic Strip or Cartoon.
Claims use since Mar. 30, 1931.

Ser. No. 313,959. J. MCKEEN CATTELL, doing business as The Science Press, New York, N. Y. Filed Apr. 29, 1931.

SCHOOL AND SOCIETY

For Magazine.
Claims use since December, 1914.

Ser. No. 314,111. JAMES H. GRAVELL, Ambler, Pa. Filed May 2, 1931.

HARMO

For Printed Charts.
Claims use since Apr. 24, 1931.

CLASS 39

Clothing

Ser. No. 268,058. THE ROSENBAUM COMPANY, Pittsburgh, Pa. Filed June 14, 1928.



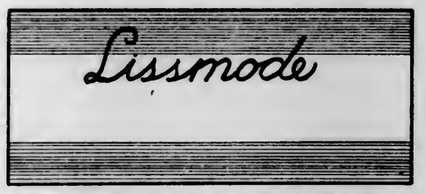
No claim is made to the word "Fleece" apart from the mark as shown in the drawing.
For Men's Topcoats and Overcoats.
Claims use since Mar. 1, 1928.

Ser. No. 302,530. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed June 18, 1930.

Bill & Bob

For Boots, Shoes, or Slippers Constructed of Leather, or Partly of Leather and/or Rubber and/or Fabric.
Claims use since June 2, 1930.

Ser. No. 309,270. HALF SIZE DRESS COMPANY, INC., New York, N. Y. Filed Dec. 23, 1930.



The lining shown on the drawing is for shading purposes only.
For Women's and Misses' Gowns, Frocks, and Dresses.
Claims use since Dec. 11, 1930.

Ser. No. 312,459. THE SCHWEITZER COMPANY, INC., New York, N. Y. Filed Mar. 23, 1931.



For Women's Undergarments—Namely, Nightgowns, Pajamas, Chemises, Step-ins, Panties, Bloomers, Petticoats, Slips, Dressing Sacques, and Negligees.
Claims use since Jan. 15, 1931.

Ser. No. 312,550. THE CROFUT & KNAPP CO., South Norwalk, Conn. Filed Mar. 26, 1931.

Chalfont

For Headwear—Namely, Hats and Caps for Men and Women.
Claims use since 1905.

Ser. No. 312,956. NANTY FROCKS, INC., New York, N. Y. Filed Apr. 4, 1931.



No right is claimed to use the descriptive word "Frocks" apart from the mark shown on the drawing.
For Afternoon and Evening Dresses and Dance Frocks.
Claims use since Oct. 23, 1926.

Ser. No. 312,996. MICHAELSON BROS., INC., Boston, Mass. Filed Apr. 6, 1931.

MIBRO

For Men's and Women's Sweaters of Wool and Cotton Material, Bathing Suits of Wool and Cotton Material; Hosiery of Wool, Cotton, and Silk Material; Underwear of Wool and Cotton Material; Gloves and Mittens of Leather, Wool, and Cotton Material; and Men's Dress, Negligee, Work, and Undershirts of Cotton and Silk Material; Garters and Suspenders.
Claims use since Feb. 25, 1931.

Ser. No. 313,106. BUFFUMS', Long Beach, Calif. Filed Apr. 6, 1931.

JAYSEE FASHIONS AT BUFFUMS LONG BEACH CALIFORNIA

The words "Fashions" and "Long Beach, California," are disclaimed apart from the mark as shown on the drawing.
For Clothing—Namely, Cloaks, Suits, Dresses, Underwear, Stockings, and Hats, for the Use of Women and Young Ladies.
Claims use since Jan. 15, 1931.

Ser. No. 313,107. BUFFUMS', Long Beach, Calif. Filed Apr. 6, 1931.

SUN-CHARM FASHIONS AT BUFFUM LONG BEACH CALIFORNIA

The words "Fashions" and "Long Beach, California," are disclaimed apart from the mark as shown on the drawing.
For Clothing—Namely, Cloaks, Suits, Dresses, Underwear, Stockings, and Hats, for Use of Women and Young Ladies.
Claims use since Jan. 15, 1931.

Ser. No. 313,888. NEUSTADTER BROS., San Francisco. Calif. Filed Apr. 27, 1931.

NATIONAL

UNION

For Overalls, Pants, Combination Suits, Work Shirts, Jackets, Blouses for Men and Boys, Girls and Women.
Claims use since Apr. 10, 1931.

Ser. No. 314,073. PRICE-SCHLESINGER INC., New York, N. Y. Filed May 1, 1931.

PERIS-COPIC PRINT

No claim is made to the exclusive use of the word "Print" apart from the mark as shown.
For Women's, Misses', and Children's Dresses.
Claims use since January, 1931.

Ser. No. 314,242. KIRBY, BLOCK & FISCHER, INC., New York, N. Y. Filed May 6, 1931.

Shanmont

For Men's, Women's, and Children's Clothing—Namely, Knitted and Textile Underwear and Hosiery.
Claims use since Apr. 29, 1931.

Ser. No. 314,262. H. C. ABERLE COMPANY, INCORPORATED, Philadelphia, Pa. Filed May 7, 1931.

FILACE

For Hosiery.
Claims use since Apr. 11, 1931.

Ser. No. 314,580. I. SCHNEIERSON & SONS, INC., New York, N. Y. Filed May 14, 1931.

Kon Jorm

For Women's, Misses, and Children's Pajamas, Princess Slips, Night Gowns, Step-In Drawers and Bloomers of a Textile Fabric.
Claims use since Jan. 15, 1930.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 313,640. BIENSTOCK AND LUBELSKY, INC., New York, N. Y. Filed Apr. 22, 1931.

CORDELANA

For Fur Trimmings for Ladies' Wear.
Claims use since Apr. 11, 1931.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 263,265. ALEX. J. HAMRAH CO. INC., New York, N. Y. Filed Mar. 16, 1928.



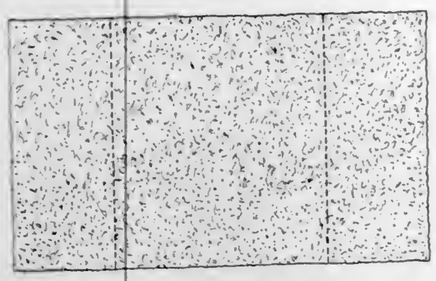
No claim is made to the exclusive use of the expressions, "Handicraft Linen" and "Real Hand Made Embroidery" apart from the mark as shown.
For Art Linens, Decorative Linens, and Fancy Linens, Hand Made and Hand Embroidered and Partly Hand Made and Partly Hand Embroidered, Made up in; Baby Pillow Covers, Banquet Sets, Bed Sheet Sets, Bed Spreads, Breakfast Sets, Bridge Sets, Buffet Sets, Center Pieces, Chair Back Cloths and Sets Thereof, Tea Cloths, Bridge Cloths, Luncheon Cloths, Banquet Cloths, Combination Luncheon Sets, Doilies, Dresser Sets, Handkerchiefs, Luncheon Sets, Napkins, Ovals and Sets Thereof, Oblongs and Sets Thereof, Pillow Cases, Refectory Sets, Round Covers, Runners, Furniture Scarfs and Sets Thereof, Square Covers, Toast Covers, Towel and Towel Sets, and Vanity Sets.
Claims use since Feb. 1, 1928.

Ser. No. 263,267. ALEX. J. HAMRAH CO. INC., New York, N. Y. Filed Mar. 16, 1928.

Florene

For Art Linens, Decorative Linens and Fancy Linens, Hand Made and Hand Embroidered and Partly Hand Made and Partly Hand Embroidered, Made up in: Baby Pillow Covers, Banquet Sets, Bed Sheet Sets, Bed Spreads, Breakfast Sets, Bridge Sets, Buffet Sets, Center Pieces, Chair Back Cloths and Sets Thereof, Tea Cloths, Bridge Cloths, Luncheon Cloths, Banquet Cloths, Combination Luncheon Sets, Doilies, Dresser Sets, Handkerchiefs, Luncheon Sets, Napkins, Ovals and Sets Thereof, Oblongs and Sets Thereof, Pillow Cases, Refectory Sets, Round Covers, Runners, Furniture Scarfs and Sets Thereof, Square Covers, Toast Covers, Towel and Towel Sets, and Vanity Sets.
Claims use since Feb. 1, 1928.

Ser. No. 294,549. WORUMBO MANUFACTURING COMPANY, Bath, Me. Filed Jan. 8, 1930.



The trade-mark consists of a marker or label in the form of arbitrarily placed single, green silk threads separate from the structural parts of the goods and constituting no part of the goods but spaced apart and woven into the back of the goods and extending longitudinally thereof in parallel lines, said parallel lines forming no part of the pattern of the woven goods. No claim is made herein for the representation of the woven goods, this being shown merely to illustrate the location of the mark and the arrangement of the marking threads in the goods. The trade-mark does not show on the face or right side of the goods.

For Woolen Fabrics for Coats and Suits Excluding All Wool Textile Piece Goods Used Particularly to Make Interlinings for Silk Neckwear.

Claims use since Dec. 10, 1929.

Ser. No. 300,463. THOMAS F. BYRNE CORPORATION, Phoenixville, Pa. Filed May 14, 1930.

TERRY TEX

No claim is made to the exclusive use of the term "Terry" apart from the mark shown.

For Textile Wash Cloths.

Claims use since Apr. 5, 1930.

Ser. No. 311,101. DAVID PELTON MOORE, New York, N. Y. Filed Feb. 16, 1931.

REXTEX

For Knitted, Pile Fabrics in which Relatively Short Loose Fibers, Such as Wools, Worsteds, Wool Noils, Woolen Shoddy, Mohair, Camel's Hair, Alapaca, Angora, Rabbit's Hair, Fur Bearing Animal's Hair, Merino, Silk, Rayon, Linen, Cotton, Ramie, and/or Any Combinations Thereof, Form the Pile Elements.

Claims use since Aug. 4, 1930.

Ser. No. 311,272. CHAS. W. HOUSE & SONS, Unionville, Conn. Filed Feb. 20, 1931.

CELESTIAL

For Woolen Bed Blankets.

Claims use since Feb. 9, 1931.

Ser. No. 311,638. THE GREAT NORTHERN SILK CO. INC., New York, N. Y. Filed Feb. 27, 1931.

Wear'n Teed Fabrics

The word "Fabrics" is hereby disclaimed apart from the mark shown.

For Textile Linings for Clothing in the Piece or Bolt.

Claims use since Feb. 1, 1931.

Ser. No. 312,382. MENTE & CO., INC., New Orleans, La. Filed Mar. 21, 1931.

KING COTTON

For Textile Bagging Material in the Piece.

Claims use since Mar. 4, 1931.

Ser. No. 313,327. CAMPBELL COMPANY, New York, N. Y. Filed Apr. 14, 1931.

SET-TEX FABRICS

No claim being made to the exclusive use of the word "Fabrics" apart from the mark as shown.

For Cotton Goods in the Piece.

Claims use since Mar. 31, 1931.

Ser. No. 313,372. KATTERMANN AND MITCHELL COMPANY, New York, N. Y. Filed Apr. 15, 1931.

"FLAMINGO"

For Silk Piece Goods.

Claims use since Apr. 9, 1931.

Ser. No. 313,431. CHARLES GOLDMAN, doing business as Atlas Mills, New York, N. Y. Filed Apr. 16, 1931.

"GAYFAIR"

For All-Silk Crepe.

Claims use since Feb. 1, 1929.

Ser. No. 313,588. BURTON BROTHERS & CO. INC., New York, N. Y. Filed Apr. 21, 1931.

BURTON'S ALL AMERICAN BROADCLOTH

The drawing being lined to indicate the colors red, white, and blue and no claim being made to the exclusive use of the word "Broadcloth" apart from the mark as shown in the drawing.

For Cotton Piece Goods and Mixtures of Cotton and Silk Piece Goods.

Claims use since 1919.

Ser. No. 313,587. W. T. GRANT COMPANY, Lynn, Mass., and New York, N. Y. Filed Apr. 21, 1931.

BOUNCING BABY

For Textile Diapers.

Claims use since Sept. 1, 1930.

Ser. No. 313,877. THE WOOLEN CORPORATION OF AMERICA, New York, N. Y. Filed Apr. 27, 1931.

W. C. A.

For Wool, Cotton, Silk, Rayon Fabrics and/or Combinations Thereof in the Piece.

Claims use since Jan. 14, 1931.

Ser. No. 313,955. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 29, 1931.

Squirrella

For Pile Fabrics in the Piece.

Claims use since Apr. 22, 1931.

Ser. No. 313,956. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Apr. 29, 1931.

Persika

For Pile Fabrics in the Piece.

Claims use since Apr. 22, 1931.

Ser. No. 314,094. GEO. WEHN & CO., Pittsburgh, Pa. Filed Apr. 30, 1931.

"Firthcraft"

For Textile Carpets and Rugs.

Claims use since Jan. 1, 1931.

Ser. No. 314,160. KATTERMANN AND MITCHELL COMPANY, New York, N. Y. Filed May 4, 1931.

CREPE "KAMINETTE"

No rights are asserted to the exclusive use of the term "Crepe" apart from the mark as shown.

For Silk Piece Goods.

Claims use since Apr. 30, 1931.

Ser. No. 314,318. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed May 8, 1931.

Hilam

For Pile Fabrics in the Piece.

Claims use since May 2, 1931.

Ser. No. 314,320. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed May 8, 1931.

Varitex

For Pile Fabrics in the Piece.

Claims use since May 2, 1931.

CLASS 43

Thread and Yarn

Ser. No. 314,888. ALGEMEENE KUNSTZIJDE UNIE N. V., Arnhem, Netherlands. Filed May 22, 1931.

ENCONA

For Artificial Yarns Made of Cellulose.

Claims use since May 1, 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 305,758. THE O-C MANUFACTURING COMPANY, Jersey City, N. J. Filed Sept. 16, 1930.



For Jock Straps, Suspensories, and Athletic Supporters for both Men and Women and Ankle and Wrist Supporters.

Claims use since March, 1912.

Ser. No. 311,169. THE AGALYN CORPORATION, Pittsburgh, Pa. Filed Feb. 18, 1931.

JD WHYTE
Agalyn
MEDIUM
SIZE
UPPER

The words "Medium Size Upper" are disclaimed apart from the mark as shown.

For a Dental Material Comprising a Molded Base for Artificial Dentures.

Claims use since Nov. 1, 1929.

Ser. No. 313,663. LEWIS METHOD, INCORPORATED, Cleveland, Ohio. Filed Apr. 22, 1931.

TELEFOIL

For Pads for Permanent Waving of Hair.

Claims use since Jan. 2, 1931.

Ser. No. 314,302. SAN-NAP-PAK MFG. CO., INC., New York, N. Y. Filed May 7, 1931.

LA CROSSNAPS

For Absorbent Cotton, Absorbent Gauze, and Sanitary Napkins.

Claims use since Dec. 1, 1930.

Ser. No. 314,559. OSCAR FAHLBUSCH, Ridgewood, N. Y. Filed May 14, 1931.

UNIVERSAL

For Nasal and Mouth Inhalers.

Claims use since Apr. 1, 1930.

CLASS 45
Beverages, Nonalcoholic

Ser. No. 294,417. DR. PEPPER COMPANY, Dallas and Waco, Tex., and St. Louis, Mo. Filed Jan. 6, 1930.

Pep

For Non-Alcoholic, Maltless, Tonic Beverages Sold as Soft Drinks and Syrups for Making the Same.

Claims use since Dec. 16, 1929.

Ser. No. 300,208. LA GRANDE DISTILLERIE E. CUSENIER FILS AINE & CIE., SOCIETE ANONYME, Paris, France. Filed May 9, 1930. Under section 5b of the act of 1905 as amended in 1920.

CUSENIER

For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks and Syrups for Making the Same.

Claims use since July 14, 1879.

Ser. No. 303,926. L. E. SILBERMAN, doing business as Colonial Products Company, Des Moines, Iowa. Filed July 28, 1930.

QUEEN
BRAND
Quicker
Service
Substance

The words "Brand, Quicker Service Substance" are disclaimed apart from the mark as shown.

For Powder Compound Used in the Place of Sugar for Aging Nonalcoholic, Maltless Soft Drinks Such as Root Beer and Ginger Ale, by Adding it to the Flavoring Extracts.

Claims use since Mar. 19, 1929.

Ser. No. 313,436. JUCI-SWEET PRODUCTS INC., Howey-in-the-Hills, Fla. Filed Apr. 16, 1931.

JUCI-SWEET

No claim is made to the word "Sweet" apart from the mark as shown.

For Nonalcoholic, Maltless Citrus Fruit Drinks.

Claims use since Feb. 20, 1931.

Ser. No. 314,373. LASH'S PRODUCTS COMPANY, San Francisco, Calif. Filed May 9, 1931.

TRICKLE

For Nonalcoholic, Maltless Beverages Both Carbonated and Noncarbonated Sold as Soft Drinks.

Claims use since Apr. 23, 1931.

Ser. No. 314,838. BLUE SEAL EXTRACT COMPANY, Cambridge, Mass. Filed May 21, 1931.

MINUTE-MAN

For Ginger Ale and Non-Alcoholic, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts for Making the same.

Claims use since Apr. 24, 1931.

CLASS 46
Foods and Ingredients of Foods

Ser. No. 279,479. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Filed Feb. 16, 1929. Under 10-year proviso.

CLIFTON

Applicant is the owner of registrations 249,300, 194,287 and 206,421.

For Canned Fruits and Fruit Preserves—Namely, Apples, Apple Butter, Apple Sauce, Apricots, Apricot Butter, Blackberries, Blackberry Preserves, Blueberries, Royal Anne and Pitted Cherries, Egg Plums, Figs, Grapes, Grapefruit, Grape Marmalade, Gooseberries, Loganberries, Loganberry Preserves, Peaches, Pears, Pineapple, Red Raspberries, Red-Raspberry Preserves, Strawberries, Strawberry Preserves; Canned Vegetables—Namely, Asparagus, Baked Beans, Beets, Celery, Kidney Beans, Lima Beans, Okra, Peas, Pumpkin, String Beans, Succotash, Sweet Corn, Sweet Potatoes, Tomatoes, and Spinach; Canned Sea Food—Namely, Clams, Codfish, Lobster, Oysters, and Shrimp; Canned Meats—Namely, Chicken, Deviled Chicken, Deviled Ham, Sliced Beef, Tongue, and Bacon; Canned Soups—Namely, Bean, Clam Chowder, and Tomato; Canned Mincemeat and Plum Pudding; Relishes—Namely, Chili Sauce, Green and Ripe Olives, Red Peppers, Sweet Relish Pickles, Tomato Catchup, and Cocktail Catchup; Spices—Namely, African Ginger, Allspice, Black Pepper, Capers, Celery Salt, Cinnamon, Cloves, Curry Powder, Mace, Mustard, Nutmeg, Poultry Seasoning, Prepared Mustard, Paprika, White Pepper, and Sage; Mexican Chillis, Salad Dressing and Vinegar, Condensed Milk, Coffee and Tea, Citron Peel, Crystallized Ginger, Grapefruit Peel, Lemon Peel, and Orange Peel, Coconut, Walnut Meats, and Peanut Butter, Marshmallow Creme, Maple Syrup and Sugar; Cereals—Namely, Barley, Desert Tapioca, Farina, Wheat Breakfast Cereal, Lye Hominy, Granulated Hominy, Pearl Hominy, Pearl Tapioca, Pop Corn in its Natural State, Rice, Wheat Bran.

Claims use since 1885.

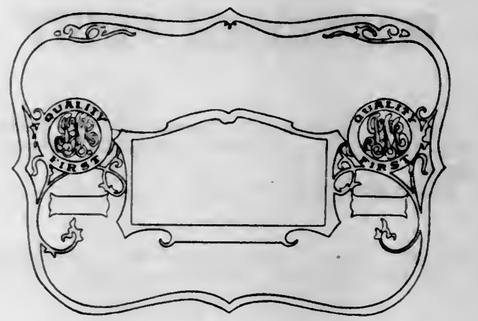
Ser. No. 297,902. FRED F. FIELD HOLSTEINS DUTCHLAND FARMS TRUSTEES, Brockton, Mass. Filed Mar. 26, 1930.

DUTCHLAND

For Milk, Cream, Ice Cream, Butter, and Cheese.

Claims use since 1903.

Ser. No. 299,588. JOHN MULHERN COMPANY, San Francisco, Calif. Filed Apr. 28, 1930.



The words "Quality First" appearing on the drawing are disclaimed apart from the mark as shown.

For Canned and Bottled Crushed Fruits, Syrups for Food Flavoring Purposes, Shelled Nuts, Glacé Fruits, Jams, Jellies, Mince Meat, Fruit Juices for Food Flavoring Purposes.

Claims use since Oct. 7, 1929.

Ser. No. 299,594. THE ROBERT PUTMAN CANDY COMPANY, Cincinnati, Ohio. Filed Apr. 28, 1930. Under 10-year proviso.

Putman

For Candies, Mayonnaise, Ice Cream, Bread, Cakes, Pies, Noodles, Potato Chips, and Box Lunches.

Claims use since Apr. 8, 1893.

Ser. No. 306,229. BARTON & GUESTIER, Bordeaux, France. Filed Sept. 30, 1930. Under 10-year proviso.

BARTON & GUESTIER
BORDEAUX
(FRANCE)

For Olive Oil.

Claims use since 1852.

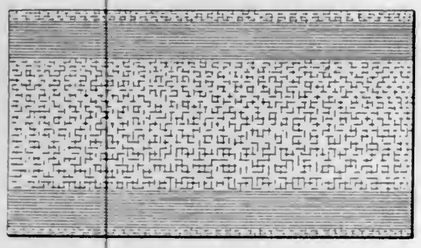
Ser. No. 306,241. L. M. MARTINI GRAPE PRODUCTS CO., Kingsburg, Calif. Filed Sept. 30, 1930.

FORBIDDEN FRUIT

For Grape Syrup for Table Use and Use in the Preparation of Foods and Ingredients of Foods as a Flavoring Syrup.

Claims use since Nov. 30, 1920.

Ser. No. 307,257. CALIFORNIA PACKING CORPORATION, San Francisco, Calif. Filed Oct. 28, 1930.



The shading on the drawing indicates the colors yellow and blue.

For Canned Fruit, Canned Vegetables, Tomato Purée, Dried Fruit, Raisins, Canned and Dried Prunes, Mincemeat, Maraschino Type Cherries, Sauerkraut, Canned Beans with and without Pork and Tomato Sauce, Catsup, Fruit Juices for Food Purposes, Jams, Jellies, Fruit Preserves, Marmalades, Tomato Sauce, Canned Hominy, Olives, Fresh Vegetables, Fruit Butter, Apple Sauce, Cranberry Sauce, Canned Fish, Pickles, Mustard, Chow-Chow, Pickle Relishes, Chili Sauce, Vinegar, Vegetable Oil, Coffee, Tomato Juice, Honey, Meat Sauces, Mayonnaise, Ravioli, Soup, Evaporated Milk, Gelatine, Sauerkraut Juice, Tamales, Spices, Peanut Butter, Salted Nuts, Shortening, Flavoring Extracts for Food Purposes, Sugar and Maple Syrup; Canned Meat—Namely, Canned Chicken; Tapioca, Macaroni, Noodles, Spaghetti, Cornstarch, Farina, Dry Rice, Tea, Sugar, Cookies, Dried Vegetables, Candies, and Cocoa.

Claims use since Jan. 2, 1908, on canned fruit, canned vegetables and tomato purée; since Apr. 4, 1908, on dried fruit, raisins, canned and dried prunes; since Oct. 10, 1914, on mincemeat; since 1917 on Maraschino type cherries; since 1918 on sauerkraut, canned beans with and without pork and tomato sauce, catsup, and fruit juices for food purposes; since 1919 on jams, jellies, fruit preserves, marmalades, and tomato sauce; since 1920 on canned hominy, olives, fresh vegetables, fruit butter, apple sauce, and cranberry sauce; since Sept. 22, 1921, on canned fish, pickles, mustard, chow chow, pickle relishes, and chili sauce; since 1924 on vinegar and vegetable oil; since June 11, 1929, on coffee; since Oct. 11, 1929, on tomato juice; since Mar. 18, 1930, on honey, meat sauces, mayonnaise, ravioli, soup, evaporated milk, gelatine, sauerkraut juice, tamales, spices, peanut butter, salted nuts, shortening, flavoring extracts for food purposes, and sugar and maple syrup; since Apr. 9, 1930, on canned meat—namely, canned chicken; since Apr. 25, 1930, on tapioco, macaroni, noodles, spaghetti, cornstarch, farina, dry rice, tea, sugar, cookies, dried vegetables, candies, and cocoa.

Ser. No. 309,102. MANUEL GOMES VEIGA, Buenos Aires, Argentina. Filed Dec. 17, 1930.

YERBATE

For Green Tea.

Claims use since January, 1930.

Ser. No. 310,679. JOHNSON EDUCATOR FOOD COMPANY, Cambridge, Mass. Filed Feb. 3, 1931.

HAMMERED

For Biscuits.

Claims use since Jan. 22, 1931.

Ser. No. 310,746. THE ABILENE FLOUR MILLS COMPANY, Abilene, Kans. Filed Feb. 5, 1931.



The lining shown in the drawing is for shading purposes only, and the individuals shown therein are fanciful. Applicant is the owner of registration No. 82,550.

For Wheat Flour, Self-Rising Flour, and Phosphated Flour.

Claims use since Dec. 12, 1910.

Ser. No. 311,337. THE KROGER GROCERY & BAKING CO., Cincinnati, Ohio. Filed Feb. 21, 1931.



For Fresh Meat—Namely, Pork Brains, Pork Links, Pork Sausage, and Beef Brains, and Smoked and Dried Chipped Beef.

Claims use since Dec. 30, 1930.

Ser. No. 312,591. AKTIENGESELLSCHAFT CHOCOLAT TOBLER, Bern, Switzerland. Filed Mar. 27, 1931.



The word "Tonic" apart from the mark is disclaimed.

For Dietetic Food Product Composed of Cocoa, Sugar, Honey, and Glycerophosphates.

Claims use since August, 1930.

Ser. No. 312,943. LOWELL E. CADD, Albert Lea, Minn. Filed Apr. 4, 1931.



All the wording except the word "Gadget" is disclaimed apart from the mark shown.

For Pastry.

Claims use since Mar. 1, 1931.

Ser. No. 313,072. AMTORG TRADING CORPORATION, New York, N. Y. Filed Apr. 8, 1931.

MOSSELPROM

For Candy.

Claims use since January, 1925.

Ser. No. 313,243. TOM HUSTON FROSTED FOODS, INC., Columbus, Ga. Filed Apr. 11, 1931.

Banana Cicle

The word "Banana" is disclaimed.

For Frozen Confections.

Claims use since Jan. 30, 1931.

Ser. No. 313,322. HERMAN H. BORCHERS, doing business as The Mel-Rah Products Co., Baltimore, Md. Filed Apr. 14, 1931.



The words "Dog Food" and "Healthy Food Makes Happy Dogs," are disclaimed apart from the mark as shown. The drawing is lined to indicate the colors red and blue.

For Concentrated Food for Dogs, Cats, Foxes, and Other Carnivorous Animals.

Claims use since May 1, 1929.

Ser. No. 313,450. J. HUNGERFORD SMITH CO., Rochester, N. Y. Filed Apr. 16, 1931.

HAPPY JACK LOLLYPOP COATING



Applicant disclaims the words "Lollypop Coating" apart from the mark as shown on the specimens filed herewith.

For Coating Material for Ice Cream Confections Made from Vegetable Fats.

Claims use since Apr. 4, 1931.

Ser. No. 313,803. J. SCHRAUTH'S SONS, INC., Poughkeepsie, N. Y. Filed Apr. 25, 1931.



No claim is made to the exclusive use of the words "Ice Cream" apart from the mark shown.

For Ice Cream, Frozen Pudding, Sherbets, Ices.

Claims use since Mar. 1, 1931.

Ser. No. 314,118. SOL LENZNER CORP., Buffalo, N. Y. Filed May 2, 1931.

MILKOMIX

For Chocolate Sirup Made of Cocoa, Malt, Cane Sugar, and Other Ingredients for the Preparation of a Chocolate Food Product.
Claims use since Feb. 1, 1931.

Ser. No. 314,124. THE NATIONAL SUGAR REFINING COMPANY OF NEW JERSEY, Jersey City, N. J., and New York, N. Y. Filed May 2, 1931.

THERMOPHREE SUGAR

No claim is made for the word "Sugar" except in connection with the mark shown.
For Sugar.
Claims use since Aug. 9, 1930.

Ser. No. 314,131. SENECA FOOD PRODUCTS CORPORATION, Utica, N. Y. Filed May 2, 1931.

WESTERN MAID

For Malt Syrup.
Claims use since Apr. 27, 1931.

Ser. No. 314,299. F. H. ROBERTS COMPANY, Boston, Mass. Filed May 7, 1931.

GranDee

For Chocolates.
Claims use since May 3, 1931.

Ser. No. 314,327. EVERFRESH BUTTER CORPORATION, New York, N. Y. Filed May 8, 1931.



No claim is made to the word "Everfresh" apart from the mark shown in the drawing and no claim is made to the representation of the carton. The drawing is lined for the color yellow.
For Butter.
Claims use since Mar. 25, 1930.

Ser. No. 314,332. H. P. HOOD & SONS, INC., Boston, Mass. Filed May 8, 1931.

FUTURA

For Ice Cream.
Claims use since Apr. 25, 1931.

Ser. No. 314,483. CANDY KITCHENS, INC., Chicago, Ill. Filed May 13, 1931.

Chappies

For Candy.
Claims use since Mar. 4, 1931.

Ser. No. 314,681. F. E. BOOTH COMPANY, INC., San Francisco, Calif. Filed May 18, 1931.

SARDILENE

For Poultry Feed.
Claims use since Aug. 1, 1929.

Ser. No. 314,786. AMERICAN STORES COMPANY, Philadelphia, Pa. Filed May 20, 1931.

Louella

For Butter.
Claims use since 1917.

Ser. No. 314,800. GENERAL BAKING COMPANY, New York, N. Y. Filed May 20, 1931.



The pictures of the children are purely fanciful.
For Bread.
Claims use since Dec. 10, 1930.

Ser. No. 314,801. GENERAL BAKING COMPANY, New York, N. Y. Filed May 20, 1931.



The pictures of the children are purely fanciful. The drawing is lined to indicate the colors red and blue and gradient tints thereof, and the colors are claimed as features of the mark.
For Bread.
Claims use since Dec. 10, 1930.

Ser. No. 314,814. NATIONAL FEATURES INC., Boston, Mass. Filed May 20, 1931.

"BELIEVE IT OR NOT!"

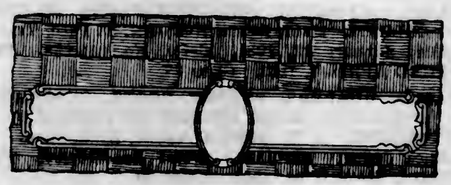
For Candy.
Claims use since May 13, 1931.

Ser. No. 314,852. LIBERTY ORCHARDS COMPANY, Cashmere, Wash. Filed May 21, 1931.

Apl-aid

For Canned Fruit.
Claims use since October, 1930.

Ser. No. 314,856. NEW STANDARD BAKING COMPANY, Philadelphia, Pa. Filed May 21, 1931.



For Cakes.
Claims use since Feb. 6, 1931.

Ser. No. 314,857. NEW STANDARD BAKING COMPANY, Philadelphia, Pa. Filed May 21, 1931.



The trade-mark consists of the words "Mrs. Stard's" displayed on an orange colored basket-weave back ground.
For Cakes.
Claims use since Feb. 6, 1931.

CLASS 49
Distilled Alcoholic Liquors

Ser. No. 314,382. THE GEO. T. STAGG CO., INC., Frankfort, Ky. Filed May 9, 1931.

MADE IN THE HEART OF THE BLUE GRASS

No claim is made to the words "Made in the" apart from the mark as shown.
For Whiskey.
Claims use since May 1, 1931.

CLASS 50
Merchandise Not Otherwise Classified

Ser. No. 291,176. PRICE AWNLOK CORPORATION, Buffalo, N. Y. Filed Oct. 17, 1929.

OMAR

For Tents and Awnings.
Claims use since Oct. 1, 1929.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

JUNE 30, 1931

284,432. BOOTS AND SHOES OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. INTERNATIONAL SHOE CO., St. Louis, Mo.
Filed December 17, 1930. Serial No. 309,085. PUBLISHED APRIL 14, 1931. Class 39.

284,433. TOILET PAPER. WHEELER PAPER CORPORATION, Albany, N. Y.
Filed December 17, 1930. Serial No. 309,103. PUBLISHED APRIL 14, 1931. Class 37.

284,434. HEAT AND COLD INSULATION MATERIAL IN WHICH MINERAL WOOL IS THE MAIN INGREDIENT, IN SHEET, GRANULATED, WOOL, AND BRICK FORMS. GENERAL INSULATING & MFG. CO., Alexandria, Ind.
Filed December 29, 1930. Serial No. 309,425. PUBLISHED APRIL 14, 1931. Class 12.

284,435. LEATHER SHOES OF ALL KINDS. JUNIOR SHOE MANUFACTURING CO., St. Paul, Minn.
Filed January 2, 1931. Serial No. 309,565. PUBLISHED APRIL 7, 1931. Class 39.

284,436. MEN'S HATS. ROTHSCHILD BROS. HAT COMPANY, St. Louis, Mo.
Filed January 2, 1931. Serial No. 309,570. PUBLISHED MARCH 31, 1931. Class 39.

284,437. PREPARATION FOR CLEANING AND POLISHING SILVERWARE, ETC. WILLIAM WALDO BATTEN, doing business as The Napthite Company, Lakewood, Ohio.
Filed January 9, 1931. Serial No. 309,833. PUBLISHED APRIL 7, 1931. Class 4.

284,438. CHECK BOOKS. DE LUXE CHECK PRINTERS, INC., St. Paul, Minn.
Filed January 12, 1931. Serial No. 309,914. PUBLISHED MARCH 31, 1931. Class 37.

284,439. BOND WRITING PAPER. HAMMERMILL PAPER COMPANY, Erie, Pa.
Filed January 15, 1931. Serial No. 309,974. PUBLISHED APRIL 14, 1931. Class 37.

284,440. LEATHER SHOES. WM. HAHN & COMPANY, Washington, D. C.
Filed January 16, 1931. Serial No. 310,015. PUBLISHED MARCH 31, 1931. Class 39.

284,441. FABRIC AND LEATHER GLOVES. RICHMOND GLOVE CORPORATION, Richmond, Va.
Filed January 17, 1931. Serial No. 310,073. PUBLISHED APRIL 14, 1931. Class 39.

284,442. PREPARATION FOR REMOVING SPOTS AND STAINS. THE ALDEN SPEARE'S SONS CO., Cambridge, Mass.
Filed January 19, 1931. Serial No. 310,082. PUBLISHED APRIL 7, 1931. Class 4.

284,443. ILLUSTRATED MONTHLY MAGAZINE. AMERICAN AUTOMOBILE ASSOCIATION, INC., Washington, D. C.
Filed January 20, 1931. Serial No. 310,152. PUBLISHED MARCH 31, 1931. Class 38.

284,444. ILLUSTRATED MONTHLY MAGAZINE. AMERICAN AUTOMOBILE ASSOCIATION, INC., Washington, D. C.
Filed January 20, 1931. Serial No. 310,153. PUBLISHED MARCH 31, 1931. Class 38.

284,445. SHOES OF LEATHER, CANVAS, RUBBER, OR COMBINATIONS OF THESE MATERIALS. JEFFERSON SHOE MANUFACTURING CO. INC., Newton, N. J.
Filed January 20, 1931. Serial No. 310,174. PUBLISHED APRIL 7, 1931. Class 39.

284,446. ANNUAL PUBLICATION. FICTION HOUSE, INC., New York, N. Y.
Filed January 20, 1931. Serial No. 310,197. PUBLISHED MARCH 31, 1931. Class 38.

284,447. BRAID MADE OF CELLULOSE. BRITISH ENKA ARTIFICIAL SILK COMPANY LIMITED, London, England.
Filed January 21, 1931. Serial No. 310,207. PUBLISHED APRIL 14, 1931. Class 40.

284,448. MAGAZINE AND NEWSPAPER FEATURE COLUMN. MARK ERWIN NUSBAUM, El Paso, Tex.
Filed January 22, 1931. Serial No. 310,258. PUBLISHED APRIL 7, 1931. Class 38.

284,449. RUBBERS, RUBBER BOOTS, OVERSHOES, AND SHOES MADE WHOLLY OR PARTIALLY OF RUBBER. A. E. LITTLE COMPANY, Lynn, Mass.
Filed January 23, 1931. Serial No. 310,297. PUBLISHED MARCH 31, 1931. Class 39.

284,450. ASBESTOS SHINGLES AND ROOFING MATERIAL INCLUDING SHEET AND ROLL ROOFING AND ASPHALT ROOFING. BIEBEL ROOFING COMPANY, Belleville, Ill.
Filed January 24, 1931. Serial No. 310,328. PUBLISHED APRIL 7, 1931. Class 12.

284,451. GLASS CLEANER. JACK HAIM, doing business as Zut Process Company, Detroit, Mich.
Filed January 26, 1931. Serial No. 310,378. PUBLISHED APRIL 7, 1931. Class 4.

284,452. MEN'S FURNISHINGS—NAMELY, HATS, NEGLIGEE SHIRTS, PAJAMAS, SWEATERS, NECKTIES, HOSIERY, AND UNDERWEAR. HART, SCHAFFNER & MARX, Chicago, Ill.
Filed January 31, 1931. Serial No. 310,603. PUBLISHED APRIL 7, 1931. Class 39.

284,453. MONTHLY PUBLICATION. NORTH AMERICAN PUBLICATION, LTD., Los Angeles, Calif.
Filed January 31, 1931. Serial No. 310,610. PUBLISHED MARCH 31, 1931. Class 38.

284,454. SHOES CONSTRUCTED OF COMBINATIONS OF LEATHER, RUBBER, AND FABRIC. RICE-O'NEILL SHOE COMPANY, St. Louis, Mo.
Filed January 31, 1931. Serial No. 310,615. PUBLISHED APRIL 14, 1931. Class 39.

284,455. PERIODICAL PUBLICATION. THE OHIO CHAPTER OF THE WILD FLOWER PRESERVATION SOCIETY, Cincinnati, Ohio.
Filed January 31, 1931. Serial No. 310,623. PUBLISHED APRIL 7, 1931. Class 38.

284,456. PAVING MATERIAL COMPRISING A MINERAL AGGREGATE COATED WITH A BITUMINOUS BONDING MATERIAL. AMIESITE ASPHALT COMPANY OF AMERICA, Camden, N. J., and Philadelphia, Pa.
Filed February 4, 1931. Serial No. 310,711. PUBLISHED APRIL 7, 1931. Class 12.

284,457. METAL AND FELT WEATHER STRIPPING. MACKLANBURG-DUNCAN COMPANY, Oklahoma City, Okla.
Filed February 4, 1931. Serial No. 310,728. PUBLISHED APRIL 7, 1931. Class 12.

284,458. NEWSPAPER COLUMN. THE BROOKLYN DAILY TIMES, Brooklyn, N. Y.
Filed June 8, 1928. Serial No. 267,691. PUBLISHED APRIL 14, 1931. Class 38.

284,459. GOLF CLUBS AND GOLF BALLS. WILSON-WESTERN SPORTING GOODS COMPANY, Chicago, Ill.
Filed October 19, 1928. Serial No. 274,028. PUBLISHED DECEMBER 18, 1928. Class 22.

284,460. PUBLICATION PUBLISHED PERIODICALLY (MONTHLY). THE ESTATE STOVE COMPANY, Hamilton, Ohio.
Filed January 12, 1929. Serial No. 277,874. PUBLISHED APRIL 14, 1931. Class 38.

284,461. PREPARED TAR, PITCH, AND ASPHALT FOR ROOFING CONSTRUCTION AND PREPARED ROOFINGS IN WHICH THE WATERPROOFING AGENT IS TAR, ASPHALT, OR OTHER BITUMEN. THE BARRETT COMPANY, New York, N. Y.
Filed March 29, 1930. Serial No. 298,072. PUBLISHED APRIL 14, 1931. Class 12.

284,462. CARTOON. BRISCOE & LINDBERG, Chicago, Ill.
Filed March 31, 1930. Serial No. 298,145. PUBLISHED MARCH 31, 1931. Class 38.

284,463. ENVELOPS AND SHEETS OF WRITING PAPER, WALL PAPER, SHELF PAPER, ETC. AMY DREVENSTEDT, New York, N. Y.
Filed April 16, 1930. Serial No. 298,939. PUBLISHED APRIL 14, 1931. Class 37.

284,464. SUPPOSITORY FOR WOMEN FOR AIDING IN THE TREATMENT OF LEUCORRHEA, PURTIUS VULVAL, INFLAMMATION OF THE GENITAL ORGANS, AND VARIOUS DISEASES OF THE VAGINA UTERUS. THE O. B. CHEMICAL CO., Cleveland, Ohio.
Filed April 21, 1930. Serial No. 299,222. PUBLISHED MARCH 3, 1931. Class 6.

284,465. GREETING CARDS, COMPLETELY-PRINTED BOOKS, BOOKPLATES, SEALS, AND PAPER MAPS. AMY DREVENSTEDT, New York, N. Y.
Filed May 30, 1930. Serial No. 301,754. PUBLISHED MARCH 31, 1931. Class 38.

284,466. MANUALS OF INSTRUCTION FOR USE BY AVIATORS. WEEKS AIRCRAFT CORPORATION, Milwaukee, Wis.
Filed June 28, 1930. Serial No. 302,980. PUBLISHED MARCH 31, 1931. Class 38.

284,467. TOILET PARTITIONS OF SHEET METAL. THE D. A. EBINGER SANITARY MANUFACTURING COMPANY, Columbus, Ohio.
Filed June 13, 1930. Serial No. 302,374. PUBLISHED APRIL 7, 1931. Class 12.

284,468. A CLEANING PREPARATION FOR GENERAL USE. J. DOM HULSMAN, doing business as The Vampire Products Company, Crafton, Pa.
Filed July 7, 1930. Serial No. 303,184. PUBLISHED APRIL 7, 1931. Class 4.

284,469. PAPER END GUARDS FOR PACKING FRUITS AND VEGETABLES. CROWN PAPER COMPANY, Sanford, Fla.
Filed July 12, 1930. Serial No. 303,420. PUBLISHED APRIL 7, 1931. Class 37.

284,470. BITUMINOUS COMPOSITION FOR SECURING ARTICLES OR MEMBERS TOGETHER. A. L. VOIGHT & COMPANY, Cleveland, Ohio.
Filed August 20, 1930. Serial No. 304,841. PUBLISHED APRIL 14, 1931. Class 12.

284,471. CERTAIN NAMED WEARING APPAREL. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed August 23, 1930. Serial No. 304,956. PUBLISHED MARCH 31, 1931. Class 39.

284,472. COAL. TRUAX-TRAER COAL COMPANY, Chicago, Ill.
Filed September 10, 1930. Serial No. 305,547. PUBLISHED APRIL 14, 1931. Class 1.

284,473. BOOTS AND SHOES OF LEATHER. INTERNATIONAL SHOE CO., St. Louis, Mo.
Filed September 23, 1930. Serial No. 305,960. PUBLISHED MARCH 31, 1931. Class 39.

284,474. SOAP, SOAP CHIPS, SOAP POWDER, AND SCOURING CLEANER. KIRKMAN & SON, Brooklyn, N. Y.
Filed October 6, 1930. Serial No. 306,448. PUBLISHED APRIL 7, 1931. Class 4.

284,475. WRITING AND PRINTING PAPER AND MAILING ENVELOPES IN PACKAGES. WHITE & WYCKOFF MFG. CO., Holyoke, Mass.
Filed October 21, 1930. Serial No. 307,017. PUBLISHED APRIL 7, 1931. Class 37.

284,476. BOND PAPER. GRAHAM PAPER COMPANY, St. Louis, Mo.
Filed October 24, 1930. Serial No. 307,149. PUBLISHED APRIL 7, 1931. Class 37.

284,477. GIRDLES, GARTER BELTS, HOSE SUPPORTERS, AND DRESS LININGS (FOUNDATIONS). THE WARREN FEATHERBONE COMPANY, Three Oaks, Mich.
Filed October 25, 1930. Serial No. 307,188. PUBLISHED MARCH 31, 1931. Class 39.

284,478. SAVINGS CERTIFICATES. SCOTT'S SAVINGS PLAN, INCORPORATED, Little Rock, Ark.
Filed February 4, 1931. Serial No. 310,739. PUBLISHED APRIL 14, 1931. Class 38.

284,479. GLASS TILE. HADLEY-DEAN GLASS COMPANY, St. Louis, Mo.
Filed February 5, 1931. Serial No. 310,764. PUBLISHED APRIL 7, 1931. Class 12.

284,480. APPAREL BELTS. GEORGE L. ROBBINS, INC., New York, N. Y.
Filed February 6, 1931. Serial No. 310,812. PUBLISHED APRIL 7, 1931. Class 39.

284,481. FABRICATED COMPOSITE ROOFING MATERIAL. INTERSTATE ROOFING AND SUPPLY COMPANY, Chicago, Ill.
Filed February 9, 1931. Serial No. 310,870. PUBLISHED APRIL 7, 1931. Class 12.

284,482. WRITING AND PRINTING PAPER. AMERICAN WRITING PAPER COMPANY, INC., Holyoke, Mass.
Filed February 13, 1931. Serial No. 311,020. PUBLISHED APRIL 14, 1931. Class 37.

284,483. PAVING MATERIALS CONTAINING BITUMINOUS MATTER. THE TEXAS ROCK ASPHALT COMPANY, San Antonio, Tex.
Filed February 14, 1931. Serial No. 311,075. PUBLISHED APRIL 14, 1931. Class 12.

284,484. NEWSPAPER AND MAGAZINE COLUMNS. MYER ROSENBERG, Chicago, Ill.
Filed February 16, 1931. Serial No. 311,104. PUBLISHED APRIL 7, 1931. Class 38.

284,485. CRAYONS, SLATE PENCILS, AND CHALK. BINNEY & SMITH COMPANY, New York, N. Y.
Filed February 18, 1931. Serial No. 311,171. PUBLISHED MARCH 31, 1931. Class 37.

284,486. PENS AND PENCILS. THE ERNALL PEN & PENCIL CORP., Camden, N. J.
Filed February 18, 1931. Serial No. 311,186. PUBLISHED MARCH 31, 1931. Class 37.

284,487. SEMIANNUAL PUBLICATION. JEWELERS PUBLISHING CORPORATION, New York, N. Y.
Filed February 18, 1931. Serial No. 311,190. PUBLISHED APRIL 14, 1931. Class 38.

284,488. BOND, FLAT, AND LEDGER PAPER AND CORRESPONDENCE ENVELOPES. GENERAL PAPER COMPANY, San Francisco, Calif.
Filed February 19, 1931. Serial No. 311,238. PUBLISHED APRIL 14, 1931. Class 37.

284,489. WRITING AND PRINTING PAPER, INCLUDING ENVELOPE PAPER. BOWERS ENVELOPE & LITHOGRAPH COMPANY, Indianapolis, Ind.
Filed February 24, 1931. Serial No. 311,362. PUBLISHED MARCH 31 1931. Class 37.

284,490. NEWSPAPER COLUMN. DAILY TRADE RECORD CO. OF NEW YORK, New York, N. Y.
Filed February 24, 1931. Serial No. 311,369. PUBLISHED APRIL 7, 1931. Class 38.

284,491. TOILET SOAP. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25, 1931. Serial No. 311,428. PUBLISHED APRIL 7, 1931. Class 4.

284,492. TOILET SOAP. GABILLA, INCORPORATED, New York, N. Y.
Filed February 25 1931. Serial No. 311,431. PUBLISHED APRIL 7, 1931. Class 4.

284,493. WRITING AND PRINTING PAPER. HURLBUT PAPER COMPANY, South Lee, Mass.
Filed March 4, 1931. Serial No. 311,729. PUBLISHED APRIL 14, 1931. Class 37.

284,494. WRITING AND PRINTING PAPER. HURLBUT PAPER COMPANY, South Lee, Mass.
Filed March 4, 1931. Serial No. 311,730. PUBLISHED APRIL 14, 1931. Class 37.

284,495. WRITING AND PRINTING PAPER. HURLBUT PAPER COMPANY, South Lee, Mass.
Filed March 4, 1931. Serial No. 311,731. PUBLISHED APRIL 14, 1931. Class 37.

284,496. WRITING AND PRINTING PAPER. HURLBUT PAPER COMPANY, South Lee, Mass.
Filed March 4, 1931. Serial No. 311,732. PUBLISHED APRIL 14, 1931. Class 37.

284,497. PAPER—NAMELY, BOOK PAPER, COVER PAPER, DOCUMENT PAPER, BRISTOL, CARDBOARDS, BOND PAPER, WRITING PAPER, LEDGER PAPER, AND PAPER FOR THE MAKING OF ENVELOPES. BUTLER PAPER CORPORATIONS, Chicago, Ill.
Filed March 5, 1931. Serial No. 311,772. PUBLISHED APRIL 14, 1931. Class 37.

284,498. PAPER HANDKERCHIEFS. THE TISSUE COMPANY, Saugerties, N. Y.
Filed March 6, 1931. Serial No. 311,853. PUBLISHED APRIL 14, 1931. Class 37.

284,499. COMBINATION UNDERGARMENTS FOR MISSES AND WOMEN, CONSISTING OF BRASSIÈRE AND BLOOMER. WINGET KICKERNICK COMPANY, Minneapolis, Minn.
Filed December 5, 1930. Serial No. 308,660. PUBLISHED APRIL 7, 1931. Class 39.

284,500. STATIONERY, AND PARTICULARLY LETTERHEADS AND ENVELOPES. THE LITTLE PRINT OF NEW ROCHELLE, N. Y., INC., New Rochelle, N. Y.
Filed December 5, 1930. Serial No. 308,673. PUBLISHED APRIL 14, 1931. Class 37.

284,501. AUTOGRAPHIC REGISTERS AND STATIONERY USED IN CONNECTION WITH AUTOGRAPHIC REGISTERS. THE EGRY REGISTER COMPANY, Dayton, Ohio.
Filed December 10, 1930. Serial No. 308,823. PUBLISHED APRIL 7, 1931. Class 37.

284,502. MAPS. MUTUAL AUTO MAP ASSOCIATION, Nevada, Mo.
Filed December 15, 1930. Serial No. 308,997. PUBLISHED MARCH 31, 1931. Class 38.

284,503. METALLIC ARCH FILES, INCLUDING HOLDING PINS AND WIRE CLOSURE ARCHES THEREFOR, WITH THE PINS HOLDING VARIOUS PAPERS IN PERFORATIONS. HERBERT R. TALBOT, New York, N. Y.
Filed October 29, 1930. Serial No. 307,332. PUBLISHED APRIL 7, 1931. Class 37.

284,504. MEDICINE FOR TREATMENT OF ECZEMA. CHRIS S. LEHOLMEN, Inwood, Iowa.
Filed November 5, 1930. Serial No. 307,555. PUBLISHED APRIL 7, 1931. Class 6.

284,505. LADIES' AND MISSES' HATS. KELLER AND HENNINGER, Cincinnati, Ohio.
Filed November 8, 1930. Serial No. 307,679. PUBLISHED APRIL 7, 1931. Class 39.

284,506. CERTAIN NAMED WEARING APPAREL. HENRY C. HOLMES, doing business as H. C. Holmes Mfg. Co., Portland, Oreg.
Filed November 11, 1930. Serial No. 307,775. PUBLISHED APRIL 7, 1931. Class 39.

284,507. CRYSTALLIZED CLEANING PREPARATION FOR GENERAL HOUSEHOLD USE. VERA B. BUNKER, doing business as V. B. Company, Jacksonville, Fla.
Filed November 13, 1930. Serial No. 307,840. PUBLISHED MARCH 31, 1931. Class 4.

284,508. SHOES CONSTRUCTED OF COMBINATIONS OF LEATHER AND FABRIC. ANDRE, INCORPORATED, Long Island City, N. Y.
Filed November 18, 1930. Serial No. 308,002. PUBLISHED MARCH 31, 1931. Class 39.

284,509. SHOES MADE OF COMBINATION LEATHER AND FABRIC, AND HOSIERY. I. MILLER & SONS, INCORPORATED, Long Island City, N. Y.
Filed November 18, 1930. Serial No. 308,025. PUBLISHED MARCH 31, 1931. Class 39.

284,510. NECKTIES, MUFFLERS, HOSIERY, KNIT UNDERWEAR, SUSPENDERS, GARTERS, AND BELTS FOR OUTER WEAR. WILLIAM J. GRIEGER, Los Angeles, Calif.
Filed December 3, 1930. Serial No. 308,544. PUBLISHED MARCH 31, 1931. Class 39.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION.

284,511. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) BARNET LEATHER CO., INC., Boston, Mass. Filed June 28, 1929. Serial No. 286,297.

DEVON

For Leather.
Claims use since September, 1927.

284,512. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. M. WHOLESALE GROCERY COMPANY, Hamtramck, Mich. Filed Mar. 1, 1930. Serial No. 296,714. The drawing is lined for red.

La France

For Coffee.
Claims use since Sept. 16, 1929.

284,513. (CLASS 39. CLOTHING.) GREAT WESTERN SHOE COMPANY, Milwaukee, Wis. Filed Mar. 15, 1930. Serial No. 297,366.

FARGO

For Leather Shoes.
Claims use since Feb. 13, 1930.

284,514. (CLASS 32. FURNITURE AND UPHOLSTERY.) AMERICAN SHOW CASE & MFG. CO., Detroit, Mich. Filed Mar. 20, 1930. Serial No. 297,572.

Americanized

For Show Cases, Wall Cases, Shelving, Wardrobes, and Units Therefor.
Claims use since Jan. 2, 1929.

284,515. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) UTICA STEAM & MOHAWK VALLEY COTTON MILLS, Utica, N. Y. Filed Apr. 14, 1930. Serial No. 298,870.

Paneltint

For Sheets, Pillowcases, Bolster Cases, Sheetings, and Cotton Piece Goods.
Claims use since Mar. 12, 1930.

284,516. (CLASS 9. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES.) THE H & D FOLSOM ARMS CO., New York, N. Y. Filed May 12, 1930. Serial No. 300,344.

AUDLEY

For Pistol Holsters.
Claims use since Jan. 1, 1915.

284,517. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) HARRY SCHLESINGER, doing business as Tivoli Manufacturing Co., Passaic, N. J. Filed May 31, 1930. Serial No. 302,036.

TIVOLI

For Game Boards and Tables.
Claims use since May 1, 1930.

284,518. (CLASS 45. BEVERAGES, NONALCOHOLIC.) PAUL SCHREIBER AND SON, New York, N. Y. Filed May 31, 1930. Serial No. 302,087.



For Nonalcoholic, Maltless, Noncereal Beverages Sold as Soft Drinks.
Claims use since May 15, 1930

284,519. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STEWART CURTIS PACKERS, INC., Los Angeles, Calif. Filed May 31, 1930. Serial No. 302,083.

MARSEILLAISE

For Canned and Bottled Olives.
Claims use since Apr. 30, 1930.

284,520. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE DEANE PLASTER CO., Yonkers, N. Y. Filed June 25, 1930. Serial No. 302,814.

VOGUE

For Sanitary Napkins.
Claims use since May 6, 1929.

284,521. (CLASS 39. CLOTHING.) THE BERRAY CO. INC., New York, N. Y. Filed July 9, 1930. Serial No. 303,271.

BERRAY

For Women's and Children's Hats, Caps, Tams, and Bonnets.
Claims use since Jan. 1, 1929.

284,522. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) CLEVELAND METAL HOSE COMPANY, Cleveland, Ohio. Filed Aug. 8, 1930. Serial No. 304,366.

HINGE-BACK

For Slit Flexible Metal Tubing.
Claims use since May 17, 1930.

284,523. (CLASS 12. CONSTRUCTION MATERIALS.) ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa. Filed Sept. 17, 1930. Serial No. 305,773.

Top Down

For Roof, Siding, and Like Building Shingles.
Claims use since Oct. 2, 1928.

284,524. (CLASS 12. CONSTRUCTION MATERIALS.) BUTTRICK LUMBER CORPORATION, Waltham, Mass. Filed Oct. 28, 1930. Serial No. 307,252.

BUTTRICK LUMBER CORPORATION
BUTTRICK LUMBER

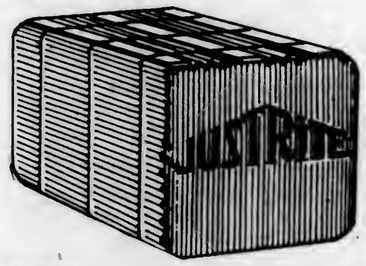
For Lumber and Building Materials—Namely, Lumber, Moulded Casings, Window Frames, Lime, Cement, Stair Treads, Shingles, Door Frames, Window Stools, Wall Board, Doors, Pickets, Drain Gutters, Stop Beads, Base Moulding, Plaster, Wooden Fence Posts, and Stair Rails.
Claims use since August, 1917.

284,525. (CLASS 39. CLOTHING.) PEGGIE HALE, INCORPORATED, New York, N. Y. Filed Nov. 6, 1930. Serial No. 307,592.

Peggie Hale INC

For Ladies' Ready-to-Wear Apparel—Namely, Dresses, Hosiery, Underwear, Coats, Suits, and Hats.
Claims use since Apr. 1, 1930.

284,526. (CLASS 10. FERTILIZERS.) PEAT MOSS SALES CORPORATION, New York, N. Y. Filed Dec. 12, 1930. Serial No. 308,904.



For Peat Moss.
Claims use since January, 1930.

284,527. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) SHAKESPEARE COMPANY, Kalamazoo, Mich. Filed Feb. 9, 1931. Serial No. 310,886.

STAY-ALIVE

For Minnow Bucket.
Claims use since Jan. 1, 1927.

284,528. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) SHAPLEIGH HARDWARE COMPANY, St. Louis, Mo. Filed Mar. 4, 1931. Serial No. 311,754.

SHAPLEIGH'S

For Axes, Adzes, Hatchets, Hammers, Wedges, Mallets, Chisels, Gouges, Gimlets, Drills, Augers, Screw Drivers, Planes, Saws, Reamers, Files, Rasps, Mattocks, Hoes, Picks, Snips, Shovels, Spades, Scoops, Automobile Tool Kits, Nail Pullers, Nippers, Box Hooks, Pinch Bars, Box Openers, Pliers, Pincers, Staple Pullers, Wrenches, Vises, Lawn Mowers, Grass Catchers, Lawn Rakes, Hayforks, Scythes, Glass Cutters, Cleavers, Pocketknives, Scissors, Razors, and Carvers.
Claims use since 1921.

284,529. (CLASS 39. CLOTHING.) LUCILE LOCKWOOD KITCHELL, doing business as Lucile Lockwood, Greenwich, Conn. Filed Mar. 12, 1931. Serial No. 312,053.

Lucile Lockwood

For Ladies' Wearing Apparel—Namely, Ladies' Hats, Coats, Dresses, and Suits.
Claims use since September, 1925.

284,530. (CLASS 2. RECEPTACLES.) JACK J. DREW, doing business as The Boxkol Company, Pittsburg, Okla. Filed Apr. 20, 1931. Serial No. 313 537.

SCUTTLE BOX

For Coal-Dispensing Boxes.
Claims use since Apr. 15, 1930.

284,531. (CLASS 27. HOROLOGICAL INSTRUMENTS.) WILLIAM C. HOROWITZ, New York, N. Y. Filed Apr. 28, 1931. Serial No. 313,920.

Croton

For Watches, Clocks, Watchcases, Watch and Clock Movements, and All Individual Parts Thereof.
Claims use since June 1, 1929.

LABELS

REGISTERED JUNE 30, 1931

39,338.—*Title:* BUSTO. For Game. ALL-FAIR INCORPORATED, Churchville, N. Y. Published February 9, 1931.

39,339.—*Title:* ALLPURE FLAXSEED. For Flaxseed. ALLPURE FLAXSEED CO., Milwaukee, Wis. Published March 15, 1931.

39,340.—*Title:* THE CANTEEN. For Candy Bars. AUTOMATIC CANTEEN COMPANY, Chicago, Ill. Published April 9, 1931.

39,341.—*Title:* BON AMI. For Polishing and Cleaning Powder. THE BON AMI COMPANY, New York, N. Y. Published April 3, 1931.

39,342.—*Title:* BURGESS VACUUM CONTACT. For Vacuum Contacts. BURGESS BATTERY COMPANY, Madison, Wis. Published May 14, 1931.

39,343.—*Title:* SHU-LAC. For Dressing for Refinishing Shoes, Hand Bags, Golf Balls, Leather Goods, Etc. CARL E. CARNEY, doing business as The Shu-Lac Company of Bradenton, Fla., and Cincinnati, Ohio. Published May 1, 1930.

39,344.—*Title:* CHAPMAN'S GENUINE SMITHFIELD RAZOR BACK HAM. For Hams. CHAPMAN & COMPANY, Smithfield, Va. Published January 2, 1931.

39,345.—*Title:* CHARD'S COD LIVER OIL CAPSULES. For Cod Liver Oil Capsules. JOHN LOUIS CHARD, doing business as The Norway Importers, Tacoma, Wash. Published August 30, 1930.

39,346.—*Title:* CHETTA'S ITALIAN STYLE. For Spaghetti Gravy. CHETTA & PURPE, INCORPORATED, New Orleans, La. Published April 20, 1931.

39,347.—*Title:* PASSION-O. For Carbonated Beverage. IRVING E. COX, Los Angeles, Calif. Published May 14, 1931.

39,348.—*Title:* BUTTER NO. 668. For Butter. WILLIAM DOANE, St. Louis, Mo. Published March 15, 1931.

39,349.—*Title:* DUGAN'S NEW YEAR CAKES. For New Year Cakes. DUGAN BROTHERS, INC., Brooklyn, N. Y. Published December 15, 1930.

39,350.—*Title:* 2-IN-1 SHINOLA HOME SET. For Home Sets of Shoe Polish. E. E. FAIRCHILD CORPORATION, Rochester, N. Y. Published April 20, 1931.

39,351.—*Title:* HIAWATHA APPEALS TO THE GREAT SPIRIT WITH MAINE FIR BALSAM INCENSE. For Incense. FIR BALSAM INCENSE COMPANY OF MAINE, Portland, Me. Published April 1, 1930.

39,352.—*Title:* FORALINE. For Depilatory Preparation. FORALINE PRODUCTS INC., Circleville, Ohio. Published April 13, 1931.

39,353.—*Title:* FREIHOFER'S HAN-DEE LOAF. For Bread. CHAS. FREIHOFER BAKING CO. INC., Troy, N. Y. Published July 25, 1929.

39,354.—*Title:* WASHBURN'S PANCAKE FLOUR. For Pancake Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published November 21, 1930.

39,355.—*Title:* GOLD DUST SCOURING POWDER. For Scouring Powder. GOLD DUST CORPORATION, New York, N. Y. Published May 4, 1931.

39,356.—*Title:* GOLDEN DUTCH. For Malt Syrup. THE GREEN PARROT PRODUCTS COMPANY, INC., Johnstown, Pa. Published April 1, 1930.

39,357.—*Title:* TROPICAL FRUIT. For Rolls. THE JAMES A. HARPER SUPPLY COMPANY, Kansas City, Mo. Published May 1, 1931.

39,358.—*Title:* TIDEELOX. For Hair Nets. MOSES HERZOG, New York, N. Y. Published January 2, 1931.

39,359.—*Title:* SPORTSGIRL SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 28, 1931.

39,360.—*Title:* BOSTON SHOE STORE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published October 15, 1930.

39,361.—*Title:* MILADY FOOTWEAR. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 27, 1931.

39,362.—*Title:* SOBEL BROS. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 22, 1931.

39,363.—*Title:* EXQUISITE FOOTWEAR. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 18, 1931.

39,364.—*Title:* THE COMMODORE SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 23, 1931.

39,365.—*Title:* THE MODERN PRISCILLA. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 9, 1931.

39,366.—*Title:* LOPEX. For Medicinal Preparation for the Relief and Treatment of Gall Stones and Catarrhal Jaundice. DR. CHARLES G. HUBENTHAL, doing business as The Lopex Remedies and Products Co., Minneapolis, Minn. Published March 10, 1931.

39,367.—*Title:* COMPOSITION CEMENT THAT STICKS ON GREASY SURFACES. For Composition Cement. CHARLES JAMES INGERSOLL, doing business as New Life Paint Manufacturing Company, Seattle, Wash. Published March 31, 1931.

39,368.—*Title:* MISTLETOE. For Thousand Island Dressing. KADANE-BROWN, INC., Dallas, Fort Worth, and Houston, Tex. Published April 6, 1931.

39,369.—*Title:* GRANDMA'S CAKES. For Cakes. LANTZ BROS. BAKING CO., St. Louis, Mo. Published May 11, 1931.

39,370.—*Title:* THE JULIETTE HOSIERY CO. For Silk Hosiery. EDWIN A. LEE, Philadelphia, Pa. Published September 19, 1930.

39,371.—*Title:* WHITE PINE. For Cough Drops. HARRY R. MALTZ, Poughkeepsie, N. Y. Published June 4, 1931.

39,372.—*Title:* MELON MOLD. For Ice Cream. MEYERS AND POWERS COMPANY, Braddock, Pa. Published February 7, 1931.

39,373.—*Title:* MAPLELEAF INSECTICIDE. For Insecticide. MILLER-FISCHER COMPANY, Detroit, Mich. Published February 15, 1931.

39,374.—*Title:* DUTCH MILL CANDIES. For Candies. MUTUAL PAPER BOX CORPORATION, Chicago, Ill. Published March 18, 1931.

39,375.—*Title:* EVEREADY WALLITE. For Electric Lamps. NATIONAL CARBON COMPANY, INC., New York, N. Y. Published March 16, 1931.

39,376.—*Title:* GLEN BROOK. For Butter. NATIONAL GROCERY COMPANY, Jersey City, N. J. Published April 24, 1931.

39,377.—*Title:* DR. HALL'S IMPROVED DIGESTAL. For Medicinal Preparation. HYMAN J. ORLOFF, doing business as Dr. Hall's Medicine Co., Philadelphia, Pa. Published June 20, 1930.

39,378.—*Title:* PABCO ROOFING. For Roofing. THE PARAFFINE COMPANIES, INC., San Francisco, Calif. Published June 28, 1930.

39,379.—*Title:* KOOKI-KID. For Cookies. THE ROCHESTER BREAD COMPANY, Rochester, Minn. Published April 1, 1931.

39,380.—*Title:* PANTRY WHIPPING CREAM. For Whipping Cream. S. M. A. CORPORATION, Cleveland, Ohio. Published March 20, 1931.

39,381.—*Title:* PANTRY TABLE CREAM. For Table Cream. S. M. A. CORPORATION, Cleveland, Ohio. Published March 20, 1931.

39,382.—*Title:* NON-ALLERGIC FAT FREE MILK, SMACO PRODUCT NO. 303. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published April 15, 1931.

39,383.—*Title:* FRESH COW'S MILK, SMACO PRODUCT NO. 200. For Food Product for Infants. S. M. A. CORPORATION, Cleveland, Ohio. Published April 15, 1931.

39,384.—*Title:* SANO TYPEWRITER PAD. For Cushioning Pads for Supporting Typewriters. SANO TYPEWRITER PAD COMPANY, Wilkes-Barre, Pa. Published April 11, 1931.

39,385.—*Title:* CHASE AND SANBORN'S SEAL BRAND TEA BALLS. For Tea Balls. STANDARD BRANDS INCORPORATED, New York, N. Y. Published April 29, 1931.

39,386.—*Title:* FLEISCHMANN'S PURE DRY YEAST. For Dry Yeast. STANDARD BRANDS INCORPORATED, New York, N. Y. Published April 10, 1931.

39,387.—*Title:* NASSAC. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published May 22, 1931.

39,388.—*Title:* CASTRATION COMPOUND. For Castration Compound. CHARLES I. STROUSE, McComb, Ohio. Published January 2, 1931.

39,389.—*Title:* TRY-ME ROCK. For Ginger Ale. TRY-ME BOTTLING CO., Washington, D. C. Published May 20, 1931.

39,390.—*Title:* FRENCH-FRIED. For Cooked and Salted Peanuts. TURNER NUT COMPANY, INC., Florence, S. C. Published May 11, 1931.

39,391.—*Title:* COFFEE. For Coffee. UNION BAG & PAPER CORPORATION, New York, N. Y. Published April 6, 1931.

39,392.—*Title:* VI-CRIS ANTISEPTIC. For Antiseptic Solution. VI-CRIS, INC., Detroit, Mich. Published April 4, 1931.

39,393.—*Title:* ALADDIN. For Silk Hosiery. WEBER, FRIEDRICH & WEIL, INC., Philadelphia, Pa. Published October 1, 1929.

39,394.—*Title:* MOVIETONE. For Silk Stockings. WEBER, FRIEDRICH & WEIL, INC., Philadelphia, Pa. Published March 25, 1931.

39,395.—*Title:* W. M. C. TISSUE. For Toilet Paper. WORTENDYKE MANUFACTURING COMPANY, Richmond, Va. Published March 21, 1931.

39,396.—*Title:* PHYLLIS XXXXX. For Malt Syrup. ZIMMERMAN BROS., Lock Haven, Pa. Published March 19, 1930.

PRINTS

REGISTERED JUNE 30, 1931

13,272.—*Title:* THE CREAM OF THE CROP. For Canned Foods. O. B. ANDREWS COMPANY, Chattanooga, Tenn. Published December 12, 1930.

13,273.—*Title:* THE TWO MOST IMPORTANT THINGS IN A GOOD SALAD. For Vinegar and Olive Oil. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published June 1, 1931.

13,274.—*Title:* ON YOUR NEXT CROWDED DAY—WE SUGGEST THIS DELICIOUS DISH. For Cooked Spaghetti in Tomato Sauce with Cheese. H. J. HEINZ COMPANY, Pittsburgh, Pa. Published May 30, 1931.

13,275.—*Title:* INTRODUCING—THE KNIT—IN GARTER. For Hosiery. HOLEPROOF HOSIERY CO., Milwaukee, Wis. Published April 24, 1931.

13,276.—*Title:* DOUBLE TESTED . . . DOUBLE ACTION. For Baking Powder. JACQUES MANUFACTURING COMPANY, Chicago, Ill. Published May 9, 1931.

13,277. TITLE: DOUBLE TESTED DOUBLE ACTING. For Baking Powder. JAQUES MANUFACTURING COMPANY, Chicago, Ill. Published May 9, 1931.

13,278.—*Title:* BAKING TESTS WILL PROVE IT BEST. For Baking Powder. JACQUES MANUFACTURING COMPANY, Chicago, Ill. Published May 9, 1931.

13,279.—*Title:* COCKED BUT LOCKED. For Rifles. IVER JOHNSON'S ARMS & CYCLE WORKS, Fitchburg, Mass. Published April 13, 1931.

13,280.—*Title:* CREATORS OF THE UNUSUAL. AS USUAL. For Jewelry. WALTER LAMPL, New York, N. Y. Published February 15, 1931.

13,281.—*Title:* BRIDGE SPREADS. For Meat Sandwich Spreads. FRANCIS H. LEGGETT & CO., New York, N. Y. Published February 17, 1931.

13,282.—*Title:* ORA. For Liquid Crystal White Deodorant. MCKESSON & ROBBINS, INCORPORATED, Fairfield, Conn. Published March 5, 1931.

13,283.—*Title:* SPRING WATER BEVERAGES. For Spring Water Beverages. THE MINNEHAHA SPRING WATER COMPANY, doing business as the Minnehaha Water Co., Cleveland, Ohio. Published March 1, 1931.

13,284.—*Title:* NEWLY DISCOVERED, (SYMBOL A-ADS-1). For Antiseptic Mouth Wash. THE PEPSODENT CO., Chicago, Ill. Published February 18, 1931.

13,285.—*Title:* JANDHO'S POST-A-GRAPH. For Printed Blanks. THE POSTAGRAPH COMPANY, Baltimore, Md. Published May 29, 1931.

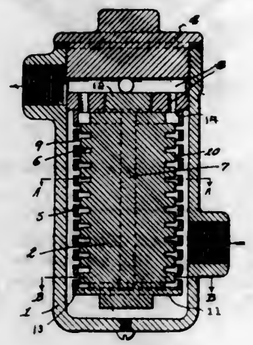
13,286.—*Title:* GEE IT'S GOOD. For Bread Bags. THE UNGER COMMERCIAL COMPANY, Cleveland, Ohio. Published January 28, 1929.

13,287.—*Title:* GROW WITH GLASSPAX. For Transparent Containers for Cookies. THE UNGER COMMERCIAL COMPANY, Cleveland, Ohio. Published March 13, 1929.

REISSUES

JUNE 30, 1931

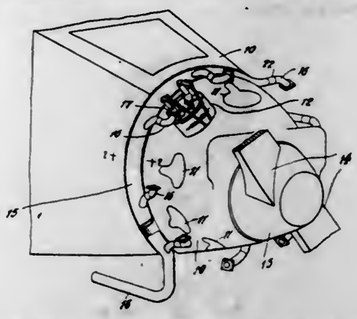
18,114. FLUID FILTER. BROR HENNING LUNDBORG, Stockholm, Sweden, assignor to Svenska Ackumulator Aktiebolaget Jungner, Stockholm, Sweden, a Corporation. Original No. 1,648,773, dated Nov. 8, 1927, Serial No. 147,588, filed Nov. 10, 1926, and in Sweden June 19, 1926. Application of reissue filed Mar. 18, 1929. Serial No. 348,100. 2 Claims. (Cl. 210—183.)



1. In a fluid filter, the combination of a housing closed at one end and a detachable covering member at the other end, the housing having an inlet and an outlet for the fluid to be filtered, said covering member having passages leading from the interior of the housing to the outlet thereof; with a core member detachably connected with the covering member, extending into the housing and spaced therefrom to form an annular chamber communicating with the inlet of the housing, and having a series of grooves extending around its periphery with a duct in its circumferential face intersecting the grooves and communicating with the passages through the covering member; and a sleeve-shaped filtering screen mounted in the annular chamber, including a series of bands spaced apart and respectively positioned opposite to the several grooves in close overlapping relation to the channel edges of the core member to preclude the passage of solid matter through the screen into the grooves.

18,115. EXHAUST MANIFOLD. GUISEPPE M. BELLANCA, New Castle, Del., assignor to Bellanca Aircraft Corporation, New Castle, Del., a Corporation of Delaware. Original No. 1,713,814, dated May 21, 1929, Serial No. 135,770, filed Sept. 16, 1926. Application for reissue filed Mar. 27, 1930. Serial No. 439,520. 16 Claims. (Cl. 244—31.)

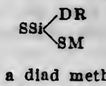
1. In an exhaust manifold construction for aeronautical engines of the radial type, a cowl through which the exhaust discharging ends of the radially disposed cylinders project, said cowl being provided with a circumscribing groove in its outer surface adjacent the engine cylinders,



an exhaust manifold mounted in said groove and adjustable circumferentially therein, and a discharge terminal on the exhaust manifold.

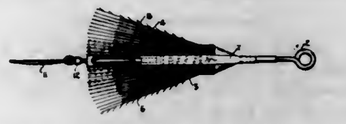
18,116. ORE FLOTATION PROCESS. IRA H. DERBY and ORIN D. CUNNINGHAM, Indianapolis, Ind., assignors to Peter C. Reilly, Indianapolis, Ind. Original No. 1,765,302, dated June 17, 1930, Serial No. 321,269, filed Nov. 22, 1928. Application for reissue filed Oct. 15, 1930. Serial No. 488,986. 9 Claims. (Cl. 209—166.)

1. A process which comprises subjecting ores to froth flotation in the presence of a compound having the general structure,



in which D represents a diad metalloid element oxygen or sulfur, R represents an alkyl, aralkyl or aryl group and M represents alkali-forming metal or hydrogen or alkyl, aryl or aralkyl.

18,117. COMBINED FISHHOOK AND WEED GUARD. JOSEPH E. PFLUEGER, deceased, Akron, Ohio, by the Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio, assignee. Original No. 1,726,502, dated Aug. 27, 1929, Serial No. 793, filed Jan. 6, 1925. Application for reissue filed Mar. 25, 1931. Serial No. 525,629. 12 Claims. (Cl. 43—39.)

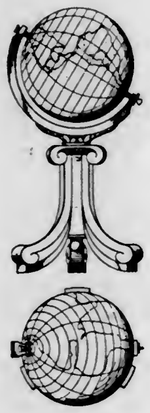


1. A fish hook, and a flexible weed guard for the hook, said weed guard having a hook guarding portion and a guiding portion rearwardly thereof and movable over the curved portion of the hook, and a lure attached to the guiding portion of the weed guard.

DESIGNS

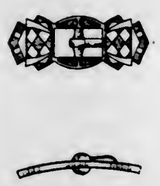
JUNE 30, 1931

84,505. RADIO CABINET. ALBERT AURILI, Lake Worth, Fla. Filed Dec. 26, 1930. Serial No. 38,119. Term of patent 3½ years.



The ornamental design for a radio cabinet, as shown.

84,506. SHOE BUCKLE. LAWRENCE M. BAYAN, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed May 8, 1931. Serial No. 39,775. Term of patent 3½ years.



The ornamental design for a shoe buckle as shown.

84,507. SHOE ORNAMENT. LAWRENCE M. BAYAN, Providence, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed May 8, 1931. Serial No. 39,776. Term of patent 3½ years.



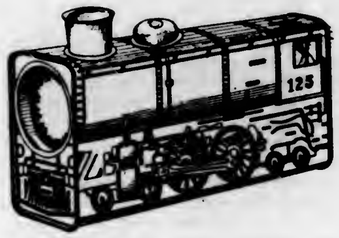
The ornamental design for a shoe ornament as shown.

84,508. BATHROOM FIXTURE. LEON BLOCH, Cleveland Heights, Ohio. Filed May 5, 1931. Serial No. 39,718. Term of patent 7 years.



The ornamental design for a bathroom fixture substantially as shown.

84,509. BOX OR SIMILAR CONTAINER. CLIFFORD CARMAN BOONE, Chicago, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 23, 1930. Serial No. 37,359. Term of patent 14 years.



The ornamental design for a box or similar container as shown.

84,510. SHOE. DAVID BOTEN, Chicago, Ill. Filed Apr. 20, 1931. Serial No. 39,565. Term of patent 3½ years.



The ornamental design for a shoe, as shown.

84,511. SHOE. DAVID BOTEN, Chicago, Ill. Filed Apr. 20, 1931. Serial No. 39,566. Term of patent 3½ years.



The ornamental design for a shoe, as shown.

84,512. SHOE. DAVID BOTEN, Chicago, Ill. Filed Apr. 20, 1931. Serial No. 39,567. Term of patent 3½ years.



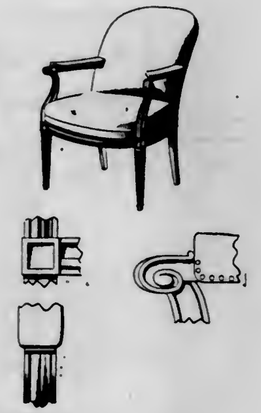
The ornamental design for a shoe, as shown.

84,513. SHOE. DAVID BOTEN, Chicago, Ill. Filed Apr. 20, 1931. Serial No. 39,568. Term of patent 3½ years.



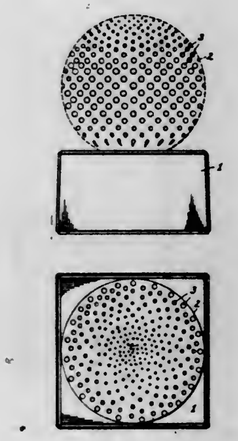
The ornamental design for a shoe, as shown.

84,514. CHAIR. DAVID H. BROWN, Grand Rapids, Mich., assignor to Century Furniture Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Oct. 28, 1930. Serial No. 37,419. Term of patent 7 years.



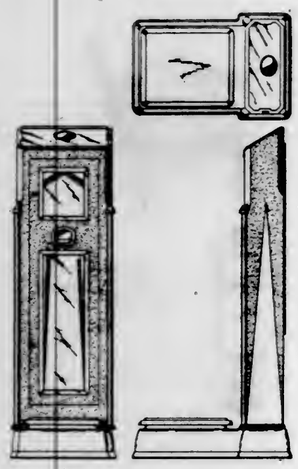
The ornamental design for a chair, as shown.

84,515. ARTICLE OF BRIC-A-BRAC. FREDERICK CARDER, Corning, N. Y. Filed Aug. 28, 1929. Serial No. 32,583. Term of patent 14 years.



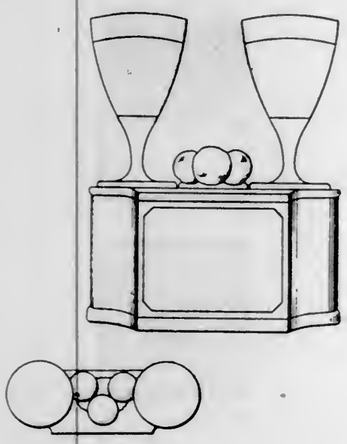
The ornamental design for an article of bric-a-brac as shown and described.

84,516. WEIGHING SCALE CASING. LEVERETT D. CHAMBERS, New York, N. Y., assignor to Camco Scale Corporation, New York, N. Y. Filed Dec. 13, 1930. Serial No. 37,968. Term of patent 14 years.



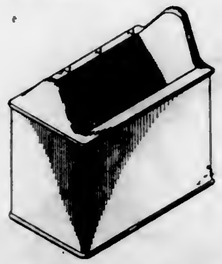
The ornamental design for a weighing scale casing, as shown.

84,517. DISPENSER. HARRY E. CROSBY, Walnut Park, Calif., assignor to Mission Dry Corporation, Ltd., Los Angeles, Calif., a Corporation of Delaware. Filed Aug. 30, 1930. Serial No. 36,827. Term of patent 3½ years.



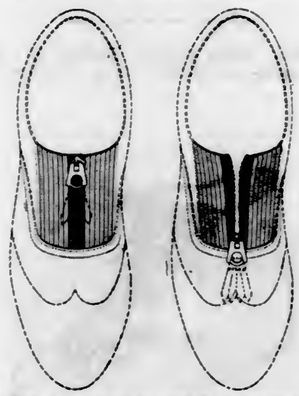
The ornamental design for a dispenser, as shown.

84,518. NAPKIN HOLDER. THOMAS N. DELIGIANES, Chicago, Ill. Filed May 31, 1929. Serial No. 31,476. Term of patent 14 years.



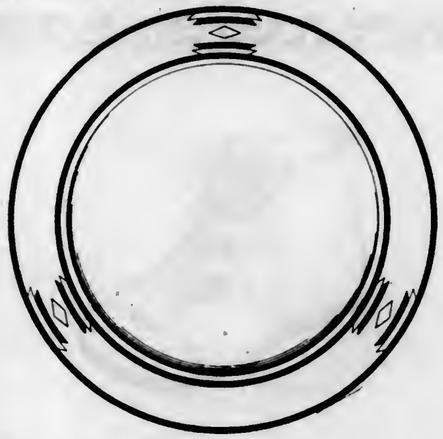
The ornamental design for a napkin holder as shown.

84,519. SHOE. WALTER E. EBLING, New York, N. Y., assignor to E. P. Reed & Co., Rochester, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 38,894. Term of patent 14 years.



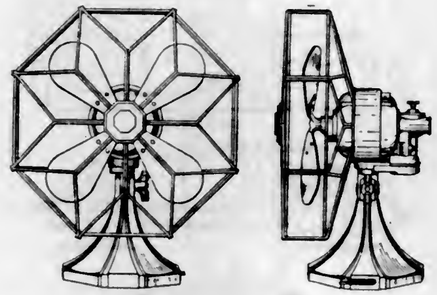
The ornamental design for a shoe substantially as shown and described.

84,520. PLATE OR SIMILAR ARTICLE. GEORGE FULTON, Oak Park, Ill., assignor to Mayer China Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed Mar. 16, 1931. Serial No. 39,104. Term of patent 14 years.



The ornamental design for a plate or similar article, as shown.

84,521. MOTOR DRIVEN FAN. RICHARD H. JORDAN, Springfield, Mass., DONALD L. HADLEY, Mansfield, Ohio, and DONALD R. DOHNER, Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 27, 1931. Serial No. 39,273. Term of patent 7 years.



The ornamental design for a motor driven fan as shown.

84,522. HOOD HINGE. HOMER G. KELLOGG, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed May 5, 1930. Serial No. 35,498. Term of patent 14 years.



The ornamental design for a hood hinge substantially as shown, and described.

84,523. SHOE BUCKLE. CLIFFORD G. KING, Barrington, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed May 6, 1931. Serial No. 39,739. Term of patent 3½ years.



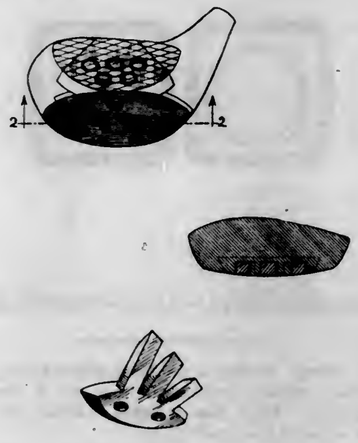
The ornamental design for a shoe buckle as shown.

84,524. SHOE BUCKLE. CLIFFORD G. KING, Barrington, R. I., assignor to C. G. King & Co., Inc., Providence, R. I. Filed May 6, 1931. Serial No. 39,738. Term of patent 3½ years.



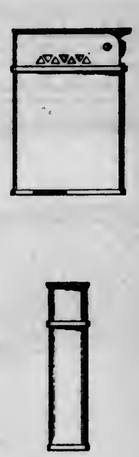
The ornamental design for a shoe buckle as shown.

84,525. GOLF CLUB HEAD. URBAN A. KLIN, Valparaiso, Ind. Filed Feb. 11, 1931. Serial No. 38,617. Term of patent 7 years.



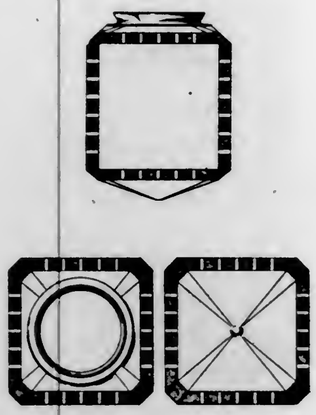
The ornamental design for a golf club head, as shown.

84,526. LIGHTER. GEORGE KOLLSTEDE, Providence, R. I. Filed Oct. 29, 1928. Serial No. 28,684. Term of patent 14 years.



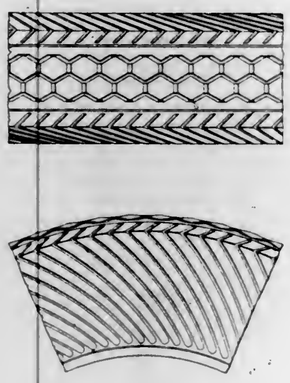
The ornamental design for a lighter substantially as shown.

84,527. ADVERTISING SIGN. NICHOLAS KOPP, Pittsburgh, Pa., assignor to Kopp Glass, Incorporated, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1931. Serial No. 39,341. Term of patent 7 years.



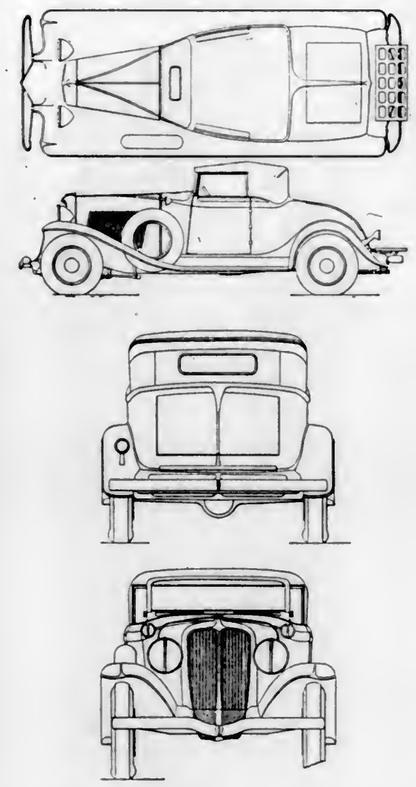
The ornamental design for an advertising sign, as shown.

84,528. TIRE. NICHOLAS LA JONE, Chicago, Ill., assignor to Inland Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 4, 1931. Serial No. 38,550. Term of patent 14 years.



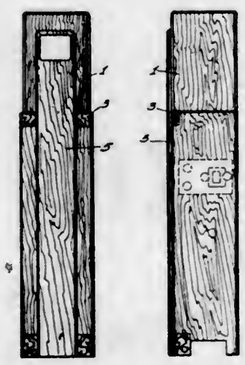
The ornamental design for a tire, substantially as shown.

84,529. AUTOMOBILE. ALAN H. LEAMY, Auburn, Ind., assignor to Auburn Automobile Company, Auburn, Ind., a Corporation of Indiana. Filed Apr. 24, 1931. Serial No. 39,615. Term of patent 7 years.



The ornamental design for an automobile substantially as shown.

84,530. RADIOCABINET. RAYMOND LOEWY, New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 7, 1931. Serial No. 38,986. Term of patent 14 years.



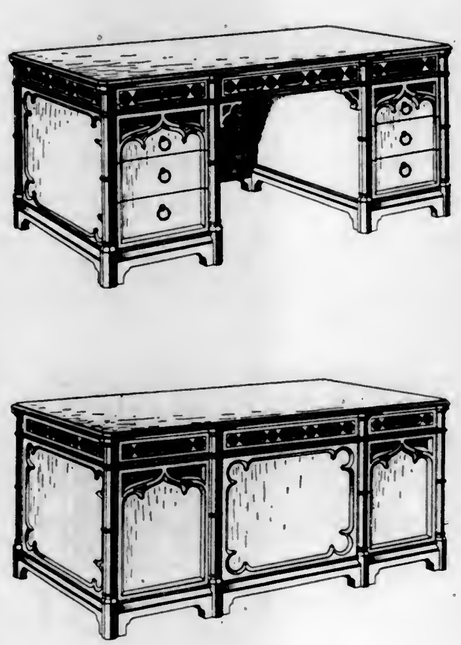
The ornamental design for a radiocabinet as shown and described.

84,531. JAR. FRANCIS S. MADDAFORD, Baltimore, Md., assignor to Crosse & Blackwell, Incorporated, Baltimore, Md., a Corporation of Maryland. Filed May 6, 1931. Serial No. 39,740. Term of patent 14 years.



The ornamental design for a jar substantially as shown.

84,532. DESK. JOSEPH R. MCCARGAR, Grand Rapids, Mich. Filed May 4, 1931. Serial No. 39,712. Term of patent 7 years.



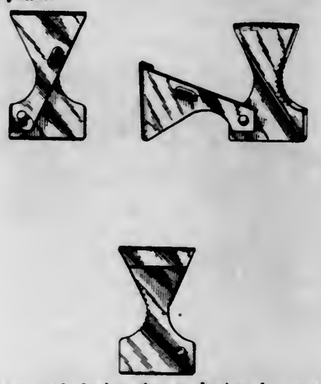
The ornamental design for a desk, as shown.

84,533. SPINET LAMP SUPPORT. ALBERT B. MCCUTCHEON, Middletown, Conn. Filed Mar. 27, 1931. Serial No. 39,272. Term of patent 3½ years.



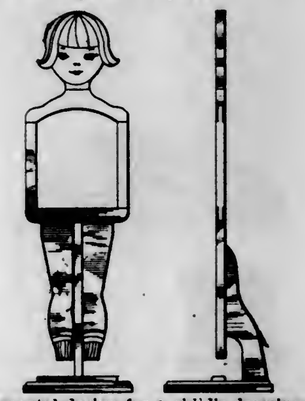
The ornamental design for a spinet lamp support, as shown.

84,534. DEVICE FOR SCRAPING AND CLEANING THE FACE OF A GOLF CLUB. HARVEY O. MILLER, Chicago, Ill. Filed Mar. 2, 1931. Serial No. 38,888. Term of patent 7 years.



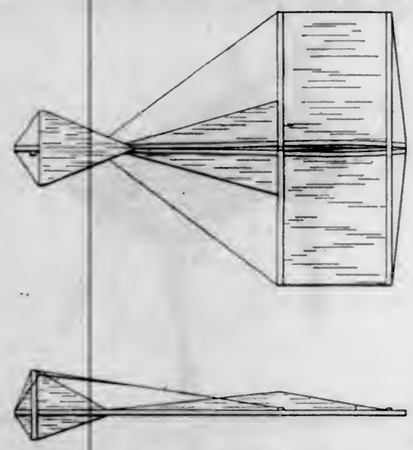
The ornamental design for a device for scraping and cleaning the face of a golf club substantially as shown.

84,535. CHILD'S DRESSING STAND. HERMIEN D. NUSBAUM, Chicago, Ill. Filed May 7, 1931. Serial No. 39,742. Term of patent 14 years.



The ornamental design for a child's dressing stand, substantially as shown.

84,536. KITE. OLIVER NYE, Toledo, Ohio. Filed Apr. 6, 1931. Serial No. 39,379. Term of patent 3½ years.



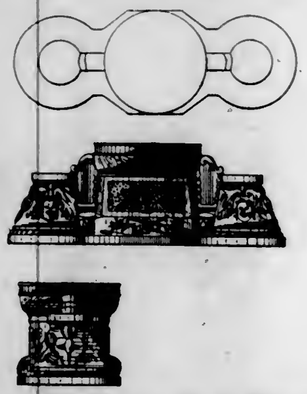
The ornamental design for a kite as shown.

84,537. LAMBREQUIN. MARIE R. OBERTINO, Mineral Point, Mo. Filed Feb. 19, 1931. Serial No. 38,721. Term of patent 7 years.



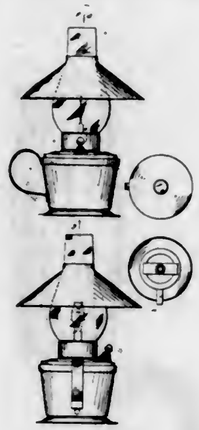
The ornamental design for a lambrequin, as shown.

84,538. BASE FOR LAMP OR ANALOGOUS ARTICLES. FRANK PALLONE, Brooklyn, N. Y. Filed May 12, 1931. Serial No. 39,816. Term of patent 7 years.



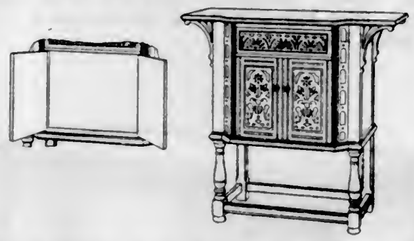
The ornamental design for a base for lamp or analogous articles, as shown.

84,539. ELECTRIC TABLE LAMP. FLOYD S. PARMENTER, Los Angeles, Calif. Filed Mar. 6, 1931. Serial No. 38,970. Term of patent 8½ years.



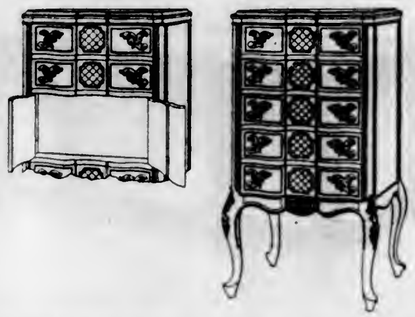
The ornamental design for an electric table lamp, as shown.

84,540. RADIOCABINET OR SIMILAR ARTICLE. GEORGE J. PIKE, Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 8, 1931. Serial No. 39,767. Term of patent 7 years.



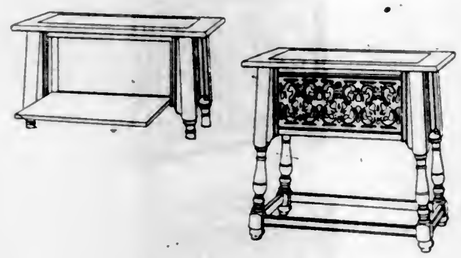
The ornamental design for a radio cabinet or similar article as shown.

84,541. RADIOCABINET OR SIMILAR ARTICLE. GEORGE J. PIKE, Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 8, 1931. Serial No. 39,768. Term of patent 7 years.



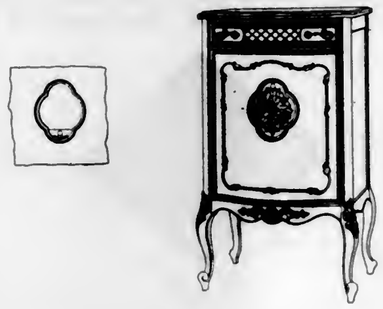
The ornamental design for a radio cabinet or similar article as shown.

84,542. RADIOCABINET OR SIMILAR ARTICLE. GEORGE J. PIKE, Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 8, 1931. Serial No. 39,770. Term of patent 7 years.



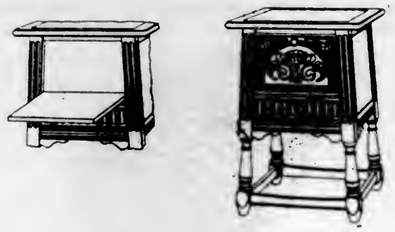
The ornamental design for a radio cabinet or similar article as shown.

84,543. RADIOCABINET OR SIMILAR ARTICLE. GEORGE J. PIKE, Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 8, 1931. Serial No. 39,771. Term of patent 3½ years.



The ornamental design for a radio cabinet or similar article as shown.

84,544. RADIOCABINET OR SIMILAR ARTICLE. GEORGE J. PIKE, Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 8, 1931. Serial No. 39,772. Term of patent 7 years.



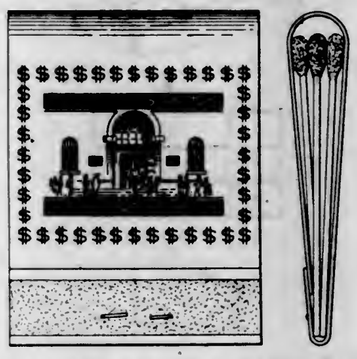
The ornamental design for a radio cabinet or similar article as shown.

84,545. RADIOCABINET OR SIMILAR ARTICLE. GEORGE J. PIKE, Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed May 8, 1931. Serial No. 39,773. Term of patent 7 years.



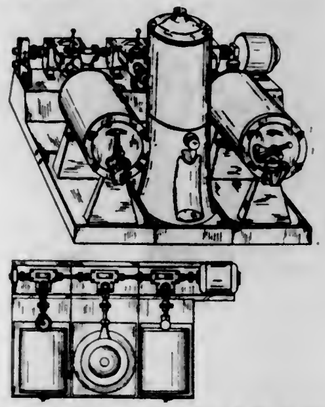
The ornamental design for a radio cabinet or similar article as shown.

84,546. MATCH BOOK. ARTHUR C. POTTER, North Woodstock, Conn. Filed Oct. 13, 1930. Serial No. 37,250. Term of patent 14 years.



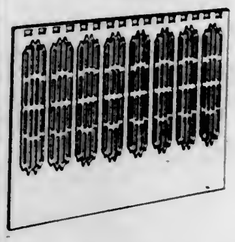
The ornamental design for the match book as shown and described.

84,547. CASING FOR A REFRIGERATING, MIXING, AND DISPENSING MACHINE. EUGENE L. REYNOLDS, Portland, Oreg. Filed Nov. 17, 1930. Serial No. 37,691. Term of patent 7 years.



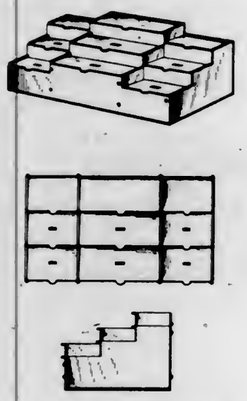
The ornamental design for a casing for a refrigerating, mixing, and dispensing machine, as shown.

84,548. GRILLE FOR A RADIATOR CABINET OR SIMILAR ARTICLE. HARRY RODSTEIN and ISIDORE NATHANSON, Brooklyn, N. Y. Filed Mar. 19, 1931. Serial No. 39,167. Term of patent 7 years.



The ornamental design for a grille for a radiator cabinet or similar article, as shown.

84,549. PIN AND NEEDLE STAND. WALTER RUSILAS, Paterson, N. J. Filed Oct. 15, 1930. Serial No. 37,261. Term of patent 7 years.



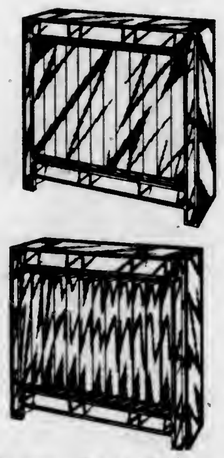
The ornamental design for a pin and needle stand, as shown.

84,550. CONTAINER FOR LIQUIDS OR ARTICLE OF SIMILAR NATURE. PETER SANTURELLO, Columbus, Ohio. Filed Jan. 24, 1931. Serial No. 38,440. Term of patent 14 years.



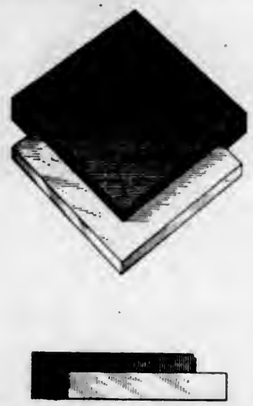
The ornamental design for a container for liquids or article of similar nature, as shown.

84,551. RADIATOR INCLOSURE. ELEANOR P. SCHOLLE, New York, N. Y., assignor to Isabella Barclay, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 26, 1931. Serial No. 39,253. Term of patent 14 years.



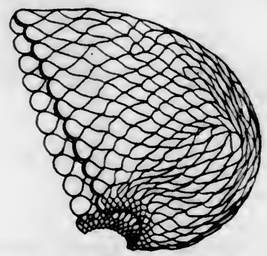
The ornamental design for a radiator inclosure as shown and described.

84,552. BASE FOR A DISPLAY STAND OR SIMILAR ARTICLE. VICTOR N. SIEGEL, Paris, France. Filed Apr. 29, 1930. Serial No. 35,432. Term of patent 3½ years.



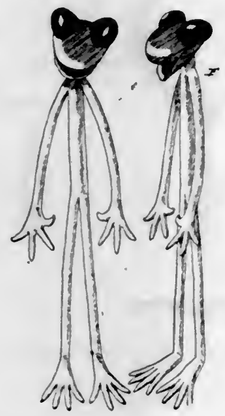
The ornamental design for a base for a display stand or similar article, as shown and described.

84,553. HAIR NET. NAT L. SOLOMON, Brooklyn, N. Y. Filed Nov. 21, 1930. Serial No. 37,752. Term of patent 14 years.



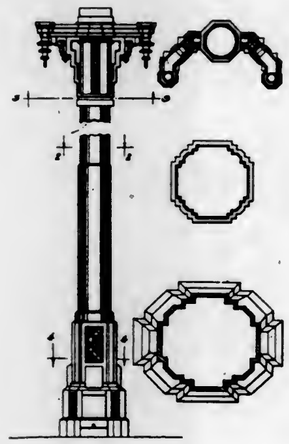
The ornamental design for a hair net as shown.

84,554. TOY FIGURE. WILMA FRITSCHY THOMPSON, New York, N. Y. Filed Apr. 25, 1931. Serial No. 39,628. Term of patent 7 years.



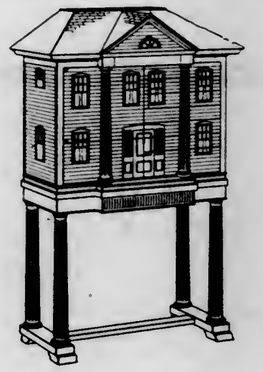
The ornamental design for a toy figure, substantially as shown.

84,555. LIGHTING POST. WESTERN UNDERWOOD, Santa Monica, Calif. Filed Sept. 24, 1930. Serial No. 37,065. Term of patent 14 years.



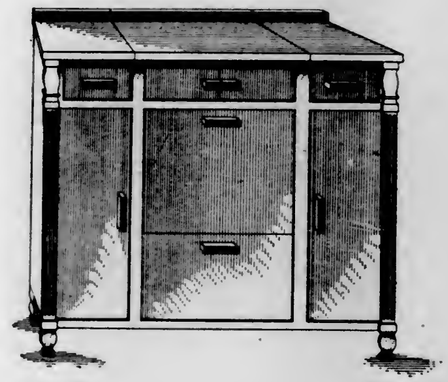
The ornamental design for a lighting post, as shown.

84,556. OPERATING ROOM CABINET OR SIMILAR ARTICLE. ELMER M. WACHTEL, Two Rivers, Wis., assignor to Hamilton Manufacturing Company, Two Rivers, Wis., a Corporation of Wisconsin. Filed Mar. 16, 1931. Serial No. 39,110. Term of patent 7 years.



The ornamental design for an operating room cabinet or similar article substantially as shown.

84,557. RANGE. GEORGE D. WILKINSON, Oak Park, and ELMER D. PELLEGRIN, Des Plaines, Ill., assignors to Cribben & Sexton Company, Chicago, Ill., a Corporation of Illinois. Filed May 7, 1931. Serial No. 39,756. Term of patent 7 years.



The ornamental design for a range as shown.

84,558. COMB. JOSEPH ZAPPULLA, Bay Shore, Long Island, N. Y. Filed Apr. 16, 1931. Serial No. 39,496. Term of patent 3½ years.



The ornamental design for a comb as shown.

84,559. HAND MIRROR. JOSEPH ZAPPULLA, Bay Shore, Long Island, N. Y. Filed Apr. 16, 1931. Serial No. 39,497. Term of patent 3½ years.

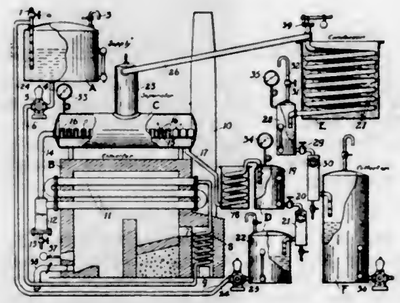


The ornamental design for a hand mirror as shown.

PATENTS

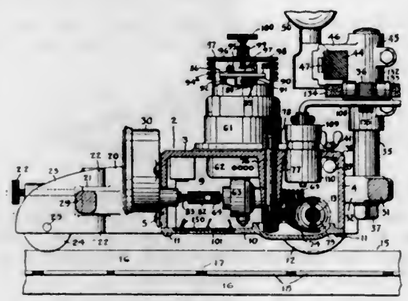
GRANTED JUNE 30, 1931

1,811,834. APPARATUS FOR THE CONVERSION AND TRANSFORMATION OF HYDROCARBONS, LIQUIDS AND FLUIDS. JOSEPH H. ADAMS, Brooklyn, N. Y., assignor, by mesne assignments, to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 26, 1916, Serial No. 74,337. Renewed Jan. 12, 1929. 18 Claims. (Cl. 106—109.)



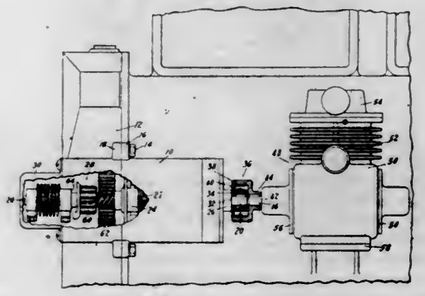
1. Apparatus for converting high boiling hydrocarbon oil into lower boiling products, comprising a tubular oil converter, maintained at a cracking temperature, means for supplying oil to said converter at the top, means for discharging products at the bottom, a carbon and residue collecting device connected to said discharge and extending below the point of discharge, means for drawing off the collected residue and carbon in said device, a separating chamber connected at the upper portion of said collecting device to receive the vapors and oil therefrom, and means for separately drawing off the converted vapors and unconverted oil from said separating chamber.

1,811,835. PORTABLE CUTTING AND WELDING MACHINE. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1930. Serial No. 495,047. 29 Claims. (Cl. 266—23.)



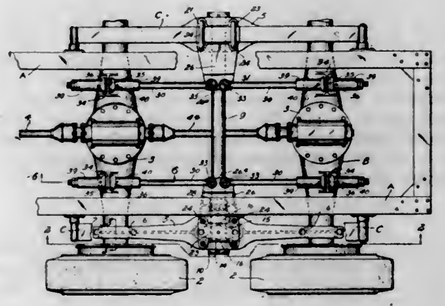
10. A machine for cutting or welding of metals, comprising a portable wheeled torch-carriage capable of traveling on a track or on the surface of the work, a motor on the carriage, a constant-speed-ratio drive from said motor to part of the wheel support of the carriage, an adjustable governor for the motor, and a translation-speed indicator operated by said drive.

1,811,836. COMBINED STARTING AND PUMPING SYSTEM FOR MOTOR VEHICLES. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 30, 1929. Serial No. 336,300. 10 Claims. (Cl. 290—28.)



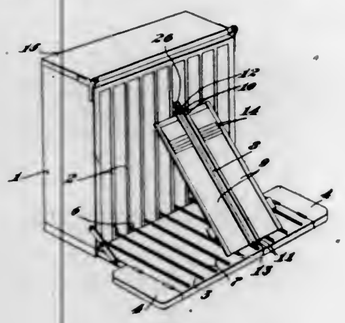
1. Automotive apparatus comprising, in combination, an internal combustion engine, an electric circuit including an electric motor, a pump, means automatically responsive to the rotation of the motor in the one direction to connect the motor to the engine for starting, means automatically responsive to rotation of the motor in the other direction to connect the motor to the pump for pumping, a switch in said circuit manually operable to make the circuit for rotating the motor in the starting direction and automatically returnable to its normal position to permit the making of the circuit therethrough for rotating the motor in the pumping direction.

1,811,837. MOTOR VEHICLE. HERBERT W. ALDEN, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed June 28, 1928. Serial No. 288,931. 15 Claims. (Cl. 180—22.)



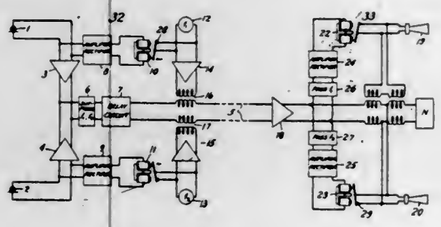
1. In a motor vehicle, a truck comprising two driving axles and side frames connecting said driving axles, members fixed to said side frames intermediate said axles, collars sleeved on said members, spring seats supported on said collars, and connections between said spring seats and said collars permitting transverse rocking movement of said truck side frames relative to said spring seats.

1,811,838. CABINET INDEX. STANLEY ANTHONY, Boston, Mass. Filed Feb. 7, 1930. Serial No. 426,572. 10 Claims. (Cl. 45—2.)



1. An index comprising a cabinet open at the front, a movable carrier normally housed in upright position within the cabinet with its lower end supported by the cabinet bottom, an arm pivoted within the upper portion of the cabinet and connected to the carrier so that the carrier is slidable along the arm, said connection constraining the carrier to move parallel to the arm, means for supporting the lower end of the carrier when it is moved outwardly of the cabinet, and means for limiting the outward movement of the carrier so that the extended carrier is supported at an inclination to the cabinet front.

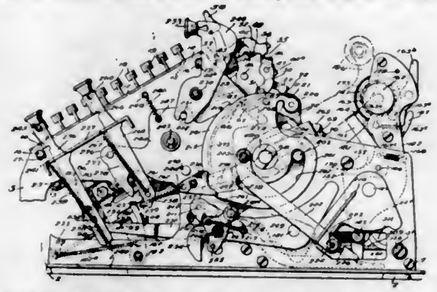
1,811,839. SOUND TRANSMISSION. HAROLD D. ARNOLD, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 14, 1929, Serial No. 370,794. 6 Claims. (Cl. 179—100.4.)



1. In a transmission system a plurality of variously located sound pick-up devices, a plurality of signaling means, a transmission line including means common to the devices for delaying currents of voice frequencies, circuits for the signaling means independent of the delaying means, a plurality of receivers variously located to correspond to the pick-up devices, and means responsive to the signaling means for selectively associating the receivers with the line.

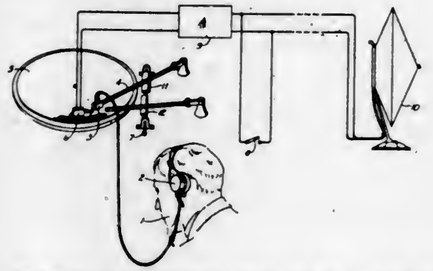
1,811,840. ADDING MACHINE. GLENN J. BARRETT, Evanston, Ill., assignor to Portable Adding Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 14, 1925. Serial No. 50,219. 6 Claims. (Cl. 235—60.)

2. The combination of an adding sector, a register wheel, a rock frame supporting said register wheel, a spring normally holding said rock frame with the register wheel in engagement with the adding sector, a rock arm connected to said rock frame, a handle operated cam disc, a lever pivoted on said rock arm and carrying a roller, a spring connected to said lever and to the rock arm normally holding said lever against a stop with the roller in position to be engaged by the said cam disc on the forward stroke of the handle to force the register wheel out of engagement with the adding sector without moving the lever on its pivot; and means to cause the lever to turn on its pivot to swing the roller out of the



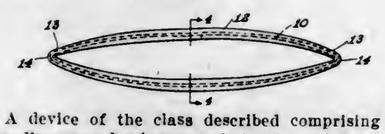
path of the cam disc at the beginning of the return stroke of the handle to thereby permit the register wheel to immediately snap back into engagement with the adding sector, the cam disc being shaped to permit the pivoted lever to snap back to normal position on completion of the return stroke of the handle.

1,811,841. SOUND REPRODUCING SYSTEM. JOHN C. BENJAMIN, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed July 13, 1928. Serial No. 292,533. 3 Claims. (Cl. 179—100.4.)



1. The method of eliminating noise in the reproduction of a sound record which consists in reproducng the record for monitoring purposes and separately reproducing for entertainment purposes only those portions of the record upon which matter has been recorded as indicated by the monitoring reproduction.

1,811,842. HAIR FASTENER. ELSIE BOSSART, New York, N. Y. Filed Feb. 28, 1931. Serial No. 518,999. 2 Claims. (Cl. 132—48.)



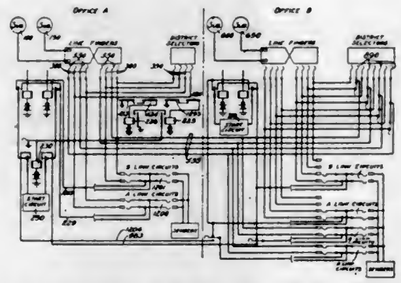
1. A device of the class described comprising a resilient endless core having oppositely disposed arcuate sides joined at the ends, said core having a cover of flexible material, the diameter of said sides being largest at the middle and lessening towards the ends.

1,811,843. ANTISLIP FABRIC. LESTER B. CHISHOLM, Waterbury, Conn., assignor to The American Mills Company, Waterbury, Conn., a Corporation. Continuation of application Serial No. 380,869, filed July 25, 1929. This application filed May 23, 1930. Serial No. 455,129. 8 Claims. (Cl. 139—421.)

1. An anti-slip fabric comprising interwoven warp and weft strands; and a ribbon of resilient anti-slip material folded transversely upon itself and secured to the fabric by strands extending transversely across the ribbon at spaced intervals, the said folded ribbon and the said strands for holding the same in place both being positioned to permit one of the folded reaches of the former to bulge outward from the face of the fabric between the said strands to form a series of protuberant and resilient anti-slip pockets.

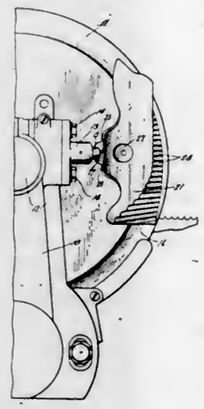


1,811,844. AUTOMATIC TELEPHONE EXCHANGE SYSTEM. AMOS F. DIXON, Jersey City, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 6, 1930. Serial No. 418,861. 11 Claims. (Cl. 179—18.)



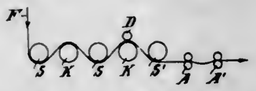
1. A telephone exchange system comprising a plurality of offices, call distributing and call extending equipment at each office, trunks connecting said offices, means including said trunks for associating call distributing equipment at one office with the call extending equipment of another office independently of the call extending equipment of the first office, and means for thereupon completing any call originated in said first office over the call extending equipment of said other office.

1,811,845. DEFLECTOR FOR SLICING MACHINES. JOSEPH FOLK, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Apr. 13, 1927, Serial No. 183,391. Renewed Oct. 23, 1929. 11 Claims. (Cl. 146—102.)



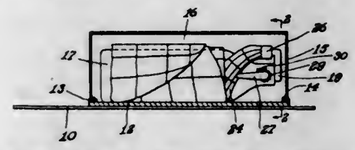
1. The combination with a slicing knife, of a deflector for directing slices away from the knife, a support for said deflector adjustable in a plane substantially parallel to the plane of the edge of said knife to adjust said deflector along the edge portion of said knife toward and away from the cutting edge thereof, means for detachably securing said deflector to said support, and means for relocating said deflector on said support in a predetermined position relative thereto after removal of said deflector to permit cleaning.

1,811,846. METHOD OF PRODUCING FANCY FIGURES ON TEXTILE MATERIAL BY MERCERIZATION. EMIL GMINDER, Reutlingen, Germany. Filed Mar. 11, 1927, Serial No. 174,473, and in Germany Mar. 13, 1926. 3 Claims. (Cl. 8—20.)



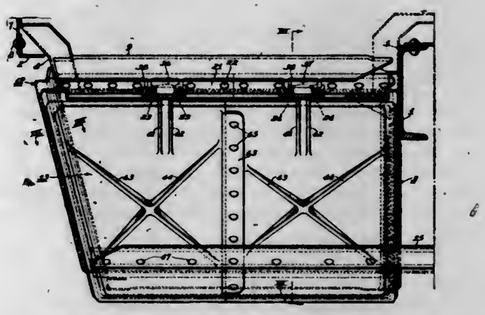
1. The process of producing a design or fancy figures on vegetable fabrics which consists in impregnating the fabric with a caustic solution, putting the fabric under tension, neutralizing said medium at certain points while still under tension to produce the said design or fancy figures, thereafter releasing the tension to permit shrinking of the unneutralizing portions, and neutralizing said last mentioned portions while in sbrunken condition.

1,811,847. VALVE CONTROLLED LIFE PRESERVER. OSCAR HELLRICH, New York, N. Y. Filed Feb. 28, 1931. Serial No. 519,031. 5 Claims. (Cl. 9—19.)



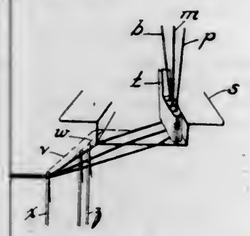
1. In a device of the class described, a support plate, a cushion on said support plate, a hinged cover secured to said plate and adapted to rest on said cushion in leakproof condition, a balloon adapted to be folded beneath said cover, a flask connected to said balloon mounted on said support plate, a valve in said flask and means on said cover for opening said valve in said flask upon opening of said cover.

1,811,848. HOPPER CAR DOOR. EDWARD HILL HOLMES, McKees Rocks, Pa., assignor to Fort Pitt Malleable Iron Company, McKees Rocks, Pa., a Corporation of Pennsylvania. Filed Dec. 11, 1930. Serial No. 501,531. 13 Claims. (Cl. 105—280.)



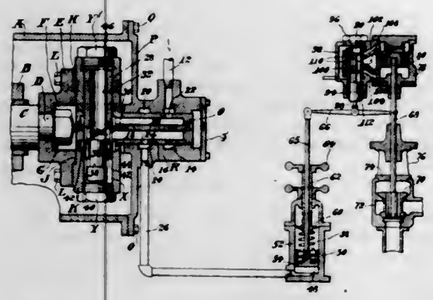
1. In a hopper car door structure, in combination, a door frame comprising two integral castings joined to constitute connected top, side and bottom members, and a door for cooperating with the frame comprising two integral castings joined to constitute a solid plate.

1,811,849. PROCESS OF KNITTING PLATED FABRIC. HAROLD E. HOUSEMAN, Edge Moor, Del., assignor to Standard-Tramp Bros. Machine Company, Wilmington, Del., a Corporation of Delaware. Original application filed Apr. 20, 1928, Serial No. 271,428. Divided and this application filed Feb. 12, 1929. Serial No. 339,327. 15 Claims. (Cl. 66—36.)



1. The process of producing on a knitting machine a plated knitted fabric which comprises feeding three threads toward the needles, imposing such differential tension on the threads as to cause one thread to normally appear on the face, and the other threads respectively in the center, and on the back, of the fabric in plated relation, manipulating threads engaged by certain needles to bring a second thread on the face, and the other threads respectively in the center, and on the back, of the fabric in plated relation, and manipulating threads engaged by other needles to bring a third thread on the face, and the other threads respectively in the center, and on the back, of the fabric in plated relation.

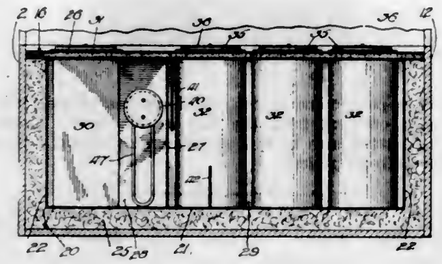
1,811,850. CENTRIFUGAL HYDRAULIC SPEED GOVERNOR. LESLIE R. HUFF, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 10, 1930. Serial No. 494,611. 5 Claims. (Cl. 264—14.)



1. A hydraulic speed governor, comprising a casing adapted to be attached to a rotary member and having a valve chamber therein, a projection on the casing having an inlet and a connecting passage extending into the valve chamber, a hydraulically operated valve in the valve chamber having a groove in its outer periphery extending across the inlet and connecting passages, a longitudinal bore in the valve, said bore being closed at one end by a sliding plunger, said valve adapted to be centrifugally moved by the rotation of the rotary member to change the relationship between the groove and the passages.

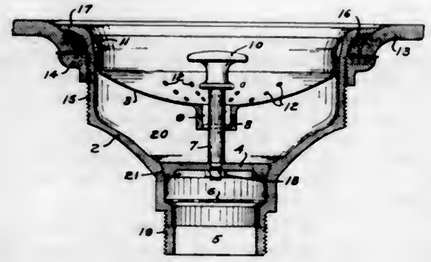
1,811,851. SODA FOUNTAIN. FRANKLIN B. HUNT, Chicago, Ill., assignor, by mesne assignments, to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 20, 1925. Serial No. 24,333. 7 Claims. (Cl. 62—95.)

2. A cooling cabinet for soda fountains comprising a plurality of compartments, a heat-transmitting partition wall separating adjacent compartments, a baffle wall extending parallel to said partition wall and spaced therefrom in one of said compartments, a fluid cooling medium



in said last mentioned compartment contacting with said partition wall and said baffle wall, and refrigerating means located in the other of said compartments.

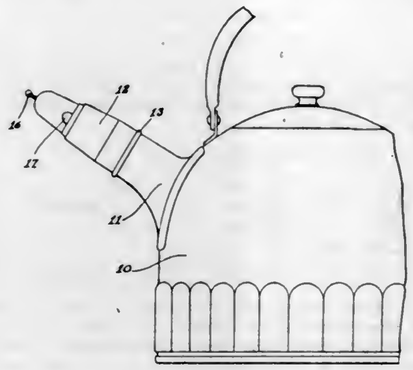
1,811,852. STRAINER. JULIUS S. JUDELL, Shorewood, Wis., assignor to Milwaukee Flush Valve Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 3, 1928. Serial No. 316,928. 5 Claims. (Cl. 4—287.)



1. In combination, a member forming a pocket having maximum internal diameter at its upper end and having an outlet at the lower end thereof, a strainer disposed entirely within said pocket, said strainer being formed with a flange at its upper end resting directly upon the upper enlarged internal portion of said member and having a downwardly dished bottom provided at its lowermost portion with an opening located above said outlet, a stopper movable beneath the lowermost portion of said strainer to control said outlet, a rod secured to said stopper and freely movable longitudinally through and rotatable within said opening, and an abutment carried by said rod and cooperable with the bottom of said strainer to hold said stopper in open position, said abutment being formed to enter said opening during closing of said stopper.

1,811,853. KETTLE ALARM. GERALD LANDMAN, Ozone Park, N. Y. Filed Dec. 29, 1930. Serial No. 505,303. 2 Claims. (Cl. 116—140.)

1. A device of the class described comprising a substantially tapering body having openings therein, a block slidable in said body and having longitudinal channels therein said body having vibrating tongues thereon at the ends of said channels adjacent said openings, and means for varying the longitudinal position of said block with

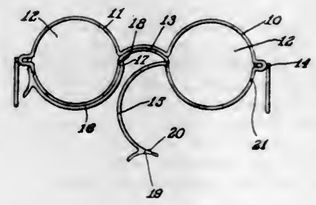


respect to said openings in order to vary the pitch of vibration of said means upon the passage of steam through said openings.

1,811,854. MANUFACTURE OF CARBON BLACK. GEORGE CHARLES LEWIS, New Dorp, N. Y., assignor to Columbian Carbon Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 19, 1928. Serial No. 271,407. 7 Claims. (Cl. 134—60.)

4. The process of producing carbon black which includes burning a mixture of hydrogen and a hydrocarbon gas with impingement of the flame on a cooling or collecting surface.

1,811,855. SUPPORT FOR HOLDING SPECTACLES ABOVE THE LINE OF VISION. HERBERT LODDE and JOHN DIECKMANN, New York, N. Y. Filed Aug. 13, 1930. Serial No. 474,976. 3 Claims. (Cl. 88—41.)

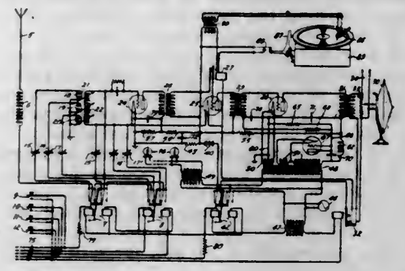


1. In combination with spectacles, a pair of lens rings forming part of a frame, each lens ring having a finger pivotally secured thereto, said finger being adapted to rotate from the unused to the depending and used position, and means at the extremity of said finger for supporting said eyeglass frame upon the nose of the user in a position in which the eyeglass frame is raised above the vision of the user.

1,811,856. SWITCHING DEVICE FOR RADIO AND PHONOGRAPH COMBINATIONS. MAURICE B. LONG, Glen Ridge, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Original application filed Oct. 1, 1926, Serial No. 138,854. Divided and this application filed May 26, 1927. Serial No. 194,342. 13 Claims. (Cl. 179—100.4.)

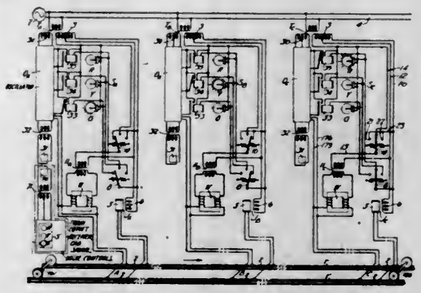
1. In combination, a radio receiver, a phonograph having an electrical reproducer and record actuating means,

start-stop mechanism for the latter, a sound reproducer, and a switch for connecting said radio receiver and said electrical reproducer to said sound reproducer alternative-



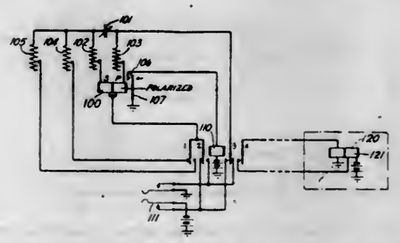
ly, said switch being connected to said start-stop mechanism and operated in the normal operation of said start-stop mechanism.

1,811,857. RAILWAY TRAFFIC CONTROLLING SYSTEM. LAURENCE E. MELHUISH, Glen Ridge, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1926. Serial No. 151,664. 7 Claims. (Cl. 246—30.)



1. In combination, a source of waves differing in frequency, a body movable relatively to said source, means responsive to said waves for controlling the motion of said body, said means comprising a source of waves of frequency differing from said other frequencies, means for combining said waves from said sources to produce resulting waves of frequencies different from the frequencies of said combined waves, and means responsive to said resulting waves for controlling the motion of said body.

1,811,858. CONTROL SYSTEM FOR TRANSMISSION OF SIGNALS. OLIVER R. MILLER, Floral Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1929. Serial No. 359,365. 14 Claims. (Cl. 175—373.)



6. A system for transmitting impulses and for regulating the duration of each impulse and the open period between

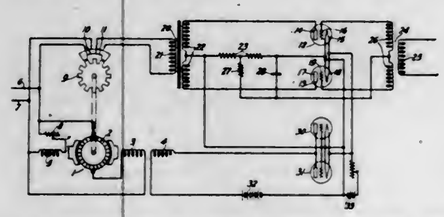
impulses comprising a polarized electromagnet having a primary and a secondary winding arranged to oppose each other when both are energized, an armature for said electromagnet, a condenser in series circuit with said secondary winding for limiting the duration of current flow through said winding, variable shunts for said secondary winding for altering the duration of current flow through said secondary winding for separately controlling the duration of impulses and the open period between impulses, and a second electromagnet operable in response to the movement of said armature in one direction and released by the movement of said armature in the opposite direction for transmitting said impulses for controlling the direction of current flow through said primary and secondary windings to operate said armature in either direction and for selecting the proper shunt for association with said secondary winding for each operation of said armature.

1,811,859. SELF COMPUTING LEVELING ROD. CHESTER H. MILLS, Wichita, Kans. Filed Apr. 2, 1928. Serial No. 266,507. 4 Claims. (Cl. 33—74.)



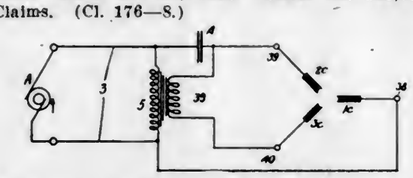
1. In a device of the class described, a lower rod and an upper rod slidably associated; an extension below the lower rod as a base element and means for adjustably positioning the same with respect to said lower rod; said means including a plate slidably mounted on the lower rod near the base thereof, said plate having openings for receiving a plunger mechanism; a plunger mechanism carried by the extension member and adapted to engage within a selected opening in said plate for adjustably positioning the parts as previously stated.

1,811,860. REGULATOR SYSTEM. EDMUND R. MORTON, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 25, 1929. Serial No. 365,904. 12 Claims. (Cl. 172—293.)



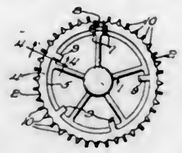
1. In combination a dynamo-electric machine, means comprising a detector for regulating said machine to maintain a characteristic thereof constant, and auxiliary means operating on said detector upon tendency of the machine characteristic to change for applying a relatively large corrective force to said machine to return the characteristic thereof to normal and for gradually reducing the corrective force.

1,811,861. ILLUMINATING APPARATUS. ALEXANDER NYMAN, Dobbs Ferry, N. Y., assignor to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 20, 1926. Serial No. 143,008. 2 Claims. (Cl. 176—8.)



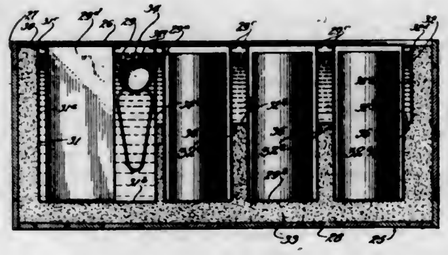
2. A system for producing constant illumination from single phase alternating current, comprising a lighting unit having at least three electrodes in operative relation to each other, a single phase alternating current supply line, two of the said electrodes being inductively coupled to the supply line by a transformer, two of the said electrodes being connected across the supply line through a condenser, and two of the said electrodes being connected across the supply line through the secondary winding of said transformer in series with said condenser, whereby currents in three phase relation are supplied to the lighting unit.

1,811,862. LAWN MOWER ACCESSORY. SARAH E. PIERCE, Conshohocken, Pa. Filed Mar. 11, 1929. Serial No. 345,940. 3 Claims. (Cl. 301—40.)



1. A traction band for attachment to a lawn mower wheel having contiguous transverse corrugations, said band comprising a correspondingly corrugated sheet metal strip for circumferentially embracing the wheel, said strip having integral radial traction projections struck out therefrom, the ends of said strip being laterally fashioned for engagement by fasteners for connecting said ends to clamp the band upon a wheel, one margin of said band being formed with an integral lateral projection adapted to be bent beneath the wheel rim and into driving engagement with the spokes of the wheel.

1,811,863. COOLER CABINET. JABEZ H. PRATT and FRANKLIN B. HUNT, Chicago, Ill., assignors, by mesne assignments, to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 6, 1926. Serial No. 92,744. 7 Claims. (Cl. 62—95.)



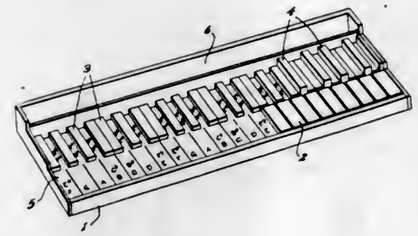
1. A cooler cabinet comprising an outer casing, a brine tank mounted in said casing and having a pair of brine

compartments of different depths, an ice cream receptacle located in one of said brine compartments, refrigerating means located in said brine compartment with said receptacle, and another ice cream receptacle extending downwardly into the other of said brine compartments and through the bottom wall thereof.

1,811,864. PROCESS OF LIBERATING FIBER FROM BAGASSE OR LIKE STALKS. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Jan. 20, 1927. Serial No. 162,417. 7 Claims. (Cl. 92—14.)

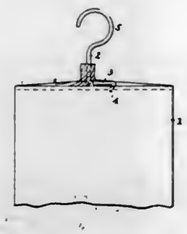
1. A process which comprises steeping bagasse or similar monocotyledons at about room temperature in an alkaline liquor of an alkalinity of at least 7% caustic soda equivalent until such liquor has diffused into and penetrated such stalks, and then cooking such stalks at atmospheric pressure in such liquor.

1,811,865. MECHANISM FOR USE IN MUSICAL INSTRUCTION. GEORGE ARTHUR ROGERS, New York, N. Y. Filed Mar. 31, 1930. Serial No. 440,397. 4 Claims. (Cl. 84—482.)



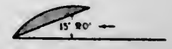
3. A device of the character described comprising a tray having a rim, and a plurality of removable keys of rectangular and regular shape filling the said tray from the rim at one end thereof to the rim at the other end thereof, said keys being removable and reversible and retained in either normal or reversed position by said rim.

1,811,866. METHOD OF AND IMPLEMENT FOR CLOSING BAGS. HERBERT RUMSEY, Jr., Nutley, N. J., assignor to Henry Muhs Company, Passaic, N. J., a Corporation of New Jersey. Filed July 21, 1930. Serial No. 469,613. 3 Claims. (Cl. 24—30.5.)



2. The hereindescribed method of constricting the mouth of a mouthed container of flexible material which consists in puncturing its mouth portion with a twisting implement having a portion to puncture said mouth portion, then turning said implement relatively to the remainder of the container in a direction to twist said mouth portion thereof and finally causing said portion of the implement to puncture the container at a point removed from its thus-twisted mouth portion, whereby the implement will retain said mouth portion in its twisted state.

1,811,867. SELF ROTATING AIR SCREW FOR THE AERODYNAMIC BRAKAGE OF AEROPLANES AND THE LIKE. GIOVANNI SERRAGLI, Florence, Italy. Filed Sept. 27, 1930, Serial No. 484,813, and in Italy Oct. 24, 1929. 5 Claims. (Cl. 244—19.)

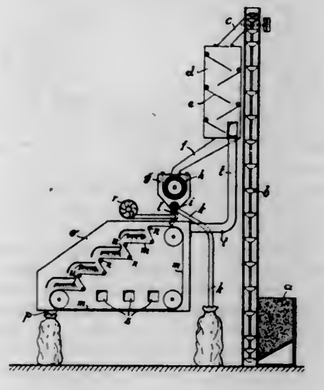


1. Braking air screw for retarding the descent of aeroplanes and the like, characterized by the fact that it is mounted loose on a shaft at right angle to the direction of the traction axis of the aeroplane, which corresponds normally to the vertical position, and is formed by four blades rigidly fixed to a hub, three of which blades forming an angle of inclination nil or practically nil with the plane of revolution of the air screw, so that when the direction of movement of the airplane coincides with the plane of the air screw, the fourth blade acts as a steering surface to prevent the air screw from revolving and when the aeraplane inclines forward the screw starts revolving thus acting as a brake for moderating the velocity of the descent.

1,811,868. PROCESS FOR PREPARING 1,8-CINEOL (EUCALYPTOL). SIEGFRIED SKRAUP, Wurzburg, and OTTO HIRSCHLER, Dusseldorf-Oberkassel, Germany, assignors to Rheinische Kampfer-Fabrik G. m. b. H., Dusseldorf-Oberkassel, Rhineland, Germany, a German Firm. Filed Aug. 10, 1929, Serial No. 385,062, and in Germany Aug. 21, 1928. 10 Claims. (Cl. 260—153.)

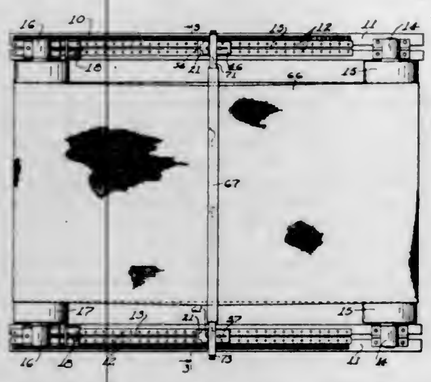
1. The process for preparing 1,8-cineol (eucalyptol) which comprises the steps of treating at temperatures below 0° C. mixtures containing 1,4-cineol and 1,8-cineol with mineral acids having a hydrating action, separating any terpene hydrocarbons which may be present, and subjecting the solution to steam distillation.

1,811,869. METHOD FOR REMOVING THE MOLDY SMELL AND TASTE OF TAINTED CEREALS AND THE LIKE. EDMUND VON HORVATH and PETER VIELWERTH, Munich, Germany. Filed Jan. 20, 1928, Serial No. 248,075, and in Germany Jan. 20, 1927. 5 Claims. (Cl. 99—11.)



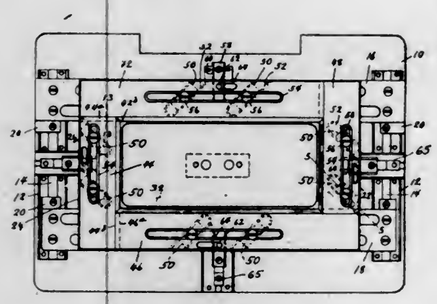
1. The process of reconditioning tainted cereals, legumes and the like which comprises exposing the moist material to a drying temperature not exceeding approximately 55° C. until the excess moisture therein has been removed and its normal water content substantially restored, and effectually subjecting the material to the action of ultra-violet rays for a period not substantially exceeding five minutes.

1,811,870. MEANS FOR AND METHOD OF TREATING FOURDRINIER WIRE BELTS. ALBERT B. WEISSENBORN, Appleton, Wis., assignor to Appleton Wire Works, Appleton, Wis., a Corporation of Wisconsin. Filed Nov. 13, 1929. Serial No. 406,887. 19 Claims. (Cl. 140—108.)



1. Apparatus for crooking a woven wire belt, comprising, in combination, means for supporting the belt at longitudinally spaced points, clamping means transversely engaging the belt at a region intermediate said spaced supporting means, means for displacing said clamping means, laterally of the direction of the belt to shift the belt toward one side substantially in its plane for producing angularly related flights between said clamping means and said spaced points and means for stretching the belt longitudinally.

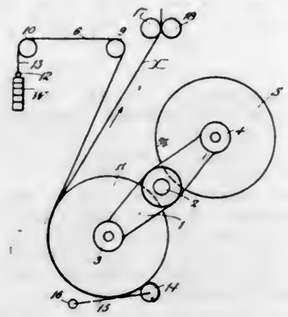
1,811,871. FOLDING MACHINE. JOSEPH W. ANTHONY, Lynn, Mass. Filed Dec. 13, 1928. Serial No. 325,826. 23 Claims. (Cl. 154—41.)



3. In a folding machine, folding elements arranged to fold over the material at the sides and also at the included corner of a blank consisting of a pair of folding plates which bound a folding space and have inner folding edges, the end of one plate closely confronting the inner folding edge of the other plate and means to move said plates simultaneously inwardly of and around the folding space.

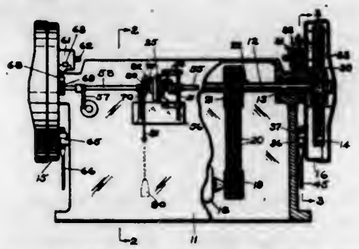
1,811,872. WEB ROLL CHANGER. HARRY V. BALL, Concord, Mass., and WALTER OGDEN, Cleveland, Ohio, assignors to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 17, 1925. Serial No. 50,536. 16 Claims. (Cl. 242—75.)

16. In a roll changer, a rotatable web roll carrier adapted to carry a spare web roll and a running web roll, a tension device including a belt support therefor, said support being located within the space through which the web rolls pass when the carrier is rotated, and a belt engaging the



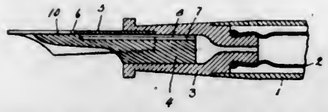
surface of the running roll and having one end fastened to the belt support and the other end held yieldingly under tension.

1,811,873. SPEED CONTROL DEVICE FOR GRINDING MACHINES. ALBERT G. BELDEN and GLENN C. NARAMORE, Worcester, Mass., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 29, 1929. Serial No. 374,796. 8 Claims. (Cl. 51—166.)



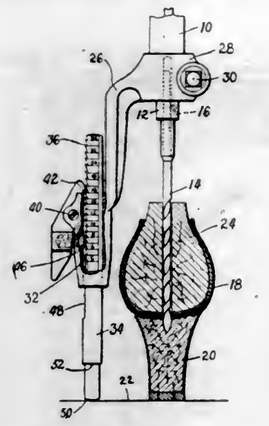
1. A grinding machine comprising a base, a spindle rotatably mounted thereon, a grinding wheel on said spindle, a variable speed motor to rotate the wheel, an electrical speed control device to regulate the rate of rotation of said wheel which includes a movable control member, a contact member movable relative to the wheel periphery and limited in its movement by contact therewith, and a stop device independently of and in the path of the control member and movable with the contact member, said parts being so arranged that the control member may be moved independently but may not be moved to increase the wheel speed above a predetermined limit until the wheel has worn away to a predetermined smaller size.

1,811,874. FOUNTAIN PEN. EDWARD C. BERRY, Melrose, Mass., assignor to The Chilton Pen Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Jan. 30, 1929. Serial No. 336,171. 9 Claims. (Cl. 120—50.)



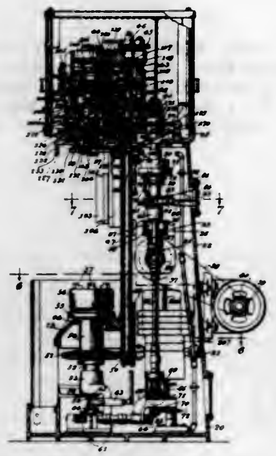
1. A fountain pen feed adapted for use in connection with a pen having an aperture and a slit extending therefrom to its writing point, said feed having an elongated unrecessed face arranged to extend from points adjacent the pen point to points beyond the pen aperture and to fit against its middle portion about its aperture and at each side of its slit, to provide a capillary feeding face thereto, and having a passage therein arranged to feed the ink to the inner end and side edges of said face.

1,811,875. HEEL DRILLING MACHINE. FREDERIC E. BERTRAND, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 9, 1929. Serial No. 331,375. 6 Claims. (Cl. 144—93.)



1. In a machine having a rotating drill holder, the combination of a gage carrier having a clamp by which it may be secured to the machine in fixed longitudinal relation to the drill holder, a depth gage member movable through said carrier in a direction parallel to the axis of the drill holder, spaced teeth upon the gage member, and a hook upon the carrier arranged to engage any one of said teeth to secure the gage in various definite positions relatively to the drill holder.

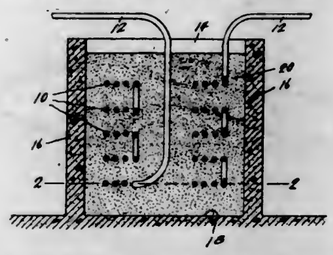
1,811,876. VERTICAL SPINDLE MACHINE TOOL. EDWARD P. BULLARD, Jr., Stratford, Conn., assignor, by mesne assignments, to The Bullard Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 8, 1925. Serial No. 42,186. 18 Claims. (Cl. 82—2.)



1. In a machine tool of the character described, the combination of a base, a rotary work carrying spindle mounted in said base, a column extending upwardly from said base at one side of said spindle, tool slide means mounted in said column, feed works mounted at the upper end of said column operatively connected with said tool slide means to move said means into and out of relation with said spindle, drive means for said spindle, drive means for driving said feed works and spindle drive comprising a continuously driven shaft vertically disposed in said column, an intermittent drive shaft in axial alignment with said continuously driven shaft and operatively connected to said feed works and spindle drive for simultaneously driving them, clutch means for connecting and disconnecting said intermittent drive shaft and said continuously driven shaft, manual means for connecting said clutch means, and automatic means adapted to be operated at the end of a single cycle of operation of said tool slide means for disconnecting said clutch means.

15. In a machine tool of the character described, the combination of a base, a rotary work carrying spindle mounted in said base, a column extending upwardly from said base at one side of said spindle, tool slide means mounted on said column, feed works mounted at the upper end of said column operatively connected with said tool slide means to move said means into and out of relation with said spindle and including slow and fast speed feed means whereby the working feed of said tool slide means is relatively slow and the return feed is relatively fast, drive means for said spindle, continuous drive means, intermittent drive means for simultaneously driving said feed works and said spindle drive means, clutch means for connecting and disconnecting said intermittent drive means to said continuous drive means, operating means for said clutch including a shaft rotatably mounted in said column, means for manually rotating said shaft, clutch operating means fixed to said shaft adapted upon rotation of said shaft in one or the other direction to connect and disconnect said clutch, means fixed to said shaft adapted upon rotation of said shaft in clutch connecting direction to connect said slow speed feed means of the feed works, automatic means for connecting said fast speed feed means of the feed works during the cycle of operation of the tool slide means, and automatic means adapted to be operated at the end of a single cycle of operation of said tool slide means for disconnecting said clutch means.

1,811,877. ELECTRIC CURRENT LIMITING REACTOR. GEORGE A. BURNHAM, Saugus, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Dec. 31, 1927. Serial No. 243,901. 6 Claims. (Cl. 175—359.)

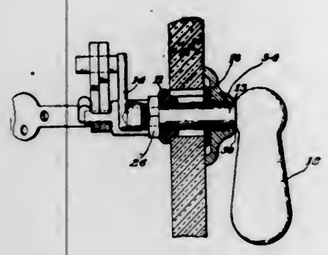


1. An electric current limiting reactor having a plurality of conductor convolutions and a mobile body of solid loose discrete particles of insulating material in which said conductor convolutions are embedded, said mobile body providing a mechanical support for said convolutions against displacement due to the magnetic forces of the reactor and also constituting means to shield said conductor convolutions against access thereto of a conducting gas.

1,811,878. OUTLET VALVE OPERATING MECHANISM FOR FLUSHING TANKS. ANDREW F. CURTIN, Medford, Mass. Filed Aug. 18, 1928. Serial No. 300,431. 6 Claims. (Cl. 4—67.)

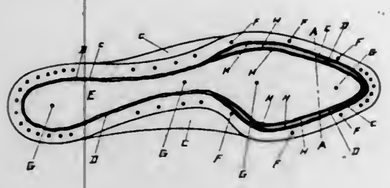
4. Outlet valve operating mechanism for flushing tanks comprising a valve operating lever, a support upon which the lever is pivoted, a tank having a hole in its wall, a hollow bolt having a flange intermediate its ends, one end of the bolt being provided with threads and the other end

being unthreaded, the bolt being adapted to be mounted with the threaded portion extending through the hole in the tank wall and with the flange in contact with the outer surface of the tank wall, a nut for the threaded end of the bolt for clamping the lever support against the inner surface of the tank wall to hold the support and bolt in position, a porcelain escutcheon mounted upon the unthreaded portion of the bolt and provided on one face with a main recess to receive and cover the flange of the bolt and with a supplementary recess extending into the body of the escutcheon from the main recess to receive



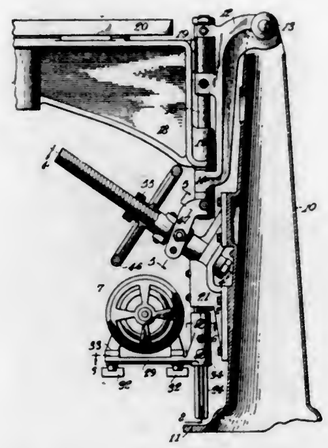
means for frictionally securing the escutcheon upon the bolt and in close contact with the outer surface of the tank wall, the opposite face of the escutcheon being unrecessed and fitting closely the end of the unthreaded portion of the bolt and substantially flush therewith, means located in said supplementary recess for so securing the escutcheon upon the bolt, and a porcelain handle provided with a shaft extending through the hollow bolt for actuating the lever, the handle being formed with a hub portion overlying and covering the end of the bolt and the escutcheon adjacent thereto.

1,811,879. METHOD OF MAKING SHOES. AUGUSTO D'ALESSANDRO, Lynn, Mass. Filed Jan. 14, 1930. Serial No. 420,777. 2 Claims. (Cl. 12—142.)



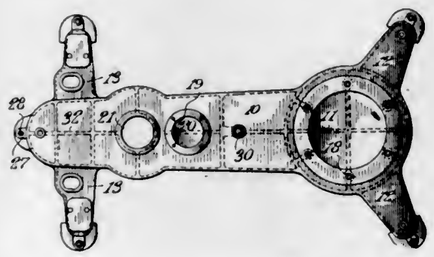
1. The method of making shoes which includes temporarily tacking an insole upon an unarmoured last; assembling a lined upper upon the last and insole thereon, pulling the lining and upper over the insole in desired position and temporarily securing the upper and lining in such position by a limited number of tacks driven part way in on a line away from the edges of the upper and lining so as to leave said edges and that part of the insole thereunder free and accessible, coating with cement the outer available surface of the insole, the inner available portions of the upper, and both available surfaces of the lining, allowing the cement to dry, pressing the upper and lining against the insole into final resting place and removing the tacks, buffing the bottom of the shoe to remove all projections and glaze, coating the bottom of the shoe with cement, allowing the same to dry, applying an outsole which has first been cement coated and dried, pressing the outsole into finished position, stitching the shoe through and through the outsole, upper, lining, and insole, and finishing the shoe in the usual manner.

1,811,880. ADJUSTING APPARATUS FOR MOTION PICTURE PROJECTION MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1928. Serial No. 271,092. 5 Claims. (Cl. 248—15.)



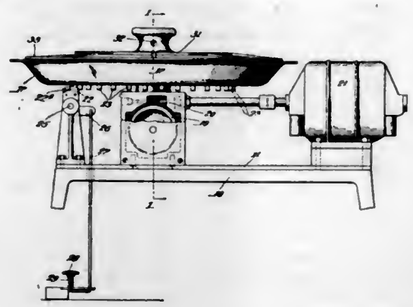
1. A motor support comprising a bracket, means for securing said bracket to a pedestal, a downwardly extending post associated with said bracket, said post being provided with a wedge shaped keyway, a motor table comprising a flat portion adapted to receive said motor and a tubular portion adapted to engage said post, a wedge shaped key secured in said tubular portion in engagement with said keyway, and means for varying the pressure of said keyway for securing the assembly in any desired position, said key having a wedge shaped slot therein and a screw threaded bolt in said tubular section and having a wedge shaped end adapted to engage said slot for preventing movement of said key relatively to said tubular portion when the pressure thereon is released.

1,811,881. BASE FOR MOTION PICTURE PROJECTION MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed May 31, 1928. Serial No. 281,870. 5 Claims. (Cl. 248—15.)



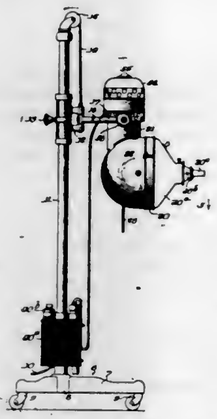
1. A base for a motion picture projecting apparatus comprising an elongated body portion having an enlarged circular section for receiving the pedestal of the projection apparatus, a pair of supporting legs extending outwardly from said pedestal supporting section, a second pair of supporting legs located at the rear of said base and means located at an intermediate portion of said base for independently supporting the same.

1,811,882. INDEXING TABLE. ROBERT D. EASTON, Chicago, Ill., assignor to R. R. Donnelley & Sons Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 13, 1928. Serial No. 325,753. 8 Claims. (Cl. 45—26.)



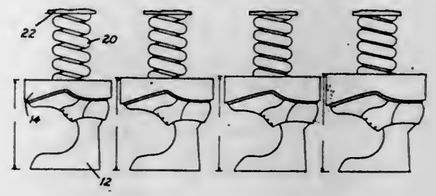
1. An indexing device comprising a rotatable member having a series of pockets each adapted to hold indexing tabs of a given kind, continuously operating friction means tending to rotate said member, and control means including a series of removable stops carried by said movable member for stopping said member at predetermined points.

1,811,883. THERAPEUTIC LAMP. NORRIS E. GOODRICH, Battle Creek, Mich., assignor to Sanitarium Equipment Company, Battle Creek, Mich., a Corporation of Michigan. Filed Feb. 13, 1928. Serial No. 253,833. 18 Claims. (Cl. 174—177.)



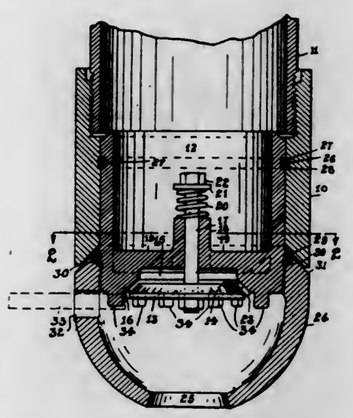
1. In a therapeutic lamp, the combination of a lamp support, a frame adjustably carried thereby, a lamp hood carried by said frame, means for supporting and feeding the carbons including a reciprocable member operable for causing relative movement between the carbons, said member being capable of holding one of the carbons in alignment therewith and provided with means whereby the outer end of the carbon may extend outside of the hood and mechanism for actuating said member including an electrically actuated plunger, a retarding means therefor, a pivotally mounted member connected at spaced points to said retarding means and said plunger respectively whereby the movement of the latter is retarded and a clutch mechanism for transmitting the movement of said pivoted member to said reciprocable member when said pivoted member is actuating in one direction by said plunger.

1,811,884. PRESSING SOLES. JOHN J. HEYS, deceased, Lynn, Mass., by Lucy A. Heys and George H. Heys, executors, Lynn, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 10, 1926. Serial No. 153,968. 3 Claims. (Cl. 12—33.)



1. A sole-pressing machine having a pair of pressure-applying forms and a pressure mechanism comprising a spring arranged to force the forms relatively toward each other with a sole between them, the pair of such forms having sole-engaging areas to operate upon a sole of a certain area, one of said forms having sufficient thickness to provide it with a portion to effect such additional compression of the spring during the operation of the machine as to cause the machine, without preliminary adjustment, to apply to such sole substantially the same pressure per unit of area as would be applied to a sole of less area when operated upon by such machine provided with a form of correspondingly less thickness.

1,811,885. FLOAT PLUG AND GUIDE FOR WELL CASINGS. ROWLAND F. HILL, Toledo, Ohio, assignor to The National Supply Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 23, 1928. Serial No. 272,053. 9 Claims. (Cl. 166—1.)

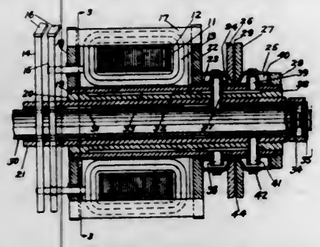


1. In a float plug and guide for well casings, a casing shoe for attachment to the lower end of a casing, a sleeve positioned within the shoe, means preventing the longitudinal movement of the sleeve in the shoe when the sleeve is in normal position in the shoe, a frangible guide positioned below the shoe and threaded on the sleeve so as to permit the guide to be adjusted toward and away from the shoe, and a packing ring between the shoe and the sleeve and engaged by the guide acting as a gland to compress the packing.

1,811,886. WELDING TRANSFORMER. THOMAS M. HUNTER, East Orange, N. J. Filed Feb. 16, 1929. Serial No. 340,513. 14 Claims. (Cl. 219—6.)

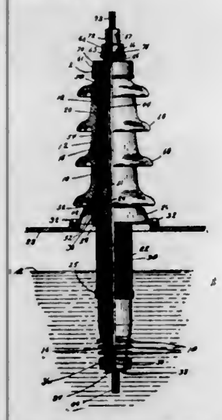
4. In a heating and seam welding transformer, a core, a primary winding surrounding said core, a heavy current secondary consisting at least in part, of bars of good

conducting material, said bars being alternately intermingled with the coils of the primary, metallic discs located one each on opposite sides of the core and securely connected to the corresponding bar ends, one of said discs having an annular ring extending therefrom,



a second annular ring having metallic connection with the other of said discs, a two-part welding or heating member clamped between said rings, thus forming the working terminals of the secondary, both of said rings being hollow, and means for passing a cooling fluid through the hollow portions of said rings.

1,811,887. INSULATOR. GUSTAV JANSSON, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Apr. 14, 1926. Serial No. 102,027. 8 Claims. (Cl. 173—318.)

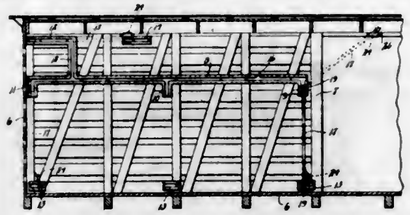


1. An electric insulator having two solid insulating bodies composed of dissimilar insulating materials, one of which is composed of paper and is more deleteriously affected by a long continued high electric stress than the other and is located in that portion of the insulator in which the electric field is least.

7. A high tension insulating bushing consisting of a high tension conductor, a porcelain insulating tube surrounding said conductor, and a paper insulating tube surrounding said porcelain tube.

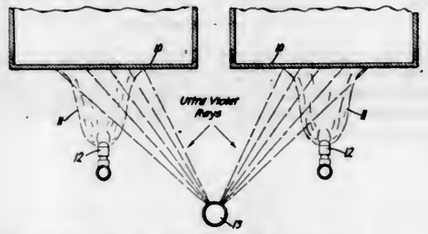
1,811,888. PARTITION FOR RAILWAY CARS. CHARLES E. JOHNSON, Minneapolis, Minn., assignor of one-half to David H. Eisenstadt, Minneapolis, Minn. Filed Dec. 21, 1927. Serial No. 241,528. 9 Claims. (Cl. 119—11.)

1. In a railway car, a pair of substantially horizontally disposed guide members secured to the sides of the car in spaced relation from the floor thereof, a gate adapted to be disposed between said guide members, short vertical guide members communicating with and extending downwardly from said first mentioned guide members at spaced intervals thereon, short horizontally disposed guide members secured to said walls directly below said second mentioned guide members, wheels mounted on said gate at either side thereof at top and bottom, the lower wheels being capable of being disposed within the outline of the sides of said gate but being extensible outwardly therefrom, whereby said upper wheels may be mounted



within said first mentioned guide members for movement therein from one set of said second mentioned guide members to another, whereupon said lower wheels may be secured in said third mentioned guide members to retain said gate in place in such position that it divides the car into two sections.

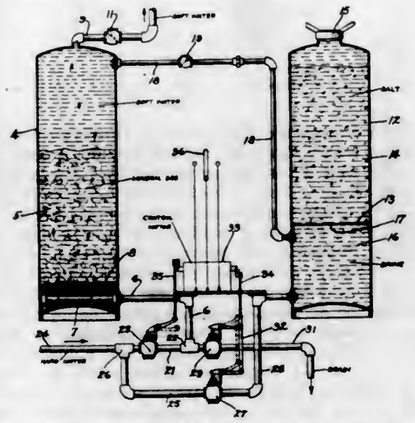
1,811,889. MANUFACTURE OF CARBON BLACK. GEORGE CHARLES LEWIS, New Dorp, N. Y., assignor to Columbian Carbon Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1927. Serial No. 243,899. 18 Claims. (Cl. 134—60.)



13. The method of increasing the yield of carbon black produced by the action of a gas flame on a moving iron surface, which includes the step of bombarding the iron surface and flame with ultra violet light.

14. An apparatus for producing carbon black including a burner and a source of ultra violet rays disposed adjacent thereto.

1,811,890. WATER SOFTENER. LYNN G. LINDSAY, Minneapolis, Minn., assignor to Trupar Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 14, 1925. Serial No. 56,288. 7 Claims. (Cl. 210—24.)



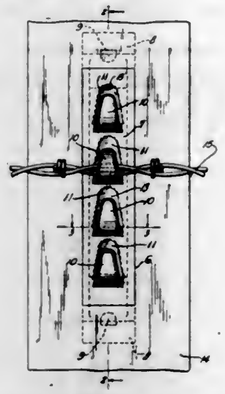
1. In a device of the class described, a pressure tank, a brine tank, a valve casing, a pipe connecting the valve casing with the pressure tank, a pipe connecting said valve casing with the brine tank, and a slidable valve in said casing to put said pipes in communication with each other for the purpose specified.

1,811,891. FASTENING FEEDING SYSTEM. THOMAS LUND, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of Massachusetts. Filed Dec. 31, 1928. Serial No. 329,380. 8 Claims. (Cl. 1—39.)



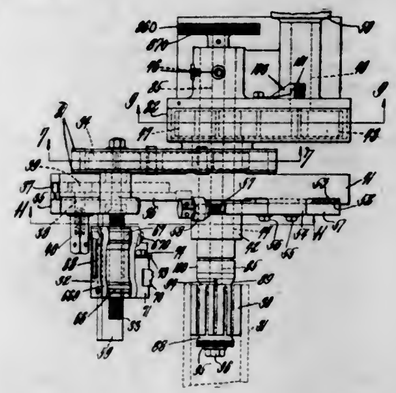
1. In a fastening-feeding system, a member provided with an opening, a relatively short flexible tube held in alinement with the opening, and a relatively long flexible fastening-conducting tube delivering to the short tube and arranged for a movement of self-adjustment longitudinally thereof.

1,811,892. WIRE FASTENING MEANS. JOHN G. OSBORNE, Milwaukee, Wis., and WILLIAM W. HICKS, Fort Worth, Tex. Filed Jan. 7, 1929. Serial No. 330,743. 2 Claims. (Cl. 256—50.)



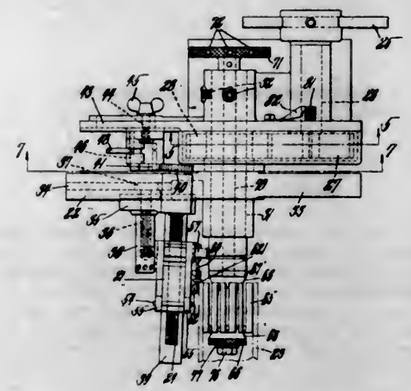
2. A fence strand anchoring member, comprising an elongated metallic plate formed with integral inwardly offset securing end portions and having a plurality of integral outwardly offset bendable tongues extending longitudinally of the plate, the plate being formed with enlarged openings adjacent each tongue and also having integral longitudinal ribs along its rear side edges, and a secondary plate coacting directly with said elongated plate between said ribs and extending longitudinally to cover the inner ends of said openings.

1,811,893. FIELD THREADING AND SQUARING MACHINE. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 21, 1926. Serial No. 136,784. 11 Claims. (Cl. 82—4.)



1. In a machine of the class described, a stationary standard, means mounted on said standard for holding the work in fixed position, a member carried by said standard revoluble about the axis of the work, a stud carried by said member and radially adjustable relatively to said axis, said stud being disposed in parallel relation to said axis, a tool carriage slidably supported by said stud and revoluble therewith about the work, a feed screw disposed in parallel relation to said stud and engageable by said tool carriage, and means for rotating said feed screw continuously as the tool carriage is revolved about said axis.

1,811,894. FIELD POINTING MACHINE. HOWARD PARKER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 21, 1926. Serial No. 136,785. 4 Claims. (Cl. 82—4.)

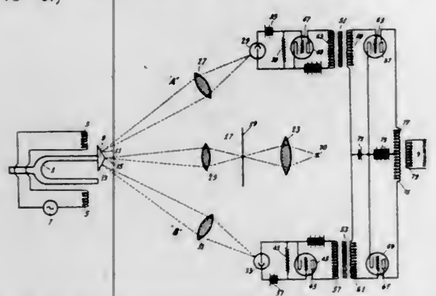


1. A machine for shaping ends of tubes, comprising an expansible chuck adapted to enter the end of a tube, a support for said chuck, means for holding said chuck against rotation relative to said support, means actuable to expand said chuck without longitudinal displacement, a tool carriage, means actuable to revolve the carriage about the work, and means for feeding the carriage along the work.

2. A machine for shaping ends of tubes, which comprises an expanding chuck adapted to enter an end of the work, means actuable to expand the chuck without longitudinal displacement thereof or change of axis, a

tool carriage, mechanism actuable to revolve the carriage about the work, said mechanism comprising a crank arm having a hub portion disposed coaxially with said chuck, a stud mounted on said arm for adjustment longitudinally thereof, said stud having a predetermined angular relation to the plane of revolution of the carriage and being adapted to slidably support said carriage, a feed screw disposed parallel to said stud and engageable by said carriage, and means for rotating said feed screw as the carriage is revolved about the work.

1,811,895. LIGHT CONTROL SYSTEM. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 31, 1928. Serial No. 316,157. 11 Claims. (Cl. 178—5.)



1. In a picture transmitting system, a picture to be transmitted, a light source for directing light to said picture, means for directing the light issuing beyond said picture along a predetermined path, a plurality of photoelectric elements for translating light energy into electrical energy, an amplifying means associated with each of said photoelectric elements, and means for continuously shifting the said light to switch the light issuing from said picture from one to another of said elements and utilizing substantially the entire amount of light available.

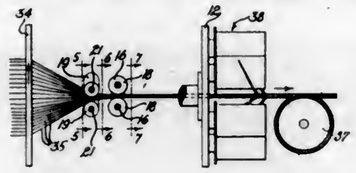
1,811,896. SPLASHLESS DISHPAN, BASIN AND THE LIKE. CHESTER R. ROSS, Cambridge, Mass. Filed Sept. 23, 1929. Serial No. 394,520. 2 Claims. (Cl. 141—9.)



1. A dish pan having outwardly and upwardly sloping side walls, the upper edges of which are bent inwardly and downwardly to provide an annular continuous splash-preventing flange, the marginal portion of which is flat and of conical form and the free edge of which at any point is directed toward the opposite wall of the dish pan, said dish pan having a vent opening in its side wall slightly below the free edge of the splash-preventing flange and situated to maintain the water level in the dish pan sufficiently below the splash-preventing flange so that any water splashed against the side of the pan will be deflected by said flange back into the pan.

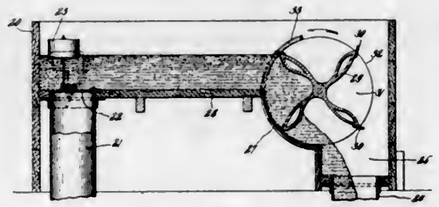
1,811,897. METHOD OF AND APPARATUS FOR FORMING CABLES. ERNEST MARTIN RUNQUIST, Cicero, and THORNTON MCDUFFEY YANCEY, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 30, 1926. Serial No. 151,655. 10 Claims. (Cl. 117—50.)

1. In an apparatus for forming stranded cables, means for twisting a plurality of strands, means for drawing the strands through the twisting means, means for forming the twisted strands drawn therethrough and a second forming means disposed at an acute angle with respect



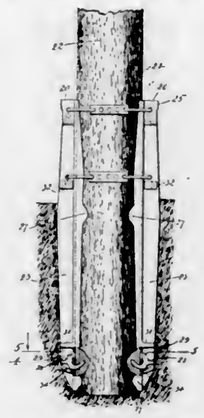
to the first mentioned forming means in a direction similar to the direction of twist imparted to the strands and in tandem to the first forming means.

1,811,898. METERING APPARATUS. MILTON O. SCHUR and ERNEST P. COOK, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 18, 1928. Serial No. 306,674. 3 Claims. (Cl. 221—106.)



1. Apparatus of the class described comprising a container for liquid, a discharge receptacle, and means for conveying fluid from said container to said discharge receptacle at a predetermined rate, said means comprising a paddle wheel having equispaced paddles and mounted for rotation on a horizontal axis, an arcuate wall concentric with said axis and extending from the bottom of said container to said discharge receptacle, said wall being engageable successively by the outer edges of the paddles and being of sufficient arcuate length to be engaged by two paddles simultaneously, means for preventing leakage around the edges of the paddles when in contact with the wall, and means for rotating the wheel at a predetermined speed.

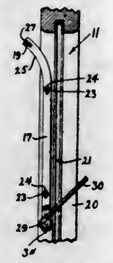
1,811,899. REENFORCEMENT FOR POLES. GEORGE B. SPRING, Newtonville, Mass. Filed Feb. 5, 1927. Serial No. 166,213. 8 Claims. (Cl. 20—100.)



1. A reenforcement for poles comprising a reenforcing member constructed and arranged to be set into the earth

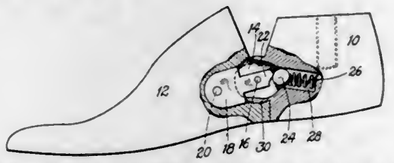
opposite one side of a pole, means for clamping the reenforcing member to the pole above the earth, and means relatively movable with respect to said member and constructed and arranged to be driven into the embedded portion of a pole for locking said member to said pole and by which the tilting force applied to the reenforcing member in resisting movement of the pole is transmitted to the embedded portion of the pole.

1,811,900. AWNING. DEE C. SPURGEON, Los Angeles, Calif. Filed Aug. 13, 1927, Serial No. 212,654. Renewed Nov. 29, 1930. 1 Claim. (Cl. 156—44.)



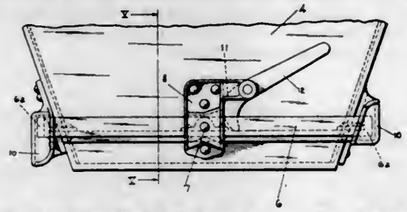
A bracket for use in a window opening, said bracket including a body having a straight main portion and having one end portion curved and extending away from said main portion, the other end portion being laterally offset and parallel to the main portion, there being an aperture in said offset portion and an open ended slot in said curved portion.

1,811,901. HINGE LAST. CARL L. STURGIS, Brockton, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 10, 1928. Serial No. 311,686. 2 Claims. (Cl. 12—136.)



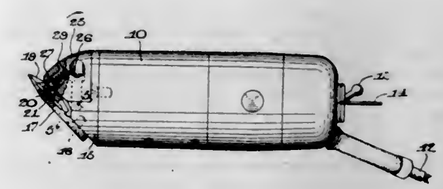
1. A hinge last comprising a forepart, a heel part having a cylindrical knuckle on its front surface spaced from its tread surface, the forepart having a cylindrical concavity in its rear surface fitting said knuckle, bonding means between the last parts consisting of a single link mounted in the forepart and pivoted at the axis of the knuckle, and a spring mounted in the heel part and arranged to be compressed by the rear end of the link as the last parts are relatively moved from extended position.

1,811,902. LATCHING MECHANISM FOR HOPPER DOORS. KENNETH J. TOBIN and AXEL WASBERG, Chicago, Ill., assignors to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 29, 1929. Serial No. 358,806. 5 Claims. (Cl. 105—308.)



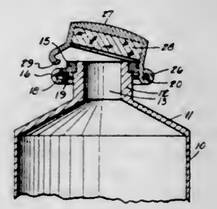
1. In a car having a hopper, a door for closing said hopper, a swingable latch bar pivoted intermediate its ends to said door, keepers secured to the ends of the hopper for receiving the ends of the latch bar, said keepers and latch bar having overlapping parts to tie the ends of the hopper together and a cam lever pivoted to said door for engaging said latch bar for maintaining the same in horizontal position.

1,811,903. HAIR CLIPPER. HUBERT VAN BREE, Racine, Wis., assignor to Racine Universal Motor Company, Racine, Wis., a Corporation of Wisconsin. Filed Apr. 18, 1929. Serial No. 356,065. 3 Claims. (Cl. 30—1.)



1. A hair clipper comprising a handle containing a motor-driven shaft, a wrist-pin thereon, a stationary knife blade on the handle at an angle to the shaft, a movable knife blade on the stationary knife blade, there being a cut-away portion in the movable knife blade to receive the wrist-pin, and bearing springs on the movable knife blade on either side of the cut-away portion bent to form closed spring loops parallel to each other and extending into the cut-away portion and receiving the wrist-pin between them and forming a way in which the wrist-pin slides.

1,811,904. CAPTIVE CAP. ALBERT WEIDMANN, Buffalo, N. Y. Filed Feb. 20, 1929. Serial No. 341,318. 8 Claims. (Cl. 221—60.)

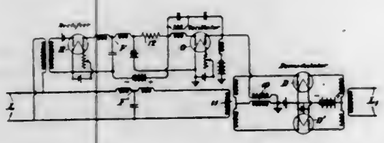


1. In a closure device for containers having an outlet neck, a cap for closing said outlet neck and a single length of wire mounted about the neck and supported thereon for movement solely in a plane perpendicular to the axis of the neck, said wire pivotally supporting the cap and being adapted for locking engagement therewith and having open ends whereby the cap may be released.

1,811,905. MEANS TO CONTROL CROSS TALK. HERMAN A. AFFEL, Ridgewood, N. J., and ALLEN CARPE, New York, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed June 26, 1928. Serial No. 288,467. 9 Claims. (Cl. 179—78.)

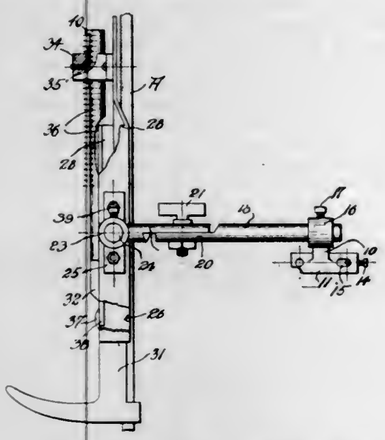
1. In a transmission system, a circuit to transmit carrier currents modulated in accordance with speech signals, a demodulating arrangement associated with said circuit, means to render said demodulating arrangement normally substantially ineffective to produce demodulated currents corresponding to signals of small volume,

means to produce a direct current whose amplitude is determined by the amplitude of the received modulated currents, and means controlled by said direct current to control the effectiveness of said demodulating arrangement to produce demodulated currents in accordance with



the amplitude of said direct current, whereby the effectiveness of said demodulating arrangement to produce demodulated currents will be substantially less in response to induced cross-talk and other interfering currents than in response to carrier currents modulated by normal voice signals.

1,811,906. BAND SAW GUARD. EMANUEL ANDRE, Green Bay, Wis. Filed May 4, 1928. Serial No. 275,025. 7 Claims. (Cl. 143—159.)

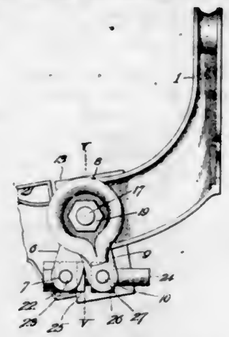


1. A band saw guard comprising a breast plate adapted to confront a saw band, means for adjustably supporting the plate in confronting relation to said band, a post adjustably connected with the plate forwardly of the same, and a foot eccentrically pivoted to the lower end of the post to gravitate in the direction of the saw band.

6. A band saw guard comprising a breast plate for partially enclosing a saw band, a foot adapted to gravitate toward the band, means carrying the foot and adjustably associated with the plate for raising and lowering the said foot, means for latching the means in adjusted position relative to the plate, means for limiting the swinging movement of the foot in the direction of the band, and means for adjustably supporting the breast plate relative to the saw band.

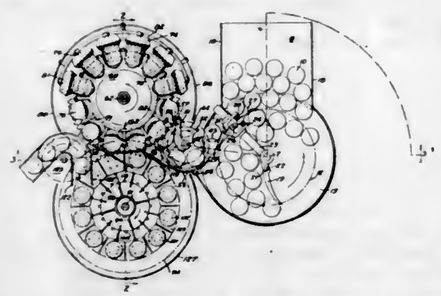
1,811,907. ASSEMBLY SUPPORT FOR LATERAL ARM AWNINGS. FREDERICK A. ANTON, Topeka, Kans. Filed May 26, 1930. Serial No. 455,729. 5 Claims. (Cl. 156—44.)

4. In a store front awning, a hanger having a horizontal tubular head provided with notches in the ends of the head, a pair of rings fitting in the respective ends of the head and having arms extending through said notches and preventing rotatable movement of the rings, a cap and a bracket fitted at opposite ends of the head at the outer sides of the rings and projecting beyond the periphery of the head, a collar pivotally mounted between and on the arms of the rings, a second collar between and pivotally mounted on the cap and bracket, a bolt extending through said collars and bearing a swivelled relation to one of them and a threaded relation to the other, said cap and bracket having extensions interlocked together



within the head, as regards rotatable movement, a headed bolt extending through the bracket, the hanger head, the said rings and said cap, and a retaining nut engaging the bolt for effecting approaching movement of the bracket and cap and for securing said parts in rigid relationship to the hanger.

1,811,908. COMBINED DRAINER AND SIRUPER. WILLIAM DE BACK, San Leandro, Calif., assignor to Sprague-Sells Corporation, Hoopeston, Ill., a Corporation of Delaware. Filed June 11, 1928. Serial No. 284,539. 18 Claims. (Cl. 225—22.)



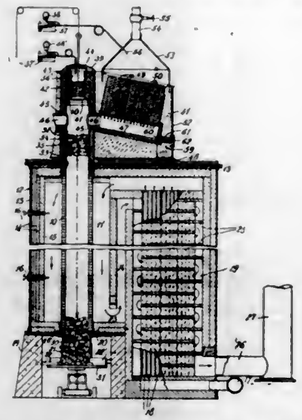
2. In a canning machine, a rotatable wheel comprising a plurality of turrets for receiving and holding the cans and having gear teeth formed thereon for driving the wheel.

1,811,909. PROCESS FOR TREATING METALLIC ARTICLES. ORIN A. BASSETT, Oklahoma City, Okla., assignor to The National Industrial Laboratories Corporation, Oklahoma City, Okla., a Corporation of Delaware. Filed Nov. 6, 1925. Serial No. 67,453. 9 Claims. (Cl. 148—7.)

7. A process of treating metal coated with a more fugitive metal, which comprises applying a fixative agent including a cyanide, borax, sodium carbonate and carbon, to the coated metal, and then heating.

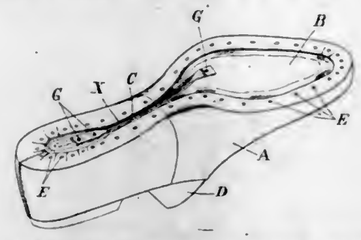
1,811,910. REDUCTION OF ZINCIFEROUS MATERIAL. FRANK G. BREYER, Palmerton, Pa., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 1, 1927. Serial No. 180,107. 9 Claims. (Cl. 75—28.)

1. The improvement in the method of reducing a porous charge of zinciferous and reducing materials and recovering zinc metal in an externally heated reducing chamber operatively connected with a condenser and having a residue discharge outlet permitting ingress and egress of gas,



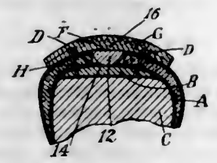
which comprises inducing the flow of evolved gases into the condenser by controlled stack draft and thereby substantially inhibiting the ingress and egress of gas through said discharge outlet.

1,811,911. SHOE AND SHANK STIFFENER THEREFOR. MICHAEL F. BROGAN, Lawrence, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 14, 1929. Serial No. 347,103. 10 Claims. (Cl. 36—76.)



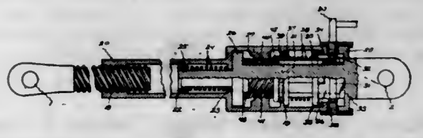
8. In a shoe of the type in which the upper materials are lasted over the insole and the outsole is directly secured to the lasted over margins of the upper, a shank stiffener of semi-elliptical cross-sectional contour arranged substantially to fill the space between said lasted over margins for a substantial portion of the length of the stiffener, the stiffener engaging both soles throughout the greater portion of its length, the insole engaging portion of the stiffener being transversely convex and the opposite side of the stiffener being correspondingly transversely concave.

1,811,912. SHOE AND SHANK STIFFENER THEREFOR. MELBOURNE W. WHITE, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 14, 1929. Serial No. 347,088. 10 Claims. (Cl. 36—76.)



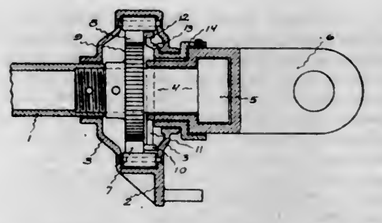
9. A shoe comprising, in combination, an insole, an outsole, upper materials having lasted-over margins interposed between the soles, a shank stiffener located within the space between the soles and between the lasted-over margins of the upper materials and engaging both soles, the stiffener having a surface substantially flush with the exposed surfaces of the lasted-over upper materials at the outsole-engaging side of the stiffener and having a transversely convex surface at its insole-engaging side, and staples straddling the stiffener at its opposite end portions and securing the stiffener to the insole, the points of the staples being clinched within the material of the insole without passing therethrough.

1,811,913. AUTOMATIC SLACK ADJUSTER FOR BRAKES. BERT HENRY BROWALL, Malmo, Sweden, assignor to Svenska Aktiebolaget Bromsregulator, Malmo, Sweden, a Corporation of Sweden. Filed Apr. 22, 1930, Serial No. 446,335, and in Germany July 10, 1929. 2 Claims. (Cl. 188—202.)



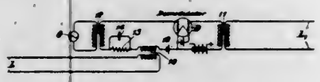
1. In an automatic slack adjuster of the character described, means adapted for actuation of the adjuster in a direction for reduction of the slack when it is too great, means actuated by the braking stress when braking and adapted for actuation of the adjuster in an opposite direction when the slack is too small, locking means adapted for interruption of the last mentioned actuation, means adapted for actuation of the said locking means at a moment corresponding to a predetermined length of idle stroke of the brake piston, and a driving means adapted for actuation of the adjuster in a direction for reduction of the slack, such driving means being arranged so that it gets the movement, which is to be transmitted to the adjuster for the purpose mentioned, by means of a relative displacement of its parts caused by the braking stress when braking.

1,811,914. AUTOMATIC SLACK ADJUSTER FOR BRAKES ON RAILWAY CARS AND THE LIKE. BERT HENRY BROWALL, Malmo, Sweden, assignor to Svenska Aktiebolaget Bromsregulator, Malmo, Sweden, a Corporation of Sweden. Filed May 13, 1930, Serial No. 452,088, and in Germany June 24, 1929. 5 Claims. (Cl. 188—202.)



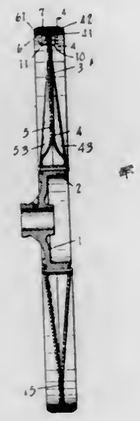
1. In an automatic slack adjuster of the character described, an actuating means adapted to actuate the slack adjuster in a direction for increasing the slack, another actuating means adapted for actuation of the adjuster in an opposite direction for reduction of the slack, the said two actuating means being arranged independent of each other in such a manner that both of them may actuate the slack adjuster when braking, the result being dependent on the difference between the actuations thus performed.

1,811,915. MEANS TO CONTROL CROSS TALK. ALLEN CARPE, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 26, 1928. Serial No. 288,331. 5 Claims. (Cl. 179—78.)



1. In a transmission system, a transmission circuit, a vacuum tube device associated with said circuit, and means to render the gain of said vacuum tube device appreciably less in response to small received current than in response to normal speech signals, said means comprising a capacity shunted by a resistance in the grid circuit of said tube and cooperating with the rectifying action of the grid filament path in the tube to produce a one-way biasing potential in the grid circuit, said resistance and condenser being so proportioned as to change the bias of said grid in accordance with the amplitude of the received current.

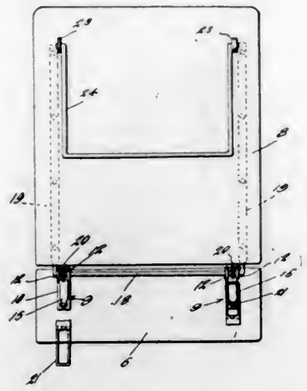
1,811,916. BAND SAW WHEEL. ANDREW G. CARTER, Grand Rapids, Mich., assignor to Carter Products Company, Inc., Grand Rapids, Mich. Filed May 31, 1930. Serial No. 458,809. 7 Claims. (Cl. 143—30.)



1. A band saw wheel comprising a hub with recessed broad peripheral flange, a wheel made of exactly opposed symmetrical convexed sheet metal disks embracing the said flange and having precisely similar meeting radial depressions spot welded together and spot welded at the periphery, one of said disks being extended into a peripheral flange having an engaging lip for the tire, the other of said disks being cut off within its periphery, an angular flange symmetrical with the integral flange portion and having an engaging lip for the tire, bolts with lock nuts through the flanged periphery and ring to couple the parts together, and a cushion tire for the said wheel having flat reinforced slitted metallic rim embedded therein.

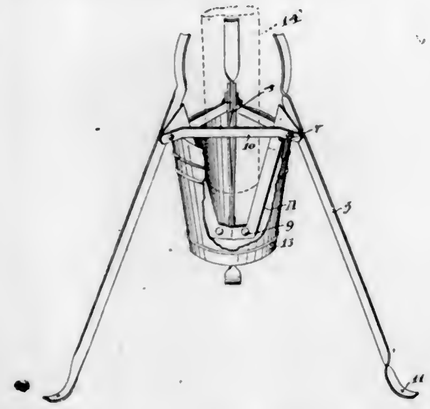
1,811,917. RECLINING SEAT BACK. PHILLIP COTA, Kankakee, Ill. Filed Aug. 20, 1930. Serial No. 476,687. 2 Claims. (Cl. 155—7.)

1. A structure of the character described comprising a seat, a back section, a plate secured to the seat and provided with a pair of ears thereon, a rod on the back section passing through the ears, a ratchet wheel on the rod arranged between said ears, said ears being provided with notches, and a pawl member pivoted to the seat and adapted



to be swung to a position engaged within the notches in the ears and also between certain teeth of said ratchet wheel to hold the back section against swinging.

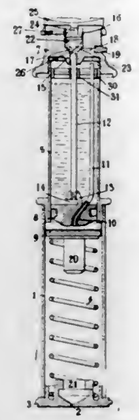
1,811,918. CHRISTMAS TREE SUPPORT STAND. JOHN J. DANNER, St. Paul, Minn. Filed Dec. 31, 1928. Serial No. 329,333. 4 Claims. (Cl. 248—38.)



1. A tree support stand comprising a central triangular framework having a plurality of notches near the upper end thereof, a container adapted to fit over the lower end of said framework and having a portion thereof adapted to enter said notches to support said container and a plurality of supporting legs pivotally connected to said framework to pivot in converging planes whose axis of convergence is vertically above said container, the upper ends of said legs being positioned to supportingly engage the trunk of a tree supported in said framework.

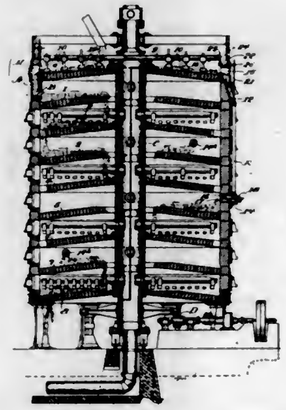
1,811,919. POCKET PERFUME SPRAYER. MARIE PIERRE LOUIS DARDEL, Paris, France, assignor to Société Marcas & Dardel, Paris, France. Filed July 25, 1929, Serial No. 380,982, and in France Apr. 15, 1929. Renewed May 11, 1931. 3 Claims. (Cl. 299—89.)

1. In a pocket perfume sprayer of the container-piston type, a removable plug closing the outer end of the container piston and having a discharge passage communicating with the interior of said container and terminating in a spray orifice, a liquid discharge tube removably



secured at its inlet end in the bottom of said container and having its outer end free, said outer end being disposed within said passage and spaced from the walls thereof.

1,811,920. METHOD AND APPARATUS FOR TREATING SOLIDS. THOMAS A. DICKSON, Denver, Colo., assignor to Colorado Iron Works Company, Denver, Colo., a Corporation of Maine. Filed Feb. 6, 1928. Serial No. 252,230. 5 Claims. (Cl. 263—26.)

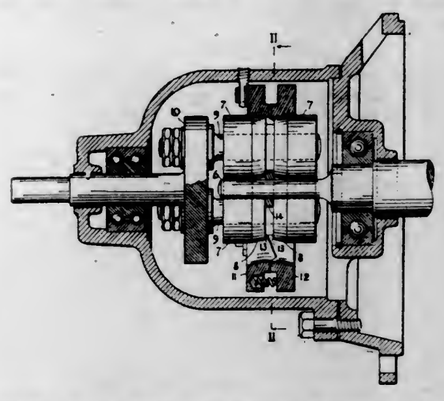


1. In a process of roasting or the like wherein the solids are caused to traverse enclosed spaces, the method of feeding the solids graded from coarse to fine successively into the line of traverse and at successive points therealong whereby the coarse solids are subjected to roasting conditions for a longer time than the fine.

1,811,921. CHANGE SPEED GEARING. HOWARD MAURICE EDMUNDS, New York, N. Y., assignor to Crocker-Wheeler Electric Manufacturing Company, Ampere, N. J., a Corporation of New Jersey. Filed June 9, 1930. Serial No. 459,931. 4 Claims. (Cl. 74—34.)

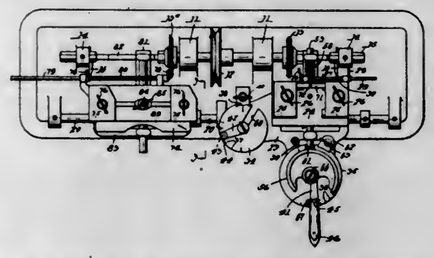
1. A speed changing system of adhesion gearing comprising an intermediate cylindrical member, cooperating

cylindrical members with shoulders, and a ring freely carried by the intermediate member and engaging the



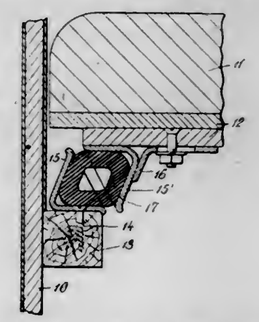
shoulders of the cooperating members, whereby their relative displacement in the direction of their axes is prevented.

1,811,922. KEY-CUTTING MACHINE. MORRIS FALK, Fitchburg, Mass. Filed Dec. 5, 1927. Serial No. 237,603. 2 Claims. (Cl. 90—13.2.)



1. In a key cutting machine, the combination of a rod, a carriage pivotally mounted on the rod, a bar on the carriage, a pair of clamps on the bar, each clamp having front and rear jaws adapted to clamp different kinds of keys in position, a pivot between the jaws on the carriage about which the bar is adapted to be reversed to present either pair of jaws to the front, and means for clamping the jaws down in either position.

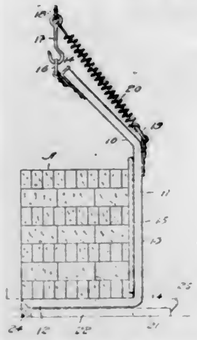
1,811,923. FLEXIBLE SUPPORT. GERHARD FLINTERMANN, West Orange, N. J. Filed Aug. 19, 1927. Serial No. 214,129. 6 Claims. (Cl. 267—35.)



1. A flexible support comprising an elongated resilient member, means connected to a load engaging the member

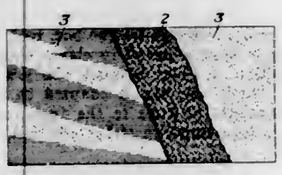
longitudinally, and means for holding the member longitudinally, said means being spaced transversely of the direction of the load for relative movement in the direction of the load.

1,811,924. BRICK HANDLING HOIST. ROBERT A. FONTAINE, Martinsville, Va. Filed May 2, 1929. Serial No. 359,915. 19 Claims. (Cl. 294—63.)



1. A brick stack handling hoist comprising a fork-like structure of substantially L-shape and including horizontal and vertical portions, the horizontal portion being formed as a plurality of arms adapted to engage beneath a stack of bricks and the vertical portion having a plate constituting a back against which the stack may rest when lifted, said vertical portion leading to an integral inclined upper portion of substantially the same width, suspension elements at the top of said inclined portion and other suspension elements at the juncture of said inclined portion with the vertical portion.

1,811,925. COATED FIBROUS MATERIAL. RAYMOND E. GARRETT, Lancaster, Pa., assignor to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 9, 1927. Serial No. 173,927. 2 Claims. (Cl. 154—46.)



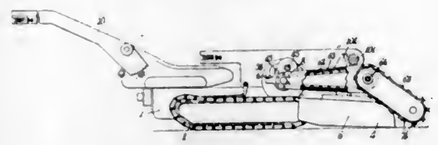
1. A sheet of fibrous material having applied thereto a homogeneous coating mixture including unvulcanized rubber and granulated cork, the amount of granulated cork in the mixture predominating over the amount of rubber present therein, the rubber being present in the mixture to the extent of about 24% by weight.

1,811,926. PHOTOGRAPHIC ROLL FILM SPOOL. PAUL GOLDACKER, Berlin-Treptow, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Nov. 30, 1928, Serial No. 322,830, and in Germany Dec. 16, 1927. 3 Claims. (Cl. 242—71.)



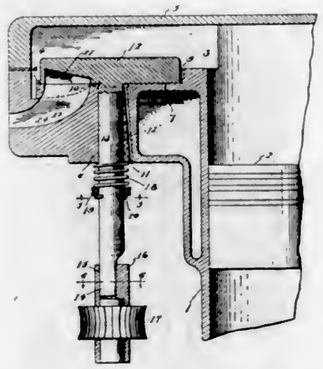
1. A photographic roll film spool having a cylindrical sheet metal core, which core has two longitudinal slots placed opposite to each other, one of which is broader than the other.

1,811,927. LOADING MACHINE. FRANK A. HALLECK, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed June 10, 1927. Serial No. 197,951. 20 Claims. (Cl. 262—9.)



4. In a loading machine, a portable body having conveying means thereon, and material gathering mechanism on said body and cooperating with said conveying means comprising a motor, a rotary gathering member adjustably mounted on said body and disposable closely adjacent said conveying means and mechanism driven by said motor for effecting rotation of said gathering member at will in either of opposite directions while said conveyor continues to operate in the same direction and without reversing said motor.

1,811,928. ROTARY VALVE FOR INTERNAL COMBUSTION ENGINES. ALFRED L. HARDING, Branson, Mo., assignor of one-third to Lee Moore, Branson, Mo. Filed May 15, 1929. Serial No. 363,259. 2 Claims. (Cl. 123—190.)

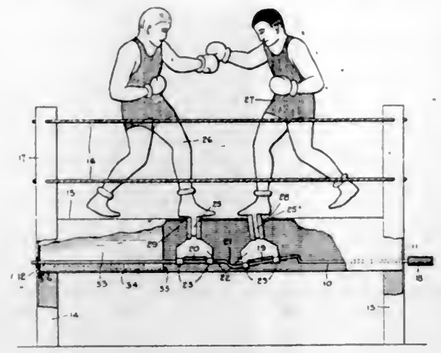


1. The combination with an internal combustion engine cylinder, of a casing carried thereby and communicating therewith, said casing having a seat therein, a valve rotatably mounted on the seat, means for rotating the valve, said casing having main inlet and exhaust ports and auxiliary inlet and exhaust ports, said valve having an opening therein communicating with a bypass, said opening and bypass being adapted to successively register with the respective inlet and exhaust ports during rotation of the valve.

1,811,929. MECHANICAL TOY. WILLIAM W. HARRIS, Brockton, Mass. Filed Apr. 7, 1928. Serial No. 268,297. 5 Claims. (Cl. 46—40.)

1. In a toy, the combination of a platform provided with slot means, a crankshaft rotatably mounted below said platform, said shaft having a plurality of connecting

rod-bearing portions disposed at an angle to the longitudinal axis of said crankshaft, clip means attached to said bent shaft portions and projecting through said slot



means, and toy means supported by said clip means so as to reciprocate in vertical planes disposed on opposite sides of the longitudinal axis of said crankshaft.

1,811,930. TURNTABLE OR TRANSFER TABLE AND TRUCK CONSTRUCTION THEREFOR. MEIER G. HILPERT, Bethlehem, Pa. Filed Jan. 5, 1929. Serial No. 330,673. 16 Claims. (Cl. 104—35.)



1. A movable structural span of the class described including main load supporting members, and transverse bracing means for said members which are located with respect to the depths of the latter so as to permit relative flexing of parts of said members about predetermined axes of flexure.

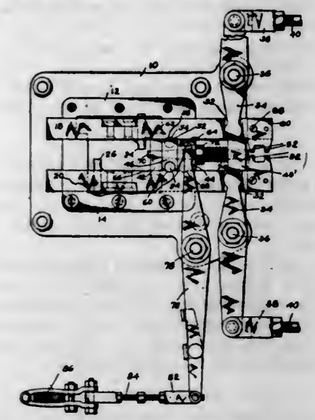
1,811,931. EQUALIZING TRUCK CONSTRUCTION. MEIER GEORGE HILPERT, Bethlehem, Pa. Filed Jan. 5, 1929. Serial No. 330,674. 20 Claims. (Cl. 104—35.)



1. A movable structural span of the class described, including a pair of main load supporting members, bracing means for said members for determining an axis of flexure for the end portions of the same, and a truck associated with an end of the span for permitting the end portions of the said members to flex independently.

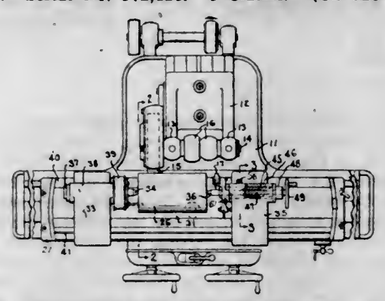
1,811,932. PNEUMATIC GEAR SHIFT LOCK. ALBERT A. HODGKINS, Leonia, N. J., assignor to Universal Gear Shift Corporation, New York, N. Y., a Corporation of Delaware. Filed May 9, 1928. Serial No. 276,227. 13 Claims. (Cl. 74—88.)

1. In an apparatus of the class described, means for shifting the gears of a car comprising two separately movable elements, each element having positions corresponding to neutral and two gear engagements, a combination lock comprising means for selectively engaging either shifting element and immobilizing it while permitting free movement of the other shifting element and



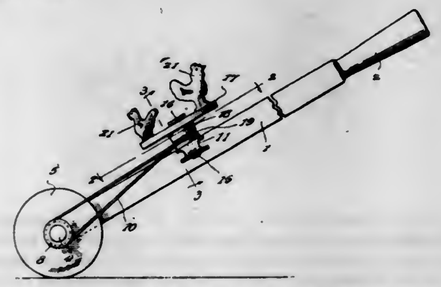
means on said lock for engaging and immobilizing said other shifting element when the gears controlled thereby are in mesh.

1,811,933. MECHANISM FOR TRUING AND DRESSING GRINDING WHEELS. FERDINAND J. HOHNHORST and FERDINAND J. KROEGER, Covington, Ky. Filed June 20, 1929. Serial No. 372,416. 6 Claims. (Cl. 125—11.)



6. In a machine of the character described, the combination with the grinding wheel, the tail-stock and tail-spindle, said tail-stock provided with an inwardly extending annular flange about said tail-spindle, a pivoted frame about said annular flange, an abrading part on said pivoted frame arranged to coact with said grinding wheel, radial clamping means on said pivoted frame about said tail-spindle, and arcuate clamping means between said pivoted frame and said tail-stock.

1,811,934. TOY. REX L. HUDSON, Jackson, Tenn. Filed July 12, 1929. Serial No. 377,875. 3 Claims. (Cl. 272—85.)



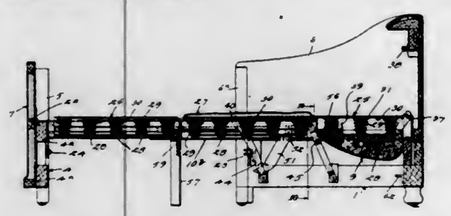
1. A toy comprising a staff, a wheel rotatably mounted at one side of said staff near the lower forward end

thereof, a drum turning with the wheel, a bracket secured upon said staff and extending from one side thereof with its outer portion bent to form upper and lower leaves, a turntable over said staff and bracket, a shaft for said turntable extending through the leaves of said bracket, a drum turning with said turntable, and a belt trained about the drums of the wheel and turntable for transmitting rotary motion from the wheel to the turntable.

1,811,935. PROCESS FOR MANUFACTURING AGGLOMERATED PRODUCTS. MARCEL HIPPOLYTE HUE, Bois-Guillaume, France. Filed Apr. 29, 1929, Serial No. 359,167, and in France Mar. 18, 1929. 1 Claim. (Cl. 44—23.)

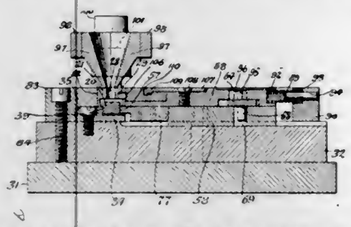
A process for the manufacture of agglomerated products from coal dust, comprising the steps of mixing the coal dust with an agglomerating material composed of 65% petroleum pitch, 24% mazout, and 6% nonoxidizing vegetable oil; then agglomerating the mixture; and finally coking the agglomerate thus obtained.

1,811,936. FOLDING BED. ROBERT H. HUTCHINS, Memphis, Tenn. Filed July 12, 1930. Serial No. 467,567. 12 Claims. (Cl. 5—44.)



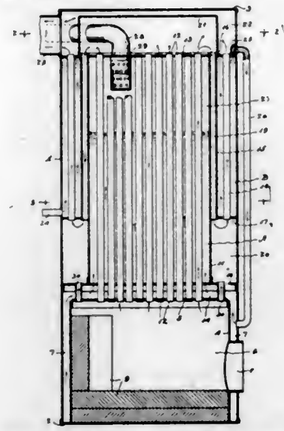
1. A folding bed, comprising an open frame, a foot located at the front side of the frame, a foot bottom section secured to the foot and located above the frame, means by which the foot bottom section is mounted for movement forwardly beyond the frame, an intermediate bottom section arranged within the frame below the foot bottom section, means for raising the intermediate bottom section into alinement with the foot bottom section during the movement of the latter forwardly beyond the frame, a head bottom section extending upwardly from the rear side of the frame, means by which the head bottom section may be lowered from the upwardly extending raised position into alinement with the intermediate bottom section after the latter has been raised, and means releasably supporting the head bottom section in the upwardly extending raised position.

1,811,937. CASTING APPARATUS. MARSDEN C. HUTTO, Detroit, Mich., assignor to Hutto Engineering Company, Inc., a Corporation of Michigan. Filed June 13, 1928. Serial No. 284,941. 24 Claims. (Cl. 22—122.)



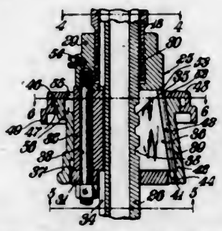
1. An apparatus for securing an abrasive member to a holder by a self-hardening fluid; comprising a plurality of enclosure walls adapted to engage the abrasive member and the holder and to support the same in spaced relation to form a mold cavity between said walls, holder and abrasive member for receiving said self-hardening fluid.

1,811,938. BOILER. GEORGE H. IRWIN, Chicago, Ill. Filed Nov. 26, 1928. Serial No. 321,865. 7 Claims. (Cl. 122—37.)



2. In a vertical fire tube boiler, the combination of a main boiler section having up-draft tubes, an economizer boiler section entirely surrounding said main boiler section and having up-draft tubes, a continuous annular down draft passage separating said sections, a fire box below said main boiler section, a stack communicating with the upper ends of said economizer section tubes, and means for causing all the products of combustion passing through said main section tubes to flow down through said passage and then up through said economizer section tubes.

1,811,939. DRILLING APPARATUS. HARRY C. JOHANSEN, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 16, 1927. Serial No. 168,804. 24 Claims. (Cl. 279—74.)

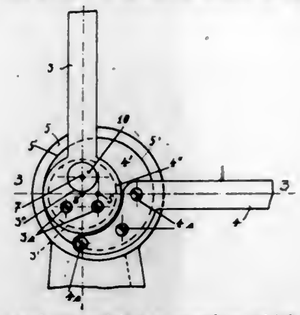


1. A grief stem chuck for a drill feeding mechanism of the character wherein a grief stem is employed comprising a body having means for engaging and driving a grief stem, and means for connecting a grief stem to said body including chuck jaws slidably mounted in said body, means including an adjusting member surrounding and movable relative to said body and connected to said jaws for sliding the latter inwardly into engagement with a grief stem and for releasing said jaws, and means including a member carried by and movable relative to said adjusting member and engageable with said body for locking said adjusting member against movement relative to said body to maintain said jaws in one position, said locking member being releasable from said body to permit adjustment of said adjusting member relative to said body.

1,811,940. PARALLELOGRAM-TYPE PANTOGRAPH. PAUL KÄPPLER, Dresden, Germany. Filed Aug. 30, 1929, Serial No. 389,366, and in Germany Apr. 10, 1929. 5 Claims. (Cl. 33—25.)

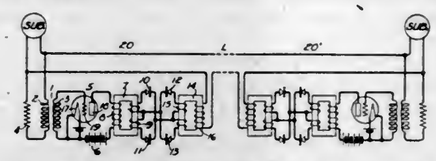
1. In a pantograph of the parallelogram type, a fixed pivot for one of the links of the parallelogram comprising

a member attached to said link and rotatably embracing the adjacent link joint of the parallelogram, said link joint having its axis of rotation eccentric to, but within,



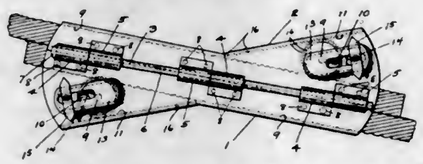
said member and comprising a member which rotatably embraces a reproducing element, eccentric to its axis of rotation.

1,811,941. APPARATUS FOR REDUCING DISTURBING CURRENTS. CLYDE R. KEITH, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 20, 1928. Serial No. 286,848. 15 Claims. (Cl. 179—78.)



1. In combination with a transmission circuit, a device introducing varying attenuation into said circuit dependent upon the current amplitude in the circuit, said device having an attenuating region for currents of small amplitudes in said circuit, and means responsive to large current flow in said circuit for removing the current attenuation of said device in the region corresponding to small amplitudes.

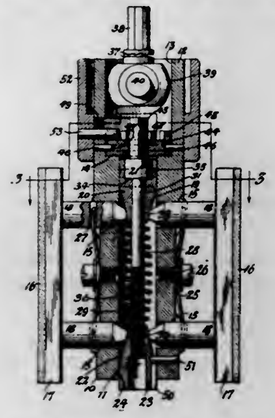
1,811,942. CABLE CLAMP. CHARLES W. KEMPER and JOHN T. KEMPER, Hayward, Calif. Filed Feb. 4, 1930. Serial No. 425,780. 6 Claims. (Cl. 24—136.)



1. A cable clamp comprising a pair of elongated shells U-shaped in cross section arranged in confronting relation to afford a passage for a plurality of cables, means on the shells interlocking same against longitudinal movement and permitting lateral separation of the shells, means cooperating with both shells locking same against lateral separation, and means within the shells for clamping the cables against withdrawal.

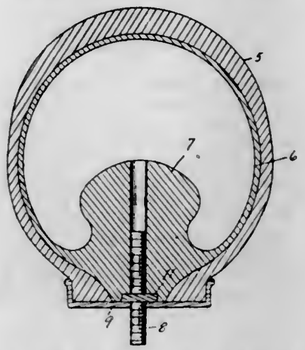
1,811,943. ADJUSTING DEVICE FOR CYLINDER GRINDERS. FRED M. KERN, Detroit, Mich., assignor to Hutto Engineering Company, Inc., Detroit, Mich., a Corporation of Michigan. Filed Jan. 31, 1928, Serial No. 250,889. Renewed Nov. 22, 1929. 7 Claims. (Cl. 51—184.2.)

6. A grinding device comprising rotatable supporting means, abrasive carriers mounted on said supporting means and movable toward and from the axis thereof; and adjusting means for moving said abrasive carriers relative to the axis of said supporting means including an adjusting disk operatively connected with said abrasive carriers and rotatable within said supporting means but



held against longitudinal movement relative thereto and provided with an annular row of teeth; and an adjusting sleeve rotatable on the exterior of said supporting means and movable lengthwise relative thereto and having a projection adapted to engage with one or another of said teeth of the adjusting disk.

1,811,944. TUBE SECURING MEANS. FREDERICK W. KRONE, San Francisco Calif. Filed Jan. 14, 1928. Serial No. 246,836. 1 Claim. (Cl. 152—10.)

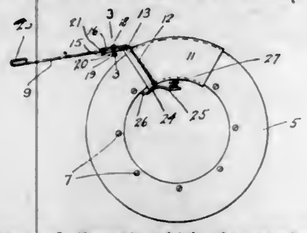


In a tire structure of the type in which a casing is associated with an inner tube in the casing and is also associated with a rim having a valve stem extending therethrough, an inner tube having secured thereto adjacent its rim portion an internal cushion projecting towards the tube perimeter, an anchor plate threadedly engaging the valve stem and detachably secured to the rim on the inner periphery thereof, and a band substantially embedded in the cushion element of the inner tube and having its free ends secured to said anchor plate, said anchor plate and band providing a continuous ring within the body of the internal cushion to prevent said tube and cushion element from creeping.

1,811,945. STEEL TAPE REEL. EMIL G. LANGE, Sedalia, Mo. Filed July 30, 1928, Serial No. 296,287. Renewed May 12, 1931. 3 Claims. (Cl. 242—84.8.)

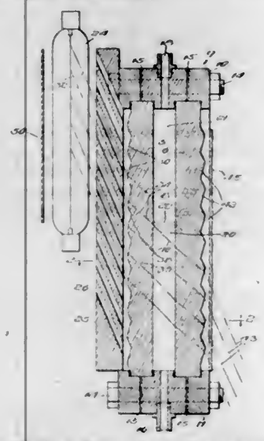
1. A reel of the character described comprising a reeling member composed of a pair of rings having a spacing mem-

ber therebetween securing the outer periphery of the rings in spaced relation, a hand grip disposed about a portion of



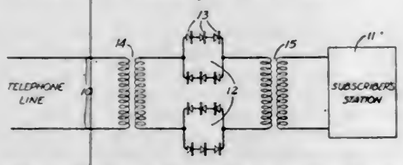
said member and through which the member is freely movable, a brake device for the reel carried by said hand grip and a tape guide also attached to said hand grip.

1,811,946. LEVEL INDICATOR. ANDREW R. LE BAILLY, Chicago, Ill. Filed June 13, 1927. Serial No. 198,630. 19 Claims. (Cl. 116—118.)



16. The method of determining the relative positions of fluids with different critical refracting angles which comprises directing parallel rays of light against said fluids at an angle between the critical refraction angles of the fluids to produce reflected rays where one fluid is encountered and refracted rays through the other fluid.

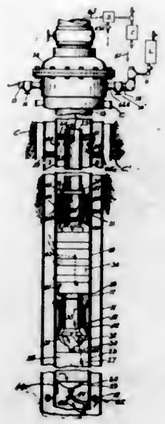
1,811,947. NOISE SUPPRESSING CIRCUIT. VICTOR E. LEGG, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 14, 1929. Serial No. 362,903. 11 Claims. (Cl. 178—44.)



1. The combination with a telephone line of means for suppressing crosstalk currents while transmitting speech currents, said means comprising resistive material in series in the line, the impedance of which decreases with increasing applied voltages.

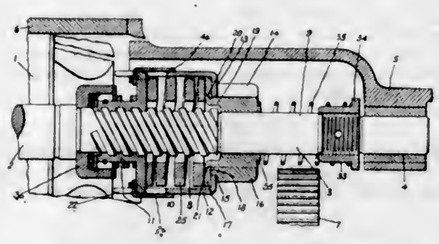
1,811,948. DEEP WELL PUMP AND SYSTEM. WALTER A. LOOMIS and SYLVESTER E. BURTON, Los Angeles, Calif. Filed Jan. 26, 1925. Serial No. 4,774. 13 Claims. (Cl. 103—5.)

1. An organization of the character described which includes an engine, a pump therebelow, a stationary tubing extending above said engine, a packer carrying said tubing, a pipe extending within said tubing and to a point above said packer, and a vertical hollow shaft between said engine and said pump, and in which said engine and



said pump both include stationary elements secured to said stationary tubing and said vertical hollow shaft constitutes means for delivering a pumped liquid into said pipe.

1,811,949. ENGINE STARTING APPARATUS. CHARLES MARCUS, New York, N. Y., assignor, by mesne assignments, to Eclipse Machine Company, Elmira Heights, N. Y., a Corporation of New York. Filed Oct. 28, 1918. Serial No. 260,048. Renewed Aug. 3, 1927. 30 Claims. (Cl. 74—7.)

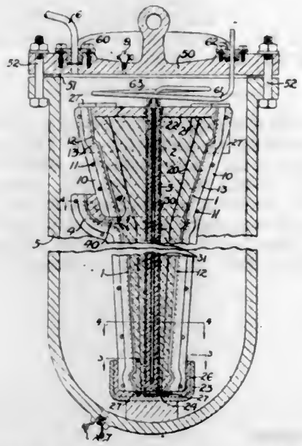


1. An engine starter including a rotatable shaft, a driving member mounted thereon and adapted to engage and drive a member of the engine to be started, a control member also mounted on the shaft and adapted to control the position of the driving member and to drive it, and means whereby the control member urges the driving member into cooperation with the engine member and then transmits a gradually increasing torque to such driving member and thence to the engine member, such means including a barrel separate from but connected rigidly with said driving member and loosely with said control member for positive rotary movement therewith and for relative movement of such control member with respect to the barrel.

1,811,950. METHOD OF AND APPARATUS FOR PRESSURE CONCRETE MOLDING. WILLIAM M. MEACHAM, Seattle, Wash. Filed Aug. 11, 1928. Serial No. 298,944. 10 Claims. (Cl. 25—1.)

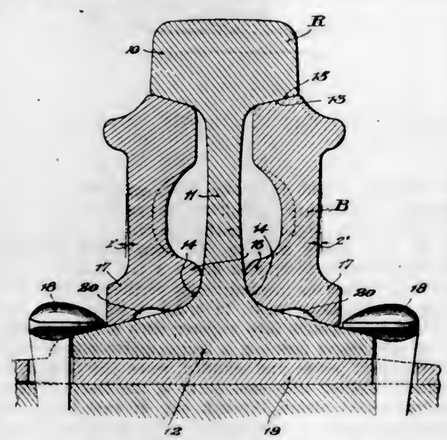
7. The method of molding concrete under pressure which consists in applying pressure to the concrete in the mold, placing the interior of the concrete within the mold in communication with a lesser pressure, supplying surplus

grouting at points which are directly exposed to the pressure fluid and separating this surplus grouting from the body of the mold by a thin layer of material which will not unite with the concrete, to thereby provide a plane of cleavage.



9. An apparatus for molding concrete objects comprising a mold, a pressure chamber adapted to receive the mold, means for applying pressure to the interior of said pressure chamber, the mold having openings permitting application of pressure within the chamber to the mass within the mold, and a water drain at lower pressure communicating with the interior of the mold.

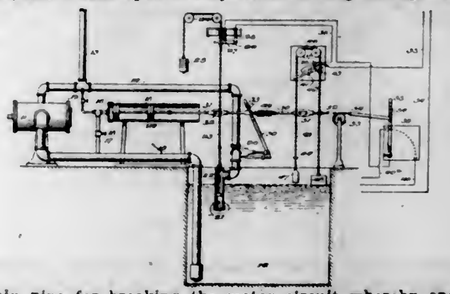
1,811,951. TOELESS RAIL JOINT BAR. JOHN NELSON MEADE, Denver, Colo., assignor to The Rail Joint Company, New York. N. Y., a Corporation of New York. Filed Aug. 13, 1929. Serial No. 385,487. 10 Claims. (Cl. 238—243.)



1. In a rail joint, the rail, and a joint bar adapted to have fulcrum engagement with the base fillet of the rail, and adjustable fishing engagement with the head of the rail.

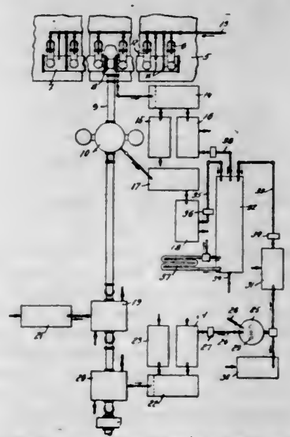
1,811,952. CONTROL DEVICE FOR PUMPING APPARATUS. SAMUEL J. MERRITT, Central City, Ky. Filed Mar. 19, 1930. Serial No. 437,157. 8 Claims. (Cl. 103—26.)

1. In a pump control mechanism, a pump having an intake pipe and a discharge pipe, a motor for said pump, an electrical circuit including said motor, a drain pipe communicating with said discharge pipe, means rendered operative by operation of the pump to close said drain pipe, and means operative by water flowing through said



drain pipe for breaking the motor circuit whereby operation of said motor can not be initiated while water is draining through the drain pipe.

1,811,953. FUEL COMPOSITION AND METHOD OF PREPARING THE SAME. STUART PARMELEE MILLER, Glen Ridge, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1927. Serial No. 206,369. 4 Claims. (Cl. 44—8.)



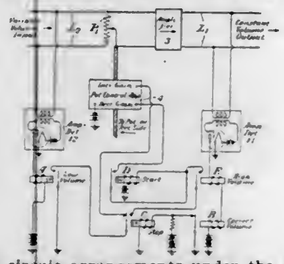
1. A new fuel composition comprising pitch and neutral oil constituents normally contained in coal tar in a substantially undecomposed condition, said composition being free from the greater part of the tar acid constituents normally contained in the tar but containing neutral oils having boiling points corresponding to those of the tar acids, and said composition being substantially free from decomposition products of the normal tar constituents.

2. The method of producing a fuel composition from hot coke oven gases, which comprises subjecting the gases to a regulated cooling to condense pitch constituents therefrom while leaving tar acid oils in the form of vapors, subjecting the gases to a cleaning treatment to separate suspended pitch particles therefrom at a temperature such that tar acid oils will be kept in the form of vapors, cooling the cleaned gases to separate tar acid oil therefrom, extracting tar acid from such oil, and blending the resulting neutral oil with the pitch directly separated from the hot coke oven gases.

1,811,954. TRANSMISSION VOLUME CONTROL. DOREN MITCHELL, New York, and HAROLD C. SILENT, Larchmont, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 17, 1928. Serial No. 326,597. 12 Claims. (Cl. 178—44.)

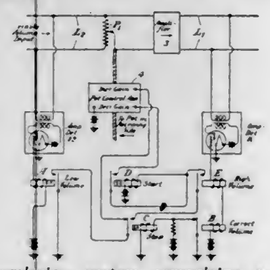
1. A transmission system comprising a one-way line section, a device included in said line section for controlling the volume of transmission over said line section, relay means associated with said line section on the incoming

and outgoing sides of said device, said relay means being responsive to currents of different values in said line



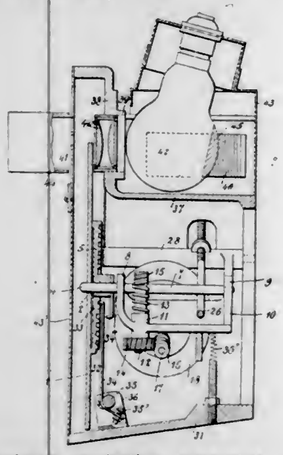
section, and circuit arrangements under the joint control of said relay means for operating said volume control device.

1,811,955. TRANSMISSION VOLUME CONTROL. DOREN MITCHELL, New York, and HAROLD C. SILENT, Larchmont, N. Y., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 17, 1928. Serial No. 326,598. 4 Claims. (Cl. 178—44.)



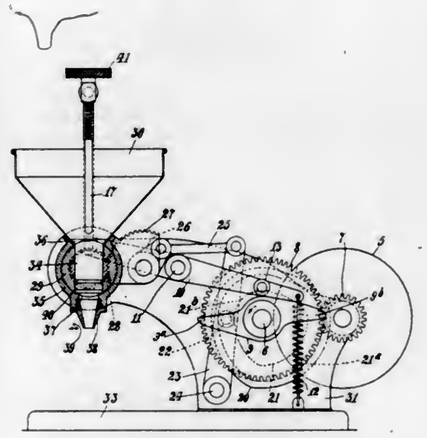
2. A transmission system comprising a one-way line section, a gain control device included in said line section, automatic control apparatus for adjusting the setting of said gain control device in accordance with the volume of the signals sent over said line section, and auxiliary relay means associated with said line section on the incoming side of said gain control device and responsive to the amplitude of the incoming signal wave for controlling the initial setting of said gain control device.

1,811,956. PROJECTION ARRANGEMENT FOR ADVERTISING PURPOSES. ERIK MOERCH, Paris, France. Filed May 20, 1929. Serial No. 364,581. 4 Claims. (Cl. 88—27.)



4. A luminous projecting apparatus comprising a transparent disk having characters thereon in spiral formation, projecting and illuminating elements arranged to project a beam of light through the characters on the disk, a pivoted frame, a rotatable carrier disk receiving and carrying the transparent disk and having a spiral groove in its under side, means on the frame for supporting and rotating said carrier disk, an arm mounted adjacent the carrier disk and extending over the same with its free end engaging the groove therein, and means on the carrier disk to engage the arm for positioning the disk.

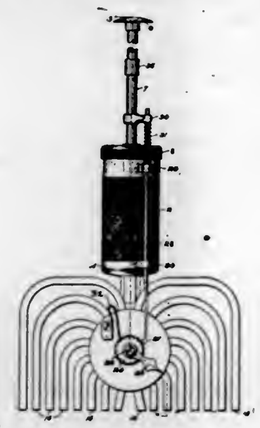
1,811,957. DEVICE FOR MEASURING AND DEPOSITING MEASURED QUANTITIES OF LIQUID, PLASTIC, GRANULAR, AND OTHER SIMILAR SUBSTANCES. JAMES MORTON, Wishaw, Scotland; William Morton, executor of said James Morton, deceased, assignor to Robert Henry Morton, Wishaw, Scotland, and himself. Filed Jan. 8, 1930, Serial No. 419,340, and in Great Britain Feb. 16, 1929. 5 Claims. (Cl. 221—103.)



1. A device of the type aforesaid, comprising in combination, a stationary cylindrical sleeve member having two diametrally opposite ports therein, a drum turnable in said sleeve member, an open ended diametral cylindrical receptacle in said drum, a free piston in said receptacle, means for intermittently oscillating said drum through substantially 180°, in order to bring each open end of said receptacle into register with a corresponding port in said sleeve member, a reciprocative plunger separate from said piston and adapted, when the ends of the receptacle register with said ports in the sleeve member, to actuate said piston through one of said ports, and means for supplying the substance to be deposited and measured to the port when the piston is actuated, said plunger reciprocating in synchronism with the oscillation of said drum.

1,811,958. LUBRICATING SYSTEM. HOWARD J. MURPHY, Reading, Mass., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Aug. 25, 1925. Serial No. 52,404. 4 Claims. (Cl. 184—35.)

1. A centralized lubricating system comprising a lubricant reservoir, a high pressure cylinder integral therewith, a thrust operated plunger extending through said reservoir and co-operating with said cylinder, a rotary valve communicating with said cylinder, conduits leading from said valve to the bearings to be lubricated, and means secured to and reciprocable with said plunger for rotating said valve.



1,811,959. VINYL DERIVATIVES OF ACETYLENE AND METHOD OF PREPARING THE SAME. JULIUS A. NIEUWLAND, Notre Dame, Ind., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 13, 1928. Serial No. 305,866. 22 Claims. (Cl. 260—171.)

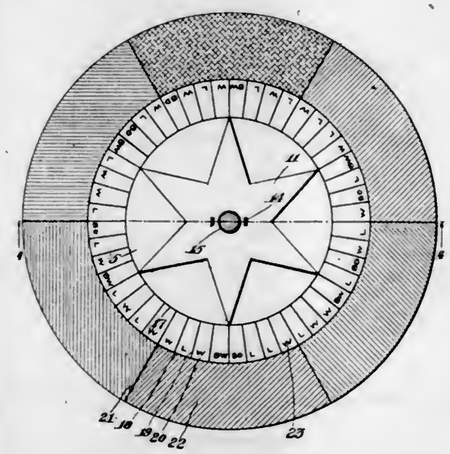
2. In the process of preparing vinyl derivatives of acetylene the step of reacting acetylene in the presence of a non-alkaline catalyst comprising cuprous chloride.

17. Divinyl acetylene.

20. A catalyst mixture comprising a saturated aqueous acid reacting solution of cuprous chloride and an ammonium compound of the class consisting of ammonium salts and the cyclic nitrogen bases.

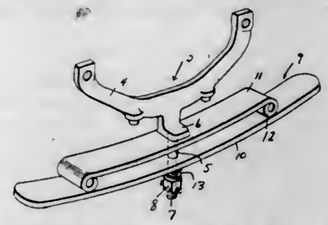
21. A non-benzenoid polymer of acetylene having the empirical formula C_8H_8.

1,811,960. GAME. MELVILLE LUDWIG ORR, Cincinnati, Ohio. Filed May 16, 1930. Serial No. 453,017. 4 Claims. (Cl. 273—142.)



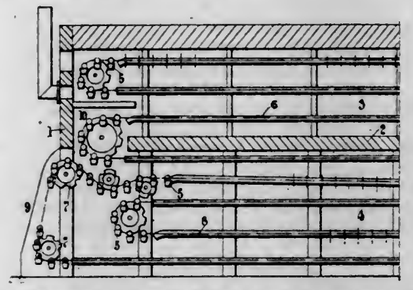
1. Apparatus for playing a game of chance comprising a base, a vertical spindle disposed centrally of said base, a spinner, and a hanger for suspending said spinner on said spindle consisting of a metal strip bent intermediate its ends and terminating in tabs bent into engagement with said spinner, the intermediate portion of the strip being concaved to provide a bearing for the upper end of the spindle.

1,811,961. MOTOR SUSPENSION SPRING MEANS. ALBERT PARTIN, Portales, N. Mex. Filed Apr. 21, 1930. Serial No. 446,035. 2 Claims. (Cl. 248—14.2.)



1. As a new product of manufacture, a spring suspension device for use and association with a strut-like bracket of the class described comprising a relatively long curvate leaf spring constructed to rest on a motor vehicle frame, a relatively short upper leaf spring having its ends curled and resting on the end portions of said first named spring, both of said springs being formed with vertically alined leg receiving holes for the purpose specified.

1,811,962. TRAVELING OVEN. JOHANNES HERMANUS NIEULANT PELKMAN, London, England, assignor to Naamlooze Vennootschap Bakovenbouw Voorheen H. P. Den Boer, Dordrecht, Netherlands. Filed Mar. 25, 1926, Serial No. 97,344, and in Great Britain Nov. 19, 1925. 4 Claims. (Cl. 107—57.)



1. A baking oven comprising a unitary chamber structure, a horizontal partition which divides said structure into two horizontal compartments, said partition having at one end an upstanding wall which is parallel with the adjacent outer wall, the opposite end wall of the oven having on substantially the same plane an inwardly extending and horizontal wall, the lower compartment forming a prover and the other a baking oven, conveying means for receptacles into which the products to be baked are charged at the forward end of the structure, being then conducted backwards and forwards in said prover and then into the forward end of the baking oven in which they are moved backwards and forwards and again backwards to the rear end of the structure.

1,811,963. APPARATUS FOR REDUCING CROSSTALK CURRENTS. EUGENE PETERSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 20, 1928. Serial No. 286,773. 15 Claims. (Cl. 179—78.)

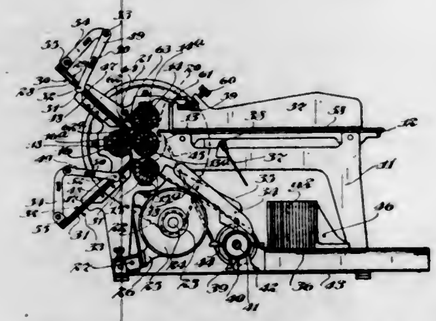
2. The combination with a circuit for the transmission of signal waves of a transmission element associated with

said circuit having the property of bilaterally freely transmitting said signal waves practically undistorted while suppressing the transmission of disturbing currents having



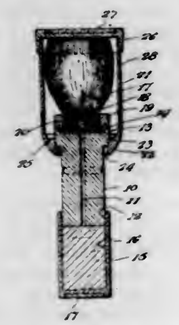
amplitudes small in comparison with said signal waves and a source of biasing potential for said transmission element for determining the point at which discrimination occurs.

1,811,964. LETTER FOLDING MACHINE. ROY N. PIERSON and CHARLES H. CARLSON, Minneapolis, Minn., assignors, by mesne assignments, to American Multigraph Co., Wilmington, Del., a Corporation of Delaware. Filed Sept. 14, 1929. Serial No. 392,598. 8 Claims. (Cl. 270—68.)



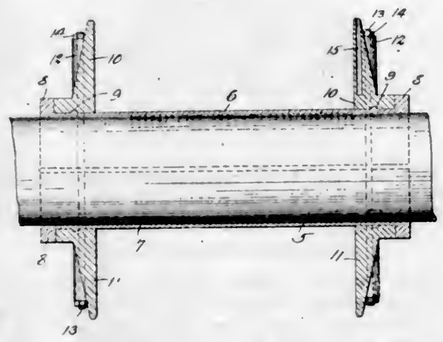
1. A folding machine comprising a group of folding rollers arranged as a central roller, an upper roller, a lower roller and a rear roller, a sheet guideway normally receiving the sheet from between said central and upper roller and having a stop for causing the said sheet to buckle downward between said central and rear roller, and lower sheet guideway receiving the sheet from between said central and rear roller and having a stop for causing said sheet to buckle between said central and lower roller, an inclined deck receiving the folded sheet from between said central and lower roller, a receiving table, and a packer operative on the folded sheets delivered from said deck and serving to pack the same on said receiving table.

1,811,965. FOUNTAIN SHAVING BRUSH AND RECEPTACLE. HARRY R. PRIEST, Loudonville, Ohio. Filed July 12, 1930. Serial No. 467,606. 8 Claims. (Cl. 132—80.)



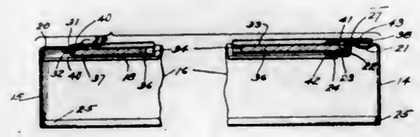
1. The combination of a shaving brush, and a receptacle adapted to house the bristles, and comprising a cylindrical wall open at both ends and having one end restricted to provide a reduced neck, the bore of said neck being wedge shaped in contour to frictionally engage the shaving brush, there being openings in the receptacle to ventilate the interior thereof, and a cap closing the open end of the receptacle opposite the reduced neck and provided with a mirror in the outer face thereof.

1,811,966. BULL WHEEL SHAFT FLANGE. JOHN PROPER, Seminole, Okla. Filed Nov. 29, 1929. Serial No. 410,621. 2 Claims. (Cl. 242—117.)



1. A flange for bull wheel shafts, including a sectional hub, enlargements at the ends of the sections, sectional flange members positioned on the sectional hub and engaging the enlargements to restrict lateral movement of the flanges, and means for securing the flanges and hub to the shaft.

1,811,967. CONTAINER COVER. HENRY T. REYNOLDS, Lombard, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 2, 1928. Serial No. 316,635. 6 Claims. (Cl. 220—82.)

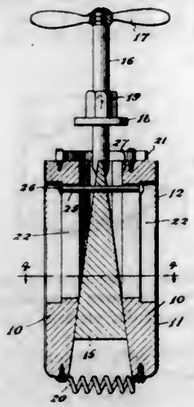


5. In a display cover for containers, a closure frame, a transparent member removably held within said frame and a locking device adapted to engage part of said member to removably lock the same in position and to slidingly move into and out of locking position.

1,811,968. BUSHING PULLER. WALLACE R. RODZIKINAS, Hatley, Wis. Filed June 26, 1930. Serial No. 464,082. 5 Claims. (Cl. 29—88.2.)

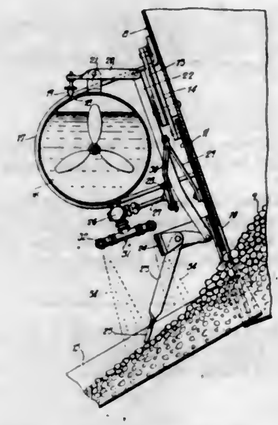
1. A tool for removing bushings and the like comprising jaws having semi-cylindrical outer faces and having flat inner faces inclined with respect to the longitudinal axis of the tool, said outer faces having an obliquely

threaded portion and a longitudinally threaded portion, the leading ends of the jaws being rounded to permit



easy entry of the tool in the bore of the bushing, and a wedge movable longitudinally between the flat inclined faces of the jaws to wedge the jaws in the bushing.

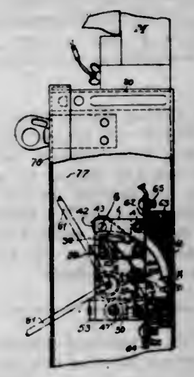
1,811,969. MATERIAL SPRAY APPARATUS. JOSEPH P. ROSENFELD, Newark, N. J. Filed Sept. 18, 1929. Serial No. 392,453. 5 Claims. (Cl. 298—7.)



1. In a structure of the class described, in combination, a vehicle body having a discharge opening, a delivery chute connected with said opening, a sliding door for said opening, a water containing tank supported on said vehicle body over said chute, valved distributing means on the bottom of said tank, and an operating connection between said valved means and said door, whereby the door controls said valved means to open the valve when the door is open, and to close the valve when the door is closed, and means on the tank and operable by the material passing through the chute for controlling the discharge of the water from the tank through the valved means.

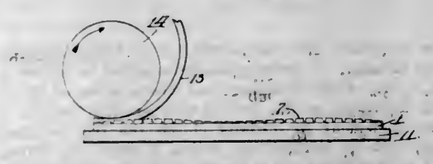
1,811,970. AUTOMATIC CIRCUIT BREAKER. JOSEPH SACHS, West Hartford, Conn. Filed June 5, 1928, Serial No. 283,060. Renewed Sept. 8, 1930. 30 Claims. (Cl. 200—88.)

1. In an automatic circuit breaker, the combination of a pivotally movable contact member biased toward its open-circuit position, an actuating member also pivotally movable and normally adapted to move the contact member to open or close the circuit, and an electro-responsive means comprising an element inherently responsive to abnormal current conditions in the circuit and constituting at least a part of a movable mechanical connection between the aforesaid members normally operative to prevent independent pivotal circuit opening movement of



the contact member, the said element upon the attainment of an abnormal current condition in the circuit and by reason of its own inherent electro-responsive characteristics being movable relatively to the aforesaid members so as to render the said mechanical connection ineffective and to thereby permit the contact member to pivotally move to its open-circuit position independently of the actuating member.

1,811,971. PRINTING FORM AND METHOD OF PREPARING THE SAME. ERNST SAUER, Schloss Kaibitz, Germany, assignor to The Ernst Sauer Process, Inc. Filed Nov. 26, 1927, Serial No. 236,021, and in Germany Dec. 7, 1926. 5 Claims. (Cl. 41—25.)

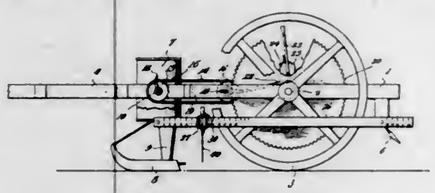


1. In the process of preparing printing forms from a gelatine copy relief that has been developed, hardened and swollen with water, the steps that comprise placing a solvent of celluloid upon the gelatine copy relief, forcing a plate of celluloid into intimate contact with the copy relief and solvent whereby it is rendered plastic by the solvent and takes a sharp impression of the copy relief and drying the celluloid plate.

1,811,972. PROCESS FOR THE PRODUCTION OF ARTIFICIAL HORN. FRITZ SCHMIDT, Troisdorf, near Cologne, Germany. Filed Feb. 20, 1925, Serial No. 10,693, and in Germany Nov. 27, 1924. 1 Claim. (Cl. 106—38.)

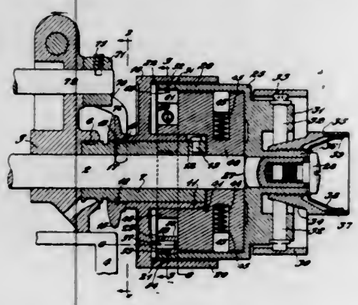
The process for the production of artificial horn, consisting in first mixing about 30 parts in weight of a cellulose derivative with about 20 parts of alcohol and some water; then mixing separately about 60 parts of unchanged commercial casein with about 10 parts of water and 5 parts of alcohol; and lastly thoroughly kneading together the two mixtures until a homogenous mass is obtained; said cellulose derivatives being selected from the group consisting of nitrocellulose, acetylcellulose, ethylcellulose and benzylcellulose.

1,811,973. CHECK ROWER. WILLIAM SCOTT, Mount Vernon, Ohio. Filed Dec. 28, 1928. Serial No. 329,014. 1 Claim. (Cl. 111—16.)
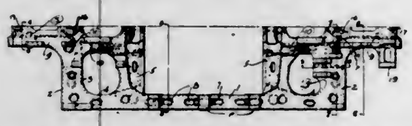


In a check row planter, the combination with a planter frame, of a graduated rail secured on the side of the frame and extending longitudinally thereof, a slide loop fitted around the rail and having an open outer side, a pointer formed on the slide at the top of the open side thereof and overlapping the rail, a pointer rod suspended on the bottom of the slide in vertical alinement with the pointer, and a line mounted on the top of the slide in vertical alinement with the pointer.

1,811,974. CLUTCH. CHESTER F. SEARLE, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed July 26, 1929. Serial No. 381,248. 28 Claims. (Cl. 192—52.)



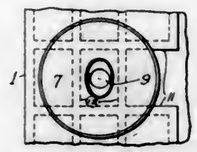
1. In a clutch, the combination of a driving-member, a driven-member, an inertia-element adapted to be set in motion by one of said members, and means operated by the relative movement of the driving-member with respect to the inertia-element to initially clutch the two members together with an intermittent action to start the driven-member at slow speed and to finally clutch the two members together to drive the driven-member at the same speed as the driving-member.

1,811,975. RAILWAY CAR UNDERFRAME. WILLIAM M. SHEEHAN, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Apr. 18, 1928. Serial No. 270,950. 24 Claims. (Cl. 105—247.)



1. In a car underframe, side sills terminating short of the end of the car, bolsters connecting said sills, and draft sills extending outwardly from said bolsters, all of said sills being box-shaped in cross section and co-operating to provide a continuous vertical outer wall for the underframe.

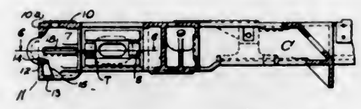
1,811,976. CAR STRUCTURE. WILLIAM M. SHEEHAN, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Original application filed Apr. 18, 1928, Serial No. 270,950. Divided and this application filed Apr. 5, 1929. Serial No. 352,817. 25 Claims. (Cl. 105—415.)



1. A railway vehicle frame member having an integral center plate portion, the lower face of said portion being provided with a non-circular element for engaging a separate wear member.

2. A railway vehicle body bolster including an integral center plate, the lower face of which is provided with a non-circular recess for engaging a separate wear member.

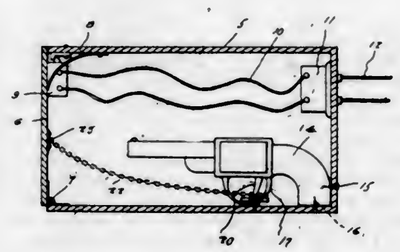
1,811,977. RAILWAY CAR DRAFT SILL. WILLIAM M. SHEEHAN, St. Louis, Mo., assignor, by mesne assignments, to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Original application filed Apr. 18, 1928, Serial No. 270,950. Divided and this application filed Apr. 5, 1929. Serial No. 352,818. 16 Claims. (Cl. 105—415.)



1. In a railway car draft framing, draft sills, and a channel-shaped coupled carrier element integral with said draft sills.

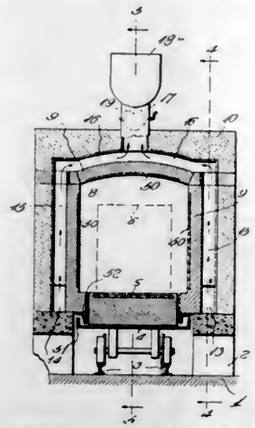
5. In a railway car draft framing, box-shaped draft sills each having outside and inside walls, there being elongated openings in the outer walls of said sills for insertion of draft keys, and draft lugs integral with the inner walls of said sills.

1,811,978. HOLD UP PROTECTOR. HENRY A. SHINE, Sausalito, Calif. Filed Jan. 14, 1930. Serial No. 420,806. 8 Claims. (Cl. 42—1.)



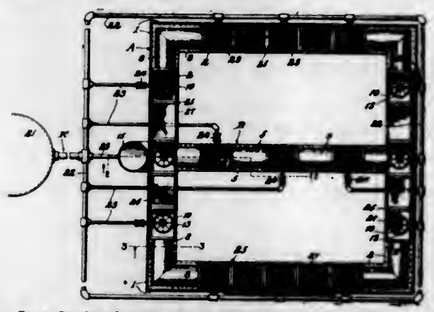
1. In an apparatus of the class described, a box, a pistol anchored in the box, one end of the box being open, a door for said open end of the box, spring hinges for mounting the door and normally holding it in an open position, a lever rockable in the box and engageable with the trigger, a chain connecting the lever with the door so that when the door is open, the lever is rocked to actuate the trigger of the pistol.

1,811,979. FURNACE OR HEAT TREATMENT CHAMBER COOLING MEANS. EDWIN L. SMALLEY, Whitefish Bay, Wis., assignor to Hevi Duty Electric Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 9, 1928. Serial No. 253,199. 11 Claims. (Cl. 263—44.)



2. In a heat treatment apparatus, a chamber for material to be subjected to heat treatment, a plurality of flues positioned in lateral planes along the length of said chamber, manifolds interconnecting said flues at opposite ends thereof, and means for forcing a cooling mixture through said flues at a predetermined rate.

1,811,980. DRYING HOUSE. FORREST H. SMITH, Ayden, N. C. Filed Aug. 7, 1929. Serial No. 383,994. 13 Claims. (Cl. 34—18.)



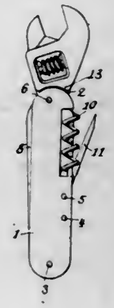
1. In a drying house, the combination with a substantially horizontal flue extending adjacent to and inside of the walls of said house; of a plurality of spaced openings in the bottom of said flue; a fluid fuel burner positioned under each of said openings; and means for supplying fluid fuel to said burners.

1,811,981. SPEED BOAT. WILLIAM J. SNADECKI, Westover, Va., assignor of one-third to Fred L. Pigeon and one-third to Roy W. Pigeon, Boston, Mass. Filed May 21, 1928. Serial No. 279,477. 5 Claims. (Cl. 114—66.5.)



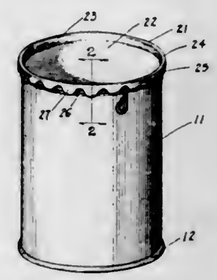
1. In a boat shell formed with lap strakes and with contour of sides generally oval from keel to gunwhale, strakes from the water line to the keel on either side, substantially parallel with the water line, and conforming for the major part of their length from the stern, to the surface of a cone with apex on the median line of the boat in advance of the bow and near the water line.

1,811,982. KNIFE ADAPTED FOR MULTIPLE USES AND COMPRISING A MONKEY WRENCH. JEAN ALBERT SOUSTRE, Cendrieux, France. Filed June 6, 1928, Serial No. 283,285, and in France Dec. 13, 1927. 1 Claim. (Cl. 7—11.)



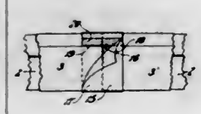
The combination in a pocket knife having two compartments, a middle partition adapted to separate the two compartments and carrying at one of its ends a monkey wrench in one piece with the said partition. two outer walls for closing the compartments externally, spacing members at both ends of the said compartments, the head of the said monkey wrench being provided with shoulders on both sides, these shoulders being adapted to bear on the said spacing members at the corresponding end of the knife.

1,811,983. CONTAINER CLOSURE AND OPENING DEVICE. CHARLES STOLLBERG, New York, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 19, 1928. Serial No. 307,008. 1 Claim. (Cl. 220—49.)



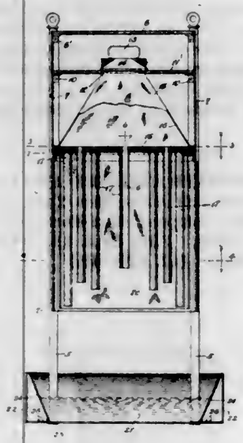
In a wire-opening container the combination of a body having an outwardly bent lip and a wire-supporting outward bead below said lip, said bead and lip forming a groove for the wire, a pulling and cover-releasing wire arranged around the can in said groove. a cover having a shoulder inserted down within the can so as to be opposite to said groove, the flange of the cover being bent tightly over the lip of the body and the contained wire and down at the outer side of the wire to a point opposite said head, the margin of the cover flange being formed with notches and bendable lugs, and an annular gasket arranged under said flange of the cover.

1,811,984. JACKET FOR COVERINGS FOR STEAM OR OTHER PIPES. PATRICK M. TAFT, Holyoke, Mass. Filed Feb. 2, 1931. Serial No. 512,773. 5 Claims. (Cl. 154—45.)



1. An insulating covering comprising a plurality of abutting sections of insulating material, jackets for said sections, said jackets being secured to said sections and an extension upon one of said jackets overlying but not secured to an end upon an adjacent jacket to cover closely the abutting ends of said sections and permit expansion and contraction thereof without uncovering said abutting ends.

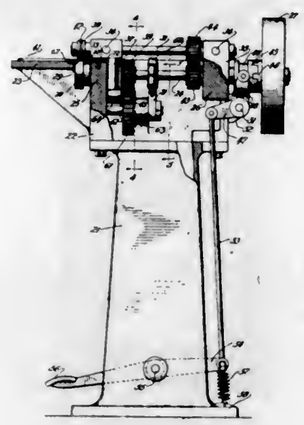
1,811,985. SOUND RESONATING AND AMPLIFYING DEVICE. CHRISTIAN A. VOLF, Jr., Weehawken, N. J., assignor to Murray T. Quigg, New York County, N. Y. Filed Dec. 1, 1928. Serial No. 323,019. 31 Claims. (Cl. 181—27.)



1. A sound amplifying device comprising in combination a relatively shallow container for a liquid, having a side wall sloping inwardly and downwardly, independently mounted sound generating means for directing sound waves downwardly therefrom onto the surface of the liquid, whereby the sound waves move along the surface of the liquid and then over the sides of the liquid container.

1,811,986. METHOD OF AND MACHINE FOR SCORING CAN ENDS. JOHN M. YOUNG, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 9, 1924. Serial No. 685,120. 9 Claims. (Cl. 113—15.)

1. The method of scoring circular can ends which consists in rotating a cutting edge relative to the can end and thereby cutting a score in the can end, without penetrating through the metal of the same, at a predetermined distance from the edge of the end, and at the same time



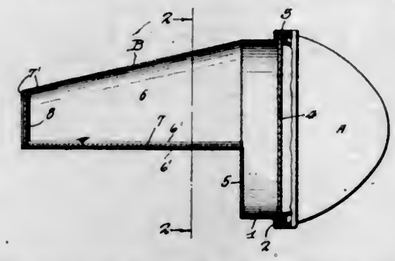
causing the rotation of the can end by the scoring direction and pressure, and confining the rotation of the can end to a circular direction.

1,811,987. SPRING MOUNTING FOR PRESSES AND THE LIKE. GEORGE F. WALES, Buffalo, N. Y. Filed Mar. 14, 1928. Serial No. 261,500. 2 Claims. (Cl. 267—1.)

1. A spring unit for use between two relatively movable members, comprising a retainer including a bolt having a thread at one end adapted to engage one of said members and a head at its other end a disk on the threaded end of said bolt, a sleeve enclosing said head and having its bore of angular form to fit the head of the bolt and thereby compel this sleeve and bolt to turn together but permitting the same to move lengthwise relatively to one another and provided on its inner end with an internal shoulder adapted to engage the underside of said head and at its outer end with an enlarged pocket, a screw nut secured in said pocket, a screw adapted to connect said nut with the other member, and a spring surrounding said bolt and sleeve and bearing at its opposite ends against said disk and pocket.

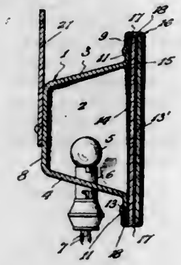
1,811,988. HEADLIGHT. REX F. WHITTEMORE, Pomona, Calif. Filed July 23, 1928. Serial No. 294,726. 1 Claim. (Cl. 240—48.4.)

A visor for a headlight comprising a semi-conical portion and a cylindrical portion, the cylindrical portion having an annular flange formed on its rear edge for attachment to a headlight, an opaque semi-circular plate formed on the front edge of the cylindrical portion and closing the lower half of the latter, the semi-conical portion having its rear end formed on the front end of the front edge of the cylindrical portion and the upper edge of said plate, said elongated semi-conical member tapering from its rear end towards its front end, spaced horizontal flanges formed on the longitudinal edges of the semi-conical shaped member and terminating short of the forward end thereof, spaced arcuate shaped flanges formed on the



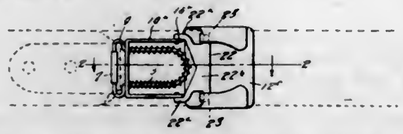
forward end of the semi-conical shaped member, a colored glass closing the front end of the semi-conical shaped member and carried by the arcuate shaped flanges, and a clear glass carried by the horizontal flanges and underlying the colored glass to retain the latter in the arcuate shaped flanges and closing the under side of the semi-conical shaped member by extending from the colored glass to the plate.

1,811,989. ILLUMINATED LICENSE HOLDER. DANIEL WILLMAN, Hartford City, Ind. Filed Mar. 20, 1929. Serial No. 348,545. 1 Claim. (Cl. 40—132.)



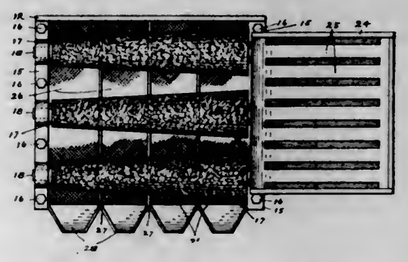
A combined tail light and number display for motor vehicles comprising a casing having an open side and an outwardly disposed flange at the open side in which is formed a crimp to provide a groove upon the forward side and a projection upon the rear side of said flange, a packing in the groove, a panel placed against the said outer flange and extending over the open side of the casing, a sectional clamp frame of channel formation embracing the outer edge portions of the panel and casing flange, and means connecting and drawing together the sections of the clamp frame to cause the rear flange of the channel clamp frame to ride upon the said rear projection to clamp the panel against the outer flange of the casing.

1,811,990. BELT BUCKLE. DORSEY M. WIRTH, Bucyrus, Ohio. Filed July 7, 1930. Serial No. 466,245. 4 Claims. (Cl. 24—191.)



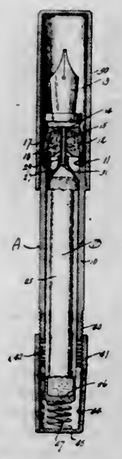
1. A belt buckle of the class described comprising a buckle body, and an expanding belt connector assembly pivotally connected to said buckle body, said belt connector assembly comprising a yoke, means pivotally connecting said yoke to the buckle body, an elongated belt connector slidably carried by the yoke, a belt connecting portion at one end of the connector and a spring on the connector and reacting against the other end of the connector and the bight portion of the yoke for yieldably resisting opposite relative longitudinal movement of the connector and yoke, and a belt engaging jaw carried by said assembly for cooperating with said buckle body for adjustably retaining the free end of the belt.

1,811,991. FRUIT SORTER AND CLEANER. GEORGE G. BATES, Kingston, N. Y. Filed Jan. 11, 1928. Serial No. 245,927. 1 Claim. (Cl. 146—193.)



A combined fruit sorter, grader and cleaner, comprising in combination with an inclined feed hopper, of a pair of end frames formed with alined bearings in the upper part thereof, shafts rotatably mounted therein, grooved pulleys secured on said shafts, a belt mounted on said pulleys including one complete wrap around the central pulley, and means for applying rotary movement to the central shaft, tapered rolls secured on said shafts, and adapted to rotate in the same direction, a cleaning material carried by said rolls, a series of combined receiving and delivery troughs mounted below said rolls at right angles thereto and in an inclined position, fabric forming the bottom thereof and adapted to receive the fruit as it passes between said rolls.

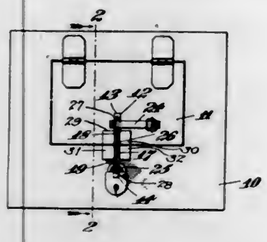
1,811,992. FOUNTAIN PEN. BENJAMIN R. BELL, Bartow, Fla. Filed Oct. 7, 1929. Serial No. 397,973. 1 Claim. (Cl. 120—42.)



In a fountain pen of the class described a barrel including a pen point holding structure having a feed tube

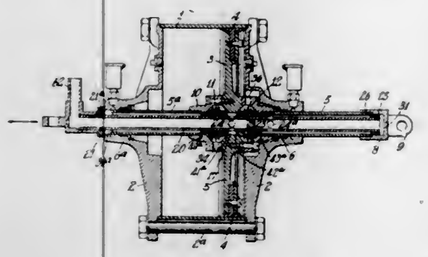
extending freely into the barrel for a substantial distance, and a removable cartridge for the barrel including a tapered neck with a restricted mouth into which the feed tube may snugly fit and a removable stopper in said mouth, the cartridge when fully inserted in the barrel with the feed tube therein having a space between the feed tube at its free end and the lateral walls of the cartridge which is greater measured in any radial direction than the diameter of the mouth of said cartridge, whereby the stopper when pushed into the cartridge during the assemblage of the latter into the barrel and on the feed tube will lie laterally of the tube after assemblage of parts to prevent obstruction of flow of ink into the feed tube.

1,811,993. FASTENER. JOHN VALENTINE BERRY, Johnstown, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Nov. 30, 1929. Serial No. 410,739. 8 Claims. (Cl. 70—14.)



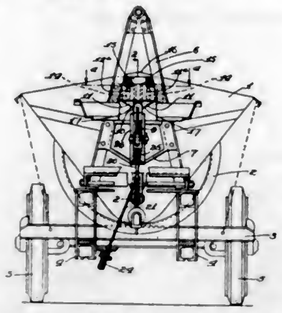
1. A fastener comprising a pair of members mounted in spaced relation to each other and having passageways therein, a connecting member slidably mounted within the passageways of said members said connecting member being capable of slidable movement in either direction for disconnecting said members and locking means adapted to engage the connecting member to restrain said member against movement in either direction.

1,811,994. POWER ACTUATOR. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg & Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Nov. 5, 1925. Serial No. 66,961. 2 Claims. (Cl. 121—41.)



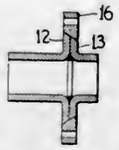
1. In a brake system for automotive vehicles having an internal combustion engine provided with a throttle controlled suction passage, the combination with a power actuator including a cylinder closed at both ends, a piston in said cylinder, a normally unrestricted passage from the suction passage to the cylinder, means including the piston hub and valve members for connecting the cylinder on both faces of the piston with the suction passage by restricted passages when the piston is in normal or off position, to submerge the piston in vacuum, and gradually deliver the air withdrawn from the cylinder to said suction means, and for connecting the cylinder on one face of the piston with said suction passage by an unrestricted passage of greater area than said restricted passages, and admitting higher pressure fluid to the cylinder on the opposite face of the piston, to effect a non-retarded movement of the piston without admitting material quantities of air to the suction passage.

1,811,995. AUTOMATIC LOCK FOR TILTING BODIES. CHARLES G. CLEMENT, Edgerton, Wis., assignor to Highway Trailer Company, Edgerton, Wis., a Corporation of Wisconsin. Filed Sept. 7, 1926. Serial No. 133,791. 3 Claims. (Cl. 298—38.)



1. In combination with a vehicle frame and a tiltable body mounted thereon, means for locking the body to the frame comprising a pair of transversely spaced, vertically movable latches carried on the body, spring means normally urging said latches into operative position, a bell crank pivotally mounted on said frame for movement about a horizontal axis, and including an upwardly extending arm serving as an abutment adapted to normally engage between the opposing faces of said latches, the other arm of said bell crank extending in lateral direction, means connected to said laterally extending arm for moving the abutment out of operative position with said latches, and yielding means reacting against such movement of the bell crank.

1,811,996. METHOD OF MAKING HUBS. CAROLUS L. EKSERGIAN, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 4, 1929. Serial No. 368,350. 5 Claims. (Cl. 29—159.3.)

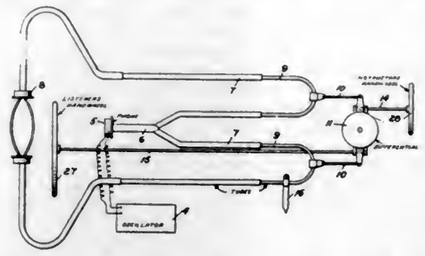


1. The method of making hubs which consists in separately flanging a pair of tubular sections, abutting the flanges, and joining the flanges together by butt welding commonly to them a ring of material.

5. As an article of manufacture a hub comprising a barrel having a radial flange, the root of which is divided into two parts in a plane at right angles to the axis of the hub, and the outer portion of which is constituted by a ring welded in common to the divided root portion.

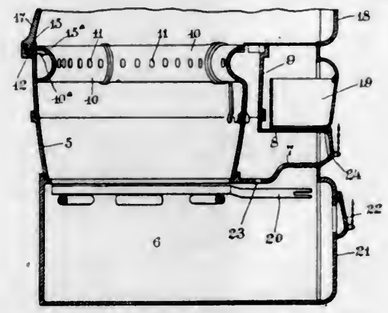
1,811,997. METHOD AND MEANS FOR TRAINING OPERATORS OF SOUND LOCATING DEVICES. HIRAM B. ELY, Philadelphia, Pa. Filed Dec. 4, 1928. Serial No. 323,741. 10 Claims. (Cl. 181—26.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

2. The method of training in binaural comparison which consists in establishing a source of sound, transmitting the sound through a single receiver and thence by separate paths to each ear of a listener, arbitrarily varying said paths to create an impression of lateral direction, having



the listener equalize the paths to perceive an impression of central direction and measuring any failure to equalize the paths.

1,811,998. MEANS FOR SUPPORTING HOT AIR RINGS IN FURNACES OR STOVES. GEORGE C. EMRICH, Columbus, Ohio. Filed Sept. 28, 1928. Serial No. 309,034. 3 Claims. (Cl. 126—146.)



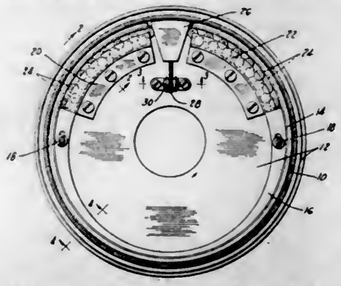
1. In a stove or furnace having a fire pot and a separable dome therefor, a tongue and groove connection between said fire pot and dome, a plurality of hanger members each consisting of a shank portion and a portion having a horizontally elongated eye portion, the shank portions of said hanger members secured in said tongue and groove connection, and said eye portion extended into the fire pot chamber, and a plurality of removable air supplying ring members for the fire pot provided with pins engaging said elongated eyes.

1,811,999. METHOD OF MAKING BRAKE DRUMS. GORDON M. EVANS, New York, N. Y., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 29, 1928. Serial No. 257,815. 1 Claim. (Cl. 29—152.)



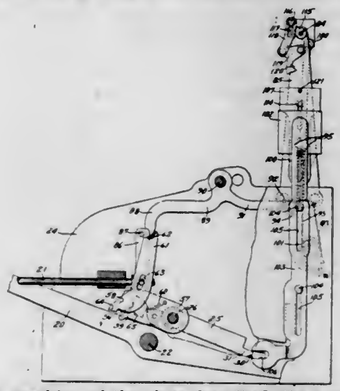
The method of making a brake drum or like article, comprising the forming of said drum from a flat plate into a substantially flat web with a circumferential flange extending from said web in the form of a frustro-conical shape, and exerting radially inward pressure on said flange and retaining said flange free of interior support during the period of exertion of said inward pressure.

1,812,000. BRAKE. RUDOLPH A. GOEPFRICH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 11, 1929. Serial No. 345,947. 16 Claims. (Cl. 188—78.)



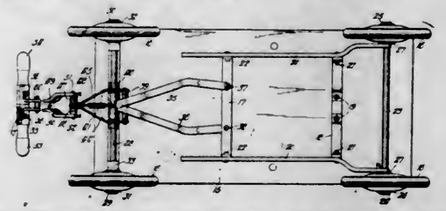
1. A brake comprising, in combination, a drum, a friction device engageable with the drum and backed by a plurality of disconnectedly-engaging thrust elements, and means for crowding the thrust elements together to cause them to react on each other to force the friction device outwardly against the drum.

1,812,001. CASH REGISTER. MAXIMILIAN M. GOLDBERG, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Jan. 5, 1922, Serial No. 527,265. Divided and this application filed July 23, 1926. Serial No. 124,443. 26 Claims. (Cl. 235—23.)



1. In a machine of the class described, the combination of a series of keys, indicators corresponding thereto and moved thereby, having a plurality of sets of figures of different values on one face thereof and a single movable means for always concealing all but one of the sets of figures at the completion of each operation.

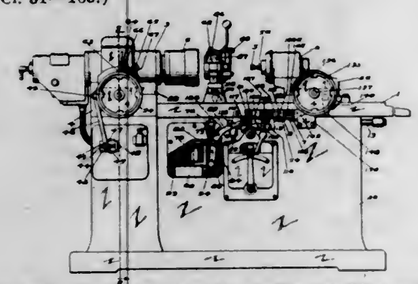
1,812,002. CONVERTIBLE VEHICLE. HARRY S. GOODMAN and CARL ROEHRI, Chicago, Ill. Filed May 14, 1928. Serial No. 277,614. 6 Claims. (Cl. 280—87.5.)



1. A convertible chassis for use in a two wheeled and four wheeled vehicle consisting of wheels, front and rear axles, a pair of side frames secured to the rear axle, handle means, a pair of radius rods, and means for connect-

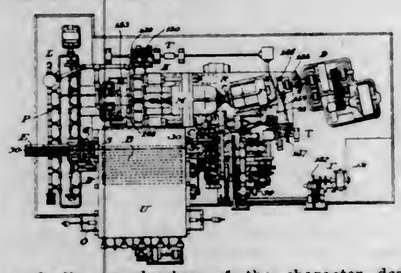
ing the parts to accommodate any one of a plurality of vehicle bodies with the frames either below or above the axis of rotation of the supporting wheels, said connecting means including a draw bar structure and means for pivoting said structure on a vertical axis to either the handle or the radius rods.

1,812,003. GRINDING MACHINE. WALDO J. GUILD, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 31, 1928. Serial No. 281,700. 7 Claims. (Cl. 51—165.)



1. The combination with a grinding machine comprising means for supporting the work, means for supporting a grinding wheel, means for producing a reciprocating motion of one of said before mentioned means with relation to the other, means to so control said motion as to cause a relative traversing motion between the wheel and the work, one past the other in contact, or to cause the withdrawal of one from contact with the other and subsequent restoration to contact, a tool for dressing the grinding wheel so mounted that it is engaged by said wheel when the contact between the work and grinding wheel has been so interrupted, feeding mechanism to feed the workpiece transverse to the said traversing motion to maintain grinding contact, and separate feeding mechanism to feed the grinding wheel transverse to said traversing motion and toward said dressing tool; of devices operated directly by said first named feeding mechanism and operable on said motion controlling means to cause the withdrawal motion and then to restore the contacting traversing relation of work and grinding wheel, and means for periodically moving the feeding mechanism that feeds the grinding wheel, whereby the grinding may proceed by a succession of uninterrupted traversing motions confined to the surface to be ground and at a stage determined directly by the movement of the feeding mechanism the contact of grinding wheel and work is automatically interrupted, the grinding wheel being dressed despite wear because of its periodic advance toward the dressing tool, the traversing contact with the work being then resumed.

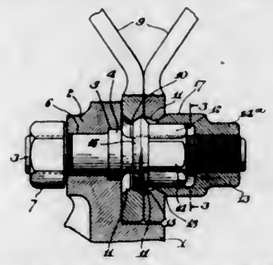
1,812,004. BAR STOCK FEED FOR ROLLING MILLS. JAMES W. HUGHES, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 23, 1927. Serial No. 242,064. 28 Claims. (Cl. 29—34.)



1. A feeding mechanism of the character described comprising means to support the bar and opposed cut-off jaws on opposite sides of the bar and means for substantially simultaneously giving the jaws a combined cut-off and bar feeding movement on a path entering the bar behind its end a distance equal to the length of the portion to be fed and leaving the bar in the original plane of the advance end of the portion to be fed.

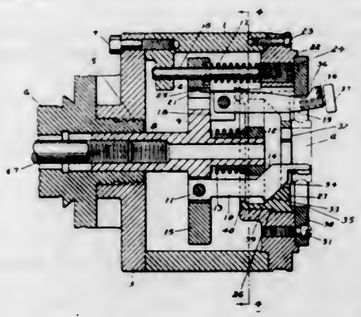
5. An automatic feeding mechanism of the character described comprising means to support the bar longitudinally and a pair of opposed jaws on opposite sides of the bar each having a bar feeding and cut-off movement on a path initially entering the bar in a plane removed from the initial plane of the end of the bar a distance equal to the length of the portion to be fed and leaving the substantially severed bar in the initial plane of the advance end, together with a transfer mechanism having a transfer movement on a path arranged at 90° to the bar and a receiving seat adapted to give longitudinal support to the portion of the bar being fed and cut off, whereby the substantially severed portion to be fed is upon movement of the transfer mechanism transferred with its axis parallel to the bar from which it has been severed.

1,812,005. SECURING MEANS FOR DEMOUNTABLE WHEELS. J. HAROLD HUNT, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 15, 1926. Serial No. 135,506. 2 Claims. (Cl. 301—9.)



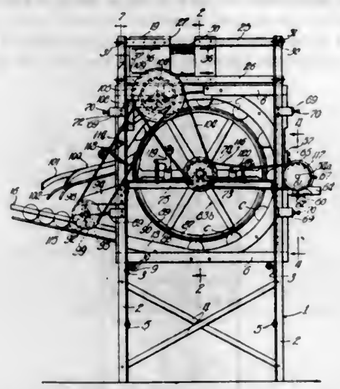
1. A dual wheel construction comprising a hub having a plurality of studs projecting laterally therefrom, a pair of wheels mounted on said hub and having apertures through which said studs project, a pair of nuts threaded directly on each stud, the outer nut having a skirt adapted to surround the other nut, the inner nut having a portion adapted to engage the inner wheel, and the skirt of the outer nut having a portion adapted to engage the outer wheel.

1,812,006. CHUCK. RICHARD H. JELLICOE, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 27, 1926. Serial No. 157,144. 19 Claims. (Cl. 279—106.)



1. In a chuck, a set of work-centering fingers, each having a pivotal mounting, a set of work-holding fingers, and a single actuating means for both said sets of fingers.

1,812,007. CAN LABELING MACHINE. CHRISTIAN CARL KRONE, Momence, Ill., assignor of one-half to Alfred H. Murray, Momence, Ill. Filed Apr. 24, 1929. Serial No. 357,698. 9 Claims. (Cl. 216—58.)



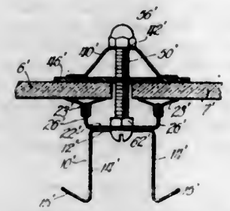
1. In a labeling machine of the character described, a label receiving hopper, means in the hopper for supporting a stack of labels for withdrawal therefrom from the bottom of the stack, a paste pan beneath the hopper, a roller dipping into the pan and disposed to contact the lap end of the bottom label, said roller revolving oppositely to the direction of feed of the labels to the cans, means in advance of the hopper for spotting the cans with adhesive, and means for feeding the cans past the spotting means and beneath the hopper in position to cause the adhesive to contact the bottom label adjacent the other end thereof, the feeding means acting to rotate the cans and subject them to pressure radially thereof as they pass beneath and beyond the hopper for wrapping and smoothing the labels about the cans.

1,812,008. DENTAL IMPRESSION BAND. WILLIAM P. LACE, Denver, Colo. Filed Dec. 19, 1929. Serial No. 415,336. 1 Claim. (Cl. 32—6.)



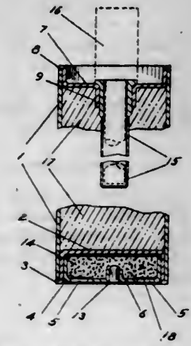
Dental impression band comprising a relatively short cylindrical tube and an outwardly flared extremity formed on said tube.

1,812,009. SKYLIGHT CONSTRUCTION. GEORGE H. LENKE, Cicero, Ill. Filed June 4, 1928. Serial No. 282,625. 2 Claims. (Cl. 108—16.)



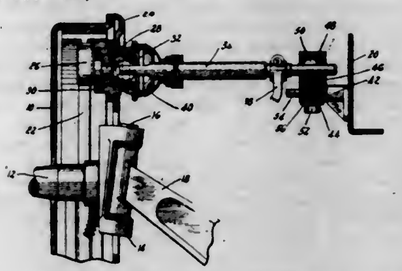
1. As an article of manufacture, a seating strip for glass skylight panes comprising a relatively thin strip of sheet metal having a mounting fold extending longitudinally and generally medially thereof, said fold forming a downwardly opening groove for straddling a relatively thin parallel sided flange on a channel-shaped gutter and the top of the fold being adapted for seating down directly upon the upper edge of the gutter flange, substantially similar upwardly extending and outwardly diverging side wings extending from the fold and having their outer edges terminating in a common plane and adapted for seating engagement with the same surface of the glass pane upon opposite sides of the fold, the top of said fold being disposed below the outer edges of said wings to be spaced from and out of engagement with the pane when the outer edges of said side wings are in engagement with the pane and the sides of the fold being disposed wholly externally of the supporting member and unconfined to free said side wings throughout the entire depth of the fold when said strip is in position upon the gutter flange.

1,812,010. SHELL CONSTRUCTION. LEWIS M. McBRIDE, Fort Sill, Okla. Filed Dec. 3, 1930. Serial No. 499,686. 14 Claims. (Cl. 102—29.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



1. A projectile comprising a tubular body member, a forward closure member, a rearward closure member adapted to contain a propellant powder charge, a cover member for said rear closure member, said members being secured to each other by press fits, and means for firing the projectile associated therewith.

1,812,011. BRAKE OPERATING MEANS. GUS F. MICHAEL, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 25, 1929. Serial No. 349,677. 5 Claims. (Cl. 308—72.)

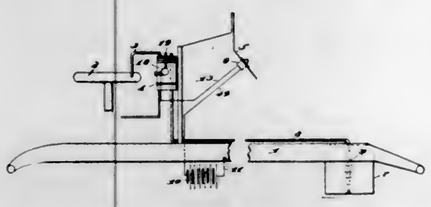


1. A control for a front automobile brake comprising, a bracket mounted on the chassis frame, a support swiveled on the bracket, and a shaft rotatably and universally supported at one end by the swiveled support.

1,812,012. GASOLINE RESERVE SIGNAL FOR AUTOMOBILES. WILLIAM H. MUZZY, Evanston, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed July 2, 1925. Serial No. 41,141. 5 Claims. (Cl. 177—311.)

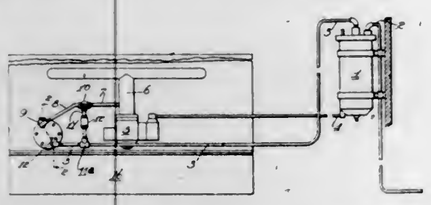
5. In an automobile, in combination with an engine and main fuel tank, an auxiliary fuel receptacle and a

fuel supply line from the main tank to the auxiliary receptacle, intermittently operated fuel feeding means for moving fuel from the main tank to the auxiliary receptacle, a reserve fuel warning signal for the driver including means operated by the fuel feeding means, for controlling the signal so that the occurrence and duration of the signal corresponds to the occurrence and duration of the intermittent fuel feeding periods; means for



affecting the duration of said feeding periods consisting in mean for partially obstructing the flow of fuel from the main tank through the supply line, said means consisting of a float in the main tank and flow-obstructing means associated with the intake of the fuel supply line arranged to be operated for limitedly obstructing the flow at a predetermined low level of the fuel in the tank.

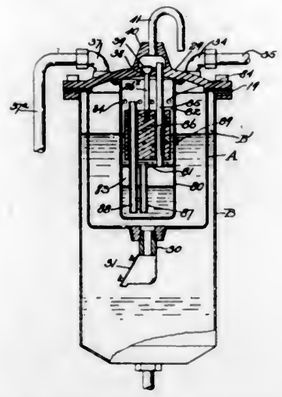
1,812,013. FUEL FEEDING SYSTEM FOR INTERNAL COMBUSTION ENGINES. WILLIAM H. MUZZY, Evanston, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed July 2, 1928. Serial No. 289,692. 5 Claims. (Cl. 158—36.1.)



1. In combination with an internal combustion engine, a fuel feeding system comprising a vacuum pumping device having a vacuum chamber, an engine-driven pump having intake and discharge check valves, a conduit connecting the intake of the engine-driven pump with the vacuum chamber of the vacuum pumping device, a conduit connecting the discharge of the pump with the intake manifold of the engine, whereby communication is provided from the vacuum chamber of the vacuum pumping device through the engine-driven pump to the intake manifold of the engine, and a by-pass pipe connecting the first mentioned conduit between the intake check valve and the vacuum chamber of the vacuum pumping device with the second mentioned conduit between the discharge check valve and the manifold, and a check valve in said by-pass opening for fluid flow toward the second mentioned conduit.

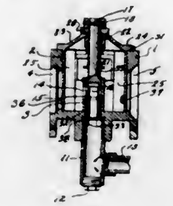
1,812,014. LIMITED SUCTION FEED DEVICE. WILLIAM H. MUZZY, Evanston, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Sept. 21, 1929. Serial No. 394,152. 8 Claims. (Cl. 103—236.)

1. In a liquid feeding system in which liquid is lifted from a low level supply to a chamber at a higher level by the creation of a partial vacuum in said chamber and in which means is provided for periodically releasing the elevated liquid for discharge by gravity, said means including an atmosphere valve to vent the chamber, and a float connected for opening said valve upon accumulation of liquid in the chamber; means to prevent an excessive degree of vacuum in the chamber, comprising a supplemental passage for supplying additional fluid thereto against resistance to the movement of such fluid flow, the resistance of said passage being adapted to be overcome by the suction when the vacuum in the chamber exceeds a predetermined value; a supplemental chamber within the vacuum chamber having an inlet for liquid dis-



posed below the lower limit of movement of the float and a transfer passage extending from the lower portion of said supplemental chamber to a point above the normal maximum liquid level in the vacuum chamber, said supplemental chamber being constantly open to the atmosphere, whereby excessive vacuum tends to transfer liquid from said supplemental chamber to the vacuum chamber for satisfying the excess of vacuum.

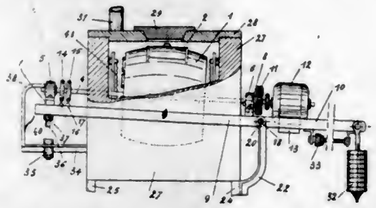
1,812,015. PROPORTIONING VALVE. GEORGE F. NAAB, Cleveland, Ohio, assignor to The North American Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 14, 1927. Serial No. 233,159. 7 Claims. (Cl. 277—19.)



1. In a device of the class described, a casing having a cylindrical valve chamber with a lateral port opening thereinto, a segmental valve in said chamber, secured with said casing against longitudinal movement and rotatable to open and close said port, the valve having a longitudinally extending edge for the purpose, and adjacent said edge a segmental skirt member associated with said valve for movement therewith and longitudinally adjustable independently of said valve to provide a secondary adjustment of the effective port area, independent of the setting of said valve.

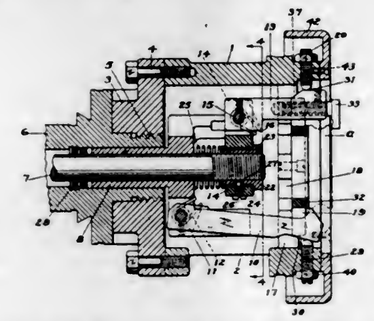
1,812,016. ELECTRICALLY HEATED APPARATUS FOR DRYING COFFEE AND THE LIKE. CHARLES NIÉLOUD, Marseille, France. Filed Aug. 25, 1928, Serial No. 302,036, and in Germany Sept. 1, 1927. 3 Claims. (Cl. 219—19.)

1. Apparatus for drying and roasting coffee and like grains, comprising a fixed oven, a movable receptacle located within said fixed oven, means for electrically heating said receptacle, a pivotally mounted frame, means for supporting said movable receptacle on said frame, an electric heating circuit, a contact on said frame connected with said circuit, a projection on said fixed oven, a contact connected with said circuit carried by said pro-



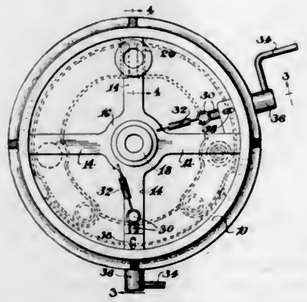
jection, the weight of material in said movable receptacle closing said contacts and means for opening said contacts when the contact carrying frame is shifted due to loss of weight of the material being roasted and means for rotating said receptacle.

1,812,017. CHUCK. DWIGHT C. PAGE and RICHARD H. JELLICOE, Worcester, Mass., assignors to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 12, 1927. Serial No. 174,940. 11 Claims. (Cl. 279—106.)



2. In a chuck, an operating rod, a set of work-clamping devices attached to said rod, a member mounted to slide in said chuck, a set of work-centering fingers pivotally attached to said member and adapted to swing in radial planes, and resilient means urging said centering fingers together when said rod is drawn inwardly of said chuck.

1,812,018. BRAKE-ADJUSTING FIXTURE. JOHN W. PETERSON, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Aug. 1, 1928. Serial No. 296,807. 3 Claims. (Cl. 29—84.)



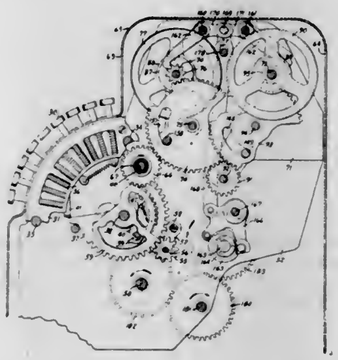
1. A fixture for adjusting brakes comprising, in combination, a part having a surface simulating the braking surface of a brake drum and arranged to be centrally mounted on a wheel spindle, and devices carried thereby for forcing the shoes of a brake firmly against said surface while the anchors of said shoes are being tightened.

1,812,019. CUSHION FILLER. JESSE R. POWELL, MADISON L. SHEELY, and ROBERT SMITH, Chicago, Ill., assignors to Armour & Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 15, 1928. Serial No. 326,176. 8 Claims. (Cl. 154—54.)



1. A pad for insertion in the pipe of a cushion, consisting of a core of curled hair, a covering of less resilient but softer material, and means for preventing the curled hair from working through the softer material.

1,812,020. CASH REGISTER. WILLIAM H. ROBERTSON, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Aug. 31, 1928. Serial No. 303,249. 14 Claims. (Cl. 235—23.)

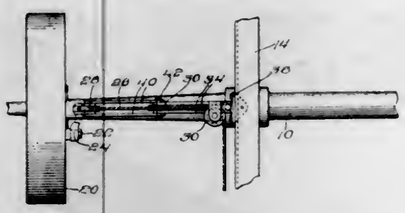


1. In a machine of the class described, the combination with a plurality of indicator-supporting shafts; of a set of indicators mounted on each shaft; an auxiliary shaft associated with each indicator-supporting shaft; a set of gear members mounted on each auxiliary shaft to drive their respective indicators on the indicator-supporting shafts; means to differentially position one set of gear members; and means to transmit motion from the set of differentially positioned gear members to the remaining gear members.

1,812,021. BRAKE OPERATING CONNECTION. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 2, 1928. Serial No. 274,531. 7 Claims. (Cl. 188—194.)

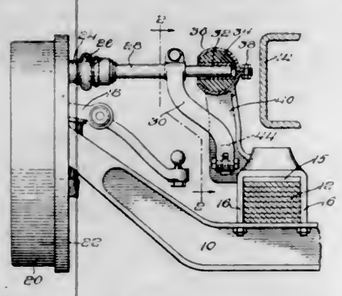
1. A vehicle having an axle and a frame supported by a spring upon the axle and having a wheel swiveled at one

end of the axle and provided with a brake, and comprising, in combination therewith, a linkage connecting the frame and the end of the axle adjacent the brake and an operating



connection for the brake supported by the linkage, the linkage being arranged to maintain the effective length of said connection substantially constant regardless of the deflections of the spring.

1,812,022. BRAKE-OPERATING MECHANISM. ROY S. SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 16, 1928. Serial No. 278,099. 7 Claims. (Cl. 188—194.)

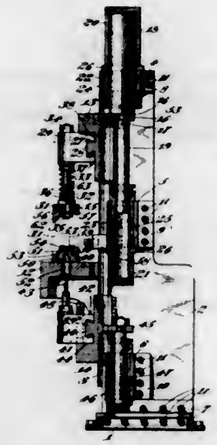


1. Operating mechanism for a front automobile brake comprising an operating shaft having a universal joint at one end and a ball and socket supporting the other end, the ball being resilient and slidably receiving the shaft.

1,812,023. PUNCHING AND UPSETTING MACHINE. ELMER S. SEAVEY, Bethlehem, Pa., assignor to Bethlehem Steel Company. Original application filed Mar. 10, 1926, Serial No. 93,614. Divided and this application filed June 1, 1927. Serial No. 195,619. 16 Claims. (Cl. 29—34.)

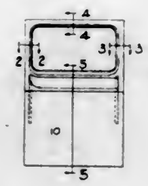
1. In a machine for perforating metal shapes, the combination of a stationary frame, slide-ways thereon, a work-receiving table mounted upon the frame, a carriage mounted upon the slide-ways on either side of the work-receiving table, a plurality of punches adjustably mounted on each carriage, the axes of the punches on one carriage at one side of the work-receiving table being in alignment with the axes of the punches on the carriage at the opposite side of the work-receiving table, means for simultaneously advancing both carriages toward each other until the ends of the punches contact with each other and for partially retracting one carriage by continued movement of the other carriage, and means for retracting the carriages.

15. In a machine for perforating metal shapes, the combination of a pair of opposed reciprocating carriages, a plurality of punches adjustably mounted on each carriage in spaced relation to each other, the punches mounted on one carriage being in alignment with the punches mounted on the opposite carriage, a shoulder formed on the punches mounted on one carriage, means for adjusting the punches on the carriages in spaced relation to each other, a stationary die mounted between the carriages, a resiliently mounted movable die carried by one of the carriages and cooperating with the stationary die to clamp a shape to be punched, perforations through the dies in alignment with the punches, the perforations in the die



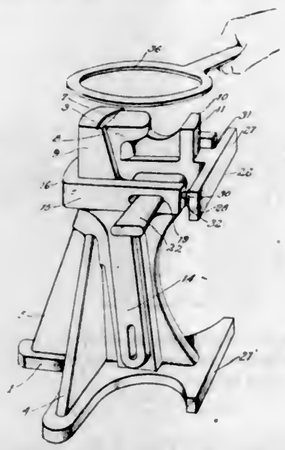
through which the punches having a shoulder pass being of larger diameter than the perforations in the die on the opposite side of the table, a recess around each perforation of larger diameter on the inside of the die in contact with the shape to be punched, means for advancing the punches and perforating the shape by extruding the metal in forming the holes around the holes punched into the recesses, means for advancing the punches having the shoulders until they engage and compress the extruded metal around the holes punched, and means for retracting the carriages.

1,812,024. CONSTRUCTION AND METHOD OF ASSEMBLY OF SHEET METAL DOORS. GEORGE TRAUTVETTER, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 27, 1928. Serial No. 288,712. 8 Claims. (Cl. 296—44.)



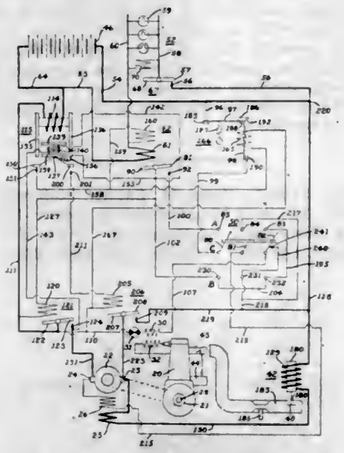
1. A unitary sub-assembly for sheet metal doors having a window opening therein comprising a unitary face panel stamping extending around the window opening, combined with a unitary glass run channel stamping also extending around the window opening and forming one side of a glass run, and joined to the panel in the margin of the opening.

1,812,025. TOOL DRESSING FORM. FRED SWAN, Wichita, Kans., assignor to The Bridgeport Machine Company, Wichita, Kans., a Corporation of Delaware. Filed Jan. 8, 1929. Serial No. 331,141. 8 Claims. (Cl. 29—89.)



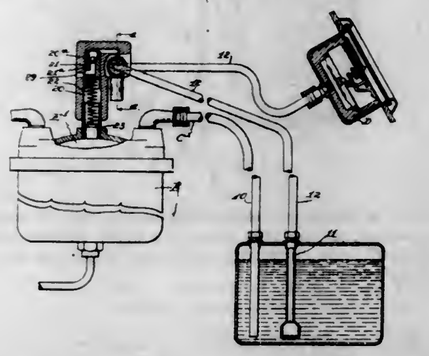
1. A tool dressing form comprising a casting, a tool engaging portion on the casting, a tool receiving rest at an angle to the face of the tool engaging portion, the casting having a relief groove at the angle of intersection of the outer face of the tool engaging portion and the tool rest and means for clamping the tool to the casting.

1,812,026. ELECTRICAL APPARATUS. WESLEY E. WENDT, Dayton, Ohio, assignor to Delco-Light Company, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 28, 1930. Serial No. 432,094. 3 Claims. (Cl. 290—30.)



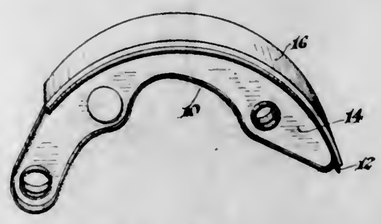
1. An electrical generating system comprising in combination an internal combustion engine, a work circuit, a generator having a field, said generator being adapted to operate as a motor for cranking the engine and as a generator for supplying current to the work circuit when driven by the engine, and electrical apparatus adapted to be positioned for rendering the engine operative upon a demand for current of a predetermined value by the work circuit, said electrical apparatus having a second position whereby said engine may be rendered operative irrespective of a demand for current by said work circuit, and said electrical apparatus having a third position for interrupting the generator field while maintaining said engine operative.

1,812,027. PUMPING MEANS FOR GASOLINE GAUGES. LEONARD H. WHEELER, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Refiled for abandoned application Serial No. 182,698, filed May 11, 1927. This application filed May 19, 1930. Serial No. 454,111. 4 Claims. (Cl. 230—50.)



1. An air pumping device for the purpose indicated consisting of a body having a cavity adapted for connection with a source of intermittent suction; a movable member for expanding and reducing the cavity; means yieldingly holding said member against movement in response to the suction through said connection, said body having an outlet from the cavity adapted for connection to transmit air pressure from the pumping device, and having an air inlet to the cavity positioned for admitting air thereto at the opposite side of the movable element from the suction connection, the passage from said air inlet to the outlet comprising a descending part succeeded by an ascending part forming a trap for liquid interposed in the line of pressure communicated from the pump to the outlet, and an air-permeable obstruction interposed between the trap and the outlet, and liquid occupying the trap to which said obstruction is impermeable.

1,812,028. BRAKE SHOE. STANLEY WHITWORTH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 19, 1929. Serial No. 379,352. 6 Claims. (Cl. 29—152.)

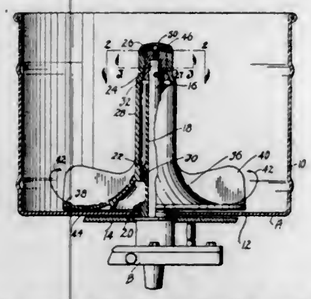


5. That method of manufacturing a brake shoe which comprises partially embedding, within an arcuate friction band, metallic inserts, and attaching a correspondingly shaped supporting rim to those portions of the metallic inserts which project from the body of the lining.

1,812,029. WASHING MACHINE DOLLY. DONALD P. WILSON, Omaha, Nebr., assignor to L. M. Decker Co., Omaha, Nebr. Filed Apr. 24, 1930. Serial No. 446,982. 3 Claims. (Cl. 259—101.)

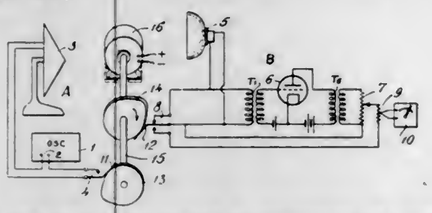
1. A dolly for washing machines comprising a central hub-shaped member open at its upper end, a bushing

mounted within said hub near its upper end, means for sealing the upper end of said hub, said last means being fastened to the bushing and serving also to retain said



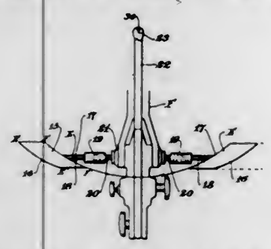
bushing in assembled relationship to the hub, an annular base formed on the hub having its upper surface curved downwardly and outwardly, and wings extending upwardly from said base.

1,812,030. ACOUSTOMETER. CLARENCE A. ANDREE, Madison, Wis., assignor to C. F. Burgess Laboratories, Inc., Madison, Wis., a Corporation of Delaware. Filed Sept. 13, 1929. Serial No. 392,350. 22 Claims. (Cl. 181—0.5.)



1. The step in the method of determining the period of reverberation of a room which comprises causing the average intensity of sound to be suitably indicated during a predetermined period of time when the sound is varying logarithmically.

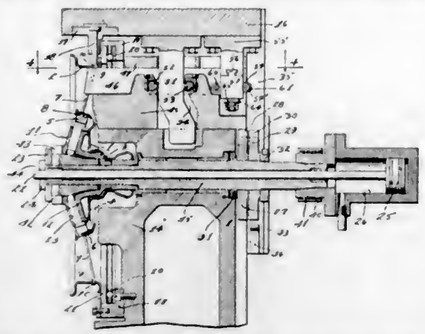
1,812,031. COMPENSATING CONDYLE CORD. ABNER G. BJORKLUND, St. Paul, Minn. Filed Nov. 16, 1927. Serial No. 233,596. 8 Claims. (Cl. 32—1.)



1. A compensating condyle cord including, a rod portion, and means on said rod adapted to indicate the point of marking of the condyle on a patient's face, said means being of a compensating nature to automatically locate the condyle axis in accordance with the actual condyle of a patient's jaw.

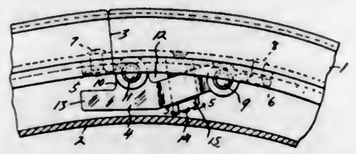
1,812,032. MACHINE FOR RIVETING SPOKES OF VEHICLE WIRE WHEELS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed July 18, 1927. Serial No. 206,757. 9 Claims. (Cl. 78—16.)

2. In a riveting machine for wire wheels, the combination with a base, of means for supporting a wheel assembly upon said base, a reciprocable member, means carried by said reciprocable member for riveting the spokes of the wheel assembly to the rim member thereof, and means ac-



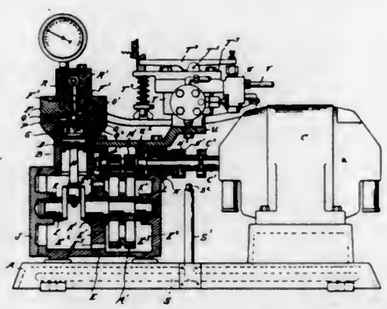
tuated by said reciprocable member for gripping the portions of the spokes adjacent to the rim member while the spokes are being riveted.

1,812,033. TIRE CARRYING RIM. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed July 16, 1928. Serial No. 293,150. 2 Claims. (Cl. 301—34.)



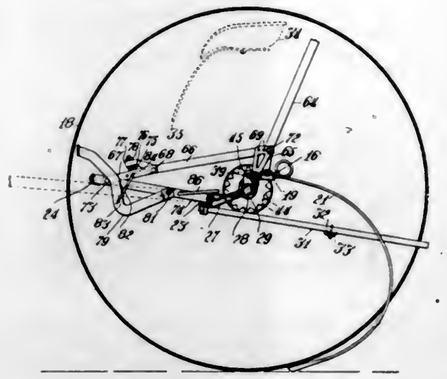
1. The combination with a transversely split rim, of a link pivotally connected to the rim ends and comprising resilient bars with an opening therebetween, and a stud extending inwardly from one rim end and adapted to extend through the opening between the bars, said stud having a lateral shoulder adapted to have a snap engagement with said link to secure the same in predetermined position relative to the stud.

1,812,034. PUMP. JOHN H. BROWN, Hollywood, Calif., assignor, by mesne assignments, to Instant-Ice Corporation, a Corporation of Delaware. Filed May 2, 1927. Serial No. 188,309. 1 Claim. (Cl. 230—234.)



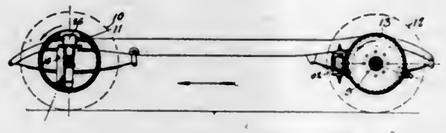
In a compressor, the combination of a crank case having a partition therein dividing the space enclosed into a crank chamber and a gear chamber, said partition having apertures affording communication between the chambers, the gear chamber also having an opening at the top, and a bracket member also forming a closure for said opening.

1,812,035. SULKY HAY RAKE. OSCAR F. CARLSON, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 26, 1927. Serial No. 178,535. Renewed Dec. 9, 1929. 20 Claims. (Cl. 56—391.)



3. In a sulky hay rake, the combination with a rake head carrying rake teeth, and a frame relative to which said rake head has swinging movement between gathering and dumping positions, of multiple link mechanism connected between said rake head and said frame, and a pair of toggle links connected between said frame and said link mechanism, one of said toggle links comprising a foot pedal for actuating said link mechanism.

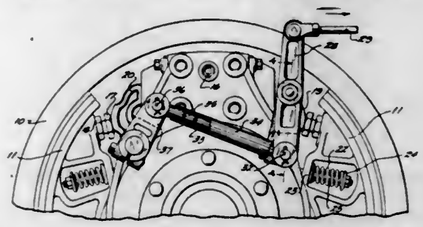
1,812,036. VEHICLE BRAKING APPARATUS. NIELS A. CHRISTENSEN, Milwaukee, Wis. Filed Dec. 15, 1924. Serial No. 755,988. 1 Claim. (Cl. 188—152.)



In vehicle braking apparatus, the combination with the front wheel and its brake drum, the rear wheel and its brake drum, of brake mechanism for said wheels, respectively, each brake mechanism including a fluid-pressure-operated motor, a brake engageable with its associated drum upon the actuation of said motor, and a support for each band including an anchor pin, the fluid-pressure-operated motors being of substantially equal capacity, that portion of the band of the front wheel on its advancing side between the anchor pin and its free end being less than that of its trailing side and having a less surface for braking engagement through self-application than that portion of the band for the rear wheel on its advancing side between its anchor pin and its free end, which advancing portion is greater than its trailing side, upon the forward travel of the vehicle so that for substantially equal pressure from said motors a greater braking force is applied to the rear wheel than to the front wheel.

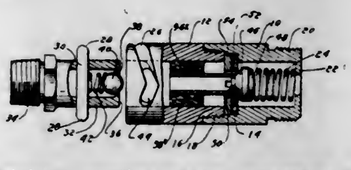
1,812,037. BRAKE MECHANISM. NIELS A. CHRISTENSEN, Cleveland, Ohio. Filed Apr. 30, 1928. Serial No. 273,900. Renewed Nov. 17, 1930. 3 Claims. (Cl. 188—106.)

1. In a wheel brake mechanism, the combination with the brake drum and brake members engageable therewith, of a pivoted lever associated with each brake member, an actuator associated with said levers for moving them to a brake application position, and means associated with the



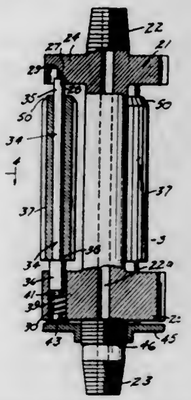
pivot shafts of said levers for moving them to a brake application position, said means including a lost motion connection permitting independent movement of said levers by said first-named actuator.

1,812,038. COUPLING. ERNEST W. DAVIS, Oak Park, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Original application filed Mar. 18, 1926, Serial No. 95,688. Divided and this application filed May 12, 1927. Serial No. 190,696. 9 Claims. (Cl. 284—19.)



2. A lubricant coupling member comprising a sleeve having an inlet end and an outlet end, a check valve element intermediate said ends, a seat for said valve, a spring pressing said valve toward its seat, a sealing element comprising a cork cylinder compressed into and having a friction fit in the outlet end of said sleeve, and a stem carried by one of said elements and having contact engagement with the other.

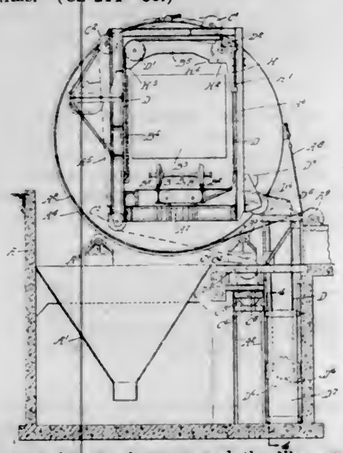
1,812,039. UNDERREAMER. GROVER C. DEAKINS, Anaheim, Calif., assignor, by mesne assignments, to John Grant, Los Angeles, Calif. Filed Dec. 6, 1927. Serial No. 238,016. 20 Claims. (Cl. 255—75.)



1. An underreamer comprising: a body; flanges formed on said body; an extension extending from said body; a member slidable on said extension; a cutter support carried by said body, one end of said cutter support engaging an inclined face in one of said flanges and having

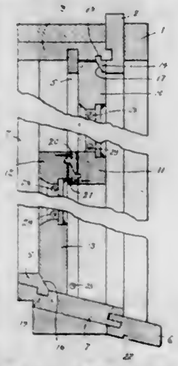
an opposite end portion passing through the other of said flanges, said cutter support having a retracted and extended position, the end of said cutter support being swung outward by said inclined face when it is moved into extended position, and the opposite end of said cutter support being supported by said slidable member so as to move substantially parallel to the axis of said body; means for actuating said slidable member to move said cutter support from retracted to extended position; and a cutter carried by said cutter support.

1,812,040. EXTERNAL COUNTERWEIGHT FOR CAR DUMPERS. WILLARD E. ERICKSON, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 8, 1927. Serial No. 159,802. 11 Claims. (Cl. 214—55.)



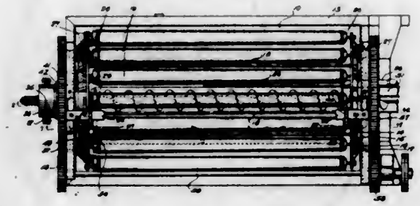
1. A clamp for car dumpers and the like comprising a vertical track, a carriage adapted to slide vertically therealong having a car engaging shoulder, a clamp beam pivoted on the carriage extending across the car and having a shoulder adapted to engage the opposed side of the car, positive means for limiting the rotary movement of the clamp beam with respect to the sliding carriage to permit the car engaging shoulder on the end of the beam when in the inoperative position to occupy a position below the car engaging shoulder on the carriage, means for raising and lowering the clamp connected directly to the carriage and means for locking the clamp comprising a cable and sheaves over which the cable travels one on the end of the beam, the other on the carriage.

1,812,041. WINDOW. PER H. ESBJORNSON, Duluth, Minn. Filed July 29, 1929. Serial No. 381,818. 1 Claim. (Cl. 20—52.)



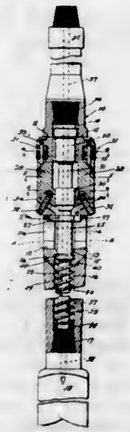
A double sash window assembly of the type described having means cooperatively engageable with the sashes for causing them to uniformly impinge the parting strip of the window, said means characterized by being scarfed into the supports therefor, and removably attached to said supports.

1,812,042. CONTINUOUS FILTER. ALBERT L. GENTER, Baltimore, Md., assignor to The Bartlett Hayward Company, Baltimore, Md., a Corporation of Maryland. Filed Oct. 2, 1929. Serial No. 396,625. 27 Claims. (Cl. 210—201.)



1. A filter apparatus comprising, in combination: a rotatable carrier; a plurality of horizontally extending filtering elements arranged around the circumference of the carrier, said filter elements being separated from each other to receive filtered material and filtrate on substantially their whole outer area; a tank for material to be filtered through which the filter elements pass as the carrier is rotated; and means for rotating said carrier with a progressive oscillatory movement.

1,812,043. REAMER AND UNDERREAMER. JOHN GRANT, Los Angeles, Calif. Filed July 19, 1927. Serial No. 206,817. 9 Claims. (Cl. 255—75.)

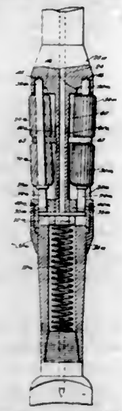


1. In a well reamer, the combination of a hollow tubular body with longitudinally slotted walls, a removable mandrel within the body, and cutters removably mounted in and filling the wall slots longitudinally and bearing inwardly against the mandrel, the cutters having flanges bearing outwardly against the inner wall surface of the body and the body wall slots having enlargements at one end to allow outward removal of the flange.

1,812,044. EXPANDING UNDERREAMER. JOHN GRANT, Los Angeles, Calif. Filed July 31, 1928. Serial No. 296,597. 12 Claims. (Cl. 255—75.)

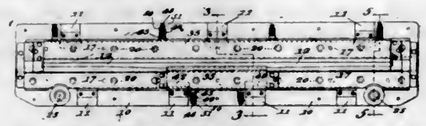
1. An expansive reamer, comprising the combination of a vertically slotted body, a vertically extending cutter located in the body slot, mounting means for the lower end of the cutter on the body allowing vertical movement and oscillatory movement of the cutter, coacting means

on the body and on the upper end of the cutter acting to cause outward tilting movement of the upper end of



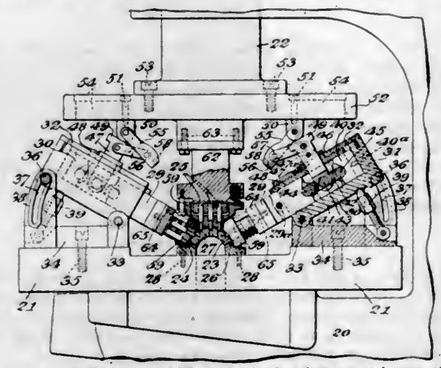
the cutter upon upward movement thereof, and a back bearing for the cutter intermediate its ends inwardly against the body.

1,812,045. APPARATUS FOR SHAPING SHEET METAL. OTTO J. GROEHN, Grosse Pointe Park, and LAWRENCE S. LAMB, Grosse Pointe, Mich., assignors to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Original application filed Dec. 28, 1927, Serial No. 243,030, Patent No. 1,708,615, dated Apr. 9, 1929. Divided and this application filed Feb. 8, 1929. Serial No. 338,466. 3 Claims. (Cl. 153—13.)



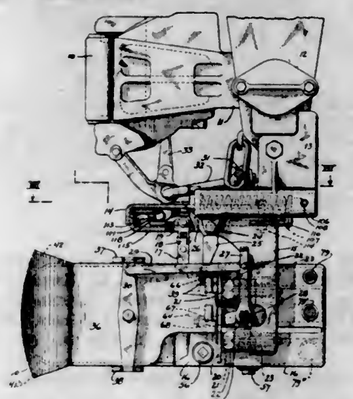
1. In an apparatus for shaping sheet metal previously bent with a flange, the combination of a member for supporting the body of said bent metal, a mandrel movable towards said member against the body of the metal, a die movable in a path inclined to said member, means for movably supporting said die, and means for urging said die simultaneously in perpendicular directions thereby imparting a resultant movement thereto in a direction inclined to said member to move said flange against said mandrel and the body of the metal on said member.

1,812,046. DIE PRESS. OTTO J. GROEHN, Grosse Pointe Park, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed June 17, 1929. Serial No. 371,650. 10 Claims. (Cl. 153—34.)



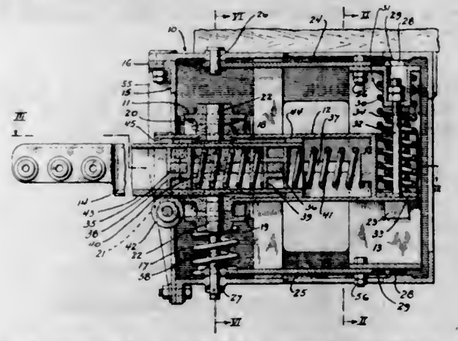
1. The combination with a press having a reciprocating ram, of dies having relatively movable cooperating members, and mechanism associated with said press for converting at least a portion of the pressure of said ram into pressure through said dies in a direction transverse to the direction of movement of said ram, said mechanism having provision for varying the angle of said transverse pressure.

1,812,047. TRAIN PIPE COUPLER. EDWARD O. HERMANN, Mill Valley, Calif., assignor to Cobb Connector Company, Los Angeles, Calif., a Corporation of Arizona. Filed Oct. 18, 1927. Serial No. 226,878. 15 Claims. (Cl. 284—12.)



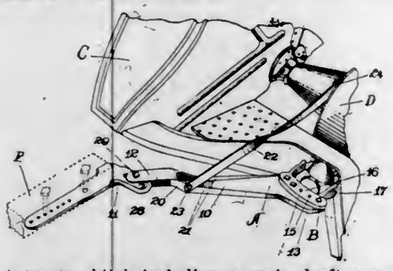
1. In a train pipe coupler system, a coupler head having ports adapted to cooperate with similar ports upon a cooperating coupler head, a fluid pressure responsive means adapted to force said heads into sealed engagement with the ports of one head in register with the ports of the other head, a valve adapted to control the flow of fluid to said pressure responsive means, means for automatically opening said valve to admit fluid pressure to said pressure responsive means when said ports are in alignment, and manually operable means for rendering said valve opening means inoperative.

1,812,048. TRAIN PIPE COUPLER SUPPORT. EDWARD O. HERMANN, Mill Valley, Calif., assignor to Cobb Connector Company, Los Angeles, Calif., a Corporation of Arizona. Filed Sept. 12, 1928. Serial No. 305,462. 8 Claims. (Cl. 285—58.)



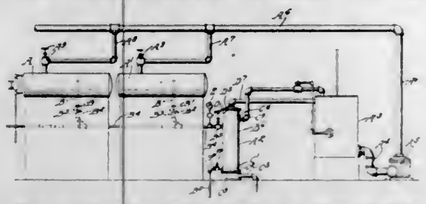
1. A hanger for train pipe couplers comprising an enclosed housing member adapted to be secured to a car frame, a vertically movable spring supported cradle mounted within said housing member, a horizontally movable spring centered cradle also mounted within said housing, and a drawbar pivotally connected to said vertically movable cradle and projecting into and cooperating with said horizontally movable cradle, whereby substantially universal movement may be imparted to said drawbar with respect to said hanger.

1,812,049. TRACTOR HITCH. ELLSWORTH W. JOHNSON, Hector, Minn., assignor to Midwest Motor Supply, Hector, Minn. Filed Sept. 23, 1927. Serial No. 221,505. 2 Claims. (Cl. 280—33.44.)



1. A tractor hitch including, a main draft arm having a formation to offset the draft point to extend to one side of the center of a tractor, a tongue connecting link, and a short projecting tongue and notched portion formed in said link to engage the tongue of an implement by said short tongue and notched portion.

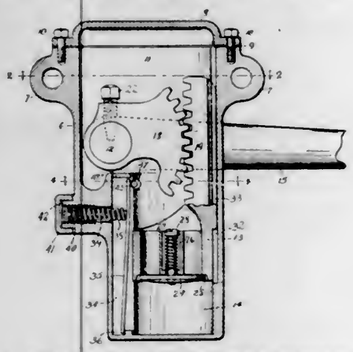
1,812,050. APPARATUS FOR CONTINUOUS BLOW DOWN FOR BOILERS. LOUIS D. KENSIO, Western Springs, Ill., assignor to National Aluminate Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 9, 1928. Serial No. 298,421. 12 Claims. (Cl. 122—1.)



1. The combination with a boiler, a blow-off pipe and feed-water supply means, of a heat exchanger tank through which the blow-off and supply water circulate, a vapor chamber in the tank wherein the pressure on the blow-off water is reduced, and a vapor pipe leading therefrom to the feed-water supply, a control valve for the vapor pipe and a float adapted to operate the valve responsive to the position of the water level in the vapor chamber.

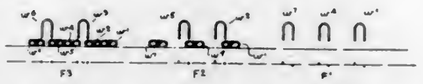
4. The combination with a plurality of boilers, of a blow-off pipe and a variable orifice control valve for each, a blow-off manifold to receive water from such pipes, a spring loaded adjustable blow-down valve controlling the flow of water from such manifold.

1,812,051. SHOCK ABSORBER. JAMES A. KNIGHT, Halifax, Nova Scotia, Canada. Filed May 28, 1928. Serial No. 281,076. 9 Claims. (Cl. 188—88.)



1. In a shock absorber of the class described, a fluid containing cylinder, a piston mounted therein, a longitudinal slot in the side of the cylinder to form a by-pass communicating with opposite sides of said piston, a movable plate adjacent said slot, said plate forming a gradual incline to vary the area of the by-pass, and resilient means to hold said plate in position.

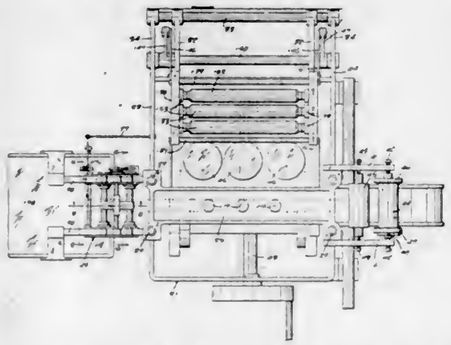
1,812,052. METHOD OF MAKING CHAINS AND APPARATUS THEREFOR. CHARLES M. LAMB, Pasadena, Calif., assignor to American Chain Company, Inc., a Corporation of New York. Filed Sept. 28, 1927. Serial No. 222,462. 48 Claims. (Cl. 59—18.)



35. A die for use in making a chain of the type including twisted links each composed of a length of wire having its ends bent toward its central portion, forming loops at each side of said central portion, said die having two adjacent series of arcuate cavities, the cavities of one series being staggered relatively to the cavities of the other series, with adjacent ends of the cavities in one series disposed near the middle of the arcs occupied by opposite cavities in the other series.

39. In a machine for fabricating chains, means for simultaneously forming a plurality of twisted links in spaced relation, and means for forming a twisted link in interlinking relation with said spaced links, connecting the same, to constitute a complete section of chain, by a series of strokes less than the total number of links.

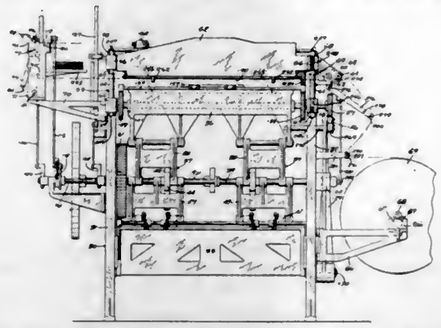
1,812,053. PRINTING PRESS. GEORGE E. LEE, Cleveland, Ohio, assignor, by mesne assignments, to Mahoning Savings and Trust Company, trustee, Youngstown, Ohio, a Corporation of Ohio. Filed Mar. 7, 1927. Serial No. 173,360. 54 Claims. (Cl. 101—197.)



1. In a printing press: impression mechanism for impressing a web; and means for feeding said web through said impression mechanism comprising a roller positioned just ahead of said impression mechanism and provided with sides for alining said web laterally, one of said sides being adjustable on said roller to provide for variations in web width, and said roller being axially adjustable as a unit to aline said web accurately with said impression mechanism.

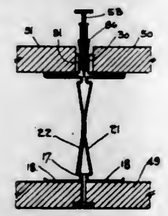
1,812,054. PRINTING PRESS. GEORGE E. LEE, Cleveland, Ohio, assignor, by mesne assignments, to Mahoning Savings and Trust Company, trustee, Youngstown, Ohio, a Corporation of Ohio. Filed May 2, 1927. Serial No. 188,327. 8 Claims. (Cl. 101—197.)

1. In a printing press: impression mechanism for impressing a web; relatively fixed means for severing said web transversely; and a power-driven feeding means unit, for drawing said web through; said impression mechanism and feeding said web to said severing means, movable as to position to vary the length of the path of said



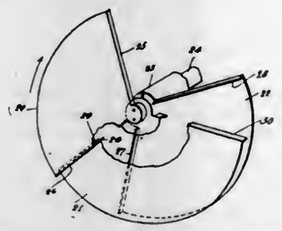
web from said impression mechanism to said severing means to register said severing means with said impression mechanism, all without any shifting of said severing means.

1,812,055. BUILDING CONSTRUCTION. JAMES H. MAHER, Montreal, Quebec, Canada. Filed Nov. 8, 1928. Serial No. 316,936. 3 Claims. (Cl. 72—46.)



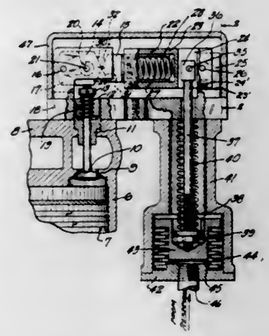
1. In building construction, surfacing boards and frame members and a beam of sheet metal forming aligning flanges folded inwardly from either side and projecting outwardly in contiguous grips to flaring edges and nails inserted in said grips and spreading them to sink said flaring edges in the boards.

1,812,056. DISSOLVING SHUTTER. GEORGE A. MITCHELL, Los Angeles, Calif., assignor to Mitchell Camera Corporation, a Corporation of Delaware. Filed Aug. 10, 1929. Serial No. 384,949. 5 Claims. (Cl. 88—19.3.)



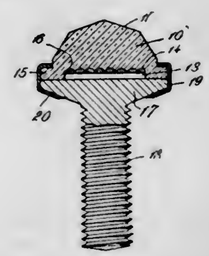
4. A shutter mechanism for a motion picture camera embodying two overlapping shutter leaves each less than 180 degrees in angular dimension mounted on one axis of rotation, means for rotating said two shutter leaves either in unison or differentially, a third shutter leaf mounted on the same axis of rotation as the first two shutter leaves, means confining the leading edge of said third leaf to float between the leading and trailing edges of one of said first two leaves, and means confining the trailing edge of said third leaf to float between the leading and trailing edges of the other of said first two leaves.

1,812,057. COMPRESSOR CONTROL APPARATUS. FRED NEALE, Cleveland, Ohio, assignor, by mesne assignments, to The Midland Steel Products Company, Cleveland, Ohio. Filed Mar. 28, 1927. Serial No. 179,066. 3 Claims. (Cl. 230—30.)



1. In a compressor control, the combination with the compressor and the pressure system supplied thereby, said compressor having an inlet valve controlling passage to atmosphere, of a pair of pivoted latches having inclined contacting surfaces and a lost motion connection relative to each other, spring means for holding said latches in engagement with each other under the action of said lost motion connection, one of said latches being operatively connected with the inlet valve of the compressor and moved by the other latch to hold said inlet valve in open position under maximum pressure conditions in said system, and means responsive to pressure changes in the system supplied by the compressor for moving the other latch to effect the movement of the first-named latch.

1,812,058. LUMINOUS DEVICE. JOHN E. PAUL, Newark, N. J., assignor to United States Radium Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 11, 1929. Serial No. 398,952. 2 Claims. (Cl. 240—2.25.)

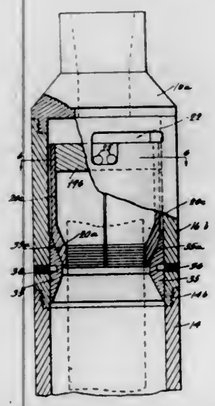


1. In a luminous locator the combination of a lens having a convex surface and a relatively flat surface opposite thereto, a plurality of facets on said convex surface, at least a portion of said flat surface being formed of contiguous indentations which form a light dispersing surface and a luminous material upon said dispersing surface.

1,812,059. COMBINATION TRIP SOCKET FOR FISHING TOOLS. ELMER E. PRYOR, Fullerton, Calif. Filed Feb. 6, 1929. Serial No. 337,859. 10 Claims. (Cl. 294—102.)

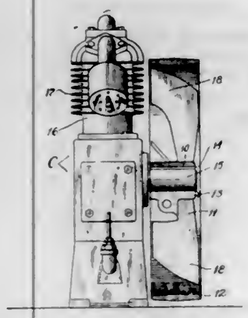
1. In a tool of the character described, a vertically extending barrel, a supporting member mounted within the barrel and vertically movable relative thereto, a gripping element loosely mounted on said member said element

being radially movable relative to said member at the point of connection therewith, and wedge means whereby rela-



tive vertical movement of said supporting member and the barrel causes said gripping element to move radially inward from the barrel.

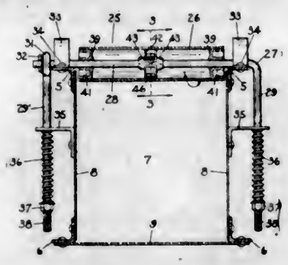
1,812,060. FAN STRUCTURE. FREDERICK J. RAYFIELD, Chicago, Ill., assignor to Champion Pneumatic Machinery Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 15, 1929. Serial No. 407,385. 1 Claim. (Cl. 230—135.)



A combined flywheel and fan comprising a hub, a rim, flat spokes radiating from said hub to said rim, said spokes being entirely within the side planes of said rim and being in planes at diagonals with said hub and rim, the outer sections of said spokes for a distance radially inwardly from their outer ends being of a width to extend from side to side of said rim to form vanes, said spokes at their inner ends extending only a short distance along said hub from one end thereof and gradually expanding in width to the outer sections.

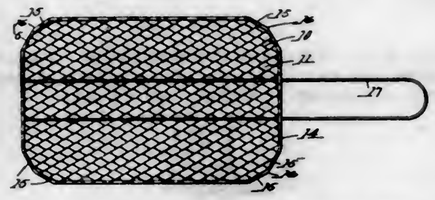
1,812,061. TUCKER FOR HAY PRESSES. ALVAH E. RUTTER, Ottumwa, Iowa, assignor to Dain Manufacturing Company of Iowa, Ottumwa, Iowa, a Corporation of Iowa. Filed Jan. 3, 1928. Serial No. 244,078. 8 Claims. (Cl. 100—30.)

1. A tucker adapted for association with the bale chamber of a hay press, comprising a hollow roller, non-rotatable means supporting said roller so that it can move inwardly and outwardly relatively to said bale chamber, heads closing the ends of said roller, and means carried



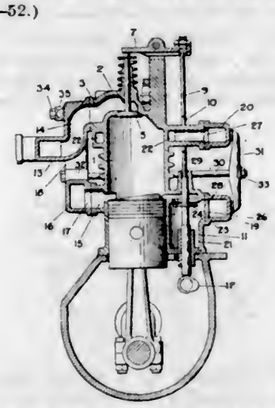
by said non-rotatable means confined within said roller between said heads cooperating with the roller for preventing rotation of the latter in one direction.

1,812,062. KITCHEN UTENSIL. EUGENE H. RYERSON, Worcester, Mass. Filed Aug. 22, 1929. Serial No. 387,742. 2 Claims. (Cl. 146—180.)



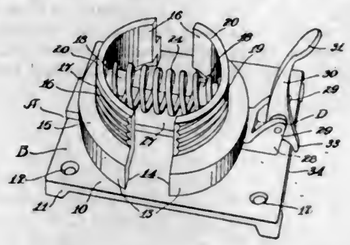
2. As an article of manufacture, a kitchen utensil, comprising a rectangular frame having sides and ends in the same plane, and a piece of expanded metal welded at its edges to said frame and lying in a plane for use as a grater, the corners of said frame being bent out of the plane thereof to constitute legs for supporting the frame on a flat surface, so that it will be suitable for use as a supporting device as well as a grater.

1,812,063. ENGINE MANIFOLD CONSTRUCTION AND ARRANGEMENT. OWEN H. SPENCER, Indianapolis, Ind. Filed June 11, 1929. Serial No. 369,997. 3 Claims. (Cl. 123—52.)



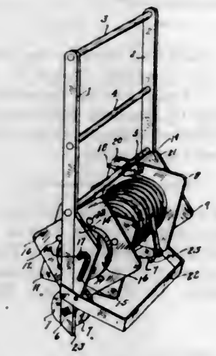
1. The combination with the cylinders of an engine, each having an exhaust port at one side thereof, and air receiving openings on the opposite side thereof from the exhaust port, of an exhaust manifold for cooperation with said exhaust ports, a pair of air conveying manifolds for cooperation with said air receiving openings, and means extending transversely of the engine for clamping all of said manifolds in engagement with the cylinders of an engine.

1,812,064. NOZZLE HOLDER. WALTER R. STEIN, Brainerd, Minn. Filed Apr. 6, 1929. Serial No. 353,082. 7 Claims. (Cl. 248—29.)



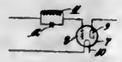
2. A support for a fire hose nozzle comprising, collar sections having threads for engaging the nozzle formed thereon, means for holding said sections spread apart against said nozzle, and means for moving said engaging sections together in a manner to release the fire hose nozzle virtually instantly from said holder.

1,812,065. HOSE REEL. ERIC SVADE, Portland, Oreg. Filed Dec. 11, 1928. Serial No. 325,216. 2 Claims. (Cl. 242—88.)



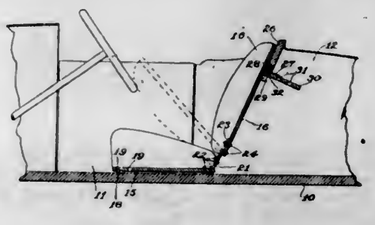
1. In a device of the class described, the combination of a pair of frame members, spreader bars disposed between the frame members and secured thereto, gusset plates secured to the lower ends of the frame members, said plates having hook shaped slots, stub shafts, supporting wheels disposed upon the stub shafts adjacent the lower ends of the frame members, a central shaft rotatably and slidably disposed between the frame members within the slots disposed within the gusset plates, a hose reel secured to the central shaft, said reel having pairs of end members to form V-shaped indentations which act as brakes when the central shaft is placed within the return of the slots and mounting wheels secured to the side of the hose reel in registerable alignment with the supporting wheels disposed adjacent the lower ends of the frame adapted to be placed into and out of engagement with the supporting wheels.

1,812,066. ELECTRIC DETECTOR AND FREQUENCY CHANGING SYSTEM. FREDERICK EMMONS TERMAN, Stanford University, Calif. Filed Mar. 7, 1927. Serial No. 173,419. 5 Claims. (Cl. 250—27.)



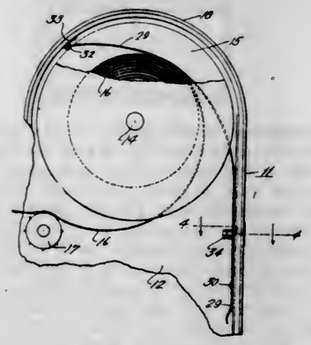
4. An apparatus of the class described comprising a vacuum tube having grid, filament and plate electrodes, a circuit interconnecting the grid and filament electrodes including means for passing a small direct current, means in said circuit for bringing said circuit in resonance with the rectified current to be produced, means in said circuit for by-passing the frequency to be converted, and means for imposing the rectified current from the plate circuit upon said first mentioned circuit.

1,812,067. VEHICLE SEAT. MILLARD H. TONCRAY, Detroit, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 9, 1928. Serial No. 253,067. 3 Claims. (Cl. 296—65.)



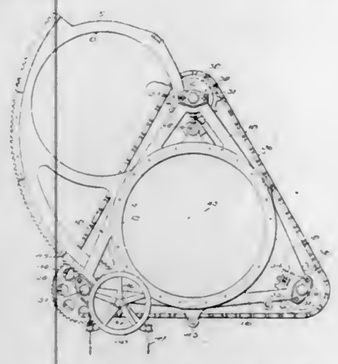
1. In a vehicle body, in combination, an open passenger compartment and a closed storage compartment, a ledge projecting from the edge of said storage compartment, a seat detachable as a unit from said passenger compartment and having a seat bottom and a seat back pivotally secured together, said seat bottom having openings therein, studs on the floor of said body adapted to engage said openings, and an adjustable support on said ledge adapted to engage said seat back.

1,812,068. FOOTAGE INDICATOR FOR MOTION-PICTURE CAMERAS. ALEXANDER FERDINAND VICTOR, New York, N. Y. Filed May 17, 1929. Serial No. 363,767. 6 Claims. (Cl. 33—169.)



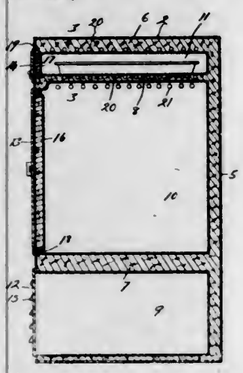
6. The combination with a film receiving roll, and a housing within which said roll is rotatably mounted, said housing being provided with a viewing aperture in one of its walls, of a guide structure extending upon opposite sides of said aperture, a scale plate slidable in said guide behind said aperture, and an elongated flat spring hingedly secured at one end to the housing and connected to said scale plate at the other end, an intermediate portion of said spring being bowed and adapted to contact with the film on the roll, whereby the unwinding of the film from the roll tends to straighten the spring and thereby changes the position of the scale with respect to the aperture.

1,812,069. VALVE. CARL J. WESTLING, Chicago, Ill. Filed Apr. 20, 1929. Serial No. 356,676. 18 Claims. (Cl. 251—51.)



1. In a valve, the combination of a valve member adapted for controlling a passage and a pair of seats for said valve member, one of said seats being removable while said valve is in service.

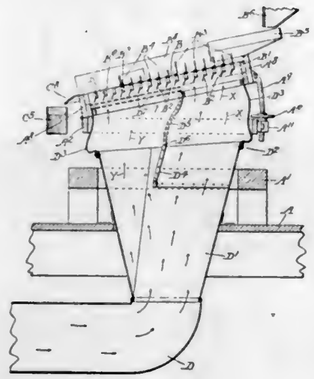
1,812,070. TRAY COMPARTMENT FOR REFRIGERATING CABINETS. THOMAS C. WHITEHEAD, Detroit, Mich. Filed Oct. 14, 1929. Serial No. 399,536. 1 Claim. (Cl. 62—95.)



In combination, a refrigerator cabinet having a front wall provided with vertically spaced openings and provided between said openings with a substantially horizontal partition that projects rearwardly from said front wall and cooperates with the top, back and side walls of the cabinet to form upper and lower chambers, the upper chamber being designed to receive ice trays, and the lower chamber being designed to receive food, and means for cooling said chambers including refrigerant tubing embedded in the top and side walls of the cabinet and in said partition, whereby such tubing encircles the ice tray chamber, and having coiled portions arranged in substantially a horizontal plane below said partition but above the opening to the food chamber whereby such coils may cool said chamber but are out of the path of food being placed therein or removed therefrom through the opening thereto in the front wall aforesaid of the cabinet.

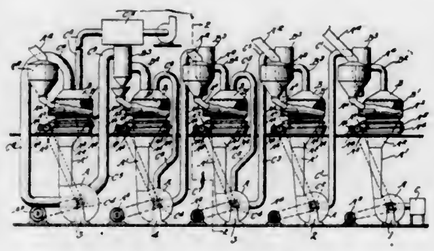
1,812,071. APPARATUS FOR CONTROLLING AIR IN DRY SEPARATING TABLES. RAY W. ARMS, Chicago, Ill., assignor to Roberts & Schaefer Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 30, 1926. Serial No. 84,834. 20 Claims. (Cl. 209—467.)

1. In an air separating table, a pervious deck, means for reciprocating it, means for discharging air upwardly through it, riffles projecting upwardly from it, extending in the direction of reciprocation and decreasing in height from one end to the other, means for feeding material to be treated to the deck and a plurality of high riffles of constant height throughout their length extending in the same direction as, of substantially greater height than, and located at the high end of, the tapering riffles.



8. In an air separating table, a pervious deck, means for discharging air upwardly though it, means for propelling a sheet of finely divided material across it, and means independent of the deck for concentrating a part of the air flow and discharging it through the deck to give an area of increased air activity.

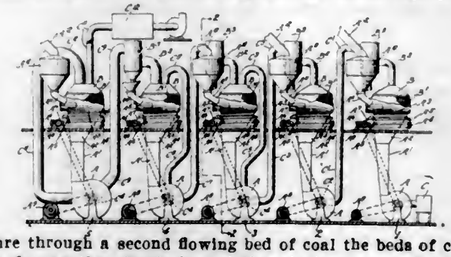
1,812,072. APPARATUS FOR DISTRIBUTING AND CIRCULATING AIR. GEORGE LYMAN ARMS, Chicago, Ill., assignor to Roberts and Schaefer Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1928. Serial No. 278,684. 16 Claims. (Cl. 209—502.)



1. The combination with a plurality of air cleaning tables all of which are pervious to air and impervious to solids of an air system therefor, comprising separate means for discharging air under pressure through the deck of each table, hoods overlying each table, a conduit leading from the hood of one table to the air discharging means for the next table.

1,812,073. METHOD OF DISTRIBUTING AND CIRCULATING AIR FOR AIR CLEANING TABLES. GEORGE LYMAN ARMS, Chicago, Ill., assignor to Roberts and Schaefer Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1928. Serial No. 278,685. 11 Claims. (Cl. 209—502.)

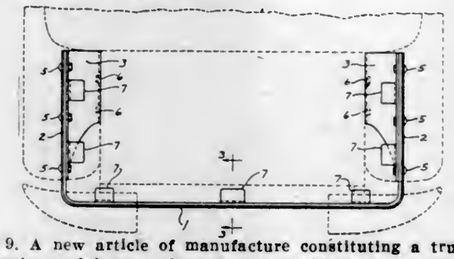
1. The process of cleaning coal by air which consists in forcing a high pressure stream of air through a flowing bed of coal adding a supply of additional air to the dust laden air above the bed, withdrawing the resultant air from above the bed and forcing such air under high pressure through a second flowing bed of coal the beds of coal as far as the circulation of the air is concerned being arranged in series.



1,812,074. EMULSION. FREDERICK WILLIAM ATACK, Kingston, Ontario, Canada, assignor to Industrial Processes Development, Limited, Toronto, Ontario, Canada, a Corporation of Canada. Filed Mar. 6, 1928, Serial No. 259,593, and in Great Britain Apr. 19, 1927. 3 Claims. (Cl. 87—5.)

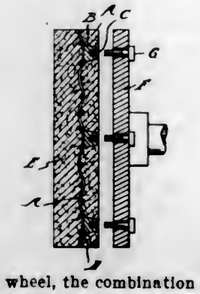
3. A stable liquid emulsion instantly miscible with water, containing water, a liquid grease solvent substantially immiscible with water, a primary emulsifying agent which is a sulphonated product derived from a glyceride and capable of forming a transient emulsion instantly miscible with water, and bentonite as a stabilizer of said emulsion.

1,812,075. COMBINED BUMPER AND TRUNK CARRIER. EROS V. BARKER, Bellevue, Ohio, assignor to The Bellevue Mfg. Company, Bellevue, Ohio, a Corporation of Ohio. Filed Nov. 26, 1930. Serial No. 498,325. 13 Claims. (Cl. 293—55.)



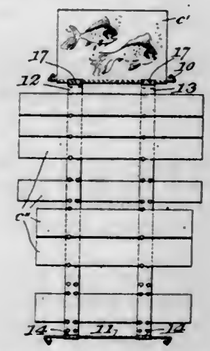
9. A new article of manufacture constituting a trunk carrier and bumper formed of a U-shaped bar, and an intermediate shock-absorbing member.

1,812,076. GRINDING WHEEL. ALAN P. BEEBE, Detroit, Mich., assignor to The Peninsular Grinding Wheel Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 22, 1930. Serial No. 483,618. 5 Claims. (Cl. 51—209.)



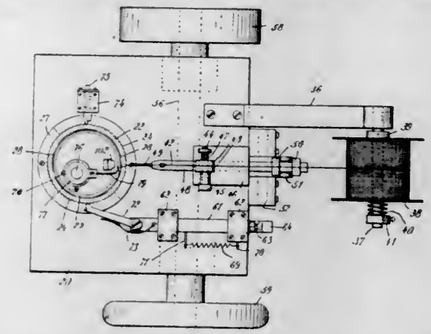
1. In a grinding wheel, the combination of an open mesh metallic reinforcement, an anchor member rigidly attached thereto and an abrasive body in which both of said members are imbedded.

1,812,077. CARD HOLDER. CONSTANTINE A. BELASH, Boston, Mass. Filed Apr. 3, 1930. Serial No. 441,380. 6 Claims. (Cl. 40—124.)



1. In a card holding device, a strip of sheet material, spaced pairs of ears on said strip, each ear being adapted to hold an edge of a card, one ear of each pair depending from the other ear and extending in the opposite direction to position adjacent cards in substantially abutting relation.

1,812,078. MESH ATTACHING MACHINE. RICHARD H. BERKLEY, Plainville, Mass., assignor to Whiting & Davis Company, a Corporation of Massachusetts. Filed June 6, 1925. Serial No. 35,433. 18 Claims. (Cl. 112—2.)

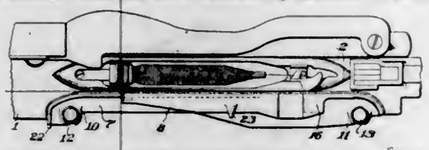


1. A machine for attaching link mesh fabric to a frame or other similar article having a series of apertures formed therein, which comprises the combination of a support for the frame and the piece of mesh to be attached thereto, the mesh being held with a row of links in registry with the apertures in the frame, means for holding a supply of wire, power-driven tools for drawing wire from the supply and inserting a loop of wire through each link and the aperture in registry therewith successively, means independent of the tools for bending the loop so inserted to a position in which it will be entered by the loop inserted through the next succeeding link and aperture, the said bending means disengaging the loop prior to the next loop-inserting operation of the said tools, and means for giving the support a step-by-step relative movement to said tools and said means, the tools and said means being actuated during the periods of rest of the said step-by-step relative movement.

1,812,079. REPLENISHING SHUTTLE BOXES. HORACE H. BURDETT, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed July 7, 1930. Serial No. 465,914. 10 Claims. (Cl. 139—183.)

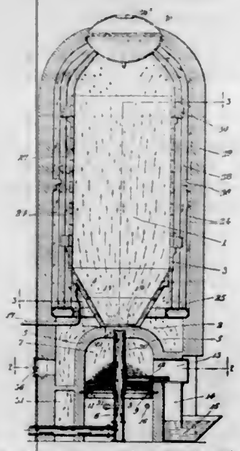
1. A shuttle box for looms having a front plate provided with an open ended thread slot extending longitudinally

thereof in line with the threads groove in a boxed shuttle and dividing the front plate into a lower anchoring member and an upper member supported at the outer end of and shorter than the lower anchoring member to provide



an upwardly open space above the inner end portion of the anchoring member that on the occurrence of a balloon in the thread as the shuttles comes to rest the thread will not be trapped between the shuttle and front plate of the shuttle box.

1,812,080. APPARATUS FOR BURNING GRANULATED COAL. WILLIAM B. CHAPMAN, Jackson Heights, N. Y. Filed Apr. 1, 1925. Serial No. 19,786. 3 Claims. (Cl. 122—235.)



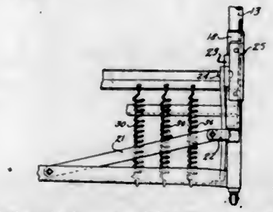
1. In combination an annular upstanding set of boiler tubes enclosing a combustion chamber, means for projecting a blast of air upwardly into said combustion chamber to suspend fuel therein, an auxiliary combustion chamber located beneath said first mentioned chamber, means for conducting the gases of combustion downwardly past said tubes from said first mentioned combustion chamber, and a gathering chamber for the spent gases surrounding said auxiliary chamber.

1,812,081. HAIR WAVING DEVICE. PAUL CHAUMIER, Dallas, Tex. Filed Jan. 30, 1931. Serial No. 512,353. 6 Claims. (Cl. 132—38.)



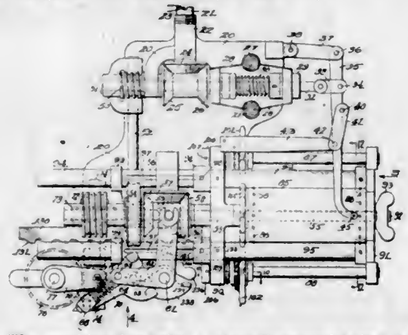
1. A hair waving device including a frame having a series of independently movable combs and a pair of stationary combs, the said independently movable combs being arranged for movement in concentric relationship with said stationary combs.

1,812,082. FOLDING BED. EDGAR COCKS, South Pasadena, Calif., assignor to Los Angeles Wall Bed Company, Los Angeles, Calif., a Corporation of California. Filed May 22, 1929. Serial No. 365,042. 17 Claims. (Cl. 5—136.)



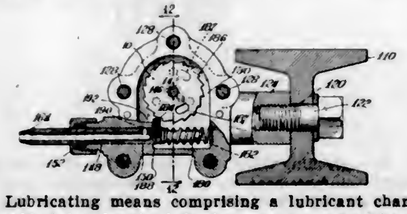
1. A folding bed, comprising in combination: a base; standards embodied in the base; a frame pivotally mounted on the standards to swing in a vertical arc from a vertical to a horizontal position, and vice versa, said frame presenting surfaces in frictional engagement with said standards; and yielding means connecting the base and the frame and adapted to progressively increase the frictional engagement between the standards and said surfaces by pressing the standards against said surfaces as the frame moves downward.

1,812,083. SPEED RECORDING MECHANISM. MARK H. DAMERELL, Worcester, Mass. Filed Jan. 6, 1928. Serial No. 244,986. 12 Claims. (Cl. 234—1.)



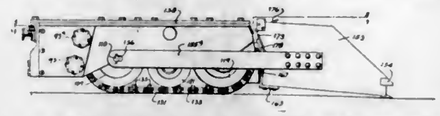
1. The combination with a recording mechanism having a record sheet, a recording element, means to cause said record sheet to travel longitudinally relative to said recording element, and means to reverse the direction of travel, of means to shift said sheet transversely relatively to said recording element at each reversal of travel of said sheet.

1,812,084. PRESSURE LUBRICATION SYSTEM. ERNEST W. DAVIS, Oak Park, Ill., assignor, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Apr. 11, 1925. Serial No. 22,491. 26 Claims. (Cl. 184—7.)



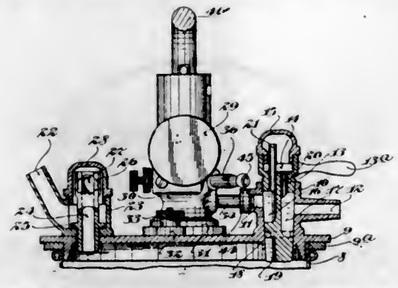
1. Lubricating means comprising a lubricant chamber, a movable inlet thereto, injection means operated by force exerted against said movable inlet, the force necessary to operate said injection means being greater than that necessary to move said inlet, a distributor for the lubricant in said chamber, and connections for step by step actuation of said distributor upon successive movements of said inlet.

1,812,085. AUTOMOTIVE MACHINE AND DISTANT CONTROL THEREFOR. KENNETH DAVIS, St. Benedict, Pa., assignor to Rembrandt Peale, St. Benedict, Pa., W. Sanders Davies, New York, N. Y., and William B. Oakes, Rutherford, N. J., as trustees. Filed Sept. 8, 1926. Serial No. 134,219. 8 Claims. (Cl. 180—9.2.)



1. A distant control for a dirigible, traction-propelled automotive machine having a plurality of traction devices including in combination a distant station, a plurality of fluid pressure conduits extending from the station to the traveling machine, and means at the station including a plurality of interconnected and simultaneously operable valves for controlling the action of the pressure fluid on the mechanism of the automotive machine to forwardly or reversely drive any one of the traction devices irrespective of the drive of the other traction devices.

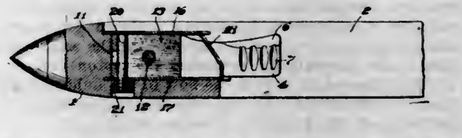
1,812,086. MILKING APPARATUS. LAURITS DINESEN, Minneapolis, Minn. Filed Feb. 21, 1929. Serial No. 341,639. 6 Claims. (Cl. 31—58.)



2. In a milking apparatus, a milk container having a removable cover, an upright valve casing on said cover having circumferentially spaced milk and air ports, a valve working in said casing and provided with milk and air ports for co-operation, respectively, with the milk and air ports of said casing, the milk port of said valve being in constant communication with the interior of said milk container, said valve having a chamber in its upper portion, the upper portion of said milk port of said valve being connected to the upper chamber of said valve, a tubular conduit leading from the upper portion of the air port of said valve to a point in said valve chamber materially above the bottom thereof, a pulsator applied on said cover and having an air nipple connected to the air port of said valve casing, a cluster of double-chambered teat cups, and flexible milk and air tubes connecting the inner and outer chambers of said teat cups, respectively to the milk port of said valve casing and to said pulsator.

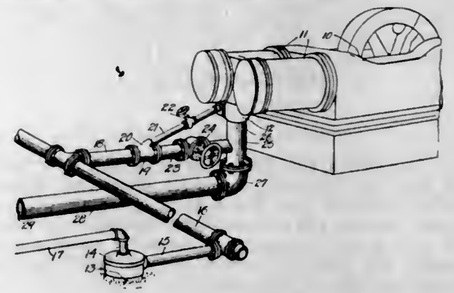
1,812,087. FILLING REPLENISHING SHUTTLE. FREDRIC E. DOUGLAS, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed May 14, 1930. Serial No. 452,359. 7 Claims. (Cl. 139—207.)

1. A filling replenishing shuttle having a bobbin holding spring comprising two bobbin holding jaws, and an integral shank connecting the jaws and provided with a slot in each leg of the shank which extends to and about the bend of the shank to form a yielding zone for the



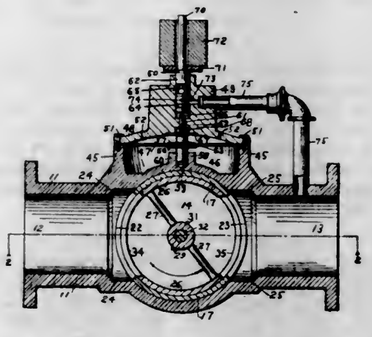
jaws during replenishment, a transverse bolt passing through the slots, and a bolt passing vertically through the shank inside the bend thereof.

1,812,088. MEANS FOR REGULATING A GAS MIXTURE FOR INTERNAL COMBUSTION ENGINES. IRWIN L. DUNN and LESLIE C. MINGUS, Tulsa, Okla., assignors, by mesne assignments, to Dunn & Lewis, Tulsa, Okla., a partnership composed of Irwin L. Dunn and James O. Lewis. Filed Aug. 2, 1926. Serial No. 126,565. 1 Claim. (Cl. 123—120.)



In combination with an internal combustion engine including a fuel intake chamber having an automatic valve, an air line having an intake open to atmosphere and communicating with said chamber, a gas line communicating with the air line between said intake and said chamber whereby gas is supplied to the air line to enrich the air with the gas between intake strokes of the engine, a branch leading from the gas line to said chamber, and valves in the gas line and branch for selectively controlling supply of gas to the air line or chamber.

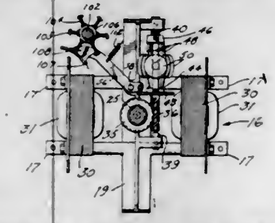
1,812,089. GAS MIXING APPARATUS. EUGENE OSCAR ENGELS, Saginaw, Mich., assignor to Baker Perkins Company, Saginaw, Mich., a Corporation of New York. Filed Oct. 27, 1926. Serial No. 144,535. 6 Claims. (Cl. 48—184.)



1. A gas mixing apparatus, comprising in combination a gas receiving chamber, means for supplying two or more

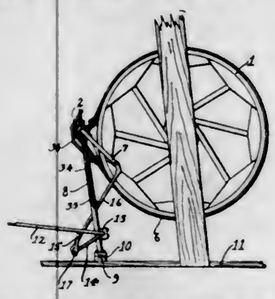
gases in predetermined proportions to the chamber, a valve for adjusting the quality of at least one of said gases admitted to the chamber, and means for adjusting the valve in accordance with the pressure of the gaseous mixture, comprising a cylinder, a piston mounted in the cylinder, a connection between the piston and valve for adjusting the valve, a pipe leading into the said cylinder, fluid under pressure for operating the piston therein, and a valve adapted to control the flow of the fluid under pressure into and out of the said cylinder and actuated by the pressure of the produced gaseous mixture.

1,812,090. PERIODIC CIRCUIT MAKER. WILLIAM A. GAMMACK and DONALD G. KNOX, Long Beach, Calif., assignors, by mesne assignments, to Jordan & Taylor, Inc., Los Angeles, Calif., a Corporation of California. Original application filed July 5, 1928, Serial No. 290,410. Divided and this application filed July 11, 1927. Serial No. 204,999. 14 Claims. (Cl. 200—81.)



1. In a switch, the combination of: a distributor carrying contacts; contacting means for successively contacting said contacts, said means breaking contact with one of said contacts and instantaneously making contact with the next of said contacts; and means for simultaneously varying the time of contact between said contacting means and each of said contacts.

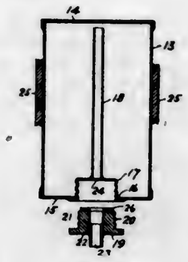
1,812,091. NONKICKING BRAKE APPARATUS. LEROY G. GATES, Bakersfield, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of California. Filed July 14, 1926. Serial No. 122,339. 27 Claims. (Cl. 188—77.)



3. In brake-apparatus, the combination of a brake member to frictionally engage a wheel, a tightener, a floating support pivotally supporting said tightener enabling the same to rock on its own axis, said tightener having a pair of wrists connected respectively with the ends of the brake member, and a brake lever rotatably mounted on the floating support and connected with the tightener to rock the same to apply the brake.

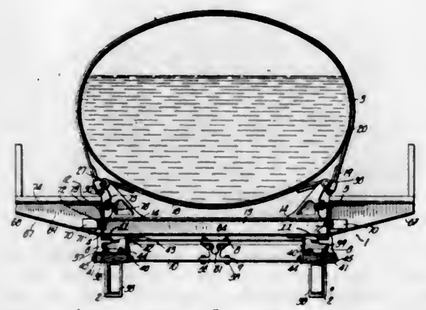
1,812,092. FUEL ADJUNCT DEVICE FOR GAS ENGINES. JAMES H. GRAVELL, Elkins Park, Pa., assignor to American Chemical Paint Company, Ambler, Pa., a Corporation of Delaware. Filed Nov. 12, 1926. Serial No. 148,092. 1 Claim. (Cl. 123—198.)

A device for introducing volatile fuel adjuncts into a gas engine comprising an intake conduit for a gas engine, a replaceable air tight chamber for holding fuel adjuncts, said chamber having an inwardly extending threaded neck provided with a seal having a puncturable spot, a tube



extending inwardly from said seal, an air tight passage connecting the cavities of said conduit and said chamber, and mechanical means coacting with the said threaded neck to secure said chamber to said conduit.

1,812,093. TRUCK TANK MOUNTING. OTTO N. GREDELL, Kansas City, Mo., assignor to Standard Steel Works, North Kansas City, Mo., a Corporation of Missouri. Filed Mar. 27, 1929. Serial No. 350,209. 13 Claims. (Cl. 280—5.)

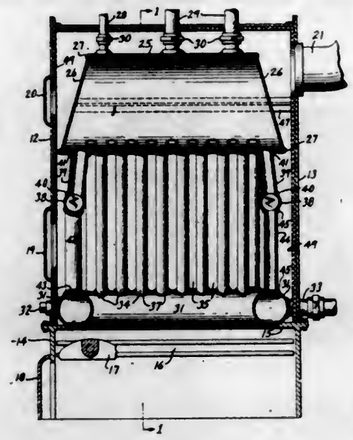


1. In a truck tank mounting, in combination with a tank and parallel sills of a truck chassis, a pair of supplemental sills supported by said chassis sills, bolsters extending between the supplemental sills and spaced downwardly from the upper edges of said sills, brackets supported by said bolsters, saddle members pivotally connected with said brackets for supporting the tank, and a band having ends connected to said brackets for anchoring the tank to the saddle members.

1,812,094. BOILER. LOUIS HARTUNG, Jr., Kearny, N. J. Filed July 11, 1929. Serial No. 377,527. 3 Claims. (Cl. 122—325.)

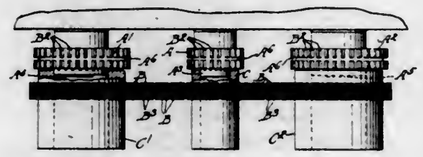
1. A device of the character described having in combination, a substantially rectangular casing, and a heating unit removably mounted in said casing, said heating unit comprising an upper drum of substantially large diameter located in the upper part of said casing, said upper drum having its ends slabbed off to substantially increase the space between the upper part of said upper drum and

the end walls of said casing for the free passage of the heat, and a lower drum of smaller diameter supported



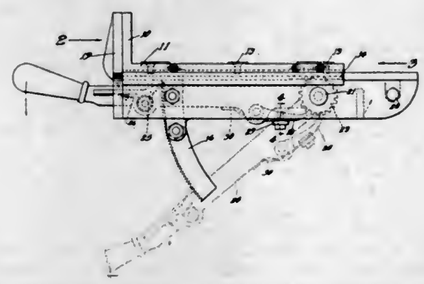
adjacent the walls of said casing, said drums being connected by a plurality of riser tubes, all the connections between said riser tubes and said drums being welded.

1,812,095. SILENT CHAIN DRIVE. HENRY E. HAYWARD, Indianapolis, Ind., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1929. Serial No. 352,677. 11 Claims. (Cl. 74—31.)



1. In a silent chain drive, a plurality of toothed peripherally grooved sprockets and a chain comprising a plurality of articulated toothed links in mesh with the sprocket teeth, means for preventing transverse movement of the chain comprising a single guide link, adapted to penetrate the sprocket and engage the ends of the sprocket teeth forming the sides of the groove.

1,812,096. QUICK ACTING VISE. ALBERT J. JAMESON, Worcester, Mass. Filed Oct. 20, 1930. Serial No. 489,775. 3 Claims. (Cl. 81—27.)



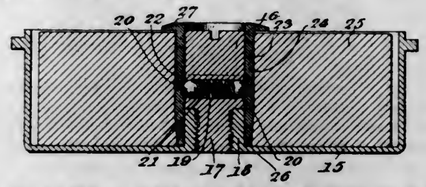
1. In a vise, the combination with a stationary jaw in vertical position and a plate on which said jaw is mounted and located horizontally, a horizontal rack on the bottom of said plate, a slide guided on the bottom of said plate and movable parallel with the direction of the rack, a second jaw mounted on said slide for cooperating with the first jaw, a pinion rotatably mounted on the slide and meshing with the rack, a handle oscillatably mounted on the slide, a pawl on the handle for engaging the teeth of the pinion, a plate carried by said handle and extending into a position to force the pawl out of the pinion teeth when the handle is moved to its limiting position and a spring for forcing the pawl into the teeth of the pinion when the pawl is free to move in that direction.

1,812,097. MEANS FOR TRANSPORTING VEHICLES AND THE LIKE. IRVING H. JUDD, Detroit, Mich., assignor to Whitehead & Kales Company, River Rouge, Mich., a Corporation of Michigan. Filed May 6, 1929. Serial No. 360,908. 12 Claims. (Cl. 280—33.1.)



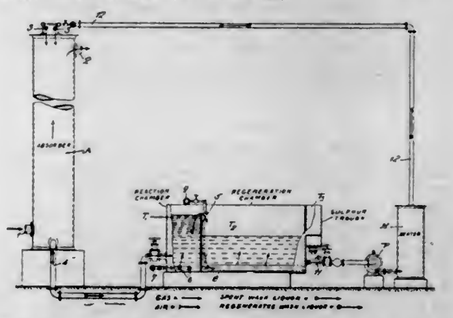
2. Transportation means of the class described including a trailer having two frames, one constituting an elevated extension of the other, and vehicle carrying means pivoted upon the elevated frame.

1,812,098. SEWING MACHINE SHUTTLE. NATHAN D. KEITH, Dedham, Mass., assignor to The West End Thread Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 2, 1930. Serial No. 472,550. 3 Claims. (Cl. 112—232.)



2. In a sewing machine shuttle, in combination, a thread-supporting post, a sleeve substantially fitting said post and having a tapered inner end adapted to be forced into the central opening of a thread cop and a flanged outer end adapted to engage the outer face of said cop, and cooperating detent means on said post and sleeve for yieldingly resisting both rotary and axial movement of the latter with respect to the former.

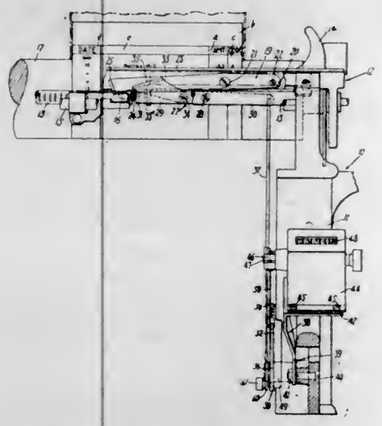
1,812,099. GAS PURIFICATION PROCESS AND APPARATUS. ALLISON A. KOHR, Maplewood, N. J., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 18, 1925. Serial No. 43,347. 9 Claims. (Cl. 23—225.)



5. In a gas purification process comprising a hydrogen-sulphide absorption-phase and an actification-phase where-

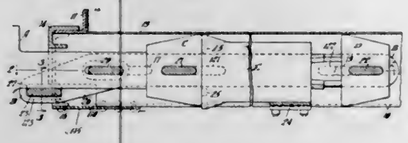
in an alkaline solution containing a compound of a metal whose sulphide is insoluble is circulated to absorb the hydrogen-sulphide impurities in the absorption phase and the spent liquor is regenerated in the actification phase, the improvement comprising causing the reactions between the alkaline solution and the metal compound for the formation of metallic sulphide to come to substantial completion before the spent liquor enters the actification phase.

1,812,100. TYPEWRITING MACHINE. ADOLPH G. KUPETZ, New Rochelle, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 25, 1924. Serial No. 739,807. 4 Claims. (Cl. 235—103.)



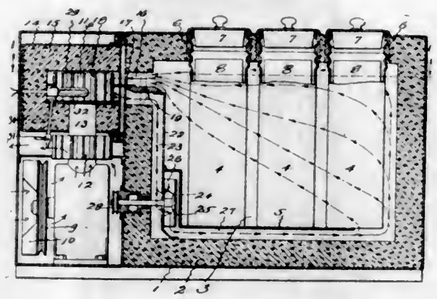
1. In a register-operating mechanism for a typewriter-carriage, a counter, a lever pivoted intermediate its ends, and having an end portion thereof provided with a pivoted extension, operating connections between the other end of the lever and the counter, and an obstruction element for use upon the carriage and effective during letter-feed movement of the carriage to pass beneath said extension; and upon return movement of the carriage to ride upon said extension to actuate said lever and thereby cause the counter to index.

1,812,101. RAILWAY DRAFT RIGGING. HARVEY J. LOUNSBURY, Glen Ellyn, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 9, 1927, Serial No. 238,752. Renewed Dec. 23, 1929. 5 Claims. (Cl. 213—66.)



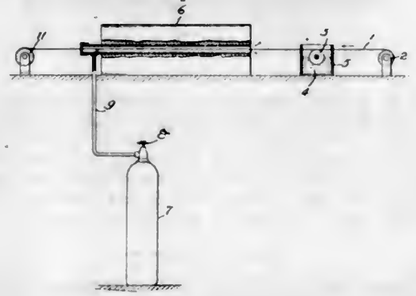
5. In a draft rigging for railway cars, the combination with a coupler; of yoke means including side arms having forwardly extending portions forming spaced walls between which the shank of the coupler is accommodated; a key extending through said side walls and coupler for connecting the latter to the yoke means, said side walls being extended forwardly of said keyed connection; and a supporting member connecting said side walls and engaging underneath and slidably supporting the shank of the coupler forwardly of the keyed connection thereof with the yoke.

1,812,102. REFRIGERATOR. IVAR LUNDGAARD, West Hartford, Conn., assignor, by mesne assignments, to Devon Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 8, 1926. Serial No. 100,485. 10 Claims. (Cl. 62—95.)



2. A refrigerator comprising a hermetically closed casing containing a refrigerating chamber and a food receiving chamber, said food chamber being accessible from the exterior but hermetically closed from the refrigerating chamber, a heat exchange engine with its cold head within said casing, and a gaseous refrigerating medium sealed within the refrigerating chamber and designed to circulate in good heat conductive relation with the wall of the food chamber and surface of said cold head.

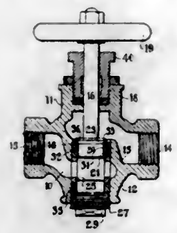
1,812,103. ELECTRON EMITTING DEVICE AND METHOD OF MAKING. DUNCAN MACRAE, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Sept. 11, 1922. Serial No. 587,270. 5 Claims. (Cl. 250—27.5.)



1. The method of preparing electron-emitting filamentary material comprising coating the same with a suspension containing a mixture of alkaline-earth carbonates and a soluble salt of an alkaline-earth metal and heating the same to cause a firm adherence on the filament.

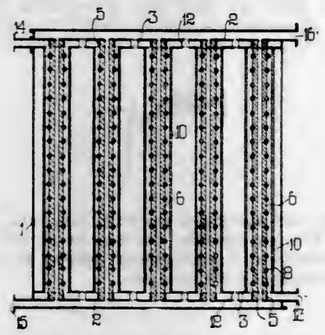
1,812,104. STOP VALVE FOR STEAM OR OTHER FLUIDS AND LIQUIDS. HAROLD LYALL MASON, London, England. Original application filed Nov. 24, 1926, Serial No. 150,590, and in Great Britain Dec. 1, 1925. Divided and this application filed Aug. 24, 1929. Serial No. 388,168. 4 Claims. (Cl. 251—167.)

1. A valve for steam and other fluids having an annular seating member in the form of a ring or washer supported and rendered fluid tight by an adjustable yielding packing compressible from without and forming the end of the packing unit and abutting on the diaphragm of the valve, the opening in the diaphragm being slightly enlarged to allow of the seating ring or washer overlapping the opening, the annular seating member and packing being so disposed relative to a gland that when the gland is



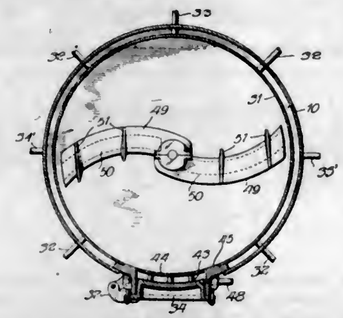
loosened or opened pressure on the seating member by movement in a direction of the valve member beyond its closing position is capable of partially or wholly displacing the seating member and its supporting packing.

1,812,105. APPARATUS FOR THE STERILIZATION OF LIQUIDS. WINCENTY MATZKA, London, England. Filed Sept. 4, 1926, Serial No. 133,692, and in Great Britain Sept. 5, 1925. 9 Claims. (Cl. 204—24.)



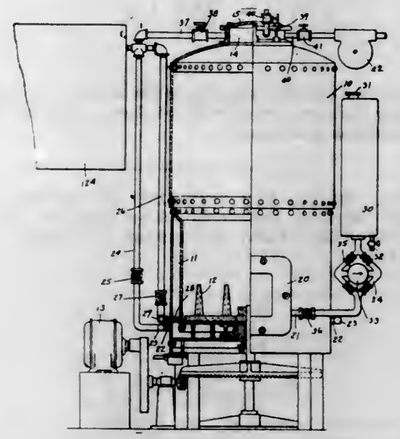
1. Apparatus for sterilization of liquids comprising a vessel, a plurality of tubes of a metal less electro-positive than hydrogen within the said vessel, means to circulate the liquid to be sterilized through said tubes, metal tubes more electro-positive than hydrogen coaxial therewith and forming cellular chambers within the said vessel, and means to circulate heating fluid through said chambers.

1,812,106. GARBAGE REDUCER. ERVIN W. MCCULLOUGH, Indianapolis, Ind. Filed July 23, 1923. Serial No. 653,403. 2 Claims. (Cl. 87—13.)



1. In a tank for cooking and draining organic material such as garbage, or the like, the combination of a side wall having an opening therein adjacent the tank bottom, a single metallic and perforated plate substantially conforming to the side wall conformation, a door for said opening in spaced relation to the plate, passage forming means communicating with said opening and forming a chamber with the door and plate and having restricted communication with the tank interior through said plate when the latter substantially completes the side wall, and means other than opening the door for draining said chamber, said plate including a plurality of dissimilar sized openings which extend entirely through the plate and provide the aforesaid restricted communication, said openings including a relatively large number of small openings and a smaller number of relatively larger openings.

1,812,107. GARBAGE TANKAGE EXTRACTION. ERVIN W. MCCULLOUGH, Indianapolis, Ind. Filed Oct. 17, 1925. Serial No. 63,163. 8 Claims. (Cl. 87—6.)



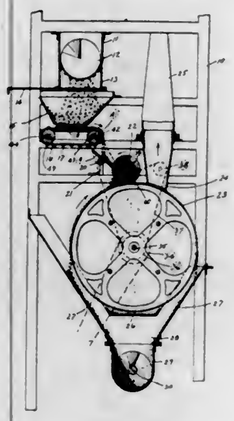
2. The process of garbage tankage extraction consisting of completely permeating in a container a mass of substantially stationary tankage normally non-percolatable in the mass and including a solvent removable component by injecting a solvent thereto from the bottom of the mass while stationary to eliminate packing thereof, to arrange said mass for subsequent solvent withdrawal and to pass completely through said mass, thereafter withdrawing the solvent from the entire mass by withdrawing the same from the bottom of said mass, and thereafter drying the substantially solvent free tankage in the same container.

7. A process of extraction as defined by claim 2, characterized by the addition of the application of steam pressure to the top of the mass for pressing the tankage and forcing the solvent from the bottom of said mass, and thereafter passing steam upwardly through the mass from the bottom of the mass for distilling the solvent in the mass and removing the same therefrom, the vaporized solvent passing upwardly through and from said mass.

1,812,108. SEPARATOR. ERVIN W. MCCULLOUGH, Indianapolis, Ind. Filed Nov. 1, 1926. Serial No. 145,388. 1 Claim. (Cl. 209—36.)

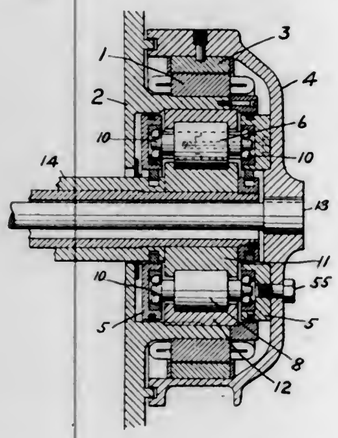
In a pneumatic separator the combination of a cylindrical, perforated, continuously rotating horizontal screen, an oppositely rotating parallel brush positioned immediately thereabove and slightly offset from the vertical plane including the screen axis and upon the approach side of the screen, a superposed pneumatic separating spout similarly positioned but oppositely offset and having its mouth terminating adjacent the screen surface, and means for

supplying a measured quantity of material to the brush whereby the latter particularizes the material and throws



the same in a direction opposite to the direction imparted thereto by the screen when projected thereon whereby four-way separation is obtained.

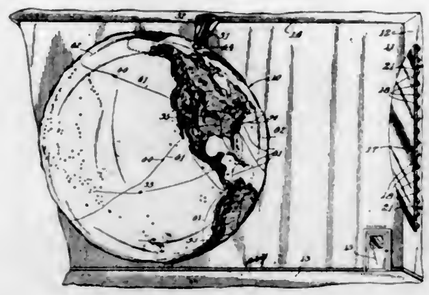
1,812,109. MEANS FOR SECURING ECCENTRIC MOTION. WILLIAM MESSINGER, Philadelphia, Pa. Filed May 14, 1930. Serial No. 452,261. 1 Claim. (Cl. 74—14.)



Mechanism of the type recited comprising in combination eccentrically arranged inner and outer circular races of which the outer one is fixed and of which the inner one gyrates around the axis of the fixed race, a cage rotatable about the axis of the fixed race as a center, rolling elements of different diameters arranged between the races and mounted in the cage for revolution about their own axes, the axes of the rolling elements being spaced different radial distances from the axis of the cage, and means for driving the cage.

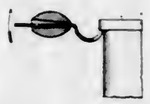
1,812,110. EDUCATIONAL DEVICE. JACOB MEYERHOFF, Chicago, Ill. Filed Aug. 13, 1930. Serial No. 474,899. 15 Claims. (Cl. 35—5.)

1. In an educational device in combination a globe simulating the earth, means for supporting and rotating said globe on an inclined axis, a relatively large source of light simulating the sun to produce the appearance of day and night on said globe upon rotation of the same, said globe having an irregular surface simulating the surface of the earth and bed of the ocean, means for causing the



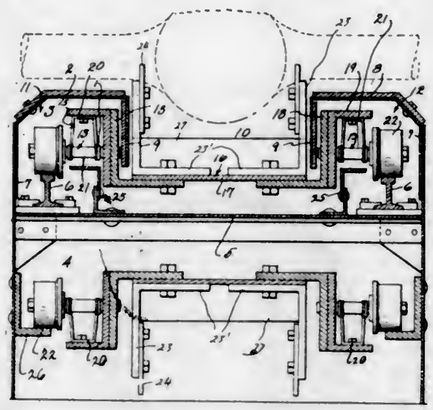
surface simulating the ocean bed to appear blue, means simulating automotive objects movably mounted on the globe and positively driven means for moving said objects along predetermined paths.

1,812,111. KEY CAN OPENER. HUGO MOCK, New York, N. Y. Filed Dec. 14, 1929. Serial No. 413,970. 7 Claims. (Cl. 220—52.)



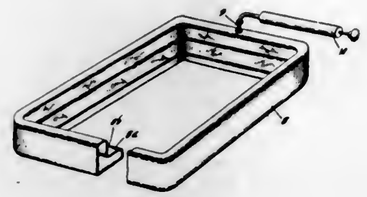
1. A key for opening a rip strip can, said key being provided with an aperture, the interior of said aperture being provided with engaging means adapted to engage and grip the tongue of a rip strip can.

1,812,112. PAINT GUARD FOR CONVEYERS. HORACE H. MORGAN, Detroit, Mich., assignor to Palmer-Bee Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 22, 1926. Serial No. 149,990. 7 Claims. (Cl. 198—189.)



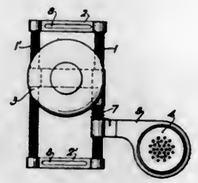
2. In a conveyer, the combination with spaced longitudinally extending chains including attachment members, cross bars carried by said chains, axles extending through said attachment members and cross bars and rollers upon said axles.

1,812,113. REFRIGERATING APPARATUS. OWEN F. NELSON, Grosse Pointe, Mich., assignor to Copeland Products, Incorporated, a Corporation of Michigan. Filed Apr. 1, 1929. Serial No. 351,812. 8 Claims. (Cl. 248—16.)



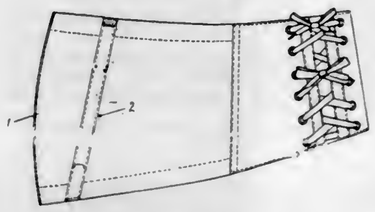
1. As a new article of manufacture, a shock-absorbing support, having the form of an endless pneumatic tube forming an opening and comprising a seat-forming portion projecting into said opening, and an upstanding portion adapted to embrace a seated member.

1,812,114. CHEEK MICROPHONE. ERNST NÖLKE, Berlin Halensee, Germany, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk Siemensstadt, near Berlin, Germany. Filed Sept. 23, 1929, Serial No. 394,433, and in Germany Jan. 22, 1929. 5 Claims. (Cl. 179—156.)



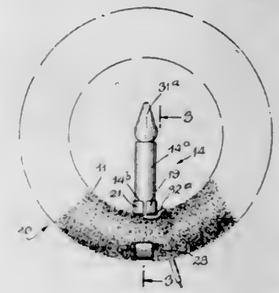
1. In combination with a support for connection with a head piece, a telephone receiver adjustably connected to said support, so that the receiver may be brought into close proximity with the ear of the wearer of the head piece, a telephone transmitter also adjustably connected to said support so that the transmitter may be brought against the cheek of the wearer, and auxiliary means for removing the transmitter away from the cheek while not in use.

1,812,115. ABDOMINAL SUPPORT. ISAAC M. PEASE, Cincinnati, Ohio, assignor to The Ohio Truss Company, a Corporation of Ohio. Filed Apr. 5, 1928. Serial No. 267,733. 1 Claim. (Cl. 2—41.)



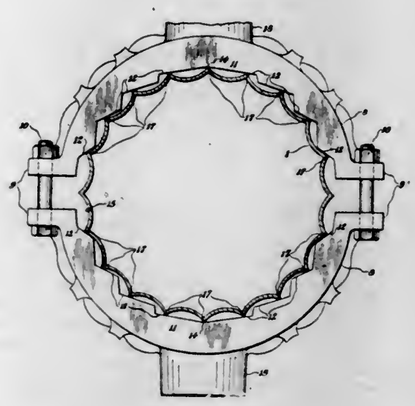
In combination with a belt of the character described, a stiffening rib for said belt, a tape stitched to said belt so as to form a channel thereon for said rib substantially coextensive therewith and having one of its ends open, a piece of material secured to said belt and extending into the open end of said channel and having its side edges stitched therein to form a pocket, said pocket being adapted to receive the end of the rib to retain same in said channel.

1,812,116. DECORATIVE DEVICE. LOUIS PROPP, New York, N. Y. Filed Apr. 4, 1930. Serial No. 441,503. 10 Claims. (Cl. 240—10.)



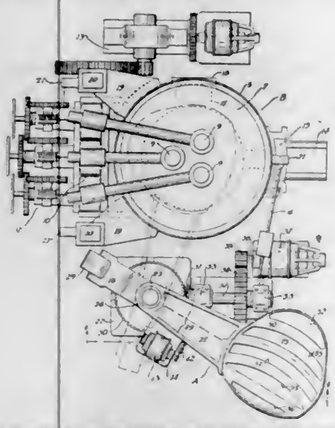
1. In combination, an annular body, a candle simulating a tubular member, and means for mounting said member on said body, said means comprising a member having a portion frictionally receiving one end of said tubular member and contacting a portion of said body and a hook portion extending partially around an opposite portion of said body, whereby said body is clamped between said first portion of said member and said hook portion of said member.

1,812,117. CLAMP COLLAR. HARRY O. RASTETTER, Canton, Ohio, assignor to The Union Metal Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Feb. 24, 1928. Serial No. 256,573. 6 Claims. (Cl. 287—52.03.)



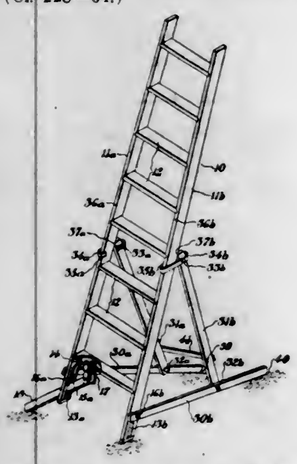
4. A clamp member for a fluted pole, having four or more faces for contacting with the pole, and all of said faces being located in planes converging to intersect each other at a line common to all of the planes.

1,812,118. METHOD OF AND APPARATUS FOR CHARGING ELECTRIC FURNACES. ALEXANDER G. RIPBERGER, Philo, Ohio. Filed Nov. 11, 1930. Serial No. 494,975. 7 Claims. (Cl. 266—1.5.)



1. The method of charging raw materials into an electric furnace which consists in creating a limited space between the roof and shell of the furnace, moving a charge of raw material horizontally into the space, and then vertically dropping the charge onto the furnace hearth.

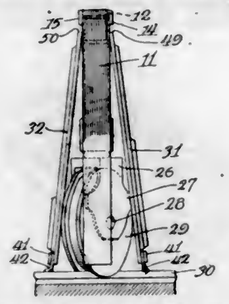
1,812,119. UNIVERSAL LADDER. JOHN C. RUSE, Hartville, Ohio, assignor of one-half to Albert Mori, Hartville, Ohio. Filed May 31, 1929. Serial No. 367,326. 10 Claims. (Cl. 228—64.)



1. A ladder including longitudinally extending transversely spaced side members, and transversely extending, longitudinally spaced step members connected at their ends with the side members, the side members and step members comprising a frame, a plurality of base supporting members extending laterally of the frame, means pivotally connecting one end of each base supporting member with the frame, and self-clamping means for individually maintaining each base supporting member in selective angular positions with respect to the frame.

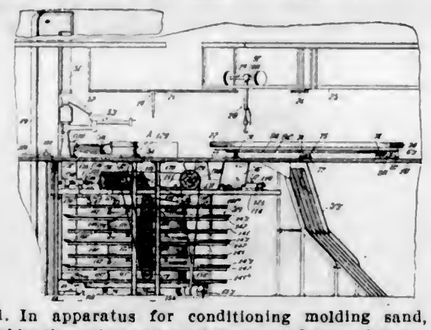
1,812,120. DOOR CONSTRUCTION. JOHN E. SCOTT, Danville, Ill., assignor to Allith-Prouty Company, Danville, Ill., a Corporation of Delaware. Filed May 24, 1930. Serial No. 455,202. 18 Claims. (Cl. 16—100.)

1. The combination of a door including a recess, a roller swiveled in said recess about an axis transverse to its axis of rotation for supporting the door along a trackway, a weathering plate covering said recess, and means for



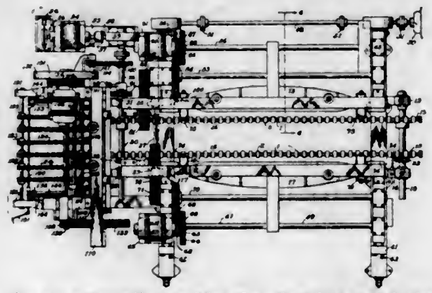
hingedly connecting said plate to the door along the upper edge of said recess for accommodating swiveling movements of said roller.

1,812,121. METHOD OF AND APPARATUS FOR MAKING CASTINGS AND HANDLING AND CONDITIONING THE MOLDING SAND THEREFOR. MAX SKLOVSKY, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 2, 1926. Serial No. 126,492. 35 Claims. (Cl. 22—217.)



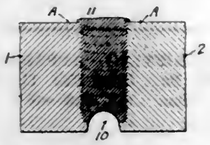
1. In apparatus for conditioning molding sand, the combination of a series of superposed imperforate trays all rotating together, and means for mixing the sand on said trays and for causing it to fall successively between said trays.

1,812,122. CONTINUOUS AUTOMATIC SHEARING MACHINE. FRANK H. STREINE, New Bremen, Ohio, assignor to The Streine Tool and Manufacturing Company, New Bremen, Ohio, a Corporation of Ohio. Filed Sept. 7, 1928. Serial No. 304,526. 18 Claims. (Cl. 164—48.)



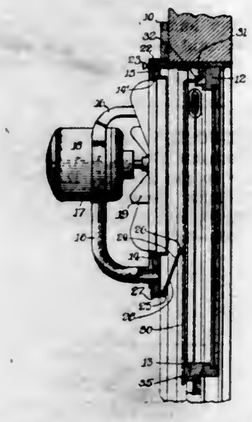
1. In an automatic machine for shearing metal sheets, shearing devices for trimming the side edges from said sheets, and caterpillar hold-down conveyors in parallelism with said shearing devices to longitudinally engage the sheets along their side edges to maintain them in correct alinement with the shearing devices at all times.

1,812,123. METHOD OF ELECTRICALLY WELDING THICK METAL PLATES. RICHARD STRESAU, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Feb. 12, 1929. Serial No. 339,293. 10 Claims. (Cl. 219—10.)



1. The method of electric arc welding thick metal plates which comprises providing a welding groove or recess between the edges to be welded, said groove being closed at the bottom and having its side walls diverging to compensate for the contraction of the fusing welding metal during the welding operation and to thereby maintain a substantially uniform minimum width of deposited metal, fusing welding metal into said groove to partially fill the same, then cutting away the metal which formed the bottom of the groove to provide an auxiliary welding groove, and finally completing the weld by filling said grooves with fused welding metal.

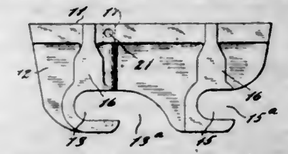
1,812,124. PORTABLE VENTILATING OUTFIT. ARTHUR G. SUTCLIFFE, Chicago, Ill., assignor to Ilg Electric Ventilating Company, Chicago, Ill., a Corporation of Louisiana. Original application filed Mar. 19, 1928, Serial No. 262,608. Divided and this application filed May 15, 1930. Serial No. 452,535. 3 Claims. (Cl. 98—94.)



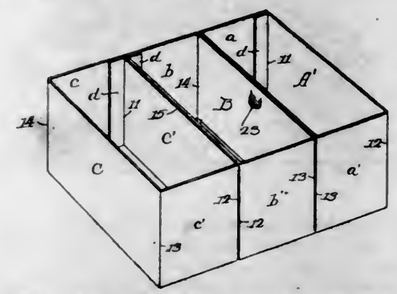
1. A portable ventilating appliance of the character described, comprising in combination a panel adapted to be mounted opposite a window and formed with an opening, a fan motor and fan mounted on said panel over said panel opening, means for mounting said panel on the window frame, means for raising and lowering the upper window sash extending downwardly behind said panel, and a closure strip hinged on the lower portion of said panel; the free edge of said closure strip slidably engaging said raising and lowering means and being thereby held out of contact with the upper sash as the latter is lowered and raised.

1,812,125. LINK FOR CHAIN GRATE STOKERS. JAMES EDWARD TRAINER, Barberton, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 14, 1922. Serial No. 600,796. 7 Claims. (Cl. 110—40.)

1. In a chain grate stoker, a link having a transverse open-mouthed slot extending longitudinally of the link and adapted to receive a stoker chain rod, said link having an opening extending from the fuel supporting edge of the link to said slot, and a metallic pin in said opening and extending across the slot for locking the link in position on the chain rod, said link having a transverse opening opposite the end of said pin, and the top of the pin extending laterally into said transverse opening to hold the pin in position.

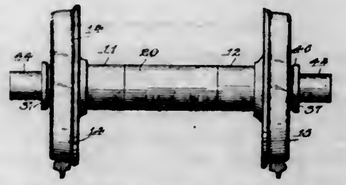


1,812,126. LINER AND DIVIDER FOR CARTONS. PAUL WALKER, Chicago, Ill., assignor to Morris Paper Mills, Morris, Ill., a Corporation of Illinois. Filed July 14, 1928. Serial No. 292,744. 13 Claims. (Cl. 229—15.)



1. A liner and divider for cartons, consisting of a plurality of collapsible cells open at top and bottom and each consisting of connected sides and ends individual thereto with the adjacent sides of adjacent cells integrally united.

1,812,127. WHEEL UNIT. ABRAM C. WISNER, Jackson, Mich., and CASPER L. REDFIELD, Chicago, Ill. Filed Feb. 12, 1930. Serial No. 427,665. 15 Claims. (Cl. 295—36.)



1. A tubular axle transversely divided into two sections, a wheel secured to each section, a tie extending thru said axle and serving to hold the sections together, and a rolling bearing between the tie and the part of the tubular axle where the sections come together.

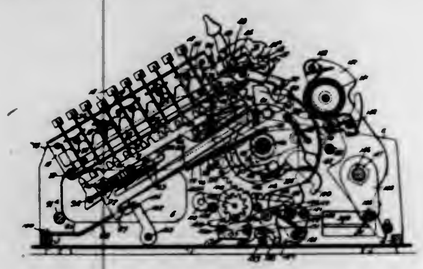
1,812,128. WHEEL UNIT. ABRAM C. WISNER, Jackson, Mich., and CASPER L. REDFIELD, Chicago, Ill. Filed Oct. 2, 1930. Serial No. 485,909. 10 Claims. (Cl. 295—36.)



1. A stationary axle having its ends adapted to enter the standard railway box without modification and to

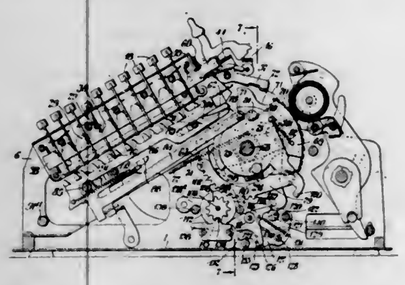
support the load resting on such boxes, a tubular axle transversely divided into two sections and surrounding the stationary axle between the parts which extend into the boxes, wheels secured to the outer ends of said sections, roller bearings inside of the hubs of the wheels and between the two axles, and rolling thrust bearings located between the roller bearings.

1,812,129. CALCULATING MECHANISM FOR ADDING AND LISTING MACHINES. GLENN J. BARRETT, Evanston, Ill., assignor to Portable Adding Machine Company, Chicago, Ill., a Corporation of Illinois. Original application filed Aug. 14, 1925, Serial No. 50,219. Divided and this application filed Oct. 7, 1927. Serial No. 224,616. 11 Claims. (Cl. 235—60.)



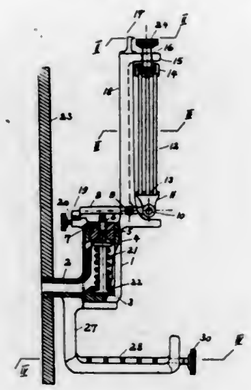
4. In a calculating machine, a main frame; an accumulator frame pivotally mounted in the main frame; an accumulator pinion in said shifting frame; a transfer-control member pivotally mounted on said shifting frame and having a stop portion normally located adjacent the pivotal axis of said frame in position to engage an adding sector irrespective of the position of said frame to limit movement of said sector in adding direction; a transfer trip rotatable with the pinion, a latch pivoted on the shifting frame to swing into and out of interlocked relation with the transfer control member; a spring connecting the latch with its associated control member, and stationary means on the main frame engageable by the latch during pinion-demeshing movement of the shifting frame.

1,812,130. ADDING AND LISTING MACHINE. GLENN J. BARRETT, Evanston, Ill., assignor to Portable Adding Machine Company, New York, N. Y., a Corporation of Illinois. Original application filed Aug. 14, 1925, Serial No. 50,219. Divided and this application filed Jan. 18, 1930. Serial No. 421,738. 8 Claims. (Cl. 235—60.)



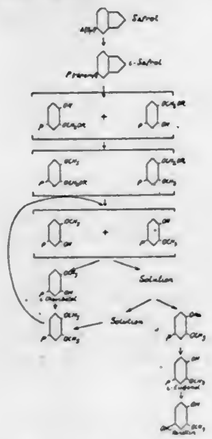
1. In a key-set adding machine, the combination with a transversely extending main shaft carrying adding sectors and type segments; a universal bail rotatably mounted on said main shaft and normally holding said adding sectors and type segments in normal position against rotation by their driving spring when released; a handle mounted on the main shaft; and means operated on the forward stroke of the handle to move the universal bail to free the adding sectors and type segments for movement by their driving springs, and operated on the return stroke of the handle to restore the sectors and segments to normal position and to place the driving springs under tension.

1,812,131. HUMIDIFYING APPARATUS. WILHELM BOCK, Gwynedd, Pa. Filed Feb. 11, 1929. Serial No. 338,963. 14 Claims. (Cl. 236—44.)



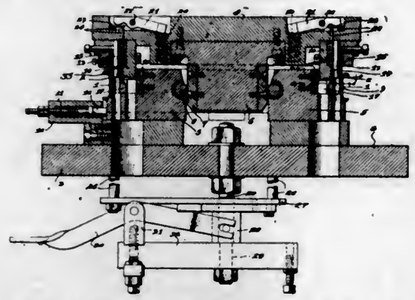
1. A humidifier for radiators comprising an external casing, a valve, means for controlling the valve in dependency upon the humidity of the atmospheric air, a valve stem guide, said guide having a conical inlet and outlet opening for complete expansion of the discharged steam.

1,812,132. PRODUCTION OF VANILLIN AND I-VANILLIN. FRIEDRICH BOEDECKER, Berlin-Dahlem, Germany, assignor to the Firm J. D. Riedel Aktiengesellschaft, Berlin-Britz, Germany. Filed Nov. 6, 1926, Serial No. 146,850, and in Germany Nov. 10, 1925. 18 Claims. (Cl. 260—137.)



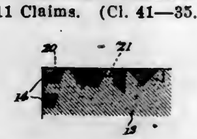
1. Process of producing vanillin, comprising treating 1-2-dihydroxybenzene methylene ether substituted in the 4-position by an univalent unbranched alkylene radical C_nH_n at elevated temperatures with alcoholic alkali, methylating the reaction product beating the resulting mixture of methyl-alkoxymethyl ethers with an acid, removing from the resulting mixture of the propenyl-ortho dihydroxybenzene-monomethyl ethers the i-chavibetol by freezing out, converting the remaining more soluble propenyl-orthodihydroxybenzene monoethers into their alkali metal salts, thereby removing from them the less soluble alkali metal salt of the i-eugenol, decomposing the said salt by an acid, and oxidizing the resulting i-eugenol to vanillin.

1,812,133. MACHINE FOR PERFORATING RIM LUGS. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 3, 1926. Serial No. 99,638. 15 Claims. (Cl. 153—2.)



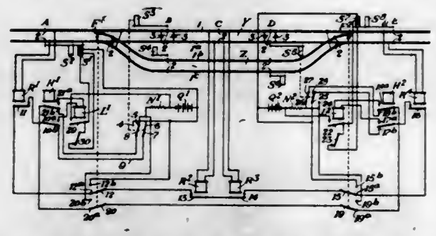
1. In a machine for perforating lugs attached to a rim, the combination with means for holding the rim true to size and shape, of means for perforating the attached lugs while the rim is held true to size and shape.

1,812,134. ORNAMENTAL MATERIAL, INSERT FOR SAME, AND METHOD OF MAKING SAME. WILLIAM B. BRAGOER, Exeter, Me., and VICTOR F. NEKARDA, Jersey City, N. J., assignors to Pearl Art, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 10, 1930. Serial No. 419,995. 11 Claims. (Cl. 41—35.)



1. An ornamental material comprising a base and laminated structures imbedded in the base, an exposed facet of a laminated structure imbedded in the base being at an angle to the layer formation of the laminated structure having such exposed facet.

1,812,135. RAILWAY SIGNALING. CHARLES A. BROOKS, Swissvale, and JOHN M. PELIKAN, Pittsburgh, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1929. Serial No. 403,199. 3 Claims. (Cl. 246—3.)

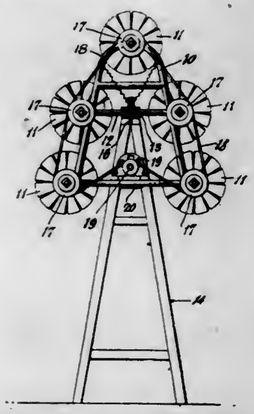


1. In combination, a stretch of railway track, a signal adjacent one end of said stretch, a second signal adjacent the other end of said stretch, a main relay, a second main relay, a signal relay, a second signal relay, a pole-changer, a second pole-changer, a circuit for said first signal relay including a front contact of said first main relay and a back contact of said second main relay as well as said second pole-changer and a source of current and the winding of said first signal relay in series, a circuit for said second signal relay including a front contact of said second main relay and a back contact of said first main relay as well as said first pole-changer and a second source of current and the winding of said second signal relay in series, means controlled by said first signal relay for controlling said first signal, and means controlled by said second signal relay for controlling said second signal.

1,812,136. CITRIC ACID MANUFACTURE. FRANK J. CAHN, Whiting, Ind. Filed Feb. 16, 1929. Serial No. 340,649. 20 Claims. (Cl. 260—120.)

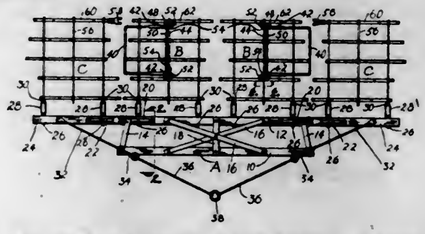
1. The method of producing acids by fungicidal action which comprises impregnating plant tissue material with carbohydrates, inoculating said material with a selected acid-producing fungus strain and growing said fungus thereon to convert carbohydrates present to the desired acid.

1,812,137. ARRANGEMENT OF WINDMILLS. CHARLES EDWARD CARROLL, Newport, Ark. Filed July 13, 1922. Serial No. 574,817. 2 Claims. (Cl. 170—38.)



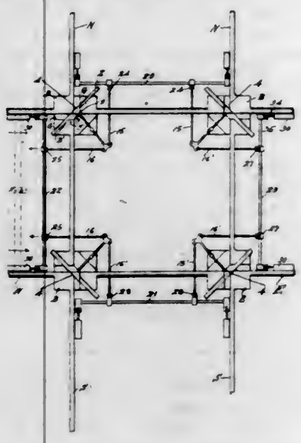
2. The combination of a suitable support, a group of wind wheels, a frame work for such wheels mounted on such support with the center of gravity below the point of support and a dynamo mounted on said frame work in driving connection with the wind wheels.

1,812,138. FOLDING HARROW EVENER. FRANK W. CIHAK and WILLIAM D. CIHAK, Creston, Iowa. Filed May 5, 1928. Serial No. 275,460. 7 Claims. (Cl. 55—84.)



1. For use with a folding harrow evener, a plurality of harrow sections, means on one of the partially folded sections for holding another of the sections in position, said means comprising a prop member adapted to engage beneath one of the fore and aft connector bars of such other section whereby said last mentioned bar is retained thereagainst by gravity.

1,812,139. RAILWAY CROSSING. CLAIBORN CLARK, Los Angeles, Calif. Filed Aug. 27, 1929. Serial No. 388,691. 8 Claims. (Cl. 246—273.)



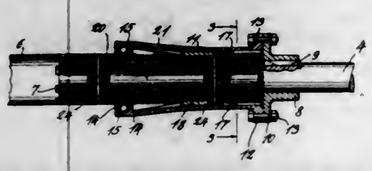
1. A sound-reducing railway crossing including a set of blocks with right angular flange gaps for passing wheel flanges, diagonal slides in said blocks having triangular bridgers shiftable diagonally at the intersection of the gaps of respective blocks to close the gaps in line of wheel passage a diagonal lever pivoted on each block and connected to its slide, and treadle actuated means connected to the levers.

1,812,140. RAIL FASTENER. MATT CRYM, Wattis, Utah. Filed Mar. 6, 1930. Serial No. 433,644. 1 Claim. (Cl. 238—336.)



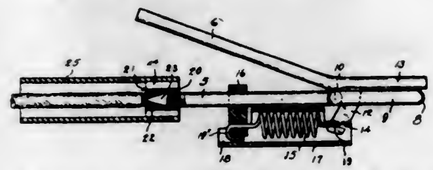
In a device of the class described the combination of a metal tie having slots adjacent the rail positions thereof; rail braces secured to said tie adjacent said slots; rail braces carried over said slots having bolts passed therethrough securing said braves slidably and rotatively on said ties; a spring, having the end turned downward adapted to fit into said slot, carried on said braces and secured thereto by a rivet, said spring adapted to be raised from said slot to allow said braces to be moved away from the rail or to be inserted in said slot to hold the rail braces in fixed relation to said rail tie and rail.

1,812,141. FLEXIBLE SHAFT COUPLING. TIMOTHY C. DOBBINS, Denver, Colo. Filed Oct. 21, 1929. Serial No. 401,292. 7 Claims. (Cl. 64—96.)



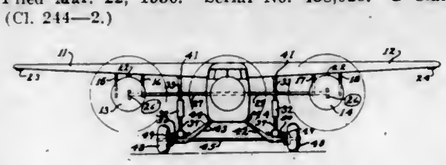
3. A flexible coupling for transmitting rotary motion from one axis to an angularly related intersecting axis which comprises, a drive shaft having one end provided with an axial opening, a driven shaft having one end provided with a coupling member having a cylindrical opening, a flexible cylindrical power transmitting member having one end located in the opening in the drive shaft and the other located in the opening in the coupling member, means for holding the power transmitting member from rotation with respect to the drive shaft and the coupling member and means carried by the coupling member and encircling the adjacent end of the drive shaft for supporting the latter, said last named means comprising a tubular member nonrotatably and slidably connected with the coupling member and provided at its free end with an inwardly extending flange adapted to serve as a support for the adjacent end of the drive shaft.

1,812,142. WELDER'S TONGS. FRANK B. DREYER, Seattle, Wash. Filed Aug. 7, 1929. Serial No. 384,099. 8 Claims. (Cl. 219—8.)



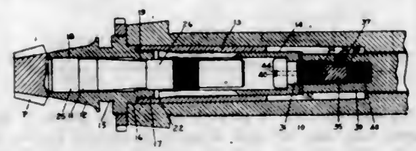
1. A welder's tong, embodying a tong member having a slot near its outer end, another tong member lying alongside said first named tong member having a substantially perpendicular finger extending through said slot and cooperating in pivotally connecting said two tong members, and a spring connected with the outer end of said finger and with said first named tong member to the rear of said slot for holding said tongs in a closed position.

1,812,143. AIRPLANE. THOMAS DUGAN, Wichita, Kans., assignor of one-half to Robert B. Davis, Wichita, Kans. Filed Mar. 22, 1930. Serial No. 438,023. 2 Claims. (Cl. 244—2.)



1. In an airplane, a landing gear hinged to the body of the airplane, a shock absorber positioned between the landing gear axle and the body of the airplane, a shaft as a part of the shock absorber and adapted to telescope in an upper part of the shock absorber, spiral grooves in said shaft and thread like lugs on the upper part of said shock absorber as a means of rotating the shaft, a gear wheel on the lower end of said shaft, a ground wheel and a clutch therein and a gear wheel on said clutch, said gear wheel being in mesh with the gear wheel on said shaft, as a connecting means for the delivery of power for rotating the ground wheel substantially as shown and described.

1,812,144. CHUCK. SCHUYLER H. EARL, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed May 14, 1929. Serial No. 363,039. 6 Claims. (Cl. 279—51.)

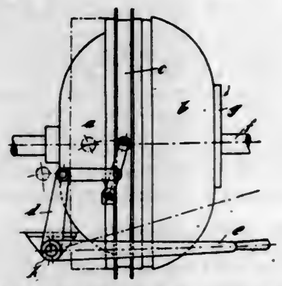


1. In a chucking device for securing a gear or similar article in a spindle, the combination with a collapsible collet adapted to be actuated on axial movement thereof in the spindle to grip the stem of the article to be chucked and clamp the same in the spindle, of a guide member mounted in the spindle having a bore ground to provide two spaced cylindrical guide surfaces corresponding to two ground surfaces on the stem for positively centering the stem in the spindle when held in the gripping device.

1,812,145. CELLULOSE ESTER LACQUER. HANS FINKELSTEIN, Uerdingen Niederrhein, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 13, 1928. Serial No. 292,595. 5 Claims. (Cl. 134—26.)

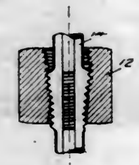
1. A composition of matter comprising cellulose nitrate, an artificial cyclic ketone resin, and a solvent therefor containing a substantial proportion of a propylene glycol monoalkyl ether corresponding to the general formula $HO—C_3H_6OR$ (in which R indicates an alkyl group with from 1 to 5 carbon atoms.

1,812,146. ROTARY MIXING MACHINE. CONSTANT FORVILLE, Seraing, Belgium. Filed Apr. 14, 1930, Serial No. 444,269, and in Belgium Apr. 26, 1929. 1 Claim. (Cl. 259—3.)



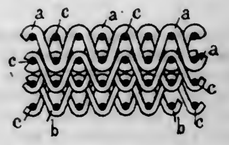
In a rotary mixing machine, the combination of a horizontal rotatable shaft, two bowl-shaped vessels facing one another and keyed on said shaft, a central feeding opening in one of said vessels, a ring space of constant width for discharging purposes between the edges of both bowl-shaped vessels, a cylindrical hoop slidably mounted on the outer circumference of one of said bowl-shaped vessels, said hoop being movable parallel to the shaft and adapted to tightly abut against the front edge of the second one of said bowl-shaped vessels so as to tightly close said ring space, an annular guide-way on the outside of said hoop, two diametrically opposed rollers engaging said guide-way, a pair of swivelling arms carrying said rollers, a hand lever for operating said swivelling arms, a transverse shaft carrying said hand lever, and means transmitting the oscillating movement of said transverse shaft to said swivelling arms.

1,812,147. MEANS FOR PRODUCING CURVE-THREADED NUTS. ELIS HELIN, Stockholm, Sweden, assignor to Carl Kindstrom, Stockholm, Sweden. Filed Oct. 22, 1929, Serial No. 401,442, and in Sweden July 5, 1929. 2 Claims. (Cl. 10—141.)



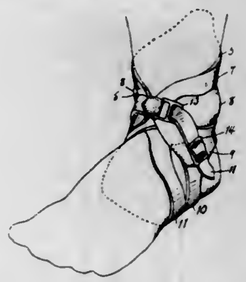
1. A screw-tap for cutting curve-threaded nuts, said tap provided with cutting teeth extending over a portion having a wider base and a narrower top with its greatest core diameter at the base, the tops of the cutting teeth of the tap lying on arcs of a curvature at least equally as great as the desired curvature of the thread.

1,812,148. PAPER MAKER'S DRIER FELT. THOMAS HINDLE, Hashingden, England. Filed Jan. 28, 1930. Serial No. 424,077. 2 Claims. (Cl. 139—408.)
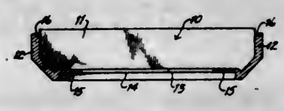


1. An improved drier felt comprising a working face wholly of worsted warp yarns coarser and thicker than the back cotton warp yarns, a back of cotton warp yarns finer and thinner than the worsted face yarns and a weft wholly of cotton yarn finer than the worsted warp yarns constituting a dense or crowded worsted face of warp yarn for the working surface and an open or porous cotton back.

1,812,149. COMBINED ANKLE-BRACE AND ARCH-SUPPORT. WILLIAM J. HOGGSON, New York, N. Y. Filed Oct. 11, 1929, Serial No. 398,889, and in Great Britain July 12, 1929. 1 Claim. (Cl. 128—166.5.)



A combined ankle-brace and arch-support comprising an ankle-piece extending above and below the ankle at the rear, and formed with clearance-openings for the ankle-bones, a band connecting the lower forward ends of the ankle-piece, a strap connected with said band, one end of the strap being provided with a loop, and a fastening device secured to one side of the ankle-piece, the looped-end of the strap passed through one ankle-opening, the other end of the strap passed through the other ankle-opening and through the loop and into engagement with the said fastening device.

1,812,150. METHOD OF MAKING WATCHCASES. ELLISON S. IRELAN, Elgin, Ill., assignor to Illinois Watch Case Company, Elgin, Ill., a Corporation of Illinois. Filed Feb. 27, 1930. Serial No. 431,709. 7 Claims. (Cl. 29—179.)



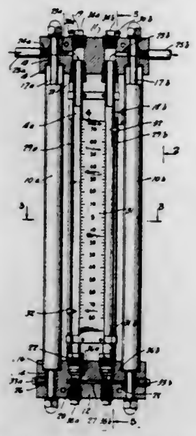
1. The method of producing watch case members which consists in forming a blank into a cup shape, drawing the ends thereof, and setting the sides to increased thickness and forcing surface metal over the ends of said sides.

1,812,151. METHOD OF WELDING. GEORGE T. JACOCKS, Brooklyn, N. Y., assignor, by mesne assignments, to Alco Products Incorporated, New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1928. Serial No. 249,922. 3 Claims. (Cl. 78—82.)



1. In a metal article having a fluid proof jointure comprising overlapping margins of sheets of metal; a plurality of spaced mortises in the margin of one of the sheets, each mortise being a perforation through said margin; a plurality of tenons projecting from the margin of the other sheet and interfitted in the mortises to hold the sheets against relative movement in their respective parallel planes, each of said tenons being disposed inwardly of the edge of the margin of the tenoned sheet, terminating short of the depth of its mortise thereby providing a pit, and being an unsevered extumescence of the tenoned margin; a pit at the rear of each tenon; and a filler of metal in each of the pits, said filler in the pit at the front end of the tenons being welded to the peripheral walls of the mortise and to the front end of the tenon.

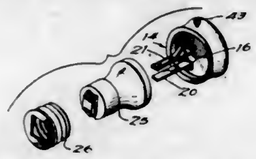
1,812,152. MANOMETER GAUGE. MILTON O. JENSEN, Huntington Park, Calif. Filed May 11, 1929. Serial No. 362,236. 3 Claims. (Cl. 73—31.)



1. A gauge of the character described comprising a frame including side stiles formed of non-fragile material, end rails formed of non-fragile material, and a pair of manometer limbs disposed intermediate said stiles and extending between said rails: said stiles being tubular, said end rails being blocks and one having connection passages communicating with the manometer limbs and having outer ends adapted to be sealed or to be connected to a source of pressure to be measured, the other of said rails having a junction passage therein connecting the manometer limbs, and said other rail having bores communicating with said manometer limbs and adapted to be sealed or to be connected to a source of pressure to be measured.

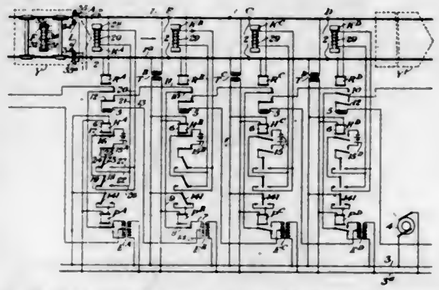
1,812,153. ELECTRICAL PLUG CONNECTION. CLIFF C. JONES, Los Angeles, Calif., assignor of one-fourth to George W. Dick, Bournemouth, England. Filed Feb. 11, 1929. Serial No. 339,045. 2 Claims. (Cl. 173—343.)

1. An electrical plug assembly embodying: a head member having contact posts; a plug member having contact means adapted to engage said contact posts; and releasable locking means including a substantially fixed finger in said plug and a yieldable lever associated with one of



said posts for holding said head member in fixed relation with said plug member, the contact posts on said head member being also adaptable for insertion into a conventional plug member.

1,812,154. RAILWAY TRAFFIC CONTROLLING APPARATUS. RALPH R. KEMMERER, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 19, 1928. Serial No. 293,948. 15 Claims. (Cl. 246—63.)

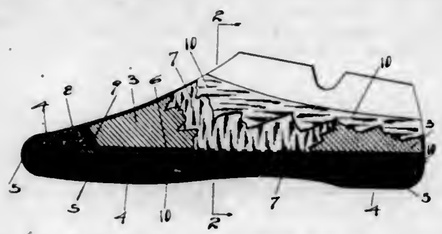


1. Railway traffic controlling apparatus comprising means for supplying current to the track rails, an inductor located in the trackway and provided with a winding, means for supplying said winding with current of one polarity or the other or for de-energizing said winding in accordance with traffic conditions, and train carried governing means controlled jointly by said inductor and by the current in the track rails.

1,812,155. A STRUCTURAL STEEL. ADOLF KLINKENBERG, Wittbraucke, near Herdecke, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Mar. 8, 1929, Serial No. 345,601, and in Germany Mar. 10, 1928. 4 Claims. (Cl. 75—1.)

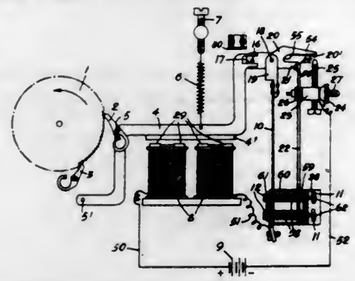
1. A structural steel having a low A_3-point, a high elastic limit and considerable toughness, containing about 0.1 to 0.2% carbon, and copper and chromium totaling 0.75 to 2.%, the ratio of copper to chromium being comprised between 1 to 1 and 3 to 1.

1,812,156. ARTIFICIAL FOOT. EARNEST R. LEAF, Portland, Oreg. Filed Mar. 23, 1929. Serial No. 349,354. 3 Claims. (Cl. 3—7.)



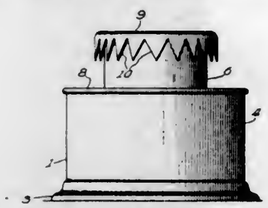
1. In an artificial foot: a yieldable sole; a body above said sole; a fibrous cushion member above said sole at the toe of said foot; a leather strip intermediate said sole and said parts thereabove, said leather strip being cemented to said parts adjacent thereto upon each side thereof; and a raw hide covering for said body and said cushion, said covering extending over the edge of said leather strip to protect the cemented joints thereof with the parts immediately adjacent thereto upon either side.

1,812,157. ELECTRIC SWITCH. GEORGES LÉOPOLD, Geneva, Switzerland. Filed Oct. 29, 1927, Serial No. 229,763, and in Switzerland Apr. 8, 1927. 1 Claim. (Cl. 200—68.)



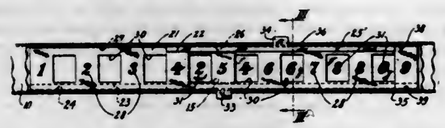
An electric circuit-closing device, comprising a fixed support, a contact member mounted for adjustment on said support, a flexible member disposed in parallelism with said fixed support, a lever pivotally mounted on said flexible member and carrying a contact member adapted to cooperate with said fixed contact to close a circuit, means for swinging said lever on its pivot, and means operative during pivotal movement of the lever to move said lever in the direction of its longitudinal axis.

1,812,158. ASH TRAY. EDWIN HERBERT LEWIS, Oak Park, Ill. Filed Nov. 12, 1930. Serial No. 495,156. 2 Claims. (Cl. 131—51.)



1. An ash receiver comprising an ash compartment for the burned portion of the cigarette, a stub compartment for the unburned portion, and means mounted above the ash compartment and having saw-teeth for separating the burned portion from the unburned portion.

1,812,159. ADJUSTABLE PRICE INDICATOR. JOHN G. LUKAS, Bayonne, N. J. Filed Mar. 14, 1930. Serial No. 435,701. 4 Claims. (Cl. 40—65.)



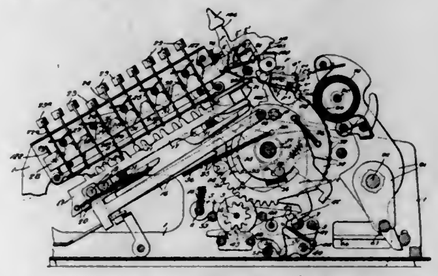
1. A combined shelf edging and indicating device for a shelf extending between partitions comprising a face plate of substantially the same width as the shelf edge, means for attaching the face plate in spaced relation to the shelf edge, said face plate having a window, a forward and a rear character bearing strip disposed in slidable relation between said face plate and said shelf edge; characters in close spaced relation on said rear strip and characters on said forward strip spaced from each other by apertures to expose characters on said rear strip; said strip being adjustable to expose different combinations of characters through said window.

1,812,160. SHOVEL. CHARLES SIDNEY MACKENZIE, Gananoque, Ontario, Canada. Filed Jan. 2, 1930. Serial No. 418,055. 1 Claim. (Cl. 294—49.)



A shovel comprising a shovel blade having a substantial transversely flat central portion extending to the upper margin of the blade, a handle in the form of a tube split longitudinally at its rear, a frog formed integral with the handle the side edges of the split merging into the upper edge of the frog to form a V shaped rear recess, and a tongue formed integral with the blade and extending from the upper edge thereof and having its marginal edges fitting the marginal edges of the recess a welded joint being formed between such edges and between the frog and the face of the shovel.

1,812,161. PRINTING MECHANISM FOR CALCULATING MACHINES. CLARENCE ORIN MAPEL, Chicago, Ill., assignor to Portable Adding Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1926. Serial No. 122,610. 4 Claims. (Cl. 101—93.)

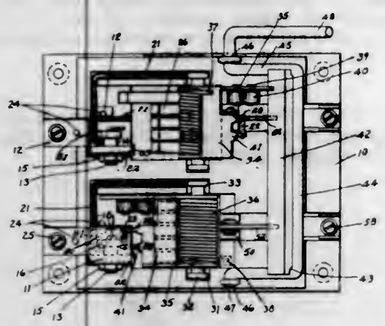


1. A zero printing control device comprising a movable cipher stop; a locking stop pivoted thereon; means operatively and directly connecting the locking stop with the cipher stop to cause the former to move in unison with the latter to inactive position; and means carried by a locking stop of higher decimal order to move the said locking stop of lower decimal order to inactive position without moving the associated cipher stop.

1,812,162. THERMOSTATIC CIRCUIT BREAKER. ROY H. MAPLE, Indianapolis, Ind. Filed Sept. 25, 1922, Serial No. 590,237. Renewed Nov. 10, 1930. 18 Claims. (Cl. 200—116.)

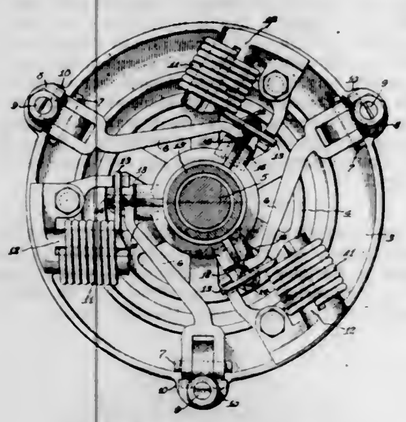
1. An electric switch construction including in combination a plurality of thermally operable switches, each hav-

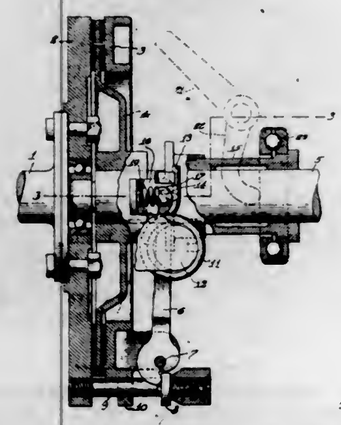
ing a current conducting and movable switch controlling member, a plurality of manually operable switches each in



series with one of the other switches, and a single common means differentially associated with both types of switches at the same time.

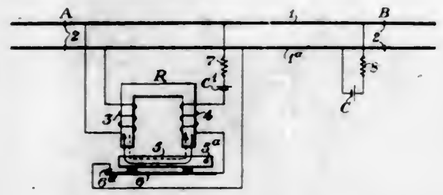
1,812,163. CLUTCH. SAMUEL M. D. MILLER, Detroit, Mich. Substitute for application Serial No. 28,343, filed May 6, 1925. This application filed Nov. 17, 1930. Serial No. 496,319. 2 Claims. (Cl. 192—89.)





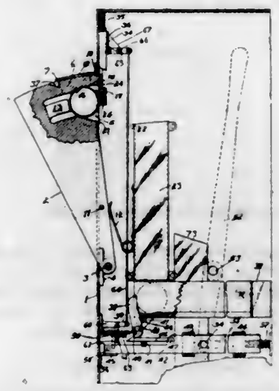
2. In combination with a clutch including relatively movable friction members adapted to be brought into frictional contact to transmit motion from one to the other, and a main spring for normally holding said friction members in frictional contact; of a lever pivotally supported adjacent said main spring and having an arm to oppose said main spring and an end portion to move one of said friction members, an operating lever, means operated by said operating lever to move said lever member, and a spring carried by said means to oppose the action of said main spring.

1,812,164. RAILWAY TRACK CIRCUITS. BENJAMIN MISHELEVICH, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed July 17, 1930. Serial No. 468,500. 2 Claims. (Cl. 246—41.)



1. In combination, a section of railway track, a source of current connected across the rails at one end of said section, a relay having two cooperating windings, a connection across the rails at the other end of said section including one of said windings, and a second connection across the rails at the latter end of said section including the other of said windings and a second source of current as well as a front contact of said relay.

1,812,165. COIN SELECTOR. FRED C. MYER, Sacramento, Calif. Filed Nov. 12, 1929. Serial No. 406,619. 7 Claims. (Cl. 194—100.)

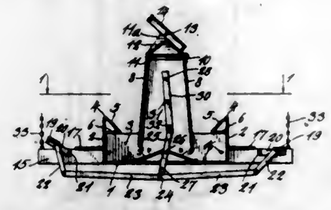


1. A coin selector of the class described comprising a coin chute having an adjustable side wall, means to feed a coin to said chute, means to propel said coin through the chute, and means to control said adjustable side wall by the insertion of the coin, to prevent vibrations of the coin as it travels through the chute.

1,812,166. POULTRY FEEDER. JOHN C. PALMER, Edgewater, Colo. Filed Feb. 17, 1930. Serial No. 428,999. 2 Claims. (Cl. 119—55.)

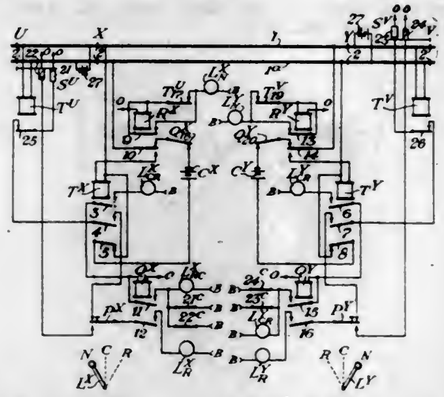
1. A poultry feeder comprising, in combination, a substantially rectangular box open at the top, the two oppositely located sides being provided with guard members

whose upper surfaces are upwardly and outwardly inclined, a feed hopper extending between the ends of the box and substantially parallel with the sides having the guards, a supporting bar secured to each of the ends of



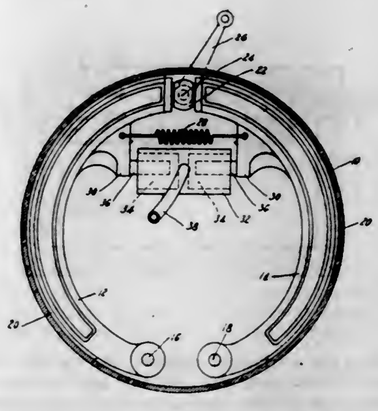
the box, the ends of the bars projecting beyond the sides of the box, a roost bar mounted for oscillation between the supporting bars, an agitator located within the feed hopper, and means for operating the agitator when the roost bar moves about its pivot.

1,812,167. RAILWAY SIGNALING. EASTON E. PARRILL, Edgewood Borough, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1929. Serial No. 400,542. 8 Claims. (Cl. 246—26.)



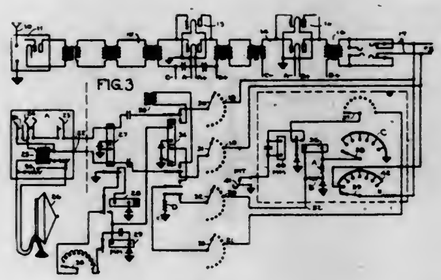
1. In combination, a stretch of railway track made up of a main section and an approach section at each end of the main section, a track circuit including a track relay for each approach section, a track battery and a track relay at each end of said main section, two relays R and Q at each end of said main section, a manually operable lever at each end of said main section and each having a normal and a reverse position, two signals governing traffic in opposite directions through said stretch, a pick-up circuit for each relay R closed when the associated lever is in the normal position and the track relay for the associated approach section is energized, a stick circuit for each relay R closed when the relay is energized and the associated lever is in normal position, means operating to connect each main section track battery with the rails of the section when the associated relay R is energized provided the associated relay Q and the associated track relay are de-energized, means operating to connect each main section track relay with the rails of the section when the associated relay R is de-energized, a pick-up circuit for each relay Q closed when the associated lever is in the reverse position and the associated main section track relay is energized, means for clearing each signal when the associated track relay and the associated relay Q are energized and the associated lever is in the reverse position, and a stick circuit for each relay Q including a contact closed when the associated signal indicates proceed.

1,812,168. BRAKE MECHANISM. HENRI PERROT, Paris, France, assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Jan. 29, 1924, Serial No. 689,218. Divided and this application filed Nov. 5, 1927. Serial No. 231,314. 13 Claims. (Cl. 188—106.)



7. In brake mechanism of the class described, the combination with a brake-drum, of a brake engageable with said drum, a brake-cylinder, opposed pistons working in said cylinder and operatively connected to the ends of the brake to move said brake into braking engagement with said drum, other means for applying said brake to said drum including a lever moved by the operator, and means to release said brake.

1,812,169. SELECTIVE PROGRAM SERVICE SYSTEM. WINFRED T. POWELL, Rochester, N. Y., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 19, 1929. Serial No. 341,091. 12 Claims. (Cl. 179—1.)

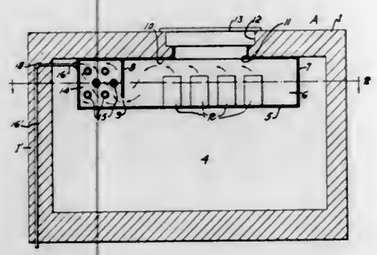


1. The method of transmitting programs from program sources to subscribers which comprises automatically selectively extending channels to any desired program source under subscribers' remote control, and automatically compensating for the varying number of channels connected to any program.

1,812,170. REFRIGERATING APPARATUS. FREDERICK W. RABE, St. Louis, Mo., assignor to Anheuser-Busch, Inc., St. Louis, Mo., a Corporation of Missouri. Filed Sept. 13, 1929. Serial No. 392,289. 5 Claims. (Cl. 62—91.5.)

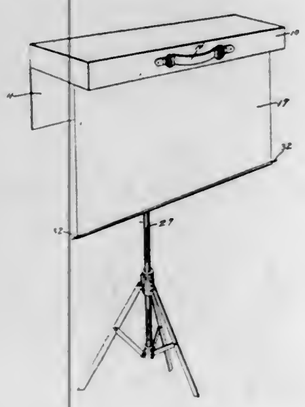
1. A refrigerating apparatus comprising a housing providing a refrigerated compartment, a refrigerant cham-

ber within said refrigerated compartment arranged to receive a refrigerant of the solidified gas type which gives off gas on sublimation, a gas chamber disposed adjacent to said refrigerant chamber and likewise located within said refrigerated compartment, said gas chamber being in communication with said refrigerant chamber whereby gas resulting from sublimation of the refrigerant may



pass from the refrigerant chamber into the gas chamber, means for discharging gas from said gas chamber, a conduit extended through said gas chamber and disposed in the path of gas moving therethrough, said conduit being arranged in communication with said refrigerated compartment so as to provide a passageway for air within said refrigerated compartment.

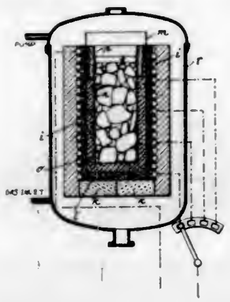
1,812,171. DISPLAY DEVICE. JOHN LESLIE RICE, Dayton, Ohio. Filed Sept. 4, 1930. Serial No. 479,667. 7 Claims. (Cl. 40—83.)



1. A device for carrying and displaying charts including a case; means in the case to support a plurality of rolls, each roll having a chart wound thereon; means on the case to receive a support rod; and means on the case to cooperate with said rod to brace said case.

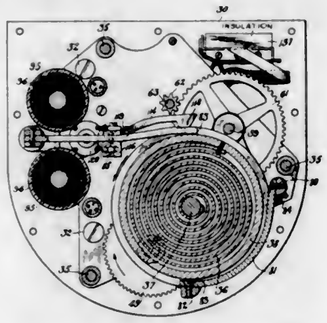
1,812,172. PRODUCTION OF CASTINGS FREE FROM PIPES AND BLOW-HOLES. WILHELM ROHN, Hanau-on-the-Main, Germany. Filed Sept. 16, 1927, Serial No. 220,054, and in Germany Dec. 28, 1925. 9 Claims. (Cl. 22—200.)

1. The method of producing castings free from pipes and blow-holes in smelting furnaces, which consist in melting the metal in the furnace, particularly in electrically heated furnaces such as resistance furnaces or in-



duction and high-frequency furnaces and gradually solidifying the entirely molten metal from the bottom upwards in the smelting vessel.

1,812,173. NON-INTERFERENCE SIGNAL TRANSMITTER. CHARLES M. SACKMAN, Cleveland, Ohio, assignor, by mesne assignments, to The Paramount Fire Alarm Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 21, 1925. Serial No. 76,929. 3 Claims. (Cl. 177—361.)

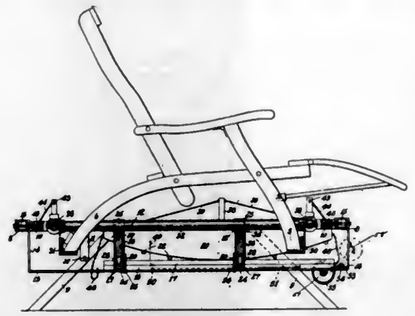


1. A non-interfering signal box including a signal wheel, a drum for rotating the wheel and having a notch in its periphery, means normally urging the drum to rotate, a stop lever normally engaging the notch to hold the drum against rotation, means for disengaging the stop lever from the notch to permit the drum to rotate, signal transmitting mechanism including a circuit controlling device and a signal lever for operating the circuit controlling device adapted to be operated by the signal wheel, a magnet in the box, an armature for the magnet, means for urging the armature out of range of the magnet, an armature controlling lever cooperating with the notch in the drum for momentarily moving the armature into the range of the magnet as the drum starts to rotate and at each rotation thereof, means upon the armature for holding the signal lever inoperative when the armature is away from the magnet and cooperating means upon the stop lever and armature for preventing the stop lever from engaging the notch in the drum when the armature is out of the range of the magnet.

1,812,174. STABILIZING DEVICE. FREDERICK D. W. SEARING, Newark, N. J. Filed Jan. 6, 1930. Serial No. 418,769. 6 Claims. (Cl. 114—194.)

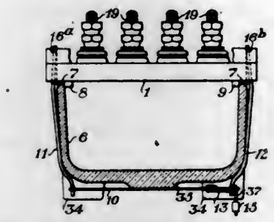
1. The combination with an outer frame and a pair of longitudinally disposed tracks carried thereby, and elastic material facing the tracks, of an intermediate frame, a

pair of longitudinally curved supports dependent therefrom and supported on the tracks carried by the outer frame, a pair of transversely disposed tracks carried by



the intermediate frame, and elastic material facing the tracks, an inner frame and a pair of transversely curved supports dependent therefrom and supported on the tracks carried by the intermediate frame.

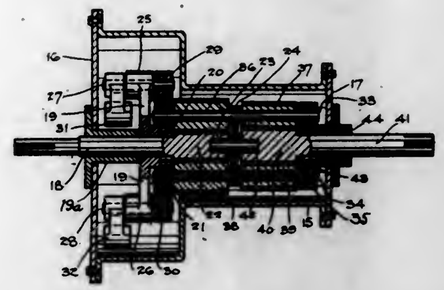
1,812,175. ELECTRICAL RELAY. NOBLE C. SHAW, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1930. Serial No. 488,609. 1 Claim. (Cl. 215—82.)



An electrical relay having an insulating top plate provided with two peripheral niches and with a plurality of metallic lugs projecting from the undersurface, a glass case coacting with the undersurface of said top plate and prevented from sliding by said lugs, a spring having a U-shaped opening in one end and having in the other end a transverse opening and a longitudinal opening and a hole, a key in said longitudinal opening assembled to slide in said opening but not to be disengaged therefrom, a first and a second side strap each having two grooves at one end for hooking such end in each of said niches and each having at the other end a transverse opening and two notches, the end of said first strap projecting through said U-shaped opening in said spring and secured thereto, the end of said second strap projecting through said transverse opening in said spring, and the end of said key in said longitudinal opening in said spring being passed through said transverse opening in said second strap.

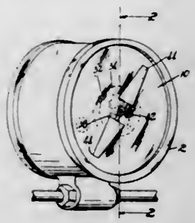
1,812,176. VARIABLE SPEED MECHANISM. LESLIE MITCHELL SHERIDAN, Coppercliff, Ontario, Canada. Filed May 3, 1930. Serial No. 449,585. 1 Claim. (Cl. 74—34.)

A variable speed mechanism comprising a casing having covered plates closing in the ends thereof, bearing members in each of said covered plates, a driving shaft journalled in one of said bearing members, a frame fixedly secured to said driving shaft and having enlarged bosses forming bearing members, a spur gear mounted on said driving shaft, a main gear secured to the extremity of said driving shaft, a pair of short shafts journalled on said frame and having at their other ends eccentric balance weights, a driven shaft journalled in the other of said covered plates and having a gear at its inner extremity, a



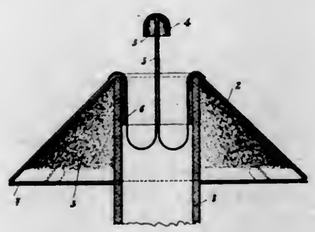
pair of shafts journalled at one end of said spur gear and at the other end to the end plate, and another gear journalled on said pair of shafts intermeshing with said main gears.

1,812,177. GLARE ELIMINATOR. MACK SMITH, Santa Monica, Calif. Filed May 20, 1930. Serial No. 453,969. 8 Claims. (Cl. 240—45.)



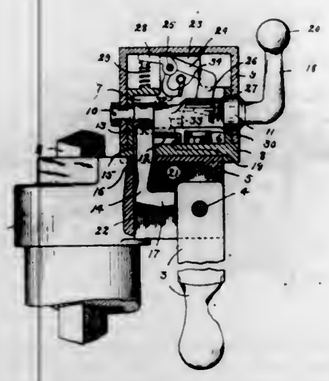
1. In a glare eliminator for use in connection with the reflected light of a light source, a transparent member through which the rays of said light source are adapted to pass, means on the inside of said transparent member for shearing said light rays, and means on the outside of said member for propelling said last mentioned means.

1,812,178. FLY CATCHER. ADOLF SPRINGMANN, Schramberg, Germany. Filed Oct. 27, 1928, Serial No. 315,546, and in Germany May 24, 1928. 1 Claim. (Cl. 43—139.)



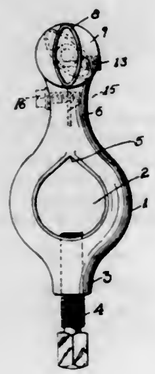
A fly or like catcher for a suction device, comprising an open-ended, upright glass tube, a conical glass shell having a centrally disposed, downwardly directed nipple adapted to fit inside the upper end of the tube, a bait cap, and means for supporting said bait cap on the shell above the orifice of the tube.

1,812,179. SWITCH STAND LOCK. PETER SWANSON, Ely, Minn. Filed Oct. 23, 1930. Serial No. 490,670. 10 Claims. (Cl. 246—414.)



1. A switch stand lock comprising a housing having a key hole therein, a rotatable shaft mounted within said housing, a locking dog eccentrically mounted on said shaft, and a gravity and spring actuated pawl for normally holding said shaft against rotation.

1,812,180. LATHE DOG. CHARLES R. TAGGART, San Francisco, Calif. Filed Oct. 7, 1929. Serial No. 397,813. 2 Claims. (Cl. 82—41.)

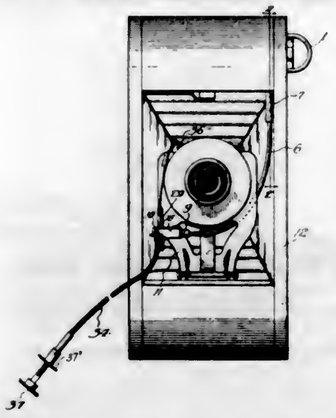


1. A lathe dog having a tail swiveled in its head and means for setting said tail in adjusted angular positions.

2. A lathe dog having a head with a hole therethrough, a tail having a stud rotatably engaging said hole, and means for locking said tail in adjusted angular positions.

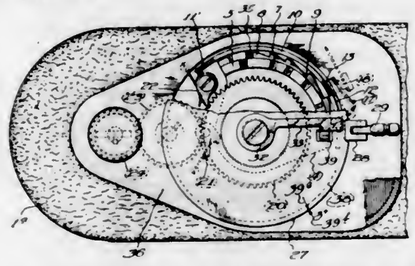
1,812,181. SHUTTER LOCKING DEVICE FOR CAMERAS. EUGENE C. THOMPSON, Los Angeles, Calif. Filed Feb. 23, 1928. Serial No. 256,111. 5 Claims. (Cl. 95—32.)

1. In a camera adapted to receive roll films, the combination with a film spool-winding key and shutter actuating mechanism, of means for placing said shutter actuating mechanism in operative or inoperative position, comprising a vertically movable locking member, a spline upon the locking member, means for moving the locking member downwardly and actuating the shutter, means for moving the locking member upwardly, and a horizontally



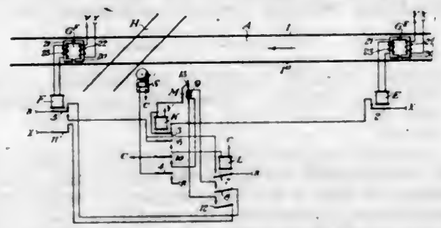
slidable element adapted to engage the spline when the said locking member is in upward position and additional means for releasing the said engagement.

1,812,182. COMPENSATING WINDING GEAR FOR CAMERAS. EUGENE C. THOMPSON, Los Angeles, Calif. Filed May 16, 1929. Serial No. 363,940. 11 Claims. (Cl. 242—71.)



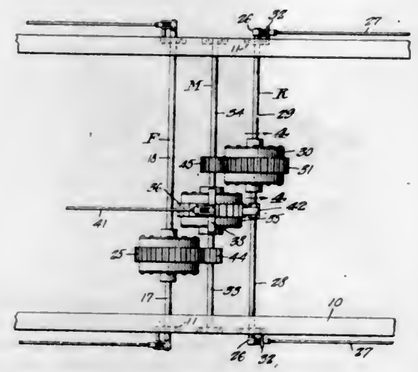
11. In a compensating winding mechanism, a gear wheel, a crank and one way clutch, means permitting a plurality of continuous revolutions of said gear, means for limiting the movements of the crank and gear to predetermined fractions of a full revolution, and means for varying the succeeding fractions of a full revolution relative to each other.

1,812,183. APPARATUS FOR THE CONTROL OF HIGHWAY CROSSING SIGNALS. HARRY C. VANTASSEL, Pittsburgh, and GEORGE R. PELASTEREA, Swissvale, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 4, 1930. Serial No. 459,155. 5 Claims. (Cl. 246—125.)



1. In combination, a railway track intersected by a highway, two normally closed relays E and F, means controlled by a train moving along said track for opening relay E as it approaches said highway and for opening relay F as it crosses the highway, a signal relay K, a stick relay L, a thermostat having a winding and a normally open contact, a stick circuit for relay K including a front contact thereof and a front contact of relay E, a pick-up circuit for relay L including a back contact of relay F and a back contact of relay K, a stick circuit for relay L including a front contact thereof and a back contact of relay K, a circuit for said thermostat winding including a front contact of relay F and a front contact of relay L as well as a back contact of relay K, a pick-up circuit for relay K including a front contact of relay F and a front contact of relay L as well as said thermostat contact, and a highway crossing signal controlled by relay K.

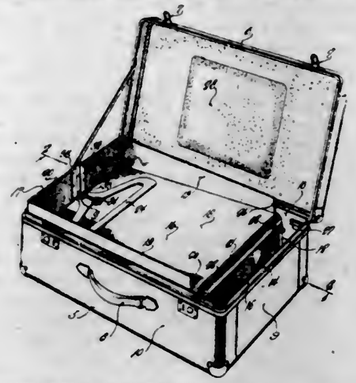
1,812,184. BRAKE EQUALIZER. FRANK W. WALSH, Vancouver, British Columbia, Canada. Filed Mar. 1, 1929. Serial No. 343,824. 1 Claim. (Cl. 188—204.)



In a brake equalizing mechanism, a pair of spaced parallel rock shafts adapted to have their outer ends connected with the brakes, each shaft including alined sections, differential mechanism geared to the adjacent ends of the sections of each shaft, and including a housing receiving said sections, a gear arranged exteriorly of each housing, a main operating rock shaft arranged between the first mentioned shafts, relatively small gears carried by the main shaft and meshing with the gears of said housing, said main shaft including alined sections, differential mechanism connecting the adjacent ends of said sections and including a housing receiving said sections, ratchet teeth arranged exteriorly of the latter mentioned housing, a yoke supported by said sections and straddling said housing, and including a centrally located depending tubular portion, a spring pressed pawl slidable in said portion and engageable with the ratchet teeth and an operating rod connected with the yoke for operating the latter at a remote point for the purpose specified.

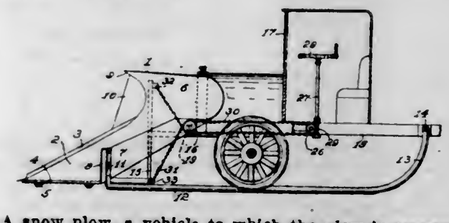
1,812,185. LUGGAGE CARRIER. GEORGE HENRY WHEARY and BENJAMIN M. HAMLIN, Racine, Wis., assignors to Wheary Trunk Company, Racine, Wis., a Corporation of Wisconsin. Filed Apr. 2, 1928. Serial No. 266,802. 2 Claims. (Cl. 190—41.)

1. Readily portable hand luggage of the case type comprising a main section and a cover therefor, a readily removable partition mounted in the main section adjacent one end thereof, a wardrobe receiver hingedly connected with the partition to normally form a cover for the main section and adapted to be swung to a vertical position, the end of the wardrobe receiver opposite its hinged connection with the partition having an increased depth, and garment supporting means mounted in said deep end of



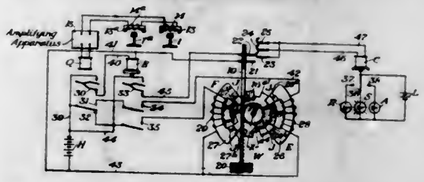
the receiver and adapted to receive garments the lower ends of which are draped over the removable partition when the garment receiver is in its normal position.

1,812,186. SNOWPLOW. LEO E. WOOD, Cerro Gordo, Iowa. Filed Apr. 4, 1930. Serial No. 441,632. 1 Claim. (Cl. 37—44.)



A snow plow, a vehicle to which the plow is connected for vertical adjustments, and mechanism mounted on said vehicle and connected to said plow for vertically adjusting it, comprising a rotatable transverse shaft on the vehicle having a worm-wheel thereon, a worm-shaft meshing therewith, a parallel rotatable shaft on the vehicle, said shafts having sprocket-wheels on their outer ends and the second-mentioned shaft having grooved sheaves thereon within its pair of sprocket-wheels, a pair of like chains each having its ends connected respectively to an upper and lower part of the plow on one side thereof, the lower reach of the chain including an elastic element, one reach of each chain passing about both sprocket-wheels on its side, thence around the sheave on that side, and sled runners rigidly connected to the lower rear parts of the plow, extending rearwardly and having their rear ends bent upwardly toward and hinged to said vehicle.

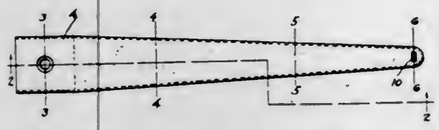
1,812,187. RAILWAY TRAFFIC CONTROLLING APPARATUS. DONALD G. ACKERLY, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 24, 1927. Serial No. 170,492. 2 Claims. (Cl. 177—353.)



1. In combination, a relay Q, means for supplying said relay with groups of energy impulses of variable number

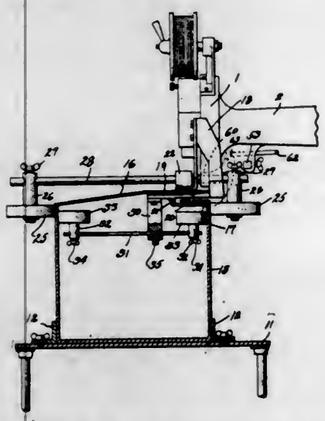
of impulses in the groups, the time interval between groups being relatively long and the time interval between the impulses in each group being relatively short, a momentary bridging contact operated by the armature of said relay, a relay B having a release period longer than said interval between impulses of a group and shorter than said interval between groups, a circuit for relay B including said bridging contact, a step-by-step motor having a movable member biased to an initial position and two windings arranged when alternately energized to move said member step-by-step away from initial position, a circuit for one of said weldings including front contacts of relays G and B connected in series, a circuit for the other winding including a back contact of relay Q and a front contact of relay B, whereby said motor member is moved two steps away from its initial position for each impulse in each group and returns to its initial position between each two groups of impulses, and signaling means selectively controlled by the relay B upon its release at the end of each group of impulses and by the position assumed by the movable member at the end of the impulse group in response to the number of impulses in the group.

1,812,188. FABRICATED BLADE ANVIL. HOWARD G. ALLEN, Niagara Falls, N. Y., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Jan. 19, 1929. Serial No. 333,643. 6 Claims. (Cl. 1—15.)



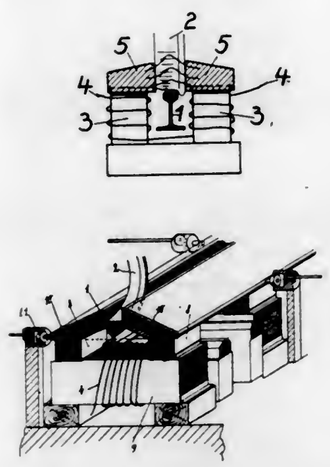
1. A fabricated blade anvil comprising upper and lower members both of which are of sheet metal construction and one of which is arcuate in cross section, said members being fitted together with their edges in close proximity, a weld connection extending around the edges, said members both uniformly tapering substantially from end to end, thus to form a relatively small end and a relatively large end, and a filler block disposed within the hollow anvil at the large end for securing purposes.

1,812,189. STAPLING MACHINE FOR FIBER BOARD BLANKS. HOWARD G. ALLEN, Niagara Falls, N. Y., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Jan. 24, 1929. Serial No. 334,677. 13 Claims. (Cl. 1—11.)



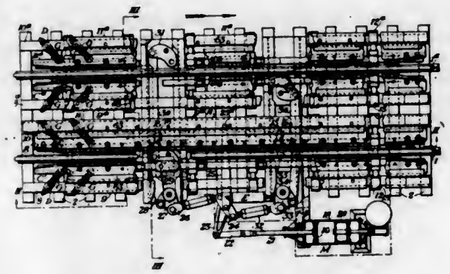
1. The combination with a stitcher head, and an open head blade anvil adapted to underlie overlapping fiber board flaps or the like through which one or more stitches are to be taken, of means carried by the anvil and positioned so as to be disposed within the hollow form of a fiber board blank set up substantially into case shape for supporting the vertically disposed parts of the blank, and a table below the anvil and said means for supporting the blank.

1,812,190. RAILWAY TRACK BRAKE. WOLFGANG BÄSELER, Munich, Germany. Filed Feb. 5, 1926, Serial No. 86,222, and in Germany Feb. 9, 1925. Renewed May 19, 1930. 5 Claims. (Cl. 188—62.)



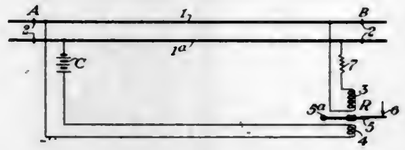
3. A railway brake comprising a U-shaped electromagnet located in the trackway with its legs on opposite sides of a rail, and pole shoes mounted on the upper ends of said legs to slide horizontally toward and away from each other to engage the opposite sides of a wheel on said rail when the magnet is energized, each pole piece being inclined upwardly from its associated magnet leg toward the position occupied by a wheel on the rail.

1,812,191. RAILWAY BRAKING APPARATUS. HERBERT L. BONE, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 24, 1928. Serial No. 307,895. 25 Claims. (Cl. 188—62.)



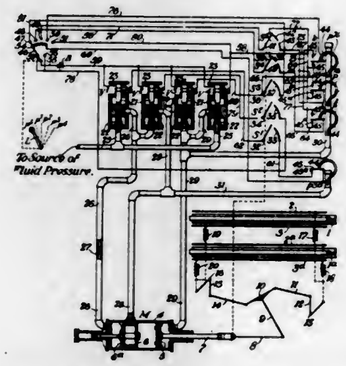
1. Railway braking apparatus comprising a braking bar located in the trackway, a cylinder, a first piston reciprocable in said cylinder and operatively connected with said braking bar, a second piston in said cylinder, and means for selectively operating said second piston to regulate the stroke of said first piston.

1,812,192. RAILWAY TRACK CIRCUITS. HERBERT L. BONE, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 4, 1930. Serial No. 459,224. 3 Claims. (Cl. 246—41.)



1. In combination, a single insulated track section, a relay having an armature biased by gravity to the open position and a main winding for closing said armature as well as an auxiliary winding for assisting the force of gravity in opening said armature, a connection across the rails of said section including said main winding, and a second connection across the rails of said section including said auxiliary winding and a source of current.

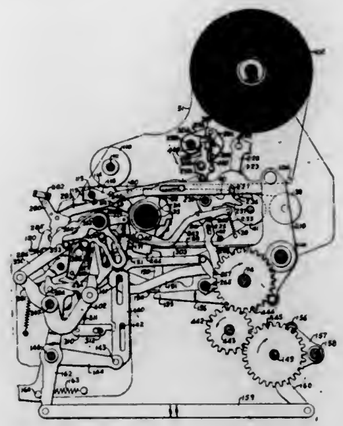
1,812,193. RAILWAY BRAKING APPARATUS. HERBERT L. BONE, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Aug. 21, 1930. Serial No. 476,862. 30 Claims. (Cl. 303—20.)



1. In combination, a railway braking bar located in the trackway, a cylinder, a first piston movable in said cylinder between one end of the cylinder and an intermediate point in the cylinder, a second piston operatively connected with said braking bar and movable in said cylinder between the other end of the cylinder and said first piston, a first valve for controlling the admission of fluid pressure to the region between said first piston and said one end of the cylinder, a second valve, means controlled jointly by said first and second valves for at times admitting fluid pressure to the region between said pistons, a third valve for controlling the admission of fluid pressure to the region between said second piston and said other end of the cylinder, a manually controlled device for selectively controlling said three valves, and a fourth valve controlled by said device for controlling the exhaust of fluid pressure from selected regions of said cylinder depending upon the condition of at least one of said first three valves.

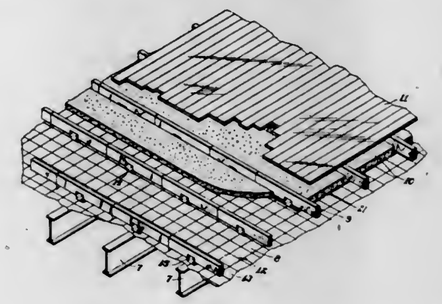
1,812,194. CASH REGISTER. SAMUEL BRAND, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Jan. 26, 1929. Serial No. 335,337. 32 Claims. (Cl. 235—3.)

1. In a machine of the class described, the combination with a printing element; means to take impressions therefrom on an issuing record material; means to take impressions from said printing element on an inserted record material, and on another record material; of means to feed the issuing record material; means normally operable on



each operation of the machine to render said feeding means ineffective; and means to disable the normally operable means, said disabling means adapted to be rendered ineffective by the insertable record material.

1,812,195. BUILDING STRUCTURE. LEWIS BRANDT, Pittsburgh, Pa., assignor to Pittsburgh Steel Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1928. Serial No. 311,008. 1 Claim. (Cl. 72—101.1.)

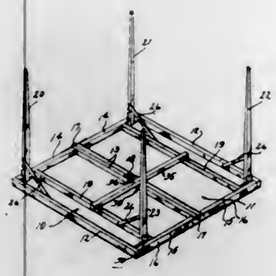


Building structure comprising sleepers, floor beams, reinforcing fabric composed of a wire mesh backed by a paper form sheet disposed against said beams and extending across the spaces between adjacent beams, and sheet metal chairs each having a flat body portion straddling said beams and downwardly-extending pointed wing portions to permit them to be forced through the paper backing and bent around the flanges of the floor beams and having upwardly-extending side portions affording vertical and lateral support to the sleepers in vertically spaced relation to the said beams.

1,812,196. FOLDABLE TABLE. NEWTON N. BROWN, Racine, Wis., assignor to Gold Medal Camp Furniture Mfg. Co., Racine, Wis., a Corporation of Wisconsin. Filed Aug. 6, 1928. Serial No. 297,729. 3 Claims. (Cl. 45—116.)

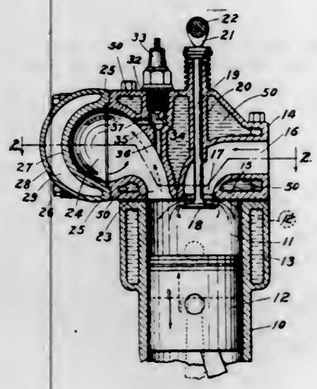
1. A foldable table comprising a top including a pair of hingedly connected sections, each section including a

frame and a top plate, a transverse bar associated with the frame of each section, legs pivotally supported on the frame and on the transverse bars and a locking bar piv-



otally mounted on the frame of one of the sections and engageable with the frames of both sections and with the transverse bars when the table is set up.

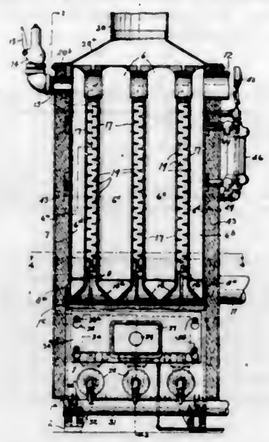
1,812,197. ISOTHERMAL FUEL INLET MEANS FOR INTERNAL COMBUSTION ENGINES. FRANK A. BULLINGTON, Kansas City, Mo., assignor to Bullington Engine Heads, Kansas City, Mo., a Common-Law Trust consisting of Louis R. Ash, Howard P. Treadway, and Frank A. Bullington. Filed Feb. 12, 1927. Serial No. 167,755. 16 Claims. (Cl. 123—191.)



1. In an internal combustion engine, a cylinder chamber, a combustion chamber communicating therewith and a closed air chamber contacting a portion of the wall surface of said combustion chamber.

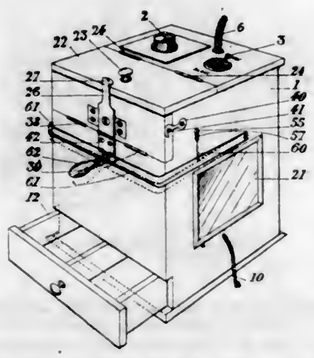
1,812,198. APPARATUS FOR HEATING OR VAPORIZING FLUID. MARK M. CLAYTON, La Porte, Ind., assignor to Bastian-Morley Co., La Porte, Ind., a Corporation of Indiana. Filed June 4, 1927. Serial No. 196,606. 1 Claim. (Cl. 122—210.)

In a fluid heater, the combination of a fire chamber, a plurality of fluid containing sections disposed in spaced side by side relation, a discharge flue above said sections, the spaces between said sections being in communication with said fire chamber and said flue, said fluid containing sections having on their opposing walls integral solid fins to reduce liming, said fins being closely spaced apart on their respective walls and disposed with the fins of one section vertically offset a distance equal substantially to the horizontal depth of the fins from the fins of an adjacent section to deflect the gases toward the wall of the opposing section, the fins of one section slightly overlap-



ping at their outer ends the outer ends of the fins of an adjacent section to decrease the tendency of pocket forming and prevent stratification on the surfaces.

1,812,199. PRESS FOR OBTAINING PHOTOGRAPHIC PRINTS BY MEANS OF ELECTRIC LIGHT. LÉON CRAYSSAC, Sete, France. Filed Oct. 20, 1928, Serial No. 313,819, and in France Oct. 27, 1927. 6 Claims. (Cl. 95—73.)

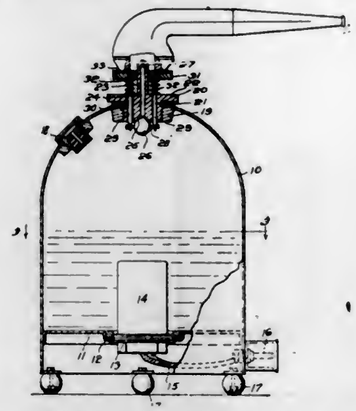


1. In an apparatus for obtaining photographic prints, the combination of: a light tight casing, a cover on said casing, illuminating means arranged within said casing, a frame arranged above said illuminating means so as to be slidable within said casing, a platen forming part of said cover and adapted to cover the upper part of said frame, a transparent panel on the top of said frame upon which panel the negative is placed, a rim fixed to said cover located below the platen and projecting over said frame, a hinged front on said casing, a rim on said hinged front and means for pressing said frame upwards towards said rims in such manner as to hold both the negative and said panel firmly in position between said frame and said rims even during the changing of the print.

1,812,200. PIPE CLEANING DEVICE. PETER DAHLEN, New York, N. Y. Filed Aug. 30, 1929. Serial No. 389,578. 12 Claims. (Cl. 131—13.)
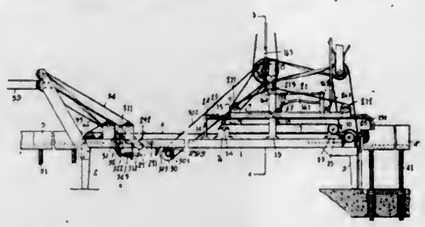
1. A tobacco pipe cleaning device comprising a boiler, an electrical heater for the same, a coupling connected with the boiler and having an outwardly projecting stationary tube and a valve seat at the intake end of the

bore of the tube, said coupling having openings formed therein, a valve to engage the valve seat, rods slidable within the openings and connected with the valve, an actuating plate arranged adjacent to the tube and connected



with the rods the arrangement being such that the outlet end of the tube projects above the actuating plate when the actuating plate is depressed by engagement with the bowl of the pipe, and springs surrounding the rods to oppose the downward movement of the actuating plate.

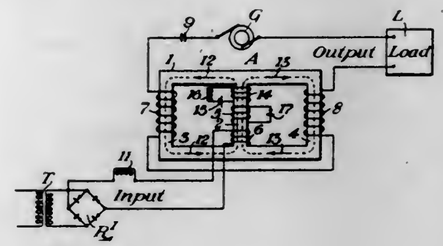
1,812,201. PAPER SORTING MACHINE. PETER F. DENNER and JOB C. ESTES, Kalamazoo, Mich. Filed Aug. 30, 1928. Serial No. 302,974. 9 Claims. (Cl. 214—11.)



1. In a paper sorting machine, the combination of a main frame with endless main conveyor of parallel conveyor belts extending from end to end thereof, a paper feed table with means for maintaining it at proper level and sheet reversing means above said main conveyor, a feed carriage, suitable guides to carry the said feed carriage from the paper feed table upwardly and forwardly to a point above the said reverse means, actuating means for said carriage, pneumatic suction heads with suction tips for engaging the top sheet of the pile of paper being inspected, a header with suction connection for said suction heads and tips, automatic control means for the suction connection comprising a slide valve with a connection to the suction hose and having a port opening to break the suction, a timed cam for actuating the said slide valve, and means for deflecting sheets from said main conveyor after inspection, as specified.

1,812,202. ELECTRICAL TRANSLATING APPARATUS. PHILIP H. DOWLING, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed June 20, 1928, Serial No. 286,984. Divided and this application filed July 9, 1929. Serial No. 376,988. 15 Claims. (Cl. 171—119.)

1. In combination, a magnetizable core having a bridging member, two windings on said core, a circuit including a source of alternating current and said two windings in series in such manner that the alternating fluxes created by the windings in said bridging member normally balance each other, means for at times creating in said bridging



member a unidirectional flux which varies the impedances of said windings and destroys the normal balance between said alternating fluxes, means responsive to an alternating flux in said bridging member for varying said unidirectional flux, and a load receiving energy from said circuit.

1,812,203. SUPPORT FOR BOXES AND THE LIKE. ROBERT J. GASKILL, Fort Wayne, Ind. Filed Mar. 26, 1928. Serial No. 264,925. 5 Claims. (Cl. 248—20.)



5. A support for boxes having a flat face, comprising a flat plate, outwardly and rearwardly inclined flanges at opposite side edges of the plate and an apertured lateral flange at the side edge of each inclined flange attachable to a fixed object and having its rear face concaved, the plate having apertures with slots communicating therewith adapted to receive bolts carried by the box.

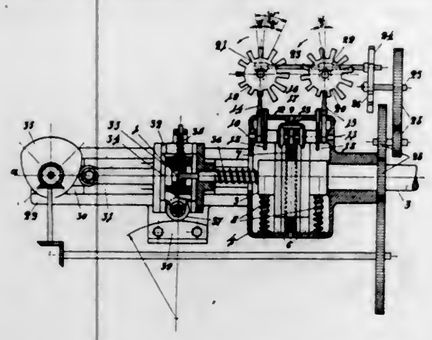
1,812,204. PROCESS IN WHICH VISCOSE SILK IS SUBJECTED TO THE ACTION OF CAUSTIC ALKALIS. ARCHIBALD JOHN HALL, Congleton, England, assignor to The Silver Springs Bleaching & Dyeing Company Limited, Timbersbrook, Congleton, England. Filed June 23, 1928, Serial No. 287,894, and in Great Britain July 9, 1927. 3 Claims. (Cl. 8—20.)

1. A process for mercerizing textile fabrics containing desulfurized viscose silk consisting in treating such materials with a solution of caustic potash under conditions of time, temperature, and concentration which are adjusted so that the cotton is mercerized to the desired degree whilst the desulfurized viscose silk is not deleteriously affected.

1,812,205. METHOD FOR MANUFACTURING CURVE THREADED NUTS AND MEANS THEREFOR. ELIS HELIN, Liljeholmen, Stockholm, Sweden. Filed Feb. 24, 1928, Serial No. 256,531, and in Sweden Aug. 9, 1927. 12 Claims. (Cl. 82—5.)

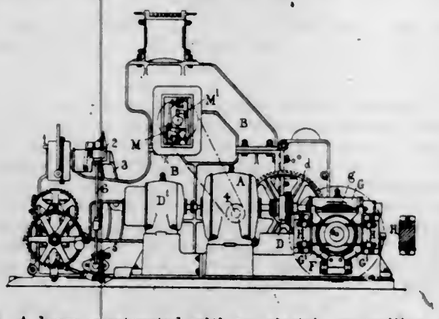
1. A method of cutting a curved threaded nut from an apertured nut-blank by means of a cutting member in engagement with the bore of said nut-blank, consisting in rotating said cutting member and simultaneously impart-

ing to one of said members a translatory movement corresponding to the desired curve of the thread.



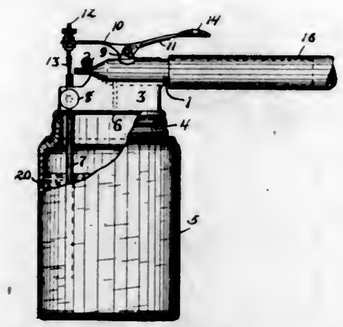
11. A machine for cutting curved threaded nuts, comprising a chuck mounted to rotate a holder for the cutter mounted in the chuck, a cutter secured to the holder, a screw shaft in the chuck arranged to turn, a nut portion on the holder engaged by the screw to reciprocate the holder, a gear on the screw, a pair of gears mounted in the chuck engaging said gears on opposite sides to turn the screw, a shaft for each said two latter gears, a ratchet wheel on each said shaft, an arm projecting from the chuck that turns on each said two shafts, a pawl in each said arm arranged to engage said ratchet wheels respectively, a toothed disc for each said pawl arranged to engage the pawl intermittently by the teeth to cause the pawl to engage the ratchet wheel and turn the said gears and screw and shift the holder and cutter, means for rotating the chuck, means for turning the tooth discs and cause them to alternately engage a pawl and swing the holder in opposite directions the several teeth on each disc being arranged to progressively increase the swinging of the pawl and resulting movement of the screw, and a support for a nut-blank that is shifted from the driving means for the chuck to advance the nut-blank to cause its bore to be engaged by the cutter.

1,812,206. DRIVING AND CONTROLLING MECHANISM OF LOOMS FOR WEAVING. JOHN HENRY HINDLE and THOMAS HINDLE, Haslingden, England. Filed Feb. 19, 1930, Serial No. 429,726, and in Great Britain Apr. 25, 1929. 4 Claims. (Cl. 139—341.)



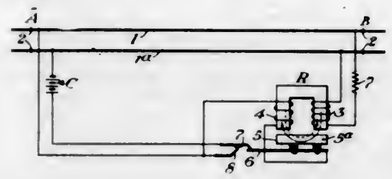
1. A loom constructed with an electric controlling circuit, a magnetic driving clutch and an electro-mechanically released brake in the same circuit functioning simultaneously, contactors to make and break the circuit, means to operate the contactors alternately at successive boxings of the shuttle timed to break the circuit when the shuttle should enter its respective shuttle box an auxiliary by-pass circuit leading to each shuttle box, and a switch thereon closed by the entry of the shuttle into the box to maintain the circuit intact.

1,812,207. ATOMIZER ATTACHMENT FOR VACUUM CLEANERS. CHARLES KELLER, Warren, Ind. Filed Aug. 19, 1927. Serial No. 214,042. 2 Claims. (Cl. 299—89.)



2. An atomizing device comprising a vessel for containing the material to be atomized; a liquid discharge tube extending from within the lower part of the vessel through the top thereof and provided with a valve for regulating the flow of liquid therethrough; a tubular member having a nozzle positioned on said vessel with its nozzle spaced from and directed at approximately right angles across the upper end of said discharge tube, there being an air duct connecting said vessel and tubular member; and an operating valve extending into and normally closing the discharge end of said liquid discharge tube, disposed in front of the tip of said nozzle, and having an operating lever in connection therewith for its support and by which it is actuated independently of the other valve.

1,812,208. RAILWAY TRACK CIRCUITS. BRANKO LAZICH, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed June 4, 1930. Serial No. 459,131. 3 Claims. (Cl. 246—41.)



1. In combination, a section of railway track, a relay having a single magnetic circuit including an armature biased by gravity to the open position, said magnetic circuit being provided with a main winding for closing said armature as well as an auxiliary winding for creating in said magnetic circuit and in said armature a flux which opposes and is weaker than the flux created therein by said main winding, a connection across the rails of said section including said main winding, and a second connection across the rails of said section including said auxiliary winding and a source of current in series.

1,812,209. DISPLAY SIGN. CHARLES L. LEWIS, Monrovia, Calif. Filed Jan. 28, 1930. Serial No. 423,991. 3 Claims. (Cl. 40—86.)

1. A display sign comprising a shell, said shell being formed in two complementary halves, and said shell being substantially spherical in shape, a curtain in each of said halves, each of said halves having a sight opening in the



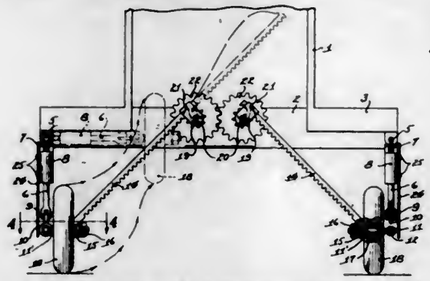
top thereof and manual means to move said curtain whereby various signs on the curtains are displayed in the sight openings.

1,812,210. DRILLING BIT. GEORGE B. LOUDERBACK, Compton, Calif. Filed May 28, 1928. Serial No. 281,267. 6 Claims. (Cl. 255—75.)



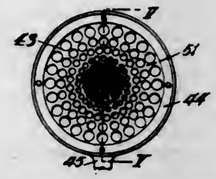
1. A drilling bit comprising; a body; cutting blades adapted for being advanced from the body obliquely to its axis; a ram adapted for advancing said blades; longitudinally slidable plunger rods normally projecting from the end of said bit; and means whereby an hydraulic pressure may be exerted upon said ram by the longitudinal sliding of said rods.

1,812,211. RETRACTABLE LANDING GEAR FOR FLYING MACHINES. GEORGE E. MCCREA, San Francisco, Calif. Filed June 26, 1929. Serial No. 373,709. 6 Claims. (Cl. 244—2.)



1. In a flying machine, a supporting structure; a pair of spaced landing wheels; a frame connecting each landing wheel with said structure; and means for swinging said frames toward each other and upwardly to substantially horizontal positions in proximity to said structure, said wheels remaining substantially vertical during the movement of said frames.

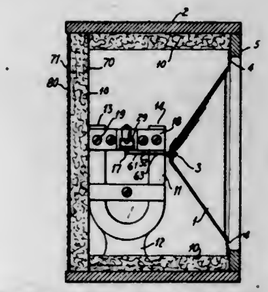
1,812,212. MOTION PICTURE PROJECTOR. WILLIAM H. MEYER, St. Louis, Mo. Filed Aug. 1, 1925. Serial No. 47,606. 18 Claims. (Cl. 88—17.)



3. In a motion picture projector, the combination of a movable fire shutter, a revolving shutter having a pivotal blade structure, a shaft to which said revolving shutter is rigidly secured, an element cooperable with the blade structure of said revolving shutter slidably mounted on said shaft, and means actuated by said element for moving said fire shutter into the projecting light ray of said projector.

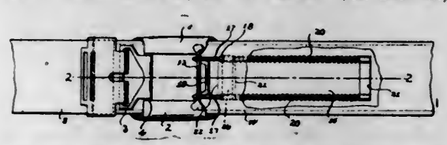
18. The combination of a source of light directed upon an object and a perforated plate positioned between the source of light and the object transversely of the light beam from said light source, the arrangement of the perforations and contours and sizes of said perforations of said plate comprising a means for suppressing the heat rays in the light beam so as to provide a substantially uniform amount of heat over the entire cross sectional area of the light beam at and adjacent to said object.

1,812,213. LOUD SPEAKER. JOHN P. MINTON, White Plains, N. Y., assignor, by mesne assignments, to United Reproducers Corporation, Rochester, N. Y., a Corporation of New Jersey. Filed Mar. 30, 1927. Serial No. 179,433. 15 Claims. (Cl. 179—115.)



1. A sound reproducer for voice and music comprising a housing having an opening in one face thereof, a stiff vibratile diaphragm mounted in said housing and having one side exposed directly to unconfined air through said opening and having the other side exposed only to air within said housing, said housing having an opening of substantial area in back of said diaphragm and said opening being covered with a layer of sound-absorbing material and means for supporting and driving said diaphragm, comprising an electromagnetic unit.

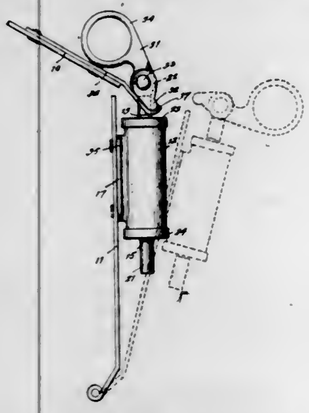
1,812,214. BELT FOR PERSONAL WEAR. EDWIN S. MIX, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Filed Sept. 16, 1927. Serial No. 219,898. 1 Claim. (Cl. 241—8.)



The combination with a belt, and belt buckle secured at one end to the belt, the belt having adjacent its oppo-

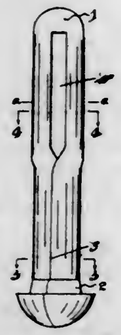
site end a pocket between its side edges opening on the rear face of the belt end in which the pocket is formed and in spaced relation to the last mentioned end, of a guide in the pocket, two guide bars movable on the guide, spring means in the pocket opposing the movement of the guide bars, an anchoring device connected to the guide bars and lying behind that belt end in which the pocket is formed, and an anchoring device on the buckle with which the anchoring device carried by the guide bars cooperates to hold the belt end to the buckle.

1,812,215. AUTOMOBILE HOOD CLAMP. RAYMOND G. MOORE, Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut. Original application filed Oct. 28, 1924, Serial No. 746,294. Divided and this application filed Oct. 25, 1926. Serial No. 143,946. 3 Claims. (Cl. 292—165.)



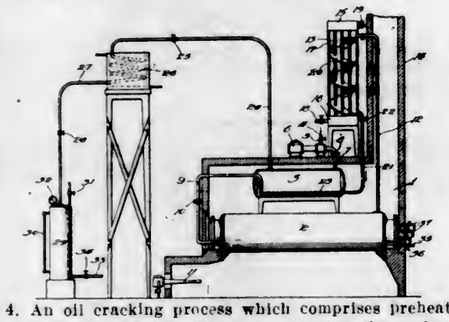
1. In a clamp, a tubular barrel formed of sheet metal bent transversely into tube form, integral extensions extending transversely from each side of said barrel adapted for attachment to a part of the clamped structure, integral projecting lugs at the upper and lower ends of said barrel, and end closure caps engaged over the ends of the barrel to secure the tubular relation thereof and having slots engaged by said lugs, said lugs being bent over upon said caps to secure them.

1,812,216. KEY BOLT. JOHN P. NORTHEY and RODNEY V. NORTHEY, Toronto, Ontario, Canada, assignors to Consolidated Bolt Company Limited, Toronto, Canada. Filed Feb. 3, 1928. Serial No. 251,590. 1 Claim. (Cl. 85—7.)



A slotted bolt comprising a slotted portion; and a longitudinally divided non-slotted stem in which the plane of division lies at an acute angle to the median plane of the slot, and includes a divided twisted portion forming a connection between the two parts aforesaid and in which the plane of division turns through the acute angle aforesaid.

1,812,217. PROCESS AND APPARATUS FOR HEATING PETROLEUM OIL. ALFRED OBERLE, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 19, 1923, Serial No. 633,099. Renewed Sept. 14, 1928. 5 Claims. (Cl. 196—48.)

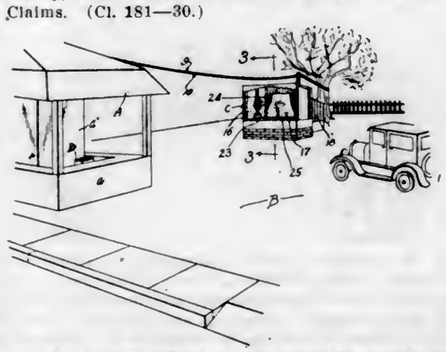


4. An oil cracking process which comprises preheating the oil in an initial heating zone, passing the preheated oil to a second heating zone and subjecting the same to cracking temperature therein, removing vapors from said second heating zone and subjecting the same to dephlegmation, passing the dephlegmated vapors and condensate formed in the dephlegmation to said initial heating zone, and removing and condensing vapors from said initial heating zone.

1,812,218. LIFT TRUCK PLATFORM. ELMER J. POWELL, Hubbard, Ohio, assignor to The Powell Pressed Steel Company, Hubbard, Ohio, a Corporation of Ohio. Filed Nov. 20, 1930. Serial No. 496,915. 2 Claims. (Cl. 248—41.)

1. A lift truck platform comprising integral sheet metal top and side members, and means to prevent distortion of the edges of the side members comprising a combined runner and bumper for each of said side members having a metal channel embracing the lower and both end edges of the side member.

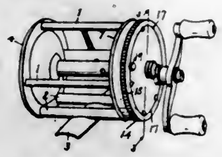
1,812,219. SOUND REPRODUCTION. LEWIS I. REED, Berkeley, Calif. Filed Oct. 2, 1928. Serial No. 309,839. 2 Claims. (Cl. 181—30.)



1. A stage for amplifying sound comprising a relatively wide and shallow front portion and a relatively narrow

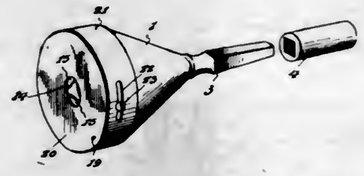
and deep rear compartment opening at its front into said front portion, the rear, side and upper walls of said compartment being constructed and arranged to form a sound amplifier.

1,812,220. FISHING REEL. WILLIAM SHAKESPEARE, Jr., Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Oct. 1, 1928. Serial No. 309,578. 7 Claims. (Cl. 242—84.1.)



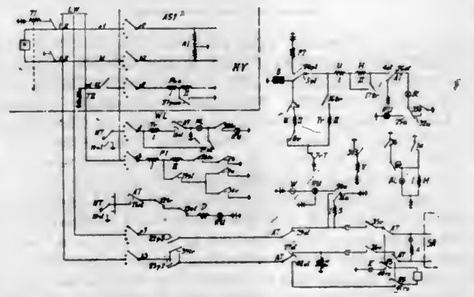
5. A fishing reel frame comprising a plurality of pillars, a head member having holes therein to receive said pillars, a locking ring rotatably mounted in said head member and having notches adapted to be brought into register with the said openings to receive the pillars, and transversely disposed cam portions adjacent said notches to be engaged with said pillars by rotative movement of the ring for clamping the head upon said pillars.

1,812,221. DRILL CHUCK. FREDERICK W. SPENCER, Chicago, Ill. Filed June 21, 1929. Serial No. 372,698. 4 Claims. (Cl. 279—33.)



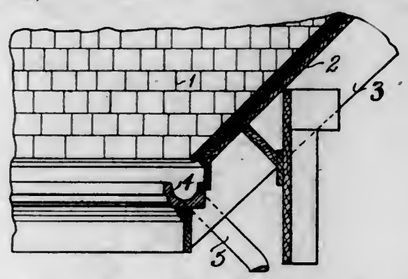
1. A chuck comprising a hollow body, a shank extending rearwardly from said body, a seat in said body to receive the rear end of a bit, a head for the front end of said body formed with a central opening, a ring fitting against said head, jaws pivoted to said ring and extending towards said opening and pivotally and slidably connected with said head for movement towards and away from the opening as the ring is rotated, means between the ring and opening to guide movement of the jaws, and means to rotate said ring.

1,812,222. TELEPHONE SYSTEM. JOHANNES STICH, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt bei Berlin, Germany. Filed May 13, 1930, Serial No. 452,087, and in Germany June 6, 1929. 9 Claims. (Cl. 179—27.)



1. In a private branch exchange, subscribers' lines, a trunk incoming from a main exchange and terminating in a switch having access to said lines, means for marking a called line, means for operating said switch to hunt for the marked line, two test wipers on said switch, means controlled over the first of said wipers for stopping the switch on the called line, and means controlled over the second of said wipers for determining the idle or busy condition of said line.

1,812,223. SHINGLE. JOHN V. TATLOW, Beaver, Wash. Filed Apr. 28, 1928. Serial No. 273,446. 1 Claim. (Cl. 108—8.)



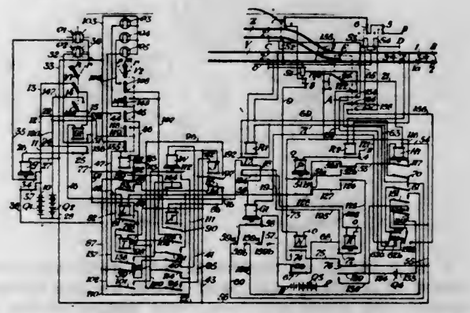
A roof structure having a continuous or non-interrupted surface and comprising rows of overlapping shingles in which each shingle has upper and lower feather edges, an inclined lap face and a beveled exposed face terminating in an apex, and said lap face and exposed face being arranged at varied angles and of different lengths.

1,812,224. ELECTRODE FOR UNIPOLAR HIGH-FREQUENCY CURATIVE TREATMENT. ERNST TREIBMANN, Leipzig, Germany. Filed Oct. 12, 1928, Serial No. 312,017, and in Great Britain July 17, 1928. 6 Claims. (Cl. 174—89.)



1. In an apparatus for unipolar high frequency curative treatment, a deformable holder of insulating material, a plurality of electrodes mounted on said holder and spring means electrically interconnecting said electrodes.

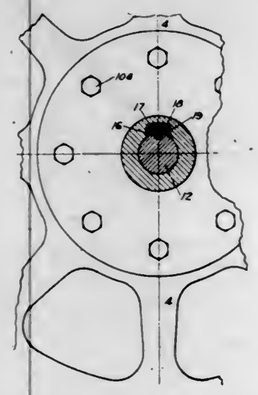
1,812,225. REMOTE CONTROL APPARATUS. JAMES J. VANHORN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 22, 1929. Serial No. 357,013. 14 Claims. (Cl. 246—3.)



1. In combination, a railway traffic governing device, a pair of conductors, a manually operable lever, an indica-

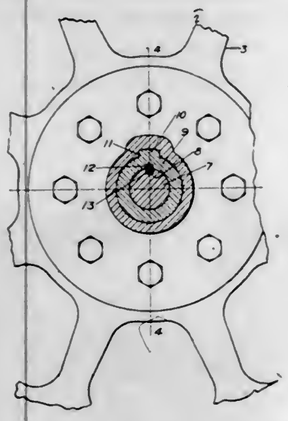
tion means, a relay for controlling said device, a circuit including said conductors and said relay, a branch path around said relay in said circuit and controlled by said device, means controlled by said lever for supplying said circuit with current for operating said relay, and means controlled by said lever for supplying to said branch path current for controlling said indication means.

1,812,226. METAL WHEEL. EDWARD E. WALKER, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Nov. 24, 1926. Serial No. 150,589. 1 Claim. (Cl. 287—53.)



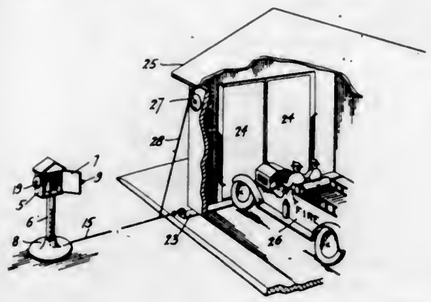
A metal wheel hub formed of relatively soft malleable cast metal having an axle opening therein with a key-sustaining insert of relatively hard metal permanently secured in the walls of the opening and provided with key shoulders on its inner face, the walls of the opening including the inner face of the insert forming an all-metal seating surface for the opening.

1,812,227. WHEEL. EDWARD E. WALKER, Erie, Pa., assignor to Erie Malleable Iron Company, Erie, Pa., a Corporation of Pennsylvania. Filed Nov. 26, 1926, Serial No. 150,781. Renewed June 18, 1929. 2 Claims. (Cl. 287—53.)



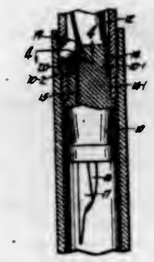
1. In a wheel, the combination of a metal wheel hub formed of relatively soft metal having an axle opening therein; and a relatively hard metal bushing secured in the opening, said bushing having key shoulders on its inner periphery.

1,812,228. TOY CALL BOX. FRED W. WARNER, Denver, Colo., assignor of one-half to Eva A. Warner. Original application filed Oct. 8, 1925, Serial No. 61,238, Patent No. 1,693,128, dated Nov. 27, 1928. Divided and this application filed Nov. 19, 1928. Serial No. 320,290. 6 Claims. (Cl. 46—37.)



1. A toy call-box for the operation of a toy fire-house at a distant point, comprising a portable stand having a foot for its loose support in an operative condition on a surface, an element adapted for the operation of an actuated part of the toy fire-house, means on the stand for the operative support of the element, and an alarm operatively associated with said means.

1,812,229. NON-LEAKING FOUNTAIN PEN. ROBERT H. WHITEHEAD, Salt Lake City, Utah, assignor of one-tenth to Charles S. Merrill, Salt Lake City, Utah. Filed Dec. 23, 1929. Serial No. 416,171. 6 Claims. (Cl. 120—48.)

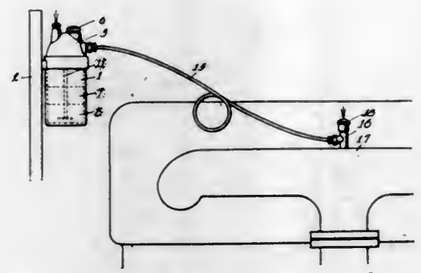


1. A fountain pen, including in combination an ink sac of resilient material, a feed member having a valve seat disposed to contact the inside of said sac, a valve on the outside of said ink sac, said valve being positioned to register with the said valve seat, and a barrel around said ink sac, said barrel having an opening in which said valve is positioned so as to have in and out motion.

1,812,230. PROCESS FOR PREPARING ACTIVE, ELEMENTARY CARBON FROM SUBSTANCES SUCH AS CARBONMONOXIDE AND CARBONMONOXIDE CONTAINING GASES. HENDRIKUS CORNELIS JOSEPHUS AARTS, Dongen, Netherlands, assignor to The General Carbonalpha Company, Wilmington, Del. Filed May 4, 1929, Serial No. 360,604, and in the Netherlands May 4, 1928. 1 Claim. (Cl. 252—3.)

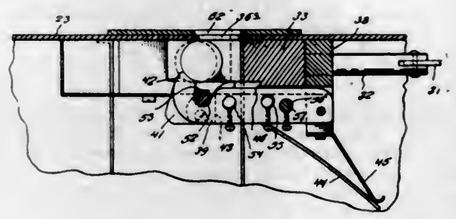
A process for preparing active elementary carbon from substances, such as carbonmonoxide and carbonmonoxide containing gases, characterized in applying as a catalyst carbon obtained by decomposition of carbonmonoxide and in starting the reaction by means of an extraneous catalyst and maintaing the gases after their leaving the space containing said extraneous catalyst at a temperature suitable to the autocatalytical action of carbon.

1,812,231. COMBINED GAS SAVING AND LUBRICATING MEANS. WILLIAM P. AGNEW, San Francisco, Calif. Filed June 28, 1929. Serial No. 374,498. 1 Claim. (Cl. 123—25.)



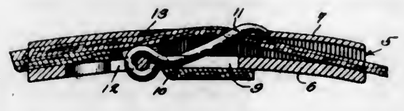
A gas saver for internal combustion engines comprising a vessel adapted for supporting a stratum of lubricating oil above a body of water, a conduit extending into the vessel above the stratum of oil and connecting with the intake manifold of the engine, a tube connecting with the atmosphere and extending into the body of water for allowing air to enter, and a disc at the end of the tube forcing the air to spread as it leaves the tube.

1,812,232. VENDING MACHINE. JOSEPH BERLAND, Cleveland, Ohio, assignor to Isaac Berland, Cleveland, Ohio. Filed Nov. 13, 1929. Serial No. 406,808. 12 Claims. (Cl. 194—57.)



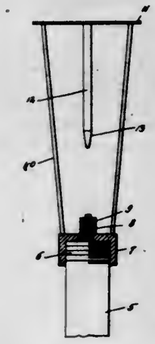
1. In a vending machine, a coin-controlled mechanism including a reciprocating coin receiver and mover, a plurality of coin-released pivoted detents, certain of said detents being normally spring-pressed into position to arrest movement of said coin receiver and mover, and means to selectively connect certain or all of said detents in any various relations for independent movement or movement in unison, whereby the mechanism may be set for causing release of said detents from the path of the coin receiver and mover upon insertion of any desired one of several coins of different denominations.

1,812,233. BELT BUCKLE. RANDOLPH BOYD, Galva, Ill. Filed Sept. 30, 1929. Serial No. 396,345. 1 Claim. (Cl. 24—178.)



In a belt, a buckle embodying an elongated body portion having spaced outer and inner walls, the outer wall being cut away providing a tongue opening, a tongue pivotally connected with the inner wall and extending through the cut away portion, one end of the belt extending into the buckle, through one end thereof and having an opening to receive the tongue near the base of the tongue, to secure said end of the belt to the buckle, and the opposite end of the belt being passed through the buckle from the opposite end of he buckle, and the latter end of the belt having an opening to receive the tongue.

1,812,234. SPRAY DEVICE. EDWIN HAROLD BRAATELIEN, Phoenix, Ariz. Filed Sept. 10, 1929. Serial No. 391,596. 1 Claim. (Cl. 299—127.)



A spraying device comprising a cap having means for attachment to the discharge end of a water supply pipe, a discharge nipple on the said cap, a frame projecting from the cap and consisting of side members and a cross member connecting the outer end of the side members, and a deflector consisting of an elongated pin of plastic material projecting inwardly from the cross member of the frame and having its lower end tapered, said pin being capable of being bent for alinement with the discharge opening of the said nipple to produce a uniform spray.

1,812,235. ARTIFICIAL BAIT. LELAND ESTYN CARR, Lopez, Wash. Filed Oct. 24, 1929. Serial No. 402,124. 4 Claims. (Cl. 43—42.)

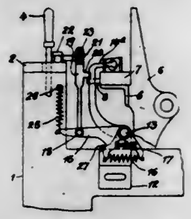


3. An artificial bait of the character described comprising an elongated, longitudinally curved, hollow body portion of substantially ovate cross-section, an integral neck of circular cross section on one end of the body portion providing a fluid inlet opening, said body portion being further provided with a comparatively small fluid outlet opening at its other end.

1,812,236. SHUTTLE-GUARD FOR LOOMS. EDUARD EGLI and EDWIN SCHOCH, Ruti, Switzerland, assignors to Maschinenfabrik Rüti Vormals Caspar Honegger, Ruti, Switzerland. Filed Nov. 18, 1929, Serial No. 408,109, and in Switzerland Nov. 30, 1928. 2 Claims. (Cl. 139—341.)

1. A device of the kind described, comprising a shaft rotatably supported in bearings and extending from side

to side of the loom, two vertical feeler arms fixed to the said shaft and extending to both sides within the shuttle box in the path of swing of the shuttle when not completely entered, a vertically movable lever in driving connection with the said feeler arms, a vertical push



rod pivoted to the said lever and having a push knob capable of being aligned with a push knob of the lathe when lowered by one of the feeler arms and by the said lever, and a horizontal connection between the push rod and the weft fork lever which connection admits vertical movements of the push rod.

1,812,237. MOBILE MOORING APPARATUS. JOSÉ ANCIRA GARCIA, Los Angeles, Calif. Filed Nov. 9, 1929. Serial No. 405,995. 1 Claim. (Cl. 244—2.)



In a mobile mooring apparatus for dirigibles, a wheel carriage having a frame, an elongated turntable mounted for rotative movement on said frame, winches on the turntable and arranged in pairs at opposite ends thereof, cables on the winches, and a pair of motors on the turntable one for each pair of winches, each motor being operatively connected to the two winches for rotating the latter simultaneously and in either direction to wind or unwind the respective cables.

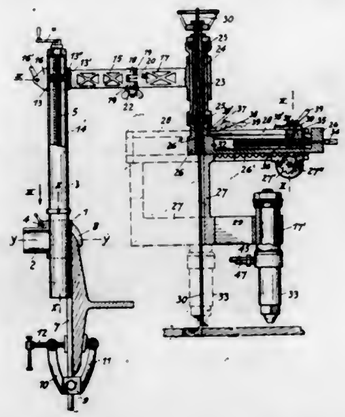
1,812,238. PROCESS FOR PREPARING COMPRESSED IODINE IN THE FORM OF RODS, PENCILS OR THE LIKE. FRITZ HAMMER, Hessen-Nassau, Germany, assignor to the Firm B. Braun, Melsungen (Hessen-Nassau), Germany. Filed Oct. 17, 1929, Serial No. 400,462, and in Germany Apr. 18, 1929. 13 Claims. (Cl. 23—245.)

1. A process for preparing compressed iodine in shaped form, comprising the steps of dissolving the iodine in an aqueous solution of an alkali metal iodide, mixing the resulting solution into a paste with at least one binding agent for reducing the volatility of the iodine and compressing the paste into the desired form.

13. As new articles of manufacture, compressed shaped pencils or rods composed of 75 parts of iodine, 75 parts of potassium iodide, 25 parts of kaolin, 100 parts of milk sugar and 12.75 parts of talc.

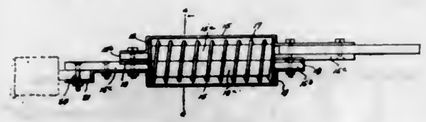
1,812,239. METHOD OF AND MACHINE FOR CUTTING HOLES. HERMANN HENTSCHEL and HANS GRIGGERSEN, Hamburg, Germany, assignors to the Firm Autogen Gasaccumulator Aktiengesellschaft, Berlin, Germany. Filed May 6, 1927, Serial No. 189,416, and in Germany June 15, 1926. 4 Claims. (Cl. 148—9.)

1. A method for autogenously cutting holes involving the use of a cutting nozzle and a relatively annular heating nozzle, consisting in delivering a suitable mixture of oxygen and fuel gas through both nozzles for heating the



point of the material to be perforated, and then delivering oxygen through both nozzles to cause perforation of the material.

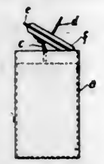
1,812,240. TRAILER COUPLING. DAVID G. HOTTMANN, Tolstoy, S. Dak. Filed July 8, 1930. Serial No. 466,549. 1 Claim. (Cl. 280—33.9.)



A coupling device comprising bars of semi-circular form in cross section arranged with their flat sides in opposed relation and having flat end portions, the flat end portion of one bar being adjacent one end of the device, and the flat end portion of the other bar being adjacent the opposite end of the device, a spring coiled about the semi-circular portion of the bars, washers surrounding the bars and opposed to the ends of the spring, wear plates arranged in endwise relation to the washers and disposed at the inner sides of the end portions of the said bars, the plates immediately adjacent the end portions of the bar being connected to said end portions, shouldered members abutting against and connected to the plates remote from the end portions of the bars, a longitudinal strap arranged opposite the convolutions of the spring and having one end portion connected to the end portion of one bar and also having another end portion connected with one of said members and adapted to cooperate therewith in connecting the device to the shaft of a trailer, and another strap arranged opposite the convolutions of the spring and having an end portion connected with the end portion of the other bar and also having another end portion connected with the other member and adapted to cooperate therewith in connecting the device to a motor vehicle; the said longitudinal strap also having shoulders opposed to the outer sides of said washer.

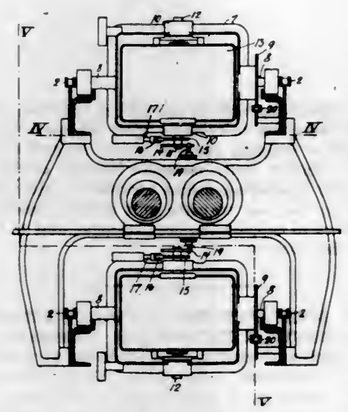
1,812,241. ELECTRICAL CONDENSER. ALOIS JAYET, Yverdon, Switzerland, assignor to Leclanche S. A., Yverdon, Switzerland. Filed Feb. 10, 1928, Serial No. 253,447, and in Germany Feb. 12, 1927. 1 Claim. (Cl. 175—41.)

In an electrical condenser, an outer-casing, a dielectric filling as means for insulating the armatures and reaching up near to the border of the casing, two slender lugs forming the connecting means of the armatures and extended over the surface of said filling, a cover for the casing, comprising a central insulating body, terminals imbedded therein with a corrugated portion and having



portions projecting from the bottom of the central body and soldered to said slender lugs and a sheet-metal frame embedded into said central body and fitting inside the walls of the upper free space of the casing and soldered thereto so as to form an air and water-tight joint.

1,812,242. MACHINE FOR THE MANUFACTURE OF HOLLOW ARTICLES. JENS JOHANNES JENSEN, Copenhagen, Denmark, assignor to Messrs. Boggild & Jacobsen, Copenhagen, Denmark. Filed Oct. 26, 1929, Serial No. 402,654, and in Germany Nov. 5, 1928. 3 Claims. (Cl. 107—8.)

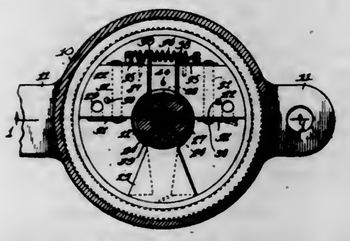


1. A machine for casting hollow articles of chocolate comprising endless belts, frames connected with the belts, molds connected with the frames by pins, certain pins having star wheels fixed thereto, pins fixed to the machine adapted to engage the star wheels to effect intermittent rotation of the molds, square disks fixed to the mold pins, a spring pressed rod carried by the mold assembly and having a roller thereon engageable with the periphery of the disk and serving to maintain the star wheels in positions to positively position the arms thereof for engagement with the pins fixed to the machine.

1,812,243. THERMIC CONTAINER. ALOYS JOST, The Hague, Netherlands. Filed Mar. 25, 1930, Serial No. 438,910, and in Belgium Apr. 26, 1929. 2 Claims. (Cl. 23—5.)

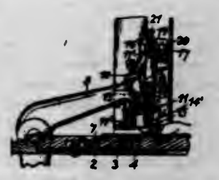
1. A thermic container consisting in a receptacle containing a salt with negative heat of solution and water, said receptacle being made of a hard inflexible material and hermetically sealed by soldering, the salt solution containing at least one solid body.

1,812,244. VEHICLE SHOCK ABSORBER. ENOS H. KREIDER, Lancaster, Pa. Filed Aug. 6, 1929. Serial No. 383,798. 6 Claims. (Cl. 188—89.)



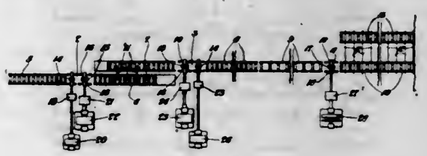
1. In a vehicle shock-absorber of the hydraulic type embodying a rock-shaft carrying a vane-piston and means forming a pressure-chamber at each side thereof, an inwardly-opening valve for each of these pressure chambers, devices for normally holding these valves open to thereby permit a free-center movement of the vane-piston, and devices whereby a major vibration of the unsprung portion of the vehicle will rock the said shaft sufficiently to positively close one of said valves while holding the other open.

1,812,245. SAFETY APPLIANCE. JOSEPH KRELL, Berlin-Zehlendorf, Germany. Filed Apr. 25, 1929, Serial No. 358,079, and in Germany May 3, 1928. 7 Claims. (Cl. 74—105.)



1. A safety appliance for address printing or similar printing machines with a printing head moving up and down, for preventing the nipping of the operator's fingers by the descending printing head, comprising in combination a protective body, means for hanging the body in the path of the printing head when the printing head is raised, means pivotally suspended from a stationary part of the machine and pivotally connected to the hanging means for controlling the body so that during the down stroke of the printing head the body is rocked forwards, that is towards the person in charge and out of the path of the printing head.

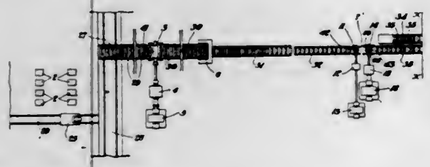
1,812,246. METHOD OF MAKING FLANGED SHAPES. WILLIAM C. OBERG, Munhall, Pa. Filed Dec. 27, 1928. Serial No. 328,813. 11 Claims. (Cl. 80—66.)



10. The method of rolling flanged shapes which consists in initially rolling a shape having web and flange portions with parallel, outwardly inclined side surfaces and edge surfaces at right angles to said side surfaces on the flange portions, making the thicknesses of the web and flange portions in the same proportion to each other as in

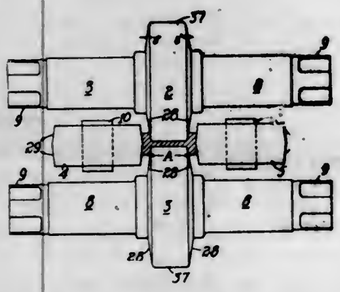
the finished shape, making the area of the web portion which lies within the rectangle formed by the side surfaces thereof and lines at right angles to said side surfaces that bisect the fillets of the shape at the ends of the web portion, and the area of the flange portions which lie in the rectangle formed by the side and end surfaces thereof and lines at right angles to the inner surfaces of the flange portions that bisect said fillets, in the same proportion to each other as the same portions of the finished shape, and then further rolling the shape and maintaining such thickness ratio and area ratio of the web and flange portions in the further rolling operations and bending the outwardly inclined flange portions into normal position in the final rolling pass.

1,812,247. ROLLING MILL PLANT AND METHOD OF OPERATING SAME. WILLIAM C. OBERG and ANDREW W. SODERBERG, Munhall, Pa. Filed Dec. 27, 1928. Serial No. 328,814. 18 Claims. (Cl. 80—36.)



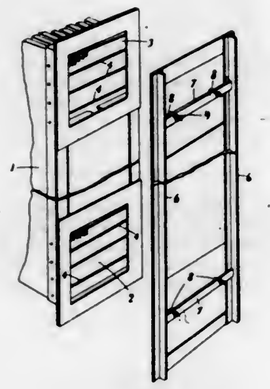
18. In the rolling of flanged shapes the steps comprising first rolling a flanged bloom in a series of back and forth passes in a roughing roll train having a reversing edging roll stand and tandem reversing universal roll stand and then further rolling the partly reduced shape in a series of back and forth passes in a second roughing roll train having a reversing universal roll stand and tandem reversing edging roll stand and finally reducing the flange and web thickness and finishing the shape in the universal finishing roll stand, first reducing the flange width of the bloom before reducing the flange and web thickness in the initial pass in the roughing roll train, shaping the bloom with its flanges out of normal position in the reducing passes in the roughing roll train, reducing the flange and web thickness and afterward rolling the edges of the partly rolled shape in the final pass in the second roll train, maintaining the flanges out of normal position in rolling the shape in the second roughing roll train and finally reducing the flange and web thickness and bending the flanges to normal position in finishing the shape in the universal finishing roll stand of the mill.

1,812,248. ROLL. WILLIAM C. OBERG, Munhall, Pa. Filed Dec. 29, 1928. Serial No. 329,195. 20 Claims. (Cl. 80—66.)



1. In a rolling mill for rolling flanged shapes, a tandem roll train comprising a universal roll stand and an edging roll stand, each of said roll stands having horizontal top and bottom rolls with frusto-conical end surfaces on the bodies thereof and the ends of said edging roll bodies having flange edging collars thereon, each end of the edging roll bodies being frusta-conical and the frusto-conical surfaces adjoining the peripheries of the body portions flaring at a greater angle relative to the peripheries than the frusto-conical surfaces adjoining the edging collars.

1,812,249. HEAT EXCHANGE APPARATUS. WILLIAM HENRY OWEN, London, England. Filed Oct. 4, 1929, Serial No. 397,368, and in Great Britain Dec. 21, 1928. 5 Claims. (Cl. 257—245.)



1. In combination with a conduit, a heat transfer unit having spaced ports to register with the ports formed in the conduit, a framing carried by the conduit to receive the heat transfer unit, members loosely engaging the framing, and tensioning means located in said ports and connected to the heat transfer unit and cooperating with said members to support the heat transfer unit in fixed relation to the framing.

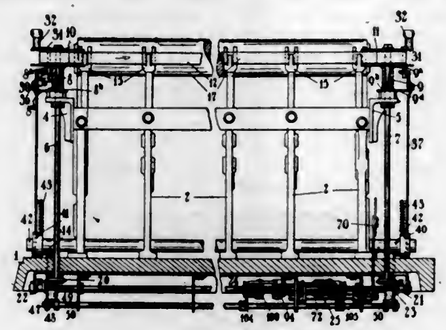
1,812,250. MANUFACTURE OF BARIUM HYDROXIDE AND STRONTIUM HYDROXIDE. BERNHARD CONRAD STUER, Aachen, Germany, assignor to the Firm Rhenania Verein Chemischer Fabriken Aktien-Gesellschaft, Aachen, Germany, a Corporation of Germany. Filed Mar. 29, 1924. Serial No. 702,965, and in Germany Apr. 6, 1926. 7 Claims. (Cl. 23—186.)

7. Process for the preparation of substantially sulphide-free barium hydroxide consisting in treating a 9% hot solution of barium sulphide with about 20% of ammonia, cooling said solution thereby precipitating crystals of barium hydroxide therefrom and washing repeatedly said crystals with aqueous ammonia.

1,812,251. RIBBON FEEDING MECHANISM. ARTHUR THOMAS, Thornton Heath, England, assignor to The Accounting & Tabulating Corporation, Great Britain, Limited, London, England. Filed Mar. 8, 1928. Serial No. 260,099. 7 Claims. (Cl. 197—160.)

1. In a ribbon feed, the combination of a pair of ribbon spools; a first-motion shaft; means for driving one of said spools to wind the ribbon thereon and unwind it from said other spool; means for driving said other spool to wind the ribbon thereon and unwind it from said first-mentioned spool, parts of said driving means, including said first-motion shaft, being common to both said driving means; means for changing over from one of said driving means to the other; means actuated from said first-motion shaft

for operating said changing-over means; means for holding said actuating means normally in an inoperative posi-



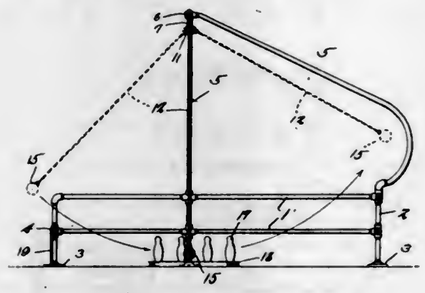
tion; and means including a spool-carried member movable under the pull of the ribbon for bringing said actuating means into the operative position.

1,812,252. DIRIGIBLE SLEDGE OR SLEIGH. FRANZ WELS, Schloss Harta, near Hohenelbe, Czechoslovakia, assignor of one-half to Christian Kronig, Schloss Harta, near Hohenelbe, Czechoslovakia. Filed Dec. 3, 1929, Serial No. 411,358, and in Austria Nov. 29, 1928. 2 Claims. (Cl. 280—21.)



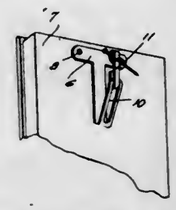
1. In a dirigible sledge, sleigh, boat and the like the provision of a paddle-wheel with vanes rotatably attached to the vehicle substantially about its longitudinal axis, steering means for rotating said paddle-wheel and means transmitting the rotation of said steering means to the shaft of said paddle-wheel.

1,812,253. GAME. GUY L. BONHAM, West Hartford, Conn. Filed Sept. 17, 1928. Serial No. 306,299. 1 Claim. (Cl. 273—40.)



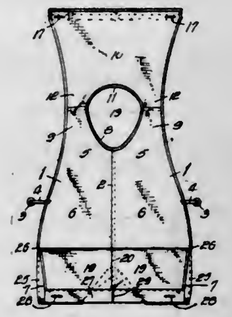
A game apparatus including connected rails and frame members providing an enclosure, a tongue supported by the frame members above the enclosure and provided with an opening having a bottom recess, a link extending loosely through the opening and downwardly from the tongue, a tooth within the link and bearing in the recess for holding all portions of the link normally spaced from the tongue, a flexible supporting element depending from the link, a ball, a stem on which the ball is mounted for rotation, means for connecting the stem to said flexible connection, and game pieces in the enclosure adapted to be struck by the ball.

1,812,254. PICTURE HANGER. ROSCOE C. BOSWELL, New Hartford, N. Y. Filed Oct. 27, 1927. Serial No. 229,135. 1 Claim. (Cl. 40—145.)



A picture hanger, a substantially T-shaped frame, an attaching member of bendable material having its laterally disposed ends at the head of the member secured to the frame and its lower end free and adapted to be turned upwardly and outwardly with respect to the picture frame at a predetermined point intermediate its ends, said free end being open between its side edges whereby to receive a picture supporting hook.

1,812,255. COMBINATION UNDERGARMENT FOR CHILDREN. MARTHA BRAZZELL, St. Louis, Mo. Filed Feb. 15, 1929. Serial No. 340,070. 1 Claim. (Cl. 2—80.)

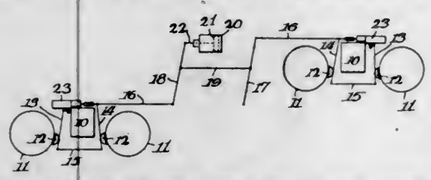


A combination undergarment for children comprising a pants portion and a waist portion, the front part of the waist portion being continuous with the front part of the pants portion and the back part of the waist portion being continuous with the front waist portion and said front and back waist portions being provided with a neck opening, the upper half of the back part of the pants portion being non-connected to the front part of the pants portion to provide a flap portion, the lower corners of the back waist portion being provided with button holes, a pair of buttons connected with the side edges of the upper front part of the pants portion for the button holes at the lower corners of the back waist portion, the upper corners of the flap portion of the back part of the pants portion being provided with button holes for the same buttons as the corner button holes of the back part of the waist portion, the upper edge of the flap portion of the back part of the pants portion being provided with a button hole midway the corner button holes thereof and a button sewed to the lower edge portion of the back part of the waist portion midway the corner button holes thereof for the button hole midway the corner button holes of the back flap portion.

1,812,256. BRAKE SLACK ADJUSTER FOR RAILWAY CARS. PERCY B. CAMP, Maywood, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Jan. 17, 1929. Serial No. 333,047. 13 Claims. (Cl. 188—200.)

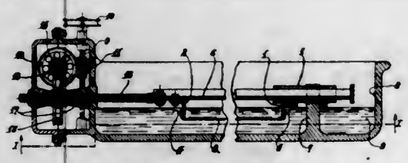
1. In a brake mechanism, a lever, a rack operatively connected with the lever, a relatively fixed guide for the

rack, a holding pawl on the guide engaging the rack, an adjuster moving with respect to the guide upon excess brake movement, a spring resisting such movement of the



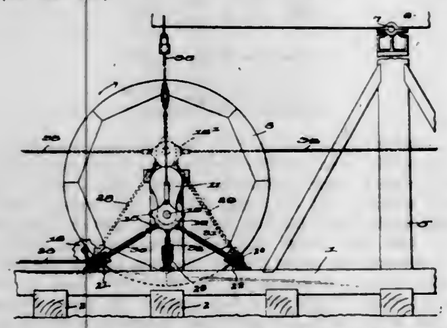
adjuster and automatically restoring it upon release of the brakes, a driving pawl on the adjuster engaging the rack, and means operated by the adjuster for securing the holding pawl in engagement with the rack.

1,812,257. PROCESS AND APPARATUS FOR TANNING LEATHER. RENÉ CHAVAND, Lyon, France. Filed Jan. 13, 1930, Serial No. 420,536, and in France Jan. 12, 1929. 4 Claims. (Cl. 149—4.)



1. A process for the manufacture of leather for belts and the like, comprising the step of tanning a hide while progressively stretching it in one direction.

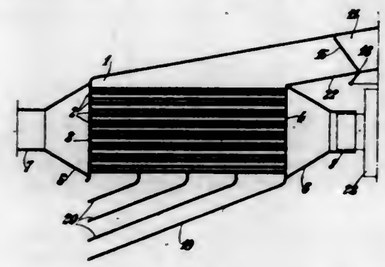
1,812,258. POWER UNIT. JAMES R. COLE, Tulsa, Okla. Filed Nov. 11, 1927. Serial No. 232,679. 10 Claims. (Cl. 74—14.)



1. A power unit comprising a base member, a vertically extending post secured thereto and having a rocker arm mounted on the top thereof, a power driven band wheel on said base member, a horizontal shaft supporting said wheel and rotatable therewith, a crank lever fixed on each end of said shaft and provided with a wrist pin at its free end, a vertical connecting plate rotatable on each of said wrist pins, pull deflectors, comprising sprocket wheels, mounted on said base on either side of said band wheel, and sprocket chains connected to said plates on the wrist pins, and engaging said deflector sprocket wheels, from whence they run to a plurality of well pumps located at different points around said unit, and with a pitman connecting one of said plates with said rocker arm.

1,812,259. PLANT FOR HEATING MOTOR VEHICLES. CHRISTIAN DE LA BARRE DE NANTEUIL, Versailles, France. Filed Aug. 28, 1926, Serial No. 132,260, and in France Feb. 4, 1926. 5 Claims. (Cl. 257—241.)

1. In a heat exchange device for use in heating vehicles, a casing, headers connected to the opposite ends thereof, parallel tubes connecting the headers together and positioned within the casing, one of the headers being connected to a source of heated fluid and the other header being provided with a discharge opening, said casing having openings in the top and bottom walls which extend from one header to the other longitudinally of the casing, an air inlet member connected about the bottom opening including a bottom wall inclined forwardly from

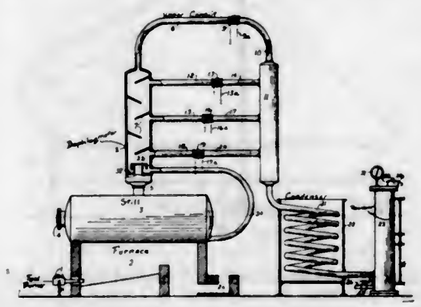


the rear header and having an open front transversely disposed, inclined partitions within said air admitting member and forming conduits, each of which direct the incoming air to different zones of the tubes, a rearwardly inclined pipe leading from the upper wall of the casing and provided in its lowermost portion adjacent the casing with an orifice, and a valve located adjacent the orifice in said exit pipe and mounted to close either the orifice or the pipe.

1,812,260. PROCESS FOR THE SEPARATION OF SUBSTITUTED α-AND β-AMINO ANTHRAQUINONES. HUGH ALBERT EDWARD DRESCHER, WILLIAM SMITH, and JOHN THOMAS, Grangemouth, Scotland, assignors to Scottish Dyes, Limited, Grangemouth, Scotland. Filed July 20, 1926, Serial No. 123,792, and in Great Britain July 21, 1925. 2 Claims. (Cl. 260—60.)

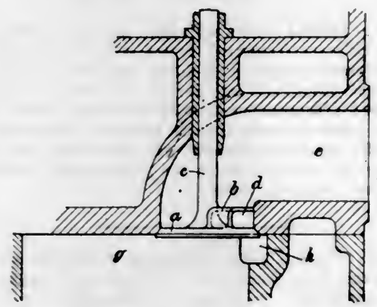
1. As an article of manufacture, 2-amino-3-chloranthraquinone in such a state of purity as to have a melting point of about 310° C. to 311.5° C.

1,812,261. DEPHLEGMATING APPARATUS. GUSTAV EGLOFF and HARRY P. BENNER, Independence, Kans., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 28, 1920. Serial No. 392,476. 1 Claim. (Cl. 196—99.)



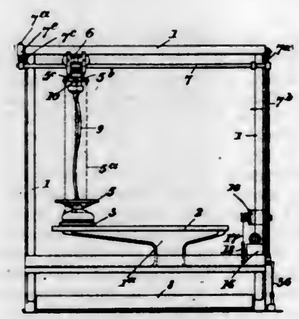
In an apparatus for cracking hydrocarbon oils, a vertically elongated dephlegmator, having a series of baffles therein vertically disposed with respect to each other, a vapor inlet at the bottom of said dephlegmator, a liquid outlet adjacent the bottom of said dephlegmator, means for preventing liquid from passing out through said vapor inlet, a plurality of vertically spaced vapor outlet conduits communicating with said dephlegmating column intermediate the baffles therein, independently operable valves positioned in said conduits, to control the passage of vapors through said conduits and permit taking off of the vapors through any desired conduit, and means for maintaining a superatmospheric pressure on the vapors in the dephlegmator.

1,812,262. INLET VALVE OF INTERNAL COMBUSTION ENGINES. JOSEPH GARDNER and JOSEPH HUGH STOTT GARDNER, Patricroft, near Manchester, England, assignors to L. Gardner & Sons Limited, Patricroft, near Manchester, England, a British Company. Filed May 10, 1930, Serial No. 451,468, and in Great Britain Oct. 12, 1929. 6 Claims. (Cl. 123—188.)



1. An inlet valve of an internal combustion engine having a raised platform like part at one side of the back of the valve in order to provide a permanent closure for that side of the valve throughway and to direct the incoming air or charge to the unshielded or unbaffled side of the valve.

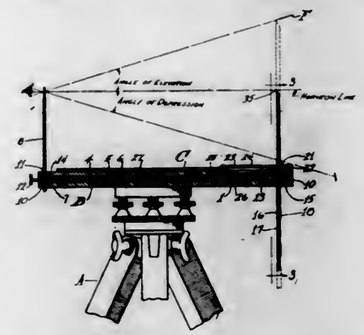
1,812,263. IRONING MACHINE. ARTHUR HAMMER, Berlin, Germany. Filed Oct. 7, 1927, Serial No. 224,661, and in Germany Oct. 25, 1926. 15 Claims. (Cl. 68—9.)



1. An ironing machine of the character described, comprising a sad-iron mounted rotatably within a bearing body, supporting means, and a plurality of suspension members connected to said bearing body and to said supporting means and having their upper as well as their under connecting points distanced from each other.

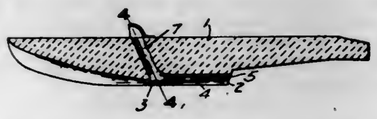
1,812,264. PANORAMIC DRAWING BOARD. WILLIAM J. HELMER, Fort Kamehameha, Territory of Hawaii. Filed July 16, 1928. Serial No. 293,159. 6 Claims. (Cl. 33—64.)

1. A sketching device comprising a drawing board, a fixed sight thereon and a movable sight finder pivotally mounted on said board on the vertical axis of the fixed sight and being swingable about the fixed sight as a center, said movable sight being movable in a vertical and a horizontal plane, and means bearing a scale movable horizontally with the movable sight for determining points on the board spaced horizontally from each other on



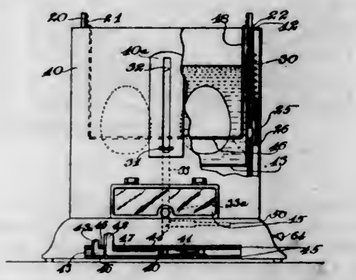
the object being drawn, there being a vertical scale carried by said movable sight and graduated the same as the first named scale.

1,812,265. PONTOON FOR SEAPLANES AND LIKE BODIES. JOHN HONE, Flin Flon, Manitoba, Canada. Filed May 31, 1930. Serial No. 458,496. 1 Claim. (Cl. 244—2.)



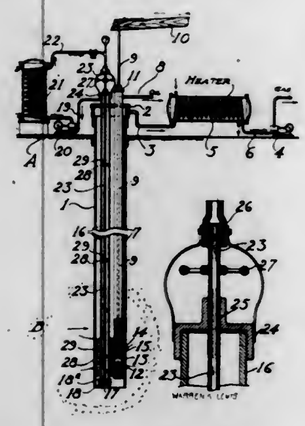
In a seaplane pontoon body having a horizontal stepped bottom, of an open groove or channel extending forward from the rise of the step at each side of the longitudinal centre of the pontoon, and a duct communicating with each groove extending through the pontoon body to the upper face thereof, and means for directing air into the upper end of each duct as the pontoon body travels forward.

1,812,266. TIMING MECHANISM FOR EGG BOILERS AND THE LIKE. FREDERICK E. HUMMEL and JOHN J. NOETH, Chicago, Ill. Filed Dec. 11, 1924, Serial No. 755,260. Renewed Sept. 20, 1928. 1 Claim. (Cl. 161—16.)



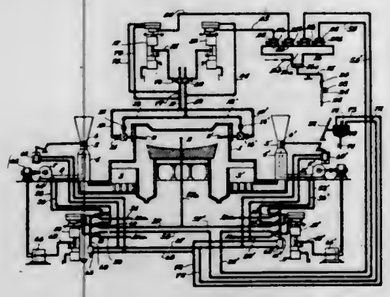
A timing device for an egg-boiler, or the like comprising an elevator, a latch to detain the latter, a main sweep-arm normally driven in one direction and manually movable in the opposite direction, a graduated segmental ledge to guide and indicate the movement of the main sweep-arm, an accessory sweep-arm operative in advance of the main sweep-arm along said ledge, a stop carried by the accessory sweep-arm and adjustably engageable with said ledge to limit the manual stroke of the main sweep-arm, and a tripper for said latch carried by the main sweep-arm and operative on the driven stroke to effect the release of the latch.

1,812,267. PROCESS FOR OPERATING OIL AND GAS WELLS UNDER REDUCED PRESSURE. WARREN K. LEWIS, Newton, Mass., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 28, 1928. Serial No. 296,008. 2 Claims. (Cl. 166—21.)



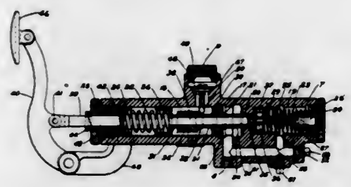
1. The method of obtaining natural gas from a well, which comprises introducing a refrigerating agent into a well to cool the gases in the lower portion of the well to condense the vapors therein, and withdrawing the residual gases by suction.

1,812,268. OPEN HEARTH FURNACE CONTROL. JAMES K. MAWHA, Maplewood, N. J., assignor to Smoot Engineering Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 9, 1930. Serial No. 442,793. 11 Claims. (Cl. 236—15.)



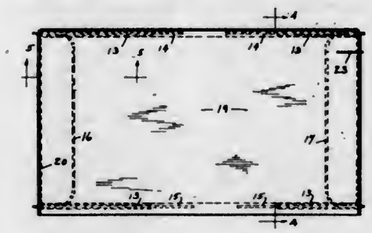
1. In combination with a reversing furnace of the type wherein a pair of continuously operating blowers supply air under pressure into damper controlled Venturi sections of a pair of stacks and the furnace is reversed by reversing the positions of the dampers in the stacks to cause the air delivered by one blower to be deflected at the closed damper and to thereupon pass into the melting chamber to which fuel is supplied and from which the air from the other blower induces withdrawal of the gases of combustion, a control system including a regulator for each blower and means associated therewith for applying to the regulator for the blower supplying air to the furnace a differential pressure varying with the rate of flow of air to the furnace and for applying to the regulator for the blower inducing the withdrawal of gases from the furnace a pressure differential varying with the pressure in the furnace.

1,812,269. FLUID PRESSURE BRAKE CONTROL. ERNEST G. MCCAULEY, Dayton, Ohio. Filed Aug. 13, 1928. Serial No. 299,385. 7 Claims. (Cl. 303—54.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



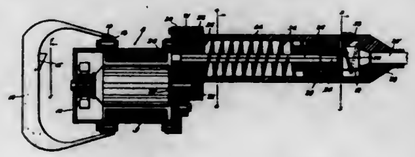
1. In a control valve for fluid pressure control devices, a pressure regulating device, a manual means for operating said device, a resilient member intermediate said manual means and said device, said device comprising two spaced piston elements adapted to receive the fluid pressure between them and be balanced thereby and a third piston element connected with said device and movable therewith for controlling the pressure and for releasing of same from said valve.

1,812,270. IRON REST. FREDERICK R PLAXCO and IRA L. FOSTER, Long Beach, Calif. Filed Oct. 19, 1929. Serial No. 400,898. 3 Claims. (Cl. 68—27.)



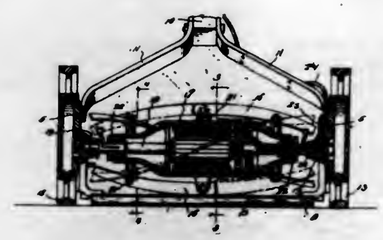
1. An iron rest comprising a substantially rectangular bottom member provided around three sides with an upstanding flange, guideways extending along the upper face of the bottom wall of said bottom member near each end of the longitudinal edges thereof; substantially U-shaped clamping members slidably mounted in said guideways to slide lengthwise of said member, having their free ends adapted to engage the underside of an ironing board; a sheet of heat resistant material supported upon the said bottom wall between said guide ways: and a top member of a configuration to conform with the said bottom member having upstanding flanges adapted to snugly surround the flanges of the bottom member and having its open end bent to snugly surround the open edge of the bottom wall of the bottom member.

1,812,271. ELECTRIC HAMMER. ELWIN GEORGE QUELLHORST, Cleveland, Ohio. Filed Dec. 20, 1929. Serial No. 415,447. 1 Claim. (Cl. 78—38.)



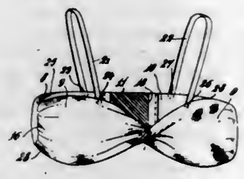
In an electric hammer of the class described, a cylindrical barrel having one end formed with a conical guide and having the opposite end open and internally and externally screw threaded, a bearing and gearing assembly detachably mounted on the externally screw threaded portion of said barrel, a follower ring adjustably mounted on the interior of the barrel and engaged with the internal screw threads, a shaft mounted for rotation in the bearings and operatively connected with the gearing, a rotatable and reciprocatory plunger in the opposite end portion of the barrel including a reduced stem slidable through said conical guide, and also including a body portion having a socket receiving slidably, the adjacent end of said shaft, an intermediate portion integrally formed with the plunger and reduced stem, a spiral thread formed on said intermediate portion, said thread having its ends longitudinally spaced, a guide and releasing screw mounted in said barrel, and cooperating with the spiral threads for permitting intermittent reciprocation of the plunger, and a coil spring bearing at one end against the follower plate and at the opposite end against the body portion of the plunger.

1,812,272. LAWN MOWER. CHARLES R. STEINMETZ, Oklahoma City, and HAROLD F. MCKINNEY, Okmulgee, Okla. Filed Nov. 20, 1928. Serial No. 320,639½. 1 Claim. (56—26.)



A lawn mower comprising a frame, ground engaging wheels carried by the frame, a stationary shaft, an electric armature carried by said shaft, an electric field casing surrounding the armature and cutter blades carried by the field casing, side plates journaled in the wheels, reduced end portions on the shaft for detachably connecting with the side plates, threads on the ends of the shaft for receiving clamping nuts adapted to maintain the shaft and side plates in rigid relationship to each other.

1,812,273. BRASSIÈRE. ELIZABETH MINOR TABB, Mahwah, N. J. Filed Nov. 5, 1925. Serial No. 67,161. 3 Claims. (Cl. 2—42.)

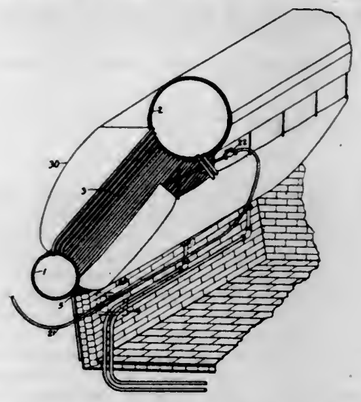


1. In a garment comprising a band to confine the bust, adapted to be worn in twisted formation as by rotation of the ends of a section thereof about a central longitudinal line of said section, said band comprising in developed formation two opposite longitudinal edges thereof; means adapting said band to be worn in said twisted formation, said means comprising a shoulder strap connection adjacent one of said edges, and a second shoulder strap connection adjacent the other of said edges.

1,812,274. PROCESS OF PREPARING 2-CHLOR-ANTHRAQUINONE. JOHN THOMAS, Carlisle, England, assignor to Scottish Dyes, Limited, Carlisle, England. Filed June 6, 1925, Serial No. 35,482, and in Great Britain Sept. 8, 1924. 4 Claims. (Cl. 260—57.)

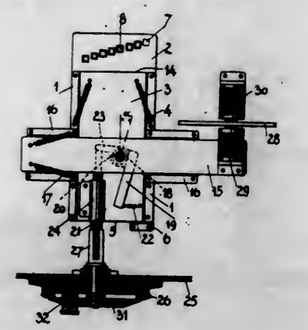
3. In the process of preparing 2-chlor-anthraquinone, the step which comprises treating para-chlor-benzoyl-benzoic acid with 85–90% sulphuric acid at an elevated temperature until the formation of a 2-chlor-anthraquinone is substantially complete.

1,812,275. METHOD OF CLEANING BOILERS. BERIAH M. THOMPSON, Cheyenne, Wyo. Filed June 24, 1927. Serial No. 201,268. 12 Claims. (Cl. 122—392.) (Granted under the act of Mar. 8, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



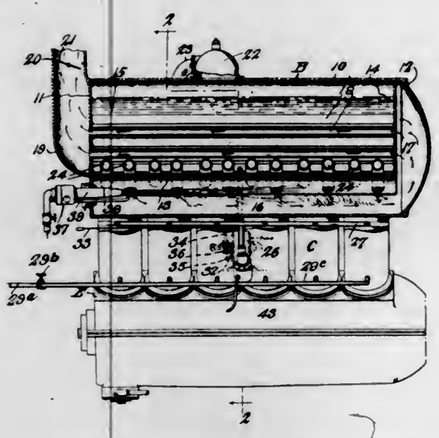
1. The method of cleaning boiler tubes which includes the steps of washing the solid deposits therefrom by impacting a heated liquid thereon at an angle and preventing said liquid from contacting parts that might be damaged thereby.

1,812,276. MECHANISM FOR PRODUCING LINEAR DISPLACEMENTS AND IN PHOTOGRAPHICAL TYPESETTING MACHINES IN CONNECTION WITH THEM. EDMUND UHER, Jr., Budapest, Hungary, assignor to Uhertype Aktiengesellschaft, Glarus, Switzerland. Filed Mar. 14, 1930, Serial No. 435,916, and in Germany Mar. 18, 1929. 10 Claims. (Cl. 95—4.5.)



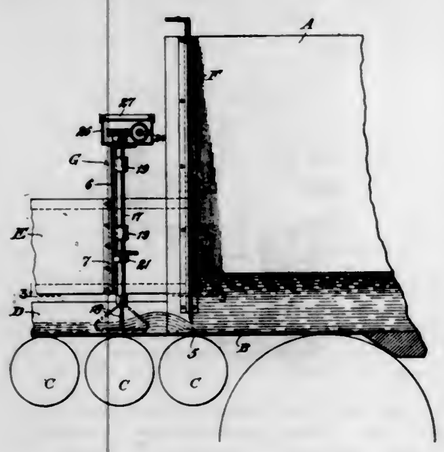
1. A mechanism for producing linear displacement by various steps of predetermined lengths, comprising a controller slide ndapted to reciprocate in a straight line, a support for said slide, guidings on said support for said slide, means for limiting the movements of said slide in one direction to selected distances, and means for transmitting at a variable ratio the movements of said slide in one direction only to the element to be displaced by steps.

1,812,277. APPARATUS FOR GENERATING MOTIVE FLUIDS. JOSEPH G. YONKESE, Brooklyn, N. Y. Filed Jan. 22, 1927. Serial No. 162,785. 6 Claims. (Cl. 60—14.)



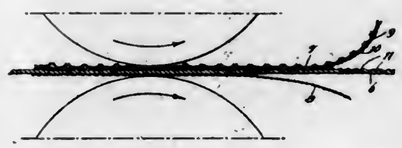
1. In combination, a motive fluid generating apparatus comprising a boiler having a water space and a firebox in heat conducting relation to the water space, and an internal combustion engine having an exhaust conduit from its cylinders extending through said water space so as to be exposed to water in the latter, and opening into said firebox, so that when the engine is in operation, heat from the exhaust gases of the engine traversing the exhaust conduit will be directly absorbed by the water in the water space from that portion of the exhaust conduit disposed in the water space, and the heat remaining in the exhaust gases as discharged into the fire-box, absorbed by water in the water space from the heated wall of the firebox, to thereby effect a maximum removal of heat units from the exhaust gases and convert the water in the water space into steam.

1,812,278. PAPER MAKING MACHINE. GEORGE S. WITHAM, Sr., Hudson Falls, N. Y. Filed Mar. 21, 1928. Serial No. 263,290. 9 Claims. (Cl. 92—44.)



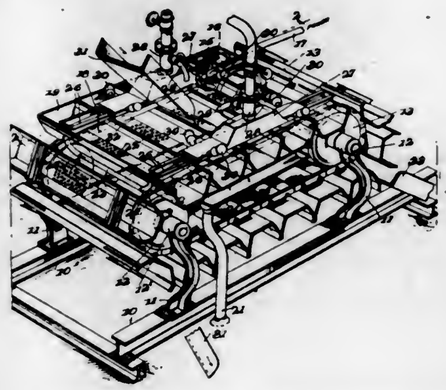
1. In a paper making machine, including a screen, the combination of a slice box having an outlet through which pulp will be discharged upon the screen, a plurality of pulp agitating devices located above the screen and in cooperative relation therewith in advance of the opening and supported on vertical axes for rotary movements in a horizontal plane, and means for rotating said devices.

1,812,279. ELASTIC MATERIAL. EDWARD S. AXLINE, New York, N. Y., assignor to Associated Apparel Industries, Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 20, 1930. Serial No. 476,521. 4 Claims. (Cl. 154—48.)



2. An elastic fabric comprising a layer of stockinet having alternate loosely knit portions enabling same to stretch and closely knit portions limiting the amount of stretch, and a sheet of rubber pressed into said stockinet and united with the loosely knit and closely knit portions thereof.

1,812,280. METHOD AND APPARATUS FOR CLEANING GRAVEL OR THE LIKE. GUY B. BEBOUT, Zanesville, Ohio. Filed Nov. 15, 1928. Serial No. 319,558. 9 Claims. (Cl. 209—424.)

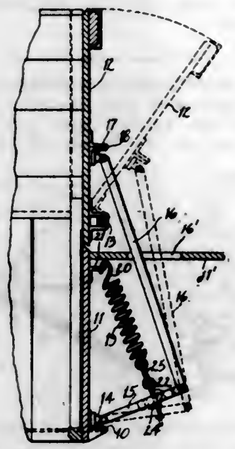


1. A method for washing and cleansing gravel or the like which comprises separating the gravel into relatively small batches, maintaining the batches of gravel in a settled and unagitated state, causing water at relatively lower pressure to flow upwardly through each batch of gravel and at the same time permitting the water rising through the gravel to flow freely away therefrom whereby all objectionable matter washed from the gravel, together with all light particles separated therefrom by the water will be pushed away from the gravel by the water when flowing in its last mentioned course.

1,812,281. PRESS BOX DOOR COUNTERBALANCING DEVICE. JOSEPH BEHLE and HUGO LINNARTZ, Dallas, Tex., assignors to The Murray Company, Dallas, Tex., a Corporation of Texas. Filed Aug. 13, 1928. Serial No. 299,315. 2 Claims. (Cl. 100—19.)

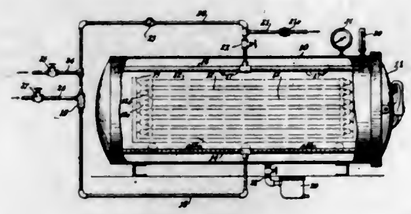
1. In a counterbalancing device for a vertically disposed cotton press box door, a strut pivoted at its upper end to the door above its hinge and extending downwardly below the hinge of the door and below the press platform, an arm pivoted to the lower end of the press box and lying entirely below the press platform and to which the lower

end of the strut is pivoted, and a coiled spring lying entirely below the hinge of the door and having its upper



end attached to the press box and its lower end attached to the arm and free from connection with the pivotal connection between the strut and the arm.

1,812,282. VULCANIZER AND METHOD OF VULCANIZING. ERNEST BLAKER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed July 19, 1928. Serial No. 293,910. 6 Claims. (Cl. 18—53.)



4. In a vulcanizer the combination of a vulcanizing receptacle having an inlet and outlet, a piping circuit connecting said inlet and outlet, and means for admitting fluid pressure to said circuit, said means being so arranged that the admission of said fluid induces a circulation of fluid through the vulcanizing receptacle and piping circuit.

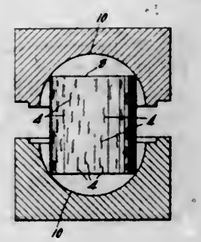
1,812,283. MANUFACTURE OF COLORED IMITATION MOTHER OF PEARL. AMERIGO F. CAPRIO, Newark, N. J., assignor, by mesne assignments, to Celluloid Corporation, a Corporation of New Jersey. Filed Dec. 27, 1926. Serial No. 157,431. 7 Claims. (Cl. 106—37.)

3. A thermo plastic sheet containing the silky variety of lead iodide.

1,812,284. MANUFACTURE OF COLORED IMITATION MOTHER OF PEARL. AMERIGO F. CAPRIO, Newark, N. J., assignor to Celluloid Corporation, a Corporation of New Jersey. Original application filed Dec. 27, 1926, Serial No. 157,431. Divided and this application filed Jan. 26, 1928. Serial No. 249,775. 4 Claims. (Cl. 134—79.)

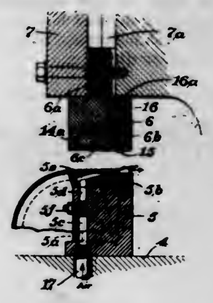
1. A liquid pyroxylin composition adapted for coating material or articles comprising approximately 25 parts of silky lead iodide, ten to fifteen parts of proxylin and 100 to 150 parts of a volatile solvent for the pyroxylin.

1,812,285. GOLF BALL AND METHOD OF MANUFACTURING SAME. JOHN A. CHRISTIE, Akron, Ohio. Filed Oct. 12, 1929. Serial No. 399,135. 5 Claims. (Cl. 154—17.)



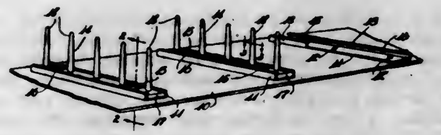
2. The process of manufacturing golf balls or the like, comprising compounding rubber, a vulcanizing agent, and an active accelerator, sheeting the said compound, rolling a sheet so obtained into a tight cylinder, placing a section of the cylinder in a mold, and curing for a period sufficient to form a hard rubber outer shell with a softer rubber core.

1,812,286. MEANS FOR PRESSING AND TRIMMING TAPE REENFORCED SEAMS OF SHEET RUBBER ARTICLES. ARTHUR E. COLLINS, Cuyahoga Falls, Ohio, assignor, by mesne assignments, to The Miller Rubber Company, Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 20, 1929. Serial No. 415,543. 4 Claims. (Cl. 164—47.)



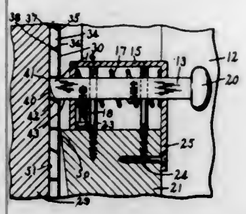
1. Apparatus for the purpose described comprising an anvil having a relatively narrow seam supporting portion and lateral shoulders adjacent one end thereof, a presser member cooperating with said anvil, and a cutter yieldably carried by said presser member and alined with the inner faces of said shoulders.

1,812,287. CONVEYER. GEORGE C. DAVIS, Dallas, Tex., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Feb. 21, 1929. Serial No. 341,648. 5 Claims. (Cl. 19—78.)



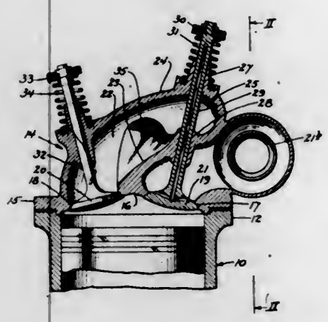
1. The combination of a conveyer belt and a work-engaging member mounted thereupon, said work-engaging member comprising a base portion of relatively hard rubber composition and upstanding pegs integral therewith and comprising a softer rubber composition.

1,812,288. SAFETY CATCH FOR WINDOWS AND THE LIKE. ALEXANDER J. DRAPEAU, Woodbridge, Conn. Filed Jan. 28, 1930. Serial No. 423,951. 2 Claims. (Cl. 292—175.)



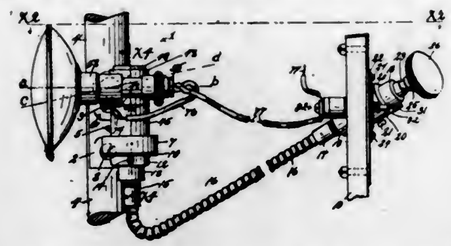
1. In a catch, a catch bolt, means to slidably mount said bolt upon one of a pair of members that are disposed to slide relatively past each other, a sheet metal catch bolt plate secured upon a face of the other of the pair of relatively slidable members, said plate having a series of spaced apart openings in the face thereof, each opening being formed by displacing portions of the material of said plate, one portion of the displaced material being of a length substantially equal to the thickness of said plate and directed inwardly substantially at right angles to the face of said plate to engage the face of the slidable member to which it is secured and to form, an upper wall for each of the aforesaid openings a support for the face of said plate and an abutment engageable by said bolt to prevent relative movement of the members in one direction, and the other portion of the displaced material being directed inwardly at an angle to form, a lower inclined wall for each of the aforesaid openings, and an abutment engageable by said bolt to retract the same when the relatively slidable members are moved relatively to each other in another direction.

1,812,289. CYLINDER HEAD FOR INTERNAL COMBUSTION MOTORS. RALPH FRIEDL, Alameda, Calif. Original application filed Aug. 30, 1927, Serial No. 216,362, Patent No. 1,726,217, dated Aug. 27, 1929. Divided and this application filed May 7, 1928. Serial No. 275,588. 1 Claim. (Cl. 123—122.)



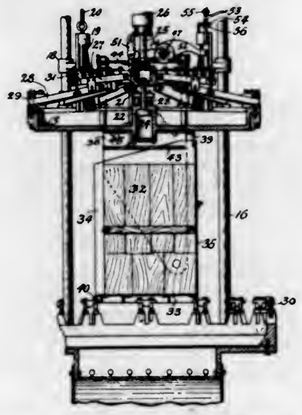
In a cylinder head for the cylinder of an internal combustion engine, said cylinder head having an intake and exhaust port, an intake and an exhaust chamber communicating respectively with said ports, the intake chamber having a portion overlying the exhaust port and chamber, a heat radiating wall separating the intake chamber from the exhaust chamber, an intake valve controlling the intake port, an exhaust valve controlling the exhaust port, a valve stem guide formed in the wall separating the intake chamber from the exhaust chamber, the stem of said exhaust valve extending through said guide and through said intake chamber and being exposed in the latter in the path of fuel entering the intake chamber, whereby fuel condensate accumulating on the exposed portion of the stem may enter the guide upon reciprocation of the stem, and fins projecting within the intake chamber from the wall separating the intake chamber from the exhaust chamber.

1,812,290. ADJUSTABLE SPOTLIGHT. WILLIAM W. GEHERSKY, Riverside, Calif., assignor of one-fourth to Fern Emard, Los Angeles, Calif. Filed Nov. 10, 1924. Serial No. 748,895. 13 Claims. (Cl. 240—61.13.)



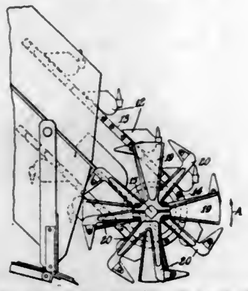
1. The adjustable spot light set forth comprising a support adapted to be connected to the exterior of a vehicle top; a lamp connected to said support for swinging movements in vertical and horizontal arcs; a worm drive for moving said lamp in the vertical arc; a gear and pinion drive separate from the worm drive for moving said lamp in the horizontal arc; a clutch interposed between said drives that is disengaged from said drives when the clutch is held in a neutral position; and means within the vehicle that is adapted to move said clutch into engagement with either of said drives to thus actuate one or the other of said drives.

1,812,291. APPARATUS FOR IMPREGNATING BUNDLES OF SHINGLES AND THE LIKE. HARRY E. GOSCH, North Tonawanda, N. Y., assignor to Creo-Dipt Company Inc., North Tonawanda, N. Y., a Corporation of New York. Filed Jan. 18, 1929. Serial No. 333,422. 9 Claims. (Cl. 91—46.)



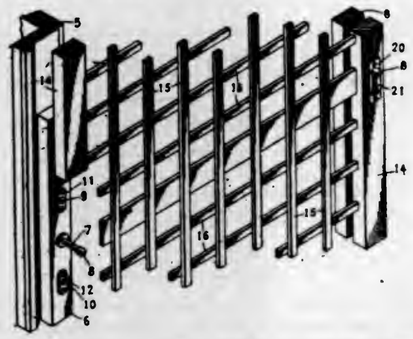
8. An apparatus for impregnating bundles of shingles and the like, comprising a tank adapted to contain the impregnating liquid and having an upper inlet, a cover movable toward and from said tank for closing and opening said inlet, a basket mounted on the underside of said cover and having a bottom adapted to support said bundles while dipping them in the liquid, and means for holding down said bundles in the baskets while submerged in the liquid, comprising a vertically movable guide rod sliding through said cover and connected at its lower end with said presser, a rock lever pivotally mounted on said cover, a link connecting one arm of said lever with said guide rod, a shifting rod connected with the other arm of said lever, spaced stops on said shifting rod, and a stationary stop adapted to be engaged alternately by said spaced stops.

1,812,292. WAGON LOADER AND EXCAVATOR. ALFRED W. HAISS, New York, N. Y., assignor to George Haiss Manufacturing Co. Inc., New York, N. Y., a Corporation of New York. Filed July 3, 1930. Serial No. 465,499. 7 Claims. (Cl. 37—190.)



1. In a machine of the character described, a combined digging and feeding mechanism comprising a rotatable shaft, a plurality of laterally spaced propeller blades carried by said shaft at opposite ends thereof, and a plurality of picks associated with each of such blades and arranged in advance thereof.

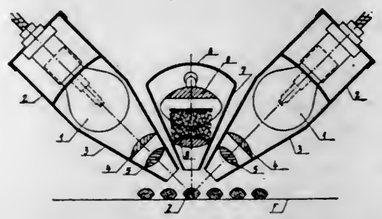
1,812,293. PROTECTIVE GRATING. SIMON B. HESS, New York, N. Y. Filed Apr. 12, 1923. Serial No. 631,738. 6 Claims. (Cl. 177—314.)



2. A burglary preventing device comprising a grating adapted to be removably attached to a window frame, interlocking pin and slot members on the frame and the grating for holding the grating in place, the pins being provided with heads, a pair of contacts carried by the grating, a pair of contacts carried by the frame, a pair of springs holding the frame-carried contacts in engagement with the grating-carried contacts, said springs serving also to maintain the grating in firm engagement with the heads of the pins, an electrical conductor passing through the grating and connected with the grating-carried contacts, and a protective circuit extending through grating and connected with the frame-carried contacts.

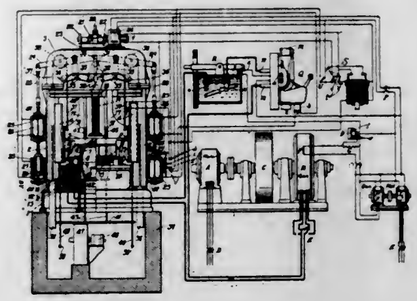
1,812,294. MEANS FOR DRESSING CIGARETTES AND THE LIKE PROVIDED WITH IMPRINTS. MAX PAUL ERNST HOHN, Dresden, Germany, assignor to the Firm "Universelle" Cigarettenmaschinenfabrik J. C. Muller & Co., Dresden, Germany. Filed Aug. 30, 1928, Serial No. 302,984, and in Germany Sept. 5, 1927. 18 Claims. (Cl. 226—5.)

1. Means for dressing cigarettes and like goods provided with imprints comprising in combination with feeding means and cigarettes disposed parallel to one another on said feeding means, an illuminating means for illuminating the imprints of the cigarettes, a medium highly sensitive to light and heat disposed above said feeding means and adapted to receive light reflected from said imprints, said illuminating means comprising high candle-power projectors, said projectors mounted in a casing, said casing having conical tapering portions directed towards the



imprints of the cigarettes and said light sensitive medium being arranged adjacent the projector casing and itself mounted in a casing said last mentioned casing tapering conically with its conical portion directed towards the cigarettes, an electric circuit controlled by the effect of said reflected light on said sensitive medium and means for rotating cigarettes, said means controlled by said electric circuit.

1,812,295. ELECTRIC WELDING APPARATUS. HENRY S. HOLMES, New York, N. Y., assignor to Thomas E. Murray, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, Jr., and John F. Murray, executors of said Thomas E. Murray, deceased, assignors to Metropolitan Engineering Company, a Corporation of New York. Filed Feb. 1, 1924. Serial No. 689,878. 5 Claims. (Cl. 219—4.)



1. An electric welding apparatus for the complete welding of an article in one welding operation, said apparatus comprising a butt welding machine adapted to take heavy currents from the secondary winding of a transformer for a much shorter period of time than that required to remove a welded article and to insert new pieces in combination with an alternating current generator of a capacity which is less than the normal capacity for carrying the primary current, means for storing energy between welding operations to be delivered to the generator during the weld and means acting instantaneously for applying an increased exciting current to the field of the generator at the start of the weld.

1,812,296. ROAD MACHINE. JAMES B. JARMIN, Dallas, Tex. Filed Apr. 20, 1928. Serial No. 271,609. 11 Claims. (Cl. 37—176.)

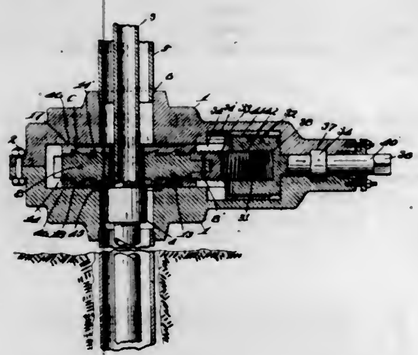
2. In a motor driven road machine, the combination of a wheel supported main frame, a hanger frame suspended from the main frame and adjustable thereon, a sub-frame

carried by the hanger frame and comprising pivoted members for shifting in a horizontal plane with its members in parallelism, and a pair of parallel scraping blades



pivotally mounted on the sub-frame, and means for maintaining said blades in their parallel relation when the sub-frame is shifted and also for maintaining them uprightly.

1,812,297. BLOW OUT PREVENTER. BERTEL M. JENSEN, Huntington Beach, Calif., assignor to W. D. Shaffer, Brea, Calif. Filed Oct. 20, 1926. Serial No. 142,915. 10 Claims. (Cl. 137—139.)

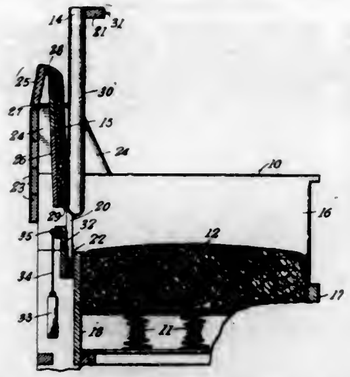


1. A blow-out preventer comprising a housing adapted to be mounted upon a well casing and having an opening therethrough for the reception of a drill pipe, closure forming members slidably mounted within the housing upon opposite sides of said opening, an actuating shaft rotatably mounted within the housing, an internally and externally threaded socket carried by said shaft, said threads corresponding in pitch and running in opposite directions, and means connecting each of said closure forming members to one of said sets of threads.

2. A blow out preventer comprising a housing having a vertical opening therethrough for the reception of a drill pipe, rigid opposed members movable in the housing presenting surfaces which are inclined to the direction of movement, and rigid members associated with said movable members and presenting surfaces adapted to be engaged by the first mentioned surfaces whereby the movable members may move the rigid members into engagement with the drill pipe in the opening and then force them against the housing, and means for moving the movable members.

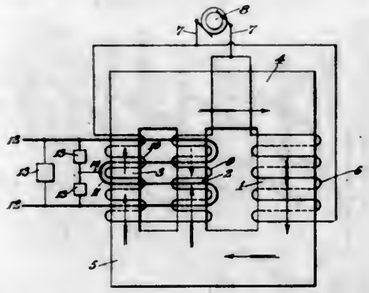
1,812,298. BED. HORACE G. KIMBLE, Brooklyn, N. Y. Filed Dec. 17, 1928. Serial No. 326,654. 6 Claims. (Cl. 5—59.)

1. A combination bed and seat having a fixed support for a mattress, a screen arranged to extend over said bed providing a seat and mounted adjacent a longitudinal edge portion of said support to be swung to an upstanding position exposing said bed, a stationary back near the edge of said support adjacent which said screen is mounted and extending above the screen in its lowered position, a movable back pivotally attached to said screen and stationary back and movable upwardly and toward said stationary back when the screen is raised, said movable back extending well over the rear longitudinal edge portion of said bed to constitute a back rest for the seat and make the seat



of less depth than the width of the bed, and said movable back also being in a position to the rear of the fixed mattress support when raised, and said screen being substantially out of the way of a person getting in and out of bed.

1,812,299. ELECTRIC CONTROLLING APPARATUS. HAROUTIUN K. KOUYOUMJIAN, Providence, R. I., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed Sept. 15, 1928. Serial No. 306,259. 27 Claims. (Cl. 171—119.)



1. An alternating current controlling apparatus comprising a core having three legs, a main exciting winding on one of said legs, a primary alternating current winding on each of the other two legs respectively, one of said alternating current windings tending to create a flux in opposition to the flux created by said main winding, and the other alternating current winding acting cumulatively with said main winding, and an output winding around the two legs of the core having the said alternating current windings thereon.

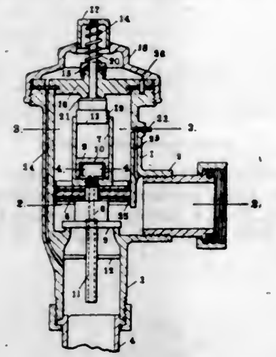
1,812,300. CONCRETE BLOCK GROIN OR SEA WALL. CHARLES T. LEEDS and WILFRED K. BARNARD, Los Angeles, Calif. Filed June 12, 1929. Serial No. 370,271. 6 Claims. (Cl. 61—4.)



1. A groin or sea wall comprising a series of concrete blocks contiguously positioned, said blocks being upwardly and rearwardly inclined toward the shore, and having upwardly converging sides.

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1,812,301. FLUSH VALVE. CHARLES SYDNEY NASMYTH, Sydney, New South Wales, Australia. Filed Sept. 4, 1929. Serial No. 390,403. 2 Claims. (Cl. 137—93.)



1. Flushing apparatus comprising in combination a cylindrical casing, a plunger reciprocable therein, a valve connected to the plunger adapted to close the opening to a flush pipe, a cylinder connected to the plunger provided with portways, a piston valve within the cylinder adapted to close a passage through the plunger and also the portways in the cylinder, a piston reciprocable within the cylinder and having a bypass passage, a rod to which the piston is connected, a push button upon the end of the rod, and a spring sleeved upon the rod, the casing having a passage way extending from above the plunger to the main water supply pipe substantially as and for the purpose specified herein and illustrated.

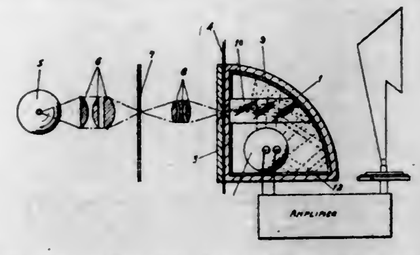
1,812,302. SANITARY KNIFE SCABBARD. ARNOLD V. NIES, Cincinnati, Ohio. Filed Nov. 27, 1929. Serial No. 410,241. 5 Claims. (Cl. 224—2.)



1. A sanitary knife scabbard comprising a leather back, rigid side members attached thereto and each having a recess in its upper end, a leather front having rigid members adapted to fit between said side members, means on each rigid member adapted to enter said recesses, respectively, whereby said front is detachably mounted and means for removably holding the lower end of said front in engagement with said rigid side members.

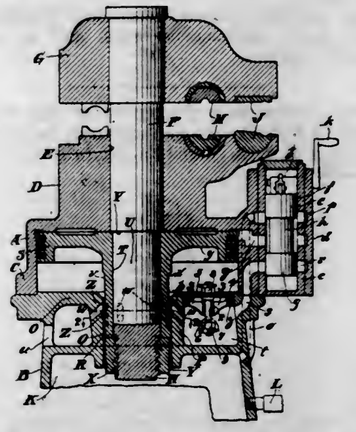
1,812,303. SOUND REPRODUCING MEANS. FREEMAN H. OWENS, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 23, 1929. Serial No. 357,591. 2 Claims. (Cl. 179—100.3.)

1. A sound-reproducing apparatus, including in combination a closed housing having an opening for the admission of light, means for supporting a travelling film carrying a photographic sound record adjacent to said opening, means for projecting light rays into said housing through said opening and sound record, an elongated light-sensitive element disposed in said housing out



of the path of said rays, and reflecting means disposed in the path of said projected rays and adapted to reflect them on to said light-sensitive element over substantially the entire length thereof.

1,812,304. DRILL SHARPENER. ARTHUR E. PETERS, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 1, 1930. Serial No. 440,719. 5 Claims. (Cl. 76—5.)

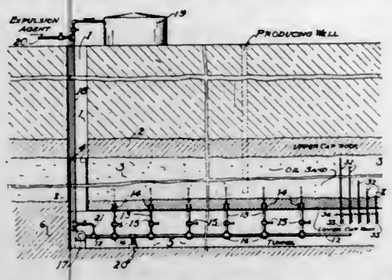


1. In a drill sharpener, the combination of an anvil block and a cross head reciprocable with respect to the anvil block, a base having a bore to form a guide, a clamping cylinder, a clamping piston in the clamping cylinder connected to the cross head having a stem reciprocating in the bore, said base having relief ports to communicate the bore with the atmosphere, there being a recess in the stem affording communication between the clamping cylinder and the relief ports, pressure actuated means for raising the cross head and the piston, and means on the stem to cooperate with the bore for cutting off the flow of the compression to the relief ports during the clamping stroke of the piston, thereby entrapping air in the clamping cylinder to cushion the final clamping stroke of the piston.

1,812,305. RECOVERY OF OIL FROM THE EARTH BY MINING OPERATIONS. LEO RANNEY, Greenwich, Conn., assignor to Standard Development Company, a Corporation of Delaware. Filed Aug. 5, 1926. Serial No. 127,233. 5 Claims. (Cl. 262—1.)

1. In the recovery of oil from an oil-bearing stratum, the improvement which comprises forming a mine gallery along the margin of the tract to be worked, the gallery being adjacent said stratum but spaced therefrom by

material substantially impervious to fluid, tapping said stratum from the gallery by a large number of closely spaced openings, drilling a surface well to the stratum within the area defined by the gallery, and introducing

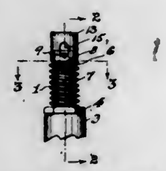


a fluid oil-expelling agent through said closely spaced openings, thereby forming a fluid barrier moving inwardly from the margin of the tract to force the oil therein through the surface well.

1,812,306. INSULATING MATERIAL. ARTHUR J. RUSS, Oakdale, Pa., assignor to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 8, 1926. Serial No. 107,790. 17 Claims. (Cl. 106—18.)

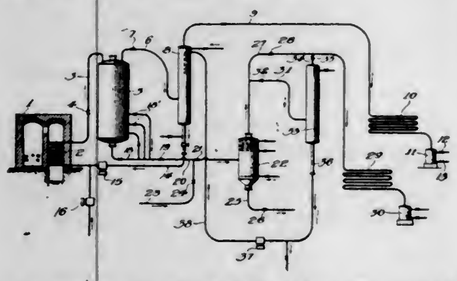
1. An insulating material comprising a mixture of an alkaline earth, diatomaceous earth and an exfoliated vermiculite mineral.

1,812,307. TERMINAL CONNECTION FOR ELECTRIC CIRCUIT WIRES. ADOLF SCHNEIDER, Brooklyn, N. Y. Filed May 22, 1928. Serial No. 279,731. 4 Claims. (Cl. 173—259.)



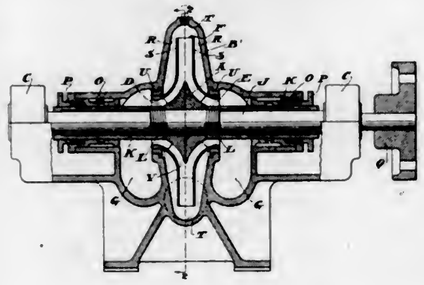
1. In a device of the kind described, a post having an opening therethrough to receive a circuit wire end or the like, a compression spring around said post, said spring having its upper end portion extending diametrically through said post opening, said end portion being adapted to thrust upwardly toward said wire end to bind the same in gripped relation to said post.

1,812,308. PROCESS OF TREATING HYDROCARBON OIL. JEAN D. SEGUY, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Dec. 19, 1928. Serial No. 327,004. 2 Claims. (Cl. 196—49.)



1. A process of cracking hydrocarbon oil, comprising subjecting the oil to cracking temperature under pressure, thereafter separating the vapors from non-vaporous residue, removing, condensing and collecting the vapors, removing the liquid residue from the cracking zone before it contains objectionable amounts of sludge and coke, and admixing with said residue a quantity of pressure distillate bottoms so controlled as to amount and temperature as to cool said residue to below cracking temperature, thereafter reducing the pressure on the mixture of residue and pressure distillate bottoms so as to cause partial vaporization thereof and additional partial cooling.

1,812,309. CENTRIFUGAL PUMP. ALLEN F. SHERZER, Ann Arbor, Mich., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 22, 1927. Serial No. 177,335. 8 Claims. (Cl. 103—104.)



1. A centrifugal pump comprising an impeller and a casing having a circular portion adjacent to the periphery of the impeller, the distance from the sides of the casing to the sides of the impeller at the periphery thereof being not less than six-tenths nor greater than nine-tenths of the width of the impeller at its periphery, the adjacent side walls of said casing and impeller being divergent toward the axis of the impeller so that longitudinal cylindrical sections of the clearance provided between the casing and impeller increases from the periphery of the impeller toward the axis of the impeller, and means to prevent substantial longitudinal movement of the impeller with respect to the casing.

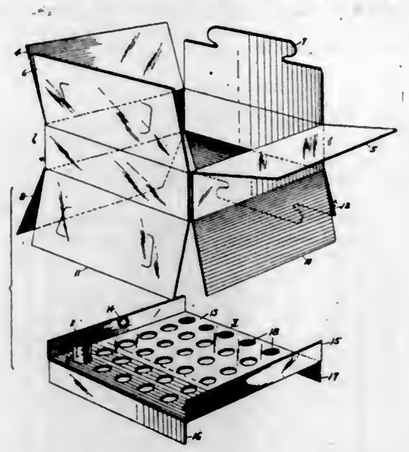
1,812,310. PROCESS FOR THE SEPARATION OF SODIUM SULPHATE FROM SULPHURIC ACID. JOHANN JOSEPH STOCKLY and RICHARD BARTUNEK, Teltow, near Berlin, Germany, assignors to the Firm Vereinigte Glanzstoff-Fabriken A-G., Elberfeld, Germany. Filed Oct. 10, 1928, Serial No. 311,707, and in Germany Oct. 13, 1927. 10 Claims. (Cl. 23—121.)

1. For the separation of sodium sulphate from sulphuric acid, the process consisting in concentrating the salt-containing sulphuric acid by evaporation to a concentration of 70–85% at which the acid, when cooled to ordinary temperature will possess the lowest coefficient of solubility for sodium sulphate, setting up crystallization and separating the acid from the masses of salt crystallized out.

1,812,311. PACKAGE FOR FIREWORKS DEVICES. BENEDIKT WOLF, Newark, N. J., assignor to Essex Specialty Co., Inc., Berkley Heights, N. J., a Corporation of New Jersey. Filed May 11, 1928. Serial No. 276,876. 2 Claims. (Cl. 206—65.)

1. In a carton for carrying vertically disposed fireworks said carton having inner and outer overlapping flaps at its top and bottom, a rack conforming to the carton interior, said rack comprising, a body provided with apertures for frictionally receiving and supporting the

vertically disposed fireworks, flanges formed on said body, one of said flanges resting upon an inner flap at the top of the carton and another of said flanges resting upon



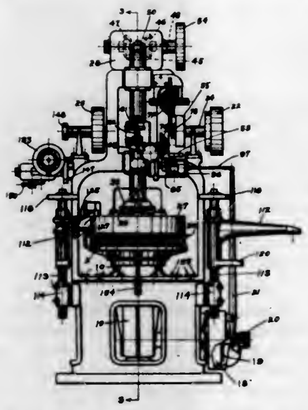
an inner flap at the bottom of the carton, the outer flaps of the carton being interlocked to retain the carton in a closed condition.

1,812,312. CIRCUIT BREAKING CONTACTS PROVIDED WITH CONDENSERS. ARLE YTTERBERG, Hogberget, Sweden, assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Swedish Corporation. Filed May 8, 1929, Serial No. 361,506, and in Sweden Dec. 14, 1928. 5 Claims. (Cl. 175—294.)



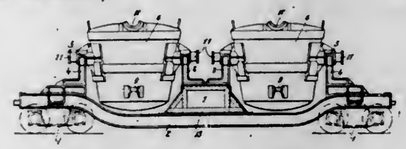
2. In combination, a pair of contacts, a condenser in parallel thereto, and two band-shaped conductors of special resistance alloy lying flat together at the major portion of their length and connecting said contacts to said condenser.

1,812,313. GRINDING MACHINE. WILLIAM ARTER, Worcester, and WARREN F. FRASER, Westboro, Mass.; said Fraser assignor to Arter Grinding Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1925. Serial No. 9,107. 24 Claims. (Cl. 51—131.)



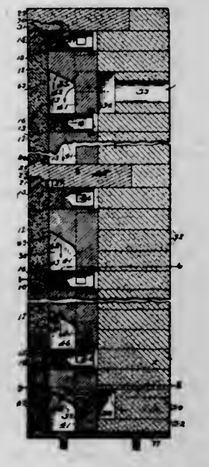
3. In a grinding machine, the combination of a grinding wheel mounted to rotate in a horizontal plane, a presser head mounted above said wheel for up and down movement and operative to press the work against said wheel, means for guiding said head for vertical movement toward or from said wheel, a part connected with said head to move up and down therewith, a stop arranged to be engaged by said part, a horizontally movable wedge supporting said stop, a screw shaft bearing against said wedge, and power operated mechanism for rotating said shaft to move said wedge in a direction to permit said stop to settle gradually and thereby limit the rate of approach of said head toward said wheel.

1,812,314. TANDEM HOT METAL CAR. CARL P. ASTROM, East Orange, N. J., assignor to M. H. Treadwell Company, New York, N. Y., a Corporation of New York. Filed Apr. 23, 1929. Serial No. 357,590. 2 Claims. (Cl. 105—270.)



1. A tandem hot metal car comprising an under frame and a supporting truck at each end, pairs of aligned ladle supporting cradles carried by said frame, ladles supported by said cradles and having projecting crane trunnions to permit the ladles to be lifted on and off the car, the adjacent center cradles being spaced apart to permit independent access to the respective crane trunnions and thereby permit said ladles to be handled independently of each other.

1,812,315. AIR COOLED FURNACE WALL. HENRY H. BAUMGARTNER, Belleville, N. J., assignor to Brake Nonclinkering Furnace Block Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 16, 1926. Serial No. 135,925. 16 Claims. (Cl. 110—1.)



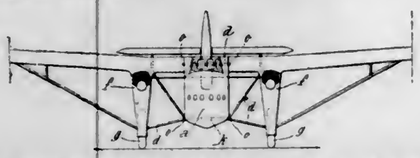
1. An air cooled furnace wall comprising a facing built up of refractory elements, and a backing spaced therefrom to leave interior air spaces outward of the rear surfaces of the face elements, said wall having air inlets and outlets arranged for air flow through said spaces for scrubbing or cooling of the face elements, and interior means tying the facing to the backing at intervals while allowing movements of the face elements in the plane of the walls; the face elements in each wall section being separated horizontally, lap jointed and packed, and interlocked vertically, with packing at the top of the wall section, and cover tiles above.

1,812,316. METHOD FOR MAKING ACTIVE CHARCOAL. ERNST BERL, Darmstadt, Germany. Filed Dec. 30, 1927, Serial No. 243,769, and in Germany Jan. 21, 1927. 13 Claims. (Cl. 252—3.)

1. A method for making active charcoal which consists in treating acid sludges derived from the treatment of hydrocarbons with neutralizing agents and heating the obtained mixture to a temperature of approximately 800° C. to 1200° C.

10. As a new article of manufacture an active charcoal derived from hydrocarbon acid sludges having by the methylene blue test an active surface of more than 700 sq. m. per g.

1,812,317. DETACHABLE FLOATING COMPARTMENT FOR AEROPLANES. LOUIS BLÉRIOT, Paris, France. Filed Jan. 2, 1930, Serial No. 418,031, and in Belgium Jan. 4, 1929. 6 Claims. (Cl. 244—2.)



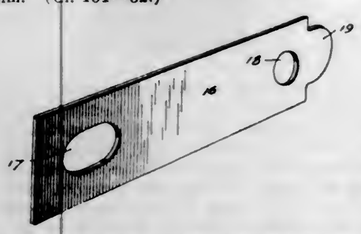
1. In an aeroplane,—a pair of wing units,—a compartment interposed between said wing units,—and interengaging means connected to said wing units and compartment for maintaining the former and the latter in assembled relation, said means including a rotatable tie element extending transversely across said compartment between said wing units and operative to simultaneously liberate said wing units when rotated in a predetermined direction.

1,812,318. DISPLAY DEVICE. WILLIAM C. BOWER, Bell, Calif. Filed Apr. 1, 1929. Serial No. 351,717. 3 Claims. (Cl. 211—37.)



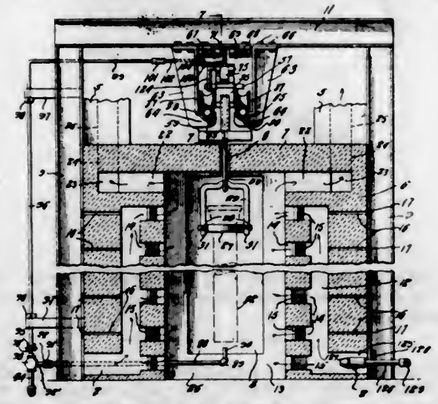
1. A display device of the type described comprising a pair of conjoined angle members, one of said members having its end rolled upon itself to form a resilient display engaging means, and the other member having a lip at an angle thereto, the corners of said lip being acuminate and upturned, said device being alternatively adapted to display articles both when positioned upright, as a rack, or on either side, when lying flat.

1,812,319. NUT LOCK. THOMAS ROBERT BRUMFIELD, Danville, Va. Filed Feb. 1, 1930. Serial No. 425,230. 1 Claim. (Cl. 151—32.)



A nut lock for fish-plates and the like in which the bolts extend in opposite directions comprising a plate of rectangular configuration having two spaced apertures therein, one of said apertures being of oval shape so as to secure a bolt having an oval portion from turning and the other of said apertures being round and of sufficient size to allow the threaded end of a bolt to pass freely therethrough and a flexible tongue upon the end of said plate adjacent said round aperture and said tongue being adapted to be bent against the side of a nut to keep the same from turning.

1,812,320. ANNEALING. FRANK G. CARRINGTON, Anniston, Ala., assignor to Ferric Engineering Company, Anniston, Ala., a Corporation of Delaware. Filed Nov. 7, 1928. Serial No. 317,818. 13 Claims. (Cl. 263—8.)



2. In an annealing process for bell-ended pipe comprising passing a pipe in a horizontal path while vertically suspended from its bell end with its bore open at both ends and progressively subjecting the pipe to zones of different temperatures.

1,812,321. FINISH REMOVER. JOSEPH G. DAVIDSON, Yonkers, N. Y., assignor to Carbide and Carbon Chemicals Corporation, a Corporation of New York. Filed Feb. 26, 1927. Serial No. 171,383. 3 Claims. (Cl. 87—5.)

1. In a process of removing finish coatings from surfaces, the step of disintegrating the coating by attacking an organic constituent thereof by applying thereto a solvent containing a compound of the type formula

$$ROC_nH_{2n}O\text{----------}C_xH_{2x}OR_1$$

where R and R_1 are alkyl or aryl groups or hydrogen; n and x are integers greater than 1; and the dotted line is a simple bond or a divalent radicle.

1,812,322. FINISH REMOVER. JOSEPH G. DAVIDSON, Yonkers, N. Y., assignor to Carbide and Carbon Chemicals Corporation, a Corporation of New York. Filed Feb. 26, 1927. Serial No. 171,384. 3 Claims. (Cl. 87—5.)

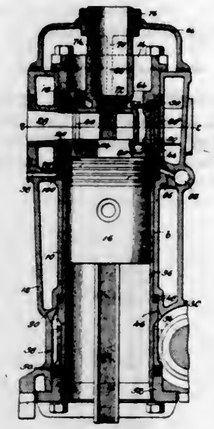
1. In a process of removing finish coatings from surfaces, the step of disintegrating the coating by attacking an organic constituent thereof by applying thereto a solvent containing a compound of the type formula

$$ROC_nH_{2n}\text{----------}C_xH_{2x}OR_1$$

where R is an acidyl group; R_1 is an alkyl or aryl group; n and x are any integers; and the dotted line is a simple bond or a divalent radicle.

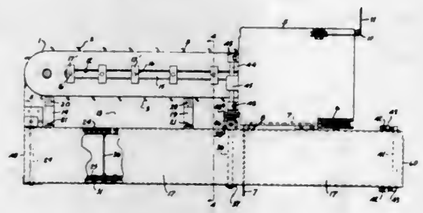
1,812,323. INTERNAL COMBUSTION ENGINE. DORSETT A. DAVISON and GEORGE E. DAVISON, Richmond, Va., assignors to The Davison Engineering Corporation, Richmond, Va., a Corporation of Virginia. Filed June 10, 1929. Serial No. 369,804. 14 Claims. (Cl. 123—80.)

1. In an internal combustion engine, a cylinder having intake and exhaust ports, a rotary valve within said cylinder controlling said ports, a valve seat surrounding said valve, means for driving said valve, and a series of superimposed sealing rings surrounding said valve and arranged in end to end abutting relation, some of said



rings having an expansion spring tension radially so as to seal outwardly against said valve seat and others having a contractile spring tension radially so as to seal inwardly against said valve.

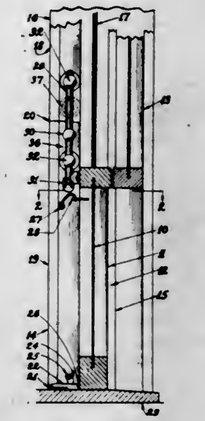
1,812,324. MATERIAL DISINTEGRATING AND CONVEYING MECHANISM. GUST DEGAND, St. Benedict, Pa., assignor, by mesne assignments, to Rembrandt Peale, St. Benedict, Pa., W. Sanders Davies, New York, N. Y., and William S. Wallace, Philadelphia, Pa., trustees. Filed Sept. 24, 1927. Serial No. 221,725. 8 Claims. (Cl. 262—30.)



1. In a material disintegrating and conveying apparatus the combination of a flight conveyor having endless chains and flights connecting the chains and material disintegrating devices mounted on one of the conveyor chains adapted to project into a pile of material to disintegrate the material and impel it onto the conveyor when the conveyor is sumped into the material.

1,812,325. SLIDING AND SWINGING WINDOW. GEORGE DREWES, Jersey City, N. J., assignor of one-half to Adolph Berman, New York, N. Y. Filed Oct. 1, 1929. Serial No. 396,583. 3 Claims. (Cl. 20—45.)

1. In a window having a vertically sliding and inwardly swinging lower sash, the combination of rockable guide strips hinged to the sill about their lower front edges and a fixed horizontal guide strip having a sash engaging face projecting upwardly from the sill and being bevelled to allow the inward swing of the lower sash on its lower front edge while said front edge remains stationary in

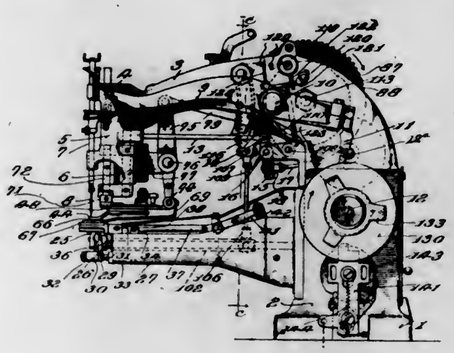


contact with the sill, and yielding means connecting said rockable strips and said sash to cause said sash to follow the movements of the said strips.

1,812,326. FRICTION ELEMENT AND METHOD OF MAKING THE SAME. JAMES DRISCOLL, Plainfield, N. J., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 21, 1930. Serial No. 430,447. 15 Claims. (Cl. 139—420.)

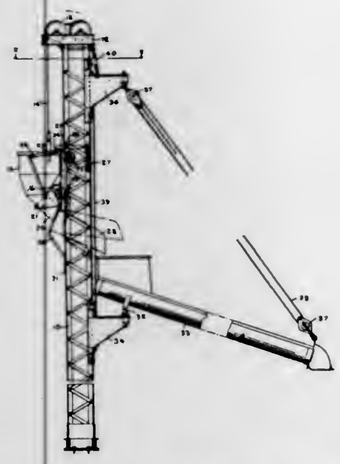
1. A method of manufacturing fibrous asbestos friction elements which comprises incorporating powdered zinc with the asbestos in sufficient quantity to substantially reduce the tendency of the element to score during use.

1,812,327. BUTTON SEWING MACHINE. ARVID ERICSSON, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1927. Serial No. 192,249. 10 Claims. (Cl. 112—110.)



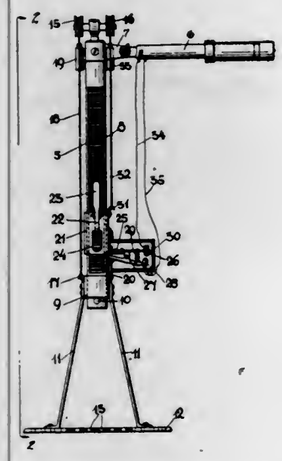
2. A button sewing machine including a button holder, a needle, means for vibrating said needle laterally, an oscillating thread carrying looper cooperating with said needle, a control disk, means operated thereby for shifting said button holder at predetermined intervals, said looper oscillating in a fixed working position, and a loop retainer for moving the needle thread loop back on the looper at each stitch formation.

1,812,328. APPARATUS FOR HOISTING AND DISTRIBUTING LOOSE MATERIAL. JOHN P. FABER, Dunellen, N. J., assignor to Ransome Concrete Machinery Company, Plainfield, N. J., a Corporation of New Jersey. Filed Aug. 5, 1924. Serial No. 730,161. 2 Claims. (Cl. 214—95.)



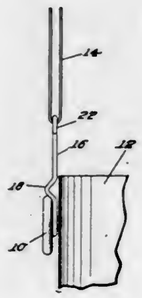
1. In a hoisting apparatus, a mast, a bucket mounted to travel along one side of the mast, a feed chute extending through the mast and adapted to receive material from the bucket and discharge the material at the other side of the mast, means for changing the vertical position of the feed chute in the mast, vertically spaced apart bracket members slidably mounted on the last-named side of the mast, means for maintaining the bracket members at a fixed distance apart, a delivery spout pivoted at its inner end to receive material from said feed chute, and a flexible supporting connection between the upper bracket and the outer end of the spout.

1,812,329. CIRCUIT MAKER OR BREAKER. HERMANN FLACH and GEORGE BARTHELMIE, Calumet City, Ill. Filed Aug. 20, 1928. Serial No. 300,702. 2 Claims. (Cl. 200—52.)



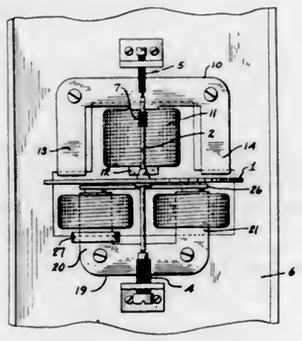
1. In a device of the class described a post, ratchet teeth on said post, a sleeve slidably mounted on said post, said sleeve having a hole therein, a ratchet lever pivotally mounted on said sleeve and adapted to engage said ratchet teeth through said hole, said teeth being formed to prevent downward movement of said sleeve when engaged by said lever, a second sleeve, slidably mounted on said post and below the first sleeve, an electric switch on said first sleeve, means for urging said switch into closed position, and means on said second sleeve for engaging said switch and forcing it into open position.

1,812,330. FASTENING LOOP FOR BUTTONS OR THE LIKE. GEORGE H. FRANCISCO, Los Angeles, Calif., assignor of one-half to Simon E. Davis, San Francisco, Calif. Filed Sept. 23, 1929. Serial No. 394,543. 1 Claim. (Cl. 24—222.)



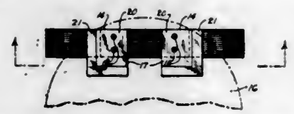
A button fastener comprising a V-shaped metal wire loop, and a hump in each arm, the hump being adjacent the point where the periphery of a button will cross said arm when in co-operative relation with the device, and with the upper ends of the arms bent outwardly, thence upwardly and finally inwardly to a welded joint.

1,812,331. INDUCTION METER. HANS FRÖHLICH, Zug, Switzerland, assignor to Landis & Gyr, A-G., a Joint-Stock Company of Switzerland. Filed Apr. 17, 1928, Serial No. 270,667, and in Switzerland Apr. 27, 1927. 3 Claims. (Cl. 171—264.)



1. An induction meter including a meter disc and driving mechanism therefor including a driving coil and core, a magnetic shunt plate cooperating with pole pieces of the core and a single ring of electrically conducting material encircling said core on the opposite side of the coil from said shunt plate.

1,812,332. INDUCTION METER. HANS FRÖHLICH and THEODOR HAUSCH, Zug, Switzerland, assignors to Landis & Gyr, A. G., Zug, Switzerland, a Corporation of Switzerland. Filed Apr. 8, 1930, Serial No. 442,528, and in Switzerland Apr. 11, 1929. 6 Claims. (Cl. 171—264.)



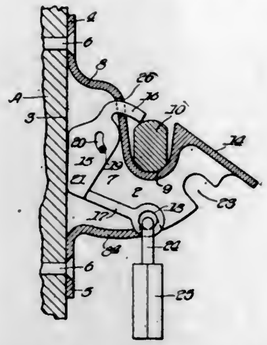
5. A pole enlarging plate comprising an iron plate having a border of an alloy the permeability of which decreases with rising temperature.

1,812,333. GAS METER. HEINRICH GERDES, Berlin-Schoneberg, Germany, assignor to Julius Pintsch Aktiengesellschaft, Berlin, Germany. Filed May 22, 1926, Serial No. 110,981, and in Germany May 29, 1925. 2 Claims. (Cl. 73—1.)



1. A dry gas meter comprising a meter casing having a cylindrical portion provided with an annular groove, a ring having a resilient annular ridge coacting with said annular groove, said ring being provided with an annular groove, a diaphragm positioned across said ring and means maintaining said diaphragm positioned, comprising a resilient ring frictionally holding said diaphragm in said annular groove of said ring.

1,812,334. LATCH CONSTRUCTION. JOHN EDWARD GLOEKLER, Pittsburgh, Pa. Filed July 10, 1930. Serial No. 466,907. 6 Claims. (Cl. 292—205.)

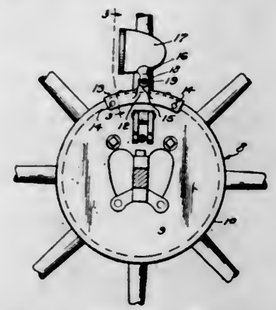


1. A bolt receiving keeper having a rear attaching base, a hollow interior, and a front concaved wall forming a socket and a swinging locking arm in the hollow interior having a bolt engaging finger operable through the front wall and a locking arm provided with a lock engaging terminal.

1,812,335. COATING COMPOSITION. FREDERICK C. HAHN, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,858. 5 Claims. (Cl. 134—79.)

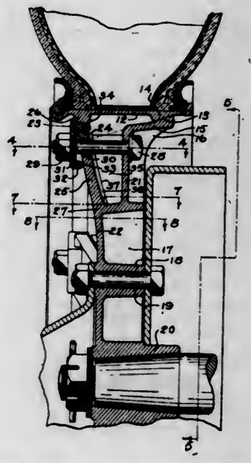
1. A coating composition containing cellulose acetate, a resinous polybasic acid ester of a monoalkyl ether of glycerine, a softener and a solvent.

1,812,336. STEERING HEADLIGHT FOR AUTOMOBILES. JOSEPH G. HOLLAND, Edgefield, S. C. Filed Aug. 19, 1930. Serial No. 476,409. 1 Claim. (Cl. 240—62.)



The combination with brake mechanism connected with the front wheel of an automobile, said brake mechanism embodying a non-rotatable upstanding circular plate having a substantial diameter, of a base formed generally L-shaped in cross-section and longitudinally curved to conform to the curvature of the periphery of the plate, said base having generally horizontal and vertical flanges, the horizontal flange engaging with the periphery of the plate and the vertical flange engaging with the side of the same, means for rigidly attaching the flanges with the plate, a relatively short rigid bracket carried by the base and offset laterally in an inwardly direction from the same and extending above the base and provided with an apertured knuckle at its upper end, a lamp provided at its bottom with a pair of spaced apertured knuckles to engage upon opposite sides of the first knuckle, an adjustable bolt passing through the apertured knuckles so that the lamp may be angularly adjusted in a vertical plane and clamped to the bracket in a selected adjusted position, the arrangement being such that the combined length of the upper radius of the upstanding plate and the bracket serves to support the lamp at an elevation for projecting the light above the bumper, said bracket being arranged near the center of the horizontal arc within which the front wheel turns during the steering operation so that the turning movement of the lamp is reduced to the minimum.

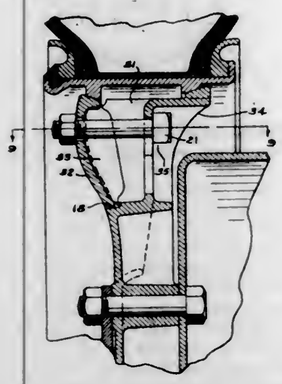
1,812,337. VEHICLE WHEEL CONSTRUCTION. JOHN W. HOLT, Cleveland, Ohio. Filed June 3, 1926. Serial No. 113,363. 9 Claims. (Cl. 301—12.)



1. In a vehicle wheel construction, a rim, spoke members having their terminal portions formed at their inner

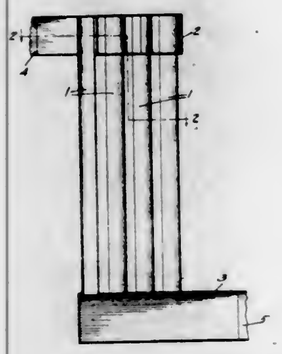
sides with inclined rim-receiving seats, and compound wedging means carried by the outer portions of the spoke terminal portions for forcing the rim into engagement with the seats, one portion of said compound wedging means being flexible, and extending at an angle to the plane of the wheel to exert an expanding force on the rim upon movement toward the plane of the wheel.

1,812,338. WHEEL RIM MOUNTING DEVICE. JOHN W. HOLT, Cleveland, Ohio. Filed Sept. 1, 1926. Serial No. 132,935. 1 Claim. (Cl. 301—12.)



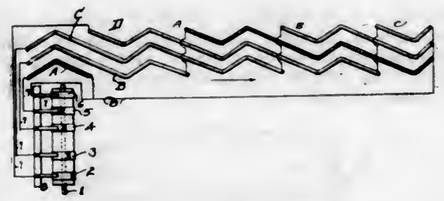
In a vehicle wheel, a removable rim having outer and inner oppositely tapered supporting flanges, spoke members terminating in tapered seats for engaging the inner supporting flange, shoulders on the outer faces of said spoke members, clip members adapted to be forced between the shoulders and the rim, bolts passing through the clip members and the spoke structure and laterally disposed flange members extending outwardly from the spoke members and substantially in line with the face of the outer supporting flange to provide clearance indicating means to facilitate accurate placing of said rim, said flange members being so positioned as to serve also as guides for the clip members.

1,812,339. APPARATUS FOR HEAT INTERCHANGING. GEORGE H. HORNE, Glendale, and MARCEL A. LISSMAN, Los Angeles, Calif., assignors to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 25, 1929. Serial No. 342,326. 2 Claims. (Cl. 257—224.)



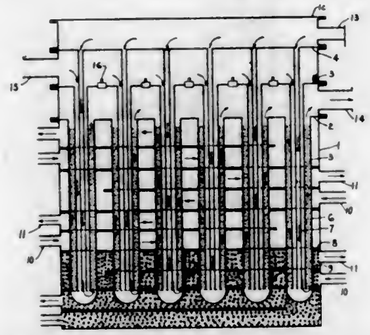
1. A heat interchanging apparatus comprising a plurality of substantially parallel cylindrical tubes spaced apart sufficiently to permit access of fluid medium therebetween, an inlet header, all of said tubes extending within said inlet header at one end and being provided with inlet openings in the side walls of the portions extending within said header, and deflectors extending adjacent the inlet openings of the respective tubes and in position to direct fluid from said header through said inlet openings and substantially tangentially into said tubes, said tubes having fluid outlet openings at the end opposite said inlet header.

1,812,340. NEON LAMP FLASHER. JOSEPH HOTCHNER, San Francisco, Calif. Filed Nov. 9, 1927. Serial No. 232,095. 6 Claims. (Cl. 177—346.)



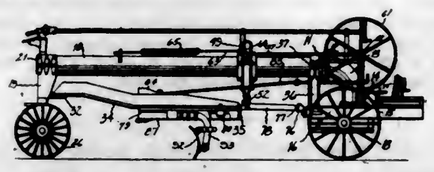
3. A lamp for traveling light effects on signs comprising a sign body, a series of overlapping zig zag gas tube lamps with one portion of the gas tube bent at a different angle than the next adjacent portion, and means to extinguish in sequence a lamp successively in the series to produce a traveling effect across and lengthways of the sign body.

1,812,341. CATALYTIC APPARATUS. ALPHONS O. JAEGER, Mount Lebanon, Pa., assignor, by mesne assignments, to the Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed Feb. 4, 1930. Serial No. 425,831. 10 Claims. (Cl. 23—288.)



1. A catalytic converter for carrying out catalytic vapor phase reactions comprising in combination a substantially vertical converter shell, substantially vertical catalyst containing compartments therein, a liquid bath medium in said converter surrounding the catalyst compartments and at least one substantially horizontal baffle fitting around the catalyst compartments, said baffle being provided with at least one central opening and with openings permitting vertical flow of bath fluid along the periphery of the converter shell wall but fitting sufficiently tightly around said catalyst-containing compartments to substantially prevent vertical flow of bath through the baffle at points other than its central and peripheral portions.

1,812,342. ROAD MACHINE. JAMES B. JARMIN, Dallas, Tex. Filed Jan. 10, 1929. Serial No. 331,605. 13 Claims. (Cl. 37—156.)



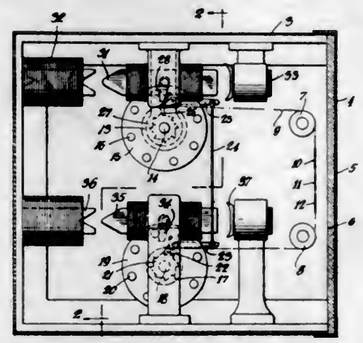
3. In a road machine, an upright front support mounted on wheels, an elongated pipe member clamped to the front support, a blade hanger clamped on the pipe member and held against rotation thereon, a rear platform supported on ground wheels, and means for securing the pipe member to the platform.

1,812,343. ELECTRICAL CONNECTING DEVICE. DAVID W. JOHNSON, Newington, and ARVID H. NERO, West Hartford, Conn., assignors to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed May 11, 1929. Serial No. 362,402. 6 Claims. (Cl. 173—343.)



1. An electric connecting device having contact apertures in its face adapted to receive contact blades, a long and a short groove leading to each aperture.

1,812,344. STREET CAR SIGN. KARL KLUG, Brooklyn, N. Y. Filed Nov. 30, 1928. Serial No. 322,766. 2 Claims. (Cl. 40—55.)

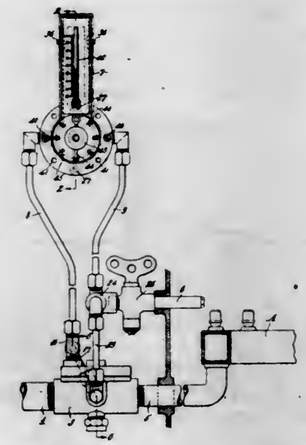


1. An apparatus for indicating streets crossed by a street car, comprising a casing, a strip, a pair of drum to which the ends of the strip are attached, a plurality of signs on the strip, a pair of shafts to which the drums are fixed, ratchet wheels fixed to the shafts, discs fixed to the shafts, said discs having a plurality of laterally projecting pins, pawls engaging the ratchet wheels, dogs adapted to engage the pins on the discs to rotate the latter and electromagnetic means to move the dogs in one direction.

1,812,345. COMPLEX CHROMIUM COMPOUNDS OF AZO DYESTUFFS. HANS KRZIKALLA, Mannheim, and FRANZ BLUEMMEL, Seckenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1928, Serial No. 322,960, and in Germany Dec. 1, 1927. 1 Claim. (Cl. 260—12.)

As a new article of manufacture the complex chromium compound of the o-hydroxy-azo dyestuff obtainable by coupling diazotized 4-nitro-2-aminophenol-6-sulfonic acid and acetylacetone, dyeing wool yellow shades with a reddish tinge.

1,812,346. THERMOSTATIC VALVE MECHANISM. OTTO JOHN KUENHOLD, Cleveland, Ohio, assignor to H. M. Sheer Company, Quincy, Ill., a Corporation of Illinois. Filed Oct. 16, 1925, Serial No. 62,836. Renewed Nov. 24, 1930. 16 Claims. (Cl. 236—80.)



1. Thermostatic control mechanism for gas burners, comprising a gas burner, controlling valve mechanism therefor including a single flexible imperforate diaphragm valve operated by gas pressure directly thereon, relay valve mechanism also including a single flexible imperforate diaphragm valve and adapted for cooperation with said controlling valve mechanism, and a thermostatic element effective upon said relay valve mechanism.

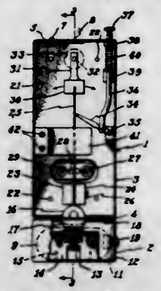
1,812,347. METHOD OF PURIFYING BORAX. WALTER A. KUHNERT, Los Angeles, Calif. Filed Feb. 11, 1929. Serial No. 339,277. 3 Claims. (Cl. 23—59.)

1. The method of separating water soluble silica from borax which comprises subjecting impure borax containing water soluble silica, in the presence of water, to the action of a water soluble aluminum bearing substance so as to obtain a solution containing borax and an insoluble precipitate containing silica, and separating said solution from said precipitate.

1,812,348. STROBOSCOPIC TESTING SYSTEM AND APPARATUS. WILLIAM D. LA RUE, Maple Shade, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed June 14, 1928. Serial No. 285,380. 6 Claims. (Cl. 88—14.)

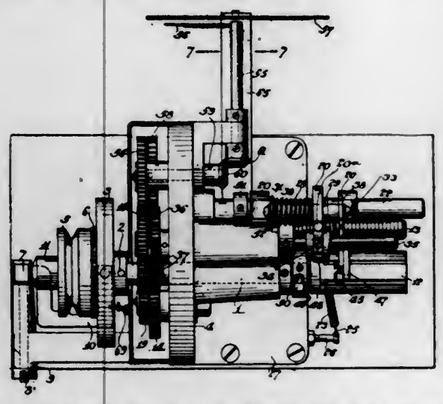
1. A portable stroboscopic testing unit comprising a casing including a plurality of hinged receptacles, a dry

cell and an incandescent lamp disposed in one of said receptacles, the wall structure of another of said receptacles having a slot traversed by a beam of light emanating from



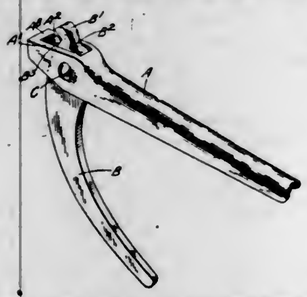
said incandescent lamp, and means comprising a spring reed mounted in one of said receptacles for periodically interrupting said beam of light.

1,812,349. COIL WINDING MACHINE. HOXSIE W. LILLIBRIDGE, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 28, 1929. Serial No. 374,327. 15 Claims. (Cl. 242—9.)



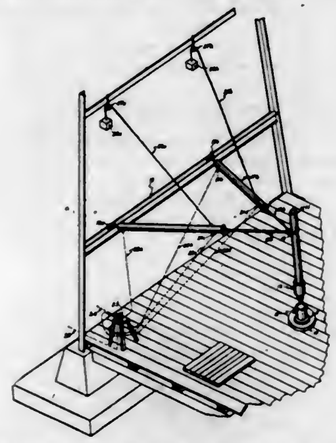
1. Mechanism for producing bank-wound coils comprising a rotating coil support, a conductor-guiding member, supporting structure therefor movable in one direction during a coil-winding operation, and means effecting intermittent movement of said member in an opposite direction during said winding operation.

1,812,350. PUNCHING OR CUTTING PLIERS. FREDERICK DONALD LINGWOOD, London, England, assignor to Manufax Limited, London, England, a Company of Great Britain. Filed Oct. 25, 1930, Serial No. 491,258, and in Great Britain Nov. 8, 1929. 7 Claims. (Cl. 164—81.)



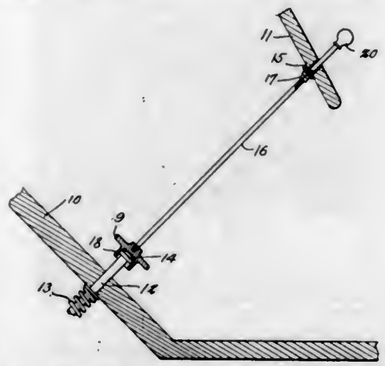
1. A tool for cutting sheet material including in combination two arms, a slotted jaw carried by one arm forming a work-supporting anvil, a cutting jaw in the form of a head carried by the other arm and adapted to pass through the slot, a neck portion connecting the head to its arm and having its cross-sectional dimensions reduced so that the cutter can be turned in a slot already cut and the cut continued in any other desired direction, and a pivot connecting the arms disposed wholly below the work-supporting surface of the anvil.

1,812,351. PIPE RACKING DEVICE. HALLAN N. MARSH, Huntington Park, Calif. Filed Nov. 22, 1930. Serial No. 497,560. 11 Claims. (Cl. 214—1.)



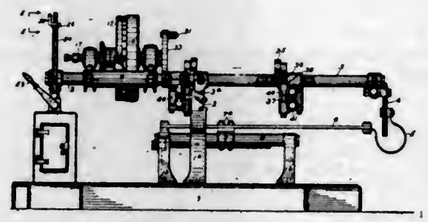
1. A device for racking pipe in a derrick, comprising: a pair of cylinders, the inner end of each said cylinder being swingingly attached to a suitable portion of said derrick; pistons working within said cylinders; rods attached to said pistons and passing through the outer ends of said cylinders; a pipe hook; an attachment of the outer end of each said rod to said hook, and means for controllably admitting an actuating fluid into either end of each said cylinder.

1,812,352. STARTER ATTACHMENT FOR AUTOMOBILES. ALEXANDER C. MCCURDY, Towson, Md. Filed Nov. 2, 1927. Serial No. 230,467. 1 Claim. (Cl. 74—39.)



An automobile starter circuit closing attachment comprising a rod alined with the starter button and extending through the automobile dash, a hollow cap on said rod adapted to fit the button of a starter circuit closer, a head on the upper end of the rod above the dash, means for limiting upward movement of said rod, and a flange extending peripherally from the cap for engagement by the foot of an operator.

1,812,353. BALANCING MACHINE. FRANCIS T. MCDONOUGH, Madison, Wis., and AMOS F. MOYER, Minneapolis, Minn., assignors, by mesne assignments, to Precision Balancing Machine Company, a Corporation of Wisconsin. Filed May 2, 1924, Serial No. 710,595. Renewed Oct. 21, 1927. 34 Claims. (Cl. 73—51.)



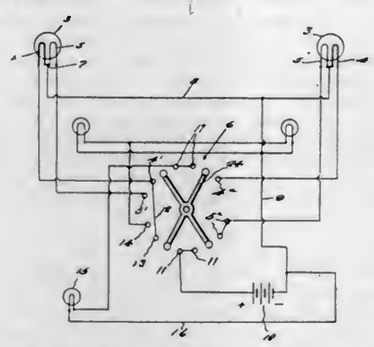
1. In a machine for balancing rotative bodies, having a resiliently mounted supporting means, a spring comprising a portion of the resilient mounting, and means for adjusting said spring as to the active length of elastic material between a point of fixed support and the point of attachment of said spring to said supporting means.

1,812,354. ROPE. HAROLD G. METCALF, Auburn, N. Y., assignor to Columbian Rope Company, Auburn, N. Y., a Corporation of New York. Filed June 25, 1927. Serial No. 201,339. 7 Claims. (Cl. 117—53.)



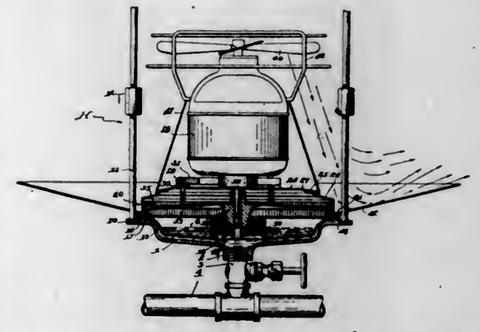
1. A rope or cordage structure formed of vegetable fibers having incorporated therein and substantially uniformly distributed between the fibers a compound of colloid rubber and cordage oil.

1,812,355. AUTOMOBILE LIGHT CONTROLLING SYSTEM. GEORGE Z. MICHAELS, New York, N. Y. Filed Mar. 9, 1929. Serial No. 345,846. 3 Claims. (Cl. 171—97.)



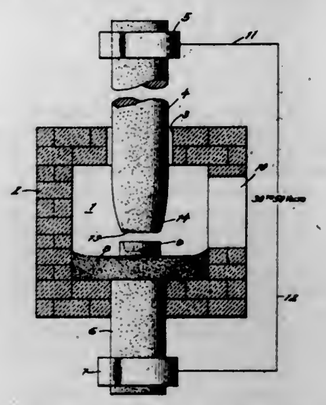
1. Lighting system for automobiles comprising a pair of headlights each including a high resistance filament and a low resistance filament, a source of current, circuits connecting; one side of each of said filaments to the source of current, a switch, circuits connecting the other side of each of said filaments to the switch, a circuit from said switch connected to the source of current, and said switch being adapted to close a circuit through said high resistance filaments or through said low resistance filaments or through one of said high resistance filaments and one of said low resistance filaments and the source of current.

1,812,356. HUMIDIFIER. BERTRAM M. MILLS, Pawtucket, R. I., assignor to The Standard Engineering Works, Pawtucket, R. I., a Corporation of Rhode Island. Filed Nov. 5, 1927. Serial No. 231,265. 18 Claims. (Cl. 261—91.)



1. A humidifier having a basin-like base provided with a screw-threaded hollow boss for engagement with a supporting water supply pipe, a cylindrical grid seated on edge in said base, a cover member mounted on the grid, said cover having a series of circumferentially spaced marginal openings, a motor above the cover, the motor having a normally vertical shaft extending down through the cover, an atomizing disk on the shaft below the cover, the edge of the disk being in a plane intermediate the top and bottom of the grid, an annular deflector having its inner edge adjacent to the outer surface of the grid, and a fan on the motor shaft above the cover arranged to deliver air through the openings in said cover and also against the deflector.

1,812,357. PROCESS OF MANUFACTURING TUNGSTEN CARBIDE. OSCAR L. MILLS, Los Angeles, Calif., assignor to Mills Alloys Inc., Los Angeles, Calif., a Corporation of Delaware. Filed Jan. 21, 1930. Serial No. 422,314. 4 Claims. (Cl. 75—1.)

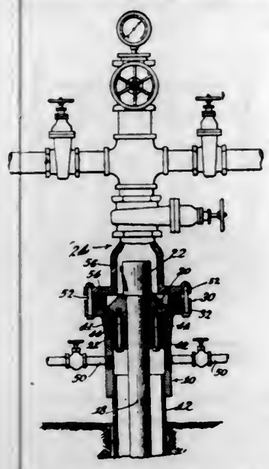


1. The process of manufacturing tungsten carbide, which comprises placing tungsten material from which the carbide is to be made in an open shallow work container, covering substantially all the exposed area of the material with the arcing end of a carbon electrode, and maintaining a short arc between the electrode and the material.

1,812,358. OIL WELL PACKING DEVICE. BURT S. MINOR, San Pedro, Calif. Filed Mar. 8, 1930. Serial No. 434,315. 3 Claims. (Cl. 166—14.)

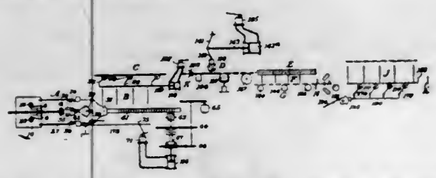
1. An oil well packing device comprising in combination with a control head, a member secured thereto by a plu-

rality of bolts and nuts, the bolts passing through openings in the control head flange and said member, a plurality of screws mounted in said member adapted to engage



packing slips placed in the control head, the bolts holding said member on said control head adapted to be removed and replaced by other bolts one at a time for connecting a "Christmas tree" to said member.

1,812,359. METHOD AND MEANS FOR THE PRODUCTION OF DRAWN METAL RODS. JAMES T. MOLTRUP, Beaver Falls, Pa. Filed Apr. 6, 1928. Serial No. 267,875. 39 Claims. (Cl. 29—33.)

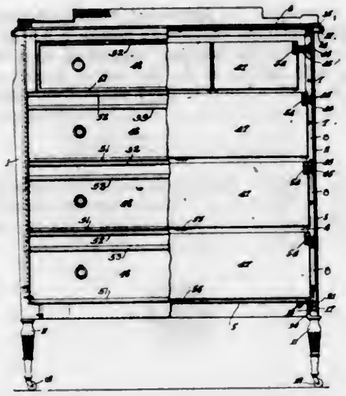


1. The method of producing metal rods in a continuous manner, comprising drawing the rods to size, delivering the drawn rods to a receiver and maintaining them therein in a prearranged order, successively withdrawing the rods from the receiver and successively straightening them in said order, during the withdrawing.

22. A metal working machine having two separate units side by side, each unit comprising a draw-bench having means for drawing rods through a die, a rod receiver below the line of draw of the rods, a rod straightener, means for actuating the straightener, means for delivering rods to the straightener, from said receiver, the path of travel of the rods through the straightener being in the plane of said receiver, a second receiver beyond the straightener and in a plane below the path of travel of the rods through the straightener, shearing means beyond the second receiver, means for actuating the shears, means for delivering rods from a receiver to a straightener, an operator's station adjacent the dies of the draw-benches, control means at said station for controlling the drawing means of both benches, a second operator's station between the first receivers and the straighteners, control means at the second station for controlling the straightener actuating means and the means for delivering rods to the straightener, a third operator's station between the second receivers and the shearing means, and control means at the third station for controlling the shear actuating mechanism and for controlling the means for delivering rods to the shears.

36. A metal working machine, having a draw-bench including a die, a rack bar, a draw-head connected to the rack bar, jaws on the draw-head, a pushing gripper, jaws on the pushing gripper for engaging a rod and pushing it through said die, means for closing the jaws on the pushing gripper, means for connecting the pushing gripper to the draw-head, means for releasing the pushing gripper from the draw-head after it has moved with the draw-head a predetermined distance, means for opening the jaws of the pushing gripper before it is released from the draw-head, and means for receiving drawn material from said draw-bench and performing a further operation thereon.

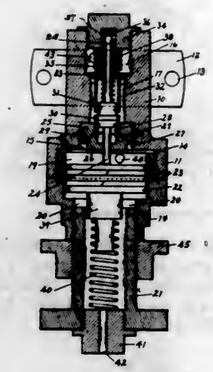
1,812,360. METAL FURNITURE. LOUIS H. MORIN, New York, N. Y., assignor to Doehler Die-Casting Co., a Corporation of New York. Filed June 30, 1927. Serial No. 202,617. 22 Claims. (Cl. 45—5.)



1. In a cabinet as an article of furniture comprising panels and a corner reinforcement at the joint between adjacent panels, the combination of an internally channeled metal frame part forming a rigid outer corner piece for the cabinet having a single inwardly opening inner channel defined and formed by lateral wings with their inner surfaces along their edges disposed at a flaring angle relatively to each other, adjacent sheet metal panels in planes at an angle to each other in line with the inner flaring surfaces formed by the wings of the channel along the edges of these wings and having adjacent bent edge margins shaped to conform to the contour of the channel in the corner piece and fitting into this channel in contiguous relation with one another, and securing means carried by the corner piece and engaging with the said bent edge margins to cooperate with the flaring wing portions of the channel for firmly holding these bent edge margins in the channel for thereby joining the panels together and reinforcing them at the corner joint.

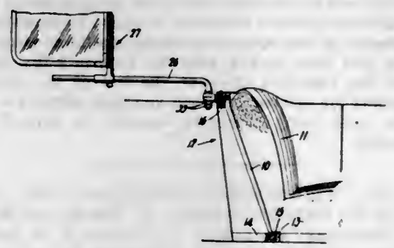
1,812,361. FEED VALVE FOR AIR BRAKE SYSTEMS. ALEXANDER W. NICHOLSON, Dickerson Run, Pa. Filed Aug. 15, 1928. Serial No. 299,699. 3 Claims. (Cl. 50—35.)

1. In a valve of the class described, a body having a cylinder chamber formed therein, a piston in said chamber, said body having an exhaust port leading from said chamber above said piston, said body having an upper chamber above the first and provided with an inlet port, said body having a passage affording communication between said chambers, a plug fitted in the lower end of said passage and having a recess extending downwardly from its upper end, said plug having ports extending downwardly from the recess to communicate with the lower chamber, a stem extending upwardly from the piston through the recess, a valve on said stem normally closing the upper end of said recess, said valve having its upper end reduced to form a shoulder, a sleeve fitting slidably on said upper end and provided with a valve at its upper end for closing the upper end of said passage, said sleeve being engageable by the shoulder to lift the last mentioned valve upon the



opening of the first valve, a spring associated with said stem and tending to maintain the valve which is carried by the stem in position of closure, and a second spring which is associated with said sleeve tending to maintain the sleeve in its valve-closing position.

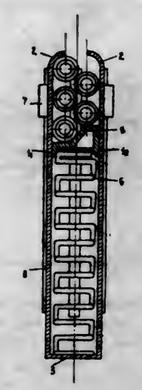
1,812,362. TONNEAU WINDSHIELD SUPPORTING MEANS. THEODORE B. NISBET, Irvington, N. Y. Filed May 3, 1927. Serial No. 188,443. 2 Claims. (Cl. 296—85.)



1. In an automobile having a seat having a bottom and a back with a frame comprising openings extending from front to rear at the top thereof and at opposite ends of the back and upholstery at the front of said frame, the combination of said frame, body irons behind the upholstery in said back with their lower ends secured to the seat at the bottom thereof and with their upper ends against said frame at the front of said openings, said upper ends having threaded parts to register with said openings, and attachments to engage said frame at the rear and having threaded parts adapted to project into said openings and to be screwed to said threaded parts of said body irons.

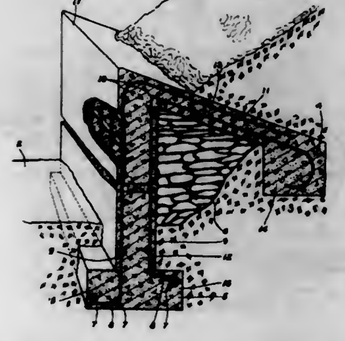
1,812,363. DEVICE FOR LOADING FIREARMS. LUIGI ORLANDO, Milan, Italy, assignor, by mesne assignments, to Metallurgica Bresciana Gia Tempini, Fiumegrande, Brescia, Italy, a Company of Italy. Filed Jan. 3, 1930, Serial No. 418,270, and in Italy Nov. 22, 1929. 5 Claims. (Cl. 42—50.)

1. A loading device for fire arms comprising a box-shaped cartridge magazine having in its middle plane parallel to the cartridge axis a longitudinal cut extending from the cartridge inlet mouth into proximity to the bottom dividing the magazine into two integral resilient parts, which recede from each other when a cartridge



filler is introduced into the magazine and automatically close onto the filled in cartridges when the filler is withdrawn.

1,812,364. RETAINING WALL STRUCTURE. JAMES A. OURSLER, Steubenville, Ohio, assignor of one-half to George Oursler, Cincinnati, Ohio. Filed Nov. 29, 1927. Serial No. 236,535. 7 Claims. (Cl. 61—39.)

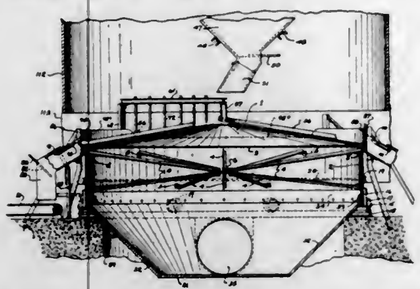


1. In a retaining structure for hillsides and the like comprising a vertical reinforced concrete wall having at its top an integral reinforced slab portion extending into the hillside and anchored therein, the slab portion of the structure being downwardly inclined toward the hillside at such angle as to direct weight thereon into a downward pressure which serves to anchor the structure more firmly in position, the reinforced slab extending uninterruptedly throughout the length of the vertical wall.

1,812,365. PROCESS AND MECHANISM FOR SEPARATING INTERMIXED DIVIDED MATERIALS. RICHARD PEALE, St. Benedict, Pa., assignor, by mesne assignments, to Peale-Davis Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 5, 1925. Serial No. 54,777. 29 Claims. (Cl. 209—467.)

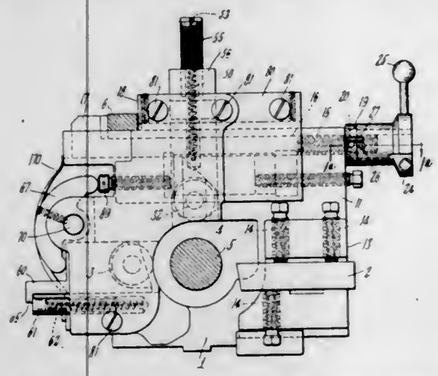
1. A mechanism for separating intermixed divided materials including in combination a rotatable air pervious table, the perviousness of which gradually changes toward its discharge edge, for supporting a bed of the materials undergoing separation, means for forcing air through the bed of materials, means for rotating the table,

and means for discharging at different levels at the periphery of the table both a heavier and lighter material after stratification and separation.



28. The process of separating intermixed divided materials which comprises rotating a bed of said materials to move the particles thereof radially outwardly by centrifugal force, passing lifting and loosening air currents simultaneously through substantially all parts of the bed, and continuously discharging both the settled heavier material and the flotant lighter material at the periphery of the rotating bed by centrifugal movement.

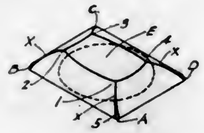
1,812,366. TAPER TURNER. GEORGE A. PERRY, Springfield, Vt., assignor to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed Dec. 21, 1928. Serial No. 327,566. 4 Claims. (Cl. 82—17.)



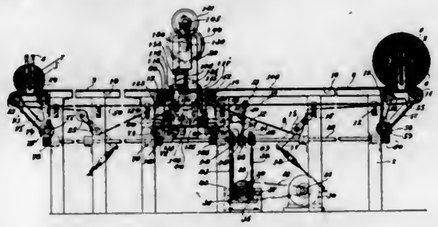
1. A taper turner comprising a work traversing member, a slide on said traversing member movable transversely to the direction of traverse of said member, a cam bar along which said member traverses for controlling the position of said slide, a tool carrier on said slide for holding a tool in operative relation to the work relative to the axis of which said member traverses, a work supporting device carried by said member and movable at an angle to the direction of movement of said slide, a pair of cooperating wedge elements one of which is carried by said device, means for operatively connecting or disconnecting the other of said elements to said slide, whereby movement of said slide to bring the tool toward said work causes said elements to effect the corresponding movement of said device, a spring normally pressing said device away from said axis, and an adjustable stop for limiting the extent of such movement in response to said spring.

1,812,367. ARTICLE OF MANUFACTURE FOR WRISTWATCH CRYSTALS. JOHN PIEF, Oklahoma City, Okla. Filed Feb. 4, 1929. Serial No. 337,479. 4 Claims. (Cl. 58—91.)

1. As an article of manufacture, a wrist-watch crystal, as described, comprising a rectangularly shaped body having oppositely concave surfaces on its lower and upper faces and having outer side and end convex edges its bottom edge portion flat, said outer convex edges having a small plane surface triangularly shaped beveled portion at the meeting corners of said side and end convex edges, said crystal being adapted to fit over a wrist-watch face.

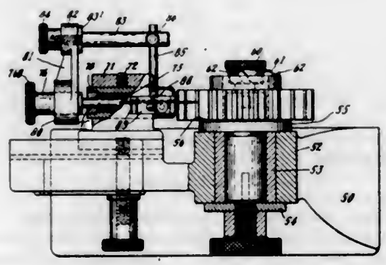


1,812,368. CLOTH MATCHING MACHINE. MARTIN E. POPKIN, New York, N. Y. Original application filed Dec. 8, 1927, Serial No. 238,711. Divided and this application filed July 5, 1929. Serial No. 376,258. 9 Claims. (Cl. 112—2.)



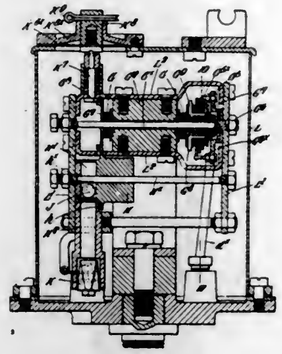
1. The combination in a cloth matching machine of a support for a web of cloth, means for temporarily securing layers of cloth in matched relation and a cloth fastening head mounted to move transversely of said support, means for moving the head, said head moving means being adapted to be released to permit the haed to be moved independently of the operating means, electrical means for driving said head and a stop for automatically disconnecting the electrical drive at the end of the traverse, said means for driving the head and said means for moving the head being connected together to operate synchronously.

1,812,369. PROJECTING MECHANISM AND GEAR STAGING DEVICE. RUSSELL W. PORTER and ROBERT O. BEARDSLEY, Springfield, Vt., assignors to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Original application filed May 3, 1923, Serial No. 636,311. Divided and this application filed July 7, 1926. Serial No. 120,937. 11 Claims. (Cl. 33—175.)



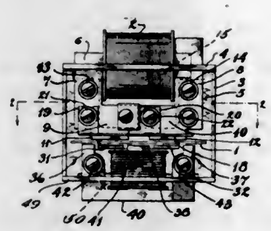
1. In an apparatus of the class described, a gear staging device comprising means for supporting a gear with capability of indexed rotation, means to hold the gear stationary in indexed position only, and a finder adjustable toward and from a side face of a tooth of the gear.

1,812,370. SUBMARINE MINE. HARTLEY BLYTH PRATT, Barrow-in-Furness, England, assignor to Vickers-Armstrong Limited, Westminster, England, a British Company. Filed Oct. 29, 1928, Serial No. 315,637, and in Great Britain Oct. 12, 1928. 7 Claims. (Cl. 102—3.)



1. A submarine mine of the kind set forth, wherein the circuit containing the electrode and the antenna has a moving coil which is geared to a rotary balance member so that these parts move in opposite directions, the balance member being so constructed that its rotary moment of inertia is equal to that of the moving coil with the result that any rotary impulse with respect to the mine exerted on the coil due to shock imparted to the mine is exactly balanced by the reaction of an equal rotary impulse given to the rotary balance member with respect to the mine.

1,812,371. INDUCTION METER. RICCARD PUDELKO, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Joint Stock Company of Switzerland. Filed Mar. 10, 1926, Serial No. 93,609, and in Switzerland Mar. 11, 1925. 12 Claims. (Cl. 171—264.)

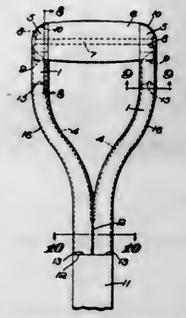


3. An induction meter including in combination a meter disc, a meter frame having a flat portion intermediate its sides and a horizontal part with a common aperture in said parts, a disc driving coil in said aperture and the core therefor fixed to said frame.

1,812,372. PROCESS OF OBTAINING AROMATIC HYDROCARBONS. ALEXANDER S. RAMAGE, Detroit, Mich., assignor to Coals and Chemicals, Ltd., a Corporation of Nevada. Filed May 18, 1928. Serial No. 278,916. 3 Claims. (Cl. 260—168.)

1. Process which comprises contacting a mixture containing olefinic gaseous hydrocarbons and the components of water gas with metallic iron at a temperature of from about 1000° F. to about 1500° F. at substantially atmospheric pressure, regulating the proportion of olefinic gases to water gas so that the iron is maintained in the active condition, and recovering liquid aromatic hydrocarbons from the resulting vapors.

1,812,373. METHOD OF FORMING D-HANDLES. WILLIAM A. READY, Brookline, Mass. Original application filed Feb. 19, 1929, Serial No. 341,131. Divided and this application filed Oct. 8, 1929. Serial No. 398,201. 10 Claims. (Cl. 29—84.)



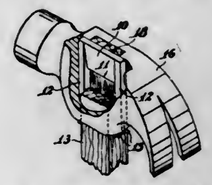
1. A method of producing a D-handle which comprises forming a metal part with two separate parallel hollow arms, dividing a portion of one end of a stem longitudinally to provide a pair of parallel wooden arms, inserting the wooden arms of the stem into the hollow metal arms and then bending the metal arms and the woden arms together into a substantially Y-shaped formation.

1,812,374. MOLDING COMPOSITION. KURT RIPPER, Berlin, Germany. Filed Mar. 15, 1928, Serial No. 262,052, and in Austria Mar. 18, 1927. 17 Claims. (Cl. 260—3.)

1. A molding powder comprising a condensation product resulting from the reaction of unaltered dicyandiamide and formaldehyde.

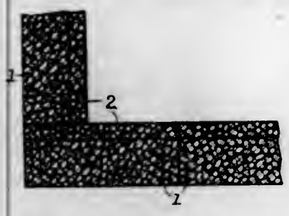
10. A process of making a molding powder, which comprises producing a mixed condensation product by reacting with formaldehyde under heat upon dicyandiamide in combination with another compound capable of forming with formaldehyde a resinous condensation product, whilst allowing the reaction to proceed until a hydrophobe resinous reaction product has been formed, which separates from the reaction mixture on cooling, bringing a watery liquid into contact with such condensation product, permitting the so treated product to undergo conversion into a fine powder, separating such powder from the bulk of the remaining liquid and washing and drying it.

1,812,375. MEANS FOR SECURING THE HEADS OF HAMMERS, PICKS, AXES AND SIMILAR TOOLS. ALBERT WILLIAM ROGERS, Santo Domingo City, Dominican Republic, West Indies. Filed Jan. 22, 1929. Serial No. 334,193. 2 Claims. (Cl. 306—33.)



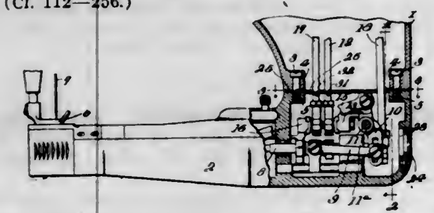
1. In a tool comprising a handle and a tool head mounted on one end thereof and having a hole formed therethrough to receive the handle, said tool head further having a pair of oppositely disposed grooves formed therein opening into said hole, a wedge driven into the tool-head carrying end of the handle, and a pair of legs extending from said wedge down said grooves in the tool head and having their inner ends laterally bent under the tool head, said legs serving to prevent the wedge pulling out unintentionally.

1,812,376. REFRACTORY HEAT INSULATING MATERIAL. DONALD W. ROSS and JAMES M. LAMBIE, Washington, Pa. Filed July 26, 1927. Serial No. 208,528. 14 Claims. (Cl. 106—9.)



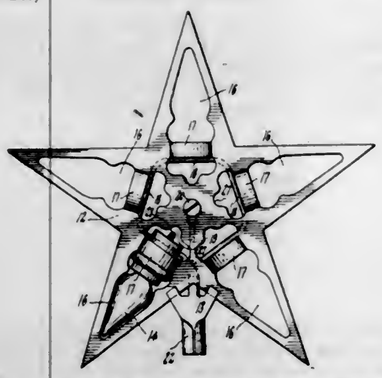
1. A heat-insulating body which includes a bonding material and grains of cyanite of such gradation of sizes as to result in minimum density of piling.

1,812,377. OIL COLLECTOR FOR SEWING MACHINES. CHARLES F. RUBEL, Chicago, Ill., and ELMER E. GRATSCH, St. Louis, Mo., assignors to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 27, 1928. Serial No. 257,532. 7 Claims. (Cl. 112—256.)



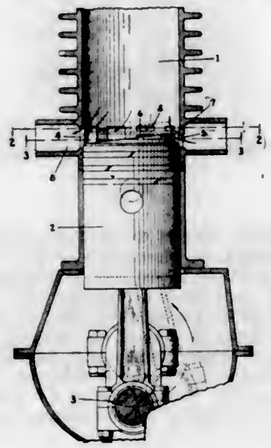
1. In a sewing machine a housing for the actuated parts, said housing having covered openings whereby access may be had to certain of said actuated parts and a collecting device attached to the housing above the covered openings, extending all the way across said openings and disposed relative to the inner wall of the housing so as to catch oil collecting on the inner wall of the housing and prevent the oil from escaping through said covered openings.

1,812,378. ELECTRICALLY ILLUMINATED ORNAMENT. ANTHONY J. SCANDURA, Malden, Mass. Filed Feb. 8, 1930. Serial No. 427,035. 2 Claims. (Cl. 240—10.)



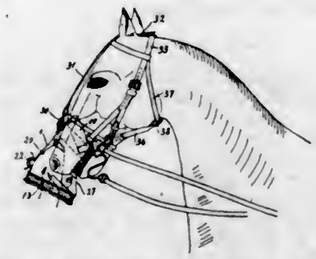
1. An electrically illuminated ornament comprising a body of sheet material having flat sides, an ornamental margin, an elongated opening shaped to receive and bear closely on opposite longitudinal side portions of a lamp socket and its bulb, and to interengage the same to prevent relative longitudinal movement thereof, an outer loop fixed to the body, projecting from one side thereof and extending across said opening, said loop being formed to bear on one side of a lamp socket inserted in the opening, and an inner loop fixed to the body, projecting from the opposite side thereof, extending across said opening, and formed to bear on the opposite side of the inserted lamp socket, said loops securing the socket and bulb against sidewise movement relative to the body and maintaining the bulb in position to illuminate both sides of the body.

1,812,379. ENGINE PORT CONSTRUCTION. OWEN H. SPENCER, Indianapolis, Ind. Filed May 3, 1929. Serial No. 360,273. 1 Claim. (Cl. 123—65.)



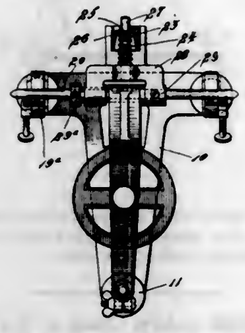
In an internal combustion engine, a cylinder, exhaust ports through the wall of said cylinder encircling substantially one half the circumference of said cylinder, additional exhaust ports around a portion of the remainder of the circumference of said cylinder and of a height less than the height of the first exhaust ports, an escape passage common to all of said exhaust ports, intake ports independent of the exhaust ports also encircling substantially one half the circumference of the cylinder and underlying the shorter exhaust ports and at that side of the cylinder opposite said escape passage, and solid walls entirely and permanently separating the intake ports from the exhaust ports, whereby the contents of the intake ports must pass into the cylinder before entering or contacting with any of the exhaust ports.

1,812,380. GAS PROTECTIVE MASK FOR ANIMALS, PARTICULARLY FOR HORSES. HERMANN STELZNER, Lubeck, Germany, assignor to Dr. Otto Heinrich Dräger, Lubeck, Germany. Filed Nov. 5, 1928, Serial No. 317,259, and in Germany Nov. 10, 1927. 7 Claims. (Cl. 128—140.)



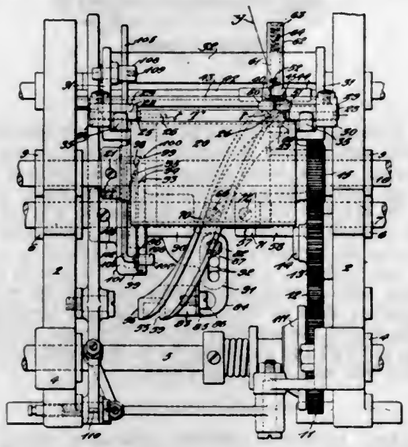
1. A gas protective mask for animals, particularly for horses, which is adapted to encompass the upper jaw and nose of the animal, said mask comprising a bag of material impermeable to gas and having an opening at each end, the opening at one end having a filter cartridge disposed therein and the edges of the bag at the free opening at the other end having a roll or strip of padding attached thereto and extending around the same, said strip of padding having a generally rectangular outline in side elevation and being shaped to conform to the contour of the upper jaw and nose of the animal and being made of a mantle filled with elastic material, the inner periphery of the padding being more yielding and more narrow than its outer periphery.

1,812,381. ARTICULATOR. JOSEPH A. STREKER, Providence, R. I. Filed May 1, 1929. Serial No. 359,558. 8 Claims. (Cl. 32—1.)



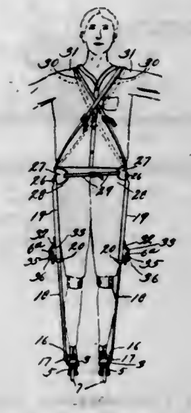
1. In a dental articulator, a base, a jaw-receiving member on said base, bearing standards on said base, a cross bar having its ends pivotally and slidably mounted in said bearing standards, a rearwardly positioned bearing standard on said base, a pivot pin mounted in said rearwardly positioned standard perpendicularly disposed to and secured to said cross bar, a movable element mounted on said cross bar, and a jaw-receiving element on said movable element.

1,812,382. TRAVERSE-MECHANISM FOR WINDING MACHINES. ERNEST R. SWANSON, Cranston, R. I., assignor to Universal Winding Company, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 3, 1928. Serial No. 316,968. 15 Claims. (Cl. 242—43.)



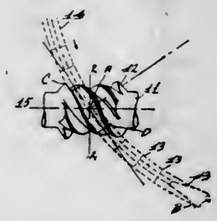
2. In a winding machine, the combination of means for traversing strand-material to wind a package, a rotating cam for actuating the traversing-means, and means automatically operative during the winding to adjust the cam to vary its angular relation with respect to its axis of rotation to alter the extent of its throw.

1,812,383. ROLLER SKATE. EARLY G. THOMPSON, Brewton, Ala., assignor of forty-nine one-hundredths to E. M. Blacksher, Brewton, Ala. Filed Sept. 15, 1930. Serial No. 482,095. 4 Claims. (Cl. 208—183.)



1. The combination with a roller skate, of a brace arm pivotally connected thereto and extending upwardly at the side of a leg of the operator, a plate to which said arm is pivotally connected, means for attaching said plate to the hip of the operator and means connecting said plate and the shoulder of the operator whereby the weight thereof is supported.

1,812,384. METHOD FOR GENERATING GEARS. NIKOLA TRBOJEVICH, Highland Park, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Aug. 6, 1928. Serial No. 297,764. 5 Claims. (Cl. 90—4.)

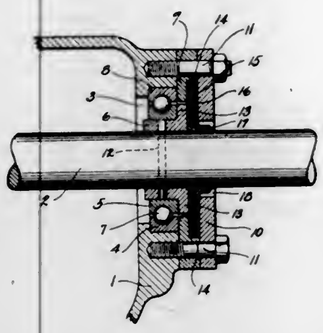


1. A method of generating worms consisting in selecting a cutter of the face mill type having convex and concave generating surfaces, in placing the said cutter in a tangential relation relative to the work, in off-setting the center of the cutting circle relative to the axis of the worm to produce the required helical angle, in rotating the worm about its axis and in translating the worm in its axial plane, the two last named motions being in a timed relation relative to each other.

1,812,385. PACKING FOR SHAFTS. NELSON TROYER, Seattle, Wash., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 28, 1929. Serial No. 350,601. 3 Claims. (Cl. 286—7.)

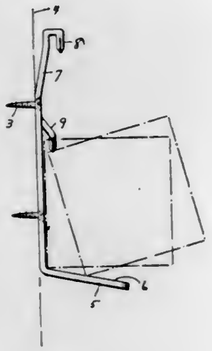
1. The combination with a wall having an opening therein and a shaft extended through the opening, and having an encircling shoulder flush with the opening, of a flat washer fitted about the shaft and seated against

the collar and overlapping the wall about the said opening, another washer overlying the first washer and formed



with an inwardly yieldable sleeve portion fitted about the shaft and a ring overlying the washers and clamping them to the wall.

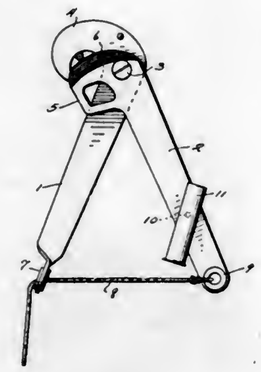
1,812,386. CAN PERFORATOR. ALONZO G. TURNER, McCammon, Idaho. Filed May 28, 1930. Serial No. 456,574. 7 Claims. (Cl. 164—119.)



1. A can perforator of the character described comprising a plate adapted for mounting on a support, an inclined extension on the lower end portion of the plate providing a cam surface, a perforating prong mounted on an upper portion of the plate in spaced opposed relation to the cam surface, said prong engageable with the upper end of the can and the cam surface engageable with the lower end of said can in a manner to force the can upwardly to cause the prong to penetrate same when the lower end of the can is forced inwardly on the cam surface, the distance between the perforating prongs and the cam surface being less than the length of the can to be perforated.

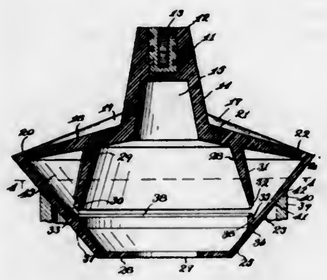
1,812,387. CUTTING IMPLEMENT. JOHN H. UPTON, Dunsmuir, Calif. Filed July 22, 1930. Serial No. 469,870. 3 Claims. (Cl. 30—11.)

1. As a new article of manufacture, a cutting implement comprising two connected members freely movable one with respect to the other, one of said members having work engaging means and the other being provided with



a cutting edge, and socket means pivotally carried by the second member for detachable engagement with the tip portion of a fishing pole or the like.

1,812,388. FLUSH VALVE. JACK E. WALKER, Los Angeles, Calif., assignor to Long-Turney Corporation, Los Angeles, Calif., a Corporation of California. Filed June 13, 1927. Serial No. 198,428. 17 Claims. (Cl. 4—56.)



9. A flushing valve having an inwardly and downwardly inclined wall adapted to engage a valve seat, a top wall connected to the outer periphery of the inclined wall, said top wall having an upward inclination, means to connect the top wall to a flushing mechanism, said top wall being depressible under liquid pressure, stretching and distorting the inclined wall to force same into close contact with part of the valve seat, a rim formed internally on the inclined wall, a partition depending from the top wall and terminating short of the inclined wall, said partition engaging behind the said rim on the downward movement of the top wall and distorting the inclined wall into close contact with part of the valve seat.

1,812,389. ACOUSTIC DEVICE. EDWARD C. WENTE, New York, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Apr. 1, 1925, Serial No. 19,793. Renewed Sept. 11, 1930. 29 Claims. (Cl. 179—115.5.)

3. An acoustic device comprising a plunger type diaphragm having a W-shaped cross section and an air

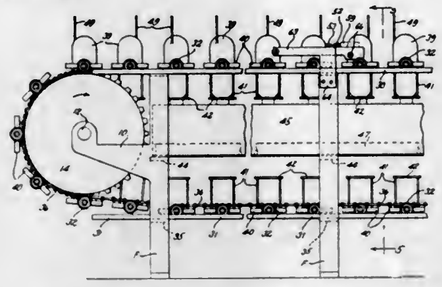
chamber for which said diaphragm forms a closure member, said chamber being too large to cause resonance of the diaphragm above 100 cycles per second.



23. An acoustic device comprising a diaphragm, a coil secured thereto for driving the diaphragm, a pair of concentric pole-pieces separated by a gap in which said coil is positioned, one of said pole-pieces having an axial opening therein, and means in said opening for absorbing sound waves.

26. An acoustic device comprising a diaphragm having one face thereof exposed directly to the surrounding air, means attached to said diaphragm at points removed from the center thereof for driving it, means to prevent the sound waves radiated by the exposed face of the diaphragm from interfering with those radiated by the other face of said diaphragm, and means for damping the waves given off by said other face of the diaphragm.

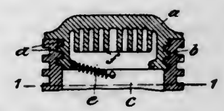
1,812,390. BOTTLE CONVEYER. MINER P. WETMORE, Norwich, Conn., assignor to The American Thermos Bottle Company, Norwich, Conn., a Corporation of Ohio. Filed Aug. 2, 1928. Serial No. 296,955. 1 Claim. (Cl. 198—131.)



In a bottle conveyer, the combination of a frame having a pair of tracks at the bottom and a pair of tracks at the top, a plurality of cross-bars provided at the ends with rollers arranged to run over both pairs of tracks, each of said bars having an opening to receive a bottle, a pair of endless chains to which said bars are connected in transversely spaced relation, wheels at the ends of said frame for driving said chains, means carried by each bar below said opening to support a bottle in substantially vertical position, a pivoted arm supported at one side of said frame and arranged to be actuated by each bottle that passes by on the conveyer, a counting device operated by said arm, and resilient means at the opposite side of said frame for engaging each bottle and holding it firmly against the edge of the opening in the supporting cross-bar when the bottle actuates said counting arm.

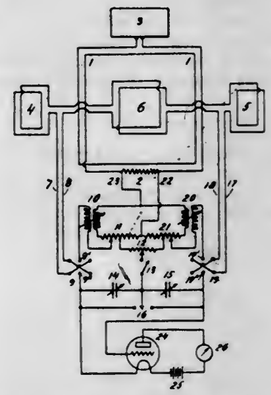
1,812,391. PISTON FOR INTERNAL COMBUSTION ENGINES. WALTER ZECHLAU, Berlin, Germany. Filed Sept. 30, 1929, Serial No. 396,264, and in Germany Oct. 6, 1928. 1 Claim. (Cl. 74—108.)

A motor piston, comprising, in combination, a piston head and a piston body connected with one another by screw-threads, the thread of the head and the thread of the body leaving gaps between them; and a tension spring having one end connected to said head and the other



end connected to said body whereby when the said head becomes unscrewed in service the spring tends to return the head to normal position.

1,812,392. METHOD OF AND APPARATUS FOR LOCATING TERRESTRIAL CONDUCTING BODIES. THEODOR ZUSCHLAG, New York, N. Y., assignor to Swedish American Prospecting Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1929. Serial No. 344,897. 20 Claims. (Cl. 175—182.)



2. A device for electromagnetically detecting and locating terrestrial conducting bodies, comprising an exciter coil adapted to generate a primary electromagnetic field to induce a secondary field in any conducting body located in the vicinity, a plurality of receiving coils adapted to be inductively influenced by said secondary field, said receiving coils being disposed in the same plane as said exciter coil, and compensating means for eliminating any inductive influence of said primary field on said receiving coils.

1,812,393. PROCESS FOR BREAKING PETROLEUM EMULSIONS. MELVIN DE GROOTE, St. Louis, LOUIS T. MONSON, Maplewood, and EDWARD H. KEISER, Clayton, Mo., assignors, by mesne assignments, to Tretolite Company, Webster Groves, Mo., a Corporation of Missouri. Filed Mar. 3, 1930. Serial No. 432,973. 10 Claims. (Cl. 196—4.)

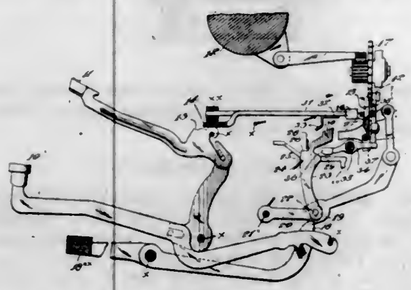
1. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing an acetylated derivative of a hydroxylated fatty acid.

10. A process for breaking a petroleum emulsion of the water-in-oil type, which consists in subjecting the emulsion to the action of a demulsifying agent containing acetyl sulforicinoleic acid.

1,812,394. VARIABLE ESCAPEMENT FOR TYPEWRITERS. BENJAMIN M. DES JARDINS, West Hartford, Conn. Filed Mar. 12, 1926. Serial No. 94,178. 5 Claims. (Cl. 197—84.)

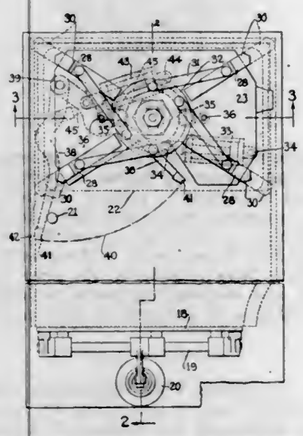
4. In a machine of the kind described, the combination with space and character keys, an escapement wheel and a

rocker having a rigid pawl cooperating therewith, of a pawl pivoted on said rocker and having a tooth normally coacting with said wheel to limit the movement thereof, a stop limiting the movement of said pivoted pawl under pressure exerted thereon by the escapement wheel, said pivoted pawl having a tail extending from said tooth



in a plane offset therefrom and a second tooth on said tail extending laterally into the plane of the first tooth, and means, actuated by the simultaneous depression of space and character keys, for controlling the swinging of said pawl to carry the first tooth out of and bring the second tooth into operative relationship with the escapement wheel.

1,812,395. METHOD AND APPARATUS FOR CLINCHING DOORS. CAROLUS L. EKSERGIAN, Detroit, Mich., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 16, 1929. Serial No. 363,668. 5 Claims. (Cl. 153—1.)



1. In combination, complemental door overlap clinching dies each forming a substantially continuous die face throughout the door overlap, and door aligning devices mounted within the continuous die face and engaging the door from between its inner and outer walls.

4. The method of clinching double walled automobile doors in the overlap thereof, which consists in aligning the door walls by aligning engagement from within and between its inner and outer walls, and clinching by simultaneous die engagement throughout the overlap.

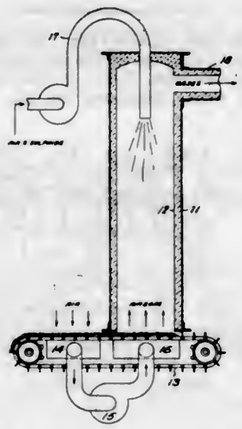
1,812,396. TERMINAL OUTLET FITTING. REUBEN ECKSTEIN, New York, N. Y. Original application filed Apr. 22, 1925, Serial No. 24,940. Divided and this application filed Nov. 7, 1925. Serial No. 67,645. 3 Claims. (Cl. 173—334.)

1. An outlet fitting for joining a plurality of circuits in parallel, comprising a two part body portion, a plurality of through passages in each of said parts, a through passage in one of said parts being adapted to mate with a passage in the other part, a current carrying member



received in said mating passages, said member comprising a pair of contact members having foot portions adapted to be clamped together by said body portions for retaining said current carrying member against any movement.

1,812,397. PROCESS OF AND APPARATUS FOR OXIDIZING METAL SULPHIDES AND MAKING SULPHUR DIOXIDE. HORACE FREEMAN, Shawinigan Falls, Quebec, Canada, assignor to The Sulphide Research Corporation Limited, Montreal, Canada, a Corporation of Canada. Filed Jan. 17, 1929. Serial No. 333,222. 24 Claims. (Cl. 75—60.)



1. A process of oxidizing metal sulphides which comprises introducing the sulphide in finely divided form into a preheated combustion chamber with an amount of air insufficient for complete oxidation, and introducing a countercurrent of air in amount sufficient to substantially complete the oxidation.

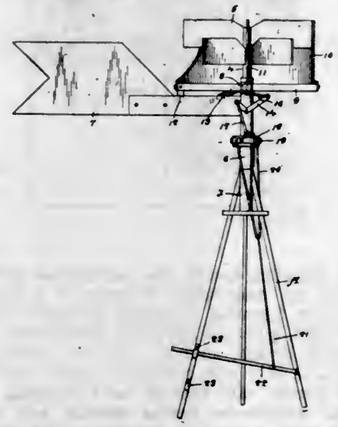
1,812,398. PROCESS FOR THE CONVERSION OF HYDROCARBONS OF HIGH BOILING POINT INTO OTHERS OF LOW BOILING POINT. ERNST GALLE, Ludwigshafen-on-the-Rhine, and HERMANN ZORN, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 19, 1928, Serial No. 327,179, and in Germany Feb. 4, 1928. 11 Claims. (Cl. 196—52.)

1. In the process of splitting hydrocarbons of high molecular weight into such of lower molecular weight by the action of heat, the step of carrying out the said treatment in the presence of a catalyst comprising a salt of metaphosphoric acid at a temperature high enough to promote the conversion.

1,812,399. PRODUCTION OF METAL CARBONYLS. WILHELM GAUS, Ludwigshafen-on-the-Rhine, ALWIN MITTASCH, Mannheim, and LEO SCHLECHT, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 29, 1929, Serial No. 374,938, and in Germany July 5, 1928. 10 Claims. (Cl. 23—203.)

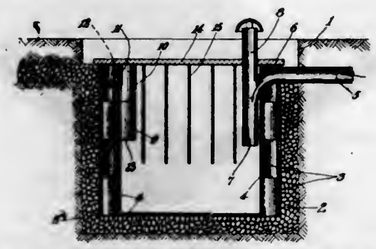
1. The process of producing metal carbonyl which comprises acting on a metal capable of forming metal carbonyl, in mixture with an inert liquid which is a solvent for carbon monoxide, with a gas containing carbon monoxide, while keeping the said metal and the said liquid in motion against each other.

1,812,400. WINDMILL. ARTHUR C. GILLEY, White, S. Dak. Filed July 10, 1929. Serial No. 377,209. 1 Claim. (Cl. 170—15.)



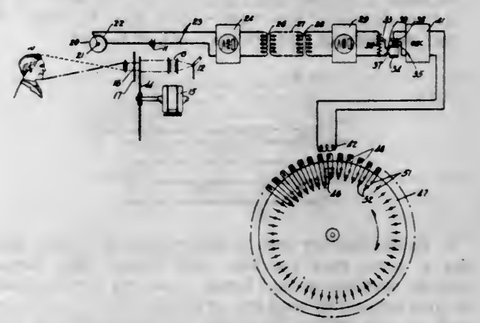
A windmill including a horizontally arranged wheel and a support, an inner sleeve mounted on the support and having a wheel journalled thereon, an outer sleeve journalled on the inner sleeve, pairs of oppositely disposed and connected arms journalled on the inner sleeve between the outer sleeve and the wheel, a semi-circular shield carried by certain ones of said arms and positioned to receive a portion of the wheel therein, a main vane secured to the outer sleeve, a stop on one of the arms, and tension means between one of the arms and the vane to normally urge the stop against the vane, an auxiliary vane secured to one of the arms, and a control having a portion thereof splined to the outer sleeve and connected to the auxiliary vane for moving the latter relative to the main vane for controlling the operation of the wheel.

1,812,401. SEPTIC TANK. ALBANUS W. GOULDING, Trenton, N. J., assignor of one-half to Clifton Reeves, New York, N. Y. Filed Dec. 19, 1928. Serial No. 326,956. 8 Claims. (Cl. 210—6.)



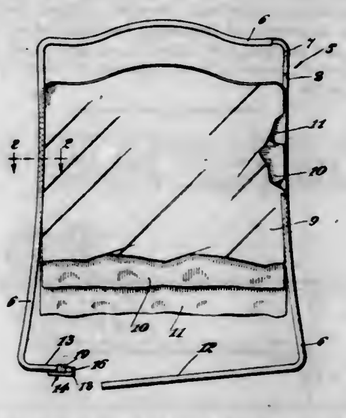
1. A septic tank, including in combination, a side wall of open construction made fluid tight on the inside thereof, an inlet leading through one side of said wall and having the end thereof located a substantial distance from the top of said tank, and a vent and tell-tale connection extending upwardly from said inlet, a discharge conduit secured to the other side of said tank and having the inlet end thereof located in a plane above the plane of the discharge end of the inlet connection, said discharge conduit having communication near the upper end thereof with the interior of said open side wall, a lid or cover for said tank, and a plurality of staggered baffle screens located in the upper portion of said tank, the lower edges of which terminate below the lower ends of said inlet and discharge connections.

1,812,402. ELECTROOPTICAL TRANSMISSION SYSTEM. FRANK GRAY, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 30, 1929. Serial No. 396,098. 16 Claims. (Cl. 178—6.)



1. In combination, a source of continuously varying signaling current, a resonant circuit, light control means in said circuit, a source of alternating current for supplying current to said resonant circuit, and means responsive to said signaling current for controlling the resonance characteristics of said circuit to vary the amplitude of the current flowing therein in accordance with the variations of said signaling current.

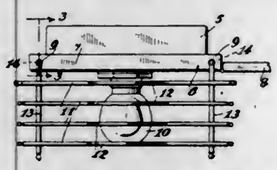
1,812,403. MIRROR AND METHOD OF FRAMING THE SAME. SAMUEL HAMMER, Brooklyn, N. Y., assignor to United Metal Box Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 23, 1930. Serial No. 422,779. 4 Claims. (Cl. 45—18.)



1. A method of framing mirrors which consists in first bending a channel shaped metal strip to form a frame

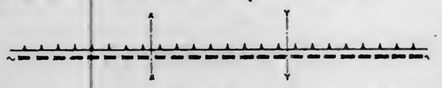
with the channel opening on the inner side thereof and unconnected end sections of the strip extending inwardly from the opposite sides of the frame, then assembling a mirror with a back plate and a sheet of packing material interposed between said plate and the mirror, then while holding the backing material under compression inserting one end and the opposite side edges of the back plate and mirror into the channels of said frame, then bending the opposite sides of the frame inwardly to position said end sections thereof in alignment and engage the other end of the mirror assembly within the channels of said end sections, then rigidly securing said aligned end sections of the strip to each other, and finally releasing the compressing pressure on the mirror assemblage to permit expansion of said yieldable packing material whereby the backing plate and the mirror are urged in opposite directions into frictional contact with the rear and front flanges respectively of the mirror frame.

1,812,404. CABINET. SAMUEL HAMMER, Brooklyn, N. Y., assignor to United Metal Box Co. Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 435,819. 10 Claims. (Cl. 312—113.)



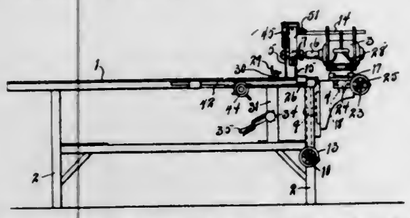
1. In combination with a cabinet having a front frame and a towel rack provided with spaced rods inserted through openings in said frame, attaching devices mounted upon the cabinet structure at the rear side of said frame, each of said devices including relatively yieldable parts between which the end of one of said rods is received and clampingly held in assembled relation to the cabinet frame.

1,812,405. ELECTROOPTICAL TRANSMISSION SYSTEM. HERBERT E. IVES, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 25, 1929. Serial No. 365,908. 15 Claims. (Cl. 178—6.)



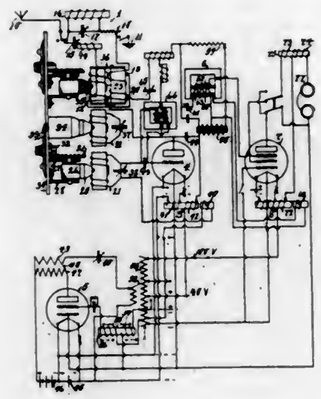
1. The method of signaling which comprises scanning a field of view of different tone values, producing from said scanning a composite electric current containing a plurality of groups of frequency components of large amplitude, and cutting said plurality of groups of frequency components between adjacent groups to form a plurality of sub-groups.

1,812,406. CLOTH CUTTING MACHINE. PETER JENKINS, Forth Worth, Tex. Filed Apr. 8, 1929. Serial No. 353,332. 3 Claims. (Cl. 164—76.)



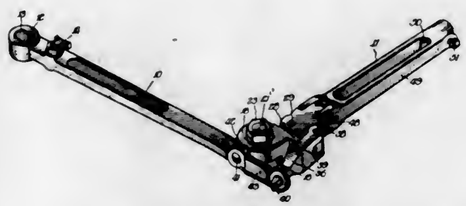
1. A cloth cutting machine comprising a platform, means for gaging the cloth thereon to be cut, means for clamping the cloth down on said platform, a revolving knife for cutting the cloth, means for vertically and longitudinally adjusting said knife relative to said platform, and means for driving said knife in its different positions.

1,812,407. RADIO APPARATUS. AUGUST J. KLONECK, New York, N. Y. Filed June 5, 1923. Serial No. 643,505. 12 Claims. (Cl. 250—20.)



1. In a signaling system the combination with receiving circuits and cooperating elements, of a plurality of electron tubes including operating electrodes, input and output circuits, a voltage supplying transformer for operating certain of said electron tubes for amplifying signals by means of a high frequency current therefrom, a source of current, said electron tubes including an oscillator, said transformer having primary and secondary coils, said primary being in connection with said source of current and with said oscillator, means for producing reactions of said oscillator of a frequency preferably above the range of frequencies of a received signal current but not necessarily at a higher harmonic of a signal current, said reactions of said oscillator energizing said primary of said transformer and by the latter said secondary, the latter having a plurality of different voltage terminals for operating said amplifying electron tubes at any desired voltage, said amplifying electron tubes having output circuits operating at different frequencies regardless of the operating high frequency current from said oscillator and transformer by conventionally bypassing the higher frequency currents in said output circuits.

1,812,408. FUSIBLE TYPE HOLD OPEN ARM. DAVID R. LASIER, Chicago, Ill., assignor to Norton-Lasier Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 5, 1929. Serial No. 344,213. 2 Claims. (Cl. 189—45.)



1. A holding device adapted to be pivotally connected between a door and door sill respectively, comprising in

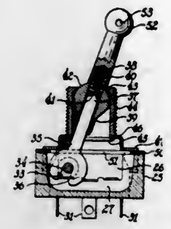
combination, a link having a friction face at one end, an element having a cooperating friction face pivotally connected to the end of said link, a second element pivoted to said first element, on an axis parallel with the pivotal axis between said link and first element, a lug on said first element, a dog pivoted to said second element, adapted for locking engagement with said lug, and a fusible link for holding said dog in engagement with said lug.

1,812,409. METHOD AND APPARATUS FOR PREVENTING ADHERENCE OF MOLTEN METAL. HERBERT V. LECKIE, Cleveland, Ohio, assignor to Steel and Tubes, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 24, 1929. Serial No. 388,092. 6 Claims. (Cl. 219—6.)



1. In apparatus for manufacturing tubing from strip metal, the combination of means for forming a strip into the shape of a tube, means for heating and welding the edges of the strip to complete the tube, and fluid pressure means for chilling any metal particles which may fall from the heated portion of the tub into the interior thereof.

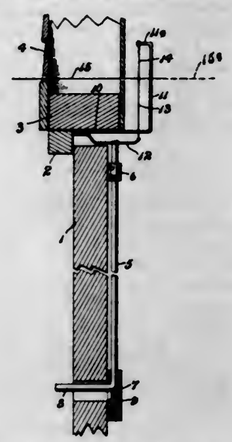
1,812,410. ELECTRIC SWITCH. GEORGE J. MEUER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 11, 1930. Serial No. 443,335. 18 Claims. (Cl. 200—16.)



1. In an electric switch, in combination, a molded insulating base having a substantially rectangular recess in the upper face thereof, contacts secured within said recess on opposite sides of the longitudinal center line of said base, said base being further provided with a relatively narrow but relatively deeper recess coincident with said center line thereof, a roller contactor movable longitudinally of said base into and out of bridging relation to said base contacts, and an actuating element engaging said contactor and extending into said relatively narrow recess to be guided by the side walls of the latter.

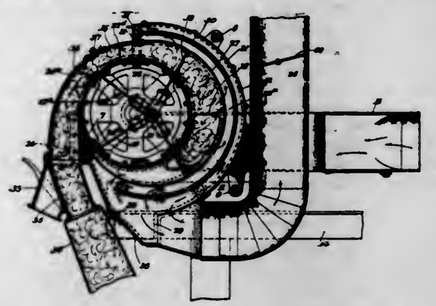
1,812,411. DOOR LATCH. CHARLES M. NORTON, Grand Rapids, Mich. Filed Mar. 18, 1929. Serial No. 347,765. 6 Claims. (Cl. 292—175.)

1. In combination, a door, a door frame around the door, a vertical rod mounted on the door, a spring member attached at one end to the door frame over said door and extending over said rod and having means with which said rod engages, a cable attached at one end to the free end of the spring member and at its opposite end having a permanent connection, and a second cable secured to the first cable between its ends and extending away there-



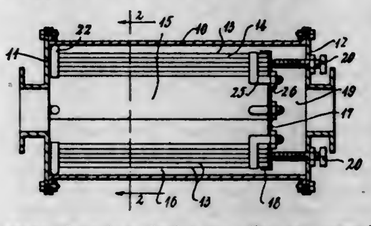
from at substantially a right angle, whereby on pulling on said second cable the spring member may be lifted to disengage from said rod.

1,812,412. MACHINE FOR HANDLING FIBROUS MATERIAL. ALEX H. OLSON, Evanston, Ill., assignor to Droll Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 3, 1929. Serial No. 368,035. 17 Claims. (Cl. 19—75.)



1. In a machine of the character described, the combination of a casing provided with an outlet, means for delivering fibrous material with air under pressure into the casing, means for positively conveying the fibrous material through the casing and positively discharging it from the casing through said outlet, and means for separating air from the material in transit to the outlet.

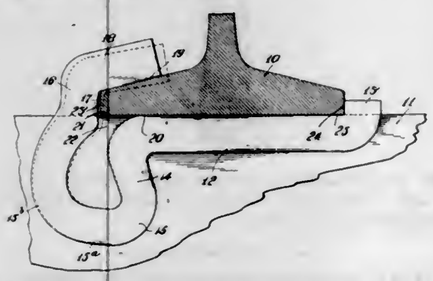
1,812,413. SILENCER. KENNETH J. REYNOLDS, East Hartford, Conn., assignor, by mesne assignments, to The Maxim Silencer Company, Hartford, Conn., a Corporation of Connecticut. Filed Jan. 24, 1929. Serial No. 334,882. 4 Claims. (Cl. 137—160.)



1. A wave damping device or silencer comprising a casing, and a structure within the casing comprising a

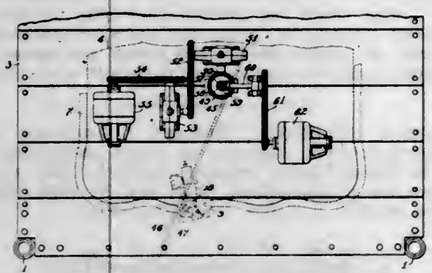
plurality of spirally arranged internested sheets spaced apart radially one from another to form a plurality of spiral passageways, the sheets having a plurality of sets of radially aligned notches formed in their end edges, and a plurality of radial tie rods each passing through a set of notches and being secured individually to each sheet as by welding or soldering, certain of the rods extending beyond the sheets to furnish support for the structure within the casing and to space it radially therefrom.

1,812,414. RAIL ANCHOR. CHARLES B. SHEPHEAD, New York, N. Y., assignor to The P & M Company, a Corporation of Illinois. Filed Mar. 1, 1930. Serial No. 432,419. 5 Claims. (Cl. 238—330.)



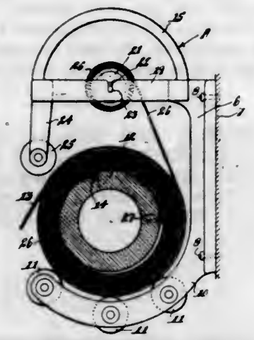
1. A rail anchor comprising a body provided at one end with means for engagement with one edge of a rail base and at the other end with a clamp including an inwardly extending jaw bearing against the inclined top surface of the rail base at one side of the rail, a depending vertically flexible portion connected to the jaw, a vertically disposed and relatively rigid portion connected with said vertically flexible portion and bearing against the bottom surface of the rail base at a location intermediate the end of said jaw and the adjacent edge of the rail base, the said rigid and vertically flexible portions being positioned to provide a space between them adapted to receive the lower corner of the base flange during the initial application of the anchor to the rail.

1,812,415. MIRROR MITERING MACHINE. GEORGE SIMONEL, Bloomington, and WILLIAM H. JOHNSON, Terre Haute, Ind., assignors to The Nurre Mirror Plate Company, Bloomington, Ind., a Corporation of Indiana. Filed Apr. 2, 1925. Serial No. 20,122. 7 Claims. (Cl. 51—100.)



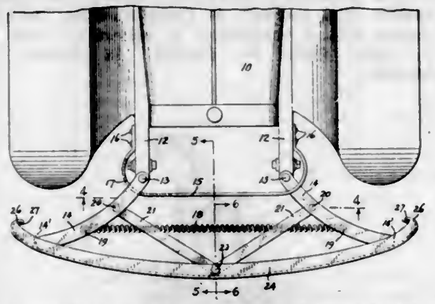
1. In a machine for grooving glass plate, the combination with a stationary support for the glass plate to be grooved, of a carriage arranged to be moved in an irregular path over the surface of said plate, a templet for guiding said carriage in said path, a grinding wheel shaft carried by said carriage, a grinding wheel mounted on said shaft, and means engaging opposite vertical walls of said templet at one and two points respectively for maintaining said grinding wheel shaft in fixed angular relation to the vertical walls of said templet.

1,812,416. AWNING SUPPORT AND PROTECTOR. JOHN A. SMITH, Chicago, Ill. Filed Dec. 17, 1928, Serial No. 326,468. Renewed Nov. 21, 1930. 7 Claims. (Cl. 156—44.)



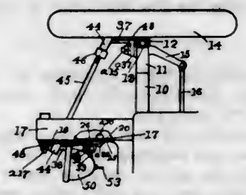
4. An awning center support comprising, in combination, a supporting frame, rollers rotatably mounted upon said frame, a drum adapted to be rotated upon said rollers and carrying an awning windably mounted thereon, and a spring actuated spool carrying a strip of protective material adapted to be interleaved with said awning and also adapted to be interposed between said awning and said rollers during the winding and unwinding of said drum.

1,812,417. AUTOMOBILE BUMPER. ADOLPH A. THOMAS, New York, N. Y. Filed Apr. 17, 1930. Serial No. 444,955. 16 Claims. (Cl. 293—55.)



1. A bumper structure for automobiles comprising a pair of outwardly diverging levers pivoted to the car, a pair of toggle links connected to said levers and converging forwardly, a bumper bar connected to said toggle links for spreading the same and said levers under the force of an impact, and elastic means arranged crosswise of the car and so mounted as to be expanded when said links and levers are spread apart.

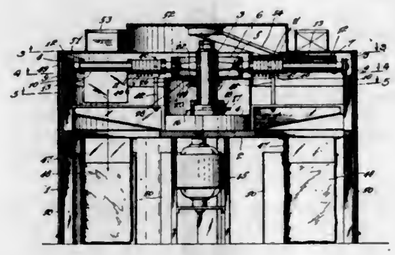
1,812,418. DIRIGIBLE GUIDE-LIGHT MOUNTING MECHANISM FOR AUTOMOBILES. WILLIAM V. VAN ETTEN, Bellingham, Wash. Filed Nov. 29, 1930. Serial No. 499,018. 1 Claim. (Cl. 240—62.62.)



In a mounting mechanism for automobile dirigible guide lights a vertical-shaft bearing bracket flange having

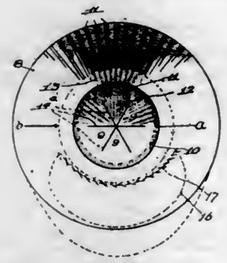
an opening therein for extending therethrough the front spring hinge bolt of said automobile said opening larger than said spring hinge bolt also having other openings therein for extending therethrough bolts engaged with the housing wall of the spring, and a cylindroangular nut on said spring hinge bolt bearing on said bracket flange with the cylindrical portion thereof extended in the larger opening around the spring hinge bolt as a bushing thereto.

1,812,419. MAIL DISTRIBUTING DEVICE. JACOB WEINER, Newark, N. J., assignor to Jacob Weiner Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 8, 1929. Serial No. 405,835. 3 Claims. (Cl. 214—11.)



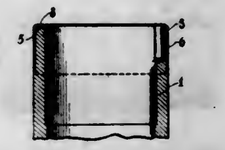
3. In an assorting device, a member having a plurality of radiated stub shafts, means for rotating the member step by step, article receiving plates rotatably mounted on the stub shaft, a plurality of collars rotatably mounted on each stub shaft, means for rotating a selected collar at a predetermined point, and means associated with the collar to tilt the plate downwardly.

1,812,420. CAP. SAMUEL E. WEINER, Chicago, Ill., assignor to Herman H. Newberger, Chicago, Ill. Filed Feb. 12, 1930. Serial No. 427,703. 2 Claims. (Cl. 66—171.)



1. A cap composed of knitted tubular material, the end sections of which are composed of rib stitches and in the form of sector-like portions, the edges of which are united by stitches, the middle section of said tubular material being composed of rib stitches and the sections being the middle section and end sections being composed of cardigan stitches, said tubular material being doubled upon itself midway between its ends whereby a central opening is provided from which run inner and outer rib stitch sections followed by inner and outer cardigan stitch sections which terminate in the middle of the cap in inner and outer rib stitch sections.

1,812,421. CORE CAP. WALTER H. WICKWARE, Ottawa, Ontario, Canada, assignor to International Paper Company, a Corporation of New York. Filed June 27, 1929. Serial No. 374,005. 9 Claims. (Cl. 242—68.)



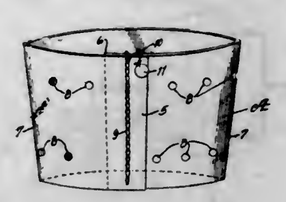
1. A core cap comprising an inner sleeve having an outwardly extending flange at one end thereof, a concentric outer sleeve having an inwardly extending flange at one end thereof, said flanges being associated in overlapping relation and integrally joined to form a web of double thickness between said sleeves, and a portion of the inner sleeve being bent laterally into engagement with the outer sleeve to form a stud-receiving cavity.

1,812,422. SAFETY RAZOR. FRANZ WIESE, Berlin-Wilmersdorf, Germany, assignor to the Firm: Gillette Safety Razor Ges. m. b. H., Vienna, Austria. Filed Nov. 9, 1925, Serial No. 67,999, and in Germany Dec. 16, 1924. 5 Claims. (Cl. 30—12.)



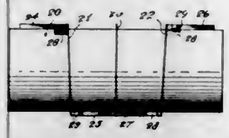
1. A safety razor comprising a thin wafer-like blade and cap and guard members adapted to clamp the blade between them so as to flex it transversely of its cutting edge, in which the guard is provided with projections at both ends extending above the remainder of the guard, curved reversely as compared to the blade curvature and shaped to make contact with the blade only over the width of the bevel at both ends of the cutting edge, thus protecting the ends of the edge.

1,812,423. BASKET LINER. ARTHUR H. WOOD, Adrian, Mich., assignor to Simplex Paper Corporation, Adrian, Mich., a Corporation of Michigan. Filed Oct. 2, 1929. Serial No. 396,633. 4 Claims. (Cl. 217—3.)



1. A basket liner for accommodating fruit and the like which consists of a strip of material bendable into circular form with its two ends connected by a cord stitched into a chain extending the length of the ends and diametrically opposed thereon, one end of the cord being extended beyond the proximate end of the liner for manipulation when the stitching is to be raveled.

1,812,424. APPARATUS FOR PRODUCING SHINGLE STRIPS. HENRY R. WOOD, Sierra Madre, Calif., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 15, 1929. Serial No. 363,322. 3 Claims. (Cl. 164—68.)



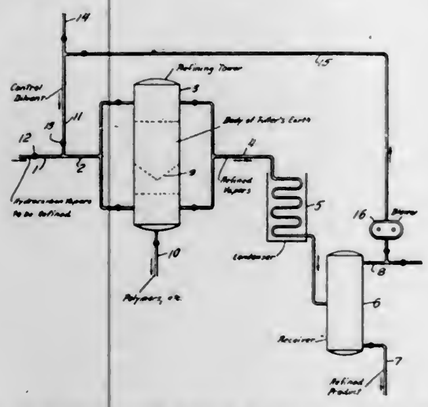
1. In mechanism for cutting sheet material to sever therefrom roofing elements of curvilinear butt-edge configuration, the combination of a rotatable cylinder and a circular knife fixed to the surface of the cylinder, said knife lying entirely in a single plane extending at an angle to the axis of said cylinder, and cutting blades fixed to the surface of the cylinder and extending in parallelism with the axis thereof on opposite sides of said circular knife, said blades being located at substantially diametrically opposed points on the cylinder.

1,812,425. EYEBROW STENCIL. GERD WOSSE, Chicago, Ill. Filed Aug. 30, 1929. Serial No. 389,395. 8 Claims. (Cl. 132—1.)



1. An eyebrow stencil comprising a stencil plate having a tapered eyebrow stencilling slot formed therein, and a dished extension integrally formed on one end of said plate for holding the same in position to permit an eyebrow to be painted.

1,812,426. ART OF REFINING HYDROCARBONS. FRANK A. APGAR, East Chicago, Ind., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Feb. 29, 1928. Serial No. 258,098. 2 Claims. (Cl. 196—96.)



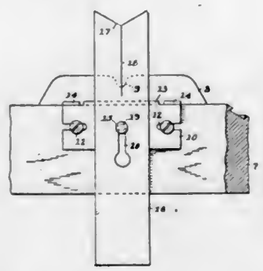
1. In a vapor phase refining of hydrocarbons by passage of the hydrocarbon vapors through a charge of an adsorptive catalyst, the improvement which comprises passing the hydrocarbon vapors through the adsorptive catalyst in admixture with a relatively inactive gaseous diluent and controlling the ratio between the hydrocarbon vapors and the diluent to decrease or increase the proportion of hydrocarbon vapors present in the mixture, respectively, as the activity of the adsorptive catalyst increases or decreases.

1,812,427. WEED KILLER. WILLIAM H. BERGMANN, Cleveland, Ohio, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 26, 1928. Serial No. 264,642. 8 Claims. (Cl. 47—49.)



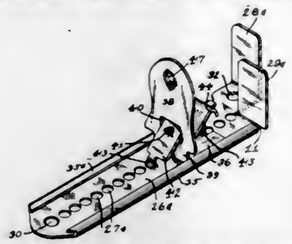
5. In a weed cutting and root destroying device, a support for a blade, a blade on the support, a cutting edge on the blade adapted to be thrust into the ground, a fluid duct associated with the blade and extending to a point adjacent the cutting edge, the blade and duct being adapted to be forced into the earth, a discharge opening for the duct positioned to permit discharge of fluid from the duct in a direction transverse to the direction of movement of the duct when shoved into the ground whereby clogging of the discharge opening is prevented.

1,812,428. SLUB DETECTOR. EDWARD BLOOM, Paterson, N. J. Filed Oct. 25, 1930. Serial No. 491,125. 15 Claims. (Cl. 28—70.)



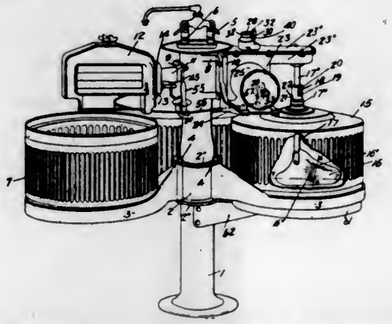
1. In combination, a support and a slub detector carried thereby and having an aperture to receive the yarn and normally held in a given position but yieldable therefrom on the support in opposite directions crosswise of and to the yarn while the latter is drawn lengthwise of itself.

1,812,429. WINDOW SHADE AND CURTAIN BRACKET. LEONARDO BRUNO, Waterbury, Conn. Filed Nov. 1, 1930. Serial No. 492,656. 2 Claims. (Cl. 156—24.)



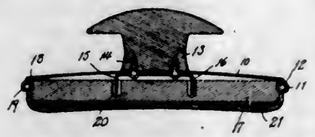
2. In a shade bracket, a base for attachment to a window frame, an adjustable angle member having an outstanding plate and a base plate slidable on said bracket base, said outstanding plate having an aperture, a lever passing through said aperture and having selective interchangeable engagement with said base at a plurality of points along its length, said aperture having a lug extending thereinto to form a pivot for said lever, and a spring located between said base plate and the outer end of said lever for pressing the lower end of said lever against said bracket base.

1,812,430. DOMESTIC LAUNDRY EQUIPMENT. THOMAS WILLIAM CHADBURN, Toronto, Ontario, Canada. Filed Mar. 15, 1930. Serial No. 436,196. 1 Claim. (Cl. 68—15.)



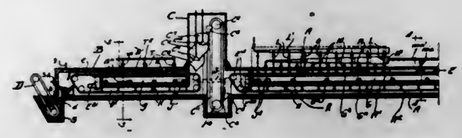
In a domestic laundry equipment the combination with a main standard support, a tub and tub supporting bracket carried by the support, of a tub lid having a central orifice, a vertical bearing secured in the orifice, a lower shaft member extending through the bearing and having a paddle on its lower end, means for supporting the shaft from longitudinal downward movement in the bearing, a gear box carried by the main standard and having a vertical bearing therein in alignment with the aforesaid vertical bearing, an upper shaft member journalled in said bearing, a coupling detachably connecting the upper and lower shaft members, and means for driving the upper shaft member from a suitable driving source.

1,812,431. MANICURIST'S BUFFER. NORTON W. CHAPMAN, Guilford, Conn., assignor to The Guilford Manufacturing Company, Guilford, Conn., a Corporation. Filed Mar. 27, 1930. Serial No. 439,310. 3 Claims. (Cl. 132—78.)



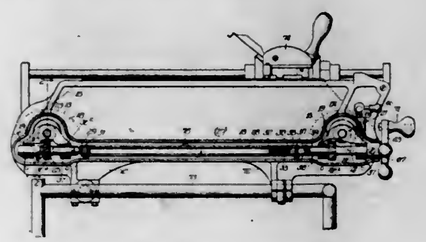
1. A manicurist's buffer comprising a shell formed with an integral annular flange, and a block covered with a suitable material and adapted to be entered into and frictionally held in engagement with the flange of the said shell.

1,812,432. METHOD OF PREPARING FUEL. PHILIP D'HUC DRESSLER, Cleveland, Ohio, assignor, by mesne assignments, to Swindell-Dressler Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 15, 1925. Serial No. 37,077. 14 Claims. (Cl. 44—10.)



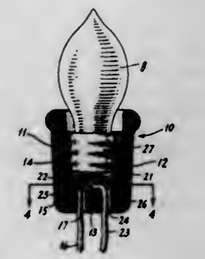
1. The method of preparing fuel which consists in passing a stream of plastic blocks of oil wet fine coal through a chamber in which they are heated and in which they are subjected to an oxidizing action.

1,812,433. WINDING AND TIGHTENING MECHANISM. JAMES K. DUNCAN and RUDOLPH WEIDE, Chicago, Ill., assignors to Ditto, Incorporated, Chicago, Ill., a Corporation of West Virginia. Filed Oct. 8, 1930. Serial No. 487,225. 25 Claims. (Cl. 242—55.)



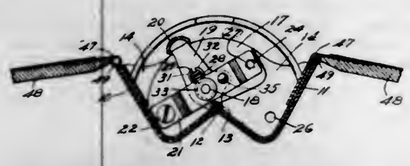
1. In winding and tightening mechanism, in combination, an axially movable rotatable shaft, a pair of spiral gears secured to said shaft, a pair of second spiral gears adapted to mate alternately with said first mentioned spiral gears, and overrunning clutch means for controlling the rotation of said second spiral gears.

1,812,434. ELECTRIC LAMP SOCKET. REUBEN ECKSTEIN, New York, N. Y. Filed Apr. 16, 1927. Serial No. 184,279. 4 Claims. (Cl. 173—358.)



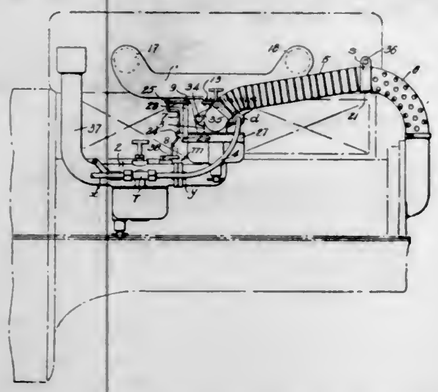
3. In an electric lamp socket, the combination of a contact shell having an inwardly extending basal rim portion and a terminal plate for connecting said shell to one side of the electrical supply, said plate having a rim portion seated on said shell rim.

1,812,435. LOOSE LEAF BINDER. ROY E. HAMILTON, Kansas City, Kans., assignor, by mesne assignments, to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed July 2, 1928. Serial No. 289,800. 12 Claims. (Cl. 129—17.)



1. In a loose leaf binder, a pair of back members, a pintle pivotally connecting said back members, a latching mechanism having interengaging parts carried by the back members to secure the back members against opening, and means carried by the pintle operable in two directions from a neutral position to disengage the interengaging parts of the latching mechanism.

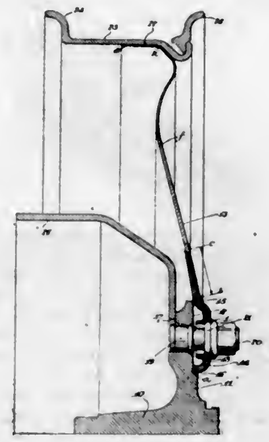
1,812,436. CARBURETING AND LUBRICATING DEVICE FOR INTERNAL COMBUSTION ENGINES. CARL FRED HUDDLE, Napoleon, Ohio. Filed Jan. 28, 1927. Serial No. 164,323. 1 Claim. (Cl. 123—127.)



The combination with an internal combustion engine having a crank case, of an intake manifold having a terminal inlet and an intermediate inlet, a main carbureter connected with the terminal inlet, a high speed carbureter operable with the main carbureter and connected with the intermediate inlet, a fuel supply pipe connected with said carbureters, a main air supply pipe connected with the main carbureter, an air supply pipe connecting the high speed carbureter with the crank case and provided at an intermediate point between the high speed carbureter and the crank case with apertures communicating with the atmosphere and adapted to decrease the vacuum of the engine, controlling means for the main carbureter, and separate controlling means for the high speed carbureter automatically operable by the first mentioned controlling means when the engine has attained a predetermined speed.

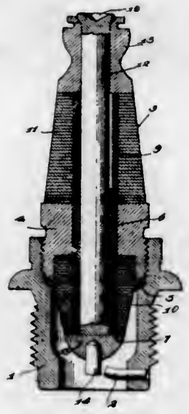
1,812,437. WHEEL DISK. J HAROLD HUNT, Detroit, Mich., assignor to Budd Wheel Company, Detroit, Mich., a Corporation of Pennsylvania. Filed Apr. 2, 1926. Serial No. 99,192. 1 Claim. (Cl. 301—63.)

A vehicle wheel comprising in combination, a hub having a radial flange formed thereon, a wheel body in the form of a metal disk having a relatively thick central portion adapted to abut said radial flange and be secured thereto, a zone of substantially uniform taper extending outwardly from the portion of said disk abutting said hub flange for a considerable part of the radial extent of



said wheel, a second zone extending outwardly from said first named zone, said second zone being of a slighter taper relative to the taper of said first zone and extending substantially to the rim-engaging portion of the disk.

1,812,438. SPARK PLUG. ROY T. HURLEY, Dobbs Ferry, N. Y., assignor to Hurley-Townsend Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 15, 1930. Serial No. 488,790. 3 Claims. (Cl. 123—169.)

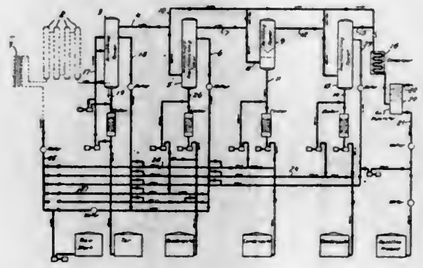


1. In a spark plug, the combination with a shell, of a nut threaded in the shell, a central electrode, and a body of flexible insulating material interposed between the central electrode and the nut, said nut having a lower thermal coefficient of expansion than the central electrode.

1,812,439. ART OF REFINING HYDROCARBONS. EDWARD W. ISOM, Scarsdale, N. Y., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Feb. 29, 1928. Serial No. 257,959. 4 Claims. (Cl. 196—96.)

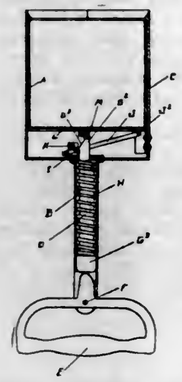
4. An improved method of producing gasoline which comprises taking off from a cracking operation a vapor mixture including vapors of the gasoline product, bringing the concentration of gasoline components in this vapor

mixture to a point such that condensed it forms a condensate containing not less than 50% and not more than 75% of the gasoline product, passing this gasoline-containing vapor mixture while at a temperature materially below the cracking temperature through an adsorptive catalyst, subjecting the vapor mixture remaining after passage through the adsorptive catalyst to a fractionating



operation and therein condensing all constituents of boiling point higher than suitable as components of the gasoline product, returning condensate produced in this fractionating operation to the cracking operation, and condensing the vapors escaping from this fractionating operation prior to further contact with the adsorptive catalyst to form the gasoline product.

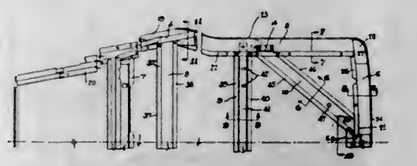
1,812,440. HOLDER FOR CONTAINERS. MACK D. JEFFRIES, Boston, Mass. Filed Apr. 15, 1930. Serial No. 444,419. 2 Claims. (Cl. 226—19.)



1. A device of the character described, comprising a container holding receptacle having a cutting edge adapted to be forced into plastic material, said receptacle being composed of a pair of sections, one of which is movable to open and closed positions with respect to the other, a handle on the other section, a member slidably carried within said handle and provided with a cam surface thereon, a link pivotally connected with said movable section and a pair of circular members positioned adjacent said link and said slidable member to effect a cam action on said link whereby said sections are forced into engagement with each other.

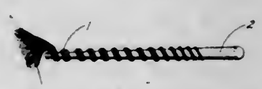
1,812,441. AUTOMOBILE BODY. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 15, 1926. Serial No. 154,884. 6 Claims. (Cl. 296—28.)

4. In a vehicle body construction, a rear sill, a channel member having its ends connected to said sill and extending upwardly at a forward incline with the channel presenting inwardly, diagonal braces connected to said sill beneath the point of its connection with the channel member, and an inwardly facing channel member



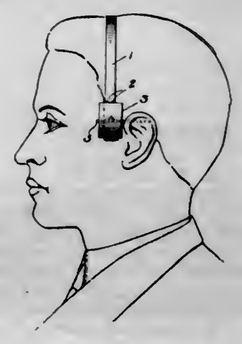
secured in vertical position to said braces and having its upper end nested within the first named channel adjacent the end thereof, whereby a vertical brace for the rear deck housing and a support for the spare tire carrier is provided.

1,812,442. METHOD OF WAVING HAIR. WILBUR S. LEWIS, Lakewood, Ohio, assignor to The Nestle-Le Mur Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 25, 1930. Serial No. 484,302. 4 Claims. (Cl. 132—33.)



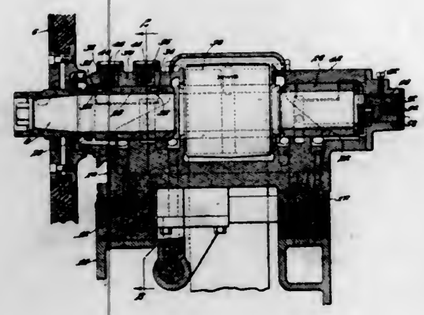
1. A method of permanently waving hair comprising winding a strand of hair on a rod, removing said hair from said rod in the form of a flat coil, folding a pad about said coil to hold it in coiled position and to substantially enclose the coil and applying heat and pressure to the coil.

1,812,443. SHAVING GUIDE. FARD MASON, Lansdale, Pa. Filed Jan. 8, 1931. Serial No. 507,453. 2 Claims. (Cl. 132—45.)



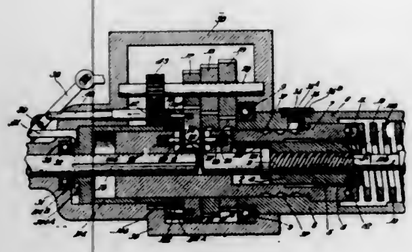
1. As a new article of manufacture a device of the kind and for the purpose described comprising in combination a flexible member adapted to engage the head, a member attached to the head member and being perforated a number of times transversely in order to admit the insertion of a sliding rod, a sliding rod to be inserted selectively in said holes and protruding to rest upon the upper junction of either ear and the head, the choice of the hole in which the rod is inserted determining the level of the lower edge of the gauge as it rests on the side of the head and in front of the ear and thus enabling the shaver to secure a neat edge of the hair immediately in front of the ear at the level desired.

1,812,444. GRINDING MACHINE. MAXWELL I. MATHEWSON, Providence, and ARTHUR BROWN, Cranston, R. I., assignors to Brown and Sharpe Manufacturing Company, a Corporation of Rhode Island. Filed June 22, 1927. Serial No. 200,623. 8 Claims. (Cl. 308—121.)



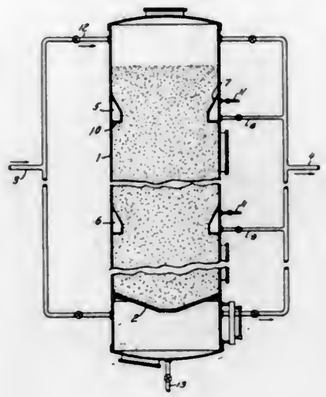
1. A grinding machine having, in combination, a grinding wheel spindle and a radial thrust bearing for the spindle comprising a fixed bearing, a radial bearing block, trunnions on the block, guideways engaging therewith to position the block with relation to the fixed portion of the bearing, and spring means for forcing the block yieldingly into engagement with the spindle.

1,812,445. TORQUE CONTROLLED GEAR CHANGING MECHANISM. FRED W. MAYER, Chicago, Ill. Filed Aug. 27, 1927. Serial No. 215,878. 2 Claims. (Cl. 74—59.)



1. In a device of the class described, driving and driven shafts, variable gear ratio changing mechanism between the driving and driven shafts, an intermediate sleeve threaded on one of said shafts, a gear changing sleeve oppositely threaded on said intermediate sleeve, yielding means bearing against said gear changing sleeve for positioning said sleeve in accordance with the torque on said shafts, and connections on said gear changing sleeve for engaging said gear mechanism.

1,812,446. ART OF REFINING HYDROCARBONS. WILLIAM MENDIUS, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Feb. 10, 1928. Serial No. 253,372. 2 Claims. (Cl. 196—96.)



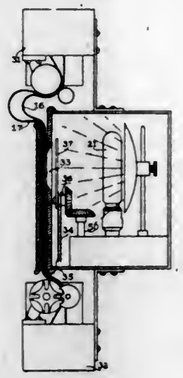
2. An apparatus for contacting hydrocarbon vapors with an adsorptive catalyst comprising a vertically arranged tower, means for supporting a charge of the adsorptive catalyst therein, a series of annular members sloping downwardly from said shell at spaced intervals within the region normally occupied by the charge of the adsorptive catalyst, auxiliary vapor connections having valves therein communicating with the space within the shell beneath said annular members, a vapor inlet to an end of said shell only, and a vapor outlet from the other end of said shell.

1,812,447. TYPEWRITING MACHINE. LOUIS A. NEMCOVSKY, New York, N. Y., assignor, by mesne assignments, to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed July 15, 1924, Serial No. 726,063. Divided and this application filed Sept. 29, 1927. Serial No. 222,700. 5 Claims. (Cl. 197—159.)



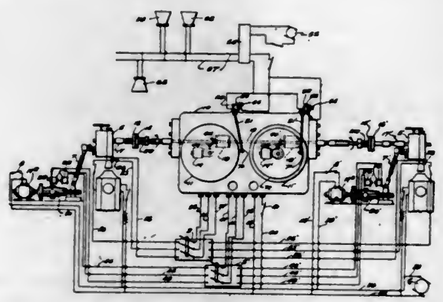
1. A ribbon-vibrating mechanism including a stationary type-bar segment and a type-bar driven universal bar on said segment, a shift-frame mounting a platen for case-shift movement, a two-color ribbon, a ribbon-vibrator formed with a wide base, spaced-apart pivots on said frame to rockably support said base between them to stabilize the swing of the ribbon-vibrator, a plate slidably mounted upon said base, tongues on said plate that vary in length to vary the rocking extent of said base by the universal bar and settable to present either color of the ribbon to the platen, and a manually-operable train having connections with said plate to set either tongue.

1,812,448. PHOTOGRAPHY. JOHN J. REILLY, Weehawken, N. J., and WILLIAM A. GILMARTIN, New York, N. Y. Filed Oct. 19, 1927. Serial No. 227,145. 4 Claims. (Cl. 95—75.)



1. The method of printing which consists in arranging a negative in contact with sensitized print stock for printing and exposing the whole negative to a plurality of light values selected in accordance with their power to print through selected tones in the said negative.

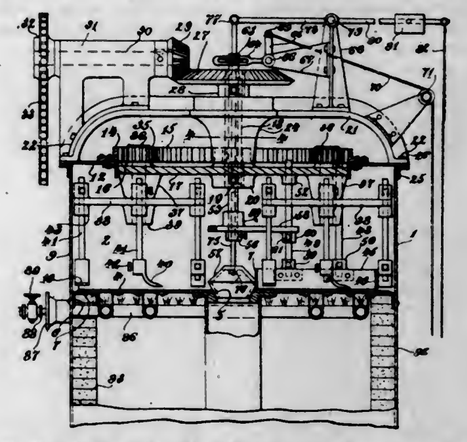
1,812,449. SYNCHRONIZED SOUND AND PHOTOGRAPHY. HARRISON W. ROGERS, New York, N. Y. Filed Oct. 31, 1928. Serial No. 316,197. 3 Claims. (Cl. 88—16.2.)



1. In an apparatus of the character described, the combination of two motor driven motion picture projectors, a sound reproducing machine having a driving motor, said latter machine being interposed between the two motion picture projectors, a synchronizing device, a common shaft drive from one side thereof, two one way clutches one to each projector connecting the projectors to said shaft said clutches being of the type that when one is being driven by the projector the other clutch is free or in reverse, and means connecting the motor of the sound reproducing machine to the other side of the synchronizing device.

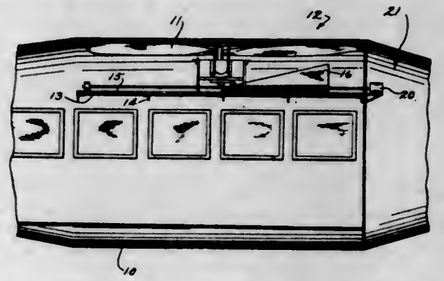
1,812,450. MIXER. AUGUSTUS J. SACKETT, Anne Arundle County, Md., assignor to The A. J. Sackett and Sons Company, a Corporation of Maryland. Filed July 14, 1928. Serial No. 292,614. 15 Claims. (Cl. 259—102.)

1. A mixing machine comprising a stationary container and stirrer blades therein with means for operating and supporting the stirrer blades to impart a planetary motion to the stirrer blades, a central discharge opening and scrapers for moving the mixed material to the discharge opening, the scrapers having a rotary motion about the discharge opening and being free to move vertically so that



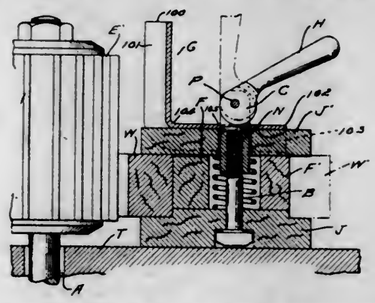
they can rest on the material and on the bottom of the container when the material is removed, and means for raising the scrapers during the operation of the machine.

1,812,451. SAFETY PROPELLER. KARL SCHAPEL, North Hollywood, Calif. Filed Feb. 8, 1930. Serial No. 426,836. 5 Claims. (Cl. 244—15.)



2. In combination with an air plane safety propeller of the helicopter type, means to cause said propeller to be vertically actuated, and means associated with the elevation of said propeller to cause an opening in said fuselage through which said propeller may be projected prior to the ejection of said propeller.

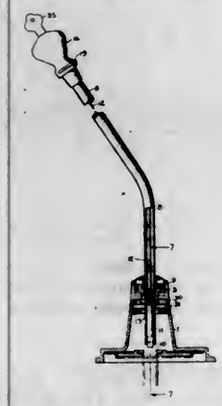
1,812,452. GUARD DEVICE FOR WOOD SHAPERS. ROBERT A. SHAW, Detroit, Mich. Filed June 28, 1930. Serial No. 463,340. 8 Claims. (Cl. 144—251.)



2. In combination, a work holder comprising relatively movable jaws for clamping the work, means for clamping

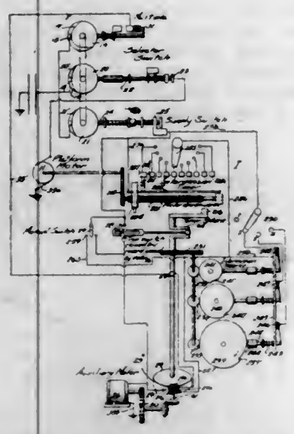
the jaws together, and a guard for protecting the operator, said guard being removably secured to the holder by the clamping means and being substantially of L-shape with a portion engaging one jaw and a portion projecting away from the jaw.

1,812,453. AUTOMOBILE LOCK. ANTHONY R. SMITH, Elyria, Ohio, assignor to Steel and Tubes, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 7, 1928. Serial No. 297,968. 12 Claims. (Cl. 70—128.)



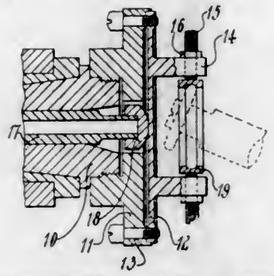
1. A transmission locking device comprising a shift lever, an assembly movable longitudinally of the lever to engage with and be withdrawn from a gear shift element, means for normally forcing the assembly longitudinally of the lever into position for operative engagement with the gear shift element, and a latch operative to automatically secure the assembly longitudinally with respect to the lever in the last mentioned position.

1,812,454. PHONOGRAPH. JACK POTTER STOCKTON, Spring Lake, N. J., assignor to Stromberg-Carlson Telephone Manufacturing Company, a Corporation of New York. Filed June 14, 1928. Serial No. 285,247. 40 Claims. (Cl. 274—10.)



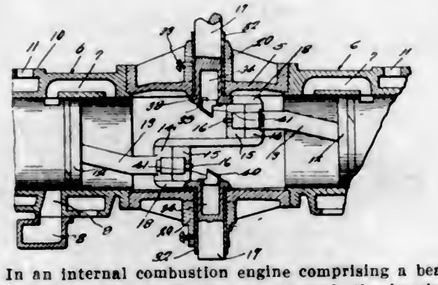
6. An automatic phonograph having a record support, a driving motor therefor, a movable reproducer and stylus cooperative with records on the support, an auxiliary motor automatically set into operation upon the completion of the playing of a record, mechanism operated thereby for effecting a record change and restoring the reproducer and stylus into position to commence playing another record after which the auxiliary motor is stopped, and means under the control of the driving motor for interrupting the cycle of operations of the auxiliary motor to arrest the mechanism whereby the time between successive renditions may be controlled.

1,812,455. DIAPHRAGM CHUCK. BYRON F. STOWELL, Springfield, Mass., assignor to Van Norman Machine Tool Co., Springfield, Mass., a Corporation of Massachusetts. Filed July 5, 1928. Serial No. 290,386. 7 Claims. (Cl. 279—46.)



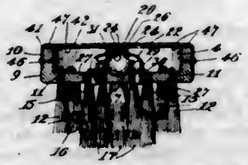
1. A chuck comprising a plurality of members arranged in a circular series, means for imparting to the members simultaneous radial movements, a plurality of supports mounted independently of the members and so as to be unaffected by their radial movements, and article stops adjustable on the supports in a radial direction for limiting the position of an object in a direction axially of the members.

1,812,456. INTERNAL COMBUSTION ENGINE. WILLIAM C. TAPP, Louisville, Ky., assignor of one-half to Robert N. Hart, Louisville, Ky. Filed Aug. 28, 1929. Serial No. 389,009. 2 Claims. (Cl. 123—73.)



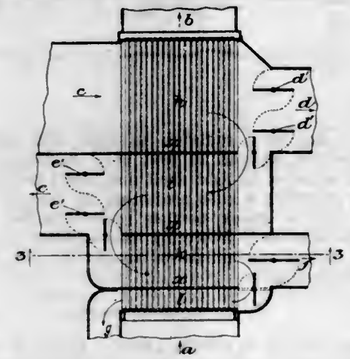
1. In an internal combustion engine comprising a bearing, a hollow drive shaft disposed through the bearing, said bearing being provided with an opening, a supply pipe secured to the bearing over the said opening, and being communicable with the said drive shaft, and means on the said urive shaft whereby the fluid delivered therethrough may be deflected in a predetermined direction, said means comprising a collar, a flange on the collar for engaging the adjacent end of the drive shaft, and an obliquely disposed construction on the collar from which the fluid is deflected.

1,812,457. BRUSH. SAMUEL TAVALIN, Astoria, N. Y. Filed May 15, 1930. Serial No. 452,552. 10 Claims. (Cl. 15—128.)



1. In a brush, the combination of a block having bristles permanently secured therein, a plurality of apertures in said block, brush members disposed in said apertures, said members comprising a tube having bristles circumferentially secured thereabout, and a pipe member connected to a supply of water by suitable means, said pipe having a plurality of branches adapted to engage said conduits within said brush members, whereby water may be ejected through said brush members.

1,812,458. AIR HEATER. GEORGE TURKUS, London, England, assignor to Babcock & Wilcox Company, New York, N. Y. Filed July 20, 1928, Serial No. 294,259, and in Great Britain July 26, 1927. 5 Claims. (Cl. 257—224.)

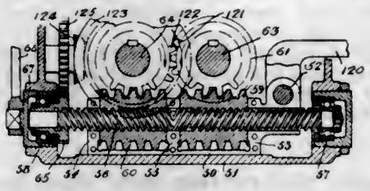


1. An air heater adapted to be heated by hot gases comprising ducts for the passage of the hot gases and air passages for the flow of the air around said ducts, said air passages formed with an outlet opening intermediate the air inlet and outlet at a point spaced in relation to the flow of the air, and a damper controlling such openings.

1,812,459. FERMENTATION OF TOBACCO. KARL VIERLING, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 17, 1928, Serial No. 255,188, and in Germany Feb. 24, 1927. 2 Claims. (Cl. 131—6.)

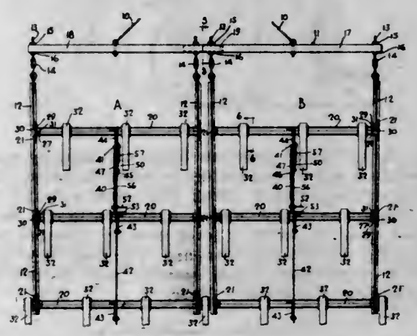
2. A process of fermenting tobacco which comprises spraying tobacco-leaves with a solution of 9 parts of mono-potassium phosphate and 1 part of di-potassium phosphate.

1,812,460. DEVICE FOR TRANSMITTING MOTION FROM A RECTILINEARLY RECIPROCATING MEMBER TO A ROTATABLE MEMBER. OTTO GOTTFRIED WELLTON, Trollhattan, Sweden. Filed Feb. 2, 1927, Serial No. 165,254, and in Sweden Feb. 18, 1926. 9 Claims. (Cl. 74—53.)



1. In a motion transmitting device the combination of a reciprocating member, a rotatable member, a self-stopping screw gearing interposed between said reciprocating member and said rotatable member and acting upon movement of said reciprocating member in the one direction as an ordinary toothed gearing to rotate said rotatable member, said self-stopping screw gearing comprising a screw wheel gearing comprising a screw wheel connected to said rotatable member, and a screw cooperating with said screw wheel and connected to said reciprocating member, a guide guiding said screw to move in a rectilinear path tangential to said screw wheel, and a gearing also interposed between said reciprocating member and said rotatable member and acting upon movement of said reciprocating member in the opposite direction to rotate said screw of said self-stopping screw gearing back to a new position of engagement with said screw wheel of such gearing.

1,812,461. HARROW. ISAAC ALLAN BABCOCK and ARTHUR W. REYNOLDS, Leonardsville, N. Y., assignors to The Babcock Manufacturing Company, Leonardsville, N. Y., a Corporation of New York. Filed Apr. 25, 1928. Serial No. 272,585. 12 Claims. (Cl. 55—104.)



1. In a harrow or the like, the combination of a drawbar, a pair of spaced side bars extending rearwardly therefrom, flexible means for connecting each side bar to said drawbar, brackets on said side bars, each of said brackets being formed with a bearing eye, and means at the rear of said drawbar for connecting said side bars; said means consisting of a plurality of tooth-carrying cross-bars the ends of which extend into said bearing eyes, and flanged bearing means fitting loosely within each bearing eye for rotatably holding said cross-bars in said bearing eyes, the flanges on said bearing means being spaced throughout their length from the sides of said brackets so as to loosely embrace the same.

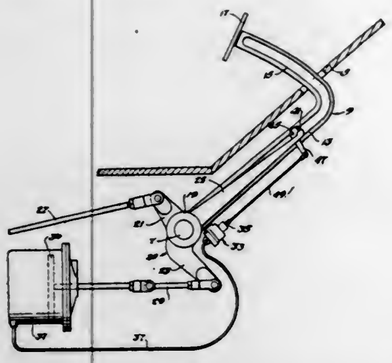
9. In a harrow or the like, the combination of a drawbar comprising a plurality of tubular members, a tubular connecting member inserted in adjacent ends of said tubular members, a plurality of side bars, and means to connect said drawbar to said side bars, said means serving to unite the drawbar members and the tubular connecting member.

1,812,462. TWINE CUTTER. RUDOLPH BEAVER, Watertown, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Aug. 22, 1927. Serial No. 214,651. 5 Claims. (Cl. 30—14.)



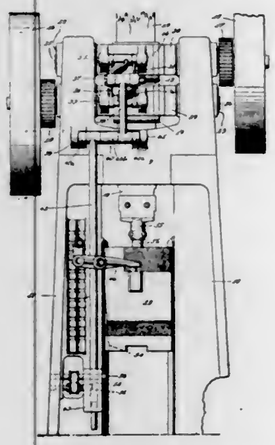
5. A twine cutter comprising a transversely forked blade-holding member having at its base an out-turned flange for supporting said member in upright position, the flange having a plane upper blade-positioning face, a blade provided with a flat back and a curved sharpened edge arranged to project above the lower fork of the blade-holding member when the back of the blade is supported by the face of said flange, and a blade-clamping plate shaped for interlocking engagement with the blade-holding member and edge engagement with said flange.

1,812,463. VACUUM BRAKE CONTROL ON PEDAL. GEORGE P. BEARY, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 19, 1928. Serial No. 262,824. 11 Claims. (Cl. 188—152.)



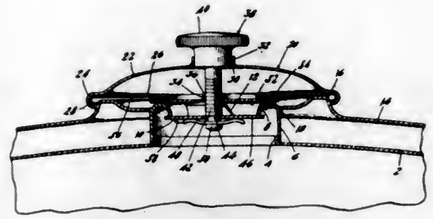
1. In a vacuum operated brake, a manually operable member, a power operated device, movable means through the instrumentality of which said power operated device is adapted to apply brakes, a control device for said power operated device, a lever movably mounted on said manually operable member and engaging said movable means, connecting means between said control device and said movably mounted lever.

1,812,464. DROP HAMMER. FREDERIC C. BILLINGS, Hartford, Conn., assignor to The Billings & Spencer Company, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 30, 1923. Serial No. 660,129. 12 Claims. (Cl. 78—29.)



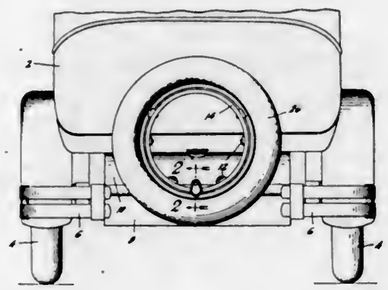
1. In a board drop hammer the combination of a hammer, and hammer board, board-lifting rolls, movable supporting means therefor, a rock link pivoted on the machine frame independently of any roll-supporting means, a friction bar having its lower part guided on the machine frame adjacent the path of the hammer and connected at its upper end to said rock link, a connection between said roll-supporting means and said rock link and means connected with the hammer for automatically moving said bar to produce sustained hammer operation.

1,812,465. RADIATOR CAP. LLOYD BLACKMORE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 4, 1928. Serial No. 310,254. 8 Claims. (Cl. 220—24.)



5. In a cap for a radiator, an outer shell portion, an insert portion secured to said shell portion, a handle turnably mounted in said shell and insert portions, said handle comprising a knob projecting out beyond the shell portion, and a shank portion screw-threaded into the insert portion and projecting therebeyond, and means on the end of the handle to secure the cap over the radiator opening.

1,812,466. TIRE CARRIER LOCK. LLOYD BLACKMORE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 19, 1928. Serial No. 313,505. 5 Claims. (Cl. 70—122.)

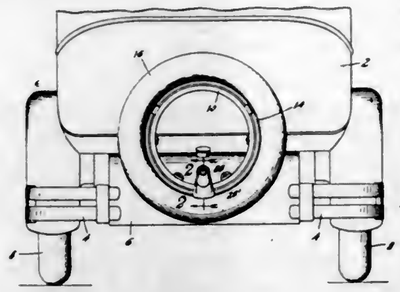


1. In a tire lock, a frame permanently secured to a vehicle, a tire rim removably mounted over the frame, a lock member having one end secured to the frame and its other end overlapping the frame side and having its extremity engaging the tire rim, a bolt passing through said overlapping end and having a threaded connection with said frame, a second lock member fitting the first named lock member and concealing said bolt, and means engaging in said frame and locking said lock members together.

1,812,467. TIRE CARRIER LOCK. LLOYD BLACKMORE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 19, 1928. Serial No. 313,506. 3 Claims. (Cl. 70—122.)

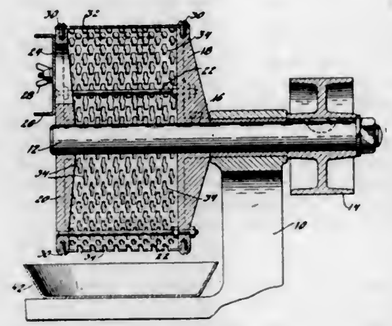
1. In a lock ..r tires mounted on a frame rigidly positioned on a vehicle, a rim for said tire, a pair of clamping arms engaging the tire rim and extending over

the frame and overlapping each other, means extending through the overlapped portions to rigidly hold said



frame, rim, and arms together, a covering member extending over the overlapped portions and concealing said means, and a lock for said covering member.

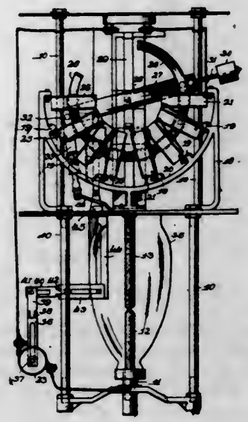
1,812,468. LOCK WASHER UNTANGLING DEVICE. ARTHUR O. BROOKE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 28, 1928. Serial No. 273,758. 2 Claims. (Cl. 209—397.)



1. A device of the class described comprising a movable member having a plurality of slots formed therein, each of said slots having one side cut away angularly from one end to a point slightly past the transverse center line of said slot, and having the other side cut away angularly from the opposite end to a point slightly past the transverse center line of the slot, whereby the slots are of greater width at their center than at their ends, for the purposes set forth.

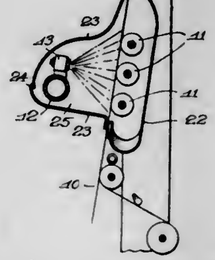
1,812,469. ARC LAMP. HAROLD J. BRUNK, Chicago, Ill., assignor, by mesne assignments, to The C. F. Pease Company, a Corporation of Delaware. Filed Sept. 28, 1927. Serial No. 222,537. 6 Claims. (Cl. 176—99.)

1. An arc lamp having an adjustable carbon and a stationary carbon, a fixed open center coil in series with said carbons, a fixed open center shunt coil across the same, a single arcuate core passing through both of said coils, and means for transmitting motion from said core to said adjustable carbon, said core and said means being balanced about a pivotal support, said shunt coil tending to move said core in a direction to reduce the arc gap, and said series coil opposing such movement whereby fluctuations in voltage and current values due to a slightly increased gap between the carbons will reduce the effectiveness of the series coil on the core



and permit movement of the latter by the shunt coil in a direction to reduce the gap, thus insuring a stable arc.

1,812,470. MEANS FOR WASHING BLUE PRINTS AND OTHER PHOTOPRINTS. HAROLD J. BRUNK, Chicago, Ill., assignor to C. F. Pease Company, a Corporation of Delaware. Filed Feb. 18, 1928. Serial No. 255,482. 2 Claims. (Cl. 95—94.)

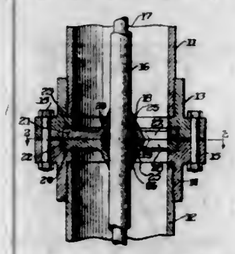


1. In a print washing machine, a plurality of nozzles spaced to deliver overlapping sprays, means for delivering liquid to said nozzles, means for moving a sheet of light sensitive material through said sprays, a series of rollers behind and in contact with said sheet for supporting the same against the action of said nozzles, and complementary enclosure members for said nozzles and rollers, said members being positioned with their upper and lower edges disposed adjacent the portion of the paper being washed but spaced sufficiently to permit the passage of the paper between the same.

1,812,471. GUIDE-BEARING. WILLIAM H. CATER, Chicago, Ill. Filed May 3, 1929. Serial No. 360,147. 4 Claims. (Cl. 308—168.)

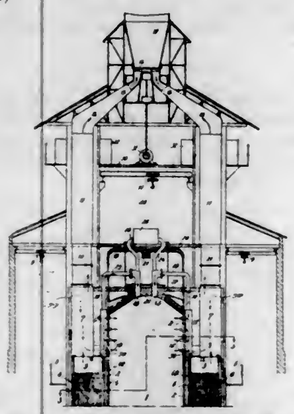
1. The combination of a sectional column-pipe, a coupling joining said sections together, a well-pipe in said column-pipe, and a guide-bearing for said well-pipe comprising a pair of apertured reversely-arranged clamping-members with mating oppositely-flaring recesses through which the well-pipe extends, and a packing in

said recesses designed to be wedged around said well-pipe upon movement of said members toward one an-



other, said pipe coupling holding said clamping-members together and with the packing wedged around said well-pipe.

1,812,472. PARTICULAR CONSTRUCTION OF TUBULAR BOILERS. MARTIN EULE, Spandau, near Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Apr. 3, 1928, Serial No. 266,944, and in Germany Apr. 8, 1927. 4 Claims. (Cl. 122—235.)



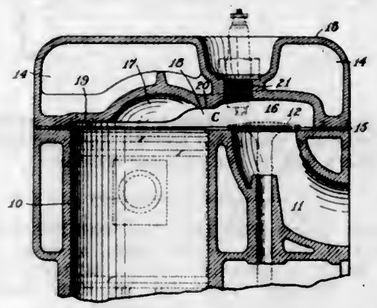
1. A tubular boiler composed of a vertical shaft heated from the top and containing the generating tubes, two vertical casings disposed on opposite sides of the shaft, each casing containing in its lower portion superheating tubes and in its upper portion an air heater, means for conducting the flue gases in a single reversal of direction from the shaft bottom into the lower portion of each vertical casing whereby the gases traverse seriatim the superheater and air heater contained therein, before they are discharged from the boiler.

1,812,473. ANIMAL-RACING DEVICE. ALPHEUS FAY and JOHN L. ZEHNDER, Louisville, Ky. Filed Nov. 7, 1927. Serial No. 231,609. 17 Claims. (Cl. 104—244.)



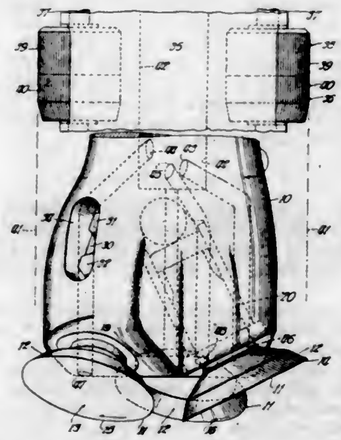
1. In combination with a race course, a lure, a motor having a shaft, a wheel fixed on said shaft, a rail along said course, along which said wheel drives said motor, a second wheel rotatably connected with said motor, turning on an inclined axis, a second rail along said course supporting said second wheel and having an upright part against which said second wheel bears to prevent sidewise displacement of said motor from said rails, and an extension from said motor to said lure.

1,812,474. INTERNAL COMBUSTION ENGINE HEAD. GEORGE H. FREERS, Indianapolis, Ind., assignor to Marmon Motor Car Company, Indianapolis, Ind., a Corporation of Indiana. Filed Feb. 28, 1930. Serial No. 432,004. 2 Claims. (Cl. 123—191.)



1. The combination, with a cylinder and inlet and exhaust passages of an internal combustion engine, of a cylinder head having a combustion chamber formed therein, said combustion chamber comprising a portion overlying the inner ends of the inlet and exhaust passages, a dome portion overlying the cylinder and offset from the axis thereof toward the valve chamber, a throat connecting the valve chamber and dome chamber and overlying that portion of the cylinder wall nearest the valve chamber and having a minimum effective cross-section at least equal to the maximum effective inlet valve opening, and a dome extension, extending to the full diameter of the cylinder and having a dimension axially of the cylinder substantially less than the depth of the dome.

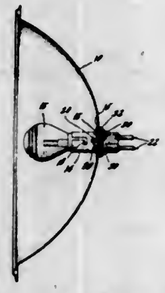
1,812,475. DRILLING DEVICE. ARTHUR M. GILDERSLEEVE and CHARLES L. DEAN, Denver, Colo., assignors to The Universal Rotary Bit Company, Denver, Colo., a Corporation of Colorado. Filed Mar. 19, 1927. Serial No. 176,610. 4 Claims. (Cl. 255—71.)



1. A bit for deep well drilling through earth and rock comprising in combination a rotary bit body of generally

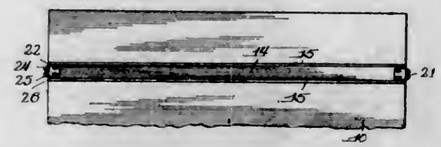
cylindrical outline, a plurality of circular cutters having shafts carried in holes in said body and arranged to support said cutters so that they engage the material to be cut at a cutting angle substantially less than ninety degrees, said cutters being made of hard steel so as to cut or chip hard rock as well as softer materials, said cutter shafts each being provided with a retaining recess, a locking pin projecting into said recess to hold the shaft and cutter in place, the end of said pin being arranged to conform substantially to the contour of said recess, said pin being provided at its outer end with an eccentric retaining element, and a fastening element on said bit body constructed and arranged to cooperate with said retaining element to hold said pin in place when said pin is properly positioned but which will not register with said retaining element when said pin is improperly positioned.

1,812,476. LAMP SOCKET MOUNTING. CHARLES E. GODLEY, Ypsilanti, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 22, 1929. Serial No. 365,114. 3 Claims. (Cl. 240—41.)



3. The combination of a reflector having an aperture therein, a tubular sheet metal socket provided with an abutment to engage the reflector to limit the extent of insertion of the socket in the reflector, said socket being provided at the other side of the reflector with outwardly pressed lugs of wedge form having their free ends projecting toward the reflector, and a coil spring in the form of an annulus bearing against the reflector and bearing against the ends of the lugs for holding the socket in position, said spring being normally stressed when in position so as to tend to contract and wedge between the ends of the lugs and the reflector and clamp the abutment in engagement with the reflector, the edge of the reflector and the socket being provided with an interfitting lug and notch to prevent rotation of the socket when locked in position.

1,812,477. DRAWING BOARD ATTACHMENT. CHARLES A. GREEN, Chicago, Ill., assignor, by mesne assignments, to C. F. Pease Company, a Corporation of Delaware. Filed Apr. 9, 1927. Serial No. 182,454. 8 Claims. (Cl. 33—80.)



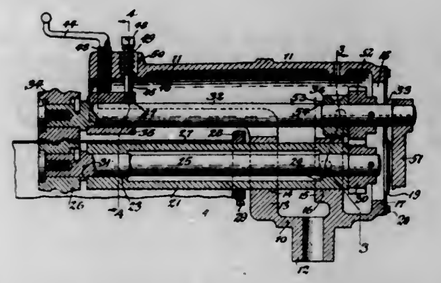
8. The combination with a drawing board of a ruler movable over the upper surface thereof, a pair of brackets, each having a flat inwardly extending portion secured to a face of said ruler, and an intermediate portion extending downwardly adjacent the edge of said board and having its lower end projecting inwardly beneath said board, and means beneath said board to which said lower ends of said brackets are secured for holding said ruler in positions of parallelism as it is moved over said board.

1,812,478. AUTOGRAPHIC REGISTER. LOUIS F. HAGEMANN, Niagara Falls, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada, a Corporation of Canada. Filed Sept. 11, 1920, Serial No. 409,572. Renewed June 20, 1928. 22 Claims. (Cl. 282—16.)



1. In a machine of the character described, in combination, a feed roller and cooperative member adapted to grip and feed a web, a portion of the periphery of said roller being of a width to enter apertures in the web and thereby cause cessation of feed, and fixed pins separate from the feed roller adapted to engage apertures in the web to longitudinally register the web relative to the machine.

1,812,479. SHEET METAL WORKING MACHINE. PAUL R. HAHNEMANN, Buffalo, N. Y., assignor to Niagara Machine and Tool Works, Buffalo, N. Y., a Corporation of New York. Filed Sept. 25, 1928. Serial No. 308,183. 5 Claims. (Cl. 153—9.)

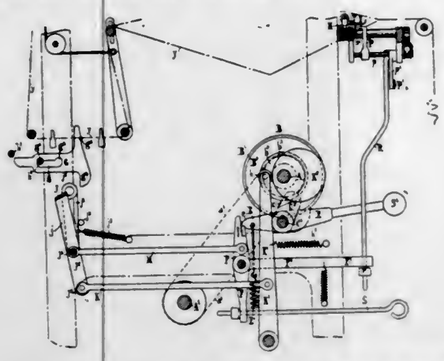


1. A metal working machine comprising a frame having a hollow rear part forming a housing and an overhanging arm projecting forwardly from the upper part of said housing, the lower part of said housing having a front wall, an intermediate inner transverse bracket and a rear wall provided with an opening; a separate lower horn passing at its rear end through said front wall and bracket and supported thereby; a lower shaft journaled in said horn and provided at its front end with a lower forming roll; an upper shaft passing through the upper part of the housing and under said arm and provided at its front end with an upper forming roll, an upper front bearing which is mounted on the front end of the arm and in which the front part of the upper shaft is journaled; an upper rear bearing which is mounted on the upper part of the housing; and intermeshing gear wheels which are secured to the rear ends, respectively, of the upper and lower shafts and which are insertable and removable through the rear opening of said housing.

1,812,480. DRIVING GEAR OF NARROW FABRIC LOOMS. HUBERT HAYWOOD, Wirksworth, England, assignor to The Haywood Narrow Fabric Loom Company Limited, The Hague, Broadbottom, Chester, England. Filed Sept. 14, 1929, Serial No. 392,547, and in Great Britain Nov. 10, 1928. 4 Claims. (Cl. 139—361.)

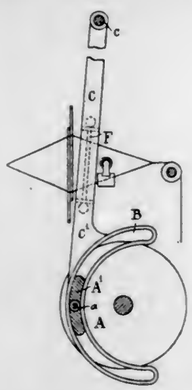
1. In a loom for weaving narrow width fabrics the combination with a driving shaft, of a driven shaft, one

member of a friction clutch mechanism affixed on said driving shaft to rotate therewith but free to slide thereon, a second member of the friction clutch mechanism mounted on said driving shaft so that it can rotate thereon, means for preventing the second clutch member from sliding on said driving shaft, gearing connecting the second



clutch member with the driven shaft, a spring normally pressing the two clutch members together, a rocking arm which when rotated separates the two clutch members to stop the loom, a warp stop motion which actuates the rocking arm on breakage of a warp yarn and weft stop motion which also actuates the rocking arm on breakage of a weft yarn or on exhaustion of a shuttle.

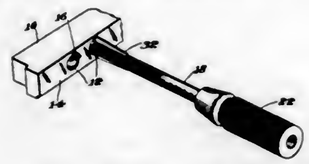
1,812,481. LOOM REED MOTION AND MECHANISM. HUBERT HAYWOOD, Wirksworth, England, assignor to The Haywood Narrow Fabric Loom Company Limited, The Hague, Broadbottom, Chester, England. Filed Oct. 26, 1929, Serial No. 402,764, and in Great Britain Feb. 16, 1929. 1 Claim. (Cl. 139—190.)



In a reed motion of the type referred to for smallware looms the combination with the slotted swinging arms, the continuously rotating discs and the pins working in the slots at the ends of the arms of a curved slide pivotally mounted in relation to the disc and carried on each pin, the curvature of the slide being the same as that of the slot in the swinging arm to prevent vibration of the pin therein.

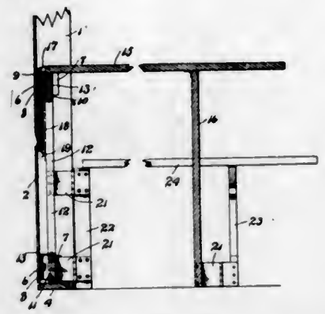
1,812,482. SCRAPING TOOL. JOHN H. HILL, Wollaston, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Mar. 22, 1930. Serial No. 438,123. 5 Claims. (Cl. 145—47.)

1. In a scraping tool, a handle rod with mandrel portion containing a transverse slot, a scraping blade inserted within said slot, and having parallel arms contacting with said rod to prevent displacement within the slot of the blade, and a shoulder on the blade having a radially-dis-



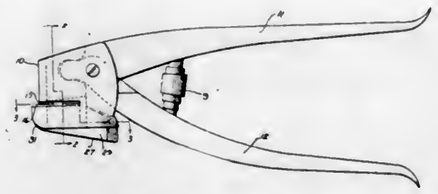
posed scraping edge formed at the base of one of said arms and projecting laterally from said mandrel portion of the rod.

1,812,483. FOLDING TABLE AND BENCH. CHARLES W. HORTON, Grand Rapids, Mich., assignor, by mesne assignments, to John E. Strong, Grand Rapids, Mich. Filed Sept. 26, 1927. Serial No. 221,941. 6 Claims. (Cl. 45—51.)



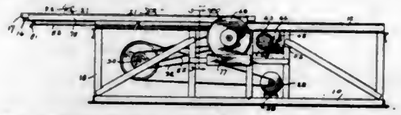
1. In combination, a vertical support, a table supporting member, means for mounting said table supporting member on said vertical support for limited vertical movement, a table having hinged connection adjacent one end to said member for swinging movement about a horizontal axis, a leg hinged to the under side of said table toward its other end, means projecting rearwardly from the hinged end of said table and means on said vertical support cooperating therewith when the table is swung from vertical to horizontal position to permit lowering of said table supporting member and when the table is swung from horizontal to vertical position to elevate said supporting member.

1,812,484. TOOL FOR CUTTING BOX STRAPPING AND THE LIKE. LEON S. HOWE, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 5, 1929. Serial No. 352,689. 4 Claims. (Cl. 164—81.)



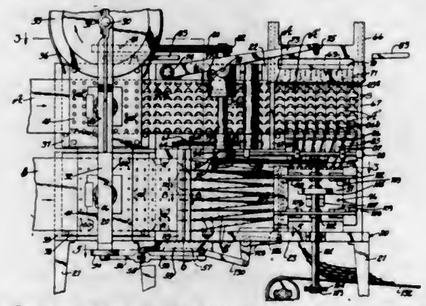
1. An improved tool for cutting box strapping and the like comprising means for cutting the box strapping, and a receptacle hinged to the lower portion of the tool below said cutting means and biased to the closed position, said receptacle having an inclined bottom portion.

1,812,485. MACHINE FOR CUTTING DESIGNS IN GLASS. PARKER H. JAMES and HARRY C. WOODSMALL, Indianapolis, Ind. Filed July 15, 1929. Serial No. 378,409. 5 Claims. (Cl. 51—92.)



3. For cutting designs on glass, the combination of a frame, a table maintained on the frame in fixed vertical relation thereto but adapted to be moved in a horizontal plane thereover, a shaft below the table and projecting at one end beyond the side of the table, a grinding wheel on said end of the shaft, and means for adjusting said shaft in a vertical plane and maintaining said shaft in that plane to permit the cutting edge of said wheel to be raised and lowered in relation to the top of said table, glass elevating means along an edge of the table, power means for reciprocating said table past said wheel, and hand means for reciprocating the table independently of the power means.

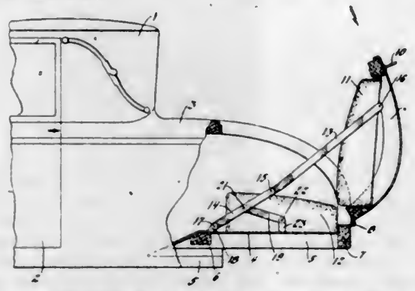
1,812,486. EGG CASE FILLER MACHINE. E. JOSEPH KANABAY, Chicago, Ill., assignor to Leon Benoit, Chicago, Ill. Filed Nov. 15, 1928, Serial No. 319,479. Renewed Dec. 22, 1930. 34 Claims. (Cl. 93—37.)



1. In a machine of the class described, the combination with an assembling frame formed with two intersecting sets of guideways for the reception of material, of feeding and inserting mechanism entirely exterior of said guideways and operating to insert the material into the intersecting guideways of the assembling frame.

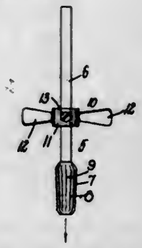
20. In an egg case filler machine, the combination of co-acting strip feeding rolls having means for bending the strips into troughlike form, and means for intermittently rotating said feed rolls.

1,812,487. AUTOMOBILE BODY. DAVID M. KLAUSMEYER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 15, 1928. Serial No. 261,935. 4 Claims. (Cl. 296—66.)



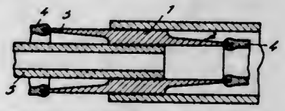
1. In an automobile body, the combination with a rear deck having an opening therein, of a hinged closure door for said opening, folding links adapted when extended to hold said door in open position, a cushion carried by said door forming a back rest, a seat cushion slidable on the floor of the deck, and a connection between one of said links and said seat cushion for sliding said cushion in unison with the movement of said door.

1,812,488. ABRADING TOOL. ARTHUR F. KRAUSZ, Boston, Mass. Filed June 5, 1930. Serial No. 459,390. 5 Claims. (Cl. 132—73.)



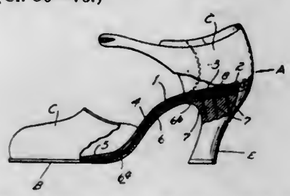
5. An abrading tool comprising a cylindrical member, the periphery of one end portion thereof being roughened to form an abrading surface, the remainder of said member constituting a shank adjacent said abrading surface, and a fan on said shank spaced apart from said abrading surface there being an unobstructed space between said fan and said abrading surface.

1,812,489. ELECTRON TUBE. ALBERT KRÜGER, Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Jan. 26, 1928, Serial No. 249,579, and in Germany Jan. 31, 1927. 1 Claim. (Cl. 250—27.5.)



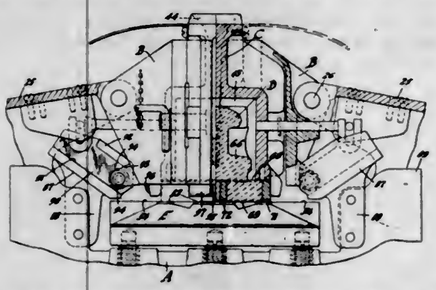
In an electron tube, a leading-in device through the wall of the tube consisting of a metal ring fused to portions of the wall of the tube at both ends to form a portion of the wall, said ring being considerably thicker in its central portion than at the ends for sealing the ring to the wall of the tube, and an internal and an external tubular conductor threaded to the enlarged central portion of said metal ring.

1,812,490. SOLE CONSTRUCTION FOR APPAREL SHOES. JOHN W. LAKE and WILLIAM T. FINKS, St. Louis, Mo., assignors, by mesne assignments, to Campello Shank Company, Campello, Mass. Filed May 7, 1928, Serial No. 275,584. Renewed May 5, 1931. 3 Claims. (Cl. 36—76.)



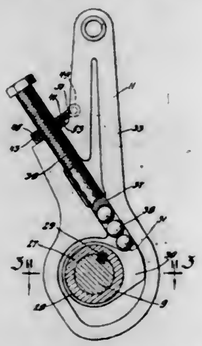
1. An apparel shoe comprising an outsole, an insole, a fibre-board secured to said insole to provide a pocket, an arch shank located within said pocket, and a heel, said insole having separable portions arranged one above the other at the heel portion thereof, and fastening devices extended through the lowermost of said separable portions of said insole through said arch shank and fibre-board and through said outsole into said heel.

1,812,491. CORE FOR METAL CASTING MOLDS. CHARLES L. LEE, Dayton, Ohio, and THOMAS C. VAN DEGRIFT, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Original application filed Apr. 22, 1925, Serial No. 24,968. Divided and this application filed Nov. 12, 1928. Serial No. 318,708. 4 Claims. (Cl. 22—165.)



1. In a casting apparatus, a non-metallic core body having a flange-like base combined with a metallic body having a rim and spoke-like members, the space between the spoke-like members being filled with core body material.

1,812,492. ADJUSTABLE BRAKE LEVER. WILLIAM S. LEE and THERON P. CHASE, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 17, 1929. Serial No. 363,950. 4 Claims. (Cl. 287—52.)



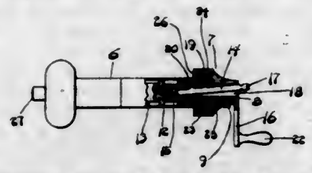
1. In combination, a shaft, a lobed hub rigid therewith, an adjustable lever arm comprising a pair of mating stampings, said stampings, when assembled, having aligned parts encompassing said shaft and engaging opposite faces of said hub, said arm also having mating radial arms, said stamping also shaped to form, when assembled, a tangential tubular passage, and means axially adjustable in said passage to engage said lobe and predetermine the angular relation of said lever arm relative to said shaft.

1,812,493. SUCTION CLEANER ATTACHMENT. EUGENE F. MARTINET, Cleveland, Ohio., assignor to The P. A. Geier Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 8, 1928. Serial No. 252,787. 3 Claims. (Cl. 15—158.)



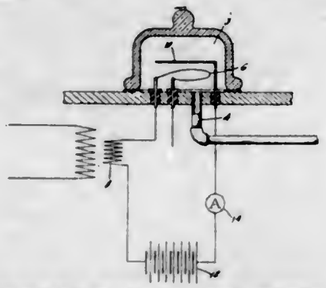
1. In combination with a vacuum cleaner nozzle terminating in lip walls forming a mouth, a brush for said nozzle including bristle members forming an offset extension for a lip wall and terminating in a face for contact with a surface to be cleaned, and means forming an extension for said lip walls mounted for free movement with respect to said lip walls and brush for directing air currents entering said mouth along a path adjacent said face.

1,812,494. SPRING WINDING AND SETTING TOOL. CURTIS MCFARLAND, Felicity, Ohio. Filed Apr. 20, 1929. Serial No. 356,863. 1 Claim. (Cl. 81—7.5.)



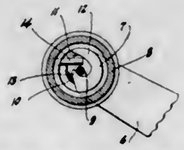
In a combined spring winding and setting tool, the combination of a spring setting element to receive a spring, and a winding element for cooperation therewith, said winding element consisting of a crank, an adjustable shaft therein slotted to receive a lugged latch, said shaft having more than one offset of varying diameter with the slot extending into each offset, and a lugged latch pivoted therein extending beyond the crank for movement, the lugs of the latch cooperating in said movement with the offsets on said shaft, whereby movement of said latch engages or releases a spring located in said setting element.

1,812,495. ELECTRICAL CONTACT. HECTOR RABEZZANA, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Jan. 31, 1929. Serial No. 336,470. 4 Claims. (Cl. 200—166.)



1. An electrical contact composed entirely of metal of high work function.

1,812,496. SIDE WIRE GAP WRENCH FOR SPARK PLUGS. HECTOR RABEZZANA, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Nov. 25, 1929. Serial No. 409,607. 6 Claims. (Cl. 81—15.)

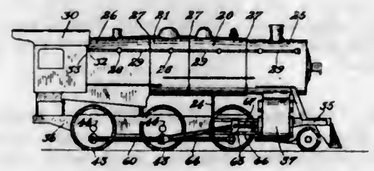


1. In a tool for adjusting the gap between electrodes of a spark plug or the like, including a hand lever, a boss on the hand lever insertable into the central opening thru the plug shell and engageable with the wall of the shell to provide a fulcrum for the lever, whereby the lever may be swung about the axis of the plug, and a part engageable with one of the electrodes to bend the same when the lever is swung.

1,812,497. RECOVERY OF POTASSIUM SULPHATE FROM POLYHALITE. GEORGE FLETCHER RANSOM, San Angelo, Tex., assignor to Humble Oil & Refining Company, Houston, Tex., a Corporation of Texas. Filed June 22, 1927. Serial No. 200,767. 1 Claim. (Cl. 23—40.)

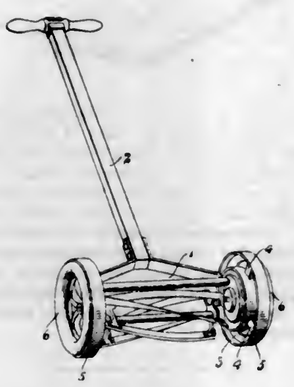
The process of recovery of potash salts from polyhalite comprising grinding and comminuting the ore, mixing lime therewith in amount approximately equivalent to the magnesium content of the ore, digesting the mixture in its original condition with hot water to dissolve the potash salts, simultaneously precipitating the magnesium sulphate, removing the precipitate, treating the solution with carbon dioxide to precipitate a portion of the lime, and then evaporating the remaining solution.

1,812,498. STRUCTURAL TOY LOCOMOTIVE AND THE LIKE. RALPH H. SHEPARD, Bronxville, N. Y. Filed Jan. 23, 1928. Serial No. 248,663. 13 Claims. (Cl. 46—48.)



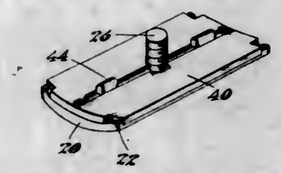
1. In a toy locomotive, a plurality of typical boiler sections, means for mounting them end to end on a supporting frame, and means for detachably connecting them together and to the frame.

1,812,499. GUARD FOR LAWN MOWER WHEELS. HAROLD WHEELER SMITH, Utica, N. Y., assignor of one-half to William A. Ainsworth. Filed Nov. 5, 1929. Serial No. 404,905. 5 Claims. (Cl. 56—249.)



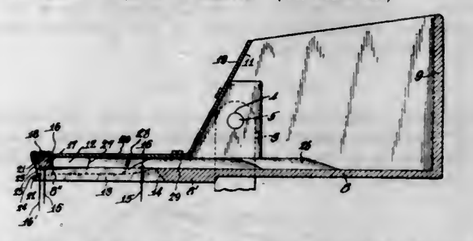
1. A lawn mower having wheels to run over the ground, and a yieldable hollow protective guard attached at the outer side of each of said wheels near its outer periphery and extending beyond the outer edges thereof.

1,812,500. SAFETY RAZOR. THEODORE L. SMITH, Concord, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed May 20, 1930. Serial No. 454,115. 6 Claims. (Cl. 30—12.)



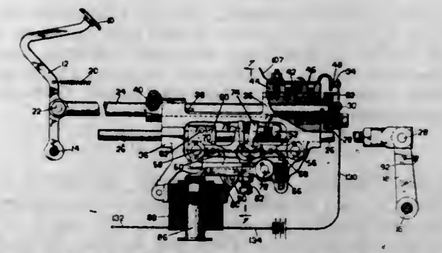
1. A safety razor comprising a holder having a blade-positioning rib and a removable plate having in one face a groove to fit upon the rib and upon the other a blade-positioning projection of a shape different from said rib.

1,812,501. PIN SORTER AND DISPENSER. FERDINAND R. STROBEL, Philadelphia, Pa. Filed June 10, 1929. Serial No. 369,875. 3 Claims. (Cl. 312—73.)



1. A pin sorter, comprising a container having a bottom wall and adapted to be tilted into an abnormal position, longitudinally extending slots in said wall, slanting surfaces upon the opposite sides of and operative to direct pins into said slot, and means bridging the forward portion of said slot to arrest the forward movement of pins above said slot, and the upper forward portion of said slot sloping beneath said means and being widened to permit the heads of pins in said slot to pass freely beneath said means.

1,812,502. BRAKE RELEASE DEVICE. GEORGE H. TABER, Los Angeles, Calif. Filed Aug. 16, 1928. Serial No. 299,900. 6 Claims. (Cl. 188—181.)

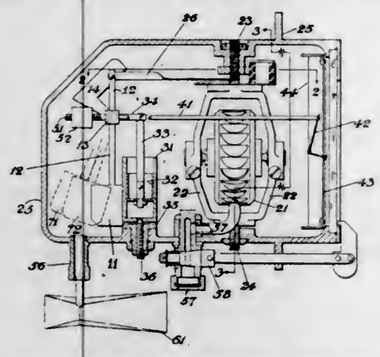


1. In braking apparatus for a rotating wheel, in combination, a brake, means for applying said brake to decelerate the rotation of the wheel, an electrical device, and means operable automatically to energize said electrical device in case the wheel ceases to rotate, whereby said device disables said applying device and releases said brake, substantially as described.

1,812,503. INCLINOMETER. MORRIS M. TITTERINGTON, Brooklyn, N. Y., assignor, by mesne assignments, to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 10, 1923. Serial No. 679,571. 16 Claims. (Cl. 33—220.)

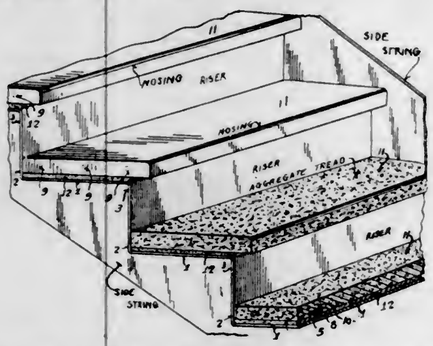
1. In combination, a pendulum and means mounting it to swing about an axis, a gyroscope and means mounting

it for precession about an axis at an angle to the axis of the swinging pendulum, connecting means established between said pendulum and said gyroscope, and indicating



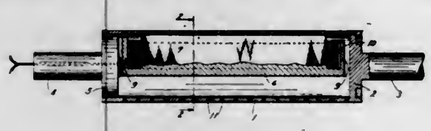
means connected with said pendulum, said means indicating the angular displacement of said pendulum relative to its mounting means.

1,812,504. METHOD AND MEANS FOR SECURING TREADS TO STEEL SUBTREADS. LOUIS DEL TURCO, Newark, N. J. Filed Jan. 24, 1930. Serial No. 423,052. 19 Claims. (Cl. 72—96.)



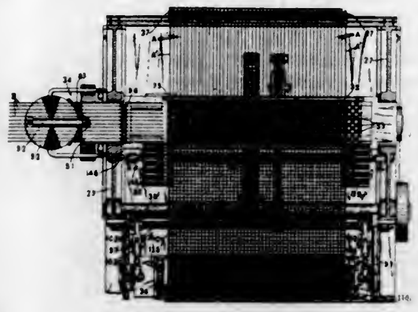
1. The method of securing a tread to a sub-tread which consists in forming a dovetail shaped indentation on the under surface of such tread, mounting a securing means on the upper face of the sub-tread and filling around said securing means and into said dovetail shaped indentation a cementitious material.

1,812,505. MEANS FOR CONVEYING MAGNETIC MATERIAL. ROY O. WERTZ, Cleveland, Ohio, assignor to The Ohio Electric Manufacturing Co., Cleveland, Ohio, a Corporation of Ohio. Filed May 9, 1929. Serial No. 361,559. 11 Claims. (Cl. 198—41.)



1. A conveyor for elongated magnetic articles which comprises a stationary multi-polar magnet extending transversely to the direction of travel of the articles, and a non-magnetic shell rotatable about the magnet for conveying the articles, the shell having means for concentrating the magnetic lines of force at the outside surface of the shell and above the poles of the magnet.

1,812,506. WOVEN WIRE FABRIC MACHINE. FREDERICK E. WILLITS, Fairport, N. Y. Filed Nov. 15, 1927. Serial No. 233,354. 50 Claims. (Cl. 139—28.)

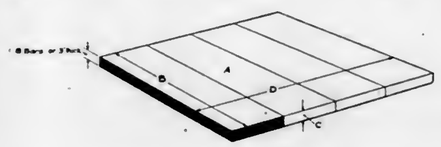


1. In a wire fabric machine, in combination, means for supporting a plurality of warp strands, means for simultaneously positioning a plurality of filler strands in intermeshing relation with the warp strands with their ends projecting adjacent to a selvage warp strand, and means for looping said projecting strand ends over said selvage warp strand.

1,812,507. DETERGENT COMPOSITION. WILLIAM J. ZICK, Heathcroft, London, England, assignor to Standard Oil Development Company. Filed Nov. 1, 1926. Serial No. 145,716. 3 Claims. (Cl. 87—5.)

3. A detergent composition comprising a soap, substantially free from alkali, containing substantially 4% by weight of a free naphthenic acid and substantially 0.25% by weight of kerosene.

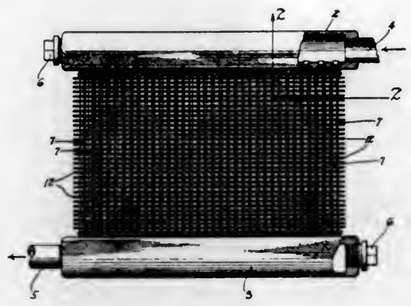
1,812,508. METHOD OF MAKING SHEETS AND PLATES. CHARLES W. BENNETT, Pittsburgh, Pa., assignor to American Sheet and Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed June 21, 1927. Serial No. 200,423. 17 Claims. (Cl. 29—18.)



1. The method of making sheets and plates, which consists in cutting long metal slabs of known width and thickness into slabs of the length and weight necessary to make a predetermined number of packs of sheets or plates, rolling the cut slabs into long thin flexible strips of known width and gage, and then cutting each rolled strip into a predetermined number of duplicate sections, matching a plurality of the strip sections and rolling the matched sections into sheets or plates of the desired length and gage and determining from the overall length of the long, flexible strip the length into which the individual sections are cut.

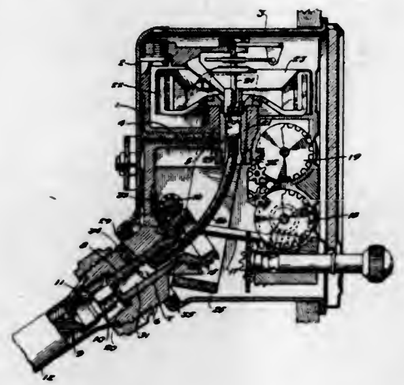
1,812,509. HEAT EXCHANGER. MERRILL L. BENSON, Minneapolis, Minn., assignor, by mesne assignments, to Super Radiator Corporation, Minneapolis, Minn., a Corporation of Minnesota. Filed June 27, 1928. Serial No. 288,651. 1 Claim. (Cl. 257—154.)

A heat exchanger comprising a plurality of tubes, a plurality of relatively thin sheet-like fins disposed in parallel spaced relation, each fin having a plurality of apertures, a flange surrounding each aperture of each fin, each fin having all of the tubes passing through its apertures, each tube being outwardly expanded so that each fin adjacent each aperture is frictionally held to each tube



to provide a substantially rigid unitary heat exchanger with the fins, and the interior of each tube throughout that portion of its length surrounded by said fins having a uniform smooth bore to minimize frictional resistance to fluid circulation therethrough.

1,812,510. SPEEDOMETER DRIVE MECHANISM. JOSEPH BERGE, Montclair, N. J., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Original application filed May 16, 1921, Serial No. 470,062. Patent No. 1,670,836, dated May 22, 1928. Divided and this application filed Mar. 1, 1928. Serial No. 258,272. 11 Claims. (Cl. 64—30.)

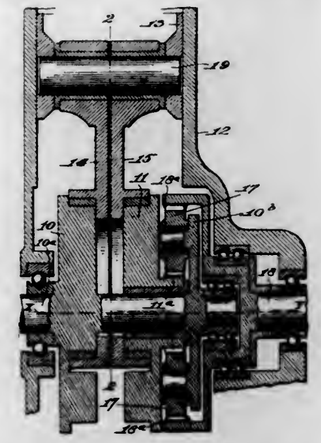


1. In combination, two members rotatable in fixed positions about axes at an angle to each other, and a built-up flexible wire cable connecting said members to drive the one from the other, said cable being free to move axially thereof between said members and to accommodate itself to the form naturally imposed thereon by the transmission of driving torque.

1,812,511. TWO SPEED POWER TRANSMISSION. WILLIAM A. CALDWELL, Los Angeles, Calif. Filed Aug. 13, 1927. Serial No. 212,709. 31 Claims. (Cl. 74—34.)

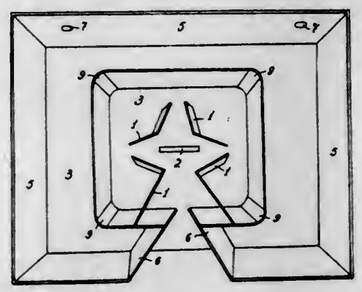
1. In a power transmission, in combination, a planetary set comprised of gearing controlled by a plurality of co-

axial members and a frame supporting all of said members for independent rotation, a reciprocation member also supported by said frame for reciprocation, means



connecting said reciprocation member to one of said gear controlling members and means connecting said reciprocation member to another one of said gear controlling members.

1,812,512. INSECT TRAP. RAUL JUAN CARBALLO, Buenos Aires, Argentina. Filed Dec. 20, 1928. Serial No. 327,443. 1 Claim. (Cl. 43—119.)

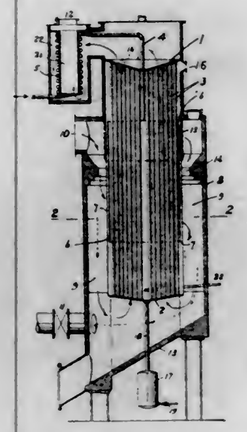


An insect trap of the character described, comprising a main housing provided with an inlet, a secondary trapping box arranged within the main housing and also provided with an inlet of considerably smaller size than the inlet of the main housing, partition walls between the box and the housing and cooperating with the openings to form a converging entrance, a prism within the box opposite the inlet opening, angularly disposed and spaced reflecting partitions within the box and on opposite sides of the prism, the space between the housing and the box constituting an insecticide receiving chamber, and the inner box being provided with openings permitting insects to pass from the box to the insecticide chamber.

1,812,513. VERTICAL FIRE TUBE BOILER. CHARLES S. CHRISMAN, West Chester, Pa., assignor to The U. G. I. Contracting Company, Philadelphia, Pa., a Corporation of Delaware. Filed Dec. 10, 1926. Serial No. 153,754. 1 Claim. (Cl. 122—7.)

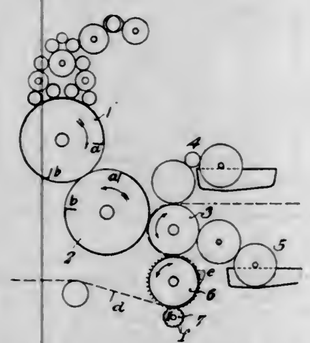
A fire tube boiler, adapted to be heated alternatively by two kinds of gases one of which is injurious to the tubes of the boiler, comprising in combination, a vertical cylindrical boiler shell, a boiler setting surrounding

said boiler shell and spaced therefrom to form a gas passage, a gas inlet to said passage near the top of the setting, a smoke box above the top of said boiler shell, a gas chamber below said shell in communication with



said gas passage, a plurality of vertical fire tubes extending through said shell connecting the smoke box with said gas chamber, means for withdrawing the injurious gas from the gas chamber and offtake means for the other gases from said smoke box.

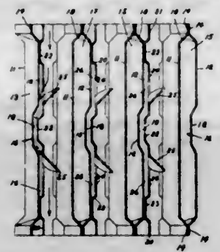
1,812,514. VARNISHING AND PRINTING MACHINE FOR BANDS. KUNO CHRISTIAN, Bad Soden on Taunus, Germany. Filed Apr. 23, 1930, Serial No. 446,602, and in Germany June 25, 1928. 1 Claim. (Cl. 101—217.)



In combination with a printing machine, means for perforating and guiding a continuous web of stiff sheet material, comprising disks having peripheral teeth and counter-disks having a plurality of recesses registering with the teeth of the first named disks, an impression cylinder, a rubber cylinder and means for successively rotating the said impression cylinder and perforating mechanism forwardly and reversely.

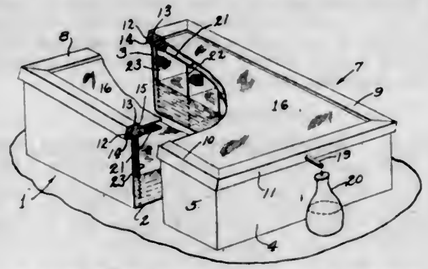
1,812,515. AUTOMOBILE RADIATOR CORE. NELSON T. CORCORAN, Cincinnati, Ohio, assignor to The Corcoran Manufacturing Company, Norwood, Ohio, a Corporation of Ohio. Filed July 11, 1929. Serial No. 377,456. 4 Claims. (Cl. 257—130.)

2. An automobile radiator core comprising a plurality of flattened endless corrugated bands the opposed walls of said bands cooperating with the walls of adjacent bands for forming water tubes the outer walls of said tubes having depressions therein and a spacer strip inserted within each band and having bosses cooperating with the



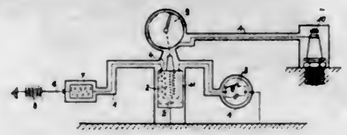
depressions in the outer walls of a pair of adjacent resulting water tubes and providing transverse air passages.

1,812,516. MEANS FOR PURIFYING WATER. GEORGE W. DOOLEY, Huntington Park, Calif. Filed Dec. 21, 1927. Serial No. 241,663. 4 Claims. (Cl. 202—234.)



1. A solar water purifier comprising a chamber, the lower portion of which constitutes a container for a supply body of water; a sheet of bibulous material positioned in the chamber above the container for the water capillary; means extending downward from the bibulous material for elevating water to the sheet; and a cover above and spaced from the sheet and penetrable by solar rays and serving as a condenser and collector for the condensate.

1,812,517. BATTERY IGNITION APPARATUS. WALTER DORN, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed June 23, 1930, Serial No. 463,225, and in Germany July 4, 1929. 5 Claims. (Cl. 123—148.)

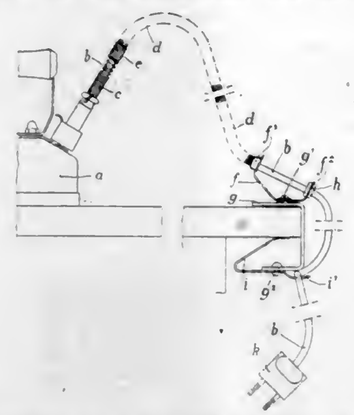


1. In a screened battery ignition apparatus which includes an induction coil connected through a series resistance to a battery and an earthed metallic screen extending around the apparatus, the provision of an earth connection from that end of said induction coil which is nearest the battery and a condenser in said earth connection.

1,812,518. GUIDE FOR THE CURRENT SUPPLY CABLE OF ELECTRIC IRONS. CLÄRE DRÜPPEL, Bottrop, Germany, assignor to Bernhard Quendt, Essen-Ruhr, Germany. Filed May 10, 1929, Serial No. 362,054, and in Germany June 30, 1927. 4 Claims. (Cl. 248—30.5.)

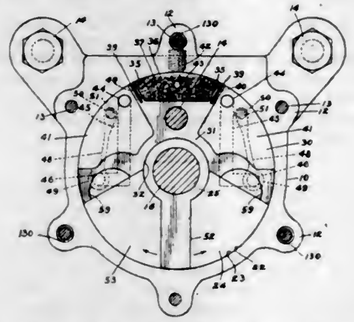
3. A guide for the current feed cable of electric irons, comprising a table clamp, a lever mounted on said table clamp to swing about a vertical axis, and having an arm

extended upwardly and out of alinement with the swinging axis of the lever, an elastic guide tube having one end fixed to the iron, means formed with the free end



of the extended arm of said lever for securely fixing the remaining end of said guide thereto, whereby to cause the arm through said guide to follow the movements of the iron.

1,812,519. FLUID OR HYDRAULIC SHOCK ABSORBER. JOHN ECKHARD, Cincinnati, Ohio. Filed Oct. 31, 1929. Serial No. 403,800. 15 Claims. (Cl. 188—89.)



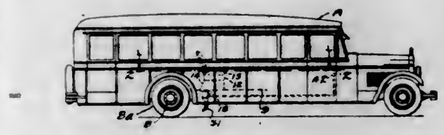
1. In a fluid shock absorber of the class described, the combination of a housing having a cavity therein for containing a fluid said housing being provided with fluid passages, means disposed within the cavity of the housing for dividing the cavity into a piston chamber and a fluid reservoir having fluid communication through the passages of the housing, a bored boss on the housing having an annular fluid collecting groove and a communicating channel, a filter in the housing in which said communicating channel terminates for conveying fluid from the collecting groove to the filter, a piston shaft extending through the bore in the boss, a piston on the shaft disposed within the piston chamber, said piston being actuatable for creating pressure in the piston chamber for displacing fluid through the passages of the housing into and from the fluid reservoir, said pressure serving also to force fluid into the filter by way of the collecting groove and its communicating channels.

1,812,520. IGNITION COIL. ADOLF ELLWANGER, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Feb. 23, 1928, Serial No. 256,413, and in Germany Apr. 2, 1927. 4 Claims. (Cl. 175—356.)

1. An ignition coil for battery ignition apparatus in internal combustion engines comprising in combination a yoke comprising a plurality of bundles of bent rectangular strips of sheet metal, all the laminæ in a bundle being of the same length, the lengths of the laminæ in the respective bundles being substantially proportional to the average radius of curvature of each bundle, and a core the ends of which are located between the ends of the yoke and spaced therefrom.

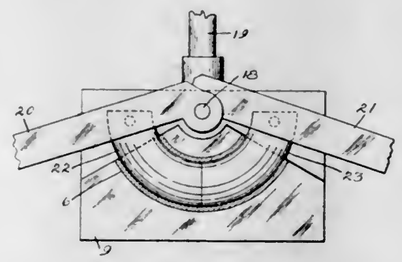


1,812,521. SANDER FOR BUSSES AND OTHER VEHICLES. RUE R. ELSTON, Minneapolis, Minn. Filed Apr. 11, 1929. Serial No. 354,258. 15 Claims. (Cl. 291—23.)



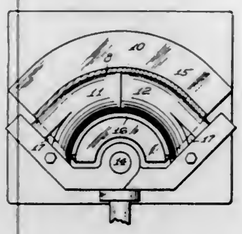
1. A sander for vehicles, comprising a sand box adapted to be mounted on the vehicle, said box having an opening therethrough, a conduit mounted below said opening and projecting downwardly therefrom, a spray nozzle secured to the lower end of said conduit, a valve normally closing the opening in said box but adapted to be operated to move out of said opening to permit sand carried in said box to run downwardly into said conduit, a spray nozzle and deflector plates in said nozzle dividing the same at the center thereof to cause the sand to be discharged from said nozzle in two streams, one stream for each tire of a double tired wheel.

1,812,522. PROCESS OF AND APPARATUS FOR MANUFACTURING METAL PIPE FITTINGS. FRED C. FANTZ, Webster Groves, Mo., assignor to Widwest Piping & Supply Co. Inc., St. Louis, Mo., a Corporation of Missouri. Filed Mar. 25, 1931. Serial No. 525,133. 3 Claims. (Cl. 113—38.)



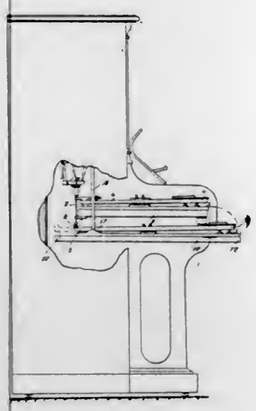
1. The process of forming pipe fittings which consists in providing a suitable blank of metal having an excess above that desired for the walls of the finishing fitting, bending the blank into an arcuate form U-shaped in cross section thereby upsetting its sides, fitting a hinged mandrel into said U-shaped piece pressing the sides of said blank towards each other over said mandrel until their edges abut, thereby distributing the metal to the required places, welding said edges, reheating said fitting, compressing same and between dies of the exact size required.

1,812,523. PROCESS OF MANUFACTURING METAL PIPE FITTINGS WITH TANGENTIAL ENDS. FRED C. FANTZ, Webster Groves, Mo., assignor to Midwest Piping & Supply Co. Inc., St. Louis, Mo., a Corporation of Missouri. Filed Apr. 18, 1931. Serial No. 531,220. 9 Claims. (Cl. 113—51.)



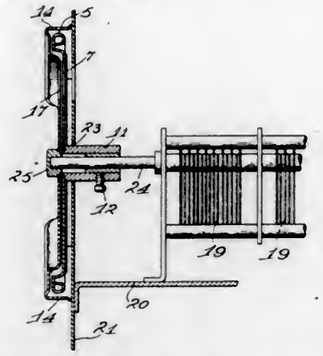
1. The process of forming pipe fittings which consists in providing a suitable blank of metal having an excess above that desired for the walls of the finished fitting, bending the blank into an arcuate form U-shaped in cross section, having tangential portions at each end, inserting a mandrel formed in halves and having its outside arcuate in its center portion but which terminates in tangents, its inner side being formed on a true radius, the sides of the outer ends of said mandrel being substantially flat, closing said dies, thereby pressing the sides of the U towards each other over the arcuate portion until their edges abut forming a circle, and the tangential portion into an oval, removing said mandrel, compressing said fitting in a pair of dies until it is circular in cross section throughout its length, and welding the adjoining edges of said fitting.

1,812,524. AUXILIARY KEYBOARD FOR PIANOS. ARTURO FRASCANI, Rome, Italy. Filed Aug. 22, 1929, Serial No. 387,748, and in Italy Dec. 22, 1928. 3 Claims. (Cl. 84—425.)



2. A piano having an unobstructed chamber under its keyboard, a closure for the front end of the chamber, actuating pins associated with the keyboard, an auxiliary keyboard slidably mounted in the chamber, the inner ends of the keys of the auxiliary keyboard being adapted to be moved under the pins when the auxiliary keyboard is moved outwardly from the chamber, and locking means for holding the auxiliary keyboard in its outermost or playing position.

1,812,525. RADIO TUNING MECHANISM. WINSLOW GOODWIN, Chicago, Ill., assignor to Crowe Name Plate & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 11, 1930. Serial No. 488,134. 2 Claims. (Cl. 116—124.3.)



1. In radio receiving apparatus, the combination of a panel, tuning mechanism comprising a shaft by the rotation of which the tuning is effected and extending crosswise of said panel, said panel containing an aperture in alinement with said shaft and a disk extending crosswise of said panel and having a dial portion and a sleeve portion extending rearwardly through said aperture and into which said shaft extends and operatively engaged with said shaft, and a plate between which and said panel said disk is located, said plate being secured to said panel and extending over the face of said disk and exposing a portion of the periphery of said disk for the application of turning force thereto.

1,812,526. PROCESS OF PURIFYING HYDROGEN. OTTO GROSS and FRIEDRICH JOST, Sodingen, Germany, assignors, by mesne assignments, to Firm Patentverwertungs A. G. "Alpina," S. A. pour l'Exploitation de Brevets "Alpina," Patents Exploitation Cy. "Alpina," Ltd., Basel, Switzerland. Filed Aug. 23, 1927, Serial No. 214,988, and in Germany Aug. 26, 1926. 1 Claim. (Cl. 23—210.)

The process of purifying hydrogen comprising acting on the gas with an agent of alkaline reaction to eliminate carbon dioxide, hydrogen sulfide, and sulfur dioxide, conducting the gas thus treated at an elevated temperature and under increased pressure in contact with a catalyst, thereafter subjecting the gas to another treatment with an agent of alkaline reaction and finally bringing the gas at an elevated temperature and under increased pressure in contact with a catalyst.

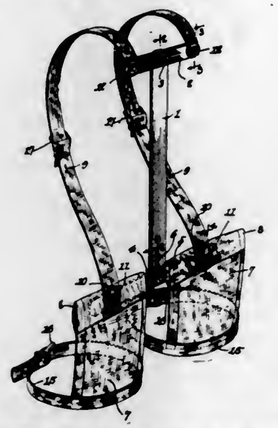
1,812,527. PROCESS OF PURIFYING HYDROGEN. OTTO GROSS and FRIEDRICH JOST, Sodingen, Germany, assignors, by mesne assignments, to Firm Patentverwertungs A. G. "Alpina," S. A. pour l'Exploitation de Brevets "Alpina," Patents Exploitation Cy. "Alpina," Ltd., Basel, Switzerland. Filed Aug. 26, 1927, Serial No. 215,758, and in Germany Aug. 30, 1926. 9 Claims. (Cl. 23—210.)

1. In the process of freeing hydrogen from gaseous organic impurities not absorbed by alkalies, the step which comprises passing the hydrogen at elevated temperature and a pressure up to about 100 atms. over a catalyst containing a heavy metal having an atomic weight of 51 to 65, other than copper, associated with an alkaline compound of a light metal to decompose the organic impurities into inorganic hydrogen compounds easily absorbed by alkalies.

1,812,528. PHARMACEUTICAL PRODUCT. REINHOLD GRÜTER, Berlin-Charlottenburg, Germany. Filed May 19, 1927, Serial No. 192,802, and in Germany Aug. 29, 1924. 11 Claims. (Cl. 260—34.)

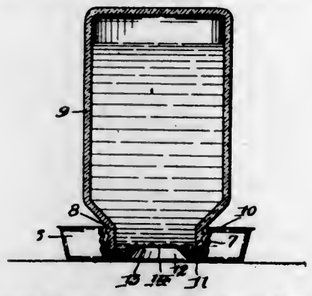
1. As a new composition of matter, the complex compound resulting from the interaction of one molecule of dimethyl amido dimethyl phenyl pyrazolon and a simple salt and a complex salt of an aromatic hydroxy-acid containing a carboxyl group linked to the nucleus.

1,812,529. BRACE. ROBERT W. HAULBROOK and WILLIAM J. COTTON, Maysville, Ga. Filed Mar. 24, 1930. Serial No. 438,590. 1 Claim. (Cl. 2—44.)



A back reinforcement for persons who must stoop, and use legs and arms while in a stooping posture, the reinforcement comprising a resilient main strip, of a length to extend from a point adjacent the wearer's shoulders to a point slightly above the buttocks, a transverse head pivoted intermediate its ends to the upper end of the main strip, a transverse foot pivoted intermediate its ends to the lower end of the main strip, shoulder straps having their upper ends connected to the head on opposite sides of the pivotal mounting of the head, and having their lower ends connected to the foot on opposite sides of the pivotal mounting of the foot, the head being somewhat shorter than the foot, to keep the upper ends of the straps close enough together so that the straps can pass down under the arms, clear of the arm pits, and impede the action of the arms to a minimum extent, and depending leg-engaging means mounted on the foot, the pivotal mounting of the foot and the head giving the reinforcement a lateral flexibility from its extreme upper end to its extreme lower end.

1,812,530. DRINKING FOUNTAIN FOR POULTRY. JOHN A. HEALY, Langdon, Minn. Filed July 21, 1926. Serial No. 123,896. 1 Claim. (Cl. 119—77.)

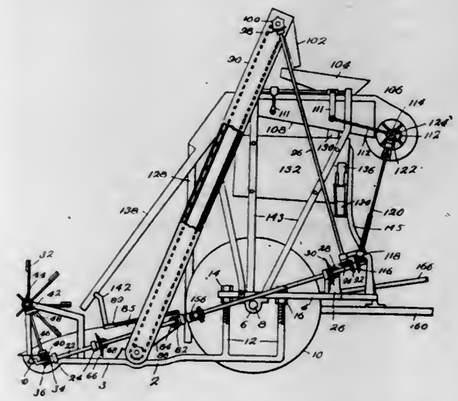


In a drinking fountain, the combination with a reservoir and a trough adapted to be supplied with water from said reservoir, said trough being formed with a filling opening in its base and a fine mesh screen extending across said opening and adapted to prevent the escape of water from said reservoir when the fountain is in use, said screen being offset upward from the base of said trough and the fountain being adapted to be inverted for filling through said opening and screen.

1,812,531. PRODUCING POTASSIUM NITRATE. PAUL HÖFER, Berlin, Germany. Filed June 17, 1929, Serial No. 371,706, and in Germany July 26, 1927. 5 Claims. (Cl. 23—102.)

1. The method of producing potassium nitrate comprising acting on a nitrate of a readily hydrolyzable metal with potassium chloride by adding one of these salts to a hot solution of the other salt, allowing the mixture to cool to separate potassium nitrate, removing same, evaporating the liquor and developing hydrochloric acid gas, adding water, potassium chloride and a nitrogen oxide to restore the original composition of the solution, and proceeding further as in the original operation.

1,812,532. COMBINED HARVESTER AND THRASHER. ERVIN F. HOGAN, Beloit, Kans. Filed Sept. 30, 1927. Serial No. 223,052. 11 Claims. (Cl. 56—122.)

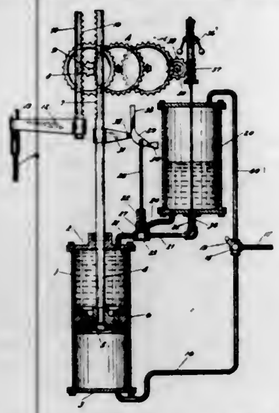


7. In a combined harvester and thrasher having cutting mechanism at the forward portion thereof, thrashing mechanism paralleling and located close to the rear of said cutting mechanism, a rack located close to the rear of said thrashing mechanism, a grid hinged to the thrashing mechanism and overlapping the adjacent portion of said rack, and a conveyor underlying said grid and paralleling the thrashing mechanism.

1,812,533. FEED MECHANISM FOR DRILLING MACHINES AND THE LIKE. WILSON P. HUNT, Moline, Ill., assignor to Moline Tool Company, Moline, Ill. Filed Oct. 17, 1929. Serial No. 400,232. 3 Claims. (Cl. 121—45.)

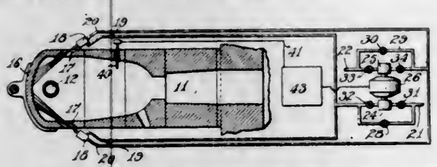
1. In combination with a tool organism including a tool to be carried thereby, a cylinder, a piston in said cylinder, a piston-rod for said piston, operatively connected with said tool organism, means for introducing a fluid force on one side of said piston, an auxiliary container in proximity to said cylinder, and united therewith by passages of varying capacity, means for closing the larger of said passages, means carried by said piston-rod for actuating the last-named means at the end of a predetermined movement of said rod, a fluent non-elastic medium contained in said cylinder on the opposite side of the

piston from the fluid force, and releasable into said auxiliary container through said passages, and means for



controlling the release of said medium automatically from the movement of said tool organism, through the smaller of said passages.

1,812,534. METHOD OF AND APPARATUS FOR FEEDING MOLTEN GLASS. FRED E. JEWETT, Muncie, Ind., assignor to Ball Brothers Company, Muncie, Ind., a Corporation of Indiana. Filed June 11, 1928. Serial No. 284,364. 7 Claims. (Cl. 49—55.)



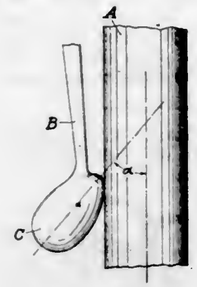
7. The combination of a source of molten glass, a covered flow spout communicating therewith and having a submerged outlet near its outer end, a refractory tube, having an external diameter in excess of the submerged outlet, arranged vertically above said outlet with its lower end submerged in the molten glass, means by which said tube may be vertically adjusted, means by which alternate plus and minus air pressures may be established within the upper end of said tube, means by which heat may be applied locally to the surface of the glass around said tube, and means by which the delivery of fluid fuel to said local heating means may be controlled, said means comprising a thermo-couple projected into the flow spout closely adjacent the surface of the glass therein at a point between the source of supply and the submerged orifice, and a baffle projected into the flow spout above the surface of the glass between said thermo-couple and the local heating means.

1,812,535. METHOD AND MEANS FOR APPLICATION OF PARADICHLOROBENZENE TO FRUIT TREES. MORRIS Y. KACHLINE, Bango, Pa. Filed May 26, 1930. Serial No. 455,915. 1 Claim. (Cl. 43—125.)
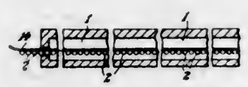


A means for treating fruit trees with paradichlorobenzene which comprises a tubular fabric carrier uniformly charged with the material throughout its length, and a sinuous line of stitching extending through the tube to maintain uniform distribution of the material.

1,812,536. CLIP FOR SECURING ARTICLES TO CLOTH. THEODON KOVACS, Berlin, Germany. Filed Apr. 4, 1930, Serial No. 441,586, and in Germany Apr. 9, 1929. 2 Claims. (Cl. 24—11.)



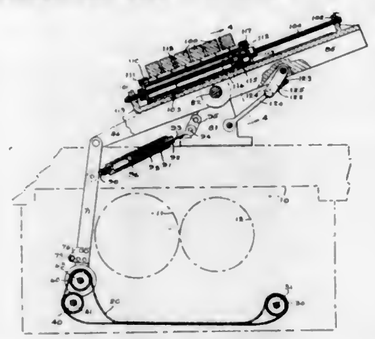
1. A clip for securing articles to cloth comprising a resilient shank adapted to be secured to the article, and a boss fixed rigidly to the free end of said shank, said boss having the shape of an oblong closed body the axis of which is arranged at an acute angle to the axis of the article, and the vertex of said angle pointing in the direction in which the article is detached from the cloth.

1,812,537. PRODUCTION OF GLASS IN STRIP FORM AND APPARATUS THEREFOR. ERNEST BRISTOW LE MARE, St. Helens, England, assignor to Pilkington Brothers Limited, Liverpool, England, a Limited Liability Company. Original application filed Apr. 27, 1929, Serial No. 358,439, and in Great Britain May 1, 1928. Divided and this application filed May 21, 1930. Serial No. 454,292. 5 Claims. (Cl. 198—127.)



1. Process of gradually reducing the speed of a hot glass strip travelling on a roller-bed by turning some of the rollers supporting the strip in a forward direction and others in a backward direction.

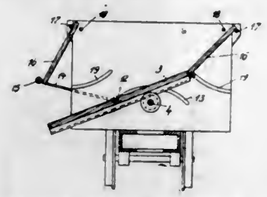
1,812,538. RUBBER MILL. WILBUR H. LOCKERT and PARK E. WELTON, Cuyahoga Falls, Ohio; said Lockert assignor to said Welton. Filed Apr. 7, 1928. Serial No. 268,322. 31 Claims. (Cl. 18—2.)



6. The combination with a mill roll, an endless belt adapted to coact therewith, a roller extending through the belt and adapted to support it, a pair of links connected with the ends of the roller leading upwardly therefrom, a walking beam mounted on the mill frame and connected at one end with one of the links, an arm

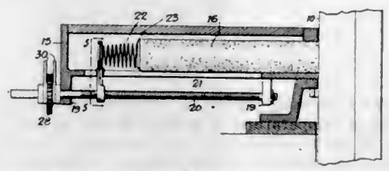
connected with the other link, a shaft on which the walking beam and arm are mounted, and means for giving said shaft a partial rotation in one direction or the other as desired, comprising a counterweight and means for causing the counterweight to act on the walking beam on one side or the other of the vertical plane through the shaft.

1,812,539. SELF-DISCHARGING WAGON. WILHELM LUDOWICI, Munich, Germany. Filed Aug. 24, 1929, Serial No. 388,163, and in Germany Dec. 20, 1927. 5 Claims. (Cl. 105—260.)



1. Self-discharging wagon comprising two fixed end walls, a shaft having its ends supported in said walls, a bottom supported by said shaft and parallelly displaceable thereon, side walls pivotally suspended from said end walls and links pivotally connecting said side walls with the edges of said bottom which adjoin said end walls.

1,812,540. ELEVATOR LUBRICATOR. EDWARD ROSELL MCKINZIE, Memphis, Tenn. Filed Aug. 19, 1929. Serial No. 386,886. 1 Claim. (Cl. 184—22.)



An elevator guide lubricator adapted to be mounted upon a reciprocating member and comprising a hollow casing provided with a slot in one end for receiving the member to be lubricated, tapered lubricant passages extending from the interior of the casing along the sides of the slot, a removable cover for said casing, a follower in said casing for advancing a lubricant stick, a slot in said casing, a threaded shaft journaled in parallel relation to the slot in the casing, a split nut on said shaft having operating means projecting through the last-named slot into the casing and engaging the follower, and automatic means for rotating said shaft.

1,812,541. RESINOUS PRODUCT AND PROCESS OF PREPARING THE SAME. JULIUS A. NIEUWLAND, Notre Dame, Ind., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 4, 1929. Serial No. 330,415. 25 Claims. (Cl. 260—2.)

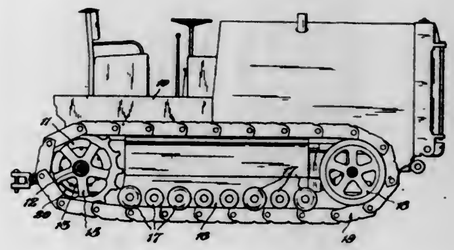
4. A polymerization product of a non-benzenoid low-boiling non-viscous polymerizable polymer of acetylene obtainable by exposing said polymer of acetylene in the presence of oxygen to a temperature of substantially 85°–87° C. for at least 16 hours.

15. The process of obtaining a polymerizable unsaturated hydrocarbon from acetylene which comprises passing acetylene into a mixture of ammonium chloride, water, cuprous chloride and copper powder to obtain a mixture of volatile non-viscous liquid acetylene polymers, separating the divinylacetylene from the resulting mixture by distillation and thereafter heating the divinylacetylene in the presence of air to effect the further polymerization of the divinylacetylene.

1,812,542. CATALYTIC PROCESS FOR THE PREPARATION OF VINYL CHLORIDE. JULIUS A. NIEUWLAND, Notre Dame, Ind., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 12, 1927, Serial No. 225,848. Renewed Mar. 22, 1930. 16 Claims. (Cl. 260—162.)

1. The process of preparing vinyl chloride which comprises reacting upon acetylene with hydrochloric acid, in the presence of a cuprous compound.

1,812,543. TRACTOR. ROLLIN H. WHITE, Cleveland Heights, Ohio. Filed Mar. 17, 1930. Serial No. 436,556. 3 Claims. (Cl. 180—91.)

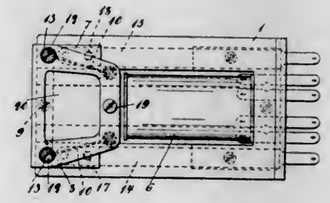


1. In a track laying tractor, a transmission casing having a laterally extending axle supporting portion, an endless track driven in proximity to the laterally projecting portion of the casing, and a shield depending from and extending forwardly of the laterally projecting portion of the casing, said shield lying in a portion of the plane of the track.

1,812,544. COATING COMPOSITIONS AND ARTICLES COATED THEREWITH. ARNOLD M. COLLINS, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,239. 13 Claims. (Cl. 134—26.)

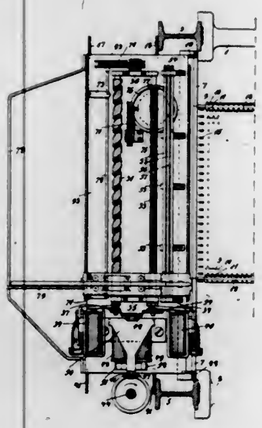
1. A coating composition mixture including as an ingredient a preformed drying oil which is a liquid non-volatile open chain polymerization product of acetylene.

1,812,545. ELECTROMAGNETIC RELAY. CARL ERIK JEAN NILSON, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Aug. 22, 1929, Serial No. 387,739, and in Sweden Aug. 24, 1928. 9 Claims. (Cl. 200—104.)



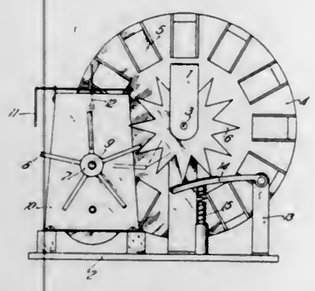
1. An electromagnetic relay comprising a flat iron core having three legs arranged with their broad sides parallel with a plane through said legs, a coil on the middle one of said legs, and a flat iron armature mounted on the one side of the legs and swingable about an axis parallel with the core plane and perpendicular to the legs.

1,812,546. AUTOMATIC AND SEMIAUTOMATIC TELEPHONE SYSTEM. CARL ERIK JEAN NILSON and DAVID LAURENTIUS LIENZÉN, Stockholm, Sweden, assignors to Telefon Aktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Nov. 2, 1929, Serial No. 404,325, and in Sweden Nov. 8, 1928. 6 Claims. (Cl. 179—27.5.)



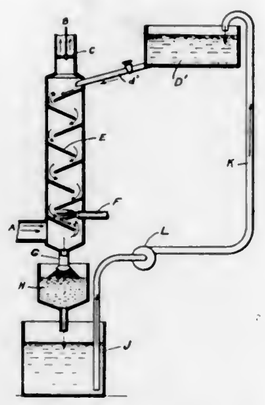
1. An arrangement in automatic and semiautomatic telephone exchanges provided with selectors of the kind in which the multiple contact field is composed of wires or the like disposed in parallel rows and the selector arms are displaceable in planes perpendicular to said wires in such a manner that they may be moved at first outside the contact field to select a line group and thereupon into the contact field to select a particular line in the group, characterized by that the contact field is common to two groups of selectors disposed on opposite sides of said field and characterized in that the opposing selector groups are displaced in relation to each other in the longitudinal direction of the wires so that the plane of motion of each selector in the one group extends between the planes of motion of two adjacent selectors in the other group and vice versa.

1,812,547. ADVERTISING DEVICE. WILHELM NOWACK, Berlin, and HANS BUWERT, Berlin-Wilmersdorf, Germany. Filed Mar. 14, 1929, Serial No. 347,119, and in Germany Sept. 4, 1928. 1 Claim. (Cl. 88—27.)



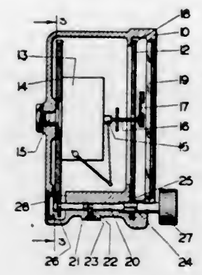
Apparatus for projecting changing advertisement and other pictures, comprising a carrier in the form of a composite rotatable disc consisting of a transparent disc and two sheets of paper formed with window-like notch-shaped openings registering with one another, the paper sheets being stuck together except round the margins of the notch-shaped openings and being stuck on to one side of the transparent disc, slides bearing the pictures to be projected, adapted to rest in the compartments formed by the free margins of the notch-shaped openings in the paper discs, and a ratchet mechanism adapted to feed the carrier forward intermittently at regular intervals of time through a distance equal to the distance between two adjacent pictures.

1,812,548. METHOD OF PRODUCING A CONSTANT DEGREE OF HUMIDITY IN AIR OR OTHER GASES. JULIUS OBERMILLER, Munich-Gladbach, Germany. Filed Aug. 22, 1923, Serial No. 658,836, and in Germany Aug. 22, 1922. 4 Claims. (Cl. 183—121.)



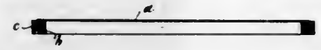
4. The process of producing, independent of normal variations in temperature, a definite degree of relative humidity in air or other gas, which consists in selecting a substance, a saturated water solution of which will draw moisture from the gas if above such degree or add moisture to the gas if below such degree, bringing such saturated solution into contact with the gas and maintaining the saturation of the solution.

1,812,549. INDICATING INSTRUMENT. JOHN D. PEACE, Jr., Flushing, N. Y., assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 6, 1929. Serial No. 390,708. 10 Claims. (Cl. 116—129.)



1. The combination with an indicating instrument having a casing, operating mechanism, a needle actuated thereby, and a dial, of common means for displacing said operating mechanism and said dial relative to said casing.

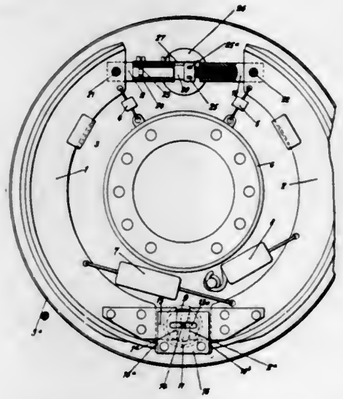
1,812,550. PHONOGRAPH DISK. ARMANDO ALVARES PENTEADO, Paris, France. Filed July 8, 1929, Serial No. 376,698, and in France June 12, 1929. 5 Claims. (Cl. 274—42.)



1. As a new article of manufacture a recorded phonographic disk consisting of a thin flexible sheet of xanthogenate of cellulose, provided with an indented spiral groove.

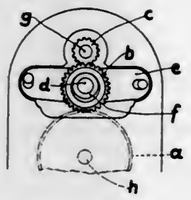
3. A process of recording ultra light phonographic disks of xanthogenate of cellulose which comprises softening the disk by dipping the same in a liquid which does not dissolve it, stretching the softened disk in a frame, directly recording the disk in the frame while in a soft state and letting the disk dry in the frame.

1,812,551. BRAKE FOR MOTOR VEHICLES. EDOUARD POULET, Courbevoie, France. Filed Feb. 21, 1929, Serial No. 341,669, and in Belgium Feb. 28, 1928. 1 Claim. (Cl. 188—78.)



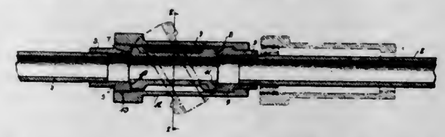
A brake for motor vehicles operating in both directions of running, comprising in combination in a brake drum: two brake segment parts connected together through an arrangement of adjustable caps; a stationary stop which maintains in the radial direction and guides in the tangential direction the two ends of the said two parts of brake segments; a cam disposed between the said ends of the said brake segment parts, and an intermediate part upon which slides the said cam; the said intermediate part of itself sliding perpendicularly to the direction of sliding of the cam in a plate connected with the driving shaft.

1,812,552. GEARING. MAX RALL and ERNST DURST, Stuttgart, Germany, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Sept. 21, 1928, Serial No. 307,497, and in Germany Oct. 17, 1927. 3 Claims. (Cl. 74—7.)



1. A set of gears including a pair of gear wheels, one pinion only having a hole therethrough interposed between and in mesh with said wheels, a pin located within the hole in said pinion and of diameter smaller than the diameter of the hole, a plate supporting said pin, and means for adjusting said plate in a plane perpendicular to the axis of the pin..

1,812,553. PIPE UNION. THEODORE H. REDFIELD, Princeton, N. J. Filed Aug. 18, 1927. Serial No. 213,889. 5 Claims. (Cl. 285—124.)



1. A pipe connection comprising seating elements secured to the adjacent ends of pipes, a filler formed as the center of the middle zone of a sphere having a diameter substantially greater than the maximum diameter of the filler constituting a separating device mounted between the pipe sections and having interfitting engagement with the seating elements, said filler having end faces of spherical shape to permit it to be rocked to disengage it from the seating elements, and a casing threadedly secured to at least one of the pipe sections and enveloping the filler when in operative position.

1,812,554. METHOD OF CROSS-DYEING FABRICS. ARTHUR S. ROBERTS, Hendersonville, N. C. Filed Dec. 17, 1927, Serial No. 240,919. Renewed Dec. 11, 1930. 8 Claims. (Cl. 8—5.)

1. That method of dyeing a fabric composed of viscose and cotton which comprises wetting the fabric with water, subjecting the fabric to a dyebath containing neutral dyeing acid dyes selected from the group consisting of wool yellow extra, Schultz Number 23, wool blue R. Schultz Number 188, and new red 5R, Schultz Number 248, and glycerine, rinsing the fabric in water, then subjecting tthe fabric to a dyebath containing substantive dyes selected from the group consisting of direct yellow S 2 G, Schultz Number 10, direct rubine B concentrated, Schultz Number 313, and direct blue 6 G extra, Schultz Number 415 and sulphonated oil, and then rinsing the dyed fabric in water.

1,812,555. METHOD OF CROSS DYEING FABRICS. ARTHUR S. ROBERTS, Hendersonville, N. C. Filed Dec. 17, 1927, Serial No. 240,920. Renewed Dec. 11, 1930. 6 Claims. (Cl. 8—5.)

1. That method of dyeing a fabric composed of viscose and cotton which comprises subjecting the fabric to a dyebath containing a basic dyestuff selected from the group consistsing of Schultz Numbers 606, 596, 515, and 499, sulphuric acid and sodium sulphate at a temperature of 180° F. and then subjecting the fabric to a dyebath containing substantive dyes selected from the group consisting of Schultz Numbers 10, and 313 at a temperature of approximately 120° F.

1,812,556. METHOD OF CROSS-DYEING FABRICS. ARTHUR S. ROBERTS, Hendersonville, N. C. Filed Dec. 17, 1927, Serial No. 240,921. Renewed Dec. 11, 1930. 2 Claims. (Cl. 8—5.)

1. That method of cross-dyeing a fabric composed of viscose and cotton fibers which comprises subjecting the fabric to a dye-bath containing dyes that are capable of being developed selected from the group consisting of Schultz Numbers 616, 198, 474, direct dyestuffs selected from the group consisting of Schultz Numbers 10, 313, and 415 together with sodium hydroxide at a temperature of approximately 140° F. then subjecting the fabric to a bath containing a diazotizing agent at ordi-

nary room temperature, then subjecting the fabric to a bath containing the developing agent, to produce two separate colors on the fabric.

1,812,557. METHOD OF CROSS-DYEING FABRICS. ARTHUR S. ROBERTS, Hendersonville, N. C. Filed Apr. 6, 1928, Serial No. 268,073. Renewed Dec. 11, 1930. 6 Claims. (Cl. 8—5.)

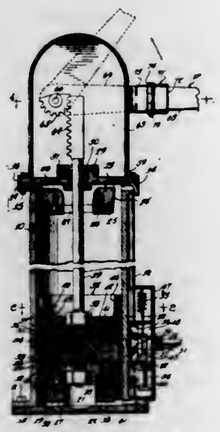
5. The method of cross-dyeing a textile fabric comprising both cotton and viscose silk which comprises subjecting the fabric to the action of a direct dyestuff selected from the group consisting of Schultz Numbers 323—343—194—616—319—426—241—436 and 462 with a preferential affinity for viscose silk in the presence of cotton at a temperature near the boiling point of the dyebath and subjecting the fabric to the action of a direct dyestuff selected from the group consisting of Schultz Numbers 313—10—326—273—471—274—9—11—456—337 and 470 with a preferential affinity for cotton in the presence of viscose silk at a lower temperature.

1,812,558. VACUUM TUBE DEVICE. JAMES ROBERT ROBERTSON, London, England. Filed Jan. 11, 1928, Serial No. 246,056, and in Great Britain Jan. 22, 1927. 14 Claims. (Cl. 176—122.)



1. A compound vacuum tube comprising a plurality of tubes sealed one within another wherein an inner tube is of such nature that, when warmed, it gives off radio-active particles which act upon the gas contained in another of the tubes.

1,812,559. RAILWAY CROSSING GATE. CHARLES R. SAMPSON, Cheswold, Del. Filed June 20, 1928. Serial No. 286,940. 12 Claims. (Cl. 39—8.)



1. A device of the character described comprising a pressure chamber, a member mounted in said chamber and movable by differential pressure on opposite sides thereof, a gate operatively connected to said member to be moved thereby to operative and inoperative positions, and means in said chamber actuated by pressure therein for locking said gate in either position.

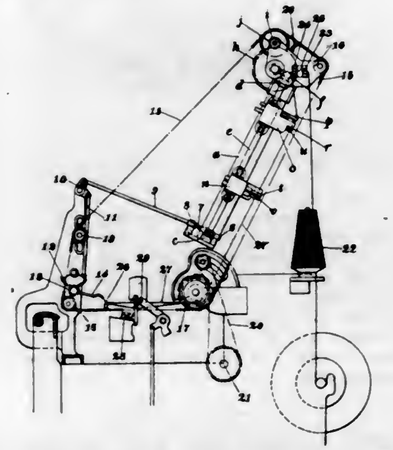
1,812,560. ARTIFICIAL MINERAL WATERS AND METHOD OF PRODUCING SAME. WALTER SCHOELLER, Berlin-Westend, Germany, assignor to Schering-Kahlbaum A. G., Berlin, Germany. Filed Nov. 16, 1927, Serial No. 233,745, and in Germany Nov. 23, 1926. 2 Claims. (Cl. 167—55.)

1. In the reproduction of natural mineral waters containing iron, the process which comprises supplying the iron content of said reproduced waters by dissolving therein water soluble ferrous salts of inorganic anions which occur in said natural waters, and stabilizing the said iron content by bottling said water under a high pressure of carbon dioxide; the said reproduced waters being saturated with carbon dioxide, free from constituents foreign to said natural waters and free from oxygen.

1,812,561. METHOD OF PRODUCING THYMOL. WALTER SCHOELLER, Berlin-Charlottenburg, HANS JORDAN, Berlin-Steglitz, and REINHARD CLERC, Berlin, Germany, assignors to the Firm Schering-Kahlbaum A. G., Berlin, Germany. Filed Nov. 22, 1928, Serial No. 321,266, and in Germany Nov. 24, 1927. 5 Claims. (Cl. 260—154.)

1. The method of producing thymol comprising acting with hydrogen at 120–170° C. in the presence of a hydrogenation catalyst on hydroxythymol, until 2 atoms hydrogen have been combined.

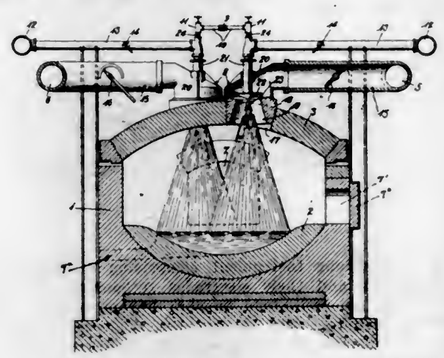
1,812,562. SHUTTLELESS LOOM FOR WEAVING. OLIVER SHIMWELL, Manchester, England, assignor, by mesne assignments, of one-half to Gawsworth Patents Limited, Manchester, England, a British Company, and one-half to Platt Brothers & Company Limited, Oldham, England. Filed Aug. 20, 1929, Serial No. 387,171, and in Great Britain Oct. 17, 1928. 11 Claims. (Cl. 139—126.)



1. In a shuttleless loom, weft gripping and severing devices, means for drawing out the weft thread stretched between the gripping and severing devices into looped form, a weft carrier for carrying the weft thread through the warp shed, frames supporting the drawing out means and a slot and pin connection between the gripping and severing devices and the frame permitting adjustment of said devices for varying the length of the weft loop.

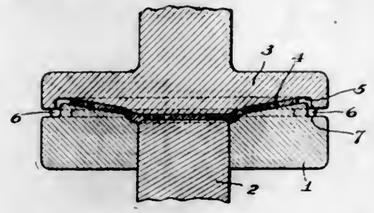
1,812,563. METALLURGICAL PROCESS. KENNETH M. SIMPSON, New York, N. Y., assignor to International Chromium Process Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 24, 1931. Serial No. 517,945. 7 Claims. (Cl. 263—43.)

7. A process of treating material in a furnace comprising placing a charge on a hearth, generating flame from an intimately commingled combustible mixture of fluid fuel and air at a point above the hearth, projecting such flame downwardly in an unobstructed path toward the hearth, regulating combustion conditions to pro-



duce intense flame temperature at points adjacent the hearth, and impinging such flame when moving under a substantial velocity onto the hearth over at least substantially the major portion of the entire surface of the charge.

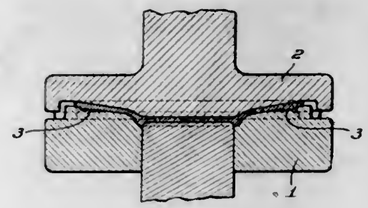
1,812,564. METHOD OF PRESSING GLASSWARE. THEODORE H. SLOAN, Charleroi, Pa., assignor to Macbeth-Evans Glass Company, a Corporation of Pennsylvania. Filed Apr. 9, 1930. Serial No. 442,773. 3 Claims. (Cl. 49—85.)



3. The method of manufacturing finished pressed glassware, consisting of providing between cooperating mold and plunger members of a glass press an article-forming cavity as thick throughout its main body as at and adjacent to its edge, placing in the center of the mold a body of molten glass of less volume than said article-forming cavity; and forming from said glass an article, having a central base portion and a body portion extending upwardly therefrom and as thick throughout its body portion as at and adjacent to its edge, solely by pressing the glass between said press members and thereby causing it to flow towards but not to the outer boundary of the body-forming portion of said cavity and to chill with a permanent convexly rounded and completely finished edge.

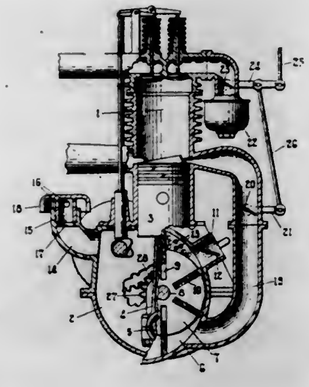
1,812,565. METHOD OF FREE-PRESSING GLASSWARE HAVING IRREGULAR EDGES. THEODORE H. SLOAN, Charleroi, Pa., assignor to Macbeth-Evans Glass Company, a Corporation of Pennsylvania. Filed Apr. 9, 1930. Serial No. 442,774. 2 Claims. (Cl. 49—85.)

2. The method of manufacturing finished pressed glassware having an irregular edge, consisting of forming between plunger and mold members of a glass press a mold cavity of different thicknesses along different lines of flow of glass between said members, placing in the center of the press mold a body of molten glass of less volume than the article-forming cavity between the mold and plunger, and forming an article from said glass solely by pressing the glass between said members and thereby causing it to flow towards but not to the outer boundary of said cavity and to chill with a permanent convexly rounded and completely finished edge, the glass



flowing farther along the thicker paths of flow in said cavity to form said edge irregular in its longitudinal extent.

1,812,566. ENGINE CONTROL AND VENTILATING MEANS. OWEN H. SPENCER, Indianapolis, Ind. Filed Mar. 21, 1929. Serial No. 348,907. 3 Claims. (Cl. 123—75.)



1. The combination with the cylinder and crank case of an engine, said crank case having openings for receiving and discharging air, of a charger chamber attached to the crank case and over the discharge openings in the crank case, a rotatably mounted charger mechanism within said charger chamber, an air passage leading from said charger chamber to said cylinder, a choke valve in said air passage, a carbureter connected with said cylinder, a controlling valve for said carbureter, and means connecting said controlling valve with said choke valve for causing said choke valve to operate coincident with said controlling valve.

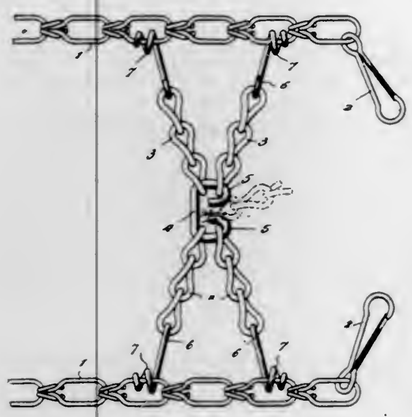
1,812,567. SOLDER FOR ALUMINUM AND ITS ALLOYS. FREDERIC STRASSER, New York, N. Y. Filed Feb. 10, 1930. Serial No. 427,430. 3 Claims. (Cl. 75—1.)

1. A solder for articles of aluminum and aluminum alloys containing 10 to 30% zinc, 7 to 15% aluminum, 1 to 5% copper and 1 to 8% bismuth and the rest tin.

1,812,568. TIRE CHAIN. MILTON E. STREEPY, Altoona, Pa. Filed Apr. 5, 1928. Serial No. 267,731. Renewed Nov. 21, 1930. 2 Claims. (Cl. 152—14.)

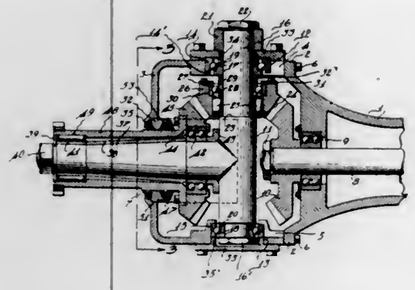
1. An anti-skid device comprising side chains, pairs of short chains arranged in X formation between the side

chains, a S link engaged by and connecting the inner converging ends of the pairs of chains and having ter-



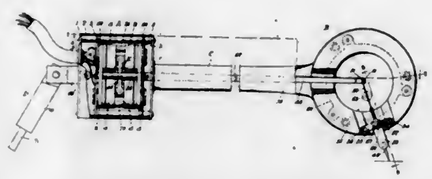
minals normally preventing disengagement of said chains, and links detachably connecting the outer diverging ends of the short cross chains with the side chains.

1,812,569. FRONT WHEEL DRIVE. HOMER B. STUART, Detroit, Mich. Filed June 7, 1929. Serial No. 369,187. 2 Claims. (Cl. 180—43.)



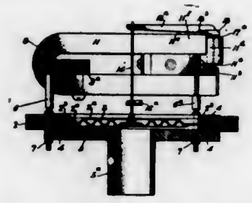
1. A front wheel drive mechanism comprising a semi-circular housing having counter-sunk circular openings formed in the top and bottom walls thereof, a slot formed in the upper wall of said housing and opening into said circular opening, a steering knuckle having its ends projecting into said circular openings, bearing members mounted in the counter-sunk portions of said circular openings and supporting said steering knuckle, a nut mounted upon a screwthreaded portion on the lower end of said steering knuckle and butting against the bearing member received in the counter-sunk opening in the lower wall of said housing whereby upward movement of said spindle is prevented, a cover plate secured to the outer face of the lower wall of said housing to cover said circular opening therein, a cover plate mounted upon the upper wall of said housing and having a circular opening therein permitting the upper end of the steering knuckle to project therethrough, a nut mounted upon the upper end of said steering knuckle and adapted to prevent downward movement thereof by reason of the cover plate on the top wall of said housing, and a spindle formed on said steering knuckle and adapted to project through an elongated opening in the front vertical wall thereof.

1,812,570. MULTIPLEX TRANSMITTER. WILLIAM P. STUNZ, Lansdowne, Md., assignor to Safe Deposit and Trust Company of Baltimore, a Corporation of Maryland, as trustee under the will of George R. Webb. Filed Jan. 6, 1928. Serial No. 244,930. 3 Claims. (Cl. 179—100.41.)



3. A telephone instrument comprising a plurality of transmitters and their electrodes responsive to receive vibrations, an oscillatory member having sets of transmitters, including four in each set, disposed at opposite faces of said member and operatively connected therewith, a Wheatstone circuit in which the transmitters are included, and means for oscillating said member to increase the resistance in a plurality of the transmitters disposed at one face of the member and reduced resistance in a plurality of the transmitters at the opposite face of said members, in alteration, whereby an increased output of current to line, alternating between negative and positive current, is effected.

1,812,571. TELEPHONIC INSTRUMENT. WILLIAM P. STUNZ, Lansdowne, Md., assignor to Safe Deposit and Trust Company of Baltimore, a Corporation of Maryland. Filed May 9, 1928. Serial No. 276,361. 3 Claims. (Cl. 179—108.)

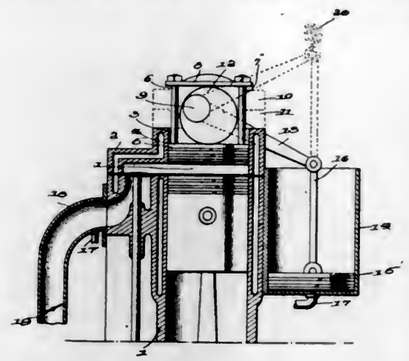


1. In a telephonic instrument, a vibratable diaphragm from which wave producing vibrations are transmitted, a plurality of armatures each fulcrumed on a permanent magnet, lever-arms extending from said armatures and having their free ends connected with the vibratable diaphragm to exert a pull in opposite directions thereon for balancing the diaphragm, and electro-magnets having their cores spaced by an air gap from the magnetically fulcrumed armatures, the windings of one electro-magnet being connected in opposite polarity to the other for action in unison and in the same direction on the diaphragm.

1,812,572. ADJUSTABLE COMBUSTION CHAMBER CONTROL. FRANK A. TALBOT, Greenville, S. C., assignor of forty-four one-hundredths to Henry H. Harris, Greenville, S. C., and eleven one-hundredths to Grahame H. Powell, Washington, D. C. Filed May 11, 1927, Serial No. 190,558. Renewed Oct. 17, 1930. 10 Claims. (Cl. 123—48.)

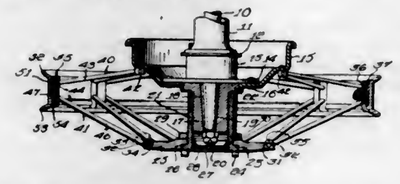
3. In an internal combustion engine having a cylinder and a combustion chamber therein, a movable member bounding a portion of said combustion chamber and adjustable to contract or expand the latter, a suction intake conduit in connection with said chamber, a device having a chamber in connection with said conduit whereby said device is contracted in dependence upon vacuum increases

in the conduit, and a motion transmitting connection between said device and said movable member whereby movements of said device in dependence upon vacuum



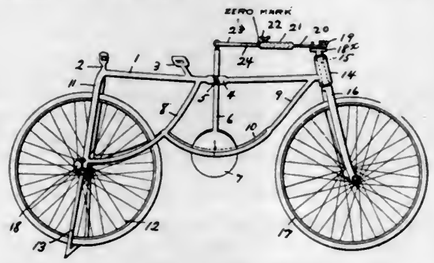
increases in the conduit are positively imparted to the movable member to contract the combustion chamber without the assistance of any force extrinsic to the engine.

1,812,573. VEHICLE WHEEL. MILTON W. THOMPSON, Atlanta, Ga. Filed Aug. 21, 1929. Serial No. 387,426. 1 Claim. (Cl. 301—16.)



In a wheel structure comprising axially relatively movable hub elements, an inboard and an outboard spokes series connected to said hub elements, each of said series comprising spoke elements, and a plurality of rim engaging members having pivotal engagement with the outer radial ends of the spoke elements of each series, each spoke element being provided with a substantially circumferentially arranged end portion, each rim engaging member being provided with a pair of axially spaced substantially circumferentially arranged openings in which the end portions of adjacent spoke elements of each series are received.

1,812,574. WHEELED DEVICE FOR LAYING OFF LAND. GEORGE WASHINGTON THURMOND, Sr., Warrenville, S. C. Filed Aug. 5, 1926. Serial No. 127,427. 2 Claims. (Cl. 33—141.)



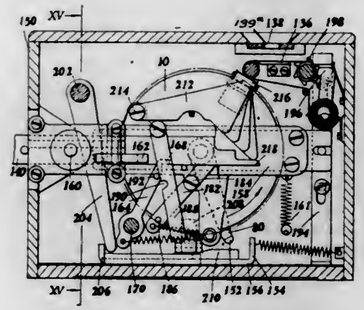
1. A device for use in laying off land, comprising a main frame, a wheel mounted in the rear portion of said frame, handles on the upper rear portion of the frame, a lever fulcrumed at an intermediate point in its length

to the frame, and having a weight on its lower arm, a wheel carrier journaled in the forward portion of the frame and having a lever at its upper end, a wheel carried by said carrier, a rod pivotally connected to said lever and having a sleeve portion equipped with a set screw, a calibrated rod pivotally connected to the upper arm of the weighted lever and telescopically arranged in said sleeve and adapted to be detachably engaged by said set screw, and means carried by the frame and arranged to receive and guide the said weight.

1,812,575. PROCESS OF MANUFACTURING PAPER PULP. HAMILTON D. WAGNON, Palouse, Wash. Filed Feb. 19, 1929. Serial No. 341,277. 1 Claim. (Cl. 92—13.)

The process of manufacturing paper pulp by first cooking the raw material for approximately two hours in a digesting liquid composed of four parts of sal soda to one part of quick lime, diluted to substantially a specific gravity test of two Baumé scale to which is added approximately one gallon of a hydrocarbon oil to each ton of material to be cooked; second subjecting the cooked material to a mechanical separation of the fibrous particles of the material, and thus produce pulp ready for use.

1,812,576. APPARATUS FOR RECORDING THE DELIVERY OF MEASURED QUANTITIES OF LIQUIDS. DANIEL LESLIE WRAY, Shoreham-by-Sea, and HAROLD GUY CHRISMAS, Cranleigh, England. Filed Sept. 8, 1930, Serial No. 480,546, and in Great Britain Sept. 5, 1929. 8 Claims. (Cl. 234—34.)

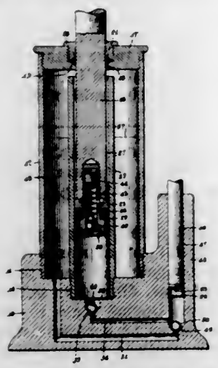


1. In combination with a liquid-measuring delivery pump, recording mechanism comprising a type wheel, means for rotating said type wheel step-by-step against resilient restraint to set the type thereof, a pivoted lever constituting a manually operable actuating member and adapted when operated to move the type wheel bodily, a detent for the lever, a notch in the lever to receive the detent, a spring urging said detent into a non-detaining position, a projection on the type wheel adapted to engage said detent when the type wheel is in the zero position and to hold it in lever detaining position and a paper support to receive the impress of the type when the type wheel is moved bodily as aforesaid.

1,812,577. LIFTING JACK. HERMAN ALBERTINE, East Rutherford, N. J., assignor to Rogers Products Company, Inc., a Corporation of New Jersey. Filed Apr. 27, 1928. Serial No. 273,190. 8 Claims. (Cl. 138—9.)

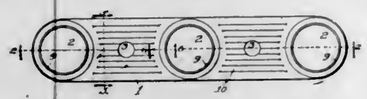
1. A jack, including an oil reservoir, a cylindrical member constituting the inner wall of said reservoir, a piston in said cylindrical member having a stem guided in said reservoir, a pump for delivering oil from the reservoir

to the interior of said cylindrical member, a safety valve in the lower end of said piston to permit escape of oil when the pressure exceeds a predetermined limit, and means for regulating said safety valve to determine the



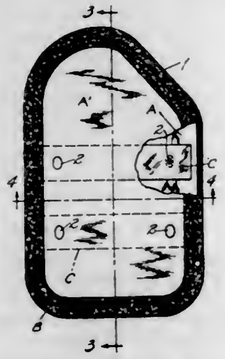
pressure at which it is to be operated, said safety valve and regulating means being a removable unit structure so that it can be separately adjusted for the desired pressure limit while removed from the jack.

1,812,578. GASKET. CLAUDE B. BAILEY, Wyandotte, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed May 20, 1926. Serial No. 110,322. 2 Claims. (Cl. 288—1.)



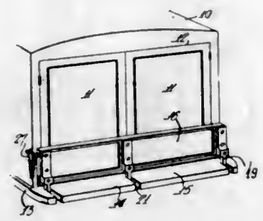
1. A manifold gasket having an elongated body portion of a single layer of sheet metal with stud openings and port holes therein spaced apart lengthwise of the body layer, means carried by the body layer immediately about the respective port holes and formed entirely of sheet metal to provide the pressure receiving and joint sealing sections of the gasket, and corrugations in the body layer between and entirely outside of said sections to stiffen the layer against bending and distortion.

1,812,579. ATHLETIC GUARD. WALTER E. BISCHOFF, St. Louis, Mo., assignor to Rawlings Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 2, 1929. Serial No. 411,080. 3 Claims. (Cl. 2—22.)



3. An athletic guard composed of a plurality of members curved in transverse cross section and arranged in nested relation, said members being formed of relatively hard, non-metallic sheet material, and a metallic reinforcing means arranged wholly on the interior of the guard between adjacent curved members and attached to one of said members.

1,812,580. VEHICLE AND TAILBOARD CONSTRUCTION. FREDERICK O. BLACK, Jersey City, N. J. Filed Mar. 5, 1929. Serial No. 344,242. 4 Claims. (Cl. 296—57.)



1. In a vehicle body construction, the combination with the floorboard, of a tailboard hingedly mounted thereto, hinge sections for said tailboard connected to said tailboard and floorboard, respectively, said sections including a common pivot inwardly of the rear end of the floorboard, guiding the inner edge of the tailboard in substantially close contact with the end of the floorboard in the horizontal position of the tailboard to form a smooth and continuous surface and locating the tailboard inwardly of the floorboard rear end in the vertical position of the tailboard whereby the floorboard end forms a bumper or guard for the tailboard.

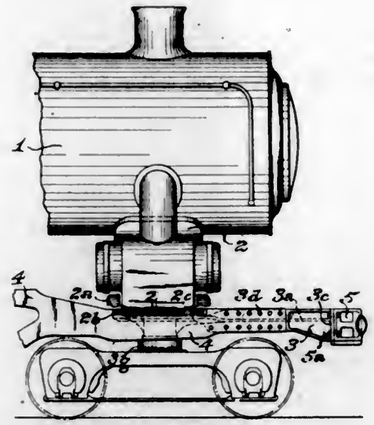
1,812,581. TIMEPIECE WINDING MECHANISM. MARCEL BLOCH, Paris, France. Filed July 12, 1929, Serial No. 377,743, and in Switzerland June 25, 1929. 4 Claims. (Cl. 58—80.)



1. A time-piece comprising a movement and a rotatable winding stem having a portion thereof provided with a screw thread, and a casing within which said movement is mounted, said casing comprising a relatively stationary member and a relatively movable member, a nut engaged on said screw threaded portion of the winding stem, means preventing the nut from turning on the screw thread but permitting the nut to move axially therealong, and means provided on said relatively movable member of the casing and arranged to act on the nut to cause rotation of the winding stem when the member is moved.

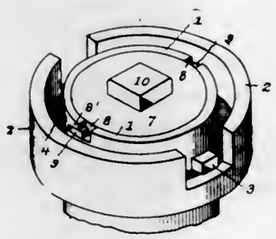
1,812,582. LOCOMOTIVE FRAME. JAMES G. BLUNT, Schenectady, N. Y. Filed July 12, 1928. Serial No. 292,191. 8 Claims. (Cl. 105—172.)

8. In a locomotive the combination of a cylinder saddle; and an under frame comprising frame main side members, a transverse plate tying the side members together disposed in advance of the saddle, a plate extending from the first plate rearwardly thereof beneath the saddle for supporting the saddle and of less width than the distance between



the side members providing open spaces between the sides of said extending plate and the respective side members, and a center pin depending from the extending plate.

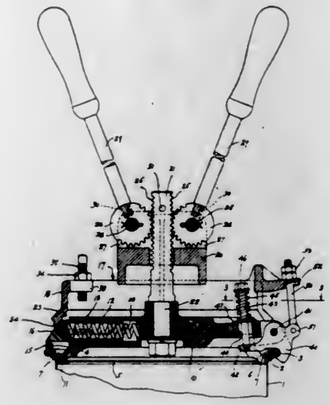
1,812,583. HOUSE DRAIN FITTING. SILVESTRO CAVALIERI, Chicago, Ill. Filed Apr. 9, 1930. Serial No. 442,977. 1 Claim. (Cl. 281—31.)



In a house drain, the combination of a drain pipe having an expanded annular inlet head adapted for arrangement with its top surface on a level with the floor surface, the vertical wall of said expanded inlet head being cut away at points to form passages therethrough, a drain fixture the main housing of which is of a circular form and of a less diameter than the inner diameter of said entry head to provide an annular space for the reception of a body of connecting concrete having bonding engagement through the aforesaid wall openings with the concrete material of the floor of the house, said main housing having lugs extending from its perimeter for bearing upon the offset bottom wall of the aforesaid inlet head.

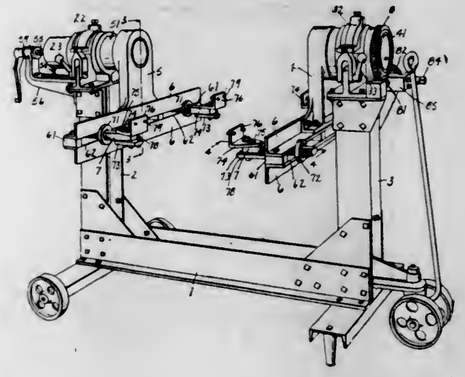
1,812,584. CONTAINER CLOSING MACHINE. ALFRED J. CHAMBERLAIN, Milwaukee, Wis. Filed Oct. 6, 1927. Serial No. 224,330. 11 Claims. (Cl. 113—18.)

1. A machine for securing a cover to a container by appropriately bending securing elements and comprising a base, dies slidable on the base for initially bending the securing elements, an actuating member for the dies, cooperating means between the dies and actuating member for imparting operative movement to the dies when the



actuating member is appropriately moved, and a die on the actuating member for imparting final bending movement to the securing elements.

1,812,585. ENGINE STAND. JAMES G. COLLINS, Kalamazoo, Mich., assignor to Atlas Press Company, Kalamazoo, Mich. Filed Sept. 21, 1928. Serial No. 307,367. 3 Claims. (Cl. 29—89.)

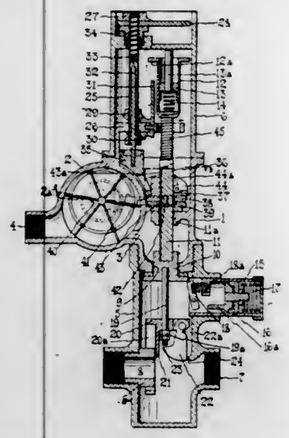


3. In an engine stand, the combination of a suitable base with standards, trunnion clamping crossheads each comprising a pair of clamp jaws carried thereby the trunnions of one of which is adjustable longitudinally, and an axially disposed adjusting screw for such adjustment, as specified.

1,812,586. APPARATUS FOR CONTROLLING THE PASSAGE OF WATER TO SPRAYERS AND THE LIKE. DONALD ELDER, Onehunga, New Zealand. Filed May 21, 1928. Serial No. 279,510. 31 Claims. (Cl. 137—144.)

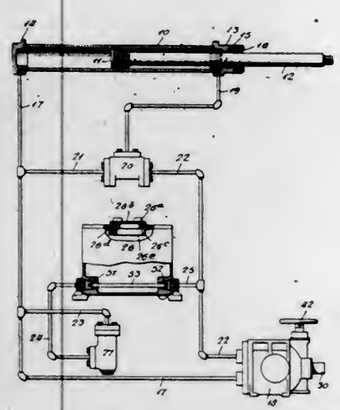
31. In an automatic water cut-off device, a body with a passage therethrough affording a water inlet and an outlet, a valve across said passage, means rotated by water flowing through said passage arranged for automatically

closing said valve after a predetermined time of opening, and a hydraulic plunger operatively associated with said



valve in a manner to slow down the final closing movement of said valve and for stopping the rotation of said means by closure of the valve.

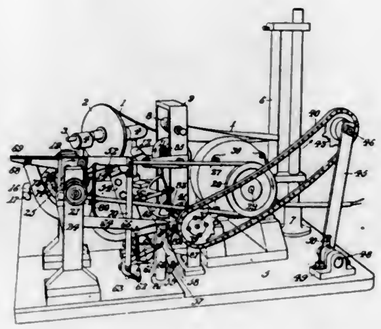
1,812,587. DRIVING MECHANISM. ARTHUR L. ELLIS, New Rochelle, N. Y., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 27, 1929. Serial No. 358,599. 9 Claims. (Cl. 60—52.)



1. In a hydraulic drive for a reciprocating member, a fluid pressure cylinder and differential piston adapted to develop a working stroke in the direction of its larger end, a reversible pump for supplying fluid under pressure to either end of said cylinder, pipe lines connecting said pump and cylinder, and a spring pressed valve located in the pipe line under suction during the working stroke of the piston to maintain a back pressure on said piston during said working stroke and thereby insure a smooth working action of said piston.

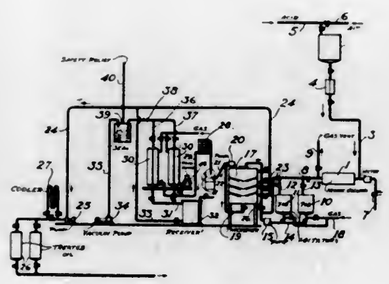
1,812,588. INK RIBBON WINDING AND MEASURING MECHANISM. ARTHUR L. FOSTER, Middletown, N. J., assignor to Manifold Supplies Company, Brooklyn, N. Y., a Corporation of New York. Filed July 7, 1927. Serial No. 203,960. 15 Claims. (Cl. 33—137.)

4. In ink ribbon winding and measuring mechanism; the combination with a winding shaft; of a ribbon spool; a clutch carried by said shaft; means on said shaft arranged to detachably engage and turn the ribbon spool; a motor arranged to turn said shaft; a chain driving wheel; a roller arranged to be traversed and turned by the ribbon being wound; and means operatively connecting said roller with said chain driving wheel; whereby said chain driving wheel is arranged to be driven by power from said motor, conveyed by the ribbon being wound; an idle chain wheel; an endless chain supported by said chain wheels; means, including a lever linkage and a stop link in said chain,



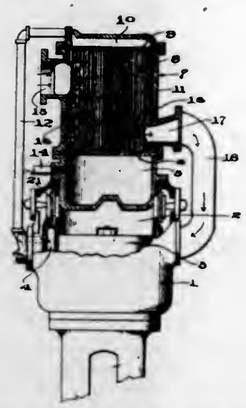
arranged to stop the winding operation of said shaft, at intervals determined by the circumferential length of said chain, and thereby determine the length of ribbon wound by said spool; a movable ribbon gauge permitting passage of a normal ribbon without movement of said gauge, but movable by engagement with an abnormal portion of the ribbon; and means operatively connecting said gauge with the winding shaft stop mechanism; whereby the winding operation is stopped upon presentation of a defective portion of ribbon at said gauge.

1,812,589. CARBONACEOUS PRODUCT. RALPH T. GOODWIN, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Feb. 18, 1926. Serial No. 89,059. 7 Claims. (Cl. 196—149.)



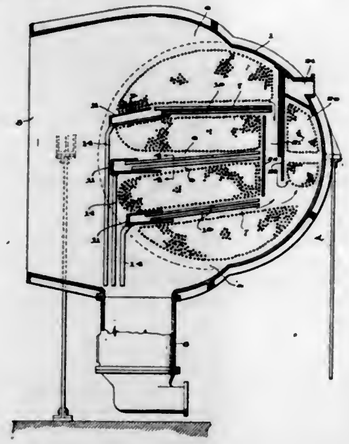
1. As a new article of manufacture, carbonaceous material precipitated by a dilute acidic reagent from heavy residues of hydrocarbon oil cracking, characterized by a fusing point between about 160° and 230° C., and being about 15 to 30% soluble in carbon disulfid.

1,812,590. PRECOOLER FOR VACUUM PUMPS. JOHN F. GRACE, Arlington, N. J., assignor to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Oct. 18, 1930. Serial No. 489,501. 8 Claims. (Cl. 230—208.)



1. The combination, of a vacuum pump having a water jacket, a precooler of the surface type embodying circulating cooling water tubes for cooling air or gas prior to its entrance into the pump, said precooler having water chambers at the ends of the tubes, one of said water chambers being a part of the water jacket of said pump.

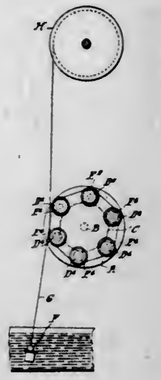
1,812,591. CONDENSER. JOHN F. GRACE, Arlington, N. J., assignor to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Nov. 26, 1930. Serial No. 498,233. 14 Claims. (Cl. 257—43.)



1. In a steam condenser, a shell having an exhaust steam inlet, a plurality of water circulating tubes in said shell and a plurality of condensate collecting and conducting channels in the shell for leading condensate towards said steam inlet.

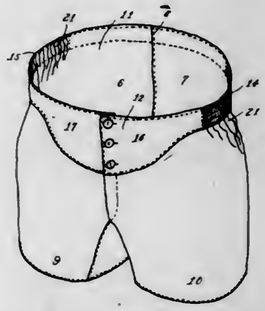
1,812,592. MEANS FOR STRETCH-SPINNING ARTIFICIAL FILAMENTS. CONRAD HERRMANN, Wuppertal-Elberfeld, Germany, assignor to American Glanzstoff Corporation, New York, N. Y. Filed May 8, 1930, Serial No. 449,413, and in Germany Apr. 29, 1930. 5 Claims. (Cl. 18—8.)

4. An apparatus for conditioning artificial silk, comprising a spinning nozzle, a thread assembling device, three or more drawing rollers between the spinning nozzle and the assembling device, said drawing rollers having individual driving gears contacting with a common circular driving



gear and being adapted to be rotated by said circular driving gear at progressively increasing peripheral speeds around the group.

1,812,593. GARMENT. PETER K. KARBERG, Dubuque, Iowa, assignor to H. B. Glover Company, Dubuque, Iowa, a Corporation of Iowa. Filed Apr. 27, 1929. Serial No. 358,475. 5 Claims. (Cl. 2—237.)

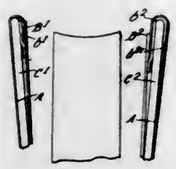


1. In an article of the character described having a waist portion of inelastic fabric, a waistband for said waist portion comprising inelastic fabric back and front portions, and elastic web members superimposed on the outside of the waist portion between said back and front portions arranged to lie at the sides of the waist portion, the normal length of said waistband being less than the corresponding length of the waist portion, the excess of fabric in the waist portion being gathered between the ends of each of said elastic members, longitudinal stitches smoothly connecting the elastic members and the fabric of the waist portion when the former are in their stretched condition, the fabric being drawn up thereby in a gathered manner when the elastic members are in their normal condition, whereby the fabric is caused to fold and unfold with contraction and extension of the elastic members.

1,812,594. REMOVABLE BOOK COVER. LEWIS GEORGE KITCAT, London, England. Filed May 27, 1930, Serial No. 456,046, and in Great Britain June 24, 1929. 7 Claims. (Cl. 281—34.)

1. A removable book over, comprising a sheet of flexible material adapted for disposal around the permanent covers and back of a book, and stiffening elements on the terminal parts of said removable cover for disposal inside of said

permanent covers, the removable cover being of such a size as to permit one of the stiffening elements being turned



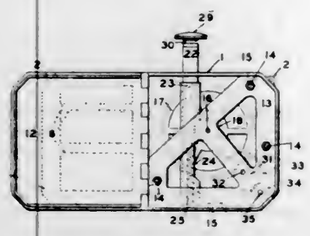
underneath that part of the removable book cover which lies on the inner side of the permanent cover of the book when the removable cover is in position.

1,812,595. SASH VENTILATOR. CARL H. LARSON, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 6, 1928. Serial No. 310,754. 7 Claims. (Cl. 98—97.)



1. In a sash ventilator, a hollow sheet metal sash rail provided with openings in the walls thereof, two spaced sheet metal plates positioned in the rail against the walls thereof and provided with openings therein for registration with the openings in the walls of the rail, spring means for maintaining the plates against the walls of the rail independent of the distance between the walls, and means for shifting the plates to move the openings therein into or out of register with the openings in the walls of the rail.

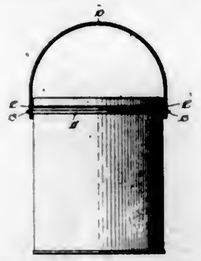
1,812,596. FAN. ADAM LEIMBACH, St. Louis, Mo. Filed Jan. 20, 1930. Serial No. 422,001. 2 Claims. (Cl. 230—241.)



2. In a device of the class described, the combination with an oblong flat casing forming a vanity case and adapted to be grasped in the palm of the hand, of driving gearing contained in one end of said casing, a compartment for a fan in the other end of said casing, a detachable fan driven by said gearing and adapted to be stored in said casing, a reciprocating operating stem projecting from one side of said casing, and a thumb button said stem, said button being rotatable to lock the stem in retracted position.

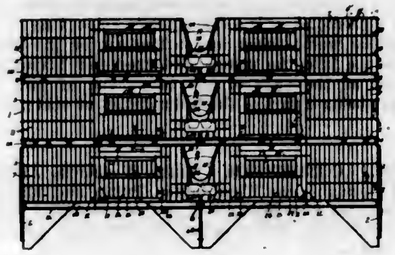
1,812,597. BAIL AND METHOD OF APPLYING SAME. WALTER F. LUSK and WILLIAM H. POTTER, Chicago, Ill., assignors to Armour & Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 29, 1929. Serial No. 350,972. 8 Claims. (Cl. 140—93.)

1. As a new article of manufacture, a bail having elongated loops adjacent the ends thereof, which loops are adapted to be forced into circular shape, and pail-embracing means having portions which are adapted to



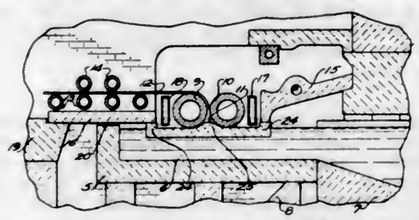
interlock with the loops, when the latter are made circular to permit the bail to be swung into any position without disturbing the interlock.

1,812,598. CAGE OR COOP. LYNN W. MACOMBER, Battle Creek, Mich., assignor to United Steel & Wire Company, Battle Creek, Mich. Filed July 18, 1929. Serial No. 379,129. 16 Claims. (Cl. 119—17.)



1. In a structure of the class described, the combination of front, rear and end walls pivotally connected at their corners to permit collapsing, the front and rear walls comprising vertically spaced panels, each including slats and horizontal bars, foraminate floors provided with supporting bars having hooks at their ends engageable with horizontal bars of said front and rear walls, said horizontal bars being adapted to be sprung to permit engagement of said hooks whereby the floors are detachably supported and the walls retained in erected position, dropping board supporting rods having hooks at their ends engageable with horizontal bars of the front and rear walls and disposed in a rearwardly inclined position, dropping boards supported by said rods below said floors, and cleaning troughs mounted on the rear wall in operative relation to said dropping boards.

1,812,599. APPARATUS FOR PRODUCING SHEET GLASS. LUKE C. MAMBOURG, Lancaster, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 6, 1927. Serial No. 217,585. 20 Claims. (Cl. 49—33.)



1. In sheet glass apparatus, a receptacle containing a mass of molten glass, a pair of rotatable rolls mounted

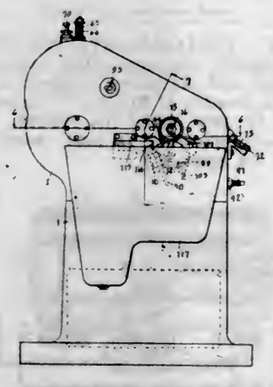
thereover and arranged to create a sheet forming pass, and a pair of non-metallic refractory members arranged within the molten glass contained in said receptacle, one of said members being positioned under the rolls at one side of the receptacle and the other of said members being placed in a similar position at the opposite side of the receptacle, said refractory members being provided for controlling the movement of glass toward the ends of the sheet forming pass between the rolls.

1,812,600. STOCK QUOTATION INDICATOR. HARRISON S. MARTIN, Brooklyn, N. Y. Filed Apr. 12, 1930. Serial No. 443,697. 5 Claims. (Cl. 40—96.)



1. An indicator for quotation of stocks and the like comprising a face plate having an elongated opening therein, two bracket arms extending rearwardly from the face plate on opposite sides of the opening, two shafts spanning the bracket arms parallel to the face plate, one immediately back of the face plate and the other spaced rearwardly therefrom, a plurality of polygonal pulleys loosely mounted on the front shaft and a corresponding number of like pulleys loosely mounted on the rear shaft, the front and rear pulleys being disposed in aligned pairs and each front pulley having a continuous flange at one end projecting through the opening in the face plate and available for manipulating the pulley, and a belt composed of linked sections disposed over each pair of pulleys and spaced from the adjacent belt by said flange, the linked sections corresponding in length to the polygonal faces of the pulleys.

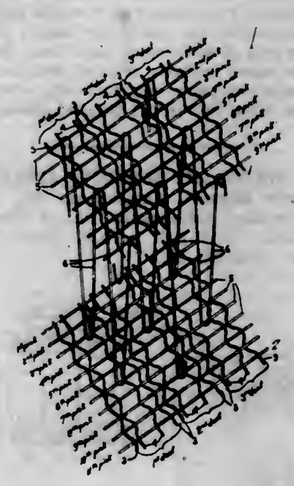
1,812,601. MILLING AND DRILLING MACHINE. GEORGE MELLING, Jackson, Mich. Filed Nov. 19, 1928. Serial No. 320,241. 30 Claims. (Cl. 29—33.)



1. In a machine of the class described, the combination of a rockshaft provided with an arm, an oscillating work holder carried by said rockshaft, a cutter unit comprising a shaft disposed parallel with said rockshaft, a drilling unit and a reaming unit, each comprising axially movable spindles disposed on opposite sides of said cutter shaft and parallel therewith, feed levers for said spindles, a cam shaft, cams on said cam shaft coacting with said levers whereby their actuation is timed, means for driving said cam shaft comprising a worm gear thereon, a shaft carrier pivotally mounted on said cutter shaft, a shaft carried by said carrier and provided with a worm coacting with said worm gear, said worm and cutter shafts having coacting beveled gears thereon, a spring acting to return said carrier to worm disengaging position, a toggle comprising a pair of pivotally connected links, one of which is pivotally connected to said carrier and provided with a projecting arm, the other being pivoted to a support, a pivoted lever, a link connecting said lever to said arm on said rockshaft, a cam on said cam shaft coacting with said lever and having portions acting to quickly shift the work holder from one tool unit position to another, dwell portions giving the work holder periods of rest in drilling and reaming positions, and eccentric portions imparting a feeding movement to the work holder in cutter unit position, manually operated means for actuating said toggle, and a trip carried by said cam shaft coacting with said arm on said toggle link.

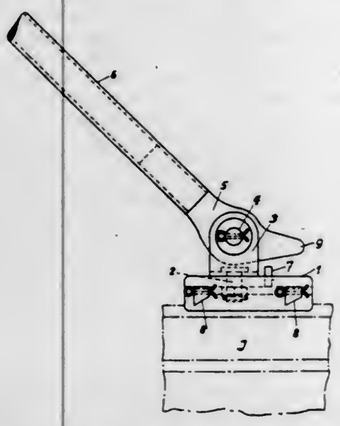
26. The combination of a movable work holder, a plurality of tool units operatively associated with said work holder and disposed along the path thereof, means for actuating said work holder comprising a cam having portions acting to shift the work holder from one tool unit position to another, a dwell portion permitting the work to rest in operative relation to one of said tool units and a portion imparting a feeding movement to said work holder relative to another of said tool units.

1,812,602. PILE FABRIC AND METHOD OF MAKING THE SAME. HORACE MELLOR, Sanford, Me., assignor to Sanford Mills, Sanford, Me., a Corporation of Maine. Filed Dec. 30, 1929. Serial No. 417,339. 3 Claims. (Cl. 139—397.)



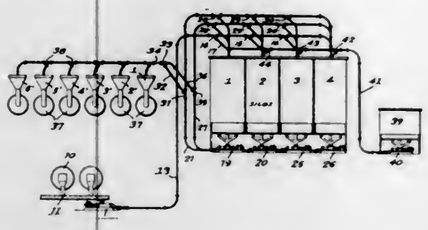
1. The method of making a double pile fabric containing both tight warp threads and slack warp threads in each fabric, which consists in arranging both the tight warp threads and the slack warp threads in pairs with the pairs of slack warp threads alternating with those of the tight warp threads, interweaving the tight warp threads and slack warp threads with filling threads and in so doing forming the successive sheds in the two fabrics so that in each shed of both fabrics all the slack warp threads will be in one part of the shed and all the tight warp threads in the other part of the shed and in the corresponding sheds in the two fabrics both the slack warp threads and the tight warp threads of one fabric will be in the opposite part of the shed from what they are in the other fabric, and passing the pile warp threads from one fabric to the other so that each pile thread will be looped about every fourth filling thread in each fabric between the slack warp threads of a pair.

1,812,603. IMPLEMENTS FOR MOVING RAILWAY WAGON. GOTTFRIED MEYER, Zurich, Switzerland, assignor to Arnold Krebs, Zurich, Switzerland. Filed Nov. 8, 1928, Serial No. 317,932, and in Switzerland June 26, 1928. 1 Claim. (Cl. 254—36.)



A device for moving railway cars, comprising a slide plate, a bracket therefor, a two armed lever, a horizontal shaft journaled in said bracket and about which said lever oscillates, and two stop members trapezoidal in cross section and disposed transversely of the slide plate, the front member being positioned nearer the middle plane passing through the axis of rotation of said lever than the rear member, the upper surfaces of both members lying in a common horizontal plane and both rear surfaces of the top members being in vertical parallel planes.

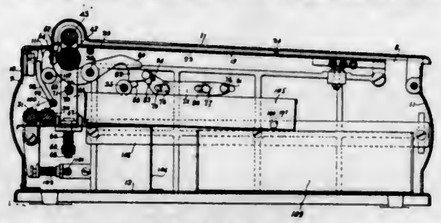
1,812,604. MIXING AND BLENDING SYSTEM. JOSEPH HUMPHREYS MORROW, Catasauqua, Pa., assignor to Fuller Company, Catasauqua, Pa., a Corporation of Pennsylvania. Filed Oct. 3, 1928. Serial No. 310,011. 30 Claims. (Cl. 83—78.)



1. A method of mixing and blending pulverulent materials which comprises delivering materials to a plurality of bins consecutively to form a series of relatively thin horizontal layers of varying analysis in each bin, withdrawing materials simultaneously from a pair of said bins and delivering them to a discharge bin to form a relatively thin horizontal layer therein, and varying the withdrawal to include all of said bins first mentioned in consecutive pairs.

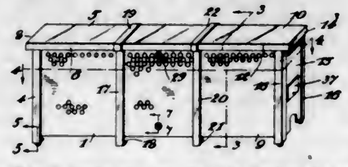
1,812,605. AUTOGRAPHIC REGISTER. FRANK E. PFEIFFER, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed July 24, 1929. Serial No. 380,502. 12 Claims. (Cl. 282—16.)

2. In an autographic register, a pair of spaced, separated, knurled ejecting rolls, a pair of spaced yieldingly positioned aligning pins associated with a pair of said knurled rolls and adapted to turn freely with respect thereto, cam associated with said pins for engaging portions of the other of said rollers to spread said roller one from the other, means to cause said rollers to turn together, an operating means therefor, yielding means for yieldingly resisting the relative rotation between said pins and associated knurled rollers, movable stop mem-



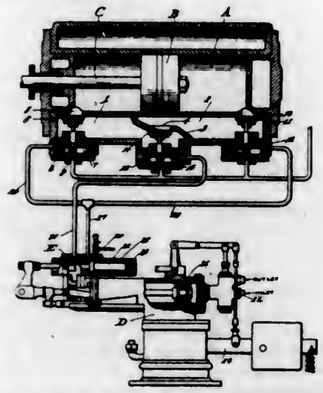
bers arranged in the path of said cam members to maintain them in spreading position, an operating handle for said rolls, cam means associated therewith for rendering said cam stopping means inoperative at a predetermined point in the cycle of operation and an independent manually operated means for rendering said stopping means inoperative for a complete cycle of operation.

1,812,606. RADIATOR INCLOSURE. KENNETH L. PORTER, New Rochelle, N. Y. Filed Nov. 1, 1928. Serial No. 316,492. 11 Claims. (Cl. 237—79.)



1. A radiator inclosure of the character described, including in combination, a plurality of sections adapted to telescope one within the other, a leg formation at the telescoping end of one of said sections, and means for securing said sections together.

1,812,607. VARIABLE CAPACITY COMPRESSOR. MICHAEL RIESNER, Cincinnati, Ohio, assignor to Worthington Pump and Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed Sept. 17, 1926, Serial No. 136,008. Divided and this application filed Sept. 26, 1928. Serial No. 308,359. 5 Claims. (Cl. 230—21.)



1. In a variable capacity compressor, the combination with a cylinder, of a plurality of clearance chambers, and

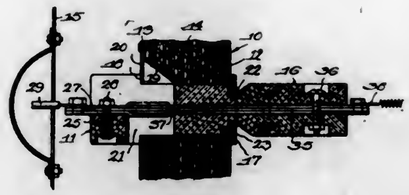
pressure controlled means for partially unloading said cylinder by simultaneous opening of said clearance chambers to the cylinder, and for wholly unloading the cylinder by opening the clearance chambers to each other.

1,812,608. ELECTRO-SURGICAL INSTRUMENT AND CONTROL. DONALD E. ROBERTS, Milwaukee, Wis. Filed Oct. 24, 1929. Serial No. 402,137. 1 Claim. (Cl. 174—89.)



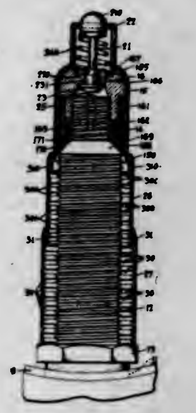
An electro-surgical instrument and control consisting of a suitable instrument handle to which is hinged an insulated arm carrying a wiping contact which slides in contact with a rheostat which is secured approximately at right angles to the instrument handle, in combination with a magnetically operated spark-gap; and operated by manual pressure of the surgeon's operating hand pressing upon the insulated arm of the rheostat, thereby opening the spark-gap, allowing current to flow to the operating instrument.

1,812,609. SEPARABLE ELECTRIC CONNECTER. FREDERICK W. ROGERS, Beaver Dam, Wis. Filed June 24, 1929. Serial No. 373,275. 8 Claims. (Cl. 173—361.)



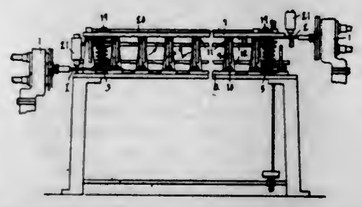
1. A plug receptacle comprising an insulating body having an enlarged rear end forming abutment shoulders, a portion of said end intermediate said shoulders being removed to provide a transverse support, said receptacle having a vertical opening therethrough, the forward portion of said receptacle having a horizontal passage extending rearwardly from the forward end and terminating at said vertical opening in alignment with a stationary contact, and a removable plug member having an extended contact adapted to be passed through said passage into said opening for connection with said stationary contact member.

1,812,610. AUXILIARY APPARATUS FOR TIRE VALVES. WILLIAM R. ROYER, Wyoming, Pa. Filed Aug. 10, 1929. Serial No. 384,909. 3 Claims. (Cl. 152—12.)



1. A valve cap for tire valve stems adapted to seal a valve stem when applied thereto and comprising in combination, a hollow metallic cap member provided with a threaded nut portion adapted to screw upon the threaded nipple of a valve stem, a resilient washer mounted in said member, said washer having a normally smooth bore adapted to be threaded by the threaded nipple of the valve stem to which the cap member is applied, a slidable valve rod mounted in said cap member, extending through said washer and guided in its sliding movements by said washer and adapted when depressed to open the valve within the tire valve stem to which the cap member is applied, to permit inflation of the tire without removal of the cap member from the stem, and a valve member on said valve rod within the cap member and adapted to seat against said washer normally to prevent escape of air through said washer.

1,812,611. MACHINE AND METHOD FOR ASSEMBLING SPRINGS. GEORGE A. STACKHOUSE, Oakland, Calif., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich. Filed Mar. 5, 1930. Serial No. 433,245. 7 Claims. (Cl. 140—3.)

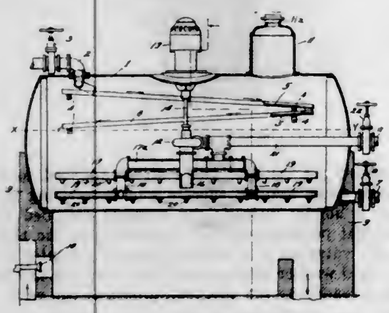


1. The method of assembling helical springs having end coils terminating in laterally disposed tie members and having offsets in such end coils opposite the tie members consisting of wrapping the tie members about the offsets of adjacent springs in open spiral coils, disposing the offsets of the connected springs in a chuck with the reaches of their offsets in alined relation, the chucks having spiral grooves therein, and rotating and advancing a spiral spring cross member in said chuck whereby it is engaged with the said offsets, the coils of the time member being spaced to receive the coils of the cross member between them.

4. In a spring assembling machine, the combination of chucks adapted to receive a plurality of connected spaced pairs of springs, one spring of each pair having an offset therein and the other a tie member spirally wound about

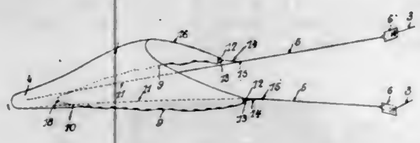
said offsets, said chucks comprising outer chuck members having longitudinal channels therein, and a plurality of coacting chuck members pivotally mounted between said outer chuck members to swing to a transverse position between said outer chuck members, said chucks being spirally grooved and adapted to receive and guide a helically coiled spring cross member rotated and advanced therein into engagement with the offset portions and tie members of said body springs within the chuck.

1,812,612. PROCESS AND APPARATUS FOR REFINING OILS. CHARLES WALCOTT STRATFORD, San Francisco, Calif. Filed Nov. 24, 1926. Serial No. 150,488. 5 Claims. (Cl. 196—68.)



5. An oil still comprising a circulating system entirely contained therein operating at relatively higher pressure than the still, an inlet oil supply line and a discharge pipe connected with the pressure circulating system.

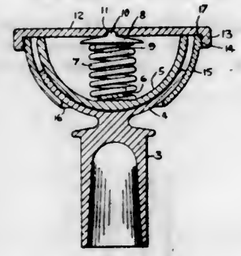
1,812,613. TRAWLING GEAR. JEAN BAPTISTE JOSEPH ALPHONSE VIGNERON, La Rochelle, France, assignor to V. D. Limited, London, England. Filed Nov. 22, 1929, Serial No. 409,065, and in France Dec. 4, 1928. 8 Claims. (Cl. 43—9.)



2. A sea bottom trawling gear comprising in combination: towing means, two shear boards connected with said towing means for spreading the gear in width, two dragging cables of great length connected with said shear boards, a net connected to said dragging cables, said net comprising a rear pocket and a covering sheet and having no belly nor foot rope, traction cables attached to said rear pocket at one end to said dragging cables at the opposite end, and weighted slack cables bordering the lower edges of said covering sheet and so connected with said traction cables as to be relieved from traction stresses.

1,812,614. TRIPOD HEAD PARTICULARLY ADAPTED FOR USE IN CONNECTION WITH A PORTRAIT CAMERA. ANTONIUS J. VIKEN, Jackson Heights, New York, N. Y., assignor to Underwood & Underwood, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 22, 1928. Serial No. 314,128. 2 Claims. (Cl. 248—47.)

1. In a portrait camera tripod the combination of a shank terminating at its upper end in a segmental spherical cup, a semi-spherical cup member seated in said first cup, a projecting nib in the center of the interior of said cup member, a heavy compression spring mounted over said nib, a bearing cap carried on the upper end of said

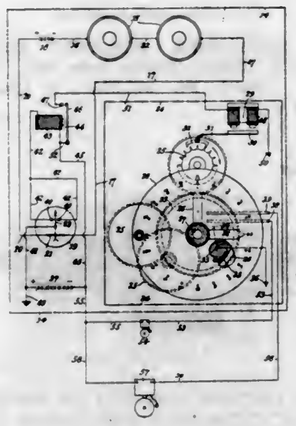


spring, said cap seating in a bearing in the center of a circular cover plate, a downturned edge on said plate internally threaded and engaged by an externally threaded semi-spherical cup member with its lower portion cut away.

1,812,615. SULPHONATED SUBSTANCES AND PROCESS OF PREPARING THE SAME. EUGENE WOLGAMUTH WALL, Philadelphia, Pa., assignor to Kali Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 23, 1929. Serial No. 349,522. 8 Claims. (Cl. 87—16.)

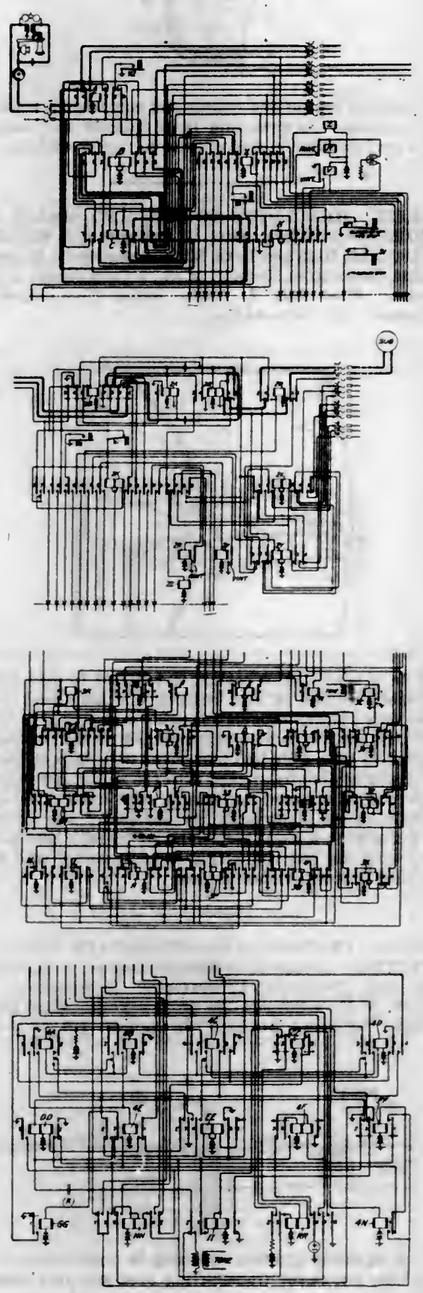
1. The process of producing a substance which will form a soluble compound with salts of the alkaline earth of hard waters, consisting in adding ethanolamines to sulphonated oils.

1,812,616. AUTOMATIC SOUND SIGNALING AND REGULATING SYSTEM FOR MICROPHONES USED IN ELECTRIC ALARM SYSTEMS. JOHN P. WILLIAMS, Bayside, N. Y., assignor to Duplex Electric Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 8, 1927. Serial No. 218,351. 3 Claims. (Cl. 177—314.)



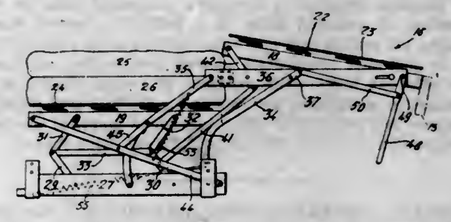
1. A microphone protective system of the class described for a structure to be protected, comprising a microphone sound detector located in a position to be actuated during a burglarious attack, a relay in circuit with said microphone, movable means controlled by said relay responsive to both intermittent and continuous vibrations of said sound detector, and an alarm circuit controlled by said means to actuate said alarm only after a predetermined movement of said means.

1,812,617. TELEPHONE EXCHANGE SYSTEM. JOHN H. E. BAKER, Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 20, 1930, Serial No. 429,945, and in Great Britain Feb. 21, 1929. 24 Claims. (Cl. 179—18.)



2. In an automatic telephone system, a first switch having a plurality of wiper sets, a second switch having a plurality of wiper sets, a first control circuit associated with said first switch, a second control circuit associated with said second switch, means for registering in said first control circuit two digit series dialed thereinto, means for selecting a wiper set in said first switch in accordance with the registration of the second digit of said two digit series, a trunk line connecting said first switch with said second switch over said selected wiper set, means in said first control circuit for transmitting special signals over said trunk in accordance with the registration of said two digits, means in said second control circuit for registering said special signals and means in said second control circuit for selecting a wiper set in said second switch in accordance with the registration of said signals.

1,812,618. FOLDING BED. HERMAN BLASE and KENNETH B. COWAN, New York, N. Y.; said Cowan assignor to said Blase. Filed Aug. 2, 1929. Serial No. 383,044. 3 Claims. (Cl. 5—22.)



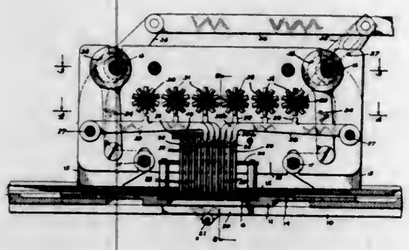
2. In a foldable bed comprising a base, a collapsible bed section, including a frame, collapsible links disposed between said base and said frame, a second bed section having a frame and an arm pivoted thereto, a pair of struts terminally pivoted on said base and on said arm, said second bed section being upwardly swingable on said struts, a lever pivoted on said arm, one arm of said lever pivoted on said latter frame, and a link terminally pivoted on said collapsible links and on the opposite arm of said lever for rocking said latter frame on swinging movement of said second bed section, substantially as and for the purpose described.

1,812,619. SOUND REPRODUCTION. DAVID G. BLATTNER, Bogota, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 24, 1928. Serial No. 256,502. 7 Claims. (Cl. 181—24.)



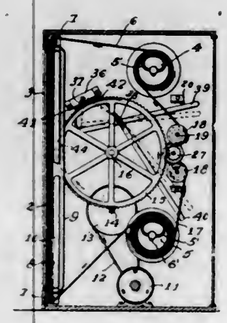
1. The combination with a phonograph pick up device adapted to be held in the hand of an operator, of acoustic stethoscopic means for conducting the sound waves set up in the device to the ears of the operator.

1,812,620. PUNCHING DEVICE. OTTO E. BRAITMAYER, New York, N. Y., assignor to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed July 5, 1923. Serial No. 649,415. 6 Claims. (Cl. 164—111.)



1. A punching device comprising a plurality of groups of punches adapted to designate numerical data by the location of punched holes in a field of a record sheet, means for setting and operating said punches consecutively to perforate consecutive number designating punchings on adjacent index point columns of record sheets, upon successive operations, and means for shifting said punches transversely relative to the record sheet material whereby the punching may be effected in different fields thereon.

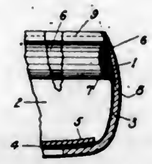
1,812,621. MOVABLE SIGN EXHIBITOR. SOLOMON CALLER, Chicago, Ill. Filed Mar. 29, 1928. Serial No. 265,547. 12 Claims. (Cl. 40—31.)



1. In an advertising device, the combination of a casing having an opening, a pair of spools within the casing, a sign strip connected to the spools and adapted to be wound off one spool and on the other, means for intermittently driving said spools, this sign strip bearing characters disposed thereon forming a series of messages, guides for directing the sign strip across the opening, whereby said messages will be displayed through said opening, an electric circuit, a switch for controlling said circuit and means for automatically reversing the direction of movement of said driving means, said last mentioned means including a pair of pivotally mounted levers adapted to be actuated by said driving means, said levers being operative to actuate said switch to place the latter in position to be operated by the driving means for reversing the direction of movement of the latter.

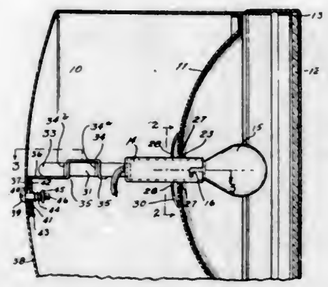
1,812,622. SHOE. PAUL S. COSTELLO, Philadelphia, Pa., assignor of one-third to Dominic B. George and Frank E. Mitulski, St. Louis, Mo. Filed Dec. 30, 1929. Serial No. 417,327. 2 Claims. (Cl. 36—58.6.)

1. In an article of the kind described, the combination with a shoe having an inner and outer quarter with a counter therebetween, of means for preventing the accidental slipping movement between the heel portion of the



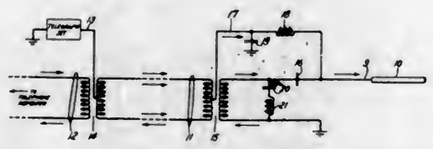
shoe and the foot of the wearer and comprising a resilient pad positioned between said inner quarter and counter; and a seat provided in said counter to receive said pad.

1,812,623. HEADLIGHT SOCKET AND MEANS FOR MOUNTING SAME. GUY H. COULTER and SAMUEL F. ARBUCKLE, Highland Park, Mich., assignors to Monogram Lens Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 7, 1927. Serial No. 203,883. 2 Claims. (Cl. 240—44.2.)



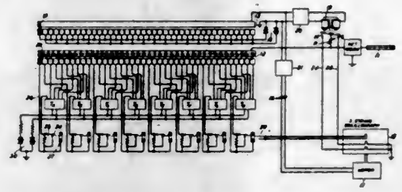
1. In a headlight, a casing; a reflector in said casing; a socket mounted in said reflector for movement in one plane only; means cooperating with said socket to impart a vertical motion thereto and mounted on said casing and adapted to have a limited movement with respect thereto; and a member axially aligned with the socket and separably connecting said socket and means, said member being unbendable in the plane in which said socket has movement but bendable in a plane perpendicular thereto, said member comprising the sole connecting means between said socket and said first mentioned means.

1,812,624. TELEPHONE AND TELEGRAPH SIGNALING SYSTEM. GEORGE C. CUMMINGS, Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1929. Serial No. 344,745. 11 Claims. (Cl. 179—3.)



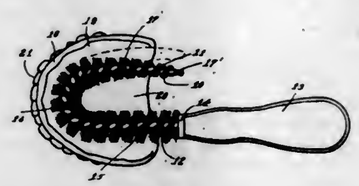
1. A signaling system comprising in combination, a two-wire line, means for transmitting over said line messages of one frequency as a two-wire circuit, and messages of another frequency over both sides of said line in parallel, a second line connected in circuit with said two-wire line, and means for transmitting both of said messages over a single conductor included in said second line.

1,812,625. SIGNAL MONITORING DEVICE. AUSTEN M. CURTIS, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 13, 1930. Serial No. 460,846. 9 Claims. (Cl. 178—68.)



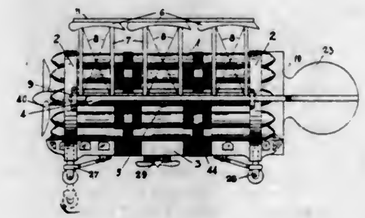
1. In a multi-channel impulse transmission system, a monitoring device common to all channels thereof, characterized in this, that means are provided for indicating a definite point in any channel in the monitor record of a plurality of channels.

1,812,626. DENTURE BRUSH. SYLVAN MAURICE EDISON, Rockford, Ill. Filed Oct. 9, 1929. Serial No. 398,286. 1 Claim. (Cl. 15—206.)



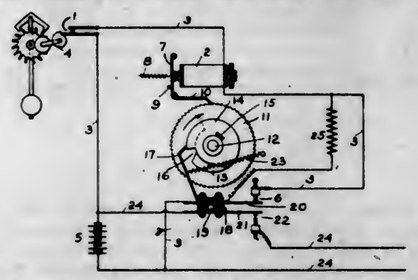
A brush for artificial dentures which includes, a twisted wire brush frame having a free end and a handle end, said frame being bent through substantially a horseshoe bend intermediate its ends to provide a curved portion and two parallelly disposed legs, a handle on said handle end coaxial with respect to one of said legs, bristles of uniform length distributed upon said frame from the end in said handle to a point beyond said bend, adapted to be employed in cleaning the gum grooves and surfaces of a full denture, bristles from said point to said free end of progressively shorter length to provide a cone shaped end, and a tuft of bristles positioned directly over said free end, said tuft and said bristles of progressively shorter length being adapted to be employed for the cleaning of the clasps and grooves of a partial denture.

1,812,627. TRIHYDRO DIRIGIBLE AND AIRPLANE. VAN EVERY EDWARDS, Springfield, Ill. Filed May 16, 1930. Serial No. 452,990. 5 Claims. (Cl. 244—6.)



2. An airplane and dirigible airship combination comprising a plurality of parallel metallic cylindrical gas containers, a frame support therefor and a control cabin operatively secured to said frame, airplane wings operatively secured to said gas containers and frame so as to extend substantially beyond the sides of the containers, a plurality of navigating motors centrally disposed in alignment and a plurality of driven propellers aligned on a shaft in spiral fitting relation thereon to be operated by wind force from said navigating propellers, a pair of longitudinal side elevator fins rigidly secured at the forward end along the side of said containers and adjustably mounted at the rear end thereof; means for varying the speed of said secondary propellers and means for controllably adjusting said elevator planes and the rudders of the airship.

1,812,628. AUTOMATIC BATTERY CHARGING SYSTEM. EDWARD F. GEIGER, Binghamton, N. Y., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Sept. 27, 1928. Serial No. 308,674. 10 Claims. (Cl. 171—314.)

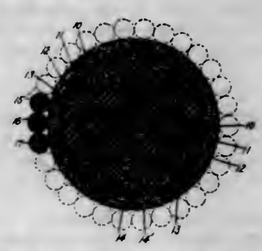


1. In combination, a storage battery, a charging circuit therefor, time controlled means actuated by said battery and means controlled by said time controlled means to connect the battery either with the charging circuit or with said time controlled means.

1,812,629. TREATMENT OF CRUDE PETROLEUM TO PREVENT CORROSION. CHARLES D. GIFFORD, Los Angeles, Calif., assignor, by mesne assignments, to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif., a Corporation of California. Filed May 28, 1928. Serial No. 281,361. 8 Claims. (Cl. 196—147.)

2. A method of rendering crude petroleum containing inorganic salts noncorrosive to metals, comprising: heating said petroleum substantially free from emulsion to a temperature of fluidity; adding to and intimately disseminating throughout said petroleum a sufficient quantity of water to dissolve the salt contained therein; passing said petroleum and said added water through a layer of finely pulverized porous material, and separating the efflux from said layer into an oil portion and a brine portion.

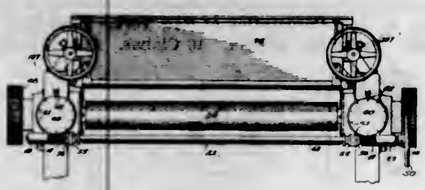
1,812,630. CABLE ARMORING. JOHN J. GILBERT, Douglaston, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 28, 1929. Serial No. 343,312. 6 Claims. (Cl. 173—266.)



1. A submarine telephone or carrier frequency cable having incoming and outgoing conductors enclosed with-

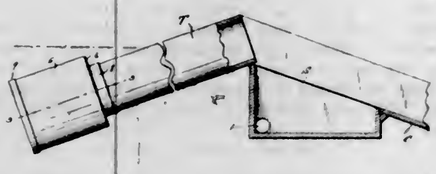
in armor wire, characterised in this, that the armor wire is freely exposed to the magnetic field set up by currents in the conductors, but for the purpose of reducing losses in the armor wire as a result of eddy currents therein the armor wire is finely subdivided.

1,812,631. FORMING APPARATUS FOR PLASTIC MATERIALS. FRANCIS W. HARNEY, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Oct. 10, 1930. Serial No. 487,813. 20 Claims. (Cl. 154—1.)



1. Mechanism for forming wallboard and the like comprising a pair of substantially parallel rolls, means for supplying plastic material to the space between said rolls, screw means associated with each end of one of said rolls to move said roll toward and away from the axis of the other of said rolls, mechanism for operating each of said screw means independently to move each end of one of said rolls independently of the other end, and mechanism for operating both of said screw means simultaneously to shift both ends of said one of said rolls simultaneously toward and away from the axis of the other of said rolls.

1,812,632. FISHING APPARATUS. ALBERT H. HARRINGTON, Brighton, Boston, Mass. Filed June 10, 1930. Serial No. 460,249. 2 Claims. (Cl. 43—4.)



1. In a fishing apparatus, an elongated tube adapted to be mounted upon a boat with one end portion in submergence, a sleeve carried by the submerged end portion of the tube, the wall of said sleeve being transparent, and means for directing light rays through said wall of the sleeve.

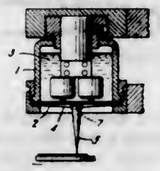
1,812,633. WEIGHING SCALE. FRANK F. HEITZ, Dayton, Ohio, assignor to Toledo Scale Manufacturing Company, Toledo, Ohio, a Corporation of New Jersey. Filed Apr. 8, 1929. Serial No. 353,316. 2 Claims. (Cl. 265—27.)

1. In a weighing scale, in combination, a lever system, a load receiver mounted thereon, pendulum load counterbalancing mechanism including a relatively movable chart and indicating hand, and means, including a shock absorbing device, for operatively connecting said lever and said load counterbalancing mechanism, said shock



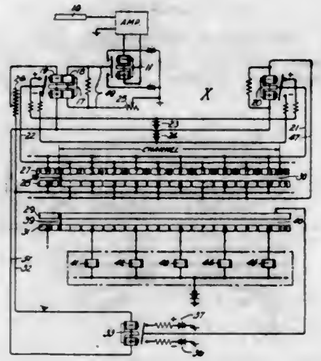
absorbing device consisting of a plurality of metallic plates, two of said plates compressively engaging a plurality of resilient pads.

1,812,634. SOUND REPRODUCER. WARREN C. JONES, Flushing, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 23, 1928. Serial No. 287,722. 4 Claims. (Cl. 274—38.)



1. A reproducer needle comprising a conical shell of metal with a hard metal surface at its point and a mounting member at its base.

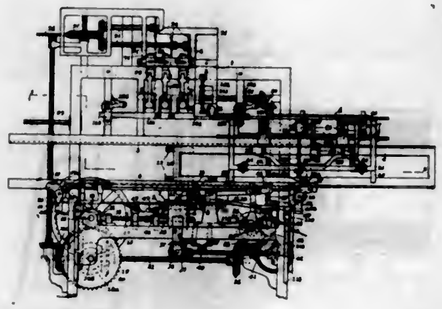
1,812,635. SIGNALING SYSTEM. WILLIAM A. KNOOP, Hempstead, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,734. 7 Claims. (Cl. 178—88.)



1. In a telegraph system, a signaling line, a plurality of receiving magnets, a device for repeating impulses

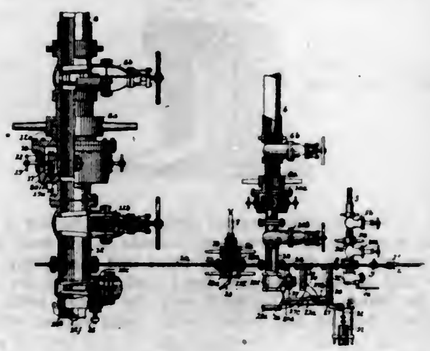
of reversed polarity to said magnets, a distributor, electromagnetic means operating in conjunction with said distributor for operating said device, other electromagnetic means, said means being arranged to control each other, and means responsive to impulses received over said line for controlling the second mentioned electromagnetic means independently of said distributor and the first mentioned electromagnetic means.

1,812,636. SAW FILING MACHINE. SINIBALDO LEONE, Paterson, N. J. Filed Dec. 31, 1927. Serial No. 243,842. 13 Claims. (Cl. 76—40.)



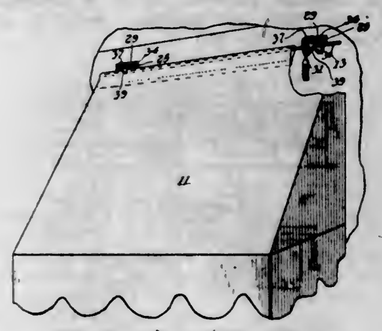
1. A machine for performing operations successively on the teeth of a saw comprising a frame, a saw-holding carriage slidable therein back and forth, reciprocatory means to operate on the saw, means to slide the carriage in one direction and simultaneously reciprocate the reciprocatory means including a rotary actuating member, means, also including a rotary actuating member, to slide the carriage in the opposite direction while the reciprocatory means is at standstill, and driving means shiftable into driving engagement with one or the other of said members.

1,812,637. APPARATUS FOR ASSISTING THE CREW OF A SUNKEN SUBMARINE. SINIBALDO LEONE, Paterson, N. J. Filed Sept. 17, 1929. Serial No. 393,253. 6 Claims. (Cl. 114—16.4.)



1. Apparatus for assisting the screw of a sunken submarine comprising a tubular structure having its passage affording communication between the interior and exterior of the submarine and also having a shut-off valve, a tubular conductor adapted to be delivered and supported at one end from a rescue craft and having a shut-off valve at the other end, said structure and the latter end of said conductor being enterable one telescopically into the other and having a coacting pawl and catch shoulder to interlock them against separation and also having means thereupon to form a sealed joint between them, and means extending to the exterior of the apparatus for disengaging the pawl from said shoulder.

1,812,638. WINDOW AWNING. HUGH WALTER MCCURDY, Chicago, Ill. Original application filed Sept. 24, 1930, Serial No. 484,055. Divided and this application filed Dec. 29, 1930. Serial No. 505,359. 5 Claims. (Cl. 156—15.)

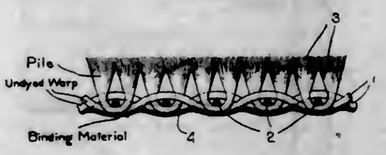


4. Means for detachably securing the top of an awning having a rod therein in place on a casing support consisting of a pair of base plates permanently secured to the casing support, each of said base plates having a threaded aperture therein and a lug projecting outwardly therefrom, a pair of clamping members for the rod for each of the base plates, each of the rear clamping members being provided with a pair of apertures therethrough, one co-operating with the lug on the base plate and the other registering with the threaded aperture in the base, means for opening and closing the pairs of clamping members, and a screw passed through the aperture in the rear clamping member registering with the threaded aperture and screwed into it so that the awnings with the clamping members still secured to the rod can be removed, leaving the base plates in place.

1,812,639. SYNTHETIC RESIN COMPOUND AND PROCESS OF PREPARING THE SAME. CHARLES G. MOORE, Lakewood, and MILTON ZUCKER, Cleveland, Ohio, assignors to The Glidden Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 1, 1929. Serial No. 375,320. 12 Claims. (Cl. 260—8.)

1. A synthetic resin, comprising the reaction product of an organic polybasic acid, a polyhydric alcohol, and the fatty acids of rubber seed oil.

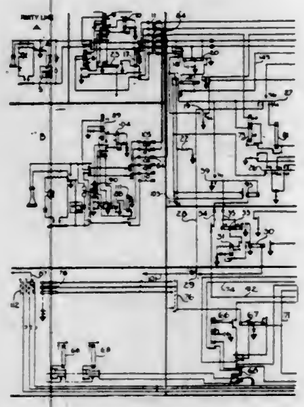
1,812,640. PILE FABRIC AND METHOD OF MAKING THE SAME. WILLIAM S. NUTTER, Sanford, Me., assignor to Goodall Worsted Company, Sanford, Me., a Corporation of Maine. Filed Feb. 4, 1928, Serial No. 252,029. Renewed Jan. 12, 1931. 10 Claims. (Cl. 139—391.)



1. A pile fabric having pile threads interlocked with interwoven filling threads and undyed warp threads, there being a deficiency of warp threads for binding the pile

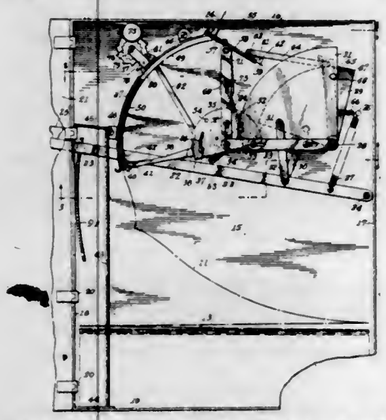
threads into the fabric, the back face of the fabric having a coating of colored pyroxylin applied thereto which by its adherence to the exposed portions of the pile threads and warp threads not only binds the pile threads into the warp threads but also colors the portions of the undyed warp threads that are exposed on the back of the fabric.

1,812,641. REMOTE CONTROL MAGNETO TELEPHONE SYSTEM. WINFRED T. POWELL, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed May 31, 1930. Serial No. 457,826. 5 Claims. (Cl. 179—27.)



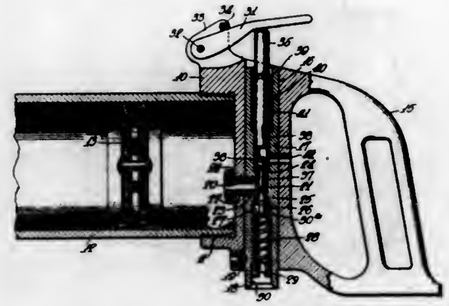
1. In a telephone system, an automatic exchange, a plurality of telephone lines and a toll line terminating at said exchange, means including automatic switches for interconnecting said telephone lines and said toll line, means including impulse-controlled devices for effecting the operation of said automatic switches, a distant exchange including an operator's position, an operating trunk and said toll line terminating in said position, said impulse-controlled devices being normally governed over said operating trunk, and means at the automatic exchange actuated from said operator's position for transferring the control of said impulse-controlled devices from said operating trunk to said toll trunk.

1,812,642. TICKET DISPENSING AND REGISTERING MACHINE. FRANK SIMOND, New York, N. Y. Filed May 18, 1926. Serial No. 109,857. 5 Claims. (Cl. 271—2.5.)



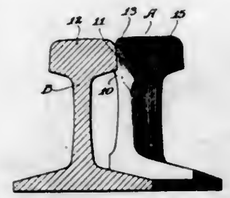
1. In a ticket dispensing machine, a narrow upright rectangular casing having a hinged door to cover one side, a pair of spring supported key levers pivoted in said casing to extend through its front wall, a large segmental cam operated by one of said levers, a small segmental cam operated by the other lever, a pivoted plate actuated by each cam independently, and an arm adjustably carried by said plate to engage a ticket to advance the same through an opening in the casing top.

1,812,643. GREASE GUN CONTROL MECHANISM. HERMAN ALBERTINE, Rutherford, N. J., assignor to Rogers Products Company, Inc., a Corporation of New Jersey. Filed June 26, 1929. Serial No. 373,720. 13 Claims. (Cl. 221—47.3.)



1. In a grease gun of the character in which fluid under pressure acting in a working chamber supplies the motive force for expelling grease, a control handle, at the rear end of said working chamber, a transverse passage, open at both ends, arranged between the handle and the working chamber and means associated therewith for controlling the admission and exhaust of motive fluid to and from said chamber, said means comprising a unitary valving assemblage bodily applicable to and removable from said transverse passage.

1,812,644. MULTIANGULAR SWITCH POINT. DAVID E. ANDERSON, St. Paul, Minn. Filed Sept. 18, 1930. Serial No. 482,768. 12 Claims. (Cl. 246—435.)

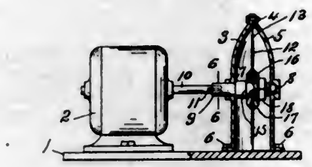


1. A switch point formed from a rail having a rail head, a beveled face formed on one side of said head down to the tip end of the switch point and converging into the body of said head, said bevel conforming to the flare of the wheel flange operated over the switch point, the opposite face of said switch point being formed with a main rail engaging recess to provide a thin beveled point at the rail tip and extending to the rail head body for wheel flange wear.

1,812,645. FABRIC CUTTING MACHINE. CARL B. BERGSON, Kansas City, Mo. Filed Oct. 17, 1929. Serial No. 400,248. 2 Claims. (Cl. 164—60.)

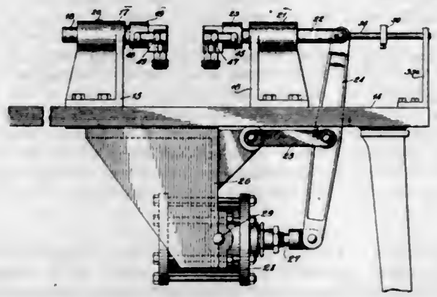
1. In a fabric cutting machine, a base having a horn provided at its inner end and upper side with a vertical groove, a housing on said base having an opening adapted

to receive the goods to be cut and into which said grooved portion of said horn extends, a horizontal shaft rotatably mounted in said housing, a circular blade in said housing fastened to and rotatable with said shaft and extending



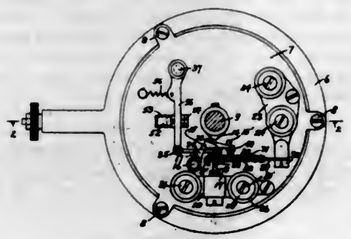
into said groove and into said opening, a motor on said base having a driving shaft alined with said horizontal shaft, and means for releasably drivingly connecting said two shafts.

1,812,646. METHOD OF APPLYING FITTINGS TO STRANDED STRUCTURES. GORMAN C. BURD, Adrian, Mich., assignor to American Cable Company, Inc., a Corporation of Delaware. Filed Apr. 3, 1930. Serial No. 441,289. 7 Claims. (Cl. 29—148.5.)



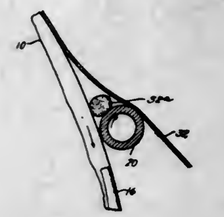
1. In the method of cutting off sections from a stock of stranded structure and applying fittings to the cut ends, the steps which consist in applying a bushing about the stock where it is to be severed, clamping the bushing thereon, severing the bushing and the stock to leave a portion of the bushing on each cut end, separating the bushed ends, and applying a fitting on each of said bushed ends separately.

1,812,647. CONTROL SWITCH MECHANISM. LOUIS O. FRENCH, Milwaukee, Wis. Filed Sept. 26, 1929. Serial No. 395,365. 5 Claims. (Cl. 200—31.)



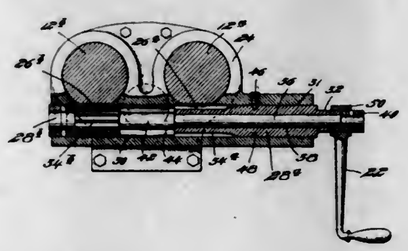
1. In control switch mechanism, the combination of a pair of relatively movable contacts, a lever associated with one of said contacts to move the same, engine-controlled means for actuating said lever, and a shiftable member interposed between said lever and said contact for varying the action of said lever on said contact to vary the relative duration of the circuit-closing period of said contacts.

1,812,648. FILTER DISCHARGING MECHANISM. WILLIAM GARDELLA, Flushing, Long Island, N. Y., assignors to Oliver United Filters Incorporated, San Francisco, Calif., a Corporation of Nevada. Filed Jan. 3, 1929. Serial No. 329,971. 4 Claims. (Cl. 210—199.)



2. The combination in a rotary drum continuous filter of a discharge roller, comprising a smooth metallic cylinder spaced from the filtering surface of said drum, and means to rotate said roller so that the surface nearest the drum moves in a direction opposite to the rotation of said drum to strip the filter cake from said drum without wear on said filter surface.

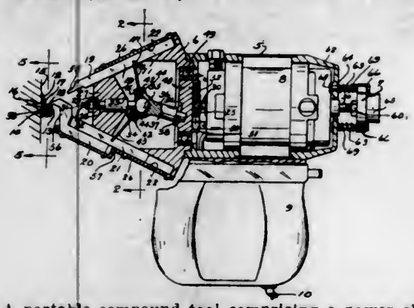
1,812,649. ADJUSTING MEANS FOR OVERHANGING ARMS. BENJAMIN P. GRAVES, Cranston, R. I., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Sept. 11, 1928. Serial No. 305,167. 2 Claims. (Cl. 90—18.)



1. In a milling machine, a column, two parallel horizontally disposed overhanging arms adapted to receive a cutter arbor yoke on the front end thereof for mounting a cutter arbor between said yoke and column having rack gear teeth formed thereon on a portion thereof normally contained within the column, a transverse bearing bore in said column adjacent said gear teeth, a sleeve shaft having a reduced end projecting from said bore and the opposite end toothed to engage the rack teeth on the adjacent overhanging arm, a shaft having a toothed end to engage the rack teeth on the further overhanging arm, a portion projecting through said sleeve shaft bore and terminating in an end beyond said sleeve shaft end of substantially the same diameter as that of the projecting sleeve shaft end and a central portion of larger diameter than the sleeve shaft contained portion to form a shoulder to prevent inward movement of the sleeve shaft and an actuating handle for said shafts slidable from a position engaging the end of the sleeve shaft to adjust the projecting length of one overhanging arm to a position engaging both the end of the shaft and the sleeve shaft to adjust the projecting lengths of both overhanging arms together and to a position engaging the projecting end of the shaft to adjust the projecting length of the other overhanging arm.

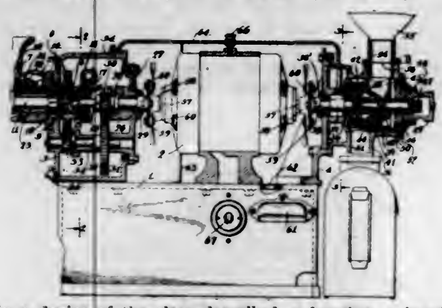
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1,812,650. POWER HAMMER. JAY HIRAM GREENLEY, Buffalo, N. Y. Filed June 12, 1929. Serial No. 370,357. 10 Claims. (Cl. 81—3.)



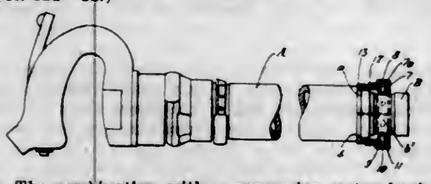
1. A portable compound tool comprising a power shaft, a plural hammer mechanism mounted upon one end of said shaft, means for successively impelling the hammers in converging lines to a common area, and flexible connections between a source of power energy and said power shaft to actuate the latter.

1,812,651. DUPLEX MOTOR DRIVE ASSEMBLY FOR KITCHEN APPLIANCES. ROY KARL GULLBERG, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed June 3, 1925. Serial No. 34,570. 1 Claim. (Cl. 74—7.)



In a device of the class described, a housing, a bearing frame secured thereto, a motor-driven shaft journalled in the bearing frame, a member constantly drivingly connected to a food instrumentality extending coaxial with said shaft and having a socket for rotatably receiving the shaft, said member being rigidly provided with a clutch element, a coacting clutch and driving element geared to the motor driven shaft, said latter clutch element freely embracing aforesaid member, a bearing frame for the latter rigid with said housing and on the side thereof opposite the first-mentioned bearing frame, and means for slidably actuating aforesaid member at will to connect and disconnect the clutch element thereof from the coacting clutch element.

1,812,652. TOOL RETAINER. GEORGE T. HARCOURT, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 22, 1929. Serial No. 357,161. 10 Claims. (Cl. 121—32.)



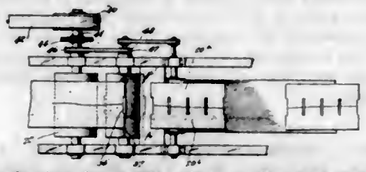
1. The combination with a percussive motor having a barrel into which a working tool is to be inserted, of retaining means for the tool engaging said barrel, and means comprising a sleeve having inwardly projectable members, an annulus in telescoping engagement with the exterior of said sleeve, and resilient means having the dual function of holding said sleeve on said barrel and of yieldingly maintaining said annulus in position to hold said members in tool engaging position.

1,812,653. MULTIPLE SUTURE YARN CONTROL. EDWARD C. HINCHLIFF, Rockford, Ill., assignor to Burson Knitting Company, Rockford, Ill., a Corporation of Illinois. Filed Apr. 25, 1930. Serial No. 447,145. 12 Claims. (Cl. 66—126.)



1. In a straight knitting machine, the combination with a bed of needles and a guide extending lengthwise of the throat of the machine and adapted to have yarn carriers reciprocate thereon lengthwise of the bed, of a plurality of yarn retainers disposed in an out of the way position with respect to the bed of needles in alignment with one another lengthwise of the bed and parallel with the guide, the said retainers being spaced from one another at suture points, there being needles in the bed constituting suture needles at the suture points from which yarn is arranged to extend past one or more intervening retainers to the yarn carrier associated therewith when the latter is inactive, and means arranged in the reciprocation of a yarn carrier on the guide to thread the yarn extending from the suture needle onto the one or more yarn retainers between the said suture needle and the yarn carrier associated therewith.

1,812,654. MECHANISM FOR CUTTING SHEET MATERIAL. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 8, 1928. Serial No. 311,017. 8 Claims. (Cl. 164—68.)



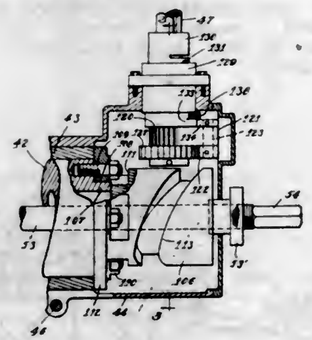
1. Mechanism for cutting sheet roofing material to produce shingle elements of varying butt-edge configuration, comprising means for slitting the sheet longitudinally along a sinuous line the pattern of which is repeated at regular intervals by the continued operation of said means, and means for severing the sheet transversely thereof at predetermined intervals, said last named means operating out of phase with the first named means.

1,812,655. DENTAL ROLL AND METHOD OF MAKING THE SAME. JOHN W. B. LADD, West Roxbury, Boston, Mass. Filed May 2, 1928. Serial No. 274,594. 17 Claims. (Cl. 32—33.)



1. As a new article of manufacture, a dental roll for absorbing saliva in the mouth, the same comprising a sheet of absorbent material rolled upon itself in the approximate form of a cylinder, and a binder of comparatively insolvent adhesive material on and about the cylindrical surface of said cylinder.

1,812,656. FEED MECHANISM FOR MACHINE TOOLS. ALBERT B. LEET, Rockford, Ill., assignor to Rockford Machine Tool Co., Rockford, Ill., a Corporation of Illinois. Filed Nov. 3, 1926. Serial No. 145,942. 2 Claims. (Cl. 74—53.)



1. A feed mechanism for a machine tool comprising the combination with a continuously rotated element, and a feed shaft disposed in crosswise relation therewith and arranged to be intermittently rotated in one direction, of a housing, a cylindrical peripherally conformed cam in said housing turning with the aforesaid element, a rocker arm having operative connection with said cam to be positively oscillated back and forth in the continuous rotation thereof, a gear sector arranged to oscillate with said rocker arm, a gear element meshing with said sector and having a lever extending therefrom, a pawl mounted on said lever, a ratchet arranged to turn the feed shaft and having said pawl arranged for operating the same, a normally stationary but rotatably adjustable cam for holding the pawl disengaged from the ratchet through a portion of its stroke, a hand crank outside the housing for turning said cam, and means for locking said crank in various positions of adjustment.

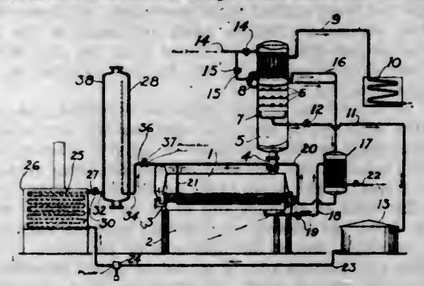
1,812,657. ATTACHABLE WASHER. REINHARD LEITZKE, Beaver Dam, Wis. Filed Dec. 21, 1929. Serial No. 415,760. 1 Claim. (Cl. 85—51.)



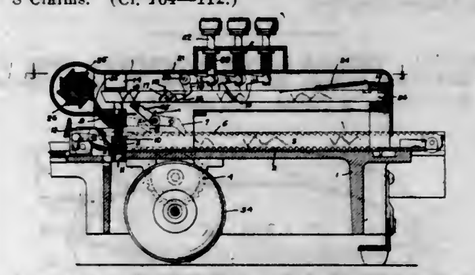
A washer with a substantially circular circumference having a radial slit, the circular circumference being cut away at right angles and directly opposite the slit on a chord between the inner and outer peripheries and intersecting the outer periphery only to remove a segmental portion of the washer providing a reduced hinged connection for the opposite sides of the washer.

1,812,658. APPARATUS FOR CRACKING HYDROCARBONS. NATHANIEL E. LOOMIS, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed July 22, 1925. Serial No. 45,195. 1 Claim. (Cl. 196—51.)

Apparatus for cracking hydrocarbon oil, comprising a cracking coil, a thermally insulated digesting drum connected thereto, means for maintaining pressure on said coil and drum, a still, internal heating flues therein, a bubble tower adapted to receive vapors from the still, a vapor heat exchanger in the upper portion of the tower, means for passing feed oil through said vapor heat exchanger, whereby the oil is preheated, a tar heat exchanger connected to the still and adapted to receive hot tar therefrom, means for passing the preheated feed stock through the tar heat exchanger and thence into the still, means for conveying heavy condensate formed in the tower to an accumulator tank and thence through the cracking coil and digesting drum, a pipe for withdrawing the oil from said drum and passing it directly to the still, and a pressure release valve in such withdrawal pipe.

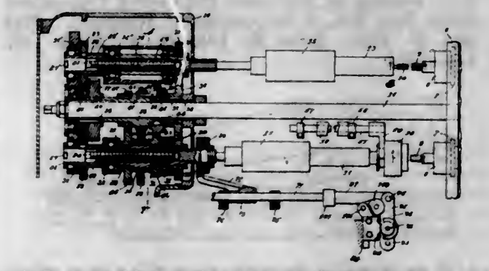


1,812,659. MOTOR DRIVEN PUNCH. ADELBERT C. MABY, Richmond Hill, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed June 13, 1925. Serial No. 36,798. 8 Claims. (Cl. 164—112.)



1. In a record-perforating machine, a punch for perforating a record, a substantially slidably guided bar freely, slidably, engageable with said punch, an actuator for said bar, means for moving said bar into co-operation with said actuator, said actuator being operable to move said bar out of cooperation with said moving means and means for restoring said bar to normal position.

1,812,660. THREAD CUTTING MEANS FOR AUTOMATIC SCREW MACHINES. JUDSON H. MANSFIELD and CHESTER F. PENROSE, Rockford, Ill., assignors to Greenlee Bros. & Co., Rockford, Ill., a Corporation of Illinois. Filed June 7, 1929. Serial No. 369,068. 30 Claims. (Cl. 29—37.)

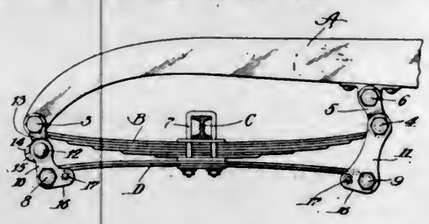


1. In a machine of the character described, the combination of one or more lead screws, one or more stock-

carrying spindles arranged to be disposed coaxial with the lead screws, means for driving the lead screws and stock-carrying spindles at the same speed, the tool spindles having nuts carried thereby threading on the lead screws, and means for driving the tool spindles and nuts carried thereby at the same speed as the lead screws to hold the same against axial movement, or slower than the lead screws to produce axial movement of the tool spindles in one direction, or faster than the lead screws to produce axial movement of the tool spindles in the opposite direction.

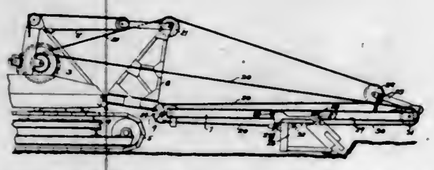
28. In a machine of the character deacribed, the combination with one or more tool spindles and one or more stock-carrying spindles disposed in coaxial relation with the tool spindles, the one kind of spindles being arranged to be driven at the same speed or faster or slower than the other kind of spindles and to be moved axially while driven faster or slower, of a shifter element associated with clutching means for determining the drive of the spindles and arranged to be moved in either direction, a reciprocable control shaft for operating said element, a dog actuated member arranged to move said shifter element through the medium of said shaft in one direction for low speed and in the opposite direction for high speed, stops on said shaft, a part movable positively in the axial movement of the spindles to engage the one stop at the end of the movement of the spindles to move said shaft for the operation of clutching means and to engage the other stop at the end of the return movement of the spindles to move the shaft in the other direction to again operate the clutching means, and means providing a yielding connection between said shaft and the dog actuated member permitting constrained movement of one part with reference to the other in either direction for the purpose described.

1,812,661. VEHICLE SPRING SUSPENSION. JOHN T. MCINTOSH, Chicago, Ill. Filed Dec. 15, 1928. Serial No. 326,167. 2 Claims. (Cl. 267—45.)



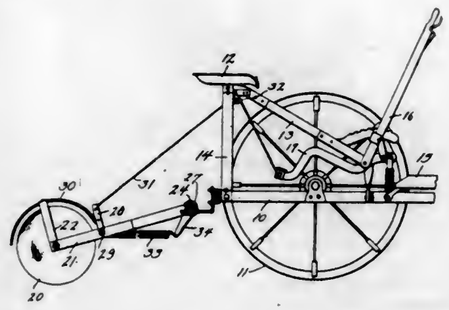
1. A suspension for attachment to the longitudinal frame member of a vehicle, comprising a main leaf spring supporting an axle of the vehicle, mountings for the spring ends, a supplemental leaf spring operatively associated with the first spring and connected thereto intermediate its ends, mountings for the supplemental spring, and coacting stop members on adjacent mountings of both springs.

1,812,662. EXCAVATOR. ARTHUR ORLOFF, Green Bay, Wis., assignor to Northwest Engineering Corporation, Green Bay, Wis., a Corporation of Wisconsin. Filed Mar. 23, 1928. Serial No. 264,260. 4 Claims. (Cl. 214—102.)



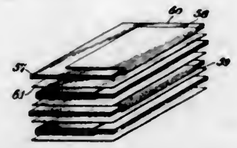
1. In an excavator, the combination with a boom mounted for up and down and lateral swinging movements, of a dipper mounted to travel back and forth along the boom, a cable operatively connected with the boom at a point forward of its mounting and at a point adjacent its mounting and then with the dipper for raising and lowering the boom and retracting the dipper, a cable for moving the dipper outwardly during digging, and means for controlling said cables including a brake to restrain the movement of said last named cable while raising the boom by first named cable.

1,812,663. ANTISIDE SLIP ATTACHMENT FOR CORN PLANTERS. CHRIST O. PETERSEN, Anthon, Iowa. Filed Dec. 21, 1929. Serial No. 415,642. 4 Claims. (Cl. 97—238.)



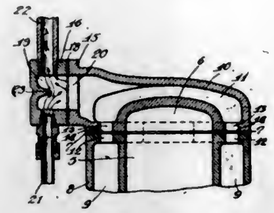
1. In a corn planter, a main frame, planter shoes, a foot lever to aid in elevating the planter shoes, a guide frame hinged to the main frame, projecting rearwardly and movable vertically, a flat disc journalled in the guide frame on an axis transverse to the planter's line of travel and adapted to travel in the ground behind the planter, exerting resistance to lateral movement of the planter, but not to forward movement, thereof, and means connecting the foot lever to the guide frame whereby depression of the foot lever will elevate the disc.

1,812,664. ELECTRICAL CONDENSER AND METHOD OF MAKING IT. WILLIAM H. PRIESS, Montclair, N. J., assignor to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Original application filed Dec. 5, 1921, Serial No. 519,868. Divided and this application filed Dec. 5, 1923. Serial No. 678,558. 9 Claims. (Cl. 175—41.)



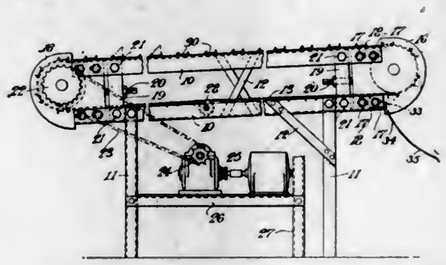
1. In an electrical condenser-stack of the type characterized by a plurality of sheets of dielectrics and metal foil armatures, the stack being separated by spacing sheets into a plurality of sections which are electrically connected in series for high potential service, the improvement which consists of folded foil-sheets around an edge of the section-spacing sheets, whereby the foil-folds constitute the series-connections between the successive stack-sections; the lengths of the folded foil-sheets being approximately twice the width of the spacing sheets; a foil-free margin being left at the ends of such folded foil-sheets and at the edges of the spacing sheets opposite to those around which the foil-sheets are folded; the folds of successive folded foils being spaced peripherally of the stack with respect to one another.

1,812,665. COOLING SYSTEM FOR INTERNAL COMBUSTION ENGINES. WILLIAM EDWARD RICHARD, Evansville, Ind., assignor to Sunbeam Electric Manufacturing Company, Evansville, Ind., a Corporation of Indiana. Filed Sept. 1, 1928. Serial No. 303,457. 7 Claims. (Cl. 123—170.)



1. A fluid-cooled internal-combustion engine comprising a cylinder having a cooling-fluid jacket, means for supplying cooling fluid to said jacket substantially at the top thereof, means connected with said jacket substantially at the top thereof and substantially in alignment with said fluid-supplying means for conducting said fluid away from said jacket, and a deflector or baffle disposed between said fluid-supplying means and said means for conducting the fluid away from the jacket.

1,812,666. MACHINE FOR GLUING CARTONS. CHARLES G. G. SCHMIDT, New York, N. Y., assignor to Pinaud Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 28, 1928. Serial No. 302,497. 17 Claims. (Cl. 93—36.)

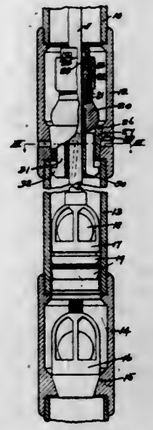


1. A machine for gluing triangular cartons formed from sheet material with three creases only and with one end of the sheet terminating at a corner and the other end folded beneath the first end and glued thereto, comprising retaining fingers between which two corners of a carton are gripped, one of said corners being the corner of the glued ends of the sheet material, said fingers acting to lightly urge the glued ends together while firmly retaining the carton therebetween without crushing.

17. A machine for gluing cartons comprising a belt, retaining fingers projecting from said belt, means for moving said belt, and means for removing the cartons from said fingers comprising a stop against which the carton strikes.

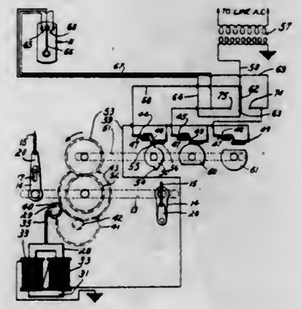
1,812,667. DEEP WELL PUMP. JOHN E. SHUTT, Stuttgart, Ark. Filed Apr. 19, 1930. Serial No. 445,577. 2 Claims. (Cl. 103—179.)

1. In a pump, which includes a casing, a pump rod, a pump barrel, a traveling valve therewithin secured to said rod, an annular tapered seat formed within said casing, and above said traveling valve, an annular thimble correspondingly tapered, seated therewithin, a sand valve slidably mounted on said rod, disposed above and seating on said thimble, a tubular sleeve slidably disposed around said rod, secured to and depending from said sand valve and below said thimble, and a plurality of blades integral



with said sleeve and radiating therefrom, said blades having projecting lugs adapted to engage the bottom of said thimble and limit the upward movement of the valve.

1,812,668. HEAT REGULATOR. DUNCAN J. STEWART, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Jan. 12, 1929. Serial No. 331,985. 5 Claims. (Cl. 236—74.)

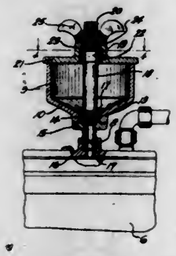


1. A furnace regulator having, in combination, an electric motor, a driving shaft arranged to be rotated thereby to operate the draft damper of a furnace, a control shaft, switching means controlled thereby and operable to determine the length of the operating cycles executed by the motor, a thermostat, a pair of switches governed in the rotation of said control shaft and cooperating with said thermostat to control separate starting circuits for said motor, manually operable means by which either of said circuits may be established independent of said thermostat, and means providing a normal driving connection between said driving and control shafts but permitting disconnection of the shafts for varying the operative relation therebetween.

1,812,669. MONOBROM DERIVATIVE OF FLUORESCEIN. WILLARD L. VOGEL, Los Angeles, Calif., assignor of one-tenth to Paul W. Prutzman. Original application filed May 28, 1928, Serial No. 281,355. Divided and this application filed Sept. 24, 1929. Serial No. 394,926. 1 Claim. (Cl. 260—62.)

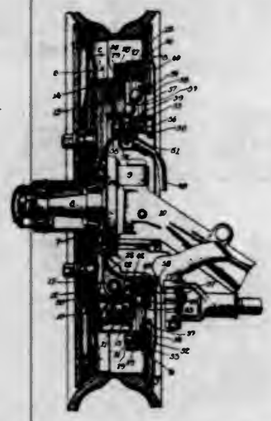
The herein described product: the monobrom derivative of fluorescein.

1,812,670. AUTOMOBILE VACUUM TANK FUNNEL. WILLIAM F. WAHL, Milwaukee, Wis. Filed May 18, 1929. Serial No. 362,619. 4 Claims. (Cl. 220—85.)



1. A funnel device, comprising a funnel shaped body portion having a depending bored stem lodgeable in the priming opening of a vacuum tank, a shank extending centrally into said body portion with its lower end portion seated in and closing said bored stem, a cover mounted on said shank and operatively engaging the same for turning purposes and seated on and closing the open end of said body portion, and a clamping member mounted on the outer end portion of said shank.

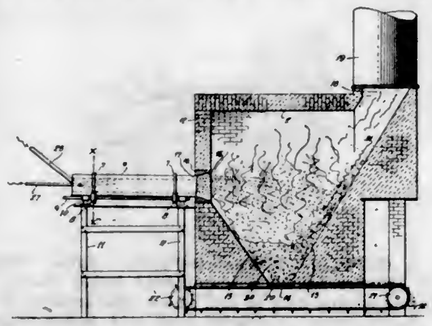
1,812,671. BRAKE. JOHN WHYTE, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed June 11, 1928. Serial No. 284,288. 11 Claims. (Cl. 188—140.)



1. A brake of the momentum type for a dirigible vehicle wheel comprising, in combination, a drum carried on the inner side of said wheel, a non-rotatable member having a peripheral flange portion cooperating with said drum to define an annular space within the drum, said member providing a central inwardly opening recess receiving the steering knuckle of said wheel, braking means disposed in said annular space and having adjacent separable end portions, expanding means associated with said end portions including a crank arm disposed in and extending circumferentially of said annular space, an annular driving surface rotatable with said drum, an annular driven surface adapted for axial engagement with said driving surface, and means rigid with said driven surface and providing in said annular space two converging cam surfaces movable circumferentially in either direction away from a normal brake-released position to move said crank arm in one direction.

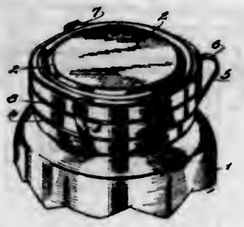
1,812,672. LIME KILN. ARTHUR ACKERMAN, New York, N. Y. Filed Jan. 24, 1928. Serial No. 249,018. 2 Claims. (Cl. 222—4.)

1. The method of calcining finely divided carbonate of lime, which consists in concurrently passing the material to be treated and combustible fuel through a rotary kiln in the same direction with the fuel in a state of combustion to effect a partial burning of said material, delivering the resulting solid and gaseous products from the rotary kiln into a settling and burning chamber to thereby permit the solids in suspension to settle out from the gases while said solids continue to burn, completing the



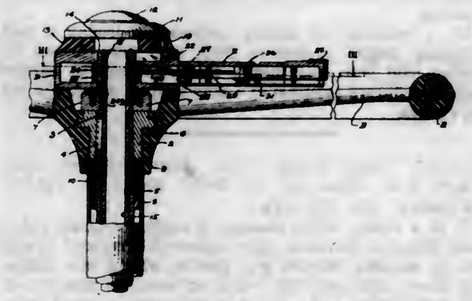
burning operations on the material in the chamber due to the residual heat of said materials and of the chamber, and permitting the exit of waste gaseous products from the chamber at a point sufficiently remote from the point of entry of the solid and gaseous products into the chamber from the rotary kiln to preclude the outgoing gaseous products from entraining and carrying off finely divided material entering the chamber from the rotary kiln.

1,812,673. JAR CLOSURE. ALBERT M. ALGEO, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed June 6, 1928. Serial No. 283,298. 9 Claims. (Cl. 215—90.)



1. A receptacle, a closure therefor, means for securing the closure to the receptacle, said means being radially movable to increase in distinct steps the pressure on said closure.

1,812,674. FRONT WHEEL POSITION INDICATOR. ANTON M. BACH, Palo Alto, Calif. Filed July 28, 1930. Serial No. 471,282. 5 Claims. (Cl. 116—31.)

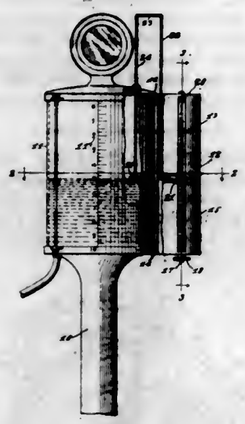


1. In a mechanism of the character described a steering tube having a steering wheel secured thereto, a stationary cap disposed above the steering wheel and spaced therefrom, a housing interposed between the steering wheel and the cap, means securing the housing with relation to the cap, a front wheel position indicator mounted on the housing, and means whereby rotary movement of the steering wheel and steering tube is transmitted to actuate the indicator.

1,812,675. MANUFACTURE OF VALUABLE PRODUCTS FROM LIGNIN SULPHONIC ACID (SULPHITE CELLULOSE WASTE). JAMES BADDILEY, ARNOLD SHEPHERDSON, and ANTHONY JAMES HAILWOOD, Blackley, Manchester, England, assignors to British Dyestuffs Corporation Limited, Manchester, England. Filed Sept. 9, 1927, Serial No. 218,569, and in Great Britain Dec. 7, 1926. 8 Claims. (Cl. 8—6.)

1. In combination a dyestuff paste or powder and the product of the moderated oxidation of sulphite cellulose pitch with nitric acid, the said combination being characterized by ready dispersibility in water.

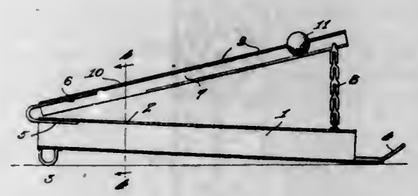
1,812,676. COMPUTING ATTACHMENT FOR LIQUID DISPENSING DEVICES. JOHN BEALL, Caldwell, Idaho. Filed Jan. 23, 1928. Serial No. 248,883. 1 Claim. (Cl. 73—82.)



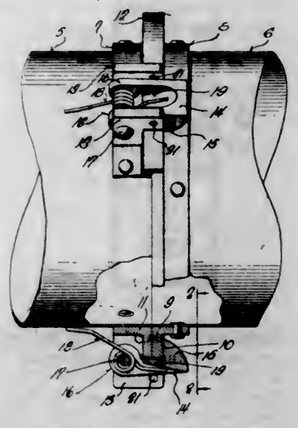
In combination with a transparent fluid dispensing receptacle provided with an opening in the upper end and a scale to indicate the amount of fluid therein and a support for said receptacle, a cylindrical casing secured to the support and extending parallel with the receptacle and having a sight opening arranged parallel with the scale, a cost computing drum journaled in the casing and having certain indicia thereof readable through the sight opening, a substantially U-shaped member including spaced parallel arms and having one arm extending into the receptacle by way of the opening therein and the other arm extending into the casing, a pointer carried by the arm extending into the casing and viewable through the sight opening, and a float carried by the arm in the receptacle to move the pointer over the indicia of the drum in rear of the sight opening in accordance with the level of the fluid in the receptacle.

1,812,677. GAME. ARTHUR E. BERGQUIST, Lindstrom, Minn. Filed Aug. 12, 1929. Serial No. 385,142. 2 Claims. (Cl. 273—96.)

1. A toy sphere projecting toy including a hollow base, having a hollow platform arranged on the base, a spring hinge connecting the platform to the base for arranging the platform at an elevation with respect to the base, flexible means limiting the swinging of the platform away from the base, said platform being provided with a plurality of pockets to receive therein a sphere being projected and being provided adjacent its lower end with an opening, and said hollow base having an opening opposite the lower opening in the platform, whereby the sphere when projected through the opening in the platform will be received in the hollow base.



1,812,678. CONVEYER DUCT. GEORGE BERNERT, North Milwaukee, Wis. Filed Sept. 19, 1927. Serial No. 220,461. 2 Claims. (Cl. 285—187.)

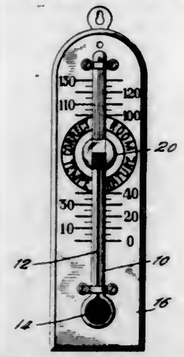


1. In a device of the character described, the combination with two longitudinally aligned conveyer duct sections having relatively thin walls, of means for readily detachably connecting the sections with their ends abutting and their inner walls substantially continuous, comprising a collar member carried by one duct section with its end substantially flush with the end thereof, a second collar member secured to the second duct section and having a part providing a seat in alignment with the end of the flange of the first collar member and having an annular flange overlying the joint between said flange end and said seat, and a latch member carried by one duct section and spring pressed to engage behind the collar of the other duct section at any point about its periphery.

1,812,679. THERMOMETER. HARRISON HURLBERT BOYCE, Jericho, Long Island, N. Y. Filed May 24, 1927. Serial No. 193,770. 10 Claims. (Cl. 116—114.)

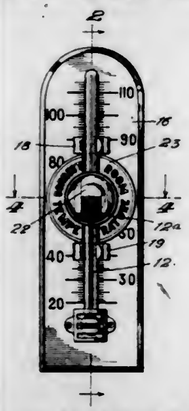
1. In a household thermometer for determining room temperature of the class described, the combination with

an indicating thermometer stem filled with a temperature responsive fluid, of a base provided with a scale, means



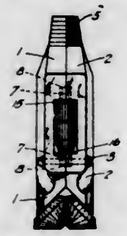
for affixing the stem to the base and a lens like element adjacent a certain restricted portion only of the scale to magnify the fluid at said portion.

1,812,680. THERMOMETER. HARRISON HURLBERT BOYCE, Jericho, Long Island, N. Y. Filed July 12, 1927. Serial No. 205,062. 10 Claims. (Cl. 116—114.)



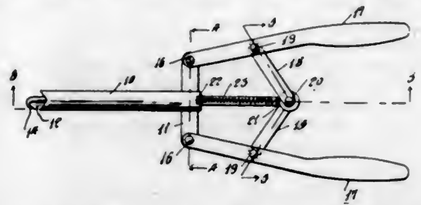
1. In a thermometer for particularly indicating a specified temperature comprising a thermometer stem having a uniform bore therein partially filled with a thermally responsive indicating fluid, a supporting back, a convex lens element permanently secured to said back and provided with an opening adapted to adjustably receive the thermometer stem and means on said back to adjustably secure said thermometer stem in position thereon, said means also permitting adjustment of said lens with respect to said stem.

1,812,681. KEY BUSHING FOR ROCK-BIT REAMER PINS. WALTER BRAUER, Seminole, Okla. Filed Feb. 13, 1929. Serial No. 339,623. 4 Claims. (Cl. 255—73.)



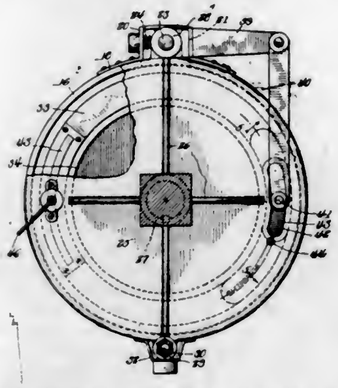
1. A device of the class described, comprising a bushing of suitable material, being adapted for use in alined pairs, each bushing having a bore for receiving and seating an end of a reamer pin, said reamer pin for carrying cutters thereon, one of said bushings having one end of said reamer pin securely fastened in the bore thereof, the other alined bushing adapted to fit and seat the other end of said reamer pin in the bore thereof, said bushings being adapted for seating one half each in alined grooves of the two body halves of a rock bit.

1,812,682. COTTER KEY PULLER. CARL H. BUCKLE and GUS R. MCPHAIL, Magnolia, Tex. Filed July 11, 1929. Serial No. 377,492. 2 Claims. (Cl. 29—86.1.)



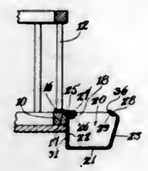
1. An extractor of the class described comprising a tube, levers pivoted to the tube, an extractor member slidable in the tube and jointly with the tube adapted to directly engage a cotter, links pivoted to the levers and to said member, the pivotal connection with said member being normally rearwardly of a line passing through their pivotal conenctions with the bandles, said extractor having a book at the forward end, an enlargement on the extractor within the bore of the tube, and a contractile spring connecting the tube and said extractor.

1,812,683. MOMENTUM ACTUATED BRAKE. ADDI BENJAMIN CADMAN and ALBERT C. WARNER, Beloit, Wis., assignors, by mesne assignments, to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed June 2, 1927. Serial No. 195,916. 3 Claims. (Cl. 188—140.)



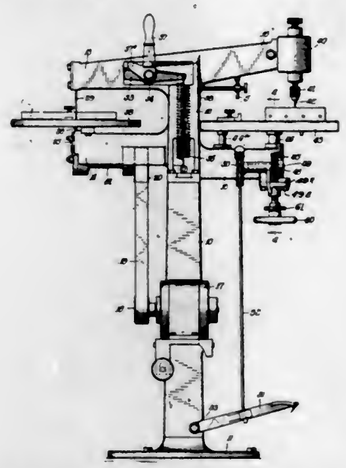
1. The combination with a vehicle wheel, of a brake drum secured to the inner side of said wheel and having an external annular surface and an inturned flange at the inner edge of said surface, a flexible band encircling said surface, operating means associated with the ends of said band and adapted when actuated to tighten the band about said drum thereby controlling the motion of said wheel, a stationary support for said operating means, an annulus mounted on said support for movement axially of said member into frictional engagement with said flange, electromagnetic means to cause said engagement, and torque multiplying means connecting said ring and said operating means and adapted to transmit the movements of said ring to said operating means regardless of the direction of rotation of said wheel.

1,812,684. FEEDING AND DRINKING ATTACHMENT FOR BROODERS. OSE F. CARPENTER, Brightwood, Va. Filed Apr. 1, 1930. Serial No. 440,786. 1 Claim. (Cl. 119—18.)



In an adjustable chick feeding device, a feed container having the top portion of one of its walls angularly disposed with respect to the remaining portion of such wall, and one or more horizontally disposed and vertically adjustable container sustaining and coupling members, each having its outer end part angularly disposed with respect to its remaiping part, the said angularly disposed part coacting with said angularly disposed portion for suspending said container in feed holding position, and each member having its inner part apertured for connecting it to and providing for the vertical adjustment thereof relative to an anchoring means therefor, the wall of the aperture coacting with the anchoring means for maintaining said member in adjusted position.

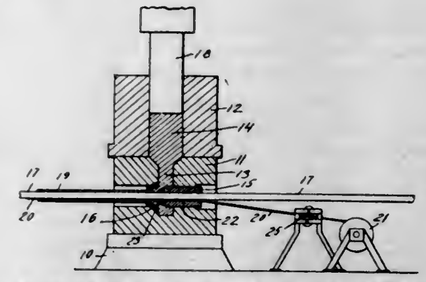
1,812,685. COMPOSING ROOM MACHINE. EDWARD CHESHIRE, St. Petersburg, Fla. Filed June 8, 1927. Serial No. 196,196. 9 Claims. (Cl. 29—26.)



1. In a machine, in combination, a standard, an arm projecting therefrom, a vertically movable table carried by said arm, rack and pinion means for raising said table, and adjustable means for governing the movement of said table relative to said one arm, said adjustable means including a screw-threaded axially reciprocable shaft, screw-threaded means cooperating with said screw-threaded shaft for determining one limit of the axial movement of said shaft, said screw-threaded means including a spring-pressed toothed button radially movable therein and adapted to engage the threads of said screw-threaded shaft.

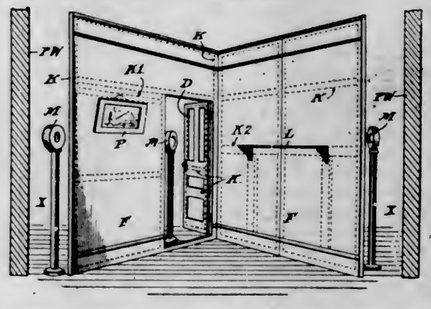
8. A router and jig-saw machine comprising, in combination, a base, a head mounted on the base, said head comprising a plurality of oppositely extending arms, one of which is provided with router mechanism and the other of which is provided with jig-saw mechanism, a plurality of supporting members extending from the base member outwardly beneath the oppositely extending arms of the head, and a plurality of work tables carried by the supporting arms for cooperation with the jig-saw and router mechanism, said latter mechanism being so constructed and arranged as to permit removal of the router tool and substitution therefor of a drilling tool.

1,812,686. PROCESS AND APPARATUS FOR MARKING RUBBER CORDS AND CABLES. GEORGE JACKSON CROWDES, Dorchester, Mass., assignor to Simplex Wire and Cable Company, Boston, Mass., a Corporation of Massachusetts. Filed May 8, 1929. Serial No. 361,318. 6 Claims. (Cl. 18—13.)



1. In the marking of rubber covered cords, cables, rubber hose and similar goods, the improvement which comprises forming a lead jacket on the rubber element with a groove in the inner side thereof and a marking ribbon therein, vulcanizing the jacketed rubber element and stripping the jacket from the vulcanized marked rubber element.

1,812,687. SOUND-CHAMBER AND SET-FRAME THEREFOR. LEE DE FOREST, New York, N. Y., assignor to De Forest Phonofilm Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 4, 1925. Serial No. 54,397. 5 Claims. (Cl. 181—30.)

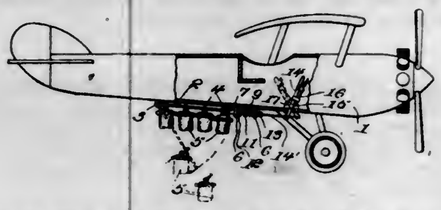


1. A sound-permeable motion picture background for use in the simultaneous photography of sound and motion, consisting of side-walls which include a skeleton support and a filling of a sheet of coarse-weave, open-mesh cloth mounted on said support, the holes in said cloth being in free communication with substantial air-spaces inside and outside the background; and an electrical sound-transmitter associated with said background and hidden thereby.

1,812,688. RELEASING DEVICE FOR MAIL BAGS. JULIUS LOUIS DE GIVE, Atlanta, Ga.; Henry L. de Give executor of said Julius Louis de Give, deceased. Filed Dec. 13, 1929. Serial No. 413,862. 2 Claims. (Cl. 244—1.)

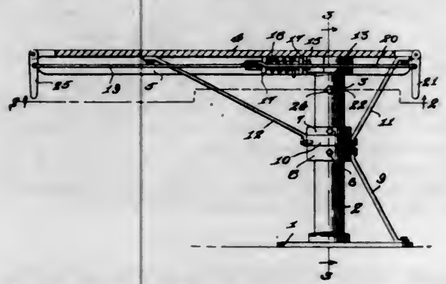
1. The combination with an aeroplane, of means upon the same for supporting a plurality of mail bags, the said means comprising a rod pivotally connected at one end to the aeroplane at the under side thereof, whereby supporting eyes upon a series of mail bags may be slidably fitted

onto the said rod, a member mounted upon the under side of the aeroplane body and having a socket, the member being movable into and out of position to receive and support



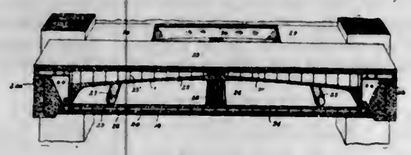
the free end of the said rod, a spring yieldably holding the socket member in active position, and manually operable means connected with the said socket member for retracting the same to release the said free end of the rod.

1,812,689. ADJUSTABLE ROAD STAND. JESSE H. FARRAR, Lubbock, Tex. Filed May 23, 1930. Serial No. 455,056. 1 Claim. (Cl. 248—1.)



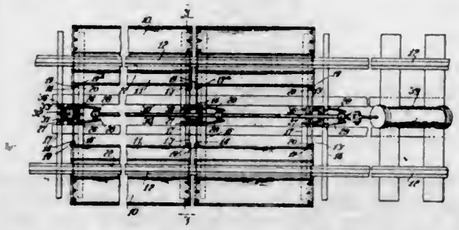
In a device for the purpose set forth, a base having a hollow standard arising therefrom, a table top, a post disposed adjacent one end of the top depending therefrom and received in the standard, adjustable members on the standard, a brace element between one of the adjustable elements and the base, a ring member journaled on the standard between the adjustable members and the brace means between the ring member and the table top, a notched element fixed on the upper end of the standard and upon which the table top rests, a spring influenced slidable bolt on the table top to engage with the notches of the ring member, an offset finger on the bolt, pivotally connected handle members on the ends of the table and rods between said handle members and the finger, said standard having an arcuate slot therethrough of a length approximately one-fourth of the circumferential diameter of the standard and a stop lug on the post received in the slot and designed to contact with the end walls thereof, for the purpose set forth.

1,812,690. ARCH JOIST AND FLOOR CONSTRUCTION. HURXTHAL F. FREASE, Canton, Ohio. Filed Aug. 16, 1926. Serial No. 129,424. 6 Claims. (Cl. 72—71.)



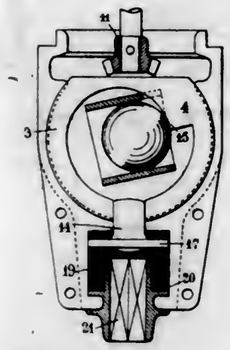
1. A structural member including an arch having outer bases, tension means connecting the outer bases of the arch and adapted to resist the end thrust thereof, end supports for the arch, the arch having a T-cross-section increasing in depth from the center of the arch to each base and the head of the T being above the stem and lying substantially in a flat plane.

1,812,691. RAILWAY CAR RETARDER APPARATUS. ERNST FRÖLICH, Essen, Germany, assignor to The Hannauer Car Retarder Company, Gibson, Ind., a Corporation of Illinois. Filed Dec. 20, 1926. Serial No. 155,923. 20 Claims. (Cl. 188—62.)



1. In apparatus for retarding the movement of railway cars, car wheel engaging members disposed on opposite sides of a track rail and adapted to be moved into engagement with the inner and outer side faces of a car wheel, one of said members being inclined upwardly toward the track rail and adapted to be depressed by the engagement of a car wheel therewith, pivoted means connecting said wheel engaging members and having capacity for movement about its pivot transversely of the rail, whereby the depression of said wheel engaging member moves said connecting member transversely of the rail and forces said wheel engaging members into frictional engagement with the side faces of the wheel.

1,812,692. CENTRIFUGAL HAMMER. NICOLAS GEORGEVITCH, Paris, France, assignor to Joseph Alfred Dahme, Paris, France. Filed Aug. 19, 1926, Serial No. 130,312, and in France Aug. 25, 1925. 1 Claim. (Cl. 78—34.)

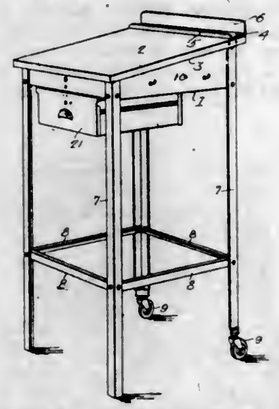


A centrifugal hammer, comprising a rotatable retaining member having a cylindrical socket, the axis of which is radially disposed with respect to the axis of rotation, a cam track surrounding said retaining member, a spherical ball freely and radially movable in said socket and directed against said track by centrifugal force, and an anvil in the path of said ball, said cam track having a portion adapted to cam said ball inwardly of said socket and also having an abrupt change of contour for releasing said ball to centrifugal force at such a point as will cause said ball, when released, to be projected freely through space against said anvil.

1,812,693. MANUFACTURE OF NEW DERIVATIVES FROM SULPHITE CELLULOSE WASTE. ANTHONY JAMES HAILWOOD, Blackley, Manchester, England, assignor to British Dyestuffs Corporation Limited, Manchester, England. Filed Sept. 26, 1927, Serial No. 222,212, and in Great Britain Dec. 21, 1926. 5 Claims. (Cl. 252—7.)

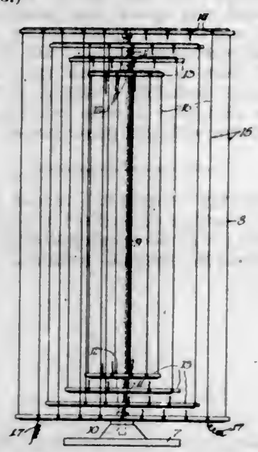
1. A process for the manufacture of new derivatives of ligninsulphonic acid (sulphite cellulose pitch) comprising the treatment of the same at temperatures above 110° C. with ammonia solution at pressure above atmospheric in a closed vessel.

1,812,694. PORTABLE DESK. HOWARD T. HALLOWELL and FRANK BENNETT, Jenkintown, Pa., assignors to Standard Pressed Steel Co., Jenkintown, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1929. Serial No. 399,641. 4 Claims. (Cl. 45—69.)



1. The combination in a desk, of a body portion; a flanged top portion of greater width than the body portion; and hinges made of two sheet metal strips and bent so that the pivot portions of the hinge will be close together, while the two leaves of each hinge will be spaced apart, one leaf of each hinge being secured to the side of the body portion and the other leaf being secured to the flange of the top portion.

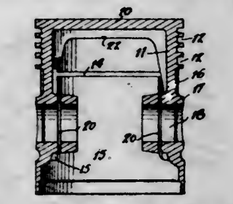
1,812,695. LOOP AERIAL. ALBERT G. HARMS, Chicago, Ill. Filed Apr. 12, 1926. Serial No. 101,325. 8 Claims. (Cl. 250—33.)



1. A loop aerial having more than two loops mounted successively one within another in decreasing size and each having a continuously extending coil winding with the coils thereof equidistantly spaced apart in parallel relation and supported on successively enlarged portions.

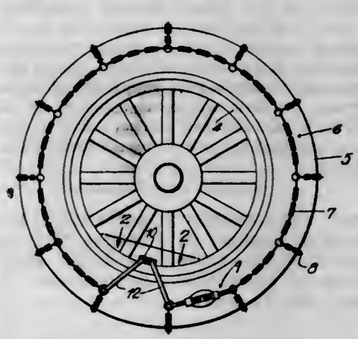
1,812,696. PISTON. STEPHEN D. HARTOG, St. Louis, Mo., assignor to Harry J. Hater, Cincinnati, Ohio. Filed Dec. 18, 1928. Serial No. 326,832. 9 Claims. (Cl. 74—108.)

1. A piston comprising a head, skirt and piston pin hubs, each of said hubs comprising spaced portions, one of said spaced portions of each hub being connected to the head and the lower portion of the skirt, and the other portion of



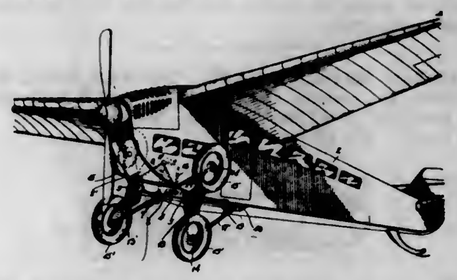
each hub being connected to the sides of the skirt, said skirt being separated by a slit inclined from the vertical on the non-thrust side thereof.

1,812,697. TIRE CHAIN FASTENING MEANS. RAY HATFIELD, Springfield, Ill. Filed July 6, 1929. Serial No. 376,454. 1 Claim. (Cl. 70—90.)



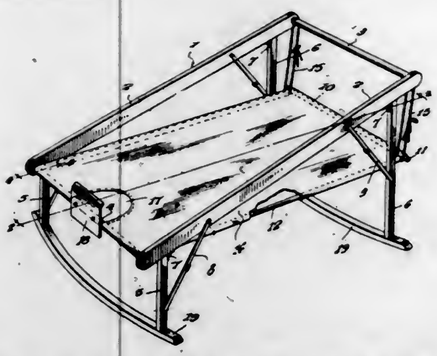
A fastening means for anti-skid chains of the type employing circumferentially extending side chains having free ends, and connected by cross links, said fastening means comprising a lock having four shackles projecting therefrom, said lock having a flat rear base adapted to rest upon the inner peripheral face of a wheel felloe, and a plurality of connecting links, connecting said shackles to the free ends of said circumferentially extending side chains, each of said links comprising a flexible member having a loop at one end for engagement with a lock shackle, and a loop at the other end for engagement with a free end of a circumferentially extending chain.

1,812,698. AEROPLANE LANDING GEAR. GEORGE E. F. HICKOX, Providence, and WILLIAM T. MITCHELL, Central Falls, R. I. Filed Dec. 17, 1929. Serial No. 414,768. 3 Claims. (Cl. 244—2.)



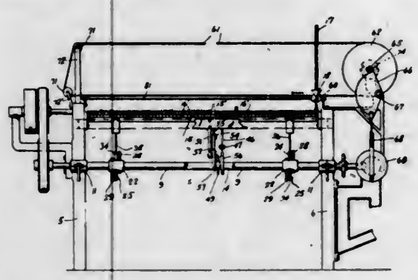
3. The combination with an aeroplane of duplicate pairs of starting and landing wheels, a rotatable structure carried by the plane on which said wheels are separately mounted, means for adjusting either set of wheels to a landing position by the rotation of said structure and means for locking said structure in either adjusted position.

1,812,699. CRADLE. RAYMOND M. HURSH, Warrensburg, Mo. Filed Oct. 9, 1929. Serial No. 398,529. 1 Claim. (Cl. 5—102.)



A device of the class described comprising a main frame, front and rear legs for supporting the frame, said legs being of unequal length to support the frame in an inclined position, a supplemental frame, means for pivotally and adjustably connecting the supplemental frame with the main frame, a fabric mattress supported by the supplemental frame, said mattress having a seat opening formed therein, and a guard supported by the main frame adjacent the opening.

1,812,700. ATTACHMENT FOR KNITTING MACHINES. CHARLES F. JOHNSON, St. Johnsville, N. Y., assignor to Walter S. Becker, Little Falls, N. Y. Filed July 12, 1928, Serial No. 292,226. Renewed Dec. 5, 1930. 7 Claims. (Cl. 66—84.)



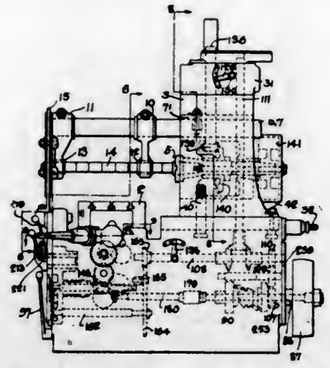
4. A machine for knitting padding comprising the combination with spaced needle bars, means intermittently moving said bars with respect to each other, a trumpet, and means for intermittently moving the trumpet back and forth to deposit roving in the space between said needle bars, of means for packing the deposited roving between said needle bars.

1,812,701. ERASER HOLDER. THOMAS H. JONES, Roanoke, Va., assignor of two-thirds to Paul B. Culp, Roanoke, Va. Filed May 31, 1930. Serial No. 458,747. 1 Claim. (Cl. 120—40.)



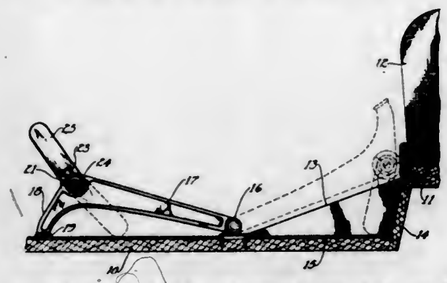
An eraser holder comprising telescopic tubular members adapted to receive the eraser, the inner tubular member having incisions leading in from its end and dividing said end into eraser clamping portions, said inner member being provided at opposite sides with parallel slots, and studs attached to the outer tubular member and slidably received in the slots and having heads extending into the inner member, the parts being so arranged and proportioned that the outer tubular member holds the studs in contact with the eraser and contracts the clamping portions of the inner member against the sides of the eraser when the same is projected beyond the ends of both of the tubular members.

1,812,702. MACHINE TOOL. EDWARD J. KEARNEY, Wauwatosa, and JOSEPH B. ARMITAGE, Milwaukee, Wis., assignors to Kearney & Trecker Corporation, West Allis, Wis., a Corporation of Wisconsin. Filed Feb. 17, 1928. Serial No. 254,970. 23 Claims. (Cl. 90—21.)



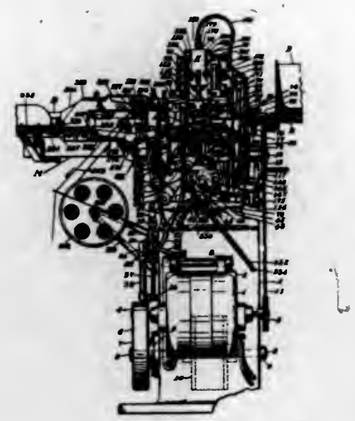
1. In a milling machine, the combination of a bed, a table reciprocable thereon, a head on said bed adjacent said table and having different portions upstanding above said table and spaced apart in the direction of table movement and a top portion rigidly connecting the corresponding ends of said spaced head portions, a carrier for spacing said spaced head portions at intermediate points, a spindle rotatably supported from said carrier, said carrier being movable between said spaced head portions for vertical adjustment of said spindle, a power source, a speed change mechanism supported from said head adjacent said top portion, a power train connecting said speed change mechanism and spindle including a vertical shaft splined for carrier adjustment, and a train connecting said speed change mechanism with said power source.

1,812,703. MOTOR VEHICLE. ARCHER L. KNAPP, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 6, 1926. Serial No. 146,599. 3 Claims. (Cl. 296—75.)



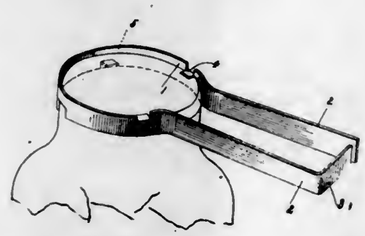
1. In a motor vehicle, the combination with the floor, the kick-up sills and the seat, of brackets secured to the floor in alinement with the kick-up sills, arms pivotally connected to the brackets, angular extensions on the ends of the arms providing supports, sleeves on the arms at the juncture between the arms and angular extensions, trunnions in the sleeves, cooperative stops between the sleeves and the trunnions, a foot board secured between the trunnions to operate as an adjustable foot rest when the arms are in an operative position and to swing down between the kick-up sills to provide a heel board for the seat when the arms are folded back over the kick-up sills.

1,812,704. CIGAR BANDING MACHINE. FRANCIS X. MALOCSAY, Upper Saddle River, N. J., assignor to International Banding Machine Company, a Corporation of New York. Filed June 16, 1925, Serial No. 37,464. Renewed Nov. 29, 1930. 22 Claims. (Cl. 131—61.)



1. In a device of the character described having a band stack, a single means for removing a band from said stack and moving it to a position where said band is rendered adhesive and thence to a second position where said band is applied to a cigar.

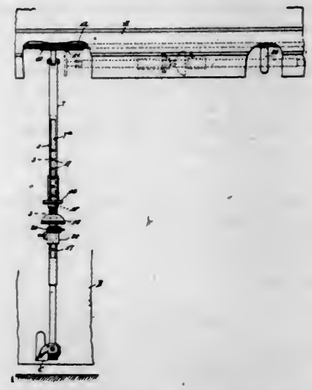
1,812,705. JAR WRENCH. ANTHONY RAGONESE FU MARIO, New London, Conn. Filed Nov. 2, 1927. Serial No. 230,607. 1 Claim. (Cl. 81—3.1.)



A jar wrench formed of a single strip of material and comprising a circular part having its ends extended to form handles, upper lugs extending inwardly from the circular part and lower lugs extending inwardly from the circular part, the lower lugs being oppositely arranged from the upper lugs, said lugs being integral with the strip from which the device is formed.

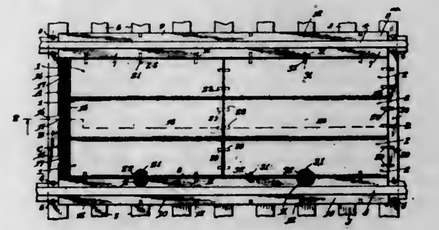
1,812,706. PIANO ATTACHMENT. NICOLAI MEDNIKOFF, Scarsdale, N. Y. Filed Dec. 12, 1929. Serial No. 413,664. 7 Claims. (Cl. 84—231.)

1. The combination with a piano of a pedal attachment therefor including pedal actuating means extending upwardly from the piano pedals and a member for supporting and guiding said actuating means, carried by and depending from the under side of the keyboard, and means for mounting said supporting and guiding member



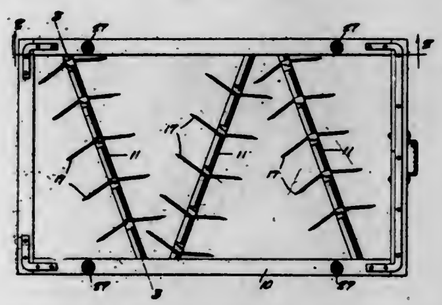
for lateral upward swinging movement with respect to the keyboard to an out-of-the-way position substantially parallel to and underneath the keyboard.

1,812,707. RAILWAY CROSSING. GEORGE ERNEST NAGEL, Columbus, Ohio. Filed June 19, 1930. Serial No. 462,335. 18 Claims. (Cl. 238—8.)



3. In railroad crossings, a slab formed of a concrete under support and an armoring plate formed with side and end depending flanges, the flanges being of less height than said body, said plate encompassing the upper portion of said support and with the outer faces of said flanges flush with the side and end faces of said support.

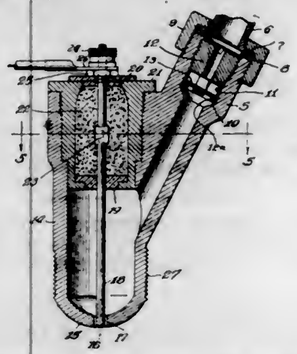
1,812,708. HARROW. RUDOLF NYGARD, AXEL FINNILA, and TORSTEN LINDELL, Sandwich, Ontario, Canada. Filed Aug. 10, 1928. Serial No. 298,729. 1 Claim. (Cl. 55—11.)



A harrow disk gang comprising in combination with a frame, a shaft of rectangular formation in cross section and having reduced threaded extremities, spindles threaded on said extremities and journaled in said frame, spaced ground engaging elements mounted on the shaft for rota-

tion therewith, each element comprising an elongated member of uniform width, and including an intermediate portion having a squared central opening to receive the shaft, and relatively inclined blades extending from the opposite ends of the intermediate portion in opposite directions and terminating to provide ground penetrating points, and said ground engaging elements being alternately arranged in right angular relation to each other throughout the length of the shaft, and spacing sleeves mounted on the shaft and arranged between the said ground engaging elements.

1,812,709. IGNITION MECHANISM FOR INTERNAL COMBUSTION ENGINES. OLE ODBE and PAUL PATRICK EMIL RICHARDS, Batavia, Ill. Filed Aug. 1, 1927, Serial No. 209,920. Renewed Nov. 12, 1930. 1 Claim. (Cl. 123—169.)



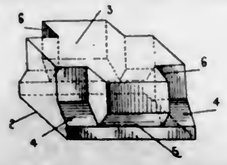
In an ignition device, a shell open at one end and having a passage in its other end, the open end of said shell being internally threaded and an internal shoulder being formed about the walls of the shell in spaced relation to its open end, a jacket screwed into said shell and having a reduced inner end portion forming a circumferential shoulder fitting against the shoulder of the shell, said jacket having an internal flange at its inner end and having its walls internally thickened toward its outer end, a plug of insulating material in the inner end of said jacket, bearing against said flange, a cap of insulating material for the outer end of said jacket extending into the same, an electrode extending axially through said jacket with its inner end portion extending through the shell and projecting through the passage in the inner end thereof and a cementitious filling for said jacket.

1,812,710. TIRE PROTECTOR. GEORGE H. PAPPAS, Baltimore, Md. Filed June 23, 1930. Serial No. 463,088. 3 Claims. (Cl. 152—18.)



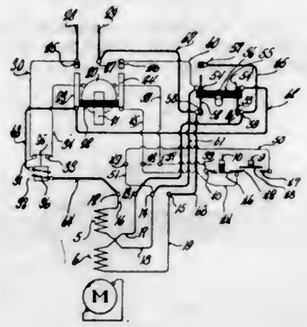
1. A device of the class described comprising an open-ended metallic band, an envelope surrounding said band, said envelope provided with a pocket at one end, the opposite end of said band adapted to fit within said pocket, and means for facilitating the anchoring of said protector within a tire casing.

1,812,711. BLOCK FOR PAVEMENTS AND COVERINGS. LUIGI PESSIONE, Turin, Italy. Filed Aug. 20, 1928, Serial No. 300,824, and in Italy Aug. 27, 1927. 4 Claims. (Cl. 94—11.)



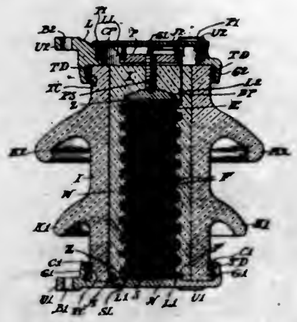
1. A substantially hexahedral pavement block having different upper and lower bed faces, two opposite plane side faces, and two end faces each formed so as to interlock with two adjacent equal blocks, characterized in that the interlocking form of each of the two end faces, as referred to the corresponding face of the fundamental hexahedron, consists of a central projection and a pair of corner depressions, starting from the upper bed face and reaching without undercuts at a distance from the lower bed face, the central projection resulting from the coupling according to a middle symmetry plane of two portions equal to the removed corner portions and rotated through 180° around a pair of axes lying on the face referred to of the hexahedron, at one-fourth of the width thereof.

1,812,712. MOTOR STARTING SWITCH. WALTER S. PFEIFER, Milwaukee, Wis., assignor, by mesne assignments, of one-half to Lynde Bradley and one-half to Harry L. Bradley, Milwaukee, Wis. Filed Dec. 30, 1927. Serial No. 243,687. 4 Claims. (Cl. 171—97.)



1. In combination with an electric translating device capable of operation from sources of electrical energy of different voltages and having a plurality of electro-responsive elements adapted to be connected in series and in parallel depending upon the voltage of the available source of electrical energy, an electric switch apparatus including a line switch adapted to connect the plurality of electro-responsive elements with a source of electrical energy and having an operating solenoid, said operating solenoid being responsive to a predetermined voltage and being at all times connected across one of the electro-responsive elements so that the voltage supplied thereto is no greater than that supplied said element, circuits including the electro-responsive elements and the operating solenoid, and an auxiliary switch connected in said circuits for connecting the electro-responsive elements in parallel or in series by the simple expedient of actuating the auxiliary switch.

1,812,713. ELECTRICAL CONDENSER. JOHN A. PROCTOR, Lexington, and WILLIAM M. BAILEY, Lynn, Mass., assignors to Wireless Specialty Apparatus Company, Boston, Mass., a Corporation of New York. Filed Jan. 23, 1925. Serial No. 4,150. 85 Claims. (Cl. 175—41.)

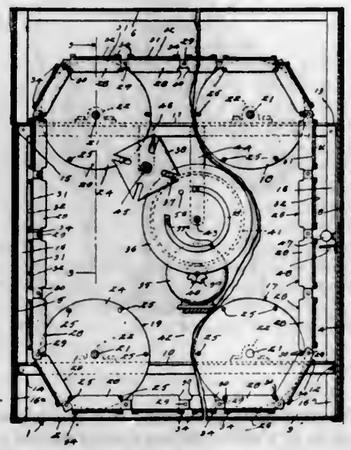


1. As a metal end-construction for a high potential sheet-stack electrical condenser enclosed in an insulating casing, a collar secured to said casing and formed with a central hole and with two inwardly projecting shoulders on diametrically opposite sides of the walls of said hole; and a plate located between the end of the stack and the said shoulders and transmitting clamping pressure from the stack to said collar and insulating casing.

1,812,714. METHOD FOR OXIDATION OF HYDROCARBONS. JAMES W. PUGH, Breckenridge, Tex., and ERNEST TAUCH and THOMAS E. WARREN, Cambridge, Mass., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Aug. 4, 1928. Serial No. 297,430. 6 Claims. (Cl. 260—116.)

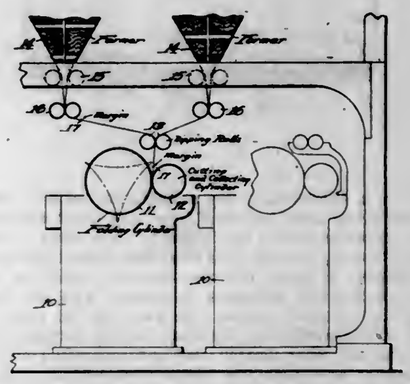
1. An improved process for obtaining liquid oxygen-containing derivatives from hydrocarbon by oxidation with an oxidizing gas, comprising dissolving said gas in the hydrocarbon while in a liquid state, passing the mixture rapidly through a reaction zone heated, withdrawing and cooling the product.

1,812,715. ADVERTISING DEVICE. OTTO I. QUILLIN and CLAUDE R. WRIGHT, Colorado Springs, Colo. Filed May 29, 1930. Serial No. 457,390. 2 Claims. (Cl. 40—32.)



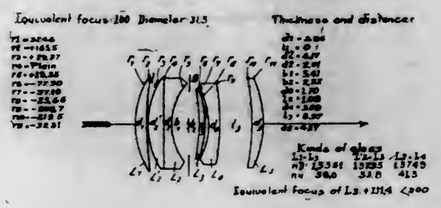
1. An advertising device, comprising a casing having a window, a series of drums rotatably supported in the casing and each embodying a pair of heads and cross bars terminally connected to the heads, an endless chain mounted upon the drums between the heads thereof and embodying links having notches for engagement with the cross bars, means for securing advertising cards to the chain, and means for intermittently operating the drums to successively present the advertising cards to the window.

1,812,716. FOLDING UNIT. OSCAR CHARLES ROESEN, Brooklyn, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 17, 1927, Serial No. 220,161. Renewed Nov. 29, 1930. 10 Claims. (Cl. 270—42.)



1. In a newspaper folding machine, the combination with a pair of formers and their nipping rolls for receiving and directing two webs, of a folding unit located at one side of the center, a frame for said unit and a pair of nipping rolls carried by said frame independently of the formers and directly over the folding unit for receiving the webs from both of the pairs of nipping rolls on the formers.

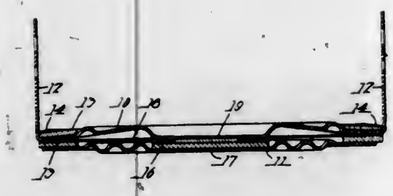
1,812,717. LENS SYSTEM. PAUL RUDOLPH, Grossbiesnitz, near Gorlitz, Germany. Filed Oct. 14, 1926, Serial No. 141,474, and in Germany Aug. 18, 1926. 1 Claim. (Cl. 88—57.)



A rapid five-lens system corrected for the spherical aberrations of the first and of the second order, containing in its interior a convexo-concave dispersive lens and a collective lens with an equivalent focus smaller than three times the equivalent focus of the entire five-lens system, which said two lenses bound a biconvex airspace that divides the entire five-lens system into two members both of which are collective; of which one member consists of (1) A collective lens, (2) An airspace of dispersive-lens form very thin along its axial line, and (3) A very thick dispersive lens itself consisting of a collective lens cemented to a dispersive lens; the other member consisting of

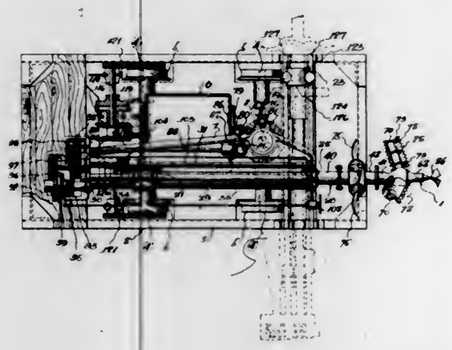
two collective lenses with a dispersive lens interposed therebetween and separated from the said collective lenses by air-spaces.

1,812,718. THERMOSTAT. ROBERT H. RUSSELL, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 27, 1928. Serial No. 250,052. 2 Claims. (Cl. 200—142.)



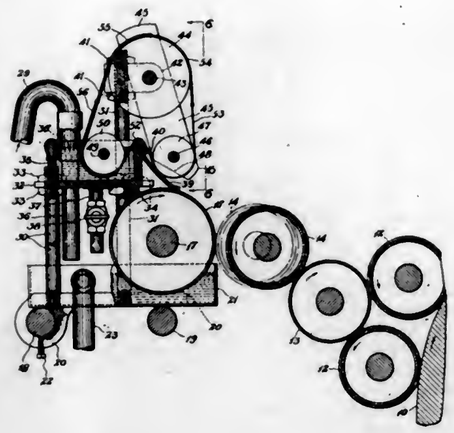
1. In a thermostat, the combination with a pair of flexible metal discs insulated from each other arranged to exert pressure toward each other so as to come in contact when released, the two discs constituting electric terminals to complete a circuit when in contact, a body of fusible alloy of material thickness in contact with one of said discs and located between the two and an imperforate disc of non-conducting material located between the alloy and the other flexible disc and separating them and of smaller area than the fusible disc, whereby when the alloy melts the insulating material will sink into the body thereof and permit the two flexible discs to be connected through the body of alloy around the edge of the insulating disc.

1,812,719. DRILLING MECHANISM. ROBERT E. SCHROEDER, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 19, 1928. Serial No. 313,445. 12 Claims. (Cl. 255—20.)



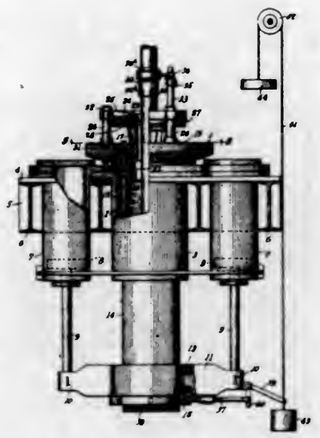
1. In a drilling apparatus, a support, a rotatable drilling arm, a pilot drill journaled within said drilling arm, a plurality of cutters extending radially outwardly from said drilling arm, and a cuttings clearing device on said drilling arm comprising a plurality of propellers rotatable with said drilling arm and rotatable on axes perpendicular to the axis of rotation of said drilling arm.

1,812,720. DAMPENING DEVICE. JOSEPH SCHULTZ, Cleveland, Ohio. Filed June 2, 1928. Serial No. 282,420. 26 Claims. (Cl. 101—148.)



1. Means for dampening in printing upon sheets carried upon a lithographic press, comprising a water reservoir, a roller, an appliance including a composite element adapted by capillarity to transfer moisture from said reservoir to said roller, and means for adjusting said element whereby to vary its function of utilizing capillary attraction.

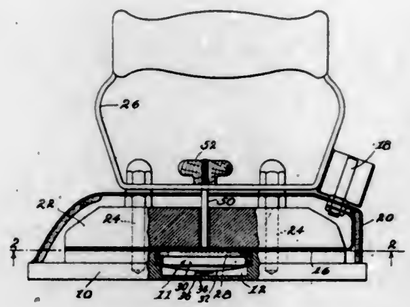
1,812,721. WELL DRILLING APPARATUS. WALDO SHELDON, South Norwalk, Conn., assignor to Sheldon Machinery Corporation, New York, N. Y., a Corporation of New York. Filed July 9, 1927. Serial No. 204,446. 32 Claims. (Cl. 255—23.)



1. In well drilling apparatus, the combination with a rotary table, of a sleeve slidingly keyed therein and adapted to be unkeyed therefrom and to remain in non-rotating relation thereto, supporting means carried by the table, pipe grip means supported by said supporting means, grip

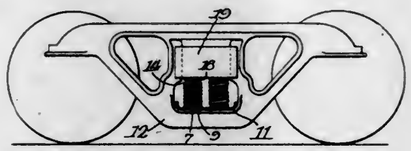
operating mechanism carried by the sleeve for closing and opening the grip means with respect to a drill pipe extending down through the sleeve and power mechanism for raising and lowering the sleeve to positively close or open the grip means.

1,812,722. TEMPERATURE CONTROLLED APPARATUS. JOHN A. SPENCER, Newtonville, Mass., assignor to Spencer Thermostat Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 3, 1925, Serial No. 20,455. Renewed Nov. 15, 1930. 20 Claims. (Cl. 236—7.)



1. Temperature controlled apparatus comprising a rotary element part of which is movable back and forth longitudinally of its axis as a result of changes in the temperature to which the apparatus is subjected, and means effective solely to rotate the element about said axis upon movement of part of said element longitudinally of its axis.

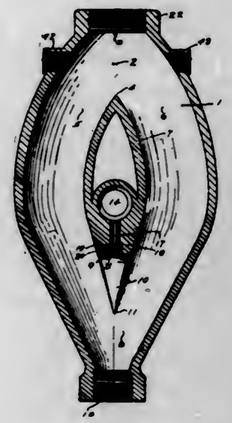
1,812,723. BOLSTER SUPPORT. DONALD F. SPROUL, Chicago, Ill., assignor to Cardwell Westinghouse Company, a Corporation of Delaware. Filed Oct. 30, 1929, Serial No. 403,421. Renewed Nov. 7, 1930. 8 Claims. (Cl. 267—9.)



3. In a bolster support in combination, a spring having the inner faces of its several turns flattened, a spring seat, a pair of segmental friction shoes engaging the inner face of the spring and each having an outstanding flange engaging the spring end, a pair of wedge shoes engaging the inner faces of the friction shoes and each having an outstanding flange engaging the opposite end of the spring and a forwardly and inwardly inclined wedge face, and a follower facing and spaced from the wedge shoe flanges and having a wedging stem cooperating with the wedge faces of such shoes, such stem being engageable with the spring seat as a limiting stop.

1,812,724. HYDRAULIC SUCTION DEVICE. JOHN G. STAMM, East Cleveland, Ohio. Filed Apr. 23, 1928. Serial No. 272,235. 3 Claims. (Cl. 230—92.)

1. In an air suction device, a hollow casing provided with a water conduit construction therein, an air-receiving passageway, and a discharge passageway for mixed air and water, the conduit construction communicating with the outside of the casing whereby water may be conducted thereto and terminating inwardly of the casing in a substantially planular surface disposed at substantially right angles to the direction of flow of air through the casing from the air-receiving passageway to



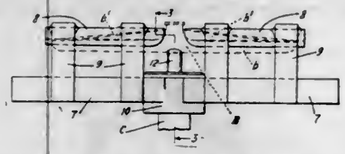
the discharge passageway, a removable nozzle piece in the conduit construction provided with a minute duct having an orifice disposed in said planular surface, whereby a jet of water emerging from the orifice impinges at right angles upon the air in the casing in contact with said surface and whereby air in motion toward said emerging water jet moves at right angles to said jet and into contact therewith, the discharge passageway being of smaller cross-sectional area than the air-receiving passageway, the discharge passageway being longitudinally spaced from and axially disposed relative to the said orifice and the casing being provided with lateral walls converging toward the discharge passageway from the orifice.

1,812,725. METHOD OF ATTACHING FILTER CLOTH. CARROLL M. STANLEY and FRANKLIN J. EVANS, Hazleton, Pa., assignors, by mesne assignments, to Oliver United Filters Inc., San Francisco, Calif., a Corporation of Nevada. Filed Aug. 27, 1927. Serial No. 215,810. 1 Claim. (Cl. 210—195.)



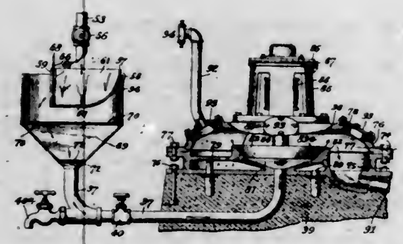
The method of tensioning and positively securing filter cloth over a backing screen to a segment of a filter leaf which comprises forming an inwardly flanged groove surrounding the opening in said segment forcing and stretching the filter cloth into said groove, the amount of cloth forced into said groove being substantially more than three times the width of the opening in said slot, subsequently forcing a soft metallic element into said groove and finally deforming the soft metallic element in said groove to an effective width substantially greater than the effective width of the groove.

1,812,726. PEENING APPARATUS. EDWARD W. STEVENS, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 17, 1927. Serial No. 240,674. 16 Claims. (Cl. 153—48.)



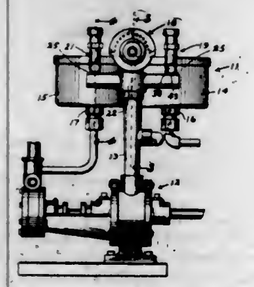
1. In apparatus of the class described, a member arranged to engage a grooved support, a percussive machine supported by said member and means on said member arranged to guide said machine for movement longitudinally of said support for peening the latter into gripping engagement with an elongate member received in the groove of said support.

1,812,727. APPARATUS FOR EMULSIFYING LIQUIDS AND FOR OTHER PURPOSES. HARRY L. SYMONS, Wimbledon, London, England, assignor to Roads Colloidal, Limited, London, England. Original application filed June 25, 1923, Serial No. 647,421. Divided and this application filed Feb. 29, 1924. Serial No. 695,886. 20 Claims. (Cl. 83—13.)



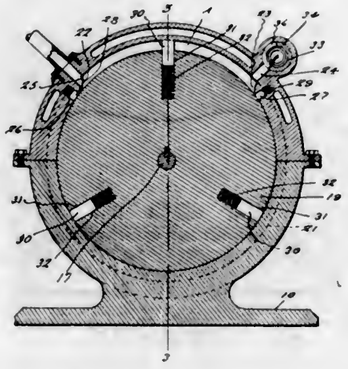
1. An apparatus of the character described comprising a mill for subjecting a liquid to the action thereof, means for continuously maintaining a constant head of liquid above said mill, means for continuously supplying liquid to said head, and means for preventing air locking in said mill.

1,812,728. FLUID PROPORTIONING DEVICE. WILBUR TEALE and HERBERT F. MCLAUTHLIN, Oakland, Calif., assignors to Hydro-Oil Fire Corporation, Tacoma, Wash., a Corporation of Washington. Filed Sept. 25, 1928. Serial No. 308,309. 3 Claims. (Cl. 261—18.)



1. In a fluid proportioning device, a manifold, a reservoir for a liquid, and means providing a closed passage from the liquid in said reservoir to said manifold, said passage having riser and gravity discharge portions with the riser portion extending above the liquid level in said reservoir and with the discharge portion contracted to provide a drip orifice therein.

1,812,729. ROTARY GASOLINE MOTOR. WILSON J. TEETERS, Lyons, Nebr. Filed Oct. 21, 1927. Serial No. 227,799. 1 Claim. (Cl. 123—16.)



A rotary engine including a support, a pair of circular spaced casings mounted on said support and having spaced annular grooves adjacent the side walls and combined expansion and firing chambers in the upper portions thereof, a drive shaft journaled in said casing, rotors secured to the shaft within said casings, annular flanges on the periphery of the rotors and extending into the grooves, spring pressed pistons carried by the rotors, said casings having intake and exhaust ports located at opposite ends of the chambers, a valve mechanism for controlling the intake ports, apring pressed guard members adjacent the ends of the chambers and bearing against the rotors, fuel compressors located at the sides of the casings and connected to the intake ports and to a fuel supply, gears located between the casings and driven by the shaft to rotate the valve mechanism, and eccentric means at the ends of the shaft to operate the compressors.

1,812,730. ASPHALTIC MATERIAL AND METHOD OF PREPARING SAME. WILLIAM C. WEST, Louisville, Ky., assignor to West Process Pavement Co., Inc., Louisville, Ky., a Corporation of Kentucky. Filed Aug. 21, 1928. Serial No. 301,169. 3 Claims. (Cl. 106—31.)

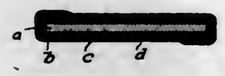
1. The process of preparing for storage and shipment an asphaltic material suitable for lining ditches, canals and reservoirs or forming a waterproof protective surafce on dikes and levees, or placing a resilient waterproof protective surface on concrete streets, sidewalks and floors, the asphalts of which are adapted to be converted to an asphalt cement on the job by blending, which comprises mixing hard asphalt in a powdered form insufficient in quantity to provide the required percentage of asphalt cement with a part of the dry pulverized earth required to make a given batch while warm, said mixing being carried out at a temperature below that at which the hard asphalt blends with a soft asphalt, adding semi-liquid asphalt or asphaltic flux to bind the powdered asphalt particles to the particles of earth, the quantity of semi-liquid asphalt or asphaltic flux being sufficient to provide the desired percentage of asphaltic cement when blended with the hard asphalt by heating, and then adding the balance of the dry, pulverized earth at atmospheric temperature, thereby cooling the mixture.

1,812,731. ROTARY ICE SCORING MACHINE. FRANCIS CAMERON WESTMAN, Toronto, Ontario, Canada. Filed Feb. 20, 1928, Serial No. 255,769. Renewed Dec. 4, 1930. 12 Claims. (Cl. 125—13.)



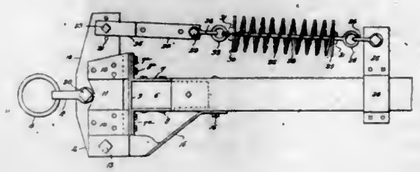
1. In an ice scoring machine, rotatory means operating to receive a cake of ice and rotate same about an axis, and scoring means positioned at right angles to said axis lowering to score the cake and rising to clear the cake after scoring.

1,812,732. PROTECTED METAL ARTICLE. JAMES HOWARD YOUNG, Pittsburgh, Pa., assignor to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 20, 1929. Serial No. 393,956. 3 Claims. (Cl. 154—45.9.)



3. A protected metal article comprising a metal article provided with a protective layer of fire-resisting asphalt composed of asphalt and chlorinated poly-phenyl.

1,812,733. DRAWBAR. DONALD F. AINSLIE, Bishop, Calif. Filed Aug. 6, 1930. Serial No. 473,443. 2 Claims. (Cl. 280—33.9.)

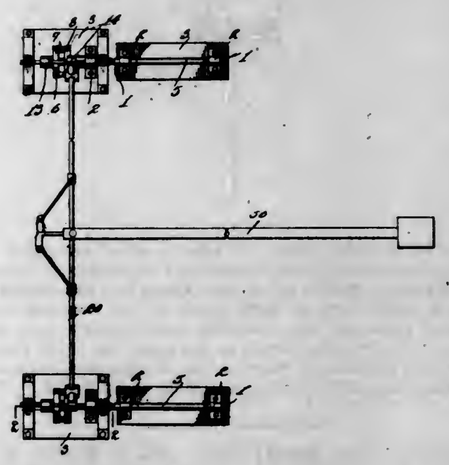


1. A draw bar construction of the type described, comprising a hollow tubular bar, a reduced extension telescoped in the outer end of the draft bar, means to secure the extension of said draft bar in said relation, angle brackets secured to the side of said extension, U-shaped members secured to the extensions on said brackets, plates secured to the inner side of the legs of said U-shaped members in lateral extension on said plate, a flat toggle bar adapted for movement between said plates, a pivot through the plates and an end portion of the toggle bar, said toggle bar having a series of bolt holes at its free end, a laterally projecting bracket on said bar, a double acting compressing spring mounted at one end to said laterally extending bracket, and having its further end attached to said free end of the toggle, and a U-shaped member to embrace the free end of the toggle in its bight secured to the other end of the spring, and a bolt through said U-shaped member and through a bolt hole in the free end of the toggle, and a draft ring pivotally mounted centrally of the forward edge of the toggle bar.

1,812,734. METHOD OF FAST-DYEING BONE. ELMER C. BERTOLET, Philadelphia, Pa., assignor to George K. Hale Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Apr. 23, 1925, Serial No. 25,488. Divided and this application filed July 17, 1926. Serial No. 123,249. 5 Claims. (Cl. 8—5.)

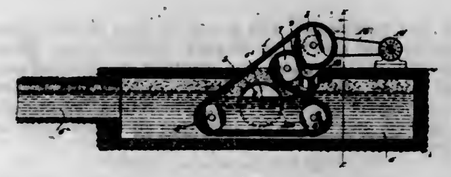
1. The method of coloring bone material consisting in subjecting it to a mixture of coloring matter and alcohol in the presence of fat for causing a penetration of the coloring matter to a substantial depth.

1,812,735. GATE OPERATING MEANS. HENRY L. BROWN, Chattanooga, Tenn. Filed June 9, 1930. Serial No. 459,972. 4 Claims. (Cl. 39—31.)



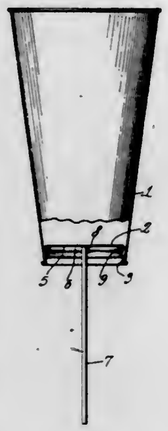
1. A gate operating mechanism comprising a crank shaft with the crank portion thereof located in the path of passing vehicles, a member fixed to said shaft, a co-operating member loose on said shaft, gate opening means connected with said loose member and interengaging elements carried by said members and so spaced as to provide lost motion between the members to permit one member to be moved relatively to the other after its first actuation without affecting said member, and means for holding said members in operative position.

1,812,736. FILTERING DEVICE. JOHN H. BUTLER, Columbus, Ohio. Filed Sept. 17, 1929. Serial No. 393,252. 3 Claims. (Cl. 210—198.)



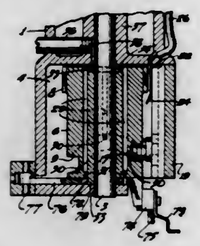
1. In a mechanical filter, a container for the liquid to be filtered having inlet and outlet ports, a pair of rollers disposed within said container, a second pair of rollers disposed upon the upper part of said container, means for moving said rollers, and an endless porous filter belt trained about said first two rollers and between said last named rollers for compressing said belt to discharge the fluid content of said belt.

1,812,737. VASE. JAMES M. COUGHLIN, Wilkes-Barre, and OSCAR P. ROSS, Kingston, Pa., assignors to Wilkes-Barre Can Company, Wilkes-Barre, Pa., a Corporation of Pennsylvania. Filed Nov. 2, 1928. Serial No. 316,777. 3 Claims. (Cl. 47—41.)



3. In a flower holder or vase, a metal receptacle, a detachable prong device comprising a single piece of spring wire bent to provide an annular spring loop and having a prong device bent at right angles to the loop and connected therewith and extending longitudinally from the axis of the loop, and means on the lower end of the receptacle for providing a keeper recess to receive the annular spring loop portion of the releasable prong device.

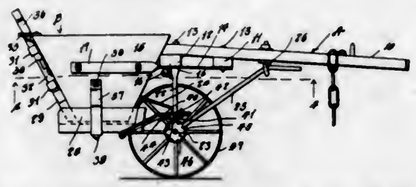
1,812,738. CAM MECHANISM. JOHN T. DALTON, Durham, N. C., assignor of one-half to Richard H. Wright, Durham, N. C. Filed Oct. 25, 1927. Serial No. 228,627. 2 Claims. (Cl. 184—1.)



2. The combination with a pair of cams having circumferential cam grooves, a member having rollers cooperative with the grooves of said cams and reciprocated vertically thereby, and a vertical slide supporting said member, of lips located above the respective rollers for dropping oil thereon, and means for supplying oil to the upper end of said slide.

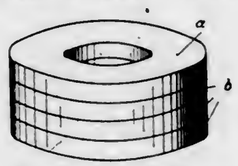
1,812,739. FERTILIZER DISTRIBUTOR. BEN DREW, Ivor, Va. Filed Nov. 21, 1928. Serial No. 320,954. 2 Claims. (Cl. 275—2.)

1. A machine of the class described comprising a hitching frame, attaching bars disposable in parallelism against the under surface of the frame, means adjustably securing said bars to the frame, said bars having depending bracket portions integral therewith and terminating at opposite ends in axles, ground wheels mounted on said axles and adjustable therewith, a hopper attached to each bar, a distributing shoe carried by each hopper, a



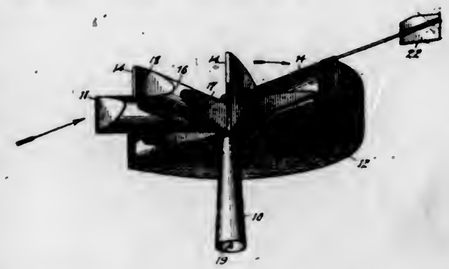
trip arm extending from each hopper, a trip wheel coacting with said trip arm and driven by each ground wheel.

1,812,740. MAGNET CORE. WALTHER EHLERS, Berlin-Copenick, Germany, assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed June 26, 1926, Serial No. 118,742, and in Germany July 6, 1925. 4 Claims. (Cl. 175—21.)



1. Magnet core composed of a plurality of superposed units offering an uninterrupted path to the magnetic flux and consisting of magnetic material having a marked permeability, one of said units differing from another unit in its magnetic properties.

1,812,741. WINDMILL. EDUARDO JIMÉNEZ ESPINOSA, Santiago, Cuba. Filed Jan. 31, 1930. Serial No. 424,881. 1 Claim. (Cl. 170—36.)

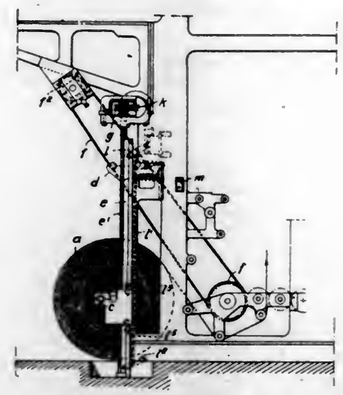


In a windmill, the combination of a wind-wheel mounted for rotation, said wind-wheel consisting of radially disposed vanes, each of said vanes being of dished construction closed at one side and fully open at the opposite side, and providing an outer and deflecting surface, a hollow windshield mounted to turn with respect to said wind-wheel and adapted to enclose substantially one-half of the upper and lower parts of said wind-wheel, and a rudder on said windshield to turn the latter in response to the pressure of the wind on said rudder.

1,812,742. MEANS FOR RAISING, CHANGING, AND DRIVING THE PAPER WEB ROLLS IN PRINTING MACHINES AND MORE PARTICULARLY IN ROTARY PRINTING MACHINES. ALFRED FALLOT, deceased, Plauen in Vokti., Germany, by Harry Priester, executor, Berlin, Germany. Filed Jan. 8, 1926, Serial No. 80,130, and in Germany Jan. 20, 1925. 4 Claims. (Cl. 242—58.)

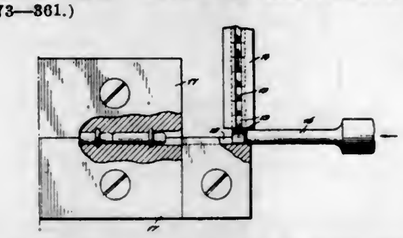
2. A paper roll changing and driving device for use in printing machines such as rotary printing machines,

comprising in combination, a paper roll spindle, traverse bearers for said paper roll spindle, traverse spindles in engagement with said traverse bearers, frictional endless driving means for rotating the said paper roll spindle with a paper roll on the same, during the upward move-



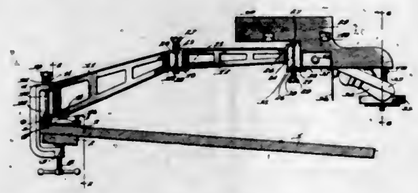
ment of the said paper roll spindle, means operated by the paper roll spindle for raising the said paper roll spindle and keeping the paper roll thereon in contact with the said frictional driving means and other means for adjusting the pressure of the frictional driving means against said paper roll.

1,812,743. TUBULAR PIN AND METHOD OF MAKING SAME. WILLIAM J. GAGNON, Bridgeport, Conn., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 11, 1928. Serial No. 305,296. 2 Claims. (Cl. 173—361.)



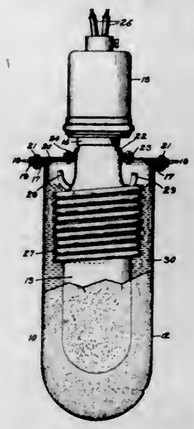
1. A tubular pin formed of sheet material comprising a shank having a longitudinal seam therein and an abutment shoulder intermediate of and unitary with said shank, said shank being necked down on one side of and next to said abutment shoulder, in combination with a cup closed over the end of the pin adjacent the necked down portion, substantially as described.

1,812,744. DRAWING BOARD ATTACHMENT. ROBERT S. GLENN, Cisco, Tex. Filed Feb. 13, 1928. Serial No. 254,099. 4 Claims. (Cl. 248—1.)



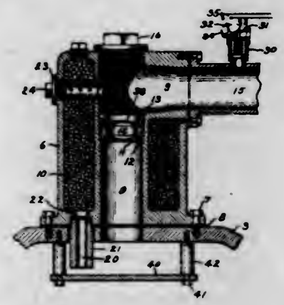
1. An attachment of the character described comprising a compartment having a pair of lugs, an arm supporting the compartment for swinging and having a pair of lugs, means fitting through the various lugs to compose a joint, and a button associated with one of the lugs engaging and being slidable upon an adjacent lug to compose a restricted but continuous bearing and to relieve the joint of strain.

1,812,745. LAMP. NEWELL T. GORDON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 2, 1929. Serial No. 396,779. 11 Claims. (Cl. 176—16.)



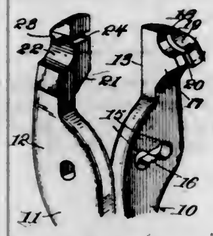
1. A lamp structure comprising a light source, spaced outer and inner envelopes, said inner envelope containing the light source, a fixed liquid in the space between said outer and inner envelopes, said liquid being capable of effectively absorbing undesirable heat radiation while transmitting visible radiation, and means for cooling said liquid.

1,812,746. ELECTRIC SWITCH. JOHN D. HILLIARD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 11, 1927. Serial No. 204,674. 8 Claims. (Cl. 200—150.)



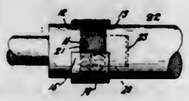
1. An electric switch adapted to interrupt a circuit beneath the surface of an insulating liquid, a closed vessel for said liquid, a hollow member secured thereto providing a large relief passage in communication with the interior of the vessel, a member normally closing said passage, said hollow member having a relatively small pressure escape passage therein also in communication with the interior of the vessel and in communication with said relief passage arranged to bypass said closing member, the member normally closing the relief passage being constructed to be blown bodily free from the passage in response to a predetermined pressure in the vessel.

1,812,747. TONGS. CHRISTIAN J. JORGENSEN, Dagmar, Mont. Filed Apr. 26, 1930. Serial No. 447,681. 2 Claims. (Cl. 29—86.2.)



2. A tool for shifting links with relation to each other, comprising long and short jaws pivotally connected together and having link-engaging surfaces adapted to register with each other, the short jaw having a pocket adapted to receive the edge of one link, and a fin carried upon the long jaw adapted to engage the end of the other link.

1,812,748. DYNAMO ELECTRIC MACHINE. AUGUST KAYSER, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Sept. 7, 1928. Serial No. 304,515. 6 Claims. (Cl. 171—252.)



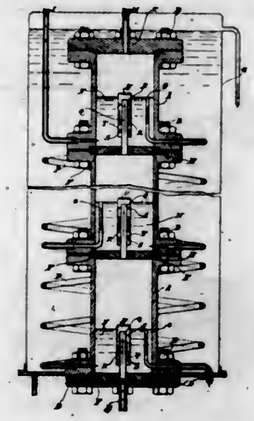
1. A stationary member for dynamo-electric machines comprising an annular magnetic structure and a frame surrounding said magnetic structure, said frame having the edges thereof folded upon themselves and abutting said magnetic structure for retaining the same in said frame.

1,812,749. RESINOUS MATERIAL AND METHOD OF MAKING THE SAME. ROY H. KIENLE, Schenectady, and WILLIAM J. SCHREIBER, Troy, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Apr. 30, 1929. Serial No. 359,422. 13 Claims. (Cl. 92—21.)

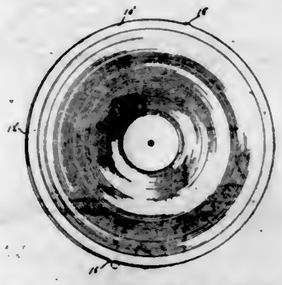
1. A sheet material comprising a fibrous substance which has incorporated with the fibres thereof the infusible condensation product of aniline and formaldehyde.

1,812,750. APPARATUS FOR ELIMINATING A SUBSTANCE FROM A GASEOUS MIXTURE. FRANCESCO LOPEZ, Padova, Italy, assignor to Società Anonima Industria Ammoniaca, Padova, Italy, a Corporation of Italy. Filed Nov. 30, 1928, Serial No. 322,902, and in Italy Mar. 26, 1928. 3 Claims. (Cl. 261—114.)

1. Apparatus for freeing a gaseous mixture from a component part thereof, comprising a series of vertically spaced chambers, means for admitting a liquid solvent of said component part to the upper chamber, means causing said liquid solvent to overflow when reaching a predetermined level within said chamber leading said liquid solvent to the next lower chamber, and so on, to the last chamber, means for admitting the gaseous mixture to the liquid solvent within the said last chamber, and means for successively admitting said gaseous mixture from said last chamber to the liquid solvent in the next and then the others higher in the series, finally discharging the treated gaseous mixture from the upper chamber, and the solution of said part in said solvent from the lower chamber, said means for admitting the gaseous mixture to each body of liquid solvent comprising a tubular inlet upwardly projecting within each chamber from the bottom thereof, and an inverted bell member inserted over said tubular inlet forming an annular chamber therewith, said inverted bell member being vertically movable in relation to said tubular inlet.

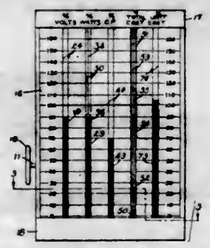


1,812,751. PHONOGRAPH RECORD. CHARLES J. MENSMAN, Washington, D. C. Original application filed Apr. 24, 1923, Serial No. 634,332. Divided and this application filed Nov. 19, 1927. Serial No. 234,526. 1 Claim. (Cl. 274—42.)



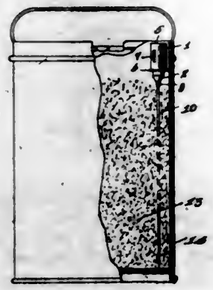
A phonograph record comprising a flat annular body, identifying indicia on a portion of the peripheral edge of the record, and stop means on said peripheral edge of the record whereby the indicia may be properly positioned and displayed when the record is stored.

1,812,752. VARIABLE CHART. GEORGE S. MERRILL, Shaker Heights, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Apr. 23, 1930. Serial No. 446,723. 2 Claims. (Cl. 116—135.)



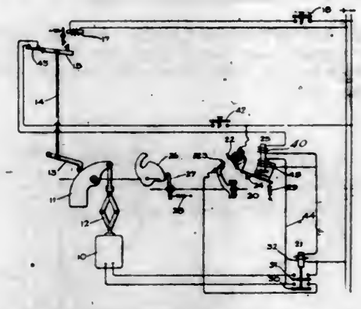
1. In a variable chart, the combination of a face board having a plurality of columns indicated thereon, indicating means disposed adjacent each of said columns comprising a marker movable to various positions in said column and interconnected actuating means for said indicating means comprising means for giving a predetermined relation to the positions of said markers.

1,812,753. COMBINED HUMIDOR, TAMP AND PICK. WADE MOSES, Cleveland, Ohio. Filed Apr. 5, 1930. Serial No. 441,799½. 7 Claims. (Cl. 131—59.)



6. A device of the character set forth comprising a receptacle having a restricted portion, a rod secured to the restricted portion, absorbent material in said receptacle, an annular flange formed on the receptacle above the restricted portion, a cap receiving the upper end of the receptacle and having its edge beaded to engage over the flange to detachably secure the cap to the receptacle, said cap having a plurality of slots arranged above the upper edge of the receptacle and the absorbent material.

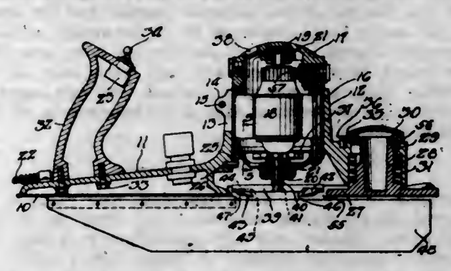
1,812,754. CONTROL OF ELECTRORESPONSIVE DEVICES. ROBERT PAXTON, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed Mar. 16, 1929. Serial No. 347,684. 6 Claims. (Cl. 172—239.)



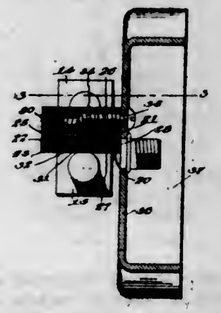
3. In combination, an electroresponsive device, a plurality of electroresponsive switches for jointly controlling the connection of the device to a supply source, one of said switches having contacts in each supply connection, energizing means for controlling the closing of said switches, connections through which each switch upon closure thereof maintains the other switch closed, and means operated by the device for effecting the opening of one of said switches.

1,812,755. POWER DRIVEN PLANE. FRANK M. QUINELER, Chicago, Ill. Filed May 2, 1930. Serial No. 449,248. 7 Claims. (Cl. 145—5.)

1. In a power driven plane, a base plate, a body upon said plate providing a sleeve, a motor including a casing confined vertically within the sleeve, means providing vertical adjustment of said casing within the sleeve, a shoe yieldably supported by said body at the forward end thereof, and planing elements rotatably operable by said motor between the shoe and the forward end of the base plate in substantially a horizontal plane.

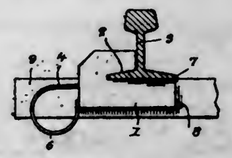


1,812,756. ADJUSTABLE BRACKET FOR BOXES. GREELEY R. RIGGS, Austin, Tex. Filed Mar. 19, 1930. Serial No. 437,191. 1 Claim. (Cl. 247—22.)



A supporting device for boxes carrying electrical equipment comprising a U-shaped bar, one leg of the bar having a depending flange, a second bar formed of a strip of metal folded upon itself and having depending flanges in contact with the first-mentioned depending flange, a U-shaped block receiving the pair of bars, one leg of the U-shaped block being shorter than the other leg with the depending flanges of the bars in contact with the end of the shorter leg, a box secured to the block in abutting relation to said other leg of the block and the depending flanges of the bars.

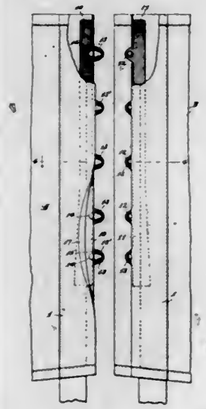
1,812,757. ANTICREEPER FOR RAILROAD RAILS. WILLIAM I. RUSSELL, Edinburg, Tex. Filed Apr. 30, 1930. Serial No. 448,684. 1 Claim. (Cl. 238—321.)



An anti-creeping device for railway rails comprising a metal member which is substantially U-shaped in cross section and which has its parallel sides from one of its ends cut away and notched, the upper walls of the notches being arranged angularly to contact with the upper sides of the base flange of a rail when such base flange is received in the notches and the distance between the notches and the cut away end of the member being substantially equal to the cross sectional width of the base flange of the rail, a two-arm spring designed to be inserted through the mem-

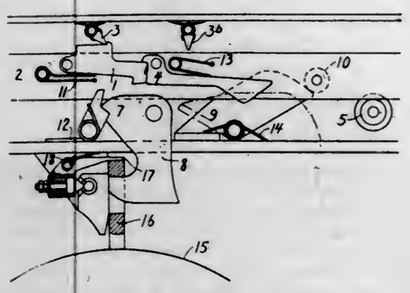
ber, both arms of the spring having their ends bent in opposite directions to provide hooks which frictionally contact respectively with the edge of the base flange of the rail and the end of the U-shaped member and the arms of the spring being connected by an outwardly rounded inwardly directed loop which provides the lower arm of a less length than the upper arm and which loop, at its juncture with the lower arm, contacts with and exerts a pressure against the inner edge of the base portion of the U-shaped member.

1,812,758. CORSET. YOLE SAYNISCH, New York, N. Y. Original application filed Nov. 15, 1928, Serial No 319,694. Divided and this application filed May 15, 1930. Serial No. 452,705. 1 Claim. (Cl. 2—263.)



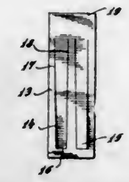
A corset including sections, removable corset steels for coupling said sections together, pockets extending longitudinally of said sections at the edges thereof for receiving said removable steels, coupling projections integrally formed on each of said steels, the projections of one of said steels having buttons thereon, the projections of the other of said steels having slots therein registering with the buttons on the projections of the other of said steels for receiving the same and coupling said steels together, and tongues struck out from the slotted projections, said tongues being bent and securing between the tongues and the coupling steels, a wall of the pocket at the marginal openings for each of said slotted projections.

1,812,759. DEVICE FOR RELEASING SHELLS IN AIRCRAFT. PER SLINDE, Kjeller, Norway. Filed Aug. 28, 1928, Serial No. 302,618, and in Norway Sept. 7, 1927. 16 Claims. (Cl. 244—1.)



1. In a device for discharging loads from an aircraft, a load carrying hook, a trigger arranged in operative relation to said carrying hook, a slide, a hook for releasing the trigger and mounted on the slide, means for moving the slide from the operating place, and means for locking the releasing hook in the operative position in certain position of the slide.

1,812,760. SOUND ACTION FOR ACCORDIONS, HARMONICAS AND LIKE INSTRUMENTS. MARIO SOPRANI, Castelfidardo, Italy. Filed June 29, 1928, Serial No. 289,170, and in Italy Sept. 9, 1927. 5 Claims. (Cl. 84—363.)

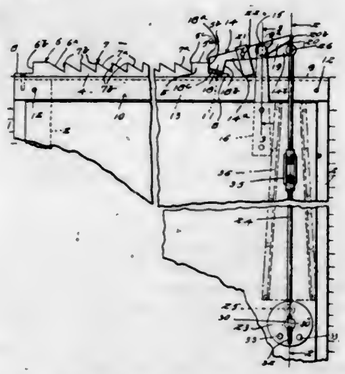


1. An action unit for musical instruments of the character specified, comprising a plate slit according to a predetermined outline, so as to form a vibrating element integral with said plate, both surfaces of said element being substantially even with the surfaces of said plate.

1,812,761. REMOVAL OF PHOSPHORUS FROM METAL BEARING SOLUTIONS. ROYALE HILLMAN STEVENS, GERALD CHAD NORRIS, and WILLIAM NELSON WATSON, Broken Hill, Northern Rhodesia, South Africa, assignors to Rhodesia Broken Hill Development Company Limited, Broken Hill, Northern Rhodesia. Filed Sept. 24, 1926, Serial No. 137,622, and in Southern Rhodesia Apr. 7, 1926. 8 Claims. (Cl. 23—22.)

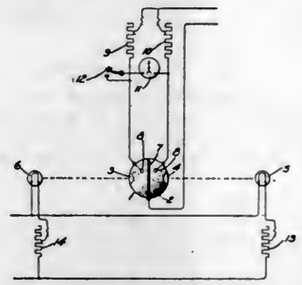
1. The process of purifying a metal-bearing acid solution containing phosphorus which consists in treating the solution to produce therein at least one part by weight of ferric iron for each part by weight of phosphoric pentoxide therein, further treating the solution to precipitate the phosphorus as ferric phosphate, and separating the solution from the precipitate.

1,812,762. SAFETY DOOR CATCH. SETH E. STEVENTON, Mount Carmel, and DAVID HARRISON WIGGS, Danville, Ill. Filed May 25, 1929. Serial No. 365,967. 2 Claims. (Cl. 292—96.)



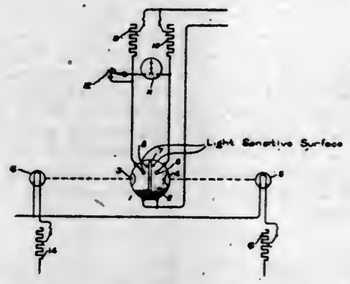
1. A catch of the character set forth, comprising a rack bar, a bracket arm having a pivot fixed thereto, an angular latch dog rockably mounted at the juncture of its arms on the pivot, an arm fixedly secured to the pivot and having an angular relation with respect to one of the latch dog arms, a spring positioned between said last arms to hold the latch dog in active position, and a catch carried by the other arm of the latch dog.

1,812,763. PHOTO-ELECTRIC DEVICE. WILLIAM E. STORY, Jr., Worcester Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 6, 1925, Serial No. 20,907. Renewed Dec. 17, 1929. 5 Claims. (Cl. 88—23.)



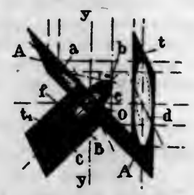
1. In combination, light sensitive means including a pair of photo-electric cells contained in a single envelope, means whereby a pair of oppositely extending beams of light, one of which may be varied, may be directed onto said light sensitive means, a single source of energy for said light beams, and means connected to said light sensitive means for indicating variations in the intensities of said light beams.

1,812,764. PHOTO-ELECTRIC DEVICE. WILLIAM E. STORY, Jr., Worcester, Mass., assignor to General Electric Company, a Corporation of New York. Original application filed Apr. 6, 1925, Serial No. 20,907. Divided and this application filed Apr. 25, 1929. Serial No. 358,070. 5 Claims. (Cl. 250—27.5.)



1. In combination, an evacuated envelope containing a plurality of photo-electric units, each comprising a light sensitive cathode and a cooperating anode, said cathodes being mounted on a common insulating material.

1,812,765. OPTICAL SYSTEM. MICHAEL ASTAFIEV, Chelsea, London, England, assignor, by mesne assignments, to Art Photogravure Company Limited, London, England. Filed Aug. 26, 1929, Serial No. 388,538, and in Great Britain Sept. 7, 1928. 8 Claims. (Cl. 88—1.)



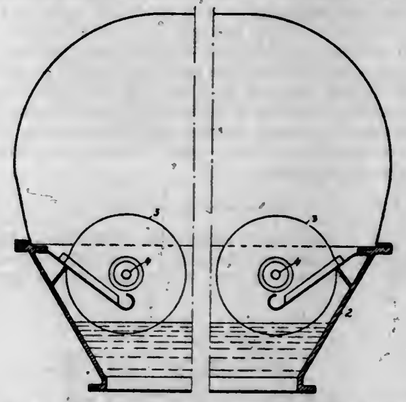
1. An optical system comprising a pair of oppositely-facing reflectors disposed in and around the line of intersection of a pair of planes crossing each other at similar inclinations to a plane normal to the system and also including said line, which reflectors include an inner one passing through an opening in an outer one and provide edge regions situated at opposite inclinations with respect to said normal plane and respectively externally and internally defining a hollow image-forming beam of light rays emergent from said inner reflector, and means compensating for unequal rates of change of the effective sizes respectively of said edge regions with declension of incident light rays within a determined angle of vision, said means consisting of non-reflecting means in juxtaposition with that portion of the inner reflector which lies to one side of said normal plane and occupying an area within the parallel ray trace of the opening in the outer reflector upon the plane of the inner reflector, the ratio between which area and the area within said trace effective with respect to parallel rays of determined inclination varies progressively in the same sense as the angle at which said rays are incident to the plane of said inner reflector.

1,812,766. LUBRICANT. ARMAN E. BECKER, Newark, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 28, 1923. Serial No. 677,512. 8 Claims. (Cl. 87—9.)

1. A process of preparing lubricants, which comprises distilling a residuum from cracking of petroleum, segregating cuts of the distillate and blending with another oil.

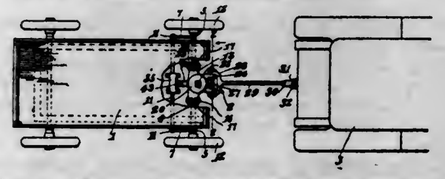
3. The method of making a lubricating oil from pressure distillation cracking residuum which comprises distilling such a residuum to segregate distillates therefrom having lubricating characteristics, adding sulphur to a distillate so segregated and heating until the sulphur dissolves.

1,812,767. GAS WASHER. KARL BEROFELD, Berlin, Germany. Filed May 16, 1928, Serial No. 278,225, and in Germany Nov. 26, 1926. 4 Claims. (Cl. 261—92.)



1. In a gas washer parallel series of rapidly rotating centrifugal disks rotatable in opposite directions; said disks dipping into a body of washing liquid; and irrigating means for feeding liquid to the sides of the disks at a point near the axis of rotation thereof.

1,812,768. TRAILER COUPLING. CHARLES EMIL BERGGREN, Wilcox, Nebr. Filed June 27, 1930. Serial No. 464,394. 1 Claim. (Cl. 280—33.55.)



In a trailer coupling for connecting a trailer with a propelling vehicle, a cross bar for supporting the forward

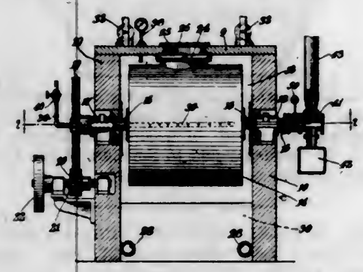
end of the trailer, a pair of wheel supporting members swivelly connected with the cross bar, a tie rod having its ends pivotally connected with the wheel supporting members, a plate seated on and fixedly secured to the cross bar, a tapered boss projecting upwardly from said plate centrally of the latter, an annular rib projecting upwardly from the plate in concentric relation to said boss, a connecting element having an upwardly tapered recess to receive said boss, said connecting element having its lower face formed with an annular groove arranged concentrically of said recess to receive said rib, a coupling bolt extending through said boss and recess and having a washer bearing against the upper face of the connecting element to rotatably connect the latter, a clamp secured to the tie rod, means pivotally connecting tthe clamp and said connecting element, and a tongue having one end pivotally connected with said connecting element and having its other end pivotally connected with the propelling vehicle.

1,812,769. PAN LOAF BREAD AND METHOD OF MAKING SAME. DELMAR M. BINGER, St. Paul, Minn., assignor to Zinsmaster Baking Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 9, 1931. Serial No. 514,678. 3 Claims. (Cl. 107—54.)



2. The method of producing a loaf of bread consisting in forming a plurality of rolls of dough, entwining said rolls about each other, proofing the product, confining it in the direction of progression of the turns of said rolls during proofing, whereby the cellular structure is stretched in the turns of the rolls lengthwise of said turns and said turns reduced in pitch, in baking the proofed product, and in confining it, during baking, against spreading, to further the stretching of the cellular structure lengthwise of the turns of said rolls.

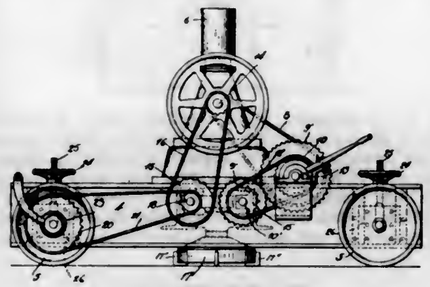
1,812,770. METHOD FOR DECOMPOSING SALTS. HOWARD B. BISHOP, Summit, N. J. Filed June 12, 1925. Serial No. 36,578. 4 Claims. (Cl. 23—153.)



3. A method of decomposing a salt with an acid which consists in agitating the salt and heating it above the boiling point of the acid to be volatilized and below the melting point of the solid constituents and then adding the acid and boiling off the volatile product at a balanced rate, the added acid being gradually sprayed on to the batch.
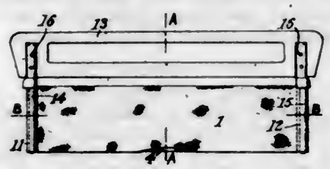
4. The method of decomposing calcium fluoride with sulphuric acid to form hydrofluoric acid and calcium sulphate, which consists in heating a batch of calcium fluoride to a temperature above the boiling point of the hydrofluoric acid and below the melting points of calcium fluoride and calcium sulphate, and while so heated and while the batch is being stirred, spraying the sulphuric acid over the surface of the batch, the acid being added so slowly that there is substantially no caking of the mass and the reaction being carried on at substantially atmospheric pressure.

1,812,771. MACHINE FOR PLANING THE SURFACES OF PAVEMENTS. CHARLES R. BLOOD and HUBERT J. HUMBERT, Sacramento, Calif. Filed Oct. 24, 1929. Serial No. 402,202. 6 Claims. (Cl. 262—19.)



1. A machine of the character described comprising a main frame mounted on traction wheels, a driving motor carried by said frame, driving connections between the motor and traction wheels, a planing head carried by said frame and mounted for horizontal rotation on a vertical shaft, a member in which said shaft rotates, and which is arranged and adapted to be moved crosswise of the frame in opposite directions, and connections between the motor, the said shaft and its supporting member, for rotating said planing head and propelling it crosswise of said frame, said connections including a vertical shaft on which the planing head is mounted and to which is keyed a worm wheel; a pair of parallel shafts, one of which is a screw shaft engaging with and moving said supporting member, a worm splined on the other shaft and arranged and adapted to operate said vertical shaft and to move crosswise of the frame in constant engagement with said worm wheel.

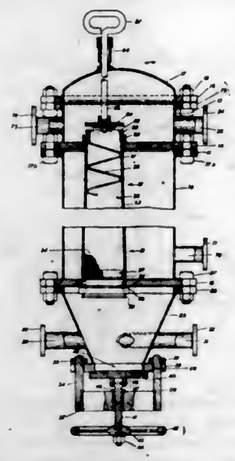
1,812,772. NAIL POLISHER. MARCEL CADÉ, Paris, France. Filed Aug. 8, 1930, Serial No. 474,021, and in France July 9, 1930. 7 Claims. (Cl. 132—78.)



1. In a polisher, the combination of a skin folded on itself so as to form a small pocket with a frame having a handle and two uprights on which can be secured the edges of the said pocket, the spacing apart of the said uprights being slightly smaller than the width of the pocket.

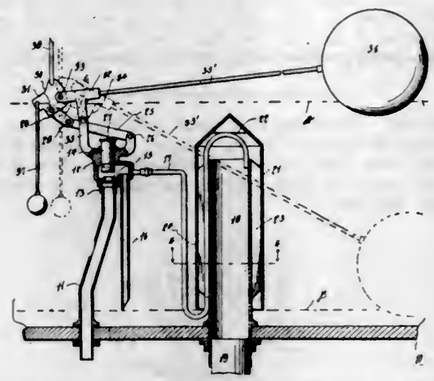
1,812,773. TAPERED TUBE FILTER PRESS. HUGH HARLEY CANNON, Los Angeles, Calif., assignor to Cannon-Prutzman Treating Processes, Ltd., Los Angeles, Calif., a Corporation of California. Filed Oct. 2, 1929. Serial No. 396,898. 8 Claims. (Cl. 210—184.)

1. In a tubular filter having a plurality of filtering tubes lined with foraminous material: a valve disc axially placed over one end of each tube, said disc cooperating with a seat adapted to retain said foraminous material



in position and removably inserted in said end of said tube to close said tube against the passage of liquid therethrough.

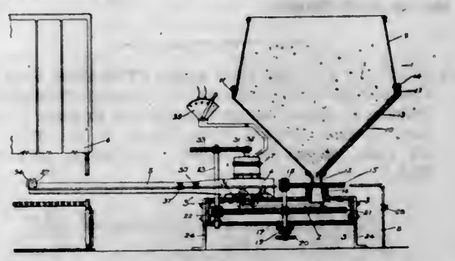
1,812,774. WATER CLOSET VALVE. WILLIAM J. COLLISON, Bakersfield, Calif. Filed Oct. 16, 1930. Serial No. 489,212. 3 Claims. (Cl. 137—104.)



1. In a device of the class described, a valve to control a water supply pipe, a lever engaging the valve, a link pivoted to the lever, a trigger plate to which the link is pivoted, a float valve means pivoted to the trigger plate and to the support for said lever, and a stop means limiting the relative movement of said link and trigger plate.

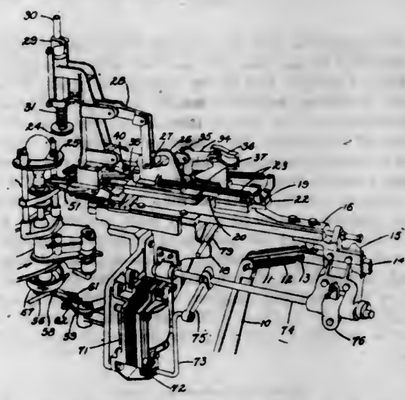
1,812,775. FUEL MIXER AND FEED. WILMOT A. DANIELSON, U. S. Army, Washington, D. C. Filed Oct. 10, 1927. Serial No. 225,319. 16 Claims. (Cl. 110—22.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A fuel mixer and feed for furnaces or the like, comprising a mixing chamber, a hopper adapted to discharge pulverized fuel into said chamber, a suction pipe leading from said chamber, air inlets leading into said chamber, a fan adapted to draw a mixture of pulverized fuel and air from said chamber having an intake connected with said suction pipe and having a discharge, a furnace feed pipe connected to said discharge, burners arranged at the end of said pipe adapted to rest within a furnace, means within the mixing chamber for conveying fuel discharged



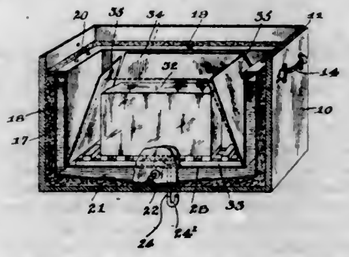
from the hopper to the suction pipe, means for enriching said mixture and driving means adapted to operate said fuel conveying means and said fan.

1,812,776. BULB SHAPING DEVICE. JOHN F. DONOVAN, East Cleveland, and FRANK J. MALLOY, Cleveland, Ohio, assignors to General Electric Company, a Corporation of New York. Filed May 11, 1929. Serial No. 362,420. 6 Claims. (Cl. 49—2.)



1. A device adapted to shape the neck of a bulb supported vertically in a movably supported holder and having a portion thereof in a plastic condition which comprises a vertically movable cup adapted to engage the top of said bulb, a set of pivoted centering jaws adapted to engage the neck of said bulb, a set of pivoted shaping jaws adapted to engage said plastic neck portion, means for moving said holder and means connected to said cup and to said jaws for reciprocating said cup and opening and closing said jaws in proper time relation to the movement of said holder.

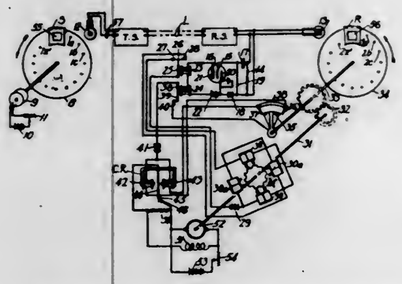
1,812,777. COMBINATION ICE-BOX AND WATER COOLER. SIDNEY W. FRECHOU, New Orleans, La. Filed Sept. 27, 1930. Serial No. 484,898. 2 Claims. (Cl. 62—79.)



1. In a combination ice-box and water cooler, an outer container, an inner receptacle for water having an ice

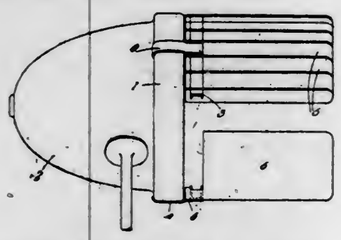
compartment, and demountable folding plates or leaves mounted in said compartment and adapted to rest upon the ice block therein.

1,812,778. METHOD AND APPARATUS FOR SYNCHRONISM AND AUTOMATIC PHASE CORRECTION. WILBUR F. FUNK, Midland Beach, and EDWARD T. KRUGLAK, Jackson Heights, Long Island, N. Y. Filed Nov. 16, 1928. Serial No. 319,926. 12 Claims. (Cl. 178—69.5.)



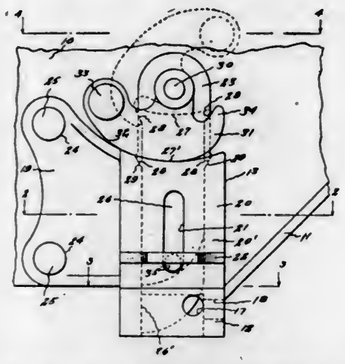
1. In apparatus for the transmission of pictures or for television or the like, the method of maintaining synchronism of motion and phase relation between the sending and receiving members which consists in increasing the intensity of the image impulse at the end of each analysis of successive line elements to produce increased primary current impulses, and in separating the increased primary current impulse produced at the end of a complete analysis of the picture from the increased primary current impulse produced at the next analysis of a successive line element to produce a secondary current impulse and utilizing said current impulses transmitting said current impulses to the receiving station to govern the speed of the receiving member, and automatically correct and maintain it in phase with the sending member so as to secure proper framing of the image at the receiving station.

1,812,779. ANTIGLARE OR ANTIDAZZLE DEVICE FOR LAMPS. ISAAC GEARY, London, England. Filed Jan. 4, 1929, Serial No. 330,248, and in Great Britain Jan. 9, 1928. 1 Claim. (Cl. 240—48.4.)



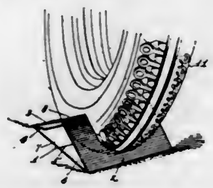
An anti-glare screen attachment for the outside forward portion of a lamp, comprising a series of blades arranged around the entire periphery of the lamp front, and projecting forwardly thereof, and substantially at right angles thereto, said blades having their inner opposite ends equally spaced apart throughout their entire length to provide an unscreened area of uniform circumference therebetween, said blades being radially spaced apart around the entire periphery of the lamp front whereby uniform unobstructed light passages are provided between said blades around the entire periphery of the lamp front to provide a large area of diffusion in the neighborhood of the lamp.

1,812,780. DUMP CAR DOORLOCK. ANDREW GERMEK, Edwardsville, Pa. Filed Mar. 12, 1930. Serial No. 435,252. 8 Claims. (Cl. 105—308.)



1. A car door securing device comprising a lock housing rigidly secured to the side wall of a car, a tongue slidably mounted therein, a keeper bar carried by and extending beyond the edge of said door and adapted to be engaged by said tongue, and means carried by said lock housing and adapted to lock said tongue in either its raised or depressed position, said lock housing comprising an integral vertical guide portion adapted to snugly and slidably receive therein said tongue, a vertical slot in said guide portion, a transverse pry bar support integral with said guide portion and extending across the bottom portion of said slot, an opening in said tongue registering with said slot, an enlarged head on said tongue having inwardly tapering faces, and similarly tapered faces on said guide portion on which said head is adapted to seat, the top edge of said tongue and guide portion being provided with a similar concave curvature.

1,812,781. COLLAPSIBLE TIRE STAND. HAROLD B. GIBBS, Bronxville, N. Y., assignor to Rusling Wood, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 30, 1930. Serial No. 492,317. 3 Claims. (Cl. 211—24.)



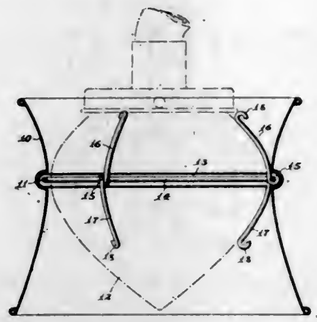
3. A tire stand comprising a base, and a pair of convergent side walls, said side walls being notched substantially to receive a tire so that the tire will engage the edges of the notch and will rest on said base.

1,812,782. ARTIFICIAL TROLLING BAIT. JOSEF GLUCK, Cleveland, Ohio. Filed Mar. 8, 1930. Serial No. 434,217. 9 Claims. (Cl. 43—45.)



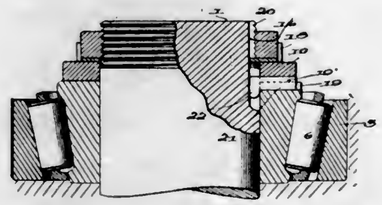
4. A spinner for a lure comprising an elongated piece of sheet metal slotted centrally in its longitudinal axis to form two integral connecting strips between the outer portions of said piece of metal, said connecting strips being bent in opposite directions with respect to each other in planes transversely to the general plane of said piece of metal, one strip forming a piercing front portion of V-shaped form and the other strip a rear pocket portion of W-shaped form.

1,812,783. LAMP SHADE. SAMUEL GOLDFINGER, New York, N. Y. Filed Dec. 18, 1930. Serial No. 503,311. 2 Claims. (Cl. 240—138.)



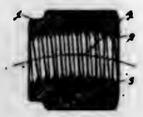
1. The combination of a lamp shade open at the upper and lower ends and having an annular groove in the inside thereof, and lamp globe engaging means to retain the shade in place on the globe, said means consisting of a resilient split ring to be sprung into said groove to connect said means with said shade within the same, and upwardly and downwardly projecting spring fingers on the ring to engage said globe.

1,812,784. BEARING LOCKING DEVICE. JOHN B. HAWLEY, Jr., Minneapolis, Minn. Filed Mar. 20, 1929. Serial No. 348,607. 2 Claims. (Cl. 308—236.)



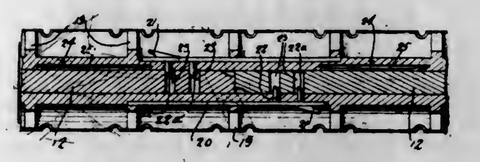
1. In combination with a rotatable shaft extended through a raceway of an anti-friction bearing, a washer surrounding the shaft, and means locking said washer to said raceway and to said shaft, said means comprising a key extended through aligned slots axially formed in the washer and raceway, and into an aperture provided in said shaft.

1,812,785. CURVE THREADED NUT. ELIS HELIN, Stockholm, Sweden. Filed Feb. 21, 1929, Serial No. 341,589, and in Sweden Mar. 7, 1928. 4 Claims. (Cl. 151—14.)



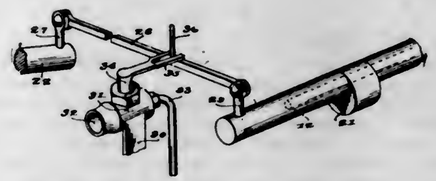
1. A nut having a threaded bore on an arcuate axis in which the angle between two consecutive spire-sides is constant throughout the whole thread and the cross-section of one of the spires in the plane of said axis is at one point of regular profile, whereas the other spires in said plane have the cross-sectional form of scalene triangles.

1,812,786. RAILWAY JOINT CHAIR. DRAGUTIN HERL, Niagara Falls, N. Y. Filed Feb. 19, 1931. Serial No. 517,034. 7 Claims. (Cl. 238—205.)



1. In a device of the character described, a railway chair, meeting rail ends seated therein and having openings in the webs thereof, spring arms carried by the sides of the chair, and pins carried by the arms adapted to be received in the rail web openings for the retention of the rail.

1,812,787. BRAKING ATTACHMENT FOR VEHICLE MOTORS. WILLIAM HASTON HEWITT, Cumberland, Md., assignor of one-half to Ora M. Doolittle, Cumberland, Md. Filed June 5, 1929. Serial No. 368,659. 2 Claims. (Cl. 123—97.)

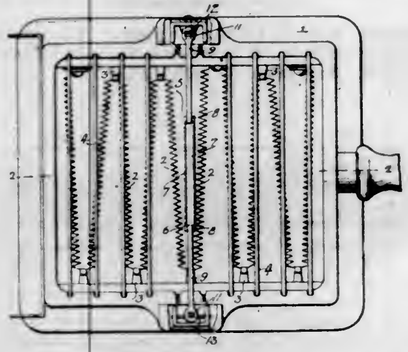


1. An internal combustion motor having intake and exhaust valves, valve operating push rods, rocker arms connecting at their opposite ends with the push rods and intake and exhaust valves, a rocker arm shaft upon which said rocker arms are journaled intermediate of their ends, said shaft having those portions journaling the rocker arms of the exhaust valves formed as eccentrics effective in one position of the shaft to permit normal push rod actuation of both intake and exhaust valve rocker arms and valves, and effective in a rotated position of the shaft to permit normal push rod actuation of the rocker arms of the intake valves and inoperatively to position the exhaust valve rocker arms relatively to their push rods and valves, an air feed conduit communicating with the intake manifold of the motor and having a rotatable air inlet valve therein, and an operating member having connections with said rocker arm shaft and with said air valve effective in one direction of movement to rotate said rocker shaft to said exhaust valve closing position and coincidently to turn said air inlet valve to air intaking position, and reversely movable to turn said rocker shaft to normal valve operating position and coincidently to close said air inlet valve.

1,812,788. THERMOSTATIC ELEMENT. ALPHEUS O. HURXTHAL, Philadelphia, Pa., assignor to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 24, 1928. Serial No. 256,648. 4 Claims. (Cl. 297—11.)

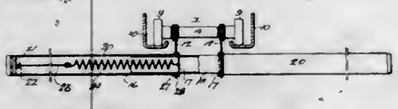
3. The combination in a thermostatic element made in sections, the central section being of a high expansive metal and consisting of two parallel bars and a cross-bar at each

end connecting the parallel bars; and low expansive sections having hooks which engage the cross-bars of the



high expansive central section, and having means by which they are attached to the mechanism to be controlled by the thermostatic element.

1,812,789. CONVEYER FOR SKEIN OR YARN DRIERS. ALPHEUS O. HURXTHAL and HERMANN BOGATY, Philadelphia, Pa., assignors to Proctor & Schwartz, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 24, 1929. Serial No. 402,257. 16 Claims. (Cl. 198—189.)



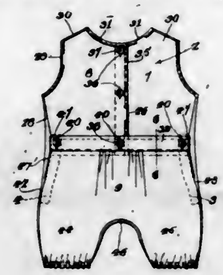
1. In a skein conveyer, the combination of a conveying element, a pole extending laterally from and supported solely and at one end only by said conveying element, and means constantly connecting the said end of said pole to said conveying element and permitting universal movement of the pole relative to the conveying element.

1,812,790. CELLULOSIC MATERIAL AND PROCESS OF MAKING THE SAME. OSCAR JAECK, deceased, Reinach, near Basel, by Wolfgang Jaeck, administrator, Basel, and FRITZ SCHÜTZ, Basel, Switzerland, assignors to the Firm of Society of Chemical Industry in Basle, Basel, Switzerland. Filed June 27, 1929, Serial No. 374,267, and in Switzerland July 13, 1928. 6 Claims. (Cl. 8—20.)

1. The process of making new cellulosic materials being immune to direct dyeing dyestuffs and having a strong affinity for basic dyestuffs, wherein the cellulose is treated with maleic anhydride.

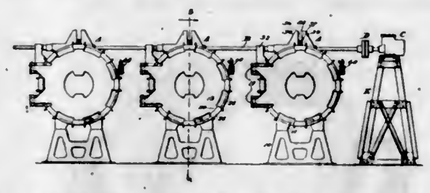
1,812,791. CHILD'S GARMENT. HARRY KATZ, Philadelphia, Pa., assignor to Moses Wertheimer, Philadelphia, Pa. Filed Dec. 21, 1929. Serial No. 415,811. 1 Claim. (Cl. 2—80.)

A child's garment of the romper type having a front and back, said front formed of a pair of oppositely disposed sections of like contour having the intermediate portion of their inner side edges secured together, each of said sections having its inner side edge formed of an intermediate squared portion, an inwardly curved upper portion and a lower portion having an inwardly curved upper part and a squared lower part, its outer side edge formed of an upper and a lower curved portion with the latter of greater length than the former, its bottom edge squared and its upper edge of less length than the bottom edge and inclining downwardly from its inner to its outer end, said back formed of a pair of upper sections and a lower section, each of said upper sections having a portion of its top edge secured to the top edge of a front section and the lower portion of its outer side edge secured to the outer side edge of a front section, said lower section having its side edges form continuations of the outer side edges of said upper sections and the lower part of its side edges secured to the lower part of the lower portions of the outer side edges of said front sections, said lower section centrally of its bottom formed with an inverted U-shaped cutout, means for securing the edge throughout of said cut-



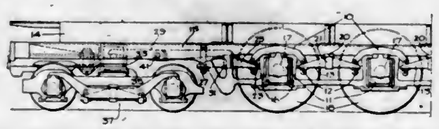
out to the lower portions of the inner side edges of said front sections to provide a crotch, means for detachably connecting the sections of the back together, and extension members in the form of rectangular strips having one end thereof positioned above said lower section, said strips having their outer lengthwise edges secured throughout to the curved lower portions of the outer side edges of said front sections, the lower part of the outer side edges of said upper sections and to the lower secured part of said lower section.

1,812,792. VULCANIZING APPARATUS. KARL B. KILBORN, Fairlawn, Ohio, assignor to Selberling Rubber Company, a Corporation of Delaware. Filed July 10, 1928. Serial No. 291,676. 6 Claims. (Cl. 18—4.)



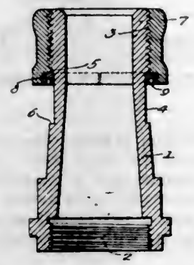
5. A vulcanizer of the class described comprising a fixed mold section, a movable mold section hinged thereto, a locking ring rotatable about one of the mold sections and provided with lugs for engagement with portions of the other mold section, a rotatable screw disposed tangentially with reference to the locking ring, a nut threaded on the screw and held against rotation whereby to translate rotary motion into rectilinear motion, and means connecting the nut with the locking ring whereby to move the same to locking and unlocking positions.

1,812,793. SPRING SUSPENSION SYSTEM. OLE K. KJOLSETH, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Dec. 12, 1930. Serial No. 501,918. 5 Claims. (Cl. 105—82.)



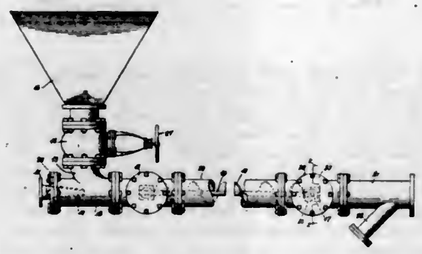
1. In combination with a locomotive or car having a platform structure, main drivers and an auxiliary truck, of a spring suspension system including means for distributing the weight of said locomotive or car between said auxiliary truck and said main drivers, said means including a side spring rigging having supports on which said platform structure is mounted, diagonally extending springs, connected to the ends of said side spring rigging, and a plurality of diagonal equalizers connected to said platform structure for supporting the same, said diagonal equalizers being mounted on said auxiliary truck at one end and connected at the other end in series with said diagonally extending springs and thereby directly to said side spring rigging.

1,812,794. NOZZLE. JOHN T. LALLY, Wilmington, Del. Filed Apr. 17, 1930. Serial No. 445,006. 4 Claims. (Cl. 299—107.)



1. A nozzle comprising a body member having an externally threaded terminal portion, a sleeve having threaded engagement with said terminal portion and means permitting movement of said sleeve inwardly on the body portion to uncover at least a portion of the said terminal, an annular element threaded into the inner end of and normally carried by said sleeve, and a shoulder on said body member positioned to engage said element to limit the advance movement of the sleeve, said ring constituting also a lock nut for securing the sleeve in the advanced position.

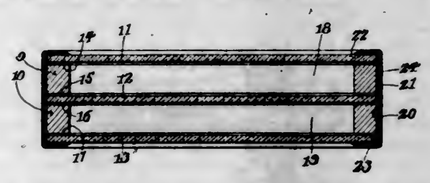
1,812,795. SULPHUR BURNER. MICHAEL J. LEAHY, Muncy, Pa. Filed Jan. 18, 1930. Serial No. 421,786. 8 Claims. (Cl. 23—278.)



1. A sulphur burner comprising, in combination, a tubular member, a nozzle for introducing air under pressure axially of said member, a sulphur hopper arranged above and opening freely to the space about said nozzle to deliver sulphur to the injecting action of said nozzle and means to control delivery of said sulphur.

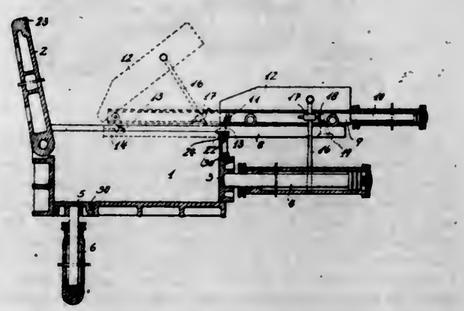
6. A sulphur burner comprising, in combination, a tubular combustion chamber, a spiral conveyor revolubly mounted in said tube, a three-way fitting having one branch connected to said tube, air blast means delivering to a second branch of said fitting and spiral conveyor feed means delivering to the third branch of said fitting, gear means housed in said fitting for actuation of said feed means by said first named spiral by revolution caused by said blast and a receptacle for supply of sulphur to said feed means.

1,812,796. TRANSPARENT PANEL UNIT. GEORGE LEIBE, New Orleans, La. Filed May 9, 1929. Serial No. 361,779. 3 Claims. (Cl. 20—56.5.)



1. A removable transparent panel unit for closing an opening in a door or wall for the purpose set forth comprising a pair of moisture freed superposed frames, the members of each frame being rigid and solid throughout, a series of superposed moisture freed skeleton pads of cushioning material and corresponding in contour to that of the frame, one outer pad being positioned against the outer face of one frame, the other outer pad being positioned against the outer face of the other frame and the inner pads positioned against the inner faces of said frames, said pads flush with the inner and outer edges of the frames, an inner and a pair of outer moisture freed transparent panels, the outer panel being positioned against the outer pads and the inner panel being positioned between the inner pads, said panels having their edges flush with the outer edges of said pads and frames, said frames, pads and panels providing superposed chambers, a sealing element for said chamber secured to the edges of the panels, the outer edges of the frames and pads and upon the marginal portions of the outer faces of the outer panels, and a binder element for the panels, pads and frames secured to said sealing element.

1,812,797. BUNDLING PRESS. WALDEMAR LINDEMANN, Dusseldorf, Germany. Filed Aug. 16, 1929, Serial No. 386,309, and in Germany Oct. 26, 1927. 6 Claims. (Cl. 78—42.)

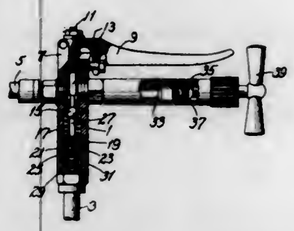


1. On a press of the described kind in combination with a press box, a lid, said walls of the press box having openings, pressure plate suitable for being moved through these holes into the press box, devices for moving these pressure plates, lines on said press box, a trolley on these lines, devices for moving this trolley, an auxiliary loading hopper on on this trolley, suitable for being tilted around the inside edge of the trolley, devices for tilting the auxiliary loading hopper above the press box, devices for holding this auxiliary loading hopper in a tilted position, and devices for bringing this loading hopper back into its horizontal position.

1,812,798. LUBRICATING APPARATUS. WILLIAM Z. LINDERS, Normandy, Mo., assignor to Lincoln Engineering Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 26, 1930. Serial No. 484,582. 5 Claims. (Cl. 221—47.3.)

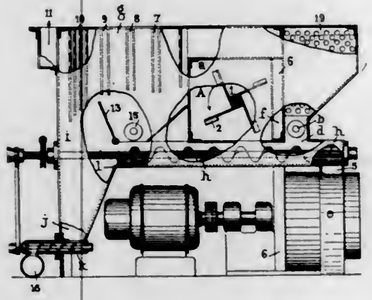
1. In lubricating apparatus, a body forming a passage for a stream of fluid, said passage having an inlet and an

outlet, a valve seating downstream toward the outlet, a metering member extending toward the inlet and adapted to close said inlet upstream against pressure entering



the same, the area of said valve as projected against pressure from the inlet being greater than the similar area of the metering member when the metering member is closed against pressure from the inlet.

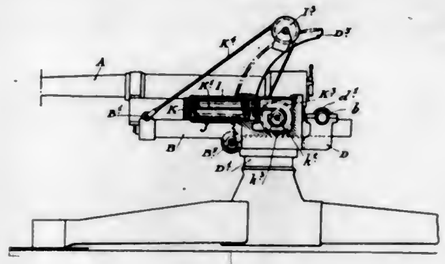
1,812,799. MEANS FOR THE MECHANICAL PREPARATION OF PULVERIZED SOLID MATERIALS. MAURICE MADORE, Alfort, France. Filed July 1, 1930, Serial No. 465,175, and in France Mar. 28, 1930. 16 Claims. (Cl. 83—11.)



1. Means for the mechanical preparation of pulverized solid materials, comprising, in combination, a drying device, means for admitting solid material to said drying device, a pulverizer, means for conveying dried solid material from said drying device to said pulverizer, a separator for the material pulverized by said pulverizer, means for conveying pulverized material from said pulverizer to said separator, a storage device for the fine material passing said separator, said storage device being adapted to be filled to a given level, means for withdrawing stored pulverized material from said storage device, and means for returning to said pulverizer coarse pulverized material rejected by said separator and also fine material conveyed to said storage device in excess of that required to maintain said given level in said storage device.

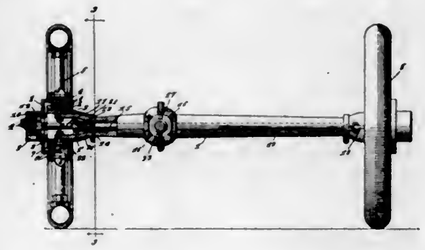
1,812,800. ARTILLERY GUN MORE PARTICULARLY APPLICABLE FOR FIRING AGAINST AIRCRAFT. NICOLAS EMILIEN METHLIN, Paris, France, assignor to Schneider & Cie., Paris, France, a Limited Joint-Stock Company of France. Filed Apr. 21, 1930, Serial No. 446,132, and in France Feb. 11, 1930. 4 Claims. (Cl. 89—37.)

4. In an artillery piece of the type having a gun carried in a cradle, the latter being pivotally mounted on a rotatable platform for oscillation about a horizontal axis, means for obtaining a static equilibrium of said piece by a symmetrical distribution of the masses on either side of the vertical axial plane of the oscillating mass comprising a pair of elevating sectors rigid with said platform and arranged symmetrically wtih respect to a vertical plane passing through the longitudinal axis of said gun, cable guiding means secured to each of said sectors, a shaft journalled in said platform, a pair of cable reeling devices mounted on said shaft, a pair of cables each secured at



one end to said cradle, passing over said cable guiding means and secured at the other end to one of said cable reeling devices, a second pair of cable reeling devices secured to said shaft, a pair of balancing elements carried by said platform, and a second pair of cables connecting said balancing elements with said second mentioned cable reeling devices.

1,812,801. FRONT WHEEL DRIVE FOR AUTOMOBILES. GLEN F. NUS, Arlington, Iowa. Filed Mar. 25, 1929. Serial No. 349,749. 1 Claim. (Cl. 180—44.)

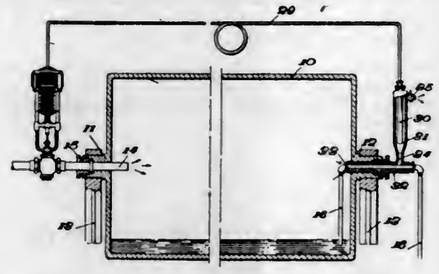


In combination with a hollow axle having a shaft journaled therein, a tubular member housing the end of the shaft and splined upon said shaft, a stub shaft, a universal joint connection between said tubular member and said stub shaft and movable in alinement with the first mentioned shaft, a head member having universal joint connection with the other end of the stub shaft, a cover member attached to said head member, a wheel having its hub attached to said cover member, a bearing ring pivoted upon the end of the axle, the hub of the wheel receiving said ring and journaled thereon, said stub shaft normally lying upon the center of the ring with the universal joint connections thereof lying beyond the opposite sides of the wheel.

1,812,802. TEMPERATURE REGULATOR FOR HOLLOW ROTATABLE ELEMENTS. LEWIS CAIAL PRICE, Boston, Mass., assignor to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Mar. 11, 1929. Serial No. 346,220. 9 Claims. (Cl. 236—18.)

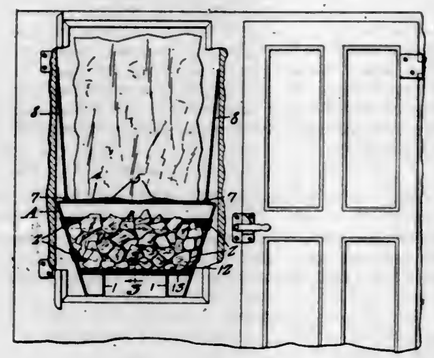
1. In a device of the type specified, in combination with a hollow rotatable element, means for rotatably mounting the same, means for supplying heating medium to the interior of said rotatable element and an exhaust for said

medium, a controller for the heating means, and means responsive to the temperature conditions within said element for actuating said controller, said means comprising a chamber disposed exteriorly of said rotatable element, means, separate from the exhaust, in communication with



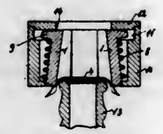
said chamber and in open communication with the interior of said element where the heating medium within said element may at all times flow to said chamber, and a temperature responsive element in said chamber operatively connected to said controller.

1,812,803. ICE RACK FOR REFRIGERATORS. FREDERICK B. RANNEY, Greenville, Mich., assignor to Ranney Refrigerator Company, Greenville, Mich. Filed Sept. 24, 1930. Serial No. 484,160. 5 Claims. (Cl. 62—69.)



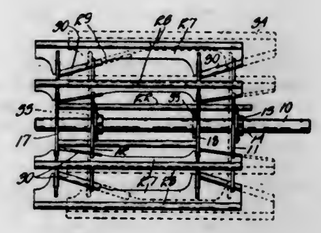
1. An ice rack for a refrigerator, comprising an openwork frame adapted to be placed in the ice chamber of a refrigerator, the top part of the frame supporting a block of ice and a plate extending across an intermediate portion of the frame for receiving chipped ice.

1,812,804. SEALING ATTACHMENT FOR MACHINES FOR APPLYING CROWN CORKS TO BOTTLES OR OTHER CONTAINERS. WILHELM OTTO PAUL RIECK, Hamburg, Germany. Filed July 14, 1928, Serial No. 292,833, and in Germany Aug. 15, 1927. 3 Claims. (Cl. 226—86.)



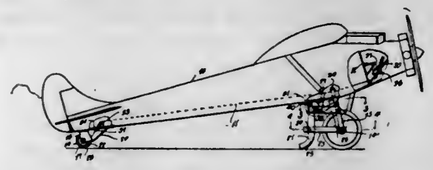
. In a machine for applying crown caps to containers, such as bottles, a casing, means within the casing for yieldably exerting pressure upon the top of a crown cap arranged upon the mouth of a container introduced into the casing, a sealing ring within the casing comprising an annular series of sections, the said casing having a cover member, the inner surface of which is substantially plane, and the end face of the sealing ring adjacent the cover member being rounded to rockingly engage with the said cover member in a radial direction, and an expansible spring encompassing said series of sections and yieldably resisting expansion of the sealing ring in a relative separation of the sections thereof, whereby the entry of the normally expanded rim of the closure cap into the sealing ring is facilitated and the rim compressed, circumferentially, upon full entry of the closure cap into the ring to a point where the compressive action of the spring about the sections of the sealing ring is equal for substantially the height of said ring.

1,812,805. REEL. JAMES A. RILEY, Johnson City, Tenn. Filed Aug. 21, 1929. Serial No. 387,519. 3 Claims. (Cl. 242—110.)



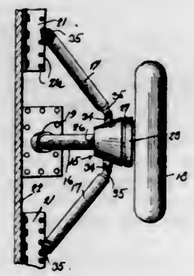
2. A reel comprising a shaft, a pair of disks mounted on the shaft and secured against axial movement thereon, a second pair of disks mounted on the shaft, but free to move axially of the shaft, the said disks having slots in their outer edges to receive blades, blades mounted in the slots, the blades having oblique inner edges in engagement with the stationary disks, the edges having a bead thereon co-operating with narrow portions in the slots on the stationary disks for holding the blades in position on the disks, the blades being movable radially in the slots on the movable disks and slidable axially in the slots on the stationary disks and a rod secured to one of the movable disks for adjusting the movable disks relative to the stationary disks for changing the size of the reel, substantially as set forth.

1,812,806. AIRCRAFT OR OTHER BRAKE. CORYDON W. SEXTON, Fayetteville, N. C. Filed Oct. 17, 1929. Serial No. 400,323. 9 Claims. (Cl. 244—2.)



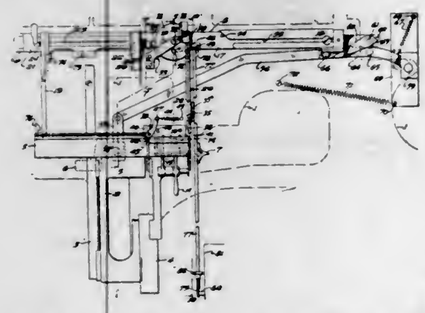
1. A brake mechanism in combination with a wheel, an upstanding brake shoe, means mounting said shoe for movement on an axis eccentric to that of the wheel for the purpose specified, and means engageable by said shoe above its pivot as it is applied to aid in relieving the wheel of the incidental strain.

1,812,807. DECKING DEVICE. CLIFFORD L. SNYDER, Detroit, Mich., assignor to Evans Products Company, a Corporation of Delaware. Filed Aug. 4, 1930. Serial No. 472,917. 21 Claims. (Cl. 105—36S.)



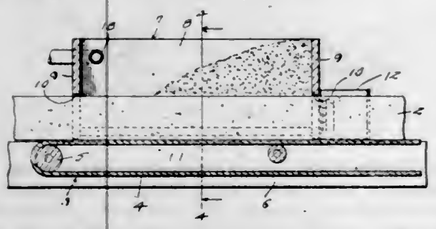
1. A decking device for motor vehicles comprising a floor brace, a pair of wall braces and a head to which the braces are attached, said wall braces and head embodying shock absorbing elements.

1,812,80S. MATRIX ASSEMBLING MECHANISM FOR TYPOGRAPHICAL MACHINES. SAMUEL E. SPERRY, Hollis, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 10, 1929. Serial No. 413,074. 20 Claims. (Cl. 199—31.)



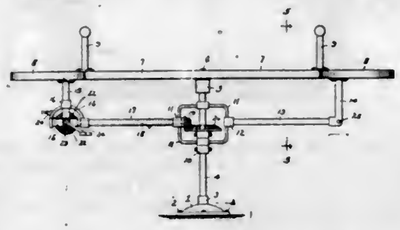
1. In a typographical machine, an assembling elevator movably upwardly from a matrix receiving position to a matrix discharging position, a slide for removing matrices from said elevator while the latter is lifted, means operative by movement of said slide in the matrix removing direction to store power to lift the elevator, and key-controlled means for setting said slide into operation.

1,812,809. BRICK SANDER AND METHOD. FLAKE F. STEELE, Winston-Salem, N. C., assignor to Pine Hall Brick & Pipe Co., Winston-Salem, N. C., a Corporation of North Carolina. Filed Nov. 7, 1929. Serial No. 405,450. 6 Claims. (Cl. 25—1.)



4. A device for sanding a brick clay column, comprising a receptacle of substantial depth having opposite walls provided with apertures for the passage therethrough of a formed clay column, the receptacle being of substantially greater width than the column and designed to contain sand covering the column, means in the receptacle above the clay column for flushing water thereon, means in the lower part of the receptacle at each side thereof for preventing the escape of material therein, and spring pressed wipers arranged to engage the sanded faces of the column to remove excess sand therefrom.

1,812,810. PEDAL WHIRL. JOHN I. STEWART, Houston, Pa. Filed Apr. 5, 1930. Serial No. 441,909. 1 Claim. (Cl. 272—33.)

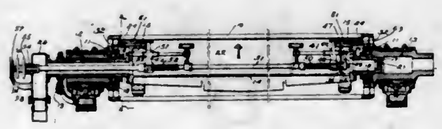


A pedal whirl comprising a vertical standard, a child supporting member journalled on the upper end of the standard and having the ends thereof shaped to provide integral seats, a frame journalled on the standard below the supporting member, oppositely disposed bearings carried by the frame, depending braces secured to the under faces of the seats, a horizontal brace secured to one of the bearings and to one of the depending braces, feet operating means carried by the other depending brace, a horizontal shaft journalled to the other bearing and geared to the feet operating means, gears connecting the shaft to the standard to cause the rotation of the supporting member about the standard by operation of the feet operating means, and handles secured to the supporting member adjacent the seats.

1,812,811. SINTERED HARD METAL ALLOY AND ARTICLES MADE THEREOF. BENNO STRAUSS, Essen, Germany, assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Apr. 14, 1927, Serial No. 183,899, and in Germany Oct. 25, 1926. 7 Claims. (Cl. 75—1.)

3. The method of forming a metal working tool which comprises ball milling a composition consisting mainly of finely divided hard metal carbide particles but containing an appreciable but minor quantity of a finely divided binder metal having a lower melting point than said carbide, said ball milling being continued until substantially each of said carbide particles are enveloped by a pellicle of said binder metal, pressing the milled material into shapes and sintering them at a temperature below the volatilization temperature of said binder metal.

1,812,812. SUCTION ROLL. EDWARD TATUM STREET, Downingtown, Pa., assignor to Downingtown Manufacturing Company, Downingtown, Pa., a Corporation of Pennsylvania. Filed Oct. 24, 1929. Serial No. 402,049. 18 Claims. (Cl. 92—53.)



1. In a suction roll, an outer rotatable shell having an inner relatively stationary suction box, said box including

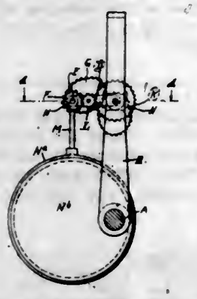
rigid arms, independently movable packing strip carriers carried by said arms and adjustable toward and away from the walls of the shell, a series of springs associated with the packing carrier of each arm and constantly urging said carriers toward the shell and a single means adjustable at the end of the roll for simultaneously adjusting the tension of both of said series of springs.

1,812,813. BULL BOARD FOR STOCK CAR DOORS. CHARLES H. THORNHILL, Presho, S. Dak. Filed July 31, 1928. Serial No. 296,455. 2 Claims. (Cl. 20—30.)



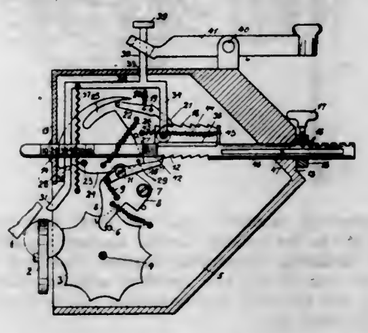
1. A stock car door, including a door-frame whose opposite jamb members are each provided with vertical guideways and also with keeper sockets inclining toward the outside of the jamb member and located at opposite ends of the guideways, a safety bar slidable in the guideways and adapted to be alternately placed in either one of said keeper sockets.

1,812,814. PROPELLER. WILLEM P. VAN LAMMEREN, Voorschoten, Netherlands. Filed Nov. 20, 1930, Serial No. 496,907, and in Great Britain June 18, 1929. 12 Claims. (Cl. 170—147.)



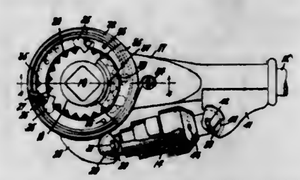
1. In a propeller for helicopters the combination with a blade support rotatable about an axis, of a blade on said support rotatable about a second axis, an arm movable about a third axis and connected by a link to said support to move in predetermined relation to said support when said support is rotated, said link being pivoted to said arm and to said support, a driving gear adapted to rotate in a predetermined direction at a speed proportional to the speed of rotation of said support and actuated by said support when the latter is moved, and a gear train between said driving gear and said blade for rotating said blade at a varying speed, said varying speed of said blade being such that the working surface of said blade during the working stroke is presented at substantially right angles to the direction in which the propeller as a whole moves and so that during substantially the first half of the non-working stroke the blade is at a very slight negative angle of incidence to the path of movement of said blade.

1,812,815. COIN COUNTING DEVICE. CURT VOGT, Berlin, Germany. Filed Apr. 7, 1930, Serial No. 442,156, and in Germany Jan. 28, 1930. 6 Claims. (Cl. 133—8.)



1. In a coin counting device, the combination of a slidable bar adjustable out of its initial position by the operator into different starting positions corresponding to the desired numbers of coins to be ejected, said bar being provided with a guide portion, a coin stop member adapted to be supported by said guide portion, means actuated by coins fed for starting said bar to move said guide portion relatively to said member towards its initial position, and means to permit said member to drop from said guide portion when the latter has reached said initial position whereby to stop the delivery of coins and lock said bar.

1,812,816. POWER WRENCH. CAIUS E. WEAVER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 24, 1930. Serial No. 447,063. 4 Claims. (Cl. 81—54.)

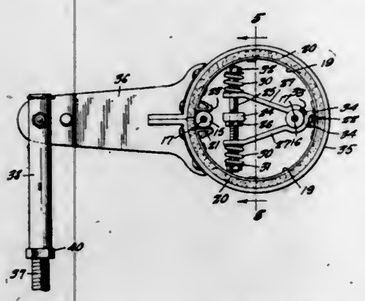


1. A power wrench comprising a lever, a rotary ratchet member mounted thereon, an oscillating member movable about said ratchet member, pawls mounted on said oscillating member and adapted to engage said ratchet member, and a hydraulic cylinder and piston pivotally connected respectively at their outer ends to said lever and to said oscillating member to actuate the latter.

1,812,817. SHOCK ABSORBER. ANTHONY WELIKES, Rochester, N. Y. Filed May 31, 1930. Serial No. 458,404. 1 Claim. (Cl. 188—130.)

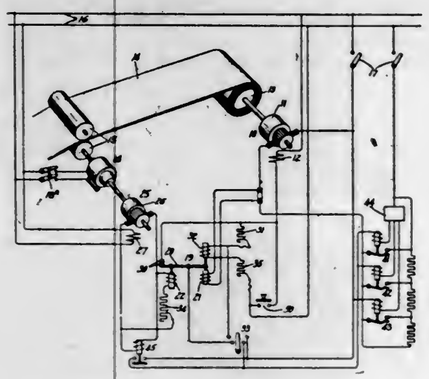
A shock absorber comprising a stationary disk having spaced diametrically opposed supporting members extended from one side thereof, a cover plate carried upon the other ends of the supporting members in confronting relation to the disk, a drum interposed for oscillatory movement between the disk and cover plate and about the supporting member, a shaft located within the enclosure defined between the several parts at right angles to the supporting members, brake shoes having the band sections therefor

provided with portions upon the ends thereof positioned upon opposite sides of one of the supporting members to prevent synchronous rocking motion of the bands with the drum, fins carried upon the opposite ends of the band sections and arranged in staggered relation, arm mem-



bers adjustably mounted upon the shaft and curved at spaced points for rocking motion against opposite sides of the remaining supporting member, and ears formed upon the ends of the arm members adjacent the curved portions and disposed in intersecting relation for engagment with said fins.

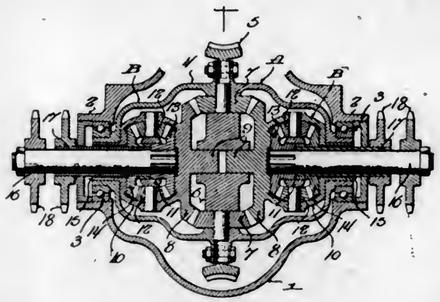
1,812,818. MOTOR CONTROL SYSTEM. HARRY A. WINNE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 16, 1928. Serial No. 278,248. 11 Claims. (Cl. 242—75.)



1. The combination with a winding reel for a strip of material to be wound thereon, of means for feeding said strip to said reel, an electric driving motor for said reel, a source of electrical supply for said reel driving motor having a substantially constant potential irrespective of the feed of said strip to said reel and means dependent upon a function of the feed of said strip to said reel and the driving motor current for regulating said driving motor so as to maintain a tension in said strip.

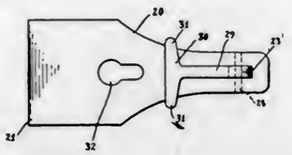
1,812,819. DRIVE FOR MOTOR VEHICLES. ARTHUR C. WOLLENSAK, Milwaukee, Wis. Filed Oct. 7, 1929. Serial No. 397,938. 2 Claims. (Cl. 180—22.)

1. A driving mechanism for vehicles provided with four driving wheels comprising a transverse housing, a driven gear mounted within said housing, a main differential case connected with said driven gear and journalled in said housing, a differential mechanism carried by said main differential case, auxiliary differential cases positioned within said main differential case and connected with the differential mechanism carried thereby, differential mechanisms mounted within said auxiliary cases, a pair of shafts connected with each of said auxiliary differential mecha-



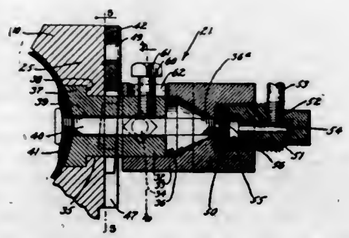
nisms, and driving connections between said shafts and said drive wheels, whereby the latter may rotate independently of each other.

1,812,820. CLAMPING LEVER FOR PLANES. JAMES M. BUADICK, New Britain, Conn. Filed Mar. 15, 1930. Serial No. 436,062. 1 Claim. (Cl. 145—16.)



A plane comprising a plane body, a blade mounted on said body, a clamping plate between which and said plane body said blade is located, said clamping plate being reduced in width at its rear end, and a clamping lever pivoted to the rear end of said clamping plate and having a cam, said lever also having a flat T-shaped arm extending forwardly of the plane from its pivotal connection with the clamping plate and lying flat against the clamping plate when in clamping position, the stem of said arm being located in the medial longitudinal line of said clamping plate and the cross-piece of the arm extending across the reduced portion of the clamping plate and having its ends projecting beyond the sides thereof when the lever is in clamping position.

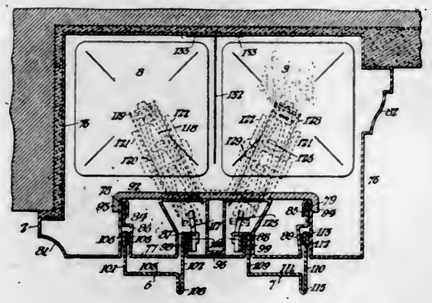
1,812,821. VULCANIZING MOLD FOR INNER TUBES AND THE LIKE. PETER DE MATTIA, Passaic, N. J., assignor to National Rubber Machinery Company, a Corporation of Ohio. Filed Aug. 29, 1928. Serial No. 302,710. 11 Claims. (Cl. 18—38.)



11. In combination with a vulcanizing mold having a mold cavity, a bushing extending through the wall of the mold and having its inner end substantially flush with the

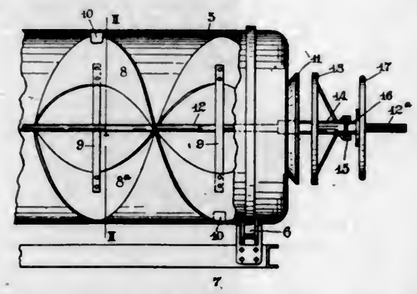
mold cavity, said bushing having a central longitudinal bore for receiving an endwise inserted inflation valve stem, means for detachably holding the bushing against longitudinal movement and against rotation, means for clamping an inflation valve stem in the bore of the bushing with its end extending beyond the bushing, and a coupling member mounted in fixed position with reference to the mold and the bushing, said coupling member having connection with a pressure fluid supply pipe and having a packing washer against which the end of the inserted valve stem is adapted to abut to provide a quick-detachable fluid-tight joint between the valve stem and the air pipe.

1,812,822. METALLIC WINDOW STRUCTURE. ALBERT LINDSAY DOERING, Germantown, Pa., assignor to J. S. Thorn Company, Philadelphia County, Pa., a Corporation of Pennsylvania. Filed Dec. 30, 1929. Serial No. 417,380. 14 Claims. (Cl. 189—72.)



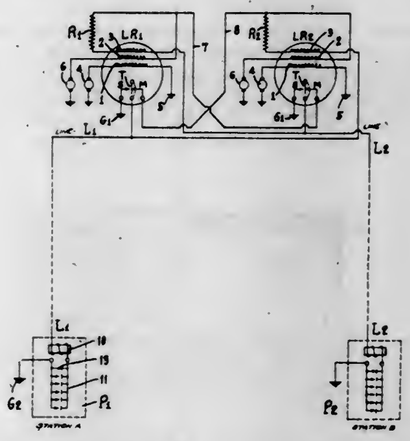
1. In a window structure; the combination with a jamb frame formed of sheet metal and including a weathering groove with opposite faces extending parallel with the direction of movement of the sash; of a sash having a weathering flange fitted in said groove in weathering relation therewith; said flange having its edge in said groove bent back on itself to reinforce it; the bent portion of said flange being bent into symmetrical relation with the main portion of said flange so as to minimize the area of said flange which may come into sliding contact with the side walls of said groove; wherein the reinforced portion of the sash weathering flange is covered with a film of antifriction metal.

1,812,823. SELF CLEANING MIXING DRUM. JOSEPH EGGERT, Columbus, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a Corporation of Ohio. Filed July 5, 1929. Serial No. 376,109. 7 Claims. (Cl. 83—73.)



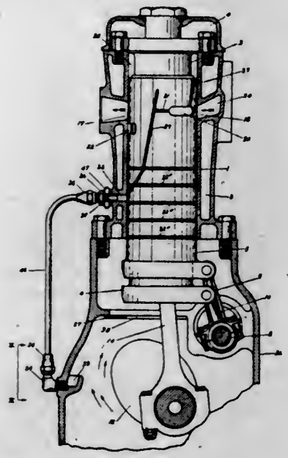
1. A mixing apparatus including a mixing vessel, a mixing member loosely contained in the vessel and resting on the lower wall of said vessel, and a lug on the wall of the vessel engaging the mixing member to rotate that member with the vessel.

1,812,824. TELEGRAPH REPEATER. CYRUS C. FERGUSON, New York, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1930. Serial No. 439,125. 9 Claims. (Cl. 178—71.)



1. In a signaling system, a line circuit, a receiving relay and a transmitting relay associated therewith, said transmitting relay being in an outgoing line circuit controlled by said receiving relay, means for maintaining a closed circuit through the operating winding of said transmitting relay and said outgoing line when the tongue of said receiving relay is on one of its contacts, means for reducing the current in said outgoing line when said tongue is away from both of its contacts and means for establishing a circuit for the winding of said transmitting relay, independently of said outgoing line and producing a unipotential condition for the opposite ends of said outgoing line when the tongue of said receiving relay is on its other contact.

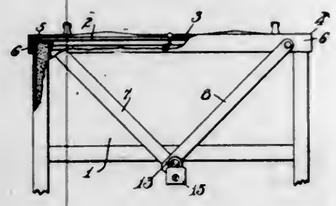
1,812,825. LUBRICATION SYSTEM FOR SLEEVE VALVE ENGINES. CHARLES A. FLEMING, Pontiac, Mich., assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 16, 1927. Serial No. 175,728. 17 Claims. (Cl. 123—196.)



1. In an internal combustion engine, a cylinder having an opening therein, a crankcase, a reciprocating valve

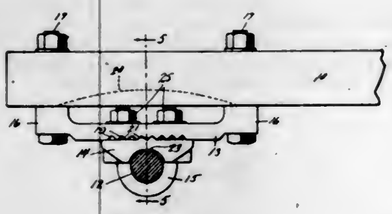
sleeve within said cylinder having an intake port, and provided with a passageway communicating with said intake port and adapted to register with said cylinder opening, and a conduit between said cylinder opening and the interior of said crankcase for conducting lubricant to said opening.

1,812,826. LOCK FOR BOTTLE REFRIGERATORS. CHESTER A. FRICK, Muncie, Ind., assignor to Glascock Brothers Manufacturing Company, Muncie, Ind., a Corporation of Indiana. Filed June 21, 1929. Serial No. 372,774. 2 Claims. (Cl. 292—1.)



1. A locking device for dispensing cabinets having hinged covers, comprising a rectangular frame adapted to lie on the cover of the cabinet, a pair of holding bars pivoted to each of two sides of said frame and adapted to extend downwardly to a point below the bottom of the cabinet, and a retaining rod adapted to be passed through the bottom ends of said holding bars.

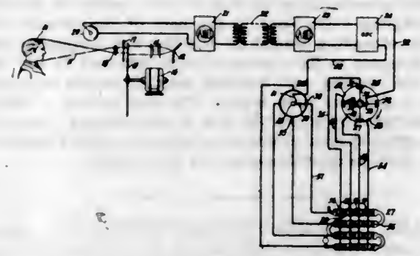
1,812,827. ADJUSTABLE AXLE HANGER. CHAUNCEY W. GANNETT, Wellington, Ohio, assignor to The Wellington Machine Company, Wellington, Ohio, a Corporation of Ohio. Filed May 4, 1928. Serial No. 275,172. 8 Claims. (Cl. 280—58.)



1. In a wheelbarrow, the combination with a wheel and axle, of a pair of saddle members each having an axle receiving recess therein, the sides of each recess flaring outwardly from the central portion thereof, said saddle members being also longitudinally slotted, a pair of longitudinally slotted hanger members to which said pair of saddle members may be adjustably secured, and a pair of U bolts passing through the saddle and the hanger members respectively and providing bearings for the opposite ends of said axle.

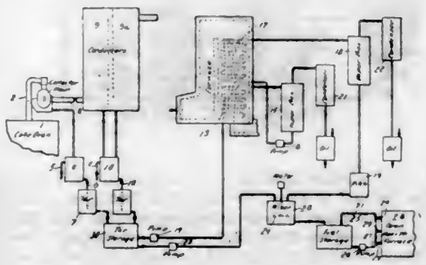
1,812,828. SWITCH OR COMMUTATING MEANS. FRANK GRAY, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1928. Serial No. 313,301. 13 Claims. (Cl. 178—6.)

1. Apparatus for the reception of images in television comprising a grid which is provided with a plurality of points each adapted to be made luminous when energized by a current of high frequency, a distributor for selectively



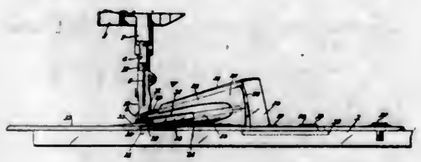
energizing groups of said points and a capacitive distributor for selectively energizing any point in any one of said groups.

1,812,829. PRODUCTION OF FUEL, ETC. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 17, 1928. Serial No. 270,625. 13 Claims. (Cl. 196—76.)



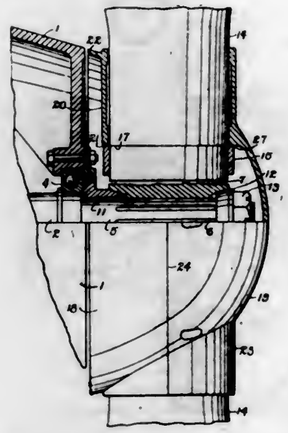
5. The improvement in the utilization of coke oven tar as fuel in steel plants which comprises subjecting part of the tar to distillation to give a distillate suitable for use for creosote oil and a pitch residue having a melting point in excess of about 250° F., blending the pitch residue while still hot and thinly fluid with coke oven tar with agitation to promote the formation of a uniform product, keeping the resulting mixture hot and thinly fluid and supplying it in a hot and thinly fluid condition as fuel to the open hearth or other furnaces of the steel plant.

1,812,830. BINDER FOR SEWING MACHINES. THOMAS O'NEILL, Brooklyn, N. Y., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Mar. 15, 1929. Serial No. 347,206. 8 Claims. (Cl. 112—138.)



2. A strip-reversing binder having an oblique delivery end, an inner fold-forming rib for doubling a binding-strip longitudinally, said rib being provided lengthwise of the binder with a recess in its front face terminating in the delivery end of the binder, and a yielding tongue disposed in said recess.

1,812,831. PROPELLER SPINNER FOR AIRCRAFT ENGINES. BEN G. PARSONS, Houston, Tex., assignor to Hurricane Motor Company, Houston, Tex., a Corporation of Texas. Filed June 6, 1929. Serial No. 368,966. 10 Claims. (Cl. 170—173.)



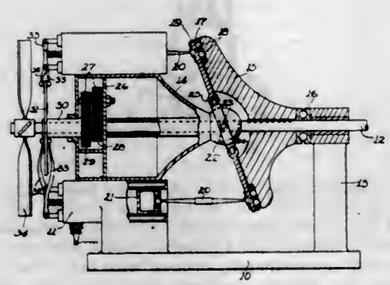
1. In combination with a forwardly curved crank case, a crank shaft therein projecting from said crank case, a propeller hub on said shaft, blades on said hub, and clamping rings on said blades; a spinner housing the forward end of said shaft, said spinner including outer and inner sections adapted to be secured together to enclose the said hub, and shoulders on said sections engaging and registering against said clamping rings.

1,812,832. FILLED PULP AND METHOD OF MAKING THE SAME. HAROLD ROBERT RAFTON, Lawrence, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Dec. 11, 1928. Serial No. 325,405. 28 Claims. (Cl. 92—40.)

1. The method of preparing alkaline filler for shipment comprising combining in wet condition said alkaline filler with pulp

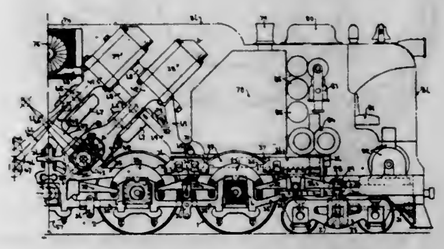
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1,812,833. GAS ENGINE. WILLIAM D. SCHAEFER, Milwaukee, Wis., assignor to Motors Development Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 25, 1929. Serial No. 380,906. 4 Claims. (Cl. 123—58.)



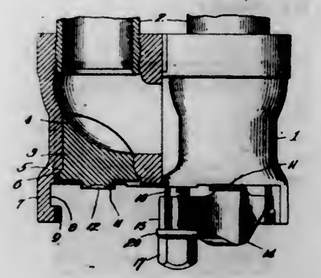
4. In a gas engine, a suitably mounted shaft, a swash plate thereon, cylinders arranged in a circular formation around the shaft, pistons in the cylinders, a thrust ring bearing on the swash plate, connecting rods connecting the pistons with the thrust ring, a sleeve mounted on the shaft, a reduction gearing connecting the shaft with the sleeve, a cam disk on the sleeve, intake and exhaust cams on opposite sides of the disk arranged concentrically for the several cylinders, and intake and exhaust valves for each cylinder having rocker arms bearing on opposite sides of the disk and engaging the respective cams for that cylinder.

1,812,834. INTERNAL COMBUSTION ENGINE-OPERATED LOCOMOTIVE. CLARENCE N. SCOTT, Houston, Tex. Filed May 13, 1929. Serial No. 362,558. 16 Claims. (Cl. 105—62.)



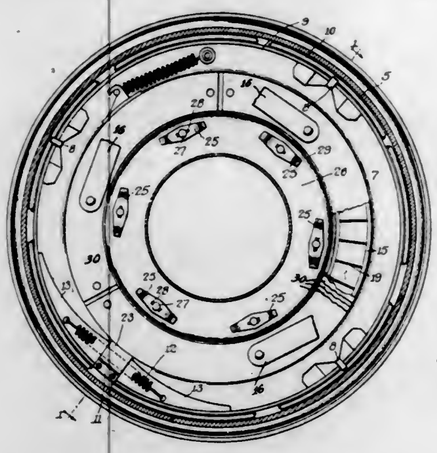
1. In a locomotive, a plurality of pairs of driving wheels, axles therefor, a driving shaft parallel with said axles, a forward engine-crank-shaft, a rear engine-crank-shaft, eight internal combustion power cylinders, four of them connected operatively with the two crank pins of the forward engine-crank-shaft and four of them connected to the two crank pins of the rear engine-crank-shaft, two of the four which are connected to the forward engine-crank-shaft and two of the four which are connected to the rear engine-crank-shaft being inclined upward and forward from their respective crank shaft axial centers, and two of the four which are connected to the forward engine-crank-shaft and two of the four which are connected to the rear engine-crank-shaft being inclined upwardly and rearwardly from their respective crank shaft axial centers.

1,812,835. PIPE COUPLING. ARTHUR J. SMITH, Kansas City, Mo., assignor to Smith Engineering Company, Kansas City, Mo., a Corporation of Missouri. Filed Oct. 22, 1928. Serial No. 314,086. 10 Claims. (Cl. 137—76.)



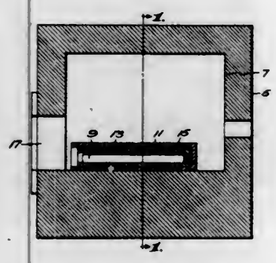
1. The combination with a body member having an opening, of a plug fitted in said opening, a clamping flange carried by said body, a clamping lug for exerting pressure on said plug and having one end cooperating with said flange, guiding means interlocking said lug and plug and preventing independent rotation of the latter, and means carried by the body for clamping the other end of said lug.

1,812,836. BRAKE. JOHN WHYTE, Beloit, Wis., assignor to Warner Electric Brake Corporation, South Beloit, Ill., a Corporation of Illinois. Filed May 18, 1929. Serial No. 364,034. 11 Claims. (Cl. 188—140.)



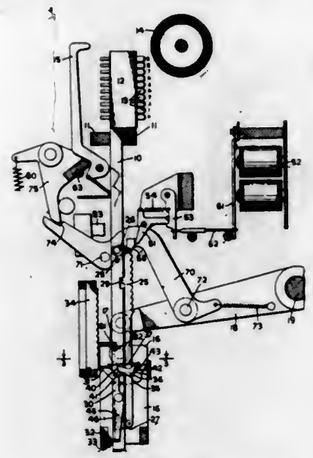
1. A friction brake of the momentum type combining a rotatable drum, braking means cooperating with a cylindrical surface of said drum, a non-rotatable plate mounted at the open end of said drum and supporting said braking means, a pair of friction rings adapted for axial gripping engagement, one of said rings being rotatable with the drum, the other being mounted on said plate for oscillatory movement about the drum axis, means for causing gripping engagement of said rings, means operable in the movement of said oscillatory ring away from brake-release position to actuate said braking means, spring means operable to restore said oscillatory ring to brake-released position when the gripping pressure between said rings is relieved, and spring means acting on said oscillatory ring at a plurality of annularly spaced points to press the ring in a direction toward said non-rotatable plate, whereby to produce a frictional force resisting but permitting the restoring movement of the driven ring.

1,812,837. MEANS FOR HEATING STEEL FOR HARDENING. MURRAY WINTER, Wrentham, Mass., assignor, by mesne assignments, to The Sentry Company, Taunton, Mass., a Corporation of Massachusetts. Continuation of application Serial No. 297,035, filed Aug. 2, 1928. This application filed May 16, 1930. Serial No. 452,978. 4 Claims. (Cl. 266—2.)



3. A protector for heat-treating high speed steel comprising a body of imporous material composed of a mixture of a quantity of graphite and a greater quantity of relatively hard carbon, said body having a chamber adapted to receive the steel, said chamber being of greater size than the article to be treated thereby to permit the maintenance of a neutral atmosphere about the same.

1,812,838. PRINTING MECHANISM FOR ACCOUNTING MACHINES. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Mar. 27, 1929. Serial No. 350,379. 14 Claims. (Cl. 101—93.)

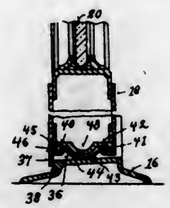


1. In a machine of the class described, a printing element movable to a plurality of printing positions, a driving element for the same having an invariable movement, latching means for positively coupling the printing element to the driving element for varying times to position the printing element in its different printing positions and electromagnetic means controlled by differentially timed electrical impulses for controlling the latching means to effect different durations of coupling between the printing element and its driving element.

1,812,839. PROCESS OF FLOTATION. IRA H. DERBY and ORIN D. CUNNINGHAM, Indianapolis, Ind., assignors to Peter C. Reilly, Indianapolis, Ind. Filed Mar. 19, 1926. Serial No. 96,061. 7 Claims. (Cl. 209—166.)

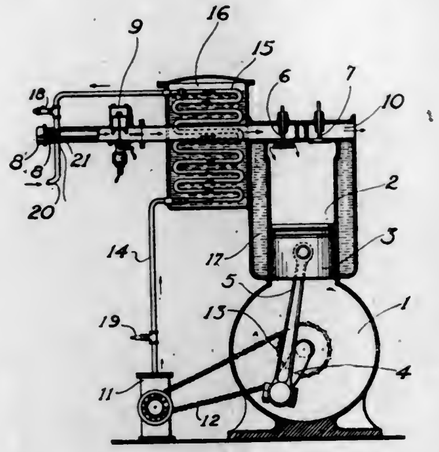
1. A process which comprises reacting on a mercaptolic substance with a phosphorus sulfide to form a reagent having collecting power in ore flotation.

1,812,840. WEATHER STRIP APPARATUS. FRANK L. MICHAELS, Covington, Ky. Filed Sept. 10, 1929. Serial No. 391,524. 4 Claims. (Cl. 189—65.)



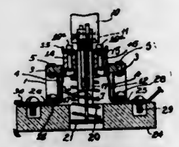
1. In combination with a door and door frame relatively movable, and one of which is provided with two spaced and substantially parallel channels, a weatherstrip of crowned resilient sheet material having one edge folded upon itself and resiliently engaged with one of said channels and its opposite free edge floating in the opposite channel, the intermediate crowned portion of said weatherstrip being in position to be engaged with the opposite member of said door and door frame when the door is closed to form a resilient weatherproof joint between said door and door frame.

1,812,841. INTERNAL COMBUSTION ENGINE AND METHOD OF OPERATING THE SAME. RALPH A. VAN EATON, Corona, N. Y., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed May 6, 1926. Serial No. 107,133. 2 Claims. (Cl. 123—1.)



1. In combination with an internal combustion engine having a cylinder, a reservoir for compressed air, means for compressing air into said reservoir, means for cooling the compressed air in said reservoir, a communication between said reservoir and said engine cylinder, a valve for controlling said communication, means for opening said valve to introduce some of the compressed air from said reservoir directly into the cylinder and a relief valve to permit the remainder of the compressed air to escape, thus further cooling by expansion that introduced into the cylinder.

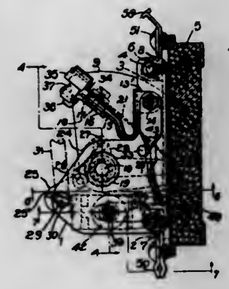
1,812,842. AUTOMATIC CIRCUIT BREAKER. JOSEPH SACHS, West Hartford, Conn. Filed Apr. 21, 1928. Serial No. 271,819. 32 Claims. (Cl. 200—88.)



1. An automatic circuit breaker comprising in combination, a movable contact member biased toward its open-circuit position, a movable actuating member normally adapted to move the contact member to open or close the circuit, and an electro-responsive means comprising an element inherently responsive to abnormal current conditions in the circuit and constituting at least a part of a mechanical connection between the said actuating and contact members normally operative to prevent independent circuit opening movement of the latter, the said element upon the attainment of an abnormal current condition in the circuit being relatively movable by reason of its own inherent electro-responsive characteristics so as to render the said mechanical connection ineffective and to thereby permit the contact member to move to its open-circuit position independently of the actuating member.

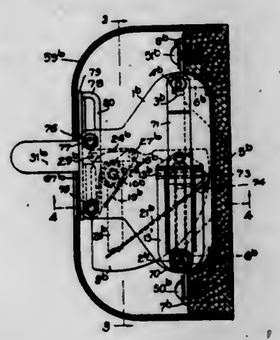
1,812,843. AUTOMATIC CIRCUIT BREAKER. JOSEPH SACHS, West Hartford, Conn. Filed Jan. 16, 1929. Serial No. 332,924. (Cl. 200—88.)

1. An automatic circuit breaker comprising in combination, a movable actuator, a movable contact member biased independently of the actuator toward its open-circuit position and releasably connectible with the actuator so as to be normally controlled thereby for movement to its closed-circuit or its open-circuit position, a restraining means acting independently of the contact member and normally serving to prevent movement of the actuator from its closed-circuit position as the result of the circuit-opening bias of the contact member, an electro-responsive means



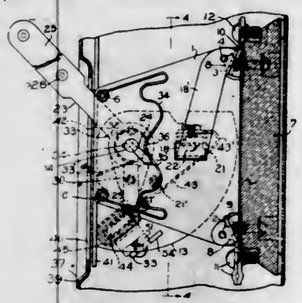
serving upon the attainment of abnormal current conditions to release the contact member from the actuator for independent automatic circuit-opening movement and also serving to substantially simultaneously cause the release of the actuator from the control of the said restraining means, and means acting automatically upon the said release of the actuator to move it to its open-circuit position corresponding to the open-circuit position of the contact member.

1,812,844. AUTOMATIC CIRCUIT BREAKER. JOSEPH SACHS, West Hartford, Conn. Filed Jan. 16, 1929, Serial No. 332,925. Renewed Feb. 26, 1931. 16 Claims. (Cl 200—116.)



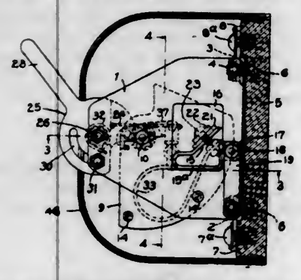
1. In an automatic circuit breaker, the combination of a stationary support, an actuator pivotally mounted on the support, a contact member also pivotally mounted on the support and biased for movement independently of the actuator to its open circuit position, electro-responsively controlled means serving to effect operative mechanical connection between the actuator and the contact member and acting to release said mechanical connection under abnormal current conditions to permit the contact member to automatically move independently of the actuator to its said open circuit position, a manually operable slide carried by the stationary support and guided for rectilinear movement, and means connecting the slide with the actuator whereby movement of the slide to on or off position normally effects corresponding pivotal movement of the actuator and the contact member to corresponding on and off positions for ordinary switching purposes.

1,812,845. ELECTRORESPONSIVELY CONTROLLED MECHANISM. JOSEPH SACHS, West Hartford, Conn. Filed Feb. 7, 1929. Serial No. 338,514. 17 Claims. (Cl. 200—88.)



1. As an article of manufacture, an electro-responsive unit comprising a current-carrying electro-thermal element and a magnet coil included in the structure of the said element and electrically connected in circuit therewith.

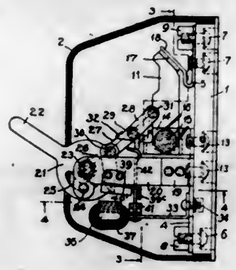
1,812,846. AUTOMATIC CIRCUIT BREAKER. JOSEPH SACHS, West Hartford, Conn. Filed Apr. 6, 1929. Serial No. 353,052. 15 Claims. (Cl. 200—116.)



1. An automatic circuit breaker comprising in combination, a movable contact member biased for movement towards its open-circuit position, a pair of toggle links adapted when in their operative relationship to hold the contact member in its closed-circuit position, and an electro-responsive means comprising an element inherently responsive to abnormal current conditions in the circuit, the said element being bodily movable with the said contact member and serving upon the passage of excess current through the electro-responsive means to change the relationship of the toggle links so as to release the contact member and permit automatic movement thereof to its open-circuit position.

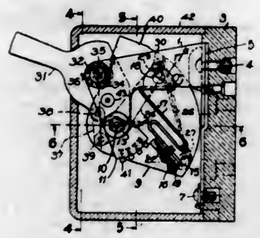
1,812,847. AUTOMATIC CIRCUIT BREAKER. JOSEPH SACHS, West Hartford, Conn. Filed Apr. 30, 1929. Serial No. 359,385. 5 Claims. (Cl. 200—88.)

1. An automatic circuit breaker comprising in combination, a movable contact member biased for movement to its open-circuit position, releasable means normally serving to hold the contact member in its closed-circuit position, an electro-responsive unit supported independently of the contact member and comprising a current carrying electro-thermal strip and a magnet coil carried thereby and electrically connected in circuit therewith, and means enabling the said unit upon the passage of excess current through the strip and magnet coil to effect the release of



the said releasable means and to thereby permit the automatic movement of the contact member to circuit opening position.

1,812,848. AUTOMATIC CIRCUIT BREAKER. JOSEPH SACHS, West Hartford, Conn. Filed May 23, 1929. Serial No. 365,419. 17 Claims. (Cl. 200—116.)



1. In an automatic circuit breaker, the combination of a rear support having a forward facing surface, two main side plates spaced apart and projecting forward from the rear member, a contact member pivoted to the main plates for movement about a transverse axis and comprising two spaced plates substantially parallel to the said main plates, the said contact member being biased for automatic movement in one direction and the said plates thereof being formed to directly engage a forward facing surface on the support to limit such movement, two stationary electric contacts, two movable electric contacts on the contact member engageable respectively with the stationary contacts and movable out of such engagement when the contact member is moved automatically as aforesaid, a manually movable actuator carried by the main plates, and an electroresponsively releasable mechanical connection between the actuator and the contact member normally enabling the former to move the latter.

1,812,849. SYNTHETIC DRYING OIL AND PROCESS OF MAKING IT. ARNOLD M. COLLINS, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 7, 1929. Serial No. 384,238. 18 Claims. (Cl. 260—170.

1. The process of polymerizing divinyl acetylene which comprises effecting the polymerization in the presence of an added solvent.

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